

A. T. JUNIPER (LIVERPOOL) Ltd.

2x32 litre compressor washing rig complete with heaters (JMP/SHWR/D/0376/C1000)

**As per the rigs JMP/SHWR/D/0376/C800BH but for
the following removals and additions:**

- Side storage box removed and replaced with electrical control box to control heating system.
- Pressure relief valves removed and replaced with pressure relief valves complete with vent pipes.
- Tank heating system complete with controls added
- Combination delivery and bleed hose removed and replaced with a ½" bore x 15' delivery hose terminating in a SM474 quick disconnect coupling
- Twin hose assembly (JMP/CF6/A/4087) added
- Storage box for twin hose assembly and electrical leads added to rear of rig
- Drop leg removed and rear castors added for stability
- New identification label and decal set added to highlight changes



OPERATING THE RIG

1. GENERAL OPERATING INSTRUCTIONS

- 1.0 Ensure panel mounted pressure regulator is fully closed (fully anti-clockwise).
- 1.1 Ensure nitrogen cylinder is fully charged to maximum stated on cylinder.
NOTE: Minimum requirement for one engine wash is 1000 PSI. The pressure is indicated on the regulator gauge.
- 1.2 Ensure all ball valves on the rig are in the closed position (across the direction of flow).
- 1.3 Fill respective tanks with recommended fluids, ie. one tank with washing solution and the other with demineralised water, or both tanks with demineralised water.
- 1.4 Close and tighten filler caps.

2. HEATING THE TANKS

- 2.0 Using the supplied leads, connect tank 1 and tank 2 to a 240V, single phase power supply. Red lights on the electrical control box will illuminate indicating you have power. The temperature of the water in the tanks is indicated on the control box's LED display. When the temperature in the tanks reaches 70°C, the red lights will go out. Leave the rig connected to the power supply until you are ready to carry out the wash.
NOTE: Thermostats fitted to the tanks control the temperature.

3. ENGINE PREPARATION

- 3.0 Fit the engine washing probes to the engine as per the fitment guide supplied with the probes.

4. WASHING THE ENGINE

- 4.0 Disconnect the electrical supply.
- 4.1 Site the rig in a suitable position away from the engine exhaust and connect the delivery hose of the rig to the twin hose assembly.

REFER TO ENGINE MANUAL FOR FLOW RATE REQUIREMENT

5. OPERATING THE RIG

- 5.0 Turn on nitrogen supply from the cylinder (fully anti-clockwise).
- 5.1 Open tank nitrogen inlet ball valve (in line with direction of flow).
- 5.2 Rotate pressure regulator clockwise until desired pressure is reached on the tank's pressure gauge.

THE RIG IS NOW PREPARED FOR COMPRESSOR WASHING. TO COMMENCE WASH:

- 5.3 Open solution tank outlet ball valve for desired wash period.
- 5.4 On completion of wash period, close tank outlet ball valve and close the nitrogen inlet ball valve to the tank.
- 5.5 Repeat operations 5.3 to 5.5 for the rinsing cycle using relevant tank and valves.

6. AFTER COMPLETING THE WASH AND RINSE CYCLE, CARRY OUT THE FOLLOWING:

- 6.0 Disconnect fluid delivery hose and twin hose assembly from the engine and re-stow them on the rig.
- 6.1 Remove engine probes and re-stow them in the trailer.
- 6.2 Turn of nitrogen cylinder.
- 6.3 Exhaust nitrogen from both tanks by operating the lever on the pressure relief valve.

Continued

7. BACK UP PROCEDURE WHEN NO NITROGEN IS AVAILABLE

7.0 Ensure nitrogen cylinder is turned off.

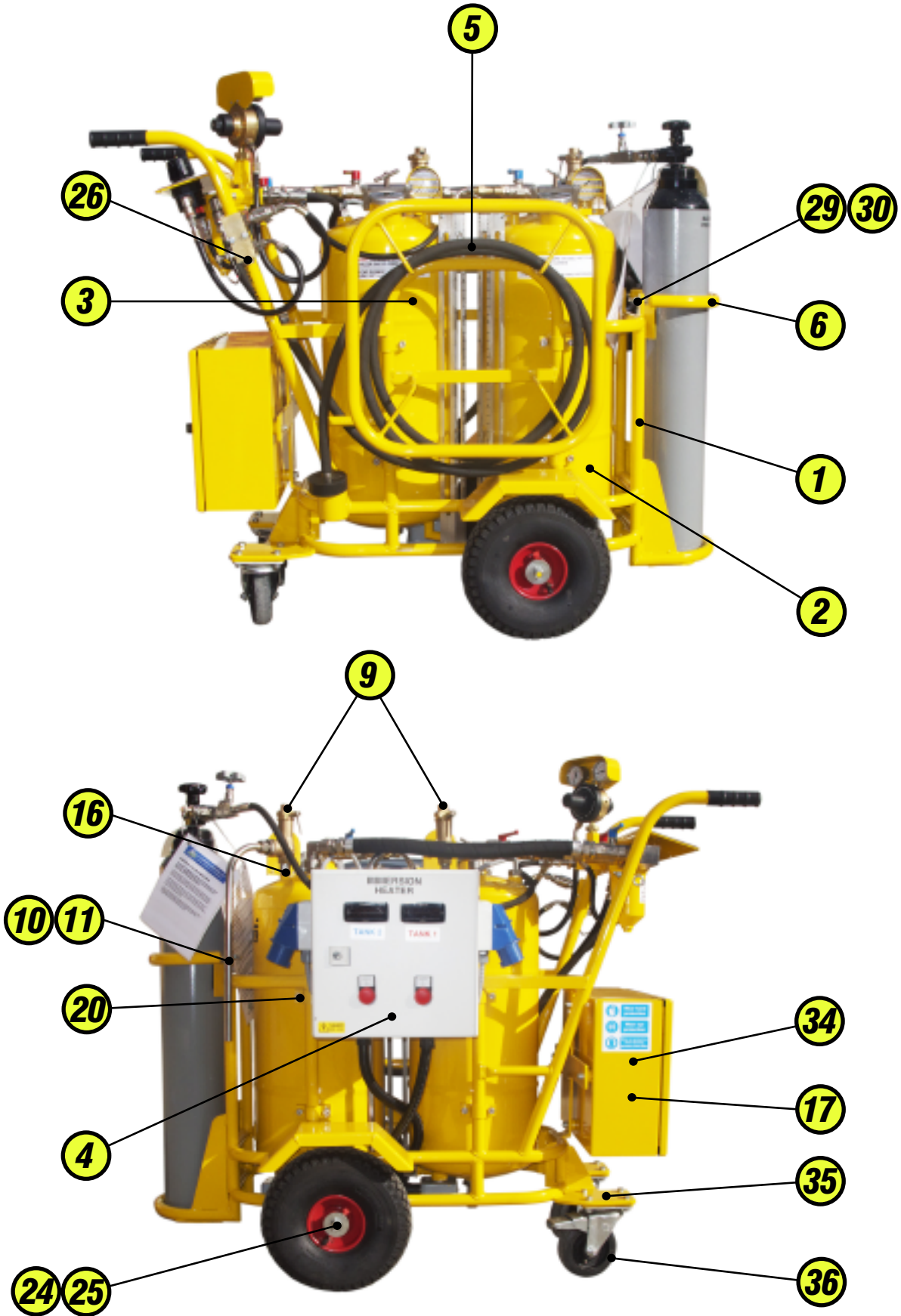
7.1 Connect auxiliary air supply to Schrader air inlet valve. Maximum allowable inlet pressure is 120 PSI.

7.2 Turn auxiliary air supply on and proceed as Para 5.2.

8. AFTER USE:

8.1 Turn off air supply and disconnect rig, then proceed as Para 7.0.

PARTS LIST



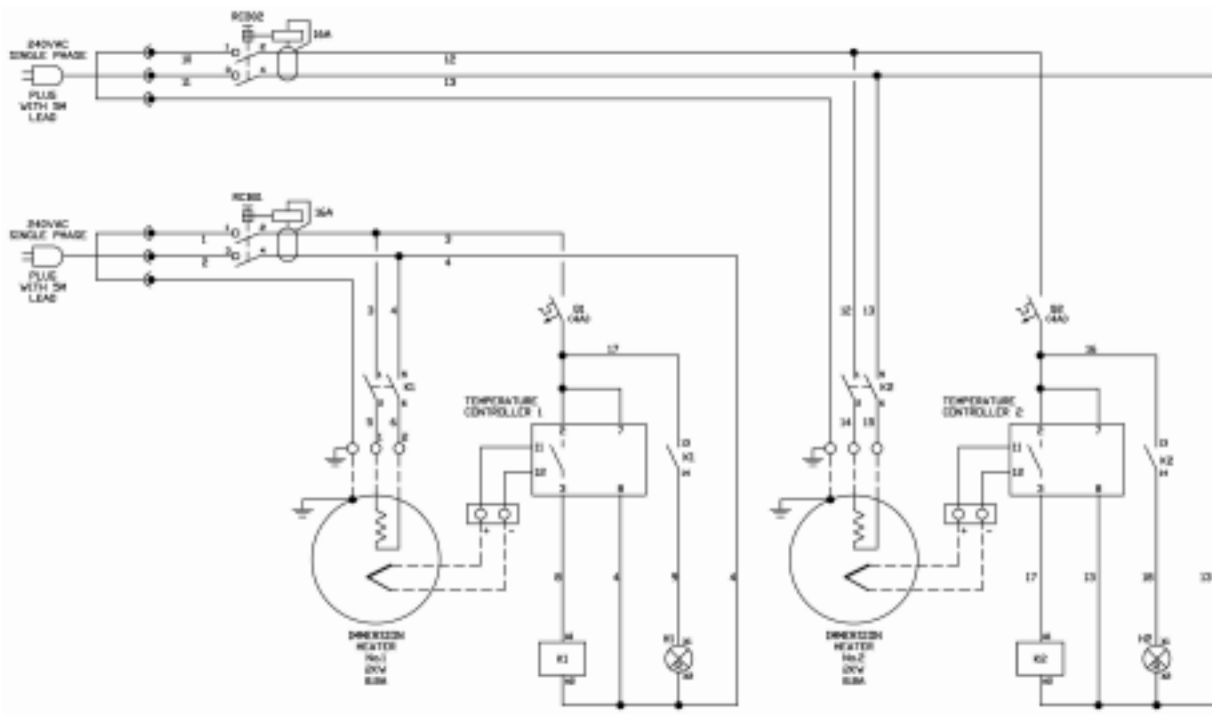


NEW PARTS LIST (and changes to quantity for existing parts)

Item	Description	Part number	Remarks, finish etc.	Qty
1	Frame	JMP/CF34/D/7049	All welded assembly	1
2	Fluid tank (front)	JMP/CF34/D/7037	Stainless steel	1
3	Fluid tank (rear)	JMP/CF34/D/7038	Stainless steel	1
4	Electrical control box	SM 945	complete with 2 power leads	1
5	Hose assembly ½" NB x 30'	JMP/CF34/HL/6669	Fluid delivery hose	1
6	Cylinder clamp	JMP/CF34/D/7049/02		1
7	Instruction sheet (laminated)	JMP/CF34/A/7052		1
8	Traffolyte panel	JMP/CF34/A/7053		1
9	Pressure relief valve	SM 725		2
10	Pressure relief valve nozzle	JMP/CFM56/A/4827	Cut to suit lengths	2
11	Relief valve nozzle bracket	JMP/CF34/A/7051	Supports front nozzle	1
12	Immersion heater	SM 944-1		2
13	Immersion heater thermostat	SM 944-3		2
14	Immersion heater conduit	SM 944-4		2
15	Equal elbow, ¼" BSP	JMP/STD/A/5471	Pressure reg valve	*2
16	Adaptor, ½" (f)BSP x ¾" (m)BSP	JMP/STD/A/7054	Safety valve	2
17	Twin hose assembly	JMP/CF6/A/4087	in storage box	1
18	Adaptor ¼" x ¼" BSP	JMP/STD/A/5397		*5
19	Adaptor ¾" x ¼" BSP	JMP/STD/A/5352		*2
20	Hex Bolt, 8mm x 16mm	N/D	Tank bracket under control box	2
21	½" Dowty seal	N/D	Sight glass and thermostat	*10
22	¾" Dowty seal	N/D	Drain valve adaptor and heater	*4
23	Socket head screws, 8mm x 16mm	N/D	Tank bracket	*14
24	Plain washer, 1¼" OD x ½" ID	N/D	Wheel	2
25	Nut, ½" UNF 'P' type	N/D	Wheel	2
26	Blanking plug, ¾" BSP	JMP/STD/A/5051/5	Charging manifold	1
27	Nyloc nut, 8mm	N/D	Control box	4
28	Plain washer, 8mm	N/D	Control box	4
29	Nyloc nut, ⅝" BSW	N/D	Cylinder clamp	2
30	Plain washer, ⅝" BSW	N/D	Cylinder clamp	2
31	Hex head set bolt, 8mm x 30mm	N/D	Filter mounting	*10
32	Plain washer, 8mm	N/D	Filter mounting	*12
33	Nut, 8mm 'P' type	N/D	Filter mounting	*10
34	Power leads	N/D	For control box (see item 4)	2
35	Castor backing plate	JMP/CF34/D/7049/03		2
36	Castor	SM 074		2
37	Decal set	SM 946		1

* In the quantity column Indicates change in quantity (Part not illustrated).

ELECTRICAL SCHEMATIC DIAGRAMS



Item	Manufacturer	Description	Part no.	Qty
E1	Rittal	Enclosure 300 x 300 x 210mm	SM945-1	1
RCBO1	Eaton	16 Amp Residual current circuit breaker	SM945-2	1
RCBO2	Eaton	16 Amp Residual current circuit breaker	SM945-3	1
K1	Eaton	240V Mini contactor	SM945-4	1
K2	Eaton	240V Mini contactor	SM945-5	1
H1	Eaton	Red indicating lamp	SM945-6	1
H2	Eaton	Red indicating lamp	SM945-7	1
Temperature controller	Tecnologic	Panel mounted temperature controller	SM945-8	2
Terminal	Weidmuller	Heater terminals	SM945-9	4
Terminal	Weidmuller	'J' Type thermocouple terminals	SM945-10	2
Power lead	Mennekes	5 Metre power lead	SM945-11	2