

MX-5 Miata Header

Part No. 56010

Installation Instructions

Read these installation instructions before starting:

- It is best to work on a “cold” car. Removal of the securing nuts may be very difficult on a “warm” car.
- Place the front of the car on jack stands. Never work on a car supported only by a floor jack.
- We highly recommend the use of anti-sieze material on all exhaust system threaded fasteners before re-assembly. However, use a minimal amount on the oxygen sensors threads to avoid contaminating the sensor element.

Removal Process

1. If equipped, remove the passenger side and center portions of the strut tower brace.
2. Remove the upper and middle (accessed from below shield) retaining bolts from the chassis-mounted exhaust heat shield. Remove the heat shield.
3. Remove the five (5) bolts that retain the upper exhaust manifold heat shield to the engine, then remove the heat shield. Remove the bolt that retains the lower heat shield, then remove the shield. (These two components will not be reused after the installation of the header.) See FIG A.
4. Loosen the radiator cap to relieve pressure. Disconnect the heater hose as shown in FIG B.
5. Hook the end of the heater hose behind the aluminum air conditioning hose tube to allow additional access for the removal of the exhaust manifold. Remove the nut that retains the passenger side end of the heater tube bracket to the firewall. See FIG C.
6. Remove the two (2) bolts that retain the coolant line from above the exhaust manifold. See FIG D.



Figure A - Remove the upper and lower heat shields.



Figure B - Remove the heater hose.

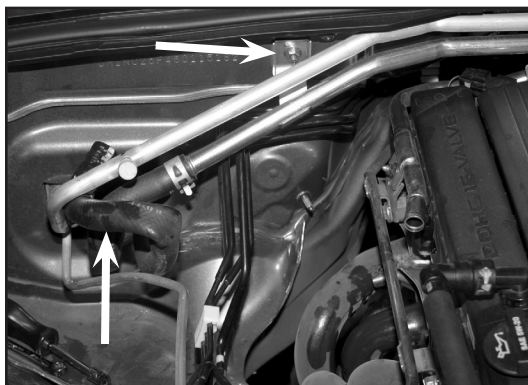


Figure C - Wrap the end of the flexible heater hose behind the aluminum tube to hold it clear of the area above the exhaust manifold. Remove the nut that secures the aluminum tube bracket to the firewall.



Figure D - Remove the coolant line retaining bolts.

7. Remove the two (2) nuts that retain the driver's side end of the aluminum air conditioning tube to the firewall. See FIG E.

8. Remove the nut that retains the lower oxygen sensor wire to the exhaust manifold.

9. Remove the five (5) bolts that retain the cover plate directly below the oil pan to gain access to the oxygen sensor electrical connectors. Remove the plate. See FIG F.

10. Disconnect both oxygen sensors electrical quick disconnects.

11. Remove the retaining bolts and remove the cross brace located behind the front subframe. See FIG G

12. Remove the nuts and springs that assemble the exhaust manifold to the catalytic converter connecting pipe. Then remove the two (2) studs from the exhaust manifold outlet flange (14mm deep - 6 point socket required).

13. Remove the lower oxygen sensor.

14. Remove all the exhaust manifold retaining nuts. Remove the heater and A/C tube brackets off the retaining studs (the nuts were previously removed in steps 5 & 7). Remove the exhaust manifold from the car while holding these tubes upwards at the firewall to allow clearance for the removal.

15. Unless the manifold inlet and/or outlet gaskets have been damaged or should signs of excessive wear these components can be re-used. Carefully remove the outlet "donut" gasket and install it on the new header. Remove the upper oxygen sensor from the exhaust manifold.

16. Remove the two (2) bell housing attachment nuts (See FIG H). Remove the "two-stud" bracket (the corner of this bracket would make contact with the header if not removed) and replace it with the two (2) supplied bolts. Insert the bolts from the front and torque them to 30 ft/lbs.

Installation

17. Guide the Racing Beat header into position. Once in place, secure the header to the engine using the original nuts and torque them to 28 ft/lbs.

18. Install the two (2) studs that were removed from the exhaust manifold outlet flange, then install the two (2) springs and nuts. Torque them to 17 ft/lbs.

19. Install the two oxygen sensors into the header - the unit with the black connector on "top". Connect the supplied extension wire to the sensor with the black connector and route the harness down the driver's side of the exhaust pipe. Connect the extension harness to the "black" chassis connector. Connect the "bottom" (grey) sensor connector to the "grey" chassis connector. Tie wrap the harnesses together for security.

21. Install the cover plate under the oil pan, torque to 18 ft/lbs.

22. Using the original retaining nuts/bolts, secure the 1) heater tube brackets to the firewall, 2) the rigid heater hose positioned above the header, 3) the flexible heater hose, 4) radiator cap, and 5) chassis-mounted heat shield.

23. Start the engine and check for any exhaust gas leaks. You may notice a burning, oily smell emitting from the exhaust, this a by-product of the manufacturing process and will dissipate after several heat cycles. (Note: Check to make certain that nothing is making contact with the header that may be causing the smell.)



Figure E - Remove the retaining nuts.



Figure F - Remove the cover plate.

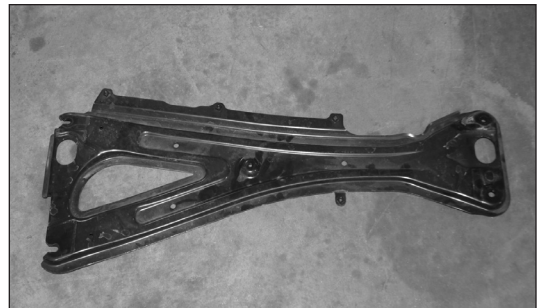


Figure G - Remove the sub-frame brace.

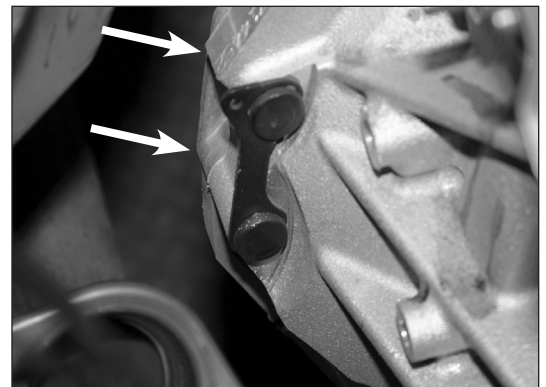


Figure H - Remove the securing nuts from the back of the bell housing, then remove this "two-stud" bracket. (Shown looking down through the engine compartment.)