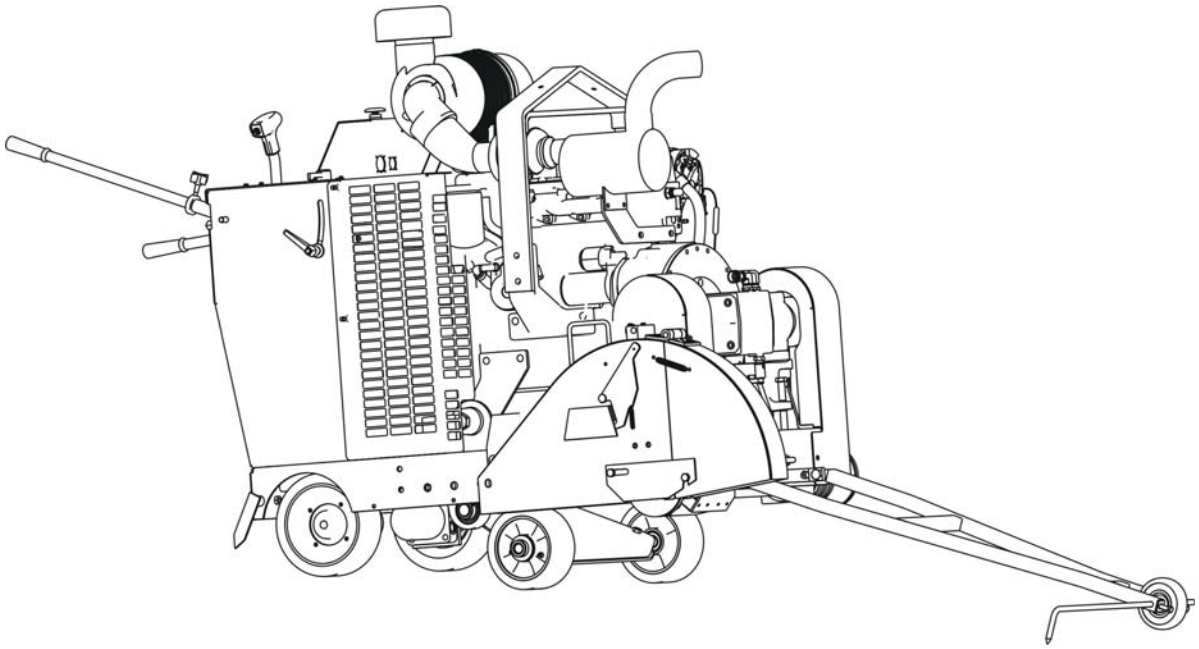
TARGET®

OPERATING INSTRUCTIONS

PRO 66 Diesel



542201029 July 21, 2004

Reference Information:

Model No.: _____

Serial No.: _____

Engine Serial No.: _____

Date Purchased: _____

NOTES:

EVERY MACHINE IS THOROUGHLY TESTED BEFORE LEAVING THE FACTORY. EACH MACHINE IS SUPPLIED WITH A COPY OF THIS MANUAL. OPERATORS OF THIS EQUIPMENT MUST READ AND BE FAMILIAR WITH THE SAFETY WARNINGS. FAILURE TO OBEY WARNINGS MAY RESULT IN INJURY OR DEATH. FOLLOW INSTRUCTIONS STRICTLY TO ENSURE LONG SERVICE IN NORMAL OPERATION.

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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. Understand all warnings, instructions, and controls**.**
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 read and understand the symbol definitions contained in this manual.
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 steel center diamond blades manufactured for use on concrete saws.
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 always tie down the machine when transporting.
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 electrical cables before sawing. If unsure, contact the local utilities.
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 only from the lift bail.
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.
DO only saw as deep as the job specifications require.
DO always give a copy of this manual to the equipment user. If you need extra copies, call TOLL FREE 1-800-288-5040.

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 or fatigued.
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 to do so.
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 tow this machine behind a vehicle.
DO NOT use the tie down brackets for lifting this machine.
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.
DO NOT operate this machine while using drugs or alcohol.
DO NOT engage bladeclutch with the engine RPM higher than 1200

****

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

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

Symbol Definitions
Definición De Los Simbolos

- Please read the instructions for use prior to operating the machine for the first time.
- Antes de la puesta en marcha, lea detenidamente las instrucciones y familiaricese con la máquina.

- Mandatory
- Obligatorio

- Indication
- Indicación

- Prohibition
- Prohibición

- Warning Triangle
- Triángwulo De Advertencia

- Wear Eye Protection
- Usar Gafas De Protección

- Wear Breathing Protection
- Usar Máscara De Protección

- The Use Of Ear Protection Is Mandatory
- Es Obligatorio El Uso De Protección Auditiva

- Wear Head Protection
- Usar Casco De Protección

- Wear Safety Shoes
- Usar Zapatos De Seguridad

- Wear Appropriate Clothing
- Usar Ropa Adecuada

- Remove The Blade Prior To Hoisting, Loading, Unloading And Transporting The Machine.
- Desmontar El Disco Antes De Desplazar, Cargar, Descargar O Transportar La Máquina En La Obra.

- Emergency Shutdown, Transmission Stop
- Parar El Motor

- Use In Well Ventilated Area
- Usar En Una Área Bien Ventilada

- Do Not Use In Flammable Areas
- No Usar In Áreas Inflamables

- Machinery Hazard, Keep Hands And Feet Clear.
- Máquina Peligrosa - Mantenga Manos Y Pies Alejados De La Máquina

- Muffler Hot. May Cause Burns and / or Ignition Of Material. Avoid Contact.
- Silenciador de tubo de escape caliente. Puede causar quemaduras y/o ignición del material. Evite los contactos.

- Danger, Poison Exhaust Gas
- Peligro, Gases De Escape Tóxicos

- No Non-working Personnel In Area
- Prohibido Para Personas Ajenas A La Obra

- No Smoking
- No Fumar

- Do Not Operate Without Blade Guard In Place
- No Operar Sin Todas Las Protecciones In Su Sitio

- Always Keep All Guards In Place
- Mantenga Siempre Las Protecciones De La Hoja En Su Sitio

- Water Supply On.
- Suministro De Agua Conectado.

- Water Supply Off
- Suministro De Agua Desconectado

- Water Supply
- Suministro De Aguq

- Blade Water Safety Switch
- Si Se Ha Interrumpido El Suministro De Agua, Pulsar El Conmutador De Seguridad De Agua Para Reposicionarlo.

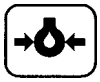
- Engine Coolant Temperature
- Temperatura Del Líquido Refrigerante

- Keep Work Area Clean/Well Lit, Remove All Safety Hazards
- Mantenga Limpio El Sitio De Trabajo/Bien Iluminado, Elimine Todos Los Riesgos De Seguridad

- Dangerously High Noise Level
- Nivel De Ruido Elevadamente Peligroso

- Pay Extreme Attention To The Care And Protection Of The Machine Before Starting Up
- Ponga Extrema Atención Al Cuidado Y Preparación De La Máquina Antes De Ponerla En Marcha

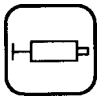
- Remove Tools From Area and Machine
- Elimine Las Herramientas Del Área Y De La Máquina



- Engine Oil Pressure
- Presion De Aceite

- Oil Required
- Necesita Aceite

- Dipstick, Maintain Proper Oil Level
- Varilla De Control, Mantenga El Nivel De Aceite Correcto



- Lubrication Point
- Punto De Lubrication

- High Range Travel Speed
- Alta Velocidad De Avance

- Low Range Travel Speed
- Baja Velocidad De Avance

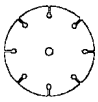
- Electrical Switch - OFF
- Conmutador De Apagado Eléctrico

- Electrical Switch - ON
- Conmutador De Encendido Eléctrico

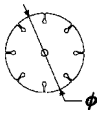
- Electrical Switch - Start
- Conmutador De Arranque Eléctrico

- Repairs Are To Be Done By An Authorized Dealer Only
- Las Reparaciones Deben Ser Efectuadas Únicamente Por Un Distribuidor Autorizado

- Headlight
- Luz De Cruce

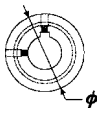


- Diamond Blade
- Sierra Diamantada



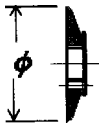
- Blade Diameter
- Diámetro De La Hoja

- Blade Engagement
- Acoplamiento De La Hoja

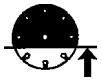


- Pulley Diameter
- Diámetro De La Correa

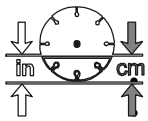
- Number of Revolutions Per Minute, Rotational Speed
- N° De Revoluciones Por Minuto, Velocidad De Rotación



- Blade Flange Diameter
- Diámetro De La Brida De La Hoja

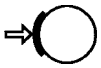


- Blade Depth Stop
- Tope De Profundidad De La Hoja

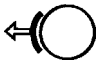


Cutting Depth Indicator - Depth of Cut
Profundidad De Corte De La Hoja

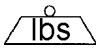
- Parking Brake
- Freno De Estacionamiento



- Parking Brake Applied
- Freno De Estacionamiento Aplicado

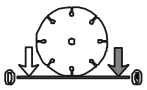


- Parking Brake Released
- Freno De Estacionamiento Suelto

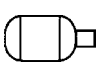


- Machine Mass (lbs)
- Masa De La Máquina (lbs)

- Positive Battery Terminal
- Terminal Positivo De Batería



Blade Depth Indicator - Zero
- Indicador De Cero De La Hoja



- Electric Motor
- Motor eléctrico

- Engine
- Motor

- Engine Speed Revolutions/Minute
- Velocidad Del Motor En Revoluciones Por Minuto (RPM)

- Engine Start
- Arranque Del Motor

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.

WARNING
POISON EXHAUST GAS

THIS SAW IS SHIPPED FROM THE FACTORY *WITHOUT* A CATALYTIC CONVERTER.
THE DIESEL 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.

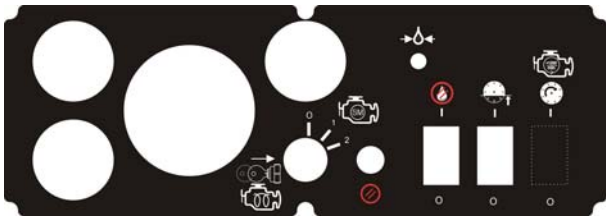
General Information

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 call 911.

Proper Ventilation:

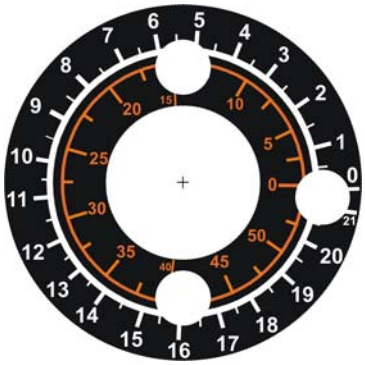
THIS SAW IS SHIPPED FROM THE FACTORY *WITHOUT* A CATALYTIC CONVERTER. It is important to be aware that saws with catalytic converters reduce CO and hydrocarbon (HC) emissions. The exhaust still contains CO. If the workspace is too confined or under-ventilated, CO may accumulate until it eventually exceeds OSHA limits. When this happens, action must be taken to remove workers from areas of high concentration. Operators and work area supervisors should take precautions to insure adequate ventilation of the workspace at all times. Carbon monoxide detection monitors should be used to determine that adequate ventilation exists.

DECAL DESCRIPTIONS AND LOCATIONS
DESCRIPCIÓN DE CALCAMONIAS Y UBICACIONES



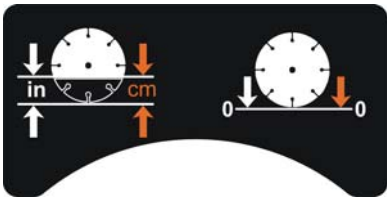
DEPTH INDICATOR

P/N 542199249



DEPTH INDICATOR

P/N 542199250



DEPTH INDICATOR, TOP

P/N 542199458

Operating Instructions, Top Of Cowl

P/N 542199429

WARNING:

1) Rear of Cowl above opening to transmission, Top of Frame

2) Both Sides of Engine by Lift Bail Mount

3) Front top of Frame, Below Right Angle Gear Box

P/N 176223 (Quantity 4)

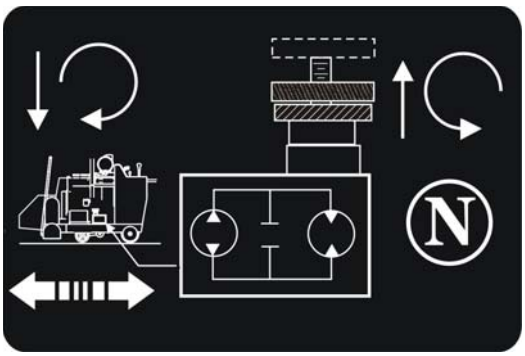
RADIATOR FILTER

P/N 166853

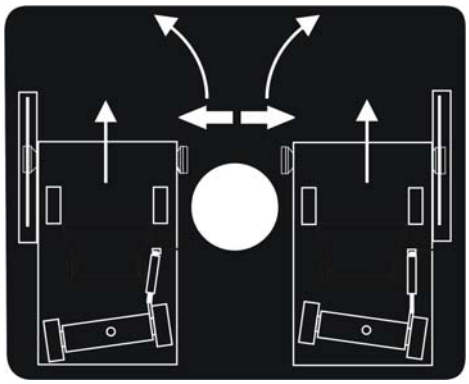
DECAL DESCRIPTIONS AND LOCATIONS
DESCRIPCIÓN DE CALCAMONIAS Y UBICACIONES

TARGET
PRO 66

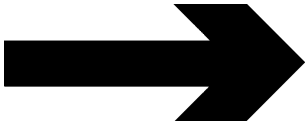
TARGET PRO 66, SIDES OF COWL
542199430 QTY (2)



TRANSMISSION BYPASS VALVE
LEFT FAN SHIELD
P/N 542199440



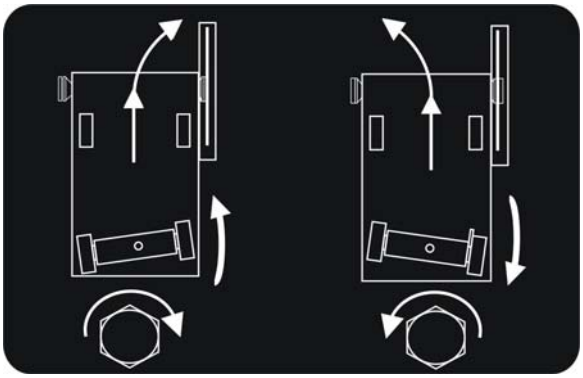
EASY TRACK
TOP OF INSTRUMENT PANEL
P/N 542199433



BLADE ROTATION DIRECTION,
TOP OF BLADE GUARD
P/N 167289

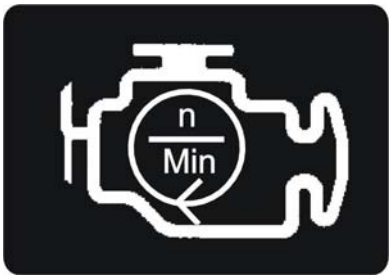
TARGET

TARGET LOGO, REAR OF COWL
191015



MANUAL AXLE ADJUSTMENT
REAR OF COWL
P/N 542199435

DIESEL FUEL DECAL
TOP LEFT OF COWL
P/N 181059



THROTTLE, DIESEL,
LEFT OF INSTRUMENT PANEL
P/N 183769

DECAL DESCRIPTIONS AND LOCATIONS
DESCRIPCIÓN DE CALCAMONIAS Y UBICACIONES

BLADE GUARD WARNING,
TOP OF BLADE GUARD

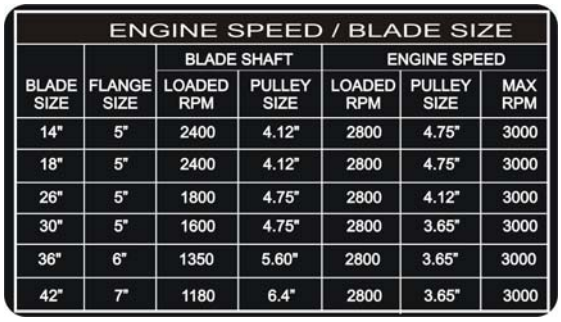
P/N 046128

MUFFLER HOT,
Front Side of Muffler Brace
Right Side Top of Fan Shield
P/N 169065 (Quantity (2))

BLADE GUARD WARNING,
TOP OF BLADE GUARD

P/N 167298

PATENTS
P/N 180427



ENGINE SPEED / BLADE SIZE

BLADE SIZE	FLANGE SIZE	BLADE SHAFT LOADED RPM	BLADE SHAFT PULLEY SIZE	ENGINE SPEED LOADED RPM	ENGINE SPEED PULLEY SIZE	ENGINE SPEED MAX RPM
14"	5"	2400	4.12"	2800	4.75"	3000
18"	5"	2400	4.12"	2800	4.75"	3000
26"	5"	1800	4.75"	2800	4.12"	3000
30"	5"	1600	4.75"	2800	3.65"	3000
36"	6"	1350	5.60"	2800	3.65"	3000
42"	7"	1180	6.4"	2800	3.65"	3000

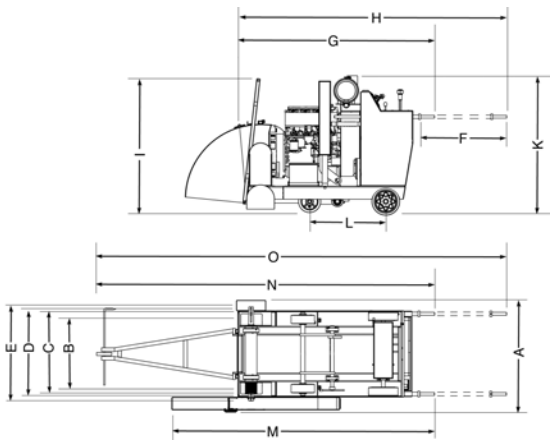
BLADESPEED CHART
TOP OF INSTRUMENT PANEL
P/N 542199434

PRO 66 DIESEL SPECIFICATIONS

Pro 66 Diesel Model	Pro 66 18	Pro 66 26	Pro 66 30	Pro 66 36	Pro 66 42
Saw	953300500	953300503	953300506	953300509	953300512
Saw with East-Track	953300501	953300504	953300507	953300510	953300513
Saw with Easy-Track & Clutch	953300502	953300505	953300508	953300511	953300514
ALL SAWS FEATURE:					
Blade Guard Capacity - in. (mm)	18 (457)	26 (660)	30 (762)	36 (914)	42 (1,067)
Max. Depth of Cut - in. (mm)	6.50 (165)	10.50 (267)	12.50 (318)	15 (381)	20.50(508)
Blade Shaft RPM	2,400	1,800	1,600	1,350	1,180
Approximate Blade Shaft HP	60 Horsepower				
Arbor Size	1" with single drive pin				
Blade Shaft Diameter - in. (mm)	2" (51)				
Blade Shaft Bearings	Cast Sealed blade shaft with 4 maintenance-free ball bearings				
Blade Shaft Drive	Dual 8-groove banded 3VX V-belts (16 grooves total)				
Blade Coolant	Zinc plated dual multiple-jet water spray tubes				
Blade Guard Attachment	Slip-on through 36"				
Blade Control	Electro-hydraulic pump raises blade; switch controlled raise/lower on speed control handle; switch controlled positive depth stop; dial type cutting depth indicator; blade drive disengagement system (clutch); quick disconnect blade flanges				
Axle Front	1.25" (38.1mm) diameter				
Axle Rear	Easy Adjust Center Pivot w/2 Hydraulic Powered Wheel Motors				
Wheels Front	8" x 3" x 1" (203mm x 76mm x 25.4mm) Thick polyurethane tread; sealed ball bearing requiring less maintenance				
Wheels Rear	10" x 3" x 1.25" (254mm x 76mm x 32mm) Solid rubber, Quick disconnect				
Transmission	Hydrostatic Pump, w/2 Hydraulic Wheel Motors connected with hoses, neutral start switch, single handle speed control, Hydraulic bypass valve for pushing.				
Max. Ground Speed	Infinite speeds: 0 – 300 FPM				
Chassis	Heavy-duty, rigid, box and channel section construction				
Weight – lb. (Kg) – Uncrated	1,740 (791)	1,762 (801)	1,827 (830)		

POWER SOURCE:	
Engine	John Deere Turbocharged Diesel
Specifications	PE4024TF270
Max. Horsepower	66 @ 2,800 RPM DIN.
Displacement (cu. in.)	149 cu. in. (2.44 liter)
Bore – in. (mm)	3.39 (86)
Stroke – in. (mm)	4.13 (105)
Cylinders	4
Fuel Capacity – gal. (l)	10 (37.8)
Oil Capacity – qt. (l)	8.5 (8) with filter OR 7.6 (7.2) without filter
Air Filter	Radial Seal with pre-cleaner and restriction indicator
Starter	Electric
Engine Coolant	50/50 Water/Ethyl Glycol Mix

SAW DIMENSIONS w/ 36" guard:		Inches	Metric (mm)
A -	Saw Width	37-3/8	949
B -	Center to Center Wheel Width (track) – FRONT	24-5/8	625
	Center to Center Wheel Width (track) – REAR	25-1/4	642
C -	Outside to Outside Wheel Width - FRONT	27-5/8	702
	Outside to Outside Wheel Width - REAR	28-1/4	717
D -	Frame Width	29-1/2	749
E -	Inner Flange to Inner Flange Width	32-1/2	825
F -	Handle Extension	30	762
G -	Minimum Saw Length (handles in, pointer up, guard up)	61	1,550
H -	Saw Length (pointer up, handles extended)	84	2,133
I -	Maximum Overall Height (pointer up)	53	1,346
	Maximum Overall Height (top of pre-cleaner, pointer down)	56	1,422
K -	Minimum Overall Height (no muffler, rotate pre-cleaner)	49-1/2	1,255
L -	Wheel Base	24	610
M -	Guard to Handle Length (handles in)	75	1,905
N -	Maximum Overall Length (handles in)	106 1/2	2,705
O -	Maximum Overall Length (handles extended)	129	3,276



SPECIAL INSTRUCTIONS FOR CHANGING BLADE SPEED ON CONCRETE / ASPHALT SAWS

WARNING: Do not exceed blade shaft speed shown for each blade size. Excessive blade speed could result in blade breakage and serious personal injury.

NOTE: As shown on the chart, some blade guards accept more than one size blade.

ENGINE SPEED / BLADE SIZE						
		BLADE SHAFT		ENGINE SPEED		
BLADE SIZE	FLANGE SIZE	LOADED RPM	PULLEY SIZE	LOADED RPM	PULLEY SIZE	MAX RPM
14"	5"	2400	4.12"	2800	4.75"	3000
18"	5"	2400	4.12"	2800	4.75"	3000
26"	5"	1800	4.75"	2800	4.12"	3000
30"	5"	1600	4.75"	2800	3.65"	3000
36"	6"	1350	5.60"	2800	3.65"	3000
42"	7"	1180	6.4"	2800	3.65"	3000

PRE OPERATION CHECKLIST

Before leaving our factory, every machine is thoroughly tested. Follow our instructions strictly and your machine will give you long service in normal operating conditions.

Before starting up the machine, make sure you read these entire Operating Instructions and are familiar with the operation of the machine.

MACHINE SET-UP:

ALWAYS park machine on a level surface with the engine "OFF" and the ignition switch set in the "0" (OFF) position before performing any maintenance. Let the machine cool down!!

1. Check engine oil. Fill to the full mark on dip stick with 15W40 class CE or CD oil.
2. Connect battery cables.

1 - 2 HOUR OPERATION CHECK LIST:

ALWAYS park machine on a level surface with the engine "OFF" and the ignition switch set in the "0" (OFF) position before performing any maintenance. Let the machine cool down!!

1. Check the engine air cleaner hose clamps. Tighten as required.
2. Tension the blade drive V-belts. DO NOT over tension!!

SCHEDULED MAINTENANCE QUICK REFERENCE

Before performing any maintenance, ALWAYS park the machine on a level surface with the engine "OFF" and the ignition switch set in the "OFF" position. Let the machine cool down!!

SERVICE DAILY:
1. Check engine oil level.
2. Check blade guard for damage.
3. Check hoses and clamps for damage or looseness. Tighten or replace as necessary.
4. Check air cleaner restriction indicator. Replace primary air filter if indicator is red.
5. Make sure all safety guards are in place and in good condition.

SERVICE EVERY 50 HOURS:
1. Clean Rear shield Air filter.
2. Inspect Radiator Air Filter and clean as necessary.
3. Check blade drive V-belt tension. Tension both sides evenly. DO NOT over tension!!!
4. Lubricate front wheel bearings.
5. Replace Hydraulic System Filter. (First 50 hours only.)

SERVICE EVERY 100 HOURS:
1. Replace engine oil and filter.
2. Lubricate front axle pivot bearings.
3. Check wheels for wear or damage.
4. Check rear wheel hubs and wheels for looseness.
5. Check engine air cleaner hose and clamps.
6. Check hydraulic system fluid level.

SERVICE EVERY 250 HOURS:
1. Replace Hydraulic System Filter
2. Grease Blade Shaft 2 pumps each end.

SERVICE EVERY 500 HOURS:
1. Replace Engine gearbox fluid.
2. Replace hydraulic system fluid.
3. Replace engine fuel filter (spin-on type).

SERVICE YEARLY:
1. Replace air filter primary and safety element.

ENGINE INFORMATION

This saw is equipped with a John Deere 4024TF 4 cylinder Diesel Engine.

Upon receipt of your Pro 66 Saw, it is vitally important to register your engine with John Deere in order to receive a full warranty. Upon registering your engine, you will be ensuring that your John Deere servicing dealer network will be better prepared to meet all of your needs. Please take a few minutes to complete the online warranty registration.

The best way to register is to go online to WWW.JOHNDEERE.COM/ENGINEWARRANTY

The link to the online warranty registration opens in a second browser window (popup window). If you have installed a popup filter, you may not have access to the warranty registration. To view the warranty registration, please disable the popup filter.

JOHN DEERE ENGINE WARRANTY REGISTRATION

Purchaser's Name _____

MAILING Address _____

City _____ **State/Province** _____ **Postal Code** _____ **Country** _____

Engine Serial Number from Engine Serial Number Plate __ __ __ __ __ __ __ __ __ __ __ __ __

(Required number is made up of two letters then four digits then one letter then six digits. All 13 characters required.)

Date Engine Delivered _____ **Engine is** ___ **Original** ___ **Replacement**

(Required) (Day) (Month) (Year)

Equipment Manufacturer _____ **Equipment Description & Model** _____

(The equipment, not the engine.) (What is it? What does the manufacturer call it?)

Does the engine provide the power to move the equipment from place to place? ____**Yes** ____**No**

How will the equipment be used? _____

The John Deere *Operation and Maintenance Manual* for the above engine was received. The warranty, safe operation, and proper servicing of the engine were explained to me. I have received and have read the Engine Owner's Warranty.

Telephone (_____) _____

E-mail Address _____ _____ _____

Purchaser's Signature Date

Note: Register via Internet at www.johndeere.com/enginewarranty or this form may be faxed to John Deere at 1-319-292-5844.

For information on your rights to privacy, please see page 2 of the John Deere Engine Owner's Warranty - Worldwide.

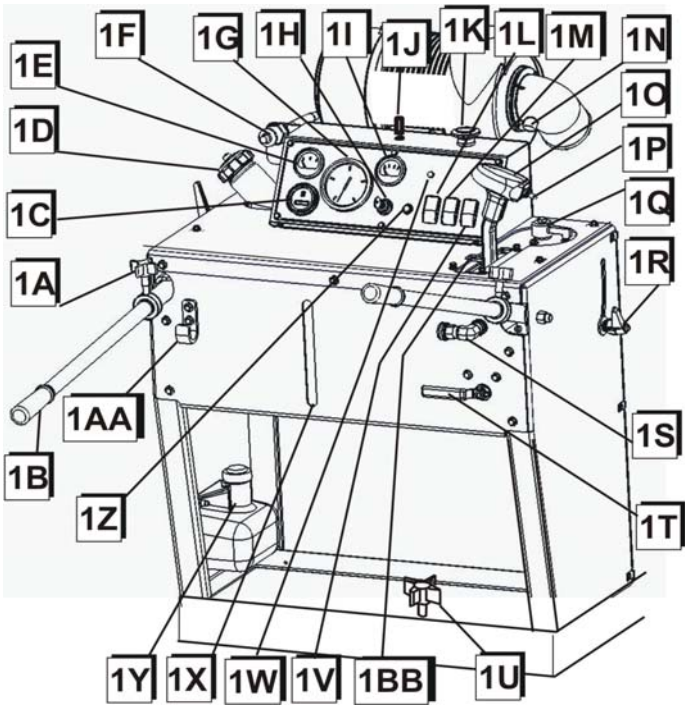


FIGURE 1:

1A. KNOB: Use to tighten operator grip handles.

1B. HANDLE BARS: For operator gripping.

1C. HOUR METER: Records engine hours of operation.

1D. FUEL TANK FILL: Fill the fuel tank at this location.

1E. WATER TEMPERATURE GAUGE: Water/Glycol is the coolant . Monitors the engine coolant temperature. Maximum Safe temperature is 220°F.

1F. ENGINE THROTTLE: Controls Engine RPM. Push Red Button to unlock. Push in to decrease RPM. Pull out to increase RPM. Or Turn Clockwise to increase RPM. Turn counterclockwise to decrease RPM.

1G. ENGINE TACHOMETER: Shows the engine RPM's and hours.

1H. ENGINE START SWITCH: Start and stop the engine using this switch. Also preheats the engine

1I. VOLTAGE GAUGE: Shows the voltage of the electrical system.

1J. AXLE ADJUSTMENT SWITCH: Toggle switch to adjust rear drive axle. Push switch right to make saw drive to the right. Left to make saw drive to the left.

1K. RED PALM SWITCH: For **EMERGENCY STOP** of the saw. Stops all systems except lights, pull **OUT** to reset. Do not use for routine stopping.

1L. WATER SAFETY SWITCH: Stops the engine if the water supply to the blade is interrupted. Set to activate switch.

1M. BLADE DEPTH STOP: Activates or overrides the depth stop for repetitive cuts at the same depth.

1N. AIR RESTRICTION INDICATOR: Service air filter elements when indicator shows a red mark. Reset before starting engine.

1O. SPEED CONTROL LEVER: Controls forward and reverse directions, stop, and the speed of the saw.

1P. RAISE/LOWER SWITCH: Located on speed control lever. Use to raise and lower the saw. Push up to raise saw upward. Push down to lower the saw.

1Q. BLADE DEPTH INDICATOR: Displays cutting depth. Sets cutting depth for BLADE DEPTH STOP.

1R. HANDLE ADJUSTMENT LOCK: Turn Clockwise to lock handle bar in position. Turn Counterclockwise to unlock and reposition handlebar.

1S. WATER INLET: Connects to 3/4" garden hose for fresh water supply.

1T. WATER VALVE: Controls water flow rate to cool the blade**.**

1U. SAW LOWER SPEED CONTROL KNOB: Turn knob clockwise to slow lowering speed. Turn knob counterclockwise to increase lowering speed.

1V. BLADE CLUTCH SWITCH: Engages Blades Drive. Light indicates Clutch Engaged. Engage only with engine RPM at 1200 RPM or less

1W. OIL PRESSURE LIGHT: Lights up when engine oil pressure is low and when key is on with the engine off.

1X. FUEL LEVEL SIGHT GAUGE: Shows the level of fuel in the fuel tank.

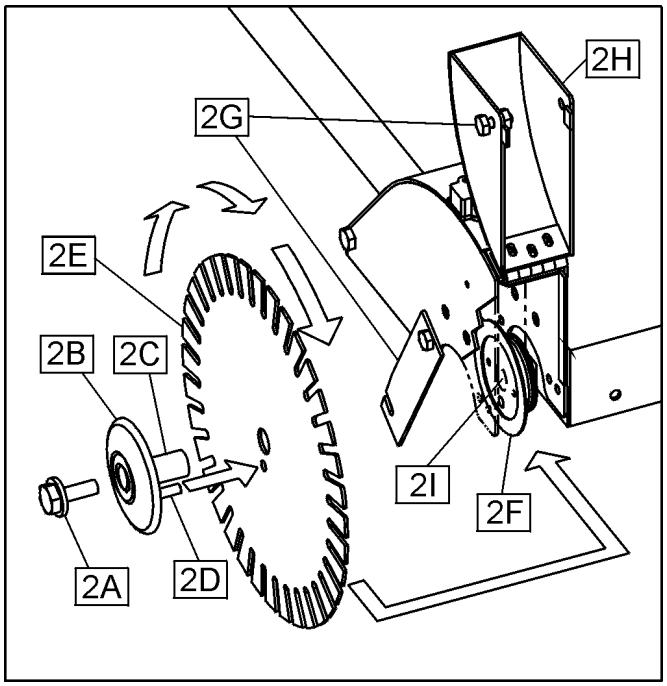
1Y. RADIATOR COOLANT OVERFLOW BOTTLE: Recovers radiator coolant when engine is hot. Should be 1/4 full when engine is off and cool.

1Z. CIRCUIT BREAKER: 25 Amps, Push into reset. Saw will not operate if circuit breaker is protruding.

1AA. HOSE HANGER: Supports water supply hose.

1BB. STOP POSITION: The saw will stop travel movement when the speed control lever (1O) is in this position. The engine will not start unless the Speed Control Lever (1O) is in the STOP position.

FIGURE 2



2A. BLADE SHAFT BOLT: Use to clamp the diamond blade between the inner and outer flange. Right side of saw has left hand threads. Left side of saw has right hand threads.

2B. OUTER FLANGE: Use to hold the diamond blade in position.

2C. OUTER FLANGE ARBOR: Use to support the diamond blade.

2D. LOCKING PIN: Use to prevent the diamond blade from rotating on the shaft during operation.

2E. DIAMOND BLADE: Use as the cutting tool for concrete and asphalt surfaces.

2F. INNER FLANGE: Inside support used to hold the diamond blade in position.

2G. BLADE GUARD NOSE LATCH: Use to latch the front part of blade guard down.

2H. BLADE GUARD FRONT: The front part of the blade guard.

2I. BLADESHAFT: Supports Blade Flanges and blade.

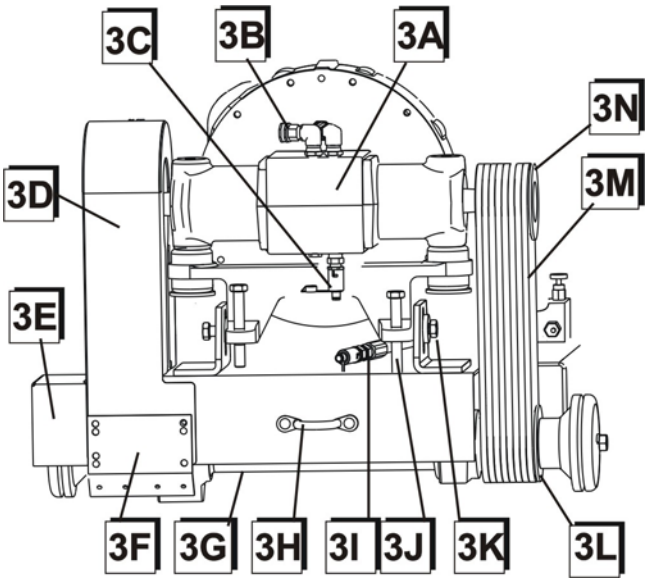
FIGURE 3

3A. ENGINE GEARBOX:

3B. WATER CONNECTION: Circulates freshwater through gearbox to cool it. Water then flows to the bladeguard.

3C. WATER DRAIN VALVE: Twist and push up to drain water from gearbox. Drain daily to prevent corrosion or damage due to freezing temperatures.

3D. BELT GUARDS: Remove to install new v-belts and check v-belt tension. (2) per, Keep in place.



3E. FLANGE COVER:

3F. BELT PROTECTOR SHIELD: Keep in place.

3G. BLADESHAFT TUBE ASSY: Sealed unit contains bladeshaft, bearings and shaft seals.

3H. TIEDOWN LUGS: Used to tie the saw down while transporting by vehicle. Not to be used to lift the saw.

3I. ENGINE OIL DRAIN VALVE: Drains engine oil without use of tools.

3J. BELT TENSIONING BOLTS:

3K. HORIZONTAL CLAMPING BOLTS:

3L. BLADE SHAFT PULLEY:

3M. V-BELTS: Set of 4, 4 Groove

3N. GEARBOX PULLEY:

FIGURE 4

4A. BLADESHAFT BEARING SEALS

4B. FRONT WHEEL BEARINGS

4C. FRONT AXLE PIVOT BEARINGS

4D. HYDRAULIC CYLINDER PIVOT PIN

4E. REAR AXLE

4F. HYDRAULIC WHEEL MOTOR

4G. HYDRAULIC RAISE LOWER CYLINDER

4H. LINEAR ACTUATOR

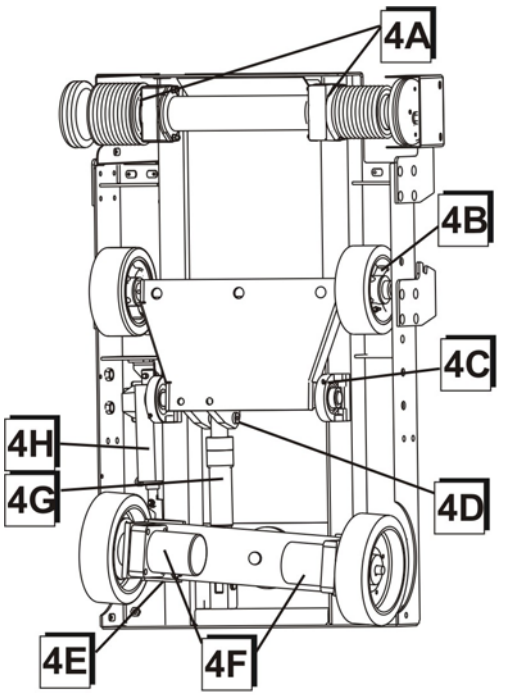


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FIGURE 5

5A. AIR FILTER ASSEMBLY: Includes
a) Housing
b) Cover
c) Primary Outer Element: Clean or replace when restriction indicator shows the RED warning.
d) Inner Safety Element: DO NOT CLEAN this filter element. Replace 1 time per year or if it becomes damaged.

5B. RADIATOR COOLANT FILL: Fill radiator from this point. Replace cap if damaged.

5C. ENGINE OIL FILL: One of two fill points.

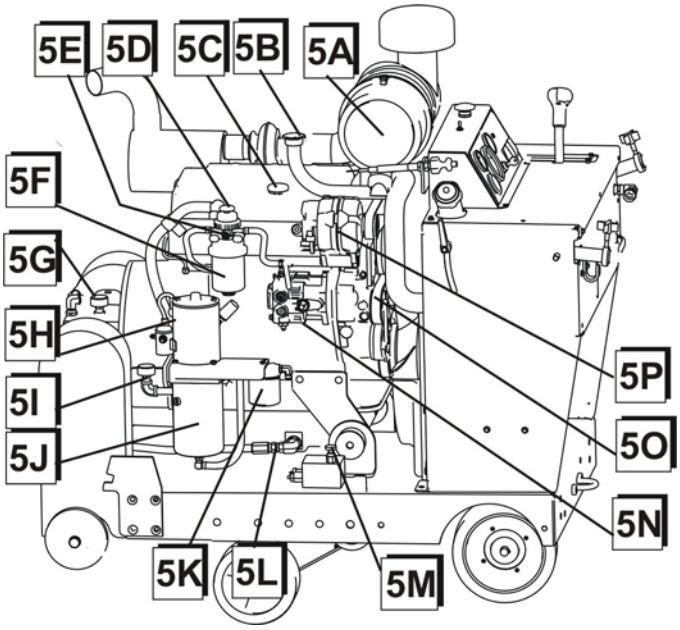
5D. FUEL HAND PRIMER PUMP: Push to prime fuel lines to help intial startup or as needed.

5E. FUEL BLEED VALVE: Open to bleed air from fuel lines.

5F. FUEL FILTER WATER SEPARATOR: See John Deere engine manual.

5G. GEARBOX FILL/VENT PLUG: Change every 500 hours. 32OZ. Capacity 75W90 Gearlube.

5H. D.C. LIFT PUMP: Raises and lowers the saw.



5I. HYDRAULIC RESERVOIR FILL: Fill and check hydraulic system fluid here.

5J. HYDRAULIC RESERVOIR: 1.5 Quarts

5K. HYDRAULIC FILTER: Filters hydraulic system fluid.

5L. ENGINE OIL DRAIN HOSE: Connects to oil drain valve 3I. Use to drain engine oil.

5M. TRANSMISSION BYPASS VALVE: Turn counter clockwise to open. Turn clockwise to close. Open to push concrete saw.

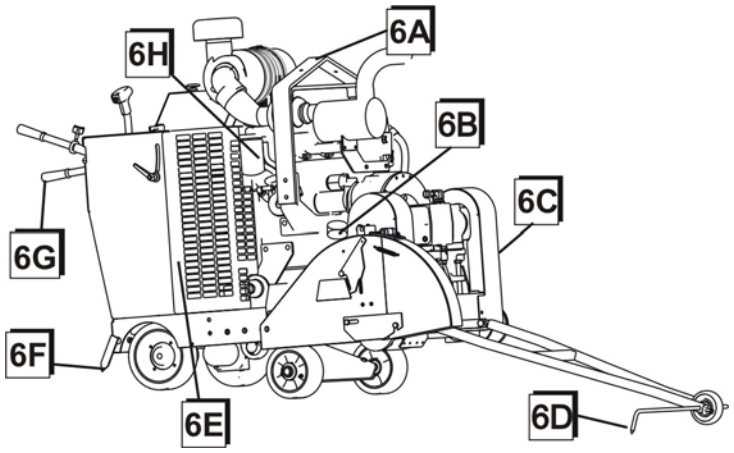
5N. HYDROSTATIC TRANSMISSION PUMP.

5O. ALTERNATOR/WATERPUMP BELT: Self Tensioning. See JohnDeere for replacements.

5P. ALTERNATOR: See John Deere for replacements.

FIGURE 6

6A. LIFTING BAIL: The saw can be lifted from this point.
6B. OIL LEVEL CHECK: Dipstick indicates oil level**.** Also an oil fill location.
6C. BELT GUARDS AND SHIELDS: Protects engine, guards, drives, and cooling fan.
6D. FRONT GUIDE: Use to locate the path of the diamond blade on the cutting line.



DO NOT OPERATE ENGINE WITH SHIELDS REMOVED!

6E. FAN SHIELDS: Protects engine, cooling fan, beltdrives and pulleys.
6F. REAR GUIDE: Use to locate the path of the diamond blade on the cutting line.
6G. HANDLEBARS: Used to maneuver the saw. Not to be used to lift the saw.
6H. ENGINE OIL FILTER: The Oil filter element needs to be changed when changing oil. (100 hr)

NOTES

MANDATORY

INDICATION
INFORMATION
INSTRUCTION

WARNING

PROHIBITION

These signs will give advice for your safety

Before leaving our factory every machine is thoroughly tested.

Follow our instructions strictly and your machine will give you long service in normal operating conditions.

1. Uses

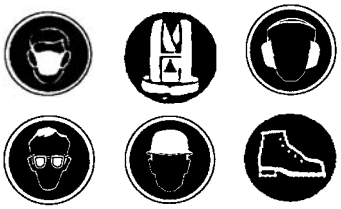
Use: Wet sawing of old and new concrete and asphalt. Dry sawing only with blade manufacturers approval of specific application.
Tools: Diamond blades — water cooled, Ø: 14", 18", 20", 24", 26", 30", 36", and 42", with Arbor Ø - 1".
(For information, contact your Target supplier.)

Depths of Cut (Maximum):

4.50" with Ø 14"	12.50" with Ø 30"
6.50" with Ø 18"	15.00" with Ø 36"
7.50" with Ø 20"	17.50" with Ø 42"
9.50" with Ø 24"	
10.50" with Ø 26"	

Before starting up the machine, make sure you read this entire manual and are familiar with the operation of this machine.

The working area must be completely clear, well lit and all safety hazards removed.



The operator must wear protective clothing appropriate to the work he is doing.

Any persons not involved in the work should leave the area.

Use only blades marked with a maximum operating speed greater than the blade shaft speed.

2. Moving The Machine

(See Figures 1, 2 and 5)

Set The Handles To The Desired Length:

- Loosen Knob (1A), pull the Handle Bar (1B) in or out to desired length, then tighten the Knob (1A). to adjust Handle Bar height, Turn Handle Bar Adjustment Lock (1R) counterclockwise to unlock. Adjust Handle Bar (1B) to the desired height. Turn Handle Adjustment Lock (1R), clockwise to lock in place.

Moving The Saw With The Engine Off:

- Turn Engine Start Switch (1H) to the **"1" (RUN)** position.
- Raise the saw by pressing up on the Toggle Switch (1P) on the Speed Control Lever (1O) until the Diamond Blade (2E) (if installed) clears the pavement surface.
- Put the Speed Control Lever (1O) into the STOP (1BB) position.
- Set the Transmission Bypass valve (5M) counterclockwise to the up (NEUTRAL) position.
- The saw can now be moved by standing behind it and pushing [while holding the Handle Bars (1B)].

DO NOT attempt to push the saw while it is in NEUTRAL on a grade (or hill). The saw operator could lose control of the saw and cause injury to himself or other person(s) in the area.

Moving The Saw With Engine On:

- Raise the saw by pressing up on the toggle switch (1P). on Speed Control Lever (1O) until Diamond Blade (2E) (if installed) clears the pavement surface.
- Set the Water Safety Switch (1L) button to the "0" (OFF) position.
- Speed Control Lever (1O) must be in the STOP (1BB) position to start the saw. The engine WILL NOT start unless the Speed Control Lever (1O) is in the STOP (1BB) position.
- Check that the Transmission bypass valve (5M) is turned clockwise (DOWN) to the closed position. Do **NOT** start the engine if the valve (5M) is in the Neutral (OPEN) position.
- Turn the Engine Throttle (1F) to a low speed setting.
- Set the Blade Clutch Switch (if installed) (1V) to **"0" (OFF)**.

* In cold conditions (below 32^ F (0^ C)) push in on the Engine Start Switch (1H) for 15 seconds. This warms the glow plugs for cold weather starting.

- Turn the Engine Start Switch (1H) to the **"2" (START)** position until the engine starts, then release the switch. It will return to **RUN** position. If the engine does not start, repeat these steps.

•Push the Speed Control Lever (1O) forward for FORWARD saw movement, or to the rear for REVERSE saw movement. The further you push the lever the faster the speed.

DO NOT OPEN the bypass valve (5M) to neutral while the saw is parked on a grade (or hill), The Operator will lose control and injury or damage could occur.

3 Transport (Blade Removed)

(See Figures 1, 2, 5, 8 and 10)

Turn engine off. Set Speed Control Lever (1O) to STOP (1BB) position. Remove diamond blade (2E) before transport.

When moving the saw up and down ramps, with engine on, use extreme caution.

- To go **DOWN** a ramp drive the saw **FORWARD** slowly.
- To go **UP** a ramp, back the saw in **REVERSE** slowly.

For steep ramps, always use a winch. Never stand below the machine.

Lifting The Saw. The saw can only be lifted by the factory installed Lifting Bail **(6A)**.

To Transport By Vehicle:

- Set the Engine Start Switch (1H) in the **OFF** position.
- Set Speed Control Lever (1O) in the **STOP (1AA)** position..
- Push Handle Bars (1B) inward and tighten Knobs (1A).

Block the saw in place or secure it into place using the factory installed TIE DOWN LUGS (3H), front and rear to prevent movement during transport.

4 Check Before Starting

Take into account the working conditions from health and safety point of view.

- ***Fuel*** (Check the engine maintenance manual.) Use No. 2 Diesel Fuel for normal conditions.
- Check that the engine oil level is correct. Because the engine often operates at an angle, check the oil level (with engine horizontal) frequently to ensure that the oil level never falls below the lower mark on the dipstick. 15W40 CD or CE engine oil is recommended. **(6B)**
- For start up, refer to the engine manual. See John Deere Manual OMRG34851

5 Fitting The Blade

(See Figures 1 and 2)

- Set engine Start Switch (1H) to **"1" position.**
- **Raise Machine to a high position using the raise lower switch (1P) on the Speed Control Lever (1O)**
- **Set the Engine Start Switch (1H) to the "0" (OFF) position.**
- **Loosen Bolt on Blade Guard Latch (2G).**
- **Raise Front Half of Blade Guard (2H)**
- **Loosen Bladeshaft Bolt (2A) Remove Outer Flange (2B).**
- Fit Diamond Blade (2E) to Outer Flange Arbor (2C).
- Install Outer Flange (2B) into the Blade Shaft (2I) making sure that the Locking Pin (2D) passes through the Diamond Blade (2E) and into the Inner Flange (2F).

Note the direction of rotation of the blade. The direction of rotation is shown by an arrow on both the DIAMOND BLADE (2E) and the BLADE GUARD (2H). Make sure that the contact surfaces on the DIAMOND BLADE (2E), INNER & OUTER FLANGES (2B & 2F) and BLADE ARBOR (2C) are clean.

- Rotate Outer Flange (2B) and Diamond Blade (2E) in the opposite direction of blade rotation to remove backlash.
- Install and tighten Blade Shaft Bolt (2A) using the Blade Shaft Wrench while firmly holding the Diamond Blade (2E).
- Lower front half of Blade Guard (2H) and tighten the Bolt (2G) on the Blade Guard Latch (2G).

The Blade Shaft Bolt (2A) on the Right Hand side has Left Hand threads. The Blade Shaft Bolt (2A) on the Left Hand side has Right Hand threads.

Slip on blade guards are provided with a safety latch which engages the support spade and a bolt to retain the rear of the guard.

Do not operate this saw without the latch engaged and the bolt installed. Inspect blade guards and latches frequently. Do not use if damaged.

To Remove A SLIP-ON GUARD:

- *Using the Blade Shaft Wrench remove the rear retaining bolt.*
- *Slip the Blade Shaft Wrench between the guard and the belt guard onto the latch lever. Raise the lever to unlatch and lift guard off spade.*

To Install A SLIP-ON GUARD:

- *Lower guard onto spade until latch engages.*
- *Install Bolt in rear of guard using the Blade Shaft Wrench.*

6 Starting The Saw

(See Figures 1, 2 and 5)

Always pay extreme care and attention to the preparation of the machine before starting.

Remove all wrenches and tools from the floor and the machine.

Always keep blade guard, belt guards and fan guards in place.

- Follow all operating instructions and warnings in this manual and on the machine.
- Close the Water Valve (1T).
- Mark the surface to be cut by drawing a line where the cut is to be made.
- Pull out Handle Bars (1B) to desired length and tighten Knobs (1A).
- Lower the Front Guide (6D) and align the Front Guide (6D), Rear Guide (6F) and Diamond Blade (2E) with the line on the surface.
- To start the saw when no water pressure is present, set the Water Safety Switch (1L) to **"0" (OFF)**.
- Set Speed Control Lever (1O) to the STOP (1BB) position. Saw will not start unless the Speed Control Lever (1O) is in the STOP (1BB) position. Check to be certain the Transmission Bypass Valve (5M) is closed in the **down** position.
- Set the Blade Clutch Switch (1T) to **"0" (OFF)** (if equipped).
- Start the engine using the Engine Start Switch (1H). Follow the procedure in the engine manual.
  In Cold conditions, pre-heat the engine glow plugs by hold in the Engine Start Switch (1H) for 15 seconds.
- Let the engine warm up for several minutes with Engine Throttle (1F) at the low speed setting.
- When ready open the Water Valve (5A, 1Z).
- Set Water Safety Switch (1L) to **"1"(ON)**.

Test for adequate water supply. (2.5 - 5.0 GPM) (10 - 20 Liters per Min.) Low water flow will cause damage to diamond blades.

- Pull Throttle (1F) out to set engine RPM at 3000.

See chart for the appropriate blade shaft and engine speeds for specific blade sizes.

- Move the saw forward or reverse slowly by pushing or pulling on the Speed Control Lever (1O)**.** Move the saw slowly to prevent stalling the blade. Make sure the Front Guide (6D), Rear Guide (5E) and Diamond Blade (2E) stay on the line.
- Set the Blade Clutch Switch (1V) to **"1" (ON)** to engage the Blade Drive (if equipped).
- Lower the saw by pressing the Raise/Lower Switch (1P) on the Speed Control Lever (1O) downward until the Diamond Blade (2E) is at the desired cutting depth (See "Blade Cutting Depth Information").

Be certain that water flow is abundant for wet sawing.

Blade Cutting Depth Information:

This saw is equipped with a Blade Depth Indicator (1Q) which indicates the depth (in inches or cm) at which the Diamond Blade (2E) is cutting. This saw also includes a Blade Depth Stop Switch (1M) which stops the cutting depth of the blade at a specified depth. The Blade Depth Stop Switch (1M) can be switched to the release position "0" when it is not required.

Use of the Blade Depth Indicator (1Q):

- Turn the Engine Start Switch (1H) to the **"0" (OFF)** position to **STOP** the engine (If running).
- Turn the Engine Start Switch (1H) to the **"1" (RUN)** position to power the electrical system.
- Lower the Diamond Blade (2E) by pushing the Toggle Switch (1R) on the Control Lever (1S) downward until the Diamond Blade (2E) touches the surface to be cut.
- Rotate the Blade Depth Indicator (1Q) to the left or right until the Blade Depth Indicator (1Q) aligns to **the desired depth of cut.** . The uncut depth will now be indicated by the numbers aligned to the Depth Indicator (1Q) needle when the blade is lowered into the cutting surface. See page 11.
- Raise the blade by pushing the Toggle Switch (1P) on the Speed Control Lever (1O) upward until the Diamond Blade (2E) is off of the cutting surface.
- Turn the Engine Start Switch (1H) to the **OFF** position to turn off power to the electrical system.

Use of the Blade Depth Stop Switch (1M) (with the engine running):

- Set the Blade Depth Stop Switch (1M) to the **"0" (Off)** position to override the depth stop setting. Saw will raise and lower over its full range without stopping.
- Set the Blade Depth Stop Switch (1M) to **"1" (ON)** to activate the Blade Depth Stop feature. When lowering the saw the Depth Indicator Dial (1Q) will trip a micro switch and the saw will not lower any further producing the desired depth of cut.
- Now the maximum cutting depth is set. If the saw is raised out of the cut surface for any reason it can now be lowered to this specified depth by lowering the blade into the cutting surface with the Raise Lower (1P) on the Control Lever (1O).

The saw WILL NOT lower to any depth greater than the position set on the BLADE DEPTH STOP SWITCH (1Q). Therefore, if a deeper cut is required, the Blade Depth Indicator MUST be turned to the new depth position. Or you can simply push the Blade Depth Stop Switch (1M) to "0" OFF to override the Depth Stop Feature.

7 Stopping The Saw

(See Figures 1-2)

For EMERGENCY STOP, press down the RED PALM SWITCH (1K) on the cowl. This will stop the engine and disconnect power to all electrical items except lights. Reset the RED PALM SWITCH (1K) by pulling out until it pops up, then restart engine.

- Move the Control Lever (1O) to the STOP (1BB) position.
- Raise the Diamond Blade (2E) out of the cut by pressing the Raise Lower Switch (1P) on the Control Lever (1O) upward until the Diamond Blade (2E) clears the surface.
- Disengage the Blade Clutch Switch (1V) if equipped with clutch.
- Turn the Engine Throttle (1F) to the LOW IDLE position.
- Turn off the Water Valve (1T).
- Let the Engine run at idle for a few minutes before shutting off.
- STOP the engine by turning the Engine Start Switch (1H) to the **"0" (OFF)** position.

8 Incidents During Sawing

(See Figures 1-2)

If **ENGINE STOPS** during sawing, check the following:

- Engine out of fuel—Check Fuel Gauge (1X).
- Lack of water signals the Water Safety Switch (1L) to stop the engine. Set Switch (1L) to **"0" (OFF)** and then restart the engine.
- Excessively fast cutting speed will stall engine.
- Red Palm Emergency Switch (1K) has been pressed down. Reset by pulling toggle switch until it pops upward.
- Circuit Breaker is blown (1Z). Push to Reset

If the Diamond Blade (2E) STOPS during sawing, check:

- Drive belt tension is inadequate.
- The clutch switch has been pushed to "0" OFF
- The clutch has an electrical failure or blown fuse.

SAW LOWERS TOO FAST:

- The lowering rate of the saw can be adjusted using the Flow Control Valve (1U) at the rear or the saw. If the saw falls too quickly, turn the knob on the Flow Control Valve (1U) CLOCKWISE until an adequate lowering rate is set.

If the ENGINE or BLADE STALLS for any reason, raise the blade completely from the cut, inspect the machine thoroughly before restarting the engine. When lowering the blade into a partial cut, align the blade exactly with the cut to prevent damage to the blade.

Entrust all repairs to your authorized dealer only.

9 Adjustments: Straight Line Sawing

(See Figures 1 and 4)

While cutting, the saw may steer to the right from the required straight line marked on the cutting surface (if the Diamond Blade (2E) is installed on the right hand side). If this occurs, the Rear Axle (4E) of the saw can be pivoted to compensate for this situation.

Saw with EASYTRACK option.

- Push Axle Adjustment Switch (1J) to the **LEFT.** Small short adjustments make large changes.
- Adjustments can be made while sawing or not sawing.
- Visually confirm the axle movement and direction.

Saws with Manual Axle Adjustment

- The axle (4E) is adjusted by turning the M12 Adjustment Bolt (1CC) located at the rear lower left of saw frame.
- If the saw steers to the **RIGHT** while sawing, Turn the Adjustment Bolt COUNTERCLOCKWISE.
- If the saw steers to the **LEFT** while sawing, Turn the Adjustment Bolt (1CC) CLOCKWISE.

10 Maintenance

(See Figures 1-6)

Before performing any maintenance, ALWAYS park the machine on a level surface with the Engine OFF and the Engine Start Switch (1H) in the "0" (OFF) position.

After each use CLEAN the machine.

LUBRICATION:

ENGINE OIL: Check daily (6B). Change Engine Oil and Oil Filter (6H) after every 100 HOURS of operation. See engine manual for oil type to use. 15W40 CD, CE is generally recommended. (6B) Capacity is 8.5 quarts (8.0 liters) with filter (6H). Align oil level with upper mark on dipstick (6B).

LUBRICATE EVERY 50 HOURS:

- Front Wheel Bearing (4C)
- Pivot Pin (4D) at front of hydraulic cylinder

LUBRICATE EVERY 100 HOURS:
- Front Axle Pivot Bearings (4C)

LUBRICATE EVERY 250 HOURS:
- Bladeshaft Seals and Bearings (4A) 2 Pumps only

HYDRAULIC SYSTEM:
Refer to Section 12 - "Hydraulic System"

ENGINE GEARBOX (3A):
- Change oil after every 500 hours of operation. Use SAE 75W90 synthetic gear lubricant. Capacity is 32 oz.
- Drain cooling water from Water Drain Valve (3C) to prevent rust and freeze damage.

COOLING SYSTEM:
The engine cooling fluid is 50/50 anti freeze /water mixture.
- Clean the Radiator Air Filter Element (1DD) every 50 hours or when required, replace if damaged. Always keep Radiator Air Filter Element (1D) in place.
- Check hoses and hose clamps for damage and looseness. Tighten or replace as required.

* Check Coolant Freeze Protection yearly.

* Flush and Clean radiator and cooling system every 500 hours.

***** Maintain at least 1/4 full coolant level in Radiator Coolant Recovery bottle (1Y) when engine is cool.

AIR FILTER :
- Clean the Air Filter Outer Element (5A) when the Restriction Indicator (1N) Red Signal appears. **DO NOT** clean the Inner Safety Element (5A)!

To change or clean the air filter element:
- Remove the Air Filter Housing (5A) by opening the three (3) Air Filter Housing Clamps, and pulling the housing off.
- Pull the Air Filter Outer Element out of the filter housing and replace, or clean by using low pressure compressed air [2.75 bar (40 psi - MAX)] from the inside out. **DO NOT** clean the filter element by tapping it on the ground or other objects, this will damage the filter element!
- Install Air Filter Outer Element by pushing it into the housing.
- Install the Air Filter Housing (5A) and close the three (3) Air Filter Housing Clamps 5A.

The three (3) Air Filter Housing Clamps (5A) can NOT be closed unless the Air Filter Outer Element is properly installed.

- Replace the Inner Safety Element once per year or if it becomes damaged.
- Replace any damaged filters or gaskets.
- Check air hose and clamps for damage or looseness. Tighten or replace as required.

Wheels and Hubs:
- Check for excess wear and looseness. Tighten or replace as required.

11 Blade Shaft V-Belt Tension

(See Figures 1-3)

This saw is equipped with high tension banded V-belts. The belts are properly tensioned at the factory but after a few hours of operation they will stretch and become loose.

To Tension V-Belts:
- Turn Engine Start Switch (1H) to the "0" **(OFF)** position.
- Using the Blade Shaft Wrench, loosen the horizontal clamping bolts (2K) at the front of the machine.
- Turn each of the two (2) vertical Tensioning Bolts (3J) [at the front of machine, below the Gear Box (3A)] CLOCKWISE until the V-Belts (3M) are tight.
- Replace **V-Belts** (3M) in complete sets only.
- For optimum V-Belt tension use Goodyear TensionRite™ Strips, P/N 191368. TensionRite™ strips are supplied with belts purchased from Target.

Never tension V-Belts (3M) beyond the original factory tension. Loose V-Belts result in poor saw performance and short belt life.
Replace all shields and guards.
Never run Saw with out all shields in place.

12 Hydraulic System

(See Figures 1-6)

The hydraulic system on this saw is used to RAISE / LOWER the Diamond Blade (2E), and to propel the saw FORWARD and REVERSE. The hydraulic system consists of a Hydrostatic Pump (5N), (2) Hydraulic Wheel Motors (4F), Hydraulic Filter (5K), DC Lift Pump (5H), Hydraulic Oil Reservoir (5J), Flow Control Valve (1U), and Hydraulic Lift Cylinder (4G).
- Hydraulic Filter (7D) should be changed after the first 50 hours of operation, then every 250 hours of operation.
- Check Hydraulic Reservoir (5K) fluid level periodically. Maintain oil level with SAE 10W30 API Class SE, CC, CD motor oil. **DO NOT OVERFILL**, check oil level when saw is level.
- Change hydraulic fluid every 500 hours of operation. Fill Hydraulic Reservoir (5I,5J) with approximately 2.5 quarts of SAE 10W30 API Class SE, CC, CD motor oil. **DO NOT OVERFILL**! Check oil level when saw is level.

- The lowering rate of the saw can be adjusted using the Flow Control Valve (1U) at the rear of the saw. If the saw falls too quickly, turn the knob on the Flow Control Valve (1U) CLOCKWISE until an adequate lowering rate is set.

13 Important Advice

(See Figures 2-3)

- Tighten loose nuts and bolts regularly, particularly after several hours of operation.
- Check V-Belt (3M) tension regularly. Re-tighten V-Belts (3M) as necessary.
- Remove the Diamond Blade (2E) for storage. Store it carefully.
- Check the water spray over the Diamond Blade (2E) periodically.
- Tighten the Diamond Blade (2E) firmly on the Blade Arbor (2C).
- Make sure the contact faces of Flanges (2B & 2F), Diamond Blade (2E), and Blade Shaft (2I) are clean.

Store in a safe place out of reach of children. Remove all adjustment tools and wrenches. Store diamond tool in a safe place so it cannot be damaged.

14 Engine Speed Adjustment

(See Figures 1-6)

Serious injury can occur to the operator or people in the work area if the rotational speed (n/min) of the Diamond Blade (2E) exceeds the maximum speed (n/min) marked on the Diamond Blade (2E).

Each Pro 66™ model, as delivered from the factory, is designed to operate with a specified range of blade sizes. If a blade size outside the specified range of sizes for your model must be used, then the saw drive configuration must be changed. [For example: If changing from a small to a very large Diamond Blade (2E), the Blade Shaft Pulleys (3L), Gearbox Pulleys (3N) and the Blade Shaft Flanges (2B & 2F) *must* be changed.]

For example: To change from a 26" drive to a 48" drive:

1. Change Gearbox Pulley from 4.12" DIA to 3.65" DIA.
2. Change Blade Shaft Pulley from 4.75" DIA to 6.90" DIA.
3. Change Blade Flanges from 5" DIA to 8" DIA.
4. Change Blade Guard from 26" to 48".
5. Engine Speed does not change.

See Blade Size Conversion charts for specific information.

15 Accessories

BLADE GUARD CONVERSION KITS:
Use the proper size blade guard for the particular diamond blade size being operated. The following blade guards are available for these diamond blade sizes:

42" Guard - 30" - 42" Blades
36" Guard - 24" - 36" Blades
30" Guard - 18" - 30" Blades
26" Guard - 14" - 26" Blades
18" Guard - 14" - 18" Blades

See Blade Size Conversion charts for specific information.

WEIGHT KIT:
A rear mounted WEIGHT KIT is available.

16 Repairs

We carry out all repairs in the shortest possible time and at the most economical prices. (See back page for our address and phone numbers.) Contact you authorized Target Dealer concerning maintenance and repairs.

17 Spare Parts

For quick supply of spare parts and to avoid any lost time, it is essential to quote the data on the manufacturers plate fixed to the machine and the part number(s) and description to be replaced with every order.

Please reference Parts Lists manual (542201031): (If you do not have a Parts List Manual, please call TOLL FREE 1-800-288-5040.)

The instructions for use and spare parts found in this document are for information only and are not binding. As part of our product quality improvement policy, we reserve the right to make any and all technical modifications without prior notice.

The manufacturer accepts no responsibility caused by unsuitable use or modifications.

NOTES

PRO 66 DIESEL BLADE SIZE CONVERSION CHART

	Size To Convert To				
Size To Convert From	**14"/18" (350mm/450mm)**	**26" (600mm)**	**30" (750mm)**	**36" (900mm)**	**42" (1050mm)**
14"/18" (350mm/ 450mm)	No Conversion Required 18" Configured as: 18" Wide Slip-On Blade Guard 1 Spade & 1 Bolt Hold Guard Four 3VX430-4 Banded V-Belts Engine Pulley, 4.75" Dia Blade Shaft Pulley 8G3V4.12 5.00" Flanges	176645 Wide SLIP-ON Blade Guard 542199467 Bladeshaft Assy 26"/30" 191895 Engine Pulley 4.12" 166363 (4) V-belts 3VX430-4 Banded.	166911 Wide SLIP-ON Blade Guard 542199467 Bladeshaft Assy 26"/30" 166366 3.65" Engine Pulley	166931 Wide SLIP-ON Blade Guard 166362 (4) V-Belts 3VX450-4 Band 542199469 Bladeshaft Assy 36" 166366 Engine Pulley 3.65" 542199362 Guard Attach. Group 36"	542199389 BladeGuard Assy 42" 199470 Blade Shaft, 42" Complete 542199362 Blade Guard Attachment 166629 (4) V-Belt 3VX465-4 Band 166366 Engine Pulley 3.65"
26" (600mm)	167471 SLIP-ON Blade Guard 166365 (2) Engine Pulley 4.75" 166363 (4) V-Belt 3VX430-4 Band 542199466 Bladeshaft Assy	No Conversion Required 26" Configured as: 26" Wide Slip-On Blade Guard 1 Spade & 1 Bolt Hold Guard 4 3VX430-4 Banded V-Belts Engine Pulley, 4.12" Dia Blade Shaft Pulley (2) 8G3V4.75 5.00" Flanges	166911 Wide SLIP-ON Blade Guard 166363 (4) V-Belt 3VX430-4 Banded 166366 3.65" Engine Pulley	166931 Wide SLIP-ON Blade Guard 166362 (4) V-Belts 3VX450-4 Band 542199469 Bladeshaft Assy 36" 166366 Engine Pulley 3.65" 542199362 Guard Attach. Group 36"	542199389 BladeGuard Assy 42" 199470 Blade Shaft, 42" Complete 542199362 Blade Guard Attachment 166629 (4) V-Belt 3VX465-4 Band 166366 Engine Pulley 3.65"
30" (750mm)	167471 SLIP-ON Blade Guard 542199466 Bladeshaft Assy 18" 166365 Engine Pulley	176645 Wide SLIP-ON Blade Guard 166363 (4) V-Belts 3VX430 191895 (2) Engine Pulley 4.12	No Conversion Required 30" Configured as: 30" Wide Slip-On Blade Guard 1 Spade & 1 Bolt Hold Guard 4 3VX430-4 Banded V-Belts Engine 3.65" Dia Blade Shaft Pulley 8G3V4.75 5.00" Flanges	166931 Wide SLIP-ON Blade Guard 166362 (4) V-Belts 3VX450-4 Band 542199362 Guard Attach Group 542199469 Bladeshaft Assy 36	542199389 BladeGuard Assy 42" 199470 Blade Shaft, 42" Complete 542199362 Blade Guard Attachment 166629 (4) V-Belt 3VX465-4 Band 166366 Engine Pulley 3.65"
36" (900mm)	167471 SLIP-ON Blade Guard 542199466 Bladeshaft Assy 18" 166365 (2) Engine Pulley 4.75" 166363 (4) V-Belt 3VX430-4 Band	176645 Wide SLIP-ON Blade Guard 166363 (4) V-Belts 3VX430 191895 (2) Engine Pulley 4.12 542199467 BladeShaft Assy 26"/30"	166911 Wide SLIP-ON Blade Guard 542199467 Bladeshaft Assy 26"/30" 166363 (4) V-Belt 3VX430-4 Banded Remove Rear Slip-On Spade to allow attachment of 30" Guard	No Conversion Required 36" Configured as: 36" Wide Slip-On Blade Guard 2 Spades & 1 Bolt Hold Guard 4 3VX450-4 Banded V-Belts Engine 3.65" Dia 5.60" Dia 8G3V Blade Shaft Pulley 6.00" Flanges	542199389 BladeGuard Assy 42" 199470 Blade Shaft, 42" Complete 166629 (4) V-Belt 3VX465-4 Band 166366 Engine Pulley 3.65"
42" (1050mm)	167471 SLIP-ON Blade Guard 166365 (2) Engine Pulley 4.75" 166363 (4) V-Belt 3VX430-4 Band 542199466 Bladeshaft Assy 542199362 Blade Guard Attachment	176645 Wide SLIP-ON Blade Guard 542199467 Bladeshaft Assy 191895 Engine Pulley 4.12" 166363 (4) V-belts 3VX430-4 Banded 542199362 Blade Guard Attachment	166911 Wide SLIP-ON Blade Guard 198090 BladeShaft Assy 26"/30" 166363 (4) V-Belt 3VX430-4 Banded 542199362 Blade Guard Attachment	166931 Wide SLIP-ON Blade Guard 542199362 Guard Attach Group 166362 (4) 3VX450-4 Banded 542199469 Bladeshaft Assy 36	No Conversion Required 42" Drive configured as : 42" Wide Guard Blade Guard Brace 4 3VX465-4 Band V-Belts 3.65" Dia Engine Pulley 6.4" Dia 8G3V Blade Shaft Pulleys 7.0" Flanges

NOTES

Diagram 1, Wiring Diagram - Pro 66 Diesel, Instrument and Control Box

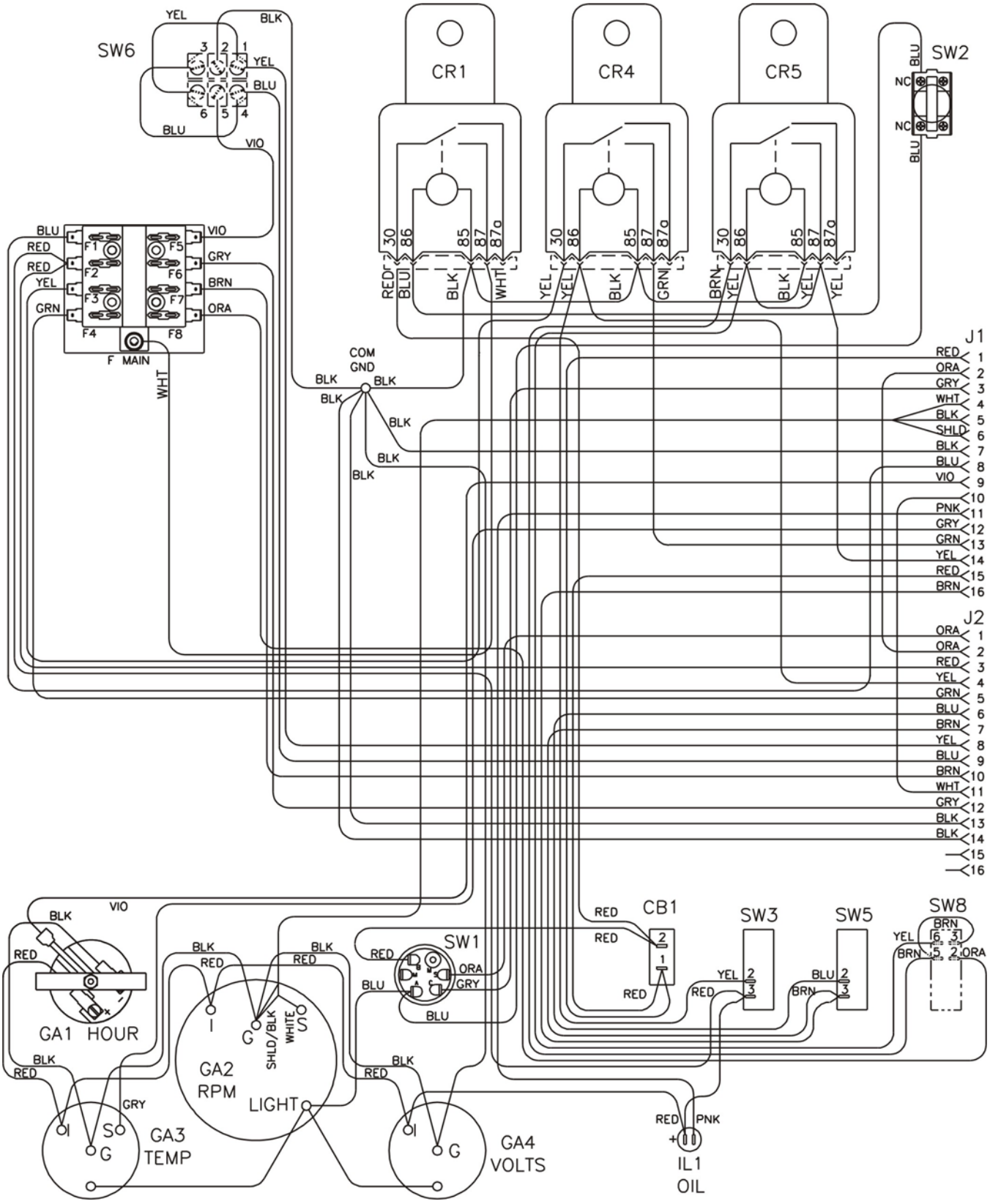


Diagram 2, Wiring Diagram - Pro 66 Diesel Engine Wiring

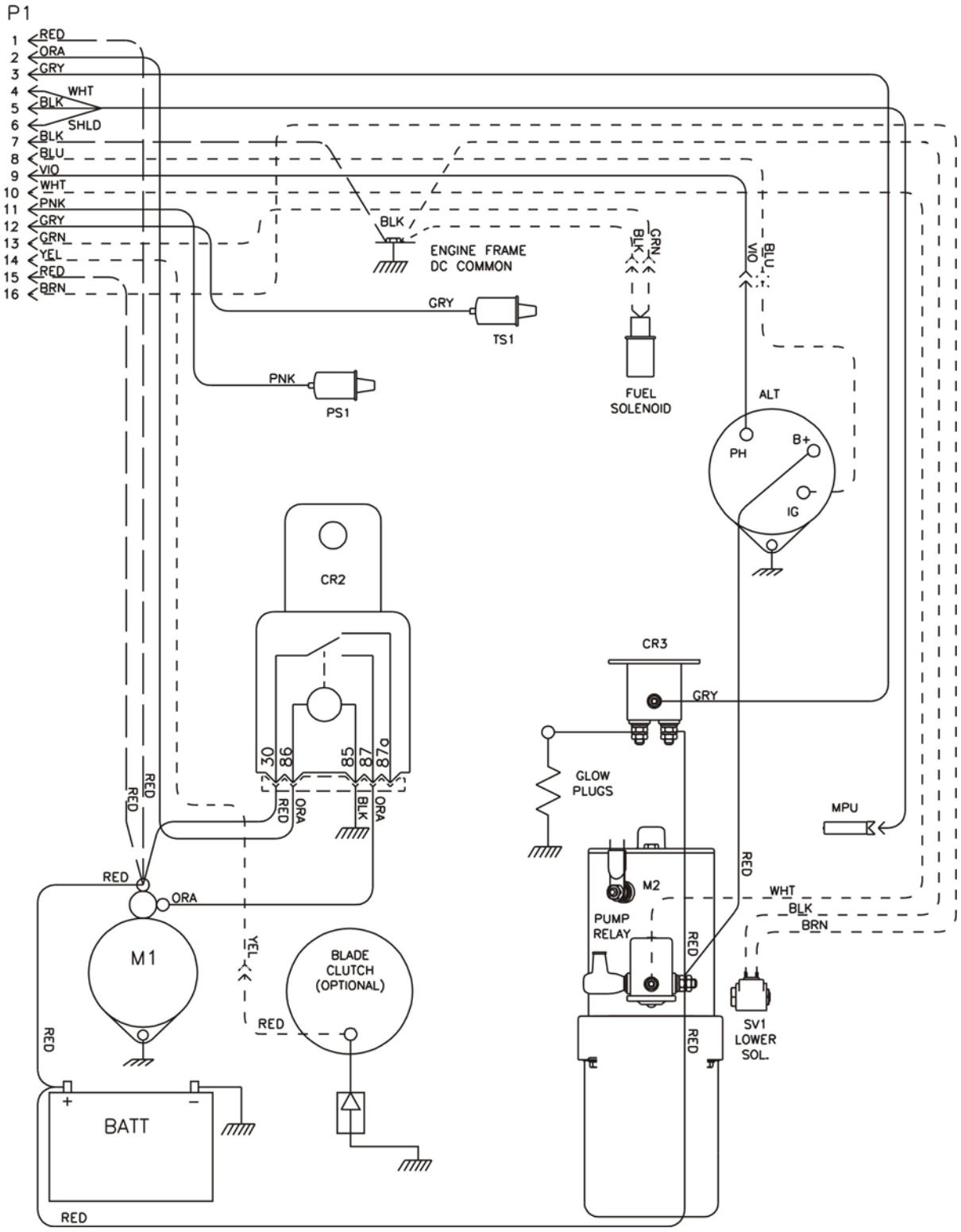


Diagram 3, Ladder Diagram - Pro 66 Diesel

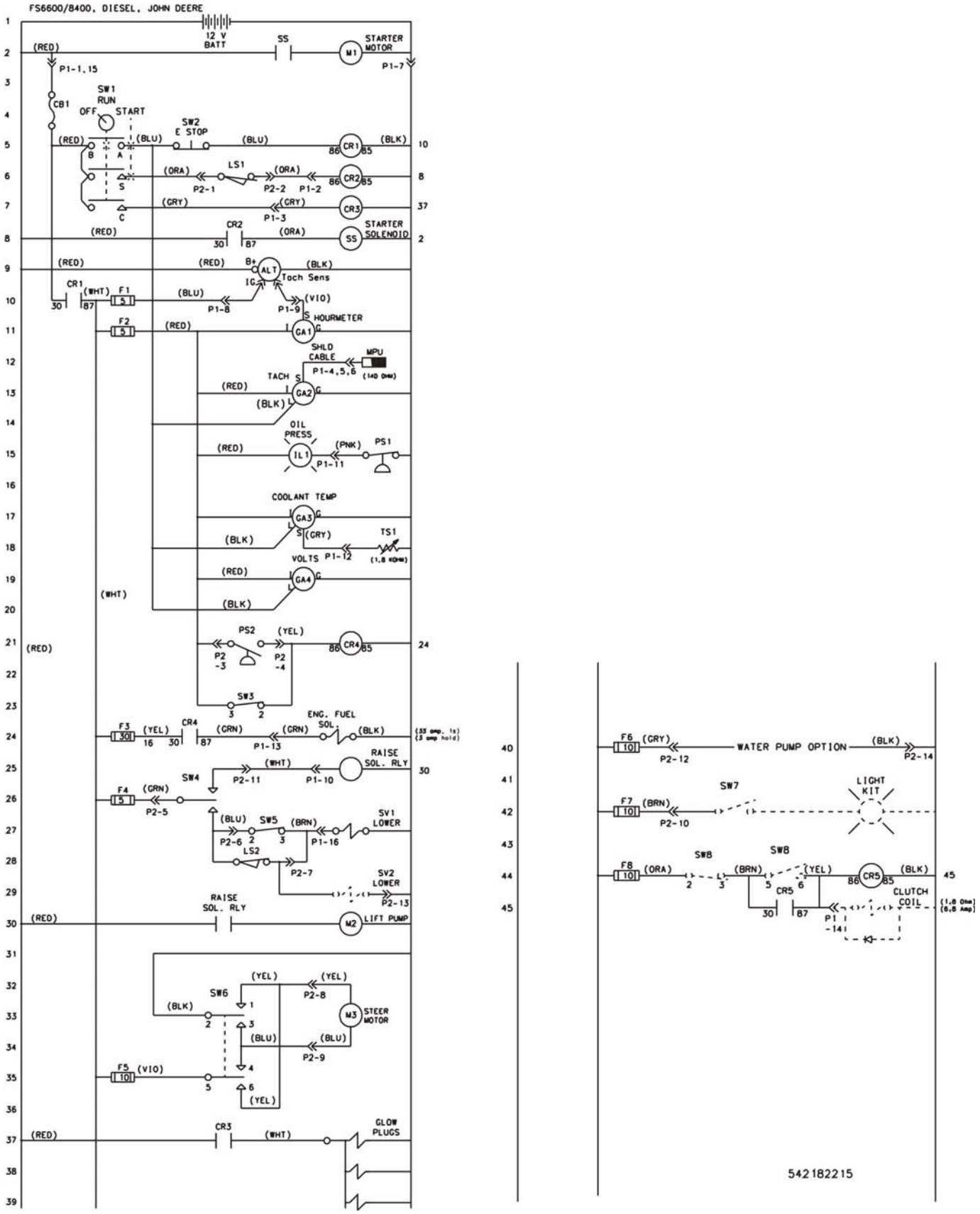


Diagram 3, Ladder Diagram - Pro 66 Diesel

COMPONENT DESIGNATORS FOR FS6600 AND FS8500

DESIG	DEVICE	FUNCTION	PART NO
ALT	ALTERNATOR	BATTERY CHARGING	
CB1	CIRCUIT BREAKER	MAIN CONTROL BREAKER	541201661
CR1	CONTROL RELAY	POWER TO FUSE BLOCK	166708
CR2	CONTROL RELAY	ENGINE START	166708
CR3	CONTROL RELAY	ENGINE GLOW PLUG	181065
CR4	CONTROL RELAY	ENGINE FUEL SOLENOID	166708
CR5	CONTROL RELAY	BLADE SHAFT CLUTCH	166708
F1	FUSE, 5A	ALTERNATOR EXCITATION	166857
F2	FUSE, 5A	ENGINE GAUGES	166857
F3	FUSE, 30A	FUEL SOLENOID	542198815
F4	FUSE, 5A	RAISE-LOWER CIRCUIT	166857
F5	FUSE, 10A	AXLE STEER (OPTIONAL)	166855
F6	FUSE, 10A	WATER PUMP (OPTIONAL)	166855
F7	FUSE, 10A	LIGHT KIT (OPTIONAL)	166855
F8	FUSE, 10A	CLUTCH (OPTIONAL)	166855
GA1	GAUGE	HOURMETER	166221
GA2	GAUGE	ENGINE TACHOMETER	542182218
GA3	GAUGE	ENGINE COOLANT TEMPERATURE	166359
GA4	GAUGE	BATTERY VOLTMETER	166438
IL1	IDICATOR LAMP	LOW OIL PRESSURE	188436
LS1	LIMIT SWITCH	NEUTRAL START	176398
LS2	LIMIT SWITCH	DEPTH STOP	539301153
M1	MOTOR	ENGINE STARTER	
M2	MOTOR	HYDRAULIC PUMP	
M3	MOTOR	REAR AXLE STEER	
MPU	MAG PICKUP	ENGINE RPM	
J1	CONNECTOR	INSTRUMENT ENCL. TO ENGINE HARNESS	SEE NOTE 6
J2	CONNECTOR	INSTRUMENT ENCL. TO COWL CONTROLS	SEE NOTE 6
PS1	PRESSURE SWITCH	ENGINE OIL PRESSURE	178724
PS2	PRESSURE SWITCH	WATER PRESSURE	
SS	SOLENOID RELAY	ENGINE START SOLENOID	
SV1	SOLENOID VALVE	LOWER SAW	166594
SV2	SOLENOID VALVE	LOWER SAW (OPTIONAL)	
SW1	SWITCH (KEY)	ENGINE, OFF-RUN-START	166707
SW2	SWITCH (PUSH-PULL)	EMERGENCY STOP	176383
SW3	SWITCH (ROCKER)	WATER SWITCH OFF	542182219
SW4	SWITCH (TOGGLE)	LIFT SWITCH, RAISE-OFF-LOWER	182102
SW5	SWITCH (ROCKER)	DEPTH STOP SWITCH, ON-OFF	542182219
SW6	SWITCH (TOGGLE)	AXLE STEER, LEFT-OFF-RIGHT (OPTIONAL)	541201593
SW7	SWITCH (TOGGLE)	LIGHT SWITCH, ON-OFF (OPTIONAL)	
SW8	SWITCH (ROCKER)	CLUTCH SWITCH, ON-OFF (OPTIONAL)	542182220
TS1	TEMP SENDER	ENGINE COOLANT TEMPERATURE	542199361

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Warning!

Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known (to the State of California) to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- ***Lead from lead based paints.***
- ***Crystalline silica from bricks and cement and other masonry products.***
- ***Arsenic and chromium from chemically-treated lumber.***

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area, and work with approved safety equipment such as those dust masks that are specially designed to filter out microscopic particles.

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