



Piston Damper Repair Sleeve

Part No.

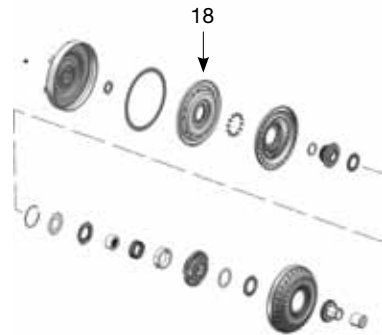
AL-DS-2

Associated Parts

- AL-O-2 Piston Seal

Illustration Reference

AL-DS-2 repairs item number 18 below. For detailed illustration, visit www.sonnax.com.



Allison 1000/2000/2400 2006-Up

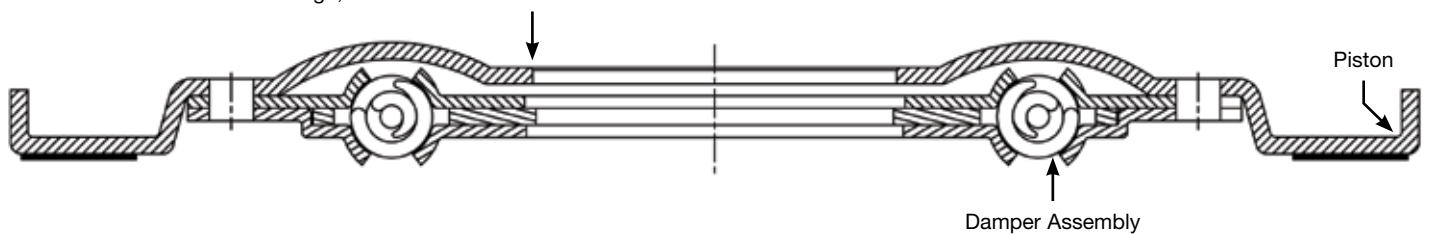


1. Machining

- Chuck the piston plate in a lathe and indicate to ensure that the friction material surface runs true.
- To keep the inside of this assembly clean during machining, you may want to take preventative steps to catch and remove all the chips the from machining. A suggestion would be to use a foam rubber sheet to catch debris and remove the foam rubber sheet with debris before welding.
- Bore the inside diameter to 3.304" - 3.309" (83.92mm - 84.05mm) to accept repair sleeve as shown in **Figure 1**.
- Machine surface flush immediately adjacent to the ID bore, as shown in **Figure 1**. This will ensure a flat mating surface for the new Sonnax repair sleeve **AL-DS-2**. Add lead-in chamfer to piston for better assembly of new sleeve.
- Remove from the lathe and remove all the burrs.

Figure 1

Bore 3.304" - 3.309" dia. (83.92mm - 84.05mm) through, machine surface flush and add lead-in chamfer





2. Installation

- Place repair sleeve **AL-DS-2** in the piston damper assembly, radius edge up as shown in **Figure 2**. Make sure the flange is pressed firmly against the machined surface, see **Figure 3**.
- Weld 360° around the flange OD. A GTAW (TIG) weld is preferred to ensure a strong, flat and leak proof weld.
- After the sleeve has been welded, allow to cool. Lightly clean the inside diameter with 600-grit emery cloth. Make sure none of the weld is above the top edge of the flange.
- It is recommended that you balance the newly repaired piston damper assembly. Do not rely on the converter balancing to balance the piston damper too. The piston damper, impeller, and cover all rotate independently and must be balanced independently. 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.

Figure 2

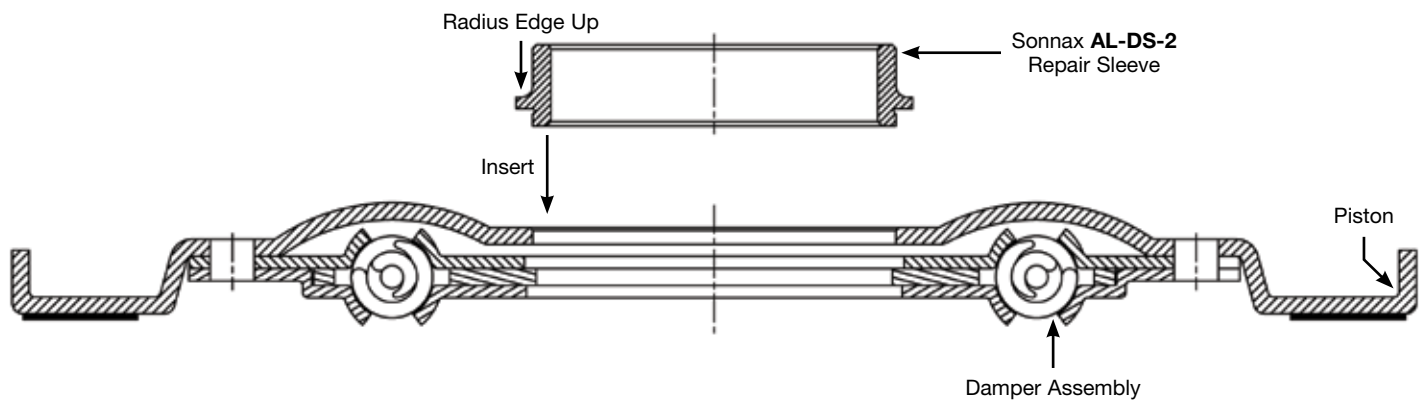


Figure 3

