

Replacing the Alfa Clutch Pedal Shaft

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[If you notice the clutch pedal in your Spider/GTV gradually dropping lower and lower with respect to the brake pedal, you may have a problem with your clutch pedal pivot shaft. If you're experiencing this, read on. RHH.]

The clutch pedal/brake pedal pivot shaft may be replaced with the pedal cluster in the car, and without opening the hydraulic lines. This is contrary to what the manual suggests, but it works!

1. Pull the cotter pin from the pin that holds the clutch lever arm to the master cylinder input shaft. Remove the pin and washer, and the arm, if the weld has broken, will come off. It will help to disconnect the battery as the brake lite will come on when the pedal is moved. It may help

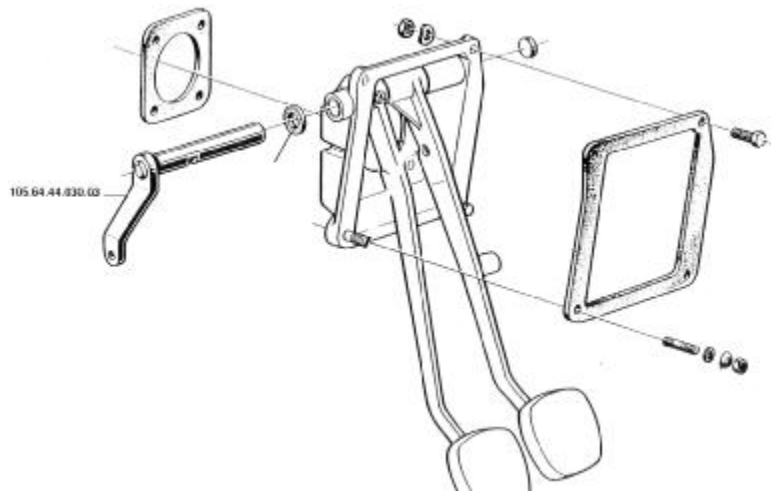


Fig. 1. Pedal box hardware

- to tape down the brake lite switch to keep it out of the way of the pedal.
2. Remove the bolt and nut that holds the brake vacuum servo to the bodywork. It's on the inside of the left fender well. Now remove the two nuts and washers securing the pedal cluster housing to the firewall.
3. From inside the car, remove the two nuts and washers (13mm socket) securing the bottom of the pedal cluster housing--see Figure 1.
4. Now, working under the hood, rock the master cylinder to loosen the housing from the firewall. There is a sticky gasket between the firewall and the casting. Once this is free, pull up on the casting to get it free of the mounting studs that held it to the firewall. Be careful not to pull too far back, since the brake and clutch lines are still attached.
5. Pull the cluster housing up until the bolt securing the clutch pedal to the shaft is visible--see Figure 2. Remove the nut part way, until the top of the nut and the end of the bolt are flush. Tap the end of the bolt until it drops down; it will still be held in place by the nut. Reach into the housing, and support the bolt with one hand, while removing the nut and washer with the other. Pull the bolt out.

6. Wiggle the clutch shaft out of the housing; it may help to use pliers or vise-grips on the end of the shaft. The clutch pedal will drop to the floor, the brake pedal will stay in place.
7. Installation of the new (or rewelded) shaft is a reverse of the above. First, grease the shaft with a thin film of chassis lube. The clutch pedal must be held in place until the shaft is thru it, the brake pedal will have to be wiggled back and forth to get it into place. Use a flexible-shaft pick-up tool to insert the bolt in the clutch pedal, thru the shaft. A little tricky, until the exact angle is achieved. The shaft must be rotated until the flat lines up with the hole in the pedal pivot.
8. If rewelding the shaft, be sure to correctly mark its location with respect to the lever arm before removing the shaft. Once out of the car, it is difficult to get the proper angle. Also, be sure to set the clutch master cylinder input shaft to the correct dimension. The book says 5.28" (134 mm) from the end of the cylinder to the end of the connecting pin hole, (nearest the fire wall). **Do not measure to the center of the hole!**

Note: prop the clutch pedal up to the correct height to be able to mark the lever arm location with respect to the shaft. Make sure the mark does not move between removing the shaft and welding it. (Ask me how I know!)

This procedure eliminates the need to bleed the hydraulic system, since it is never opened up. There is enough play in the hydraulic lines to be able to move the assembly a few inches. The whole procedure should take no more than an hour for removal, and a like amount to reinstall.

[This is a good time to peel back the rubber boots on the clutch MC and brake MC and grease the balls at the end of the actuator rods. This makes their operation smoother and quieter. RHH.]

A few Band-Aids for skinned knuckles might help, and some proper Italian automotive words are occasionally in order. I had to use English ones, remembered from my days of owning/working on British sports cars. Maybe my Alfa was over-awed by my command of English colloquialisms!

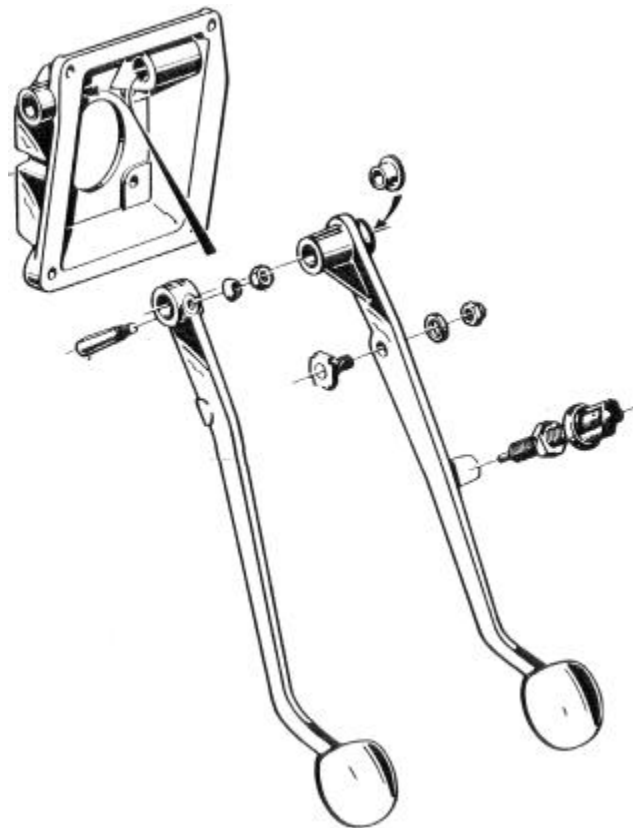


Fig. 2. Pedal securing bolts

The hardest part of this procedure is to reinsert the clutch pedal to shaft pin. If the pin drops, it may fall below the car, into the car, or between the firewall and the carpet. In other words, don't drop it unless you have a spare. *[If you do drop the pin, a magnetic pick-up tool can help retrieve it. RHH.]* The hood release cable constantly gets in the way, I think if I were to repeat this job, I'd recommend disconnecting it, but don't drop the hood before before it's reconnected! When raising the housing from the firewall, the pedals will tend to find their own way up into the under-dash area, binding occasionally on the bodywork sheetmetal. (You'll never see the scratches.)

While I worked alone, it would help to have a second person in the car, moving the pedals for you when you insert the pedal shaft.

[For a second article describing clutch pedal shaft replacement, see [Droopy Clutch Pedal](#), RHH.]
