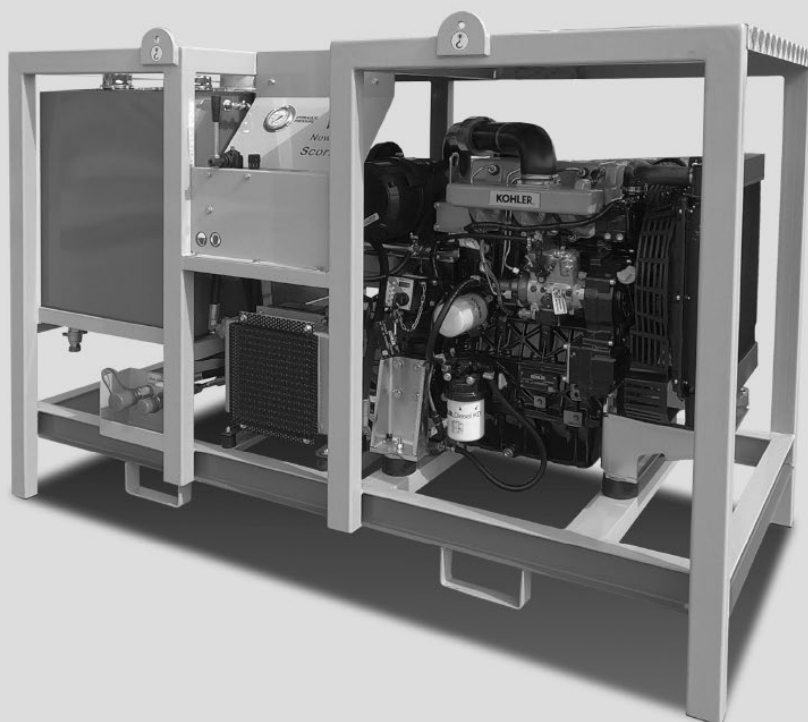


ScorPack 32 kW

Hydraulic Power Unit with Dual Output



Operation Manual

V1.2 | English | 2026 | 05-03

Table of Contents

1. Safety	5
1.1. Warning Symbols	5
1.2. General Safety Guidelines	5
1.3. Equipment Safety Decals	5
1.4. Safety Devices	6
2. Transportation, Lifting & Storage	7
2.1. Transportation	7
2.2. Lifting	7
2.3. Storage	7
3. Proper Use	8
4. Product Information	10
4.1. Technical Specifications	10
4.2. Unit Identification	10
5. System Description & Functions	11
5.1. Main Characteristics	11
5.2. Main Components:	11
5.3. Main Functions:	12
5.3.1. Hydraulic Valves Controls	12
5.3.2. Engine Throttle	12
5.3.3. Hydraulic Pressure Gauge(s)	13
5.3.4. Hydraulic Oil Temperature and Level Gauge	13
5.3.5. Automatic Shutdown Valve (Over Speed Valve)	13
5.3.6. Spark Arrestor	13
5.3.7. Main Switch	13
5.3.8. Engine Ignition Switch	14
5.3.9. Heat Exchanger	14
5.3.10. Hydraulic Oil Drain & Shut-off valve	14
5.3.11. Fuel Drain & Shut-off valve	15
6. Installation & Assembly	16
6.1. Installation	16
6.1.1. General Recommendations	16
6.1.2. Required Equipment	16
6.2. Assembly	16
6.2.1. Hydraulic Connections	16

7. Operation	17
7.1. Recommended Operating Conditions.....	17
7.2. Pre-Operation Checklist.....	17
7.3. Operating the equipment.....	17
7.3.1. Engine Start.....	17
7.3.2. Operating the Hydraulics	18
7.4. Stopping Operation	20
8. Cleaning	20
8.1. Cleaning the hydraulic hoses	20
9. Maintenance.....	21
9.1. System Periodic Maintenance Schedule	22
9.2. Engine Periodic Maintenance Schedule	23
10. Troubleshooting	23
11. Index	24

1. Safety

1.1. Warning Symbols



General danger symbol



Danger due to electrical voltage

DANGER! Negligence of this warning may cause loss of life or damage to the equipment.

WARNING! Incorrect handling or use may cause personal or property damage, to the equipment, other equipment or personnel.

CAUTION! Negligence of this sign will weaken or damage the operating safety and reliability of the equipment.



NOTE! This sign indicates useful information on safe and effective product handling.

1.2. General Safety Guidelines

Safety instructions and warnings are guidelines for proper and safe use. Situational awareness is essential to promoting a safe workplace and for the safety instructions to be properly implemented.

The operator should be aware that the equipment may be dangerous if improperly used.

If the safety instructions are not carefully read, understood and complied with the equipment there may be a danger to the user.

The user must carefully read and follow the equipment instructions, as well as the operating instructions for other manufacturer's equipment incorporated into the system, before operating or servicing the equipment.

In addition to following the basic safety instructions presented in this user guide, the operator of the equipment should follow safety instructions for handling hazardous materials and follow the guidelines for worker protection (HAZWOPR, OSHA) to prevent injury, loss of life, or damage to the equipment or property.



DANGER! The correct personal protective equipment (PPE) should be worn at all times when operating the equipment. Failure to follow this protocol may result in personal injury and in some cases may result in death.



DANGER! Danger zones are present during equipment deployment and recovery and can be created by equipment movement. These areas can occur between:

- Equipment and beach
- Equipment and work platform
- Equipment and vessel
- Equipment and other equipment
- Equipment and open water

1.3. Equipment Safety Decals



DANGER! Failure to follow safety decal information may result in loss of life, injury, or damage to equipment or property.

In the event safety decals are damaged, worn, or removed please contact New Naval for replacements. Failure to replace safety decals may result in dangerous situations, misuse of equipment or improper maintenance.

1.4. Safety Devices



DANGER! Safety devices should not be removed or from the equipment nor modified before, after or during operation. Doing so may cause injury, loss of life and/or damage to equipment or property.

DANGER! Appropriate safety devices should be used when securing, loading and transporting equipment. Failure to do so may result in injury, loss of life and/or damage to equipment or property.

2. Transportation, Lifting & Storage

2.1. Transportation

Always transport the equipment in an upright position.



CAUTION! For both transporting and storing the equipment, ensure that the hydraulic connections are protected. Do not place a heavy load on the connections or use them as lifting points.

WARNING! Always use appropriate transport and safety equipment when transporting equipment. Safety straps and proper load bearing equipment should always be used. The equipment must be properly secured while in transit and on the deployment platform to minimize movement, shifting and/or possible overturning. When standing freely, the equipment might not be sufficiently stable.

2.2. Lifting



DANGER! Never stand or work underneath suspended load.

CAUTION! To lift with a crane, always use designated equipment lifting points, along with appropriate lifting kit.

Use certified lifting equipment as follows:

4-leg lifting slings with thimbles.

4 shackles Bolted Type.

Note the equipment weight to use lifting slings and shackles with safe working load.



Fig. 1 – Designated Lifting Eyelet

General guidelines:

- All lifting operations must be carefully planned and appropriately supervised.
- Lifting operations should always be based on an updated and valid risk assessment.
- Use of a safety line helps accurate control of suspended loads and precise location and arrangement.

2.3. Storage

- Store to a dry and protected location.
- Disconnect all ancillary equipment (i.e., hoses).
- Use provided protective equipment covers.



CAUTION! It is important that all water be removed from the equipment otherwise damage to the equipment may occur.

3. Proper Use

Regularly check the temperature of the engine to make sure it is not overheating. Ensure that nothing flammable is on the equipment during operation.

Before first use please make sure the Power Pack is filled with

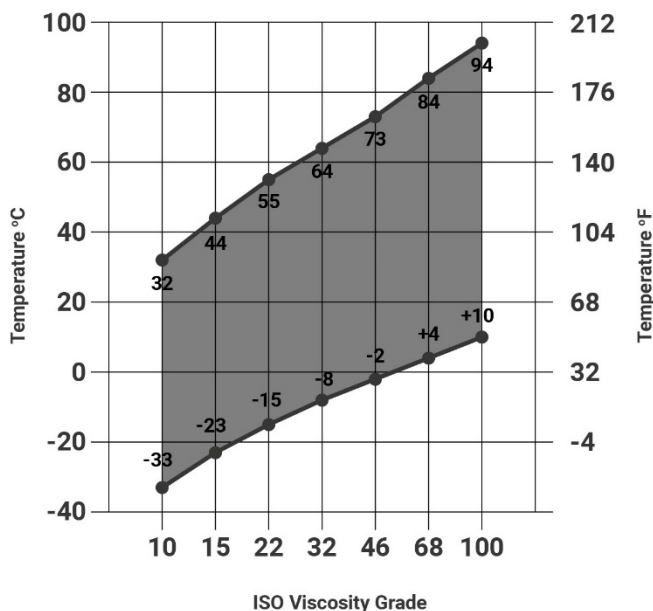
- Engine Oil
- Diesel Fuel
- Hydraulic Oil

If not do the following:

- Fill the engine with:
 - Engine Oil (Please refer to the engine's hardcopy operation manual included)
 - Diesel Fuel (Please refer to the engine's hardcopy operation manual included for proper fuel type). The fuel tank capacity is approximately 70 liters.
- Fill the Power Pack's tank with:
 - 120 to 140 liters of hydraulic oil.

Consult the table below on the oil type:

Temperature Operating Graph for Hydraulic Oil



NOTE! Use only the lubricants recommended by the manufacturers of the engine and hydraulic system

(refer to the specific manuals for each component or the assembly section for more information).

Recommended Operating Conditions:

Air -20°C to +50°C (-4°F to 122°F)



DANGER! Any other use of equipment besides its designated purpose may result in injury, loss of life or damage to equipment or property.



NOTE! Modifying or rebuilding equipment will invalidate all warranty terms and any and all liability clauses.



DANGER! The engine emits Carbon Monoxide (CO), proper ventilation is necessary. Do not use the power unit in closed areas. The exhaust fumes contain toxic carbon monoxide that can cause severe injury and death.

Incorrect or careless use may cause danger to life, equipment and property.

All operators should wear appropriate PPE and PFD devices at all times.

When working from vessels, a lifeline should be used for operations close to the bulwarks.

Don't place heavy loads on the equipment.

Do not remove any hydraulic oil hose during operation.

Limits specified in the operating conditions, technical description and data are not to be exceeded.

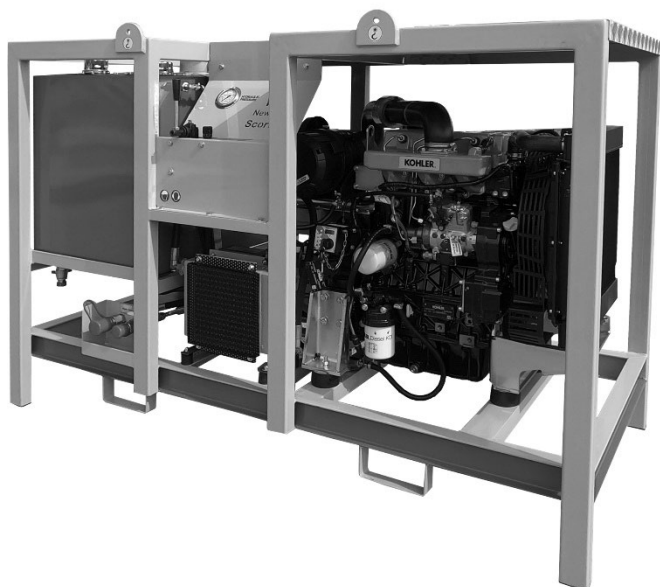


Warning! Surfaces that become heated during operation can cause burns to operators if they aren't

aware and if proper PPE is not used. Stay clear of the exhaust pipe during operations as it may become hot.

4. Product Information

4.1. Technical Specifications



ScorPack Power Unit 32 kW

Dimensions (LxWxD) 1800 x 850 x 1240 mm

Weight Dry 570 kg

Power 32 kW

Hydraulic Flow Rate (max) 6 lpm for Skimmer Line
24 lpm for Pump Line

Hydraulic Pressure (max) 60 bar for Skimmer Line
170 bar for Pump Line

Engine Start Electric Starter

Frame Material Mild steel, hot deep
galvanized or epoxy
paint system coated

Gauges Hydraulic Pressure / Oil
Level / Fuel Level /
Hydraulic Oil
Temperature

Fuel Diesel

Hydraulic Connections (m/f) 1/2" for Skimmer Line
3/4" for Pump Line

4.2. Unit Identification

An identification plate on the equipment provides product information and identification.

- New Naval contact information
- Serial #: Equipment designated serial number
- Date: Manufacture date
- Weight (kg): Equipment weight



New Naval

New Naval Ltd.
(+30) 22920-27936
2nd km Lavriou-Souniou | Lavrio 195 00 | Greece
info@newnaval.gr | www.newnaval.com

Serial #:

Date:

Weight (kg):



NOTE! Do not remove the nameplate, as the corresponding item will not be identifiable or trackable without it.

5. System Description & Functions

The Hydraulic Power Unit, ScorPack 32 kW is a medium weight hydraulic power pack intended to power equipment with demanding power requirements. The robust design of the power pack makes it ideal for operation in harsh environments.

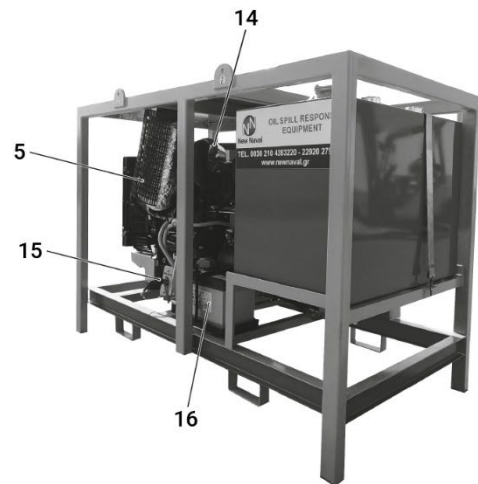
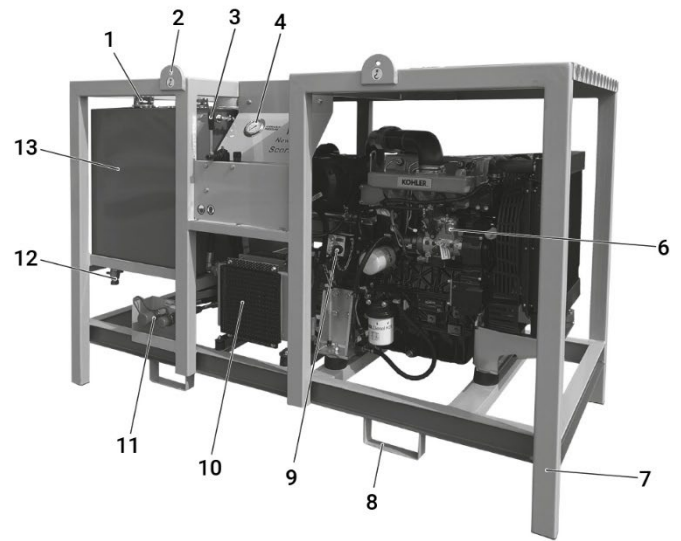
5.1. Main Characteristics

Class	32 kW
Type	Hydraulic Power Unit
Power Method	Diesel-Driven Engine
Power Applications	High-Capacity Pumps, Recovery Skimmers, Boom Reels, Air Blowers

The basic advantages of the ScorPack 32 Power Unit are the following:

- The frame is constructed of mild steel, hot deep galvanized or epoxy paint system coated, creating a durable protective cage.
- The power unit comes fitted with reliable, renowned engine brands.
- The power unit comes with a complete hydraulic hose set.
- All hydraulic hoses are fitted with quick couplings connections including protective dust caps.
- The system can be customized with an assortment of additional options specific to operational needs and customer desire.
- Suitable rain and wind proof (offshore) cover (optional).
- Optionally fitted with overspeed valve and spark arrestor.
- Lifting eyes & forklift channels.

5.2. Main Components:



1	Fuel Tank Lid
2	Lifting Eyelets (x4)
3	Hydraulic Valves Controls
4	Hydraulic Pressure Gauges
5	Exhaust
6	Diesel Driven Engine
7	Power Pack Frame

- | | |
|----|---|
| 8 | Forklift Sockets |
| 9 | Engine Ignition Switch (Electric Starter) |
| 10 | Hydraulic Oil Heat Exchanger |
| 11 | Hydraulic Connections |
| 12 | Fuel Tank Drainage |
| 13 | Fuel & Hydraulic Oil Tanks |
| 14 | Over Speed Valve (optional) |
| 15 | Main Switch |
| 16 | Battery |

5.3. Main Functions:

5.3.1. Hydraulic Valves Controls



Fig. 6 – Hydraulic Controls & Pressure Gauges

The hydraulic controls are load-sensing and regulate the directional flow and the amount of flow to the paired equipment.

Push up/down the control valves to engage the hydraulic flow.

Find the correct position of the hydraulic control valve to the appropriate flow.

Please refer to section **Operating the Equipment**.

5.3.2. Engine Throttle

The engine throttle can be set so that the resulting engine speed (rpm) translates into the appropriate hydraulic pump speed and consequently the proper

flow for both the pump hydraulic motors and the recovery modules.



Warning! Should be the power pack be used in other applications than the paired ones, the engine speed can be accordingly adjusted to achieve the required hydraulic flow. It is recommended that experienced technicians/engineers with the necessary know-how into hydraulics should adjust the throttle like-so.



Fig. 8 – Engine throttle in lowest rpm adjustment (engine idling).

5.3.3. Hydraulic Pressure Gauge(s)

The pressure gauge shows the amount of bar (PSI) that is flowing to each of the connected piece of equipment.

Maximum hydraulic pressure for skimmer line is preset and not should not exceed 60 bar.

Maximum hydraulic pressure for pump line is preset and not should not exceed 170 bar.

5.3.4. Hydraulic Oil Temperature and Level Gauge



Fig. 9

The gauge is located on the side of the hydraulic oil tank and shows both oil temperature and oil quantity left within the tank.

5.3.5. Automatic Shutdown Valve (Over Speed Valve)

This model may be equipped with an automatic shutdown valve that shuts down the engine in the event of exceeding RPMs, to prevent the otherwise rare occurrence of engine runaway.



Fig. 10

5.3.6. Spark Arrestor

This model's engine exhaust may be fitted with a spark arrestor.

5.3.7. Main Switch

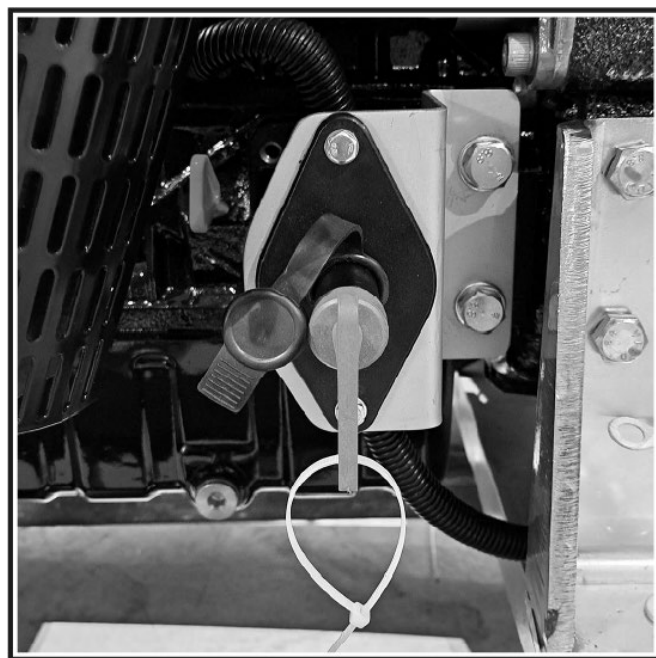


Fig. 11 – Main Switch

This model may be equipped with a battery to support the electronic ignition switch.

The battery must be connected and the main switch must be turned to **ON** to operate the system, as shown above (Fig. 17).

5.3.8. Engine Ignition Switch

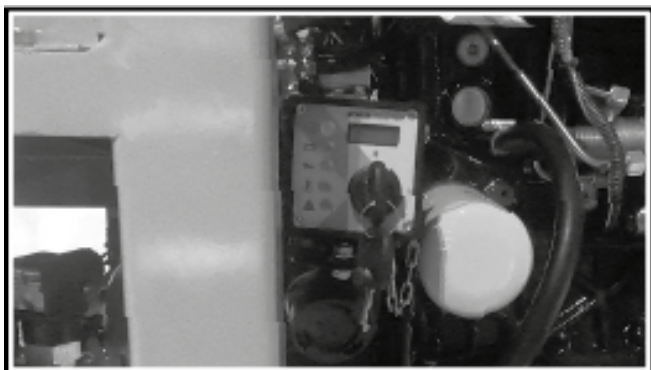


Fig. 12 – Key Switch

This model comes with an electric starter which is engaged by the use of a key switch, located on the front side of the control panel.

The switch panel has a battery indicator that comes on when Battery is ON.

The electric starter has 3 positions, 0, 1 & 2 which are described below:

0 (key vertical) – When you turn the key to this position the engine shuts down. Electric current to the battery indicator and other electric devices is shut off. You can insert and remove the key in this position.

1 (key horizontal) – This is the position the key will be in when the engine is running.

2 (Key rotated) – Turn the key to this position to start the engine. Battery and oil check light indicators are on. As soon as the engine starts, release the key and it will automatically return to the position 1. Please refer to the engine's hardcopy operation manual included, for further information.



NOTE! Please refer to the engine's hardcopy operation manual included, for further information.

5.3.9. Heat Exchanger

The system incorporates a heat exchanger for cooling the hydraulic oil. A box houses the relay and the fuse of the exchanger's electric circuit. Please consult the wiring diagram in pg. 23 if needed.

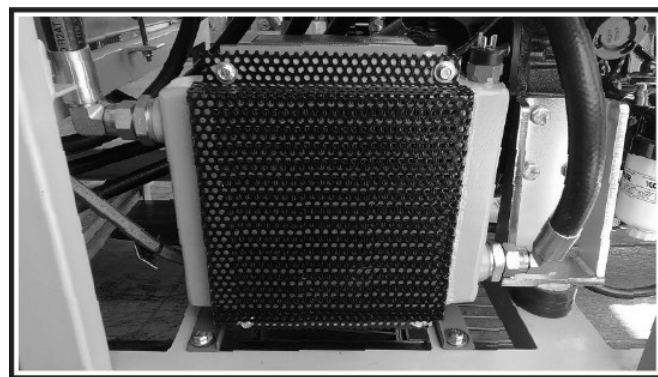


Fig. 13



Fig. 12 – Plastic Relay & Fuse Box

5.3.10. Hydraulic Oil Drain & Shut-off valve

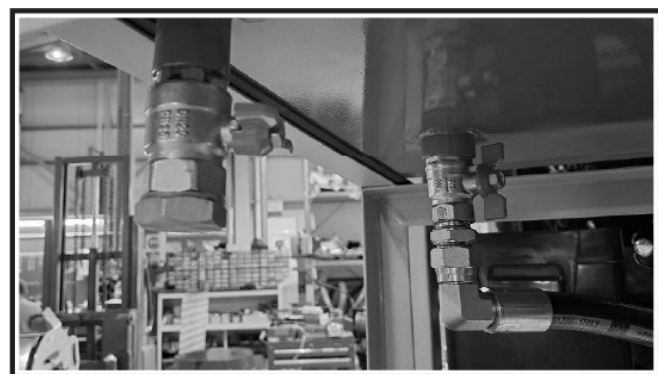


Fig. 14

Beneath the oil tank there two valves. One is for draining the oil (left) and the other (right) to shut the hydraulic oil flow, off through the system.



NOTE! Ensure the shut off valve is and remains open before powering and during usage of the system.

5.3.11. Fuel Drain & Shut-off valve



Fig. 15

Beneath the fuel tank there two valves. One is for draining the fuel (left) and the other (right) to shut the fuel flow, off through the system.



NOTE! Ensure the shut off valve is open before powering and during usage of the system.

6. Installation & Assembly

6.1. Installation



DANGER! Personnel working near the water's edge should wear a personal floatation device as well as proper PPE.



WARNING! Prior to installation examine and define the operation's nature. Proper installation can improve efficiency and safety of an operation.

6.1.1. General Recommendations

It is strongly recommended to take the following steps through installation.

- Examine the work site and plan a layout to set up the equipment so that is in easily deployed.
- Place and set up any safety or containment equipment that may be necessary.
- Identify any potential safety risks or factors that may be debilitate the operation.
- Transport the equipment to the working site.
- Place the power unit on a horizontal flat surface on the shore or working area, as near as possible to the recovery area with the thickest oil layer, so that the operator can monitor the skimmer during operation.
- Place the storage receptacle in a location that the transfer hoses can reach but will not be a hindrance to the operation.
- Place all ancillary equipment next to the where it will be connected to (i.e., hoses).
- Take a moment before the assembly and make sure all operators involved understand the procedure and the safety risks at hand.

6.1.2. Required Equipment

- Hydraulic Hoses
- Hydraulic Power Receiving Unit
- Hydraulic Oil
- Diesel Fuel

6.2. Assembly

6.2.1. Hydraulic Connections

Connect the power unit's quick couplings (male: pressure / female: relief) to the hydraulic equipment with the corresponding size, with the hydraulic hoses provided.



NOTE! Remove the plastic dust caps prior to connecting the couplings.

Each set of hydraulic coupling is labelled for easy connection with corresponding piece of equipment.



WARNING! Make sure the power unit is off during the connection process.



WARNING! Check connections are firm and secure.

7. Operation



DANGER! All personnel should use fully approved PPE during operation of the equipment.

7.1. Recommended Operating Conditions



CAUTION! Below 0°C (32°F), remove water from the equipment after use to prevent damage from freezing.

Ideal conditions for equipment usage are:

Air Temp.	-20°C to +50°C (-4°F to 122°F)
------------------	--------------------------------

7.2. Pre-Operation Checklist

Prior to start of operation take the following steps for preparation of the equipment:

1. Check hydraulic oil level. Add if necessary. Make sure oil tank drain valve is closed and oil shut-off valve is open.
2. Check engine oil level. Add if necessary. Refer to the engine's manual for further information.
3. Check engine's fuel level. Refuel if necessary. Refer to the engine's manual for consulting about proper type of fuel (diesel). Make sure fuel tank drain valve is closed and fuel shut-off valve is open.
4. Check all hydraulic and transfer hoses are connected correctly and securely.
5. Ensure the power pack's battery is connected.
6. If provided, check if Overspeed Valve and Spark Arrestor are properly installed.
7. Ensure hydraulic controls are in the neutral position.

7.3. Operating the equipment

7.3.1. Engine Start

Follow the steps below to start the engine:

1. Push and turn clock-wise the main switch to ON.

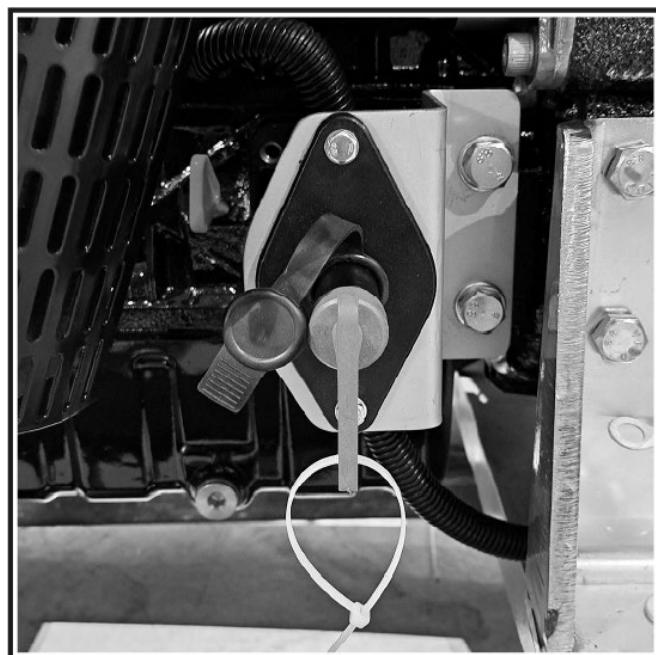


Fig. 16 – Main Switch OFF

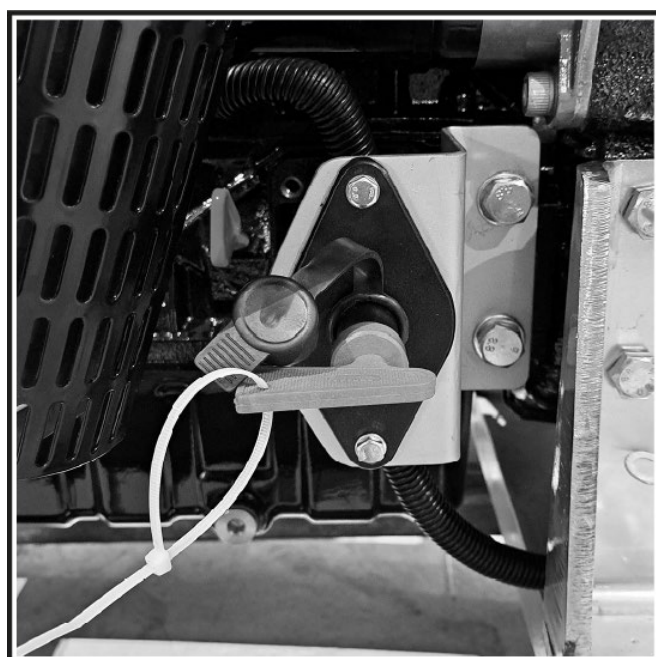


Fig. 17 – Main Switch ON



Fig. 18 – Fuel Level Gauge

2. Insert the key into the key switch. Turn the key clockwise to the 1 position. Wait until all lights and sounds go off. Turn the key to position 2. The engine starts and the key returns to position 1.

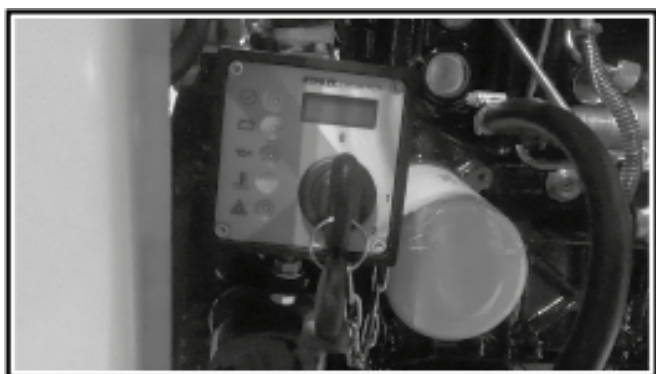


Fig. 19 – Engine Ignition Switch Position 0

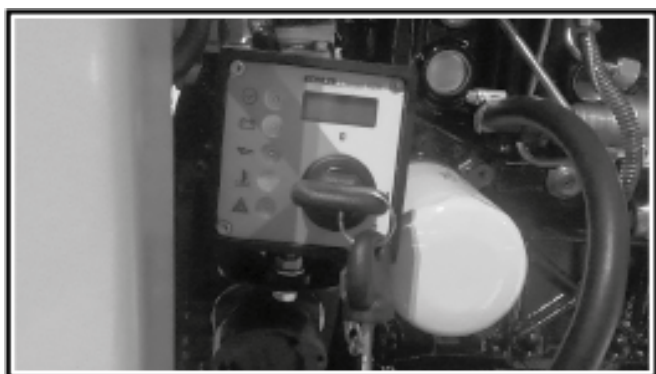


Fig. 20 – Engine Ignition Switch Position 1

3. Allow the engine to run a few minutes for warm up.



NOTE! On every initial engine start-up, set the throttle to its lowest position (Fig. 8 & 22) and allow the engine to

idle for approximately 5-10 minutes while you check for proper engine oil pressure, diesel fuel leaks, engine oil leaks, and for proper operation of the indicators and/or gauges.



NOTE! Make sure the engine is installed on a level surface. If a continuously running engine is installed at an angle greater than 20° (in any direction) or if an engine runs for short periods of time (less than 3 minutes) at an angle greater than 25° in any direction, engine oil may enter the combustion chamber causing excessive engine speed and generate white smoke and also may occur unsatisfactory oil pressure. These may cause serious engine damage

7.3.2. Operating the Hydraulics

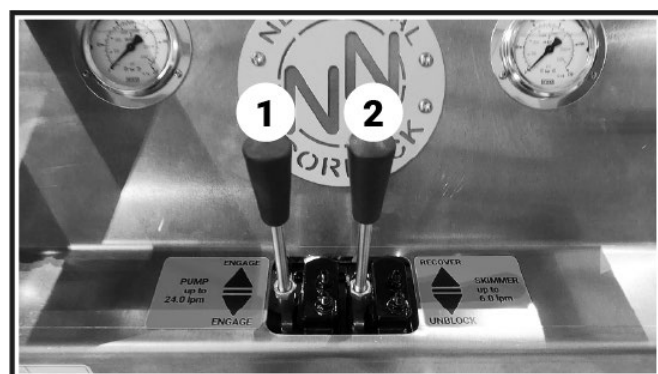


Fig. 21

Engage the hydraulics control to check that the equipment receiving the hydraulic power is functioning properly.

Control 1 engages the pump.

Control 2 engages the recovery banks.

Engage Pump with control 1 (Fig. 21). Adjust pump speed depending on viscosity of collected fluid. The flow increases proportionally by engaging the lever. Maximum speed is achieved in terminal position. In most cases the following rule of thumb applies: The heavier the oil the lower the RPMs of the pump. Push the lever as to desired speed.

Engage the skimmer's recovery banks with control 2 (Fig. 21). Push to forward (recovery banks rotate to collect), draw to reverse. The flow increases

proportionally by engaging the lever. Maximum speed is achieved in terminal position. Same rule applies here: The heavier the oil the lower the RPMs of the recovery bank. In the event of debris attached on the recovery bank, engage reverse to remove it.



WARNING! Do not engage the pump before the skimmer's collection hopper has been filled with liquids.

Depending to the operational needs, and the given workload, adjust the throttle so that engine's rpm increases just as needed for the engine to respond.



Fig. 22 – Engine throttle in lowest adjustment (engine idling)

If needed lift the throttle stick gradually and slowly, from the idling position, to increase the engine's speed and achieve the desired rotational speed.



Fig. 23 – Engine throttle lifted



WARNING! Check the gauges to make sure the hydraulics are operating correctly and at the right pressure. Hydraulic pressure should not exceed 60 bar at the skimmer's side and 170 bar at the pump's side. If the equipment is functioning properly, the pressure is correct and the engine is running well continue operations.



NOTE! Engine should work in a smooth and linear manner. Consult the engine's operational manual for optimized engine work conditions.



NOTE! Continuously check the engine oil and fuel levels, and the hydraulic oil and temperature level. If levels run low stop the equipment and refill.



NOTE! If a hydraulic pressure gauge breaks for any reason, close the orange handle to stop hydraulic oil from entering the gauge.

7.4. Stopping Operation

To terminate the operation:

1. Turn the hydraulic power source to neutral before turning it off.
2. Lower the throttle completely (Fig. 22)
3. Turn the key switch to position 0.
4. Turn the main switch to OFF.
5. While hydraulic hoses are connected, engage manual hydraulic controls to allow the pressure to move hydraulic oil through the system while relieving pressure.
6. Disconnect the hydraulic hoses. Place the dust caps to prevent contamination or damage to the couplings.



WARNING! Do not remove any hydraulic hoses while the system is still operative.

8. Cleaning



DANGER! Always unplug the battery and insulate the cables and battery poles, before cleaning.



WARNING! Always use appropriate PPE like protective clothing and gloves. Cleaning without adequate personal protection may lead to oil exposure, which imposes hazards to the operator's health.



CAUTION! Use only fresh water to rinse equipment. If needed use only mild detergents. Harsh or abrasive clean chemicals may deteriorate or even damage parts of the equipment.

8.1. Cleaning the hydraulic hoses

Keep exterior surfaces clean.

Grease hydraulic connections after cleaning and prior to storing.

Place dust caps.

9. Maintenance



NOTE! Equipment should be serviced following a maintenance schedule based on the frequency of the equipment use and the environment that the equipment is operated in.

Failure to carry out scheduled maintenance can result in damage to the equipment and malfunction in an oil spill recovery operation.

Review safety, operating, and maintenance instructions before proceeding. Only qualified and trained personnel should carry out maintenance. Always use the appropriate tools, PPE and carry out maintenance in the appropriate and safe work area.

It's the user's responsibility to maintain and test their equipment.

Regular maintenance intervals, e.g. 6-month and 12-month maintenance program are recommended so that response equipment is functioning at full capability and prepared for immediate use during oil spill response operations.

A maintenance schedule should be created according to the amount of use of the equipment, whether for training or actual spill response. The environment the equipment is deployed in also impacts maintenance intervals.

A maintenance record should also be kept.

Servicing and lubrication intervals depend mainly on the circumstances of use and the storage environment. This table may be used for reference values:

Environment/conditions	Lubrication Interval
Dry & Clean Workspace	300 hours or 6 months
Exposed/Outdoors Conditions	100-200 hours or 4 months
Harsh/Dirty/Corrosive/Arctic Conditions or >70 hours of use per week	50 hours or 2 months
Extreme Conditions	Continuous lubrication or central lubrication system

Regardless of how many hours the equipment has been used, after each operation the equipment should always be inspected, serviced and cleaned.

Any worn or damaged parts should be replaced.

Maintenance on each component varies depending on working conditions and time used, therefore it is important to read the manuals and maintenance guides of each component e.g., engine, hydraulics, etc. to ensure the proper maintenance is carried out.



WARNING! The system should never be powered or connected to a power source during maintenance.

9.1. System Periodic Maintenance Schedule

System	Check Item	Before Use	After Use	Every Month	Every 3 Months	First 50 Hours	Every 200 hours	Every 2000 hours
General	Inspect, Start & run for at least 20 minutes to charge battery & maintain moving parts			○				
Metal Frame	Visual check of the physical integrity of metal structure. (Special Attention to weld joints for cracks, breaks, paint flaking, cuts, incisions.)	○			○			
Hydraulic Tank	Visual check for leaks (Special attention to level indicators, valves & welding).	○	○		○			
	Visual check of all supply & return hoses	○	○		○			
	Visual check of hydraulic oil level. Add if necessary.	○						
	Replace Hydraulic oil					◇		◇ or every 24 months
	Replace Hydraulic oil Return Filter					◇	◇ or every 12 months	
Hydraulic System	Visual check for leaks	○	○		○			
	Lubricate hydraulic connections		○					
	Visually check hydraulic system and its components, verifying physical integrity and absence of corrosion, cracks, cuts, abrasions, disjunctions, lacerations and other surface damages.				○			
Control Levers	Visual check of the physical integrity of control levers	○	○					
	Manually check operating fluidity of control levers	○						
	Check that control levers move to all positions freely	○	○					
Electrics & Electronics	Visually check the physical integrity of electric and electronic equipment				○			

○ : Check ◇ : Replace

9.2.Engine Periodic Maintenance Schedule

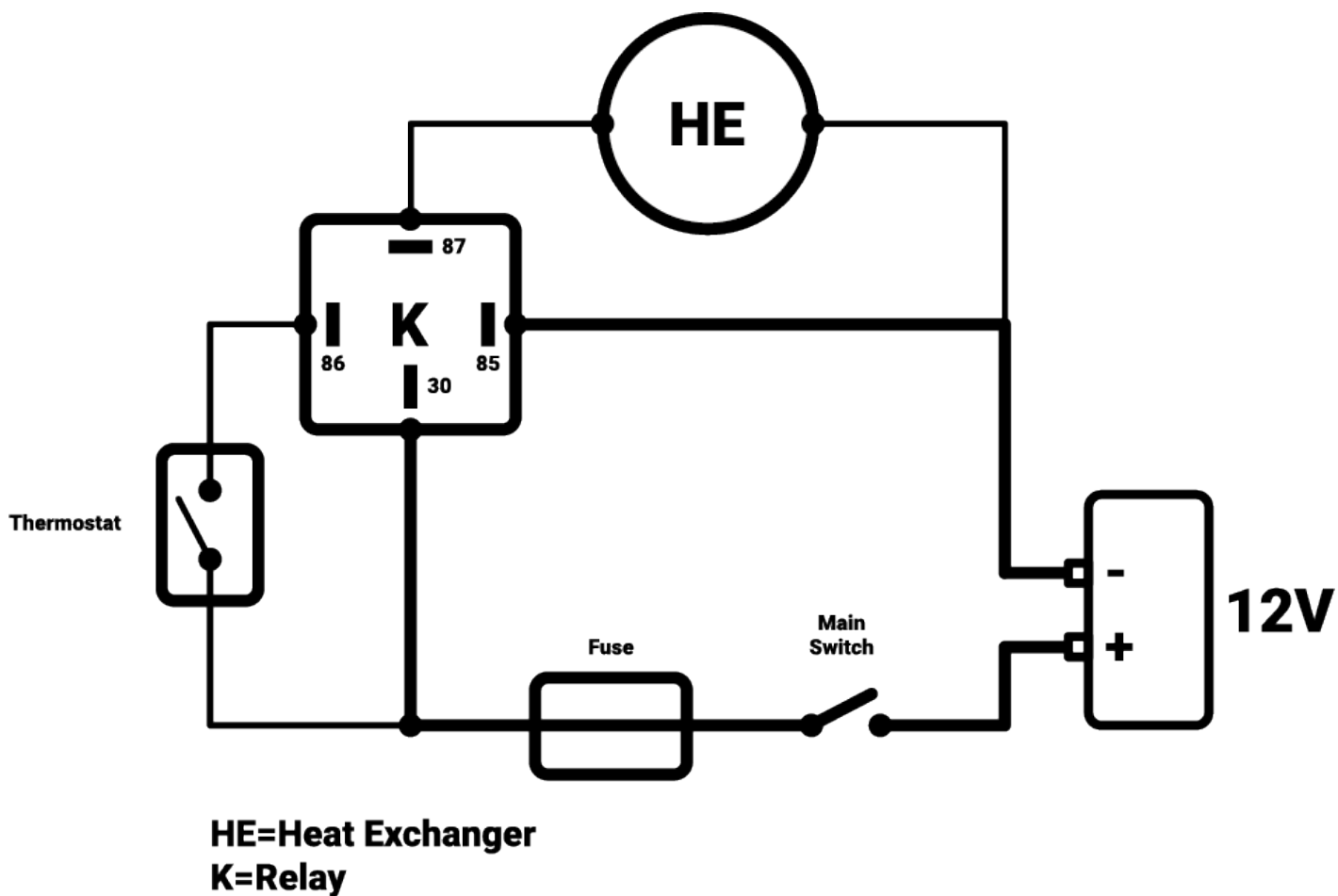
Please refer to the engine's operation manual for thorough description of the procedures for proper care and maintenance of the engine.

10. Troubleshooting

	Problem	Possible Solution
1.	Cannot connect hydraulics	Check that the hydraulic connections are paired correctly.
		Check that the hydraulic connectors are not damaged.
		If the hydraulic connections are paired correctly and they connectors are in good working condition then the hydraulic lines are pressurized and therefore cannot be easily connected.
		To depressurize hydraulic lines: With 2 adjustable wrenches loosen the quick release hydraulic connector from the hose coupling and the pressure will be released along with some hydraulic oil. The hydraulic connector is screwed on to the hose coupling. Please contain hydraulic oil.
2.	Engine is overheating	Check fluid levels
		Check the cooler is working properly
		Check that the exhaust is breathing properly
3.	Hydraulic flow is inconsistent or failing	Check that all connections are correct and secure
		Check that the hydraulic flow matches that of the receiving unit
		Check that all hydraulic hoses are undamaged
		Ensure the engine is running properly

11. Index

Heat Exchanger Wiring Diagram



New Naval Ltd.

2nd km Lavriou-Souniou

Lavrio 195 00, Greece

(+30) 22920-27936

info@newnaval.gr

www.newnaval.gr



New Naval