

# **FLOWMASTER**

## **AMERICAN THUNDER™**

12/22/03

### **SYSTEM #17104**

**1967-1974 V-8 CAMARO/FIREBIRD (EXCEPT CONVERTIBLE)**

**1967-1974 V-8 NOVA**

**\* NOT FOR USE ON POLLUTION CONTROLLED VEHICLES \***

#### **Removal:**

- 1) Raise vehicle and support securely with jack stands.
- 2) Remove existing system from the header collector or manifold down pipes back.

#### **Installation:**

- 1) Position the FLOWMASTER muffler behind the axle, in the stock location and temporarily support the muffler with a floor jack, jack stands or a sturdy box.
- 2) Slide the intermediate pipes, #16033 and #16034, into the muffler inlets and install the provided 2½" clamps. Tighten lightly to allow for adjustments. NOTE: For 1967-1969 vehicles only, cut 2¼" off of the muffler inlet end of the intermediate pipes (See Figure A).
- 3) Install the H-pipe assembly #16267 into the intermediate pipes #16033 and #16034 and install clamps; remember to clamp tightly enough to hold in position yet lightly enough to allow for adjustments and pipe alignment.
- 4) Install the connector pipe #16261 from H-pipe assembly to headers. It may be necessary to cut these pipes due to variation of header widths. NOTE: It will be necessary to either weld a standard flange (not supplied) or connect to header cone or manifold down pipes. Measure twice and cut once! Align the front pipe assembly with header collector outlets or manifold down pipes. Temporarily support these pipes with stands.
- 5) Adjust the position of the muffler so it is centered in the muffler cavity behind the axle and between the rear springs. Be as accurate as possible. This step may require the help of an assistant.
- 6) Slide the intermediate pipe hanger assemblies, HA109, with bolts removed, onto the intermediate pipe hanger brackets. (See diagram).
- 7) Raise muffler and pipe assembly and allow hanger to make contact with the floorboards. Be certain the muffler and pipes are aligned properly. Use holes in the hanger assembly to make marks for the assembly bolt holes. Do this on both sides of the system. There will be a total of four (4) holes, two (2) on each side of the system for each hanger.

- 8) Drill out marked holes with 5/16" drill, through the floorboard. NOTE: Remove the rear seat before drilling to avoid damaging it.
- 9) Bolt hangers to floorboard.(See Figure B)
- 10) Remove temporary support and allow system to suspend on the hangers.
- 11) Insert tail pipes #16035 and #16036 into the muffler outlets and adjust for desired position; clamp tightly enough to hold in position but allow for adjustment. It may be necessary to trim muffler end of tail pipes to obtain proper fit between the leaf springs and the quarter panel.
- 12) Support muffler just enough to hold it's weight.
- 13) Install rubber hangers onto tail pipes #16035 and #16036 (non-metal-bushed end of hanger connects to wire tailpipe mount.) Position the tail pipes in the desired location.
- 14) Use the hangers to locate hanger bolt-hole location and mark on the frame rail. Use a 3/16" bit to drill hanger bolt hole. Install the included lag screw and washer to bolt the tail pipes hangers to the frame rail. Be sure lag screw is installed in the metal-bushed-end of the rubber hanger. NOTE: Make sure tail pipes are aligned properly before holes are drilled.
- 15) Remove temporary support and allow system to suspend on hangers.
- 16) Adjust and align all pipes; maintain a minimum of ½" clearance between the new FLOWMASTER exhaust system and the chassis, drivetrain components, brake lines and fuel lines. Also keep suspension travel in mind.
- 17) Once all adjustments are made, Tighten all connections and clamps. For a cleaner installation, the clamps can be removed and the entire system welded.

**NOTE: These systems are not intended to replace catalytic converters on vehicles so equipped. Please check state and local emissions regulations.**

**WE STRONGLY RECOMMEND WELDING ALL SLIP-FIT CONNECTIONS.**

**PACKING LIST FOR KIT #17104**

<b>BOX 1 OF 2 (5016)</b>		
<u>Qty</u>	<u>Description</u>	<u>Part No.</u>
1	Muffler	42585
 <b>BOX 2 OF 2 (1024)</b>		
<u>Qty</u>	<u>Description</u>	<u>Part No.</u>
2	Connector pipe	16261
1	H-pipe assembly	16267
1	Intermediate Pipe (Right)	16033
1	Intermediate Pipe (Left)	16034
1	Tailpipe (Right)	16035
1	Tailpipe (Left)	16036
1	Parts Kit	PK348
8	2½" Clamp	MC250S
2	Intermediate Pipe Hangers	HA109
2	Rubber Tailpipe Hangers	HA122
2	5/16" X 1½" Lag Bolts	HW217
2	5/16" Fender Washers	HW305
2	3/8" hanger keepers	HW501

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