



**Juniper 2x25 Gallon Multi-Engine Compressor Washing Rig  
Part No. JMP/CFM56/D/4777/C400**

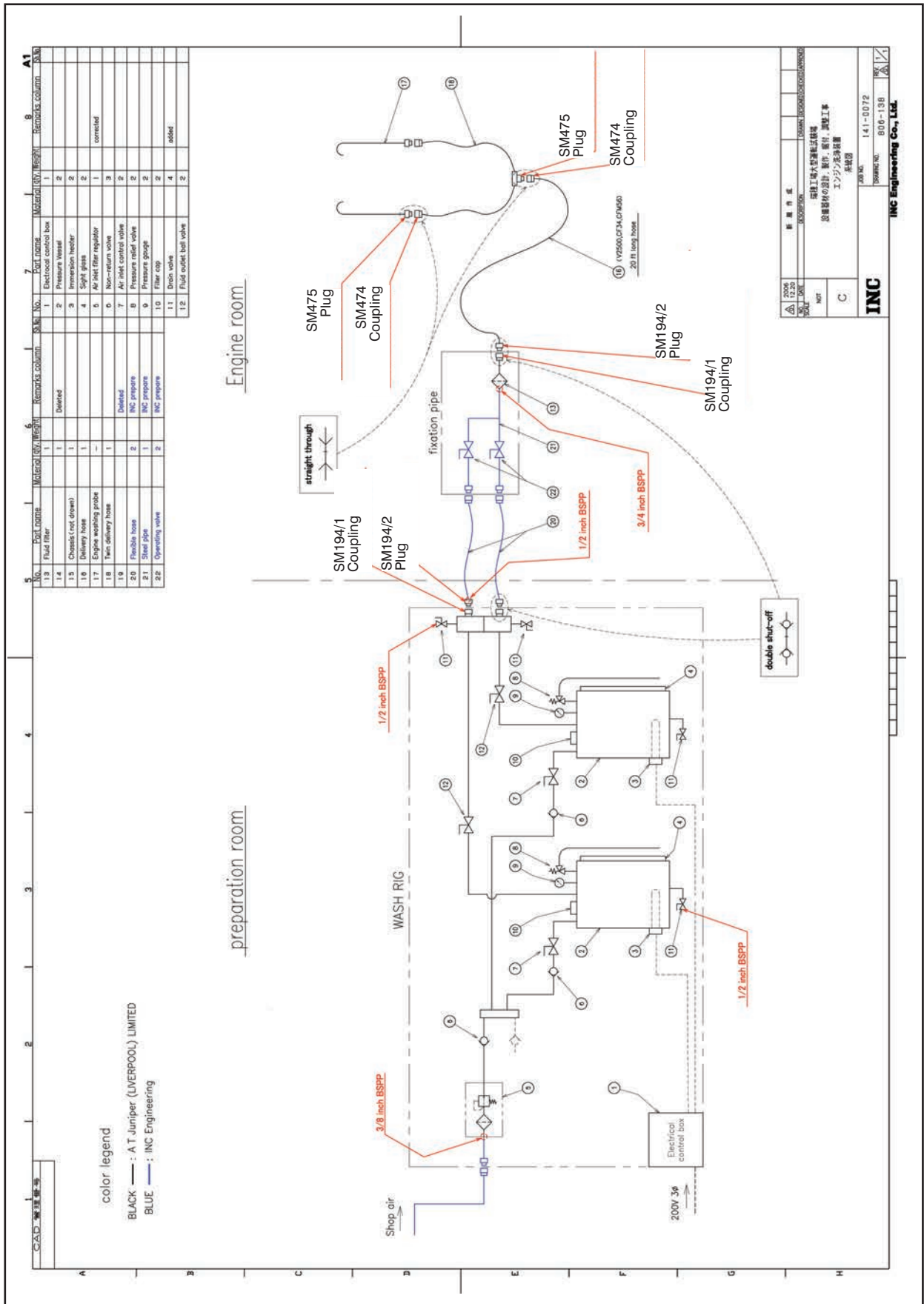
This rig is all as per our rig JMP/CFM56/D/4777/C200 but for the following modifications:



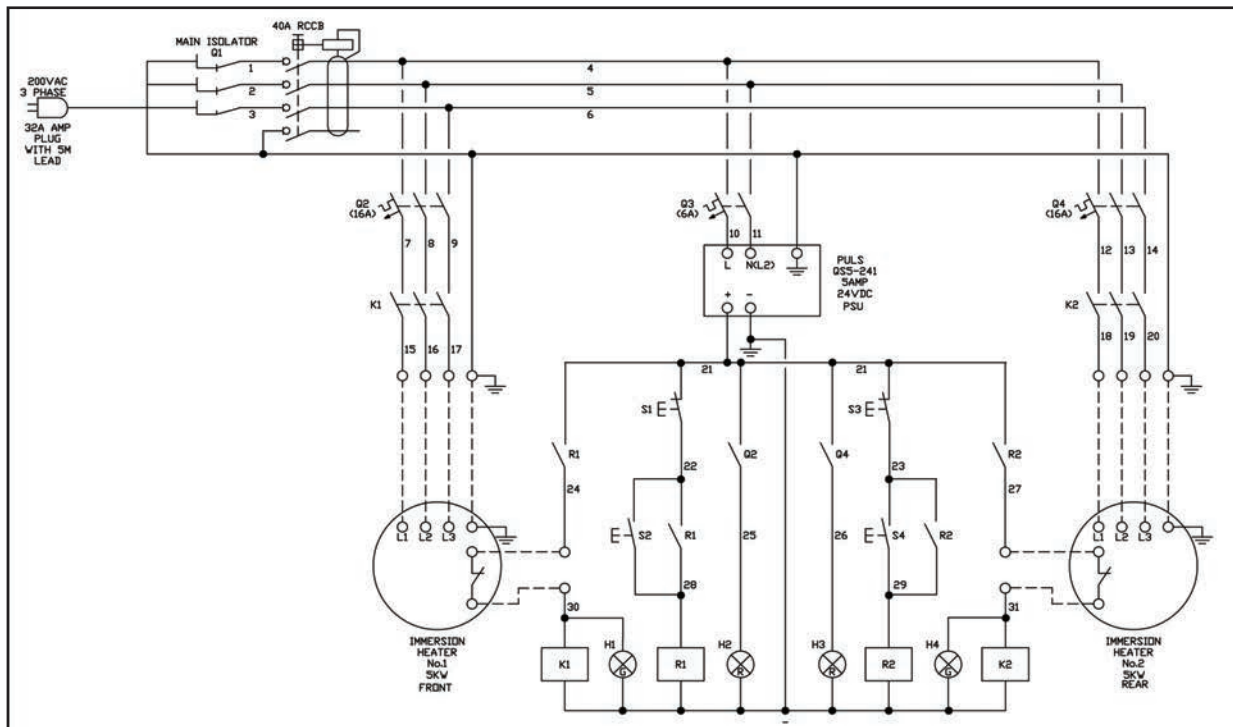
**The modifications are as follows:**

- The electrical system is designed for 460/480 volts, 3 phase, 60Hz.
- Box section fork lift tine guides incorporated on the underside of the rig.
- Delivery hoses increased in length from 15ft to 60ft.
- Includes a hand held 60" washing lance.

Schematic diagram of the re-configured system.

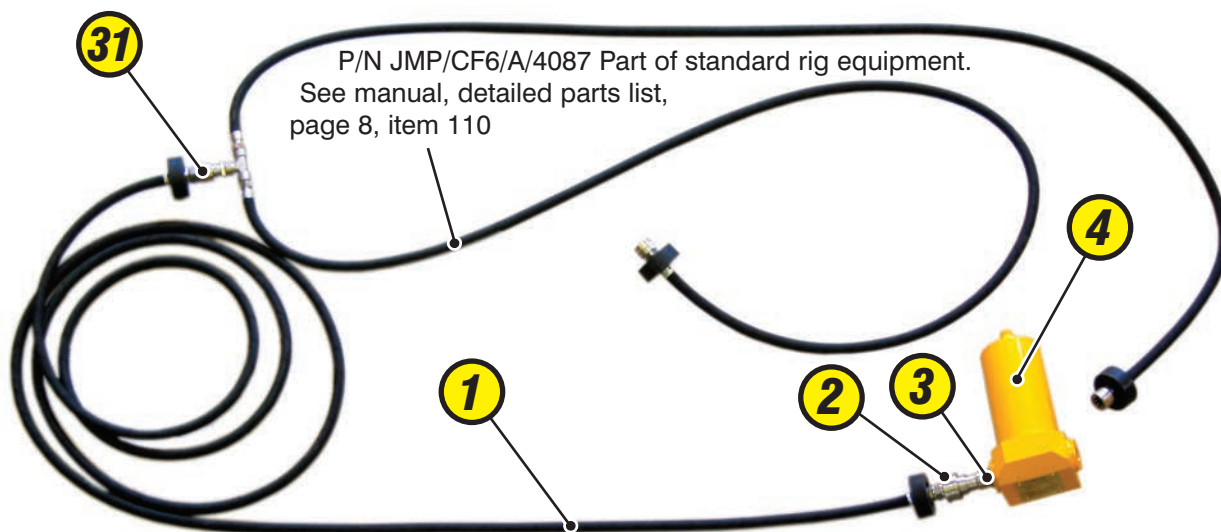


Electrical Schematic diagram and spare parts list.

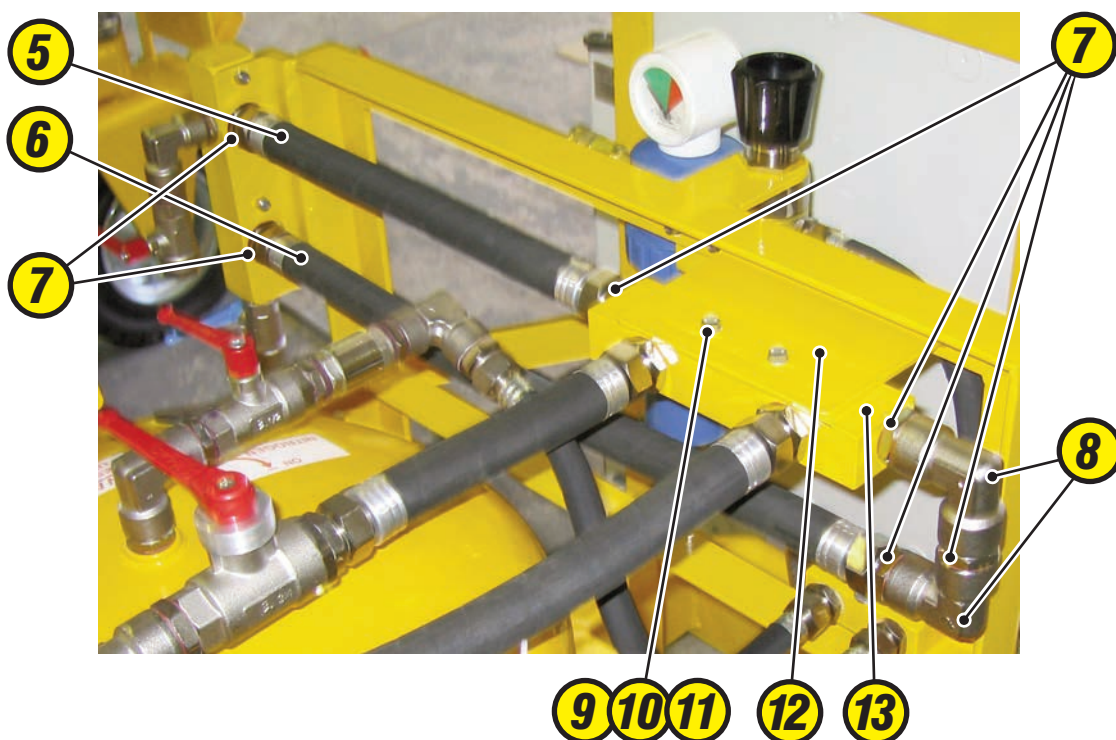


Item	Description	Part number	Qty
E1	Enclosure and Backplate	JMP/CFM56/D/6532/1	1
RCCB	40 Amp RCCB 30mA Trip	JMP/CFM56/D/6532/2	1
RCCB	RCCB Enclosure	JMP/CFM56/D/6532/3	1
Q1	Door Isolator 32 Amp	JMP/CFM56/D/6532/4	1
Q2	MCB 16 Amp 3 Pole	JMP/CFM56/D/6532/5	2
Q2	MCB Auxiliary	JMP/CFM56/D/6532/6	1
Q4	MCB 16 Amp 3 Pole	JMP/CFM56/D/6532/7	1
Q4	MCB Auxiliary	JMP/CFM56/D/6532/8	1
Q3	MCB 16 Amp 2 Pole	JMP/CFM56/D/6532/9	1
K1	Heater Contactor 18 Amp	JMP/CFM56/D/6532/10	1
K2	Heater Contactor 18 Amp	JMP/CFM56/D/6532/11	1
S1	Red PB/Contact block	JMP/CFM56/D/6532/12	1
S2	Green PB/Contact block	JMP/CFM56/D/6532/13	1
S3	Red PB/Contact block	JMP/CFM56/D/6532/14	1
S4	Green PB/Contact block	JMP/CFM56/D/6532/15	1
H1	Green Pilot Light	JMP/CFM56/D/6532/16	1
H2	Red Pilot Light	JMP/CFM56/D/6532/17	1
H3	Red Pilot Light	JMP/CFM56/D/6532/18	1
H4	Green Pilot Light	JMP/CFM56/D/6532/19	1
PSU	5A 200V AC / 24V DC Power Supply	JMP/CFM56/D/6532/20	1
	Outgoing Terminals	JMP/CFM56/D/6532/21	10
	Earth Brackets	JMP/CFM56/D/6532/22	2
	End Brackets	JMP/CFM56/D/6532/23	2
	Din 35 Rail	JMP/CFM56/D/6532/24	1
	8 Way Earth block	JMP/CFM56/D/6532/25	1
	40 x 40 Slotted trunking	JMP/CFM56/D/6532/26	1
	5 Core 4mm SY Cable	JMP/CFM56/D/6532/27	10m
	7 Core 4mm SY Cable	JMP/CFM56/D/6532/28	5m
	SY Cable glands	JMP/CFM56/D/6532/29	4
R1/R2	Double pole changeover relay	JMP/CFM56/D/6532/30	1

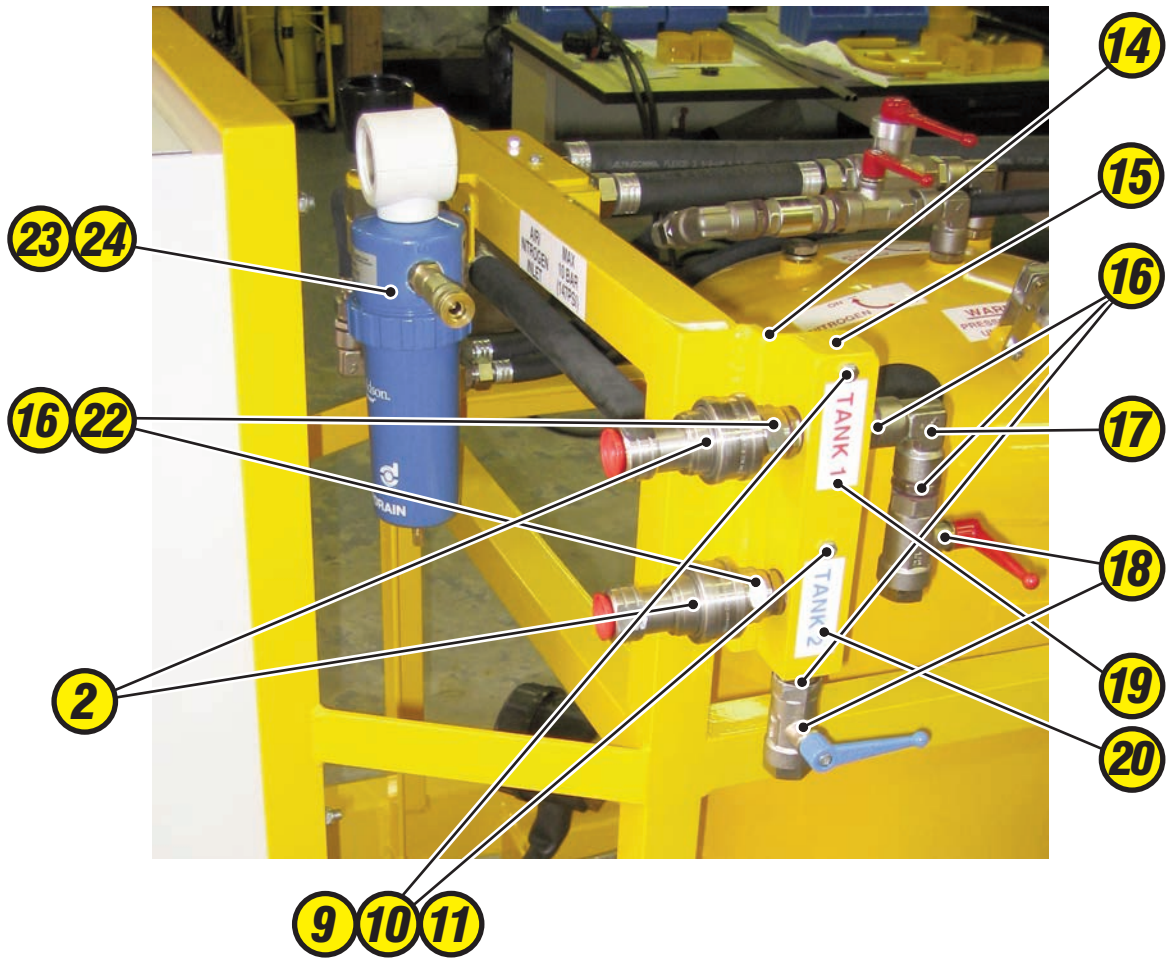
Modifications shown in detail together with Part Numbers.



Item	Description	Part number	Qty
1	Hose assembly ½" bore, 20ft length	JMP/CFM56/HL/6540	1
2	Hansen coupling (female)	SM194/1	3
3	¾" x ½" BSP adaptor	JMP/PEG/A/0298	1
4	Fluid filter assembly	JMP/STD/C/1793	1
5	Hose assembly	JMP/CFM56/HL/6538	1
6	Hose assembly	JMP/CFM56/HL/6539	1
7	¾" x ¾" Adaptors	JMP/STD/5349	6
8	¾" Elbows	SM054	2
9	M6 x 45 Hex head bolt	-	4
10	M6 BZP Washer	-	12
11	M6 BZP Nyloc nut	-	6
12	Bracket fluid outlet manifold	JMP/IHI/B/6541	1
13	Fluid manifold outlet	JMP/IHI/B/6533	1

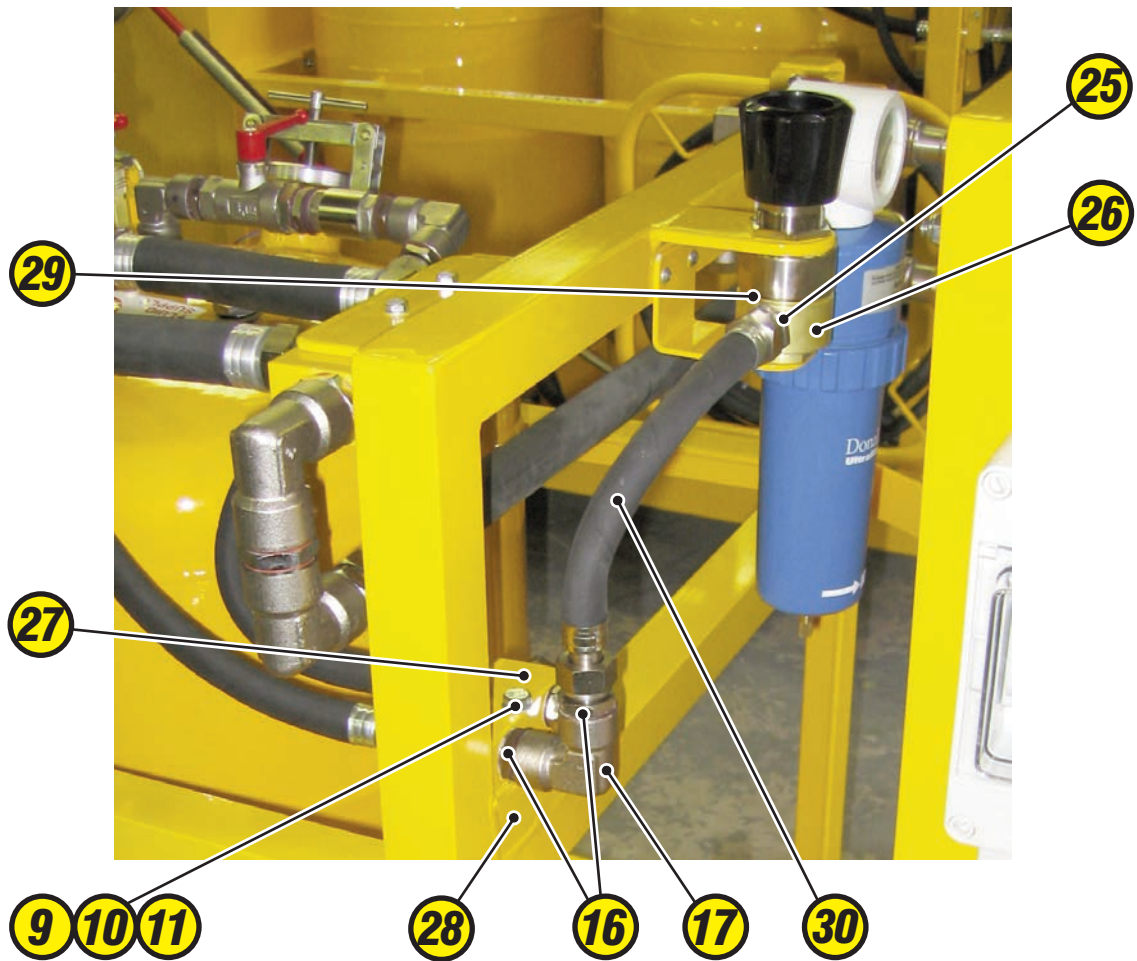


Modifications shown in detail together with Part Numbers.



Item	Description	Part number	Qty
14	Bracket fluid outlet manifold	JMP/IHI/B/6541	1
15	Fluid manifold outlet	JMP/IHI/B/6534	1
16	1/2" x 1/2" BSP adaptor	JMP/STD/A/5289	5
17	1/2" BSP Elbow	SM052	1
18	1/2" Ball valve	SM028	1
19	Tank label (red)	-	1
20	Tank label (blue)	-	1
21	M6 x 50 Hex head BZP bolt	-	2
22	Hansen coupling (male)	SM194/2	2
23	Pre-filter element	SM749/1	1
24	Filter 3/8" ports	SM749	1

Modifications shown in detail together with Part Numbers.



Item	Description	Part number	Qty
25	1/2" x 1/4" BSP adaptor	JMP/STD/A/4790	1
26	Nitrogen inlet regulator valve	SM647	1
27	Air manifold	JMP/STD/A/5289	1
28	Manifold mount angle	JMP/IHI/B/6542	1
29	3/8" x 1/4" Adaptor	JMP/STD/A/5352	1
30	Hose assembly	JMP/CFM56/HL/6543	1
31	Coupling (female)	SM474	1

# **Juniper 2x25 Gallon Compressor Wash Rig, Part No. JMP/CFM56/D/4777/C400, Serial No. S2368**

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Functional test, 8th march 2007 (see photo overleaf)

Both tanks were filled with water up to the maximum level of 115 litres.

A 6m long x 3/4" bore delivery hose was fitted with the quick disconnect coupling. Part No: SM194/1. This hose was connected to the Tank 1 outlet from the rig and the other end was connected to the 3/4" BSP inlet to the filter.

The 1/2" bore x 20ft long delivery hose was attached to the filter outlet using the quick disconnect SM194/1 and the other end of the hose was connected to the twin hose assembly.

A set of CFM56 washing probes were fitted to the twin hose assembly and elevated to a height of approximately 3.3m (11ft). The outlet of both probes was hooked into a calibrated plastic drum.

An air supply of 6 bar was connected to the air inlet connection on the rig.

## **Test 1, Tank 1**

Regulated pressure 80psi (maximum), Recorded flow rate 33 litres per minute.

## **Test 2, Tank 2**

Regulated pressure 60psi, Recorded flow rate 28 litres per minute.

## **Test 3, Tank 2**

Regulated pressure 50psi, Recorded flow rate 26 litres per minute.

## **Test 4, Tank 2**

Regulated pressure 40psi, Recorded flow rate 22 litres per minute.

## **Test 5, Tank 1**

Regulated pressure 40psi, Recorded flow rate 23 litres per minute.

## **Conclusion**

The maximum flow rate obtainable with this system using a set of CFM56 engine probes is 33 litres per minute, 10 litres per minute in excess of the requirements for CFM56 and V2500 engines.

To maintain the existing 10 litre margin over the required flow rate, the connecting hoses and valves to be supplied by INC should have a bore no less than 3/4" (20mm).

**Note:** Quick disconnect fittings with double shut off valves can restrict the flow.

Functional testing of the Juniper 2x25 gallon rig, 8 March 2007

\* The bottom packing case shown in the photo will actually be used to transport the rig and the 'Heat Treated Timber' stamp is clearly visible.

