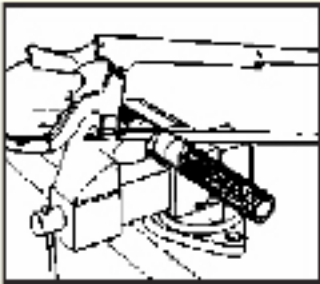


Steering, Brake & Suspension Specialists

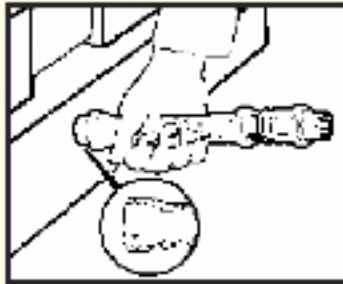
Aeroquip Line Assembly Instructions

Official Aeroquip Instructions

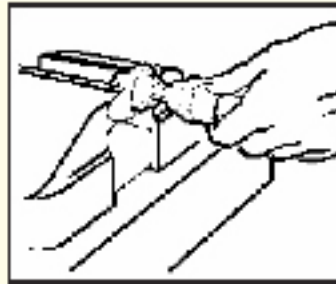


Step 1. Cut hose square to length with fine tooth hack saw or cut off wheel. To minimize wire braid flare out, wrap hose with masking tape and cut through tape. Remove tape, trim loose wires and flush with lube before next step. Burs on bore of tube should be removed with a knife. Clean the hose bore.

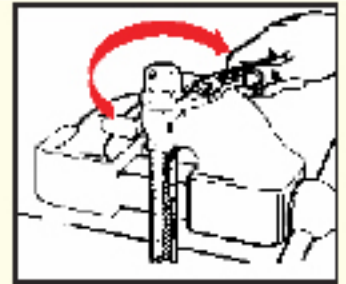
Sometimes wire braid hose will "neck down" on one end and "flare out" on the other end. This can be used to an advantage. Slip two sockets back to back over the "necked down" end of the hose, position approximately 3 inches from each end. Mount nipple hex in a vise. Work the hose bore over the nipple to size the tube and aid in separating the braid prior to fitting the sleeve. Remove hose from nipple.



Step 2. Push the sleeve over the end of the tube and under the wire braid by hand. Complete positioning of the sleeve by pushing the hose end against a flat surface. Visually inspect to see that the tube butts against the inside shoulder of the sleeve. Set the sleeve barbs into the Teflon® tube by pushing a round nose tapered punch into the end of the sleeve and tube.



Step 3. Lubricate nipple and socket threads. Use a molydisulfide base lubricant for stainless steel fittings (e.g. Molykote Type G); lubricants containing chloride are not recommended. Other material combinations use standard petroleum lubricants. Hold the nipple with hex in the vise. Push hose over nipple with twisting motion until seated against nipple chamfer. Push socket forward and start threading of socket to nipple.



Step 4. Wrench tighten hex until clearance with socket hex is at .031 inches. Your thumb nail is a convenient measuring device. Tighten further to align corners of nipple and socket hexes. **CLEAN, PROOFTEST TWICE OPERATING PRESSURE AND INSPECT ALL ASSEMBLIES.**

To disassemble: Unscrew and remove nipple; slide socket back on hose by tapping against flat surface; remove sleeve with pliers.

Important: Fittings may be disassembled and reused at least once. However, all such fittings should be carefully examined for distortion, thread damage and I.D. dimensions. New sleeve is recommended upon reuse of fitting.

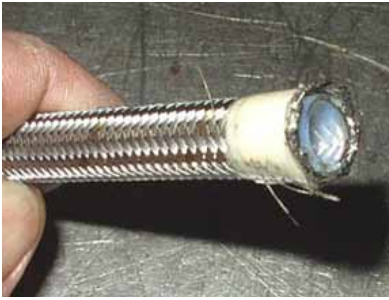
Replacement brass sleeves are available. Refer to Page 19.

Additional Instructions (provided by Hydratech)

Step One: Loosely connect the braided stainless pre-assembled hose ends to the appropriate brake assist unit ports, then route the lines out to the PS pump and steering box / rack as desired. Mark them at the desired lengths by wrapping them with duct tape so that the desired cut point will be right in the middle of the taped area. Now that you have determined how you wish to route the lines and their respective desired lengths, remove the hoses from the vehicle.

Step Two: Using a high speed cutoff wheel on an air motor or Dremel tool, cut the hose as straight and cleanly as possible. This can also be accomplished using a very potent set of shears or a hack saw, though the high speed cutoff wheel seems to do the best job. We use a Beverly Sheer Cutoff Tool for large scale hose production, though even a sharp chisel can be used to sheer the hoses cleanly.

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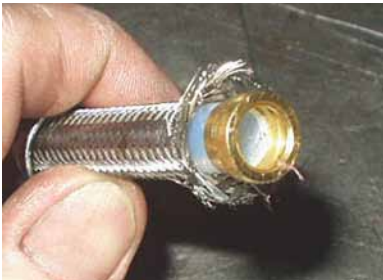
Step Three: Slide the female hosenut down onto the hose with the threaded opening oriented towards the cut hose end. Carefully remove the tape from the stainless overbraid. Now take a blunt tipped screwdriver or alternate tool and spread the stainless overbraid away from the inner teflon hose liner about a 1/4".

NOTE: Be very careful not to accidentally poke a hole in the somewhat softer teflon liner while spreading the braided stainless overbraid away, or leakage may occur.

Step Four: Carefully start the brass ferrule onto the teflon liner. The teflon liner is to go inside of this ferrule. Be careful not to let the teflon liner fold over or distort during this step.



Step Five: Grab the hose and push it firmly against a solid surface to push the teflon liner all the way into the ferrule until it seats against a flat inner stop.



Step Six: Grab a suitable tapered punch and expand the teflon liner into the I.D. of the ferrule firmly.



Step Seven: Put a few drops of your favorite lube on the hose end male nipple, the threaded area of the hose end, and a drop also in the female hose end to aid assembly and prevent thread galling while tightening. (Any lube will essentially do, though we prefer to use the moly cam / lifter assembly lube here in house).

Step Eight: Grab the hose end and firmly insert it into the female hose end. You may at this point yank the hose end back out to make sure that the teflon hose liner has not folded over or been injured in any way during the hose end insertion process, then pop it back in after all is verified as proper.



Step Nine: Slide the female hose nut firmly up and over the necked out stainless hose over braid until you can get the hose end threaded into the nut - be careful not to cross thread these two items.

Step Ten: Using two 11/16" wrenches, tighten the hose end into the stationary hose nut until it is plenty tight (about 10-12 ft. lbs worth of torque). The gap between the hose end and the hose nut should be very little (if at all) at this point. You may now back the hose end out of the hose up to one full turn to orient it in the direction desired. Doesn't this have to be tight? NO! The initial torque down crushes the brass ferrule down a few thousandths, which seals the teflon liner very well against the male nipple of the hose end, which means that you will still seal the joint positively even if unscrewed up to three full turns (!). These lines seal so well that they can also be used with Nitrous without fear of leakage!



Step Eleven: Using your favorite cleaner spray or hot soapy water, flush the assembled hose of any possible debris, then blow out the hose with compressed air.

Step Twelve: Install the completed hoses into their respective locations and continue onto the various other system installation steps!

TIP: If you must disassemble one of these hose ends and repair it for any reason out in the field, you may use a tapered punch to carefully open the brass ferrule back up again just enough to get it back onto the teflon liner again. If the ferrule is too heavily distorted to straighten back out properly, replacement sleeves (ferrules) may be obtained: Aeroquip # FBM 3823 (pack of 5 ferrules). Also, we strongly advise that you wear a pair of heavy leather gloves during the hose assembly process, as the stainless overbraid can poke you quite badly if you are not careful.

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For technical help call Classic Performance Products Monday thru Friday 8:30am to 5:00pm at (714) 522-2000

Classic Performance Products, Inc. 714.522.2000 | fax 714.522.2500
378 E. Orangethorpe Ave. | Placentia, CA 92870 | www.classicperform.com