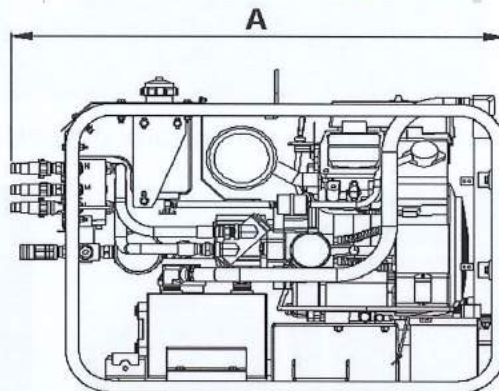
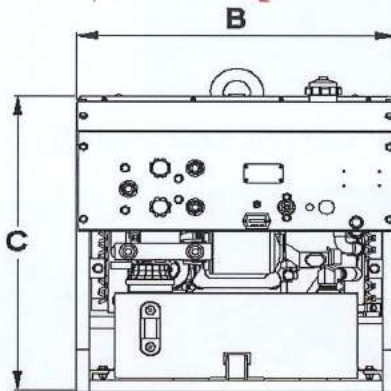


# PANDROL

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## 00100K DUAL CIRCUIT POWER UNIT

The Pandrol Dual Circuit Power Unit is designed to deliver (2) 5 gpm or (1) 10 gpm circuit at 2000 psi hydraulic pressure. A power unit mounted hose reel with a 50 foot hose is available as well as various carts and provisions to move the machine manually or power assisted. (See accessories listed below.)



ENGINE	HYDRAULICS	DIMENSIONS	WEIGHT
23 HP KOHLER FUEL: GASOLINE START: 12 VOLT ELECTRIC	(2) 5 gpm (19 lpm) OR (1) 10 gpm (38 lpm) 2000 psi (140 bar)  FLUID:HYDRAULIC 5 US GALLONS (18.9 LITERS)	A - 34" (863.6 mm) B - 24" (609.6 mm) C - 24" (609.6 mm)	313 lbs (142 kg)

### **ACCESSORIES:**

- 06300— Power unit mobility cart
- 06327— Power unit mobility kit
- 00187— Lift handle kit
- 02326—Hose reel equipped with 50' transmission hose and mounting bracket.

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## POWER UNIT MOBILITY CART



*Shown above with Pandrol 00100K power unit (off track mobility)*



*Shown above folded down and on track mobility.*

**Model Number:** 06300

**Dimensions:** 29" x 39" x 18.25"

**Weight:** 96 lbs (44 kg)

### **Description:**

The **Pandrol Mobility Cart** is light weight and highly versatile. It is simple to set up and allows the operator to easily maneuver a power unit **on** and **off** the rail. It can also be used as a tool trolley. The unit folds down for compact storage.

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## **GENERAL SAFETY PRECAUTIONS:**

TOOL OPERATORS AND MAINTENANCE PERSONNEL MUST ALWAYS COMPLY WITH THE SAFETY PRECAUTIONS GIVEN IN THIS MANUAL, AND WITH ALL STICKERS AND TAGS ATTACHED TO THE TOOL AND HOSE. ALL SAFETY PRECAUTIONS ARE GIVEN FOR YOUR SAFETY. READ TO UNDERSTAND AND FOLLOW ALL SAFETY, MAINTENANCE AND OPERATION INSTRUCTIONS BEFORE YOU USE OR MAINTAIN THE TOOL. REVIEW THE MANUAL DAILY BEFORE USING THE TOOL. IN ADDITION, FOLLOW ALL SAFETY GUIDELINES GIVEN YOU BY YOUR SUPERVISOR. DO NOT USE THE TOOL IF YOU HAVE ANY QUESTIONS ABOUT THE OPERATION, SAFETY OR MAINTENANCE OF THIS TOOL. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN PERSONAL INJURY OR EQUIPMENT DAMAGE.

PANDROL HAS NO CONTROL OVER TOOL USE OR OPERATION ONCE IT LEAVES THE PANDROL PLANT. PANDROL HAS NO CONTROL OVER OPERATOR OR MAINTAINER SELECTION. THE CUSTOMER MUST ASSUME RESPONSIBILITY FOR THE TOOL'S SUITABILITY FOR A PARTICULAR FUNCTION. DURING USE OF TOOL, GOOD JUDGEMENT MUST BE USED TO WORK SAFELY AND EFFICIENTLY WITHOUT ENDANGERING THEMSELVES OR BYSTANDERS. UNDERSTANDING OF THE OPERATION AND MAINTENANCE MANUAL IS ESSENTIAL FOR ANYONE USING OR MAINTAINING THE TOOL.

- DO NOT OPERATE THE TOOL UNTIL YOU HAVE BEEN THOROUGHLY AND PROPERLY TRAINED OR UNDER THE SUPERVISION OF AN INSTRUCTOR.
- CHECK POWER SOURCE DAILY TO DETERMINE IF CORRECT FLOW AND PRESSURE ARE AVAILABLE. NEVER EXCEED FLOWS OR PRESSURES FOR THE TOOL BEING USED. PERSONAL INJURY OR DAMAGE TO THE TOOL CAN RESULT.
- OPERATORS MUST CLEAR THE WORK AREA OF NON-ESSENTIAL PERSONNEL. FLYING DEBRIS CAN CAUSE SERIOUS INJURY.
- THE OPERATOR MUST BE FAMILIAR WITH ALL PROHIBITED WORK AREAS SUCH AS UNSAFE GRADES, POOR FOOTING AREAS AND OVERHEAD HAZARDS.
- MAINTAIN BALANCE AND PROPER FOOTING AT ALL TIMES. NEVER OVERREACH TO THE EXTENT THAT A BROKEN PART OR SUDDEN MOVEMENT OF THE TOOL CAN CAUSE YOU TO LOSE YOUR BALANCE AND FALL, OR CAUSE INJURY TO YOUR SELF OR SOMEONE ELSE.

- WHEN WORKING NEAR ELECTRICAL CONDUCTORS, ALWAYS ASSUME THAT THE CONDUCTORS ARE ENERGIZED AND THAT HOSES AND CLOTHING CAN CONDUCT HARMFUL ELECTRICITY. USE HOSES LABELED AND CERTIFIED AS NONCONDUCTIVE.
- DO NOT OPERATE THE TOOL AT EXCESSIVE FLUID TEMPERATURES OPERATOR DISCOMFORT AND POTENTIAL BURNS CAN RESULT AT HIGH OIL TEMPERATURES.
- NEVER WEAR LOOSE CLOTHING THAT CAN GET ENTANGLED IN THE WORKING PARTS OF THE TOOLS OR BE CARELESS WITH HANDS, FEET OR OTHER BODY PARTS AROUND THE WORKING PARTS OF THE TOOLS. HYDRAULIC TOOLS EXERT HIGH TORQUE AND FORCE AND CAN CAUSE SERIOUS INJURY OR DEATH IF IMPROPERLY USED.
- TO AVOID PERSONAL INJURY OR EQUIPMENT DAMAGE, ALL TOOL REPAIR, MAINTENANCE OR SERVICE MUST ONLY BE PERFORMED BY AUTHORIZED AND PROPERLY TRAINED PERSONNEL.
- ALWAYS WEAR SAFETY EQUIPMENT SUCH AS OIL INJECTION RESISTANT WORK GLOVES, SAFETY GLASSES, SAFETY BOOTS, EAR PROTECTION AND OTHER SAFETY APPAREL DICTATED BY YOUR SUPERVISOR APPLICABLE FOR THE JOB YOU ARE DOING AND THE TOOL YOU ARE USING.
- DO NOT CLEAN INSPECT OR REPAIR THE TOOL WHILE CONNECTED TO THE POWER SOURCE. ACCIDENTAL ENGAGEMENT OF THE TOOL CAN CAUSE SERIOUS PERSONAL INJURY.
- OIL INJECTION HAZARD EXISTS WITH THIS TOOL. OIL INJECTION IS A CONDITION WHERE HYDRAULIC OIL IS INJECTED UNDER THE SKIN FROM PRESSURE IN THE LINE. ALWAYS WEAR GLOVES AND REPAIR ANY LEAKS IMMEDIATELY. NEVER CARRY A TOOL BY THE HOSES.
- DO NOT USE DAMAGED EQUIPMENT. IMMEDIATELY REPLACE ANY DAMAGED HOSES, FITTINGS, OR OTHER COMPONENTS SHOWING WIRE BRAID, NICKS, CUTS, DAMAGE OR ABRASIONS. FAILURE TO DO SO MAY RESULT IN EQUIPMENT DAMAGE AND / OR PERSONAL INJURY OR DEATH.
- CLEAN UP ANY OIL OR FLUID SPILLS IMMEDIATELY.

HAVE SUPERVISOR ADD ADDITIONAL PRECAUTIONS RELATING TO THE SPECIFIC WORK AREA AND LOCAL SAFETY REGULATIONS BELOW:

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## **SAFETY PRECAUTIONS:**

1. **ALWAYS** WEAR PROTECTIVE EQUIPMENT SUCH AS GLOVES, SAFETY GLASSES, EAR PROTECTION AND SAFETY SHOES.
2. DO NOT WEAR CLOTHING WHICH MAY BECOME ENTANGLED IN THE TOOL.
3. **ALWAYS** KEEP WORK AREA FREE OF TOOLS OR ANY OTHER OBJECTS WHICH MAY IMPAIR SOUND FOOTING.
4. **CAUTION** OIL INJECTION HAZARD EXISTS WITH THIS TOOL. OIL INJECTION IS A CONDITION WHERE THE HYDRAULIC OIL IS FORCED UNDER THE SKIN THROUGH PRESSURE IN THE LINE. ALWAYS WEAR GLOVES, DO NOT CARRY THE TOOL BY HYDRAULIC HOSES, AND REPAIR LEAKS IMMEDIATELY.
5. **DO NOT** OPERATE THE POWER UNIT UNTIL YOU HAVE BEEN PROPERLY TRAINED OR UNDER THE SUPERVISION OF A QUALIFIED INSTRUCTOR.
6. **NEVER** STORE ENGINE OIL OR HYDRAULIC OIL NEAR OXYGEN TANKS OR LINES.
7. **NEVER** ADD ENGINE OIL OR HYDRAULIC OIL WHEN A SPILL MIGHT COME IN CONTACT WITH YOUR OXYGEN LINES, TORCH OR FITTINGS.
8. **CLEAN UP** SPILLS IMMEDIATELY.
9. **NEVER** PERFORM GRINDING OR SAWING OPERATIONS THAT DIRECT SPARKS INTO THE CLOSE PROXIMITY OF THE POWER UNIT OR FLAMMABLE MATERIALS.
10. **NEVER** OPERATE THE POWER UNIT WITH ANY PART OF THE EXHAUST SYSTEM OR THE HEAT DEFLECTOR REMOVED.
11. **PERIODICALLY**, INSPECT THE FUEL TANK, FUEL LINE AND FITTINGS FOR CRACKS OR LEAKS AND REPAIR OR REPLACE AS REQUIRED.
12. AVOID OVER FILLING THE FUEL TANK; WIPE UP ANY SPILLS **IMMEDIATELY** AND PROPERLY DISPOSE OF THE CLEANING RAGS.
13. **ALWAYS** TURN POWER UNIT **"OFF"** AND DISCONNECT HOSES BEFORE PERFORMING ANY MAINTENANCE.

## 00100K DUAL CIRCUIT POWER UNIT

**FLOW:** (2) 5 GPM PORTS (19LPM) OR (1) 10 GPM PORT (38LPM)  
**PRESSURE:** 2000 PSI (140 BAR)

**BEFORE STRATING THE POWER UNIT, CHECK ALL FLUID LEVELS,  
ADD FUEL, MOTOR OIL AND HYDRAULIC OIL AS REQUIRED**

### OPERATION:

1. To start the power unit, check to make sure that both control valves are in the "off" position.
2. Set the engine kill switch to the "on" position.
3. Pull the choke all the way "out".
4. Push the starter button.
5. Allow the engine to warm up until it will run smoothly with the choke all the way "in".
6. Connect the power transmission hose to either the 5 or 10 gpm ports, depending on the flow required for the tool you will be using.
7. Connect the tool(s) to the power transmission hose before turning on control valves at power unit "on".
8. Rotate appropriate flow control valves. (see valve positioning this manual).
9. In cold weather start power unit and allow oil to circulate before using a tool. In extreme cold weather refer to cold weather operation section of this manual.
10. During warm weather turn oil cooler fan "on" for additional cooling capacity.
11. To shut down the power unit or to change tools, turn the control valves to the "off" position.

### VALVE POSITIONING:

The 00100K power unit is designed to operate either one tool at 10 gpm (38 lpm) or 2 tools simultaneously, at 5 gpm (19 lpm). Refer to operating instructions for each tool to determine flow requirements.

*Note:* When operating a 10 gpm tool you **cannot** have any other tool connected to the 5 gpm ports, even if the tool is not being used.

**5 gpm tools:** To operate a 5 gpm tool, Connect both tools to the ports marked 5 gpm and turn "on" the valve corresponding to each tool port.

**10 gpm tools:** to operate a 10 gpm tool, connect it to the port marked 10 gpm and turn on both control valves.

### CHANGING TOOLS:

1. Turn the control knobs to the "off" position before disconnecting hoses.
2. Once the tool has been changed, turn the valves to the "on" position depending on flow requirements of the tool to be used.

## **COLD WEATHER OPERATION:**

The power unit and tools will perform well in extreme cold weather if the warm up procedures are followed. These procedures should be used anytime the temperature is below 40 degrees Fahrenheit (4.4c)

In extremely cold climates, changing to an aircraft quality hydraulic oil (mil. spec. h-5606) will reduce the warm up time required. When warm weather returns, be sure to change back to a higher viscosity hydraulic oil.

*Note: Refer to operating procedures of this manual before starting.*

1. Start the power unit and let it run until it is running smoothly with the choke all the way "in".
2. Connect the power transmission hoses to the power unit and couple the power transmission hose tool ends together forming a "loop".
3. Turn a tool control valve "on" to circulate oil through the hose.
4. When the oil reaches 50 degrees Fahrenheit (10 c ) you may begin to operate the tool.

## **MAINTENANCE:**

1. Check tools **DAILY** for proper operation, leaks, or damage.
2. Inspect hoses **DAILY**. Replace cut, burned, or otherwise damaged hoses.
3. Keep quick disconnect couplers **CLEAN AND LUBRICATED**.
4. Use hydraulic fluids that comply with HTMA SPECIFICATION 5.7. The hydraulic fluid should have a viscosity between 100 and 400 SSU (20 to 82 centistokes) at the maximum and minimum expected operating temperatures. Petroleum based hydraulic fluids with anti-wear properties and a viscosity index of over 140 work for a wide range of operating conditions.

### **THE FOLLOWING OILS MEET HTMA SPECIFICATION 5.7:**

AMOCO RYKON MV  
CITGO A/WALL TEMP  
SUNVIS 706  
MOBIL D.T.E. 13  
CHEVRON EP-MV  
TEXACO "RANDO" HDAZ

Other fluids that meet or exceed this specification can be used.

\*See **COLD WEATHER OPERATION** hydraulic oil note.

5. Have tool inspected, at least annually, by Pandrol or a Pandrol qualified service representative to determine if tool is in need of safety changes or worn part replacement.
6. Contact Pandrol on a periodic basis, at least annually, for service Bulletins, safety notices, or other important information pertaining to this tool.



## **ENGINE MAINTENANCE:**

FOLLOW THE HOURLY OR CALENDAR INTERVALS, **WHICHEVER OCCUR FIRST**. MORE FREQUENT SERVICE IS REQUIRED WHEN OPERATING IN ADVERSE CONDITIONS NOTED BELOW.

CHECK OIL LEVEL	EVERY 5 HOURS OR DAILY
SERVICE AIR CLEANER	EVERY 25 HOURS OR SEASON*
CHANGE OIL	EVERY 50 HOURS OR SEASON*
CHANGE OIL FILTER AND SPARK PLUGS	EVERY 100 HOURS OR SEASON*
SERVICE AIR CLEANER CARTRIDGE	EVERY 100 HOURS OR SEASON**
CLEAN COOLING SYSTEM	EVERY 100 HOURS OR SEASON**
REPLACE IN-LINE FUEL FILTER	EVERY 50 HOURS OR SEASON

CHANGE OIL AFTER FIRST 5 HOURS THEN AFTER EVERY 50 OR SEASON

\* CHANGE OIL MORE OFTEN WHEN OPERATING UNDER HEAVY LOAD OR HIGH TEMPERATURES.

\*\* CLEAN MORE OFTEN UNDER DUSTY CONDITIONS OR WHEN AIRBORNE DEBRIS IS PRESENT.  
REPLACE AIR CLEANER PARTS IF VERY DIRTY.

## TROUBLE SHOOTING GUIDE:

- A. BEFORE ANY TROUBLESHOOTING, CHECK **ALL** FLUID LEVELS, AND ADD FUEL, MOTOR OIL AND/OR HYDRAULIC OIL AS REQUIRED.
- B. REPAIR ANY LEAKS OR OBVIOUS DAMAGE TO POWER UNIT.
- C. MAINTENANCE TO BE PERFORMED BY QUALIFIED MAINTENANCE PERSONNEL ONLY. READ OPERATION MANUAL TO UNDERSTAND OPERATIONAL CHARACTERISTICS BEFORE MAKING ANY ADJUSTMENTS.

**PROBLEM:** *POWER UNIT RUNS, BUT ENGINE QUILTS WHEN UNDER LOAD.*

1. CHECK SYSTEM RELIEF PRESSURE - VALVE (PART #00139) SHOULD BE SET AT 2000-2100 PSI. CHECK FLOW SHOULD BE NO GREATER THAN 10 GPM ON 10 GPM PORT.
2. IF FLOW AND PRESSURE ARE OK, BUT ENGINE STILL QUILTS UNDER LOAD:
  - DRAIN GAS AND CHECK FOR WATER OR CONTAMINATION.
  - TUNE ENGINE (IF MUFFLER HAS HOLES, VALVES MAY BE BURNED)

**PROBLEM:** *POWER UNIT FLOW GREATER OR LESS THAN 10 GPM.*

**NOTE:** *IF ADJUSTMENTS ARE TO BE MADE, REFER TO CALIBRATION SYSTEM SECTION, PAGE 27*

1. CHECK FLOW RATE UNDER LOAD. WITH FLOW AND PRESSURE TEST GAUGE (PART #03600) ATTACHED TO POWER UNIT, SLOWLY "DIAL IN" 1500 PSI. POWER UNIT SHOULD STILL DELIVER 9.5 – 10 GPM ON THE 10 GPM PORT WITH BOTH CONTROL VALVES ON.

**PROBLEM:** *BOTTOM 5 GPM PORT DROPS FLOW UNDER LOAD, AND WON'T DELIVER 2000 PSI RELIEF PRESSURE, OTHER PORTS OK.*

1. ADJUST FLOW CONTROL VALVE (PART #0141-01). SEE FLOW CONTROL SETTING FROM CALIBRATION PROCEDURES PAGE 29.
2. **SERVICE PRECAUTION:** DO NOT TAKE SYSTEM RELIEF VALVE AND FLOW CONTROL VALVES OUT AND INSTALL THEM IN THE WRONG HOLES. IF YOU DO, DAMAGE TO THE PUMP WILL RESULT.

## TROUBLE SHOOTING GUIDE CONT.:

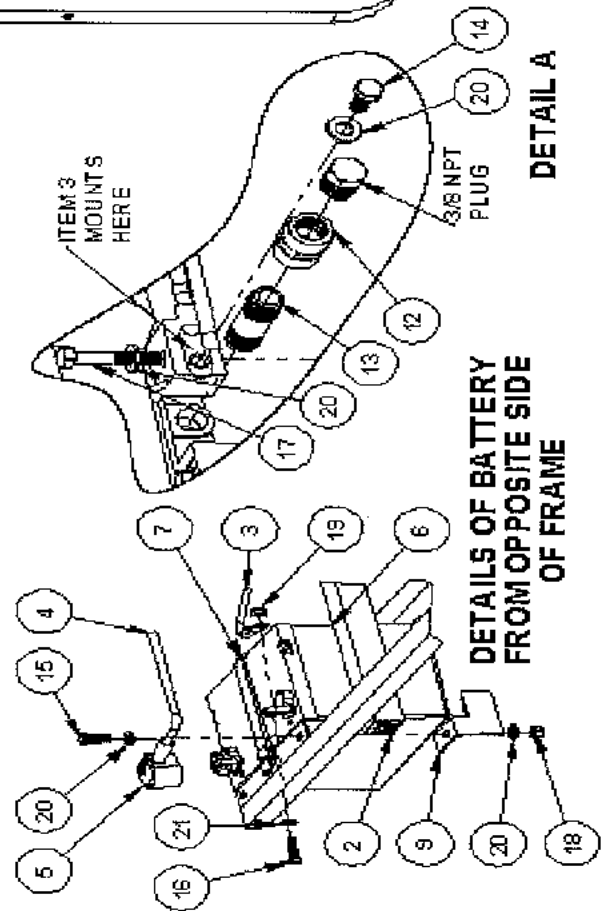
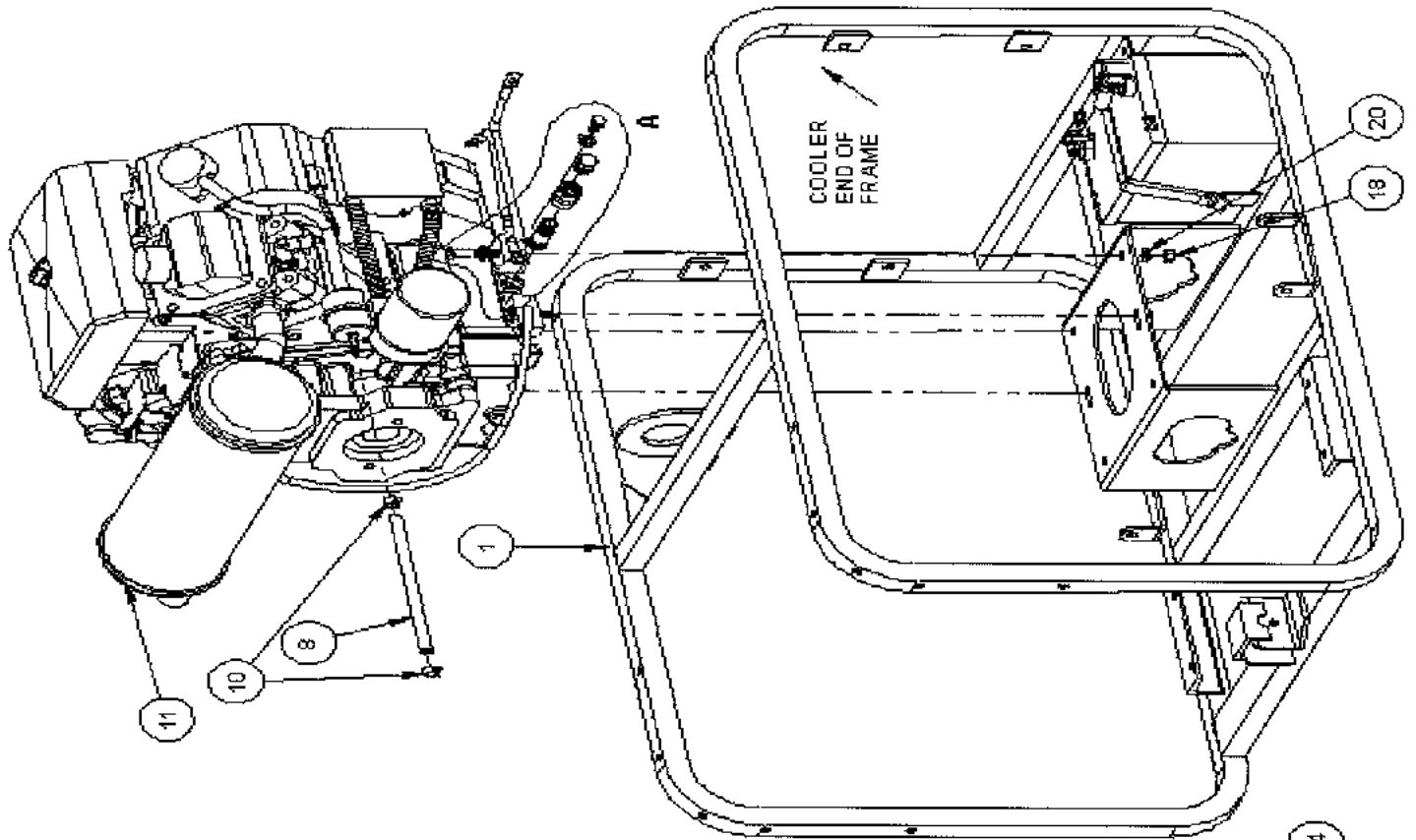
**PROBLEM:** HYDRAULIC OIL OVERHEATS.

1. CHECK TEMPERATURE WITH THERMAL MEASUREMENT DEVICE. IF OVER 140 DEGREES F. (60 DEGREES CELSIUS), CHECK THE FOLLOWING:
  - HYDRAULIC OIL TO FULL MARK IN TANK
  - ADEQUATE CLEARANCE FOR AIR CIRCULATION AROUND POWER UNIT.

**POWER UNIT SHOULD BE MOVED SO UNRESTRICTED AIR MOVEMENT IS AVAILABLE IN FRONT, REAR AND SIDES OF UNIT. REMEMBER, THE COOLER DRAWS AIR FROM AROUND THE POWER UNIT. IF THE COOLER CAN ONLY DRAW HOT EXHAUST, CAPTURED AIR NEXT TO BULKHEAD, OR SUPER-HEATED AIR IN TRUCK BODY HOT HYDRAULIC OIL WILL BE THE RESULT.**

2. CHECK TOOL FLOW RATE. OPERATE 5 GPM TOOLS ONLY ON 5 GPM. EXCESS FLOW AT 10 GPM CAN CAUSE OVER SPEEDING OF THE TOOL OR HEAT BUILDUP DEPENDING ON THE TOOL DESIGN.
3. MAKE CERTAIN THAT ONLY THE CONTROL KNOBS NEEDED FOR THE TOOL BEING USED ARE TURNED ON. HAVING BOTH KNOBS TURNED ON AND ONLY USING ONE 5 GPM TOOL WILL ALLOW FLUID TO BE FORCED OVER THE RELIEF CAUSING OVER HEATING.
4. CHECK SYSTEM FOR EXCESSIVE BACK PRESSURE. BACK PRESSURE SHOULD NOT EXCEED 250 PSI - SEE BACK PRESSURE SECTION PAGE 34.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	00104	POWER UNIT FRAME	1
2	00114	PLASTIC SQUARE PLUG	1
3	00120	NEGATIVE BATTERY CABLE	1
4	00121-02	POSITIVE BATTERY CABLE	1
5	00121-02-1	POSITIVE BATTERY COVER	1
6	00122	BATTERY	1
7	00123	BATTERY STRAP	1
8	00130	FUEL HOSE	1
9	00172	BATTERY RETAINER CLIP	1
10	01031	FUEL HOSE CLAMP	2
11	06501	GASOLINE ENGINE	1
12	309-06	3/8 NPT HEX COUPLER	1
13	3/8 X 2 -60	3/8 NPT x 2 SCH. 80 NIPPLE	1
14	A-1021	5/16-18 x 3/4 HEX HEAD BOLT	1
15	A-1022	5/16-18 x 1 HEX HEAD BOLT	1
16	A-1022B	5/16-18 x 1 BRASS HEX HEAD BOLT	2
17	A-1025	5/16-18 x 1 3/4 HEX HEAD BOLT	4
18	A-2048	5/16-18 NYLOCK NUT	5
19	A-2048B	5/16-18 BRASS NYLOCK NUT	2
20	A-2191	5/16 SAE FLAT WASHER	11
21	A-2191B	5/16 BRASS FLAT WASHER	2



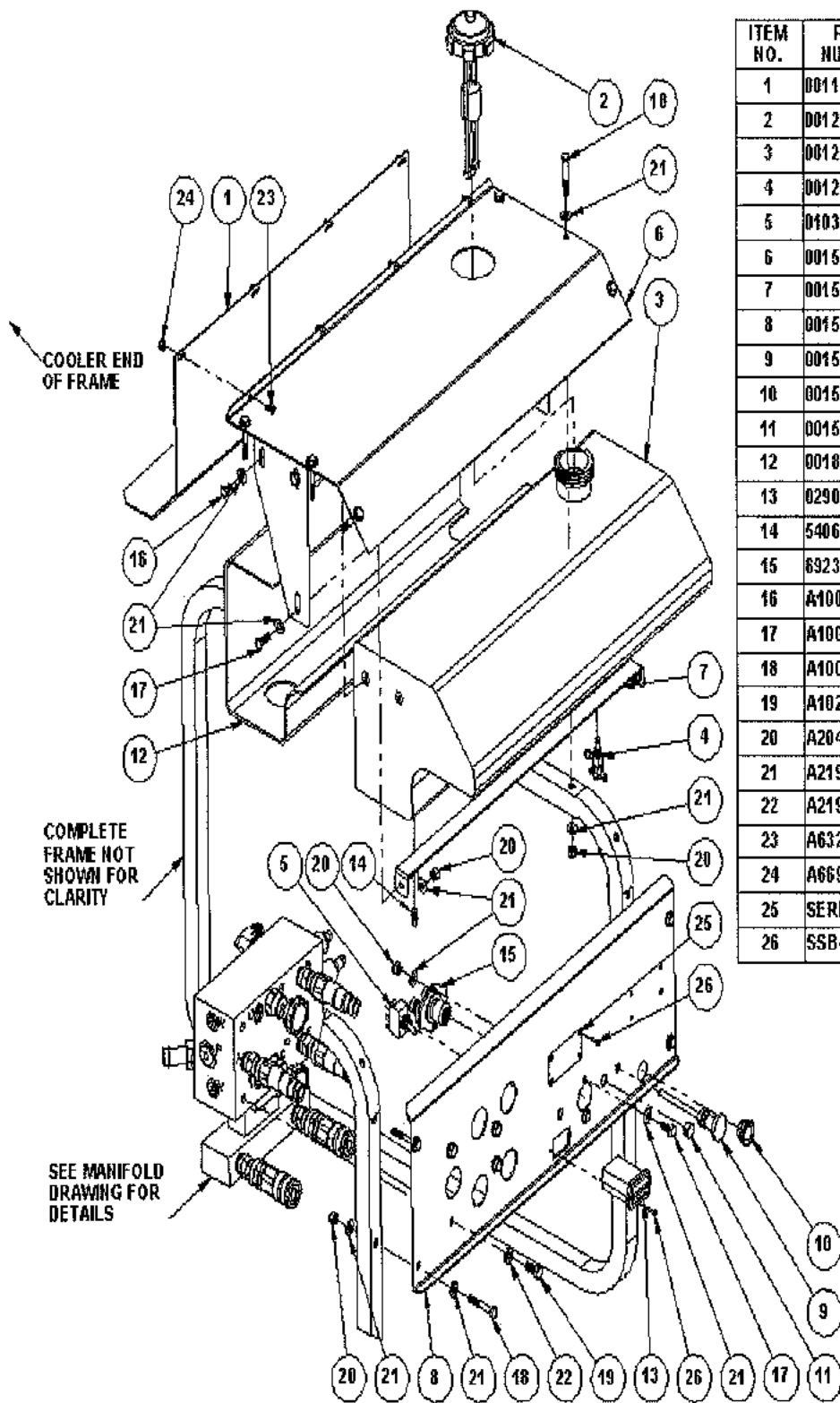
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ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	00116-01	EXHAUST DEFLECTOR	1
2	00127	FUEL CAP	1
3	00128	FUEL TANK	1
4	00129	FUEL VALVE	1
5	01032	IGNITION SWITCH	1
6	00153	UPPER CONSOLE ASSEMBLY	1
7	00154	FUEL TANK STRAP	1
8	00155	LOWER CONSOLE PANEL	1
9	00157K	CHOKE CABLE	1
10	00158	STEEL PLUG	1
11	00159	PLASTIC PLUG	1
12	00180	FUEL TANK INSULATION	1
13	02903	HOUR METER	1
14	5406-SHP-2	1/8 NPT SQ. HEAD PLUG	1
15	692303	STARTER SWITCH	1
16	A1000	1/4-20 x 1/2 HEX HEAD BOLT	4
17	A1001	1/4-20 x 3/4 HEX HEAD BOLT	4
18	A1005	1/4-20 x 1 3/4 HEX HEAD BOLT	10
19	A1021	5/16-18 x 3/4 HEX HEAD BOLT	4
20	A2046	1/4-20 NYLOCK NUT	14
21	A2190	1/4 SAE FLAT WASHER	32
22	A2191	5/16 SAE FLAT WASHER	4
23	A6325	#10-24 x 1/2 BHCS	4
24	A6699	#10-24 NYLOCK NUT	4
25	SERIAL TAG	MATWELD SERIAL TAG	1
26	SSB4-6S	DIA. 1/8 x 3/8 POP RIVOT	6

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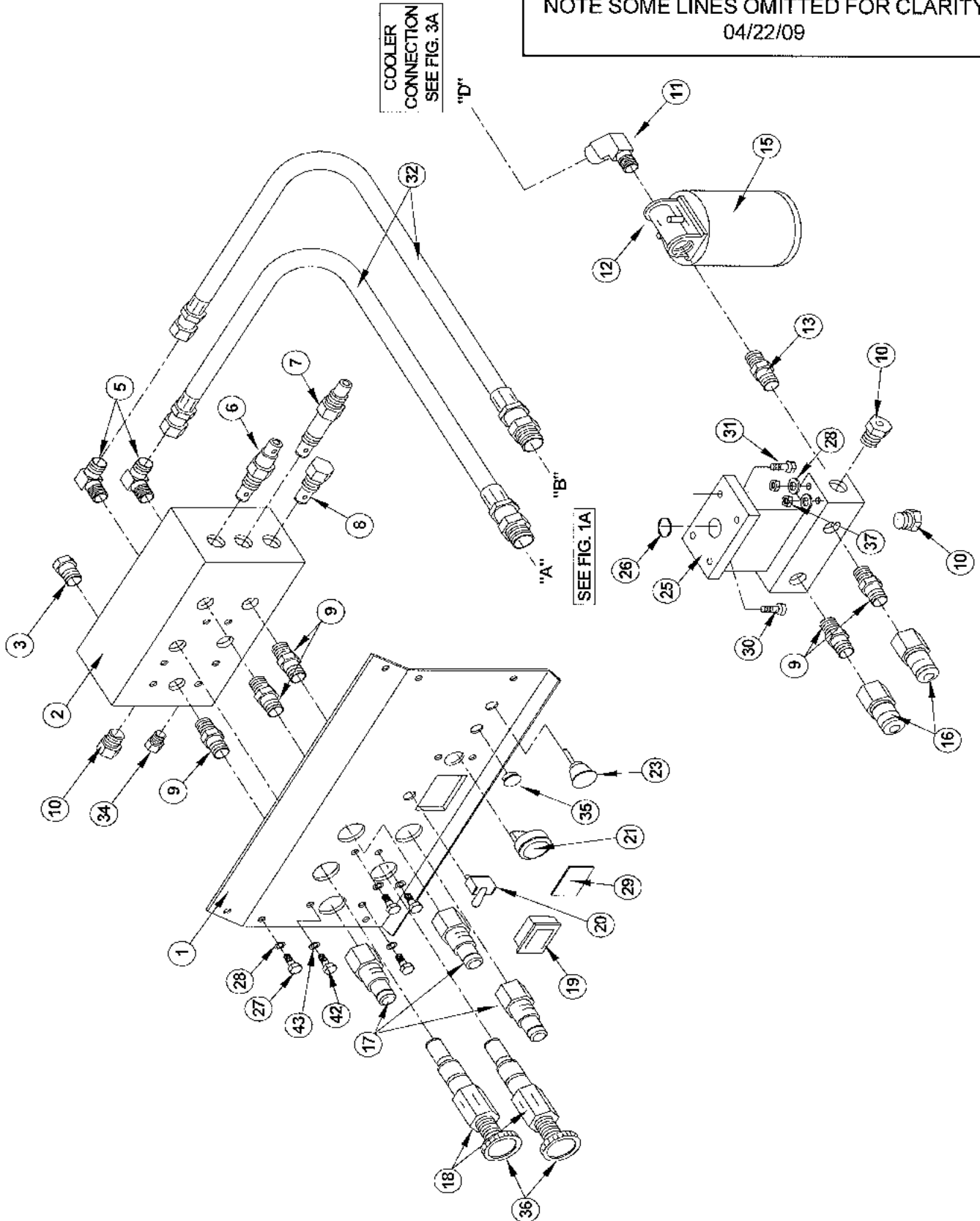
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**00100K POWER UNIT  
FIG. 2A CONTROL PANEL  
& MANIFOLD ASSEMBLY**  
NOTE SOME LINES OMITTED FOR CLARITY  
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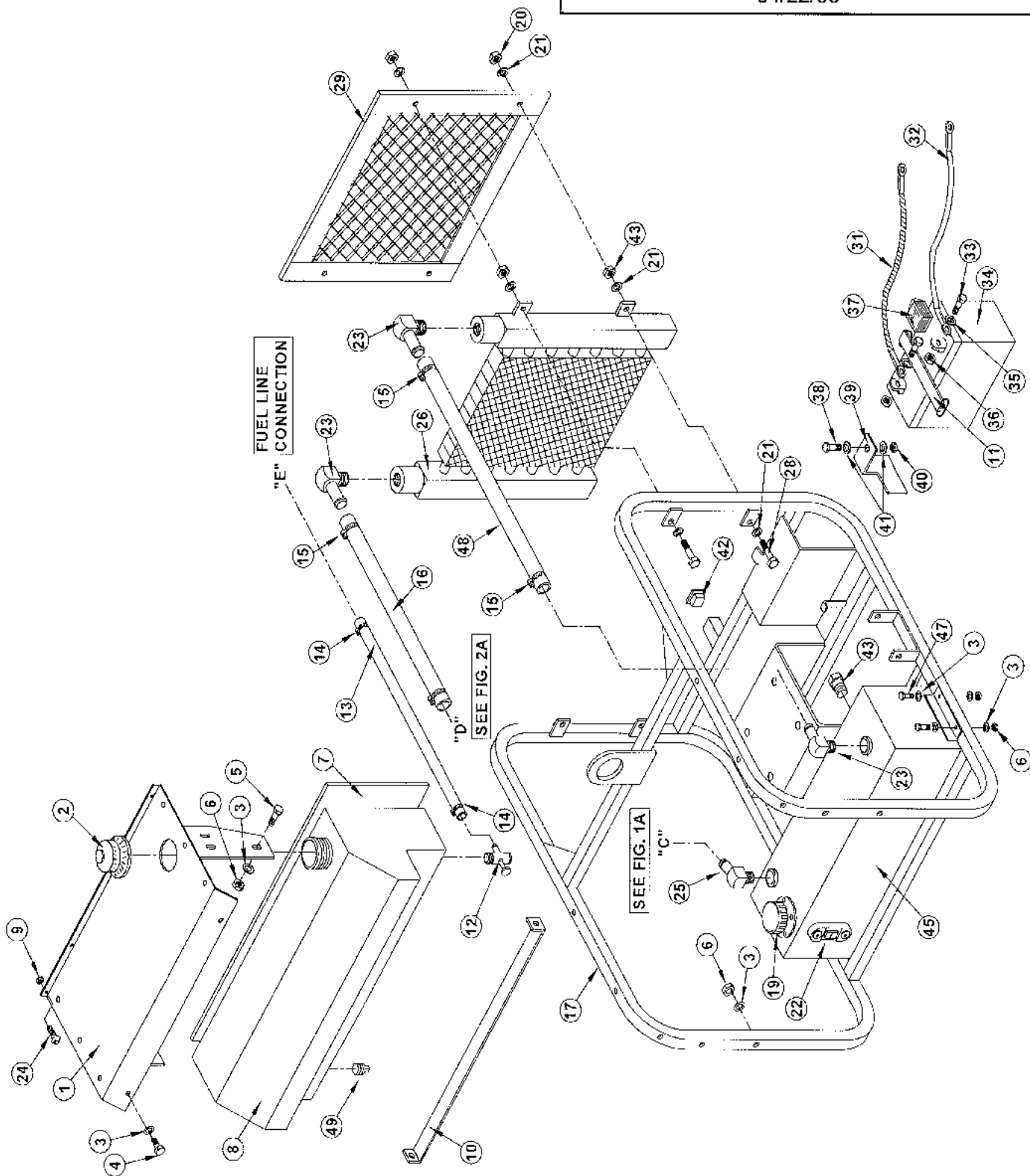
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**00100K POWER UNIT  
CONTROL PANEL & MANIFOLD ASSEMBLY FIG. 2A**

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	00155	LOWER CONSOLE	1
2	00136	MANIFOLD BLOCK	1
3	231P-10	#10 O-RING PLUG	1
4	OMIT		
5	515-08-10	1/2 T X 10 STR. THD 90	2
6	00141-01	FLOW CONTROL VALVE	1
7	00139	RELIEF VALVE	1
8	00140	CHECK VALVE	1
9	69-08-08	1/2 NPT HEX NIPPLE	5
10	231P-08	#8 O-RING PLUG	3
11	4503-12-12	3/4 BARB x 3/4 MP 45 ELBOW	1
12	00150	FILTER BODY ASSEMBLY	1
13	69-12-08	3/4 X 1/2 NPT HEX NIPPLE	1
14	OMIT		
15	00149	HYDRAULIC OIL FILTER	1
16	00145	QUICK DISCONNECT COUPLER	2
17	00146	QUICK DISCONNECT NIPPLE	3
18	00137	CONTROL VALVE w/KNOB	2
19	02903	HOUR METER	1
20	01032	IGNITION SWITCH	1
21	692303	STARTER SWITCH	1
23	00157K	CHOKE CABLE	1
25	00175	RETURN MANIFOLD BLOCK	1
26	00183	RETURN MANIFOLD O-RING	1
27	A1005	1/4 X 1-3/4 HEX HEAD BOLT	4
28	A2190	1/4 SAE FLAT WASHER	6
29	SERIAL TAG	SERIAL NUMBER TAG	1
30	A5434	1/4-20 X 3/4 SHCS	2
31	A5448	5/16-18 X 1 SHCS	2
32	00135	HOSE-DIVIDER MANIFOLD	2
34	231-04	#4 O-RING PLUG	10
35	00159	PLASTIC PLUG	1
36	00138A	REPLACEMENT KNOB ONLY	2
37	A2046	1/4-20 NYLOCK NUT	2
42	A1021	5/16 X 3/4 HEX HEAD BOLT	4
43	A2191	5/16 SAE FLAT WASHER	4

**00100K POWER UNIT**  
**FIG. 3A FRAME ASSEMBLY**  
 NOTE SOME LINES OMITTED FOR CLARITY  
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**00100K POWER UNIT  
FRAME ASSEMBLY FIG. 3A**

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	00153	UPPER CONSOLE	1
2	00127	FUEL CAP	1
3	A2190	1/4 SAE FLAT WASHER	26
4	A1005	1/4 X 1-3/4 HEX HEAD BOLT	6
5	A1000	1/4 X 1/2 HEX HEAD BOLT	6
6	A2046	1/4-20 NYLOCK NUT	16
7	00180	FUEL TANK INSULATION	1
8	00128	FUEL TANK	1
9	A6325	10-24 NYLOCK NUT	4
10	00154	FUEL TANK STRAP	1
11	00123	BATTERY STRAP	1
12	00129	FUEL VALVE	1
13	00130	FUEL HOSE	1
14	01031	HOSE CLAMP	2
15	00152	#12 HOSE CLAMP-COOLER HOSE	4
16	00151-1	FILTER TO COOLER HOSE	1
17	00104	FRAME ASSEMBLY	1
18	OMIT		
19	00131	FILTER - BREATHER ASSEMBLY	1
20	A2050	3/8-16 NYLOCK NUT	4
21	A2192	3/8 SAE FLAT WASHER	9
22	00182	HYD. OIL SIGHT GLASS	1
23	4501-12-16	1MP X 3/4 H 90	3
24	A6325	10-24 X 1/2 BHCS	4
25	4503-16-16	1" MP x 1" BARB 45 ELBOW	1
26	00125A	OIL COOLER	1
28	A1044	3/8 X 1-1/2 HEX HEAD BOLT	4
29	02339	COOLER GUARD	1
31	00120	BATTERY GROUND CABLE	1
32	00121-02	BATTERY POSITIVE CABLE	1
33	A1022B	5/16 X 1 GR. 5 BRASS	1
34	00122	BATTERY	1
35	A2191B	5/16 FLAT WASHER BRASS	2
36	A2048B	5/16-18 NYLOCK NUT BRASS	2
37	00121-02-01	BATTERY POST COVER	1
38	A1022	5/16 X 1 HEX HEAD BOLT	1
39	00172	BATTERY RETAINER CLIP	1
40	A2048	5/16-18 NYLOCK NUT	1
41	A2191	5/16-18 SAE FLAT WASHER	2
42	00114	SQUARE PLUG	1
43	00158	3/8 NPT HEX STEEL PLUG	1
44	OMIT		
45	01008A	HYDRAULIC TANK	1
46	00197	MAGNETIC DRAIN PLUG	1
47	A1002	1/4-20 x 1 HEX HEAD BOLT	4
48	00126-1	COOLER TO TANK HOSE	1
49	5406-SHD-2	1/8 NPT SQUARE HEAD STEEL PLUG	1

**PANDROL**

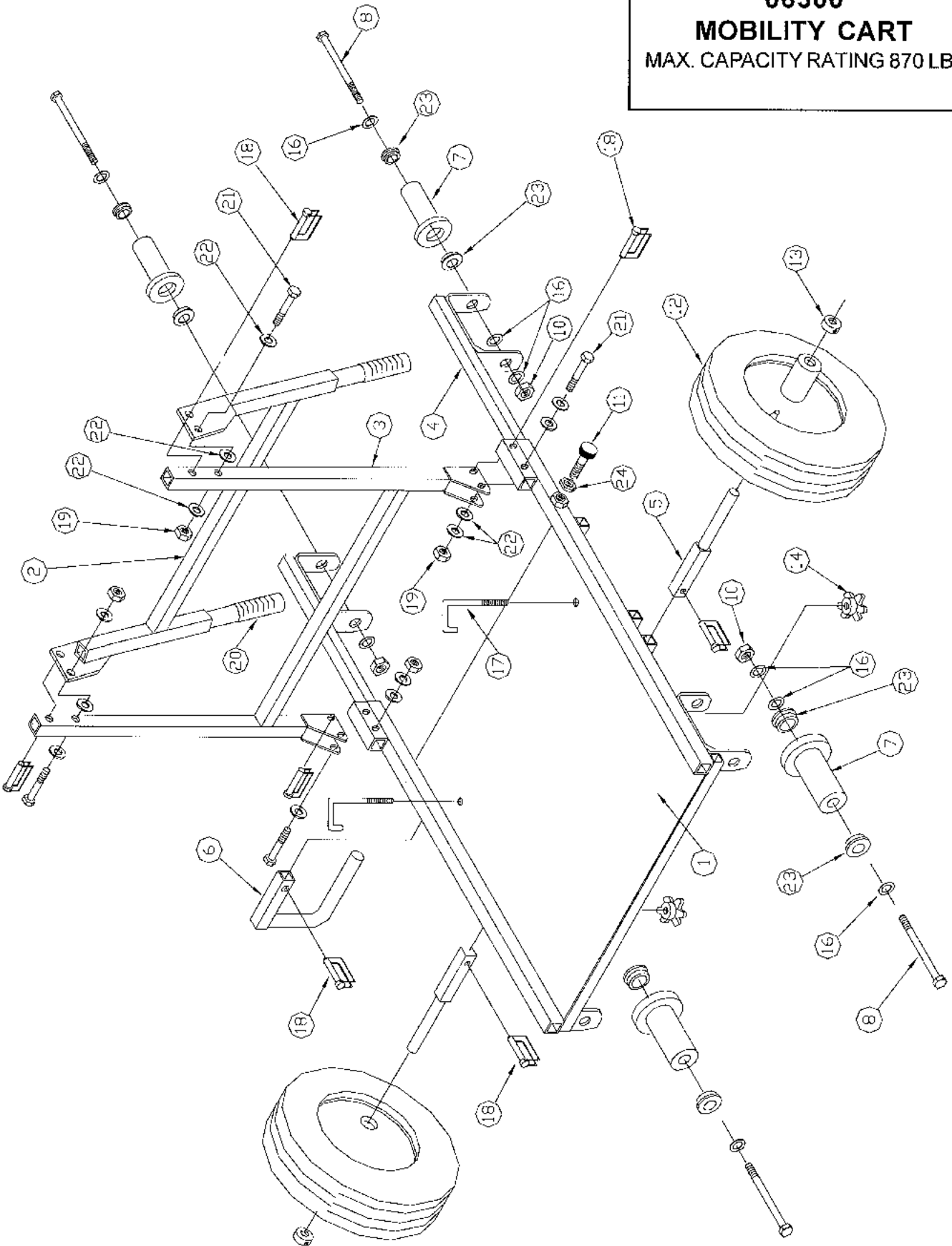
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**FAX:(419) 599-3630**

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**06300**  
**MOBILITY CART**  
 MAX. CAPACITY RATING 870 LBS



**PANDROL**

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<b>06300 PARTS LIST</b> <b>MOBILITY CART</b>
---

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	06301	RAIL CART BASE FRAME	1
2	06302	HANDLE ASSEMBLY	1
3	06303	HANDLE ADJUSTMENT FRAME	1
4	06304	GAUGE ADJUSTMENT FRAME	2
5	06305	STUB AXLE	2
6	06306	PROP LEG	1
7	06307	TRACK WHEEL	4
8	A1098	1/2-13 x 6 HEX HEAD BOLT	4
9	OMIT		
10	A2054	1/2-13 NYLOCK NUT	4
11	00608	SPRING LOCK KNOB	2
12	00101	MOBILITY WHEEL AND TIRE	2
13	01505	AXLE LOCK COLLAR	2
14	06328	ADJUSTMENT KNOB	2
15	OMIT		
16	A2194	1/2 SAE FLAT WASHER	12
17	06329	J-BOLT	2
18	00174	RETAINER PIN	7
19	A2048	5/16-18 NY LOCK NUT	4
20	00106	HANDLE GRIP	2
21	A1027	5/16-18 x 2 1/4 HEX HEAD BOLT	4
22	A2191	5/16 SAE FLAT WASHER	14
23	00110	INSULATED TRACK WHEEL BEARING	8
24	A1454	3/8-16 HEX JAM NUT	2

**PANDROL**

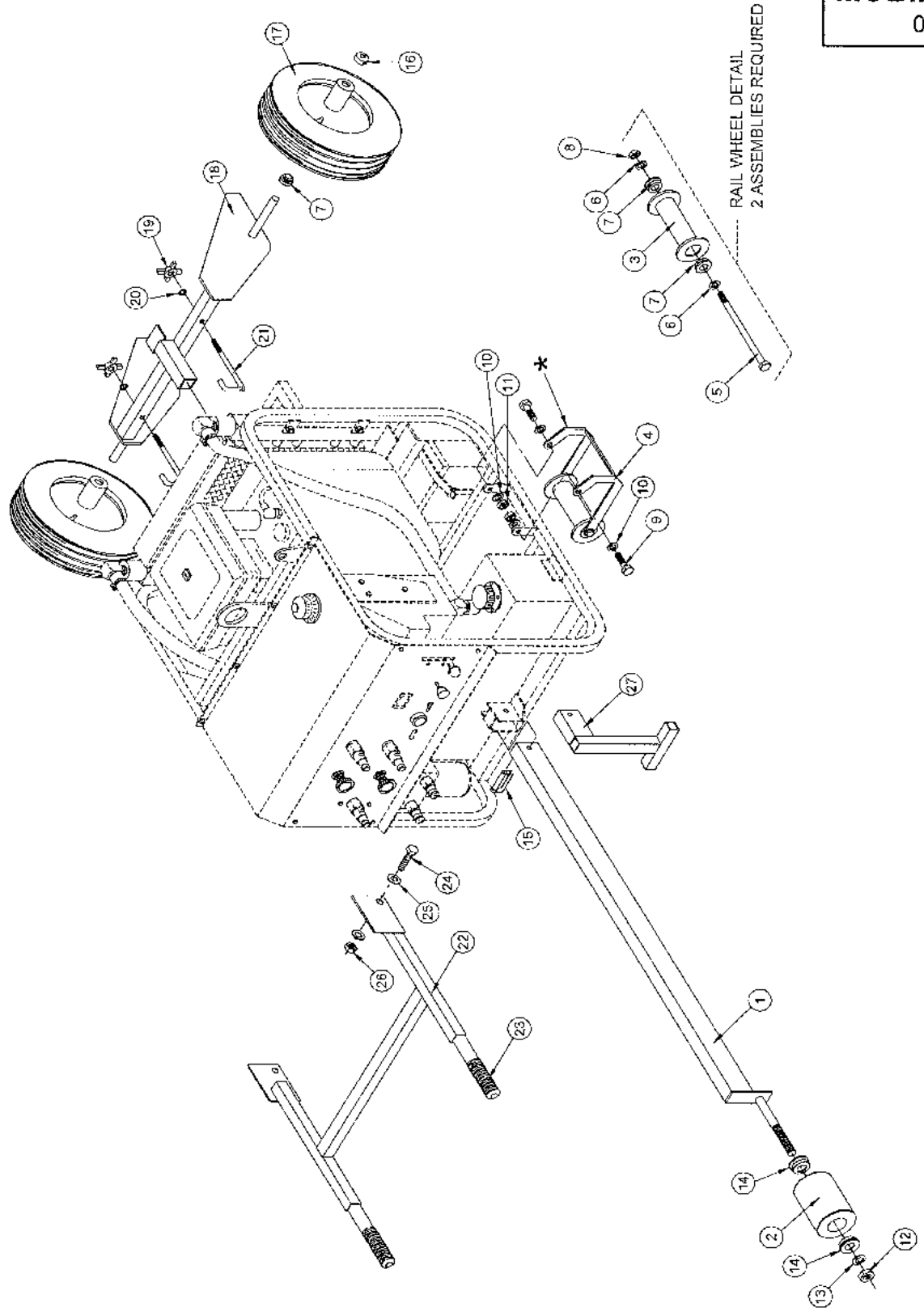
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**06327**  
**MOBILITY KIT**  
 01/01



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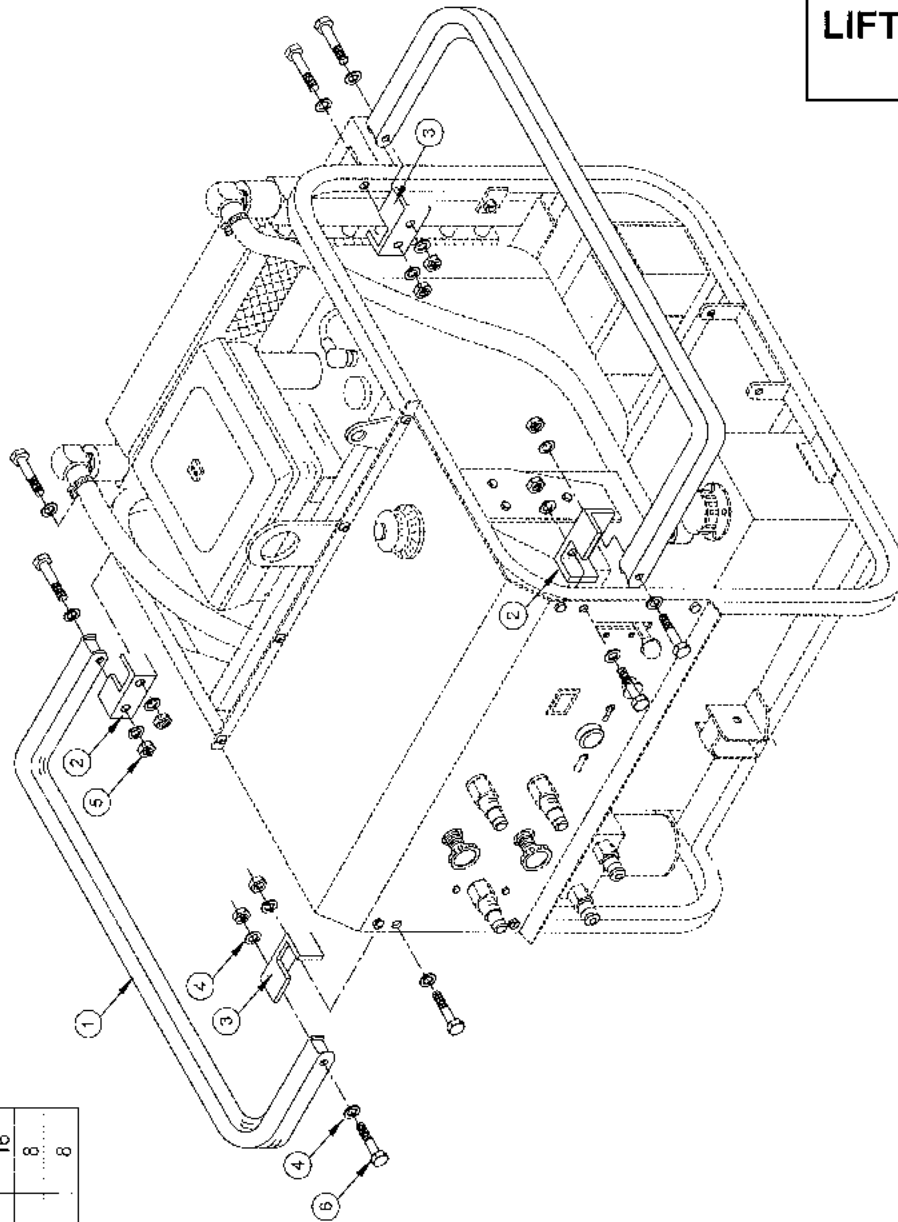
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**06327  
MOBILITY KIT**

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	00179	OUTRIGGER	1
2	00112	OUTRIGGER ROLLER	1
3	00108	RAIL WHEEL	2
4	00107	RAIL WHEEL BRACKET	2
5	A1098	1/2-13 x 6 HEX HEAD BOLT	2
6	A2194	1/2 SAE FLAT WASHER	4
7	00109	RAIL WHEEL BEARING	4
8	A2054	1/2-13 NYLOCK NUT	2
9	A1043	3/8-16 X 1 1/4 HEX HEAD BOLT	4
10	A2192	3/8 SAE FLAT WASHER	8
11	A2050	3/8-16 NYLOCK NUT	4
12	A2058	5/8-11 NYLOCK NUT	1
13	A2196	5/8 SAE FLAT WASHER	1
14	00113	OUTRIGGER BEARING	2
15	00174	OUTRIGGER RETAINER PIN	1
16	01505	LOCK COLLAR	2
17	00101	RUBBER TIRE	2
18	06335	MOBILITY FRAME	1
19	06328	KNOB	2
20	A2191	5/16 SAE FLAT WASHER	2
21	06329	5/16 J-BOLT	2
22	00105	FRONT HANDLE ASSEMBLY	1
23	00106	HANDLE GRIP	2
24	A1005	1/4-20 X 1-1/2 HEX HEAD BOLT	2
25	A2190	1/4 SAE FLAT WASHER	4
26	A2046	1/4-20 NYLOCK NUT	2
27	06332	PROP LEG	1

**00187-KIT**  
**LIFT HANDLE KIT**  
 01/01



PARTS LIST			
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	00194	LIFT HANDLE	2
2	00187	RIGHT LIFT HANDLE BRACKET	2
3	00188	LEFT LIFT HANDLE BRACKET	2
4	A2190	1/4 SAE FLAT WASHER	16
5	A2046	1/4 NYLOCK NUT	8
6	A1005	1/4-20 X 1-3/4 GR. 5 ZP	8

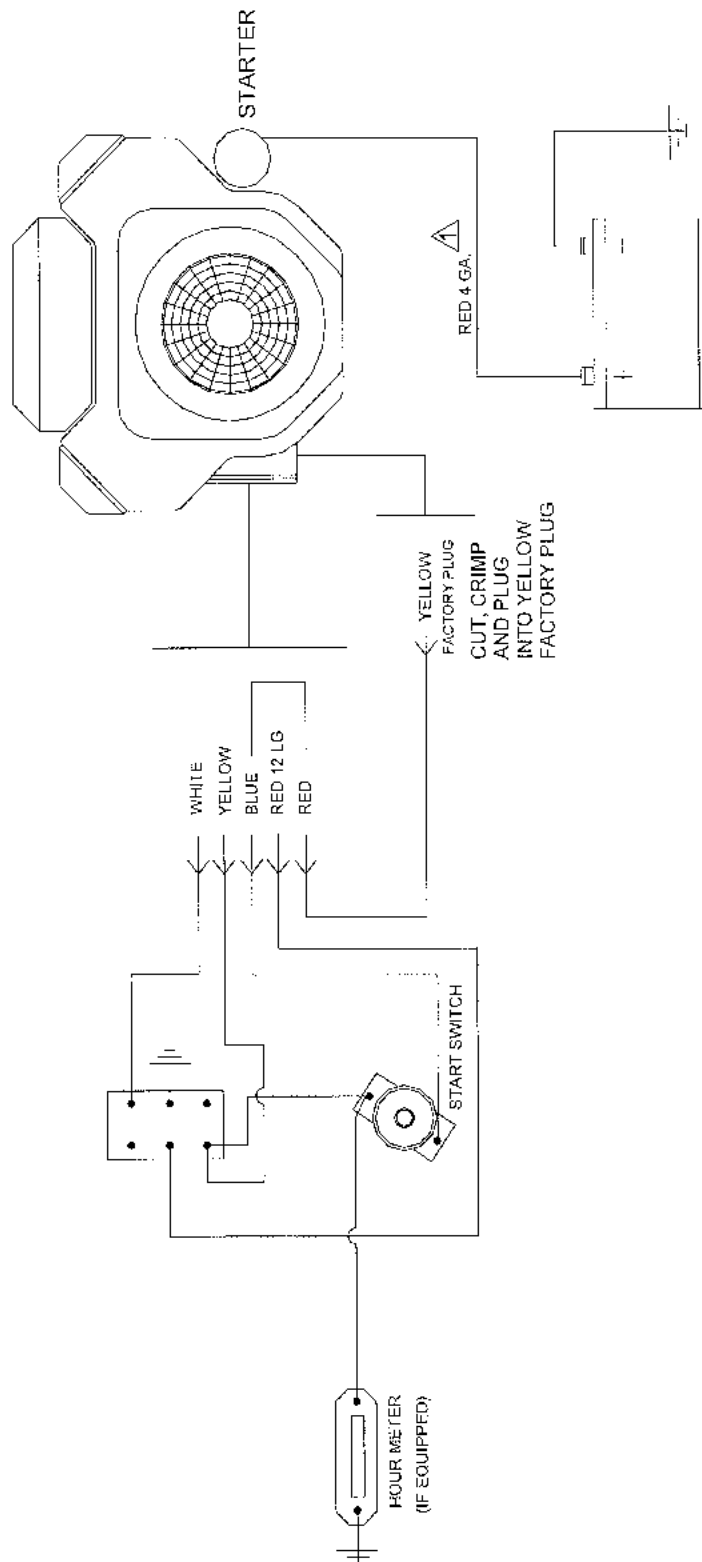
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**00100K POWER UNIT  
WIRING SCHEMATIC**



**PANDROL**

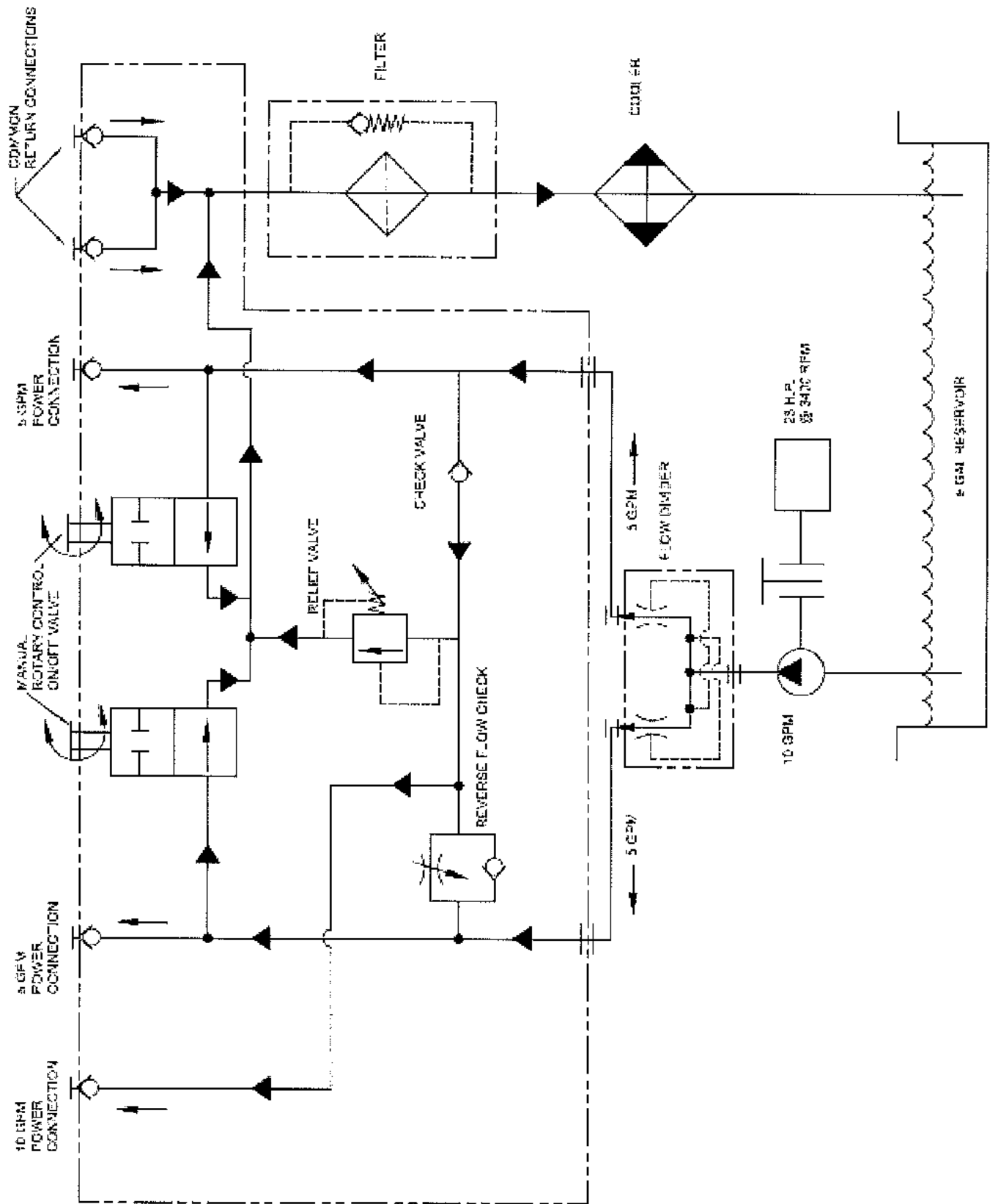
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**00100K POWER UNIT  
FLOW DIAGRAM**  
01/01



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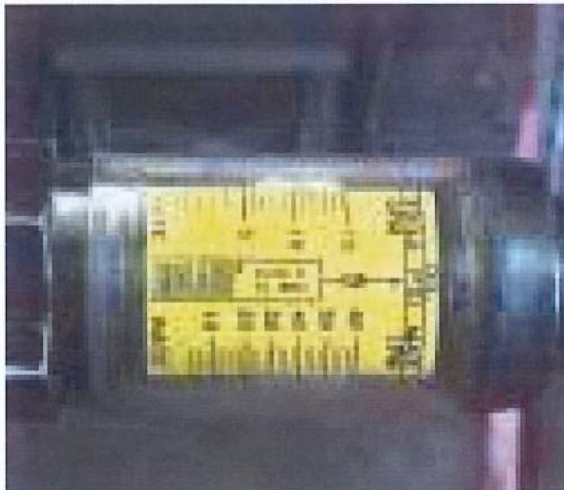
## CALIBRATION PROCEDURES FOR 00100K MANIFOLD:

A FLOW AND PRESSURE TEST GAUGE IS REQUIRED FOR CALIBRATING HYDRAULIC POWER SOURCES. **PANDROL PART NUMBER 03600 FLOW AND PRESSURE TEST GAUGE.**

**NOTE:** PROCEDURES SHOULD ONLY BE PERFORMED AFTER THE ENGINE HAS BEEN WARMED AND THE HYDRAULIC OIL HAS REACHED APPROXIMATELY 70-90 DEGREES (21-32 CELSIUS).

### FLOW CALIBRATION

- CONNECT THE 03600 FEMALE COUPLING ONTO THE 10 GPM (MALE) PORT, AND THE MALE COUPLING INTO THE RETURN (FEMALE) PORT. OPEN TOP AND BOTTOM CONTROL VALVES AND READ THE FLOW METER, MAKE CERTAIN THE NEEDLE VALVE IS OPEN NOT RESTRICTING FLOW. YOU SHOULD HAVE A READING OF 10 GPM. (AS SHOWN)



## RELIEF PRESSURE CALIBRATION:

- WITH FLOW AND PRESSURE TEST GAUGE CONNECTED TO THE 10 GPM PORT, CLOSE THE NEEDLE VALVE, AND TURN ON TOP CONTROL VALVE NOTING THE PRESSURE SHOWN ON THE GAUGE. PROPER RELIEF SETTING WILL BE 2000-2100 PSI. (TURN VALVE OFF AFTER CHECKING PRESSURE)
- IF YOU NEED TO ADJUST THE 00139 PRESSURE RELIEF VALVE. LOOSEN THE JAM NUT ON THE 00139 RELIEF VALVE WITH A 3/4" DEEP SOCKET. (OR SIMILAR TOOL) TURN THE ADJUSTMENT SCREW **CLOCKWISE** TO **INCREASE** RELIEF SETTING. (A 1/4" HEX KEY WILL BE NEEDED FOR ADJUSTMENT) TURN TOP VALVE ON NOTING THE PRESSURE ON THE GAUGE. AFTER RELIEF PRESSURE HAS BEEN REACHED, TIGHTEN THE JAM NUT ON THE 00139 RELIEF VALVE BEING CAREFUL NOT TO TURN PRESSURE ADJUSTMENT SCREW. TURN THE VALVE OFF AFTER SETTING PRESSURE.



## FLOW CONTROL SETTING:

- YOU WILL NEED THE PRESSURE TEST GAUGE CONNECTED TO THE 10 GPM PORT. USING THE 3/4" DEEP SOCKET (OR SIMILAR TOOL) AND 1/4" HEX KEY, LOOSEN JAM NUT ON THE 00141-01 FLOW CONTROL VALVE AND TURN ADJUSTMENT SCREW **CLOCKWISE** UNTIL IT SEATS. (DO NOT OVER TIGHTEN)



- TURN BOTTOM CONTROL VALVE ON AND OFF UNTIL PRESSURE REMAINS ON GAUGE. (APPROXIMATELY 1500 PSI) THIS PRESSURE WILL REMAIN ON THE GAUGE UNTIL THE 00141-01 FLOW CONTROL VALVE IS ADJUSTED.
- **SLOWLY** TURN THE ADJUSTMENT SCREW **COUNTER CLOCKWISE** UNTIL PRESSURE SUDDENLY DROPS TO ZERO. TIGHTEN THE JAM NUT ON THE 00141-01 FLOW CONTROL VALVE BEING CAREFUL NOT TO TURN THE ADJUSTMENT SCREW. CHECK THE INITIAL SETTING BY TURNING THE CONTROL VALVE ON (FULL RELIEF 2000-2100 PSI) AND OFF MAKING SURE THAT THE PRESSURE DROPS TO ZERO.

## FINAL CALABRATION AND DOUBLE CHECK:

CONNECT THE TEST GAUGE TO THE TOP 5 GPM PORT. WITH NEEDLE VALVE OPENED, TURN ON TOP CONTROL VALVE. FLOW METER SHOULD READ 5 GPM. TURN NEEDLE VALVE IN TO PRESSURIZE SYSTEM TO 1500 PSI AND NOTE THE FLOW METER. YOU SHOULD NOT SEE MORE THAN 1/2 A GPM DROP. (4 1/2 GPM FLOW) THE BOTTOM 5 GPM PORT WILL BE TESTED IN THE SAME MANNER. (USING THE BOTTOM CONTROL VALVE)

- IF THE BOTTOM 5 GPM PORT READS ANY LESS THAN 4 1/2 GPM, THEN YOU WILL HAVE TO RE-CALIBRATE THE 00141-01 FLOW CONTROL VALVE. LOOSEN JAM NUT AND VERY SLIGHTLY TURN ADJUSTMENT NUT CLOCKWISE AND TIGHTEN JAM NUT. REMOVE THE GAUGE AND TURN VALVES ON AND OFF, CONNECT IT TO THE 10 GPM PORT. IF IT GOES ON EASILY, ADJUSTMENT IS COMPLETE.
- MOVE THE GAUGE TO THE 10 GPM PORT AND TURN BOTH CONTROL VALVES ON. FLOW METER SHOULD READ 10 GPM TURN NEEDLE VALVE IN TO PRESSURIZE SYSTEM TO 1500 PSI AND NOTE THE FLOW METER. YOU SHOULD NOT SEE MORE THAN 1/2 A GPM DROP. (9 1/2 GPM FLOW)



THIS COMPLETES THE CALIBRATION PROCEDURE. IF ANY PROBLEMS ARE ENCOUNTERED, PLEASE CONTACT PANDROL FOR TECHNICAL SERVICE.

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**PANDROL**

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10/19



**DECAL LEGEND:**



DCL-1001



DCL-1002



DCL-1074

**Matweld, Inc.**  
PADUCAH, KENTUCKY

**MODEL 00100**  
**HYDRAULIC POWER UNIT**  
**2000 P.S.I. OPERATING PRESSURE**

**STARTING INSTRUCTIONS**

- Hydraulic control valve in "OFF" position.
- Move ignition switch to "ON" position.
- Pull choice choke control out.
- Push start button to start engine.
- With engine running push choke control in.

DCL-1005A

**Matweld, Inc.**

TOOL	MAX BACK PRESSURE PSI / BAR	OPERATING FLOW GPM / LPM
RAIL SAWS	250/17	10/38
IMPACT WRENCH-01500A	150/10	5/19
IMPACT WRENCH-02500	250/17	10/38
SPIKE DRIVER	150/10	5-10/19-38
SPIKE PULLER	150/10	5-10/19-38
GRINDER	250/17	10/38
TAMPER	150-10	5/19
WELD SHEAR	250/17	5/19
12 IMPACT/TIE DRILL	150/10	5/19
RAIL DRILL - MANUAL	250/17	5/19
RAIL DRILL - SELF FEED	400/28	10/38

MAXIMUM OPERATING PRESSURE FOR ALL MATWELD TOOLS: 2000PSI / 140 BAR

**WARNING**

DISCONNECT TOOL FROM HYDRAULIC CIRCUIT BEFORE MAKING ANY ADJUSTMENTS OR REPAIRS. KEEP HANDS AND BODY PARTS AWAY FROM MOVING PARTS. WEAR ALL SAFETY EQUIPMENT AND FOLLOW ALL SAFETY RULES AND PROCEDURES APPLICABLE TO MACHINE, ENVIRONMENT AND JOB.

UNLEADED  
FUEL ONLY

DCL-1005

**PANDROL**

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### HYDRAULIC CONTROLS OPERATION

- This power unit offers two individual 5 GPM supplies or one combined 10 GPM supply.
- Turn control knobs to "off" position before attaching hoses, changing tools, or detaching hoses.
- To operate a 10 GPM tool - connect hose to 10 GPM supply and turn both valve control knobs to "on".
- To operate a 5 GPM tool - connect hose to a 5 GPM supply and turn adjacent valve control knob "on". Two 5 GPM tools may be operated at the same time.
- NOTE: If you are using one service hose, or one tool at a time, it is not necessary to switch the hose between the 10 GPM port and a 5 GPM port. Hook the service hose to the 10 GPM port and a 5 or 10 GPM tool. Turn on the top valve only for 5 GPM flow. Turn on both valves for a 10 GPM flow.

### CAUTION

- Refer to maintenance manual for cold weather operation.
- Never operate the power unit with any part of the exhaust system or heat deflector removed!
- Operate in a ventilated area only!
- Keep clear of open flames or sparks!

DCL-1005



# REVIEW OF HYDRAULIC PRINCIPLES

## A. TOOL CIRCUIT

### 1. HYDRAULIC FORMULAS:

$$\text{GPM} = \frac{\text{CID} \times \text{RPM}}{231} \qquad \text{HP} = \frac{\text{GPM} \times \text{PSI}}{1456.9}$$

Example: HP required to deliver 10 GPM at 1500 PSI.

$$\frac{10 \text{ GPM} \times 1500 \text{ PSI}}{1456.9} = \frac{15000}{1456.9} = 10.3 \text{ HP}$$

(subtract back pressure for tool HP)

### Estimated HP delivered by pump or used by tool.

GPM	PSI					
	500	1,000	1,500	2,000	2,500	3,000
3	1.03	2.06	3.09	4.12	5.15	6.18
5	1.72	3.43	5.15	6.86	8.58	10.30
10	3.43	6.86	10.3	13.70	17.20	20.60
15	5.15	10.30	15.40	20.60	25.70	30.90

### 2. BACK PRESSURE

BACK PRESSURE MEASURED AT THE TOOL RETURN PORT MUST NOT EXCEED THE MANUFACTURERS BACK PRESSURE RATING. MOST MANUFACTURERS LIST THE MAXIMUM BACK PRESSURE FOR THEIR HYDRAULIC TOOLS AT 250 PSI. BACK PRESSURE MEASURED ON THE RETURN SIDE OF THE TOOL IS THE FORCE REQUIRED TO GET THE OIL BACK TO THE TANK. IN ALMOST ALL CASES THE LOWER THE BACK PRESSURE THE BETTER THE TOOL PERFORMANCE. FIRST, THE BACK PRESSURE IS SUBTRACTED FROM THE MAXIMUM TOOL PRESSURE TO ARRIVE AT A MAXIMUM TOOL OPERATING PRESSURE. FOR EXAMPLE, TOOLS WITH 2000 PSI OPERATING PRESSURE ARE INSTALLED ON A SYSTEM WITH 250 PSI BACK PRESSURE. THIS LEAVES 1750 PSI AS A MAXIMUM TOOL PRESSURE. IMAGINE A SYSTEM WITH 500 PSI BACK PRESSURE. 2000 MINUS 500 PSI BACK PRESSURE LEAVES ONLY 1500 PSI FOR THE TOOL. SECOND, TOOLS ARE DESIGNED FOR PRESSURE TO BUILD ON THE PRESSURE SIDE OF THE TOOL. IF TOO MUCH PRESSURE BUILDS ON THE RETURN SIDE, NOT ONLY IS PERFORMANCE EFFECTED, BUT SEALS MAY BLOW. THIS IS WHY IT IS VERY IMPORTANT TO DIRECT THE FLOW INTO THE TOOL CORRECTLY. REVERSING THE HOSES TO TEST MAY RESULT IN BLOWN SEALS, DAMAGE TO THE TOOL, AND PERSONAL INJURY.



## **LIMITED WARRANTY**

PANDROL, NAPOLEAN OH, WARRANTS TO THE ORIGINAL PURCHASE OF THIS PRODUCT THAT THE PRODUCT WILL BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP FOR THE PERIOD OF ONE (1) YEAR AFTER THE DELIVERY OF SUCH PRODUCT TO THE CUSTOMER. OTHER EQUIPMENT AND PARTS USED, BUT NOT MANUFACTURED BY PANDROL, ARE COVERED DIRECTLY BY THE WARRANTY OF THE MANUFACTURER OF THOSE PRODUCTS. PROOF OF PURCHASE MUST BE DOCUMENTED INCLUDING REFERENCE TO A SERIAL NUMBER LOCATED ON EACH TOOL. THE PURCHASER'S ONLY REMEDIES UNDER THIS LIMITED WARRANTY SHALL BE LIMITED AT PANDROL'S SOLE OPTION TO THE FOLLOWING: REPAIR, REPLACEMENT OR REFUND OF THE PURCHASE PRICE OF THE DEFECTIVE PRODUCTS. EACH OF THESE REMEDIES REQUIRES TIMELY NOTIFICATION OF THE DEFECT IN THE PRODUCT AND SUBSTANTIATION THAT THE PRODUCT HAS BEEN PROPERLY STORED, MAINTAINED AND USED. PANDROL'S OBLIGATIONS HEREUNDER EXTEND ONLY TO THE PURCHASER OF THE PRODUCT AND NOT TO ANY THIRD PARTY.

AS A CONDITION PRECEDENT TO PANDROL'S OBLIGATION HEREUNDER, THE DEFECTIVE PRODUCT MUST NOT HAVE BEEN ALTERED OR MODIFIED WITHOUT THE EXPRESS WRITTEN APPROVAL OF PANDROL. THE PRODUCT MUST NOT HAVE BEEN SUBJECTED TO DELIBERATE DAMAGE, SHIPPING DAMAGE, NEGLIGENCE, TAMPERING BY UNAUTHORIZED PERSONNEL OR DAMAGE BY IMPROPER USE, STORAGE OR MAINTENANCE. SERIAL NUMBERS MUST NOT HAVE BEEN ALTERED, DEFACED OR REMOVED. SUCH ACTION VOIDS LIMITED WARRANTY.

### **EXCLUSIONS TO LIMITED WARRANTY**

*THIS LIMITED WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY OTHER WARRANTY, WRITTEN OR ORAL, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.*

LIMITED WARRANTY DOES NOT COVER NORMAL WEAR AND TEAR ITEMS SUCH AS FILTERS, HOSES, COUPLERS, BITS, SOCKETS, AUGERS, AND BATTERIES.

### **LIMITATION OF LIABILITY**

EXCEPT AS PROVIDED ABOVE, PANDROL SHALL IN NO EVENT BE LIABLE OR RESPONSIBLE FOR ANY INJURY, LOSS OR DAMAGE, DIRECT, INCIDENTAL OR CONSEQUENTIAL, ARISING OUT OF THE USE OR MISUSE OR INABILITY TO USE THE PRODUCT, HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY INCLUDING, WITHOUT LIMITATIONS, BREACH OF CONTRACT, TORT, (INCLUDING NEGLIGENCE OR STREET LIABILITY) AND NOT WITHSTANDING ANY FAILURE OF ANY REMEDY HEREIN OF ITS ESSENTIAL PURPOSE, EVEN IF PANDROL WAS AWARE OF THIS POSSIBILITY OF SUCH DAMAGE. PANDROL'S LIMITED WARRANTY AS SET FORTH ABOVE SHALL NOT BE ENLARGED, DIMINISHED OR AFFECTED BY, AND NO OBLIGATION OR LIABILITY SHALL ARISE OR GO OUT OF THE RENDERING OF TECHNICAL ADVICE OR SERVICE BY PANDROL OR ITS AGENTS. THE FOREGOING MAY NOT BE CHANGED EXCEPT BY WRITTEN AGREEMENT SIGNED BY AN AUTHORIZED OFFICER OF PANDROL, THE REMEDIES SET FORTH HEREIN ARE EXCLUSIVE.

# **CUSTOMER INFORMATION:**

Name \_\_\_\_\_

Company \_\_\_\_\_

Serial # of your Pandrol tool \_\_\_\_\_

(Upon receiving your Pandrol tool, make sure to list serial number above so that a good record is kept for order information.)

## **PANDROL HYDRAULIC TOOL LIST**

*All Pandrol Hydraulic Tools operate at 5 or 10 GPM @ 2000 PSI*

### **POWER UNITS:**

00100K – GASOLINE POWERED 1-10 GPM OR 2-5 GPM

02900A – DIESEL 1-10 GPM OR 2-5 GPM

*(OPTIONAL CATALYTIC EXHAUST AND/OR MSHA CERTIFIED)*

05500 – TWIN POWER DUAL CIRCUIT 1-10 GPM OR 2-5 GPM & 5000 WATT GENERATOR

02050K – GASOLINE POWERED 1-5 GPM

03700A – ELECTRIC POWER 1-10 GPM OR 2-5 GPM

### **GRINDERS:**

09200A – PRECISION FROG GRINDER

06000 – PROFILE GRINDER

06900 & 06900A – MULTI-PURPOSE GRINDER (TRIGGER VERSION AVAILABLE)

05900 – FROG/PROFILE GRINDER (TRIGGER VERSION AVAILABLE)

00700 – RAIL SURFACING GUIDE

04600 – STRAIGHT STONE CW ROTATION (TRIGGER VERSION AVAILABLE)

04700 – STRAIGHT STONE CCW ROTATION (TRIGGER VERSION AVAILABLE)

07500 – CHAMFER TOOL

04800 – CUP STONE GRINDER (TRIGGER VERSION AVAILABLE)

00600C – CUP STONE GRINDER

05400 – ANGLE GRINDER

05600 – BULL NOSE GRINDER

02400 – 10" OR 14" FROG AND SWITCH GRINDER

### **TRACK TOOLS:**

03900A – REVERSING RAIL SAW

05100A & 05100B – POWER WELD SHEAR

03500 – SELF FEED RAIL DRILL

01600A – 5 GPM 1" IMPACT WRENCH

04500D – HYDRAULIC DRILL IMPACT WRENCH

08200 – TAMPER

02800 – 60 TON BRIDGE SPREADER

01200 – SPRING ANCHOR APPLICATOR

01100A – SPIKE PULLER (SINGLE, 2 STAGE & TRIGGER VERSIONS AVAILABLE)

00800A – 16" RAIL SAW

05000 – HAND PUMP WELD SHEAR

01500 – RAIL DRILL

02500 – 10 GPM 1" IMPACT WRENCH

03100C – RAIL PULLER

08300 – SPIKE DRIVER

07650 – HYDRAULIC CLIP TOOL

### **OTHER PRODUCTS:**

HYDRAULIC MANIFOLDS

HYDRAULIC TEST GAUGES

HOSE REELS

HYDRAULIC HOSES

ACCESSORIES

**PANDROL**

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**FAX:(419) 599-3630**

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