

# MicroDynamics

## SOLID STATE IGNITION RETARD SYSTEM

For Turbocharged, Supercharged, High-Compression and Multi-Fuel use.

### Type EMS6

- Designed for use with retro-fit turbocharger installations and boost upgrades on production turbo engines.
- Provides the corrections to the original ignition timing that are required for many types of performance upgrade.
- The EMS6 system works in addition to the engine's original ignition timing system which is left as standard for ease of maintenance and maximum off-boost flexibility and fuel economy.
- One standard kit suits all inductive ignition types, both contact breaker and contactless electronic with any type of ignition coil.
- May also be used in non-turbo applications to avoid detonation on full load.
- Simply wires to the vehicle's ignition coil without the need to interfere with any of the original connections or wiring.



**EMS6 OPERATION** - The unit receives input signals representing engine speed from the ignition coil and boost pressure from a manifold pressure sensor; it calculates the correct amount of ignition retard for the engine's load requirements and produces the necessary drive signals to modify the ignition timing.

**IMPORTANT NOTE** - EMS6 units are suitable for use with all Inductive Ignition Systems with all coil types (either electronic or contact breaker). Operation from C.D. or Multi Spark Ignition is not possible.

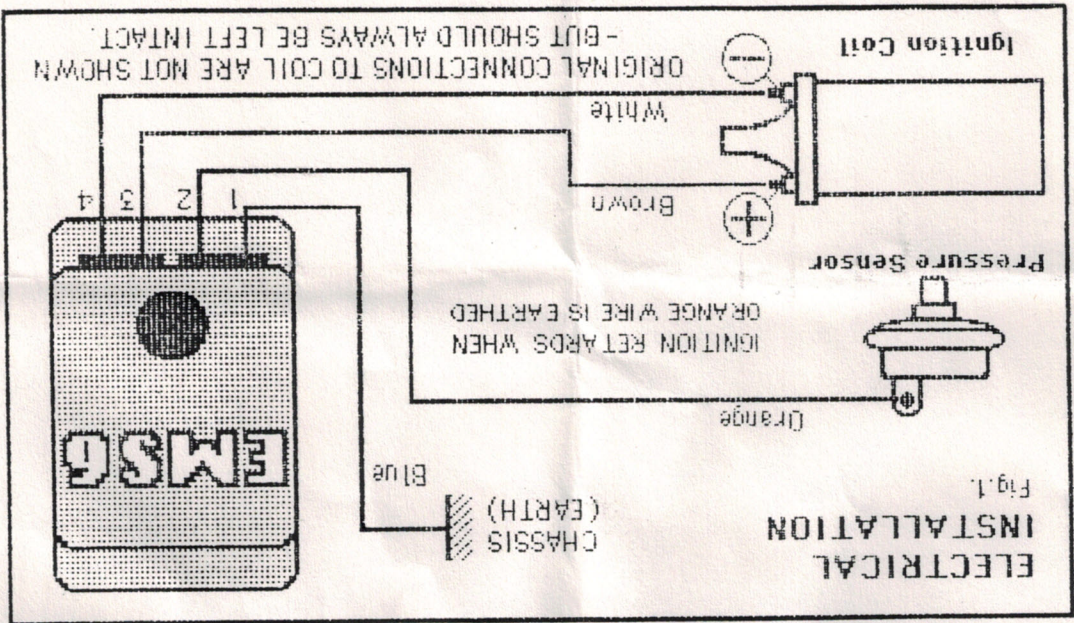


Fig.1.  
ELECTRICAL  
INSTALLATION

Alternative Applications  
 EMS6 units can also be manually switched for such applications as automatic timing control for DUAL FUEL ENGINES. The normal timing should be set-up for gas operation and the EMS6 wired such that it operates when the engine is running on petrol.  
 Manual switching may be achieved either by wiring normally and manually earthing pin 2 or by permanently wiring pin 2 to earth and switching the supply to pin 3 or even by switching between the coil (-) terminal and pin 4.