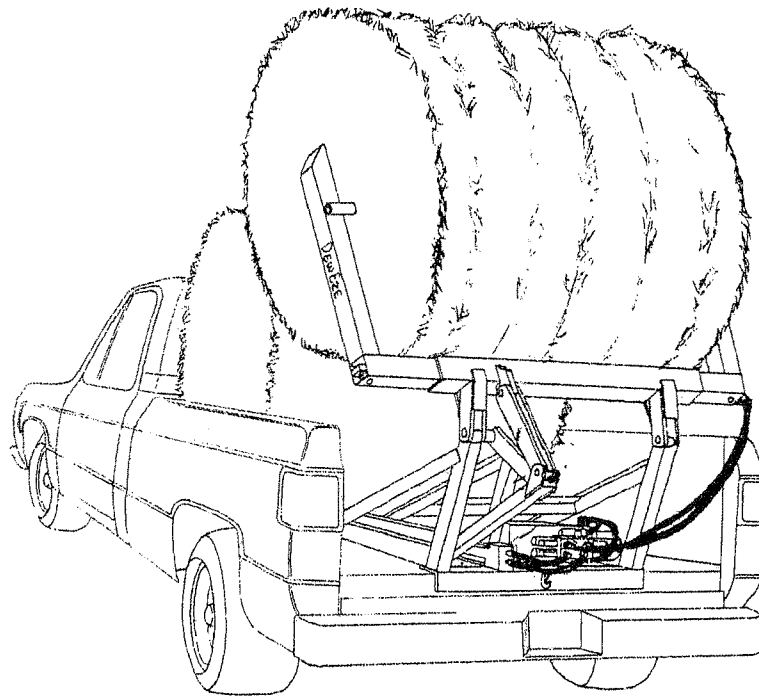


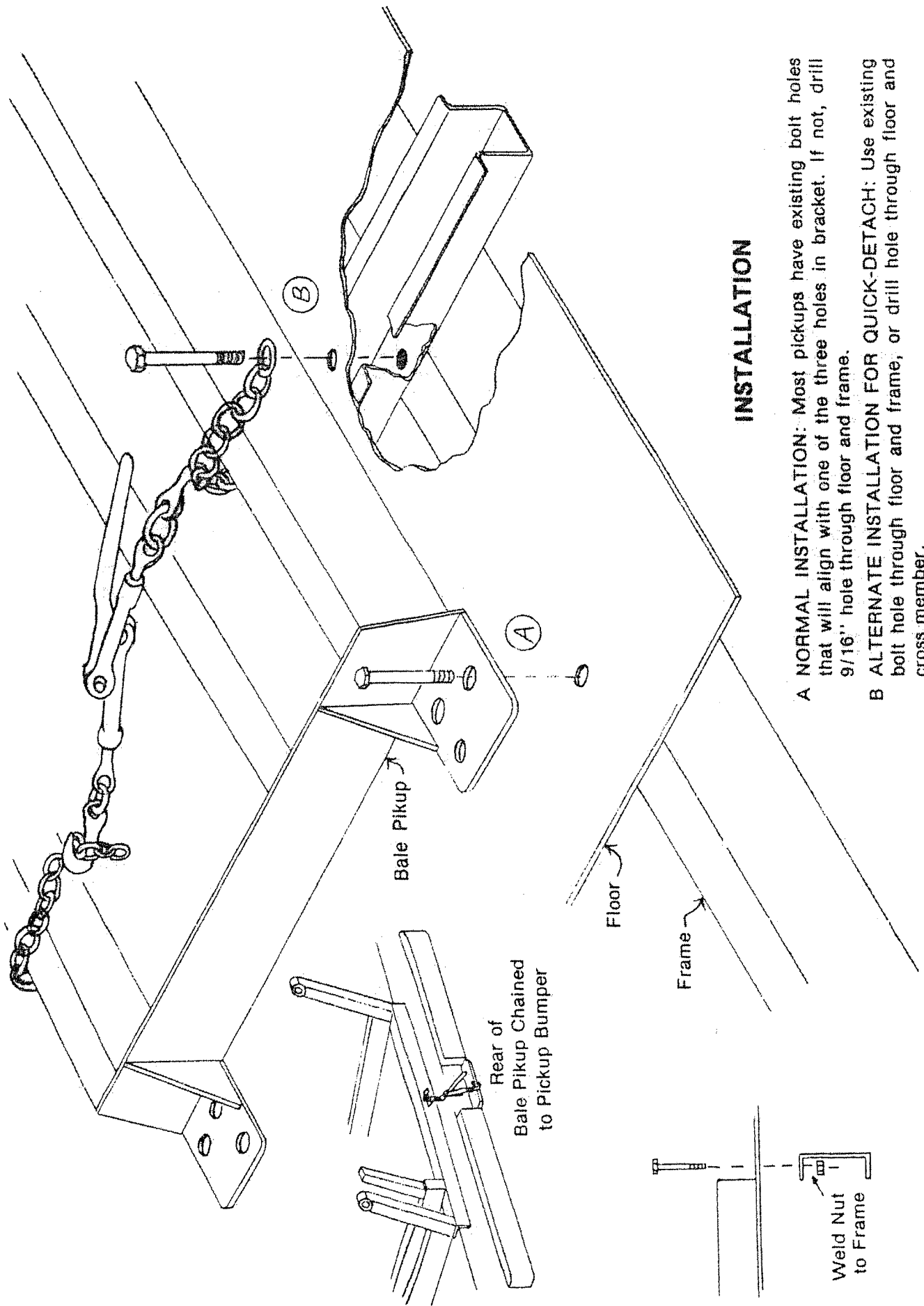
Bale Pickup 265 Series Operation & Service Manual



HARPER INDUSTRIES INC.

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INSTALLATION

- A NORMAL INSTALLATION: Most pickups have existing bolt holes that will align with one of the three holes in bracket. If not, drill 9/16" hole through floor and frame.
- B ALTERNATE INSTALLATION FOR QUICK-DETACH: Use existing bolt hole through floor and frame, or drill hole through floor and cross member.

Elec./Hyd. Installation and Operating Tips

Good installation calls for the power cable (#2/0) to be routed to clear all obstructions, with care to be taken that the cable does not pass over sharp frame members or placed in a position where the insulation will be squeezed or scraped to bare wire. An electrical short could occur. Support (with cable clamps) and or tie cable along the full length of run. Cover with heater hose or wire loom if not provided. Connect the cable directly to the positive 12-volt DC battery terminal. Make sure there are good grounding connections between the electric motor and the truck frame. At least a 70 amp/hr battery is required.

Do not carry sharp metal objects (shovel, axes, parts, etc.) in the bed of truck where the weight of the bales on such objects can cause damage to the electric cables or hydraulic lines.

Many vehicles are factory equipped with alternators of 40 amp – 50 amp capacity. With heater motors running and lights on, these small alternators may not maintain a fully charged battery when operating the electric hydraulics of the DewEze Bale Pikups. It is strongly recommended that an optional, higher capacity alternator be purchased and installed. The largest available should be considered, and alternators with a 70 amp rating as a minimum and an 80 amp plus rating for optimum performance.

Check operation and installation of breather plug on top of tank.

To Winterize – drain 1-11/2 quarts of oil from reservoir and add Kerosene to proper level, allowing a 2 inch space below top for expansion and circulation. An exotic Arctic (cold weather) hydraulic oil is not normally required. However if desired, Imperial Oil NUTO A10 (pour point –50F) can be substituted, or an equivalent. CAUTION – When operating in the summer season drain your winter oil and refill tank with good grade 5W-20 viscosity hydraulic oil.

If in doubt, contact your DEWEZE DEALER.

Elec./Hyd. Hydraulic System

DISASSEMBLY OF THE HYDRAULIC UNIT BY THE CUSTOMER IS NOT RECOMMENDED BEYOND THAT WHICH IS DESCRIBED HEREIN. Satisfactory performance of the components is dependent on precision machining and on factory assembly with special equipment. Disassembly of the unit can void the factory warranty.

STARTING PROCEDURE: Under no condition run without oil. The self-contained 12V Hydraulic Unit and the Bale Pickup hydraulic system have been checked and tested before shipment. Fill the reservoir with CLEAN oil. Allow at least 2" space below reservoir top for expansion and circulation. Most pump failures, valve problems, and short unit life can be traced to dirt or other foreign material getting into the hydraulic system through improper servicing.

When starting the motor for the first time, alternately start and stop the motor/pump unit several times until pump is primed and full flow begins. Erratic operation will occur until all air is worked out of the system. If necessary, bleed air from the system (preferably at highest point with system under pressure.)

STRAINER: The unit is equipped with an inlet screen strainer. Periodic inspection, and if necessary, cleaning of the strainer is recommended. To gain access to the strainer, remove pump unit from frame and stand on end so it will not be necessary to drain oil. Remove the motor adapter from the reservoir. The strainer is screwed on to the pipe that leads to the pump. **CAUTION:** Use care in removing strainer so as not to collapse it. Wash in solvent and blow out with air from inside out. Overtightening of the screws on reassembly can strip the threads in the motor adaptor. The reservoir breather cap should also be checked and cleaned periodically with solvent and air blown from inside out.

PUMP AND MOTOR: Neither the pump nor the motor require any attention under normal operating conditions. The motor bearings are life-lubricated. The pump bearings are lubricated by the fluid being pumped.

Operating Instructions

LOADING: Back the truck to the bale, as shown in the picture. Open wide the hugger arms and lower them along side the bale. When the arms are aligned with the bale, close them across the center of the bale. Lift the bale onto the truck. Release the bale and repeat the operation for the second bale, except, do not release the bale after it is on truck. Instead, keep the bale in the arms while hauling and it will be ready for unloading at your destination.

UNLOADING: Do the reverse of the loading operation.

UNROLLING: Place the optional spinners in the "eye" of the arms. Position the arms over the bale so that the spinners are at the center of the bale. Close the arms and pick up the bale. To unroll, lower the bale onto the ground and drive. Gradually lower the arms as the bale unrolls.

REMOVING PIKUP UNIT FROM TRUCK: Loosen the pikup frame from the truck bed. For pikups with 12V power units make sure the electrical ground jumper wire is firmly attached to the truck. Slide the safety stands in the bushings at the lower rear of the pikup from the bottom. Slide the stands down to the ground and tighten the set screws. Run the arms over to the unload position until they are approximately hip height. Stand between the arms at their extremities. Place your hands on the arms and apply your body weight. The pikup will tip out of the truck until the arms touch the ground. Disconnect the ground wire and the power cable. Roll up the power and control cables and lay them on the pikup. Drive away.

TO RELOAD THE PIKUP UNIT: Back the truck to with 20" of the rear angle of the pikup. Attach the ground jumper wire to the truck. Hook up the power cable. Take the control box and push the unload switch. The pikup unit will tip itself back into the truck bed. Push the load switch after being sure the pikup unit is securely in the truck bed. The arms then are brought over into the truck. The pikup unit may be positioned manually to line up the mounting bolts. Remove the safety stands and drive away.

Servicing the pikup

HYDRAULIC OIL RECOMMENDATION: Fill and maintain oil level at 2"-3" below reservoir top. The oil reservoir is filled with CO-OP SUPER HTB, a 5W-20 viscosity hydraulic oil. When adding oil, use CO-OP SUPER HTB or an equivalent grade oil.

LUBRICATION: Every 50 hours at grease zerk locations. Apply grease as needed to areas where arms slide inside crossarm.

Trouble Shooting

General

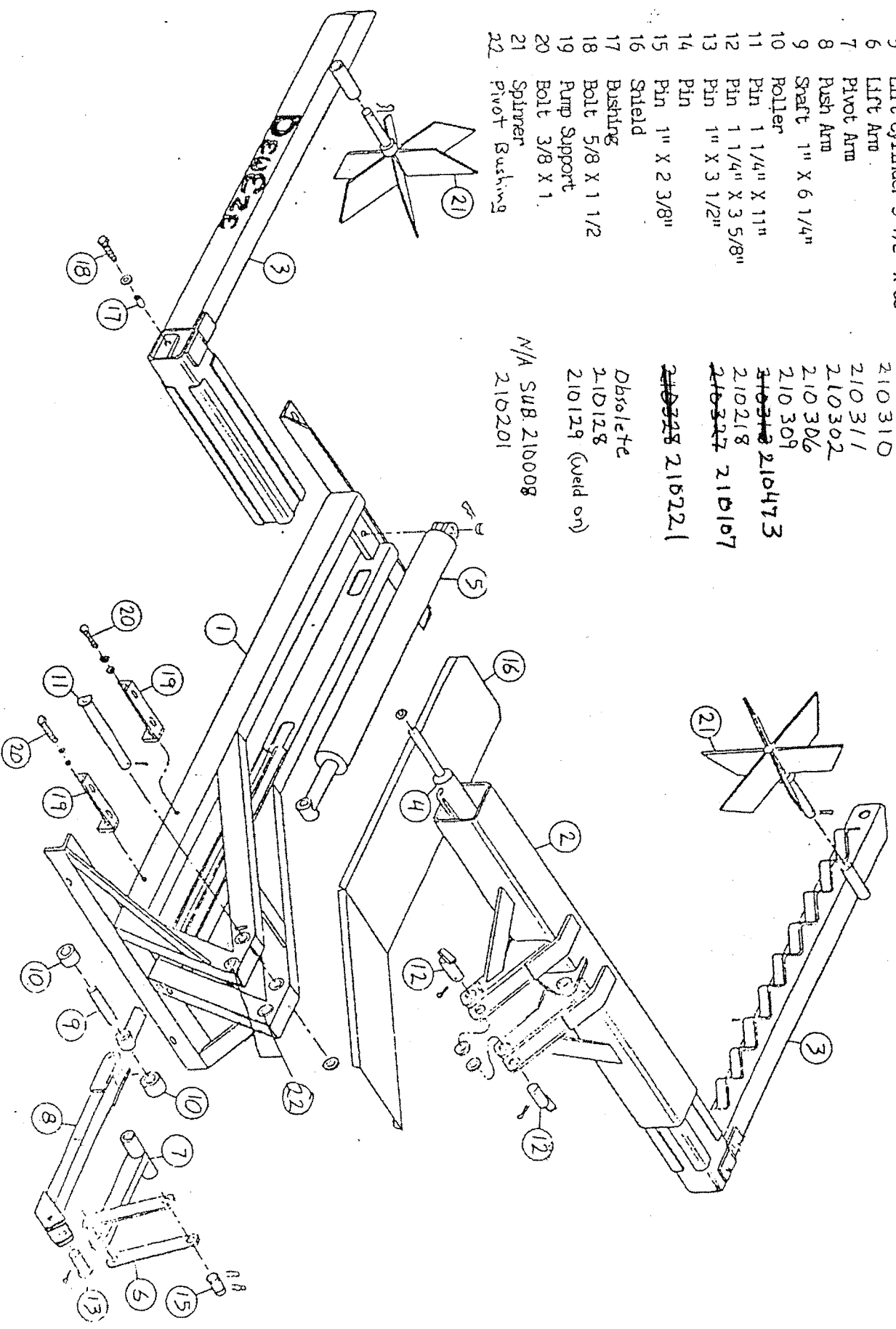
1. A good way to prevent problems with the hydraulic system is a periodic inspection.
 - a. Watch for any signs of leakage.
 - b. Check oil level of reservoir regularly. Add oil to reservoir only when both cylinders are retracted. Allow at least a 2" space below the reservoir top for expansion and circulation.
 - c. Actually examine the oil. If milky in appearance it is probably saturated with air or water, and should be replaced with fresh oil.
 - d. Watch for hose lines that are abrading, kinked, or flattened.
 - e. If cylinder movement is jerky or erratic, there may be air in the system or a bent cylinder rod.
2. Unusual sounds in the hydraulic pump or anywhere in the system should be investigated by a fluid power mechanic.
3. High heat, 150 degrees F or greater, can be damaging to the hydraulic system and should not be tolerated. Feel various parts of the system to make sure there are no "hot spots", which may indicate a problem is developing.

Specific

1. On installations which use Quick-Disconnect couplers, make sure the couplers are clean, properly connected and mated, so that oil flows freely from hydraulic power source to Bale Pickup.
2. Check to see that the motor and valves are wired correctly and with tight connections. The #2/0 cable must be connected directly to the positive battery terminal.
3. If one cylinder does not operate while other cylinder operates freely:
 - a. Check for a physical obstruction to proper operation, such as a jammed bale, or a locked joint which may prevent proper cylinder operation.
 - b. Check for a kinked or broken hydraulic hose.
 - c. Check for a faulty electrical circuit or control switch.
 - d. Sometimes the control valves will become sticky or obstructed. The valves can be opened manually by pushing the small pin on either end of the valve with a small punch. If this does not free the valves, they should be checked by a fluid power mechanic.
4. If valves seem to be malfunctioning, check for low voltage. 9V are required to properly operate the valves while the electric motor is running under loaded conditions. Low voltage can be caused by a weak battery, a bad alternator or faulty wiring. Sometimes it may be necessary to add a booster battery to the system to keep the operating voltage above 9V.
5. Make sure hydraulic pump is capable of producing the recommended 2200 psi oil pressure. Oil flow should be at least 1 gpm, but not greater than 5 gpm.
6. Check reservoir oil level. Allow at least 2" space below reservoir top for expansion and circulation.
7. Check for air or dirt in the system. Do not disassemble the valve or pump components. This should be done by a qualified fluid power mechanic.
8. Check relief valve for proper setting (2200 psi) with pressure gauge in outlet line.
9. Check hydraulic cylinder for possible internal leakage.
10. Check strainer for clogging (indicated by a noisy pump).

- 2 Cross Arm
- 3 Hugger Arm L.H.
- 4 Hugger Arm R.H.
- 5 Squeeze Cylinder 2" X 3/4"
- 6 Lift Cylinder 3 1/2" X 33"
- 7 Lift Arm
- 8 Pivot Arm
- 9 Push Arm
- 10 Shaft 1" X 6 1/4"
- 11 Roller
- 12 Pin 1 1/4" X 1 1/2"
- 13 Pin 1 1/4" X 3 5/8"
- 14 Pin 1" X 3 1/2"
- 15 Pin 1" X 2 3/8"
- 16 Shield
- 17 Bushing
- 18 Bolt 5/8 X 1 1/2
- 19 Pump Support
- 20 Bolt 3/8 X 1
- 21 Spinner
- 22 Pivot Bushing

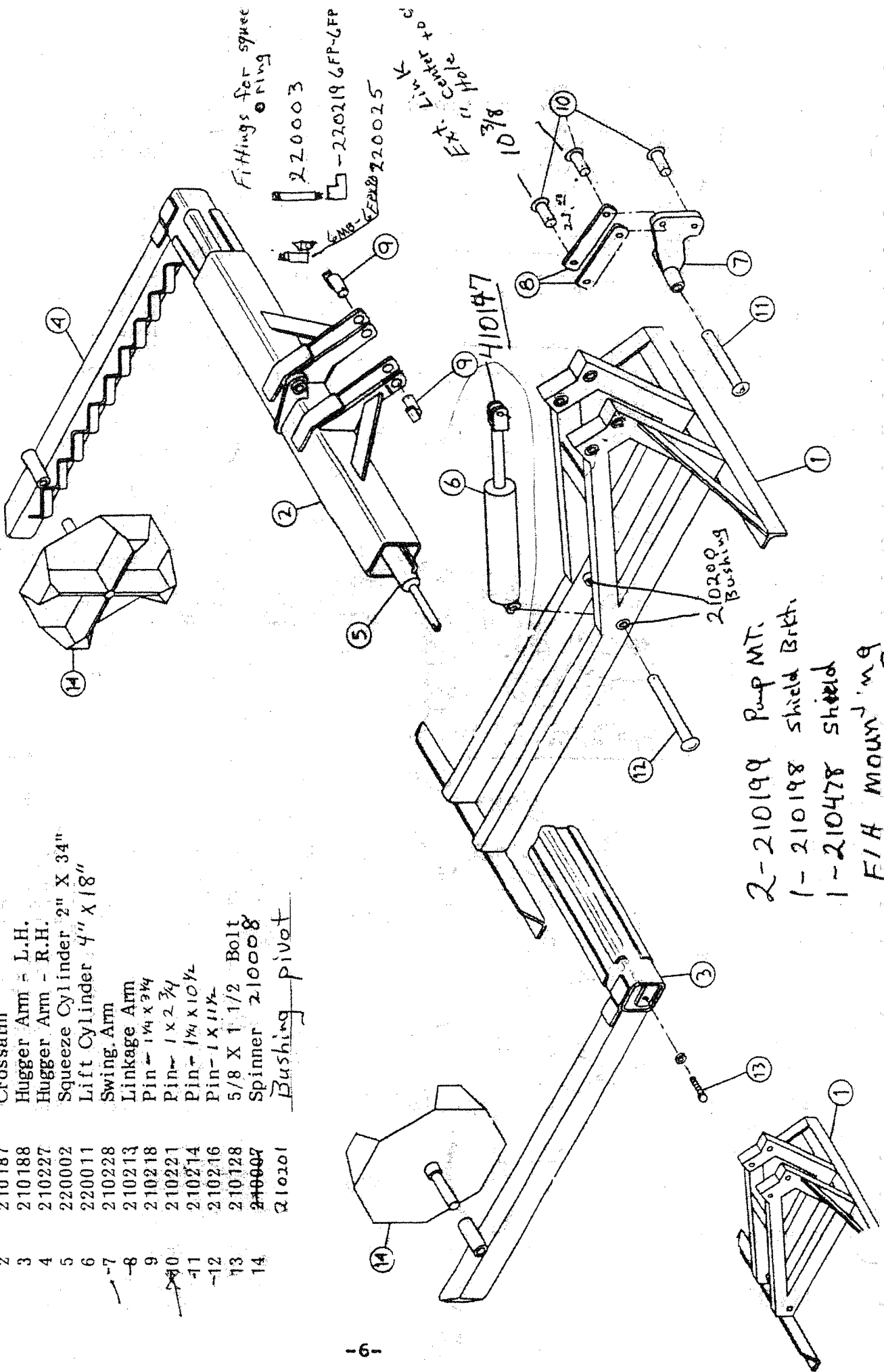
- 220002
- 220055
- 210310
- 210311
- 210302
- 210306
- 210309
- 210473
- 210218
- 210327 210107
- ~~210328~~ 210221
- Obsolete
- 210128
- 210129 (Weld on)
- N/A SUB 210008
- 210201



265 Decal set LPU Squeeze Hoses (60") - 220111

2- 200002 Bale P.U. Black
 2- 200005 DewEze Red on Black
 2- 200010 caution

ITEM	PART NUMBER	DESCRIPTION
1	210185	Frame - Short
2	210186	Frame - Long
3	210187	Crossarm
4	210188	Hugger Arm - L.H.
5	210227	Hugger Arm - R.H.
6	220002	Squeeze Cylinder 2" X 34"
7	220011	Lift Cylinder 4" X 18"
8	210228	Swing Arm
9	210213	Linkage Arm
10	210218	Pin - 1/4 x 3/4
11	210221	Pin - 1 x 2 3/4
12	210214	Pin - 1/4 x 10 1/2
13	210216	Pin - 1 x 11 1/2
14	210128	5/8 X 1 1/2 Bolt
	210007	Spinner 210008
	210201	Bushing pivot

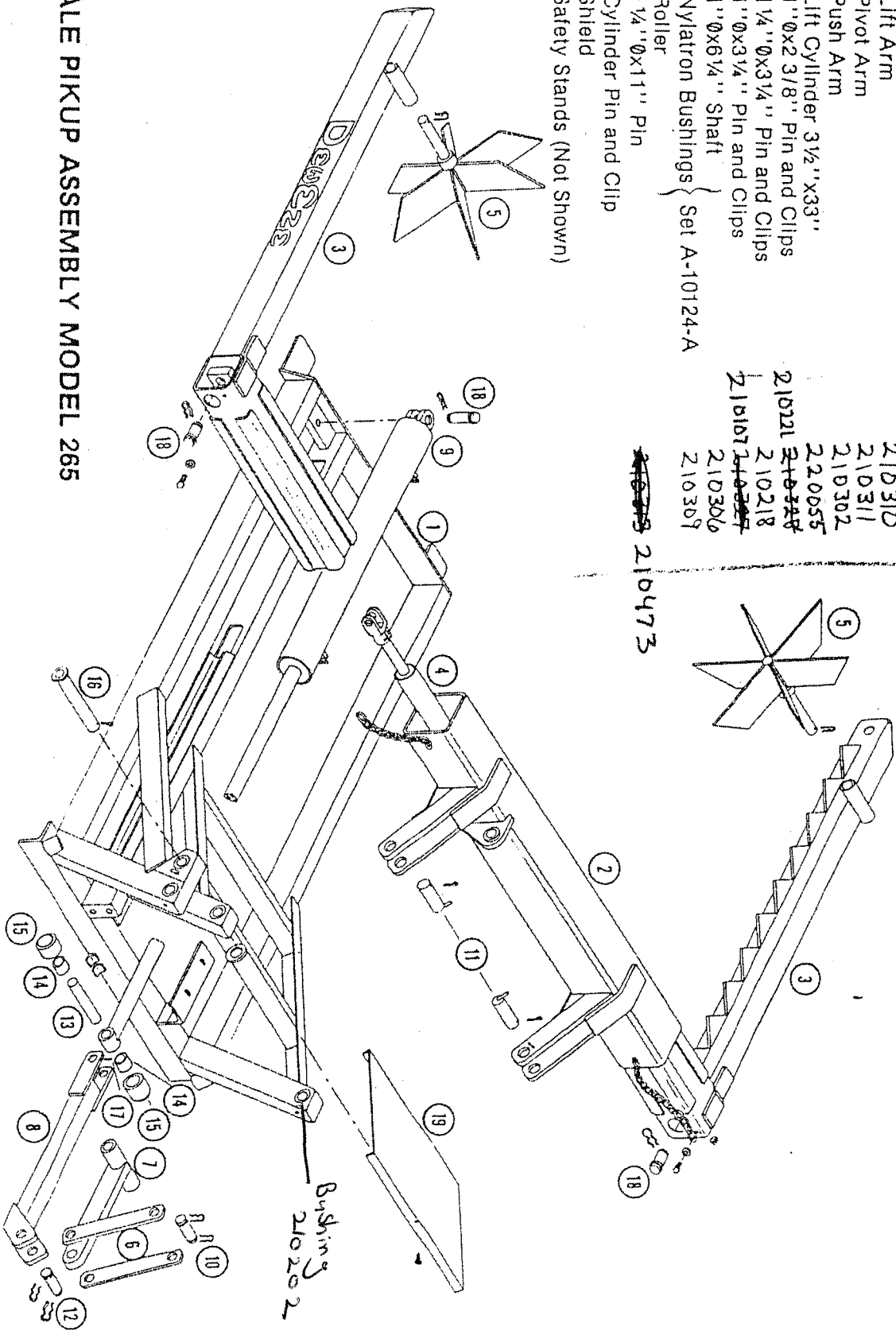


2- 210199 Pump Mt.
 1- 210198 Shield Brkt.
 1- 210478 Shield
 E/H MOUNTING

- 1 Frame
- 2 Crossarm
- 3 Hugger Arm
- 4 2"Øx34" Cylinder Squeeze
- 5 Spinner
- 6 Lift Arm
- 7 Pivot Arm
- 8 Push Arm
- 9 Lift Cylinder 3½"x33"
- 10 1"Øx2 3/8" Pin and Clips
- 11 1¼"Øx3¼" Pin and Clips
- 12 1"Øx3¼" Pin and Clips
- 13 1"Øx6¼" Shaft
- 14 Nylatron Bushings } Set A-10124-A
- 15 Roller
- 16 1¼"Øx1" Pin
- 18 Cylinder Pin and Clip
- 19 Shield
- 20 Safety Stands (Not Shown)

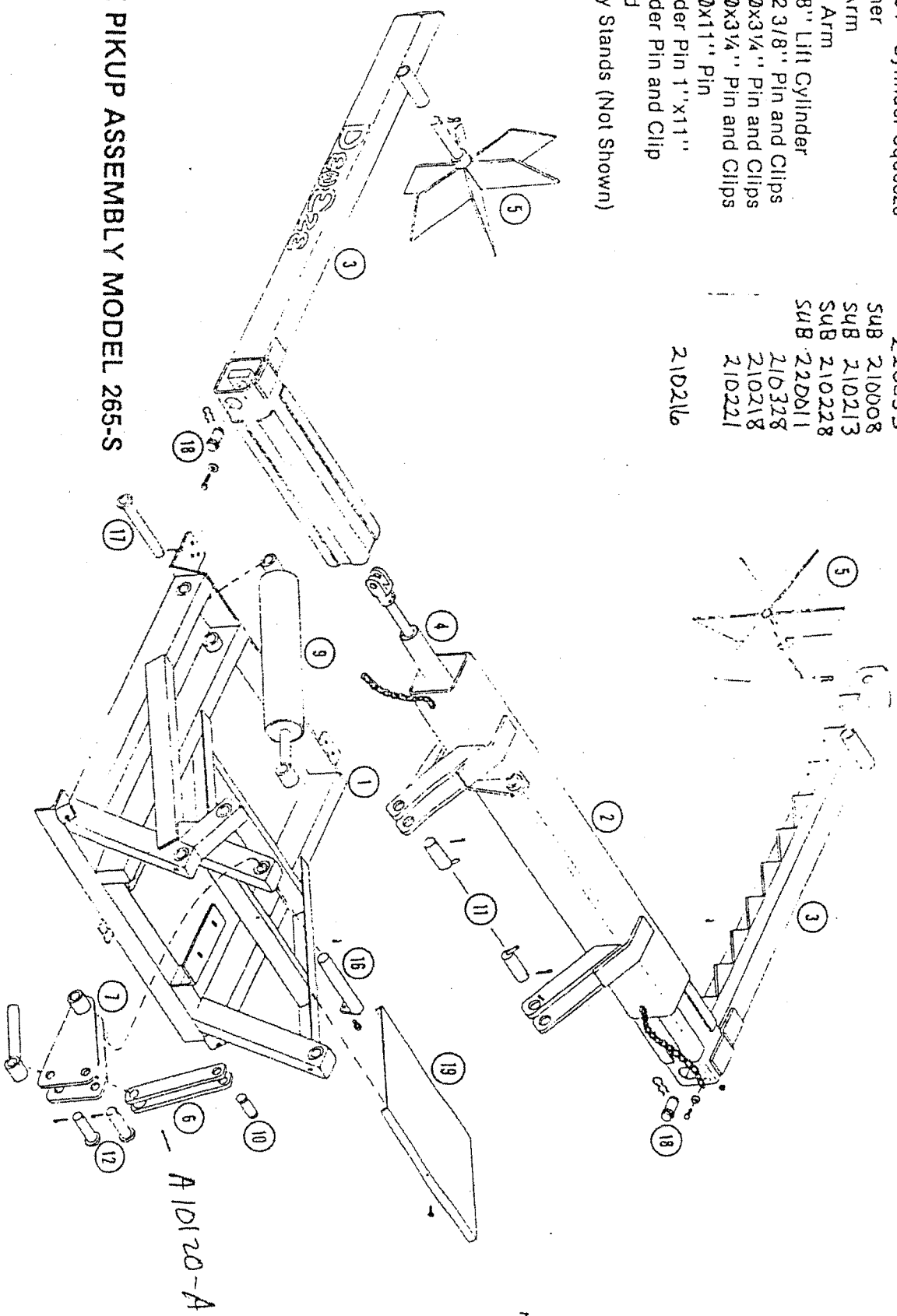
	220053
SUB	210008
	210310
	210311
	210302
	220055
	210121
	210218
	210107
	210306
	210309

~~210473~~ 210473



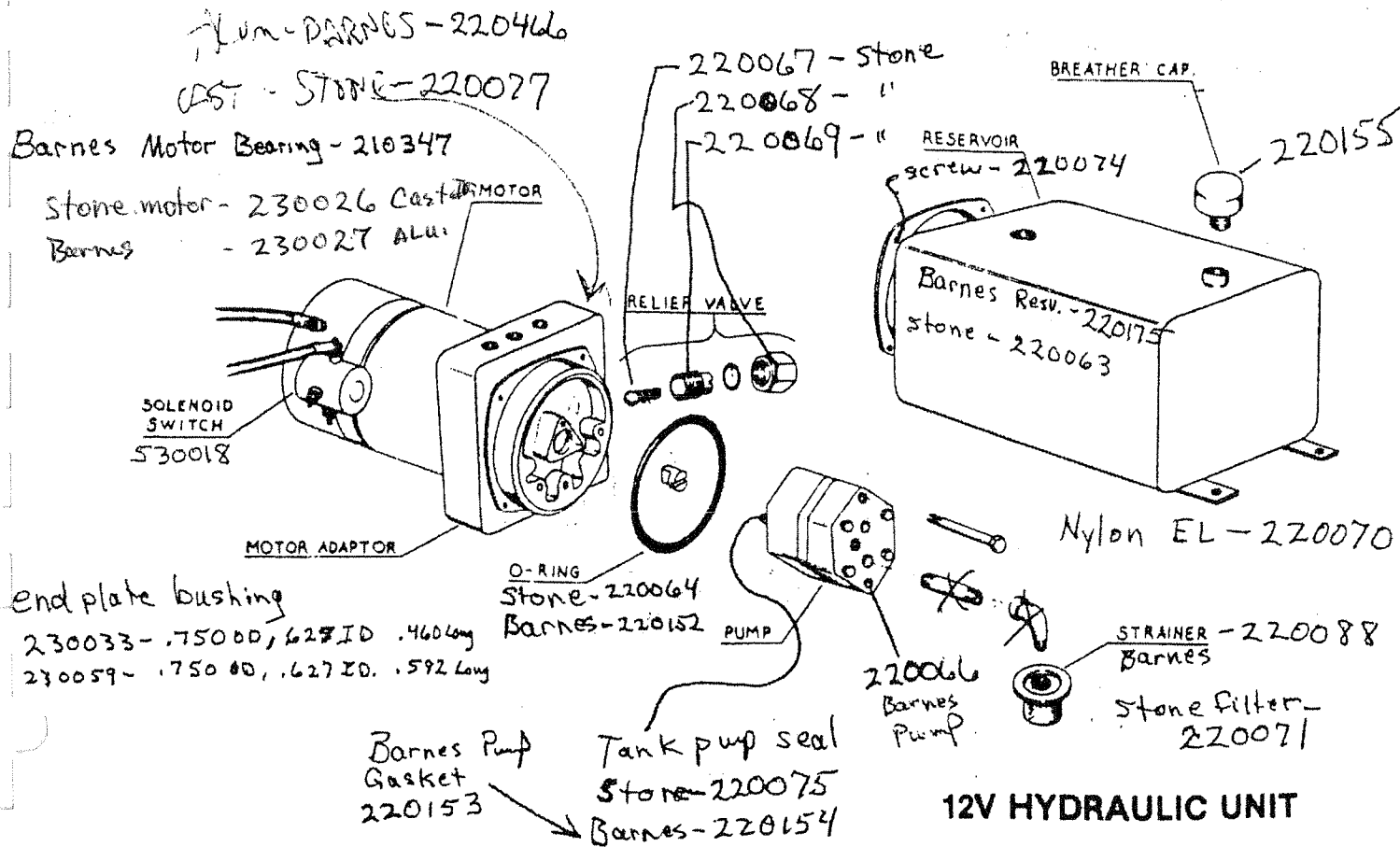
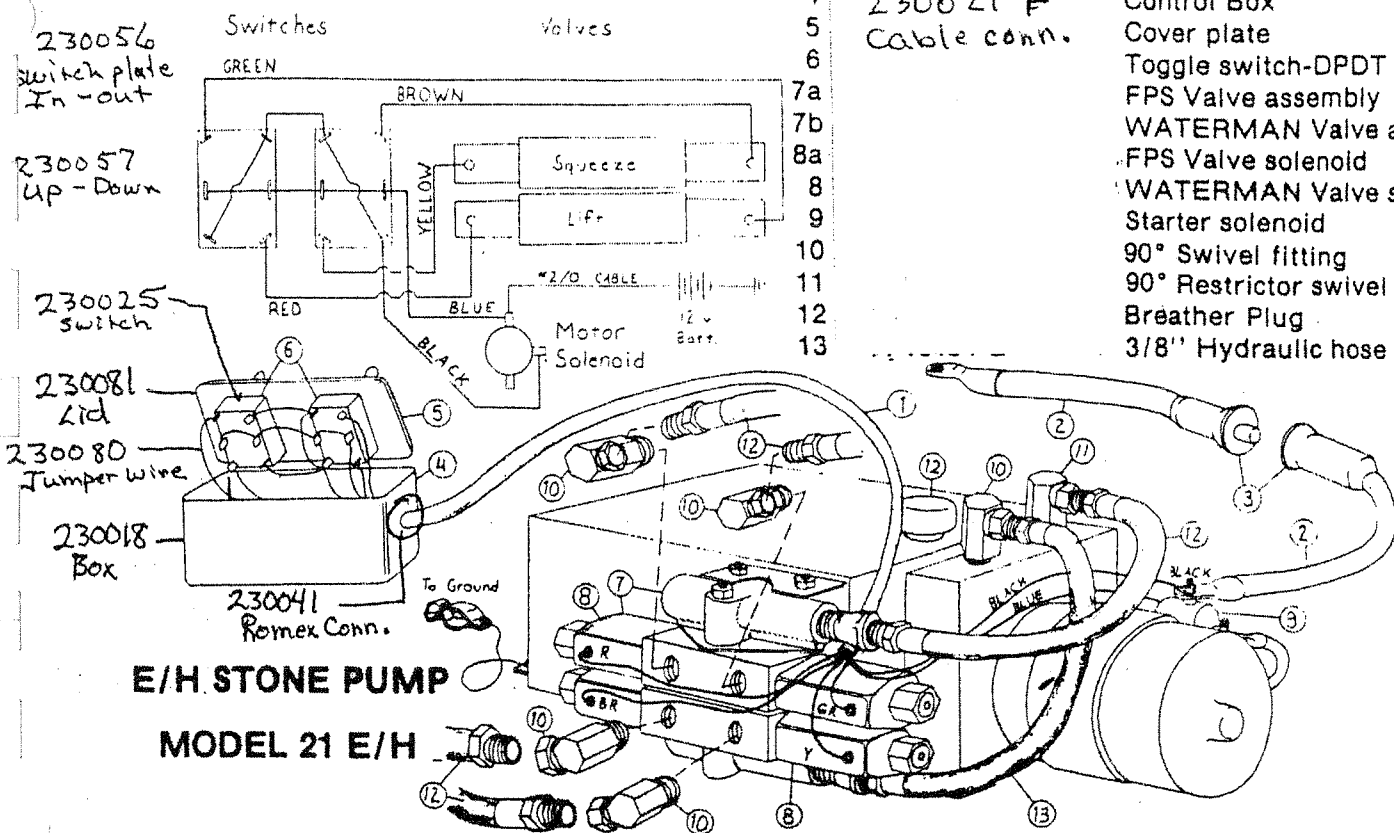
BALE PICKUP ASSEMBLY MODEL 265

ITEM	DESCRIPTION	PART NUMBER
1	Frame	
2	Crossarm	
3	Hugger Arm	
4	2"Øx34" Cylinder Squeeze	2220053
5	Spinner	S4B 210008
6	Lift Arm	S4B 210213
7	Pivot Arm	S4B 210228
9	4"x18" Lift Cylinder	S4B 22D011
10	1"Øx2 3/8" Pin and Clips	210328
11	1 1/4"Øx3 1/4" Pin and Clips	210218
12	1"Øx3 1/4" Pin and Clips	210221
16	1 1/4"Øx1 1" Pin	
17	Cylinder Pin 1"x1 1"	210216
18	Cylinder Pin and Clip	
19	Shield	
20	Safety Stands (Not Shown)	



BALE PICKUP ASSEMBLY MODEL 265-S

ITEM	PART NUMBER	DESCRIPTION
1		#14/6 Cond. cable
2		#2/0 cable
3	230020 M	Cable connector
4	230021 F	Control Box
5	Cable conn.	Cover plate
6		Toggle switch-DPDT
7a		FPS Valve assembly
7b		WATERMAN Valve assembly
8a		FPS Valve solenoid
8		WATERMAN Valve solenoid
9		Starter solenoid
10		90° Swivel fitting
11		90° Restrictor swivel
12		Breather Plug
13		3/8" Hydraulic hose



Specifications

- Weight**800lbs.
- Frame Length, Long** 87 inches
- Frame Length, Short** 43 inches
- Frame Width** 34 inches
- Distance between Arms:**
 - Open** 86 inches
 - Closed** 52 inches
- Lifting Capacity** 1800 lbs.
- Hydraulics** Under Hood Hydraulics or Self-contained
12V electric hydraulic pump
- Minimum Hydraulic Requirements** 2000 psi, 1.5 gpm

Cylinder Repair Kits

- 4" x 18" Cylinder** CROSS Seal Kit IC4785
- 2" x 34" Cylinder** CROSS Seal Kit 3C1720

DewEze Inc. is continually striving to improve its product, and therefore, reserves the right to make improvements or changes, when it becomes practical and possible to do so, without incurring any obligations to make changes or additions to the equipment produced at an earlier or later date.



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