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Hockenheim/Interlagos Airbox Fitting Guide

Introduction

This range of airboxes is designed to fit any engine from 4 to 12 cylinders in most configurations. A fitting kit is supplied that includes a blank backplate or base box that can be drilled to suit throttle bodies or carburettors, a nitrile rubber seal, U-nuts and bolts. A range of snorkels are available that can be bonded in place to allow connection to a remote filter via ReVerie's 'Micropore Ducting'. Alternatively, where space permits trumpet socks can be used within the airbox. All the 'Hockenheim' and 'Interlagos' airboxes are available in Carbon Fibre or Glass Fibre pre-preg.

The airboxes can be trimmed down to the required depth (no more than 20mm on the 'Interlagos') to fit within constraints caused by bulkheads, chassis rails, etc. For boxes trimmed at an angle or offset a flat backplate is required. Please ensure that there is sufficient space to package your chosen airbox before cutting, drilling or altering the airbox in any other way as ReVerie cannot exchange or refund modified parts. These airboxes are only suitable for naturally aspirated engines.

Instructions for parts: R01SE0036, R01SE0074, R01SE0105, R01SE0096, R01SE0432, R01SE0454, R01SE0473, R01SE0458, R01SE0480, R01SE0452, R01SE0453, R01SE0337, R01SE0332, R01SE0030, R01SE0033, R01SE0077, R01SE0078, R01SE0090, R01SE0093, R01SE0099, R01SE0102, R01SE0118, R01SE0121, R01SE0124, R01SE0127, R01SE0131, R01SE0133, R01SE0139, R01SE0140, R01SE0141, R01SE0142, R01SE0143, R01SE0144, RO1SE0145, RO1SE0146, R01SE0186, R01SE0188, R01SE0333, R01SE0338

ReVerie Parts Required

To fit an 'Interlagos' or 'Hockenheim' airbox to a typical engine you will need the following components:

- 'Interlagos' or 'Hockenheim' Airbox Kit
- Snorkel(s) (58, 75, 100 or 152mm)
- Trumpet Socks, Remote Foam Filter or Filter Canister Kit
- Ducting (58, 75, 100 or 152mm)
- Hose Clips

Tools and Materials Required

No specialist tools or equipment are required to fit a ReVerie airbox. 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)

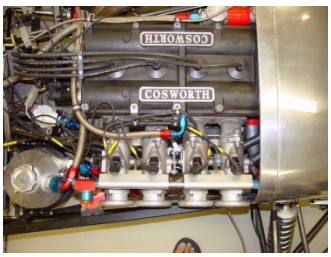
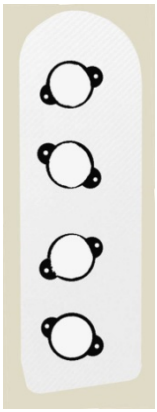
To make installation easier, having the following materials to hand is advisable:

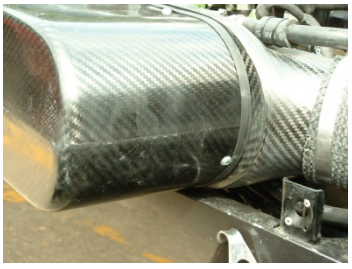
- Sheet of Paper (large enough to cover the backplate)
- Spray Mount Adhesive

- Grease or Vasoline
- A good quality epoxy adhesive (we recommend Scotchweld DP490 available from the ReVerie Online Store or by mail order)
- Thread Sealant (such as Loctite Threadlock)
- Air Filter Oil

Instructions

Please read fully before starting installation. If using a flat backplate read the appendix.

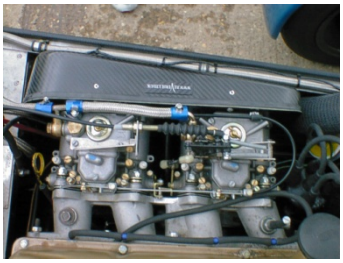
	1. Remove existing airbox/air filter from the engine and leave trumpets attached to throttle bodies/carbs.
	2. Offer up the airbox without its backplate to check for clearance. It is possible that the airbox may require some trimming to fit within the constraints of the engine bay. Use of a template 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.
	3. 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) 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 5.) shown below.
	4. If you are happy with the quality of imprint, 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 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. (NB - image shows flat backplate).
	5. 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.

	6. Bolt the backplate to the carbs/throttle bodies with the inlet trumpets in place. Refit the airbox and ensure there are no foul conditions. Where an airbox protrudes through the bodywork small amounts of trimming might be required if the airbox is larger than the previous filter.
	7. It is now possible to choose the best location for intake snorkels. Note that these are not necessary on the 'Hockenheim' airbox with an 'XE backplate'. To keep the installation neat it is best to fit snorkels within the engine bay but it should be remembered that access to the hose clips will be required for future servicing. The snorkels can be attached in any position where there is sufficient space on the airbox. It is essential that the total snorkel area does not restrict the engine's breathing. ReVerie can provide guidance on this but generally speaking for an engine producing 300bhp or less a single 100mm snorkel, three 58mm snorkels or one 58mm and one 75mm snorkel should not cause a restriction.
	8. To attach snorkels to the airbox first trim holes of the appropriate diameter (following the instructions shown in Note 4.) ensuring that there is enough space between each snorkel to allow the attachment of ducting and hose clips. The snorkels feature a flange that provides a bonding surface. For best fit this might need a little trimming in some areas. Before bonding, key the bonding surfaces (the snorkel flange and the appropriate area on the inside of the airbox) with some 120 grit sandpaper and then thoroughly clean and degrease the surfaces using acetone, petrol or similar. Apply epoxy adhesive to the snorkel flange and push into place. It is advisable to clamp the bond surfaces or apply a weight to prevent the snorkels moving and give the best bond whilst the adhesive cures. Increased temperature can speed cure times and this is best achieved through use of an oven or an upturned carboard box with a fan heater inside and a few vent holes in the top. Do not exceed a cure temperature of 90°C as the airbox may distort.
	9. The airbox can now be semi-permanently attached to the backplate. Use thread sealant on all the bolts and screw into place so that they are all hand tight. With the airbox in place it is now possible to route ducting to it from a remote filter, filter canister or intake scoops (where trumpet socks have been used). 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).

For instructions on the fitting of a remote filter, filter canister or intake scoop please read the appropriate instructions, all available from ReVerie. It should be noted that for best performance induction air should be picked up from an area with good airflow and where the air is as close to ambient temperature as possible.

Appendix – Flat Backplate

If you are using a flat backplate with your ReVerie airbox use the following instructions to ensure a good fit between the components.

	1. The flat backplate airbox kits are supplied with angle brackets to allow fixing of the backplate to the airbox. The angle brackets can be permanently attached to either the backplate or the airbox by use of an epoxy adhesive and a single rivet to maintain its position during cure. Shown here are brackets attached to the backplate.
	2. Line up the airbox so that a good seal is made and then drill through the box and angle brackets (it is usually best to mark the position of the brackets on the airbox before doing this). Start with a 3mm pilot drill and then drill through with a 5.5mm clearance drill.
	3. Remove the airbox and fit the deep threaded U-nuts to the angle brackets. If necessary the hole in the angle bracket can be slotted and the U-nut placed on the side of the bracket so that it can slide up and down allowing the box to be pushed home hard. When happy with the seal, hand tighten the bolts. The airbox shown here has the brackets bonded and riveted to the airbox and relies on the bolts to pinch the seal.