

Transmission Installation Guide – LKQ

Congratulations on your purchase of a quality LKQ transmission. Every effort has been made to assure the unit you are preparing to install will provide many years of trouble-free performance.

LKQ adheres to a strict inspection policy, including operation the transmission in the vehicle if possible, and inspecting the case, fluid and filter for excessive debris or discoloration. Many accessory parts and components have been left attached to our assembly for your convenience and care of handling. These may save some time, however the installer is responsible for exchanging parts and accessories as needed and replacing normal wear and tear items that are not covered under the warranty.

Proper installation of this unit is critical. Please take a moment to acquaint yourself with the following pre-installation instructions. Unit failure as a result of improper installation is not covered under LKQ warranty.

PRE-INSTALL CHECKLIST:

1.) Ensure that the unit provided is materially the same as the one being replaced.

2.) Determine why original unit failed

Determining why the original unit failed and making the necessary repairs is critical.

3.) Scan for diagnostic trouble codes

Scan tool use is a requirement for electronic automatic transmission replacement. All vehicles must be properly scanned for diagnostic trouble codes before and after installation. These scans will check all electrical components, and tell you if the components that make the automatic transmission function are in good working order.



4.) Inspect all wiring harnesses and connectors carefully

Loose terminals and corrosion can cause your transmission to fail. Carefully inspect all connectors for loose or bent pins, use an electrical contact cleaner to clean all

connections. Make sure all retainer clips are not broken and are holding properly.



5.) Flush transmission oil coolers according to OEM specifications

Your transmission will fail if all contaminants from the previous failure are not flushed from the system. All transmission coolers must be forward and reverse flushed. Any debris left in the cooling system will cause premature transmission failure that is not covered under your LKQ warranty. Some coolers are not flushable and must be replaced. These units include:

6.) Check your universal joints, driveshaft yokes and axle shafts

Bad universal joints can cause driveline vibrations and premature bearing/bushing failure to the transmission. FWD transaxles that have any differential failure will damage the axle shaft in most cases, inspect very carefully the ends that go into the transaxle. Verify oil pump drive shaft or input shaft (if equipped) is present and fully seated. Check right side differential side (spider) gears for alignment.

7.) Purchase OE recommended transmission fluid

Using “bulk” fluid in many late model transmissions can cause the unit to fail. OE recommended fluid has become much more specialized and units are dependent on their specific flow and cooling characteristics. Make sure you have the proper fluid on hand before you start your install.

8.) Check your accessories

Although your LKQ unit comes with some accessories, they are not covered under warranty. The installer must check all cooler lines, engine/trans mounts, TPS, VSS, MLPS, Throttle Cables, etc. Replace damaged or broken accessories as required.

9.) Check flex plates, dowel pins & crank pilots

Check your flex plate to make sure it is not cracked or the converter mounting pads are not worn out. Crank pilot holes must be free of debris. Put a small amount of grease in the pilot to ensure the converter slides into place properly. Every automatic transmission must have 2 dowel pins in the back of the engine for proper centerline alignment. If the dowel pins are not in perfect condition or are missing the unit will fail after very few miles..

ROUTINE INSTALL CHECKLIST:

After performing the pre-install checks, the following steps should be taken while installing any LKQ transmission.

If you are installing any of the units listed below – please see the special instructions for additional procedures specific to those units.

1996-2003 FORD F150, 250, 350, Explorer, Expedition, Excursion automatic units –see page 4

1.) Remove oil pan and replace filter

In some cases LKQ has removed the old filter from the transmission. IN other cases the old filter is still in the unit. In all cases the filter must be replaced with a new one.

2.) Verify oil pump drive and input shafts are in place correctly

3.) Replace front seal

Input Seal



- 4.) **Install and index the torque converter completely into the front pump**
- 5.) **Inspect and replace the rear seal as needed**
- 6.) **Change over sensors as needed**
- 7.) **Exchange the speedometer senders as needed**
- 8.) **Replace the radiator or cooler if recommended by the manufacturer**
- 9.) **Remove all “cap-plugs” from lines and orifices**

10.) Make proper T.V. adjustment / setup with a pressure gauge

Units that use a cable / mechanical linkage must be set up with a pressure gauge. Check for proper mechanical operation, and check for specific instructions supplied with this unit. “Seat of the pants” adjustments will cause premature failure of your



transmission.

10.) Fill transmission with the OEM recommended fluid

Make sure you are filling the unit with the proper type fluid. Carefully monitor fluid level. Your LKQ transmission will have residual fluid so filling capacities will be less than OE specifications. Verify the differential portion of the transmission is full of fluid.

11.) Clear all transmission computer codes in vehicle prior to starting

Many late model transmissions have electronic controls that must be reset before operation. In some cases this must be done by an OEM dealership.

SPECIAL INSTALL CHECKLIST:

*THESE INSTRUCTIONS ARE SPECIFIC TO THE FOLLOWING MODELS:
1996-2003 FORD F150, 250, 350, Explorer, Expedition, Excursion automatic units*

Proper torque converter installation

Installation requires that the input shaft be properly indexed and seated into the front planetary gear (Transmission) and for the torque converter to be properly indexed into the front pump. This is a common mistake occurring at the time of installation causing failure and permanent transmission damage.

PLEASE FOLLOW THIS PROCEEDURE:

- 1.) Hang the transmission vertically, tail shaft down, and install the shaft first ensuring full indexing. They cannot properly align without this step as the gear “droops” when the transmission is lying horizontally.
- 2.) Insert the input shaft with the short splines going into the pump collar.
- 3.) Slightly rotate the input shaft until the shaft drops into place completely into the overdrive planetary of the front hub. **DO NOT** drive the shaft into place! A properly seated shaft can be identified by only having the cut splines visible on the input shaft protruding from the pump shaft collar.
- 4.) Install the torque converter being careful to fully index the shaft into the front pump by rotating evenly until it drops into place. This will require rotating the torque converter ½ turn in either direction to completely drop into place. When completely seated the forward face of the torque converter will be approximately 2 inches below the bell housing to engine surface. **DO NOT** drive the converter into place. Use the weight of the converter to allow proper indexing.

HOW TO PREP EXCHANGE UNIT FOR RETURN

Getting you a full and prompt core credit for your exchange is important to LKQ. Please take the following steps to prep your exchange unit prior to return:

- 1.) Do not return the exchange unit prior to completed installation. (this may result in lost bolts, sensors and/or brackets.
- 2.) Completely drain fluid from transmission and pan.
- 3.) Reuse “cap-plugs” from replacement unit to prevent fluid loss.
- 4.) Secure unit on pallet with bands
- 5.) Call LKQ when your exchange unit is ready for pick-up.

.....perf.....

Warranty registration card

Installers - complete and return this card to activate your LKQ Powertrain warranty and get your FREE LKQ tool bag – a \$15 value!

Shop Name _____	LKQ INVOICE # _____
Address _____	LKQ Salesperson _____
City, ST, zip _____	Mileage _____
Phone _____	Technician Name _____

Please circle the number which describes your agreement with the following statements:

	Strongly agree					Strongly disagree				
My engine was delivered in a timely manner	1	2	3	4	5	6	7	8	9	10
My engine was clean and looked good	1	2	3	4	5	6	7	8	9	10
My engine was more than I expected	1	2	3	4	5	6	7	8	9	10
My engine was less than I expected	1	2	3	4	5	6	7	8	9	10
I will buy more engines from LKQ	1	2	3	4	5	6	7	8	9	10
My engine performed without any issues	1	2	3	4	5	6	7	8	9	10
My LKQ sales rep was professional	1	2	3	4	5	6	7	8	9	10
Comments _____										

