

Professional Service Equipment

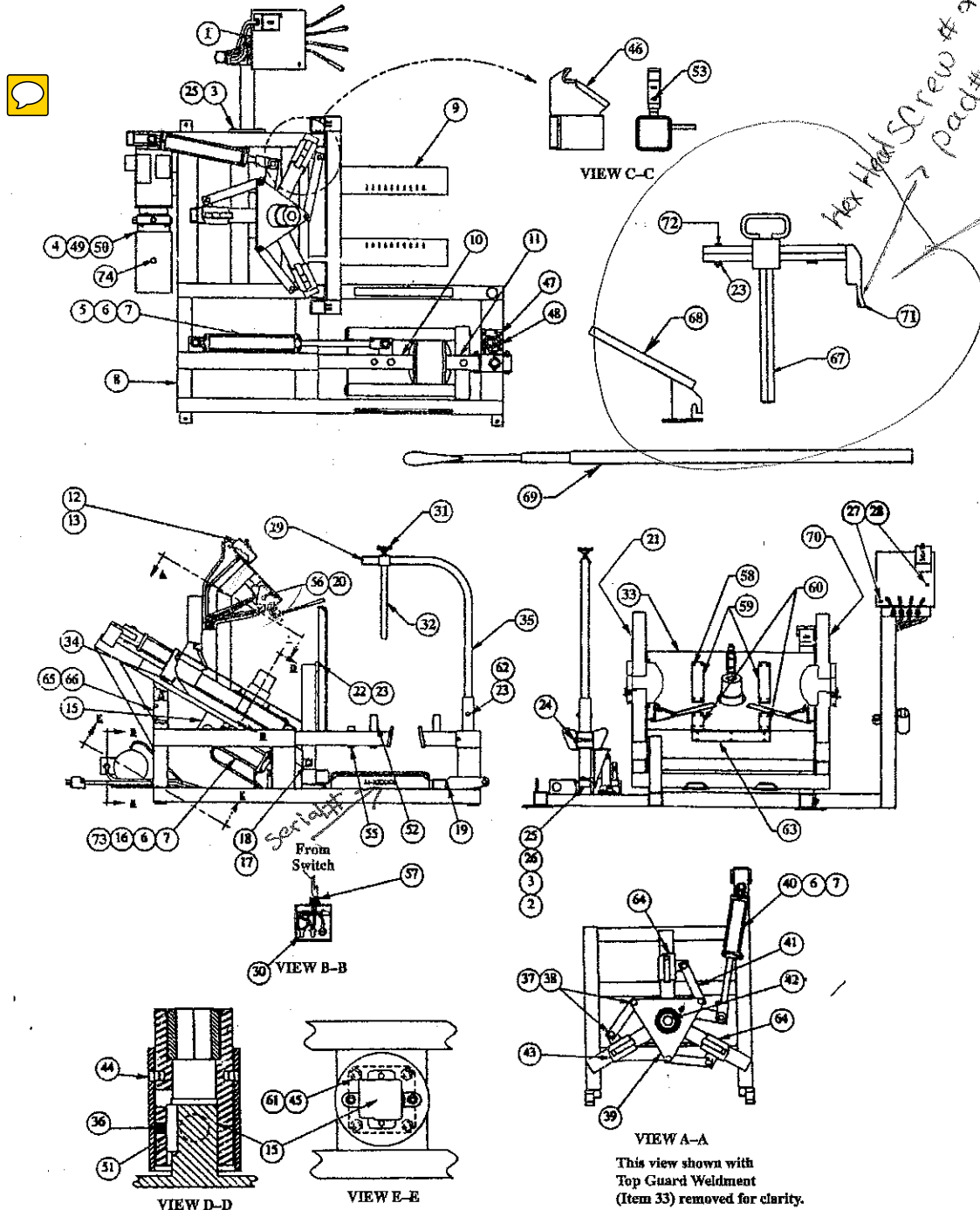


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Parts List

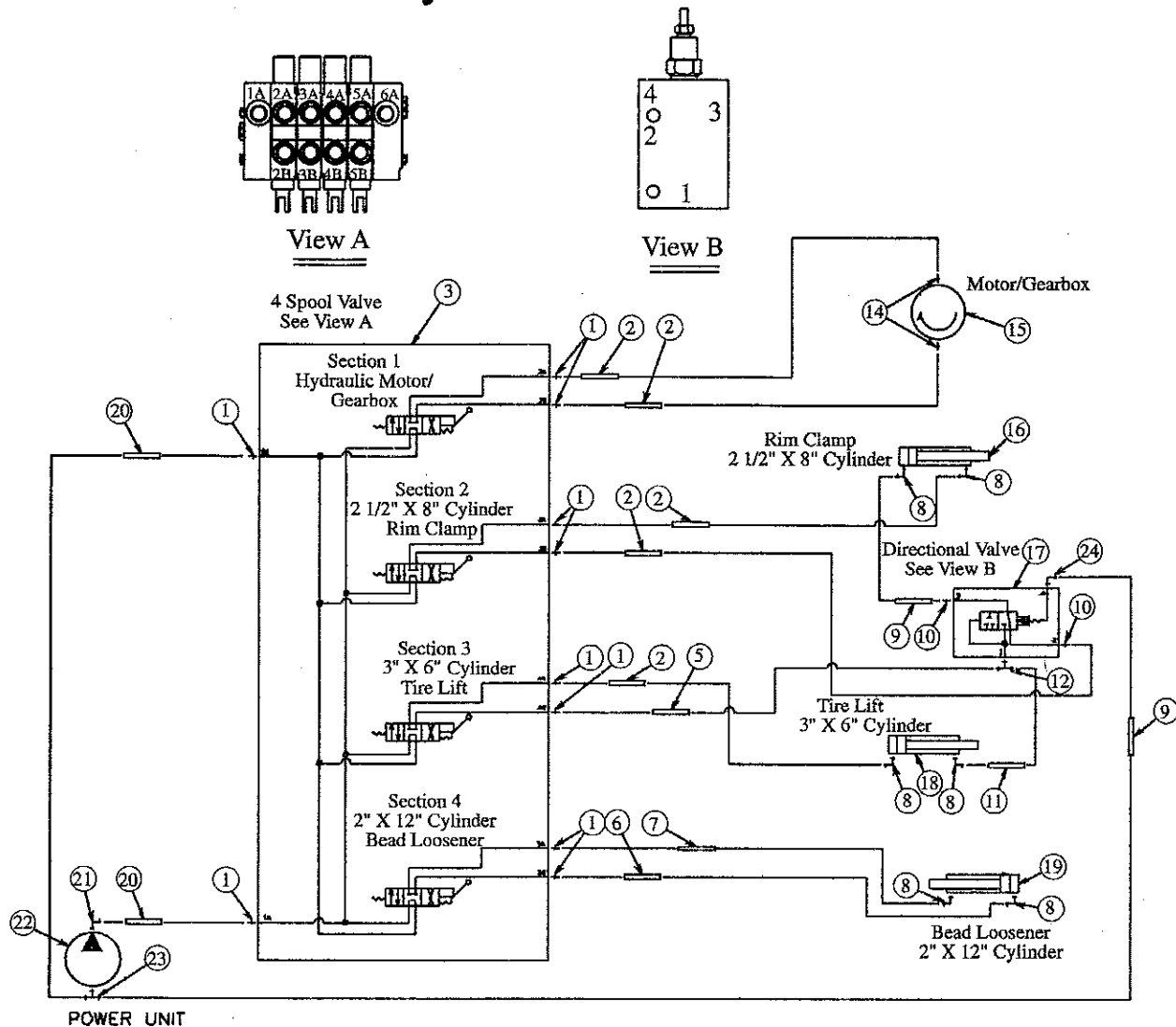
Model 2100

Final Assembly Parts List



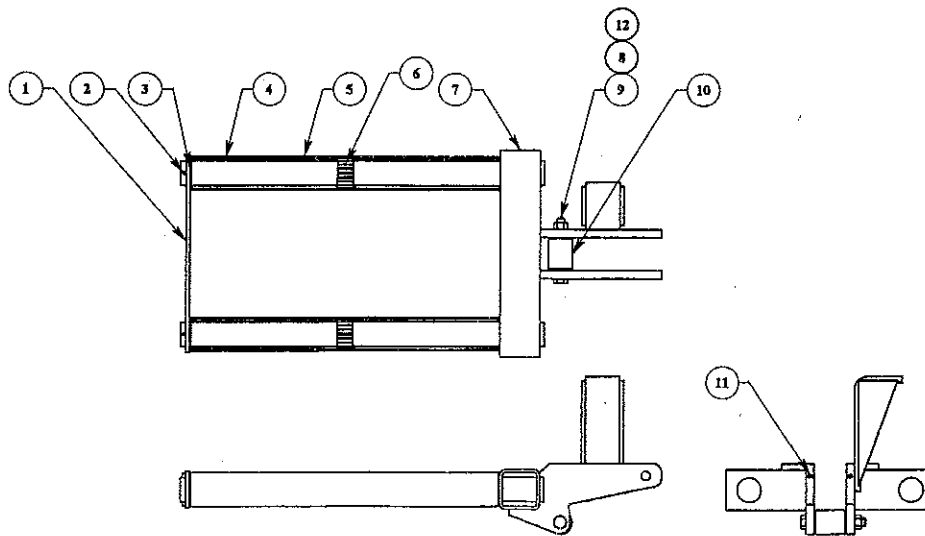
1	1	3-881-02030	Valve Stand Weldment
2	1	1-881-04111	Bearing, Cylindrical, 3/4 O.D. X 1 1/2 ID.
3	3	1-203-01403	Nut, Hex, 1/2-13 UNC, Regular, Steel, Self Locking
4	1	1-353-40041	Power Unit, Tire Changer (Single Phase)
	1	1-353-40046	Power Unit, Tire Changer (Three Phase)
5	1	2-353-45008	Cylinder, Hydraulic, 2" x 12"
6	6	Ref. Pin, 1" Dia. X 3 1/2" Long (2 ea. Included with Items 5,16, and 40)	
7	12	Ref. Pin, Cotter, 3/16" X 2 1/2" Long (4 ea. Included with Items 5,16, and 40)	
8	1	4-881-02027	Base Weldment
9	1	3-881-02042	Tire Lift Weldment
10	1	2-881-02028	Moving Shoe Tube Weldment
11	1	2-881-02029	Stationary Shoe Tube Weldment
12	1	3-881-01002	Tire Changer Wire Subassembly (Single Phase)
	1	3-881-01009	Tire Changer Wire Subassembly (Three Phase)
13	2	1-202-00803	Screw, Pan Head, #10-32 UNF, Steel, Plated, 1/2" Long
15	1	3-881-04052	Motor/Gear Box Unit
16	1	1-353-45011	Cylinder, Hydraulic, 3" x 6"
17	2	1-881-04024	Pivot Pin, Drilled
18	4	0-235-21021	Roll Pin, 3/16" Dia. X 1 3/4"
19	1	3-881-01004	Roller Tube Bracket Subassembly
20	1	4-881-00004	Hydraulic Plumbing Assembly
21	1	2-881-01013	Lift Pad With Hinge Assembly, L.H.
22	2	0-200-31208	Capscrew, Hex Head, 3/8-16 UNC, Steel, Grade 5, Plated, 1 1/2" Long
23	3	1-203-01202	Nut, Hex, 3/8-16 UNC, Steel Plated, Self Locking
24	1	1-235-40001	Pin, Quick Release, 7/16" Dia. X 3" Grip Length
25	3	0-200-31417	Capscrew, Hex Head, 1/2-13 UNC, Steel, Grade 5, Plated, 3 3/4" Long
26	1	1-881-04092	Wheel, 1 1/2" Dia. (used on serial numbers 1199 and below)
	1	1-881-04202	Wheel, 1 1/4" Dia. (used on serial numbers 1200 and above)
27	2	0-200-31206	Capscrew, Hex Hd., 3/8-16 UNC, Steel, Grade 5, Plated, 1" Long
28	2	0-204-11202	Washer, Lock, Split Type, 3/8", Medium, Steel, Plated
29	1	0-235-21030	Roll Pin, 3/16" Dia. X 2" Long
30	3	0-593-10003	Electrical Connector, Twist
31	1	1-881-01005	Adjustment Knob
32	1	2-881-02037	Sliding Bracket Weldment
33	1	4-881-02047	Top Guard Weldment
34	4	1-201-21006	Machine Screw, Slotted Pan Head, 1/4-20 UNC, 3/4" Long
35	1	1-881-04150	Tire Stabilizer
36	1	1-881-04179	Setscrew, Socket Head, 7/16-20 UNF, Steel, Cup Point X .44 Long
37	6	1-203-01601	Nut, Hex, 5/8-11 UNC, Steel, Plated, Self Locking
38	6	1-202-01608	Capscrew, Special, 5/8-11 UNC, Steel, Grade 5, Plated, 1 1/2" Long
39	1	2-881-02043	Cam Plate Weldment
40	1	2-353-45009	Cylinder, Hydraulic, 2 1/2" X 8"
41	3	1-881-04183	Rim Lock Link
42	1	2-881-02031	Drive Tube Weldment
43	3	2-881-02046	Rim Lock/Guide Tube Weldment R.H.
44	2	1-881-04115	Setscrew, Special, 1/2-20 UNF
45	4	0-200-31408	Capscrew, Hex Head, 1/2-13 UNC, Steel, Grade 5, Plated, 1 1/2" Long
46	3	1-881-04162	Rim Lock Plastic Pad
47	1	1-353-40019	Hand Jack, 2 Ton, Drilled
48	1	0-202-01105	Capscrew, Socket Hd., 5/16-18 UNC, Steel, Grade 5, Plated, 1" Long
49	4	0-200-31102	Capscrew, Hex Head, 5/16-18 UNC, Steel, Grade 5, Plated, 1/2" Long
50	4	0-204-01101	Washer, Plain, 5/16 Dia., Medium, Steel, Plated
51	1	8-010-62011	Bar, Square, 1/2X 1/2, Ems 1-2X2" Long
52	1	1-881-04122	Pin, Rim Stop
53	6	0-201-01001	Capscrew, Socket Head, 1/4-20 UNC, Steel, 1/2" Long
54	1	3-881-00002	Placard Orientation and Shipping Assembly, Model 2100
55	1	1-881-04128	Pin, Rim Stop, Aluminum Wheel
56	1	3-881-01006	Valve Handle Subassembly
57	1	1-592-00003	Cable Connector, 1/2
58	22	1-205-21001	Rivet, Drive, St/Alum., 3/16 Dia. X 1/4 Grip
59	2	1-881-04165	Top Guard Wear Strip, Long
60	2	1-881-04166	Top Guard Wear Strip, Short
61	4	0-204-11400	Washer, Lock, Split Type, 1/2" Med., Stl., Unplated
62	1	0-200-31210	Capscrew, Hex Hd., 3/8-16 UNC, Grade 5, Plated, 2" Long
63	1	1-881-04171	Top Guard Wear Strip, Long, 6 Holes
64	2	1-881-02045	Rim Lock/Guide Tube Weldment L.H.
65	1	1-881-04177	Directional Valve with Pilot
66	2	0-200-31110	Capscrew, Hex Head, 5/16-18 UNC, Regular Steel, Plated, 2" Long
67	1	3-881-02018	Hex Socket, Hex Shaft Weldment
68	1	2-881-02012	Bead Retention Tool Weldment
69	1	2-881-01018	Bead lifting Prybar Weldment
70	1	2-881-01012	Lift Arm With Hinge Assembly, R.H.
71	1	3-881-02019	Tool Head Weldment
72	1	0-201-40018	Capscrew, Button Head, 3/8-16 UNC, Steel, Grade 5, Plated, 2" Long
73	6	Ref.	Pin, Cotter, Hairpin, 3/16
74	1	1-353-49244	Cap, Breather

Hydraulic Parts List



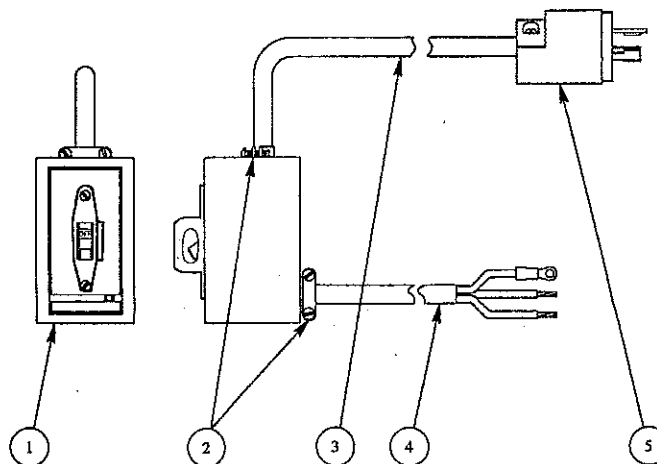
Item	Qty.	Part Number	Description
1	10	1-274-14006	Adapter, Straight, 3/4-16 SAE O-Ring X 9/16 JIC
2	5	1-271-42004	Hose Assembly, Multiwire, Female 9/16-18 SAE 37° Flare, 70" Long
3	Ref.	2-353-50002	4 Spool Valve
5	1	1-271-42010	Hose Assembly, Multiwire, Female 9/16-18 SAE 37° Flare, 64" Long
6	1	1-271-42006	Hose Assembly, Multiwire, Female 9/16-18 SAE 37° Flare, 90" Long
7	1	1-271-42007	Hose Assembly, Multiwire, Female 9/16-18 SAE 37° Flare, 106" Long
8	6	1-274-02007	Adapter, 90° Elbow, 3/4-16 Adjustable SAE O-Ring X 9/16-18 JIC
9	2	1-271-42011	Hose Assembly, Multiwire, Female 9/16-18 SAE 37° Flare, 20" Long
10	2	1-274-12011	Adapter, Straight, SAE O-Ring 9/16-18 X 9/16 JIC
11	1	1-271-42009	Hose Assembly, Multiwire, Female 9/16-18 SAE 37° Flare, 32" Long
12	1	1-274-22002	Adapter, Tee, 9/16-18 JIC X 9/16-18 Adjustable SAE O-Ring X 9/16-18 JIC
14	2	1-274-12010	Adapter, Straight, 1/2-14 Pipe X 9/16-18 JIC
15	Ref.	3-881-04052	Motor/Gearbox Unit
16	Ref.	2-353-45009	Cylinder, Hydraulic, 2 1/2" X 8"
17	Ref.	1-881-04177	Directional Valve with Pilot
18	Ref.	1-353-45007	Cylinder, Hydraulic, 3" X 6"
19	Ref.	1-353-45008	Cylinder, Hydraulic, 2" X 12"
20	2	1-271-42008	Hose Assembly, Multiwire, Female 9/16-18 SAE 37° Flare, 78" Long
21	1	1-274-02006	Adapter, 90° Elbow, 3/8-18 Pipe X 9/16 JIC
22	Ref.	1-353-40041	Power Unit, Tire Changer
23	1	1-274-22001	Adapter, Tee, 9/16-18 JIC X 9/16-18 JIC X 3/8-18 Pipe
24	1	1-274-02009	Adapter, 90° Elbow, 9/16-18 Adjustable SAE O-Ring X 9/16 JIC

Roller Tube Parts List



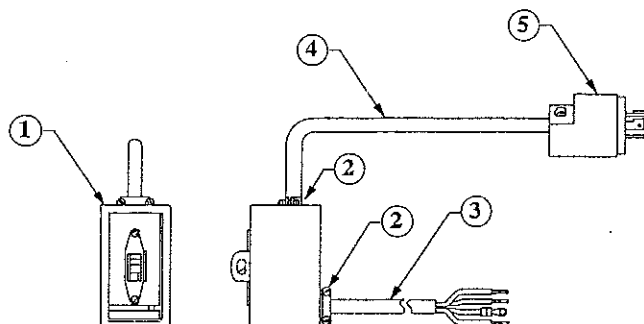
Item	Qty.	Part Number	Description
1	1	2-881-04091	Roller Tube End Plate
2	2	0-235-21030	Roll Pin, 3/16" Dia. x 2" Long
3	2	1-204-02303	Washer, Special, 2 1/8" x 1 9/16" x .060 Thick
4	4	8-057-36021	Pipe, Plastic, 1 1/2", Schedule 40, PVC, 8 7/8" Long
5	2	8-082-57022	Tubing, Round, 2 1/8" x 3/32 Wall, 18 31/32" Long
6	2	1-440-14002	Bearing, Roller, 1 1/2" Dia. Bore
7	1	3-881-02026	Roller Tube Support Bracket Weldment
8	1	0-200-31417	Capscrew, Hex Head, 1/2-13 UNC, Steel, 3 3/4" Long
9	1	1-203-01403	Nut, Hex, 1/2-13 UNC, Self Locking, Steel, Plated
10	1	1-881-04092	Wheel, 1 1/2" Dia. (used on serial numbers 1199 and below)
1	1	1-881-04202	Wheel, 1 1/4" Dia. (used on serial numbers 1200 and above)
11	2	0-201-31009	Setscrew, Steel, 1/4-20 UNC, Plated, Nylon Patch
12	1	1-881-04111	Bearing, Cylindrical, 3/4" O.D. x 1/2" I.D.

Electric Parts List (Single Phase)



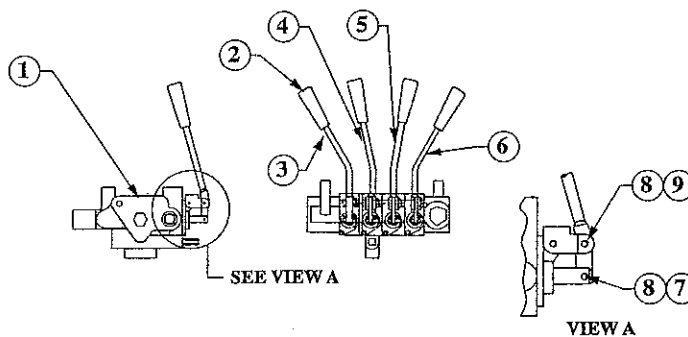
Item	Qty.	Part Number	Description
1	1	1-591-00003	D.P. Toggle Switch
2	2	1-592-00003	Cable Connector, 1/2"
3	1	1-593-20001	Wire Assembly, 12-3 W/Terminals
4	1	1-593-20002	Wire Assembly, 12-3 W/Terminals
5	1	1-591-00002	220 Volt Twist-Lock Plug

Electric Parts List (Three Phase)

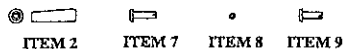


Item	Qty.	Part Number	Description
1	1	1-591-00006	Three Pole Toggle Switch
2	2	1-592-00003	Cable Connector, 1/2"
3	1	1-593-20003	Wire Assembly, 14-4 W/Terminals (Switch to Motor)
4	1	1-593-20004	Wire Assembly, 14-4 W/Terminals (Switch to Plug)
5	1	1-591-00005	20 Amp, 250 Volt 3Ø, Twist-Lock Plug

Valve Handle Subassembly

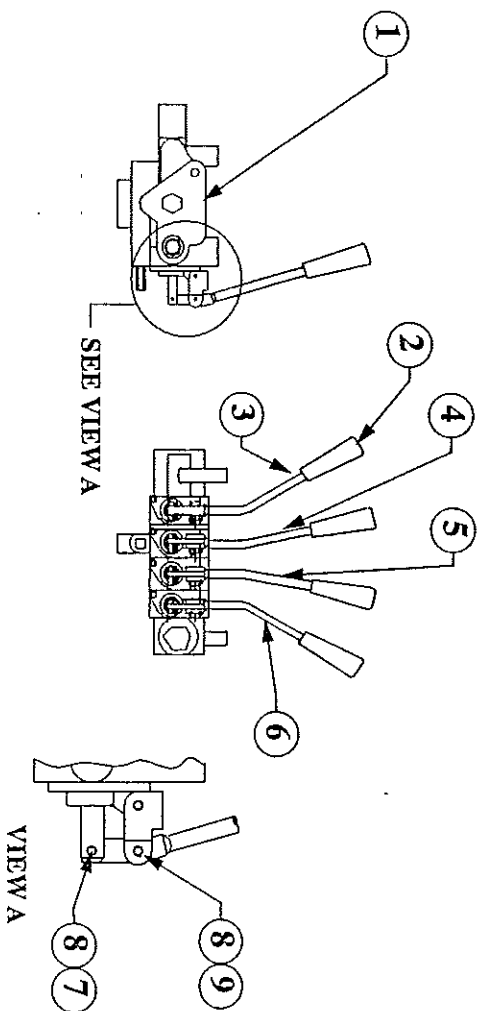


Items 2, 7, 8, & 9 are supplied with item 1 (4 Spool Valve) as
Prince Manufacturing Corp. P/N 660401004 (Tie Rod Kit)



Item	Qty.	Part Number	Description
1	1	2-353-50002	4 Spool Valve
2	4	Ref.	Knob, Handle
3	1	1-881-04152	Handle, Bent, L.H.
4	1	1-881-04154	Handle, Bent, L.H. Middle
5	1	1-881-04155	Handle, Bent, R.H. Middle
6	1	1-881-04153	Handle, Bent, R.H.
7	2	Ref.	Pin, Long
8	3	1-203-51004	Pin, Long
9	1	Ref.	Pin, Short

Valve Handle Subassembly



Items 2, 7, 8, & 9 are supplied with item 1 (4 Spool Valve) as
Prince Manufacturing Corp. P/N 660401004 (Tie Rod Kit)

ITEM 2 ITEM 7 ITEM 8 ITEM 9

Item	Qty.	Part Number	Description
1	1	2-353-50002	4 Spool Valve
2	4	Ref.	Knob, Handle
3	1	1-881-04152	Handle, Bent, L.H.
4	1	1-881-04154	Handle, Bent, L.H. Middle
5	1	1-881-04155	Handle, Bent, R.H. Middle
6	1	1-881-04153	Handle, Bent, R.H.
7	2	Ref.	Pin, Long
8	3	1-203-51004	Palmnut 7/16" diameter
9	1	Ref.	Pin, Short

Maintenance/Trouble Shooting



NEVER allow the electric motor or the on/off switch to get wet. Disconnect the electrical power and cover the motor and switch with plastic before washing the machine.

Maintenance

NOTE: Dirt can easily plug the hydraulic system and cause malfunction. When filling the reservoir, clean dirt and debris from around the fill plug before removal, and make sure all oil funnels and containers are clean.

Trouble shooting

PUMP MOTOR WILL NOT RUN	
Possible Causes 1. Power to machine is off. 2. Electrical wiring improperly connected. 3. Switch damaged. 4. Motor damaged.	Solutions Turn on power to the machine. Have a qualified electrician investigate and correct. Same as number 2. Same as number 2.
MOTOR TURNS BUT NO POWER AT HYDRAULIC FUNCTIONS	
Possible Causes 1. Low oil supply in reservoir. 2. Leaking control valve or cylinder. 3. Power unit defective.	Solutions Remove fill plug on reservoir and fill reservoir with hydraulic oil to within 1" of the top. NOTE: Do not use brake fluid. Fill with Mobile DTE 24 or equivalent. Turn tire system off and then remove hoses from cylinder and plug with 3/8" male JIC plugs. Turn system back on and operate valve to the cylinder with hoses removed. The power unit should make a loud sound indicating it is pumping oil over the relief valve. If it does make a loud sound the cylinder is defective and needs to be repaired. If the power unit does not change in noise level the valve spool is leaking and that section of the valve should be replaced. Replace power unit.
MOUNT/DEMOUNT TOOL WILL NOT ROTATE	
Possible Causes 1. Low oil supply in reservoir. 2. Leaking control valve or hydraulic motor.	Solutions Remove fill plug on reservoir and fill reservoir with hydraulic oil to within 1" of the top. NOTE: Do not use brake fluid. Fill with Mobile DTE 24 or equivalent. Turn system off and then remove hoses from hydraulic motor and plug with 3/8" male JIC plugs. Turn system back on and operate valve to the hydraulic motor. The power unit should make a loud sound indicating it is pumping oil over the relief valve. If it does make a loud sound the hydraulic motor is defective and needs to be repaired. If the power unit does not change in noise level the valve spool is leaking and that valve section should be replaced.



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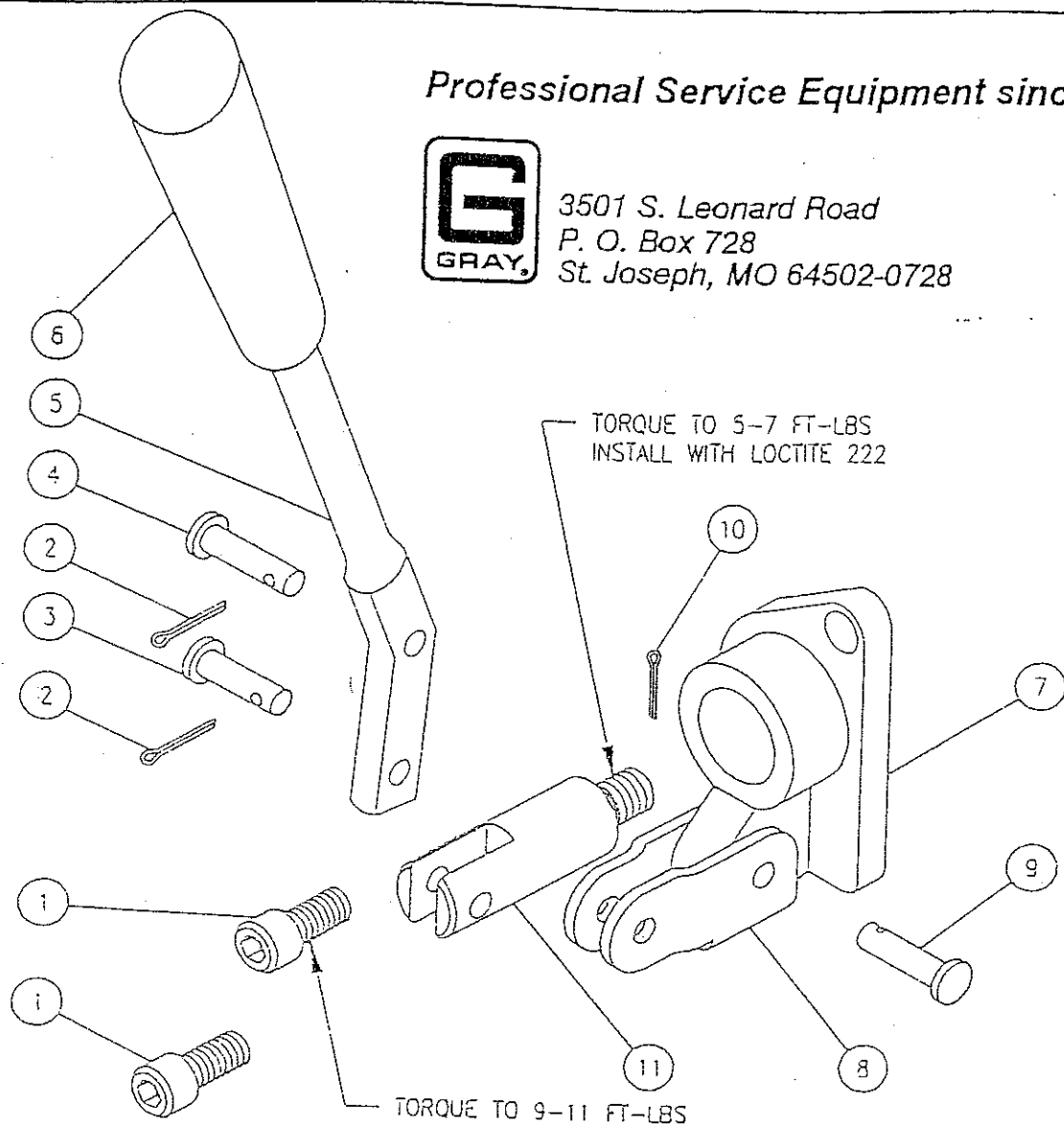
Model 2100 Tire Machine Hydraulic Reservoir Screen Cleaning Procedures

1. Remove vertical hose on top of reservoir and place end into a clean empty container.
2. Turn power to machine on and allow the machine to pump out hydraulic fluid from reservoir into the bucket. Caution should be taken to make sure you do not run the motor to long causing the motor to lock up. Turn off power as soon as the oil stops pumping from the hose.
3. Remove the six screws holding the reservoir to the motor and remove reservoir tank.
4. Locate filter screen and clean. You may need to remove the suction tube and screen to clean thoroughly. Simply screw suction tube back into place after cleaning. No thread sealer will be needed.
5. Re-install hydraulic hose.
6. Replenish hydraulic fluid. The fluid removed from the reservoir may be re-used if it is clean and free of foreign material.
7. The machine should now function properly.

Professional Service Equipment since 1952



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ITEM	QTY	GRAY PART NO.	DESCRIPTION	PRINCE MFG NO.
1	2	535-21009	CAP SCREW	
2	2	535-25002	COTTER PIN	
3	1	535-22004	CLEVIS PIN	
4	1	535-22005	CLEVIS PIN	
5	1	SEE VALVE HANDLE SUBASSEMBLY PARTS LIST		
6	1	535-20011	HANDLE KNOB	
7	1	535-35035	CLEVIS	
8	1	535-35036	LINK	
9	1	535-22005	CLEVIS PIN	
10	1	535-25002	COTTER PIN	
11	1	535-45025	SPOOL ADAPTER	