Transmission and Torque Converter Installation Instruction

Florida Torque Converter

Torque converter and transmission installation is not always as easy as it looks. The vast majority of transmission and converter warranty issues are directly traceable to incorrect installation. Damage resulting from incorrect installation will void your warranty!

We strongly recommend that you read and follow these instructions.

Step 1:

Once the converter is removed from its box take a moment to verify that it is correct for the application. To do this, hold the converter up to the flexplate to verify that the bolt pattern is correct and also that the converter pilot fits properly into the rear of the crankshaft with no excessive clearance. It is sometimes necessary to remove any paint from the converter pilot with a piece of sandpaper.

Step 2:

Check the flexplate for cracks or excessive wear on the starter teeth. Also make sure that the two alignment dowels are in the back of the engine block. Make sure that the dowel pins and the holes that they fit in the transmission are free of corrosion and are lubricated slightly.

Concentricity of the converter and transmission to crankshaft centerline is extremely critical. Missing dowels and cracked or bent flexplates normally results in transmission and / or converter failure in a very short period of time.

Step 3:

Flush transmission cooler in both directions. Aerosol products made specifically for this purpose are available. When finished, make sure that all traces of flush product are removed from transmission cooler by blowing through with compressed air.

This step is mandatory and must not be skipped! Contamination dislodged from your transmission cooler can cause immediate damage to the transmission and torque converter and will void your warranty.

Step 4:

Converter must have at least one quart of the correct ATF for the application added to it before installation. This can sometimes take a little while so be patient.

Step 5:

Lubricate the converter hub and lock up o ring (if so equipped) with a small amount of transmission assembly lube, Vaseline or equivalent.

Step 6:
Install the torque converter into the transmission, being careful not to damage the front seal or pump bushing. Once the converter begins to engage the pump, hold the pilot of the converter with one hand to center the converter as best you can. At the same time, rotate the converter in a clockwise direction. While spinning torque converter give it a little push and it is helpful to have transmission on an angle to promote ease of torque converter installation. This will allow the splines and hub tabs or slots to engage the pump correctly.

You will hear and feel two or three distinct drops of the converter into the transmission before it is all way in. If you are unsure please contact us. If the converter isn’t properly engaged in this manner, immediate damage will occur upon starting the engine. If in doubt see photo on page 3.

Step 7:
Locate the transmission onto the engine dowel pins and install transmission mounting bolts. As you pull the transmission up to the block – using hand tools only! keep checking the torque converter to make sure it is not binding. If it binds you probably do not have the torque converter installed properly. The transmission should contact the engine block squarely. If it does not, find out why.

Step 8:
After the bell housing bolts are tight, the converter must rotate freely. Push the converter into the transmission as far as possible – there must be clearance between the converter and flexplate at this point! If a stud type converter is used it should jingle in the holes at this point.

Step 9:
Install torque converter bolts, using Red Loctite or equivalent and torque to specification. If bolts were supplied with your torque converter be sure to use them.

Step 10:
Finish installation of the transmission. When finished, add 4 quarts of ATF and start the engine – now add 2-3 more quarts immediately.

Additional fluid can now be added until the transmission reads ‘full’ on the dipstick. (In Mitsubishi and Chrysler vehicles it is necessary to fill transmission and check the level with the shifter in Neutral – not Park). Please contact us if you need to know the approximate capacity of the transmission that you are working with.

Please feel free to contact us with any questions if you are unsure of these procedures. We are always happy to help.

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The number 1 cause of vibration is failure to prepare the crankshaft for installation. Each time the converter is installed without sanding out the crankshaft rust, removing the paint from converter
pilot and adding a little grease, the converter may be drawn up crooked with the first bolt. This may cause the converter to run-out and usually ruins the pump bushing.

Below is a chart that shows how to measure for proper depth clearances. Please check for proper clearances. Failure to do so can and will cause damage to the transmission and/or torque converter. Take measurement "A" shown in Figure 1. The correct method of measuring "A" is shown in Figure 2. Now take measurement "B" on the engine as shown in Figure 1. This is the distance between the engine block mating surface and the converter mount mating surface on the flywheel or flexplate. Compare the two measurements that you have taken. "A" must be greater than "B". If "A" is not greater than "B", converter is not installed properly. Pull converter off slightly, then push it on again, rotating it at the same time. Continue to do this until you feel the converter move inward and stop at proper engagement. Repeat measurement "A" and compare it again with "B". "A" must be greater than "B". Do not proceed further until you have installed the converter properly. If you have any questions, please contact our tech department or consult a trained mechanic for assistance.