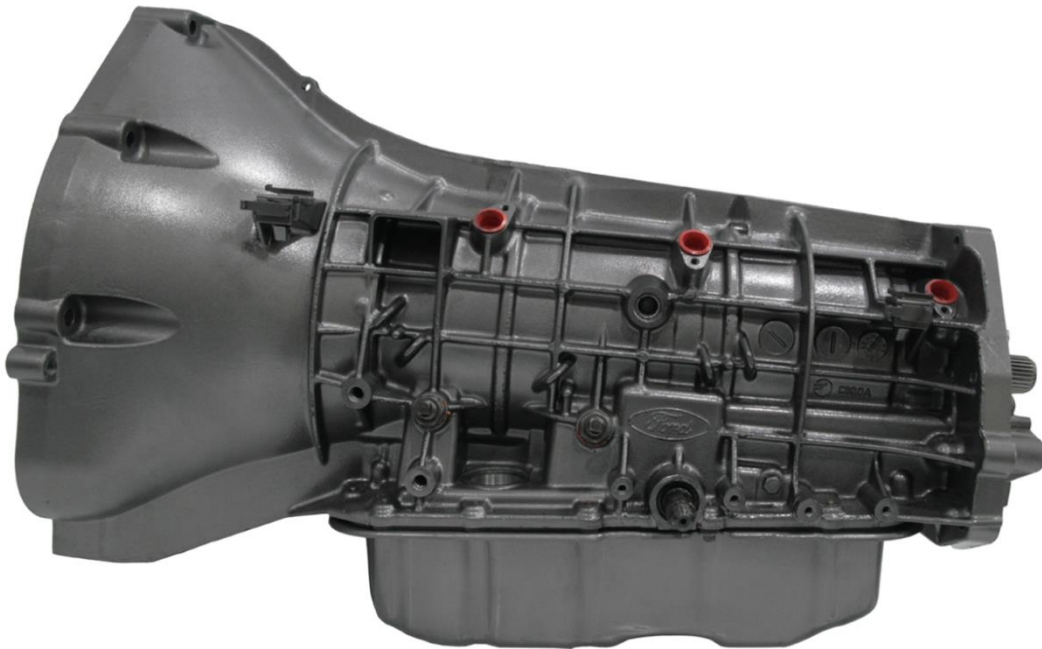


5R55W/S/N Installation Guide

Read This Entire Document Before Installing Your Transmission



BEFORE REMOVING THE OLD TRANSMISSION

You **MUST** have a scanner and scan the vehicle for any codes. All codes **MUST** be fixed **BEFORE** installing the new transmission.



INSTALLATION SUGGESTIONS

1. The cooling system on this vehicle **SHOULD** be replaced. The plate cooler in this vehicle cannot be properly flushed and is a non-serviceable component which must be replaced with new.

Technical Bulletin

5R55 Transmission - 8 Lug Torque Converter Flex Plate Adapter Alignment

Ford Lincoln Mercury 5R55N/S/W with 8 lug torque converters

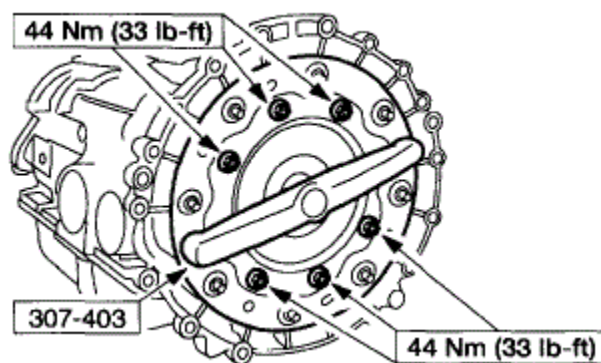
Issue:

Some models use an 8 lug torque converter that requires a special alignment tool in order to properly align the flex plate adapter. If your 5R55 has an 8 lug torque converter, then this bulletin applies.

Failure to properly align the flex plate adapter can result in vibration and front area leaks. Also it can lead to torque converter, pump, and bushing failure. **Use of this tool is required on all 5R55 series 8 lug converters in order to not void your warranty.**

Tool Required:

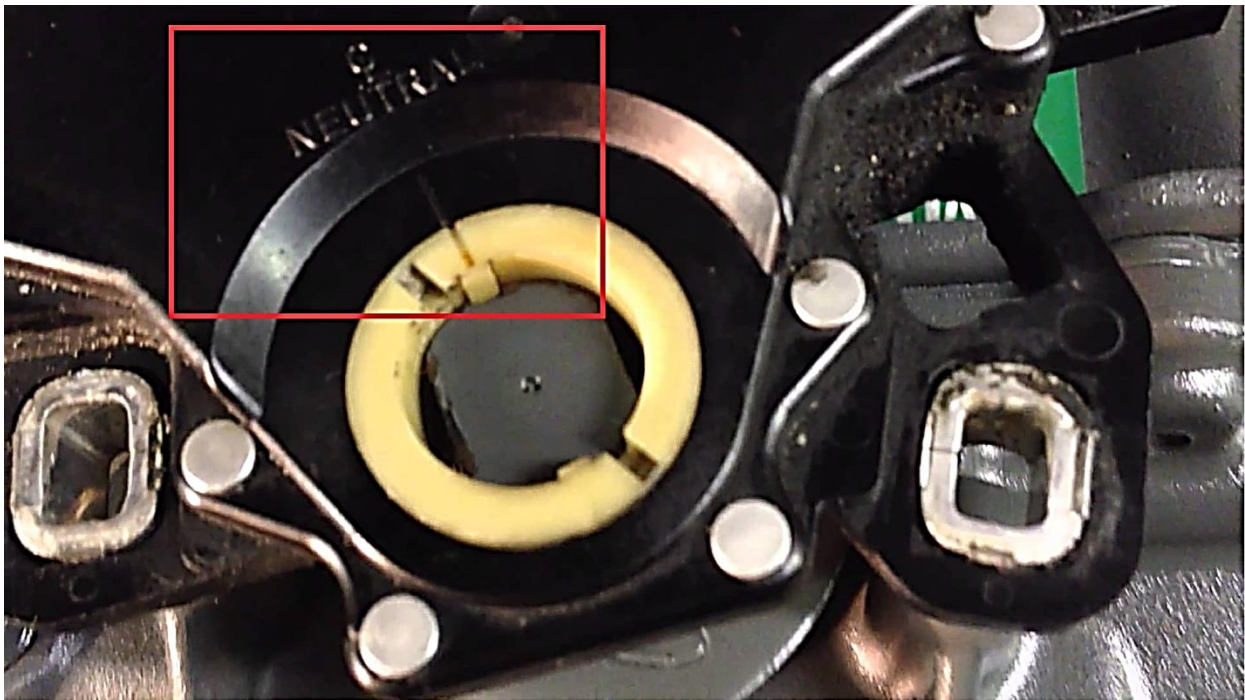
Tool Required	Manufacturer	Part #
Alignment Tool	Ford Rotunda	307-403
Alignment Tool	Adapt-A-Case	T223AC
Alignment Tool	Atec Trans-Tool	T-0519



*Range sensor and
shifter cable
adjustments are very
critical with this
transmission.*

Adjust the range sensor

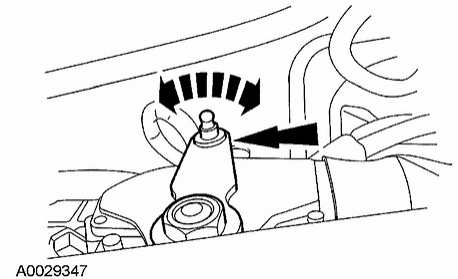
1. Best done before installing the manual shaft linkage. If the linkage has been bolted on, it may be necessary to remove it to see the alignment marks.
2. Loosen the 2 bolts which hold the range sensor to the case. The sensor has an inner part that turns with the linkage shaft. This piece has a score mark on it. The outer body which bolts to the transmission case also has a score mark. These score marks need to be aligned perfectly when the vehicle is in neutral.



3. Tighten the bolts when score marks are aligned.
4. Move the shift lever back and forth and recheck to insure that the score marks are still aligned. Repeat if necessary.

Verify proper shifter cable adjustment:

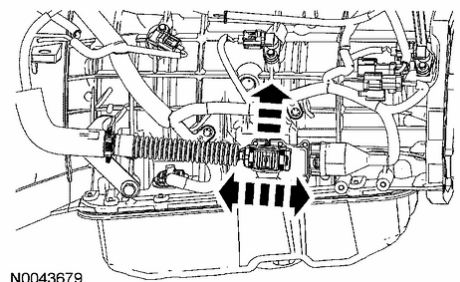
- **Disconnect the cable from the transmission**
- **Set the transmission to park and attempt to turn the wheels. If the wheels DO NOT turn then you are in park.**
- **Now rotate the linkage two detents(clicks) in the opposite direction of park (this verifies you are in neutral).**



- **Now have an assistant select neutral with the shift lever hold steady pressure upward**

- **The cable end and manual lever should line up. If not then the cable end needs to be adjusted.**

- **Push the lock up to free the cable end.**
- **Now you can slide the cable end back and forth to line it up with the manual shaft pin.**
- **Now pull the lock down and connect the cable end to the manual shaft.**



Filling the 5R55:

This is an unusually difficult transmission to fill, if not done correctly the transmission will experience shifting and performance issues.

This transmission requires
Mercon V

Tip: Adding fluid through the speed sensor holes (usually 4qts) before installing the unit will prevent the need for pumping fluid in later.

If fluid *WASN'T* added through the sensor hole:

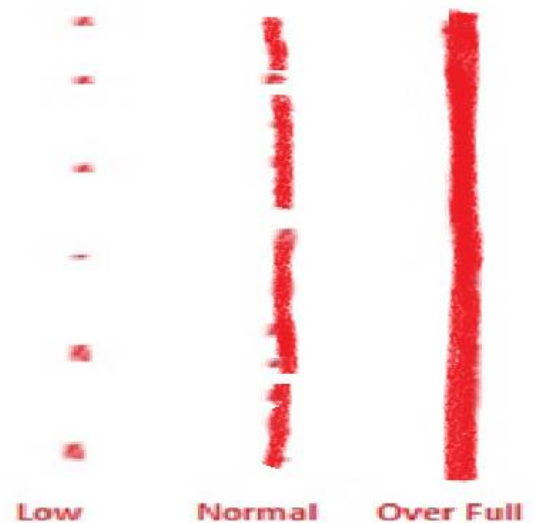
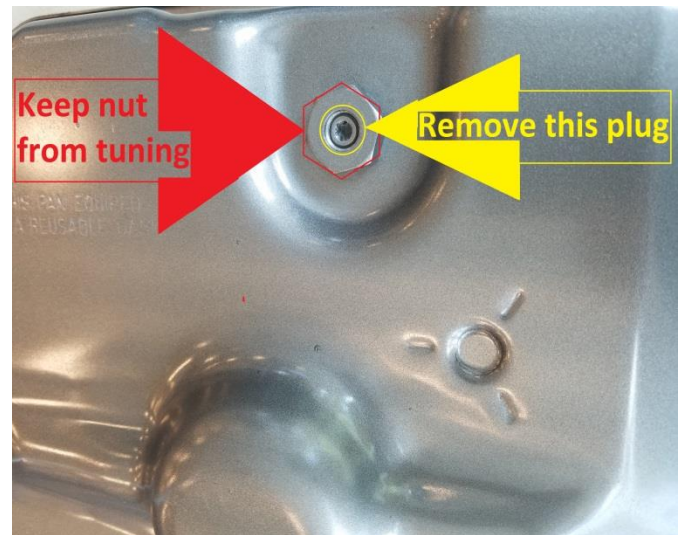
Remove the plug from the stand pipe (T30). With the engine OFF pump the fluid into the small opening in the pan. Fill until fluid runs out of the stand pipe in a steady stream and then insert the plug hand tight to stop the stream. Start the engine, remove the plug and continue filling. Stop filling when a steady stream develops again.

Proceed to final fluid check

If fluid *WAS* added through the speed sensor hole start here:

Run the vehicle in the air manually selecting all shifter ranges holding in each gear for at least five seconds.

Final fluid check - With the transmission between 80-120 degrees as indicated on your scan tool, check the fluid with the engine running and transmission in neutral or park. Remove the plug from the stand pipe and you should have a steady stream. Let the fluid drain till the stream starts to fluctuate and air bubbles appear, put the plug back in BEFORE the flow of fluid stops completely as this will result in an under full condition.



Fast Learn:

1. All codes must be fixed. This includes all of the modules used in this vehicle. If there are ANY CODES present, the **PCM WILL NOT** Relearn!
2. Make sure that the fuel tank is at least **1/3 full or more**.
3. Battery must be at 12.2 volts minimum with the key in the **"off position"**.
4. Disconnect the battery for a minimum of 15 minutes, then reconnect.
5. Start the vehicle and bring the transmission up to 170 degrees F.
6. Bring the engine up to normal operating temperature.
7. With the engine running:
 - Shift from Park to Reverse 5 times holding the transmission in each gear for 5 seconds.
 - Shift from Reverse to Drive 5 times holding the transmission in each gear for 5 seconds.
 - Shift from Neutral to Drive 5 times holding the transmission in each gear for 5 seconds.
8. ****Turn off engine and remove key from ignition, then open the driver's door****this will put all the modules to sleep and retain the relearn strategy

Proper shift patterns could take an additional 200 miles after the relearn is done.

After this procedure it still may take several days of driving the vehicle for the transmission to fully adapt and begin to shift properly. You MUST DRIVE EASY for the first 300miles after a Quick Learn is done. This includes no towing or accelerations above ½ throttle.

Fast learn should be performed any time:

- The battery is disconnected
- Major transmission repair
- Solenoid block replacement
- TCM calibration changed

Once Fast Learn steps are complete, perform a thorough test drive with multiple accelerations and from a stop with light to medium throttle application.

Rescan the vehicle. If codes are present, compare these to the original codes. Use a scan tool for DTC's and correct the codes and re-road test the vehicle.

INSTALLATION CHECKLIST

- ☐ Scan vehicle and fix all codes
- ☐ Replace the cooling system (Radiator) and replace or clean cooling lines
- ☐ Inspect flex plate for cracks or breakage. Damaged flex plates are common
- ☐ Compare bolt pattern on flex plate to bolt pattern on new torque converter
- ☐ Inspect crankshaft pilot bore for wear and apply grease to aid with installation
- ☐ Compare replacement transmission and torque converter to original before installation
- ☐ Verify all dowel pins are present, clean, and in good condition – these are critical for proper alignment
- ☐ Do not tighten bell housing bolts with force; may damage torque converter if shifted in transit
- ☐ Inspect wiring harness and connector for damage and /or corrosion
- ☐ Inspect entire electrical system including ground, battery, alternator, mass air flow sensor and throttle position sensor.
- ☐ Inspect axle shaft splines and check transmission/engine mounts
- ☐ Install supplied tail shaft housing gaskets and seals
- ☐ If 4WD application, replace transfer case input shaft seal
- ☐ Inspect transmission mounts, carrier bearing, driveshaft, yoke and U-joints. Excessive vibration due to defective mounts and other faulty driveline parts is the main cause of broken cases.

Road Test Check list

- ☐ Does vehicle hold in park
- ☐ Engagement into reverse
- ☐ Acceleration in reverse
- ☐ Does engine free spin in neutral
- ☐ Engagement into Over Drive
- ☐ Acceleration in Over Drive
- ☐ 1-2 shift in Over Drive
- ☐ 2-3 shift in Over Drive
- ☐ 3-4 shift in Over Drive
- ☐ 4-5 shift in Over Drive
- ☐ 5-4 downshift in Over Drive
- ☐ 4-3 downshift in Over Drive
- ☐ 3-2 downshift in Over Drive
- ☐ 2-1 downshift in Over Drive
- ☐ Engine braking in manual 1
- ☐ Engine braking in manual 2
- ☐ Torque Converter lock up and release