

SMARTPACK 75-H Owner & Operator Manual



Revision: 3

Revised date: 16/01/2023



THIS PAGE IS LEFT BLANK INTENTIONALLY.



MEA Product Registration Form

THE ATTACHED FORM MUST BE COMPLETED AND RETURNED WITHIN 30 DAYS OF INSTALLATION OR WARRANTY WILL BE VOID

ALTERNATIVELY, PLEASE GO ONLINE AND COMPLETE WARRANTY FORM

www.mobileenergyaustralia.com.au/warranty-registration





MEA Product Warranty Registration Form

CUT HERE

This form must be completed and returned to MEA at the time of Installation. Warranty will be void if this form is not received by MEA within 30 days of installation.

MEA Dealer Infor	mation			
Company Name:				
City:	State:		Country	:
MEA Installer Info	ormation			
Company Name:				
	State:/ / Day Month		Country	:
Owner Information Company Name:				
Address:				
•			-	:
rosicode.		FIIONE #		
Product Informati				



TABLE OF CONTENTS

1. COMPRESSOR / COMPRESSED AIR SAFETY	2
2. SPECIFICATIONS	
3. OPERATING PROCEDURE	
4. INSTALLATION	8
5. SCHEDULE MAINTENANCE	9
6. SPARE PARTS	10
7. TROUBLESHOOTING	12
8. DRAWINGS & ILLUSTRATIONS	13
9. WARRANTY	20
10. MOBILE ENERGY AUSTRALIA - CONTACTS	22
11. APPENDIX A – PRODUCT DESIGN REGISTRATION	23
12. APPENDIX B – FLUIDS & MATERIAL SAFETY DATA SHEETS	24

MEA Product Warranty Registration form and partner Product Warranty Registrations must be completed and returned to MEA.



1. COMPRESSOR / COMPRESSED AIR SAFETY

MEA DISCLAIMS ALL LIABILITIES FOR DAMAGE OR LOSS OF EQUIPMENT AND PROPERTY, PERSONAL INJURIES (INCLUDING DEATH), AND CONSEQUENTIAL DAMAGES ARISING OUT OF ANY MEA SYSTEM NOT USED IN ACCORDANCE WITH THE OPERATOR'S MANUAL. ALL UNITS ARE SHIPPED WITH A DETAILED OPERATOR'S MANUAL. THIS MANUAL CONTAINS VITAL INFORMATION FOR THE SAFE USE AND EFFICIENT OPERATION OF THE UNIT. READ THE OPERATOR'S MANUAL BEFORE STARTING THE UNIT. FAILURE TO ADHERE TO THE INSTRUCTIONS COULD RESULT IN SERIOUS BODILY HARM OR PROPERTY DAMAGE.

Care is required when working with an air compressor or compressed air. Compressed air is one of the many ways energy can be stored. Releasing the stored energy in an uncontrolled manner can result in catastrophic consequences. Death and permanent disability are possibilities that can occur due to mis usage. The following are suggested as minimum precautions to be used when operating the SMARTPACK Air Compressor. It is important that each work site shall perform a risk analysis and produce a procedure to eliminate or control the hazardous condition to minimise the risk to personnel and equipment. Health and Safety Regulations necessitate that this is a compulsory process to be carried out on each site. These, together with site specific safety procedures will help to minimize the risk to accidents, personnel injury, and loss of life. It is the responsibility of the employer to ensure that the work site is safe for all employees and that the safety procedures are followed by all employees.

SAFETY WHEN OPERATING AN AIR COMPRESSOR

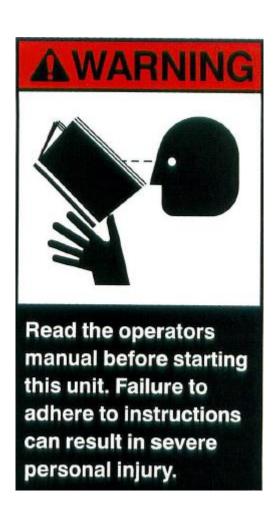
- Do not bypass or disable the oil temperature and pressure sensors unless planning on running to failure (MEA does not recommend the practice).
- Do not expose the tank or compressor to extreme heat.
- Do not perform any service or repairs until the system has been completely relieved of air pressure.
- Maintenance and repairs on the system should only be done by qualified personnel.
- Do not operate the compressor while driving (vehicle mounted systems).
- Do not tamper with the pressure relief valve.
- Follow safe work practice, wear the appropriate personal protective equipment (PPE) when operating air-powered equipment, particularly eye and hearing protection.
- Avoid contact with rotating components, ensure all safety guards are in place.
- Avoid all contact with pressurized air. If it penetrates the skin, it can enter blood stream and cause death.
- Vaporized oil propelled by high pressure is an explosive mixture. To prevent compressor explosion
 or fire, make sure that the air entering the compressor is free of flammable vapours.
- Do not breathe the compressor air, vaporized oil is a respiratory hazard.
- Stay clear of all moving parts when the system is operating.
- Follow safety procedures for service operations as set by the authority.
- Run the system at idle speed and under no load conditions for 2 to 3 minutes before turning the system off to allow system cooling and lubrication to occur.

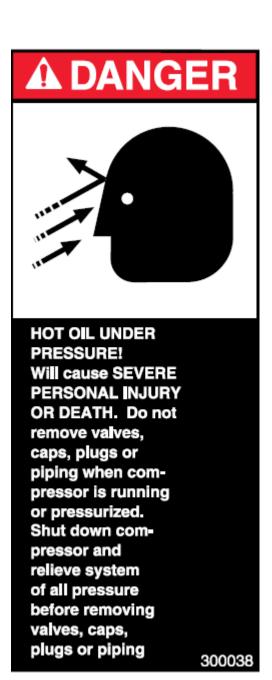


HYDRAULIC SAFETY

ALL HYDRAULIC EQUIPMENT MUST BE TREATED WITH EXTREME RESPECT AND CARE. AS THE WORKING FLUID IS UNDER EXTREME PRESSURE, UP TO 5000PSI, WITH HIGH FLOW RATES GENERATING HIGH HEAT, ALL APPROPRIATE SAFETY PRECAUTIONS MUST BE TAKEN IN TO ACCOUNT AND SAFETY EQUIPMENT MUST BE WORN IF IN CONTACT WITH THE EQUIPMENT UNDER OPERATION. ALL LEAKS, NO MATTER HOW MINOR, MUST BE RECTIFIED IMMEDIATELY AND ANY WEAR IN THE HOSES MUST BE ADDRESSED AND EQUIPMENT REPLACED. HYDRAULIC INJECTION IS DANGEROUS AND LIFE THREATENING AND EVEN A PINHOLE LEAK WILL BLANKET AN ENTIRE ENCLOSED SPACE VERY QUICKLY WITH HAZARDOUS VAPORISED HYDRAULIC OIL MIST.















2. SPECIFICATIONS

Compressor Model: PACKSMART76

Compressor Type: Oil flooded rotary screw compressor

Hydraulic Motor Type: 20cc Gear Motor

Control: 24V/12V Electronic Control, optional unloading valve for hydraulic flow control

Maximum Air Delivery: 75 cfm @ 150psi

Oil Flow Requirements: 62 LPM

Oil Pressure (Nominal): 195 Bar

Drive coupling speed: 3100 rpm

Pressure Regulation: Mechanical Inlet control valve modulates flow in response to demand

Safety Features: 200 PSI relief valve in compressor sump

Temperature safety sensor in compressor

Rapid blow-down valve to discharge system pressure on shutdown

Lubrication: MEA Certified and Approved Synthetic Oil.

Filters: Paper-type replaceable air filter

Spin-on type oil filter

Coalescing separator element



3. OPERATING PROCEDURE

WARNING

CAREFULLY READ THE OPERATING INSTRUCTIONS BELOW. FAILURE TO ADHERE TO THE FOLLOWING COMPRESSOR OPERATING INSTRUCTION COULD RESULT IN SERIOUS INJURY.

- 1. Check Oil Level
- 2. Check Hoses and fittings for leaks. Make sure the hoses are not loosened or damaged.
- 3. Check and make sure hydraulic (P) supply / (T) return / case drain (if applicable) are installed correctly. FAILURE TO DO THIS WILL VOID WARRANTY ON COMPRESSOR
- 4. Check Air Filter for Blockage.
- 5. Check the Safety circuit switch operation (Reset Switch).
- 6. Switch on the vehicle and activate the vehicle flow control (turn PTO on).
- 7. Turn on the compressor either at the control box or in the cab and ensure it is in the unloaded state (check load/unload switch).
- 8. Turn on the unload/load switch to load and see if the compressor builds pressure to the regulated setting.
- 9. Plug an air tool into the air outlet and operate. Ensure that the compressor works as required.
- 10. When the work is finished, switch the compressor to unload. Allow compressor to run on for <u>2</u> <u>minutes</u> to ensure fully unloaded
- 11. Switch off at either the control box or in Cab and switch off the vehicle.
- 12. It is good practice to check for any visible signs of hydraulic fluid leakage and or compressor fluid leakage after each use.



4. INSTALLATION

The SMARTPACK 75H is designed as an integrated compressor system for connection to an existing hydraulic system. The SMARTPACK 75H only requires connection of a pressure line in, a return to tank line out and a connection of the motor case drain line (if applicable) to the tank.

WARNING(!) When setting the compressor unit up, ensure there is a safety mechanism in place to prevent any excessive flow or pressure into the compressor hydraulic circuit. MEA will not warrant any damage caused and will void warranty due to inadequate safety protection of the existing hydraulic system.

- 1. Install SMARTPACK 75H into position on the vehicle using 6 x M12 x 1.75 Grade 8.8 Fasteners.
- 2. Install the hydraulic lines (i.e., pressure in, return out and drain line if applicable).
- 3. Connect the electrical control box to the vehicle; be sure to place an in-line weatherproof fuse (30A 12V and 20A 24V) within 300mm of the vehicle battery. Ensure the control box is compatible with your vehicle's voltage rating.
- 4. Connect the electrical harness as per the circuit diagram to the vehicle and the SMARTPACK 75H.
- 5. Check the oil level in the compressor. Top up if necessary.
- 6. Run the vehicle, turn on the hydraulic system operate the compressor on toggle switch on the control box and check the hydraulic solenoid for operation. Compressor will now run. ENSURE COMPRESSOR COUPLING IS ROTATING IN THE CORRECT DIRECTION. IF NOT SHUT DOWN HYDRAULICS IMMEDIATELY.
- 7. Turn the load/unload switch to load and check the compressor builds pressure to the regulated pressure setting.
- 8. Plug an air tool into the air outlet and operate checking that the compressor works as required, run for 2 minutes.
- 9. Unload the compressor, switch off the hydraulics at control box. Switch off the vehicle and check for any oil leaks on the system.
- 10. When the compressor has cooled down (safe to touch), re-check the compressor oil level and top up if required.



5. SCHEDULE MAINTENANCE

The maintenance intervals recommended are based on standard operating conditions. The intervals for inspection, lubrication and maintenance given herein are maximum intervals and it should be noted to schedule the maintenance accordingly to sites.

When the unit is being operated in a dusty environment, in high ambient temperatures or in other unusual conditions, an assessment needs to be done for shorter service interval.

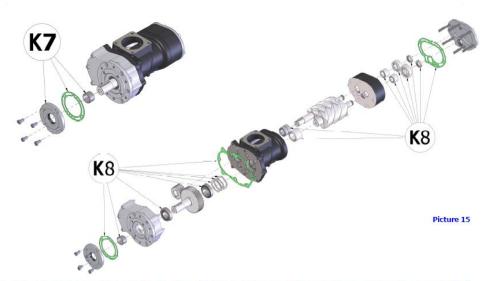
A planned program of periodic inspection and maintenance will help to avoid premature failure and costly repairs. Daily visual inspections should become routine.

Interval	Compressor		
	ACTION TO BE TAKEN		
Periodically During Operation	Observe all gauge readings. Note any change from the normal readings and determine the cause. Have the necessary repairs made.		
	(Note: "Normal" is the usual gauge reading when operating at similar conditions on a day-to-day basis.)		
	Inspect and replace spin-on coalescing element if necessary.		
Periodically or as required	Inspect and clean oil cooler fins.		
	Check system for oil and/or air leaks.		
	Check the compressor oil level.		
Every 10 Hours or Daily	Check air filter/s and connecting hose and clamps.		
	Check for oil and air system, including hoses, for leaks.		
Every 25 Hours or Monthly	Drain water from tank and check Compressor oil level.		
	Check system for oil and/or air leaks.		
After first 50 hours of operation	Check engine/compressor mounts fastener torque.		
,	Check belt and pulleys for signs of wear - note that belt normally gives off blue particles until it runs in.		
	Check compressor oil level.		
F	Clean air cleaner element.		
Every 100 Hours	Check engine/compressor/generator mounts for excessive wear and fastener torque.		
	Change compressor oil approx. 4L.		
From 400 Hours of an anti-	Change compressor oil filter.		
Every 400 Hours of operation or 9 months (See Service Kit List)	Change compressor air filter.		
months (See Service Kit List)	Check belt and pulleys for signs of wear.		
	Check valve clearance.		
800 Hours / 18 months	Change compressor coalescing filter.		

IMPORTANT: PLEASE CONTACT MOBILE ENERGY AUSTRALIA FOR MORE INFORMATION IF YOU HAVE ANY QUESTIONS REGARDING THE SETUP AND OPERATION OF PRODUCTS.



6. SPARE PARTS



Extraordinary maintenance kits and their part numbers with all the instructions needed to carry out an appropriate maintenance are included in the technical specifications of the air-end requested and are available on demand.

Kit ricambi regolatore Consultare il documento specifico Intake valve spare parts kit See the specific document Kit ricambi gruppo vite V75 Consultare il documento specifico V75 air-end spare parts kit See the specific document K18 K18 K18 K18 K19



К7	940.0249	V75 AIR-END OIL SPLASHGUARD SPARE PARTS KIT	•	•	•	after 10000 hours
К8	940.0148	V75 AIR-END BEARINGS SPARE PARTS KIT	•	•	•	after 20000 hours

К	IT CODE	DESCRIPTION	PACK SMART	V75C55°	PACK SMART V75C 71°	PACK SMART	V75C83°	WORKING TIME
K1	270.0590	SEPARATOR NIPPLE M32-39 SPARE PARTS KIT		•	•	•	•	After 8000 hours
К9	940.0249	V75 SHAFT SEAL SPARE PARTS KIT		•	•	•		After 8000 hours
K10	742.0091	PACK SMART "C" SERIES OIL RECOVERY SPARE PARTS KIT		•	٠	•	•	Corrective maintenance
K12	940.0248	V75 BEARINGS SPARE PARTS KIT		•	•	•		After 20000 hours
K14	220.0010	G10 M.P.V. (1/2" - 3/4") SPARE PARTS KIT		•	٠	•	•	After 8000 hours
K15	220.1802	VRO19 OIL RECOVERY VIEWER		•	•	•	•	Corrective maintenance
	725.0050	THERMOSTATIC VALVE SPARE PARTS KIT - 55°		•				
K17	725.0051	THERMOSTATIC VALVE SPARE PARTS KIT - 71°			•			After 8000 hours
	725.0052	THERMOSTATIC VALVE SPARE PARTS KIT - 83°				•		
K18	743.0071	TANK SEALINGS PACK SMART V75C SPARE PARTS KIT		•	•	•	•	Corrective maintenance
K19	743.0051	PACK SMART V75C OIL INJECTION FITTINGS SPARE PARTS KIT		•	•	•	•	Corrective maintenance

10008-P0024	AIR FILTER
10008-P0045	SPIN-ON COALESCING FILTER
10008-P0041	OIL FILTER
10012-P0083	UNLOADER VALVE – 12V
10012-P0084	UNLOADER VALVE – 24V
10019-K0005	COMPRESSOR OIL 5L (INCL. CONTAINER)

*Contact MEA spare parts sale for information regarding items (such as motor seal and coupling) not covered herein.



7. TROUBLESHOOTING

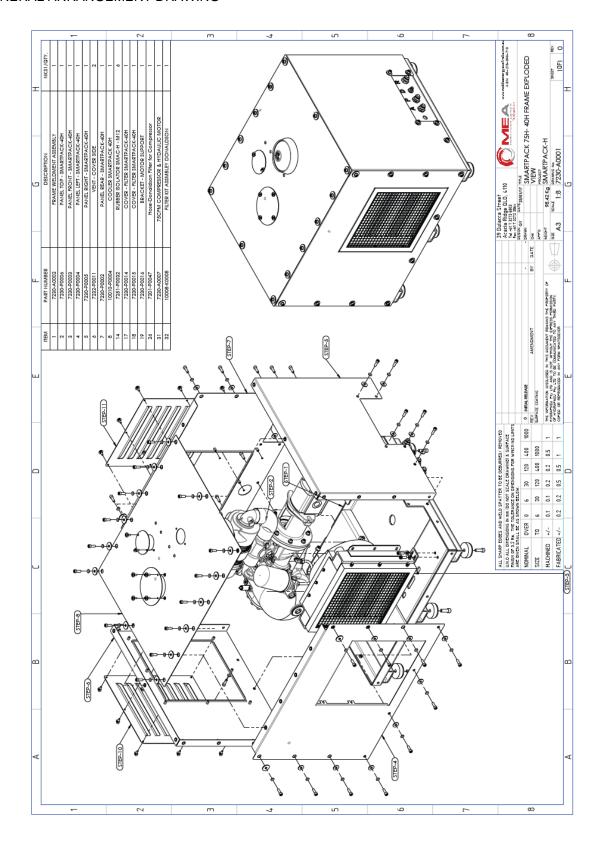
SYMPTOMS	PROBABLE CAUSE	CORRECTIVE ACTION			
	1-The intake valve remains closed.	1-Check the valve. If necessary, replace the			
		damaged parts with the spare parts kit.			
The compressor does not	2-The solenoid valve does not work	2-Check the solenoid valve. If necessary,			
load.	accurately	replace it.			
	3-Losses on the pressure line.	3-Check pipes and cables. If necessary,			
During idling phase, the	1-The solenoid valve does not work	replace them. 1-Check the solenoid valve. If necessary,			
compressor does not	accurately.	replace it.			
discharge pressure from	-	2-Remove the calibrated nozzle. Clean or			
separator tank	2-The calibrated nozzle is clogged.	replace it.			
Compressor capacity or	1-The air filter is clogged.	1-Remove the air filter. Clean or replace it.			
pressure lower than		2-Check the valve. If necessary, replace the			
usual	2-The intake valve does not open.	damaged parts with the spare parts kit.			
standard.	3-Air loss from safety valve.	3-Replace the valve.			
Compressor keeps on	1-The solenoid valve does not work	1-Check the solenoid valve. If necessary,			
loading over working	accurately.	replace it.			
pressure: safety valve opens	2-Clogged separator filter.	2-Replace the separator filter.			
	1-Insufficient cooling.	1-Check the cooling system. Check coolant level on tank.			
	2-Dirty oil	2-Replace it with new oil.			
	3-Oil level is too low.	3-Check coolant level on tank and if			
		necessary, add oil.			
Compressor overheating.	4-Clogged-up cooler or pipe connection	4-Clean cooler and pipes.			
	5-The thermostatic valve does not	5-Check the thermostatic valve. If necessary,			
	work correctly.	replace the damaged parts with K13 spare			
		parts kit (Contact MEA for parts required)			
During unlanding along		6-Clogged oil filter			
During unloading phase, pressure increases up to	1-The intake valve remains open.	1-Check the valve. If necessary, replace the damaged parts with spare parts kit.			
safety		2-Remove the calibrated nozzle. Clean or			
valve opening	2-The calibrated nozzle is clogged.	replace it.			
	1-The intake valve does not work	1-Check the valve. If necessary, replace the			
Oil leakage from intake	properly	damaged parts with spare parts kit.			
valve only when the	(does not close)	damagod parto with oparo parto kit.			
machine is switched off:	2-The no-return valve of intake valve				
oil soaked-up air filter	does not work correctly.	2-Check it and clean it.			
	1-Too high level of oil in the tank	1-Check oil level on separator tank.			
Oil soaked-up air filter	2- Clogged separator filter	2- Replace the separator filter.			
during	3-The recovery oil viewer is dirty or	3 -Clean it or if necessary, replace the			
unloading phase	does not work	damaged parts with K11 spare parts kit.			
31	appropriately.	If separator filter is clogged up, replace it.			
The compressor remains	1-The intake valve does not work				
The compressor remains under loading phase.	properly	1-Check the valve. If necessary, replace the damaged parts with spare parts kit.			
under loading priase.	(does not close)	<u> </u>			
Rotor seizure	1-Unknown particles inside.	1-Call MEA technical support.			
110101 0012410	2-Insufficient lubrication.	2-Call MEA technical support.			
Presence of oil in the	1-Separator filter damaged.	1-Replace the separator filter.			
outlet of minimum	2-Oil recovery viewer obstructed.	2-Clean the oil recovery viewer.			
pressure valve	3-Separator nipple with O-rings	3-Replace K1 spare parts kit.			
	damaged.				

ABN 98 674 578 946



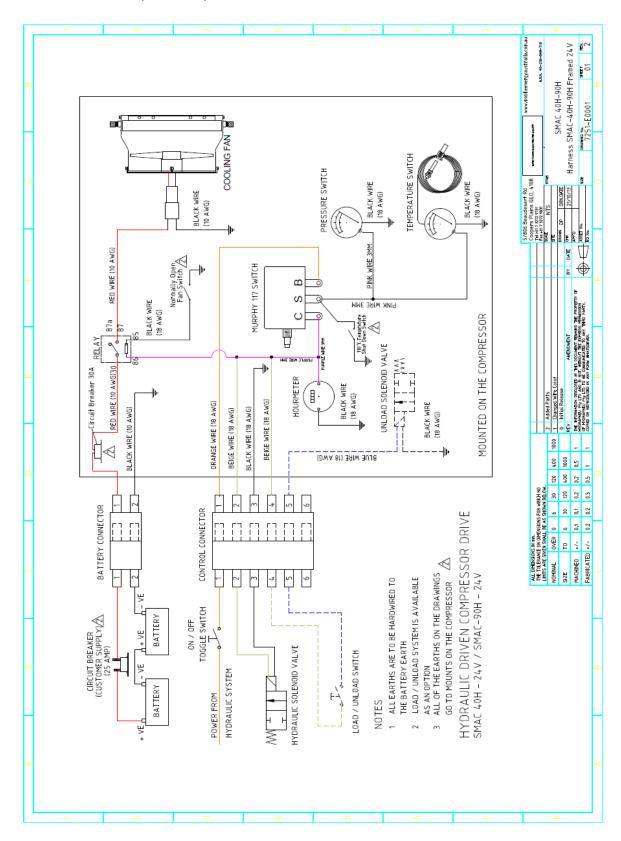
8. DRAWINGS & ILLUSTRATIONS

GENERAL ARRANGEMENT DRAWING



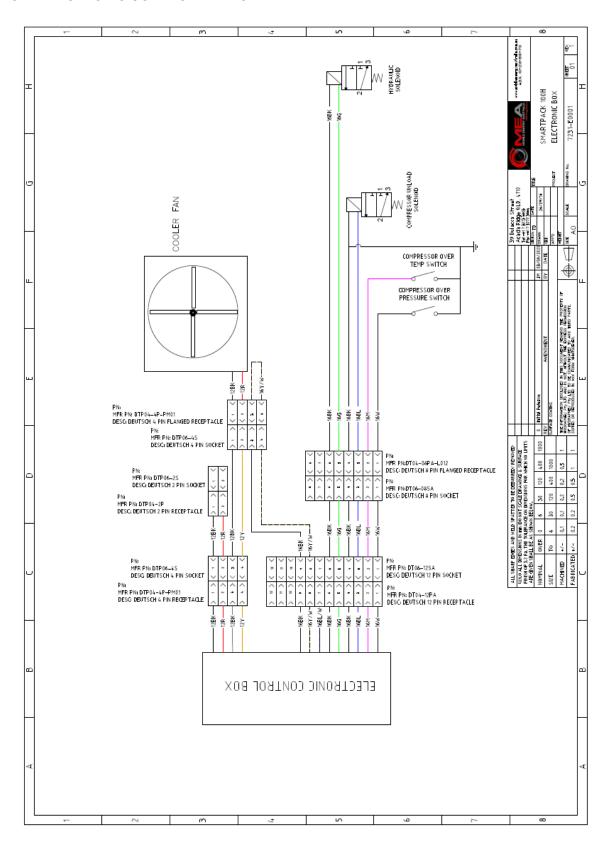


ELECTRICAL DIAGRAM (FRAMED)



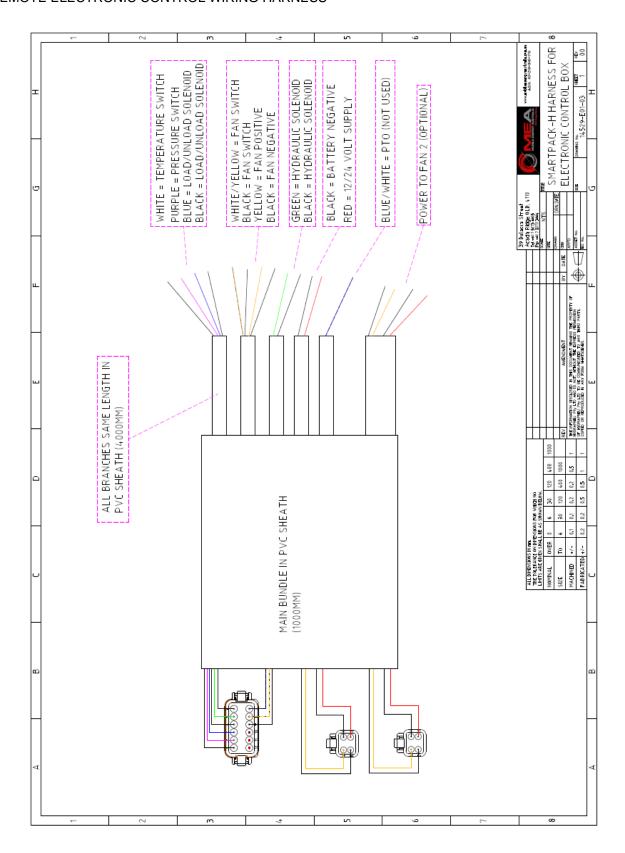


REMOTE ELECTRONIC CONTROL WIRING



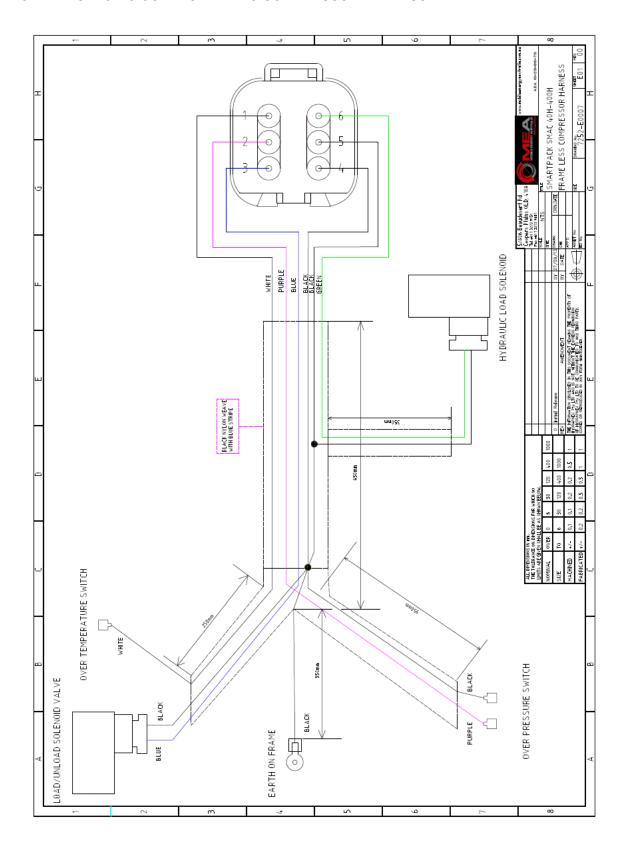


REMOTE ELECTRONIC CONTROL WIRING HARNESS



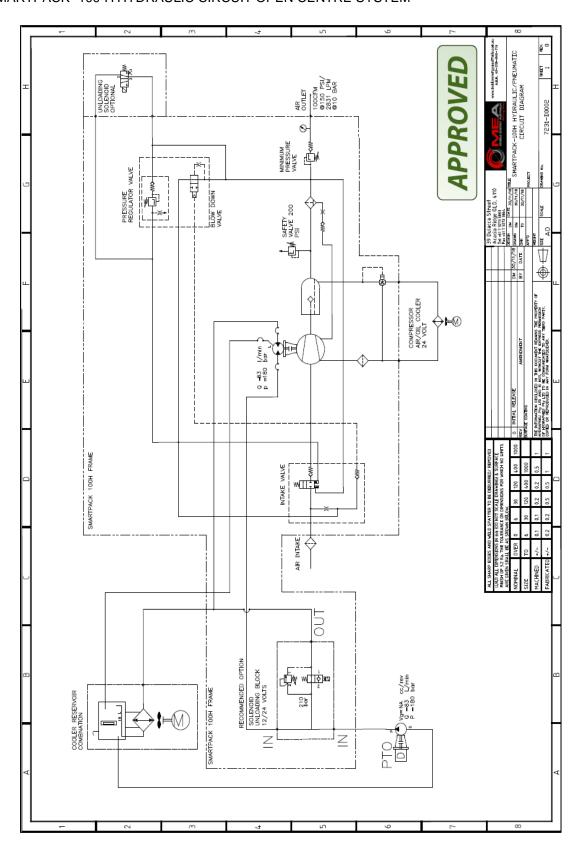


REMOTE ELECTRONIC CONTROL WIRING COMPRESSOR HARNESS



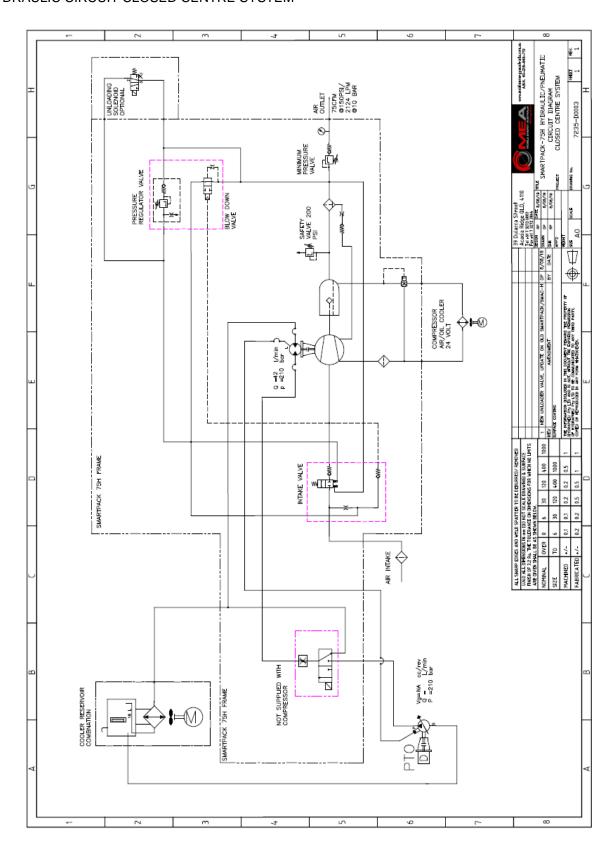


SMARTPACK -100-H HYDRAULIC CIRCUIT OPEN CENTRE SYSTEM





HYDRAULIC CIRCUIT CLOSED CENTRE SYSTEM





9. WARRANTY

1 GENERAL PROVISIONS AND LIMITATIONS

1.1 Mobile Energy Australia (hereafter "MEA") warrants to each original retail purchaser (hereafter "Buyer") that such product(s) are, at the time of delivery to the buyer, free of manufacture ring defects in material and workmanship.

2 NO WARRANTIES IS MADE WITH RESPECT TO

- 2.1 Any product(s) which in the judgment of MEA has been subject to negligence, accident, improper storage, improper installation, improper application, improper operation, or maintenance or has been repaired or altered by others without the written authority of MEA.
- 2.2 Components or accessories manufactured, warranted, and serviced by others.
- 2.3 Damages caused by the lack of normal maintenance, service, and repairs such as the replacement and service of filters and seals.
- 2.4 Damages caused by the lack of normal minimum action, such as adjustments and inspections, replacement of items, such as service filters, seals, and service kits.
- 2.5 Consequential damages caused by product(s) failure.
- 2.6 Any product(s) if other than MEA's genuine components are used in the product(s).
- 2.7 Normal wear and tear of product(s).

3 WARRANTY PERIOD

- 3.1 The warranty period will commence upon installation of the product(s). The returned registration form marks the date of installation. If the registration form is not received, the warranty period will be deemed to commence 30 days from date of shipment from MEA.
- 3.2 The Product(s) is warranted against manufacturer defects in materials and workmanship for a period of 12 months.
- 3.3 The compressor air end is warranted to be free from defects in material and workmanship for a period of 12 months from the date of installation.
- 3.4 Components supplied under warranty shall be warranted for the remainder of the original warranty period.
- 3.5 MEA factory rebuilt components shall be warranted for a period of 6 months from date of shipment.

4 MEA OBLIGATIONS

- 4.1 The obligation of MEA is limited to repairing or replacing parts, during normal business hours, at an authorized service facility, any component, that in the judgment of MEA are defective.
- 4.2 The obligation of MEA is limited to replacement of faulty parts. No liability is accepted for any freight costs, consequential damages, injuries, or expenses directly or indirectly related to the Product(s) failure.



5 BUYER OBLIGATIONS

- 5.1 Buyer shall notify MEA of the alleged defect within 10 days of initial discovery and return the allegedly defective component(s) within 30 days of initial discovery.
- 5.2 The Buyer must prepay all costs associated with the warranty.
- 5.3 The Buyer must return components claimed under this warranty to a facility designated by MEA for evaluation, to establish a claim under this warranty.
- 5.4 Buyer shall maintain and service MEA Product(s) in accordance with the MEA Product(s) Owner's

6 WARRANTY REGISTRATION VALIDATION

A registration form is provided to the Buyer with the product(s). The form must be fully completed by the Buyer and returned to MEA upon completion of the installation of the product(s) to validate the warranty. No warranty claims will be processed unless MEA has received a fully completed warranty registration form.

7 DISCLAIMER AND WARRANTY SERVICE

- 7.1 Any labour costs claimed more than MEA's set rate and/or times are not provided by this warranty. If applicable, any labour costs more than MEA rate schedules caused by, but not limited to, location or inaccessibility of the equipment, travel time or labour provided by unauthorized service personnel are not provided by this warranty.
- 7.2 This warranty is in lieu of all other warranties or obligations expressed or implied. MEA expressly disclaims all implied warranties of merchantability or fitness for a purpose.
- 7.3 Warranty claims must be pre-authorized by MEA, and the components returned via prepaid freight using the designated "Returned Merchandise Authorization" number and form.

PLEASE NOTE:

Both the MEA Product Registration Form and the Kubota Engine Warranty Registration Form MUST be returned to MEA in the stamped, self-addressed envelope.

WARNING!!!

Failure to return PRODUCT WARRANTY REGISTRATION FORMS detailed above may result in the delayed processing of warranty claims.



10. MOBILE ENERGY AUSTRALIA - CONTACTS

Sales

Email: sales@mobileenergyaustralia.com.au

Office: 07 3273 6803

Spare Parts

BH Office: 07 3273 6803

Email: sales@mobileenergyaustralia.com.au

Service

Email: workshop@mobileenergyaustralia.com.au

Office: 07 3273 6803



11. APPENDIX A - PRODUCT DESIGN REGISTRATION



www.mobileenergyaustralia.com.au

TRHC Pty Ltd ATF for the ThoroughClean Trust ABN 98 674 578 946

07 November 2022

To whom it may concern

Smartpack 75H Design Registration

The Smartpack 75H design has been assessed against the requirements of the Work Health & Safety Act 2011 and Australian Standard 4343:2014. The Smartpack 75H has been found to comply with the requirements of AS4343:2014 Hazard Level E and as such does not require design registration.

Regards

Nicholas Groothoff Engineering Manager Mobile Energy Australia

39 Dulacca St, Acacia Ridge QLD 4110

Ph: +61 7 3273 6803

www.mobileenergyaustralia.co



12. APPENDIX B - FLUIDS & MATERIAL SAFETY DATA SHEETS

FLUID TYPE	DESCRIPTION	PART NUMBER
Compressor Oil	Semi Synthetic Compressor Oil 68	10019-P0002

Please use QR code to link you to relevant MSDS

