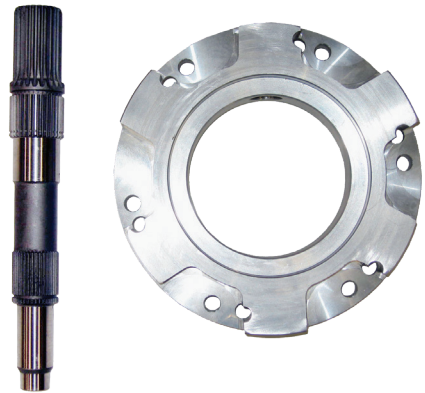


GM 4L60E TO ATLAS AND NP231 TRANSFER CASE- 23SPL

KIT CONSISTS OF:

No.	Qty	Part No.	Description
1.	1	51-9305	ADAPTER
2.	1	52-9300	4L60E OUTPUT SHAFT
3.	1	716090	CROSSMEMBER
4.	1	716520	O-RING SEAL
5.	1	716654	TRANSMISSION MOUNT
6.	6	720011	10mm-1.5 HEX NUT
7.	4	720093	10mm-1.5 x 50mm STUDS
8.	2	720094	10mm-1.5 x 40mm STUDS
9.	6	723766	3/8"-16 x 2" S.H.C.S.
10.	2	724314	7/16-20 X 1.25" SHCS (X-MEMBER)
11.	6	911003	10mm STAR WASHER
12.	1	300617	RELUCTOR
13.	3	300617A	RELUCTOR SET SCREW
14.	1	300619	SENSOR
15.	4	720095	8mm-1.25x 20mm (used on NP231 T/C only)



KIT OVERVIEW:

This kit is designed to make the shortest 4L60E possible when bolting to a NP231 or an Atlas 2sp & 4sp. This kit only works with the 1997 & newer removable bell housing, 6 bolt rear 4L60E transmission. When bolting up to a NP231 transfer case, the NP231 will require some modifications shown on the next page. This kit is designed to work with the standard 2.00" length Atlas input stick out, it will not work on the short transfer case inputs.

This kit includes a new mainshaft that must be installed into the transmission. This shaft is a billet shaft with a 23 spline end for the transfer case. Having a reputable automatic transmission shop install this shaft is recommended. We can also supply a complete transmission with this shaft installed. A special crossmember foot & mount are included in this kit.

Note: this kit should not be used on right drop Atlas 2 speed cases as the yoke will interfere with the transmission.

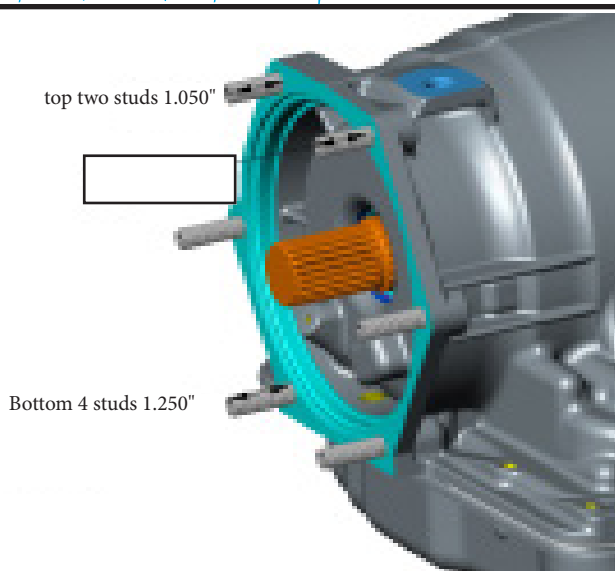
ASSEMBLY INSTRUCTIONS:

1. Have the 52-9300 4L60E mainshaft installed into your transmission.
2. Clean the threads in the rear of the transmission case making sure that all oil is removed. Apply Blue Loctite to the 10mm-1.5 studs. Thread the studs into the rear of the transmission to the specified depth using an Allen wrench. (See photo for stud depth).
3. Install the adapter housing to the Atlas using the 6 allen head bolts, these bolts when oriented onto the Atlas will determine the front drop of the Atlas. Once the clocking is determined clean the threads of the bolts and loctite into position.
4. Put the Atlas transfer case into low or high range (not neutral). This helps the assembly.
5. Refer to the shifter instructions for any steps required before transfer case installation.
6. Install the reluctor on the Atlas front input aligning the sensor hole in the adapter with the center of the reluctor ring and then lock in place with blue loctite on the 3 set screw and retaining compound loctite 609. Install the sensor in the adapter and check the air gap between the ring and sensor which should be .010" to .012".
7. Install the o-ring onto the transmission side of the adapter. Place a small bead of silicone around the mating surface of the adapter and the transmission.

SPECIAL NOTE: 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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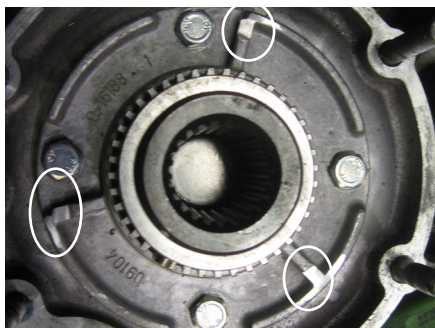
8. Slide Atlas transfer case over the transmission output shaft, rotating the output yoke as needed to align the splines between the tranny and transfer case. Next, align the holes of the adapter to the studs in the transmission and push the Atlas completely onto the transmission. Make sure there is no gap between the Atlas and the transmission before installing the nuts.
9. Install the top two lock washers and nuts onto the top two 4L60E studs and tighten hand tight.
10. Slide the crossmember foot mount over the bottom 4 transmission studs. Install the remaining washers and the nuts.
11. Tighten all 6 transmission-to-transfer case nuts to approximately 30 ft./lbs.
12. The crossmember foot is threaded to accept transmission mount Part #716654 or equivalent. Crossmember fabrication will most likely be needed to mount the transmission mount to the crossmember.
13. Refer to the shifter instruction sheet again and finish remaining items. Also refer to the Atlas manual for other guidelines including oil and operation.



NP231 MODIFICATION: There are three cast ribs on the front of the NP231 transfer case that must be modified to allow the adapter to fit properly. With a grinder, grind down the 3 ribs that protrude up to high shown in the photo or test fit the adapter to identify these cast ribs. The four bolts on the front retainer must also be replaced for clearance. By doing these modifications it will allow the adapter to bolt up flush.



Adapter Fit before modifications to transfer case.



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