

The M7 Direct Flow Intercooler (DFIC) Install Guide

Please Note:

Read through this entire guide *BEFORE STARTING INSTALLATION*.
If anything seems unclear, please call our office:

562-608-8123

Monday – Friday
9:00am – 6pm PST

If you require assistance outside of these times, please call
562-712-3270

And someone will assist you. If no one is available when you call,
please leave a message and someone **will** return your call.

If any part of this installation seems too difficult, we strongly suggest
you contact your local MINI mechanic to assist in installation or to
install this unit for you.

Above all else, **DO NOT hesitate to call us for help!**

Sincerely,

Team M7

Tools:

- 8 mm Socket
- 10 mm Socket
- 3/8 inch Socket
- 5 mm Allen wrench
- #30 Torx
- Ratchet
- Extension bar
- Phillips Screwdriver

Estimated Install Time: 45 minutes to 1 hour



****This installation guide refers to MINI Cooper S models sold in the United States.
If you have any questions, please call our office.****

This information is meant only as a guide. The author of this information, M7 Tuning, or any M7 Tuning employees assumes no liabilities for any outcomes resulting from using this information. Proceed at your own risk! It is always best to consult a licensed mechanic or your local MINI Dealer before undertaking any mechanical work on your vehicle.

Parts List:

- DFIC
- DFIC hood scoop
 - 4 (four), $\frac{3}{4}$ inch nuts
 - 4 (four) washers
- DFIC Diverter
 - 2 (two) bolts
 - 2 (two) washers
- Adhesive Foam strip
(note, as of 12.01.06 the foam strip has been updated to a kit of 4 foam pieces)
- 8 (eight) bolts for intercooler clamps
- 8 (eight) washers for intercooler clamps



This bent diverter has been replaced with a wider piece that no longer requires flaring of the side fins.



This is the correct orientation of the DFIC when looking at it head-on (from the front of the car).



Begin by removing the (4) #30 Torx bolts that hold in the stock intercooler diverter.



Remove the Diverter



Using the 8mm socket, remove the (2) black horseshoe shaped brackets located towards the front of the intercooler. An extension may be useful if your tools will not fit.



Remove the wiring harness from the clip at the front of the intercooler. This wiring harness will be tucked under the DFIC Diverter.



To make room for the diverter, use a 10 mm socket to remove the clip that held the wiring harness in place. Leave the hose clamp in place.



You only need to remove the clip.



Leave the hose clamp connected to the manifold using the same 10 mm bolt that also held in the clip. Tighten this down until snug. No grunting!



Use a #30 Torx to remove the four (4) intercooler inlet/ outlet clamps. There are eight (8) bolts in total to remove.



Before removing, note that the top and bottom of each clamp has one male end and one female end.



Remove the stock intercooler by pulling the unit up from the back and then towards the front of the car. It may be helpful to have someone hold the clamp bottoms to prevent them from falling into the engine bay.



Remove the stock black rubber bellows. These will be replaced with the new silicone boots supplied with your DFIC.



CAUTION

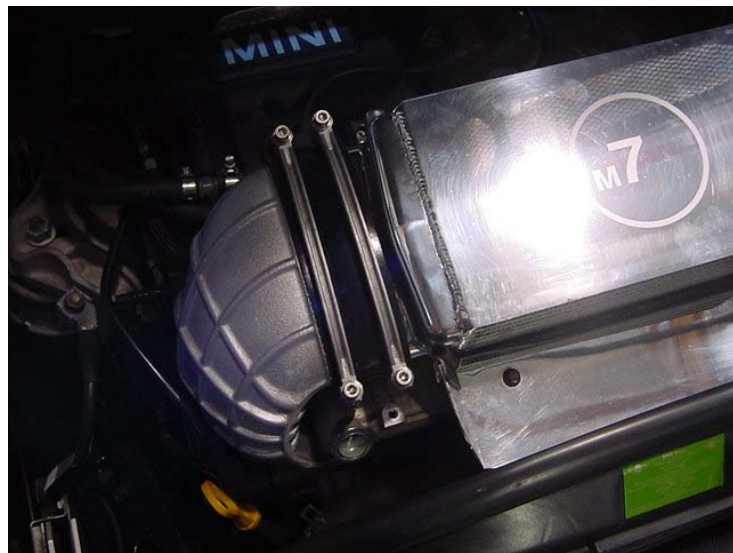
Take a good look at the intercooler clamps before continuing. Each clamp has two parts: Top and Bottom. The top has no threading for screws. The bottom is threaded for screws. It is **EXTREMELY** important (to avoid frustration) that you make this distinction now.



Attach the large silicone boot to the passenger side intercooler horn. Clamp this one side down.

Attach the small silicone boot directly onto the intercooler and clamp it down.

Slide the large end of the intercooler onto the larger boot and push the rest of the intercooler down into place.



Adjust the placement of the rubber boots and the DFIC itself to reduce any connection gaps. Make sure that all ends of the silicone boots have installed correctly.



This may be one of the trickiest parts of the installation. Fish the bottom parts of the remaining inlet/ outlet clamps under the silicone boots.



Make sure that you are installing the bottom pieces! (See Caution on previous pages)

It may be helpful to pull the DFIC slightly upwards to give you more room. Then slide the clamps in from the back of the car towards the front.



Attach the top of the clamps and replace the T-30 screws with the 8 long Allen bolts and washers supplied. DO NOT TIGHTEN yet.



Before tightening down the clamps, run your fingers around the inlet and outlet holes of both the passenger and driver's side to make sure there is a good seal between the DFIC and the ducts. If the boots are scrunched or the seal is not good, adjust the position of the DFIC and the silicone boots.



If all is well, tighten the Allen bolts down to 7 ft-lb each.



Next we will attach the diverter. It will attach to the intake manifold using the two (2) innermost threaded holes left over from the OEM intercooler brackets.



Bring the diverter nose down behind the fan shroud and align the holes with those on the intake manifold.



Use the two (2) supplied screws and washers to attach the diverter to the manifold. **DO NOT OVERTIGHTEN!** Hand-tight is good, but **NO GRUNTING!**



Next, remove the hood scoop liner. **DO NOT CLOSE THE HOOD until this is removed.**

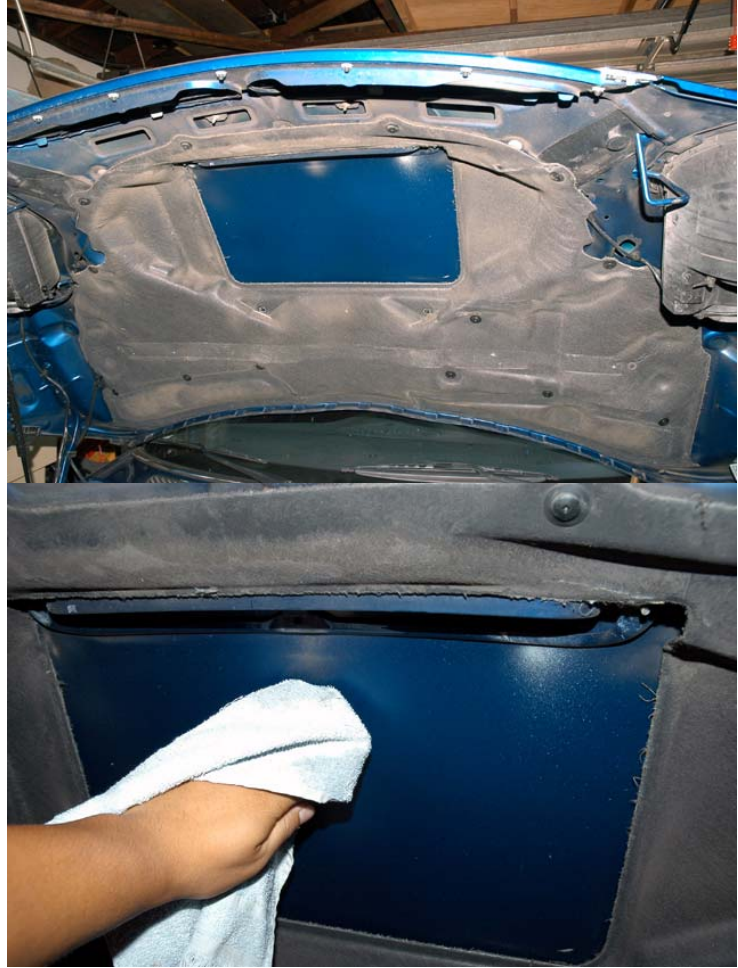
This requires the 8 mm socket and a Phillips screwdriver.

Note: The two 8 mm nuts used to hold the scoop liner in place also attaches the back end of the hood scoop to the hood.

After removing the screws and the nuts, the scoop liner will be free to fall out. Be ready to catch it after removing the last screw.



Clean the newly exposed hood surface.



Align the adhesive foam over the front of the intercooler as shown with the sticky side up.

NOTE: Foam package has been upgraded. Use large 2" wide foam piece here. The 1" foam now attaches to the diverter so that it sits *under* the edge of the fan shroud.



Use a small piece of tape to LIGHTLY hold the foam in place when you let go.

The foam must be able to attach to the hood so do not apply the tape too hard.



Gently close the hood and the adhesive foam will stick to it. You may apply LIGHT pressure to the hood to make sure the foam sticks.



Open the hood and make sure the foam attached. Gently push the foam to make sure it is applied properly from end to end.

Note: The two short 2" wide pieces attach alongside the long piece at either end. (For reference, these should fit directly above the ends of the diverter when the hood is closed).



Remove the two (2) remaining 8 mm nuts that are holding the stock hood scoop in place.



After the nuts are removed, there is a clip in the middle of the scoop still holding it in place.



To remove the scoop, gently pull it upwards just enough to clear the front screws from the mounting holes.



Then pull the scoop out towards the front bumper to unclip the scoop.



Replace the stock scoop with the DFIC scoop.

DO NOT FORCE the DFIC scoop into place.

Try starting with the passenger side of the scoop, then sliding in the driver's side of the scoop.



If you are still having fitment issues, you may have to file one or more of the attachment holes to allow easier entrance of the new scoop's screws.

Forcing the scoop into place may result in unexpected damage to both the DFIC scoop and your hood.



Use the four (4) supplied washers and 3/8 inch nuts to secure the DFIC scoop to the hood.

DO NOT OVERTIGHTEN the nuts. Hand-tight is good enough to keep the scoop in place.



CONGRATULATIONS!

This is the end of the M7 DFIC Installation guide.
We hope that you found this guide helpful.

The final step is to go out, drive, and FEEL the difference!

This information is meant only as a guide. The author of this information, M7 Tuning, or any M7 Tuning employees assumes no liabilities for any outcomes resulting from using this information. Proceed at your own risk! It is always best to consult a licensed mechanic or your local MINI Dealer before undertaking any mechanical work on your vehicle.

M7 Tuning || 562.608.8123 || www.M7Tuning.com