



INSTALLATION INSTRUCTIONS

For Small Block A-body W2 "STEP" Headers

1-5/8" O.D. primary tubes, 1-3/4" secondary tubes with 3" collectors

PLEASE READ INSTALLATION INSTRUCTIONS BEFORE INSTALLING

PART NO. TTI-340AW2-C1 (Chrome plated)
TTI-340AW2-C2 (Ceramic Coated outside only)
TTI-340AW2-C3 (Polished Ceramic Coated outside only)
TTI-340AW2-C4 (Ceramic Coated w/ a Thermal Barrier inside)
TTI-340AW2-C5 (Polished Ceramic Coated w/ a Thermal Barrier inside)

NOTE: Ceramic Coating is a matte silver finish.



- Fits: 1967-1976 A-bodies
- Fits 318 / 340 / 360 A-engines with W2 Econo heads – Casting no. 3870810 (LA style bolt pattern)
- Clears the Stock Starter or High Torque mini Starter part no.'s: R53005984, P5249644AB, 56027702AC, P5007860 or P4286522
 - Mini Starters can easily be changed without removing the header
- Clears Manual or Power Steering, Power Brakes and A/C
- Clears short screw-on oil filters or the 90 degree adapter may be used for this application
- Clears Automatic or Manual Transmissions
 - Some Z-Bars require modification to clear the header
- Clears Floor Shift or Column Shift
 - B&E-body applications: Column shift may require modified Torque Shaft Assembly – Sold separately (Sheet #SHT7174TSA)
- Clears small block Mopar Milodon oil pan part no. MIL30935 & MIL30940
- Clears stock steering linkage
 - Will not clear the quick-ratio extended length pitman arm and idler arm

ATTENTION: Make sure your engine is located to factory specs

TTI's headers were designed to fit with the engines located to the factory specifications. If the engine is not located correctly in the chassis, the headers will not fit properly. Use the following dimensions to check your engine location before installing your headers. From the center of the crankshaft to the top of the K-frame the correct distance is 5-1/4". The engine is also offset toward the passenger-side. Measure from the center of the crankshaft to each frame rail. The difference should be 2-1/2". If necessary place shims between the insulator assembly and the K-frame mounting pad to achieve the proper dimensions. With the engine mounted in the correct location the headers will fit properly.

1. Disconnect the negative cable from the battery terminal.
2. Raise the front of the vehicle with an appropriate lifting device and place on jack stands.
3. Disconnect the plug wires and remove all of the spark plugs. Remove the cast iron manifolds and the stock exhaust pipes. If you are installing the complete TTI Exhaust System, then remove and discard your entire stock exhaust system, including hangers.
4. Remove the oil filter and the starter. Passenger-side, remove and discard the brace between the engine and the transmission. Drivers-side, remove the lower mounting stud for the starter and replace it with a bolt.
5. Now is a good time to check the condition of your engine mounts. If they are worn or deteriorated, replace them now. When the engine is mounted correctly the headers will fit correctly.
6. Drivers-side Header: Use a pickle-fork to loosen the ball joint on the drag link at the pitman arm and the left tie rod. Remove the bolt from the idler arm swing this assembly aside. Remove the drivers-side engine mount bolt and raise the engine approximately 1½". Use a block of wood between the oil pan and the floor jack.
 - On models with Automatic Transmission and Floor Shift, re-position the adjustable swivel and the lower rod attached to the torque shaft lever. Move them to the upper side of the torque shaft lever to clear the header collector. See modified Torque Shaft Lever illustration. (Sheet #SHT3703)
 - Check the cylinder head sealing surface of the exhaust ports to insure that they are clean. Place the supplied header gasket into position on the studs. Remove the #7 tube from the header. Insert the header into position from under the car. Before bolting to the cylinder head, slip the rear cylinder #7 tube in between the

frame and the torsion bar into the slip-connector (lightly grease the inside of slip) of the header. Lower the engine and place the header into position on the cylinder head. Use the original studs and nuts or the provided headers bolts to secure the header to the cylinder head. Tighten the center bolts first then the end ports. Torque the bolts to 25 lbs. evenly to insure a proper seal.

- Reinstall the steering linkage assembly by reversing the disassembly procedure. Be extremely careful to re-install all nuts, bolts and pins that were removed. Install motor mount bolt.
 - Install the starter and connect the wiring. Adjust the wiring to insure that there is absolutely no contact with the header. Due to variations in the routing of brake lines, it may be necessary to re-position a brake line to achieve adequate clearance from a header tube. A minimum clearance of ½" from a header tube is required.
7. **Passenger-side Header:** Check the sealing surface of the exhaust ports to insure they are clean. Place the supplied header gasket into position on the studs. Turn the steering wheel to the full left position. Insert the header into position from under the car. Use the original studs and nuts or the provided header bolts to secure the header to the cylinder head. Tighten the center bolts first then the end ports. Torque the bolts to 25 lbs. evenly to insure a proper seal. Install the oil filter.
 8. Attach the adapter / reducers to the header collectors with the nuts, bolts and gaskets provided. The adapter / reducers are 9" long and may need to be shortened for your application.
 9. Re-connect the negative battery cable.
 10. Now that your headers are installed, wipe down the tubes with hot soapy water or an environmentally safe Orange Cleaner Degreaser and a soft cloth to remove any grease or skin oils (finger prints) from the header tube surface. Never use abrasive cleaners.
 - It is normal for Chrome plated headers to discolor almost immediately after firing-up engine.
 - To insure years of service from your ceramic-coated headers, it is suggested to follow our care and maintenance procedures. (Sheet #SHT0603)
 11. Start the engine and check for leaks.

Re-torque all of the header bolts after approximately 50 miles of driving

To complete the rest of your exhaust system installation, we highly recommend the use of our TTI Performance Exhaust Systems. The 2-1/2" or 3" O.D. kits will bolt directly to the TTI Headers. Our exhaust systems come complete with all hardware and all new hanger assemblies. They are manufactured with aluminized tubing and are mandrel bent by the latest technology CNC tube benders insuring precision fit on every installation.

Headers supplied with:

- (12) 5/16" 18x1" Header Bolts
- (2) Header Gaskets (taped to inside of box)
- (2) Reducers

Reducer kit Includes:

- (2) 3" - 3-bolt 1/16" Reducer Gaskets
- (6) 3/8" - 16 x 1-1/4" Reducer Bolts
- (6) 3/8" - 16 Nuts
- (6) 3/8" Split lock washers

Illustration / Instruction sheets attached: # SHT0603 - # SHT3703 - # SHT7174TSA.

Tube Technologies, Inc.
1555 Consumer Circle
Corona, CA 92880-1726
Ph. (951) 371-4878 Fax (951) 371-6143
E-mail: info@ttiexhaust.com