



Operation and Maintenance Instructions
Parts List

HT74DVDQ Power Unit



167 Stock Street, Nesquehoning, PA 18240 Phone: 570-645-3779 Fax: 570-645-4061

Website: www.hydra-tech.com

E-Mail: htpump@hydra-tech.com

HT74DVDQ Power Unit

Specifications

Engine: Deutz TD 2.9 L4 (EPA Tier 4 Final)

Horse Power: 74 (55 Kw)@ 2500 RPM

Engine Control Panel: LOFA CP 750 (URPS Spec)

Hydraulic Output: Variable Max. 30 GPM (114 LPM)

Hydraulic Pressure: Maximum 2900 PSI (197 Bar)

Hydraulic Oil Capacity: 60 US gal. (227 L)

Fuel Capacity: 115 US gal. (435 L)

Overall Height: **Skid** 67-1/2 inches (172 Cm) **Trailer** 82 inches (208 Cm)

Width: **Skid** 44 inches (112 Cm) **Trailer** 70 inches (178 Cm)

Overall Length: **Skid** 104 inches (264 Cm) **Trailer** 156inches (396 Cm)

Weight (Dry): **Skid** 3765 lbs. (1708 Kg) **Trailer** 4306 Lbs. (1953 Kg)

Weight: Adder for hydraulic oil + 440 lbs., Full fuel + 800 lbs.

Hose Ports: Pressure: 1" female quick disconnect coupler, wing nut style.

Return: 1" male quick disconnect coupler, wing nut style.

Case Drain: 1/2" female quick disconnect coupler

Filters: Engine oil: (Deutz) 01174418

Fuel: (Deutz) Primary 04130241, Secondary 04132775

Air: (Deutz – Mann) Inner 01319257, Outer 01180870

Hydraulic oil: Hy-pro HP4CL9-10MB

IMPORTANT SAFETY INFORMATION



SAFETY ALERT SYMBOL

This symbol is used to call your attention to hazards or unsafe practices which could result in an injury or property damage. The signal word, defined below, indicates the severity of the hazard. The message after the signal word provides information for preventing or avoiding the hazard.

⚠ DANGER

Immediate hazards which, if not avoided, **WILL** result in severe injury or death.

⚠ WARNING

Hazards which, if not avoided, **COULD** result in severe injury or death.

⚠ CAUTION

Hazards or unsafe practices which, if not avoided, **MAY** result in injury or property damage.

⚠ WARNING

Before operating this tool, see the safety information and operating instructions in the Operation Manual.

⚠ WARNING

Do not operate the pump if the impeller blades are exposed. After assembly, install the inlet screen before operating the pump.

Failure to observe this warning could result in severe injury or death.

⚠ WARNING

Do not inspect, adjust, or clean tool when it is connected to a power source. Accidental startup could result in serious injury.

⚠ WARNING



Skin injection hazard:

Oil under pressure easily punctures skin causing serious injury, gangrene or death. If you are injured by escaping oil, seek medical attention immediately.

- Do not use fingers or hands to check for leaks.
- Do not hold hose or couplers while operating the power source.
- Depressurize the hydraulic system before servicing.




**HYDRA-TECH
PUMPS**

167 Stock Street, Nesquehoning, PA 18240 **Phone:** 570-645-3779 **Fax:** 570-645-4061

Website: www.hydra-tech.com

E-Mail: htpump@hydra-tech.com

IMPORTANT SAFETY INFORMATION

	<p>⚠ WARNING</p> <p>Wear eye protection when operating or servicing this tool.</p> <p>Failure to wear eye protection could result in serious eye injury from flying debris or hydraulic oil.</p>
---	---

<p>⚠ WARNING</p> <p>Do not exceed the maximum hydraulic flow, pressure relief or back pressure listed in the Specifications and Parts manual.</p> <p>Failure to observe this warning could result in severe injury or death.</p>

<p>⚠ WARNING</p> <p>Do not disconnect tool, hoses, or fittings while the power source is running or if the hydraulic fluid is hot. Hot hydraulic fluid could cause serious burns.</p>
--

<p>⚠ CAUTION</p> <p>Hydraulic oil can cause skin irritation.</p> <ul style="list-style-type: none">• Handle the tool and hoses with care to prevent skin contact with hydraulic oil.• In case of accidental skin contact with hydraulic oil, wash the affected area immediately to remove the oil. <p>Failure to observe these precautions may result in injury.</p>
--

<p>IMPORTANT</p> <p>Do not reverse hydraulic flow. Operation with hydraulic flow reversed can cause tool malfunction. Connect the supply (pressure) hose and return (tank) hose to the proper tool ports.</p>
--

<p>IMPORTANT</p> <p>Procedure for disconnecting hydraulic hoses, fittings or components:</p> <ol style="list-style-type: none">1. Move the flow lever on the hydraulic power source to the OFF position.2. Stop the power source.3. Follow the sequence under Disconnecting Hoses to prevent pressure buildup. In case some pressure has built up, loosen hoses, fittings or components slowly.
--



167 Stock Street, Nesquehoning, PA 18240 **Phone:** 570-645-3779 **Fax:** 570-645-4061

Website: www.hydra-tech.com

E-Mail: hpump@hydra-tech.com

PUMP SAFETY PRECAUTIONS

Pump operators and maintenance personnel must always comply with the safety precautions given in this manual and on the stickers and tags attached to the pump and hose. These safety precautions are given for your safety. Review them carefully before operating the pump and before performing general maintenance or repairs. Supervising personnel should develop additional precautions relating to the specific work area and local safety regulations. If so, place the added precautions in the space provided in this manual.

All Hydra-Tech submersible pumps will provide safe and dependable service if operated in accordance with the instructions given in this manual. Read and understand this manual and any stickers and tags attached to the pump and hoses before operation. Failure to do so could result in personal injury or equipment damage.

- Operator must start in a work area without bystanders. The operator must be familiar with all prohibited work areas such as excessive slopes, dangerous terrain conditions, and confined spaces.
- Establish a training program for all operators to ensure safe operations.
- Do not operate the pump unless thoroughly trained or under the supervision of an instructor.
- Always wear safety equipment such as goggles, head protection, hearing protection, and safety shoes at all times when operating the pump.
- Do not inspect or clean the pump while the hydraulic power source is engaged. Disconnect both hydraulic hoses before attempting to clean or inspect the pump. Accidental engagement of the pump can cause serious injury.
- Do not operate this pump without first reading the Operating Instructions.
- Do not install or remove this pump while the hydraulic power source is connected. Accidental engagement of the pump can cause serious injury.
- Never operate the pump near energized transmission lines. Know the location of buried or covered services before starting work.
- Do not wear loose fitting clothing when operating the pump. Loose fitting clothing may get entangled with the pump and cause serious injury.
- Supply hoses must have a minimum working pressure rating of 3000 psi/ 206 bar or higher depending on model.
- The hydraulic circuit control valve must be in the "OFF" position when coupling or uncoupling the pump. Wipe all couplers clean before connecting. Failure to do so may result in damage to the quick couplers and cause overheating. Use only lint-free cloths.
- Be sure all hose connections are tight.
- Do not operate the pump at oil temperatures above 140° F/60° C. Operation at higher oil temperatures can cause operator discomfort and may cause damage to the pump.
- Do not operate a damaged, improperly adjusted, or incompletely assembled pump.
- To avoid personal injury or equipment damage, all pump repair, maintenance and service must only be performed by authorized and properly trained personnel.
- Do not exceed the rated limits of the pump or use the pump for applications beyond its design capacity.
- Always keep critical pump markings, such as labels and warning stickers legible.
- Always replace parts with replacement parts recommended by Hydra-Tech Pumps.
- Check fastener tightness often and before each daily use.
- NEVER put your hands or any other body part into the volute or discharge outlet while the pump is running. Do not operate pump without the strainer and discharge lines in place.
- Do not lift the pump by pulling on the hydraulic hoses. Use a suitable line or chain fastened to the pump handle or lifting point. Always use appropriate lifting equipment to locate or move the pump.
- Do not point water discharge toward bystanders or property.
- DO NOT PUMP FLAMABLE LIQUIDS.

OPERATION

PREOPERATION PROCEDURES

CHECK HYDRAULIC POWER SOURCE

1. Using a calibrated flow meter and pressure gauge, make sure the hydraulic power source develops flow and pressure that is appropriate for the pump.
2. Make certain that the hydraulic power source is equipped with a relief valve set to open at 10% above rated operating pressure.
3. Make certain that the power source return pressure does not exceed 100 psi/ 7 bar.
4. Make sure the pump inlet is clear of debris. Remove any obstruction before connecting the hydraulic hoses.

CONNECTING HYDRAULIC HOSES

1. Wipe all hose couplers with a clean lint free cloth before making connections. Do not connect pressure to the return port. Motor shaft seal limit is 100 psi/7 bar.
2. Connect the hoses from the hydraulic power source to the couplers on the pump or pump hoses. It is a good practice to connect return hose first and disconnect it last to minimize or avoid trapped pressure within the pump motor.

Note: If uncoupled hoses are left in the sun, pressure increase inside the hoses might make them difficult to connect. Whenever possible, connect the free ends of the hoses together.

3. Make sure the hydraulic hoses are connected to ensure that the flow is in the proper direction. The female coupler on the submersible pump is the inlet (pressure) coupler.

PUMP OPERATION

1. Observe all safety precautions.
2. Attach discharge hose to the pump outlet. For best performance, keep the discharge hose as short as possible and lay it out to avoid sharp bends or kinks.
3. Attach a chain or cable to the pump's handle or lifting point. Use suitable lifting equipment to lower the pump into the liquid to be pumped. Do not raise or lower the pump by its hoses or couplers to avoid damage to the hoses or couplers. Never point the discharge hose at bystanders or property.
4. Turn on the hydraulic power source. Watch for solids in the liquid being pumped. If solids or semi-solids are excessive, the discharge flow might decrease. If this happens, stop the pump and check for the cause of the problem. Under some conditions, the liquid being pumped might be slowed enough so that it can no longer push particles in the liquid. If this happens, particles can accumulate in the pumping chamber, causing further restriction and damage. The impeller then acts as a "grinding wheel" which causes accelerated pump wear.

Reduced liquid flow can be caused by the following:

- The pump sinks into solids at the bottom of the hole blocking the inlet.
- The end of the discharge hose is too high, causing an excessive lift height for the column of liquid being pushed by the pump. This slows the flow of liquid to a level where it can no longer carry solids. Kinks in the discharge line will reduce flow and increase demand on the power unit.
- The flow and pressure of hydraulic fluid to the pump is too low, which reduces impeller speed. A 20 percent decrease in hydraulic fluid flow can reduce pump performance by 50 percent. When operating at reduced hydraulic flow and pressure, keep the end of the discharge line as low as possible.

Note: It will not damage the pump to operate it "dry."

5. The pump must maintain a minimum impeller speed in order to move semi-solid particles through the pump. While pumping liquids containing large semi-solids, monitor the flow from the outlet of the discharge hose. If it begins to slow, turn off the hydraulic power source and lift the pump from the work area. Disconnect the hydraulic hoses and clean at the water hose and the pumping chamber. Pumping liquids with a solids to liquid ratio greater than 30 per cent solids to 70 percent liquid will cause accelerated impeller wear.
6. When pumping is complete, set the hydraulic control valve to the "OFF" position. Lift the pump from the work area using the chain or cable to avoid damage to the hoses or couplers.
7. To maintain optimum performance, it is good practice to periodically inspect the impeller and wear components for wear or damage. This is especially important following the pumping of liquids containing sharp, abrasive solids. **ALWAYS DISCONNECT THE HYDRAULIC HOSES BEFORE ATTEMPTING INSPECTION OF THE IMPELLER.**

COLD WEATHER OPERATION

If the pump is to be used during cold weather, preheat the hydraulic fluid at low power source speed. When using the normally recommended fluids, fluid should be at or above 50°F/10° C (400 ssu/82 centistokes) before use. Damage to the hydraulic system or pump motor seals can result from use with fluid that is too viscous or thick.

EQUIPMENT PROTECTION & CARE

- Make sure all couplers are wiped clean before connection.
- The hydraulic circuit control valve must be in the "OFF" position when coupling or uncoupling the pump. Failure to do so may result in damage to the quick couplers and cause overheating of the hydraulic system.
- Make sure the circuit PRESSURE hose (with male quick disconnect) is connected to the "IN" (female quick disconnect) port on the submersible pump. The circuit RETURN hose (with female quick disconnect) is connected to the opposite port. Do not reverse circuit flow. This can cause damage to internal seals.
- Always replace hoses, couplings and other parts with replacement parts recommended by Hydra-Tech Pumps. Supply hoses must have a minimum working pressure rating of 3000 psi/206 bar.
- Do not exceed the maximum rated flow or pressure for the submersible pump (refer to Specifications in this manual for correct flow rate and pressure). If specifications are exceeded, rapid failure of the internal seals will result.
- Always keep critical labels and markings, such as warning stickers and tags legible.
- Pump repair should be performed by experienced personnel only.
- Make certain that the recommended relief valves are installed in the pressure side of the system.

Operating Instructions

HT74DVDQ Power Unit

BEFORE STARTING:

1. Fill oil reservoir to the top of the sight glass with a good grade of hydraulic oil with anti-wear additives.
 - a. New oil should be run through a 10 micron filter before use.
 - b. For Hydraulic Power Units of less than 15 horsepower, use Dexron ATF, or Chevron Clarity AW-46 (bio-oil) or another brand of AW-46 bio-oil (see list below).
 - c. For Hydraulic Power Units of more than 15 horsepower, use AW-46 hydraulic oil, or Chevron Clarity AW-46 (bio-oil) or another brand of AW-46 bio-oil (see list below).

Note: If you will be “charging” hydraulic hoses with hydraulic oil, keep in mind that the hydraulic oil reservoir will need topped off after the hoses are charged.

Mineral Based AW-46

Pennzoil	AW 46 Gold
Chevron	Rando HD
Shell	Tellus S2 MX
Mobil	D.T.E. 25 Ultra

Bio Friendly AW-46

Chevron	Clarity/Clarity EA
Sunoco	Sunvis 600+ Ashless
Terresolve	Envirologic
Phillips 66	Powerflow NZ HE

* Select weight of oil based on operating conditions and average ambient temperatures. For example, if the unit will be operating in colder climates, AW-32 hydraulic oil can be used instead of AW-46.

**In above normal temperature conditions where mineral based fuels are , Dextron Automatic Transmission Fluid can be used.

Consult Product Data and MSDS sheets prior to selecting hydraulic oil.

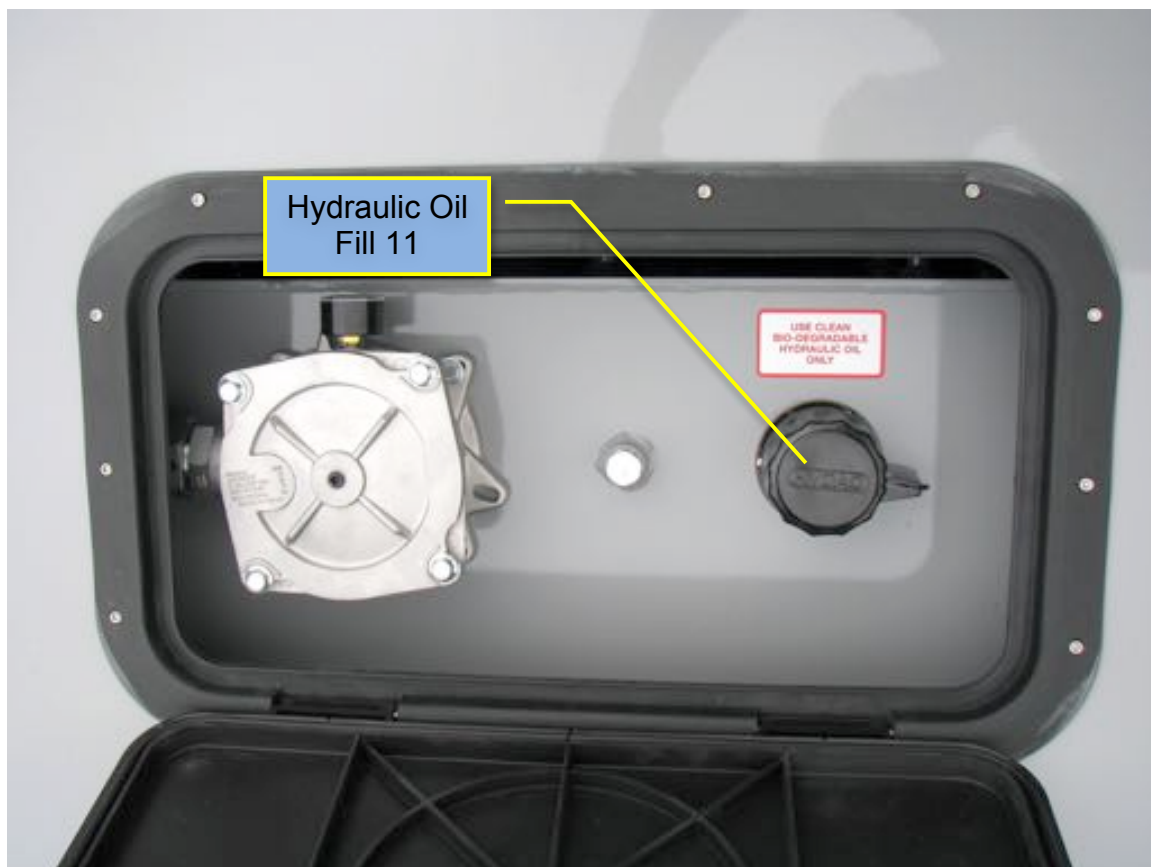
2. Fill fuel tank with clean diesel fuel.
3. Check engine oil (See engine instruction manual for correct oil for each climate).
4. Connect hydraulic hoses from power unit to submersible pump or other hydraulically powered equipment.



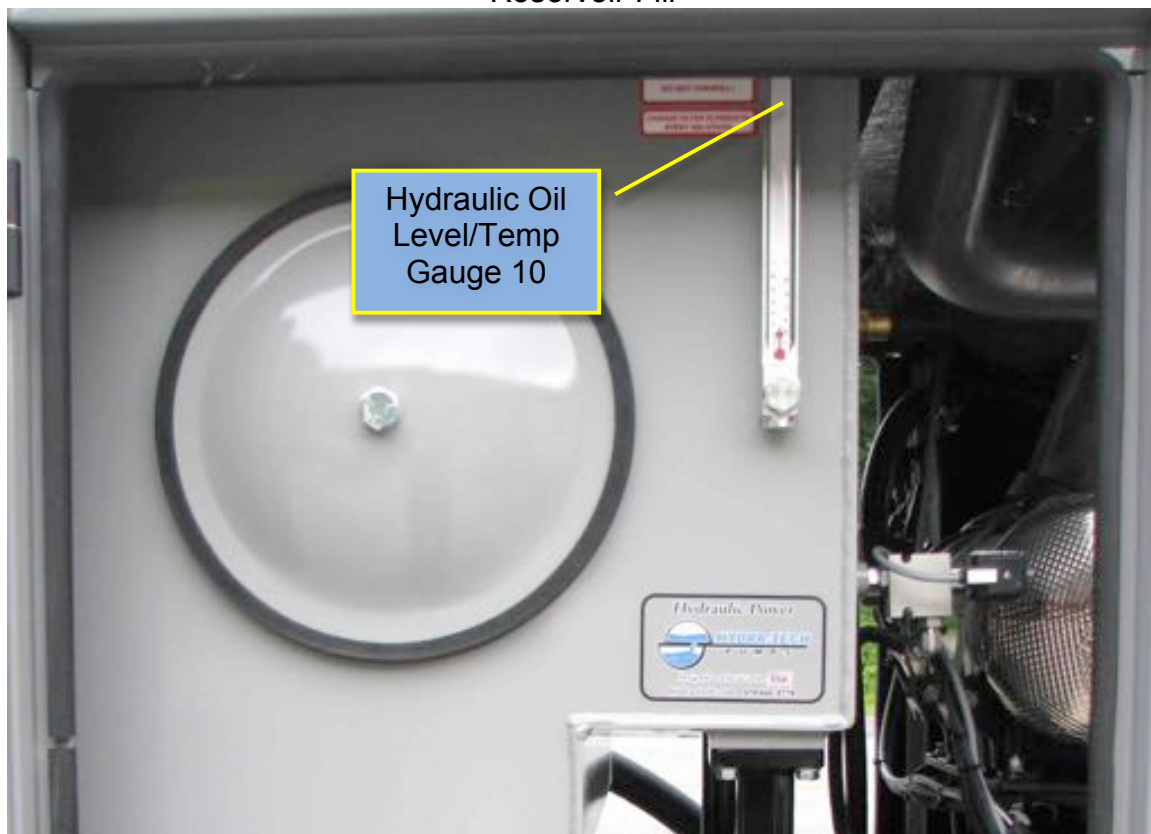
Be sure to completely connect the hydraulic couplings or damage

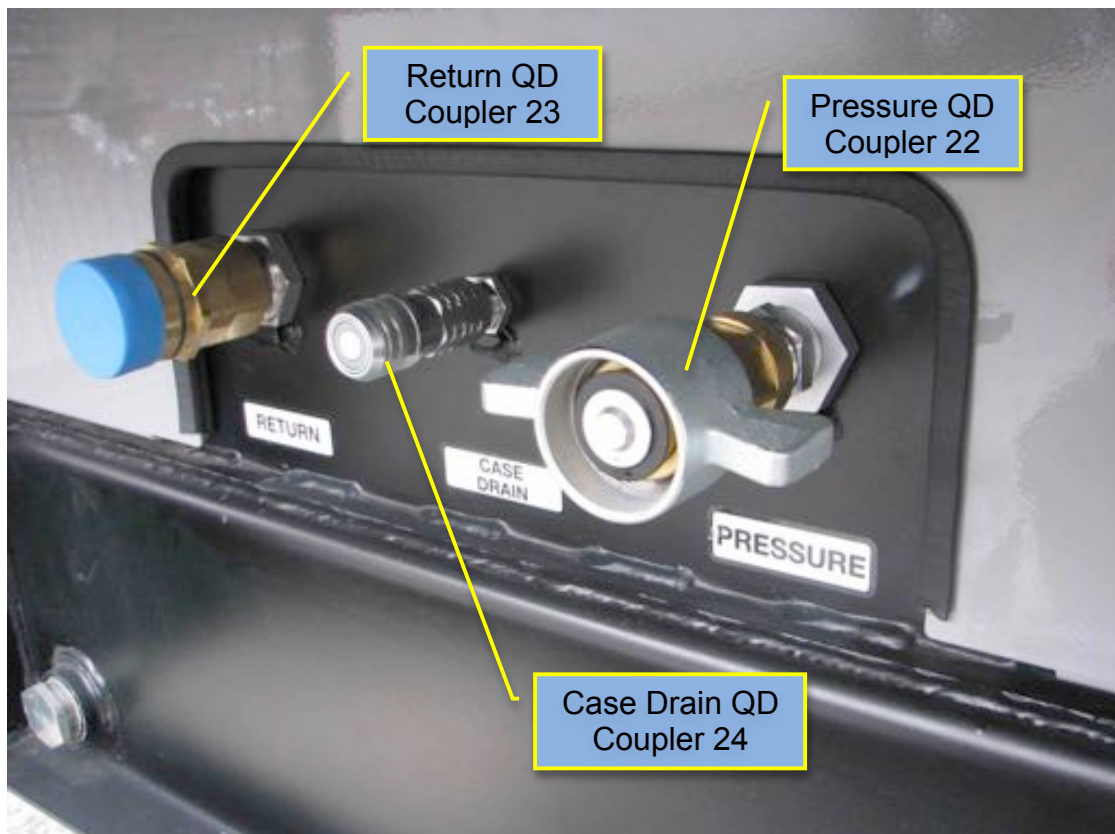
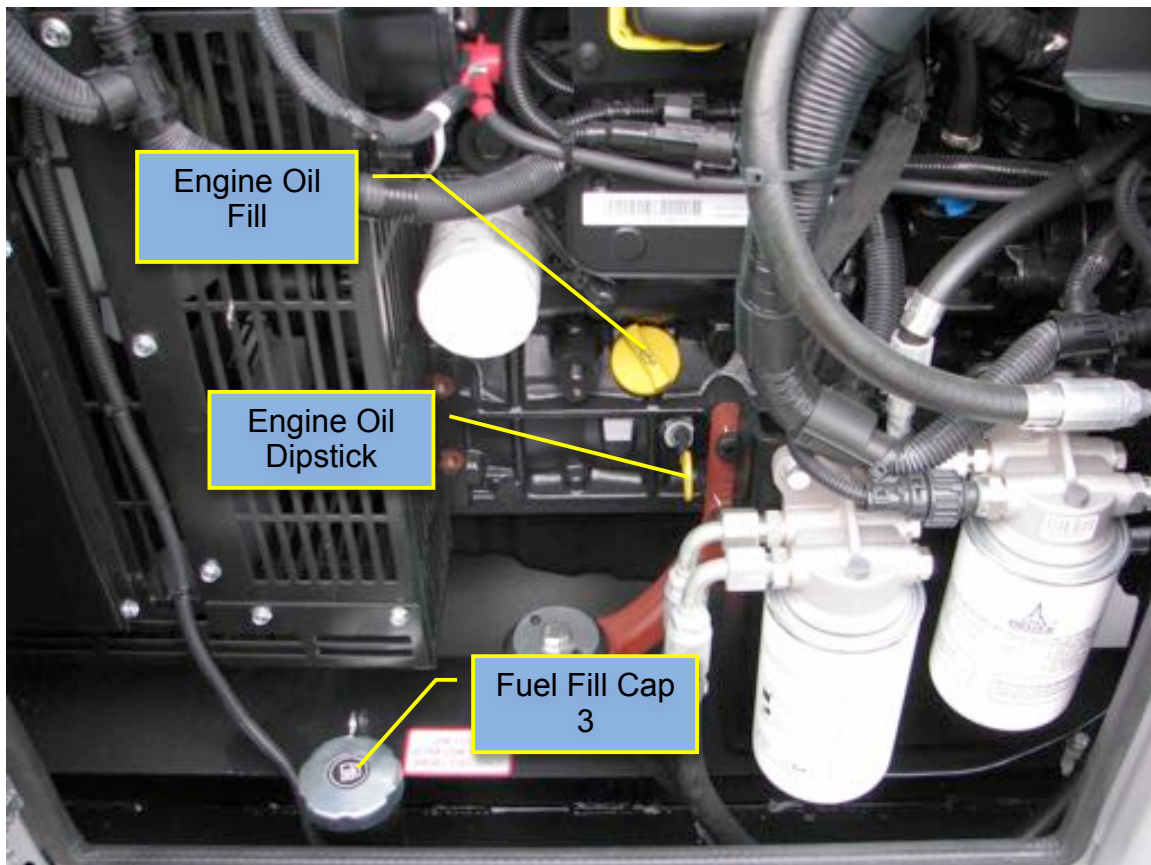
will result to the hydraulic system and the submersible pump.

Pressure and return hoses cannot be connected incorrectly because the couplings are incompatible. **Always be sure the connections are clean before assembling.**



Reservoir Fill





Hydraulic Hose Connections

STARTING PROCEDURE: (Manual Mode)

(For more information on the engine controls see the Lofa CP-750 Manual)

1. Place submersible pump away from the power unit for a dry test on land.
2. Make sure the Emergency Stop Switch is pulled out. Start engine and let warm up for one or two minutes at idle (or 800 RPM).
3. Move the Hydraulics OFF/ON switch to the ON position to energize the hydraulic system. Slowly increase the engine speed to 1200 RPM.
4. Check submersible pump to be sure it is operating.
5. Slow the engine, move the Hyd. switch to the off position and turn off the key switch to stop the engine.
6. Lower the submersible pump into the water then start the engine again. Energize the hydraulic system and adjust engine speed to achieve the desired pump output.



NOTE: If maximum pump performance is not required, it is best to slow engine speed to meet the needed flow. This saves fuel and extends the life of the equipment.



Do not increase engine speed once you reach 2900 PSI operating pressure.

STOPPING PROCEDURE:

1. To de-energize the hydraulic system, move the Hyd. switch to the OFF position. Slow the engine to idle speed.
2. To stop the engine, turn the key switch to the OFF position.
3. The E-Stop (Red Button) can be used to stop the unit at any time. Push in to stop.



CAUTION: *Be sure the key switch is in the OFF position and the key removed before attempting any service work.*

STARTING PROCEDURE: (Auto Mode)

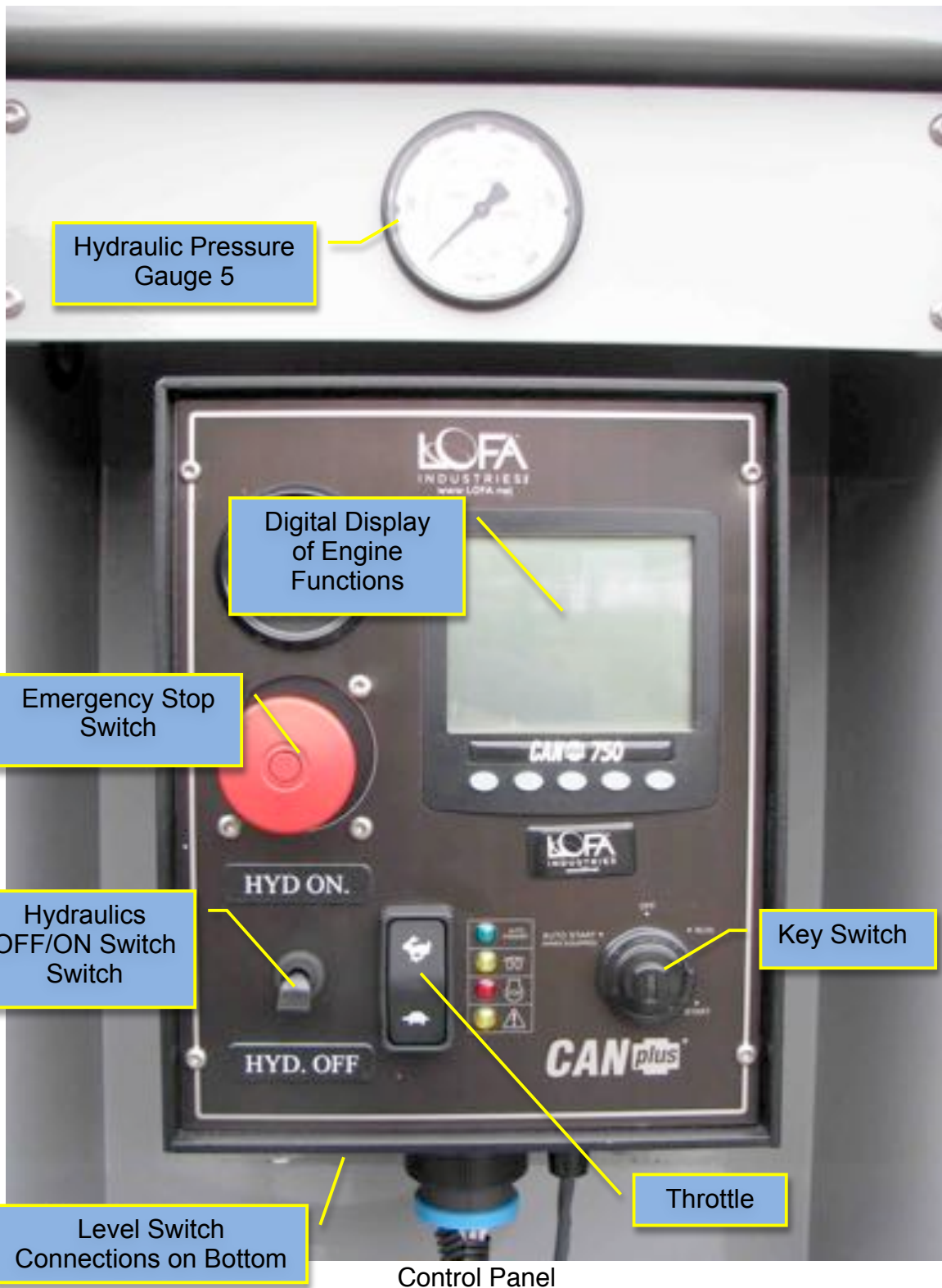
(For more information on the engine controls see the Lofa CP-750 Manual)

1. Connect float level switches or level transducer to the proper connections on the bottom of the control panel.
2. Make sure that the level switches or transducer are correctly installed in the sump and the submersible pump is connected properly and submerged.
3. Start the engine manually and set the engine speed to the desired RPM. Shut the engine off without slowing the speed. This sets the maximum speed the engine will run at when auto starting.
4. Move the Hydraulics OFF/ON switch to the ON position to energize the hydraulic system. Rotate the Key Switch to the **AUTO START** position
5. If connected properly the engine will start after a slight delay and pumping will begin.
6. The engine speed will ramp up while pumping until the maximum set speed is reached.
7. When the low sump level is detected the engine will slow down and the engine will shut down.

The E-Stop (Red Button) can be used to stop the unit at any time. Push in to stop.



CAUTION: Stay clear of the unit, do not open access doors on the unit or attempt any work on the unit when it is in the AUTO mode. Serious injury could result! Only access the control panel in this mode. Be sure the key switch is in the OFF position and the key removed before attempting any service work.



Hydraulic Pressure
Gauge 5

Digital Display
of Engine
Functions

Emergency Stop
Switch

Hydraulics
OFF/ON Switch

Key Switch

Throttle

Level Switch
Connections on Bottom

Control Panel

MAINTENANCE INSTRUCTIONS

HT74DVDQ Power Unit

ENGINE:

Maintain engine as per Deutz Diesel instruction booklet provided with each unit.

HYDRAULIC PUMP (#20):

1. The hydraulic pump is a Kawasaki pressure compensated piston unit capable of giving a long and dependable service life as long as the hydraulic oil is kept clean and the filters are changed at regular intervals.
2. To check the hydraulic output, energize the system with the hydraulic pressure port plugged. (if equipped with quick disconnect couplers, simply disconnect the hydraulic hoses) and read the pressure gauge supplied on the unit. This reading should always be above 2000 PSI at full throttle (the reading will normally be between 2500-2900 PSI).



NOTE* Maximum flow and pressure points are adjustable. The settings above represent factory set points at time of delivery. Before making any volume or pressure adjustments to this unit contact Hydra-Tech Pumps.

3. Pump is not field-serviceable. If pump failure is suspected, be sure to check suction strainer, oil level in the reservoir and the solenoid valve before determining the hydraulic pump is bad.
4. If service is required, consult nearest Kawasaki Hydraulics Dealer or Hydra-Tech Pumps.

SUCTION STRAINER (#17):

1. The suction strainer is mounted inside the reservoir and may be removed for cleaning by draining the oil from the reservoir and removing the reservoir access cover. The strainer may then be removed and cleaned.
2. Clean the strainer with solvent or kerosene and dry with compressed air, then re-install, making sure dirt does not enter the reservoir. Make certain the pipe connection is tight.
3. The strainer should be removed and cleaned when cleaning the reservoir (every 1000 hours).

SIGHT GLASS/TEMPERATURE GAUGE (#10):

1. Always maintain the hydraulic oil level to the top of the sight glass
3. Be sure the operating temperature never exceeds 170 degrees F (77 degrees C). **If the temperature becomes excessive**, shut down the system and let cool. Check for insufficient oil in reservoir, kinked hydraulic hoses, inadequate ventilation of the reservoir or oil cooler, clogged return line filter (gauge on filter will read above 40 PSI or in red area), or blocked hydraulic circuit **(e.g. submersible pump impeller jammed or hydraulic hose couplings improperly connected)**.

SOLENOID VALVE (#7):

1. The solenoid valve is mounted on the front of the reservoir.
2. The function of the valve is to energize the hydraulic pump by means of closing off a vent port, in turn, creating pressure in the hydraulic system.
3. The valve should be almost maintenance free.
4. If the unit fails to build hydraulic pressure:
 - A) Check to be sure there is electric power coming from the engine panel Hydraulics OF/ON switch. If power is present an LED will light at the solenoid coil. If not, contact Hydra-Tech Pumps or have a qualified service technician determine the loss of power.
 - B) If electric power is present and the solenoid does not function, the problem may be debris caught in the valve cartridge or a faulty solenoid coil. To clean the valve cartridge, remove the cartridge and check for dirt or debris that may be lodged in the valve. Clean and re-install.
 - C) If the solenoid coil is faulty, it must be replaced by a qualified technician.
 - D) If this does not solve the problem, the hydraulic pump may need servicing.

FILLER CAP AND STRAINER (#11):

1. The filler cap is mounted on top of the reservoir and is used to vent air in and out of the reservoir if pressure in the reservoir exceeds 5 PSI in the event the desiccant breather becomes plugged.
2. It is equipped with a strainer to prevent debris from entering the reservoir when filling. Keep this clean.

RETURN LINE FILTER (#13):

1. The return line filter is located on the top of the oil reservoir and is accessible by removing the hatch over the filter. The filter cartridge should be changed every 250 Hours or sooner if the gauge indicates a higher than normal backpressure.
2. When the system is in operation, notice the needle on the indicator. This should remain below 40 PSI when oil is warm. If this reading is above 40 PSI (or in the red area), the filter cartridge must be replaced. The cartridge is a “drop-in” type.
3. Use only the exact replacement filter cartridge with 10-micron filtration.
4. Filter cartridge must be replaced when changing hydraulic oil in the reservoir.
5. If the hydraulic oil becomes emulsified or visibly dirty, change the oil and filter regardless of the indicator reading or service interval.

OIL RESERVOIR:

1. The hydraulic oil reservoir is designed for maximum cooling characteristics and ease of maintenance.
2. The oil in the reservoir should be changed every 1000 hours of running time for maximum component life. The reservoir should be cleaned every 1000 hours.
3. The reservoir capacity is 60 U.S. gallons (227 liters).
4. A drain valve and hose located at the bottom of the oil reservoir allows easy removal of the hydraulic oil.
5. As always, keep dirt from entering the hydraulic system.

LOW OIL SHUTDOWN SWITCH (#15):

1. The low oil shutdown switch is mounted on the front of the hydraulic oil reservoir. It will shut down the engine in the event of loss of hydraulic oil to protect against damage to the system.
2. If the unit shuts down for low hydraulic oil level, check for leaks in the hydraulic system and repair before operating the unit.

HIGH TEMPERATURE SHUTDOWN SWITCH (#16):

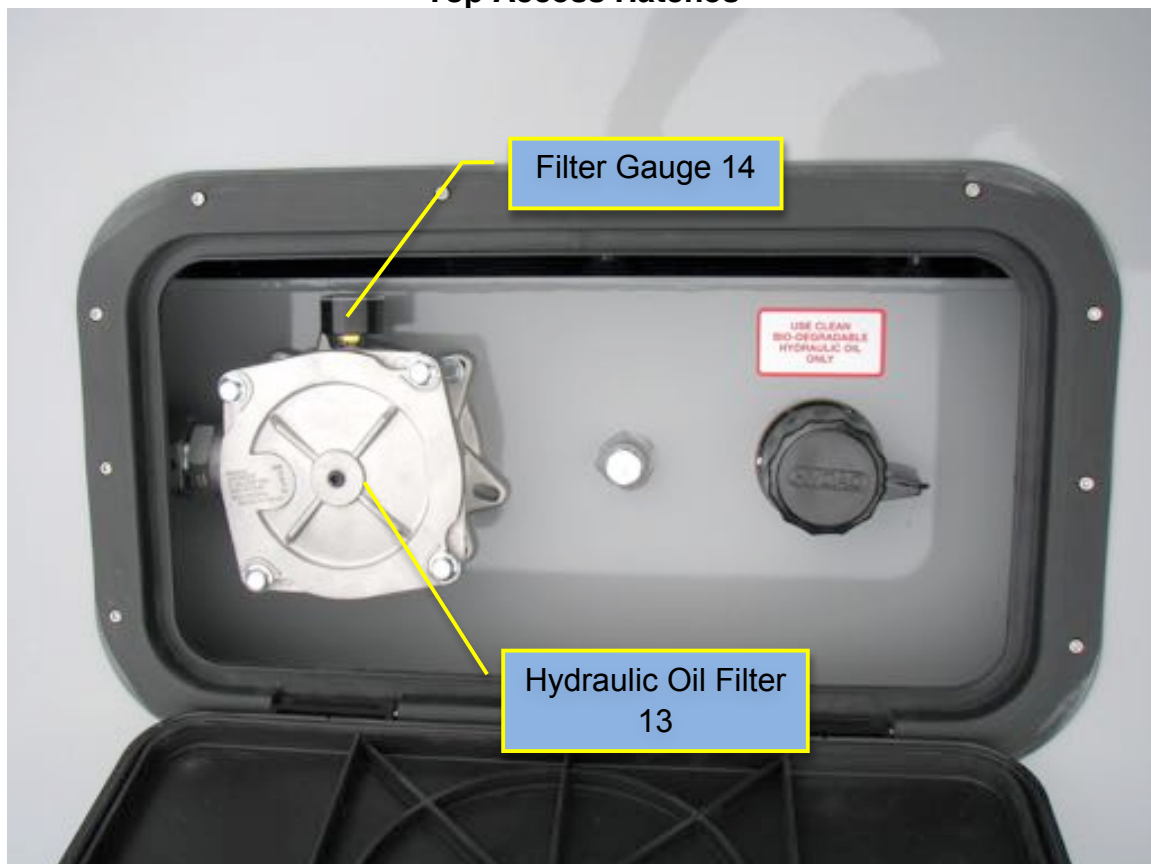
1. The high temperature switch is mounted on the front of the hydraulic oil reservoir. This will sense a high hydraulic oil temperature and shut the unit down if oil temperatures exceed 190° F.
2. If the unit shuts down for high oil temperature, let the unit cool down then check for things like: low oil in reservoir, operating the unit at a speed too high for the demand, obstructed air path in and out of enclosure, dirt in cooler fins etc. Correct the cause before operating the unit.

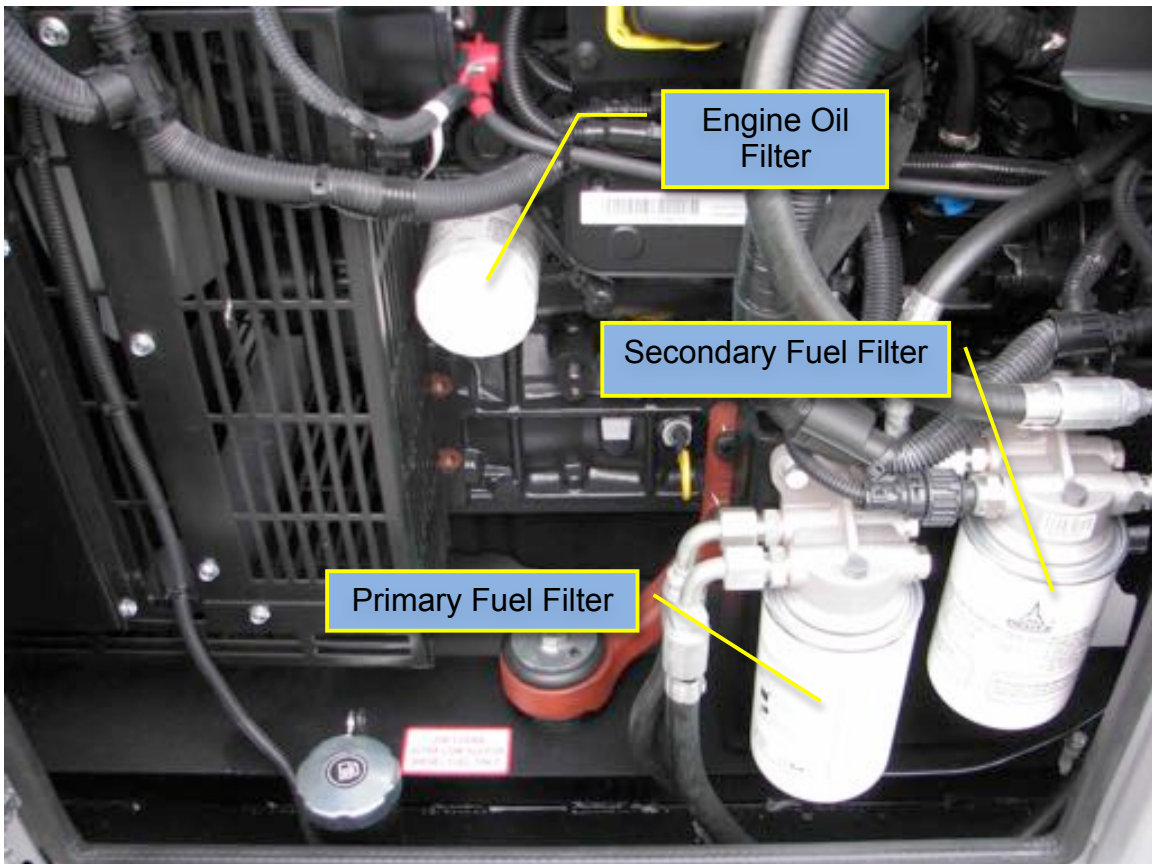
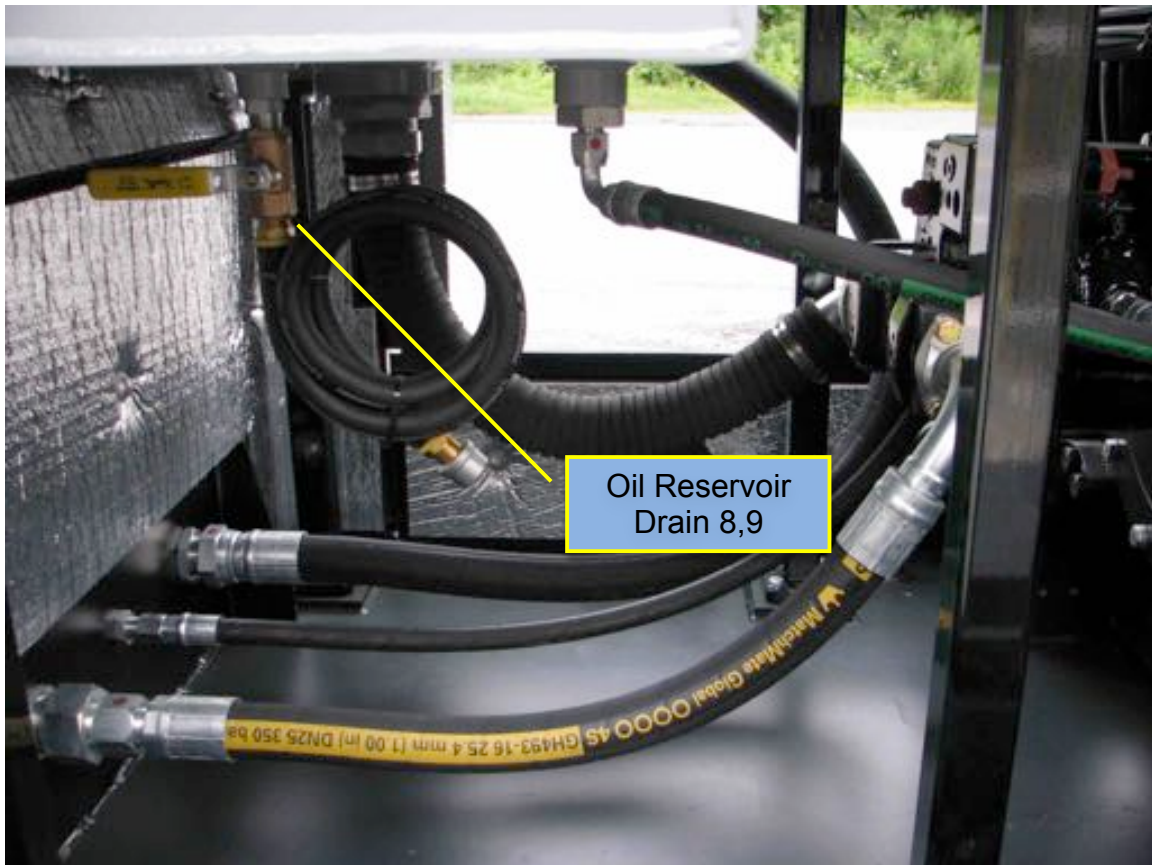
HYDRAULIC OIL COOLER (#1):

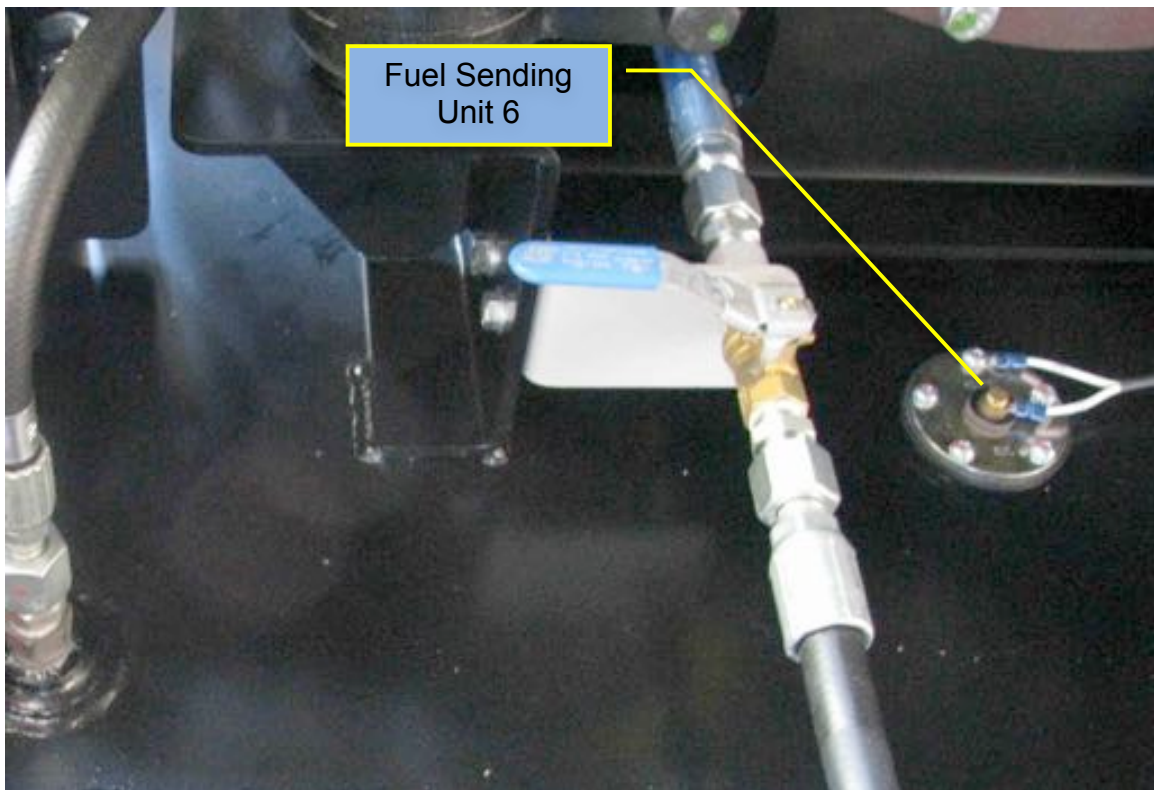
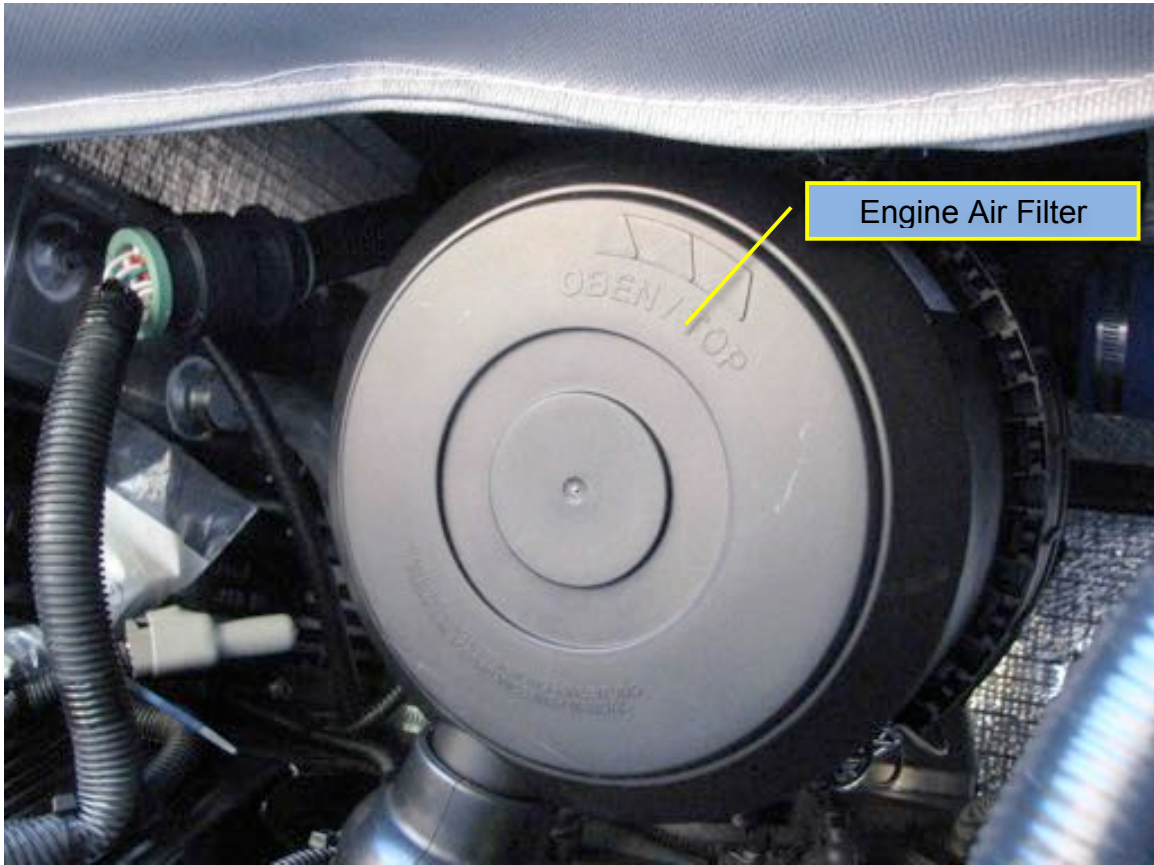
1. This unit is equipped with air/oil cooler to help cool the hydraulic oil.
2. This unit includes a cold oil bypass valve that will re-circulate cold oil back to the reservoir to allow proper warm-up of the hydraulic oil and to protect the return line from excessive backpressure.
3. The only routine maintenance required is to be sure the cooling fins are kept clean so air can circulate freely through it. If any signs of oil leakage are visible, the cooler must be repaired or replaced immediately.

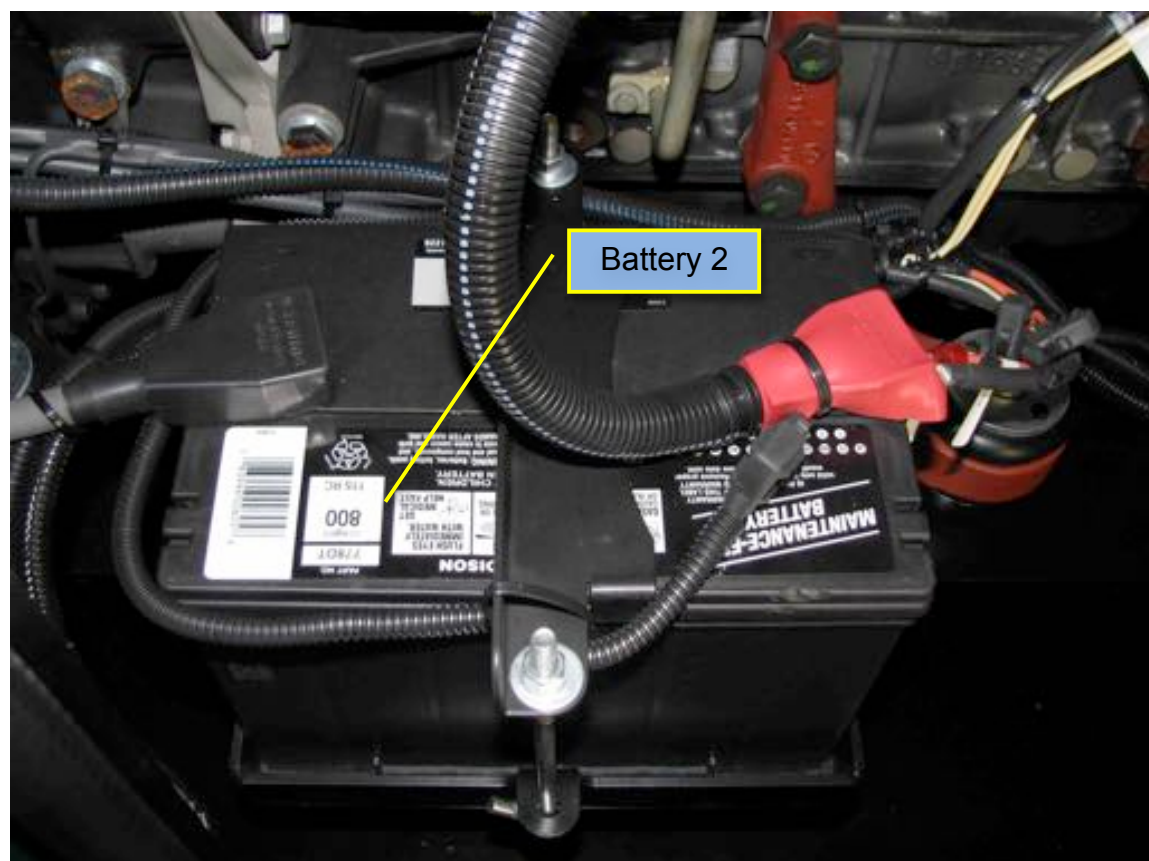
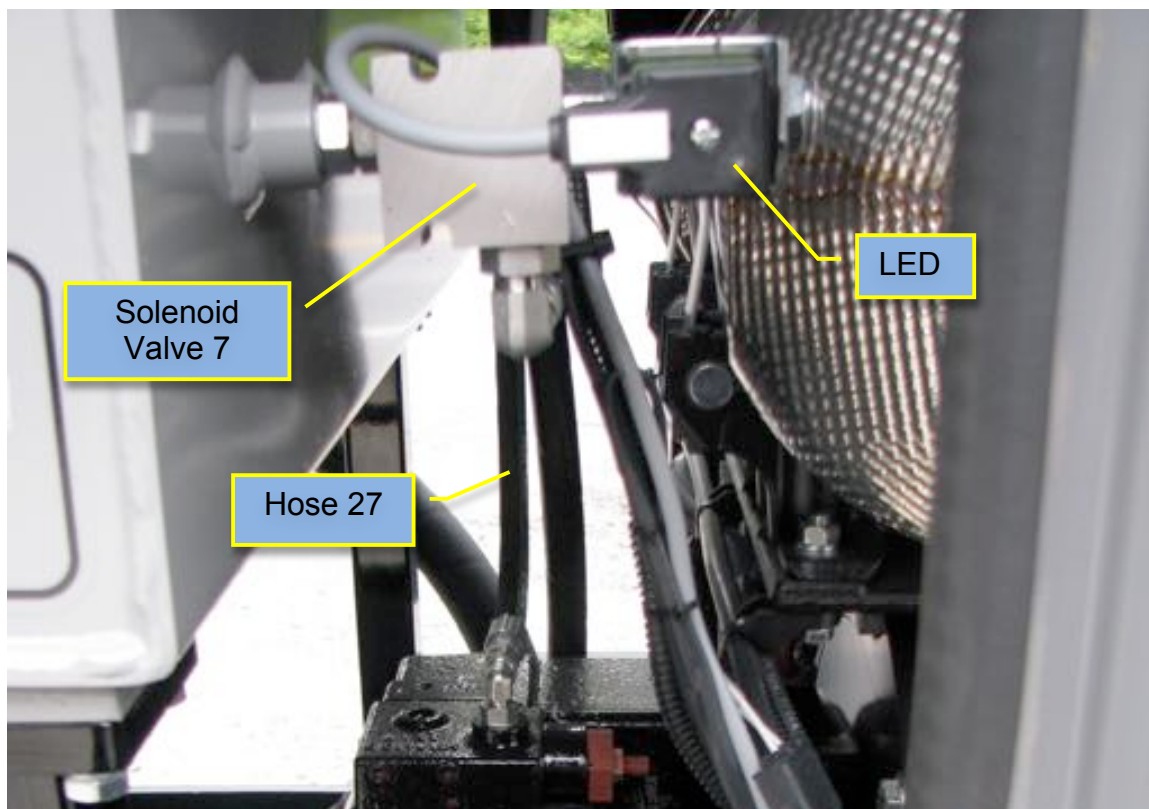


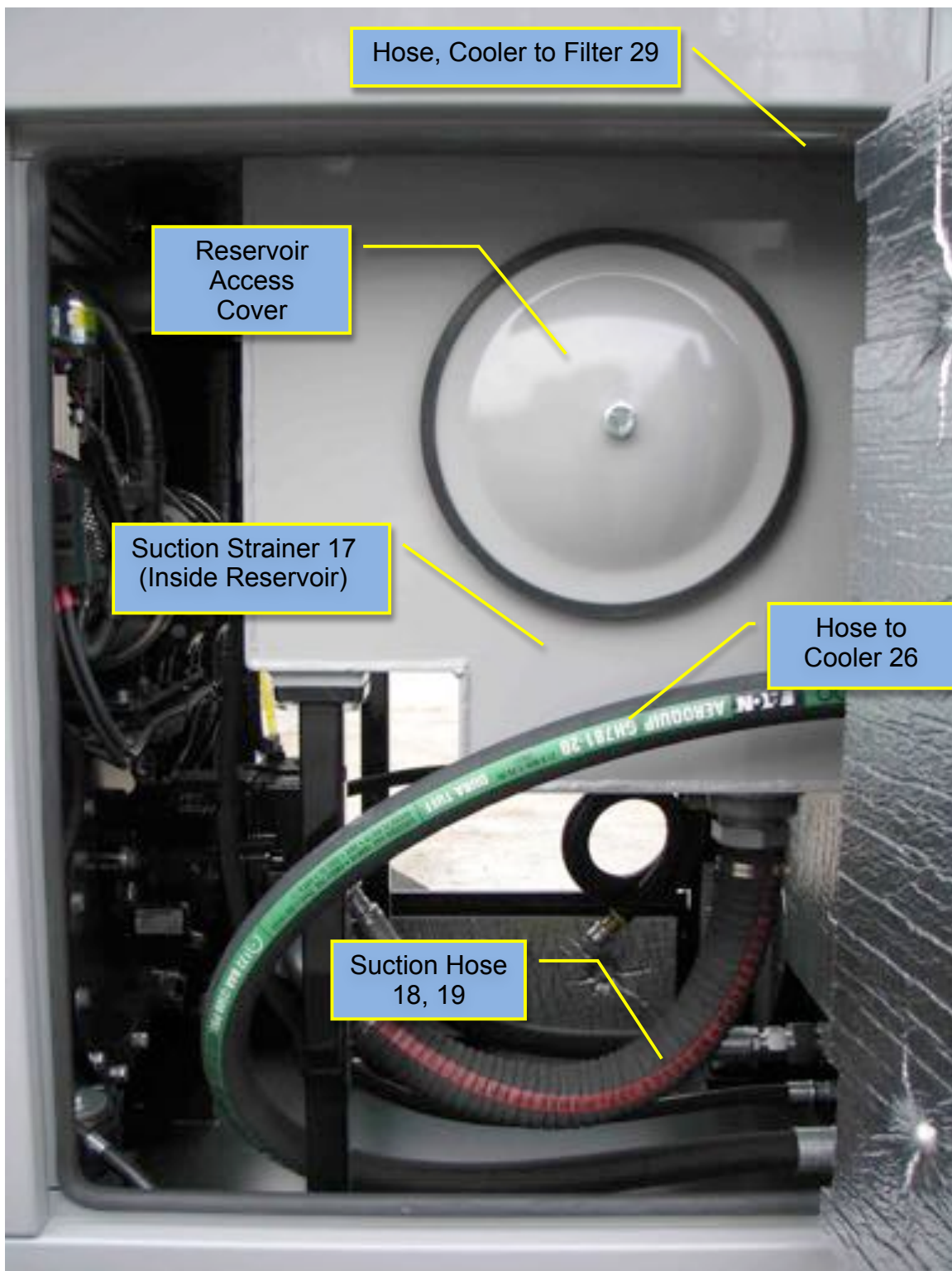
Top Access Hatches











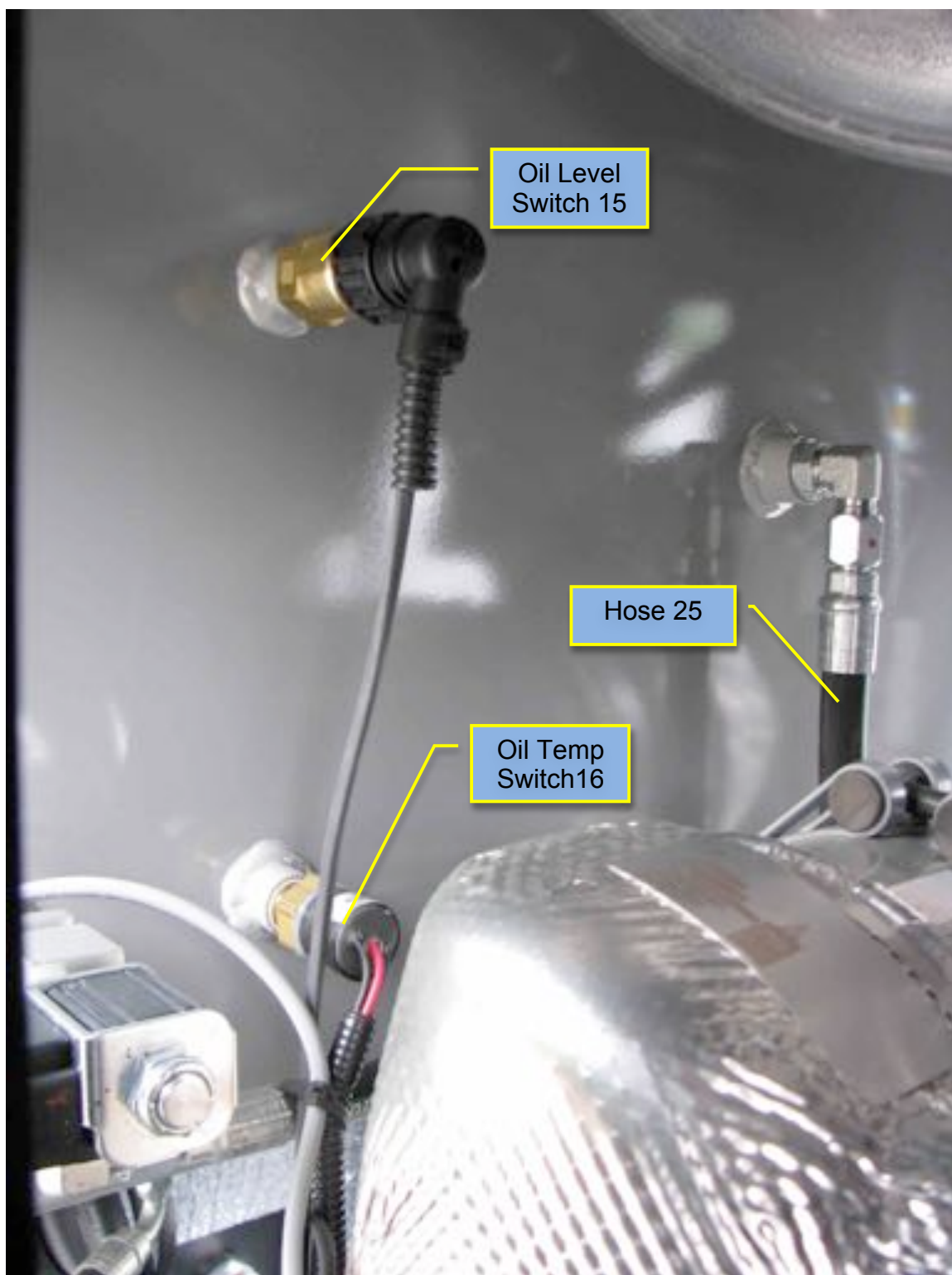
Hose, Cooler to Filter 29

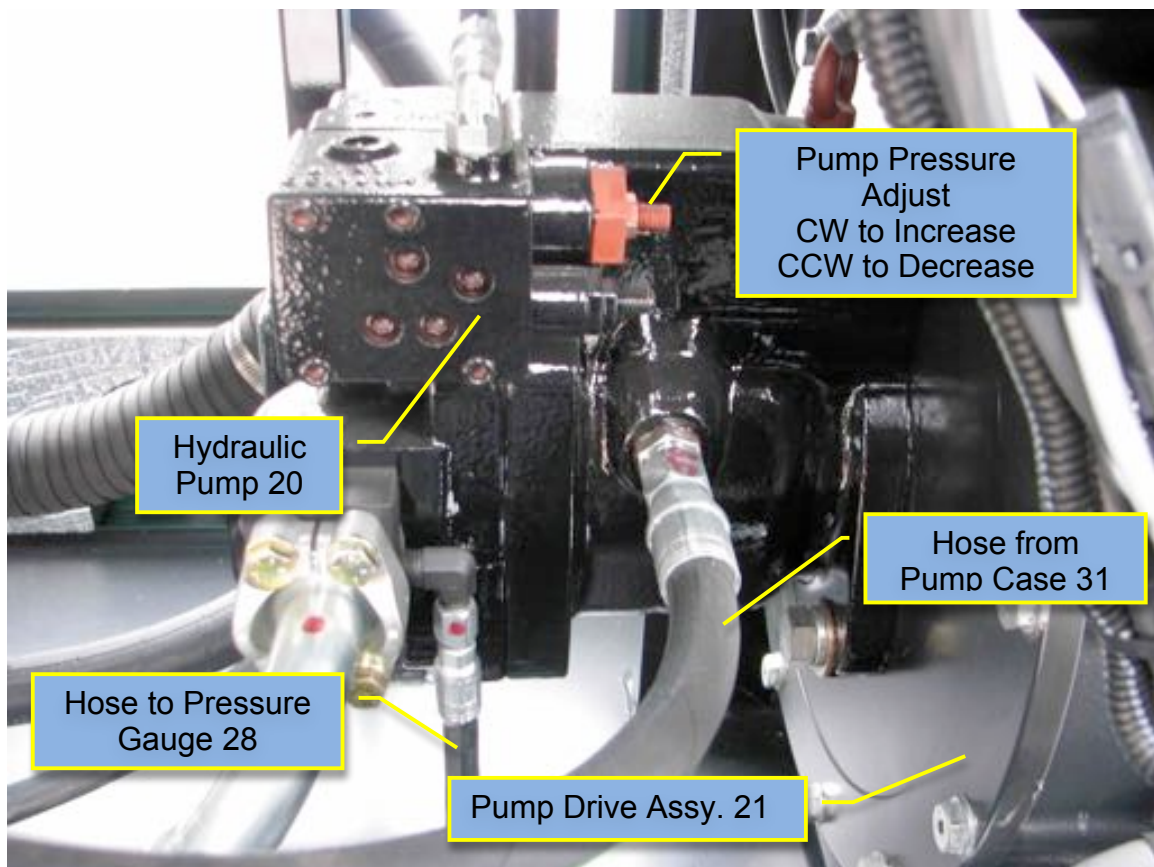
Reservoir
Access
Cover

Suction Strainer 17
(Inside Reservoir)

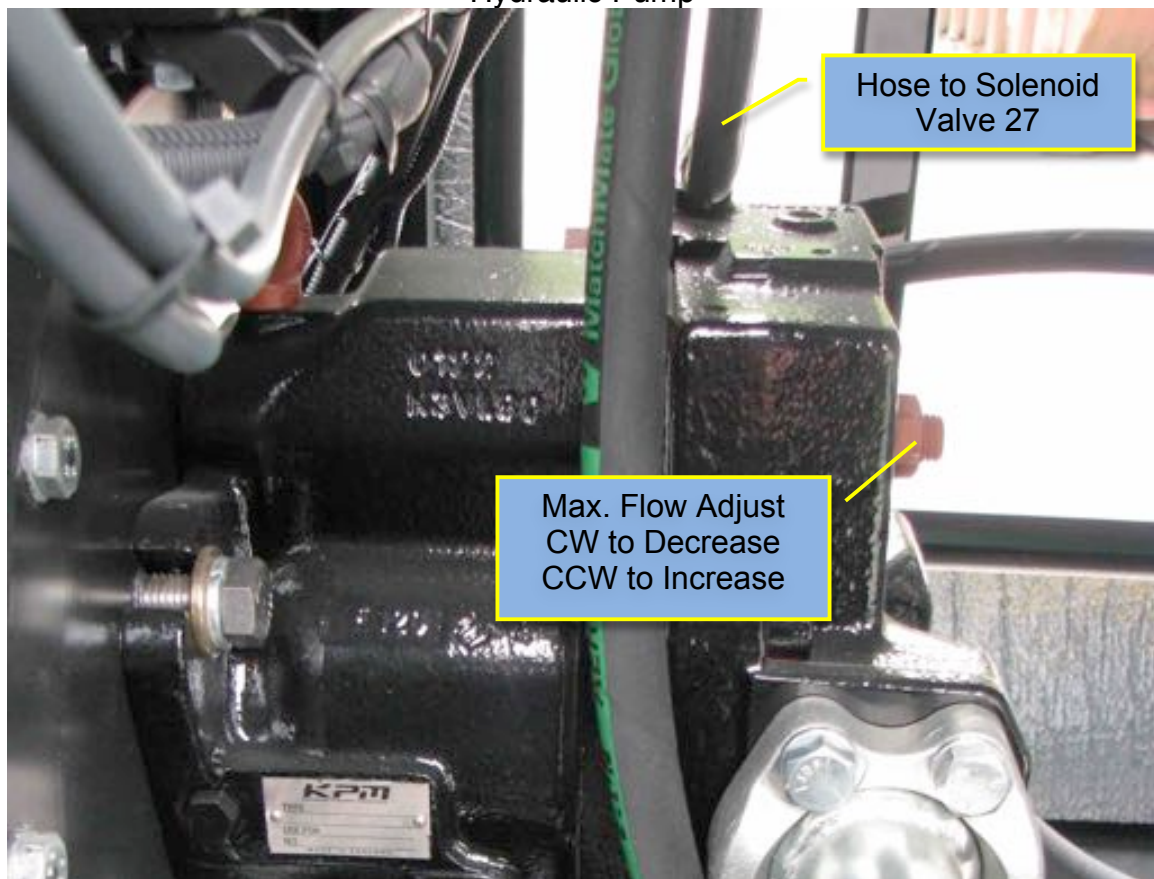
Hose to
Cooler 26

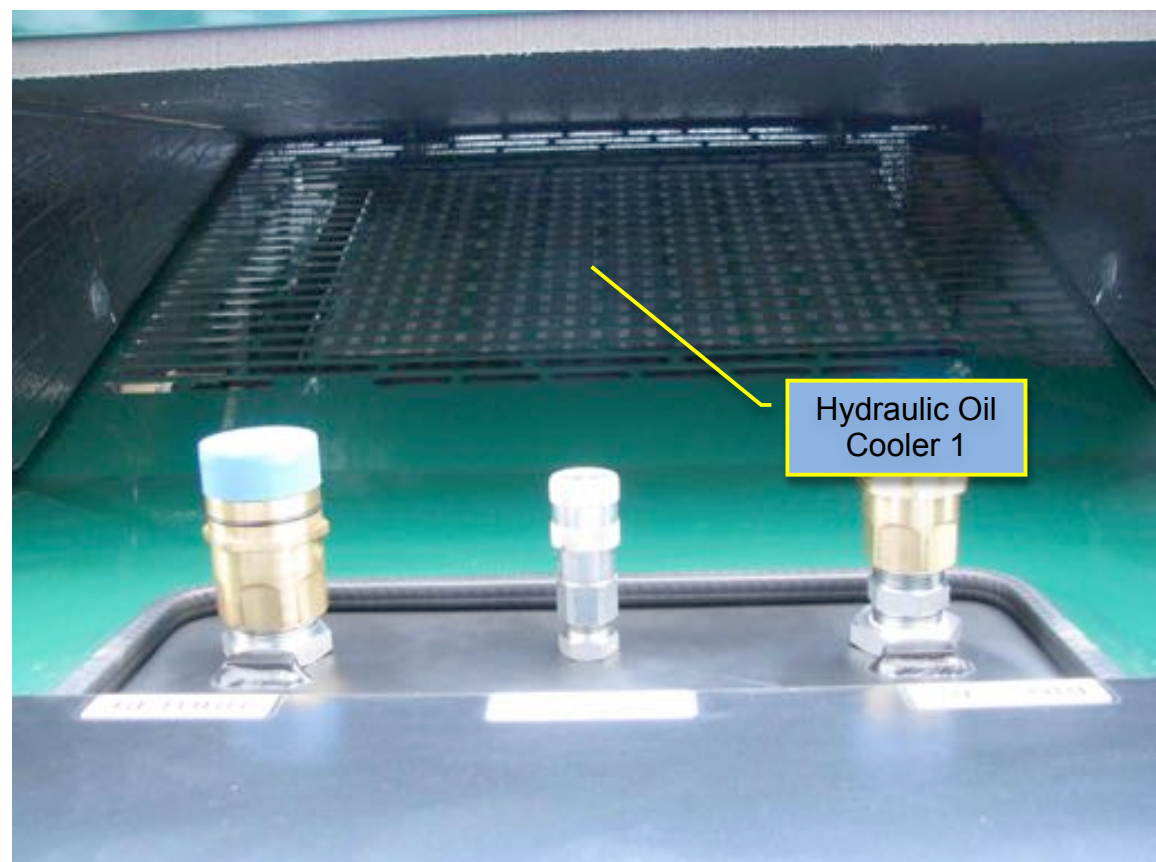
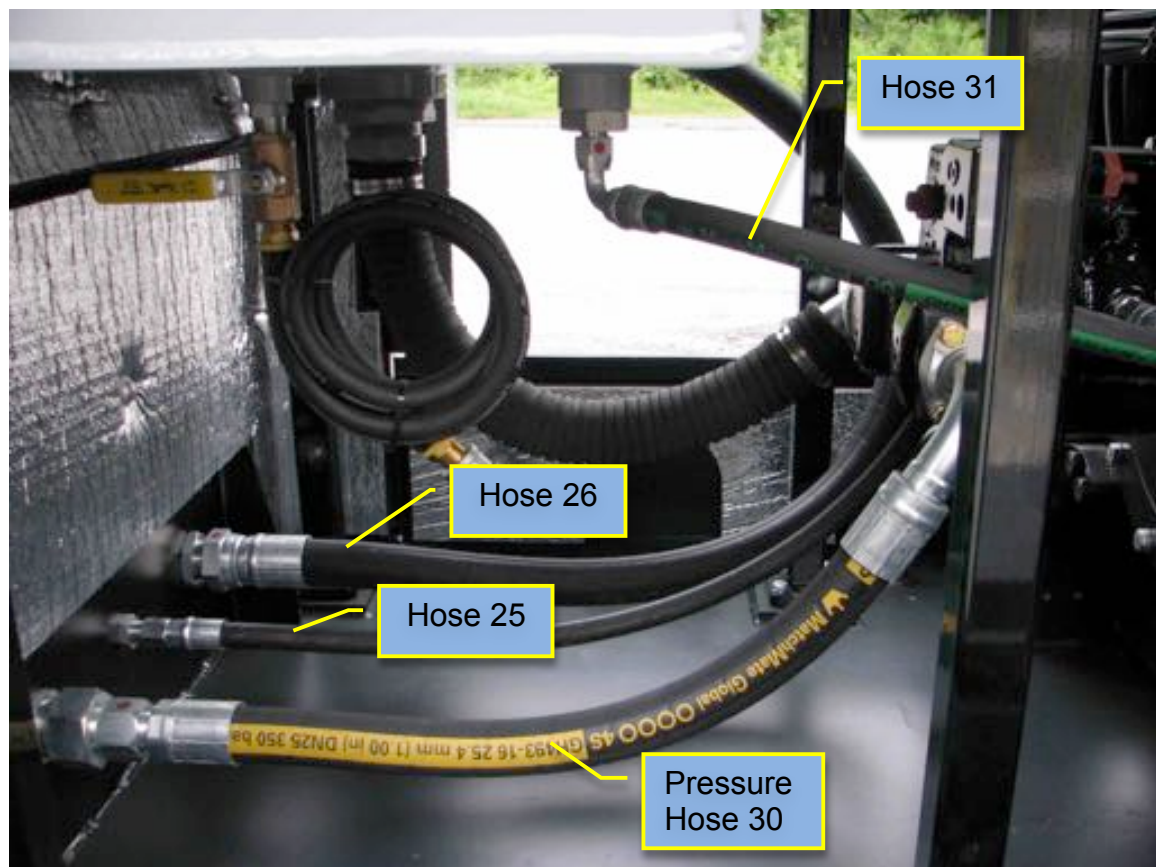
Suction Hose
18, 19



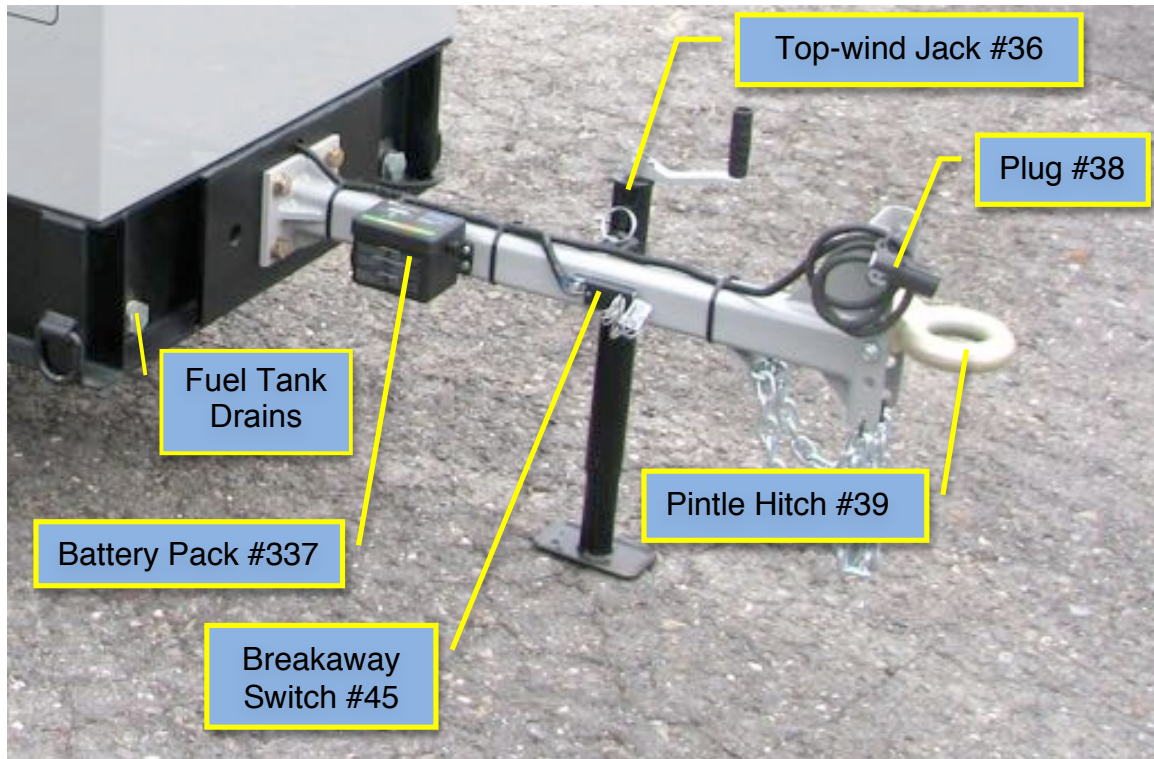


Hydraulic Pump

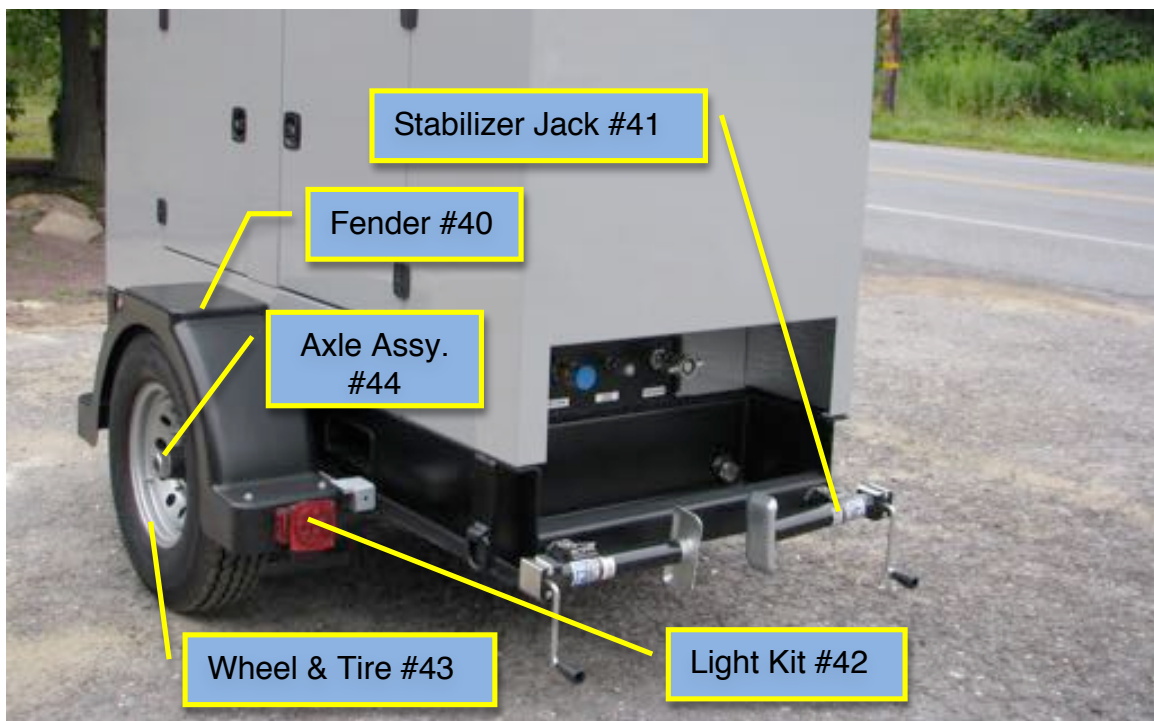




(Similar Unit Shown)



Trailer Components



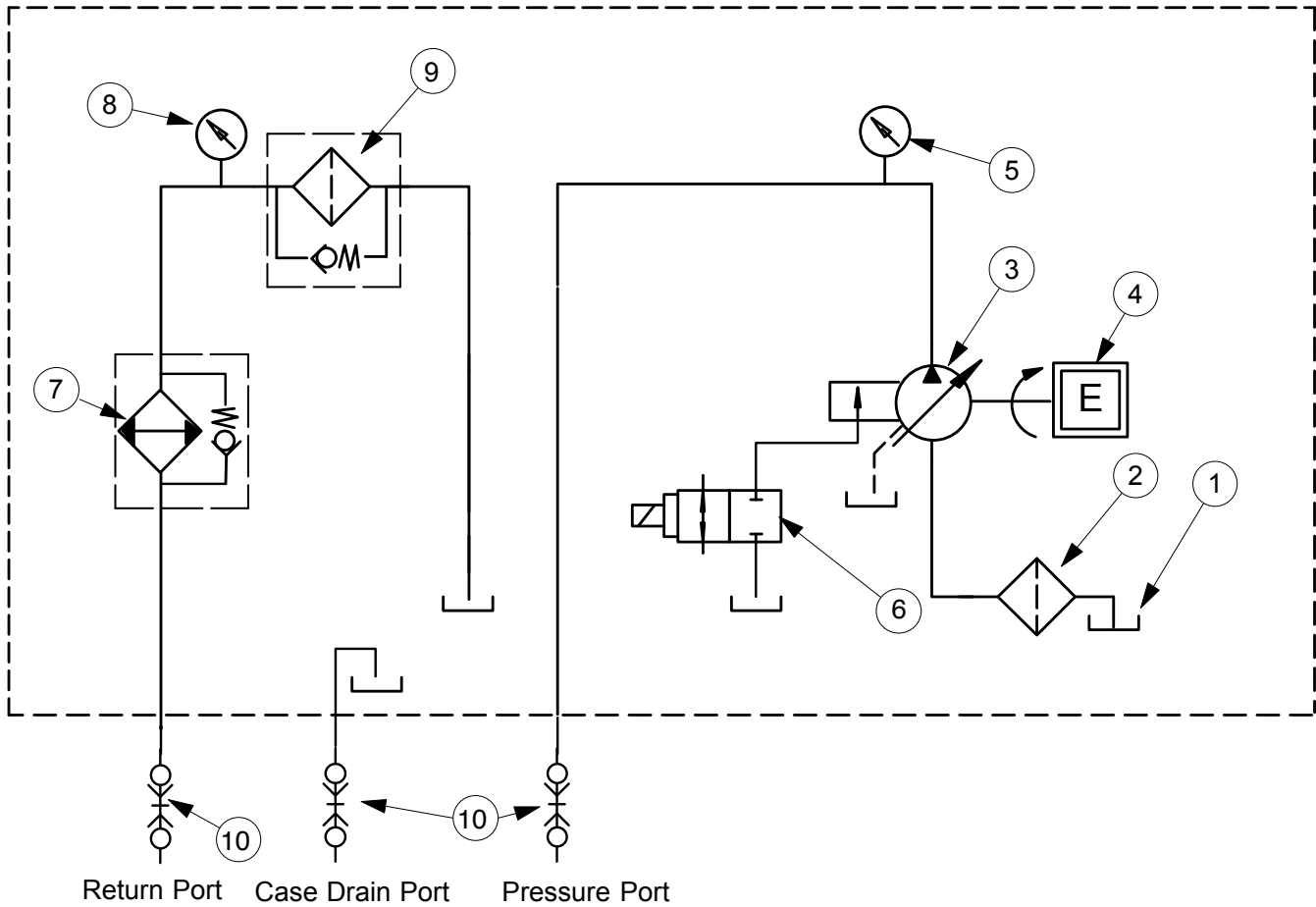
PARTS LIST
HT74DVDQ POWER UNIT
Always mention serial # of unit when ordering parts

Item	Part #	Description
1.	2648SAE	Hydraulic Oil Cooler w/bypass
2.	8166	Battery (12 volt)
3.	8341	Fuel filler cap
4.	12635	Lofa CP-750 Engine Panel
5.	7841A	Pressure gauge, 5000 PSI
6.	8362	Fuel Level Sending Unit (in tank)
7.	6816B	Solenoid Valve Assy.12 Volt
8.	6814	Reservoir drain valve
9.	9365	Oil Drain Hose
10.	1829	Sight level/Temperature gauge
11.	1536	Filler cap/strainer assy. (5 PSI)
12.	-----	(Not used on this model)
13.	11146	Return filter assy. (complete)
	HP4CL9-10MB	Return filter (cartridge only)
14.	HP43978	Gauge, filter wear
15.	8040A	Low Oil level shut-down switch
16.	7118	High Temperature shut down switch
17.	6119	Suction strainer
18.	11814	Oil suction hose, 2-1/2"
19.	12601	Hose clamp (2 req.)
20.	8030	Hydraulic pump
21.	11477	Hyd. pump drive assy.
22.	0184	1" female Q.D. coupler
23.	0182	1 " male Q.D. coupler
24.	9378	1/2" female case drain Q.D. coupler
25.	12599	Hyd. hose assy. (case drain from bulkhead)
26.	12598	Hyd. hose assy. (bulkhead to cooler)
27.	10697	Hyd. hose assy. (hyd. pump to solenoid valve)
28.	11411	Hyd. hose assy. (hyd. pump to pressure gauge)
29.	12597	Hyd. hose assy. (cooler to filter)
30.	12596	High pressure hose assy. (hyd. pump to bulkhead)
31.	12605	Case drain hose (hyd. pump to tank)
32.	703-1506	Exhaust Rain Cap (NAPA)

HT74DVDQ POWER UNIT
Trailer Parts

Item	Part #	Description
36.	11514	Top-Wind Jack
37.	8388	Battery Pack w/charger (12 volt)
38.	6381	Trailer Connector Plug
39.	8250 8251	Pintle Hitch 2-5/16" Ball Hitch (Optional)
40.	12629	Fender (2 req)
41.	12631	Stabilizer Jack (2 req)
42.	0283LED	Light Kit
43.	12523	Wheel & Tire Assy., 16" (2 req)
44.	12524	Axle Assy. w/electric Brakes, 7K
45.	2880	Breakaway Switch

HYDRAULIC SCHEMATIC HT74DVDQ Power Unit



- 1) Oil Reservoir
- 2) Suction Strainer
- 3) Pressure Compensated Hydraulic Pump
- 4) Diesel Engine
- 5) Pressure Gauge
- 6) Solenoid Valve
- 7) Hydraulic Oil Cooler
- 8) Filter Pressure Gauge
- 9) Return Filter w/ By-Pass Valve
- 10) Quick-Disconnect Coupling



167 Stock Street, Nesquehoning PA 18240
Phone: (570) 645-3779 Fax: (570) 645-4061
Email: htpump@hydra-tech.com
Website: www.hydra-tech.com

Hydra-Tech Pumps Limited Warranty Submersible Pumps Only

Hydra-Tech Pumps warrants to the original purchaser only that this product is free from defects in material and workmanship, and agrees to repair or replace, at Hydra-Tech's option, any submersible pump part found to be defective within **24 months from the date of purchase**.
This warranty is not transferable.

THIS WARRANTY DOES NOT COVER DAMAGES RESULTING FROM CARELESS HANDLING, IMPROPER INSTALLATION, LACK OF SERVICE, INCORRECT POWER OR FAULTY APPLICATION SUCH AS PUMPING ABRASIVES, CORROSIVES, OR FLUIDS IN EXCESS OF 160 DEGREES F. WARRANTY COVERAGE IS NORMALLY NOT AVAILABLE FOR WEAR ITEMS SUCH AS: Wear Rings; Wear Plates; Impellers, and Mechanical Seals.

Any modification or alteration of this equipment will void the warranty. Any claim for warranty damage must be accompanied by digital photos of the defective part or parts, the serial number from the equipment, and a detailed description of the defect and possible causes. All warranty claims should be emailed to htpump@hydra-tech.com or mailed to Hydra-Tech Pumps, 167 Stock Street, Nesquehoning, Pennsylvania 18240 USA.

Submersible Pumps judged by Hydra-Tech Pumps to have been defective in workmanship or materials when shipped from the factory and within the warranty period will be either repaired or replaced at Hydra-Tech's option free of charge including motor freight both ways, within the continental United States.

HYDRA-TECH MAKES NO WARRANTY EXPRESSED OR IMPLIED INCLUDING WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE EXCEPT AS STATED ABOVE. HYDRA-TECH SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES ARISING OUT OF ANY BREACH OF WARRANTY AND WHETHER OR NOT ARISING OUT OF OR BASED ON HYDRA-TECH'S NEGLIGENCE, WHETHER ACTUAL OR IMPLIED, AND FOR DAMAGES TO ANY PROPERTY OR PERSON ARISING OUT OF THE PURCHASE OR THE USE, OPERATION OR MAINTENANCE OF THE EQUIPMENT. HYDRA-TECH SHALL NOT BE RESPONSIBLE FOR REPAIRS OR ALTERATIONS MADE BY OTHERS.

No person is authorized to make any representations or warranties on behalf of Hydra-Tech and no other person is authorized to alter or extend any of the conditions contained in this warranty.

December 2016

