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DO NOT USE WATER-BASED TRANSMISSION FLUSHING FLUID – THE CONVERTER LOCKUP CLUTCH LINING WILL DISINTIGRATE, AND *WARRANTY WILL BE VOIDED.*

Dodge 47/48RE PRO FORCE PRO FORCE 3D Torque Converter

Installation Instructions

1060210X	**518/618 Non L/U**	**1988-1993**
*** 1070247X, -LX, -X-HS**	**47RH & 47/48RE**	**1994-2007**
† 1071217X, -LX		
^ 1071218X, -LX		

PART NUMBERS WITH "**X**" FEATURE ENHANCED STALL, "**LX**" LOW STALL, AND "**X-HS**" HIGH STALL

** Features single lock-up clutch*

† Features triple lock-up clutches

^ Features triple lock-up clutches and BigShaft turbine hub

PLEASE READ ALL INSTRUCTIONS BEFORE INSTALLING THIS PRODUCT.

BD Engine Brake Inc.
1-800-887-5030 | https://www.bddiesel.com

Important Tips Before You Start

Always service the transmission when installing a torque convertor. This will ensure that both the torque converter and transmission will be operating with fresh clean transmission fluid.

Please be aware that engine horsepower increase modifications may require an increase in transmission mainline pressure, to prevent transmission or converter clutches from slipping. Contact a BD service representative for more vehicle-specific details.

Preparing the Crankshaft and Convertor for Installation

- Always check crankshaft pilot for burrs and out-of-round.
- Remove any rust with fine emery paper, and lightly grease pocket receiving torque convertor pilot hub.
- Remove any paint from torque convertor's crank pilot hub with fine emery paper.
- Before installation, pre-fit torque convertor to flex plate, and into back of the crankshaft. It should be a snug, even fit (neither loose nor binding).
- Slowly pour two quarts of automatic transmission fluid into convertor.
- Check flex plate for cracks or worn teeth.
- If replacing the torque converter only, replace the transmission front seal.

Convertor Installation

Support and rotate torque converter back and forth while installing it into transmission. You will feel it seat 3 times for the input shaft, stator support, and oil pump notches. Use care to not damage the front seal. Make sure that the convertor is fully installed– do not assume that it is in place when you receive the transmission. After you are sure it is in place, always keep the tail end of the transmission low so that it cannot slip out.

Checking Convertor-to-Flex Plate Alignment

- Bolt the transmission to the engine with two bell housing bolts (hand tight), and check the convertor for free movement.
- After the bell housing bolts are tightened, the convertor should have 1/16"-1/8" of clearance between the pads on the convertor and the flex plate. If there is not enough clearance, remove the transmission and double-check if the convertor is seated properly in the front of the transmission.
- Add Loctite® to the torque convertor nuts and/or bolts before installation.
- Draw the convertor bolts up evenly, so as not to bind the convertor, which can cause vibration and pump bushing failure.
- If there is a vibration after installation, you could try marking the convertor to the flex plate, then rotating it one bolt at a time.

NOTE: The #1 cause of vibration is the failure to prepare the crankshaft for installation. Each time the convertor is installed without polishing off the crankshaft rust, removing the paint from the convertor pilot, and adding a little grease, the convertor may be drawn up crooked with the first bolt. This condition may cause convertor run-out and will usually ruin the pump bushing. The second most common complaint on convertors is a whine after installation. This usually means that there is too much clearance between the convertor pads and the flex plate. This draws the convertor hub too far out of the pump drive gear, causing the gear to "rock".

Reusing Convertor When Replacing the Transmission

We strongly recommend replacing the convertor with every rebuilt transmission because of the difficulty of thoroughly cleaning it on the inside. If you choose not to replace it, the convertor must be removed and thoroughly flushed. Make the following inspections: internal thrust washers and bearings for misalignment, condition of the inner sprag, inner turbine hub splines, inner lockup seal (on lockup convertors), hub condition for wear/scoring, the drain plug, pilot and mounting devices to ensure proper alignment and overall good condition.

Cooler & Cooler Lines

The cooler and cooler lines ***MUST*** be flushed to remove all metal particles and oil. ***DO NOT BLOW THEM OUT WITH AIR.*** Use a solvent that will flush out old oil and metal particles. This is particularly important if the transmission you have removed has metal in the fluid. ***DO NOT USE WATER BASED TRANSMISSION FLUSHING FLUID!***

Flex Plate Inspection

Inspect for cracks where the plate bolts to the engine, and out of round holes where the convertor bolts to the flex plate. Check for warping. Inspect the ring gear teeth for excessive wear or missing teeth.

Manual Control Linkage (if applicable)

The manual control linkage must be re-adjusted according to the repair manual, to assure proper setting for the unit being installed. Adjust the linkage with the vehicle in actual road operation.

Shift Linkage

Excessive shift linkage wear (including slop at the steering column) may cause shifting malfunctions such as improper throw, dragging into or out of gears, or jumping out of gear.

Motor & Transmission Mounts

The condition of the motor mounts & transmission mounts can affect linkage adjustments. Worn mounts can create in-vehicle noises, and can cause excessive wear to internal transmission parts. Broken or oil-soaked mounts must be replaced.

U-Joints and Driveshaft Yoke

Tight or worn U-Joints may cause vibration in the driveline, as well as premature failure of bushings and seals in the tail casting. A tight or worn (tapered) front yoke will quickly damage the rear seal and bushings, causing loss of lubricant, which in turn can lead to transmission failure.

Important Engine/Transmission Notes

Before operating an electronic transmission after re-installing it, connect a scan tool to record and clear any transmission trouble codes. The TPS and temperature sensor play a critical role in the operation of electronic transmissions. The convertor clutch will not operate until the transmission reaches a certain temperature. Be sure these sensors are working properly, and replace faulty units. Fill the transmission with the correct amount of the specified transmission fluid. Test drive the vehicle to check transmission operation, and to complete any relearn procedures. Refer to the service manual for the detailed relearn procedure.

***DO NOT:** Check the operation of the transmission with the drive wheels off the ground.	***DO NOT:** Re-use old oil. Dirty oil causes valves to stick and may clog the lines if contaminated. Both may lead to premature failure of the transmission or torque convertor!