

P.O. Box 247, 4320 Aerotech Center Way Paso Robles, CA 93447 Telephone: (800) 350-2223 Fax: (805) 238-4201 PAGE 1 OF 3 Page Rev. Date: 08-08-19 P/N: 50-5760

AA)

## GM 4L60E AUTOMATIC TO TOYOTA TRUCK (21 SPLINES)

KIT CONSISTS OF:		
Qty.	Part No.	<u>Description</u>
1	51-0405	4L60E / UNIVERSAL ADAPTER
1	51-4000	ADAPTER CASTING (Ref: 711140) (Assembled by AA)
1	52-6200	COUPLER (27 X 21 Splines) (Ref: 711362) (Assembled by )
1	52-6900	SHAFT ( <i>Ref: 711369</i> )
1	716063	COVER PLATE
1	716072	RELUCTOR RING CLAMP RING
		(One piece reluctor, bolt torque 10 ft-lbs.)
1	716079	22mm PLUG
1	716082	700R/4I60 NYLON BUSHING
1	716308	BEARING (#6209) (Assembled by AA)
1	716450	SNAP RING (GM #378-5205) (Assembled by AA)
1	716456	SNAP RING (T/A #N5000-334) (Assembled by AA)
1	716511	"O"-RING <i>(GM #135-8899)</i>
1	716563	GASKET
1	716564	GASKET
1	716734	SEAL (NAT #471833) (Installed in Casting by AA)
4	720040	8mm X 1.25 X 20mm <i>(Metrics)</i>
4	720046	METRIC S.H.C.S. 10mm-1.5 THR X 40mm
1	300619	RELUCTOR SENSOR
	<b>Qty.</b> 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 4 4 4	Qty.Part No.151-0405151-4000152-620017160631716072171607917160821716450171645617165631716564171673447200404720046

In 1996, GM produced a newer version of its electronically controlled 4L60E. This 4L60E transmission is 21-1/2" long, and has a removable bellhousing. It has a hex bolt pattern on the output side of the transmission, similar to a TH400.

The 51-0405 adapter was designed to make this style of 4L60E look just like a 700R. By incorporating a new clamp-on reluctor ring and sensor on this adapter, a 40 pulse per output shaft revolution signal is generated for the drivetrain control module. This adapter comes with a new clamp-on reluctor ring that should be installed on the new 700R output shaft that you have had installed in your transmission. This clamp-on reluctor ring clamps over the stock governor gear on the 700R output shaft. We have provided two reluctor sensor locations to choose from in the adapter. The hole not being used will need to be plugged with the plug provided.

Before tightening this clamp, trial fit the 51-0405 adapter plate onto the back of the 4L60E transmission. With the adapter set on the back of the transmission, install the 300619 reluctor sensor into the adapter casting. The 300619 sensor should line up over the teeth of the reluctor clamp. When you obtain this location, remove the adapter housing, making sure not to disturb the position of the clamp on the shaft. With the clamp now exposed, tighten the set screw on the clamp. *Loctite on these set screws is recommended*.

Trial fit the 51-0405 adapter and 300619 sensor back on the transmission and make sure the reluctor ring

<u>SPECIAL NOTE:</u> The components packaged in this kit have been assembled and machined for a specific type of conversion. Modifications to any of the components will void any possible warranty or return privileges. If you do not fully understand the modifications or changes that will be required to complete your conversion, we strongly recommend that you contact our sales department for more information. This instruction sheet is only to be used for the assembly of Advance Adapter components. We recommend that a service manual pertaining to your vehicle be obtained for specific torque values, wiring diagrams and other related equipment. These manuals are normally available at automotive dealerships and parts stores. Always inspect parts prior to installation for consistency with the OEM offering (e.g., spline count, tooth count, lubrication points, etc.).



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teeth and sensor still line up properly. RTV Blue Silicone should be used to seal the 51-0405 adapter to your 4L60E transmission. Screw the 300619 sensor completely into the 51-0405 casting. With a feeler gauge, check the gap between the sensor and the reluctor ring. This gap should be around 0.010" to 0.012". Once 0.010" to 0.012" clearance is obtained, loc-tite the sensor into position. You are now ready to bolt your conversion adapter to the 51-0405 kit. *NOTE:* On a few applications, customers have not positioned the clamp in the incorrect position which has caused interference with the coupler shaft in the conversion adapter. If you try bolting the conversion adapter up to the 51-0405 and find interference, the coupler may be hitting the clamp on the reluctor.

With the 51-0405 installed the rear of the transsmission should now have a square bolt pattern that uses 4 bolts. There are several various lengths of output shafts that these transmissions has been furnished with. You must make sure the proper shaft has been installed into the transmission for use with our transfer case kit. The speed-o-meter gear is normally located in the tailhousing, but when adapting it to the transfer case, the location will change to the back side of the transfer case.

Make sure the bearing retainer clip found on the front side of some transfer cases is removed prior to assembly of the new adapter. This clip was used to retain lover bearing in Toyota transfer case.

The coupler in this kit is made for a 21 spline male shaft that protrudes from the front of your transfer case. When replacing transmissions that were equipped with turbo-charged engines, you will need to use a 23 spline coupler in place of the 21 spline coupler furnished with this kit.

When installing the new transfer case adapter, make sure that the coupler and the output shaft do not bottom out. We have found on occasion that a transmission output shaft may be slightly longer than we have allowed for; and when coupling into our new spud shaft, we find a small amount of interference. The adapter housing and coupler must be assembled to the back of the transmission without interference. **DO NOT FORCE THE NEW TAILHOUSING ONTO THE TRANSMISSIONS.** If assistance is needed, please feel free to call us on our toll free number (800) 350-2223.

When assembling the adapter housing to the transmission case, we have provided a new square-type "O"-ring seal to prevent fluid leakage. This seal is a stock GM item that is used on all installations.

All installations will require the use of a transmission cooler. The cooler can either be installed in the radiator or a remote location is acceptable. The transmission shift control can either be a Hurst floor mounted type shifter or sometimes the existing column shift can be modified on certain applications.

The linkage on the Toyota transfer cases will vary. Some have the control lever on the tailhousing of the transmissions while others have it on the transfer case. This adapter can be used with either style. If the opening is not used on the top of the new housing, you will need to cover the square opening.

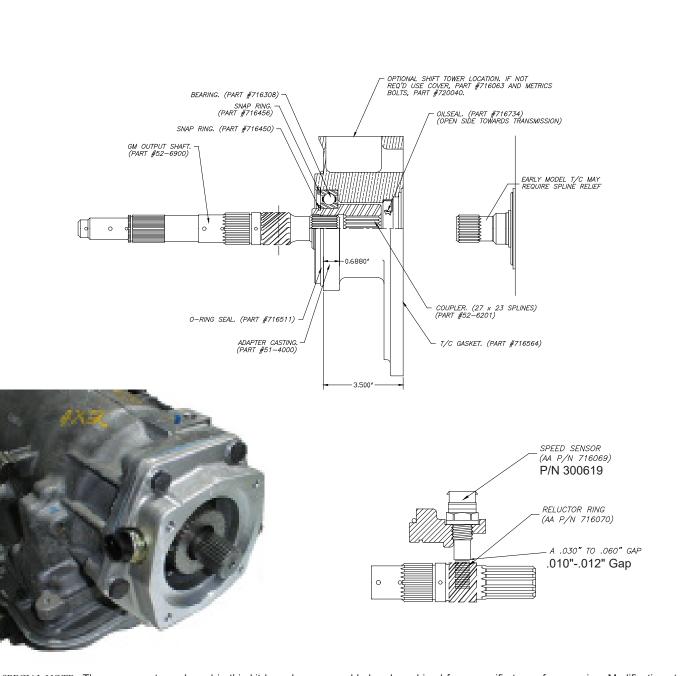
If you have a 1989 - 95 electronic fuel injected 4 cylinder. The transfer case shifter linkage was relocated on the 5 speed tailhousing. The shifter mechanism for both the transfer case and the transmission were one unit. When using this transfer case with any of our transfer case adapters, you must either modify or replace your transfer case. By changing the shifter rods from a 1984-88 (Carbureted 4 cyl.) transfer case or using Toyota part numbers 36314-35020 (high-low rod) and 36313-35020 (front drive rod), you will be able to retain your stock transfer case. The other option is to purchase a 1984-88 (Carbureted 4 cyl.) transfer case.

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