

M7 R52S & R53 Cold Air Intake

Installation Guide

53-3M7301



M7 Speed engineers and manufactures the highest quality 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 a local M7 dealer (listed on our website www.m7tuning.com) or a local automotive accessory installation 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 Good or Bad. Thank you.

M7 R53 Cold-Air Intake

Please check the following parts list to ensure that you have all necessary pieces for installation.

- ☐ Cold Air Intake Housing-Assembled with rubber edging
- ☐ M7 Filter with Clamp
- ☐ P/N: 90-1004, R53 CAI Hardware Kit

Tools Needed

T25 Torx driver	10mm wrench & socket
T30 Torx driver	Straight blade screwdriver
½" wrench & socket	#2 Phillips screwdriver



1. **NOTE: DISCONNECT YOUR BATTERY. THIS IS NECESSARY SO YOU DO NOT DAMAGE YOUR COMPUTER OR VEHICLE'S ELECTRICAL SYSTEM DURING INSTALLATION.**

Remove the Top half of the Factory Air Box

2. Remove the clamp and the intake hose connected to the filter box (The hose clamp will be replaced).
3. Remove the rubber weather stripping on the left side above the factory air box. It is easily removed by pull straight up. No glue is used to hold this in place. *See Figure #1*
4. Pull up on the positive battery connection box to release it from the side of the air filter housing and lay it to the side-out of the area where you are working. *See Figure #1*

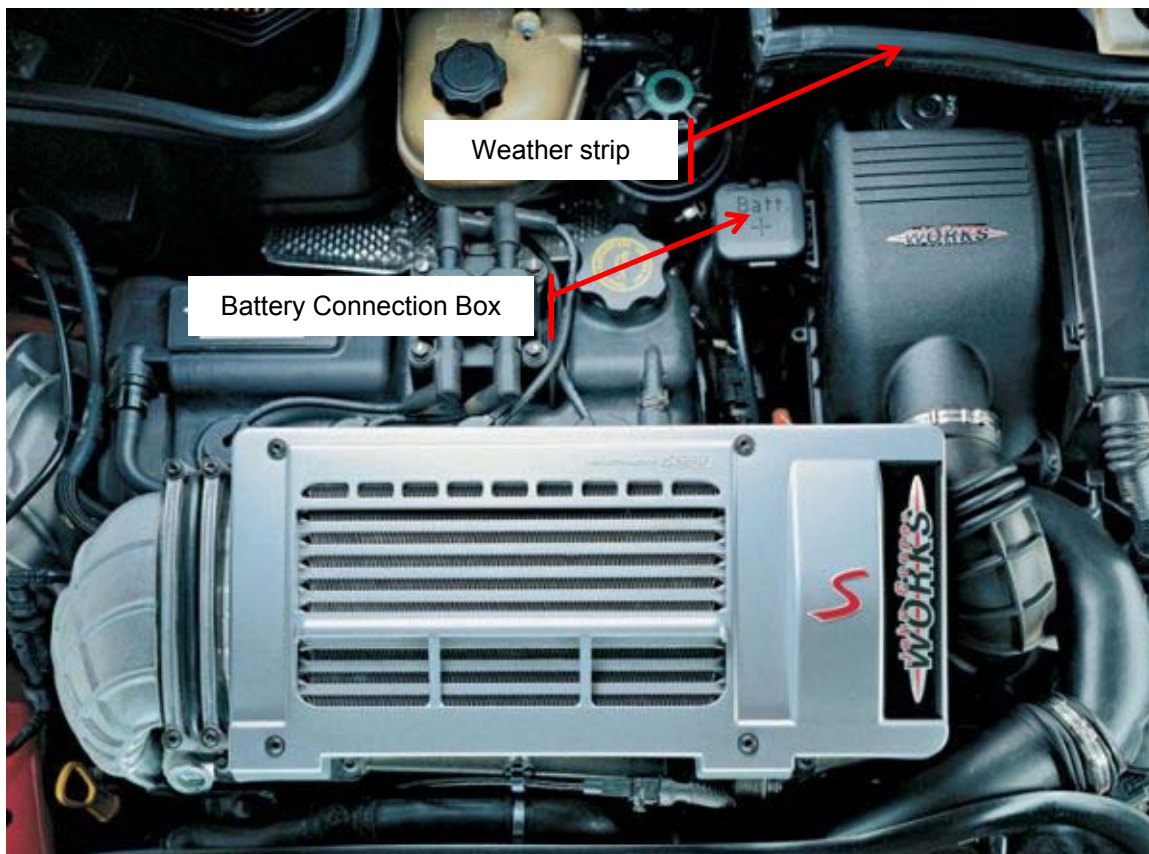


Figure 1

Ultimate MINI Performance

5. Remove the two T-25 screws located toward the front of the car that are holding the upper filter housing in place (Location noted by red circles). Remove the upper filter housing and the filter element. See Figure #2



Figure 2

6. Follow the positive battery cable down towards the bottom half of the air box. Maneuver it out of the slot that holds it next to the lower air filter housing.
7. Remove the plastic intake tube connected to the radiator shroud. Release the 4 tabs that lock the tube into place and remove it from the car. The "S"-shaped plastic tube is connected to the bottom of the airbox. Pop it out from its connection. With some turning and maneuvering, the tube can be removed from the engine bay.
8. **Disconnect the ECU**
 - a. Remove the ECU cover located to the right of the air box. It is held into place by (2) locking tabs. Depress each tab and slid it off to expose the ECU and connectors. See Figure #3



BEFORE PROCEEDING VERIFY THAT THE BATTERY IS DISCONNECTED.



Figure 3



BEFORE PROCEEDING VERIFY THAT THE BATTERY IS DISCONNECTED.



Figure 4

- b. Release and remove 2 ECU Wiring Harnesses connectors.
Look to where the actual wiring ends and goes into the connector. Under this junction, there will be a lock with two hook-like tabs. To release the locks, you have to pull on the hooks. For the harness closest to the front of the car, this will slide to the front. For the harness closest to the rear of the car, this will slide to the rear. Both of these will slide out about 1¼". If your fingers are too big to get into the hooks, try using a screwdriver to slide the locks out. Make sure you're not bending these pieces, they should slide straight out. Do this for both of the wiring harnesses. When the locks are released the 2 harness connectors can easily be removed from the ECU by pulling straight up. Move the two harnesses out of the way. Be careful not to damage the pins on the connectors or ECU.

Note: As a safety precaution to these sensitive areas we suggest temporally placing tape over points to help prevent damage or dirt get into them.

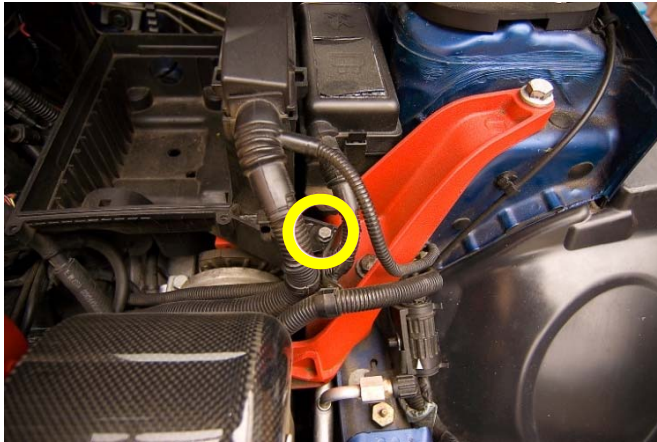


Figure 5

Remove the lower half of the factory air box.

9. At the front driver's side corner of the ECU box there is a 10mm bolt holding the lower air filter housing in place. See Figure #5. Remove this bolt (be careful not to allow it to drop into the engine bay) and the lower air filter housing will be free for removal. Simply pull up on the lower air filter housing and it will be out of the car. There will be some resistance from the back of the box because it is held in by two rubber mounts. These will pop off with a gentle but deliberate tug. Set all of these parts aside as you will need them for reinstallation.



10. With the bottom of the stock airbox out of the car, the last thing to remove is the plastic separator at the fire wall. There are (2) T30 screws on the passenger side of the separator. Remove these two as well as the plastic Phillips retainer screw on the driver's side of the separator. Remove the (2) T30 screws holding in the bottom of the plastic separator (these may be hidden under two large rubber caps used for holding in the bottom of the airbox). The back separator can now be lifted out of place. **THIS PIECE IS NOT REUSED**

11. **Replace the bottom half of the airbox into its factory location.** Reinstall the two (2) T30 screws and reconnect the 10mm bolt that holds down the front of the ECU box. Reinstall the factory “S” tube by twisting it back into place until it connects with the bottom of the airbox. Be sure to reconnect the smaller plastic intake tube that connects to the radiator shroud.



12. **Reconnect the ECU.** NOTE: Use caution and care when reinstall the connectors so not to damage the electrical pins. Remove all tape if applied in step 8b. One at a time align the connector directly over its mating part and gently press straight down until the connector seats. Do not force it. When completely seated, slide the lock into place to lock the connector to the ECU. Repeat this for the second connector. Snap the cover back into place.
13. **Install the M7 Airbox.**
Remove the lid from the M7 Cold Air Intake and place the main part of the box into the engine bay. Reuse the T30 bolts to connect the passenger side of the M7 CAI to the cowl area. Attach the supplied 5/16 nut, bolt and washer set on the driver's side of the intake. Use the two (2) supplied stainless steel screws to attach the front tabs of the intake to the bottom of the stock airbox. Reconnect the OEM rubber intake tube to the CAI using the provided clamp to tighten this connection (the clamp has a 10mm nut for tightening).
14. Loosen the clamp on the foam filter. Wash away and dry any oil on the rubber part of the filter (do not wash oil off from the foam element or you will need to purchase and use a re-oiling kit). Slide the filter onto the tube inside of the CAI and tighten the hose clamp. Reinstall the lid.
15. Place the positive battery connection onto the hook on the side of the M7 CAI (similar to the OEM holder). Reinstall the rubber weather stripping to the partition between the engine bay and the cowl area. Check to make sure that all of the connection points are tightened down so that no air leaks exist. If all is well, reconnect your battery and you're done!

If anything seems unclear, please don't hesitate to call our office Monday – Friday, 9am—4pm EST. Or e-mail us techsupport@m7tuning.com.

Enjoy the Ride and Stay M7 Tuned.....