

**M7 Speed Cold Side Intercooler Elbow Kit
PN 56-33020X
Installation Guide**



M7 Speed engineers and manufactures the highest quality and best fitting Mini Cooper accessories and performance parts available anywhere on Planet Earth! Please inspect your parts when you receive them to verify everything is included and no damage has happened during shipment. Read these instructions completely BEFORE attempting to install this product. If you are not confident you can do the work described or do not have the tools or skills necessary please contact your local Authorized M7 dealer (listed on our website www.m7speed.com) or a local automotive performance center to perform this work. We acknowledge not everything is perfect but we work very hard every day to improve our products and make installations easier. If you have any comments please contact M7 Customer Service directly at 704-663-0094. We encourage and welcome all criticism. Thank you.

Tools/Supplies Needed:

- 7 mm socket and ratchet or nut driver
- 8 mm socket and ratchet or nut driver
- 5/16" socket and ratchet or nut driver
- Straight Blade Screwdriver
- T-25 Torx socket and ratchet or nut driver
- T-27 Torx socket and ratchet or nut driver
- 1/8" hex wrench
- Flathead Screwdriver
- Radiator Hose Removal Toll (Curved hook or pick)
- MAF Cleaner (Optional)
- Foamy window cleaner

Estimated Install Time (Actual time may vary):

- 15 minutes – 45 minutes

Skill Level

- Easy

Parts List

QTY	M7 Part #	DESCRIPTION
1	96-1189	Gen 2 Cold Side Silicone Elbow
1	96-1158	Gen 2 Throttle Body Silicone Elbow
1	96-1190	Connector tube 2.5 OD x 4" Long
1	95-4056	#36 Lined Worm Drive Clamp
2	95-4058	#40 Lined Worm Drive Clamp
1	95-4060	#44 Lined Worm Drive Clamp
1	97-1042	Red Plastic Plug


CAUTION-

FOR YOUR SAFETY INSTALL THIS PRODUCT ONLY WHEN THE ENGINE IS COLD. THIS WILL PREVENT BURNING YOURSELF AND PREVENT ANY DAMAGE TO THE DELICATE PLASTIC PARTS YOU WILL BE WORKING WITH.

Remove the airbox assembly.

If your MINI is equipped with an aftermarket intake kit (not OE part) refer to the manufacturer's instructions for proper removal and installation of that product.

Factory Air Box Removal

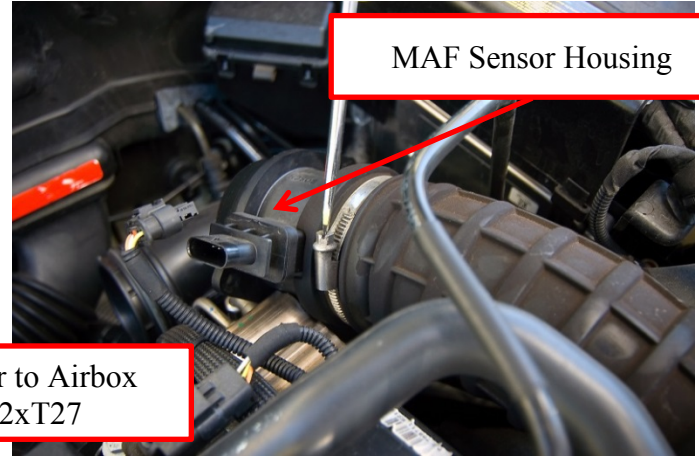
1. Disconnect the battery.
2. Disconnect MAF sensor electrical connector: See Figure #1
 - a. The MAF plug is located on the intake hose. Push down on the small tab on the harness side and gently pull the plug out. Do not pry or damage will occur.
3. Loosen the hose clamp connecting the MAF housing to the turbo inlet hose. Figure #2
4. Remove the (2) T-27 screws connecting the MAF housing to the factory intake box. Figure #1
5. Mark the MAF sensor so it is reinstalled in the correct flow direction.
6. Remove the MAF housing from the factory air box and inlet pipe. Set the MAF housing aside in a safe place. The sensor is delicate.
7. (Optional) While your MAF sensor is removed and easily accessible, now is a good time to perform some needed maintenance and clean your MAF sensor. This is easily done using a specially formulated MAF spray cleaner you can buy at any local Autoparts store.
8. Remove the (3) T-25 screws holding the factory intake box cover to the factory base. Figure #3
9. Remove the air box cover and the factory air cleaner element.
10. Fully loosen (1) T-25 screw on the RS (passenger side) of the air box that connects the air box base to the engine intake manifold.
11. Pull the air box base straight up to disconnect it from the engine. It will take some effort to disengage the base from the interference fit rubber grommets but do not pry on it.

CAUTION: The intake manifold is plastic and it will break if too much force is applied. Human force is sufficient. Once the base is free, rotate it approximately 1/8 to 1/4 turn towards the rear of the car while at the same time pulling it apart from the factory fresh air hose. If the three grommets come free from the intake manifold reinstall them now.



MAF Sensor to Airbox
Screws 2xT27

Figure #1: MAF Sensor Connector



MAF Sensor Housing

Figure #2: Intake Hose Clamp

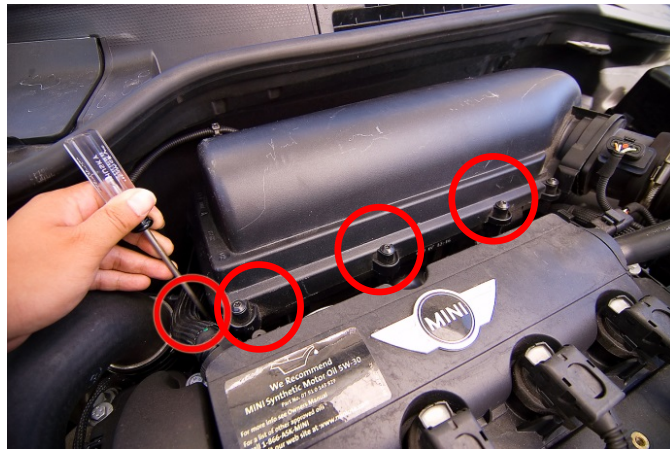


Figure 3: Remove Factory Airbox Cover

12. (Optional) This is a good time to clean your MAF sensor using a specially formulated sensor cleaner you can buy at any local Auto Parts store.



Remove Hose Clamp

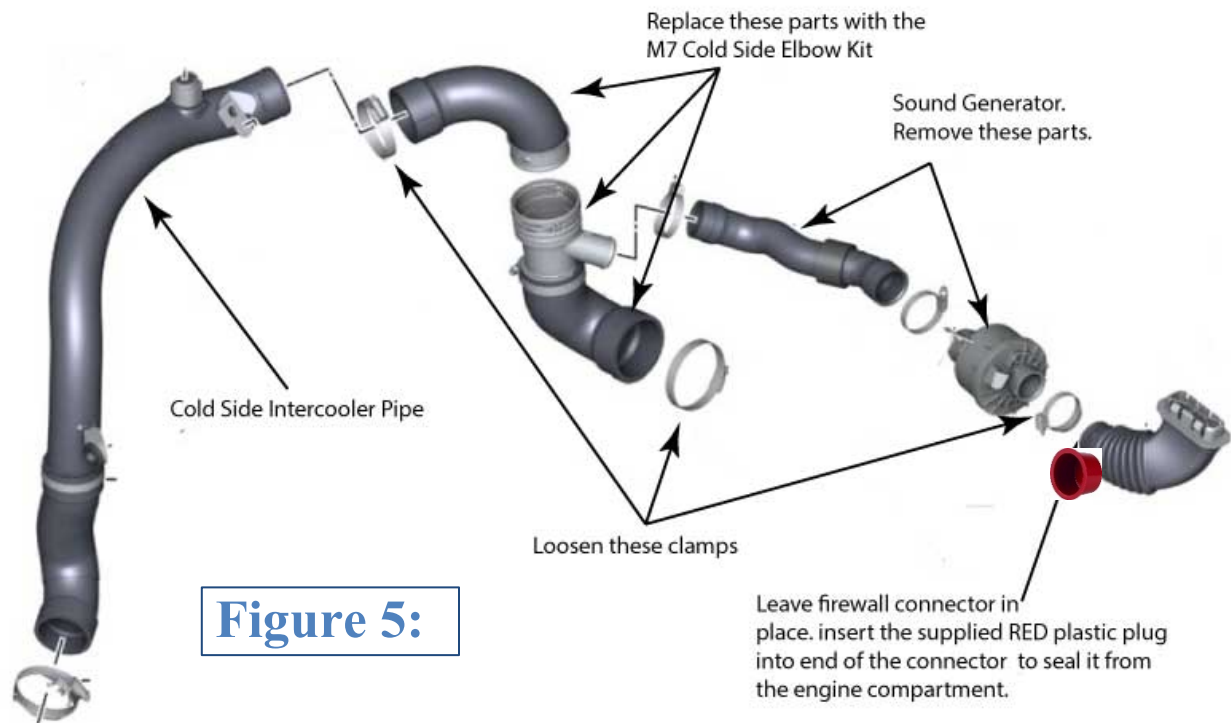
Figure 4: Remove Clamp

NOTE: Some MINIs are equipped with a sound generator that connects between the cold side intake pipe and the firewall. The M7 Speed Cold Side Elbow Kit eliminates this component. If your MINI is not equipped with this component simply bypass any instructions relating to it.

CAUTION. The throttle body and cold pipe are plastic and they will break if too much force is applied to it. **BE CAREFUL!**

SEE FIGURE #5 for steps 13-21

13. Remove the clamp holding the factory elbow to the cold side pipe near the passenger side strut tower.
14. Remove the clamp holding the elbow to the throttle body.
15. If equipped remove the clamp holding the sound generator hose to the firewall connector.
16. Use a hose removal tool (curved hook or pick if one is available) or a twisting motion to break the seal between the OE rubber elbows and the mating pipe and throttle body.



17. Remove the OE elbows and sound generator parts as described in Figure #5. Leave the firewall connector attached to the firewall in place.

Figure 6: Red Plug
Start of engagement
into firewall connector



Figure 7: Red Plug
Fully installed into
firewall connector.



18. Install the M7 Speed Elbow Kit to replace the OE Elbows as follows.

A small amount of foamy window cleaner eases installation.

DO NOT USE ANY OIL OR SOLVANT BASED PRODUCT!

- a. Install the M7 connector tube into the PN 96-1158 elbow.
- b. Place PN 96-1158 elbow with connector tube onto the throttle body. Align it so the connector tube is vertical.
- c. Place one (1) #44 and two (2) #40 clamps over the connector tube. Do not tighten
- d. Then place PN 96-1189 elbow with one #36 clamp onto the connector tube and cold side intercooler pipe.
- e. Align the two elbows so there no stress on the throttle body or cold side tube and the parts are not touching and nearby part.
- f. Make sure the connector tube is equally engaged into the two (2) elbows (approximately 1" into each elbow) and is fully slid onto the throttle body.

19. Position the four (4) clamps as required and tighten using a 5/16" socket or nut driver. **DO NOT OVER TIGHTEN!**

20. Install the supplied RED plastic plug into the sound generator firewall connector. Press firmly until it is fully inserted. It is a tapered fit so no clamp is needed to keep it in place. See Figure #6 & #7

21. Reinstall the intake airbox by reversing the removal steps at the beginning of document.

Enjoy the ride & stay M7 Tuned.....

If you have any questions or concerns, don't hesitate to call our office

Monday – Friday, 9am—4pm EST or e-mail us techsupport@m7speed.com.