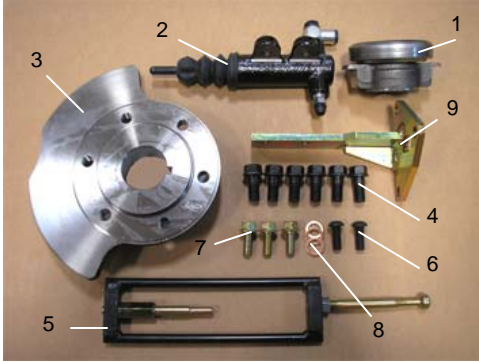


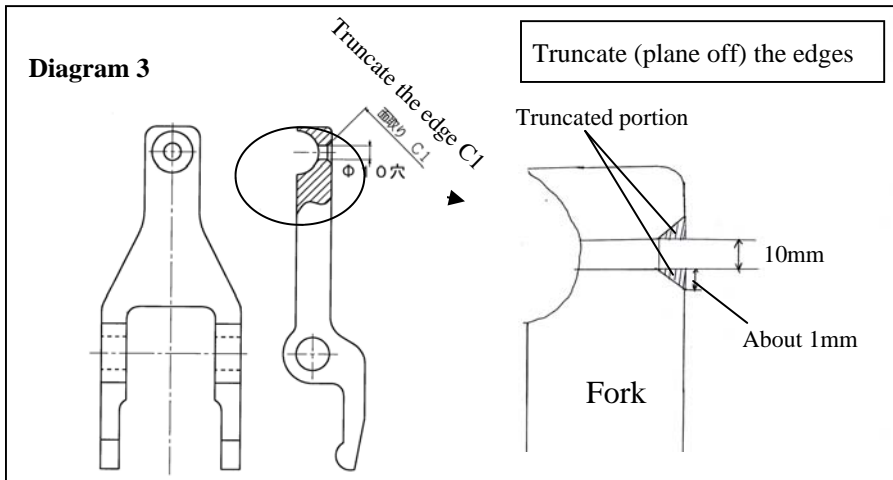
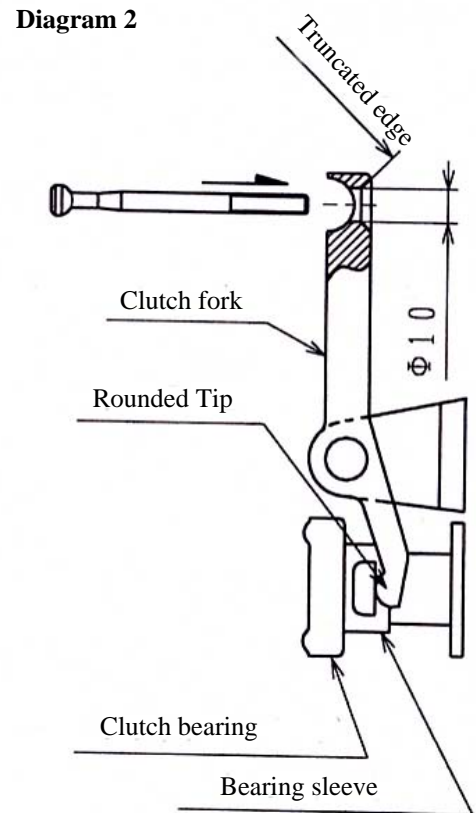
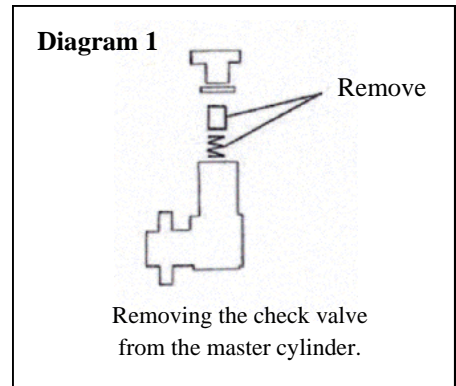
Instruction manual to convert pull style to push for Mazda FD3S



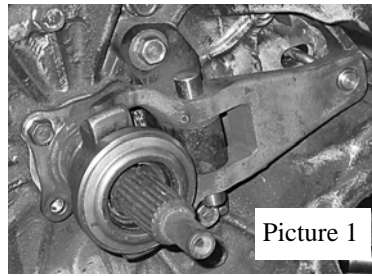
- Necessary parts** (It comes with clutch kit)
 1 - Clutch bearing & bearing sleeve (1),
 2 - Slave cylinder (1), 3 - Counter weight (1),
 4 - Flywheel bolt (6), 5 - Reverse rod (1),
 6 - Button bolt (2), 7- Flange bolt (3),
 8 - Copper Washer(3), 9 - Bracket (1)

Pull style to push style conversion process

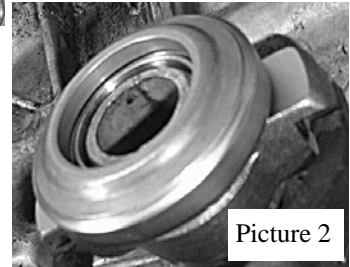
- 1) Remove the transmission then clean the input shaft. Insert the clutch hub of CARBONETIC carbon clutch onto the input shaft and make sure that you can insert / remove the hub very smoothly. In order to assure the smooth operation, remove the rust from the input shaft. If the input shaft is not straight enough, it might be necessary to purchase a new one.
- 2) The clutch master cylinder tends to cause a possible disengagement problem. Check it and overhaul it if necessary.
- 3) Refer to the diagram 1. Remove the check valve which is located at the joint portion of the piping on the master cylinder side. The check valve regulates the release function.
- 4) Remove the release fork, make a 10mm diameter hole on it, then truncate the edge (refer to the diagram 2 and diagram 3). Extract the pin from the fork and reverse the side (make the fork upside down) and fix it without using fork spring. As is described on Diagram 2, insert the rod into the 10mm hole and attach a nut so that the rod does not fall off. (after attaching the transmission to the engine, it helps if you could access the rod easily from the hole on the slave cylinder side.)



- 5) Apply grease on the contact area of the rod and the fork.
- 6) Reverse the clutch fork (upside down) and install it so that the rounded section on the tip makes contact with the bearing sleeve. (Refer to the Picture 1)
- 7) Insert the clutch bearing onto the bearing sleeve. (Refer to the Picture 2) - (For most US kits, this process is already done at the ACROSS Factory.)
- 8) Refer to the diagram 4 and modify the slave cylinder.

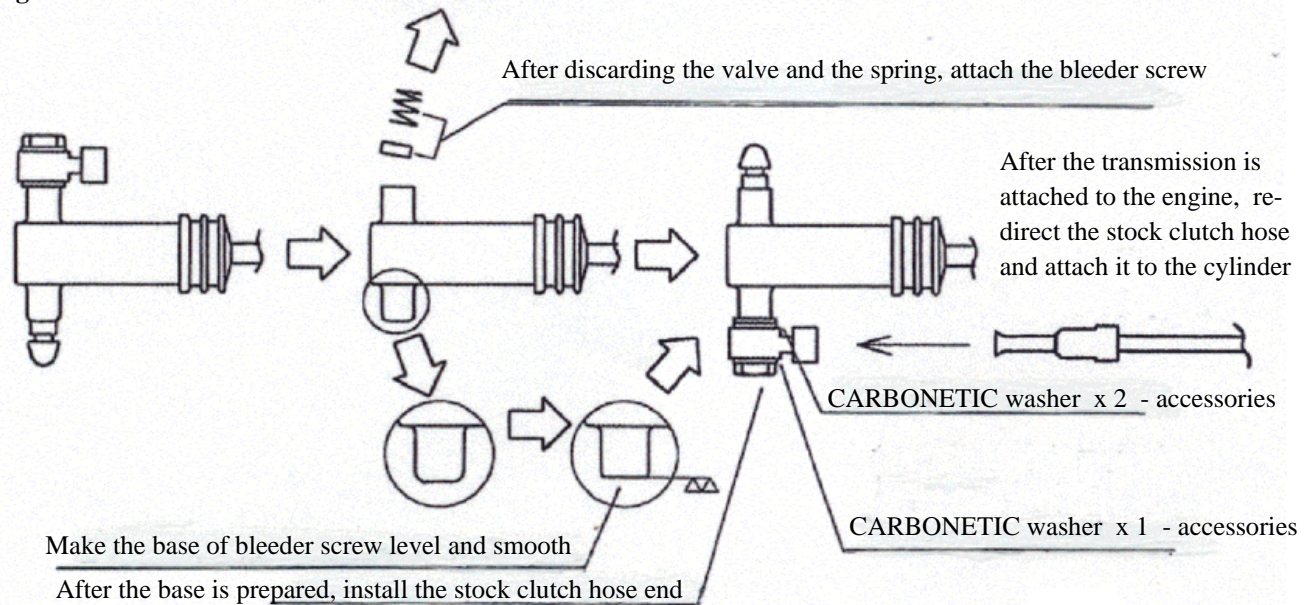


Picture 1



Picture 2

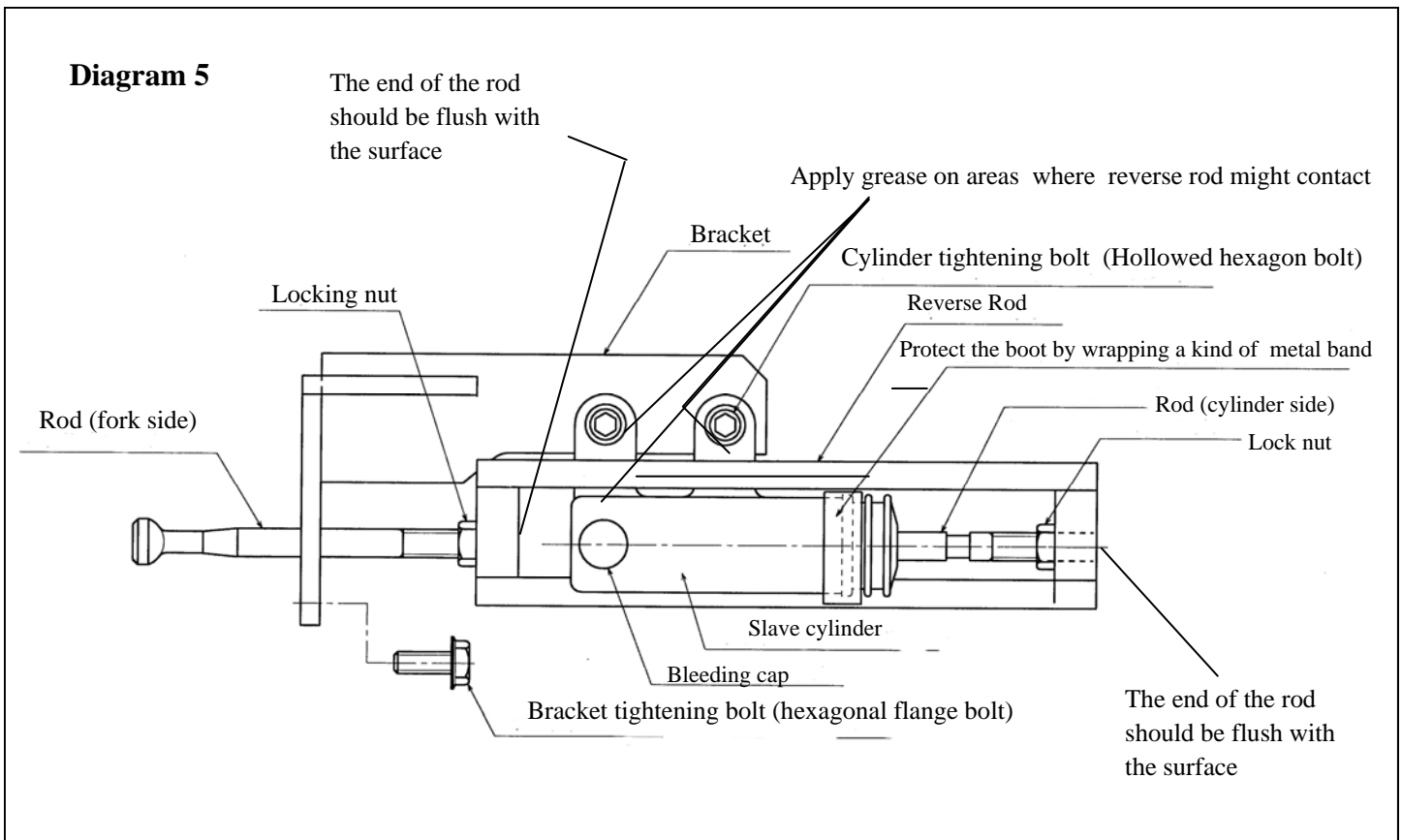
Diagram 4



Modification of the Mitsubishi slave cylinder

- 1 Remove the fitting at the fluid entry port.
- 2 Discard the valve and the spring in the entry port—refer to the diagram above.
- 3 The location of the bleeder valve and the fluid entry port will be reversed in the assembly. After removing the bleeder valve, **prepare the entrance smooth and flat** by sandpaper in order to secure the tight seal. (refer to the diagram below). The stock clutch hose will be attached here. If it is not airtight, oil leakage might cause a malfunction of the clutch. Please pay the extra attention.
- 4 Install the stock entry fitting (end of the clutch hose) using the stock bolt. The original 2 stock copper washers are likely to be damaged. Replace the original washers with the CARBONETIC washers x 3 as shown above.
- 5 Attach the bleeding valve to the original fluid entry port.
- 6 **If there is any oil leakage, re-prepare the surface and /or change the number of washers until the leakage is eliminated**

- 9) Refer to the diagram 5 and attach the slave cylinder to the CARBONETIC bracket. The bracket is to be attached to the transmission after the transmission is attached to the engine and the bleeding air is complete.
- 10) Refer to the diagram 5 and connect the reverse rod to the slave cylinder.
- 11) Protect the rubber boot section of the slave cylinder from frequent contact with the rod by wrapping some kind of metal band.
- 12) Apply grease on the area (bolt etc) which might have a contact with the rod.
- 13) Attach the clutch to the engine. * Insert the counter weight on the eccentric shaft and tighten the center nuts at the specified torque (40 ~ 50 kg-m). Bolt down the counterweight to the flywheel at the specified torque (6.2 kg-m).
* Attach the clutch.
- 14) Attach the transmission to the engine

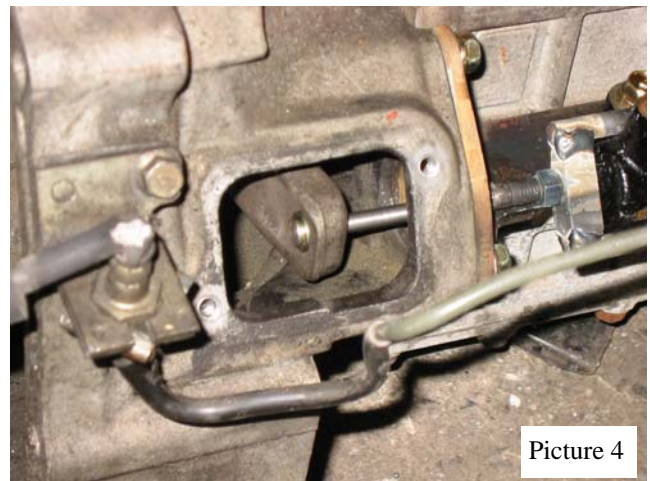


- 15) Twist the clutch oil hose under the body of the car so that it fits around the slave cylinder nicely, then connect the hose to the cylinder and bleed the air. Pay attention to keep the piston inside the cylinder when bleeding the air by utilizing the reverse rod and the rod on the cylinder side.
(Refer to the Picture 3)



Picture 3

- 16) Connect the rod (fork side) which is assembled in the process 4) to the reverse rod as shown on the Diagram 5.
(Also refer to the Picture 4)
- 17) Using 3 flange bolts, attach the bracket with the slave cylinder to the transmission.
- 18) Apply grease on the area where the reverse rod might have a contact with the cylinder and tightening bolts.



Picture 4