

4F27E

INSTALLATION GUIDE

Ford Automatic Transmission

CHECKLIST

- Compare replacement transmission and torque convertor to original before installation.
- Scan original vehicle computer, record any codes for later review and resolve all codes.
- Transmission cooler and lines **must be** hot flushed or replaced.
- Inspect flex plate closely and completely for cracks or damage; replace if necessary.
- Inspect crank pilot bearing for wear and apply a small amount of grease to aid with installation.
- Verify that both dowel pins are clean, installed properly, and are in good condition; this is critical for proper alignment.
- Check torque converter bolt length; too long of a bolt will damage the torque converter.
- Verify torque converter is properly and completely installed onto output shaft.
- Do not tighten bell housing with force; torque converter may have shifted during installation.
- Inspect mounts and axle shaft.
- Inspect and install PRNDL Neutral Safety Switch.
- Fill transmission with purchased synthetic or OEM-approved fluid.

GUIDELINES

Prior to installation of the replacement transmission, scan the vehicle for engine and transmission codes, record all codes, and resolve all engine codes. If you are not able to perform a scan, take the vehicle to a dealership. If any ABS or Speed Sensor codes are found, these issues must be resolved prior to transmission replacement.

The entire transmission cooling system must be completely cleaned, flushed, and flow tested. If the cooler is plugged, it must be replaced. A restricted and/or contaminated cooling system is the leading cause of transmission failure after replacement.

Inspect the transmission wiring harness for damaged wires or connectors. Verify proper function of the entire electrical system, including the battery, alternator, and, most importantly, **the vehicle grounds**.

This is an electronically-controlled transmission with a complex shift adapt system. The following information is **very important** to understand and perform correctly. Failure to do so may cause damage to your new transmission and/or cause performance problems.

The TCM must be recalibrated; disconnecting the battery is not sufficient. Your local dealership can perform this for a nominal charge. Do not attempt if you do not have the proper equipment.

Visit Ford's site motorcraft.com to verify that the vehicle's TCM has the latest software, updates, and calibrations to esure proper operation and shift quality.

A final system scan is required after the road test or if problems are detected during the test drive. If codes are present, compare to original codes to diagnose or call the tech line for help.



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Updated Rear Cover

Due to premature rear cover failures in most Mazda applications, all of our remanufactured 4F27E (FN4A-EL) transmissions are updated with the improved Ford-designed rear cover.

MAZDA APPLICATIONS ONLY

The cooler return line must be relocated from the case to the end cover. During remanufacturing, the transmission is internally updated and the factory cooler line hole in the case is **permanently** sealed – all Ford applications will remain unmodified. Mazda units are updated to accept Mazda factory cooler line fittings (M14 x 1.50).

UPDATED COOLER PORT SHOWN IN RED



NOTE

If you install the return cooler fitting into the original case location there will be no lubrication provided to the rear of the transaxle and immediate failure will result and is **not** covered under your warranty.