RAS Ram Air Scoop for R56 MINI Cooper S - 2007+

The DDMWorks Ram Air Scoop makes use of the non-functional hood scoop that was just waiting to be used as an intake source. This paired with our PFB make our (RIS) Race Intake System.

Installation time of the Ram Air Scoop depends on you and your mechanical skills. It is suggested that you read through the directions a few times to familiarize yourself with the components of the kit, and your car. If you are pretty handy with tools the intake can be installed in under 30 minutes, however we suggest that you schedule at least two hours for the installation.

If you have any questions during the installation you can call us at (864) 907-6004 or email us at Tech@ddmworks.com.

<table>
<thead>
<tr>
<th>PACKING LIST</th>
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<tbody>
<tr>
<td><strong>Description</strong></td>
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<tr>
<td>DDMWorks Ram Air Scoop “RAS”</td>
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<tr>
<td>Button Head—PRE-INSTALLED on Lid</td>
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<tr>
<td>Flat Washer—PRE-INSTALLED on Lid</td>
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<tr>
<td>Edge Molding 1/2 inch—PRE-INSTALLED</td>
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<tr>
<td>Edge Molding —PRE-INSTALLED</td>
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<td>7/32” ID Vacuum tube</td>
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**All 2009+ model year R56 Mini’s will receive (4) plastic retainers with your kit. All model years before 2009 will reuse their stock retainers**

<table>
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<th>TOOLS NEEDED</th>
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<tr>
<td>Phillips head screwdriver</td>
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<tr>
<td>4mm Allen key (included)</td>
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<tr>
<td>Allen key set</td>
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<td>T-25 torx</td>
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Before you start installing the Ram Air Scoop you need to do the following:

1. Make sure the car has had time to cool as you will be working close to the engine.
2. Disconnect the negative terminal from the battery.
Installation of Ram Air Scoop (RAS)

1. First we will need to remove the padded heat shield that is attached to the underside of the hood.

2. **(All 2009+ model cars can skip this step, you do not have the padded heat shield, the 4 plastic retainers will be in your hardware bag.)** There are four (4) plastic retainers holding the padded heat shield to the underside of the hood, using a Phillips screwdriver, unscrew the center section of each one of these retainers. Once you remove the center section of the plastic retainer, the rest of the retainer can be pulled straight out. Remove all four retainers being careful not to break or drop them as they will be re-used. (you may want to put a large towel over the engine compartment in case you drop one of the retainers so that you do not lose it to the engine bay)

3. With the retainers removed, remove the padded heat shield from under the hood.

4. Now we are going to remove the grill section from the hood scoop, start by looking under the hood, there is an Allen head bolt under the hood scoop. Remove this bolt first.

5. Once that bolt is removed, if you look on the inside of the hood and at the back of the stock hood scoop you will see a small plastic retainer. Once you squeeze the small tabs of this retainer together you can push it up towards the hood, releasing the back of the stock hood scoop.

6. Once you release the back of the stock hood scoop, gently close the hood down and you will now be able to pop out the rest of the hood scoop, as it is held in place with 4 snap-in connectors only at this point. It can be somewhat helpful to push up on the small plastic retainer that you just released while working to get the rest of the hood scoop off.

7. Once the scoop is removed, there are 4 small Phillips head screws holding the black plastic “grill” in place, remove these 4 screws and you will be able to remove this “grill” from the car. Set it aside as we will not be re-using it.

8. Once the grill is removed, re-install the hood scoop by snapping it back into place and re-installing the Allen head bolt that was removed.

9. The Ram Air Scoop was shipped to you assembled. Using the supplied 4mm Allen head wrench remove the six (6) bolts holding it together.

10. With the bolts removed, we are going to install the lower section that looks like a “V” first. Find the 4 plastic retainers that you removed earlier. Line the “V” section up on the hood so that the 4 tabs fit against the hood with the larger opening of the “V” facing towards the front of the hood.

11. Using 2 of the plastic retainers attach the 2 tabs facing towards the center of the “V” first. With these two retainers in place, line up the two tabs on the outside of the “V” with their respective holes, but do not attach them with the plastic retainers yet. Once the “V” is lined up, push the center into the 2 retainers towards the center of the “V” locking it into place.

12. Now that the “V” is positioned, re-install the lid using the 6 bolts that you removed earlier.
Installation of Ram Air Scoop (RAS) cont.

13. With the lid on the RAS position the “V” section until the holes line up for the 2 outside tabs and install retainers in those 2 tabs also.

14. Now we need to replace the vacuum line going from the valve cover to the firewall. Squeeze the connector on each end of the hard plastic line which will release it, remove the line from the car, we will not be re-using it.

15. **DO NOT SKIP THIS STEP!**
   Next we will need to rotate the plastic line coming out of the engine that the hose you just removed was attached to. There is a T-25 torx silver head bolt holding it in. Loosen this bolt and remove it. Then rotate the plastic nipple 90 degrees so that it is facing the passenger side of the car (see picture to the right). Once the nipple is rotated, re-insert the bolt in the original location and gently tighten it down until it secures the nipple in place.

16. Find the supplied tubing in the intake kit and connect the two tubes you just removed the hard plastic line from.

17. Check for fitment and make sure the RAS is secure and in place, it is now ready to supply cold air to you intake!

Congratulations!

You did it! With the Ram Air Scoop installed your car will breathe easier and rev happier! Now go motor and enjoy your new DDM modification! If you have any questions feel free to give us a call or send us an email.

  
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RAS Installed and ready for use!