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Model One B/C Owner's & Installation Guide



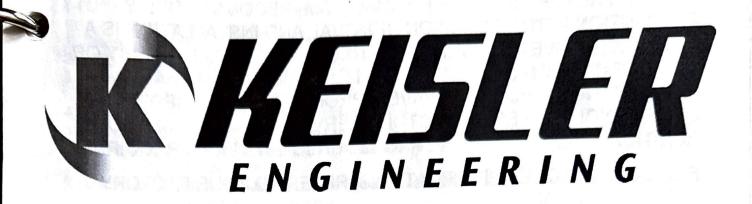
Model One AM / FM Radio w/ USB/SD MP3 Playback and Infinimount Shaft/Bracket System

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CORVETTE 1968 – 1982





5-SPEED
MANUAL TO MANUAL

TRANSMISSION CONVERSION INSTALLATION MANUAL



Installation Tips

Thank you for your recent purchase of a TREMEC TKO transmission. All TREMEC transmissions are manufactured under strict ISO and QS 9000 quality standards, ensuring that you receive a quality product. Proper installation, maintenance and appropriate driving techniques will provide years of enjoyment from your new TREMEC transmission. The transmission installation should be performed by an ASE Certified Mechanic with appropriate tools, lifts and follow standard safety precautions.

Pre-Installation

While unlikely, the transmission may be stuck between gears if the transmission was placed on end during shipment. **Before installing the transmission into the vehicle**, make sure that the transmission turns freely. Simply turn the input shaft by hand and attempt to shift the transmission into each gear. If you are unable to turn, or shift the transmission, please contact the distributor where you purchased your transmission for further instructions.

Oil

Caution: NO OIL IN TRANSMISSION. Due to various synchronizer materials used in TREMEC transmissions, and different climates and applications, no one single fluid will work for all transmissions. We recommend GM synchromesh part # 12345349, or Dexron III / Mercon Spec ATF fluid for all TKO transmissions. The transmission should be filled through the fill plug located on the passenger side of the transmission. Proper fill level is achieved when oil reaches the fill plughole when level (approximately 5.28 pints)

Clutch housing

The clutch housing must be properly installed and aligned using a dial indicator. The centerline of the transmission must match the crankshaft, or severe damage to the transmission will occur. The clutch housing must also be perpendicular to the rear of the engine block. A maximum run-out of .005" is allowable. Specific dial indicating instructions should be included with your clutch housing.

Clutch disc

Proper clutch adjustment is necessary; usually between .030 to .085 inch, air gap is required. (Please see clutch manufactures recommendations). The clutch disc must have an "air gap" to break torque to make a clash-free shift and prevent damage to the transmission. An adjustable clutch cable with a solid mount at the firewall, or a hydraulic system is desirable.

Drive shaft

It is extremely important to maintain the original driveline angle. Excessive driveline angles will cause vibrations and may damage the transmission. All TKO transmissions use a standard 31-spline slip-yoke part # 2-3-6041X, which is available from authorized TREMEC distributors. When installing the slip-yoke, be careful not to damage the rear-seal, as this will result in oil leakage. There is a rubber donut on the output-shaft that is used to prevent any remaining oil in the transmission from leaking during shipment. While you may remove this donut, it is not necessary. It will simply slide forward on the shaft when the slip-yoke is installed. If you do remove the donut, use extreme caution to avoid damaging the rear seal. The slip-yoke must be able to stroke freely on the transmissions output shaft without bottoming out while maintaining maximum spline contact. Therefore, proper driveshaft length is critical.

Crossmember & Mount

It is important to have the crossmember located properly to the rear mount location on the transmission. Modifications that result in an "overhang" or cantilevered mount will result in a vibration and potential to cause severe damage to the transmission. Proper mount height and crossmember location are very important to maintain correct driveline angle.

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LABOR CHARGE

INSTRUCTIONS

930-0001

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HEADER INSTALLATION

Basic Procedures

Some basic tools and patience is all that is needed to install headers. All of our headers are thoroughly inspected prior to shipping to insure perfect fit and years of trouble free performance. If you encounter any problems with our products please contact our customer service department.

- Disconnect the ground lead from the battery.
- Use heavy duty jack stands to support the car if you raise it for installation.
- Remove the exhaust manifold and thoroughly clean the gasket-sealing surface on the cylinder head.
- Coat the weld rings on the sealing surface of the header and the gasket with high temperature sealant. We recommend Permatex Ultra Black RTV.
- Starting with the hardest to reach first, finger tighten all bolts.
- Working from the center, alternating left to right tighten all bolts.
- · Start the engine for a few minutes and then let cool completely. CAUTION...avoid overheating the engine during initial start-up. New or rebuilt engines must have the proper timing and fuel/air mixture to avoid heat-related gasket sealing problems. Retighten the bolts and take a 30-minute test drive, allow to cool, and then retighten the bolts again. Periodically check bolt tightness to avoid gasketsealing problems.

Finish & Maintenance

Our headers and exhaust components are available with a variety of finishes including paint, chrome and ceramic coating. Some products are sold plain (bare metal) so you can customize your own finish.

Ceramic Coating

Our coating is simply the best available featuring outside application, high thermal resistance, advanced corrosion and rust protection, reduced under hood temperatures and a polished high luster silver finish. Care should be as follows:

- Prior to starting the engine, wipe the header with solvent to remove oils and grease that might burn into the surface.
- Avoid excessive start-up heat particularly on a new or rebuilt engine. We recommend a used header for new engine break-in. Because of variations in each engine's state of tune, coating discoloration
- Stubborn stains can be buffed with fine steel wool or gray Scotchbrite. Avoid products which contain any abrasive components. Use our 910-80118 purple metal polish on smaller stains.

Speedway Motors Inc., P.O. Box 81906 Lincoln, NE 68501 (402) 323-3200 www.speedwaymotors.com





Corporate Office: PerTronix Inc. 440 E. Arrow Highway, San Dimas, California 91773 * Phone 909.599.5955 * FAX 909.599.6424 * www.patriotexhaust.com

Not legal for use on catalyst-equipped vehicles except for racing vehicles which may not be operated on a highway.

GENERAL HEADER INSTALLATION INSTRUCTIONS

PerTronix thanks you for choosing PATRIOT Exhaust Products, the best value for the dollar of any brand in the industry. Please read and understand these instructions completely prior to starting work.

CHECK TO MAKE SURE YOU RECEIVED THE PROPER PARTS FOR YOUR APPLICATION. IF YOU ARE UNSURE YOU HAVE RECEIVED THE PROPER PARTS, CALL BEFORE YOU START WORK.

BE SURE TO WORK SAFE! WHENEVER YOU WORK UNDER THE VEHICLE BE SURE THAT IT IS LOCATED ON LEVEL, SOLID GROUND AND IS SUPPORTED BY ADEQUATE SAFETY STANDS! REMEMBER: HOT ASPHALT WILL NOT SUPPORT MOST JACK STANDS!

Many factors affect the installation of headers, some of which are broken or aftermarket motor mounts, accidents that impact the configuration of the frame, and/or the installation of different engines or aftermarket cylinder heads. Most installations require some welding. If you are uncomfortable with welding operations, we recommend that you contact a professional exhaust system specialist to install your new headers.

Attention Customers breaking in new engines: Due to the extreme heat generated during the break-in process, the appearance of the ceramic coating may be altered in certain areas. The protection characteristics and thermal barrier properties of the coating is never compromised. It is recommended that a cast iron manifold or old set of headers be used for this process.

Notice: The coating of these headers can be marred or scratched during installation. If the header needs to be returned and is damaged, you will be charged for recoat.

DISASSEMBLY

Disconnect the negative battery cable from the battery.

- If a car lift is not available, raise the vehicle 2 feet or higher and support it with adequate safety stands. Make sure the vehicle is on a flat solid surface and is stable.
- 3. Apply penetrating oil to all nuts and bolts to be removed.

Remove and mark all spark plug wires and then remove all spark plugs.

NOTE: Grasp the spark plug boot, not the wire, and use a twisting motion while pulling the wire from the plug.

Disconnect the head pipes from the exhaust manifolds and remove the manifolds. Depending on the application, you may be required to remove the alternator, dipstick, clutch linkage, and/or oil filter. In some cases it may be necessary to remove the starter and power steering unit. Only remove what is necessary to allow the removal of the manifolds or the installation of the headers.

6. Replace the spark plugs finger tight so debris will not get into the cylinders during the cleaning operation.

Remove any gasket material or any carbon deposits that remain on the head surface. The use of a gasket removal agent will ease the removal of any gasket material. We recommend the use of a sharp gasket scraper to remove the bulk of material and to finish the operation with a sanding block to provide a clean flat sealing surface.

8. After cleaning is complete remove the spark plugs again.

At this point it may be necessary to cut the head pipes to allow room to install the headers. If you are installing a new exhaust system you may cut the head pipes any where you choose, but if you are using the existing exhaust you need to cut the head pipes in the proper location so that they will be able to be welded to the reducers supplied with your headers.

ASSEMBLY

- 1. Install the headers (usually from the bottom of the vehicle, depending on the header style and vehicle model). Slide the headers into place and install a bolt at either end of the header to hold them in place. This will allow you to determine proper fit.
- Once you have determined proper fitment, install the gaskets. Install the gaskets using a THIN film of Ultra Copper Hi-Temp Sensor-Safe Silicone Sealer on both sides of the gasket. Install all of the header bolts supplied and hand tighten. Tighten all bolts evenly to a torque of approximately 25 ft. lbs. on 5/16" & M8 bolts and 35 ft. lbs. on 3/8" bolts.
- Install any accessories that were removed during the header installation.



Phone: (800) 882-4688 Web: www.corvette-paragon.com

2159 - 1969 SIDE EXHAUST ASSEMBLY

CARE AND MAINTENANCE

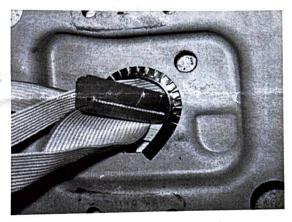
Due to the unstable nature of paint adhesion to chrome, special care must be taken when cleaning your side exhaust covers to help prevent peeling. Always use a soft cloth and mild soap when washing. Never use a pressure washer and be sure to dry with a soft cloth. Keeping the covers dry as often as possible will help preserve the paint and aid in preventing corrosion of the aluminum. The location of the side exhaust assemblies on the car makes them very susceptible to road damage such as stone chips scratches etc... Due to the conditions described above, there are no implied warranties against paint peeling and/or corrosion.

Our shipping department takes special care in packaging these side exhaust assemblies. If damage has occurred during shipping, it must be inspected by U.P.S at your location in the package material used in shipping. Call us immediately to report any damage occurred during shipping and we will contact U.P.S for a damage claim.

1968-77 Chevy Corvette Dakota Digital Gauge Installation This sheet covers the installation of the Dakota Digital gauge kit into the original clusters.

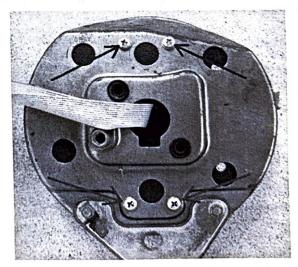
- 1. Remove the clusters from the vehicle. The procedure for the speedometer and tachometer clusters are the same, but only one side is shown in the photos.
- 2. Remove the three screws holding the bezel on to the gauge can. Two are indicated by the upper arrows in the photo at right; one is on the bottom side of the can and cannot be seen here. After the bezel is set aside, remove the two screws near the center of the can to remove the original gauge. On the speedometer can (shown) you will also need to remove the trip meter reset cable.





3. Use the provided flexible grommet material on the edge of the mechanical cable openings on the original gauge cans to protect the ribbon cables. A few dabs of silicone will help hold it in place. Pass the ribbon cables through the lined cable openings until the gauge assemblies sit into the cans and the cables are not being pinched.

- 4. Use four of the supplied $\#10-32 \times .500$ " screws and lock washers to secure the gauge assembly into the can. It is recommended to start all the screws before tightening completely. If the screw holes do not line up properly, the gauge assembly is in the wrong can.
- 5. Re-install the bezels to the gauge cans using the screws removed in step 2.





1968-82 CORVETTE
CLIMATE CONTROL
PACKAGE
INSTALLATION GUIDE