# STOP!



# REGISTER YOUR WARRANTY WITHIN 30 DAYS OF INSTALLATION

Visit <u>transmissionwarrantyregistration.com</u> to register your unit

Failure to register warranty ONLINE within 30 days of installation will void warranty coverage

Once warranty registration is complete, file a warranty claim by contacting the warranty team:

Phone: 866-417-9237

Email: transmissionwarranty@aermfg.com

\*Your transmission must be registered before the warranty team can assist\*

# \*\*\*\*\*ATTENTION\*\*\*\*

# PLEASE NOTE THE FOLLOWING WILL VOID WARRANTY:

Use of any of the following:

- Aftermarket pan
- Aftermarket tuning package
- Performance program or modifying the program chip
- Aftermarket engine modifications

Revising the EGR/Catalytic Converter

Transmission modification, including modifying the torque converter Snowplow application

Failures involving broken shafts, cases, or housings

Note: You must program or relearn the calibration if it is required by your application prior to operation of vehicle.

The following have special installation protocols that must be followed:

45RFE 46RE

47RE 48RE

5R110 6L80E/6L90E

6R140 6R80

6T40/45 6T70/75

68RFE

<sup>\*\*\*</sup>Specific installation protocols for model purchased are included within this packet\*\*\*

# **Installing your Remanufactured Transmission**

# **PRE-INSTALLATION STEPS**

- Remove new unit from shipping pod and compare it to the original transmission for likeness and compatibility.
- Inspect for damage. Install external accessories from core unit to replacement transmission.
- Completely clean, flush, and back flush cooling system with a hot flusher. Gravity flush or rinsing/blowing out the lines is not sufficient. If any part of the cooling system is damaged or contaminated, it must be *completely* cleaned or replaced. Some applications require cooler replacements. Refer to OEM requirements if you are not sure. Your warranty could be voided.
- Inspect the flexplate for cracks and/or worn torque converter mounting holes and starter engagement teeth.
- Clean crankshaft pilot with emery cloth and be sure it's free of rust. Clean paint from torque converter pilot. Use a small amount of grease in crankshaft pilot to insure smooth movement of converter in pilot.
- Remove the torque converter support brackets from the remanufactured transmission and reinstall the brackets on the core transmission to retain the torque converter during shipment of the core return. Do not remove the converter from the reman unit.

# **INSTALLATION STEPS**

- Be sure that you have exchanged the external accessories from the core unit to the remanufactured transmission and the torque converter bolt pattern matches prior to installation.
- Confirm both engine dowel pins are in place in the back of the block and are clean for a smooth mating to transmission case.
- After confirming torque converter is fully seated in transmission, align transmission bellhousing to engine block and tighten bolts to manufacturers torque specs.
- Confirm torque converter has proper clearance. If it is too tight, remove the transmission and reset torque converter in transmission pump. If the distance is too great, use even sized washers to correct spacing.
- Make sure torque converter is mated evenly to flexplate before starting bolts.
- Attach converter to flexplate with the correct bolts. Do not overtighten the bolts. Refer to manufacturers torque specs.
- Secure the cross member, dust shields and support brackets and braces.
- Reattach external linkage, cables, external sensors along with wiring harnesses and connectors.

# FINAL INSTALLATION STEPS

- Upon installation, it is necessary to fill and check fluid levels and add additional fluid to obtain required fluid levels.

  Refer to manufacturers specs to determine correct fluid to be used if unsure.
- While on lift or jack stands, run in reverse only for the first 2-3 minutes. Then run in forward gears and pay attention to shift points and quality. You may need to add fluid at this stage. Recheck fluid level before proceeding to the next step.
- A complete flow test must be performed to determine the proper operation of the cooling system.

### \*\*1 Quart per 15 seconds minimum flow rate\*\*

- A complete computer system scan should be performed, and all active and history codes should be cleared.
- Some applications require a <u>"REFLASH"</u> or <u>"QUICK LEARN"</u> function. Refer to the repair manual, tech service or manufacturer for information on this step before proceeding.
- Test drive vehicle. This test should utilize all gears and as many different driving conditions as possible and allow the vehicle to get to full operating temperature for more than 10 minutes.
- After the test drive, check for leaks, confirm fluid is full.
- Vehicle should be re-scanned to ensure no electronic issues occurred during test drive.

# **Important Torque Converter Installation Tips**

# PREPARE THE CRANKSHAFT AND CONVERTER FOR INSTALLATION

- Always check crankshaft pilot for burrs or out of round
- Remove rust with emery cloth and lightly grease crankshaft pilot
- Remove paint from torque converter pilot with emery cloth
- Check flexplate for cracks or worn teeth
- Install converter in transmission-make sure converter is fully seated in pump

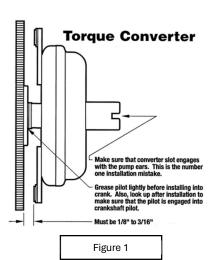
# CHECK CONVERTER TO FLEXPLATE ALIGNMENT

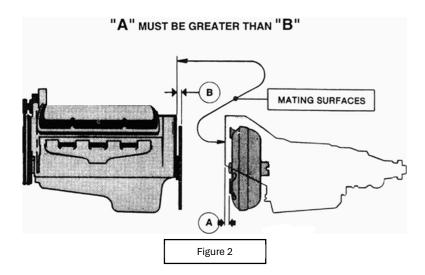
After bellhousing bolts are tight, check free movement of torque converter. It should have 1/16" to 1/8" of clearance between pads on converter and flexplate. If you have more than 1/16" to 1/8", install equal thickness washers to reduce clearance to 1/16" to 1/8". If there is not enough clearance, remove the transmission and check to see if the torque converter is fully seated in pump. Draw converter bolts up evenly so as to not pull torque converter into a bind causing vibrations or pump bushing failure. If vibration occurs after installation, mark torque converter to flexplate and rotate converter one bolt hole at a time.

The number one cause of vibration is failure to prepare the crankshaft for installation. Each time the torque converter is installed without sanding out the rust in the crankshaft pilot and/or removing the paint from the torque converter pilot and adding a little grease, the converter may be drawn up crooked with the first bolt. This may cause the converter to "run-out" and usually ruins the pump bushing creating a leak and/or pump damage. The second most common complaint about torque converters is a whine after installation. This usually means there is too much clearance between converter pads and the flexplate. This draws the converter hub too far out of the pump drive gear causing the whine.

# CHECKING CLEARANCE

Below is a chart that shows how to measure proper depth clearances. Please check for proper clearance. Failure to do so can and will cause damage to the transmission and/or torque converter. Take measurement "A" shown in figure 1. The correct method of measuring "A" is shown in figure 2. Now take measurement "B" on the engine as shown in figure 1. This is the distance between the engine block mating surface and the converter mount mating surface on the flexplate. Compare the two measurements that you have taken. "A" must be greater than "B". If "A" is not greater than "B" the converter is not installed properly. Pull converter off slightly, then push it on again, rotating it at the same time. Continue until you feel the converter move inward and stop at the proper engagement. Repeat measurement "A" and compare it again with "B". "A" must be greater than "B". Do not proceed further until you have installed the converter properly.





# Remanufacturer's Limited Warranty

The Remanufacturer issues this Limited Warranty to the original purchaser/owner of the vehicle in which the engine, transmission or component is installed. The Remanufacturer warrants the remanufactured engine, transmission or component part, which was purchased and is described in this warranty to be free from defects in materials or workmanship if properly installed and maintained during the specified warranty period. If the remanufactured engine, transmission or component fails due to a defect in materials or workmanship during the specific warranty period, the Remanufacturer will repair, replace, or refund, at the discretion of the Remanufacturer the engine, transmission, or component in question.

### Transmissions-Whichever Shall Occur First

- 36 Months/100,000 Miles: Passenger cars, police cars and light trucks up to 1 ton, except motors homes\* and special use vehicles\* listed below. This warranty covers parts and labor as described in remanufacturer's limited warranty for a period of 36 months/100,000 miles.
- 24 Months/24,000 Miles: Trucks over 1 ton and motor homes\* and special use vehicles\* listed below. This warranty covers parts and labor as described in the remanufacturer's limited warranty.
- 12 Months/12,000 Miles: All taxi cabs, Ford Mustang Cobra, GT, Ford F-150 Lightning and Harley Davidson pickups. All vehicles equipped with OEM supercharger. This warranty covers parts and labor as described in the remanufacturer's limited warranty.
- 3 Months: Stationary, agricultural and industrial. This warranty covers parts and labor as described in the remanufacturer's limited warranty.
- 18 Months: Marine applications. This warranty covers parts and labor as described in the remanufacturer's limited warranty.
- Class B and C Motor Homes: These being built on Ford, Dodge, or General Motors "cutaway chassis" or
  van chassis will be warrantied under the remanufacturer's limited warranty. Coverage excludes labor for
  removal and replacement of accessories not specific to the original manufacturer's chassis.
  - o ½ ton through ¾ ton for standard 36 Month/100,000 miles.
  - o 1 ton for standard 24 Month/24,000 miles.
- Class A Motor Homes: These being "purpose built" chassis or truck chassis in excess of 11,000 lb. GVW will carry a 6 Month/12,000 miles parts only warranty.

This warranty is subject to the standards described in the remanufacturer's limited warranty.

\*\*ALL TRUCK AND VAN CHASSIS EMERGENCY SERVICE VEHICLES AND RAILROAD VEHICLES WITH HIGH RAIL EQUIPMENT ARE EXCLUDED FROM THIS WARRANTY\*\*

# **Limited Warranty Disclaimer and Exclusion to Coverage**

# Limited warranty excludes:

- 1. Not registered with the Remanufactured Warranty Registration Department within 30 days of installation.
- 2. Installed in vehicles or marine applications used for racing, off-road use, or containing high performance modifications, aftermarket superchargers, emergency service vehicles, railroad vehicles with high rail equipment.
- 3. This warranty does not cover damage or failure arising directly or indirectly from improper installation (not in accordance with the original equipment manufacturer's specifications) or related vehicle problems, misuse, maintenance, neglect, abuse, overheating, contamination, foreign object damage, vandalism, abnormal operation, environmental conditions, lack of lubrication at start up, accident or damage which was apparent and not reported at the time of delivery.
- 4. Not serviced at proper intervals, use of transmission fluid/oil not in accordance with original manufacturer's specifications.
- 5. Installed using a different valve body or converter other than the one supplied with the transmission.
- 6. Installed with an aftermarket pan other than the one supplied with the transmission.
- 7. Installed in a vehicle that has undergone aftermarket tuning, performance programing, chip modification, aftermarket engine modifications, or revision to the exhaust gas recirculation (EGR) or catalytic converter.
- 8. Installed without programming or relearning the calibration based on information provided.
- 9. Compensation for inconvenience or loss of vehicle use.
- 10. Expenses incurred in securing replacement vehicles, rentals, lodging, towing, roadside assistance, vehicle storage, loss of time, loss of income, commercial loss, long distance telephone calls, legal fees, or other consequential cost or damages.
- 11. Any extensions to Limited Warranty beyond the described period from the date or mileage of the original installation of engine or component due to repairs or replacements.
- 12. Repairs or replacements otherwise covered if performed without prior authorization from the Remanufacturer, failure to return defective engine, transmission, component or repair parts, failure to supply proper paperwork and documentation\*.
- 13. Parts and labor costs that exceed allowable limits\*. Parts and labor costs due to misdiagnosis of failure.
- 14. Any gaskets, gasket sets or component parts, unless installed at time of remanufacture.
- 15. Any costs incurred for replacement of any parts not related to remanufactured engine, transmission or component failure (i.e., ignition components, fuel system components, sensor, cooling system components or other maintenance related components).
- 16. Any and all failures occurring outside the contiguous states of the United States of America.
- 17. Labor incurred removing or replacing accessories not specific to the original chassis manufacturer on all class B and class C motor homes.

### \*SEE LIMITED WARRANTY CLAIMS PROCESSING AND PAYMENT POLICY.

General Limitations 1) You must be able to provide an original receipt in your name for the warranty claim to be considered. 2) Any repairs not authorized by APS will void the warranty. 3) We reserve the right to have the part(s) inspected to ensure that all pertinent provisions of this warranty have been met prior to any replacement, repair, or refund.

THIS WARRANTY IS NULL AND VOID IF: Failures are caused by non-covered components, improper installation, failure to repair any subsystem failure, failure due to component or part not installed on the unit when manufactured, usage for which the part was not intended and/or improper maintenance (e.g., using the incorrect types and levels of fluids and lubricants as specified by the vehicle manufacturer). Product is installed in an application for which the vehicle manufacturer did not intend. Failure is caused by towing a trailer or other vehicle unless your vehicle is equipped for this purpose as recommended by the vehicle manufacturer. Product is installed or operated outside the United States of America or Canada. Failure is caused by or related to a collision, fire, theft, vandalism, riot, explosion, lightning, earthquake, windstorm, hail, water, freezing, flood or any other act of God. Failure is caused by neglect, abuse, misuse, racing (whether on road or off-road), or modifications. There is evidence that the vehicle was continually operated after failure occurred. The engine heat tabs are missing, tampered with, melted, misplaced, or otherwise not as originally installed. This part may have accessories that are attached and must be switched or removed to accommodate proper installation, which is the responsibility of the installer. Such accessories are not covered by this warranty. This limited warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. APS does not authorize any person to create for it any obligation or liability in connection with this warranty. In the case of engines this warranty is limited to defects to the block, heads, pistons, crankshaft, camshafts, valves, rockers, connecting rods and other internal lubricated parts. All other parts that may be provided are considered "accessories and extra parts". No warranty is provided for any such parts that are attached, including but not limited to these parts such as solenoids, injectors, switches, sensors, water pumps or manifolds. There are no warranties on overheated, burned, or overloaded parts. Engines, Transmissions, and Transfer Cases all require that all installation and ongoing maintenance procedures be followed. Engines are sold as a long block assembly only, which includes just the short block and cylinder head(s). Any other parts that are included are not warrantied. Any claim on a defective or incorrect part must be made within the warranty period. The part must be returned to the manufacturer for verification that it is the same part they sent and is indeed defective. Upon its return, the part must be in the same condition as when sold. It is agreed that the sole determiner of the condition for return is the manufacturer. No refund or exchange can be made until the manufacturer has verified the part condition. There are NO returns on altered, disassembled, overheated parts or parts that fail due to failure to lubricate properly.

### LABOR RATES

### Over the counter sales - installed by Independent Repair Shops and Fleets:

- Current Motor or All Data customer pay time. Not to exceed \$50.00 per flat rate hour.\*
- Fluids (oil, antifreeze) are capped at \$45.00 and are covered for the initial 1,000 miles.
- In service repair, parts are covered at cost. Receipt for parts purchased must be supplied for coverage.

## Over the counter sales - installed by Vehicle Owner:

Current motor or all data customer pay time. To be paid at \$25.00 per flat rate hour, not to exceed \$300.00\*

\*All parts and labor payments subject to approval upon inspection of the remanufactured engine, transmission, component, or parts by the Remanufacturer

# Jurisdiction, Venue, and Arbitration

Disputes and controversies of every kind and nature between APS and Purchaser, arising out of or relating to this agreement, transaction or purchase shall be settled by mandatory binding arbitration in Carrollton, Dallas County, Texas, in accordance with Texas arbitration law. The arbitrator shall be an arbitrator mutually agreeable to the parties, or if the parties cannot agree, an arbitrator appointed by the Court. Jurisdiction and venue for any and all disputes and controversies between the parties shall be in Carrollton, Dallas County, Texas, and decided in accordance with Texas law. The prevailing party in any arbitration proceeding or Court matter shall be entitled to reimbursement for reasonable attorney's fees and costs, defined to include fees paid to arbitrators and expert witnesses.

# **Limited Warranty Claims Filing Procedure**

Approval for repairs or replacements of remanufactured engines, transmissions, or components must be obtained from the customer service department prior to any work being performed. Any repairs or replacements performed without prior approval will not be covered.

# When calling the customer service department please have the following information:

- 1. Serial number of the engine or transmission
- 2. Part number of engine, transmission or component
- 3. Date and mileage at the time of installation
- 4. Current mileage
- 5. Make, model, year, vehicle identification number and license plate number
- 6. Description of problem that you are having with the remanufactured engine or component

Diagnostic time will only be covered if instructed by the customer service department. Remanufactured engines, transmissions, components or parts found to be defective must be returned to the Remanufacturer for failure analysis or the claim will be denied. Any remanufactured engines, transmissions, components or repair parts must be submitted with appropriate paperwork and authorization number to ensure payment.

# Paperwork and information required:

- 1. Original sales ticket and repair order
- 2. Current sales ticket and repair order
- 3. Sales tickets for any parts purchased to complete repairs to replacements
- 4. All services and maintenance records
- 5. Warranty authorization number

Please retain a copy of the paperwork and authorization for future reference. CLAIMS NOT SUBMITTED WITHIN 30 DAYS OF LAST ACTION WILL BE VOID.