

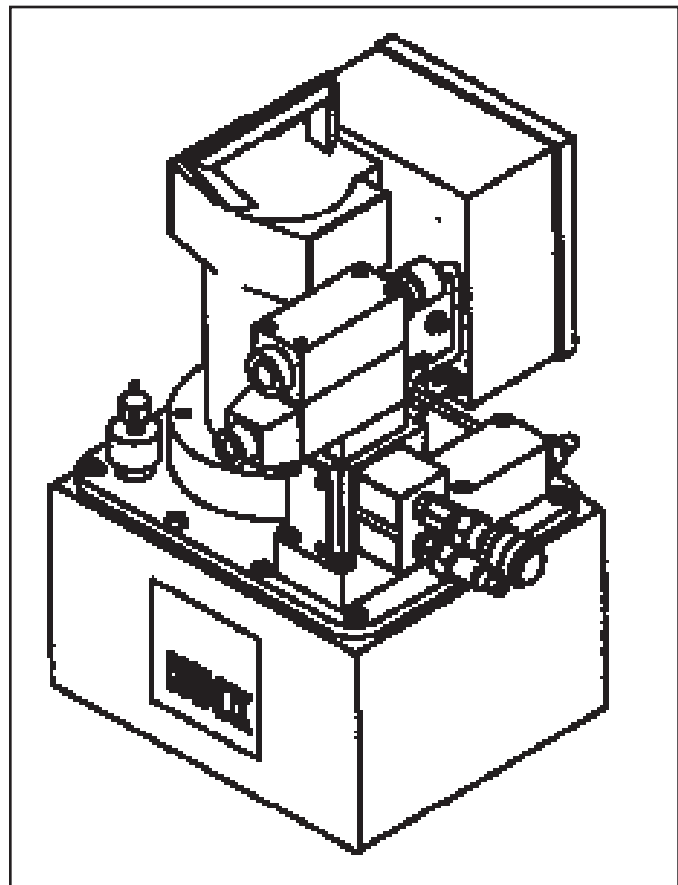
Alcoa
Fastening
Systems



INSTRUCTION MANUAL

940-220 *POWERIG®*

HYDRAULIC UNIT



Makers of Huck®, Marson®, Recoil®
Brand Fasteners, Tools & Accessories

Form HK 604
03-22-2004



NOTICE

THIS MANUAL APPLIES TO MODEL 940-220

SERIAL NUMBER 1191 AND ABOVE

SAFETY

This instruction manual must be read with particular attention to the following safety guide lines, by any person servicing or operating this tool.

1. Safety Glossary



— Product complies with requirements set forth by the relevant European directives.



— Read manual prior to using equipment.



— Eye protection required while using this equipment.



— Hearing protection required while using this equipment.



WARNINGS - Must be understood to avoid severe personal injury.

CAUTIONS - show conditions that will damage equipment and or structure.

Notes - are reminders of required procedures.

Bold, Italic type and underlining - emphasizes a specific instruction.

2. Huck equipment must be maintained in a safe working condition at all times and inspected on a regular basis for damage or wear. Any repair should be done by a qualified repairman trained on Huck procedures.
3. Repairman and Operator must read manual prior to using equipment and understand any Warning and Caution stickers/labels supplied with equipment before connecting equipment to any primary power supply. As applicable, each of the sections in this manual have specific safety and other information.
4. See MSDS Specifications before servicing the tool. MSDS Specifications are available from you Huck representative or on-line at www.huck.com. Click on Installation Systems Division.
5. When repairing or operating Huck installation equipment, always wear approved eye protection. Where applicable, refer to ANSI Z87.1 - 1989
6. Disconnect primary power source before doing maintenance on Huck equipment.
7. If any equipment shows signs of damage, wear, or leakage, do not connect it to the primary power supply.
8. Make sure proper power source is used at all times.
9. Never remove any safety guards or pintail deflector.
10. Never install a fastener in free air. Personal injury from fastener ejecting may occur.
11. When using an offset nose always clear spent pintail out of nose assembly before installing the next fastener.
12. If there is a pinch point between trigger and work piece use remote trigger. (Remote triggers are available for all tooling).
13. Do not abuse tool by dropping or using it as a hammer. Never use hydraulic or air lines as a handle. Reasonable care of installation tools by operators is an important factor in maintaining tool efficiency, eliminating downtime, and in preventing an accident which may cause severe personal injury.
14. Never place hands between nose assembly and work piece.
15. Tools with ejector rods should never be cycled with out nose assembly installed.
16. When two piece lock bolts are being used always make sure the collar orientation is correct. See fastener data sheet of correct positioning.

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OVERVIEW

Specifications

Width 16.1 inches 409 mm

Length 13.9 inches 354 mm

Height 18.5 inches 470 mm

Weight (w/o hyd. fluid) 66 pounds 30 kg

Electrical system 220 volts, 50/60 hertz, single phase, AC

Control System Solenoid operated directional valve, 24 volts

Motor 12000 RPM, 1-1/8 HP, 20 amps. nominal

Pump 2-stage, gear-piston type, 70 cu. in./min.
@5000 psi out pressure
(Output pressure adjustable to 10,000 psi)

Pressure setting as shipped:

 RETURN 2,200 - 2,400 psi 15,200 - 16,500 kPa

 PULL 5,400 - 5,700 psi 37,200 - 39,300 kPa

Reservoir Capacity 2.6 gallons 10 liters

Minimum Operating Temperature (ambient) 0°F -18°C

Maximum Hydraulic Fluid Temperature 150°F 65°C

Hydraulic Fluid is not supplied by Huck. Use automatic transmission fluid, DEXTRON III, or equivalent. Fire-resistant hydraulic fluid must be used to comply with OSHA regulation 1926.302 paragraph (d): "the fluid used in hydraulic power tools shall be fire-resistant fluid approved under Schedule 30 of the US Bureau of Mines, Department of Interior, and shall retain its operating characteristics at the most extreme temperatures to which it will be exposed." Fluid viscosity 300 SUS @ 100°F and 50 SUS @ 210°F is recommended for ambient temperatures 0 to 130°F.

Certified by the Canadian Standards Association (File 13975)

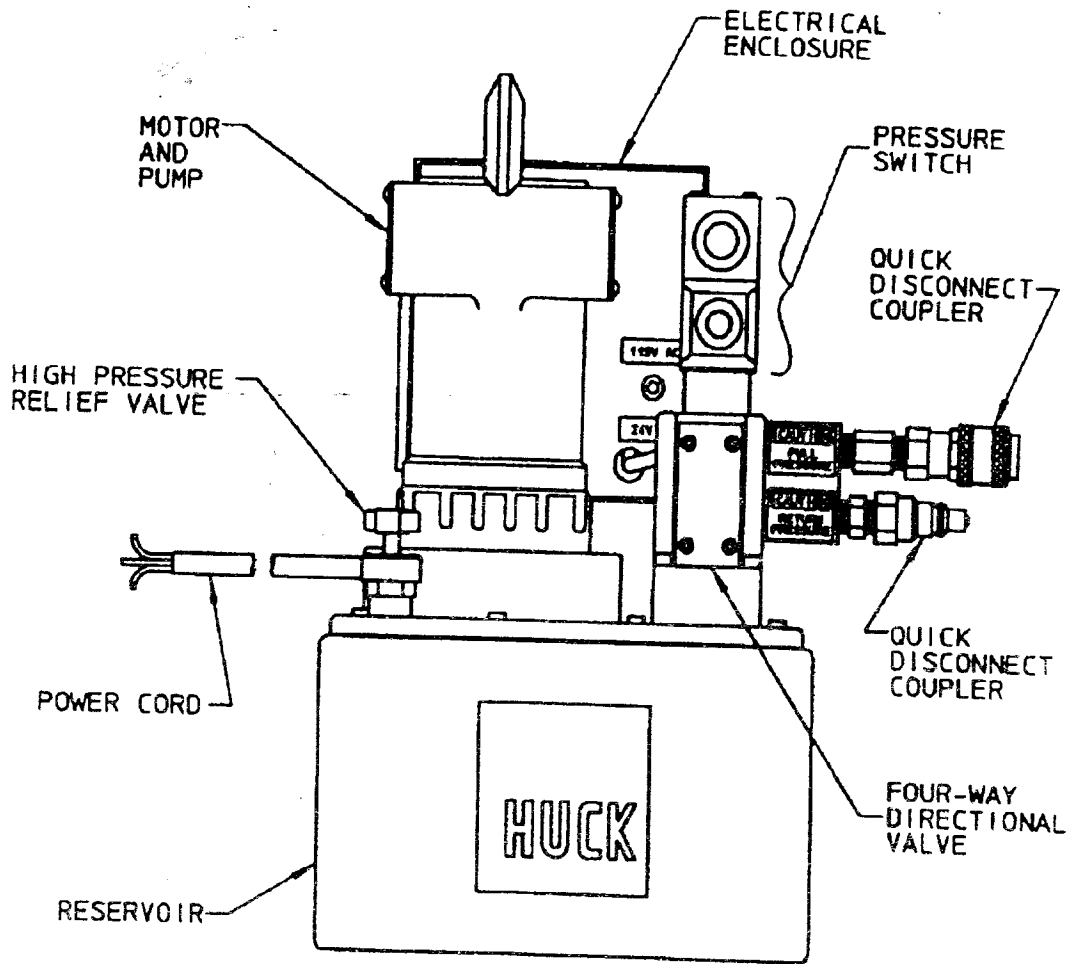


FIGURE 1
MAIN COMPONENTS

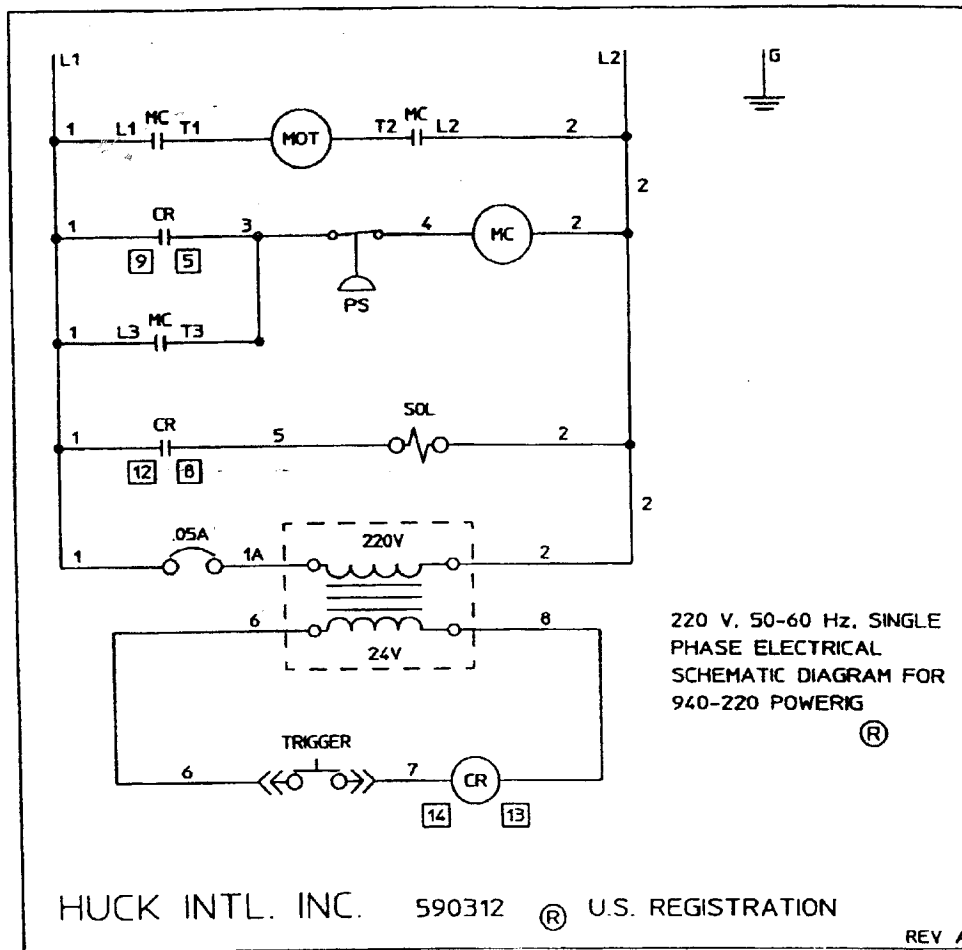


FIGURE 2
ELECTRICAL SCHEMATIC DIAGRAM

Description

Model 940-220 POWERIG® Hydraulic Unit is a portable, electrically operated power source designed to operate all Huck hydraulic installation equipment excluding HUCK-SPIN® tools.

Please refer to Figure 1. **Bold text** in this section of the manual indicates a part identified in Figure 1.

Model 940-220 operates on 220 volt AC, 50-60 Hz, one-phase electrical power. The **power cord** is type SO 600 volt 12/3. The POWERIG Hydraulic Unit requires 15 amp (minimum) circuit with a common wall outlet.

An **electrical enclosure** contains a motor contactor, a transformer, a relay and a circuit breaker. See also Figure 5.

Hydraulic pressure is developed by a two-stage, gear-piston **pump** driven by a 1 1/8 horsepower universal electric **motor**.

Pressurized fluid is directed by a **four-way directional valve** to either the PULL port or the RETURN port of the installation equipment.

The **four-way directional valve** is operated by a 24 volt AC control circuit.

The **high pressure relief valve** controls PULL pressure (maximum pressure of the unit) and is adjustable by the operator.

An internal relief valve is preset at the factory to protect the operator and equipment. The internal relief is not adjustable by the operator.

A **pressure switch** controls RETURN pressure and turns off the POWERIG Hydraulic Unit at the end of an installation cycle.

Pressures are adjustable to match Huck equipment being used. See applicable tool instruction manual for pressure settings for other Huck installation equipment.

Hydraulic fluid is stored in the **reservoir** which also serves as the base. Remove the **filler cap/dipstick** to check fluid level and to add fluid.

Hydraulic quick disconnect couplers are furnished for connecting hoses from installation equipment.

Principal of Operation

Figure 2 shows the electrical schematic diagram of the POWERIG Hydraulic Unit.

Pressure switch (PS) contacts are normally closed. Increasing pressure opens contacts.

When the tool trigger switch is depressed, 24 volts AC is applied between relay terminals CR13 and CR14 activating the relay coil and closing two sets of contacts, CR9-CR5 and CR12-CR8. Closing contacts CR9-CR5 starts the motor. Closing contacts CR12-CR8 activates the solenoid coil of the pilot valve. The pilot valve shifts the directional valve spools. Pressurized fluid is directed to the PULL pressure port of the installation equipment.

When the tool trigger switch is released, the relay contacts open. The solenoid coil is de-activated and the spring return of the pilot valve shifts the directional valve spools. Pressurized fluid is directed to the RETURN pressure port of the installation equipment.

The motor contactor is held closed until the preset RETURN pressure is reached and pressure switch (PS) contacts open. The motor turns off, the pressure drops, and pressure switch returns to the closed (normal) position.

PREPARATION

Service

Introduction of foreign material into Hydraulic Unit will result in poor performance and down time for repair. To avoid this, observe the following good practices:

Clean the area around the filler cap before adding hydraulic fluid.

Use a clean funnel with a filter.

Keep quick-disconnect couplers clean by keeping them off the floor. Wipe off quick-disconnect couplers before connecting them.

Before Use

Fill the reservoir with hydraulic fluid, approximately 1-1/2 gallons (5.7 liters), until the fluid level is between the grooves of the dipstick.

The POWERIG Hydraulic Unit is shipped without hydraulic fluid.

CHECKING PRESSURES

Checking PULL Pressure and RETURN Pressure

Check pressures before use, before troubleshooting, and after overhauling. See pressures given in specific tool instruction manual. Use T-10280 Gage (Figure 9) to check and adjust pressures.

- 1) Plug the POWERIG® Hydraulic Unit into a 220 volt, 15 (minimum) amp wall outlet.
 - 2) Plug an auxiliary trigger (113056, Figure 8) into the outlet on the POWERIG Hydraulic Unit control panel.
 - 3) Connect "T" gage, #T-10280, to the hydraulic quick-disconnects.
 - 4) Move the "T" gage lever to the middle position (open).
 - 5) Press and hold the auxiliary trigger to start the POWERIG Hydraulic Unit. The motor will start. Hydraulic fluid will be directed to the PULL pressure port of the installation equipment.
- 7) Read the PULL pressure on the gage.
 - 8) Move the "T" gage lever to the OPEN position.
 - 9) Release the tool trigger. Hydraulic fluid is directed to the RETURN pressure port of the installation equipment.
 - 10) Slowly move the "T" gage lever to the RETURN position.
 - 11) Read the maximum pressure on the gage (just before the unit turns off). This is the RETURN pressure.
 - 12) Disconnect the electrical power.
 - 13) Remove the "T" gage.

CAUTION

This check must be completed quickly as the hydraulic unit's components should not be subjected to sustained high pressure.

- 6) Move the "T" gage lever to the PULL position.

ADJUSTING PRESSURES

NOTE: Use "T" gage T-10280 to check pressures during adjustment, see the "CHECKING PRESSURES" section of this manual. Set pressures according to the installation equipment manual.

Adjusting PULL Pressure

NOTE: PULL pressure is the maximum POWERIG® pressure. Do not exceed the pressure rating of the installation equipment. See the installation equipment manual for pressure rating.

WARNING

IF RECOMMENDED MAXIMUM PRESSURE IS EXCEEDED, VIOLENT FAILURE OF FASTENING SYSTEM MAY OCCUR. THIS MAY CAUSE SEVERE PERSONAL INJURY.

- 1) Loosen the jam nut of the high pressure relief valve.
- 2) Turn the adjusting screw clockwise to increase PULL pressure **OR** counter-clockwise to decrease PULL pressure.
- 3) Tighten the jam nut after PULL pressure has been adjusted.
- 4) Check PULL pressure. Follow instructions in the appropriate section of this manual.

Adjusting RETURN Pressure

- 1) Loosen the jam nut on pressure switch.
- 2) Turn the adjusting screw clockwise to increase RETURN pressure **OR** counter-clockwise to decrease RETURN pressure.
- 3) Tighten the jam nut on pressure switch after return pressure has been adjusted.
- 4) Check RETURN pressure. Follow instructions in the appropriate section of this manual.

OPERATION

Each time before using the POWERIG® Hydraulic Unit:

- 1) Check the fluid level in the reservoir and add hydraulic fluid as required.
- 2) Inspect hoses for damage and wear. If hoses show wear that has removed more than the surface texture, they must be replaced.
- 3) Check the entire system and repair any leaks.
- 4) Check electrical cord and extension for abrasion and replace as required.

Operating Tools

Plug the power cord into a grounded wall outlet. If an extension cord is used, it should be UL type SO or STO, 600 volt, 12/3 if 25 feet long and 10/3 if 50 feet long.

Check pressures and adjust as necessary. See the appropriate sections in this manual.

WARNINGS must be understood before checking pressures.

Connect a Huck hydraulic tool to the POWERIG® Hydraulic Unit using a hose kit. See TABLE 2 for hose kit part numbers.

Be sure that:

- 1) Hose from PULL PRESSURE on the control panel runs to the port stamped with a letter P on the tool.
- 2) Hose from RETURN PRESSURE on the control panel runs to the port stamped with letter R on the tool.

Plug the control cable from the tool into the two-prong socket on the POWERIG Hydraulic Unit control panel.

Depress the tool trigger switch and let the the POWERIG Hydraulic Unit operate for a few minutes to circulate fluid and remove air from the system.

Attach a nose assembly to the installation equipment. Fasteners may now be installed. Follow instructions in the tool manual.

MAINTENANCE

Parts List

See Figures 3, 4, and 5 for part numbers.

Wiring

See Figure 5 for wiring diagram and TABLE 1 for wire list.

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NOTES:

① ITEMS #10 AND #11 ARE COMPONENTS OF ITEM #4.

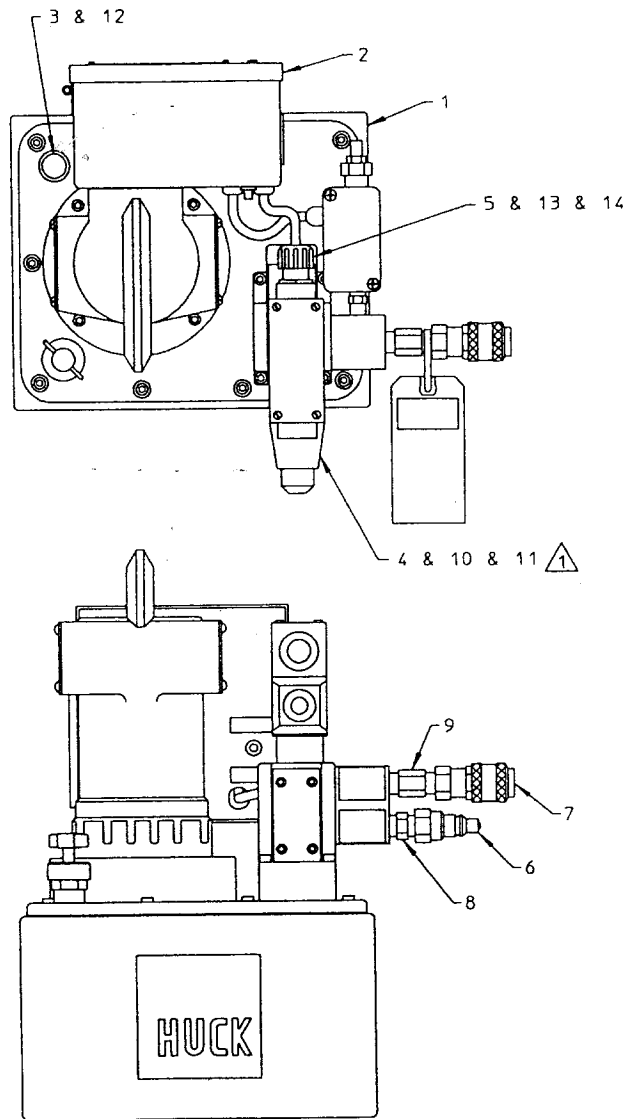


FIGURE 3
FINAL ASSEMBLY

505453	2	SPLICE-BUTT (22-16)	113	14
502366	2	LOCKNUT 1/2	102	13
500811	1	O-RING AS568-114 C366Y D70	80	12
112473	1	SOLENOID ASSEMBLY	N	11
112120	1	SOLENOID COIL	N	10
504057	1	NIPPLE, FLODAR	161	9
502729	1	PIPE NIPPLE 3/8 NPTF	151	8
110439	1	HYDR COUPLER BODY	A	7
110438	1	HYDR COUPLER NIPPLE	A	6
506360	2	STRAIN RELIEF	114	5
112119	1	PILOT VALVE	N	4
103592	1	FILLER CAP ASSEMBLY	A	3
124073	1	ELECTRICAL ENCLOSURE ASSY	D	2
112121	1	PUMP, MOTOR & VALVE ASSEMBLY	D	1
PART NO	QTY	DESCRIPTION		ITEM

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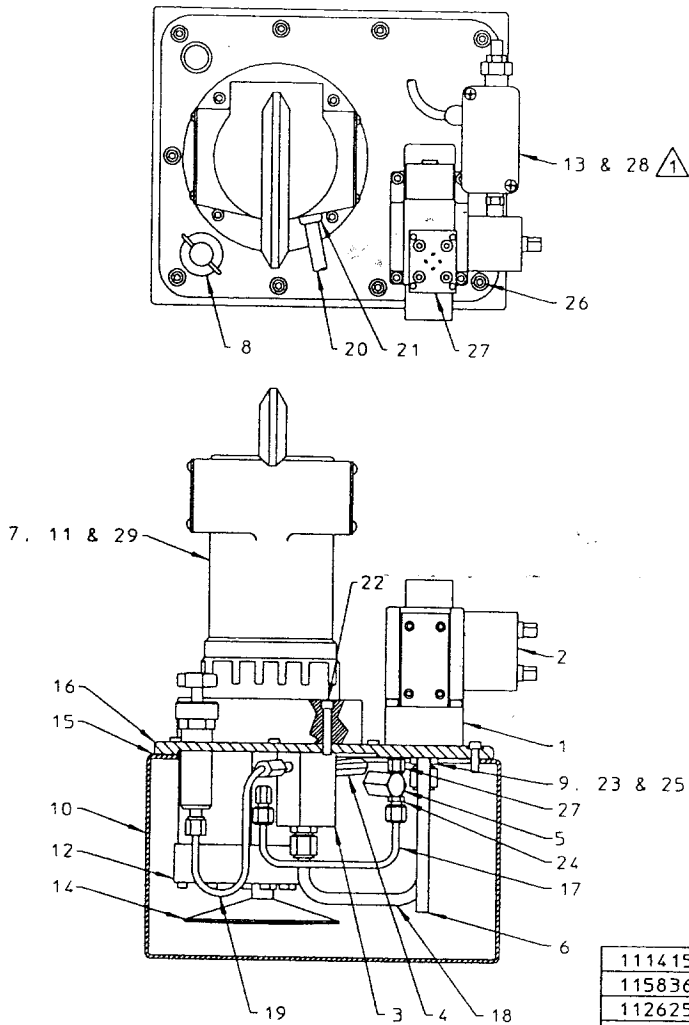
940-220 POWERIG FINAL ASSEMBLY

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			SUPERCEDES	06/01/94				

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NOTES:

⚠ ITEM #28 IS A COMPONENT OF ITEM #13.



111415	1	MOTOR BRUSHES-SET	A	29
115836	1	MICROSWITCH	N	28
112625	1	ADAPTER PLATE, PILOT VALVE	N	27
500071	10	SCR SOC HD CAP 1/4-20 X 3/4	3	26
504408	1	O-RING ASS568-012 CV747 D75	78	25
504157	2	CONNECTOR	163	24
503165	1	BACK-UP RING PARBAK 8-012	85	23
500067	4	SCR SOC H CAP 10-24 X 1-1/2	3	22
111371	1	STRAIN RELIEF	N	21
112630	1	POWER CORD FOR 220VAC 940RIG	N	20
111368	1	RELIEF LINE ASSEMBLY	N	19
111367	1	PUMP LINE ASSEMBLY	N	18
111366	1	PILOT LINE ASSEMBLY	N	17
111364	1	COVER PLATE	N	16
111357	1	COVER PLATE GASKET	N	15
111355	1	FILTER ASSEMBLY	N	14
115753	1	PRESSURE SWITCH ASSEMBLY	N	13
111347	1	PUMP ASSEMBLY	N	12
112117	1	MOTOR 1-1/8 HP 220V	N	11
111189	1	RESERVOIR	N	10
107217	1	ADAPTER UNION	A	9
106397	1	EXTERNAL RELIEF VALVE	N	8
103918	1	PUMP MOTOR COUPLING	N	7
103904	1	RETURN LINE	N	6
103903	1	ACCUMULATOR	N	5
103901	1	RELIEF VALVE	N	4
103900	1	CHECK VALVE	N	3
103599	1	MANIFOLD	N	2
103596	1	DIRECTIONAL VALVE	N	1
PART NO	QTY	DESCRIPTION		ITEM

FIGURE 4
PUMP, MOTOR & VALVE ASSEMBLY

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PUMP, MOTOR & VALVE ASSEMBLY
940-220 POWERIG

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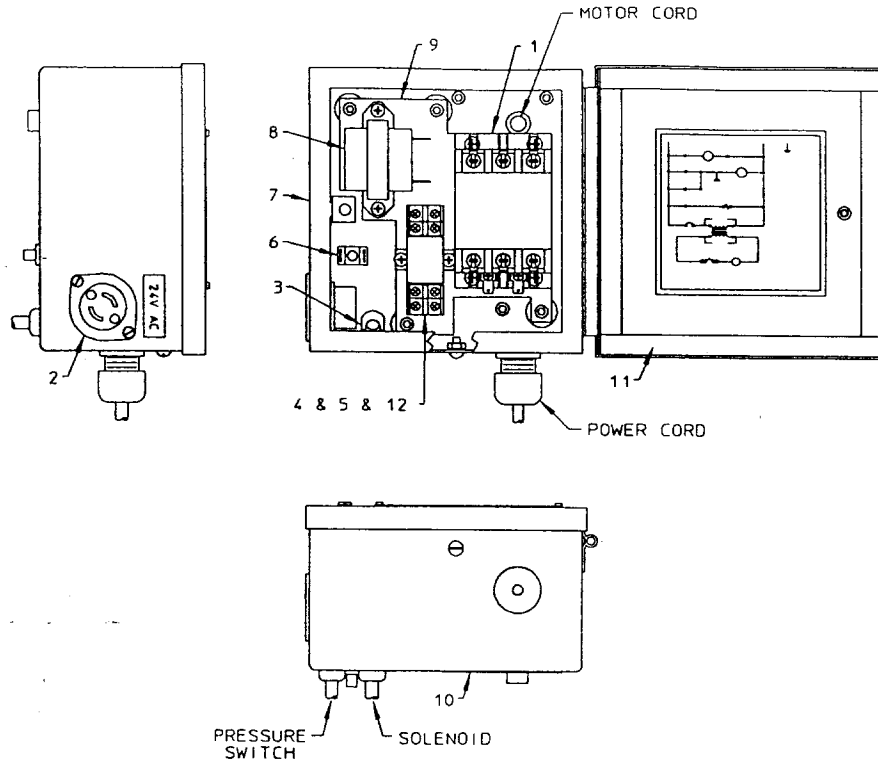
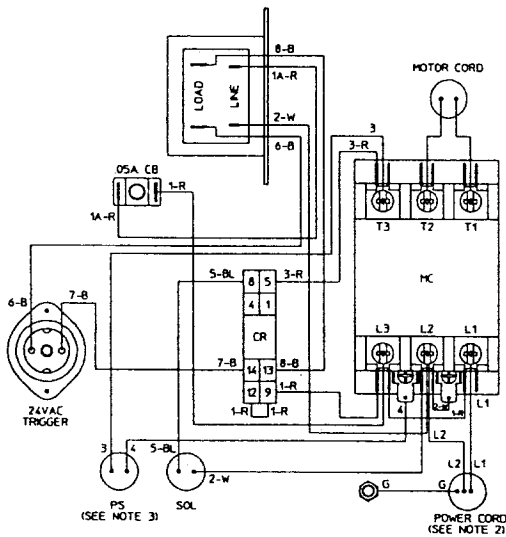


FIGURE 5
ELECTRICAL CONTROL ASSEMBLY



NOTES:

1. WIRE LABEL CODE: XX-XX
 - R - RED
 - W - WHITE
 - B - BLUE
 - BL - BLACK

INDICATES ALPHANUMERIC LABEL TO APPEAR AT BOTH ENDS OF CONDUCTOR.
2. WIRE COLOR CODE FOR POWER CORD:
 - L1 - LIGHT BLUE OR BLACK
 - L2 - BROWN OR WHITE
 - G - GREEN/YELLOW OR GREEN
3. WIRE COLOR CODE FOR PRESSURE SWITCH:
 - 3 - LIGHT BLUE OR BLACK
 - 2 - BROWN OR WHITE

123539	1	WIRE HARNESS 940 POWERIG	B	14
123497	1	CORD ASSEMBLY, SOLENOID	B	13
506393	1	HOLD DOWN SPRING, RELAY	124	12
506368	2.25'	GASKET, ENCLOSURE	200	11
123432	1	GASKET, MOTOR	B	10
123433	1	PANEL, ENCLOSURE	B	9
506625	1	TRANSFORMER	124	8
123479	1	ENCLOSURE	D	7
506626	1	CIRCUIT BREAKER .05 AMP	124	6
506366	1	RELAY	124	5
506365	1	SOCKET, RELAY	124	4
506364	2	STRAIN RELIEF	114	3
110685	1	BASE FEMALE	A	2
506627	1	CONTACTOR	124	1
124073	X	ELECTRICAL CONTROL ASSEMBLY D	XX	
PART NUMBER	QTY	DESCRIPTION		ITEM

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KINGSTON, NEW YORK 12401

ELECTRICAL CONTROL ASSEMBLY
940-220 POWERIG

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			SUPERCEDES	06/01/94				
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TABLE 1
Wire List

Wire Number	Color	From	To
1A	red	transformer line	circuit breaker
1	red	CR 12	CR 9
1	red	circuit breaker	MC L3
1	red	MC L1	MC L3
1	red	MC L3	CR 9
2	white	MC L2	transformer line
2	white	MC terminal	MC L2
3	red	MC T3	CR 5
6	blue	transformer load	trigger
7	blue	trigger	CR 14
8	blue	transformer load	CR 13

Preventive Maintenance

An effective preventive maintenance program includes scheduled inspections to detect and correct minor troubles. Perform the following steps monthly during normal use:

Inspect hydraulic and electrical fittings to be sure they are secure.

Inspect hoses for signs of damage. Replace hoses if abrasion is deeper than the surface texture.

Rotate hoses end-for-end to equalize wear and fatigue.

Inspect during operation to detect any abnormal heating, vibration or leakage.

Inspect hydraulic fluid. If contamination (particles, water, sludge, etc.) is detected, clean the reservoir and replace fluid.

Clean exterior surfaces.

Check supply voltage. Do not operate the the POWERIG® Hydraulic Unit if the line voltage is more than 5 percent above or below 220 Volts.

Troubleshooting

Always check the simplest possible cause of malfunction first. For example, blown fuse, tripped circuit breaker, defective switch or control cord. Eliminate each possible cause until the defective circuit or part is located. Where possible, substitute known good parts for suspected bad parts. A qualified electrician should check out the electrical system. Use the *TROUBLESHOOTING GUIDE* as an aid in locating trouble and correcting it.

Troubleshooting Guide

Trouble	Probable Cause
1. Motor fails to start when tool switch is depressed.	<ul style="list-style-type: none"> (a) Loose or defective control cord or connectors. (b) Power source not properly fused. (c) Defective tool switch. (d) Loose wire(s). (e) Defective relay. (f) Incorrect power source. (g) Defective motor contactor. (h) Defective transformer
2. Motor runs, but tool will not reciprocate.	<ul style="list-style-type: none"> (a) Hoses not coupled properly. (b) Hydraulic fluid viscosity not proper or level is low. (c) Defective pilot valve solenoid or coil. (d) Unloading valve missing in tool. (e) Bind in tool or nose assembly. (f) Defective directional valve. (g) Pump to motor coupling damaged.
3. Pintail of fastener fails to break off.	<ul style="list-style-type: none"> a) PULL pressure set too low. (b) Worn or defective hose couplers. (c) Hydraulic fluid viscosity not proper or level is low. (d) Hydraulic fluid overheated. (e) Worn or defective directional valve. (f) Internal relief valve set too low or defective. (g) Worn or defective pump.
4. Tool will not return when switch is released. (Tool will not push nose assembly off swaged fastener.)	<ul style="list-style-type: none"> (a) RETURN pressure set too low. (b) Hoses not coupled properly. (c) Worn or defective solenoid. (d) Worn or defective pilot valve.

Trouble	Probable Cause
5. Motor fails to shut-off when installation cycle is completed.	(a) RETURN pressure switch set too high. (b) Hydraulic fluid viscosity not proper or level is low. (c) Hydraulic fluid overheated. (d) Defective limit switch in pressure switch assembly.
6. Pump making noise throughout entire cycle.	(a) Pump is cavitating-fluid level may be low or fluid viscosity too heavy. (b) Strainer is dirty and clogged
7. Tool operation slow -- entire cycle does occur.	(a) Pump is cavitating-fluid level may be low or fluid viscosity is too heavy. (b) Strainer is dirty and clogged. (c) Worn or defective directional valve. (d) Worn or damaged pump. (e) Worn or defective hydraulic couplers.

Spare Parts

The quantity of spare parts that should be kept on hand varies with the application and number of the POWERIG® Hydraulic Units in service. For directional valve and pilot valve maintenance, Seal Kit, 124100, should be kept on hand at all times. This kit contains O-rings and back-up rings required to service one directional valve and one pilot valve.

Other parts that should be available to the service technician are: Pump to Motor Coupling, Relay, Transformer, Pilot Valve, and Motor Brushes.

Directional Valve Overhaul

If minor overhaul of the directional valve (cleaning and replacing O-rings and back-up rings) is necessary, Seal Kit, 124100, is available. If major overhaul is necessary, return the directional valve to the nearest repair facility shown on the inside of the back cover.

Clean components in mineral spirits. Smear LUBRIPLATE 130AA, or equivalent, on O-rings and mating surfaces to aid assembly and prevent damage to O-rings. LUBRIPLATE is trademarked and manufactured by Fiske Brothers Refining Co. and is available in most localities. A handy tube of LUBRIPLATE 130AA is available from Huck as part number 502723.

Refer to Figure 6 when installing Seal Kit 124100.

Internal Adjustment of Pressure Switch

See Figure 7.

1. Remove the top cover of the switch.
2. Loosen two screws located in the bottom of the switch housing.
3. Place a 0.20-inch-thick shim between the spring retainer and the platen.
4. Loosen the set screw on the spring retainer until it contacts shim.
5. Lock the spring retainer in place with the set screw.
6. Slide the switch mounting bracket toward the switch button until it contacts the platen surface.
7. Secure with two screws located in the middle of the bottom cover.
8. Connect a volt/ohm meter to the electrical cord.
9. Tighten the switch adjustment screw against the switch mounting bracket until the switch button contacts the platen and actuates. The volt/ohm meter will react when the button actuates. A click can be heard.
10. Continue tightening the switch adjustment screw 1/8 of a turn after the switch button actuates.
11. Replace the top cover of the switch.

Replacing Pump to Motor Coupling

The pump to motor coupling can be replaced by removing four socket cap screws holding the motor housing to the cover plate and lifting the motor to one side. Lift out the original coupling with needle-nose pliers. Drop in the new coupling, align the slots and reassemble motor to cover plate.

Pump Overhaul

If pump requires overhaul return it, or the complete unit, to the nearest repair facility shown on the inside of the back cover.

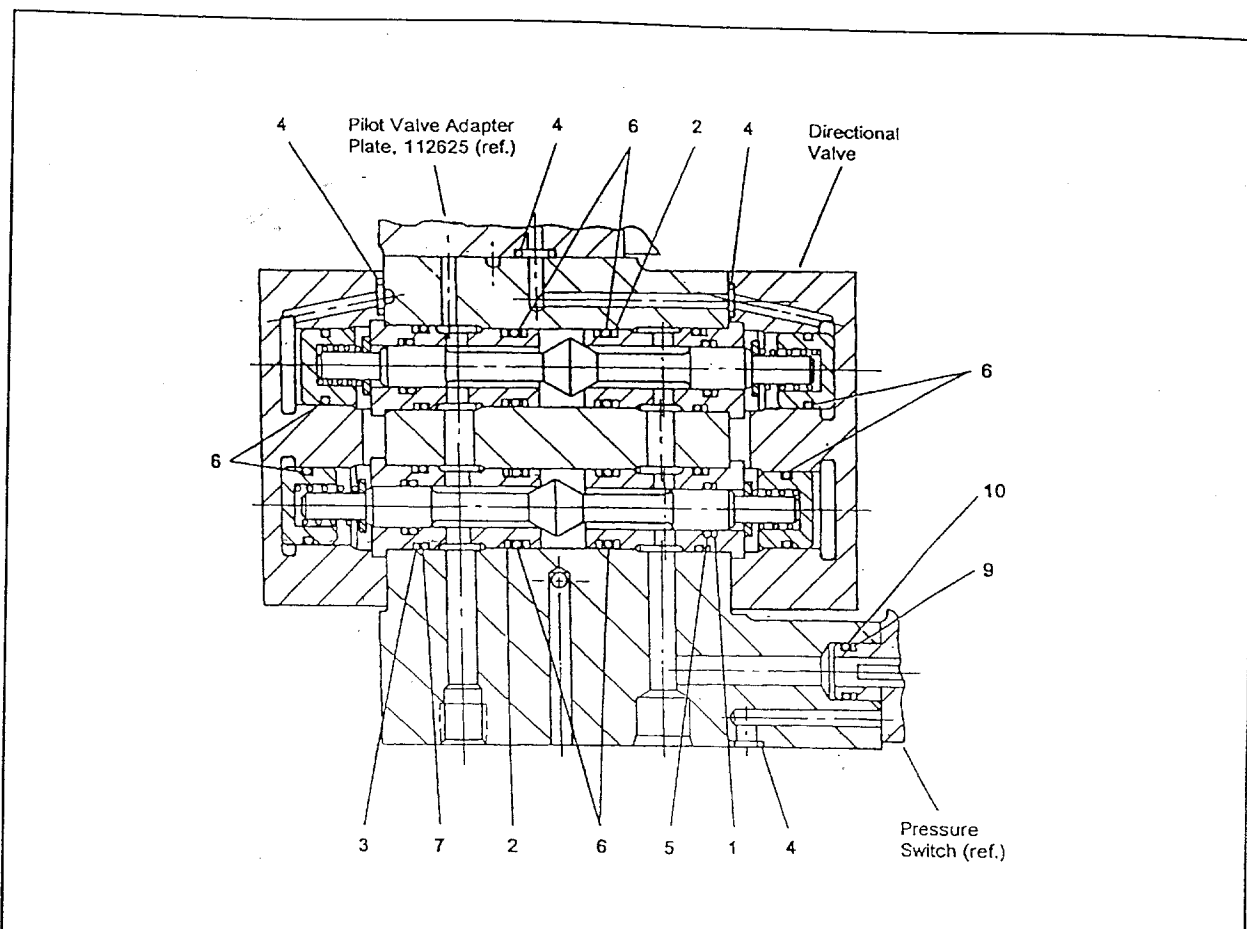
ACCESSORIES

Auxiliary Switch and Control Cord, 113056 - An auxiliary switch is available for use when checking and adjusting pressures, and troubleshooting.

"T" gage T-124833 - A "T" gage is available for use when checking and adjusting pressures, and troubleshooting.

Hose and Control Cord Kits - Hose and control cord kits are available as shown in TABLE 2.

TABLE 2	
Hose and Control Cord Kits	
Length in feet	Huck Part Number
12	118309-12
26	118309-26, 111955*
38	118309-38
52	118309-52, 112176*
*Use in severe conditions and in welding environment.	



Component	Item	Qty	Huck Part	Description
Directional Valve	1	8	501084	Back-up Ring Shamban S-11248-012
	2	8	501087	Back-up Ring Shamban S-11248-015
	3	4	501088	Back-up Ring Shamban S-11248-016
	4	13	504404	O-ring AS568-008 Parker V747 75D
	5	9	504408	O-ring AS568-012 Parker V747 75D
	6	8	504411	O-ring AS568-015 Parker V747 75D
	7	4	504412	O-ring AS568-016 Parker V747 75D
Pilot Valve	8	4	504552	O-ring AS568-013 National V25 95D (not shown) is between pilot valve (111351, not shown) and adapter plate (ref 112625)
Pressure Switch	9	1	501078	Back-up Ring Shamban S-11248-006
	10	1	504402	O-ring AS568-006 Parker V747 75D

Figure 6
Directional Valve showing O-rings
in Seal Kit, 124100

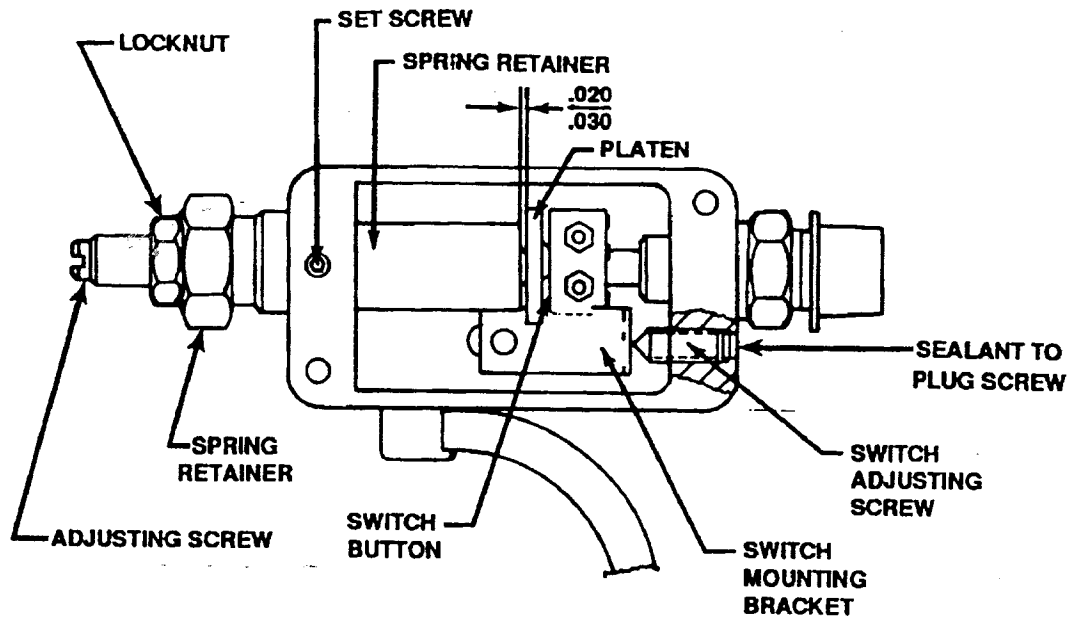
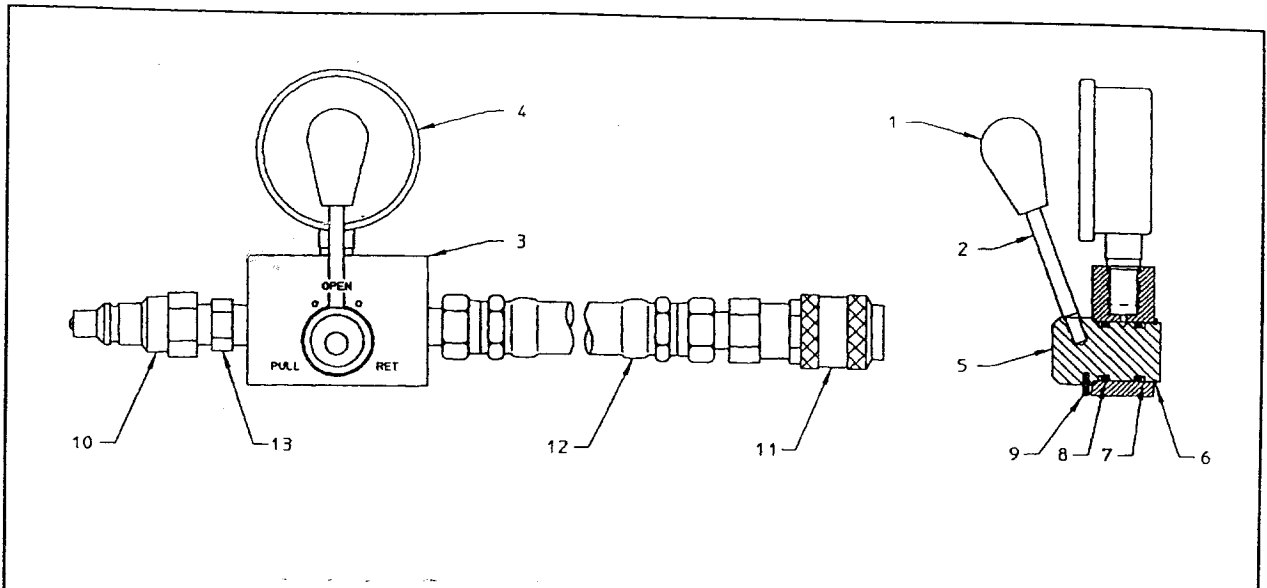


Figure 7
Pressure Switch



Figure 8
Electrical Switch and Control Cord Assembly, 113056
(12 ft. auxiliary switch used with pressure setting gage, T-10280)



Item	Qty	Huck Part	Description
1	1	113877	Control Knob
2	1	113878	Control Lever
3	1	113874	Pressure Gage Body
4	1	113876	Pressure Gage
5	1	113875	Flow Control Spindle
6	1	501007	Retaining Ring Truarc 5100-100
7	2	501108	Backup Ring Shamban S-11248-117
8	2	504036	O-ring AS568-117 National C67 90D
-	3	502131	Slotted Pin .094 x .375 long (not shown)
-	1	110440	Hydraulic Coupling Assembly (Includes Items 10 and 11)
10	1	110438	Nipple (male)
11	1	110439	Body (female)
12	1	110842	Hydraulic Hose 3/16 ID x 24 long, male NPT both ends
13	1	503683	Pipe Nipple Flodar PF10-6

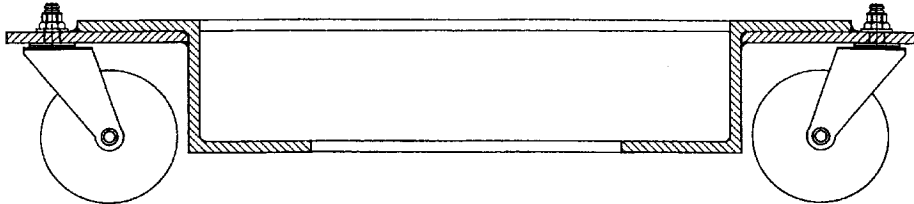
Figure 9
"T" Gage T-10280

Tool & Product Update

DOLLY FOR 940 POWERIG®

NEW DOLLY P/N 116685 FOR USE WITH MODEL 940 POWERIG® HYDRAULIC UNIT

Assembly P/N 116685 is a heavy duty steel dolly made of welded 1/4" thick "Z" channel for added strength. The Model 940 is simply placed in the dolly for use, the large 3" diameter casters allow for easy movement of the unit throughout the work area. This reduces operator fatigue, and wear and tear on your Model 940 Hydraulic Unit.



SPECIFICATIONS

Weight	36 lbs	16.3kg
Height	4in	102mm
Length	31in	787mm
Width	15in	381mm

LIMITED WARRANTIES

Tooling Warranty: Huck warrants that tooling and other items (excluding fasteners, and hereinafter referred as "other items") manufactured by Huck shall be free from defects in workmanship and materials for a period of ninety (90) days from the date of original purchase.

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Huck Installation Equipment should be serviced by trained service technicians only.

Always give the Serial Number of the equipment when corresponding or ordering service parts.

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One Corporate Drive Kingston, New York 12401-0250
Telephone (845) 331-7300 FAX (845) 334-7333

Canada

6150 Kennedy Road Unit 10, Mississauga, Ontario, L5T2J4, Canada.
Telephone (905) 564-4825 FAX (905) 564-1963

Outside USA and Canada

Contact your nearest Huck International Office, see back cover.

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FAX: 520-748-2142

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FAX: 310-830-1436

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