

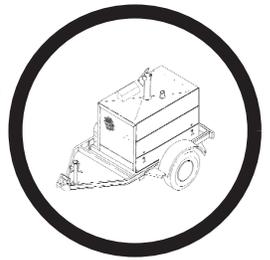


GB Operator's manual & spare parts list.

It is the owner's responsibility to ensure that all operators of this machine have read and understood the content of this manual before using the product! Careless or improper use of this machine can cause serious or even fatal injury! Allow only competent adults to operate this machine!

PP 2525 D

PP 3030 D



 WARNING!	
	Before operating machine, read and understand this entire operation manual & engine operation manual supplied with engine.
	Be familiar with machine before operation!

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Introduction

Congratulations on your selection of a Husqvarna Hydraulic Power Pack. We are certain you will be pleased with your purchase of one of the finest hydraulic power packs on the market.

We want to help you get the best performance from your new machine and to operate it safely. This manual contains that information. Please read and understand this entire manual, as it contains important information on operational safety, maintenance and suggestions on how to get the best performance from your Husqvarna Hydraulic Power Pack.

*Best Wishes
Husqvarna*

We have provided important safety messages in this manual and on the machine. Please read these messages carefully. A safety message alerts you to potential hazards that could hurt you or others. Each safety message is preceded by a symbol or the safety alert symbol (▲) and one of two words, **WARNING**, or **CAUTION**. These signal words mean:

▲ WARNING: Indicates a hazardous situation which, if not avoided COULD result in death or serious injury.

▲ CAUTION: Indicates a hazardous situation, which, if not avoided, COULD result in minor or moderate injury. It may also be used to alert against unsafe practices.

Each message tells you what the hazard is, what can happen, and what you can do to avoid or reduce injury. Other important messages are preceded by the word **NOTICE**.

NOTICE: Indicates a hazardous situation which, if not avoided, could result in property damage. Your machine or other property can be damaged if you don't follow this instruction.

The safety labels should be periodically inspected and cleaned by the user to maintain good legibility at a safe viewing distance. If the label is worn, damaged, or is illegible, it should be replaced.



DUST WARNING

Cutting, especially when DRY cutting, generates dust that comes from the material being cut, which frequently contains silica. Silica is a basic component of sand, quartz, brick clay, granite and numerous other minerals and rocks. Exposure to excessive amount of such dust can cause:

- Respiratory diseases (affecting your ability to breath), including chronic bronchitis, silicosis and pulmonary fibrosis from exposure to silica. These diseases may be fatal;
- Skin irritation and rash; and
- Cancer according to NTP* and IARC*

* National Toxicology Program, International Agency for Research on Cancer

Take precautionary steps

- Avoid inhalation of and skin contact with dust, mist and fumes;
- Wet cut when feasible, to minimize dust;
- Wear and ensure that all bystanders wear appropriate respiratory protection such as dust masks designed to filter out microscopic particles. (See OSHA 29 CFR Part 1910.1200)

California Prop 65 Warning:

Use of this product can cause exposure to materials known to the State of California to cause cancer and/or birth defects or other reproductive harm.

SAFETY INSTRUCTIONS

SAFETY FIRST!



WARNINGS

DO's AND DO NOT's



WARNING: FAILURE TO COMPLY WITH THESE WARNINGS AND OPERATING INSTRUCTIONS COULD RESULT IN DEATH OR SERIOUS BODILY INJURY.

DO

- DO** Read this entire operator's manual before operating this machine. Read and understand all warnings, instructions, controls, and symbol definitions contained in this manual, and on the machine.
- DO** always give a copy of this manual to the equipment user. If you need extra copies, call TOLL FREE 1-800-288-5040 in USA, or +1-913-928-1300 for International, or see "contact information" section of this manual.
- DO** keep all guards in place and in good condition.
- DO** wear safety approved hearing, eye, head and respiratory protection.
- DO** read and understand all warnings and instructions on the machine.
- DO** keep all parts of your body away from the blade and all other moving parts.
- DO** know how to stop the machine quickly in case of emergency.
- DO** shut off the engine and allow it to cool before refueling or doing maintenance.
- DO** inspect the blade, flanges and shafts for damage before installing the blade.
- DO** use the blade flange size shown for each blade size.
- DO** use only the blade flanges supplied with the saw. Never use damaged or worn blade flanges.
- DO** use only blades marked with a maximum operating speed greater than the blade shaft speed. Verify speed by checking blade shaft rpm and pulley diameters and blade flange diameters.
- DO** verify saw drive configuration by checking blade shaft RPM, pulley diameters, and blade flange diameter.
- DO** read all safety materials and instructions that accompany any blade used with this machine.
- DO** inspect each blade carefully before using it. If there are any signs of damage or unusual wear, **DO NOT USE THE BLADE.**
- DO** mount the blade solidly and firmly, Wrench tighten the arbor nut.
- DO** make sure the blade and flanges are clean and free of dirt and debris before mounting the blade on the saw.
- DO** use the correct blade for the type of work being done. Check with blade manufacturer if you do not know if blade is correct.
- DO** use caution and follow the instructions when loading and unloading the machine.
- DO** operate this machine only in well ventilated areas. Breathing Poison Exhaust Gas could result in death.
- DO** instruct bystanders on where to stand while the machine is in operation.
- DO** establish a training program for all operators of this machine.
- DO** clear the work area of unnecessary people. Never allow anyone to stand in front of or behind the blade while the engine is running.
- DO** make sure the blade is not contacting anything before starting the engine.
- DO** use caution when lifting and transporting this machine.
- DO** use caution and follow instructions when setting up or transporting the machine.
- DO** have all service performed by competent service personnel
- DO** verify the blade arbor hole matches the machine spindle before mounting the blade.
- DO** always check for buried hazards, such as electrical or gas lines before sawing. Always contact local utilities before operation in unknown areas.
- DO** move the machine at least 10 feet (3 meters) from the fueling point before starting the engine and make sure the fuel cap is on the machine and properly tightened.
- DO** lift machine only from specified lifting point.
- DO** clean the machine after each day's use.
- DO** use the proper blade flange size for each blade size. Never use damaged or worn blade flanges.
- DO** use caution when handling fuel.
- DO** only cut in a straight line, and only saw as deep as the job specifications require.

SAFETY INSTRUCTIONS

SAFETY FIRST!



WARNINGS DO's AND DO NOT's



WARNING: FAILURE TO COMPLY WITH THESE WARNINGS AND OPERATING INSTRUCTIONS COULD RESULT IN DEATH OR SERIOUS BODILY INJURY.

DO NOT

- DO NOT** operate this machine unless you have read and understood this operator's manual.
- DO NOT** operate this machine without the blade guard, or other protective guards in place.
- DO NOT** stand behind or in front of the blade path while the engine is running.
- DO NOT** leave this machine unattended while the engine is running.
- DO NOT** work on this machine while the engine is running.
- DO NOT** operate this machine when you are tired, fatigued or under the influence of drugs or alcohol.
- DO NOT** use a wet blade without adequate water supply to the blade.
- DO NOT** exceed maximum blade speed shown for each blade size. Excessive speed could result in blade breakage.
- DO NOT** operate the machine if you are uncertain of how to run the machine.
- DO NOT** use damaged equipment or blades.
- DO NOT** touch or try to stop a moving blade with your hand.
- DO NOT** cock, jam, wedge or twist the blade in a cut.
- DO NOT** transport a cutting machine with the blade mounted on the machine.
- DO NOT** use a blade that has been dropped or damaged.
- DO NOT** use carbide tipped blades.
- DO NOT** touch a dry cutting diamond blade immediately after use. These blades require several minutes to cool after each cut.
- DO NOT** use damaged or worn blade flanges.
- DO NOT** allow other persons to be near the machine when starting, refueling, or when the machine is in operation.
- DO NOT** operate this machine in an enclosed area. Breathing Poison Exhaust Gas could result in death.
- DO NOT** operate this machine in the vicinity of anything that is flammable. Sparks could cause a fire or an explosion.
- DO NOT** allow blade exposure from the guard to be more than 180 degrees.
- DO NOT** operate this machine with the belt guards or blade guard removed.
- DO NOT** operate this machine unless you are specifically trained for its operation.
- DO NOT** use a blade that has been over heated (Core has a bluish color).
- DO NOT** jam material into the blade.
- DO NOT** grind on the side of the blade.
- DO NOT** operate this machine with the any guards or shields removed.
- DO NOT** cut deeper than 1" per pass with a dry blade. Step cut to achieve deeper cuts.

This machine was designed for certain applications only. DO NOT modify this machine or use for any application other than for which it was designed. If you have any questions relative to its application, DO NOT use the saw until you have written Husqvarna Construction Products and we have advised you.

**Husqvarna Construction Products North America
17400 West 119th Street, Olathe, Kansas 66061 USA**

Symbol Definitions



Please read the instructions for use prior to operating the machine for the first time.



Mandatory



Indication



Prohibition



Warning Triangle



Wear Eye Protection



Wear Breathing Protection



Use of hearing protection is mandatory



Wear Head Protection



Wear Safety Shoes



Wear Appropriate Clothing



Emergency Shutdown



Use In Well Ventilated Area



Do Not Use In Flammable Areas



Machinery Hazard, Keep hands and Feet Clear.



Muffler Hot. May Cause Burns and / or Ignition of Material. Avoid Contact.



Danger, Poison Exhaust Gas



No Non-working Personnel In Area



No Smoking



Always Keep All Guards In Place



Engine Stop



Engine Start



Engine Run



Engine Start Switch



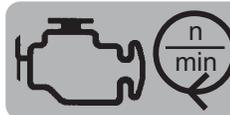
Engine Oil Temperature



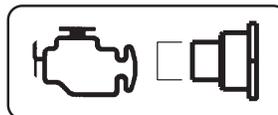
Engine Oil Pressure



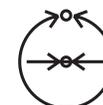
Engine Hourmeter



Engine Speed (RPM)



Push Button Inward To Start Engine



Hydraulic Pressure Control



Alternator

Hazard Symbols



Explosive Fuel

Gasoline is extremely flammable and its vapors can explode if ignited. Store gasoline only in approved containers, in well-ventilated, unoccupied buildings, away from sparks or flames. Do not fill the tank while the engine is hot or running, since spilled fuel could ignite if it comes in contact with hot parts or sparks from ignition. Do not start the engine near spilled fuel. Never use gasoline as a cleaning agent.



Hot Parts!

Engine components can get extremely hot from operation. To prevent severe burns, do not touch these areas while the engine is running or immediately after it is turned off. Never operate the engine with heat shields or guards removed.



Rotating Parts!

Keep hands, feet, hair and clothing away from all moving parts to prevent injury. Never operate the engine with covers, shrouds or guards removed.



Lethal Exhaust Gasses!

Engine exhaust gasses contain poisonous carbon monoxide. Carbon monoxide is odorless, colorless and can cause death if inhaled. Avoid inhaling exhaust fumes and never run the engine in a closed building or confined area.



Rotating Parts!

Never tamper with the governor components or settings to increase the maximum speed. Severe personal injury and damage to the engine or equipment can result if operated at speeds above maximum.

General Cautions and Warnings



Warning

Never attempt any adjustment or repair to the machine while the engine is running. Never put hands or feet under the machine while the engine is running. Serious injury may occur.



Warning

Never run the engine in an unventilated area.



Warning

Never fill the fuel tank with the engine running. Spilling diesel fuel on a hot engine may cause a fire or explosion.

General Cautions and Warnings (Continued)



Warning

Always wear safety glasses and ear protection when operating this machine.



WARNING POISON EXHAUST GAS



THIS SAW IS SHIPPED FROM THE FACTORY *WITHOUT* A CATALYTIC CONVERTER. THE ENGINE PRODUCES CARBON MONOXIDE EXHAUST EMISSIONS AND IS *NOT SAFE* FOR USE IN ENCLOSED AREAS. USE OF A CATALYTIC CONVERTER REDUCES THE CARBON MONOXIDE EXHAUST EMISSIONS, BUT STILL IS *NOT SAFE* FOR USE IN ENCLOSED AREAS. USE ONLY IN WELL-VENTILATED AREAS. WORKSITE AIR QUALITY MUST COMPLY WITH OSHA 29 CFR 1910.1000 PER TABLE Z-1, LIMITS FOR AIR CONTAMINANTS. MONITOR WORKSPACE AIR QUALITY TO INSURE COMPLIANCE. FAILURE TO COMPLY WILL RESULT IN DANGER TO LIFE AND CAUSE PERMANENT INJURY OR DEATH.

General Information

Carbon monoxide (CO) has the distinction of being one of the few commonly encountered industrial gasses that is both highly toxic (poison) and odorless. When inhaled, CO acts as a chemical asphyxiant by preferentially combining with hemoglobin in the blood stream. As a result, the hemoglobin is not able to transport its normal amount of oxygen, which results in under-oxygenation of tissues. Symptoms of low-level CO exposure include headaches, dizziness, confusion, and nausea. **However, loss of consciousness, permanent injury and death may result from continued or more intense exposure.** Because of the health hazards associated with CO inhalation, the Occupational Safety and Health Administration (OSHA) have imposed personal exposure limits. The OSHA exposure limits, which are specified in the 29 CFR 1910.1000 (1998 Revision), allow for a 200 PPM Ceiling Limit and a TWA of 35 PPM per 8-hour shift/40-hr workweek. It is strongly recommended that the OSHA 29 CFR 1910.1000 (Code of Federal Regulations) be consulted for more information on exposure limits for various hazardous materials. If CO Poisoning is suspected immediately remove the victim to fresh air and obtain emergency medical attention.



WARNING HEARING HAZARD

DURING NORMAL USE OF THIS MACHINE, OPERATOR MAY BE EXPOSED TO A NOISE LEVEL EQUAL TO **85 dB (A)** OR GREATER. TEMPORARY AND/OR PERMANENT DAMAGE TO HEARING MAY RESULT. HEARING PROTECTION REQUIRED.

Decal Locations

Husqvarna

PP 2525 D

DECAL, HUSQVARNA PP 2525 D LOCATION:
LEFT & RIGHT SIDE PANELS
(PP 2525 D ONLY)
P/N 502 29 01-01 (2X)

Husqvarna

PP 3030 D

DECAL, HUSQVARNA PP 3030 D LOCATION: LEFT & RIGHT SIDE PANELS
(PP 3030 D ONLY)
P/N 502 29 01-02 (2X)

Husqvarna

DECAL, HUSQVARNA LOCATIONS:

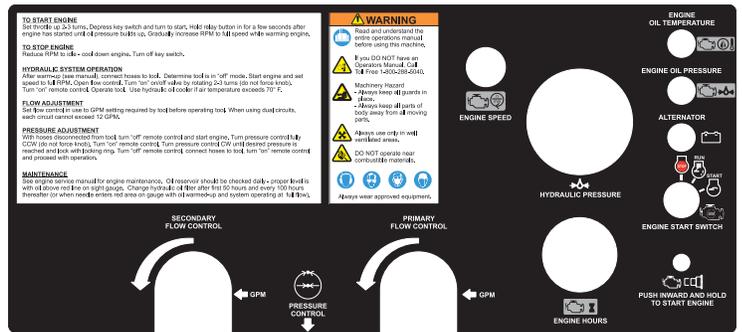
- (1) FRONT OF FRAME ENCLOSURE
 - (1) ABOVE CONTROL PANEL
(SKID MOUNTED UNITS ONLY)
 - (1) REAR TRAILER FRAME
(TRAILER MOUNTED UNITS ONLY)
- P/N 542 19 07-33 (2X)



DECAL, HYDRAULIC OIL LOCATION: HYDRAULIC TANK
P/N 501 98 70-01 (1X)



DECAL, VALVE ON / OFF LOCATION: VERTICAL SURFACE BELOW CONTROL PANEL
P/N 502 44 76-01 (1X)



DECAL, CONTROL PANEL LOCATION: CONTROL PANEL
P/N 502 29 00-01 (1X)

WALL SAW					
Blade Speeds and Flow Requirements					
BLADE SIZE	RPM RANGE	WALL SAW MODEL		MOTOR TYPE	
		35H & 1500H 360-2100	3.8 CIR Motor 1.25 CIR Motor	5.2 CIR Motor	1.94 CIR Motor
		GPM REQUIRED			
24"	1300-1500	22 - 25	30 (1300 RPM)	30 (1200 RPM)	
30"	1300-1500	22 - 25	30 (1300 RPM)	30 (1200 RPM)	
36"	1100-1300	19 - 22	25 (1100 RPM)	28 (1100 RPM)	
42"	900-1000	15 - 17	21 - 23	23 - 25	
48"	800-900	13 - 15	18 - 21	20 - 23	
54"	650-750	11 - 13	15 - 17	16 - 19	
60"	600-650	10 - 11	14 - 15	15 - 16	
66"	550-600	9 - 10	13 - 14	14 - 15	

WARNING
OPERATING SAW BLADES AT ROTATIONAL SPEEDS GREATER THAN THOSE RECOMMENDED BY THE MANUFACTURER CAN CAUSE BLADE DAMAGE AND POSSIBLY SUBSEQUENT PERSONAL INJURY
70137A

DECAL, WALL SAW RPM LOCATION: ABOVE CONTROL PANEL
P/N 541 20 18-33 (1X)

Contents of Carton

1. *Husqvarna Hydraulic Power Pack.*
2. *Owners Manual (This document).*
3. *Engine Operation Manual.*

Unpacking

This machine was inspected and operated before shipment and should not require any additional adjustment prior to its initial use. However, in the unlikely event of damage during shipment, the operator is advised to check out the machine by following the instructions of this manual in operating each of the equipment subsystems.

Uncrate the equipment carefully to prevent damage. Follow the instructions contained in this manual for the assembly and installation of any component parts which may have been removed for shipping purposes.

Check each item making certain that all items are accounted for and in visually in good condition before discarding any packing materials. If there are any damaged or missing parts call customer service on our toll free telephone number: **1-800-288-5040**.

Specifications with asterisk () refer to the PP 3030 D power pack.

BEFORE STARTING

This instruction manual describes the operating procedures, care, maintenance, adjustments and safety precautions for proper use of this machine. This equipment is intended for industrial applications by experienced operators. It is to be operated in conformance with applicable federal, state and local codes or regulations pertaining to safety, air pollution, noise, etc.

IMPROPER USE OF THIS EQUIPMENT OR IMPROPER MACHINE ALTERATIONS MAY BE EXTREMELY DANGEROUS.

The operator is cautioned against using this machine before having read and fully understood the instructions presented in this manual and in the original manufacturer's instructions provided separately.

USER RESPONSIBILITIES

It is the operator's responsibility to use this machine under safe working conditions and to be fully aware of requirements for operator safety and safety of co-workers, observers and public at large. The operator must be aware of the machine's capabilities and limitations and follow the safety precautions in each section of this manual. Periodic maintenance is required, in accordance with instructions herein, to promote safe and reliable operation.

Care is to be taken by the operator to see that all of the safety features furnished with the machine are properly maintained and operational.

It is the responsibility of the operator to provide a safe working environment and to follow proper safety procedures when operating this equipment. Operators must use approved ear protection, safety hat, eye protectors, gloves, safety shoes and any other personal protective equipment required for compliance with standard safety practices or federal, state and local codes and regulations.

HYDRAULIC SYSTEM

Inspect the hydraulic reservoir to ensure it is filled with fluid prior to start-up. Use a high quality petroleum based hydraulic oil with the following properties is recommended: anti-wear, low foaming, rust and oxidation inhibitors, wide temperature range. It should have a fluid viscosity of approximately 300 SSU @ 100°F (ISO 68) for use in higher ambient temperature climates, regularly above 80°F. In climates where the ambient temperature does not regularly exceed 80°F., the oil should have a fluid viscosity of approximately 225 SSU @ 100°F., (ISO 46). Check with local oil suppliers for availability. The oil must be kept free of contamination to avoid damage to system components. The strainer in the filler tube must always be in place when adding oil. Quick-disconnects must be cleaned before connection is made. Maximum allowable oil temperature at pump inlet is 180°F., suggested maximum temperature is 150°F. The hydraulic system is compatible with all Husqvarna hydraulically-driven sawing and drilling components. The system may not be compatible with components of other manufactures. Husqvarna may be able to supply information as to operational capabilities if sufficient specifications are available.

NOTICE

Initial fill-up of Hydraulic System requires the “filling” of the hydraulic hoses. Adhere to the “INITIAL HYDRAULIC RESERVOIR FILL-UP PROCEDURE”.

INITIAL HYDRAULIC RESERVOIR FILL-UP PROCEDURE

When initial fill-up requires the “filling” of the hydraulic hoses, the following procedure must be adhered to:

1. Fill reservoir to top.
2. Connect hoses to power pack and to each other.
3. With controls off, start engine and run at half speed.
4. Turn on remote control and on/off valve.
5. Slowly open flow control.
6. Watch oil level in sight gauge.
7. As soon as oil disappears, close flow control.
8. Refill reservoir until oil reaches top of sight gauge.
9. Repeat steps 5-8 until oil doesn't drop in sight gauge.
10. Proper fluid level is when oil is above red line when fluid is cool.

NOTICE

Do not operate power pack if hydraulic oil is not visible in sight gauge. If hydraulic oil is not visible, the low oil level shutdown device will prevent the engine from running after releasing the murphy switch. (Refer to “STARTING” section of the document).

Caution

Improper use of the hydraulic system or improper machine alterations may be extremely dangerous. Introduction of contaminants into the hydraulic system will reduce component service life and may void warranty.

BATTERY

Caution

If battery is charged or installed in reverse, damage can result to the battery, alternator and electrical system.

ENGINE

This machine is equipped with an air-cooled diesel engine. It must be started and operated in accordance with the Deutz engine manual provided. Special maintenance must be undertaken during the break-in period as specified by the Deutz engine manual. Refer to page 5.1 Maintenance Schedule in the Deutz Operation Manual.

Prior to starting the engine MAKE SURE THE ENGINE CRANKCASE IS FILLED WITH OIL TO THE PROPER LEVEL. A dipstick is provided for gauging the oil level in the crankcase. Operating without oil will ruin the engine and void engine warranty.

ENGINE OIL

Quality Grade:

Lube oils are differentiated according to their performance and quality class. In common use are the API Specifications named after the "American Petroleum Institute".

Approved API oil classes:

Naturally aspirated engines: CC/SE CC/SF
 CD/SE CD/SF
 CE/SFCE/SG

Turbocharged engines: CD/SE CD/SF
 CE/SFCE/SG
 SHPD*

* SHPD (Super High Performance Diesel) oils are approved by KHD by name only, since a valid specification had not yet been laid down at the time of printing. Should you be in doubt, ask your DEUTZ SERVICE agent. To locate a Deutz service agent near you refer to www.deutz.com.

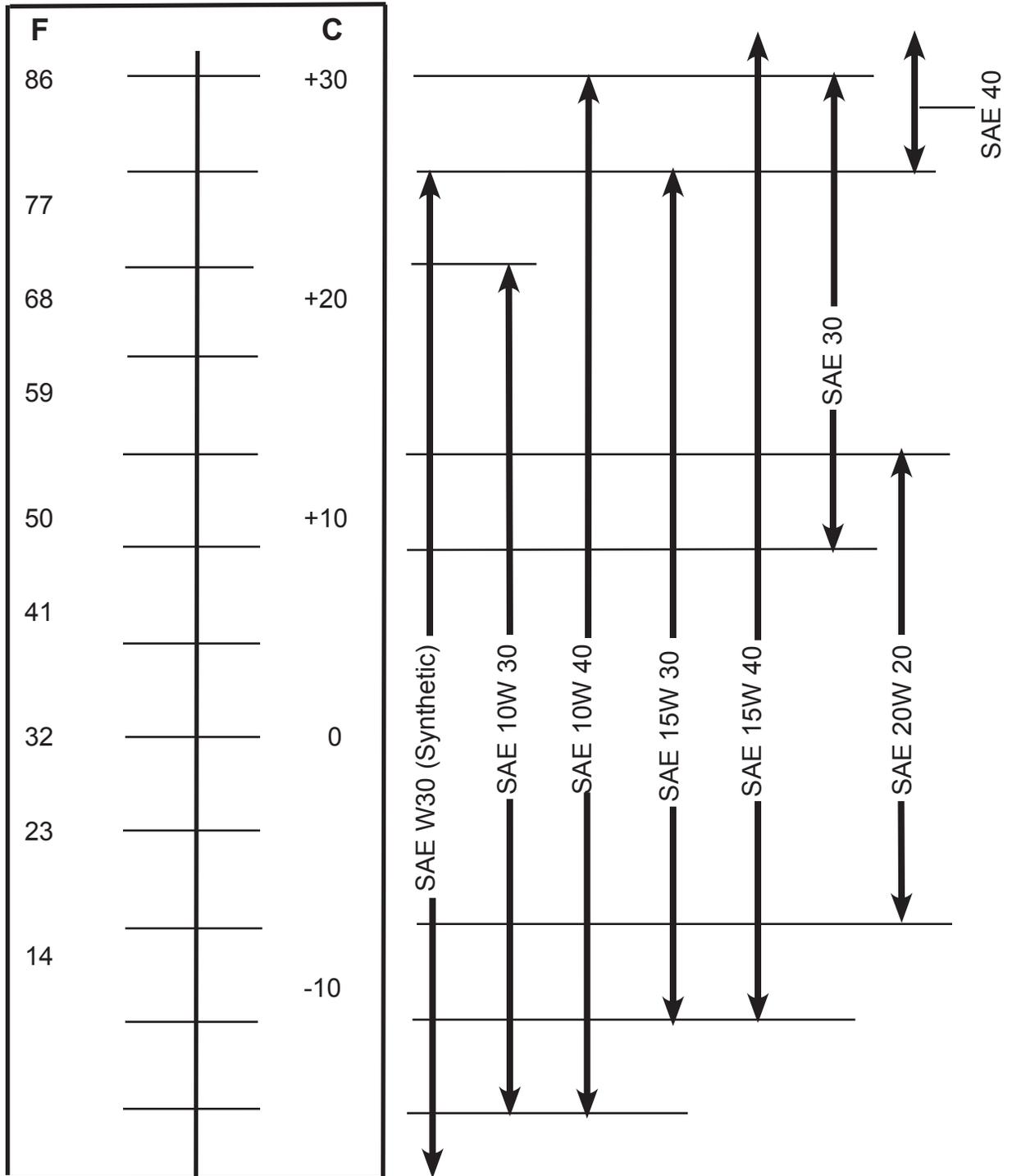
Viscosity:

As the viscosity of oils dependent on the temperature, the choice of the SAE-grade should be governed by the ambient temperature prevailing at the engine operating site. Optimum operating behavior will be attained if you take as a guide the oil viscosity diagram on the following page. Should the temperatures temporarily fall below the limits of the SAE-grade selected, this will merely affect the starting performance, but will not cause any damage to the engine. The application limits should not be exceeded over lengthy periods of time in order to keep wear down to a minimum. Oil changes dictated by the time of the year can be avoided by using multi-grade oils. Multi-grade oils, particularly light flowing oils, also reduce the fuel consumption.

Ambient Temperature Table

Select the oil viscosity (SAE grade) according to the ambient temperature prevailing at the time of starting the engine.

Keep shorter periods between oil changes when operating at temperatures below -14°F.



OPERATION IN WINTER

Diesel Fuel

Use winter-grade diesel fuel for operation at sub-zero temperatures.

Additional Maintenance Jobs

At temperatures below -4°F lubricate the flywheel ring gear with low-temperature grease, e.g. Bosch FT1V31, from time to time through the pinion hole (if necessary, remove the starter.)

Cold-Starting Aids

At temperatures near or below freezing point, start with heating plug, if necessary. This not only lowers the starting limit temperature, but also proves useful at temperatures normally not requiring a starting aid.

Battery

Cold starting requires a good state of charge of the battery.

Lowering the starting limit temperatures by 39 to 41°F is possible by raising the battery temperature to about +68°F. This is achieved by removing the battery and storing it in a warm room.

FUELING

Only fuel recommended by the engine manufacturer is to be used with this equipment. Adding fuel to the tank should be accomplished only when the engine is stopped and cool and care should be taken to prevent spilling fuel over any part of the equipment.

Warning

In the event of fuel spillage do not attempt to start the engine or operate any electrical component until the spilled fuel has been removed. Maintain an approved fire extinguisher and keep it readily available in the event of fire.

When filling the fuel tank do not overfill. Always leave enough space for expansion due to environmental heating.

Operation of the power pack should not be continued to the point of complete fuel consumption. The operator is advised to drain the tank during temporary storage within an enclosed area. This will reduce chances of fire.

 **Warning**

DO NOT OPERATE IN CLOSED AREAS

The operator is warned not to use this equipment within enclosed spaces. Exhaust from the engine contains carbon monoxide, a poisonous, odorless and invisible gas, which, if breathed by the operator or other occupants of the enclosed space, causes serious illness and possibly death. Enclosed spaces include all areas where natural ventilation is restricted, such as buildings, truck enclosures and access paths between buildings. Open skyways, windows and doorways are not sufficient for preventing this hazard.

PROHIBITION OF ALTERNATIVE APPLICATIONS

Use of this equipment as a vehicle for transporting personnel or equipment is hazardous. No attempts to use the equipment for this purpose should be allowed.

This equipment was designed for a single purpose. Its modification for alternative uses is not recommended and may create an unrecognized hazard to the operator.

 **Warning**

LUG NUTS

Lug nuts settle naturally. The torque of the nuts **must** be checked within 50 - 100 miles of new or after serving, however, frequent checking is recommended. Lug nut torque is 100 **FT. LBS.**

STARTING

Electric Starting



Before starting, make sure that no one is standing in the immediate vicinity of the engine or power pack driven machine. After having carried out repairs, make certain that all removed panels and guards are put back in place and that all tools are removed from the engine and engine compartment. When starting with heating plug, do not use any other additional starting aids. **A combination of the ether starting system with heating plug and/or any other cold-starting aids is not permitted. There is a danger of an accident!**

Do not actuate the starter for more than 20 seconds at a time. If the engine does not start, wait one minute before repeating the attempt.

If the engine does not start after two attempts, trace the cause with the aid of the diagnosis chart located within the Engine Operation Manual.

Starting without Cold-Starting Aid

Insert key.

- Position ACC = not connected.
- Position 0 = no operating voltage.

Turn key clockwise

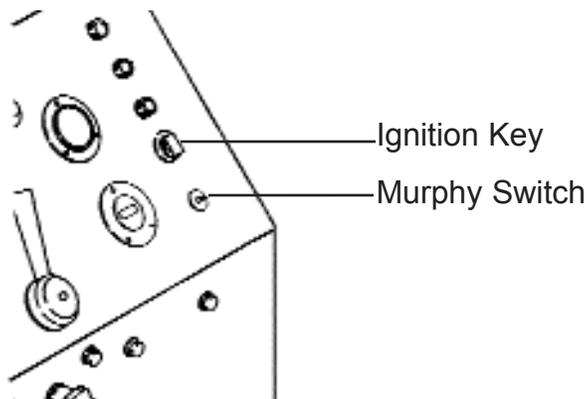
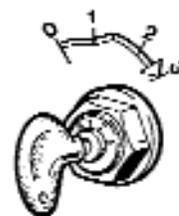
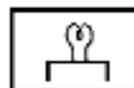
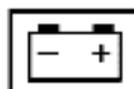
- Position 1 = operating voltage.
- Pilot lamps light up.

Push key in deeper and turn further clockwise against spring action. Push the Murphy Switch button inward as the ignition key is turned.

- Position 2 = no function.
- Position 3 = starting.

Release key as soon as the engine starts firing.

- Pilot lamps go out.

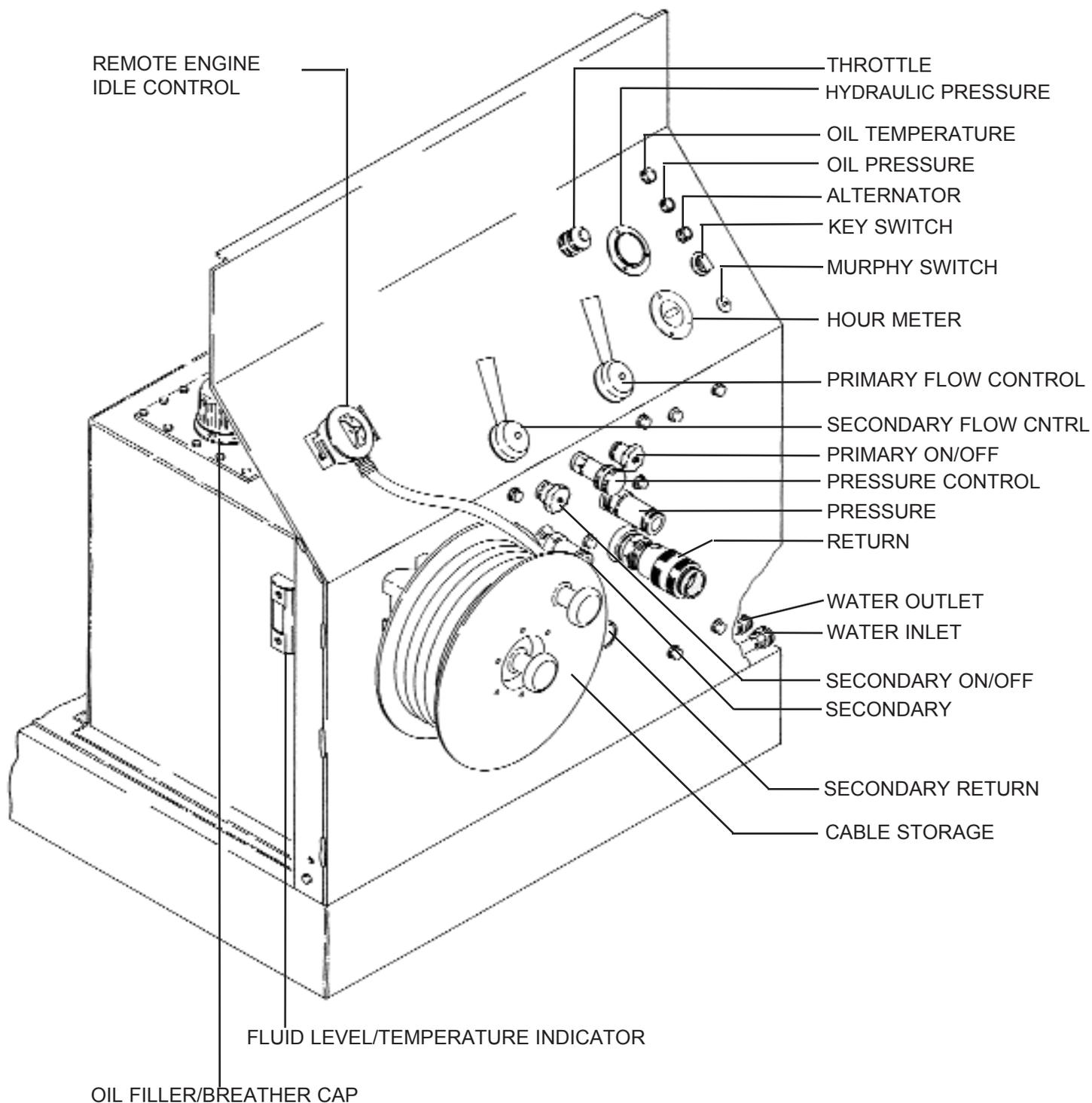


OPERATION

Do not attempt to start engine before completely understanding the function and operation of all controls of the power pack and the equipment being driven. It is the operator's responsibility to determine if it is safe to start the unit and if the driven equipment is safe to run on this unit.

DESCRIPTION OF CONTROLS

The controls for operation of the hydraulic power pack are located on the remote control box and on the control console.



CONSOLE CONTROLS

REMOTE CONTROL BOX

1. Provides on/off control for complete hydraulic system and reduces engine speed to idle when in “off” position.
2. ONLY use for emergency shut-down when system is in operation.
3. Use for unloading hydraulic system when starting engine, particularly on cold start-up.
4. DO NOT use as shut-off to stop driven components. Always shut off component first, then switch remote box to “off” position. This will unload pump and allow disconnect of hydraulic hoses from driven component. When reversing procedure, switch to “On” position prior opening shut-off valve on driven component.

CONTROL CONSOLE

1. Throttle Control - pull out to maximum position and turn to lock. Use ONLY when remote control of engine speed is not required or is malfunctioning.
2. Ignition Control - turn key to “On” position, then push and turn to start engine, while holding in the button on the “Relay.” Turn key to “Off” position to stop engine.
3. Primary Flow Control - use to control hydraulic flow to components required a volume of up to 25 gpm (30 gpm*).
4. Secondary Flow Control - use to control flow when operating both systems simultaneously, up to 12 gpm.
5. On/Off Controls - turn counterclockwise to turn “On” the system in use. When system is not in operation, turn “Off” by turning fully clockwise.
6. Primary System Ports - upper port is pressure line, lower port is return line.
7. Secondary System Ports - upper port is pressure line, lower port is return line.
8. Pressure Control - use to set maximum system pressure between 1000 psi - 2500 psi (3000 psi*).
Adjust as follows:
 - a. Setting must be made prior to connecting into driven components. Do so by disconnecting primary system pressure hose at console or at driven component.
 - b. With engine shut down and remote control to “Off” position, turn pressure control fully counterclockwise (low pressure).
 - c. Open primary flow control, determine that secondary flow control is closed, then start engine.
 - d. Switch remote control to “On” position and turn pressure control clockwise to desired pressure setting, lock in place using lock ring.
 - e. Switch remote control to “Off” shut down engine and connect hoses to driven component.

NOTE: Engine and hydraulic system should be at operating temperature and engine should be run at full rpm. If primary pressure hose has been disconnected at control panel and pressure fluctuation occurs while setting pressure, connect hose at panel and disconnect end at driven component.

Specifications with asterisk () refer to the 3030 power pack.

9. Bleed Valve (located behind console on back of manifold block) - use to “fine-tune” sensing circuit. It is set at the factory approximately 1/8 turn open. If hydraulic surging occurs it can be adjusted to eliminate surging.

 **Warning**

Prior to use, the operator must know the hydraulic requirements and limitations of the driven equipment to be operated and the appropriate adjustments must be made on the controls. Failure to do so or the introduction of other control devices, may cause system heating or may render the system inoperative.

NOTICE

Power unit engine must never be shut-off while hydraulic system is under load. To prevent such an occurrence, shut off engine only when pressure gauge indicates stand-by pressure - 300 psi.

OPERATING THE POWER PACK

Prior to start-up, it is recommended that all fluid levels be checked to be sure they are within safe levels for operation. If the unit is to be operated without being hooked up to the driven component, the flow valves should be closed and the remote box should be in the “Off” position. If the unit is attached to a component, any controls on the component must be in the “Off” position.

Once it has been determined these settings have been made and the power unit is clear to start, the engine can be started. If the engine and hydraulic system are at operating temperature, the engine can be started with the governor set to the full setting required for operation. This normally only occurs when the unit has been shut down just long enough for another set-up to be made on the wall saw, core drill or other driven component (approx. 15 min. or less). Whenever the system is not at operating temperature, it must be “warmed up” prior to operating any driven components.

In moderate temperature this will involve starting and running the engine and circulating the fluid at lower rpm and low pressure for a few minutes before increasing the engine rpm. In cooler temperatures, this will involve a longer period of time to allow the engine and oil to warm to the appropriate levels. In cold temperatures, it may be necessary to utilize the decompression lever (if equipped) located on the engine to obtain correct cranking speed for starting. It may also be necessary to close the flow control valve to unload the hydraulic system while the engine warms up. This valve is then gradually opened to allow circulation of the oil. All warm-up procedures should take place with the hose ends coupled and before hooking in driven equipment. Note: This power unit is designed to be operated with the enclosure door on the exhaust side of the engine open, however, it is recommended that both be open in warmer climates.

To operate the driven equipment, first determine that the equipment is correctly attached, mounted and in the correct control configuration as per its instructions. Switch remote box to “On”, slowly open the shut-off valve on the driven equipment and operate the driven equipment as required. When operations are completed, close shut-off valve on driven equipment. Switch remote box to “Off” before attempting to remove hose ends from driven equipment or whenever driven equipment is to be shut off for more than a few minutes.

 **Warning**

Never attempt to couple or uncouple hoses when engine is running or when remote box is in “On” position.

NOTICE
Quick-Disconnect Couplings MUST BE FULLY ENGAGED AND LATCHED! Failure to do so can result in inoperative system or component damage. It is imperative that the quick-disconnects be cleaned when connecting hoses and devices. Failure to thoroughly clean will result in premature failure of system components.

OPERATING DRIVEN EQUIPMENT

Instructions supplied with the driven equipment must be followed to ensure correct connection and operation of each individual piece of equipment. Equipment supplied by Husqvarna will be capable of being connected correctly and will be compatible with this power pack unless otherwise stated. With equipment of other manufacturers, it will be necessary to determine the following:

1. Correct direction of flow through the equipment.
2. Correct pressure and flow required by the equipment.
3. Compatibility of any valving or circuitry with Husqvarna’s system. Some hand-held equipment, such as hand saws or hammers, utilize trigger controls which are operated frequently. These valves must be of the open center type for correct operation.

 **Warning**

It is the operator’s responsibility to connect, mount or operate this unit and any driven equipment in a correct and safe manner. Incorrect operation or modification of this system may be extremely hazardous.

If other manufacture equipment is to be used with this power pack and the safe operation cannot be determined by the operator, call Husqvarna for technical assistance before us.

HYDRAULIC OIL COOLER

The power unit is equipped with a water-type cooler which must be supplied, when utilized, with a minimum of 4 gpm water flow. The water supply hose is connected to the cooler and then routed either to the driven tool or to a convenient drain point on the job site. Routing the water to a drain normally provides higher cooling capacity where required.

It is recommended that cooler be utilized when regardless of air temperature.

MAINTENANCE

Periodic maintenance of this machine will be required to promote safe and reliable operation. Generally the maintenance should require only routine cleaning, changing of fluids, filters and inspection.

Caution

The operator is advised to establish routine maintenance procedures based on the recommendations specified herein and machine utilization rate. Failures resulting from inadequate maintenance schedules and procedures may result in unsafe working conditions, machine damage and voided equipment warranties.

SAFETY REQUIREMENTS

All maintenance operations must be performed while exercising good workmanship to avoid hazards and prevent accidents. It is the user's responsibility to provide the tools necessary and appropriate for each maintenance task and to inspect each maintenance operation to make sure that hazards have not been introduced through maintenance errors.

The following recommendations are made to promote personnel safety during maintenance operations.

1. Make sure the power unit is properly blocked to prevent movement while working.
2. Securely support enclosure doors and openings to prevent their accidental closing.
3. When maintenance procedure does not require electrical power, disconnect the battery.
4. When working on hoses and fittings, prevent excess oil leakage onto the work area.
5. Double check all fittings which may have been loosened during maintenance to determine they having been retightened prior to starting engine.

ENGINE

Perform all maintenance procedures as recommended by the engine manual.

ENGINE MAINTENANCE

In Running Hours ⁽¹⁾

	Every 10 hours or daily	Non- ⁽²⁾ recur-rent after	Every							
			125	250	500	750	1000	2000	3000	
Oil Level	I									
Engine Leaks		I								
Oil Bath and Dry Type Air Cleaners ^{(3) (6)}	I									
Battery and Battery Cable Connections			I							
Engine Oil and Oil Filter ⁽⁷⁾		R		R	R ⁽⁴⁾	R ⁽⁵⁾				
Fuel Filter		R					R	R	R	
Valve Clearance (Adjust if necessary) ⁽⁷⁾		I								
Engine Mountings		I								
V-Belts		I								
Injectors										I
Fuel Feed Pump							I	I	I	

<p>I-Inspect, R-Replace 1) Maximum permissible guide intervals. After commissioning of new and overhauled engines. Clean if necessary. grade API: CC/SE grade API: CD/SE</p>	<p>6) Renew if necessary. 7) Refer to Deutz Engine Manual. 2) 3) 4) Oil 5) Oil</p>
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HYDRAULIC SYSTEMS

ITEM	PERIOD	MAINTENANCE
Hydraulic Oil Level	Daily	Inspect & maintain above red line.
Hydraulic Hose & Fittings	Daily	Inspect & repair or replace.
Nut, Bolts, Mounting Devices	Weekly	Inspect & repair or replace.
Hydraulic Oil Filter	After 1st 50 hrs., then every 100 hrs.	Replace
Pump Compensator Filter	200 Hours	Clean or replace.
Hydraulic Suction Strainer	400 Hours	Clean or replace.
Hydraulic Reservoir	400 Hours	Drain oil, discard, clean reservoir, replace oil.
Trailer Lug Nuts	After 1st 50-100 miles, then every 100 miles	Inspect and torque to 100 ft-lbs

NOTICE

Hydraulic pump used on this machine must always have the case filled with hydraulic oil, else damage may occur to the hydraulic system. Fill to the drain port prior to starting. If for any reason, the hydraulic pump case has been drained, it must be refilled, up to drain port prior to start-up.

Upon initial new start-up of the power unit or whenever hydraulic pump has been repaired or replaced it is recommended that the pump be rotated slowly at initial start-up to prevent cavitation and pump damage. On **gasoline engine powered units** this can be accomplished by removing and grounding the coil wire on the ignition and cranking the engine for 15-20 seconds. On **diesel engine powered units**, engage the engine stop device or cut off fuel flow to injectors. On **electric-powered units**, “bump” the electric motor on-off, 3-4 times.

Following this procedure start the unit in the normal manner, monitoring the system pressure to determine that the pump is picking up oil. If there is no indication of fill in 30 seconds, stop motor and determine cause.

Clean the power pack whenever possible to aid inspection and maintenance. Be aware of any changes in the system while it is in operation, as this may indicate a potential future component failure.

IDLE DOWN SOLENOID

Whenever the idle down solenoid is repaired or replaced, it is important that the linkage be properly adjusted. To adjust, turn on ignition switch (do not start engine) and switch the remote switch on. This will activate the solenoid. Then install the linkage, making sure that the linkage bottoms out against the solenoid plunger. An airgap of approximately .015 -.030 should exist between the governor control arm and governor stop screw when the linkage is properly adjusted.

Warning

It is important that the trailer and its components be inspected regularly (every 100 hours). Check the following: wheel lug nuts for proper torque, ball hitch for condition and tightness of mounting bolts, ball hitch for condition of latch and latch detent, suspension components for looseness or damage, frame weld for cracking or damage and wheel bearings for looseness or roughness. Any items found to be loose, worn, damaged or cracked must be repaired or replaced immediately. Failure to do so could lead to a trailer failure which could cause serious injury or death of yourself or other motorist.

Warning

Replace any missing, damaged or otherwise unreadable warning, caution or instruction labels as soon as possible. Failure to do so can lead to operating situations which could cause personal injury or death.

Warning

When doing repairs or maintenance on this machine, always use genuine Husqvarna parts. Failure to do so could lead to component failure, subsequent personal injury or death and void equipment warranties.

TROUBLESHOOTING GUIDE FOR LOSS OF POWER ON 2525 OR 3030 POWER UNIT WITH 360 WALL SAWS

PRELIMINARY CHECKS

1. Correct hydraulic oil level.
 2. Correct engine operation.
 3. Clean hydraulic oil filter.
4. No excess metal material in oil.
 5. No external oil leakage-particularly in sensing circuit.

TROUBLESHOOTING

PROBLEM	SYMPTOM	PRESSURE READING ON POWER UNIT	FLOW & PRESSURE ON TEST KIT	CAUSE	SOLUTION
No blade rotation		0 or maximum psi		Hydraulic QD not connected	Inspect, connect as necessary, test
		Maximum psi		Wall saw internal damage. Locked up.	Disconnect from hydraulic system, test by hand, disassemble to locate problem
	Pump noise	0 psi		Pump shaft failed-pump not rotating	Remove pump to inspect - repair as necessary.
Blade rotates but with major power loss	Excessive system temp., pump or motor may be noisy	Maximum psi, but slow gauge response under blade stall	Partial to full flow, but psi slow response	Excessive aeration in hyd oil or pump cavitation	Refer to pump service manual.
			Maximum flow, maximum psi	Hydraulic failure - excess internal slippage	Repair or replace as necessary
	Excessive hose vibration	Maximum psi, but slow gauge response under	Partial to full flow but psi slow response	Pump failure - excess internal slippage shaft failure	Repair or replace

TROUBLESHOOTING Continued

PROBLEM	SYMPTOM	PRESSURE READING POWER UNIT	FLOW & PRESSURE ON TEST KIT	CAUSE	SOLUTION
Blade rotates but with partial power loss	Minor heat build up, no noise	Difficult to maintain 1250 psi & over w/o stalling blade	Maximum flow maximum psi	Blade polished can not utilize HP output from hyd saw	Replace blade or attempt to "open up"
Blade rotates but with complete or partial power	No heat build-up no noise. Oil to compensator when hose fitting checked.*	300 psi or less	12 gpm or less 300 psi or less	Stuck flow compensator spool	Remove and clean as necessary. Inspect on removal to prove cause.
	No oil to comp when hose fitting checked.* Aerated oil to compensator when hose fitting checked.*	Maximum psi Maximum psi or less than max	Flow less than max psi Less than max flow or pressure or less than max on both	Worn flow comp spool or Weak spring flow comp spool Maladjusted compensator spools	Adj to correct reading or replace Adjust to correct specs
	No heat build up, no noise Oil to compensator when hose fitting checked.*	300 psi or less	12 gpm or less 300 psi or less	Sensing hose obstructed or Sensing hose not connected	Repair or replace Inspect and connect
		300 psi or less, but erratic	12 gpm or less 300 psi or less but erratic	Aeration in hyd oil or Air inclusion in sensing line	Ref to pump aeration cause and solution bleed sense line
	No heat build up, no noise Oil to compensator when hose fitting checked.*	300 psi or less	12 gpm or less 300 psi or less	Stuck pressure compensator spool	Remove and clean as necessary. Inspect on removal to prove cause.
		Less than max, slow response on stall	Full flow, but less than max psi Slow response	Weak spring on pressure comp spool or Worn press comp spool	Adjust to correct reading or replace Replace comp assy

* Check oil to compensator at fitting where 1/4" sensing hose is attached to pump comp.

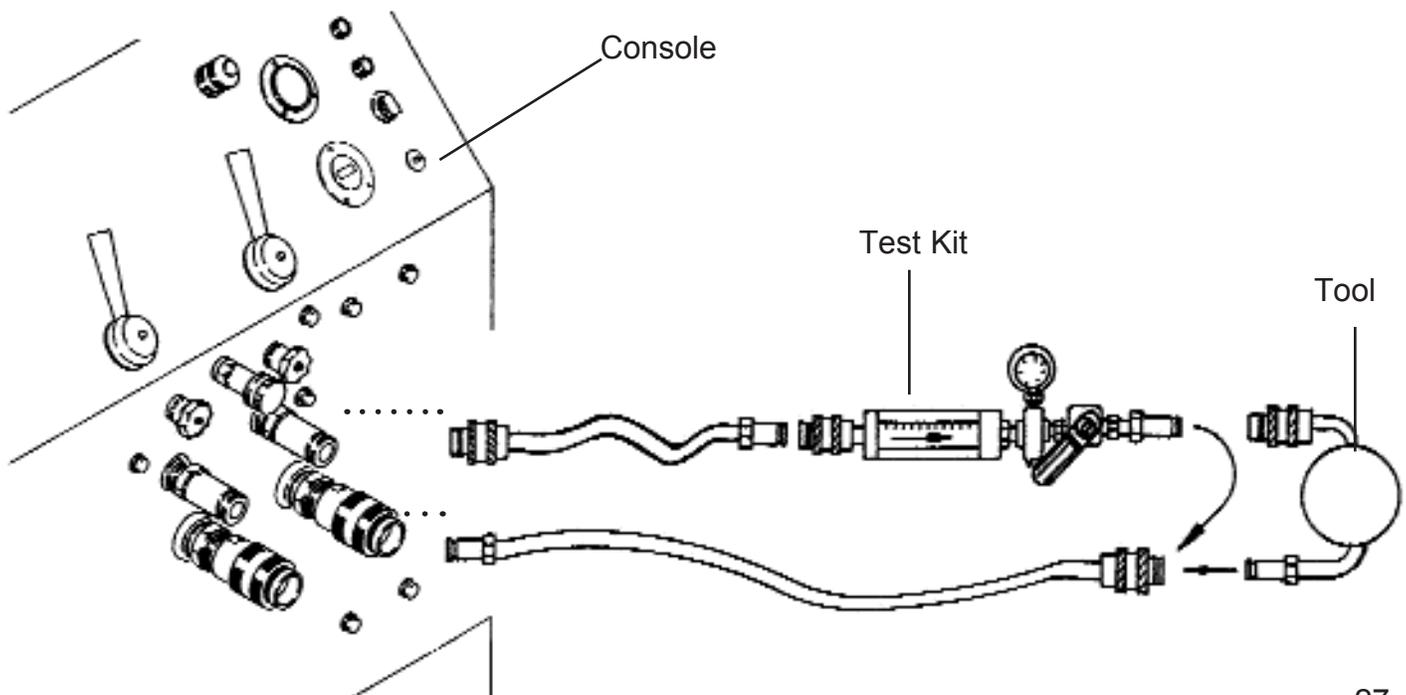
TESTING PROCEDURE WHEN USING HUSQVARNA TEST KIT

1. Attach test kit as shown.
2. Determine that all preliminary checks have been made and oil is warmed-up to at least 100°F.
3. To check flow
 - Adjust engine to full RPM and flow control to full open position.
 - Read flow. Maximum flow should be at specified level (25 gpm on PP 2525 D and 30 gpm on PP 3030 D).
4. To check pressure
 - Controls as above, close test kit valve completely.
 - Read pressure. Pressure should respond quickly to maximum specified level (2500 psi on both).
5. To check pump
 - Read flow with test kit valve full open.
 - Partially close valve to read 500 psi on gauge.
 - Read flow and make note of reading.
 - Partially close valve to read 1000 psi, 1500 psi and 2000 psi in succession, noting flow readings at each valve position.
6. With pump and compensator in good condition, flow should not decrease more than 1-2 gpm until pressure gauge reads 1900-2100 psi (2600 psi*) on systems with 2500-3000 max. psi.

- NOTE:
- Test only valid on PP 2325 and on PP 2525 with properly installed cam stop.
 - Monitor engine speed on PP 2325 to make certain it does not drop more than 150-200 rpm.

7. If pump does not test with specifications:
 - If excess heat is evident - pump is at fault.
 - If no excess heat is evident - compensator is at fault.

* Specifications with asterisk (*) refer to Model PP 3030 D power pack.



PRESSURE ADJUSTMENT PROCEDURE

MODEL PP 2525 D & PP 3030 D

STANDBY PRESSURE

Connect test kit to end of pressure hose. Connect other end of test kit to the return hose thus completing the hydraulic circuit. Start up power pack and adjust throttle to maximum RPM. Close the valve on the control panel. Pressure reading on panel gauge should read 300 to 350 PSI. This is correct standby pressure.

If the gauge does not read in this range, adjust the small allen screw on the side of the compensator. The compensator is located on the back end of the hydraulic pump on the power pack. The standby pressure adjusting allen screw is the one standing closest in toward the compensator. Be sure to loosen the 7/16" locknut on the allen screw before attempting to adjust allen screw. Turning the allen screw clockwise increases standby pressure and turning it counterclockwise decreases pressure.

NOTE: Do not attempt to adjust the other allen screw that stands out away further from the compensator at this time.

SYSTEM PRESSURE

Connect test kit to the end of the pressure hose. Connect the other end of test kit to the return hose, thus completing the hydraulic circuit. Connect both hoses to the power pack. Start up power pack and adjust throttle to maximum rpm. Close the load valve on the test kit slowly. Pressure reading on test kit should read 2500 psi (3000 psi*). A lower reading of 2300 or 2400 psi is acceptable, especially on older units. Open load valve on test kit. Flow meter should read 25 gpm (30 gpm*). If the gauge does not give you these readings, adjust the small allen screw on the side of the compensator. The compensator is located on the back end of the hydraulic pump on the power pack.

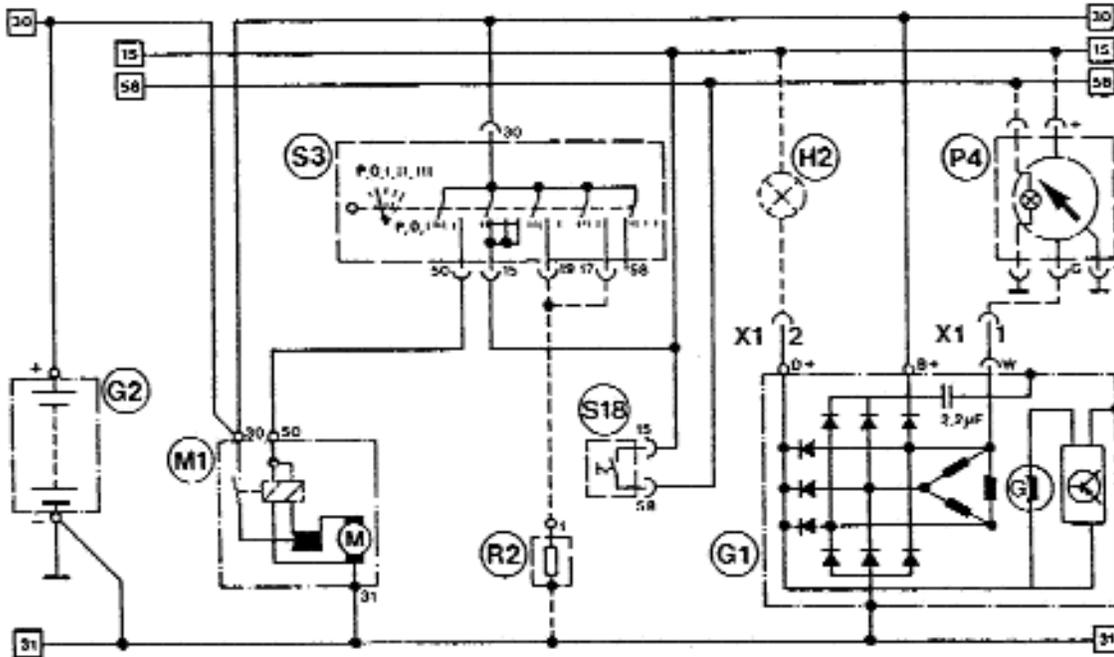
The system pressure adjusting screw is the one standing farthest out from the compensator, (next to the shorter compensator screw). Be sure to loosen 7/16" locknut on the allen screw before attempting to adjust. Turning the allen screw clockwise increases pressure. Counter clockwise decrease pressure. When reaching acceptable pressure tighten locknut and open load valve on test kit.

NOTE: Do not attempt to adjust the other allen screw that sits close to the compensator at this time.

Specifications with asterisk () refer to Model PP 3030 D unit.



WIRING SCHEMATIC FL1011/E



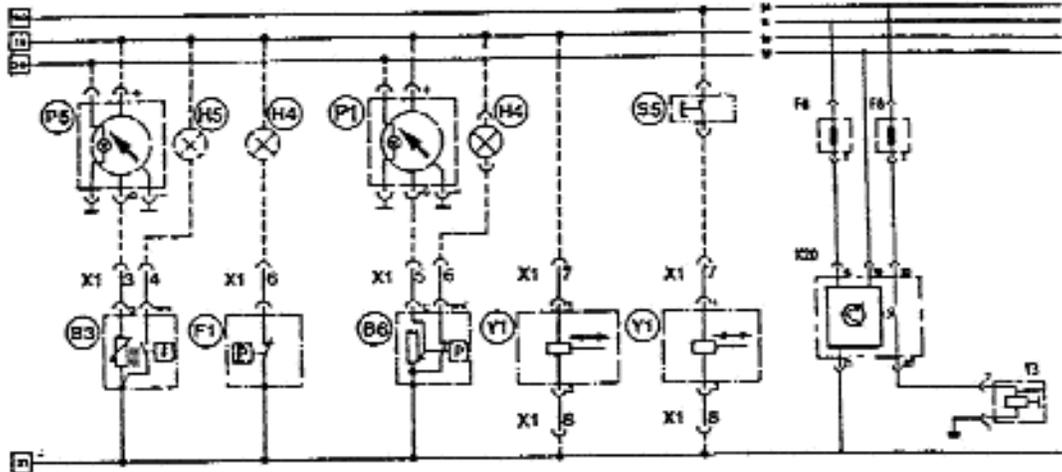
STARTING CIRCUIT:

G2	BATTERY	S18	PANEL LIGHT SWITCH
M1	STARTER	G1	ALTERNATOR
S3	STARTER SWITCH	H2	CHARGING LIGHT
R2	GLOW PLUG	P4	TACHOMETER

NOTES:



WIRING SCHEMATIC B/FL1011/F/E



WARNING/SHUT-OFF CIRCUIT

- | | | | |
|----|-------------------------------|-----|--|
| P5 | TEMPERATURE GAUGE, OIL | Y3 | SOLENOID, EXCESS FUEL |
| H5 | WARNING LIGHT, HIGH OIL TEMP | H4 | WARNING LIGHT, OIL PRESSURE |
| B3 | SENDING UNIT, OIL TEMPERATURE | B6 | SENDING UNIT, OIL PRESSURE |
| H4 | WARNING LIGHT, OIL PRESSURE | S5 | PUSH-BUTTON, ENGINE STOP |
| F1 | OIL PRESSURE SWITCH | Y1 | SOLENOID, ENERGIZE TO RUN/
ENERGIZE TO STOP |
| P1 | PRESSURE GAUGE, OIL | K20 | TIMING RELAY (1011 only) |

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