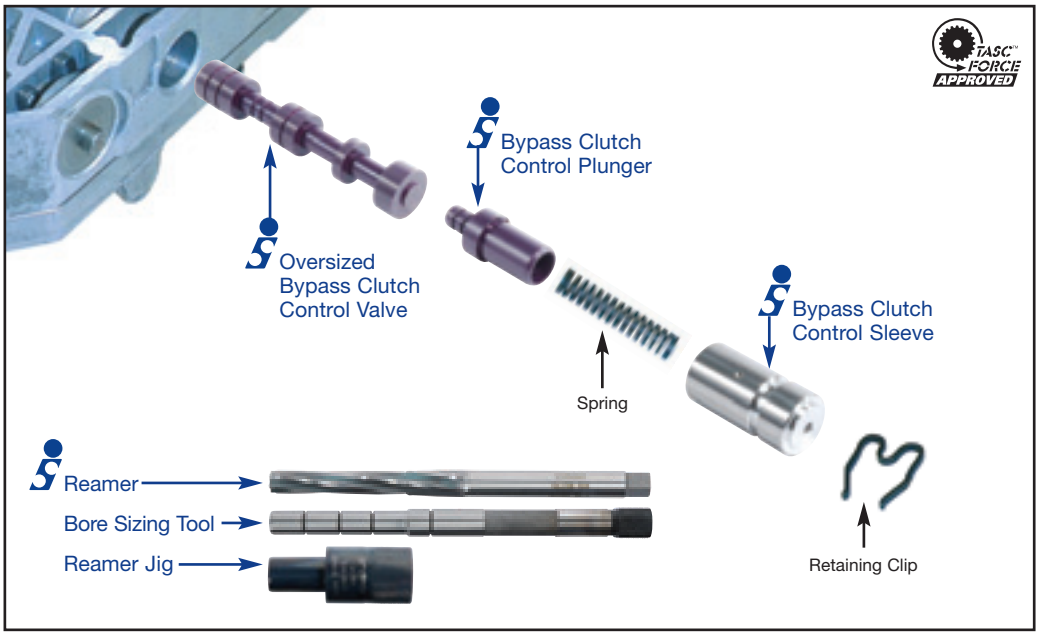
Bypass Clutch Control Valve Kit

96206-05K

1 BCC Valve
1 BCC Sleeve & Plunger Assembly

96206-TL

1 Reamer
1 Reamer Jig
1 Bore Sizing Tool



Bore Wear Inspection:

1. Remove all bore components. Install bypass valve backward.
2. Remove bypass control plunger from the bypass control sleeve. Use the sleeve as a Go/No-Go gauge, as illustrated in Figure 1. With a close-fitting sleeve and valve assembly, align for an on-center insertion into the bore.
3. Excessive bore wear will be indicated by failure of the sleeve/valve to be fully inserted into the bore without tilting or moving the valve inward.
4. A bore in good condition will be indicated by the sleeve/valve assembly installing fully into the bore with correct axial alignment (no tilting).

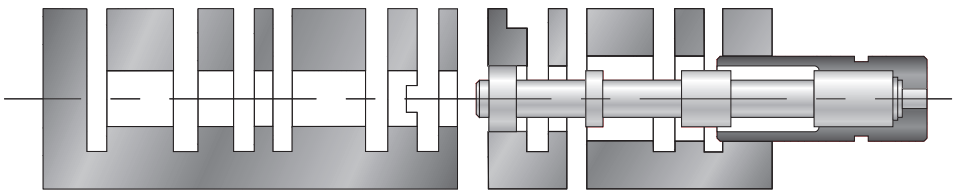


Figure 1

Reaming Instructions

1. Remove valves from the bore to be reamed.
2. Clean valve body. A mix of mineral spirits & degreaser in a 5:1 ratio or equivalent works well.
3. Clamp the valve body to bench with open circuits up.
4. Fill bore with cutting fluid (Kerosene, Tap Magic™, etc.)
5. Insert the reamer jig into bore as illustrated.
6. Soak fluted end of reamer with cutting fluid.
7. Insert reamer into reamer jig until reamer guide tip enters the first bore to be cut, as illustrated. Securely position the reamer against the bore to remove any reamer wobble.
8. With the reamer carefully and securely positioned, use a speed handle to ream the bore. The reaming action should be clockwise in a smooth and continuous motion, at approximately 1 to 1 1/2 revolutions per second.
9. The reamer should actually pull itself through the bore, so little or no back pressure should be applied to the reamer or speed handle.
10. Continue reaming until the tip of the reamer bottoms in the bore. Spin the reamer 5-10 more times after bore bottoming to allow for excess material removal and better surface finish.
11. Using low air pressure, blow free the chips before removing the reamer.
12. To remove the reamer, turn clockwise while slowly pulling outward on the reamer.
13. Remove any remaining debris from the bore with low air pressure and mineral spirits/degreaser mixture.
14. Lubricate the replacement valve with ATF. Fit the valve into the reamed bore. If snug, repeat the reaming procedure with an air drill at 500 rpm.

Cautions

- Never turn the reamer backward.
- Pushing on the reamer will result in poor surface finish, inadequate and sporadic material removal, and material being left unremoved as the reamer exits a bore.
- Blow free any chips from the reamer after each use.
- Never use a crescent wrench to turn the reamer.

Bore Sizing Instructions

After reaming of the bore, use the bore sizing tool with a slide hammer to ensure proper valve fit and bore integrity.

1. Lubricate the bore sizing tool with ATF.
2. Insert the reamer jig into the valve body, then insert the sizing tool into the bore, pushing carefully until it bottoms in the bore.
3. The tool should then be reciprocated in the bore, mimicking the stroking of the valve.
4. With the tool bottomed in the bore, a screwdriver tip may be placed through a valve body port and into a tool groove, then tapped with a hammer.

Reassembly Instructions

1. Lubricate the replacement BCC valve and insert into reamed bore. The largest spool diameter should be furthest outboard after assembly.
2. Remove the spring from the OEM sleeve and plunger assembly. This will be reused in the replacement assembly.
3. Install the OEM spring into the replacement sleeve and plunger assembly.
4. Push the replacement sleeve and plunger assembly into the bore, open end first, just far enough to reinstall the OEM clip.