

Honda TRANSALP: A Compendium of Thoughts and Ideas

**Derived from the ADVRider thread:
SHOW US YOUR TRANSALP MODIFICATIONS!**

Compiled by Eric Gauerke



Going somewhere???

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Preface

This paper is based on the long running thread “**Show us your TRANSALP modifications!**” (<http://advrider.com/forums/showthread.php?t=39170>) created April 13, 2004 on ADVRider.com by Modrover. Modrover posted this thread to give owners of the Honda TRANSALP a common place to show and discuss work and modifications they have performed on their own TRANSALP bikes. What was thought to be a simple thread which might lead to a few dozen postings took on a life of its own, and continues on to this day with over fourteen thousand posts and three and a half million views.

What led me to start this paper was my purchase of a 1989 TRANSALP. Buying this bike for me was the realization of a long running dream of wanting to own one of these bikes. Given that “my new to me bike” was now 24 years old and in fairly solid working condition; it was still going to need work if I was going to trust it on any backwoods or long adventure trips. Having been a member of the ADVRider for several years, I had browsed through a number of threads on the forum and knew there was a vast array of talent and resources available to draw from.

With every bike I have built, I have always taken notes on specific modifications that people have performed; technical advice that is offered; areas to watch out for and finally suggestions for parts that either need to be replaced or upgraded based on real world issues found while riding. Not being one to rush a project, I spent the better part of a month reading this thread from start to finish capturing specific data that I need for my build. I chose to focus on specific areas I was going to work on: suspension upgrades, tuning, carburetors, body work, some aspects referenced with the TRANSALP to Africa Twin conversion as well as work-a-rounds.

NOTE: While globally the TRANSALP production ran for many years, it had only a limited run in the United States and because of this; the focus of this document is primarily geared towards the 1987 to 1990 U. S. version of the TRANSALP.

For those interested in performing the TRANSALP to African Twin conversion: Jeff's posts start about post #784 in the actual thread and continue intermittently until the 1200s. Additional data can be found in Appendix A of this paper.

Acknowledgement

This paper is based on the cumulative writings, images and posts of many individuals and where possible, I have tried to make note of either the persons name or in most cases their forum handle. If you find your posting in this paper without credit, no slight is intended. I did not start my collection of data with the intent of publishing a paper. If you find that a post or image that you wrote, captured or created and would like credit please contact me on ADVRider and I will update the that section. At the end of the day this really is your paper as it could not have developed without you.

I want to specifically thank two people who have helped in vetting this first version of this paper: (**Ladder106**: Ray Stedronsky and **MAS335**: Mark Scalise), their help has been overwhelming. Last but not least, MODROVER who got this whole crazy thing going!



MODROVERS BIKE

How this document is organized:

Normally, when you tell a story, you have an organized process in how you relay the information. It is done in a manor that builds on a common theme or story line. This is problematic when dealing with an internet thread on a forum as you have literally hundreds of stories going on simultaneously. Between two individual posts you can span vast amounts of data and unless you have been following the stories or staying up to date, many individuals simply miss out on the core ideas being discussed.

As such, I have organized this paper more like an encyclopedia following an alphabetical organization on each topic. Trying to put this paper together in a linear proved to be overwhelming and very disjointed. Therefore the index of this paper will be the common theme to finding data.

When ever possible I have included pictures as they were posted, since a picture can sometimes tell a book worth of information. The problem is, a few years back a server change at ADVRider stripped many of the images that were hosted on the computer. Only pictures that were hosted offsite remained. PLEASE, if you have any pictures that were deleted and would like to see them back in the paper, send them to me and they will be added.

****UPDATES:** This paper is not static, if you would like to add a section, image or other information to this paper, please send me a message and I will be happy to post your data into the document. At present I do not have a scheduled time frame when I will update the paper. More then likely it will be on either a quarterly or bi-annual basis.

In closing, please consider all options and safety considerations before undertaking any of the described procedures and modifications. Each rider needs to be cognitively aware of their own skill levels and abilities and what specific changes can or may do to the performance or handling characteristics of their motorcycle.

A:

AIR BOX: (LADDER106)

The TA is pretty finicky when it comes to resealing the air tubes. I've found it best to disconnect the large rubber seal between the rear of the air tube (that lives between the frame rails) and the airbox. Then remove all the bolts that hold the airbox to the frame. There are two on the top, one on the right side and one that connects the airbox to the rear fender inner extension (underneath the airbox on the left).

Now that the air tube is not connected to anything else, carefully seat the rubber tubes between the air tube and the carb mouths. Then with those clamps tight reinstall the rubber seal between the air tube and the air box. You'll probably find that this is difficult to get to seal correctly. Do NOT move the air tube to accomplish a good seal. Instead, move the entire airbox (usually up and forward) to make the seal between the air tube and the airbox. Tighten those clamps and then reattach the airbox to the frame.

First there is not (as best as I can figure) a lot of air flow through these two boxes. They lead to the area of the carb on the UNDERSIDE of the vacuum diaphragms and (if I remember right) eventually into the float bowl area. So it's not like a lot of air is constantly moving through there.

That being said, it is a way that dust and grit can enter the carbs particularly if you're riding in the desert or a very dusty area.

My guess on the popping is that you pushed/pulled/moved the plastic air tube (#17 on the drawing provided by MPirate) in order to get the rubber seal (#19) to seat between the air tube and the air box.

The clamps and boots between the air tube and carb mouths are pretty sensitive. Particularly now that our bikes are 18 years old and the rubber is hardened by repeated heat cycles. Sometimes careless POs have bugged these tube us with screwdrivers and other tools trying to get at the carbs. I've seen two bikes that were really bad in this respect.

Moving the air tube can pop one or both of the boots partially off the carb mouth and creat a leak....hence the proceedure I described for reassembling the airbox bits.

Get back in there with a good flashlight (one of those new little LED penlights on the flexible stalk works real well) and see if you can find a place that the boot had slipped off the carb mouth.

I've resorted to using a normal (but thinner) radiator hose clamp on my front carb since the stock clamp kept slipping off

.....and now another possibility.....

Although probably NOT your problem, the TA does use two small diaphragms mounted under small plates on the side of each carb. There are call "Air Cutoff Valves" or sometimes "Coast Enricheners". I don't know exactly how they work but they are designed to prevent a lean condition on closed throttle overrun and stop the annoying popping. It MAY be that yours have cracked or are dirty and not moving correctly.

On the TA airbox.....IMHO, the gasket between the air filter and the box is not necessary. The TAs air filter is sealed to the box "lid". Outside air enters the box through the left rear tube and passes through the filter from the outside to the center of the filter. Filtered air comes from the center of the filter into the right side of the airbox and up into the engine. The important place to seal is the "end" of the filter at the point it contact the side of the airbox. You don't want dirty air leakin through that point into the air tube and up into the carbs. Sealing the metal filter lid to the airbox should not be critical.

If nothing above fixes your problem, let us know and we'll go further into idle mixture and yanking the EPA plugs sealing the mixture screws out of your carbs.

This is just before removal of the TA front bracket and instruments.

AIRFILTER CUSTOM:

RAYS CUSTOM FILTER:

(IMPORTANT NOTE: Seal It Up)

Did you remove the strange tube leading from the airbox to the carbs?

If so, I'd suspect that something did not go back together perfectly and you are pulling outside air into one carb resulting in a lean condition at closed throttle (overrun) whatever you want to call it. The TA is pretty finicky when it comes to resealing the air tubes.

I've found it best to disconnect the large rubber seal between the rear of the air tube (that lives between the frame rails) and the airbox. Then remove all the bolts that hold the airbox to the frame. There are two on the top, one on the right side and one that connects the airbox to the rear fender inner extension (underneath the airbox on the left).

Now that the air tube is not connected to anything else, carefully seat the rubber tubes between the air tube and the carb mouths. Then with those clamps tight reinstall the rubber seal between the air tube and the air box. You'll probably find that this is difficult to get to seal correctly. Do NOT move the air tube to accomplish a good seal. Instead, move the entire airbox (usually up and forward) to make the seal between the air tube and the airbox. Tighten those clamps and then reattach the airbox to the frame.

Let us know if this does the trick.

TA Air Filter Mod (Ladder106)

Summer is upon us and dust will soon be a major factor here on the left coast.

I've never been happy with my paper TRANSALP filters since I prefer to have something that can be serviced in the field with a minimum of difficulty. Also, I've never really trusted the K&N stuff.

Here's a little step-by-step to get a good cleanable foam filter stuck onto the good ol' TA.

First remove the old dirty paper filter and cut the paper off the cage with a knife (if you want to make you wife angry) or a razor blade.



This step may not be necessary but I wanted to have as much "lip" to catch the new foam filter as possible. I used a Dremel with a carbide bit to grind off the paper that was left along with the adhesive (epoxy I think) that was used to seal the paper to the metal. Be careful that you don't go through the metal. Do both sides.



I then proceeded to the local shop where the owner and I searched through their stock of filters to find something close in internal and external diameter and overall length. I found a UNI that worked. The number is NU 2483 ST. I have no idea what bike this filter is supposed to fit....doesn't really matter.



Cut the filter right below the joint between the yellow (denser) foam and the red foam of the filter body.



The filter then gets stretched over the screen and the top gets tucked in.



But before you do this step, be sure to grease the both edges of the foam where they contact the metal. This will keep air from sneaking around the edges.



Tuck the top under the metal lip and make sure the edges are sealed all around.



Spray with filter oil and you're done. Total time - about 3 hrs including the trip to the shop and the filter search....plus maybe 30 minutes for bench-racing.



It even fits.



A quick test ride shows no effect to jetting, no lean spots, no surging. Seems to work just fine. I may even buy another filter to keep in a baggie so changing in the field is easy.

LESS WORK FILTER CONVERSION (MAS335) Well I was working on a friends NX125 which needed a new air filter and once it came in I checked out the size and ordered another one for the air filter frame, it's a perfect fit with no cutting of any kind, drops in and fits snug and is much cheaper than the UNI filter.
Honda: 17213-KB7-000



Alignment (Locorider):

After two non successful attempts trying to align the front wheel, I tried another way...and it worked wonderfully!!!!



The rear wheel was snug between the c-channels, 3 pieces of steel held them together. Two pices of 1" wood hold the front wheel in place and perfectly aligned with the rear one. Then I checked the handlebars and voilá...it wasn't aligned. So I loosen the T's and the fork brace, aligned the handlebar and tightened everything up....Did a test ride and it was perfect.



B:

BATTERY (NOMILES)

Yuasa Ytx14ah-bs



It plops right in.

Battery Family: High Performance, Maintenance Free

Battery Type: YTX14AH-BS

Voltage: 12

Capacity: 12

Dimensions: 5 5/16" x 3 1/2" x 6 9/16"

Weight: 7.7 lbs.

Metric Dimensions: 134mm x 89mm x 166mm

Metric Weight: 3.5 kg

Polarity:

Acid Volume: 0.69

Amps: 1.2

C.C.A.: 210

Question on front brake line with detailed response from Ladder106:

Hey there,

I know you asked ghostdancer, but, I just did mine using GALFER and I ordered a 48" i to i line (blue) with a 40 degree banjo on one end and a 12 degree banjo on the other. (the TA standard is 90 degrees but 40 puts less tension at the crimped connection up top) and yes, you use the TA m.c. and caliper. Mine is REALLY tall and if I were to do it again, I would go 50". It works fine though. I can send you an email with pics. if you like scince I can't figure out how to post to this site.

Why not just go for an aluminium arm from a RD04 Africa Twin. It's a pretty much straight bolt up into the TA frame. I've installed one on my TA and modded the rear drum to fit but there is now an AT rear wheel and disc set-up in the garage waiting for mounting. The wheel needs a new rim and I'm going to do bearings and spokes first so it may be a while. A quick zap to weld two tabs for the master cylinder mount (make certain to disconnect the battery and the CDIs before welding to the frame) and I should have a rear disc.

If any of you are thinking about this, here are a few detail "secrets". If you go with the AT arm be sure you get the bolt that holds the rear suspension linkage to the arm. It's different than the one on the TA and the TA bolt will NOT fit into the AT arm. NOTE: The identical bolt from a 94 XR 250 is a close but not exact fit.

You might also consider getting the AT suspension linkage. It has a bit of different geometry from the TA linkage. I'm not smart enough to know how this affects rate-of-rise. It does mean that you have to use a shorter shock, like that stocker on the RD04 AT.

When buying the rear wheel, try to get the AT wheel spacers. They are just a bit thicker than the TA ones but result in better chain line when everything is set up.

A caution from buying from the UK. It's nice to communicate in a common (well almost) language but shipping from the UK is grossly expensive. Once they get stuff onto the island they are not very good about letting go of it. Make certain you check shipping costs before you buy.

I've had very good luck with German ebay. Many folks there speak (or at least write or translate) passable english. Shipping is still rather expensive but nothing like the UK.

Here's the facts on the TA/AT conversion. The Africa Twin front fairing and dual headlight part is "sculpted" differently enough from the TA piece that it doesn't match up to the TA side panels. You could certainly make it work with some fiberglass work or maybe live with the imprefections....dunno How much gap would be left? TA front ends work well with AT tanks. See the previous posts by Gene

with the bikes at the Artic Circle (nice going Gene!). Unless I'm grossly mistaken (again) the TAs have AT tanks attached. The tanks are black so you have to look kinda closely. The AT tanks are larger and farther forward so trimming back the TA side panels is required....but they mate up pretty well.

The other way 'round (like you're suggesting) doesn't work too well unless you do the whole enchilada. Once you have the AT front end you'll find it doesn't match the TA side panels and once you have the AT side panels you'll find the TA tank is too short and leaves a big gap.

You end up doing the whole thing using AT front end, dual headlights, side panels and tank. The TA seat will work with the AT tank but has to be "bent" a bit in the front. An AT seat works better and the RD04 version bolts up the the TA but overhangs the TA side panels (the ones under the seat) a bit more. It works but not perfectly.

Look back to post #1955 on this thread. I took photos of my conversion and it shows it reasonably well.

If you use the AT tank, I'd strongly recommend the bottom tank support bracket. This is shown in my photos and bolts up directly to the TA. (It replaces the bracket that supports the lower part of the TA side panels). With almost 7 gal of fuel aboard, supporting the tank only by the 2 "U" shaped tabs at the front end is not smart, particularly if you're taking the bike off-road. The lower bracket supports the tank very nicely.

I'm mentioning this because many guys have the main body panels posted for sale but don't list the support brackets. In many cases, they have them but aren't sure we want them so you have to be specific.

I can post some "exploded" RD04 part diagrams if you need assistance with what I'm talking about.

Don't get frustrated. It's a bit of a search. Sometimes (like now) there's nothing out there....other times there's a bunch of it. I think that now that Honda discontinued the AT in europe, more spare AT parts are being sold there locally and not going on the international marketet.

Ray

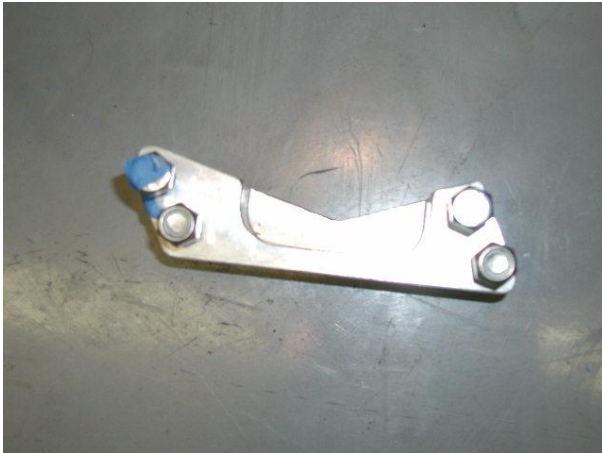
Front Brake Modification (LADDER106):

Here's the brake solution I mentioned previously. Basically you install a custom bracket for the stock caliper and then use a stock Honda Hawk rotor that's noticeably bigger. Add (if you don't already have them) a SS brake line and upgraded (EBC in my case) pads.

Using a 1989 Honda Hawk NT650 rotor and brake

Voila! Instant very large improvement in braking- feel, power, fade resistance- all in a two finger brake (one, if its strong). As soon as they bed in, I'll post a TA stoppie pic

One view of the bracket <http://www.map-engineering.com/>



Mods seen here:

Honda XR600 front fork fitted on AT RD04 fork clamps.

AT RD07 swingarm incl. brakes and wheel.

AT RD04 engine.

SW-motech engine guard.

Hepco-Becker crash bars.

Therefore I installed the XR600 front fork on my TA.

The XR600 forks vs the TA forks



NOTE ON BOLTING ON AXLE: and another hint on that thing:

both contacting surfaces are not even / plain. There is an upper and a lower end. The upper end has to be tightened first, and not X-wise as you would expect.

The way I'm doing it is actually easier than installing the emulators in the stock forks (I'm a motorcycle suspension service shop and have installed them before). With the XR600 forks you will get 280mm of travel, if you get them from a 1990 and newer 600 they will be cartridge forks and flex alot less than the TA forks (XR650L forks will also work). 1987-1988 CR forks are also the same with different valving and spring rates. The extra ground clearance is worth its weight in gold if you do any kind of off road traveling. I have less than \$200 in this setup and it can be done by anyone with normal hand tools. I will have pics and better install notes throughout the next several days.

Bracket and rotor)M,A,P,):

Got mine yesterday, it really looks good! I've got some new EBC HH pads ready for the install this weekend. I'll also take pics.



I highly recommend, Cycle Brakes.com for fast service. I purchased my Galfer SS brake line and some Galfer pads and Galfer rear brake shoes last summer and got great service. Ordered the new HH pads on Sunday night late, got the pads in Wednesday's mail.

http://cyclebrakes.com/html/our_products.html

I'm not sure the Galfer rear brake shoes made too much of a difference? When I replaced the old ones I also adjusted the brake linkage, so hard to tell. I bought the Galfer shoes because they were on the Cyclebrakes site and I was ordering the other stuff, they don't cost very and I was going to have the rear wheel off to replace the tire and wheel bearings. That rear TA brake just sucks no matter what shoes are on there.

What really does the trick is the M.A.P. front brake!

Got my installed and I'm a happy guy! it REALLY works.



Stock ratty rotor

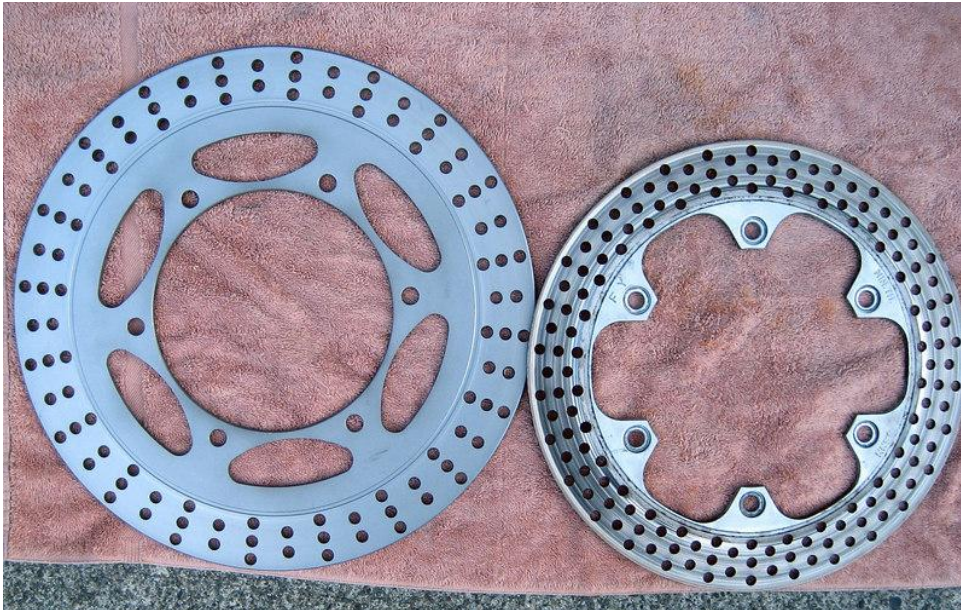


Installing the bracket (sorry about the flash glare) this is looking from the inside out (wheel side)



Done... I don't like the makers marks on bolt heads so I removed them. The new pads are EBC HH

sintered, sourced from www.Cyclebrakes.com



316mm vs. 276mm ~> This is what makes it work.



It really made a huge difference for my bike! I did have a lousy rotor but I'm sure that even if it had been brand new this upzoot would still be worth it, the Galfer SS brake line was done last June and it did help a bit.

The pads haven't seated on the new/used rotor yet but when they do things will be even better, can't wait to go on a trip with a loaded bike. 🙏

REAR BRAKE CONVERSION -PULL VERSION FROM PUSH VERSION(Locorider)

I found that pulling is more efficient than pushing when using a steel rod on the brakes. I switched the brake level on the drum to the upper side, adjusted the brake shoes indicator, so that it shows the wear correctly and its working fine. See the pictures...



I also switched the front brake arm...

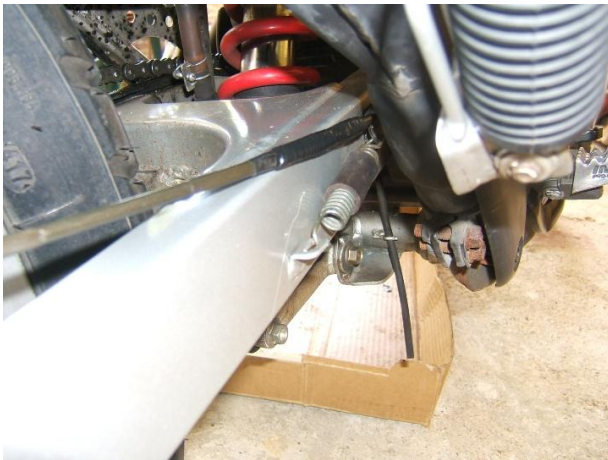


Here is another view of the "pulling" rod.



Spring

I installed the spring where it was, but I may weld another hook over the arm. But it is working fine the way it is.



Note (Dr.E): on converting from a push to a pull configuration, this in no way effects the operation of the rear brake. The twin rear pads are engaged to the drum via a cam attached to the brake arm so either pulling or pushing moves the brakes in the exact same direction. Also, if you finding that your rear brake seems to be fading or weak, adjusting the arm that the brake rod attaches to will increase the brake pad throw, thus leading to greater grab.

REAR BRAKE:

Drum Part#

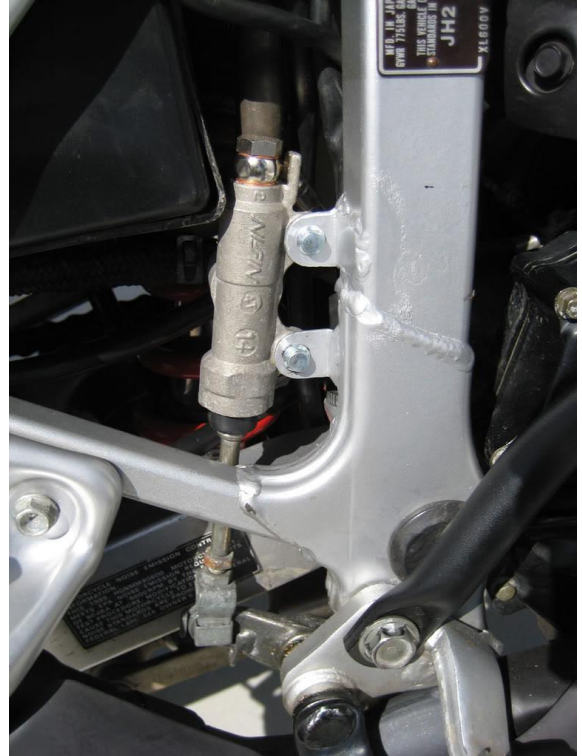


Rear Disk Brake for US model TA (MENASCO PIRATE):

Here are some photos from my attempt to add Ebay procured parts TA from Italy and England to my old trusty 89 TA. Somebody needs to tell me how to do this better. The screen only allows me to insert one picture per post? OK I FIGURED IT OUT, DAMN IT, I MISS MY MAC



I had to fab an adaptor to take up the space between the right swing arm and the hub. I determined the width of the spacer needed by subtracting the stack up between the old hub and the disk brake hub on the 89 axle. The spacer also adapts to the disk brake torque arm to the feature on the swing arm intended for the Hub torque arm. This works well as the adaptor slides with the hub when you adjust the chain.



I'm not happy with the hose routing yet. I used 45 deg fittings on both ends I will have this changed to 15 deg on the caliper end. I'll also change the hose clamps to lower the path around the top of the caliper.

I touched up the weld area on the frame with the silver paint mentioned in earlier postings. Not shown is the mounting of the reservoir. I extended the voltage regulator studs and the stock reservoir bracket fits perfectly over the regulator. The stock brake arm is the same as the 93 model and the cast arm for the 93 drives the master cylinder fits perfectly.

The master cylinder and caliper were overhauled using kits from David Silver Spares and CMSNL.com. The caliper piston fits other US models but I could not find the rubber parts cross referenced on a US model. They were not expensive and the shipping was very fast from DDS and CMSNL.com.

Brake works better than stock but is not super strong.

Overall it was a fun project and worth the effort. I've got about \$300 in the wheel, brake caliper and master cylinder. It took me about 2-3 hours to fab all the parts. The method allows returning to stock in 30 minutes.

Mods to this TA to date

Corbin Seat, Just added a heat kit – Oh baby, fresh warm buns!

Hot Grips

Givi Crash Bars, Just added Highway pegs to them

Happy trails racks, Did my own removable Pelican cases 4 years ago

Givi Top case mount

Garmin GPS
XM radio
Progressive Front Springs
Race Tech Cart Emulators
Hawk Front Disk Brake Mod

Wilbers Shock somewhere between here and Germany
Front Wheel (Gold Rim) Somewhere between here and Italy

This bike has been to 25 states including Alaska and back, all over Baja and Copper Canyon Mexico



BUYING PARTS FROM EUROPE:

You'll need an IBAN number and a BIC number from the seller. Most German sellers are familiar with this since that's the way they transfer money around easily in their country.

Expect to pay around \$20.00 or so for the transfer (that's why it's nice if you can find one seller with everything you need at one time). You'll probably have to ask for someone at your bank that has done this before (so they don't ball it up). You can also shop around different banks for international transfer rates. Some banks give account holders special rates.

When I first did this I ended up withdrawing my money from one bank because they refused to provide this service.

It may take 30 minutes or so to get everything correct. Make certain you get a receipt and then confirm with the seller that the transfer was made. Confirmation sometimes takes 24 hrs or so since I think the banks save up the days transfers and send them all at one time.

C:

CARBURATORS:

ASSEMBLING AIR BOX AND CARBS (LADDER106):

A word on the carb boots and assembly:

I found that it is best to put the carb and air box system together in this order.

1. Remove the airbox mounting bolts from the frame (there is one bolt you'll miss that is under the rear fender. The airbox should be "free floating" and able to move in the frame. This is a KEY POINT.
2. Fit the carbs back onto the engine. Align and tighten the 4 clamps on the boots/sleeves that hold the carbs in place. Pay particular attention to the notches that are used to align these parts.
3. Fit the carb cables and choke cables.
4. Fit the hard plastic air tube that runs under the tank. Tighten the clamps between the tube and the carb first.
5. Fit and tighten the clamps between the air tube and the air box. NOTE: You will most likely have to push the airbox forward to make the connection between the tube and airbox fit well.
6. At this point all the clamps are tight and you can now push the airbox gently back and align and tighten all the air box mounting bolts.

This method is a bit tedious but it's the only way I found to make certain that there is no leak between the air tube and carb or the carb and the engine. The system is a bit complicated and leaving the air box in place makes fitting the air tube back onto the carbs difficult and inaccurate.

Another tip:

Probably not a problem for Carlos but for the rest of us with a real winter (well.....an almost real winter here in California).....a blow dryer or heat gun is your friend when dealing with these carb boots and parts. Getting them warm makes them MUCH easier to work with.

Remember you're working around gasoline so HOT is a relative term.
I have one step to add to that since rebuilding Chris's bike.

The rubber air tube that joins the air box has a specifically molded area that is designed to accept the screw clamp that holds this tube to the airbox.

The clamp should be placed into this area to prevent the tube from being "pinched open" when tightened.

The clamp has to be put into a difficult to see and find area that is at about the 7 o'clock position if you're looking at the hole from the back of the bike. It's tucked down between the rear fender and the frame tubes on the left side.

You can reach the screw with a long screwdriver.

It's best to look at this with a good light and get the clamp placed correctly.

Also.....

There is a molded "line" on the air tube at the rear. The rubber connection between the tube and the airbox should come up to the line to insure there is enough hard tube inserted into the rubber for the clamp to seal upon.

Hope all this makes some form of sense.

But what I really want to know is:

IS IT REALLY NECESSARY TO PULL THE COOLANT TUBE AND HOSE TO GET THE VALVE COVER OFF THE REAR CYLINDER.

Just a memory check so I can justify having another beer when I get home from the firehouse tomorrow

If I understand all that you have said then your problem is stuck or leaking float valves in one or both carbs. In each float bowl there is a vent port to allow "neutral" atmospheric air in so that the gas can be pulled up into the carb and into the cylinder. If the float bowls were not vented then the carbs could not draw fuel. It's a low pressure/high pressure feature of CV carbs.

They look like overflow pipes but are actually vent pipes. Since you filled the gas tank above this level then gravity would force the fuel straight out of these tubes IF one or more float valves were not functioning correctly.

I read your first post and have been wondering what "I checked out the carbs" really meant?

This image shows these vent ports capped off with white caps. Their lines run back to the air box with one tube running along the top of the air box and the other running down the front of the air box.

Without the carbs working correctly you really can't tell much about how the bike runs.



FWIW, One of the trickiest issues with re-installing the Carb air tube back into the airbox boot is making sure it is really installed deep enough back. I have seen more than one bike with the bottom edge not even sealing in the boot.

I took tape, in this case yellow electrical tape and ran around the back end of the tube about 1/2" from the edge. This tape line helps me gauge exactly how far I have the tube installed into the air box boot.

You'll like this idea Ray? No more guessing.



SLOW JET MOD (MAS335):

I think this idea came from Showkey and basically all the # 40 does is enrichen the fuel supply in the Carb during idle and in the lower portion of the throttle rpm's, say between 1,500 to 3,000 rpms. The bike will start easier, idle better when it is cold, smooths out the roll on throttle response and gets rid of a slight flat spot between 2,500 and 3,000 rpms.

It will not make a night and day difference in overall performance but it is worth doing and the bike does run smoother and starts easier as if a properly running TRANSALP really needed help starting.

If I was pulling carbs just for this I would do a full carb overhaul. The vacuum piston air filter canisters with the disintegrating foam filters and all the trash that gets into the Diaphragm chambers would be a greater concern.

FOLLOWON WORK TO THE CARB WORK ABOVE (MAS335):

My take on it is If the caps are there then I would leave them alone. The pilot mixture screws come preset from the factory but people remove them for various reasons and mess around with them.

The Pilot Screws only control the fuel air mixture during idle. I have seen more problems from people removing the covers and tinkering with them than just leaving them alone. Removing the caps can damage the carb and the jet, both of which I have seen.

Adjusting them for high altitude or major jetting changes are the only good reasons I know of for altering the factory settings. Changing the slow jet to a #40 should not require any Pilot Jet adjustment.

I think I am correct on this but if I am not stay tuned, Ladder or Showkey or someone else will correct it.

(LADDER106) I just take them off 'cause I like messin' with stuff

Actually they can be somewhat "diagnostic".

If you change your exhaust or put in a foamy air filter or other intake/exhaust mods or even if you put in the #40 pilot (slow) jets, you'll want to know if your jetting is correct.

If, after you make your mods, you find the idle mixture has to be set either lean (out 1/2 turn or less) or rich (out 3 1/2 turns.....more doesn't do anything) this can indicate a larger or smaller pilot jet is needed.

After about 3 turns, the screw does nothing to make the mixture any richer so if you're turning it out and the bike is running better and better, once you get to 3 turns....it's larger pilot jet time. Same with leaning it (turning it in) if it runs better as the screw goes in, a smaller pilot is in order (or your "choke" is sticking or your float level is too high or your float valve is leaking...etc).

Without the ability to adjust, you just don't know.

TA carb jettings vs. model years.

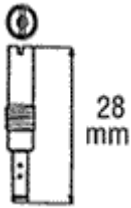
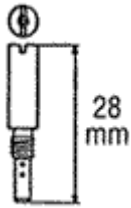
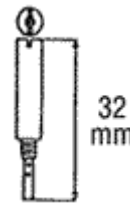
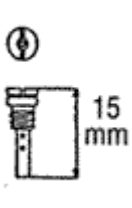
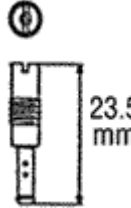

Year/letter	Bike types	Carb type	Main jet (front, rear cylinder)
1987 H	AR,CM,E,F,FI,G,IT,ND,SP,SW,U	VDF0A A	128,130
	2G	VDF0C A	132,138
1988 J	AR,CM,E,F,FI,G,IT,ND,SP,SW	VDF0A A	128,130
		VDF0A B	
	2G	VDF0C B	132,138

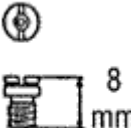

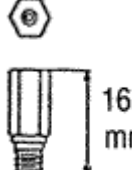
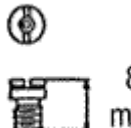

1989 K	AR,E,F,G,IT,ND,SP	VDF0A B	128,130
		VDF0A C	
	SW	VDFKA A	120,120
	2G	VDF0C C	132,138
1990 L	F,IT,SP	VDF0A C	128,130
1991 M	AR	VDF7C A	118,120
	E,F,G,IT,SP	VDF0A C	128,130
	SW	VDFKB A	118,120
	2G	VDF0A C	128,130
1992 N	as in 1991	as in 1991	as in 1991
1993 P	as in 1991	as in 1991	as in 1991
1994 R	AR	VDFKD A	128,130
	E,F,G,IT,SP	VDF0A C	128,130
	SW	VDFKB B	118,120
	2G,2IT	VDF0A C	128,130
1995 S	?	?	?
1996 T	AR	VDFKD A	128,130
	E,F,G,IT,SP	VDFLA A	118,120
	SW	VDFKB B	118,120
	2G	VDFLA A	118,120
	2IT	VDFLA B	118,120
1997 V	AR	VDFLD A	118,118
	E,F,G,IT	VDFLB A	118,115
	SW	VDFLC A	118,115
	2G,2IT	VDFLB A	118,115
1998 W	same as 1997 plus 2F added to 2G,2IT		
1999 X	same as 1998, plus		
	YA,YB,YC,YF,YG,YH,YJ	VDFLB A	118,115
	YD	VDFLC A	118,115
	YE	VDFLD A	118,118

Key to types:

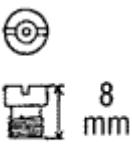

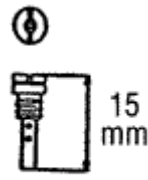
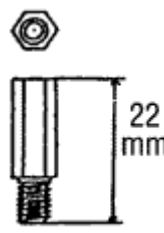
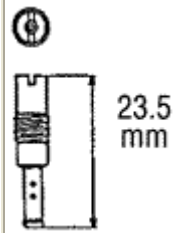
AR=Austria **CM**=Canada **E**=United Kingdom **F**=France **FI**=Finland **G**=Germany **IT**=Italy **ND**=Northern Europe **SP**=Spain **SW**=Switzerland **U**=Australia **2G**=Germany 27 bhp(1987-1993) 34 bhp(1994-1999) **2IT**=Italy 34 bhp **2F**=France 34 bhp **YA**=United Kingdom **YB**=Germany **YC**=France **YD**=Switzerland **YE**=Austria **YF**=Italy **YG**=Germany 34 bhp **YH**=France 34 bhp **YJ**=Italy 34 bhp

Besides - I don't like the idea that Honda knows what I want better than I do.

Jet Series	N424-21	N424-22	N424-24	N424-25	N424-26	N424-35
	 28 mm	 28 mm	 32 mm	 15 mm	 23.5 mm	 7 mm
Jet Sizes Available	035 to 98	035 to 080	035 to 080	035 to 098	035 to 080	035 to 120
Application	(Slow Jet)	(Slow Jet)	(Slow Jet)	(Slow Jet)	(Slow Jet)	(Slow Jet)
AFTER MARKET			CRS	FCR		
HONDA	PJ, PWM (Motocross) (ATV)	PJ (Motocross)				
	PE 26-30 (Motocross) (ATV)	PE 34-38 (Motocross)				
KAWASAKI	PWK (Motocross)	CVK-V (V-Engine)		CV, CVK (Road Bike)		CDK, CDKII (Jet Ski)
HARLEY				BH (Non CV Type) BD (Screamin Eagle)		
YAMAHA				BD (Snowmobile)		

Jet Series	N424-36	99101-124	99101-357	99101-393	99101-806
	 8 mm	 8.5 mm	 16.5 mm	 8 mm	 9 mm
Jet Sizes Available	90 to 200	50 to 150	60 to 230	60 to 200	90 to 250

Application	(Main Jet)	(Slow Air Jet)	(Main Jet)	(Main Jet)	(Main Jet)
AFTER MARKET		FCR	FCR,CRS	FCR(MAIN AIR JET)	
HONDA			PD (Dual Purpose) PE-34-38PE (Motocross) PJPDVG (Motocross) (ATV)	CVVD (Road Bike) (V-Eng) 26-30 VB VE (Motocross)(Sidedraft) (Motocross)(Downdraft) VA	
KAWASAKI	CDK, CDKII (Jet Ski)		PWK (Motocross)	CV, CVK (Road Bike)	
HARLEY			BD (Screamin Eagle)		BH (Non CV Type)
YAMAHA			BD (Snowmobile) PWM(Motocross)		

Jet Series	N424-27	99101-116	N424-14	99101-393	991031-420
					
Jet Sizes Available	150 to 250	50 to 120	35 to 098	40 to 280	32 to 52
Application	(Main Jet)	(Main Jet)	(Slow Jet)	(Main Jet)	(Slow Jet)
AFTER MARKET			FCR	CRS	
HONDA		PB (Small ATV)		(VB (Sidedraft)
KAWASAKI					
HARLEY	CVH (CV Type)		CVH		
YAMAHA					

Carburetor Parts Warehouse http://www.carbparts.com/keihin/needles_tuning/keihin_jet_list.htm
(216) 524-1599

Keihin N424-21 #40 Slow Jet mod (NOR CAL):

Did the [Keihin N424-21 #40 Slow Jet](#) mod yesterday and - WOW, what a difference! For what little a pair of these jets cost, this mod is a must do for all US model/carbed TA's!

Before, my TA would snort and buck when warming up from a cold start unless heavily choked - now it starts very easily and just sits there and purrs with very little choke. Throttle response is greatly improved and I feel there is an increase in low speed power/torque. I also removed the Main jets and soaked them for awhile in some ancient Gumout liquid carb cleaner (not the new reformulated crap).

CARB REBUILD (MAS335):

Since the Carb rebuild kits from Honda have been discontinued the float bowl gasket has been the most important part no longer available.

Partly out of necessity I spent some time sourcing for a O ring that would fit neatly into the float bowl recess but never found a identical substitute. What I did end up finding is this Buna N (neoprene) O ring. The diameter of the ring is 2.5mm, the original is about 2.00mm. This means that the O ring is a very tight fit but almost a perfect length.

Here is what I had to do to get them installed, first I carefully cleaned the groove on the bowl cover and removed any old residue. It seems that sometimes the original rubber bowl seal was glued in places to maybe hold it in place? Getting all that rubber residue out is important.

Then I installed the O ring by pressing it in place while slightly pulling the O ring in the direction I was moving. Because the overall length of the O ring is slightly shorter than the actual length of the groove it required this very slight stretch, otherwise you get all the way around and then find you are about 1/8" shy of having enough O ring.

I also found that the best way to "press" the O ring into the groove was to use the corner edge of a formica laminated counter top, it gave me a good firm surface and room to work at the same time.

I tried applying some oil to make the O ring fit easier and all that did was help the O ring pop out, you need the oil free friction to hold it in place.

Because of the .50mm thinkness difference you can no longer tighten the bowl cover against the carb body as you normally see. You need to just get the bowl cover screws firm, over tightening could bend or distort the bowl corners where the screws mount.

I have been using these for a few months as a test and they seem to work fine, no leaks and nothing has worked loss.

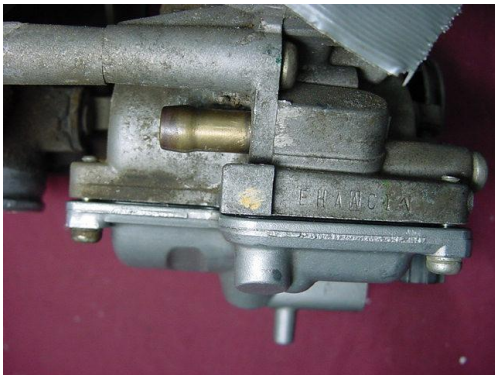
In order to get these I had to make a special purchase of 50 since they are a odd size and not a stock item.

I also found substitute "mini" O rings for the Pilot Needle Jet screws.

No special tools or skill required, just persistence.



Seal gap.



89-90 Carb O-ring source

If you are looking for O-rings for the float bowl on an 89 or 90 TA the large oil filter O-ring from a 1997 and newer Suzuki DR-650 works just fine. Clean the slot, don't grease it and push it in. You might add just a film of grease to the carb flange before you screw the cover back on. Don't overtighten the four screws.



CLEANING CARBS (LADDER106)

The CV carb throttle cables are not directly connected to the carb slides. Instead, they operate a pair of butterfly valves downstream (as the air flows) from the slides.

It sounds to me as though the slides (or maybe one of the slides) is not opening. This may be because the needle is physically stuck into the needle jet with varnish (unlikely with all the seafoam you've used but still possible) - or - one of the slide diaphragms is torn, cracked and/or has a hole in it. This prevents negative pressure above the diaphragm from lifting the slides.

Here's what I'd do:

Before pulling the carbs completely, just remove the tank and then remove the carb tops. You'll see the diaphragms underneath. Lift the diaphragms GENTLY and the slides will come up. If you feel any resistance, stop pulling on the diaphragm and find a way to lift the slide directly (more in the center). You don't want to tear a diaphragm.

If the slides were stuck, look for a brownish ring of varnish around the needle. Clean this off and you should be OK.

The mains are pretty big holes and normally only clog if dirt or something large gets into the bowl.

You may have water in the bowl. This sounds unlikely if you're environment is warm but it is possible. Remove the drain screws from the bottom of the bowl (the flat screw head that you see on the bottom)

and turn the fuel on to flush the bowl out.Careful with the gasoline.....It's best to catch the fuel in a clear glass container. If there's water there you can see it settle to the bottom. The water may be in the tank rather than the carbs. Because the pilot jet is higher in the float bowl, the bike will run OK at idle but when it comes on the main it sucks up the water (since the main is deepest in the bowl)

On reassembly, pay attention to the position of the carb tops. There is one small "upward dent" in the carb top next to a screw position. This dent has to be placed over the bleed hole in the carb body (you'll see it with the top off) or you're in trouble.

Also, have you looked at the inside of your air cleaner. Many times small critters set up house inside an airbox bringing in all kinds of lint weeds etc to make a nest. You may have a blocked air filter and not know it. Odd....but it happens.

Use the JIS screwdriver or you'll be hating life.

Palak,

The air ducts are routinely mismanged. They fit well when don'e correctly but can be left open if one is not careful at reassembly.

I'm sure that the airbox leakage was at least partially responsible for your poor running.

Did the bike run well before you shut it down for that long period of storage?

The crankcase vents into the airbox so, yes, you will get some oil in there.

There is a drain line at the bottom of the airbox with a section of clear (yours is probably brown or at least yellow by now) in the lower section. There should be a round plug on the end of the tube. The tube is about 10mm I.D. The theory is that you see oil and condensation building up in the clear part, then pull the drain to get rid of it.

Anyways, a bit of oil inside the airbox is normal.

I don't find it necessary to remove the rear coils to get the carbs out.

First remove the throttle cables. You don't have to loosen the adjusters on the cable ends. All you have to do is remove the two phillips head screw holding the plate to which the cable ends attach to the carbs. This will give you enough slack to remove the cable ends from the carbs.

Then remove the choke (enrichener) cables. Be careful here. You can gently slide the rubber boots back

and then reach in with the end of a 10mm open-end wrench. The black pieces screwed into the carbs are PLASTIC. They should thread out without too much resistance. They are soft and easy to round-off or break so be careful.

Once the cables are disconnected, loosen the clamps and rock the carbs back and forth while putting some upward pressure on the carb assembly. The carbs will eventually pop off the rubber tubes.

Once the carbs are off the tubes, move them up while rotating them anti-clockwise (as seen when straddling the bike facing forward) to slide them out from between the frame tubes.

TIP1: If the carbs don't come out of their rubber boots easily (remember they've been there for quite some time and are very happy just staying there). Find a heat gun or very quietly steal your wifes blow dryer. Blow hot air on the tubes to make them more plyable and try again.

TIP 2: Do NOT return the blow dryer to the bathroom with greasy hand prints on the handle or you are BUSTED. She won't want to use the dryer again and you'll be buying her another....but you will have one for the shop now.

Use TIP 1 before trying to pry the carbs up with any kind of tool. This is usually "a bad thing".

If you're going into the carbs, I'd advise replacing the pilots all-together. Sudco may have replacements and they are in So. Cal so shipping should be really fast.

Take some photos of your project so we can all get involved.

I'd replace the pilots because the holes are so tiny, I'm never certain that whatever chemical I'm using (seaform, carb cleaner, etc) has actually penetrated into the jet and removed the crud enough to take the jet out to it's standard diameter. A pilot jet is about the size of the tiny lead refills for the mechanical pencils.

The main jets are about the diameter of paper clip wire or larger.

The mains can more easily be cleaned if clogged and are much more difficult to clog in the first place.

In general you do not want to "clean" a jet by shoving something through it.

You'll see what I mean when you get the pilot jets out.....tiny tiny opening.

In short, they are inexpensive enough to just replace and be certain that the jet diameter is correct.

Your bike spends a lot of time running on the pilots and these should be as accurate as possible.

The only real wear in the carb jets occurs between the needle and the needle jet (the tube the needle slide into). Intake pulses make the needle vibrate forwards and backwards as the pressure changes. On

really old carbs (or a big single cylinder bike like my DR750) you can actually see the needle jets get "egg" shaped and the needle have a worn or thin section.

If you see this, those parts should be replaced.

Specifications

Fuel

Grade	Unleaded, minimum 91 RON (Research Octane Number)
Fuel tank capacity	
XL600V models	18 litres
XL650V models	19.6 litres
XRV750-L to N (1990 to 1992) models	24 litres
XRV750-P models onward (1993-on)	23 litres
Fuel tank reserve capacity	
XL600V models	3.5 litres
XL650V models	3.8 litres
XRV750-L to N (1990 to 1992) models	warning light system
XRV750-P models onward (1993-on)	5.1 litres

Carburettor adjustments

Pilot screw setting (turns out)	
XL600V-H and J (1987 and 1988) models	2 ½
XL600V-K to P (1989 to 1993) models	2 ½
XL600V-R to T (1994 to 1996) models	1 ½
XL600V-V to X (1997 to 1999) models	2 ½
XL650V models	3
XRV750-L to N (1990 to 1992) models	2 ½
XRV750-P to S (1993 to 1995) models	2 ½
XRV750-T models onward (1996-on)	2 ½
Float height	
XL600V, XL650V, XRV750-L to N (1990 to 1992) models	7.0 mm
XRV750-P models onward (1993-on)	13.7 mm
Idle speed	see Chapter 1
Synchronisation vacuum range	see Chapter 1

Float height = 7 mm

Pilot screw = 2 1/2 turns? (a little fuzzy)

"But make sure you get them prior to break them!"

I always keep some instock. For what it is worth, the TRANSALP Carb Insulators are a bit pricey. I had a set for a Hawk GT650 and found that they are indentical but only lack a small molded tab on the outside to help positon the clamp I think? Anyway, they work perfect and are much cheaper than the TRANSALP counterpart. I just checked www.cheapcycleparts.com and the carb connector tubes for a 90 NT650 (17253-MBL-600) and a 90 TRANSALP (17258-MM9-670, 17259-MM9-670) were basically the same price - around \$11 each

Posted by **mas335**

The source that I use has about a \$4.50 cost difference between the two? Maybe I need to switch sources. The bottom line is both will work on the TRANSALP.

good to know - thanks MAS335

Like brass that has been near (or in) the ocean. There's no real way to tell how much on the ID of the pilot jet has been affected....that's why I recommended replacement. Might as well get the #40s. nitrile, neoprene, vinyl, and others all quickly succumb

And THAT is why you have to keep all O-rings and seals well away from this crap. Also remember that there is a seal in the carb that you can't really remove (well not without a lot of work) and that's the one that seals the throttle/butterfly valve shaft. Keep the "Toon Dip" away from this part too.
carb stuff

<http://www.nrp-carbs.co.uk/index.htm>

<http://www.motorcyclecarbs.com/Honda...P15673C831.cfm>

The carb to cylinder head connectors for the NT 650 are p/n 16211-MN8-750 @ \$10.07 each. The TRANSALP-specific p/n is 16211-MAW-600 @ \$14 each.

Buy new complete vacuum pistons. These are priced at about \$95 each on cheapcycleparts.com. FYI - I emailed cheapcycleparts.com and asked them if the Vacuum Pistons/Diaphragms (p/n 16111-MF5-841) for our 89-90 TA's were still available and they replied back confirming that they were. The question of whether this means that Honda is still producing them or that there is just still stock available, remains unanswered.

The 1986 VT500C Shadow uses the same slide diaphragm as the TA

CARB DIAPHRAMS:

(I have been told the GL1200 diaphragms fit perfectly)

LADDER106 ON CARB DIAPHRAM REPAIR AND CRITICAL NOTE ON NEEDLES:

I found a small hole (about the size of the carb needle) in both carb diaphragms.

Luckily, I got a spare set of carbs off a low mileage TA a few years ago. Two new(ish) slides and diaphragms installed....bike runs just fine. I really didn't notice much different in performance between the two. I guess the hole has to get a bit larger before it starts to affect how well the slide raises.

My bike is at about 60,000 right now.

If your mileage is similar, taking a look at the carb diaphragms is probably a good idea. You can do this without removing the carbs so it's not difficle. Just pay attention to get the lids back on the correct way.

Ray

Really.....no joke.

Here's the problem. I'm rebuilding the carbs after finding the torn and deteriorating diaphragms and fixing that.

I'm transferring the needles and springs into the new(er) slides and I find....

DIFFERENT NEEDLES

One needle is labeled 7 Z B the other 7 Z C.

So - for several thousand TRANSALP points.....Who knows why they are different..

.....and.....

.....more importantly.....

WHICH NEEDLE GOES INTO WHICH CARB ??

Both the Honda Manual and the Haynes Manual say nothing about this difference.

Since I didn't know, I spent a warm afternoon changing needle combinations. The bike doesn't seem to want to tell me it likes one combination better than the other. 🤔

TRANSALP points are only redeemable for bragging rights.

Solve this problem and we change your screen name to

TRANSALP - _____

Guru

Maven

God

Sensei

Master

Scholar

Doctor

.....err.....guy

Something tells me I am going to regret answering this. Per Honda's part numbers the 7ZC goes in the rear cylinder carb. I noticed this feature a long time ago and was always surprised that the manual says nothing about the differences.

I think Showkey is the man to investigate why the differences. We have had discussions about one needle running richer than the other and I think the reasoning behind it was to help cool the rear cylinder since it does not get as much air flow to help cool it?

I asked Bob about this once before but caught him on vacation and never heard back from him.

I guess with an answer like this I only get half the points and I am not smarter than a 5th grader.

I thought the richer of the two would go into the rear since Honda ran a richer main there for a few models. The KTM guys say that the rear cylinder on their twins is jetted just a bit richer as well. Seems odd given that the bike is water cooled, but, there you have it.

Also, searching through the carb catalogs the Keihin needles get richer as the letters progress up the alphabet with "A" being leanest, etc. So it seemed logical that the 7ZC was richer than the 7ZB.

But it's comforting knowing that someone who's taken apart more TA carbs than I confirms this.....Thanks again, MAS335

So for anyone else out there messing about with their TA carbs here are a few pointers that you'll only find on this list.

1. At 60,000 miles check your diaphragms for cracks and small holes.
2. The slide needles are DIFFERENT. Don't mix them up
3. If you ignore the above (or a PO has ignored this for you)
4. The richer (further up the alphabet) needle goes in the REAR cylinder.
5. "Palak" reports good results from repairing diaphragm tears with HONDABOND. This might be a good thing to have on a trip or just in general with your tool stuff.

Next on the "TO DO" list is to find an inexpensive source for new carb slides. All I've found is about \$135.00 so far.

Well I am just glad I could help, this site has helped me learn my way around these bikes more than you know.

For anyone who will be inspecting their Carb needles the numbers are at the top just under the shoulder. I could not read them without a magnifying glass, very tiny numbers.

Regarding the slides, do you just need the rubber part or the entire slide? A few months back there was someone on ebay selling the only the diaphragm sections in a set of 6, they were not cheap. I would split them with someone but I didn't want to experiment with the investment of 6. Apparently they just slide off of the piston. Haven't looked for them, maybe they are still around on ebay, don't remember the user's ID.

I experimented with a "off the shelf" flexible "patch" and my impression was promising but have not really tested it out. I think a properly cleaned surface is the key which I did not do, just wanted to test the "flexability" aspects. If the crack is near the base this idea won't work.

MAS335 additional CARB DATA:

For what it is worth I am running two non TRANSALP dedicated needles in a TRANSALP and the bike runs better, stronger and with a smoother more linear engine response with no hesitation, when you roll on the throttle the engine revs on demand anywhere in the power band, the strongest running

TRANSALP I have owned.

Fuel mileage is down about 3-4 mpg but well worth it and since I switched to the "L106" Uni foam filter mod the bike starts better and seems to run better, clearly the engine is breathing easier.

I have no idea where these needles came from, probably part of a "parts deal" I purchased. Maybe from a Dynojet kit, I really can't say but the needles are 8BE and 8BH, they are obviously much more slender than standard needles and I am using them with 40/120 jets. The only downside if you want to call it that is on cold start up, although it fires up immediately it wants very very little choke.

MORE CARB DATA (Jeff@TheQuadShop):

Is that just the float bowl rubber gaskets or a kit?

Honda only sold gasket kits with the float bowl gasket and o-rings, the float gasket was not sold as a separate part.

16010-MR1-691 should or might work, in the US it is the superceded part for the NT650 Hawk carb kit, in stock and available, but as Dan stated a little \$ at about \$40.00. Most likely some of the o-rings in the kit will be different if the gaskets are the same?

16010-MM9-670 original TA part supercedes to several discontinued part #.

The float bowl on a TA was used on other bikes which makes you think the gasket would be the same??? A few bikes that might be the same float gasket might be the 84-85 VF750F, VF700C 84-87, V65 83-85 there are most likely others but we would still be looking at \$\$ Honda gasket kits unless the afterMarket made gaskets for the more common models???

Either way it would be \$80 gamble but a good one since the Hawk and TA carbs are very very close to each other as others have proven by interchanging.

CARBURATOR ISSUES FROM (LADDER106):

Those two black boxes are the "Secondary Air Filters" listed in the service manual. They provide filtered air to the area below the carb diaphragms.

Be glad they are there.

I've rebuilt many carbs that were very dirty in this area because the vent lines that all the CV carbs have were just run to outside air. Dirt and dust here will find its way past the carb slide and into the engine.

The TA is the only bike I've seen that provides filtration in this area. The problem is.....most guys do not know what these filters do and have never opened the boxes. When you do, you'll find a small piece of gray foam. This is how it came from Honda.

Now, our bikes are so old, most of this foam has long since degraded into gray/black dust. You'll now find the dust (along with other dirt) in the area under the carb diaphragm slowly working its way into the engine.

What I did with this is to go to the local lawnmower shop, got a green foam air filter, cut it to shape to fit into the boxes, cleaned the carbs and lines, oiled the new foam and clipped it into the boxes.

Carlos, there is no reason that you couldn't plumb both lines into one filtered box. You could also run one or both line into one of those small K&N end-line filters and put it anywhere on the bike.

There is not a lot of air that moves "Through" these filters....air just goes back and forth as the slides and diaphragms go up and down.

Now....those black plugs.

The first place I'd look is the "choke" plunger ends. Each end has a small neoprene seal that keeps the enrichening circuit on the carb closed. As old as our bikes are, this seal gets dry and cracked and the richer "start" circuit of the carb stays partially open. You can run the bike with this carb circuit open or slightly open and the bike will run OK....the plugs will be a bit black and the MPG will suffer but the bike will run. Probably the dual plug CDI ignition has a lot to do with how tolerant the bike is of mixture misadjustment.

So, check your "choke" cables to make sure the plungers are closing completely and check the little seals on the end of the brass choke plungers. Be very careful removing the plungers. They are held into the carbs with a soft plastic fitting (10mm hex). It's difficult to get a wrench in here and very easy to round off the hex points. Go slowly and carefully. Do not put any sideways pressure on these fittings since they also break easily. They are 20 year old plastic that have gone through many heat-cycles.

After that, its important to know that carbs do "wear". Wear usually is seen in the needle and needle jet. As the bike runs and the intake pulses, the needle gets shoved back the forth inside the carb. Over time this will physically wear a small groove in the needle and/or wear the needle jet (the brass jet the needle goes into) into an oval shaped hole.

Look here for wear also and replace jets as necessary. Needles will be harder to replace due to parts availability.

A word on the carb boots and assembly:

I found that it is best to put the carb and air box system together in this order.

1. Remove the airbox mounting bolts from the frame (there is one bolt you'll miss that is under the rear fender. The airbox should be "free floating" and able to move in the frame. This is a KEY POINT.
2. Fit the carbs back onto the engine. Align and tighten the 4 clamps on the boots/sleeves that hold the carbs in place. Pay particular attention to the notches that are used to align these parts.
3. Fit the carb cables and choke cables.
4. Fit the hard plastic air tube that runs under the tank. Tighten the clamps between the tube and the carb first.
5. Fit and tighten the clamps between the air tube and the air box. NOTE: You will most likely have to push the airbox forward to make the connection between the tube and airbox fit well.
6. At this point all the clamps are tight and you can now push the airbox gently back and align and tighten all the air box mounting bolts.

This method is a bit tedious but it's the only way I found to make certain that there is no leak between the air tube and carb or the carb and the engine. The system is a bit complicated and leaving the air box in place makes fitting the air tube back onto the carbs difficult and inaccurate.

Another tip:

Probably not a problem for Carlos but for the reast of us with a real winter (well.....an almost real winter here in California).....a blow dryer or heat gun is your friend when dealing with these carb boots and parts. Getting them warm makes them MUCH easier to work with.

Remember you're working around gasoline so HOT is a relative term.

WAYS ON CARBS:

Your pilot jets are either clogged or their flow is being reduced as a result of the bike sitting for long periods and fuel drying and turning to jelly or varnish inside the jet, thereby reducing its size. (Or the bike came from someone who lives at high altituda and the pilot jets have been replaced by smaller ones or the mixture screws are turned way lean....but I'm betting on my first guess)

The bike is running lean on the pilot (idle and just off-idle) circuit. That's why it's better with the "choke" out. It's not really a "choke" in the correct definition in that it doesn't choke or reduce the amount of AIR entering the carbs. What it does do is open another circuit in the carb most correctly called the "enrichening circuit"makes the bike run richer when a richer mixture is called for....on startup when cold.

Given that it runs better with the enrichener circuit engaged, I'm saying it's lean on the pilots. That means they are either clogged or set up for a bike that lives at high altitude.

What part of Arizona did the bike come from?

Most older used bikes that have been idle will benefit from fitting new pilot jets. You can try to clean the old ones but the holes are very very small....DO NOT push wire or other objects into the jets. Chemical cleaners may work but there is very little chance that the chemical will get into the holes to actually clean anything.

The only way to know for certain is to replace the jets. Try Carb Parts warehouse or SUDCO for online jets....sometimes they have a much better selection than any shop.

The only other problem with the TA carb is that some of the diaphragms that lift the slide are getting old and some have cracked. That will result in a bike that starts and runs OK at idle and just above but will have a huge "flat spot" at about 3500 4000 rpm when the slides are starting to raise (cause they won't.....raise that is).

Also.....while you're there (under the tank with the carbs off) check the TAs secondary air filters. They live in two small black boxes near the carbs. There is supposed to be a small foam filter inside each box. I'd bet you have nothing there but bits of foam and gray dust (from the decomposed foam). Go to a mower shop and get any cheap foam air cleaner, cut to fit the boxes, lightly oil, and be happy.

.....any coffee that doesn't come from France is OK with me

.....when putting the carbs back on the bike be careful when fitting the rubber boots that join the carbs to the plastic air tube that comes up from the airbox.

The boots have to be turned to the correct angle to line up and seal. You DO NOT want an air leak here. This is not the job to tackle when you're tired or have had a few beers.

Some people have had good luck soaking the rubber in hot water for a while if they seem hard and unwilling to seal or conform to the carb.

Another caution.....

Stay away from the aerosol Carb Cleanser you can buy at the auto parts stores.

I tried this stuff (don't remember the brand but I think it was a white can with black and white lettering) and it turned all the "O" rings and seals in the carb soft and mushy. When I tried to reassemble the carb, the seals and O rings had somehow grown and would not fit back into the spaces they had come from. Had to order another rebuild kit and wait a few weeks to get the bike running again.

CARB SYNCING:

The carb sync tool works great. I've found that the TA runs best when the carbs are synced at idle or just barely above. For some reason (maybe the wierd TA intact tract) the sync changes at larger throttle openings. I've synced at 4000 rpm only to be unhappy with increased vibes under load like when climbing a hill.

Best smoothness came with the carbs done at idle....your mileage may vary. Build up a small plastic fuel bottle so you can completely remove the tank when doing the carbs. My wife got real bored holding the tank to the left of the bike while I fooled around with the sync screw. Oh...you'll also need a phillips screwdriver #2 (I think) with a long narrow shaft to reach the screw.

On antifreeze/coolant, an old Honda mechanic (like been working on them since the CB model days) says that Honda cooland or a product called "Coolinall" or similar does best. He says that the weak link in the water pumps is the ceramic seal and the Honda brand stuff does best with lubing this seal and letting water pumps last. For the relatively insignificant savings in buyin the auto stuff I've listened to him and have had good luck with water pumps on the TA (36,000) and my DRZ (6500). The DRZ by the way has a rep for leaking water pumps.

Ray Stedronsky
Davis, CA

Originally Posted by **wdeTA**

I got a complete used carb off the list a while back to have a spare since I've had some carb issues in the past. I went to put it on just to try it out and discovered it has an extra connection (appears to be fuel)

that my current carb doesn't have. In the photo, the black connection goes to the fuel tank. The brass connection next to it is the mystery one. I see it in the TA manual, but it isn't connected to anything in the pics. Anyone know where this connects to, or if it even does connect to anything. I suspect it might have something to do with CA emissions stuff that isn't on my TA.



LADDER106:

Correct, it is a fuel vapor line. If you don't have a Citizens Republic of Kaleeforneea bike (or if you've ripped off all the cannister crap) you just plug this off. You can find nice rubber caps or you can use a bit of fuel line, a clamp and a M6 screw to seal it. There is also one other smaller diameter line that must be sealed off to prevent air leakage.

CARBURATOR SUGGESTIONS:

I would question the need to rebuild the carbsif the bike is running good??? Poor idle, flat spot, misfire???

HONDA lists a gasket set for the TRANSALP that has o-rings and gaskets NO jets, no needle and seats part # 16010-MM9-670 float valve (needle and seat) set # 16011-KV0-672.

There are only a couple of moving parts in the carbs the needle and seat is one and available from HONDA. If they was replaced a float bowl gasket is the only other part needed. But unless the needles are not sealing, no need to replace. Most people agree the HONDA needle and seats are better than aferMarket.

Dirt is the worst enemy both from the air and fuel.....both can be cleaned with few parts needed.....maybe an o-rings and gasket again. Jets again cleaned in all but the worst cases. If the bike is running jets are not a problem. The carb slide diaphragms last years and are very expensive\$\$\$\$\$.....don't fix them unless they really "broken". And again if it running good the diaphragms are good.

Maybe the best maintenance item during a winter "tune-up" with out carb rebuilding is carb synchronization..... big bang for the buck. If you were to do a "carb overhaul" carb sync is a critical step.

CDI RECONFIGURATION:

Alternate CDI unit to purchase:

ARGENTINA CDI's

I ordered two units from an E-bay vendor (J & J Karts) for approximately US\$104 each.

The units were ordered at the same time and both came packaged as "Ricks Motorsports Electronics, Inc" Part number 15-611

and each one had a label stuck on the side with the same info.

"CDI 1553"

"Honda"

"TRANSALP"

"x1600v"

"Industra Argentina"



Modify this BEFORE it becomes a problem!

The TRANSALP's engine is fired by a pair of CDI modules located underneath the seat. With the seat removed you will see a pair of black plastic boxes, each approximately the size of a pack of cigarettes, nestled between the frame rails. If these boxes are fixed in the factory configuration (see below) you will need to purchase the relocation kit. If they are left in this position, most all of them will fail due to the connectors resting against the underside of the seat pan. The constant vibration eventually damages them internally and will leave you running on only one cylinder. Replacement CDI modules run

about \$160 each.



FACTORY CONFIGURATION
MM9-010



CORRECT CONFIGURATION USING HONDA relocation kit: 30401-

CDI UNIT: 30410-MS8-610

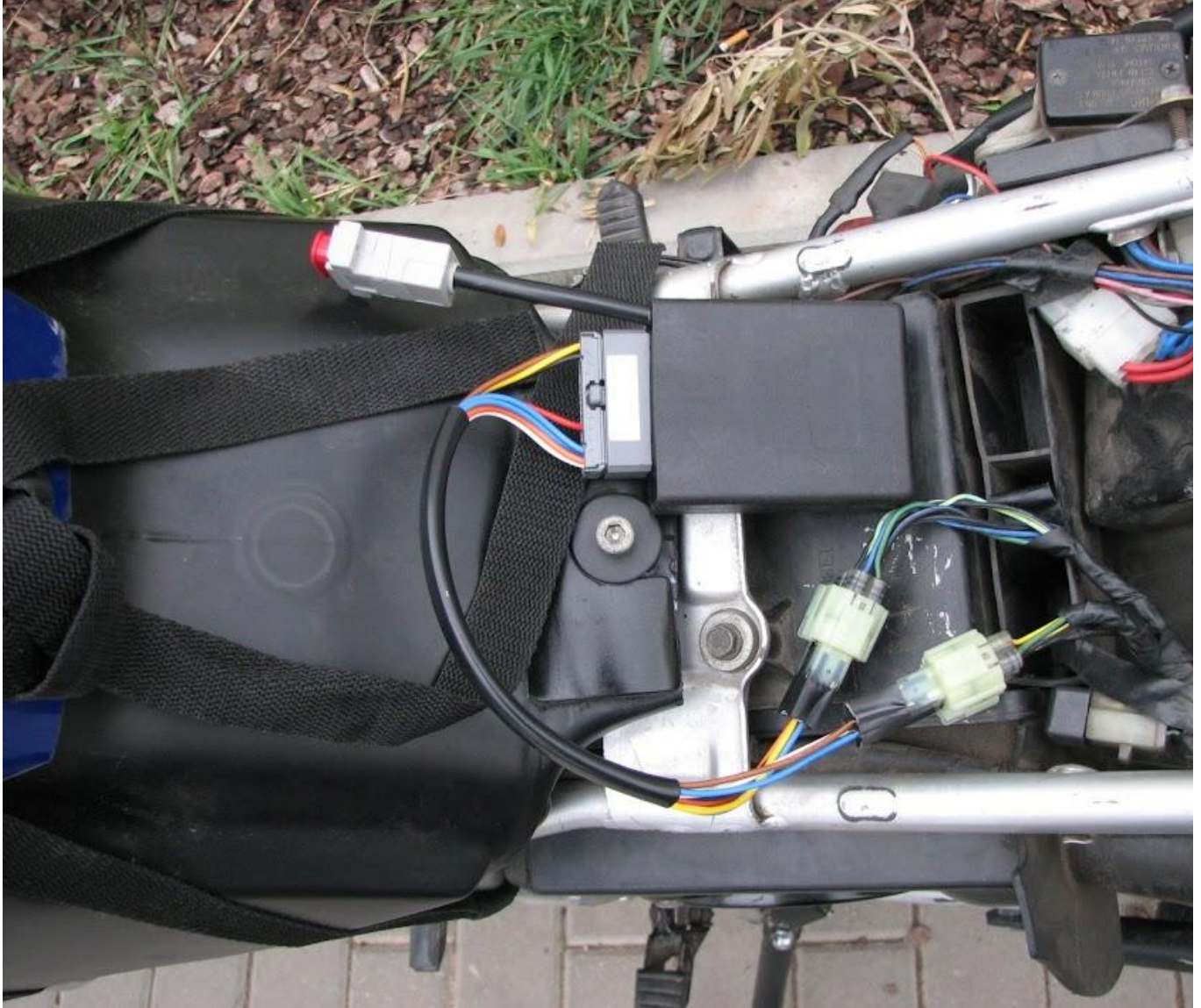
I found that the CDI mounts have not been upgraded so here are the before and after pictures for those who haven't done this. I tried a couple of positions before I settled on this one. This keeps the wires the neatest and safest. The front CDI is the one with Blue/Black and Blue/Black wires.....

CDI SINGLE UNIT: (explain)

Hi,

i'm about to upgrade CDIs for my TRANSALP. The unit of choice is [DC-CDI-P2](#) from **Ignitech.cz**. Question is how is that unit protected from water. I don't want a unit to die because of "not indoor usage". What are the opinions of owners of that unit?

Here is the photo of a unit i'm thinking about. Serial port (for unit programming) sticking out of the box doesn't look watertight at all. That's my concern



Thanks

My 87 was outfitted with an ignitech when I bought it. I've been sorting out some other issues so haven't had much seat time and cannot comment on it yet. However, one thing to consider if you get it - take the stock cdi holder, cut the middle section out (piece of rubber that would normally separate the two units) and the cdi can be placed horizontal to keep the connectors away from the seat. If you're concerned about the serial port cap letting water in, give it a few wraps with electrical tape or zip tie a small piece of sandwich bag over the port.

cheers

Rick

CHAIN LENGTH (LADDER106):

You'll be fine with the 120 and the 16T CS sprocket.

I got a 130 link chain too and just cut off what I didn't need. Dunno the number of links I removed. Just line up the CS sprocket center, swingarm center and rear axle and cut off the appropriate amount of chain so it's not too tight at that point....you know the drill..

I've been running a 16 up front for a few years now. The only time I put on anything smaller is when I know for certain the ride will involve some single track with mud or fairly serious hills.

For everyday/gravel road/mountain road/dirt two lane tracks etc the 16 does just fine.

No problem getting away from a light

At 80 your RPM will be right around 6000 depending on tire choices. The torque and hp curves for the stock TA line up right around 6000 so the engine is in the "meat" of the powerband here. You can still open it up to go faster for passing but it will handle slight hills and headwinds well at that RPM.

The 16 does make it harder/impossible to pull the front end up over trail obstacles (not that my TA with the AT tank, 6.5 gal of fuel, tank bag, AT bodywork etc is easily going to do that) so you have to ride accordingly.

I've never tried the 17 (I'd like to) but I'd think that it would be good for "economy" down around 60 or so but the engine might grunt a bit spinning slower at higher speeds. It probably won't pull max rpm on top with this gearing particularly if you've got bags and gear on board to spoil any aerodynamics the bike might have (laugh away) but that's not what the TA is all about anyway.

The nice thing about changing CS sprockets is that normally you don't hafta mess with chain links/length. There's usually enough slack to just move the rear up into the arm.....CAUTION.....pay attention that you allow enough chain slack in the TA. A lot of people run their chains too tight and damage the output shaft bearing (usually when doing sprocket mods or running with a touring load for long distances).

The TA is easy to change sprockets on with just two M6 bolts to remove to slip the sprocket off the shaft. You can do this easily in mid ride (well after you've stopped for a few minutes).

Just off the top o' my head, there doesn't seem to be any interference or space problems with a larger CS sprocket on the TA. I don't remember thinking that the 16 comes really close to some hard part. I'd hafta take the cover off to confirm this.

Many bikes, for some reason, use about a 3:1 final drive ratio so, yeah, in most cases moving up or down one tooth in front is about equal to 3 teeth in the back. Not a hard and fast rule though.

CHAIN TENSION (LADDER106):

Careful with the chain tension, mate.

Err a bit on the loose side. The manual makes it just a bit tighter than I would like.

If you want to get it perfect, put the bike up on an stand and remove the rear suspension link bolt to allow the swingarm to move independent of the rear spring and shock.

Put blocks under the rear wheel until the center-lines of the CS sprocket, swingarm pivot and rear axle are all in a line. (a piece of string will insure you have this right)

Now look at chain tension.

This is the point at which tension will be the tightest. Suspension movement in either direction from here will only loosen the tension.

I set this up so the chain is snug but not tight right at this point. The rear wheel and chain should move smoothly when turned with your hand.

Reconnect everything and then measure your slack as the bike sits normally like you would at a fuel stop. Record or remember (yeah, right) this measurement. You can then take a quick look when getting fuel or lubing the chain and know your slack is OK.

Some guys have had their slack adjusted way too tight (like a street bike) and have had wear problems at the output shaft splines and/or the output shaft bearing. Lots of shops don't understand that the TA has lots more rear wheel travel than a street bike and should be set up more like a MX bike with lots of slack as the bike sits on the sidestand.

SHOP CREATED CHAIN OILER (LADDER106):**Bodging**

And speaking of "a lot less than \$200".....a nice smooth segue.....right?

I finished my chainoiler bodge...more of a bodge really rather than a mod.

I put 200 miles on it today and it works surprisingly well. What it ISN'T is pretty.

I just couldn't see spending about \$200 for a bottle and tubing although the "computerized" system was interesting..... so I started poking around the hardware store. I spotted some small plastic valves for drip irrigation systems and thought I knew of a spot on the TA (and the AT) swingarm where a diverter or wye (Y) would go. The only thing I needed was a reservoir. I found one cheap...but you need to see the photos for this.

Here goes:

The diverter or wye was built from small block of aluminium that I had lying around. I carefully drilled a single hole into one side and then carefully lined up two holes on the other side to form a "Y". I actually got all the holes to line up and didn't drill completely through the block....a rather amazing piece of engineering.....for me.

Got a bit of 1/8 in copper tubing and epoxied three bits into the aluminium block. Drilled a 6mm hole and used the front bolt of the sprocket guard to hold it up. I had to use a long M6 bolt to extend through the sprocket guard hole. Spaced the block with a nylon spacer and bent the two copper tubes out to clear the sprocket and then back together again to get close.



On the two outlet pipes I cut some plastic tubing from the pickup tube from an old Windex bottle (the tube that goes down into the liquid). The plastic is "stiffish"....flexible but will hold a shape.....you can kinda form it with a hair dryer. I used this to extend the copper tubing down to the point that almost touched the chain to a point just after the chain and sprocket mesh. No close-up photo so use your imagination. It looks alot like the Scottoiler thingie.

Next I ran small tubing up to the drip irrigation valve. I used two valves. One valve just upstream of the diverter on the swingarm. I use this to turn the system on and off since I didn't want to disturb the placement of the flow regulation valve and I thought that if oil will drain out from the valve, this will make less of a mess on the shop floor when the bike it just sitting.



I ran the tubing forward and turned about at the place the silly sidestand indicator switch used to be. Then the tubing runs up the angled frame tube that runs up and back to the rear of the frame.

OK.....laugh away.....this part of the bike is looking more and more "Good Housekeeping" The coolant overflow tank was relocated when I had to make room for the shock reservoir on the AT shock. Now with the addition of the Ketsup bottle (yes, mustard or mayo will work too for those of you who will have to ask) it looks like a grocery store behind the left side cover.



The Ketsup bottle fits perfectly. I drilled and added a vent/fill port. I discovered that the cap to the Ketsup bottle must be sealed to the bottle with silicon. Otherwise the oil oozes out between the cap and bottle and drips down the frame.

To fill I used a large syringe with a piece of tubing on the end that fits over the vent tube. Squeeze the air out of the bottle, insert vent tube into syringe and squeeze in oil. I'm using chain saw bar oil...Husqvarna brand cause, well, at least that part is motorcycle related.

The second valve you see on the frame diagonal tube is the one I use to regulate flow. The valves are "quarter turn" so regulating flow is a bit sensitive but can be done while riding.

The photos taken were after a 200 mile ride with about 15 miles of graded dirt and 5 miles of gravel roads. The dirt was dry but it wasn't very dusty. The chain wasn't wiped down but the valve and tubing was to make the photo better defined.

What I mainly notice with this system is that the chain seems to stay lots cleaner than with spray lube. With the spray, after dirt or gravel, the chain would be quite a bit "goopier" with the dirt and the lube mixed. The rear rim had maybe 25% more oil spots on it than spray lube so that may be a disadvantage if dirty rims bug you.

On the whole I'm very pleased. Next thing I'm thinking of is inserting a small carb jet into the line to reduce flow so the adjustment valve isn't so sensitive. Right now wide open produces a drop of oil about every 5 sec. I'm trying for about one drop every 60-90 sec.

The guys with Scotttoilers say that the system is temperature sensitive so flow will most likely increase when the weather warms....so "jetting down" seems to make sense. I'll play with this the post what I find.

By the way...the ride today was great. A bit windy but spring is here!!

For those of you in N. Cal. If you haven't ridden Western Mine/Ida Clayton Road yet...give it a try. It's part dirt, bumpy and then narrow one-lane pavement. Perfect for Beasties.

COOLANT LEAKS AND CARBS (LADDER106)

My question: is it really necessary to drain the coolant and remove the carb(s) to replace the valve cover gasket for the rear cylinder?

Yep, it is.

Unless my memory has totally gone (always possible) there isn't enough room to remove the rear valve cover without also removing the rear chrome coolant tube that goes into the rear head. You could always pull the rear engine mounts (swingarm pivot) and see if the engine can drop down enough so the valve cover clears the frame but I haven't tried this yet as it seems to be as much work as pulling carbs and coolant.

So you get to drain the coolant.

You also get to replace the small O-ring that seals the chrome tube to the head. Yeah, I know, you don't have this part yet. Sorry but it's necessary. You can bodge the job by using some sealant on the old O-ring here but remember, all these seals are OLD. Carefully clean around this tube with a dental pick to

free up all the small gravel and dirt that sits on top of the seal, then hit it with compressed air to make sure all the crud is gone before pulling the tube.(DO THIS WHEN YOU CLEAN THE BIKE BEFORE YOU PULL THE VALVE COVER) Anything left will certainly fall into the cooling system.

If you got a top-end gasket set the coolant O-rings should be included. There should be 4 of them (the other two are for the chrome 90deg tubes coming out of the side of the cylinder wall)

Also strongly consider a small (a little goes a long, long way) thin coating of the gray very expensive non-drying silicone sealant that Honda and Suzuki sells on the valve cover gasket. This stuff is about \$20 (yeah, I know) a tube but worth it. Lasts a long long time and does the job right.

When we rebuilt Chris's bike this summer I used an afterMarket valve cover gasket (Honda part not available) and got to disassemble the bike and repeat the process cause the gasket still seeped a bit without any sealant.

If, while you're there, you decide to do both gaskets remember the valve cover with the large breather tube goes on the rear head (yes, I did that wrong too).

The "cup is half full" folks will point out that coolant is not forever and should be replaced every year or two for good water pump health. (Coolanol brand coolant has worked well for me over the years. The DRZ has a finicky water pump but I've not had a problem with it using this stuff.) Plus, think of all the fun you'll have getting that gasket to sit in the grooves and not get twisted and squeezed out in a corner. This job does not go well with beer.

This is also a good time to look closely at fuel lines and inspect carb diaphragms. Make certain the E10 fuels aren't turning your tubes to goo. When replacing the carbs warming up the tubes with a heat gun or hair dryer has worked well for me. Also a thin coating of grease around the carb lip will help things slip back on.

And....lastly, there is a procedure (probably only published here) to insure you get that nasty top air tube to seat correctly on the carbs and then mate up to the air box without leaking.

COOLANT ISSUE (IMPORTANT)

All HONDA bikes and cars need a non Silicates coolant.....silicates trash the water pump seal which causes water pump bearing failure. The water pump may or may not be your problem????? Water pumps are not known to be a big concern. Partially plugged radiator would be far more common.

CLUTCH REPLACEMENT (LADDER106):

For a clutch replacement you'll need:

The plates (both fiber and metal). 4 new clutch springs Buy parts specifically for the TRANSALP. (The TA has a different right plate with a thin circular spring to stop the clutch from juddering under certain conditions)

A new right side case gasket

Oil to refill (since you have to drain it)

A new oil pump drive chain. The chain lives under the clutch and stretches over time. It's cheap and replacing it when the clutch is out anyway it a good idea. It stretches and starts to hit the case. I've not heard of one failing but as it contacts the case it puts small aluminum filings into the oil and drives you nuts on oil changes because you'll swear the engine is on it's last legs.

27 or 24 mm socket (dont remember which and I loaned my service manual out....sorry)

Torque wrench

Two new exhaust pipe/cylinder head gaskets (copper rings)

A tool to hold the clutch basket while you remove the center nut. This is important !! Do not try to hold the clutch basket by prying on the spring "towers" with a bar or screwdriver. You WILL break a tower off and find yourself replacing the basket. This tool can be borrowed from a good shop or fabricated yourself with a bit of time and some steel bar stock. It should thread into at least two of the spring towers (all 4 is WAY better) and either bolt to the bike or be long enough (like 2-3 feet) to hand hold and provide leverage against the wrench removing the center nut....or both See photo: http://www.ta-deti.de/ta/pics/eddys_clutch_tool.jpg



A pneumatic or electrical impact wrench is a big help in loosening the center nut but not required. Make short "jabs" at the wrench mimicking the action of an impact wrench rather than applying one long heavy push. This loosens the nut better and keeps you from smacking your knuckles on the footpeg when the nut suddenly lets go.

To remove the right side case, you have to remove the exhaust pipes. The silencer can stay put. The front pipe separates from the silencer by the right peg. The rear pipe separates from the front at this point also. If your bike has a lot of rust here, pretreat the exhaust hardware with liquid wrench or some sort of bolt helper. Be prepared to replace this hardware if it's too far gone.

It's pretty straightforward. Drain the oil. Remove the pipes, Remove the right cover, Remove the springs. Install holder tool, yank the clutch plates and lay them out on cardboard in order. Replace the oil pump drive chain and reassemble the clutch following the order in which you removed it. Replace springs (strongly recommended since it's the springs that squeeze the clutch together to make the bike move.....I've seen quite a few clutches that were slipping because the springs were sacked rather than the plates gone) Replace gasket, case, oil.

If you have a Dremel tool (or want to spend a few hours with a file) look down into the exhaust pipes pretending you're a bunch of exhaust gas heading for the outside air. Note how restrictive those welds are right where the flange is welded onto the pipe at the point the pipe joins the head. Using patience and some prudent judgement, remove weld material to open up the pipe so the flow is less restricted...you can make the opening MUCH larger....be amazed how much smoother the bike runs at higher revs.

Reassemble exhaust system (metric stainless hardware is very nice here) Readjust new clutch and wheelie off into the sunset....Enjoy

D:

E:

ELECTRICAL INSTRUMENT LIGHTS TRANSALP speedometer (MAS335):

Yes, they take 168 bulbs. I would change them all while you are doing this. I found that just a drop of WD-40 around the base really helped in pulling these holders out. They have been stuck in place for 18 years and are mean.

One of the problems with the poor lighting is the design in just how the light gets from the bulb to the gauge face. It is transferred by a aluminum stand tube and light just "spills" over to the gauge. I wish I had tried to "open" the tube by removing some of the shielding. I think that would help more than anything else.

TURN SIGNAL SWITCHES:

I have fixed several of the turn signal mechanics on my Hondas including 3 TA's, CBR400, CBR250 and NX650. Usually all they need is to be taken a part, cleaned with contact cleaner and put back together using a little silicone grease. After 10 to 15 years the grease gets hard or dirty and the switches get stiff and then go flakey.

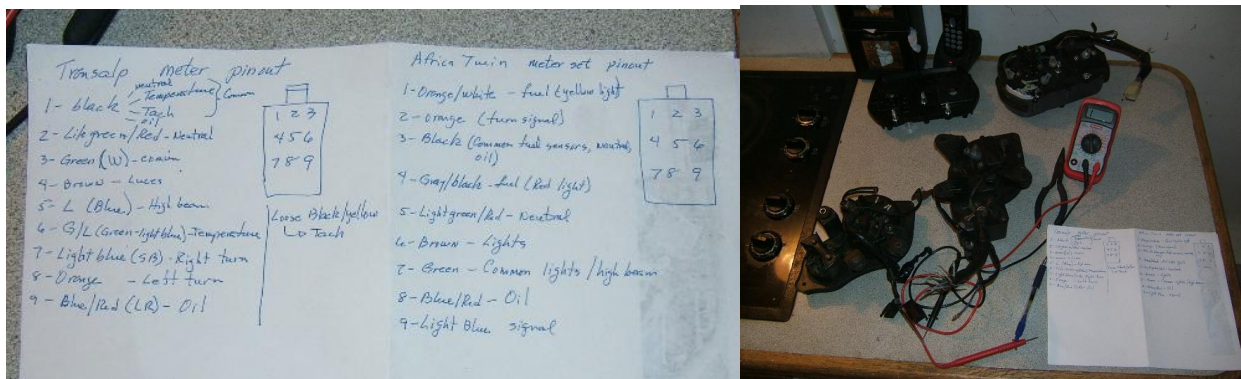
LADDER106 COMMENT: I'm certain that Honda did not use this switch gear on the TRANSALP exclusively.

In fact, the switch on my son's XR250L is identical (same shape, size color on the high beam switch, etc) to the one on my TA. While that doesn't necessarily mean that Honda still has new ones in the warehouse, it should expand your search on ebay and other wreckers so you can replace yours with a better part. If you can find an older parts guy whose been doing the job for 10 years or so (rare) I bet you could find a brand spankin' new one somewhere. **COMMENT:** The switchgear on my buddies XR650L is the same. I think the different part number accounts for a different wire lead length due to the handlebar variations among the bikes.

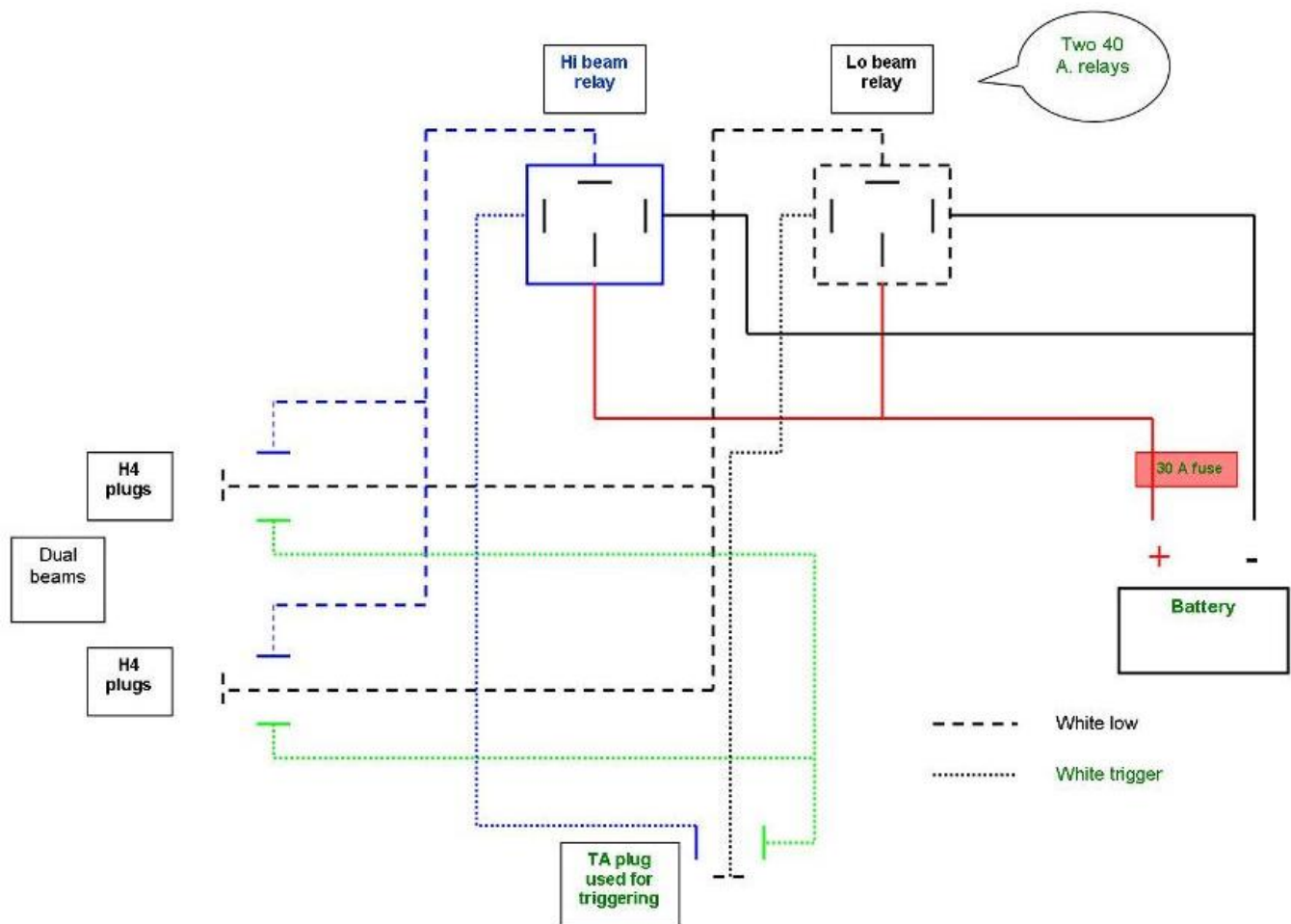
WIRE DIAGRAM FOR SWITCHES (LOCORIDER)

The not so good news is...

...that I had to redo the pinout on the plug....and extend some wires, etc...So, it wasn't a straight bolt on...



And after performing a delicate surgery, in a controlled environment...(kitchen counter)😄



(LADDER106 COMMENT TO CARLOS ON WIRING) Note, this is a TA to AT mod, but image is for the pin out.

Carlos, those are the same instruments as the RD04...they are separate also. It looks like you have all the wiring well in hand. In case you haven't discovered this - the wiring to the water temp. has to be reversed....at least is did on mine. When I first plugged it in the temp read full hot - kinda worried me for a minute. But then as the bike ran the temp gauge showed a lower temp. I reversed the two wires and it worked normally. Give it a try before you do anything though...yours might be different. Just wanted you to be ready for it.

LED DASH BULB REPLACEMENT (DSERIC):

I had a burnt out bulb in the dash so decided to switch to LEDs for lower power consumption and longevity. Here is the pics from my '98 TA:

The bulb on the left of center has the shield removed as it is a different size bulb and lower output.



Bulb shields were bent out a bit more to allow more light from the bulbs.



The final result. As bright if not a tad more than stock. Saved about 15 watts. Sorry for the blurred image.



These are the bulbs I used from www.superbrightleds.com:

ENGINE MOUNTING BOLT UPGRADE (LADDER106):

TA engine mount improvement

This doesn't really qualify as a mod, but here's how I spent the afternoon.

Working on my son's PD06, checking engine mounts and other things. Tried check tightness on front mount and got this:



Now this is about the 3rd time this has happened to one of our TRANSALPs and I finally got sick of it. These 8mm bolts are too long to do the job of an engine mount. Furthermore, the hole in the frame is just less than 9 mm so the bolts don't really fit snugly in the frame at all...rather they just rattle around. Now I realize that drawing the two mounting plate together will likely create enough friction to not allow any real movement, I'm not certain what happens here with vibration.

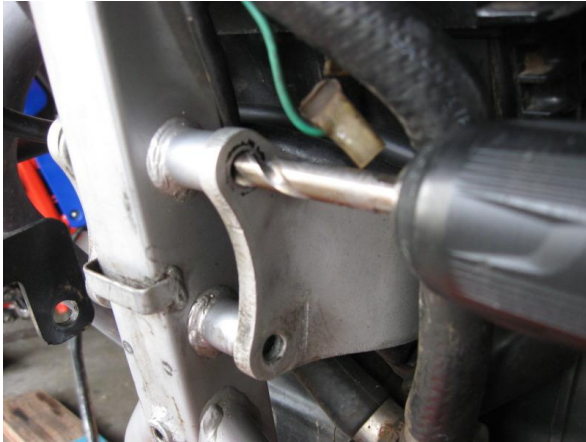
The bolt measures 7.7 mm



and the hole measures 8.4 (actually a bit larger since my calipers would not fit all the way inside.

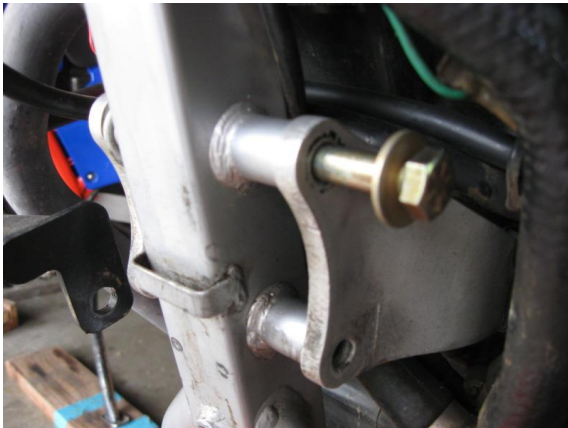
Now, a SAE 3/8 in bolt will measure 9.5mm but really most of the ones I found are 9.3. My 3/8 in. drill bit also measures 9.3.

So, it's time to loose about 1mm (dia) of metal from the front part of the frame. Center the lower mount with a tapered punch and proceed to drill out the top hole. Lots of oil and quite a bit of torque...but it really doesn't remove that much metal at all.

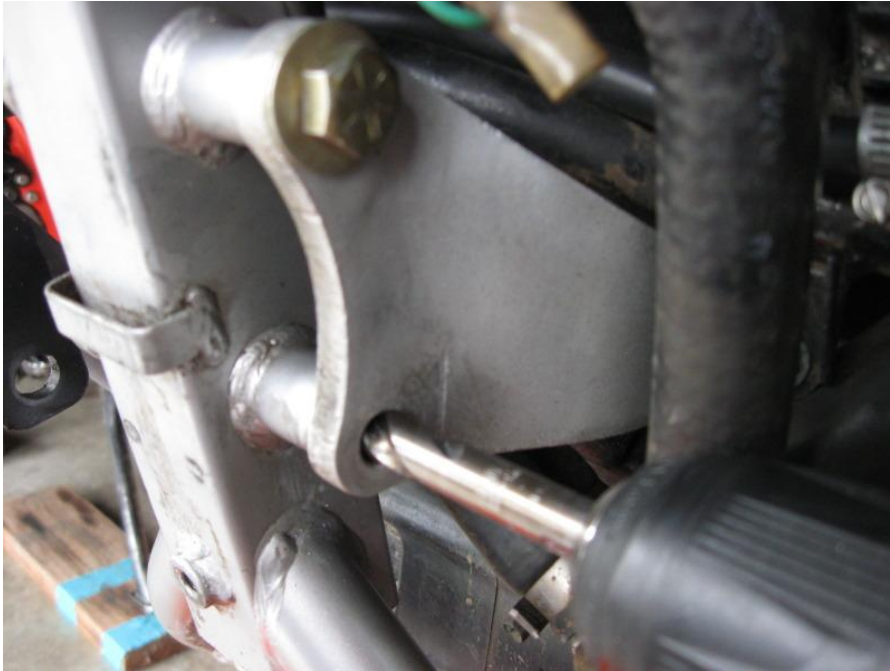


Ooops removed the punch before taking photo....

Lube and insert a nice Grade 8 SAE bolt.



Repeat on bottom hole:



Assemble:



Now the forward mount will actually do its job. You do have to break out the SAE tools to tighten this. But I don't see it loosening up anytime soon.

EXHAUST MOD WITH DRZ CAN (LADDER106):

DRZ400 exhaust can be grafted onto the TRANSALP

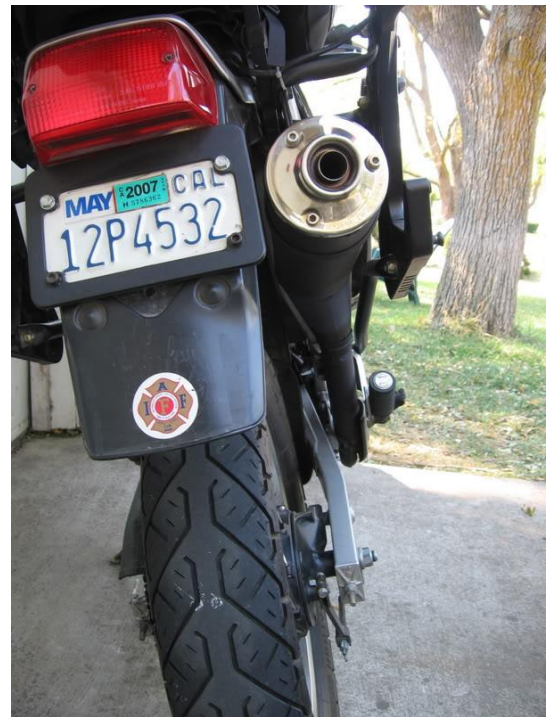
A while back I noticed my TA muffler was beginning to develop a "soft" spot on the inside down low in a corner. Removing the muffler and taping it on the shop floor produced a shower of rusty metal flakes.....slow death.

Forward to a few weeks ago.....while buying chainlube at a local repair shop I noticed a DRZ400 exhaust in the corner with other metal scrap. I asked the owner what his plans were for the piece. "Taking it out with the recycling.....want it?" was the reply. So I went home with a DRZ exhaust can on the back of the TA. Now, I've got a DRZ and often wondered if the can could be adapted to the TA...the angles looked about right....and the DRZ exhaust clamp fit right onto the TA head pipes....same diameter.

After playing around with trial fits, I cut out this section from the DRZ pipe:

This left me with the clamp end and the exhaust can end. I made a bracket to mount up the can and made a trip to the local muffler shop. A 9 inch straight piece of pipe was all I needed. The owner of the muffler shop dug out a 10 in piece from his scrap bin that fit over both ends of the DRZ pipe.

I bit of trimming, positioning, tacking and final welding left me with this:



To clear the rear suspension, the stock DRZ mounting tabs had to be removed and the pipe angled just a bit to the right.

It's not an absolutely perfect application but the angle change is more noticable in the photo than on the bike and so far the entire project has been FREE.

Here's a photo of the finished product:



OK...how does it work?

I have about 500 miles on the pipe to date. This includes one 6 hour day out to the Pacific and back.

The sound is just a bit louder and deeper than stock but almost to stock TA levels....in otherwords quiet and unobtrusive. The DRZ pipe is an approved spark arrestor and says so on the side if you're up in the state or national forests and that matters.

The TA runs just fine with the new can...in fact it seems a bit stronger....nothing amazing....and it all may be wishful thinking but after a few hours riding it felt like an improvement. It exhibits no "lean running" characteristics...no popping, no surging. I tested it at all throttle openings from lugging in too high a gear to full throttle 8000 plus rpm shots through the gears.

Mileage has gone from 51 to almost 55 on the last 2 tanks of fuel.

To be certain I wasn't too lean, I put on a modified end cap that I have for my DRZ. Looks like this:



The TA is much louder with this endcap but not really that bad. I'd prefer not to ride with it for more than a few hours though...the sound rather bounces off the fairing and creates a wierd "thrumming" inside my helmet....but the TA still didn't show me any lean conditions with this in place.

Many DRZ guys are removing the stock pipes for afterMarket stuff. I've seen some on ebay for around \$50.00 but I'm sure you could get them cheaper locally....on craigslist.... or the local shop.

Mine cost me nothing but time and a burnt finger (Dad taught me to bend over the unused end of the welding rod for a reason). If you had to pay for everything I'm sure you could do it for under \$100.00.....priced a stock TA muffler lately?

Ray Stedronsky
Davis, CA

ELECTRICAL SWITCH:

I used the Baja Designs switch for lighting, horn and kill functions and an E start buton from the CRFx bikes.



EXHAUST HEADER MOD (ACTIVEMOTO):

This is the second 650 TRANSALP I have taken the exhaust off and it is surprising to see how the exhaust headers are constricted with weld.

This front pipe measured 24mm diameter before and 29mm after.

Can't think it does any harm to clean them up if you have the exhaust off. the welds are hard so you need a good grinder in an electric drill. Wear some eye protection.

The ports outlets in the cylinder head are larger. I measure the rear port at 35mm and the gasket is a perfect match. The front was harder to measure but it looks to be 34mm, the gasket is smaller than the rear, but also matches up perfect. The first restriction is the exhaust header pipe, with the weld it is 11 mm in diameter smaller than the head.

Dusting off the slide rule I calculate removing the weld in the header, increases the area by 46 %.

The picture shows the weld
Steve



After it has been cleaned of.

F:

FRONT FENDER (LADDER106):

I used Jeff's method to mount my fender also. It's a good idea and works well.

I ended up with the front part of the front fender a bit farther away from the tire than the back part.

My first try with mounting had me trying to get the fender "even" all the way around the circumference of the tire.

When I ran the front wheel up the tubes and tried to turn the front wheel when the suspension was compressed, I found that the rear part of the fender would contact the crash bars. I "adjusted the two spacers on the top of the SRC brace until I was able to suck the back part of the fender closer to the tire.

So, if you look at my fender closely, the curve of the fender is a slight parabola and not a half-circle. But it works well in reasonably muddy conditions and doesn't hit any part of the bike.

Fender (HIGH)

As promised, here's my high fender progress so far. I used an afterMarket Cycra braced fender, because I figured this would mean less sagging at higher speeds. I went with a yz fender because I like the shape a lot more than the honda fender, and because I couldn't find a honda fender in blue. The stock holes were pretty close, but I had to slot them a little to get the position right. I used some 2 1/2 inch bolts and the existing threaded holes in the bottom clamp, and a few washers for shims on the bolts to adjust fender angle and height. Overall offset is approx. 2". I haven't had a test ride yet, so I don't know if I got it right the first time, or if I'll have to make some adjustments (things rarely work out for me on the first try, so I'm expecting to have to adjust a few times 🤔) The rear of the fender moves clearly from end to end, with a very slight brush around 1/4 turn. I don't think it's enough to interfere with anything, but I may shorten the rear of the fender a bit. There's a lip on the back of the fender which wouldn't be missed if I dremelized it.

FENDER MOD REAR(WW-TAREG):

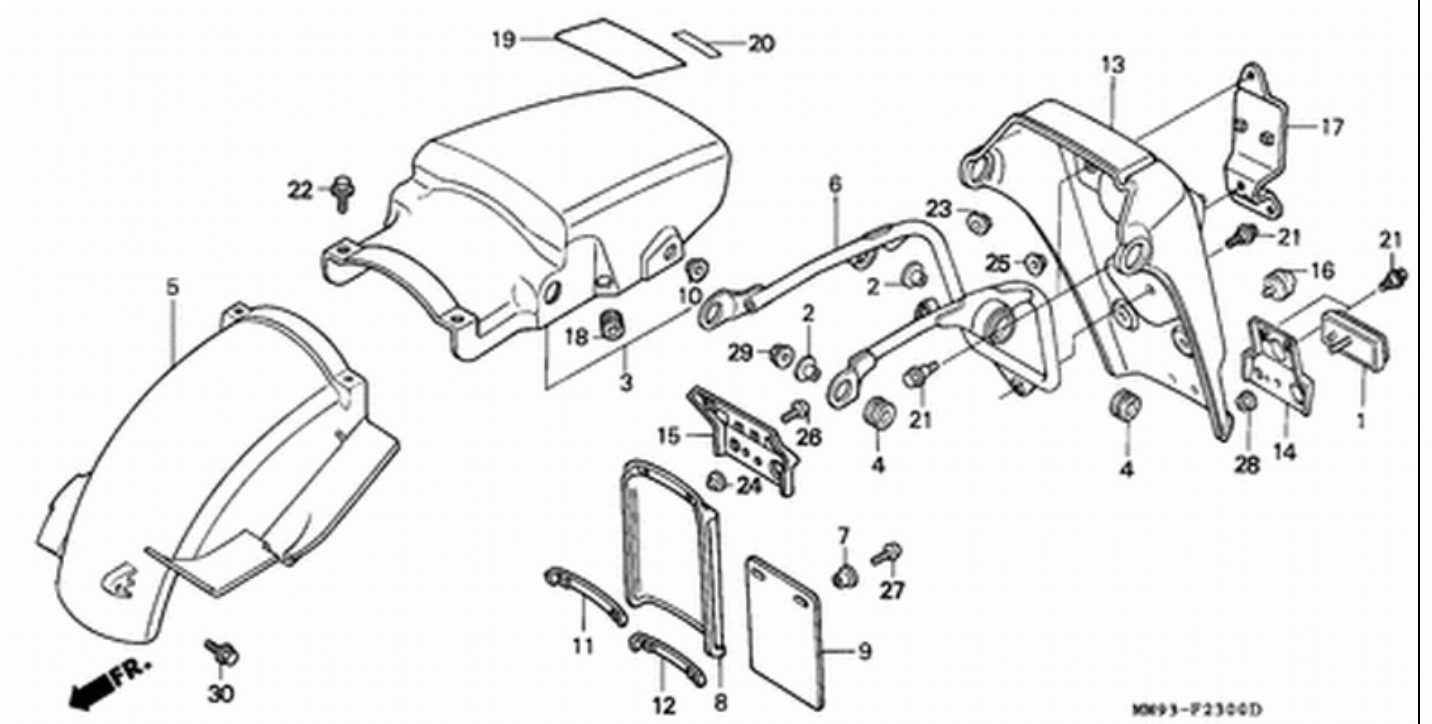


it's very easy and low priced to realize

1. bend the support (part No. 6) from 30° to 45°
2. cut the top bow of the fender (part No. 13) and fix it with hot-melt adhesive inside the fender so you can turn and mount it to 45° without damaging the spoiler (part No. 3)
3. At least change the original HONDA backlight to KTM model.

Hope I could help

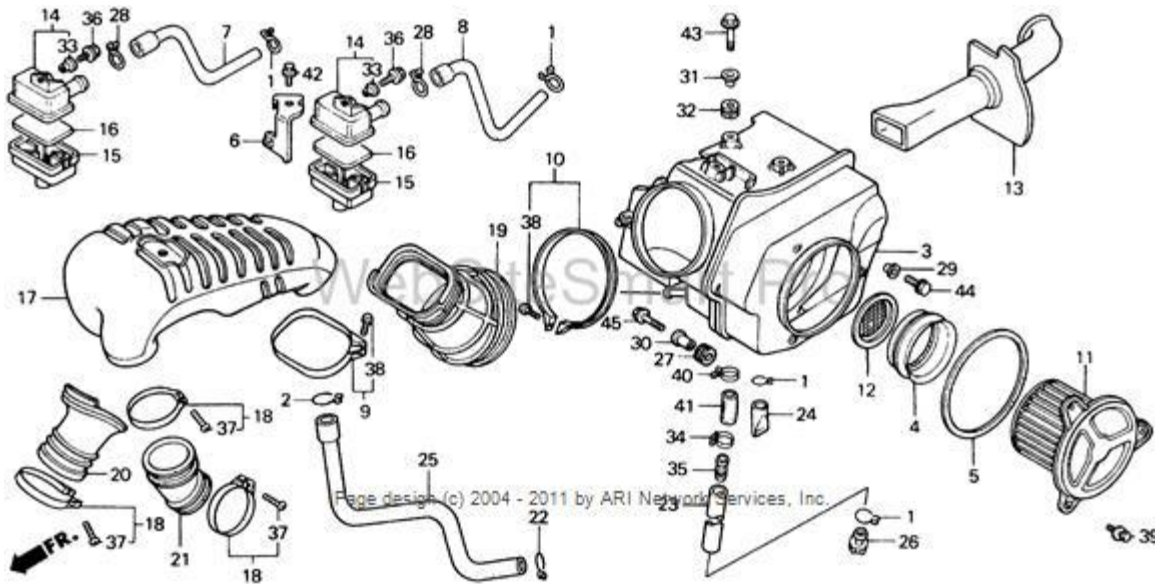
Thomas



FILTERS (SECONDARY):

While you have your bike down so far, don't forget the secondary air filters. Two small black boxes under the tank with a largish hose to each carb.

Supposed to be a bit of foam in each one. On older bikes the foam turns to dust. The foam is actually supposed to be an air filter so cleaning and spraying it with tacky filter oil at intervals is a good idea.



The actual filter's are #16 they're housed inside small black plastic boxes that pop open with tabs. You'll need to take off at least the right side bodywork, then you can reach up in there and get to both of them.

FOOT PEG LOWERING (LADDER106):

Finally figured how to download cellphone photos so here are the photos from my weekend footpeg mod.

First, I have really long legs. Second, I kept wanting to raise the bars higher to be comfortable when standing. I realized I could both raise the bars and get my knees more comfortable by lowering the pegs.

With the increase in ride height with the longer suspension, I'm not loosing any ground clearance....in fact, I think the stock TA might benefit from this or maybe with a slightly "less radical" approach.

.....anyways.....the mods:

First an exetnsion with gusset was welded to the right side peg support:



Then a plate was cut and welded to the left side plate that supports the peg and sidestand. The sidestand switch mount was also cut off since I don't use it:



The left side stock bashplate mount was removed since I'm using the Motech plate and the mount will interfere with the shift linkage.

The brake lever is modded by adding a piece of tubing to extend the pivot point outward. The shift lever is cut off the mount and a smaller tab is welded on. A new shift lever is made from scratch.....apologies for the crappy photo



The new brake lever comes over the top of the peg. I extended the brake lever "tab" for easier access.

The shadows do wierd things in this photo - but you get the idea



For the shift lever, we made a bushing that allows the lever to pivot around the bottom ped/sidestand mount plate. Two rod ends (one left hand thread) were used to build the link. The shift lever position can be finely adjusted by loosening the lock nuts and rotating the link - moving the lever up and down:



That's IT !! It works very well.

It's much less tiring going from sitting to standing since my knees are much less bent. My arms no have a slight bend at the elbows when standing rather than "straight-arming" the bars and leaning forward at the waist before the mods.

The only drawback might be brushing my feet off the pegs in deep ruts, but the plate would be bottoming also at that point so I don't think it will be a problems....time will tell

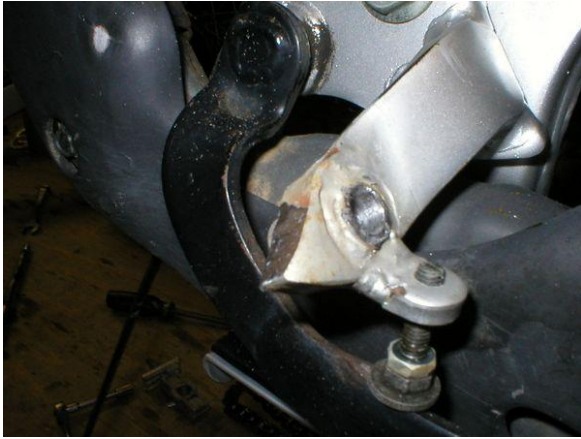
Now for some better pegs and "MY GOD" I might just be finished with this project....except for building better rear panniers and maybe AT side panels.....

Foot peg upgrade:

The first set of footpegs I ordered worked like a charm! All I had to do was drill out the mounting hole in the TA mount to accept a bigger pin (which I found at a hardware store) of the footpeg and grind a little off the footpeg seat and it bolted right up.

These are the IMS Pro-4 pegs and are top of the line. Much wider than stock and have nice sharp cleats. These retail for \$95 but I bought them on clearance sale for \$50. I have 3 pairs left if anyone wants a set. I sell them to you for what I have in them plus shipping.

Here you can see the section where I had to grind away a slight amount of material so that the peg would sit flat. I did this with my dremel. I drilled out the hole with a 13/32 bit.



The pins that I bought were a little long so I used an alum spacer to take up the gap. I could have looked harder to find a shorter pin but I was in a hurry.
All mounted up and added a little chrome bling too!



Front Fork Alternative:

The XR400 front fork is identical to the XR600, but there might be some issues with the caliper. The Caliper bracket on the 88-89 TA is a straight bolt-on to the XR600 fork.

FRONT FORK UPGRADE (LADDER106):

ON TUNING FORKS: Setting the front end up correctly. This takes a stand to get the front off the ground and some time. Many shops never get this right.

It involves removing the front wheel, fender and fender/fork brace.

Reverse the axle, then insert the larger diameter end into the right fork. Tighten the right side axle pinch bolts on to the axle just tight enough so the axle can be spun with your fingers (you want to remove any slop from the clamp) then remove the axle and insert just the axle as you normally would through BOTH fork legs.

The key here is that you should be able to thread the axle through both legs with your fingers. Keep going until the tapered end of the axle goes into the left fork leg. If you cant do that it's because one fork leg is set higher or lower in the triple clamps.

Loosen one leg and move the whole fork tube up or down until the axle will thread smoothly through both fork legs. Tighten the fork tubes.

At this point IT IS NOT IMPORTANT if the fork tubes protrude from the top triple clamp at different heights. What's important is what the front axle sees. Well....OK if the fork tubes are a LOT different I'd start looking for other problems.

Now that the forks are aligned with the axle, reinstall the fork brace and fender. You must make certain that the fork brace does not pull one fork leg up or down or that it doesn't try to pull the legs together or spread them apart. It should just slide in and gently touch the fork legs. With the TAs sheet metal fork brace, a bit of creative pushing, pulling and bending may be required.

With the brace and fender in place recheck that the axle is still smoothly turning in the fork legs...if not...find out why and fix it.

Then remount the wheel.....things should smooth out.

But remember, with the Intiminators in place, your fork will feel much stiffer with this bounce test than it did before. Your "on the road" compliance should be much better than before.

This is going to be a project to turn my 89 TRANSALP into an Africa Twin with better off road capabilities. The first part of the conversion is the suspension, I'll be starting with the forks then moving on to the shock. I'm going to give basic instructions with each pic.

Here is the list of parts for the front part of the conversion. I found most of this stuff used on Ebay. XR600 parts (XR650L parts will also work):

1. Pair of forks
2. Triple clamps with stem
3. Axle (only if XR is 93 or newer)
4. Brake hose brackets and clamps
5. Front wheel bearings, seals (Pivot works makes a complete kit), side bushing and center sleeve (only if XR is 93 or newer)
6. Speedo drive (only if XR is 93 or newer) and cable
7. SRC fork brace (optional)
8. SRC seal savers (optional)
9. XR or CR front fender, bolts and spacers (optional)

Other parts

1. Galfer custom length (XR600) brake hose with TA master cylinder and caliper ends
2. 1 brake caliper bolt that is 5mm longer than stock TA
3. 17mm x 2.5mm washer

STOCK FORK IMPROVEMENT (LADDER106)

Here's my "formula" for improving the stock TA forks.

Grab a Dremel tool and a torch...swallow hard and remove 7 coils (about 4 in.) from the stock spring. This actually results in a heavier spring. There is still enough space between the coils that the suspension will bottom BEFORE the springs coil bind. Best part is if you don't like it, you can always put the cut off portion back on top of the longer section and have the spring almost back to normal.

Heat and rebend the top cut-off coil so it lays flat (perpendicular to the fork tube)

Replace the cut off portion with a 4.5 in piece of tubing. PVC pipe works just fine.

Install Racetech cartridge emulators. I used a pair from an XR250 that I found on ebay (41mm). These are adjustable and I think I had the spring preload on the emulators turned in 3 turns. To install these, you have to disassemble the fork (so check and replace your bushing at this point) and drill huge holes in the stock damper rods.....again swallow hard and drill away.

Fill the legs with 5 wt fork oil. Bel-Ray or equivalent. The manual says ATF but common wisdom is that ATF varies its "weight" somewhat so you really don't know what you're getting.

Fill the legs 100-110 mm below the top. This is with the legs removed and vertical, springs out and forks compressed all the way and all the air bled out. Stock air space is 122 or 125mm. Using less will increase the rate when the forks compress making them harder to bottom.

This gave me good performance both on and off-road with stock TA legs. It held up the increased weight of the AT tank and only bottomed a time or two when crashing through large whoops.

The mod is cheap with the exception of the emulators....can't help that.

I ran the tubes with the caps level with the top of the top clamp....pretty much as far down as they would go. This was for the AT rear arm, shock and linkage which raised the rear height from that of the stock TA.

I weigh 190 in riding gear.

This should maximize the stock forks for normal road and off-road riding. For long two/up or a loaded trip a bit more preload may be required.

You can adjust the emulator preload to suit your conditions. To do it, you have to remove the cap and spring, then pull the emulator out of the oil. You can do this with the tubes on the bike but it takes some patience. I'd pull the spring part way out, go have lunch while the oil ran down the spring back into the leg and then use a magnet on a telescoping rod (like you get at auto part store for grabbing dropped nuts down your engine) to pull out the emulator....adjust and reassemble.

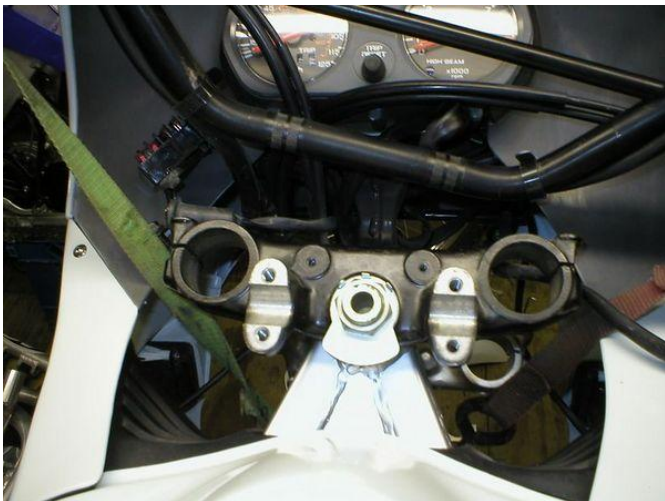
FRONT FORK WORK (LADDER106)

Remove forks (remember to loosen top cap before loosening bottom triple clamp bolts and after loosening top triple clamp bolts....did I get that right? I can never remember). Remove springs. Dump out whatever is in there.....yuck (if you're OCD you can measure what comes out and compare that to

what you have to put back in 'cause I don't think you've got much oil in there). Flush with diesel or solvent that is kind to seals. Invert and let dry. Refill with 5 wt fork oil (real honest to gosh fork oil from a motorcycle shop..buy at least 2 qts). Collapse legs and fill to about 130 mm below the top with the springs out and legs collapsed all the way (you don't have to be too accurate here). Pump legs up and down (slowly because oil will shoot out of the long rod if you get too excited) to remove air bubbles. Refill to 125mm below the top (you DO have to be accurate here). Extend legs. Install springs. Install legs (or legs first springs later if you like). Put everything back together and go find that nasty speed bump again.

FRONT FORK UPGRADE(JEFF @ THE QUADSHOP):

After removing the TA forks and triple clams (this is much easier than it sounds) Install the XR triple clams into the TA stem.



I chose to use the SRC fork brace because of my years of racing XR's and working with Scott Summers. These braces make conventional forks steer like upside down forks without the harshness that come with upside down forks. It also gives a perfect place to mount the OEM TA fender. I have never had or seen one of these units fail!



I only had to do very minor trimming and drill 4 holes to mount the fender to the brace.

Next up is to slide the forks into the clamps, I ran mine about a 1/4" above the top of the upper clamp till I get the rear done and can set the ride height. I used the SRC fork skins to protect the forks from rocks, mud and dirt. It's amazing how much crap the stock boots suck inside them. All that dirt will sit on top of the seals and will eventually make them leak. The fork skins will not allow any of that stuff to get to the seals.



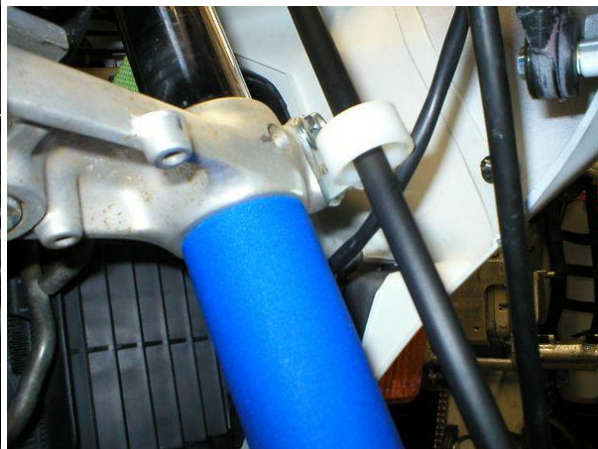
Now it's time to install the brake system. The only difficult part about this is that the lower caliper bolt hole on the fork must be slotted about 1/8" upwards. To do this I used a bit that was the same size as the bolt hole and pulled up on the drill to slot the hole. Do a little bit at a time until the bolt will thread into the caliper. It took me all of about 2 minutes to do this with a sharp bit. This will not weaken the mount since it is very little material removed.



You will now notice that the upper caliper bolt is too short so you will need to find one that is 5mm longer.

Next comes the brake hose. I called up Galfer and told them that I wanted a stainless TA hose that was the same length as an XR600 hose. Just make sure you tell them you will be using the TA master cylinder and caliper since they have different ends.

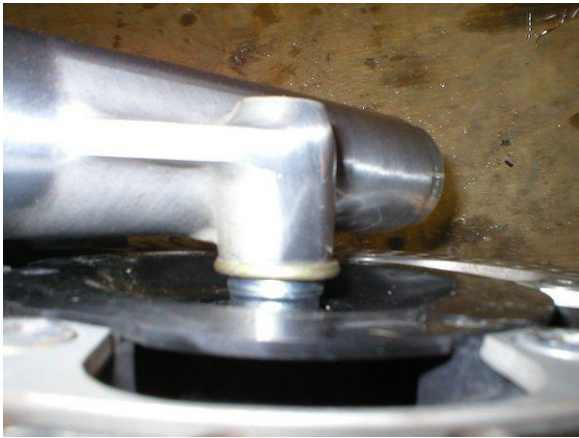
I used 2 brake hose guides from the XR on the upper and lower triple clamp pinch bolts.



Next comes the wheel. If you got forks from a 93 or newer XR then you will need to buy the larger XR bearings, seals, bushing, center sleeve and speedo drive (you can also bore the speedo drive) since the axle on these models is 17mm as opposed to the 15mm TA and 92 and under XR axles.



Once you have the bearings replaced, slip the wheel into the forks and push the axle till its just come through the opposite side of the hub. This is where you will insert the 17mm x 2.5mm washer (you won't have to use a washer if you have the 15mm axle and forks).

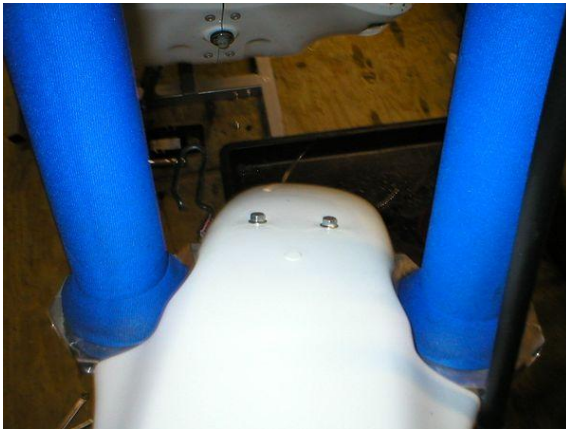


Now is the time to install the fork brace if you have one.



I mounted my stock front fender to the brace using the thread holes in the front of the brace. You can also go with the high fender since the lower triple clamp has the mounts to install an XR or CR fender. You will also need the aluminum spacers/washers and bolts from Honda to mount one.

And drilled 2 holes in the center of the brace towards the rear.



All done, it took be about 2 hours including answering work calls to install these. Man its gonna have some great ground clearance!



This weekend I will make an aluminum bracket to hold the key switch and fuse box. I will star on the rear install on Tuesday or Wednesday.

FORK SETTINGS (LADDER106):

It looked like the stock oil level for the XR650L was 125 mm. I set mine for 100mm so the rate should rise pretty fast as the forks compress.....still I think the stock .44kg/mm (are those the right units) will be too light for the bike.

WAYS SECRET FOR TA STOCK SUSPENSION IMPROVEMENT: Here's my "formula" for improving the stock TA forks.

Grab a Dremel tool and a torch...swallow hard and remove 7 coils (about 4 in.) from the stock spring. This actually results in a heavier spring. There is still enough space between the coils that the suspension will bottom BEFORE the springs coil bind. Best part is if you don't like it, you can always put the cut off portion back on top of the longer section and have the spring almost back to normal.

Heat and rebend the top cut-off coil so it lays flat (perpendicular to the fork tube)

Replace the cut off portion with a 4.5 in piece of tubing. PVC pipe works just fine.

Install Racetech cartridge emulators. I used a pair from an XR250 that I found on ebay (41mm). These are adjustable and I think I had the spring preload on the emulators turned in 3 turns. To install these, you have to disassemble the fork (so check and replace your bushing at this point) and drill huge holes in the stock damper rods.....again swallow hard and drill away.

Fill the legs with 5 wt fork oil. Bel-Ladder106 or equivalent. The manual says ATF but common wisdom is that ATF varies its "weight" somewhat so you really don't know what you're getting.

Fill the legs 100-110 mm below the top. This is with the legs removed and vertical, springs out and forks compressed all the way and all the air bled out. Stock air space is 122 or 125mm. Using less will increase the rate when the forks compress making them harder to bottom.

This gave me good performance both on and off-road with stock TA legs. It held up the increased weight of the AT tank and only bottomed a time or two when crashing through large whoops.

The mod is cheap with the exception of the emulators....can't help that.

I ran the tubes with the caps level with the top of the top clamp.....pretty much as far down as they

would go. This was for the AT rear arm, shock and linkage which raised the rear height from that of the stock TA.

I weigh 190 in riding gear.

This should maximize the stock forks for normal road and off-road riding. For long two/up or a loaded trip a bit more preload may be required.

You can adjust the emulator preload to suit your conditions. To do it, you have to remove the cap and spring, then pull the emulator out of the oil. You can do this with the tubes on the bike but it takes some patience. I'd pull the spring part way out, go have lunch while the oil ran down the spring back into the leg and then use a magnet on a telescoping rod (like you get at auto part stores for grabbing dropped nuts down your engine) to pull out the emulator....adjust and reassemble.

LADDER106 On XR Forks again:

.....on another note, I made some adjustments to the XR forks yesterday.

I'm using a 1.25 in. preload spacer with the stock springs (44kg springs if I remember right). After riding on graded gravel and the street I felt I had the oil level set too high. I started with 100mm air gap since I was worried that the stock springs would be too soft and tried to make up for bottoming with increased oil level. The forks seemed way too harsh on larger square edged bumps like when going up a curb.

Yesterday I lowered the oil level to 145mm (yep, that's a big change). That's stock setting for the XR forks and I wanted to try it.

Golly, gosh if the harshness didn't go away. There's a bit more dive on the street but not so much that it's bothersome. It's way better off-road. I was able to ride about 4 miles of pretty simple and non-technical single track today before the rain set in. Slow speeds, 1st and 2nd gear.

Nice reaction to going over railroad ties (I was riding some RR maintenance road/trail) and generally all-around better control with the front moving much more on larger bumps. It would probably not be good jumping....but the bike on the whole is not good in the air so I'm not loosing there.

I still like the XR top clamp. Getting rid of the rubber mounted bars makes the bike much easier and more confident to ride at slow speeds maneuvering over obstacles and such.

So front settings right now are 1.25 in. proload, 5 wt BellLadder106 fork oil set , 145mm air gap.

....and guess what, now the rear end is crappy. Time to start looking for a good rear shock that uses all the travel and get rid of the stocker with the spacer

First ride photos and comments on the suspension upgrade:



Here's a photo of the relocated TA fuse holder. I'm still using my cell phone camera after destroying my digital cam in the Pacific last summer so the quality isn't great.

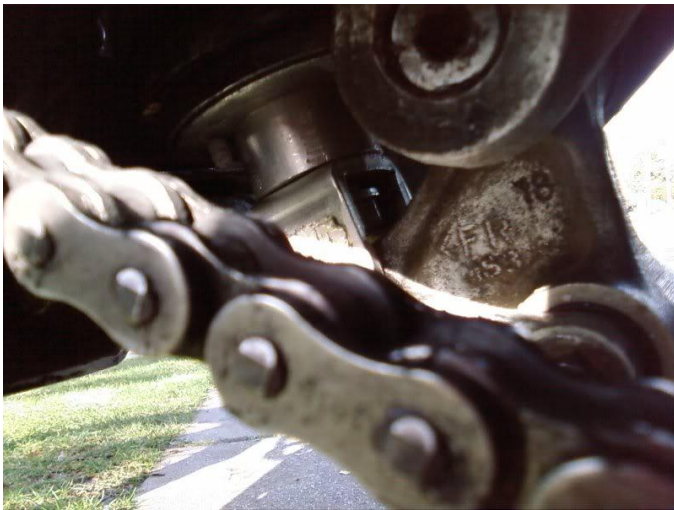
I used the stock holder, flatened and reshaped the area that bolts to the top clamp and used the left ignition switch bolt to hold it on. The right side plastic that covered the TA switch was removed.



Last is a bad photo of the spacer I made for the rear shock. Using the AT arm and links gives me more space to work with here (I think) than that available on the TA. After a bunch of measuring I decided to use 20 mm.

The spacer was made from aluminium 1 1/2 rod. Drilled and taped on a lathe to 14X1.5 thread. A 14X1.5 bolt was inserted up from the bottom of the "U" shaped clevis that attached to the suspension link.

The shock arm was threaded in from above and the bolt went in from the bottom. I did this to see if a spacer could be fabricated "at home" rather resorting to a machine shop. You could do the same thing just by using a drill press. I don't think a hand held drill would be accurate enough to get a good center or good threads cut into the aluminium.



If you look into the center of the "U" shaped clevis piece you can just about make out the head of the bolt.

My reasoning says that this piece is always in compression and that the aluminium threads won't get pounded in two directions (compression and tension) so hopefully they'll last until I can afford a better shock to give me full suspension travel in the rear.

Ride impressions:

Straight up, the bike feels slower. I found myself entering corners about 5-10 mph too fast. Maybe the increased ride height does this....maybe I've been on the DRZ too long. I don't have the speedo hooked up yet but a "fast cruise" doesn't feel like it happens until about 6500 in top gear now. With 16/47 I think that's pushing 90....yikes!

No funny handling in straight lines, no wobbles, no problems with a 15-25 mph side wind.

No "falling" into corners. The bike feels like it corners like it used to. I took it fairly easy but it holds a line well on pavement and doesn't give the impression that it's as tall as it is.....until you stop and try to put your foot down.....Hey who put the ground way down THERE?

I won't be touching the foot pegs down in corners now.....unless I'm crashing.

Only did a few miles of fast graded dirt/gravel. Got up to 75 on the gravel part with no wobbles or wiggles.

There's not much serious dirt that's not either underwater or thick goopy mud right now so I stayed away from that for now.

So....as a first ride.....SUCCESS!!...The bike feels good and will take just a bit of getting comfortable with. I thought I'd post a few more photos of my TA/AT conversion:

My front end (well the Africa-Alp front end) is a work in progress.

Right now I've got the stock forks with XR250 Racetech cartridge emulators. The preload on the emulator spring is cranked down 3 turns from fully slack. 20 wt Bel Ladder 106 oil. Tube filled to 120mm (I think that's right but don't hold me to it) with springs removed and forks collapsed.

Per my reply to your DR post on "Thumpers" I have taken 10 cm off the stock springs from the "stiffer" end of the spring (the end that wasn't "progressively" wound). Substituted a spacer that started out flush with the top of the fork tube with the fork assembled and since have added about 3 cm of preload to that.

I weigh 185 in riding gear and the Alp has a RD04 rear swing arm and AT link and shock installed. This raises the rear end up from stock so the bike has a bit of weight transferred onto the nose right now. I'm also running the AT front body work and fuel tank (just shy of 7 gal) so there's more weight on the front than the standard TA.

I'm very happy with this set-up to be a good 50/50 road/dirt compromise. It only bottoms on the worst G-outs and the few times I've had the whole bike in the air (she jumps just fine but kinda lands like a bank vault). No bottoming on the street, good cornering and braking. Tires are TKC 80s.

Now the internal debate is whether I should increase front end travel (after being happy with this setup I don't really know what I'd gain) by installing two other options.

1. XR250R front legs. These are 41mm and will bolt right into the TA clamps. The axle and front wheel bolts right up. The only mods involve the front brake caliper and the front fender mount. Then there's the problem of adding a fork brace. Internal travel has been limited to 9 3/4 in. (with the addition of an internal spacer) to prevent the front fender from contacting the Alps frame on full compression.
2. A complete XR600 front end change over. Don't have the parts for this one yet but this increases ride height so much that I'd have to also increase the rear travel. It can be done but affects other things. Chain slack is one, Chain contact with (and wear of) the rubbing block on the AT swingarm is another. The AT wear block is different from the TA part so I'd have to go to the Europeans for replacement.

For what I'm using the bike on right now....I just don't see the need. The DRZ does all the really ruff stuff and is still fun on the street.

Ray Stedronsky

FRONT FORK (SHANDY)

I put the Race Tech emulators in the front forks of my 650 TRANSALP I started out with the standard setting on the emulators, two turn's compression on the poppet spring (68ftllb). I used 10 WT fork oil

They are easy to fit, the damping rod requires drilling. That involves drilling out the original compression damping holes and adding a couple of extra holes, I used an 8mm drill bit. The thickness of the emulator helps the sag; static sag is reduced to 50mm I changed to the 40ft llb poppet spring to improve the high speed damping, it also gives better fine tuning. The settings at the moment are 10wt fork oil, standard fork springs which compress at 0.6 kg per mm, and emulators with 40 ft llb poppet springs with 3 turns of pre load.

The emulator adjustment is easy and involves removing the fork springs and emulator; with emulator removed I can reduce the tension on the poppet spring. On the road it now gives a great feel of confidence in bends the steering now feels positive, changing direction while cranked over is easy, more important is it goes where you point it and stays on line. On a short dirt road test it is very good absorbing the bumps instead of bouncing across them, I can really see the forks working.



FUEL PETCOCK REBUILD KIT INSTALLED...EASY BREEZY(LADDER106):

Fuel valve... UP = normal running or On

Fuel valve... Middle = Off

Fuel valve... Down = Reservoir Setting

Just thought I'd share some info. I learned while installing these petcock rebuild kits... enjoy. 🍷

OK Here's the scoop... I ordered the genuine Honda side covers before I found out that those diaphragms can be had in a kit for half the price. Oh well... at least you guys informed me... I just should have waiting for all the replies to come back before JUMPING! HA!

Anyway, those rebuild kits are only like \$16 so what the hell... I got a couple of those too. Yes, I did say two. Remember, I have two '89 TA bikes. Kind of a blessing and a curse. ;^)

Part number for K&L rebuild kit 18-2701 (contains 2 diaphragms, 2 o-rings, and 1 spring) \$16.95 ea

Part number for Honda factory side cover kit 16953-ME5-005 (contains 2 diaphragms, 1 spring, 1 AL spacer that sandwich between the diaphragms, 1 AL spacer that fits between the petcock body and the outer cover, 1 AL outer cover, and 4 screws) \$27.95 ea

I elected to use the Honda kits as I couldn't resist installing that pretty new cover! I plan to keep the two rebuild kits as spares.

Here is some interesting info. I found out. You might already know this or not, but this is my .02

1) The 2 diaphragms actually do act as a mini fuel pump. The relationship of the tank to the carbs. is such that gravity alone isn't enough. The light action pumping of the diaphragms provides that little bit extra needed.

2) You don't have to worry about flooding your bike if these diaphragms breakdown. If you always remember to turn the petcock to the OFF position this will never happen. The valve shuts off the fuel completely. I guess the petcock valve could leak causing the fuel to flood the motor, but I don't think it's a problem. The diaphragms also shut the fuel flow off from the motor in the absence of vacuum. Kind of a safeguard. Yes, you can leave your petcock in the ON position (with good diaphragms) and no fuel will flow, but turning the petcock to OFF is like doubling your protection. Plus, I feel it extends the life of the diaphragms a bit by not requiring them to take on all the responsibility.

3) You don't have to remove the tank to install the kits. I just removed the side faring and had lots of room. As stated above, no fuel will run out in the OFF position when removing the side cover. The 4 screws are easy to get at and I'd say the hardest part was just making sure that spring got lined up right when offering the bits together.

So, that's it. Pretty easy install and it goes fast. Having those crash bars might require a little more effort to remove the side faring, but they also make for handy holders. You can put a little bucket on the bars when you're finally doing the petcock test (vacuum with mouth on air line) and let the fuel flow into the bucket without holding it. Nothing real important, but kind of nice nonetheless.

FUSE BOX AND IGNITION SWITCH (LADDER106):

Some creative thought when mounting the TA fuse holder/ignition switch to the top triple clamp. (You've got that easily if you can do the side panels and instrument holder/dashboard)

Depending on the year of your forks, you may need wheel bearings from the XR to accomodate the 17mm axle. The TA axle is 15mm (but this is the same size used on the early XR forks....(pre 93 if I remember). If you have to use the larger ID bearings, you'll also have to remove a small amount of material from the inner metal tube that keeps the bearings seperated inside the hub. Also, watch for binding when mounting up the speedo drive. Depending on how far the new bearings mount into the hub, the speedo drive may require a very thin spacer to keep it from contacting the outer part of the hub when spinning. You'll see what I mean when you assemble the front wheel.....just pay attention to any binding you get when you tighten everything up and give it a spin.....if it binds - it's probably the speedo drive.

The Summers Racing fork brace provides an excellent way to both stabilize the forks and mount the front fender. Thanks to Jeff for this! A high fender seems like it'll be easier but I could not find a way to mount one that didn't strike the crashbars when turning AND provide enough space between the

fender and the tire at full compression.

I had to add a 2.5mm spacer between the left side wheel spacer and the fork let to allow the caliper to contact the disc correctly.

You'll have to come up with a solution to allow the springs to support the AT tank/fairing and extra weight of the fuel you're carrying. Sandplow is getting some Racetech springs, I think, so check with him about what rate he's ordering. I modded my XR springs to be stiffer and can provide an explanation of this if needed. It works "fair" but I'll get better springs after I finally get a longer shock and correct rate for the rear.

SRC fork covers work well with this mod. the standard rubber "bellows" don't compress down enough and will tend to push the fork brace down the tubes and into the front tire.....BAD!

You'll need enough patience to move the front end up and down the tubes a number of times to make certain that nothings contacts the front fender at full bump. You'll also have to experiment around with mounting the front fender to prevent contact. (You'll end up with it a bit closer to the tire in the rear than in the front).

You'll need a spacer to add to the rear shock to raise the rear of the bike to balance it. Once you do this, you'll find that the mechanical operation of the rear drum begins to be a bit "problematic".

I don't know exactly how the XR front end works with the RD03 front body work so be careful when turning the bars lock-to-lock when you first assemble the front end and watch for interference with brackets, cables and wiring.

It's a fun project but one change certainly tends to affect two or three other things. It takes a while to solve all the problems.

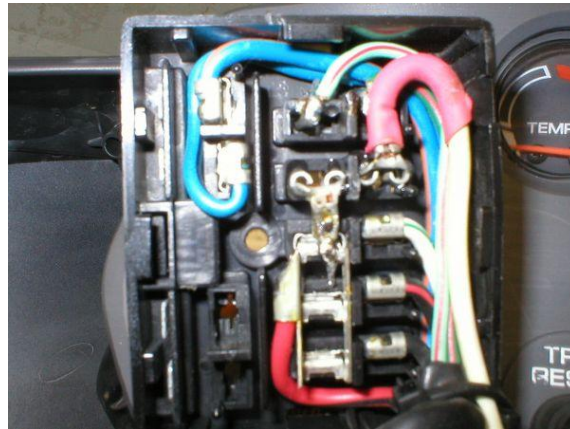
Are you really getting a AT? It would be fun to have a stock AT and then mod the suspension on the TA. Let met know if I can help.

Ok, now its time to take care of the key switch and fuse box since our XR600 upper triple clamp does not have the brackets to mount them. This mod actually took longer to make than installing the forks but its not hard at all. I used a piece of 3/16" sheet aluminum cut to 3" x 5". I layed the piece of alum. on top of the 600 clamp and MAS335ed the two existing threaded holes that where used for the odometer. Using the old TA t-clamp I traced out the key hole and mounting holes for the key switch. I used a 1 1/8" holesaw to cut the hole for the key switch and a drill bit for the two bolts.

Next I removed the bracket from the fuse box and trimmed off the two little rectangular plastic extrusions that were on the bottom of the fuse panel. I snapped the cover on the fuse box and temporarily mounted the key switch to the plate and set the box and cover onto the key switch and plate. I marked the location of the holes for the fuse box snaps. Drill holes and set assembly with cover back on top of plate

Next I used a pencil to trace around the plate and cut the excess material off the plate for a nice clean look. I had to cut the upper left corner off so the wires would have a place to exit (fuse box is mounted upside down from stock position) and cut two notches for the cover clips to attach to the fuse box.

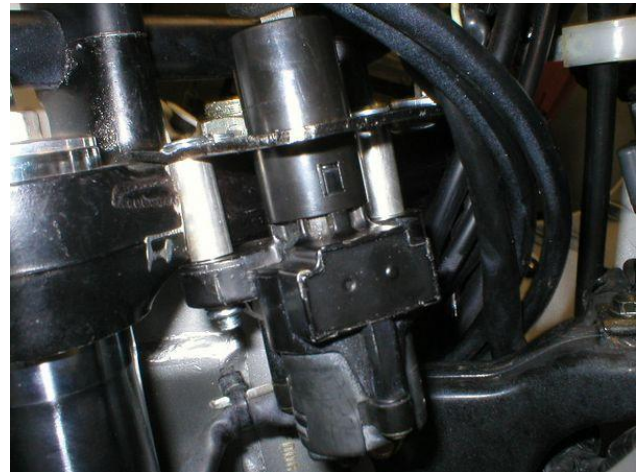
This is what you should have. I have the templet if anyone wants it to save you a BUNCH of time.



While I had the fuse box off I noticed that it had two empty ports for fuses. Knowing that I will be installing some cool electronics and grip heaters soon I thought I would take advantage of these ports.

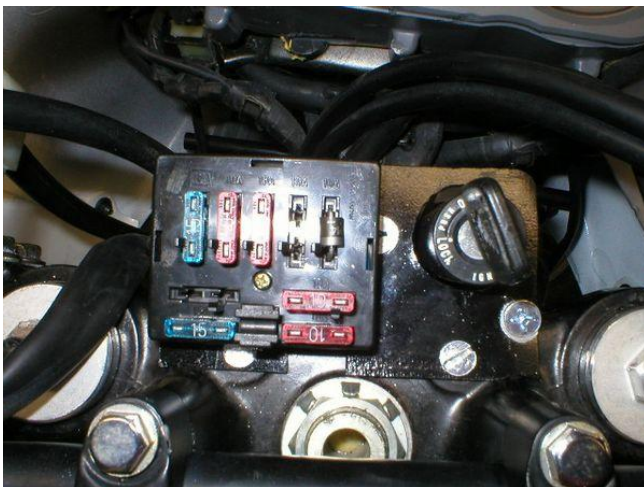
I used 2 female spade connectors and stuck them into the blank holes. On one end I soldered a short piece of wire to the switched hot wire on the left hand side. On the other side I ran length of wire (white) out of the box and zip tied it to the wire loom for future use. I left the fuse out till I get ready to wire in a GPS or digital gauges later on.

Now to mount the plate to the t-clamp you'll need 2 6mmx12mm machine screws. For the key switch you'll need 2 6mmx50mm machine screws with 2 washers, 2 nyloc nuts and 2 25mm alum spacers that I found at Ace Hardware.



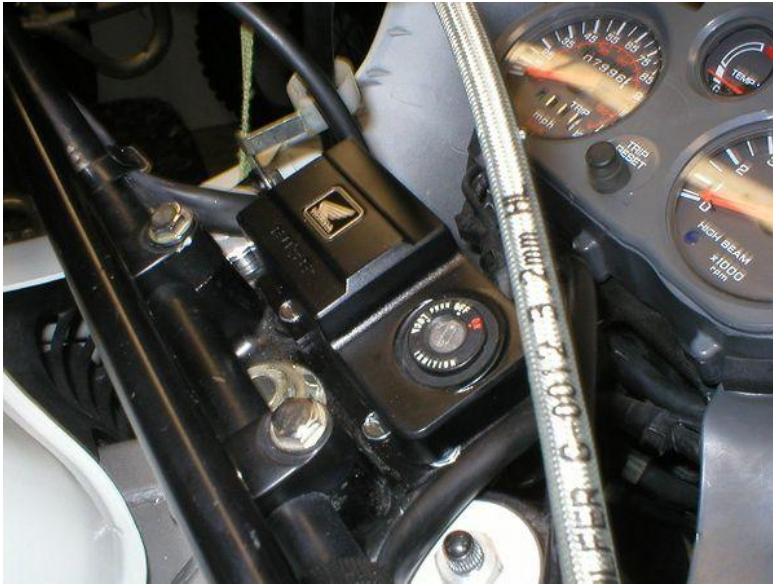
Use the 2 alum spacers to space the key switch down below the plate. I did have to do some minor grinding on the t-clamp with a dremel so the lower bolt would be back far enough to align the steering lock properly. Its not enough to cause any saftey issues.

Now you can snap on the fuse box.



And the cover.

It looks factory and the steering lock will still work in both directions!



FUEL GAUGE OPTICAL (LADDER106):

After playing around with the AT tank on my converted TRANSALP, I found that (using the NT650 Hawk petcocks) "Reserve" was about 1 quart of fuel. This is due to the shape of the AT tank and using a petcock not designed for the tank. I

The AT uses two fuel sensors that illuminate one yellow and one red light on the instrument panel when fuel gets low. I didn't get the sensors and just plugged the holes so I played around today with a "poor-man's fuel gauge. I didn't want to have my "reserve" only get me 10 or 12 miles. That's kinda "Surprise your only priority right now is fuel". Not what you want to hear miles away from nowhere.

I put a brass "T" into the right side fuel line, got some clear fuel hose and ran the clear hose vertically up the inside of the side fairing. The hose (and fuel level) is visible with a quick lean and glance on the right side of the bike when in the saddle. I ran the hose up to the fuel tank cap vent and put in another "T" then ran the vent into the crossbar pad, across the cross bar and ended with one of those small check valves so fuel doesn't run out of the tank when the bike is on its side. Here's a couple of photos:



No leaks-and it seems to work well, at least during daylight hours. With the check valve in place air can enter and compensate for falling fuel level. When I fill the tank, the cap is off and air in the indicator line can vent out the open cap so the level in the indicator line can rise with the level of the tank.

So, I guess when electronics don't work, you can always rely on physics.

Ray Stedronsky
Davis, CA

....on the fuel sensors.....

I thought about using them but they were always too expensive. The "collective wisdom" from the UK AT site was that they were a bit sensitive and prone to failure if the "low" light(s) were left on too long.

They work on temperature with the fuel keeping the sensor cool and then the sensor heating up and closing the electrical circuit when the fuel level falls. It appears that if the fuel is left low too long the sensor eventually overheats and fails. Most problems, obviously, occurred with the Yellow light.

With the extra expense and thought of current always flowing into my fuel and being an older rider who grew up watching the odometer or trip meter to gauge range, in the end, I decided to plug mine. I found that transcase plugs from a Toyota Forerunner were the correct size.

I did built a "quick and dirty" sight gauge. On the right side of the bike I inserted a "T" into the fuel line and another "T" into the tank vent hose on the fill cap. I then ran a piece of clear fuel tubing up the right

side fairing between the two "Ts" This gives me an instant visual check on fuel any time the petcock is on.

It's my 100% accurate, always reliable, no moving parts, fuel gauge.

The clear fuel line on the "T" from the tank vent connects to another "T" placed in the fuel line coming from the right side petcock on the AT tank. I can visualize fuel level from about 3.5 gallons remaining all the way down to empty. The fairing gets in the way for the top few gallons. If you didn't mind the line being outside the fairing (which I thought was not a good idea for protection sake....and, yeah, for looks) you could read the level down the entire tank.

For the TA tank with one petcock on the left, you'd have to get a bit more creative about how you ran the line. But the concept is the same.

Here's what it looks like on the AT tank. I later added some small level mark corresponding to the number of gallons left in the tank.



The caps from my sons XR250L (94), my old TA tank and my AT tank all interchange. Service Honda lists the XR250L cap as:

17620-KV6-033 Price is about \$48.00 new. It is identical to the one in the parts diagram above. You could probably find one at a salvage yard for less. You can toss any bag right over this cap without worries.

Or...you could use a big ol' spring to keep the tubing from kinking and toss a tank bag over it anyway like this:

G:

GAS -ETHANOL (LADDER106):

Dunno what fuel europe is using or if there is any standardization from country to country.

All you really need to test the fuel is a 100cc graduated cylinder.

A few easy steps:

1. Add exactly 90cc of fuel to the grad. cylinder.
2. Add 10cc of water to bring total to 100cc.
3. Seal the top so nothing leaks out and then vigorously shake the contents.
4. Let it sit still for 10 min. or so.
5. Find the place where the water and fuel has separated (water near the bottom)

Now, if this separation MAS335 is above the 10cc line (remember you added 10cc of water) there is "something" in your fuel that is absorbing water....most likely some type of alcohol.

If, for example you see the separation MAS335 at 20 cc - your initial fuel sample had 10cc of alcohol and 90cc of gasoline....so 11% alcohol in the initial sample. The interesting part here is that we've found fuels as high as 16-20% alcohol. It seems that the alcohol is added at the local level and someone doesn't understand ratios very well. Or it might be that the stuff separates in the tanks at the fuel stations and if you happen to get fuel when the tanks are low, you end up with a large alcohol ratio. Don't really know what's happening exactly yet.

The difficult part here is to seal the grad cylinder well. Almost all of them have a little pour spout so the correct rubber stopper is needed if you want to be accurate. Don't just hold your thumb over the end. And, please, remember what your dealing with and don't do the test next to your wood-burning stove.

Our research showed that most large auto manufacturers were changing their O-rings and other "rubber" products to alcohol resistant formulas starting in the middle to late 1990s. Some but not all felt that alcohol was the coming thing in fuel and guessed correctly.

This doesn't help TRANSALP guys in the USA with 1989 and 1990 model bikes and it's unknown if Honda (or any other motorcycle builder) actually changed these products on their motorcycle line or not.

This is pretty much all I know at this point.

On the StarTron stuff:

Our local chain saw shop has been testing fuel for the past 18 months. They have found that this product will reduce the alcohol content from 10 per cent down to about 1.5 or 2 %.

I've started using it in my motorcycles. Cost is about \$10 USD for a bottle and one bottle will mix with about 50 gal. of fuel. Does it increase your fuel cost.....yep...Do you look like an arm-chair chemist at the fuel station while you get out your syringe and squirt blue stuff into your fuel tank....yep. But have you ever tried to replace your carb diaphragms on your TA....expensive, huh?

The other problems are that alcohol, being a great solvent, will remove varnish and other products from old fuel tanks, pumps and lines. All this old loose crud then lodges in idle jets and small carb passages or at the least plugs up fuel filters. So if you're not running a fuel filter....get one. Easier replacement than a carb rebuild.

On my own machines, this is the alcohol related problems I've had:

Both Clarke fuel tank caps on my DRZ400 and XR250 have degraded, cracked and gotten soft and jelly like at the inside seal - replaced.

The fuel prime "bulb" on my Briggs-Stratton mower degraded to the point that I pushed my finger into it and it fell apart with the contents of the fuel tank on the ground. This happened at the beginning of this summer. When replacing the bulb I also found the fuel line was soft and beginning to "dissolve"

The carb diaphragms on my TA developed cracks in multiple places. Discovered during the carb rebuild at the start of the summer.

We started having life-threatening failures on our power tools at the Fire Dept.

I didn't see any relationship between these things until we got interested in the fuel problems at work.

On Performance:

I've seen no actual "performance" gain from using this additive. The biggest change I saw was in my Suzuki DR750. This bike never liked to run down around 2500-3000 RPM even though you'd think a big single would lug down without complaint. It always surged and bucked down low and generally was not happy.

With the additive the bike will pull smoothly down to about 2000 RPM without complaint.

I've seen no real change in the TRANSALP. It "seems" to start easier but that's pretty subjective and not very scientific.

That's all I know so far.

GAS TANK VENT HOLE (TARIDER):

Vent Hole

There is a small orifice on the side of filler neck. I actually made mine larger to allow faster fueling of "dead space".



H:

HEADS, REMOVING (MAS335):

Ladder106, you have probably done this before but just in case you haven't this will help. I discovered one bolt on the head that I do not think is ever mentioned in the shop manual. I think it is a 5mm bolt and about 3 inches long. It is easy to overlook because you are working with the larger bolts and never think about any other bolt. After getting all the main bolts out I still could not get the head off and finally saw this small socket head bolt in the corner. Be on the lookout for it, as I said I do not think it is discussed or pointed out in the Honda manual. See the bolt head in the lower right corner of this image. Torque value will need to be based on the bolt diameter since it is not mentioned.

I didn't know Honda had a gasket set, what I do know is the head gaskets and base gaskets are no longer available per Showkey and he knows everything that goes on with Honda parts!

Regarding the cam chain tensioner, removing it was a pain. The manual discussing pulling up a tab and inserting a small pin like a cotter pin in a hole to help hold it up and eliminate the tension on the chain. Pulling that tab up is nearly impossible, there is nothing to grab onto. The tab is the small beveled piece to the right side of the tensioner assembly. You'll see. Biggest headache of the entire process.

For what it is worth this image is from a engine with 50K and the wear indication on the cam chain tensioner is well within the replacement limits so I don't think anyone needs to stress over wondering if their cam chain tensioner is worn out, at least not at 50K.

LADDER106'S COMMENT:

With close inspection I see no need to ever be concerned with the life of the cam chain and that is assuming the bike has been well cared for. The chain and sprocket on this 50,000 engine look fine. The chain contact wear Mark on this cam drive sprocket is hardly noticeable. The chain has multiple side plates per link with hefty looking link pins. With the chain wrapped around half of the sprocket and pulled snug you can then barely detect any defection when trying to lift a link off the sprocket.

I simply would not lose sleep over worrying about the chain wear based on this example.

Chain contact Mark are the small dots on the face of the teeth.

Heated Grips installation Tip:

On many installations the throttle grip is hotter than the other.

This is due to dissimilar thermal masses.

The throttle tube is not in contact with the handle bar therefore it heats up easier not having the handle bar as a heat sink.

To make the grip heaters heat the same temp on both grips, I take electricians tape and wrap the non-throttle bar end so that a spare throttle tube can be slipped on for a tight fit. Now I have two throttle tubes isolated from the bar approx the same, allowing the grips to maintain a more even temp in both. Of coarse this requires a second throttle tube and two pairs of grips to get the second throttle grip, but worth it.

I use the bar switch sold by aerostich / rider warehouse. I can't tell you how many of those inferior do dad switches have broken. Also I don't bother with low and high settings and the resistors involved, I just use them on or off. When you need them you need them all the way. Gloves can do the rest. My favorite grip is the: 737 by ProGrip.

A tip for grips easy on and off is:

Wet the inside of grips with isopropal alchol and they slide right on.

The alcohol will evaporate leaving the grip perfectly stuck to the bar or grip.

I use a lab bottle with a long squirt spout to inject isopropal alcohol in under the grip wetting it inside.

The long spout reaches up in under and around un-sticking and allowing the grip to twist loose and slide right off.

Hopefully this is useful info.

HELPFUL TIPS (LADDER106):

- The CDI boxes ARE the "do-hickey" for the TA and at least you don't have to take half the engine apart to fix them. Changing the position can help but they seem to have about a 25000 mile life before they get cranky.

Rule is...carry a spare. If you're on a long trip, carry two. Anytime the bike starts running on one cylinder or miss-firing look there first. Good thing is, they are easy to change and only as big as a pack of Camels (that's cigarettes not dromedaries for you younger guys).

- Careful with the tank mounting rubber doughnuts on the frame. They seem like then want to stay there but then disappear like magic when your standing there with the tank in your hands fitting it back

onto the frame and are certain to be found in the most inaccessible part of your shop.

- The little brass "nut-certs" in the front fairing get real friendly with the screws and will spin inside the plastic when removing the screws. Since you've already fought this battle, you just have to be careful to secure them back inside the plastic fairing before reattaching the front. Go easy on the torque here and a dab of "anti-seize" on the screws helps a bunch later on.
- Take a very close look at the air tube going from the airbox to the carbs. The rear tube is attached to the main tube between the frame with a sealant that sometimes cracks due to age and heat and lets air bypass the system. Slathering more silicone on it seem to work pretty well. Also every PO is not too skilled at getting that rear tube to seal well onto the carb and you may find an air leak or gap at that point if they have removed this tube in the past. If you yank the tube and getting it back together is driving you nuts, repost here and we can talk you through the "procedure" for doing this easily. This post is getting too long already.
- Carb syncing is done with the tank off. The adjustment screw (#2 phillips) is found by looking through the hole in the middle of the air tube. You need a balancing manometer and an aux. fuel source. The screw is veeerrrry sensitive to changes so don't start randomly turning it a bunch.
- You've already got the larger front brake but a braided line will help a bit more. Watch the rear spring depending on your weight and the load you want to carry. If your rear sag (with you on the bike - loaded) gets to be more than 2.5 inches or so you may get a slow wobble above 70 or 75. The rear springs get tired after 20 years. From the photos, it looks like there is a lot of rear sag even with all the plastic taken off. Serious off-roading will lead you to a progression of suspension mods and a replacement rear shock is the only thing that will get the TA close to the handling of that big orange bike in your garage. The bars are rubber mounted in the top triple.....some guys like it, some find the response too vague and replace the rubber with aluminium cones (See Jim Rowley).
- Watch chain tension. Lots of people set this up way too tight. There's about 7 in of travel in the rear so tension has to be more like a dirt bike than a street bike. Too tight and the transmission output splines at the CS sprocket get hammered. Give this a quick look and a clean and dab of grease before final assembly.

The rest is just details to give the bike a personalized fit

UNDERLYING PROBLEMS.....

- Most of the TAs in the US are old bikes...some have been well cared for and others not but almost all have some level of corrosion in the electrical connectors. The end result is that the voltage regulator "sees" low voltage in the system and sends more current to the battery than the battery really needs. This results in overcharging leading to boiling off the water portion of the battery electrolyte resulting in sulfation and much lower amperage in the battery when you really need it.....like when the weather gets colder.

The fix is easy but somewhat tedious. Simply strip off all the plastic, remove the tank and clean ALL the electrical connectors on the bike. Good contact cleaner is OK but on some you'll find you have to get physical with light sanding or a dental pick. Spray with LPS 30 or use dielectric grease. I've also found that a headlight relay helps quite a bit.

ON RAISED SUSPENSION (LADDER106)....

When doing the front end, also give some consideration for raising the rear.

Just bolting on a front end that's 3 inches longer is not going to make your TA handle very well unless you compensate in the rear.

The rear can be raised with a 30mm spacer between the shock and the "U" bolt that attaches it to the suspension linkage. This usually has to be machined because threads are involved. (see posts 800 - 1100 in this section and again by Adh007 in more recent posts)

Then you have to give some thought to extra chain slack, chain rub blocks and changes in rear brake rod geometry (I think the stock length is OK).

You also might think about how much farther it will be to the ground if you have to dap on the downhill side of a slope. Not for the in-seam challenged and (unlike our GS brothers) we don't get all happy about taking photos of our bikes while on their sides.....I've never figured out why these guys like this so much.....unless they spend a large amount of their ride time like that.

BUYING PARTS FROM EUROPE:

You'll need an IBAN number and a BIC number from the seller. Most German sellers are familiar with this since that's the way they transfer money around easily in their country.

Expect to pay around \$20.00 or so for the transfer (that's why it's nice if you can find one seller with everything you need at one time). You'll probably have to ask for someone at your bank that has done this before (so they don't ball it up). You can also shop around different banks for international transfer rates. Some banks give account holders special rates.

When I first did this I ended up withdrawing my money from one bank because they refused to provide this service.

It may take 30 minutes or so to get everything correct. Make certain you get a receipt and then confirm with the seller that the transfer was made. Confirmation sometimes takes 24 hrs or so since I think the banks save up the days transfers and send them all at one time.

HELPFUL PROTECTION WHILE ON THE ROAD (<http://shortwayround.co.uk/suzuki/>):

This is taken from the website Short Way Around and while it applies to a DR650 bike, the information is very useful:

Protection

My short legs often lead to stupid crashes where a quick ‘dab’ would save the day for most riders. This is usually the case in water crossings and when the going gets slow and rocky thereby making the risk damaging a casing higher for me than most. To that end I’ve fitted ignition, clutch and oil filter housing covers. The bashplate on my BMW took a real beating so I opted for what seems to be regarded as the best available – the Australian made B & B Engineering.

Levers are protected by Cycra handguards and the ASV clutch lever is alleged to be ‘unbreakable’. It is designed to allow the lever to fold out as well as in.

Tools and Spares

Removing the seat on the DR for the first time was a revelation. Every fixing I could see used either a 10 or 12mm spanner or a screwdriver – far simpler than the multitude of tools needed to work on the BMW.

After exchanging a few emails with Tim Hobin (see previous chapters) and spending a while working on the bike I came up with the following toolkit. Replacing the sump plug bolt with one from the timing mark inspection hole was a great tip from Tim and ruled out the need to carry any 3/8” drive tools.

By proving I could break the bead of the rear tyre with just my riding boots and two tyre levers I eliminated the heavy clamp I had needed to carry on the BMW and with a ‘normal’ method of adjustment for the steering head bearings I also eliminated the special tool I’d made in Australia for the BMW.

The upshot of all this is that I’ve reduced my toolkit weight from 5.75kg on the BMW to 1,75kg on the DR.



DR toolkit

Toolkit contents:

Combination spanners 8/10/12/13/14

1/4" Drive sockets 6/8/10/12/13/14 – 6mm for main jet

1/4 Drive ratchet (Husky)

1/4 Drive T bar

Allen Keys (Ball End) 2.5/3/4/5/6

Allen bits 8/10 (these came from 3/8 sockets and I cut them from the casings. They fit in an 8mm socket)

1/4 Drive screwdriver bit holder

Bits for above – #2 & 3 Phillips , #2 & 3 Flat

Float bowl spanner (Motion Pro)

OEM front spindle spanner (19mm)

Combination tyre lever/24mm spanner for rear spindle (Motion Pro)

Sparkplug socket and bar (bar doubles as a punch)

Pin punch (cut down) for brake pads

4" Vice Grip

Sawzall blade

Soldering iron (uses lighter fluid)

Feeler gauges (stripped down selection)

Chain Tool (Ballards Australia)

Small Multi-Meter

Tyre pressure guage

Tube valve snake – again, small hands make poking the valve through the rim very hard so I'm going to try one of these. The 'handle' incorporates a valve removal tool.

MTB pump

Small torch

Toothbrush – chain cleaning

Cut-down filler for Scottoiler

Spares – After meeting many DR riders along the way I've decided to carry a very limited selection of spares. They include a gearbox output shaft seal, fork seals, a complete rear shock seal kit (kindly donated by Rick at Cogent Dynamics), fuses, headlight and taillight bulbs, front sprocket, chain links, front and rear inner tubes, MTB derailleur cable inner (will repair throttle or clutch cable) and screw-on cable ends, Scottoiler 'injectors', carburetor jets (for altitude change).

Consumables – JB Weld (Araldite), Quicksteel, Superglue, Loctite, anti-seize compound, solder, puncture repair kit (plenty of patches & glue), Schrader valves & caps, Duck tape, electrical insulation tape, electrical wire, Scotchbrite, emery cloth, a length of fuel hose, 2 x fuel hose clamps and a selection of nuts/bolts/washers, zip-ties.

Tooltube contents



Consumables, 2 tubes, T-bar and tyre levers

The toolkit fits inside the OEM tool bag inside the OEM tool tube along with the soldering iron, Scottoil filler and chain tool.

The pump mounts inside the L/H pannier frame (See Prop Stand in Miscellaneous below)

Quicksteel, Scotchbrite and emery cloth fits under the seat and a 125ml bottle of Scottoil fits in front of the airbox on top of the shock.

A length of fuel hose is zip-tied to the L/H subframe along with the tyre lever that wouldn't fit in the tube.

Head and tail light bulbs are wrapped in bubble wrap and packed inside two ketchup bottles (tops cut off then one pushed inside the other so both ends are closed) and zip-tied in a 'recess' under the rear mudguard.

Still outstanding are the seal/jets kit and the nuts/bolts/washers (which are packed in an Altoids mints tin). Having run out of places to pack stuff they may have to live in my rucksack on day rides.

26/08/10 – When the exhaust fell off it melted a hole in the tooltube so I replaced it. The new exhaust system has the silencer sitting at a slightly different angle and prevented me from re-mounting the tooltube. I re-drilled the pannier frame mounted brackets so I could mount the tooltube lower down but that allowed the tooltube mounts to overhang them which meant they could flex. And flex they did until they broke a second tooltube. I need to find somewhere to fabricate some longer, thicker brackets and weld them to the pannier frames.

02/01/11 - My second tooltube broke its mountings and eventually fell off somewhere on the CDR (Chapter 23). It has been replaced by the aluminium one below.



Aluminium Tooltube

Miscellaneous

Fixings – The screws in Japanese switchgear is notoriously soft and so I replaced them all with cap head bolts. I did the same with the cross head fixings on the ignition coil.

Brake Hose – Tilting the GPS forward to enable viewing whilst standing, caused the front brake hose to potentially ride up over the antenna and snap it off. A combination of altering the angle the brake hose attaches to the master cylinder, modifying the headlight cowl and re-positioning the top hose guide loop *seems* to have cured this.

Prop Stand – I didn't want to fit a centre-stand to the bike so instead cut-down an adjustable length walking stick and fitted rubber feet to either end. It fits to the bike inside the R/H pannier frame with two 'floating' cigarette lighter socket mounting clips and a wrap around Velcro strap for extra security.

The pump fits in the same way inside the L/H pannier frame.



Prop stand in use



Prop Stand stored

I think that about covers it but will add more if I think of anything. I'll finish off with a final list of mods along with my working 'To-Do' list that those of you building DR's may find useful. There are more photos in the Gallery under DR Preparation.

Modifications – front to rear

1. Slot & tape wheel rims, fit HD inner tubes
2. Strip forks, drill damper rods, fit emulators, make spacers to suit, fit new springs and oil, reassemble
3. Strip and grease steering head bearings, reassemble, adjust and torque
4. Fit fork legs, service brake calipers, fit stainless steel brake hose, modify headlight cowl for brake hose re-route, fit brackets to tilt cowl forward slightly.
5. Fit handlebar risers, grip heaters, grips and make all necessary electrical connections
6. Fit L/H switchgear and re-wire.
7. Fit clutch lever, mirror mount, replace all switchgear screws with cap heads
8. Fit GPS/Switchgear mount, fit switches and make necessary electrical connections
9. Handguards – fit
10. Fit headlight relays and route wiring. Replace headlight bulb
11. Screen – fit
12. Replace coil mounting screws
13. Check all cables and wiring for chaffing – re-route as necessary
14. Scottolier – fit
15. Safari tank – fit. Add inline fuel filters
16. Aux fuel tap for stove
17. Fit 14T front sprocket
18. Bashplate
19. Engine guards
20. Strip and clean carburetor. Note jet sizes. Re-route breather tubes
21. Add washers to stiffen footrests
22. Service engine – check valve clearances, replace sump plug with ignition inspection cover plug, change oil, fit washable stainless steel oil filter
23. Clean and oil air filter
24. Strip, clean, grease, reassemble rear suspension linkage and torque
25. Strip, clean, grease rear brake pivot
26. Fit rear shock
27. Fit aux wiring fuses, make necessary connections and route wires to front and rear
28. Fit rack, drill rear mudguard to suit
29. Fit pannier frames (longer bolts & nyloc nuts), tool tube, pump and prop stand mounts.
30. Make Q/R system for Pelicase
31. Licence plate LED – fit and connect
32. Clean and grease all electrical connections and switches

l:

J:

K:

KEY CODE IF YOU NEED TO ORDER A REPLACEMENT (NOMILIES):



Before you throw away that helmet holder you should note the # stamped on the back plate, that # is your Key Code, the secret # needed to cut new ignition keys should you ever need new ones and have lost all of them, that # will save you buying a new ignition \$witch.

The helmet holder is held on to the tool case mounting bracket with some small round smooth head bolts that can be grabbed with vice grips and turned.

This guy can do it from the key code. ~> <http://www.motorcyclekeys.com/>

I bought my TA without keys and he saved me.

KICKSTAND COMPENASATION FROM RAISED SUSPENSION (LADDER106):

For anyone wondering what they might do for the kickstand if they were to upgrade their suspension with the XR600 fork swap and some sort of height increase in the rear. (spacer or custom length shock)

Here's what I did. I used a 3/4" steel pipe nipple to add 2.5 inches of length. I cut the original stand and sleeved it inside the pipe before welding so that I'd have maximum strength.

I also welded a larger foot on the bottom of the stock TRANSALP kickstand foot because I was tired of always looking for a rock or something to put under the kickstand every time I had to get off the bike on the dirt.





LANGUAGE:

GERMAN TO ENGLISH (BLACKBERT)

AT parts from Germany

I just got the quicklock fasteners from this guy on Ebay.de. He sent me a list of other parts, not yet listed on Ebay, but he doesn't mind sending them to the US (no Paypal account at this moment though) Thinking of you modders, I asked him, and I can put the list here. If interested, you can contact him [here](#).

2 Zündspulen hinten	ignitation plug rear
2 Zündspulen vorn	ignitation plug front
Anlasser	startermotor
Ansaugstutzen + Schellen	fuelrubbers to engine
Aufblendrelais	relais for main light 60 watts
Batterie	
Batteriekabel	
Benzinabsperrelais	fuel relais lock off
Bremslichtschalter hinten	breakswitch rear
Bremspumpe+Bremszylinder hinten	breakpump+mastercylinder rear
Bremssattel hinten	break rear
Choke	
Gabel mit Gabelbrücken	frontfork+bridges
Gasgriff	throttle
Hinterrad	wheel rear
Hinterradantrieb	secondarydrive
Hupe	horn
Kabelbaum DZM	cabel round meter
Kabelbaum Haupt	main cabel electric
Kabelbaum Tacho Unit	cable speedometer
Kühlwasserleitungen	pipeline water
Kupplungsbowdenzug	clutch cable
Lenker	barr
Lenkeraufnahme	holder for barr
Luftfiltergehäuse	airfilter main plastics
Motoraufhängung	holder for whole engine
Motorschutz ALU	motor protection - aluminium
Rahmen	frame with papers
Ritzelabdeckung	frontsprocketprotection

Rücklicht	light rear
Scheinwerfer	main lights front 2x
Schwinge	swingarm
Schwingenachse + Mutter	axle swingarm
Seitenständerkontrolle	sidestandcontroll
Seitenständerschalter	switch sidestand
Tachoeinheit	speedometer unit
Thermostat	
Vergaser	carburretor
Vorderrad + BT45 2000km	front wheel + tire BT45F - 2000km
Wasserpumpe	waterpump
Werkstatthandbuch	original manual honda

M:

N:

NEUTRAL SWITCH (SPEEDSMITH)

Hi there,

I have an '87 TA with 100,000 km on it, and I find that it starts to shift less smoothly when it needs an oil change.

(Usually around every 3000 km).

As for the neutral light issue, it probably needs a new switch.

I am in need of my second one at the moment.

Touch the wire going to the switch to ground a few times, with the ignition on.

The light should come on every time you ground the wire.

If it doesn't, you may have a wiring or connection issue.

Here's the section from the service manual, to help you out with locating the switch:

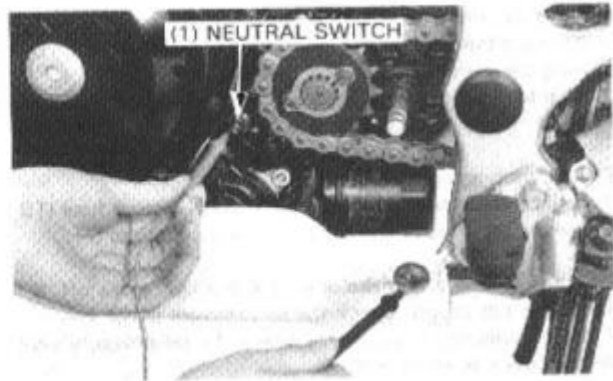
NEUTRAL SWITCH

INSPECTION

Remove the drive sprocket cover, and temporarily install the gearshift pedal.

Check the neutral switch for continuity between the switch terminal and body ground as shown.

There should be continuity when the transmission is in neutral and should be no continuity with the transmission in any gear.



19-8

O:

Oil filters:

In regards to oil filters, here is more info than you might want!

Alternate Motorcycle Oil Filters

If your motorcycle uses the Honda 15410-MM9-013 oil filter, following are some filters which are equivalent to and possibly superior to the Honda filter.

Important: The only meaningful difference between all those shown below are external length. Your motorcycle's clearance and available space for a spin-on filter may be different, so you need to consider that. The very shortest filters should fit anywhere. All threads and gasket dimensions are compatible, all have anti-drain back valves, and all have bypass valves that operate in the normal range of 8 to 13 psi range.

Motorcycle-Specific Filters - (About 2.5 to 3 inches long)

1. Purolator Motorcycle ML16817 about \$6.00
2. NAPA Gold 1358, Carquest 85358, WIX 51358 about \$7 to \$8
3. AC Delco PF2135 about \$10
4. FRAM PH6017A about \$7

Automobile Filters - (About 3.5 inches long - fit reference 1994 Mazda MX-3, V-6 Engine)

1. Mobil 1 M1-110 about \$10
2. Bosch 3323 about \$5
3. Purolator Pure One L14620 about \$6
4. NAPA Gold 1356, Carquest 85356, WIX 51356 about \$6
5. Deutsch D-370 about \$4
6. AC Delco PF-2057 about \$6
7. Motorcraft Long Life FL-821 about \$4
8. STP S-02867 about \$3
9. FRAM, Castrol, Penske 7317 about \$3

Automobile Filters - About 2.5 inches long

1. Bosch 3300 about \$5
2. NAPA Gold 1365 about \$6
3. Purolator L14622 about \$5
4. AC Delco PF1237 about \$6
5. STP S-02876 about \$3
6. FRAM PH6607 about \$3

7. WalMart SuperTech ST7317 about \$2

SuperTech filters are made by Champion Laboratories who make Mobil One and Bosch filters and also some automaker brands. While they may not have the advanced filter media of the highest efficiency and highest priced filters, they are considered premium filters and will perform well.

I've been using the WalMart SuperTech filter for years without any problems.

OIL PUMP CHAIN - Old vs New (2bold2getold)

Originally Posted by **mas335** ➔

I would be interested to know how much "slack" is in the oil pump chain before you remove it. If you can measure the chain slack travel I can compare it to other engines I have seen.

Once you install the new one a measurement of it would also be helpful.

Thanks,

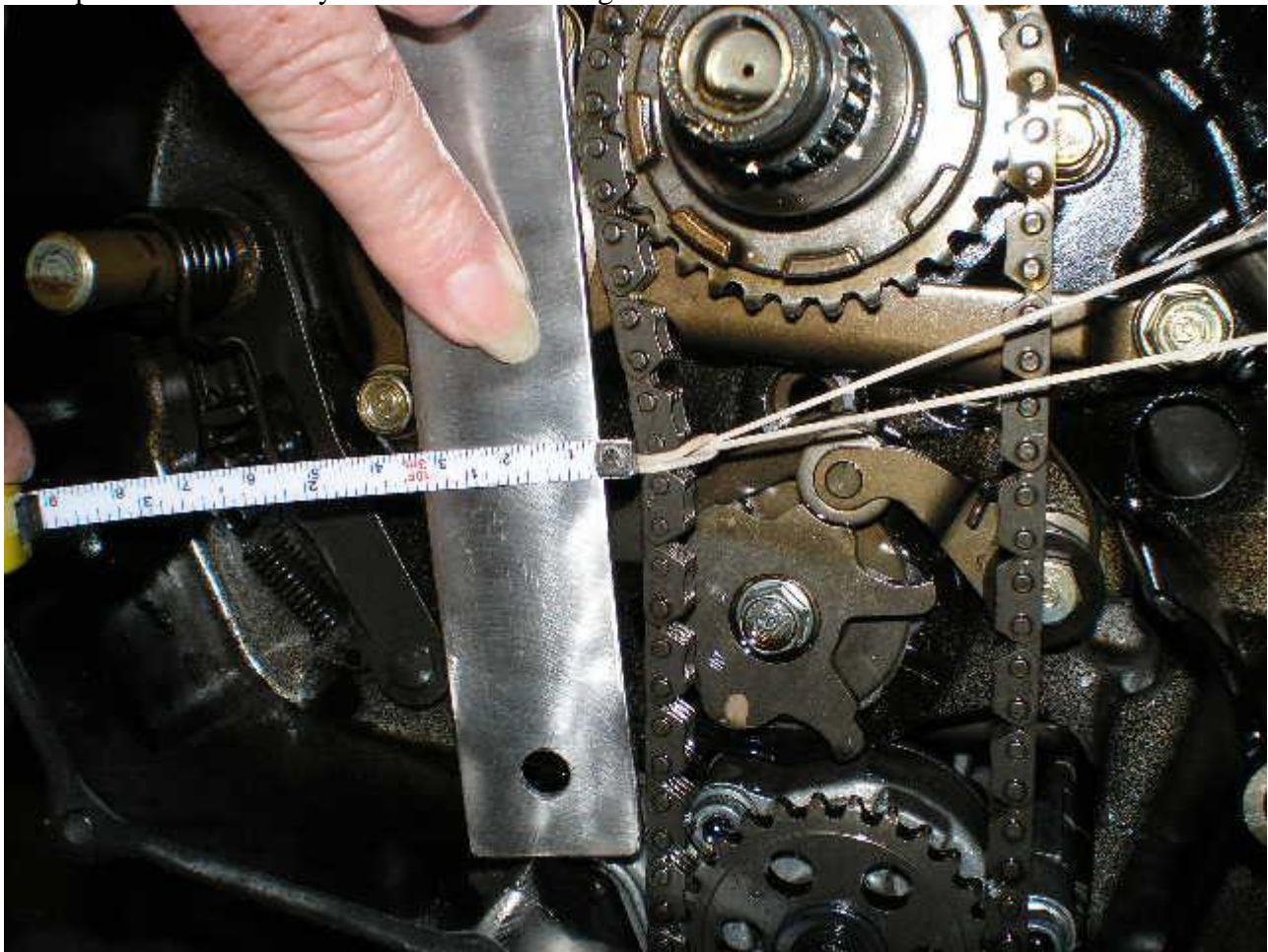
That's what I was curious about. So here



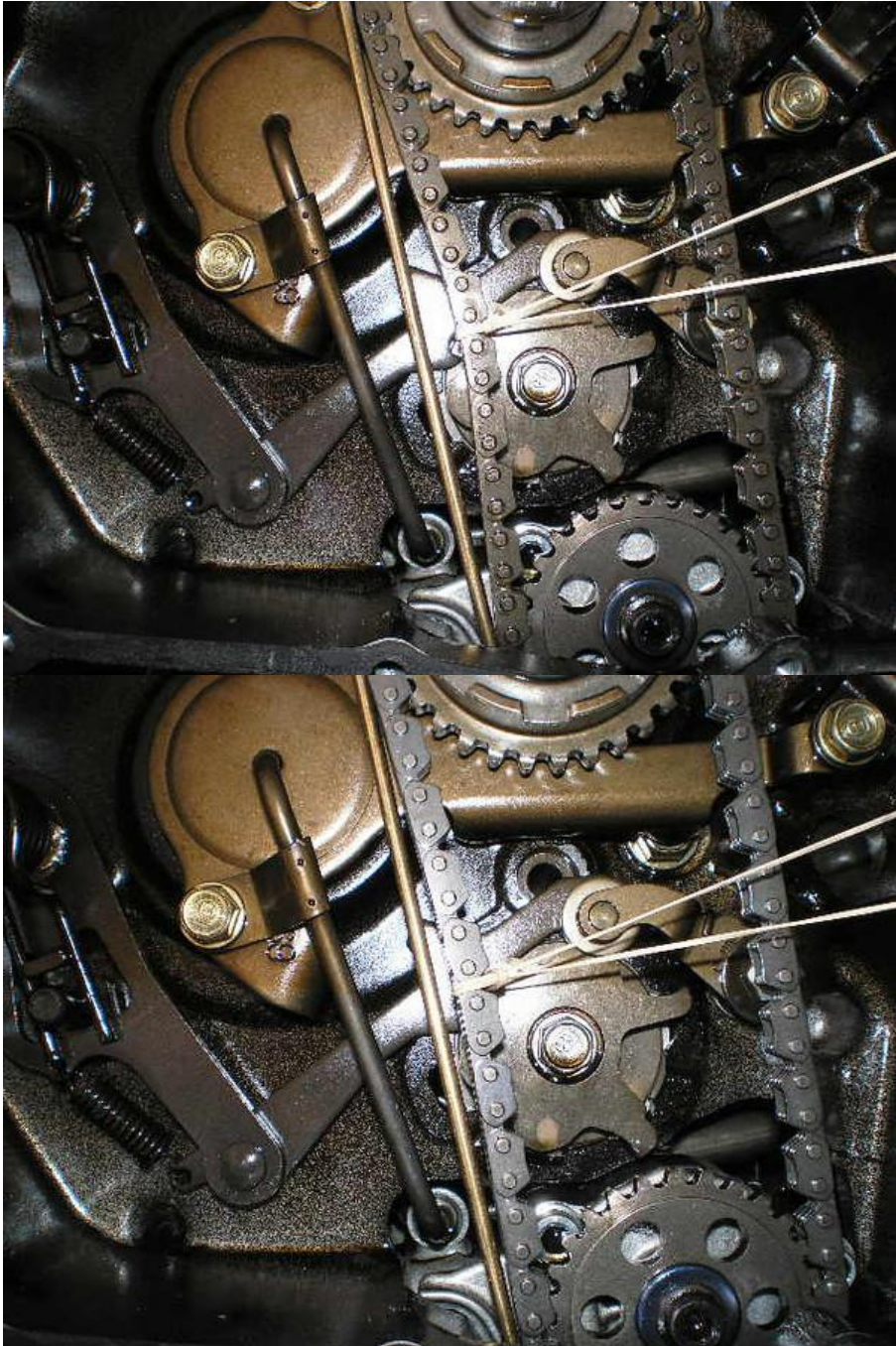
goes.

Looks like about a 1/4"... More than I expected. Ordered the new one this afternoon, will be a few days before it gets here. I'll post more pics and measure again when I get it installed. BTW had to get the wifie

to help with the shots. My nails don't look that good.🙄



Here is a wear/stretch comparison of an oil pump chain with approximately 18k miles compared to a new one. I put a brass brazing rod next to the chain/sprockets to illustrate the difference. My impression is: the old one is stretched more than I expected, and the new one is pretty tight. So once again, If you need a new clutch you probably need a new oil pump drive chain also.



Originally Posted by **showkey** ➡

I don't beleive slipping is possible with the chain pictured. Pulling the chain away from the sprocket at the high full contact point is the correct way to check the true wear or slack.

If this minor amount of slack was a concern this chain would have a chain tensioner from the factory....because they are all like the one pictured. This chain is used on over 25 bikes over a 30 year a period with no failures. The oil pump chain might be compared to the water pump that also has been replaced as a precaution with no data points. On a higher mileage bikes (+80,000-100,000) the cam chain and tension is the area that could benefit from inspection.

P:

Paint for frame exact match (SHOWKEY):

Found an exact match for 1989 TRANSALP frame paint. Can be applied over existing paint with complete blending and exact match.

Rust-Oleum Aluminum 7515



PAIR VALVE MOD (DAVE):

PAIR stands for “Pulsed Secondary Air Injection System”. On the 650 TA’s fitted with this system it consists of a vacuum operated PAIR valve that allows oxygen (clean air from the air box) through reed valves directly into the exhaust port when running with closed or partially closed throttle and against compression. The reed valves prevent exhaust gasses from escaping into the air box when exhaust pressure is higher than atmosphere. You will find the PAIR valve on the right hand side inside the fairing just behind and to the top of the radiator. If you follow the pipes connected to the PAIR valve you will find a thin rubber pipe running between the right hand intake and PAIR (between the carb and cylinder) and two thick rubber pipes, one running from the bottom of the air box to the PAIR and another running from the PAIR through a “T” to the top of both cylinders. The reed valves are inside this little “domes” where the pipes connect to the top of the cylinders. If you remove the exhaust you can see the hole inside the port roof running up through the cylinder casting and cylinder head directly to the reed valves. For a good description of how this system works by burning nasties in the exhaust emissions, Google for “Toyota PAIR system” on the net they have a very easy to understand explanation in .pdf format.

Following is how I removed the PAIR and CC on my 05 TA: Remove the CC and bypass with stainless pipe, all gradual bends and smooth welding. Remove the PAIR valve and all pipes connecting to it. Plug the hole in the intake with a M5 X 5 cap screw. Plug the hole in the bottom of the air box with a rubber

plug and some silicon rubber. Remove the reed valve domes, tap the holes where the pipes used to connect M10 and plug with short stubs made from 10mm threaded rod and a drop of thread lock and replace. You can now also reduce main jet sizes from 132 to 125, on my TA it is running extremely well on 125 mains with the plugs burning a nice brown indicating that all is well and happy.

Dave

Q:

R:

REAR BRAKE REVERSAL (LOCORIDER):

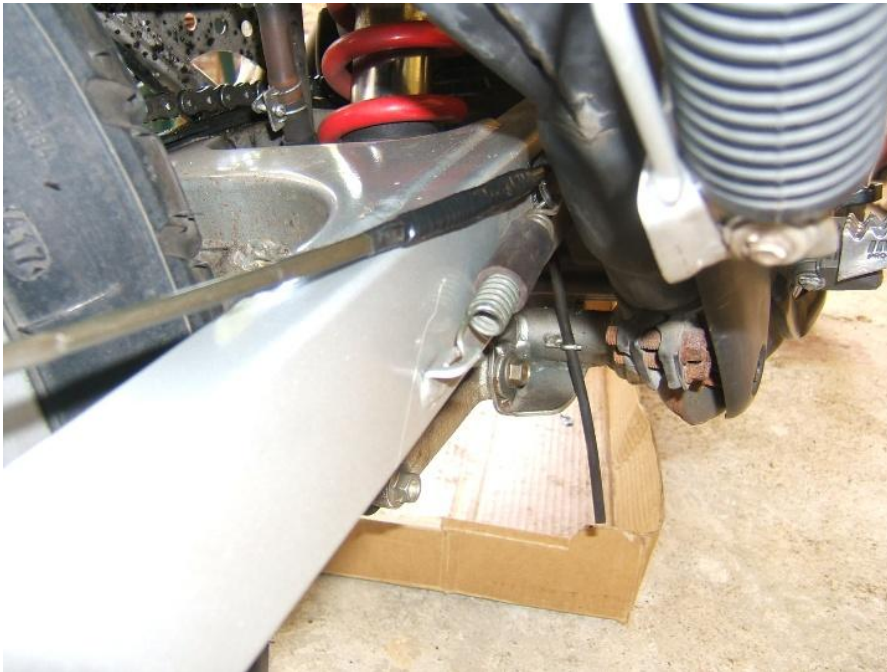
I made a little change, just to clear things down there. Now, instead of pushing, its pulling...



...rear brake pedal mod...

Also had to invert the lever...





The rear brake spring I installed the spring where it was, but I may weld another hook over the arm. But it is working fine the way it is.

S:

SPEEDOMETER SETUP FOR XR FORKS(LADDER106):

Depending on the year of your forks, you may need wheel bearings from the XR to accomodate the 17mm axle. The TA axle is 15mm (but this is the same size used on the early XR forks....(pre 93 if I remember). If you have to use the larger ID bearings, you'll also have to remove a small amount of material from the inner metal tube that keeps the bearings seperated inside the hub. Also, watch for binding when mounting up the speedo drive. Depending on how far the new bearings mount into the hub, the speedo drive may require a very thin spacer to keep it from contacting the outer part of the hub when spinning. You'll see what I mean when you assemble the front wheel.....just pay attention to any binding you get when you tighten everything up and give it a spin.....if it binds - it's probably the speedo drive.

SHOCK REAR, ALTERNATE IDEA TO MATCH XR400/600/650 FRONT FORKS:

I was going to bite the bullet and get a custom Wilburs shock to match the XR600 forks but after doing some research I found that a shock from an 83 CR250 is the correct length that I need and has compression and rebound adjustments. I will have to rebuild this shock with the correct spring and valving but is a great cost savings over the Wiburs shock.





'86 XR250R Shock in XL600V (Part 2)

Hey Guys,

I picked up the rebuilt shock last week & fitted it yesterday. Here is some pictures & information:

Spring rate: 11.5kg / mm

Spring Make: Teknik

Oil weight: 5wt Silkolene RSF (Racing Shock Fluid)

Nitrogen Gas pressure: 175 psi

New hose length: 400mm

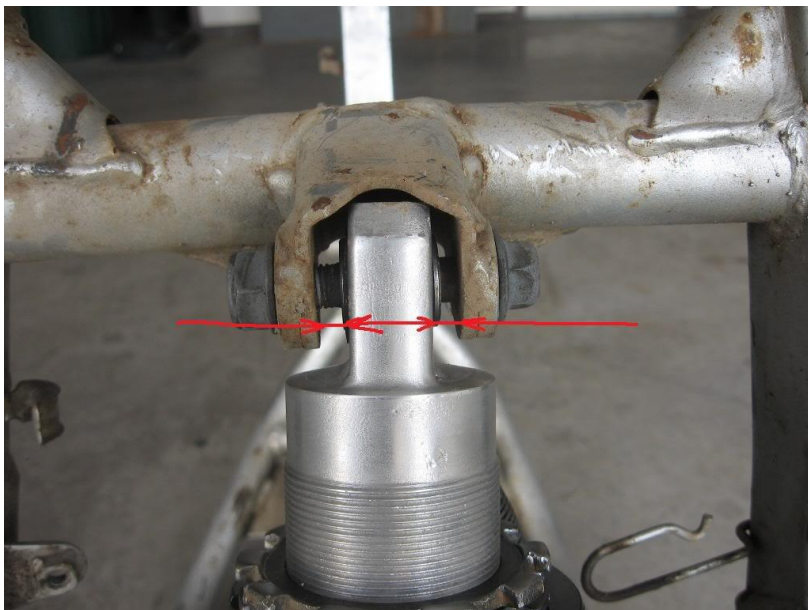
Spring preload: 14mm

Static sag: 27mm

Rider weight: 85kg or 187 lbs (nude!!)



Above: Rebuilt shock. Note: original blue XR250R spring. Teknik could not supply a new rebound dial. I have one coming from Yamaha of Troy in the States.



I have a spare frame & checked the clearance in the top hitch. I used a Loctite 401 gel superglue to attach some washers to the top bush (two each side). This held so I could get the washers into position on the bike.



Above: Positioning the remote reservoir. 16 position clicker. Is far enough back that it doesn't catch on my boots.



Above: Overall bike posture.

Above: The XR250R shock does not have any inbuilt shield to protect the chrome. I fitted an Acerbis Universal Mud Flap (Rear Shock Cover), part number: 0008320.090. I cut about 25mm (1") from the top

& bolted it to the OEM mudflap. I used two OEM 6mm washer bolts with shoulders: 90102-MM9-010. I used two nyloc nuts & washers on the other side.

How does it feel?

Apart from the increased travel, the low speed action is much smoother. I took the bike along a dirt road with some water causeways, hitting them with reasonable pace, I could feel the rear bottoming out on the stop. Not harsh, but sooner than expected. I had the compression clicker on position 10 (out of 16), so I still have some adjustment to stiffen the compression a little. When the shock is due for service, I may need them to add some shims to the compression stack for high speed oil flow. I haven't paid too much attention to the rebound action, well not until the new dial arrives & I can experiment with the settings on the side of the road.

The only problem now is that the superior action of the rear is now highlighting that the front forks would benefit from installation of afterMarket compression & rebound valving kits! This would be another A\$600.00, so it will have to wait...

REAR SHOCK UPGRADE TO WILBURS:



Custom 30mm extended TRANSALP shock with added upward travel and a tapered mount that SHOULD clear the suspension bits at full extension.

and a set of progressively wound XR600R springs with rates that are appropriate to carry me and the alp on the new XR600 front legs.

They're going on this Saturday.

Stock TRANSALP shock topped out at full extension.



Extended TA shock with spacer showing potential for interference if not taken into account when specifying a custom rear shock. Using a spacer avoids this contact. Simply getting a longer TA shock would result in contact between the shock perch and the suspension linkage.



2 Different Spacer designs. One belongs to Santa, the other is Jeffattireballs. Both spacers are 30mm, providing the appropriate increase in rear height to compliment the increase that comes with the

XR600R fork swap. This is a good solution, but not the ideal as it raises the rear but does not increase suspension travel.



Finally. The solution worked out with Wilbers. 30mm of space was added to the stock TA shock length to provide the appropriate rear height increase to match the XR600R fork. A narrower, tapered spring perch was used to further increase the clearance at the base of the shock to avoid interference. ALSO, travel was added to the shock in the upward direction in order to utilize the extra distance gained between the tire and the rear fender. Not the full 30mm, so the rear still doesn't have the 12" of travel that the XR fork offers, but an increase none-the-less.



I'll find out this weekend if all my measuring, pondering, calculating, working with the Wilbers guys, and finger crossing worked.

I got my new Wilbers Extreme Rama Jamma Boinger ~ went with the remote height adjuster so I don't have to use the long chisel to do it anymore, I'm getting old.

This is what you get for your money, Honey.





ON WILBER SHOCK (LADDER106):

From Klause at Wilbers USA

For the XL 600 V TRANSALP we can offer you shocks from the Wilbers range of products as follows.

The shock can and will be built to your specs for length, weight etc.

Model 640 @ \$ 659.00

with adjustable rebound damping and threaded pre-load

Model 641 @ \$ 989.00

as before but with additional remote reservoir and high/low speed compression damping.

Optional :

Length adjuster for +/- 5 mm on the shock @ \$ 108.00

Remote hydraulic pre-load adjuster at \$ 359.00

Warranty - 5 years

Delivery - 4 weeks

S&H - \$ 25.00

Please call us with your order at 732-786-9777

Regards

Klaus Huenecke

REAR SHOCK OVERVIEW DATA ON ALTERNATE IDEAS:

SHOCK MEASUREMENT:

I measured roughly to the middle of the rear axle position:

RAYS is 640mm

PD06 TRANSALP, you already know this, 585 mm.

RD03 AfricaTwin 88-89, 615 mm.

RD07/RD07a), 635 mm.

I'll give you a hint! But first a short story...This morning I visited the Machine Shop to get a quote for a shock spacer ...so I started to look for a less costly solution....so I went to this nuts and bolts store, but when you mention something like 14 x 1.5, they go what????

Dont get it?



RD04, not sure, doesn't have one.

I'm impatient....I have to work tomorrow and wont be able to connect during the day, until late...so I'll tell you now....

As I was telling you, visited Pep.....and got some used metric wheel nuts and studs...



Then after some cutting and painting here it is...



UPDATED PIC...NOTICE THE BOLT ON THE BOTTOM!





(10mm at the shock is likely close to an inch of additional wheel travel). With an extra 1-2 inches of wheel travel it's possible to use a much lower wheel rate (softer springs) and have a better off road ride and performance.

No cost....nada....and the result is....



As you can see, the bike is higher by the mile...I lowered the front fork by one inch....the nut that I used as spacer is exactly 30mm, but with the added washer it goes like 2.5mm longer...The bike handles like a charm, more responsive on the curves and easy on the bumps...even though there are no rubber bushings on the handlebar, it is much better because of the added travel...Still, I'm able to reach the floor with the tip of my boots...

The SRC fork brace is on the way... so it will look much better with the fender on. Oh, forgot to tell you,

that the front brake works perfectly...

Nop...just added some blue bolt glue and bolted them together...should be fine...I missed one picture...



LOCORIDER:

I have done some research on rear shocks that did / didn't fit the '88 TA. I'll keep this breif as it is nearly midnight here,

First Picture:



Above from left to right: '98 XR400R, '88 XL600V (with 30mm spacer), & '98 XR250R rear shock assemblies.

REAR SHOCK ADJUSTMENT (LADDER106):

The US Honda Service manual lists that standard rear spring FREE length as 268.5mm

The service limit is 263mm.

After installation, the manual lists the maximum length (spring adjuster wound toward the top of the shock as: 267.5mm

The minimum length (adjuster wound down to maximum) is: 258 mm.

Since you have the US model, I would assume this would apply to your bike.

I've found that the bike handled best with a rear sag set at about 1.75 inches (rider and gear on the bike, feet up).

I found a cheap-and-dirty-shade-tree way of making a spacer for the tired old spring. It's a bit heavy but it works and is indestructible. There is still enough space between the coils for full shock travel. Here's a photo.

.....don't laugh...well go ahead but at least give me points for originality.

CHEAP REAR SPACER (LADDER106)

I rode some backroads and gravel yesterday and found the TA trying to push the front end quite a bit before I could get the back to slide around. One road was freshly graveled and a bit deep so I thought that was the problem. Once home and inspired by all Jeffs suspension work I did a quick measurement of the rear suspension sag.

To my surprise the rear was going down over 3.5 inches with me on the bike. That's just about HALF the entire rear travel.

So today, I took apart the rear suspension. With no preload on the spring, the adjustment collar was about 2/3 of the way down the threads. That only left about 1/2 in or less to preload the spring.

The service manual says that the rear spring service limit is 263mm. Mine measured 265 so I know the spring has sacked out over the 27000 miles and 14 years. The damping of the rear shock was still intact

with no leaks. Eventually a new Wilbers will be purchased but since I'm putting money into the DRZ right now, the TA would have to be fixed on the cheap.

Here what I came up with: A 2 inch steel pipe union has three parts when unscrewed. It costs \$3.79 at the local hardware store. One part fits very nicely over the bottom spring stop. I had a small lip that was easily ground flat on the bench grinder. It spaced the rear spring just about 1 inch. The top spring adjuster just barely threaded on but it worked.

I've added about another 1/2 inch of preload to the spring and the rear sag is now just a bit over 2 in. The makes a visible difference in the rear ride height of the TA and, although I didn't go back to the gravel, it makes the front end feel much better "planted" on some graded semi-dry dirt.

The front shock has so little travel in itself I'm not worried about "coilbinding" the spring.

This gives me a bunch more preload adjustment for carrying bags and gear and should give me back my handling for the next few months.

Oh...while your there you can clean and relube all the needle bearings in the rear suspension linkage (you WERE going to do that this spring anyway...right?) Careful !!! The needles in the bearings are loose....the grease helps hold them in place....don't use lots of solvent and compressed air....quess how I found out and why the knees of my pants look like my shop floor.

Doesn't look too bad, huh?

Here's the photos:



RAY
Davis, CA

This is a pipe union from the hardware or plumbing supply store. 2 1/2 in. I think. Take the shock apart and then use the correct part of the union. You'll have to do a bit of grinding on the spring side to make the spring sit flat but it's easy to do, cheap and works.

It will give you back the adjustability that you lost until you can afford another shock.

REAR SHOCK, TIRES AND WHEELS DISCUSSION: (JIM RAWLEY Owner of M.A.P.)

I run heavy duty tubes and carry usually just the front. It can be folded up in a pinch (no pun intended) for the rear. Or sometimes when I feel energetic, I carry both front and rear.

Q: Took the shock out to do the red bolt thing. Lifted the wheel all the way, and in my case the brake bar gets trapped between the muffler and the swingarm...not a good thing, but I don't think it may do terminal damage to the bike. Without the shock it will go all the way up, and the only thing restraining

will be the chain tension, but wont hold it to go all the way.

I'll try again when I install the shock back with the shorter spacer (5mm shorter, I'm not that tall). I'm going to the shop to cut the spacer...I'll be back!

LADDER106: Quote:

Without the shock it will go all the way up, and the only thing restraining will be the chain tension, but wont hold it to go all the way.

I'd expect that to happen with the shock completely gone. What I was thinking was:

If the bolt for the spacer does come undone, the connection between the shock and the triangular shaped suspension link will be gone. The shock will still be attached at the top mounting point.

But...with the spring and spring collar still in place and unable to fall between the space inside the dogbones, the spring will still offer SOME support to the system as the suspension settles.

Therefore...the rear wheel won't collapse all the way up against the inside of the fender. (like it does with the shock completely removed.

Didn't understand the part about the chain offering resistance. Once past the "centerpoint" the chain will get more slack as the suspension compresses.

LOCCORIDER: I did not push it, because the swing arm was too close to the muffler and remember that I changed the way the brake bar was setup. I have the bar going over the swingarm and it gets between the swingarm and the muffler. So, if the red-glue-covered-bolt-on-the-shock-bracket gets loose, I will end up without rear brake. So at that point, the arm was straight and the chain was in tension.



I was going to do the trial with the shock on, but it was late, too tired, it was too humid and too hot. Got the forks pushed down all the way, cutted 5 mm out of the spacer, and with tha bolt looks much better.

So in total it was 30mm plus 2mm of a washer, minus 5 will be 27mm. Now I have both feet on the ground and looks good.





AT SUSPENSION ON THE TRANSALP

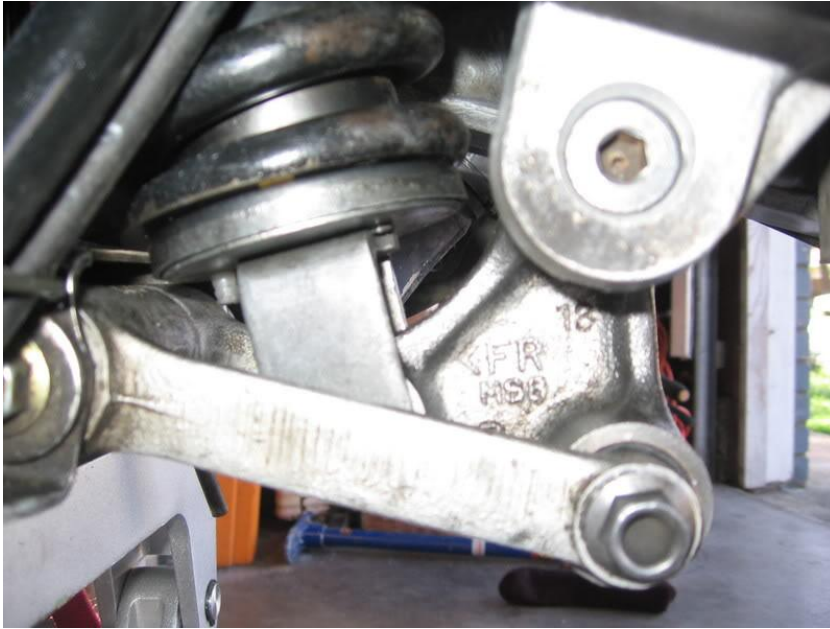
A beautiful Saturday and a day of modding.

My suspension linkage and shock arrived from Germany last week so today the AfricaAlp got the AT rear swingarm and suspension. Here's how it went.

The swingarm is a straight "bolt-up" proposition so no problems here (see Jeff's posts about #880 for photos)

Once the swingarm was on the AT shock and suspension linkage was added. The AT triangular link piece has different dimensions from the TRANSALP piece. I wanted to keep the rising-rate geometry the same as Honda designed it and I also think this will let me add a Wilbers later without the interference problems others have overcome.

Here's the link piece:



You can see that the dimensions are different from the TRANSALP piece:



For anyone else attempting this, the upper link bolt (the one with the allen key) that mounts the link to the swingarm is important to get. The TRANSALP uses a normal nut and bolt arrangement here but the AT swingarm has the large hole for the round head of the special bolt to fit into. This bolt may be the same used on an XR600 or 650 or 400 (many Honda parts are interchangeable) but I didn't want to have to hunt one down at the local salvage yard. Happily the rider I got the AT parts from included this bolt in the package.....whew!

The AT shock has a remote reservoir and a short hose that limits where you can mount it. My solution was to remove the TRANSALP coolant tank to make room for the reservoir:



....and remount a coolant tank in the space just in back of the airbox on the right hand side. This required removal of the airbox snorkel. The bike does not seem to run any different with the snorkel removed and since water would have to be about 3 feet high to get into the airbox now, it should not be a problem. The coolant tank is courtesy of Rubbermaid with help from the Dremel tool and some plastic fittings from the local friendly hardware store....looks a bit "Good Housekeeping" but works and you don't see it normally:

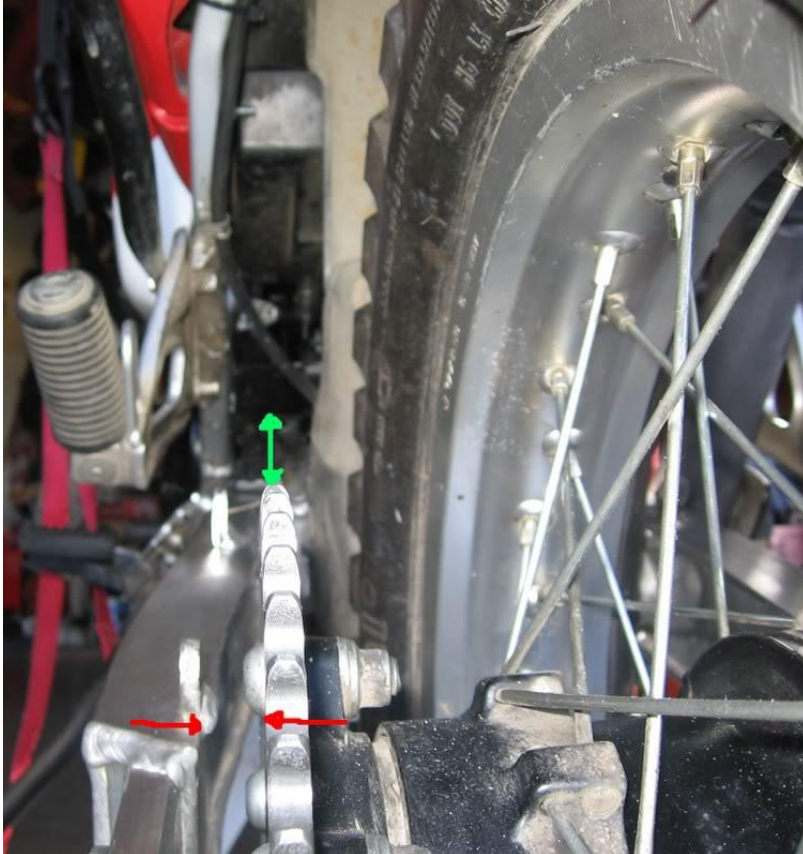


With all this completed, it was time to mount the rear wheel. This required the most time. The TRANSALP left hand wheel spacer is about 4mm thinner than the Africa Twin spacer. Using the TA spacer made mounting the rear wheel easier because it all just fit with minor trimming on the brake backing plate (see Jeff's photos).

The problem was that the chain-line was off, the chain rubbed the inside of the chainguard, the sprocket protector under the swingarm and the inside of the frame at the swingarm pivot. I measured the front/rear wheel alignment with stringlines and didn't find any great problem but the stringlines aren't incredibly accurate so maybe the 4mm didn't show.

Anyway.....I decided to use the left side spacer that came with the Africa Twin parts. This solved the

chainline problems but made the rear wheel (with spacer and brake installed) too wide for the swingarm. Using a bench mounted disc sander, I removed material from the outside of the brake backing plate where the axle comes through until the unit slipped into the swingarm. Here's a photo showing the additional space (between the red arrow) on the left side and a totally straight chainline (green) arrow. Unfortunately, my camera didn't show the CS sprocket very well. It's there and right in front of the rear sprocket....sweet!



Now the fun began.....the rear brake backing plate stay (the part the keeps the backing plate from spinning when the brake is applied) had to be carefully carved up so it would fit into the AT swingarm. Material was removed with a file until the unit fit well and didn't bind. Take this slowly. If you don't remove enough material the brake will make the wheel try to cock sideways in the swingarm and you'll have to push the wheel straight to get the wheel into alignment. I didn't want this so the majority of the afternoon was spend filing away until the wheel went into the arm and could move through the entire chain adjusting range with no binding or cocking. I got real good at installing the removing the rear wheel....musta done it 50 times....install, bind, find the tight place, MAS335, file, repeat..... Here's what it looks like:



This made it all fit together. Like Jeff, I'd like to eventually find a AT rear wheel and disc brake set-up but that will have to come later.

To complete this project, you'll need a new chain. I got a 130 link RK-Xring and trimmed off about 5 links.

Here's a photo of the finished rear end:



So now I've got an honest 8 (plus just a bit) inches of rear wheel travel in the rear. Next I'm going to fit a pair of XR250 forks up front. They are the same diameter as the TRANSALP forks so the triple clamps can stay. It will take a bit of modding to get the front brake to work. I think 9.5 inches in front and 8+ in the back will work well on the bike since (in all honesty) I'm doing about 90 percent road and 10 percent dirt....hell thats still 3 more inches of travel than my first MX bike had.

....oh yeah, at some point the welder will have to come out so the kickstand can be elongated. Carrying the 4X4 piece in the tank bag might not be too bad of an idea. It'll give me something to throw at our cellphone talking,radio blasting,make-up applying,no-one-else-is-on-the-road-but-me, drivers we have round these parts....should make a satisfying CLUNK against the side window....and if the widow is open.....OH WELL

I think that, quite often, riders look in the wrong place to solve a "wobble" problem.

Weight is certainly a factor as is the way the bike moves through the air. Large square boxes mounted out in the air stream do, obviously, nothing to improve air flow.

IMHO, the first thing to change is the rear suspension sag. Lots of riders pile 50 to 70 pounds of gear on their bike, never raise the rear ride height back to "normal" and then wonder why their bikes handle so poorly. Remember that as the rear load increases the bike rotates around the front axle. The steering geometry changes with load. With the large somewhat inaccessible lockrings on the rear shock a lot of us never play with this setting.

In the dirt, 10 or 20 mm of difference in rear sag or ride height or whatever you want to call it will make a large difference in the way the bike corners. Same thing on the road it's just that the added traction of the pavement masks some of the "problems".

Try adjusting your rear sag when loaded first.

Other "wobble" problems have been found to be aero related. Particularly with a "dirty" bike like the TA with big square bags, it has been found that the air flow coming around the rear of the bike will attach and then separate from the bike at a particular frequency. (Try slowly sneakin up on the the back of an 18 wheeler on the freeway.....as you reach a certain distance behind you'll feel the wind buffetting the bike from side to side.....same thing) This may also occur differently on each side of the bike. If this happens what you get is a big invisible hand grabbing the back of the bike and shaking. What you feel is a wobble at the bars.

If the suspension doesn't cure it, it's probably air related and like the Doc said," Does it hurt to do that.....then don't do that". Do you really have to cruise at 85 with a full load?

Ray Stedronsky
Davis, CA

SMOG CANISTER REMOVAL:

If it's anything like my BMW R1200CLC, it goes about like this:

There's a tube venting the gas tank into the charcoal canister
There's a tube connecting the canister to a solenoid operated valve
There's a tube from that valve to the air box
There's a tube from that valve to near the ground

Your TA may eliminate the solenoid operated valve; in which case you'd just have

The vent tube
A tube from canister to air box.

Either way you slice it, the only thing you have to stop off is the tube into the air box.
Then extend the tank vent tube to near the ground.

No Kali smog doodles on my 89 TA, so I am flying blind on this. But the principle should remain the same.

SPEEDOMETER REPAIR OF BROKEN WORM GEAR (LADDER106):

Riding Monday and the speedo needle starts vibrating....then about 10 miles later starts jumping....then about 5 miles later lays down and dies.....CRAP. I know what this is. The dreaded TRANSALP speedo drive gear failure. Drive ring ordered that afternoon from the friendly local dealer. The problem is, I replaced the drive gear about 5000 miles ago. Why the quick failure??

Today, for a nice rainy day project, I took the speedo drive off the wheel and pulled it off the drive cable. I tried to clean out all the old grease and all the chewed up nylon gear teeth. The more I cleaned the more came out. I finally resorted to aerosol brake cleaner and compressed air and even more crap came out. After about 30 minutes of this I realized that by the time I got everything inside clean, there would be absolutely NO lube left in there and even then I wouldn't be certain all the rubbish was gone.

The best way to clean this thing is to remove the worm gear. But how to do it? I tried pulling on the little drive tab with a pair of needle-nose pliers but no go. I figured that during assembly, the gear was just pressed in and the only way it was gonna come out was to be "presuaded" from the front. I drilled a small 5/32 hole into the housing where the front of the worm gear rotates. Do this carefully. You only want to penetrate the aluminium housing.



Then found a small drift and began to lightly tap on the end. With a few heavier taps (I'm NOT talking lumberjack swings with the ball-peen here) the gear began to move. I had to support the end on a socket to allow the drive end to come out of the housing.



These are the parts you will find inside:



Disassemble this carefully. The spacers are very thin and the grease will make them adhere to the housing and the worm gear shaft. If you get too happy with parts cleaner and compressed air you'll spend 15 minutes chasing the spacers around your shop floor....guess how I know this.

Now you can clean ALL the old lube and broken teeth out of the housing.

Relube with white lithium grease (other web sites state that other greases "attack" the nylon. While this sounds a bit suspect to me, after this I wasn't gonna dispute it). Install the new drive gear. Here it is with part number



To reassemble, place the worm gear back inside the case and slide the shiny metal bushing down on top the shaft. The part with the protruding boss goes toward the gear. Tap the bushing down. I used a 10mm deep socket (notice how I use my sockets for everything except removing bolts). The bushing will seat and you'll have about 2mm back and forth play in the worm gear. This is what I started with. I thought I could reduce it some but some pretty serious taps would not move the bushing any closer and I called it good.

The rubber seal can be pushed down on top the bushing by hand using the socket.

Clean and lube the speedo drive cable, Dab a bit of Silicon sealer onto the front of the drive housing to seal up the hole you drilled, reinstall the front wheel and ride off with a functioning speedo....YAY

I considered screwing a grease fitting into the front for future lubing but there didn't seem to be enough metal there to support one. You could always peel off the silicone and pump in some grease through the hole.

SPROCKETS:

I've put over 10,000 miles on my 90 TA since I bought it February 1st of this year. The previous owner changed out the front sprocket to a 16T paired with the stock 47T rear sprocket. At 55mph I'm turning about 4 grand - at 80mph 6 grand on the button. Overall seems to be around a 500rpm reduction from the stock 15T gearing. I feel the gearing is just about perfect for Adventure Touring as long as you don't try to do any steep, technical, off road climbs or descents. If you stick to moderate forest service roads or light jeep trails, this gearing is just fine.

You can increase the size of the countershaft sprocket by one tooth to a 16 T (15 is stock). This is just about the equivalent of reducing the rear by 3 teeth.

I use both a 15 and 16 depending on the tires I'm running and the riding I'm doing. I've had good luck with the 16 for highway running. It's still low enough for some off roading but slippery hills climbing is a bit of a challenge. No adverse affects on mileage.

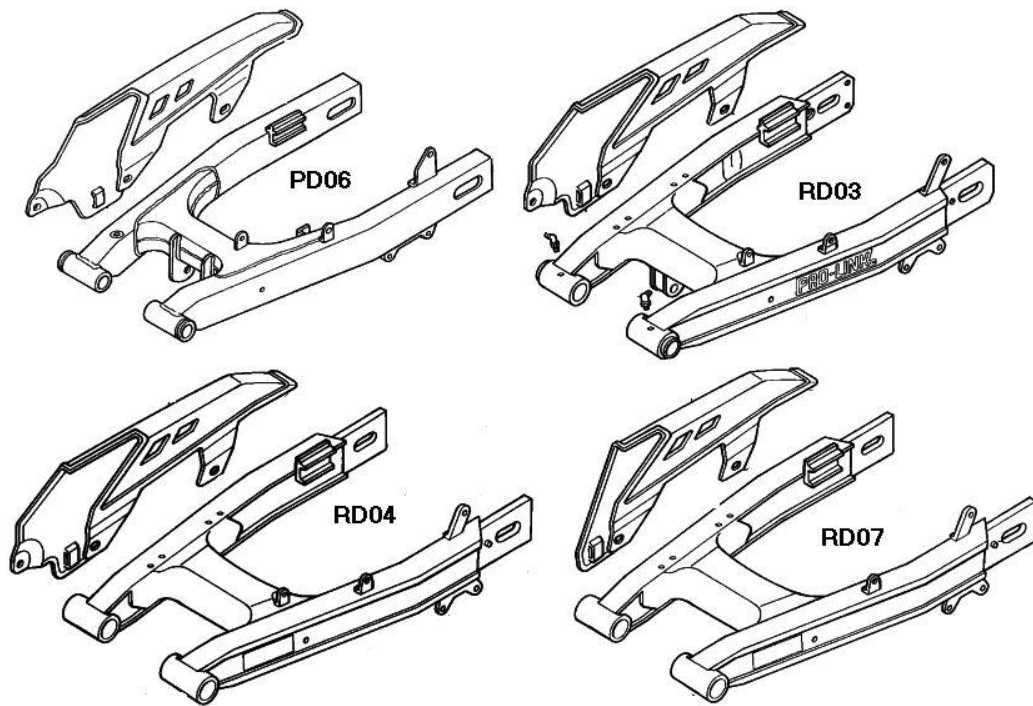
I think you can get them from Sprocket Specialties or JT. Don't have any idea about international shipping though....I'd expect them to be available in Germany with all the TAs still running around there. There was also some talk a while back about the stock 16T sprocket from the Honda Hawk (same basic engine at the TA) fitting the TA but I don't have the part #.

STATOR ACCESS PORT aka crank bolt cover (NORCALTA):

Stumbled across this nifty little item on another forum I belong to. Solves the problem of stripping out the 10mm allen keyway on the stock TA crank bolt cover when trying to remove it during a valve adjustment. It's a bit more than double the cost of the stock part at \$23 plus shipping but looks like you'd never have a problem with stripped allen keyway again. <http://safermoto.com/lima>



SWINGARMS:



SPECIAL NOTE ABOUT SWINGARMS:

Originally Posted by **Ladder106** ➡

I do not believe there is any difference between the RD04 and TRANSALP suspension links other than the large allen bolt that attaches it to the AT swingarm and I think that can be sourced from other US Honda parts..



Not sure about the RD04 but the RD03 and 89 TA links were quite different. I found that when I used the TA link I just blew thru the suspension stroke. Just changing to the RD03 link made for a more progressive feel in the spring rate. I think it made all the difference on my bike.



(END SPECIAL NOTE)

No, they are not. RD04 and RD07 have 256mm rear rotor, same as PD10 (with two front rotors) in front. Internal diameter is 144, distance between 4 hole centers is 166mm. Bolt holes are 10mm.

PD06 have 100% same rear rotor with RD03- 240mm. Internal diameter is 105mm and distance between hole centers are 125mm, but 4 bolt holes in disk are 10.5mm. TRANSALP 650 have same rear disk.

BUT- brake caliper brackets are absolute interchangeable between RD03, 04 and 07 regards their place against swingarm. If you have 240mm disk, use bracket from RD03, otherwise from RD04, 07 regardless which AT swingarm you have.

I tested that caliper from PD06 '94 fits in RD03 and RD04 caliper bracket perfect, I guess, same with RD07 bracket.

Wheel hubs and sprocket drive&cushions are also 100% PD06=RD03. RD04 and 07 have different wheel hub and sprocket drive&cushions.

LADDER106:

My modification was completed with RD04 parts only. I was told that RD03 and RD04 parts would fit the PD06 TRANSALP (and should also work for your PD10 but I have no experience with this bike since they were never imported to the USA).

Frame changes in the RD07 model resulted in changes in shock absorber length and other suspension changes in the rear. These changes seem slight but enough to make parts exchanges difficult.

The RD04 and PD06 TRANSALP shock are the same length in the extended position. The stock PD06 shock has 40mm of free travel ...it moves 40 mm before touching the rubber bumper-stop. I would think it would move about 10mm more into the bumper stop so probably 50mm total travel would be correct.

The RD04 shock had more travel in the shock but I don't remember the exact figure. My old TRANSALP shock was measured on the bench this morning but the RD04 shock is still in use and it's difficult now to get accurate measurements.

The rear tire will come close to the rear fender with the longer RD04 arm installed. The Africa Twins used a different rear subframe with a longer rear fender.

Most riders in the US use the RD04 arm so they can switch to a rear disc brake. Since you already have a disc on the PD10 I'm not sure why you would want to make this change...other than the RD04 arm looks nicer. As you've seen, you may run into problems with the brake caliper interfering with the stock exhaust at full compression.

In a previous post, you asked about how the stock forks bottom. I researched this and found that most forks today are designed to bottom "hydraulically" with a male and female cone shaped part of the damper units. These two cones trap a bit of fork oil between them causing movement to stop. Forks do not bottom by coil binding since this will eventually fracture the fork springs.

Given that fact, I don't see any reason (unless you are a manufacturer worried about liability) not to limit travel by coil binding the fork if you are certain this will almost never happen.

This may work well for you if you want to use the XR400 fork for touring and riding with your wife. Shortening the stock spring so that it coil binds will also increase the spring rate (to a point) creating a stiffer spring in front....which is what you'll need. Only experimenting will tell you if the balance between travel and spring rate is correct so at some point you just have to get out the angle grinder and start cutting off coils.....a bit scary (at first)

SWING ARM SERVICE (MAS335):

Of all the TRANSALPs I have serviced or restored I have never seen the shock linkage serviced due to neglect. The seals are small and not very well protected from the outside elements. Neglected they can

look like this image.

If you decide to properly service the swingarm and shock linkage bearings here are a few things that may help.

1) Lift the rear wheel off the ground to unload linkage stress

2) Loosen and remove the swingarm to frame shaft bolt nut. With a soft metal rod (aluminum) that is smaller in diameter than the shaft diameter, place it against the threaded end of the shaft and hit it with a hammer, all you are trying to do is make sure it will move at all, 1/2" is plenty. I have seen them completely rusted inside the bushing sleeves making the swingarm remove impossible which ends the idea of servicing the swingarm bearings but you can still service the linkage bearings.

3) Loosen all of the linkage bearing bolt nuts **before** dismantling the swingarm, it will be much easier than trying to do this once the swingarm has been removed due to their torque values and the swingarm moving around.

4) Including the swingarm bearings there are a total of 11 bearings. 4 in the swingarm and 7 in the linkage assembly, all are the same size.

5) On rare occurrences I have seen some TRANSALPs with "caged" needle bearings which means you can not remove the roller needles and just clean them as best as you can. The caged bearings also have about half as many needle bearings as the full needle bearing.

6) Per Honda, a 40% Molybdenum Disulfide(MoS₂) rated grease is recommended, anything higher than the 40% is fine.



There is only one way to properly clean and grease them.....

T:

TIMING (LADDER106)

Have you taken the large valve covers off the cylinder heads? If so, you can adjust the valves without looking at the timing Mark (so you don't HAVE TO remove the plug in the side case. Just watch the cam lobes. You can adjust when the rocker is anywhere on the lowest side of the cam. Piston doesn't have to be at TDC.

If you haven't removed the large covers and are adjusting through the smaller access covers you can still find TDC. Open the intake side adjustment cover, put the bike in gear. Push the bike (helps to have the plugs removed) or spin the back wheel if the bike is on a stand. Watch the intake rocker push down the intake valves so your sure that piston is on the intake stroke.

Now insert a clean screwdriver or small rod of some kind into the sparkplug hole until you feel the top of the piston. Keep turning the back wheel until the piston comes up to the highest point...that's Compression TDC. Adjust valves.

You might have to do this a few times to get the "feel" right.

Do the same to the other cylinder and you get the valve adjustment done. You can then happily strip out the soft aluminum side cover and fix it later. I've pretty much given up on mine.

The only thing "magic" about TDC is that it lets you adjust both intake and exhaust at the same time. If you can see the cams you can adjust intake and exhaust separately just by doing it on the lowest part of the cam.

Ray (who also wants a centerstand)Stedronsky
Davis,CA

U:

V:

VALVE ADJUSTMENT:

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VALVE COVER AND OTHER REPLACEMENT ISSUES (LADDER106):

Unless my memory has totally gone (always possible) there isn't enough room to remove the rear valve cover without also removing the rear chrome coolant tube that goes into the rear head. You could always pull the rear engine mounts (swingarm pivot) and see if the engine can drop down enough so the valve cover clears the frame but I haven't tried this yet as it seems to be as much work as pulling carbs and coolant.

So you get to drain the coolant.

You also get to replace the small O-ring that seals the chrome tube to the head. Yeah, I know, you don't

have this part yet. Sorry but it's necessary. You can bodge the job by using some sealant on the old O-ring here but remember, all these seals are OLD. Carefully clean around this tube with a dental pick to free up all the small gravel and dirt that sits on top of the seal, then hit it with compressed air to make sure all the crud is gone before pulling the tube.(DO THIS WHEN YOU CLEAN THE BIKE BEFORE YOU PULL THE VALVE COVER) Anything left will certainly fall into the cooling system.

If you got a top-end gasket set the coolant O-rings should be included. There should be 4 of them (the other two are for the chrome 90deg tubes coming out of the side of the cylinder wall)

Also strongly consider a small (a little goes a long, long way) thin coating of the gray very expensive non-drying silicone sealant that Honda and Suzuki sells on the valve cover gasket. This stuff is about \$20 (yeah, I know) a tube but worth it. Lasts a long long time and does the job right.

When we rebuilt Chris's bike this summer I used an after market valve cover gasket (Honda part not available) and got to disassemble the bike and repeat the process cause the gasket still seeped a bit without any sealant.

If, while you're there, you decide to do both gaskets remember the valve cover with the large breather tube goes on the rear head (yes, I did that wrong too).

The "cup is half full" folks will point out that coolant is not forever and should be replaced every year or two for good water pump health. (Coolanol brand coolant has worked well for me over the years. The DRZ has a finicky water pump but I've not had a problem with it using this stuff.) Plus, think of all the fun you'll have getting that gasket to sit in the grooves and not get twisted and squeezed out in a corner. This job does not go well with beer.

This is also a good time to look closely at fuel lines and inspect carb diaphragms. Make certain the E10 fuels aren't turning your tubes to goo. When replacing the carbs warming up the tubes with a heat gun or hair dryer has worked well for me. Also a thin coating of grease around the carb lip will help things slip back on.

And....lastly, there is a procedure (probably only published here) to insure you get that nasty top air tube to seat correctly on the carbs and then mate up to the air box without leaking.

Hey, at least it's not a Norton.

VIN Plate Rivets:



W:

WHEEL BEARINGS (LADDER106)

First take a quick photo or remember how deep the bearings are installed into your hub. Many do NOT have any kind of "lip" to stop against and it's possible to push them into the hub too far causing a bind when the axle is tightened.

There is enough "wiggle room" between the bearings so that the spacer between them can be pushed off center a bit.

This provides a access to a bit of the inner races.

Carefully heat the area around one bearing with a plumbers torch (you don't want glowing red here....just warm to hot aluminium). Lay the hub down on the ground or your bench, push the spacer to one side and use the exposed part of the inner race to tap the lower bearing toward the outside of the hub with a drift or punch.

You don't want to push the bearings completely through the entire hub. Just push from the inside toward the outside on the inner races.

I've had good luck using an old socket wrench extension. It's long enough and the larger curved end fits the curve of the inner races well enough to get a bite.

Tap firmly around the the circumference of the race. You'll begin to see some movement. If you have to start striking harder, reheat the area around the bearing.

You should have to hit it with some sharp taps but you shouldn't be using "lumberjack swings".

This obviously renders the bearing unusable again.....even if they look good, the inside races will be damaged by the blows.

Install the new ones by the reverse process. A press is best but they can be installed by using a large socket that is large enough to contact the OUTER race but too small to be held by the hub. Apply some heat and tap the new bearing in by striking evenly around the edge of the large socket to drive the bearing squarely into the hub. You won't damage anything by hitting on the outer race. Using a punch or drift here is dicey since it's easy to miss and end up driving the punch through the bearing seal and into the bearing.....yes I've done that!. The correct size large socket or perfectly size piece of pipe works

best.

Use your photo to refresh your memory on how deep into the hub the bearing is supposed to go.

DO NOT FORGET TO REINSTALL THE SPACER AFTER YOU TAP IN THE FIRST BEARING. If you do you'll ruin one bearing driving it back out of the hub again.

Also, quality bearings can be had for much less money than your motorcycle dealership will charge. Simply bring your removed bearings to a bearing supply house and be amazed and the different numbers and sizes of bearings available.

WHEEL PROP aka bike proper-upper (Nomile):

I got this idea from Ladder106 (Thanks Ladder106!) He showed me the one he made to prop up his TA/AT he made his in 2 pieces to fit in his tank bag for chain oiling etc. I started to make a 2 piece then just did a single piece for starters to get the proper length, it fits inside my Zega's easily and weighs only 4.5oz. /127grams. it fits inside my tankbag also.

3/4" /19mm PVC pipe with an end cap on the ground and a notch cut into the coupling that fits on the shock link, seems very strong, works well so far.



(Note, carrying two of the telescoping lifts will work for the front tire as well for changing in the field)



start of a 2 piece just need just another end cap and coupling.

UNIQUE IDEA FOR REAR LIFT:

Here's another approach:



WOBBLE (LADDER106):

How much weight did you have on the rear of the bike?

Nevermind.....what's really important it how much rear sag you had with the bike loaded and you on it. I'm betting you used at least half of the rear travel and maybe more.

Any time a TA guy complains about this wobble it's because the rear is so far down that the front forks are angled like a chopper.

Crank up the rear preload for about 2 in. of rear sag and take it for another ride...I'll bet it's better.

X:

XR600R SUSPENSION MOD PROJECT:

OK, I got the XR600 Forks on my Alp. Woot!

I used Jeff's Instructions pretty much exactly, so I won't bore you with step by step instructions that have already been given.

It was easy. All I needed was the forks and clamps from a 1992 XR600R and a custom length stainless brakeline.

My swap was even more straightforward than Jeff's because I used a 1992 Fork, which has the same axle size as the TRANSALP. It's a pretty much bolt up swap.

EDIT: One error to correct from Jeff's instructions: you still need a spacer between the wheel and the fork even if using the older forks and axles. If you don't your caliper won't install.

Here's some pics. Pennytech style.

Poor mans workbench.



Poor Man's paint booth (this is the key switch bracket) I slightly modified Jeff's design.

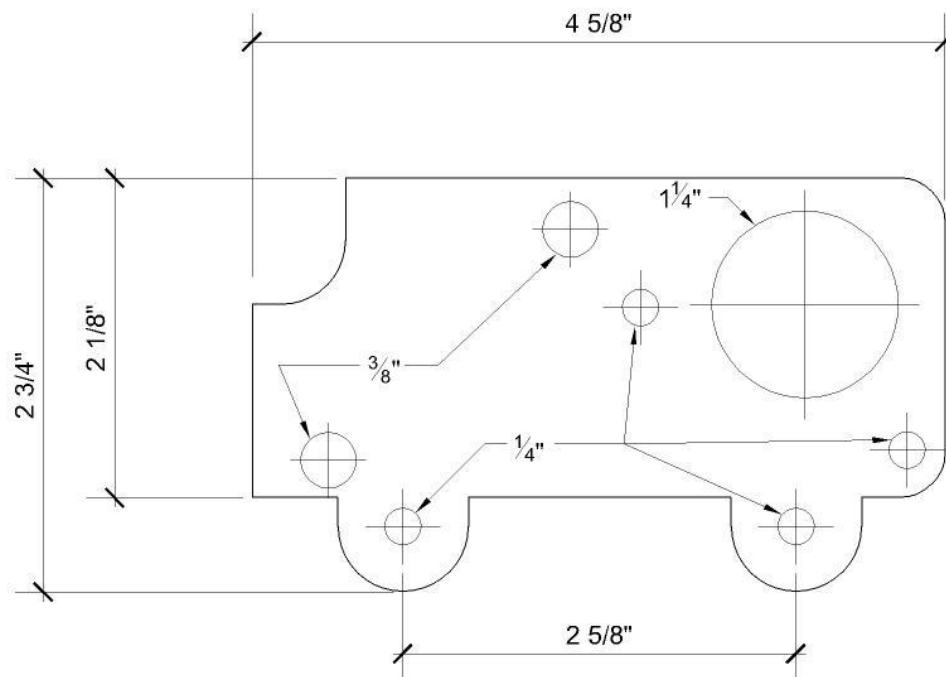


Poor mans work stand, located in poor mans garage. 🇺🇸

Here's a pic of the modified upper triple with the spacer JB welded in place and painted to match so that it looks like it's supposed to be that way.



A pic of the modified upper clamp with the Keyswitch and Fusebox bracket installed.



And here's the bike. I'm loving the height. As of right now it's still lower than final height. I don't have the rear spacer/ new Wilbers Shock yet, so I dropped the new forks in the clamps a half inch and cranked up the rear preload to level it out.

I'm definitely needing some new forkboots and a fender.



I tried to install the XR600 High front fender but it hits the fairing in the front and the crashbars in the rear, so I'll be figuring something else out. If you want any other pics or have any questions about the install, just ask.

I only went for one neighborhood test ride after I was done, so no tough testing, but I can already say it feels like a whole different bike! I LIKES!

For those that care, I tweaked Jeff's key switch bracket design. This is what is necessary to make the cockpit look factory and the steering lock work in both directions when using XR600R forks and clamps. It bolts to the 2 threaded holes in the XR upper clamp.

Here's the template in 8.5x11 PDF so you can print it actual size. [Download Template.pdf](#)

I printed it, cut it out, and used rubber cement to stick it to the aluminum plate. Then I took a center punch and put a dent at the center of all the crosshairs, and drilled each hole to the appropriate size. Finally after all the holes were drilled, I cut out the perimeter. Voila, perfect template!

FROM ADH007:

A quick Photographic design study for those contemplating or in the middle of this project.

Stock TRANSALP shock topped out at full extension.



Extended TA shock with spacer showing potential for interference if not taken into account when specifying a custom rear shock. Using a spacer avoids this contact. Simply getting a longer TA shock would result in contact between the shock perch and the suspension linkage.



2 Different Spacer designs. One belongs to Santa, the other is Jeffattireballs. Both spacers are 30mm, providing the appropriate increase in rear height to compliment the increase that comes with the XR600R fork swap. This is a good solution, but not the ideal as it raises the rear but does not increase suspension travel.



Finally. The solution worked out with Wilbers. 30mm of space was added to the stock TA shock length to provide the appropriate rear height increase to match the XR600R fork. A narrower, tapered spring perch was used to further increase the clearance at the base of the shock to avoid interference. ALSO, travel was added to the shock in the upward direction in order to utilize the extra distance gained between the tire and the rear fender. Not the full 30mm, so the rear still doesn't have the 12" of travel that the XR fork offers, but an increase none-the-less.



I'll find out this weekend if all my measuring, pondering, calculating, working with the Wilbers guys, and finger crossing worked.

EDIT: I snagged some of the pics seen here from Jeff and Santa's posts. I hope you guys don't mind. Yall were my inspiration.

Originally Posted by **atgreg**

It's a rising rate through the linkages so it's not 1:1 from shock to swingarm. EG, I put a shock with 9mm extra lenth and travel on my 750 AT and I ended up with 30mm more travel at the back wheel

I'm continuing to work with Klause at Wilbers (great guy to work with and Highly reccomended customer service)

I put the bike up on a jack and did some more messing around, measuring, etc, etc.

Yall are right. In order for the rear of the alp to match the travel and lift characteristics of an XR600 fork it needs a shock that is 405mm eye to eye fully extended (about 30mm over stock) but the compressed length needs to be the same as the stock TRANSALP shock. (this is what you don't get with the spacer)

This wouldn't be a problem, except that it needs that 30mm to be added at the bottom between the perch and the eye (like the spacer) to avoid interference with the TRANSALP linkage at full droop. So I'm not sure yet if that small of a compressed length is possible.

I've got Klause figuring it out for me. I'll keep yall updated.

Oh, and Im thinking I'll be going with progressively wound XR600 Fork Springs at .43kg/.66kg

The other option was .48kg Straight Rate springs..

Model 640 rear shock with 405 mm eye to eye length and as much travel as possible considering the 70 mm from the bottom eye to the spring retainer or perch. Blue spring
Fork springs for the XR 600 R fork with a progressive rate of 4.3 to 6.6 Kg
Total price: \$ 430.00 for shock, \$ 99.00 for spring, S&H \$ 25.00 = \$ 554.00.

Please let me know that hits is OK with you. I will send the order to the factory on Monday evening, so it there before they get in the office on Tuesday.

We have some other option for the retainer to make the transition to the spring diameter less drastic. We have retainer rings with a 60 degree angle upwards to the spring with a 75 mm diameter before it makes the transition to the 85 mm spring diameter.

RWS fork brace and Tusk Neoprene Fork boots on the XR600 Front end.

I mounted the stock fender to the fork brace after much careful dremeling.



XR600R forks are plentiful on the net, but the key is to find one from a '91 or a '92.

In '91 they went from damping rod to cartridge style forks, which are very nice.. but in '93 they upped the Axle diameter. So the '91 and '92 are the only ones that are cartridge style forks **and** will fit the TRANSALP wheel without having to get new bearings, speedo drive, etc.

If you don't mind all the wheel crap involved with a larger diameter axle, you could also include '93 and up XR600R forks on your search as well as any year XR650L forks. If you don't feel like you need the cartridge forks, you could extend your search all the way back to 1986. I used a 1992 set of forks and trees.

Hope that helps.

Y:

Z:

APPENDIX A:

Honda TRANSALP and Africa Twin

[Main Page](#) < [Honda TRANSALP XL600V](#) < **Honda TRANSALP and Africa Twin**

The Honda Africa Twin is a 650cc (RD03) or 750cc (RD04, RD07) cousin of the 600cc Honda TRANSALP. The earlier Africa Twins are very similar in construction to the TRANSALP, and many parts can be put onto a TRANSALP. Potential improvements include a larger fuel tank, an aluminum swingarm, taller suspension, and a rear disk brake.

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Model Designations

Model designations become very important when purchasing parts, so it's important to understand the meaning of PD06, RD04, RD04, and RD07.

The TRANSALP imported into the US in 1989 and 1990 is the **PD06** XL600V.

There are several models of Africa Twin. The important thing to remember is that **RD07 parts cannot be used on TRANSALPs**, as the frame is significantly different. Many **RD03** and **RD04** parts, however, bolt straight up to a TRANSALP. The following chart shows years and models. Note that only models relevant to the US-spec TRANSALP are shown:

Year	Model	Picture
1988	RD03 XRV650	
1989	RD03 XRV650	
1990	RD04L XRV750	
1991	RD04M XRV750	
1992	RD04N XRV750	
1993	RD04P XRV750	

1994+ RD07 XRV750



For a full breakdown of TRANSALP models (PD06H, J, K, PD10, etc) see [Deti's page](#).

For a full history of the Africa Twin (RD03, RD04L, M, N, P) see [this page](#) (Japanese).

Fuel Tank

RD03 and RD04 fuel tanks, which are identical apart from color scheme, will fit directly onto a TRANSALP frame. An RD07 has an entirely different frame, so its tank will **not** fit a TRANSALP.

Interference

Without the support bracket, the RD03/RD04 tank's [petcocks may interfere with the TRANSALP engine's oil lines](#). This does not seem to be an issue with later TRANSALPs, which may use a different oil routing more similar to the NT650 Hawk.

Support Bracket

The Africa Twin tank requires a support bracket, which is mentioned [here](#) ([image](#)).

This item may be listed on [Ebay Germany](#) as "Verkleidungshalter" (translates as "Fairing bracket"). It certainly appears to be the exact same part as what is commonly listed as "Kühlerhalter" ("cooler holder").

It appears in both the XRV650K and XR750N microfiche as 64209-MS8-000 PIPE COMP., COWL MOUNTING.

Fuel Pump

The Africa Twin gas tank requires a fuel pump in order to get the last few gallons into the carburetors. First, a few safety precautions:

- **An anti-siphon/cut-off valve is critical in motorcycle applications.**
 - When the gas tank is higher than the carburetor, gasoline may leak into the carburetors while the bike is parked. This could result in cylinders filled with incompressible gasoline

and bent connecting rods when one attempts to start the engine. It could also result in a massive fuel leak and a fire.

- **An RPM-related cut-off is also critical.** A mechanical fuel pump will, by its nature, stop pumping when the engine stops. An electric fuel pump, without a cutoff, will continue to pump fuel. In the event of a crash, would likely cause fuel to be pumped continuously out of the bike, **resulting in a fire.** Purolator/Facet recommends an oil-pressure cut-off switch for their electric pumps, so that it only runs when there is oil pressure from a running engine.

Stock Africa Twin

The Africa Twin's OEM fuel pump is electric, and it's prone to failure due to internal electrical contacts which arc and destroy themselves. The pump itself can be hardwired and controlled by an external relay, which prevents the arcing problem.

Substitute Pumps

Fuel pumps are rated in flow rate (gallons or liters per hour) and pressure (PSI).

In selecting a fuel pump, the right pressure is critical. Carburetors have a float bowl which works a bit like a toilet's valve system. Sealed floats are pushed upward by their buoyancy as fuel fills the float bowl. When enough fuel has entered, the floats press a needle valve closed, stopping additional fuel from entering the float bowl.

The TRANSALP's carburetors are designed to accept gravity fed gasoline. Pumping fuel in with a fuel pump may overwhelm the float & needle system, pumping too much fuel into the float bowl, causing an over-rich condition. A worst case scenario would end in hydraulic lock and a severely broken engine! Even without this worst case, running an overly rich mixture would cause poor fuel mileage and increased cylinder wear as the excess gasoline washes oil from the cylinder walls.

How Much Pressure Is Needed?

The pressure created by a column of water is about 0.433 PSI per vertical foot. Assume that the fuel pump is mounted at the lowest point on the frame, the carburetor inlet is no more than two feet above this point. So, if we were pumping water instead of gasoline, we would require only around 0.866 PSI or less to overcome gravity. Gasoline has only about 75% the density of water, **so the TRANSALP should require no more than about 0.65 PSI to overcome gravity.**

A real life example can be found in the KTM 950. [This post](#) states that a stock KTM 950 fuel pump puts out **2.2 PSI** (at the carburetors), draws 1 amp, and pumps 23.4 liters (6.2 gallons) per hour. So, the KTM's carburetor floats and needle valves can hold back at least 2.2 PSI. We don't know how much the TRANSALP's needle valves can hold back, but we can assume it's certainly no more than 2.2 PSI!

As detailed below in the Electronic Fuel Pump section, about 0.3 PSI is lost per foot of fuel line between the pump and carburetor.

How Much Flow Rate Is Needed?

[This post](#) provides an interesting, simple method of estimating pumping capacity requirements for a 100hp KTM 950 Adventure:

Assume 100 hp, this is 75kw.

In an hour at fuel load the engine will produce 75kwh/hr of energy. Assume the engine converts 33% of the energy in the gasoline. We need to input 250kwh of gasoline. Gasoline has an energy density of about 8.76kwh/l. So the max fuel flow rate is about 30l/h. This is 8 gph.

I left a bit of slack in the calculations by rounding up. Made the flow rate come out higher than it actually is. It's close to 7gph which is the output of a 40177, so close I'd go for it and see what it does in the real world.

Since the TRANSALP puts out around 1/2 the horsepower of the KTM 950 (50 hp versus 100hp), it would seem that 4 gallons (15.14 liters) per hour should be sufficient.

- [This page](#) has Modrover asking for advice on regulating a fuel pump. Are new float needles required? He gives up in the end, returns the TRANSALP to stock form, and buys a real Africa Twin.
- [This post](#) on ADVRider's Orange Crush section, has tips on selecting and mounting fuel pumps.

[This link](#) says that the Honda Hawk NT650V fuel pump is rated at 600cc (0.630 US qt) per minute, which is approximately 9.5 gallons per hour.

Mechanical Fuel Pumps

Mechanical, vacuum-operated fuel pumps are powered by vacuum from the engine. Mikuni produces a compact one for motorcycles. It pumps 14 liters (3.7 gallons) per hour at [3.2 PSI](#), costs around \$20, and is fully rebuildable. They produce other pumps as well, but the 14 liter version is the only one suitable for the TRANSALP.

According to [this post](#), 'Modrover' found that the **3.2 PSI from the Mikuni pump was too much for the TRANSALP's float needles to handle:**

I own a '88 XRV650 now, but did the AT tank mod to my TRANSALP awhile back. **I used this pump and found it to be a bit more than the stock needles could take.** It was pumping too good! ;^)

Dellorto also makes a vacuum-operated fuel pump, which seems to be popular on karts. It has a built-in adjustable regulator. It costs around \$50.

Pros:

- Inexpensive (\$20ish).
- Rebuildable.
- Automatically stop pumping when the engine stops. i.e. they won't continue pumping gas all over after a crash.

- Output may increase with engine RPM?

Cons:

- **Almost certainly too much pressure for the TRANSALP's carburetors.**
- May be less reliable than electronic pumps.
- Requires a new vacuum line.
- [Potential for vapor lock in hot conditions](#). Engine heat boils the gasoline in the tube between the pump and the carb, so the pump begins ineffectively pumping and compressing gaseous gasoline.
- Only available in a single pressure rating which, according to 'Modrover', is too much for the TRANSALP's float needles.
- May not have an anti-siphon/shut-off valve, which could cause the engine to flood with fuel when parked.

Resources:

- [Mikuni website](#)
 - DF44-211: 1 outlet, 14 Liters/hr
- [A site selling Mikuni vacuum pumps](#) from the K&L catalog. It appears that one can choose between genuine Mikuni and a generic pump (?).

Electronic Fuel Pumps

Honda Fuel Pumps

It's likely that other Honda motorcycle fuel pumps could be used on the TRANSALP. Some models use pumps which are internal to the gas tank, which is probably not suitable for adaptation to the TRANSALP. Some likely donors are:

- VT600
- VT750
- VT1100
- NT650V Hawk
- CB-1
- PC800

Relay Protection

Honda fuel pumps are known to fail as a result of contact arcing. [This page](#) explains how to avoid the arcing using a diode.

AfterMarket Fuel Pumps

[Facet](#) (a Purolator company) makes solid state fuel pumps, which claim to have no moving parts or diaphragms to wear out.

Pros:

- May be more reliable than mechanical pumps.
- Available in a variety of pressure ranges.

Cons:

- More expensive (\$33 - \$63+ from online sources).
- Not rebuildable.
- Requires a switched electrical supply, preferably one which cuts out when the engine dies so that the pump doesn't continue pumping gasoline onto the ground after a crash, leading to a fiery death and all of your loved ones talking about what an idiot you were at your funeral.

Resources:

- [Facet-Purolator's fuel pump web page](#).
- [This post](#) describes using the Facet 40105 electronic fuel pump from Aircraft Spruce and Supply.
- [This post](#) mentions that Purolator's filter (F10028) screws into the Facet pumps, and is much shorter than Facet's own filter.
- [This post](#) mentions that the Wix 33049 filter may be compatible.
- [This post](#) says it's important to seal the Facet pumps with silicone or rubber sealant to prevent shorts in the event the pump gets wet.

Short list of Facet pumps (pumps which are obviously unusable on the TRANSALP have been omitted):

Model	Pressure (PSI)	Flow Rate (gallons/hr)	Check Valve	Anti-Siphon	Comments
40105	3 - 4.5psi	30 GPH	no	no	Too much pressure, no shut-off valve
40171	2 - 3.5	15 GPH	yes	yes	Likely too much pressure, same specs as 40178, but with Packard connector and less dry lift
40178	2 - 3.5	15 GPH	yes	yes	Likely too much pressure
40163	1.5 - 2.5psi	17 GPH	yes	no	Possibly too much pressure, and no shut-off valve
40177	1 - 2	7 GPH	yes	yes	Probably a good choice
40252	1 - 1.5psi	6.5 GPH	yes	yes	Probably a good choice, Packard connector

I have installed the 40105, which clearly puts out too much pressure, since it starts too easily when cold, and runs worse at idle with the pump engaged. Also, it is capable of pumping around 7.5 times the volume of fuel needed by the TRANSALP engine! Finally, it has no anti-siphon/cutoff valve, which means fuel could continually leak into the carburetors, cylinders, and crankcase when the bike is parked!

The 40252 and 40177 are most suitable for the TRANSALP. The 40252 uses a 'Packard' connector, which is simply a brand of sealed quick-connector. Either can be very hard to find, but [this post](#) recommends trying [J&N Electric](#). [Pegasus Auto Racing carries the 40177 for \\$62.99](#). It can be had for somewhat less from Facet's west coast distributor.

[There is talk on ADV Rider](#) of the 40171 (2 - 3.5 PSI) causing flooding on the big KTM bikes, and [many people add a fuel pressure regulator to compensate](#). This seems to add more support for a very low 1 - 2 PSI pump.

[This post](#) claims to have recommendations from a Facet engineer:

1-The Fuel Pressure from the Pump loses about .3lbs /foot in PSI. So if the Pump from its location to the Carbs is about 2.5 -3 feet, so there would be about a 1 lb loss in PSI from its Max potential.

2- BEST to Install the OUTLET End Higher than the Inlet End.

3- Pump is suggested use is Under 180 F degrees.

4- Recommended Filters for the Facet is 74 Micron Media and Not Less since those may impede proper fuel flow. Some sold in Parts Stores are 10-15 Microns...unfortunately, many are NOT labeled.

[This Polish Africa Twin page](#) quotes an email from Facet indicating that the 40177 is best for the Africa Twin, followed by the 40104 and 60104 Posi-Flo.

Hi Kuba

Thank you for your email. The best Facet fuel pump model/part number for your application is a 40177 Cube Solid State pump. This pump is rated for 1-2psi, 7gph which will not over run your carb's. However the next best part number would be a 40104 Cube or 60104 POSI-FLO, both are rated for 1.5-4 psi, 25gph. Please tell me where you are located and I will try and help you find these part numbers.

Paul Puleo
National Sales Manager
Motor Components, LLC
(w) 607-737-8371
(f) 607-737-8335
www.facet-purolator.com

Pressure Regulation

The Africa Twin's fuel pump is voltage regulated. At around 1,000 RPM, voltage to the pump is about 3V. At higher RPMs, it reaches 12V.

- [This XRV.org.uk post](#) mentions voltages.
- [This thread](#) discusses the stock Africa Twin fuel pump versus the Facet. It is indicated that the Africa Twin has some sort of regulation circuit which varies the input voltage from 3V up to 12V, and has a cut-off for safety (when the engine stops turning, it shuts off the electric fuel pump).

It may be possible to use a fuel pressure regulator:

- [This regulator](#) might work (Mr. Gasket adjustable 1 - 6psi). Reviews are mixed.
- [Holley 12-804](#) 1 - 4 PSI regulator, \$28.
- [This post](#) mentions using a "PRO54" regulator set to 1.5 psi on a KTM 950.

Rear Suspension

Rear Shock

TRANSALP Rear Shock

As mentioned on the [TRANSALP page](#), WP specifies 14.69 inches (373.13mm) as the stock shock length.

[This post](#) says this regarding a shock for a '92 TRANSALP:

Ohlins don't list a shock for any TRANSALP now, so that's a bit of a dead end - I guess it's been discontinued. However Hagon list the same part number for "TRANSALP XL600V-H,J,K,M,N,P,R,S,T (PD06)" from 1987 onwards. By my reckoning that covers well past 1992, and if Hagon list the same shock for all those models then the Ohlins from an '89 bike should fit the '92 model without any problems as well

[Hyperpro](#) list:

- Spring: XL600V '87 - '00 SP-HO06-SSB01, XL650V '00-'06 SP-HO06-SSB013, XL700V '08- SP-HO07-SSB024
- Shock: Hyperpro no longer lists a shock for anything earlier than the XL700V.

Africa Twin Rear Shock

- [Ohlins HO 645](#) for the Africa Twin 1995 - 2002 (RD07).
 - Based on the S46HR1C1S.
 - 46 - 46mm piston diameter.
 - S - monotube/singletube.
 - H - gas pressurized with external reservoir.
 - C1 - compression damping adjuster located on reservoir.
 - R1 - damping set with clicking knob with right-hand thread.
 - S - hose-mounted hydraulic spring preload adjuster.

[This post](#) indicates that 1.5cm extra shock length translates to 4cm additional height. It also indicates that an 80kg rider will do well with the 90nm spring from Ohlins.

['kordix' adapted a KTM LC4SM rear shock to his RD07 Africa Twin.](#)

- 2004 and 2005 model KTM LC 4 SM rear shocks listed at 415mm eye-to-eye.

Swingarm

The Africa Twin has an aluminum swingarm which is longer than the steel TRANSALP swingarm. It can be fitting with relatively few problems. Notably, the drum brake stopper has to be ground to fit the Africa Twin swingarm (assuming an Africa Twin disc rear wheel hasn't been used as well), and a 124 link chain is needed.

The RD03, RD04, and RD07 swingarms appear to be identical, but in fact differ. The RD04 swingarm is slightly longer than the RD03 swingarm. The RD07 swingarm has slightly different mounting spacers and bushings and requires adaptation to the TRANSALP. If an Africa Twin rear wheel is to be used for disc braking, note that the disc and bracket are different on the RD03 than on the RD04 and RD07. See below, under "Rear Brake".

- [Translated "TRANSALP with Africa Twin swingarm"](#) (from TRANSALP.de).

Swingarm Parts Interchangeability

This diagram from the XRV750N microfiche is colored to indicate compatibility of many of the swingarm parts between the TRANSALP and the RD04 Africa Twin. Green indicates that the part numbers are the same, while red indicates that the parts differ.

Chain Slider

[This ADVRider post](#) mentions two European sources which ship internationally and stock Africa Twin chain sliders.

Rear Brake With Africa Twin Swingarm

The stock drum brake housing can be machined to fit into the slot on the RD04/RD07 swingarm.

Alternatively, an Africa Twin rear wheel can be used to get a disc brake. [This post](#) provides the following information on rear brake disks:

Model	Rotor Dia.	Internal Dia.	Bolt Center Dist.	Bolt Dia.
PD06	240mm	105mm	125mm	10.5mm
RD03	240mm	105mm	125mm	10.5mm
RD04	256mm	144mm	166mm	10mm
RD07	256mm	144mm	166mm	10mm

The same post goes on to point out that the RD03 and RD04 rear caliper brackets are for different diameter disks, but they are interchangeable in terms of width along the axle. So, if you have a 240mm disk, use an RD03 caliper bracket. Otherwise, use an RD04 or RD07 caliper bracket, regardless of which AT swingarm you have.

Tabs will have to be welded to the TRANSALP frame to accomodate the Africa Twin's rear master cylinder. [This page](#) shows a European TRANSALP with its rear master cylinder reservoir attached to a plate which bolts to the regulator-rectifier.

Rear Brake Rotors for Africa Twins

EBC

- RD03 and later TRANSALPs with disc rear brakes: MD6097D.
- RD04 and RD07: MD6103D, pads FA140 or FA140HH.

Buying Parts

Ebay

Ebay is a good source for used Africa Twin parts. I recommend [Ebay Germany](#) since shipping prices from Germany are reasonable, and German sellers have proved very helpful. UK sellers have either refused to ship, or charge exorbitant rates, and Italian sellers want nothing to do with me.

Payment

Traditionally, German Ebay sellers accepted only SWIFT money transfers. Ask your bank if they can perform an international money transfer. Get a copy of the transfer form, and look for "SWIFT" in the routing number area.

More recently, some German Ebay sellers have begun accepting PayPal. This makes the process much simpler and faster.

Make sure to get a shipping quote before committing to purchase!

German Terms

Finding parts in German can be tough without any language skills.

English	German
Fairings	Verkleidung
Tank Support Bracket	Verkleidungshalter ("fairing bracket") Kühlerhalter ("cooler holder")
Swingarm	Schwinge
Brake Rotor	Bremsscheibe
Sprocket	Kettenrad
Sprocket Carrier	Kettenradträger

Rear	Hinten
Wheel	Rad
Rear Wheel	Hinterrad

Other

- [This post](#) gives contact information for a seller in Singapore.

Substitution

Honda reuses parts whenever possible across models. It's worth finding part numbers on the microfiche and looking them up online. [Ron Ayers](#) has an excellent parts lookup facility.

Petcock

According to [this page](#), "the left AT petcock is the same as the petcock for a 1990 NT650 Honda Hawk" ([\\$55 at BikeBandit.com](#)).

Microfiche

The Honda parts microfiche for Africa Twins is an absolute necessity. I have made PDF copies particularly relevant pages of the XRV750N microfiche:

- [Swingarm](#)
- [Rear Wheel](#)
- [Gas Tank](#)
- [Rear Suspension](#)
- [Front cowl](#)

Resources

JEFF QUAD SHOP TA/AT TRANSFORMATION:

This is going to be a project to turn my 89 TRANSALP into an Africa Twin with better off road capabilities. The first part of the conversion is the suspension, I'll be starting with the forks then moving on to the shock. I'm going to give basic instructions with each pic.

Here is the list of parts for the front part of the conversion. I found most of this stuff used on Ebay.

XR600 parts (XR650L parts will also work):

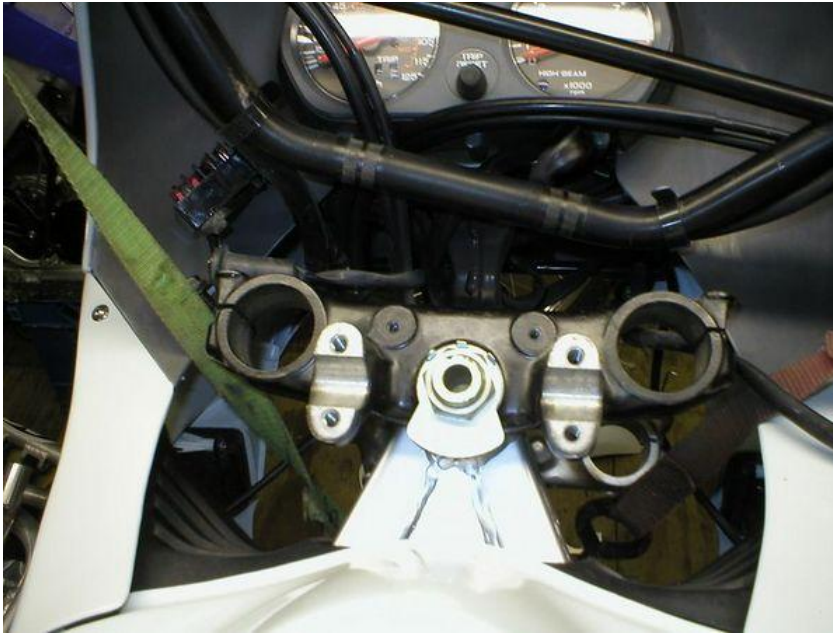
1. Pair of forks
2. Triple clamps with stem
3. Axle (only if XR is 93 or newer)
4. Brake hose brackets and clamps
5. Front wheel bearings, seals (Pivot works makes a complete kit), side bushing and center sleeve (only if XR is 93 or newer)
6. Speedo drive (only if XR is 93 or newer) and cable
7. SRC fork brace (optional)
8. SRC seal savers (optional)
9. XR or CR front fender, bolts and spacers (optional)

Other parts

1. Galfer custom length (XR600) brake hose with TA master cylinder and caliper ends
2. 1 brake caliper bolt that is 5mm longer than stock TA
3. 17mm x 2.5mm washer



After removing the TA forks and triple clams (this is much easier than it sounds) Install the XR triple clams into the TA stem.



I chose to use the SRC fork brace because of my years of racing XR's and working with Scott Summers. These braces make conventional forks steer like upside down forks without the harshness that come with upside down forks. It also gives a perfect place to mount the OEM TA fender. I have never had or seen one of these units fail!



I only had to do very minor trimming and drill 4 holes to mount the fender to the brace.



Next up is to slide the forks into the clamps, I ran mine about a 1/4" above the top of the upper clamp till I get the rear done and can set the ride height. I used the SRC fork skins to protect the forks from rocks, mud and dirt. Its amazing how much crap the stock boots suck inside them. All that dirt will sit on top of the seals and will eventually make them leak. The fork skins will not allow any of that stuff to get to the seals.



Now its time to install the brake system. The only difficult part about this is that the lower caliper bolt hole on the fork must be slotted about 1/8" upwards. To do this I used a bit that was the same size as the bolt hole and pulled up on the drill to slot the hole. Do a little bit at a time untill the bolt will thread into the caliper. It took me all of about 2 minutes to do this with a sharp bit. This will not weaken the mount since it is very little material removed.



You will now notice that the upper caliper bolt is too short so you will need to find one that is 5mm longer.



Next comes the brake hose. I called up Galfer and told them that I wanted a stainless TA hose that was the same length as an XR600 hose. Just make sure you tell them you will be using the TA master cylinder and caliper since they have different ends.

I used 2 brake hose guides from the XR on the upper and lower triple clamp pinch bolts.



Next comes the wheel. If you got forks from a 93 or newer XR then you will need to buy the larger XR bearings, seals, bushing, center sleeve and speedo drive (you can also bore the speedo drive) since the axle on these models is 17mm as opposed to the 15mm TA and 92 and under XR axles.



Once you have the bearings replaced, slip the wheel into the forks and push the axle till its just come through the opposite side of the hub. This is where you will insert the 17mm x 2.5mm washer (you won't have to use a washer if you have the 15mm axle and forks).



Now is the time to install the fork brace if you have one.



I mounted my stock front fender to the brace using the thread holes in the front of the brace. You can also go with the high fender since the lower triple clamp has the mounts to install an XR or CR fender. You will also need the aluminum spacers/washers and bolts from Honda to mount one.



And drilled 2 holes in the center of the brace towards the rear.



All done, it took be about 2 hours including answering work calls to install these.



Man its gonna have some great ground clearance!



This weekend I will make an aluminum bracket to hold the key switch and fuse box. I will start on the rear install on Tuesday or Wednesday.

Ok, now it's time to take care of the key switch and fuse box since our XR600 upper triple clamp does not have the brackets to mount them. This mod actually took longer to make than installing the forks but it's not hard at all. I used a piece of 3/16" sheet aluminum cut to 3" x 5". I laid the piece of alum. on top of the 600 clamp and MAS335ed the two existing threaded holes that were used for the odometer. Using the old TA t-clamp I traced out the key hole and mounting holes for the key switch. I used a 1 1/8" holesaw to cut the hole for the key switch and a drill bit for the two bolts.

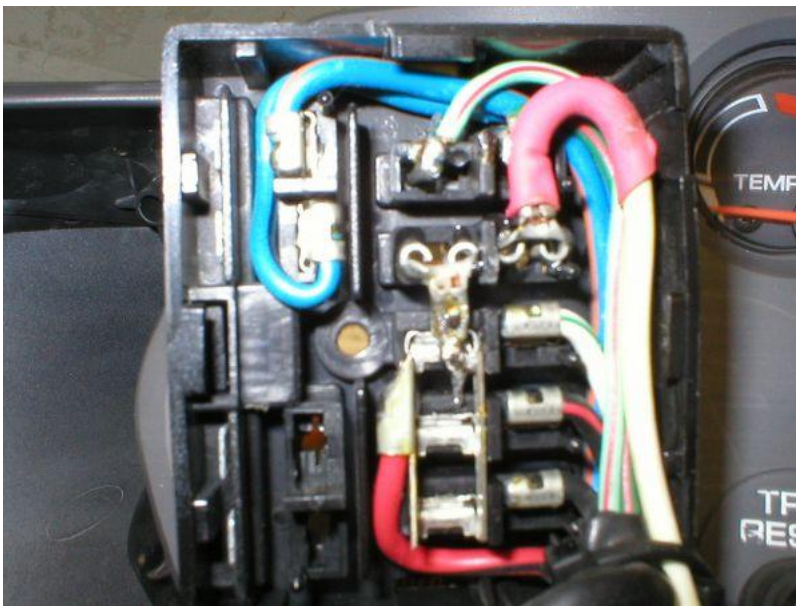
Next I removed the bracket from the fuse box and trimmed off the two little rectangular plastic extrusions that were on the bottom of the fuse panel. I snapped the cover on the fuse box and temporarily mounted the key switch to the plate and set the box and cover onto the key switch and plate. I MAS335ed the location of the holes for the fuse box snaps. Drill holes and set assembly with cover back on top of plate.

Next I used a pencil to trace around the plate and cut the excess material off the plate for a nice clean look. I had to cut the upper left corner off so the wires would have a place to exit (fuse box is mounted upside down from stock position) and cut two notches for the cover clips to attach to the fuse box.

This is what you should have. I have the template if anyone wants it to save you a BUNCH of time.



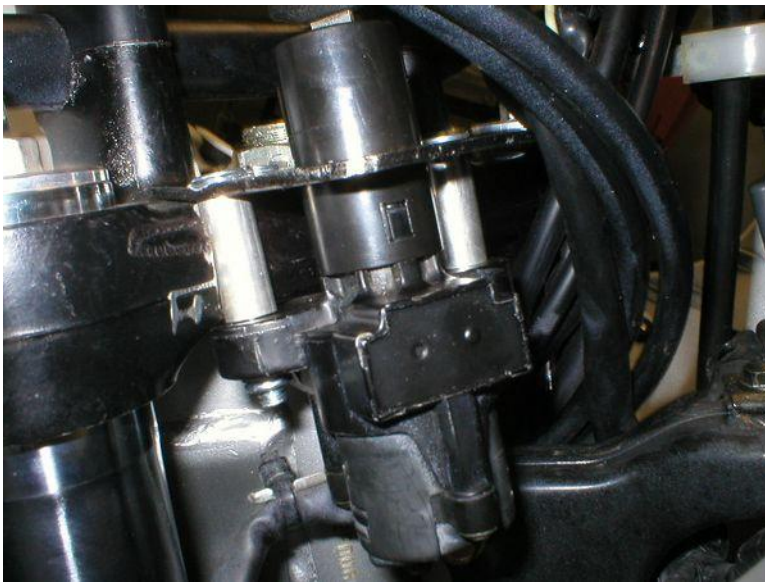
While I had the fuse box off I noticed that it had two empty ports for fuses. Knowing that I will be installing some cool electronics and grip heaters soon I thought I would take advantage of these ports. I used 2 female spade connectors and stuck them into the blank holes. On one end I soldered a short piece of wire to the switched hot wire on the left hand side. On the other side I ran length of wire (white) out of the box and ziptied it to the wire loom for future use. I left the fuse out till I get ready to wire in a GPS or digital guages later on.



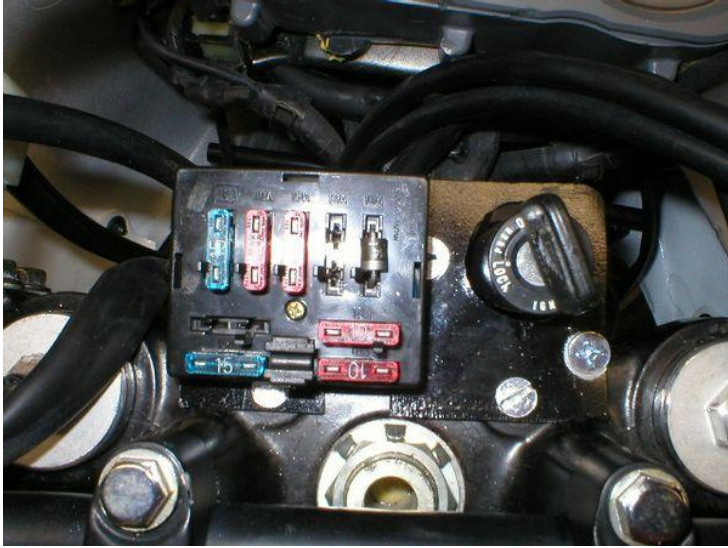
Now to mount the plate to the t-clamp you'll need 2 6mmx12mm machine screws. For the key switch you'll need 2 6mmx50mm machine screws with 2 washers, 2 nyloc nuts and 2 25mm alum spacers that I found at Ace Hardware.



Use the 2 alum spacers to space the key switch down below the plate. I did have to do some minor grinding on the t-clamp with a dremel so the lower bolt would be back far enough to align the steering lock properly. Its not enough to cause any saftey issues.



Now you can snap on the fuse box.



And the cover.



It looks factory and the steering lock will still work in both directions!



Hopefully I'll get a piece for the rear shock in tomorrow so I can bring it up to match the front.

The first set of footpegs I ordered worked like a charm! All I had to do was drill out the mounting hole in the TA mount to accept a bigger pin (which I found at a hardware store) of the footpeg and grind a little off the footpeg seat and it bolted right up.

These are the IMS Pro-4 pegs and are top of the line. Much wider than stock and have nice sharp cleets. These retail for \$95 but I bought them on clearance sale for \$50. I have 3 pairs left if anyone wants a set. I sell them to you for what I have in them plus shipping.

Here you can see the section where I had to grind away a slight amount of material so that the peg would sit flat. I did this with my dremel. I drilled out the hole with a 13/32 bit.



The pins that I bought were a little long so I used an alum spacer to take up the gap. I could have looked harder to find a shorter pin but I was in a hurry.

All mounted up and added a little chrome bling too! 🏆





After MAS335 pegs for true offroad bikes and they will most likely all have the stronger pins. The stock TA pins are tiny and would break under hard offroad abuse. The grinding I did was very little.

Ok, I finally received the piece from the machine shop to raise the rear end to match the height that the XR600 forks gave. It raises the shock by 30mm. It's a pretty simple piece that any machine shop should be able to make for you for around \$25. This will work fine till I can order up a Wilbur's shock.



To make the brake rod work I had to index the brake arm on the drum 1 spine forward. Then I made a simple little bracket to hook the return spring too and attached it to the forward most brake line holding hole. (does that make since?)



Now I'm just waiting for the AT fairings, headlight assembly and vacuum pump.
Problem with Wheel mounting above:

Originally Posted by **Vega25**

Put the front wheel on last night after installing new bearings and seals. The night before I installed the front brake caliper and drilled out the lower hole, which was nerve racking, to get the lower bolt lined up. The wheel went on without much effort, however, it does not turn freely and I'm not sure wh

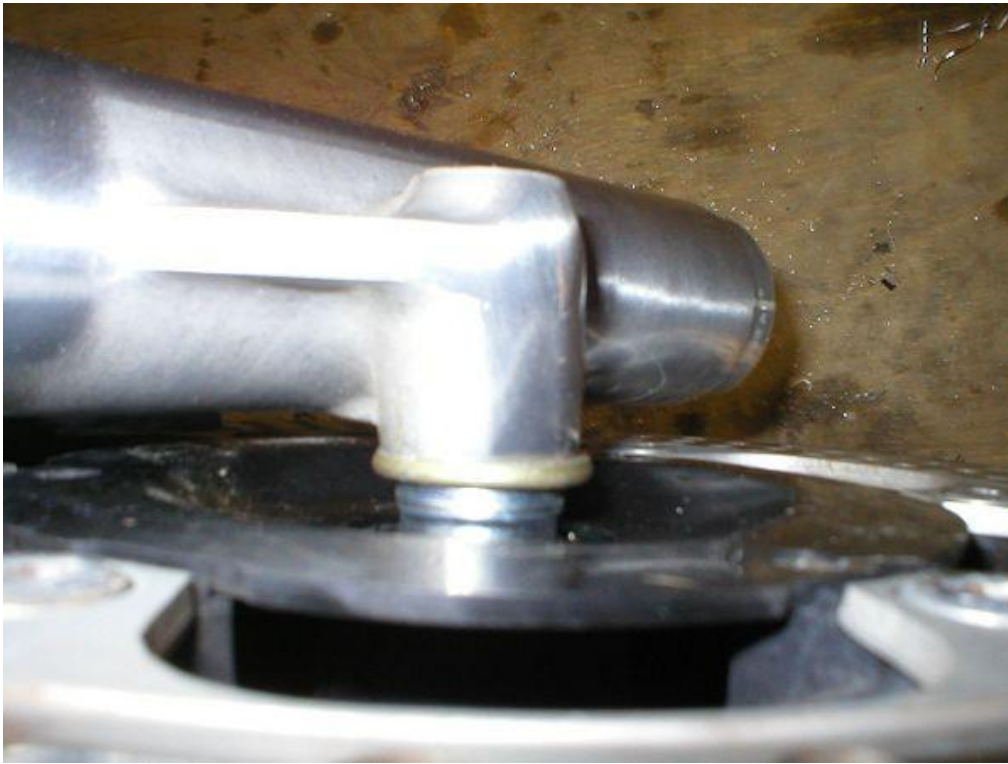
Originally Posted by **TRANSALP Jas**

Did you put a small spacer in there? In order to line up my front wheel properly on the new forks, I had to put a thick washer between the wheel spacer and the fork on one side. the first time I put it on, it was without the washer, and the wheel wouldn't turn. with the washer, everything was fine.

Originally Posted by **Vega25**

I did put a washer in and it does not appear the pads are binding the disk. Maybe my washer is not thick enough.

Once you have the bearings replaced, slip the wheel into the forks and push the axle till its just come through the opposite side of the hub. This is where you will insert the 17mm x 2.5mm washer (you won't have to use a washer if you have the 15mm axle and forks).



From LADDER106: **It may be the speedo side**

If you have the spacer on the brake disc side and the disc is lined up in the caliper, the bind may be behind the speedo drive.

Try this:

Loosen the axle about one turn. Does everything free up now? If so there is a bind between the speedo drive and the hub. Dunno why but mine did this. I originally had a speedo drive eliminator that I got from Glenn and everything was OK. When I finally bored out my TA speedo drive to 17 mm and installed it it bound up with the axle tight.

I put a very thin (<1mm) washer between the speedo drive the the bearing (this is requires a bit of patience) and everything was fine.

My TA drive was old and kept stripping the nylon gears despite being "rebuilt" twice so I got a XR650 speedo drive from ebay. It installed perfectly - no spacer required - and everything is happy.

The TA speedo drive may just be a twitch too thin for some bearings or maybe we both needed another MM or so taken off the front bearing spacer that lives inside the hub.

Let us know if this helps.....and don't think we haven't noticed that you have avoided the rear mastercylinder in your recent photos

(JEFF @QUADSHOP WORK)

Ok, now starts the beginning of the Africa Twin conversion. First is this Africa Twin RD04 swingarm that I won on Ebay for \$7 plus \$35 freight.

You can see in this pic that the AT swingarm is quite a bit longer and made of aluminum instead of stamped steel.



All the mounts are exactly the same, the only difference is that the AT swingarm is longer and it has a tab for a disc brake instead of a drum brake.



No worries, the dremel comes to the rescue again. With a little grinding work, the drum brake slides right in to the disc brake bracket tab. This is only temporary till I can find an Africa Twin or TRANSALP rear wheel with disc.



The TA axle is a little long so I used 2 oversize nuts to take up the slack till I can find an AT axle.



All that I need to do to make the brake arm reach is index the drum lever forward 2 splines and it will just fit. I will hook the return spring to one of the screws for the brake cable holder on top of the swingarm.



Linkage will bolt up but you need the bolt that attaches the linkage to the swingarm from the AT as it is a special bolt.

Oh ya, and don't forget to order a longer chain! I bought a DID 525V o-ring with 140 links and cut it down to the right length.

Ok, I finally received the piece from the machine shop to raise the rear end to match the height that the XR600 forks gave. It raises the shock by 30mm. It's a pretty simple piece that any machine shop should be able to make for you for around \$25. This will work fine till I can order up a Wilbur's shock.

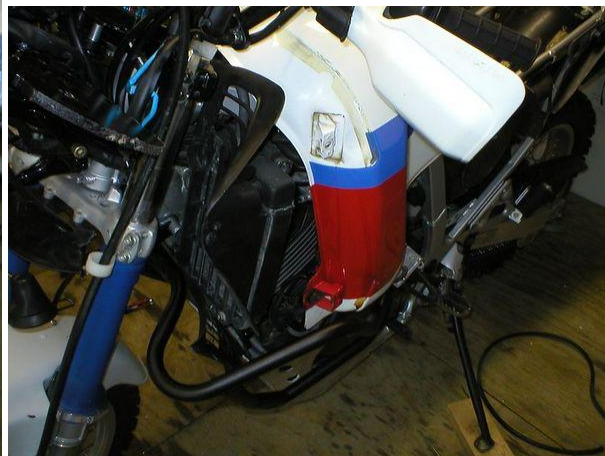


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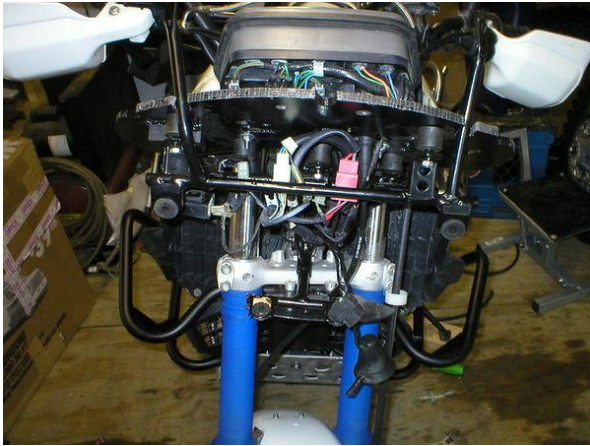


Now I'm just waiting for the AT fairings, headlight assembly and vacume pump.

I finally received enough parts to conver it to the Africa Alp. The only thing I need now is a seat.
The tank bolts right on with no modifications.

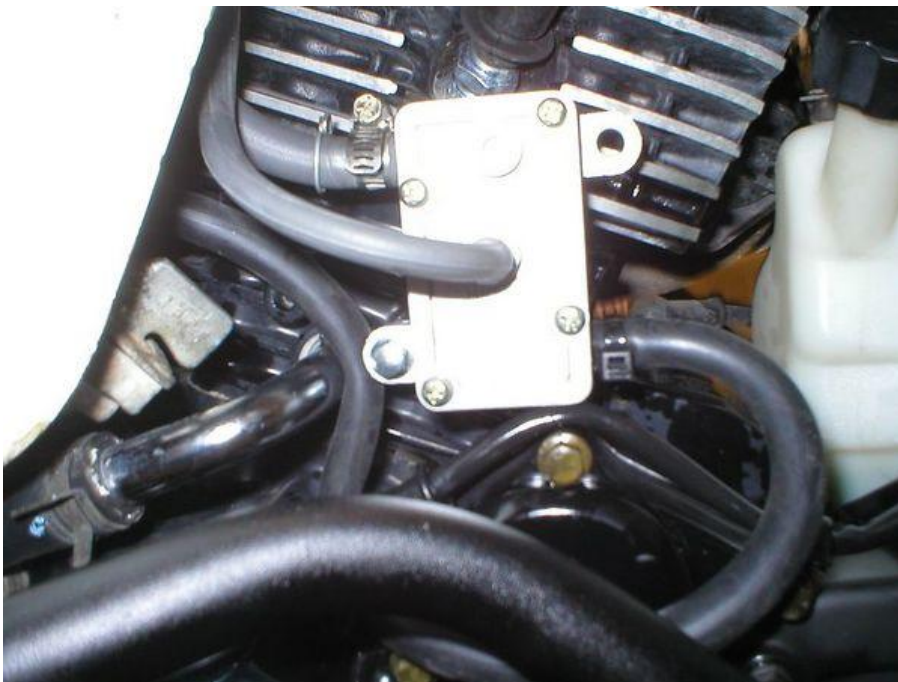


The insturment and light bracket also bolts right on in place of the stocker.



I made a custom dash out of lexan. The stock guages are only temporary untill I get a digital guage set.

After routing the fuel lines from both petcocks I mounted this \$20 Mikuni vacume pump to move the fuel from the low hanging tank sides. This works like it was made for it and I'm sure it will be much more reliable than the OEM AT electric fuel pump that is know to fail. I attached the pump to the existing coolant hose retainer bolt.



And WALA.....the Africa Alp is born!



The tank and shrouds cleared the Givi crash bars perfectly.



The stock TA seat gets pushed back a little at the front. The AT seat will bolt right on. I'm going to send an AT seat

to Bojangles to do his magic when I find one so in the mean time I'm using the TA seat.

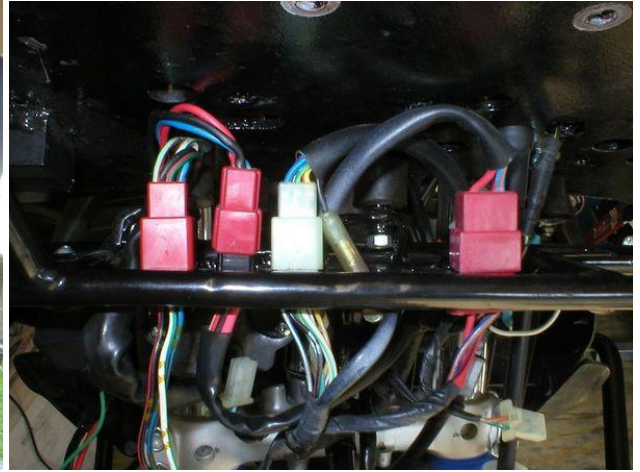


This is a simple bolt-on project, the TA dash will also bolt right on but mine will be custom and that is the only fabrication work that I did. As for the extra light, I changed the OEM AT bulbs to H4 and bought a socket at Auto Zone and just spliced it into the existing TA light socket.

Knowing that I was going to be powering a few accessories, I decided to install a second fuse box that I had left over from my NX250 project.

It was pretty straight forward, just had to figure out which wires were which using the NX wiring diagram. This will give me enough to mount 4 more accessories with 3 being hot all the time and one being switched with the key.

The fuse box mounted right into the location where the AT fuse box goes.



The NX plugs went right into the extra plug holders in the AT instrument bracket nice and neat.

I added this water proof 12v outlet to the dash that I sell, its made by Summers Racing Components.



I used one of the other ports for my GPS, one for my HID aux. lights and the switched one for grip heaters. I still have one port open for maybe a heated vest purchase this winter.


APPENDIX B:

TRANSALP FAQs




[Diese Seite auf Deutsch](#) 




All about technology, weak points and accessories regarding the Honda TRANSALP models PD06-PD10 (construction years 1987-1999) © [Franz-Manfred Schüngel](#)

This page is a compilation of the experiences communicated through the  [TRANSALP-Forum](#). It is based on the contributions of various TRANSALP riders who passed their knowledge on to others.

Links are MAS335ed as follows:

 [Link to german language site](#),  [link to english language site](#),  [Link to TRANSALP.de \(german\)](#). All other links are internal links to targets on this page.

Please mail supplementations, dead or additional links to the [Keeper of the TA-FAQs](#). If questions arise, please post in the  [Forum](#). It is in german language, but quite a few speak english. Names of *Companies* and *Products* may be registered tradeMark. Prices are rough approximates. I do not take any responsibility or liability for any given instructions; any modifications on your bike are at your own risk. No liability is taken for the contents of linked pages or sites.

Adresses of dealers and manufacturers:

 [Second hand parts \(Deti\)](#); check [here](#) for a few online contacts

 [\(Accessory-\)Manufacturers \(Deti\)](#)

An **air filter** is about 30 € and needs to be replaced every 18 Mm. Recently genuine parts without rubber seal (part no. 17230-MM9) were sold rather than the cartridges including the seal (17230-MS6), but usually the old seals can be used again (will cost 9 € otherwise). Accessory air filters are no good, they have often been the reason of bad engine performance and backfires. The alternative to the genuine part is the reusable K&N filter (60 €). It can be washed with a specific cleaner and consists of oiled cotton. It comes ready to use. Cleaning and oiling needs to be done after 10 to 80 Mm, depending on conditions. Optimal performance is achieved when the filter is in use for a while. For rides in extremely dusty conditions (desert) the genuine filter is recommended, also turn the rubber air intake on the airbox towards the seat.

 [Air filter](#)

Occasional **backfires** can be regarded as normal. If they happen often, or are accompanied by an unusual high fuel consumption (above 6 L) there is a problem. The air filter might be clogged, or the intake mufflers leak. The latter can be diagnosed by using Start Pilot spray: Sprayed on the intake mufflers with the engine idling, a leak will cause the engine to rev up. It might help in this case to

remove the spacers in the muffler clamps, this allows to tighten the joint more. Another cause for leak air can be a porous vacuum hose from the fuel tab.

Backfires can also be caused by a jammed choke cable or choke piston, these are easily removed and checked. Sometimes there is a hole in one of the vacuum membranes in the carburetor, the repair kit is supposed to cost above 40 €. A repair with 2-component glue might work. The look of the spark plugs can help to diagnose this. It may also help to turn out the idling mixture adjusting screw on the carburetor for a half to a full turn.

The acid level of the **battery** drops sometimes quite suddenly, which can mean the end of the battery life. Check the level regularly. This is easier done if the battery is mounted without the black rubber case. The drop is most probably caused by a thermal fault in the regulating circuit, charging the battery not suitably on long rides. Changing the RR unit against an accessory part (e.g. by Motek) solves the problem, adding a cooling fan and checking all plug contacts helps a lot. Do use only demin water to fill up the battery.

The 14 Ah-battery of the more recent TRANSALP models can also be used in the older ones, the rubber case must be abandoned and in few cases holes have to be drilled in the connections. Battery types are YB12A-B (12 Ah) and YB14-B2 (14 Ah).

The Hawker SBS8 battery also fits, the connections must be modified. It is extremely durable and powerful, but should only be run with an accessory RR unit (max charging voltage 13.8 V). You need a new battery when the voltage drops on load so heavy that the starter is not able to move the engine, although the battery has been charged. Often only a summing noise from the magnetic switch can be heard, and the rest of the electric stuff is also not likely to work properly.

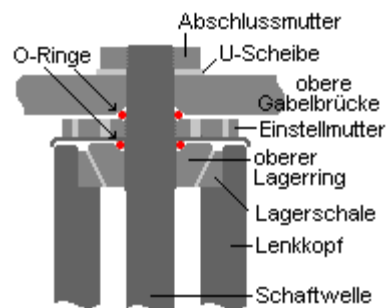
The **bearings** of the TRANSALP do not always last forever. There is substitution:

🔧 [Die Radlager der TRANSALP](#) (wheel bearings)

🔧 [Die Lenkkopflager der TRANSALP](#) (headset bearings)


According to Gerd the adjustment of the headset bearing is really easy if two rubber rings are inserted above the upper bearing and the adjustment screw. 3/4" sealing rings fit. The rings have to be pressed right into the triangular gaps. The adjustment screw is fastened tightly by hand. The upper o-ring can be omitted in case the steering lock does not engage.


Secure the center stand with a belt when working on the headset bearing.



ProLink bearings (as of 1989 model) are available from Honda or [Emil Schwarz](#); dimensions until 1996: 17.5*24.5*22 mm.

The **brakes** of the TRANSALP are quite all right, but the front rotor is worn out some time. The original part being some 400 €, an accessory disc is usually chosen. Cast iron rotors are available

from *Spiegler* and *Brembo* (150 €), stainless steel rotors from *Braking* (150 €). These are comparable to the original quality and are available e.g. through  [Enduro-Zentrale](#). According to rumours *Spiegler* also offers stainless steel rotors for TRANSALP. Important: Always use the brake pads matching the rotor of the specific manufacturer. Accessory rotors need registration depending on local legislation. An alternative to the original brake pads the Lucas pads can be used with the original rotor.

An improved performance can be achieved by using a larger rotor, like the 320 mm disc made by  [HE-Motorsport](#).

An improved feeling of your brake can be achieved by using steel braided lines (from 50 € onwards, makes most sense for the front brake). They improve the feeling because they do not extend under pressure, and they allow prolonged brake fluid changing intervals. When you are working on brakes you require the essential know how!

 [Kleines Bremsen-Brevier](#)

 [Brake Fluids](#)

The micro switch in the front brake lever can be repaired:

 [Reparatur des Microschalters](#)

If you switch to Lukas discs on a PD10, secure (with extra screws) or omit the hub covers. They are not fixed by the discs and can block the front wheel.

The **carburetors** of the TRANSALP are somewhat complicated. If you still want more info, try here:

 [List jets vs. model year](#) (Deti)

A common cause for different looking spark plugs is a stuck or corroded choke piston, mainly on older models.

 [Known Problems](#) (Deti)

To fix humble speed-up at medium revs it can help to lift the spray nozzles in the carburetor a little: Washers (aluminium or Nylon also works) with a 3 mm inner hole (outer diameter 6 mm, 0.1 or 0.2 mm thick) are mounted under the nozzles. The success must be tested by riding.

CDI's (Capacitive Discharge Ignition) are the little black boxes under the seat, igniting the mixture in the Cylinders at the right moment. They are pretty expensive (from 150 to 250 € new, it is worth to compare prices!) and happen to fail occasionally in TRANSALP made before 1993, because the seat presses against the plugs of the upright mounted boxes a bit. The tachometer can help to find the broken CDI, it is connected to the left CDI for the rear cylinder with a yellow and two black-yellow cables.

Sometimes it is possible to repair the broken contacts. *Motek* in Bielefeld, Germany, phone +49-521-453744, does in for 140 €. To avoid this failure it is recommended to replace the support by the one used for 1994/1995 models. Here the CDIs are mounted horizontally. Costs 15 €, *Honda* spare part no. 30401-MM9-010. Replacing the support is really easy and is therefore recommended for all TRANSALPs up to model year 1993. A horizontal support can also be self made, or the original support can be cut open at the bottom and the CDIs stuck further in. It is also possible to protect the CDIs with a piece of wood or similar (pressure on the case, not on the plugs).


TRANSALPs from 1996 onwards have only one TCI for both cylinders and have different technology

(connection to the damper flat sensor on the carburetor).

 [Mehr über die Zündbox](#)

 [Reparatur der CDI](#)

The CDIs of model year 1988 (MM9) are a bit cheaper (150 €) and can also be used for the TRANSALPs with MS8 CDI. Even in mixed service problems have not yet occurred. The CDIs of model year 1987 (MM9 CI529) are indeed different, as there is no kill switch on the side stand and no corresponding connection on the CDI unit. The CDIs of the 650 cc Africa Twin (RD03, model years 1988/1989) are identical with the TRANSALP CDIs. The CDI from the 750 cc Africa Twin RD04 (model years 1990-1992, one CDI for both Cylinders) has also been used successfully. Werner Moehrle has reconstructed the black box with modern electronics; it is sold for around 130 Euros via motorbike-shop.de.

The **center stand** is not standard on the TRANSALP. Going offroad you will hardly miss it, but otherwise it is really helpful when assembling stuff (not for lubricating the chain - that's done by the Scottoiler). First choice is original *Honda* (130 €), although much force is needed to put the bike on the stand. The spring must be inserted with the long end pointing towards the engine and catches the bolt in the narrowest gap between exhaust and frame. The *Five Stars* model (100 €) is made of too soft material, so it should not be used regularly. It is still ok, though, if you just need it to press it to the ground on a ride to make sparks. If the springs do not fit, use Honda springs for the side stand. A better stand is available from  [SW mo-tech](#) (120 €). The handle provided to lift the bike should be bent a bit on this model, because it can come in contact with the swingarm.

All center stands can be fitted to TRANSALP models 1989 onwards. Only *Five Stars* offers a different center stand for the 1987 and 1988 models. There is no center stand for the 1989 US import. Sometimes mounting of the spring is a bit difficult, the support is a bit hidden between exhaust and frame. It can help to stretch the spring using a vice (or bending it, if you do not have a vice) and put small coins between the coils.

The center stand should be fastened with a strap for safety when working on the fork (fork springs, headset bearings).

For changing the **chain and sprockets** the swingarm should be removed. This allows greasing the pro link bearings, recommendable on high mileage. Do not save money on the new kit, service life of cheap kits is usually pretty short. A good choice are *DID* or *RK*, but for the latter broken chains have been reported. A breaking chain is no fun, for it can cause serious damage and often means a side-lined bike. The best (and most expensive) kits are probably *AFAM* Gold (150 €), *AFAM* also offers sprockets (even countershafts with 14 sprockets). The worst are *Regina* Gold. *Honda* kits are also good, sprockets even first choice. Always change the complete kit! If you do not want to remove the swingarm, the chain should be riveted, which requires a special chain-rivet installing tool (borrow in a garage). Most failing chains had a broken clip-style master link, so use an endless chain wherever possible. The size is 525 or 5/8 x 1/16, original length 118 pins.

A popular way to reduce chain life is to mount the countershaft sprocket the wrong way. Correctly mounted the elevation points away from the engine, usually leaving the MAS335 on the countershaft visible. The screws of the rear sprocket are really soft, separating the stroke damper (cautiously hit the rear side of the sprocket by sticking a piece of wood through the spokes of the unmounted wheel) allows you to use decent tools leaving the nuts in working condition.

Going offroad you might like a lower transmission ratio. You can mount a bigger rear sprocket (e.g. 49 sprockets) which requires a longer chain (120 pins instead of 118). Using a smaller countershaft (14 sprockets, 47' rear sprocket) allows you to keep the original chain (118 pins). The lower ratio will lead to an improved acceleration in all gears and lower fuel consumption at lower speeds, but will cause uncomfortable high revs and higher fuel consumption at highway speed.

A higher transmission ratio hardly increases top speed of your TRANSALP. If you want top speed, get a Hayabusa (please let us know how you tune it for offroad use). Still some people report positive experience with 16' countershafts, allowing to reduce fuel consumption below 5 litres when travelling on highways a lot. Even 17' countershafts have been tested and appreciated. Anyone ever changed the countershaft against the rear sprocket?

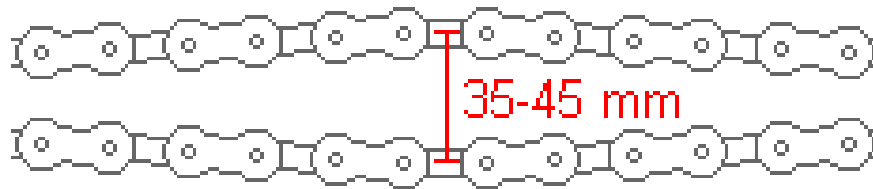
Larger sprockets are available through *Hein Gericke* and *Götz*, the 14' countershaft at *TAF* (25 €) or *AFAM* and rear sprockets through *mo-tech*:

 [TAF GmbH](#)

 [mo-tech Kettenräder](#)

Due to the altered noise and emission levels a changed transmission ratio requires legalization through authorities in germany, but this is rarely done since it requires a lot of money or efficient persuasion of officials.

The **chain slack** must be adjusted occasionally. A loose chain can grind in the swingarm, which has a rubber protection that should also be controlled. If worn, it can be replaced, turned around or filled with 2-component-glue. A loose chain can jump off the sprocket at the worst, which can block the rear wheel. Since the chain is tightened when the swingarm dives, there has to be a certain chain slack, otherwise the chain wears out really fast and the bearings can be damaged. The slack is measured on the side stand: The chain is taken in the middle between the sprockets, pushed up (towards the swingarm) and down, the difference between these positions is measured. *Honda* recommends 35 to 45 mm slack, by tending towards 45 mm you should be on the safe side. Sometimes even 50 to 60 mm are recommended, it is best tested under load. After adjustment move the bike a bit and check again. If the slack varies, the chain has been stretched unevenly. Throwing the kit away and getting a new one helps in this case.



Clattering noise? The black plastic grid in front of the coolers can make an unnerving clattering noise, especially at higher speeds. It can be fixed with double-sided tape or similar. When it is mounted the 'wrong' way (in front of the side fairing instead of behind) and thereby stuck between fairing and crashbar, it will never clatter again. It can also be simply thrown out. Sometimes the fork clatters, when the fork oil is really old. Changing helps.

When the **clutch** needs replacing (40 - 60 Mm) new springs should be used as well as new clutch linings. First choice is *Honda* springs (15 €). Accessory springs (10 €) are usually harder and demand higher operation forces. Accessory linings from *Lukas* (60 €) seem quite good, you are on the safe

side with genuine *Honda* (80 €). The steel parts can usually be used again if they are still plane (check against glass plate, up to 0.3 mm is ok) and not tarnished. Mind the right order on mounting and use a new gasket for the cover (4-14 €).

 [How to change the clutch](#) (Deti)

Accessory clutch levers are a bit critical: Although looking like the genuine part, some do not operate the micro switch in the mounting correctly. This makes it impossible to start the engine when the gearbox is not in neutral. So genuine levers are first choice (see [starting](#) ..). A broken (usually corroded) micro switch can be repaired:

 [Microschalter reparieren](#)

There are many **colours** available and a few listings:

 [Modellgeschichte](#)

 [Frame numbers, type and color codes](#) (Deti)

 [Colour Page](#) (with images, Hans)

 [Farbliste](#) (Luigi)

Depending on the **construction year** the differences of TRANSALPs are relevant. Check the frame number for the model year or look for the type letter under the seat (e.g. XL600VN):

H	J	K	L	M	N	P	R	S	T	V	W	X
1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999

Usually 'construction year' refers to the 'model year', an early 1991 TRANSALP may have been made in 1990 and also have a registration date in 1990. For spare and accessory parts refer to the model year as evaluated by the vehicle identification number.

 [Vehicle identification numbers \(also re-imported vehicles\)](#) (kleinjung.de)

 [Modifications through the years](#) (Deti)

 [Frame numbers, type and color codes](#) (Deti)

The **coolers** need thorough air bleeding after the coolant was changed. They are filled through the filling hole in the right cooler. It must be filled to the brim repeatedly, briefly running the engine between the fillings. Air remaining in the coolers will prevent proper flow through, causing overheating and early activation of the cooler fan.

[Changing the coolant](#)

Crash bars are probably the most popular accessory on TRANSALPs. Since they cost less than a single side fairing they charge off when the bike is dropped once. They also increase transport capacity, especially for flower bunches and frozen pizza. They are available from a range of manufacturers:


Five Stars - most popular. Mounting is no problem, the material is pretty soft (normal for 5*). They will bend on stress, but bending them back is not too difficult. The upper screw joint near the cooler can break, destroying the cooler. Use a stainless steel screw at this point. Some change the mounting to *mo-tech* style by fastening it to the frame with a self-made clamp.

Hepco und Becker - black and white crash bars are available from this manufacturer. Unfortunately there were serious problems with manufacturing precision, mounting them proved extremely

difficult to impractical. The first series was moreover known to jam with the mudguard on heavy braking. These problems should not arise with recent models.

SW mo-tech crash bars are not mounted to the rather weak cooler screws, but to the frame with a clamp.

Motad makes stainless steel crash bars, which are mounted to the cooler screws. Available e.g. through

 [MGH](#) (also sells AFAM etc.)


African Queens makes quite professional looking bars from 22 mm pipe, which are really stable and therefore mounted rather close to the fairing.

 [Pictures](#) on  [TRANSALPia](#)

Crash bars should be mounted with as little tension as possible to avoid corrosion susceptibility by stress cracking. When doing your own, do not make them stiffer than the frame.

 [Sturzbügel für die Alp](#)

 [Crashbars \(Deti\)](#)

Engine guard: A name hardly applicable to the plastic decorative apron on TRANSALPs. The material is not too bad and hard to break, but it does not protect the underside of the engine. Moreover, a replacement will be 260 € new. To protect the engine seriously, you can do your own engine guard, reinforce the genuine guard using aluminium sheets, get a used one for the Africa Twin (XRV 650, RD03) and modify it for your bike or simply buy an accessory guard:  [SW mo-tech](#) produces a fairly cheap one (130 €), *African Queens* is much more expensive (650 €). Simply omitting the genuine guard is at least an optical improvement.

 [Alu-Motorschutz für die TRANSALP](#)

 [Custom engine guard \(Deti\)](#)

When your **exhaust pipe** went rust, an accessory model is worth evaluating. Do not trust in promises about power gain, you are happy to avoid power loss. The best legal exhaust in .de is probably the *Laser* stainless pipe, not really cheap (350 €). A Cheaper solution is offered by *Marving* for 150 € including bad finish. *Sebring* is a good compromise. With a short adapting part the Africa Twin 650 (RD03) pipe can also be fitted, illegal, but inconspicuous due to the *Honda* label. The use of a CBR 600 pipe was even reported legal. Sometimes a new carburetor adjustment is required when the pipe is changed.

 [Exhaust pipes \(Deti\)](#)

There is a stainless steel manifold available:

 [Stainless steel manifold for TRANSALP](#)

If the **fairing** gets damaged, many do their own repair. Cracks can be repaired by glueing an aluminium sheet to the backside, best glue is two component stuff. Hot-melt adhesive is also suitable, but the workpiece should be preheated. Scratches can be covered using the *Honda* touch up paint (10 €). Cheaper still is acryl lacquer for modelling (1 €), which is available in modelling shops in a wide range of colours. Paint the scratch and wipe with a soft paper cloth immediately, so the paint will only fill the scratch. Makes it almost invisible. Pieces of the original [stickers](#) are also useful for repairing little chips. For larger areas see [painting](#). To protect the fairing [crash bars](#) are very popular.

[Reparatur der Verkleidung](#)

[Verkleidung schweißen](#)

[Fairing reconstructions](#)

Do not use accessory **fuel filters** on the TRANSALP. They cause you having to switch the fuel tab to reserve pretty soon and you will not get very far. The pressure of the fuel flowing from the tank is simply not sufficient. The fuel from the right side of the tank cannot be used anyway, so when you run out of fuel, lean your bike over to the left side quite far so the fuel can flow over to the left half. Always good for a few more km.

If you do not want your **gear lever** to bend, when you throw your bike in a corner after use, better get one that flaps. Accessory dealers are supposed to have them, but they are hard to find; but using the genuine lever from any Africa Twin model works just fine. MTX 80-200 also fits, XR/XL are quite a bit longer - suitable for bigfoots.

The white **hand guards** are often considered an optical impertinence. Remedy is found among accessories, for the material is hard to paint. Standard accessory guards can easily be mounted as well as the *Honda* guards for Dominator and Varadero (on the PD10).

Better still are bracket-like hand guards, which are also mounted to the end of the bar, and are able to protect the levers when the bike is dropped. The guards made by *Acerbis* (65 € with spoilers) are quite popular, although they are not easy to mount on the original bar. Sometimes the seam within the bar needs some filing off, or the aluminium plug of the guard must be lathed off (PD10). Many chose to mount a new [handlebar](#) also (usually *Renthal*). With TRANSALPs before 1993 (without adjustable brake lever) mounting the guards is not even easy on an aluminium bar, sometimes the *plastica italia* needs some cutting and the ball at the end of the brake lever must be sawn off. The much cheaper (27 € with spoilers) alternative from Polysport, available at *Gericke*, is easily mounted on the original bar. It does not whatsoever include a mounting kit for aluminium bars. These guards should be stable enough to prevent the breaking of levers on dropping the bike. If the fittings are not screwed to the bar too tightly, allowing them to be turned with some force, the levers are also more likely to survive a drop.

The **handlebar** of the TRANSALP does not break often, still many change it against an aluminium bar, available from *Renthal*. It is insignificantly lighter, supposedly more stable, much more beautiful (available also in golden anodisation matching the golden rims) at fits well together with the *Acerbis* [hand guards](#). Cost: 55 €, available through *Zupin* in Germany.

[Renthal](#)

Really popular is type 6133, also sold as 'Enduro Bend High', 'Paris-Dakar' or '6.5 Inch'. It is a bit wider than the genuine bar and a bit less cranked. Elongation of the wires is usually not necessary. Only the plastic bits on the mountings that match the little holes in the genuine bar must be removed with a sharp knife. A strength durability report is delivered with the bar, it needs registration to be legal in germany.

If the bar looks skew, but diving the fork seems no problem (uptight fork!) it is merely a problem of the bar support. Minor corrections can be achieved by hitting the end of the bar with the steering

lock engaged, the more professional approach is to loosen one support, align the bar and tighten it again. When the rubber part of the support wears out, the feeling gets really bad. These rubber parts are not available as genuine spare parts, but they can easily be improvised using flexible pressure tubing. The rubber can also be bridged using washers M 20 or lathed discs (outer diameter 32 mm, inner 19 mm, 4 mm thick).

If you ride standing a lot and wish a higher bar:  [SW mo-tech](#) and  [Touratech](#) offer riser kits for 40 € each.

Hazard lights can easily be installed, since the frequency does not change when left and right indicators are switched on simultaneously. You only need a double pole switch, or a single pole switch and two diodes, to construct it. Tap the indicator cables or solder short wires to the indicator switch.

 [The diode solution \(Deti\)](#)

 [Warnblinker](#) (Michi)

If the hazard lights are supposed to stay on when the ignition is shut off, still leaving it impossible to switch the hazard lights on when the bike is locked, more expenses are necessary:

 [Phils Warnblinker](#) (including continuous adjustment for heated grips)

The **headlight** of the TRANSALP is quite bright. If you want more light, use a *Phillips* Premium or *Osram* H4 Super bulb (8 €), they yield 30% more light with normal specifications (60/55 W) and thereby normal heat development. They have a somewhat shorter lifetime, especially under rough conditions. So do not use it for offroad, or switch off the main light for the occasional gravel road. To change the bulb (1991 onwards) pull off the plug (press both sides), take off rubber cover, and unhinge the clamping yoke on the right side, it is then swivelled to the left. On reassembly mind the right orientation of bulb and rubber cover. It is a little bit tricky, if you have thick fingers you might have to take away the grey dash cover.

A substitute for the genuine headlight for models until 1993 is the Suzuki Alto (82-85) headlight sold by Hella (1AE003427-021) or Bosch (Bosch-Nr.: 0301019101) for 30 €, it fits, looks like the genuine part and is brighter.

Twin headlights are not easily mounted, because the opening in the fairing is not big enough. On installing higher rated bulbs (e.g. 55/100 W) make sure to use proper thick section wiring. This will also cause additional thermal stress to the lamp and connection, so using an additional light might make more sense.

 [How to mount a stronger headlamp \(Deti\)](#)

 [Halogen-Page \(Arnim\)](#)

Also in 1991 the height adjustment has changed: Under the grey dash cover there is a screw top right on the headlight (put a long screwdriver between tachometer and subframe). Bottom left is the corresponding screw for left/right adjustment.

Heated grips keep the hands warm in winter. Most heated grips work have two power levels, technically parallel and series connection, subjectively 'tepid' and 'ouch!'. A continuous adjustment can be self made or bought as module, there is also a model from *Honda* available (quite expensive). Most popular models are Daytona grips available through *Polo* and *Gericke* shops (60 €,

watch out for special offers) and Saito grips from *Louis* shops (30 €) which are quite thick and made of plastic rather than rubber, but have a three level electronic adjustment. They are sometimes defective when new, but dealers know about this and exchange is no problem.

 [Warme Finger](#)

 [Daytona vs. Saito](#)

 [Phils Regler](#)

 [Regler als Fertigmodul](#)

They are usually connected to the cooler fan fuse (10 A) since the fan and the grips are hardly ever in use simultaneously. This also switches them off with the ignition. Life time can be elongated by mounting normal grips in summer. It is important to avoid sharp bends on mounting heated grips (throttle movement!) and cover critical points with tape or heat shrink tubing.

IMHO:  [RTFM](#) ([SCNR](#) ;-)

Inspections are cheapest when you do your own. Estimated working time for professional service is 2,5 h for the first inspection (1 Mm), 0,8 h für minor (6/18/30.. Mm) and 3 h for major (12,24,36.. Mm). There is a database to allow cost comparison:

 [Wartungs- und Inspektionsdatenbank](#) (Karsten)

To carry **luggage**, there is a variety of opportunities:


A tank bag as the advantage that it can be loaded heavily without disturbing the riding performance too much, due to its mounting close to the center of gravity. The rain protection is medium to good, depending on model. They offer no appreciable theft protection, but it is easy to take them with you. For the TRANSALP, a magnetic base plate is a good choice. Strap-mounted base plates work as well. The bags from *Bagster* are quite popular, although they are pretty expensive (bag 100 €, base plate/tank cover matching the bikes colour also 100 €).

 [Bagster](#)

 [about Bagster tank bags](#)

Side bags offer good rain protection, but no real theft protection, depending on model. A luggage rack helps mounting them, but it is not necessary. Without a luggage rack you have to take care that the bag is kept away from the muffler. They can be loaded moderately heavy and are a low-budget and low-weight alternative to side cases. *Ortlieb* side bags are absolutely waterproof.

[Muffler spacer for side bags](#)

Side cases require a luggage rack. They offer good wheather and moderate theft protection and allow to lock away helmets. Expedient racks are made by  *Hepco&Becker* (150 €), but after mounting the original cases the right one is substantially higher than the left one, making corrections necessary. Also popular are *Givi/Five Stars*. Low budget luggage racks are better used with side bags, but the 'Carry' model from *Polo* offers real good value for money (55 €). Side cases can be loaded moderately heavy like side bags. Regarding the material, the choice is plastic or aluminium. Both solutions are not really cheap.

 [Carlos Alu-Koffer Seite](#)

 [Alukoffer low budget](#)

A topcase is really cheap, offers some weather and theft protection and will hold a helmet and some other stuff. This makes them really convenient in every day use, but the place is not chosen well for luggage: Being high and on the back, a heavy load has a serious impact on riding performance. So do not load your topcase heavily.

If you are travelling alone on your bike, you can put a lot of stuff in a motorcycle bag. They are cheap, some models are waterproof. They should be mounted lengthwise on the passenger seat, if you have a topcase, you can also mount them across. For mounting ratcheting ties are convenient and much safer than rubber tethers.

 [Gepäckauswahl](#) and  [Gepäckunterbringung](#) (Possi)

1 **Mm** (Megameter) = 1000 km = 1000000 m = 100000000 cm

Many want a **model** TRANSALP. There was a Tamiya model quite a while ago, but nothing is available these days. If you see something, please [post](#).

The front **mudguard** of the TRANSALP is mounted pretty close to the wheel, which can be a problem offroad - stones or dirt coming in between can break the mudguard or jam the wheel. The mudguard can easily be modified using metal sheets keeping the genuine look. I rose it 38 mm, much more is not possible without colliding it with the front fairing on a strong dive. Not recommended for models as of 1994, the new fairing design does not leave enough space. Alternatively an accessory mudguard can be mounted to the lower fork brace, it is a bit more tricky to do and the look is different. Additional problems have to be faced with a PD10. Do not omit the fork stabilizer in any case.

 [Schutzblech hochlegen](#) (Carlo)

It is also possible to use mudguard and fork protectors of the Africa Twin and with modifications the fork protectors of the KTM Adventure (use neoprene gaiters).

New **paint** is usually considered when you dislike the colour of your bike and want something individual. If you do not have the proper equipment, leave the job to a professional. The 2 component lacquers used there correspond to genuine quality, whereas solvent based spray can lacquer are only good for repainting small damages, especially on crash bars and similar. Their regularity, solvent resistance and abrasion proofness is insufficient for larger and stressed areas. Of course the areas have to be free of dust and grease, use the right primer for plastic or metal. If possible use primer and lacquer of the same manufacturer, use additional plasticizer on plastic surfaces.

 [Die LackFAQ](#)

Never save on **oil** - the correct oil level has a much larger impact on engine life time than the brand. Check the level by holding the bike in a vertical position (not on side or center stand) on even ground, do not screw in the dipstick. A specific oil is not required for the TRANSALP, the engine lasts (almost) for ever anyway. Keep to the manufacturers recommendation for the right viscosity, 10W40 or 15W40 mineral oil is always a good choice. And keep away from miracle additives, especially those containing PTFE (e.g. Slick50). Use a new sealing washer after changing the oil;

screw dimensions: M14 x 1.5

 [Motoröl](#)

 [Motorölwechsel](#)

 [Oil FAQ](#)

Enhanced oil consumption occurs mainly with older engines (before 1990) at high mileage. Usually changing the valve stem seals helps, check timing chains and the clutch when you have the engine disassembled. Take out the engine towards the right side. On any suspicion of a fuel leak into the oil (oil in air filter box, smell of fuel in oil, too much oil in draining pipe) do not drive any more, but check the carburetors immediately (float pin leak due to incorrect floater adjustment) and change the oil. Can lead to serious engine damage otherwise.

Use genuine oil filters preferably; there is a bargain set with key. MANN filters MW64 can also be used.

The **pegs** are hiding a little secret: If you take off the rubber (screws from the underside) they are excellent for offroad use.

In germany, **reduced power versions** are available for licence reasons. The power is reduced (to 34 or 27 horse powers, depending on version) by a stricture in the intake manifold, so *Honda* offers different intake manifolds whereas accessory dealers offer metal plates that are inserted in the existing manifolds. Alternatively mechanical stops to the throttle can be used.

The **repair manuals** published by *Bucheli* are quite popular and cost 22 €. Unfortunately only the very first TRANSALP model is regarded in the book. It is still useful for newer models, but improvisations for the modifications have to be made increasingly. More detailed is the *Honda* workshop manual. It is 70 € and updates for newer models are available. Including all updates it will be 140 €.

 [Literatur zur Honda XL600V TRANSALP](#)

 [Original Microfiches \(Download\)](#)

The **saddle** of the TRANSALP is not quite the best for long rides. The foam is too soft, causing heavy guys to sit almost directly on the round plastic support. *Götz* offeres a harder saddle core (50 €). It has to be trimmed a bit sometimes to fit exactly. A local saddler should be able to make a better core as well as redo the cover, regarding individual changes (higher, lower ..). Doing your own is not really necessary, saddlers are usually worth their money. Do compare prices: Recovering varies roughly round 50-80 €; complete redoing including core 100-250 €. If no saddler is near, the saddle can be sent to *Jungbluth*.

 [Saddle \(Deti\)](#)

 [Götz](#)

 [Jungbluth](#)



Saddle height: Too high - there are easy solutions. For just a few Centimeters the fork can be mounted a bit deeper after loosening the screws of the fork braces, reducing spring preload on the shock will lower the rear. If this proves insufficient, it is recommendable to have the thickness of the padding in the saddle reduced. This can also improve the seat comfort if done properly.

Alternatively there are modified pro link rods (*Stauch* [4 cm lower, PD06/10] for 160 € and *Emil Schwarz* [2 cm lower, PD06] for 260 €) and shorter shocks (even more expensive) available for TRANSALPs. These modifications can set an early limit to max slope and cause the necessity to shorten the side stand.

 [Stauch](#)

 [Emil Schwarz](#)

Saddle height: Too low - usually the desire is enhanced ground clearance. It can be achieved by a longer fork like one from XR 600 or Africa Twin (including fork braces, the Dominator fork will even fit into the TRANSALP braces) and a longer shock (e.g. *White Power* or *Öhlins*). It enhances offroad capabilities a lot more than just modified springs, but is also a lot more work. The Africa Twin RD07 shock fits the TRANSALP ('93), is about 5 mm longer, harder and illegal.

 [Kais Umbau](#) on  [TRANSALPia](#)

 [XR 600-Gabel](#) and  Africa Twin-Gabel [RD03](#) or [RD04](#)

 [Hardenduro-Umbau](#) (XR 600, Stefan)


Scottoilers are those nice little guys that do the tedious chain lubrication for you. Adjustable amounts of oil are allowed to flow on the chain continuously as long as the engine runs (vacuum controlled). Unlike chain grease the spots on the rear rim are easily washed off. According to the manufacturer lifetime of the chain is exceeded to three times the normal, which seems quite a bit overstated. Still chain life is probably prolonged enough to charge off the 100 € for the Scottie. Cheaper (depending on pound exchange rate) is direct order from UK, but some problems have occurred by that way:

Scottoilers (Scotland) Ltd. 106 Clober Road, Milngavie, Glasgow Scotland, G62 7SR U.K. Tel: +44 141 955 1100 Fax: +44 141 956 5896

Hein Gericke sells an alternative, it works electrically and is a bit cheaper.

 [Different ways to mount a scottoiler \(Deti\)](#)

 [Chain lubrication systems \(Deti\)](#)

 The [Schwaboiler](#), a low budget solution

 [Helmuts Scottie Seite](#)

 [TM accessories](#): Order Scottie for 110 € including p&p




The end of the lubricating pipe must be adjusted to (almost) touch the rear sprocket. The oil will flow along the sprocket and lubricate the middle of the chain (the chain rolls and the sprocket/chain contact areas). If the oil is collected by the chain, it will spread on the side where the O-rings are. This is no good, since the oil goes only to one side, and this part does not even need lubrication, because the O-rings seal a grease reservoir for the chain lifetime. When the middle of the chain is lubricated the O-rings still get enough oil to remain pliable.

Chain saw oil is sometimes used as lube; never use biological oils! Stihl chain saw oil (semi-synthetic) and Avia type S serve well.

Failing Scotties usually have a blocked outflow or flow rate limiter (porous plastic ball near the outflow). If cleaning does not help spare parts are available.

If you prefer spray-on chain grease do not use teflon based lubricants. S100 or Castrol are popular, insiders tip is HKS Czech, but also expensive and hard to find.

Chain oilers are available from other manufacturers these days:

- Chaintec von *Hein Gericke*, elektrisch, ~90 €
- CLS200
-  [Pro-Oiler](#), elektronisch, ~200 €
-  [McCoj](#), elektronisch zum Selberbasteln, ~110 €
-  [Kettenoeler](#), magnet valve controlled system

Shimmy is not nice and happens sometimes at higher speeds. It can be caused by a heap of things, so you have to go through all:

1. Unsuitable tyre combination, incorrect pressure, heavy/uneven wear.
2. Headset bearing adjusted incorrectly or broken: On released front wheel the bar must be movable to both sides easily, it must not engage in any position or have clearance. You can check on clearance by setting up the bike in front of a wall and push the handlebar strongly towards it, tangible clearance or cracking noise from the headset are bad signs.
3. Worn swingarm bearings: On released rear wheel the swingarm must not be moved by a vigorous shake sideways.
4. Spokes loose: Lightly hit with a wrench successively and keep an ear on the sound pattern.
5. Off-centre or axial runout of a rim, badly balanced wheel.
6. Unsuitable loading (before 1990 the rear is known to be too soft, leading to problems with sidecases), load too far on the rear (topcase). Put heavy objects in your tank bag or side bags close to the center of gravity, see [luggage](#).
7. Wheel bearings worn (clearance), front or rear wheel.
8. Suspension adjusted too soft, spring or damper worn out.
9. Clothing not tight or grip on handlebar too tight.

Usually nothing of the above will cause shimmy by itself, but a combination of two or three of these points might cause it. If nothing helps, you can try to enhance caster by reducing the spring preload on the rear shock, progressive fork springs (see [suspension too soft](#)) can also reduce shimmy.

Sigma speedos are made for bicycles. Still they are very popular amongst bikers since they work up to 300 km/h. A magnet is mounted to the front wheel which closes the reed contact that has to be mounted to the fork at short distance. The speed is calculated from the frequency of these contacts and the tyre circumference, which has to be measured and entered into the device. Depending on model time, travel time, trip kilometers, mileage, average speed and maximum speed can also be displayed. To use it on a bike the cable has to be elongated, or a connection kit for bicycles rear wheels can be used. Most *Sigmas* are mounted to the left side on TRANSALPs, the magnet is glued or screwed to the black plastic disc within the rotor, the reed contact is mounted to the fork using cable ties. Some mount the magnet to a spoke on the right side and the contact to the speedo cable.

There is a wireless *Sigma* model, which is problematic for two reasons: The transmitting distance is quite a bit larger than on a bicycle, and the model is said to work only to a maximum speed of 130

km/h. Moreover, the ignition can cause interference.

Magnets are available from *Cateye*: A flat magnet (for the plastic disc), part no. 166-5130 and a spoke screw-on model, part no. 166-5120 for 4 € each in bicycle shops. They also offer a quite ugly illumination that works on batteries, quite a nice one with 12 V connection is available in *Polo* shops for 15 €.

 [Mounting .. \(Deti\)](#)

 [Anbau .. \(Volker\)](#)

 [Die Radtachoseite \(Helmut\)](#)

Using a specific sensor element *Sigma* speedos can be used as fuel consumption gauges. The circuitry is also available as a ready to use module.

 [Spritmesser \(Possi\)](#)


 [Fertigmodul](#)

There are four **spark plugs** on a TRANSALP, still to the surprise of a few people.

 [Spark plugs](#)

If the **speedometer** does not work anymore, but the cable is still intact and not slipped off, it is usually due to breaking of the driving cog wheel in the hub. The spare part (44806-KF0-000) will cost 24 €. For greasing use acid and resin free grease only. Sometimes the cogs break, sometimes the engaging noses. Prior to changing check the smooth running of the metal worm in the speedo drive and make sure to remove all plastic fragments. If something is broken there try to get the whole drive at a second hand part dealer. Sometimes the cog only run in on the right hand side, so the engaging noses slip over. This can be compensated with fitting washers. The gear of the XL500R also fits and has a metal cog wheel.

The **spokes** are sometimes loose or broken, especially on PD10's. The material is not quite the best. Be careful when retightening, to avoid an off-centre runout. A minor axial runout is less critical. To change spokes have it done by a wheel builder, like saddlers these (nowadays fairly rare) workshops offer good value for money and competent guidance. Stainless spokes are a good choice.

On **starting** the engine will run if 1. the kill switch is set to RUN (in OFF position the engine will still be moved until model year 1993, unless  [modified](#)) and 2. the transmission is in neutral or the clutch is engaged with no side stand used. If starting in neutral does not work, nor does the 'neutral' light, the switch for the 'neutral' light is worn and must be replaced (on center stand no oil will leak). For diagnosing or makeshift repair the switch can be mounted without the washer, it should still work for a while then.

 [Wechsel des Leerlaufschalters](#)

If starting is not possible with the clutch engaged, the micro switch in the lever support is not operated correctly. On moving the lever a quiet clicking noise must be audible sounding like the corresponding switch in the hand brake lever support for the stop light. The clutch lever might be an accessory part (see [clutch](#)), or the lever has been bent when the bike was dropped. Less often the micro switch itself does not work, it can be disassembled and repaired with contact spray.

 [Reparatur des Microschalters](#)

If the bike does not start due to a [battery](#) failure you can push it to get the engine running, which is a good exercise. When jump starting from a car do not have the cars engine running.



The **Stickers** can be removed quite well with a hot air gun, the remaining glue with petrol ether. The thin elastic foil will break on removal. A few bits can be helpful for repairing small damages in paint. Replacement stickers are available at Honda and not really cheap (120 €). More individual and economic are self-made stickers, e.g. laser printed ones on suitable self-adhesive foil. You can name your TRANSALP in a variety of languages:

 [Alp überAll](#)



 [Aufkleber selbermachen](#)

A **Streetfighter** modification is also already there.

 [Streetfighter](#)

A **Super Moto** reconstruction is the dream of TRANSALP scooters: Smaller and wider wheels, e.g. 17" front, 320 mm rotor, wider rim on rear. Requires a speedo adjustment and official legalization, the whole thing is available from  [HE Motorsport](#) in Freilassing o  [ABP-Racing](#). Not quite cheap either way.

 [Gernots Umbau](#)

Suspension strut (shock) broken? Can be repaired ( [SW mo-tech](#),  [technoflex](#)), estimate 200 € for reconditioning with customisation. The spring can be replaced easily, when appropriate by a harder version called Hyperpro (1991 onwards, 100 €). Available from *Wilbers* or *Polo* shops. If the shock needs replacing, think of a better (more adjustments) or otherwise different (longer/shorter) accessory. *Koni* was a good choice (300 €, 1991 onwards) due to its life time warranty, additional adjustments and reasonable price; but it is no longer in production.

The shock can be protected from dirt spray by elongating the rear plastic mudguard with suitable material (rubber boot, leather substitute ..). For accessory shocks this is highly recommended, for they are usually not protected against dirt as good as the original showa part is.

Suspension too soft - a common problem, leading e.g. to heavy diving on breaking. The solution is harder, progressive fork springs as available from *Wirth*, *White Power*, *Technoflex* and other manufacturers. On mounting new fork oil is also required (different viscosity). Unmounting the fork is not necessary, unless you have a recent model where the oil draining screws have been spared. Furthermore you have to pay attention to the fact that *White Power* and *Technoflex* springs are longer, so you have to mount them without the spacers that came with the original springs until 1995. *Wirth* springs, being a bit harder than the rest, may have to be mounted with the spacers, there are two versions of different length. Compare the springs and check the manual. The original springs from 1996 onwards are longer (61 cm) and do not need spacers. It is dangerous (and senseless) to mount extra spacers to make the suspension harder. If you want it really hard, just weld the dip pipe to the stand pipe or fill the fork with concrete, and replace the rear spring with a solid metal tube (paint a spring on it for the police - but check the disclaimer at the top of this page too).

Mount the springs the right way up (manual) and be sure to get the oil fill level right, it is measured

without springs and completely immersed fork from the top rim.

On the rear suspension only the spring preload can be adjusted (with unmounted damper). If you want more adjustments, you have to get an (expensive) accessory damper. If you also want more clearance, it becomes even more costly (see [Saddle height: Too low](#)). If you just want a harder spring, you get an accessory spring for 100 € from Hyperpro (1991 onwards). Also see [here](#).

The **swingarm** is connected to the shock via the pro link arms, it is supported in bronze sockets until the 1988 model. More recent TRANSALPs have needle bearings that can also be used for the older models. The swingarm bearings are norm parts labelled 2016 for 20 mm shafts and cost 5 €, the pro link bearings are only available with the pro link arms.

Emil Schwarz will modify early models for 250 € (send in swingarm). Besides needle bearings grease nipples are added there.

It is a good idea to lubricate the pro link bearings on changing the chain (see [chain and sprockets](#)). The seals are available from *Honda* separately.

An Africa Twin swingarm can also be fitted to the TRANSALP:

 [Africa Twin Schwinge](#)

The **tank** of the TRANSALP can be replaced by the larger (~24 l) genuine Africa Twin (RD04) model. Level indicators (try to buy sensors with tank) and fuel pumps have to be mounted to it. Problems occur with the California model of the US imports, the ominous secondary air system has to be (re)moved. The filler cap looks quite warty like the genuine TRANSALP part. The AT RD04 cap also fits, but a second key has to be used. The MTX 80 cap fits as well and does not need a key. Really large and expensive tanks and rear tanks are available through *African Queens*. Fuel consumption gauge see [Sigma](#).

 [Mehr Sprit für die TRANSALP](#)

When the fuel tap leaks, do not buy a new one (150 €). *Honda* offers a repair kit for 40 € containing all the parts falling out on disassembly (both membranes, 4 screws, spring, washer, spacer, cover); part no. 16953ME5005. Meanwhile a similar kit is also available from Louis for 15 €, but without the inner membrane.

The **temperature gauge** of the TRANSALP is just for guessing: On some bikes it will rise on riding, but on most it hardly moves from the left position in normal conditions. Some people therefore find it necessary to install a digital oil temperature gauge on their bikes, as available from *Conrad* or *Götz*. The sensor is installed instead of the oil draining screw (14 x 1.5). Anyway, most people develop a feeling about the engine temperature.

 [Conrad Electronic](#)

 [Goetz](#)

To protect your bike against **theft**, it is a good idea to lock it. If you expect more, since you have to park in a neglected back yard between wrecked cars for a couple of weeks, additional locks and alarms seem a good idea. Brake disc locks are often used, they are small, cheap and offer pretty good protection. On the other hand the damage caused by a forgotten brake disc lock is fairly high (especially when you take off with a wheelie). So when you use them, park in front of a wall or

similar, like Gold Wing riders do it to show off their reverse gear on departure. On pushing your bike backwards you will notice the lock before it comes to a damage. U locks are a bit less handy, but can allow to lock the bike on to something immobile. The rack of the PD10 can hold the original *Honda* U lock, but also other commercial locks like the Abus 54 HB/150 (length 340 mm, width 120 mm) or the Abus Granit Classic 74 (330 x 170mm).

Within the **throttle** there is a white plastic separating the opening and closing line. If the throttle was opened by unfastening the screws, the lower line will tend to stick under the plastic. It is easier to mount the throttle after unfastening the lines on the carburetor.

Tuning of TRANSALP engines can be achieved by simply using the Africa Twin engine or by spending tons of money on other stuff:


 [Tuning für die Alp](#)

Tinkering with miracle mufflers and jet kits without serious professional equipment (power testing station) at hand did never yield anything fair.

The **TÜV** is happy every two years, when one of these nice bikes turns up to the compulsory biennial check on roadworthiness. Some accessory parts need legislation in germany, which means to visit them guys more often. *DEKRA* is an alternative to the *TÜV* in germany. Some modifications cannot be seen without disassembly (like fork springs), so the biennial check can be mastered without having them legally. But if an accident happenes and the remains of the TRANSALP are examined by a motor vehicle expert, you are up shit creek without a bucket. So legalise your modifications. If you plan reconstructions or something new, try to go through it with your inspector of least distrust in advance.


 [TÜV](#)

 [DEKRA](#)

TÜV offeres  [a range of brochures](#) as pdf download, like [pdf] [Umbauten am Motorrad](#). They are also available at *TÜV* stations.


Tyres are an everlasting topic. I will have to refer to overviews, since too many factors influence the decision (individual bike, load, personal preferences ..). The main decision is between offroad profiles (more grip offroad, in wet conditions and winter, louder, more fuel consumption and wear) or road profiles (less wear, but usually a bit more expensive, less noise). Popular choices are the Continental TKC 80 (offroad with road ability, for regular gravel and little offroad use) and Metzeler Enduro 4 (road tyre, still good for the occasional gravel road), the latter has been made responsible for [shimmy](#) in a few cases. Using composition (e.g. Michelin) tubes rather than Metzeler or Continental keeps you from constant air refillings. Natural rubber tubes loose some pressure continuously, but are safer offroad. When damaged the air will leak slowly through the hole. Composition rubber tubes hold the pressure for a long time, but can burst when damaged. Most tyres are pre-balanced, a paint spot Mark the lightest side. The valve should be mounted where the spot is.

The PD10 TRANSALP is (at least in germany) restricted to the use of specific tyres, meaning you must only mount tyres individually listed in the registration. Different tyres need written permission

by the manufacturer, available from your dealer or at
 [Metzeler](#) by faxback (+49-89-6663 2223).

 [Reifen für die TRANSALP](#)

 [Tires \(Deti\)](#)

Used parts are a good opportunity to save quite a bit of money if replacement is required. Deti provides a  [list of dealers](#). A few can be found online (for Germany; try Google for your place):

 [Bike-Teile](#)

 [MRC](#)


 [Mototeile](#)

 [Gebrauchtteile](#)

 [Motopartner](#)

It is possible to make a bargain at online auctions, but the choice is not wide.

 [Online-Auktionen](#)

The **value** of your bike is exactly what someone is willing to pay for it.  [Schwacke](#) offers a rough estimate. Condition and Mileage have a serious impact on the value in both ways. Popular accessories like crash bars, luggage racks or center stands enhance the value a little, more exotic accessories hardly do (sell separately). Selling bikes in a near to genuine condition is much easier than selling reconstructions.

The **valve clearance** must be adjusted from model 1989 onwards (engine no. PD06E-2200001 respectively PD06E-3200001 for the power reduced 2G models) to [intake] 0.15 (+/-0.02) mm and [outlet] 0.20 (+/-0.02) mm, earlier models (to 1988 and 1989 US import) intake and outlet 0.10 mm. The *Bucheli* repair manuals refers only to the first model and will therefore state the wrong clearance for 1989+ models! In case of doubt refer to your users manual. Another way to check in case of doubt is to check the countershaft mount which also changed with the new model. For adjusting the clearance needle-nosed pliers or keys for air bleeding radiators at home are useful.

 [Adjust valve clearance \(Deti\)](#)


The **windshield** of the TRANSALP is not really protective. Thanks to accessory parts it is still possible to make it a lot worse. Some people report positive experiences with certain models, but the dependance on body size and weight, TRANSALP model, subjective preferences and more does not allow universal statements. So you will have to try. Noise on highways can be reduced by using earplugs. A different approach are selfmade spoilers.


 [Windshields \(Deti\)](#)


 [Verkleidungsscheibe kürzen](#)

 [Sehr grosse Verkleidungsscheibe](#)


Additional links to on-topic websites

 [TRANSALP.org](#) American website

 [Andys Motocross-Seite](#) All tracks in and around germany


 [Carlos Motorrad- und Reiseseite](#)

 [Detis TRANSALP Page](#)


 [Globusbiker](#) Thomas Kröger, Katharina Herrmann. Africa crossing, modifications


 [Luigis Motorradseiten](#)

 [Manfreds TRANSALPseiten](#)


 [Martins Biker-Site](#) Nokia logos

 [Michis TRANSALP Seite](#)


 [Motorrad online](#)


 [Peters Moped und Reiseseiten](#)

 [Possis Webseiten](#) (not about TRANSALP, but excellent anyway)

 [TRANSALP.de](#) home page

 [TRANSALP.it](#) Lista Italiana Sostenitori/Simpatizzanti TRANSALP

 [TRANSALPclub.nl](#) - same with dutch

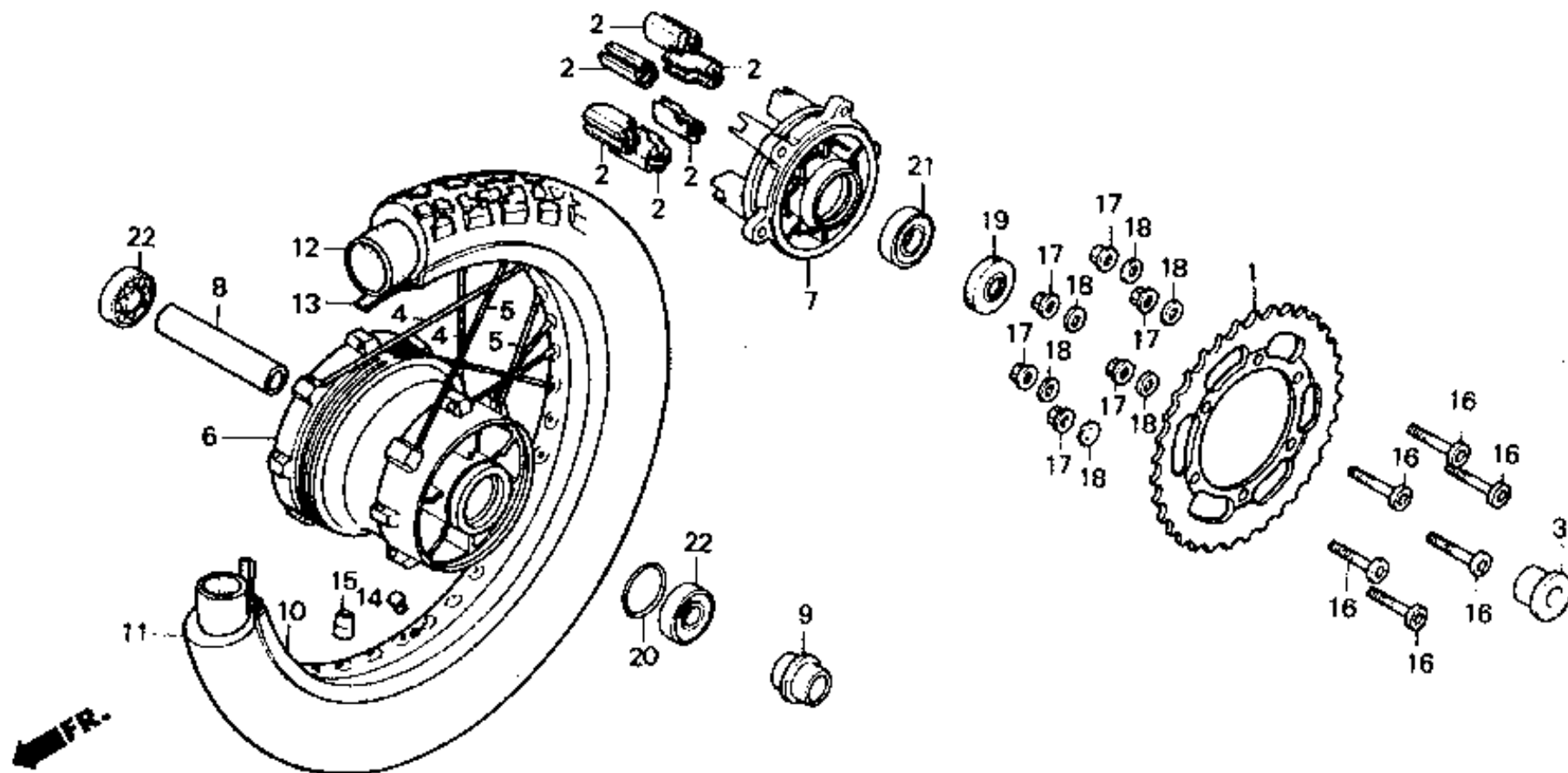
 [TRANSALPfreunde Deutschland IG](#)

 [TRANSALPia](#)

APPENDIX C:

Part Reference List

Rear wheel:



001 Superseded by part #41200-MAB-620 below:

001 [Sprocket \(47 T\)](#)

001 Superseded by part #41200-MAB-620 below:

001 [Sprocket \(47 T\)](#)

002 [Rubber, Rr.](#)

41201-MM9-000 --- 1

41200-MAB-620 \$87.47 1

41201-MM9-505 --- 1

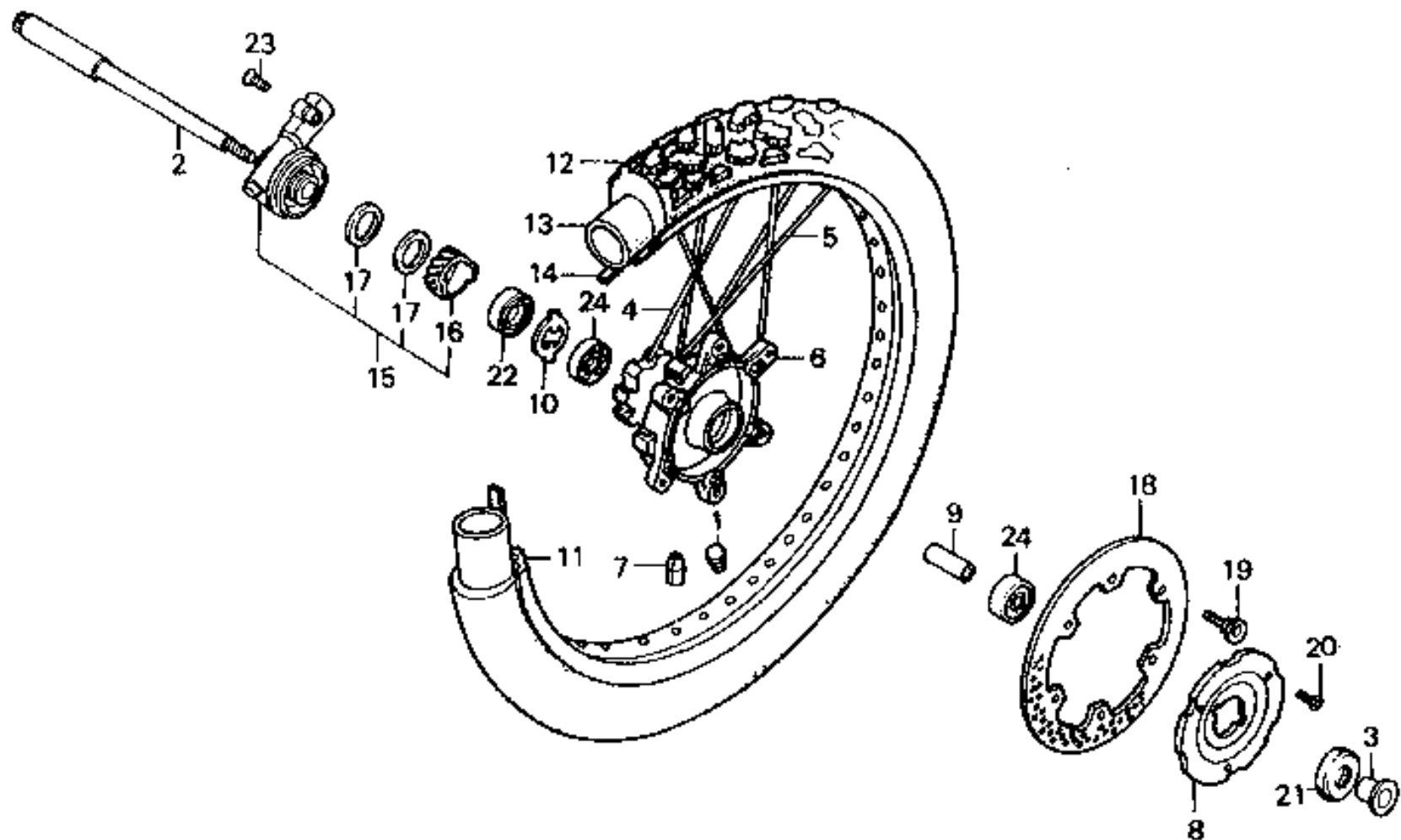
41200-MAB-620 \$87.47 1

41241-MC4-010 \$7.70 6

003 Collar, Rr. Wheel	42312-MC4-000	\$16.26	1
004 Spoke Set A, Rr. This part is on backorder.	426A0-MM9-000	\$4.00	18
005 Spoke Set B, Rr. This part is on backorder.	426B0-MM9-000	\$4.00	18
006 Hub, Rr. WheelThis part is no longer available.	42601-MM9-000	---	1
007 Flange, Final Driven	42611-MS8-000	\$158.44	1
008 Collar A, Rr.This part is no longer available.	42620-MM9-000	---	1
009 Collar B, Rr. Axle Distance	42625-MC4-000	\$12.78	1
010 Rim, Rr. Wheel	42701-MM9-671	\$261.54	1
011 Tire (130/80 17)This part is no longer available.	42711-MM9-005	---	1
011 Tire (130/80 17)	42711-MG7-743	\$78.57	1
011 Tire (130/80 17)This part is no longer available.	42711-MG7-744	---	1
012 Tube, Tire (120/90 17) (Bs)This part is no longer available.	42712-MN9-003	---	1
012 Superseded by part #42712-MA0-005 below:	42712-KB7-902	---	1
012 Tube, Tire (5.10 17) (Inoue)	42712-MA0-005	\$11.00	1
012 Superseded by part #42712-MA0-005 below:	42712-MA0-003	---	1
012 Tube, Tire (5.10 17) (Inoue)	42712-MA0-005	\$11.00	1
012 Superseded by part #42712-MA0-005 below:	42712-MM9-005	---	1
012 Tube, Tire (5.10 17) (Inoue)	42712-MA0-005	\$11.00	1
012 Superseded by part #42712-MA0-005 below:	08400-37100	---	1
012 Tube, Tire (5.10 17) (Inoue)	42712-MA0-005	\$11.00	1
012 Superseded by part #42712-MA0-005 below:	42712-371-004	---	1
012 Tube, Tire (5.10 17) (Inoue)	42712-MA0-005	\$11.00	1
012 Superseded by part #42712-MA0-005 below:	42712-MG7-003	---	1
012 Tube, Tire (5.10 17) (Inoue)	42712-MA0-005	\$11.00	1
012 Superseded by part #42712-MA0-005 below:	42712-371-003	---	1
012 Tube, Tire (5.10 17) (Inoue)	42712-MA0-005	\$11.00	1

012 Superseded by part #42712-MA0-005 below:	42712-MC4-009	---	1
012 Tube, Tire (5.10 17) (Inoue)	42712-MA0-005	\$11.00	1
012 Superseded by part #42712-MA0-005 below:	42712-KK0-003	---	1
012 Tube, Tire (5.10 17) (Inoue)	42712-MA0-005	\$11.00	1
012 Superseded by part #42712-MA0-005 below:	42712-MC4-005	---	1
012 Tube, Tire (5.10 17) (Inoue)	42712-MA0-005	\$11.00	1
013 Superseded by part #42713-MG7-003 below:	42713-MM9-005	---	1
013 Flap, Tire (2.15 17)	42713-MG7-003	\$5.48	1
013 Superseded by part #42713-MG7-003 below:	42713-425-772	---	1
013 Flap, Tire (2.15 17)	42713-MG7-003	\$5.48	1
014 Cap, Rim Hole	42717-329-000	\$3.76	1
015 Balancer (20 G)	44606-283-000	\$6.03	0
016 Bolt	90128-MM9-000	\$3.70	4
017 Nut, Axle (10 Mm)	90304-GA6-003	\$2.56	6
018 Washer (10 Mm)	90465-MM9-000	\$3.24	1
019 Superseded by part #91252-MC4-013 below:	91252-MC4-003	---	1
019 Oil Seal (28 X47.2 X7) (Arai) EXTRA ONE	91252-MC4-013	\$5.18	1
019 Superseded by part #91252-MC4-013 below:	91252-MC4-005	---	1
019 Oil Seal (28 X47.2 X7) (Arai)	91252-MC4-013	\$5.18	1
020 Superseded by part #91307-MB0-003 below:	91302-317-700	---	1
020 O Ring (54 X2) (Arai) EXTRA ONE	91307-MB0-003	\$2.96	1
020 Superseded by part #91307-MB0-003 below:	91307-MB0-000	---	1
020 O Ring (54 X2) (Arai)	91307-MB0-003	\$2.96	1
021 Bearing, Radial Ball (6204 U)	96140-62040-10	\$14.54	1
022 Bearing, Radial Ball (6203 Uu)	96150-62030-10	\$9.28	2

FRONT WHEEL:



FR.

001 [Cap, Rim Hole](#)

42717-329-000 \$3.76 1

002 Superseded by part #44301-KBR-000 below:

44301-KF0-000 --- 1

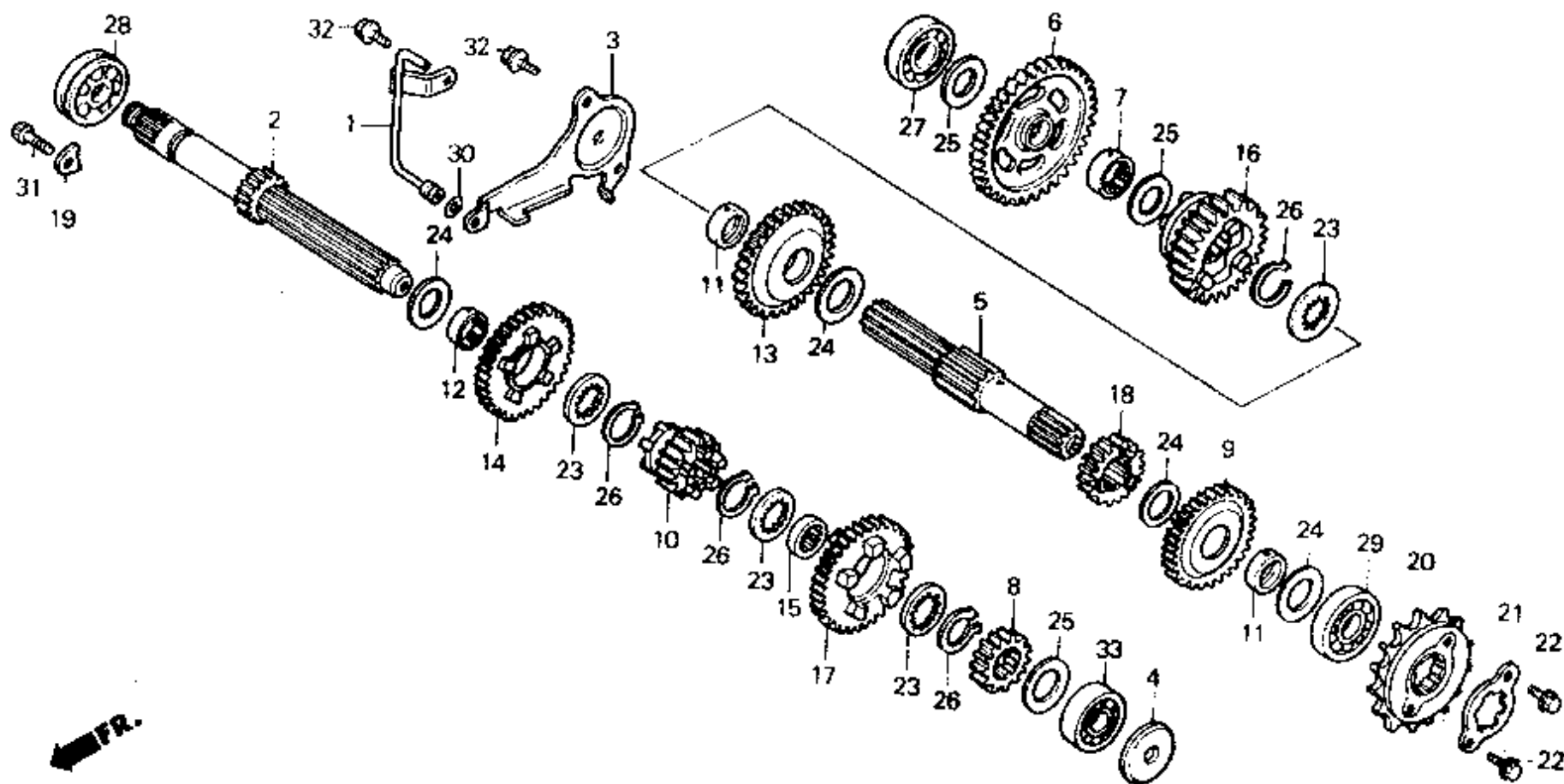
002 Axle,Fr.Wheel	44301-KBR-000	\$37.12	1
003 Collar, Fr. Wheel This part is on backorder.	44311-MG3-000	\$11.31	1
004 Superseded by part #44610-MM9-405 below:	446A0-MM9-000	---	18
004 Spoke Set A, Fr.	44610-MM9-405	\$3.52	18
005 Superseded by part #44611-MM9-405 below:	446B0-MM9-000	---	18
005 Spoke Set B, Fr.	44611-MM9-405	\$3.52	18
006 Hub, Fr. Wheel	44601-MM9-000	\$168.97	1
007 Balancer (20 G)	44606-283-000	\$6.03	0
008 Superseded by part #44610-MM9-010 below:	44610-MM9-000	---	1
008 Cover, Fr. Wheel Hub	44610-MM9-010	\$9.71	1
009 Collar, Fr.	44620-MG3-000	\$8.92	1
010 Retainer, Gear Box	44680-MA0-000	\$5.55	1
011 Rim, Fr. Wheel	44701-MM9-671	\$242.55	1
012 Superseded by part #44711-MN9-015 below:	44711-MG7-014	---	1
012 Tire, Fr. (90/90 21)This part is no longer available.	44711-MN9-015	---	1
012 Superseded by part #44711-MG7-743 below:	44711-MM9-005	---	1
012 Tire, Fr. (90/90 21)	44711-MG7-743	\$69.23	1
013 Superseded by part #44712-446-631 below:	44712-KF0-003	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-KR9-008	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-KB7-901	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-KS6-003	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-KS6-641	---	1

013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-KY7-003	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-MC4-009	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-MG7-003	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-MM9-005	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-KA3-711	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-440-004	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-446-003	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-437-971	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-400-004	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-340-006	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-340-003	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-KB1-911	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-MC4-005	---	1

013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-331-671	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-329-003	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	0Y400-33100	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	08400-34010	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	08400-33100	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	08400-43700	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-357-004	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
014 Flap, Tire (1.85 21)	44713-MM9-005	\$5.48	1
014 Flap, Tire (1.40/1.60 21) (Dunlop)	44713-400-004	\$4.42	1
015 Box Assy.	44800-MK5-013	\$64.90	1
016 Gear, Speedometer	44806-KF0-000	\$22.18	1
017 Washer, Speedometer Gear	44809-402-000	\$2.80	2
018 Disk, Fr. Brake	45251-ML7-690	\$206.40	1
019 Bolt, Disk (8 X22)	90105-MK5-010	\$3.70	4
020 Screw, Oval (4 X10)	90204-MM9-000	\$2.80	4
021 Superseded by part #90755-229-003 below:	90755-229-005	---	1
021 Oil Seal (21 X37 X7)	90755-229-003	\$3.77	1
022 Superseded by part #91258-410-013 below:	91258-410-003	---	1

022 Dust Seal (40 X50 X5) (Arai)	91258-410-013	\$7.08	1
022 Superseded by part #91258-410-013 below:	91258-410-006	---	1
022 Dust Seal (40 X50 X5) (Arai)	91258-410-013	\$7.08	1
023 Screw, Oval (5 X20)	93700-05020-0G	\$0.99	1
024 Bearing, Radial Ball (6202 Uu)	96150-62020-10	\$8.85	2

Transmission:

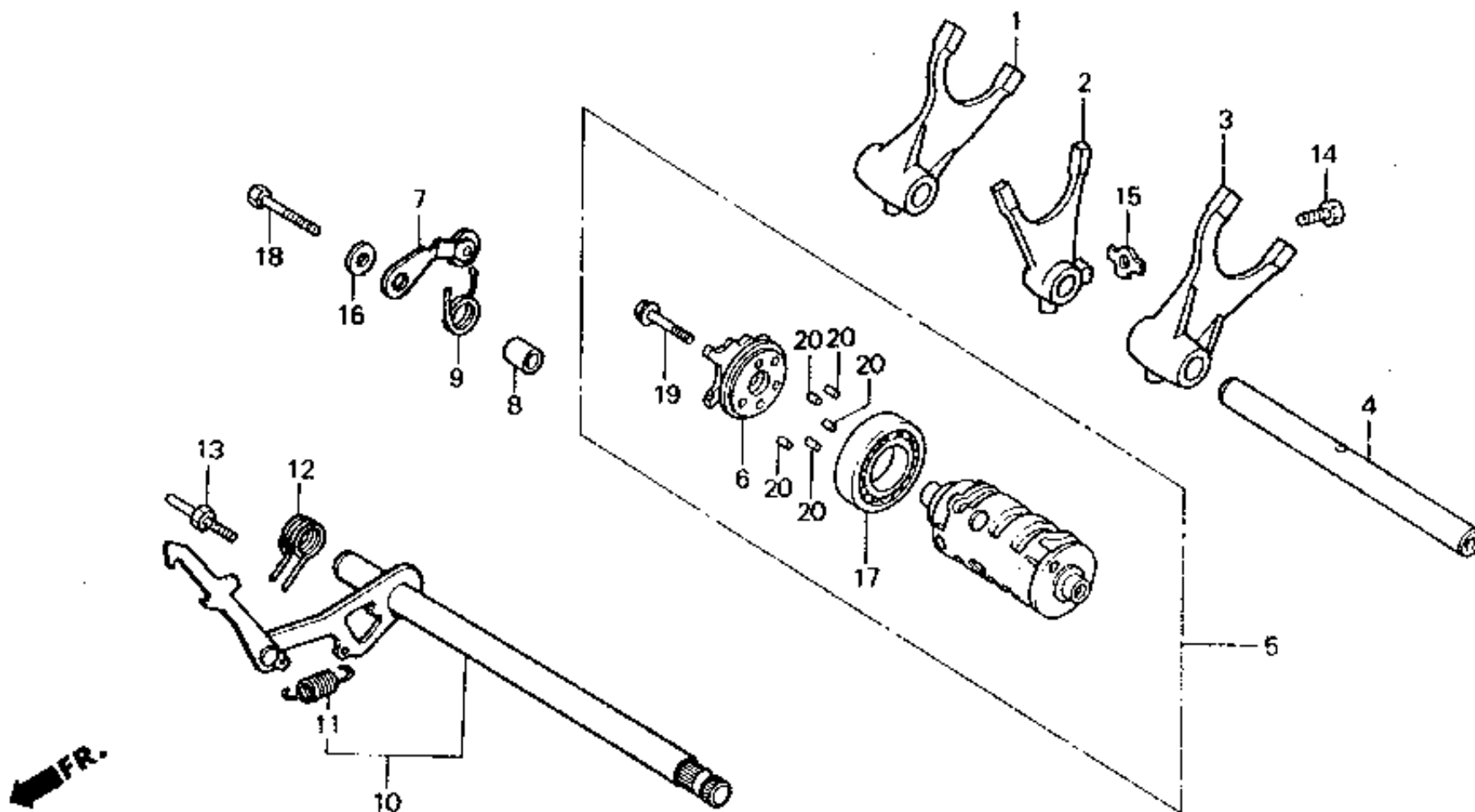


001 Pipe, Oil Feed	15520-MS6-000	\$22.20	1
002 Superseded by part #23210-MZ8-B40 below:	23210-MN8-000	---	1
002 Mainshaft (14 T)	23210-MZ8-B40	\$107.13	1
003 Plate	23212-MS9-000	\$10.92	1

004 Plate, Oil Guide	23219-MF5-000	\$3.47	2
005 Superseded by part #23220-MZ8-H00 below:	23220-KW9-010	---	1
005 Countershaft	23220-MZ8-H00	\$90.57	1
005 Superseded by part #23220-MZ8-H00 below:	23220-KW9-000	---	1
005 Countershaft	23220-MZ8-H00	\$90.57	1
006 Gear (36 T)	23421-MM9-000	\$98.07	1
007 Collar (20 X11.8)	23422-MB0-010	\$14.43	1
008 Gear (18 T)	23431-MS6-620	\$32.05	1
009 Gear (32 T)	23441-MM9-000	\$86.84	1
010 Gear (21 T)	23451-MS6-620	\$86.84	1
011 Bush	23455-HA7-670	\$17.35	1
012 Bush (25 X28 X15)	23455-MM9-000	\$14.43	1
013 Gear (29 T)	23461-MM9-010	\$84.93	1
014 Gear (24 T)	23471-MM9-000	\$80.20	1
015 Collar, Spline (25 X28 X15)	23472-MR1-000	\$15.25	1
016 Gear (27 T)	23481-MS6-620	\$93.50	1
017 Superseded by part #23491-MS6-920 below:	23491-MM9-000	---	1
017 Gear (26 T)	23491-MS6-920	\$73.87	1
018 Superseded by part #23501-MZ8-B40 below:	23501-MS6-920	---	1
018 Gear (25 T)	23501-MZ8-B40	\$67.84	1
018 Superseded by part #23501-MZ8-B40 below:	23501-MS6-620	---	1
018 Gear (25 T)	23501-MZ8-B40	\$67.84	1
019 Plate	23521-MM9-000	\$3.62	1
020 Sprocket (15 T)	23801-MM9-010	\$31.72	1
021 Plate, Fixing	23811-MN8-000	\$7.83	1
022 Bolt, Flange (6 X12)	90118-958-003	\$3.22	2

023	Washer, Spline (25 X31 X1.5)	90451-KY2-000	\$3.50	2
024	Washer, Thrust (25 Mm)	90456-MA6-000	\$2.47	1
025	Superseded by part #90454-428-000 below:	90554-700-000	---	1
025	Washer, Thrust (20 Mm)	90454-428-000	\$2.47	1
026	Circlip (25 Mm)	90601-107-000	\$3.32	4
027	Superseded by part #96140-62040-10 below:	91003-MG2-791	---	1
027	Bearing, Radial Ball (6204 U)	96140-62040-10	\$14.54	1
027	Superseded by part #96140-62040-10 below:	91003-MK2-680	---	1
027	Bearing, Radial Ball (6204 U)	96140-62040-10	\$14.54	1
027	Superseded by part #96140-62040-10 below:	91003-MG2-792	---	2
027	Bearing, Radial Ball (6204 U)	96140-62040-10	\$14.54	2
028	Superseded by part #91007-438-003 below:	91007-393-003	---	1
028	Bearing (63/22)This part is no longer available.	91007-438-003	---	1
029	Bearing (5205)	91014-969-003	\$76.79	1
030	O Ring (5.6 X1.9) (Arai)	91318-ME5-003	\$3.08	1
031	Bolt, Flange (6 X12)	95701-06012-00	\$1.10	2
032	Bolt, Flange (6 X16)	95701-06016-00	\$1.67	2
033	Bearing, Radial Ball (6204)	96100-62040-00	\$8.14	1

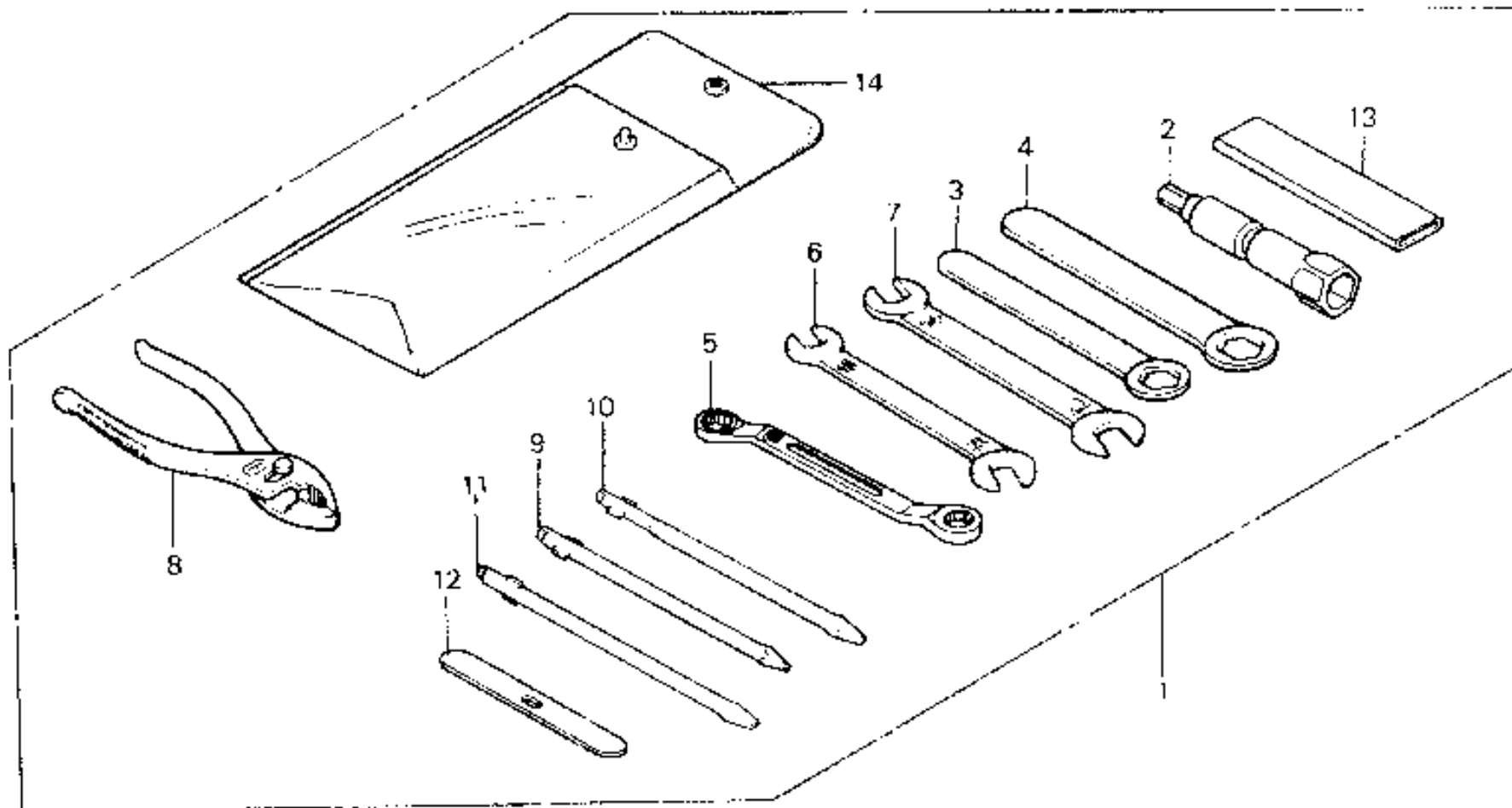
GEAR SHIFT DRUM:



001 Fork, R. Gearshift	This part is no longer available.	24211-MS9-000	---	1
002	Superseded by part #24212-MS9-750 below:	24212-MR1-000	---	1
002	Fork	24212-MS9-750	\$60.03	1
003	Fork, L. Gearshift	24213-MN8-000	\$60.03	1

004 Shaft	24241-MM9-000	\$16.57	1
005 Superseded by part #24300-MS8-010 below:	24300-MS8-000	---	1
005 Drum, Gearshift	24300-MS8-010	\$126.71	1
006 Plate, Cam	24301-MS8-000	\$19.74	1
007 Stopper, Drum	24430-MS8-000	\$12.00	1
008 Collar, Gearshift Drum Stopper	24432-413-000	\$5.97	1
009 Spring, Shift Drum Stopper	24435-MM9-000	\$3.54	1
010 Arm, Gearshift	24610-MM9-000	\$58.08	1
011 Spring, Gearshift Arm	24641-216-000	\$2.47	1
012 Superseded by part #24651-MB0-010 below:	24651-MB0-000	---	1
012 Spring, Gearshift Return	24651-MB0-010	\$5.07	1
013 Pin, Shift Return Spring	24652-259-000	\$3.37	1
014 Bolt, Special (7 X18)	90041-MB0-000	\$4.00	1
015 Washer, Lock	90407-MB0-000	\$2.47	1
016 Washer (6 X2.3)	90488-MB0-000	\$4.00	1
017 Bearing, Ball (16005) (Ntn)	91008-374-003	\$10.00	1
018 Bolt, Hex. (6 X25)	92101-06025-0A	\$1.70	2
019 Bolt, Flange (6 X18)	95701-06018-00	\$1.63	4
020 Roller (4 X11.8)	96220-40118	\$0.99	6

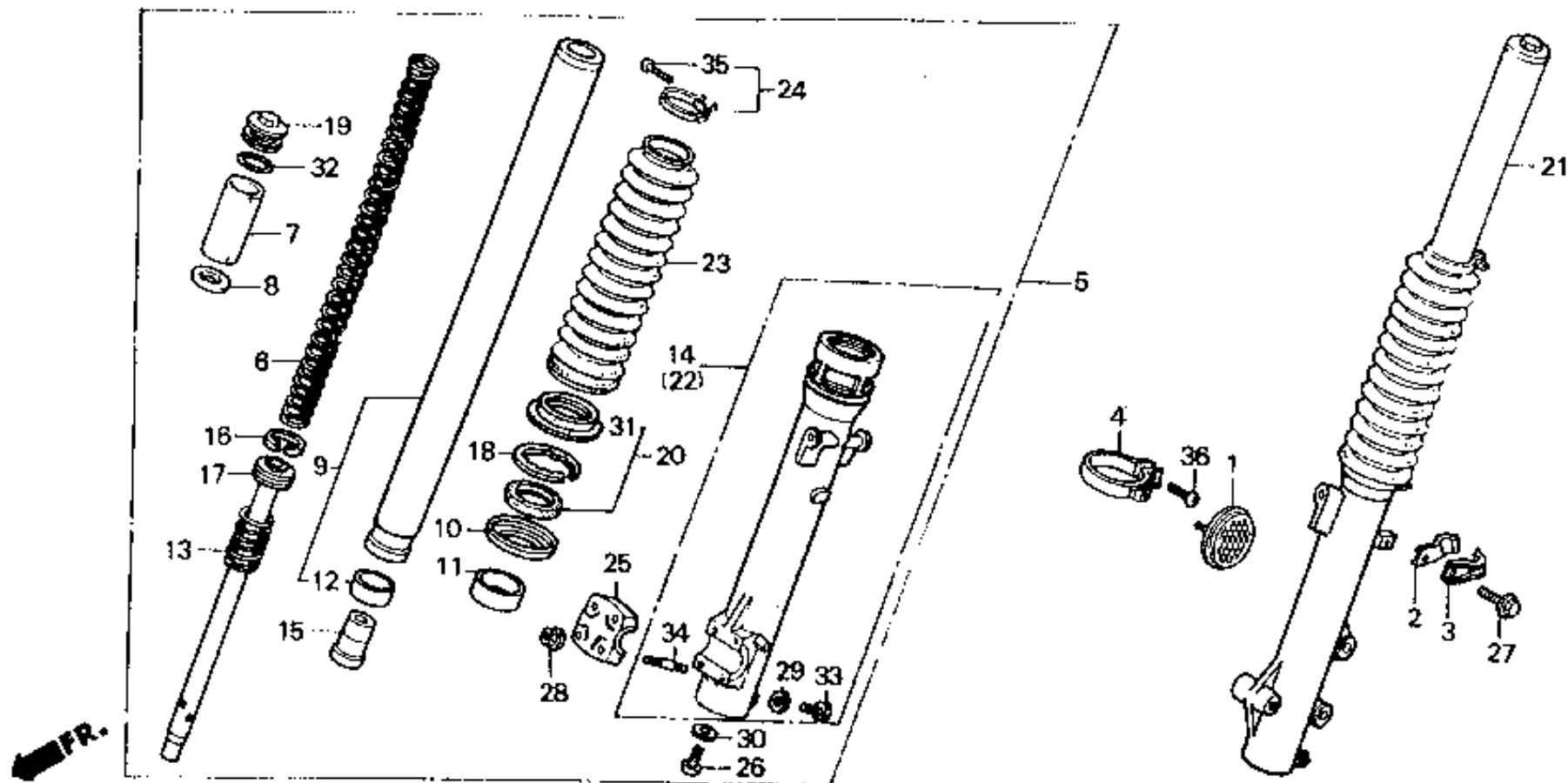
TOOLS



001 Tool Set	This part is no longer available.	89010-MM9-000	---	1
002	Wrench, Plug	89216-MJ1-000	\$16.58	0
003	Superseded by part #89218-MN8-000 below:	89218-MF5-000	---	0
003	Wrench, Eye (17)	89218-MN8-000	\$11.68	0

004	Wrench, Eye (24 Mm)	89223-MM9-000	\$9.97	1
005	Wrench, Eye (10 X12)	89227-MJ4-000	\$19.69	1
006	Spanner (10 X12)	99001-10120	\$2.49	0
007	Spanner (14 X17) This part is on backorder.	99001-14170	\$4.00	0
008	Superseded by part #89210-GBJ-J10 below:	99002-13500	---	0
008	Pliers (135) (Kowa)	89210-GBJ-J10	\$4.73	0
009	Driver 1, Plus Screw (No.2)	99003-10000	\$2.38	0
010	Driver 2, Plus Screw (No.3)	99003-20000	\$2.38	0
011	Driver 3, Minus Screw (No.2)	99003-30000	\$2.06	0
012	Lever	99003-40000	\$1.44	1
013	Handle, Eye Wrench (12 Mm)	99006-12000	\$3.62	0
014	Superseded by part #89101-ME5-670 below:	99008-02000	---	1
014	Bag, Tool	89101-ME5-670	\$4.17	1

FRONT FORKS



001 Reflector, Fr. This part is no longer available.

002 [Clamp A, Brake Hose](#)

003 [Clamp B, Brake Hose](#)

004 [Stay, Fr. Reflector](#)

005 [Fork, R. Fr. *Pb181* \(Starlight Blue\)](#)

33741-MM9-690 --- 2

45464-MM9-000 \$3.70 1

45465-MM9-000 \$3.70 1

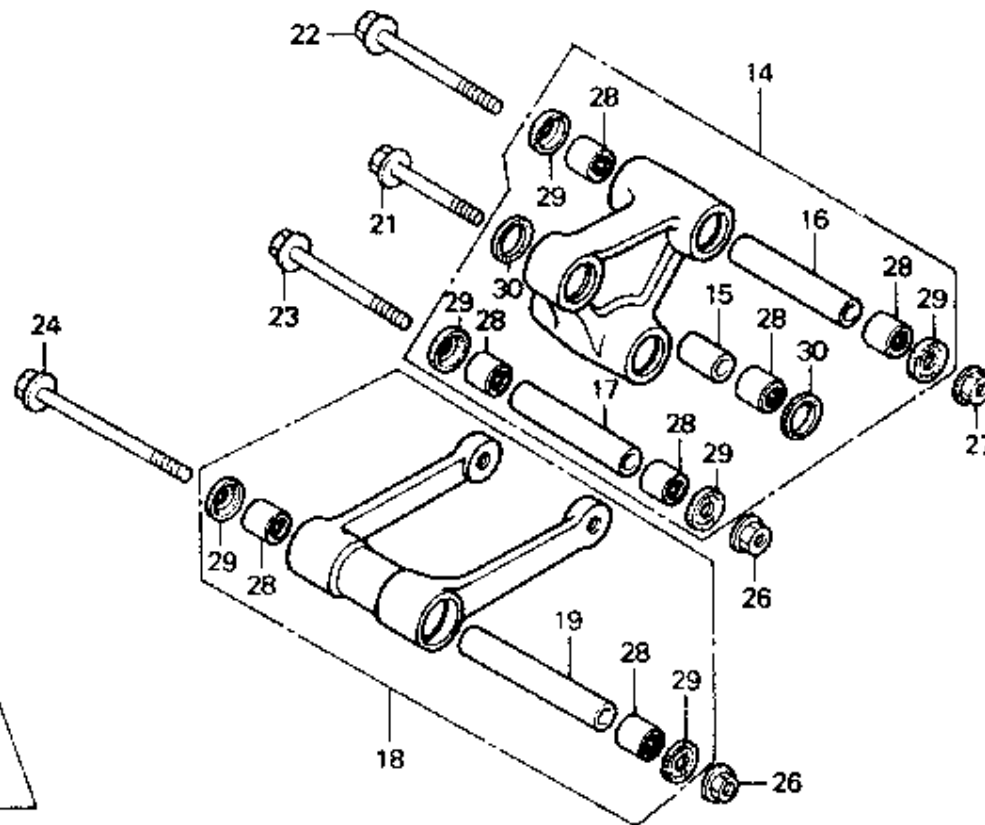
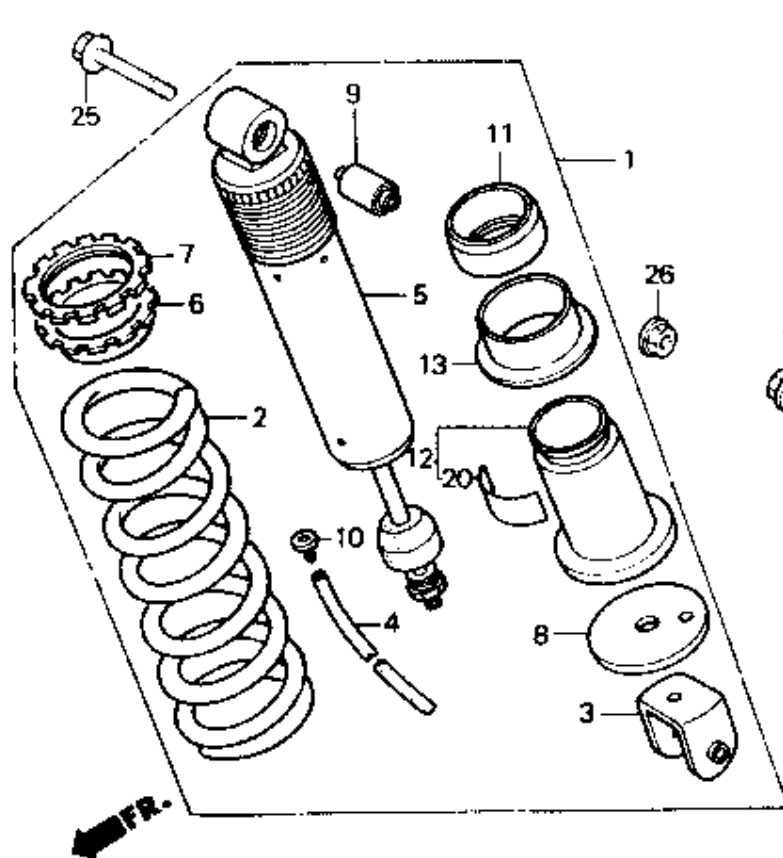
45467-MM9-650 \$10.98 2

51400-MM9-671ZA \$571.01 1

006 Spring, Fr. Fork	51401-MM9-671	\$58.14	2
007 Collar, Spring	51402-MG2-701	\$10.62	2
008 Seat, Spring	51403-KF0-003	\$3.57	4
009 Pipe, Fr. Fork	51410-MM9-671	\$210.89	2
010 Ring, Back Up	51412-KF0-003	\$6.97	2
011 Superseded by part #51414-KCR-003 below:	51414-MN5-003	---	2
011 Bush, Guide (Showa)	51414-KCR-003	\$9.32	2
011 Superseded by part #51414-KRC-003 below:	51414-MB4-003	---	2
011 Bush, GuideThis part is no longer available.	51414-KRC-003	---	2
012 Bush, Slider	51415-MG2-701	\$10.62	2
013 Spring, Fr. Rebound	51416-KF0-003	\$4.95	2
014 Case, R. (Lower) This part is on backorder.	51420-MM9-003	\$203.78	1
015 Piece, Oil Lock	51432-MM9-671	\$15.20	2
016 Ring, Piston	51437-KF0-003	\$6.50	2
017 Pipe, Seat	51440-MM9-671	\$40.02	2
018 Ring, Oil Seal Stopper	51447-KA4-711	\$3.37	2
019 Bolt, Fr. Fork	51454-MM9-671	\$38.66	2
020 Superseded by part #51490-KAE-003 below:	51490-KF0-305	---	2
020 Seal Set, Fr. Fork	51490-KAE-003	\$21.69	2
021 Fork, L. Fr. *Pb181* (Starlight Blue)	51500-MM9-671ZA	\$571.01	1
022 Case, L. (Lower)	51520-MM9-003	\$219.80	1
023 Boot, Fr. *Pb181* (Starlight Blue)This part is no longer available.	51611-MM9-013ZA	---	2
024 Band, Fr. Fork Boot This part is on backorder.	51612-KF0-003	\$7.83	2
025 Holder, Axle	51634-MA0-003	\$24.22	1
026 Bolt, Socket (8 X27)	90116-383-721	\$3.82	2
027 Superseded by part #95701-06010-00 below:	90170-MG3-000	---	1

027 Bolt, Flange (6 X10)	95701-06010-00	\$1.81	1
028 Nut, U (6 Mm)	90301-473-003	\$2.62	1
029 Gasket, Fr.	90543-273-000	\$2.60	1
030 Washer, Special (8 Mm) (Showa)	90544-283-000	\$2.60	2
031 Dust Seal, Fr. Fork	91254-KF0-003	\$13.17	2
032 O Ring (33.2 X2.4)	91356-KF0-003	\$3.34	2
033 Bolt, Hex. (6 X8)	92101-06008-0A	\$1.44	2
034 Bolt, Stud (6 X25)	92900-06025-0E	\$1.56	4
035 Screw, Pan (3 X20)	93500-03020-0A	\$1.04	1
036 Screw, Pan (6 X16)	93500-06016-0B	\$0.99	2

REAR SHOCK:

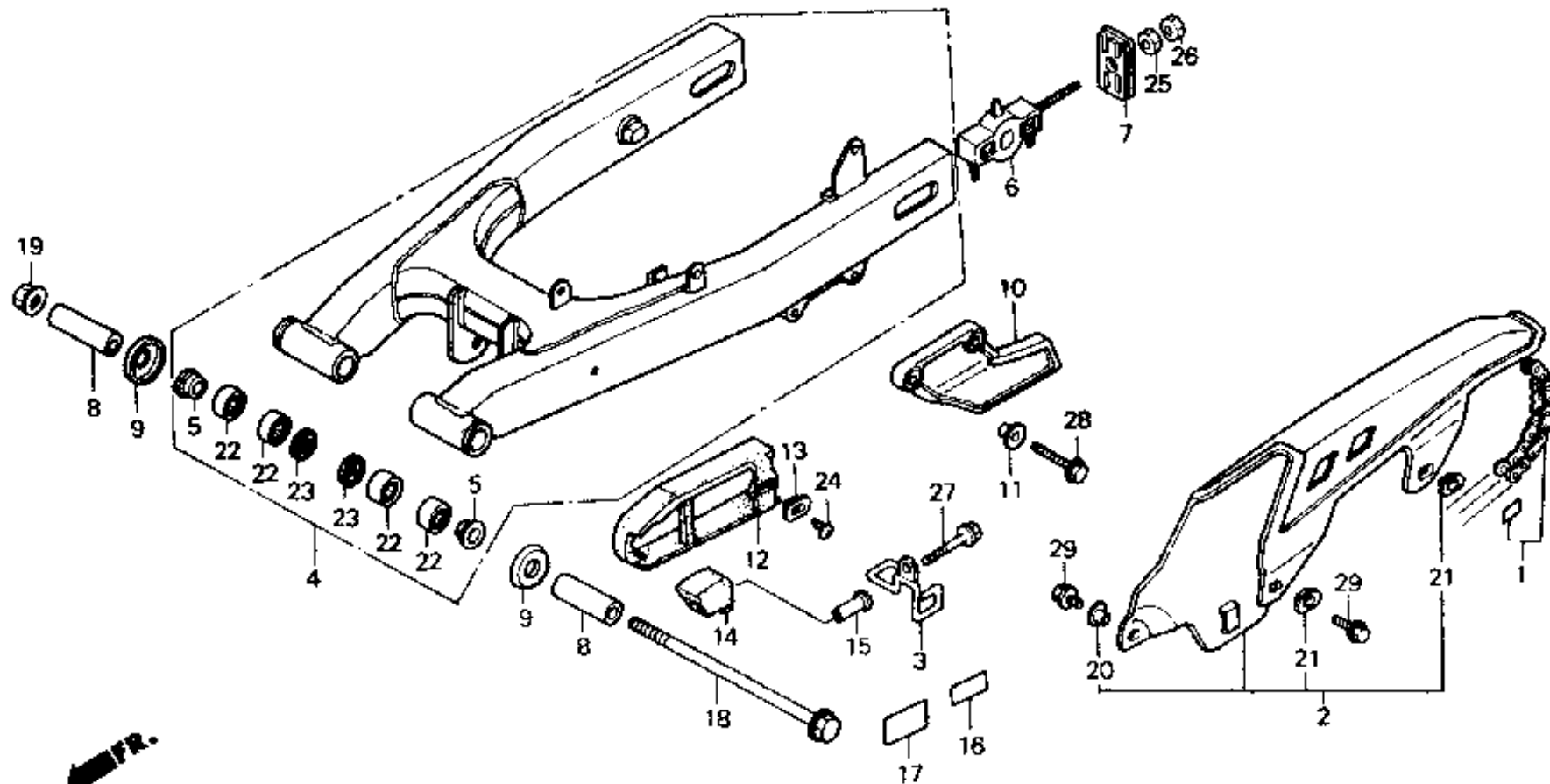


Ref # Part Name Part Number Your Price # Required Quantity

001	Cushion Assy., Rr.	52400-MM9-671	\$656.04	1
002	Spring, Rr. Shock	52401-MM9-671	\$105.40	1
003	Metal, Joint	52403-MM9-003	\$19.74	1
004	Pipe, Drain	52405-KR8-003	\$4.38	1
005	Damper, Rr. This part is no longer available.	52410-MM9-671	---	1

006	Adjuster, Spring (Showa)	52422-MN9-701	\$21.17	2
007	Nut, Adjuster (Showa)	52423-MN9-701	\$16.40	2
008	Stopper, Spring SeatThis part is no longer available.	52424-KB7-003	---	1
009	Bush, Damper (Lower)	52451-MA0-000	\$10.06	1
010	Joint, Pipe	52456-KB7-003	\$3.10	1
011	Dust SealThis part is no longer available.	52457-MN9-701	---	1
012	Guide, Spring	52458-MN9-871	\$13.32	1
013	Seat C, Spring	52459-KB7-003	\$17.15	1
014	Arm Assy., Cushion This part is on backorder.	52460-MS6-620	\$172.11	1
015	Colr, Damper (Lower)	52464-MN9-000	\$11.55	1
016	Collar A	52464-MS6-620	\$11.55	1
017	Collar B	52464-MS8-000	\$12.72	1
018	Rod Assy.	52470-MS8-000	\$136.71	1
019	Collar	52473-MS8-000	\$14.43	1
020	Superseded by part #87516-MBL-610 below:	87516-KY7-911	---	1
020	Label, Rr. Damper	87516-MBL-610	\$3.54	1
021	Bolt, Flange (10 X42)	90126-KT2-000	\$4.72	1
022	Bolt, Flange (12 X90)	90128-KF0-000	\$5.40	1
023	Bolt, Flange (10 X98)	90130-KA3-730	\$11.52	1
024	Bolt, Flg (10 X118)	90151-MM9-000	\$8.62	1
025	Bolt, Flange (10 X60)	90154-HA6-000	\$6.60	3
026	Nut, U (10 Mm)	90304-GE8-003	\$3.26	1
027	Nut, Flange (12 Mm)	90306-KF0-003	\$3.46	5
028	Bearing, Needle	91079-KA3-831	\$17.42	2
029	Oil Seal (17.5 X26 X5)	91205-KT2-005	\$3.70	2
030	Seal (17.5 X26 X2.5)	91261-MN9-005	\$3.70	2

SWING ARM:



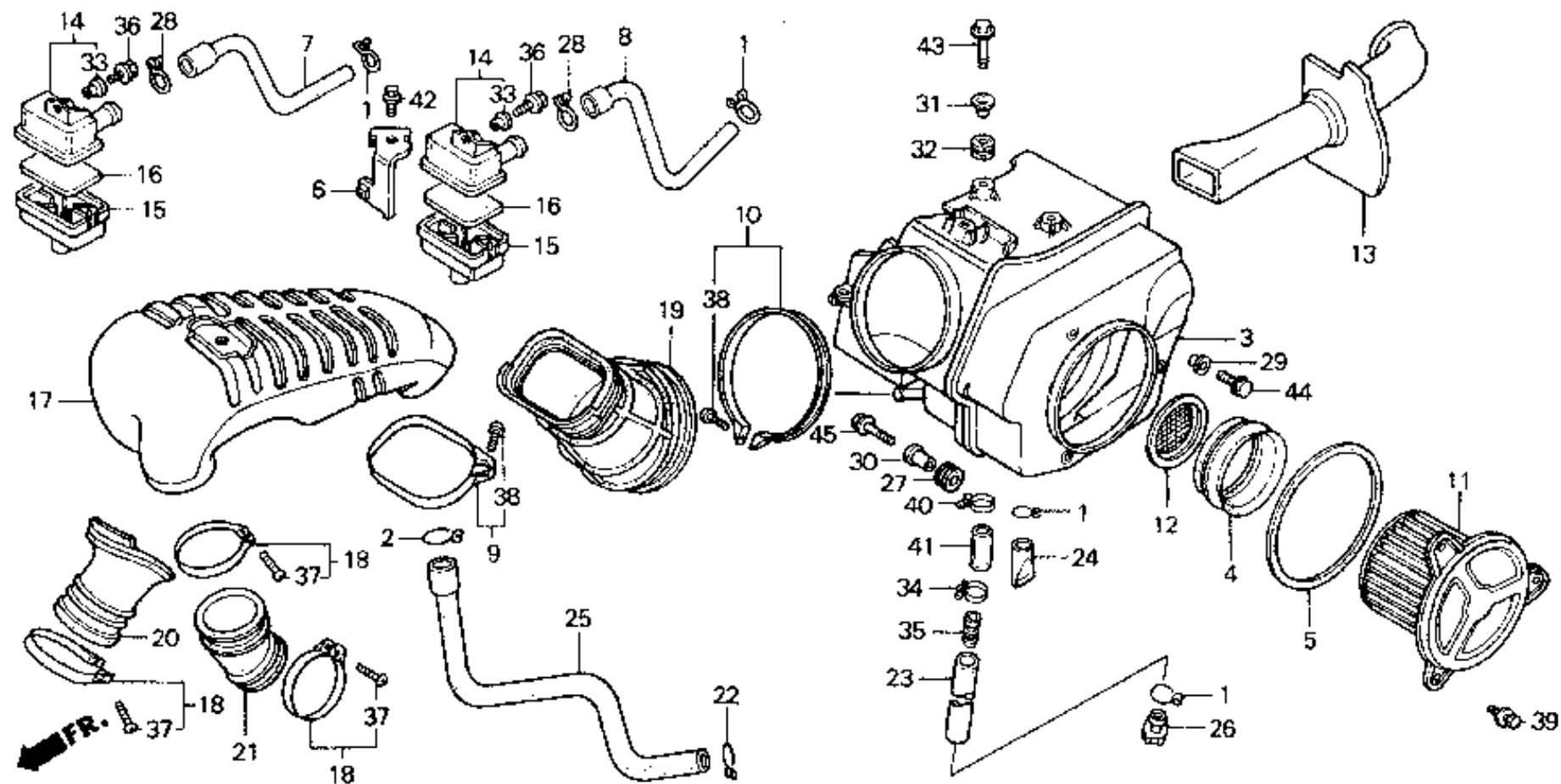
001 Chain Set, DriveThis part is no longer available.	405A3-MM9-005	---	1
001 Chain Set, DriveThis part is no longer available.	405A3-MM9-671	---	1
002 Case, Drive Chain	40510-MM9-000	\$40.26	1
003 Clamp, Breather Tube	50178-MM9-000	\$8.05	1
004 Swingarm *Nh146 M* (Accurate Silver Metallic)	52100-MM9-010ZA	\$369.05	1

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005 Bush, Pivot Thrust	52109-MM9-300	\$10.62	2
006 Superseded by part #52120-KV0-700 below:	52120-KV0-000	---	2
006 Collar	52120-KV0-700	\$34.77	2
007 Plate	52121-MJ0-000	\$13.97	2
008 Collar, Swingarm	52141-MM9-000	\$10.62	2
009 Superseded by part #52144-KR8-005 below:	52144-KR8-003	---	2
009 Cap, Dust Seal	52144-KR8-005	\$8.48	2
010 Guard, Chain	52156-KB7-000	\$28.80	1
011 Collar, Chain Guard	52159-KB7-000	\$4.73	2
012 Slider, Chain	52170-MM9-000	\$22.62	1
013 Washer, Chain Slider	52171-KR6-000	\$2.38	2
014 Slider, Chain	52181-MM9-000	\$22.62	1
015 Collar	53209-HA0-000	\$4.58	1
016 MAS335, Tire Caution	87505-MM9-670	\$3.38	1
017 MAS335 This part is on backorder.	87509-MM9-670	\$3.80	1
018 Bolt, Swingarm Pivot	90121-MS8-000	\$57.45	1
019 Nut, U (14 Mm)	90305-GE8-003	\$3.48	1
020 Superseded by part #90512-KF9-900 below:	90512-422-000	---	1
020 Washer (6 X20)	90512-KF9-900	\$2.96	1
021 Washer (6 X9)	90513-405-000	\$1.54	2
022 Bearing, Swingarm	91071-KS6-004	\$13.25	1
023 Dust Seal (20 X26 X4.5) (Arai)	91254-KS6-003	\$6.62	6
024 Screw, Tapping (5 X8)	93901-25080	\$1.15	2
025 Nut, Hex. (8 Mm)	94001-08000-0S	\$1.26	2
026 Nut, Hex. (8 Mm)	94002-08000-0S	\$1.48	1
027 Superseded by part #95701-06040-00 below:	95700-06040-00	---	2

027 Bolt, Flange (6 X40)	95701-06040-00	\$1.49	2
028 Superseded by part #96001-06020-00 below:	96000-06020-00	---	2
028 Bolt, Flange (6 X20)	96001-06020-00	\$1.85	2
029 Superseded by part #96300-06012-07 below:	96500-06012-07	---	2
029 Bolt, Flange (6 X12)	96300-06012-07	\$1.49	2

AIR CLEANER:



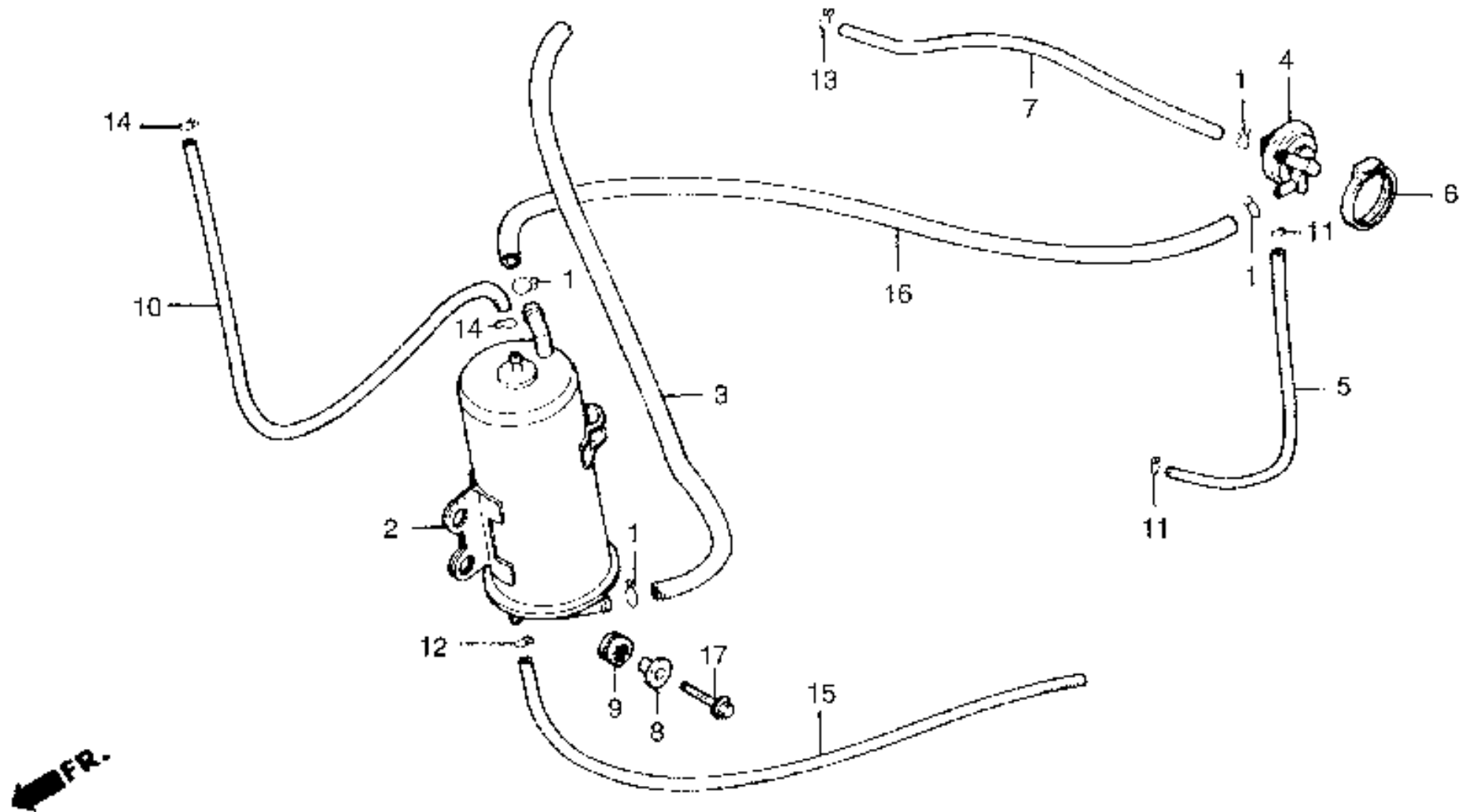
- 001 [Clip, Breather Tube](#)
- 002 [Clip, Breather Tube](#)
- 003 [Housing, Air Cleaner](#)
- 004 [Seal, Element](#)
- 005 [Seal](#)

15772-292-010	\$2.78	1
15772-551-000	\$0.99	2
17210-MS8-000	\$99.61	1
17213-MM9-300	\$10.66	1
17217-MF5-000	\$8.05	1

006 Stay, Sub A/Clnr Hsg	17221-MM9-670	\$8.91	1
007 Tube, R. Sub A/Clnr	17222-MM9-670	\$8.88	1
008 Tube, L. Sub A/Clnr	17223-MM9-670	\$9.31	1
009 Band, Air Cleaner	17227-MM9-000	\$7.65	1
010 Superseded by part #17256-HB9-000 below:	17228-MM9-000	---	1
010 BandThis part is no longer available.	17256-HB9-000	---	1
011 Element, Air Cleaner	17230-MM9-000	\$21.15	1
012 Superseded by part #17240-MY8-000 below:	17240-MM9-000	---	1
012 Trap, Flame	17240-MY8-000	\$8.78	1
013 DuctThis part is no longer available.	17241-MS8-700	---	1
014 Case, Sub A/Clnr	17251-KT8-000	\$15.43	1
015 Cover, Sub A/Clnr	17252-KT8-000	\$12.78	1
016 Filter, Sub A/Clnr	17253-KT8-000	\$3.33	2
017 Chamber, Air CleanerThis part is no longer available.	17253-MM9-000	---	1
018 Superseded by part #95018-60250 below:	17256-358-000	---	3
018 Band, Air Cleaner Connecting Tube (60)	95018-60250	\$4.40	3
019 Tube	17257-MM9-000	\$8.82	1
020 Tube, R. ConnectingThis part is no longer available.	17258-MM9-670	---	1
021 Tube, L. ConnectingThis part is no longer available.	17259-MM9-670	---	1
022 Clip, Breather Tube	17316-611-000	\$5.80	1
023 Tube B, Drain	17357-MM9-000	\$12.63	1
024 Superseded by part #17358-HM8-000 below:	17358-HA0-680	---	1
024 Tube, Drain	17358-HM8-000	\$3.70	1
025 Tube, Oil Breather	17358-MM9-000	\$14.66	1
026 Plug, Breather Tube	17370-382-870	\$3.32	1
027 Cushion, Fr. Fuel Tank	17611-MB1-000	\$3.26	2

028 Clip, Sub Tank Hose	17724-102-700	\$3.38	5
029 Collar	33118-MC7-000	\$3.50	1
030 Superseded by part #61104-428-000 below:	61104-MA6-720	---	2
030 Collar, Fr. Fender	61104-428-000	\$3.55	2
030 Superseded by part #61104-428-000 below:	61104-357-000	---	4
030 Collar, Fr. Fender	61104-428-000	\$3.55	4
031 Collar A, A/Clnr HsgThis part is no longer available.	90501-MC4-000	---	2
032 Grommet A, Air Cleaner Housing	90505-MC4-000	\$2.42	2
033 Washer, Chain Case Setting	90522-028-000	\$2.62	1
034 Clip, TubeThis part is no longer available.	91462-393-780	---	1
035 Joint, Tube	91463-393-780	\$2.03	1
036 Bolt, Hex. (6 X14)	92101-06014-0A	\$1.41	4
037 Screw, Pan (4 X25)	93500-04025-0A	\$1.97	2
038 Screw, Pan (5 X25)	93500-05025-0A	\$1.19	1
039 Screw Washer (6 X12)	93891-06012-07	\$1.22	4
040 Clip, Tube (A16)	95002-01160	\$3.22	1
041 Tube (11 X15 X60)	95003-37006-31	\$1.41	1
042 Bolt, Flange (6 X10)	95701-06010-00	\$1.81	1
043 Bolt, Flange (6 X20)	95701-06020-08	\$0.99	4
044 *95700 06012 08This part is no longer available.	95800-06012-08	---	1
045 Superseded by part #96300-06020-07 below:	96500-06020-07	---	1
045 Bolt, Flange (6 X20)	96300-06020-07	\$1.81	1

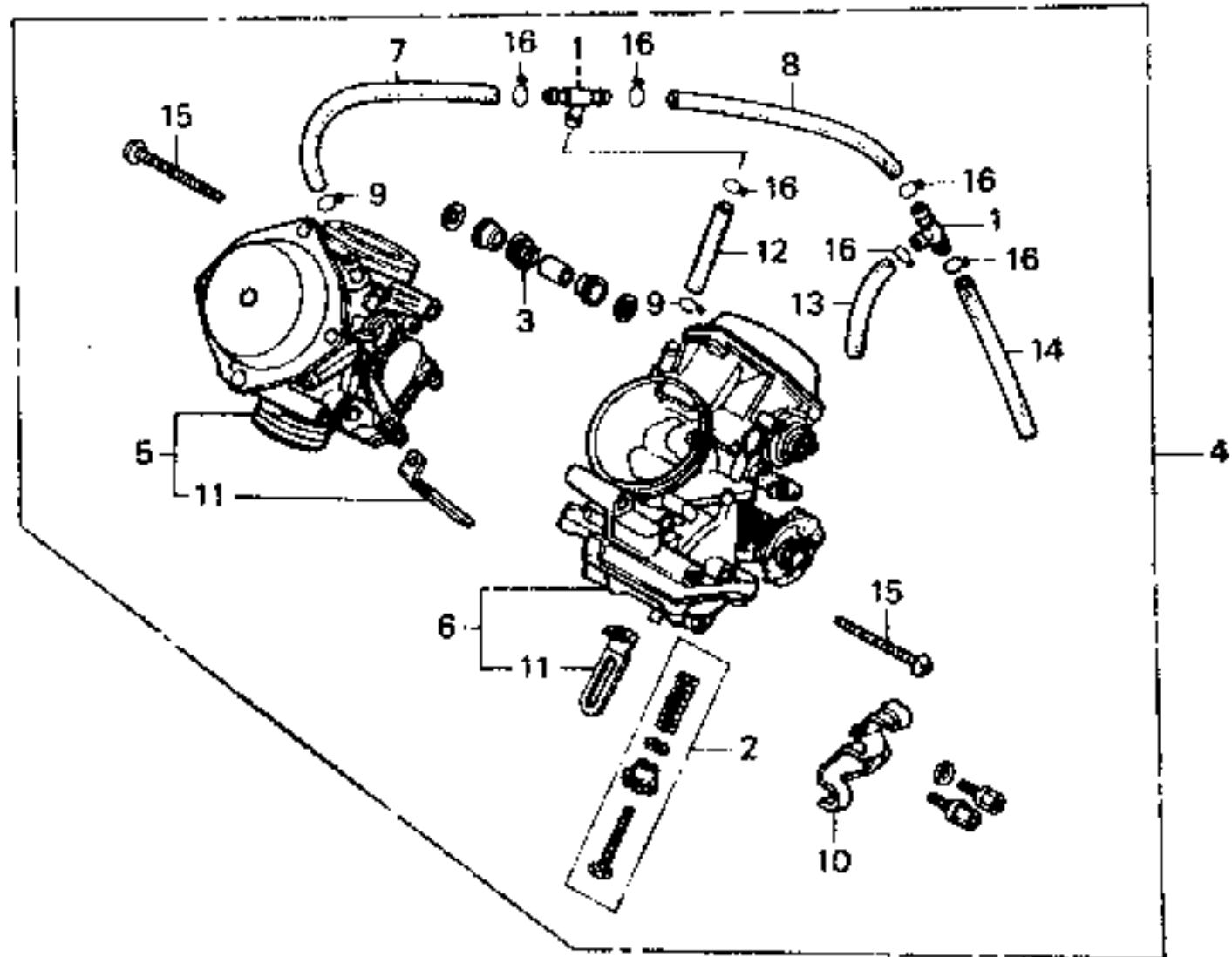
CANISTER AC:



001 Superseded by part #15772-500-010 below: 15772-500-013 --- 2
 001 [Clip, Breather Tube](#) 15772-500-010 \$3.52 2

002 Canister	17410-MM9-860	\$211.31	1
003 Tube, Canister Air	17413-MM9-860	\$12.06	1
004 Valve, Purge Control	17440-MM9-860	\$71.37	1
005 Tube, Purge Control	17445-MM9-860	\$4.35	1
006 Rubber, Purge Control Valve Mounting	17451-ME5-760	\$8.09	1
007 Tube	17463-MM9-860	\$7.67	1
008 Superseded by part #61104-428-000 below:	61104-MA6-720	---	2
008 Collar, Fr. Fender	61104-428-000	\$3.55	2
008 Superseded by part #61104-428-000 below:	61104-357-000	---	4
008 Collar, Fr. Fender	61104-428-000	\$3.55	4
009 Rubber, Headlight Case Mounting	61304-415-000	\$3.10	2
010 Superseded by part #95001-45003-50M below:	95001-45003-20M	---	1
010 Bulk Hose (4.5 X3000)	95001-45003-50M	\$31.54	1
011 Clip, Tube (B7)	95002-02070	\$1.51	2
012 Clip, Tube (B8)	95002-02080	\$1.51	5
013 Clip, Tube (B12)	95002-02120	\$1.15	2
014 Clip, Tube (C9)	95002-50000	\$1.30	1
015 Bulk Hose, Vacuum (4.5 X1000)	95005-45001-20M	\$19.45	1
016 Bulk Hose, Vacuum (8 X1000)	95005-80001-20M	\$13.52	1
017 Bolt, Flange (6 X25)	95701-06025-07	\$1.81	1

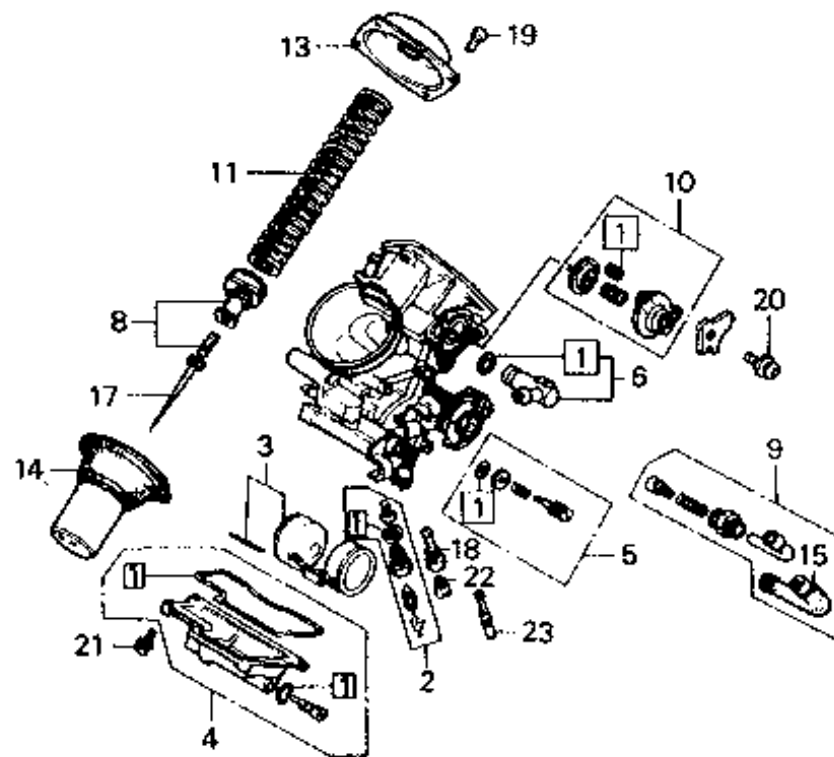
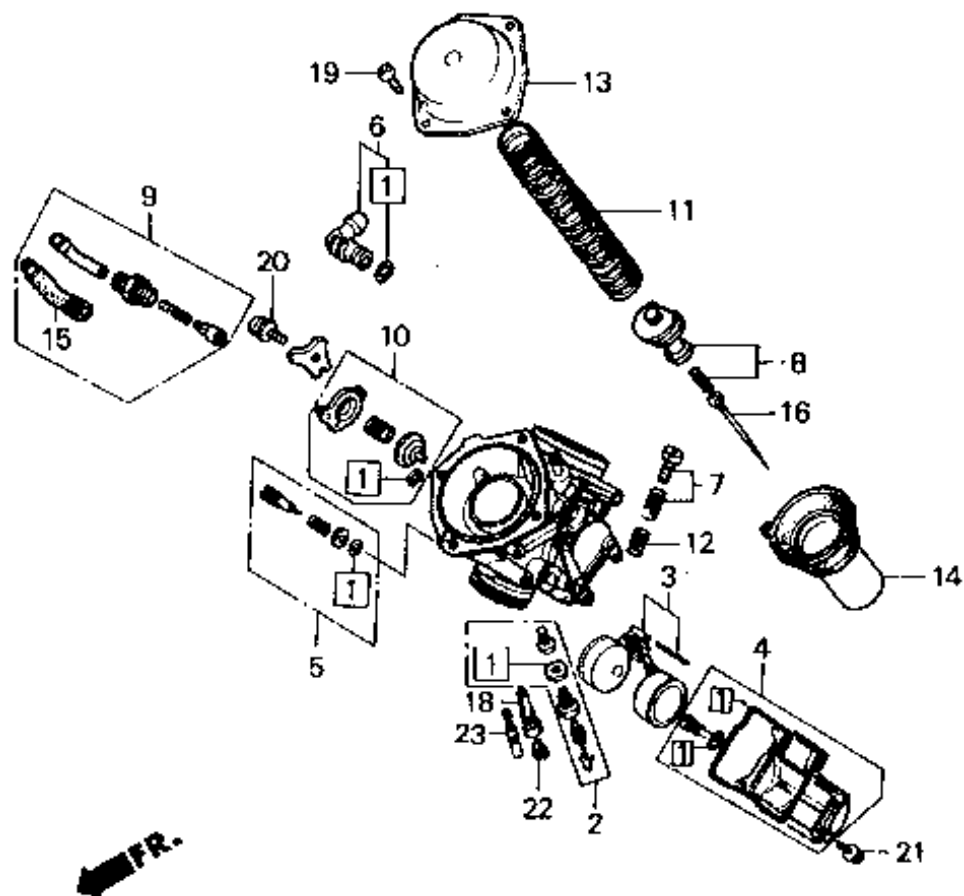
CARBERATOR



FR.

001 Superseded by part #17195-MN5-000 below:	16026-MF5-671	---	1
001 T Joint	17195-MN5-000	\$6.88	1
002 Superseded by part #16028-MAH-000 below:	16028-KM9-711	---	1
002 Screw Set	16028-MAH-000	\$31.82	1
002 Superseded by part #16028-MAH-000 below:	16028-ME9-671	---	1
002 Screw Set	16028-MAH-000	\$31.82	1
003 Spring	16053-ME9-672	\$6.37	1
004 Carburetor Assy.This part is no longer available.	16100-MM9-670	---	1
004 Carburetor Assy.This part is no longer available.	16100-MM9-860	---	1
005 Carburetor, R. Fr.	16101-MM9-860	\$399.04	1
005 Carburetor Assy., R. Fr.	16101-MM9-670	\$399.04	1
006 Carburetor, L. Rr.	16102-MM9-860	\$399.04	1
006 Carburetor Assy., L. Rr.	16102-MM9-670	\$399.04	1
007 Tube	16143-MF5-671	\$4.85	2
008 Tube	16143-MM9-621	\$7.65	1
009 Clip, Tube This part is on backorder.	16163-KM4-004	\$2.58	1
010 Stay, Wire	16169-MM9-621	\$14.34	1
011 Superseded by part #16179-ME9-751 below:	16179-MM9-621	---	2
011 Clip, Plate	16179-ME9-751	\$6.75	2
012 Superseded by part #16028-MN8-910 below:	16198-MF5-671	---	1
012 Tube	16028-MN8-910	\$19.34	1
013 Tube	16198-MM9-621	\$7.65	1
014 Superseded by part #16144-MG8-405 below:	16199-MM9-621	---	1
014 Pipe, Air VentThis part is no longer available.	16144-MG8-405	---	1
015 Screw, Pan (5 X40)	93500-05040-0H	\$1.00	2
016 Clip, Tube (B10)	95002-02100	\$1.57	3

CARB COMPONENTS:



001 Superseded by part #16010-MM8-305 below:	16010-MM9-670 ---	2
001 Gasket SetThis part is no longer available.	16010-MM8-305 ---	2
002 Superseded by part #16011-KV0-672 below:	16011-KV0-721 ---	2
002 Valve Set, Float	16011-KV0-672 \$38.40	2
002 Superseded by part #16011-KV0-672 below:	16011-KV0-671 ---	2

002 Valve Set, Float	16011-KV0-672	\$38.40	2
003 Superseded by part #16013-MAH-000 below:	16013-ML7-004	---	4
003 Float Set	16013-MAH-000	\$29.91	4
004 Superseded by part #16015-MAH-750 below:	16015-MN2-631	---	2
004 Chamber Set, Float	16015-MAH-750	\$69.60	2
004 Superseded by part #16015-MAH-750 below:	16015-MB0-871	---	2
004 Chamber Set, Float	16015-MAH-750	\$69.60	2
005 Superseded by part #16016-MAH-670 below:	16016-MF5-671	---	2
005 Screw Set	16016-MAH-670	\$15.97	2
006 Joint Set	16026-MR1-004	\$25.72	1
007 Screw Set	16029-MN4-003	\$12.91	1
008 Plate Set, Valve	16037-ME5-671	\$16.77	2
009 Superseded by part #16046-MAB-690 below:	16046-MR1-004	---	2
009 Valve Set, Starter	16046-MAB-690	\$28.34	2
010 Valve Set, Air CutThis part is no longer available.	16048-KW0-004	---	2
011 Spring, Rr. This part is on backorder.	16051-MB0-671	\$14.74	2
012 Spring	16052-ME9-672	\$3.83	1
013 Superseded by part #16107-MN2-671 below:	16107-MM9-621	---	2
013 TopThis part is no longer available.	16107-MN2-671	---	2
014 Piston, Vacuum	16111-MF5-841	\$97.54	2
015 Cap, Cable Sealing	16118-ME9-671	\$8.05	2
016 Needle, Fr. JetThis part is no longer available.	16131-MM9-670	---	1
017 Needle, Rr. JetThis part is no longer available.	16151-MM9-670	---	1
018 Holder, Needle Jet	16165-MF5-671	\$23.45	2
019 Screw, Pan (4 X10)	93500-04010-0A	\$1.15	8
020 Screw Washer (4 X10)	93892-04010-08	\$1.44	2

021 Screw Washer (4 X16)	93892-04016-00	\$0.99	8
022 Superseded by part #99101-GHB-1200 below:	99101-393-1200	---	0
022 Jet, Main (#120)	99101-GHB-1200	\$5.95	0
023 Superseded by part #99103-MY0-0380 below:	99103-427-0380	---	2
023 Jet, Slow (#38)	99103-MY0-0380	\$11.60	2

002 Superseded by part #16950-MM9-013 below:

003 Body, Petcock

004 Superseded by part #16952-MM9-305 below:

16950-MM9-003 --- 1

16950-MM9-013	\$162.17 1
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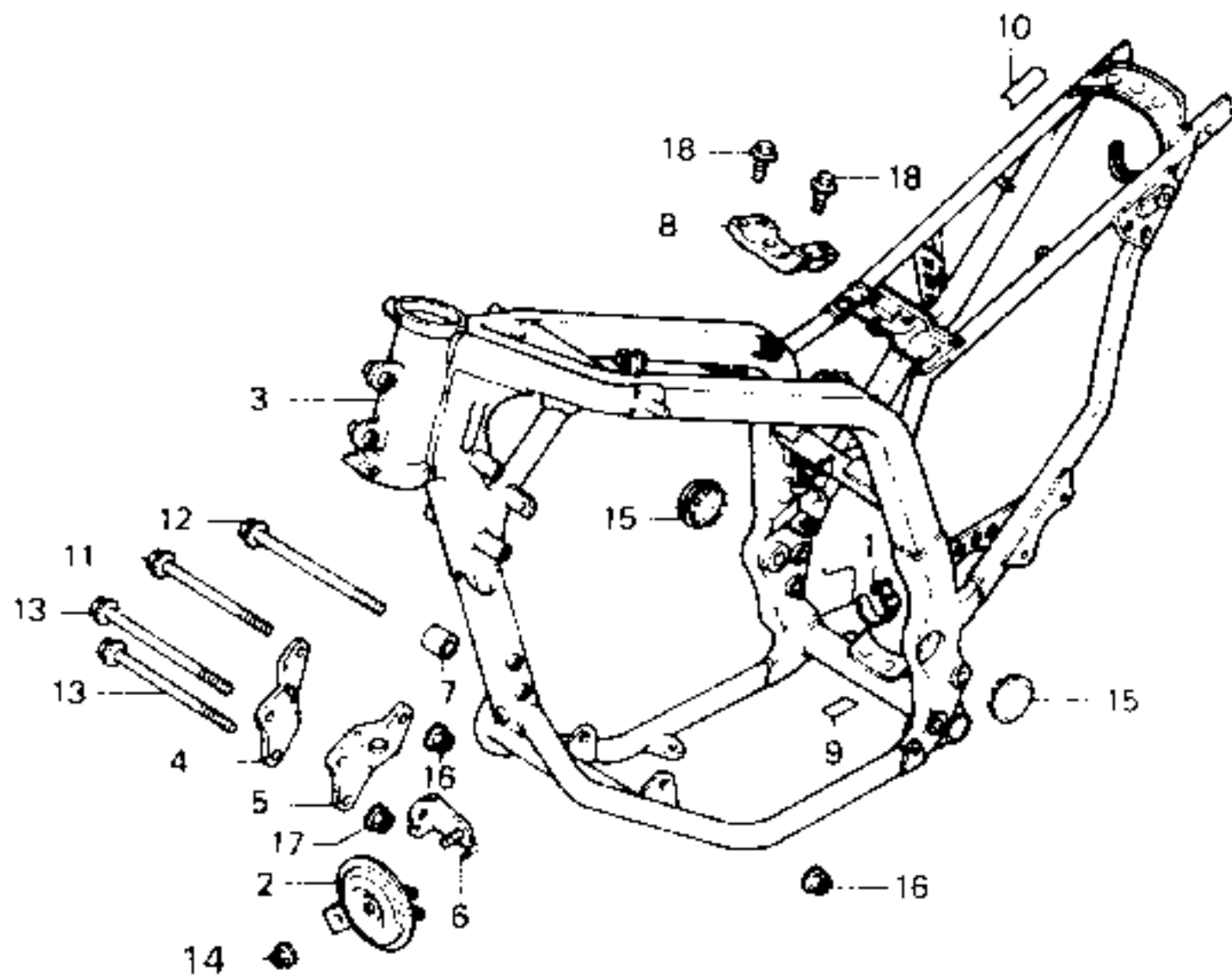
16951-MA1-732	\$71.37	1
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16952-MM2-003 --- 1

004 Screen Set	16952-MM9-305	\$23.52	1
005 Superseded by part #16953-ME5-025 below:	16953-ME5-015	---	1
005 Cover Set, PetcockThis part is no longer available.	16953-ME5-025	---	1
005 Superseded by part #16953-ME5-025 below:	16953-ME5-005	---	1
005 Cover Set, PetcockThis part is no longer available.	16953-ME5-025	---	1
006 Wire A, Guard	16953-MM9-000	\$5.33	1
007 Tube (3.5 X300)	16956-MM9-000	\$7.65	1
008 Superseded by part #16075-GHB-720 below:	16958-MA1-731	---	1
008 O Ring,1.3 X10.6	16075-GHB-720	\$2.69	1
008 Superseded by part #16075-GHB-720 below:	16195-657-300	---	1
008 O Ring,1.3 X10.6	16075-GHB-720	\$2.69	1
009 Joint, Fuel Tube	16958-MB0-000	\$7.87	1
010 Filter, Cup	16959-461-751	\$11.20	1
011 Superseded by part #16965-MAW-760 below:	16965-MM9-000	---	1
011 Lever, Petcock	16965-MAW-760	\$21.48	1
012 Cup, Fuel Strainer	16967-GA6-671	\$15.49	1
013 Superseded by part #17509-MAW-760 below:	17503-MM9-000	---	1
013 Rubber, Rr. TankThis part is no longer available.	17509-MAW-760	---	1
014 Tank, Fuel *Nh193 P* (Pearl Crystal White)This part is no longer available.	17520-MM9-780ZA	---	1
015 Collar	17525-KG7-830	\$4.20	1
016 Tube	17530-437-000	\$6.05	1
017 Cushion, Fr.	17611-MM9-000	\$8.25	2
018 Superseded by part #17620-KE1-013 below:	17620-KE1-003	---	1
018 Cap, Fuel Filler	17620-KE1-013	\$23.62	1
019 Superseded by part #17620-KV6-033 below:	17620-KV6-023	---	1
019 Fuel Fill Cap	17620-KV6-033	\$62.78	1

019 Superseded by part #17620-KV6-033 below:	17620-KV6-013	---	1
019 Fuel Fill Cap	17620-KV6-033	\$62.78	1
020 Grommet, Air Cleaner Housing	83551-300-000	\$3.26	2
021 Label, Radiator	87508-MM9-670	\$3.66	1
022 Label, Drive (Typeg)This part is no longer available.	87560-KY7-910ZC	---	1
023 Label, Fuel (Typeg)	87586-MR6-670ZA	\$2.96	1
024 Screw, Pan (5 X32)	90020-MM9-000	\$2.62	1
025 Bulk Hose, Fuel (7.5 X8000)	95001-75008-60M	\$59.08	1
026 Bulk Hose, Fuel (7.5 X8000)	95001-75008-60M	\$59.08	1
027 Bulk Hose, Fuel (7.5 X8000)	95001-75008-60M	\$59.08	1
028 Clip, Tube (B7)	95002-02070	\$1.51	2
029 Clip, Tube (B12)	95002-02120	\$1.15	2
031 Clamp, Tube (D12)	95002-41200-08	\$2.14	2
032 Clip, Tube (C9)	95002-50000	\$1.30	1
033 Bolt, Flange (8 X35)This part is no longer available.	95800-08035-00	---	1

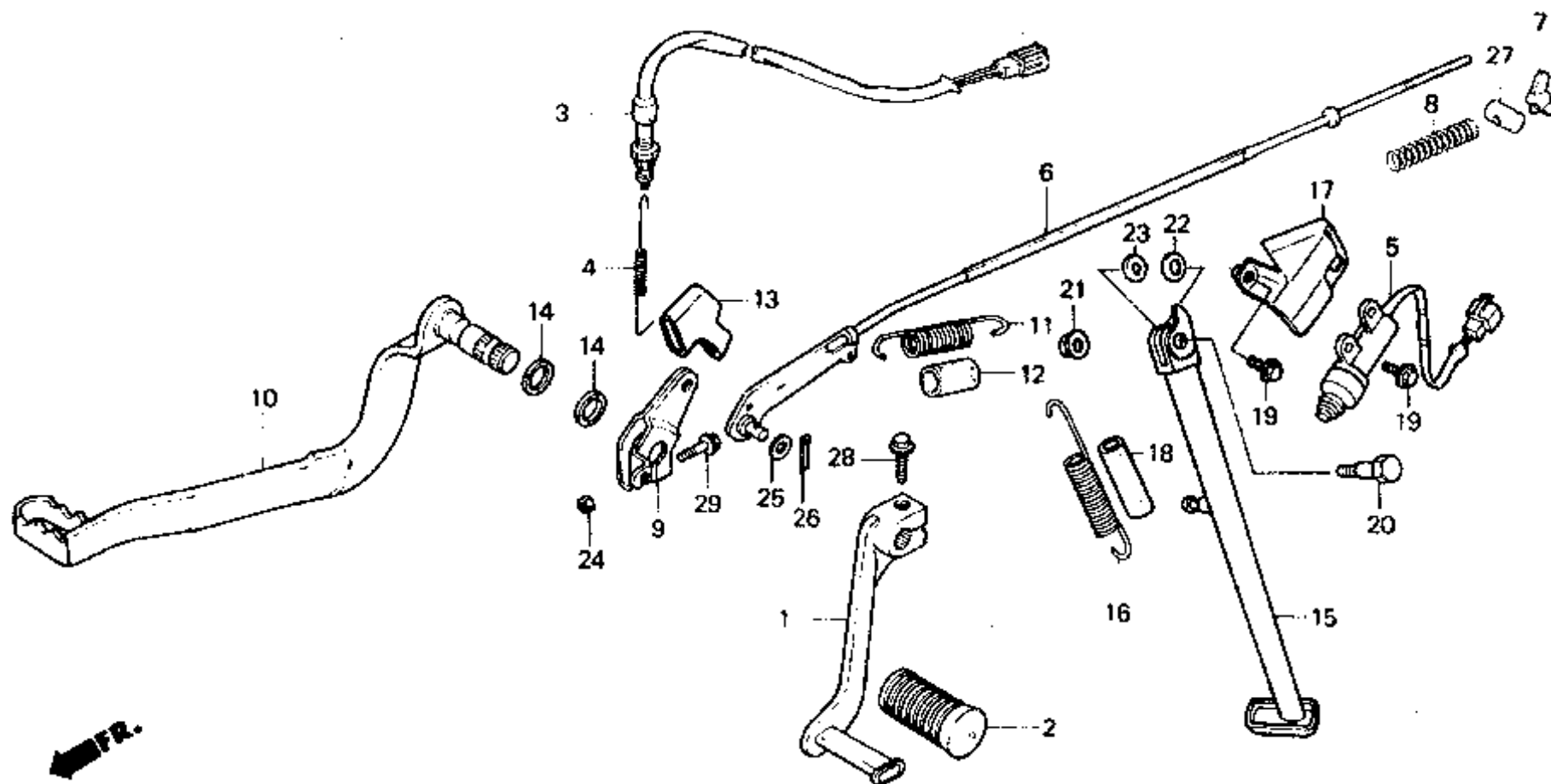
FRAME:



FR.

001 Band B1, Wire	32161-404-610	\$2.74	1
002 Superseded by part #38120-MM9-018 below:	38120-MM9-008	---	1
002 Horn (Low)	38120-MM9-018	\$46.69	1
003 Frame *Nh146 M* (Accurate Silver Metallic)This part is no longer available.	50100-MM9-670ZA	---	1
003 Frame *Nh146 M* (Accurate Silver Metallic)This part is no longer available.	50100-MM9-860ZA	---	1
004 Plate, R. Fr.	50181-MM9-010	\$25.18	1
005 Plate, L. Fr.	50182-MM9-010	\$25.18	1
006 Superseded by part #50183-MAW-760 below:	50183-MS8-000	---	1
006 Stay,Horn	50183-MAW-760	\$7.28	1
007 Collar, R. Eng Hgr	50184-MM9-000	\$6.33	1
008 Bridge *Nh146 M* (Accurate Silver Metallic)	50185-MM9-000ZA	\$13.97	1
009 Label, Reserve Tank	87507-ME9-670	\$3.26	1
010 Label, Color (Type1)	87565-MM9-670ZA	\$2.77	1
011 Bolt (10 X153)	90103-GA6-000	\$10.02	1
012 Bolt, Engine Hanger	90103-GC2-920	\$8.03	1
013 Bolt, Flange (8 X110)This part is no longer available.	90103-MB9-870	---	2
014 Nut, Flange (8 Mm)	90208-425-870	\$2.03	1
015 Cap, Pivot	90302-MS6-620	\$7.70	2
016 Nut, Flange (10 Mm)	90308-382-670	\$3.46	2
017 Nut, Hex. (8 Mm)	90309-357-000	\$3.04	2
018 Bolt, Flange (6 X10)	95701-06010-00	\$1.81	1

PEDAL:



001 Pedal, Gearshift	24701-MM9-000	\$24.43	1
002 Rub, Gearshift Pedal	24781-419-000	\$3.97	1
003 Superseded by part #35350-KA2-405 below:	35350-MM9-010	---	1
003 Switch, Rr. Stop	35350-KA2-405	\$9.82	1
004 Spring, Stop Switch	35357-MM9-000	\$3.57	1

005	Switch, Side Stand	35710-MM9-831	\$53.85	1
006	Superseded by part #43451-MS6-680 below:	43451-MM9-000	---	1
006	Rod, Rr. Brake	This part is no longer available.	43451-MS6-680	---
007	Nut, Brake Adjusting	43459-434-000	\$9.18	1
008	Spring A, Brake Rod	43472-KB9-750	\$3.13	1
009	Arm, Rr.	46502-MM9-000	\$15.43	1
010	Pedal, Brake	46510-MM9-000	\$66.72	1
011	Superseded by part #46513-KN5-000 below:	46514-KN5-670	---	1
011	Spring Assy., Brak	46513-KN5-000	\$3.80	1
012	Tube	46515-KL4-000	\$3.37	1
013	Cover, Middle Arm	46523-MM9-000	\$7.83	1
014	Dust Seal (17 X20 X2.5)	46525-KK0-003	\$3.77	1
015	Bar, Side Stand	50530-MM9-830	\$52.08	1
016	Spring, Side Stand	50535-ML6-670	\$4.73	1
017	Cover	50535-MM9-830	\$15.43	1
018	Tube	50536-MM9-670	\$2.47	1
019	Bolt, Flange (6 X16)	90103-MM9-830	\$2.84	3
020	Screw	90108-MM9-670	\$5.62	1
021	Superseded by part #90304-VM0-770 below:	90304-KV0-701	---	1
021	Nut, U (10 Mm)	90304-VM0-770	\$3.16	1
022	Washer (24 X13)	90501-MF9-710	\$2.84	1
023	Washer (24 X10)	90502-MF9-710	\$2.84	1
024	Superseded by part #94030-08000 below:	94030-08200	---	2
024	Nut, Hex. (8 Mm)	94030-08000	\$1.07	2
024	Superseded by part #94030-08000 below:	94001-08000	---	2
024	Nut, Hex. (8 Mm)	94030-08000	\$1.07	2

025 Washer, Plain (8 Mm)	94101-08000	\$0.89	2
026 Superseded by part #94201-20350 below:	94201-20280	---	2
026 Pin, Split (2.0 X35)	94201-20350	\$1.59	2
026 Superseded by part #94201-20350 below:	94201-20320	---	2
026 Pin, Split (2.0 X35)	94201-20350	\$1.59	2
026 Superseded by part #94201-20350 below:	94201-20250	---	2
026 Pin, Split (2.0 X35)	94201-20350	\$1.59	2
026 Superseded by part #94201-20350 below:	94201-20220	---	2
026 Pin, Split (2.0 X35)	94201-20350	\$1.59	2
026 Superseded by part #94201-20350 below:	94201-20200	---	2
026 Pin, Split (2.0 X35)	94201-20350	\$1.59	2
026 Superseded by part #94201-20350 below:	94201-29220	---	2
026 Pin, Split (2.0 X35)	94201-20350	\$1.59	2
027 Joint B, Brake Arm	95015-32001	\$0.99	1
028 Bolt, Flange (6 X20)	95701-06020-07	\$1.44	1
029 Bolt, Flange (8 X35)	95701-08035-08	\$0.99	4

FR.

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005 Step, R.	50616-MM9-000	\$16.45	1
006 Spring, R.	50617-MM9-000	\$3.66	1
007 Arm, L. *Nh146 M* (Accurate Silver Metallic)This part is no longer available.	50620-MM9-830ZA	---	1
008 Arm, L. *Nh146 M* (Accurate Silver Metallic)	50625-MM9-830ZA	\$29.77	1
009 Step, L.	50642-MM9-000	\$14.11	1
010 Spring, L.	50644-MM9-000	\$3.66	1
011 Superseded by part #50661-MS8-000 below:	50661-MM9-000	---	2
011 Rubber, Step	50661-MS8-000	\$6.50	2
012 Superseded by part #50710-MAW-760ZA below:	50710-MM9-000ZA	---	1
012 Step, R. *Nh146 M* (Accurate Silver Metallic)	50710-MAW-760ZA	\$43.48	1
013 Rubber, Pillion StepThis part is no longer available.	50711-MM9-010	---	2
014 Washer, Pillion Step	50712-405-000	\$3.31	4
015 Bar, Pillion Step	50715-MM9-000	\$16.14	2
016 Step, L. *Nh146 M* (Accurate Silver Metallic)	50810-MM9-000ZA	\$56.22	1
017 Bolt, Flange (8 X53)	90103-MM0-620	\$3.50	4
018 Bolt, Rr.	90118-MM9-000	\$7.57	1
019 Bolt, Flange (12 X38)	90212-MM9-000	\$5.85	1
020 Bolt, Flange (10 X38)	90213-MM9-000	\$3.70	2
021 Washer (6 Mm)	90485-MB2-000	\$2.34	1
022 Spacer	90503-MG7-000	\$2.58	1
023 Washer, Plain	90505-GC6-000	\$1.54	2
024 Nut, Hex. (6 Mm)	94002-06070-0S	\$1.15	6
025 Washer, Plain (8 Mm)	94101-08000	\$0.89	2
026 Superseded by part #94201-16250 below:	94201-16150	---	2
026 Pin, Cotter (1.6 X25)	94201-16250	\$1.22	2
027 Superseded by part #95701-06022-07 below:	95700-06022-07	---	2

027 [Bolt, Flange \(6 X22\)](#)

028 Superseded by part #95701-06022-07 below:

028 [Bolt, Flange \(6 X22\)](#)

029 Superseded by part #96300-08016-00 below:

029 [Bolt, Flange \(8 X16\)](#)

95701-06022-07 \$1.41 2

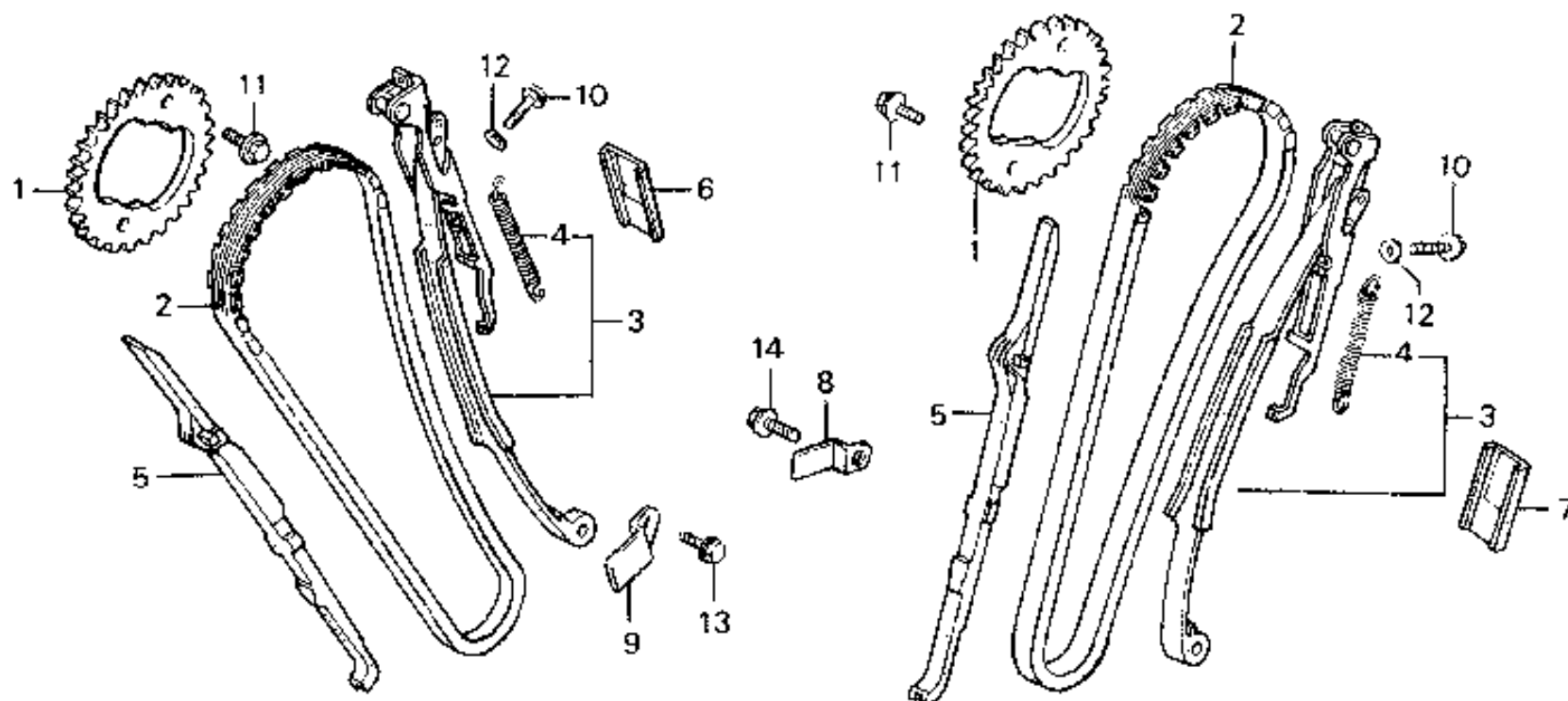
95801-06022-07 --- 1

95701-06022-07 \$1.41 1

96400-08016-00 --- 2

96300-08016-00 \$1.63 2

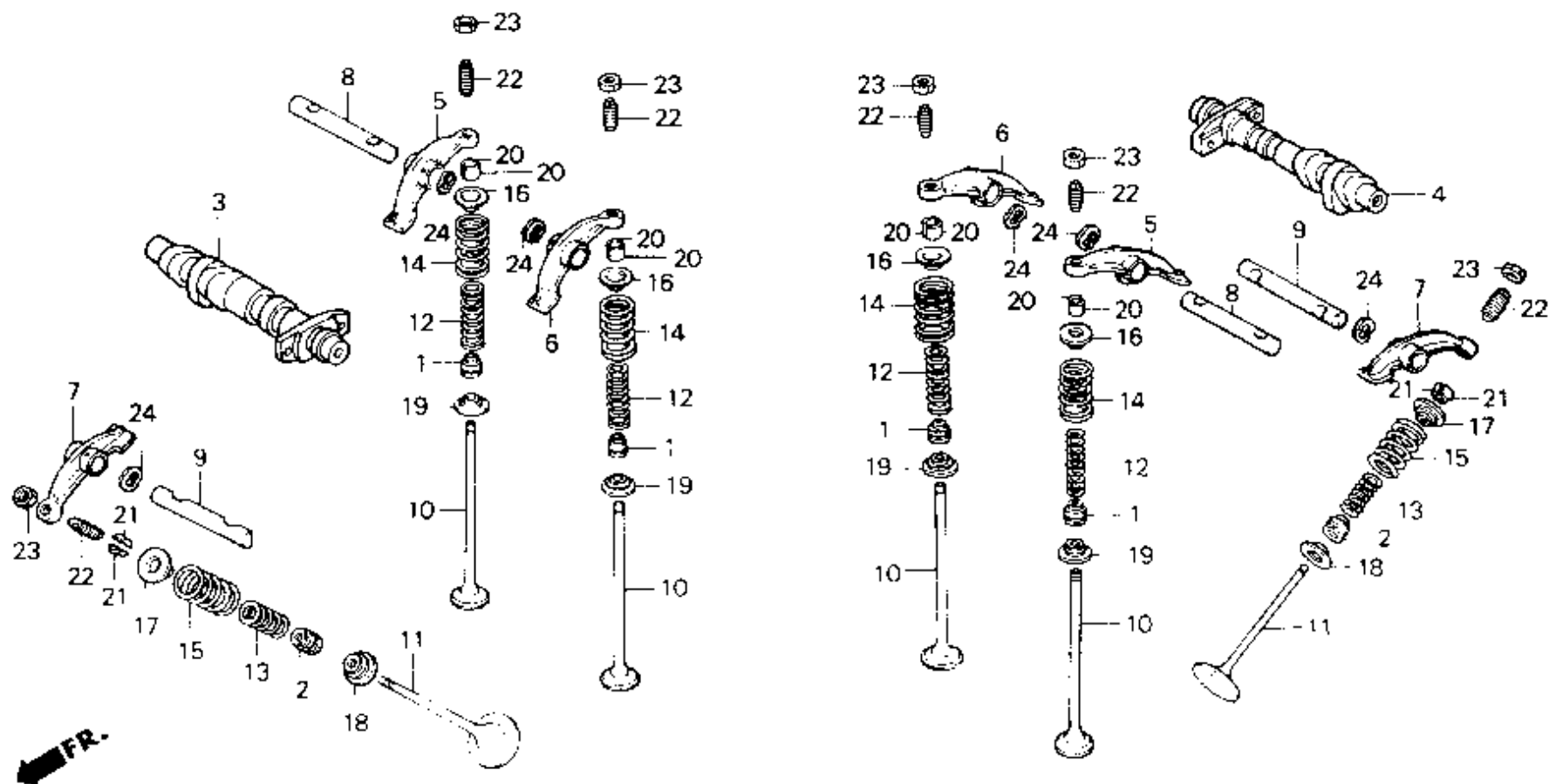
CAM CHAIN:



001 Superseded by part #14322-MZ8-B40 below:	14322-MR1-000	---	2
001 Sprocket, Cam (40 T)	14322-MZ8-B40	\$35.22	2
002 Chain, Cam (118 L) (Borg Warner)	14401-MN1-671	\$81.53	1
003 Tensioner, Cam Chain	14510-MR1-000	\$95.80	2
004 Spring, Cam Chain Tensioner (Nippon Hatsujo)	14516-MG8-003	\$3.57	2

005 Superseded by part #14522-MV1-000 below:	14522-MR1-000	---	2
005 Guide, Cam Chain	14522-MV1-000	\$32.88	2
006 Rubber, Fr. Cushion	14531-MN8-000	\$6.18	1
007 Rubber, Rr. Cushion	14532-MN8-000	\$6.18	1
008 Plate A	14623-MF5-000	\$4.57	1
009 Plate BThis part is no longer available.	14624-MF5-000	---	1
010 Bolt, Special (6 Mm)	90021-MF5-000	\$3.31	2
011 Superseded by part #90086-MZ8-H00 below:	90086-MF5-000	---	4
011 Bolt, Special Flange (7 X13)	90086-MZ8-H00	\$2.98	4
012 Washer, Sealing (6 Mm)	90441-706-000	\$1.85	2
013 Bolt, Flange (6 X14)	95701-06014-00	\$1.48	1
014 Bolt, Flange (6 X16)	95701-06016-00	\$1.67	2

CAMSHAFT:

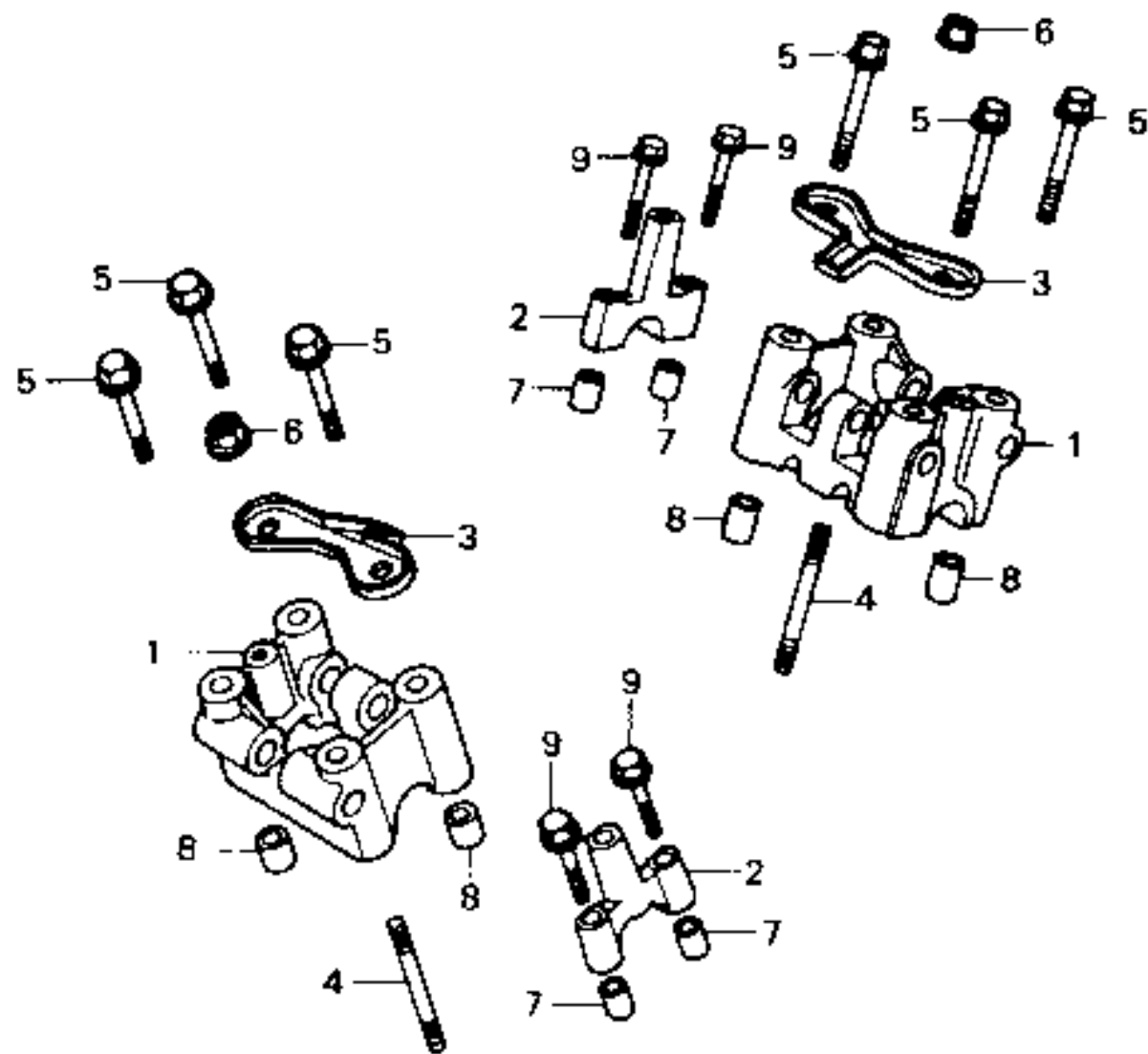


- 001 [Seal, Valve Stem \(Arai\)](#)
- 002 [Seal, Valve Stem \(Arai\)](#)
- 003 [Camshaft, Fr.](#)
- 004 [Camshaft, Rr.](#)
- 005 [Arm A, In. Rocker](#)

12208-413-003	\$8.20	2
12209-413-003	\$9.97	6
14110-MS8-000	\$131.40	1
14120-MS8-000	\$131.40	1
14421-MR1-000	\$40.77	2

006	Arm B, In. Rocker This part is on backorder.	14422-MR1-000	\$40.77	2
007	Arm, Ex. Valve Rocker	14431-MR1-000	\$40.77	2
008	Shaft, In. Rocker Arm This part is on backorder.	14441-MF5-000	\$19.06	2
009	Shaft, Ex. Rocker Arm This part is on backorder.	14451-MF5-000	\$19.06	2
010	Superseded by part #14711-MV1-000 below:	14711-MF5-000	---	4
010	Valve, In.	14711-MV1-000	\$23.54	4
011	Valve, Ex.	14721-MR1-000	\$44.29	2
012	Spring, In. Valve	14751-MR1-003	\$4.92	4
013	Spring, Ex. Valve	14752-MR1-003	\$6.33	2
014	Spring, In. Valve (Outer) (Chuo Spring)	14761-MR1-003	\$6.92	4
015	Spring, Ex. Valve	14762-MR1-003	\$8.62	2
016	Retainer, In. Valve Spring	14771-MF5-000	\$8.09	6
017	Retainer, Vlv Spr	14771-MR1-000	\$7.28	4
018	Seat, Valve Spring	14775-ME9-000	\$9.05	6
019	Seat, Valve Spring	14775-MF5-000	\$10.62	4
020	Cotter, Valve	14781-MB4-000	\$3.13	8
021	Cotter, Valve	14781-MB9-000	\$3.20	12
022	Screw, Tappet Adjusting	90014-MF5-000	\$4.85	6
023	Nut, Tappet Adjusting	90206-590-000	\$3.60	6
024	Washer, Wave (12 Mm)	90402-428-000	\$2.60	2

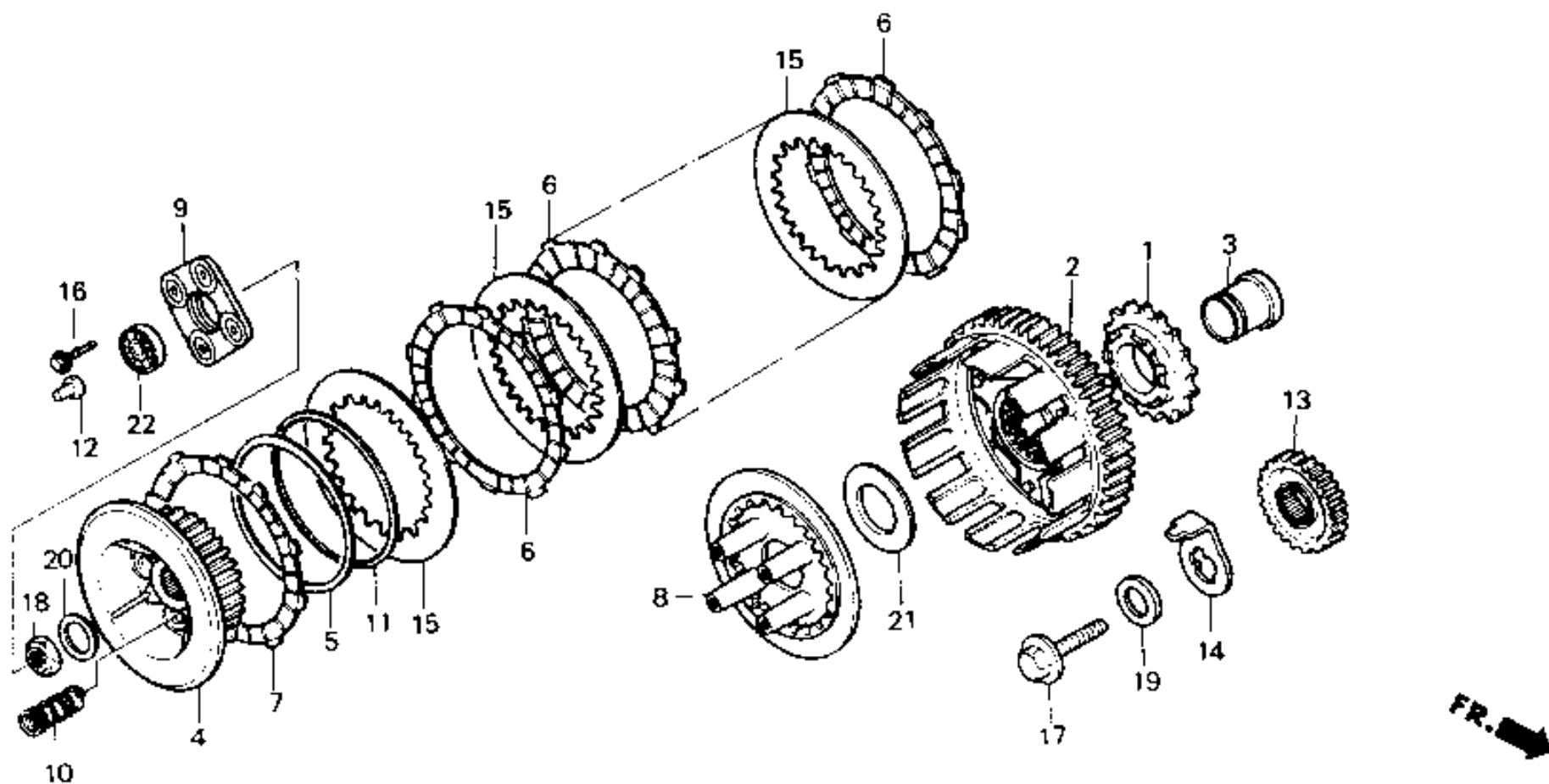
CAMSHAFT HOLDER:



←FR.

001	Holder, Rr. Camshaft	12223-MF5-030	\$93.00	2
002	Hldr, Side Camshaft This part is on backorder.	12225-MF5-000	\$32.05	1
003	Plate	12226-MF5-000	\$12.92	1
004	Bolt, Stud	90013-MF5-000	\$3.37	1
005	Bolt, Flange	90066-MC7-000	\$3.26	3
006	Nut, Flange (8 Mm)	94050-08080	\$0.99	2
007	Pin, Dowel (8 X14)	94301-08140	\$1.50	2
008	Pin, Dowel (10 X16)	94301-10160	\$1.99	4
009	Bolt, Flange (6 X40)	96001-06040-00	\$1.77	2

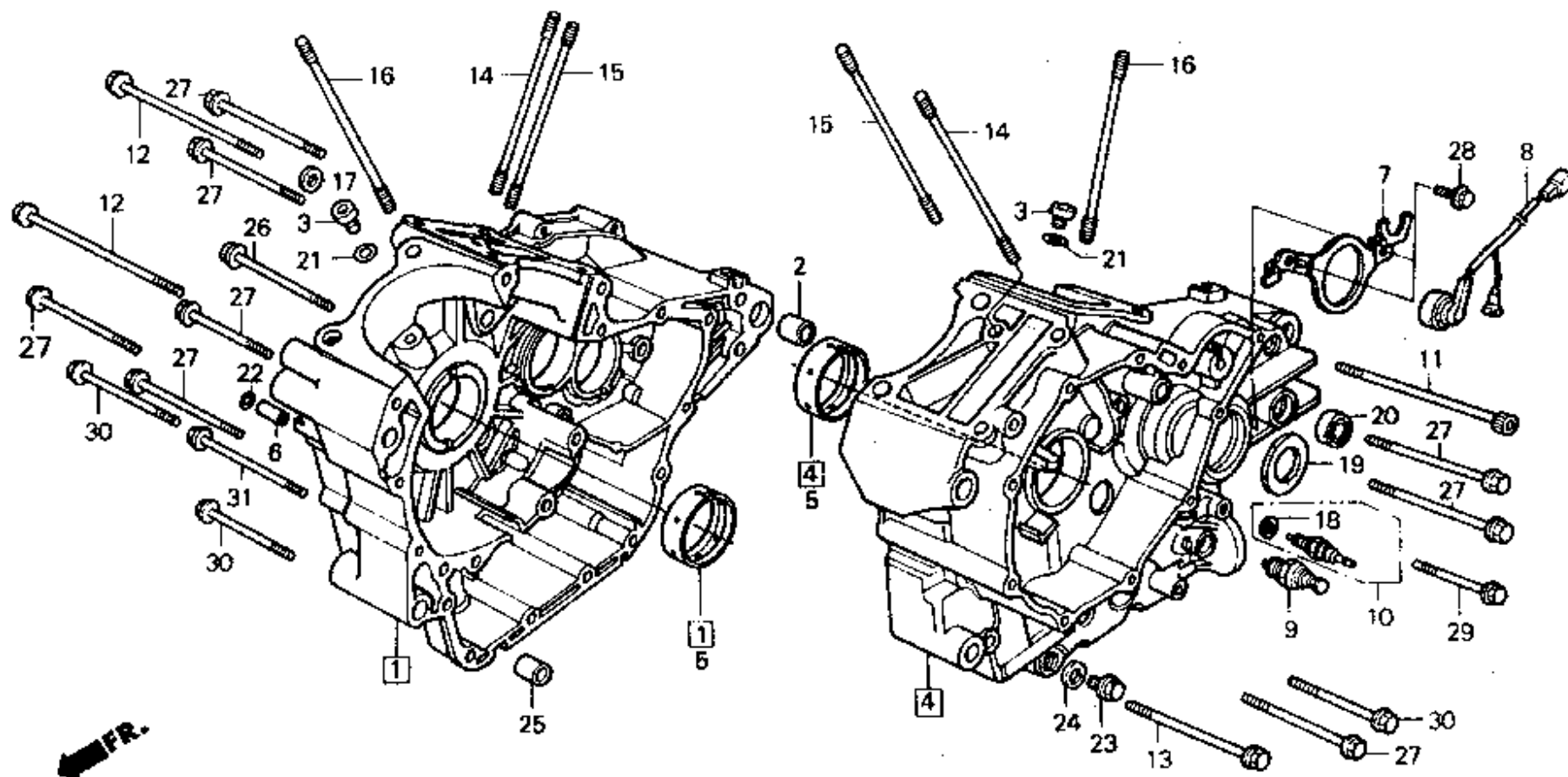
CLUTCH:



001 Superseded by part #15131-MR1-003 below:	15131-MR1-000	---	1
001 Sprocket (31 T)	15131-MR1-003	\$32.43	1
002 Superseded by part #22100-MS6-920 below:	22100-MS9-600	---	1
002 Clutch Outer	22100-MS6-920	\$266.81	1
002 Superseded by part #22100-MS6-920 below:	22100-MR1-000	---	1

002 Clutch Outer	22100-MS6-920	\$266.81	1
003 Collar, Primary Driven	22116-MF5-000	\$31.18	1
004 Center, Clutch	22120-MM9-010	\$73.57	1
005 Seat, Judder Spring	22125-435-000	\$6.57	1
006 Disk, Cl Friction missing 2	22201-MS6-620	\$9.85	8
007 Superseded by part #22202-ML4-611 below:	22201-302-010	---	1
007 Disk B, Cl Friction	22202-ML4-611	\$10.97	1
008 Plate, Clu Press	22350-MR1-000	\$42.94	1
009 Plate, Clutch Lifter	22361-MR1-000	\$14.11	1
010 Spring, Clutch	22401-MM9-000	\$3.42	4
011 Spring, Judder	22402-435-000	\$19.25	1
012 Rod, Clutch Lifter	22847-415-000	\$4.57	1
013 Gear (36 T)	23103-MR1-010	\$92.91	1
014 Plate, Pulser	23105-MS8-000	\$16.62	1
015 Plate A, Clutch	23311-413-000	\$7.37	6
015 Plate, Clutch	22321-MM9-000	\$6.45	6
016 Bolt, Special Flange (6 X30) missing 3	90007-MR1-000	\$2.84	4
017 Bolt, Ubs (12 X28)	90013-415-000	\$7.72	1
018 Nut, Lock (18 Mm)	90236-HA0-000	\$7.52	1
019 Washer (12.5 X34 X5)	90402-PC6-000	\$10.26	1
020 Washer (18 Mm)	90432-KE5-000	\$3.70	1
021 Washer, Thrust (22 Mm)	90452-471-000	\$3.63	1
022 Bearing, Radial Ball (6001)	96100-60010-00	\$9.69	1

CRANKCASE:



001 [Crankcase, R.](#)

002 [Collar \(23 X20\)](#)

003 [Jet, Oil](#)

004 [Crankcase, L.](#)

005 Superseded by part #13326-MM9-315 below:

11100-MS6-620 \$587.01 1

11105-MM9-000 \$6.13 1

11146-MM9-000 \$12.42 2

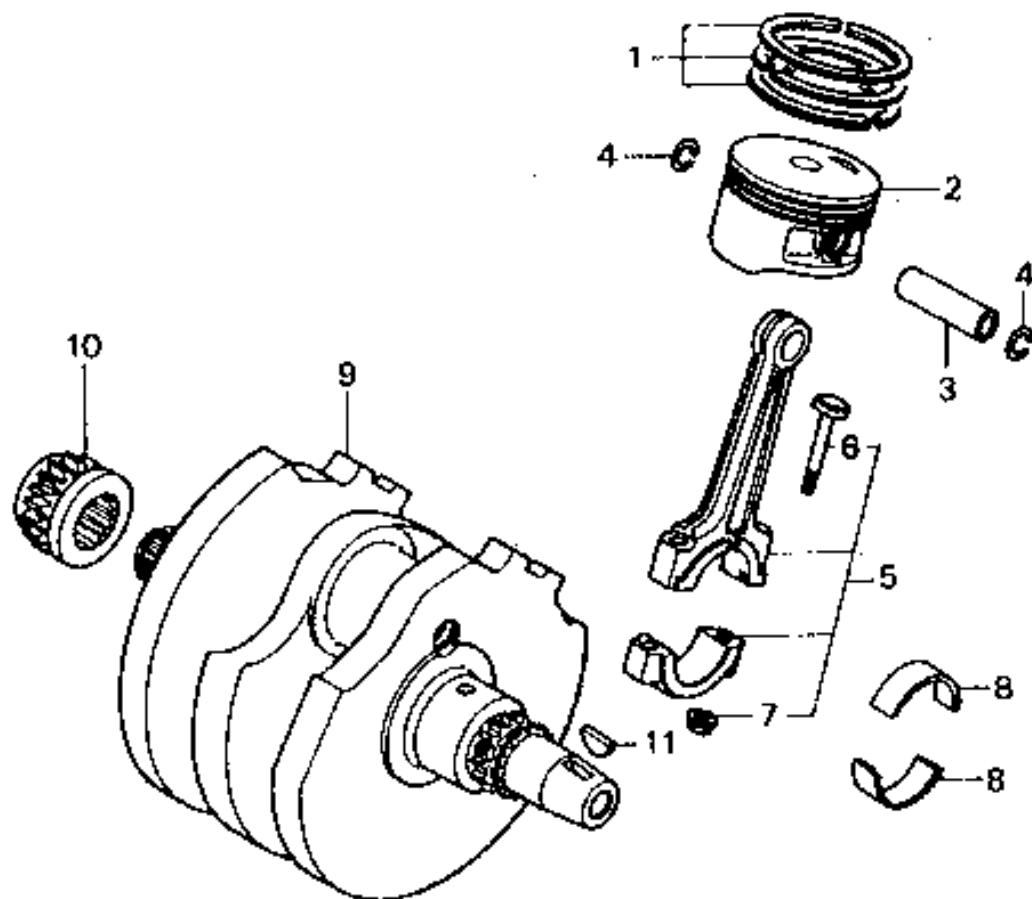
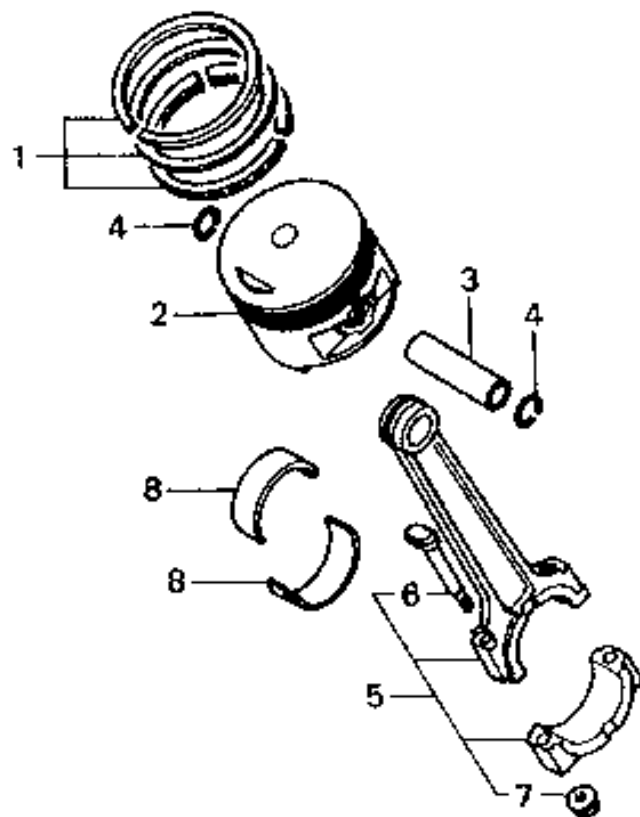
11200-MS6-620 \$620.24 1

13326-MM9-305 --- 2

005 Bearing B, Main	13326-MM9-315	\$19.02	2
005 Superseded by part #13327-MM9-315 below:	13327-MM9-305	---	2
005 Bearing C, Main	13327-MM9-315	\$19.02	2
005 Superseded by part #13325-MM9-315 below:	13325-MM9-305	---	2
005 Bearing A, Main	13325-MM9-315	\$19.02	2
006 Orifice (1.6)This part is no longer available.	15515-MM9-000	---	1
007 Superseded by part #23531-MV1-000 below:	23531-MR1-770	---	1
007 Plate, Oil Seal Setting	23531-MV1-000	\$6.77	1
008 Sub Harness	32101-MS8-000	\$12.28	1
009 Superseded by part #35500-MJ4-024 below:	35500-MJ4-014	---	1
009 Switch Assy., Oil Pressure (Denso)	35500-MJ4-024	\$28.23	1
010 Superseded by part #35600-MAW-601 below:	35600-MS9-600	---	1
010 Switch Assy., Neutral (Tec)	35600-MAW-601	\$15.78	1
011 Bolt, Socket (8 X125)	90001-MM9-000	\$5.85	1
012 Bolt, Flange (8 X140)	90002-MM9-000	\$3.83	1
013 Bolt, Flange (8 X70)	90008-KE9-000	\$3.80	1
014 Bolt, Stud (8 X197)	90011-MM9-000	\$5.85	2
015 Bolt (10 X193.5)	90012-MR1-000	\$7.57	2
016 Bolt, Stud (10 X197)	90013-MR1-000	\$7.57	6
017 Washer, Sealing (8 Mm)	90441-ME9-000	\$2.42	2
018 Washer, Neutral Switch	90443-KR0-000	\$1.57	1
019 Oil Seal (25 X45 X7)This part is no longer available.	91201-MM9-003	---	1
020 Oil Seal (12.5 X25 X8) (Arai)	91204-425-003	\$4.95	1
021 O Ring (5 X1.7) (Arai)	91305-MG7-003	\$2.84	2
022 Superseded by part #91301-PC9-003 below:	91313-393-003	---	2
022 O Ring (7.7 X2.3) (Arai)	91301-PC9-003	\$2.69	2

022 Superseded by part #91301-PC9-003 below:	91308-283-000	---	2
022 O Ring (7.7 X2.3) (Arai)	91301-PC9-003	\$2.69	2
023 Bolt, Drain Plug (14 Mm)	92800-14000	\$2.84	1
024 Washer, Drain Plug (14 Mm)	94109-14000	\$0.74	1
025 Pin, Dowel (14 X20)	94301-14200	\$2.23	2
026 Bolt, Flange (8 X65)	95701-08065-00	\$1.91	1
027 Bolt, Flange (8 X80)	95701-08080-00	\$1.91	2
028 Bolt, Flange (6 X14)	96001-06014-00	\$1.10	6
029 Bolt, Flange (6 X40)	96001-06040-00	\$1.77	2
030 Bolt, Flange (6 X50)	96001-06050-00	\$1.77	2
031 Bolt, Flange (6 X80)	96001-06080-00	\$2.57	2

CRANKSHAFT:

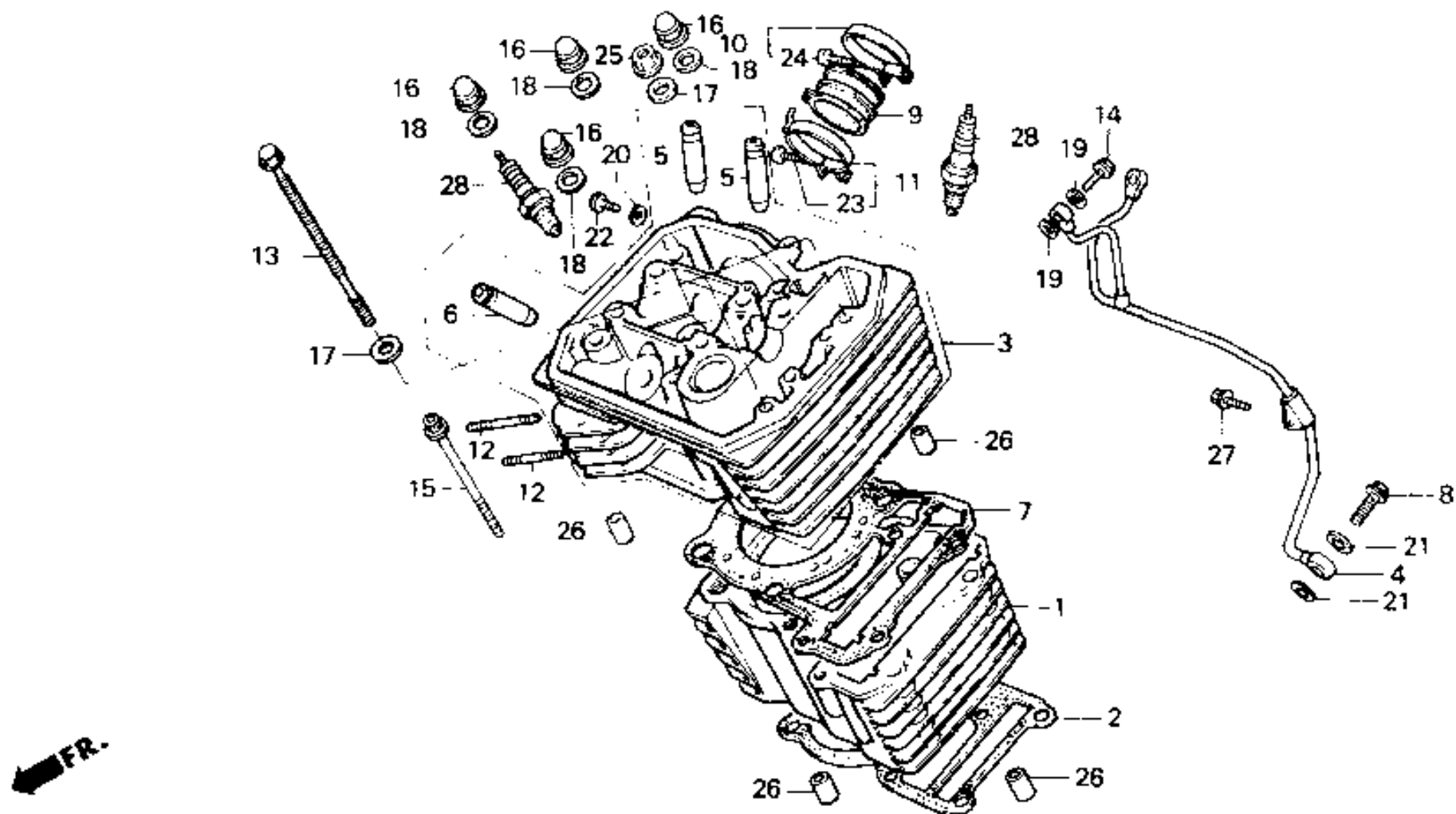


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001 Superseded by part #13012-MS6-305 below:	13012-KR0-305	---	0
001 Ring Set (0.25)	13012-MS6-305	\$40.12	0
001 Superseded by part #13011-MS6-305 below:	13011-KR0-305	---	2

001	Ring Set (Std)	13011-MS6-305	\$40.12	2
001	Superseded by part #13013-MS6-305 below:	13013-KR0-305	---	0
001	Ring Set (0.50)	13013-MS6-305	\$40.12	0
002	Piston (0.25)	13102-MM9-305	\$64.14	0
002	Piston (0.50)	13103-MM9-305	\$64.14	0
002	Piston (Std)	13101-MM9-000	\$64.14	2
003	Superseded by part #13111-MT3-000 below:	13111-MB0-000	---	2
003	Pin, Piston	13111-MT3-000	\$7.92	2
004	Clip, Piston Pin (18 Mm)	13112-MF5-000	\$2.80	4
005	Rod C, Connecting	13203-MR1-000	\$139.21	2
005	Superseded by part #13210-MBL-G00 below:	13202-MR1-000	---	2
005	Rod A, Connecting	13210-MBL-G00	\$139.21	2
005	Superseded by part #13210-MBL-G00 below:	13201-MR1-000	---	2
005	Rod A, Connecting	13210-MBL-G00	\$139.21	2
006	Superseded by part #13213-463-003 below:	13213-463-004	---	4
006	Bolt, Connecting Rod (Nagoya Rashi)	13213-463-003	\$7.77	4
007	Nut, Connecting Rod	13215-ML7-000	\$3.50	12
008	Bearing A, Conn Rod	13216-MF5-003	\$12.69	4
008	Bearing A, Conn Rod	13216-MF5-004	\$12.69	4
008	Bearing B, Conn Rod	13217-MF5-004	\$11.42	4
008	Bearing C, Conn Rod	13218-MF5-003	\$11.42	4
009	Crankshaft	13300-MS6-620	\$485.87	1
010	Sprocket (20 T)	14311-MR1-000	\$50.08	1
011	Key, Woodruff (25 X14)	90741-413-000	\$2.31	1

FRONT CYLINDER:



001 Superseded by part #12100-MS6-650 below:

001 [Cylinder, Fr.](#)

001 Superseded by part #12100-MS6-650 below:

12100-MM9-020 --- 1

12100-MS6-650 \$301.84 1

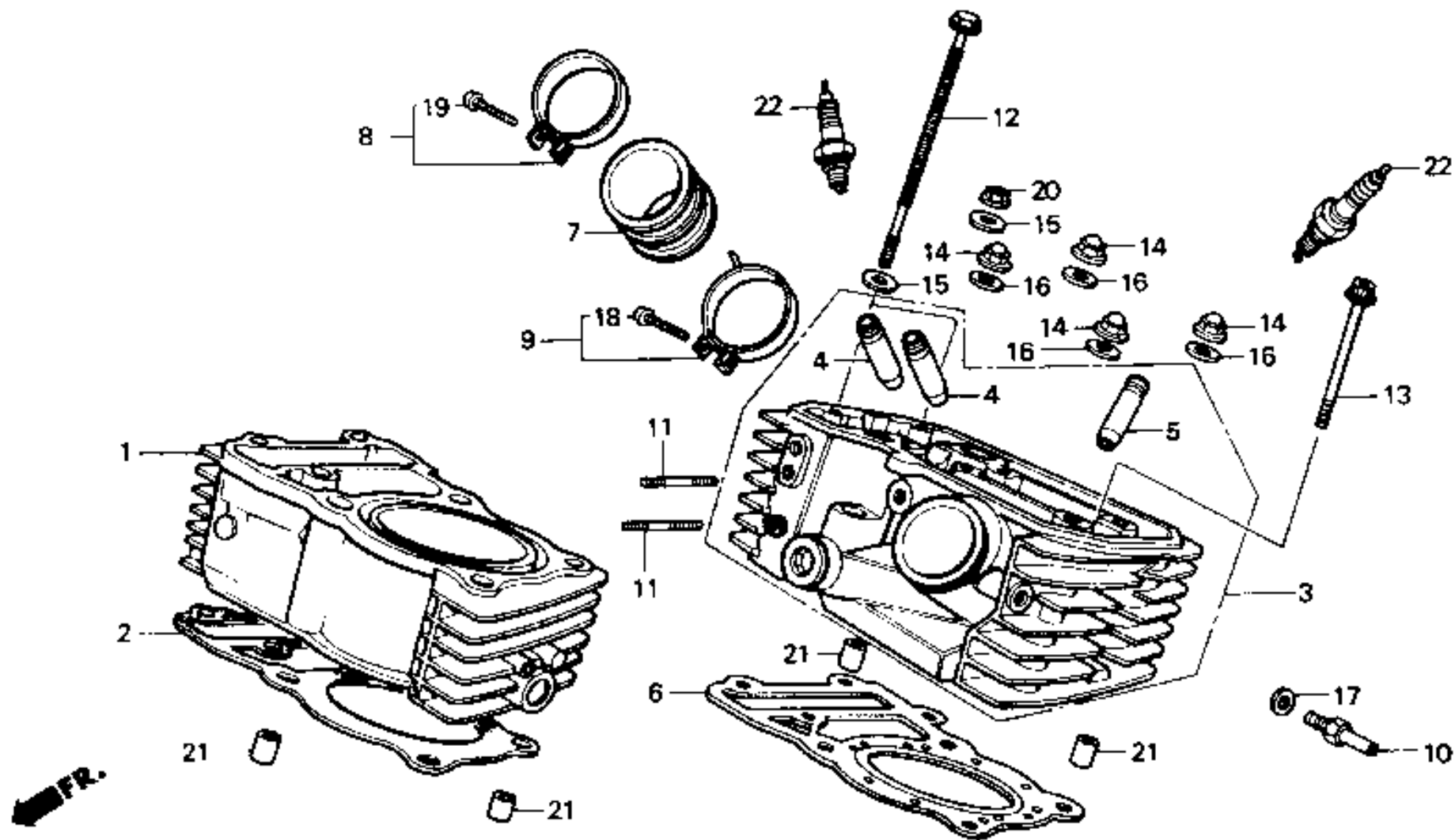
12100-MM9-010 --- 1

~ 309 ~

001 Cylinder, Fr.	12100-MS6-650	\$301.84	1
002 Gasket, CylinderThis part is no longer available.	12191-MR1-003	---	1
003 Cylinder Head, Fr.This part is no longer available.	12210-MM9-000	---	1
004 Pipe, Oil Passage	12230-MR1-020	\$79.73	1
005 Guide, In. Valve (Over Size)	12231-MF5-305	\$14.03	2
006 Guide, Ex Vlv (Os)	12241-MF5-315	\$11.71	1
007 Superseded by part #12251-MS6-651 below:	12251-MM9-013	---	1
007 Gasket, Cyl Hd	12251-MS6-651	\$21.14	1
008 Bolt, Flange (8 X30)This part is no longer available.	15532-KN8-730	---	1
009 Superseded by part #16211-MAW-600 below:	16211-MS8-000	---	1
009 Insulator, Carb	16211-MAW-600	\$16.06 f	1
010 Band A, Insulator	16218-MN8-750	\$6.33	2
011 Band B	16219-MS8-000	\$7.70	1
012 Bolt, Stud (8 X25)	90015-MM9-000	\$3.24	2
013 Superseded by part #90081-MZ8-H01 below:	90081-MM9-003	---	2
013 Bolt, Cylinder	90081-MZ8-H01	\$7.02	2
014 Bolt (7 X26.5)	90085-MF5-000	\$4.25	2
015 Superseded by part #90012-KN8-730 below:	90094-MK4-600	---	1
015 Bolt, Socket (6 X70)This part is no longer available.	90012-KN8-730	---	1
016 Nut (10 Mm)	90202-329-000	\$3.31	8
017 Superseded by part #90401-MZ8-H00 below:	90401-MR1-000	---	3
017 Washer (8 Mm)	90401-MZ8-H00	\$2.71	3
018 Washer (10 Mm)	90410-HC4-000	\$3.50	4
019 Washer (7 Mm)	90441-MC0-000	\$2.60	4
020 Washer, Sealing (5 Mm)	90452-323-000	\$1.94	1
021 Washer C (8 Mm)	90475-703-000	\$1.67	3

022	Screw, Pan (5 X8)	93500-05008-0G	\$1.15	1
023	Screw, Pan (5 X22)	93500-05022-0G	\$1.37	1
024	Screw, Pan (5 X25)	93500-05025-0G	\$1.07	2
025	Nut, Flange (8 Mm)	94050-08080	\$0.99	2
026	Pin, Dowel (14 X20)	94301-14200	\$2.23	2
027	Bolt, Flange (6 X14)	96001-06014-00	\$1.10	6
028	Spark Plug (X27 Epr U9) (Denso)	98069-59926	\$2.96	0
028	Spark Plug (Dpr9 Ea 9) (Ngk)	98069-59916	\$3.04	0
028	Spark Plug (X24 Epr U9) (Denso)	98069-58926	\$2.96	1
028	Spark Plug (Dpr8 Ea 9) (Ngk)	98069-58916	\$2.99	1
028	Spark Plug (X22 Epr U9) (Denso)	98069-57926	\$2.96	0
028	Spark Plug (Dpr7 Ea 9) (Ngk)	98069-57916	\$3.04	0

CYLINDER REAR:



001 Superseded by part #12110-MS6-650 below:

001 [Cylinder, Rr.](#)

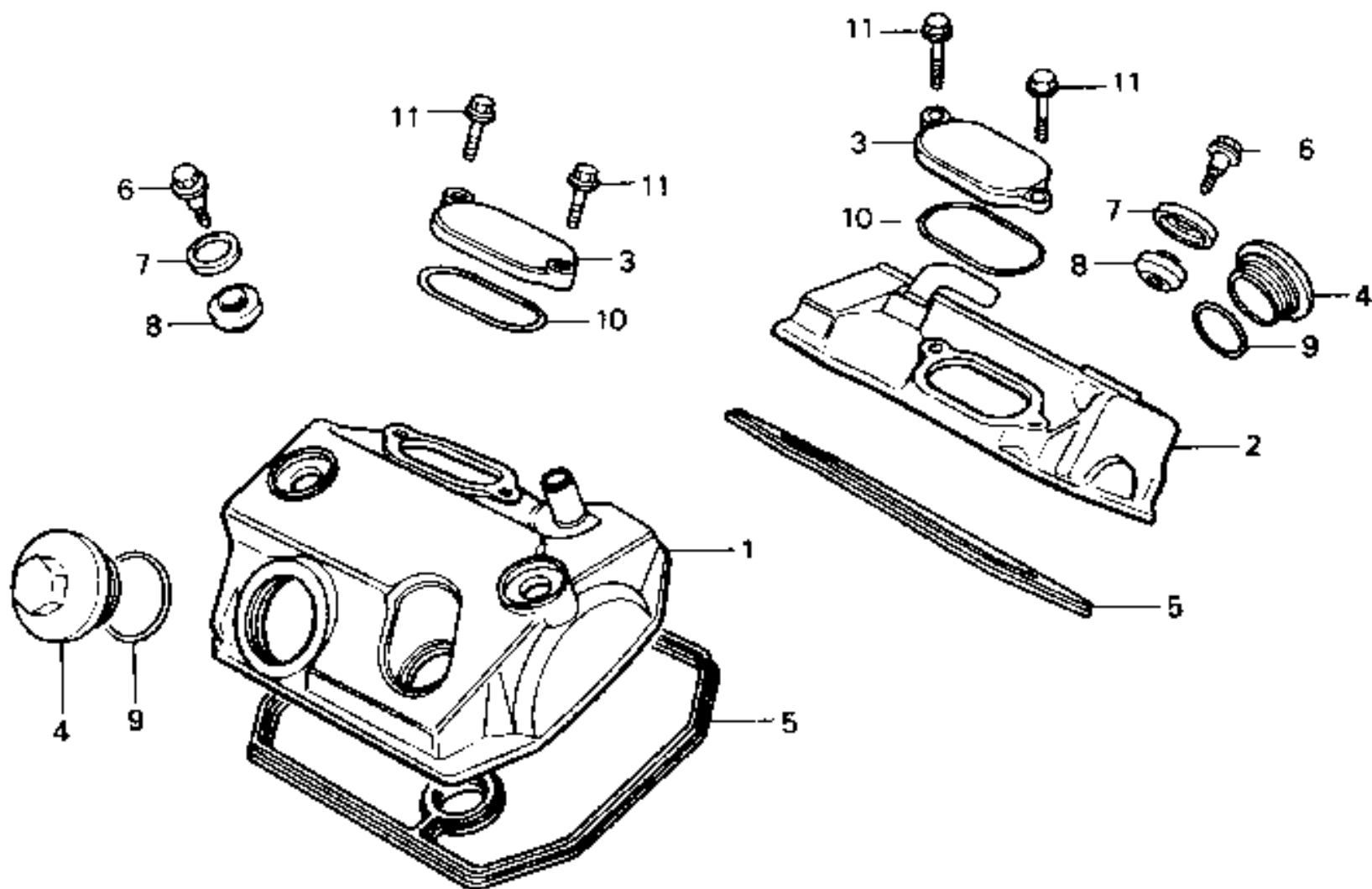
12110-MM9-020 --- 1

12110-MS6-650 \$301.84 1

001 Superseded by part #12110-MS6-650 below:	12110-MM9-010 ---	1
001 Cylinder, Rr.	12110-MS6-650 \$301.84	1
002 Gasket, CylinderThis part is no longer available.	12191-MR1-003 ---	1
003 Cylinder Head, Rr.	12220-MM9-010 \$432.88	1
004 Guide, In. Valve (Over Size)	12231-MF5-305 \$14.03	2
005 Guide, Ex Vlv (Os)	12241-MF5-315 \$11.71	1
006 Superseded by part #12251-MS6-651 below:	12251-MM9-013 ---	1
006 Gasket, Cyl Hd	12251-MS6-651 \$21.14	1
007 Superseded by part #16211-MAW-600 below:	16211-MS8-000 ---	1
007 Insulator, Carb	16211-MAW-600 \$16.06	1
008 Band A, Insulator	16218-MN8-750 \$6.33	2
009 Band B	16219-MS8-000 \$7.70	1
010 Joint, Pb	16221-MA6-000 \$8.05	1
011 Bolt, Stud (8 X25)	90015-MM9-000 \$3.24	2
012 Superseded by part #90081-MZ8-H01 below:	90081-MM9-003 ---	2
012 Bolt, Cylinder	90081-MZ8-H01 \$7.02	2
013 Superseded by part #90012-KN8-730 below:	90094-MK4-600 ---	1
013 Bolt, Socket (6 X70)This part is no longer available.	90012-KN8-730 ---	1
014 Nut (10 Mm)	90202-329-000 \$3.31	8
015 Superseded by part #90401-MZ8-H00 below:	90401-MR1-000 ---	3
015 Washer (8 Mm)	90401-MZ8-H00 \$2.71	3
016 Washer (10 Mm)	90410-HC4-000 \$3.50	4
017 Washer, Sealing (5 Mm)	90452-323-000 \$1.94	1
018 Screw, Pan (5 X22)	93500-05022-0G \$1.37	1
019 Screw, Pan (5 X25)	93500-05025-0G \$1.07	2
020 Nut, Flange (8 Mm)	94050-08080 \$0.99	2

021	Pin, Dowel (14 X20)	94301-14200	\$2.23	2
022	Spark Plug (Dpr9 Ea 9) (Ngk)	98069-59916	\$3.04	0
022	Spark Plug (X24 Epr U9) (Denso)	98069-58926	\$2.96	1
022	Spark Plug (Dpr8 Ea 9) (Ngk)	98069-58916	\$2.99	1
022	Spark Plug (X22 Epr U9) (Denso)	98069-57926	\$2.96	0
022	Spark Plug (Dpr7 Ea 9) (Ngk)	98069-57916	\$3.04	0
022	Spark Plug (X27 Epr U9) (Denso)	98069-59926	\$2.96	0

CYLINDER HEAD TOP:



001 [Cover, Fr. Cyl Hd](#)

12311-MM9-000 \$145.87 1

002	Cover, Rr. Cyl Hd	12320-MM9-000	\$145.87	1
003	Cover	12351-MF5-000	\$22.46	2
004	Cap	12361-MF5-000	\$17.34	2
005	Gasket, Head Cover	12391-MF5-750	\$12.06	2
006	Bolt, Flange	90011-MA6-000	\$3.50	2
007	Washer, Mounting Rubber	90541-MB0-000	\$4.00	4
008	Rubber, Mounting	90542-MB0-000	\$2.99	4
009	O Ring (44 X3)	91303-MF5-003	\$3.37	2
010	O Ring (62.4 X2.5)	91304-MF5-003	\$4.25	2
011	Bolt, Flange (6 X20)	96001-06020-00	\$1.85	2

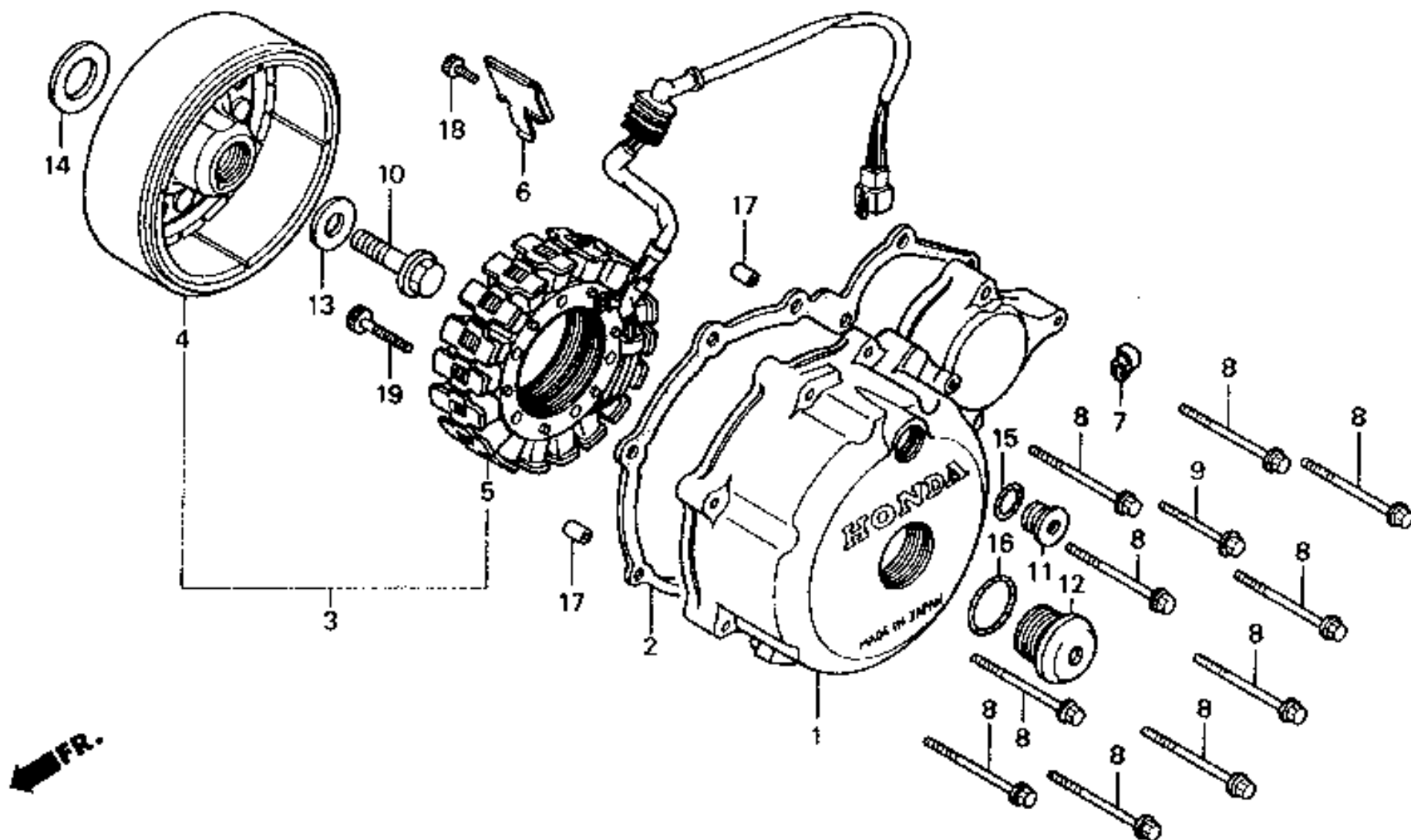
GASKET KIT:

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001	Superseded by part #11394-MM9-850 below:	11394-MM9-000	---	1
001	Gasket, R.	11394-MM9-850	\$8.05	1
002	Superseded by part #11395-MM9-850 below:	11395-MM9-000	---	1
002	Gasket, L.	11395-MM9-850	\$5.90	1
002	Superseded by part #11395-MM9-850 below:	11395-MM9-306	---	1
002	Gasket, L.	11395-MM9-850	\$5.90	1
003	Gasket, Oil Strainer	15154-425-000	\$5.97	1
004	Gasket, Water Pump Cover	19226-MM9-000	\$3.35	1
005	Washer (11 Mm)	90425-300-000	\$2.27	1
006	Superseded by part #91307-425-003 below:	91301-250-000	---	1
006	O Ring (21.5 X3.2)	91307-425-003	\$2.71	1
007	O Ring (32.95 X2.62) (Arai)	91302-MB0-013	\$2.62	1
008	Superseded by part #91356-MA6-005 below:	91303-KF0-003	---	1
008	O Ring (14.8 X2.4) (Nok)	91356-MA6-005	\$1.97	1
009	O Ring (13.8 X2.5)	91303-377-000	\$3.06	1
010	O Ring (5 X1.7) (Arai)	91305-MG7-003	\$2.84	2
011	Superseded by part #91312-MG7-003 below:	91309-425-003	---	1
011	O Ring (24.4 X3.1)	91312-MG7-003	\$4.12	1
012	Superseded by part #91313-MG7-004 below:	91313-MB0-003	---	1
012	O Ring (14.8 X2.2)	91313-MG7-004	\$2.87	1
013	Superseded by part #91301-PC9-003 below:	91308-283-000	---	2
013	O Ring (7.7 X2.3) (Arai)	91301-PC9-003	\$2.69	2
013	Superseded by part #91301-PC9-003 below:	91313-393-003	---	2
013	O Ring (7.7 X2.3) (Arai)	91301-PC9-003	\$2.69	2

014	Oil Seal, Pipe	91315-MF5-003	\$3.34	2
015	O Ring (13 X2.5)	91319-300-000	\$3.78	1
016	Superseded by part #91356-425-005 below:	91356-425-003	---	1
016	O Ring (29.7 X2.4) (Nok)	91356-425-005	\$2.76	1
017	Washer, Drain Plug (14 Mm)	94109-14000	\$0.74	1

LEFT CRANK CASE COVER:

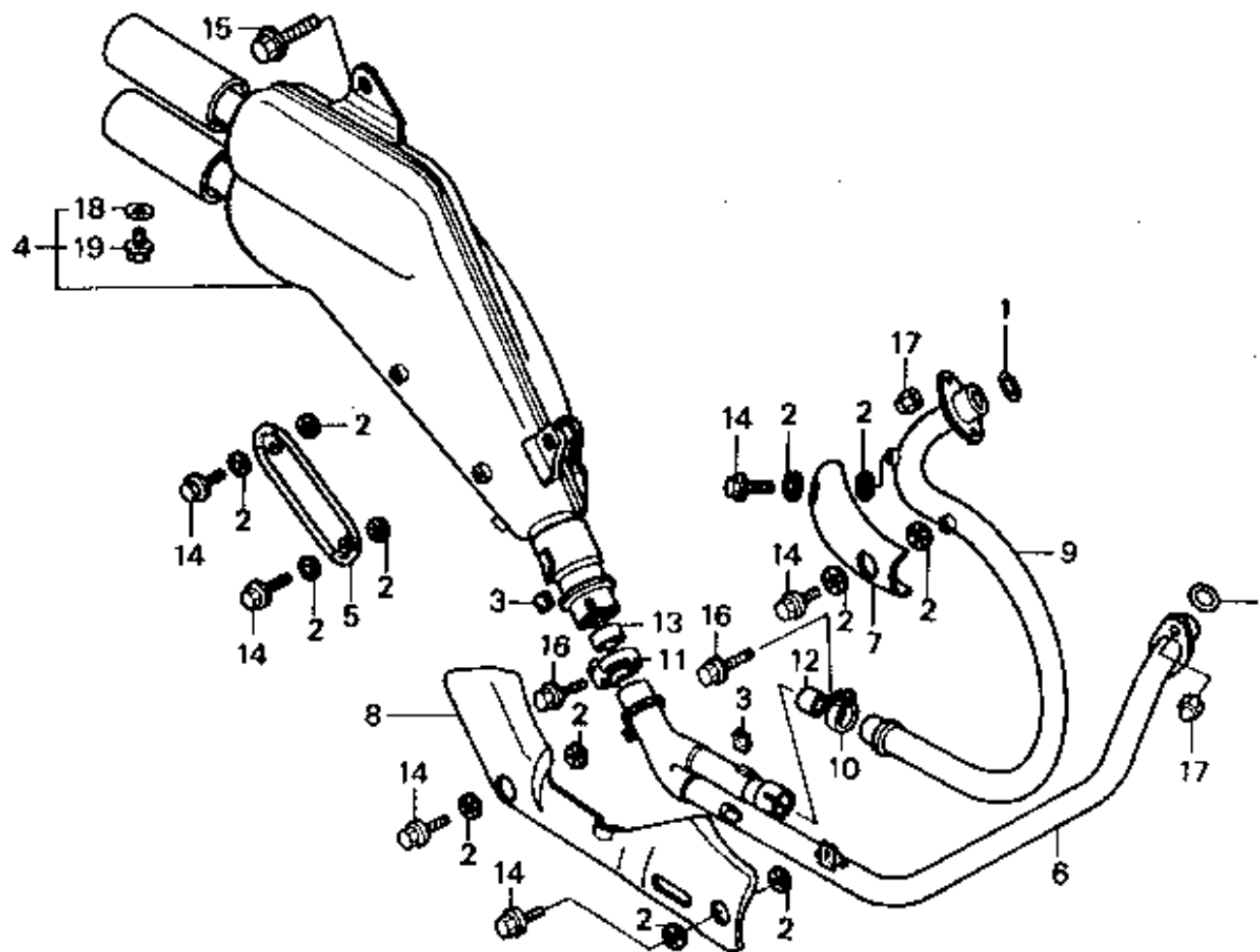


001 [Cover, L. Crankcase](#)

11341-MM9-000 \$133.46 1

002 Superseded by part #11395-MM9-850 below:	11395-MM9-000 ---	1
002 Gasket, L.	11395-MM9-850 \$5.90	1
002 Superseded by part #11395-MM9-850 below:	11395-MM9-306 ---	1
002 Gasket, L.	11395-MM9-850 \$5.90	1
003 Generator Assy.	31100-MS6-004 \$540.54	1
004 Flywheel	31110-MS6-004 \$352.08	1
005 Stator	31120-MM9-004 \$293.69	1
006 Clamp, Alternator Wire	32961-MN8-740 \$9.34	1
007 Clip	32972-KG0-000 \$3.64	1
008 Superseded by part #90005-GHB-700 below:	90003-MS8-000 ---	4
008 Bolt, Flange (6 X35)	90005-GHB-700 \$2.67	4
009 Superseded by part #90005-GHB-720 below:	90004-MS8-000 ---	12
009 Bolt, Flange (6 X45)	90005-GHB-720 \$3.14	12
010 Bolt, Flange	90025-MN8-000 \$8.62	1
011 Superseded by part #90084-KV6-920 below:	90084-MM9-000 ---	1
011 Cap,14 Mm	90084-KV6-920 \$7.83	1
012 Cap	90087-KT7-000 \$13.12	1
013 Washer (12.5 X34 X5)	90402-PC6-000 \$10.26	1
014 Superseded by part #90453-MS6-920 below:	90453-MN8-750 ---	1
014 Washer (30 X50 X1)	90453-MS6-920 \$4.52	1
015 O Ring (13.8 X2.5)	91303-377-000 \$3.06	1
016 Superseded by part #91356-425-005 below:	91356-425-003 ---	1
016 O Ring (29.7 X2.4) (Nok)	91356-425-005 \$2.76	1
017 Pin, Dowel (8 X14)	94301-08140 \$1.50	2
018 Bolt, Socket (6 X12)	96700-06012-00 \$1.74	2
019 Bolt, Socket (6 X32)	96700-06032-00 \$2.03	3

MUFFLER:

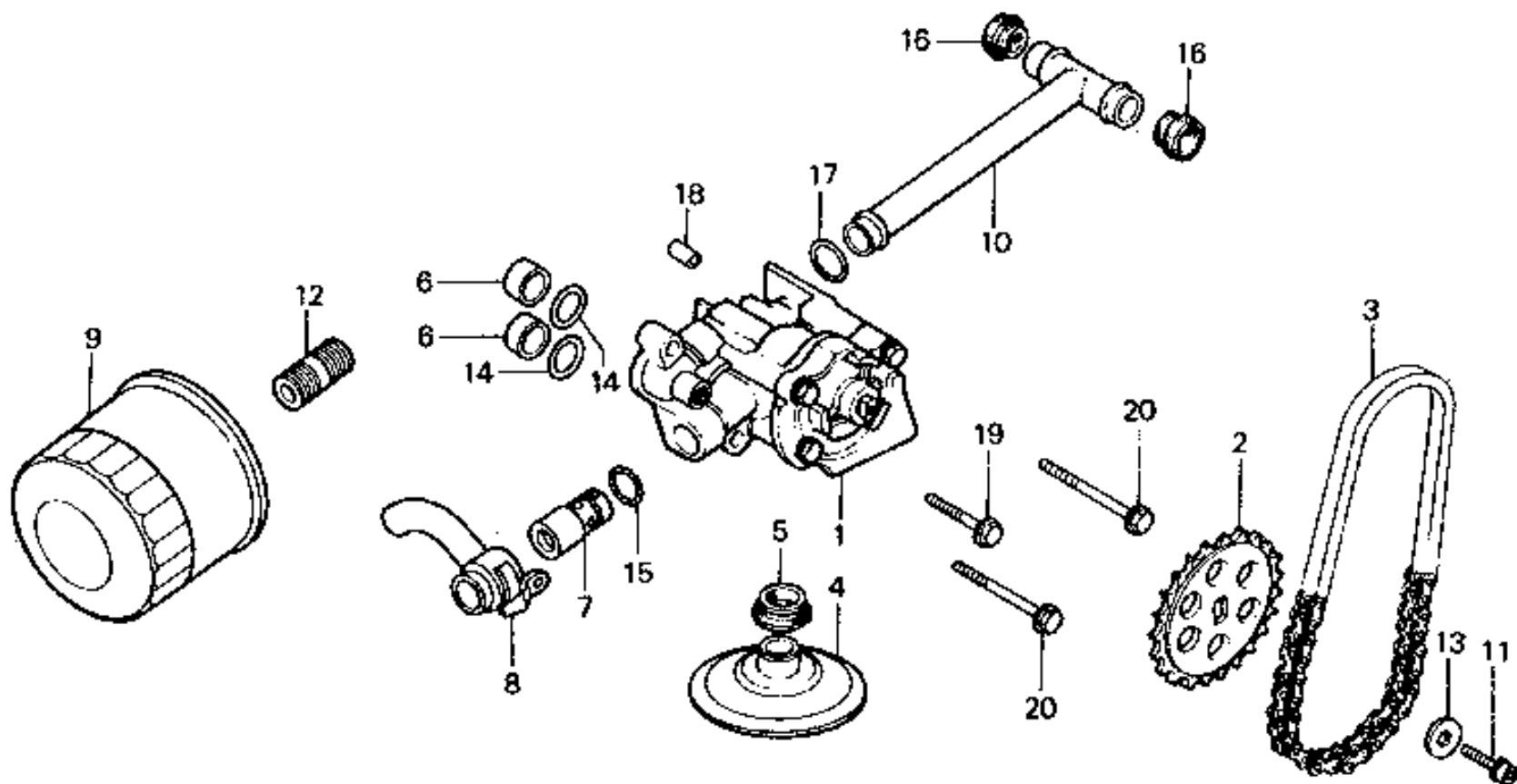


001 Superseded by part #18291-MN4-920 below:	18291-236-000	---	2
001 Gasket, Ex. Pipe	18291-MN4-920	\$4.00	2 (4 total)
002 Superseded by part #18292-MM9-740 below:	18292-415-000	---	4

002	Gasket, Protector	18292-MM9-740	\$2.69	4
002	Superseded by part #18292-MM9-740 below:	18292-KF9-900	---	4
002	Gasket, Protector	18292-MM9-740	\$2.69	4
003	Rubber, Protector Gasket	18293-147-000	\$3.60	2
004	MufflerThis part is no longer available.	18310-MM9-670	---	1
005	Superseded by part #18315-MAW-760 below:	18315-MM9-000	---	1
005	Protector, Muffler	18315-MAW-760	\$59.35	1
006	Superseded by part #18320-MS6-930 below:	18320-MM9-013	---	1
006	Pipe, Fr. Ex.	18320-MS6-930	\$104.13	1
007	Superseded by part #18341-MAW-760 below:	18326-MM9-000	---	1
007	Protr, Rr. Ex. Pipe	18341-MAW-760	\$12.54	1
008	Superseded by part #18344-MAW-760 below:	18327-MM9-003	---	1
008	Protector, Ex. Pipe	18344-MAW-760	\$97.36	1
009	Superseded by part #18370-MS6-680 below:	18370-MS6-620	---	1
009	Pipe, Rr. Ex.This part is no longer available.	18370-MS6-680	---	1
010	Band, L. Ex. Pipe	18374-ML4-003	\$10.89	1
011	Band, Muffler	18376-KG0-003	\$11.78	2
012	Gasket, Muffler	18391-ML8-000	\$7.02	1
013	Gasket, Muffler	18392-MK4-000	\$9.12	2
014	Bolt, Flange (6 X12)	90101-MM9-000	\$2.84	6
015	Bolt, Flange (10 X42)	90126-KT2-000	\$4.72	1
016	Bolt, Flange (8 X32)	90216-MM9-000	\$3.80	1
017	Nut, Cap (8 Mm)	90304-ME1-670	\$4.43	4
018	Washer, Plain (10 Mm)	90508-VM6-003	\$2.42	2
019	Superseded by part #92101-10012-0G below:	92000-10012-0G	---	2
019	Bolt, Hex. (10 X12)	92101-10012-0G	\$2.00	2

OIL PUMP:

FR. 



001 Pump Assy., Oil This part is no longer available.

002 [Sprocket, Oil Pump Driven \(27 T\)](#)

003 [Chain, Oil Pump Drive \(70 L\) \(Borg Warner\) This part is on backorder.](#)

004 [Strainer, Oil](#)

005 [Gasket, Oil Strainer](#)

15100-MR1-000 --- 1

15134-MR1-000 \$25.72 1

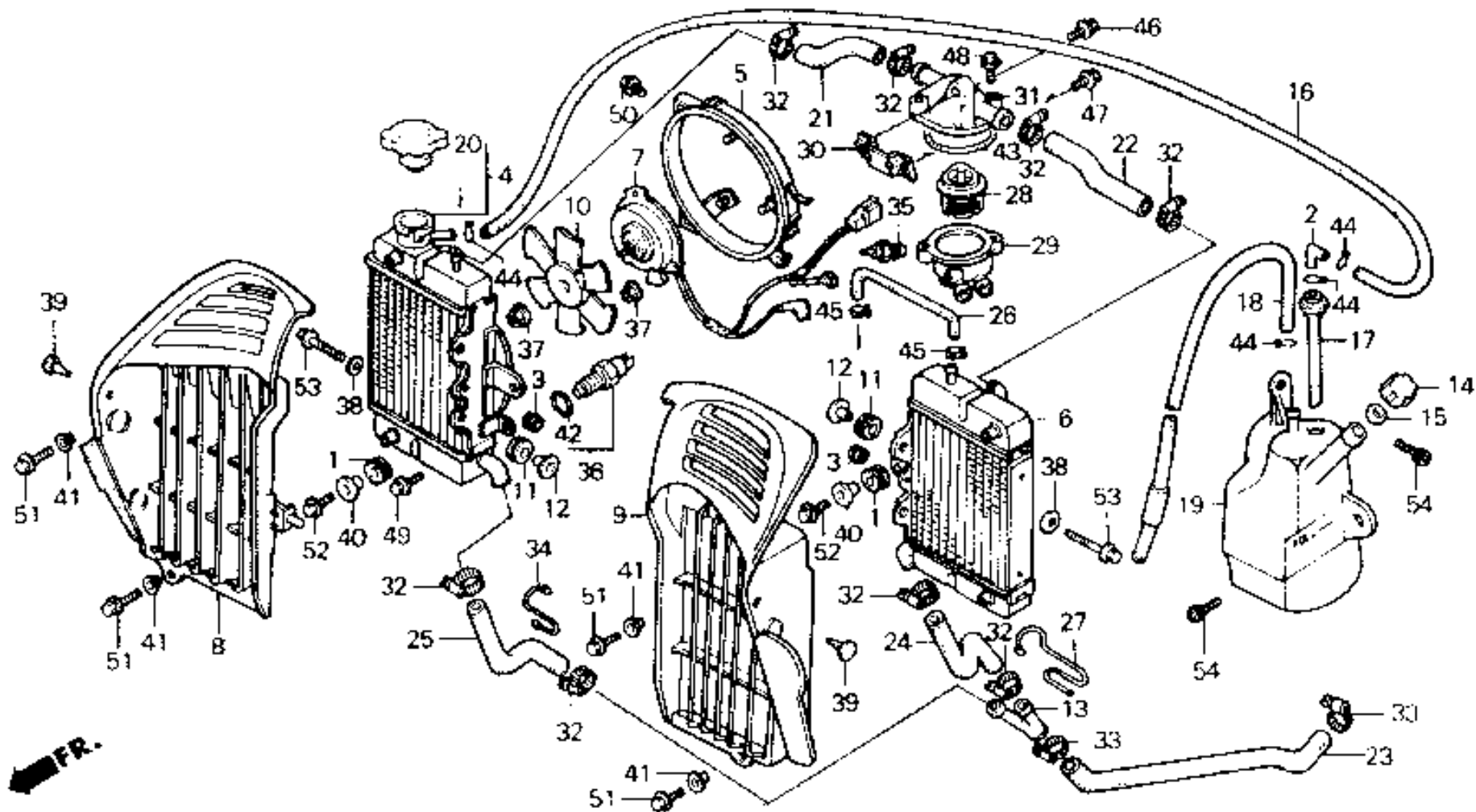
15136-MR1-003 \$64.80 1

15153-MR1-000 \$11.15 1

15154-425-000 \$5.97 1

006 Collar, O Ring This part is on backorder.	15155-300-000	\$3.10	1
007 Valve Assy., Relief	15220-MB0-010	\$27.22	1
008 Pipe, Oil Relief	15240-MM9-000	\$15.62	1
009 Superseded by part #15410-MFJ-D01 below:	15410-MM9-013	---	1
009 Filter, Oil (Toyo Roki)	15410-MFJ-D01	\$10.66	1
009 Superseded by part #15410-MFJ-D01 below:	15410-MM9-003	---	1
009 Filter, Oil (Toyo Roki)	15410-MFJ-D01	\$10.66	1
010 Pipe, Oil	15511-MF5-000	\$24.29	1
011 Superseded by part #90009-MZ8-H00 below:	90009-ME5-000	---	1
011 Bolt, Flange Socket (6 X14)	90009-MZ8-H00	\$1.86	1
012 Boss, Oil Filter	90019-MB0-000	\$6.45	1
013 Washer, Shift Drum Stopper	90487-MB0-000	\$3.31	1
014 Superseded by part #91356-MA6-005 below:	91303-KF0-003	---	1
014 O Ring (14.8 X2.4) (Nok)	91356-MA6-005	\$1.97	1
015 Superseded by part #91313-MG7-004 below:	91313-MB0-003	---	1
015 O Ring (14.8 X2.2)	91313-MG7-004	\$2.87	1
016 Oil Seal, Pipe	91315-MF5-003	\$3.34	2
017 O Ring (13 X2.5)	91319-300-000	\$3.78	1
018 Pin, Dowel (8 X14)	94301-08140	\$1.50	2
019 Bolt, Flange (6 X28)	95701-06028-00	\$1.57	2
020 Superseded by part #95701-06045-07 below:	95701-06045-00	---	2
020 Bolt, Flange (6 X45)	95701-06045-07	\$1.80	2

RADIATOR:



- 001 [Rubber, Air Cleaner Housing Mounting](#)
- 002 [Joint, Breather Tube](#)

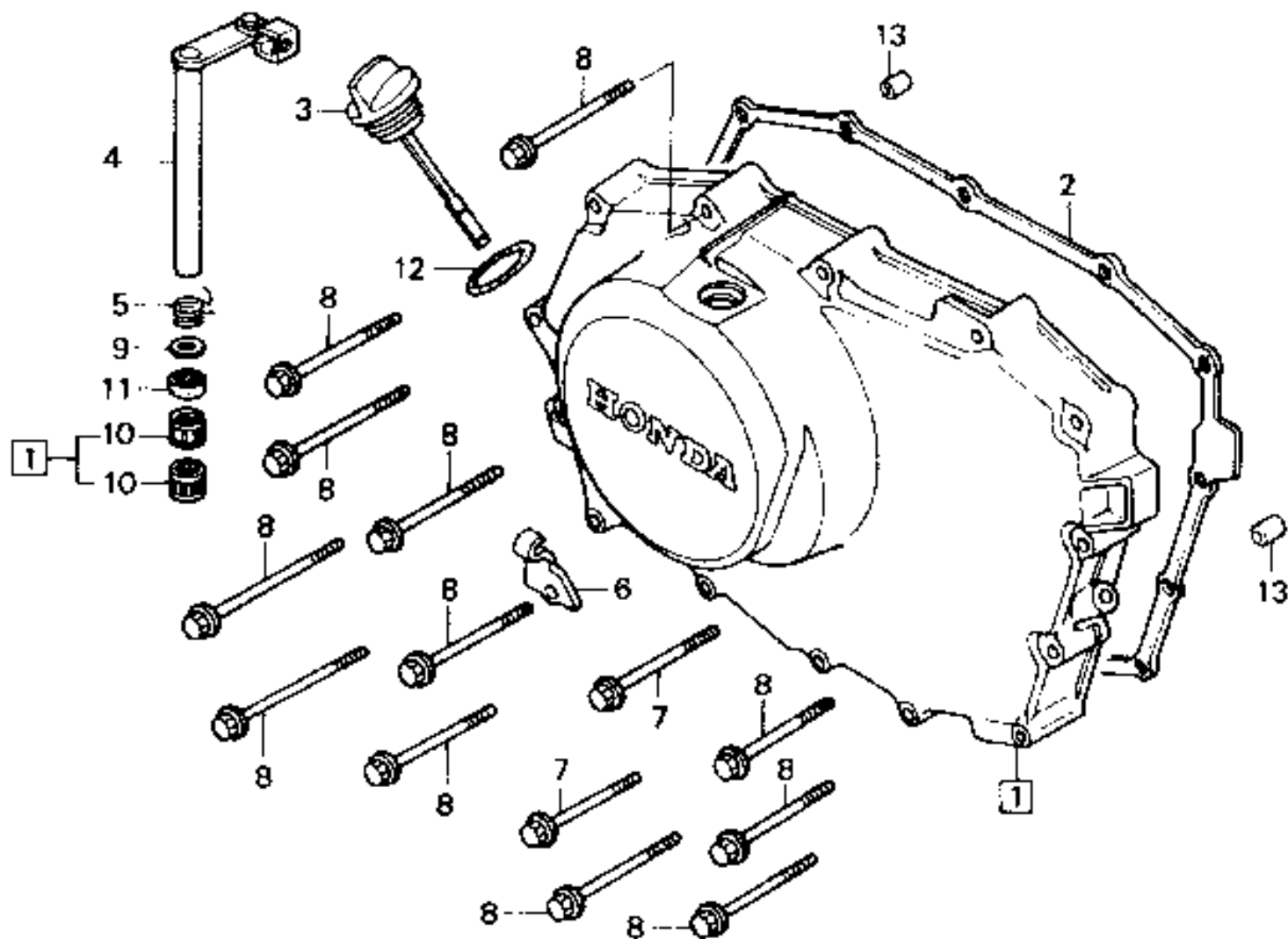
17245-107-010	\$2.71	2
17359-419-670	\$2.37	1

003 Grommet, Air Bypass	This part is no longer available.	18624-634-670	---	2
004 Superseded by part #19011-MAB-621 below:		19011-MM9-003	---	1
004 Radiator		19011-MAB-621	\$266.89	1
005 Shroud		19013-MM9-670	\$41.58	1
006 Radiator, L.		19020-MM9-003	\$310.12	1
007 Superseded by part #19030-MS8-010 below:		19030-MS8-000	---	1
007 Motor Assy., Fan	This part is no longer available.	19030-MS8-010	---	1
008 Superseded by part #19032-MAW-760 below:		19032-MM9-000	---	1
008 Grille, R. Radiator		19032-MAW-760	\$46.58	1
009 Grille, L. Radiator		19035-MM9-000	\$37.26	1
010 Fan, Cooling (Toyo)		19040-MF5-751	\$39.65	1
011 Rubber, Radiator Mounting		19051-KA3-830	\$3.27	3
012 Collar, Radiator Mounting		19052-KA3-710	\$5.13	2
013 Joint, Water Hose		19069-MM9-000	\$14.43	1
014 Cap, Reserve Tank		19104-ME9-000	\$10.25	1
015 Gasket, Reserve Tank		19107-MG8-000	\$3.24	1
016 Tube, Overflow	This part is no longer available.	19107-MM9-000	---	1
017 Superseded by part #19108-MB0-010 below:		19108-MB0-000	---	1
017 Tube, Level		19108-MB0-010	\$7.53	1
018 Tube, Reserve Tank		19108-MM9-000	\$14.14	1
019 Superseded by part #19110-MAW-760 below:		19110-MM9-000	---	1
019 Tank, Reserve		19110-MAW-760	\$24.37	1
020 Superseded by part #19045-MZ1-621 below:		19111-MM9-000	---	1
020 Cap, Radiator		19045-MZ1-621	\$31.51	1
021 Hose, Water (5)		19222-MM9-000	\$6.78	1
022 Hose, Water (6)		19223-MM9-000	\$7.65	1

023	Hose, Water (7)	19231-MM9-000	\$15.43	1
024	Hose, L. Water	19232-MM9-000	\$9.29	1
025	Hose, R. (No.8)	19234-MS6-620	\$11.31	1
026	Tube, Radiator Joint	19235-MM9-000	\$9.06	1
027	Clamp, L. Radiator	19241-MM9-000	\$5.55	1
028	Thermostat Assy.	19300-KE8-000	\$37.40	1
029	Case, Thermostat	19311-MM9-000	\$50.52	1
030	Bracket, Thermostat	19312-MS8-010	\$6.23	1
031	Cover, Thermostat	19315-MM9-000	\$35.80	1
032	Clamp, Water Hose (25 Mm)	19504-KY1-003	\$7.40	2
033	Clamp, Water Hose	19505-ML3-770	\$5.28	10
034	Clamp, Water Hose	19515-MM9-000	\$5.37	1
035	Thermo Unit	37750-PC1-004	\$43.89	1
036	Switch Assy., Thermo	37760-MR1-003	\$39.51	1
037	Nut, Serrate (5 Mm)	90315-MK3-003	\$2.71	4
038	Washer (22 X6 X1.6)	90404-PD1-000	\$2.83	2
039	Stopper A	90499-SB0-000	\$2.66	2
040	Superseded by part #61104-422-000 below:	90501-MA3-770	---	1
040	Collar, Setting	61104-422-000	\$5.13	1
041	Washer	90556-MB4-000	\$2.42	2
042	Superseded by part #91307-PH7-660 below:	91307-611-000	---	1
042	O Ring (13.5 X1.4)	91307-PH7-660	\$2.33	1
043	O Ring (47.5 X2)	91311-KE8-000	\$2.66	1
044	Clip, Tube (B12)	95002-02120	\$1.15	2
045	Clamp, Tube (D12)	95002-41200-08	\$2.14	2
046	Bolt, Flange (6 X18)	95701-06018-00	\$1.63	4

047 Bolt, Flange (6 X20)	95701-06020-08	\$0.99	4
048 Superseded by part #96001-06020-07 below:	96000-06020-07	---	2
048 Bolt, Flange (6 X20)	96001-06020-07	\$1.57	2
049 Bolt, Flange (6 X10)	96001-06010-00	\$1.49	3
050 Bolt, Flange (6 X10)	96001-06010-07	\$1.74	2
051 Superseded by part #96300-06012-07 below:	96500-06012-07	---	2
051 Bolt, Flange (6 X12)	96300-06012-07	\$1.49	2
052 Superseded by part #96300-06020-07 below:	96500-06020-07	---	1
052 Bolt, Flange (6 X20)	96300-06020-07	\$1.81	1
053 Superseded by part #96300-06025-07 below:	96500-06025-07	---	4
053 Bolt, Flange (6 X25)	96300-06025-07	\$2.03	4
054 Superseded by part #96600-06012-07 below:	96700-06012-07	---	4
054 Bolt, Socket (6 X12)	96600-06012-07	\$1.49	4

RIGHT CRANKCASE COVER:



001 [Cover, R. Crankcase](#)

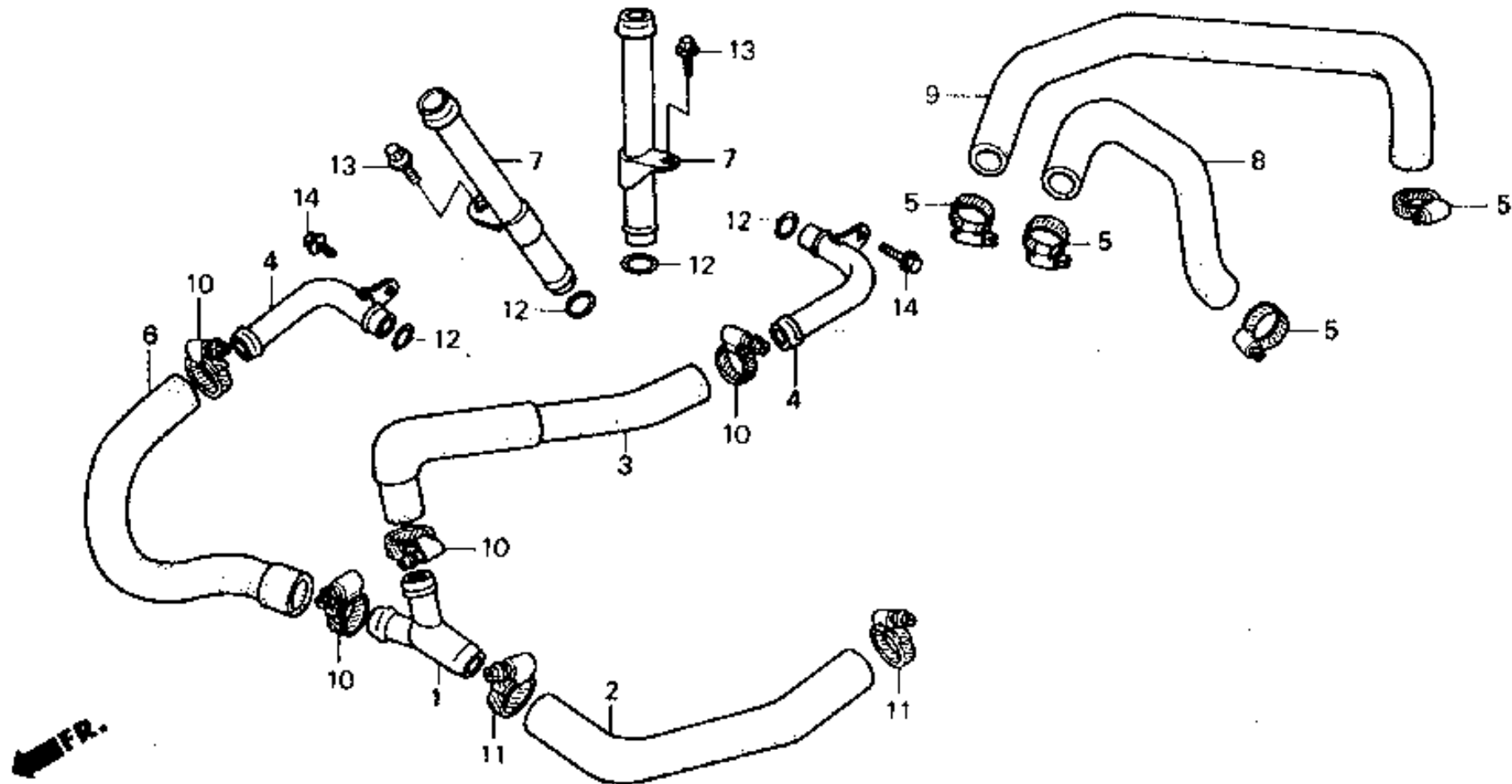
11330-MM9-010 \$176.30 1

002 Superseded by part #11394-MM9-850 below: 11394-MM9-000 --- 1

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002	Gasket, R.	11394-MM9-850	\$8.05	1
003	Dipstick, Oil	15650-MM9-000	\$15.03	1
004	Lever, Clutch	22810-MS6-000	\$40.12	1
005	Spring, Clutch Lever	22815-MS8-000	\$2.58	1
006	Receiver	22825-MM9-000	\$4.38	1
007	Superseded by part #90005-GHB-700 below:	90003-MS8-000	---	4
007	Bolt, Flange (6 X35)	90005-GHB-700	\$2.67	4
008	Superseded by part #90005-GHB-720 below:	90004-MS8-000	---	12
008	Bolt, Flange (6 X45)	90005-GHB-720	\$3.14	12
009	Washer (12 Mm)	90546-KF0-000	\$2.42	1
010	Superseded by part #91101-PZ9-000 below:	91053-719-005	---	1
010	Bearing, Needle (12 X16 X10)	91101-PZ9-000	\$6.25	1
010	Superseded by part #91101-PZ9-000 below:	91053-719-003	---	2
010	Bearing, Needle (12 X16 X10)	91101-PZ9-000	\$6.25	2
010	Superseded by part #91101-PZ9-000 below:	91053-719-004	---	2
010	Bearing, Needle (12 X16 X10)	91101-PZ9-000	\$6.25	2
011	Oil Seal (12 X18 X5) (Arai)	91204-KK0-003	\$3.77	1
012	Superseded by part #91307-425-003 below:	91301-250-000	---	1
012	O Ring (21.5 X3.2)	91307-425-003	\$2.71	1
013	Pin, Dowel (8 X14)	94301-08140	\$1.50	2

COOLANT PIPES:

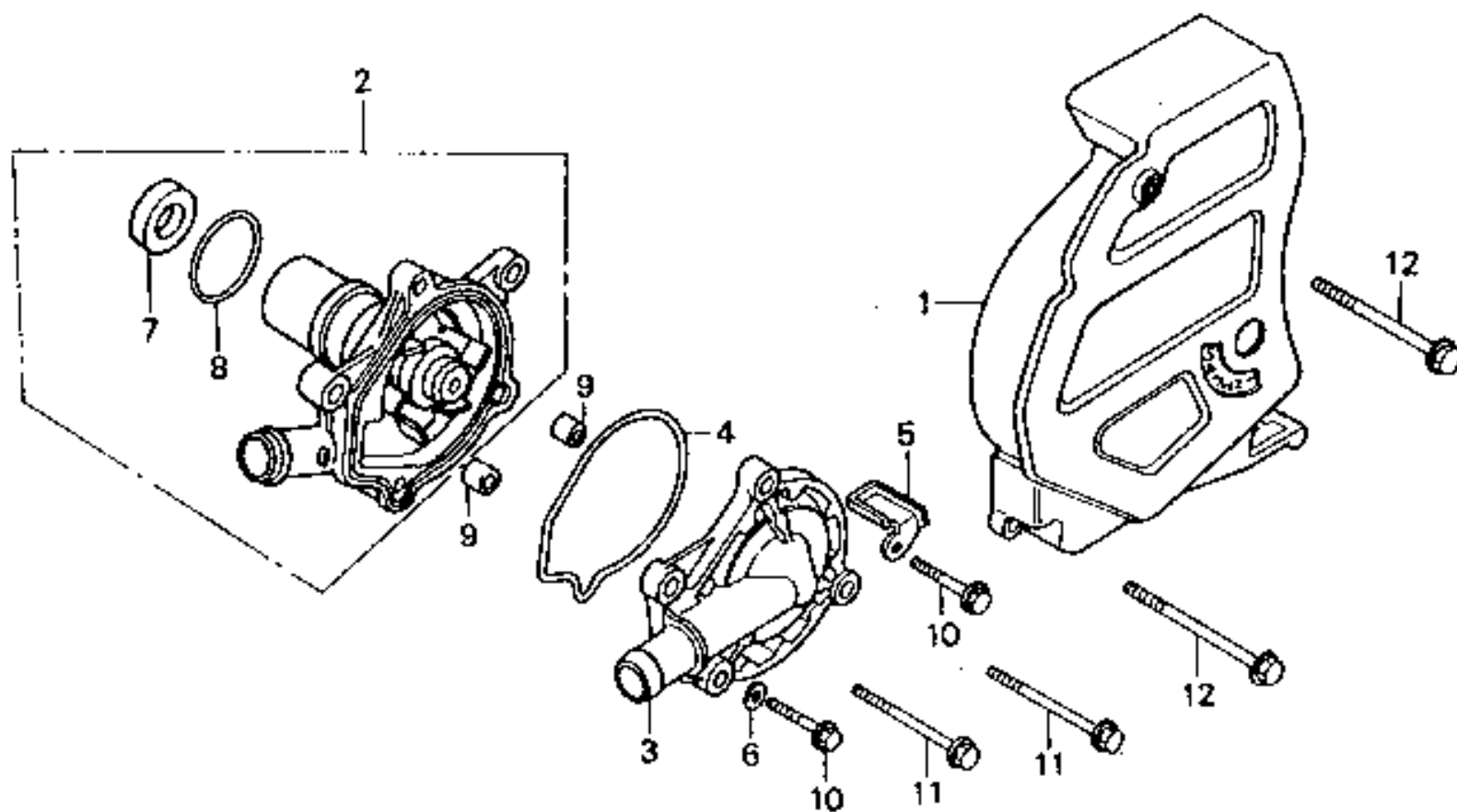


- 001 [Joint, Water Hose](#)
- 002 [Hose, Main Water](#)
- 003 [Hose, Rr.](#)
- 004 [Pipe, Water](#)

- 19069-MM9-000 \$14.43 1
- 19501-MM9-000 \$10.54 1
- 19502-MM9-000 \$10.54 1
- 19503-MM9-000 \$12.55 2

005 Clamp, Water Hose (25 Mm)	19504-KY1-003	\$7.40	2
006 Hose, Fr.	19505-MM9-000	\$12.31	1
007 Pipe, Outlet Water	19511-MM9-000	\$9.32	2
008 Hose, Fr.	19521-MM9-000	\$10.54	1
009 Hose, Rr.	19522-MM9-000	\$17.35	1
010 Clamp, Water Hose (25 Mm)	19504-KY1-003	\$7.40	2
010 Clamp, Water Hose (21 Mm)	90701-MF5-003	\$3.83	4
011 Clamp, Water Hose	19505-ML3-770	\$5.28	10
011 Clamp (27 Mm)	90702-MF5-003	\$4.70	2
012 Superseded by part #91315-ME9-003 below:	91315-ME9-004	---	2
012 Seal, Water Pipe	91315-ME9-003	\$3.37	2
013 Bolt, Flange (6 X12)	96001-06012-00	\$1.89	1
014 Bolt, Flange (6 X14)	96001-06014-00	\$1.10	6

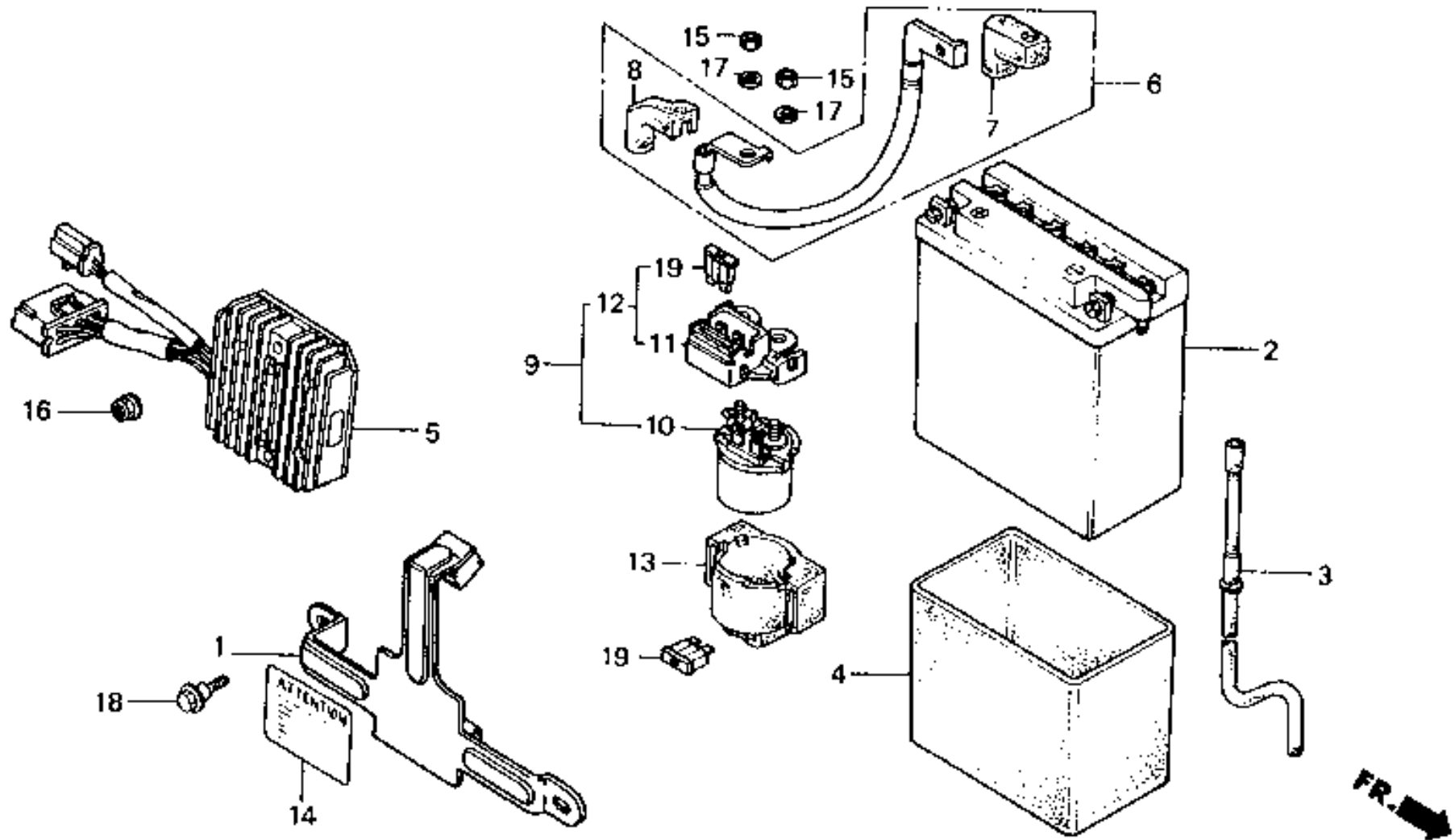
WATER PUMP:



001 Superseded by part #11350-MAW-630 below: 11351-MM9-010 --- 1
 001 [Cover, L. Rr.](#) 11350-MAW-630 \$159.06 1
 002 Superseded by part #19200-MN8-020 below: 19200-MN8-010 --- 1

002	Water Pump	19200-MN8-020	\$162.99	1
002	Superseded by part #19200-MN8-020 below:	19200-MN8-000	---	1
002	Water Pump	19200-MN8-020	\$162.99	1
003	Cover, Water Pump	19221-MM9-000	\$65.49	1
004	Gasket, Water Pump Cover	19226-MM9-000	\$3.35	1
005	Clamp, Oil Pressure Wire	32972-MS8-000	\$6.23	1
006	Washer (11 Mm)	90425-300-000	\$2.27	1
007	Oil Seal (12 X28 X7)	91201-MF2-003	\$3.70	1
008	O Ring (32.95 X2.62) (Arai)	91302-MB0-013	\$2.62	1
009	Pin, Dowel (8 X14)	94301-08140	\$1.50	2
010	Superseded by part #95701-06025-07 below:	95700-06025-07	---	2
010	Bolt, Flange (6 X25)	95701-06025-07	\$1.81	2
011	Bolt, Flange (6 X45)	95701-06045-07	\$1.80	2
012	Bolt, Flange (6 X25)	96001-06025-07	\$1.54	1

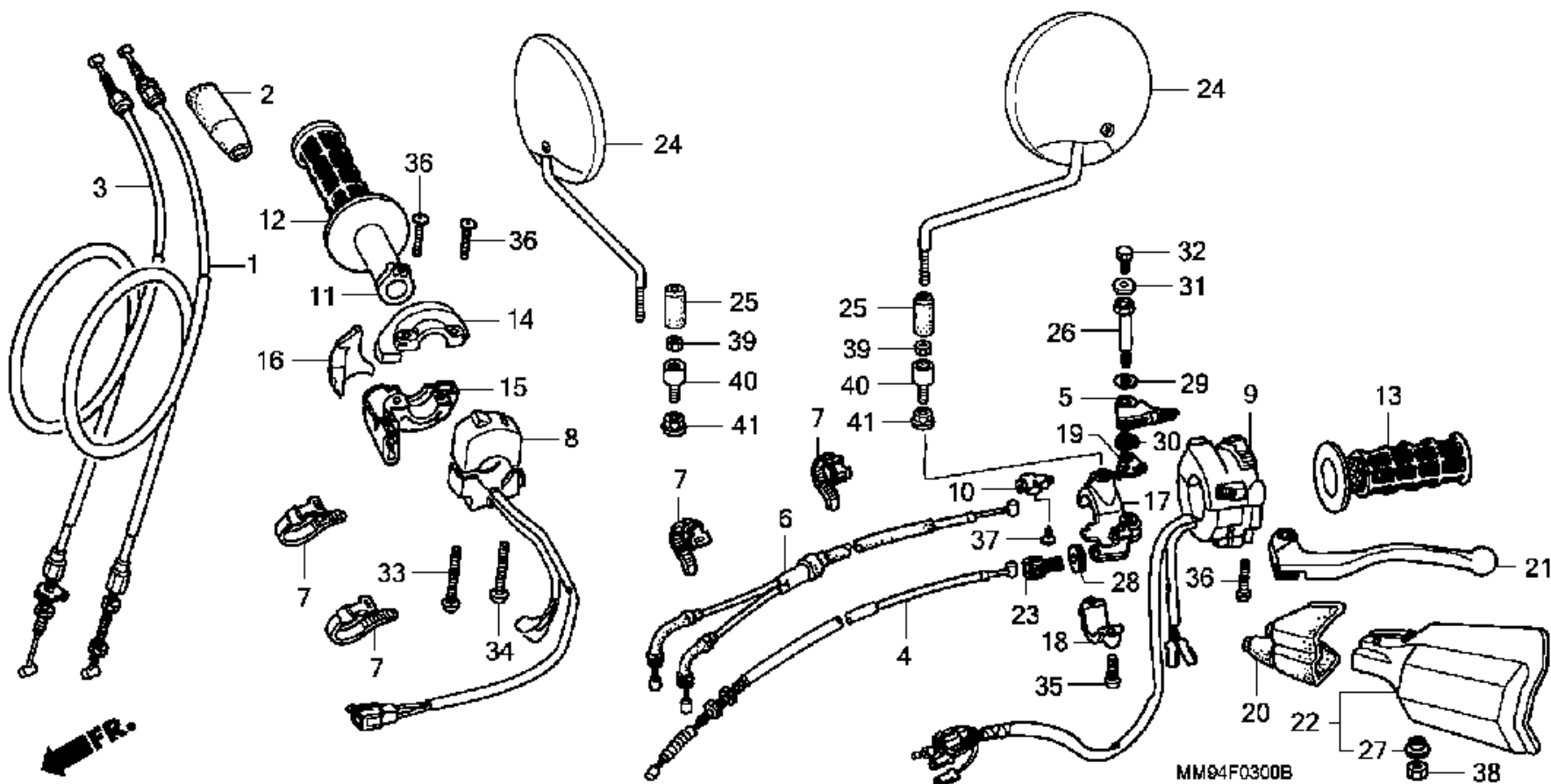
BATTERY:



001 Band, Battery	17250-MS8-000	\$25.45	1
002 Superseded by part #31500-ML7-672AH below: 31500-ML7-672	---		1

002 Battery (Yb12 A B)	31500-ML7-672AH	\$77.18	1
003 Tube	31503-MM9-000	\$8.88	1
004 Case, Battery	31511-MM9-000	\$25.31	1
005 Superseded by part #31600-MS6-921 below:	31600-MM9-000	---	1
005 Rectifier, Regulate	31600-MS6-921	\$180.36	1
006 Cable	32401-MM9-000	\$17.00	1
007 Cover A	32414-MM9-000	\$3.70	1
008 Cover B	32416-MF5-000	\$3.70	2
009 Sw, Starter Magnetic	35850-MK3-671	\$74.21	1
010 Switch	35851-MF5-751	\$66.72	1
011 Holder, Fuse	35852-MG7-751	\$14.49	1
012 Holder Assy., Fuse	35855-MG7-751	\$21.17	1
013 Rubber, Shock	35856-MF5-751	\$6.60	1
014 Label, Battery	87506-MM9-670	\$3.66	1
015 Nut, Hex. (6 Mm)	94002-06080-0S	\$1.48	2
016 Nut, Flange (6 Mm)	94050-06000	\$1.05	2
017 Washer, Spring (6 Mm)	94111-06000	\$0.99	6
018 Superseded by part #96300-06010-07 below:	96500-06010-07	---	2
018 Bolt, Flange (6 X10)	96300-06010-07	\$1.49	2
019 Fuse, Blade (30 A)	98200-33000	\$1.63	2

HANDLE SWITCH:



001 [Cable A, Throttle](#)

002 [Cover, Throttle Cable](#)

003 [Cable B, Throttle](#)

004 Superseded by part #22870-MAB-620 below:

17910-MM9-000 \$23.62 1

17913-KB7-000 \$8.22 1

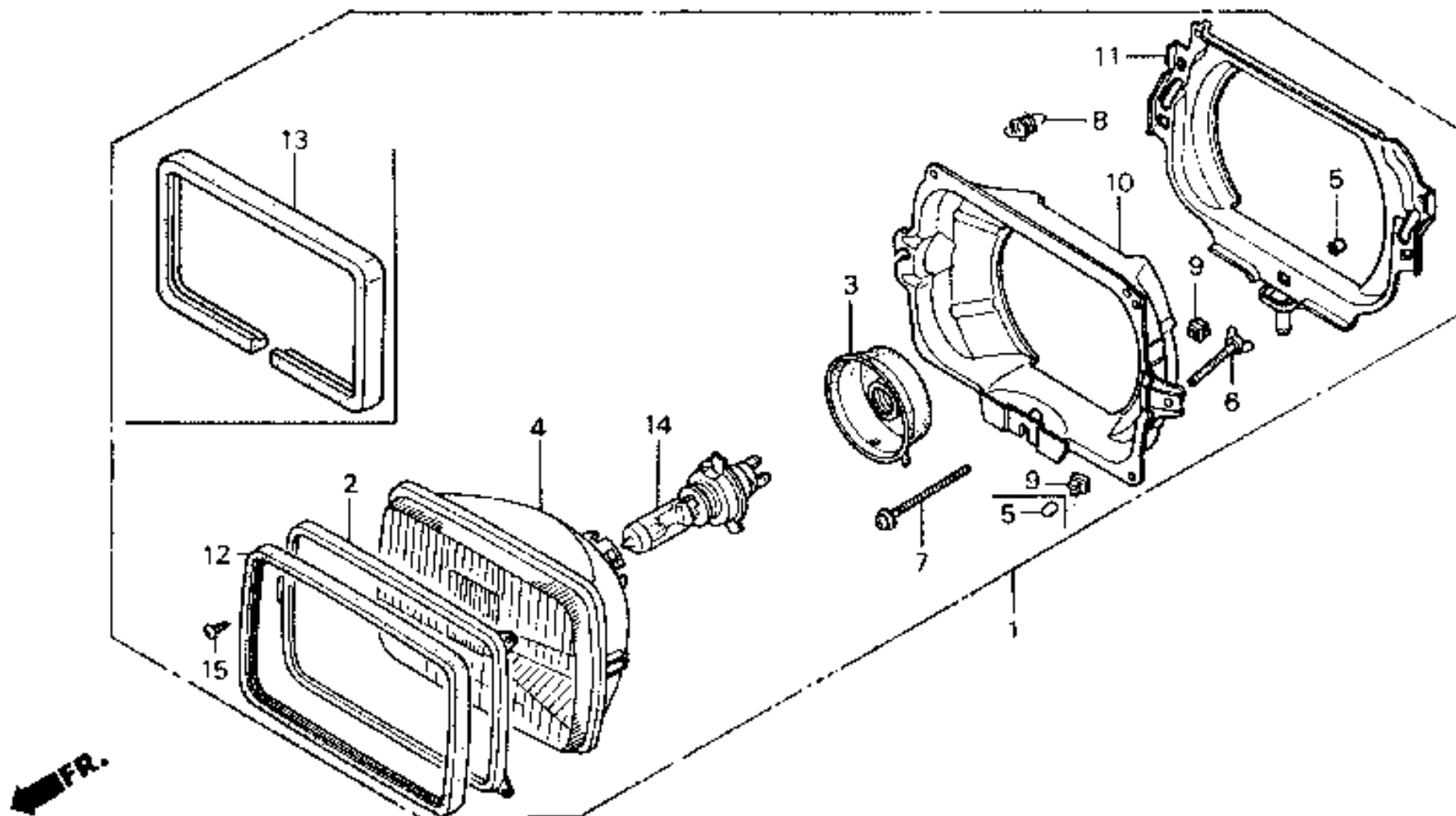
17920-MM9-000 \$25.51 1

22870-MM9-000 --- 1

004	Cable, Clutch	22870-MAB-620	\$18.05	1
005	Superseded by part #17961-MG2-010 below:	17961-MG2-000	---	1
005	Lever, Choke	17961-MG2-010	\$11.98	1
006	Superseded by part #17950-MS8-000 below:	17950-MM9-000	---	1
006	Cable, Choke	17950-MS8-000	\$43.22	1
007	Band B1, Wire	32161-404-000	\$2.74	2
008	Switch, Starter Stop	35130-MM9-720	\$44.83	1
009	Switch, Turn SignalThis part is no longer available.	35200-MM9-720	---	1
010	Switch Assy., Clutch	35330-MK5-003	\$11.80	1
011	Superseded by part #53141-429-010 below:	53141-429-000	---	1
011	Pipe, Throttle Grip	53141-429-010	\$14.89	1
012	Superseded by part #53165-MGW-305 below:	53165-MK5-010	---	1
012	Grip, R. Handle	53165-MGW-305	\$6.36	1
013	Superseded by part #53166-MGW-305 below:	53166-MK5-010	---	1
013	Grip, L. Handle (Coo)	53166-MGW-305	\$7.47	1
014	Housing, Throttle (Upper)	53167-KB7-000	\$28.14	1
015	Housing, Throttle (Lower)	53168-MG7-000	\$24.92	1
016	Slider, Throttle Cable	53169-KB7-000	\$5.88	1
017	Bracket, L. Handle Lever	53172-MK5-000	\$19.51	1
018	Holder, L. Lever Bracket	53174-KE1-000	\$10.46	1
019	Plate, Point	53176-MM9-000	\$3.62	1
020	Cover, L. Handle Lever	53177-MK5-000	\$5.88	1
021	Lever, L. Handlebar	53178-MG7-003	\$20.38	1
022	Guard, L. *Nh138* (Shasta White)	53185-MK5-000ZA	\$31.51	1
023	Bolt, Wire Adjusting	53192-KA4-710	\$6.87	1
024	Mirror	88210-MM9-000	\$15.86	2

025 Cover, Lock Nut	88112-MM9-000	\$6.78	2
026 Bolt, Lever Pivot	90114-MK5-000	\$5.98	1
027 Collar (6 X4)	90127-KF0-770	\$3.06	1
028 Superseded by part #90321-KF0-000 below:	90321-KA4-700	---	1
028 Nut, Fixing	90321-KF0-000	\$6.37	1
029 Washer (8 Mm)	90405-463-000	\$3.12	1
030 Washer, Wave	90406-KF0-003	\$2.84	4
031 Washer B	90554-240-000	\$1.51	1
032 Superseded by part #92101-05012-0G below:	92201-05012-0A	---	1
032 Bolt, Hex. (5 X12)	92101-05012-0G	\$0.99	1
032 Superseded by part #92101-05012-0G below:	92101-05012-0A	---	1
032 Bolt, Hex. (5 X12)	92101-05012-0G	\$0.99	1
033 Screw, Pan (4 X32)	93500-04032-0G	\$0.99	1
034 Screw, Pan (4 X45)	93500-04045-0G	\$1.22	1
035 Screw, Pan (5 X16)	93500-05016-0G	\$1.15	4
036 Screw, Pan (5 X20)	93500-05020-0G	\$1.04	2
037 Screw, Tapping (3 X12)	93901-32320	\$1.15	1
038 Superseded by part #94001-06200-0S below:	94001-06000-0S	---	2
038 Nut, Hex. (6 Mm)	94001-06200-0S	\$0.49	2
039 Nut, Lock (Left Hand Thread)	90301-KBA-900	\$1.54	2
040 Rubber, Mounting	88255-MM9-000	\$4.07	2
041 Superseded by part #90303-428-900 below:	94050-10070	---	7
041 Nut, Flange (10 Mm)	90303-428-900	\$3.31	7

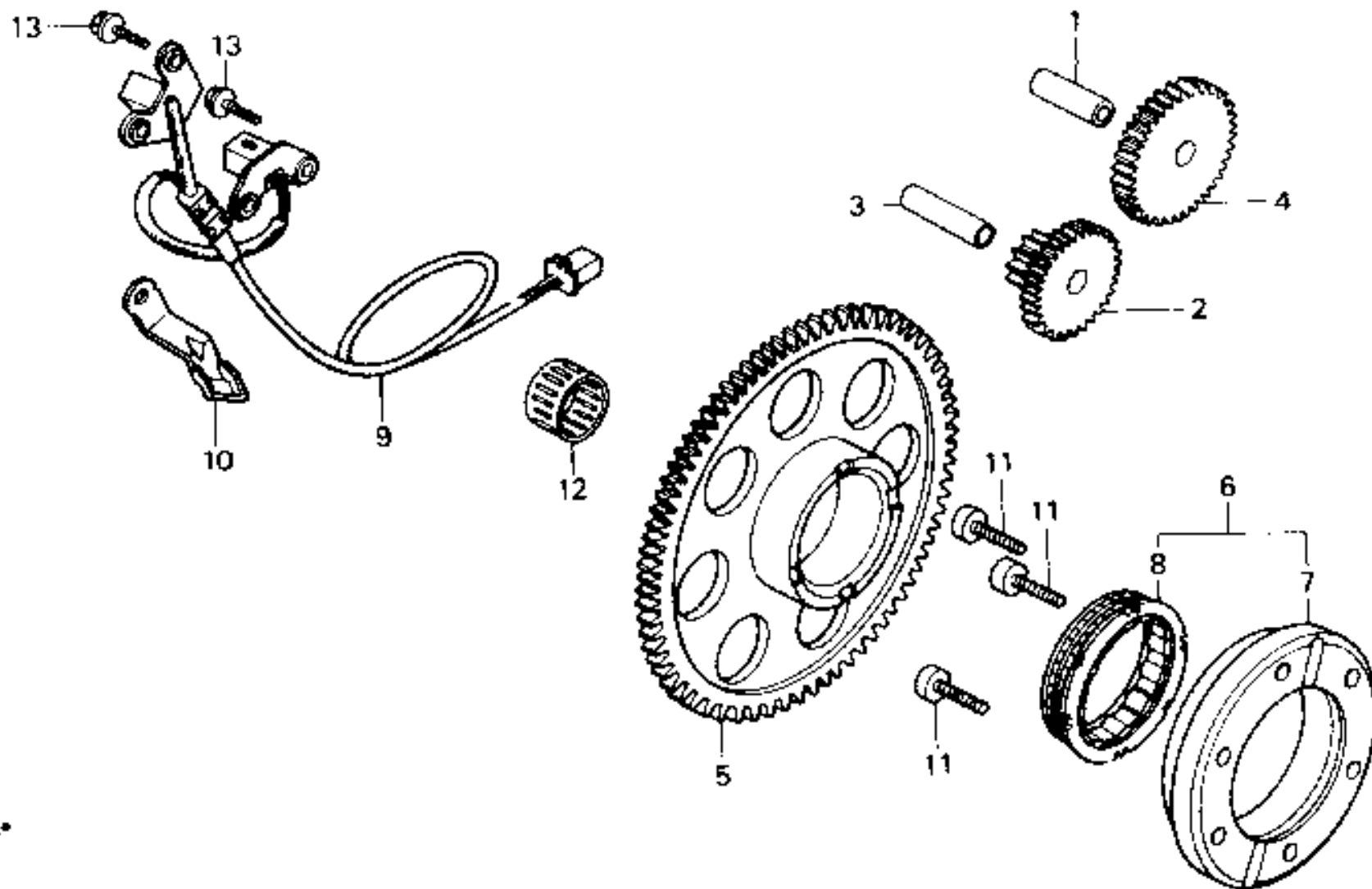
HEADLIGHT:



001 Superseded by part #33100-MM9-724 below:	33100-MM9-721	---	1
001 Hdlt (12 V 60/55 W)	33100-MM9-724	\$215.27	1
001 Superseded by part #33100-MM9-724 below:	33100-MM9-722	---	1

001 Hdlt (12 V 60/55 W)	33100-MM9-724	\$215.27	1
002 Ring, RetainingThis part is no longer available.	33102-692-671	---	1
003 Superseded by part #33112-MM9-013 below:	33112-MM9-003	---	1
003 Cover, Rubber	33112-MM9-013	\$7.47	1
004 Headlight Unit	33120-MB0-771	\$69.96	1
005 Cover, Screw	33136-MM9-003	\$2.17	1
006 Screw, Special	33142-MM9-003	\$9.06	2
007 Screw, Adjusting	33143-692-672	\$5.53	1
008 Spring, Adjuster	33144-692-671	\$5.80	1
009 Nut, Nylon Cap	33145-657-671	\$4.40	2
010 Ring, Mounting (1)	33150-MM9-621	\$35.08	1
011 Ring, Mounting (2)	33154-MM9-621	\$33.38	1
012 Rubber	33171-MC5-000	\$16.52	1
014 Superseded by part #34901-MC7-601AH below:	34901-MC7-601	---	1
014 Bulb (12 V60/55 W)	34901-MC7-601AH	\$7.27	1
015 Superseded by part #90162-692-013 below:	90162-692-003	---	3
015 Screw, Tapping (4 X8)	90162-692-013	\$3.72	3

PULSE GENERATOR:

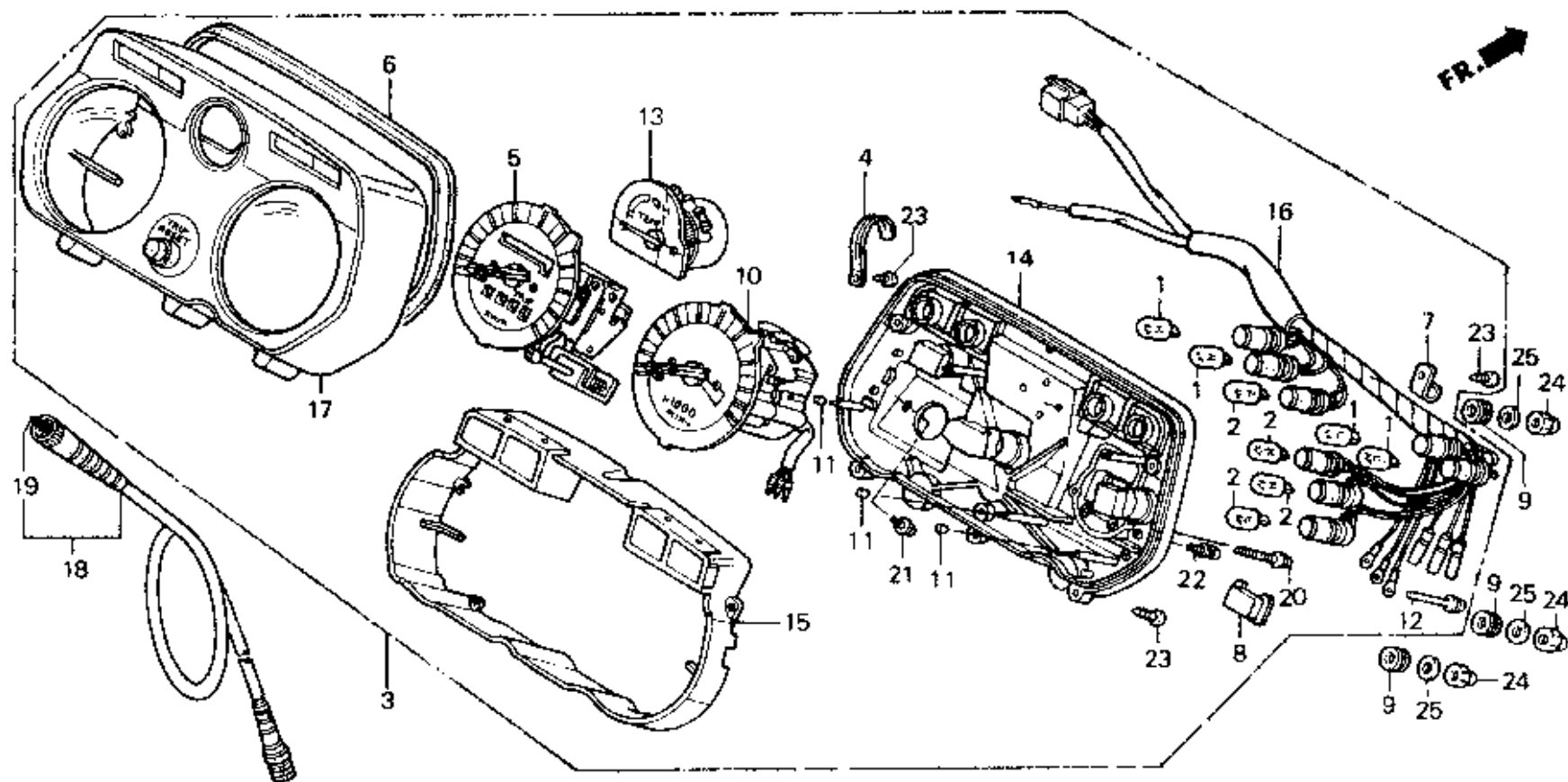


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001 Superseded by part #13111-GS7-000 below: 13111-GK8-000 --- 1

001 Pin, Piston	13111-GS7-000	\$6.50	1
001 Superseded by part #13111-GS7-000 below:	13111-122-000	---	1
001 Pin, Piston	13111-GS7-000	\$6.50	1
002 Gear (38 T/12 T)	28101-MS8-000	\$42.78	1
003 Pin (10 X44)	28102-ME9-000	\$7.47	1
004 Gear, Starter (51 T)	28106-ME9-010	\$50.03	1
005 Gear (75 T)	28110-MM9-000	\$92.91	1
006 Superseded by part #28125-MM9-014 below:	28120-MM9-003	---	1
006 Clutch Outer, Starting	28125-MM9-014	\$171.06	1
006 Superseded by part #28125-MM9-014 below:	28125-MM9-004	---	1
006 Clutch Outer, Starting	28125-MM9-014	\$171.06	1
007 Superseded by part #28128-MM9-014 below:	28121-MM9-000	---	1
007 Clutch Outer, Starting	28128-MM9-014	\$106.60	1
008 Superseded by part #28126-MK5-004 below:	28125-MK5-023	---	1
008 Clutch, One Way	28126-MK5-004	\$75.91	1
009 Generator, Pulse	30300-MS8-000	\$80.90	1
010 Clamp, Pulse	32963-MM9-000	\$5.37	1
011 Superseded by part #90010-MAY-000 below:	90010-KE5-000	---	6
011 Bolt, Socket (8 Mm)	90010-MAY-000	\$3.68	6
012 Bearing, Needle (30 X37 X20) (Ntn)	91021-MF5-841	\$21.32	1
013 Bolt, Flange (6 X20)	95701-06020-00	\$1.44	1

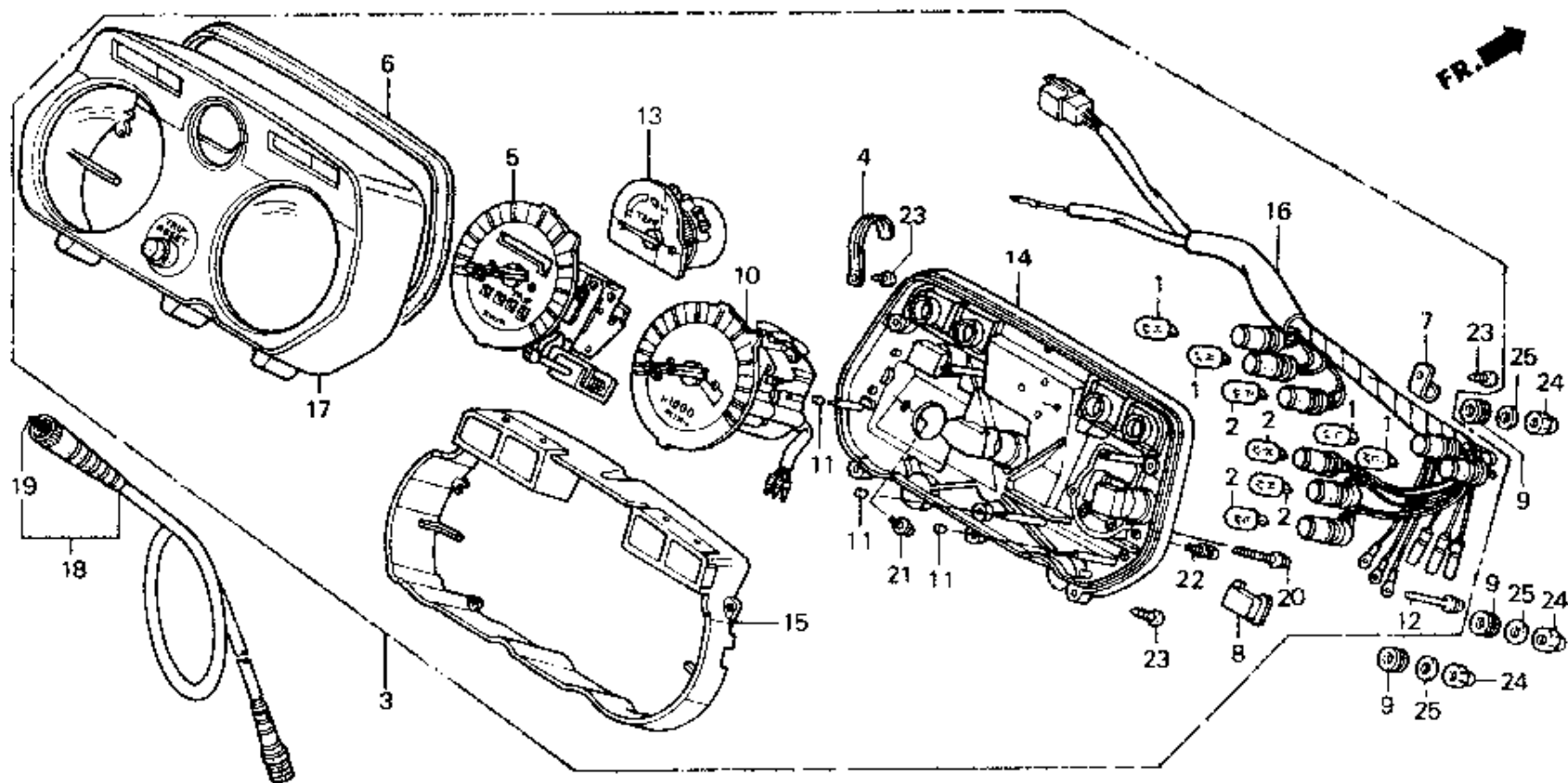
SPEEDOMETER AND TACHOMETER: (PART 1)



001 Superseded by part #37237-SA5-003 below:	34908-GA7-701	---	3
001 Bulb (14 V 3.4 W) (Ns)	37237-SA5-003	\$3.46	3
001 Superseded by part #37237-SA5-003 below:	37102-567-009	---	3
001 Bulb (14 V 3.4 W) (Ns)	37237-SA5-003	\$3.46	3
001 Superseded by part #37237-SA5-003 below:	37237-SA5-004	---	3
001 Bulb (14 V 3.4 W) (Ns)	37237-SA5-003	\$3.46	3

002	Bulb, Wedge Base (T10) (12 V 1.7 W) (Stanley)	34908-MB9-871	\$2.60	2
003	Meter, CombinationThis part is no longer available.	37100-MM9-671	---	1
004	Clamp	37198-MM9-008	\$2.58	1
005	Speedometer Assy.This part is no longer available.	37200-MM9-671	---	1
006	SealThis part is no longer available.	37211-MM9-300	---	1
007	Clamp	37215-MB6-831	\$2.42	1
008	Grommet	37216-GJ8-701	\$3.13	1
009	Rubber	37242-435-700	\$4.40	2
010	Superseded by part #37250-MM9-601 below:	37250-MM9-721	---	1
010	Tachometer Assy.This part is no longer available.	37250-MM9-601	---	1
011	Rubber, Cushion	37304-198-901	\$3.54	3
012	Screw Washer (3 X22)	37305-KE5-008	\$2.56	6
013	Meter, Temperature	37450-MM9-601	\$57.38	1
014	Case Assy. (Lower)	37615-MM9-611	\$23.52	1
015	Case Assy. (Inner)	37616-MM9-008	\$35.72	1
016	Socket	37619-MM9-611	\$42.94	1
017	Case Assy. (Upper)This part is no longer available.	37620-MM9-008	---	1
018	Cable, Speedometer	44830-MM9-000	\$21.68	1
019	Cable (Inner)	44831-MM9-000	\$6.23	1
020	Superseded by part #90133-SG0-A01 below:	90032-ML7-671	---	2
020	Screw, Tapping (4 X3)	90133-SG0-A01	\$3.11	2
021	Screw, Flange (4 X8)	90101-GC8-008	\$3.13	2
022	Screw Washer (3 X8)	90102-KM9-008	\$2.00	2
023	Screw, Tapping (4 X16)	93903-24480	\$1.15	2
024	Nut, Cap (6 Mm)	94021-06070-0S	\$1.22	1
025	Washer, Plain (6 Mm)	94103-06800	\$0.99	2

SPEEDOMETER TACHOMETER (CHANGE PART 2):



001 Superseded by part #37237-SA5-003 below:

001 [Bulb \(14 V 3.4 W\) \(Ns\)](#)

34908-GA7-701 --- 3

37237-SA5-003 \$3.46 3

001 Superseded by part #37237-SA5-003 below:

001 [Bulb \(14 V 3.4 W\) \(Ns\)](#)

37102-567-009 --- 3

37237-SA5-003 \$3.46 3

001 Superseded by part #37237-SA5-003 below:

001 [Bulb \(14 V 3.4 W\) \(Ns\)](#)

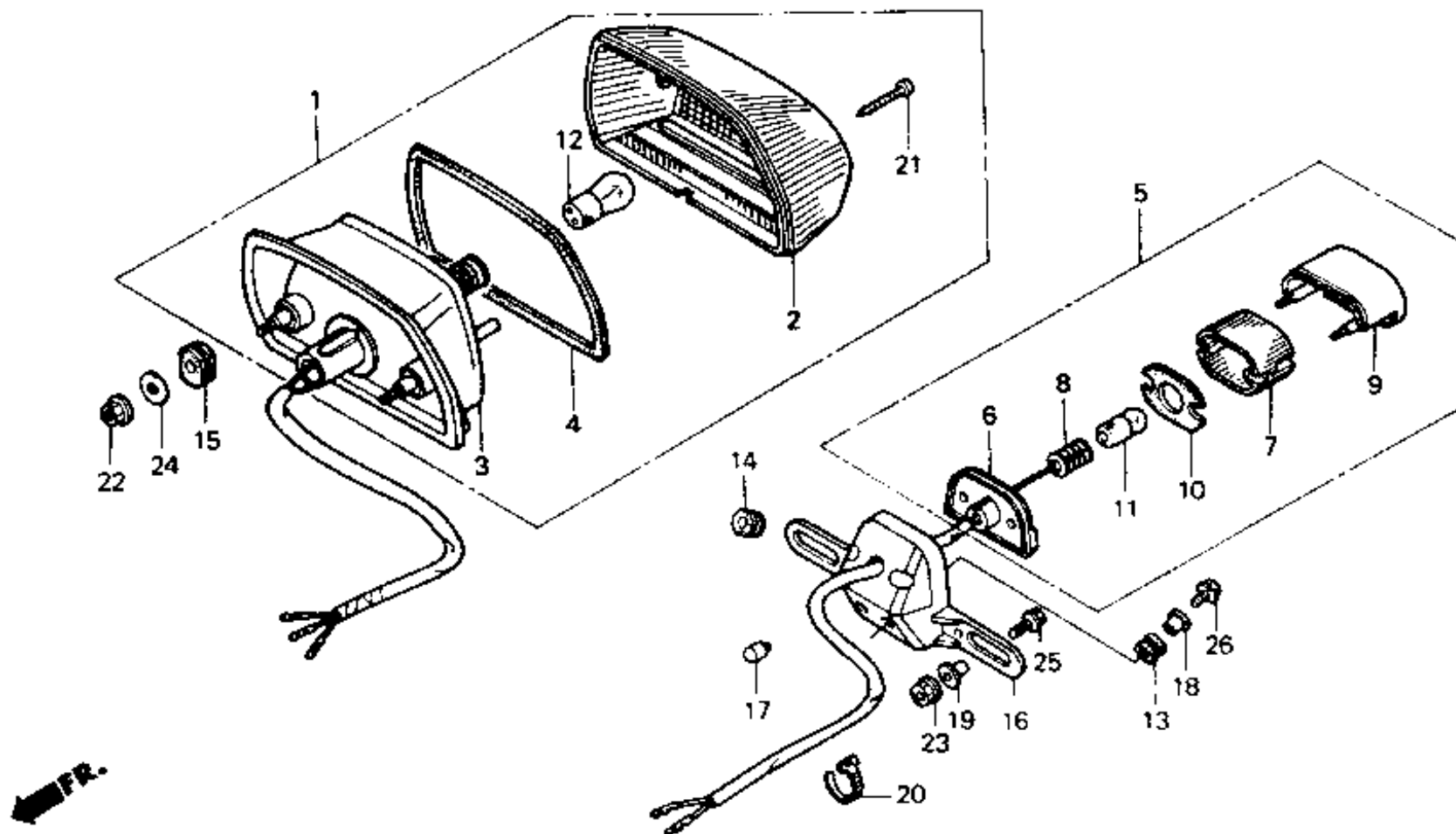
37237-SA5-004 --- 3

37237-SA5-003 \$3.46 3

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002	Bulb, Wedge Base (T10) (12 V 1.7 W) (Stanley)	34908-MB9-871	\$2.60	2
003	Meter, CombinationThis part is no longer available.	37100-MM9-671	---	1
004	Clamp	37198-MM9-008	\$2.58	1
005	Speedometer Assy.This part is no longer available.	37200-MM9-671	---	1
006	SealThis part is no longer available.	37211-MM9-300	---	1
007	Clamp	37215-MB6-831	\$2.42	1
008	Grommet	37216-GJ8-701	\$3.13	1
009	Rubber	37242-435-700	\$4.40	2
010	Superseded by part #37250-MM9-601 below:	37250-MM9-721	---	1
010	Tachometer Assy.This part is no longer available.	37250-MM9-601	---	1
011	Rubber, Cushion	37304-198-901	\$3.54	3
012	Screw Washer (3 X22)	37305-KE5-008	\$2.56	6
013	Meter, Temperature	37450-MM9-601	\$57.38	1
014	Case Assy. (Lower)	37615-MM9-611	\$23.52	1
015	Case Assy. (Inner)	37616-MM9-008	\$35.72	1
016	Socket	37619-MM9-611	\$42.94	1
017	Case Assy. (Upper)This part is no longer available.	37620-MM9-008	---	1
018	Cable, Speedometer	44830-MM9-000	\$21.68	1
019	Cable (Inner)	44831-MM9-000	\$6.23	1
020	Superseded by part #90133-SG0-A01 below:	90032-ML7-671	---	2
020	Screw, Tapping (4 X3)	90133-SG0-A01	\$3.11	2
021	Screw, Flange (4 X8)	90101-GC8-008	\$3.13	2
022	Screw Washer (3 X8)	90102-KM9-008	\$2.00	2
023	Screw, Tapping (4 X16)	93903-24480	\$1.15	2
024	Nut, Cap (6 Mm)	94021-06070-0S	\$1.22	1
025	Washer, Plain (6 Mm)	94103-06800	\$0.99	2

TAIL LIGHT:

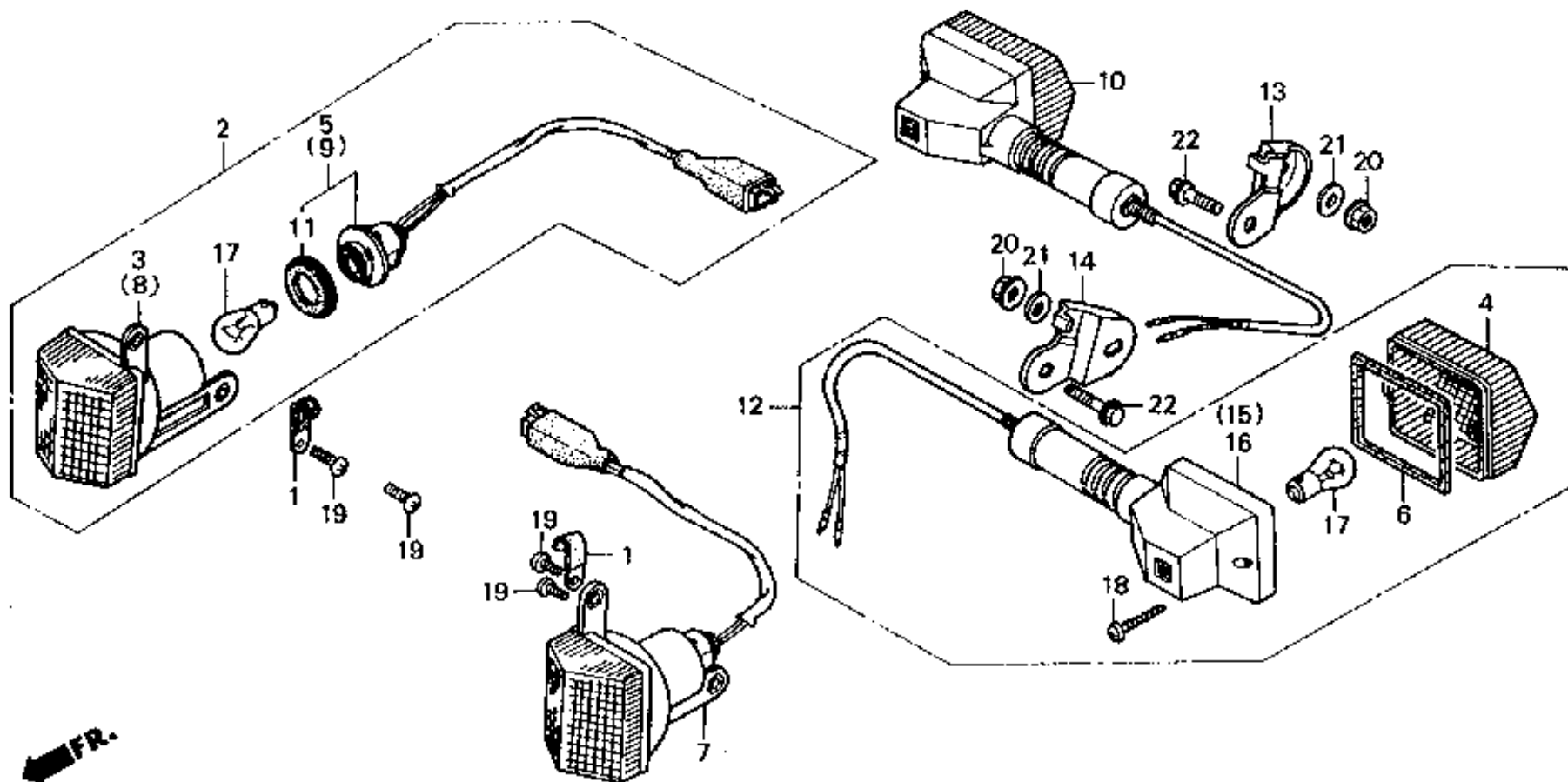


- | | | |
|---------------------|---|---|
| 001 Taillight Unit | This part is no longer available. 33701-MM9-721 --- | 1 |
| 002 Lens, Taillight | This part is no longer available. 33702-MM9-721 --- | 1 |
| 003 Base, Taillight | This part is no longer available. 33703-MM9-721 --- | 1 |

004	Seal, Gasket	33709-MM9-611	\$3.96	1
005	Light Assy., License	33720-MM9-720	\$80.44	1
006	Base	33721-MB2-003	\$36.37	1
007	Lens, License Light	33722-MB1-013	\$13.45	1
008	Wire, License	33725-MM9-720	\$8.95	1
009	Cover, License	33727-ME4-671	\$17.88	1
010	Gasket, Lens	33729-MB1-003	\$4.43	1
011	Superseded by part #34904-634-611 below:	34909-505-610	---	1
011	Bulb (12 V 5 W)	34904-634-611	\$1.57	1
011	Superseded by part #34904-634-611 below:	34616-568-671	---	1
011	Bulb (12 V 5 W)	34904-634-611	\$1.57	1
011	Superseded by part #34904-634-611 below:	34908-272-000	---	1
011	Bulb (12 V 5 W)	34904-634-611	\$1.57	1
011	Superseded by part #34904-634-611 below:	34902-500-003	---	1
011	Bulb (12 V 5 W)	34904-634-611	\$1.57	1
012	Bulb, Stop & Taillight (12 V 27/7 W)	34906-MG9-771	\$3.32	1
013	Rubber, Fr. Fender Mounting	61103-357-000	\$2.49	2
014	Grommet, Wire Cord	80102-323-000	\$1.83	1
015	Rubber	80106-MG7-000	\$3.54	2
016	Bracket, Number Plate	84701-ML7-670	\$23.52	1
017	Nut, Special (4 Mm)	90302-MB2-000	\$4.00	2
018	Superseded by part #61104-422-000 below:	90501-MA3-770	---	1
018	Collar, Setting	61104-422-000	\$5.13	1
019	Washer (6 X20)	90502-VA4-640	\$2.98	2
020	Band, Wire (95 Mm)	90650-KV6-003	\$3.16	1
021	Screw, Tap (4 X25)	93901-34680	\$1.07	4

022	Nut, Flange (6 Mm)	94050-06000	\$1.05	2
023	Nut, Flange (6 Mm)	94050-06080	\$0.99	7
024	Washer, Plain (6 Mm)	94103-06800	\$0.99	2
025	Bolt, Flange (6 X16)	95701-06016-00	\$1.67	2
026	Bolt, Flange (6 X22)	95701-06022-07	\$1.41	1

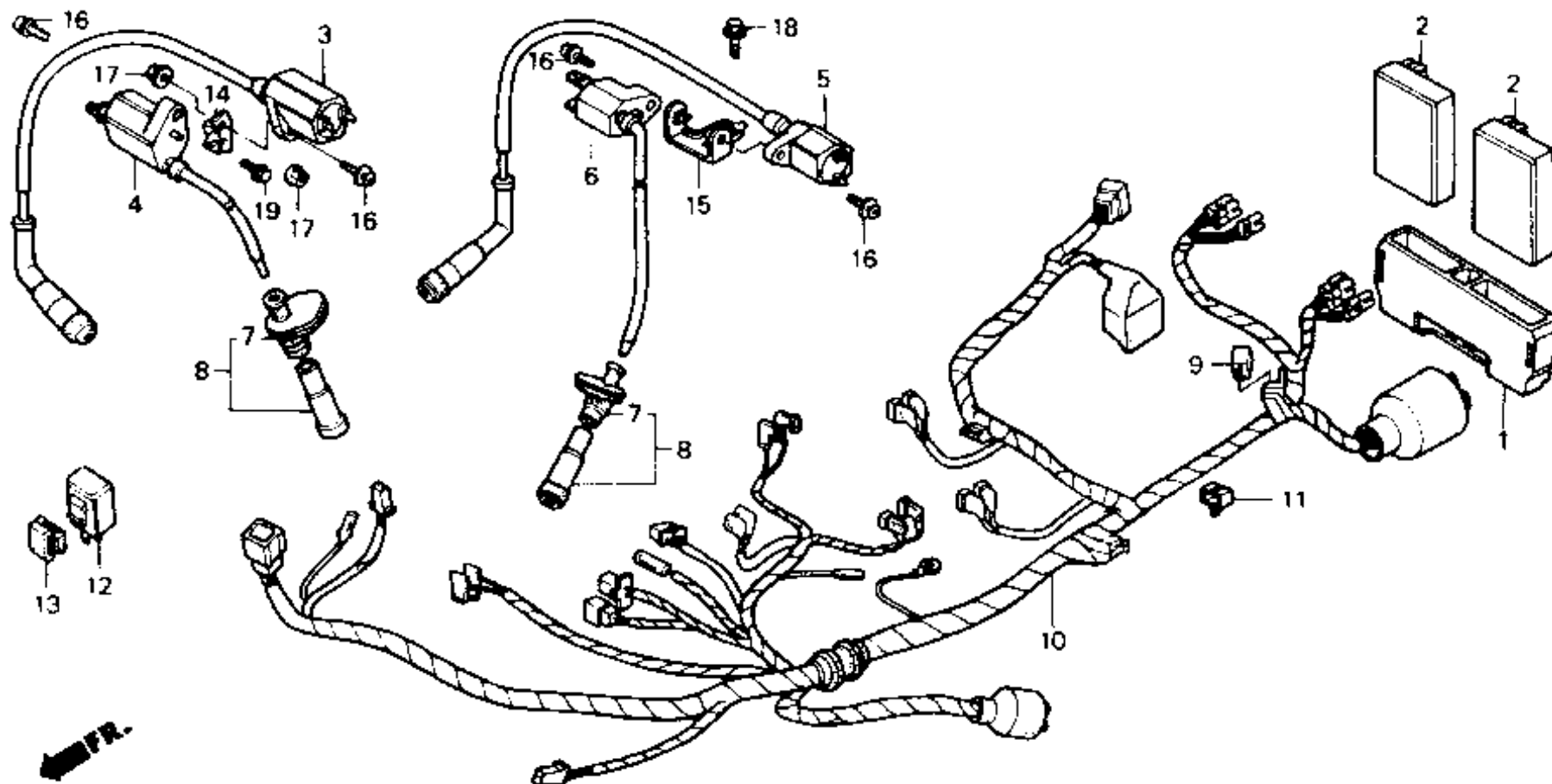
TURN SIGNAL:



001 Clamp, Starter Cable	31211-MB0-000	\$3.64	1
002 Turn Signal Assy. This part is no longer available.	33400-MM9-003	---	1
003 Lens, R. Fr.	33401-MM9-003	\$35.29	1
004 Superseded by part #33402-MGW-305 below:	33402-MG2-003	---	4
004 Lens, Turn Signal (Coo)	33402-MGW-305	\$7.58	4

005 Socket, R. Fr.	33405-MM9-003	\$13.32	1
006 Gasket, Lens	33407-MG2-003	\$4.43	4
007 Turn Signal Assy.	33450-MM9-003	\$44.08	1
008 Lens, L. Fr.	33451-MM9-003	\$35.29	1
009 Socket, L. Fr.	33455-MM9-003	\$13.32	1
010 Superseded by part #33500-MG2-406 below:	33500-MM9-720	---	1
010 Turn Signal Set, R.This part is no longer available.	33500-MG2-406	---	1
011 Gasket, Seal	33518-SA2-003	\$3.16	1
012 Superseded by part #33500-MG2-406 below:	33550-MM9-720	---	1
012 Turn Signal Set, R.This part is no longer available.	33500-MG2-406	---	1
013 Stay, R. Rr.	33601-MK5-000	\$10.62	1
014 Stay, L. Rr.	33602-MK5-000	\$10.62	1
015 Superseded by part #33620-MG2-406 below:	33620-MM9-720	---	1
015 Base, R. Rr.This part is no longer available.	33620-MG2-406	---	1
016 Superseded by part #33620-MG2-406 below:	33670-MM9-720	---	1
016 Base, R. Rr.This part is no longer available.	33620-MG2-406	---	1
017 Bulb, Turn Signal (12 V 23 W) (Stanley)	34905-268-671	\$2.91	4
018 Screw, Tapping (3 X25)	91901-MG2-003	\$2.47	4
019 Screw, Pan (5 X10)	93500-05010-0A	\$1.15	2
020 Nut, Flange (10 Mm)	94050-10000	\$1.29	3
021 Washer, Plain (10 Mm)	94102-10000	\$0.99	2
022 Bolt, Flange (8 X40)	96400-08040-07	\$2.31	1

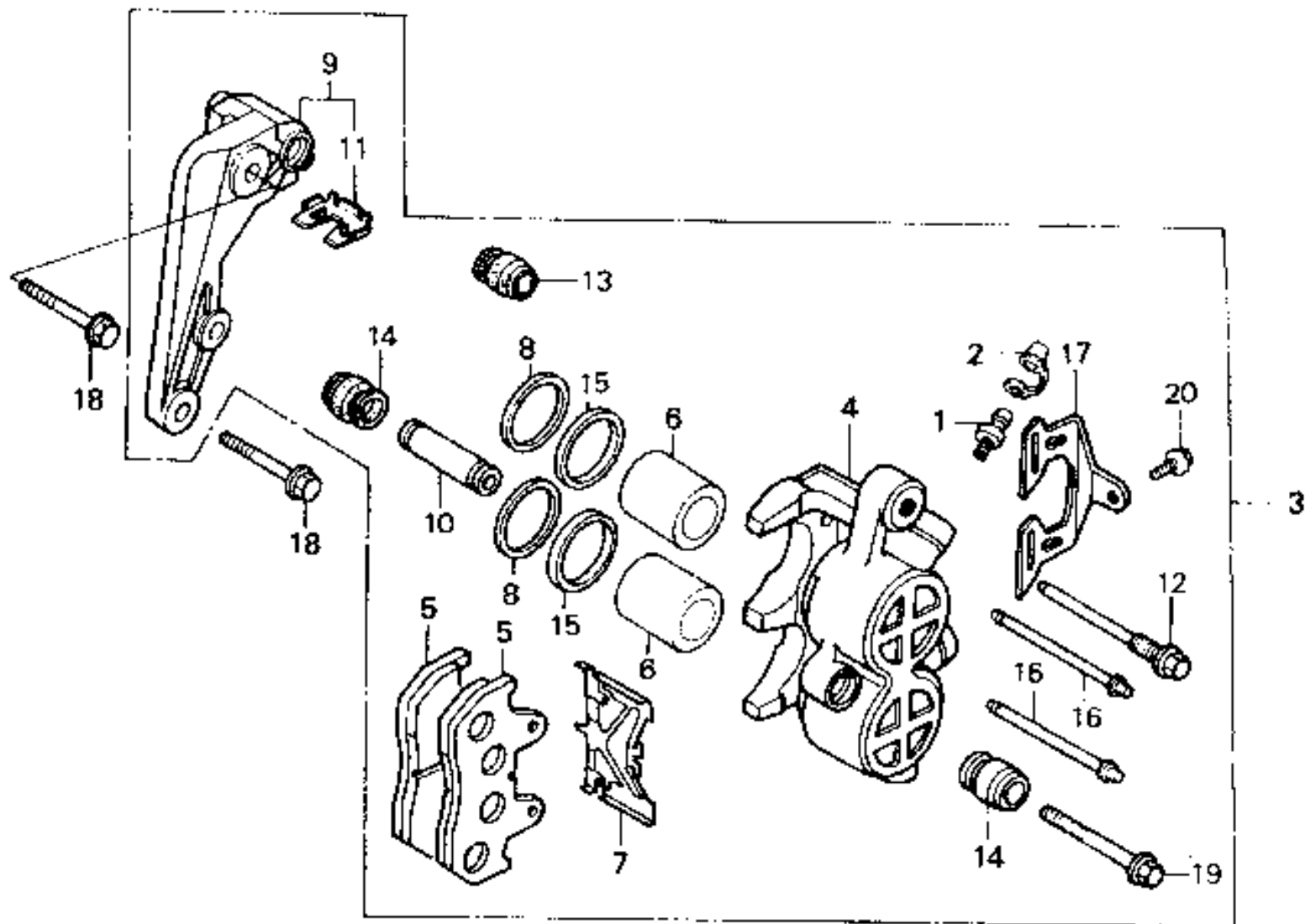
WIRE HARNESS:



001 Superseded by part #30401-MM9-010 below:	30401-MM9-000 ---	1
001 Cushion	30401-MM9-010 \$12.18	1
002 Module, Ign Cont	30410-MS8-610 \$111.53	2
003 Coil, Ignition (1) This part is no longer available.	30510-MM9-000 ---	1

004 Coil, Ignition (2)	This part is no longer available.	30520-MM9-000	---	1
005 Superseded by part #30540-MV1-000 below:		30540-MS8-000	---	1
005 Coil, R. Fr.		30540-MV1-000	\$59.49	1
006 Superseded by part #30550-MV1-000 below:		30550-MM9-000	---	1
006 Coil, L. Rr.		30550-MV1-000	\$59.49	1
007 Seal, Plug Cap		30605-MF5-000	\$12.03	2
008 Cap Assy.		30701-MF5-000	\$20.74	2
009 Superseded by part #31700-124-008 below:		31700-124-003	---	1
009 Rectifier Assy., Silicon (Shindengen)		31700-124-008	\$19.75	1
010 Wire Harness		32100-MM9-670	\$190.91	1
011 Grommet, Wire		32985-300-000	\$3.31	4
012 Relay, Turn Signal		38301-MG2-008	\$31.88	1
013 Suspension, Turn Signal Relay		38306-GE7-000	\$3.52	1
014 Stay, Fr.		50155-MM9-000	\$7.67	1
015 Stay, Rr.		50188-MM9-000	\$10.68	1
016 Screw Washer (5 X22)		93893-05022-07	\$1.49	4
017 Nut, Flange (5 Mm)		94050-05000	\$1.44	2
018 Superseded by part #95701-06012-08 below:		95700-06012-08	---	1
018 Bolt, Flange (6 X12)		95701-06012-08	\$1.54	1
019 Bolt, Flange (6 X10)		95701-06010-00	\$1.81	1

FRONT BRAKE CALIPER:

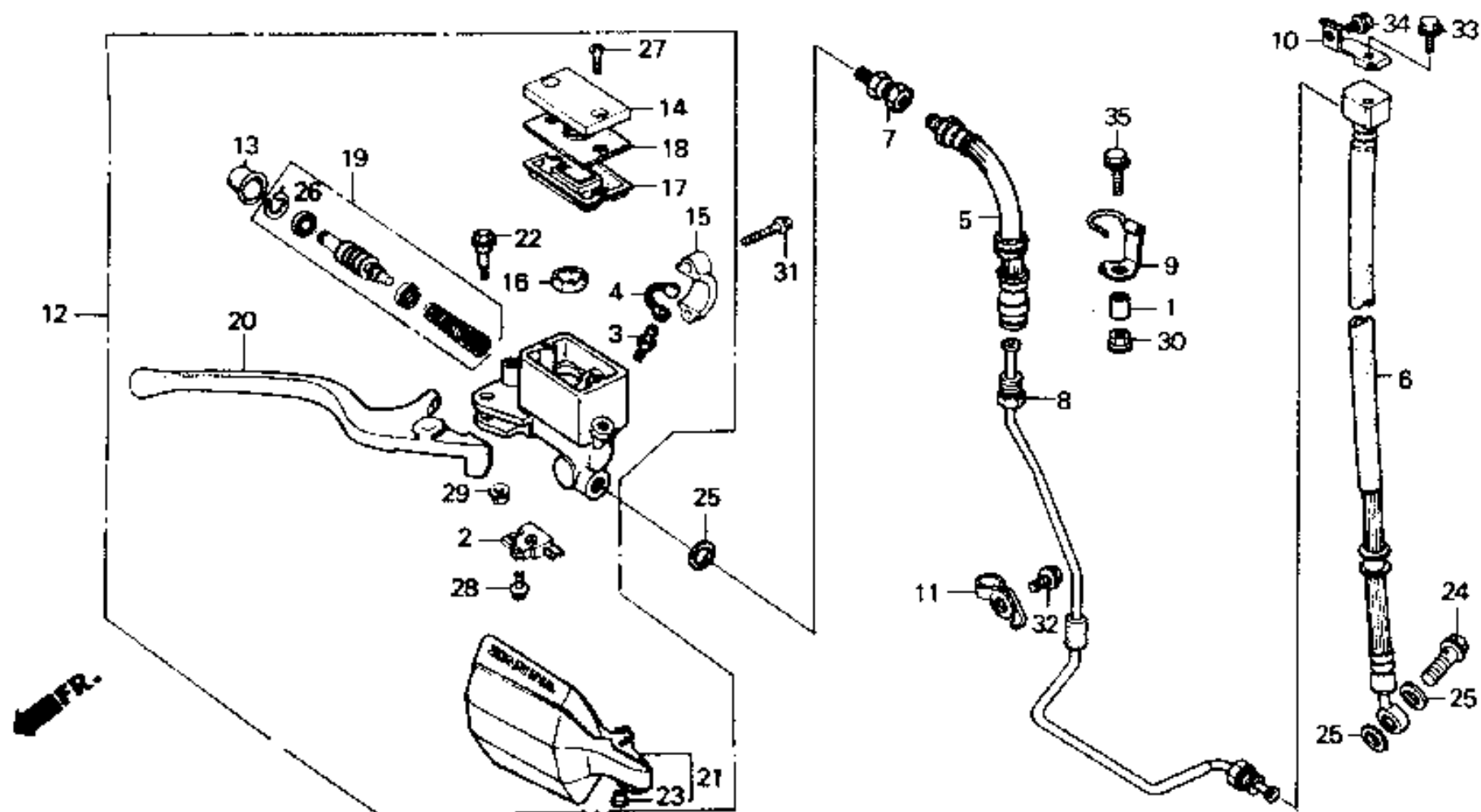


NI [Brake Pad Kit](#)

451A0-MM9-670 \$39.23 1

001 Screw, Bleeder (Nissin)	43352-568-003	\$5.52	1
002 Cap, Bleeder	43353-461-771	\$3.77	1
003 Caliper Assy., Fr.This part is no longer available.	45100-MM9-781	---	1
004 Caliper, L.This part is no longer available.	45101-MJ6-006	---	1
005 Pad (Jb)	45105-MM9-781	\$18.88	2
006 Piston	45107-MA3-006	\$30.31	2
007 Spring, Pad (Vin: 1011956 Up To Cm001211)	45108-MA3-006	\$4.23	1
008 Superseded by part #45109-166-006 below:	45109-160-006	---	2
008 Dust Seal	45109-166-006	\$4.78	2
009 Bracket, L. Fr.This part is no longer available.	45110-MK5-006	---	1
010 Sleeve	45111-MA3-006	\$8.88	2
011 Retainer, Bracket	45112-445-631	\$5.85	1
012 Bolt, Pin	45131-MA3-006	\$11.71	1
013 Boot B	45133-MA3-006	\$4.07	1
014 Boot, Pin	45133-166-016	\$3.46	2
015 Seal, Piston	45209-166-006	\$5.12	1
016 Pin, Hanger	45215-MA3-006	\$7.83	2
017 Plate	45217-MJ0-006	\$4.87	1
018 Superseded by part #96400-08040-00 below:	90155-MM9-670	---	2
018 Bolt, Flange (8 X40)	96400-08040-00	\$2.31	2
019 Superseded by part #90180-MN8-006 below:	90180-MA3-006	---	1
019 Bolt, Flange (8 X49)	90180-MN8-006	\$4.52	1
020 Superseded by part #95701-06010-07 below:	95700-06010-07	---	1
020 Bolt, Flange (6 X10)	95701-06010-07	\$1.70	1

FRONT MASTER BRAKE CYLINDER:



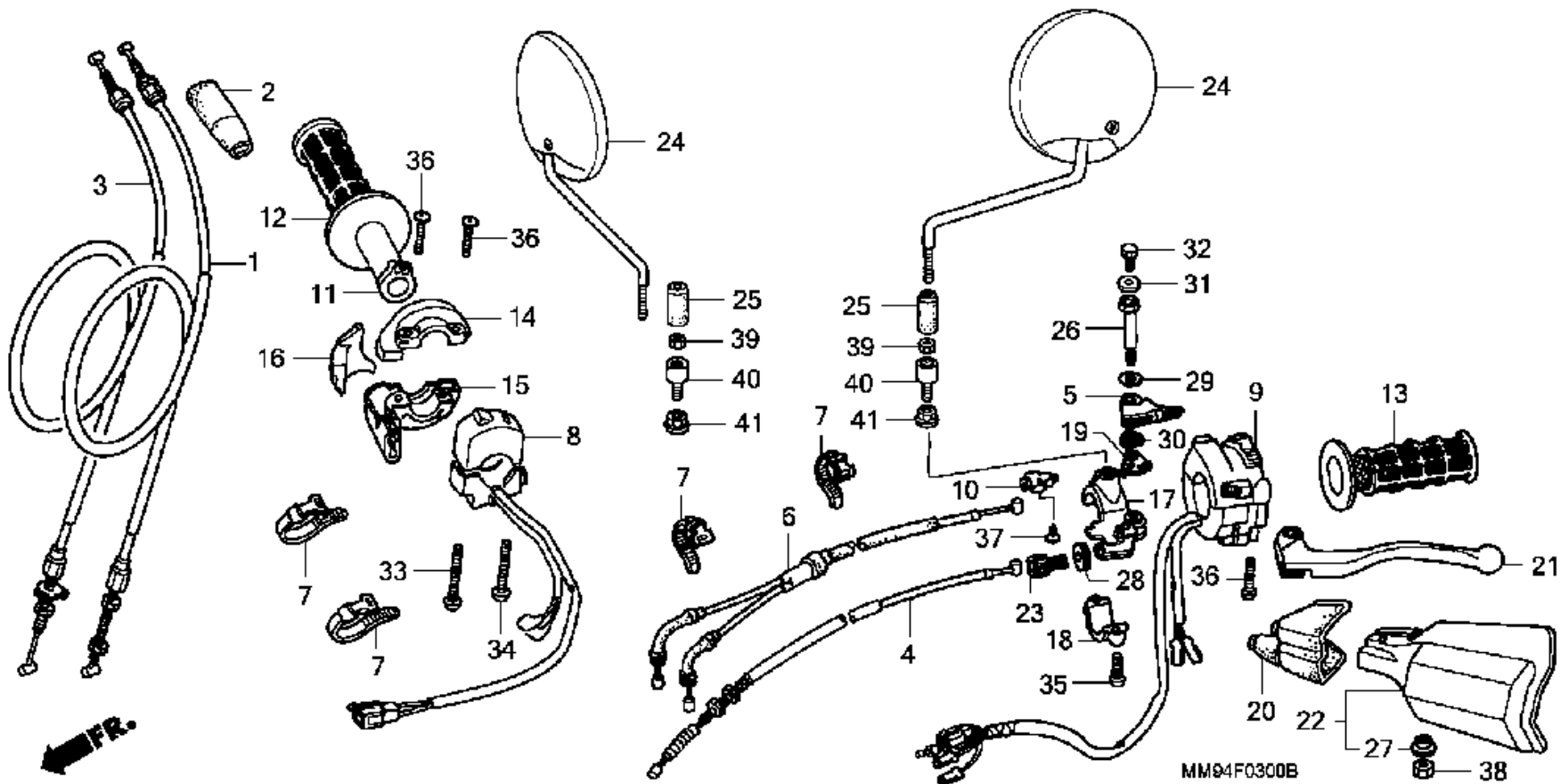
- 001 [Collar](#)
- 002 [Switch Assy., Fr. Stop](#)
- 003 [Screw, Bleeder \(Nissin\)](#)

- 33603-053-650 \$1.91 1
- 35340-MA5-671 \$16.26 1
- 43352-568-003 \$5.52 1

004 Cap, Bleeder	43353-461-771	\$3.77	1
005 Superseded by part #45125-MM9-013 below:	45125-MM9-003	---	1
005 Hose, Brake (Upper)This part is no longer available.	45125-MM9-013	---	1
006 Superseded by part #45126-MM9-020 below:	45126-MM9-000	---	1
006 Hose, Brake (Lower)This part is no longer available.	45126-MM9-020	---	1
007 Superseded by part #45127-KZ4-003 below:	45127-KA3-831	---	1
007 Joint, Brake Hose	45127-KZ4-003	\$13.48	1
008 Pipe, Fr. Brake	45135-MS8-000	\$18.65	1
009 Clip, Brake Hose	45461-MM9-670	\$8.20	1
010 Stay, Brake Hose	45462-MG2-010	\$4.35	1
011 Clamp, Fr.	45463-MM9-000	\$3.40	1
012 Superseded by part #45510-MM9-405 below:	45500-MM9-671ZA	---	1
012 M/Cyl Assy. *Nh138* (Shasta White)This part is no longer available.	45510-MM9-405	---	1
013 Boot	45504-410-003	\$8.09	1
014 Cap, Master Cylinder	45513-HA2-006	\$18.31	1
015 Holder, Master Cylinder	45517-166-006	\$9.03	1
016 Separator	45518-MG3-016	\$8.17	1
017 Diaphragm	45520-MG7-006	\$7.65	1
018 Plate, Diaphragm	45521-HA2-006	\$7.82	1
019 Superseded by part #45530-HB9-006 below:	45530-MG3-305	---	1
019 Master Cylinder Set	45530-HB9-006	\$37.97	1
020 Lever, R. Handle	53175-MM9-006	\$28.05	1
021 Guard, R. *Nh138* (Shasta White)	53180-MK5-000ZA	\$31.51	1
022 Bolt, Handle Lever Pivot	90113-KF0-770	\$4.25	1
023 Collar (6 X4)	90127-KF0-770	\$3.06	1
024 Superseded by part #90145-KM3-751 below:	90145-KM3-750	---	1

024 Bolt, Oil (10 X22)	90145-KM3-751	\$7.20	1
025 Washer, Oil Bolt	90545-300-000	\$2.33	4
026 Circlip	90651-MA5-671	\$2.62	1
027 Superseded by part #93600-04012-0G below:	93600-04012-1G	---	2
027 Screw, Flat (4 X12)	93600-04012-0G	\$1.09	2
028 Superseded by part #93893-04012-07 below:	93893-04012-17	---	1
028 Screw Washer (4 X12)	93893-04012-07	\$1.70	1
029 Nut, Flange (6 Mm)	94050-06000	\$1.05	2
030 Nut, Flange (6 Mm)	94050-06070	\$1.78	3
031 Bolt, Flange (6 X25)	95701-06025-07	\$1.81	1
032 Bolt, Flange (6 X10)	96001-06010-00	\$1.49	3
033 Bolt, Flange (6 X12)	96001-06012-00	\$1.89	1
034 Bolt, Flange (6 X12)	96001-06012-07	\$1.49	2
035 Bolt, Flange (6 X22)	96001-06022-07	\$2.09	2

HANDLE SWITCH:



001 [Cable A, Throttle](#)

002 [Cover, Throttle Cable](#)

003 [Cable B, Throttle](#)

004 Superseded by part #22870-MAB-620 below:

004 [Cable, Clutch](#)

17910-MM9-000 \$23.62 1

17913-KB7-000 \$8.22 1

17920-MM9-000 \$25.51 1

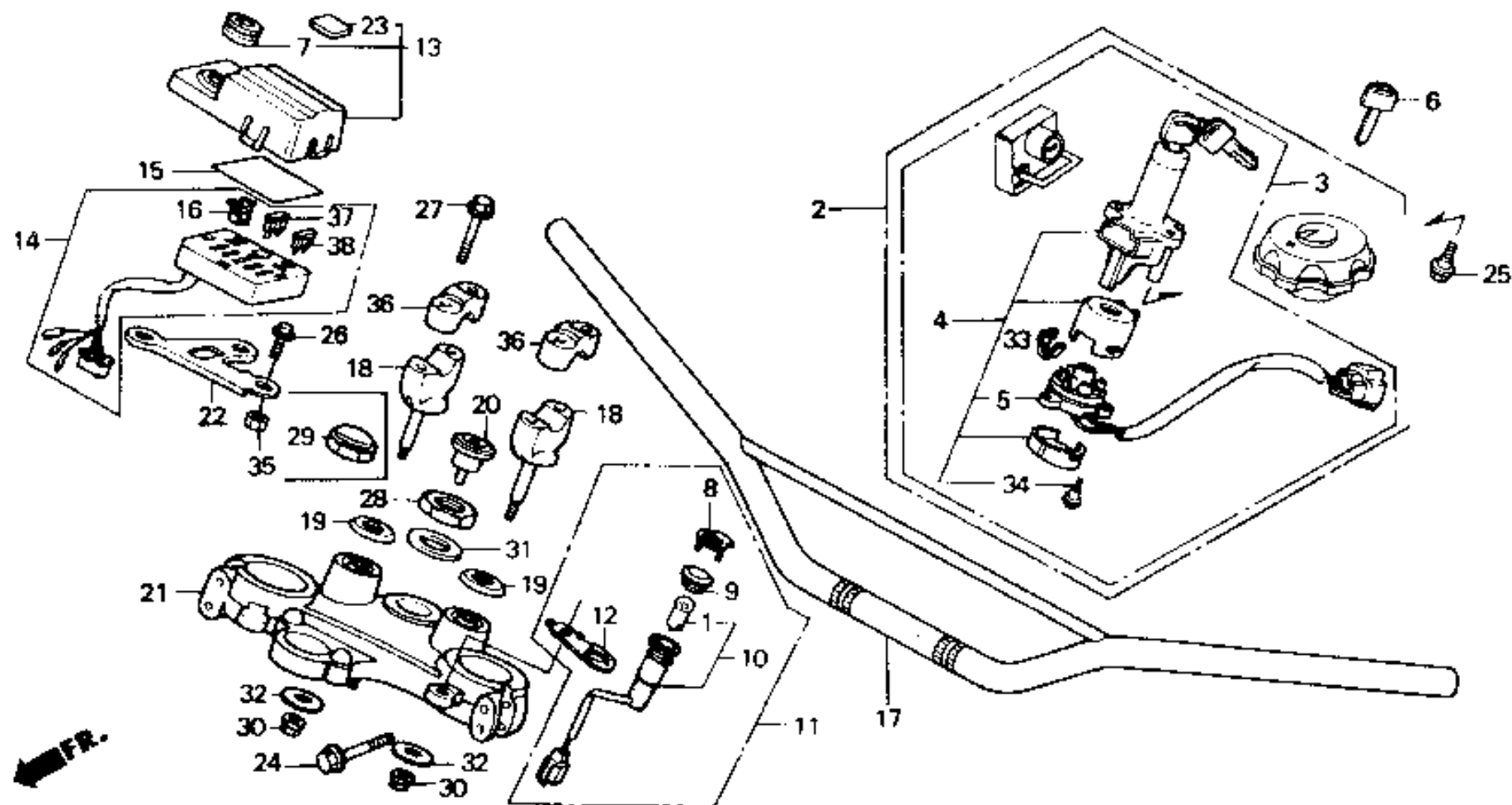
22870-MM9-000 --- 1

22870-MAB-620 \$18.05 1

005 Superseded by part #17961-MG2-010 below:	17961-MG2-000	---	1
005 Lever, Choke	17961-MG2-010	\$11.98	1
006 Superseded by part #17950-MS8-000 below:	17950-MM9-000	---	1
006 Cable, Choke	17950-MS8-000	\$43.22	1
007 Band B1, Wire	32161-404-000	\$2.74	2
008 Switch, Starter Stop	35130-MM9-720	\$44.83	1
009 Switch, Turn SignalThis part is no longer available.	35200-MM9-720	---	1
010 Switch Assy., Clutch	35330-MK5-003	\$11.80	1
011 Superseded by part #53141-429-010 below:	53141-429-000	---	1
011 Pipe, Throttle Grip	53141-429-010	\$14.89	1
012 Superseded by part #53165-MGW-305 below:	53165-MK5-010	---	1
012 Grip, R. Handle	53165-MGW-305	\$6.36	1
013 Superseded by part #53166-MGW-305 below:	53166-MK5-010	---	1
013 Grip, L. Handle (Coo)	53166-MGW-305	\$7.47	1
014 Housing, Throttle (Upper)	53167-KB7-000	\$28.14	1
015 Housing, Throttle (Lower)	53168-MG7-000	\$24.92	1
016 Slider, Throttle Cable	53169-KB7-000	\$5.88	1
017 Bracket, L. Handle Lever	53172-MK5-000	\$19.51	1
018 Holder, L. Lever Bracket	53174-KE1-000	\$10.46	1
019 Plate, Point	53176-MM9-000	\$3.62	1
020 Cover, L. Handle Lever	53177-MK5-000	\$5.88	1
021 Lever, L. Handlebar	53178-MG7-003	\$20.38	1
022 Guard, L. *Nh138* (Shasta White)	53185-MK5-000ZA	\$31.51	1
023 Bolt, Wire Adjusting	53192-KA4-710	\$6.87	1
024 Mirror	88210-MM9-000	\$15.86	2
025 Cover, Lock Nut	88112-MM9-000	\$6.78	2

026 Bolt, Lever Pivot	90114-MK5-000	\$5.98	1
027 Collar (6 X4)	90127-KF0-770	\$3.06	1
028 Superseded by part #90321-KF0-000 below:	90321-KA4-700	---	1
028 Nut, Fixing	90321-KF0-000	\$6.37	1
029 Washer (8 Mm)	90405-463-000	\$3.12	1
030 Washer, Wave	90406-KF0-003	\$2.84	4
031 Washer B	90554-240-000	\$1.51	1
032 Superseded by part #92101-05012-0G below:	92201-05012-0A	---	1
032 Bolt, Hex. (5 X12)	92101-05012-0G	\$0.99	1
032 Superseded by part #92101-05012-0G below:	92101-05012-0A	---	1
032 Bolt, Hex. (5 X12)	92101-05012-0G	\$0.99	1
033 Screw, Pan (4 X32)	93500-04032-0G	\$0.99	1
034 Screw, Pan (4 X45)	93500-04045-0G	\$1.22	1
035 Screw, Pan (5 X16)	93500-05016-0G	\$1.15	4
036 Screw, Pan (5 X20)	93500-05020-0G	\$1.04	2
037 Screw, Tapping (3 X12)	93901-32320	\$1.15	1
038 Superseded by part #94001-06200-0S below:	94001-06000-0S	---	2
038 Nut, Hex. (6 Mm)	94001-06200-0S	\$0.49	2
039 Nut, Lock (Left Hand Thread)	90301-KBA-900	\$1.54	2
040 Rubber, Mounting	88255-MM9-000	\$4.07	2
041 Superseded by part #90303-428-900 below:	94050-10070	---	7
041 Nut, Flange (10 Mm)	90303-428-900	\$3.31	7

HANDLE BAR:



001 Superseded by part #37237-SA5-003 below:

001 [Bulb \(14 V 3.4 W\) \(Ns\)](#)

001 Superseded by part #37237-SA5-003 below:

001 [Bulb \(14 V 3.4 W\) \(Ns\)](#)

37237-SA5-004 --- 3

37237-SA5-003 \$3.46 3

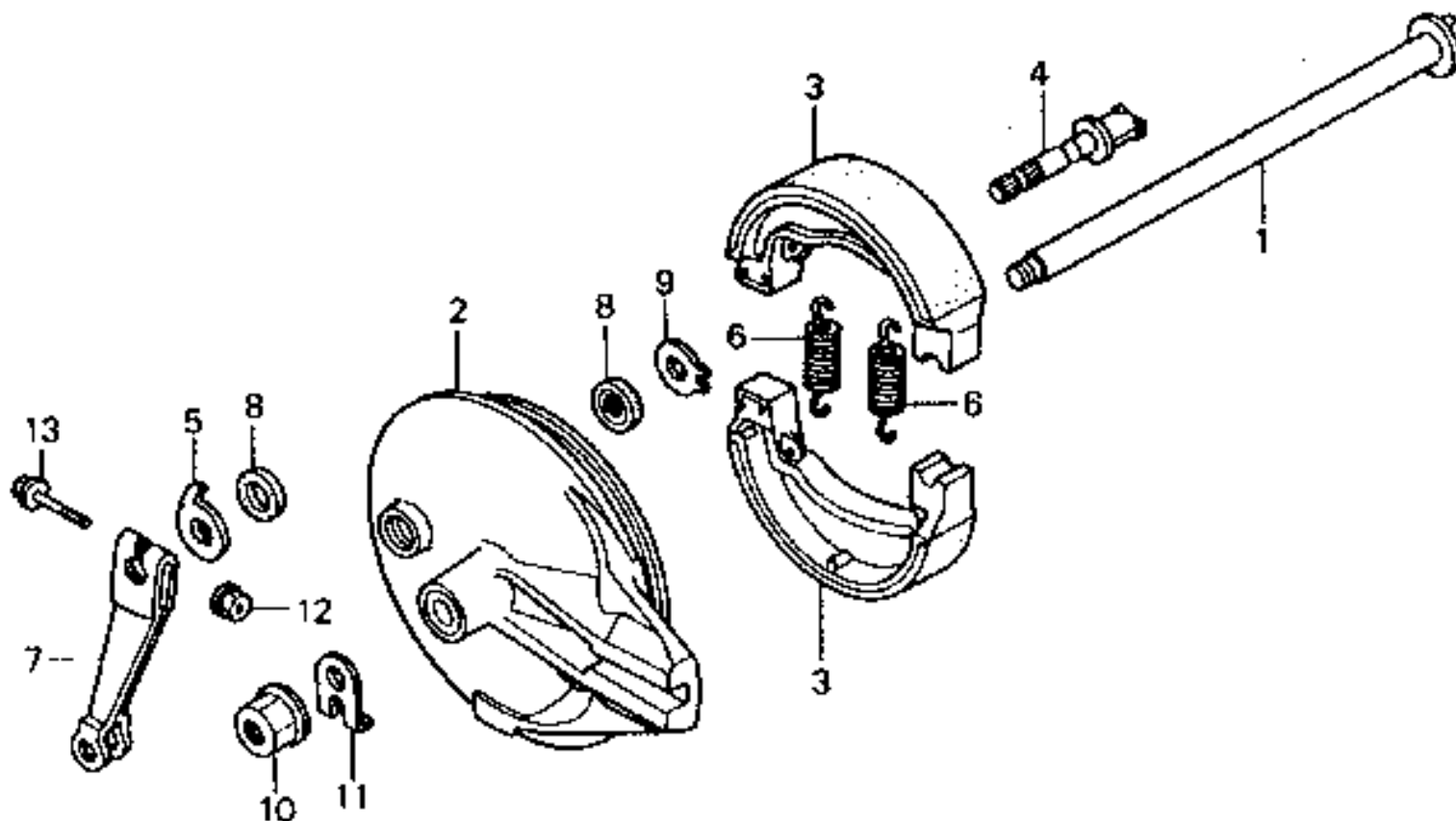
34908-GA7-701 --- 3

37237-SA5-003 \$3.46 3

001 Superseded by part #37237-SA5-003 below:	37102-567-009	---	3
001 Bulb (14 V 3.4 W) (Ns)	37237-SA5-003	\$3.46	3
003 Superseded by part #35010-MM9-852 below:	35010-MM9-850	---	1
003 Lock SetThis part is no longer available.	35010-MM9-852	---	1
003 Superseded by part #35010-MM9-852 below:	35010-MM9-851	---	1
003 Lock SetThis part is no longer available.	35010-MM9-852	---	1
004 Superseded by part #35100-MS8-020 below:	35100-MM9-007	---	1
004 Switch Assy.	35100-MS8-020	\$95.91	1
004 Superseded by part #35100-MS8-020 below:	35100-MM9-017	---	1
004 Switch Assy.	35100-MS8-020	\$95.91	1
004 Superseded by part #35100-MS8-020 below:	35100-MM9-027	---	1
004 Switch Assy.	35100-MS8-020	\$95.91	1
005 Superseded by part #35101-MM9-013 below:	35101-MM9-003	---	1
005 Base, Contact	35101-MM9-013	\$43.28	1
006 Key, Blank (Type 1) (Key No. Axx / Bxx)	35121-KW3-771	\$7.27	0
006 Key, Blank (Type 2) (Key No. Cxx / Dxx)	35122-KW3-771	\$7.27	0
007 Grommet	37312-KB7-008	\$3.34	1
008 Panel, Side Stand	37556-MM9-830	\$3.40	1
009 Lens	37561-GB7-641	\$6.75	1
010 Socket	37562-MS8-000	\$9.06	1
011 Lamp, Side Stand	37570-MM9-670	\$23.62	1
012 Stay	37590-MN9-000	\$7.67	1
013 Cover, Ignition Switch	37610-MS6-620	\$20.75	1
014 Plate Assy., Fuse	38200-MM9-013	\$37.92	1
015 Label, Fuse	38215-MM9-300	\$3.66	1
016 Puller, Fuse	38235-SA5-004	\$3.64	1

017	Handlebar This part is on backorder.	53100-MM9-000	\$70.64	1
018	Hldr, Handle (Lower)	53132-KL3-670	\$18.86	2
019	Cap, Handlebar	53135-KA3-730	\$3.77	2
020	Cap, Steering StemThis part is no longer available.	53208-KB7-870	---	1
021	Bridge, Fork Top	53220-MK5-000	\$185.90	1
022	Stay, Fuse Case	61312-MM9-000	\$12.54	1
023	MAS335, Wing	87122-KY7-910	\$8.28	1
024	Bolt, Flange (8 X45)	90103-MM9-000	\$3.50	4
025	Bolt, Flange (8 X19)	90104-MJ1-000	\$4.25	2
026	Bolt, Flange (8 X25)	90107-MS9-000	\$3.50	1
027	Bolt, Flange (8 X36)	90111-362-000	\$3.58	4
028	Nut, Steering StemThis part is no longer available.	90304-KA2-000	---	1
030	Superseded by part #90309-428-731 below:	90309-KF0-003	---	1
030	Nut, Flange (M8 X1.25) (Self Lock)	90309-428-731	\$3.20	1
031	Washer	90503-349-690	\$3.50	1
032	Washer, Handle Cushion	90535-KB9-000	\$4.43	2
033	Band, Self Lock	91058-MG9-681	\$2.69	2
034	Superseded by part #91059-KY2-711 below:	91059-MK4-601	---	3
034	Screw, Tapping (3 X16)	91059-KY2-711	\$2.96	3
035	Nut, Hex. (8 Mm)	94001-08070-0S	\$1.48	2
036	Holder B2, Handlebar (Upper)	95014-22200	\$8.06	2
037	Fuse, Blade (10 A)	98200-31000	\$1.63	4
038	Fuse, Blade (15 A)	98200-31500	\$1.63	2

REAR BRAKE:

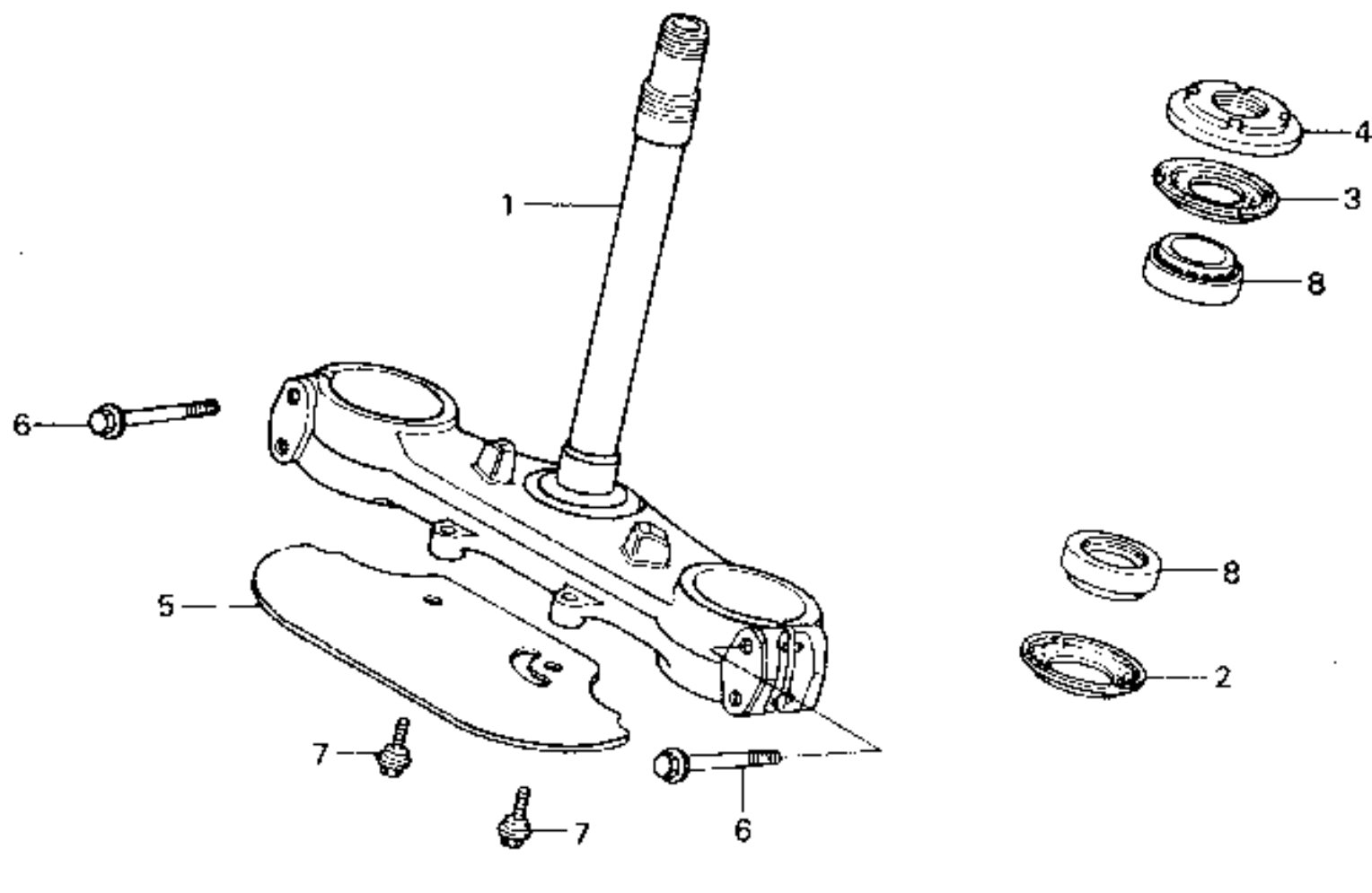


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NI	Superseded by part #06430-GBJ-740 below:	431A2-429-010	---	1
NI	Shoe Set, Brake (Qty 2)	06430-GBJ-740	\$25.06	1
001	Superseded by part #42301-MS6-621 below:	42301-MM9-000	---	1
001	Axle, Rr. WheelThis part is no longer available.	42301-MS6-621	---	1

002 Superseded by part #43100-MN9-670ZB below:	43100-MM9-000	---	1
002 Panel, Rr. Brake	43100-MN9-670ZB	\$139.31	1
003 Superseded by part #06430-GBJ-740 below:	43120-429-010	---	2
003 Shoe Set, Brake (Qty 2)	06430-GBJ-740	\$25.06	2
004 Cam, Rr. Brake	43141-MC4-000	\$23.22	1
005 Indicator, Rr. Brake	43145-MM9-000	\$3.35	1
006 Spring, Brake Shoe	43151-329-000	\$2.56	2
007 Superseded by part #43410-MS6-620 below:	43410-MM9-000	---	1
007 Arm, Rr. BrakeThis part is no longer available.	43410-MS6-620	---	1
008 Dust Seal, Brake Cam (Nok)	45134-KB7-005	\$2.96	2
009 Seat, Fr. Brake CamThis part is no longer available.	45142-KB7-000	---	1
010 Nut, Flange (16 Mm)	90305-ME5-003	\$3.82	1
011 Washer, Rr. Axle	90559-MM9-000	\$7.52	1
012 Nut, Flange (6 Mm)	94050-06000	\$1.05	2
013 Bolt, Flange (6 X32)	95701-06032-00	\$1.81	2

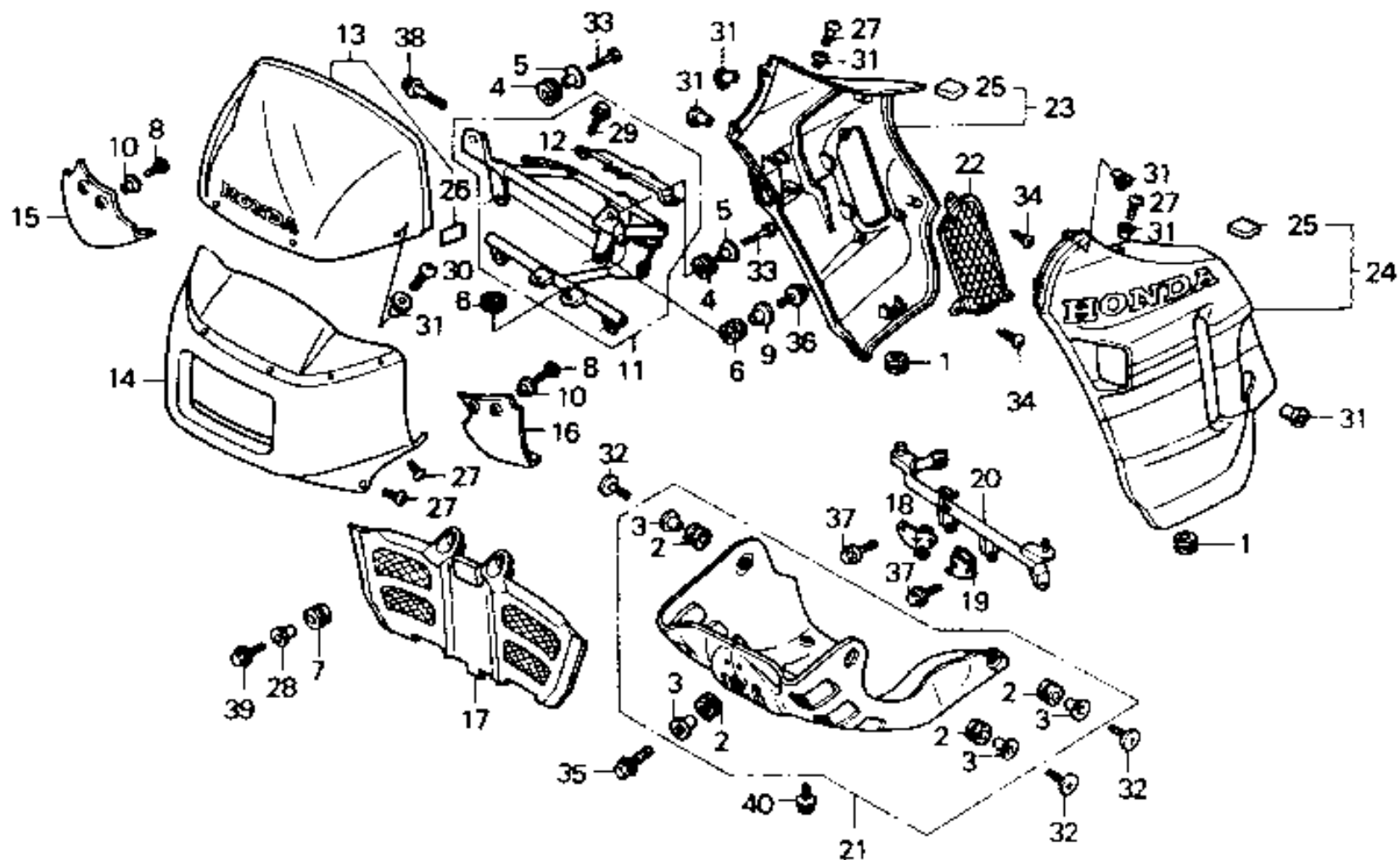
STEERING STEM:



001 Stem, Steering	53200-MM9-000	\$211.36	1
002 Dust Seal, Steering Head (Arai)	53214-KA4-701	\$4.95	1
003 Superseded by part #53214-MM9-003 below: 53214-MM9-005	---		1

003	Dust Seal	53214-MM9-003	\$5.42	1
004	Thread	53229-KN5-650	\$15.62	1
005	Plate, Air Guide	61120-MM9-000	\$13.97	1
006	Bolt, Flange (8 X40)	90107-KF0-000	\$4.00	4
007	Bolt, Flange (6 Mm)	90111-ML0-730	\$3.50	2
008	Bearing, Head Pipe (Upper) (Nachi)	91015-425-832	\$20.63	2

COWL:



FR.

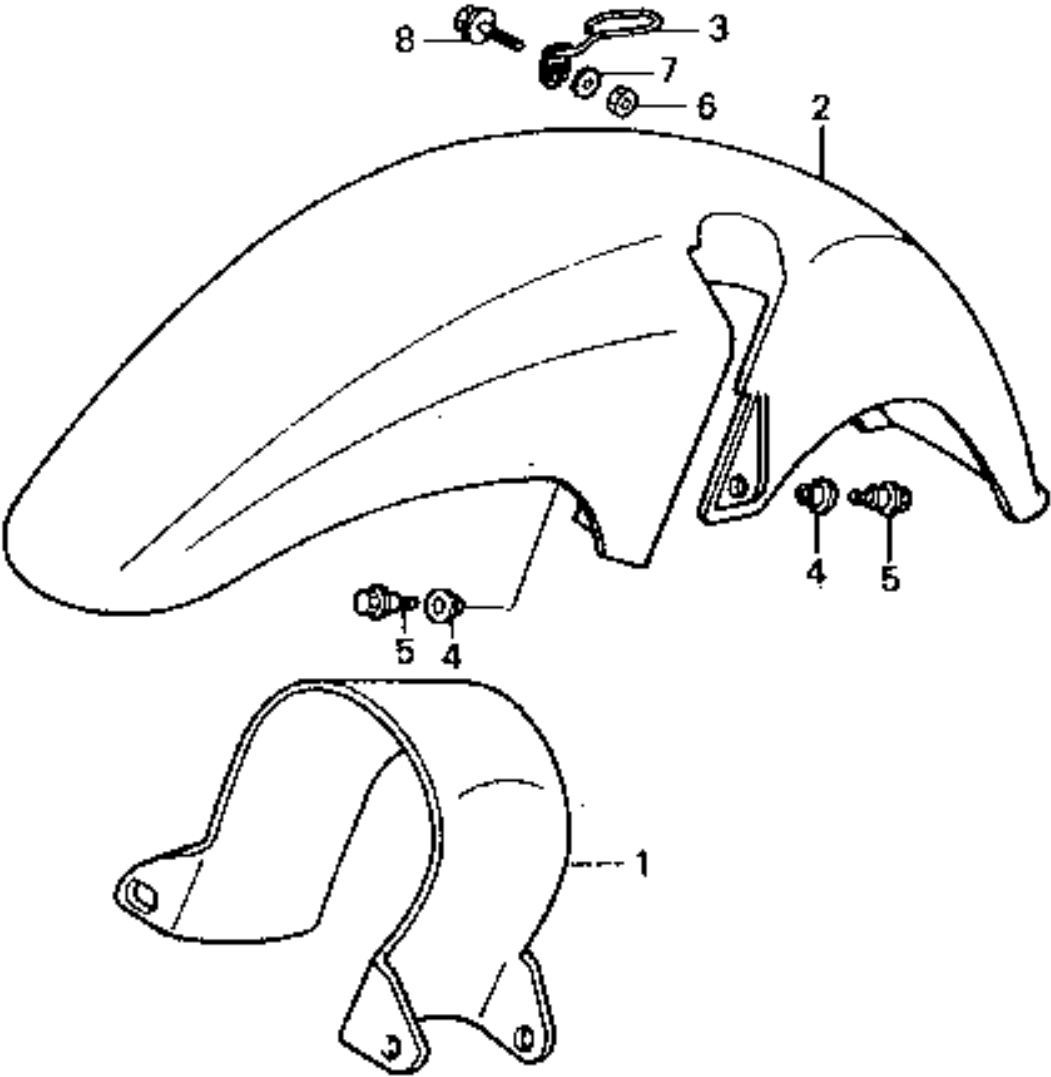
- 001 [Grommet, Air Cleaner Housing](#)
- 002 [Cushion, Fr. Fuel Tank](#)
- 003 [Collar](#)

17251-KE8-690	\$2.36	4
17611-MB1-000	\$3.26	2
17612-KR3-600	\$4.35	5

004 Rubber	19051-GE2-000	\$3.37	1
005 Collar, Radiator Mounting	19052-MB0-000	\$4.73	3
006 Rubber	33157-MJ0-000	\$3.57	2
007 Rubber, Taillight	33712-KT1-670	\$4.00	2
008 Screw, Cross Recessed Head Machine	52426-KM4-003	\$2.80	1
009 Collar	61104-430-000	\$4.07	2
010 Collar	61304-HB9-000	\$2.96	4
011 Stay Assy., Fr. Cowl	61310-MM9-000	\$187.81	1
012 Stay, Speedometer	61311-MM9-000	\$24.69	1
013 Screen, Fr.This part is no longer available.	61320-MM9-670	---	1
014 Cowl *Nh193 P* (Pearl Crystal White)This part is no longer available.	64201-MM9-000ZA	---	1
015 Pnl, R. Cowl *Nh200* (Glen Gray)This part is no longer available.	64202-MM9-000ZA	---	1
016 Pnl, L. Cowl *Nh200* (Glen Gray)This part is no longer available.	64203-MM9-000ZA	---	1
017 Superseded by part #64206-MAW-760 below:	64206-MM9-000	---	1
017 Cowl, Center	64206-MAW-760	\$65.40	1
018 Stay, R. Cowl	64207-MS8-000	\$8.51	1
019 Stay, L. Cowl	64208-MS8-000	\$8.20	1
020 Pipe, Cowl Mounting (Lower)	64209-MM9-000	\$55.89	1
020 Pipe, Cowl Mounting	64209-MM9-860	\$66.25	1
021 Cowl *Nh193 P* (Pearl Crystal White)This part is no longer available.	64210-MS6-620ZB	---	1
022 Cover, R. Air Duct	64215-MM9-000	\$31.51	1
023 Cowl Set *Nh193 P* (Pearl Crystal White)This part is no longer available.	64220-MM9-670ZA	---	1
024 Cowl Set *Nh193 P* (Pearl Crystal White)This part is no longer available.	64230-MM9-670ZA	---	1
025 Rubber, Side Cover	83609-KV3-300	\$2.86	1
026 Label, Windshield	87522-MM9-670	\$2.96	1
027 Screw (5 X16)	90001-MG1-000	\$4.00	2

028 Colr, Side Mounting	90001-961-670	\$3.80	3
029 Bolt, Special (6 X12)	90018-KV0-000	\$2.84	3
030 Screw, Truss (5 X16)	90109-SB6-000	\$3.74	4
031 Nut (5 Mm)	90111-MM9-000	\$5.85	2
032 Screw, Cowl Setting (Lower)	90124-MM9-000	\$3.66	1
033 Superseded by part #92301-06022-0A below:	92301-06022-1A	---	4
033 Bolt (6 X22)	92301-06022-0A	\$1.41	4
034 Screw, Tapping (5 X8)	93901-25010	\$0.99	3
035 Superseded by part #95701-06022-00 below:	95700-06022-00	---	1
035 Bolt, Flange (6 X22)	95701-06022-00	\$0.99	1
036 Superseded by part #95701-06022-07 below:	95700-06022-07	---	2
036 Bolt, Flange (6 X22)	95701-06022-07	\$1.41	2
037 Bolt, Flange (6 X12)	95701-06012-00	\$1.10	2
038 Bolt, Flange (8 X40)	95801-08040-08	\$2.03	2
039 Bolt, Flange (6 X18)	96500-06018-07	\$1.63	2
040 Superseded by part #96300-06022-00 below:	96500-06022-00	---	4
040 Bolt, Flange (6 X22)	96300-06022-00	\$1.63	4

FRONT FENDER:

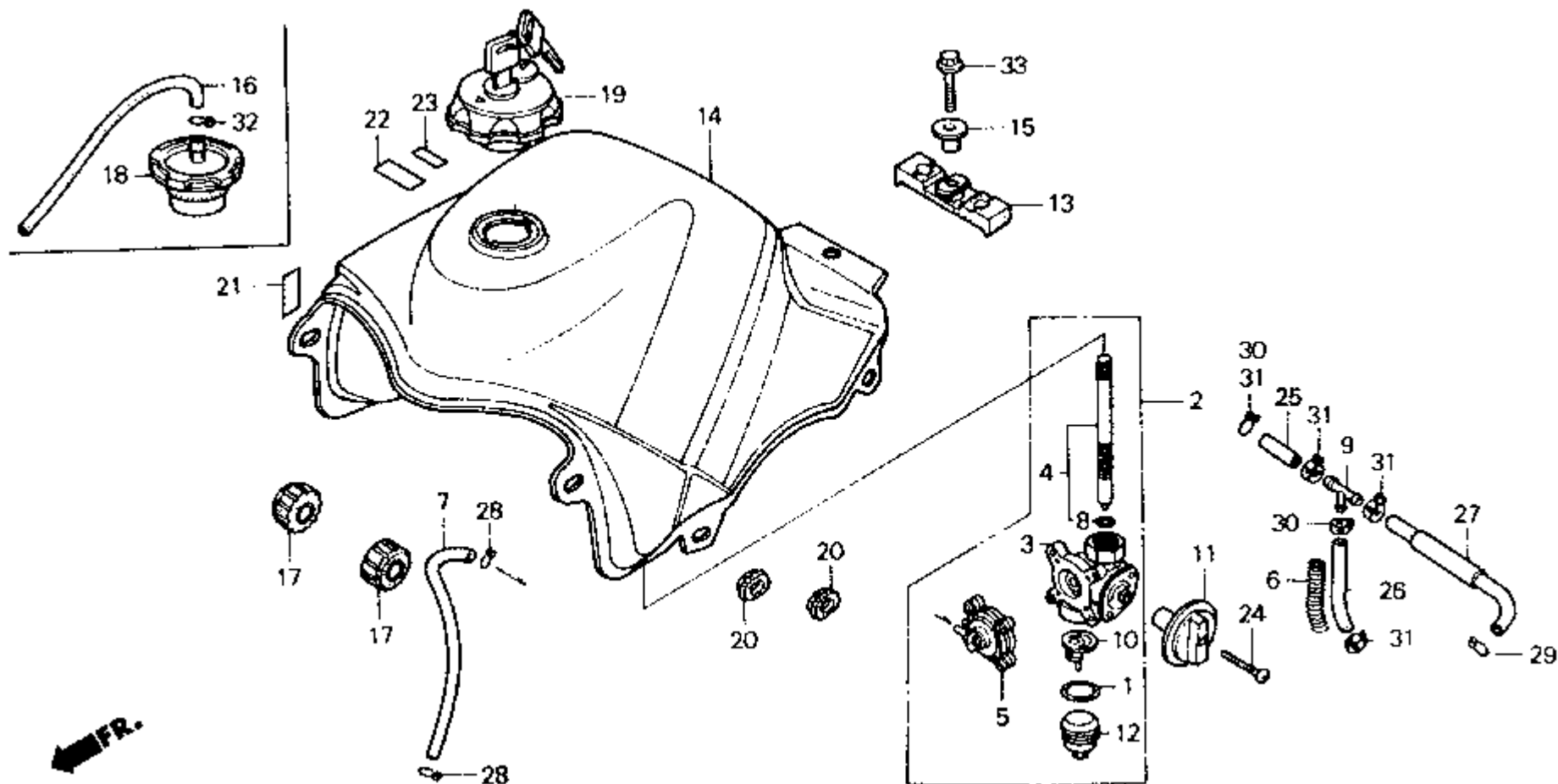


001 Superseded by part #53240-MAW-760 below:

53240-MM9-000 --- 1

001 Brace, Fr. Fork	53240-MAW-760	\$25.02	1
002 Fender, Fr. *Nh193 P* (Pearl Crystal White)This part is no longer available.	61100-MM9-000ZA	---	1
003 Guide	61101-MS6-620	\$9.29	1
004 Collar, Fr. Fender	61104-428-000	\$3.55	2
005 Bolt, Fr. Fender Fixing	90106-MM9-000	\$2.96	1
006 Superseded by part #94001-06020-0S below:	94030-06020	---	1
006 Nut, Hex. (6 Mm)	94001-06020-0S	\$1.44	1
006 Superseded by part #94001-06020-0S below:	94030-06200	---	1
006 Nut, Hex. (6 Mm)	94001-06020-0S	\$1.44	1
007 Washer, Plain (6 Mm)	94103-06400	\$1.07	2
008 Superseded by part #96300-06012-07 below:	96500-06012-07	---	2
008 Bolt, Flange (6 X12)	96300-06012-07	\$1.49	2

FUEL TANK:



FR.

001 [Gasket, Fuel Strainer Cup](#)

002 Superseded by part #16950-MM9-013 below:

002 [Petcock Assy., Auto](#)

003 [Body, Petcock](#)

16173-001-004 \$3.87 1

16950-MM9-003 --- 1

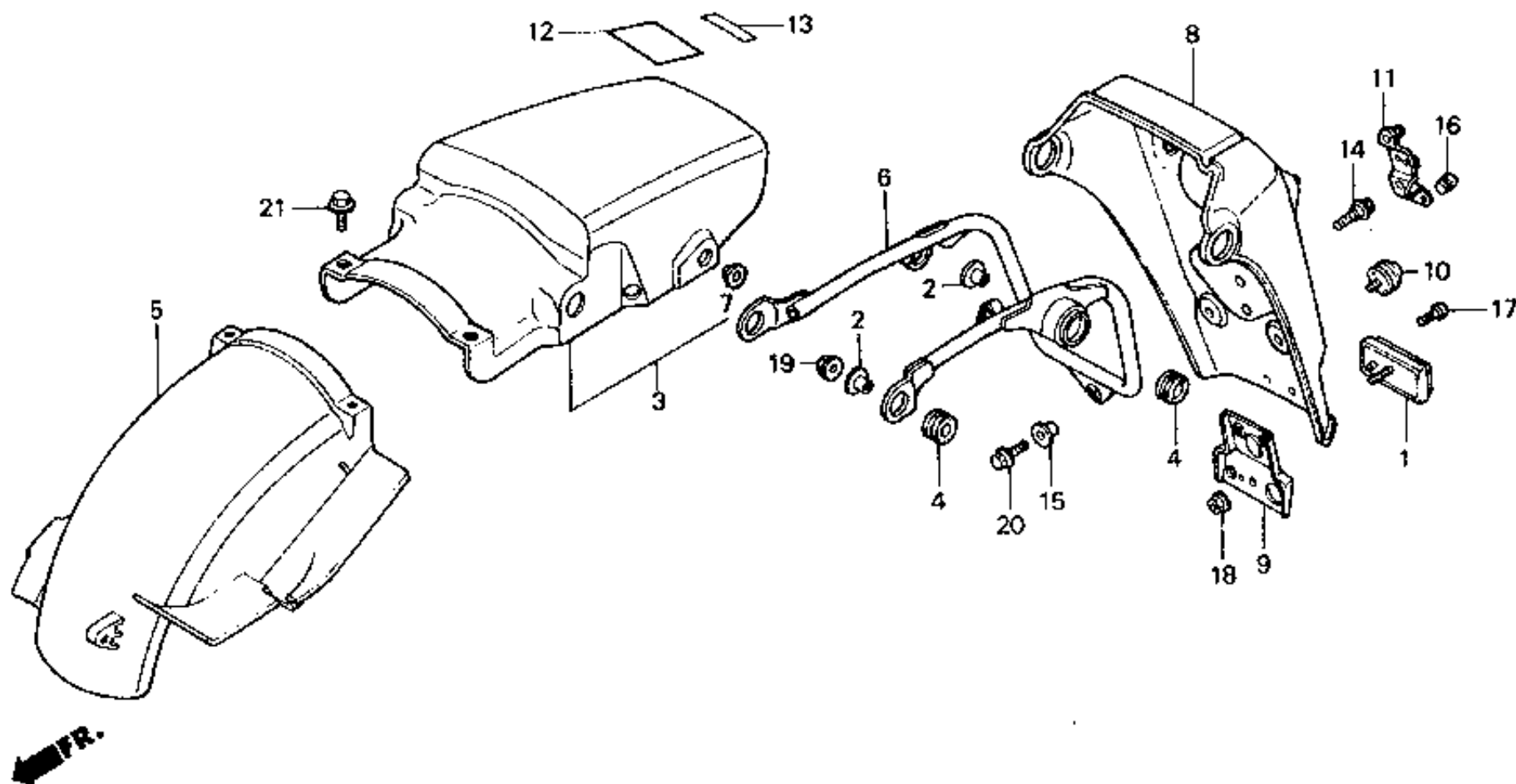
16950-MM9-013 \$162.17 1

16951-MA1-732 \$71.37 1

004 Superseded by part #16952-MM9-305 below:	16952-MM2-003	---	1
004 Screen Set	16952-MM9-305	\$23.52	1
005 Superseded by part #16953-ME5-025 below:	16953-ME5-015	---	1
005 Cover Set, PetcockThis part is no longer available.	16953-ME5-025	---	1
005 Superseded by part #16953-ME5-025 below:	16953-ME5-005	---	1
005 Cover Set, PetcockThis part is no longer available.	16953-ME5-025	---	1
006 Wire A, Guard	16953-MM9-000	\$5.33	1
007 Tube (3.5 X300)	16956-MM9-000	\$7.65	1
008 Superseded by part #16075-GHB-720 below:	16958-MA1-731	---	1
008 O Ring,1.3 X10.6	16075-GHB-720	\$2.69	1
008 Superseded by part #16075-GHB-720 below:	16195-657-300	---	1
008 O Ring,1.3 X10.6	16075-GHB-720	\$2.69	1
009 Joint, Fuel Tube	16958-MB0-000	\$7.87	1
010 Filter, Cup	16959-461-751	\$11.20	1
011 Superseded by part #16965-MAW-760 below:	16965-MM9-000	---	1
011 Lever, Petcock	16965-MAW-760	\$21.48	1
012 Cup, Fuel Strainer	16967-GA6-671	\$15.49	1
013 Superseded by part #17509-MAW-760 below:	17503-MM9-000	---	1
013 Rubber, Rr. TankThis part is no longer available.	17509-MAW-760	---	1
014 Tank, Fuel *Nh193 P* (Pearl Crystal White)This part is no longer available.	17520-MM9-780ZA	---	1
015 Collar	17525-KG7-830	\$4.20	1
016 Tube	17530-437-000	\$6.05	1
017 Cushion, Fr.	17611-MM9-000	\$8.25	2
018 Superseded by part #17620-KE1-013 below:	17620-KE1-003	---	1
018 Cap, Fuel Filler	17620-KE1-013	\$23.62	1
019 Superseded by part #17620-KV6-033 below:	17620-KV6-023	---	1

019 Fuel Fill Cap	17620-KV6-033	\$62.78	1
019 Superseded by part #17620-KV6-033 below:	17620-KV6-013	---	1
019 Fuel Fill Cap	17620-KV6-033	\$62.78	1
020 Grommet, Air Cleaner Housing	83551-300-000	\$3.26	2
021 Label, Radiator	87508-MM9-670	\$3.66	1
022 Label, Drive (Typeg)This part is no longer available.	87560-KY7-910ZC	---	1
023 Label, Fuel (Typeg)	87586-MR6-670ZA	\$2.96	1
024 Screw, Pan (5 X32)	90020-MM9-000	\$2.62	1
025 Bulk Hose, Fuel (7.5 X8000)	95001-75008-60M	\$59.08	1
026 Bulk Hose, Fuel (7.5 X8000)	95001-75008-60M	\$59.08	1
027 Bulk Hose, Fuel (7.5 X8000)	95001-75008-60M	\$59.08	1
028 Clip, Tube (B7)	95002-02070	\$1.51	2
029 Clip, Tube (B12)	95002-02120	\$1.15	2
031 Clamp, Tube (D12)	95002-41200-08	\$2.14	2
032 Clip, Tube (C9)	95002-50000	\$1.30	1
033 Bolt, Flange (8 X35)This part is no longer available.	95800-08035-00	---	1

REAR FENDER:



001 [Reflector, Reflex](#)

33741-MC7-612 \$9.62 1

002 [Collar \(8 X15\)](#)

80101-KB7-000 \$3.95 2

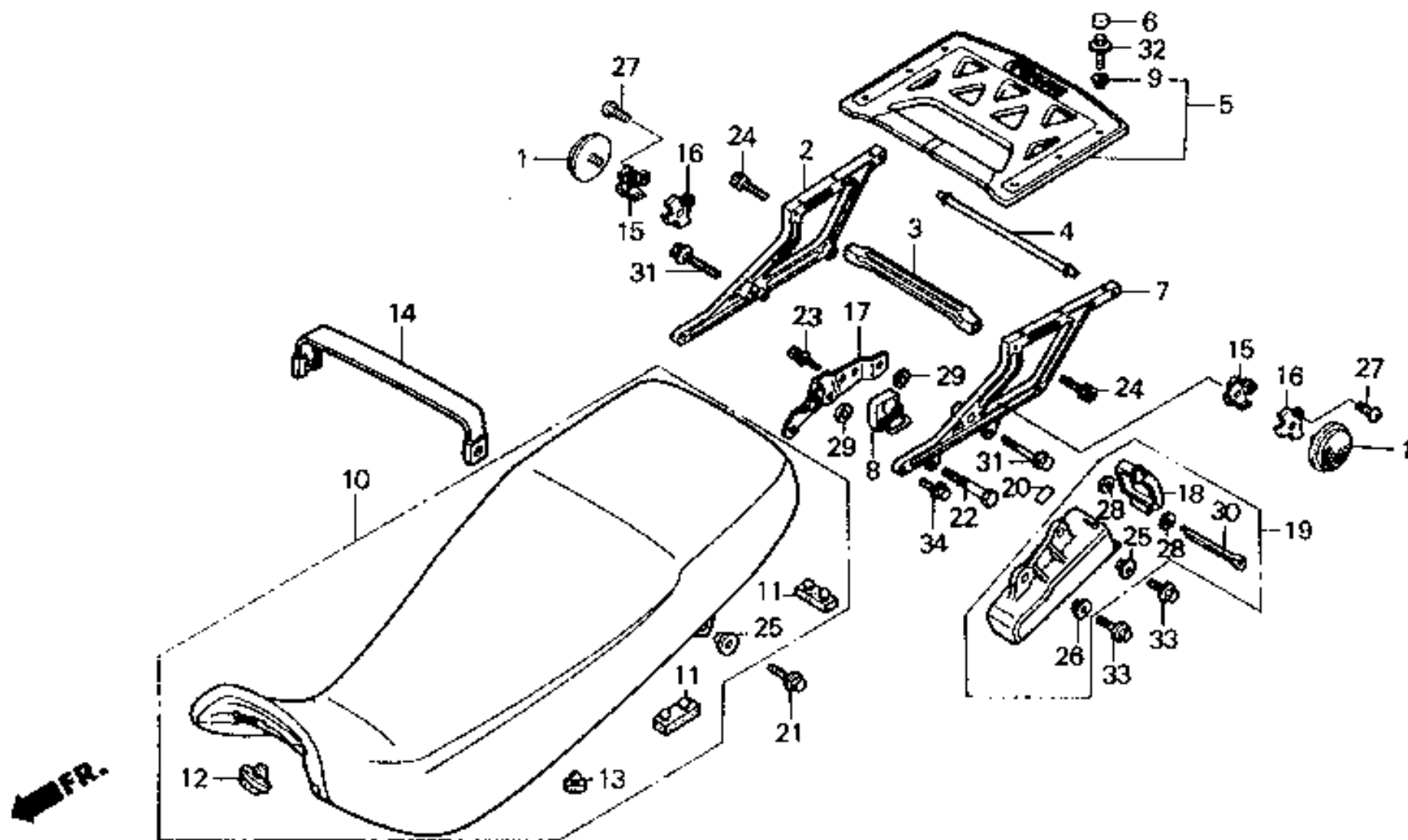
003 Fdr A, Rr. *Nh193 P* (Pearl Crystal White) This part is no longer available. 80101-MM9-000ZA --- 1

004 [Rubber, Mounting](#)

80102-KB7-000 \$3.86 4

005 Fender B, Rr.	80102-MM9-000	\$64.56	1
006 Stay, Rr. Fender	80105-MM9-000	\$64.56	1
007 Collar A, Rr. Fender	80126-GC5-000	\$3.13	2
008 Splash Guard, Rr.This part is no longer available.	80211-MM9-720	---	1
009 Stay, Reflector	80400-MG2-620	\$14.34	1
010 Plug, Rr. Cowl	80501-415-000	\$2.40	1
011 Stay This part is on backorder.	84702-MM9-720	\$7.83	1
012 Label	87512-MN9-870	\$4.73	1
013 Label, Rr. Carrier	87513-MN9-870	\$3.40	1
014 Bolt, Flange (6 Mm)	90112-MM9-000	\$3.50	1
015 Washer, Rr. Cover	90506-425-000	\$2.62	2
016 Plug, Cone Type	90899-422-610	\$2.29	4
017 Screw, Pan (5 X12)	93500-05012-0G	\$1.15	2
018 Nut, Flange (5 Mm)	94050-05070	\$1.30	1
019 Nut, Flange (8 Mm)	94050-08000	\$0.99	1
020 Bolt, Flange (6 X12)	95701-06012-07	\$1.44	4
021 Bolt, Flange (6 X16)	95701-06016-08	\$1.70	2

SEAT:



001 Superseded by part #33741-HB9-641 below:

33741-148-872

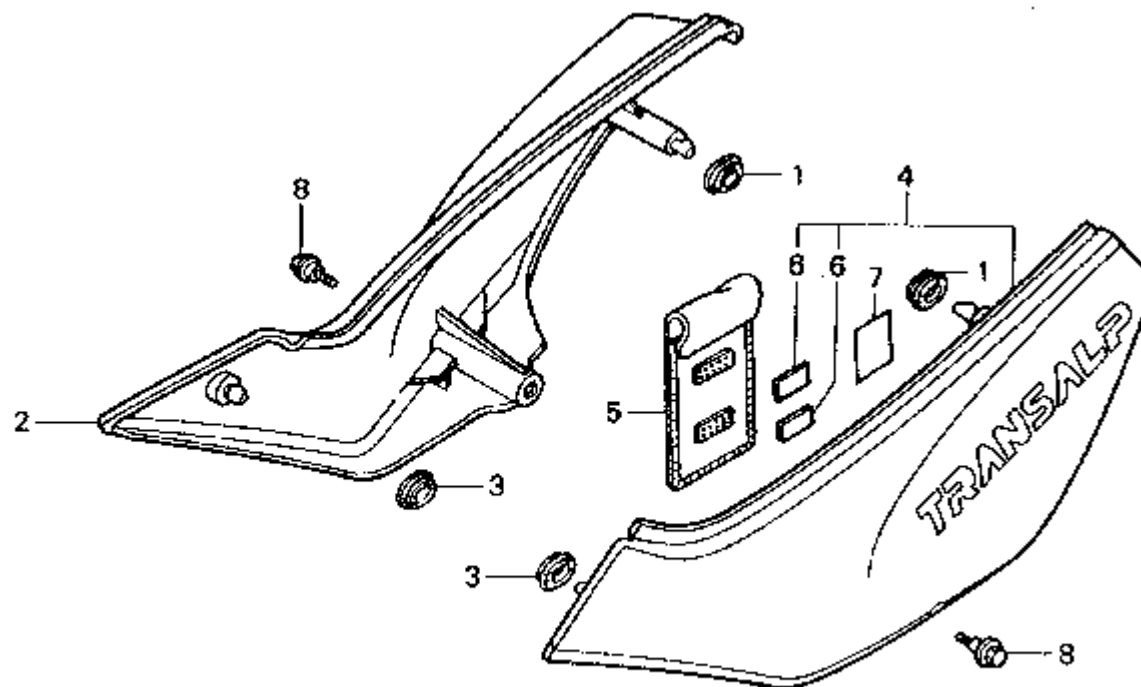
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001 Reflector, Rr. Reflex	33741-HB9-641	\$10.06	2
002 Superseded by part #50310-MAW-760 below:	50310-MAB-620	---	1
002 Carrier, R. Rr.	50310-MAW-760	\$27.75	1
002 Superseded by part #50310-MAW-760 below:	50310-MM9-000	---	1
002 Carrier, R. Rr.	50310-MAW-760	\$27.75	1
003 Superseded by part #50311-MAW-760 below:	50311-MK5-000	---	1
003 Grip, Passenger	50311-MAW-760	\$17.05	1
004 Pipe, Carrier Cross	50313-MK5-000	\$15.62	1
005 Base, Rr. Carrier	50315-MK5-000	\$25.48	1
006 Cup, Carrier Base	50316-MK5-000	\$3.24	6
007 Superseded by part #50320-MAW-760 below:	50320-MAB-620	---	1
007 Carrier, L Rr	50320-MAW-760	\$27.75	1
007 Superseded by part #50320-MAW-760 below:	50320-MK5-000	---	1
007 Carrier, L Rr	50320-MAW-760	\$27.75	1
008 Holder Assy., Helmet	50710-MG2-003	\$48.82	1
009 Collar, Fr.	61101-KB7-910	\$3.54	6
010 Seat, Double *Pb19 L* (Star Shine Blue)This part is no longer available.	77200-MM9-780ZA	---	1
011 Rubber, Seat Setting	77204-312-000	\$3.77	1
012 Rubber, Seat Stopper	77211-MB0-000	\$4.73	2
013 Rubber B, Seat Stopper	77215-GC2-000	\$3.77	4
014 Seat Belt *Pb19 L* (Star Shine Blue)	77216-MM9-780ZA	\$30.86	1
015 Stay, R. Reflector	80401-MM9-690	\$5.97	2
016 Stay, L. Reflector	80402-MM9-690	\$5.97	2
017 Stay, Tool Box	83502-MK5-000	\$17.57	1
018 Cap, Tool Box	83504-KG0-000	\$15.46	1
019 Superseded by part #83520-KBR-000 below:	83510-KG0-000	---	1

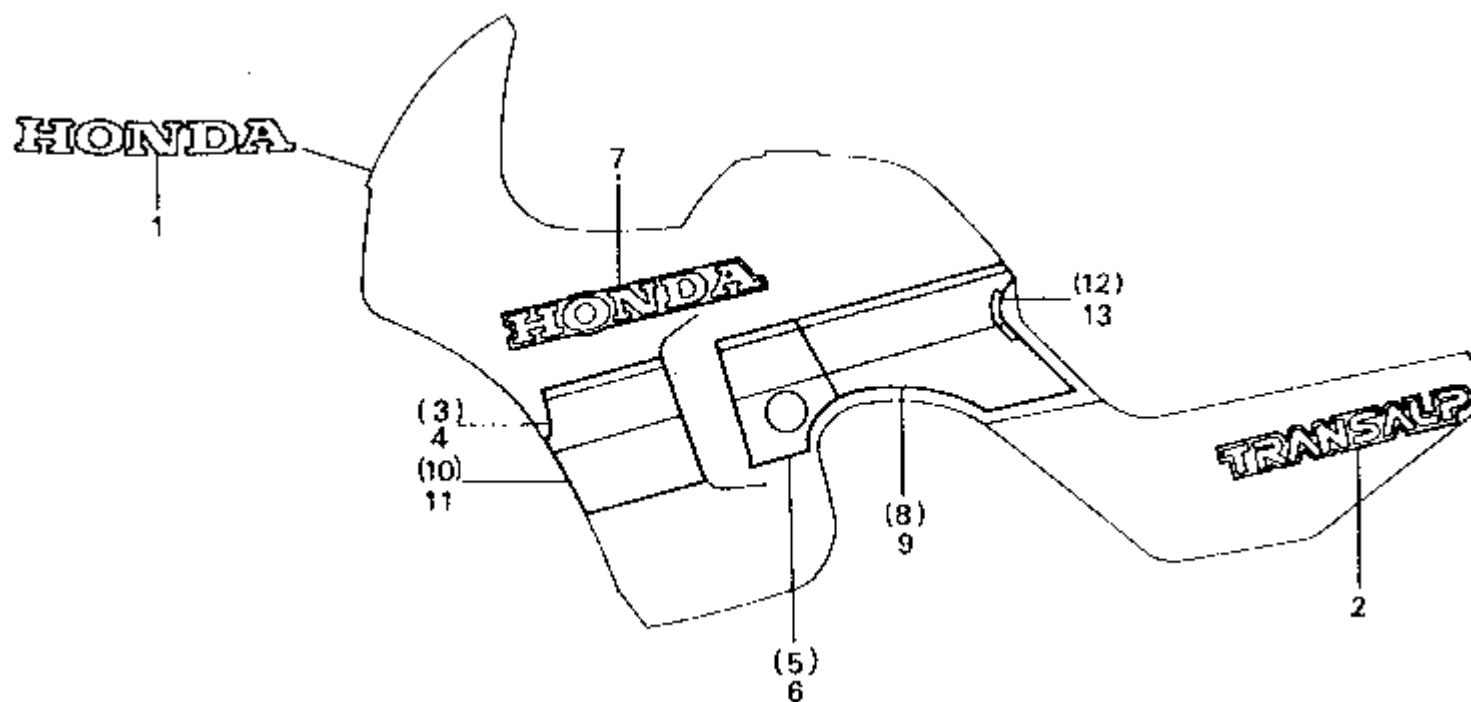
019 Box Assy., Tool	83520-KBR-000	\$40.71	1
020 Label, Helmet Holder	87511-323-670	\$2.27	1
021 Bolt, Flange (6 X20)	90104-GF6-000	\$3.00	1
022 Bolt, Seat LockThis part is no longer available.	90107-MA1-000	---	2
023 Superseded by part #90107-195-860 below:	90107-428-000	---	2
023 Bolt B (6 Mm)	90107-195-860	\$3.80	2
024 Bolt (8 Mm)	90116-KB7-910	\$3.70	2
025 Washer (6 X20)	90512-329-690	\$2.96	3
026 Washer (6 X9)	90513-405-000	\$1.54	2
027 Screw, Pan (5 X12)	93500-05012-0G	\$1.15	2
028 Washer, Plain (3 Mm)	94101-03000	\$0.99	2
029 Washer, Plain (6 Mm)	94101-06700	\$1.00	2
030 Pin, Split (3.0 X50)	94201-30500	\$0.99	1
031 Superseded by part #96300-08050-07 below:	96500-08050-07	---	2
031 Bolt, Flange (8 X50)	96300-08050-07	\$2.63	2
032 Superseded by part #96001-06018-00 below:	96000-06018-00	---	6
032 Bolt, Flange (6 X18)	96001-06018-00	\$1.49	6
033 Superseded by part #96300-06016-07 below:	96500-06016-07	---	2
033 Bolt, Flange (6 X16)	96300-06016-07	\$1.49	2
034 Superseded by part #96300-08016-07 below:	96500-08016-07	---	1
034 Bolt, Flange (8 X16)	96300-08016-07	\$1.49	1

SIDE COVERS:



001	Grommet, Rr. Cover	11346-MB4-770	\$3.64	2
002	Cover *Nh193 P* (Type1) (Pearl Crystal White)This part is no longer available.	83520-MM9-670ZA	---	1
003	Grommet, Air Cleaner Housing	83551-300-000	\$3.26	2
004	Cover *Nh193 P* (Type1) (Pearl Crystal White)This part is no longer available.	83620-MM9-670ZA	---	1
005	Bag, Owner's Manual	83642-GM2-000	\$12.09	1
006	Tape, Magic (25 X50) (Female)	83643-355-300	\$2.78	2
007	Diagram	87135-MM9-860	\$3.37	1
008	Bolt, Special (6 X14)	90102-MM9-010	\$2.84	2

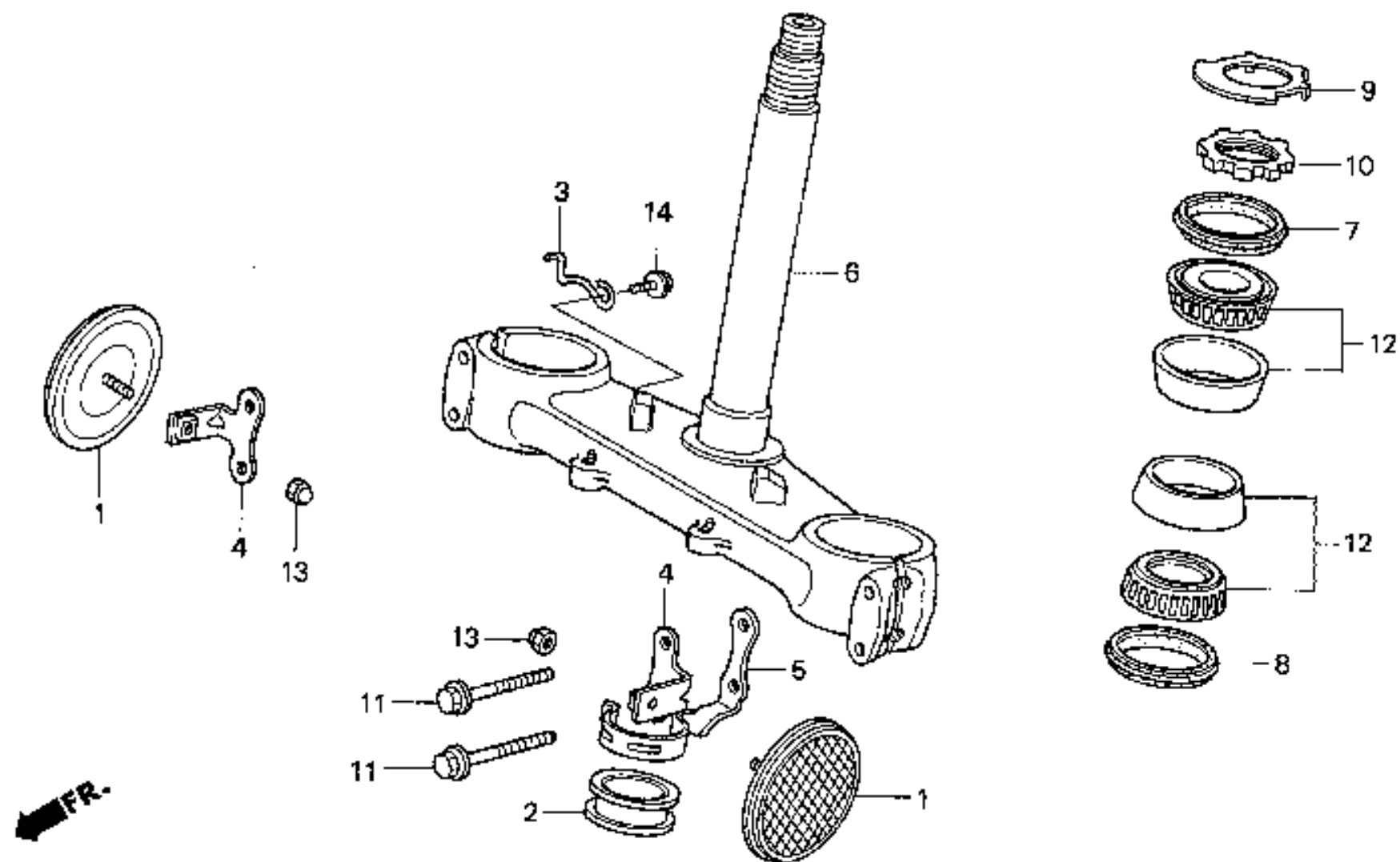
STRIPE:



001 MAS335, Fr. Screen	61321-MM9-300	\$7.95	1
002 MAS335 (Type1)	80133-MM9-720ZB	\$10.80	2
003 Stripe (1) (Type1)	87134-MM9-300ZA	\$22.95	1
004 Stripe (1) (Type1)	87135-MM9-300ZA	\$22.95	1
005 Stripe (2) (Type1) This part is no longer available.	87136-MM9-300ZA ---		1
006 Stripe (2) (Type1)	87137-MM9-300ZA	\$14.25	1
007 MAS335, Side Cowl	87138-MM9-670	\$17.80	2
008 Stripe, R. (Type1)	87141-MM9-300ZA	\$33.88	1
009 Stripe, L. (Type1)	87142-MM9-300ZA	\$33.88	1

010 Stripe 1, R.This part is no longer available.	87143-MM9-670	---	1
011 Stripe 1, L.	87144-MM9-670	\$14.09	1
012 Superseded by part #87157-MM9-300ZB below:	87157-MM9-300ZA	---	1
012 Sub Stripe (Type2)	87157-MM9-300ZB	\$3.94	1
013 Sub Stripe (Type1)	87158-MM9-300ZA	\$3.40	1

1994 XR650L STEERING STEM:



001 [Reflector, Fr. Reflex](#)

002 [Inner, Cable Guide](#)

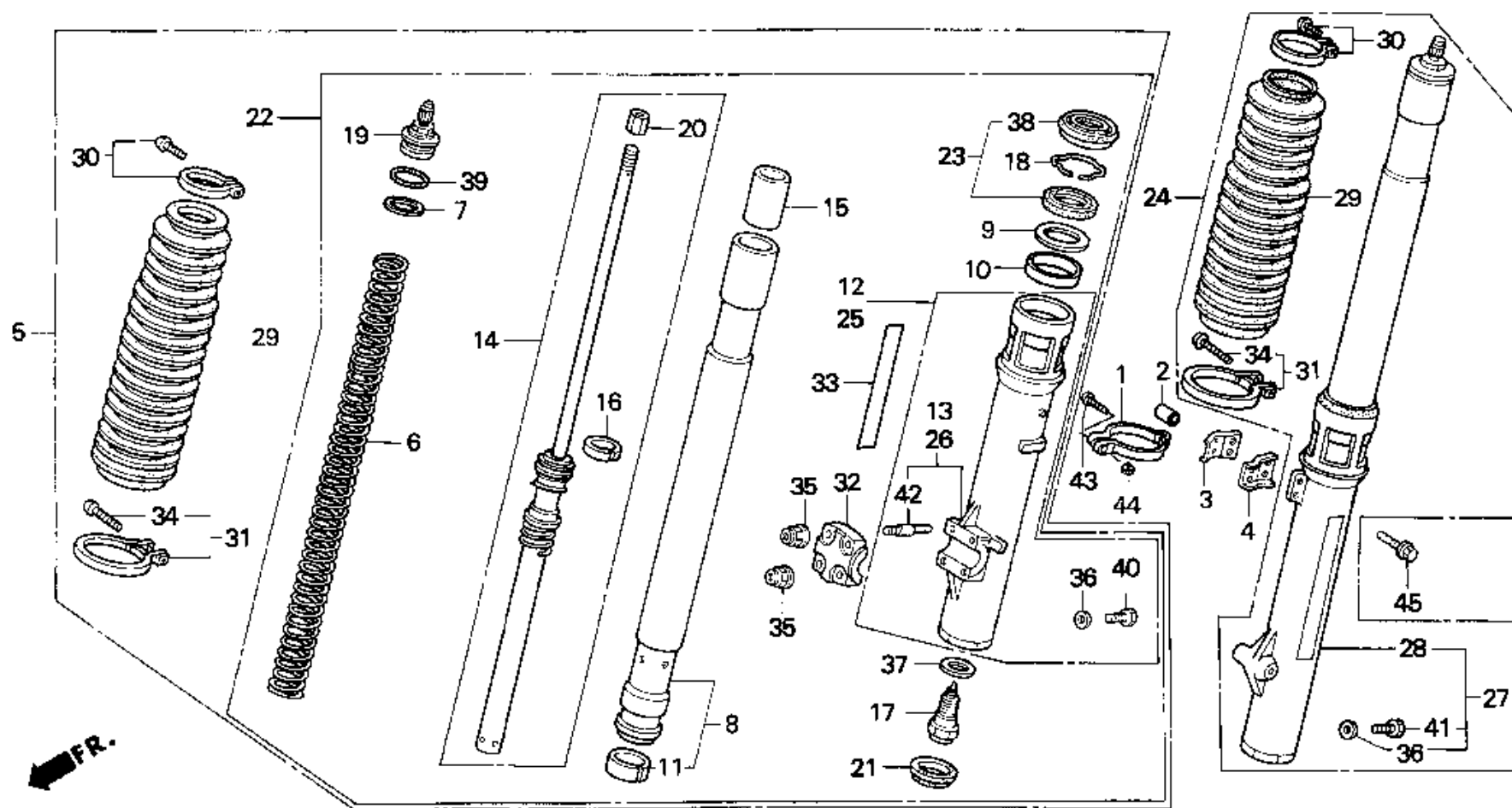
33742-HB9-641 \$8.74 2

45466-KA4-000 \$4.85 1

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003	Guide, Speedometer Cable	45466-KR6-010	\$3.48	1
004	Stay, Fr. Reflector	45467-MG2-670	\$6.12	2
005	Guide, Brake Hose (Lower)	45468-MK5-000	\$11.20	1
006	Stem, SteeringThis part is no longer available.	53200-MN1-670	---	1
007	Dust Seal, Steering Head (Arai)	53214-KA3-732	\$4.62	1
008	Dust Seal, Steering Head (Arai)	53214-KA4-701	\$4.95	1
009	Washer, Top Thread	53228-KN5-000	\$5.85	1
010	Thread, Steering Head Top	53229-MN1-670	\$15.62	1
011	Bolt, Flange (8 X40) ordered 2 only	90107-KF0-000	\$4.00	4
012	Bearing, Head Pipe (Upper) (Nachi)	91015-425-832	\$20.63	2
013	Superseded by part #94021-06020 below:	94021-06000-0S	---	2
013	Nut, Cap (6 Mm)	94021-06020	\$1.60	2
013	Superseded by part #94021-06020 below:	94022-06020	---	2
013	Nut, Cap (6 Mm)	94021-06020	\$1.60	2
013	Superseded by part #94021-06020 below:	94021-06020-0S	---	2
013	Nut, Cap (6 Mm)	94021-06020	\$1.60	2
014	Bolt, Flange (6 X12)	96300-06012-00	\$1.41	1

Front Shock



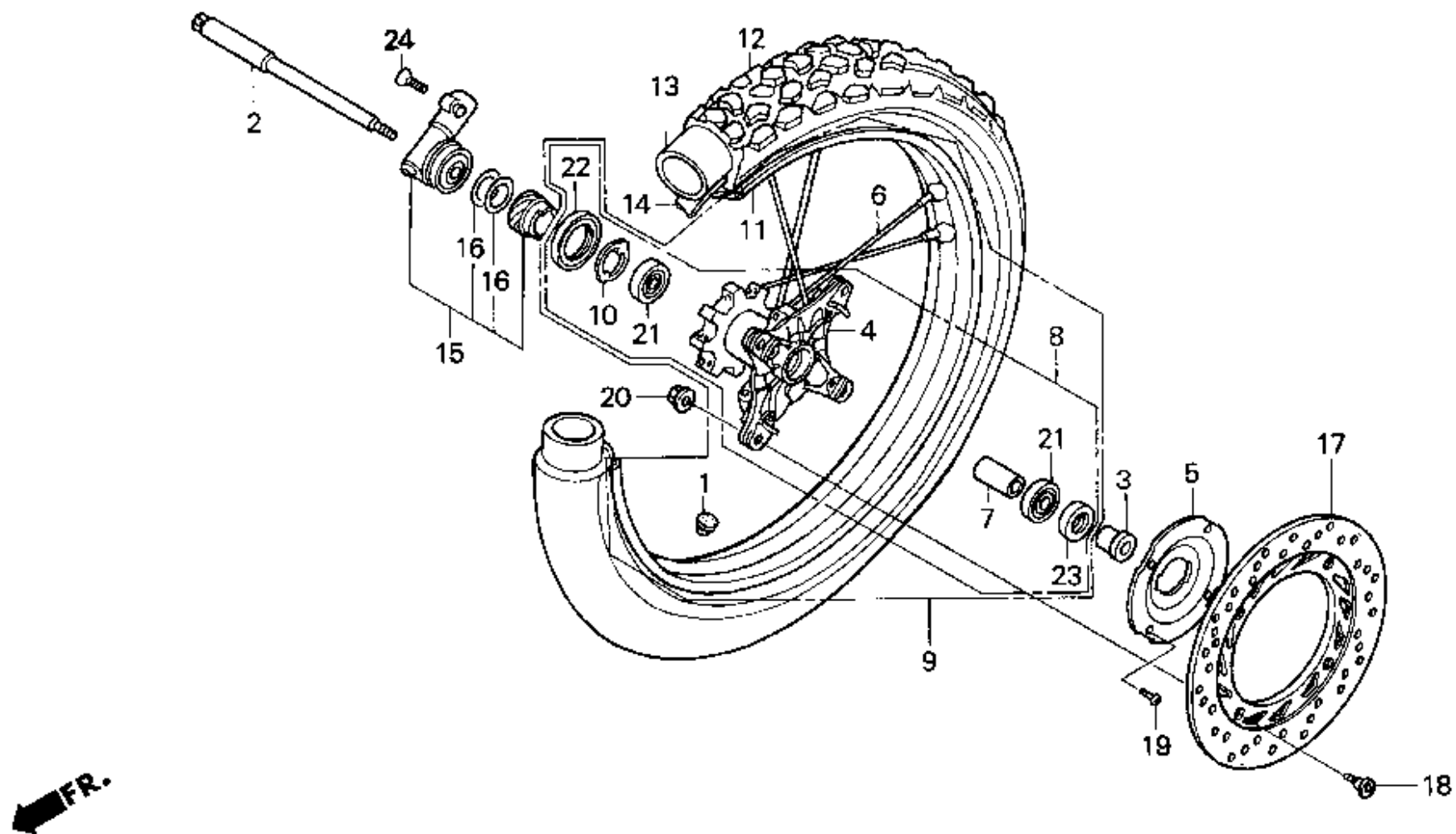
001 [Clamp](#)

44832-KT1-670 \$5.37 1

002 Collar, Speedometer Cable Clamp	44833-MN1-680	\$3.36	1
003 Clamp A, Fr. Brake Cable	45461-MG3-650	\$4.07	1
004 Clamp B, Fr. Brake Cable	45462-MG3-650	\$5.37	1
006 Spring, Fr. Fork (Showa)	51401-MY6-671	\$85.37	2
007 Seat, Spring	51405-KA4-711	\$4.67	2
008 Pipe, Fr. Fork	51410-MN1-681	\$241.76	2
009 Ring, Back Up	51412-KA4-711	\$6.97	2
010 Bush, Guide	51414-MN1-671	\$5.33	2
011 Bush, Slider	51415-MN1-671	\$10.62	2
012 Superseded by part #51420-KS7-023 below:	51420-KS7-003	---	1
012 Case, R. (Lower) (Showa)	51420-KS7-023	\$273.99	1
012 Superseded by part #51420-KS7-023 below:	51420-KS7-013	---	1
012 Case, R. (Lower) (Showa)	51420-KS7-023	\$273.99	1
014 Damper, Fr. (Showa)	51430-MY6-671	\$181.84	2
015 Piece, Oil Lock (Showa)	51432-KS7-003	\$15.62	2
016 Bush, Cylinder	51435-KS7-003	\$14.43	2
017 Bolt, Center (Showa)	51441-KS7-003	\$50.22	2
018 Ring, Oil Seal Stopper	51447-KA4-711	\$3.37	2
019 Bolt Assy., Fr. Fork (Showa)	51450-KS6-831	\$45.17	2
020 Nut, Lock (Showa)	51451-KS7-701	\$10.23	2
021 Cap, Fr. Fork (Showa)	51461-KA4-831	\$4.00	2
022 Fork Sub Assy., R. Fr. (Showa)This part is no longer available.	51480-MY6-305	---	1
022 Fork Sub, R. Fr.	51480-MY6-315	\$676.71	1
023 Seal Set, Fr. Fork (Showa)	51490-KA4-831	\$20.32	2
025 Superseded by part #51520-MY6-672 below:	51520-MY6-671	---	1
025 Case, L. (Lower) (Showa)	51520-MY6-672	\$273.99	1

027 Fork Sub, L. Fr.	51580-MY6-315	\$676.71	1
027 Fork Sub Assy., L. Fr. (Showa)This part is no longer available.	51580-MY6-305	---	1
029 Boot, Fr. *B106* (Capri Blue)	51611-MN1-671ZB	\$32.75	2
030 Band, Boot (Upper) (Showa)	51612-KA4-831	\$7.70	2
031 Band, Boot (Lower) (Showa)	51613-MK2-003	\$6.33	2
032 Superseded by part #51634-MV1-003 below:	51634-KA4-831	---	1
032 Holder, Axle	51634-MV1-003	\$20.23	1
033 MAS335, Fr. Fork	87130-KZ1-770	\$4.68	2
034 Screw, Pan (3.5 X25)	90202-MK2-003	\$3.37	2
035 Nut, U (6 Mm)	90301-473-003	\$2.62	1
036 Gasket, Fr.	90543-273-000	\$2.60	1
037 Washer, Special	90544-KS7-003	\$2.84	2
038 Dust Seal, Fr. Fork	91254-KA4-831	\$10.18	2
039 O Ring (35.2 X2.4)	91356-KA4-711	\$3.34	2
040 Superseded by part #92101-06008-0A below:	92000-06008-0A	---	1
040 Bolt, Hex. (6 X8)	92101-06008-0A	\$1.44	1
042 Bolt, Stud (6 X25)	92900-06025-0E	\$1.56	4
043 Screw, Pan (5 X28)	93500-05028-0G	\$1.00	3
044 Nut, Hex. (5 Mm)	94001-05070-0S	\$1.11	1
045 Bolt, Flange (6 X16)	96300-06016-00	\$1.41	1

1994 XR650L FRONT WHEEL:



001 [Cap, Rim Hole](#)

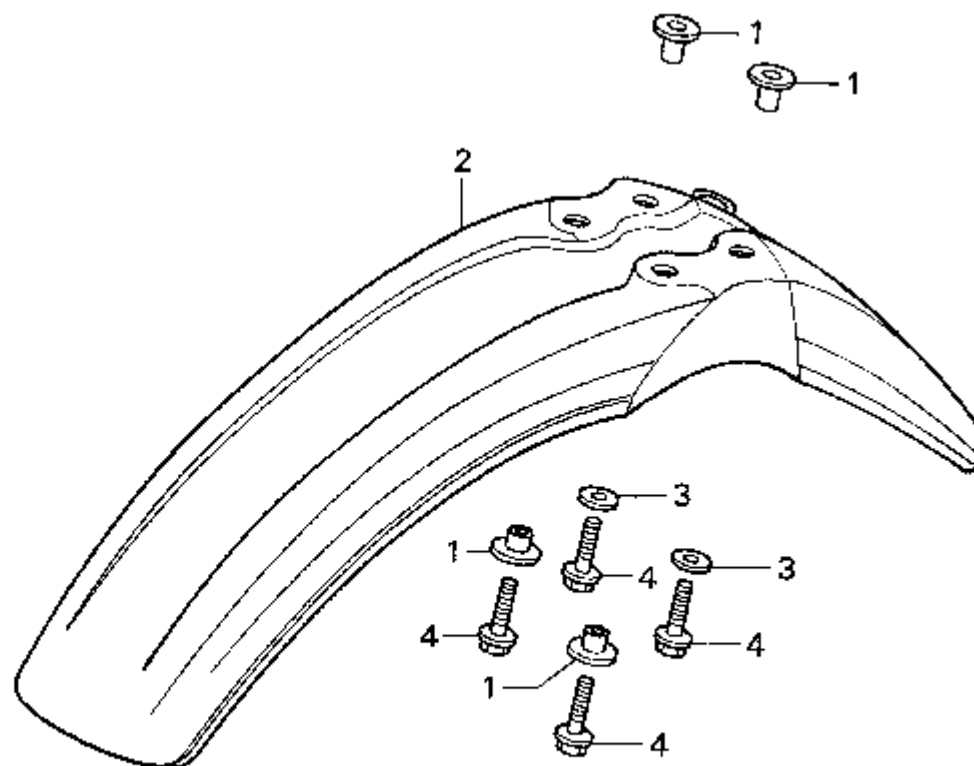
42717-329-000 \$3.76 1

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002	Axle, Fr. Wheel This part is on backorder.	44301-KAE-870	\$42.60	1
003	Collar, Fr. Wheel	44311-KAE-870	\$10.25	1
004	Hub, Fr. Wheel	44601-MY6-670	\$154.90	1
005	Cover, Fr. Hub	44610-MN9-010	\$9.71	1
006	Spoke Set, Fr.	44610-MY6-405	\$3.58	32
007	Collar, Fr. Axle Distance	44620-KAE-870	\$8.54	1
009	Wheel Sub Assy., Fr.	44650-MY6-305	\$542.26	1
010	Retainer, Gear Box	44680-MA0-000	\$5.55	1
011	Superseded by part #44701-MY6-672 below:	44701-MY6-671	---	1
011	Rim, Fr. Wheel (Daido)	44701-MY6-672	\$163.73	1
012	Superseded by part #44711-MY6-675 below:	44711-MY6-671	---	1
012	Tire, Fr. (3.00 21 51 S) (Dunlop)	44711-MY6-675	\$104.34	1
012	Superseded by part #44711-MY6-675 below:	44711-MY6-673	---	1
012	Tire, Fr. (3.00 21 51 S) (Dunlop)	44711-MY6-675	\$104.34	1
013	Superseded by part #44712-446-631 below:	08400-33100	---	1
013	Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013	Superseded by part #44712-446-631 below:	08400-34010	---	1
013	Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013	Superseded by part #44712-446-631 below:	0Y400-33100	---	1
013	Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013	Superseded by part #44712-446-631 below:	44712-446-003	---	1
013	Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013	Superseded by part #44712-446-631 below:	44712-340-003	---	1
013	Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013	Superseded by part #44712-446-631 below:	44712-400-004	---	1
013	Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1

013 Superseded by part #44712-446-631 below:	44712-MC4-005	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
013 Superseded by part #44712-446-631 below:	44712-437-971	---	1
013 Tube, Tire (2.75/3.00 21) (Inoue)	44712-446-631	\$9.80	1
014 Flap, Tire (1.40/1.60 21) (Dunlop)	44713-400-004	\$4.42	1
015 Box Assy., Speedometer Gear	44800-MY6-771	\$68.91	1
016 Washer, Speedometer Gear	44809-402-000	\$2.80	2
017 Disk, Fr. Brake	45351-MN9-020	\$161.79	1
018 Bolt, Rr. Disk (8 X22)	90105-ML0-730	\$4.52	4
019 Screw, Oval (4 X10)	90204-MM9-000	\$2.80	4
020 Superseded by part #90309-MR1-770 below:	90309-ML4-901	---	4
020 Nut, Flange (8 Mm)	90309-MR1-770	\$3.16	4
021 Bearing, Radial Ball (6003 Sh2)	91065-KA3-832	\$11.37	2
022 Dust Seal (40 X50 X5) (Arai)	91258-410-013	\$7.08	1
023 Dust Seal (24 X37 X7) (Nok)	91259-KS6-831	\$6.62	1
024 Screw, Oval (5 X20)	93700-05020-0G	\$0.99	1

XR650 Front Fender



FR.

001 Collar, Fender Mounting	61104-KA4-700	\$5.25	4
002 Fender, Fr. *Nh138* (Shasta White)This part is no longer available.	61105-MY6-670ZA	---	1
003 Washer (6.5 X20)	90545-292-000	\$2.03	2
004 Superseded by part #96300-06022-00 below:	96500-06022-00	---	4
004 Bolt, Flange (6 X22)	96300-06022-00	\$1.63	4

FR.

52400-KB7-003 --- 1

52400-KB8-003 --- 1

52401-KB7-003 \$174.19 1

52403-KB7-003 --- 1

52405-KB7-003 --- 1

52406-KB7-003 \$4.40 2

006	Damper, Rr.	52410-KB7-003	\$388.32	1
007	Adjuster, Spring	52422-MA0-003	\$24.60	1
008	Nut, Adjuster	52423-MA0-003	\$18.72	1
009	Stopper, Spring SeatThis part is no longer available.	52424-KB7-003	---	1
010	Bush, Damper (Lower)	52451-MA0-000	\$10.06	1
011	Bush, Damper (Upper) This part is on backorder.	52452-KB7-003	\$10.34	1
012	Joint, Pipe	52456-KB7-003	\$3.10	1
013	Dust SealThis part is no longer available.	52457-KB7-003	---	1
014	Guide, Spring	52458-KB7-003	\$11.31	1
015	Seat C, Spring	52459-KB7-003	\$17.15	1
016	Arm, Shock AbsorberThis part is no longer available.	52460-MA0-010	---	1
017	Bush, Damper Arm	52462-MA0-013	\$19.49	1
018	Collar	52463-MA0-010	\$11.38	1
019	Rod Assy.	52470-MA0-010	\$129.23	1
020	Bush	52472-MA0-013	\$17.80	2
021	Superseded by part #52473-MA0-020 below:	52473-MA0-010	---	2
021	Collar	52473-MA0-020	\$10.06	2
022	Collar, Bush	52486-KB7-003	\$9.25	2
023	Bolt, Flange (12 X78)This part is no longer available.	90128-MA0-003	---	1
024	Bolt, Flange (10 X69)	90129-MA0-003	\$9.25	3
025	Superseded by part #90129-KAS-900 below:	90151-MA0-000	---	1
025	Bolt, Flange (10 X71)	90129-KAS-900	\$6.62	1
026	Bolt, Flange (10 X43)	90153-MC4-003	\$4.25	1
027	Nut, Axle (10 Mm)	90304-GA6-003	\$2.56	6
028	Nut, Flange (12 Mm)	90306-181-761	\$4.25	1
029	Superseded by part #91261-964-671 below:	91261-MA0-003	---	2

029 Seal	91261-964-671	\$7.92	2
029 Superseded by part #91261-964-671 below:	91261-MA0-005 ---		2
029 Seal	91261-964-671	\$7.92	2
030 Superseded by part #91262-MA0-015 below:	91262-MA0-013 ---		2
030 Seal, Rr. Cushion Connecting Rod Pivot (Nok)	91262-MA0-015	\$8.00	2
031 Dust Seal B	91351-KB7-003	\$3.18	2
032 Nipple, Grease (B.T6 S)	96201-80000	\$2.31	1

APPENDIX D

Miscellaneous Parts and Stuff

Parts:

UK PARTS SUPPLIER: David Silver Spares. Every order showed up within a week and cost wasn't three times more.
star tron fuel additive stalls the issue of ethanol (WALMART) as ethanol will kill the bike!

A LOT of parts that appear to cross over between the NXs and the TA. The shift levers are certainly the same as are some other bits & pieces.

Oil Filter EaOM103 **XRV650 uses the same oil filter and air filter as the XL600V** WalMart SuperTech ST7317

Motorcycle-Specific Filters - (About 2.5 to 3 inches long)

Oil Filters: Purolator PureOne PL14610 or the WalMart SuperTech ST7317 are the filters to use. Looks like the Purolator
PureOne PL14612 would work too as it's the same filter as the PL14610 except 3/4 of an inch shorter.

1. Purolator Motorcycle ML16817 about \$6.00
2. NAPA Gold 1358, Carquest 85358, WIX 51358 about \$7 to \$8
3. AC Delco PF2135 about \$10
4. FRAM PH6017A about \$7

Automobile Filters - (About 3.5 inches long - fit reference 1994 Mazda MX-3, V-6 Engine)

1. Mobil 1 M1-110 about \$10
2. Bosch 3323 about \$5
3. Purolator Pure One L14620 about \$6
4. NAPA Gold 1356, Carquest 85356, WIX 51356 about \$6
5. Deutsch D-370 about \$4
6. AC Delco PF-2057 about \$6
7. Motorcraft Long Life FL-821 about \$4
8. STP S-02867 about \$3
9. FRAM, Castrol, Penske 7317 about \$3

Automobile Filters - About 2.5 inches long

1. Bosch 3300 about \$5
2. NAPA Gold 1365 about \$6
3. Purolator L14622 about \$5
4. AC Delco PF1237 about \$6
5. STP S-02876 about \$3
6. FRAM PH6607 about \$3
7. WalMart SuperTech ST7317 about \$2

SuperTech filters are made by Champion Laboratories who make Mobil One and Bosch filters and also some automaker brands. While they may not have the advanced filter media of the highest efficiency and highest priced filters, they are considered premium filters and will perform well.

Air Filter 15602

BRAKES: EBC FA69 HH

REAR SHOCK SPRING: Rear: '86 - '91 XR250R with 10.5kg/mm spring. 175psi nitro & revalved to suit spring. Thunder Dan

Carb O-ring / gasket 16010-MM9-670

Float Valve (needle and seat set) 16011-KVO=672

Sprockets: Front 16T, Rear 47T (**Sprocket Specialties or JT**)

Front forks: 1994 IIRC XR650

Wheels bearings need to be upgraded to this fork

Speedo drive (only if XR is 93 or newer) and cable NEED TO BUY (XR650L speedo cable is the correct length)

(you can also bore the speedo drive) since the axle on these models is 17mm as opposed to the 15mm

The 650 L cable will screw right in. It's what I'm running.

TA and 92 and under XR axles

Upper brake caliper bolt is too short so you will need to find one that is 5mm longer NEED TO BUY

Consider using the Gaffer lines I have for the front brake

Key and Fuse box needs to be remounted with new forks NEED TO MODIFY

SRC Fork Brace

Rear Shock 1983 CR250

Tires: 140/80-17 try to see if a 150/70-17 will fit

Petcock valve rebuild kit

Honda factory side cover kit 16953-ME5-005 (contains 2 diaphragms, 1 spring, 1 AL spacer that sandwich between the diaphragms, 1 AL spacer that fits between the petcock body and the outer cover, 1 AL outer cover, and 4 screws)

Alternate: K&L rebuild kit 18-2701 (contains 2 diaphragms, 2 o-rings, and 1 spring)

~ 400 ~

CDI relocation kit: 30401-MM9-010 (maybe use silicon pads) **Left side CDI runs the tach (VERTICAL IS GOOD)**

CHAIN: 525 chain on the 520 sprocket will not be a problem (RAY RECOMMENDS 525 DID 525V o-ring with 140 links and cut it down to the right length.)

NOTE: Also, 520 being lighter, requires less horsepower to straighten out. I.e., it absorbs less power. It just means you lose less power through the drivetrain.

520 RK GXW Race Chain;

- 16T 520 Front sprocket pattern from Honda XR650R (sprocket code MBN); &
- 51T 520 Rear sprocket pattern from Yamaha WR450F (sprocket code 428), with mounting holes enlarged from 8mm to 10mm.

CHAIN SLIDERS (ORDER BOTH)

SPROCKETS: Sprocket specialists has the 16 in stock for \$30. She also mentioned they had a 14 and a 17. 17-47 @ 80mph is 5300rpm. For those of you with the 16-47: Is it difficult to get away from a light? You think 17-47 would be pushing it for another 300 rpm? I was going to buy both just to try it out but wanted some feedback as to whether I was out in left field on this. Their 591 sprocket is listed as fitting the Hawk GT, VLX600 Shadow and the TRANSALP. I just changed mine to 16 (www.hdlparts.com, from a 1988 NT650)

FWIW as a general rule of thumb but not a law, if there are any manufacturers stampings like part numbers or how many teeth on a sprocket... this side will face out so it can be read when installed.

INLINE FUEL FILTER (DO NOT GET) If you screw the petcock completely out of the tank you will find a long, integrated filter screen, not only the small screen inside the petcock (hope this is not only word-mess and you understand what I mean). So there is no need to put an extra fuel filter, the Honda engineers already put one.

CAM CHAIN AND TENSIONERS: when doing clutch do these...maybe. Mark showed at 50K they were solid???

CLUTCH: like Mas335 said: first check the free play at lever, should be around 10 to 20mm. Also check if the cable moves free inside the plastic tube. Then make sure not use any synthetic oil, additives (like slick50) and some car oils. If all that is ok go for the clutch. On a non-offroad-TA clutches live more than 100,000km. Mostly it's just the springs getting weak, but if you got everything apart there I would also recommend to change the discs. Hardest part is removing the old gasket from the case. Order a new one in advance. If you need instructions how to disassemble the clutch without special tools feel free to ask.

RAY on CLUTCH: Did you reroute your clutch cable when you did the front end swap? If so you may have altered the cable slack. Remember that it's the 6 springs that hold the clutch together when the lever is released and springs get tired with age and heat. As mentioned, make sure you're using oil rated for motorcycle use and not cager stuff with crazy teflon or other junk in it.

FWIW, I replaced my TA clutch at about 35,000. Started slipping on off-road climbs. Easy to do. Remember NOT to use a screwdriver or other bar to try to hold the clutch while removing the center nut. Make a tool (see Detis' TA site) or use an air impact wrench...or both.

Also, plan on replacing the oil pump drive chain. It lives in back of the clutch and is right there when everything is apart. They tend to get a little slack over time and start hitting the inside case. Puts aluminum flakes in your oil and freaks you out when you do an oil change. The oil pump drive chain is about \$10.00 and since you're there anyway it's good to include that in clutch work.

Valve clearance:

Intake: 0.15mm or 0.006 in.

Exhaust: 0.20mm or 0.008 in.

Specifications

Engine

Engine idle speed	
XL600V models	1300 ± 100 rpm
XL650V and XRV750 models	1200 ± 100 rpm
Spark plugs	
Type	
Standard	NGK DPR8EA-9, or Denso X24EPR-U9
Cold climate (below 5°C/41°F)	NGK DPR7EA-9, or Denso X22EPR-U9
Extended high speed riding	NGK DPR9EA-9, or Denso X27EPR-U9
Electrode gap	0.8 to 0.9 mm
Valve clearances (COLD engine)	
XL600V-H models	
Intake and exhaust valves	0.1 mm
All other models	
Intake valves	0.13 to 0.17 mm
Exhaust valves	0.18 to 0.22 mm
Carburettor synchronisation – max. difference between readings	
XL600V models	40 mm Hg
XL650V models	20 mm Hg
XRV750-L to N (1990 to 1992) models	30 mm Hg
XRV750-P models onwards (1993-on)	20 mm Hg
Cylinder compression	
XL600V-H to P (1987 to 1993) models	157 to 185 psi (11.0 to 13.0 Bar)
XL600V-R to X (1994 to 1999) models	164 to 192 psi (11.5 to 12.5 Bar)
XL650V models	164 to 224 psi (11.5 to 15.5 Bar) @ 400 rpm
XRV750 models	157 to 213 psi (11.0 to 15.0 Bar) @ 400 rpm
Oil pressure (at oil pressure switch, with engine warm)	
XL models	64 psi (4.5 Bar) @ 6000 rpm, oil @ 80°C
XRV models	71 to 85 psi (5.0 to 6.0 Bar) @ 5000 rpm, oil @ 80°C

CLEAN OUT HEADERS: Internal weld will block about 46% of the flow (where connects to engine)

130/80T-17 Rear

90/90T-21 Front

TUBES:

130 - 4.00 x 17 tube

100 - 3.50 x 19 tube

THERMOSTAT:

Originally Posted by **Bronco638** ➡

Hey! I figured that one out on my own. 🏠

I just bought a new t-stat and o-ring (among other TA bits) from a place in Michigan. They have the lowest prices that I've come across. The stat was \$34.03 and the o-ring was 2.97.

[Babbitt's Sports Center](#)

Thanks, will see if they can ship to Canada. Is this the part number:

19300-KE8-000

ORing. 91311-KE8-000

Will check locally as well if these are the numbers. Thanks again.

Bronco638 ➡

Hey! I figured that one out on my own. 🏠

I just bought a new t-stat and o-ring (among other TA bits) from a place in Michigan. They have the lowest prices that I've come across. The stat was \$34.03 and the o-ring was 2.97.

[Babbitt's Sports Center](#)

Thanks, will see if they can ship to Canada. Is this the part number:

19300-KE8-000

ORing. 91311-KE8-000

Will check locally as well if these are the numbers. Thanks again.

I think that after 20 years of service the old thermostat could do with replacing.

Honda wants \$32 for a new 'stat, but a car thermostat is less than \$9.

Also Honda does not spec the temp at which their 'stat opens, and I wanted to know that number.

Automobile 'stats are supplied with that temp specification.

So I took the thermostat and housing down to Advanced Auto where I was allowed to open box after box until I found a 180F 'stat that would fit the housing.



Well it sorta fit....

While the overall height of the new one was less than the old one.
The height of the new one from the flange to the top is actually taller than the old one.
But other than that it fit the housing socket just fine.



So....what to do???

Make up a spacer plate from 3/16" thk aluminum. Use a gaaket on the bottom side and the OEM O-ring on the top.

And.....vah-lah...



like it was made for it.

Well, almost like it was made for it....you'll notice in the third photo there is a small hole in the flange of the new 'stat. That hole was not there on the new 'stat originally, but the old 'stat did have a hole, I had to drill that one myself. The hole is an air bleed to help with filling the system.

Happy to report the new 'stat works like a champ.

TAIL LIGHT:



The Hella plugs and plays same as OEM.

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Also the petcock: COVER SET, PETCOCK - P/N 16953-ME5-005

\$24 at Honda Direct Line Parts

\$22.65 at Service Honda



carb diaphragm

Adventure tank:



www.advtank.com in Colorado.

BOOKS ON ADVENTURE:

Adventure Motorcycling Handbook by Chris Scott
Riding South by Gregory Frasier
Riding the World by Gregory Frasier
Two Wheels Through Terror by Glen Heggstad
Chasing Che by Patrick Symmes

On your quest to find Honda parts in the US, I'm not sure if all or any of the following will ship to Canada but here are some links to OEM Honda parts in the US.

Also have included some links to TRANSALP forums and info

OEM Honda Parts

<http://www.servicehonda.com/>

<http://www.hdlparts.com>

<http://houseofmotorcycles.bikebandit.com>

<http://www.discounthondaparts.com>

http://partsfinder.ridenow.com/fiche_select.asp

<http://www.cheapcycleparts.com/pages...7/default.aspx>

Trasalp Sites and Info

<http://www.TRANSALP.org/phpbb2/index...535f569b7cfb5e>

http://autos.groups.yahoo.com/group/...TRANSALP_MODS/

<http://www.ta-deti.de/ta/sitemap.html>

<http://www.bajkeri.com/>

<http://f.webring.com/hub?ring=TRANSALP>

<http://techTRANSALP.co.uk/index.html> (For XL650V TRANSALP Owners)