

P.O. Box 247, 4320 Aerotech Center Way Paso Robles, CA 93447 Telephone: (800) 350-2223 Fax: (805) 238-4201 PAGE 1 OF 4 Page Rev. Date: 01-10-18 P/N: 50-2905

# FORD C-4 300M TO ATLAS TRANSFER CASE- SHORT

KIT CONSISTS OF:			
<u>No.</u>	Qty	Part No.	Description
1.	1	51-2902	C-4 ADAPTER PLATE
2.	1	51-9210	MODIFIED 51-9200 ADAPTER
3.	1	52-2905	C-4 OUTPUT SHAFT- 27 SPLINE
4.	1 KIT	716055	CROSSMEMBER KIT
5.	1	716061	C4 VENT
6.	4	723147	5/16"-18 x 1" F.H.C.S.
7.	5	723701	3/8"-16 NUT
8.	6	723705	3/8"-24 NUT
9.	5	723714	3/8"-16 x 1.5" STUD
10.	6	723731	3/8"-16 x 1" S.H.C.S.
11.	11	911003	3/8" INTERNAL STAR WASHER

<u>Kit Note</u>: The adapter overall length is 2.9" long.

#### **GENERAL INFORMATION:**

The output shaft included in this kit must be installed into a custom built, fully manual C-4 transmission. The length of this kit does not leave any space for the governor assembly; therefore, it must be used with a manual valve body. Additionally, the governor housing needs a lathe modification and a mill/drill press modification.

#### **INSTRUCTIONS:**

- 1. Have a transmission shop build the fully manual C-4 with the 52-2905 output shaft.
- Give the governor casting to a qualified machinist to turn the part down to the desired thickness of 0.530" +/- 0.005". This can be seen below in the picture. The second modification is to countersink the four 5/16" bolt holes until the included 5/16"-18 flat head cap screws sit flush with the surface.





P.O. Box 247, 4320 Aerotech Center Way Paso Robles, CA 93447 Telephone: (800) 350-2223 Fax: (805) 238-4201 PAGE 2 OF 4 Page Rev. Date: 01-10-18 P/N: 50-2905

## FORD C-4 300M TO ATLAS TRANSFER CASE- SHORT

3. The dowel pin must be shortened to 1.40" so that it is flush with the shortened governor housing.





### Shortened governor housing and dowel pin.

- 4. Place the governor housing over the park gear into the transmission case. Insert the dowel pin through the governor housing, park spring and the park arm. Secure the governor housing with the included 5/16"-18 flat head cap screws and torque to factory specs.
- 5. Put a dab of silicone on the tip of each of the 3/8"-16 x 1.5" studs and Loctite on the threads. Thread them into the adapter plate until they are just below, flush with the back side.
- 6. Press the included C-4 breather (#716061) into the adapter plate (51-2902).



*The* 51-2902 *plate after installing studs.* 



P.O. Box 247, 4320 Aerotech Center Way Paso Robles, CA 93447 Telephone: (800) 350-2223 Fax: (805) 238-4201 PAGE 3 OF 4 Page Rev. Date: 01-10-18 P/N: 50-2905

# FORD C-4 300M TO ATLAS TRANSFER CASE- SHORT

- Apply a thin film of silicone to the back flange of the C4 transmission and using a mallet, tap the 51-2902 plate over the governor housing. Fasten with the 3/8"-16 socket head cap screws. Torque to factory specs.
- Check operation of the transmission park gear. Verify that the transmission will shift in and out of park without any binding. *If you encounter any problems, do not proceed.* Remove the plate and find and eliminate the interference. If you should need further assistance, please call us at 1-800-350-2223.
- Apply a thin film of silicone to the 51-9201 casting that mates to the adapter plate. Slide 51-9201 aluminum adapter over the studs and lightly tap into place with a mallet. Install star washers and nuts.
- 10. Prepare the transfer case for the installation by threading P/N #302069 studs (included with the Atlas transfer case.) into the transfer case input ring.
- 11. Pre-assemble the P/N 716055 crossmember mount according to the instructions included with that kit.
- 12. Insert the transfer case studs into the adapter until the studs just begin to protrude through the adapter. Slide the crossmember mount into place and over the transfer case studs. Push the transfer case the remaining distance so that it is completely seated into the adapter. Install the star washers and the 3/8"-24 nuts.







P.O. Box 247, 4320 Aerotech Center Way Paso Robles, CA 93447 Telephone: (800) 350-2223 Fax: (805) 238-4201 PAGE 4 OF 4 Page Rev. Date: 01-10-18 P/N: 50-2905

### FORD C-4 300M TO ATLAS TRANSFER CASE- SHORT

The assembled kit looking from the top.





*The assembled kit looking from the bottom.*