



## AISIN 6

### DELAY OR SLIP IN DRIVE

**COMPLAINT:** An Aisin 6 transmission may have an after overhaul complaint of a delay or slip on initial take-off in drive. After transmission dis-assembly, the K1 Clutch is found to be burnt. Secondary complaints may also be converter clutch slip or difficulty filling the torque converter.

**CAUSE:** The four sealing rings that were installed onto the K1 Drum input shaft were undersized by .050".

**CORRECTION:** Beginning with the 2009 model year, the diameter of the input shaft became .050" larger in diameter. The pump cover/stator shaft was also changed to accommodate the larger diameter input shaft.

2008 and earlier K1 input shaft sealing ring area diameter is **1.470"** in diameter and the remainder of the input shaft is 1.01" in diameter (See Figure 1). The sealing rings for this K1 drum can be **1.433" to 1.440" in diameter**.

The 2009 and later K1 input shaft sealing ring area is **1.520"** in diameter and the remainder of the input shaft is 1.06" in diameter (See Figure 3). The sealing rings for this drum can be 1.483" to 1.490", approximately a .050" difference.

The technician received the incorrect overhaul kit from his supplier and initially did not notice the difference in ring diameter resulting in the above complaints.

Once the technician realized what had happened using a wet air check method, the correct kit was ordered containing the correct diameter sealing rings and the complaints were corrected. Make certain that your parts supplier is made aware of this when you are ordering an overhaul kit.

### SERVICE INFORMATION:

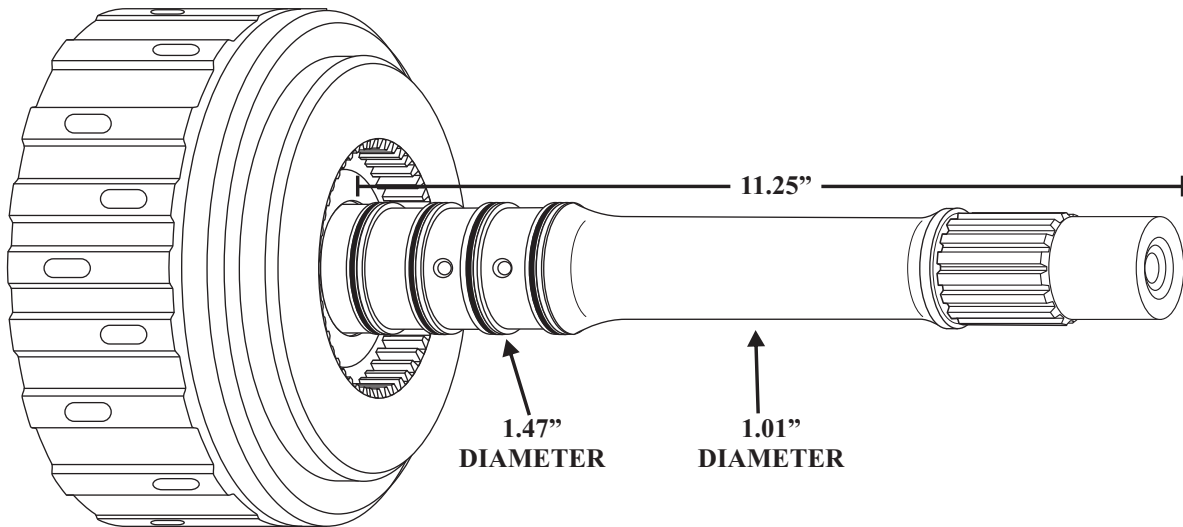
As an additional service note, the tilt cab truck K1 drum is 11.25" tall (See Figure 1). The K1 drum for a Dodge application is taller than the tilt cab truck version. The Dodge K1 drum is 12.25" tall (See Figure 3).

Also notice that the splines at the tip of the stator shaft are different for a Tilt Cab Truck and the stator shaft 4.00" tall (See Figure 2), application then the splines for the tilt cab applications and the stator shaft is 4.25" tall, See Figure 4.

*Many thanks to Orlando from Advanced Transmissions*

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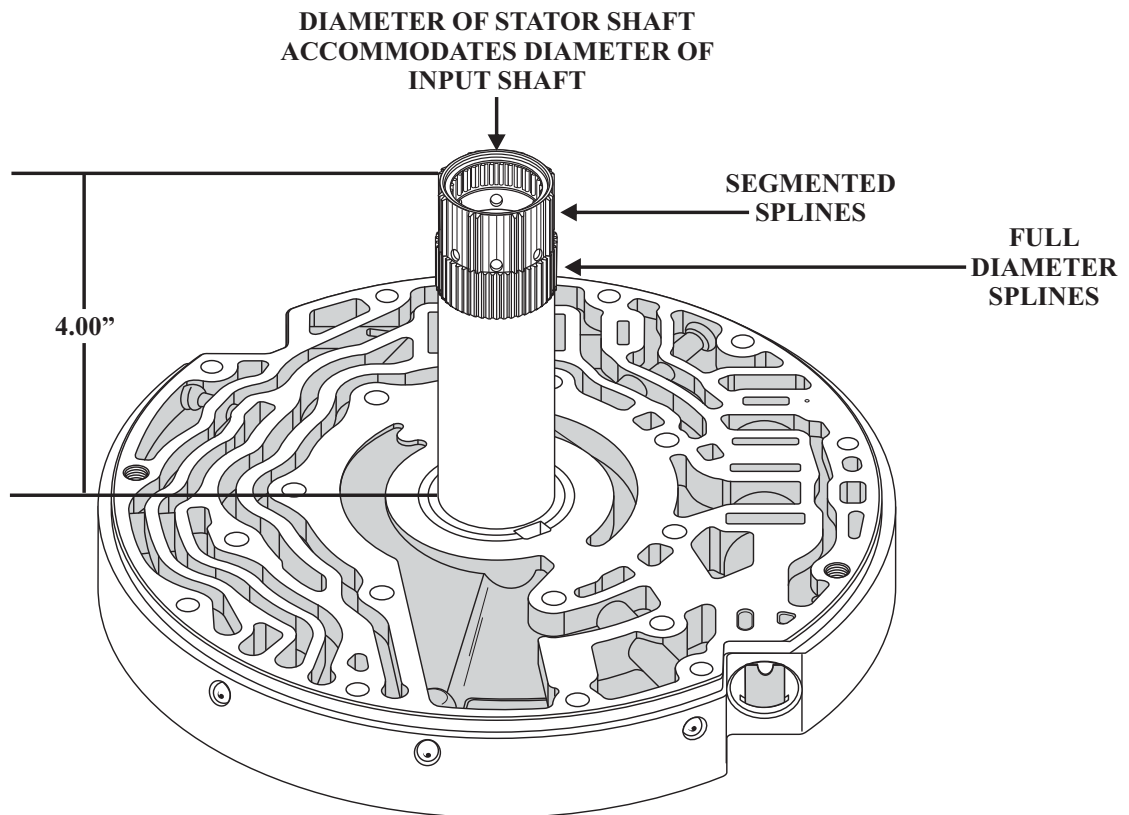
### 2008 & EARLIER K1 DRUM



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Figure 1

### 2008 & EARLIER PUMP COVER/STATOR SHAFT

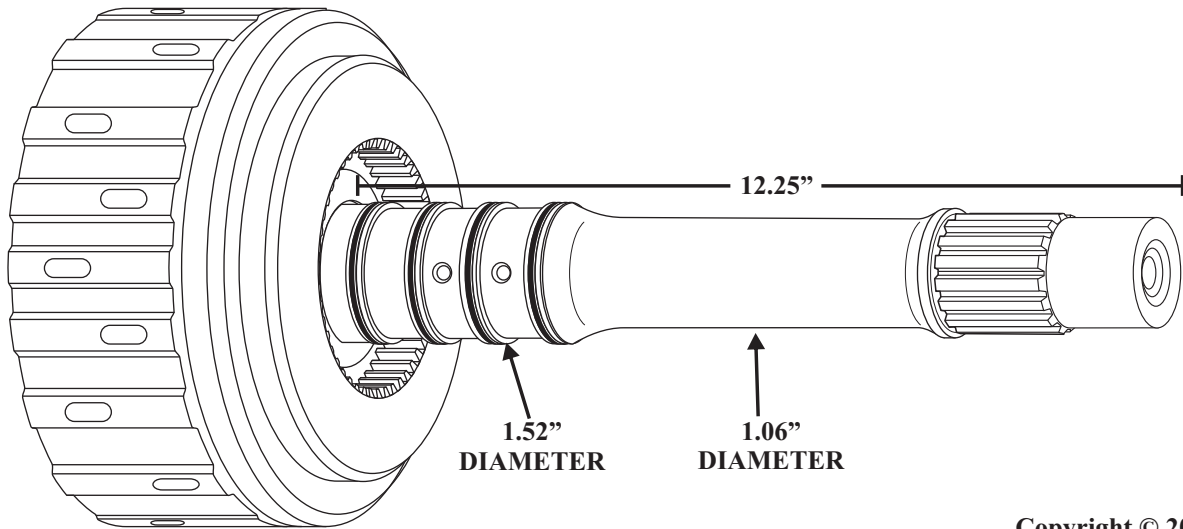


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Figure 2

## AISIN 6 DELAY OR SLIP IN DRIVE

### 2009 & LATER K1 DRUM

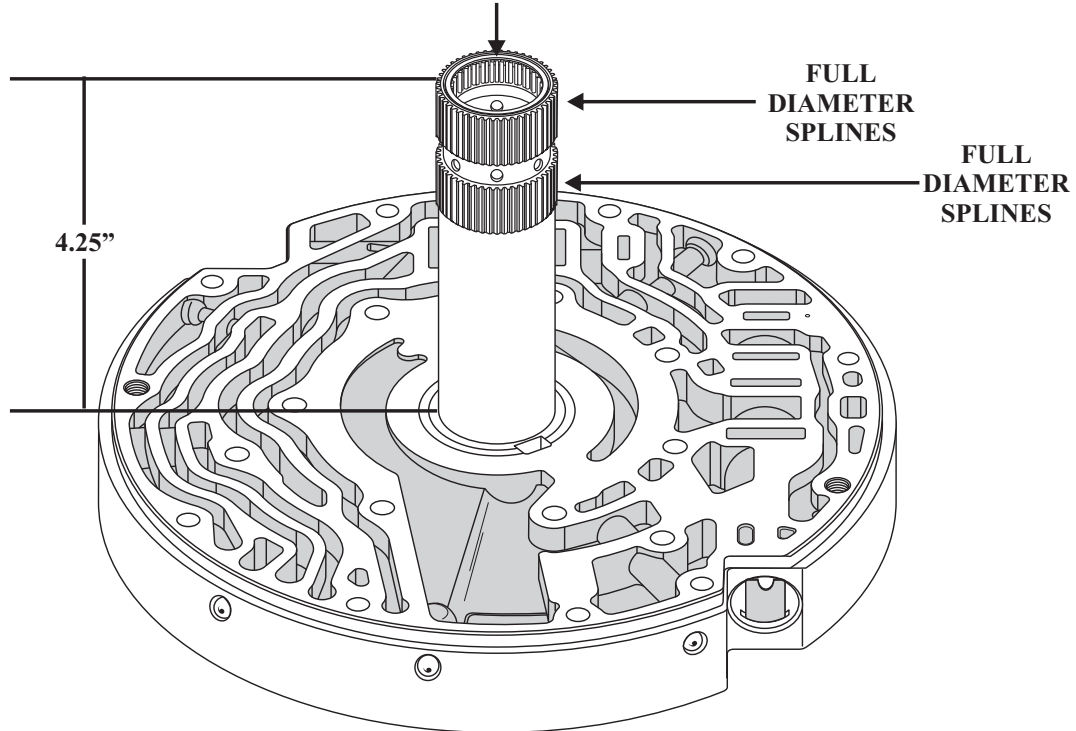


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Figure 3

### 2009 & LATER PUMP COVER/STATOR SHAFT

DIAMETER OF STATOR SHAFT  
ACCOMMODATES DIAMETER OF  
INPUT SHAFT



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Figure 4