

# OPERATION AND MAINTENANCE MANUAL

## “WILDCAT”

### MODEL SL-25



**Snorkel** **ECONOMY**

A FIGGIE INTERNATIONAL COMPANY

ST. JOSEPH, MISSOURI

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**SL-25 OPERATION AND MAINTENANCE MANUAL**  
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# ⚡ DANGER

## THE WILDCAT SL-25 AERIAL WORK PLATFORM IS NON-INSULATED.

AVOID CONTACT WITH ELECTRICAL CONDUCTORS UP TO 300 VOLTS. MAINTAIN AT LEAST 10 FEET CLEARANCE FROM CONDUCTORS OF 300 TO 50,000 VOLTS.

If the platform or supporting structure or any other conductive part of the machine contacts a non-insulated high-voltage electrical conductor, the result may be **SERIOUS INJURY** or **DEATH** for persons on or near the unit.

If in contact with a live electrical conductor, the entire unit will be charged to the voltage of the conductor. If this happens the platform operator should remain on the machine and use caution to not contact any other structure or object within his reach. This includes the ground, adjacent buildings, poles, and any object not a part of the WILDCAT SL-25. Such contact would make his body a conductor to the adjacent object creating an electrical shock hazard with possible **ELECTROCUTION** and **DEATH**. If the platform is in a position where the operator could leave the machine, he **MUST** do so by **JUMPING** so as to not be in contact with the machine and the ground at the same time.

Further, if in contact with a live conductor, the platform operator **MUST** warn others on the ground in the vicinity of the machine to **STAY AWAY** from the machine, since their body could, again, form the path for electricity to ground creating an electrical shock hazard with possible **ELECTROCUTION** and **DEATH**.

Under no circumstances shall any person on the ground attempt to operate the ground controls when the platform structure is in contact with electrical wires or if there is a danger of such contact.

Additionally, it **MUST** be a specific duty of the WILDCAT SL-25 operator to warn others working in the area around the unit to be always aware of overhead wires and possible contact with them. The operator **MUST** also be ready to warn others on the ground and advise them to stay away from the WILDCAT SL-25 when the situation demands.

Even if a wire is present that is supposed to be "de-energized", it should be treated as "LIVE" and given a wide berth. **"PLAY IT SAFE"**.

To assist in alerting personnel relative these electrical hazards, decals have been placed at strategic locations on each machine. Additional decals are available if it is desired to place them in other locations.

In conclusion, personnel working on or near the WILDCAT SL-25 unit must be continuously aware of electrical hazards, recognizing that **SERIOUS INJURY** or **DEATH** could result if contact with an electrical wire does occur.

| VOLTAGE RANGE<br>(Phase to Phase) | MINIMUM SAFE APPROACH DISTANCE |          |
|-----------------------------------|--------------------------------|----------|
|                                   | (Feet)                         | (Meters) |
| 0 to 300V                         | AVOID CONTACT                  |          |
| Over 300V to 50KV                 | 10                             | 3.05     |
| Over 50KV to 200KV                | 15                             | 4.60     |
| Over 200KV to 350KV               | 20                             | 6.10     |
| Over 350KV to 500KV               | 25                             | 7.62     |
| Over 500KV to 750KV               | 35                             | 10.67    |
| Over 750KV to 1000KV              | 45                             | 13.72    |

The WILDCAT SL-25 scissorlift platform incorporates built-in safety features, and has been factory tested for compliance with Snorkel-Economy specifications and industry standards. However, any personnel lifting device can be potentially dangerous in the hands of untrained or careless operators.

## TRAINING RESPONSIBILITIES:

**Operator Training:** Whenever a user directs or authorizes an individual to operate an aerial platform the user shall ensure that the individual has been trained in accordance with the manufacturer's operating and maintenance manual, the user's work instructions, and the requirements listed in Section 8 of ANSI Standard A92.6-1990 before operating the aerial platform.

**Model Training:** The operator shall be trained either on the same model of aerial platform or one having operating characteristics and controls consistent with the one to be used during actual work site operation. Under the direction of a qualified person, the trainee shall operate the aerial platform for a sufficient period of time to demonstrate proficiency and knowledge in the actual operation of the aerial work platform. Care shall be taken to ensure the area of such operation has a minimum of obstacles and is conducive to training. Only properly trained and authorized personnel shall be permitted to operate the aerial platform.

**Before Operation:** Before being authorized to operate the aerial platform, the operator shall have:

- (1) Been instructed by a qualified person in the intended purpose and function of each of the controls
- (2) Read and understood the manufacturer's operating instruction(s) and user's safety rules, or been trained by a qualified person on the contents of the manufacturer's operating instruction(s) and user's safety rules
- (3) Understood by reading or by having a qualified person explain all decals, warnings, and instructions displayed on the aerial platform.

For a complete list of responsibilities see ANSI A92.6-1990 or Snorkel Economy Manual "Responsibilities of Dealers, Owners, Users, Operators, Lessors and Lessees".

Every person who maintains, inspects, tests or repairs these units, and every person supervising any of these functions, **MUST** be properly trained and **MUST** read and understand this entire manual. The manual **MUST** be kept available for ready reference.

## **▲DANGER**

**DO NOT** operate this equipment unless you are Trained and Authorized and have read and thoroughly understand all information given in this Operation And Maintenance Manual, and on all CAUTION, WARNING and DANGER signs on the unit.

Costly repairs and down time can be prevented by following a regular maintenance program. Regular maintenance is the key to safe, trouble-free operation and extended machine life.

This manual provides information concerning maintenance guidelines, and inspection procedures that will keep your WILDCAT SL-25 in good operating condition.

Since work platforms are operated under many different conditions, it is difficult to define a single time schedule for maintenance that is appropriate for every machine. Recommended intervals are based on a unit running approximately fifty (50) hours a month as average normal use. It is understood that some units will see more use, others less, so it **MUST** be the user's responsibility to adjust requirements as necessary to meet individual conditions and usage.

Any alteration and/or modification of a unit must have written approval from the Engineering Department of Snorkel-Economy, A Figgie International Company.

Information contained in this manual concerns only current WILDCAT SL-25 units, and the right is reserved to make changes at any time without obligation.

Should there be a question concerning anything covered in this manual, please contact the Snorkel-Economy Service Department, Elwood Kansas, telephone 1-800-255-0317 or 913-989-4481.

For additional information contact:

Snorkel-Economy  
P O Box 4065  
St Joseph Mo 64504-0065  
Phone: 913-989-4481

## GENERAL DESCRIPTION

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|                                                                        |                    |
|------------------------------------------------------------------------|--------------------|
| MAXIMUM PLATFORM HEIGHT .....                                          | 25 FEET - 0 INCHES |
| WORKING HEIGHT - NOMINAL .....                                         | 31 FEET - 0 INCHES |
| PLATFORM SIZE .....                                                    | 44 x 90 INCHES     |
| ROLL-OUT DECK EXTENSION .....                                          | 40 x 36 INCHES     |
| WEIGHT (APPROXIMATE) .....                                             | 4,700 POUNDS       |
| RATED WORK LOAD                                                        |                    |
| TOTAL .....                                                            | 850 POUNDS         |
| ROLL-OUT EXTENSION DECK .....                                          | 250 POUNDS         |
| DRIVE SPEEDS                                                           |                    |
| SPEED 3, PLATFORM LOWERED .....                                        | 2.0 M.P.H.         |
| SPEED 2, PLATFORM LOWERED .....                                        | 1.1 M.P.H.         |
| SPEED 1 .....                                                          | 0.4 M.P.H.         |
| GRADEABILITY .....                                                     | 25%                |
| PLATFORM LIFT SPEEDS                                                   |                    |
| SPEED 3 .....                                                          | 25 SECONDS         |
| SPEED 2 .....                                                          | 45 SECONDS         |
| SPEED 1 .....                                                          | 105 SECONDS        |
| TURNING RADIUS                                                         |                    |
| OUTSIDE .....                                                          | 115 INCHES         |
| INSIDE .....                                                           | 30 INCHES          |
| OVERALL LENGTH .....                                                   | 95 INCHES          |
| OVERALL WIDTH .....                                                    | 45 INCHES          |
| OVERALL HEIGHT, STOWED (SWING DOWN RAIL RETRACTED) .....               | 78½ INCHES         |
| OVERALL HEIGHT, STOWED (RAILS AT FULL HEIGHT OR NON-RETRACTABLE) ..... | 89 INCHES          |
| PLATFORM HEIGHT, STOWED .....                                          | 45 INCHES          |
| GUARDRAIL HEIGHT                                                       |                    |
| MAIN PLATFORM .....                                                    | 44.3 INCHES        |
| EXTENSION DECK .....                                                   | 43.3 INCHES        |
| TOEBOARD HEIGHT .....                                                  | 6 INCHES           |
| WHEELBASE .....                                                        | 78 INCHES          |
| GROUND CLEARANCE                                                       |                    |
| PLATFORM RAISED/POTHOLE PROTECTOR LOWERED .....                        | 1¼ INCHES          |
| PLATFORM STOWED/POTHOLE PROTECTOR RAISED .....                         | 4 INCHES           |
| TIRES - (SOLID RUBBER) .....                                           | 16-5.00 x 8        |
| ELECTRICAL SYSTEM .....                                                | 24 VOLT DC         |
| HYDRAULIC SYSTEM MAX. PRESSURE .....                                   | 2750 PSI           |
| TIRE CONTACT PRESSURE, NOMINAL (W/CAPACITY) .....                      | 107 PSI            |

### OSHA & ANSI STANDARDS:

The WILDCAT SL-25 scissorlift has been built in so far as we are aware, to conform with OSHA and ANSI Rules and Regulations.

- Paragraph 1910.67 Title 29, C.F.R.  
Vehicle-mounted Elevating and Rotating Work Platforms - Labor
- OSHA Paragraph 1926.556 Title 29, C.F.R.  
Aerial Lifts - Construction
- ANSI Standard A92.6-1990  
Self-Propelled Elevating Work Platforms
- CSA Standard CAN 3-B354.2-M82  
Self Propelled Elevating Work Platforms for use on Paved/Slab Surfaces

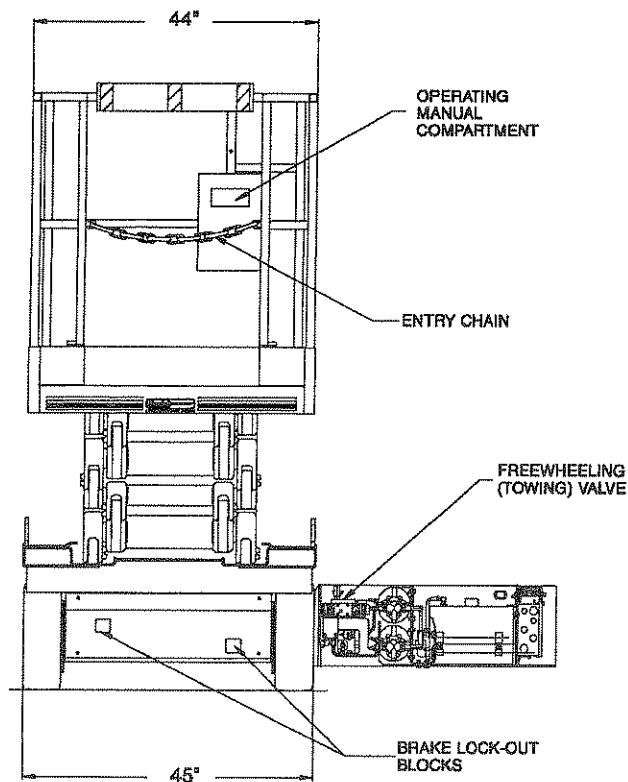
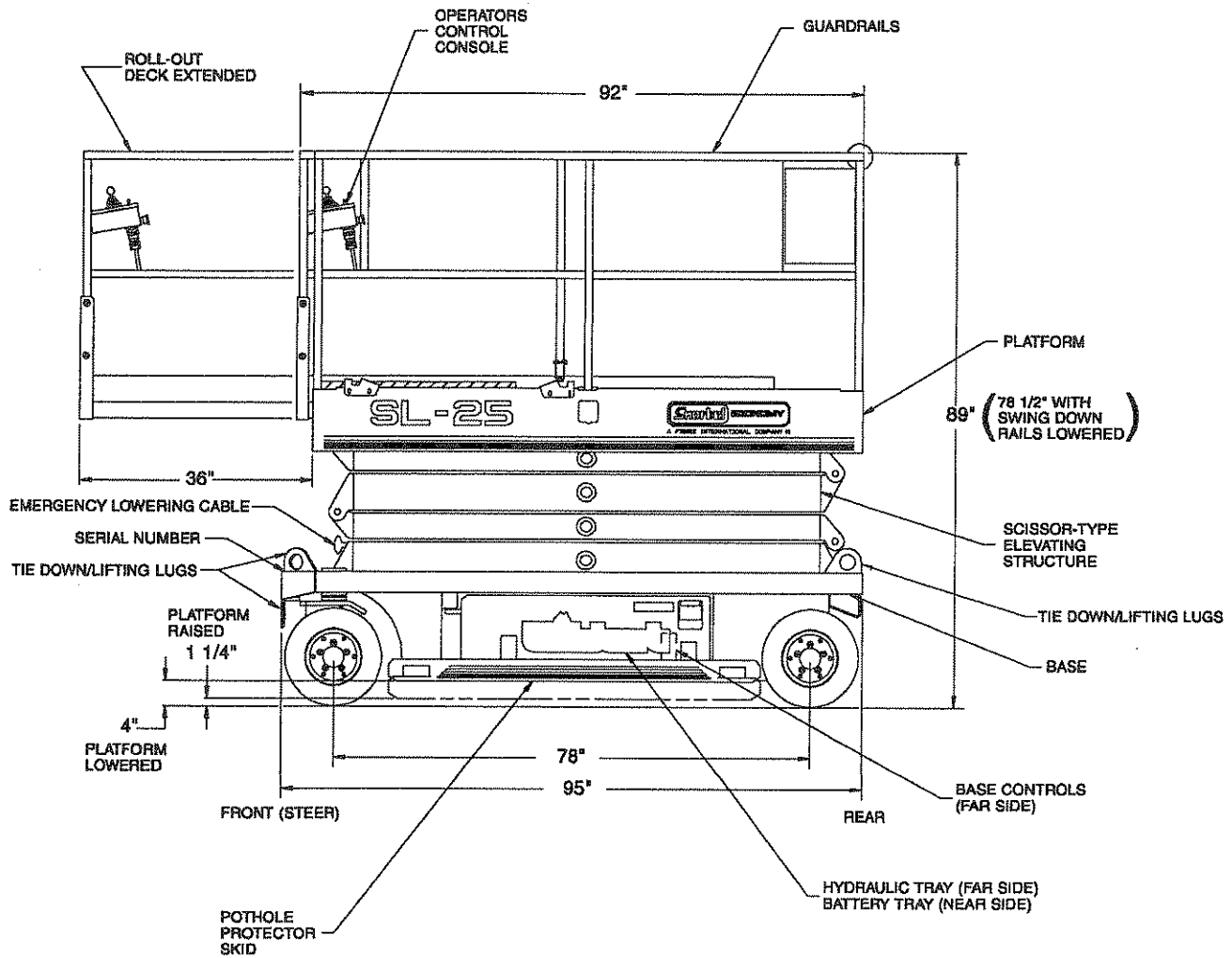
It is imperative that all owners and users of the WILDCAT SL-25 scissorlift read, understand and conform to these regulations. Ultimate compliance to OSHA regulations is the responsibility of the employer utilizing the equipment.

ANSI Standard A92.6-1990 clearly identifies requirements of all parties who may be involved with aerial work platforms.

A reprint of the Responsibilities of Dealers, Owners, Users, Operators, Lessors and/or Lessees is available from Snorkel-Economy dealers or factory at no cost upon request.

# WILDCAT MODEL SL-25

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This particular portion of the Operator's Manual contains information concerning the operating characteristics of the controls, rated platform work load and instructions on maintaining stability. These paragraphs should be referred to often. A good understanding of the equipment limitations and capabilities will assure maximum operating efficiency and minimize chances of hazardous operation.

#### **RATED PLATFORM WORK LOAD:**

Total ..... 850 Pounds  
Roll-out extension deck ..... 250 Pounds

The rated platform work load listed above, is the combined weight of all personnel, their tools and other equipment carried by the platform and within its floor dimensions.

The rated platform work loads above, are applicable in all positions when on a firm, level surface, and include an adequate safety margin as required by OSHA and ANSI.

**DO NOT** diminish this safety factor by overloading.

**DO NOT** carry loads from any point outside of the platform floor.

### **▲ DANGER**

Proper stability of unit is based on the standard unit and all of its components as supplied from the factory.

Modification of the unit, either the addition or removal of parts and/or weight, can greatly affect the platform stability and safety.

**DO NOT** under any circumstances operate the unit with batteries or other weight removed.

#### **STEERING:**

Steering is accomplished with a hydraulic cylinder. The steering axle is not self-centering, therefore, steer control direction **MUST** be reversed when turn is completed in order to return to straight line travel.

#### **DRIVE:**

Drive is accomplished with two (2) high torque hydraulic drive motor assemblies, one (1) on each front steering yoke. Unit is equipped with dual spring applied, hydraulically released parking brakes on rear wheels that release when hydraulic drive is operated.

#### **LIFT SPEEDS:**

Lift speeds on the WILDCAT SL-25 are controlled by the use of the SPEED select switch at the platform operator's control console. Any of the three speeds can be used to control upward lift rate when machine is operated using platform controls. Downward speed is not affected by SPEED select switch.

#### **DRIVE SPEEDS:**

Drive speeds on the WILDCAT SL-25 are controlled by the use of the SPEED select switch at the platform operator's control console, (same as lift speed). Any of the three speeds can be operated when the platform is in lowered position.

#### **ELEVATED DRIVE SPEED INTERLOCK:**

Drive speed ranges are interlocked through a limit switch that senses scissor arm position at the base frame. Elevating the platform above approximately 7 feet automatically causes the two fastest speed ranges (speed positions 2 and 3) to be locked out and only 0.4 MPH speed (position 1) is operable regardless of SPEED switch position.

### **▲ DANGER**

**DO NOT** alter, disable, or in any way override the drive speed interlock system.

**DO NOT** use the machine if it drives faster than 1/2 mile per hour (25 feet in 30 seconds) when elevated above 7 feet with SPEED switch in position 2 or 3.

#### **DRIVE/LIFT LEVEL SENSOR INTERLOCK:**

When the platform is elevated above approximately 7 feet, lift and drive functions are interlocked through a level sensor system. If the machine's base is tilted more than 2 degrees, this interlock automatically prevents controls from operating the lift (UP) or drive functions; and instead, sounds an alarm when those controls are activated.

The operator must then lower the platform to allow drive system function, and move the machine to a level surface.

Note: This interlock and alarm action may also be caused by the Pothole Protection interlock, as discussed in the following sections.

**DRIVE/LIFT LEVEL SENSOR INTERLOCK**  
(Continued):**▲ DANGER**

The WILDCAT SL-25 is to be elevated **ONLY** on firm, flat, level surfaces.

**DO NOT** alter, disable, or in any way override the level sensor interlock system.

**DO NOT** use boards, or other temporary means to support or level the machine.

**DO NOT** use the machine if the Drive/Lift level sensor interlock system is not working properly.  
(See page 18 for test procedure).

**POTHOLE PROTECTION SYSTEM:**

The WILDCAT SL-25 is equipped with movable frame "skids" that automatically lower and lock at about 1¼ inch ground clearance when the platform is elevated above 6 feet, and automatically lift to about 4 inch ground clearance when the platform is fully lowered. The reduced ground clearance under this "Pothole Protection" system limits the tilt angle the elevated machine can reach if one wheel drops into a hole or pavement interruption, greatly reducing the likelihood of a resulting tipover accident.

The presence of this equipment **DOES NOT** justify being careless about working near holes or drop-offs.

**▲ DANGER**

**DO NOT** drive or position machine for elevated use within 4 feet of any drop-off, hole, or other tipover hazard.

**DRIVE/LIFT POTHOLE PROTECTOR INTERLOCK:**

When elevated above approximately 7½ feet, lift (UP) and drive functions are interlocked through a limit switch that senses the fully down and locked position of the Pothole Protection linkage. If an obstruction under the skids or some other impairment prevents the system from fully lowering to locked position, this interlock prevents controls from operating lift (UP) or drive functions; and instead sounds an alarm when those controls are activated similar to Level Sensor interlock.

**DRIVE/LIFT POTHOLE PROTECTOR INTERLOCK** (Continued):

After fully lowering the platform, the operator should then check for obstructions under pothole protector skids and check operation of the Pothole Protector using base controls.  
(See page 18 for test procedure).

**▲ DANGER**

**DO NOT** alter, disable, or in any way override the Pothole Protector or its interlock system.

**DO NOT** use the machine if the Pothole Protector or its interlock system are not working properly.

**BRAKING:**

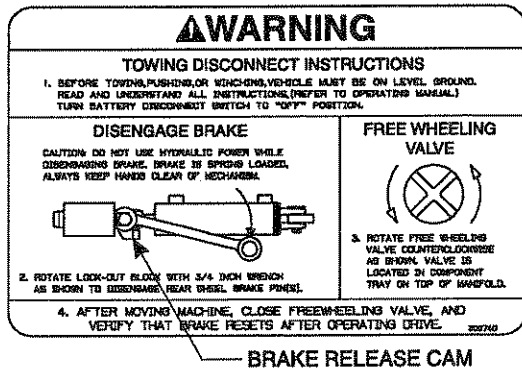
Braking action to stop and hold the machine is produced by two types of operating systems:

- Hydraulic wheel drives on the front (steer) wheels produce stopping action when the drive hydraulics are de-energized. A "cushion cylinder" in the hydraulic drive system allows this dynamic braking action to bring the machine to a smooth stop before the parking brake system engages.
- Spring applied, hydraulic pressure released parking brake systems on each rear wheel produce holding action when the drive hydraulics are de-energized. A restrictor valve provides delay in the spring-applied pin engagement speed, allowing time for the hydraulic wheel drives to stop the machine.

Both of these systems operate automatically to stop and hold the machine when drive controls are released or power is interrupted. Both systems must therefore be manually disengaged for towing or winching the machine.

**BRAKE DISENGAGE PROCEDURE:**

- 1 Before manually disengaging the parking brakes, be sure work platform is on level ground.
- 2 Turn battery disconnect switch to the "OFF" position.
- 3 Visually inspect the brake release cam for rust or dirt and for correct orientation. Cam should be oriented as shown in figure below when brakes are **NOT** disengaged and should swing freely when pushed with finger. If brake cam is not oriented correctly or does not move freely **DO NOT** operate machine. Contact authorized service technician.
- 4 Using a  $\frac{3}{4}$  inch wrench, rotate each brake pin's lock-out block  $90^\circ$  to retract the pin from the wheel lugs. Remove wrench immediately, see illustration below.



- 5 Open free wheeling valve by turning valve knob counter-clockwise. The free wheeling valve is located on the hydraulic manifold assembly in the right hand tray. It is accessed by unlatching, then swinging out the tray. Turning the valve handle counter-clockwise to a fully opened position allows hydraulic fluid to flow through the wheel motors, providing "free wheeling" so the work platform can be towed or pushed without damaging the wheel motors. When towing, **DO NOT** exceed 2 MPH.
- 6 After moving machine, close free-wheeling valve fully and operate drive to reset parking brakes or manually reset using a wrench. Verify that brakes reset properly.

**⚠ WARNING**

**ALWAYS** return free wheeling valve and parking brakes to normal operating condition **IMMEDIATELY** after moving the machine. Failure to do so may result in an accident if an operator unaware of the disconnect condition operates the machine with the drive and brakes disabled.

**SAFETY BAR:**

The WILDCAT SL-25 is equipped with a swing up safety bar to support the platform should access to mechanisms within the scissor arm structure or the base frame be required. A safety bar decal outlines proper operation of the safety bar.

**⚠ DANGER**

**DO NOT** reach through the scissors arm mechanism unless the safety bar is properly positioned. **INJURY** or **DEATH** could occur if the platform is not supported by the safety bar and should suddenly drop onto personnel working within the scissor arms or under the raised platform.

**MANUAL LOWERING CABLE:**

A manual lowering cable is provided for use in the case of an emergency or in the event the platform is to be lowered without the use of the standard electrical/hydraulic system. Refer to emergency operation procedures (page 12 in this manual) for proper lowering cable operation.

**⚠ DANGER**

Beware of descending platform and keep hands and arms clear of scissor structure during platform lowering procedure.

Use extreme caution not to lower platform onto personnel, obstructions, or electrical wires under the elevated platform.

**SWING-OUT TRAYS:**

Batteries and hydraulic components on the WILDCAT SL-25 are enclosed within swing-out trays on each side of the machine. For access to these components when the machine is lowered, position machine on a hard level surface and step down on pothole protector skid near rear tire to rotate skid away from tray, unlatch and open tray. If platform is elevated to approximately 6 feet, the pothole protection skids are lowered and trays will swing-out without stepping down skid.

**⚠ WARNING**

Swing-out trays **MUST** be closed when platform is elevated more than 9 feet.

## BASE CONTROL STATION:

Master switches and controls for operating the WILDCAT SL-25 from ground level are housed in a sealed electrical enclosure on the right side swing-out tray. A control access opening in the tray is provided to allow access to the operating controls. The battery disconnect switch has provisions to allow a padlock to be used to lock the switch in the "OFF" position for securing the machine against unauthorized use.

### **⚠WARNING**

**DO NOT** leave machine unattended with Base Control Station switches ON or with the BATTERY DISCONNECT switch not locked in "OFF" position.

#### 1 BATTERY DISCONNECT switch:

This switch, when in "OFF" position, disconnects power to all control circuits as well as the pump/motor contactor. Switch must be in "ON" position to operate any electrical control function.

#### 2 Base EMERGENCY stop switch.

Two position toggle type switch with red safety guard. Pushing red safety guard down over toggle switch disconnects power to all control circuits. Lift guard and push toggle switch up to restore power.

#### 3 Platform/Base CONTROL SELECT switch:

Two position maintained toggle switch. To operate platform UP/DOWN functions from Base Control Station, this switch must be in "BASE" (down) position. To operate machine from Platform Control Station this switch must be in "PLATFORM" (up) position.

#### 4 LIFT (up/down) switch:

Three position momentary toggle switch. This switch raises and lowers the platform when activated. To raise the platform, pull up on switch until desired height is reached. Release switch to stop. To lower platform, push down on toggle switch. As platform lowers, a lowering alarm will sound.

#### 5 Circuit breaker reset buttons:

These push buttons are used for resetting circuit breakers in the event of a power overload or battery short to the frame. Circuit breakers are located inside swing-out tray, on hinged cover of Base Control enclosure box.

## EMERGENCY LOWERING CONTROL:

The WILDCAT SL-25 uses a hydraulic lift cylinder with integral valving to provide holding ability not affected by hydraulic line failure. One valve is an electric solenoid valve that allows oil to flow out of the cylinder to lower the platform when energized by the operating control switches. The other valve is a manually operated type that is activated by a remote control cable routed to a "pull" handle located at the front (steer) end of the base frame. (See illustration on page 12).

This "Emergency Lowering" valve control may be used to lower the platform manually should there be an impairment to the use of the electrical lowering controls such as an electrical malfunction, battery power loss, or Base Control Station access difficulty.

It also is a convenient means of lowering the scissors arms onto the safety support bar. (See page 7).

## PLATFORM CONTROL CONSOLE (JOYSTICK TYPE WITH HAND SWITCH):

#### 1 CONTROL SELECT - Drive/Platform switch:

Three position momentary toggle switch. To operate Lift/Lower functions, pull and hold toggle handle rearward while operating UP/DOWN toggle switch. To operate Drive/Steer functions, push and hold toggle handle forward with the heel of your hand while operating joystick with your thumb and fingers.

Note: Pump units operate continuously when CONTROL SELECT switch is held forward in "DRIVE" position.

#### 2 SPEED switch:

Three position maintained toggle switch controlling both lift (up) and drive speeds. To select drive or lift speed, position toggle in desired range; 1 (slow), 2 (med) or 3 (fast). If platform is elevated, drive speed is automatically limited to slow speed regardless of SPEED switch position.

#### 3 Platform UP/DOWN switch:

Three position momentary toggle switch. This switch raises and lowers the platform when activated along with CONTROL SELECT switch. To raise the platform, pull up on switch until desired height is reached. Release switch to stop. To lower platform, push down on toggle switch. As platform lowers, a lowering alarm will sound.

## PLATFORM CONTROL CONSOLE (JOYSTICK TYPE WITH HAND SWITCH) – (Continued):

### 4 Drive/Steer JOYSTICK:

Drive and steer functions are controlled by movement of joystick controller in the desired direction of travel while holding forward CONTROL SELECT switch. Steer and drive functions can be operated separately or simultaneously.

Note: The steering axle is not self-centering, therefore, steer control direction **MUST** be reversed when turn is completed in order to return to straight line travel.

### 5 EMERGENCY stop button:

A red "mushroom-head" shaped button switch will shut off power to the platform controls when pushed in. The button will remain in until reset. To restore power to the operator's control console, simply pull button outward to reset. This switch should be pushed in when controls are not in use to help protect against unintended control operation.

### 6 Operators horn button - (optional item):

This push button switch when depressed, sounds an audible horn.

## PLATFORM CONTROL CONSOLE (JOYSTICK TYPE WITH FOOT SWITCH):

### 1 CONTROL SELECT - Drive/Platform switch:

Two position maintained toggle switch. To operate LIFT/LOWER platform functions, place switch in PLATFORM position. To operate DRIVE and STEER functions, place switch in DRIVE position.

### 2 SPEED switch:

Three position maintained toggle switch controlling both lift (up) and drive speeds. To select drive or lift speed, position toggle in desired range; 1 (slow), 2 (med) or 3 (fast). If platform is elevated, drive speed is automatically limited to slow speed regardless of SPEED switch position.

### 3 FOOT SWITCH:

FOOT SWITCH must be depressed to provide power to platform LIFT/LOWER or DRIVE/STEER functions.

Note: Pump operates continuously when FOOT SWITCH is depressed with CONTROL SELECT switch in "DRIVE" position.

## PLATFORM CONTROL CONSOLE (JOYSTICK TYPE WITH FOOT SWITCH) – (Continued):

### 4 Platform UP/DOWN switch:

Three position momentary toggle switch. This switch raises and lowers the platform (FOOT SWITCH must be depressed and CONTROL SELECT switch must be in PLATFORM position). To raise the platform, pull up on switch until desired height is reached. Release switch to stop. To lower the platform, push down on toggle switch. Release switch to stop. As platform lowers, a lowering alarm will sound.

### 5 DRIVE/STEER joystick:

Drive and steer functions are controlled by movement of joystick controller in the desired direction of travel (FOOT SWITCH must be depressed and CONTROL SELECT switch must be in DRIVE position). Steer and drive functions can be operated separately or simultaneously.

Note: The steering axle is not self-centering, therefore, steer control **MUST** be reversed when turn is completed in order to return to straight line travel.

### 6 EMERGENCY stop button:

A red "mushroom-head" shaped button switch will shut off power to the platform controls when pushed in. The button will remain in until reset. To restore power to the operator's control console, simply pull button outward to reset. This switch should be pushed in when controls are not in use to help protect against unintended control operation.

### 7 Operators horn button - (optional item):

This push button switch when depressed, sounds an audible horn.

## OPERATOR'S INSPECTION

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Before each day's operation of the work platform, the operator **MUST** perform the general inspection as outlined in the Daily Maintenance (Operator's Inspection) chart.

The purpose of the operator's inspection is to keep the equipment in proper working condition and to detect any signs of malfunction during normal operations between scheduled maintenance checks.

While it may not be the operator's responsibility to perform mechanical maintenance, they **MUST** be thoroughly familiar with the unit since their own safety is involved.

Many costly maintenance jobs can be prevented through observance of the following by WILDCAT SL-25 operators.

### DAILY MAINTENANCE (OPERATOR'S INSPECTION)

| COMPONENTS                           | SERVICE REQUIRED                                                |
|--------------------------------------|-----------------------------------------------------------------|
| Personal Protective Devices          | Visually Inspect (Condition)                                    |
| Placards, Warnings, Control Markings | Visually Inspect (Condition)                                    |
| Operation and Maintenance Manual     | Visually Inspect (On Machine in Document Holder)                |
| Pothole Protection/Safety Devices    | Visually Inspect (Condition, Operation)                         |
| Parking Brakes                       | Check Operation                                                 |
| Bolts and Fasteners                  | Visually Inspect (Looseness)                                    |
| Structural Damage & Welds            | Visually Inspect (Weld Cracks, Dents)                           |
| Entry Chains or Gate                 | Check Operation                                                 |
| Guides, Rollers and Slides           | Visually Inspect (Condition)                                    |
| Tires and Wheels                     | Visually Inspect (Condition)                                    |
| Battery Fluid Level                  | Check Fluid Level                                               |
| Battery Terminals                    | Visually Inspect (Corrosion)                                    |
| Operating and Emergency Controls     | Visually Inspect (Operation)                                    |
| Wiring Harnesses                     | Visually Inspect (Installation, Condition)                      |
| Hydraulic Leaks                      | Visually Inspect (Hoses, Tubes)                                 |
| Hydraulic Oil                        | Check Fluid Level                                               |
| Swing Down Railing                   | Latched and pinned in "UP" position at four corners of platform |

### **CAUTION**

**DO NOT** operate a WILDCAT SL-25 series scissorlift that is known to be damaged or malfunctioning.

Defective components and/or equipment malfunctions jeopardize the safety of the operator and other personnel, and can cause extensive damage to the unit. Remember, a poorly maintained unit could become the greatest operational hazard you may encounter.

The following procedures are provided to aid WILDCAT SL-25 operating personnel in the proper operation of the unit.

## PLATFORM CONTROL CONSOLE (WITH HAND SWITCH):

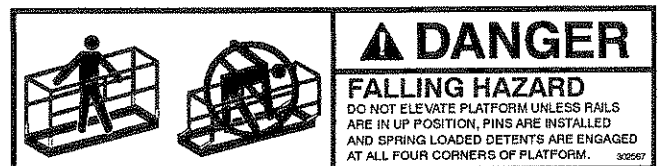
- 1 Close and latch swing-out battery and hydraulic components side trays.
- 2 Place BATTERY DISCONNECT switch to "ON" position.
- 3 Make sure EMERGENCY STOP switch is in "ON" position.
- 4 Place Platform/Base select switch in the "BASE" (down) position.
- 5 Operate Lift UP/DOWN switch to make sure unit is functioning properly.
- 6 Place Platform/Base SELECT switch in the "PLATFORM" (up) position.
- 7 Enter work platform to prepare for platform operation.
- 8 Secure platform entrance gates or chains. Be sure swing down rails are in up position, spring loaded detents are engaged and safety pins are installed at all four corners of platform.



- 9 Reset EMERGENCY STOP button by pulling out on red "mushroom head".
- 10 To drive work platform, select desired speed; 1 (slow), 2 (med) or 3 (fast) using SPEED switch. Hold CONTROL SELECT switch forward in "DRIVE" position, use JOYSTICK to control direction of travel. To steer the machine, use JOYSTICK control to control direction of steer movement. Steer and drive functions can be operated separately or simultaneously. Speed selection; 1 (slow), 2 (med) or 3 (fast) for drive function can be changed while on the move.
- 11 To elevate the platform, select desired speed; 1 (slow), 2 (med) or 3 (fast) using SPEED switch, hold CONTROL SELECT switch in the "PLATFORM" (rearward) position and pull up on the UP/DOWN switch. Speed selection: 1 (slow), 2 (med) or 3 (fast) for lift (UP) function can also be changed while on the move.
- 12 To lower the platform, hold CONTROL SELECT switch in the (rearward) "PLATFORM" position and push "down" on UP/DOWN switch. SPEED switch does not affect lowering speed.

## PLATFORM CONTROL CONSOLE (WITH FOOT SWITCH):

- 1 Close and latch swing-out battery and hydraulic components side trays.
- 2 Place BATTERY DISCONNECT switch to "ON" position.
- 3 Make sure EMERGENCY STOP switch is in "ON" position.
- 4 Place Platform/Base select switch in the "BASE" (down) position.
- 5 Operate Lift UP/DOWN switch to make sure unit is functioning properly.
- 6 Place Platform/Base SELECT switch in the "PLATFORM" (up) position.
- 7 Enter work platform to prepare for platform operation.
- 8 Secure platform entrance gates or chains. Be sure swing down rails are in up position, spring loaded detents are engaged and safety pins are installed at all four corners of platform.



- 9 Reset EMERGENCY STOP button by pulling out on red "mushroom head".
- 10 To drive work platform, select desired speed; 1 (slow), 2 (med) or 3 (fast) using SPEED switch. Place CONTROL SELECT switch in DRIVE position and step on FOOT SWITCH. Use JOYSTICK to control direction of travel. To steer the machine, use JOYSTICK control to control direction of steer movement. Steer and drive functions can be operated separately or simultaneously. Speed selection; 1 (slow), 2 (med) or 3 (fast) for drive function can be changed while on the move.
- 11 To elevate the platform, select desired speed; 1 (slow), 2 (med) or 3 (fast) using SPEED switch. Place CONTROL SELECT switch in PLATFORM position and depress FOOT SWITCH. Pull up on the UP/DOWN switch. Speed selection: 1 (slow), 2 (med) or 3 (fast) for lift (UP) function can also be changed while on the move.
- 12 To lower the platform, place CONTROL SELECT switch in PLATFORM position, step on FOOT SWITCH and push "down" on UP/DOWN switch. SPEED switch does not affect lowering speed.

## GENERAL OPERATION:

**ALWAYS** operate unit to provide the safest and most efficient use of the WILDCAT SL-25 scissorlift giving consideration to the following factors:

### 1 Type of Terrain

The WILDCAT SL-25 scissorlift is to be elevated **ONLY** on firm, flat, level surfaces.

## DANGER

**DO NOT** elevate work platform with unit on soft, uneven, or sloped surfaces.

2 When operating controls, care **MUST** be taken that the platform is not lowered or brought into contact with buildings, obstructions, electrical wires, or personnel near the machine.

### 3 Rated Work Load:

Total ..... 850 Pounds  
Roll-Out Extension Deck ..... 250 Pounds

The platform rated work load is the combined weight of all personnel, their tools and other equipment carried by the platform and within its floor dimensions.

### 4 Windy conditions.

## DANGER

**DO NOT** operate the WILDCAT SL-25 series scissorlift in windy or gusty conditions.

### 5 Electrical wires and installations.

The WILDCAT SL-25 is a **NON-INSULATED** work platform.

## DANGER

**DO NOT** operate near **ELECTRICAL** conductors. Regard all conductors as being energized. (See page 1 for more explanation of electrical hazards).

6 Emergency shutdown from the platform is accomplished by pushing in the **EMERGENCY STOP** button on the platform control box front. This switch overrides all other switches on the control box. Reset switch by pulling out on mushroom shaped head.

## GENERAL OPERATION (Continued):

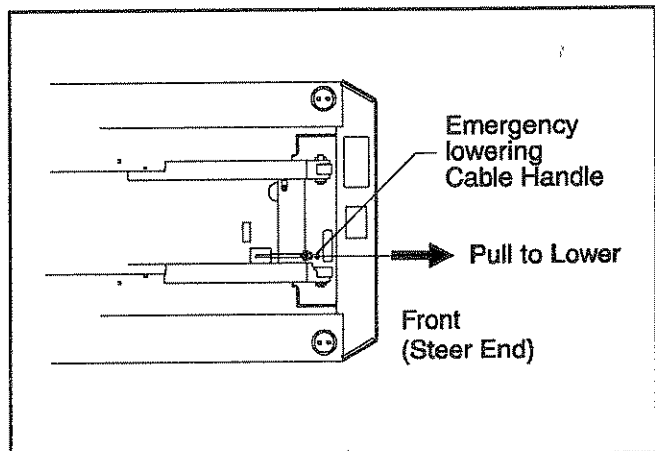
7 At the end of each day's work, the following procedure should be followed to stow and secure the WILDCAT SL-25 work platform.

- Operate controls to bring work platform to the fully lowered position.
- Turn battery disconnect switch to "OFF" position.
- Padlock battery disconnect switch to prevent unauthorized use.

Note: If unit is to be transported, follow procedures outlined under Transporting Work Platform to assure safe loading and unloading procedures.

## EMERGENCY PLATFORM LOWERING PROCEDURES:

1 Locate emergency lowering cable pull handle on scissor arms at front (steer) end of machine, (see illustration below).



Emergency Lowering Cable Pull Handle

2 Retract extension deck if possible.

3 Pull out cable handle to allow platform to descend. Return handle to normal position to stop.

## DANGER

Beware of descending platform and keep hands and arms clear of scissor structure during emergency platform lowering procedure.

Be careful not to lower platform onto personnel, obstructions, or hazards under the elevated platform.

4 After platform has been lowered, be sure cable handle is returned to normal position.

## GENERAL SAFETY CAUTIONS:

This section is designed to provide safety practices to be followed when using this work platform. All personnel assigned to work on or around the work platform **MUST** be thoroughly familiar with this and all other portions of the manual which relate to safe operation of the unit. Review this section often - it involves the safety of you and your fellow workers.

## DRIVING THE UNIT:

- 1 Enter work platform and fasten entry gates or chains.
- 2 Secure tools and equipment that are in the platform to prevent possible shifting and injury to personnel in the platform or on the ground.
- 3 Keep in mind overall height and overhang. Always make sure there is sufficient clearance before entering or moving under any overhead obstructions.
- 4 Keep both feet firmly positioned on platform floor.
- 5 Always look in the direction of travel.
- 6 Be aware of conditions around unit; Personnel, other equipment, tools, etc.
- 7 Drive unit slowly, unless conditions allow higher speeds.
- 8 Be sure swing-out rails are in "UP" position, spring-loaded detents are engaged and safety pins are installed at all four corners of platform except when passing through low-height clearance obstructions while platform is in stowed position.

## GENERAL OPERATING CAUTIONS:

- 1 **DO NOT** position WILDCAT SL-25 at job site in such a manner as to jeopardize its stability.

### ⚠ DANGER

The WILDCAT SL-25 series scissorlift is to be elevated **ONLY** on firm, flat, level surfaces.

- 2 **USE EXTREME CAUTION** when operating in the vicinity of electrical wires. The entire work platform is **NON-INSULATED**.

### ⚠ DANGER

**SERIOUS INJURY or DEATH** of platform operator or ground personnel can result from unit contacting live wires. Avoid contact with any object where a dangerous electrical potential may exist. (See page 1 for more explanation of electrical hazards).

## GENERAL SAFETY CAUTIONS (Continued):

- 3 If any equipment trouble is experienced during operation, **SHUT DOWN** until trouble is located and corrected. **DO NOT** operate unit with a known defect.
- 4 **DO NOT** use unit for any other purpose than to position personnel and their tools and equipment.
- 5 The unit is not designed for and must not be used as a crane.
- 6 Keep platform floor clear of unnecessary tools and equipment.
- 7 **DO NOT** exceed platform rated work load.
- 8 **DO NOT** carry loads from any point outside of the platform floor.
- 9 **DO NOT** operate WILDCAT SL-25 in windy or gusty conditions.
- 10 **DO NOT** attach wires, cables or other such items to platform.
- 11 **DO NOT** use auxiliary scaffolding, ladders, or other such means to extend normal reach of the platform.
- 12 **DO NOT** allow unauthorized or unqualified persons to operate the work platform.
- 13 Personnel **MUST** be inside the platform while working aloft.
- 14 If personnel are required in the area under the raised platform, Caution **MUST** be observed regarding possibility of falling tools or other objects.
- 15 Always stop controls in neutral "OFF" position before operating in opposite direction.
- 16 **DO NOT** modify unit in any way or attempt to "override" the safety features of the unit.
- 17 **DO NOT** open swing-out hydraulic component or battery trays when platform is elevated above 9 feet.

## GENERAL ELECTRICAL SYSTEM CAUTIONS:

- 1 **DO NOT** recharge batteries unless Electrolyte level has been checked. Operate charger in accordance with the battery charging instructions outlined in the maintenance section of this manual.
- 2 **DO NOT** smoke or introduce a flame or spark in the charging area.

**⚠ DANGER**

Lead acid batteries generate highly explosive Hydrogen gas, especially during charging cycle. To avoid the possibility of an explosion, charge batteries only in a well ventilated area away from sparks or flame.

- 3 Use protective face and eye equipment when checking the condition of charging batteries.
- 4 Place BATTERY DISCONNECT switch in the "OFF" position before charging batteries.

## GENERAL OPERATOR SAFETY CAUTIONS:

A good safety practice is to have a Ground Safety Operator or other qualified operating personnel in the immediate area of the work platform to provide assistance as needed to:

- 1 Warn platform operator of any obstructions or hazards that may not be obvious to the platform operator.
- 2 Watch for platform entering into a dangerous condition where stability can be jeopardized; Soft terrain, sloping surface, impending drop-off, etc.
- 3 Watch for loss of control by platform operator.

Any of these conditions **MUST** be called to the attention of the platform operator and may be sufficient reason to "de-activate" platform control and assume control from Ground Control Station.

**YOUR SAFETY IS YOUR  
RESPONSIBILITY - THINK SAFETY**

## TRANSPORTING WORK PLATFORM

Before loading, unloading, or hauling the WILDCAT SL-25 on transport truck or trailer, the following information **MUST** be completely understood.

- 1 The WILDCAT SL-25 weighs approximately 4,700 pounds. Loading ramps and carrier vehicles must have adequate capacity.
- 2 A forklift may be used to load machine onto transport vehicle. The WILDCAT SL-25 scissorlift can be lifted from the rear using forklift pockets or from either side at designated points under pothole protector skids.
- 3 Winching is recommended for loading and unloading the WILDCAT SL-25 scissorlift.
- 4 A winch **MUST** be used to load and unload on ramps that exceed 20% grade (24 inch vertical rise in 10 feet horizontal length) or when poor traction, uneven surfaces, or stepped ramp transitions make driving the machine hazardous.

## WINCHING PROCEDURE:

- 1 Locate transport vehicle so that WILDCAT SL-25 will not roll forward after being loaded.
- 2 Fully lower platform and retract extension deck.
- 3 Be sure the machine is centered with the loading ramps and carrier vehicle bed, and that the steering wheels are straight.
- 4 Attach the winch at the tie down lugs on the front (steer) end of chassis.
- 5 Disengage parking brakes and open free-wheeling valve to prevent damage to hydraulic drive motors.  
(Refer to procedures outlined on page 7 of this manual).
- 6 Winch machine onto transport vehicle.
- 7 Close free-wheeling valve and reset parking brakes.

## TRANSPORTING WORK PLATFORM

(Continued):

### HOISTING PROCEDURE:

- 1 Be sure tie down lugs are in good condition (free of cracks, rust, etc.).
- 2 Remove all personnel, tools and equipment from platform.
- 3 Connect chains or other lifting apparatus to create a four point lift using lifting lugs supplied of top surface of base frame at each corner.
- 4 A spreader bar of sufficient length to keep chains etc.. from contacting upper structure of scissor lift must be used.
- 5 User assumes all responsibility for being sure lifting apparatus (chains, spreader bar, etc..) are of adequate strength to lift the machine, overall weight (approximate)..... 4,700 pounds.

## TRANSPORTING WORK PLATFORM

(Continued):

### DRIVING PROCEDURE:

If a winch is not available and the ramp incline is within the 20% grade capability of the machine, observe these precautions for driving unit up or down a loading ramp, providing surface conditions are within guidelines below.

- 1 Fully lower platform and retract extension deck.
- 2 Enter work platform, remove any unnecessary tools, materials or other loose objects from the platform.
- 3 Place SPEED switch in speed 2 for climbing a ramp or speed 1 for descending a ramp.
- 4 Operate controls to drive the unit on to or off of the transport vehicle. Drive unit **STRAIGHT** through the grade transitions with minimal turning.

## **⚠ DANGER**

**DO NOT** drive the WILDCAT SL-25 on any steep ramp with poor traction, uneven surfaces, steps, turns, or incline angle steeper than 25% grade (30 inch vertical rise in 10 feet horizontal length).

### SECURING FOR TRANSPORT:

After the WILDCAT SL-25 scissorlift has been loaded on transport vehicle, secure the machine to the carrier vehicle as follows:

- 1 Chock wheels. **DO NOT** rely on machines parking brakes.
- 2 Place BATTERY DISCONNECT switch to the "OFF" position.
- 3 Clear the work platform of men and materials.
- 4 Place 4 inch blocks under front ends of pothole protection skids to limit tie-down "binder" loads to front drive wheel bearings.
- 5 Secure the WILDCAT SL-25 series scissorlift to the carrier vehicle. Use chassis tie down lugs for attachment points.

Note: Over tightening the binding straps or chains can damage drive motors or other components.

Snorkel-Economy has established a Preventive Maintenance Schedule that includes Daily Maintenance (Operator's Inspection), 30 Day or 50 Hour (frequent) Maintenance and Yearly or 500 Hour (annual) Maintenance, to detect any defective, damaged or improperly secured parts and provide information regarding lubrication and other minor maintenance items.

The Maintenance Schedule on the following page, outlines the requirements of these maintenance checks for each time interval. The operator's Daily Maintenance and inspections **MUST** be performed by a trained operator. All other maintenance and inspections **MUST** be performed by a trained service technician **ONLY**.

Note that the 30 day or 50 hour (frequent) and yearly or 500 hour (annual) Maintenance, require use of the Preventive Inspection Maintenance Checklist form from pages 20 and 21 of this manual to pinpoint all inspection items. Retain a copy of these forms for your records.

They also require the use of the Placards and Decals Inspection Chart from pages 22 and 23 of this manual to locate all WARNING and CAUTION placards and decals on the unit.

All placards and decals **MUST** be in place and legible. Retain a copy of the inspection chart for your records.

Snorkel-Economy recommends that you make additional copies of both the Preventive Inspection Maintenance Checklist forms and the Placards and Decals Inspection Chart for your use in performing these inspections.

## WARNING

Failure to perform the Preventive Maintenance at the intervals outlined in the Maintenance Schedule may result in a unit being operated with a defect that could result in **INJURY** or **DEATH** of the unit operator.

**DO NOT** allow a unit to be operated that has been found to be defective.

Repair all defects before returning the unit to service.

### DAILY MAINTENANCE (Operator's Inspection)

| COMPONENTS                           | SERVICE REQUIRED                                             | RECOMMENDED LUBRICANT OR FURTHER INSTRUCTIONS |
|--------------------------------------|--------------------------------------------------------------|-----------------------------------------------|
| Personal Protective Devices          | Visually Inspect (Condition)                                 |                                               |
| Placards, Warnings, Control Markings | Visually Inspect (Condition)                                 |                                               |
| Operation and Maintenance Manual     | Visually Inspect<br>(On Machine in Document Holder)          |                                               |
| Pothole Protection/Safety Devices    | Visually Inspect (Installation, Condition, Operation)        |                                               |
| Parking Brakes                       | Check Operation                                              |                                               |
| Bolts and Fasteners                  | Visually Inspect (Looseness)                                 |                                               |
| Structural Damage & Welds            | Visually Inspect (Weld Cracks, Dents)                        |                                               |
| Entry Chains or Gate                 | Visually Inspect (Operation)                                 |                                               |
| Guides, Rollers and Slides           | Visually Inspect (Condition)                                 |                                               |
| Tires and Wheels                     | Visually Inspect (Condition)                                 |                                               |
| Battery Fluid Level                  | Check Fluid Level                                            |                                               |
| Battery Terminals                    | Visually Inspect (Corrosion)                                 |                                               |
| Operating and Emergency Controls     | Visually Inspect (Operation)                                 |                                               |
| Wiring Harnesses                     | Visually Inspect (Installation, Condition)                   |                                               |
| Hydraulic Leaks                      | Visually Inspect (Hoses, Tubes)                              |                                               |
| Hydraulic Oil                        | Check Fluid Level                                            |                                               |
| Swing-Down Railing                   | Latched and Pinned in "UP" Position at 4 Corners of Platform | Safety Pin Lanyards Attached                  |

### 30 DAY OR 50 HOUR MAINTENANCE (Qualified Service Technician)

| COMPONENTS                                                    | SERVICE REQUIRED                        | RECOMMENDED LUBRICANT OR FURTHER INSTRUCTIONS |
|---------------------------------------------------------------|-----------------------------------------|-----------------------------------------------|
| Daily Maintenance                                             | Perform Maintenance as Per Schedule     |                                               |
| Preventive Inspection Maintenance Checklist (Pages 20 and 21) | Perform Inspection, Complete Form       | Retain Copy of Checklist                      |
| Placards & Decals Inspection Chart (Pages 22 and 23)          | Perform Inspection, Complete Form       | Retain Copy of Checklist                      |
| Door Hinges & Latches                                         | Lubricate                               | SAE 10W Oil or Spray Lube                     |
| Batteries                                                     | Check Specific Gravity                  | 1.260/1.310 at 80° F.                         |
| Electrical Connectors & Plugs                                 | Check Tightness                         |                                               |
| Emergency Lowering Cable                                      | Check Operation                         |                                               |
| Platform Lift Capacity                                        | Check if Platform can Lift Maximum Load |                                               |
| Platform Lift/Lower Speeds                                    | Check Smooth Operation & Speeds         |                                               |
| Safety Bar                                                    | Check Operation                         |                                               |
| Snap Rings, Steering Yoke                                     | Visually Inspect (Operation, Tightness) | Replace if Damaged                            |
| Level Sensor Interlock                                        | Check Operation, Test per Page 18       |                                               |
| Pothole Protection Interlock                                  | Check Operation, Test per Page 18       |                                               |

### YEARLY OR 500 HOUR MAINTENANCE (Qualified Service Technician)

| COMPONENTS                     | SERVICE REQUIRED                    | RECOMMENDED LUBRICANT OR FURTHER INSTRUCTIONS       |
|--------------------------------|-------------------------------------|-----------------------------------------------------|
| 30 Day or 50 Hours Maintenance | Perform Maintenance as Per Schedule |                                                     |
| Hydraulic Oil Reservoir        | Clean and Replace Fluid             | Mobil DTE-11 or DTE-13                              |
| Hydraulic Return Filter        | Replace                             | After 1st. 50 Hours, Yearly or 500 Hours Thereafter |
| Hydraulic Pressures            | Check Pressures                     |                                                     |
| Platform Controller            | Check Operation                     |                                                     |
| Base Controls                  | Check Operation                     |                                                     |
| Wheel Bearings                 | Clean and Repack                    | Conoco Super Sta (or equivalent)                    |

#### BATTERY CHARGER:

WILDCAT SL-25 scissorlifts are equipped with an on-board automatic battery charger.

This charger has an electronic circuit that will completely recharge the batteries and automatically turn off after the charge cycle is complete.

The charging cycle may last from 1½ to 16 hours depending on the state of charge of the batteries.

#### BATTERY CHARGER (Continued):

If the charging cycle should exceed this time without the batteries having been fully recharged, the charger should be shut off and the batteries should be checked.

If the batteries show no signs of problems and the specific gravity readings are within the range indicated above, then the charger should be checked.

## POTHOLE PROTECTION INTERLOCK TEST:

- 1 Find a smooth, flat, level concrete slab to park on in order to avoid Level Sensor Interlock Action.
- 2 Remove all persons and materials from platform.
- 3 With platform fully lowered and swing-out trays closed, check ground clearance under Pothole Protector skids. Clearance should be over 3¾ inches on both sides of machine.
- 4 Using BASE CONTROLS, raise the platform while watching movement of Pothole Protector skids. Skids should lower to less than 1¼ inch ground clearance, lift slightly as the linkage goes "over center" and then stop in "locked" position before platform floor height reaches 7 feet.
- 5 Using BASE CONTROLS, fully lower the platform while watching movement of the Pothole Protector skids. Skids should lower slightly as the linkage goes back "over center" and then raise to their original position at over 3¾ inches ground clearance.
- 6 Place a 1½ inch thick board (such as standard 2 x 4 lumber) under the right side Pothole Protector skid to prevent it from lowering fully.
- 7 Using BASE CONTROLS, raise the platform while watching the Pothole Protector. When the board prevents the Pothole Protector skid from fully lowering to overcenter "locked" position, the Pothole Protection Interlock system should shut off raising motion and sound an alarm at less than 7 feet platform floor height. The alarm should then sound whenever the "UP" switch is activated and the platform should not lift any further.
- 8 Lower the Platform and move the board to prevent the left side Pothole Protector skid from lowering fully.
- 9 Using BASE CONTROLS, raise the platform while watching the Pothole Protector. When the board prevents the Pothole Protector skid from fully lowering to overcenter "locked" position, the Pothole Protection Interlock system should shut off raising motion and sound an alarm at less than 7 feet platform floor height. The alarm should then sound whenever the "UP" switch is activated and the platform should not lift any further.

### **⚠ DANGER**

If system **DOES NOT** operate properly, the machine **MUST** be repaired or adjusted by a trained service technician before it can be used to elevate workers.

## LEVEL SENSOR INTERLOCK TEST:

- 1 First, test Pothole Protection Interlock to verify proper operation.
- 2 Lower platform to stowed position.
- 3 Remove all materials and persons from platform.
- 4 Find a level concrete slab to use as a test surface. Verify with a carpenter's bubble level that the four locations where the machine's tires will rest are in a level plane within ¼ inch between front and rear axles, and within ⅛ inch between left and right wheels on each axle.
- 5 Elevate front tires of machine six (6) inches.
- 6 Using BASE CONTROLS, raise the platform no more than 9 feet platform floor height. The Level Sensor Interlock system should shut off raising motion and sound an alarm at less than 7 feet platform floor height. The alarm should then sound whenever the "UP" switch is activated, and the platform should not lift any further.
- 7 Repeat steps 5 and 6 above elevating rear tires.
- 8 Elevate tires on right side of machine one (1) inch.
- 9 Using base controls, raise the platform to 9 feet platform height. The Level Sensor Interlock system should allow platform to be raised to 9 foot elevation. The system should **NOT** cut out platform raise function and should **NOT** sound an alarm.
- 10 Elevate tires on right side of machine two (2) inches.
- 11 Using BASE CONTROLS, raise the platform no more than 9 feet platform floor height. The Level Sensor Interlock system should shut off raising motion and sound an alarm at less than 7 feet platform floor height. The alarm should then sound whenever the "UP" switch is activated, and the platform should not lift any further.
- 12 Repeat steps 8 through 11 above elevating tires on left side of machine.

### **⚠ DANGER**

If system **DOES NOT** operate properly, the machine **MUST** be repaired or adjusted by a trained service technician before it can be used to elevate workers.

**LUBRICATION:**

lubricants as recommended by Snorkel-Economy, should be used in maintaining your unit. If in doubt regarding the use of lubricants other than those listed, contact Snorkel-Economy Customer Service Department, Elwood Kansas, for evaluation and recommendation. Service all components as indicated in the Maintenance Schedule. Wipe away all excess lubricant from exposed surfaces. Over lubrication can collect dirt and foreign matter which acts as an abrasive. Lubrication of accessory equipment should be in accordance with the equipment manufacturer's recommendations.

**GENERAL MAINTENANCE TIPS:**

Any time the work platform is elevated to perform maintenance work, properly position the safety bar as outlined on the safety bar decal.

**⚠ DANGER**

**DO NOT** reach through scissors mechanism unless the safety bar is properly positioned.

**INJURY** or **DEATH** could occur if the platform is not supported by the safety bar and should suddenly drop onto personnel performing maintenance work under the raised work platform.

**HYDRAULIC OIL RESERVOIR:**

The fluid level should be kept at level indicated by the placard on the hydraulic oil reservoir and should be checked with all cylinders fully retracted and the platform in stowed position. The reservoir filler/breather cap should be removed and the cap breather cleaned yearly with Kerosene, Fuel Oil, or other solvent. The tank suction strainer should also be removed yearly and cleaned of debris. Any time the hydraulic oil is changed or added, it is absolutely necessary that only clean hydraulic oil is used. If it becomes necessary to add or use oil other than the recommended fluid, it is important that it be compatible and equivalent to the factory fill. Local oil suppliers can generally furnish this information. If questions still remain, contact Snorkel-Economy Customer Service Department, Elwood Kansas, for further information.

**DOOR HINGES AND LATCHES:**

Door hinges and latches may be lubricated as required with spray lubrication or SAE 10W oil. After lubricating, remove any excess oil or over spray so it will not collect dirt and debris.

**RETURN FILTER:**

On SL-25 scissorlifts, the hydraulic oil return filter is located in the right hand side (hydraulic components) swing-out tray assembly near tray pivot point. The filter element is a throw-away type filter and should be changed after the initial break-in period (approximately 50 hours operation time). After initial break-in, change filter yearly or every 500 hours of operation. When changing the filter element, the oil inside of the filter element, should be examined for deposits of metal cuttings, which if present, could indicate excessive wear in some of the system components.

**WHEEL BEARINGS:**

Wheel bearings should be cleaned and repacked yearly, (or every 500 hours of operation), using specific lubricants as specified in the maintenance schedule.

**BATTERIES:**

WILDCAT SL-25 series scissorlifts are electro-hydraulic operated machines, therefore particular attention should be paid to the batteries and on-board charger to assure proper machine operation. Batteries will have longer life if the electrolyte level is maintained and they are kept charged. The unit will have better operating characteristics with fully charged batteries. In cold weather the batteries should be maintained at full charge to keep from freezing. An extremely low or dead battery can freeze in cold weather. Make sure connections are clean and tight. Make sure charging equipment is operating properly.

The specific gravity of all battery cells should be checked per the time interval on the maintenance schedule. To obtain proper specific gravity readings of batteries, they **MUST** be checked **ONLY** after they have been fully charged. Using a calibrated hydrometer, check specific gravity for readings of 1.260/1.310 at 80° F. If reading from any cell should vary more than 50 gravity points (0.050), this indicates a bad cell and that battery should be replaced.

**⚠ DANGER**

Lead-acid batteries contain sulfuric acid which will damage eyes or skin on contact. When working around batteries always wear a face shield to avoid acid in eyes. If acid contacts eyes, flush immediately with clear water and get medical attention. Wear rubber gloves and protective clothing to keep acid off skin. If acid contacts skin, wash off immediately with clear water. Lead-acid batteries produce flammable and explosive gases. Never allow smoking, flames or sparks around batteries.

<https://truckmanualshub.com/>  
Preventive Inspection Maintenance  
30 Day or 50 Hour Checklist

This image shows a single page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

NOTE: If correction action is required on any item, attach sheet indicating problem and action taken.

All items have been properly checked and tested and found to be operating satisfactorily or necessary corrective action has been completed.

INSPECTED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

## Serial Number \_\_\_\_\_

(\*) - Recommended also for Frequent and Annual inspection.

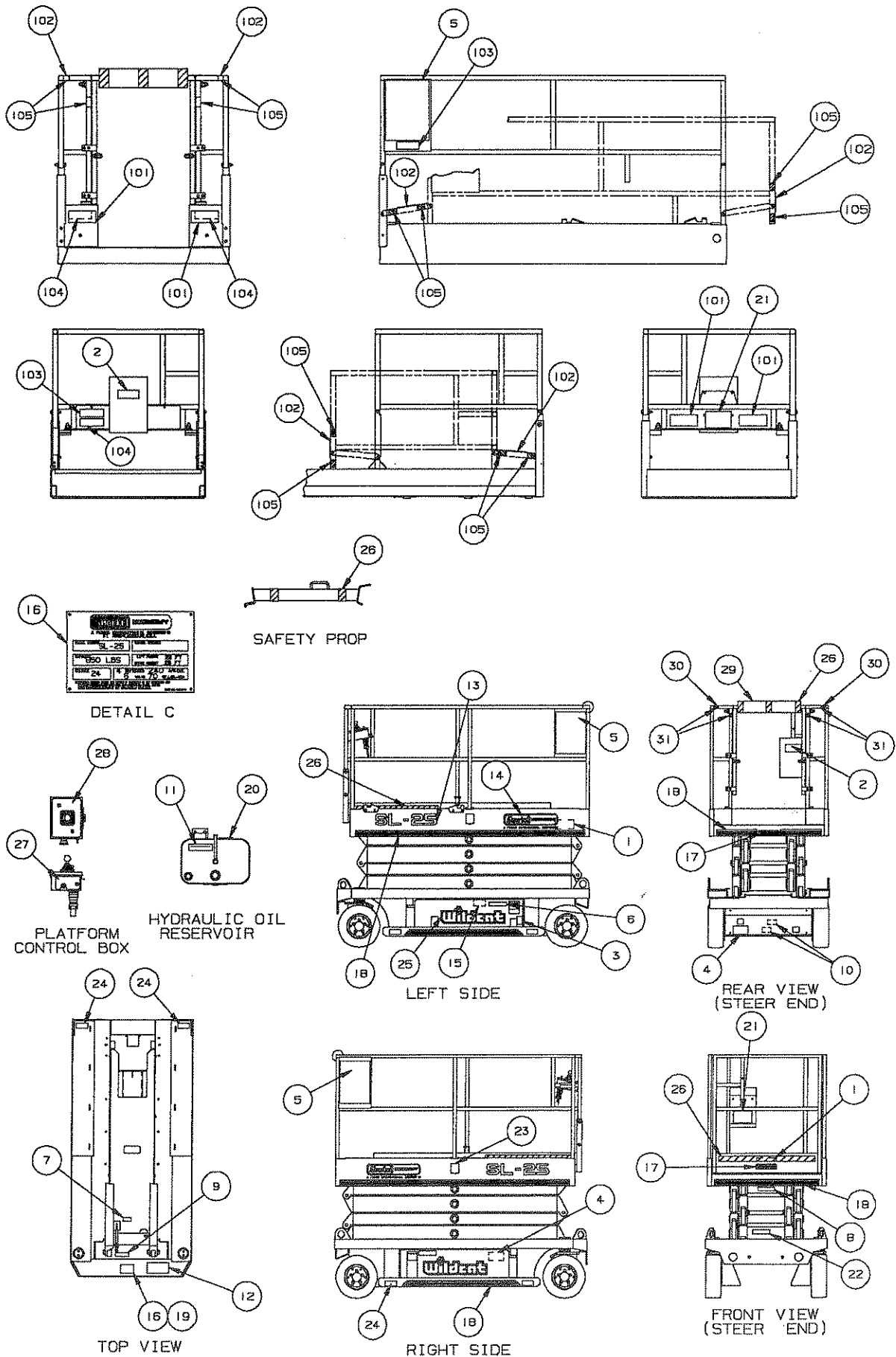
| NO  | PART #  | DESCRIPTION                       | QTY  | OK | X | ✓ |
|-----|---------|-----------------------------------|------|----|---|---|
| 19. |         | Drive Screw or Rivet              | 4    |    |   |   |
| 20. | 451776  | Decal, Hydraulic Fluid Level      | 1    |    |   |   |
| 21. | 300699  | Decal, Operators Checklist        | 1    |    |   |   |
| 22. | 300700  | Decal, Beware Descending Platform | 1    |    |   |   |
| 23. | 0073585 | Decal, Made in USA                | 2    |    |   |   |
| 24. | 621486  | Decal, Forklift                   | 6    |    |   |   |
| 25. | 459616  | Decal, Wildcat (24 Inch)          | 2    |    |   |   |
| 26. | 969249  | Stripes, Warning                  | 162" |    |   |   |
| 27. | 300703  | Decal, Platform Control Box Front | 1    |    |   |   |
| 28. | 300702  | Decal, Platform Control Box Top   | 1    |    |   |   |
| 29. | 9980003 | Pipe Insulation                   | 24"  |    |   |   |
| 30. | 302562  | Decal, Pinch Point                | 2    |    |   |   |
| 31. | 969249  | Stripes, Warning                  | 24"  |    |   |   |

| NO   | PART # | DESCRIPTION                       | QTY | OK | X | ✓ |
|------|--------|-----------------------------------|-----|----|---|---|
| 101. | 302559 | Decal, Warning - Pinch Point      | 4   |    |   |   |
| 102. | 302562 | Decal, Pinch Point                | 8   |    |   |   |
| 103. | 302567 | Decal, Danger - Swing Down Rails  | 3   |    |   |   |
| 104. | 302568 | Decal, Warning - Swing Down Rails | 3   |    |   |   |
| 105. | 969249 | Stripes, Warning                  | 96" |    |   |   |

[illegible]

All decals and placards have been checked and found to be in place or necessary corrective action has been completed.

INSPECTED BY: \_\_\_\_\_ DATE: \_\_\_\_\_







## LIMITED WARRANTY

Snorkel-Economy, a Figgie International Company warrants each new machine manufactured and sold by it to be free from defects in material and workmanship for a period of one (1) year from date of delivery to a Customer or for one year after the machine has been placed in first service in a Dealer rental fleet, whichever comes first. Any part or parts which, upon examination by the Snorkel-Economy Service Department, are found to be defective, will be replaced or repaired, at the sole discretion of Snorkel-Economy, through its local Authorized Dealer at no charge.

Snorkel-Economy further warrants the structural components; specifically, the mainframe chassis, turntable, booms and scissor arms, of each new machine manufactured by it to be free from defects in material and workmanship for an additional period of four (4) years. Any such part or parts which, upon examination by the Snorkel-Economy Service Department, are found to be defective will be replaced or repaired by Snorkel-Economy through its local Authorized Dealer at no charge; however, any labor charges incurred as a result of such replacement or repair will be the responsibility of the Customer or Dealer.

The Snorkel-Economy Service Department must be notified within forty-eight (48) hours of any possible warranty situation during the applicable warranty period. Personnel performing warranty repair or replacement must obtain specific approval by Snorkel-Economy Service Department prior to performing any warranty repair or replacement.

Customer and Dealer shall not be entitled to the benefits of this warranty and Snorkel-Economy shall have no obligations hereunder unless the "Pre-Delivery and Inspection Report" has been properly completed and returned to the Snorkel-Economy Service Department within ten (10) days after delivery of the Snorkel-Economy product to Customer or Dealer's rental fleet. Snorkel-Economy must be notified, in writing, within ten (10) days, of any machine sold to a Customer from a Dealer's rental fleet during the warranty period.

At the direction of the Snorkel-Economy Service Department, any component part(s) of Snorkel-Economy products to be replaced or repaired under this warranty program must be returned freight prepaid to the Snorkel-Economy Service Department for inspection. All warranty replacement parts will be shipped freight collect from the Snorkel-Economy Service Department or from Snorkel-Economy's Vendor to Dealer or Customer.

### REPLACEMENT PARTS WARRANTY

Any replacement or service part made or sold by Snorkel-Economy is not subject to the preceding **Limited Warranty** beyond the normal warranty period of the machine upon which the part was installed.

### THIS WARRANTY EXCLUDES AND SNORKEL-ECONOMY DOES NOT WARRANT:

1. Engines, motors, tires and batteries which are manufactured by suppliers to Snorkel-Economy, who furnish their own warranty. Snorkel-Economy will, however, to the extent permitted, pass through any such warranty protection to the Customer or Dealer.
2. Any Snorkel-Economy product which has been modified or altered outside Snorkel-Economy's factory without Snorkel-Economy's written approval, if such modification or alteration, in the sole judgment of Snorkel-Economy's Engineering and/or Service Departments, adversely affects the stability, reliability or service life of the Snorkel-Economy product or any component thereof.
3. Any Snorkel-Economy product which has been subject to misuse, improper maintenance or accident. "Misuse" includes but is not limited to operation beyond the factory-rated load capacity and speeds. "Improper maintenance" includes but is not limited to failure to follow the recommendations contained in the Snorkel-Economy Operation, Maintenance, Repair Parts Manuals. Snorkel-Economy is not responsible for normal maintenance, service adjustments and replacements, including but not limited to hydraulic fluid, filters and lubrication.
4. Normal wear of any Snorkel-Economy component part(s). Normal wear of component parts may vary with the type application or type of environment in which the machine may be used; such as, but not limited to sandblasting applications.
5. Any Snorkel-Economy product that has come in direct contact with any chemical or abrasive material.
6. Incidental or consequential expenses, losses, or damages related to any part or equipment failure, including but not limited to freight cost to transport the machine to a repair facility, downtime of the machine, lost time for workers, lost orders, lost rental revenue, lost profits or increased cost.

This warranty is expressly in lieu of all other warranties, representations or liabilities of Snorkel-Economy, either expressed or implied, unless otherwise amended in writing by Snorkel-Economy's President, Vice President-Engineering, Vice President-Sales or Vice President-Marketing.

**SNORKEL-ECONOMY MAKES NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION OF THIS LIMITED WARRANTY. SNORKEL-ECONOMY MAKES NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND DISCLAIMS ALL LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO INJURY TO PERSONS OR PROPERTY.**

The Customer shall make all warranty claims through its local Authorized Dealer and should contact the Dealer from whom the Snorkel-Economy product was purchased for warranty service. Or, if unable to contact the Dealer, contact the Snorkel-Economy Service Department for further assistance.

<https://truckmanualshub.com/>  
**REPAIR PARTS MANUAL**

# **“WILDCAT”**

## **BATTERY POWERED AERIAL WORK PLATFORM**

**MODEL SL-25**

### **NOTES:**

Always give the serial number and model number of your “Wildcat” when ordering parts.

This information is found on the placard on the front of the base frame.

Be sure or order all parts by their part number, and if possible specify routing of shipment.

All correspondence relative to this unit, such as field reports, discrepancy reports, requests for service information, etc., should be directed to:

Snorkel-Economy  
A Figgie International Company  
P O BOX 4065  
ST JOSEPH MO 64504-0065

Attention Service Manager



A FIGGIE INTERNATIONAL COMPANY

ST. JOSEPH, MISSOURI

## LIMITED WARRANTY

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## **REPAIR PARTS MANUAL ORGANIZATION**

The Repair Parts Manual consists of four sections, separated by index tab dividers with the Index of the contents for each section immediately following the divider.

Sub-assemblies and detailed parts are identified by index numbers on the illustrations that correspond to the item numbers on the parts listing. When requesting any part, always specify complete part number, description, model and serial number of your unit.

The following is a general description of each section and its contents.

### **Repair Parts and Illustrations:**

Repair Parts (Section 1), contains parts listings and illustrations for general mechanical repair parts of all major installations and sub-assemblies of the unit.

### **Hydraulics:**

Hydraulics (Section 2), contains parts listings and illustrations of hydraulic components installations including hydraulic schematics and individual components such as cylinders, controls valves and solenoid operated valves.

### **Electrical:**

Electrical (Section 3), contains listings and illustrations of electrical components installations including wiring schematics and controller drawings.

### **Options:**

Options (Section 4), contains parts listings and illustrations of optional installations that may be installed on your unit.

## DISASSEMBLY AND REASSEMBLY PROCEDURES

The illustrations located in Repair Parts Manual, are designed for use as a guide for disassembly of the "Wildcat" SL-25 and components as well as for parts replacement. Always refer to the hydraulic system installation drawings and the electrical wiring diagram before removing or disassembling associated parts.

**DO NOT** attempt to disconnect or remove any hydraulic line before reading and understanding all text concerning the system hydraulics. In most cases, disassembly of the "Wildcat" SL-25 will be obvious from the illustration.

When disassembling or reassembling components, complete the procedural steps in sequence. **DO NOT** partially disassemble or assemble one part, then start on another. Always check your work to assure that nothing has been overlooked.

The following list is a gentle reminder when disassembling or assembling the "Wildcat".

1. Always be conscious of weight.
2. Never attempt to lift heavy objects without the aid of a mechanical device.
3. **DO NOT** allow heavy objects to rest in an unstable condition.
4. Always make sure work platform is in stowed position - blocked or the weight removed by a suitable lifting device before disconnecting the hydraulic hose from the motor/pump unit to the lift cylinder.
5. When raising a portion of the machine, be sure that adequate blocking is properly positioned - **DO NOT** depend on lifting device to hold and secure weight.
6. If a part resists removal, check to see if all fasteners, electrical wiring, hydraulic lines, etc., have been removed or that other parts are not interfering.

Parts should be thoroughly inspected before restoring to service at the time of reassembly. Burrs, nicks or scratches may be removed from machined surfaces by honing or polishing with #600 crocus cloth, followed by a thorough cleaning in an approved cleaning solvent, and blown dry with compressed air. **DO NOT** alter the contour of any part. If this operation does not restore the part to a serviceable condition, replace the part. Replace all O-rings, seals, and gaskets at reassembly. Use new roll pins or cotter pins. Dip all packing rings and seals in hydraulic oil before reassembling in cylinder and manifold installations. Replace any part having imperfect threads. In general, units that have been disassembled can be reassembled by reversing the order of disassembly.

Remember that the service life of a machine can be increased by keeping dirt and foreign materials out of the vital components. Precautions have been taken to safeguard against this; shields, covers, seals and filters are provided to keep air and oil supplies clean; however, these items must be maintained on a scheduled basis in order to function properly.

At any time air or oil lines are disconnected, clean surrounding areas as well as the opening and fittings themselves. As soon as a line or component is disconnected, cap or cover all openings to prevent the entry of dirt or foreign materials.

New parts should remain in their container until they are ready to be used.

Clearly mark or tag hydraulic lines and electrical wiring connections when disconnecting or removing them from unit. This will assure that they are correctly reinstalled.

Proper assembly is critical to the successful rebuilding of any unit. Carefully inspect any parts which are to be reused. If in doubt, replace.

**"SAFETY FIRST"** is a good slogan.

Replace any guards and protective devices that have been removed to carry out maintenance and repair work.



## REPAIR PARTS - SECTION 1

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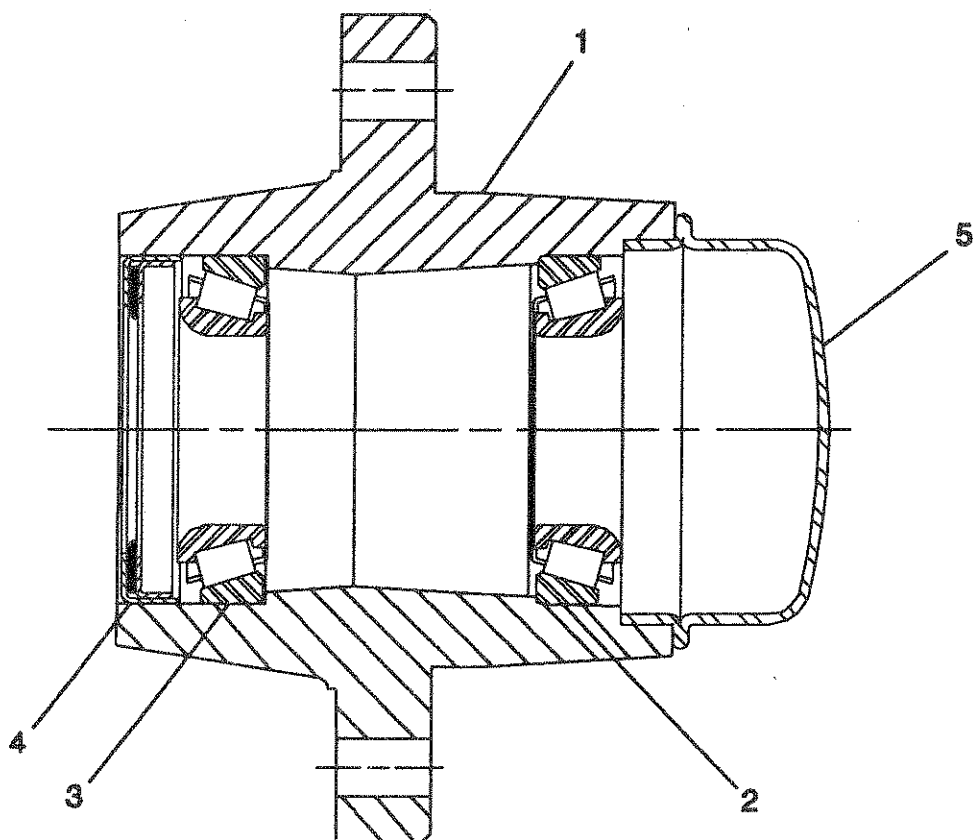
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# BEARING HUB ASSEMBLY

<http://www.timkenmanualshub.com/>

| Item | Part No | Description                                   | Req |
|------|---------|-----------------------------------------------|-----|
| 0.   | 301480  | Bearing hub assembly, complete . . . . .      | 2   |
| 1.   | 301479  | Bearing hub . . . . .                         | 1   |
| 2.   | 2540012 | Bearing cup, Timken #LM67010 . . . . .        | 2   |
| 3.   | 034377  | Bearing cone, Timken #LM67048 . . . . .       | 2   |
| 4.   | 034387  | Grease seal, Chicago Rawhide #14972 . . . . . | 1   |
| 5.   | 301507  | Dust cap, Armstrong #P-502011 . . . . .       | 1   |



| Item | Part No | Description                                       | Req |
|------|---------|---------------------------------------------------|-----|
| 1.   | 986389  | Washer, special 1.38 OD x .765 ID x .060 thick    | 2   |
| 2.   | 986359  | Machine washer 7/8 OD x 1/2 ID x 14 gauge thick   | 4   |
| 3.   | 984459  | Lug nut 1/2-20 #RH600 3/4 hex                     | 10  |
| 4.   | 7720201 | Reducer bushing                                   | 2   |
| 5.   | 604076  | Thrust bearing 1 inch ID self-lubricating         | 6   |
| 6.   | 590984  | Cylinder assembly, brakes                         | 2   |
| 7.   | 561196  | Bearing, Garlock #16DU20                          | 2   |
| 8.   | 5570008 | Breather vent with felt washer                    | 2   |
| 9.   | 5560168 | Washer                                            | 4   |
| 10.  | 5560128 | Capscrew                                          | 4   |
| 11.  | 5093028 | Clamp, Aeroquip #900729-28                        | 3   |
| 12.  |         |                                                   |     |
| 13.  |         |                                                   |     |
| 14.  | 5093013 | Clamp, Aeroquip #900729-13                        | 1   |
| 15.  | 5093012 | Clamp, Aeroquip #900729-12                        | 1   |
| 16.  | 5093005 | Clamp, Aeroquip #900729-5                         | 1   |
| 17.  | 5093002 | Clamp, Aeroquip #900729-2                         | 4   |
| 18.  | 5093000 | Clamp, Aeroquip #900729-01                        | 2   |
| 19.  | 5065728 | Straight thread adapter, -6 SAE/-8 JIC            | 4   |
| 20.  | 5065707 | Straight thread adapter, -6 SAE/-6 JIC            | 1   |
| 21.  | 5065705 | Straight thread adapter, -6 SAE/-4 JIC            | 4   |
| 22.  | 5064002 | Reducer, -8/-4 JIC                                | 2   |
| 23.  | 5063906 | Nut, -8 JIC                                       | 2   |
| 24.  | 5036803 | Tee, swivel nut branch -4                         | 1   |
| 25.  | 5036706 | Tee, swivel nut run -8 JIC                        | 2   |
| 26.  | 5035305 | Elbow, 90° -6 SAE/-6 JIC                          | 1   |
| 27.  | 5035303 | Elbow, 90° -4 SAE/-4 JIC                          | 2   |
| 28.  | 5034404 | Union, straight bulkhead -8                       | 4   |
| 29.  | 5033704 | Elbow, 90° male -4/-4                             | 1   |
| 30.  | 5033604 | Adapter, male -4/-4                               | 1   |
| 31.  | 472326  | Clevis pin 1/2 inch diameter x 1.13 inch grip     | 2   |
| 32.  | 465276  | Clevis pin 1/2 inch diameter x 1.28 inch grip     | 2   |
| 33.  | 0151470 | 1/2 hydraulic tube assembly                       | 1   |
| 34.  | 411226  | Bearing, 1 inch ID x 1 inch long self-lubricating | 4   |
| 35.  | 302434  | 1/2 hydraulic hose assembly                       | 2   |
| 36.  | 302433  | 1/2 hydraulic hose assembly                       | 2   |
| 37.  | 302432  | Bracket, tray ramp                                | 1   |
| 38.  | 302431  | Slide pad                                         | 2   |
| 39.  | 464004  | Cylinder assembly, cushion                        | 1   |
| 40.  | 302428  | Spacer, stabilizer spring                         | 8   |
| 41.  | 302427  | Spring, stabilizer angle retainer                 | 4   |
| 42.  | 302423  | Guard, stabilizer ft linkage                      | 2   |
| 43.  | 302422  | Cable assembly, cushion valve                     | 1   |
| 44.  | 302421  | Bracket, interlock switch                         | 1   |
| 45.  | 302420  | Bracket, cushion valve linkage                    | 1   |
| 46.  | 302363  | Bracket, cushion valve                            | 1   |
| 47.  | 302362  | Block, Stabilizer cross shaft                     | 4   |
| 48.  | 302361  | Block, stabilizer cross shaft                     | 4   |
| 49.  | 302302  | Hydraulic drive motor                             | 2   |
| 50.  | 302284  | Bracket, tray latch catch                         | 2   |

# BASE FRAME ASSEMBLY

<https://truckmanualshub.com/>

| Item | Part No | Description                                                    | Req |
|------|---------|----------------------------------------------------------------|-----|
| 51.  | 302269  | Hub . . . . .                                                  | 2   |
| 52.  | 302256  | Lug, arm pivot . . . . .                                       | 2   |
| 53.  | 302255  | Stabilizer x-shaft front . . . . .                             | 1   |
| 54.  | 302254  | Stabilizer x-shaft rear . . . . .                              | 1   |
| 55.  | 302252  | Bracket, stabilizer . . . . .                                  | 1   |
| 56.  | 302248  | Pin, headless 1/2 inch diameter x 1 1/4 inch long . . . . .    | 4   |
| 57.  | 302246  | Bracket, stabilizer spring . . . . .                           | 1   |
| 58.  | 302245  | Link, stabilizer x-shaft connector . . . . .                   | 4   |
| 59.  | 302244  | Channel, stabilizer x-shaft connector . . . . .                | 1   |
| 60.  | 302243  | Stabilizer skid . . . . .                                      | 2   |
| 61.  | 302238  | Bracket, angle return spring . . . . .                         | 4   |
| 62.  | 302236  | Link half, stabilizer foot . . . . .                           | 8   |
| 63.  | 302234  | Block, machined stabilizer foot . . . . .                      | 4   |
| 64.  | 302233  | Stabilizer foot . . . . .                                      | 4   |
| 65.  | 302232  | Spindle, left hand . . . . .                                   | 1   |
| 66.  | 302231  | Spindle, right hand . . . . .                                  | 1   |
| 67.  | 302229  | Pin cap, steering . . . . .                                    | 2   |
| 68.  | 302550  | Steer connector link half . . . . .                            | 1   |
| 69.  | 302212  | Base frame weldment . . . . .                                  | 1   |
| 70.  | 301480  | Bearing hub assembly . . . . .                                 | 2   |
| 71.  | 302553  | Steer connector link half . . . . .                            | 1   |
| 72.  | 301464  | Formed brake disk . . . . .                                    | 2   |
| 73.  | 301443  | Swivel, long 90° -10/-6 . . . . .                              | 2   |
| 74.  | 301442  | Swivel, short 90° -10/-6 . . . . .                             | 2   |
| 75.  | 301406  | Pin, tray adjustment . . . . .                                 | 2   |
| 76.  |         | Cotter pin 1/8 inch diameter x 1 1/2 inch long . . . . .       | 2   |
| 77.  | 301402  | Bearing, flanged 3/4 ID x 1 5/16 OD x 9/16 inch long . . . . . | 2   |
| 78.  | 301341  | Bracket, brake cylinder . . . . .                              | 2   |
| 79.  | 301286  | Spring, stabilizer shaft return . . . . .                      | 1   |
| 80.  | 302625  | Roller, stabilizer . . . . .                                   | 1   |
| 81.  | 301265  | Spacer, stabilizer . . . . .                                   | 4   |
| 82.  | 300928  | Brake pin assembly, left hand . . . . .                        | 1   |
| 83.  | 300927  | Brake pin assembly, right hand . . . . .                       | 1   |
| 84.  | 300778  | nut, lock 1/2-13 center lock . . . . .                         | 11  |
| 85.  | 300769  | Link half pothole protection . . . . .                         | 8   |
| 86.  | 302614  | Tilt alarm sensor assembly . . . . .                           | 1   |
| 87.  | 300729  | Wheel bolt 1/2-20 . . . . .                                    | 10  |
| 88.  | 302566  | Cushion valve . . . . .                                        | 1   |
| 89.  | 300395  | Bearing, 3/4 ID x 1 OD x 3/8 inch long . . . . .               | 4   |
| 90.  | 300393  | Clevis pin 3/8 inch diameter x 1 5/16 inch long . . . . .      | 2   |
| 91.  | 300379  | Pin, headless 3/4 inch diameter x 1 1/4 inch long . . . . .    | 4   |
| 92.  | 300368  | Cylinder assembly, steering . . . . .                          | 1   |
| 93.  | 300357  | Bushing, 2 3/4 ID x 3 OD x 2 1/4 inch long . . . . .           | 4   |
| 94.  | 300354  | Thrust bearing, 2 3/4 ID x 3 7/8 OD x 1/4 inch thick . . . . . | 2   |
| 95.  | 300351  | Bearing, 1/2 ID x 3/4 OD x 1/2 inch long . . . . .             | 5   |
| 96.  | 2592404 | Bearing, Oilite #AA634-4 . . . . .                             | 8   |
| 97.  | 2590711 | Bushing, Oilite #AA507-11 . . . . .                            | 10  |
| 98.  | 2501616 | Bearing, Garlock 16DU16 . . . . .                              | 4   |
| 99.  | 0071510 | Spacer, air cylinder mounting . . . . .                        | 1   |
| 100. | 0070910 | 1/4 hydraulic hose . . . . .                                   | 1   |

# BASE FRAME ASSEMBLY

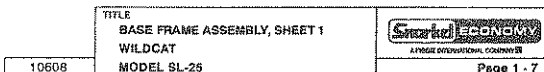
<https://truckmanualshub.com/>

| Item | Part No | Description                                               | Req |
|------|---------|-----------------------------------------------------------|-----|
| 101. | 0030101 | Slide pad . . . . .                                       | 1   |
| 102. | 0020283 | 1/4 hydraulic hose assembly . . . . .                     | 2   |
| 103. |         | Capscrew 1/2-13 x 2 3/4 long hex head grade 5 . . . . .   | 8   |
| 104. |         | Capscrew 3/8-16 x 1 long hex head grade 5 . . . . .       | 9   |
| 105. |         | Capscrew 1/4-20 x 1 1/4 long hex head grade 5 . . . . .   | 2   |
| 106. |         | Capscrew 5/16-18 x 1 long hex head grade 5 . . . . .      | 4   |
| 107. |         | Capscrew 5/8-11 x 1 1/4 long hex head grade 5 . . . . .   | 2   |
| 108. |         | Capscrew 3/4-10 x 3 long hex head grade 5 . . . . .       | 2   |
| 109. |         | Capscrew 3/8-16 x 3/4 long hex head grade 5 . . . . .     | 4   |
| 110. |         | Capscrew 3/8-16 x 7/8 long hex head grade 5 . . . . .     | 8   |
| 111. |         | Capscrew 3/8-16 x 1 1/4 long hex head grade 5 . . . . .   | 10  |
| 112. |         | Capscrew 3/8-16 x 2 long hex head grade 5 . . . . .       | 1   |
| 113. |         | Capscrew 3/8-16 x 1 long hex head grade 5 . . . . .       | 2   |
| 114. |         | Capscrew 1/2-13 x 2 1/2 long hex head grade 5 . . . . .   | 4   |
| 115. | 5560039 | Self locking nut 1/2-13 ESNA #21NE-083 . . . . .          | 13  |
| 116. | 5560034 | Self locking nut #10-24 ESNA #22NM-04 . . . . .           | 4   |
| 117. | 5560004 | Self locking nut 1/4-20 ESNA #22NE-040 . . . . .          | 10  |
| 118. | 5560033 | Self locking nut 3/8-16 ESNA #22NE-066 . . . . .          | 51  |
| 119. | 5560054 | Self locking nut 1/4-28 ESNA #22NE-048 . . . . .          | 2   |
| 120. |         | Washer 5/16 medium flat . . . . .                         | 45  |
| 121. |         | Washer 3/4 medium flat . . . . .                          | 2   |
| 122. |         | Washer 1/4 medium flat . . . . .                          | 8   |
| 123. |         | Washer 1/2 medium flat . . . . .                          | 9   |
| 124. |         | Washer 3/8 medium flat . . . . .                          | 7   |
| 125. |         | Washer #10 medium flat . . . . .                          | 4   |
| 126. |         | Washer 5/8 medium lock . . . . .                          | 2   |
| 127. |         | Washer 5/16 medium lock . . . . .                         | 2   |
| 128. |         | Washer 3/8 medium lock . . . . .                          | 16  |
| 129. | 2690004 | Rod end, 1/4-28 female with ball . . . . .                | 2   |
| 130. |         | Carriage bolt 1/4-20 x 1 inch long . . . . .              | 6   |
| 131. |         | Carriage bolt 3/8-16 x 1 inch long . . . . .              | 20  |
| 132. |         | Carriage bolt 3/8-16 x 1 1/2 inch long . . . . .          | 4   |
| 133. |         | Carriage bolt 3/8-16 x 1 1/4 inch long . . . . .          | 4   |
| 134. |         | Carriage bolt 1/2-13 x 1 1/2 inch long . . . . .          | 11  |
| 135. |         | Washer, 1 1/16 ID x 2 OD x 1/8 inch thick . . . . .       | 2   |
| 136. |         | Cotter pin 5/32 inch diameter x 1 3/4 inch long . . . . . | 2   |
| 137. |         | Cotter pin 1/8 inch diameter x 1 1/4 inch long . . . . .  | 6   |
| 138. |         | Cotter pin 1/8 inch diameter x 1 inch long . . . . .      | 4   |
| 139. |         | Roll pin 1/4 inch diameter x 1 inch long . . . . .        | 2   |
| 140. |         | Roll pin 1/4 inch diameter x 2 3/4 inch long . . . . .    | 8   |
| 141. |         | Machine screw #10-24 x 3/4 long round head . . . . .      | 2   |
| 142. |         | Machine screw #10-24 x 2 long round head . . . . .        | 2   |
| 143. |         | Shoulder bolt 3/4 x 3/4 . . . . .                         | 2   |
| 144. |         | Set screw 1/4-20 x 3/8 long socket head . . . . .         | 2   |
| 145. |         | Carriage bolt 1/2-13 x 1 1/2 inch long . . . . .          | 9   |

# BASE FRAME ASSEMBLY

<https://truckmanualshub.com/>

| Item | Part No | Description                                                         | Req |
|------|---------|---------------------------------------------------------------------|-----|
| 146. | 0051189 | 3/8 hydraulic hose assembly . . . . .                               | 1   |
| 147. |         | Capscrew 3/8-16 x 1 1/2 long hex head grade 5 . . . . .             | 2   |
| 148. | 0240791 | 3/8 hydraulic hose assembly . . . . .                               | 1   |
| 149. |         | Shoulder bolt 1/2 inch shoulder 3/8-16 x 1 1/4 long . . . . .       | 4   |
| 150. |         | Capscrew 3/8-16 x 1 1/4 long socket flat head . . . . .             | 2   |
| 151. |         | Capscrew 3/8-16 x 3/4 long socket flat head . . . . .               | 4   |
| 152. |         | Capscrew 1/4-20 x 3/4 long hex head grade 5 - full thread . . . . . | 4   |
| 153. | 0071272 | Shim, .063 inch thick aluminum . . . . .                            | 2   |
| 154. | 0070838 | Shim, .030 inch thick aluminum . . . . .                            | 2   |
| 155. |         | Nut 3/8-16 hex . . . . .                                            | 7   |
| 156. | 5090034 | Sleeve, hose abrasion x 76 inch long . . . . .                      | 1   |
| 157. |         | Washer 3/16 medium flat . . . . .                                   | 2   |
| 158. | 5560031 | Self locking nut 5/16-18 ESNA #22NE-058 . . . . .                   | 4   |
| 159. |         | Capscrew 5/16-18 x 1 1/4 long hex head grade 5 . . . . .            | 2   |
| 160. | 302574  | Lanyard . . . . .                                                   | 2   |
| 161. |         | Nut 5/16-18 hex . . . . .                                           | 2   |
| 162. | 0150224 | Clamp bar . . . . .                                                 | 4   |
| 163. | 986619  | Washer 1 1/2 OD x 1 ID x 1/16 inch thick . . . . .                  | 4   |
| 164. | 302624  | Spacer . . . . .                                                    | 1   |
| 165. |         | Capscrew 1/2-13 x 3 long hex head grade 5 . . . . .                 | 1   |
| 201. | 302356  | Base frame cover . . . . .                                          | 1   |
| 202. | 302357  | Brake cover . . . . .                                               | 1   |
| 203. | 302430  | Screw 5/16-18 x 3/4 long whiz-lock . . . . .                        | 8   |
| 204. | 302536  | Rear step weldment . . . . .                                        | 1   |
| 205. |         | Speed nut 5/16-18 . . . . .                                         | 8   |
| 301. | 5093001 | Clamp, Aeroquip #900729-1 . . . . .                                 | 5   |
| 401. | 488176  | Non-marking tire assembly, 5 x 8 (white) . . . . .                  | 4   |





# HYDRAULIC TRAY ASSEMBLY

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| Item | Part No | Description                                                               | Req |
|------|---------|---------------------------------------------------------------------------|-----|
| 0.   | 302336  | Hydraulic tray assembly . . . . .                                         | 1   |
| 1.   | 0020279 | $\frac{3}{8}$ hydraulic hose assembly . . . . .                           | 1   |
| 2.   | 0100271 | $\frac{3}{16}$ hydraulic hose assembly . . . . .                          | 1   |
| 3.   | 0060315 | $\frac{1}{2}$ hydraulic hose assembly . . . . .                           | 2   |
| 4.   | 0322684 | $\frac{1}{4}$ hydraulic hose assembly . . . . .                           | 2   |
| 5.   | 300437  | Bearing, Oilite #FF901-6 . . . . .                                        | 2   |
| 6.   | 300497  | Elbow, 90° -6/-6 . . . . .                                                | 2   |
| 7.   | 300554  | $\frac{1}{2}$ hydraulic tube assembly . . . . .                           | 1   |
| 8.   | 300659  | Alarm, 102 DB dual function . . . . .                                     | 1   |
| 9.   | 300726  | Tubing, clear $\frac{3}{8}$ ID x $\frac{1}{2}$ OD x 7 inch long . . . . . | 1   |
| 10.  | 301440  | Hydraulic oil return filter . . . . .                                     | 1   |
|      | 451896  | Replacement filter element . . . . .                                      |     |
| 11.  | 302257  | Spring, torsion - tray latch . . . . .                                    | 1   |
| 12.  | 302274  | Hydraulic tray weldment . . . . .                                         | 1   |
| 13.  | 302285  | Channel, tray latch . . . . .                                             | 1   |
| 14.  | 302387  | Hydraulic oil reservoir assembly . . . . .                                | 1   |
|      | 212012  | Replacement strainer, 100 mesh - 10 GPM . . . . .                         |     |
|      | 211051  | Replacement fill cap, vented weatherproof . . . . .                       |     |
| 15.  | 302430  | Screw $\frac{5}{16}$ -18 x $\frac{3}{4}$ long whiz-lock . . . . .         | 6   |
| 16.  | 302443  | Control valve assembly . . . . .                                          | 1   |
|      | 302301  | Control valve package . . . . .                                           |     |
| 17.  | 302449  | $\frac{1}{2}$ hydraulic tube assembly . . . . .                           | 1   |
| 18.  | 302469  | $\frac{3}{8}$ hydraulic tube assembly . . . . .                           | 1   |
| 19.  | 302468  | $\frac{3}{4}$ hydraulic tube assembly . . . . .                           | 1   |
| 20.  | 302452  | $\frac{3}{4}$ hydraulic tube assembly . . . . .                           | 1   |
| 21.  | 302453  | $\frac{1}{2}$ hydraulic tube assembly . . . . .                           | 1   |
| 22.  | 302454  | Pump mount bracket . . . . .                                              | 1   |
| 23.  | 302463  | Return hose, $\frac{1}{2}$ diameter x 14 inch long . . . . .              | 1   |
| 24.  | 3040082 | Terminal, .250 male fully insulated 16/14 wire . . . . .                  | 3   |
| 25.  | 3044160 | Terminal, ring tongue insulated #8 stud 16/14 wire . . . . .              | 1   |
| 26.  | 3080019 | Motor, electric 24 volt - 4.18 horsepower . . . . .                       | 2   |
| 27.  | 416246  | Fitting, plug . . . . .                                                   | 1   |
| 28.  | 455186  | Hour meter . . . . .                                                      | 1   |
| 29.  | 457406  | Clamp, worm drive . . . . .                                               | 2   |
| 30.  | 466986  | Return hose, $\frac{3}{4}$ diameter x 17 inch long . . . . .              | 1   |
| 31.  | 5033618 | Adapter, male -12/-12 . . . . .                                           | 1   |
| 32.  | 5033717 | Elbow, 90° male -12/-12 . . . . .                                         | 1   |
| 33.  | 5035320 | Elbow, 90° -8 SAE/-6 JIC . . . . .                                        | 1   |
| 34.  | 5035308 | Elbow, 90° -12 SAE/-12 JIC . . . . .                                      | 1   |
| 35.  | 5037005 | Elbow, 90° swivel -6/-6 . . . . .                                         | 1   |
| 36.  | 5065710 | Adapter, straight thread -10 SAE/-8 JIC . . . . .                         | 2   |
| 37.  | 5065711 | Adapter, straight thread -12 SAE/-8 JIC . . . . .                         | 1   |
| 38.  | 5090034 | Sleeve, hose abrasion x 15 feet long . . . . .                            | 1   |
| 39.  | 5093002 | Clamp, Aeroquip #900729-2 . . . . .                                       | 3   |
| 40.  | 5093027 | Clamp, Aeroquip #900729-27 . . . . .                                      | 3   |
| 41.  | 5550006 | Clamp, Ideal #5406 . . . . .                                              | 4   |
| 42.  | 5550028 | Hose clamp, Miro Gear #6202 . . . . .                                     | 2   |
| 43.  |         | Speed nut $\frac{5}{16}$ -18 . . . . .                                    | 6   |
| 44.  | 584925  | Cable assembly, 10 $\frac{1}{2}$ inch long . . . . .                      | 3   |
| 45.  | 6020069 | Hydraulic gear pump . . . . .                                             | 2   |

# HYDRAULIC TRAY ASSEMBLY

<https://truckmanualshub.com/>

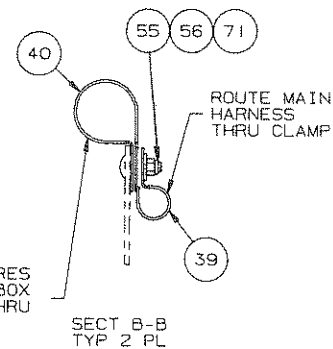
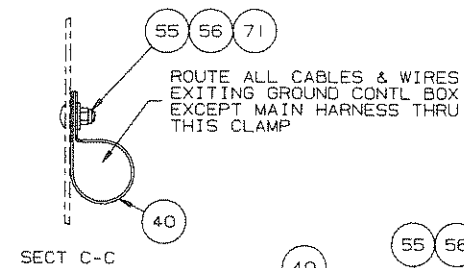
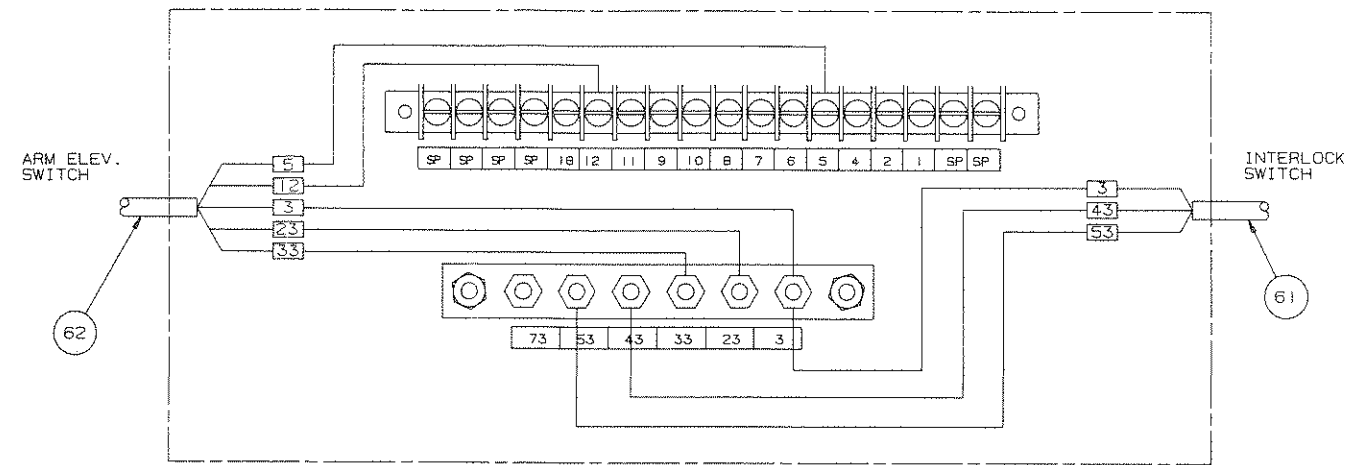
| Item | Part No | Description                                                  | Req |
|------|---------|--------------------------------------------------------------|-----|
| 46.  |         | Nut #8-32 hex . . . . .                                      | 2   |
| 47.  |         | Washer #8 shakeproof lock . . . . .                          | 2   |
| 48.  |         | Machine screw #8-32 x 5/8 long round head . . . . .          | 2   |
| 49.  | 302467  | Relief/check valve . . . . .                                 | 1   |
| 50.  | 302472  | 3/8 hydraulic tube assembly . . . . .                        | 1   |
| 51.  | 302471  | 3/8 hydraulic tube assembly . . . . .                        | 1   |
| 52.  | 302470  | 3/8 hydraulic tube assembly . . . . .                        | 1   |
| 53.  | 3040514 | Solenoid switch, 24 volt DC . . . . .                        | 1   |
| 54.  |         | Washer 5/16 medium flat . . . . .                            | 6   |
| 55.  |         | Carriage bolt 3/8-16 x 1 inch long . . . . .                 | 13  |
| 56.  | 5560033 | Self locking nut 3/8-16 ESNA #22NE-066 . . . . .             | 15  |
| 57.  |         | Washer 1/4 medium flat . . . . .                             | 7   |
| 58.  |         | Capscrew 1/4-20 x 7/8 long hex head grade 5 . . . . .        | 6   |
| 59.  |         | Washer 1/4 medium lock . . . . .                             | 5   |
| 60.  | 0240791 | 3/8 hydraulic hose assembly . . . . .                        | 1   |
| 61.  | 301404  | Limit switch assembly, pothole interlock . . . . .           | 1   |
|      |         | (see drawing in section 3 for details and replacement parts) |     |
| 62.  | 301469  | Limit switch assembly, platform elevation . . . . .          | 1   |
|      |         | (see drawing in section 3 for details and replacement parts) |     |
| 63.  | 5560034 | Self locking nut #10-24 ESNA #22NM-04 . . . . .              | 3   |
| 64.  |         | Machine screw #10-24 x 3/4 long round head . . . . .         | 3   |
| 65.  |         | Washer #10 medium flat . . . . .                             | 3   |
| 66.  | 5093028 | Clamp, Aeroquip #900729-28 . . . . .                         | 1   |
| 67.  | 5065708 | Adapter, straight thread -8 SAE/-6 JIC . . . . .             | 1   |
| 68.  |         | Capscrew 3/8-16 x 5 long hex head grade 5 . . . . .          | 1   |
| 69.  |         | Capscrew 3/8-16 x 3/4 long hex head grade 5 . . . . .        | 1   |
| 70.  |         | Washer #10 external tooth lock . . . . .                     | 1   |
| 71.  |         | Washer 5/16 medium flat . . . . .                            | 11  |
| 72.  |         | Capscrew 3/8-16 x 1 long hex head grade 5 . . . . .          | 2   |
| 73.  |         | Washer 3/8 medium lock . . . . .                             | 2   |
| 74.  |         | Capscrew 1/4-20 x 2 long hex head grade 5 . . . . .          | 2   |
| 75.  | 5560004 | Self locking nut 1/4-20 ESNA #22NE-040 . . . . .             | 2   |
| 76.  |         | Carriage bolt 1/4-20 x 3/4 inch long . . . . .               | 2   |
| 77.  | 5035305 | Elbow, 90° straight thread -6 . . . . .                      | 1   |
| 78.  | 5065707 | Adapter, straight thread -6 . . . . .                        | 2   |
| 79.  | 5065703 | Adapter, straight thread -4/-4 . . . . .                     | 1   |
| 80.  | 5063701 | Cap -4 . . . . .                                             | 1   |
| 81.  | 0051189 | Hose assembly, lift tank . . . . .                           | REF |

## Standard Electrical System - Control Box and Cable

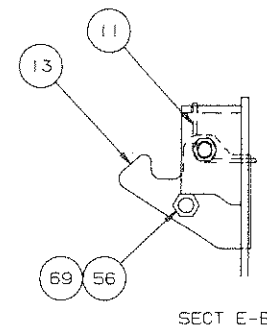
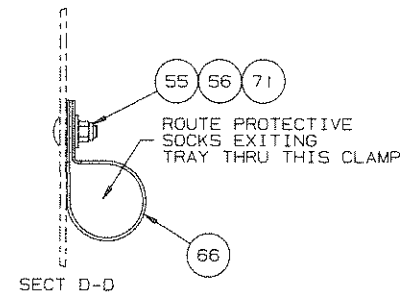
|      |        |                                       |   |
|------|--------|---------------------------------------|---|
| 101. | 302447 | Cable assembly . . . . .              | 1 |
| 102. | 302442 | Ground control box assembly . . . . . | 1 |

## Quick Disconnect Electrical System - Control Box and Cable

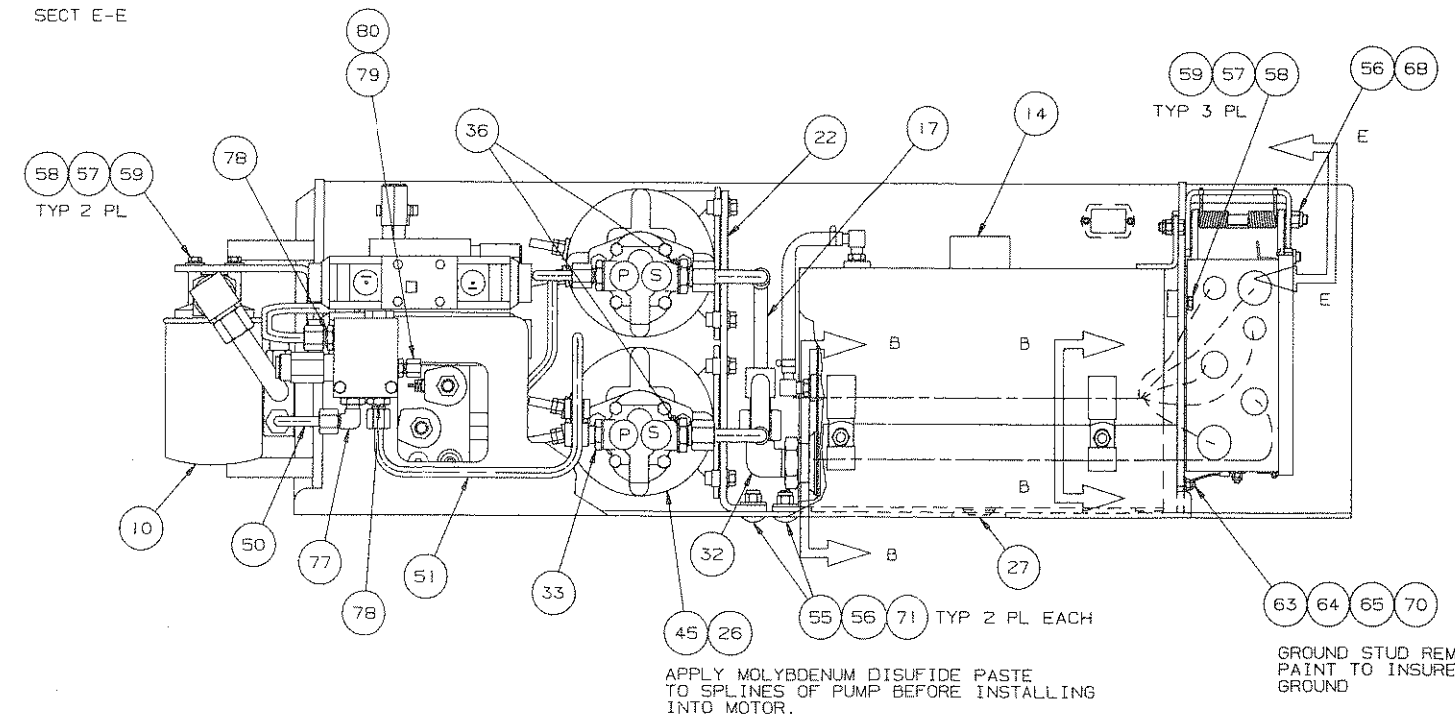
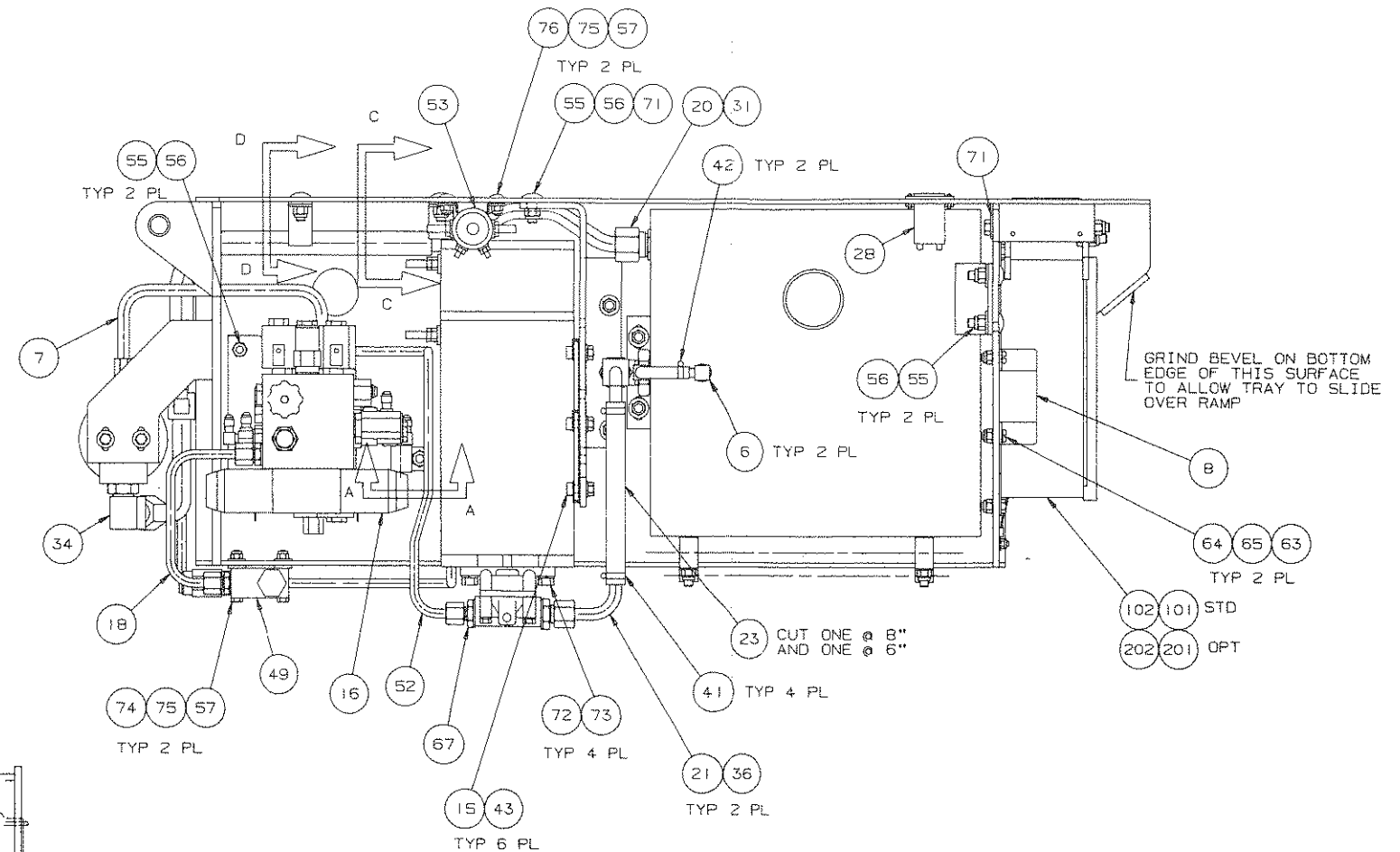
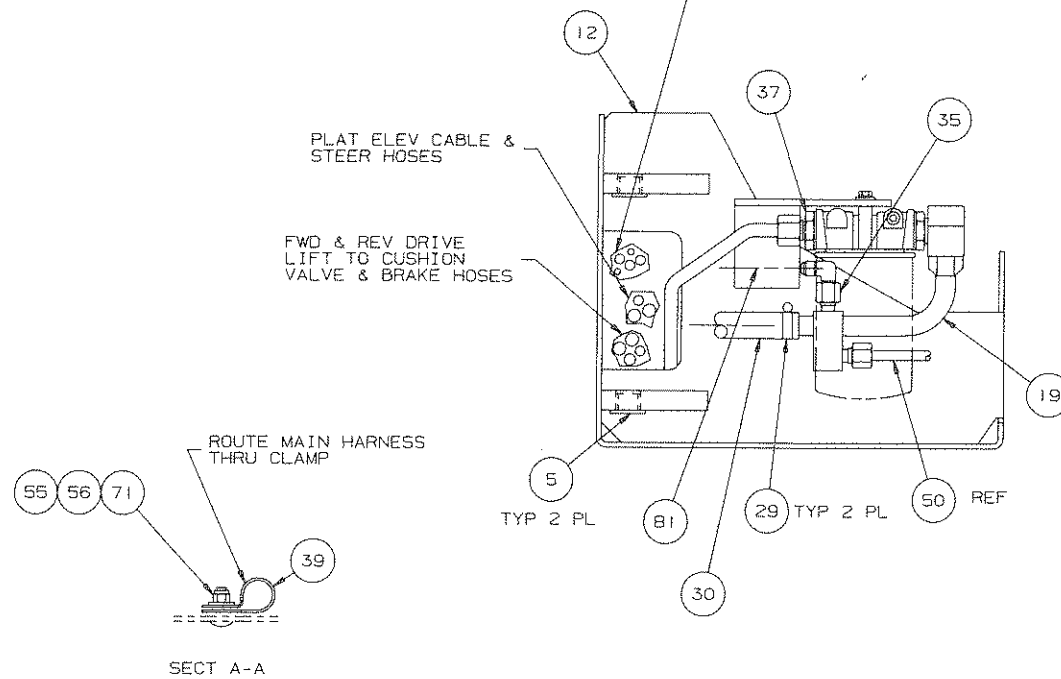
|      |        |                                            |   |
|------|--------|--------------------------------------------|---|
| 201. | 302445 | Cable assembly, quick disconnect . . . . . | 1 |
| 202. | 302442 | Ground control box assembly . . . . .      | 1 |

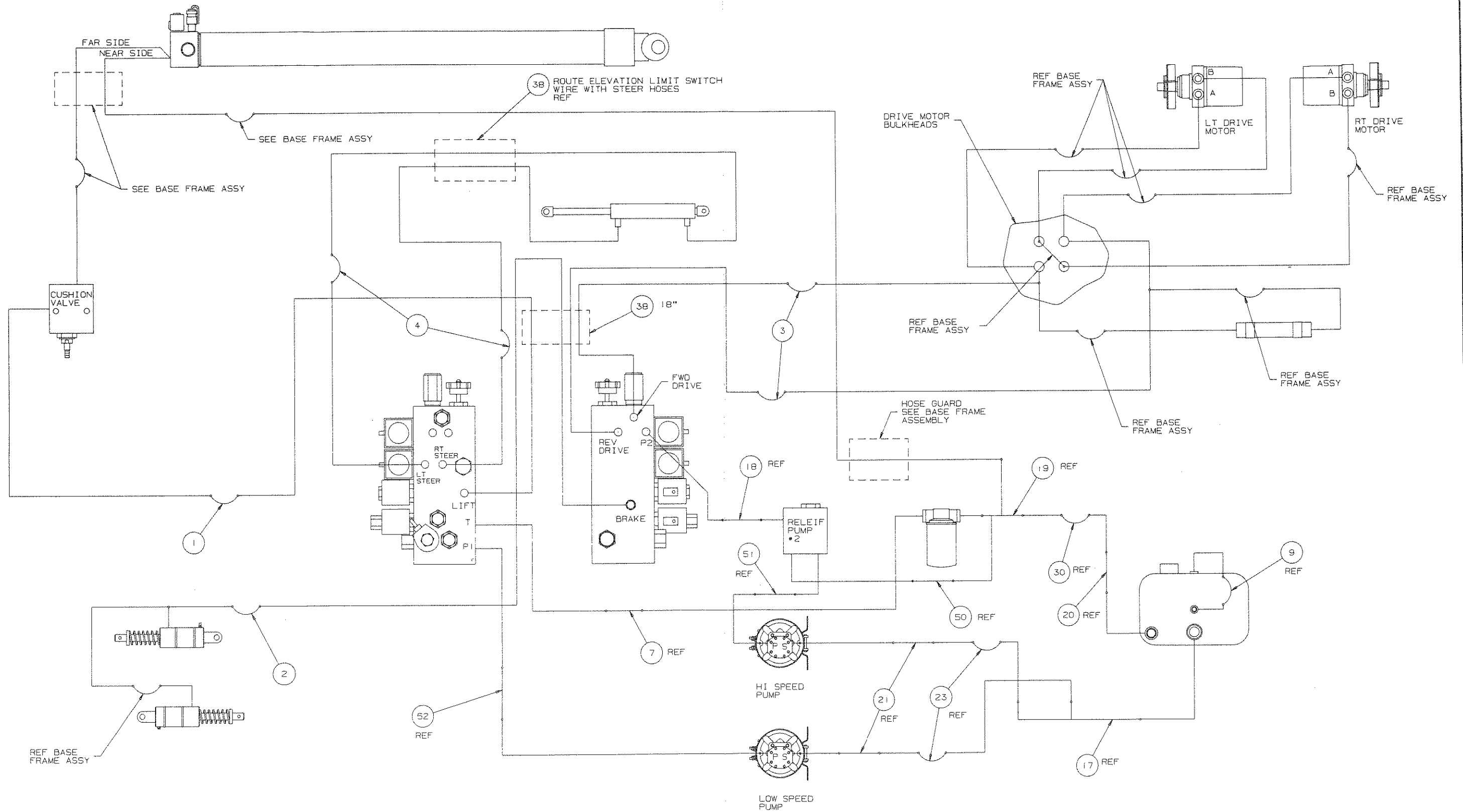


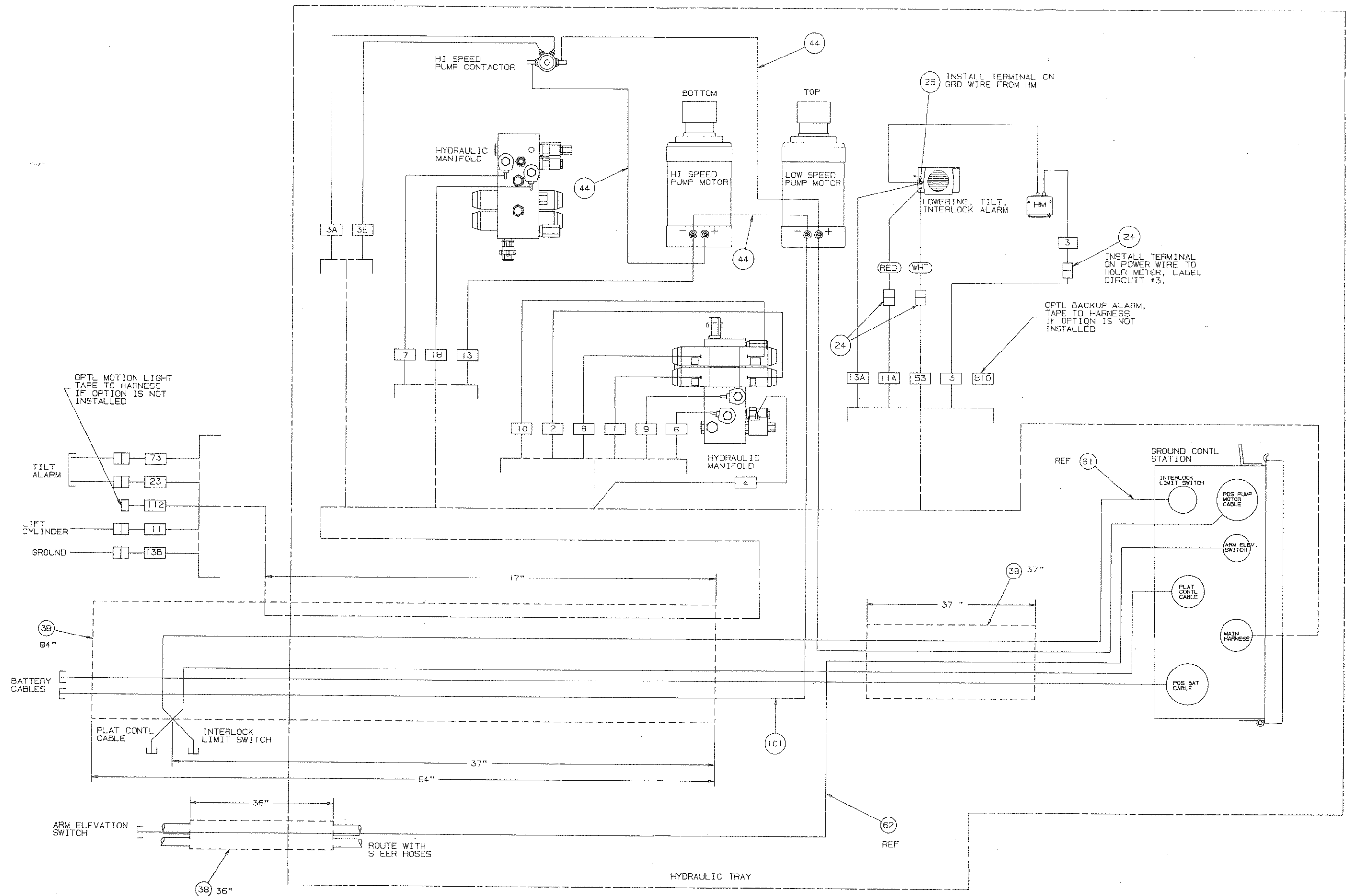
ROUTE ALL CABLES & WIRES  
EXITING GROUND CONTL BOX  
EXCEPT MAIN HARNESS THRU  
THIS CLAMP

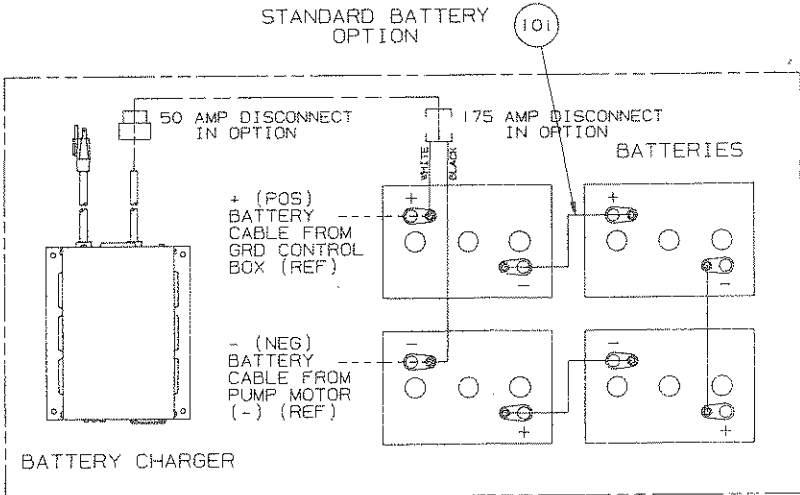
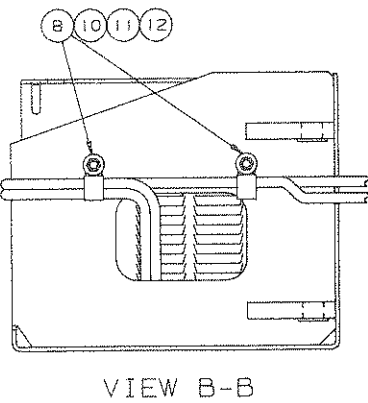
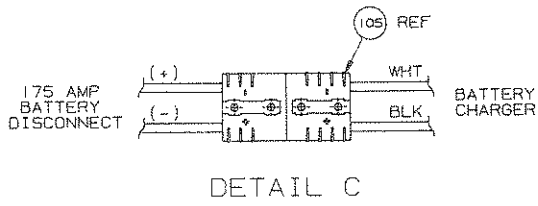
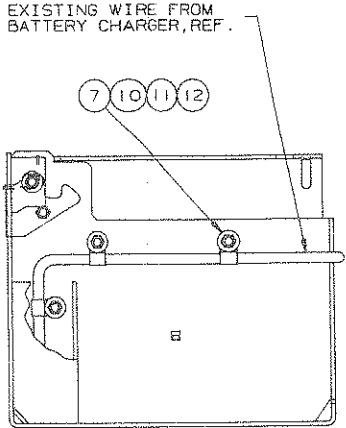
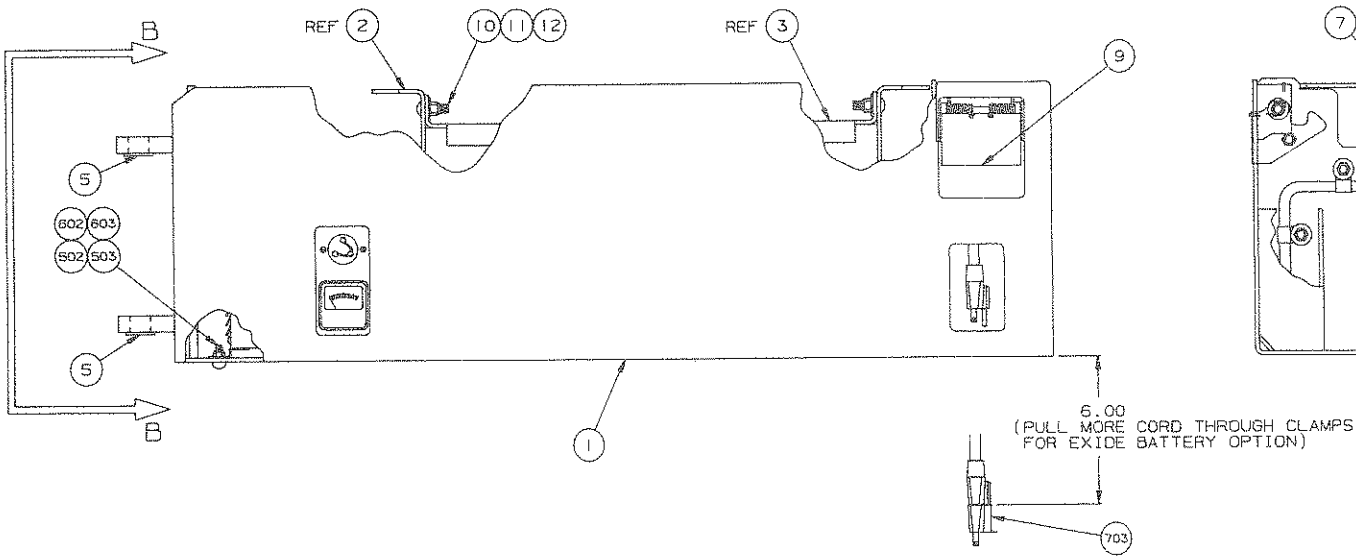
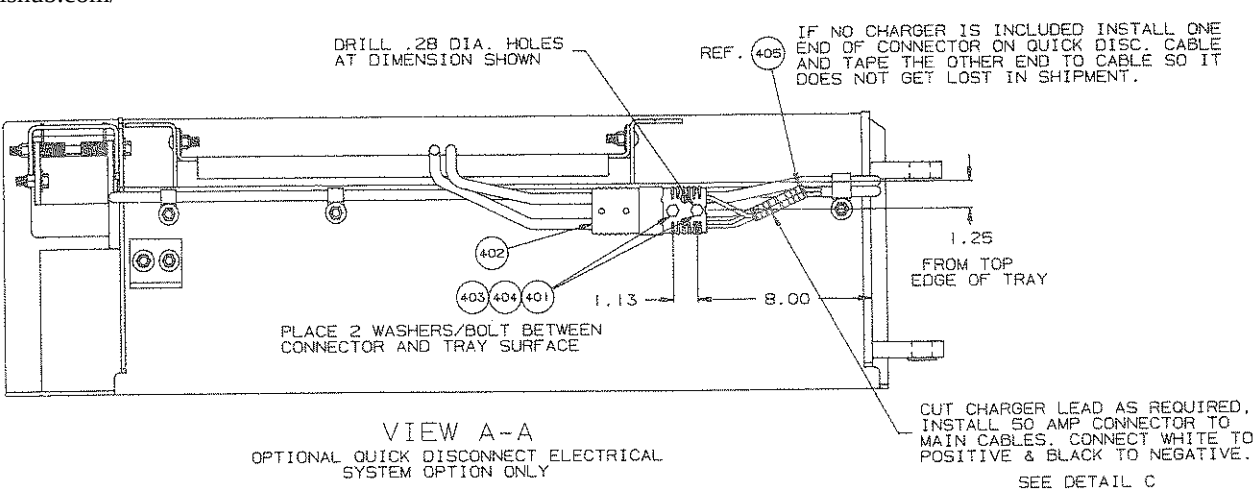
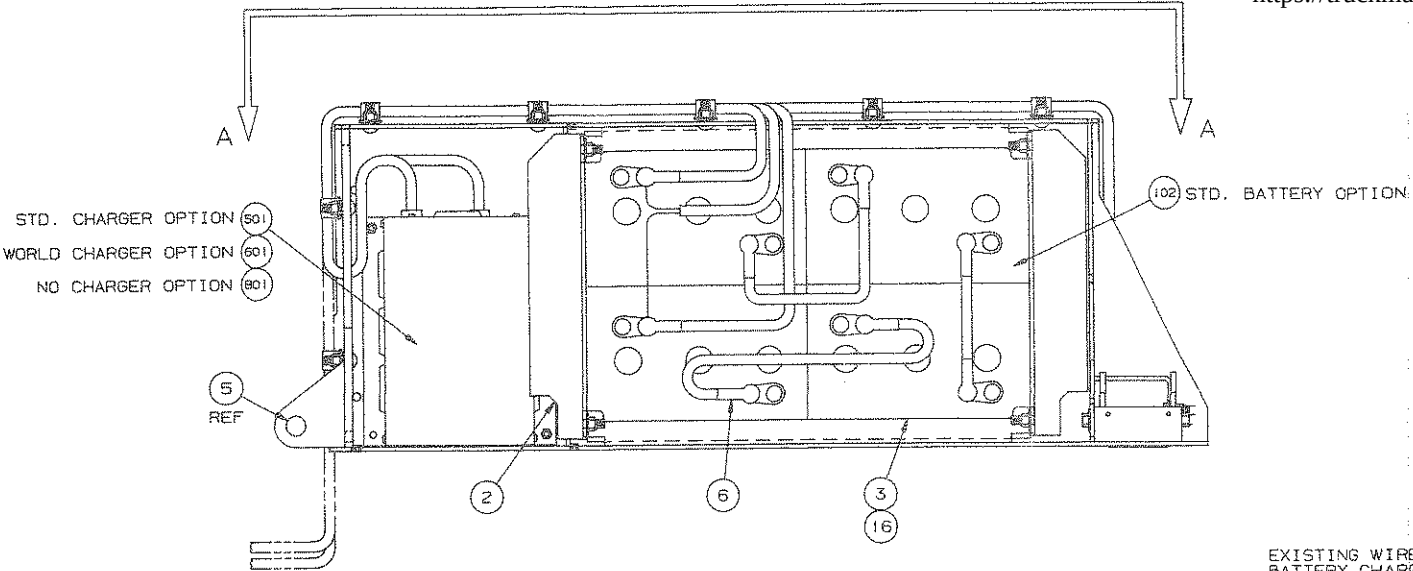


POS(+) & NEG(-) BAT CABLES,  
MAIN HARNESS EXITING TRAY,  
PLATFORM CONTROL CABLE &  
INTERLOCK SWITCH CABLE.

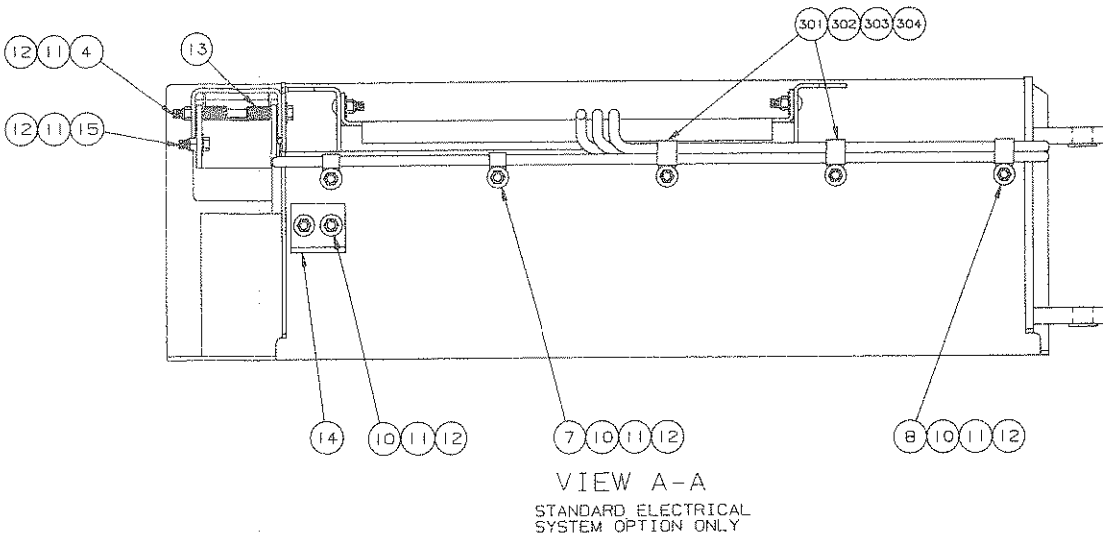








ELECTRICAL SCHEMATIC



VIEW A-A  
STANDARD ELECTRICAL  
SYSTEM OPTION ONLY

| Item | Part No | Description                                                    | Req |
|------|---------|----------------------------------------------------------------|-----|
| 0.   | 302456  | Battery tray assembly, complete . . . . .                      | 1   |
| 1.   | 302314  | Battery tray weldment . . . . .                                | 1   |
| 2.   | 302458  | Removable tray . . . . .                                       | 1   |
| 3.   | 302457  | Battery hold down angle . . . . .                              | 2   |
| 4.   |         | Capscrew $\frac{3}{8}$ -16 x 5 long hex head grade 5 . . . . . | 1   |
| 5.   | 300437  | Bearing, flanged . . . . .                                     | 2   |
| 6.   | 3040269 | Wire boot . . . . .                                            | 8   |
| 7.   | 5093000 | Clamp, Aeroquip #900729-01 . . . . .                           | 5   |
| 8.   | 5093008 | Clamp, Aeroquip #900729-8 . . . . .                            | 3   |
| 9.   | 302285  | Latch handle . . . . .                                         | 1   |
| 10.  |         | Carriage bolt $\frac{3}{8}$ -16 x 1 inch long . . . . .        | 14  |
| 11.  |         | Washer $\frac{3}{8}$ medium flat . . . . .                     | 16  |
| 12.  | 5560033 | Self locking nut $\frac{3}{8}$ -16 ESNA #22NE-066 . . . . .    | 16  |
| 13.  | 302257  | Latch spring . . . . .                                         | 1   |
| 14.  | 302473  | Tray ramp, battery . . . . .                                   | 1   |
| 15.  |         | Capscrew $\frac{3}{8}$ -16 x 1 long hex head grade 5 . . . . . | 1   |
| 16.  | 302547  | Angle, plastic battery insulator . . . . .                     | 2   |

#### Standard Battery Installation

|      |         |                                           |   |
|------|---------|-------------------------------------------|---|
| 101. | 584926  | Battery wire . . . . .                    | 3 |
| 102. | 3050027 | Battery, 6 volt DC - 240 amp/hr . . . . . | 4 |

#### Standard Electrical System or Japanese with Key Switch

|      |         |                                                             |   |
|------|---------|-------------------------------------------------------------|---|
| 301. |         | Washer $\frac{5}{16}$ wide steel flat . . . . .             | 2 |
| 302. | 5560033 | Self locking nut $\frac{3}{8}$ -16 ESNA #22NE-066 . . . . . | 2 |
| 303. | 5093008 | Clamp, Aeroquip #900729-8 . . . . .                         | 2 |
| 304. |         | Carriage bolt $\frac{3}{8}$ -16 x 1 inch long . . . . .     | 2 |

#### Optional Quick Disconnect Electrical System

|      |         |                                                                             |   |
|------|---------|-----------------------------------------------------------------------------|---|
| 401. | 5560004 | Self locking nut $\frac{1}{4}$ -20 ESNA #22NE-040 . . . . .                 | 2 |
| 402. | 302445  | Cable assembly, quick disconnect . . . . .                                  | 1 |
| 403. |         | Capscrew $\frac{1}{4}$ -20 x $1\frac{3}{4}$ long hex head grade 5 . . . . . | 2 |
| 404. |         | Washer $\frac{1}{4}$ medium flat . . . . .                                  | 6 |
| 405. | 583726  | Plug, connector 24 volt - 50 amp - red . . . . .                            | 2 |

#### Standard Battery Charger Installation

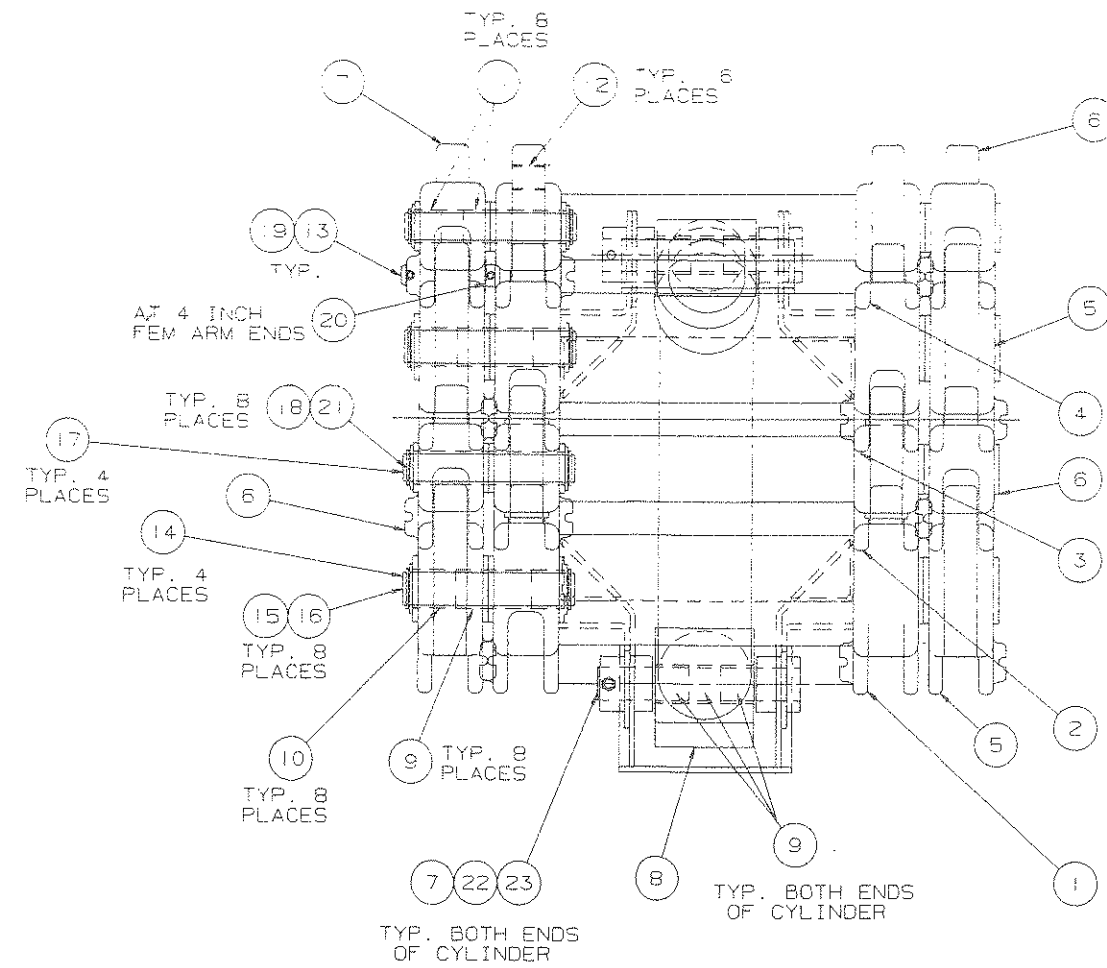
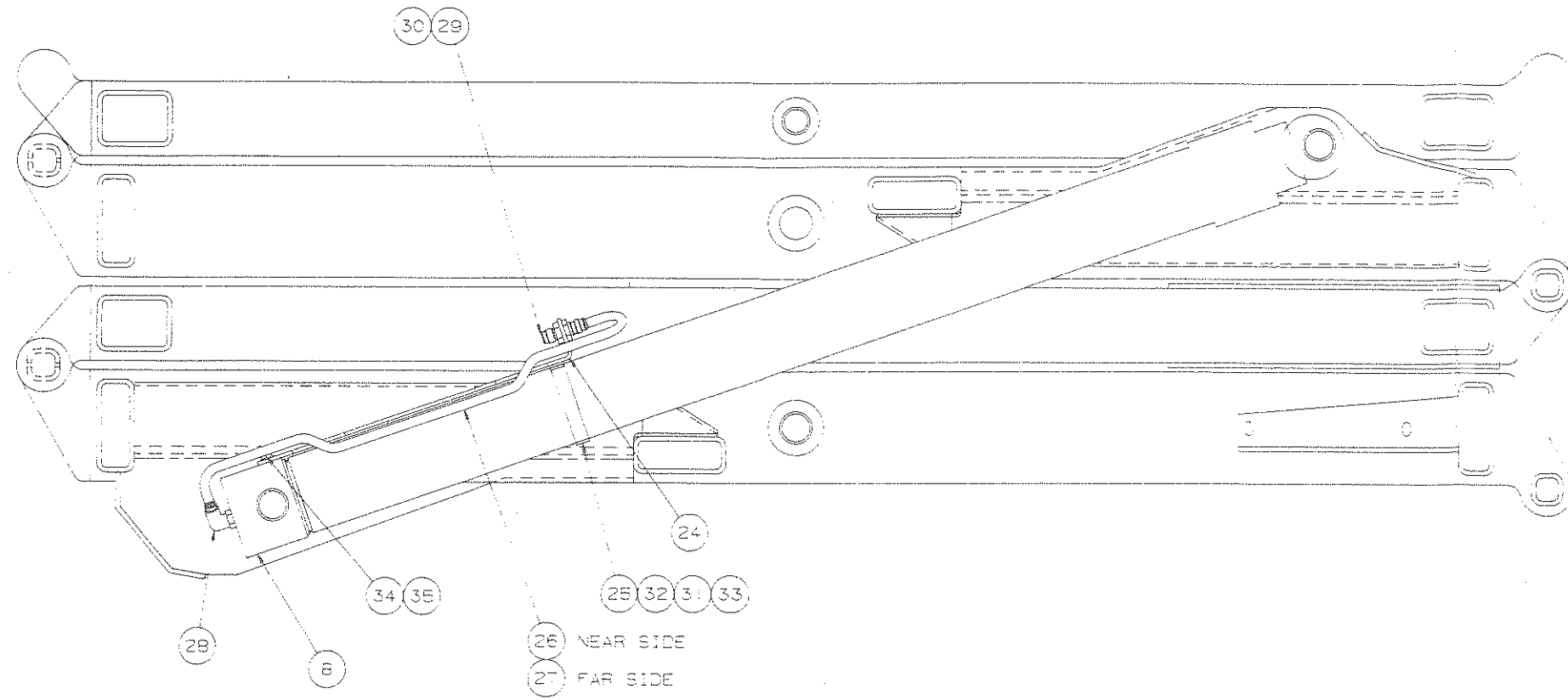
|      |         |                                                                     |   |
|------|---------|---------------------------------------------------------------------|---|
| 501. | 300594  | Battery charger, 24 VDC/25AMP - 120 VAC/60HZ . . . . .              | 1 |
| 502. |         | Carriage bolt $\frac{1}{4}$ -20 x $\frac{3}{4}$ inch long . . . . . | 2 |
| 503. | 5560004 | Self locking nut $\frac{1}{4}$ -20 ESNA #22NE-040 . . . . .         | 2 |

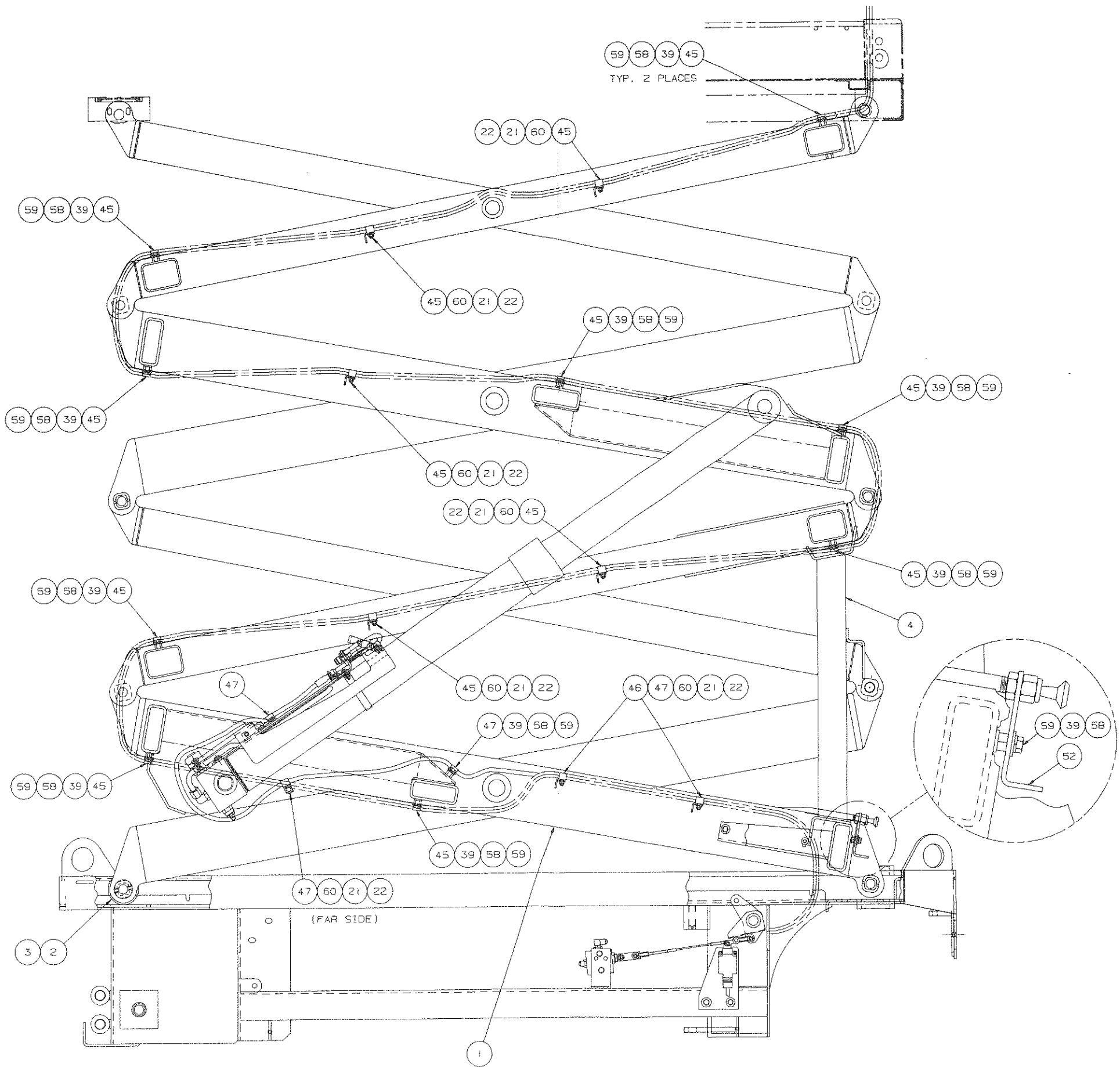
#### Optional World Battery Charger Installation

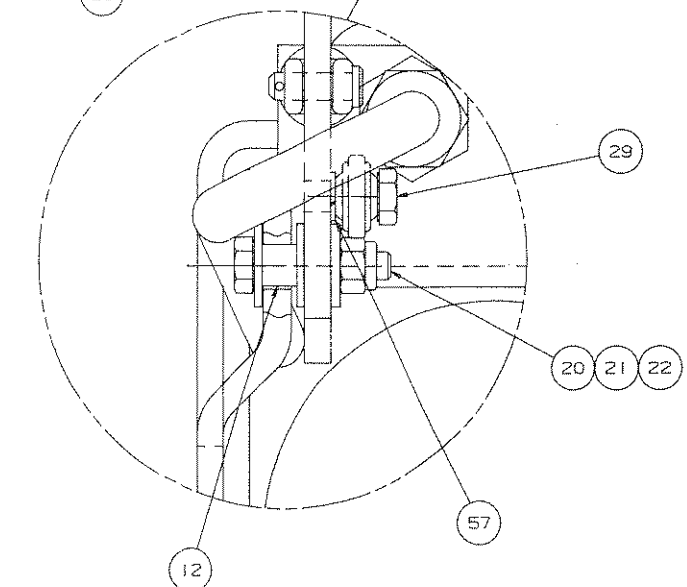
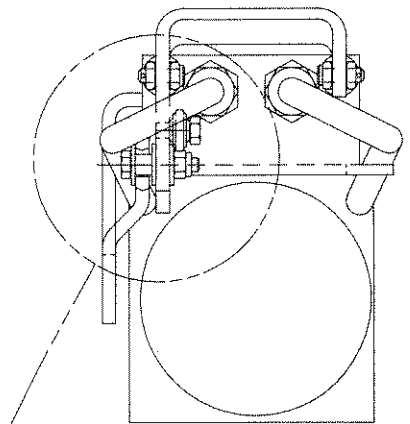
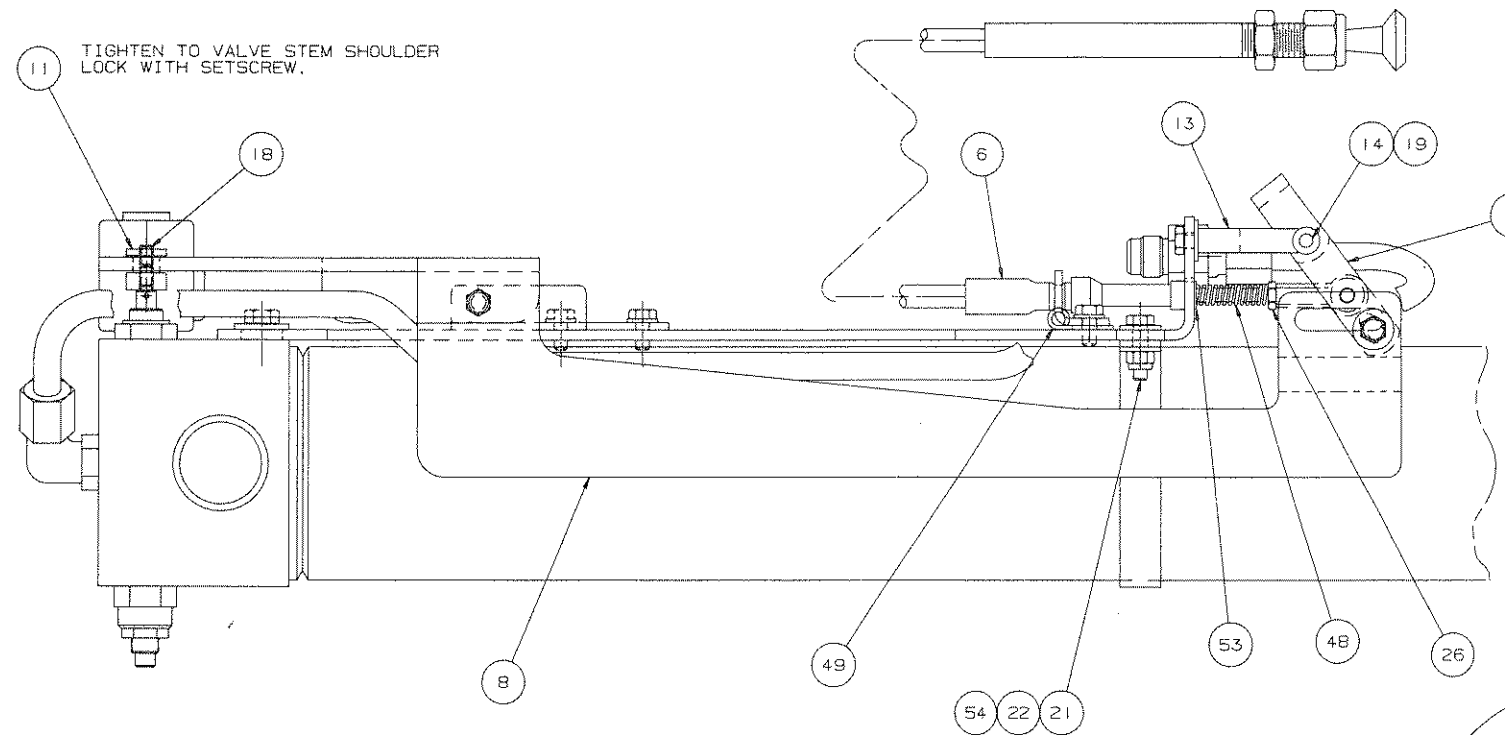
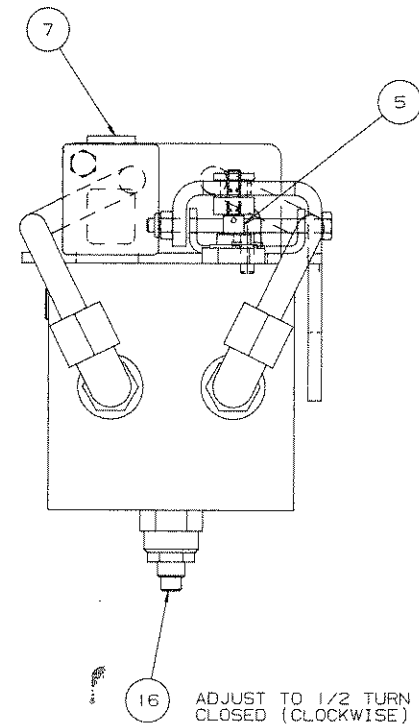
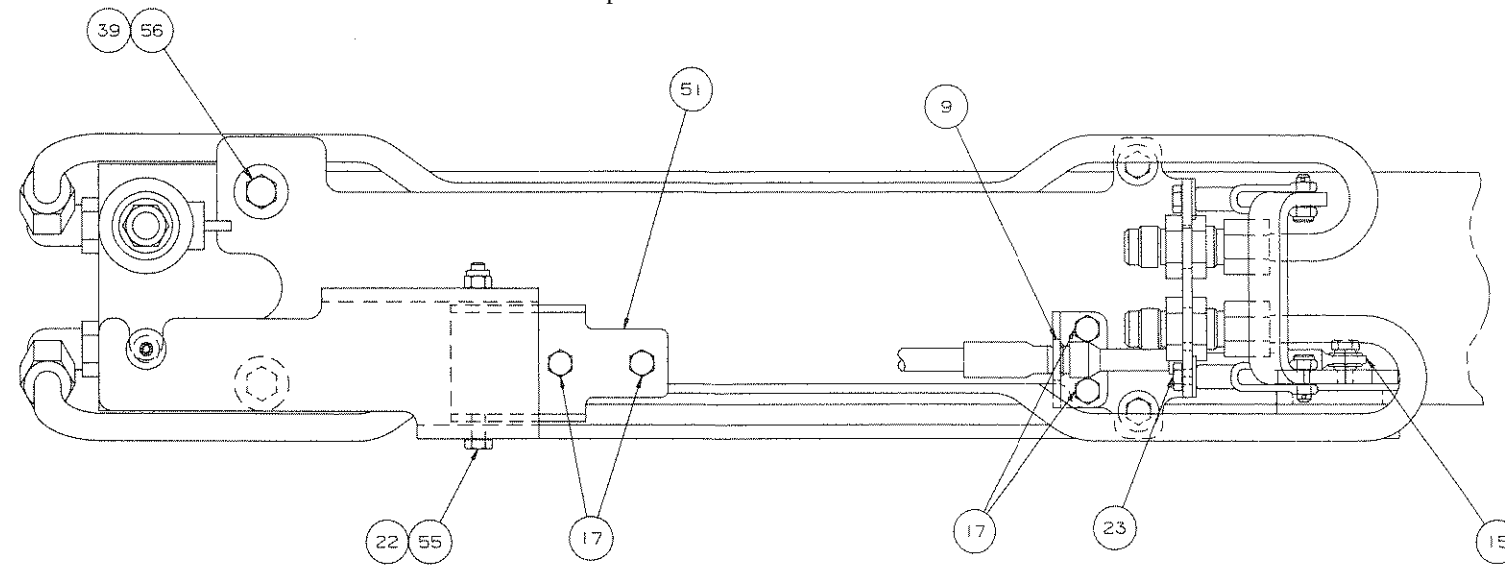
|      |         |                                                                     |   |
|------|---------|---------------------------------------------------------------------|---|
| 601. | 300755  | Battery charger, 24 VDC/20AMP - 50/60HZ . . . . .                   | 1 |
| 602. |         | Carriage bolt $\frac{1}{4}$ -20 x $\frac{3}{4}$ inch long . . . . . | 2 |
| 603. | 5560004 | Self locking nut $\frac{1}{4}$ -20 ESNA #22NE-040 . . . . .         | 2 |
| 703. | 301496  | Ground plug adapter . . . . .                                       | 1 |

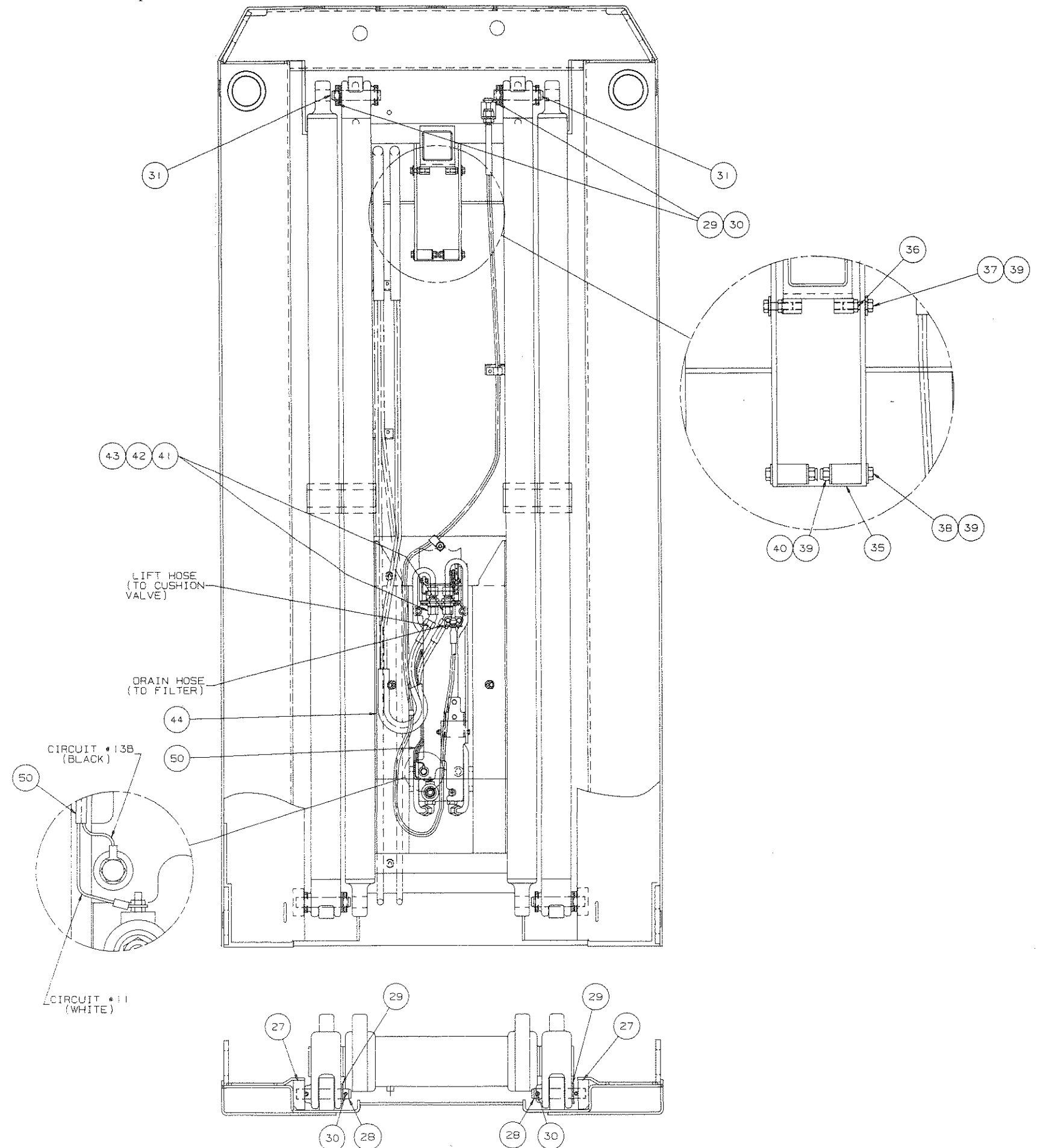
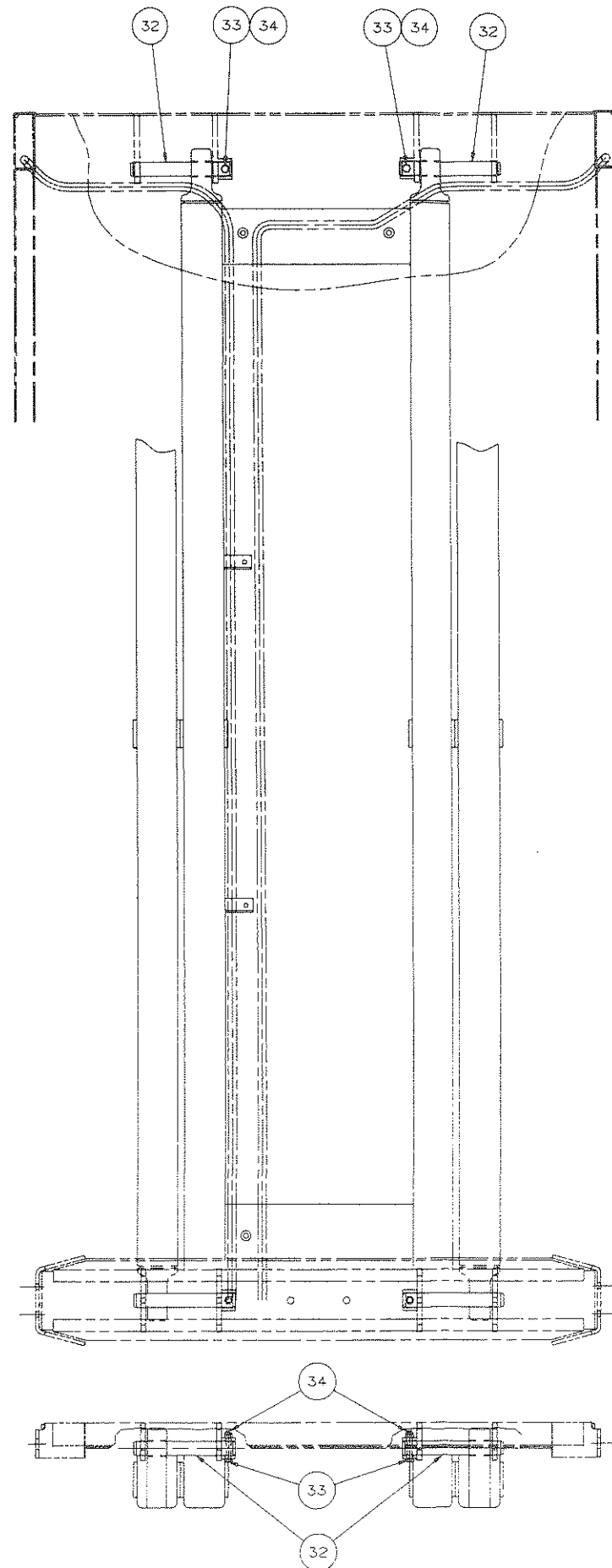
# SCISSOR ARMS ASSEMBLY

| Item | Part No | Description                                                           | Req |
|------|---------|-----------------------------------------------------------------------|-----|
| 0.   | 302327  | Scissor arms set assembly . . . . .                                   | REF |
| 1.   | 302288  | 1st inner arm weldment . . . . .                                      | 1   |
| 2.   | 302385  | 2nd inner arm weldment . . . . .                                      | 1   |
| 3.   | 302289  | 3rd inner arm weldment . . . . .                                      | 1   |
| 4.   | 300458  | 4th inner arm weldment . . . . .                                      | 1   |
| 5.   | 302287  | 6 x 3 basic arm . . . . .                                             | 4   |
| 6.   | 300451  | 4 x 3 basic arm . . . . .                                             | 4   |
| 7.   | 302317  | Pin, 1½ inch diameter lift cylinder . . . . .                         | 2   |
| 8.   | 302240  | Cylinder assembly, lift . . . . .                                     | 1   |
| 9.   | 561126  | Bearing, 1½ inch ID x 1¾ inch OD x 1½ inch long . . . . .             | 14  |
| 10.  | 2500016 | Bearing, 1½ inch ID x 1¾ inch OD x 1 inch long . . . . .              | 8   |
| 11.  | 2500035 | Bearing, 1¼ inch ID x 1½ inch OD x 1¼ inch long . . . . .             | 16  |
| 12.  | 561196  | Bearing, Garlock #16DU20 . . . . .                                    | 16  |
| 13.  | 570284  | Pin, arm end . . . . .                                                | 12  |
| 14.  | 302318  | Pin, 1½ inch diameter arm center . . . . .                            | 4   |
| 15.  | 302324  | Washer 1½ inch ID x 2¼ OD x 10 gauge thick . . . . .                  | 8   |
| 16.  | 302323  | Snap ring 1½ inch HD external . . . . .                               | 8   |
| 17.  | 300905  | Pin, 1½ inch diameter arm center . . . . .                            | 4   |
| 18.  | 5560252 | Machinery bushing, 1¼ inch ID x 2½ inch OD x 14 gauge thick . . . . . | 8   |
| 19.  |         | Roll pin . . . . .                                                    | 24  |
| 20.  |         | Washer 1 inch medium flat . . . . .                                   | 8   |
| 21.  | 300541  | Snap ring 1¼ inch HD external . . . . .                               | 8   |
| 22.  |         | Capscrew ¾-16 x 3 long hex head grade 5 plated . . . . .              | 2   |
| 23.  | 5560033 | Self locking nut ¾-16 ESNA #22NE-066 . . . . .                        | 2   |
| 24.  | 302321  | Bracket, lift cylinder tube . . . . .                                 | 1   |
| 25.  | 302322  | Strap, lift cylinder bracket . . . . .                                | 1   |
| 26.  | 302319  | Tube, right hand lift cylinder . . . . .                              | 1   |
| 27.  | 302320  | Tube, left hand lift cylinder . . . . .                               | 1   |
| 28.  | 5035306 | Elbow, 90° -8 SAE/-6 JIC . . . . .                                    | 2   |
| 29.  | 5034404 | Union, straight bulkhead -8 . . . . .                                 | 2   |
| 30.  | 5074404 | Locknut, bulkhead -8 . . . . .                                        | 2   |
| 31.  |         | Capscrew ¼-20 x ¾ long hex head grade 5 plated . . . . .              | 2   |
| 32.  |         | Washer ¼ medium flat . . . . .                                        | 2   |
| 33.  | 5560004 | Self locking nut ¼-20 ESNA #22NE-040 . . . . .                        | 2   |
| 34.  |         | Capscrew ¾-16 x 1 long hex head grade 5 plated . . . . .              | 2   |
| 35.  |         | Washer ¾ medium flat . . . . .                                        | 2   |









# SCISSOR ARMS INSTALLATION

<https://truckmanualshub.com/>

| Item | Part No | Description                                                    | Req |
|------|---------|----------------------------------------------------------------|-----|
| 1.   | 302327  | Scissor arm set assembly . . . . .                             | 1   |
| 2.   | 300519  | Roller, lower arm set . . . . .                                | 2   |
| 3.   | 561196  | Bearing, Garlock #16DU20 . . . . .                             | 2   |
| 4.   | 302539  | Safety Prop . . . . .                                          | 1   |
| 5.   | 300657  | Manual lowering cartridge valve . . . . .                      | 1   |
| 6.   | 300673  | manual lowering control cable . . . . .                        | 1   |
| 7.   | 300719  | Valve cartridge coil assembly . . . . .                        | 1   |
| 8.   | 302528  | Lowering valve lever . . . . .                                 | 1   |
| 9.   | 302529  | Lowering cable clip . . . . .                                  | 1   |
| 10.  | 302530  | Arm, lowering cable . . . . .                                  | 1   |
| 11.  | 302531  | Lowering valve cap nut . . . . .                               | 1   |
| 12.  | 302554  | Spacer 3/8 inch OD x .049 inch wall x 5/16 inch long . . . . . | 1   |
| 13.  | 2610001 | Yoke 1/4-28 female SAE . . . . .                               | 2   |
| 14.  | 2620001 | Clevis pin . . . . .                                           | 2   |
| 15.  | 2690004 | Rod end, 1/4-28 female with ball . . . . .                     | 1   |
| 16.  | 6010833 | Valve cartridge, adjustable flow control . . . . .             | 1   |
| 17.  |         | Self tapping screw 1/4-20 x 1/2 long . . . . .                 | 4   |
| 18.  |         | Set screw 1/4-20 x 3/8 long allen head . . . . .               | 1   |
| 19.  |         | Cotter pin 1/16 inch diameter x 1/2 inch long . . . . .        | 2   |
| 20.  |         | Capscrew 1/4-20 x 1 1/4 long hex head grade 5 plated . . . . . | 1   |
| 21.  |         | Washer 1/4 medium flat . . . . .                               | 17  |
| 22.  | 5560004 | Self locking nut 1/4-20 ESNA #22NE-040 . . . . .               | 13  |
| 23.  |         | Capscrew 1/4-28 x 3/4 long hex head grade 5 plated . . . . .   | 2   |
| 24.  |         | Roll pin 5/16 inch diameter x 1/2 inch long . . . . .          | 1   |
| 25.  |         | Capscrew 1/4-20 x 5/8 long hex head grade 5 plated . . . . .   | 1   |
| 26.  |         | Nut 1/4-28 hex jam . . . . .                                   | 1   |
| 27.  | 302516  | lower arms slider block . . . . .                              | 2   |
| 28.  | 302517  | Lower arm slider pin . . . . .                                 | 2   |
| 29.  | 986619  | Washer, shim . . . . .                                         | 4   |
| 30.  |         | Roll pin . . . . .                                             | 8   |
| 31.  | 570284  | Pin, end 4 7/8 inch long . . . . .                             | 2   |
| 32.  | 571364  | Pin, 1 inch diameter x 7 1/2 inch long . . . . .               | 4   |
| 33.  |         | Capscrew 5/16-18 x 2 long hex head grade 5 plated . . . . .    | 4   |
| 34.  | 5560031 | Self locking nut 5/16-18 ESNA #22NE-058 . . . . .              | 4   |
| 35.  | 302486  | Roller, sliding end rail . . . . .                             | 2   |
| 36.  |         | Nut 3/8-16 hex jam . . . . .                                   | 2   |
| 37.  |         | Capscrew 3/8-16 x 1 1/4 long hex head grade 5 plated . . . . . | 2   |
| 38.  |         | Capscrew 3/8-16 x 2 1/4 long hex head grade 5 plated . . . . . | 2   |
| 39.  |         | Washer 3/8 medium flat . . . . .                               | 20  |
| 40.  | 5560033 | Self locking nut 3/8-16 ESNA #22NE-066 . . . . .               | 2   |
| 41.  | 5036905 | Elbow 45° swivel nut -6 . . . . .                              | 2   |
| 42.  | 5063906 | Nut -8 . . . . .                                               | 2   |
| 43.  | 5064003 | Reducer -8/-6 JIC . . . . .                                    | 2   |
| 44.  | 5090034 | Sleeve, hose abrasion guard x 18 inch long . . . . .           | 1   |
| 45.  | 5093000 | Clamp, Aeroquip #900729-01 . . . . .                           | 15  |

**SCISSOR ARMS INSTALLATION**<https://truckmanualshub.com/>

| Item | Part No | Description                                                                        | Req |
|------|---------|------------------------------------------------------------------------------------|-----|
| 46.  | 5093008 | Clamp, Aeroquip #900729-8 . . . . .                                                | 3   |
| 47.  | 5093019 | Clamp, Aeroquip #900729-6 . . . . .                                                | 5   |
| 48.  | 0080415 | Compression spring . . . . .                                                       | 1   |
| 49.  | 302571  | Anchor, lowering cable . . . . .                                                   | 1   |
| 50.  | 302565  | Wire assembly, lift cylinder . . . . .                                             | 1   |
| 51.  | 302558  | Bracket, valve lever pivot . . . . .                                               | 1   |
| 52.  | 300683  | Emergency lowering cable bracket . . . . .                                         | 1   |
| 53.  |         | Washer $\frac{3}{16}$ medium flat . . . . .                                        | 1   |
| 54.  |         | Capscrew $\frac{1}{4}$ -20 x 1 long hex head grade 5 plated . . . . .              | 2   |
| 55.  |         | Capscrew $\frac{1}{4}$ -20 x $3\frac{1}{4}$ long hex head grade 5 plated . . . . . | 1   |
| 56.  |         | Capscrew $\frac{3}{8}$ -16 x $\frac{3}{4}$ long hex head grade 5 plated . . . . .  | 2   |
| 57.  |         | Washer $\frac{1}{4}$ medium lock . . . . .                                         | 1   |
| 58.  |         | Washer $\frac{3}{8}$ medium lock . . . . .                                         | 12  |
| 59.  |         | Capscrew $\frac{3}{8}$ -16 x $\frac{5}{8}$ long hex head grade 5 plated . . . . .  | 12  |
| 60.  |         | Capscrew $\frac{1}{4}$ -20 x $\frac{3}{4}$ long hex head grade 5 plated . . . . .  | 8   |

# PLATFORM INSTALLATION, STANDARD RAILS

| Item | Part No | Description                                                                               | Req |
|------|---------|-------------------------------------------------------------------------------------------|-----|
| 1.   | 300860  | Deck latch assembly . . . . .                                                             | 1   |
| 2.   | 986309  | Washer special 1 $\frac{7}{8}$ inch OD x $\frac{3}{4}$ inch ID x 11 gauge thick . . . . . | 12  |
| 3.   | 302304  | Slide pad, rollout . . . . .                                                              | 1   |
| 4.   | 302305  | Nut tee $\frac{5}{16}$ -18 round propeller . . . . .                                      | 6   |
| 5.   | 302306  | Screw flanged $\frac{5}{16}$ -18 x $\frac{3}{8}$ long . . . . .                           | 6   |
| 6.   | 302337  | Platform weldment . . . . .                                                               | 1   |
| 7.   | 302563  | Detent stop, front rollout . . . . .                                                      | 1   |
| 8.   | 302564  | Detent stop, rear rollout . . . . .                                                       | 1   |
| 9.   | 302480  | Pin detent assembly . . . . .                                                             | 2   |
| 10.  | 302486  | Roller, sliding end rail . . . . .                                                        | 4   |
| 11.  | 302503  | End rail . . . . .                                                                        | 1   |
| 12.  | 302509  | Guide bracket, rollout deck . . . . .                                                     | 2   |
| 13.  | 302388  | Rollout deck weldment . . . . .                                                           | 1   |
| 14.  | 302389  | Rollout railing weldment . . . . .                                                        | 1   |
| 15.  | 302417  | Railing, right hand side . . . . .                                                        | 1   |
| 16.  | 302418  | Railing, left hand side . . . . .                                                         | 1   |
| 17.  | 438706  | Plastic hole plug $\frac{13}{16}$ inch diameter . . . . .                                 | 1   |
| 18.  | 468886  | Plastic end-cap - 1 $\frac{1}{4}$ inch square . . . . .                                   | 12  |
| 19.  | 483544  | Wear pad . . . . .                                                                        | 12  |
| 20.  | 583326  | Roller . . . . .                                                                          | 4   |
| 21.  | 583406  | Hole plug 2 inch diameter . . . . .                                                       | 4   |
| 22.  | 591274  | Stop bar, rear . . . . .                                                                  | 2   |
| 23.  | 592114  | Slider mount . . . . .                                                                    | 4   |
| 24.  |         | Washer 1 $\frac{1}{4}$ ID x 2 OD x 14 gauge thick . . . . .                               | 4   |
| 25.  | 592254  | Shim, guide bracket . . . . .                                                             | 4   |
| 26.  |         | Capscrew $\frac{3}{4}$ -10 x 1 $\frac{3}{4}$ long hex head grade 5 . . . . .              | 4   |
| 27.  |         | Washer $\frac{3}{4}$ medium lock . . . . .                                                | 4   |
| 28.  |         | Carriage bolt $\frac{1}{4}$ -20 x 1 inch long . . . . .                                   | 4   |
| 29.  | 5560004 | Self locking nut $\frac{1}{4}$ -20 ESNA #22NE-040 . . . . .                               | 7   |
| 30.  |         | Carriage bolt $\frac{3}{8}$ -16 x 1 long hex head grade 5 . . . . .                       | 4   |
| 31.  | 5560033 | Self locking nut $\frac{3}{8}$ -16 ESNA #22NE-066 . . . . .                               | 34  |
| 32.  |         | Capscrew $\frac{1}{4}$ -20 x 1 $\frac{3}{4}$ long hex head grade 5 . . . . .              | 3   |
| 33.  |         | Washer $\frac{1}{4}$ medium flat . . . . .                                                | 3   |
| 34.  |         | Capscrew $\frac{3}{8}$ -16 x 1 $\frac{3}{4}$ long hex head grade 5 . . . . .              | 6   |
| 35.  |         | Capscrew $\frac{3}{8}$ -16 x 2 long hex head grade 5 . . . . .                            | 8   |
| 36.  |         | Capscrew $\frac{3}{8}$ -16 x 2 $\frac{1}{4}$ long hex head grade 5 . . . . .              | 2   |
| 37.  |         | Washer $\frac{5}{16}$ medium flat . . . . .                                               | 10  |
| 38.  |         | Capscrew $\frac{3}{8}$ -16 x 2 $\frac{1}{2}$ long hex head grade 5 . . . . .              | 8   |
| 39.  |         | Capscrew $\frac{3}{8}$ -16 x $\frac{3}{4}$ long hex head grade 5 . . . . .                | 4   |
| 40.  | 302271  | Slider . . . . .                                                                          | 1   |
| 41.  | 302474  | Slide pad . . . . .                                                                       | 2   |
| 42.  | 302475  | Slide pad mount . . . . .                                                                 | 2   |
| 43.  | 5093002 | Clamp, Aeroquip #900729-2 . . . . .                                                       | 2   |
| 44.  |         | Capscrew $\frac{5}{16}$ -18 x $\frac{7}{8}$ long hex head grade 5 . . . . .               | 4   |

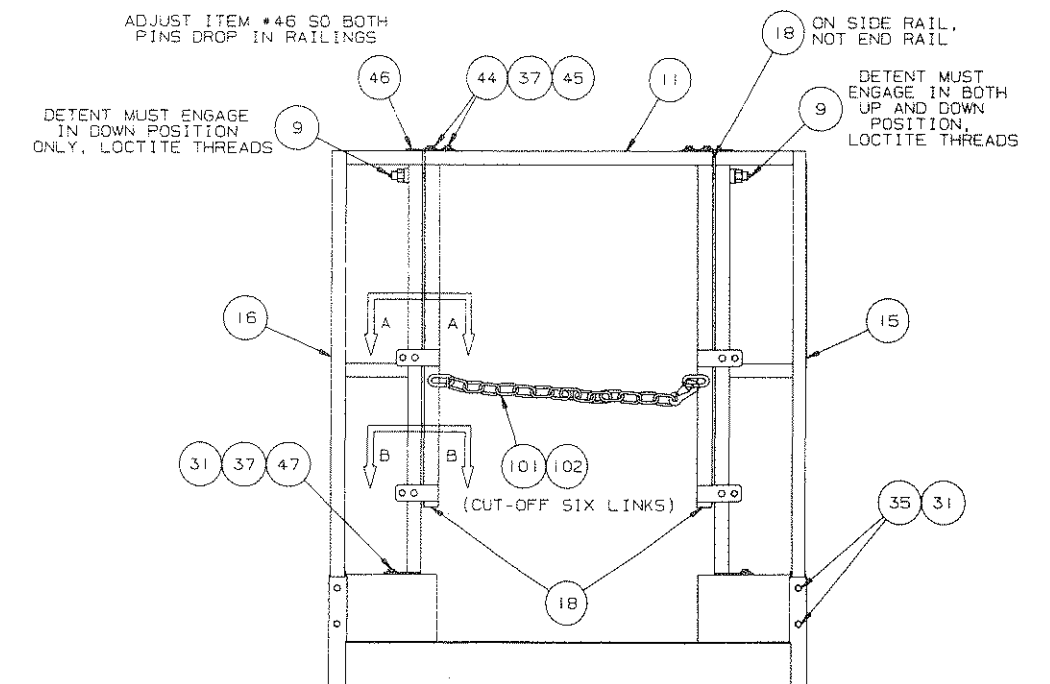
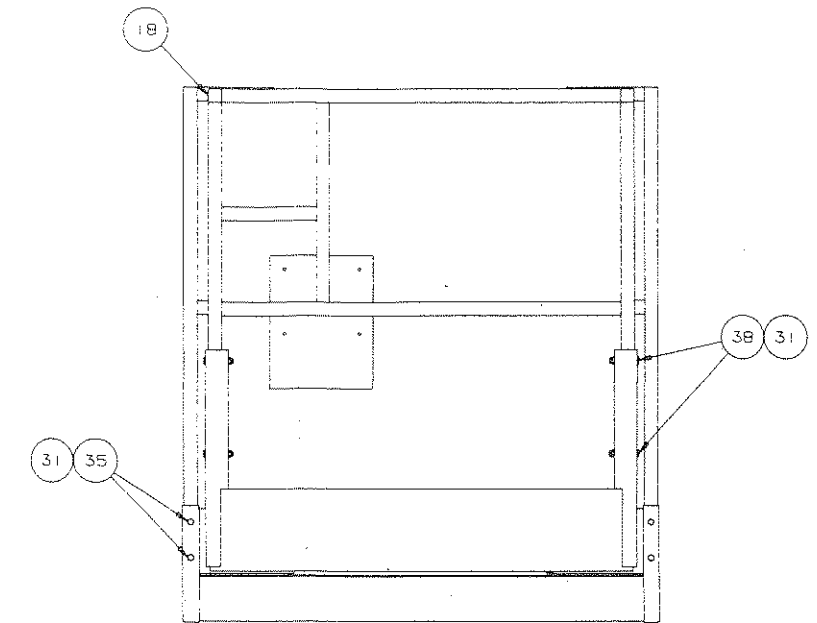
# PLATFORM INSTALLATION STANDARD RAILS

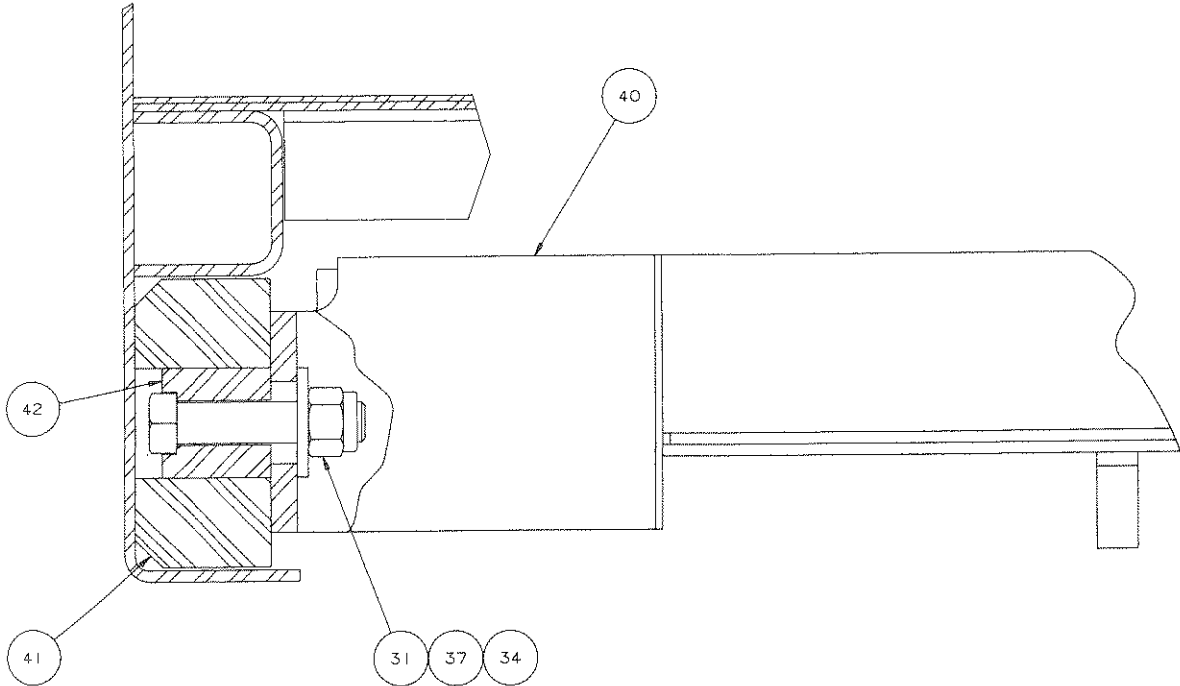
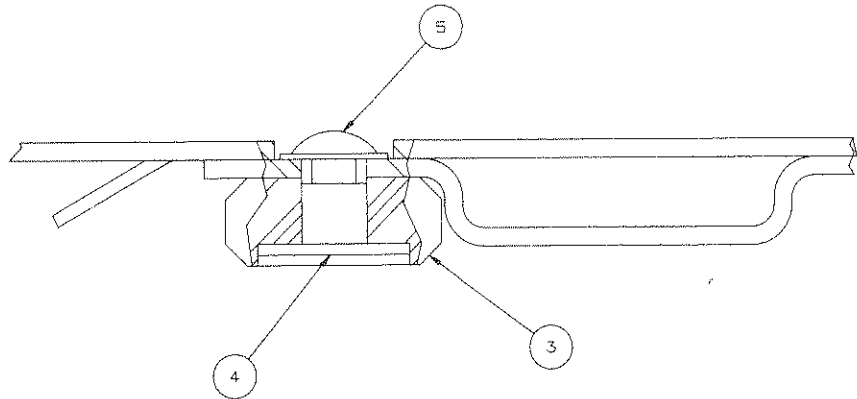
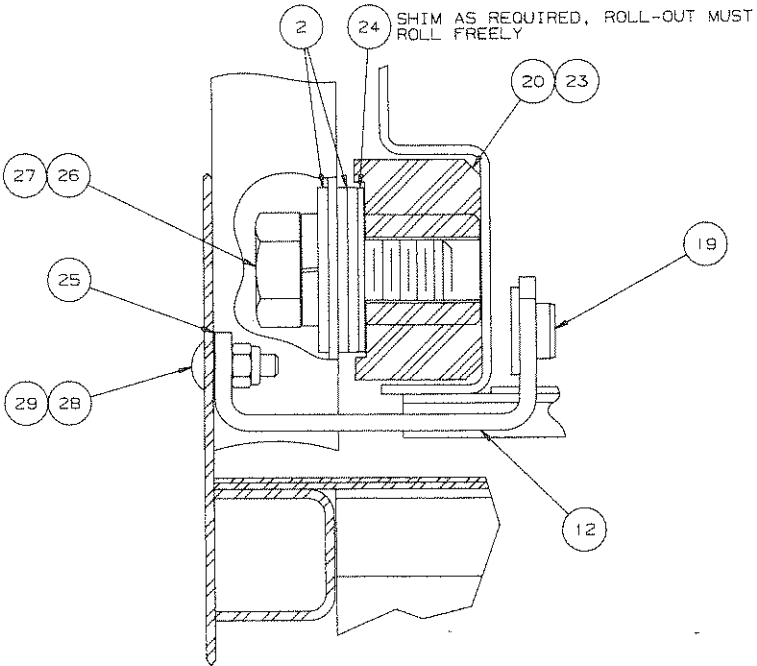
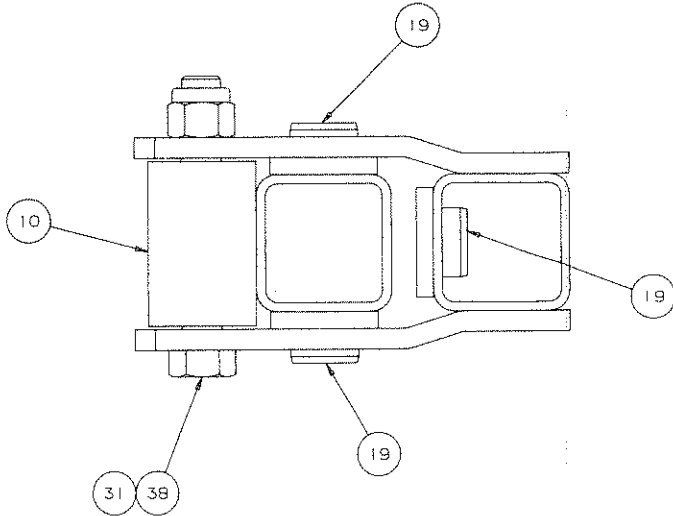
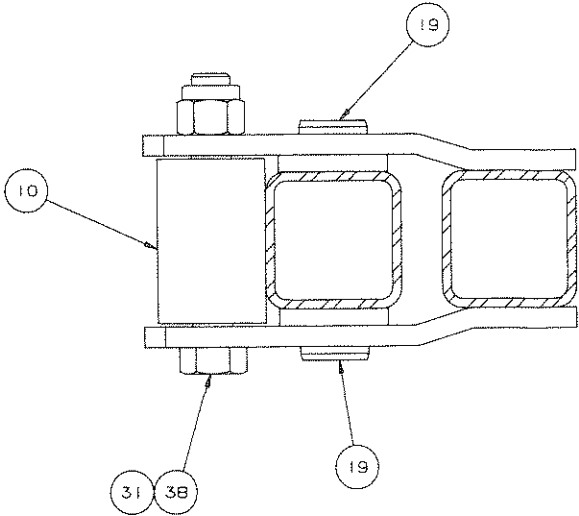
<https://truckmanualshub.com/>

| Item | Part No | Description                                                                | Req |
|------|---------|----------------------------------------------------------------------------|-----|
| 45.  | 5560031 | Self locking nut $\frac{5}{16}$ -18 ESNA #22NE-058 . . . . .               | 4   |
| 46.  | 302589  | Sliding end rail bracket . . . . .                                         | 2   |
| 47.  |         | Capscrew $\frac{3}{8}$ -16 x $\frac{7}{8}$ long hex head grade 5 . . . . . | 2   |

## STANDARD ENTRY CHAIN PARTS ONLY

|      |        |                                   |   |
|------|--------|-----------------------------------|---|
| 101. | 458556 | Chain assembly, 19 link . . . . . | 1 |
| 102. | 301479 | Threaded connector link . . . . . | 1 |





\* ADJUST TO PROVIDE CLEARANCE AS SHOWN  
AND TORQUE TO 25 FT. LBS.

# PLATFORM INSTALLATION, SWING DOWN RAILS

<https://truckmanualshub.com/>

| Item | Part No | Description                                                       | Req |
|------|---------|-------------------------------------------------------------------|-----|
| 1.   | 3020508 | Decal, mounting plate . . . . .                                   | 1   |
| 2.   | 300860  | Deck latch assembly . . . . .                                     | 1   |
| 3.   | 986309  | Special washer 1 7/8 OD x 3/4 ID x 11 gauge thick . . . . .       | 12  |
| 4.   | 302304  | Slide pad, rollout . . . . .                                      | 1   |
| 5.   | 302305  | Nut tee 5/16-18 round propeller . . . . .                         | 6   |
| 6.   | 302306  | Screw 5/16-18 x 3/8 long . . . . .                                | 6   |
| 7.   | 302337  | Platform weldment . . . . .                                       | 1   |
| 8.   | 302563  | Detent stop, front rollout . . . . .                              | 1   |
| 9.   | 302564  | Detent stop, rear rollout . . . . .                               | 1   |
| 10.  | 302557  | Rollout deck weldment . . . . .                                   | 1   |
| 11.  | 302404  | Link, rollout retractable railing . . . . .                       | 4   |
| 12.  | 302411  | Link, main deck retractable railing . . . . .                     | 4   |
| 13.  | 302480  | Pin detent assembly . . . . .                                     | 2   |
| 14.  | 302486  | Roller, sliding end rail . . . . .                                | 4   |
| 15.  | 302499  | Retractable rail, right hand . . . . .                            | 1   |
| 16.  | 302500  | Retractable rail, left hand . . . . .                             | 1   |
| 17.  | 302501  | Rail pivot bracket, right hand . . . . .                          | 1   |
| 18.  | 302502  | Rail pivot bracket, left hand . . . . .                           | 1   |
| 19.  | 302503  | End rail, retractable railing . . . . .                           | 1   |
| 20.  | 302504  | Rollout, retractable railing . . . . .                            | 1   |
| 21.  | 302505  | Railing pivot bracket, left hand . . . . .                        | 1   |
| 22.  | 302506  | Railing pivot bracket, right hand . . . . .                       | 1   |
| 23.  | 302507  | Rollout detent bracket . . . . .                                  | 1   |
| 24.  | 302509  | Guide bracket, rollout deck . . . . .                             | 2   |
| 25.  | 302518  | Pivot lug, retractable railing . . . . .                          | 2   |
| 26.  | 302544  | Snapper pin with lanyard 3/8 diameter x 2 1/4 inch long . . . . . | 4   |
| 27.  | 438706  | Plastic hole plug 1 3/16 inch diameter . . . . .                  | 1   |
| 28.  | 455014  | Pin-detent assembly . . . . .                                     | 4   |
| 29.  | 468886  | Plastic end cap - 1 1/4 inch square . . . . .                     | 22  |
| 30.  | 483544  | Wear pad . . . . .                                                | 12  |
| 31.  | 583326  | Roller . . . . .                                                  | 4   |
| 32.  | 583406  | Hole plug 2 inch diameter . . . . .                               | 4   |
| 33.  | 591274  | Stop bar, rear . . . . .                                          | 2   |
| 34.  | 592114  | Slider mount . . . . .                                            | 4   |
| 35.  |         | Washer 2 OD x 1 1/4 ID x 14 gauge thick . . . . .                 | 4   |
| 36.  | 592252  | Shim, guide bracket . . . . .                                     | 4   |
| 37.  |         | Capscrew 3/4-16 x 1 3/4 long hex head grade 5 . . . . .           | 4   |
| 38.  |         | Washer 3/4 medium lock . . . . .                                  | 4   |
| 39.  |         | Carriage bolt 1/4-20 x 1 inch long . . . . .                      | 4   |
| 40.  | 5560004 | Self locking nut 1/4-20 ESNA #22NE-040 . . . . .                  | 10  |
| 41.  |         | Carriage bolt 3/8-16 x 1 inch long . . . . .                      | 8   |
| 42.  | 5560033 | Self locking nut 3/8-16 ESNA #22NE-066 . . . . .                  | 56  |
| 43.  |         | Capscrew 1/4-20 x 3/4 long hex head grade 5 . . . . .             | 2   |
| 44.  |         | Capscrew 1/4-20 x 1 3/4 long hex head grade 5 . . . . .           | 4   |
| 45.  |         | Washer 1/4 medium flat . . . . .                                  | 6   |
| 46.  |         | Capscrew 3/8-16 x 1 3/4 long hex head grade 5 . . . . .           | 4   |
| 47.  |         | Capscrew 3/8-16 x 2 long hex head grade 5 . . . . .               | 4   |
| 48.  |         | Capscrew 3/8-16 x 2 1/4 long hex head grade 5 . . . . .           | 14  |
| 49.  |         | Washer 5/16 medium flat . . . . .                                 | 38  |
| 50.  |         | Capscrew 3/8-16 x 2 1/2 long hex head grade 5 . . . . .           | 8   |

# PLATFORM INSTALLATION, SWING DOWN RAILS

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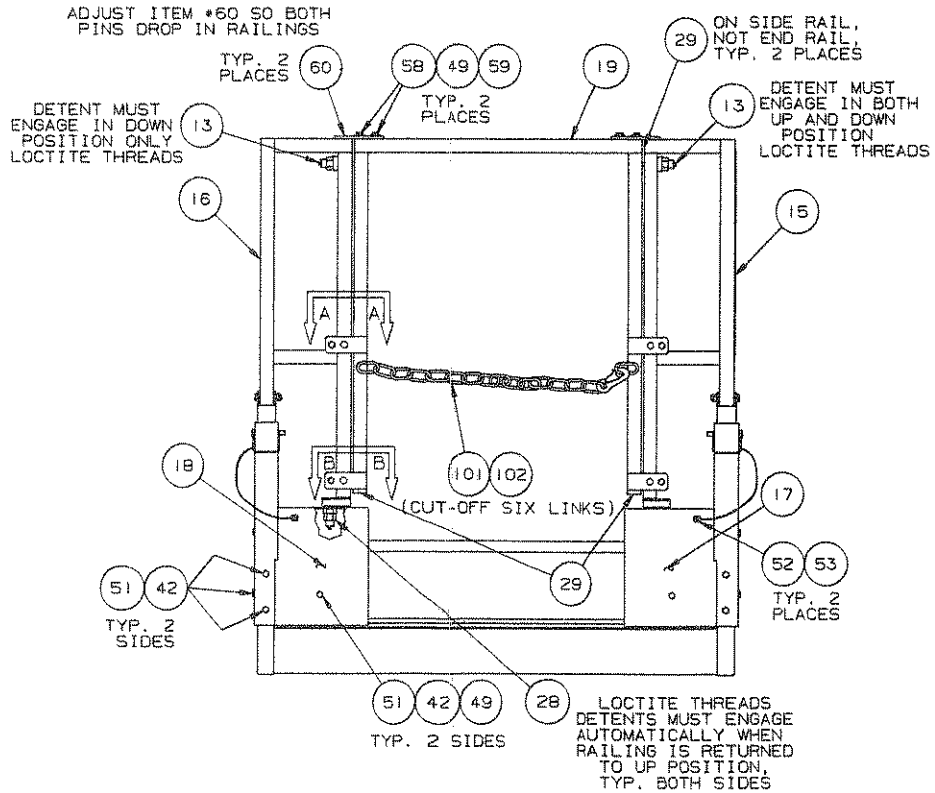
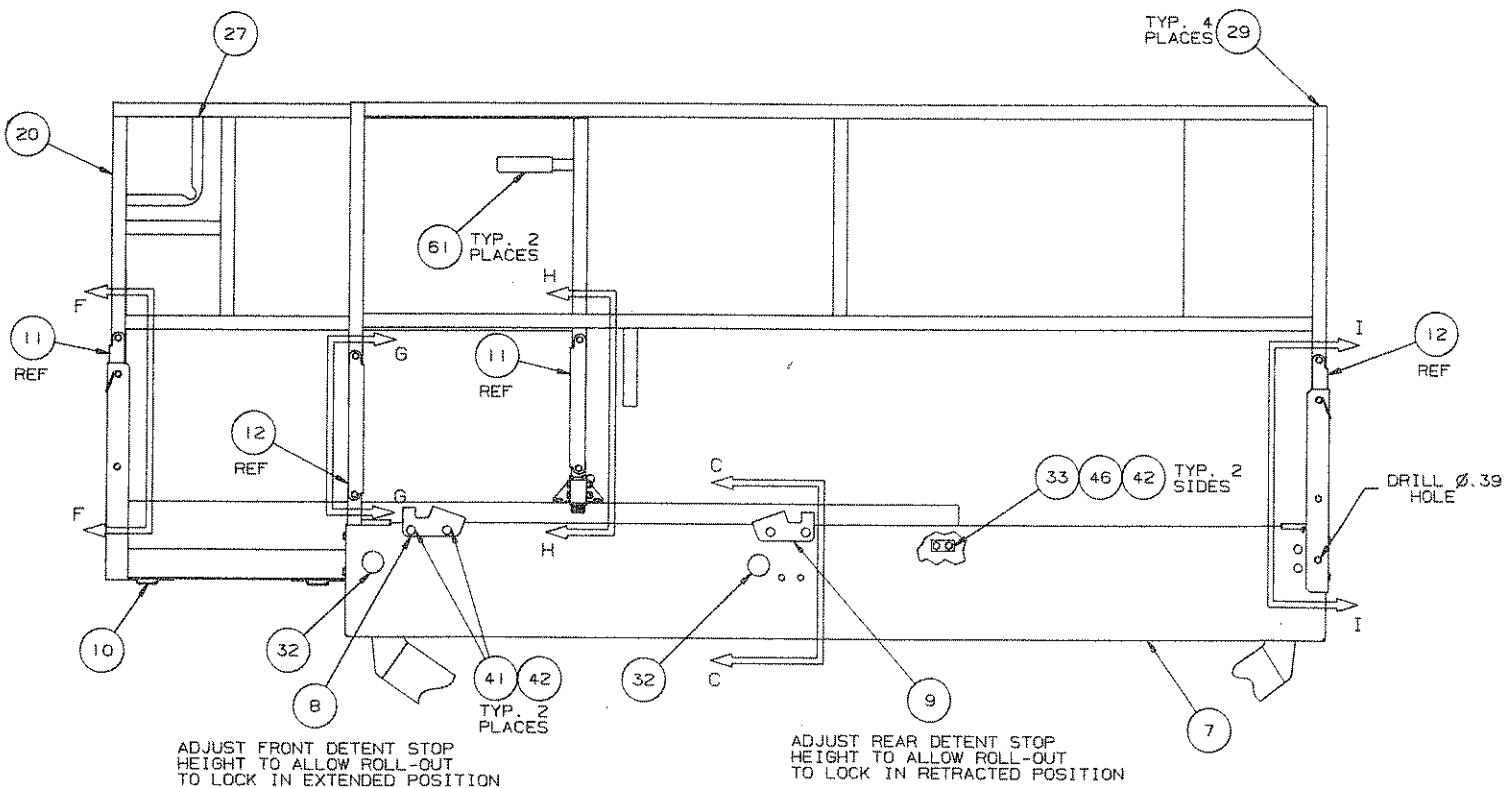
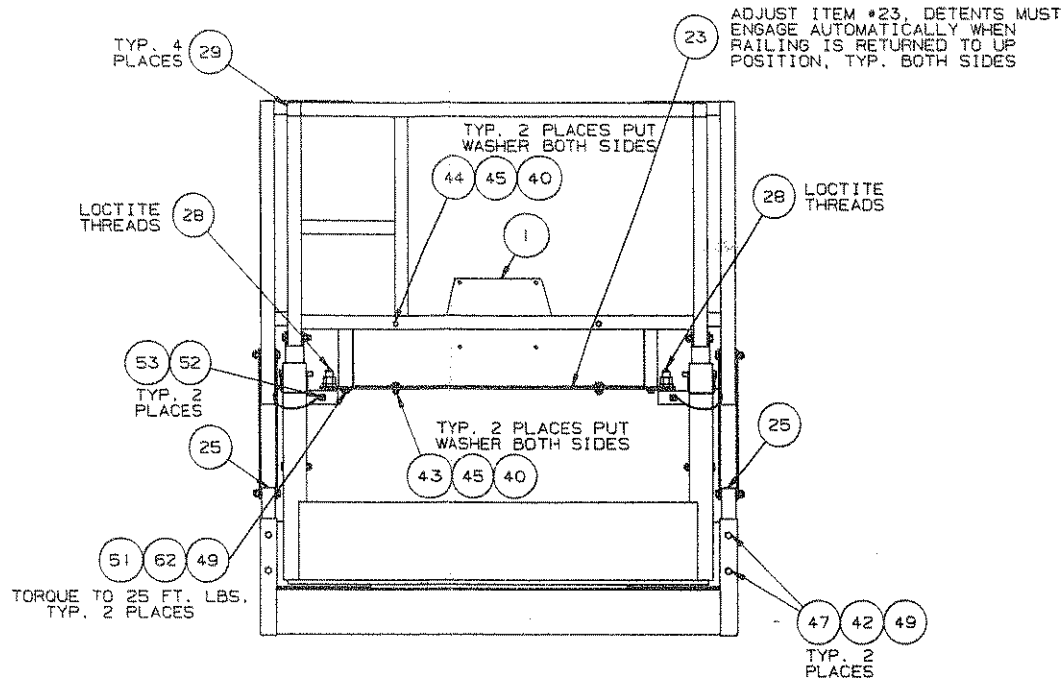
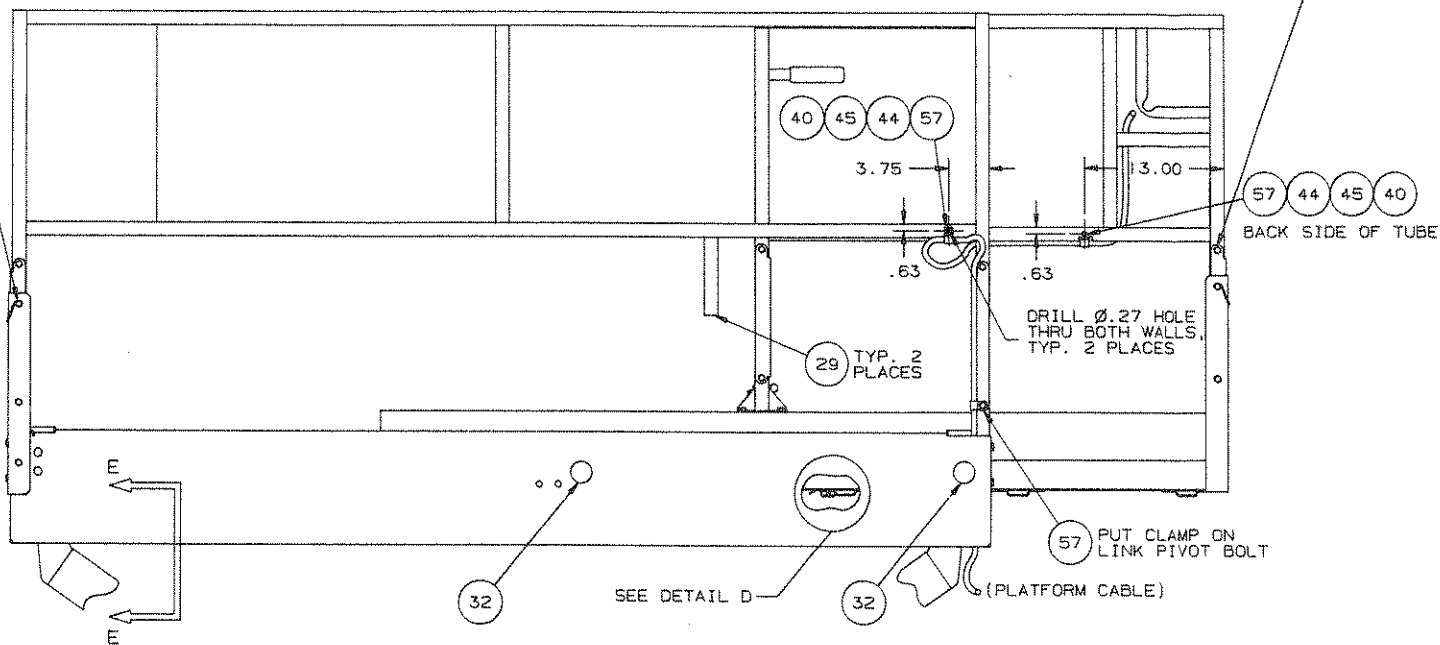
| Item | Part No | Description                                                                 | Req |
|------|---------|-----------------------------------------------------------------------------|-----|
| 51.  |         | Capscrew $\frac{3}{8}$ -16 x $\frac{3}{4}$ long hex head grade 5 . . . . .  | 12  |
| 52.  |         | Machine screw #10-24 x $\frac{1}{2}$ long round head . . . . .              | 4   |
| 53.  | 5560034 | Self locking nut #10-24 ESNA #22NM-04 . . . . .                             | 4   |
| 54.  | 302271  | Slider . . . . .                                                            | 1   |
| 55.  | 302474  | Slide pad . . . . .                                                         | 2   |
| 56.  | 302475  | Slide pad mount . . . . .                                                   | 2   |
| 57.  | 5093002 | Clamp, Aeroquip #900729-2 . . . . .                                         | 3   |
| 58.  |         | Capscrew $\frac{5}{16}$ -18 x $\frac{7}{8}$ long hex head grade 5 . . . . . | 4   |
| 59.  | 5560031 | Self locking nut $\frac{5}{16}$ -18 ESNA #22NE-058 . . . . .                | 4   |
| 60.  | 302589  | Bracket, sliding end rail . . . . .                                         | 2   |
| 61.  | 127076  | Grip, plastic handle grip . . . . .                                         | 2   |
| 62.  |         | Washer $\frac{3}{8}$ medium lock . . . . .                                  | 2   |

## STANDARD ENTRY CHAIN PARTS ONLY

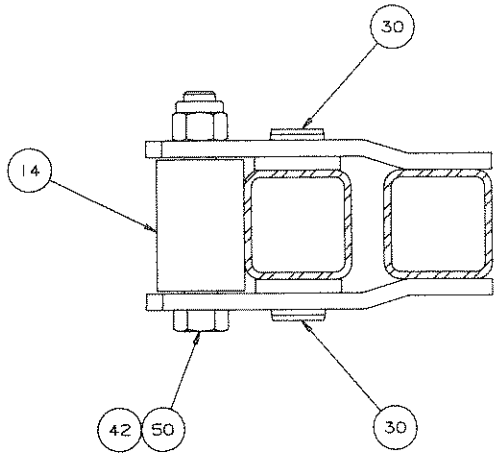
|      |        |                                   |   |
|------|--------|-----------------------------------|---|
| 101. | 458556 | Chain assembly, 19 link . . . . . | 1 |
| 102. | 301497 | Threaded connector link . . . . . | 1 |

PLACE TEMPORARY 1/8" THICK SPACER BETWEEN ITEM #12 AND CHANNEL ON RAIL PIVOT BRACKETS AND CLAMP TIGHT, TYP. 2 PLACES. DRILL Ø.39 HOLE THRU ITEM #12 AND RAILING TUBE USING HOLE IN ROLL-OUT CHANNEL AS GUIDE. REMOVE CLAMP AND SPACER AND INSTALL PIN.

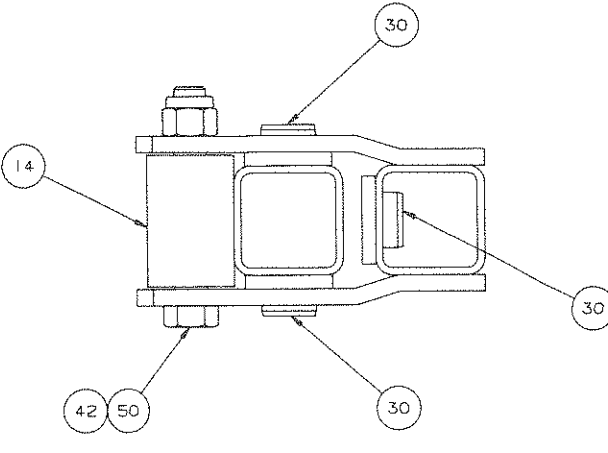
PLACE TEMPORARY 1/8" THICK SPACER BETWEEN ITEM #11 AND CHANNEL ON ROLL-OUT AND CLAMP TIGHT, TYP. 2 PLACES. DRILL Ø.39 HOLE THRU ITEM #11 AND RAILING TUBE USING HOLE IN ROLL-OUT CHANNEL AS GUIDE. REMOVE CLAMP AND SPACER AND INSTALL PIN.



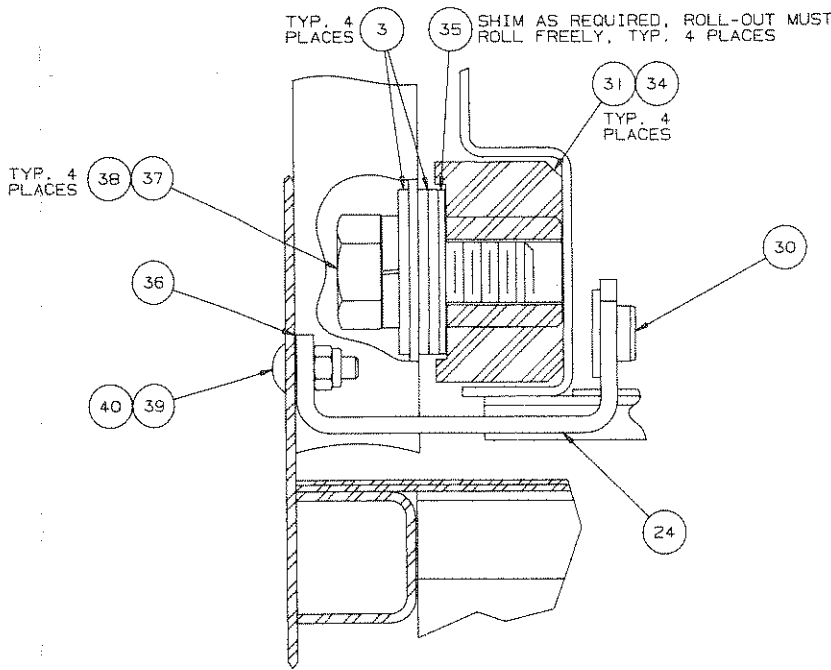
NOTE: SEE DECAL INSTALLATION DRAWING FOR DECALS USED ON RETRACTABLE RAILING.



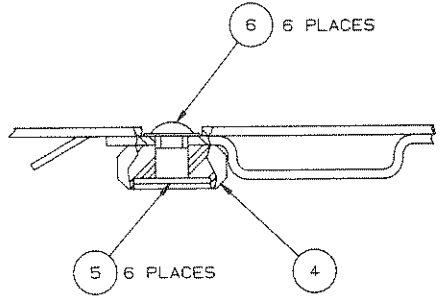
SECTION A-A  
TYP. 2 SIDES



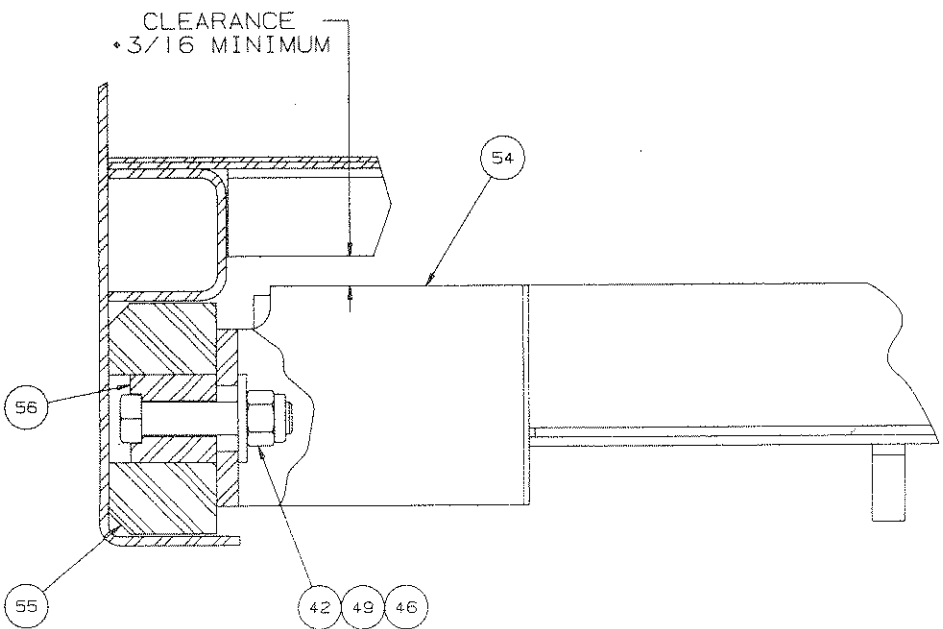
SECTION B-B  
TYP. 2 SIDES



SECTION C-C  
TYP. 2 SIDES

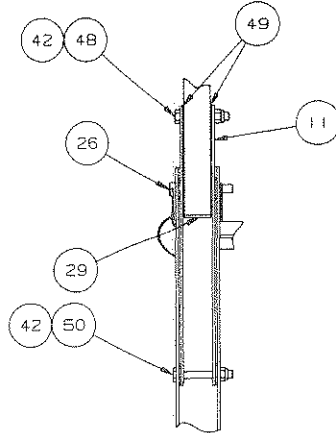


DETAIL D

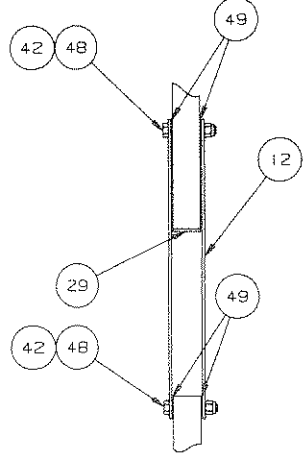


• ADJUST TO PROVIDE CLEARANCE AS SHOWN  
AND TORQUE TO 25 FT. LBS. TYP. 4 PLACES

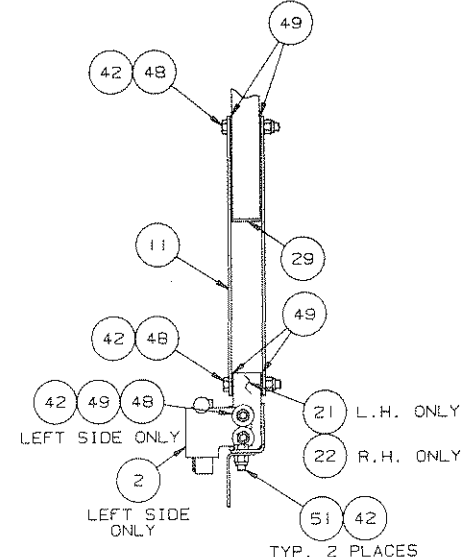
SECTION E-E  
TYP. 2 SIDES



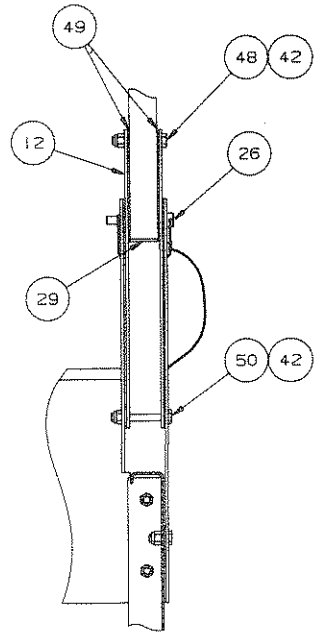
SECTION F-F  
TYP. 2 SIDES  
(SCALE : 1/4" = 1")



SECTION G-G  
TYP. 2 SIDES  
(SCALE : 1/4" = 1")



SECTION H-H  
TYP. 2 SIDES  
(UNLESS NOTED)  
(SCALE : 1/4" = 1")



SECTION I-I  
TYP. 2 SIDES  
(SCALE : 1/4" = 1")



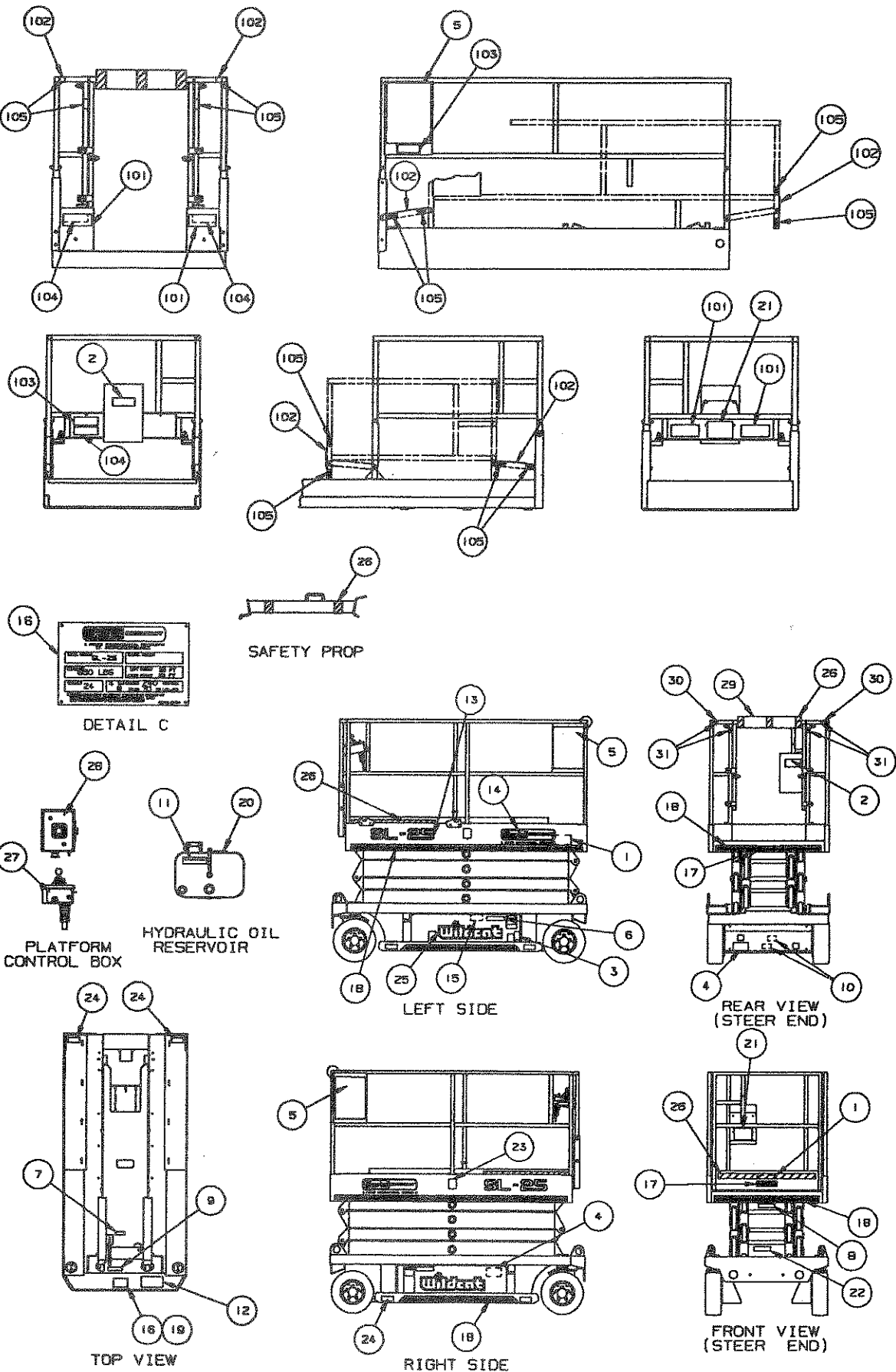
# PLACARDS-INSTALLATION

| Item | Part No | Description                                           | Req  |
|------|---------|-------------------------------------------------------|------|
| 1.   | 302326  | Decal, capacity 850 lbs. - 3 persons . . . . .        | 2    |
| 2.   | 562426  | Decal, operators manual enclosed . . . . .            | 1    |
| 3.   | 416836  | Decal, battery charger plug - 115 volt ONLY . . . . . | 1    |
| 4.   | 300740  | Decal, brake/free wheeling valve . . . . .            | 2    |
| 5.   | 480658  | Placard, danger . . . . .                             | 2    |
| 6.   | 300760  | Decal, caution - swing out trays . . . . .            | 2    |
| 7.   | 451986  | Decal, switch warning . . . . .                       | 1    |
| 8.   | 300694  | Decal, ANSI/CSA standards . . . . .                   | 1    |
| 9.   | 0070420 | Placard, emergency bleed down . . . . .               | 1    |
| 10.  | 475596  | Decal, cylinder disassembly . . . . .                 | 2    |
| 11.  | 467036  | Decal, full . . . . .                                 | 1    |
| 12.  | 583656  | Decal, safety bar . . . . .                           | 1    |
| 13.  | 302325  | Decal, SL-25 . . . . .                                | 2    |
| 14.  | 300697  | Decal, Snorkel-Economy logo (20 inch long) . . . . .  | 2    |
| 15.  | 451726  | Decal, battery maintenance fluid level . . . . .      | 1    |
| 16.  | 969676  | Name plate, serial number . . . . .                   | 1    |
| 17.  | 300698  | Decal, Snorkel-Economy logo (10 inch long) . . . . .  | 2    |
| 18.  | 562586  | Multi-stripe, orange 2" . . . . .                     | 331" |
| 19.  |         | Drive screw or rivet . . . . .                        | 4    |
| 20.  | 451776  | Decal, hydraulic fluid level . . . . .                | 1    |
| 21.  | 300699  | Decal, operators checklist . . . . .                  | 1    |
| 22.  | 300700  | Decal, beware descending platform . . . . .           | 1    |
| 23.  | 0073585 | Decal, made in USA . . . . .                          | 2    |
| 24.  | 621486  | Decal, forklift . . . . .                             | 6    |
| 25.  | 459616  | Decal, Wildcat (24 inch long) . . . . .               | 2    |
| 26.  | 969249  | Stripes, warning . . . . .                            | 162" |
| 27.  | 300703  | Decal, platform control box - front . . . . .         | 1    |
| 28.  | 300702  | Decal, platform control box - top . . . . .           | 1    |
| 29.  | 998003  | Pipe insulation . . . . .                             | 24"  |
| 30.  | 302562  | Decal, pinch point . . . . .                          | 2    |
| 31.  | 969249  | Stripes, warning . . . . .                            | 24"  |

## Following Decals for Swing Down Rails ONLY

|      |        |                                             |     |
|------|--------|---------------------------------------------|-----|
| 101. | 302559 | Decal, warning - pinch point . . . . .      | 4   |
| 102. | 302562 | Decal, pinch point . . . . .                | 8   |
| 103. | 302567 | Decal, danger - swing down rails . . . . .  | 3   |
| 104. | 302568 | Decal, warning - swing down rails . . . . . | 3   |
| 105. | 969249 | Stripes, warning . . . . .                  | 96" |

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## HYDRAULICS - SECTION 2

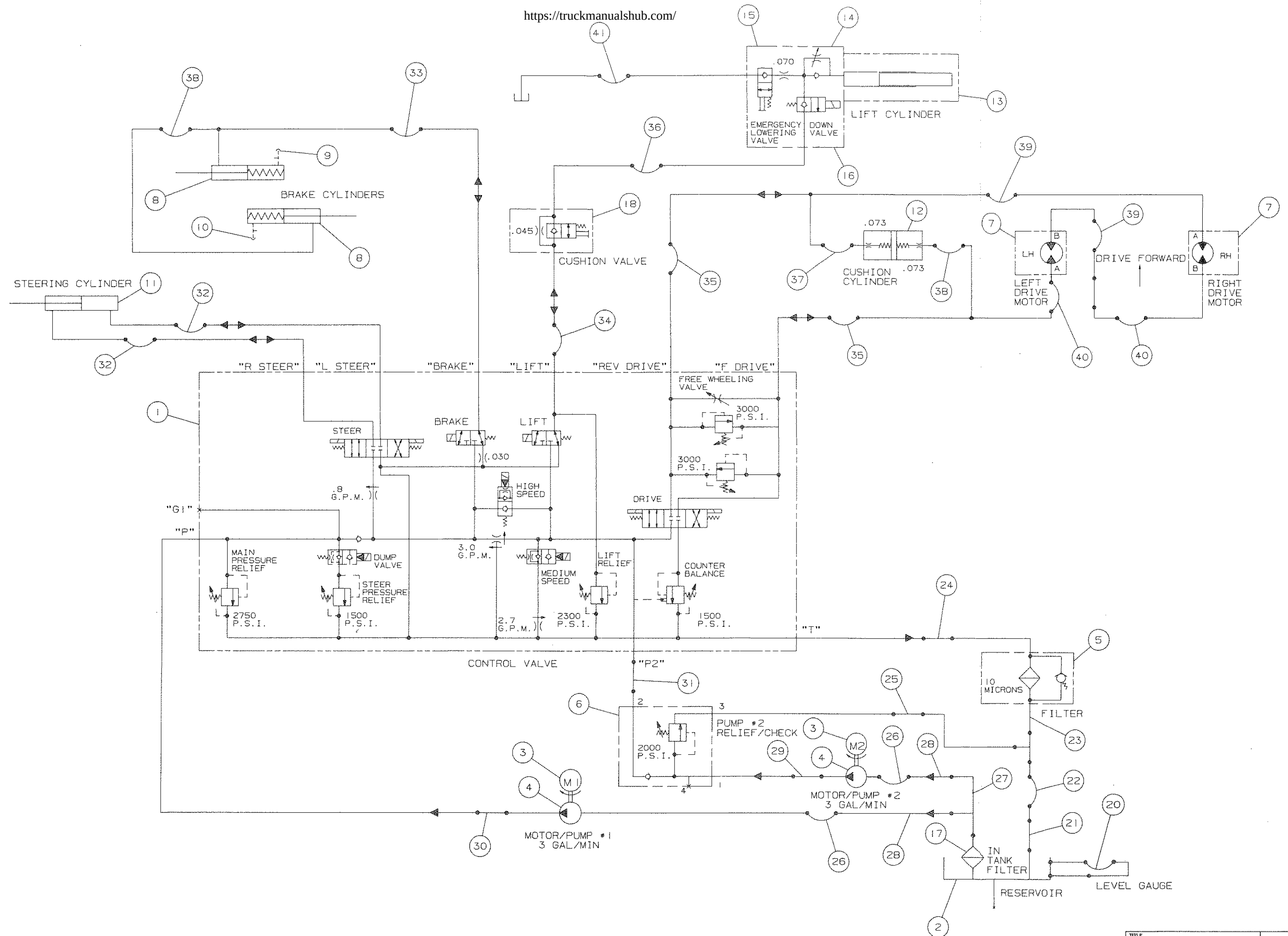
### INDEX

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|                                              |             |
|----------------------------------------------|-------------|
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| Hydraulic Schematic, Drawing . . . . .       | Page 2 - 3  |
| Control Valve Assembly, Parts List . . . . . | Page 2 - 4  |
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| Cylinder Assembly, Lift . . . . .            | Page 2 - 8  |
| Lift Cylinder Cartridge Valve . . . . .      | Page 2 - 9  |
| Cushion Valve . . . . .                      | Page 2 - 10 |
| Relief/Check Valve . . . . .                 | Page 2 - 11 |

# HYDRAULIC SCHEMATIC

| Item | Part No | Description                                                                  | Req |
|------|---------|------------------------------------------------------------------------------|-----|
| 1.   | 302443  | Control valve assembly, complete . . . . .                                   | 1   |
|      | 302301  | Control valve package - (see page 2 - 6 for replacement parts listing)       |     |
| 2.   | 302387  | Hydraulic oil reservoir . . . . .                                            | 1   |
| 3.   | 3080019 | Motor . . . . .                                                              | 2   |
| 4.   | 6020069 | Hydraulic gear pump . . . . .                                                | 2   |
| 5.   | 301440  | Hydraulic oil return filter . . . . .                                        | 1   |
|      | 451896  | Replacement filter element                                                   |     |
| 6.   | 302467  | Relief/check valve . . . . .                                                 | 1   |
| 7.   | 302302  | Hydraulic drive motor . . . . .                                              | 2   |
|      | 302618  | Drive motor seal repair kit                                                  |     |
| 8.   | 590984  | Cylinder assembly, brakes . . . . .                                          | 2   |
|      | 475144  | Brake cylinder seal repair kit                                               |     |
| 9.   | 459336  | Breather, weatherproof . . . . .                                             | 1   |
| 10.  | 472256  | Breather . . . . .                                                           | 1   |
| 11.  | 300368  | Cylinder assembly, steering . . . . .                                        | 1   |
| 12.  | 464004  | Cylinder assembly, cushion . . . . .                                         | 1   |
| 13.  | 302240  | Cylinder assembly, lift . . . . .                                            | 1   |
|      | 302601  | Lift cylinder seal repair kit                                                |     |
| 14.  | 6010833 | Adjustable flow control cartridge valve . . . . .                            | 1   |
| 15.  | 300657  | Manual bleed down cartridge valve . . . . .                                  | 1   |
| 16.  | 300719  | Lift cylinder cartridge valve (see page 2 - 9 for replacement parts listing) | 1   |
| 17.  | 300493  | Strainer, 100 mesh - 10 GPM . . . . .                                        | 1   |
| 18.  | 302566  | Cushion valve . . . . .                                                      | 1   |
| 19.  |         |                                                                              |     |
| 20.  | 300726  | 3/8 ID x 1/2 OD clear tube x 7 inch long . . . . .                           | 1   |
| 21.  | 302452  | 3/4 hydraulic tube assembly . . . . .                                        | 1   |
| 22.  | 466986  | Return hose, 3/4 diameter x 17 inch long . . . . .                           | 1   |
| 23.  | 302468  | 3/4 hydraulic tube assembly . . . . .                                        | 1   |
| 24.  | 300554  | 1/2 hydraulic tube assembly . . . . .                                        | 1   |
| 25.  | 302472  | 3/8 hydraulic tube assembly . . . . .                                        | 1   |
| 26.  | 302463  | Return hose, 1/2 diameter x 7 inch long . . . . .                            | 2   |
| 27.  | 302449  | 1/2 hydraulic tube assembly . . . . .                                        | 1   |
| 28.  | 302453  | 1/2 hydraulic tube assembly . . . . .                                        | 2   |
| 29.  | 302471  | 3/8 hydraulic tube assembly . . . . .                                        | 1   |
| 30.  | 302470  | 3/8 hydraulic tube assembly . . . . .                                        | 1   |
| 31.  | 302469  | 3/8 hydraulic tube assembly . . . . .                                        | 1   |
| 32.  | 0322684 | 1/4 hydraulic hose assembly . . . . .                                        | 2   |
| 33.  | 0100271 | 3/16 hydraulic hose assembly . . . . .                                       | 1   |
| 34.  | 0020279 | 3/8 hydraulic hose assembly . . . . .                                        | 1   |
| 35.  | 0060315 | 1/2 hydraulic hose assembly . . . . .                                        | 2   |
| 36.  | 0240791 | 3/8 hydraulic hose assembly . . . . .                                        | 1   |
| 37.  | 0070910 | 1/4 hydraulic hose assembly . . . . .                                        | 1   |
| 38.  | 0020283 | 1/4 hydraulic hose assembly . . . . .                                        | 2   |
| 39.  | 302434  | 1/2 hydraulic hose assembly . . . . .                                        | 2   |
| 40.  | 302433  | 1/2 hydraulic hose assembly . . . . .                                        | 2   |
| 41.  | 0240770 | 3/8 hydraulic hose assembly . . . . .                                        | 1   |





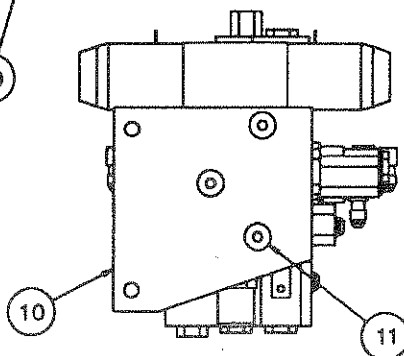
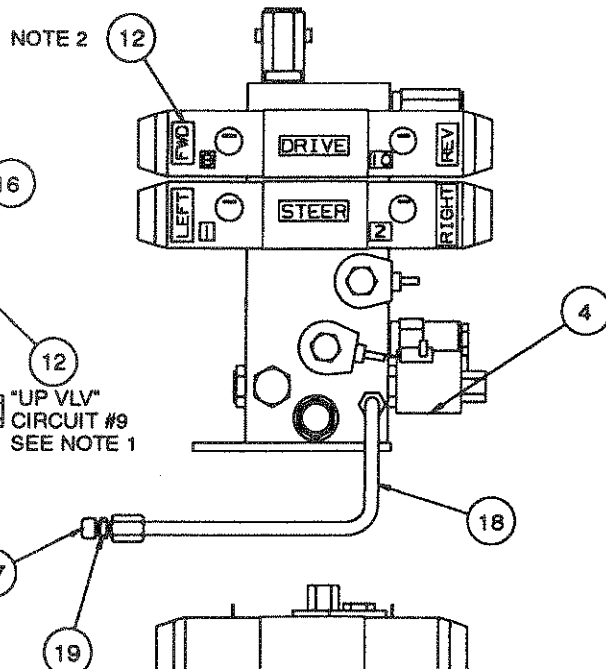
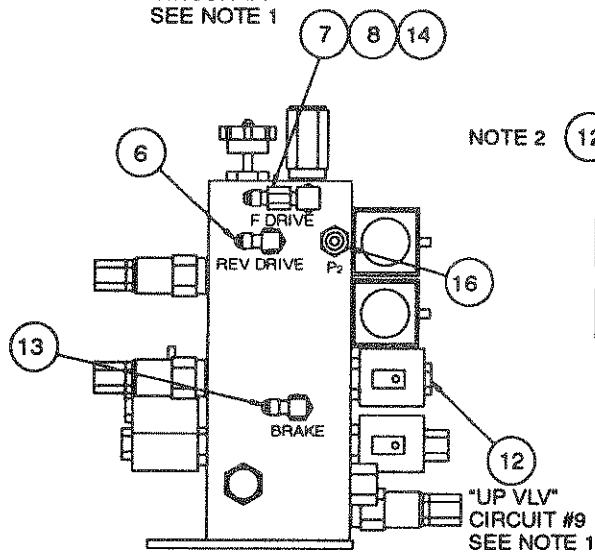
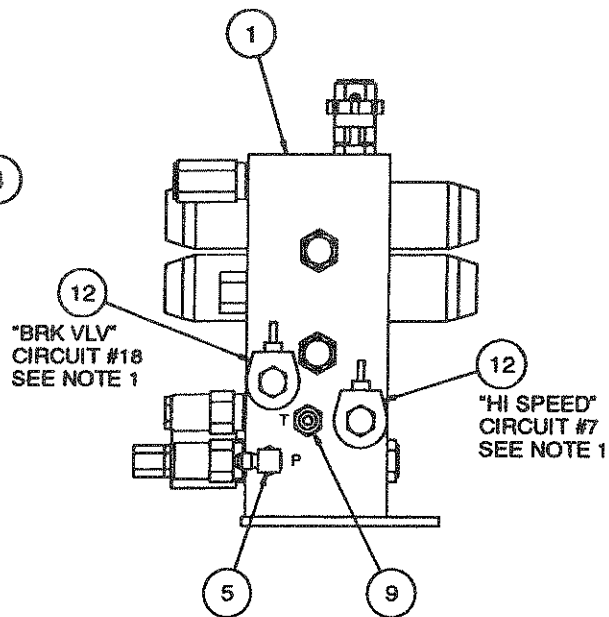
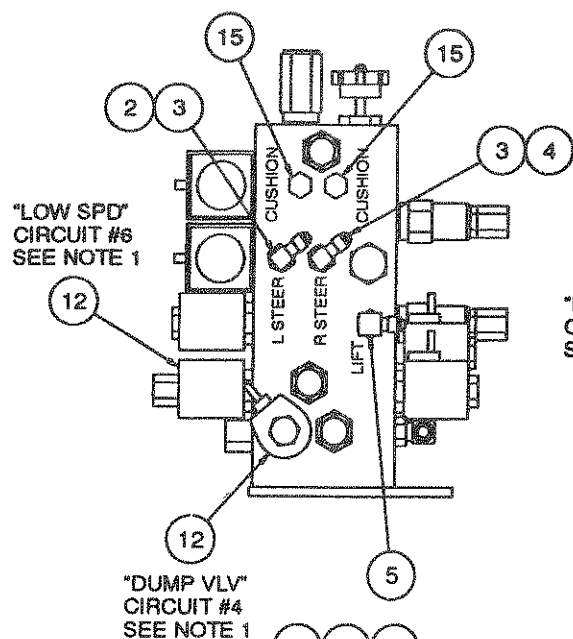


# CONTROL VALVE ASSEMBLY

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| Item | Part No | Description                                                    | Req |
|------|---------|----------------------------------------------------------------|-----|
| 0.   | 302443  | Control valve assembly, complete . . . . .                     | 1   |
| 1.   | 302301  | Control valve package . . . . .                                | 1   |
| 2.   | 5065803 | Adapter, straight thread long -4 . . . . .                     | 1   |
| 3.   | 5037003 | Elbow, 90° swivel nut -4 . . . . .                             | 2   |
| 4.   | 5065703 | Adapter, straight thread male -4 . . . . .                     | 2   |
| 5.   | 5035305 | Elbow, 90° straight thread -6 . . . . .                        | 2   |
| 6.   | 5035315 | Elbow, 90° straight thread -6/-8 . . . . .                     | 1   |
| 7.   | 5037006 | Elbow, 90° swivel nut -8 . . . . .                             | 1   |
| 8.   | 5036906 | Elbow, 45° swivel nut -8 . . . . .                             | 1   |
| 9.   | 5065806 | Adapter, straight thread long -8 . . . . .                     | 1   |
| 10.  | 300661  | Base plate . . . . .                                           | 1   |
| 11.  | 972559  | Capscrew $\frac{3}{8}$ -16 x 1 long flat head socket . . . . . | 3   |
| 12.  | 300732  | Decal set, valve package . . . . .                             | 1   |
| 13.  | 5035303 | Elbow, 90° straight thread -4 . . . . .                        | 1   |
| 14.  | 5065728 | Adapter, straight thread -6/-8 . . . . .                       | 1   |
| 15.  | 5075203 | Plug, hex head o-ring boss -4 . . . . .                        | 2   |
| 16.  | 5065707 | Adapter, straight thread -6 . . . . .                          | 1   |
| 17.  | 5063701 | Cap -4 . . . . .                                               | 1   |
| 18.  | 0070908 | $\frac{1}{4}$ hydraulic hose assembly . . . . .                | 1   |
| 19.  | 5034802 | Union -4 . . . . .                                             | 1   |

# CONTROL VALVE ASSEMBLY

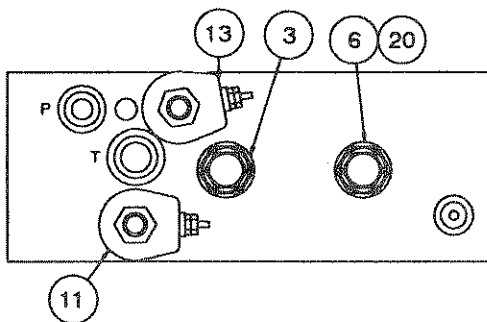
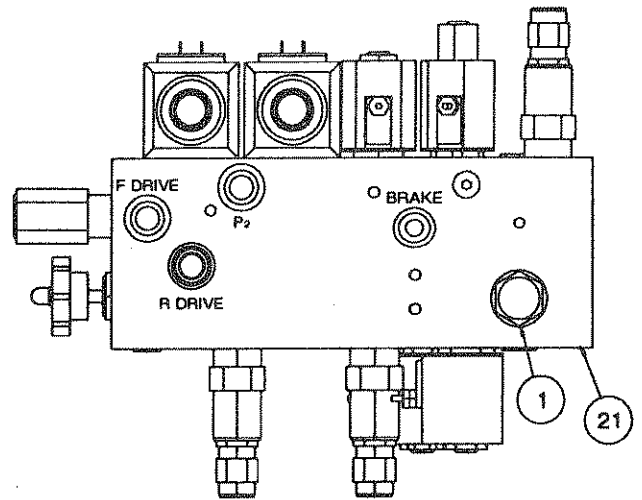
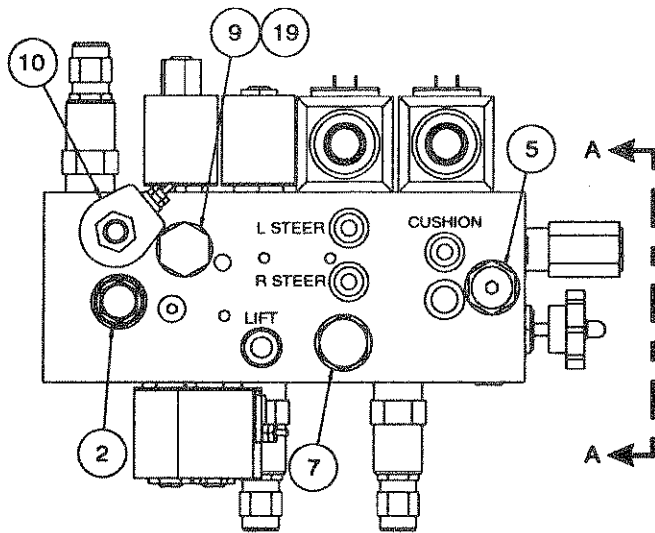
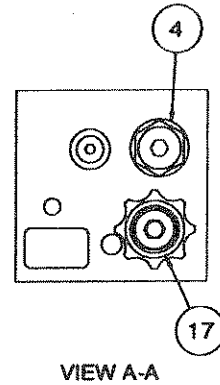
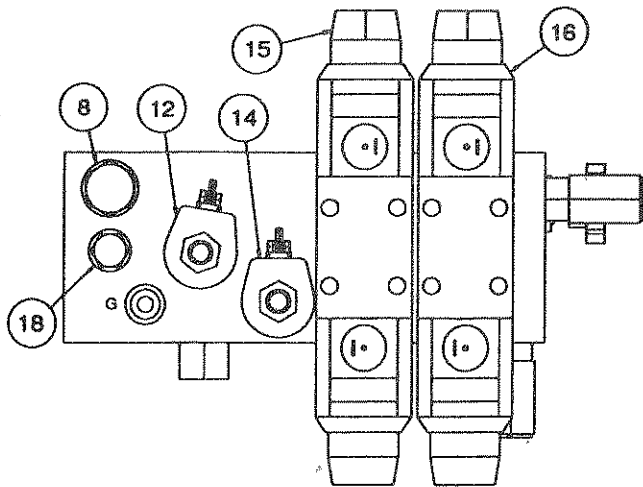


## NOTES:

1. PUT COIL FUNCTION AND CIRCUIT NUMBERS ON COILS FROM PEEL OFF DECAL, ITEM 12.
2. PUT VALVE DESIGNATION, MANUAL FUNCTION AND CIRCUIT NUMBERS ON AS SHOWN FROM PEEL OFF DECAL ITEM 12.

# CONTROL VALVE PACKAGE

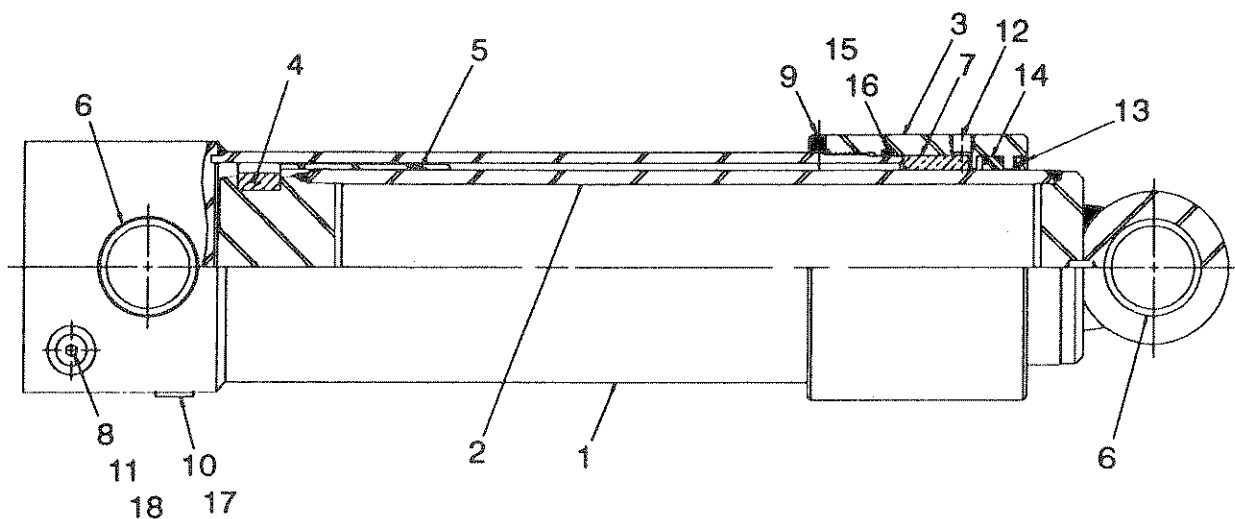
| Item | Part No | Description                                                     | Req |
|------|---------|-----------------------------------------------------------------|-----|
| 0.   | 302301  | Control valve package, complete . . . . .<br>Vickers #MCD-3467A | 1   |
| 1.   | 6010719 | Check valve cartridge . . . . .                                 | 1   |
|      | 6010533 | Seal repair kit, check valve cartridge                          |     |
| 2.   | 6010779 | Relief valve cartridge, main pressure . . . . .                 | 1   |
|      | 6010533 | Seal repair kit, relief valve cartridge                         |     |
| 3.   | 6010780 | Relief valve cartridge, lift . . . . .                          | 1   |
|      | 6010533 | Seal repair kit, relief valve cartridge                         |     |
| 4.   | 6010781 | Relief valve cartridge, drive - forward . . . . .               | 1   |
|      | 6010533 | Seal repair kit, relief valve cartridge                         |     |
| 5.   | 6010781 | Relief valve cartridge, drive - reverse . . . . .               | 1   |
|      | 6010533 | Seal repair kit, relief valve cartridge                         |     |
| 6.   | 6010782 | Relief valve cartridge, counterbalance . . . . .                | 1   |
|      | 6010533 | Seal repair kit, relief valve cartridge                         |     |
| 7.   | 6010784 | Flow control cartridge, steer . . . . .                         | 1   |
|      | 6010533 | Seal repair kit, flow control cartridge                         |     |
| 8.   | 6010848 | Flow control cartridge, priority . . . . .                      | 1   |
|      | 6010533 | Seal repair kit, flow control cartridge                         |     |
| 9.   | 6010847 | Flow control cartridge, low speed dump . . . . .                | 1   |
|      | 6010533 | Seal repair kit, flow control cartridge                         |     |
| 10.  | 6010787 | Solenoid cartridge valve, load dump . . . . .                   | 1   |
|      | 6010788 | Replacement cartridge                                           |     |
|      | 3040554 | Replacement solenoid, 24 volt DC                                |     |
| 11.  | 6010789 | Solenoid cartridge valve, hi speed . . . . .                    | 1   |
|      | 6010790 | Replacement cartridge                                           |     |
|      | 3040554 | Replacement solenoid, 24 volt DC                                |     |
| 12.  | 6010787 | Solenoid cartridge valve, medium speed . . . . .                | 1   |
|      | 6010788 | Replacement cartridge                                           |     |
|      | 3040554 | Replacement solenoid, 24 volt DC                                |     |
|      | 6010535 | Seal repair kit, solenoid valve                                 |     |
| 13.  | 6010837 | Solenoid cartridge valve, brake . . . . .                       | 1   |
|      | 6010707 | Replacement cartridge                                           |     |
|      | 3040608 | Replacement solenoid, 20 volt DC                                |     |
|      | 6010537 | Seal repair kit, solenoid valve                                 |     |
| 14.  | 6010717 | Solenoid cartridge valve, lift . . . . .                        | 1   |
|      | 6010707 | Replacement cartridge                                           |     |
|      | 3040554 | Replacement solenoid, 24 volt DC                                |     |
|      | 6010537 | Seal repair kit, solenoid valve                                 |     |
| 15.  | 6010715 | Solenoid control valve, steer . . . . .                         | 1   |
|      | 3040552 | Replacement solenoid, 24 volt DC                                |     |
| 16.  | 6010715 | Solenoid control valve, drive . . . . .                         | 1   |
|      | 3040552 | Replacement solenoid, 24 volt DC                                |     |
| 17.  | 6010292 | Needle valve assembly, towing . . . . .                         | 1   |
|      | 0150567 | Seal repair kit, needle valve                                   |     |
| 18.  | 6010782 | Relief, load dump . . . . .                                     | 1   |
| 19.  | 6010813 | Orifice disc (.030 diameter), brake . . . . .                   | 1   |
| 20.  | 6010792 | Piston, counterbalance valve . . . . .                          | 1   |
| 21.  |         | Manifold body with plugs . . . . .                              | 1   |



# CYLINDER ASSEMBLY, LIFT

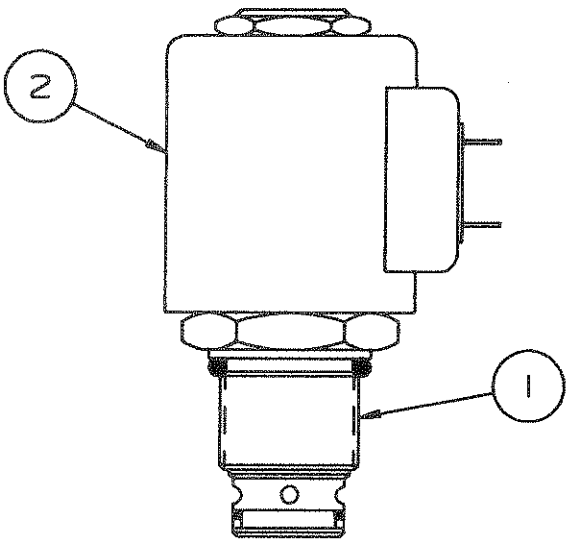
<https://truckmanualshub.com/>

| Item | Part No | Description                                                       | Req |
|------|---------|-------------------------------------------------------------------|-----|
| 0.   | 302240  | Cylinder assembly, lift - Great Bend Industries #14201 . . . . .  | 1   |
|      | 302601  | Seal repair kit, lift cylinder (kit includes items 13 through 18) |     |
| 1.   |         | Tube assembly, GBI #213983 . . . . .                              | 1   |
| 2.   |         | Rod assembly, GBI #213988 . . . . .                               | 1   |
| 3.   |         | Retainer, GBI #213989 . . . . .                                   | 1   |
| 4.   |         | Piston, GBI #213990 . . . . .                                     | 1   |
| 5.   |         | Spacer, GBI #213991 . . . . .                                     | 1   |
| 6.   | 561126  | Bearing, 1½ ID x 1¾ OD x 1½ inch long . . . . .                   | 6   |
| 7.   |         | Bushing, GBI #213992 . . . . .                                    | 1   |
| 8.   |         | Pipe plug, GBI #213993 . . . . .                                  | 1   |
| 9.   |         | Set screw ¼-20 x ¼ inch long socket head . . . . .                | 1   |
| 10.  |         | Port plug, GBI #30248 . . . . .                                   | 1   |
| 11.  |         | Port plug, GBI #31151 . . . . .                                   | 1   |
| 12.  |         | Pipe plug, GBI #30370 . . . . .                                   | 1   |
| 13.  | 7135329 | Wiper, lip type GBI #30287 . . . . .                              | 1   |
| 14.  | 7140134 | U-ring, GBI #34823 . . . . .                                      | 1   |
| 15.  | 7110242 | O-ring, GBI #30131 . . . . .                                      | 1   |
| 16.  | 7140135 | Back-up ring, GBI #34825 . . . . .                                | 1   |
| 17.  | 7110906 | O-ring, GBI #30249 . . . . .                                      | 1   |
| 18.  | 7110904 | O-ring, GBI #30916 . . . . .                                      | 1   |

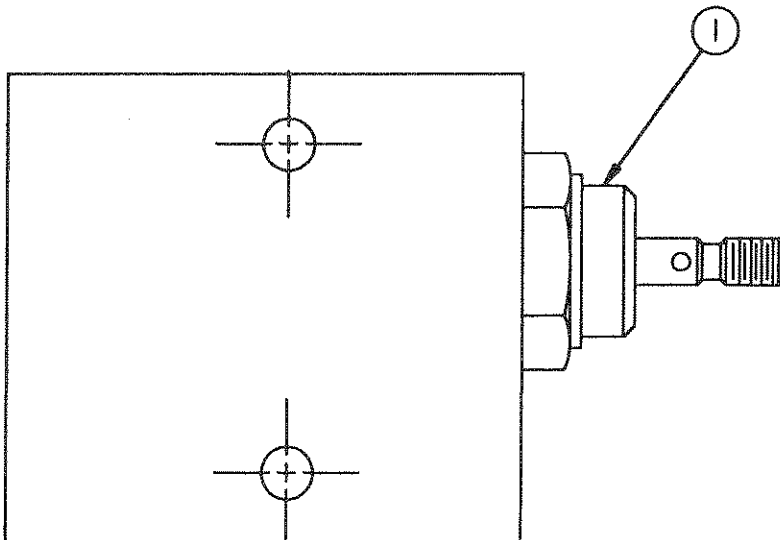
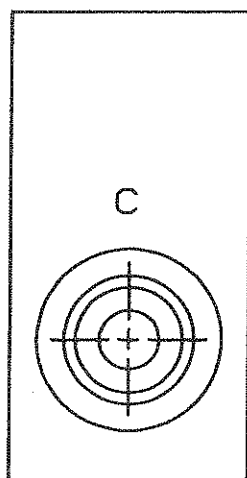
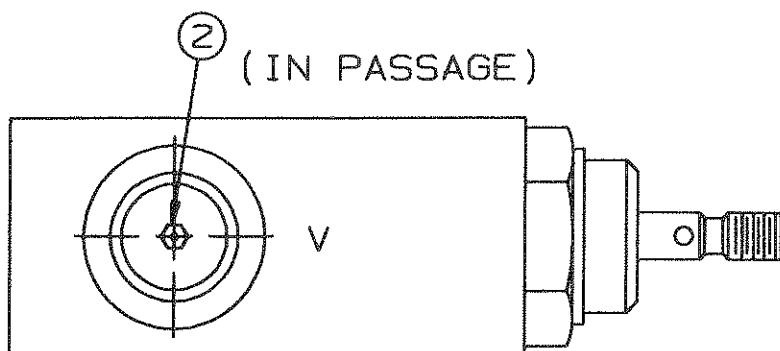


LIFT CYLINDER CARTRIDGE VALVE

| Item | Part No | Description                                    | Req |
|------|---------|------------------------------------------------|-----|
| 0.   | 300719  | Lift cylinder cartridge valve . . . . .        | 1   |
|      | 6010533 | Seal repair kit, lift cylinder cartridge valve |     |
| 1.   | 6010509 | Replacement 2 way cartridge . . . . .          | 1   |
| 2.   | 3040458 | Replacement solenoid, 24 volt D.C. . . . .     | 1   |

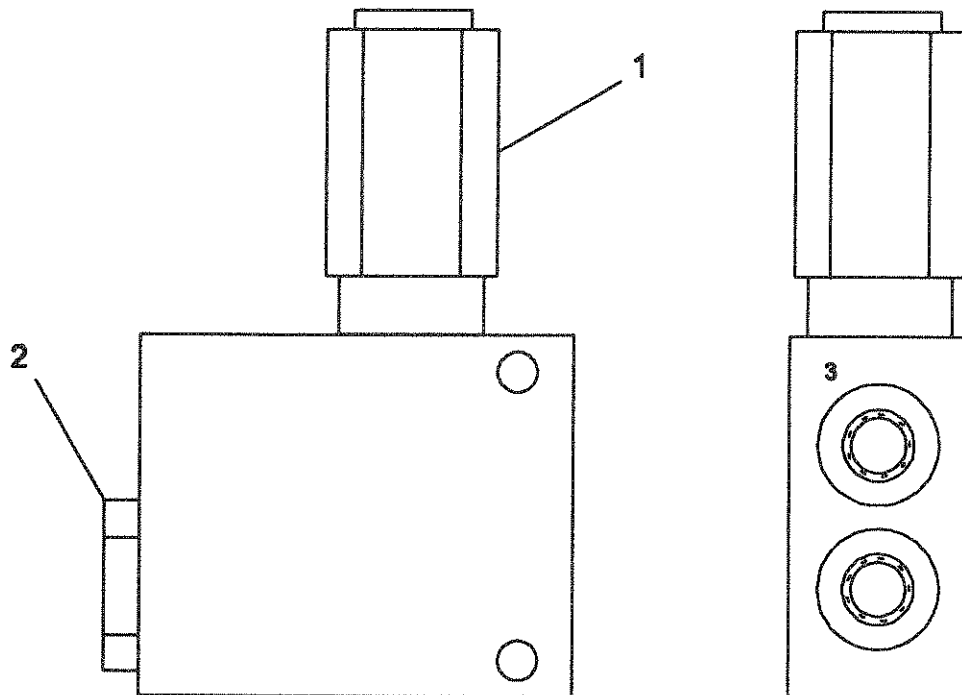


| Item | Part No | Description                                        | Req |
|------|---------|----------------------------------------------------|-----|
| 0.   | 300643  | Cushion valve . . . . .                            | 1   |
| 1.   | 300657  | Replacement manual 2 way cartridge valve . . . . . | 1   |
| 2.   |         | .035 diameter orifice plug . . . . .               | 1   |



<https://www.mitsubishi.com>  
**RELIEF/CHECK VALVE**

| Item | Part No | Description                                  | Req |
|------|---------|----------------------------------------------|-----|
| 0.   | 302467  | Relief/check valve . . . . .                 | 1   |
| 1.   | 6010548 | Replacement relief valve cartridge . . . . . | 1   |
| 2.   | 6010719 | Replacement check valve cartridge . . . . .  | 1   |



## **ELECTRICAL - SECTION 3**

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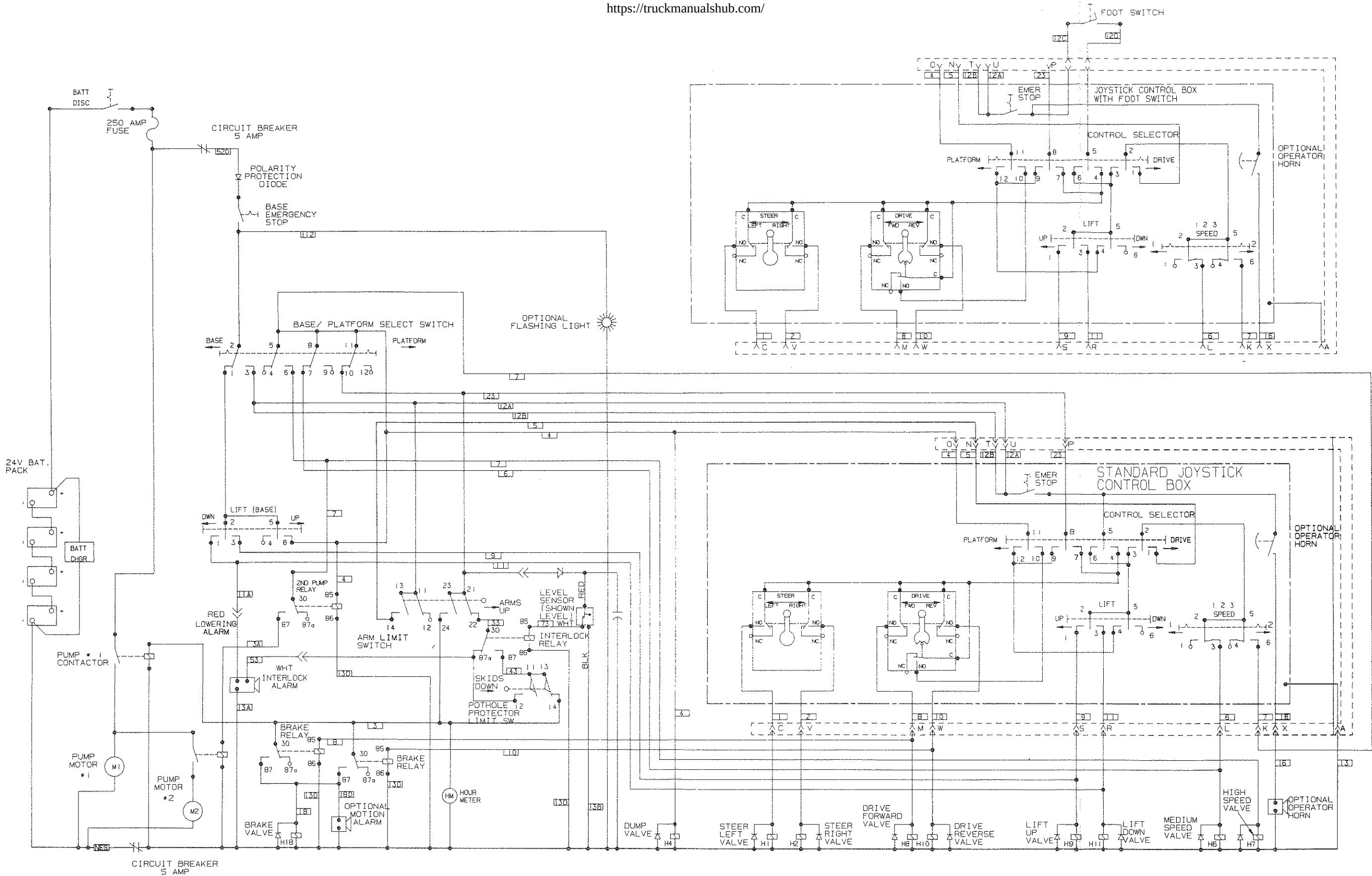
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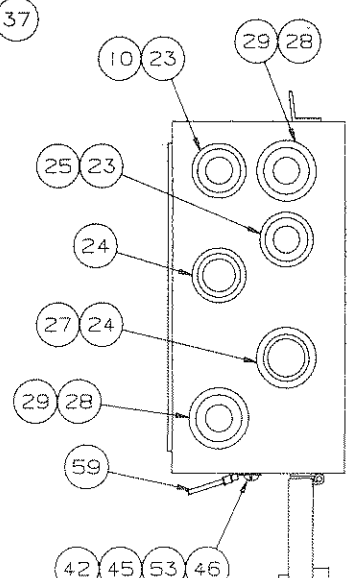
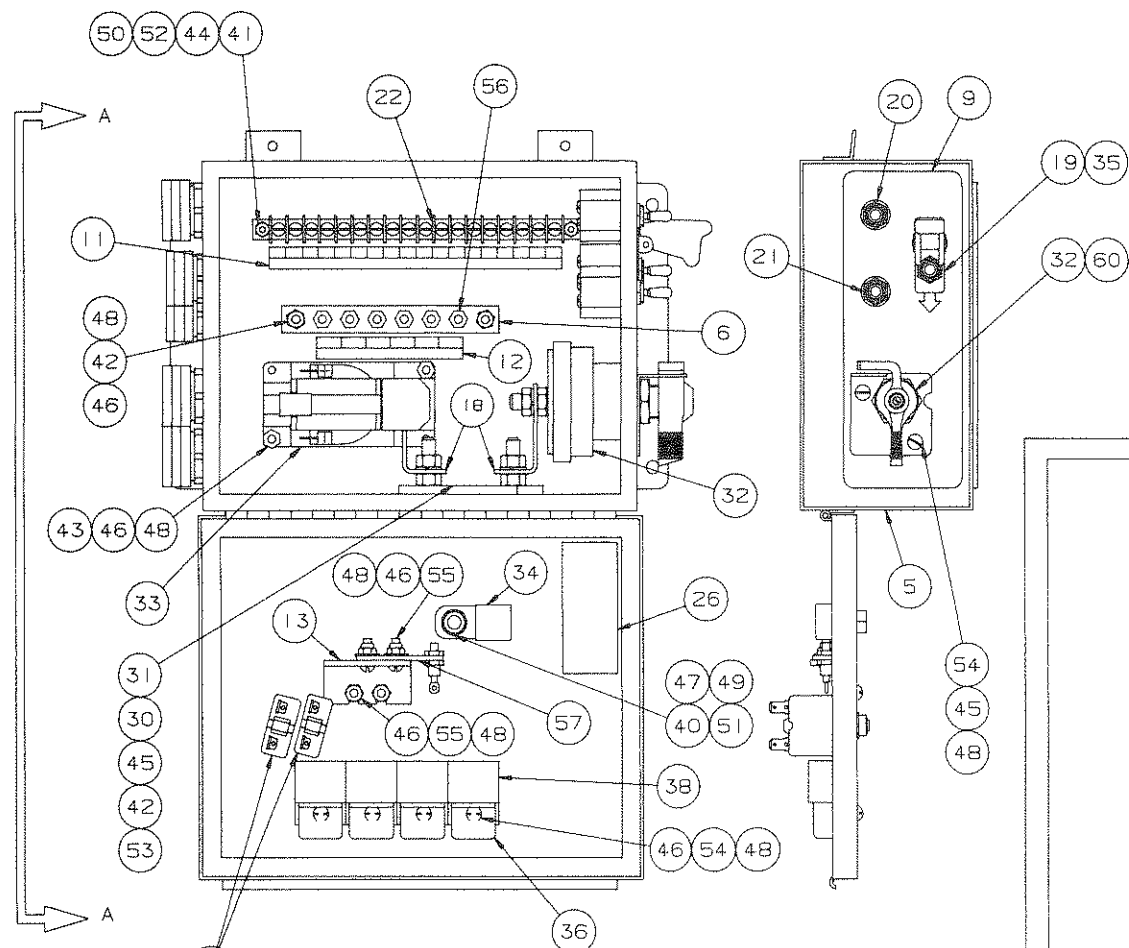
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# WIRING CODE AND FUNCTION

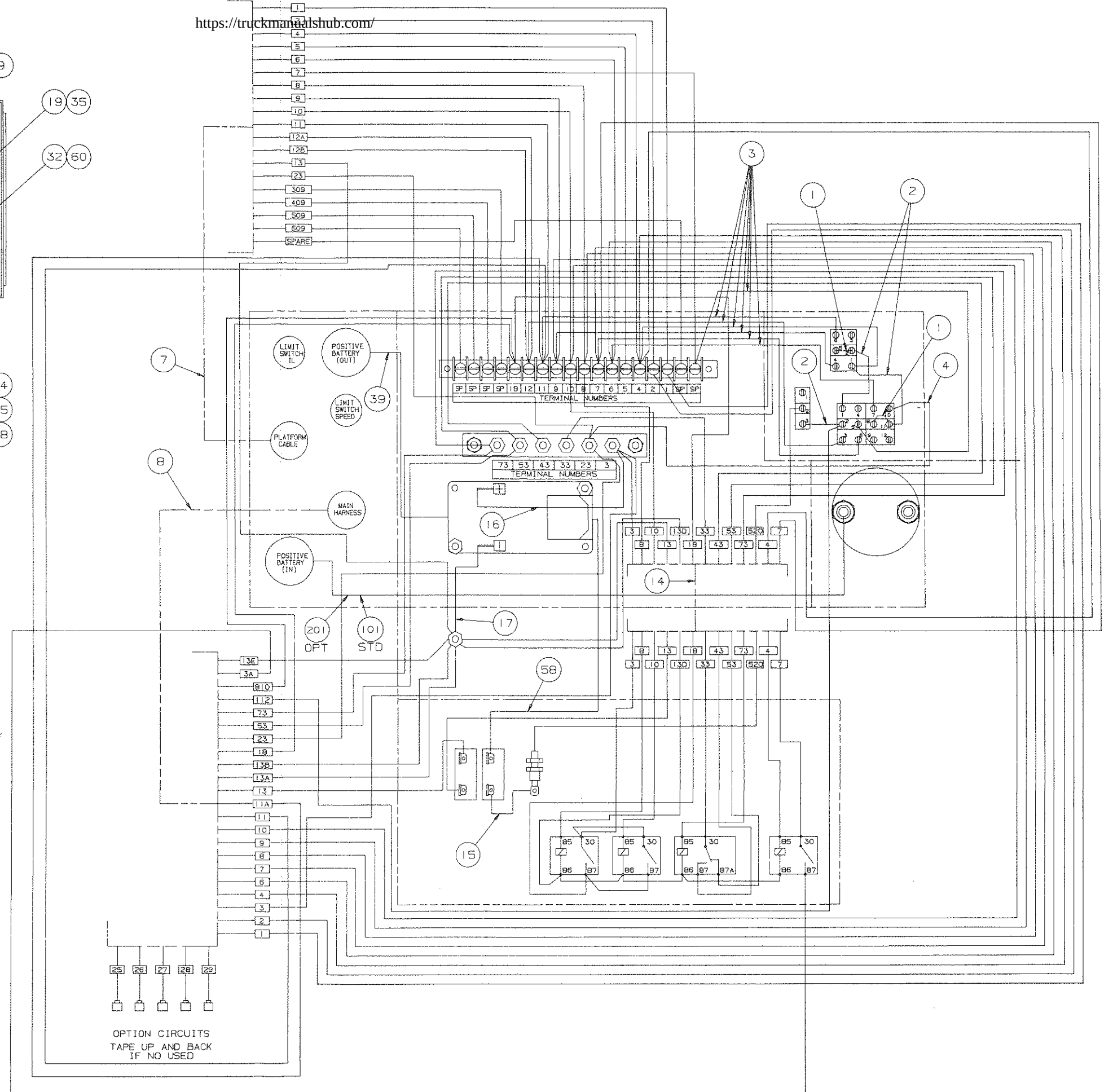
<https://truckmanualshub.com/>

| Wire No.     | Description                                                    |
|--------------|----------------------------------------------------------------|
| 1. . . . .   | Steer - Left                                                   |
| 2. . . . .   | Steer - Right                                                  |
| 3. . . . .   | Hour Meter - Limit Switches - Brake Relays - Pump #1 Contactor |
| 3A. . . . .  | Pump #2 Relay to Pump #2 Contactor                             |
| 4. . . . .   | Dump Valve - Pump #2 Relay                                     |
| 5. . . . .   | Arm Limit Switch to Platform Control Switch                    |
| 6. . . . .   | Medium Speed Valve                                             |
| 7. . . . .   | Hi Speed Valve/Pump #2 Relay                                   |
| 8. . . . .   | Drive - Forward/Brake Relay                                    |
| 9. . . . .   | Lift - Up                                                      |
| 10. . . . .  | Drive - Reverse/Brake Relay                                    |
| 11. . . . .  | Lift - Down                                                    |
| 11A. . . . . | Lower Alarm                                                    |
| 12A. . . . . | Main Power, 24 Volt D.C. - Arm Limit Switch                    |
| 12B. . . . . | Main Power, 24 Volt D.C.                                       |
| 12C. . . . . | Foot Switch - Power                                            |
| 12D. . . . . | Foot Switch - Normally Open                                    |
| 13. . . . .  | Ground Circuit                                                 |
| 13A. . . . . | Ground to Lower Alarm and Tilt Alarm                           |
| 13B. . . . . | Ground to Tilt Sensor                                          |
| 13D. . . . . | Ground for Relays                                              |
| 16. . . . .  | Operators Horn in Platform - (Optional Item)                   |
| 18. . . . .  | Brake Release                                                  |
| 23. . . . .  | Power to Tilt Sensor - Arm Limit Switch                        |
| 33. . . . .  | Power to Interlock Relay                                       |
| 43. . . . .  | Power to Interlock Switch                                      |
| 53. . . . .  | Tilt Alarm                                                     |
| 73. . . . .  | Tilt Signal                                                    |
| 112. . . . . | Motion Light - (Optional Item)                                 |
| 180. . . . . | Motion Alarm - (Optional Item)                                 |
| 520. . . . . | Power to Emergency Stop at Ground Controls                     |





VIEW A-A



OPTION CIRCUITS  
TAPE UP AND BACK  
IF NO USED

# GROUND CONTROL ENCLOSURE ASSEMBLY

| Item | Part No | Description                                                                 | Req |
|------|---------|-----------------------------------------------------------------------------|-----|
| 0.   | 302442  | Ground control enclosure assembly . . . . .                                 | 1   |
| 1.   | 0060373 | Jumper strap . . . . .                                                      | 2   |
| 2.   | 0070747 | Jumper wire . . . . .                                                       | 3   |
| 3.   | 0181028 | Wire . . . . .                                                              | 7   |
| 4.   | 0240483 | Jumper . . . . .                                                            | 1   |
| 5.   | 302441  | Box, electrical enclosure . . . . .                                         | 1   |
| 6.   | 3044721 | Terminal strip, 6 circuit #10 stud . . . . .                                | 1   |
| 7.   | 302466  | Control wire assembly . . . . .                                             | 1   |
| 8.   | 302440  | Wire assembly, main harness . . . . .                                       | 1   |
| 9.   | 302546  | Placard, ground control station . . . . .                                   | 1   |
| 10.  | 3040300 | Connector, Appleton #CG-1850 . . . . .                                      | 1   |
| 11.  | 300730  | Decal, terminal numbers . . . . .                                           | 1   |
| 12.  | 300731  | Decal, terminal numbers (strip) . . . . .                                   | 1   |
| 13.  | 301439  | Diode holder angle . . . . .                                                | 1   |
| 14.  | 302439  | Wire assembly, internal harness . . . . .                                   | 1   |
| 15.  | 300869  | Diode assembly . . . . .                                                    | 1   |
| 16.  | 300736  | Wire assembly . . . . .                                                     | 1   |
| 17.  | 300737  | Wire assembly . . . . .                                                     | 1   |
| 18.  | 300738  | Bus bar . . . . .                                                           | 2   |
| 19.  | 3020013 | Switch, SPST toggle . . . . .                                               | 1   |
| 20.  | 3020018 | Switch, DPDT toggle . . . . .                                               | 1   |
| 21.  | 3020048 | Switch, 4PDT toggle . . . . .                                               | 1   |
| 22.  | 3040057 | Terminal strip, 18 circuit slip-on . . . . .                                | 1   |
| 23.  | 3040070 | Locknut, Appleton #BL-50 . . . . .                                          | 2   |
| 24.  | 3040110 | Locknut, Appleton #BL-75 . . . . .                                          | 2   |
| 25.  | 3040115 | Connector, Appleton #CG-3750 . . . . .                                      | 1   |
| 26.  | 0070967 | Corrosion inhibitor . . . . .                                               | 1   |
| 27.  | 3040295 | Connector, Appleton #CG-6275 . . . . .                                      | 1   |
| 28.  | 3040387 | Locknut, Appleton #BL-100 . . . . .                                         | 2   |
| 29.  | 3040547 | Connector, Appleton #CG-37100 . . . . .                                     | 2   |
| 30.  | 446076  | Fuse, 250 amp Buss #ANL250 . . . . .                                        | 1   |
| 31.  | 446086  | Fuse block . . . . .                                                        | 1   |
| 32.  | 3020049 | Switch, battery disconnect . . . . .                                        | 1   |
| 33.  | 465026  | Pump contactor . . . . .                                                    | 1   |
| 34.  | 5093004 | Clamp, Aeroquip #900729-4 . . . . .                                         | 1   |
| 35.  | 562236  | Switch guard . . . . .                                                      | 1   |
| 36.  | 562846  | Relay, 24 volt DC . . . . .                                                 | 4   |
| 37.  | 582206  | Circuit breaker, 5 amp capacity . . . . .                                   | 2   |
| 38.  | 584486  | Relay holder . . . . .                                                      | 4   |
| 39.  | 625614  | Cable assembly, 56 inches long . . . . .                                    | 1   |
| 40.  |         | Capscrew $\frac{5}{16}$ -18 x $\frac{3}{4}$ long hex head grade 5 . . . . . | 1   |
| 41.  |         | Machine screw #6-32 x $\frac{3}{4}$ long pan head . . . . .                 | 2   |
| 42.  |         | Machine screw #10-24 x $\frac{3}{4}$ long round head . . . . .              | 4   |
| 43.  |         | Machine screw #10-24 x 1 long round head . . . . .                          | 2   |
| 44.  |         | Nut #6-32 hex . . . . .                                                     | 2   |
| 45.  |         | Nut #10-24 hex . . . . .                                                    | 2   |

# GROUND CONTROL ENCLOSURE ASSEMBLY

<https://truckmanualshub.com/>

| Item | Part No | Description                                          | Req |
|------|---------|------------------------------------------------------|-----|
| 46.  | 5560034 | Self locking nut #10-24 ESNA #22NM-04 . . . . .      | 13  |
| 47.  | 5560031 | Self locking nut 5/16-18 ESNA #22NE-058 . . . . .    | 1   |
| 48.  |         | Washer #10 medium flat . . . . .                     | 18  |
| 49.  |         | Washer 5/16 medium flat . . . . .                    | 1   |
| 50.  |         | Washer #6 medium flat . . . . .                      | 2   |
| 51.  |         | Washer 5/16 medium lock . . . . .                    | 1   |
| 52.  |         | Washer #6 medium lock . . . . .                      | 2   |
| 53.  |         | Washer #10 lock - shake-proof . . . . .              | 3   |
| 54.  |         | Machine screw #10-24 x 1/2 long round head . . . . . | 6   |
| 55.  |         | Machine screw #10-24 x 5/8 long round head . . . . . | 4   |
| 56.  | 5560038 | Self locking nut #10-32 ESNA #22NM-02 . . . . .      | 6   |
| 57.  | 301459  | Heat sink . . . . .                                  | 1   |
| 58.  | 300870  | Wire assembly . . . . .                              | 1   |
| 59.  | 0073056 | Wire assembly . . . . .                              | 1   |
| 60.  | 300840  | Lockout lever assembly . . . . .                     | 1   |

## Following items for standard electrical system only

|      |        |                                                      |   |
|------|--------|------------------------------------------------------|---|
| 101. | 302444 | Cable assembly, 2 gauge battery (positive) . . . . . | 1 |
|------|--------|------------------------------------------------------|---|

## Following items for optional quick disconnect electrical system only

|      |        |                                            |   |
|------|--------|--------------------------------------------|---|
| 201. | 302445 | Cable assembly, quick disconnect . . . . . | 1 |
|------|--------|--------------------------------------------|---|

**PLATFORM CONTROL BOX ASSEMBLY**<https://truckmanualshub.com/>

| Item | Part No | Description                                                          | Req |
|------|---------|----------------------------------------------------------------------|-----|
| 0.   |         | Platform control box assembly . . . . .                              | 1   |
|      | 302577  | Joystick control box assembly with palm switch                       |     |
|      | 302578  | Joystick control box assembly with palm switch and battery gauge     |     |
|      | 302579  | Joystick control box assembly with foot switch                       |     |
|      | 302580  | Joystick control box assembly with foot switch and battery gauge     |     |
|      | 302581  | TUV joystick control box assembly with palm switch                   |     |
|      | 302582  | TUV joystick control box assembly with palm switch and battery gauge |     |
|      | 302583  | TUV joystick control box assembly with foot switch                   |     |
|      | 302584  | TUV joystick control box assembly with foot switch and battery gauge |     |
| 1.   | 300604  | Jumper wire . . . . .                                                | 1   |
| 2.   | 300605  | Jumper wire . . . . .                                                | 5   |
| 3.   | 300606  | Jumper wire . . . . .                                                | 4   |
| 4.   | 300607  | Jumper wire . . . . .                                                | 2   |
| 5.   | 300608  | Jumper wire . . . . .                                                | 1   |
| 6.   | 0060373 | Jumper strap . . . . .                                               | 5   |
| 7.   | 0070746 | Jumper wire . . . . .                                                | 1   |
| 8.   | 300611  | Jumper wire . . . . .                                                | 1   |
| 9.   | 0070753 | Jumper wire . . . . .                                                | 1   |
| 10.  | 300612  | Jumper wire . . . . .                                                | 1   |
| 11.  | 300613  | Jumper wire . . . . .                                                | 1   |
| 12.  | 3040097 | Sealing plug, Deutsch #114017 . . . . .                              | 13  |
| 13.  | 3040338 | Connector, Deutsch #HD34-24-23-PN . . . . .                          | 1   |
| 14.  | 3020018 | Switch, DPDT toggle . . . . .                                        | 1   |
| 15.  | 446826  | Contact block . . . . .                                              | 1   |
| 16.  | 0070967 | Corrosion inhibitor . . . . .                                        | 1   |
| 17.  | 3020089 | Switch, DPDT toggle . . . . .                                        | 1   |
| 18.  | 300579  | Joystick controller . . . . .                                        | 1   |
|      | 8150086 | Replacement boot . . . . .                                           |     |
|      | 8150087 | Replacement knob . . . . .                                           |     |
| 19.  |         | Strain relief (included with plug - item 29) . . . . .               | 1   |
| 20.  | 300552  | Control box weldment . . . . .                                       | 1   |
| 21.  | 300549  | Channel, control box mount . . . . .                                 | 1   |
| 22.  | 300550  | Channel, control box mount . . . . .                                 | 1   |
| 23.  | 5560034 | Self locking nut #10-24 ESNA #22NM-04 . . . . .                      | 5   |
| 24.  |         | Machine screw #10-24 x 3/4 long round head . . . . .                 | 6   |
| 25.  | 3040098 | Panel nut #24, Deutsch #112263-90 . . . . .                          | 1   |
| 26.  | 3040099 | Lock washer #24, Deutsch #112264 . . . . .                           | 1   |
| 27.  |         | Nut #10-24 hex . . . . .                                             | 1   |
| 28.  |         | Washer #10 medium lock . . . . .                                     | 1   |
| 29.  | 3040339 | Plug, Deutsch #HD36-24-23SN-059 . . . . .                            | 1   |

**Following additional items required for #302577 platform control box only**

|      |        |                                                       |   |
|------|--------|-------------------------------------------------------|---|
| 101. | 300614 | Jumper wire . . . . .                                 | 1 |
| 102. | 300563 | Switch, DPDT toggle . . . . .                         | 1 |
| 103. | 446836 | Emergency stop operator, standard push-pull . . . . . | 1 |

**Following additional items required for #302578 platform control box only**

|      |         |                                                       |   |
|------|---------|-------------------------------------------------------|---|
| 101. | 300614  | Jumper wire . . . . .                                 | 1 |
| 102. | 300563  | Switch, DPDT toggle . . . . .                         | 1 |
| 103. | 446836  | Emergency stop operator, standard push-pull . . . . . | 1 |
| 202. | 300802  | Jumper wire . . . . .                                 | 1 |
| 203. | 0181103 | Jumper wire . . . . .                                 | 1 |
| 204. | 7110031 | O-ring, Parker DASH 31-7 . . . . .                    | 1 |
| 205. | 487696  | Battery condition indicator . . . . .                 | 1 |

# PLATFORM CONTROL BOX ASSEMBLY

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## Following additional items required for #302579 platform control box only

|      |         |                                             |   |
|------|---------|---------------------------------------------|---|
| 103. | 446836  | Emergency stop operator, standard push-pull | 1 |
| 302. | 3020048 | Switch, DPDT toggle                         | 1 |
| 303. | 3040115 | Connector, Appleton #CG-3750                | 1 |
| 304. | 3040070 | Locknut, Appleton #BL-50                    | 1 |
| 305. | 302585  | Foot switch assembly                        | 1 |

## Following additional items required for #302580 platform control box only

|      |         |                                             |   |
|------|---------|---------------------------------------------|---|
| 103. | 446836  | Emergency stop operator, standard push-pull | 1 |
| 202. | 300802  | Jumper wire                                 | 1 |
| 203. | 0181103 | Jumper wire                                 | 1 |
| 204. | 7110031 | O-ring, Parker DASH 31-7                    | 1 |
| 205. | 487696  | Battery condition indicator                 | 1 |
| 302. | 3020048 | Switch, DPDT toggle                         | 1 |
| 303. | 3040115 | Connector, Appleton #CG-3750                | 1 |
| 304. | 3040070 | Locknut, Appleton #BL-50                    | 1 |
| 305. | 302585  | Foot switch assembly                        | 1 |

## Following additional items required for #302581 platform control box only

|      |        |                                                         |   |
|------|--------|---------------------------------------------------------|---|
| 101. | 300614 | Jumper wire                                             | 1 |
| 102. | 300563 | Switch, DPDT toggle                                     | 1 |
| 401. | 563866 | Emergency stop operator, push to lock/rotate to release | 1 |

## Following additional items required for #302582 platform control box only

|      |         |                                                         |   |
|------|---------|---------------------------------------------------------|---|
| 101. | 300614  | Jumper wire                                             | 1 |
| 102. | 300563  | Switch, DPDT toggle                                     | 1 |
| 202. | 300802  | Jumper wire                                             | 1 |
| 203. | 0181103 | Jumper wire                                             | 1 |
| 204. | 7110031 | O-ring, Parker DASH 31-7                                | 1 |
| 205. | 487696  | Battery condition indicator                             | 1 |
| 401. | 563866  | Emergency stop operator, push to lock/rotate to release | 1 |

## Following additional items required for #302583 platform control box only

|      |         |                                                         |   |
|------|---------|---------------------------------------------------------|---|
| 302. | 3020048 | Switch, DPDT toggle                                     | 1 |
| 303. | 3040115 | Connector, Appleton #CG-3750                            | 1 |
| 304. | 3040070 | Locknut, Appleton #BL-50                                | 1 |
| 305. | 302585  | Foot switch assembly                                    | 1 |
| 401. | 563866  | Emergency stop operator, push to lock/rotate to release | 1 |

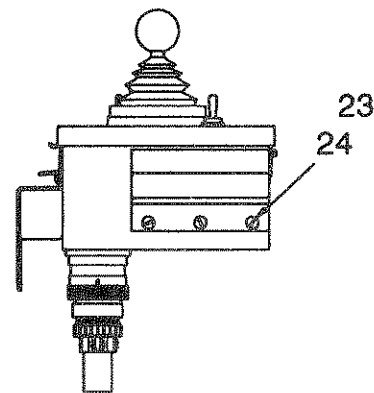
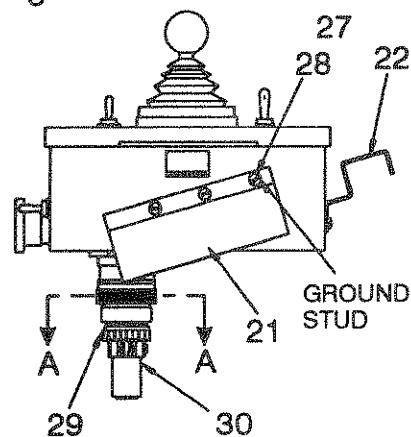
## Following additional items required for #302580 platform control box only

|      |         |                                                         |   |
|------|---------|---------------------------------------------------------|---|
| 202. | 300802  | Jumper wire                                             | 1 |
| 203. | 0181103 | Jumper wire                                             | 1 |
| 204. | 7110031 | O-ring, Parker DASH 31-7                                | 1 |
| 205. | 487696  | Battery condition indicator                             | 1 |
| 302. | 3020048 | Switch, DPDT toggle                                     | 1 |
| 303. | 3040115 | Connector, Appleton #CG-3750                            | 1 |
| 304. | 3040070 | Locknut, Appleton #BL-50                                | 1 |
| 305. | 302585  | Foot switch assembly                                    | 1 |
| 401. | 563866  | Emergency stop operator, push to lock/rotate to release | 1 |

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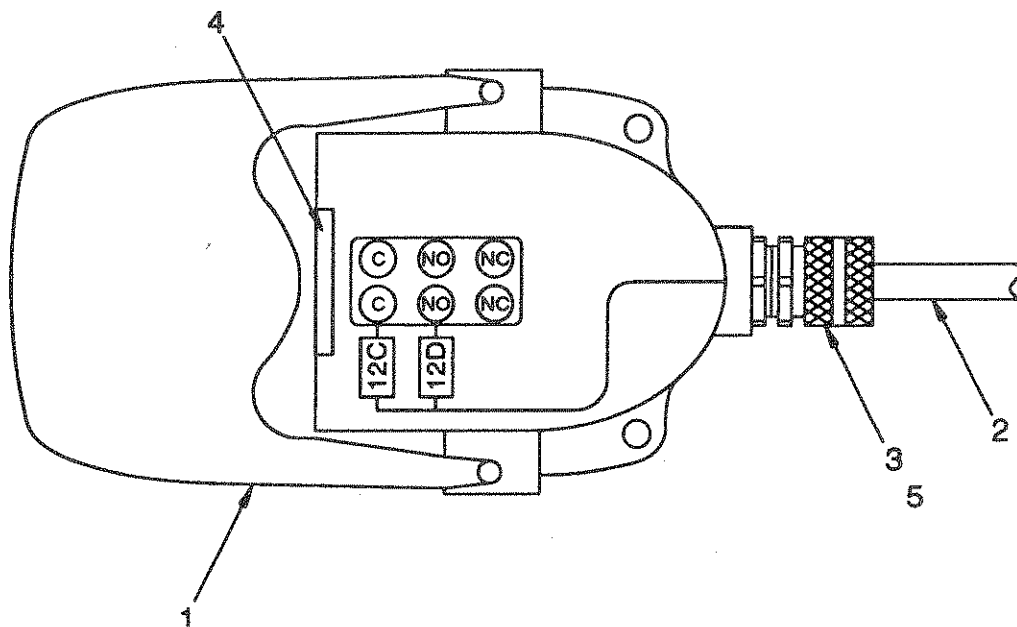
- SOCKETS
- 31
- NOTE 1
- SECTION A-A



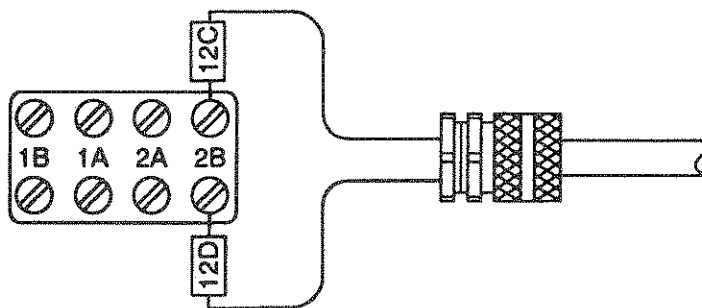
# FOOT SWITCH ASSEMBLY

<https://truckmanualshub.com/>

| Item | Part No | Description                            | Req |
|------|---------|----------------------------------------|-----|
| 0.   | 302585  | Foot switch assembly . . . . .         | 1   |
| 1.   | 3020021 | Foot switch . . . . .                  | 1   |
| 2.   | 302587  | Wire assembly . . . . .                | 1   |
| 3.   | 3040295 | Connector, Appleton #CG-6275 . . . . . | 1   |
| 4.   | 0070967 | Corrosion inhibitor . . . . .          | 1   |
| 5.   | 3040110 | Locknut, Appleton #BL-75 . . . . .     | 1   |



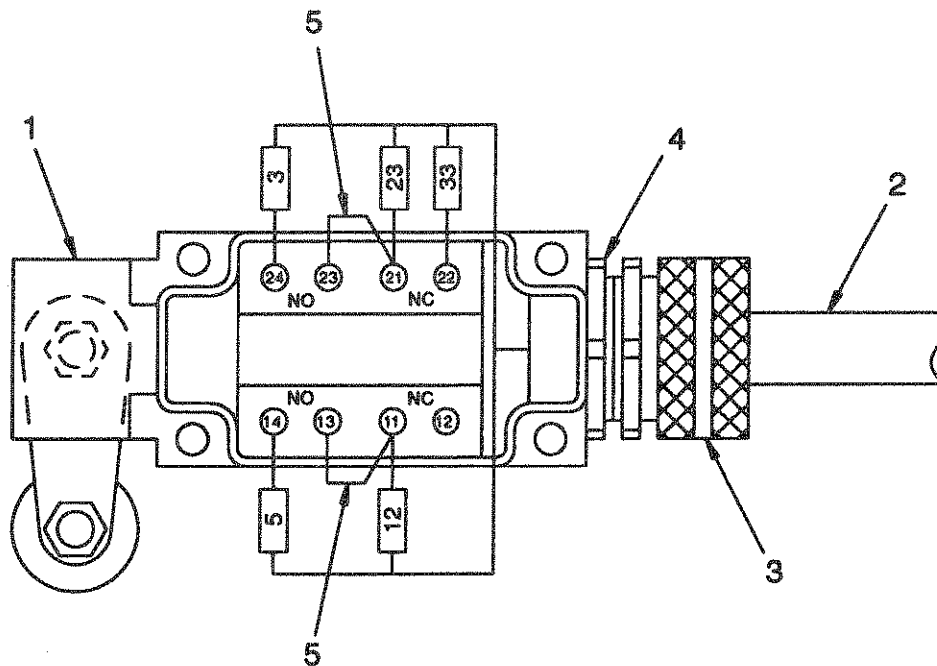
FOOT SWITCH SHOWN WITH  
LINEMASTER SWITCH



FOOT SWITCH WIRING SHOWN FOR  
SQUARE D SWITCH

# LIMIT SWITCH ASSEMBLY, PLATFORM ELEVATION

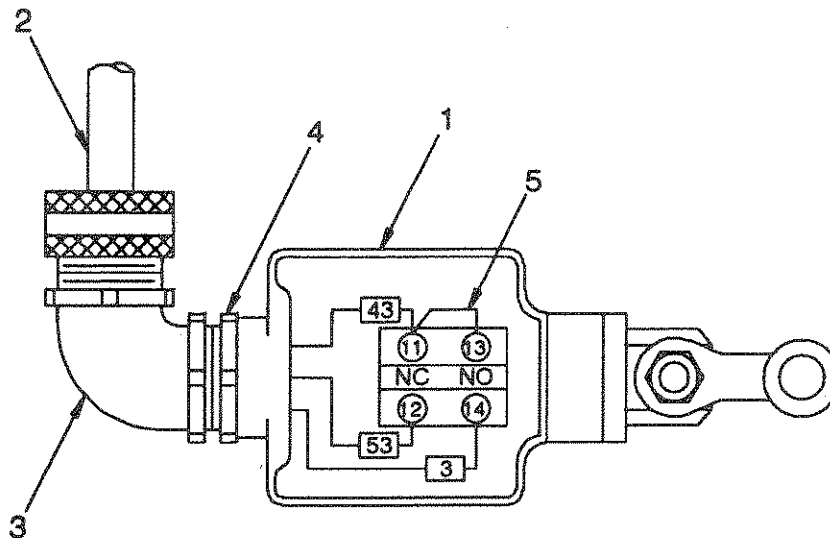
| Item | Part No | Description                                             | Req |
|------|---------|---------------------------------------------------------|-----|
| 0.   | 301469  | Limit switch assembly, platform elevation . . . . .     | 1   |
| 1.   | 300565  | Limit switch . . . . .                                  | 1   |
| 2.   | 301468  | Wire assembly . . . . .                                 | 1   |
| 3.   | 3040115 | Connector, Appleton #CG-3750 . . . . .                  | 1   |
| 4.   | 3040070 | Locknut, Appleton #BL-50 . . . . .                      | 1   |
| 5.   | 3011601 | Wire, 16 gauge single conductor x 2 inch long . . . . . | 2   |



# LIMIT SWITCH ASSEMBLY, POT HOLE INTERLOCK

<https://truckmanualshub.com/>

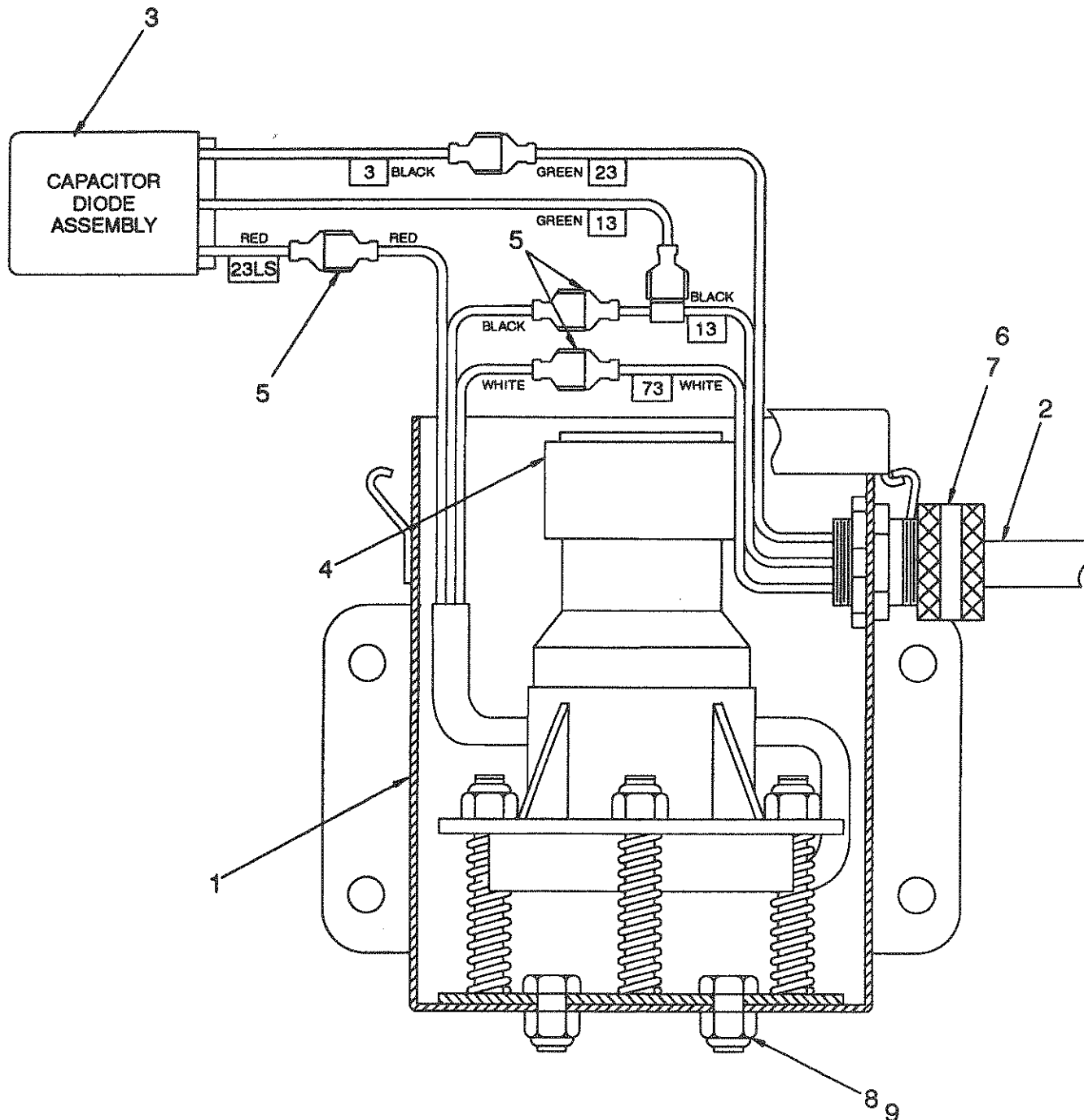
| Item | Part No | Description                                             | Req |
|------|---------|---------------------------------------------------------|-----|
| 0.   | 301404  | Limit switch assembly, pothole interlock . . . . .      | 1   |
| 1.   | 3020079 | Limit switch . . . . .                                  | 1   |
| 2.   | 301423  | Wire assembly . . . . .                                 | 1   |
| 3.   | 3040385 | Connector 90°, Appleton #CG90-2550 . . . . .            | 1   |
| 4.   | 3040070 | Locknut, Appleton #BL-50 . . . . .                      | 1   |
| 5.   | 3011601 | Wire, 16 gauge single conductor x 2 inch long . . . . . | 1   |



# TILT ALARM SENSOR ASSEMBLY

<https://truckmanualshub.com/>

| Item | Part No | Description                                                  | Req |
|------|---------|--------------------------------------------------------------|-----|
| 0.   | 302614  | Tilt alarm sensor assembly, 2 axis . . . . .                 | 1   |
| 1.   | 300654  | Tilt alarm box . . . . .                                     | 1   |
| 2.   | 300749  | Wire assembly, tilt alarm . . . . .                          | 1   |
| 3.   | 300939  | Capacitor/diode assembly . . . . .                           | 1   |
| 4.   | 302478  | Tilt sensor, 2 axis - 2° and 4° . . . . .                    | 1   |
| 5.   | 3040046 | Terminal, male 1/4 inch fully insulated 22/18 wire . . . . . | 3   |
| 6.   | 3040070 | Locknut, Appleton #BL-50 . . . . .                           | 1   |
| 7.   | 3040300 | Connector, Appleton #CG-1850 . . . . .                       | 11  |
| 8.   |         | Capscrew 1/4-20 x 1/2 long hex head grade 5 . . . . .        | 2   |
| 9.   | 5560040 | Self locking nut 1/4-20 ESNA #22NE-040 . . . . .             | 2   |

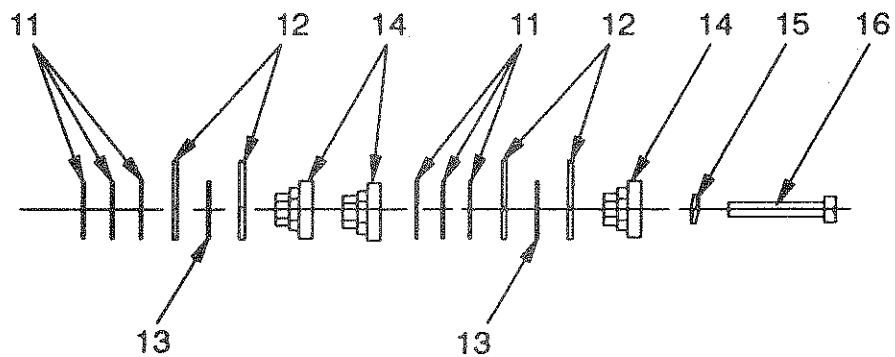
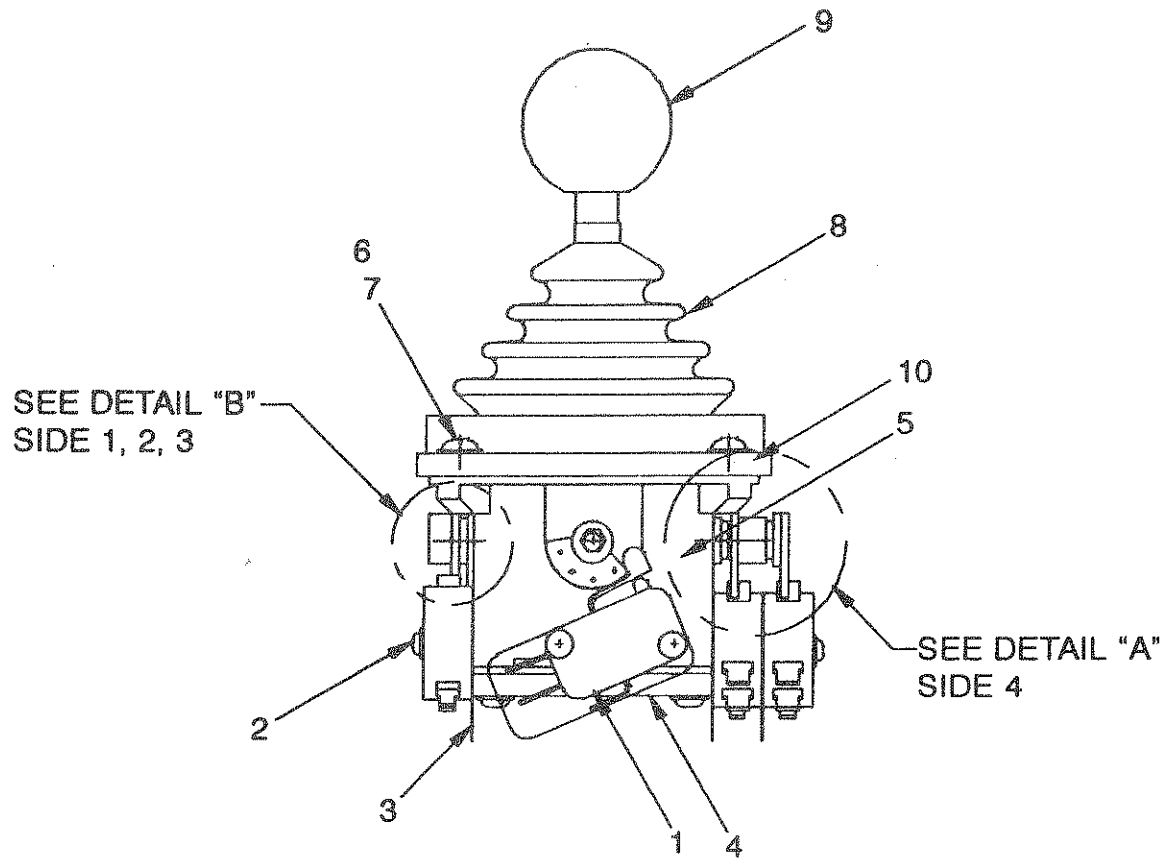


# JOYSTICK CONTROLLER

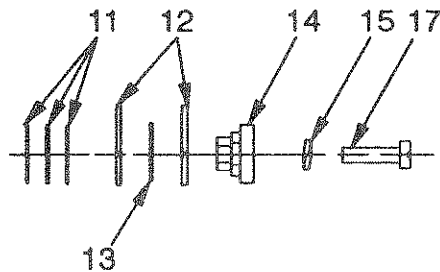
<https://truckmanualshub.com/>

| Item | Part No | Description                                         | Req |
|------|---------|-----------------------------------------------------|-----|
| 0.   | 300579  | Joystick controller, O.E.M. #BJS5M7761 . . . . .    | 1   |
| 1.   | 3020033 | Microswitch, Micro #V3L139-D8 . . . . .             | 4   |
| 2.   |         | Screw #4-40 x 3/4 long, O.E.M. #A/75 . . . . .      | 6   |
| 3.   |         | Insulator, O.E.M. #B/35 . . . . .                   | 4   |
| 4.   |         | Gate - 18 degrees, O.E.M. #GG/5 . . . . .           | 1   |
| 5.   |         | Cast housing, O.E.M. #GG/1 . . . . .                | 1   |
| 6.   |         | Mounting screw, O.E.M. #GG/6 . . . . .              | 4   |
| 7.   |         | Mounting washer, O.E.M. #B/90 . . . . .             | 4   |
| 8.   | 8150086 | Neoprene boot, O.E.M. #GG/15 . . . . .              | 1   |
| 9.   | 8150087 | Round knob, O.E.M. #A/121 . . . . .                 | 1   |
| 10.  |         | Boot Flange, O.E.M. #G/16 . . . . .                 | 1   |
| 11.  |         | Small washer, O.E.M. #A/48 . . . . .                | 15  |
| 12.  |         | Cam - 4 hole, O.E.M. #A/49 . . . . .                | 10  |
| 13.  |         | Spacer, O.E.M. #A/18 . . . . .                      | 5   |
| 14.  |         | Black cam coupling, O.E.M. #A/47 . . . . .          | 6   |
| 15.  |         | Split lock washer, O.E.M. #B/105 . . . . .          | 4   |
| 16.  |         | Screw metric M3 x 20MM long, O.E.M. #A/84 . . . . . | 1   |
| 17.  |         | Screw metric M3 x 12MM long, O.E.M. #A/81 . . . . . | 3   |

# JOYSTICK CONTROLLER



DETAIL "A"



DETAIL "B"  
TYP 3 PLACES

## **OPTIONS - SECTION 4 INDEX**

---

|                                                            |             |
|------------------------------------------------------------|-------------|
| A.C. Outlet, 110 Volt on Platform, Parts List . . . . .    | Page 4 - 2  |
| A.C. Outlet, 110 Volt on Platform, Drawing . . . . .       | Page 4 - 3  |
| Backup/Motion Alarm . . . . .                              | Page 4 - 5  |
| Entry Gate, Automatic Closing - Standard Rails . . . . .   | Page 4 - 6  |
| Entry Gate, Automatic Closing - Swing Down Rails . . . . . | Page 4 - 7  |
| Flashing Light . . . . .                                   | Page 4 - 8  |
| Operator Horn . . . . .                                    | Page 4 - 9  |
| Spare Battery Tray . . . . .                               | Page 4 - 10 |

# A.C. OUTLET 110 VOLT ON PLATFORM

| Item | Part No | Description                                          | Req |
|------|---------|------------------------------------------------------|-----|
| 1.   | 0150606 | Placard, 110 volt - 15 amp power . . . . .           | 1   |
| 2.   | 238396  | Electrical plug, 15 amp - 125 volt . . . . .         | 1   |
| 3.   | 3011403 | Wire, 3 conductor 14 gauge x 47½ feet long . . . . . | 1   |
| 4.   | 3040297 | Box, weatherproof A.C. outlet . . . . .              | 1   |
| 5.   | 3040397 | Terminal #8 spade insulated 12/10 wire . . . . .     | 1   |
| 6.   | 5093004 | Clamp, Aeroquip #900729-4 . . . . .                  | 2   |
| 7.   | 5093001 | Clamp, Aeroquip #900729-1 . . . . .                  | 21  |
| 8.   | 606614  | Bracket, A.C. outlet box . . . . .                   | 1   |
| 9.   | 962709  | Grip, cord ½ connect . . . . .                       | 1   |
| 10.  |         | Washer ¼ medium flat . . . . .                       | 2   |
| 11.  |         | Capscrew ¼-20 x 1¾ long hex head grade 5 . . . . .   | 2   |
| 12.  | 5560004 | Self locking nut ¼-20 ESNA #22NE-066 . . . . .       | 2   |

## STANDARD A.C. OUTLET

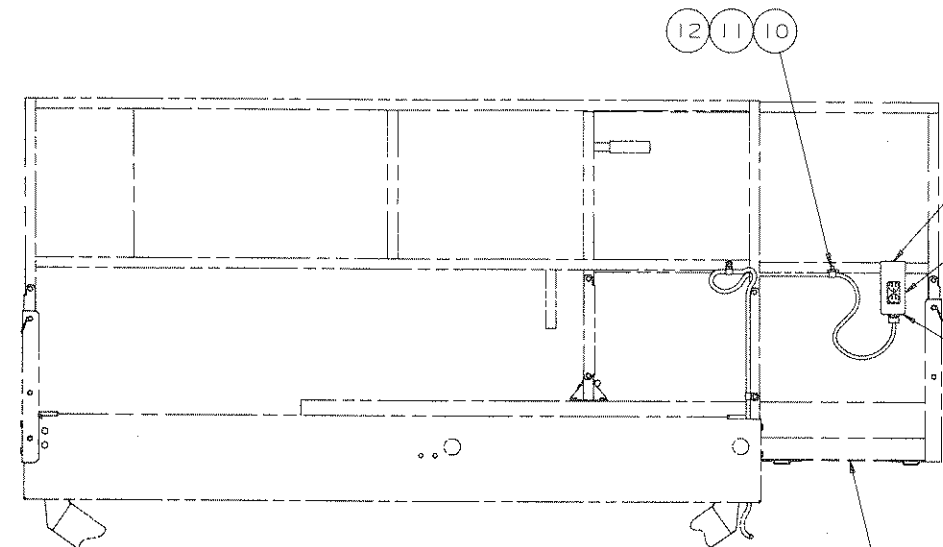
|      |         |                                           |   |
|------|---------|-------------------------------------------|---|
| 101. | 960779  | Receptacle, 15 amp - 125 volt . . . . .   | 1 |
| 102. | 3045211 | Cover, weatherproof A.C. outlet . . . . . | 1 |

## GROUND FAULT CIRCUIT INTERRUPT A.C. OUTLET

|      |         |                                                |   |
|------|---------|------------------------------------------------|---|
| 201. | 3040624 | Receptacle, GFCI - 20 amp . . . . .            | 1 |
| 202. | 3040625 | Cover, GFCI weatherproof A.C. outlet . . . . . | 1 |

## GROUND FAULT CIRCUIT INTERRUPT A.C. OUTLET WITH GENERATOR

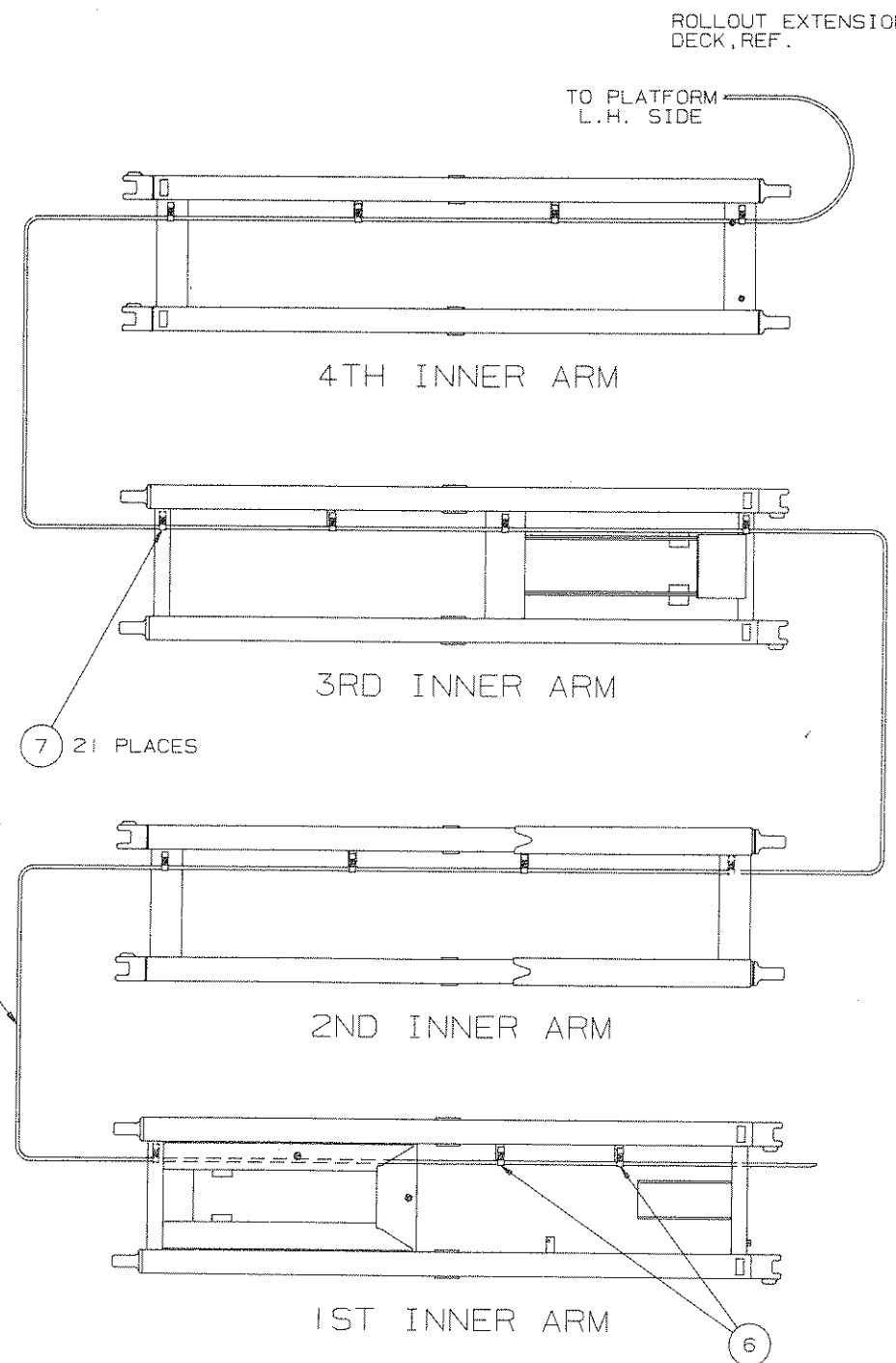
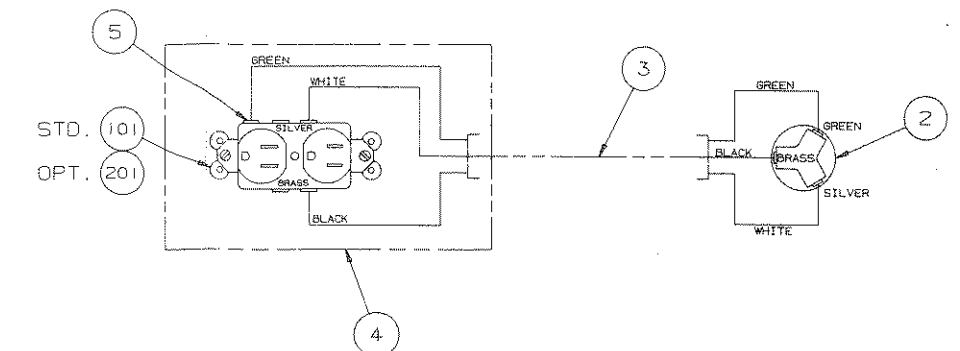
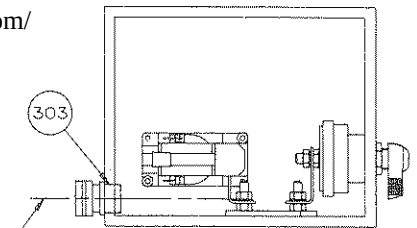
|      |         |                                                           |   |
|------|---------|-----------------------------------------------------------|---|
| 201. | 3040624 | Receptacle, GFCI - 20 amp . . . . .                       | 1 |
| 202. | 3040625 | Cover, GFCI weatherproof A.C. outlet . . . . .            | 1 |
| 301. | 300782  | Cable assembly, 4 gauge red x 148 inches long . . . . .   | 1 |
| 302. | 300783  | Cable assembly, 4 gauge black x 108 inches long . . . . . | 1 |
| 303. | 3040110 | Lock nut, Appleton #BL-75 . . . . .                       | 1 |
| 304. | 3040269 | Insulator boot . . . . .                                  | 2 |
| 305. | 455536  | Motor generator, Rediline #DA24A . . . . .                | 1 |
| 306. | 5090034 | Sleeve, hose abrasion guard x 8 feet long . . . . .       | 1 |
| 307. |         | Capscrew 5/16-18 x 1 long hex head grade 5 . . . . .      | 4 |
| 308. | 5560031 | Self locking nut 5/16-18 ESNA #22NE-058 . . . . .         | 4 |
| 309. |         | Washer 5/16 medium flat . . . . .                         | 9 |
| 310. |         | Carriage bolt 3/8-16 x 1 inch long . . . . .              | 1 |
| 311. | 5560033 | Self locking nut 3/8-16 ESNA #22NE-066 . . . . .          | 1 |
| 312. | 5093004 | Clamp, Aeroquip #900729-4 . . . . .                       | 1 |



CONNECT POS. (RED)  
CABLE TO FUSE BLOCK  
(PUMP CONTACTOR SIDE)

PLUG AC CORD INTO  
GENERATOR INSTEAD  
OF ROUTING TO REAR  
OF FRAME IF OPTION  
WITH GENERATOR IS  
REQ'D.

SECTION B-B



ROLLOUT EXTENSION  
DECK, REF.

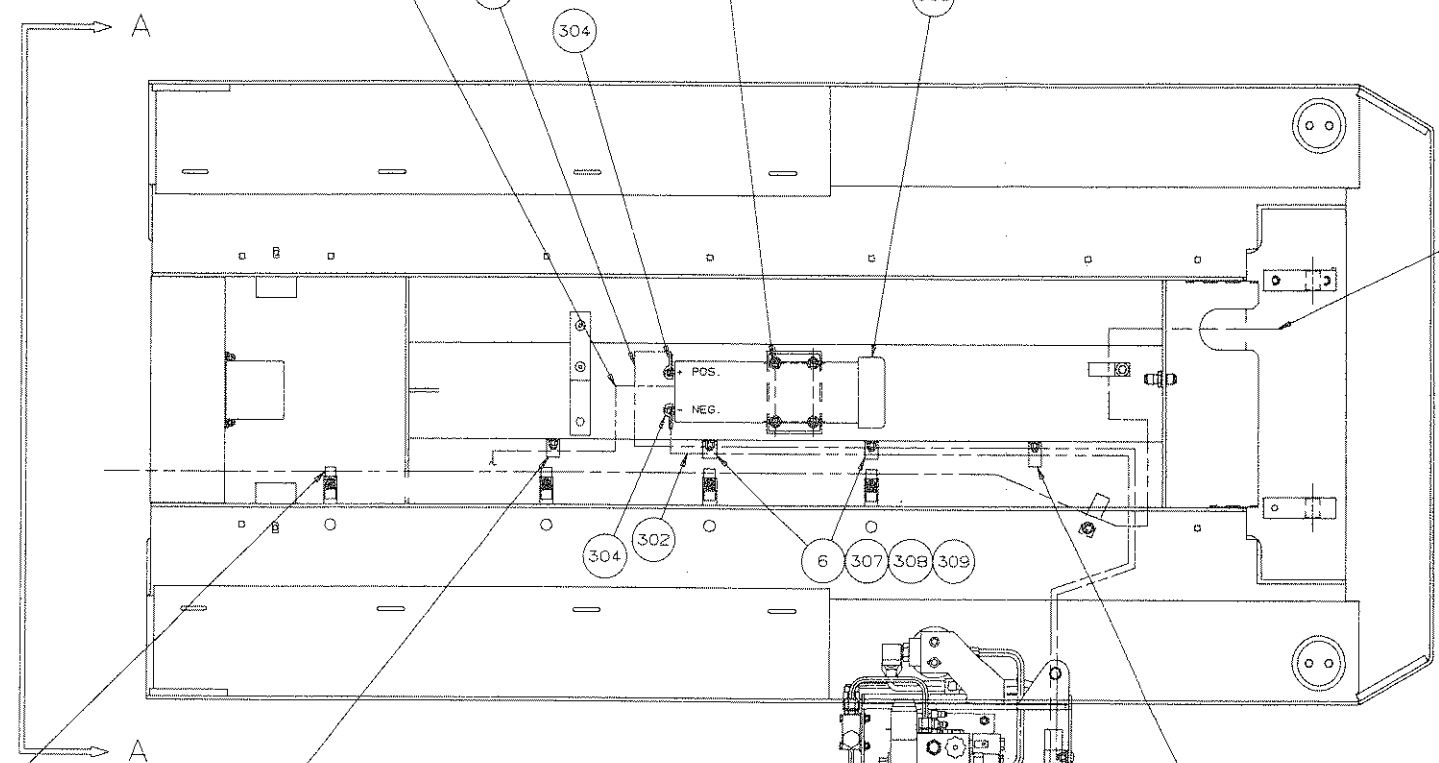
TO PLATFORM  
L.H. SIDE

4TH INNER ARM

3RD INNER ARM

2ND INNER ARM

1ST INNER ARM



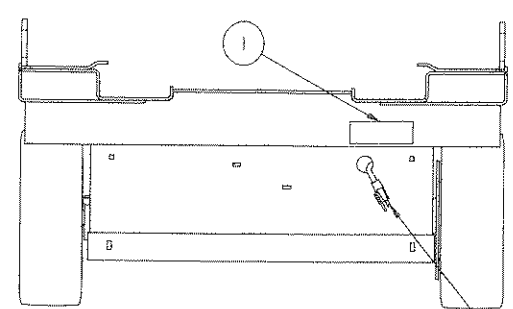
AC CORD COMING  
FROM PLATFORM

FOR OPTION "AC W/GENERATOR"  
PLACE 1/2" CLAMP HERE ROUTE  
AC CORD AS SHOWN AND PLUG INTO  
GENERATOR.

FOR OPTION "AC OUTLET W/O  
GENERATOR" PLACE 1/2" CLAMP  
HERE AND ROUTE AS SHOWN.

ROUTE "POS." CABLE THROUGH  
EXISTING CLAMPS AS SHOWN  
(SEE DETAIL B-B AND C-C)  
FOR CONNECTION INTO BOX

CONNECT "NEG." CABLE TO "NEG." POST  
ON TOP OF MOTOR/PUMP UNIT.



VIEW A-A

ROUTING SHOWN IS FOR OPTION  
"AC OUTLET W/O GENERATOR"  
FOR OPTION "AC OUTLET W/GENERATOR"  
PLUG INTO GENERATOR.

1  
2  
3  
4

5  
6  
7

8  
9  
10  
11  
12

13



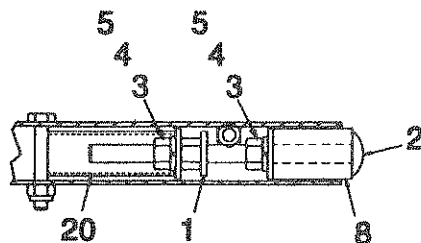
<https://truckmanualshub.com>



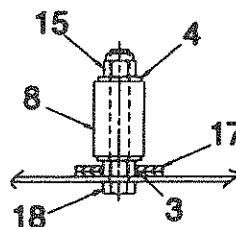
# ENTRY GATE, AUTOMATIC CLOSING - SWING DOWN RAILS

<https://truckmanualshub.com/>

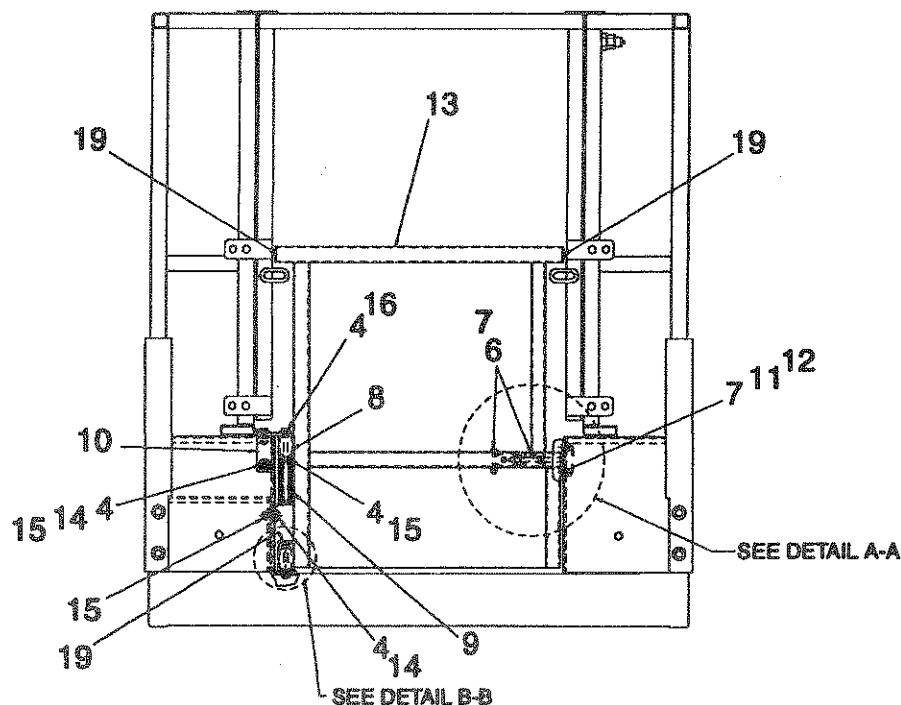
| Item | Part No | Description                                                              | Req |
|------|---------|--------------------------------------------------------------------------|-----|
| 1.   | 0180821 | Nut $\frac{3}{8}$ -16 flange                                             | 1   |
| 2.   |         | Carriage bolt $\frac{3}{8}$ -16 x 5 inch long                            | 1   |
| 3.   |         | Nut $\frac{3}{8}$ -16 hex                                                | 3   |
| 4.   |         | Washer $\frac{5}{16}$ medium flat                                        | 9   |
| 5.   |         | Washer $\frac{1}{4}$ medium lock                                         | 2   |
| 6.   |         | Capscrew $\frac{1}{4}$ -20 x $1\frac{3}{4}$ long hex head grade 5        | 2   |
| 7.   | 5560004 | Self locking nut $\frac{1}{4}$ -20 ESNA #22NE-040                        | 4   |
| 8.   | 302486  | Slider                                                                   | 3   |
| 9.   | 302590  | Torsion spring                                                           | 1   |
| 10.  | 302604  | Hinge bracket                                                            | 1   |
| 11.  | 302570  | Detent bracket                                                           | 1   |
| 12.  |         | Carriage bolt $\frac{1}{4}$ -20 x $\frac{3}{4}$ inch long                | 2   |
| 13.  | 302599  | Gate weldment                                                            | 1   |
| 14.  |         | Capscrew $\frac{3}{8}$ -16 x 1 long hex head grade 5                     | 3   |
| 15.  | 5560033 | Self locking nut $\frac{3}{8}$ -16 ESNA #22NE-066                        | 5   |
| 16.  |         | Capscrew $\frac{3}{8}$ -16 x $2\frac{3}{4}$ long hex head grade 5        | 1   |
| 17.  |         | Washer $\frac{5}{8}$ medium flat                                         | 2   |
| 18.  | 5560247 | Capscrew $\frac{3}{8}$ -16 x $2\frac{1}{2}$ full thread hex head grade 5 | 1   |
| 19.  | 468886  | End cap, square plastic                                                  | 3   |
| 20.  | 5530009 | Compression spring                                                       | 1   |



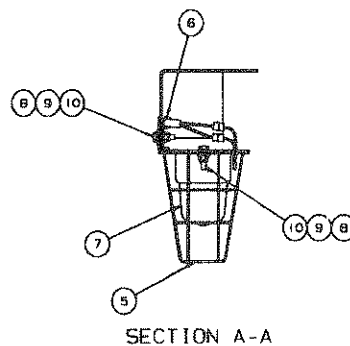
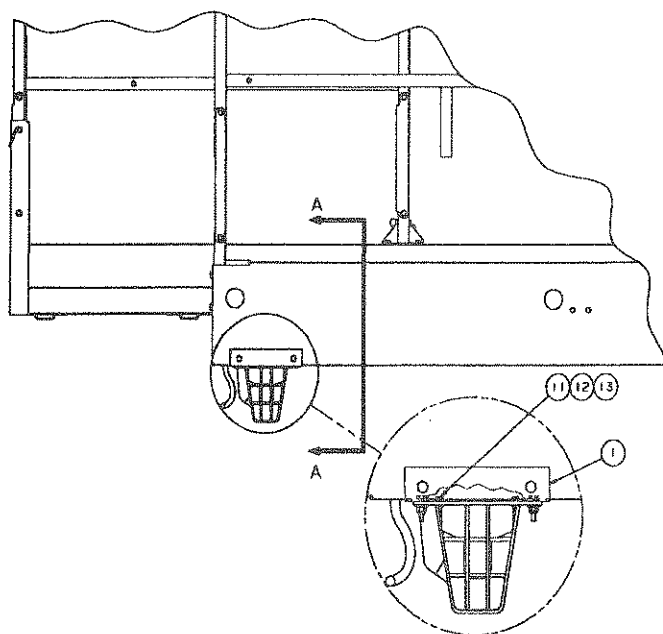
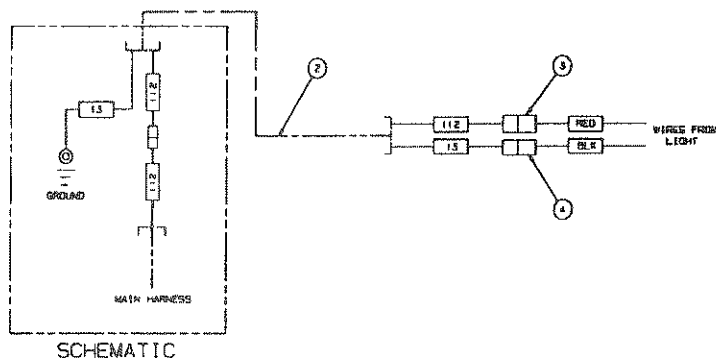
DETAIL A-A



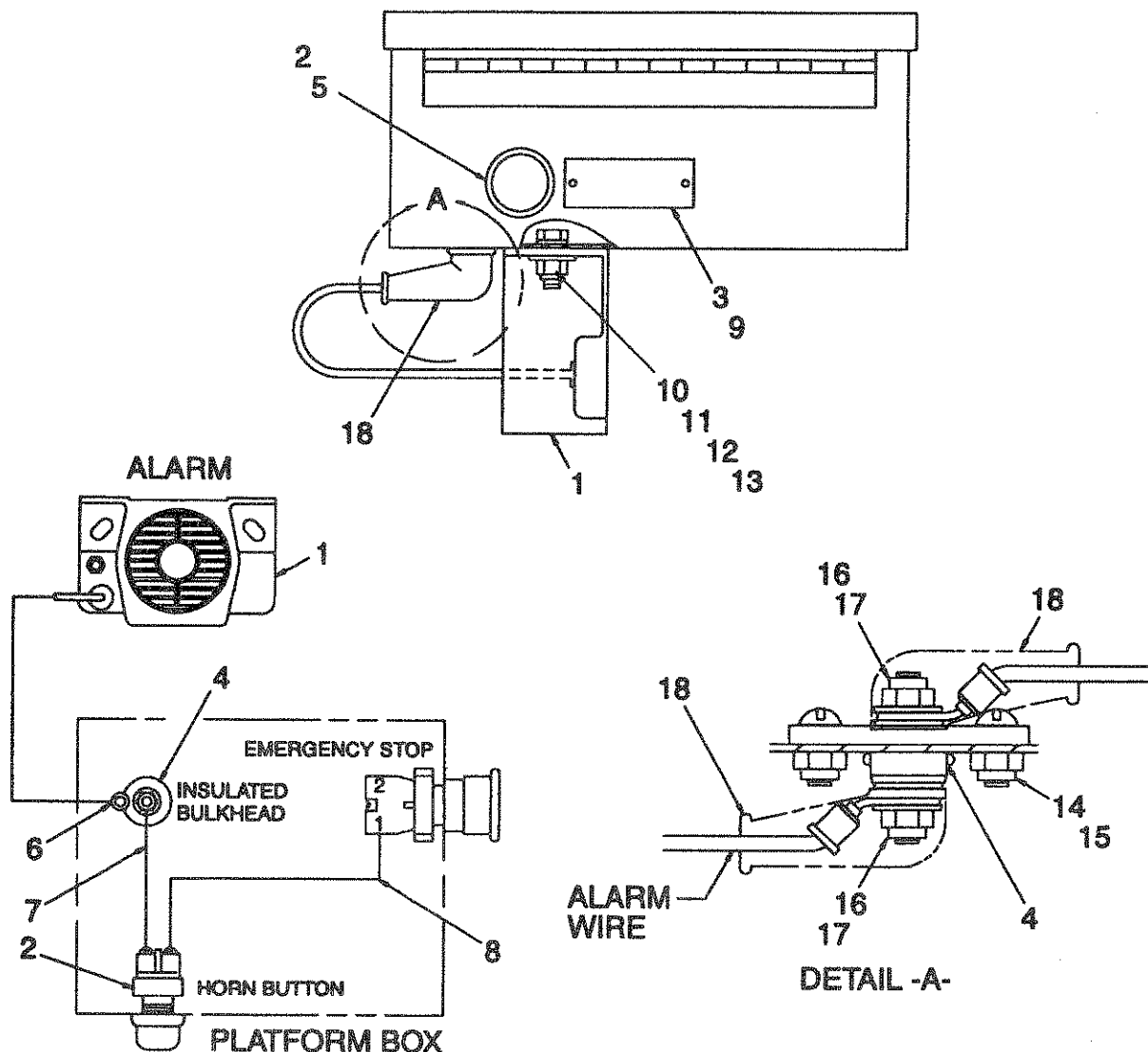
DETAIL B-B



| Item | Part No | Description                                               | Req |
|------|---------|-----------------------------------------------------------|-----|
| 1.   | 301494  | Angle, motion alarm mount . . . . .                       | 1   |
| 2.   | 302573  | Wire assembly, flashing light . . . . .                   | 1   |
| 3.   | 3040082 | Terminal .250 male fully insulated 16/14 wire . . . . .   | 1   |
| 4.   | 3040083 | Terminal .250 female fully insulated 16/14 wire . . . . . | 1   |
| 5.   | 487686  | Light guard . . . . .                                     | 1   |
| 6.   | 5093019 | Clamp, Aeroquip #900729-19 . . . . .                      | 3   |
| 7.   | 564136  | Flashing light, amber . . . . .                           | 1   |
| 8.   | 5560004 | Self locking nut ¼-20 ESNA #22NE-040 . . . . .            | 4   |
| 9.   |         | Capscrew ¼-20 x 1 long hex head grade 5 . . . . .         | 4   |
| 10.  |         | Washer ¼ medium flat . . . . .                            | 4   |
| 11.  | 974689  | Machine screw #10-24 x ¾ long round head . . . . .        | 2   |
| 12.  | 5560034 | Self locking nut #10-24 ESNA #22NM-04 . . . . .           | 2   |
| 13.  |         | Washer #10 medium flat . . . . .                          | 2   |



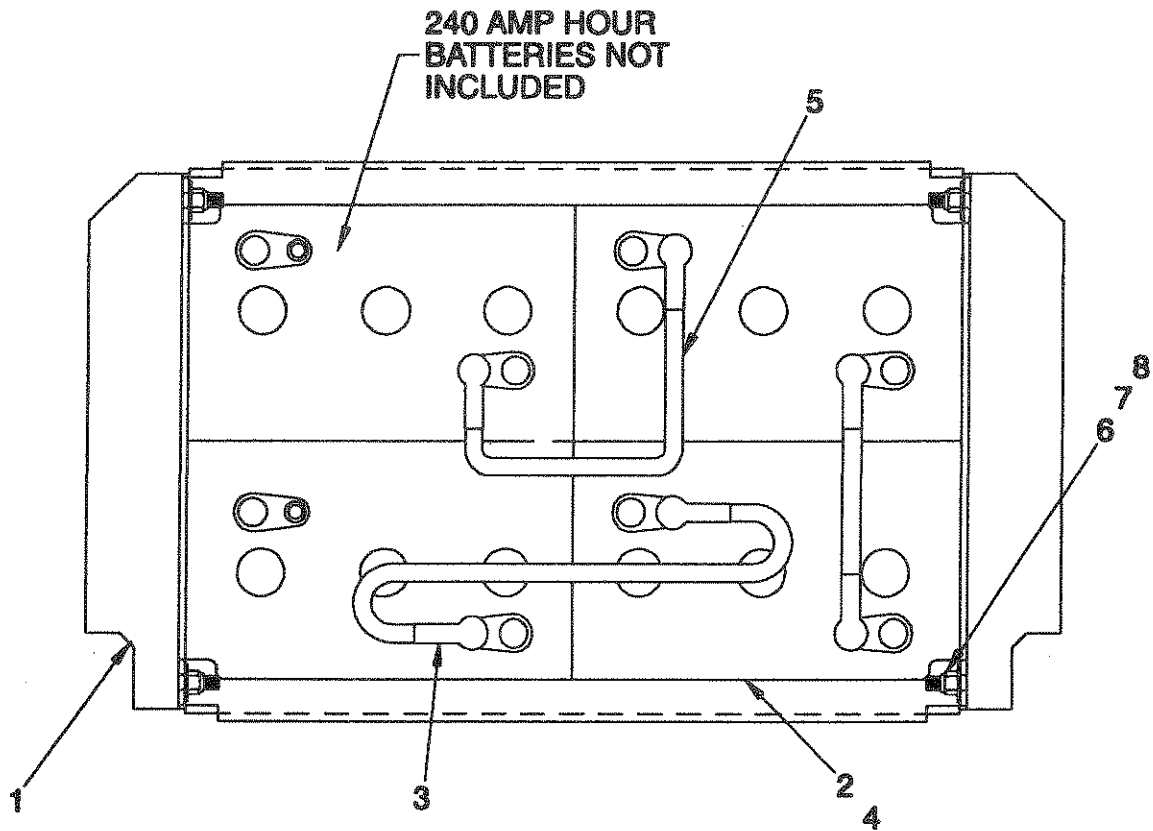
| Item | Part No | Description                                           | Req |
|------|---------|-------------------------------------------------------|-----|
| 1.   | 300660  | Alarm horn . . . . .                                  | 1   |
| 2.   | 3026027 | Switch, push button . . . . .                         | 1   |
| 3.   | 0071269 | Placard, horn . . . . .                               | 1   |
| 4.   | 302586  | Feed thru stud . . . . .                              | 1   |
| 5.   | 7140092 | Switch seal . . . . .                                 | 1   |
| 6.   | 3044161 | Terminal #10 stud 16/14 wire . . . . .                | 1   |
| 7.   | 300786  | Jumper wire . . . . .                                 | 1   |
| 8.   | 300787  | Jumper wire . . . . .                                 | 1   |
| 9.   |         | Pop rivet #AD32ABS . . . . .                          | 2   |
| 10.  |         | Capscrew 1/4-20 x 3/4 long hex head grade 5 . . . . . | 2   |
| 11.  | 5560004 | Self locking nut 1/4-20 ESNA #22NE-040 . . . . .      | 2   |
| 12.  |         | Washer 1/4 medium flat . . . . .                      | 2   |
| 13.  |         | Washer 1/4 medium lock . . . . .                      | 2   |
| 14.  |         | Machine screw #10-24 x 3/4 long round head . . . . .  | 2   |
| 15.  | 5560034 | Self locking nut #10-24 ESNA #22NM-04 . . . . .       | 2   |
| 16.  | 5560038 | Self locking nut #10-32 ESNA #22NM-02 . . . . .       | 2   |
| 17.  |         | Washer #10 medium flat . . . . .                      | 2   |
| 18.  | 3040268 | Insulator boot . . . . .                              | 2   |



# OPERATOR HORN

<https://truckmanualshub.com/>

| Item | Part No | Description                                                 | Req |
|------|---------|-------------------------------------------------------------|-----|
| 0.   | 302612  | Spare battery tray assembly . . . . .                       | 1   |
| 1.   | 302458  | Removable tray . . . . .                                    | 1   |
| 2.   | 302457  | Battery hold down angle . . . . .                           | 2   |
| 3.   | 3040269 | Wire boot . . . . .                                         | 8   |
| 4.   | 302547  | Plastic battery insulator angle . . . . .                   | 2   |
| 5.   | 584926  | Battery wire . . . . .                                      | 1   |
| 6.   |         | Carriage bolt $\frac{3}{8}$ -16 x 1 inch long . . . . .     | 4   |
| 7.   | 5560033 | Self locking nut $\frac{3}{8}$ -16 ESNA #22NE-066 . . . . . | 4   |
| 8.   |         | Washer $\frac{3}{8}$ medium flat . . . . .                  | 4   |



## **OPERATING INSTRUCTIONS LESTRONIC II BATTERY CHARGER**

---

(Built-in or Portable Application)

1. Connect power supply cord to properly grounded outlet of the proper voltage and frequency as specified on the charger nameplate. Circuit breaker or fuse protection in the AC line must be adequate to handle the input power requirements. When it is necessary to use an AC extension cord to the charger use a three conductor, 12 gauge cord with ground and keep as short as possible.

If DC output cord to batteries, charger will automatically turn on after a short delay.

2. Connect DC output cord to batteries (if not already connected).
3. Monitor ammeter for correct charge rate. Normal charging at the finish charge rate for the last 3 to 5 hours is important to achieve equalization of all battery cells every time the batteries are charged. New batteries or batteries charged in cold temperatures (below 50 degrees F) will require more time to achieve full charge.
4. Charger turns off automatically when batteries are fully charged.

### **⚠CAUTION**

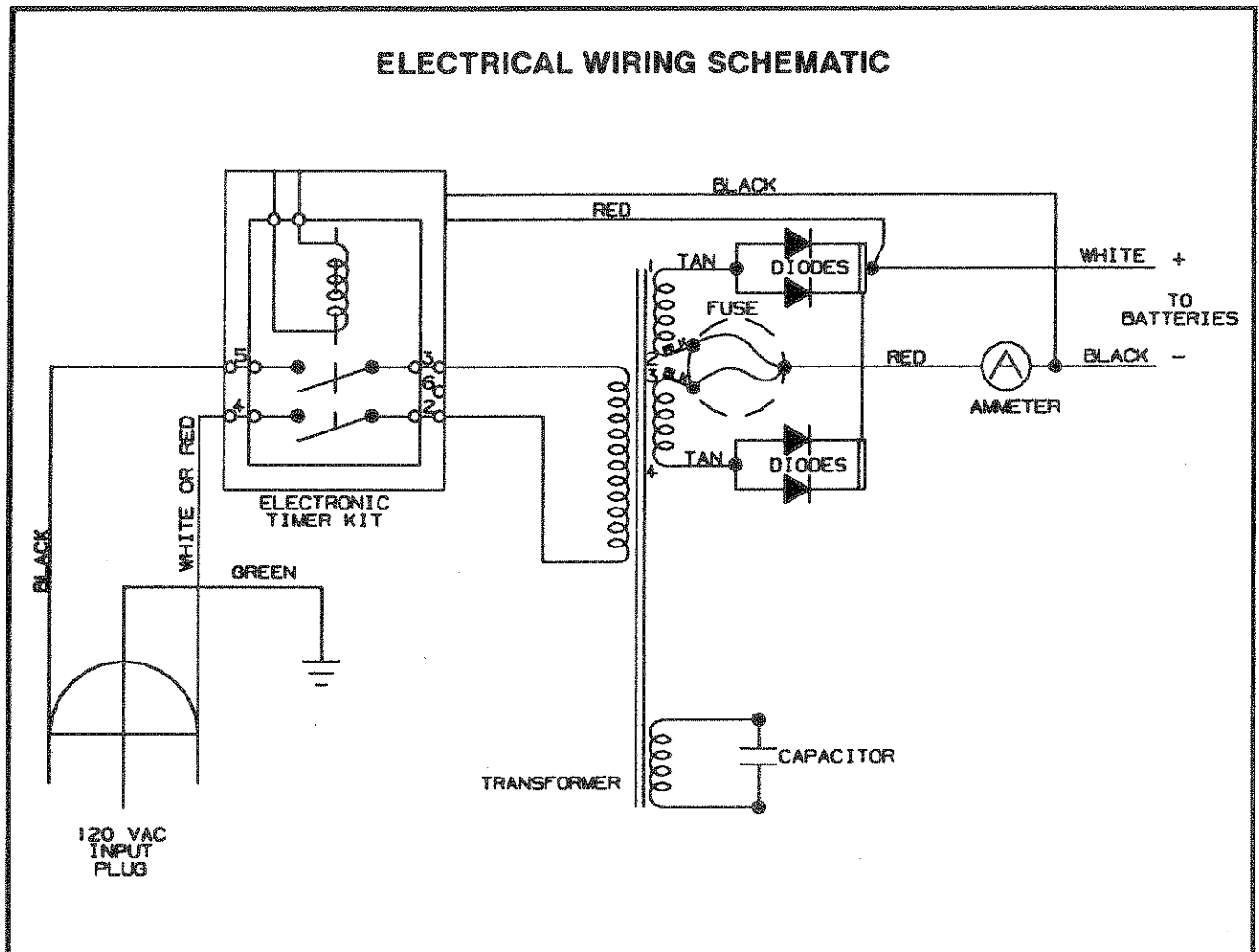
**DO NOT** leave charger on while unattended for more than two consecutive days. Severe overcharging and possible damage to batteries will result if charger should fail to turn off.

For warranty service and parts, contact:

**LESTER ELECTRICAL OF NEBRASKA**  
625 West A Street - Lincoln, Nebraska 68522

PARTS LIST FOR LESTRONIC II CHARGER  
 MODEL 15660 TYPE 24LC25-8ET  
 120 VAC 60 HZ

| PART NO. | DESCRIPTION                                     | QTY. |
|----------|-------------------------------------------------|------|
| 19714S   | CASE ASSEMBLY . . . . .                         | 1    |
| 14605S   | TRANSFORMER ASSEMBLY . . . . .                  | 1    |
| 12594S   | HEATSINK ASSEMBLY . . . . .                     | 1    |
| 04401S   | CAPACITOR, 4.0 MRD, 660 VAC . . . . .           | 1    |
| 16369S   | AMMETER . . . . .                               | 1    |
| 14480S   | FUSE ASSEMBLY . . . . .                         | 1    |
| 02028S   | BUSHING, 7W-2, INSULATOR FOR CORDSETS . . . . . | 2    |
| 19698S   | CORDSET, DC . . . . .                           | 1    |
| 19697S   | CORDSET, AC . . . . .                           | 1    |



# SL-25 VALVE CONTROL TABLE

USE THIS TABLE TO IDENTIFY THE VALVES THAT ARE ENERGIZED ELECTRICALLY FOR A GIVEN FUNCTION. SHADED AREAS INDICATE THAT THE VALVE IS ENERGIZED.

| FUNCTIONS             | VALVES     |             |            |           |                       |           |           |          |            |             | 11/17/94 |
|-----------------------|------------|-------------|------------|-----------|-----------------------|-----------|-----------|----------|------------|-------------|----------|
|                       | STEER LEFT | STEER RIGHT | DUMP VALVE | MID SPEED | HIGH SPEED & # 2 PUMP | DRIVE FWD | DRIVE REV | UP VALVE | DOWN VALVE | BRAKE VALVE |          |
| DRIVE FWD, LOW-1      |            |             |            |           |                       |           |           |          |            |             |          |
| DRIVE FWD, MID-2      |            |             |            | ★         |                       |           |           |          |            |             |          |
| DRIVE FWD, HIGH-3     |            |             |            | ★         | ★                     |           |           |          |            |             |          |
| DRIVE REV, LOW        |            |             |            |           |                       |           |           |          |            |             |          |
| DRIVE REV, MID        |            |             |            | ★         |                       |           |           |          |            |             |          |
| DRIVE REV, HIGH       |            |             |            | ★         | ★                     |           |           |          |            |             |          |
| STEER RIGHT           |            |             |            |           |                       |           |           |          |            |             |          |
| STEER LEFT            |            |             |            |           |                       |           |           |          |            |             |          |
| LIFT (PLTFM) UP, LOW  |            |             |            |           |                       |           |           |          |            |             |          |
| LIFT (PLTFM) UP, MID  |            |             |            |           |                       |           |           |          |            |             |          |
| LIFT (PLTFM) UP, HIGH |            |             |            |           |                       |           |           |          |            |             |          |
| LIFT (GND)            |            |             |            |           |                       |           |           |          |            |             |          |
| DOWN                  |            |             |            |           |                       |           |           |          |            |             |          |