


A U T O T E C H

Installation Instructions

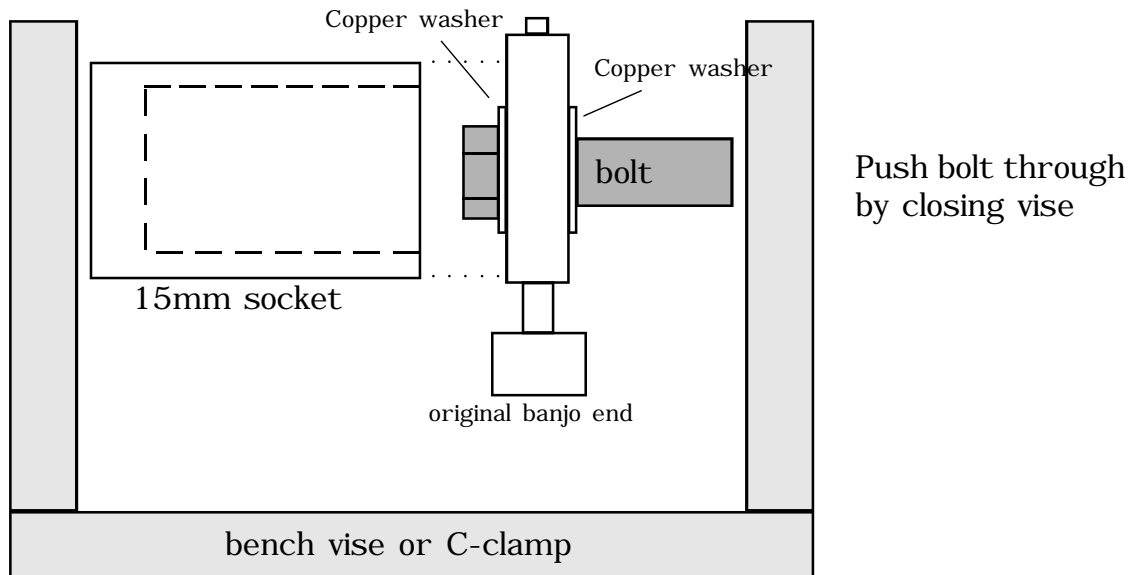
sport tuning

Part Number: 10.611.208K THRU 10.698.212K
Description: SPORTTUNED STAINLESS STEEL BRAIDED BRAKE LINES
Procedure:

1. Jack up the car and support it on jack stands.
2. Starting with the front brake lines, remove the standard brake hoses using an open-ring spanner wrench (Autotech # 99.012.009). The banjo bolt in the caliper uses an 11mm hex. Note: it may be necessary to use a little penetrating oil on the original hard line connections. Be sure to keep the retaining spring used at the female end of the hose for re-use with the Autotech hose.

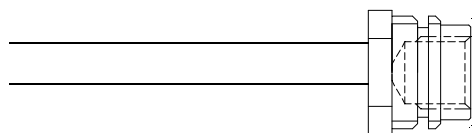
Installation Tip: To avoid rounding the flats on the VW brake fittings, Autotech recommends using an open-ring spanner wrench rather than a normal open end wrench. The shape of the tool should resemble this. 

3. Remove the hollow bolt from the original banjo fitting for re-use. The hollow bolt is held to the banjo fitting with two staked copper crush washers. The bolt can be pressed out of the washers and banjo fitting in a vise using a 15mm or larger 1/2 inch drive socket for a receiver, as shown below. We supply new copper washers to replace the originals that will be destroyed during this process.



4. Using a new M10 copper washer on each side of the banjo fitting, attach the Autotech brake line to the caliper. Make sure to align the notch on the end of the banjo fitting with the locating pin in the caliper if your car has one. Tighten the bolt to 35 Nm (26 ft lbs). Make sure that the brake line does not rub against any other metal objects as the braid will gradually grind through whatever it is touching.

5. Insert the female end of the Autotech brake line through the bracket on the inner fender. Place the spring clip over the hose end, and thread the spinning male hard line fitting into the hose end. Using a wrench on both fittings, tighten to 11 ft. lbs.
6. For the rear of the vehicle, it may be necessary to loosen the bolts mounting the rear axle beam and lower it away from the body (with a floor jack as support) in order to gain access to the "middle" brake hoses.
7. For the middle hoses, all cars will re-use the original retaining clips, even if the new Autotech hoses use ends that look a little different than your original ones. Refer to your repair manual for the correct tightening torques on the axle beam bolts if you removed them.



This new end design replaces the grooved female ends found on A3 cars. The stock A3 clips are used.

8. The rear-most hoses for cars with disc brakes install using original retaining clips. Start by threading the male end into the caliper and tightening to 11 ft. lbs. Then insert the female end through the factory bracket, and thread the male hard line into the hose, being sure to install the retaining clip in between. Tighten this also to 11 ft. lbs.
9. Flush your braking system thoroughly to get rid of any possible sediment. Install new, high quality fluid, such as our Lucas DOT 5.1 Brake Fluid, into the system and bleed all four corners of the car; furthest away from the master cylinder first, until all air is out of the circuit. See your repair manual for bleeding instructions.
10. Go over all hose locations once again to inspect for possible hose rubbing and re-check to make sure all fittings are secure.
11. Place the vehicle back on the ground and test the vehicle a low speed to make sure the system is operating safely and properly.

WARNING!

Do not allow braided brake hoses to kink or bend around an abnormally tight radius. Damage to the Teflon® liner may occur, causing brake system failure, resulting in serious injury or death. When servicing brakes, do not allow calipers to hang from hoses! Use a cord, wire, or other secure method of hanging the caliper so that brake hose is not loaded.