

P.O. Box 247, 4320 Aerotech Center Way Paso Robles, CA 93447 Telephone: (800) 350-2223 Fax: (805) 238-4201 PAGE 1 OF 5 Page Rev. Date: 07-20-20 P/N: AB4010 & AB4011

## ATLAS 4 speed INPUT CHANGE OUT KIT

## KIT CONSISTS OF: AB4010 Small Bearing Swap Kit

<u>No.</u>	Oty	Part No.	<b>Description</b>
1.	1	300500	SEAL-INPUT SHAFT ATLAS
2.	1	305300	BEARING-INPUT
3.	1	305307	BEARING-NEEDLE POCKET
4.	1	340407	SNAP-RING EXT
5.	1	716455	SNAP RING
6.	1	42R504	O-RING
7.	2	340403	WASHER - PLANET FIBER THRUST
8.	1	305380	O-RING
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Small Bearing Swap kit for 23, 27, 32, & 29 29 spline input(also requires **P/N 305308**)

## KIT CONSISTS OF: AB4011 Large Bearing Swap Kit

<u>No.</u>	Qty	Part No.	Description
1.	1	300473	SEAL-INPUT SHAFT ATLAS
2.	1	305310	BEARING-INPUT
3.	1	305308	BEARING-NEEDLE POCKET
4.	1	340408	SNAP-RING EXT
5.	1	716455	SNAP RING
6.	1	42R504	O-RING
7.	2	340403	WASHER - PLANET FIBER THRUST
8.	1	305380	O-RING
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Large bearing Swap kit for 31, & 34

The input shafts for the Atlas 4 speed are late model stock New Process inputs gears. These are the new gear pitch design from New Process. If the wrong year input is used, damage can occur to the planetary assembly. The 4 speed case requires the disassembly of the planetary housing.

The aluminum retainers are not included with these kits and will only be required when switching a large bearing input to a input needing a small bearingor vise versa.

Small bearing retainer P/N 305115. Large bearing retainer P/N 305116

**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.

## **ATLAS 4 SPEED INPUT SHAFT CHANGE**

Remove the planetary reduction from the front of the Atlas. This housing is coupled to the Atlas main case with 6 socket head cap screws.







Remove the top shifter from the planetary housing.



Remove the shifter detent spring and ball. Remove the set screw that holds the shift rail in the case.



Remove the shift rail so that the shifter fork can be removed. Once the fork is removed, the drive hub can be pulled from the unit.



Flip the unit over to gain access to the snap ring on the front input. The seal will need to be removed from the casting. The planetary assembly and the input are now ready to be removed from the housing. The bearing is a light press fit to the input and the input may need to be tapped slightly to be removed.



Once the planetary assembly is removed, locate the snap ring that holds the input gear to the planets. Removing the snap ring allow the input to be removed. On the input gear you will still have a steel thrust washer as well as a fiber one, these will need to be placed on the new input gear. The bottom side of the input has one additional fiber washer that needs to be replaced, you will find this one in the planet assembly. Please note that the new input gear will need to have a needle pocket bearing installed and if you are changing the input assembly from a small bearing to a large of visa versa, the front retainer will need to be changed out.

When reassembling the unit back together, please use an assembly lubricant. RTV silicon should be used on surfaces and loctite on the fasteners.



