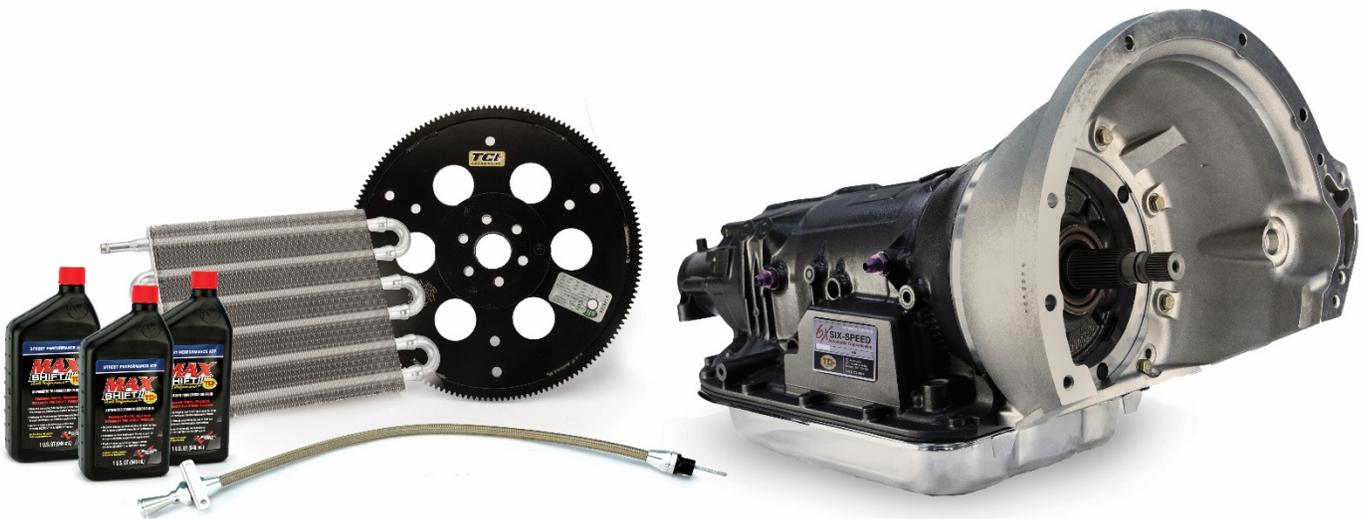




INSTRUCTIONS

TCI® 6X Six-Speed™ Transmission with Adapter Bellhousing (Part #s 271701P31, 271701P32, 271701P33)

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 Kit Contains:

- 6x Six-Speed™ Transmission
- EZ-TCU™ transmission controller
- Spacers - 3 (BE SURE TO FOLLOW INSTALLATION INSTRUCTIONS, OR ELSE YOUR TRANSMISSION WILL BE DAMAGED)
- Max Shift™ Transmission Fluid - 3 Gallon
- Transmission Cooler
- Universal Dipstick

*These transmissions currently only hold 10 inch torque converters or less.

Congratulations on your purchase of the TCI® 6x Six-Speed™ transmission package that will allow both fully automatic shifting, as well as full manual control when desired. This transmission is equipped with the gear ratios listed below.

Gear	Ratio
1st	2.97
2nd	2.23
3rd	1.57
4th	1.18
5th	1
6th	0.75
Reverse	1.76

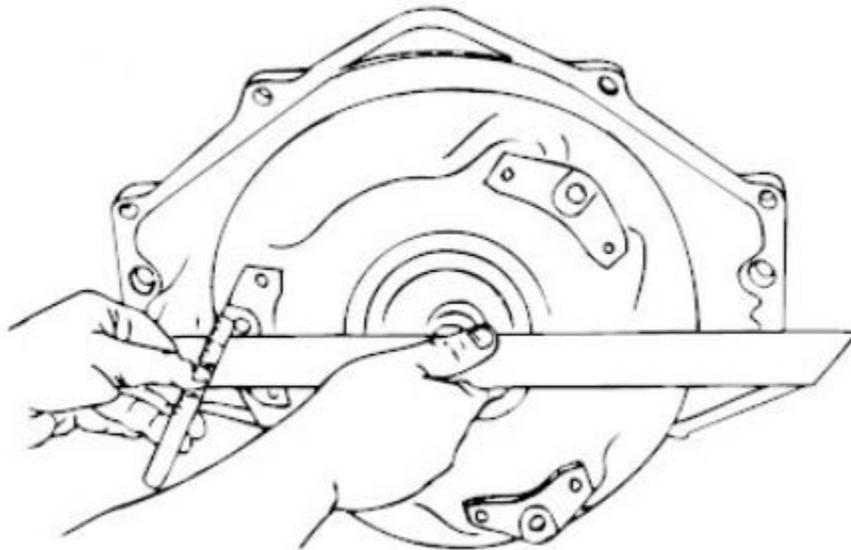
In order to familiarize yourself with the all of the features of this transmission and TCU, you should install the TCU software on your computer and go to the “Help” section of the software. In it, you’ll find the detailed instructions on how to completely tune the transmission performance for your application. With that being said, here’s a quick start installation guide.

This TCI® 6x Six-Speed™ Transmission has four forward detent positions. It will only function as a 6-speed transmission with the shifter in the OD detent position. The transmission will then automatically shift through the six gears by default. In order to manually shift through all six gears, you must leave the shifter in the OD position and utilize the Manual/Automatic mode that is equipped in the TCU. This requires that the manual/automatic wire be connected to an activation switch. See the TCU “Help” section for details. TCI® Paddle Shifter (part # 301441) can be used for this, as well as the Outlaw™ Shifter with shift buttons listed below. We recommend the following shifters for this application: FASTGATE™, part number 616541; Outlaw™ with manual shift buttons, part number 611641; or StreetFighter®, part number 616443.

The transmission cooler fitting threads are ¼” SPT. TCI® includes the rear inverted flare fitting with your 6x transmission. #6 AN fittings are available as part number 831011. Do not use a traditional rear fitting with this transmission, as damage will result. After the cooler lines are connected, the transmission will need to be filled with fluid. The total fluid volume will depend on the torque converter size, transmission cooler, transmission pan, etc. We recommend our Max Shift™ transmission fluid that is included with this package.

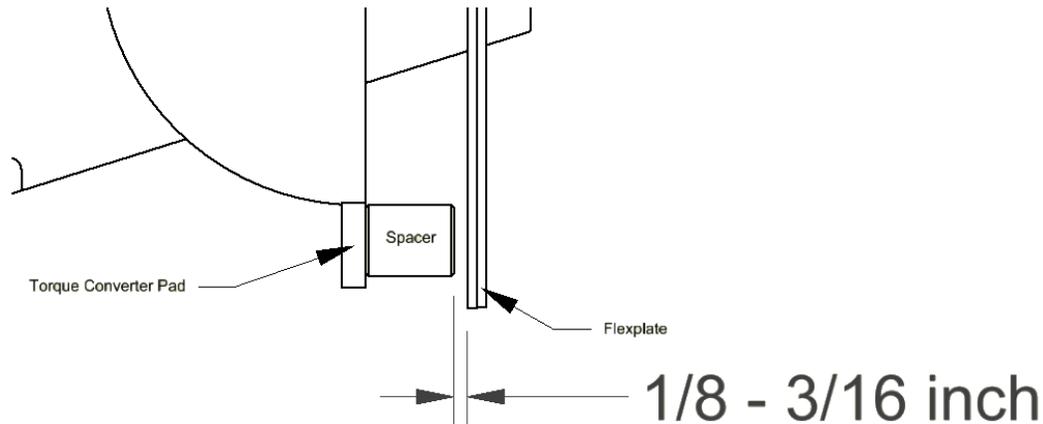
INSTALLATION

1. If your engine's crankshaft has a pilot bearing or bushing, remove it at this time.
2. Clean crankshaft pilot with emery.
3. Install flexplate, and torque flexplate bolts to engine manufacturer spec.
4. Install pilot adapter to crankshaft pilot. The adapter is a tight fit; lightly tap it in to place until flush with crankshaft. Be careful not to ding the adapter, as doing so could prevent the converter from sliding into position. It is recommended to use a rubber or plastic hammer. To help the adapter go in straight, use a 2x4 or some other softer material to ensure that it is pressed in evenly. Some kits do not need this pilot adapter.
5. Install torque converter to transmission per torque converter installation instructions. Measure the transmission bellhousing to torque converter pad distance. With these adapter kits, the distance should measure about **1.10 inches**. These bellhousings are deeper than OE transmission bellhousings.



6. Install transmission to engine as normal. Torque transmission mount bolts to OE spec.
7. With the torque converter pushed all the way back, hold supplied flexplate spacer between torque converter pad and flexplate. There must be a **1/8 to 3/16 inch** space between the supplied spacer, and the torque converter pad. Failure to check this gap could result in transmission and torque converter failure. Some kits use large spacers like the ones pictured, other kits may simply use a washer. It is very important that you verify the **1/8 to 3/16** measurement with the spacer yourself.

If the dimensions is not quite in spec during your installation, you may either add shims, subtract shims, or simply trim some of the supplied spacer in order to get the spec within the window.



8. Bolt torque converter to flexplate **WITH SPACERS INSTALLED BETWEEN FLEXPLATE AND TORQUE CONVERTER**. Apply locking compound to the threads and torque bolts to **58 ft-lbs**. Some kits do not need spacers. Verify that the gap distance is correct for your application.
9. Continue to follow the other transmission installation instructions as normal.

Once the transmission is installed in your vehicle, there are a few basic connections that need to be made in order to get going.

The TOSS (Transmission Output Speed Sensor) is marked "A", and the main harness connector is marked "B". The main harness connector is keyed to line up in one orientation only. Line the arrow on the TCI[®] harness up with the notch on the case connector. All of the TCU connectors are clearly labeled accordingly.

In addition to these connections, there are four connections required for the TCU. The first two are the power and ground sources. The power wire should be connected to a switched 12V source. The ground wire should be connected to the battery ground if possible. The next wire to connect is the TPS wire. If you are installing the transmission in a vehicle that does not have a throttle position sensor (TPS), you must install one. TCI[®] offers a remote-mount TPS for carbureted applications (part #377401). If you are installing the 6x behind a fuel-injected engine, you can simply utilize the existing TPS sensor. TCI[®] offers two different adapter harnesses that allow the TCU main harness to be pigtailed into an existing TPS while still functioning with the engine control module. This is a plug-and-play solution for splitting the TPS signal. See the following table for details.

Note: It's critical that the TPS be set to 0% at an idle and 100% at WOT. The TPS must move as soon as the throttle moves.

Description	Part #
TPS Adapter Harness for 2nd generation-style TPS (TPI style TPS)	377200
TPS Adapter Harness for 1st generation-style TPS most commonly found on earlier computer-controlled carburetors	377201

The final required connection is the RPM input wire. This can be connected to your ignition box RPM output wire. Again, all of these are clearly marked. For more details, there are fully detailed wiring instructions included in the “Help” section of the TCU.

This transmission should be used with a non-vented driveshaft slip-type yoke. TCI® offers these for this application as seen in the table below.

Yoke Type	Part #
N3R U-joint	965300
1310 U-joint	965310
1350 U-joint	965350

The TCU is programmed with a startup calibration file for the 6x transmission; however, there are some basic inputs that are required for each application. These includes the vehicle rear gear ratio, tire diameter, type of tachometer input, and throttle position calibration at both idle and WOT. You will be prompted for this information by the Setup Wizard. Although a laptop computer is recommended for full control of all transmission functions, it isn't mandatory. TCI® is proud to offer the optional Touchscreen Monitor/Programmer (part # 377525) for basic programming of the TCU.

As seen above, the 377525 also allows monitoring all of the transmission functions, as well as other digital and analog inputs. Information such as vehicle speed, engine RPM, active gear, throttle position, and battery voltage are automatically sent to the monitor.

For any assistance on the function or installation of your 6x transmission, feel free to call us at 888-776-9824.

FAQ

Q: Must I put a spacer between the torque converter and the flexplate? The internet told me not to do this.

A: YES. These kits require a spacer in order to get the correct torque converter pullout/spacing.

Q: My pilot adapter does not fit right. Is there a problem?

A: NO. The pilot adapter is designed to be a slight press fit. If the pilot adapter appears to be far too big, measure your crankshaft pilot, and measure the pilot adapter with a caliper, and call our tech line.

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.