

## Instruction to change the pull style clutch to push style for Subaru WRX

Additional parts required — Nissan clutch bearing 30502-21000 (included)

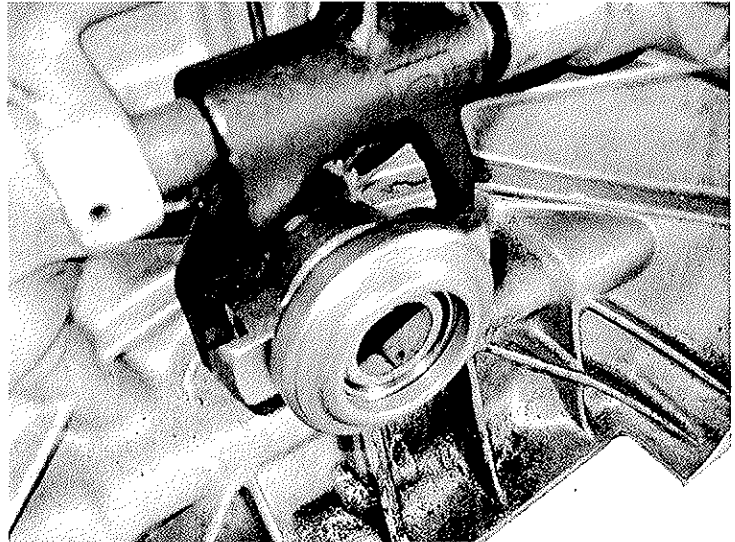
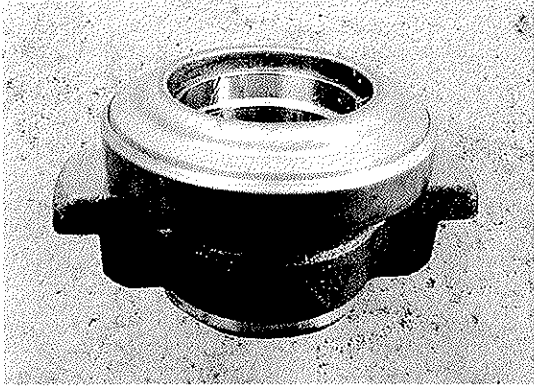
Included in the CARBONETIC clutch kit

- 1 Bearing sleeve (1)
- 2 Reverse Rod (1)
- 3 Support—bracket to be attached to the fork (1)
- 4 Cylinder rod replacement (1)
- 5 Cylinder rod nut (1)
- 6 Support fixing bolt (1)
- 7 Reverse Rod—Fork fixing bolt & nut (1 each)
- 8 Cylinder adjustment washer

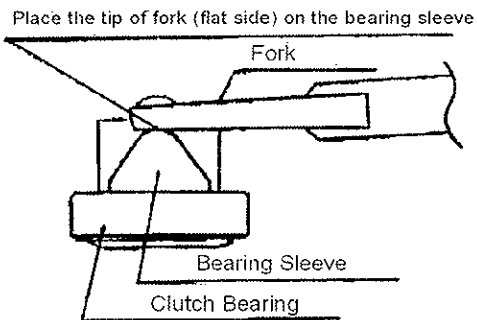
U.S kit includes the Subaru slave cylinder 30620AA013 & Nissan bearing

### Installation procedure

- 1) Install the Nissan bearing to the bearing sleeve in the clutch kit
- 2) Attach the fork so that the tip of the fork (flat side) pushes the bearing sleeve
- 3) Clean the attachment area, slightly apply grease, then install the bearing sleeve on the pipe which encloses the input shaft. (The pipe extrudes from the clutch case)
- 4) Assemble the clutch and clutch case to the engine
- 5) Remove the stock parts indicated the page two
- 6) Remove the cylinder from the clutch case — no need to remove the oil pressure line
- 7) **Important** Put through the reverse rod from the side of the flange of the cylinder. (Be careful on the direction of the reverse rod—it has head and tail). Fix the cylinder by making sure that the cylinder and the reverse rod is parallel. The cylinder is attached by the two bolts. Install the washer on the bolt at the engine side, then tighten the bolt. The washer will help making the reverse rod and the cylinder parallel when the reverse rod connects the fork and the cylinder. However, in a rare case, the washer provided by ATS&ACROSS does not produce the intended effect due to the variable original shape of the Subaru cylinder. In that case, either remove the washer or make the original spacer so that the cylinder and reverse rod become parallel.
- 8) Remove the cylinder boot and rod. Replace the rod with the one provided by ATS&ACROSS (replacement cylinder rod). In order to protect the cylinder boot from the reverse rod, apply something like a resinous band on the boot — tyrap will do.
- 9) Adjust the master cylinder rod which is between clutch pedal and master cylinder so that the pedal free play is zero or minimum. (Be careful not to make it the negative)

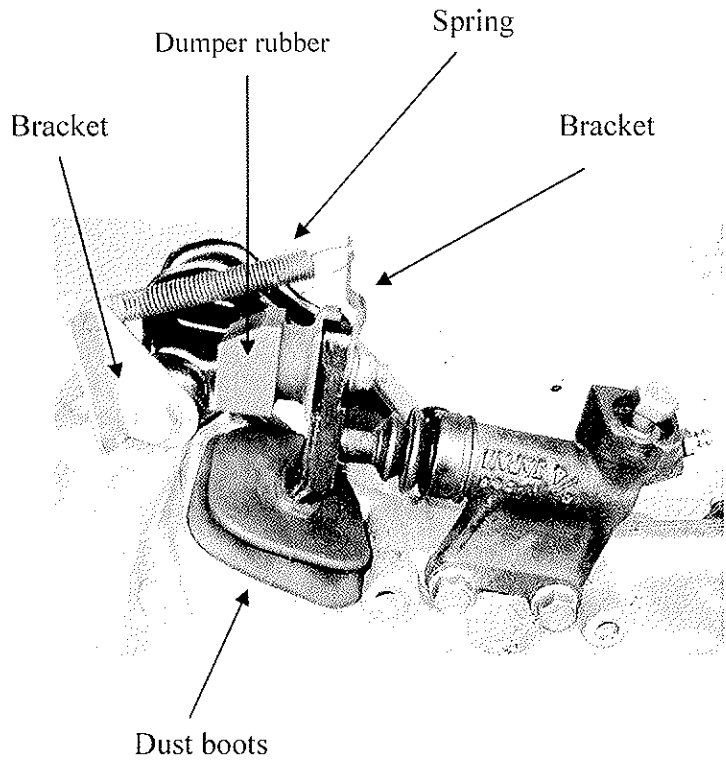


Insert the bearing onto the bearing sleeve. Make sure it is installed completely.

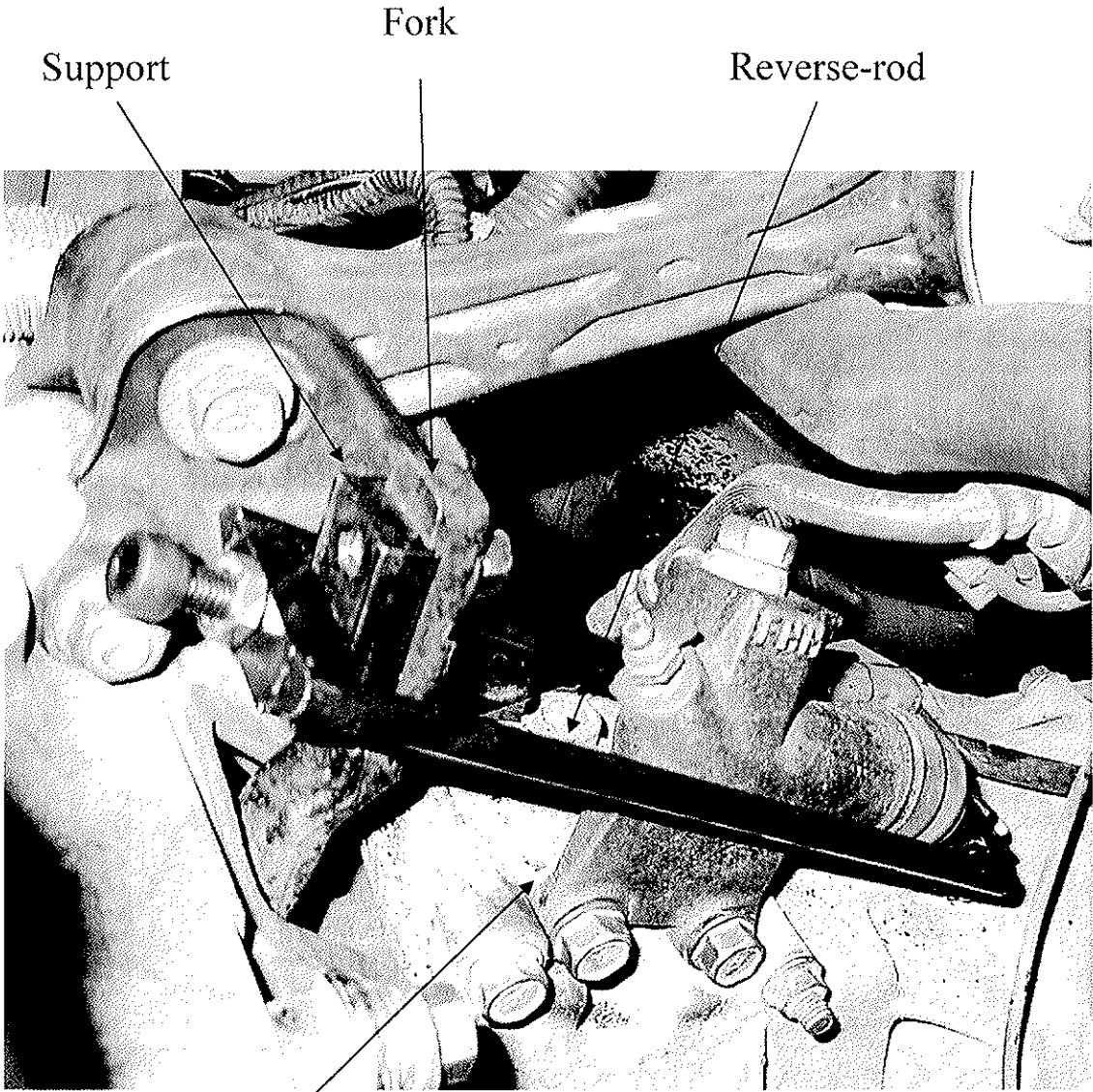


Removal of stock parts

Remove the stock parts indicated by arrows in the diagram on the right. Those parts are not required to install CARBONETIC clutch.



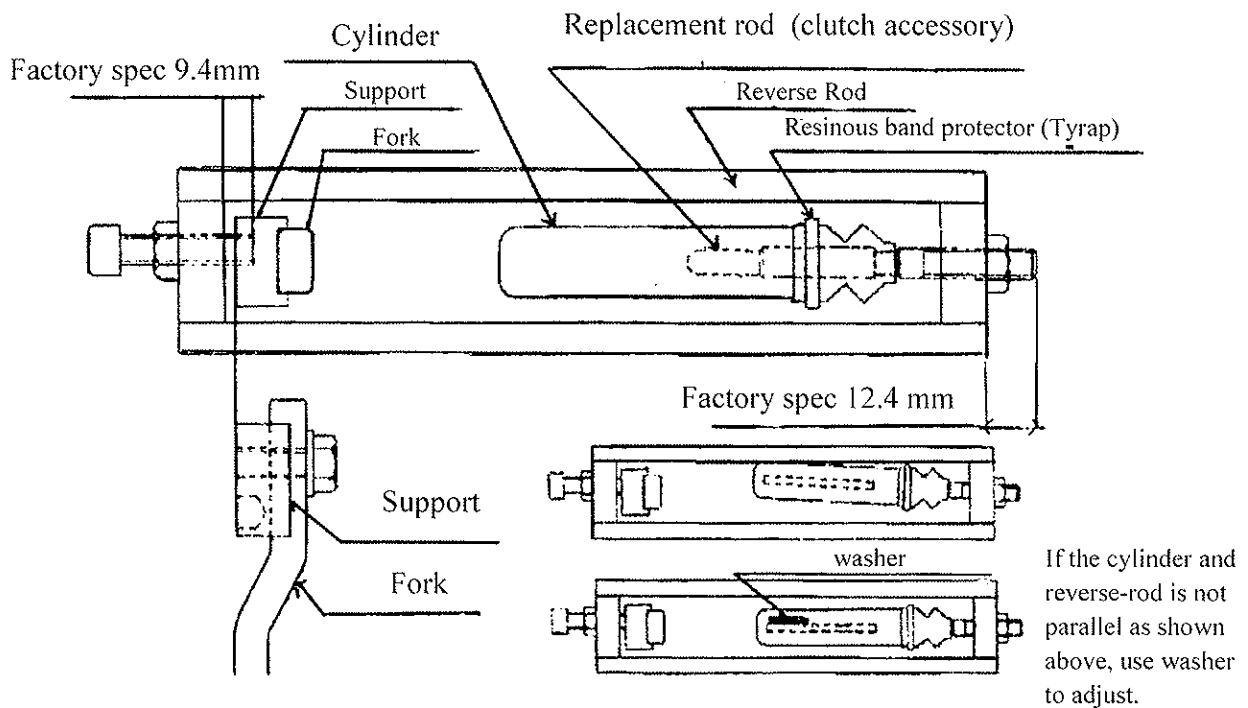
Cylinder assembly. Completion picture



Washer

At the factory, the bolt and rod clearances are fixed as shown below.  
 Install the support to the fork and the replacement rod to the cylinder.  
 Please use the diagram below as a reference.

**Important**      The cylinder and reverse rod have to be placed parallel



Cylinder view from the top

### Attention

The clutch kit (pull-push conversion parts) is manufactured to work with the slave cylinder for GC8—Subaru parts #30620AA013.

We do not know if the slave cylinder is same for the GC8, GDA exported into your country.

If there is a fitting problem, use the slave cylinder #30620AA013 which can be purchased through ATS&ACROSS, if it is not available at your local Subaru dealer.

### **Change the return spring inside the slave cylinder for Imprezza (GC8, GDA), Legacy & Forester (5 speed MT) to the stronger one (Subaru stock parts)**

Some of the slave cylinders use a weaker (shorter) spring described below as an old model with 34mm spring. This short spring increases the possibility of snapping the reverse rod due to lack of sufficient pressure applied to the reverse rod and the clutch fork when the clutch is disengaged. Please exchange the short spring with the 49mm spring which comes with the clutch cylinder repair set 30622AA010 (Subaru genuine stock parts).

#### <Note>

If a new slave cylinder is purchased from ATS&ACROSS along with our carbon clutch, you do not have to check the spring. ATS&ACROSS sells only new type of slave cylinder with 49mm spring.

