

TST's Front Crank Seal Installation **Instructions for Cummins "B" Engines**

These instructions replace the Cummins supplied instructions in the 3804899 kit which were written for seal replacement with the front cover still on the engine. Use these instructions to aid in the seal installation mentioned in step 16 of our Dowel Pin Fix Kit, or anytime the seal is replaced with the gear cover removed from the engine.

Tool list and required parts:

A hammer med size.

A large flat blade screw driver (12 inch).

Red Threadlocker

A long punch small diameter or

Brake Parts Cleaner (Mopar 04897150AB)

Cummins Front Crank Seal Kit 3804899

A Cummins "B" engine needing a new front seal

Procedure for work.

1) With the front gear cover removed from engine, place gear cover front down on a work surface and drive the old seal out hitting the metal case of the seal from the back side of the cover with a punch or screwdriver and hammer as shown in Figure 1. **Caution: Do not damage the cover bore .**



Figure 1



Figure 2



Figure 3

2) Clean the bore with parts cleaner, dry the bore, then place the seal driver furnished with the seal kit in the front side of the cover bore as shown in Figure 2. Flip the cover over, front side down with the seal driver against the work surface such that the driver tool will control the depth of the seal when it is installed from the back side of the cover.

3) Remove the semi-transparent plastic seal starter guide from the inside diameter of the seal. Coat the outside diameter of the seal metal case with a light coating of red threadlocker. These seal have two sealing lips, one is the black oil seal lip and the other is a yellow dust lip. Since we are installing the seal from the back side of the cover, the side with the yellow dust lip would go in first or down when laid on the work surface. Start installation of the seal into the back side of the gear cover as shown in Figure 3 by taping lightly with a hammer. **Caution: Do not let the seal go in the bore tilted,**



Figure 4



Figure 5

keep it flat. Use a wide bladed screwdriver or punch as shown in Figure 4 to drive the seal into the bore until it is against the supplied seal driver that was placed on the front side of the gear cover bore on the work surface. Re-install the semi transparent plastic guide into the seal from the back side of the cover.

4) Proceed with reinstalling gear cover on the engine using instructions elsewhere. **Before you re-install the damper,** install the black rubber dust shield that was include in the 3804899 kit. This shield fits snug on the crank with the large diameter side of the shield touching the metal face of the crank seal as shown in Figure 5. Proceed with damper installation.