

VENTILATING INTERIOR OF ELAN

Club member Tom Dill has developed a flow through ventilation system that beats heat in the Elan coupe and could easily be used in the Elite as well. The total cost was around \$10.00 and fifteen man hours. The system in its present stage consists of two 2" dia. inlet ducts routed from the grill into the dash area where it blasts the passengers with a good steady stream. Just completed are two vents which were adapted to the Lotus crest badges on the roof panels. The noise level is only slightly increased from these additional opening and the effect is such that it takes slow traffic and 90 degrees plus weather to necessitate lowering the windows.

The ducting itself may be purchased in varying diameters from 1" to 3 $\frac{1}{2}$ " diameters, in 6 foot lengths, (one for each duct) at many auto supply stores. It was found on the '67 Coupe that 2" dia. was the maximum suitable for routing to the location chosen (outside the dash wood on the plastic cowling between the windows and the dash). It seems even smaller diameters must be chosen for certain earlier models if the same outlet area is used. One club member routed his outlets through the radio opening area. This position might allow even larger diameters. The ducting material on mine was routed from its opening in the dash cowling above the steel reinforcing rods found there, through the fender panel, down along the fender well, back through the fender panel near the headlight to the grill. You will need an electric drill and a circle-cutter attachment for the 2" dia. holes in the fiberglass. Incidentally these holes have shown no signs of cracking for over 5000 miles. Radiator hose clamps were drilled to accept short machine screws, holes drilled through the fender well, and the ducting routed high in the well and secured with the clamps. Be careful on the right fender as improper routing may result in chaffing of tire on duct at full lock.

To mount the loose end of the duct which has been routed to the dash it is first necessary to cut a 2" dia. hole in the plastic cowl on each edge of the dash. This material is soft enough so that an electric drill may be used as a reamer. The trickiest part of all is building or adapting a regulating device. Members may find they can adapt units from other cars which use cables and remote butterflies, nozzles, etc. My units are "scratch" items made of 2" dia. chrome exhaust tip, steel wire, and two $\frac{1}{4}$ " thick (hand cut and finished) walnut discs which act as butterflies. The duct is a press fit inside the metal tube which is drilled for a steel wire acting as swivel pin for the disc. The adjustment of the completed unit is simply to adjust the wooden butterfly the desired opening, the tube itself is what is mounted through the cowl hole.

To exhaust the incoming air (or other hot air) in the car the Lotus emblems were pulled off of the coupe and a 3/4" dia. hole drilled in the space beneath them. On coupes you must drill through fiberglass, a cardboard liner and the vinyl headliner. A plastic tube is inserted and cut flush with the outside panel. The tube can be epoxied, glued or left a tight, press-fit. The emblem is modified slightly before replacing over the tube. To promote better draw characteristics some of the chromium is ground away on the lower inside edge. A sponge rubber gasket is used to waterproof the vent opening and to make the badge stand away from the opening for better scavenging. When the emblems are replaced they appear stock, but are functional. The completed vents will draw cigarette smoke from 30 mph on. Roadster owners may not experience the need for the vents (nor perhaps for the system itself), but probably would enjoy the additional air. It was noted after this system was installed that certain late model Elans have tiny versions of this system sans vent, but inadequate for Southern California.