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 P/N: 50-5715

**\*TOYOTA FJ CRUISER 2007 & UP, \*2005-15 2.7L 4 cyl. Tacoma 6-speed  
 \*TACOMA 2005 & UP w/ 4.0L & Manual to ATLAS T/C**

**KIT CONSISTS OF:**

**Additional items required:  
 SPEEDOMETER ADAPTER  
 P/N 300605**

<u>No.</u>	<u>Qty.</u>	<u>Part No.</u>	<u>Description</u>
1.	1	51-5715	3/8" ADAPTER PLATE
2.	1	52-5715	TOY. 22 SPL. x JEEP 23 SPLINE SPUD SHAFT and SPUD SHAFT COLLAR
3.	1	716459	SHAFT SNAP RING <b>**<u>(INSTALLED)**</u></b>
4.	1	716755	NATIONAL SEAL FOR TAILHOUSING
5.	6	723718	3/8"-16 F.H.C.S x 1.00" LONG

**Atlas STD input**

Shifter kits for the Atlas 303009 left drop 2 speed and 303009A for the left drop 4 speed.  
 On kit 303009 the adapter plate will require some clearance for one of the Atlas shift rails as well as a bit of the stock Toyota tailhousing.

Shifter kit for the Atlas right drop 2 & 4 speed is 303009R  
 On kit 303009R the adapter plate may require some clearance for one of the Atlas shift rails as well as a bit of the stock Toyota tailhousing depending on the rotation of the Atlas.

**Notes:** This kit is designed to adapt the Atlas transfer case to a Toyota FJ Cruiser transmission. This adapter plate works with the 6 speed manual transmission only. The exhaust that runs under the stock transfer case can remain installed when doing the new transfer case install; however, we found it was much easier to remove it while installing the transfer case.

**Installation:** Remove the stock transfer case from the stock tailhousing adapter. Make notes on the bolt location on the stock tailhousing as these bolts are various lengths and are to be reused when installing the Atlas. The stock tailhousing is retained along with the stock rubber crossmember support. Once the transfer case is removed, you'll see a seal located in the stock tailhousing. This seal must be removed and discarded. Install the new oil seal in its place.

The kit comes with a new spud shaft which fits into the stock Toyota transmission 22 spline output shaft. This spud shaft has a Jeep 23 male spline on the opposite side which fits into a standard 23 spline Atlas case. The spud shaft should be installed onto the Atlas first, the collar portion on the shaft is a precision fit onto the Atlas input. You may find yourself tapping on the end of the shaft to install it on the Atlas. Air can get trapped between the two shafts making this a slightly long process.

**SPECIAL NOTE:** The components packaged in this kit have been assembled and machined for specific type of conversions. Modifications to any of the components will void any possible warranty or return privileges. If you do not fully understand 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.



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The adapter plate should now be installed onto the Atlas transfer case. The adapter plate indexes off of the Atlas front retainer and is bolted on with the (6) 3/8"-16 flat head bolts. The stock transfer case had a 40 degree rotation, the new adapter plate can offer you eight clocking options. All of these options may not be feasible due to transmission clearances and body clearances. On the prototype vehicle we did, the 40 degree rotation was retained. The Atlas should be test fitted before the adapter plate is secured to check for Atlas shift rail clearance on the transmission tailhousing; and the Atlas cable linkage should also be test fitted on the unit to check for the same clearance issues. Once these areas of concern are checked, check for any necessary clearances. The stock tailhousing and adapter plate may require clearance on some rotations. The adapter plate should be installed. The bolts and bolt holes should be cleaned, red Loctited and torqued to 30 ft./lbs.

Once the adapter plate is secured and orientated correctly, you'll now need to couple it onto the back of the stock transmission tailhousing. The stock tailhousing used two dowel pins to align the stock transfer case to the transmission. These dowel pins must be retained into the stock tailhousing for proper alignment of the Atlas onto the transmission.



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