7 Ignition

Distributors

No fewer than five different distributors were used on the twin-cam, all with varying degrees of advance. Since they all appeared to function on the same basic engine, how could they work correctly with as much as 12 degrees difference in advance between them? Unfortunately, once again, the various workshop manuals are misleading, and the earlier manuals are wrong.

Before unravelling the complexities, and explaining why different distributors were used, one particular aspect must be cleared up, namely that Lucas distributors 23D4 and 25D4 were current at the same time. The 25D4 had a vacuum retard mechanism, while the 23D4 did not. The early 25D4 (as stated in the workshop manuals) is not the same as the late emission/European 25D4. Distributors used by Lotus on the twin-cam engine are shown in the table below.

Model	Number	Introduced	Ignition advance (distributor degrees)	Engine use
23D4	40953	18 September 1963	11–13	Standard Weber, Elan, L/Cortina. All domestic Strombergs on Elan, +2, Europa
23D4	41189A	6 March 1967	6–8	All S/E engines on Elan, +2, Europa, L/Cortina S/E, Escort T/Cam, all domestic Big Valve engines
25D4	40930	early 1962–63 (ceased early 1964)	12–13	1498 cc T/Cam, early 1558 cc T/Cam on Elan, L/Cortina
25D4	41225A	3 January 1968	6–8	Federal exhaust-emission Strombergs only—all types, Big Valve Dellorto, domestic and European, ECE 15 regulations
25D4	41225 (vacuum retard removed)		6–8	European, late-model domestic Big Valve engines, pre ECE 15 regulations