

## Overview of Aftermarket Ignition Systems for the Fiat Dino, Ferrari Dino and Lancia Stratos Stradale

V 3.2, 01/2011, www.dinoplex.org, info@dinoplex.org

Ignition System	Points Trigger	Optical Pickup	Magnetic Pickup	Hall Pickup	Crankshaft Sensor	Inductive Ignition	Has Current and Dwell Control*	Capacitive Ignition	Electronic Advance	Programmable Advance	Trigger Setup	Ignition Controller	Maximum Coil Current (Inductive Ignitions)	Coil	Cost	Requires a tach adapter**	Good Value	Advantages	Originality	Time to install & setup	Comment
<b>Ferrari Dino 206 GT &amp; 246 L Series</b> Factory installed, S125 AX-15/BX-15	X							X			Two set of Points, three lobe cam. Points are wired in parallel.	Magneti Marelli Dinoplex C AEC 101 D/DA Electronic capacitive discharge ignition	n/a	Magneti Marelli BZR 205A	€400-800 (used, good condition) Rarely offered.	no	•	•	++	++	Magneti Marelli Dinoplex C capacitive ignition. Powerful CD ignition and relatively easy to repair if it breaks. Requires BZR 205A coil with three terminals, won't work with standard/CDI coils with only two terminals.
<b>Ferrari 246 GT Ignition, up to '70/'71</b> Factory installed, S125 AX-15/BX-15	X							X			Two set of Points, three lobe cam. Points are wired in parallel.	Magneti Marelli AEC 103A Electronic capacitive discharge ignition	n/a	Magneti Marelli BAE 200A	€300-600 (used, good condition) Rarely offered.	no	•	•	++	++	Magneti Marelli AEC103A ignition. Very difficult to repair if it fails as the internals are potted in epoxy.
<b>Ferrari 246 GT Ignition, '70/'71 - '74</b> Factory installed, S125 C	X							X			Two set of Points, six lobe cam. Second set of points retards ignition and is activated via throttle microswitch.	Magneti Marelli AEC 103A Electronic capacitive discharge ignition	n/a	Magneti Marelli BAE 200A, 203A	€300-600 (used, good condition) Rarely offered.	no	•	•	++	++	Magneti Marelli AEC103A ignition. Very difficult to repair if it fails as the internals are potted in epoxy.
<b>Lancia Stratos HF Stradale Ignition</b> Factory installed, S125 C	X							X			Two set of Points, six lobe cam. Second set of points retards ignition and is activated via throttle microswitch.	Magneti Marelli AEC 103A Electronic capacitive discharge ignition	n/a	Magneti Marelli BAE 203A	€300-600 (used, good condition) Rarely offered.	no	•	•	++	++	Magneti Marelli AEC103A ignition. Very difficult to repair if it fails as the internals are potted in epoxy.
<b>Pertronix Ignitor I</b> www.pertronix.com			X			X					Marelli S125 converted to contactless Magnetic Pickup and trigger sleeve.	Pertronix Ignitor MR-161 (S125AX/BX) with a magnetic sensor driving an IGBT transistor.	4.0 A	Pertronix FlameThrower 40001 or third party coil with a minimum of 3.0 Ohm resistance	\$120 + Coil	yes	+	•	+	+	Distributor conversion to magnetic trigger, easy to install. Not recommended as full ignition setup for the Dino as the Ignitor I considerably lowers the coil output current as soon as it gets hot which happens quite fast in the Dinosaurs engine compartment. Good choice for triggering a Dinoplex or other points triggered ignition.
<b>Superformance AEC103A Replica</b> www.superformance.co.uk	X					X					Standard Marelli S125 Distributor/points	Super4 OEM transistor ignition installed in an AEC103A replica enclosure	3.5 A	Bosch Red Coil (0221 119 030) with resistor	£299.50 (ignition, coil and resistor)	no	+	•	++	++	AEC103 replica based on the Super4 transistor ignition. Dwell is controlled by the original points setup so you need to take care that your point dwell setting is ok.
<b>Crane XR700 (700-0231)</b> www.cranecams.com		X				X					Marelli S125AX/BX/C converted to Crane Optical Trigger pickup	Crane XR700 Ignition Module	4.5 A	Crane PS20/PS40	\$107 + coil	yes	++	+	-	+	Electronic transistor ignition, distributor conversion to optical trigger.
<b>Crane XR3000 (3000-0231)</b> www.cranecams.com		X				X	X				Marelli S125AX/BX/C converted to Crane Optical Trigger pickup	Crane XR3000 Electronic Ignition Module	4.5 A	Crane PS50/PS60	\$139 + coil	yes	++	+	-	+	Advanced electronic transistor ignition featuring dwell and current control, distributor conversion to optical trigger.
<b>Lumention Performance Optronic CEK150</b> www.autocar-electrical.com		X				X	X				Marelli S125 converted to Lumention optical pickup CET150	Lucas CEM Power Module	5.5 A	Lumention CEC Constant Energy Coil	£250 (Kit, contains all parts)	yes	+	+	-	+	Points to optical pickup conversion, uses Lumention transistor amplifier PMA50. Fixed dwell. OS50 optical pickup and rotor (Part# FK425 or FK9) must be adapted to Marelli distributor, no ready made conversion kit is currently available. Requires suppressed spark wires to avoid EMV issues.
<b>Bosch High Performance Transistor Ignition (AEC101/103 DIY Conversion)</b> see www.dinoplex.org for wiring & howto's		X				X	X				Lumention CET150 pickup	Bosch 0 227 100 137 Advanced electronic transistor ignition module	7.8 A	Bosch TCI Coil 0 221 119 334	€280 (for all parts)	no	++	+	++	-	Bosch high performance ignition setup for converting a defective Dinoplex C or AEC103A to a modern ignition system while keeping the original appearance. Wiring & howto on www.dinoplex.org
<b>Perma-Tune PTFR Ignition</b> www.perma-tune.com		X						X			Standard Marelli S125 Distributor/points	Perma-Tune PTFR Ignition	n/a	Perma-Tune SC010 Coil	\$350 + coil	no	+	+	-	+	CD based ignition system delivering a single, powerful spark. Similar principle as the original AEC101/AEC103.
<b>Perma-Tune Dinoplex Conversion</b> www.perma-tune.com		X						X			Standard Marelli S125 Distributor/points	Perma-Tune Ignition (built into AEC 103 box)	n/a	Perma-Tune SC010 Coil	\$1300 + coil	no	-	+	++	+	Perma-Tune ignition build into existing Dinoplex box for stock appearance. Price includes conversion of supplied Dinoplex AEC103A unit.
<b>MSD 6AL-2 (#6421)</b> www.msdisignition.com		X						X			Standard Marelli S125 Distributor/points	MSD 6AL-2 #6421 (Digital)	n/a	MSD Blaster II Coil #8202	\$326 (ignition, coil and coil bracket)	no	+	+	-	+	Multi spark CD ignition with electronic rev limiter. Not really required for the low capacity/low compression Dino engine, more useful in large capacity engines with a high compression where the very high secondary voltage helps with the combustion and ignition cycle.
<b>Electronic distributor with coil</b> www.dinoparts.de			X			X	X				System is based on a new distributor made by 123ignitions, combined with a sleeve adapter to fit the Dino engine.	OEM transistor ignition made by 123ignitions.nl, with one preprogrammed advance curve	3.5 A	Bosch Red Coil (0221 119 030) with resistor	€898 (Kit, contains all parts)	yes	-	++	-	+	Replacement distributor with hall pickup and electronic advance map, no need to adjust advance weights anymore. Interesting product, although relatively expensive compared to a 123ignitions distributor for other six cylinder engines. One fixed timing map included, cannot be reprogrammed by the user.
<b>Black Stallion BSMpdi</b> www.superformance.co.uk www.blackstallionmotors.com.au			X			X	X				New Distributor using a Bosch cap and Siemens hall sensor	BSM Delta Advanced Ignition Module	7.8 A	Bosch TCI Coil for transistor ignitions	£1395.00 (Kit, contains all parts)	yes	+	++	-	-	Replacement distributor with hall pickup and electronic advance map. Very effective for more torque and a smoother running engine. No need to adjust advance weights anymore. Two advance curves can be programmed via a PC and selected from a dashboard switch. Fair price considering it comes with a new distributor, coil, a set of spark wires and is fully programmable.
<b>Electromotive XDI</b> www.electromotive-inc.com		X				X	X				Crankshaft Sensor and 60-2 trigger wheel, replaces the distributor with a multiple coil pack	Electromotive XDI configurable Ignition Controller	?	Electromotive DFU, wasted Spark OEM Coilpack	\$889 (Kit, contains all parts)	no	++	++	+	--	Advanced distributorless ignition controller with MAP sensor, advance is programmed using knobs on the controller unit. Very interesting price for the kit and does not require a laptop for setup although less configuration options than other systems.
<b>Megajolt/E</b> www.autosportlabs.com		X				X	X				Crankshaft Sensor and 36-1 trigger wheel, replaces the distributor with a multiple coil pack	MegaJolt/E programmable Ignition Controller	6.0 A	Ford EDIS6 wasted Spark Coil Pack	\$400-500 (includes controller, coil, sensor and trigger wheel)	no	++	++	+	--	Very advanced system, distributorless ignition controller with MAP or TPS sensor and programmable control unit. Two advance curves can be programmed via PC and selected from the dashboard. Excellent software. Good choice if you want to have absolute control and are not intimidated to set up your Dino on a rolling road. Supports Lamda, temperature and other sensors.

\* Current control ensures that the coil will not overheat  
Dwell control dynamically adapts the coil current based on the RPM

\*\* Ignitions which require a tach adapter to trigger the Dinosaurs electronic Veglia Tacho  
Compatible tach adapters include Crane's 8-2050 and ZMM's Ignition voltage converter  
Do not connect the Veglia tach directly to the ignition coil, this can damage the tach.