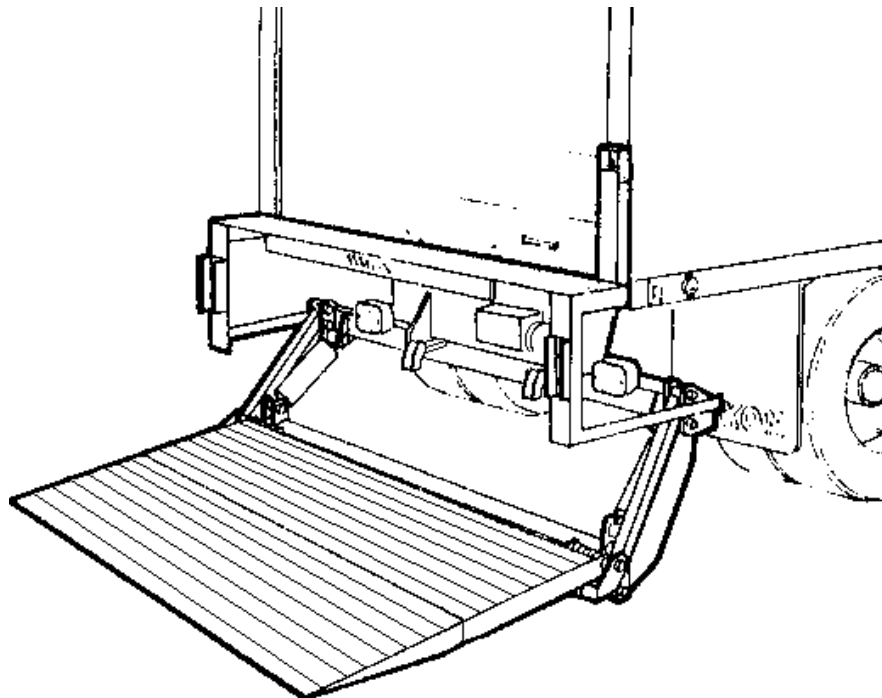


M-97-28
REV. C
MAR. 2000

**MAINTENANCE
MANUAL
TUK-A-WAY[®]
LIFT GATE SERIES**

80-3 LM



MAXON[®]
LIFT CORP.

11921 Slauson Avenue.
Santa Fe Springs, CA. 90670
(800) 227-4116

MAXON[®]

LIFT CORP.

**11921 Slauson Ave.
Santa Fe Springs, CA. 90670**

CUSTOMER SERVICE:

TELEPHONE (562) 464-0099 TOLL FREE (800) 227-4116

FAX: (888) 771-7713

**NOTE: Check with Customer Service for updated versions
of Manuals on an annual basis.**

WARRANTY POLICY & PROCEDURE

NEW LIFTGATE WARRANTY

Term of Warranty: 2 Years from Date of In-Service

Type of Warranty: Full Parts and Labor

MAXON agrees to replace any components which are found to be defective during the first 2 years of service, and will reimburse for labor based on MAXON's Liftgate Warranty Flat Rate Labor Schedule. (Call MAXON Customer Service for a copy).

All claims for warranty must be received within 30 Days of the repair date, and include the following information:

1. Liftgate Model Number
2. Liftgate Serial Number
3. Detailed Description of Problem
4. Corrective Action Taken, and Date of Repair.
5. Parts used for Repair, Including MAXON Part Number(s).
6. MAXON R.M.A. # and/or Authorization # if applicable (see below).
7. Person contacted at MAXON if applicable.

All warranty repairs must be performed by an authorized MAXON warranty station. For major repairs, MAXON Customer Service must be notified and an "Authorization Number" obtained. Major repairs would generally be considered repairs made to the structural assembly of the liftgate and/or repairs not outlined in the MAXON Liftgate Warranty Flat Rate Schedule.

Major components (i.e. hydraulic pumps, cylinders, valves, or failed structural parts) must be returned, freight pre-paid, prior to the claim being processed. To ensure timely processing of these warranty claims, an R.M.A. (Returned Merchandise Authorization) number must be obtained from MAXON Customer Service prior to the return of any defective part. Defective Parts must be returned within 60 days of the claim date for consideration to:

**MAXON Lift Corp.
16205 Distribution Way, Cerritos, CA 90703
Attn: RMA#__**

MAXON's warranty policy does not include the reimbursement for travel time, towing, vehicle rental, service calls, oil, batteries, defects due to misuse or abuse, or loss of income due to downtime. Fabrication of parts, which are available from MAXON, are also not covered.

MAXON's Flat Rate Labor Schedule takes into consideration the time required for diagnosis of a problem.

PURCHASE PART WARRANTY

Term of Warranty: 1 Year from Date of Purchase

Type of Warranty: Part Replacement

MAXON will guarantee all returned genuine replacement parts upon receipt and inspection of parts and invoice.

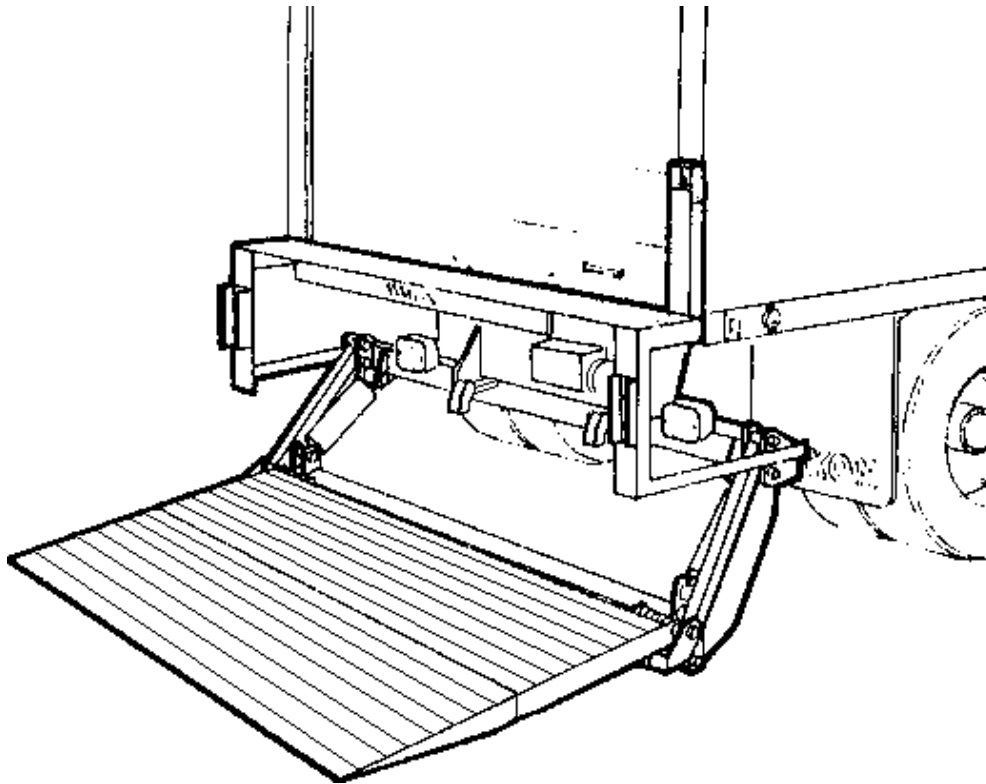
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INTRODUCTION

This publication contains the information required to maintain the **80-3LM**. If there is any doubt regarding the suitability of these lifts being maintained on it's intended vehicle, or any portion of these instructions that you do not understand, please contact the **MAXON Customer Service Department** for consultation.

Unauthorized modification to this equipment may cause premature failure or create hazards in its use that are not foreseen at the time of installation. These kinds of changes should be discussed with our Engineering Department before being undertaken.



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WARNING

1. Read the **Maintenance Manual** and understand it thoroughly before any maintenance of this unit is done.
2. Read the **YELLOW** urgent warning decal on the side of the vehicle close to the unit before operating.
3. If decals are dirty, clean them. If decals are defaced or missing, replace them. **Free replacements** are available from the manufacturer. See information at the end of the Warnings
4. Be aware that the safety and location of other people or objects should be considered before operation of this unit. Stand to one side of platform while operating this unit.
5. Do not stand under, or have any foreign object under the Platform when lowering. **Be sure that the lowering of the Platform and/or Flipover will miss your feet!**
6. Keep fingers, hands, arms, legs, and feet clear of moving parts when operating this unit.
7. If during your maintenance procedure, it becomes necessary to ride the platform, keep your feet and any foreign objects clear of the rear edge of the platform. Otherwise your feet or the foreign objects could become trapped between the edge of the platform and the vehicle bed.
8. Inspect all Roll Pins monthly, to insure that they are not broken. Replace if broken.
9. Inspect all hydraulic hoses and fittings annually. Check for cracks and deterioration, and replace if necessary.
10. **Disconnect battery** when replacing parts or servicing.
11. Do not allow children to ride, play with, or operate this unit.
12. In the event of an emergency while operating the unit, release the toggle switch and the unit will stop immediately.
13. A properly installed Lift should operate smoothly and the only noise during the operation of this unit should be from the Pump Unit during the raising of the Platform. Any scraping, grating or audible indications of rough operation will need investigating. The cause will need resolving before any further deterioration of performance occurs.
14. Use only **Maxon Authorized Parts** for replacement. Replacement parts should be ordered from:

MAXON LIFT CORP. Parts Department
11921 Slauson Ave., Santa Fe Springs, Ca. 90670
Phone: (800) 227-4116

PERIODIC MAINTENANCE CHECKLIST

Annually

Visually check the complete unit for excessive wear, worn parts or broken welds. Check all Hinge Pins for excessive wear or broken welds. For parts replacement, see the Assembly Breakdown Drawings.

Six Months

Visually check the Platform Hinge Pins for excessive wear or broken welds. For parts replacement, see the Assembly Breakdown Drawings.

Quarterly

Check the oil in the Pump Reservoir. The oil should be Grade ISO-(32) Hydraulic Fluid. ***See below for Cold Weather operation.**

Check Hoses and Fittings for scuffing and leaks. Replace if necessary.

Check the electrical wiring for worn insulation, and the terminals for corrosion and secure fit.

Check all bolts for tightness.

Check that all Warning Decals are in place and readable.

Check that all roll pins are properly installed. Replace if necessary.

Inspect the Hook & Chain Assembly for proper operation.

* **COLD WEATHER OPERATION**

OIL SPECIFICATIONS:

Grade ISO-(32)
Gravity, API - 29.5 Degrees
Pour Point, F- (-54 Degrees)

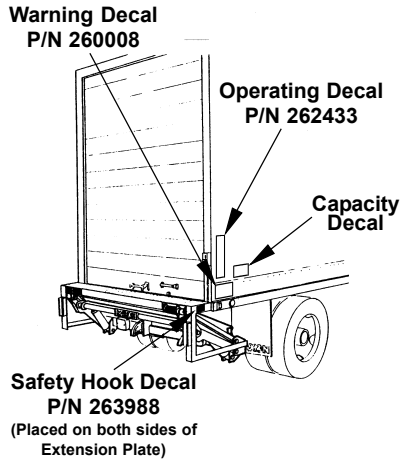
VISCOSITY:

@ 40 Degrees C - 31.2 cSt
@100 Degrees C - 6.2 cSt
VISCOSITY INDEX - 154 VI
Flash Point, F - 325 Degrees

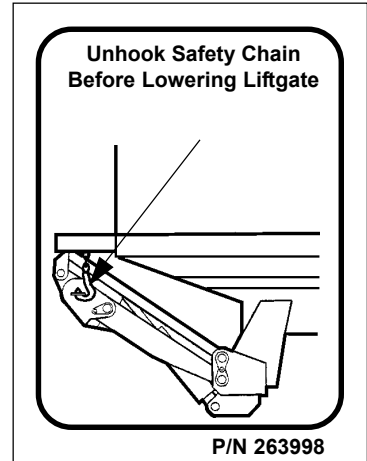
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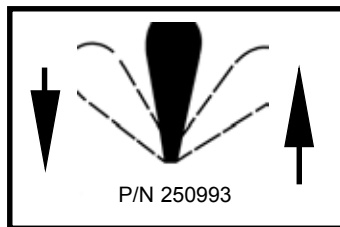
DECALS, 80 SERIES



These Decals are located on the rear corner post of the vehicle, at the control position. They should be read completely and understood before operating the Lift Gate. They should also be kept clean and readable at all times. If any decal should become detached from the vehicle, or defaced, it must be replaced. Free replacements are available from: **MAXON Lift Corp., Parts Dept.**



THE MAXIMUM CAPACITY OF THIS LIFT IS 3000 LBS. WHEN THE LOAD IS CENTERED ON THE LOAD CARRYING PLATFORM
P/N 220388



OPERATING INSTRUCTIONS
GPT & 80-3/4 Units

- 1** Unhook Safety Chain First.
- 2** Activate Toggle Switch to Lower Stowed Lift Gate. This point must touch the ground.
- 3** Open Platform.
- 4** Open Flipover.
- 5** Activate Toggle Switch to Raise or Lower Platform.
- 6** To Tuck Unit Away after Use, Reverse Steps 1 thru 4.

MAXON
P/N 251838

WARNING
READ CAREFULLY

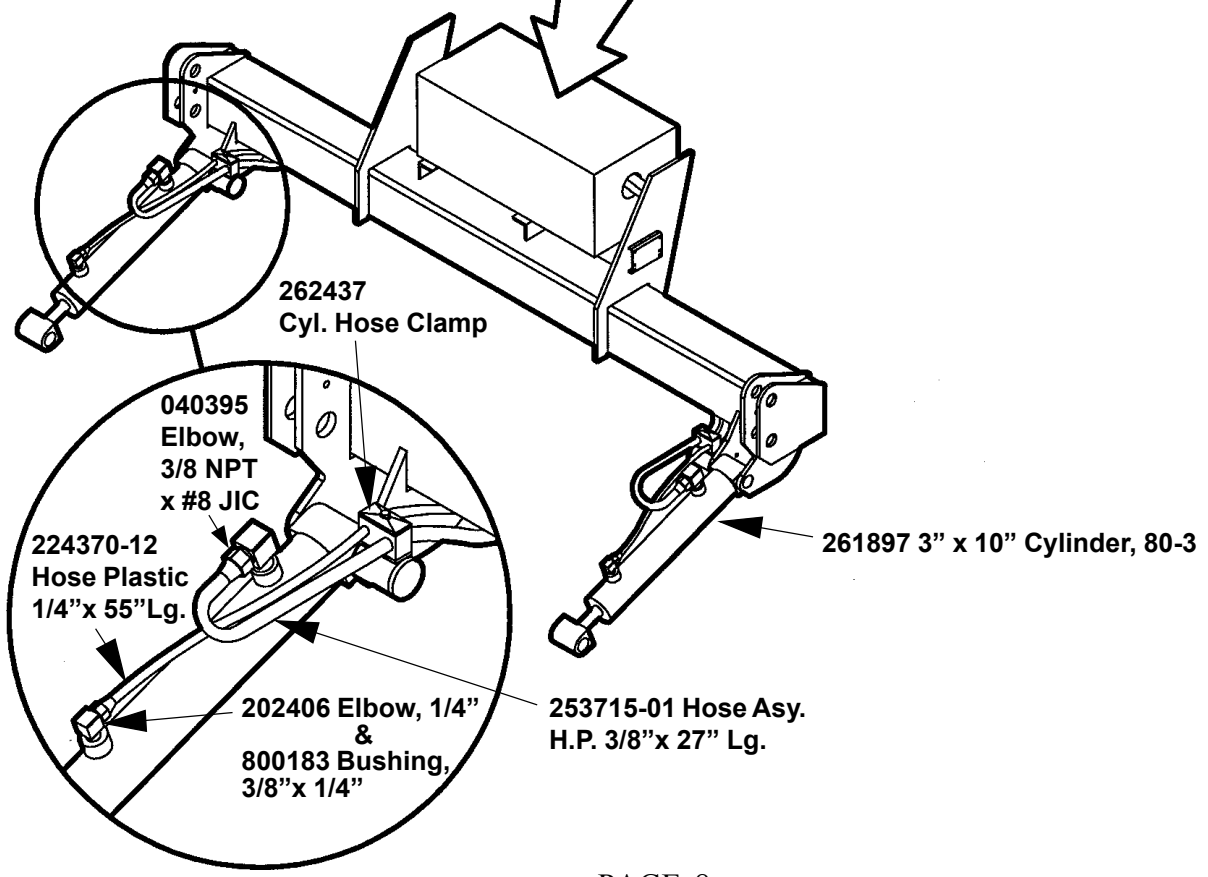
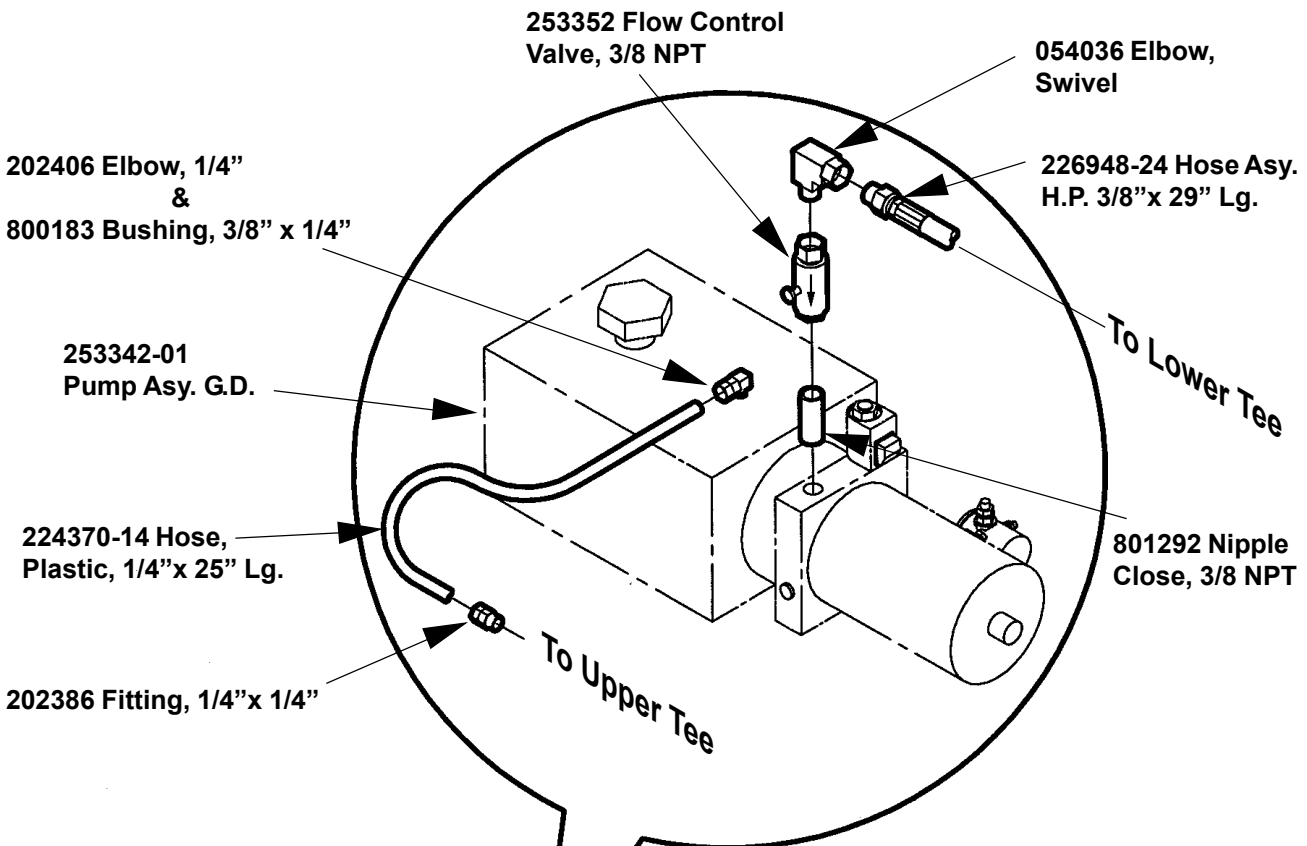
- Improper operation of this Lift can result in serious personal injury. Do not operate unless you have been properly instructed and have read, and are familiar with the operating instructions. If you do not have a copy of the instructions, please obtain them from your employer, distributor, or lessor, before you attempt to operate Lift.
- Be certain that the vehicle is properly and securely braked before using the Lift.
- Always inspect this Lift for maintenance or damage before using it. If there are signs of improper maintenance, damage to vital parts, or slippery Platform surface, do not use the Lift until these problems have been corrected.
- Do not overload the Lift. The load limit is based on evenly distributed cargo over the entire Platform surface. If you are using a pallet jack, be sure it can be maneuvered safely. Do not operate a forklift on the Platform or travel with the platform in an open position at any time.
- Load should be placed in a stable position close to the edge of the Platform nearest the truck. The heaviest portion of the load should never be placed beyond the center of the Platform away from the truck.
- Never allow yourself, a helper, or bystander to stand in a position where a falling load could land on either of you. Also do not allow any part of yours or your helper's body to be placed under, within, or around any portion of the moving liftgate, or its mechanisms, or in a position that would trap them between the platform and the ground or truck when the liftgate is operated.
- If a helper is riding the Platform with you, make sure you are both doing so safely and that you are not in danger of coming in contact with any moving or potentially moving obstacles. USE GOOD COMMON SENSE. If load appears to be unsafe, do not lift or lower it.

MAXON LIFT CORP. PART NO. 264081

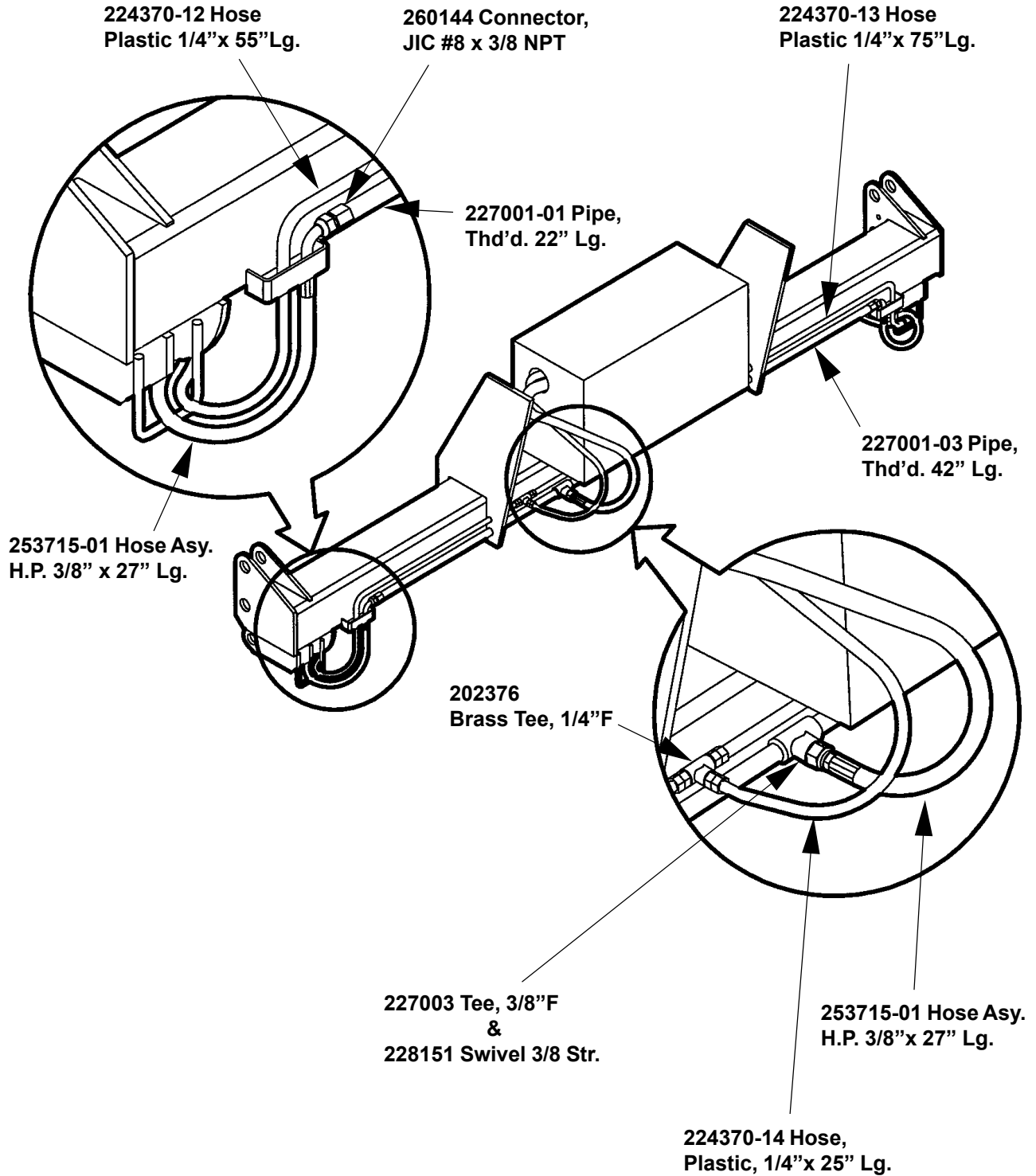
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HYD. HOSE ROUTING, GRAVITY DOWN

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HYD. HOSE ROUTING, GRAVITY DOWN



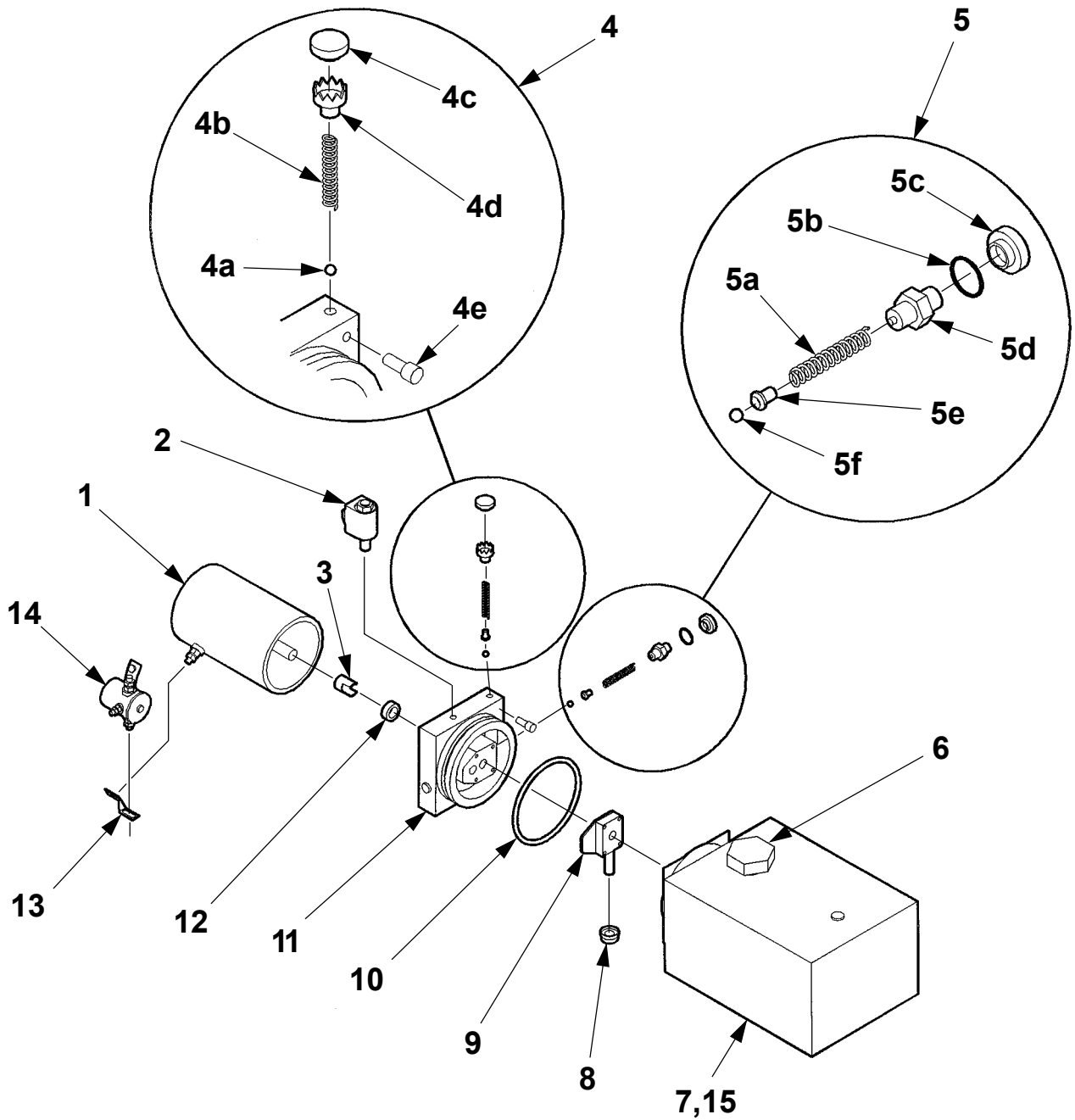
253171 PUMP, GRAVITY DOWN

ITEM	QTY.	PART NUMBER	DESCRIPTION
1	1	250093	MOTOR, HEAVY DUTY 12 VOLTS DC
2	1	253353	VALVE, SOLENOID 2-WAY
*2a	1	226594	O-RING KIT, 2-WAY VALVE
3	1	229200	COUPLING
4	1	251885	CHECK VALVE KIT
4a	1	260257	STEEL BALL
4b	1	260254	SPRING
4c	1	260258	PLUG
4d	1	260255	RETAINER
4e	1	260256	SOCKET HEAD CAPSCREW
5	1	260229	RELIEF VALVE KIT
5a	1	260231	SPRING
5b	1	260235	O-RING
5c	1	260234	VALVE CAP
5d	1	260232	ADJUSTING SCREW
5e	1	260233	SPRING GUIDE
5f	1	260230	STEEL BALL
6	1	260847	FILLER/BREATHING CAP
7	1	251882	RESERVOIR, 3 QT.
8	1	260250	FILTER
9	1	260236	PUMP ASSEMBLY
10	1	251884	O-RING
11	1	260252	DRIVEPLATE ASSEMBLY 5"
12	1	260261	OIL SEAL
13	1	229199	BUS BAR
14	1	260270	SOLENOID SWITCH
*15	4	229202	CAPSCREW, HEX. WASHER HD.

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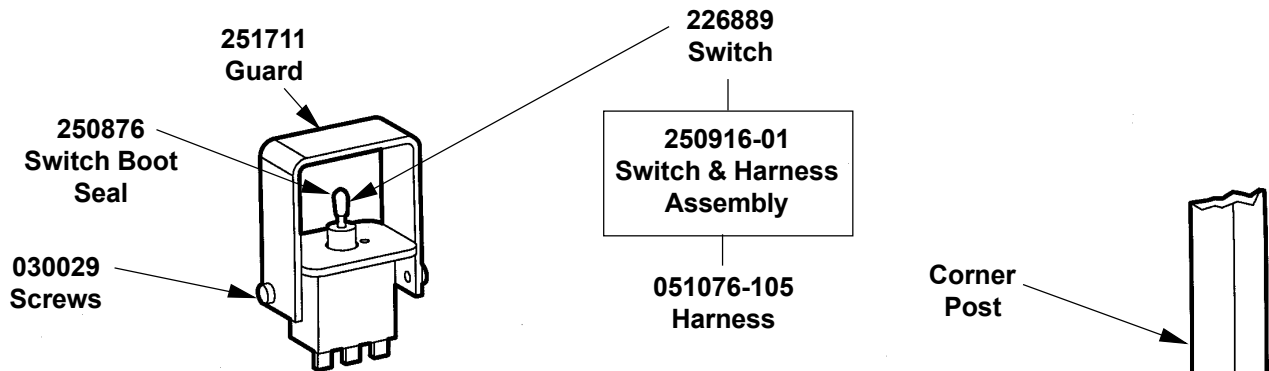
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253171 PUMP, GRAVITY DOWN

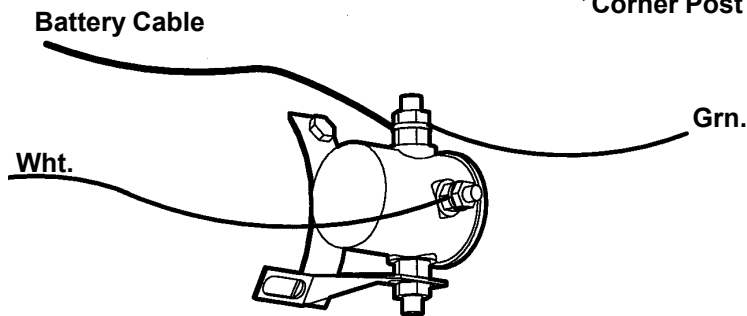
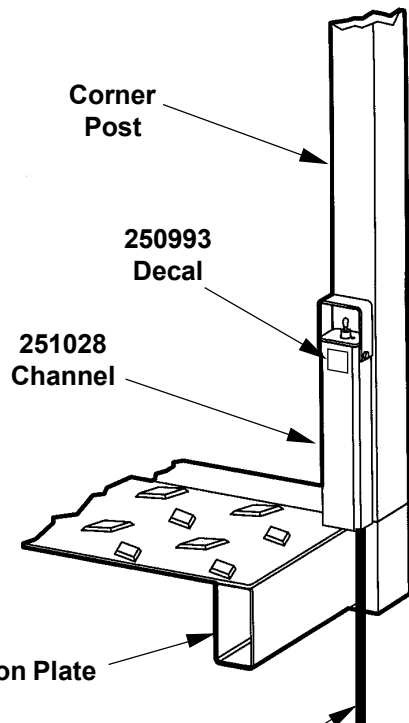
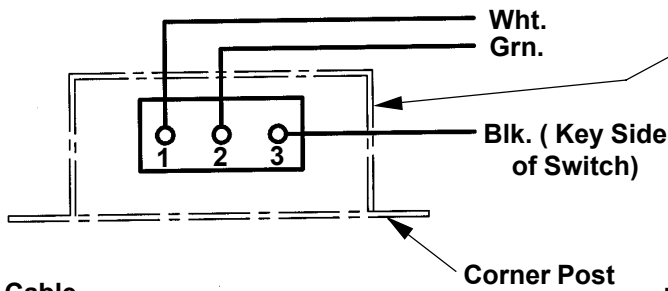


CONTROL SWITCH GRAVITY DOWN

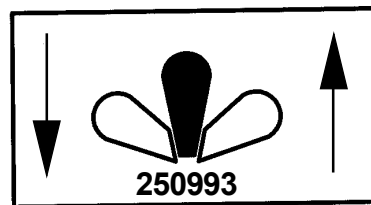
Assemble Switch in Mount Bracket as shown. When mounting the bracket to the Channel, note the location of the Wht. & Blk. wires to ensure proper wiring to match the "UP/DOWN" Decal.



Looking at Switch from the Platform, the Wht. Wire must be on the left or "Door" side.



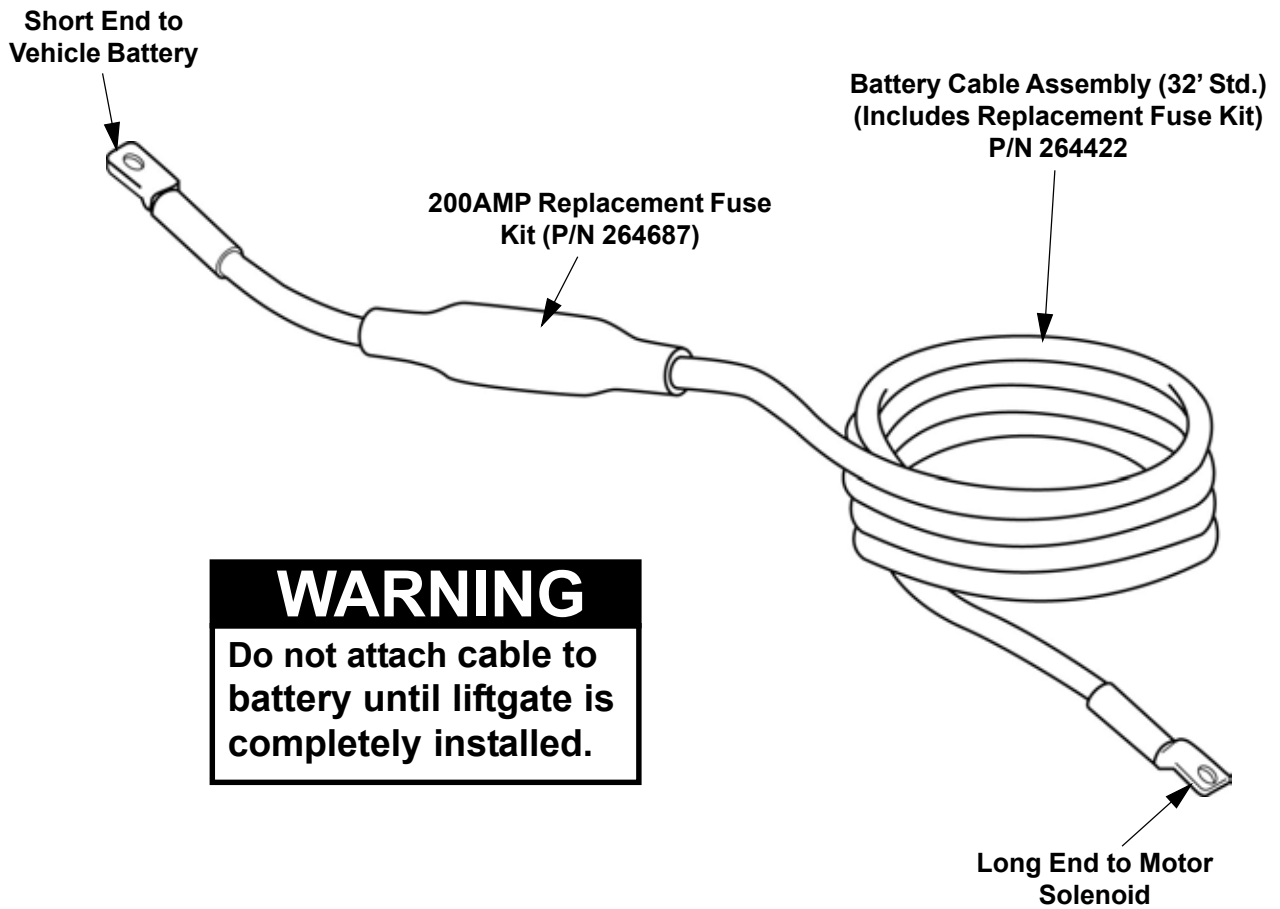
Pump Unit Motor Solenoid





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FUSED POWER CABLE



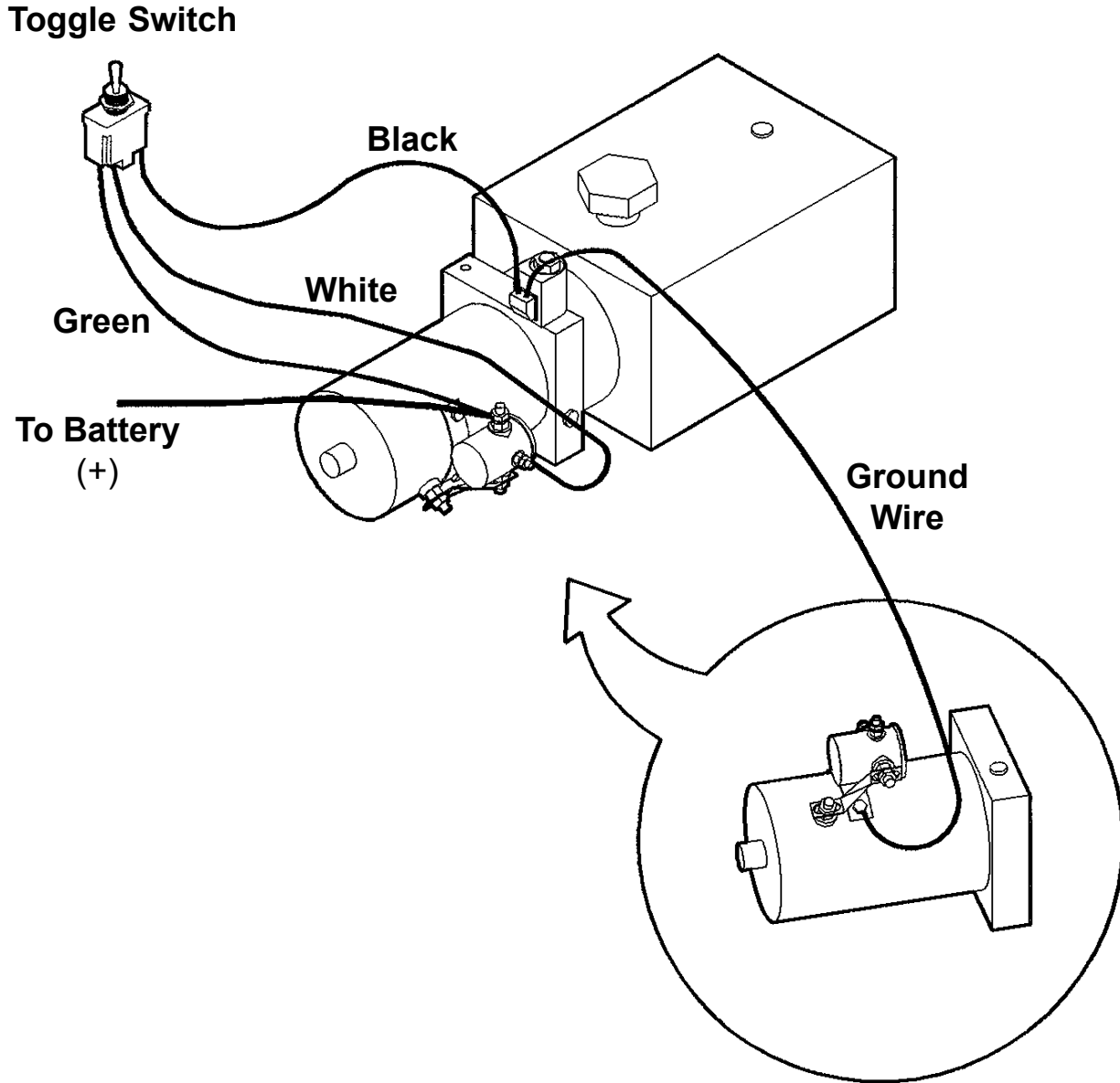
WARNING
Do not attach cable to battery until liftgate is completely installed.

ADDITIONAL AVAILABLE BATTERY CABLE KITS		
	PART NUMBER	
40' CABLE ASSEMBLY	264848	Cable Assembly 
10' EXTENSION CABLE ASSEMBLY	264849	Extension Cable Assembly 

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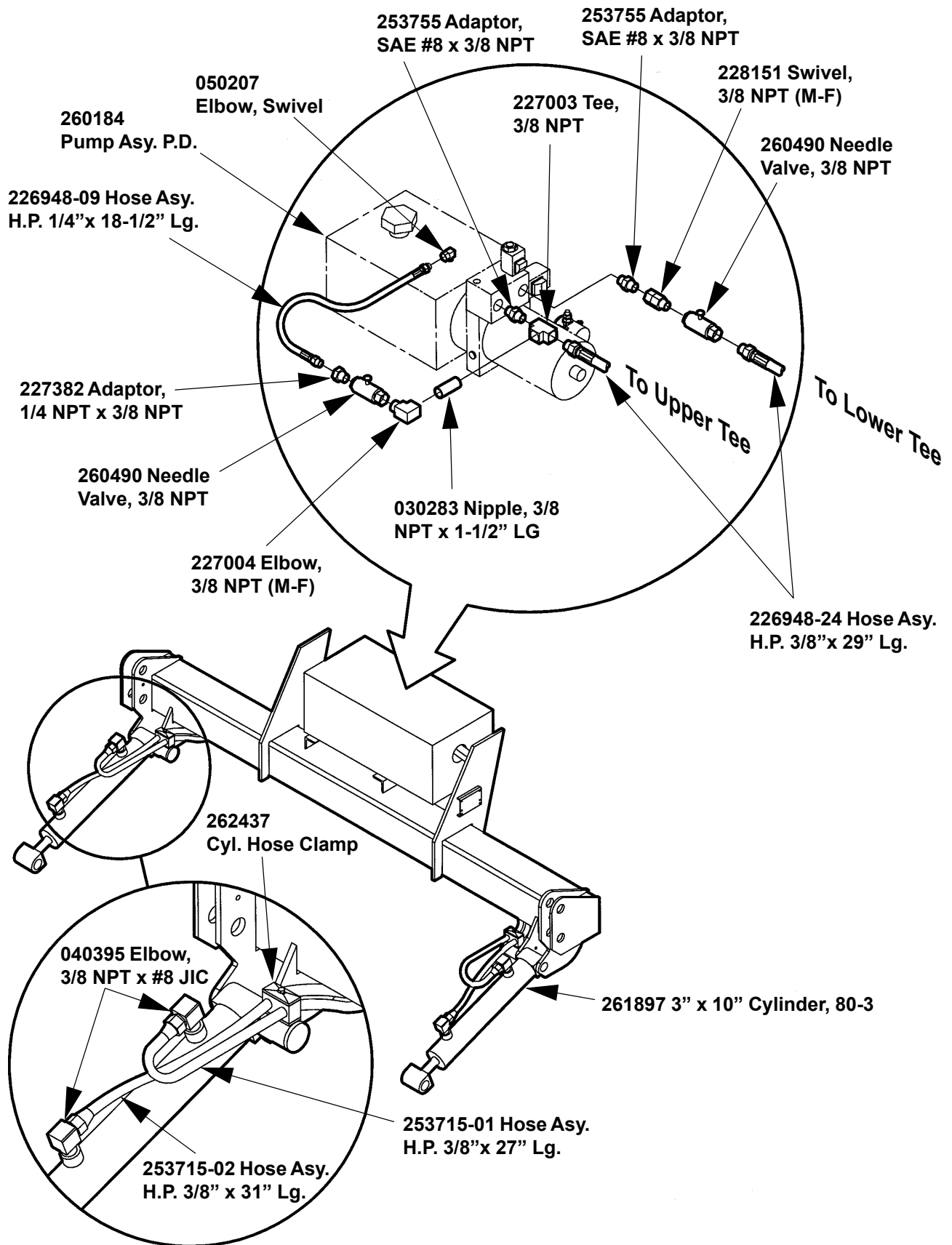
WIRE CONNECTIONS GRAVITY DOWN

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	POWER TO
UP	WHT.
DOWN	BLK.

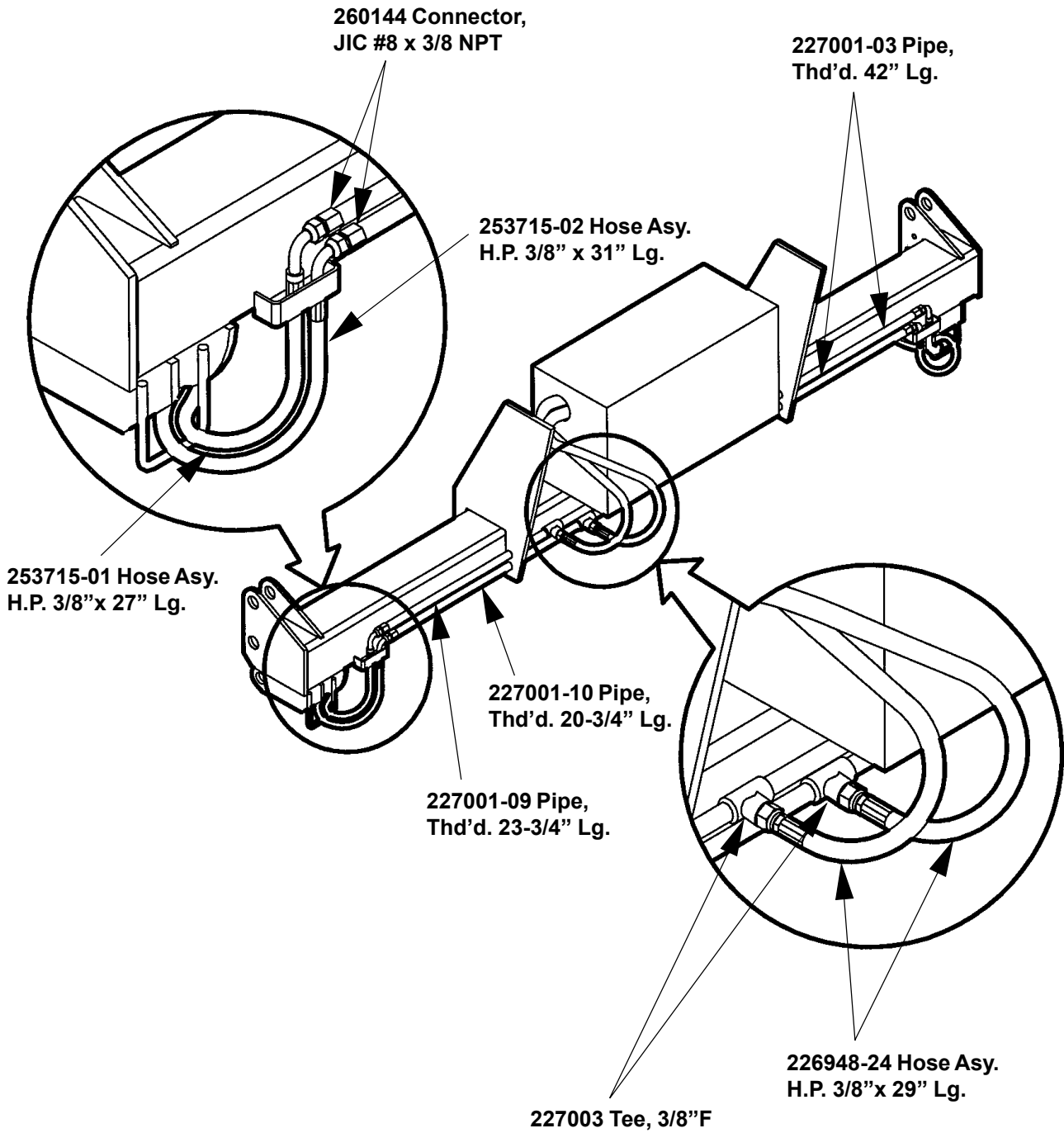
HYD. HOSE ROUTING, POWER DOWN



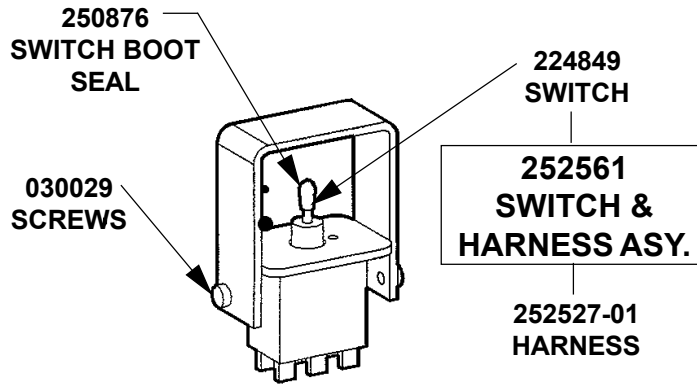
HYD. HOSE ROUTING, POWER DOWN

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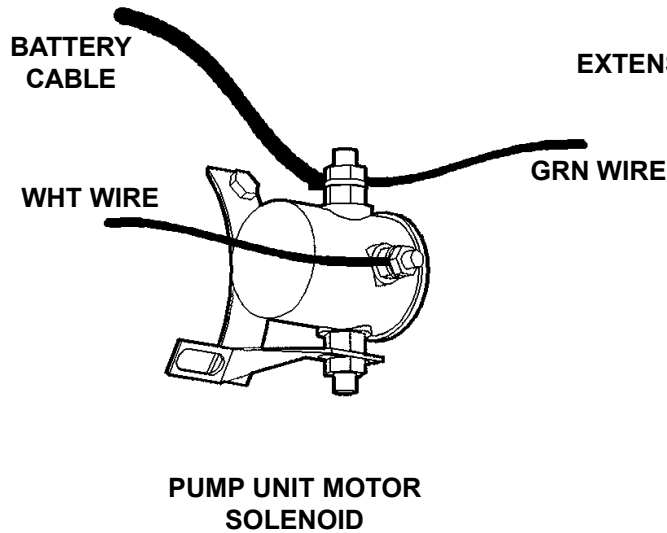
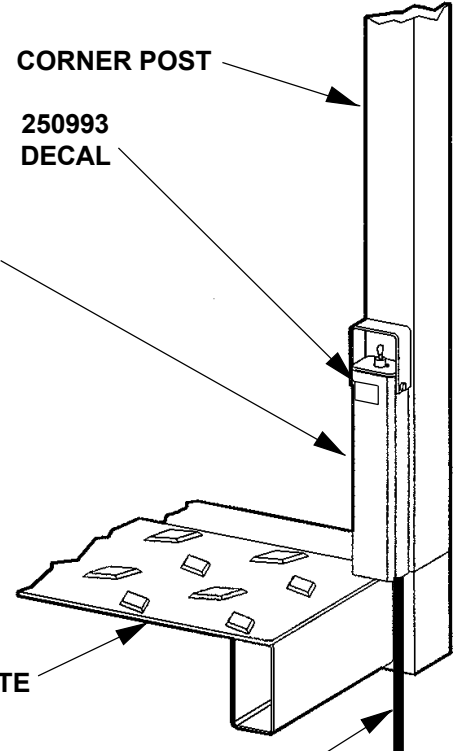
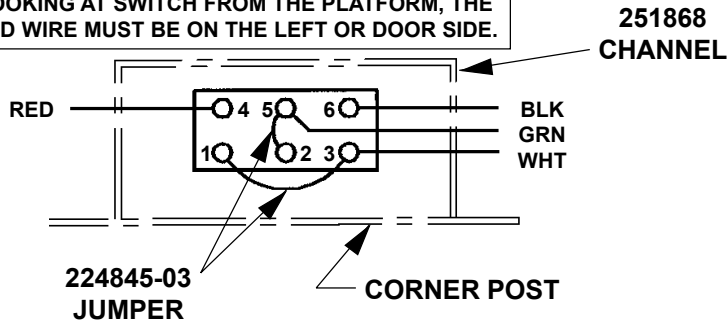
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CONTROL SWITCH, POWER DOWN



LOOKING AT SWITCH FROM THE PLATFORM, THE RED WIRE MUST BE ON THE LEFT OR DOOR SIDE.



HARNESS TO PUMP UNIT



FUSED POWER CABLE



Short End to Vehicle Battery

Battery Cable Assembly (32' Std.)
(Includes Replacement Fuse Kit)
P/N 264422

200AMP Replacement Fuse Kit (P/N 264687)

WARNING
Do not attach cable to battery until liftgate is completely installed.

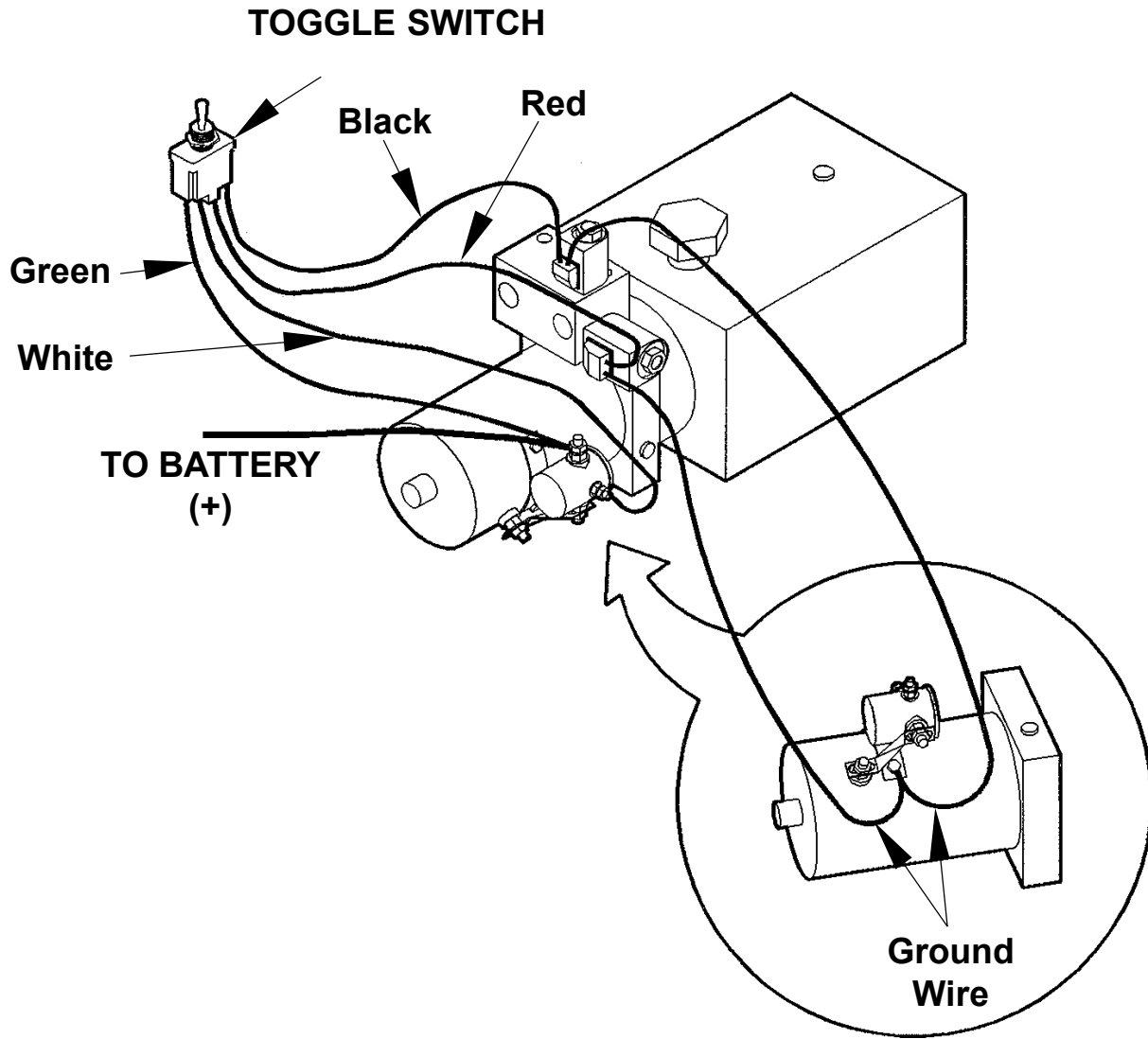
Long End to Motor Solenoid

ADDITIONAL AVAILABLE BATTERY CABLE KITS		
	PART NUMBER	
40' CABLE ASSEMBLY	264848	Cable Assembly 
10' EXTENSION CABLE ASSEMBLY	264849	Extension Cable Assembly 

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WIRE CONNECTIONS, POWER DOWN



	POWER TO
UP	WHT, RED
DOWN	WHT, BLK

253170 PUMP, POWER DOWN

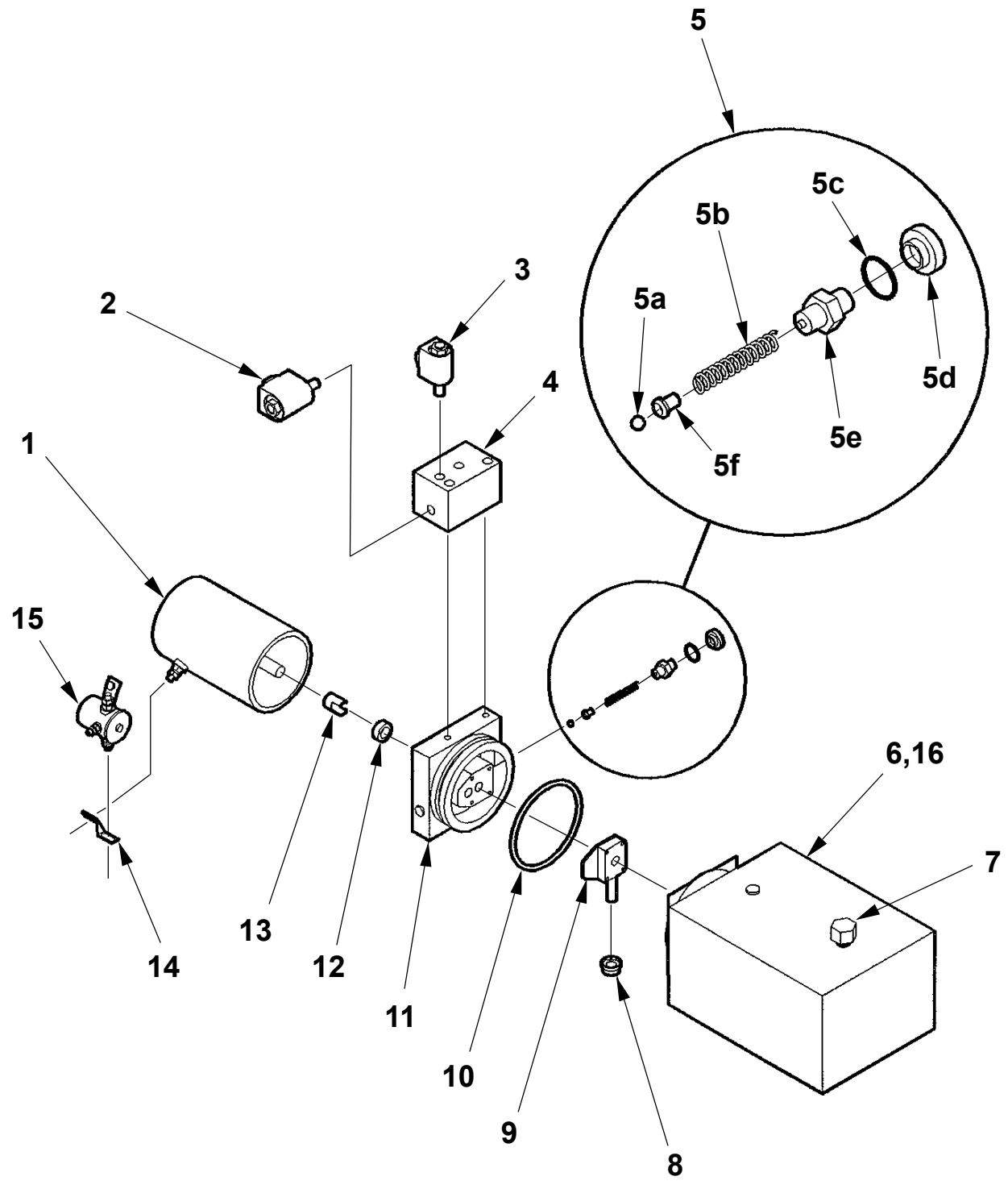
ITEM	QTY.	PART NO.	DESCRIPTION
1	1	250093	HEAVY DUTY MOTOR, 12 VDC
2	1	260276	VALVE, SOLENOID 4-WAY
*2a	1	226595	O-RING KIT, 4-WAY VALVE
3	1	253353	VALVE, SOLENOID 2-WAY
*3a	1	226594	O-RING KIT, 2-WAY VALVE
4	1	260275	MANIFOLD BLOCK ASSEMBLY
5	1	260229	RELIEF VALVE KIT
5a	1	260230	STEEL BALL
5b	1	260231	SPRING
5c	1	260235	O-RING
5d	1	260234	VALVE CAP
5e	1	260232	ADJUSTING SCREW
5f	1	260233	SPRING GUIDE
6	1	261106	RESERVOIR, 2.5 GAL. W/.75 BREATHER
7	1	260847	FILLER/BREATHER CAP
8	1	260250	FILTER
9	1	260236	PUMP ASSEMBLY
10	1	251884	O-RING
11	1	260274	DRIVEPLATE ASSEMBLY, 5"
12	1	260261	OIL SEAL
13	1	229200	COUPLING
14	1	229199	BUS BAR
15	1	260270	SOLENOID SWITCH
*16	4	229202	CAPSCREW, HEX HD. WASHER

*NOT SHOWN

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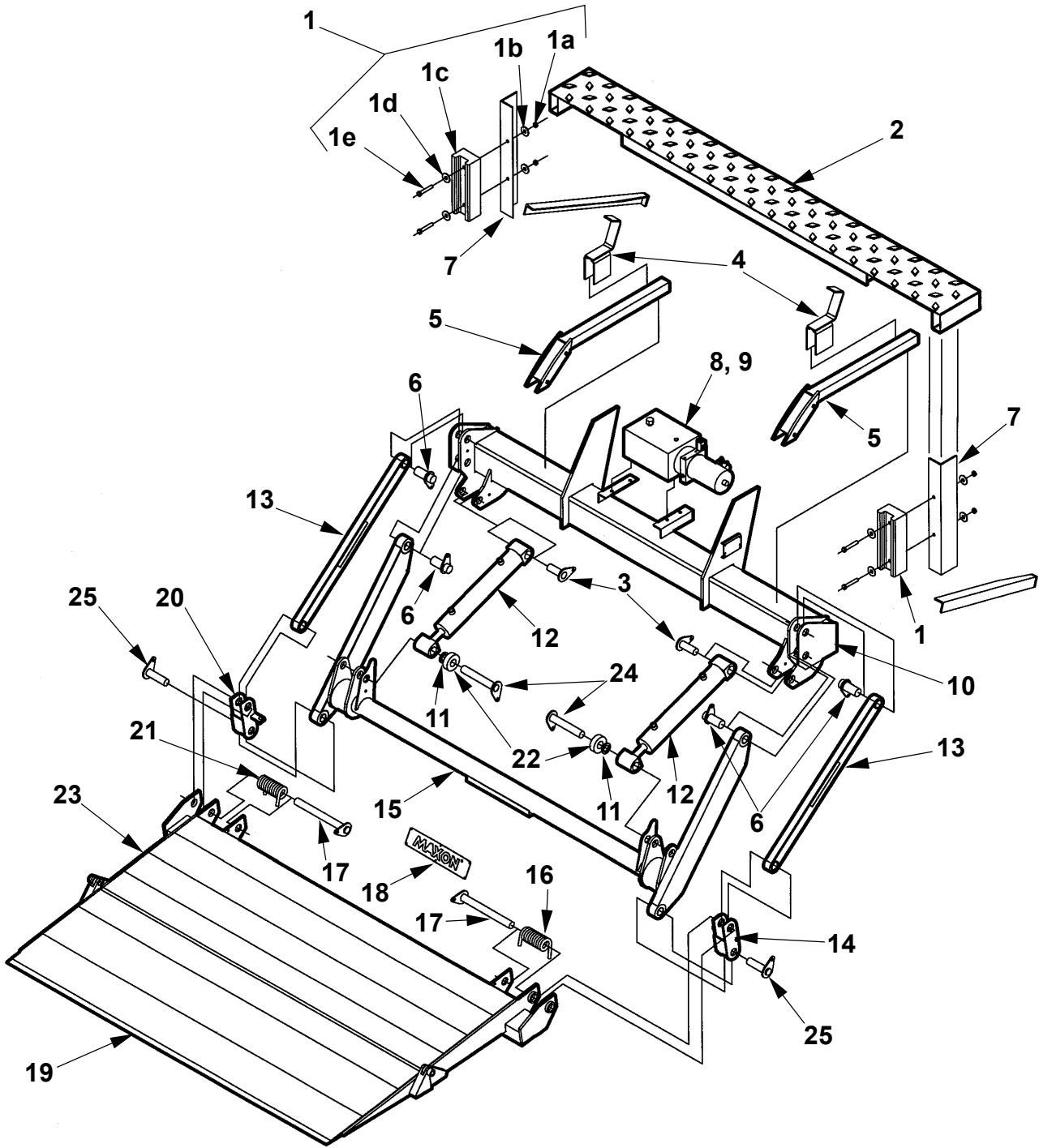
253170 PUMP, POWER DOWN



80-3LM ASSEMBLY

MAXON[®]

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80-3LM ASSEMBLY

ITEM	QTY.	PART NUMBER	DESCRIPTION
1	2	203410	KIT, RUBBER DOCK BUMPER (OPTIONAL)
1a	4	030323	NUT, HEX, 1/2-20 UNF
1b	4	030567	LOCKWASHER, 1/2"
1c	2	222988	RUBER BUMPER PAD
1d	4	030566	FLATWASHER, 1/2"
1e	4	030083	BOLT, 1/2-20 UNF x 2" LONG
2	1	226355	EXTENSION PLATE WELDMENT
3	2	262462	PIN WELDMENT, CYL. 1.375 DIA.
4	2	262490	SADDLE ASSEMBLY
5	2	261806-01	PLATFORM OPENER
6	4	226358	PIN WELDMENT
7	2	226856	DOCK BUMPER ANGLE
8	1	253170	PUMP ASSEMBLY
9	1	260157	PUMP BOX ASSEMBLY
10	1	262429	MAINFRAME WELDMENT
11	2	226372	ROUND TUBE x 1/4"
12	2	261897	CYLINDER, 3" x 10"
13	2	261785-01	PARALLEL ARM WELDMENT
14	1	261797-02	SHACKLE WELDMENT RH
15	1	261800-01	LIFTFRAME WELDMENT
16	1	226363-01	TORSION SPRING RH
17	2	226364	PIN, SPRING
18	1	050175	NAMEPLATE
19	1	262356-01	FLIPOVER WELDMENT 24"
		262356-02	FLIPOVER WELDMENT 30"
20	1	261797-01	SHACKLE WELDMENT LH
21	1	226363-02	TORSION SPRING, LH
22	2	226375	ROLLER x 1"
23	1	262338-01	PLATFORM WELDMENT 24"
		262338-02	PLATFORM WELDMENT 30"
24	2	262435	PIN WELDMENT, CYL. 1.375 DIA.
25	2	226365	PIN, SHACKLE

PUMP PRESSURE ADJUST SETTING

Lower the Platform to the ground to relieve any pressure on the hoses. Remove the existing hose and swivel assembly from Port "B" (3/8" NPT). Install a **0-3000 PSI Gauge**, to port "B".

Remove the Valve Cap, from the Pump Block. Using the Raise/Lower Switch on the Curb side of the vehicle, actuate the motor and check the gauge reading. Adjust the relief valve to a pressure setting of **2750 PSI**.

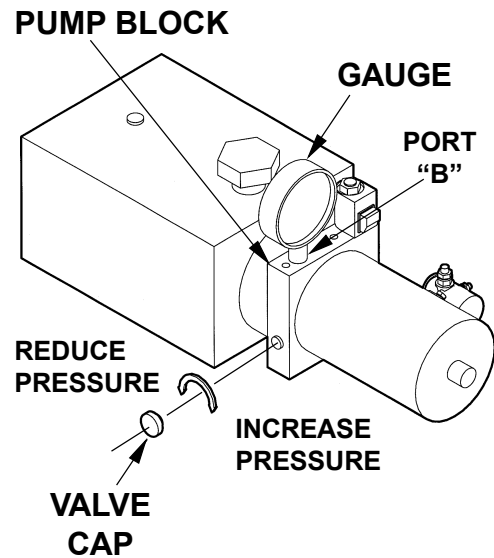


FIGURE 1

Activate the Raise/Lower Switch several times to verify that the pressure shown on the gauge will remain at the proper setting. (Ref. Fig. 1).

WARNING!

Setting the pressure higher than recommended could cause damage to lift components.

If the unit does not maintain the pressure reading, it may be necessary to remove and inspect the relief valve components (Ref. Fig. 2).

Check for *nicks* or *cuts* on the Spring, and Ball. Replace any damaged parts before reassembling the unit.

Upon reassembly, you will have to seat the Ball by inserting a 3/16" diameter rod through the Spring and tapping the Ball against the seat with a hammer.

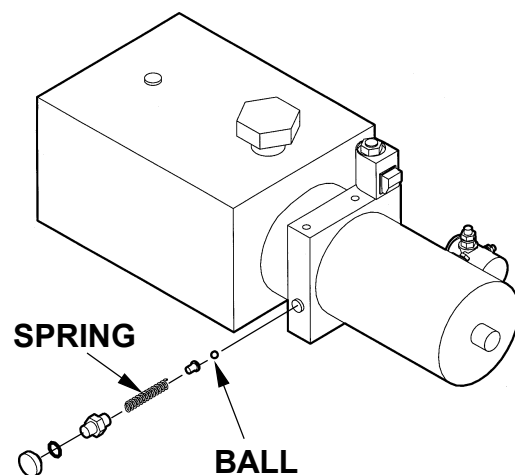


FIGURE 2

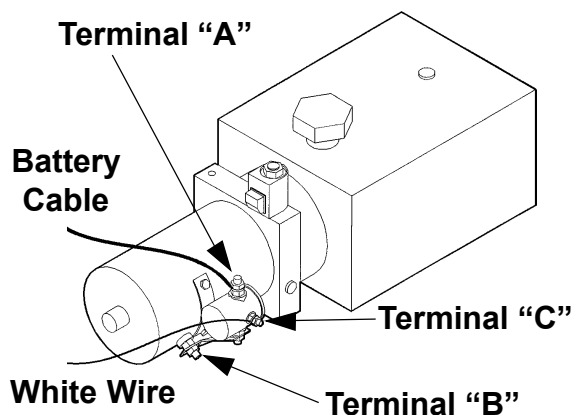
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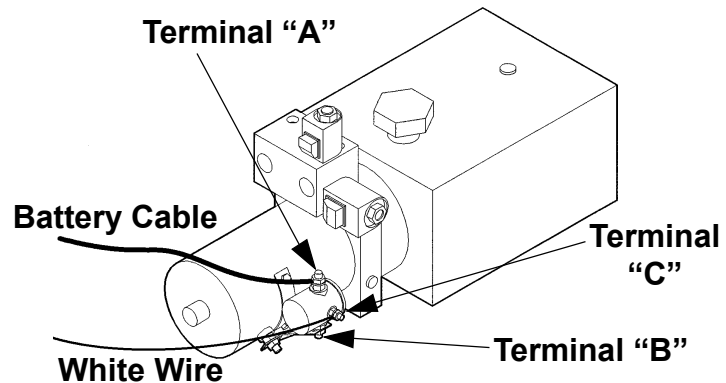
TROUBLESHOOTING

PLATFORM WILL NOT RAISE

1. Verify that power is being supplied to the Solenoid Terminal "A". Recharge the battery if less than 12 volts.
2. Fill Reservoir to within 1" below the top with the recommended hydraulic fluid.
3. Touch a jumper wire to terminals "A" & "C". If motor runs, check Switch, Switch connections, and White wire. Correct the connections or replace the Switch.
4. Touch heavy jumper cables to terminals "A" & "B".
 - a. If motor runs, replace the motor solenoid.
 - b. If motor does not run, repair or replace the pump motor.
5. Check for structural damage. Replace worn parts.
6. Check filter in the pump Reservoir. Replace if necessary.
7. Check for a broken motor-to-pump coupler. Replace if necessary. A worn pump is extremely noisy, and needs replacement.



GRAVITY DOWN



POWER DOWN

PLATFORM RAISES BUT LEAKS DOWN

1. Check Solenoid Valves for electrical shorts by holding a screwdriver approximately 1/4" from the top nut of the Solenoid. (See Fig. 1). The solenoid should not draw the screwdriver to the nut with a magnetic force, unless the toggle switch is actuated. The Coil can be replaced by removing the Nut and Wires.

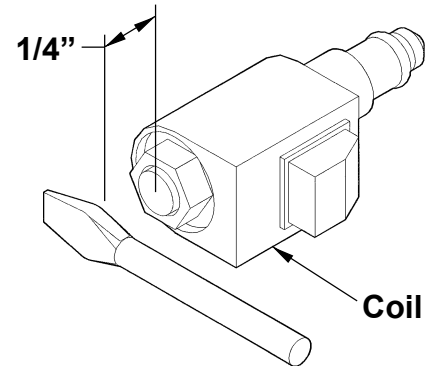


FIGURE 1

2. Check the Valve Stem by removing the Coil Assembly, (Item 1, Fig. 2). Unscrew the Valve Stem, (Item 2, Fig. 2), from the Pump. Push on the plunger that is located inside the Valve Stem by inserting a paper clip in the end. If the Plunger does not move freely approximately 1/8", replace the Valve Stem.

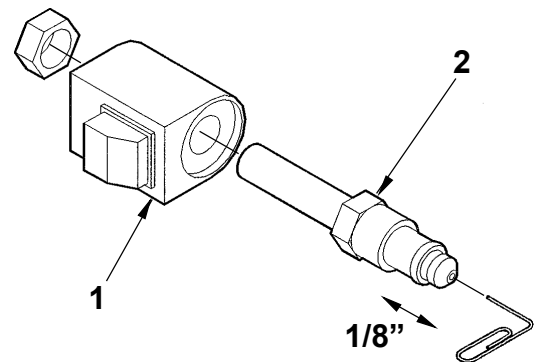


FIGURE 2

3. Check the Hydraulic Cylinder. With the Platform on the ground, remove the Breather Plug or Vent Line from the Vent Port of the Cylinder. Raise the Platform to be level with the bed. If hydraulic fluid streams from the Vent Port, the Piston Seals are worn. Replace the Seals. (See Fig. 3).

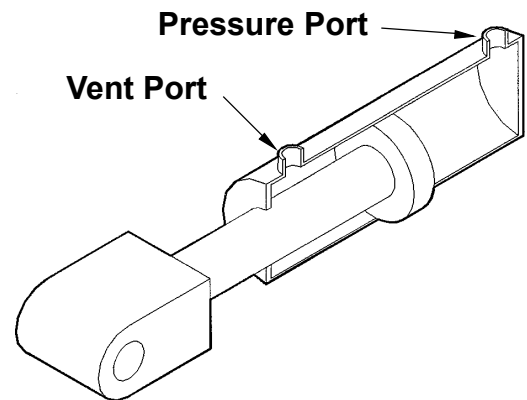


FIGURE 3

PLATFORM RAISES PARTIALLY AND STOPS

- 1.** Lower the opened Platform to the ground. Fill the Reservoir to within 1” from the top with the recommended Hydraulic Fluid.
- 2.** Verify that the Battery shows 12 volts or better under load from pump motor. The use of a voltage load tester is recommended.
- 3.** Check for Structural damage, or lack of lubrication. Replace worn parts.
- 4.** Check Filter in the Pump Reservoir. Replace if necessary.
- 5.** Check for a broken motor-to-pump coupler. Replace if necessary. A worn pump is extremely noisy, and needs replacement.

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LIFTGATE WILL NOT LIFT RATED CAPACITY

1. Verify that the Battery shows 12 volts or better under load from pump motor. The use of a voltage load tester is recommended.
2. Check for Structural damage or lack of lubrication. Replace worn parts.
3. Check the Hydraulic Cylinder.

GRAVITY DOWN UNITS: With the Platform on the ground, remove the Breather Plug or Vent Line from the Vent Port of the Cylinder. Raise the Platform. If hydraulic fluid streams from the Vent Port, the Piston Seals are worn. Replace the Seals.

POWER DOWN UNITS: Remove the Power Down Hose from the cylinder. Raise the Platform. If hydraulic fluid streams from the Power Down Port, the Piston Seals are worn. Replace the Seals.

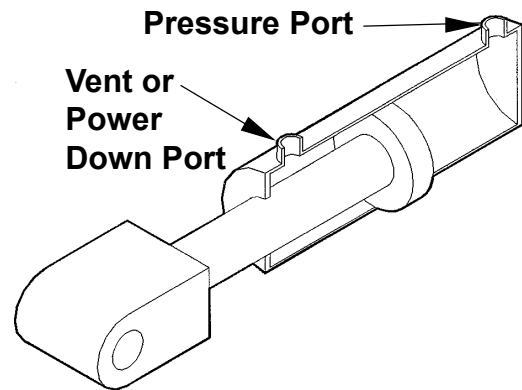


FIGURE 1

4. With Platform on the ground, remove the pressure hose and fitting from the Pump and replace it with a 0-3000 PSI Pressure Gauge. Hold the switch in the "UP" position. Adjust the Relief Valve on the side of the Pump until the gauge shows 2800 to 3000 PSI . (**See Fig. 2**)

5. If Pump cannot produce 2800-3000 PSI with a minimum of 12 Volts available, the Pump is worn and needs to be replaced.

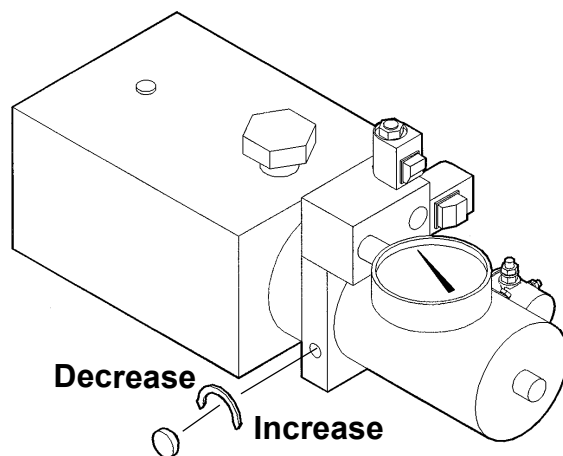


FIGURE 2

PLATFORM RAISES SLOWLY

1. Verify that power is being supplied to Terminal "A". Recharge the battery if less than 12 Volts registers on the Voltage Tester. **(See Fig. 1)**
2. Lower the opened Platform to the ground. Fill the Pump Reservoir to within 1" from the top with the recommended hydraulic fluid **(for Gravity Down Units only)**.
3. Verify the Pump Motor is grounded to the vehicle frame.
4. Check for leaking hoses and fittings. Tighten or replace as required.
5. Check for structural damage or lack of lubrication. Replace worn parts.
6. Check the Filter in the Pump Reservoir. Replace if necessary.

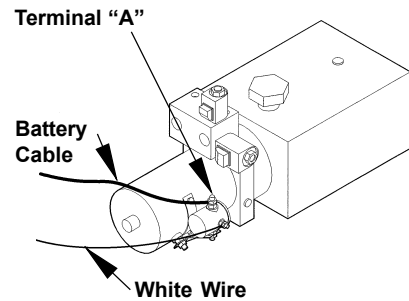


FIGURE 1

7. With Platform on the ground, remove the pressure hose and fitting from the Pump and replace it with a 0-3000 PSI Pressure Gauge. Hold the switch in the "UP" position. Adjust the Relief Valve on the side of the Pump until the gauge shows 2800 to 3000 PSI . **(See Fig. 2)**

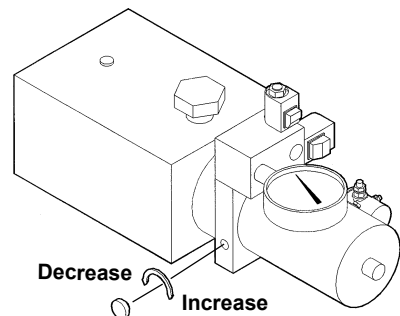


FIGURE 2

8. With the Platform on the ground, remove breather plug or vent line from vent port of cylinder. Raise the Platform to bed level. If hydraulic fluid streams from the Vent Port, the Piston Seals are worn. **(See Fig. 3)** Replace the Seals.

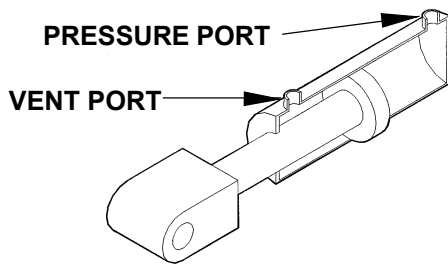


FIGURE 3

9. Check the Flow Control Valve. The arrow on the valve shows the direction of flow that is restricted, and Must point back to the Reservoir. **(See Fig. 4)**

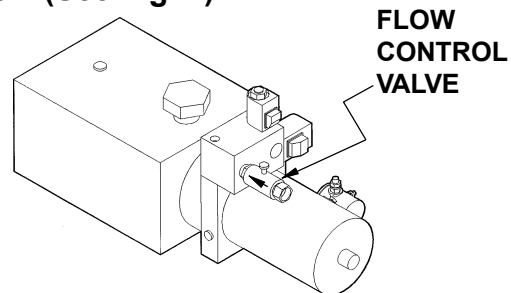


FIGURE 4

PUMP WILL NOT OPERATE

1. Verify that power is being supplied to the Solenoid Terminal "A" (Ref. Fig. 1). Recharge the battery if less than 12 volts.
2. Touch a jumper wire to terminals "A" & "C" (Ref. Fig. 1). If motor runs, check Switch, Switch connections, and White wire. Correct the connections or replace the Switch.
3. Touch heavy jumper cables to terminals "A" & "B" (Ref. Fig. 1).
 - a. If motor runs, replace the motor solenoid.
 - b. If motor does not run, repair or replace the pump motor.
4. Check for a broken Pump Shaft or motor-to-pump coupler. Replace if necessary. A worn pump is extremely noisy, and needs replacement.

(Tractor/Trailer Vehicles) Check electrical connections to Tractor.

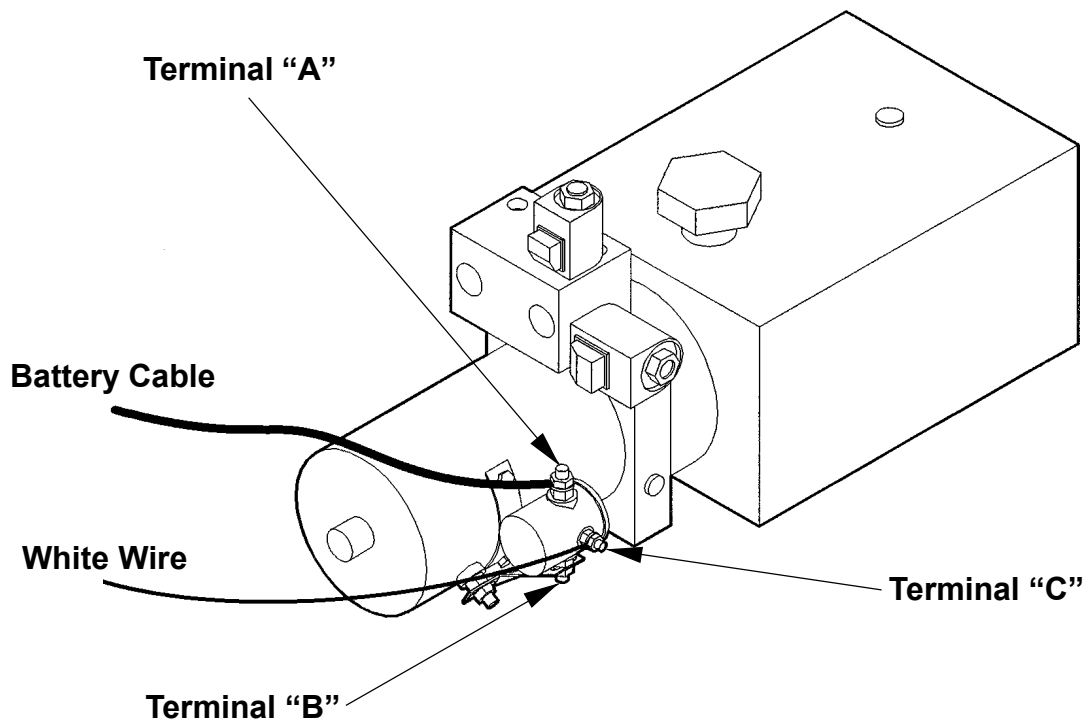


FIGURE 1

PLATFORM LOWERS TOO FAST OR TOO SLOW

1. Check the Flow Control Valve. The Arrow on the valve shows the direction of flow that is restricted and must point back to the Reservoir. **(See Fig. 1)**

2. Too Fast:

GRAVITY DOWN

The Flow Control Valve could be fully open. To slow the flow, turn the knob in a clockwise direction to restrict the flow through the valve. **(See Fig. 1)**

POWER DOWN

The Flow Control Valve could be closed. To increase the flow through the valve, turn the knob in a counter-clockwise direction. **(See Fig. 1)**

3. Too Slow:

GRAVITY DOWN

The Flow Control Valve could be closed. To increase the flow through the valve, turn the knob in a counter-clockwise direction. **(See Fig. 1)**

POWER DOWN

The Flow Control Valve could be fully open. To slow the flow, turn the knob in a clockwise direction to restrict the flow through the valve. **(See Fig. 1)**

4. Check for structural damage or lack of lubrication. Replace worn parts.

5. Check the Filter in the Pump Reservoir. Replace if necessary. A worn Pump is extremely noisy, and needs replacement.

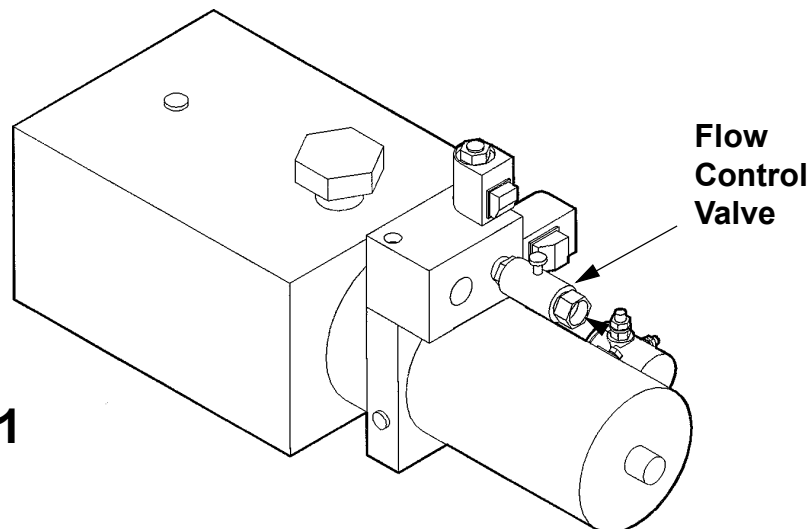


FIGURE 1

PLATFORM WILL NOT LOWER

1. Verify that power is being supplied to the Solenoid Terminal "A" (Ref. Fig. 1). Recharge the battery if less than 12 volts.

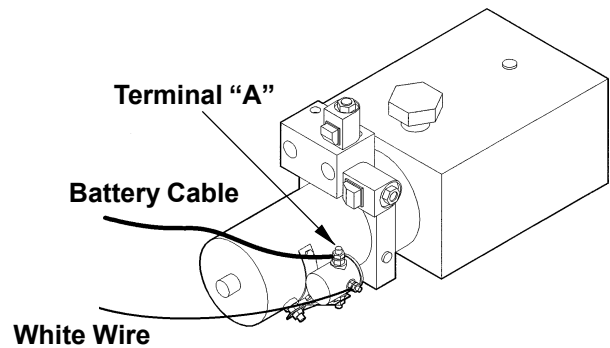


FIGURE 1

2. Check for structural damage or lack of lubrication. Replace worn parts.

3. Check Solenoid Valve for power by holding a screwdriver approximately 1/4" from the top nut of the Solenoid. Energize the unit. (See Fig. 2). A good solenoid will draw the screwdriver to the nut by a magnetic force. The Coil can be replaced by removing the Nut and Wires.

4. Check the Valve Stem by removing the Coil Assembly, (Item 1, Fig. 3). Unscrew the Valve Stem, (Item 2, Fig. 3), from the Pump. Push on the plunger that is located inside the Valve Stem by inserting a paper clip in the end. If the Plunger does not move freely approximately 1/8", replace the Valve Stem.

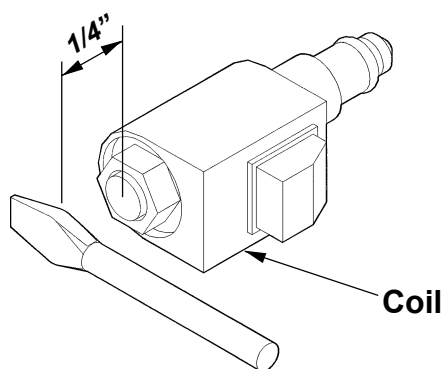


FIGURE 2

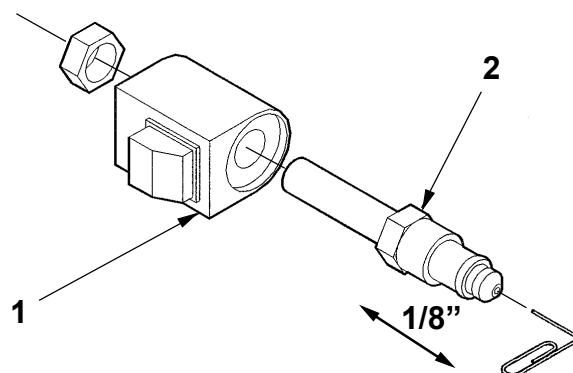
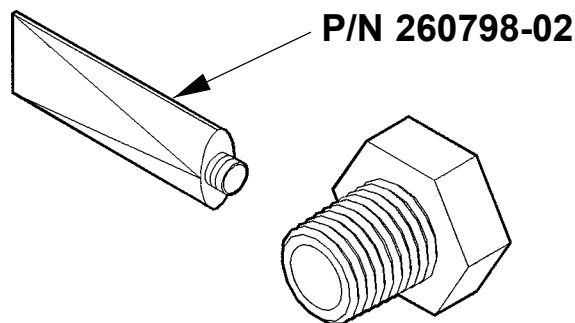


FIGURE 3

LIQUID SEALANT APPLICATION

1. Clean all threads with a soft brush and a suitable cleaning solvent.
2. Dry threads thoroughly with compressed air or shop towel.
3. Apply the Liquid Sealant (Compound PLS 2), to the external threads of the Male Connector.
4. Assemble the fitting and torque it to the prescribed value.
5. Check for leakage. If leakage exists, remove the fitting and return to Step # 1.
6. If fitting is loosened or removed, return to Step # 1.



CAUTION

Due to the 80% lead content in PLS 2, follow these safety and first aid precautions:

Eye Contact - Flush eyes immediately with large quantities of water, lifting the upper and lower eyelids occasionally. If irritation persists, consult a physician.

Skin Contact - Flush the contaminated skin and wash with soap and water.

Ingestion - If person is conscious, give large quantities of water to drink and induce vomiting. Consult a physician immediately.