

Tru-Street Transmission

Installation Paperwork


Tru-Street *Services*

PLEASE READ BEFORE INSTALLATION

If you have any questions regarding your warranty, please call (618) 943-4856
or email us at info@bowlertransmissions.com

Bowler Performance Transmissions
10885 May Chapel Road
Lawrenceville, IL 62439



 **YouTube** Check out our YouTube channel for installation and tech videos!



WARRANTY



To prevent voiding your warranty please read this document

TRU-STREET 12 MONTH / 12,000 MILE LIMITED/CONDITIONAL WARRANTY AGREEMENT

Your Bowler Performance Transmissions re-manufactured transmission(s) is (are) warranted against failure due to workmanship and/or parts used in the re-manufacturing process for a period of 12 months/ 12,000 miles (whichever occurs first) from the date that the shipment is delivered/received. In the rare event that you should experience a problem with your transmission(s), we request that you call our technical service line at 618-943-4856. Please call us before attempting to repair or remove the transmission – we will work with you to ensure there is a reason to do so. Any unauthorized internal tampering or alteration will VOID the transmission warranty. This excludes regular maintenance i.e. fluid/filter and pan gasket.

We may ask you to ship the transmission back to us or take it to an A.T.R.A. approved professional transmission or reputable repair facility in your area. If we chose to send your transmission to a local shop, Bowler Performance Transmissions must authorize any repairs before physical work is performed. We will coordinate with that facility to ensure the transmission is in perfect working order. Bowler Performance Transmissions is not responsible for labor, parts or fluids incurred to remove or replace the transmission. If the transmission must be replaced, we will work with you to ship you another unit. Bowler Performance Transmissions reserves the right to have the transmission returned to us for repair or replacement.

If failure is due to faulty materials or workmanship within the 12 months /12,000-mile period, we will repair or replace the transmission at no cost to you except shipping, PERIOD! If failure is caused in no way by faulty materials or workmanship, we will fix the transmission and you will be billed only for the parts and labor needed. The customer is responsible for all shipping expenses to get the transmission to and from Bowler Performance, if the failure is at the fault of Bowler Performance Transmission, we will ship the transmission back to you at no additional cost.

This warranty expressly does not cover loss or injury from the use of the product. This warranty is non-transferable and only applies to the owner of the vehicle at the time of installation. Bowler Performance Transmissions reserves the right to change the terms and conditions of this warranty at any time.

Acceptance of this warranty agreement is verified by the receipt of the transmission purchased. No other warranty, whether written or implied, is valid for this transmission. If you are unsure that your particular installation or application will void this warranty, please call before performing the installation. We will make every effort to assist you with any questions or concerns you may have.

Any other items purchased from Bowler Performance Transmissions along with your Tru-Street transmission will be covered by the individual manufacturer's warranty.

Special Note We understand that not all builds progress and finish as planned, and it may be more than 12 months before your transmission is ready to be used, which falls outside of our standard warranty time frame. If you find yourself in this situation and would like further peace of mind that your transmission will perform as intended, we offer a service that will reinstate your original warranty and reset the clock. To take advantage of this service we ask that you contact us and schedule a time to ship your transmission back to us. We will then inspect, and dyno test your transmission to ensure that everything is still operating to our standards. Once the transmission has passed our tests, we will reinstate the 12-month/ 12,000 mile warranty. All costs associated with this procedure are the sole responsibility of the consumer.

INSTALLATION TIPS AND INFORMATION TO PREVENT A TRANSMISSION FAILURE.

Failure of your transmission due to any of the below items will void any warranty offered from Bowler Performance Transmissions.

All of our transmissions are built to the specifications that are given by you, the customer, and fully dyno tested to prove the product works as promised before we ship. Sometimes things break or fail and we are happy to take care of these problems, as long as, the failure is due to our workmanship or failure of a component we provided. We pride ourselves on great customer service and offering quality products, however, we cannot honor our warranty when the failure was due to forces outside our control. This includes, neglect, improper installation, improper transmission fluid cooling, lack of education on the electronic controls and/or calibration, or not using the components sent in our package.

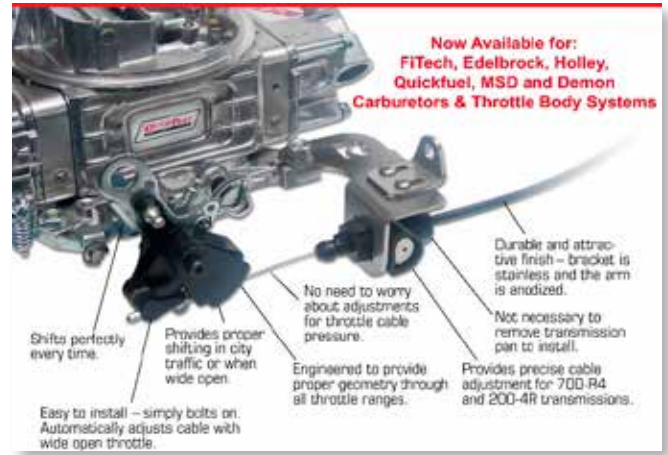
1. An external transmission cooler that is rated at 40,000 GVW capacity or higher is required on all transmission installs. We can supply the proper fluid cooler with your transmission, but you are also welcome to source your own. If you received a fluid cooler in your package, this is the cooler specified by Bowler for your application, and this must be used to prevent voiding your warranty. The cooler must be mounted in front of the radiator with proper air flow. If it must be mounted under the vehicle a fan must be used to force air across the heat exchanger. It is also critical that the fluid cooler is mounted away from exhaust, restrictive areas, and any other sources of heat. A frame mounted cooler (Fig 1.) Is not acceptable. A cooler in the radiator is not sufficient for the proper cooling of any high-performance transmission.



Fig 1.

2. If you have purchased an electronically controlled transmission, the TCM calibration is the life of the transmission by controlling shift timing and pressure. If we send a controller with the package it will be set with the data that is provided by the customer along with the proper pressures. If you need to make adjustments, such as shift timing, tire size or gear ratio, please contact us to verify the proper way to make these changes and to maintain your warranty. If you alter the calibration without the consent from Bowler your warranty will be void. If you are supplying your own controller or using an OEM ECM, we require the calibration to be sent in for us to review and sign off from, please send the calibration to info@bowlertransmissions.com. If the calibration is not signed off by Bowler your warranty will be void.

3. If you purchased a 700-R4 transmission you must use the Bowler Tru-Shift system unless the engine is a factory GM TBI or TPI that was originally equipped with a 700-R4. Please follow our Tru-Shift instructions to prevent transmission damage. If you are using an aftermarket carburetor system, EFI, Eight Stack injection system or other systems that we do not offer a Tru-Shift system for such as a Quadra-Jet, tri-power or other system that is not intended for use with the 700-R4 your warranty will be void.



4. Dyno testing. If you are going to dyno test your vehicle there is a very specific way to perform a dyno test with an automatic transmission. You must ensure that the gear selector is in the D position. If you place the shifter in the OD(overdrive) position transmission failure will occur! Even if you are using an electronic controller and manual shifting through the gears if the physical gear selector is in the OD position failure will occur. If your vehicle is equipped with a push button OD, ensure that the OD is disabled. Do not allow the torque converter to go into lock-up on the dyno. You should dyno test with the transmission in the D / 3rd gear position and never allow it to shift to OD / 4th or lock the converter up. Failure to do this will void your warranty.



5. Transmission fluid level. We require the transmission fluid level to be double checked after a 3-5 mile test drive. Many automatic transmissions will see fluid levels drop after the first drive as passages and clutch drums continue to fill. If you are using a flexible dipstick / fill tube please check to ensure the full indicator mark is level with the pan rail on the transmission, we have found many aftermarket flexible dipsticks not showing the correct fluid level resulting in a transmission being driven low on fluid. Transmission damage will occur if the transmission is driven even one quart low. A transmission that has been over filled can see problems with front seal failures and/or fluid being pushed out the vent which can result in a fire. See the picture examples on the next page for more information.



Accurate indicator position



Indicator To High (Overfull)



Indicator To Low (Underfilled)

6. Battery voltage and wiring. It is very important that you are using properly sized battery cables and chassis grounds to ensure the quality of the electrical current going to the transmission controller. Often the battery is remote mounted in the trunk and will require a minimum of a 4 gauge or larger wire to provide proper voltage. We recommend a 0 gauge wire to the distribution block on the firewall. In order to properly ground the battery, you should have multiple ground straps, such as; from the engine block to the chassis, from the battery to the engine block, as well as, transmission case to the chassis. It is recommended that your transmission controller wiring for both the positive (power) and negative (ground) connections are ran directly to the battery terminals to ensure your best connections. We often see painted, powder coated, and anodized alternator brackets that cause poor ground connections to the alternator which will cause weak charging, overheating of the alternator, and potential electrical failures. We recommend that you run a separate ground wire directly to the alternator to help prevent this problem. Improper vehicle wiring and connections can result in electrical damage to the transmission control unit and subsequently the transmission. Failures of this nature will not be covered under warranty.
7. Torque converter pull up. Even if you do not remove your converter after receiving the transmission, we recommend that you double check the position of your converter face to the face of the transmission. You should have approximately 1" from the face of the bell housing to the face of the converter mount pad. When installing the transmission, the converter should not touch the mounting surface of the flexplate, you will be required to pull the converter up to the flexplate, approximately .180" - .200". If this distance is more or less, please stop and give us a call immediately. While you are checking the pull up you need to ensure that the converter pilot is fully engaged into the engine crankshaft. You should have approximately .150" - .200" of pilot engagement.

ENGINE BOLT TORQUE SPECS

Bowler recommends using ARP hardware when available for flywheels, clutches, and flexplates.

ARP recommends using Loctite 242 on the bolt thread and ARP Ultra Torque fastener lubricant under the bolt head if not using a washer.

GM SB and BB Engines:

Flywheel or flexplate to crank bolts – 60 ft-lb

Bellhousing to engine block – 35 ft-lb

Transmission to bellhousing bolts 40 ft-lb

Pressure plate to flywheel – 35 ft-lb

Torque converter to flexplate – 35 ft-lb

GM LS series engines with 6 bolt crank flanges:

Flywheel or flexplate to crank bolts – first pass 15 ft-lb, second pass 37 ft-lb, final pass 74 ft-lb

Bellhousing to engine block – 37 ft-lb

Transmission to bellhousing bolts 40 ft-lb

Pressure plate to flywheel – 54 ft-lb

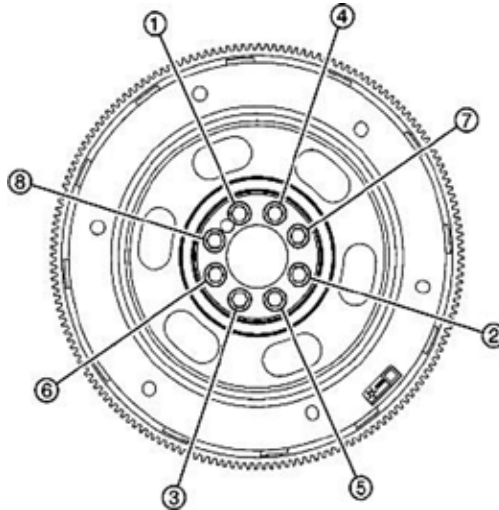
Torque converter to flexplate – 46 ft-lb

GM LSA & LT series engines with 8 bolt crank flange:

Flywheel or flexplate to crank bolts – first pass 11 ft-lb, second pass 22 ft-lb, final pass an additional 45 degrees. Use sequence pattern on the next page.

GM LSA & LT series engines with 8 bolt crank flange:

Flywheel or flexplate to crank bolts – first pass 11 ft-lb, second pass 22 ft-lb, final pass an additional 45 degrees. Use sequence pattern below.



Bellhousing to engine block bolts – 43 ft-lb
Transmission to bellhousing bolts 40 ft-lb
Pressure plate to flywheel – 54 ft-lb
Torque converter to flexplate – 46 ft-lb

Small Block and Big Block Ford engines:

Flywheel or flexplate to crank bolts – 75 ft-lb
Bellhousing to engine block – 65 ft-lb
Transmission to bellhousing bolts 40 ft-lb
Pressure plate to flywheel – 24 ft-lb
Torque converter to flexplate – 35 ft-lb

Ford Coyote and Modular engines:

Flywheel or flexplate to crank bolts – 75 ft-lb
Bellhousing to engine block – 50 ft-lb
Transmission to bellhousing bolts 40 ft-lb
Pressure plate to flywheel – 54 ft-lb
Torque converter to flexplate – 35 ft-lb

Mopar Gen 3 Hemi engines:

Flywheel and Flexplate to crank bolts – 70 ft-lbs
Bellhousing to engine block – 50 ft-lb
Transmission to bellhousing bolts 40 ft-lb
Pressure plate to flywheel – 54 ft-lb
Torque converter to flexplate – 35 ft-lb

Automatic Transmissions:

- If the transmission has been Dyno tested there is normally 1-2 quarts still in the system.
 - We recommend starting with 5 quarts of fluid to fill the pan, and then start the vehicle. Start adding fluid immediately add at least 4 quarts more and then start checking the level.
 - Always double check the fluid after the 1st test drive.
 - Check fluid with the vehicle running and in Park (*unless dealing with a Mopar transmission*).

TRANSMISSION TYPE	FLUID TYPE	AMOUNT
4L80-E	Dexron III Dexron VI Royal Purple (Max ATF)	14 Quarts
4L80-E with Deep Pan	Dexron III Dexron VI Royal Purple (Max ATF)	16 Quarts
4L60-E	Dexron III Dexron VI Royal Purple (Max ATF)	10.5 - 11 Quarts
4L60-E with Deep Pan	Dexron III Dexron VI Royal Purple (Max ATF)	12.5 - 13 Quarts
4L65-E	Dexron III Dexron VI Royal Purple (Max ATF)	10.5 - 11 Quarts
700-R4	Dexron III Dexron VI Royal Purple (Max ATF)	10.5 - 11 Quarts
700-R4 with Deep Pan	Dexron III Dexron VI Royal Purple (Max ATF)	12.5 - 13 Quarts
GM 10L80/90 & Ford 10R80	Mercon ULV ATF	13 Quarts
GM 8L90	Dexron High Performance ATF	11.1 Quarts
GM6L80/90	Dexron VI Royal Purple (Max ATF)	12.5 Quarts
Ford 6R80	Mercon LV	13.1 Quarts
4R70-W	Dexron V Royal Purple (Max ATF)	12 Quarts
TKX, TKO 500/600, & T5	Royal Purple Synchronax Any name brand synchronesh	3 Quarts
T56/Magnum/TR-6060	Royal Purple Synchronax Any name brand synchronesh	4 Quarts
LGT	Monolec LE 1150	3.7 Quarts

