



Toyota A340E Transmission & Torque Converter

Installation Guide

The installation of your ATF Transmission & Torque Converter is not always as easy as it looks. Therefore, we strongly recommend that you read these instructions and follow them carefully so that you avoid any unnecessary problems due to improper installation.

STEP 1: After you have taken the torque converter out of the box, take a minute to make sure that it is correct for your application. To do this, hold the converter onto the flex plate to check that the converter pilot fits properly into the rear of the crank shaft with no excess clearance. Check to make sure that the bolt holes or the studs on the converter line up with the bolt pattern of the flex plate.

STEP 2: After you check the converter for fitment to the flex plate and crankshaft, check the flex plate itself for cracks or excessive wear on the starter teeth if not new. It would be a shame to go through the trouble of removing the transmission and not replacing the flex plate if necessary. We strongly recommend that you replace your stock flex plate with a heavy duty flex plate.

NOTE: Always check the starter bendix gear if the used flex plate is found to have wear or teeth damaged. Starter would need to be replaced at this time as well.

STEP 3: Prior to installing the converter into the transmission, pour approx. 1 quart of transmission fluid into the converter. Using a light grease such as white lithium, coat the transmission seal, front pump bushing and converter neck or hub.

STEP 4: Install the neck or hub of the torque converter into the front pump of the transmission, carefully trying not to damage the front seal and bushing. Once you are into the pump, support the pilot of the converter with one hand to center the converter and rotate the front mounting pads in a clockwise direction. This will allow the splines and hub slots to engage into the transmission pump. At this point, use a white lithium grease or equivalent and grease the torque converter pilot, and crank shaft pilot hole so that the converter slides into the crank without binding up.

NOTE: Do Not Install Transmission until the Torque Converter is all the way in!!!! The Torque Converter sits flush with the Face of the Transmission!

STEP 5: Before installing the transmission onto the engine, make sure that the back of the engine has dowel pins. They need to be free of rust, and that the dowel holes in the transmission are free of dirt or corrosion. Grease both lightly to avoid any type of bind up.

STEP 6: Position the transmission onto the engine dowel pins and install transmission mounting bolts. The transmission housing should contact the engine block squarely. **If it does not, LOOK FOR THE REASON. DO NOT attempt to draw the transmission against the block with the bolts.** The converter is probably not all of the way into the transmission and can cause damage to either or both the transmission & torque converter.

STEP 7: After the transmission housing bolts are tight, check to see if the converter can turn freely without much force. Next, pull the converter into the crankshaft of the engine as far as possible. This ensures proper spacing without damaging the front pump of the transmission. If the converter is bolted on the flex plate incorrectly it can pull the front pump bushing out causing immediate transmission failure when running.



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STEP 8: To finish the installation of the transmission, before the engine is started, pour 4-5 quarts of transmission fluid into the transmission. Start the engine, immediately upon start up and add two more quarts of transmission fluid. Continuing slowly adding transmission fluid while having someone shifting the transmission through the gears to get fluid throughout all the passages and until it is properly filled.

Note: Most Toyota Transmission fills are 9-11 quarts. We use Dexron 6 Synthetic Fluid.

Cooler lines: The Pressure line is the FRONT cooler line. Return line is the REAR cooler line on all Toyota Transmissions.

Transmission temperatures: are critical to the life of your transmission. The ideal operating temperature range for the Transmission is 160 Degrees to 200 Degrees. Temperature readings can be had by either running a gauge off the bottom cooler line or from the transmission pan itself.

Couple Tips to be aware of:

Vent Lines: Do Not Run a Vent Line from the transmission vent all the way to the back of the car. This will cause the transmission to have a vapor lock and prevent the transmission from being filled properly. Best option is to run a vented 1 quart canister within 18"-20" of the transmission vent. Do not use the brass type vents.

Vehicles with Improper Grounds: This cannot be overlooked. Vehicles with improper grounds can make small arc welds inside the pump bushings against the torque converter hub. This will ruin both the transmission pump and the torque converter hub and cause both to have to be rebuilt. Ground wires must be run properly to ensure this does not happen. Also included is slow starting vehicles or low battery charges. These are all culprits of this and cause transmission failures.

Shifter Adjusting & Shifter Cable Routing: Always set shifter adjustments by setting the shifter itself in High Gear and the transmission in High Gear first. Never start setting the shifter in Park or Neutral. When checking the adjustment through the gears make sure the shifter & shifter arm does not move forward or backwards on the transmission in each gear position. This indicates that the transmission is not properly in each gear and must be corrected before starting the car or driving. Having an improper setting is detrimental to the life of the transmission. Also detrimental is not having the shifter cable itself mounted to the transmission pan rail. It is imperative that it is not mounted to the vehicles chassis or body of the vehicle.

Lastly Always Check the Transmission Pan Bolts when installation is complete and also periodically. This will prevent any leaks and premature transmission failures from vehicles who have ran low on fluid.