ADVANCE ADAPTERS INC.

P.O. Box 247, 4320 Aerotech Center Way
Paso Robles, CA 93447
Telephone: (800) 350-2223 Fax: (805) 238-4201

P/N: 303009R

New Item: 3/7/25

Page Rev. Date: 03-07-25

ATLAS TRANSFER CASES (Right Drop) CABLE SHIFTER units built before 4/30/12

KIT CONSISTS OF:

No.	Qty	Part No.	Description
1	1	723141	5/16 -18 NYLOC HEX NUT
2	4	722546	SCREW-TEK HEX SELF DRILLING W/NEO #10- 16 X 1
3	1	722523	1/4 USS FLAT WASHER PLTD.
4	2	340617	BOLT- 1/4 -28 X 1 S.H.C.S. black oxide
5	2	303313	ROD END- FEMALE 1/4 -28
6	4	303312	BUSHING- IGUS 3/8
7	1	303310A	BOLT- SHOULDER 3/8 DIA. 5/16 TH x 3 shoulder l.
8	2	303304	LEVER- ATLAS TWIN STICK CABLE SHIFTER
9	1	303301	HOUSING- ATLAS TWIN STICK SHIFTER
10	3	303121	NUT-1/2-13 HX JAM BLACK ZINC
11	1	303120	Serrated-Flange Hex Locknut 1/2 - 13 zinc
12	1	302084	SHIFTER STICKER - ATLAS REV PATTERN (H-N-L)
13	2	302083	KNOB- INJ MOLD THREADED
14	1	302080	STUD BOLT 1/2 -13 X 7 B7
15	1	302063	BOOT RING- ATLAS TWIN STICK
16	1	302061	ATLAS LOGO 2 STICKERS NEW KNOBS
17	1	302060	BOOT- TWIN STICK
18	1	302450	FLANGE BOLT- 5/16 -18 x 1/2 SERRATED
19	1	302402	BRACKET- ATLAS CASE CABLE MOUNT RIGHT DROP
20	3	302451	FLANGE BOLT- 3/8-16 x .875
21	1	302401	TAB- ATLAS JK/JL CASE CABLE LOCK
22	2	303319	NUT- SHIFT RAIL NUT RETAINING CABLE ATLAS
23	2	303318	BLOCK- ATLAS SHIFT RAIL CABLE MOUNT
24	2	302454	CLEVIS PIN- 1/4 x 1"
25	2	302455	COTTER PIN- 3/32 x 3/4"
26	2	303311	48" CABLE GROVE ONE END

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.

ADVANCE ADAPTERS INC.

P.O. Box 247, 4320 Aerotech Center Way
Paso Robles, CA 93447
Telephone: (800) 350-2223 Fax: (805) 238-4201

ATLAS TRANSFER CASES (Right Drop) CABLE SHIFTER units built before 4/30/12

We can offer a set of aluminum knobs which are labeled either way.

P/N 303152AA $42.95 set
reverse pattern

P/N 303152 $42.95 set

This shifter will not fit the Allison transmission due to cable interferance with the stock adapter housing.

P/N 303150AA $42.95 each
standard pattern

P/N 303150 $42.95 each

NOTE ON THIS KIT: This kit is a universal-type cable shifter assembly. Mounting the shifter is left to the installer. The shifter can be mounted flush with the floor so that the cables exit underneath the floor, and the shift boot flange is bolted directly to the floor. Otherwise, the shift cables will need to be routed through the floor and the shifter bolted wherever you desire.

NOTE ON SHIFTING: The Atlas Transfer case is a synchronized unit. The transfer case shifts best when the shafts are spinning. Note that when the transfer case is shifted when not in motion, the teeth may or may not be aligned. If the teeth are aligned, then the unit will slip into gear easily. If the unit does not slip into gear easily, then no amount of pulling on the handle will cause the unit to shift. The transfer case must be spun slightly and then it will shift.

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.

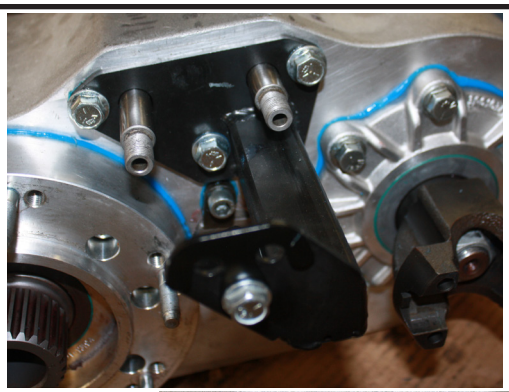
ADVANCE ADAPTERS INC.

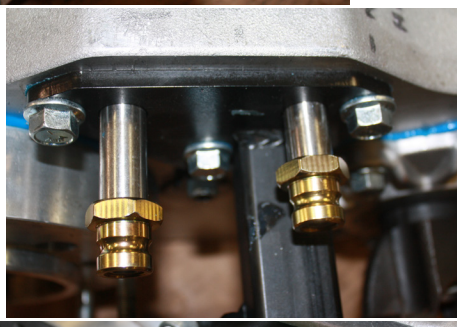
P.O. Box 247, 4320 Aerotech Center Way
Paso Robles, CA 93447
Telephone: (800) 350-2223 Fax: (805) 238-4201

ATLAS TRANSFER CASES (Right Drop) CABLE SHIFTER units built before 4/30/12

ASSEMBLY

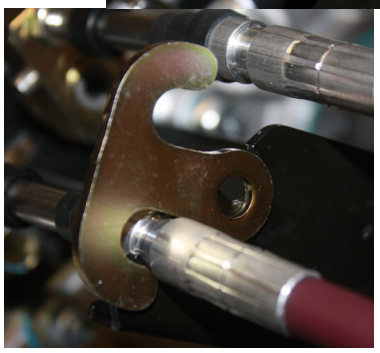
The cable bracket needs to be installed on the front of the Atlas and silicone on the threads of the bolts.
Install the retaining (gold zinc)nuts until they are fully threaded on the shifter rails. We use a connector block that need to be connected to the cables. The threads of the cable should be flush with the back side of the block or protrude slightly. You can then use the 1/4- 20 jam nut to lock in place. These blocks allow the cables to be installed closer together and provides more clearance on the transmission. Connect the blocks & cables to the shift rails. We like to mark one of the cable with a piece of tape so it can be identified as the cables route into the vehicle and connect to the shifter. Slip the block and cable onto the retaining nut and install the clevis pin and cotter pin to retain. Once the cable are connected to the Atlas line up the mounting groves of the cables with the cable mount bracket and install the retaining bracket (302401)and bolt.





Shifter End:

1. Remove 1 of the 5/8" jam nuts and the lock washer from each cable and discard.
2. Slide the Barrel Retainer plate over both shifter cables. Then thread both cable barrels onto the shift cables.
3. Now thread the heim joints onto the shift cables inner rod , and tighten the jam nuts. (This should look like the photo to the right.)
4. Using a mallet, hammer the pivot bushings into the shifter handles. Start the bushing into the handle, hold the handle with the bushing side down on the table, hit the top side of the handle with the dead blow hammer to install the bushing. Repeat for the remaining bushings.



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.

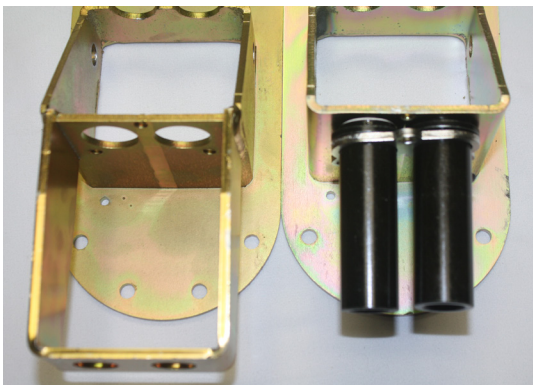
ADVANCE ADAPTERS INC.

P.O. Box 247, 4320 Aerotech Center Way
Paso Robles, CA 93447
Telephone: (800) 350-2223 Fax: (805) 238-4201

ATLAS TRANSFER CASES (Right Drop) CABLE SHIFTER units built before 4/30/12

Shifter Box End:

Note: We have manufactured two different designs to the shifter box in this kit. September of 2024 we have started the transition from the cable barrels that hold the cables to the shifter to a welded bracket that is part of the shifter box and retains the cables.



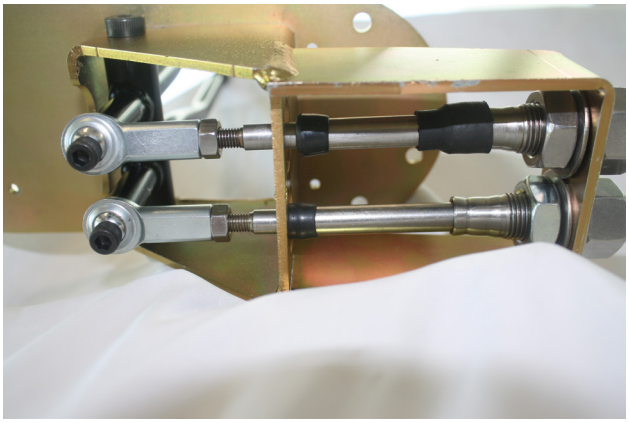
The old style is the one shown on the right and the new one shown on the left. Both of these boxes work the same, the new design just eliminates a few extra components. We have kits that may still have the old style box and therefore we will cover both installations

Old style:

1. Remove 1 of the 5/8" jam nuts and the lock washer from each cable and discard.
2. Slide the Barrel Retainer plate over both shifter cables, then thread both cable barrels onto the shift cables.
3. Now thread the heim joints onto the shift cables inner rod and tighten the jam nuts. (This should look like the photos to the right.)
4. install the retainer plate to the shifter box with the 3 screws. dont tighten until final assembly.

New style:

1. Remove 1 of the 5/8" jam nuts and the washer from each cable.
2. Slide the shifter cables through the holes in the bracket and then retain them with the jam nut and washer removed in step 1
3. Now thread the heim joints onto the shift cables inner rod and tighten the jam nuts, about a .250" of threads should be left on the cable to the heim. (This should look like the photo below.)



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.

ADVANCE ADAPTERS INC.

P.O. Box 247, 4320 Aerotech Center Way
Paso Robles, CA 93447
Telephone: (800) 350-2223 Fax: (805) 238-4201

ATLAS TRANSFER CASES (Right Drop) CABLE SHIFTER units built before 4/30/12

Old & New Style:

4. Using a mallet, hammer the pivot bushings into the shifter handles. Start the bushing into the handle, hold the handle with the bushing side down on the table, hit the top side of the handle with the dead blow hammer to install the bushing. Repeat for the remaining bushings.
5. Orient the shifter handles so they bend away from each other and slide the handles into the top of the shifter body.
6. Insert the pivot shoulder bolt through the shifter body and the shifter handles. Fasten with the 1/4" flat washer and the 5/16" locknut.
7. Slide the heim joint to meet the tapped hole in the shift handle and insert the bolt from the bottom of the shifter box to secure the handles to the cables.
8. With the transfer case in neutral and the shifter box assembled, you will need to adjust the handles in the shifter box.

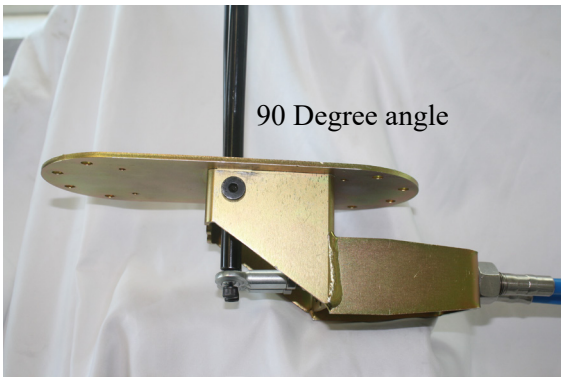
Old Style:
Make sure the 5/8" jam nut is not tight against the cable barrel. By turning the cable barrel with a set of pliers it will move the outer cable housing inward or outward and thus move the handle forward or backwards in the shifter box.

New Style:
adjust the 5/8" nuts to move the handles forward or backwards in the shifter box.

Both Boxes:

1. Ensure the Transfer Case is in Neutral.
2. Adjusting the Handles: The goal is to position the shifter handles so they form a 90-degree angle relative to the top of the shifter box. This ensures proper alignment and smooth operation of the shift linkage.
3. Cable Adjustment: With the handles in the correct 90-degree orientation, you can now adjust the cable ends. Loosen the jam nuts on the cable to allow for movement and adjustment. Ensure the cables are aligned to prevent binding.
4. Securing the Cables: Once the handles and cables are correctly positioned:
   - Tighten the jam nuts to lock the cable adjustment in place.
   - For older-style setups, tighten the cable barrel retainer plate screws to secure the cables to the shifter box.

This process ensures the shifter handles have the correct angle preventing any issues during operation. Make sure everything is tightened securely but without overtightening, as this could damage components.



11. Slide the shift boot over the handles and stretch it over the shifter body. Depending on how the shifter is mounted, you may want to bolt the shift boot through the shifter body. If the shifter will be flush mounted in the floor, you may bolt through the shift boot, shifter body and the floor with one set of bolts.
12. Once the boot is in place, thread the 1/2"-13 jam nuts, and then thread the shift knobs onto the shifter handles.

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.