

## Piston Damper Repair Sleeve

### Part No.

**AL-DS-2**

### Associated Parts

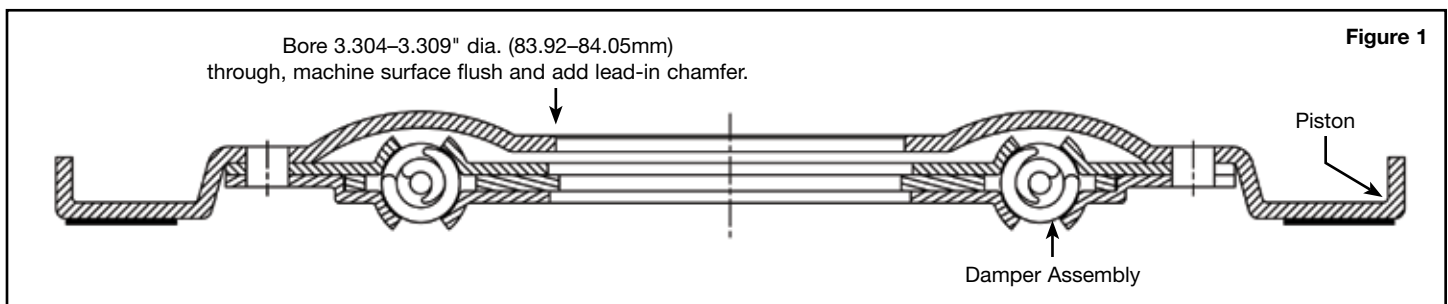
- AL-O-2 Piston Seal

## Allison® 1000/2000/2400, 2006-Later



### 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 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" (83.92–84.05mm) to accept repair sleeve **Figure 1**.
- Machine surface flush immediately adjacent to the I.D. bore **Figure 1**. This will ensure a flat mating surface for Sonnax piston damper repair sleeve **AL-DS-2**. Add lead-in chamfer to piston for better assembly of Sonnax sleeve.
- Remove from the lathe and remove all the burrs.



## 2. Installation

- Place repair sleeve **AL-DS-2** in the piston damper assembly, radius edge up **Figure 2**. Make sure the flange is pressed firmly against the machined surface **Figure 3**.
- Weld 360° around the flange O.D. 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 I.D. with 600-grit emery cloth. Ensure 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.

