



SMARTPACK 35

Owner & Operators Manual



35 CFM Diesel Driven Air Compressor

Revision: 02
Reviewed: 14/12/2022

**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



CUT HERE



MEA Product Warranty Registration Form

This form must be completed and returned to MEA at the time of Installation. This will assist MEA in processing the product in the unlikely event that a warranty claim is needed

MEA Dealer Information

Company Name: _____

City: _____ State: _____ Country: _____

MEA Installer Information

Company Name: _____

City: _____ State: _____ Country: _____

Installation Date: ____ / ____ / ____
 Day Month Year

Owner Information

Company Name: _____

Address: _____

City: _____ State: _____ Country: _____

Postcode: _____ Phone #: _____

Product Information

MEA Serial Number: _____

Model Number: _____

TABLE OF CONTENT

1. SAFETY	6
2. SPECIFICATIONS	9
3. OPERATING PROCEDURES.....	11
4. INSTALLATION	13
5. SCHEDULE MAINTENANCE	16
6. SPARE PARTS AND SERVICE KITS	17
7. TROUBLESHOOTING	23
8. DRAWINGS & ILLUSTRATIONS	25
9. WARRANTY	28
10. MOBILE ENERGY AUSTRALIA - CONTACTS.....	31
11. APPENDIX A – DESIGN REGISTRATION.....	32
12. APPENDIX B - FLUIDS & MATERIAL SAFETY DATA SHEETS	33

1. 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 INJURY 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. The following are suggested as minimum requirements to be followed when operating the MEA SMARTPACK system. 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.
- 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 tyre service operations as set by the authority.

⚠ WARNING



Read the operators manual before starting this unit. Failure to adhere to instructions can result in severe personal injury.

⚠ DANGER



**HOT OIL UNDER PRESSURE!
Will cause SEVERE PERSONAL INJURY OR DEATH. Do not remove valves, caps, plugs or piping when compressor is running or pressurized. Shut down compressor and relieve system of all pressure before removing valves, caps, plugs or piping**

300038

⚠ DANGER



Discharge air used for breathing will cause severe injury or death consult filtration specialist for additional filtration and treatment equipment to meet occupational safety and health administration standards

300040

⚠ WARNING



Do not operate without fan guard in place.

300041

2. SPECIFICATIONS

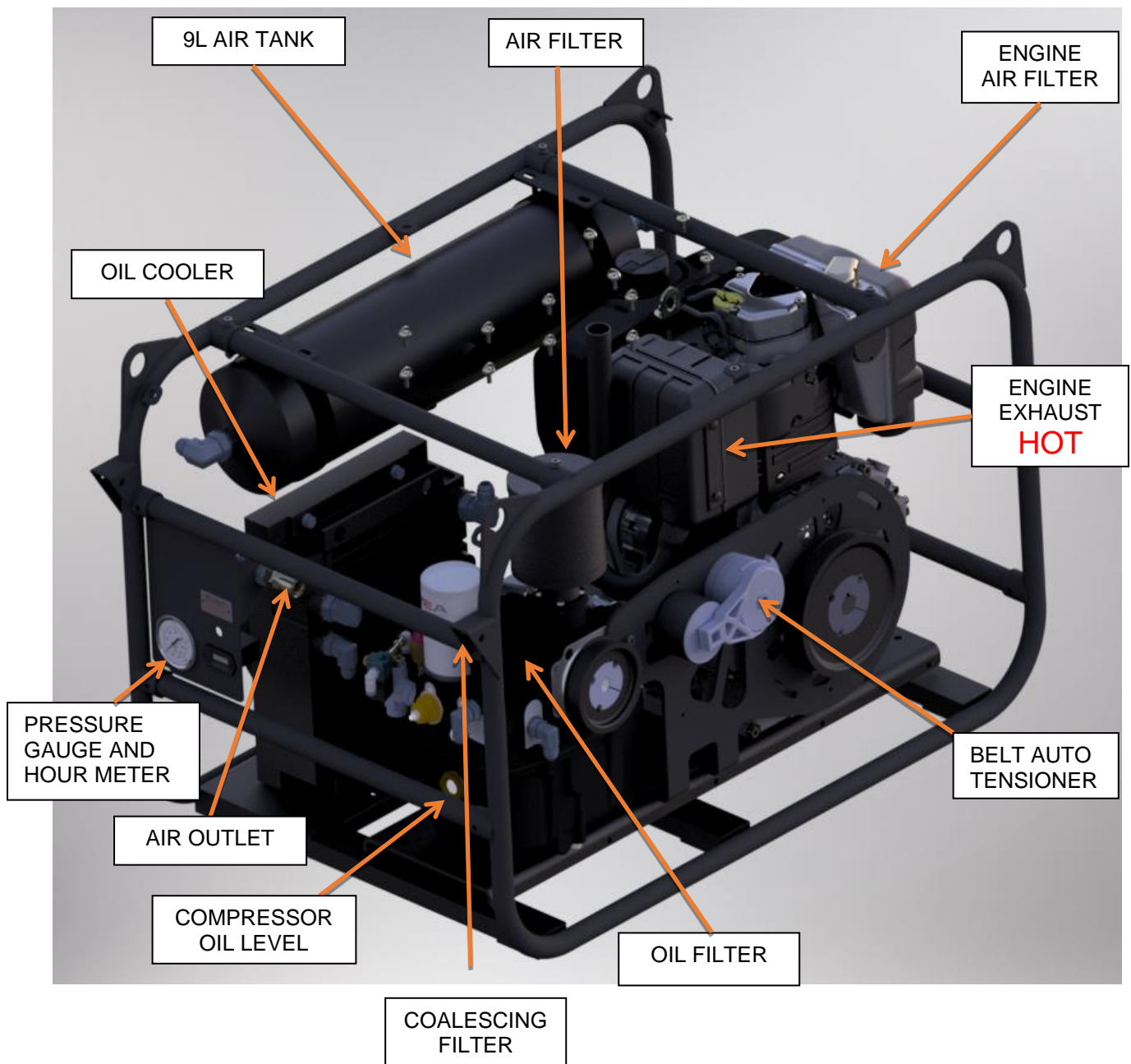
Compressor Type:	Oil injected rotary screw compressor
Drive System:	Diesel powered via 6 PK drive belt
Control:	Pneumatic
Maximum Air Delivery	35 CFM @ 150 psi
Pressure Regulation:	Mechanical inlet control valve modulates flow in response to demand
Inlet Valve Regulation	Pneumatic
Engine Control System:	Pneumatic speed control, engine and compressor high temperature and pressure engine shutdown system
Safety Features	200 PSI relief valve in compressor sump Temperature safety sensor in the compressor
Lubrication:	All replacement compressor oils must be approved by MEA prior to use. Warranty will be nullified if oil has not been approved. MEA certified and approved semi synthetic compressor oil Part Number 10019 – P0002 Quantity of Compressor Oil Required – 3.5 Litres
Filters	Compressor oil filter element spin-on type (Not Possible to Clean) Compressor coalescing filter element (Not Possible to Clean)

Engine Model:	KOHLER KD15-440						
Engine Type:	Single Cylinder, Air cooled, Diesel Combustion Engine						
Power (continuous):	8 Kw (10.9 HP) @ 3600RPM						
Electrical System:	12 Volts DC						
Maximum RPM:	3600 (max speed).						
Direction of Rotation:	Counter-Clockwise (viewed from flywheel).						
Engine Control System:	STANDARD: Electric key start, pneumatic speed control,						
Engine Protection:	Engine low oil pressure and temperature sensors.						
Lubrication:	<p>MEA approved oil to meet strict emission control regulations, min. class “CF” or better is required. If oil does not meet the minimum requirements, all warranty will be nullified.</p> <p>IMPORTANT:</p> <p>Engine oil should be MIL-L-2104F or have properties of API classification CF grades or higher. Change the type of engine oil according to the ambient temperature.</p> <table border="0"> <tr> <td>Above 25°C (77°F)</td> <td>SAE30 or SAE10W-30 or SAE15W-40.</td> </tr> <tr> <td>0°C to 25°C (32°F to 77°F)</td> <td>SAE20 or SAE10W-30 or SAE15W-40</td> </tr> <tr> <td>Below 0°C (32°F)</td> <td>SAE10 or SAE10W-30 or SAE15W-40</td> </tr> </table> <p>Engine Oil quantity 2.5L</p>	Above 25°C (77°F)	SAE30 or SAE10W-30 or SAE15W-40.	0°C to 25°C (32°F to 77°F)	SAE20 or SAE10W-30 or SAE15W-40	Below 0°C (32°F)	SAE10 or SAE10W-30 or SAE15W-40
Above 25°C (77°F)	SAE30 or SAE10W-30 or SAE15W-40.						
0°C to 25°C (32°F to 77°F)	SAE20 or SAE10W-30 or SAE15W-40						
Below 0°C (32°F)	SAE10 or SAE10W-30 or SAE15W-40						
Filters:	<p>Air Filter - Paper-type replaceable (Not Possible to Clean)</p> <p>Oil Filter – Cartridge type (Not Possible to Clean)</p> <p>Engine fuel filter – Plastic in line element (Not Possible to Clean)</p>						

3. OPERATING PROCEDURES

PRE-START CHECK EACH DAY

1. Check the oil level in the engine.
2. Check the oil level in the compressor
3. Check all hoses are secured and not damaged. Replace all damaged hoses before starting.
4. Check all electrical cables are secure. Secure all cables that are not tied down.
5. Check the air inlet and air filter on the engine are clear.



STARTING THE DIESEL ENGINE

1. Check the air outlet valve is closed.
2. Ensure that the lever on the fuel solenoid is pointing downwards.
3. Turn the key to the right to power the glow plugs wait until glow plug indicator light has gone out, continue to turn the key until engine starts, then release the key.
4. Allow the engine to run at no load for 2-3 minutes. This will allow the engine to warm up and lubrication system to be fully operational before the load is applied.
5. If the engine does not start, check the fuel tap if there is one and repeat the process described in 2 and 3 above. The maximum number of attempts should be limited to 4 and after this; the operator should seek assistance from a mechanic.

STARTING THE COMPRESSOR

1. Once the engine is running the compressor will start filling the tank. Ensure all valves are closed for compressor to reach pressure.
2. Once the tank is at pressure, the engine speed drops to ~1200 RPM.
3. Listen for air leaks in the air system.
4. Should there be any air leaks from broken hose or connections, stop the engine. Advise your maintenance department that you require assistance.

STOPPING THE COMPRESSOR UNIT

1. Close the air outlet valve on the tank and let the compressor get to set pressure, then the engine rpm will run down to a high idle.
2. Turn the engine off by turning the key to the off position
3. If you hear a slight "hissing" noise this is normal, the compressor is blowing down.

4. INSTALLATION

IF INSTALLING A WATER SEPARATOR ENSURE THAT IT IS MOUNTED AS FAR FROM THE COMPRESSOR AS POSSIBLE OR THAT IT HAS AT LEAST TWO METRES OF HOISING BETWEEN THE COMPRESSOR DISCHARGE AND SEPARATOR INLET.

The compressor air intake is protected by a paper-type replaceable air filter, and a spin-on type oil filter for the oil side and a coalescing filter for final oil removal from the air.

Safety features included in the compressor are:

- 200 PSI relief valve in separation manifold.
- Over temperature safety sensor in the compressor oil.
- Over pressure control mounted at the minimum pressure valve.
- **Do not disable or bypass the over-temperature shutdown circuits. Failure of the shutdown system could result in equipment damage, injury, or death.**

The information in this section is very important for proper operation of the compressor. Read these requirements before commencing the installation work.

1. General Consideration Mounting the Compressor Unit

The starting point for the installation is a quick overview of the requirements. Some of these points will be dealt with in more detail further on in this text. Things that should be considered now are as follows.

1. The unit should be installed in a well-ventilated area.
2. The unit will need to be installed level and any variation in the frame to be supported via washers for spacers and properly secured to the vehicle by means of 5.8 grade fasteners.
3. During installation, the unit should be orientated so that the filler cap and be easily accessed to check oil level.
4. The installation should allow access to all areas of the unit without having to disconnect lines or remove and reposition it.
5. The unit should be protected from excessive exposure to the elements and possible incidental damage from other operations.
6. The unit should be installed in an area away from heat sources such as engines, exhaust systems or other components that generate heat.
7. The unit should not be installed in a location where it will be exposed to high contamination levels or combustible gases.
8. The engine exhaust should be routed away from the compressor unit. The engine exhaust should be in an area where the exhaust CANNOT be filled up with rain. However, the exhaust must not face directly down to the ground.

2. Mounting of Compressor Unit considering Ventilation

It is not possible to make absolute recommendations regarding ventilation because of the widely differing circumstances that are possible. Duty cycle, ambient temperature and enclosure shape are some of the important variables. Ideal ventilation will provide good airflow through the unit with no restrictions. There are two ways in which the SMARTPACK 35D compressor can be mounted.

1. Top or Deck Mounting

This is the preferred mounting location. Placing the unit in an area where there are no restrictions on the intake of fresh air and exhausting of hot air and exhaust gases. This provides the best cooling and ensures reliability and life for the compressor / diesel engine.

2. Enclosed Mounting

It is important that discussion occurs between the manufacturer and the person installing the unit when it is to be placed in an enclosed area. Ventilation is one of the most important things to consider when looking at the installation of a compressor/diesel engine driven unit in an enclosed area. It is important that the air intake to the compressor and the engine exhaust are located outside of the enclosed space. The unit generates a considerable amount of heat when running. Proper ventilation is vital for ideal operation and to avoid damage to components. Ensure there is a minimum of 10" (250 mm) clearance between cooler grills on SMARTPACK 35D and any other components mounted on the vehicle. It is strongly recommended that the installation is tested if the unit is installed in an area considered to be enclosed mounting. The following is a method suggested for testing.

- 2.1 It is best to test the installation at the hottest expected ambient temperature.
- 2.2 Setup and run the system at 120 PSI. This can be done by installing a ball valve on the air outlet pipe and adjusting the opening of the valve so that the compressor is running continuously at 120 PSI.
- 2.3 Record the engine, compressor, and current ambient temperature for future reference.
- 2.4 Run the system at full load for at least one hour or until the temperatures stabilizes. Temperature stabilizing means there is no rise in temperature for 15 minutes when the compressor is running at the rated load.
- 2.5 Record the engine and compressor temperatures every 10 minutes.
- 2.6 If the system over-heats, the ventilation is not sufficient, review the installation, make changes as needed, and repeat the test.

3 Engine Exhaust consideration when installing Diesel Engine Driven Compressor Unit

In cases that the exhaust system needs to be ducted away from the engine assembly, the following are a minimum that should be considered

1. The exhaust pipe needs to be adequate for the engine.
2. There needs to be a flexible joint at the point where the extension is connected to the exhaust system of the Diesel Engine Driven Compressor Unit.
3. Ensure the exhaust pipe has suitable clearance and does not meet anything.
4. Ensure that the exhaust system has a method to prevent water from entering the exhaust system.
5. Ensure exhaust from the diesel engine is routed in a way to prevent recirculation back into the unit.

4. **Securing the Diesel Engine Driven Compressor Unit to the body of the vehicle.**

It is important to consider maintenance needs, (daily needs), service requirements, electrical connections, air connections, location of control panel before the SMARTPACK 35D is secured to the body of the vehicle.

1. Locate a suitable mounting position for SMARTPACK 35D Place the unit and check for clearances to any other objects.
2. There are four weld nuts located at the four corners of the bottom formed plate which can be used as mounting bolt locations. Holes can also be drilled through the bottom of the formed plate if alternate locations are required.
3. Remove the 6 x rubber bumpers from the underside of the unit and using a minimum of 4 – M12 bolts. Secure the unit to the body of the truck
4. Drill four holes in mounting surface and secure the SMARTPACK 35D to the truck.
5. The SMARTPACK 35D is designed to be a standalone self-contained compressor it does not need to be connected to a vehicles power and fuel supply.

6. **Check Operation – Setup & Performance Testing of Diesel Driven Compressor.**

1. The compressor is dispatched from the factory with the pressure pre-set to the customer specification.
2. Set the ball valve to the closed position.
3. On starting the compressor, the air pressure will build in the tank to set pressure specified by the customer. Once at set pressure the engine speed will drop to a high idle.

If the pressure is not at the specified pressure, refer to MEA before attempting any adjustments.

4. Use a spray bottle with soapy water to check for leaks in the air line. You will see soap bubbles around any area with an air leak. Rectify any leaks you may find.
5. Keep the system running at the pre-set pressure until the compressor is up to operating temperature.
6. Using the ball valve located on the outlet of the compressor, slowly open the ball valve, and watch the pressure drop. The pressure will drop up to the point that the pressure is 20 PSI below the setting detailed in 1 above. The engine will speed up to the maximum pre-set RPM.
7. Keep the opening of the ball valve at the setting described above for about 5 minutes. The engine should continue to run at the maximum pre-set RPM.
8. Slowly close the ball valve and watch the pressure while closing. The engine will drop to the lower speed when the regulated pressure is reached.
9. Your compressor is working correctly if it is operating as per this description

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.

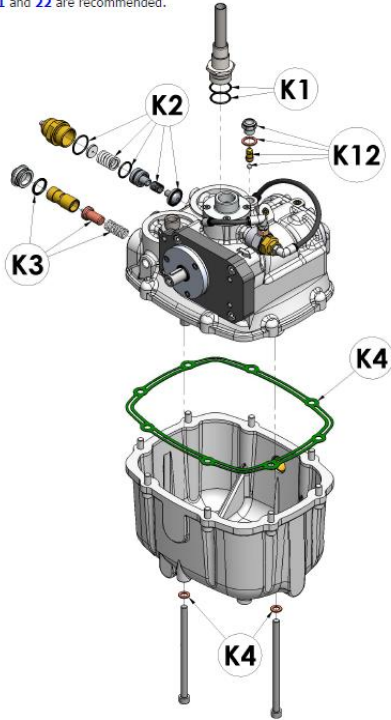
SERVICE INTERVAL	COMPRESSOR
Periodically During Operation	Observe all gauge readings. Note any change from the normal reading and determine the cause. Have the necessary repairs made? (Note: "Normal" is the usual gauge reading when operating at similar conditions on a day-to-day basis.)
Periodically as required	Inspect and replace spin-on coalescing element if necessary.
	Inspect and clean oil cooler fins.
	Check for oil and/or air leaks.
Every 10 Hours or Daily	Check the compressor oil level.
	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 than and check Compressor oil level
After first 50 hours of operation	Check system for oil and/or air leaks
	Check engine/compressor mounts fastener torque.
	Check belt and pulleys for signs of wear
Every 100 Hours	Check engine/compressor mounts fastener torque.
	Check compressor oil level
	Check system for oil and/or air leaks
	Clean air cleaner element
	Check engine/compressor/generator mounts for excessive wear and fastener torque.
Every 400 Hours of operation or 9 months	Change compressor oil 3L
	Change compressor oil filter
	Change compressor air filter
	Check belt and pulleys for signs of wear
	Check engine/compressor mounts fastener torque.
800 Hours / 18 months	Change compressor oil filter
	Change compressor coalescing filter
	Change compressor air filter

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

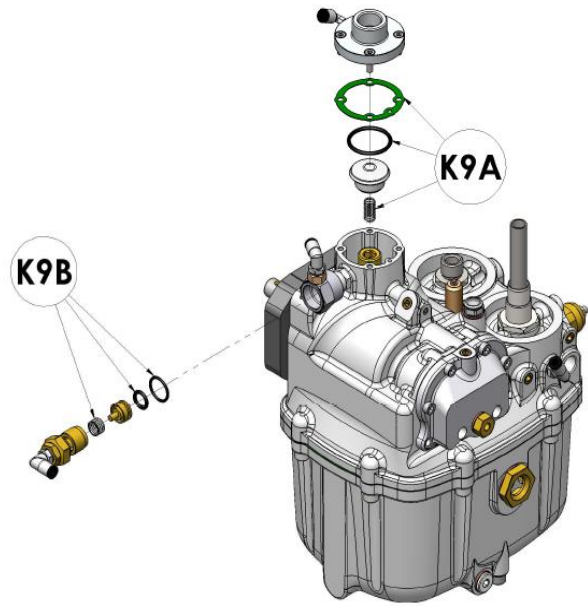
6. SPARE PARTS AND SERVICE KITS

Compressor

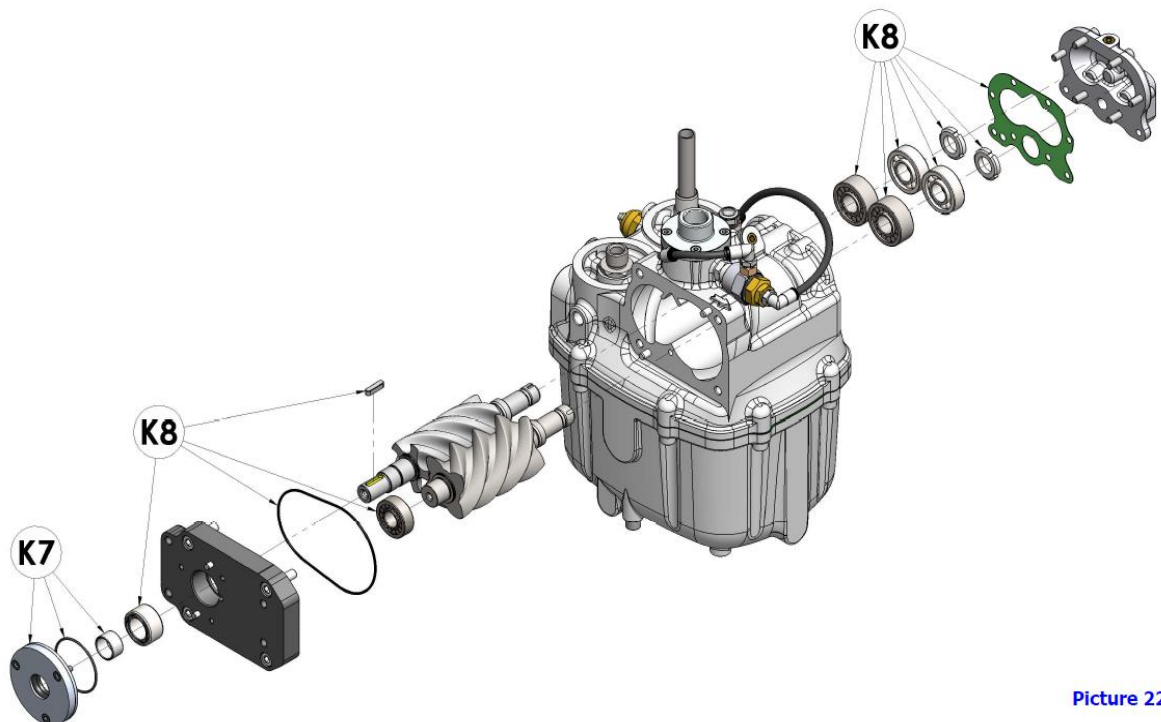
For a correct maintenance of a Adam, the spare parts kits shown here below in the pictures 20, 21 and 22 are recommended.



Picture 20



Picture 21



Picture 22

The table on the right shows a schedule for the maintenance of a Adam. The table indicates working hours for a standard machine. These working hours can be modified depending on work environment and cycle numbers.

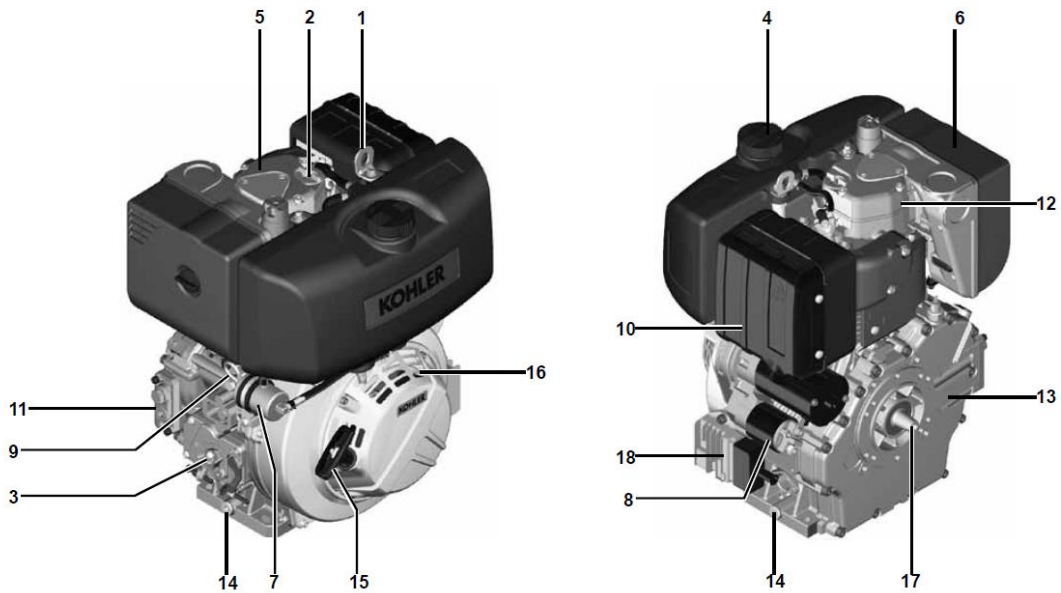
VMC PART NUMBERS		DESCRIPTION	ADAM L60/55°	ADAM L60/71°	ADAM L60/83°	WORKING HOURS
K1	270.0590	M22-M24 SEPARATOR NIPPLES SPARE PARTS KIT	•	•	•	Corrective maintenance
K2	220.0010	V.M.P. G10 (1/2-3/4) SPARE PARTS KIT	•	•	•	after 8000 hours
K3	725.0050	THERMOSTATIC VALVE SPARE PARTS KIT ADAM 60 55°	•			after 8000 hours
	725.0051	THERMOSTATIC VALVE SPARE PARTS KIT ADAM 60 71°		•		
	725.0052	THERMOSTATIC VALVE SPARE PARTS KIT ADAM 60 83°			•	
K4	725.0074	ADAM BASE FLANGE O-RING SPARE PARTS KIT	•	•	•	Corrective maintenance
K7	725.0021	ADAM 60 AIR-END OIL SPLASHGUARD SPARE PARTS KIT	•	•	•	after 8000 hours
K8	725.0022	ADAM 60 AIR-END BEARINGS SPARE PARTS KIT	•	•	•	after 20000 hours
K9A	600.5090	KIT INTAKE VALVE RH30E-nr SPARE PARTS KIT	•	•	•	after 8000 hours
K9B*	220.0619	KIT GHS100 FOR INTAKE VALVE RH30nr SPARE PARTS KIT	•	•	•	after 8000 hours
K12	725.0090	INTERNAL OIL RECOVERY VIEWER	•	•	•	Corrective maintenance

SMARTPACK 35D SERVICE KITS AND PART NUMBERS

200 Hour - 7219-KB0001		
Part Number	Description	Quantity
10019-K0007	OIL 5 LITRE CONTAINER DIESEL	1
10021-P0006	DECAL OIL MEA OIL	1
10008-P0126	FILTER OIL ENGINE KOHLER	1
10008-P0128	FILTER AIR ENGINE KOHLER	1
7201-P0075	DECAL NEXT SERVICE DUE	1
400 Hour - 7219-KB0002		
Part Number	Description	Quantity
10019-K0007	OIL 5 LITRE CONTAINER DIESEL	1
10021-P0006	DECAL OIL MEA OIL	1
10008-P0126	FILTER OIL ENGINE KOHLER	1
10008-P0128	FILTER AIR ENGINE KOHLER	1
7201-P0075	DECAL NEXT SERVICE DUE	1
10019-K0005	OIL 5 LITRE CONTAINER COMPRESSOR	1
10001-P0076	FUEL FILTER INLINE	1
10008-P0041	FILTER OIL COMPRESSOR	1
800 Hour - 7219-KB0003		
Part Number	Description	Quantity
10019-K0007	OIL 5 LITRE CONTAINER DIESEL	1
10021-P0006	DECAL OIL MEA OIL	1
10008-P0126	FILTER OIL ENGINE KOHLER	1
10008-P0128	FILTER AIR ENGINE KOHLER	1
7201-P0075	DECAL NEXT SERVICE DUE	1
10019-K0005	OIL 5 LITRE CONTAINER COMPRESSOR	1
10001-P0076	FUEL FILTER INLINE	1
10008-P0041	FILTER OIL COMPRESSOR	1
10008-P0110	FILTER COALESCING	1
10008-P0111	FILTER AIR COMPRESSOR	1

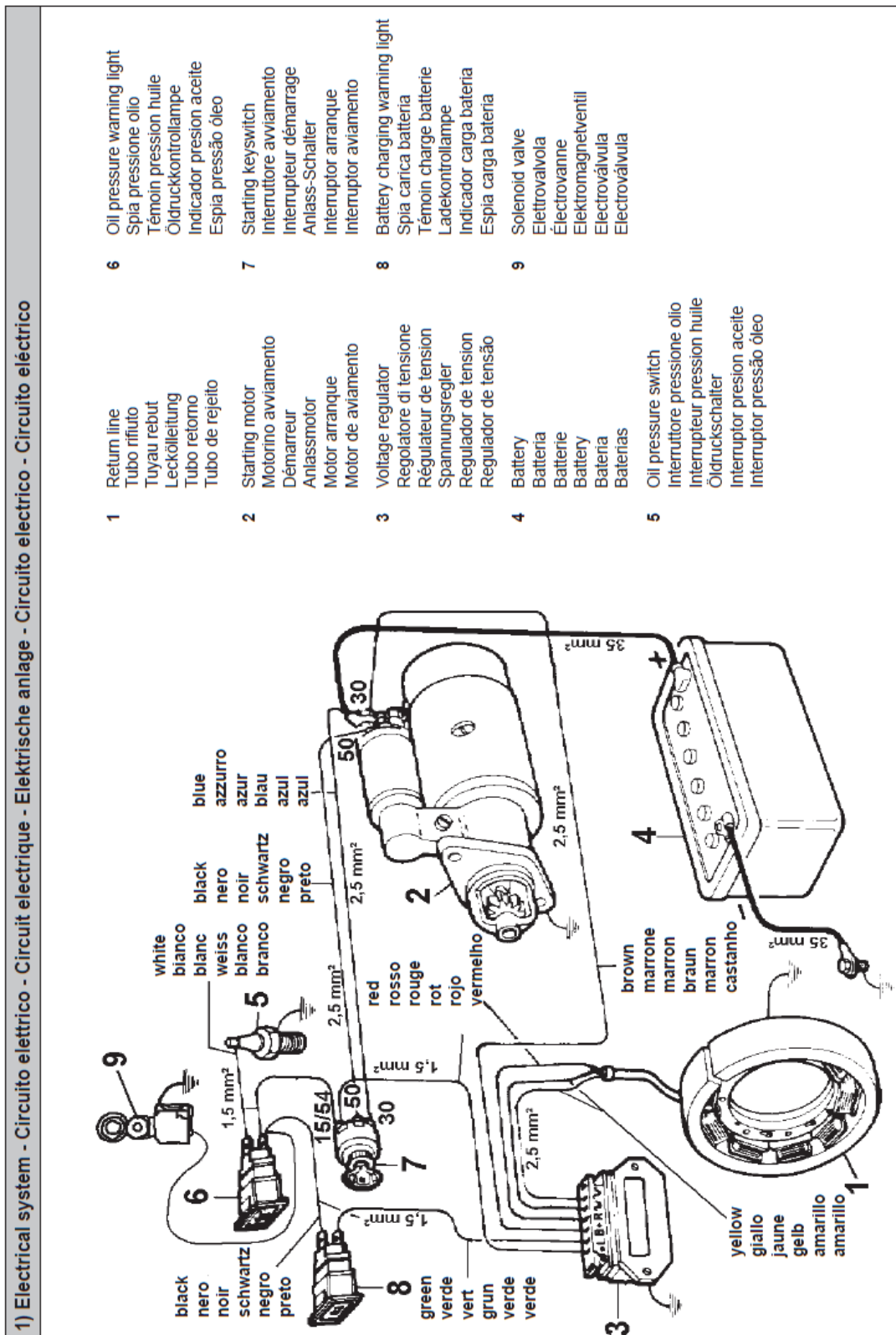
IMPORTANT: PLEASE CONTACT MOBILE ENERGY AUSTRALIA FOR MORE INFORMATION IF YOU HAVE ANY QUESTIONS REGARDING THE SETUP AND OPERATION OF THE SMAC RANGE OF PRODUCTS.

Diesel Engine

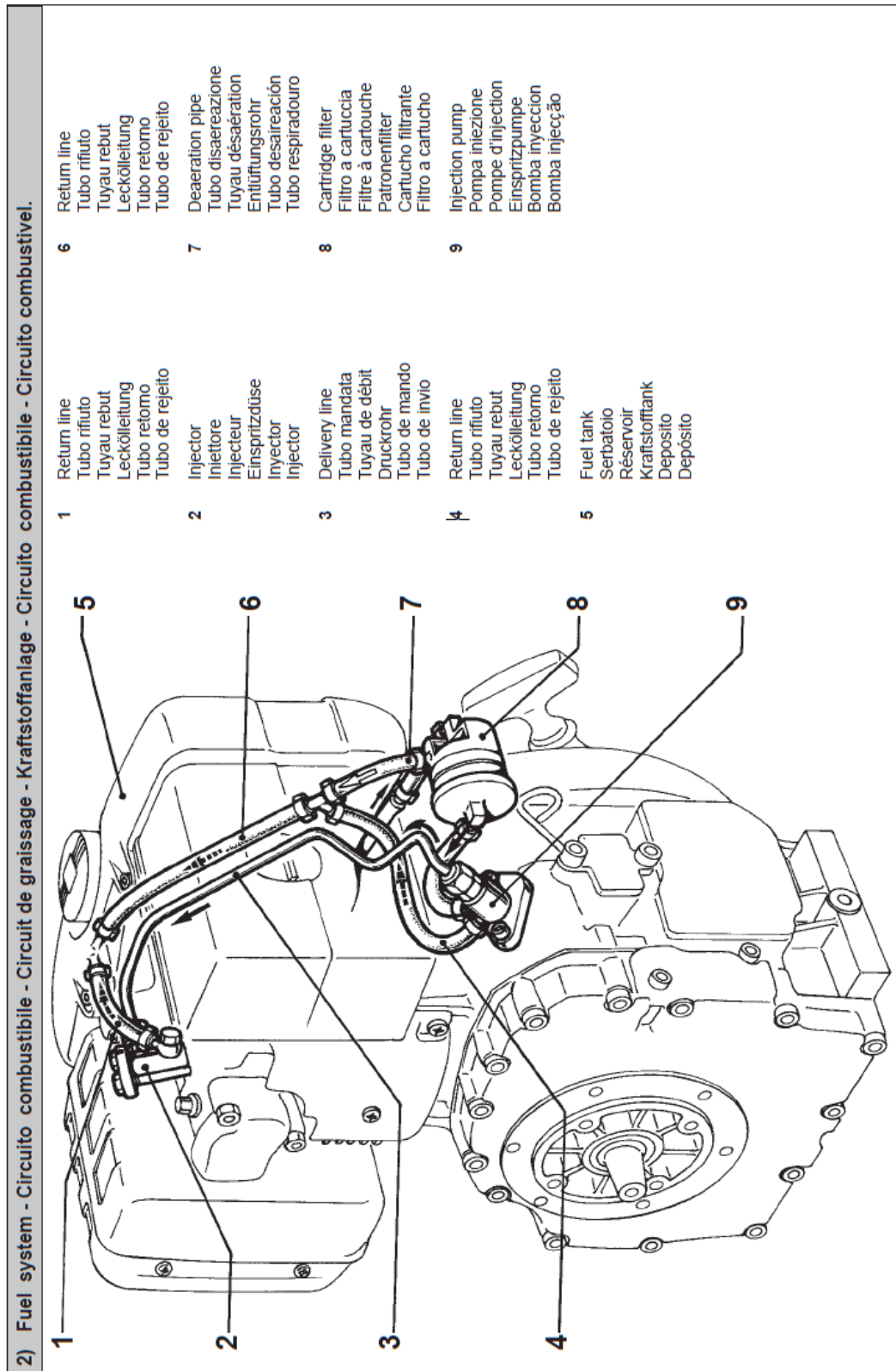


1	Lifting point on the engine
2	Oil refilling hole
3	Throttle lever
4	Fuel inlet
5	Rocker arm cover
6	Air suction intake
7	Fuel filter
8	Starter motor
9	Oil dipstick
10	Exhaust muffler
11	Internal oil filter
12	Cylinder head
13	Crankcase
14	Engine oil drain plug
15	Recoil starter
16	Engine cooling air intake
17	PTO on crankshaft
18	Voltage regulator

Diesel Engine Electrical System



Diesel Engine Fuel System



7. TROUBLESHOOTING

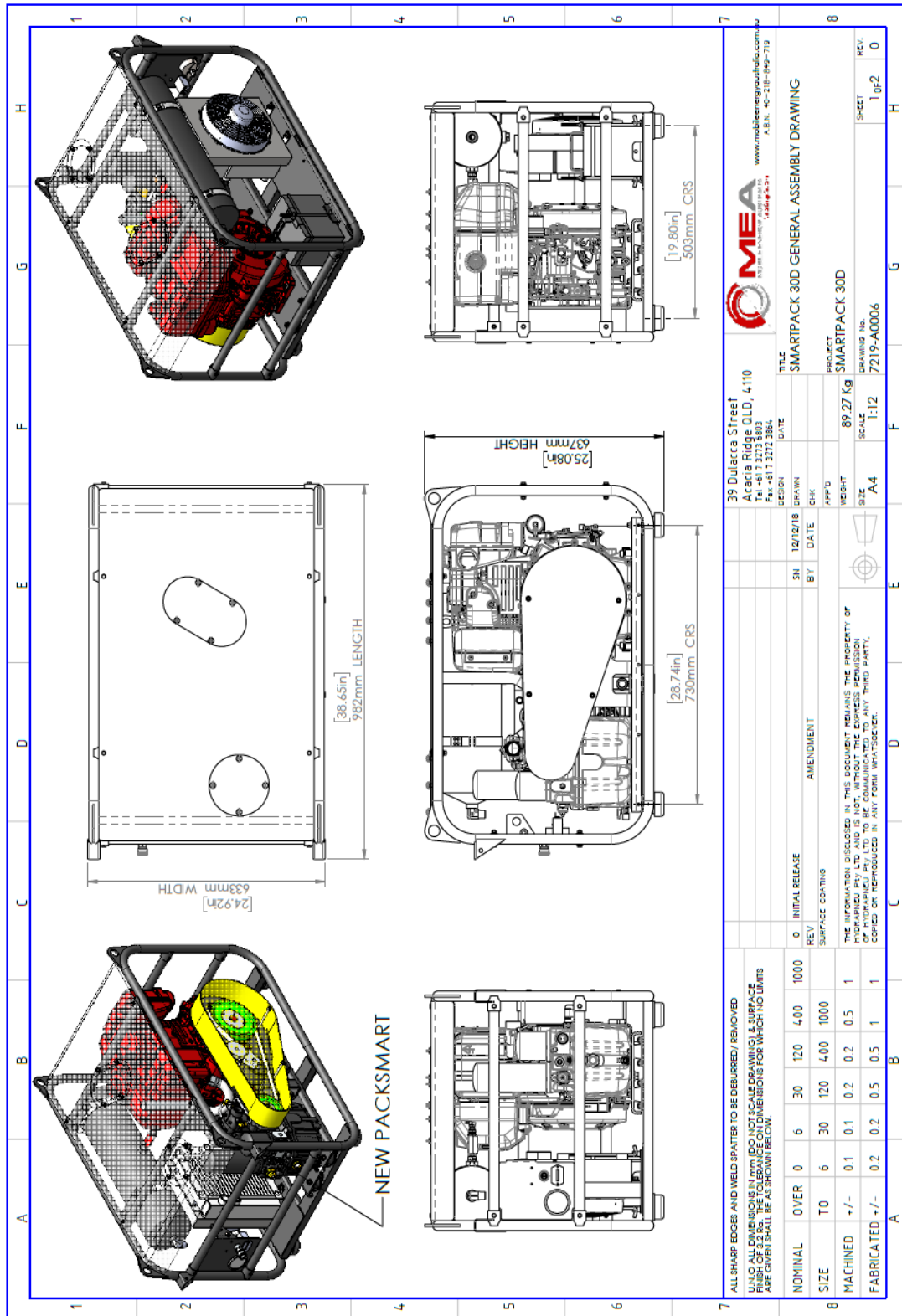
Compressor

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

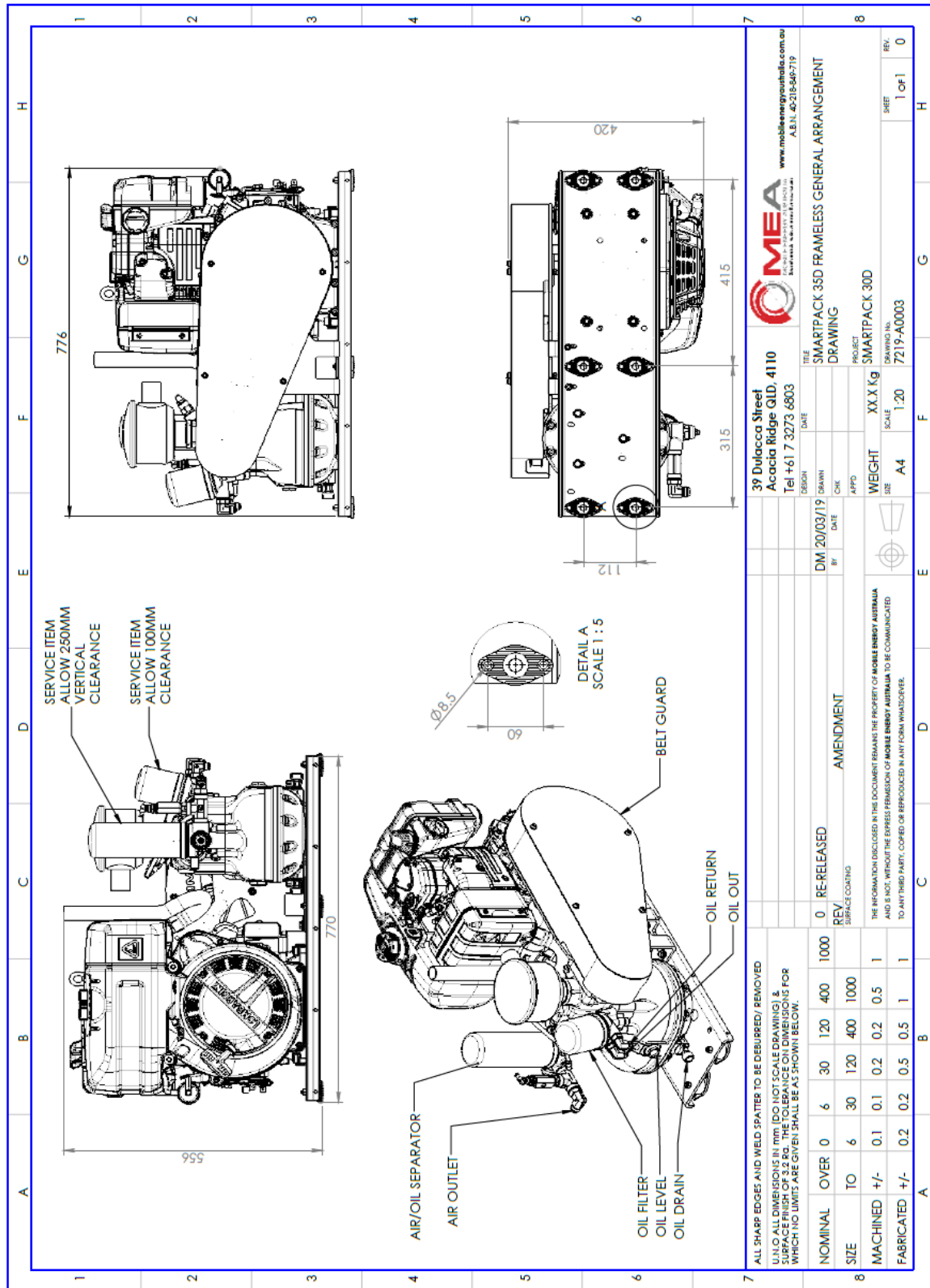
Diesel engine

POSSIBLE CAUSE		TROUBLE									
		Engine does not start	Engine starts but stops	No acceleration	Non-uniform speed	Black smoke	White smoke	Too low oil pressure	Increase oil level	Excessive oil consumption	oil and fuel dripping from exhaust
FUEL CIRCUIT	Clogged pipes										
	Clogged fuel filter										
	Air inside fuel circuit										
	Clogged tank breather hole										
	Faulty fuel pump										
	Injector jammed										
	Jammed injection pump delivery valve										
	Wrong injector setting										
	Excessive plunger blow-by										
	Jammed injection pump delivery control										
	Wrong injection pump setting										
LUBRICATION	Oil level too high										
	Jammed pressure relief valve										
	Worn oil pump										
	Air inside oil suction pipe										
	Faulty pressure gauge or switch										
	Clogged oil suction pipe										
ELECTRIC SYSTEM	Battery discharged										
	Wrong or inefficient cable connection										
	Defective ignition switch										
	Defective starter motor										
	Clogged air filter										
MAINTENANCE	Excessive idle operation										
	Incomplete running-in										
	Engine overloaded										
	Advanced injection										
SETTINGS/REPAIRS	Delayed injection										
	Incorrect governor linkage adjustment										
	Broken or loose governor spring										
	Idle speed too low										
	Worn or jammed piston rings										
	Worn or scored cylinders										
	Worn valve guides										
	Jammed valves										
	Worn bearings										
	Governor linkage not free to slide										
	Drive shaft not free to slide										
	Damaged cylinder head gasket										

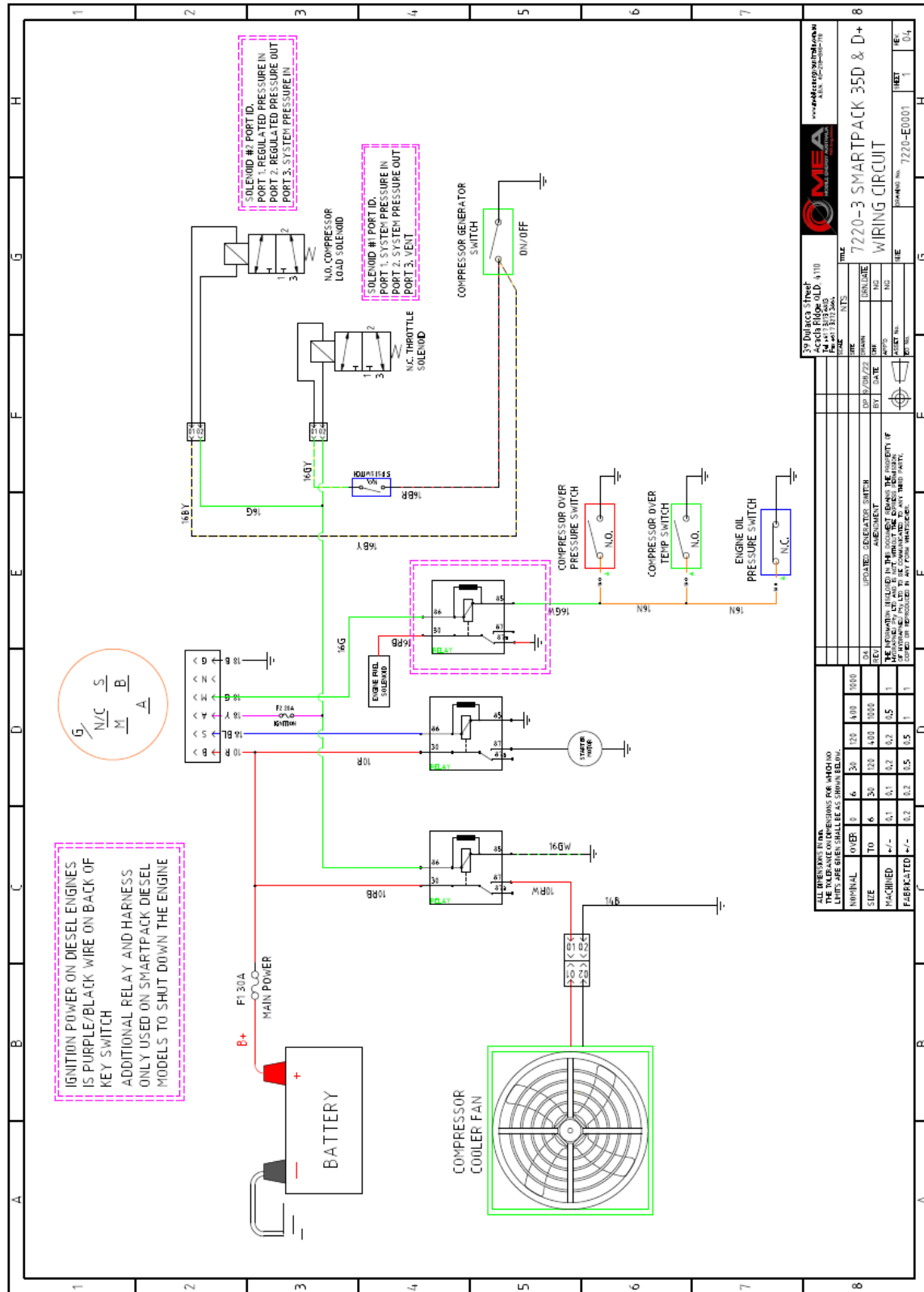
8. DRAWINGS & ILLUSTRATIONS



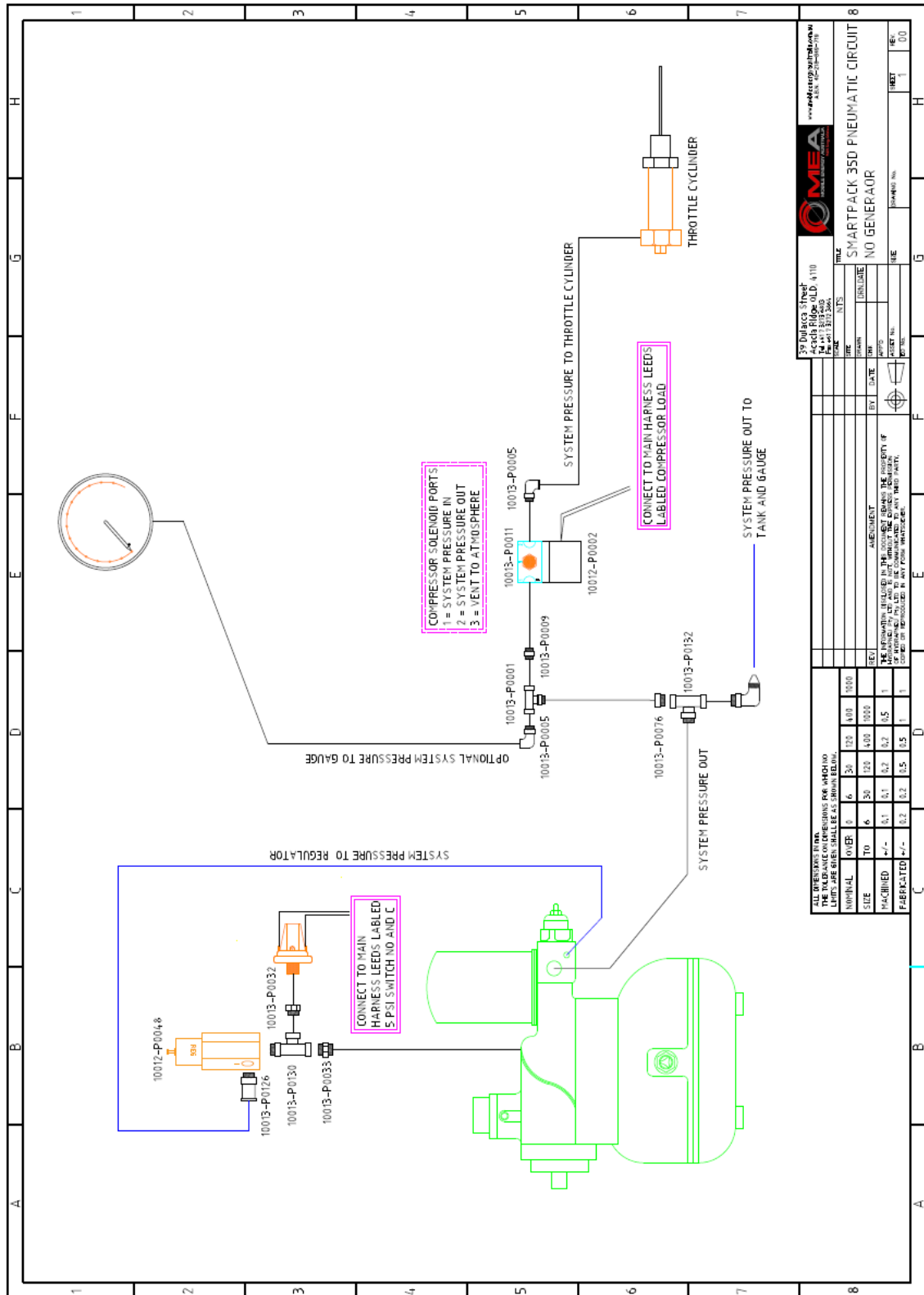
DRAWINGS & ILLUSTRATIONS



DRAWINGS & ILLUSTRATIONS



DRAWINGS & ILLUSTRATIONS



39 Dulacca Street Acacia Ridge QLD 4110 Australia Ph: +61 7 3273 6803		MEASUREMENTS		DATE		BY		REV	
TITLE	DATE	REV	DATE	BY	DATE	BY	DATE	BY	DATE
SMARTPACK 35D PNEUMATIC CIRCUIT									
NO GENERATOR									
<p>ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN MILLIMETERS DIMENSIONS IN PARENTHESES ARE IN INCHES UNLESS OTHERWISE SPECIFIED</p> <p>THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF MOBILE ENERGY AUSTRALIA PTY LTD. IT IS TO BE USED ONLY FOR THE PROJECT AND NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN PERMISSION OF MOBILE ENERGY AUSTRALIA PTY LTD.</p>									

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 manufacturing defects in material and workmanship.

2. NO WARRANTY 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 two (2) years 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 Manual.

6. WARRANTY REGISTRATION VALIDATION

- 6.1 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 particular 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.

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

Office: 07 3273 6803

Email: sales@mobileenergyaustralia.com.au

Spare Parts

Office: 07 3273 6803

Email: sales@mobileenergyaustralia.com.au

Service

Office: 07 3273 6803

Email: workshop@mobileenergyaustralia.com.au

11. APPENDIX A – 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 35D Design Registration

The Smartpack 35D design has been assessed against the requirements of the Work Health & Safety Act 2011 and Australian Standard 4343:2014. The Smartpack 35D 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.com.au

12. APPENDIX B - FLUIDS & MATERIAL SAFETY DATA SHEETS

FLUID TYPE	DESCRIPTION	PART NUMBER
Compressor Oil	Semi Synthetic Compressor Oil 68	10019-P0002
Engine Oil	Diesel Engine Oil 15W40	10019-P0007

Please use QR code to link you to relevant MSDS

