

## **XE (Mondello) Induction System Fitting Guide**

### ***Introduction***

This kit was conceived for a Caterham Se7en running with an XE engine but can be suitable for any vehicle running a 2.0 16v Vauxhall XE engine (up to 210BHP). Air is picked up by a 'Mondello' scoop mounted on the top of the nose fairing and feeds a bespoke airbox attached to the throttle bodies or carbs. Filtration is achieved through the use of trumpet socks. This Induction System is available with Carbon Fibre or Glass Fibre pre-preg material options.

Testing showed that intake noise was reduced whilst performance was unaffected.

### ***ReVerie Parts Included***

The induction system includes the following ReVerie components:

- 'Hockenheim XE75' Airbox Kit (box, XE backplate & fittings)
- 'Mondello 75' Intake Scoop
- C1150 Dual Trumpet Sock Filter DCOE
- Ducting (75mm)
- Hose Clips
- Scotchweld DP490 Epoxy Adhesive
- Mondello drilling template

### ***Tools and Materials Required***

No specialist tools or equipment are required to fit a ReVerie induction kit. For best results we recommend using the following tools:

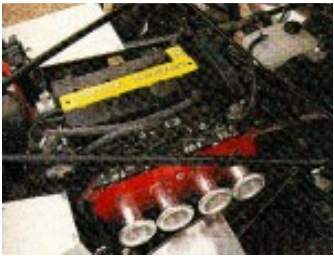
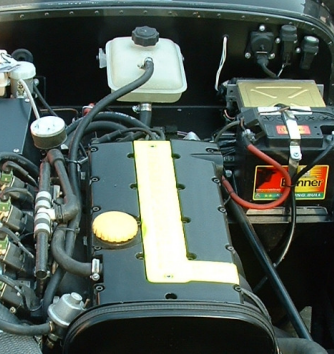

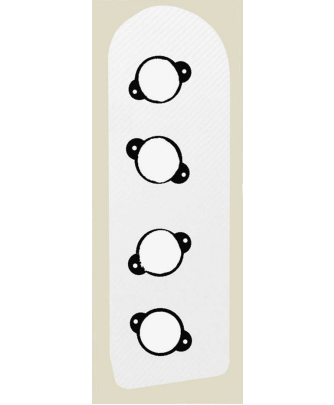
- Set of Spanners (for removal of trumpets)
- Flat Head Screwdriver (for hose clips)
- 3mm Allen Key (for airbox fasteners)
- Drill Bits (to drill clearance holes for the inlet trumpet fixings and pilot holes for the choke hole centres)
- Hole Saw or Dremel with grit/diamond tip cutter (to cut choke holes/snorkel entries)
- Rotary Sander (for careful enlargement of choke holes when necessary)






To make installation easier, having the following materials to hand is advisable:

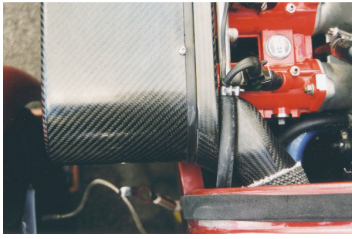
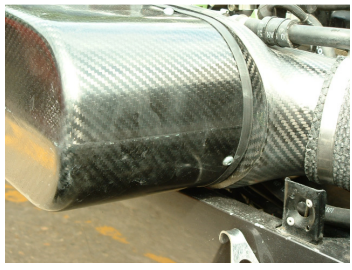

- Thread Sealant (such as Loctite Threadlock)
- Air Filter Oil
- Spray Mount Adhesive
- A piece of A3 paper

## Instructions

Please read fully before starting installation.

	<ol style="list-style-type: none"> <li>1. Remove existing air filter from the engine and leave trumpets attached to throttle bodies/carbs.</li> </ol>
	<ol style="list-style-type: none"> <li>2. To allow for the installation of the induction system it is necessary to move the coolant bottle from its original position. ReVerie recommends mounting it on the engine bay bulkhead and lengthening the coolant hoses, as shown.</li> </ol>
	<ol style="list-style-type: none"> <li>3. Offer up the airbox without its backplate to check for clearance. It is possible that the airbox may require some trimming to ensure it doesn't foul the front mudguard on full lock. Use of a template might make visualisation of this easier. Once happy that sufficient space is available bolt the airbox to the backplate ready for the next stage of fitting. Note that there should always be at least a 25mm gap between the airbox and trumpet mouths.</li> </ol>
	<ol style="list-style-type: none"> <li>4. Use a small amount of spray mount adhesive to attach the paper to the backplate. Remove the inlet trumpets from the carbs or throttle bodies and rub grease/vasoline around the trumpet mounting face. Carefully position the airbox so that the backplate is in the correct position relative to the throttle bodies or carbs (making sure that the airbox is at the correct height and angle to package inside the bonnet or fit through the bonnet aperture as applicable) and then push the backplate firmly against the greased surface to leave a clear imprint of the fixing and choke hole details. Note that if space is tight the airbox may require trimming before this stage can be achieved. If this is the case please follow the trimming instructions (Note 7.) shown below.</li> </ol>

	<p>5. If you are happy with the quality of imprint or are using the template, remove the backplate from the airbox. Mark the centres for the choke holes and all the fixing holes. Drill all the fixing holes to the appropriate size and small pilot holes for the choke hole centres. Then cut the choke holes. To cut a clean choke hole we recommend the use of a grit/diamond tipped hole saw or a Dremel with an appropriate attachment. The size of the choke hole can be increased by using a rotary sander with care (use 80 or 120 grit). Holes for other features (e.g. air flow sensors etc.) should also be cut at this stage. The location of these is best achieved through use of a template from the previous backplate used.</p>
	<p>6. Some throttle bodies require the trumpet bases to be pressed off the trumpets. The bases are often bonded in place and heat might need to be applied to weaken the adhesive. Once apart the trumpets can be pushed through the carbon backplate before being rebonded (with DP490) and pressed back together. In the case of the Weber Alpha system, the trumpet bases are threaded allowing direct fixing to the backplate via bolts.</p>
	<p>7. If the airbox requires trimming for packaging purposes (i.e. bulkhead/body in the way, fouling condition with steering on full lock etc.) this can be easily achieved. Whilst the composite can be cut using a hacksaw the cleanest cut is achieved by the use of a diamond or carbide cutting disc tool with a high rotational speed (such as a Dremel). It is best to take a rough cut first and then double check measurements before making a final precision cut.</p>
	<p>8. Bolt the backplate to the carbs/throttle bodies with the inlet trumpets in place or push the trumpets into silicon hoses and clamp as appropriate. Push the trumpet sock filters over the trumpets. Refit the airbox and ensure there are no foul conditions. Where the airbox protrudes through the bodywork small amounts of trimming might be required if the airbox is larger than the previous foam filter.</p>
	<p>9. It is now possible to locate the 'Mondello 75' intake scoop. ReVerie recommends fitment on the offside (i.e. the same side as the Airbox) towards the rear of the nose fairing (as shown). Locate the scoop so that there is sufficient space to route the 75mm micropore ducting from the Mondello exit and that there are no fouling conditions.</p>
	<p>10. Use the Mondello drilling template to mark hole centres for the mounting studs and the cut out area for the scoop. Drill the hole centres using a pilot drill first. Cut out the scoop area using a Dremel or similar (as directed in Note 7).</p>

	<p>11. Bolt the Mondello scoop in place and connect the micropore ducting to it using a hose clip provided. Reattach the nose fairing to the car. The other end of the ducting connects to the airbox backplate, as shown. Secure in place with a hose clip</p>
	<p>12. The airbox can now be semi-permanently attached to the backplate. The deep threaded U-nuts and fixing holes can be moved to wherever is most appropriate for best access as shown (positions provided in factory items are only for guidance). Use thread sealant on all the bolts and screw into place so that they are all hand tight.</p>
	<p>13. Everything is now in place and the new induction system can be enjoyed!</p>

For best performance the trumpet sock filters, housed in the airbox, should be cleaned regularly using detergent and lubricated with a proprietary filter oil. If you have any queries or questions regarding installation, contact ReVerie using the details shown on this fitting guide.