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TCI® 508010 Installation Instructions

Ford 5R110 Transmission Pan

Kit Contains:

Quantity	Item
1	TCI® Transmission Pan with O-ring (ARP* 568-281)
20	8mm X 25mm stainless Allen head cap screws (Torque 12-16 Ft.-lbs.)
8	8mm X 20mm stainless Allen head cap screws (Torque 12-16 Ft.-lbs.)
21	Stainless 5/16 AN washers
1	Drain plug assembly with magnet & O-ring (ARP* 568-910)
1	Stainless 1/8" pipe plug (for optional temperature sender—not included)
1	Drain Plug & 1/8" pipe plug (Torque to 30 in.-lbs)

* - ARP stands for Aerospace Recommended Practice



PLEASE READ THESE INSTRUCTIONS AND PARTS LIST COMPLETELY BEFORE INSTALLING THIS NEW TRANSMISSION PAN. CONSULT YOUR OWNER'S OR SHOP MANUAL FOR TRANSMISSION FLUID REQUIREMENTS.

Tools Required:

- 13mm socket wrench and driver (for removing old pan)
- 6mm Allen bit with a 3/8" ratchet drive (6mm Allen key is furnished)
- 3/16" Allen bit with a 3/8" ratchet drive
- 3/8" drive torque wrench
- Gasket scraper
- Smooth flat file approx. 8-12" long
- Oil drain pan (approx. 20 quart capacity)
- Mercon Approved or TCI® Max Shift™ Transmission Fluid

A word of caution to the installer/vehicle owner:

The TCI Automotive® deep aluminum pan is designed to fit the factory Ford 5R110 transmission as supplied as original equipment. However, in some applications, or because of the use of certain factory options and/or aftermarket equipment, there may be clearance problems between your TCI Automotive® pan and other vehicle components. It is the responsibility of the owner/installer to ensure that there is no contact between the pan and other moving, obstructing or fixed vehicle components. Contact with any vehicle component, or the modifying of the TCI Automotive® pan voids the warranty. TCI Automotive® assumes no liability, expressed or implied, for damage or injury to persons or property.

Installation:

1. Park your vehicle on level ground and apply the parking brake. Use jack stands if the vehicle must be raised.
2. Position a large drain pan under the transmission to catch the fluid. Also drain the torque converter.
3. Starting at the rear, remove the 20 existing pan bolts.
4. Using a gasket scraper, start at the rear of the pan and carefully (so as not to gouge the transmission case) insert between the existing pan and transmission housing and pry the old pan off.
5. Allow all of the old oil to drain.
6. Using a gasket scraper, carefully remove all of the old gasket material (dried silicone) from the transmission case.
7. Use clean lint free rags to clean the transmission case gasket surface. The surface must be clean and flat for the O-ring to seal.
8. Before installing the TCI Automotive® pan, check the gasket mating, surface on the transmission case for dents, irregularities, or gouges. Should any exist, carefully remove the high spots using a smooth flat file. **BE CAREFUL NOT TO "ROUND OFF" THE FLAT GASKET SURFACE.**
9. Check to make sure the threads in the case are deep enough by screwing the 8mm X 25mm bolt in the case with the washer in place. Measure the threads that stick through, as it should be a minimum of 3/8" and a maximum of 1/2". The front two bolts, one on each side of the bell housing, 3 bolts in the rear of the case and

one by the shift lever, is where the 8mm X 20mm bolts go if needed. These are flat bottom holes and some times they are not drilled and tapped deep enough and **if they are forced in, the two front bolts will put a dimple in the ID of the pump bore. A BIG NO...NO!!!**

10. Remove the filter and replace it with a filter for a 4-wheel drive application (Ford Part # 3C3Z7A098AA) or (TCI® Part# 508505 O-ring & Filter). At every change, the 4X4 filter must be used with the TCI Automotive® pan. **FAILURE TO USE THE 4X4 FILTER CAN RESULT IN TRANSMISSION FAILURE!!! FILTER CAN BE PURCHASED FROM FORD DEALER OR TCI AUTOMOTIVE®**
11. Apply a thin layer of transmission fluid to the pan surface O-ring.
12. Align the bolt holes and install the 12 8mm X 25mm cap screws with washers and 8 8mm x 20mm cap screws with washers and tighten "finger tight."
13. Using a 6mm hex bit and 3/8" drive torque wrench, torque the stainless Allen cap screws to (12-16 Ft.-lbs) in a "cross tight" pattern.
14. CHECK the drain plug and 1/8" pipe plug for tightness. If you are going to install a temperature gauge sender unit, do so at this time. Remove the 1/8" pipe plug and install the sender in its place. Be sure to use Anti-Seize on the sender's pipe threads. Tighten both the drain plug and 1/8" pipe plug to (30 In-lbs.) **Do Not Over Tighten.**
15. Remove the dipstick and add the new MERCON or TCI® Max Shift™ RTF Transmission Fluid or TCI® Max Shift™ STF Transmission Fluid. The TCI Automotive® pan will hold 16 quarts of oil or 7.5 quarts of additional oil over a stock 4X4 pan. FILL TO FULL LINE ON THE DIPSTICK.

NOTE: Always refer to the dipstick for accuracy in filling fluid levels.

Maintenance:

The TCI Automotive® pan is constructed of high-quality aircraft aluminum and has a powder-coated finish. The Allen head bolts and washers are stainless steel. The components require no maintenance.

TCI Automotive® suggest you follow the manufacturer's recommendations for transmission service intervals. You may drain your transmission oil without removing the TCI Automotive® pan. However, we recommend you remove the pan and change the filter a minimum of every 3rd engine oil change. You may notice "fuzzy" metallic particles and some minute debris in the pan during changes. This is common wear to bushings and excess clutch seating particles. This is one reason you change oil. The other reason is oils breakdown after time. If you notice any large chips of metal or enough debris that you can drag an object through it and it leaves a trench, further inspection should be performed. We suggest that a qualified professional mechanic who specializes in automatic transmissions perform this inspection. Remember to clean the drain plug prior to reinstallation. Apply a thin layer of oil to the drain pan O-ring and reinstall.

Torque to 30 inch-lbs. **DO NOT OVER TIGHTEN.** Follow the procedure for filling the transmission.

When it's time to service your transmission, **DO NOT USE ANYTHING TO PRY THE PAN FROM THE TRANSMISSION CASE** that will damage the gasket surface. If you damage the surface, use a smooth mill file carefully.

TCI Automotive® invites your comments and suggestions. We are continually looking for ways to provide the highest quality products and service to our customers. You may submit your comments and suggestions by writing or calling our office at:

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Visit us online at: <http://www.tciauto.com>

Other related parts:

TCI Automotive® MAX SHIFT™ RTF Transmission Fluid	Part# 950600 (3-1 Gal. Jugs)
TCI Automotive® MAX SHIFT™ STF Synthetic Transmission Fluid	Part# 950650 (12-Quarts)
TCI Automotive® 5R110 Filter & O-ring Kit	Part# 508505
TCI Automotive® 2 1/2" Electric Temperature Gauge	Part# 801000

