Installation Instructions

ATI SUPERCASE® / BELLHOUSING

Part # 200011

NOTICE – The ATI SuperCase is SFI 4.1 manufacturer certified. The ATI Bellhousing is SFI 30.1 manufacturer certified. These certifications are valid for a period of 5 years. Upon expiration, the units must be returned to ATI for inspection and recertification. This recertification is mandated by the SFI Foundation and is required by the competition sanctioning bodies.

The ATI SuperCase is engineered to accept GM Powerglide spec replacement parts. The ATI Bellhousing may be installed to the case before or after the transmission assembly. Standard Powerglide assembly procedures should be followed unless noted otherwise.

Case Venting – It is important to properly vent the transmission to the atmosphere. ATI recommends using a length of semi-clear, high temp, Teflon based tubing (1/4" OD, 1/8" ID) with a Push-In fitting (1/4" tube, 1/8" NPT). The tubing should be routed to some type of catch bottle to prevent any fluid from reaching the track surface. The vent hole is near the top of the case above the servo bore.

Tailhousing Venting – The tailhousing also needs to be vented. If you are using a stock oem governor support the venting is done through the case. If you are using an aftermarket governor support (with bearing) the vent hole becomes blocked. The solution is to either drill a ¼” hole in the support into the cavity area between the 1 o’clock and 2 o’clock positions or provide a separate vent for the tailhousing. ATI’s tailhousings and other makers provide a threaded hole for an additional vent tube. “Shorty” extensions do not require venting.

Assembly Notes
• The reverse gear clutch pack needs to be installed prior to inserting the steel safety liner into position.
• The 2 pressure test ports need to be plugged (plugs included). One is located in front of the servo bore. The other is near the rear of the right side.
• Pipe thread holes need to be sealed with Teflon pipe sealant or equivalent.
• Straight thread holes need a light coat of “anti-seize” lubricant.
• The 6 – 7/16” bolts (included with the bellhousing) that attach the bellhousing are to be torqued to 40 ft/lb and use red “262” Loctite.
• For optional SuperCase to Bell Stud Kit refer to Instruction #950263-I.

BOLT NOTICE - The ATI bellhousing is attached to the SuperCase using six (6) 7/16 bolts. The 2 short bolts MUST be installed at the bottom. The bolts should be torqued to 40 ft/lb using red “262” Loctite.

Hardware list: (4) 7/16-14 x 1 1/4 bolts ....Part # 951104
(2) 7/16-14 x 1 bolts ........Part # 951103
(6) Serrated washers........Part # 953015

ATI is not responsible if you strip the bottom threads of the case!
Powerglide Transmission Case Torque Specs
Recommended by ATI Performance Products.

Transmission to Engine Bolts .................................................... 35  ft lbs
Oil Pan to Case Bolts ................................................................. 12  ft lbs
Tailhousing to Case Bolts ........................................................... 25  ft lbs
Servo Cover to Case Bolts .......................................................... 20  ft lbs
Front Pump to Case Bolts ............................................................ 13  ft lbs
Governor Support to Case Bolts .................................................. 10  ft lbs
Valve Body to Case Bolts ............................................................. 13  ft lbs
Valve Body Suction Screen Attaching Screws ............................ 2 ½ ft lbs
Parking Lock Pawl Bracket Attaching Bolts ................................. 15  ft lbs
Pressure Test Point Plugs ............................................................ 5  ft lbs
Low Band Adjustment Lock Nut .................................................. 15  ft lbs
Shifter Shaft Inner Lever Nut ....................................................... 2 ½ ft lbs
Input/Output shaft total end play .............................................. .028” to .059”

Low Band Adjustment – Tighten the low servo adjusting screw to 80 in lbs using a torque wrench. The input and output shafts must be rotated simultaneously to properly center the low band on the clutch drum. Then back off 3.5 turns and tighten the locknut. If using an Aluminum Drum, back off 5 turns.

For SuperCases and adapter plate set-ups the flexplate adapter must go onto the rear of the crank first then install the flexplate and bolts.