

## ASSEMBLY INSTRUCTION SHEET

Page Rev. Date: 04-05-06

## TJ AUTO (3 speed) ATLAS II SHIFTER

### KIT CONSISTS OF:

<u>No.</u>	<u>Qty</u>	<u>Part No.</u>	<u>Description</u>
1.	1	302051	TWIN STICK BASE MOUNT
2.	1	302060	TWIN STICK BOOT
3.	1	302061	TWIN STICK KNOB (FRONT H-N-L)
4.	1	302062	TWIN STICK KNOB (REAR H-N-L)
5.	1	302063	TWIN STICK BOOT RING
6.	1	302068	TWIN STICK HANDLE (TJ) AUTO REAR
7.	1	302068-1	TWIN STICK LEVER (TJ) AUTO FRONT
8.	1	302075	1/2" INSIDE STAR WASHER
9.	1	302066	TWIN STICK TUBE TJ AUTO 3.5"
10.	2	303055	TWIN STICK BRASS ROD END
11.	1	303070	TWIN STICK TOWER LEFT HAND
12.	4	*303081*	LARGE NYLINER INSTALLED INTO TOWER
13.	2	303085	1/2" SHOULDER BOLT
14.	2	303091	TWIN STICK SHIFT LEVER BASE ( <i>Welded to 302068 &amp; 302068-1</i> )
15.	4	303096	SMALL NYLINER
16.	4	303110	BUTTON SHIFTER
17.	4	303115	ECLIP RETAINER
18.	1	303120	HEX LOCK NUT 1/2"-13 PLATED
19.	2	303121	1/2"-13 JAM NUT (SHIFTER KNOBS)
20.	8"	303100	HEAT SHRINK
21.	3	723731	S.H.C.S. 3/8"-16 x 1"
22.	2	723756	3/8"-24 x 3.25" ALL THREAD GRD 5
23.	1	302080	STUD BOLT 1/2"-13 x 7.0" LG.

Additional parts boxed with shifter kits, but part of Atlas T/C assembly.

1.	1	301600	SITE TUBE KIT
2.	6	302069	ATLAS STUDS
3.	6	302071	3/8"-24 NUTS
4.	3	303200	TORCOIL

**On this shifter, we DO NOT use a Jam nut located on the front of the base mount. We use an "O"-Ring on the all-thread shift link to retain it in place.**

**NOTE: For the complete shifter installation procedures, please refer to the Final Installation section located in the Atlas manual.**

**As of January 1, 2005, we have changed the design of our shifter tower. We no longer use a set of Zerk fittings on the tower and have omitted the white nylon bushings. The new design uses a Igus black bushing which does not require grease. These bushings are not interchangeable.**

White bushings:	303080 (large) 4 required
	303095 (small) 4 required
Black bushings:	303081 (large) 4 required
	303096 (small) 4 required

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In September of 2005, the design of the TJ and Unlimited sticks underwent some changes for installation convenience. The bends of the sticks look similar, but they are now configured to be placed into the stock hole in the floorboard. They will still come up "in-line" with themselves, within the same hole in the stock plastic console. They also feature a lower profile shape for increased floorboard clearance. Care still needs to be taken when fitting these shifters into the Jeep. It may be necessary to adjust the 3/8"-24 all thread a couple of times to get the sticks lined up perfect. Likewise, different body lifts and aftermarket "belly up" pans may need more attention.

The extension tube supplied in the kit can be shortened to accommodate custom applications; but if using a stock transmission and engine, please try to use the specific length supplied in the shifter kit. The 3/8"-24 all thread is fully adjustable and may be trimmed once the desired length is found. Please take the time to apply the "heat shrink" to the threaded rods so that they do not "back out" and eventually fall apart (if "O" rings are supplied in your particular kit, please use them to retain the threaded rods instead).

A good way to start your installation of the shifters is to begin with the rear stick. This stick should start out in the "high range" position (this is with the shift rail fully extended out of the case, which is with the knob towards the back seat). Once in "high range", adjust the 3/8"-24 all thread so that the stick is in close proximity to the top of the transfer case. This should clear the body without a problem. Next; trial fit the console and "fine tune" the rear shifter so that it is about 3/8" to 1/2" away from the back side of the slot in the console. Remove the console, and shift the stick into "low range" (shift rail all the way "buried" into the case, which is with the knob towards the dash). With the front stick in "neutral," adjust the rod so that the two shifters are almost touching each other. Take both shifters and test them in all positions. You may need to play with the lengths a little bit, but fine tune them so they never hit. It is a good idea to place the console on at this time and check all the ranges for clearance. Also be very aware that the stock motor mounts and transfer case mounts located on the TJ and Unlimited are very "soft" - which will have considerable movement during torque load and rough terrain. This movement is more than enough to cause the shifters to contact part of the body and push it out of gear. Once achieved, you should now think about sealing the floorboard.

The boot supplied in the kit will cover most of the stock hole, but a small piece of sheet metal may need to be obtained to cover the rest. Be careful that the fasteners you are using don't protrude too far into the floor. Many times we have seen the screws for the boot ring and cover plate too long, hitting parts of the Atlas shifter under the body. Also remember that exhaust fumes, water, and debris can travel into the cab of the vehicle if it isn't sealed properly.

