

The Elan Factory – Product Data Sheet



Lotus Esprit Turbo radiator fan cowling (Lotus part number E082K4102K)

If your Esprit still has the original radiator shroud then it's a good practice that the assembly should be checked periodically for cracks. The standard item was manufactured from moulded ABS and this produced a reasonable looking component. Unfortunately ABS does not withstand constant vibration and temperature cycling very well. Despite the fan support hoops imparting a certain amount of strength to the assembly, many Esprits continue to be driven with cowlings that are badly cracked and fans that are about to drop out on to the road.

From experience gained in our workshop, the radiator fan cowling is understood to play a vital role in channelling the air through the radiator. This component is often overlooked and once it breaks, is then completely removed from the radiator. Several vehicles have been observed where the cowling has been discarded and aftermarket fans have fastened directly to the radiator core. If there is no fan cowling fitted, then there is cross-talk present between the fans which in turn cause a dramatic drop in efficiency. This type of modification should be avoided as installing fans without a shroud causes over-heating problems. Fastening fans (whatever type) directly to the radiator core should also be avoided. The fan manufacturers' instructions may suggest this practice is quite appropriate but with the passage of time, constant vibration, and slight movement will eventually cause the radiator to fail.

After evaluating several potential solutions, The Elan Factory decided there were sufficient positive attributes to warrant remanufacturing the original component but in a more durable form of fibreglass instead of ABS. By duplicating the existing component, this allows the original fans to be re-used thus producing an elegant solution that is both plug-n-play and cost effective.

We have stocks of shrouds and can provide a fitting service upon request. All fan shrouds are supplied with 12 month warranty. It is also possible to supply and fit more efficient fans units. Please call for details.



The adjacent photograph portrays the original fans and mountings that have been transplanted from an old cracked shroud to a new fibreglass fan shroud.

This is reasonably straightforward but first the radiator and fan shroud assembly must be removed from the vehicle.

The next step is to dismantle the damaged shroud by removing the assembly from the radiator and then releasing the fans by drilling out the pop-rivets. Once the fans, supports stays and hoops are free, they can then be fastened into the new fibreglass shroud. Care should be taken not to damage the radiator core during this process. Once the fans are fastened in their respective locations, the interconnecting wiring loom must be fastened to the shroud by means of tie-wraps (zippy-clips). It is recommended that all three fans be tested off the vehicle before being installed into the new shroud.

Once the radiator and shroud have been re-installed on to the vehicle, the engine should be run up to check that the fans operate at the correct temperature.

Check the fan fuses and relays are of the correct rating.

Note: This same fan shroud (Lotus part number E082K4102K) was installed on the following vehicles as original equipment: Lotus Esprit S3 (normally aspirated), Lotus Esprit turbo, HCl, Lotus Esprit X180, Turbo Esprit SE, S4, S4s, Sport 300. The new fibreglass component is a direct replacement and no modifications are required.

Copyright © 2007 All rights reserved.

Cannot be reproduced or published without the expressed written consent of:

The Elan Factory

www.elanfactory.com.au

sales@elanfactory.com.au

Tel (613) 9761-1903

Fax (613) 9739-8944

12 September 2007