

TEST EQUIPMENT DIVISION

S400A-CR Injector Tester

COMMON RAIL INJECTOR TEST COMPARATOR

Comprising:

Merlin S400A

Air operated injector tester with S500-1 digital display monitor and printer.

Merlin S300-1

Common Rail Injector System suitable for piezo injectors as well as conventional solenoid types.

Merlin C 302

Twin Calibration Unit for measuring injector delivery and back-leak flows. The unit is supplied with 2 x 0-30cc glass measuring tubes calibrated in increments of 1.0cc divisions. MERLIN'S patented solenoid operated bottom fill/bottom drain system eliminates aeration and frothing of test oil normally caused by top fill systems. Bottom fill system enables instant readings to be taken on completion of count sequence. Rapid drain system automatically returns fuel level to a pre-set zero position.

Programmable electronic counter.



An affordable modular test system for the comparative testing of common rail injectors.

This system provides a simple effective method of flow-testing common rail injectors using test equipment from our product range.

The system consists of two test machines, Merlin models S400A and S300-1, plus a new twin tube calibrator for measuring delivery and back-leak flows.

When the modified Merlin S300-1 Common Rail Injector System is used in conjunction with the Merlin S400A Injector Tester, a common rail injector can be operated sufficiently to observe the nozzle spray pattern and measure the back-leak time.

The injector is then repositioned into a holder in the spray chamber from where delivery and back-leak flows are measured, over a set count and at a set air supply pressure, on the Merlin C402 Calibration Unit. Maximum rating is 700 bar, this is considered acceptable for the type of testing for which this unit is designed and will identify most faults with these injectors.

The S300-1 can generate pulses suitable to drive piezo injectors as well as conventional solenoid types and is designed to operate the Bosch, Delphi, Denso and Siemens series of automotive common rail injectors.

Notes:

This is a modular system which can also be used with Merlin S425A 2-spring injector tester. Standard S300-1's can be modified to fit the S400A-CR with appropriate price reduction.

