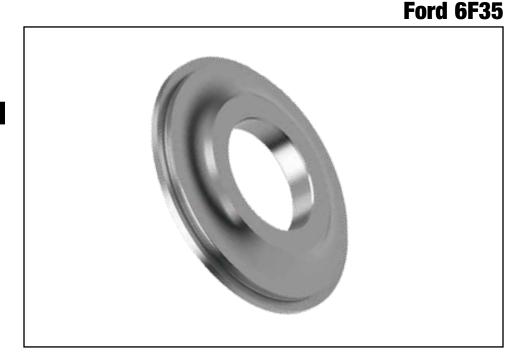
Instructions

Piston/Damper Repair Sleeve

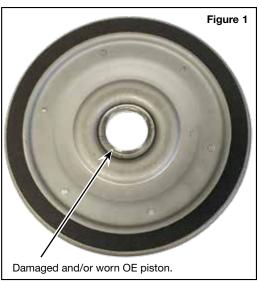
Part No.



Machining & Installation Instructions for Piston Plate

- 1. Start with a damaged or worn OE piston bore (Figure 1).
- 2. Chuck the piston plate in a lathe with damper spring side facing out.
- 3. Measure **FD-DS-3** pilot diameter (approximately 3.556–3.558") and bore the inside diameter .001–.003" larger depending on desired fit (**Figure 2**).
- 4. Machine surface directly adjacent to the I.D. bore (**Figure 3**) removing minimal material to ensure the surface is flat for new sleeve.

 Add lead in chamfer for better assembly.
- 5. Remove from the lathe and remove all the burrs.
- 6. Place repair sleeve in the piston damper assembly from the friction side, (**Figure 4**). Make sure the flange is pressed firmly against the machined surface from step 4.
- 7. Weld 360° around the flange O.D. a GTAW (TIG) weld is preferred to ensure a strong, flat and leak proof weld (Figure 5).
- 8. After the sleeve has been welded, allow to cool. Lightly clean the I.D. with 600-grit emery cloth. Make sure none of the weld is above the top edge of the flange.





TORQUE CONVERTER PARTS

PISTON/DAMPER REPAIR SLEEVE FD-DS-3

Machining & Installation Instructions for Piston Plate continued

9. It is recommended that you balance the newly repaired piston damper assembly. Do not rely on the converter balancing to balance the piston damper as well. The piston damper, converter impeller, and cover all rotate independently and must be balanced independently. If an unbalance piston damper is installed in a converter and then the converter is balanced, that converter will only be balanced if the piston locks up at the same position as it was during balancing. Balancing can be done on a converter balancer using a turbine hub as a centering tool. Material may be removed, as in the factory, or material can be added. A weld bead may be enough to balance the assembly, but be careful not to overheat the friction ring if adding a weld bead to balance.

