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Installation Instructions

1964 1/2 to 73 Ford Mustang/Mercury Cougar With 351W Swap

Part# 1653S – 4spd/5spd/C4/C6/AOD

Part# 1655S – 5spd with Cable Clutch



This product is Legal for use on 1974 and older Non-Catalyst equipped vehicles and is considered a "Replacement Part" per California Air Resources Board regulations, as long as ALL emissions sensitive components are retained, Including EGR, A.I.R., Heat Risers etc. Failure to retain any of these components , or use on 1975 or newer Catalyst equipped vehicles, would render this product Illegal for Street or Off Highway use and may only be used for Closed Course Competition.

WARNING:

This product can expose you to chemicals including Lead, Nickel, Cadmium and Chromium which are known to the State of California to cause cancer and birth defects or other reproductive harm. **For more information go to**
www.P65Warnings.ca.gov

Read all instructions carefully before attempting installation.

PerTronix© thanks you for choosing JBA HEADERS, the best fitting, highest quality header on the market. In order to realize the full potential of our good fit, please read and understand these instructions completely prior to starting work.

Check to make sure you received the proper parts for your application. The header number will be stamped on the engine flange. 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.

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 re-coat.

JBA uses sealing beads on all its headers. We have found that when installed correctly, the raised bead around each port increases the pressure exerted on the gasket directly adjacent to the port and effectively prevents leaking gaskets. It is normal for the flange to be raised off the cylinder head the thickness of the sealing bead. It is important when installing the header, to install all bolts loosely, then tighten evenly to ensure the flat installation of the flange. The torque sequence from one flange to another will vary, but generally every bolt on a header should be first fit snug, starting from the inside of the flange working out, alternating from top to bottom so that the bolt connects the flange to the manifold to the point where they barely touch. Second, using the same inside-out pattern, tighten each bolt until finished. This method will help prevent leakage and will give the user the best possible performance out of their pair of headers. Installation of these headers requires an adequate work space, general mechanic's tools, general mechanical "know-how" and a reasonable degree of experience. Most auto enthusiasts with these resources will have little difficulty installing these headers. However, you should carefully read these instructions before attempting to install these headers. If in doubt, consult a professional mechanic. (Better to do it now than to get stuck half-way through the installation.)

NOTE: • 64 1/2 -65 Cars must update motor mount frame bracket to a 66 and later frame bracket

- Must use D00Z-6038-G motor mount or Sealed Power #270-2286 for proper clearance.
- Aftermarket bell housings will require clearancing for tubes
- Header flange needs to be clearanced when used with head studs or head bolts with hardened washers.
- Shock tower width must be a minimum of 33 3/4". It is recommended that a C5ZZ16A052E Style "Export Brace" be installed to maintain that clearance
- 90° spark plug boots recommended on all cylinders.

1. Place vehicle in a location where the floor is solid and flat, with adequate lighting. Do not attempt to work on a hot engine. Heat causes metal to expand and makes removal of fasteners difficult at best. Disconnect the negative battery cable from the battery. Raise the front of the vehicle and remove the front tires to obtain adequate access to the bottom exhaust manifold flanges. Use large-base jack stands to support the vehicle. Do not rely on the jack! Block the tires to prevent the vehicle from rolling off the jack stands.

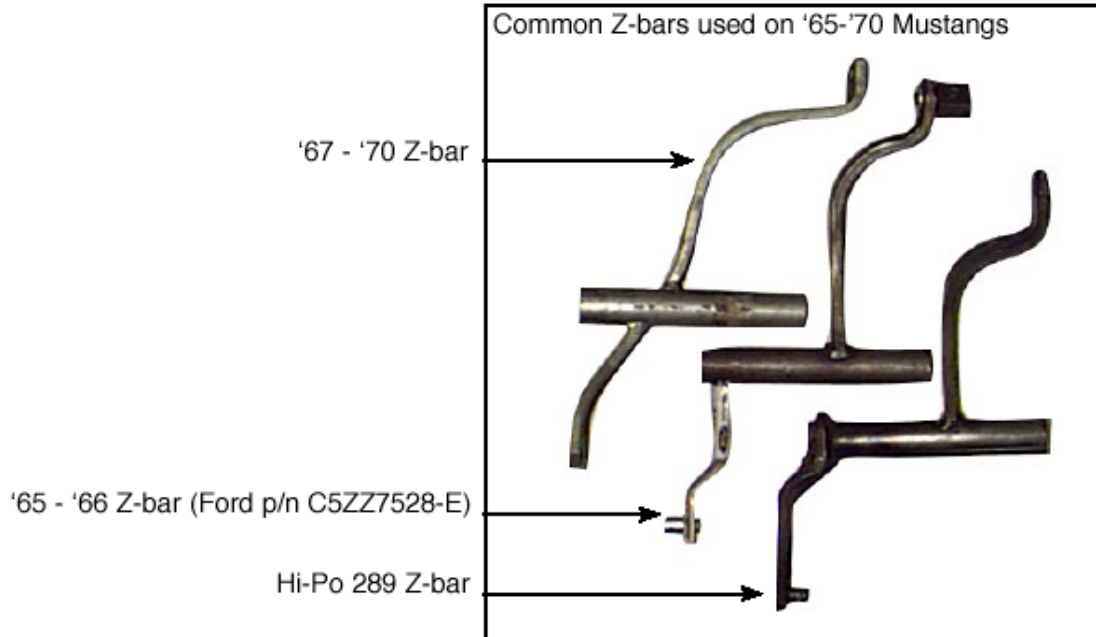
2. Disconnect the spark plug wires by grasping and gently twisting the spark plug wire boots. Do not pull on the wires! Brush or blow any debris, which may have collected around the manifolds or spark plugs. This will help prevent foreign matter from entering the combustion chamber when the manifolds are removed. Spray WD-40 or some type of penetrating oil on all accessible fasteners and fittings before attempting to remove them.

3. Typically the exhaust pipes in these early Vehicles are long gone. These instructions assume the removal of all old components and the installation of a new exhaust system from JBA or by a competent exhaust shop. JBA manufactures a wide variety of H Pipes and exhaust systems to work with these headers. Contact your JBA Dealer for more information.

4. On stick Shift cars, remove the Clutch equalizer bar "Z-bar" and lower rod *Note there were several different Z-bars used on the Mustang. See explanation on next page.

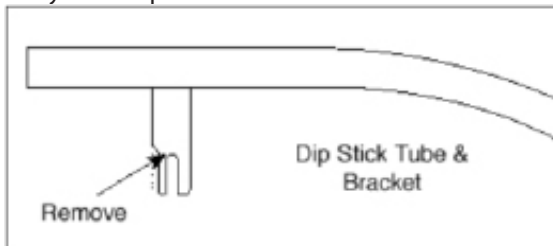
Z-Bar usage

There are multiple Z-bars from Ford and other reproduction Z-bars found on the early Mustangs. The three most common styles are shown below.



On '65-'66 model cars, either of the early style Z-bars pictured should have adequate clearance for the new JBA Headers. Due to the age and wear of these cars, many times the stock Z bar may be worn or have been replaced by a component that will not clear the headers. In this case, JBA offers a replacement part #1650Z, that will work with these headers. In '67-'70 model cars, the upper lever of the Z-bar may need to be relocated slightly to allow for header clearance. To do this, cut off the existing lever and weld it back on for adequate clearance. 1968-'70 models with rag-joint two-piece steering columns have the tightest fitment. The slightest motor mount or chassis wear can cause interference.

5. If your car has an EFI motor, unplug the O2 sensors before going any further. Additionally, if you have a late model oil pan with the dip stick in the side of the pan, instead of the original front mounted location, you need to remove the dip stick and will need to grind away a small portion as shown in the illustration



6. Remove the bolts and remove the stock manifolds from the heads. Remove the gaskets and any gasket material or any carbon deposits that remain on the head surface. The use of a gasket removal agent or scraper will ease the removal of any gasket material. Use care not to get debris into ports or spark plug holes.

7. Bolt the header to the head using the supplied gaskets header bolts and washers. Apply anti-seize to the header bolts if installing on aluminum heads. Tighten evenly working from the center out.

8. Reinstall the spark plug wires and looms taking care not to let any wires rest against the header tubes. Reinstall the battery cable. Make sure all rubber hoses and wires are kept away from the headers. Otherwise, the heat will damage these components.

9. Connect the JBA H Pipes and Exhaust system of your choice to complete the installation, or take to a competent muffler shop for a custom exhaust.

10. After the exhaust modification have been made to adapt the headers to your exhaust system, recheck everything! Make sure all bolts are tight.

11. Start the engine and let it warm up. Check for leaks. Shut engine off and let it cool down. Check to make sure all fasteners are tight.

12. All Tubular Headers require maintenance including periodically check and retighten the header bolts.

Parts List:

- (1) Driver's Side Header Assembly
- (1) Passenger's Side Header Assembly
- (16) 3/8" x 1" header bolts & lock washers
- (2) Header gaskets
- (4) Collector Bolts & Nuts

LIMITED ONE YEAR WARRANTY

All JBA HEADERS and exhaust products are guaranteed, to the original purchaser, to be free of defects in materials and workmanship for one year. This warranty covers the replacement or repair of the product only and does not cover the cost of removal and installation, customer applied aftermarket coatings or any discoloration or corrosion of finished surfaces.

Damage or product failure resulting from collision, improper installation, off-road use, road hazards, the use of exhaust insulating wrap or like products or rust occurring after installation, is not covered by the warranty. The warranty extends only to the original purchaser.

Should a part become defective it should be returned to the original selling retailer and must be accompanied with the sales receipt. If there is no retailer in your area, call the factory for a return authorization and return your part prepaid to the factory for inspection. PerTronix reserves the rights to replace or repair the alleged defective part and return the part freight collect.



