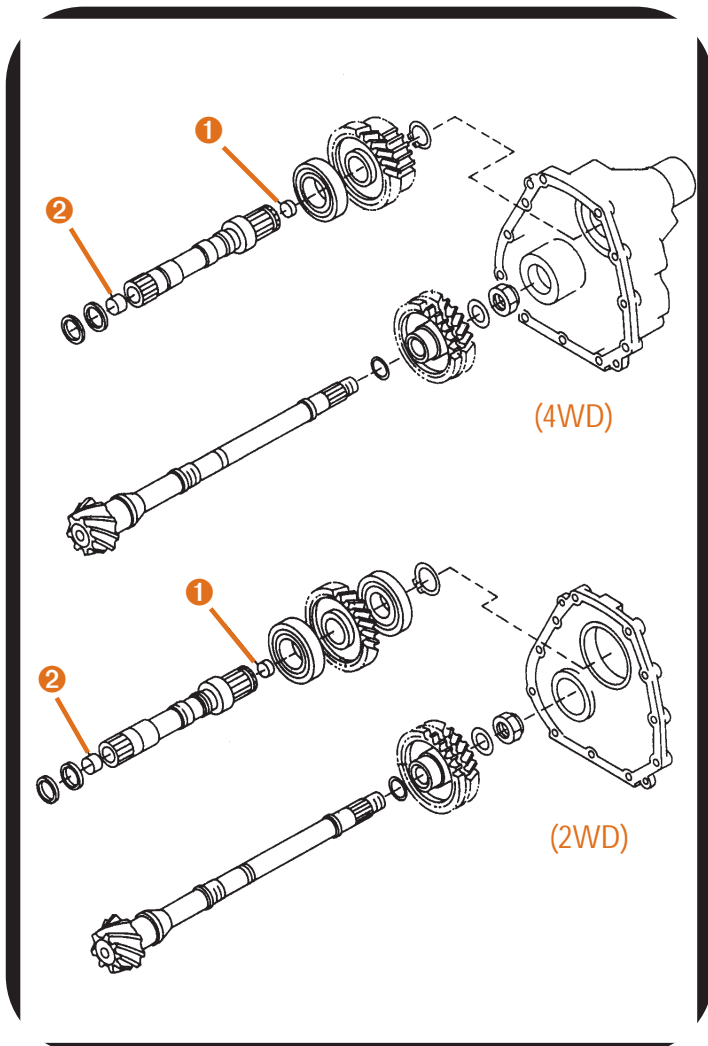


## Prevention Of Repeat Planetary Gear Failure

Whenever the 4EAT is being repaired or replaced with a new or remanufactured unit, it is very important to ensure that a quality repair is being performed. A shop comeback is frustrating, and detrimental to customer satisfaction. It is also avoidable.

In addition to replacing any damaged parts and making all of the required precision measurements, a thorough inspection of the failed parts, replacement parts, and the affected circuit must be performed to determine the cause of the failure and to ensure that it does not happen again. Back flushing of the oil cooler and lines must also be included as part of this procedure.

When performing a repair to the rear planetary gear section of the 4EAT, you are repairing an effect. For every effect, there is a cause which must be found. The following are causes for rear planetary failure which have been documented:



- Restricted flow through the radiator cooler.
- Kinked or obstructed radiator cooler lines.
- Improper filter kit installation or hose routing. Refer to Subaru Service Bulletin number 16-56-93 for filter kit installation procedures.
- Debris restricting ATF flow through the input shaft or its oil feed holes.
- Reuse of a heat-damaged input shaft (where the internal seal has become deformed).
- Orifice plug missing from the rear of the reduction shaft (refer to Item 1 in the illustration that accompanies this bulletin).
- Bushing missing from the front of the reduction shaft (refer to Item 2 in the illustration).

By ensuring that the above items are checked on the vehicle and on the parts being reinstalled into the transmission case (both new and used), you are ensuring a quality finished product.