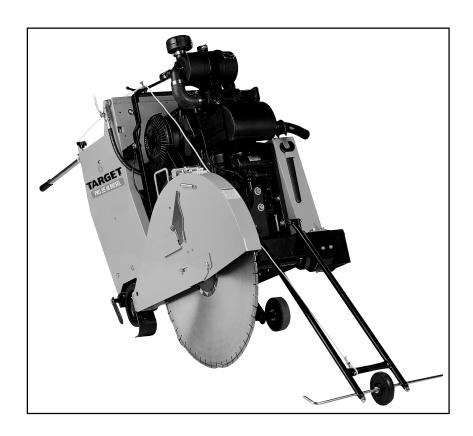
## OPERATING INSTRUCTIONS INSTRUCCIONES DE OPERACIÓN



# PRO 35 III DIESEL PRO 35 III ELECTRIC PRO 65 III DIESEL STANDARD MODELS



17400 W. 119<sup>th</sup> Street Olathe, Kansas 66061, USA

Customer Service ....... 800-288-5040
Corporate Office ......... 913-928-1000
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Corporate Office Fax ... 913-438-7951
Int'l. Fax .................. 913-438-7938
Internet ...... http://www.targetblue.com



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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# 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 Head Protection
- Usar Casco De Protección



- Wear Breathing Protection
- Usar Máscara De Protección



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



- · Wear a Hard Hat
- Usar Casco Duro



- · 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 On Jobsite.
- Desmontar El Disco Antes De Desplazar, Cargar, Descargar O Transportar La Máquina En La Obra.



- Motor Off
- 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



- 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 All Guards In Place
- No Operar Sin Todas Las Protecciones In Su Sitio



- · Always Keep the Blade 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



- Water Safety Switch-Press to Reset if Water Supply Interrupted
- Si Se Ha Interrumpido El Suministro De Agua, Pulsar El Conmutador De Seguridad De Agua Para Reposicionarlo.



- 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



- 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



- Unleaded Fuel Only
- Solamente Combustible Sin Plomo



- 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



- Blade Cutting Depth
- 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 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** 

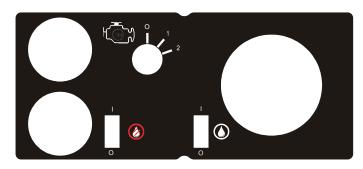
DURING NORMAL USE OF THIS MACHINE, OPERATOR MAY BE EXPOSED TO A NOISE LEVEL EQUAL OR SUPERIOR TO **85 dB (A)** 

## **ATENCION**

**RIESGO DE DAÑO AUDITIVO** 

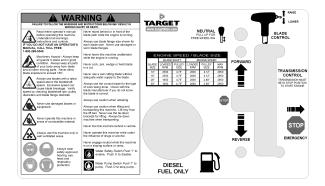
EN CONDICIONES NORMALES DE UTILIZACIÓN, EL OPERADOR DE ESTA MÁQUINA PUEDE ESTAR EXPUESTO A UN NIVEL DE RUIDO IGUAL O SUPERIOR A 85 dB (A)

# DECAL DESCRIPTIONS AND LOCATIONS DESCRIPCIÓN DE CALCAMONIAS Y UBICACIONES



#### **INSTRUMENT PANEL**

P/N 191028 (PRO 65 III Diesel)
P/N 191006 (PRO 35 III Diesel - Shown)
P/N 191127 (PRO 35 III Electric)



#### **OPERATING INSTRUCTIONS, TOP OF COWL**

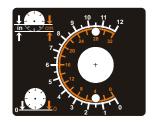
P/N 191017 (PRO 65 III Diesel)
P/N 183768 (PRO 35 III Diesel - Shown)
P/N 191098 (PRO 35 III Electric)



**BATTERY** 

P/N 167350 (All Models)





#### **DEPTH INDICATOR**

P/N 191308 (PRO 65 III Diesel)
P/N 191009 (PRO 35 III Diesel/Electric - Shown)



#### **WARNING:**

- 1) Rear of Cowl above opening to transmission, Top of Frame
- 2) Left Side of Engine by Lift Bail Mount

P/N 176223 (Quantity 2, All Models)



#### **TOP OF BLADE GUARD**

P/N 046128 (All Models)



**DEPTH STOP: TOP OF COWL** 

P/N 163233 (All Models)



#### **TOP OF FRAME BETWEEN BLADESHAFT BEARINGS**

P/N 166669 (Quad Sealed Bearings ONLY, PRO 65 III Diesel)

P/N 040563 (Standard Ball Bearings ONLY, PRO 35 III Diesel/Electric)

## **DECAL DESCRIPTIONS AND LOCATIONS** DESCRIPCIÓN DE CALCAMONIAS Y UBICACIONES

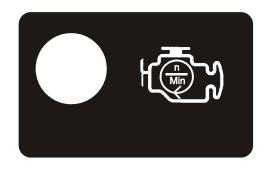


**BLADE ROTATION DIRECTION, TOP OF BLADE GUARD** 

P/N 167289 (All Models)



**AXLE ADJUSTMENT:** LEFT REAR, FRAME BASE P/N 163246 (All Models)



THROTTLE, DIESEL, RIGHT OF DEPTH INDICATOR P/N 183769 (All Models except PRO 35 III Electric)



**REAR OF COWL** P/N 191012 (All Models)





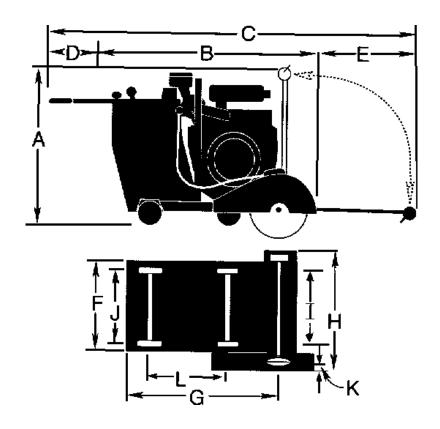
**LEFT AND RIGHT SIDES OF COWL (QTY 2)** P/N 191001 (PRO 35 III Diesel)

**LEFT AND RIGHT SIDES OF COWL (QTY 2)** P/N 191099 (PRO 35 III Electric)



**LEFT AND RIGHT SIDES OF COWL (QTY 2)** P/N 191005 (PRO 65 III Diesel)

# SAW DIMENSIONS



ITEM	DESCRIPTION - inch (mm)	PRO 65III	PRO 35III
Α	Height	51 (1295)	51 (1295)
В	Minimum Saw Length (Handles In, Pointer Up, Guard Up)	56-1/4 (1429)	52 (1321)
С	Maximum Overall Length (Handles Extended, Pointer Down)	132-3/8 (3362)	111 (2819)
D	Handle Extension	30 (762)	30 (762)
Е	Maximum Pointer Extension	38 (965)	37 (940)
F	Frame Width	28-7/8 (733)	23-7/8 (606)
G	Frame Length	47-1/4 (1200)	39-1/2 (1003)
Н	Saw Width	36-1/2 (927)	31-3/4 (806)
ı	Front Axle Length	23-3/8 (594)	20 (508)
J	Rear Axle Length	24-1/4 (616)	21 (533)
K	Blade to Wall	2-7/8 (73)	1-7/8 (48)
L	Wheel Base Length	23-1/2 (597)	18-1/4 (464)
M	Blade Shaft Maximum Height	19-3/8 (492)	15-1/2 (394)
	Center to Center Wheel Width -Front	22-7/8 (581)	19-7/8 (505)
	Center to Center Wheel Width - Rear	24-1/4 (616)	21-3/8 (543)
	Outside to Outside Wheel Width - Front	25-1/4 (641)	21-13/16 (554)
	Outside to Outside Wheel Width - Rear	27-1/4 (692)	23-3/8 (594)
	Inner Flange to Inner Flange	31-3/16 (792)	26-3/8 (700)
	Saw Length (Pointer Up, Handles Extended)	84-1/4 (2140)	82 (2083)
	Maximum Overall Height (Pointer Up)	52 (1321)	52 (1321)
	Wheel Base	22-7/8 (581)	17-7/8 (454)
	Guard to Handle Length (Handles In)	64-7/8 (1648)	60-1/2 (1537)
	Maximum Overall Length (Handle In)	102-3/8 (2600)	87-1/2 (2223)
	Minimum Fixed Width	34-1/4 (870)	29 (737)
	Crated Dimension: (L x H x W)	64" x 56-1/2" x 42" (1626 x 1435 x 1067mm)	57-1/2" x 33" x 49" (1461 x 838 x 1245mm)

## **PRO 65 III DIESEL SPECIFICATIONS**

Model No:	<u> 18S</u>	<u> 26S</u>	<u>30S</u>	<u> 36S</u>	<u>48W</u>	SCPL20G
Standard Model:	C50263	C50267	C50271	C50275	C50279	C50283
Standard w/Water Pump:	C50264	C50268	C50272	C50276	C50280	C50284

## STANDARD SAW FEATURES

Blade Guard Capacity:	18" (450mm)	26" (650mm)	30" (750mm)	36" (900mm)	48" (1200mm)	18" / 20" (450mm / 508mm)
Bladeshaft RPM:	2750	1900	1400	1400	1000	2750
Max. Depth Of Cut:	6-1/2" (16.5cm)	10-1/2" (26.7cm)	12" (30.5cm)	15" (38.1cm)	20" (50.8cm)	1-3/4" (4.5cm)

**Arbor Size:** 1" (25.4mm) with drive pin, blade can be mounted on either side of shaft

Blade Shaft: 1-3/4" (44.5mm) diameter with quick disconnect flanges

Blade Shaft Bearings: Dual self-aligning quad sealed bearings

Blade Shaft Drive: Jackshaft reduction system

**Blade Control:** Electro-hydraulic pump raises and lowers blade; positive depth stop, cutting depth indicator.

Quick-Lift blade raising and lowering button on the speed control lever.

Blade Coolant: Water

Axles: Front 1-1/2" (38.1mm) diameter

**Rear** 1-1/4" (31.8mm) diameter

Wheels: Front 8" x 2-1/2" x 1" (203 x 63.5 x 25.4mm); Roller bearings, solid rubber tires, neoprene grease

seals, pressure lubrication fittings provided

Rear 10" x 3" (254 x 76mm) quick release; solid rubber tread

**Transmission:** Hydrostatic Transmission with sealed gearbox and single chain final drive, neutral safety

start switch and free wheeling neutral

**Speed:** Infinite speed 0 to 250 FPM forward and reverse

Chassis: Heavy-Duty, rigid, box and channel section construction

Weight - Ib. (kg)

Crated: 1,582 (712) 1,599 (720) 1,685 (758) 1,716 (772) 2,071 (932) 1,625 (731) **Uncrated:** 1,485 (668) 1,502 (676) 1,588 (715) 1,619 (729) 1,974 (888) 1,528 (688) Add for: Pump 10 (4.5) 10 (4.5) 10 (4.5) 10 (4.5) 10 (4.5) 10 (4.5) **Deluxe Spotlight** 7 (3) 7 (3) 7 (3) 7 (3) 7 (3) 7 (3)

## **PRO 35 III DIESEL SPECIFICATIONS**

 MODEL NO:
 18S
 26S
 30S

 Item Number:
 C80231
 C80233
 C80235

Item No. C80232 C80234 C80236

w/Water Pump:

STANDARD SAW FEATURES

**Blade Guard** 18" 26" 30" **Capacity:** (450mm) (650mm) (750mm)

**Bladeshaft RPM:** 2500 1650 1650

Max. Depth Of Cut: 6-3/4" 10-3/4" 12-1/2"

(17.15 cm) (27.31 cm) (31.8 cm)

Arbor Size: 1" (25.4mm) with drive pin, blade can be mounted on either side of shaft

Blade Shaft: 1-7/16" (36.5mm) diameter

Blade Shaft Bearings: Dual self-aligning pillow block ball bearings

Blade Shaft Drive: (2) 3 Groove 3VX banded belts

**Blade Control:** Electro-hydraulic pump raises and lowers blade; positive depth stop, cutting depth

indicator. Quick-Lift blade raising and lowering button on the speed control lever.

Blade Coolant: Water; Zinc plated dual multiple-jet water spray tubes; Water supply connector located at

left rear of saw; Separate water control valves on each side of the saw.

Axles: Front 1" (25.4mm) diameter

Rear 1" (25.4mm) diameter

Wheels: Front 6" x 2" x 1" (152 x 51 x 25.4mm); roller bearings, solid polyurethane tires, neoprene

grease seals, pressure lubrication fittings provided

Rear 8" x 2" x 1" (203 x 51 x 25.4mm); keyway; solid rubber tread; mounted and keyed on axle shaft

**Transmission:** Hydrostatic Transmission with sealed gearbox and single chain final drive, neutral safety start

switch, and free wheeling neutral

**Speed** Infinite speed 0 to 220 FPM forward and reverse

Chassis: Heavy-Duty, rigid, box and channel section construction

Weight - Ib. (kg)

Crated: 1,126 (510) 1,136 (515) 1,291 (578) **Uncrated:** 1,063 (482) 1,218 (548) 1,053 (477) Add for: **Pump** 10 (4.5) 10 (4.5) 10 (4.5) **Deluxe Spotlight** 7 (3) 7 (3) 7 (3)

## PRO 35 III 20HP ELECTRIC SPECIFICATIONS

MODEL NO: <u>26S/230V</u> <u>26S/460V</u> <u>30S/230V</u> <u>30S/460V</u> <u>30S/575V</u>

 Item Number:
 C80166
 C80165
 C80168
 C80167
 C80169

 Item No.
 N/A
 N/A
 N/A
 N/A
 N/A
 N/A

w/Water Pump:

STANDARD SAW FEATURES

Blade Guard Capacity: in (mm): 26" (650) 26" (650) 30" (750) 30" (750) 30" (750) **Bladeshaft RPM:** 1750 1750 1420 1420 1420 10-3/4" 12-1/2" 12-1/2" Max. Depth Of Cut: 10-3/4" 12-1/2" (27.3 cm) (27.3 cm) (31.8 cm) (31.8 cm) (31.8 cm)

**Arbor Size:** 1" (25.4mm) with drive pin, blade can be mounted on either side of shaft (two drive pins)

Blade Shaft: 1-7/16" (36.5mm) diameter

Blade Shaft Bearings: Dual self-aligning pillow block ball bearings

Blade Shaft Drive: Six(6) 3VX V-Belts

Blade Control: Electro-hydraulic pump raises and lowers blade; positive depth stop, cutting depth

indicator. Quick-Lift blade raising and lowering button on the speed control lever.

Blade Coolant: Water; Zinc plated dual multiple-jet water spray tubes; Water supply connector located at

left rear of saw; Separate water control valves on each side of the saw.

Axles: Front 1" (25.4mm) diameter

Rear 1" (25.4mm) diameter

Wheels: Front 6" x 2" x 1" (152 x 51 x 25.4mm); roller bearings, solid polyurethane tires, neoprene grease

seals, pressure lubrication fittings provided

Rear 8" x 2" x 1" (203 x 51 x 25.4mm); keyway; solid rubber tread; mounted and keyed on axle

shaft

**Transmission:** Hydrostatic Transmission with sealed gearbox and single chain final drive, neutral and

neutral safety start switch, parking brake, single control handle for neutral and

forward/stop/reverse.

**Speed** Infinite speed 0 to 220 FPM forward and reverse

**Brake:** Spring applied; Hydraulic pressure release; Caliper and Disc brakes.

Chassis: Heavy-Duty, rigid, box and channel section construction

Weight - Ib. (kg)

 Crated:
 933 (423)

 Uncrated:
 860 (390)

 Add for:
 Pump
 10 (4.5)

 Deluxe Spotlight
 7 (3)

# **POWER SOURCE**

ENGINE / MOTOR:	Pro 65III  Deutz Diesel	Pro 35III  Deutz Diesel	Pro 35III E  Baldor Electric Motor
MODEL:	BF3L1011F	F2L1011F	TEFC
HORSEPOWER:	57	32	20
DISPLACEMENT:	133 cu in (2.18 l)	83 cu in (1.37 l)	
BORE:	3.6" (91 mm)	3.6" (91 mm)	_
STROKE:	4.00" (101.6 mm)	4.1" (105 mm)	_
CYLINDERS / Stroke:	3/4	2/4	_
FUEL CAPACITY:	9.75 Gal (36.67 I)	6.75 Gal (25.38 I)	_
OIL CAPACITY:	8.5 Qt. / 8 I	7 Qt. / 6.5 I	
AIR FILTER:	Dry Type, 4 Stage	Dry Type, 4 Stage	_
STARTER:	Electric	Electric	<del></del>
COOLANT:	Air/Oil	Air/Oil	Air

# 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.

PRO 35 III DIESEL ENGINE SPEED / BLADE SIZE						
BLADE	BLADE SHAFT ENGINE SPEED					
SIZE	LOADED	PULLEY	LOADED	PULLEY	MAX	
SIZE	RPM	SIZE	RPM	SIZE	RPM	
14"	2500	4.75"	2800	4.12"	2950	
18"	2500	4.75"	2800	4.12"	2950	
26"	1650	4.75"	2800	2.80"	2950	
30"	1650	4.75"	2800	2.80"	2950	

PRO 35 III 20 HP ELECTRIC MOTOR SPEED / BLADE SIZE						
BLADE SHAFT ELECTRIC MOTOR						
BLADE SIZE	RATED	PULLEY	RATED	PULLEY		
SIZE	RPM	SIZE	RPM	SIZE		
14"	2560	4.12"	1760	6.00"		
18"	2560	4.12"	1760	6.00"		
26"	1760	4.12"	1760	4.12"		
30"	1430	4.12"	1760	3.35"		

PRO 65 III DIESEL ENGINE SPEED / BLADE SIZE						
BLADE	BLADE	SHAFT	EN	NGINE SPEI	ED	
SIZE	LOADED PULLEY LOADED PULLEY M					
SIZE	RPM	SIZE	RPM	SIZE	RPM	
14"	2750	4.12"	2800	8.0"	3000	
18"	2750	4.12"	2800	8.0"	3000	
26"	1900	4.12"	2800	5.6"	3000	
30"	1400	5.60"	2800	5.6"	3000	
36"	1400	5.60"	2800	5.6"	3000	
48"	1000	7.60"	2800	5.6"	3000	

JACKSHAFT PULLEYS REMAIN THE SAME FOR ALL BLADE SIZES

#### **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.
- **DO** turn the "ON/OFF" switch to the "OFF" position prior to connecting the machine to the power source.
- **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 reinforced abrasive blades or 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.
- **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 make sure electric powered machines are plugged into a properly grounded circuit
- **DO** make sure power cords are the proper size and in good condition.
- **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 gas cap on the machine and the fuel can is properly tightened.
- **DO** lift only from the lift bail.
- DO clean the machine after each day's use.
- **DO** follow all electrical codes in your area.
- **DO** use correct voltage and proper extension cords. Never carry tool by cord or yank it to disconnect it from receptacle. Keep cord away from heat, oil and sharp edges.
- DO disconnect tools from power source when not in use, before servicing and when changing accessories.
- **DO** carefully maintain and clean for better and safer performance. Follow instructions for changing accessories. Inspect tool cords periodically and, if damaged, have repaired by authorized service facility.
- **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**

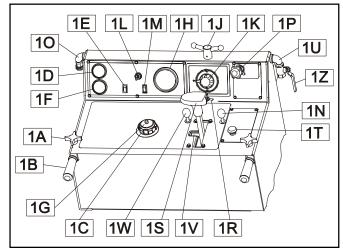
DO NOT	operate this machine unless you have read and understood this operator's manual.
DO NOT	operate this machine without the blade guard, or other protective guards in place.
DO NOT	stand behind or in front of the blade path while the engine is running.
DO NOT	leave this machine unattended while the 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 unless it is properly vented.
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 guard 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	lay power cords in or near the water.
DO NOT	tow this machine behind a vehicle.
DO NOT	leave the machine unattended with the motor running.
DO NOT	replace the motor with any motor that does not have a special grounding connection
DO NOT	use the tie down brackets for lifting this machine.
DO NOT	operate this machine with the transmission guard 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.

\*\*\*\*\*\*

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 Diamant Boart, Inc. and we have advised you.

Diamant Boart, Inc. 17400 West 119th Street Olathe, Kansas 66061

#### FIG. 1



(PRO 65 III DIESEL SHOWN)

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

**1B. HANDLE BARS:** For operator gripping.

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

**1D. OIL PRESSURE GAUGE:** Shows the engine oil pressure

**1E. WATER SAFETY SWITCH:** Stops the engine if the water supply to the blade is interrupted.

**1F. VOLTAGE GAUGE:** Shows the voltage of the electrical system.

**1G. FUEL GAUGE:** Shows the level of fuel in the fuel tank.

**1H. ENGINE TACHOMETER:** Shows the engine RPM's.

**1J. BLADE DEPTH STOP:** Sets the depth stop for repetitive cuts at the same depth.

**1K. BLADE DEPTH INDICATOR:** Displays cutting depth.

**1L. ENGINE START SWITCH:** Start the engine using this switch.

1M. WATER PUMP SWITCH: Optional

**1N.** PARKING BRAKE (Optional): Pull up to lock rear axle parking brake. Push down to release Parking brake.

10. WATER INLET:

1P. ENGINE THROTTLE:

1R. 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.

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

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

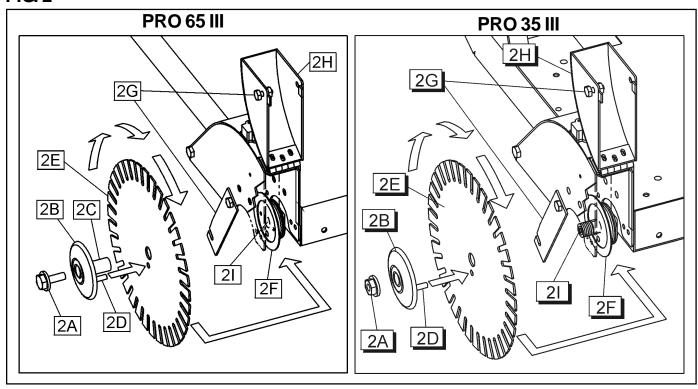
1U. WATER OUTLET:

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

**1W. TRANSMISSION ENGAGE NEUTRAL KNOB:** Pull up to disengage transmission and push the saw in freewheel wheel mode. Push down to engage transmission and drive under power.

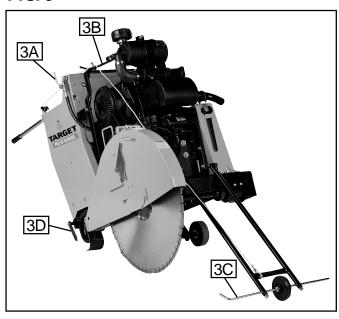
1Z. WATER VALVE:

#### FIG. 2



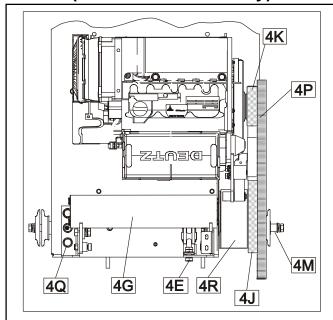
- **2A. BLADE SHAFT BOLT OR NUT:** Use to tighten the outer flange against the diamond blade.
- **2B. OUTER FLANGE:** Use to hold the diamond blade in position.
- **2C. OUTER FLANGE ARBOR:** Use to support the diamond blade.
- **2D. LOCKING PIN:** Use to prevent the diamond blade from rotating on the 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 of the blade guard in the down position.
- **2H. BLADE GUARD FRONT:** The front section of the blade guard.
- **2I. BLADE SHAFT:** Supports the blade flanges and blade.

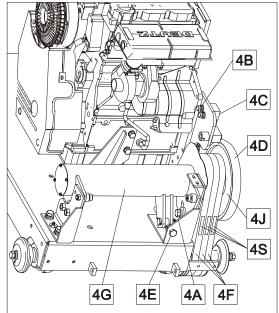
#### FIG. 3

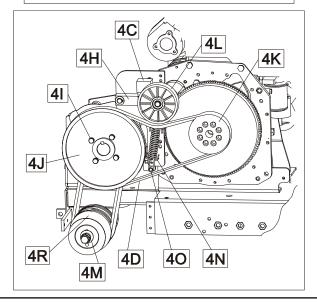


- **3A. WATER VALVE:** Use to control the water supply to the diamond blade.
- **3B. LIFTING BAIL:** The saw can be lifted from this point.
- **3C. FRONT GUIDE:** Use to locate the path of the diamond blade on the cutting line.
- **3D. REAR GUIDE:** Use to locate the path of the diamond blade on the cutting line.

#### FIG. 4 (PRO 65 III Diesel Only)







- **4A. JACKSHAFT CLAMPING BOLTS:** Locks Jackshaft in position.
- **4B. BUMPER LOCKING BOLTS:** Locks Idler Bumper in place.
- **4C. BUMPER:** Reduces vibration on Idler Arm Assembly.
- **4D. COGGED FLAT DRIVE BELT:** Drives jackshaft from engine crankshaft.
- **4E. JACKBOLT:** Turn counterclockwise to tension v-belts.
- **4F. V-BELTS:** Banded 3 Groove 3VX set of 3. Drives Bladeshaft.
- **4G. JACKSHAFT ASSEMBLY:** Transfers power and slows RPM to bladeshaft.
- **4H. IDLER ARM:** Arm holds idler pulley in position.
- **4I. SPROCKET BOLTS:** Holds Jackshaft Sprocket in place.
- 4J. JACKSHAFT SPROCKET: Drives jackshaft.
- **4K. ENGINE CRANKSHAFT SPROCKET:** Drives cogged belt.
- **4L. IDLER PULLEY:** Applies force to backside of cogged drive belt to maintain tension.
- **4M. BLADESHAFT:** Supports Blade flanges and Blade.
- **4N. IDLER SPRING:** Maintains tension on idler pulley.
- **40. SPRING ANCHOR:** Anchors spring, can be rotated to install spring.
- **4P. STRAIGHT EDGE TOOL:** Used to align engine sprocket and crankshaft sprocket.
- **4Q. BLADESHAFT BOLTS:** Fastens bladeshaft and jackshaft. Right side is adjustable to align jackshaft.
- 4R. V-BELT PULLEY: On Bladeshaft..
- **4S. TENSION GAUGE:** Goodyear TensionRite<sup>™</sup> gauge indicates proper tension when installing v-belts.

#### 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 this entire Operation's Manual and are familiar with the operation of the machine.

#### WITH MACHINE COLD AND SETTING LEVEL:

- 1. Check engine oil. Fill to the full mark on dip stick with 15W40 class CE or CD oil.
- 2. Connect battery cables.
- 3. Electric Models: Verify all electrical connections are intact.

#### **1 - 2 HOUR OPERATION CHECK LIST:**



ALWAYS park machine on a level surface with the engine "OFF" and the ignition switch set in the "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!!
- 3. Check the transmission drive chain. DO NOT over tighten!!

#### 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.

#### **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. Lubricate bladeshaft bearings (Standard ball bearings only Pro 35).
- 6. Lubricate front wheel bearings.

#### **SERVICE EVERY 50 HOURS:**

- 1. Clean engine air fins.
- 2. Lubricate rear axle bearings.
- 3. Check blade drive V-belt tension. DO NOT over tension!!!

#### **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 transmission drive chain and sprockets for looseness.
- 5. Check engine air cleaner hose and clamps.
- 6. Check DC lift pump fluid level.
- 7. Check hydrostatic transmission fluid level.

#### **SERVICE EVERY 250 HOURS:**

- 1. Lubricate bladeshaft bearings. (Quad-sealed bearings Pro 65).
- 2. Replace fuel filter (in-line type).

#### **SERVICE EVERY 500 HOURS:**

- 1. Replace DC lift pump fluid.
- 2. Replace hydrostatic transmission fluid.
- 3. Replace fuel filter (spin-on type).

#### **SERVICE YEARLY:**

1. Replace air filter safety element.







**WARNING** 



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.



USE

**Use:** Wet sawing of old and new concrete and asphalt.

**Tools:** Diamond blades — water cooled, Ø: 12",14", 18", 20", 24", 26", 30", 36", 42" and 48" with Arbor Ø - 1" (For information, contact your Target supplier)

#### Depths of Cut (Maximum):

	Blade Size				
MODEL	12"	14"	18"	20"	24"
35 III Diesel	3½	4 ½	6 ½	7 ½	9½
65 III Diesel	3 ½	4 ½	6 ½	7 ½	9 ½
Side Plunge			2"	3"	n/a

	Blade Size				
MODEL	26"	30"	36"	42"	48"
35 III Diesel	10 ½	12 ½	n/a	n/a	n/a
65 III Diesel	10 ½	12	15	17	20
Side Plunge	n/a	n/a	n/a	n/a	n/a



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 Fig. 1 and 2)

#### 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).

#### Moving The Saw With The Engine Off:

- Turn Engine Start Switch (1L) to the "1" (RUN) position.
- Raise the saw by pressing up on the Toggle Switch (1R) on the Speed Control Lever (1S) until the Diamond Blade (2E) (if installed) clears the pavement surface.
- Release the Parking Brake (if equipped) by pulling up on Brake Knob (1N).
- Pull up on the Neutral Knob (1W).
- 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 parked 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:

- Turn Engine Start Switch (1L) to the "1" (RUN) position.
- Raise the saw by pressing up on the Toggle Switch (1R) on Speed Control Lever (1S) until Diamond Blade (2E) (if installed) clears the pavement surface.
- Push down on the Neutral Knob (1W).
- Push down on the Parking Brake Knob (1N) (if equipped).
- Set Water Safety Switch (1E) to "0" (OFF).
- Speed Control Lever (1S) must be in the STOP (1V) position to start the saw. The engine WILL NOT start unless the Speed Control Lever (1S) is in the STOP (1V) position.
- Diesel Models: Pull Throttle (1P) out halfway.
- Turn the Engine Start Switch (1L) to the "2" (START) position until the engine starts, then release the switch. It will return to "1" (RUN) position. If the engine does not start, repeat these steps.
- PUSH the Control Lever (1S) forward for Forward saw movement, or to the rear for Reverse saw movement.
   The further you push the lever the faster the speed.

#### TRANSPORT (BLADE REMOVED)

(See Fig. 1, 2, and 3)



Turn engine off. Set Speed Control Lever (1S) to STOP position. Remove diamond blade (2E) before transport. Set Neutral Control Knob (1W) to ENGAGE position (DOWN). Set Parking Brake (1N) ON (UP) (if equipped).

When moving the saw up and down ramps, with the 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.



WARNING! DO NOT roll the saw down a ramp while the transmission is in NEUTRAL (1V).

**Lifting The Saw.** The saw can only be lifted by the factory installed Lifting Bail (3B).

#### To Transport By Vehicle:

- Set Engine Start Switch (1L) in the "0" (OFF) position.
- Set Speed Control Lever (1S) in the STOP (1V) position.
- Set Transmission Engage (1W) to engage down position.
- Set Parking Brake (1N) to up position (if equipped).
- Push Handle Bars (1B) inward and tighten Knobs (1A).



Block the saw in place and secure it into place with chains or straps to prevent movement during transport.

#### 4

#### **CHECK BEFORE STARTING**













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

- Fuel: Check the engine maintenance manual.
  - Diesel Models: #2 Diesel fuel is recommended.
- 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 oil is recommended.
- For start up, refer to the engine manual.

#### 5

#### FITTING THE BLADE

(See Fig. 1 and 2)



Always set the Engine Start Switch (1L) to the "0" (OFF) position before mounting the blade.

- Set the Engine Start Switch (1L) to the "0" (OFF) position.
- Raise the machine to a high position [by pressing the Toggle Switch (1R) on the Control Lever (1S) upward].
- Loosen the bolt on the Blade Guard Latch (2G).
- Raise the front half of the Blade Guard (2H).
- Unscrew the Blade Shaft Bolt (2A) or Nut (2A). Remove Outer Flange (2B).
- Fit Diamond Blade (2E) to Outer Flange Arbor (2C) or Shaft Arbor (2I).
- 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) or Nut (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) or Nut (2A) on the Right Hand side has Left Hand threads. The Blade Shaft Bolt (2A) or Nut (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 a Wrench, remove the rear retaining bolt.
- Raise the Spade Safety Latch 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 and tighten using Wrench.

#### 6

#### STARTING THE SAW

(See Fig. 1, 2 and 3)



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 and transmission guard in place.

- Follow the operating instructions and warnings on top of the saw cowl.
- Close the Water Valve (1Z).
- 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 (3C). Align the Front Guide (3C), Rear Guide (3D) and Diamond Blade (2E) with the line on the surface.
- To start the saw with no water pressure, set the Water Safety Switch (10) to the "0" (OFF) position.
- Set Speed Control Lever (1S) to the STOP (1V) position. Saw will not start unless the Speed Control Lever (1S) is in the STOP (1V) position.
- Start the engine using the Engine Start Switch (1L). Follow the procedure in the engine manual.
- Let the engine warm up for several minutes with the Engine Throttle (1P) set at idle.
- When ready, open the Water Valve (1Z).
- Set Water Safety Switch to "1" (ON).



Test for adequate water supply [2-1/2 to 5 gal/min (10 to 20 lit./min)]. Low water flow will cause damage to diamond blades.

- Move the saw forward or reverse slowly by pushing or pulling on the Speed Control Lever (1S). Move the saw slowly to prevent stalling the blade. Make sure the Front Guide (3C), Rear Guide (3D) and the Diamond Blade (2E) stay on the line.
- Lower the saw by pushing the Toggle Switch (1R) down on the Speed Control Lever (1S) until the Diamond Blade (2E) is at the desired cutting depth (See "Blade Cutting Depth Information—Below).

#### **Blade Cutting Depth Information:**

This saw is equipped with a Blade Depth Indicator (1K) which indicates the depth at which the Diamond Blade (2E) is cutting. This saw also includes a Blade Depth Stop (1J) which stops the cutting depth of the blade at a specified depth.

#### Use of the Blade Depth Indicator (1K):

- If the engine is running Turn the Engine Start Switch (1L) to the "0" (OFF) position to STOP the engine.
- Turn the Engine Start Switch (1L) to the "1" (ON) position.
- 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 Knob (1K) to the zero position. The blade cutting depth will now be indicated on the Depth Indicator (1K) when the blade is lowered into the cutting surface.

#### Use of the **Blade Depth Stop** (1J):

- Lower the blade by pushing the Toggle Switch (1R) on the Speed Control Lever (1S) downward until the Diamond Blade (2E) is at the required depth [as indicated on the Blade Depth Indicator (1K)].
- Set the Blade Depth Stop (1J) by turning the knob clockwise until tight. 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 Toggle Switch (1R) on the Control Lever (1S).



The saw WILL NOT lower to any depth greater than the position set on the BLADE DEPTH STOP (1J). Therefore, if a deeper cut is required, the Depth Stop Knob MUST be loosened, then SET to the new depth required.

7

#### STOPPING THE SAW

(See Fig. 1, 2 and 3)



For EMERGENCY STOP, press down the RED PALM SWITCH (1T) on the cowl. This will stop the engine, disconnect power to all electrical items except lights. Reset the RED PALM SWITCH (1T) by pulling up the red button. Then restart engine.



DO NOT use the EMERGENCY STOP SWITCH (1T) for normal, routine engine stopping.

- Move The Control Lever (1S) to the STOP (1V) position.
- Raise the Diamond Blade (2E) out of the cut by pressing the Toggle Switch (1R) on the Control Lever (1S) upward until the Diamond Blade (2E) clears the surface.
- Set the Engine Throttle (1P) to the IDLE position.
- Turn off the Water Valve (3A).
- Allow engine to run for 5 minutes to cool the Turbocharger, or damage to Turbocharger will occur.
- STOP the engine by turning the Engine Start Switch (1L) to the "0" (OFF) position.



DO NOT turn Key Switch (11) off while saw is moving.

8

#### **INCIDENTS DURING SAWING**

(See Fig. 1 and 2)

If ENGINE STOPS during sawing, check the following:

- Engine out of fuel—Check Fuel Gauge (1G).
- Lack of water signals the Water Safety Switch (1E) to stop the engine. Press button (1E) to "0" (OFF), and then restart the engine.
- Excessively fast cutting speed will stall engine.
- Red Palm Emergency Switch (1T) has been pressed down. Reset by pulling up the red button.
- Engine may be hot or cogged belt may be broken.

If DIAMOND BLADE (2E) STOPS during sawing, check:

• Drive belt tension is inadequate.

#### **SAW LOWERS TOO FAST:**

 The lowering rate of the saw can be adjusted using the Flow Control Valve at the rear or the saw. If the saw falls too quickly, turn the knob on the Flow Control Valve 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: STRAIGHTLINE SAWING

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 of the saw can be pivoted to compensate for this situation.

- Loosen the three (3) 1/2"-13 UNC Bearing Mounting Bolts on the Left End of the rear axle.
- The axle is adjusted by turning the M12 Adjustment Bolt located at the rear lower left of saw cowl.
- If the saw steers to the RIGHT while sawing, Turn the Adjustment Bolt COUNTER-CLOCKWISE.
- If the saw steers to the LEFT while sawing, Turn the Adjustment Bolt CLOCKWISE.
- Verify transmission belts and pulleys and chain and sprockets are in line.
- Re-tighten the three (3) 1/2"-13 UNC Bearing Mounting Bolts.

#### 10

#### **MAINTENANCE**



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

After each use: CLEAN the machine.

#### LUBRICATION:







**ENGINE OIL:** Check daily. Change Engine Oil and Oil Filter after every 100 HOURS of operation. 15W40 is generally recommended.

\* Diesel Models: 15W40 CE or CD

Pro 35 III

Pro 65 III

**Capacity:** 7.0 Qt. (6.5l) 8.5 Qt. (8l)

**STANDARD BALL BEARING BLADESHAFT BEARINGS:** Lubricate daily with a Premium Lithium 12 based grease conforming to NLG1 GRADE #2 consistency. (Pro 65, Pro 35)

#### **Lubricate Daily:**

- Front Wheel Bearings
- Blade Shaft Bearings (Pro 35 III only)

#### Lubricate every 50 hours:

Rear Axle Bearings

#### Lubricate every 100 hours:

Front Axle Pivot Bearings

#### Lubricate Every 250 Hours: (Pro 65 only)

 Quad-Sealed Blade Shaft Bearings: Use only a Premium Lithium 12 based grease conforming to NLG1 GRADE #2 consistency.

#### TRANSMISSION GEARBOX:

 This unit is lubricated for the life of the unit, so no lubrication is required. If, for any reason, the unit does need to be refilled, use Mobilux EP023, 1.5 quarts (1.41 l), synthetic gear lubricant.

#### **HYDRAULIC SYSTEM:**

· Refer to Section 12, Hydraulic System .

#### **AIR FILTER:**

 Replace the Air Filter Outer Element when the Restriction Indicator Red Signal appears. DO NOT clean the Inner Safety Element!!!!!

#### To Change The Air Filter Element:

- Remove the Air Filter end cap by unlatching the clamps, and pulling the cap off.
- Pull the Air Filter Outer Element out of the filter housing and replace. 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. Replace end cap and close latches.
- 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.

#### **DRIVE CHAIN AND SPROCKETS:**

Check for wear and looseness. Tighten as required.



Do not over tighten the Drive Chain!! The correct tightness allows for some slack.



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.

#### **FUEL FILTERS:**

- Replace in-line Fuel Filter every 250 hours.
- Replace spin-on Fuel Filter every 500 hours.

#### 11

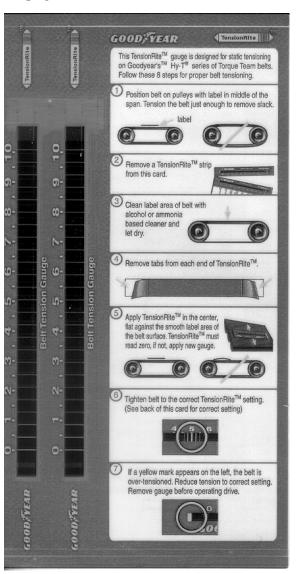
# BLADESHAFT V-BELT AND JACKSHAFT BELT TENSION

(See Fig. 1, 4 and 5)

#### **PRO 65 DIESEL**

This saw is equipped with a cogged flat drive belt (4D), which is driven off the engine crankshaft sprocket (4K) to the sprocket (4J) on the jackshaft (4G). Tension is maintained by a spring-loaded flat idler (4L). This cogged belt is made with Kevlar and does not need retensioning. The jackshaft (4G) drives the bladeshaft (4M) with 3 banded high-tension v-belts (4F). The banded v-belts are properly tensioned but after a few hours of operation will stretch and become loose. Use **Goodyear TensionRite™ Gauges**, Fig. 5 to ensure proper tension. Read the instructions on the gauge to apply and use properly.

#### FIG. 5



#### TO TENSION V-BELTS - PRO 65 DIESEL:

- Turn Engine Start Switch (1L) to the "0" (OFF) position.
- Remove Belt Guard.
- Use Wrench to loosen clamping bolts (4A).
- Loosen Bolts (4B) on the Bumper (4C) to release tension on Cogged Belt (4D).
- Banded V-Belts supplied by Target come with a Goodyear TensionRite<sup>™</sup> tension gauge (4S). When retensioning belts, **ALWAYS** use TensionRite<sup>™</sup> gauge to ensure achieving the proper tension.
- Using a Wrench, Rotate jackbolt (4E) CLOCKWISE to release the tension.
- Apply TensionRite<sup>™</sup> Adhesive Strip (4S) to all three belts in the center of the span as indicated on the instructions.
- Using a Wrench, Rotate jackbolt (4E) COUNTER-CLOCKWISE until the Yellow indicator line on the TensionRite™ Strip lines up with the appropriate number for used belts.

Pro 65 III Diesel Tension # 2.6

- Do not over tension.
- Tighten (2) Clamp bolts (4A) locking the Jackshaft tube (4G) in place.
- Press the Idler Bumper (4C) down against the Idler Arm (4H) slightly compressing the rubber.
- Tight bolts (4B) to lock the Bumper (4C) in place.

#### TO INSTALL NEW V-BELT - PRO 65 DIESEL:

- Turn Engine Start Switch (1L) to the "0" (OFF) position.
- Remove Belt Guard.
- Remove Frame Corner.
- Loosen Bolts (4B) on the Bumper (4C) to release tension on Cogged Belt (4D).
- Remove Cogged Belt (4D).
- Remove 4 Bolts (4I) on the Jackshaft Sprocket (4I).
- Remove Sprocket (4J).
- Use Wrench to loosen clamping bolts (4A).
- Using a Wrench, Rotate jackbolt (4E) CLOCKWISE.
   This will rotate the Jackshaft tube (4G) down, loosening the V-Belts (4F).
- Banded V-Belts supplied by Target come with a Goodyear TensionRite<sup>™</sup> tension gauge (4S). When replacing belts, **ALWAYS** use the TensionRite<sup>™</sup> gauge to ensure achieving the proper tension.
- Replace Banded V-belts (4F) in complete sets only!

- Using a Wrench, Rotate jackbolt (4E) COUNTER-CLOCKWISE to just take up the slack in the Belts.
- Apply TensionRite<sup>™</sup> Adhesive Strip (4S) to all three belts in the center of the span as indicated on the instructions.
- Using a Wrench, Rotate jackbolt (4E) COUNTER-CLOCKWISE until the Yellow indicator line on the TensionRite™ strip lines up with the appropriate number for new belts

Pro 65 III Diesel Tension # 3.5

**Do not over tension.** Save Extra TensionRite™ gauges for future retensioning.

- Tighten (2) Clamp bolts (4A) locking the Jackshaft tube (4G) in place.
- Install Sprocket (4J), on to jackshaft.
- Install 4 Bolts (4I) and lock-washers on the Jackshaft Sprocket (4J). Tighten with wrench.
- Install Flat Cogged Belt (4D) over both sprockets (4J, 4K). It may be necessary to remove the idler spring (4N) from the spring anchor (4O) to get the belt on.
- The spring anchor (40) can be loosened and rotated to make installing the Idler Spring (4N) easier. Install the spring and tighten bolts.
- Press the Idler Bumper (4C) down against the Idler Arm (4H) slightly compressing the rubber.
- Tighten bolts (4B) to lock the Bumper (4C) in place.
- Replace Frame Corner and Belt Guard.

#### **SPROCKET ALIGNMENT - PRO 65 DIESEL:**

The sprockets, (4K, 4J) are aligned at the factory. If for any reason the jackshaft (4G) or bladeshaft (4M) are removed or replaced, it is critical to maintain alignment. Use a straight edge (4P) to align both sprockets within, 0.03 inches. The right bladeshaft bolts (4Q) can be loosened to adjust the jackshaft (4G) to get the sprockets (4K, 4J) parallel. The sprocket (4J) can be adjusted left or right to align with the engine sprocket (4K). Align the v-belt pulley on the bladeshaft (4M) to the v-belt pulley on the jackshaft (4R) after the sprockets have been aligned.

## TO TENSION V-BELTS - PRO 35 III DIESEL AND ELECTRIC:

ALWAYS use Goodyear TensionRite™ Gauges, Fig. 5 to ensure achieving the proper tension. Refer to the instructions on the back of the TensionRite gauge for proper use. 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.

Model	Used Belts	New Belts
Pro 35 III Diesel 26"/30"	'# 1.75	# 2.25
Pro 35 III Diesel 18"	# 2.25	# 3.0
Pro 35 III Electric	# 2.25	# 3.0

- Turn Engine Start Switch (1L) to the "0" (OFF) position.
- Using the wrench, loosen the horizontal clamping bolts at the front of the machine.
- Turn the Tensioning Bolt [at the front of machine]
   CLOCKWISE until the V-Belts are tight.
- Replace V-Belts in complete sets only.



Never tension V-Belts beyond the original factory tension. Loose V-Belts result in poor saw performance and short belt life.

#### 12 HYDRAULIC SYSTEM

The hydraulic system on this saw is used to RAISE / LOWER the Diamond Blade (2E) and to propel the saw FORWARD or REVERSE. The hydraulic system consists of a Hydrostatic Transmission, a DC Lift Pump with a Flow Control Valve, and a Hydraulic Lift Cylinder.

- Check Hydrostatic Transmission 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 Hydrostatic Transmission fluid every 500 hours of operation. Fill Hydraulic Reservoir with SAE 10W30 API Class SE,CC,CD motor oil. DO NOT OVERFILL! Check oil level when saw is level.
- Check the DC Lift Pump fluid level periodically.
   Maintain oil level with Dextron III transmission fluid. DO NOT OVERFILL!
- The lowering rate of the saw can be adjusted using the Flow Control Valve at the rear of the saw. If the saw falls too quickly, turn the knob on the Flow Control Valve CLOCKWISE until an adequate lowering rate is set.

#### 13 PARKING BRAKE (OPTIONAL)

If installed, this saw has a mechanical parking brake that locks the rear axle by engaging a mechanical lock into a gear on the rear axle.

- To engage parking brake, pull up on the parking brake knob (1N). The brake will lock when the locking lever lines up with a slot in the gear.
- To disengage the brake, push down on the parking brake knob (1N).

#### 14 | IMPORTANT ADVICE

(See Fig. 2)

- Tighten loose nuts and bolts regularly, particularly after several hours of operation.
- Check V-Belt tension regularly. Re-tighten V-Belts as necessary. Replace V-Belts in complete sets only.
- 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.
- Use the Emergency Stop Switch (1T) ONLY in the case of emergency. Do not use for normal engine stopping.
- Put the saw in STOP (1V) before turning the key to the OFF position.

#### 15 PRO 35III ELECTRIC SAWS

The Pro 35III is available in several 20HP electric versions. It is available in 4 different voltages with three (3) different motors. It comes completely wired with appropriate plugs, connectors, wiring, motor starter, overload heaters and an in dash current load meter. The electric saw is operated exactly like a gas saw after it is connected to the power source. The key must be turned to the Start position and will engage the motor starter. Turn the key off, the motor will stop. The emergency stop switch and water safety switch will also stop the motor.

Operate the electric saw at a speed where the current load meter does not exceed 100% of full load current. Exceeding 100% of the full load amperage will result in the current overload heaters to overheat and shut off the electric motor. After allowing the overload to cool off, (approx. 5 minutes), press the RESET button on the front of the electrical enclosure box. Turn the key to the start position to engage the motor starter.



**DO** turn the "ON/OFF" switch to the "0" (OFF) position prior to connecting the machine to the power source.

make sure electric powered machines are plugged into a properly grounded circuit.

**DO** make sure power cords are the proper size and in good condition.

**DO** follow all electrical codes in your area.

DO use correct voltage and proper extension cords.

Never carry tool by cord or yank it to disconnect it from receptacle. Keep cord away from heat, oil and sharp edges.

DO disconnect tools from power source when not in use, before servicing and when changing accessories.

DO carefully maintain and clean for better and safer performance. Follow instructions for changing accessories. Inspect tool cords periodically and, if damaged, have repaired by authorized service facility.

**DO NOT** lay power cords in or near the water.

**DO NOT** leave this machine unattended with the motor running.

**DO NOT** replace the motor with any motor that does not have a special grounding connection.

#### 16

#### **ACCESSORIES**

#### **BLADE GUARD CONVERSION KITS:**

Use the proper size blade guard for the particular diamond blade size being operated. Consult factory for blade guards that are available.

#### WEIGHT KIT: (Pro 65 III)

A rear mounted Weight Kit is available. It is standard equipment for units shipped with 48" blade guards. It can be purchased as an accessory for units with smaller blade guard sizes.

#### **ACCESSORIES AND KITS**

Item	Part No.	35III	65III
Deluxe Light Kit		167656	181117
Tie Down Kit	167190	Χ	Χ
48" Conversion Kit	191345		X
Blade Guards:			
18" Slip-on	176635	X	Х
18" Bolt-on	174273	X	X
26" Slip-on	176645	X	Х
26" Bolt-on	167475	X	Х
30" Slip-on	166911	X	Х
30" Bolt-on	167676	X	Х
36" Slip-on	166931		Х
36" Bolt-on	174275		X
48" Bolt-on	166932		Х
Water Pump Kit		167554	191322
Blade Stack Kit			
(Std. Shaft) (4.50")	176292	X	
Blade Stack Kit,			
QDS Flanges:			
5.00" Dia	177327		Х
6.00" Dia	163480		Χ
Side Plunge Kit	191349		Χ

#### Notes:

- If A Box Is NOT CHECKED, That Item Is NOT AVAILABLE For The Saw Model Shown.
- New Saw Models (Pro 35 III, Pro 65 III) Have Some OF These Items Installed As Standard.

Equipment: Check Specification Sheet For Standard Features.

#### 17 METRIC HARDWARE

These saws are equipped with the majority of its hardware items (capscrews, nuts, etc.) utilizing the METRIC system, although a limited number of hardware items continue to use the ENGLISH (INCH) system of measurement. Within this manual and the corresponding parts list, these components are specified by the measurement. Be sure to use the proper hardware (METRIC or ENGLISH) or threaded fasteners (such as welded-on nuts) could be damaged.

#### 18 REPAIRS

We carry out all repairs in the shortest possible time and at the most economical prices. (See front page for our address and phone numbers)

#### 19 SPARE PARTS

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

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

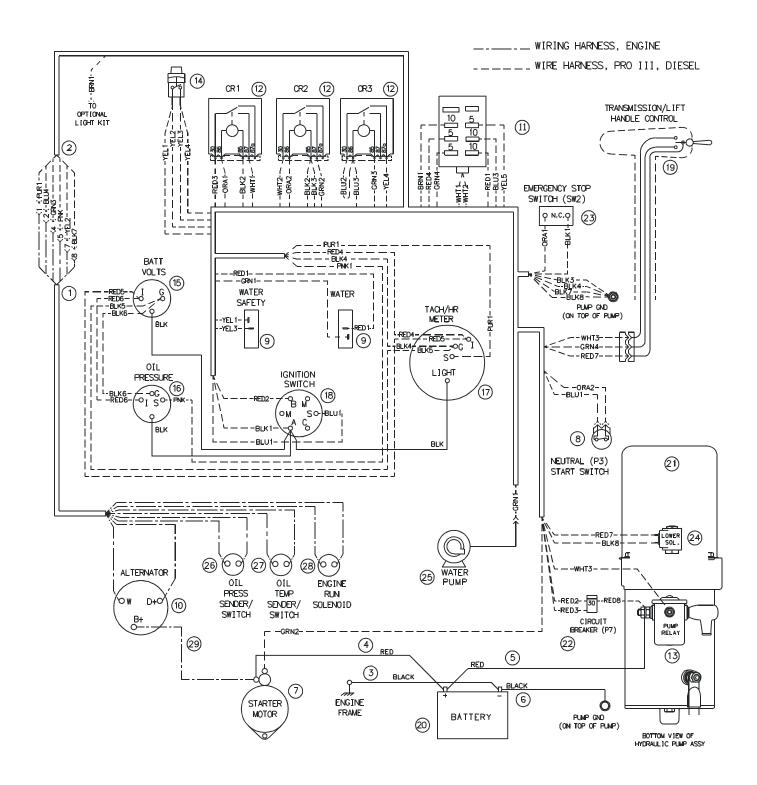
#### PRO 35 III DIESEL BLADE SIZE CONVERSION CHART

	Size To Convert To			
Size To Convert From	14"/18"	26"	30"	
14"/18"	No Conversion Required 18" Configured as: 18" Wide Slip-On Blade Guard 1 Spades & 1 Bolt Hold Guard Two 3VX450-3 Banded V-Belts Engine Pulley 4.12 Dia Blade Shaft Pulley 6G3V4.75 5.00" Flanges Accessory Drive belt 3vx450	176645 Wide SLIP-ON Blade Guard 183642 Pulley, 2.8" Dia 7 Gr. 183814 Socket head Capscrews 183816 V-Belts, Set of 2 3VX435-3 Banded 166022 Accessory drive Belt 3VX430	166911 Wide SLIP-ON Blade Guard 183642 Pulley, 2.8" Dia 7 Gr. 183814 Socket head Capscrews 183816 V-Belts, Set of 2 3VX435-3 Banded 166022 Accessory drive Belt 3vx430	
26"	176635 18" Wide SLIP-ON Blade Guard 183643 Engine Pulley, 4.12" Dia 7 Gr. 183639 Hex Hd head Capscrews M24 x 2.0 x 80 183815 Lockwasher, M24 183726 V-Belts, Set of 2 3VX450-3 Banded 160858 Accessory drive Belt 3VX450	No Conversion Required 26" Configured as: 26" Wide Slip-On Blade Guard 1 Spades & 1 Bolt Hold Guard Two 3VX435-3 Banded V-Belts Engine Pulley 2.8 Dia Blade Shaft Pulley 6G3V4.75 5.00" Flanges Accessory Drive belt 3VX430	166911 Wide SLIP-ON Blade Guard	
30"	176635 18" Wide SLIP-ON Blade Guard 183643 Engine Pulley, 4.12" Dia 7 Gr. 183639 Hex Hd head Capscrews M24 x 2.0 x 80 183815 Lockwasher, M24 183726 V-Belts, Set of 2 3VX450-3 Banded 160858 Accessory drive Belt 3vx450	176645 Wide SLIP-ON Blade Guard	No Conversion Required 30" Configured as: 30" Wide Slip-On Blade Guard 1 Spades & 1 Bolt Hold Guard Two 3VX435-3 Banded V-Belts Engine Pulley 2.8 Dia Blade Shaft Pulley 6G3V4.75 5.00" Flanges Accessory Drive belt 3VX430	

#### PRO 65 III DIESEL BLADE SIZE CONVERSION CHART

	Size To Convert To				
Size To Convert From	14"/18"	26"	30"	36"	48"
14"/18"	No Conversion Required 18" Configured as: 18" Wide Slip-On Blade Guard 1 Spades & 1 Bolt Hold Guard Three 3VX400-3 Banded V-Belts Engine Sprocket, 8.0" Dia Blade Shaft Pulley 9G3V4.12 5.00" Flanges Trans Sprocket Teeth Trans Chain: #50, 62 Pitches	176645 Wide SLIP-ON Blade Guard 166677 Trans Drive Chain 163729 Trans Drive Sprocket 183710, Engine Sprocket 5.6* Use Upper Mount Holes on Idler Assy Move Jackshaft to Front Mounting Hole location	166911 Wide SLIP-ON Blade Guard 191302 Drive Belts 166677 Trans Drive Chain 163729 Trans Drive Sprocket 183710, Engline Sprocket 5.6* 191303 Bladeshaft assy w/ Quad Seal Bearings Use Upper Mount Holes on Idler Assy Move Jackshaft to Front Mounting Hole location	166931 Wide SLIP-ON Blade Guard 191302 Drive Belts 166677 Trans Drive Chain 163729 Trans Drive Sprocket 183710, Engine Sprocket 5.6* 191303 Bladeshaft assy w/ Quad Seal Bearings 176681 Guard Attach. Group 36* Use Upper Mount Holes on Idler Assy Move Jackshaft toFront Mounting Hole	191345 Conversion Kit 183710, Engine Sprocket
26"	176635 Wide SLIP-ON Blade Guard 183707 Engine Sprocket, 8" 163728 Trans Drive Sprocket 176702 Trans Drive Chain Move Jackshaft to Rear Mounting Hole location. Use Lower Mounting Holes on Idler Assy	No Conversion Required 26" Configured as: 26" Wide Slip-On Blade Guard 1 Spades & 1 Bolt Hold Guard Three 3VX400-3 Banded V-Belts Engine Sprocket, 5.6" Dia Blade Shaft Pulley 9G3V4.12 5.00" Flanges Trans Sprocket 19 Teeth Trans Chain: #50, 58 Pitches	166911 Wide SLIP-ON Blade Guard 191302 Drive Belts 191303 Bladeshaft assy w/ Quad Seal Bearings	166931 Wide SLIP-ON Blade Guard 191302 Drive Belts 191303 Bladeshaft assy w/ Quad Seal Bearings 176681 Guard Attach. Group 36"	191345 Conversion Kit
30"	176635 Wide SLIP-ON Blade Guard 191189 Drive Belts 191193 Bladeshaft assy w/ Quad Seal Bearings 183707 Engine Sprocket, 8" 163728 Trans Drive Sprocket 176702 Trans Drive Chain Move Jackshaft to Rear Mounting Hole location Use Lower Mounting Holes on Idler Assy	176645 Wide SLIP-ON Blade Guard 191189 Drive Belts 191193 Bladeshaft assy w/ Quad Seal Bearings	No Conversion Required 30" Configured as: 30" Wide Slip-On Blade Guard 1 Spades & 1 Bolt Hold Guard Three 3VX425-3 Banded V-Belts Engine Sprocket, 5.6" Dia Blade Shaft Pulley 9G3V5.60 6.00" Flanges Trans Sprocket 19 Teeth Trans Chain: #50, 58 Pitches	166931 Wide SLIP-ON Blade Guard 176681 Guard Attach Group	191345 Conversion Kit
36"	176635 Wide SLIP-ON Blade Guard 191189 Drive Belts 191193 Bladeshaft assy w/ Quad Seal Bearings 183707 Engine Sprocket, 8" 163728 Trans Drive Sprocket 176702 TransDrive Chain Move Jackshaft to Rear Mounting Hole locatior Use Lower Mounting Holes on Idler Assy	176645 Wide SLIP-ON Blade Guard 191189 Drive Belts 191193 Bladeshaft assy w/ Quad Seal Bearings  Remove Rear Slip-On Spade to allow attachment of 26* Guard	166911 Wide SLIP-ON Blade Guard  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 Three 3VX425-3 BandV-Belts Engine Sprocket, 5.6" Dia Blade Shaft Pulley 9G3V5.60 6.00" Flanges Trans Sprocket 19 Teeth Trans Chain: #50, 58 Pitches	191345 Conversion Kit
48"	176635 Wide SLIP-ON Blade Guard 191189 Drive Belts 191193 Bladeshaft assy w/ Quad Seal Bearings 176628 Guard Attach. Group* 183707 Engine Sprocket, 8* 163728 Trans Drive Sprocket 176702 Trans Drive Chain 183704 Cogged Belt W-1440 Move Jackshaft to Rear Hole location Use Lower Mounting Holes on Idler Assy 191330 Spring Assembly	176645 Wide SLIP-ON Blade Guard 191189 Drive Belts 191193 Bladeshaft assy w/ Quad Seal Bearings 176628 Guard Attach. Group 183704 Cogged Belt W-1440 191232 Belt Guard 191238 Belt Guard Bracket 191234 Frame Corner 183933 Flange Cover 191330 Spring Assembly	166911 Wide SLIP-ON Blade Guard 191302 Drive Belts 191303 Bladeshaft assy w/ Quad Seal Bearings 176628 Guard Attach. Group 183704 Cogged Belt W-1440 191232 Belt Guard 191238 Belt Guard Bracket 191234 Frame Corner 183933 Flange Cover 191330 Spring Assembly	166931 Wide SLIP-ON Blade Guard 191302 Drive Belts 191303 Bladeshaft assy w/ Quad Seal Bearings 176681 Guard Attach. Group 36" 183704 Cogged Belt W-1440 191232 Belt Guard 191238 Belt Guard Bracket 191234 Frame Corner 183933 Flange Cover 191330 Spring Assembly	48" Drive configured as: 48" Wide Guard Blade Guard Brace 3 3Grv Band 3VX530 V-Belts W-1600 Goodyear Cog Belt 5.6" Engine Sprocket Bladed Shaft Pulley 10G3V7.60" 8.0" Flanges Trans Sprocke:19 Tooth Trans Chain #50 58 Pitches Frame Ext, Belt Guard

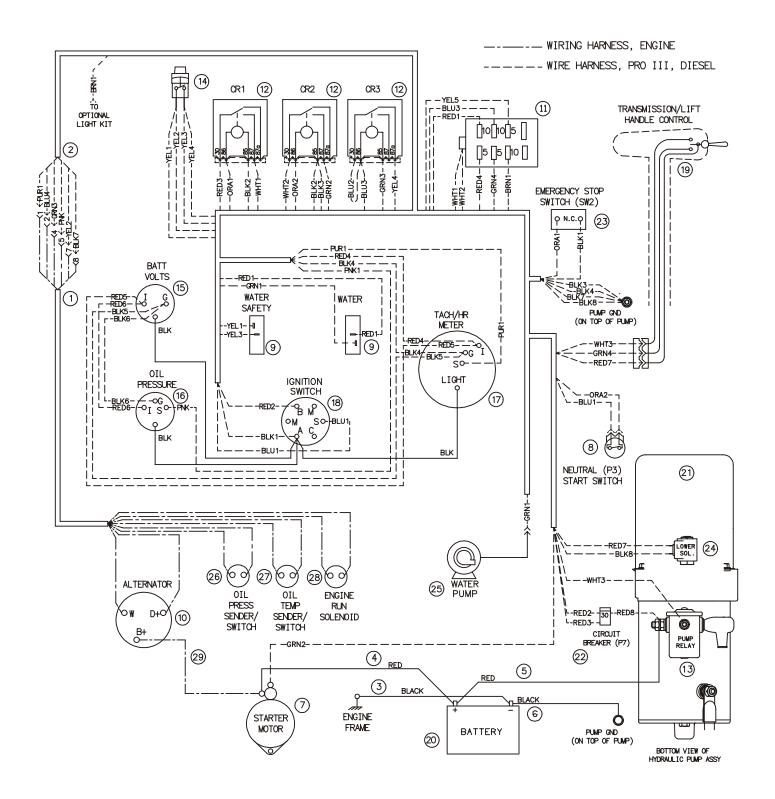
## Diagram 1 - Wiring Diagram - PRO 35 III Diesel, 182127



## Diagram 1 - Wiring Diagram - PRO 35 III Diesel, 182127 Parts List

DIAG.	PART	DESCRIPTION	
LOC.	NO.	DESCRIPTION	REQ.
1		WIRING HARNESS, ENGINE (DEUTZ 4271805)	
2	182126	WIRE HARNESS, PRO III DIESEL	1
3	163179	CABLE, BATTERY, NEGATIVE	
4	163180	CABLE, BATTERY, POSITIVE	1
5	139261	CABLE, BATTERY, POSITIVE, HYD.	1
6	176714	CABLE, BATTERY, NEGATIVE, HYD.	1
7		STARTER (DEUTZ 1180995)	1
8	176398	SWITCH, NEUTRAL SAFETY	1
9	166711	SWITCH, ROCKER	2
10		ALTERNATOR, (DEUTZ 1180648)	1
11	166622	BLOCK, FUSE	1
12	166708	RELAY, N.O. N.C.	3
13	166121	SOLENOID RELAY	1
14	178724	SWITCH, WATER PRESSURE	1
15	183896	GAUGE, BATTERY VOLTS	1
16	183853	GAUGE, OIL PRESSURE	1
17	182137	GAUGE, TACH/HOUR METER	1
18	166707	SWITCH, IGNITION	1
19	182100	HANDLE, TRANSMISSION/LIFT CONTROL	1
20	163121	BATTERY, 12 VOLT	1
21	166350	PUMP, HYDRAULIC, LIFT ASSY	1
22	178645	CIRCUIT BREAKER, 30 AMP	1
23	176383	E. STOP SWITCH	1
24	166594	COIL - 12V DC	1
25	164977	WATER PUMP	1
26	191026	SENDER/SWITCH, OIL PRESSURE (DEUTZ 1175981)	1
27		SENDER/SWITCH, OIL TEMPERATURE (DEUTZ 1179305)	1
28		SOLENOID, FUEL (DEUTZ 4270581)	1
29		B+ WIRE (DEUTZ 4179133)	1

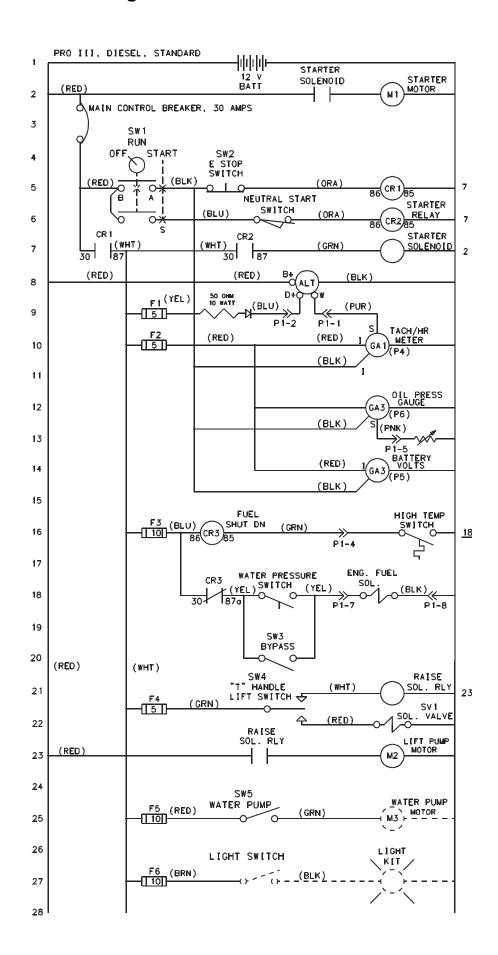
## Diagram 2 - Wiring Diagram - PRO 65 III Diesel, 182139



## Diagram 2 - Wiring Diagram - PRO 65 III Diesel, 182139 Parts List

DIAG.	PART	DECODIDE	QTY.
LOC.	NO.	DESCRIPTION	REQ.
1		WIRING HARNESS, ENGINE (DEUTZ 4270531)	1
2	182126	WIRE HARNESS, PRO III DIESEL	
3	163179	CABLE, BATTERY, NEGATIVE	1
4	163180	CABLE, BATTERY, POSITIVE	1
5	139261	CABLE, BATTERY, POSITIVE, HYD.	1
6	176714	CABLE, BATTERY, NEGATIVE, HYD.	1
7		STARTER (DEUTZ 1181751)	1
8	176398	SWITCH, NEUTRAL SAFETY	1
9	166711	SWITCH, ROCKER	2
10		ALTERNATOR, (DEUTZ 1180648)	1
11	166622	BLOCK, FUSE	1
12	166708	RELAY, N.O. N.C.	3
13	166121	SOLENOID RELAY	1
14	178724	SWITCH, WATER PRESSURE	1
15	183896	GAUGE, BATTERY VOLTS	1
16	183853	GAUGE, OIL PRESSURE	1
17	182138	GAUGE, TACH/HOUR METER	1
18	166707	SWITCH, IGNITION	1
19	182100	HANDLE, TRANSMISSION/LIFT CONTROL	1
20	163121	BATTERY, 12 VOLT	1
21	166350	PUMP, HYDRAULIC, LIFT ASSY	1
22	178645	CIRCUIT BREAKER, 30 AMP	1
23	176383	E. STOP SWITCH	1
24	166594	COIL - 12V DC	1
25	164977	WATER PUMP	1
26	191026	SENDER/SWITCH, OIL PRESSURE (DEUTZ 1175981)	1
27		SENDER/SWITCH, OIL TEMPERATURE (DEUTZ 1179305)	1
28		SOLENOID, FUEL (DEUTZ 4270581)	1
29		B+ WIRE (DEUTZ 4179132)	1

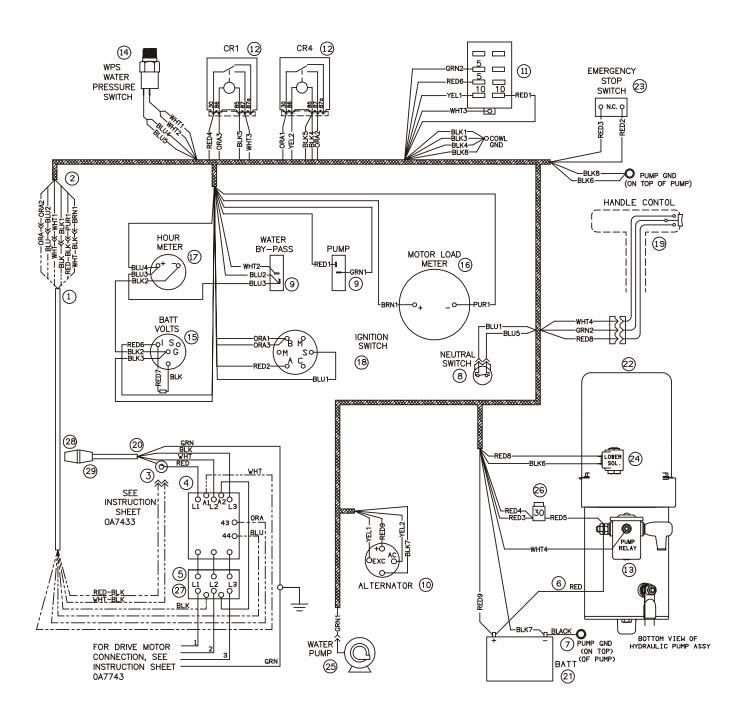
Diagram 3 - Ladder Diagram - PRO 35 III Diesel and PRO 65 III Diesel, 182121



## Diagram 3 - Ladder Diagram - PRO 35 III Diesel and PRO 65 III Diesel, 182121 Component Designators

DESIGNATOR	DEVICE	FUNCTION
ALT	ALTERNATOR	BATTERY CHARGING
СВ	CIRCUIT BREAKER	MAIN POWER
CR1	CONTROL RELAY	POWER TO FUSE BLOCK
CR2	CONTROL RELAY	ENGINE STARTER
CR3	CONTROL RELAY	ENGINE TEMP SHUTDOWN
F1	FUSE, 5A	ALTERNATOR EXCITATION
F2	FUSE, 5A	ENGINE GAUGES
F3	FUSE, 10A	FUEL SOLENOID CIRCUIT
F4	FUSE, 5A	RAISE-LOWER CIRCUIT
F5	FUSE, 10A	WATER PUMP (OPTIONAL)
F6	FUSE, 10A	LIGHT KIT (OPTIONAL)
GA1	GAUGE	ENGINE TACHOMETER & HOURMETER
GA2	GAUGE	ENGINE OIL PRESSURE
GA3	GAUGE	BATTERY VOLTMETER
M1	MOTOR	ENGINE STARTER
M2	MOTOR	HYDRAULIC PUMP
M3	MOTOR	WATER PUMP (OPTIONAL)
P1	PLUG CONNECTOR	COWL TO ENGINE HARNESS
SV1	SOLENOID VALVE	RAISE-LOWER SAW
SW1	SWITCH (KEY)	ENGINE, OFF-RUN-START
SW2	SWITCH (PUSH-PULL)	EMERGENCY STOP
SW3	SWITCH (ROCKER)	WATER SWITCH OFF
SW4	SWITCH (ROCKER)	LIFT SWITCH, RAISE-OFF-LOWER
SW5	SWITCH (ROCKER)	WATER PUMP, ON-OFF (OPTIONAL)

## Diagram 4 - Wiring Diagram - PRO 35 III Electric, 182062



## Diagram 4 - Wiring Diagram - PRO 35 III Electric, 182602 Parts List

DIAG.	PART	DECORPTION	QTY.
LOC.	NO.	DESCRIPTION	
1		CABLE, CONTROL	<b>REQ.</b> 1
2		WIRING HARNESS, COWL	1
3		TRANSFORMER, CURRENT	1
4	176915	STARTER, MOTOR CONTROL	1
5	176917	OVERLOAD RELAY	1
6	176838	CABLE, BATTERY, POSITIVE, HYD.	1
7	176714	CABLE, BATTERY, NEGATIVE, HYD.	1
8	176398	SWITCH, NEUTRAL SAFETY	1
9	166711	SWITCH, ROCKER	2
10	117154	ALTERNATOR	1
11	166622	BLOCK, FUSE	1
12	166708	RELAY, N.O. N.C.	2
13	166121	SOLENOID RELAY	1
14		WATER PRESSURE SWITCH	1
15	166438	GAUGE, BATTERY VOLTS	1
16	176918	METER, MOTOR LOAD	1
17	163779	GAUGE, HOUR METER	1
18	166707	SWITCH, IGNITION	1
19	182100	HANDLE,TRANSMISSION/LIFT CONTROL	1
20	183433	CORD, 4 GA, 208/230 VOLT/20 HP (208/230V/20HP Only)	1
20	183402	CORD, 8 GA, 460/575 VOLT/20 HP, 575 VOLT/30 HP (460/575V/20HP & 575V/30HP Only)	1
20	176957	CORD, 6 GA, 460 VOLT/30 HP (460V/30HP Only)	1
21	163121	BATTERY, 12 VOLT	1
22	166633	HYDRAULIC PUMP ASSY	1
23	176383	E. STOP SWITCH	1
24	166594	COIL - 12V DC	1
25	164977	WATER PUMP, ASSY	1
26	178645	CIRCUIT BREAKER, 30 AMP	1
27	176949	OVERLOAD HEATER, 208 VOLT/20 HP (208V/20HP Only)	3
27	176948	OVERLOAD HEATER, 230 VOLT/20 HP (230V/20HP Only)	3
27	176947	OVERLOAD HEATER, 460 VOLT/20 HP (460V/20HP Only)	3
27	176946	OVERLOAD HEATER, 575 VOLT/20 HP (575V/20HP Only)	3
27	183361	OVERLOAD HEATER, 460 VOLT/30 HP (460V/30HP Only)	3
27	183337	OVERLOAD HEATER, 575 VOLT/30 HP (575V/30HP Only)	3
28	176931	CONNECTOR, 208/230 VOLT/20 HP (208/230V/20HP Only)	1
28	176942	CONNECTOR, 480 VOLT/20 HP (480V/20HP Only)	1
28	176944	CONNECTOR, 575 VOLT/20 & 30 HP (575V/20&30HP Only)	1
28	183403	CONNECTOR, 480 VOLT/30 HP (480V/30HP Only)	1
29	176930	PLUG, 208/230 VOLT/20 HP (208/230V/20HP Only)	1
29	176943	PLUG, 480 VOLT/20 HP (480V/20HP Only)	1
29	176945	PLUG, 575 VOLT/20 & 30 HP (575V/20&30HP Only)	1
29	183404	PLUG, 480 VOLT/30 HP (480V/30HP Only)	1

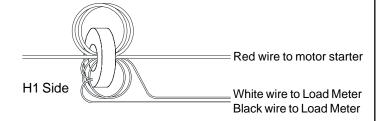
#### **Diagram 5 - PRO 35 III Electric Wiring Instructions**

This equipment includes the electric Motor, Motor overload protection, and Motor control circuit. For correct operation, the equipment must be selected and configured for each voltage and horsepower rating as shown in the following table. Inspection and/or changes to the equipment are to be performed only after the electrical service has been disconnected and then by qualified personnel.

	208V, 3 Ph	230V, 3 Ph	460V, 3 Ph	575V, 3 Ph	460V, 3 Ph	575V, 3 Ph
DBI Drive Motor PN	167042	001325	001325	161461	183360	183335
Rated Horsepower	20	20	20	20	30	30
Motor Full Load Current	60 A	52 A	26 A	20.6 A	37 A	29.6 A
Motor Connections	1 2 3	4 5 6 0 0 9	4 5 6 0 7 08 0 9	71 72 73	07 08 09	1 2 3
	LINE	1 2 3	91 92 93	LINE	01 02 03	LINE
		LINE	LINE		LINE	
DBI Overload Heater PN	176949	176948	176947	176946	183361	183337
Vendor PN	SFH83	SFH82	SFH75	SFH72	SFH78	SFH76
Power Cord PN	183433	183433	183402	183402	176957	183402
Cord Description	4 Cond, 4 GA	4 Cond, 4 GA	4 Cond, 8 GA	4 Cond, 8 GA	4 Cond, 6 GA	4 Cond, 8 GA
DBI Power Connector PN	176931	176931	176942	176944	183403	176944
Vendor PN	460C9W	460C9W	2733SW	2743SW	460C7W	2743SW
DBI Power Plug PN	176930	176930	176943	176945	183404	176945
Vendor PN	460P9W	460P9W	2731SW	2741SW	460P7W	2741SW
Current Transformer wiring *						_
No of primary turns	1	1	2	2	1	2
No of secondary turns	-2	0	0	+6	+5	-4

#### **Current Transformer Wiring**

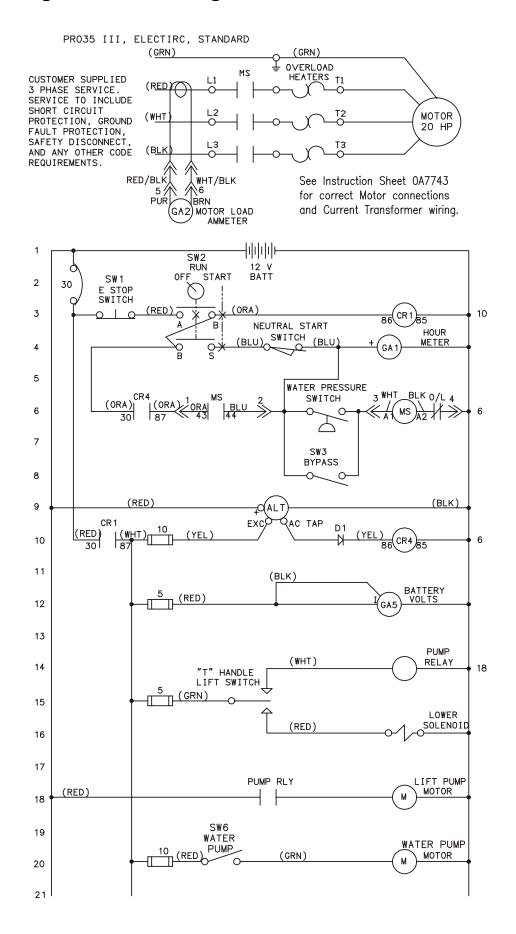
A single primary turn is made with a single pass of the red wire through the hole in the transformer, entering from the 'H1' side. Two primary turns are made by passing the red wire through the transformer hole twice, resulting in a single loop. The -2 secondary turns are made by passing the white wire of the transformer through the hole two times from opposite the 'H1' side. The +6 secondary turns are made by passing the white wire of the transformer through the hole six times entering from the 'H1" side.



#### NOTICE

The end user is responsible for providing the electrical service in accordance with the National Electrical Code and any other applicable local codes. Service must include at the minimum: Motor disconnecting means, Motor branch-circuit short-circuit protection, Motor branch-circuit ground-fault protection, and correctly sized Motor circuit conductors.

## Diagram 6 - Ladder Diagram - PRO 35 III Electric, 182068



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 800-825-0028

 Corp. Office FAX
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 913-928-1300

 Int'l. E-mail
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## A

## **WARNING**



The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

