Introduction

Essentially, the GE90 2 x 25 gallon multi-engine compressor wash rig (JMP/GE90/D/4038/C200) is the same as the standard 2 x 25 rig (JMP/CFM56/D/4777/C200), except for the addition of chassis mounted external brackets housing the GE90-115B short engine probes supplied as standard.

Other probes are available for the GE90 rig if required and are listed below. For our full list of wash probes, lances and spray rings, please contact us direct or refer to the company website.

General

The GE90 2 x 25 gallon rig comprises two 115 litre stainless steel pressure vessels mounted on a rigid steel chassis, supported by three heavy duty wheels with 16" super elastic tyres, one of which is mounted on a heavy duty steering castor unit. A drawbar, which can be locked in the upright position for storage and safety, is attached to the steering castor unit with a drawbar operated parking brake acting on the front wheel when locked in the upright position.

Each tank is fitted with a filler cap, gauze strainer, pressure gauge, sight glass, pressure relief valve, 3/4" BSP drain valve and a 6kW immersion heater.

A ¼", 20 ft long, outlet delivery hose is stowed on the right side of the rig as viewed from the front, with a ½", 20 ft long, outlet delivery hose, together with a ¼", 20 ft long blow-off hose in the rear storage box for clearing the sensing tubes/hoses after a wash. Rubber protective collars are installed on the end of each hose to protect the couplings from damage.

Operation

The fluid in the tanks is pressurised by two rechargeable onboard nitrogen cylinders (a MS28889-2 Schrader charging valve is fitted to the rig for in-situ recharging) controlled by a regulator and distributed to the top of each pressure vessel via a nitrogen inlet manifold. There is also an optional Air Inlet Kit (JMP/CFM56/D/6612) available to enable the connection of offboard compressed air or nitrogen if required. Once pressurised, the fluid is forced up the outlet stack pipe to the appropriate fluid outlet isolation ball valve. From there it is directed through the filter, to the 3-way engine selection ball valve, which controls the output to the appropriate tooling via the outlet hose connection to the twin hose assembly.

The rig has two 6kW immersion heaters (one for each pressure vessel) requiring a 115V/200V. 3-phase, 400Hz electrical power supply to heat the tanks to a temperature of 70°c in one hour. The necessary power is supplied from a ground power unit (GPU) or hangar power supply. A 24V battery installed in the rig's electrical enclosure provides the power required for the interlock (necessary for the power to connect) to operate.

Size: (L) 2515mm x (W) 1067mm x (H) 1296mm Weight: (Dry) 352Kg

Packing crate dimensions: (L) 2642mm x (W) 1093mm x (H) 1524mm Weight: (Gross) 601Kg

Rig Variations

JMP/GE90/D/4038 (First appeared - 1996) Four wheeled chassis. 220V/240V, single phase, 50Hz electrical system.

JMP/GE90/D/4038/C200 (First appeared - 2005) The standard version of the rig. Specification as detailed above.

JMP/GE90/D/4038/C300 (First appeared - 2014) Static version of the rig. 380V/440V, three phase, 50Hz electrical system.

Probe sets available

JMP/GE90/D/4081 (Short probes) Developed for Boeing 777-200/200ER aircraft

JMP/GE90/D/4599 (Long probes -127½") Developed for Boeing 777-200/200ER aircraft

JMP/GE90-115B/D/4949 (Short probes) Developed for Boeing 777-300ER aircraft - Supplied as standard

JMP/GE90-115B/D/4948 (Long probes -135") Developed for Boeing 777-300ER aircraft

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ETAIL

DESCRIPTION





AIRCRAFT SERVICE EQUIPMENT 🔎 🛛

THE JUNIPER **GE90 2X25 GALLON COMPRESSOR** WASHING RIG JMP/GE90/D/4038/C200



On this version of our 2x25 gallon rig, chassis mounted brackets house the GE90-115B short engine probes supplied as standard.

> A demonstration hot water wash on a GE90-115B engine fitted to a Boeing 777-300ER aircraft for Singapore Airlines at Changi Airport, Singapore

2

A GE90 short engine probe (JMP/GE90/D/4081) anchored in position on a GE90-94B engine fitted to a Boeing 777-200ER aircraft for KLM at Schiphol Airport

The 2x25 gallon rig during a hot water wash on a GE90-94B engine fitted to a Boeing 777-200ER aircraft for KLM at Schiphol Airport







Above: The GE90-115B long engine probes (JMP/GE90-115B/D/4948) in position on a GE90-115B engine during a demonstration wash for Singapore airlines at Changi Airport

4

A GE90 long engine probe in position on a GE90-94B engine fitted to a Boeing 777-200ER aircraft together with the 2x25 gallon rig during a hot water wash for GAMECO at Baiyun International Airport, Guangzhou, China





The 2x25 gallon rig is the mainstay of the Juniper range; versatile enough to tackle most engines yet maneuverable enough for the remotest areas of an airfield. This GE90 version has the same specification as the standard rig with the addition of externally mounted GE90-115B short engine probes (JMP/GE90-115B/D/4949) supplied as standard. These probes will also fit the standard GE90 engines.

As part of Juniper's ongoing programme of development and improvement, the standard rig's two onboard nitrogen cylinders can now be supplemented with an Accessory Inlet Kit (JMP/CFM56/D/6612) enabling the connection of offboard compressed air or nitrogen to pressurise the tanks.

Now also fitted as standard, is our innovative electrical control system using 115/200v, 3 phase, 400Hz to power immersion heaters mounted at the base of each of the two tanks, fed directly from standard aircraft ground power.

For our full list of wash probes, lances and spray rings, please contact us direct or refer to the company website.