

WATER TEMPERATURE GAUGE CONVERSION

by Dean Price

Most Lotus owners have replaced or rebuilt the Smith's water temperature gauge at least once, some long-time owners as much as two to three times.

As replacement cost is approximately \$25, and rebuilding cost \$12.50 (at Nisonger's or Sullivan Speedo Shop in Hollywood), this gets to be a bit much after the 2nd or 3rd such episode. The villain, of course, is the hollow capillary tube which apparently becomes embrittled with age and exercise, and finally breaks, losing all its gas to the atmosphere, rendering the gauge inoperative.

Many methods have been attempted to immobilize the capillary tube at possible breaking points, but most are ineffective, and after all, are only efforts to prop up an obsolete piece of equipment. The answer, friends, is to substitute the STEWART-WARNER electrical water temperature gauge which functions on electrical impulse rather than by mechanical impulse supplied by expanding gases in the capillary tube. This means no capillary tube, but a simple 14-16 gauge wire running out to the sending unit which with 3/8's" pipe thread, screws readily into the hole vacated by the capillary tube and adaptor.

As the original gauge in Elans is a dual gauge, incorporating oil pressure, I moved it to the far right side of the instrument group, first removing the water temperature needle which is no longer operative. A 2" holesaw, used carefully, does the job and the oil tube can now be re-routed out the right side of the firewall and the engine, eliminating the more circuitous route used originally.

The gauges come in the same flat black and white as on the Smiths unit, but have a different bezel. A nice touch is to put the Smiths bezel on the S-W gauge by carefully grinding through the S-W bezel which is crimped in place. After this is done, there remains sufficient rim to be carefully trimmed with shears to fit within the Smiths bezel (obtained at wrecking yard or ?). Only the bezel need be purchased as the glasses are interchangeable.

Following are the necessary part numbers. Stewart-Warner has a big shop in L.A., but cheapest source is J.C. Whitney in Chicago. Also Beedee in Pasadena stocks S-W parts at discount to Lotus/Westers although discounted price still can't match Whitney's catalog price.

Gauge - #D 311W  
Lighting kit - #366-CH  
Sending Unit - #D-362-AJ