

INJECTOR TEST AND ULTRASONIC CLEANING SYSTEM

MULTIJET V6 / V4



A top line equipment which carries out the most important tests recommended by SAE for analysis of single and multipoint injectors, before and after ultrasonic cleaning. Tests up to 6 injectors at a time, performing the following tests:

FLOW AND EQUALIZING TEST

It allows observation of the volume injected and analysis of equal performance by the injectors (in the case of multipoint injectors). Tests are performed in two ways: accelerated flow and programmed flow.

LEAKAGE TEST

Through this test it is possible to check out injectors sealing when subject to a pressure 20% above operating pressure. Problems like wetting on the injectors' extremities, dripping, continuous jet and serious falling of pressure indicate leakage problems.

SPRAY AND TIMING TESTS

With a stroboscopic light it is possible to observe the injectors spray pattern. Tests are performed in two ways: accelerated spray or programmed spray. The Timing Test shows the geometry of the spray

pattern in various stages when the injector remains open. The measuring cylinders are emptied automatically right after the conclusion of the tests.

ELECTRIC TEST

This test checks the electrical properties of each injector, indicating if there are short circuits, burnt out coils and impedances out of specification.

ULTRASONIC CLEANING AND DIRECT JET

In this process, the injectors pulse in the vat with their extremities subject to a cavitation process that, through the action of ultrasonic waves, eliminate the deepest particles ('hammer' mode). All these features guarantee a deep and uniform cleaning in the whole vat.

Multijet V6 / V4 has the exclusive Direct Jet Cleaning Method which consists on a continuous activation of each injector for 3 seconds followed by a fast pulse, generating a turbulence that concludes the cleaning process.



Before cleaning

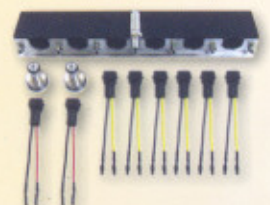


After cleaning

Technical Characteristics

- Power Supply: 110 / 220VAC (50 / 60Hz) • Manometer: 0 to 7 bar • Ultrasonic frequency: 40 KHz • Ultrasonic power: 90W • RPM Selection: 500 to 7000RPM • Opening time of injectors: 1ms to 10ms

ADAPTORS AND ACCESSORIES



MULTIJET V6 / V4



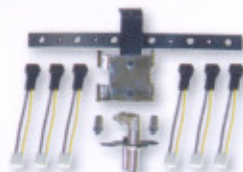
Nissan A Tsuru



Nissan B



Nissan C



ADAPTORS WITH SUPPORT (S10 4.3 V6)



ADAPTOR "O" Subaru

ADAPTORS (NT.: ref. CORSA and CELTA)



RAILE

Estrobojet



STANDARD RAIL



Filter extractor tool

FILTERS, O-RINGS AND LOWER PEAKS FOR INJECTORS



KRI001017
Bosch / Rochester System



KRI001020
Bosch System (Golf 1.8L 96)



Test and cleaning fluids

SONIC CLEANING SYSTEM

MULTIJET POP

HIGH POWER ULTRASONIC

Multijet POP was designed to fulfill a market need of a robust equipment with excellent quality and low cost.

Compact and easy to operate, Multijet POP checks the status of the single and multipoint injection systems, before and after the ultrasonic cleaning.

This equipment performs the main following tests:

FLOW AND EQUALIZING TESTS • LEAKAGE TEST • SPRAY TEST

ULTRASONIC AND DIRECT JET CLEANING

In this process, the injectors pulse in the vat with their extremities subjected to a cavitation process that, through the action of ultrasonic waves, eliminate the deepest particles ("Hammer" Mode). While other ultrasonic cleaning equipment use transducers in a tablet shape, Multijet POP has a cannon ultrasonic transducer with a self adjustment circuit, in a conical shape and 50W power (almost the double power of other equipment). All those features guarantee a deep and uniform cleaning in the whole vat.

STEPPER MOTOR TEST

This test moves the stepper motor piston in order to check its forward and back movements, being possible to remove the piston and thread for cleaning (which can be done in the ultrasonic vat), to couple them later on again, through the inverse process, avoiding damages in the stepper motor

Technical Features

- Voltage: 94 to 140VAC / 180 to 264VAC (47-63 Hz) • Ultrasonic frequency: 37 to 40 KHz • Ultrasonic operation: Light and Heavy Cleaning • RPM Control: 1000 / 3000 / 5000 RPM • Ultrasonic electronic timer: min. 15 minutes / max. 30 minutes • Electronic timer



ESTROBOJET



Spray Test

Multijet family equipment features an output for stroboscopic light (Estrobojet) for spray view.

SOME MULTIJET POP ADAPTORS. PLEASE CONSULT YOUR DISTRIBUTOR TO CHECK THE INJECTOR ADAPTORS AVAILABLE.



MULTICLEANER 750

Ultrasonic cleaning bowl for fuel injectors

Higher resistance and better performance to remove superficial or deep dirt particles.

Ultrasonic cleaning bowl designed to clean injection nozzles and small metal parts (except aluminum), plastics and glass.

WITH THE EXCLUSIVE "HAMMER" CLEANING SYSTEM and 50W POWER ULTRASOUND

Technical Characteristics:

- Voltage: 100V or 220V (50 / 60Hz)
- Ultrasonic frequency: 35 to 40 KHz
- Ultrasonic operation: Light / Heavy cleaning
- Injector frequency: 500RPM
- Injector's opening time: 20ms
- Timer: 6 min. (min.) / 30 min. (max.)

HIGH POWER ULTRASONIC



Multiservice Stand

EXCLUSIVE BIO-DEGRADABLE CLEANING AND TEST FLUIDS



"ULTRA CLEANER BIO" CLEANING SOLUTION

Totally biodegradable and eco-friendly solution. Neither flammable nor abrasive, with a slightly alkaline pH. It is concentrated for dilution in water for a totally homogeneous product. 0.5 liter of the solution makes 2 liters.

INJECTORS TEST AND CLEANING SYSTEMS