

A Fitting Guide for the Forge Motorsport Front Mounting Intercooler for the BMW Mini Cooper S 2.0 Diesel

(A copy of this guide is available online, in the media section of our website)

A general tool kit will be required with the use ideally of a vehicle ramp or jack and axle stands. More specifically a power drill and 6.5mm or ¼" drill bit, T25 Torx driver and a craft knife.

Suitable Personal Protective Equipment, clothing, footwear and eyewear is recommended.



Firstly the vehicle will need to be secure and raised to allow the removal of the front wheels. The hood or bonnet of the vehicle should be opened. The grill needs to be removed. This is secured at the top edge by four plastic fasteners (push pins). The center pin of the fastener is prized out with the blade of a flat screw driver. This allows the fastener to be withdrawn from its locating hole.



In order to release the lower edge of the grill it is first necessary to remove the lower chrome cover. At each side there is a plastic tab that requires raising slightly to release the clip that secures the chrome strip.



At the base edge of the grille there are four levers. When pushed towards the centre of the vehicle they allow the release of the grill from the bumper cover.



Rear view of grille showing fastener mechanism



There are now two Torx T25 screws to remove. One on each side at the top of the bumper cover.

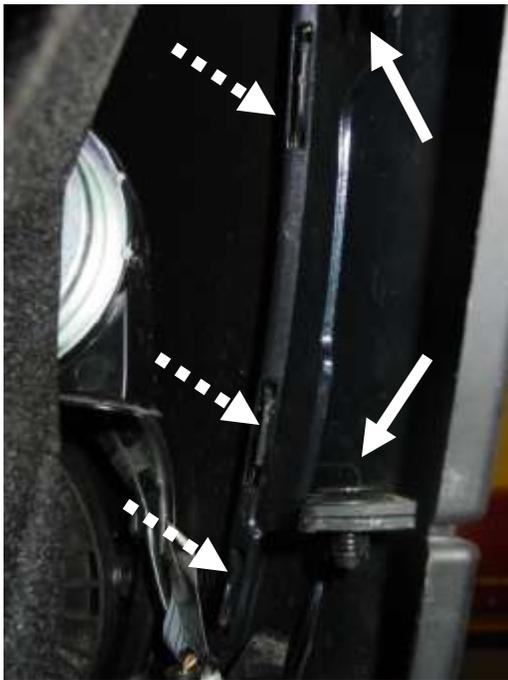


The underside of the bumper cover is secured by three of the push pin type fasteners and two T25 Torx screws (one each side).





The next fasteners to be removed are those that secure the wheel arch liner at the front. With the vehicle suitably supported, and the front wheels removed it will be easier to gain access to these. Also remove the two round access covers by rotating and withdrawing.



With the fasteners removed the wheel arch liner can be pulled away. The outer wheel arch trim is secured by two of the pushpin type fasteners that require removal and three plastic tabs (dotted arrow) These can be "released" by pushing with a flat blade screw driver.

The above operations need to be carried out on both sides of the vehicle.



With the wheel arch trim loose at the front it is possible to access and remove the T25 Torx screw that secures the front panel.

On both sides it is necessary to unplug the wires that go to the side and fog lights. (There is a tab on the plug that is squeezed to release the plug) and also disconnect the temperature sensor plug on the right hand side.



The front panel can now be removed. It is advisable to lay it on an old blanket or other suitable protection.



The Original intercooler mounting screws (T25 Torx) can now be removed from each side of the intercooler.



Depending on the vehicle origin it may be necessary to remove the plastic quadrants that fit between the wheel arch and the front of the vehicle, from underneath. These are secured by cross point screws that are rotated through 90 degrees to release.



Using a Flat blade screwdriver remove the clip from the bayonet fitting on each of the intercooler hoses and remove the intercooler hoses. Then prize the hose clamp apart and remove the intercooler pipe from the pipe run.





Remove the intercooler hose from the throttle body by removing the bayonet clip with a flat blade screwdriver. And pull the hose off the coupler.

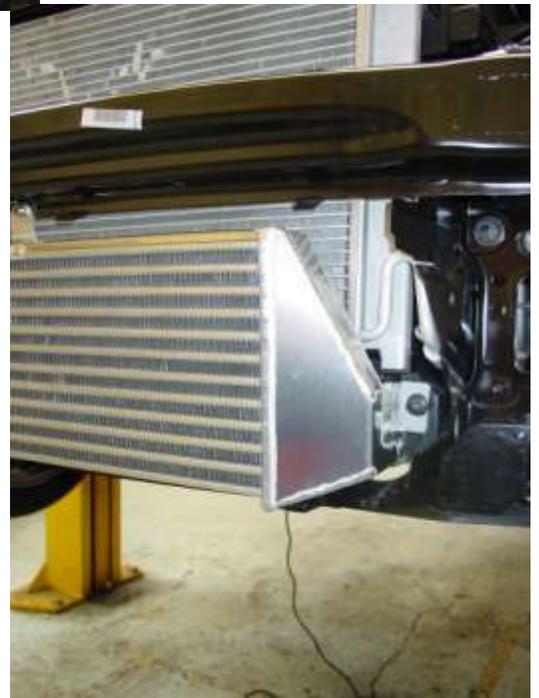
The Original intercooler can now be removed. It may be easier, when stood at the front of the vehicle to remove your right hand side first before removing your left hand side.



The forge intercooler can now be installed into the hoses (do not tighten the clamps at this stage) and the two T25 Torx screws used to secure the intercooler brackets to the front panel. The rubber mountings of the original intercooler are not re-used. On the lower edge of the black plastic front panel there are slots that the intercooler end tanks will locate in (arrowed)



In the centre at the top of the new intercooler there is a bracket that will secure the intercooler to the metal crash bumper. In order to attach this, a 6.5 mm or 1/4" hole requires drilling. To facilitate this, with the intercooler in place, mark the required position of the hole on the crash bumper.



Now remove the intercooler. It is strongly advised that in order to drill the crash bumper it is removed from the vehicle first, to prevent any damage to the air condenser radiator.

To remove the crash bumper there are three 13mm nuts at each side that are visible looking at the front of the vehicle and two lower 13mm bolts visible from the rear of the front panel. The front panel is also attached on the lower edge each side with a T25 screw.

With the crash bumper removed the position the hole is to be drilled can be centre punched and if available, a smaller diameter drill used for a "pilot" hole prior to drilling the 6.5mm or ¼ " hole. Due to the material the crash bumper is constructed from this operation made prove to be slow and difficult. The use of lubricating oil at the drill tip may assist this operation. On successful completion of this task the crash bumper can then be refitted as a reversal of the removal procedure.

Fit the two silicone hoses and bayonet fitting using the hose clamps provided.



The front panel, grill, wheel arch liners of the vehicle can now be refitted as a reversal of the removal procedure not forgetting to reconnect the light and sensor connectors.



You can now enjoy the additional performance of your new intercooler.

Thank you for buying Forge Motorsport products.

