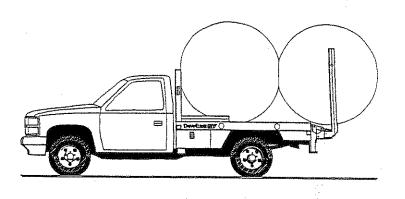
Operation & Service Manual

300 SERIES FLATBED



INTRODUCTION

Thank you for purchasing a DewEze 300 Series Flatbed. We hope it provides you with many years of service. The Flatbed with live hydraulics allows it to be used for a wide range of farm and ranch chores. This manual is written as an aid to operating and maintaining your Flatbed.

FOR YOUR RECORDS

| Date of Purchase |
|------------------|
| Dealer's Name |
| Dealer's Phone |
| Serial Number |

Following publication of this manual, certain changes in standard or optional equipment may have occurred which would not be included in these pages. Your DewEze dealer is the best source for up to date information.

DewEze Manufacturing reserves the right to change product specifications at any time without incurring obligation to provide such updates to previously manufactured units.

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OPERATION AND SERVICE

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DEWEZE MANUFACTURING

STATEMENT OF WARRANTY

DewEze Manufacturing warrants to each purchaser of new DewEze Bale Pikup Flatbeds from an authorized dealer or representative that such equipment to be free from manufacturing defects which appear while in normal service for a period of TWO YEARS commencing with delivery to the original user (effective on Flatbeds sold after January 1, 1997).

The obligation of DewEze under this warranty is expressly limited, at our option, to replacement or repair at a service facility designated by DewEze or at the manufacturing plant in Harper, Kansas, of such part or parts as inspection shall disclose to have been defective. This warranty does not apply to defects caused by damage or unreasonable use (including failure to provide reasonable and necessary maintenance) while in the possession of the consumer.

DewEze shall not be liable for consequential damages of any kind, including but not limited to, consequential labor costs or transportation charges in connection with replacement or repair of defective parts.

DewEze makes no warranty with respect to trade accessories. They are subject to the warranties of their respective manufacturers.

ANY IMPLIED OR STATUTORY WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. DewEze makes no other express warranty, nor is anyone authorized to make any on behalf of DewEze.

For information procedures please contact your nearest dealer.

MODEL IDENTIFICATION

| MODEL | 372 | 375 | 378 | 380 | 382 | 385 | 387 |
|--------|-------|--------|-------|-------|-------|---------|-------|
| WIDTH | 7' | 7: | 7' 8" | 7' 8" | 7' 8" | 7' 8" | 7' 8" |
| LENGTH | 9' 2" | 8, 6,, | 8' 6" | 9' 2" | 9' 6" | 10' 6'' | 11' |
| WEIGHT | 1850 | 1800 | 1850 | 1900 | 1975 | 2135 | 2170 |

FLATBED SPECIFICATIONS

| HYDRAULIC SYSTEM | Powered by engine-driven pump or self-contained battery powered electric/hydraulic unit |
|------------------------|---|
| SYSTEM PRESSURE | 2450 psi |
| OIL RESERVOIR CAPACITY | 10 Ga1. |
| OIL FILTER | DewEze 720043, Wix 51551 (10 Micron) |
| CYLINDER, LIFT | 4.50 x 16.64 |
| CYLINDER, SQUEEZE | 2.00 x 34.00 Double end |
| CYLINDER, EXTEND* | 2.00 x 20.00 |
| CYLINDER, EXTEND* | 2.50 x 20.00 |

BOLT TORQUE SPECIFICATIONS

(EXCEPT AS SPECIFIED ELSEWHERE)

| BOLT DIAMETER | BOLT TORQUE (ft-lb) | | | | | | | |
|---------------|---------------------|--|--|--|--|--|--|--|
| 5/16" | 19 | | | | | | | |
| 3/8" | 33 | | | | | | | |
| 5/8" | 160 | | | | | | | |
| 1" | 630 | | | | | | | |

^{*} On XRM bed only.

SAFETY

TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND THE SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH



THIS SYMBOL MEANS

- ATTENTION!
- BECOME ALERTI
- YOUR SAFETY IS INVOLVED!

SIGNAL WORDS:

Note the use of the signal words DANGER, WARNING and CAUTION with the safety messages. The appropriate signal word for each has been selected using the following guidlines: WARNING: Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

DANGER: Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components which, for functioal purposes, cannot be guarded.

CAUTION: Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. it may also be used to alert against unsafe practices.

If you have questions not answered in this manual or require additional copies or the manual is damaged, please contact your dealer or DewEze Manufacturing, 151 E. Hwy 160, Harper, Kansas, 67058. (316)-896-7381, FAX (316)-896-7129.

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SAFETY...YOU CAN LIVE WITH IT

EQUIPMENT SAFETY GUIDELINES

Safety of the operator is one of the main concerns in designing and developing a new piece of equipment. Designers and manufacturers build in as many safety features as possible. However, every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury, study the following precautions and insist those working with you, or for you, follow them.

In order to provide a better view, certain illustrations in this manual may show an assembly with a safety shield removed. However, equipment should never be operated in this condition. Keep all shields in place. If shield removal becomes necessary for repairs, replace the shield prior to use.

Do not attempt to operate this equipment under the influence of drugs or alcohol.

Review the safety instructions with all users annually.

This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible adult familiar with farm machinery and trained in this equipment's operation. Do not allow persons to operate or assemble this unit until they have read this manual and have developed a thorough understanding of the safety precautions and of how it works.

SAFETY SIGNS AND DECALS

Replace any CAUTION, WARNING, DANGER or instruction safety decal that is not readable or is missing. New decals are available from your authorized dealer or the DewEze factory. Location of such decals is indicated in this booklet. Do not paint over, remove or deface any safety signs or warning decals on your equipment. Observe all safety signs and practice the instructions on them.

HOW TO INSTALL SAFETY SIGNS

- * Be sure that the installation area is clean and dry.
- * Decide on the exact position before you remove the backing paper.
- * Remove the smallest portion of the split backing paper.
- * Align the decal over the specified area and carefully press the small portion with the exposed sticky backing in place.
- * Slowly peel back the remaining paper and carefully smooth the remaining portion of the decal in place.
- * Small air pockets can be pierced with a pin and smoothed out using the piece of decal backing paper.

GENERAL FLATBED SAFETY



- * WARNING: Do not stand under the hugger arms when operating the bale pickup unit, even when the arms are empty.
- * Make sure all safety pins are in place and Flatbed mounting bolts are secure to the truck frame.
- * Make sure hinges, joints, and sliding parts are well greased, especially during off season to prevent rusting and binding.
- * Check with your truck dealer for any load limits, additional suspension or tire requirements. The Flatbed's lifting capability may exceed the truck's load capacity in a few instances.

FLATBED HYDRAULIC SAFETY

* Do not activate the electric clutch unless the truck engine is at idle. Switching the clutch on at road speeds can seriously damage your hydraulic system.



* CAUTION: Do not operate the hydraulic system with the hood open.

BEFORE OPERATING

FILL RESERVOIR

Park truck on level surface to check and fill reservoir. Fill reservoir until oil is between bottom and top sightglass. Reservoir holds approximately 10 gallons of oil.

IN COLD WEATHER (below 10° F) fill with hydraulic oil specifically rated for cold weather. Do not attach other hydraulic equipment to the Flatbed. The oil will intermix and the cold weather viscosity will be lost.

FILL SYSTEM

Start engine and run both cylinders in and out or up and down twice to fill system with oil. Make sure the two hoses coming through the Flatbed frame to the squeeze arms do not kink or stretch during operation. Check for hydraulic leaks.

SYSTEM PRESSURE

Connect a hydraulic test gauge to the quick couplers in hoses going to squeeze cylinder. Check hydraulic system for pressure. It should be 2450 psi.

OPERATING INSTRUCTIONS

STARTING

Turn pump ON with engine idling. (Red light will indicate pump is on.)

IMPORTANT: in cold weather, allow engine to idle for 5 to 10 minutes with pump on before operating the arms. This allows the oil to warm up and flow more freely. Neglecting this may cause hydraulic pump failure.

LOADING

Back the truck against the bale with the arms wide apart and tilted slightly upward. Close the arms firmly against the bale. Lift the bale onto the truck. Release the bale and repeat the operation for the second bale. Lift the second bale onto the bed using it to push the first bale all the way forward. Do not release the second bale. When hauling one bale make sure it is resting on the bed. When hauling two bales make sure the second bale is as far forward as it will go (Fig. 1). Carrying a bale behind the bed as shown in Fig. 2 places excessive stress on the cylinder, linkage, and pins.

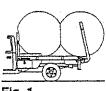
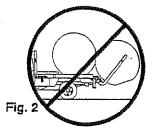


Fig. 1



UNLOADING

Do the reverse of the loading operation.

NOTE: Sometimes it may be necessary to operate with spinners to grip the front bale for unloading.

UNROLLING

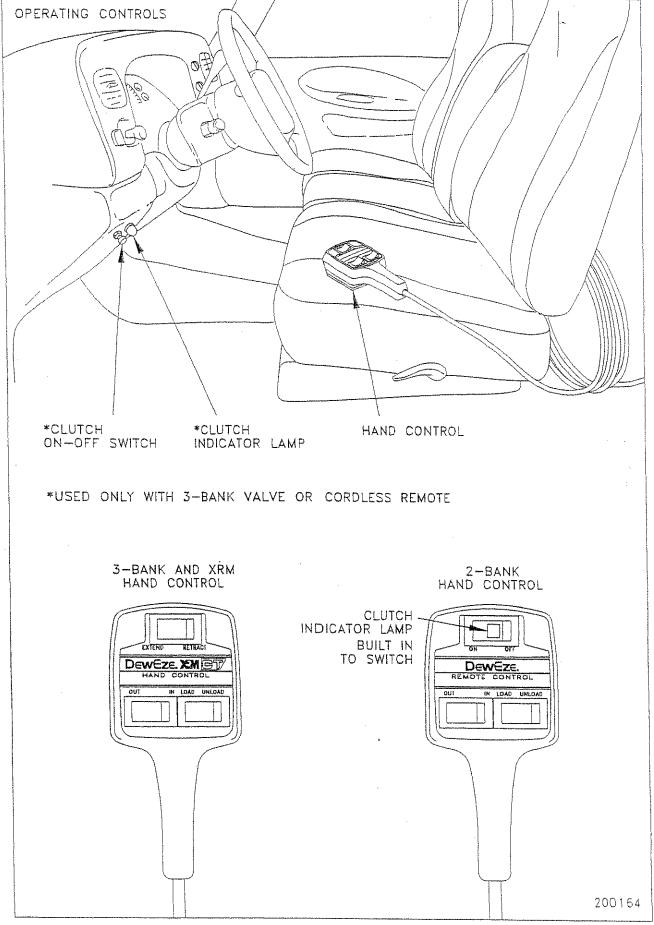
With the arms laying on the bed, place the optional risers in the "eye" of the arms, and the spinners in the "eye" of the risers. Position the arms over the bale so the spinner is at the center of the bale. Close the arms and pick up the bale. To unroll, lower the bale onto the ground. Turn the pump off and stroke the Unload switch as you drive to gradually lower the arms as the bale unrolls.

NOTE: Without the risers, the spinners will not lower close enough to the ground to completely unroll the bale.

STORING THE ARMS

Close the arms partially and lay on the flatbed. Open arms until they are flush with the side of the bed. They now serve as sides for the flatbed.

TURN CLUTCH OFF when not using hydraulic system. Operating the truck at road speeds, or above 2,000 RPM, with pump engaged, may cause hydraulic pump failure.



| ordanie za propinski kompositera propinski kompositera propinski | | TROUBLE SHOOTING |
|--|------------------------|--|
| PROBLEM AREA | SYMPTOM | POSSIBLE SOLUTIONS |
| Hydraulic Pump | No Oil Flow | CHECK OIL LEVEL IN RESERVOIR. If oil level is low, check for leaks in system. CHECK BELT TENSION. Tighten if needed. Replace belt if necessary. CHECK FOR SHEARED KEY ON PUMP SHAFT. Replace key. CLUTCH NOT FUNCTIONING. See clutch section. INTERNAL PUMP DAMAGE. Have pump repaired or replaced. CHECK PRESSURE LINE AT PUMP TO SEE IF OIL IS MOVING. |
| | No Oil Pressure | VALVE NOT FUNCTIONING. Check for disconnected wires at solenoid. CHECK FOR POSSIBLE LEAKS IN SYSTEM. Repair leaks or blown hoses. CHECK FOR MALFUNCTIONING SWITCH. Replace broken switches. PRESSURE RELIEF SPRING BROKEN ALLOWING OIL TO BYPASS SYSTEM. Replace spring. PRESSURE SEAL ON PUMP IS BROKEN OR WORN. Replace. BELTS OR CLUTCH ARE SLIPPING. Tighten belts. PRESSURE RELIEF MAY BE SET TOO LOW. CAUTION: PRESSURE EXCEEDING 2,600 PSI CAN DAMAGE THE PUMP. |
| Clutch | Does Not Engage | CHECK FOR BLOWN FUSE. Replace. CAUTION: Fuse should not exceed 30 amps. CHECK WIRE TO CLUTCH. Insure there are no breaks or shorts in wire and that it is plugged into clutch lead. CHECK FOR BAD SWITCH IN SYSTEM. Replace. CHECK FOR BLOWN MAGNETIC COIL. Use jumper from positive battery terminal to coil lead to check coil. Replace coil if necessary. |
| Belt(s) | Jumping Off Pulleys | BELTS TOO LOOSE. Tighten belts. CHECK FOR EXCESSIVE BELT WEAR. Replace worn belts. CHECK FOR LOOSE PUMP BRACKET. Tighten loose bolts. Replace broken bolts. CHECK ALIGNMENT OF CLUTCH AND CRANKSHAFT PULLEYS. Re-align pulleys. CHECK CRANKSHAFT PULLEY FOR LOOSE OR BROKEN BOLTS. Tighten loose bolts. Replace broken bolts. CHECK ALIGNMENT OF IDLER PULLEY (IF APPLICABLE) AND THE CONDITION OF IDLER PULLEY BEARINGS. Re-align idler pulley. Replace worn or broken bearings. |

TROUBLE SHOOTING - Cont.

Assuming the coil and electrical system seem to be functioning, use a screwdriver and push in on the button at the end of the tube assembly. (Note: The solenoids rest on this tube.) This will usually operate the valve.



CAUTION: Make sure no one is on or around moving parts of the equipment that is hooked to the hydraulic system.

If spool is jammed, do not force it as this may scar the spool or valve body. Disassemble valve, clean, and reassemble. If spool is still tight, use a very fine emery cloth to smooth burns or rough edges on spool.

NOTE: The relief valve is preset from the factory. Warranty is voided if the valve pressure is increased beyond the factory setting.

For additional trouble shooting information and help contact your dealer.

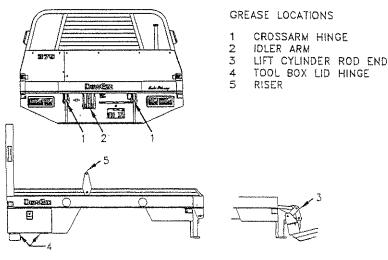
MAINTENANCE

- 1. Oil reservoir must be kept full at all times. Maintain the oil between the two sightglasses.
- 2. In cold weather, engage clutch and let the hydraulic system circulate until system sounds normal.
- 3. Change oil filter (10 micron) after first forty hours of use and then every 250 hours or annually thereafter.
- 4. Keep belt tension tight. Loose belts may cause premature wear of belts and pulleys.
- 5. Watch hydraulic system for signs of leakage. Loss of hydraulic fluid may cause serious damage to major hydraulic components.

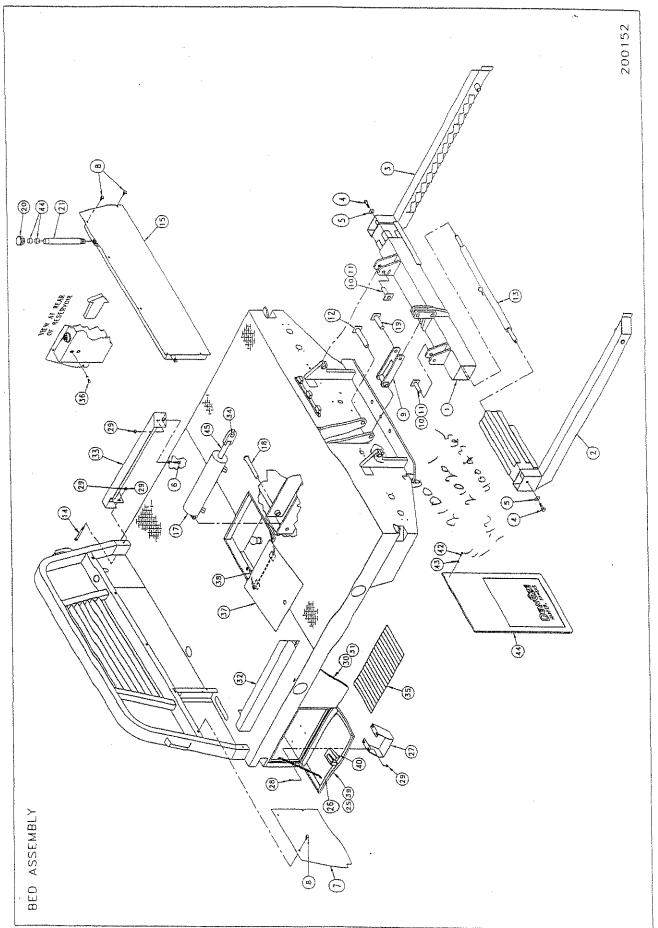


WARNING: Do not check for hydraulic leaks with your hands while the system is operating. Use a piece of cardboard or wood. Hydraulic fluid escaping under pressure can penetrate the skin.

- 6. When quick-couplers leak, the O-ring may need to be replaced.
- 7. Examine the oil. If milky in appearance it is probably saturated with air or water and should be replaced with fresh oil.
- 8. Unusual sounds in the hydraulic pump or anywhere in the system should be investigated by a fluid power mechanic.
- 9. High heat, 190° or greater, can be damaging to the hydraulic system. Feel various parts of the system to make sure there are no "hot spots" which may indicate a problem is developing.
- 10. Clutch should be disengaged when hydraulic system is not in use.
- 11. Make sure quick-disconnect couplers are clean, properly connected and mated, so that oil flows freely from hydraulic power source to implement.
- 12. For easy hookup of the couplers, shut clutch switch "off" and activate control valve switches with the ignition "on". This will release the pressure in the lines on the truck.
- 13. When quick-couplers are not in use, cover with dust caps.
- 14. Engine should not exceed 2,000 RPM with clutch engaged and pump operating.
- 15. Grease the locations once a week as indicated in the illustration below.

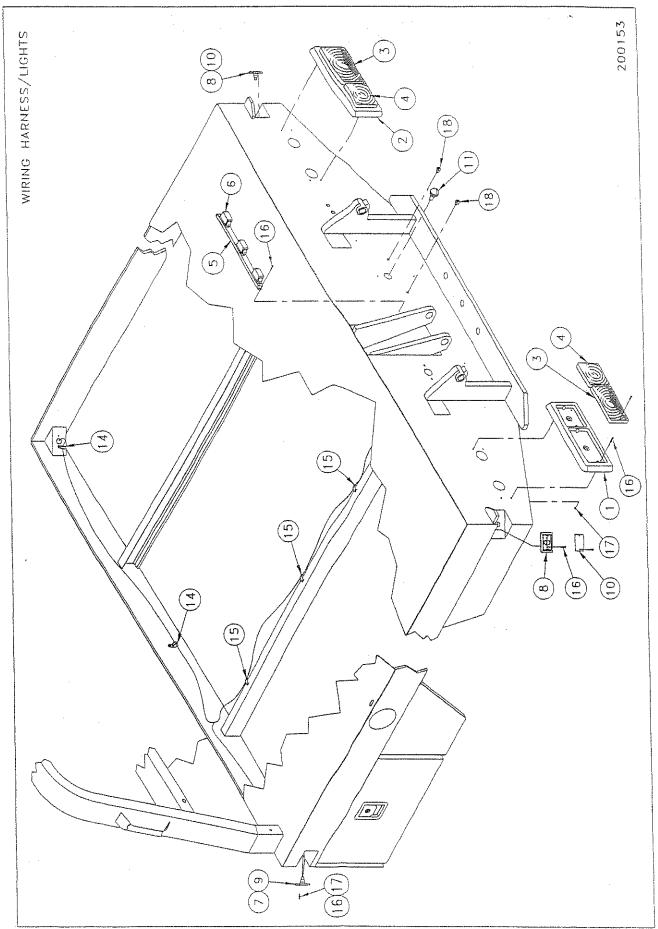


Schematics & Parts
Section

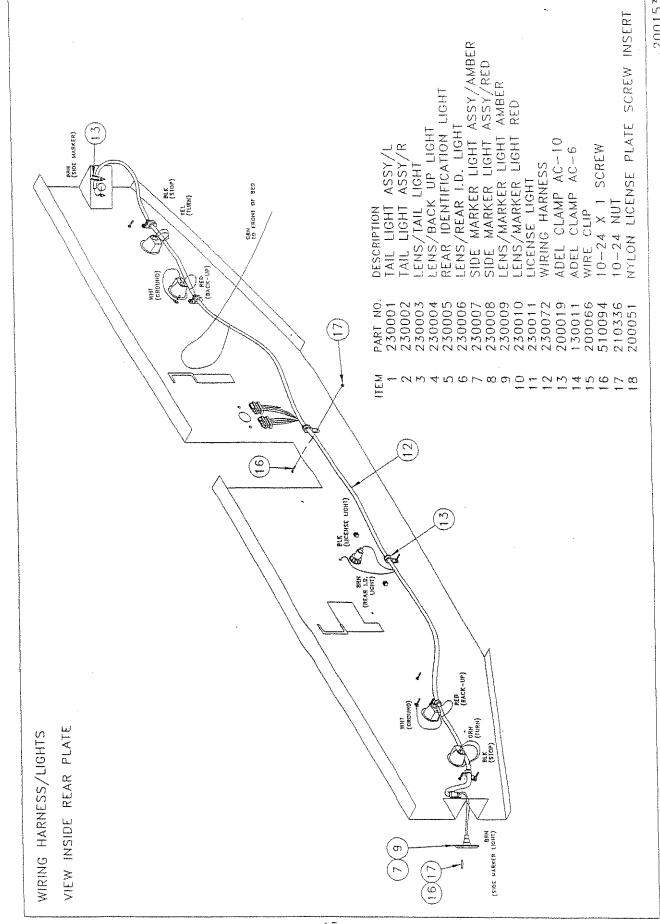


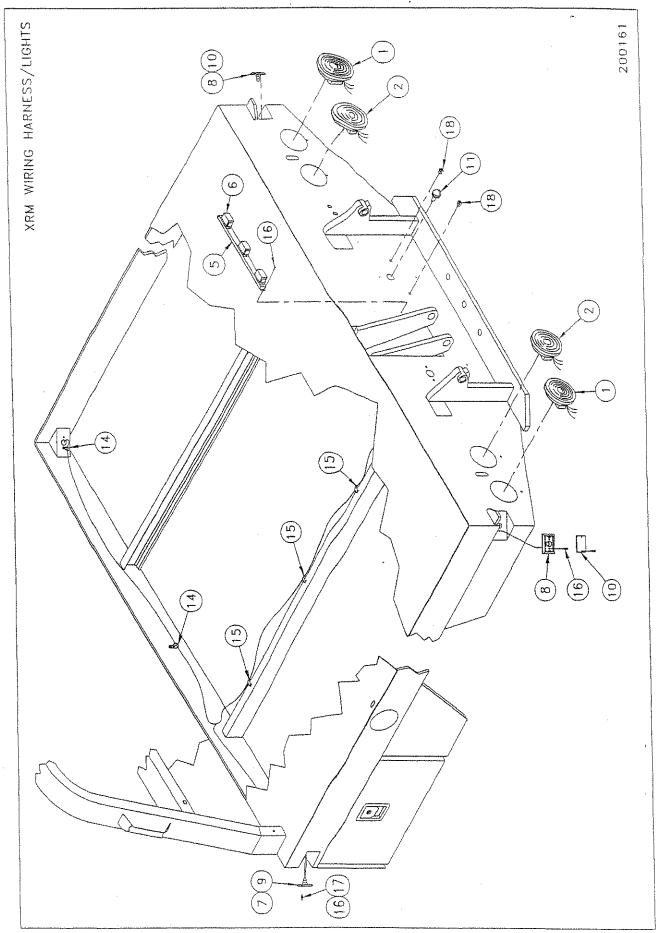
| 1100 | | FENDER/L 383,38/ | FENDER/R 5/0,5/0,500, | FENDER/R | SIDE RAIL/L | SIDE RAIL/L | SIDE RAIL/L | SIDE RAIL/L | SIDE RAIL/L | SIDE RAIL/L | SIDE RAIL/ | SIDE RAIL/R | SIDE RAIL/R | SIDE | SIDE RAIL/R | SIDE RAIL/R 387 | BUSHING/L | MAT/TOOL | | LID/RE | ROD/F | /TOOL BOX | OX LID | 1/4 X 1 SELF TAPPING SCREW | | FLAP/ | MUD FLAP/NARROW BED | SUARD, | CYLINDER ROD WELD ASSY W/LUG | |
|-------------|---------------|------------------|-----------------------|--------------------|-----------------|----------------|-------------------|----------------------|-------------|-------------|--------------------------|-------------|------------------|----------------|-------------|-----------------|---------------|----------------------|----------|------------|-------------|-----------|--------|----------------------------|----------|--------|---------------------|----------------------|------------------------------|--|
| | 210170 | 210285 | 2101/1 | 210284 | 210665 | 210667 | 210671 | 210675 | 210679 | 210683 | 210661 | 210665 | 210669 | 210673 | 210677 | 210681 | 200129 | 200118 | 200116 | 210919 | 210892 | 200100 | 210100 | 710586 | 510322 | 210174 | 210178 | 220515 | 220552 | |
| | 30 | , | 31 | | 32 | | | | | | 33 | | | | | | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 4 | 42 | 43 | | 44 | 45 | |
| DESCRIPTION | CROSSARM ASSY | HUGGER ARM/L | HUGGER ARM/R | 5/8NC X 1 1/2 BOLT | 5/8 FLAT WASHER | 3/8NC X 1 BOLT | VÁLVE COVER PLATE | 3/BNC X 1/2 WIZ BOLT | ARM | | PIN/CROSSÁRM 1.00 X 3.25 | /IDLER 1.25 | SOÚEEZE CYLINDER | 3/8NC X 5 BOLT | RESERVOIR | GREASE ZERK | CYLINDER/LIFT | PIN/BASE 1.00 X 8.00 | 1.25 X 4 | FILLER CAP | FILLER NECK | | _ | NC NUT | TOOL BOX | `` | i) | 3/8NC X 3/4 WIZ BOLT | WIZ NUT | |
| PART NO. | 1074 | 107 | 1073 | 1012 | 1034 | 1006 | 1064 | 1108 | 1093 | 0046 | 107 | 1075 | 2000 | 7 0 7 | 2049 | 1017 | 202 | 101 | 07 | 70.38 | 204 | 036 | 027 | 1027 | 0.55 | 500 | 0.00 | 40 | 710631 | |
| ITEM | •••• | 2 | 3 | 4 | · ru | ω (Δ) | 7 | . α |) o | 10 | * | 12 | 1 7 |) 7 | - <u>-</u> | د | | - CC | <u></u> | 2.0 | 2 | 22 | 23 | 24 | 4 C | 7 0 |) t | , v , x | 29 | |

BED ASSEMBLY

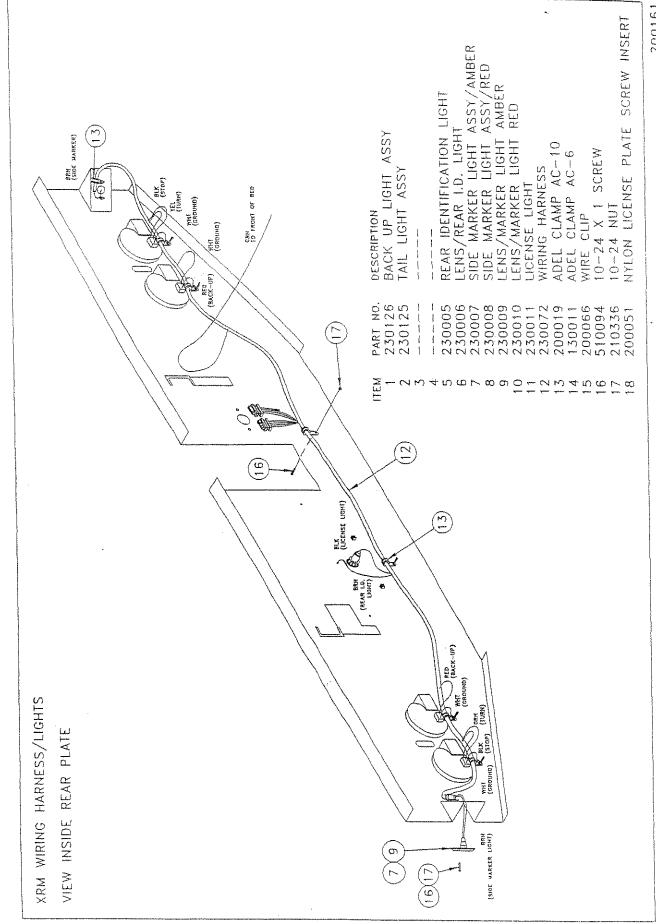


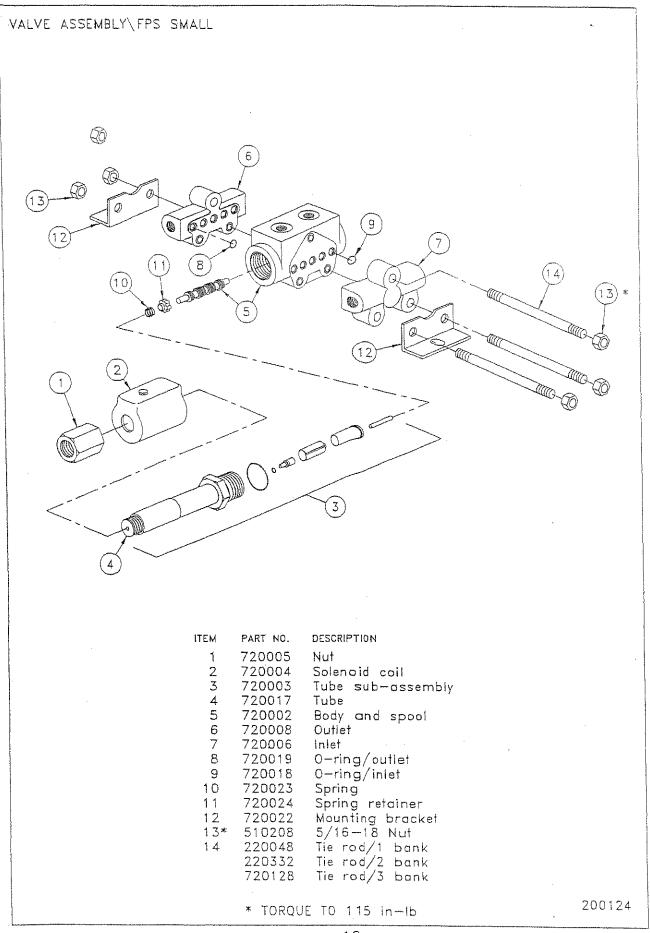
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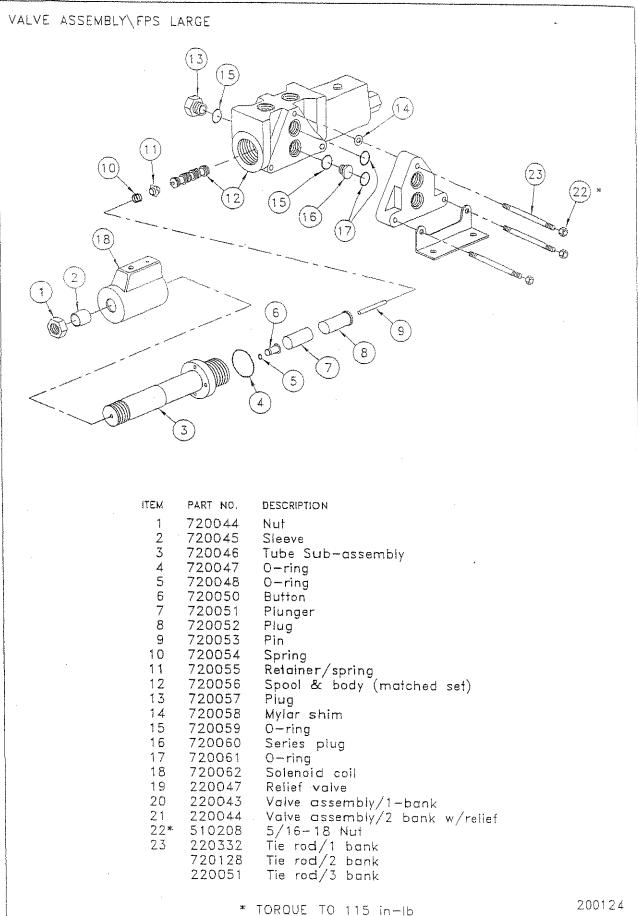


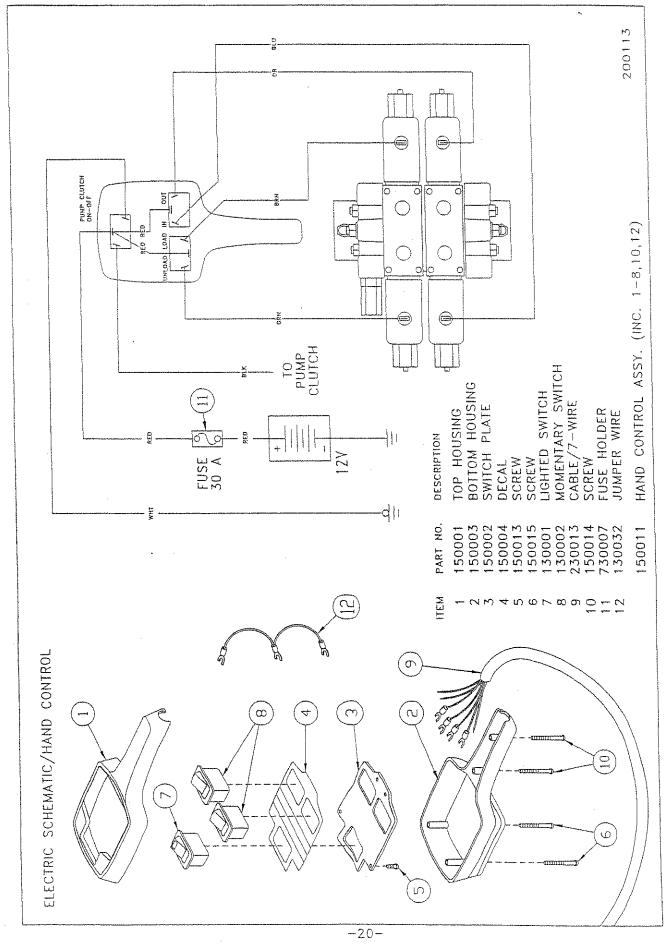


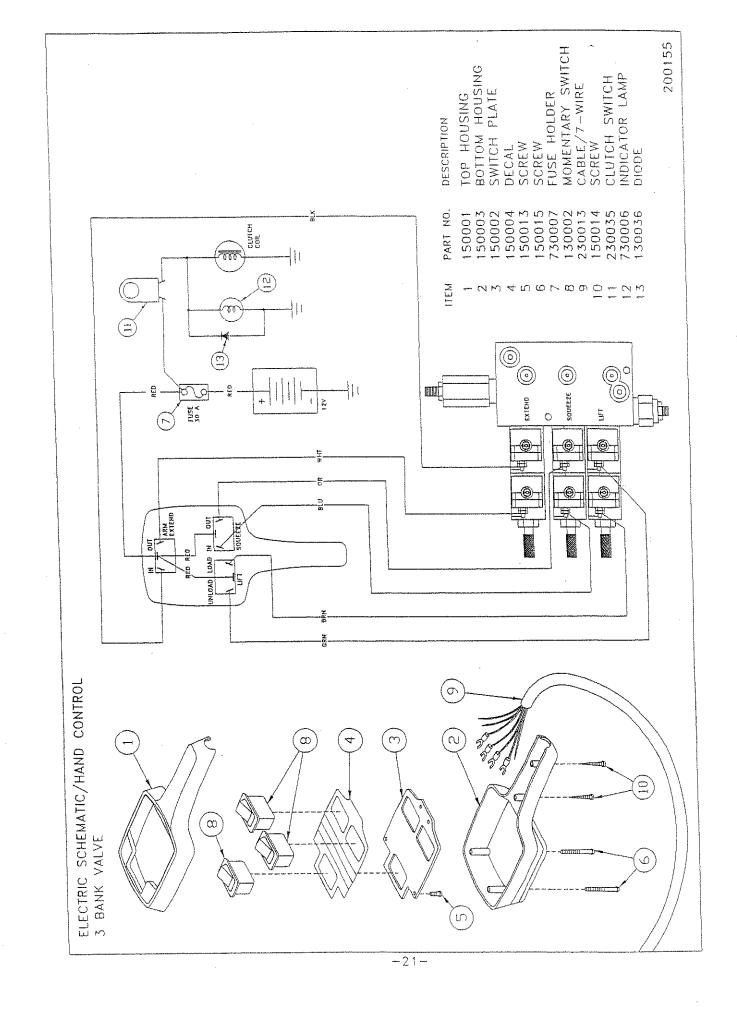
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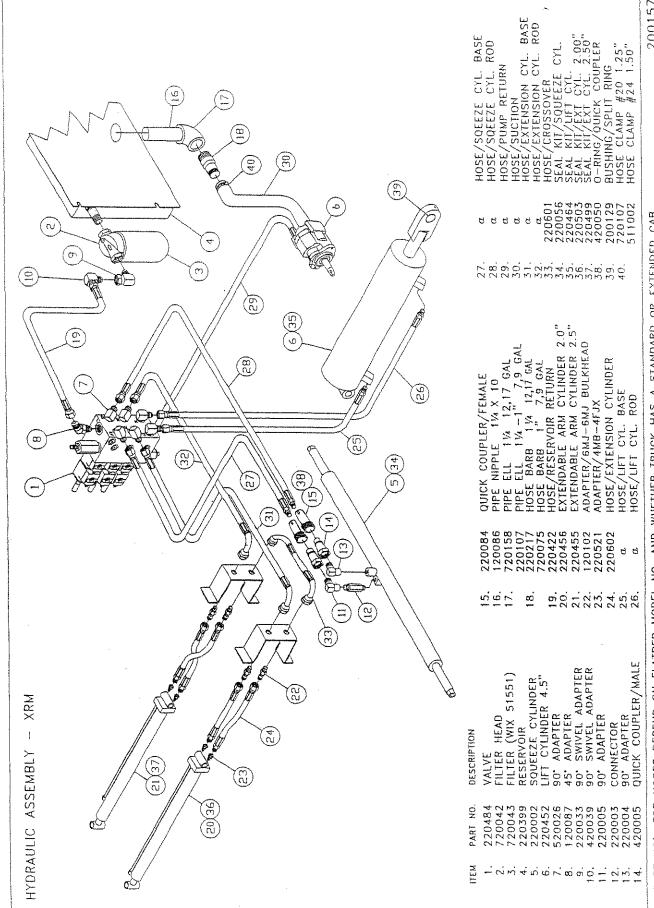




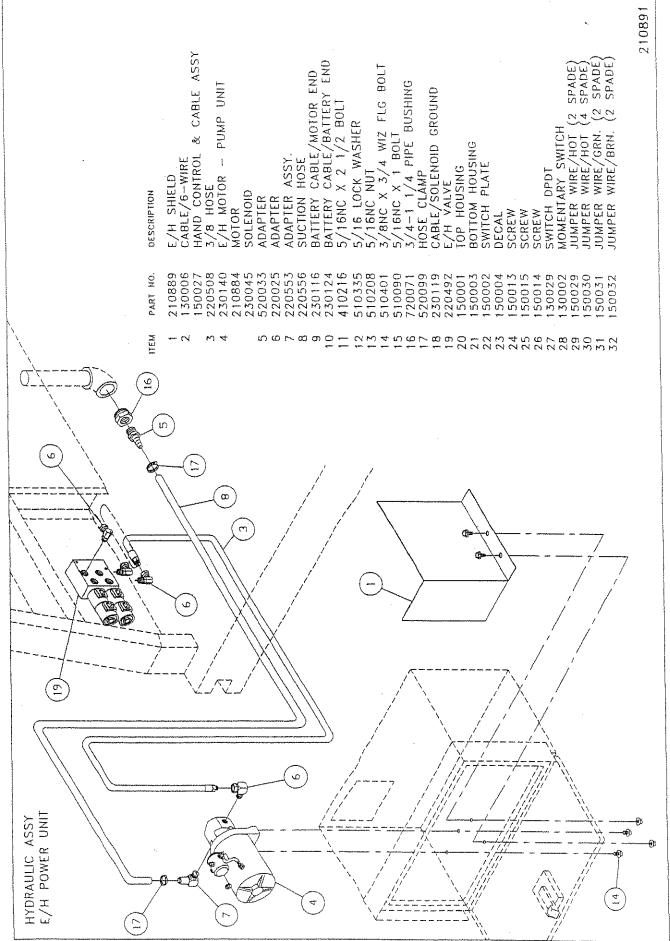


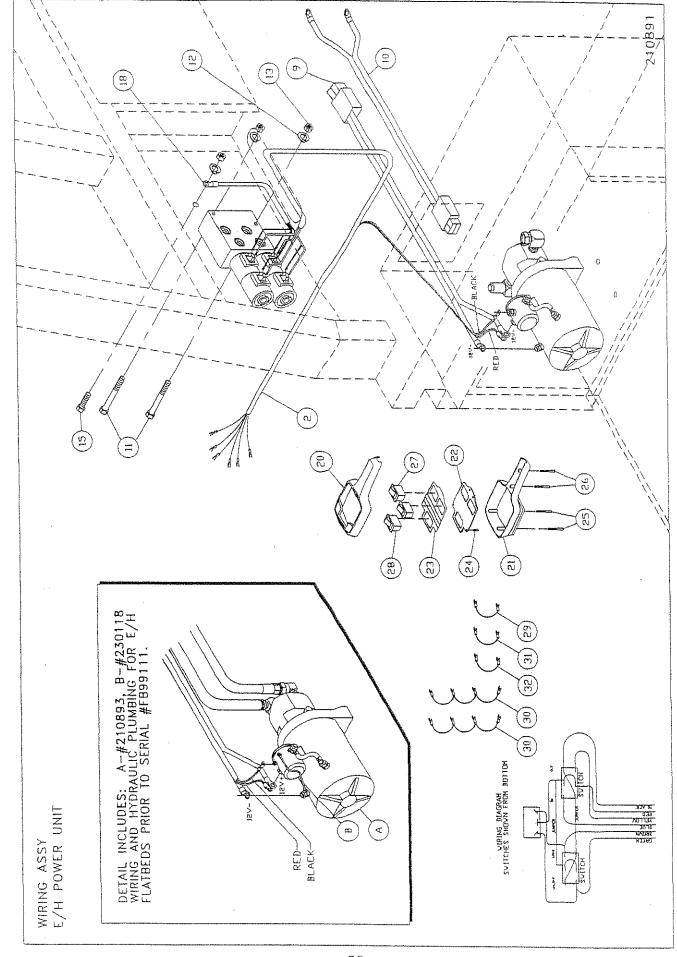
| | HOSE/SQUEEZE HOSE/LIFT CYL. HOSE/LIFT CYL. HOSE/PUMP RE HOSE/SUCTION SEAL KIT/SQUE SEAL KIT/SQUE SEAL KIT/SQUE O-RING/QUICK BUSHING/SPLIT HOSE CLAMP # HOSE CLAMP # |
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| (a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c | CONNECTOR 90' ADAPTER QUICK COUPLER/MALE QUICK COUPLER/FEMALE PIPE FLL 114 12,17 GAL PIPE ELL 114 12,17 GAL HOSE BARB 114 12,17 GAL HOSE BARB 117,19 GAL HOSE RARB 117,19 GAL |
| 5 2 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 | 220003 220004 420005 220084 120086 720107 220107 220217 720075 220422 α |
| | 12. 2 13. 2 14. 4 15. 2 16. 1 17. 7 18. 2 ER 19. 2 |
| | DESCRIPTION VALVE FILTER HEAD FILTER (WIX 51551) RESERVOIR SQUEEZE CYLINDER LIFT CYLINDER 4.5" 90' ADAPTER 90' SWIVEL ADAPTER 90' SWIVEL ADAPTER 90' SWIVEL ADAPTER |
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| HYDRAULIC ASSEMBLY 2-BANK VALVE | ITEM PART NO. 1. 220052 2. 720043 3. 720043 4. 220399 5. 220002 6. 220026 7. 520026 8. 120087 9. 220039 11. 220005 |

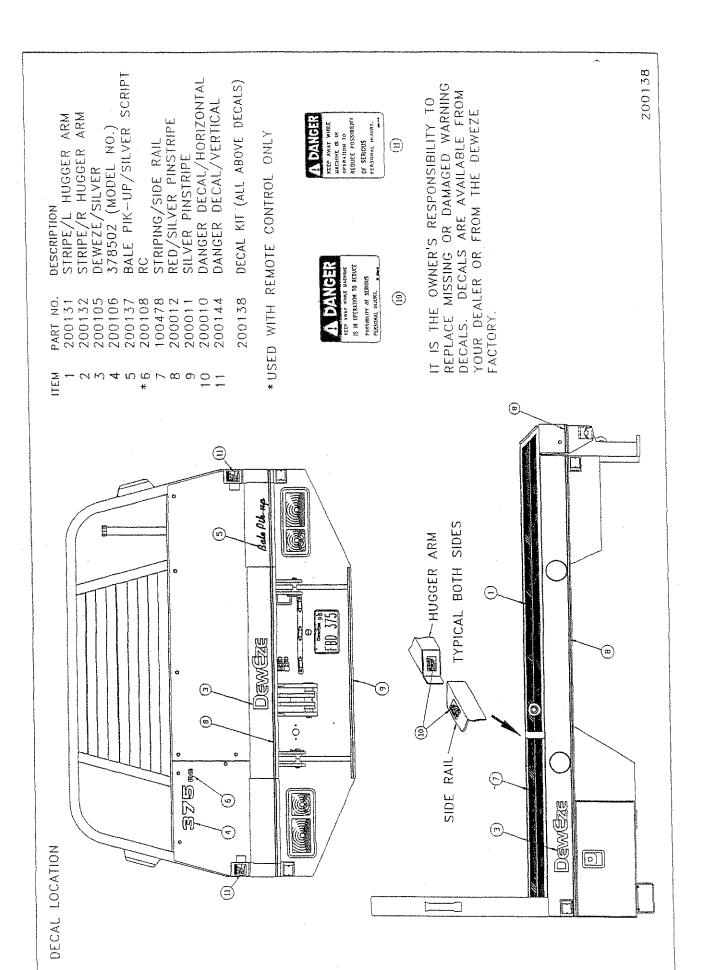
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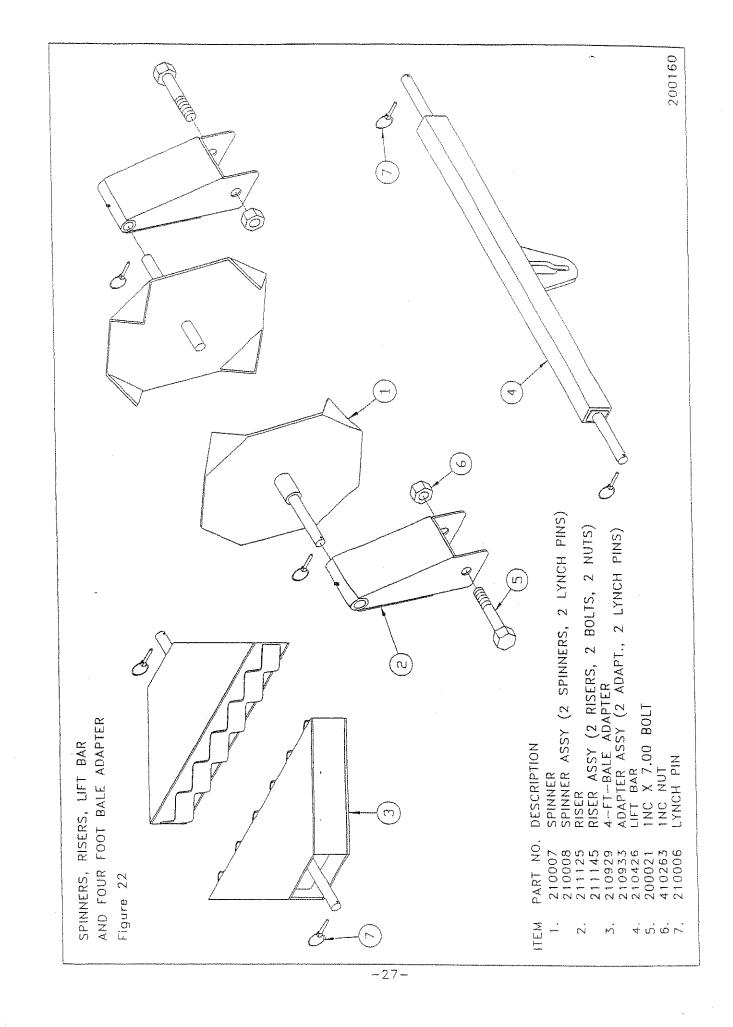


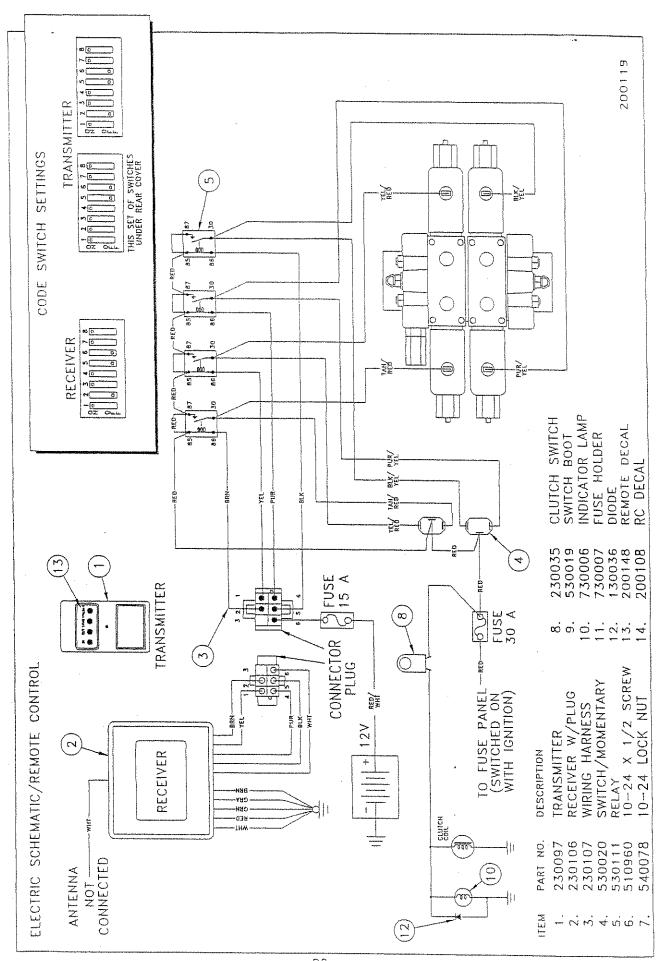
HOSES DEPEND ON FLATBED MODEL NO. AND WHETHER TRUCK HAS A STANDARD OR EXTENDED CAB. a part no's for hoses depend on Flaibed Model no. And b part no's for pump and fiffings depend on pump size. PART NO'S FOR

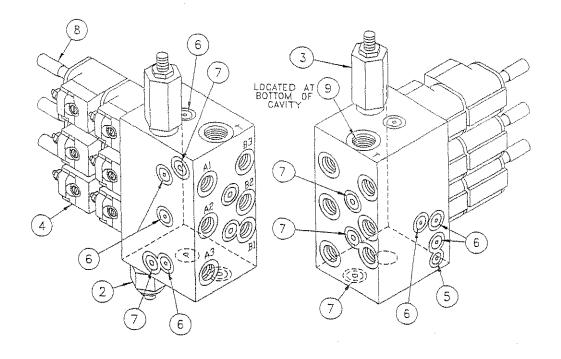












| ITEM | PART NO. | DESCRIPTION |
|------|----------|------------------------|
| 1 | | |
| 2 | 220536 | Load control valve |
| 3 | 220537 | Relief valve |
| 4 | 220538 | Coil |
| 5 | 720196 | Hex plug |
| 6 | 220539 | Hex plug |
| 7 | 720197 | Hex plug |
| 8 | 220540 | 3/4 Way solenoid valve |
| 9 | 220541 | Set screw |

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