

# TAKE TIME TO READ THE INSTALLATION PROCEDURES BEFORE STARTING

# Helpful hint to extend the life of your TTi Aluminized Exhaust System

Exhaust System corrosion will occur if moisture (condensation) is not cleared out of the exhaust system. Make sure that the vehicle is driven at least 20 to 30 minutes when ever the car is started to completely dry out all liquid / acid that is created by the combustion process in the engine. Failure to do so will cause pre-mature rotting of the exhaust from the inside out.

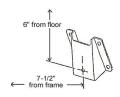
Please take all under car safety precautions when installing Exhaust & Headers, including eye protection. When raising vehicle, use an appropriate lifting devise and place on jack stands as a safety measure. Caution! Bumper jacks are intended for emergency use only and should never be used to support your vehicle.

**<u>First check your Engine Location</u>** K-members are not all identical and the dimensions must be checked to ensure proper fit. Check your engine location prior to installation of your TTi Exhaust System or Headers. TTi Exhaust Systems or 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</u>. If necessary, place shims between the insulator assembly and the K-frame mounting pad to achieve the proper dimensions. Shim kits and engine mounts can be purchased from Schumacher Creative Services of Seattle, WA (206) 364-7151.

• <u>62-65 "B"-body applications</u>: 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 towards the passenger-side. Measure from the center of the crankshaft to each frame rail. The difference should be 3".

# Install your new TTi Exhaust System from the rear working forward towards the engine

- 1. **Tailpipe Hanger Receptacles** The new O.E. style tailpipe hangers will use an existing mounting hole on most vehicles. However, drilling a new mounting hole may be required for proper location of the hanger. The highest point of the tailpipe should be centered directly over the rear axle.
- 2. Tailpipes /Wagon Only: Side-exit tailpipes are provided with Tailpipe Bracket Hangers that must be welded to the tailpipe after locating their position on your vehicle.
- **3. Muffler Hanger Body Brackets** These brackets are mounted directly to the body panel behind the rear seat. Mount the bracket 6" from the floor and 7½" from the frame as shown on the diagram.
- **4. Muffler Hangers** Bolt the Muffler Hangers to the center hole of the Muffler Hanger Body Brackets.



- A Install the hangers with the offset towards the driveshaft.
- TTi Exhaust Systems were designed to use the Dynomax Super Turbo Mufflers. Using other mufflers may require modification to the muffler slips (cutting & welding) for proper fit & alignment due to the muffler case length and width differences.
  - 3.0" systems designed with DynoMax #17793 Offset inlet / Center outlet 23" overall length. Using mufflers longer than TTi systems were designed for will require shortening the outlet end of the H-pipe. Using mufflers shorter than TTi systems were designed for will require "Slip-Connectors" for additional length. Slip-Connectors sold separately P/N: SC30.



TTi Performance Exhaust and Headers Tube Technologies, Inc. Corona, California 92880-1726 Product Info / Technical Help (951)371-4878 Phone Hours: Monday - Friday 8:00am - 4:00pm (Pacific Time)

#### **MAINTENANCE & CARE**

#### Helpful hint to extend the life of your Headers and Exhaust System...

Exhaust corrosion will occur if moisture (condensation) is not cleared out of the tubes. Make sure that the vehicle is driven at least 20 to 30 minutes whenever the car is started to completely dry out all liquid / acid that is created by the combustion process in the engine. Failure to do so will cause pre-mature rotting of the tubes from the inside out.

#### **Headers**

TTi strives to offer the highest quality header coatings available on the market today. However, high performance coatings do require care and maintenance. The following tips are suggested to insure years of service of your Nickel-Chrome, Ceramic-Coated, Polished Ceramic Coated & Stainless Steel Headers.

**Warning: First Engine Runs -** Header coating damage usually occurs during the first engine run when the exhaust temperatures exceed 1200°F. Excess exhaust temperatures are normally caused by excessively lean or excessively rich air/fuel mixtures and/or incorrect ignition timing. For this reason we strongly suggest that you use an old set of headers or a set of cast iron manifolds for your first engine run / cam break-in. This will insure that you will not damage the coating or void the warranty of your new TTi ceramic-coated headers.

**After Header Installation and Before Engine Run -** Remove grease and/or skin oils from the header tube surface. Stains & fingerprints will show when header gets hot.

- Nickel Chrome Plated Headers: Wipe down tubes with rubbing alcohol and a soft cloth, dry thoroughly.
- Ceramic Coated, Polished Ceramic Coated and Stainless Headers: Wipe the tubes down with an environmentally safe Orange Cleaner Degreaser or mild soap, warm water and a soft cloth, dry thoroughly.

**When storing your car for an extended period of time**, some precautions must be taken. Park the car over a large sheet of plastic or tarp. This will protect your car and headers from moisture seeping up through the floor. Wipe down and dry the headers thoroughly. Then coat the headers with WD-40 or an equivalent where the tubes are welded to the header flanges and where the tubes come in close proximity to each other (especially where the four tubes enter into the collector). These areas are prone to rusting, as the coating is unable to get between the tubes in the unexposed areas of the header. If rust occurs, it will travel into and under the coating and create a stain. When you are ready to start the car after storage, wash the WD-40 off by following the cleaning procedures.

### Cleaning: Road grime / Oil / Grease / Surface deposits (surface rust) from water or other liquids

- Use an environmentally safe Orange Cleaner Degreaser, warm water and a soft cloth. Two or Three cleanings may be required. Be sure to dry thoroughly.
- Use cleaning compounds like, Nevr-Dull, Mothers or The Wax Shop and about 15-20 minutes of elbow grease.
- Stainless Steel: Nevr-Dull Wadding Polish

### **Polish to Revitalize Coating**

- Nickel Chrome Plating: Bluing / discoloration is inevitable. You cannot remove it, although there are products that claim to do so like, Blue-Job Chrome Polish.
- Ceramic Coated / Polished Ceramic Coated: Mothers PowerMetal or Nevr-Dull.

# For More Aggressive Cleaning: Stains / Baked-on Oils or Fluids / Melted-on Microfiber Towels or Plastic Grocery Bags (Yes, this happens a lot)

Try a Super-fine "0000" Steel wool pad or use an Ultra-fine Scotch-brite pad. If all else fails, spray paint! Use Krylon 1402 High Heat Spray Paint – Aluminum color. Once headers heat up, color will or should blend.

**Unfortunately**, you cannot bring back a "High Luster" Polish appearance (C3 & C5 - Coating Option).



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## 90-DAY LIMITED WARRANTY

Mfg. by Tube Technologies, Inc. (TTi)

TTi warrants all products to the original purchaser to be sold free of defects in material and workmanship for 90-days from date of purchase. In the event of an alleged defect in material or workmanship contact TTi at (951) 371-4878. Please provide a proof of purchase reference at time of call for quicker look-up. Ex: Invoice #, Packing List # or Sales Order #.

TTi does not warrant products that have been damaged caused by abuse, neglect, accident, improper installation or use on other applications other than recommended by TTi Performance Exhaust and Headers. Under no circumstances will TTi replace, repair or refund any product that has been altered in any way, mutilated or shows evidence of the use of insulating wrap products. TTi will not warranty cost of removal or re-installation of a product or will not be responsible for any shipping charges incurred. TTi will not assume responsibility for mufflers meeting individual customer's preference or the specific sound ordinances in any city, county and/or state. TTi reserves the right to make changes in design, materials and specifications or to make product changes as deemed necessary without prior notice.

## **Return Policy**

Returned merchandise is subject to a 10% restocking fee. TTi does not refund freight. Contact TTi at (951) 371-4878 or the Authorized TTi Distributor from whom the merchandise was purchased through to receive a "Return Merchandise Authorization Number" (RMA #). Proof of purchase required! (Invoice, Packing List or Sales Order #) Return the merchandise along with a copy of your proof of purchase to: TTi Returns Dept. • 1555 Consumer Circle • Corona, CA 92880. Enclose a written reason for the return with a contact phone number and clearly write the RMA # on the outside of the box. Merchandise must be received in resalable condition. Final issuance of credit / refund is subject to receipt and inspection of merchandise by Tube Tech. Inc.

**Note:** Parts damaged in transit due to insufficient packaging may incur repair charges by TTi.

For general packaging guidelines to help prepare your package for safe shipping read our Packaging Guidelines & Procedures.

# 2-YEAR LIMITED CERAMIC COATING WARRANTY

by Engineered Applications L.L.C.

In the event of an alleged defect in the coating; peeling, chipping, flaking or rusting, complete a "Coating Warranty Return Form" and return it along with parts to: Engineered Applications. Proof of Purchase required! (Invoice or Packing List)

Final determination of warranty is subject to receipt and inspection of parts by EA. EA will not accept liability for products that have been damaged caused by abuse, neglect, accident, improper installation, shows evidence of insulating wrap products or show evidence of adverse conditions such as; High heat temperatures encountered during engine break-in.

**Note:** Engineered Applications sole responsibility is strictly to strip-off existing coating, recoat and return it back to you. EA will not warranty any labor related costs.