



## 4L80E Converter Installation

When installing a torque converter into a 4L80E transmission you can follow the standard GM torque converter installation instructions. This is a very straight forward installation in most cases. If you are installing this behind an early model engine (prior to LS) there are a few technical issues you will encounter. The flexplate spacing is critical when bolting the 4L80E to a '96 & earlier engine application. The B&M 4L80E converters will bolt up to the cataloged B&M flexplates using the three mounting holes on the 11-1/2" diameter bolt circle. When installing on a late model flexplate with six holes on the 11-1/2" bolt circle use the six supplied bolts. Test fit the converter up to the flexplate to be certain the crank pilot on the converter engages into the crankshaft. The fit into the crank should be a snug fit, if the converter will not slip into the rear of the crank there may be dirt or burrs on the crank I.D. that must be corrected for a proper fit. After this test fit has verified the pilot on the converter is properly engaging the crankshaft pilot the converter must be fitted into the transmission.

Be sure to fill the converter with one to two quarts of automatic transmission fluid (B&M Synthetic Trick Shift #80286) prior to installing the converter into the transmission. The impeller hub on the 4L80E converter has 'Drive Flats' that engage the pump gear in the transmission. Be certain these are lined up with the pump gear and fully engage prior to placing the converter / transmission assembly up to the engine block. The converter should have 1/16" - 1/8" pull up to the flexplate for proper engagement.

If there is more than 1/16" - 1/8" space between the drive plate and the rear surface of the flexplate when the transmission bellhousing meets the engine block you will need to measure the distance between the flexplate and the drive plate. If this dimension is 3/16", for example, you will need to shim the converter using 1/8" spacers (flat washers) between the flexplate and the converter drive plate. Be certain the pilot on the converter remains engaged in the crankshaft pilot. Torque the flexplate to converter bolts to 30-35 ft. lbs.



This GM Performance Part crankshaft spacer must be used when installing a transmission built before 1997 to a LS1-type motor. The LS design small block crankshaft flange is 10mm shorter in relation to the end of the bell housing flange. If using an automatic transmission built before 1997, there will be a 10mm gap between the crankshaft and torque converter when the bell housing is bolted to the block. This will require a flexplate spacer to adapt older automatic transmissions to the LS1-type engine. The LS1 flywheel is reused, and it goes on before the spacer. Torque converter bolt holes in the flywheel must be elongated to fit the non-LS1 torque converter bolt circle.

GM Performance Part #809-12563532

#### Crankshaft Spacer Bolt

- ☒ Must be used with 809-12563532 spacer
- ☒ Sold each (1)
- ☒ Requires 6
- ☒ Designed for LS1, LS2, LS3, LS6, LS7 and L92 engines

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