

INSTALL GUIDE | Porsche 981 Boxster / Cayman Sport Headers

FS.POR.981.SHDR





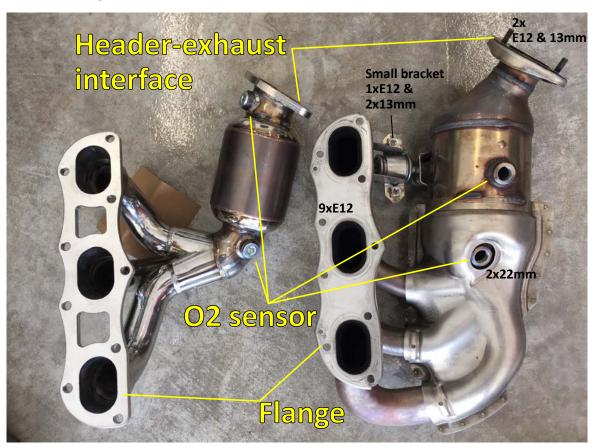


CAUTION

- Allow car to cool before performing any installation(s) or service(s) on it.
- Always work on an even and level surface when raising vehicle(s) with a jack, and support all raised vehicles with locked jack stands once elevated.
- Fabspeed Motorsport recommends that all installations be supervised or verified by a trained professional technician.
- Fabspeed Motorsport is not responsible for any personal injury or damage(s) sustained to a vehicle during installation of aftermarket performance parts.

Overview

The figure below shows the FABSPEED sport header and stock header (right). Removing the stock header and catalytic converter unit from the car and replacing it with the FABSPEED sport header unit is straight forward. Removing the stock unit consists of (for each side) removing back tire, removing two O2 sensors, removing two nuts mating the header-exhaust connection, removing three screws attaching a small bracket, removing nine bolts mating the header flange to the engine, and removing three bolts from a second, larger bracket.



The brackets are not re-used, so assembly of the new unit requires fewer screw connections. However, the O2 sensor wires need to be lengthened by adjusting points to which the wires are secured. Once this is done, reassembly is the reverse of disassembly.



The geometry of the exhaust pipes makes it difficult to reach some of the nine E12 bolts, but it is doable with a swivel connector, extensions, and a modified E12 socket, which is described below. A $\frac{1}{4}$ " 10mm thin walled socket or even a $\frac{1}{4}$ " 3/8" socket with $\frac{1}{4}$ " swivel connector will also fit the E12 screws reasonably well. If you have those, you can try them, but they need to be small in diameter.

Required Tools

- Lift/Jack/Jackstands
- ½" x19 mm lug nut socket
- ½" torque wrench (for lugs)
- T-25 bit/socket
- 3/8" Ratchet
- 3/8" Torque Wrench FT-LB
- 3", 6", and 9" extensions for 3/8" socket
- 3/8" Swivel connector/extension
- E12 Torx Socket

- Sacrificial E12 Torx socket (if you do not want to grind down a good one) or ¼" swivel extension and mating thin-walled 10 mm socket and ¼" ratchet or ¼-to-3/8 connector
- 10mm socket (3/8" drive)
- 13mm socket (3/8" drive)
- 13mm Open Wrench
- 22mm Open Wrench (for O2 Sensor)
- Knife or wire cutters (to cut O2 sensor wire tie)

Step-by-step Procedures

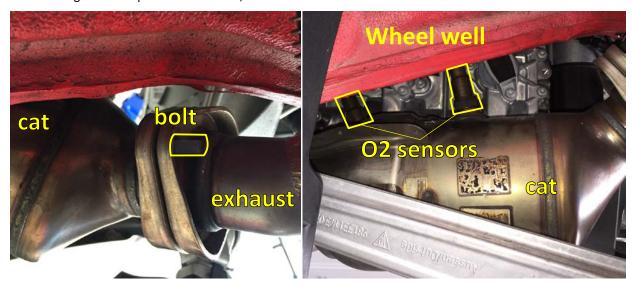
Loosen lugs on both back tires.

Lift/jack car as high as possible. The more room you have to work, the easier it will be.

Remove back tires

Access through the tire well (see image below)

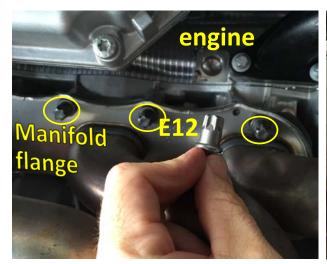
- Remove two bolts from the header-exhaust interface using E12 and 13 mm socket or wrench
- Using a 22mm open-ended wrench, remove two O2 sensors on each side



Optional – use a 10 mm socket or wrench and T25 bit to remove the rear-most engine cover. This is not required, but might be useful to help get light higher up where the O2 sensor wires are routed and secured.



Using an E12 socket, loosen the nine screws attaching the stock header unit to the engine. Remove all but one or two just to hold the unit in place.



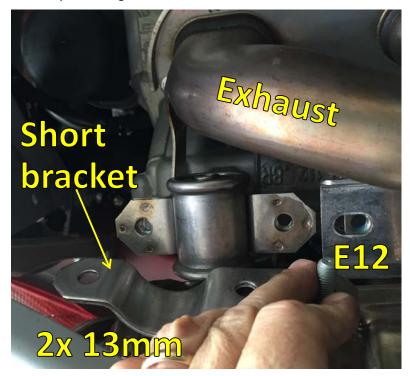


In the next steps, we will be removing two brackets shown below.





Remove the short bracket by removing two 13 mm hex head bolts and one E12 bolt.



Remove remaining screws from stock header flange.

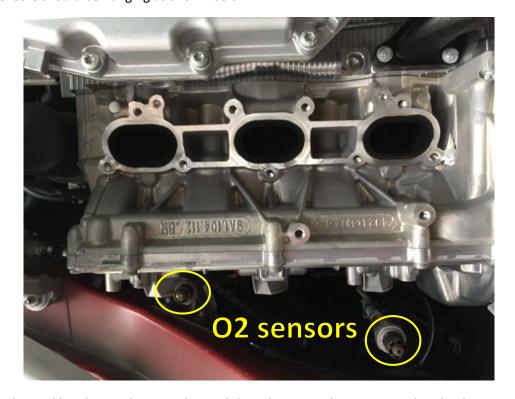
Move unit so the three E12 socket heads securing the larger bracket are visible/exposed and can be removed. Remove the larger bracket.



Remove the stock header/cat unit.



The O2 sensors should be hanging as shown below.



Position Fabspeed headers and new gasket and thread-in several E12 screws - hand tighten. See below for number designation of through holes in the flange.



Screw heads in positions 2,3,5, and 9 should be readily accessible using the standard E12 socket and 3/8" extensions. Positions 6 and 8 should be easily accessible using a swivel connector. Positions 1,4,



and 7 require a special, small diameter E12 socket (or $\frac{1}{4}$ " thin-walled 10 mm or $\frac{3}{8}$ " socket). These screws should be torqued to approximately 19-20 ft-lb.*

A small diameter E12 socket can be achieved by grinding as shown at right. Position 7 is particularly challenging due to the constrained space. But using a long extension, swivel connector, and the modified E12 socket it is possible to properly tighten the screw.

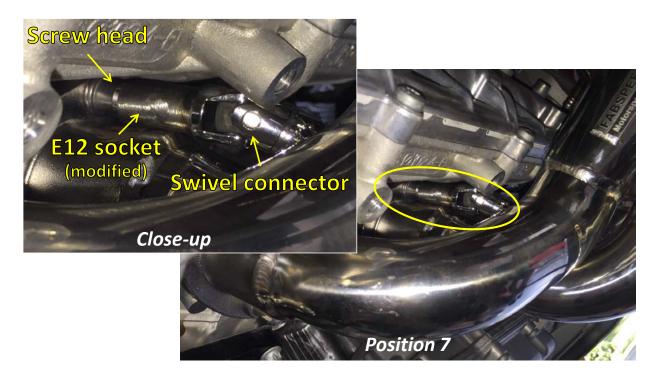


Positions 6 and 8 should be readily accessible using a swivel extension, like shown below.





Position 7 is most challenging. The image below shows the special (smaller) E12 socket connected to a swivel extension connected to a straight extension. Manipulate the socket/extensions through the exhaust pipes to mate socket to screw head.



Determine if the O2 sensors can reach to their connection points. If they do not reach, remove sensor lead wire attachment points until there is enough wire. Screw the sensors in using a 22 mm open-ended wrench taking care not to over-twist the wire. Use wire-ties or other suitable mechanism to re-secure sensor wires if needed.

Secure the header-exhaust connections with new gasket using stock or Fabspeed-provided hardware.

Re-install rear tires, torque to spec. (118 ft-lb).*

Start engine, push PSE button, rev, and smile!