



Installation Instructions for TCI #376025 Transbrake Valve Body Kit

Thank you for choosing TCI® products; we are proud to be your manufacturer of choice. Please read this instruction sheet carefully before beginning installation, and also take a moment to review the included limited warranty information. Contact us toll free at 1.888.776.9824 or at www.tciauto.com under Tech Support with any questions.

**THIS VALVE BODY IS A FULL MANUAL SHIFT
WITH A REVERSED SHIFT PATTERN: P-R-N-1-2-3-4**

IMPORTANT: THIS VALVE BODY KIT WORKS BEST WITH 87' – 93' 700R4/4L60 YEAR MODEL TRANSMISSIONS and REQUIRES COMPLETE DISSASSEMBLY OF THE TRANSMISSION and SHOULD ONLY BE INSTALLED BY AN EXPERIENCED TRANSMISSION BUILDER

TCI recommends the use of TCI's Billet pump rotor: PART # 373400

This billet rotor is standard in all of TCI's 200/4R, 700R4 and 4L60E transmissions

This Kit Contains:

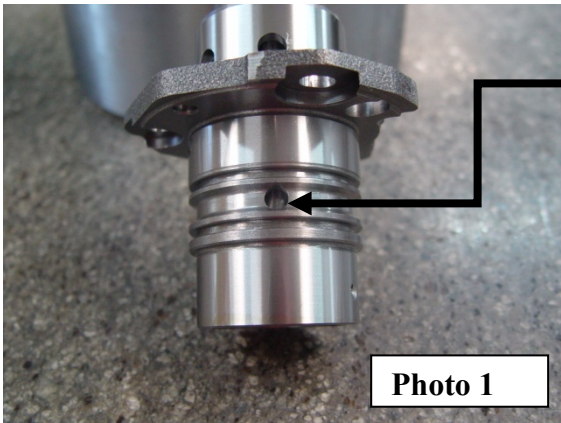
- 376025 Valve Body
- (1) Special Manual Valve
- (1) Pressure Boost Valve Sleeve
- (1) Pressure Regulator Spring (GOLD)
- (3) Flange Head Bolts M6-1X12MM
- (16) HD Piston Return Springs
- Wiring Harness Assembly
- Solenoid Adapter & Solenoid

STEP 1: Completely disassemble the transmission. Verify that the transmission stator support tube and the reverse input drum are the correct parts for the installation of this kit. See Photo 1 & 2. If the parts don't match the parts in Photo 1 and 2, STOP the installation process until the correct parts are obtained. TCI offers the correct parts to complete the installation.

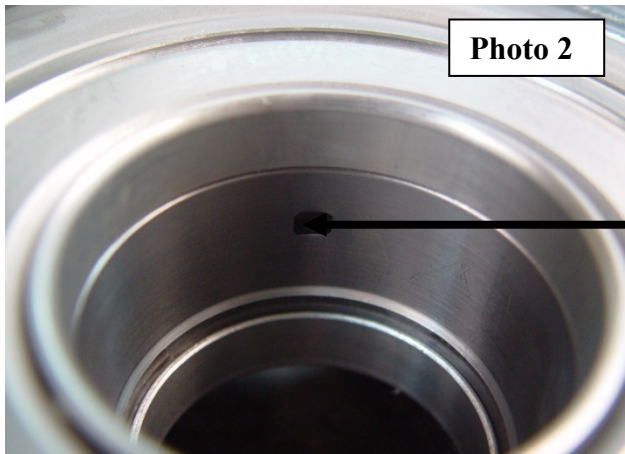
- 373380 (Stator tube)
- 375560 (Reverse input drum)

If your transmission has the correct stator tube and reverse input drum, the installation of the TCI 376025 can proceed.

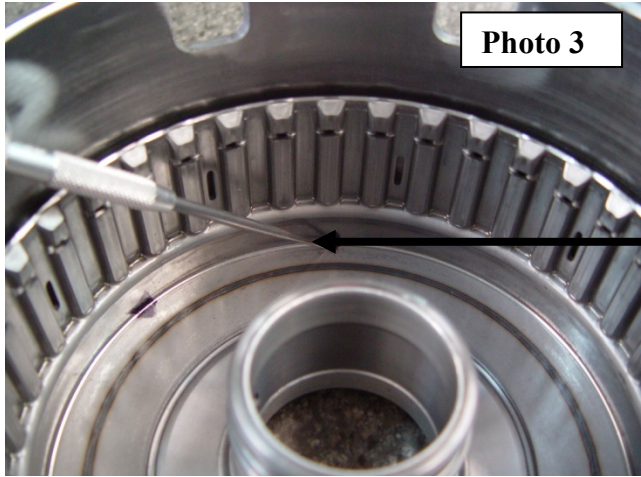
STEP 2: Drill the reverse input drum as shown in Photo 3.



This hole in the stator tube must measure at least 0.215" or the stator tube must be replaced with a new stator tube TCI 373380.

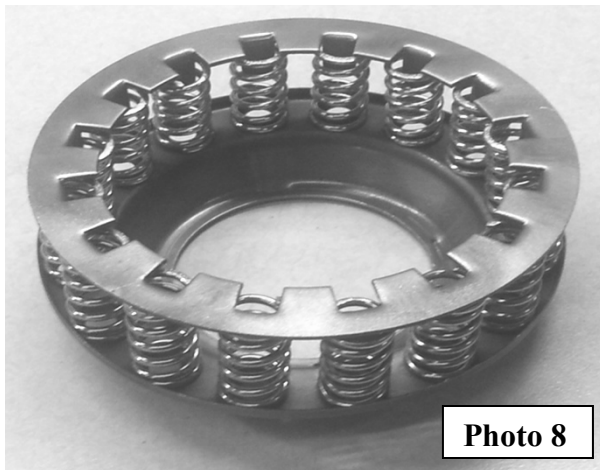
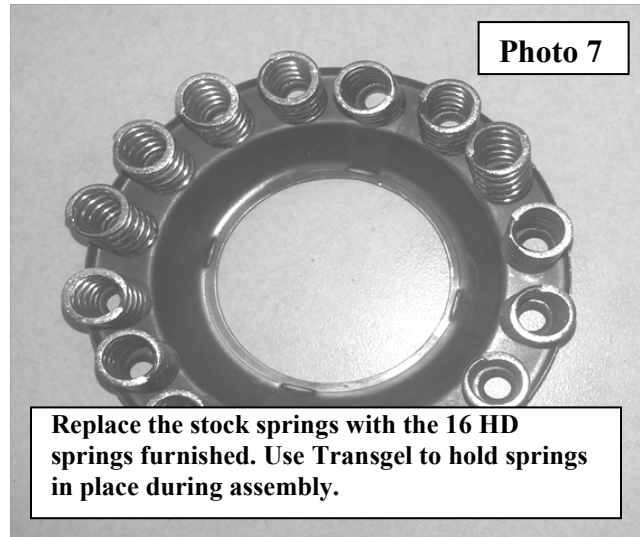
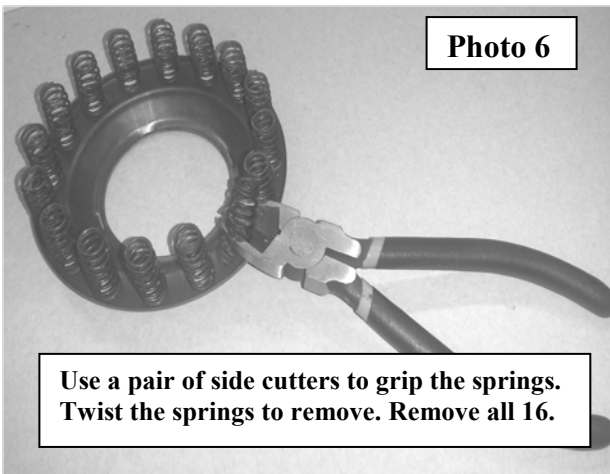
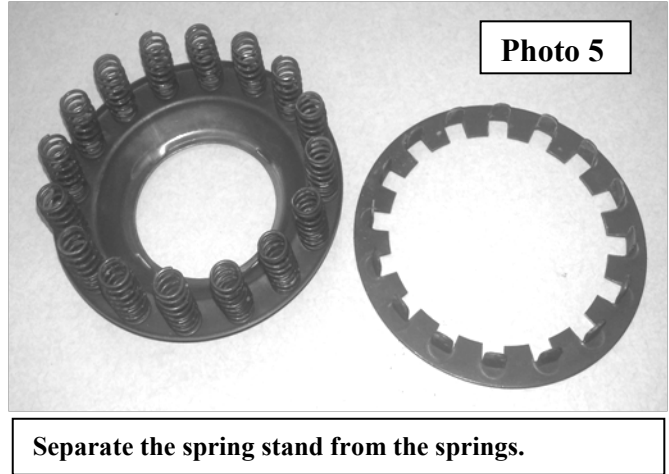
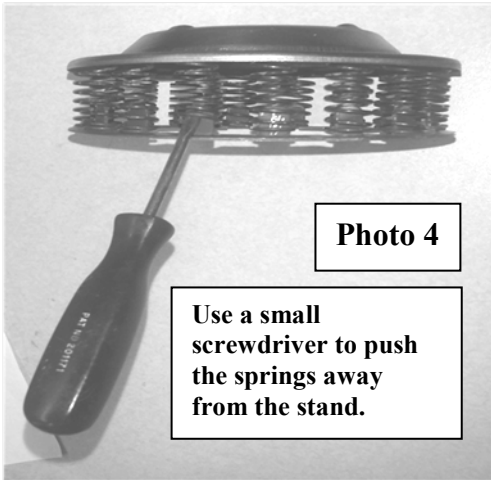


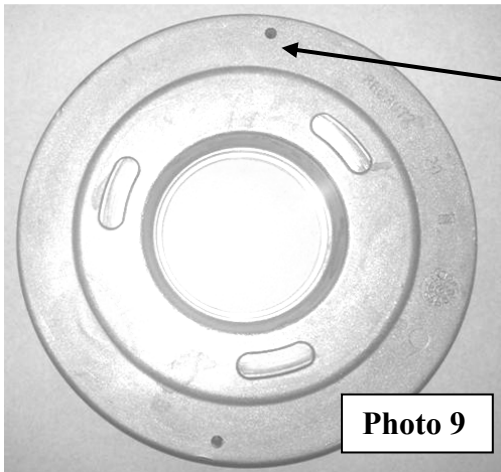
This hole in the reverse input drum must be a large square hole or the drum will need to be replaced. TCI 375560



Drill a 1/16" hole approximately at a 45 degree angle at this location. Make sure the hole is drilled completely through the drum.

STEP 3: Install the 16 HD springs as shown in Photos 4-8.





Install the set screw in the open bleed hole in the piston. Make sure the set screw is below the surface of the piston.

Photo 9

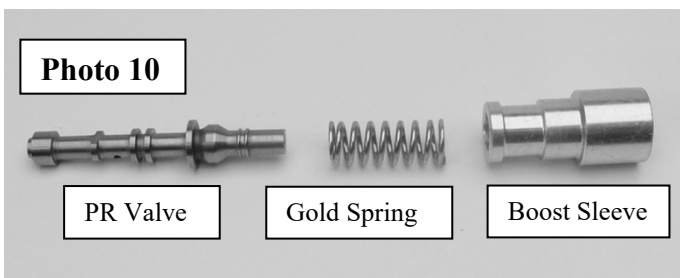


Photo 10

PR Valve

Gold Spring

Boost Sleeve

STEP 4: Install the furnished 8-32 x 1/8 set screw in the open bleed hole in the reverse input piston as shown in Photo 9.

STEP 5: Assemble the reverse input drum with new seals and the HD springs following the regular assembly procedure. Discard the Bellville plate! Begin the reverse input clutch stack up with two .090" flat steel plates and a friction plate. Continue installing the other frictions & steels in the normal way. Set clutch clearance to .050"-.075". Different thickness backing plates are available to adjust the clutch clearance as needed.

STEP 6: Install the low/reverse piston with new seals in the normal way. Discard any waved steel plates and replace with flat steel plates. Set the low/reverse clutch clearance to .050"-.070". Different thickness center supports and thicker & thinner low/reverse steel plates are available to adjust the clutch clearance.

STEP 7: Install the pressure regulator assembly as shown in Photo 10.

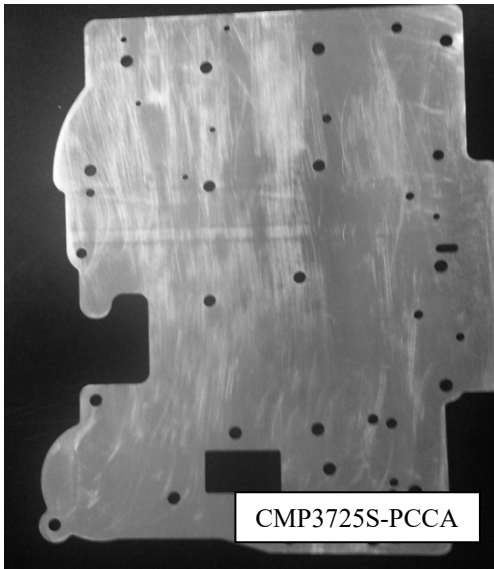
STEP 8: Reassemble the transmission following the regular assembly procedure.

STEP 9: The valve body can be installed now. Install the valve body plates with gaskets as shown. Install the auxiliary valve body and check ball as normal.

IMPORTANT!

THE GOVERNOR MUST BE LEFT IN THE TRANSMISSION FOR LUBE PURPOSES

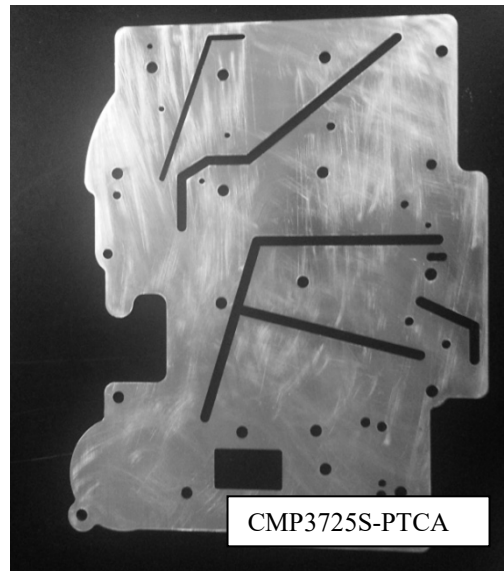
STEP: 9 VALVE BODY PLATES AND GASKETS



INSTALL
CASE
GASKET
W/WHITE
STRIPE
UNDER THIS
PLATE

CLEAR
ANODIZED:
THIS PLATE
INSTALLS
AGAINST
THE CASE

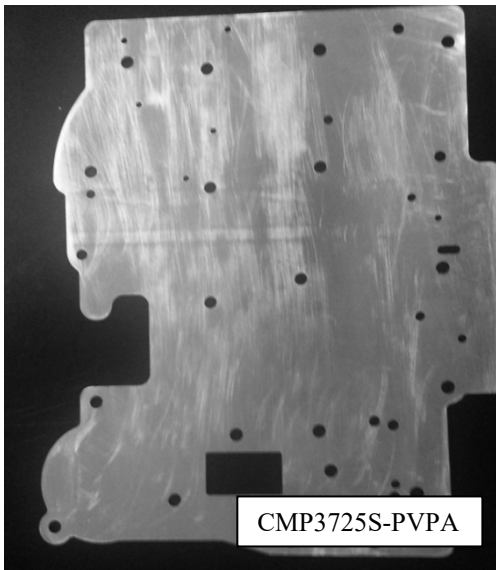
CMP3725S-PCCA



CMP3725S-PTCA

INSTALL
THE VALVE
BODY
GASKET
W/BLUE
STRIPE ON
TOP OF THIS
PLATE

PURPLE
ANODIZED:
THIS PLATE
INSTALLS
AGAINST
THE VALVE
BODY



CMP3725S-PVPA

INSTALL A TRANSFER PLATE
GASKET W/ ORANGE STRIPE ON
BOTH SIDES OF THIS PLATE

CLEAR ANODIZED: THIS PLATE
INSTALLS BETWEEN THE OTHER
TWO PLATES

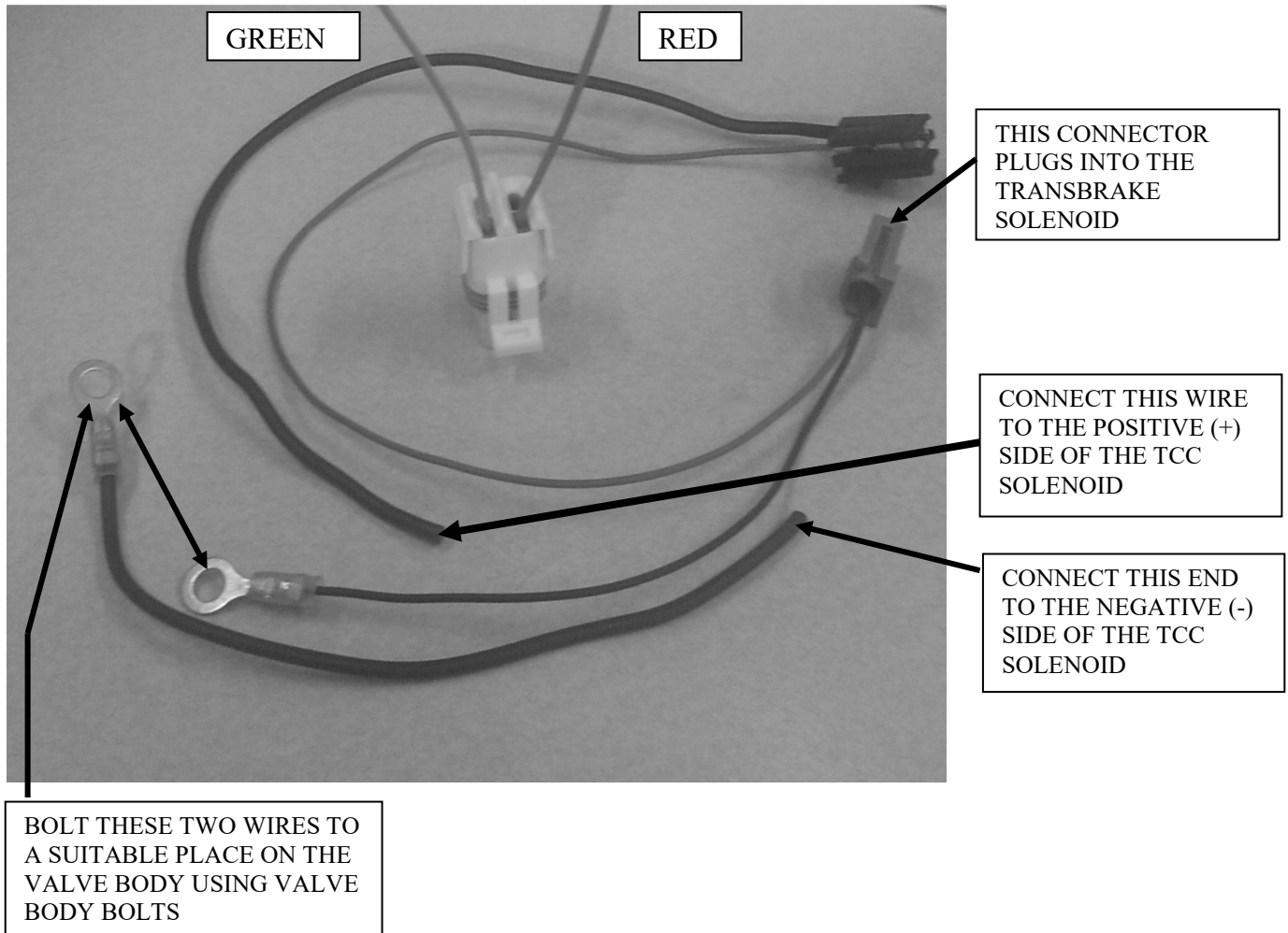
STEP 10: Start all of the valve body bolts before tightening to 110 in. lbs.

STEP 11: Install the wiring harness as shown on next page.

STEP: 11 WIRING HARNESS

CONNECT THE GREEN WIRE TO A GOOD 12 VOLT (+) FUSED SOURCE FOR THE TCC LOCKUP

CONNECT THE RED WIRE TO A GOOD 12 VOLT (+) SOURCE W/ AN INLINE 5 AMP FUSE FOR THE TRANSBRAKE



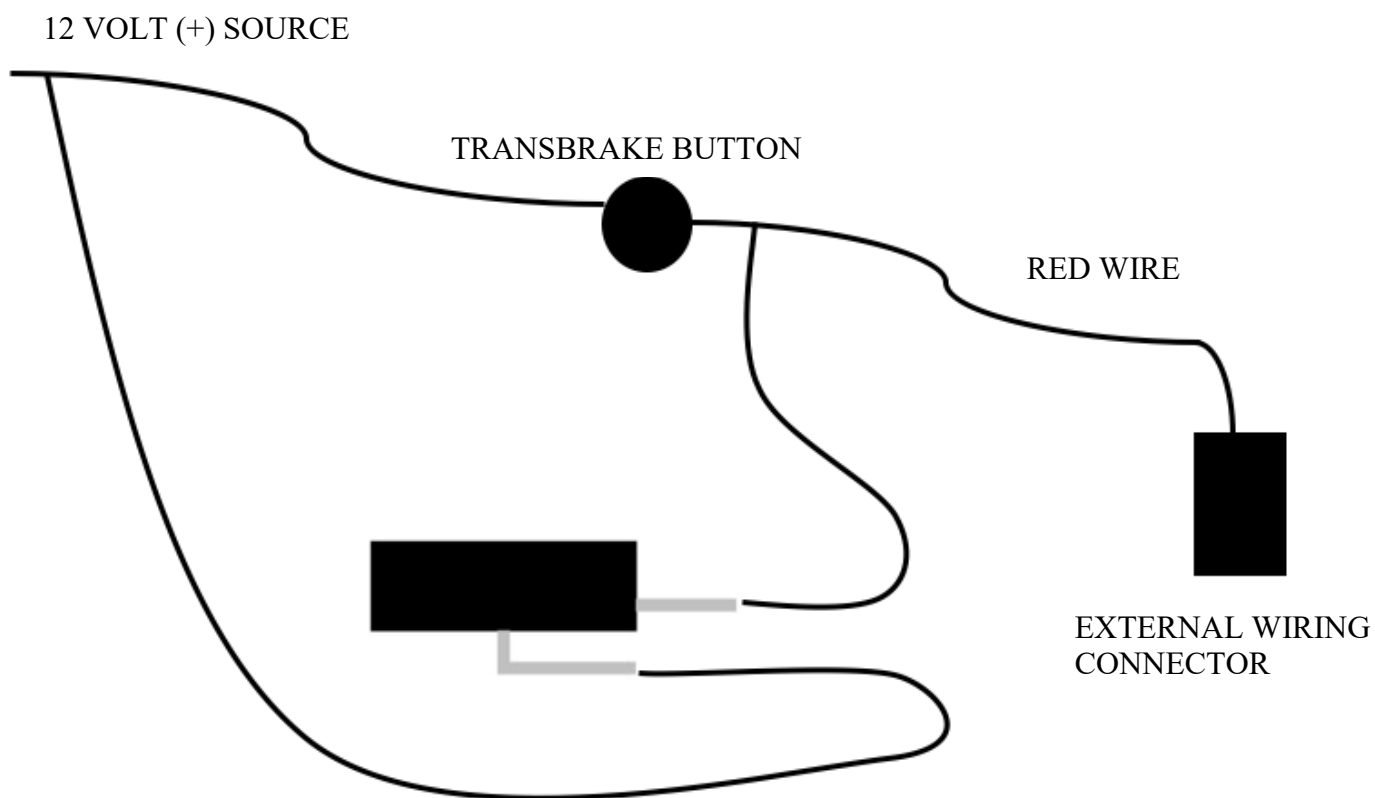
BURNOUT PROCEDURE: Break the tires loose in the water box with the transmission in 2nd gear. When the tires are spinning, shift to 3rd gear to finish the burnout process.

TRANSBRAKE OPERATION: Place the shifter into the 1st gear and push the transbrake button. The transbrake will only apply in the 1st gear.

REVERSE OPERATION: Place the shifter into the **reverse or neutral** position and push the transbrake button. Option for reverse use: View **REVERSE** switch diagram.

REVERSE SWITCH DIAGRAM

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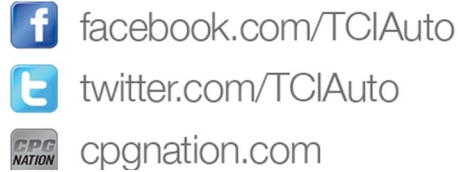


TCI recommends the following part numbers to strengthen and make the 700R4 more reliable:

- 373934 HD input housing with 379600 (300M) shaft & HD sun shell
- 375201 Billet band anchor pin
- 376004 Adjustable servo pin
- 373400 TCI billet pump rotor

Social Media

Stay up-to-date with the latest TCI® and COMP Performance Group™ company and product information by following us on any of our social media platforms.



Limited Warranty

TCI® Automotive warrants that all of its products are free from defects in material and workmanship for a period of (1) one year from the date of purchase. This limited warranty shall cover the original purchaser.

TCI® Automotive's obligation under this warranty is limited to the repair or replacement of its product. To make a warranty claim, the part must be returned within (1) one year of purchase to the address listed below, freight prepaid. Items covered under warranty will be returned to you freight collect. It is the responsibility of the installer to ensure that all of the components are correct before installation. We assume no liability for any errors made in tolerances, component selection or installation.

There is absolutely no warranty on the following:

- Any parts used in racing applications.
- Any product that has been physically altered, improperly installed or maintained.
- Any product used in improper applications, abused or not used in conjunction with the proper parts.
- Damage due to excessive manifold pressure, e.g. nitrous backfires, engine misfire, etc.

There are no implied warranties of merchantability or fitness for a particular purpose. There are no warranties which extend beyond the description of the face hereof. TCI® Automotive will not be responsible for incidental and consequential damages, property damage or personal injury damages to the extent permitted by law. Where required by law, implied warranties or merchantability and fitness are limited to a term of 1 year from the date of original purchase.

This warranty gives you specific legal rights and you may also have other legal rights, which vary from state to state.

CALIFORNIA PROPOSITION 65 WARNING

This product may contain one or more substances or chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.