



REVISED DECEMBER 2010

Part No. 106777

**MAXI LITE
ML 20B SERIES
OPERATOR'S
MANUAL**

ALLMAND BROTHERS INC.

P.O. BOX 888

HOLDREGE, NE 68949

PHONE: (308) 995- 4495, 1- 800- 562- 1373

ALLMAND FAX: (308) 995- 5887

ALLMAND PARTS DEPT. FAX : (308) 995- 4883

MAXI LITE ML 20B SERIES

INSPECTION CHECK LIST

FOR PREPARING THE MAXI LITE FOR DELIVERY OR RENTAL

The **MAXI LITE ML 20B** requires service as well as proper operation in order to provide the performance and safety it has been designed for. Never deliver or put a machine into service with known defects or missing instructions or decals. Always instruct the customer in the proper operation and safety procedures as described in the operator's manual. Always provide the manual with the equipment for proper and safe operation.

CHECK LIST:

- Visually inspect the equipment to ensure that all instructions and decals are in place and legible.
- Inspect the tower latch and knob assembly which locks the tower in the vertical position for proper operation
- Check the hitch assembly and safety tow chains
- Check the outriggers and jacks to make sure they operate properly
- Inspect the light assemblies for damage and test for proper operation
- Inspect the electrical wiring for signs of damage
- Check the ground rod cable and the ground lug. Make sure they are clean, undamaged, and functional.
- Inspect the tires to ensure good condition and proper inflation
- Check oil, fuel, coolant levels, and hydraulic fluid levels.
- Check to make sure the operator's manual is with the equipment.
- Inspect the machine physically for damage and repair if necessary.
- Inspect the light bar and latch in transport position.

NOTE: See appropriate section of manual for scheduled maintenance intervals.

After completing the inspection check list, operate the tower through a complete operation cycle, following the operating instructions in the operator's manual.

WARNING

**NEVER ALLOW ANYONE TO OPERATE THE EQUIPMENT WITHOUT
PROPER TRAINING!**

ALWAYS READ THE INSTRUCTIONS FIRST!

TABLE OF CONTENTS

INSPECTION CHECK LIST	2
TABLE OF CONTENTS	3
INTRODUCTION	4
SAFETY SYMBOL INFORMATION	4
SAFETY AND WARNING DECALS.....	5-7
HYDRAULIC LIFT MAST OPERATION	8-10
MANUAL WINCH MAST OPERATION	11-12
ELECTRIC WINCH MAST OPERATION	13
TOWING AND STARTING INSTRUCTIONS	14-16
SERIAL NUMBER LOCATION	17
SPECIFICATIONS.....	18-20
CONTROLS AND COMPONENTS	21-28
ROUTINE MAINTENANCE SCHEDULES.....	29
TROUBLESHOOTING.....	30
ASSEMBLY PARTS AND ACCESSORIES	31

INTRODUCTION

- This manual provides the information necessary for the safe operation of the Allmand Bros., Inc., **MAXI-LITE ML 20B** light tower.
- The **MAXI-LITE ML 20B** light tower is operated with a 12 VDC hydraulic pump and hydraulic cylinder.
- Specific operating instructions and specifications are contained in this publication to familiarize the operator and maintenance personnel with the correct and safe procedures necessary to maintain and operate the equipment.

Take time to read this book thoroughly. If you are uncertain about any of the information presented in the manual, contact the factory or your dealer for clarification before operation.

SAFETY SYMBOLS

The purpose of the **SAFETY INFORMATION SYMBOL** shown below is to attract your special attention to safety related information contained in the text.

 **DANGER**

 **WARNING**

 **CAUTION**

FAILURE TO UNDERSTAND AND COMPLY WITH SAFETY RELATED INFORMATIONAL INSTRUCTIONS MAY RESULT IN INJURY TO OPERATOR OR OTHERS. IF YOU DO NOT UNDERSTAND ANY PART OF THIS INFORMATION CONTACT YOUR DEALER FOR CLARIFICATION PRIOR TO OPERATING EQUIPMENT.

NOTE

The word **NOTE** is used to bring your attention to supplementary information in relation to various aspects of proper operation and maintenance.

NOTE: Keep this manual accessible during operation to provide convenient reference.

NOTE: Any reference in this manual to **LEFT** or **RIGHT** shall be determined by looking at the trailer from the rear.

SAFETY AND WARNING DECALS

SAFETY WARNING

ALWAYS REPLACE ANY SAFETY AND INSTRUCTION DECALS THAT BECOME DAMAGED, PAINTED, OR OTHERWISE ILLEGIBLE.

Refer to these representations of the safety warning decals used on the MAXI-LITE to insure correct ordering if replacing becomes necessary.

OPERATING INSTRUCTIONS
Read and understand Operator's Manual before operating machine.

BEFORE STARTING:

1. Visually inspect machine for leaks or damage.
2. Make sure battery connections are clean and tight.
3. Check engine oil level (see manual).
4. Check fuel supply (see manual).
5. Check air cleaner, seals, hoses and clamps (see manual).


STARTING:

1. Turn off all circuit breakers.
2. Turn switch to Preheat position, hold until the glow plug lamp goes out.
3. Turn switch to start position until the engine starts. Release key as soon as the engine starts.
4. If engine fails to start, repeat cycle.

NOTE Do not crank for more than 10 seconds without allowing starter to cool for 30 seconds

STOPPING:

1. Turn lights off with circuit breakers.
2. Unplug external leads.
3. Turn switch to (OFF) position.

 CAUTION


MAKE SURE GROUND ROD IS PUT AWAY AND JACKS, OUTRIGGERS AND MAST ARE FULLY RETRACTED AND LOCKED INTO PLACE BEFORE TOWING.

090249

PART NO. 090249

Location: Inside left hand door panel.

SETUP TRAILER AND RAISE TOWER

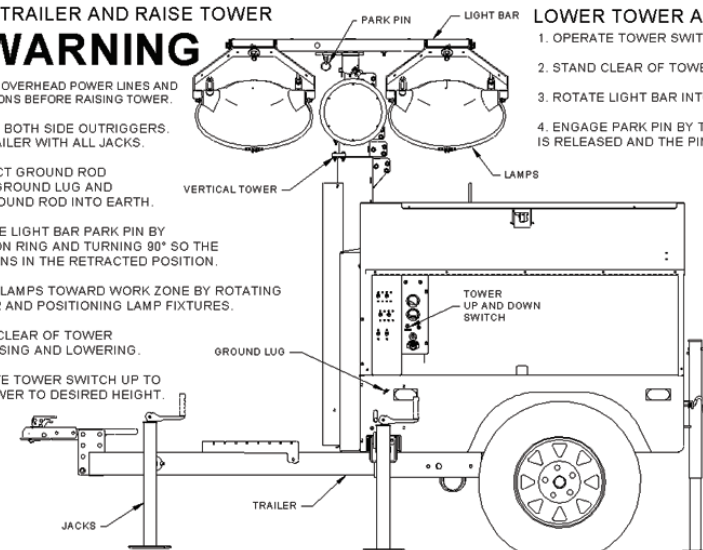
 WARNING

CHECK FOR OVERHEAD POWER LINES AND OBSTRUCTIONS BEFORE RAISING TOWER.

1. EXTEND BOTH SIDE OUTRIGGERS. LEVEL TRAILER WITH ALL JACKS.
2. CONNECT GROUND ROD WIRE TO GROUND LUG AND DRIVE GROUND ROD INTO EARTH.
3. RELEASE LIGHT BAR PARK PIN BY PULLING ON RING AND TURNING 90° SO THE PIN REMAINS IN THE RETRACTED POSITION.
4. DIRECT LAMPS TOWARD WORK ZONE BY ROTATING LIGHT BAR AND POSITIONING LAMP FIXTURES.
5. STAND CLEAR OF TOWER WHEN RAISING AND LOWERING.
6. OPERATE TOWER SWITCH UP TO RAISE TOWER TO DESIRED HEIGHT.

LOWER TOWER AND PREPARE FOR TOWING

1. OPERATE TOWER SWITCH DOWN TO LOWER TOWER.
2. STAND CLEAR OF TOWER WHEN RAISING AND LOWERING.
3. ROTATE LIGHT BAR INTO PARK POSITION (IN LINE WITH TRAILER).
4. ENGAGE PARK PIN BY TWISTING ON THE RING UNTIL THE PLUNGER IS RELEASED AND THE PIN ENGAGES THE HOLE IN THE LIGHT BAR.
5. REPOSITION LAMP FIXTURES FOR TRANSPORT BY PULLING THEM DOWN INTO THE LOWEST POSITION AND FACING TOWARD THE CENTER OF THE TRAILER.
6. REMOVE GROUND ROD AND SECURE INSIDE TRAILER.
7. RAISE JACKS AND SWING INTO TRANSPORT POSITION.
8. RETRACT OUTRIGGERS AND SECURE.



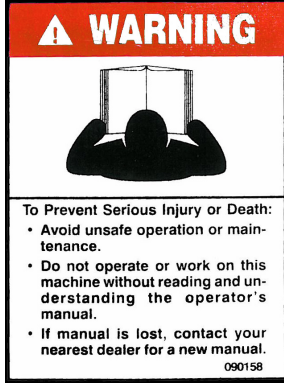
Allmand™
For parts and service contact your authorized dealer or visit Allmand on the web at www.allmand.com or call 1-800-562-1373

101925

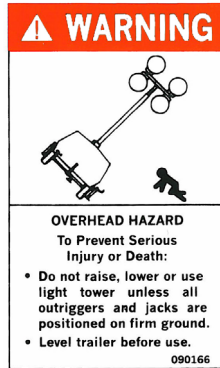
PART NO. 101925

Location: Inside left hand door panel.

SAFETY AND WARNING DECALS



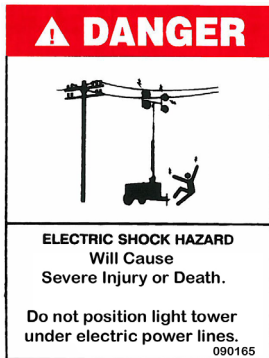
PART NO. 090158
Location: AC control panel



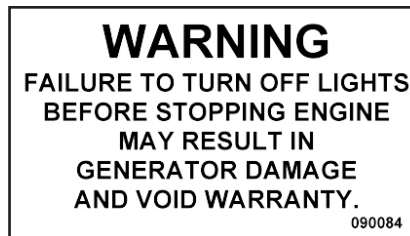
PART NO. 090166
Location: Inside left hand door panel



PART NO. 090163
Location: On left side wheel well



PART NO. 090165
Location: Inside left hand door panel



PART NO. 090084
Location: AC control panel



PART NO. 090162
Location: On left front enclosure panel

GROUNDING LUG 090133

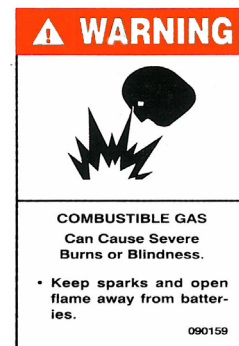
PART NO. 090133
Location: On left side panel below ground lug

DIESEL 090034

PART NO. 090034
Location: On left inner fender adjacent to fuel tank filler neck



PART NO. 090226
Location: Left front panel.



PART NO. 090159
Location: On right hand wheel well

SAFETY AND WARNING DECALS



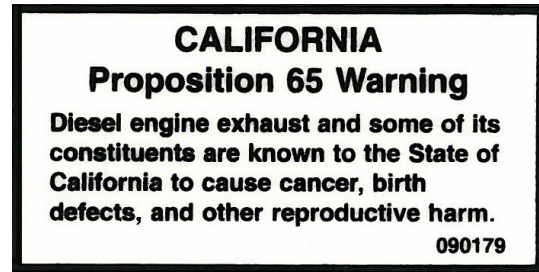
PART NO. 090002
Location: On light bar assembly



PART NO. 090005
Location: Inside left door panel



PART NO. 090160
Location: On trailer drawbar near reversible hitch assembly.



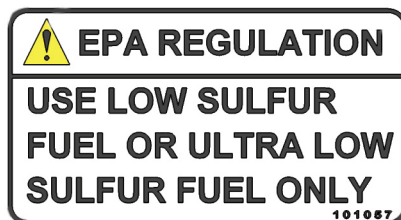
PART NO. 090179
Location: On fuel tank near filler neck.



PART NO. 100247
Location: Inside left door panel.



PART NO. 101404
Location: On either side of mast assembly immediately above roof panel.



PART NO. 101057
Location: On fuel tank near filler neck.



PART NO. 090306
Location: On DC control panel



PART NO. 090465
Location: Inside left door panel.

HYDRAULIC LIFT VERTICAL MAST OPERATION

DESCRIPTION OF OPERATION

The Allmand **MAXI-LITE ML 20B** hydraulic lift tower assembly consists of a seven section telescoping mast which can be extended by operating a single hydraulic cylinder. The light bar assembly can be rotated into position by releasing the light bar park pin. To release the park pin, pull the ring and turn it 90 degrees so that the pin remains in the retracted position. The light bar is designed to rotate with enough resistance so that the bar will stay in the desired position once the operator has directed the lights on the work zone. If the light bar rotates too easily or does not stay in position, remove the cap plug from the center of the light bar cover and tighten the nut to achieve the desired resistance and replace the cap plug.



SAFETY WARNING!

- **ALWAYS CHECK FOR OVERHEAD OBSTRUCTIONS BEFORE RAISING AND LOWERING MAST. ALLOW 35' CLEARANCE. AVOID ALL OVERHEAD ELECTRICAL WIRES.**
- **TO PREVENT INSTABILITY AND HELP ENSURE SAFE OPERATION, ALWAYS PROVIDE PROPER GROUND SUPPORT BEFORE RAISING MAST.**

BEFORE RAISING MAST, VISUALLY INSPECT EQUIPMENT FOR DAMAGE OR WEAR. FAMILIARIZE YOURSELF WITH THE LOCATION AND FUNCTION OF ALL OPERATING PARTS BY STUDYING THIS MANUAL. OBSERVE ALL CAUTION DECALS LOCATED ON EQUIPMENT

TO SET UP TOWER AND RAISE LIGHTS

1. Extend both side outrigger jacks, rear jack and tongue jack to stabilize and level the trailer.

NOTE: Jacks should be placed only on firm footing.



SAFETY WARNING!

THE SUPPLEMENTAL GROUND ROD IS A SAFETY DEVICE THAT MAY REDUCE THE CHANCE OF PERSONAL INJURY FROM STRAY ELECTRICAL CURRENT. Therefore, Allmand recommends using the ground rod. However, it is the user's responsibility to determine the requirements and/or applicability of local, state, or national electrical code which governs the use of the ground rod.

2. Attach the ground rod to the grounding lug, and drive the ground rod fully for adequate electrical ground, as required by local, state, or national code.
3. Start engine.(NOTE: Tower may be raised and lowered as needed without engine running.)
4. While the tower is still in the down position, position the light bar and lamps so they are aimed at the work zone and tilted at the approximate angle to get maximum coverage once the tower is raised.
5. Stand clear of the tower when raising and lowering the lights.

HYDRAULIC LIFT VERTICAL MAST OPERATION

6. Operate the hydraulic lift switch to the “up” position to raise tower to the desired height.
7. If lights need to be adjusted for better lighting of the work zone after raising the tower, lower the tower using the “down” switch position and make desired adjustments to the light bar and light fixtures. Raise the tower into position. Repeat this step if necessary.
5. Reposition the lamp fixtures for transport by pulling them down into the lowest position and face the fixtures toward the center of the trailer.
6. Remove ground rod from earth. Disconnect wire from ground lug and secure in trailer
7. Raise jacks and rear stand, retract outriggers and secure for towing

NOTE: Ensure the detent pins are properly engaged in the outriggers before towing.



SAFETY WARNING!

VISUALLY INSPECT EQUIPMENT FOR DAMAGE BEFORE OPERATING. ALLOW ADEQUATE CLEARANCE AROUND TRAILER FOR TOWER AND INSURE THAT NO PERSONS ARE STANDING IN UNDER THE LIGHTS WHEN LOWERING.

TO LOWER TOWER AND LIGHTS

1. Turn off lights.
2. Operate the hydraulic lift switch in the down position to lower the lights to the lowest vertical position. When tower reaches the bottom, run switch for three additional seconds to ensure that the tower is at it's lowest possible position.
3. Stop engine.
4. Rotate the light bar into the transport park position (in line with trailer) and engage the park pin by twisting on the park pin ring until the plunger is released and the pin engages the hole in the light bar.

HYDRAULIC TOWER POWER UNIT

POWER UNIT INSTALLATION & START UP PROCEDURE

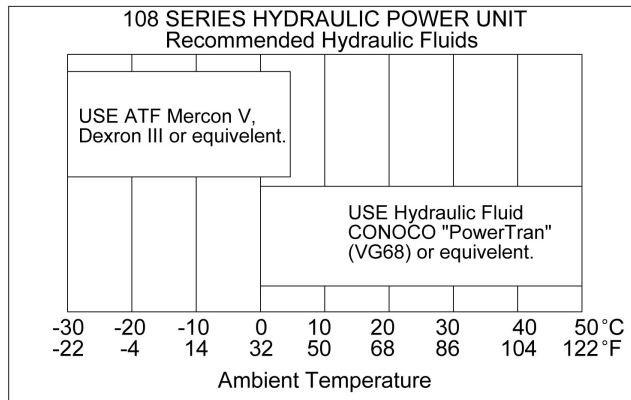
Fill the reservoir with automatic transmission fluid or any clean hydraulic fluid having a viscosity index that is suitable for the climatic conditions in which the unit will be operated. Recommended operating temperature range is +20° F to +180° F.

GENERAL START UP INSTRUCTIONS

NOTE: The ports are marked on the casting 'UP' and 'DN'. When facing the power unit with the motor up, plug the right hand, or 'DN' port. Jog the motor until oil flows from the left hand, or 'UP' port. If oil does not flow from the 'UP' port, reverse the wire leads on the motor, and repeat. The pump is now primed. Connect the hose (or tubing) to the 'UP' port and tighten. Connect the other hose end to the blind end of a fully retracted hydraulic cylinder. With the hose fitting loose, operate the power unit until oil (and no air) bleeds from the fitting. Tighten the fitting. Refill the reservoir.



HYDRAULIC FLUID SPEC CHART



Note: For extreme cold conditions, use MOBIL Aero HFA (VG10) or equivalent hydraulic fluid.

MANUAL WINCH MAST OPERATION

DESCRIPTION OF OPERATION

The **MAXI-LITE ML 20B SERIES** tower assembly consists of a three section telescoping mast which can be raised and extended by operating two hand crank winches. One winch, mounted with the handle extending through the side of the trailer frame, raises and lowers the mast from the horizontal towing position, the vertical position, and back. The second winch mounted on the tower extends the telescopic sections.

The three section mast assembly can be rotated from the ground by loosening a knob and rotating the entire assembly 360° to aim the lights as necessary.



SAFETY WARNING

- ALWAYS CHECK FOR OVERHEAD OBSTRUCTIONS BEFORE RAISING AND LOWERING MAST. ALLOW 35' CLEARANCE. AVOID ALL OVERHEAD ELECTRICAL WIRES.
- TO PREVENT INSTABILITY AND HELP ENSURE SAFE OPERATION, ALWAYS PROVIDE PROPER GROUND SUPPORT BEFORE RAISING MAST.
- BEFORE RAISING MAST, VISUALLY INSPECT EQUIPMENT FOR DAMAGE OR WEAR. FAMILIARIZE YOURSELF WITH THE LOCATION AND FUNCTION OF ALL OPERATING PARTS BY STUDYING THIS MANUAL. OBSERVE ALL CAUTION DECALS LOCATED ON EQUIPMENT

NOTE: The latch locks the mast in the vertical position and disengages the sections allowing the tower assembly to be rotated to position the lights.

TO ERECT MAST AND RAISE LIGHTS

1. Extend both side outrigger jacks, rear jack and tongue jack to stabilize and level the trailer.

NOTE: Jacks should be placed only on firm footing.



SAFETY WARNING

- WHEN EXTENDING REAR JACK, WATCH TO ENSURE YOU ARE CLEAR OF THE OVERHANGING ENDS OF THE MAST BEFORE YOU STAND UP.
 - THE SUPPLEMENTAL GROUND ROD IS A SAFETY DEVICE THAT MAY REDUCE THE CHANCE OF PERSONAL INJURY FROM STRAY ELECTRICAL CURRENT. Therefore, Allmand recommends using the ground rod. However, it is the user's responsibility to determine the requirements and/or applicability of local, state, or national electrical code which governs the use of the ground rod.
2. Attach the ground rod to the grounding lug, and drive the ground rod fully for adequate electrical ground, as required by local, state, or national code.
 3. Release the pin that secures the mast to the rear mast support.
 4. Operate the hand crank on the side of the trailer to raise the mast from horizontal to vertical.
 5. Turn black knob counterclockwise and engage latch in strike plate. Retighten black knob.
 6. Operate the hand crank winch on the tower clockwise to raise the lights vertically.
 7. To rotate the lights, release the black knob and turn the tower assembly with the handles provided.
 8. To turn on lights, flip the breaker switches to the up position. (SEE FIG. 1)

MANUAL WINCH MAST OPERATION



SAFETY WARNING

- IF THE TOWER CANNOT BE ROTATED AFTER LOOSENING THE BLACK KNOB, CHECK TO ASSURE THE LOWER LATCH IS ENGAGED IN THE STRIKE PLATE. THIS DOUBLE LATCH FEATURE PREVENTS THE TOWER FROM BEING ROTATED IF THE LATCH IS NOT ENGAGED.



SAFETY WARNING

VISUALLY INSPECT EQUIPMENT FOR DAMAGE BEFORE OPERATING. ALLOW ADEQUATE CLEARANCE AROUND TRAILER FOR TOWER AND INSURE THAT NO PERSONS ARE STANDING IN FRONT OF OR BEHIND UNIT WHEN LOWERING.

TO LOWER MAST AND LIGHTS

1. Turn off lights.
2. Release black knob and rotate tower until winch handle points to the front of the trailer and retighten knob.
3. Operate hand crank winch on tower counterclockwise to lower the lights to the lowest vertical position
4. Operate hand crank winch on side of trailer clockwise to take up any cable slack.
5. Turn the black knob counterclockwise and lift to release the latch from the strike plate. Retighten the knob with the latch disengaged from the strike plate.

6. Operate the hand crank on the side of the trailer counterclockwise to fold the mast down into the towing position.

NOTE: Sufficient load (75 lb. min) must be applied to the cable to overcome internal resistance and operate the brake properly. Insufficient load will not turn the reel thus continual turning without sufficient load will remove the winch handle from the shaft.

7. Secure light cords into hook on the rear tower support for towing.
8. Secure pin locking mast to rear tower support.
9. Remove ground rod from earth. Disconnect wire from ground lug and secure in trailer
10. Raise jacks and rear stand, retract outriggers and secure for towing

NOTE: Ensure the detent pins are properly engaged in the outriggers before towing.

NOTE: Visually inspect the flood light mounting yokes for loose hardware. This could prevent a broken fixture during towing.

STRONG ARM ELECTRIC WINCH MAST OPERATION

DESCRIPTION OF OPERATION

The **MAXI-LITE ML 20B SERIES** tower assembly consists of a three section telescoping mast which can be raised and extended by operating a single electric winch mounted inside the enclosure. A single three position toggle switch mounted on the control panel is used to raise and lower the mast. The winch and cable are protected by an integral clutch and a circuit breaker. The clutch is designed to slip when the mast reaches full extension.

The circuit breaker is a safeguard for the clutch. If the clutch is misadjusted or inoperative the circuit breaker should trip to protect the system from overload. The electric winch operates off the 120 volt circuit breaker along with 120 volt receptacle thus requiring **that the 120 volt circuit breaker switch must be on to operate the winch.**

The three section mast assembly can be rotated from the ground by loosening a knob and rotating the entire assembly 360° to aim the lights as necessary.



SAFETY WARNING!

- **ALWAYS CHECK FOR OVERHEAD OBSTRUCTIONS BEFORE RAISING AND LOWERING MAST. ALLOW 35' CLEARANCE. AVOID ALL OVERHEAD ELECTRICAL WIRES.**
- **TO PREVENT INSTABILITY AND HELP ENSURE SAFE OPERATION, ALWAYS PROVIDE PROPER GROUND SUPPORT BEFORE RAISING MAST.**

NOTE: The latch locks the mast in the vertical position and disengages the sections allowing the tower assembly to be rotated to position the lights

BEFORE RAISING MAST, VISUALLY INSPECT EQUIPMENT FOR DAMAGE OR WEAR. FAMILIARIZE YOURSELF WITH THE LOCATION AND FUNCTION OF ALL OPERATING PARTS BY STUDYING THIS MANUAL. OBSERVE ALL CAUTION DECALS LOCATED ON EQUIPMENT

TO ERECT MAST AND RAISE LIGHTS

1. Extend both side outrigger jacks, rear jack and tongue jack to stabilize and level the trailer.

NOTE: Jacks should be placed only on firm footing.

- WHEN EXTENDING REAR JACK, WATCH TO ENSURE YOU ARE CLEAR OF THE OVERHANGING ENDS OF THE MAST BEFORE YOU STAND UP.
 - THE SUPPLEMENTAL GROUND ROD IS A SAFETY DEVICE THAT MAY REDUCE THE CHANCE OF PERSONAL INJURY FROM STRAY ELECTRICAL CURRENT. Therefore, Allmand recommends using the ground rod. However, it is the user's responsibility to determine the requirements and/or applicability of local, state, or national electrical code which governs the use of the ground rod.
2. Attach the ground rod to the grounding lug, and drive the ground rod fully for adequate electrical ground, as required by local, state, or national code.
 3. Release the pin that secures the mast to the rear mast support.
 4. Operate the hand crank on the side of the trailer to raise the mast from horizontal to vertical.
 5. Turn black knob counterclockwise and engage latch in strike plate. Retighten black knob.
 6. Operate the hand crank winch on the tower clockwise to raise the lights vertically.
 7. To rotate the lights, release the black knob and turn the tower assembly with the handles provided.
 8. To turn on lights, flip the breaker switches to the up position. (SEE FIG. 1)

STRONG ARM ELECTRIC WINCH MAST OPERATION



SAFETY WARNING

- IF THE TOWER CANNOT BE ROTATED AFTER LOOSENING THE BLACK KNOB, CHECK TO ASSURE THE LOWER LATCH IS ENGAGED IN THE STRIKE PLATE. THIS DOUBLE LATCH FEATURE PREVENTS THE TOWER FROM BEING ROTATED IF THE LATCH IS NOT ENGAGED.



SAFETY WARNING

VISUALLY INSPECT EQUIPMENT FOR DAMAGE BEFORE OPERATING. ALLOW ADEQUATE CLEARANCE AROUND TRAILER FOR TOWER AND INSURE THAT NO PERSONS ARE STANDING IN FRONT OF OR BEHIND UNIT WHEN LOWERING.

TO LOWER MAST AND LIGHTS

1. Turn off lights.
2. Release black knob and rotate tower until winch handle points to the front of the trailer and retighten knob.
3. Operate hand crank winch on tower counterclockwise to lower the lights to the lowest vertical position
4. Operate hand crank winch on side of trailer clockwise to take up any cable slack.
5. Turn the black knob counterclockwise and lift to release the latch from the strike plate. Retighten the knob with the latch disengaged from the strike plate.

6. Operate the hand crank on the side of the trailer counterclockwise to fold the mast down into the towing position.

NOTE: Sufficient load (75 lb. min) must be applied to the cable to overcome internal resistance and operate the brake properly. Insufficient load will not turn the reel thus continual turning without sufficient load will remove the winch handle from the shaft.

7. Secure light cords into hook on the rear tower support for towing.
8. Secure pin locking mast to rear tower support.
9. Remove ground rod from earth. Disconnect wire from ground lug and secure in trailer
10. Raise jacks and rear stand, retract outriggers and secure for towing

NOTE: Ensure the detent pins are properly engaged in the outriggers before towing.

NOTE: Visually inspect the flood light mounting yokes for loose hardware. This could prevent a broken fixture during towing.

TOWING AND STARTING INSTRUCTIONS

TOWING INSTRUCTIONS

Before towing the MAXI-LITE the trailer should be inspected visually to insure that the following operations have been completed.

1. Hitch is securely attached to towing vehicle (safety chains secure).
2. All outriggers and jacks are retracted and secured.
3. Tower is lowered.
4. Light fixtures are positioned for transport.
5. Doors are closed and secure.
6. Check tires for adequate air pressure
7. Taillights are connected and operating (if equipped).
8. Ground rod is removed from ground and secured in the trailer

GROUND ROD INSTRUCTIONS (If so equipped)

1. Remove optional ground rod stowed just inside the left door (attached to the lower frame)
2. Unroll the electrical wire lead from the ground rod.
3. Attach the ground rod lead to the grounding lug located near the ballast compartment.
4. Drive the ground rod a minimum of 2 1/2 FT into the earth for adequate electrical grounding. If this is not possible consult your local qualified electrician.
5. **AFTER SHUTDOWN OF ENGINE:** Remove the ground rod from the earth, remove lead from the trailer ground lug and store ground rod inside left door.

BEFORE STARTING

1. Fill the engine with the right grade of lubricating oil (see pg. 19) and to correct level (check dipstick).
2. Ensure there is an adequate supply of fuel.
3. Ensure **that the air cleaner is firmly attached**, the air canister seals and the hose clamps are properly sealed. Air cleaner element should be checked and replaced if necessary.
4. Install the ground rod.

DESCRIPTION OF OPERATION

By depressing the start assist switch, the fuel solenoid is energized. The solenoid plunger is drawn into the coil and activates the fuel control linkage to RUN position. When the engine starts, adequate engine oil pressure at the oil pressure switch will maintain the solenoid in the energized position. The start assist switch can be released as soon as the engine starts. A 10A inline fuse protects the solenoid from electrical damage.

LOW OIL PRESSURE SHUTOFF SYSTEM

Should a low oil pressure condition occur (less than 5 PSI), the pressure sending unit breaks the circuit between the battery and the fuel solenoid, allowing the spring load to immediately move the fuel control to the shutoff position.

HIGH COOLANT TEMPERATURE SHUTOFF SYSTEM

Should a high coolant temperature condition occur, the temperature sending unit breaks the circuit between the battery and the fuel solenoid, allowing the spring load to immediately move the fuel control to the shutoff position.

STARTING INSTRUCTIONS

STARTING THE ENGINE

NOTE: The Isuzu engine includes a glow plug cold start system controlled by the ignition switch on the control panel. Glow plugs are not needed on a warm engine or if the ambient temperature is above 50 F. Do not use starting fluid or ether!

1. Turn the ignition switch to the **PREHEAT** position and hold until the glow plug lamp goes out.
2. Turn the ignition switch to the Start position until the engine starts. Release key as soon as the engine starts.
3. If engine fails to start it may be necessary to cycle the glow plugs again.

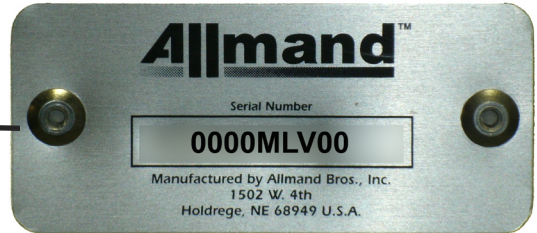
NOTE: To prevent equipment damage, DO NOT hold ignition switch for more than 10 seconds in the start position. If the engine does not start in 10 seconds, wait 30 seconds and try the start sequence again. Do not run the cell motor for more than 20 seconds continuously. Limit engine cranking to 3 attempts with a 2 minute cool-down between each. After 3 attempts allow to cool to ambient temperature.

STOPPING THE ENGINE

1. Turn the ignition switch to the OFF position. This breaks the circuit between the battery and the fuel solenoid, allowing the spring load to immediately move the fuel control to the shutoff position.
2. Disconnect the ground rod (if so equipped).

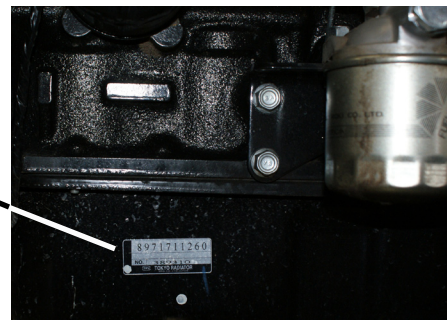
SERIAL NUMBER LOCATIONS

Trailer: All MAXI-LITE ML GEÓ SERIES models have a serial number plate located on the lower left corner of the rear panel.



Generator: Label attached to the side of the generator housing.

Engine: ISUZU 4LE1 - Plate attached to the engine right side, near the fuel filter.



SPECIFICATIONS

MAXI-LITE DIMENSIONS

Height lowered:	7'8" (2.34 m)
Height extended:	25'6" (7.8 m)
Length:	10'4" (3.25 m)
Width:	6'4" (1.92 m)
Outrigger width:	12'10" (3.5 m)
Trailer:	Structural steel frame Leaf spring axle
Wheels & tires:	15"

DOMESTIC SHIPPING WEIGHT

Fixtures:	15 lbs. ea. = 60 lbs.
Total weight:	2,580 lbs. (963 kg)

TRAILER

The engine-generator set is housed in a lockable enclosure with the frame fabricated from heavy gauge steel mounted on a two-wheel leaf spring axle. The design enables the trailer to contain the outriggers in a simple compact position. The design includes an adjustable-height reversible hitch that includes a 2" ball and a 3" pintle hook hitch.

MAST

When the mast is in the operating position it is located in the middle of a four-point outrigger system for optimum balance and stability.

The mast consists of seven fabricated steel sections that telescope to 25' 6" (7.8m) and UHMW plastic guide pads to provide smooth operation and reduced friction. The mast sections are extended with either a manual or electric winch, or hydraulic pump. The electric winch design includes limit switches that turn the winch off when the mast reaches full extension or is fully retracted.

STABILIZERS

Four (4) point outrigger design with tower center mounted between two (2) retractable side outriggers, tongue jack and rear jack.

FLOOD LIGHT ASSEMBLY

The flood light assembly consists of four 1250 watt metal halide, four 1000 watt metal halide or four 1000 watt high pressure sodium (HPS) lamp fixtures sealed for all weather use.

SHO 1250 fixture - Metal Halide Lamp

Lumen rating: 150,000 initial lumens

SHO 1000 fixture - Metal Halide Lamp

Lumen rating: 110,000 initial lumens

SHO 1000 fixture - HPS Lamp

Lumen rating: 140,000 initial lumens

ISUZU 4LE1 ENGINE

Isuzu 4LE1, Indirect injection 4 Cylinder

Displacement:	133 cu. in. (2179 cc)
Bore:	85 mm
Stroke:	96 mm
Power output:	34.1 BHP@ 1800 RPM
Power output derating:	3.5% for every 1000 ft altitude (305 m) above sea level
Air Inlet Temp:	1% per 10°F (5.6C) above 77° F (25°C)
Fuel:	Diesel
Oil sump capacity:	Fill to correct level
Starting:	12 volt electric

Low oil pressure, high engine temperature shut-downs and a glow plug cold start assist are standard equipment on the Isuzu 4LE1 diesel engine.

NOTE: Consult the Isuzu Operator's Manual for cold weather starting instructions.

*Horsepower ratings are established in accordance with Society of Automotive Engineers
Small Engine Test Code- J1349 GROSS.*

SPECIFICATIONS

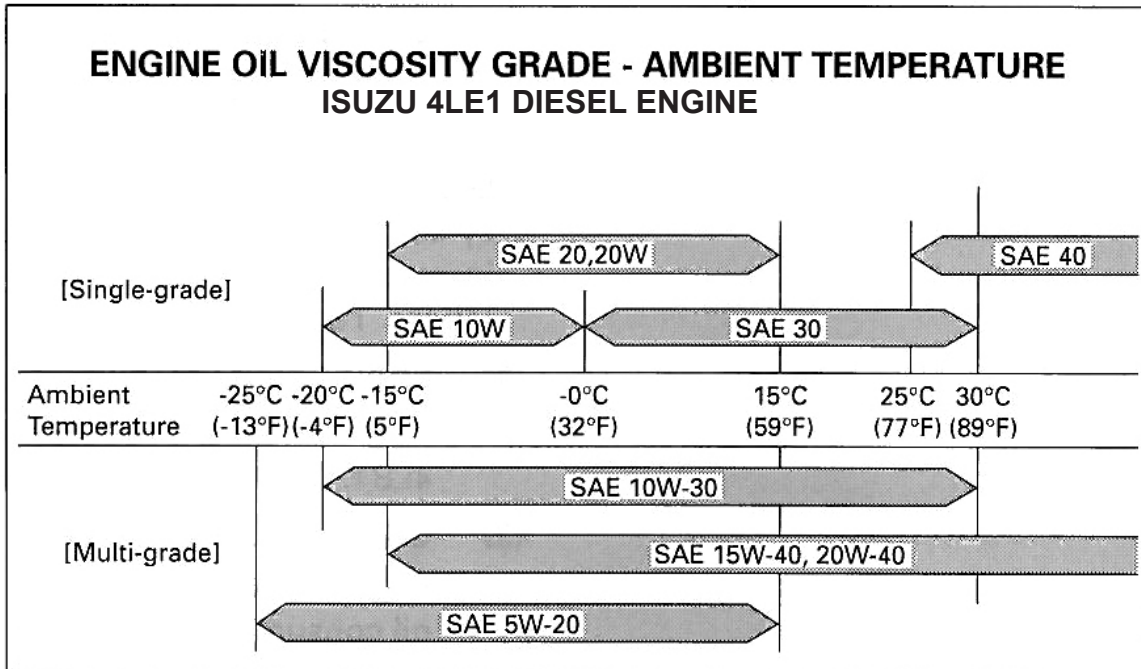
GENERATOR

- 20 kW single phase and 20 kW three phase models available

FUEL REQUIREMENTS

Use a clean No. 2 Diesel fuel oil (SAE J313 JUN87) according to ASTM D975. Do not use alternative fuel, because its quality is unknown or it may be inferior in quality. Do not use kerosene, which has a very low cetane rating, and can adversely effect the engine. Refer to the Isuzu Operators Manual for more detailed fuel requirements.

LUBRICATION REQUIREMENTS



CONTROLS AND COMPONENTS

NOTE: PHOTOGRAPHS MAY SHOW NON-STANDARD EQUIPMENT AND OPTIONS



FIG. 1. AC CONTROL PANEL

1. Switch, Circuit Breaker (Lights 1&2 and lights 3&4)

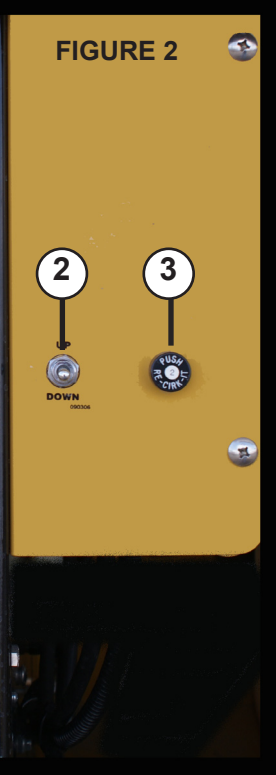


FIG. 2. DC CONTROL PANEL

2. Momentary Contact Switch. Lift up to raise and extend the tower.
Press down to lower the tower.
3. 2 AMP Circuit Breaker (Hydraulic Pump)



FIGURE 3

FIG. 3. ISUZU ENGINE CONTROL PANEL

4. Ignition Switch
5. Glow Plug Indicator
6. Engine Fault Warning Lamps
7. Hour Meter



SAFETY WARNING

FAILURE TO UNDERSTAND AND COMPLY WITH SAFETY RELATED INFORMATION AND INSTRUCTIONS MAY RESULT IN INJURY TO THE OPERATOR OR OTHERS. IF YOU DO NOT UNDERSTAND ANY PART OF THIS CONTACT YOUR DEALER FOR CLARIFICATION PRIOR TO OPERATING EQUIPMENT.

CONTROLS AND COMPONENTS

NOTE: PHOTOGRAPHS MAY SHOW NON-STANDARD EQUIPMENT AND OPTIONS

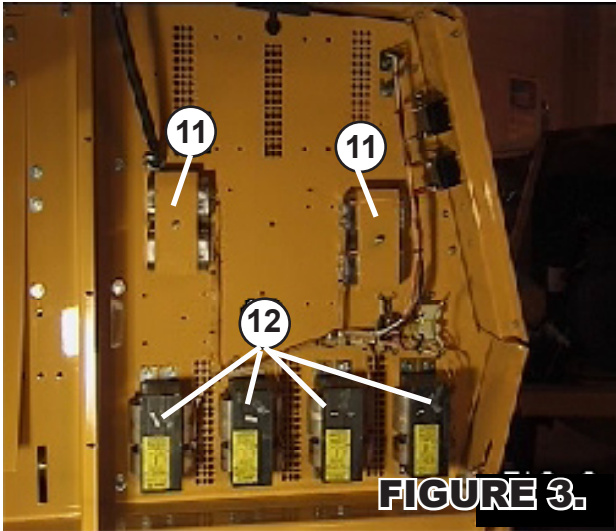
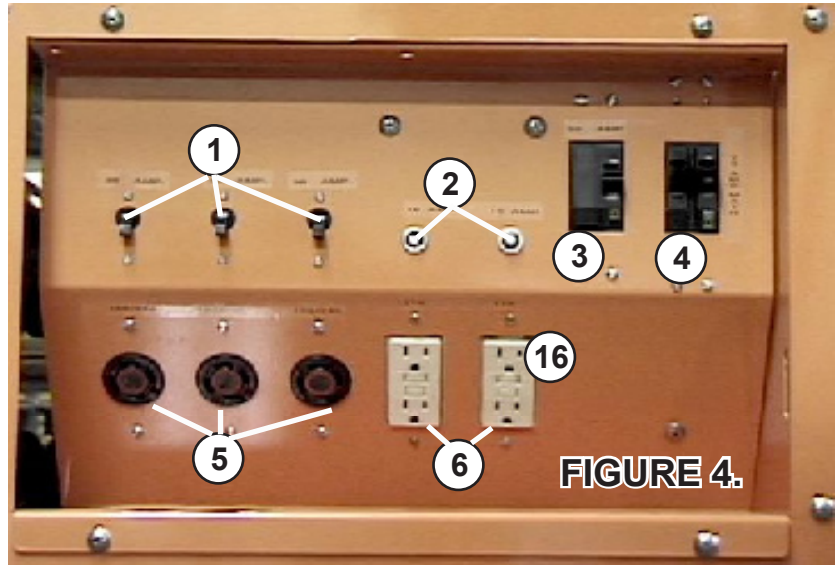


FIG. 3 BALLAST PANEL

- 11. Ballast, Capacitors 1 through 4
- 12. Ballast, Transformers 1 through 4

FIG. 4 CONVENIENCE PANEL

- 1. 30 Amp Breakers
- 2. 15 Amp Breakers
- 3. 50 Amp Breaker
- 4. 70 or 90 Amp Main Breaker
- 5. 120/240 volt Receptacles
- 6. 110/120 Volt Outlet Receptacles (Ground fault)



SAFETY WARNING

FAILURE TO UNDERSTAND AND COMPLY WITH SAFETY RELATED INFORMATION AND INSTRUCTIONS MAY RESULT IN INJURY TO THE OPERATOR OR OTHERS. IF YOU DO NOT UNDERSTAND ANY PART OF THIS CONTACT YOUR DEALER FOR CLARIFICATION PRIOR TO OPERATING EQUIPMENT

CONTROLS AND COMPONENTS

NOTE: PHOTOGRAPHS MAY SHOW NON-STANDARD EQUIPMENT AND OPTIONS

FIG. 5 GROUND ROD (Optional)

16. Ground Rod

Ground Rod should be attached to grounding lug with wire provided and ground rod and then driven fully into the earth for adequate electrical ground as required by local, state or national electrical codes.

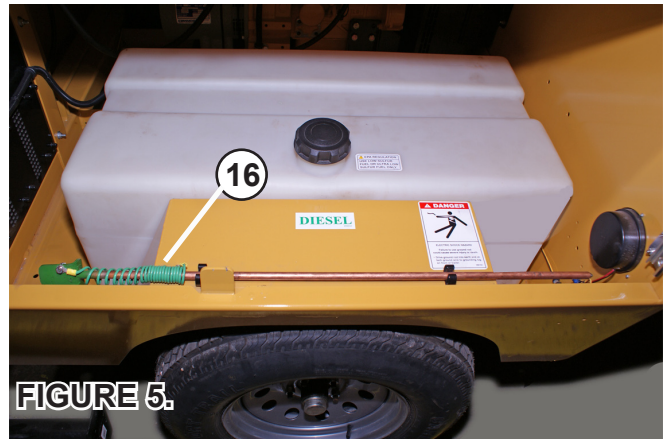


FIG. 6 ENGINE (Left Side)

17. Air Cleaner
18. Fuel Filter
19. Oil Filter
20. Radiator

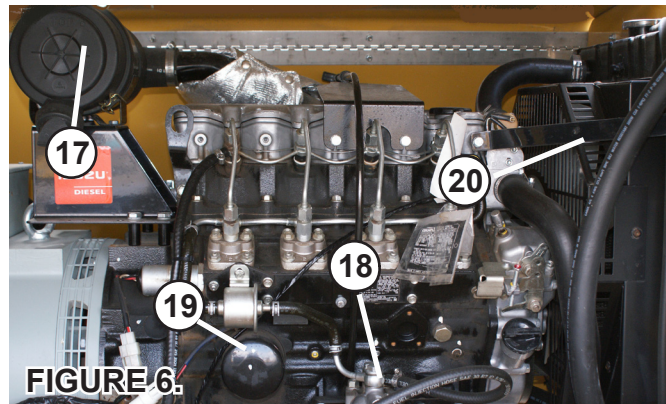
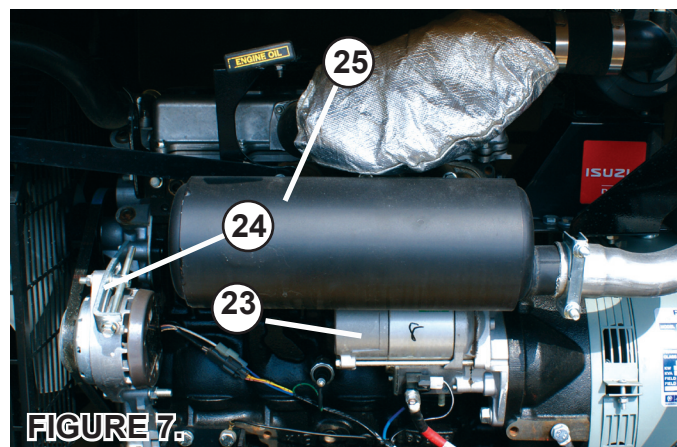


FIG. 7 ENGINE (Right Side)

23. Starter
24. Alternator
25. Muffler



NOTE: Above photos illustrate component locations on the Isuzu 4LE1 diesel engine. Component location on other engine models may vary from the locations indicated above.

CONTROLS AND COMPONENTS

NOTE: PHOTOGRAPHS MAY SHOW NON-STANDARD EQUIPMENT AND OPTIONS

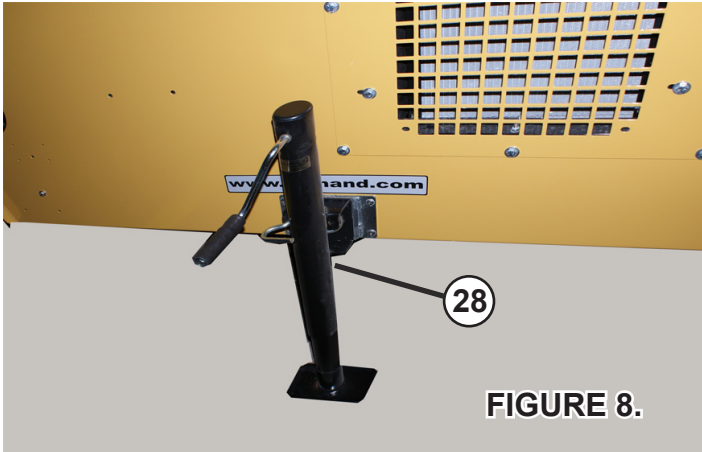


FIG. 8 REAR JACK

28. Rear Jack

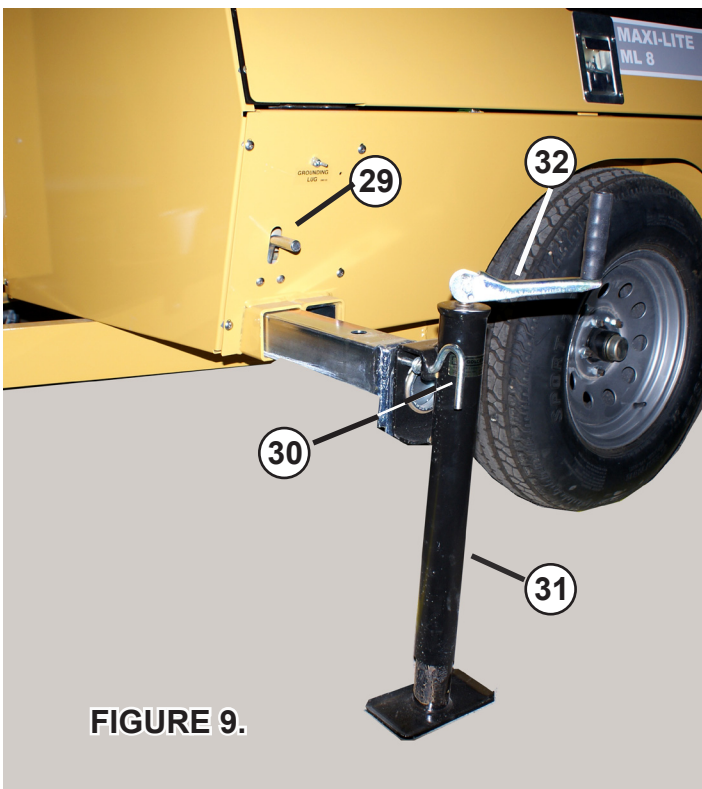


FIG. 9 OUTRIGGER JACK

29. Pin--Retains outrigger in retracted position for towing.

30. Jack Pin--Pull to allow jack to rotate

31. Outrigger Jack

32. Jack Handle--Crank handle to raise and lower foot of jack to level trailer.

CONTROLS AND COMPONENTS

NOTE: PHOTOGRAPHS MAY SHOW NON-STANDARD EQUIPMENT AND OPTIONS

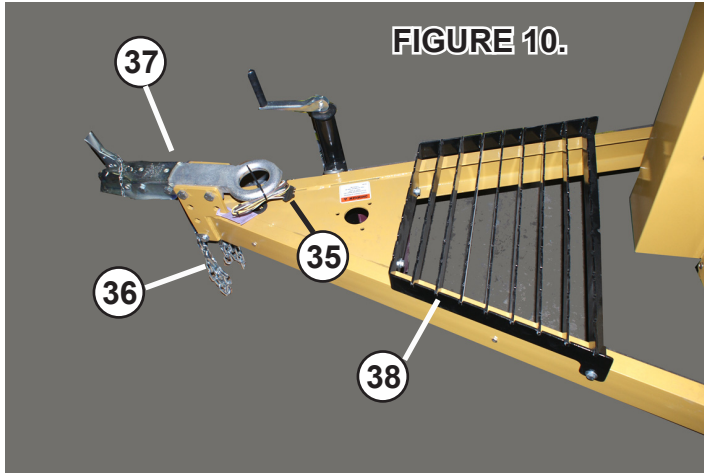


FIG. 10 TONGUE ASSEMBLY

- 35. Taillight Wiring Harness
- 36. Safety Tow Chains
- 37. Reversible Hitch (2" Ball and 3" Pintle Hitch)
- 38. Step Plate--Allows operator to position light fixtures prior to raising tower. (Hydraulic only)

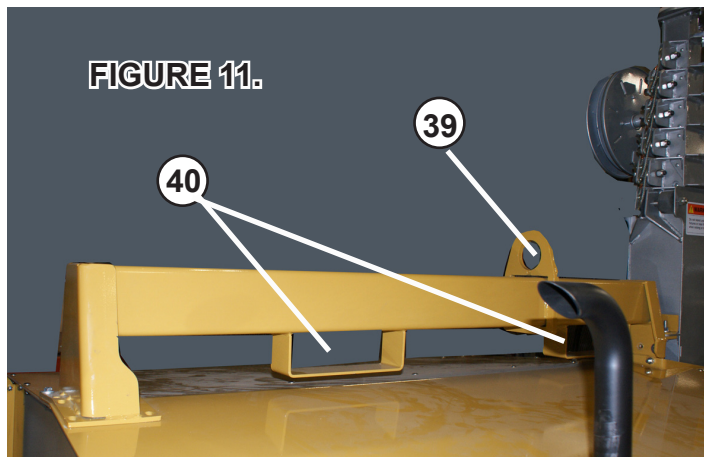


FIG. 11 FORKLIFT POCKETS

- 39. Lifting Eye
- 40. Forklift Pockets

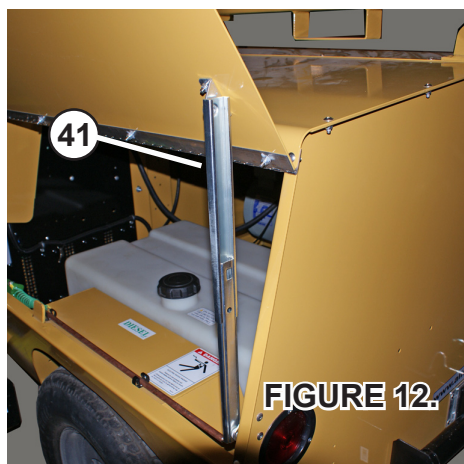


FIG. 12 DOOR PROP

- 41. Door Prop--Locks door panel in open position.

CONTROLS AND COMPONENTS

NOTE: PHOTOGRAPHS MAY SHOW NON-STANDARD EQUIPMENT AND OPTIONS

Fig. 13. Hydraulic Bypass Valve

- 41. Bypass Valve
Allows tower to be lowered manually in the event of a failure.

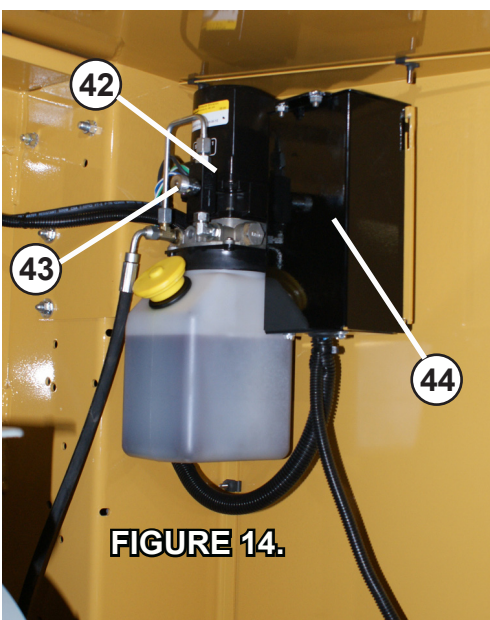
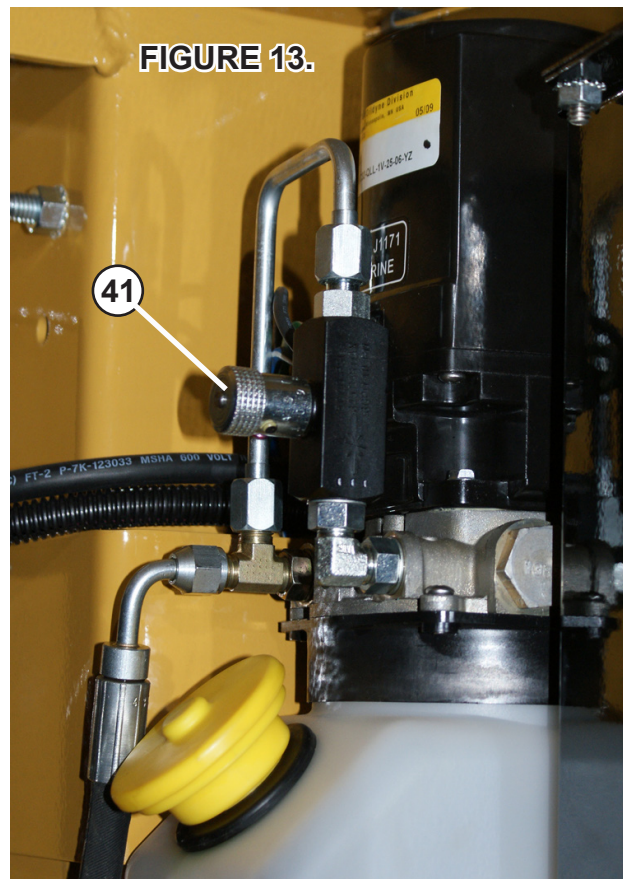


Fig 14. Hydraulic Power Unit Assembly

- 42. Hydraulic Pump
- 43. Bypass Valve
- 44. 12 VDC Enclosure
Houses 125A fuse and 100A solenoid

CONTROLS AND COMPONENTS

NOTE: PHOTOGRAPHS MAY SHOW NON-STANDARD EQUIPMENT AND OPTIONS

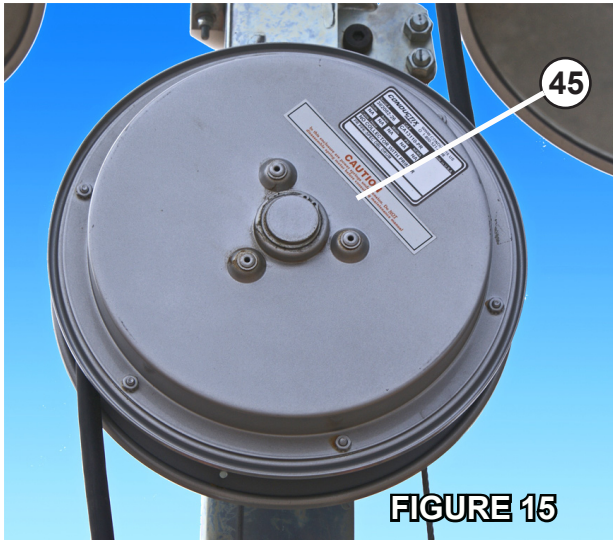


FIG. 15 Cord Reel

45. Cord reel —*Manages the mast power cable and prevents tangling.*

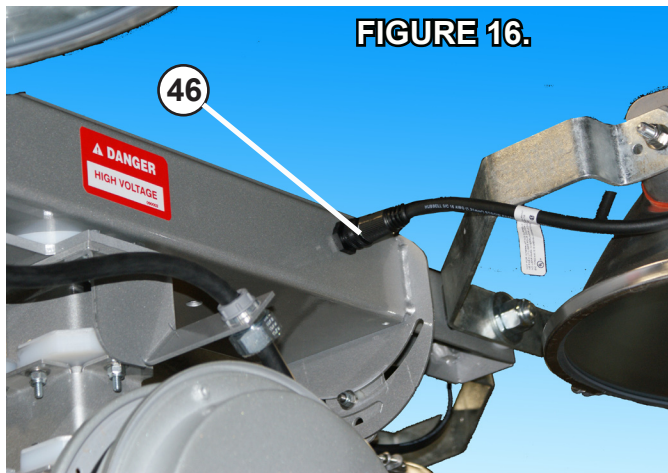


FIG. 16 Light Bar

46. Lamp Connector Lead—*Allows quick connecting/disconnecting of the lamp fixtures*

CONTROLS AND COMPONENTS

NOTE: PHOTOGRAPHS MAY SHOW NON-STANDARD EQUIPMENT AND OPTIONS

FIG. 17 Vertical Tower

- 1. Seven Section Vertical Tower**
- 2. Light Mounting Locations** --Mount lights here for use during operation
- 3. Light connector sockets**—attach light leads to light bar at these female receptacles when provided

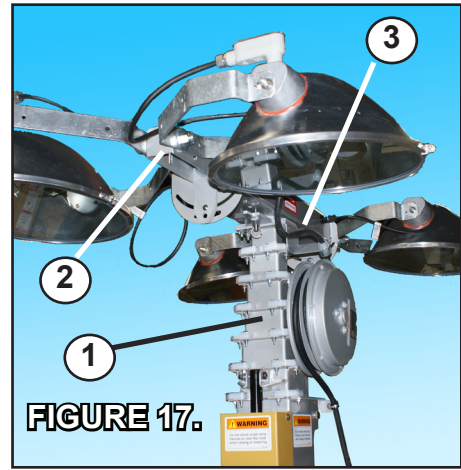
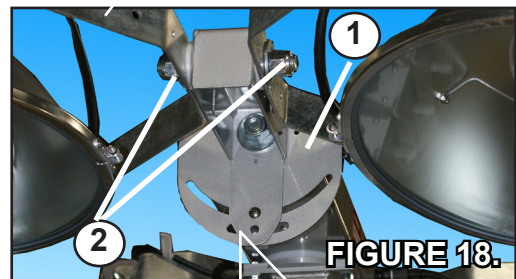


FIG. 18 Light Bar and Mounting Locations

- 1. Light Bar**
- 2. Light mounting locations** —Mount lights here for use during operation



ROUTINE MAINTENANCE

ISUZU 4LE1

INSPECTION, MAINTENANCE, AND LUBRICATION SCHEDULE

Check condition of the steel tower cables and make sure they are properly secured.

LUBRICATION GREASE SPECIFICATIONS:

N.G.L.I. consistency #2, high temperature anti-friction bearing lubricating grease.

Service intervals shown below have been established for operation under normal conditions. Where equipment is operated under severe conditions (very dusty, extreme heat or cold, etc.) affected items should be serviced more frequently.

INTERVAL	ITEM	PROCEDURE
DAILY OR 10 HOUR	Fuel Level	Check and fill as necessary
	Lubricating Oil	Check level and condition
	Oil Pressure Warning Lamp	
50 HOUR	All 10 Hour Items	As above
	Air Cleaner	Service as required. Service requirements may be accelerated
	Engine Oil	Check engine oil and replace if necessary
	Engine Generator Assembly	Check for fuel and lubricating oil leaks
250 Hour	All 50 Hour Items	As above
	Engine Oil System	Drain lubricating oil, flush out system, renew filter element and refill with correct grade and type of oil.
	Coolant	Check level and condition
500 Hour	All 250 Hour items	As above
	Fuel Filter	Replace with new
	Oil Filter Element	Replace with new
750 Hour	Engine Oil System	Drain lubricating oil, flush out system, renew filter element and refill with correct grade and type of oil.
	Fan Belt	Check tension and condition
	Radiator	Clean out fins with water or air
1000 Hour or Yearly	All 750 Hour Items	As above
	Engine Valves	Adjust Clearance
	Cable pulleys on tower	Inspect for wear. Clean and lubricate
	Axle Wheel Bearings	Clean and repack
	Fuel System	Clean sediment from tank, replace filter element

TROUBLESHOOTING



SAFETY WARNING

DANGER!

HIGH VOLTAGE! DO NOT ATTEMPT TO TEST AND REPAIR GENERATOR AND BALLAST ELECTRICAL SYSTEMS UNLESS YOU UNDERSTAND AND ARE QUALIFIED TO WORK ON SUCH SYSTEMS.

DO NOT WEAR JEWELRY WHILE WORKING WITH ELECTRICITY! If the following procedures do not solve your problem, have the circuit tested by a licensed electrician. **DO NOT** attempt to test generator voltage or ballast electrical systems unless you are a qualified electrician. Consult the factory for voltage specifications and test procedures

PROBLEM	POSSIBLE CAUSE
ONE OR MORE LIGHTS DO NOT LIGHT UP.	1. Circuit breakers in the outlet box are not turned on or have tripped.
	2. Lamps are not allowed time to cool after last being lit. You must allow 15 minutes between the time the lights are shut off and the time they are restarted.
	3. The lamp or lamps are burned out or broken.
	4. One or more of the lamps are not screwed in securely.
	5. Plug and socket at light bar not securely pushed together and locked.
	6. The temperature of the ballast is below -20 degrees F. the efficiency of the capacitors in the ballast is not enough to ignite the lamps. For operations where the temperatures of the ballasts falls below -20 degrees F. some means of warming the ballast must be used.
	7. Low electrical system voltage.
	8. A loose connection in the back of the lamp socket in the lamp holder.
	9. A circuit breaker or breakers are defective.
	10. A loose connection on the terminal board.
	11. The engine and generator are not running up to speed (1800 RPM)
	12. A wrong style replacement lamp (requiring a different ballast) has been installed.
	13. Too much power is being drawn from the auxiliary outlets.
	14. Capacitor or transformer have failed.
	15. Corrosion has occurred on the lamp bases.

For engine and generator troubleshooting, see engine and generator manuals or contact your dealer.



REVISED DECEMBER 2010

**MAXI LITE
ML 20B SERIES
PARTS MANUAL**

**ALLMAND BROTHERS INC.
P.O. BOX 888
HOLDREGE, NE 68949**

**PHONE: (308) 995- 4495, 1- 800- 562- 1373
ALLMAND FAX: (308) 995- 5887
ALLMAND PARTS DEPT. FAX : (308) 995- 4883**

MAXI LITE ML 20B SERIES

TABLE OF CONTENTS
MAXI LITE ML 20B SERIES

12/22/2010

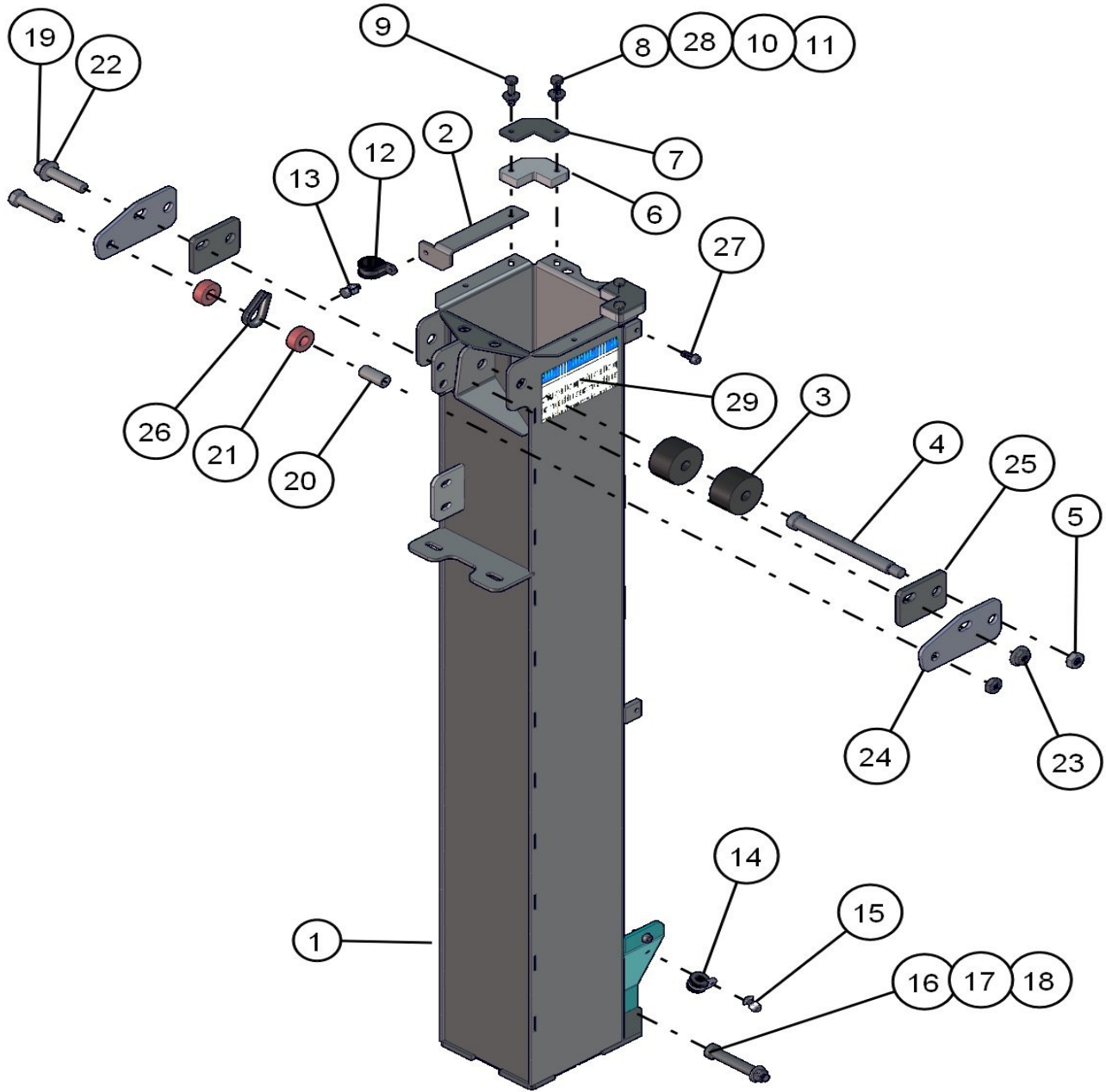
HYDRAULIC TOWER (OPTION)	3-20
ROTATIONAL LIGHT BAR (VERTICAL ONLY)	10
SHO LAMPS	11-13
MANUAL TOWER (OPTION)	22-26
ELECTRIC TOWER	28-33
LIGHT BAR (ELEC. & MANUAL ONLY)	31
1000W BALLAST	34
1250W BALLAST	35
AXLE	37
TIRES	37
FRAME	38
OUT RIGGERS	39
JACKS	39
FUEL TANK	
50 GAL. (OPTION)	40
70 GAL. (OPTION).....	42
INSIDE LAMP STORAGE	41
BUNDED TRAY ENGINE	44
ISUZU 4LE ENGINE	45
MARATHON GENERATOR	46
ISUZU CONTROL PANEL	47
LIGHT SWITCH ENCLOSURE	48
REAR RECEPTICAL	49
PANELS	
QUARTER LEFT.....	54
QUARTER RIGHT	55
FRONT L & R	56
ROOF L & R	57
RADIATOR.....	58
REAR OUTLET ENCLOSURE	50-51
OUTLET PANEL	
240V (OPTION)	52
208V-3 PHASE (OPTION).....	53
DOOR	
RIGHT	60
LEFT	61
REAR TOWER SUPPORT	62
EXTENDED (OPTION).....	63
BATTERY	65
GROUND ROD	66
TAIL LIGHTS	67
VIN PACKAGE (OPTION).....	68-69
INTERIOR WORK LIGHT	70

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

SECTION 1 HYDRAULIC TOWER

MAXI LITE ML 20B SERIES

12/22/2010



NO	QTY	PARTNO	DESCRIPTION
1	1	101034	SECTION 1 HYDRAULIC TOWER
2	1	101403P	CORD GUIDE BRACKET
3	2	100203	ROLLER
4	1	100202	5/8 X 6 SS SH BOLT
5	1	044096	1/2-20 HEX NUT PL
6	2	100088	CORNER FRICTION BLOCK
7	2	100089P	CORNER BLOCK COVER
8	4	043060	3/8 INT STAR WASHER
9	1	046025	1/4-20 X 1 1/2 HEX BOLT
10	4	047005	1/4 FLAT WASHER
11	6	044023	1/4-20 NYLOCK NUT
12	1	022024	#12 CUSH CLAMP 1/4 HOLE
13	1	046010	1/4-20 X 3/4 HEX BOLT SS
14	1	310212	#10 CUSH CLAMP 1/4 HOLE
15	1	041050	1/4-20 X 3/4 TRUSS BOLT

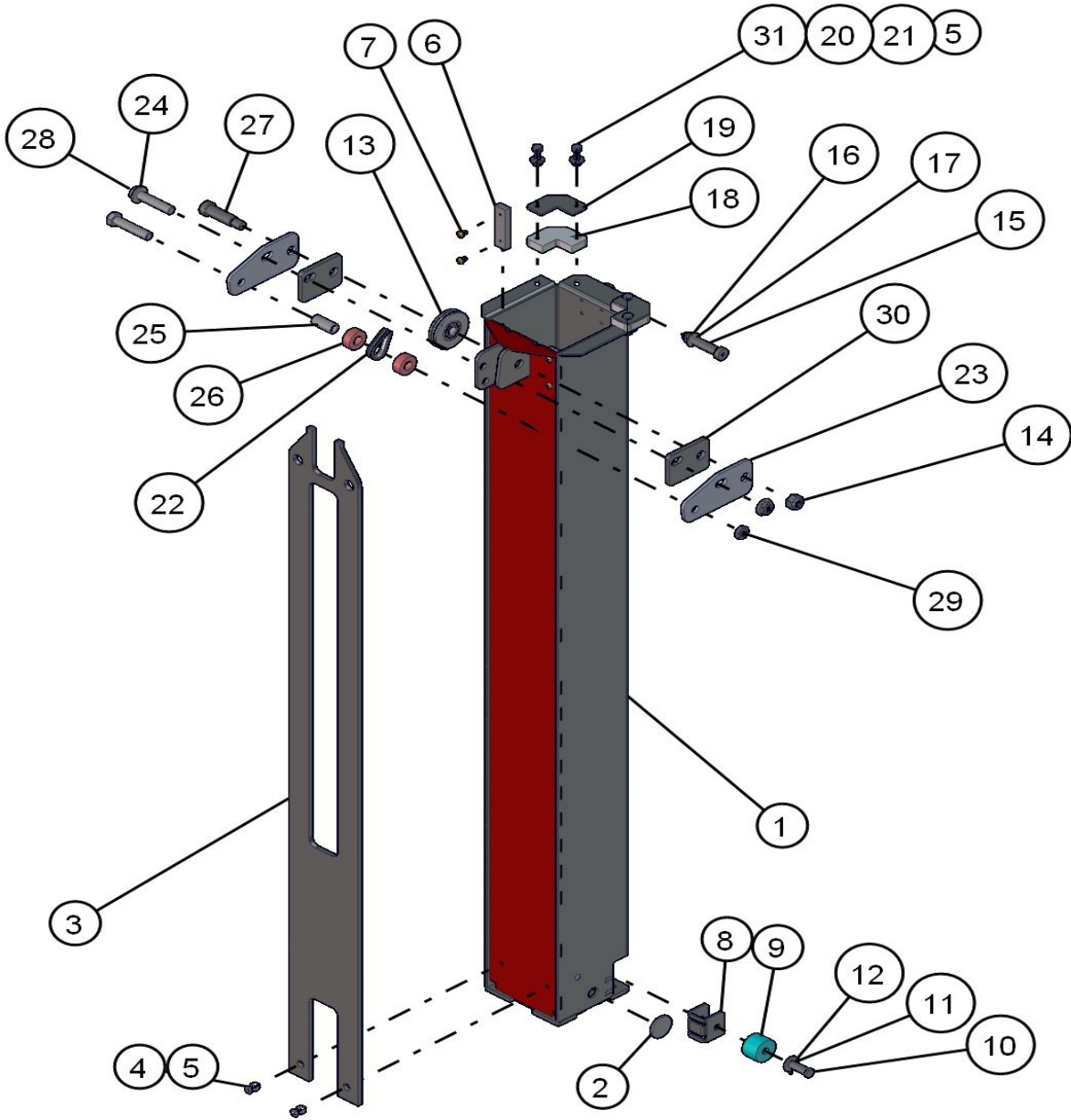
NO	QTY	PARTNO	DESCRIPTION
16	1	101379	1/2 X 2.75 SH BOLT
17	1	047010	5/16 FLAT WASHER
18	1	044038	3/8-16 NYLOCK HNUT
19	2	046205	1/2-13 X 2 1/2 HEX BOLT GR5 PL
20	1	102273	LONG SPACER
21	2	102271	PLASTIC SPACER
22	2	047025	1/2 FW PL
23	2	100643	1/2-13 NYLOCK
24	2	102270P	BRACKET,
25	2	102269P	SPACER BRACKET
26	1	045040	1/4 CABLE THIMBLE
27	4	041070	1/4-20 X 3/4 SL- SELF TAPPING SCREW
28	3	046020	1/4-20 X 1 1/4 HHCS
29	2	101404	TOWER WARNING DECAL

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

SECTION 2 HYDRAULIC TOWER

MAXI LITE ML 20B SERIES

12/22/2010



NO	QTY	PARTNO	DESCRIPTION
1	1	101035P	SECTION 2 HYDRAULIC TOWER
2	2	101626	FRICITION PLUG
3	1	100204P	SEC 2 ROLLER PLATE
4	2	041047	1/4-20 X 3/4 PH CSKMS
5	6	044023	1/4-20 NYLOCK NUT
6	2	100062	3/8 UHMW SPACER
7	4	041023	#10 X 3/8 PLS
8	2	101374P	BEARING CAGE
9	2	101380	COMPOSITE ROLLER
10	2	101377	CLEVIS PIN 7/16 X 1 1/2
11	2	047015	3/8 FLAT WASHER
12	2	045044	COTTER PIN
13	1	100160	2 1/2 PULLEY
14	1	044048	NUT NYLOCK 1/2-13 HEX PL
15	1	101378	1/2 X 2 SH BOLT
16	1	044038	3/8-16 NYLOCK HNUT

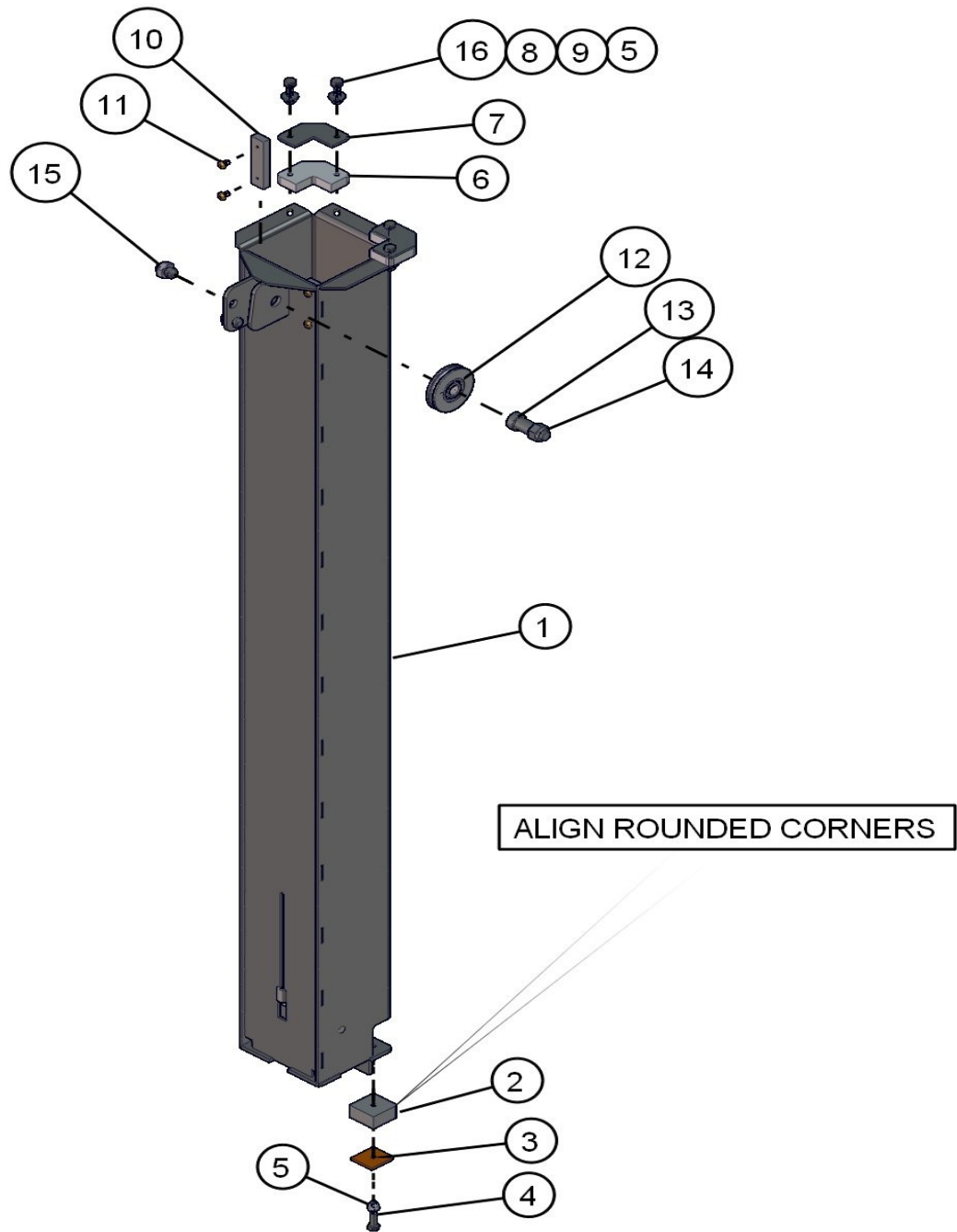
NO	QTY	PARTNO	DESCRIPTION
17	1	047010	5/16 FLAT WASHER
18	2	100088	CORNER FRICTION BLOCK
19	2	100089P	CORNER BLOCK COVER
20	4	043060	3/8 INT STAR WASHER
21	4	047005	1/4 FLAT WASHER
22	1	045040	1/4 CABLE THIMBLE
23	2	102270P	BRACKET,
24	2	047025	1/2 FW PL
25	1	102273	LONG SPACER
26	2	102271	PLASTIC SPACER
27	1	102365	5/8 X 1 3/4 SHSSCREW
28	2	046205	1/2-13 X 2 1/2 HEX BOLT GR5 PL
29	3	100643	1/2-13 NYLOCK
30	2	102269P	SPACER BRACKET
31	4	046020	1/4-20 X 1 1/4 HHCS

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

SECTION 3

MAXI LITE ML 20B SERIES

12/22/2010



NO	QTY	PARTNO	DESCRIPTION
1	1	100060P	SECTION 3
2	2	100094	UHMW 1 1/2 WEAR BLK
3	2	100095P	1 1/2" WEAR BLK CVR
4	2	046025	1/4-20 X 1 1/2 HEX BOLT
5	6	044023	1/4-20 NYLOCK NUT
6	2	100088	CORNER FRICTION BLOCK
7	2	100089P	CORNER BLOCK COVER
8	4	043060	3/8 INT STAR WASHER
9	4	047005	1/4 FLAT WASHER

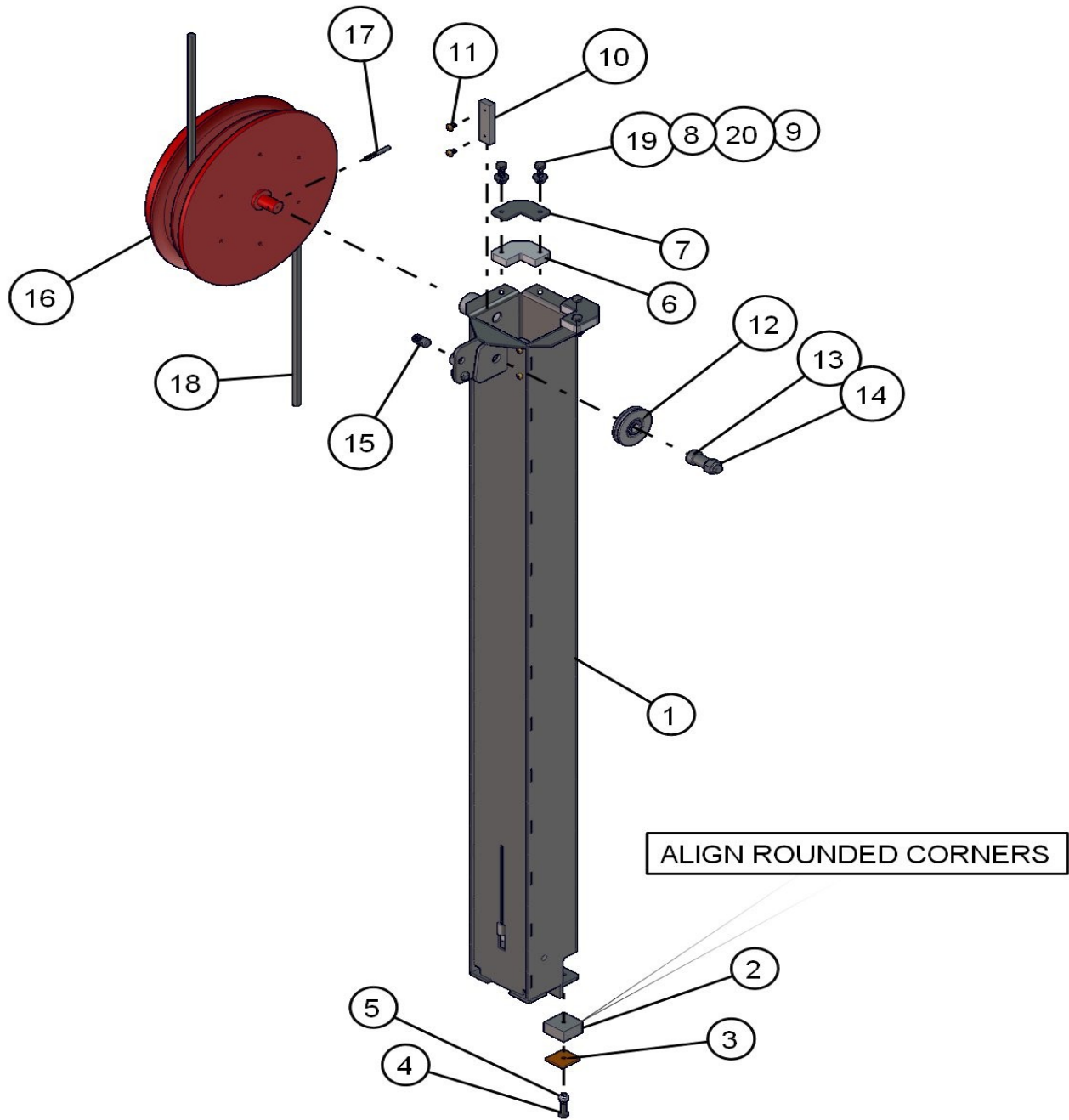
NO	QTY	PARTNO	DESCRIPTION
10	2	100062	3/8 UHMW SPACER
11	4	041023	#10 X 3/8 PLS
12	1	100160	2 1/2 PULLEY
13	1	100642	5/8 X 1 SHOULDER BOLT
14	1	044048	NUT NYLOCK 1/2-13 HEX PL
15	2	100071	3/16 CABLE BOLT
16	4	046020	1/4-20 X 1 1/4 HHCS

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

SECTION 4

MAXI LITE ML 20B SERIES

12/22/2010



NO	QTY	PARTNO	DESCRIPTION
1	1	100070P	SECTION 4
2	2	100094	UHMW 1 1/2 WEAR BLK
3	2	100095P	1 1/2" WEAR BLK CVR
4	2	046025	1/4-20 X 1 1/2 HEX BOLT
5	2	044023	1/4-20 NYLOCK NUT
6	2	100088	CORNER FRICTION BLOCK
7	2	100089P	CORNER BLOCK COVER
8	4	043060	3/8 INT STAR WASHER
9	4	044023	1/4-20 NYLOCK NUT
10	2	100062	3/8 UHMW SPACER
11	4	041023	#10 X 3/8 PLS

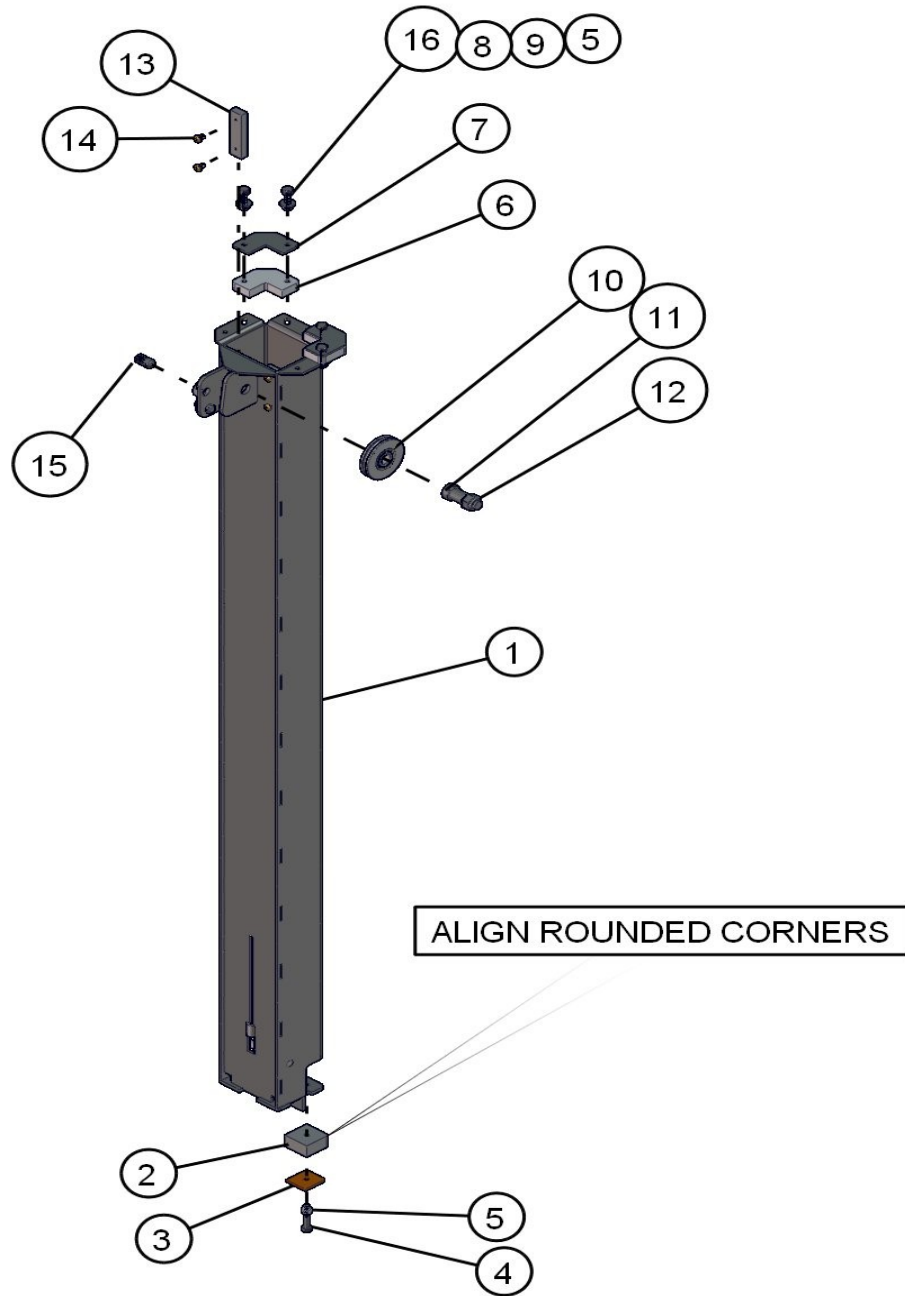
NO	QTY	PARTNO	DESCRIPTION
12	1	100160	2 1/2 PULLEY
13	1	100642	5/8 X 1 SHOULDER BOLT
14	1	044048	NUT NYLOCK 1/2-13 HEX PL
15	2	100071	3/16 CABLE BOLT
16	1	320410P	CORD REEL
17	1	320453	3/16 X 1 3/4 ROLL PIN
18	1	100687	VERTICAL TOWER CORD 16/8 X 310"
19	4	046020	1/4-20 X 1 1/4 HHCS
20	4	047005	1/4 FLAT WASHER

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

SECTION 5

MAXI LITE ML 20B SERIES

12/22/2010



NO	QTY	PARTNO	DESCRIPTION
1	1	100075P	SECTION 5
2	2	100094	UHMW 1 1/2 WEAR BLK
3	2	100095P	1 1/2" WEAR BLK CVR
4	2	046025	1/4-20 X 1 1/2 HEX BOLT
5	6	044023	1/4-20 NYLOCK NUT
6	2	100088	CORNER FRICTION BLOCK
7	2	100089P	CORNER BLOCK COVER
8	4	043060	3/8 INT STAR WASHER
9	4	047005	1/4 FLAT WASHER

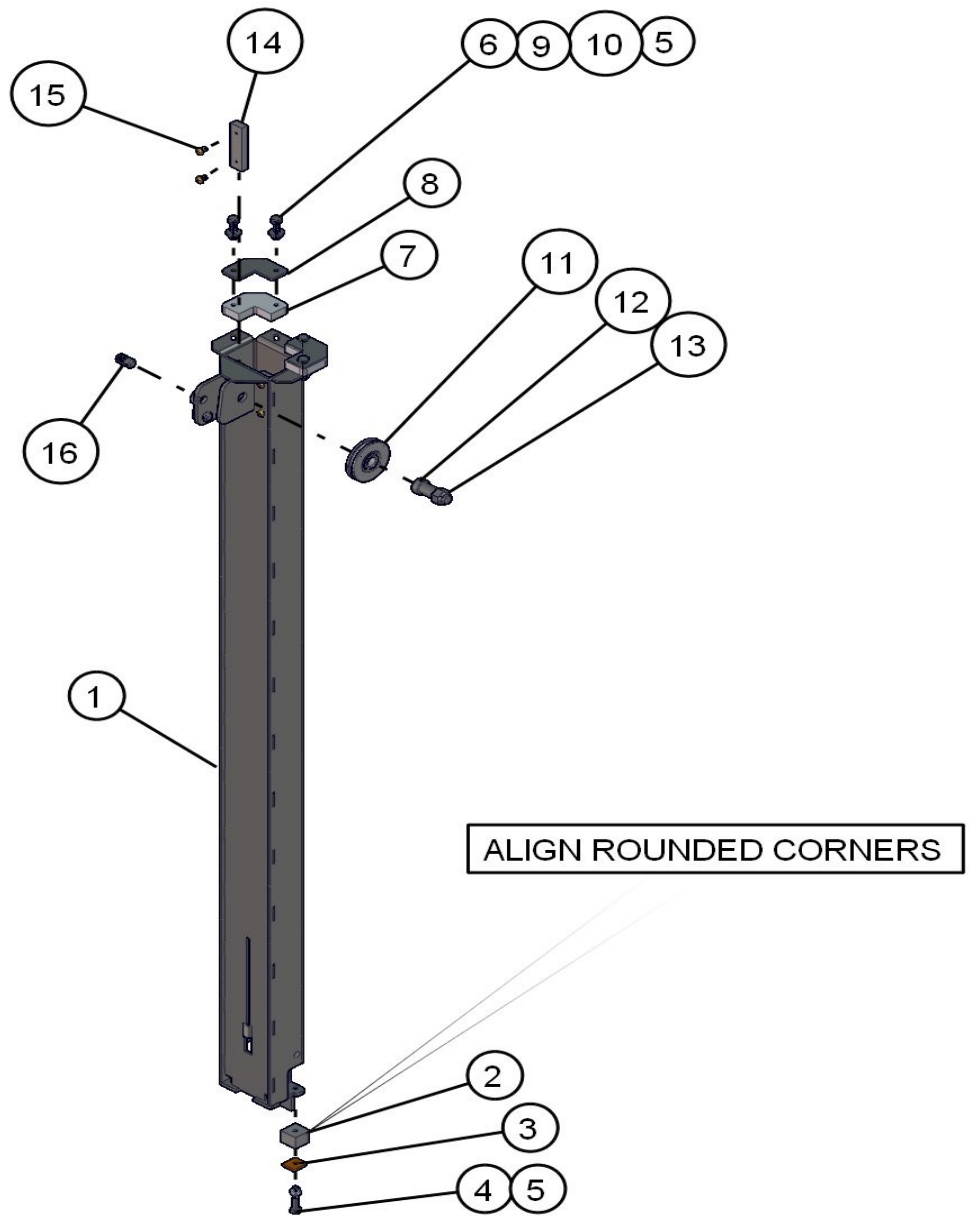
NO	QTY	PARTNO	DESCRIPTION
10	1	100160	2 1/2 PULLEY
11	1	100642	5/8 X 1 SHOULDER BOLT
12	1	044048	NUT NYLOCK 1/2-13 HEX PL
13	2	100062	3/8 UHMW SPACER
14	4	041023	#10 X 3/8 PLS
15	2	100071	3/16 CABLE BOLT
16	4	046020	1/4-20 X 1 1/4 HHCS

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

SECTION 6

MAXI LITE ML 20B SERIES

12/22/2010



NO	QTY	PARTNO	DESCRIPTION
1	1	100080P	SECTION 6
2	2	100178	UHMW 3/4 X 1" SQ WEAR BLK
3	2	100179P	1" WEAR BLK CVR
4	2	046025	1/4-20 X 1 1/2 HEX BOLT
5	6	044023	1/4-20 NYLOCK NUT
6	4	046020	1/4-20 X 1 1/4 HHCS
7	2	100088	CORNER FRICTION BLOCK
8	2	100089P	CORNER BLOCK COVER
9	4	043060	3/8 INT STAR WASHER

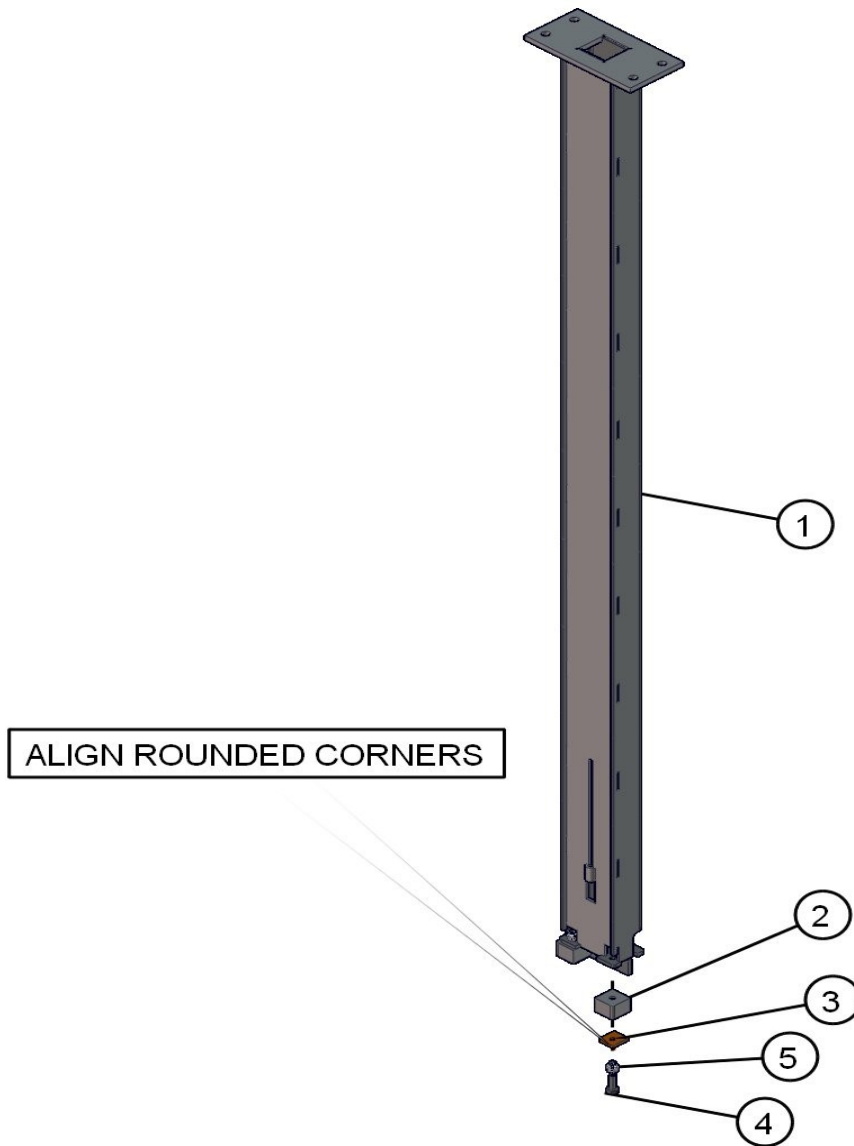
NO	QTY	PARTNO	DESCRIPTION
10	4	047005	1/4 FLAT WASHER
11	1	100160	2 1/2 PULLEY
12	1	100642	5/8 X 1 SHOULDER BOLT
13	1	044048	NUT NYLOCK 1/2-13 HEX PL
14	2	100062	3/8 UHMW SPACER
15	4	041023	#10 X 3/8 PLS
16	2	100071	3/16 CABLE BOLT

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

SECTION 7

MAXI LITE ML 20B SERIES

12/22/2010

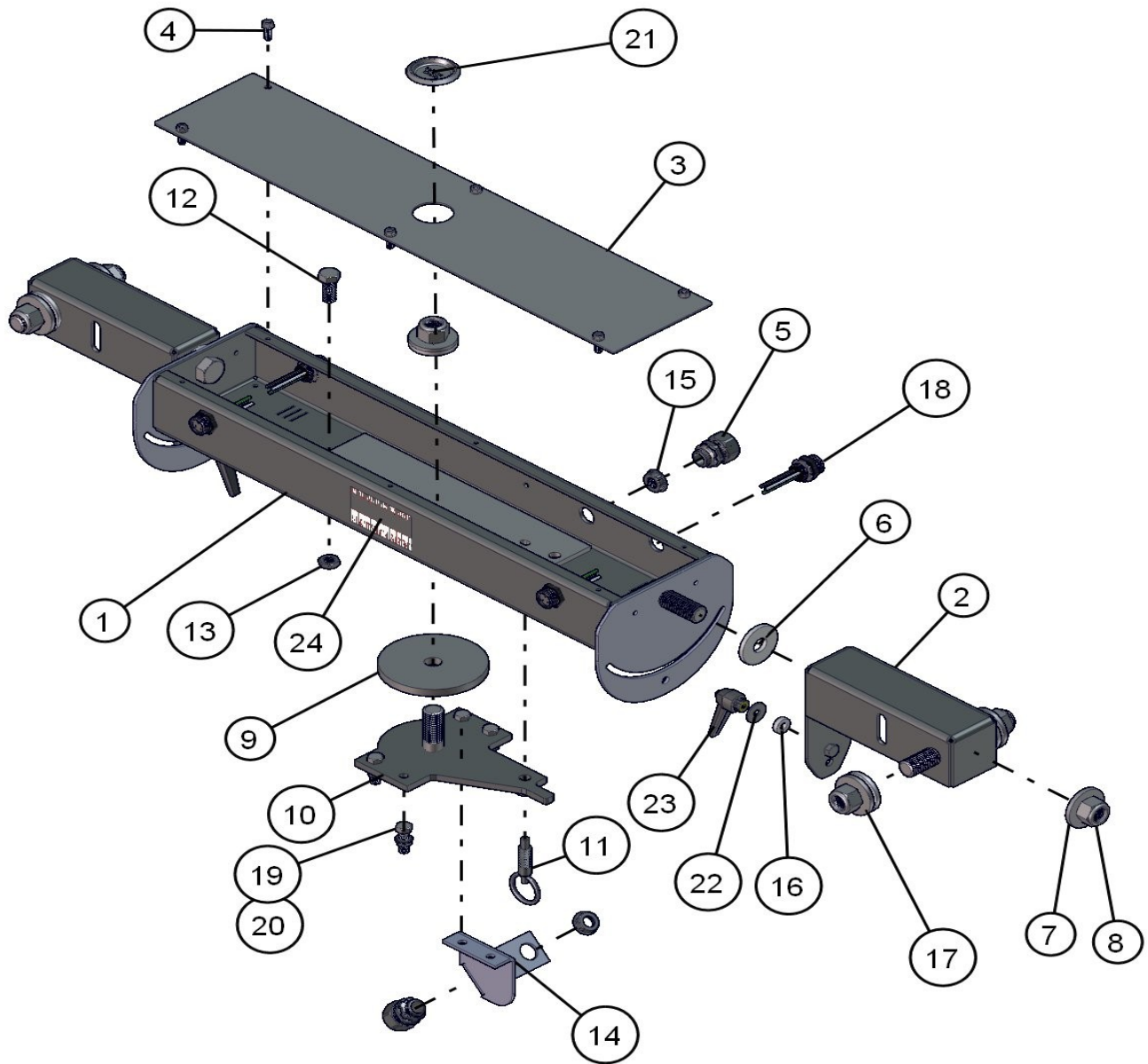


NO	QTY	PARTNO	DESCRIPTION
1	1	100085P	SECTION 7
2	2	100178	UHMW 3/4 X 1" SQ WEAR BLK
3	2	100179P	1" WEAR BLK CVR
4	2	046025	1/4-20 X 1 1/2 HEX BOLT
5	2	044023	1/4-20 NYLOCK NUT

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

ROTATIONAL LIGHT BAR MAXI LITE ML 20B SERIES

12/22/2010



HYDRAULIC TOWER ONLY

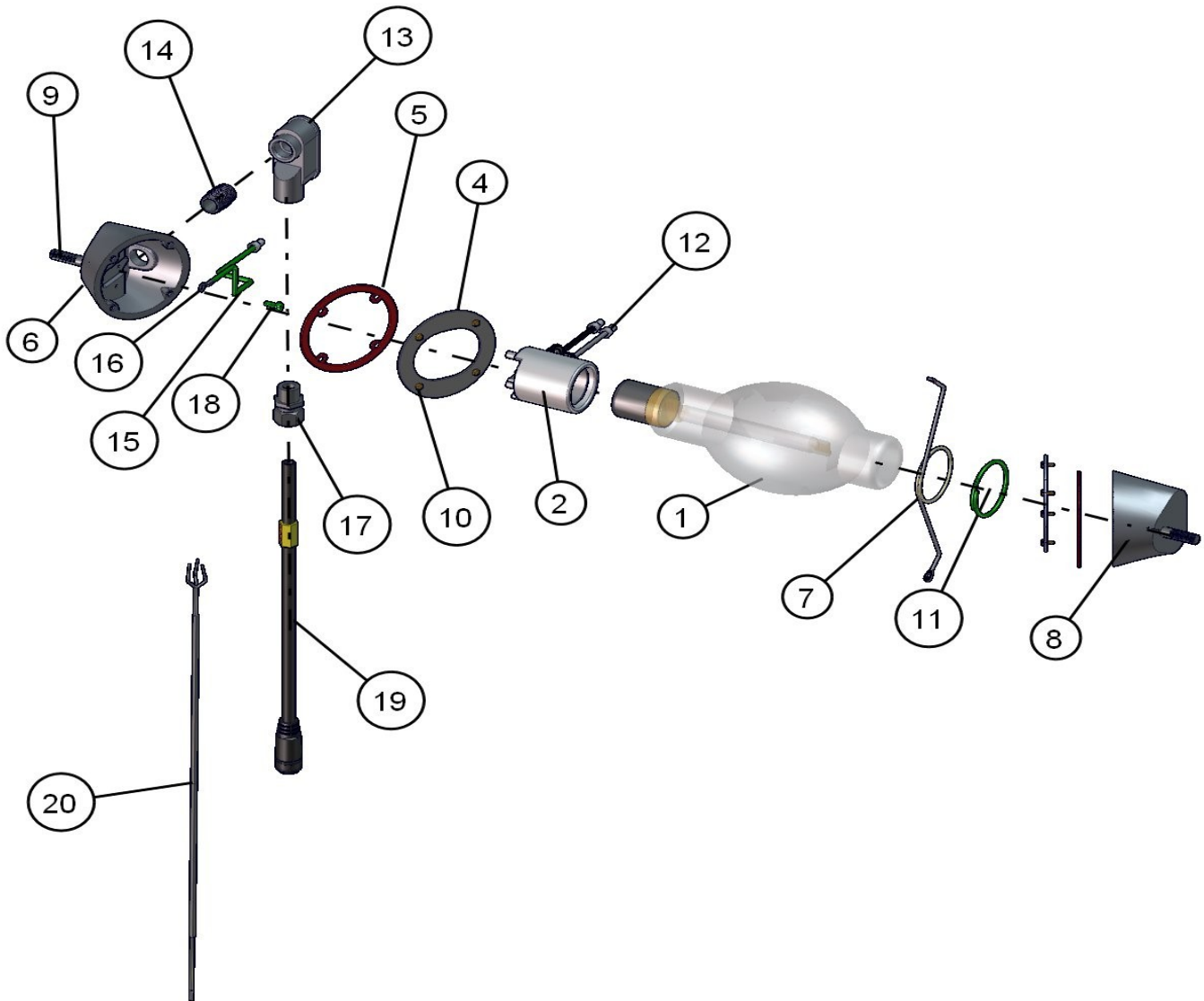
NO	QTY	PARTNO	DESCRIPTION
1	1	101930P	LIGHT BAR
2	2	101931P	LAMP MOUNT
3	1	101929P	COVER
4	6	041070	1/4-20 X 3/4 SL- SELF TAPPING SCREW
5	2	310033	1/2 CORD GRIP
6	7	650550	.785 X 2" HDPE WASHER
7	3	047035	3/4 FLAT WASHER PLTD
8	7	044058	3/4-10 NYLOCK PLATED HEX NUT
9	1	100147	UHMW BEARING
10	1	100143P	WELD, ROTATION MOUNT
11	1	100148	SPRING LOCK 1/2-13 X1.4
12	1	046180	1/2-13 X 1 1/4 HHCS GR 5
13	1	100643	1/2-13 NYLOCK

NO	QTY	PARTNO	DESCRIPTION
14	1	100154P	BRACKET
15	2	022415	BUSHING THREADED
16	2	047019	3/4 OD X .385 ID NYLON BUSHING
17	4	047035	3/4 FLAT WASHER PLTD
18	4	310414	QD CONNECTOR FEMALE
19	4	046115	3/8-16 X 1 1/4 HHCS
20	4	044036	3/8-16 KEPS HEX NUT
21	1	680878	CAPLUG 1 3/4"
22	2	047015	3/8 FLAT WASHER
23	2	102361	ADJUSTABLE LEVER,
24	2	090002	HIGH VOLTAGE DECAL

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

1000W SHO LAMP MAXI LITE ML 20B SERIES

12/22/2010

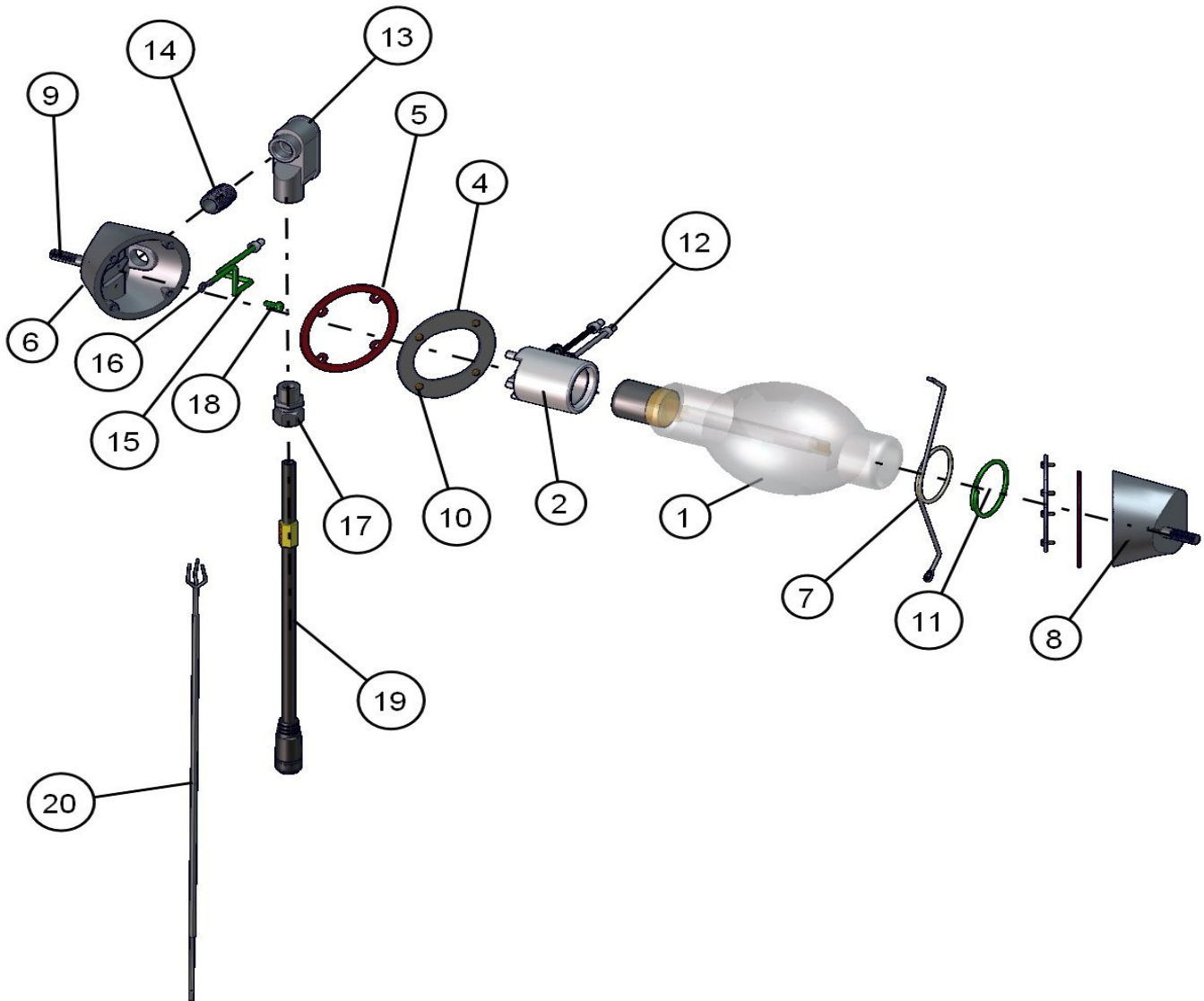


NO	QTY	PARTNO	DESCRIPTION
1	1	610211	LAMP 1000W BT37(MH)
2	1	610212	CERAMIC SOCKET
4	1	610208	INTERIOR COVER PLATE
5	2	610213	GASKET
6	1	610205	SOCKET END CAP, w. STOP BOSS
7	1	610209	LAMP SUPPORT TIP
8	1	610205	SOCKET END CAP, w. STOP BOSS
9	2	045142	STUD 3/8-24 X 3/8-16 X 2"
10	8	041028	10-24 X 1/2 HEX MACH SCREW
11	1	610210	FIBERGLASS MESS TUBE 12"
12	3	022060	WIRE CAP SMALL
13	1	610214	ELBOW
14	1	610215	NIPPLE
15	1	020133	14 AWG GREEN 6"
16	1	022155	#10 ELEC. RING
17	1	510007	1/2 DIA CORD GRIP
18	1	041257	10-32 GROUND SCREW
19	1	310434	MALE CONNECTOR CABLE (OPTION)
20	1	650159	16/3 X 68 HARD WIRED LEAD (OPTION)

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

1250W SHO LAMP MAXI LITE ML 20B SERIES

12/22/2010



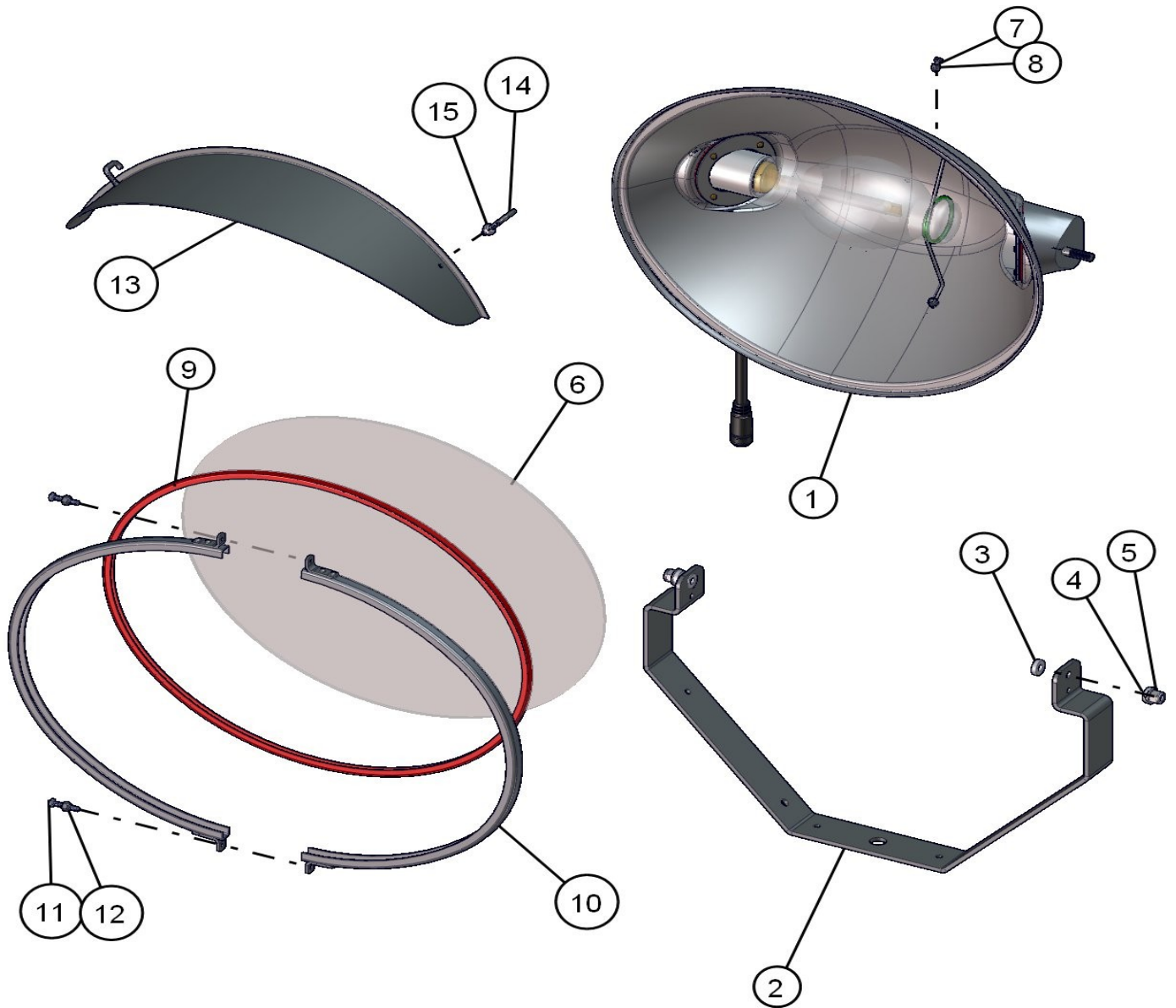
NO	QTY	PARTNO	DESCRIPTION
1	1	610221	LAMP 1250W BT37
2	1	610212	CERAMIC SOCKET
4	1	610208	INTERIOR COVER PLATE
5	2	610213	GASKET
6	1	610205	SOCKET END CAP, w. STOP BOSS
7	1	610209	LAMP SUPPORT TIP
8	1	610205	SOCKET END CAP, w. STOP BOSS
9	2	045142	STUD 3/8-24 X 3/8-16 X 2"
10	8	041028	10-24 X 1/2 HEX MACH SCREW
11	1	610210	FIBERGLASS MESS TUBE 12"
12	3	022060	WIRE CAP SMALL
13	1	610214	ELBOW
14	1	610215	NIPPLE
15	1	020133	14 AWG GREEN 6"
16	1	022155	#10 ELEC. RING
17	1	510007	1/2 DIA CORD GRIP
18	1	041257	10-32 GROUND SCREW
19	1	310434	MALE CONNECTOR CABLE (OPTION)
20	1	650159	16/3 X 68 HARD WIRED LEAD (OPTION)

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

SHO LAMPHOLDER

MAXI LITE ML 20B SERIES

12/22/2010



NO	QTY	PARTNO	DESCRIPTION
1	1	610201	REFLECTOR
2	1	680493P	YOKE MOUNT
3	4	047019	3/4 OD X .385 ID NYLON BUSHING
4	2	047016	3/8 SAE FLAT WASHER
5	2	044037	3/8-24 NYLOC NUT
6	1	610203	LENS FROSTED
7	2	041200	8-32 X 1/2 HEX MACH SCREW
8	2	044013	#8-32 NYLOCK NUT
9	1	610217	SILICONE GASKET
10	2	610202	LENS CHANNEL
11	2	041036	10-24 X 1 1/4 SS RHMSPH
12	2	044019	10-24 NYLOC NUT
13	1	610017A	SAF-T VISOR (OPTION)
14	2	045070	#10-24 HOOK SQ BD BOLT (OPTION)
15	2	044023	1/4-20 NYLOCK NUT (OPTION)

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

SHO LAMP ASSEMBLIES
MAXI LITE ML 20B SERIES

12/22/2010

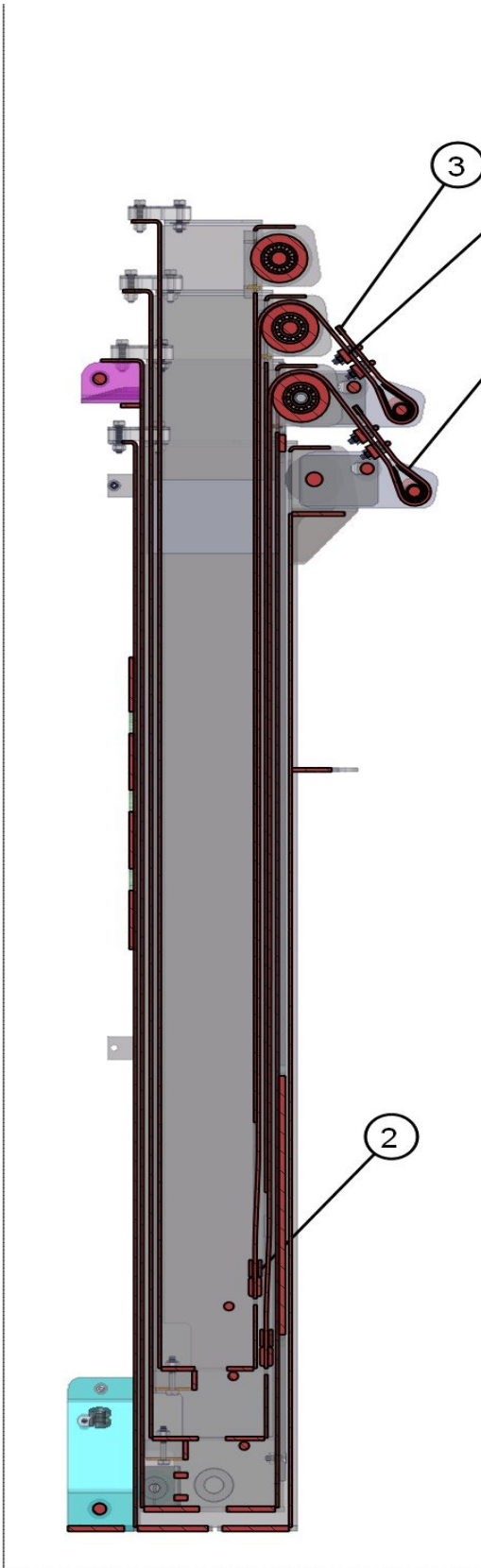
610250 -- LAMPHOLDER ASSY W/ YOKE W/ LAMP (610211) QD LEAD
650144 -- LAMPHOLDER ASSY W/ YOKE W/ LAMP (610211) NO LEAD
610265 -- LAMPHOLDER ASSY W/ YOKE W/ LAMP (610218) QD LEAD
610263 -- LAMPHOLDER ASSY W/ YOKE W/ LAMP (610218) NO LEAD
100632 -- LAMPHOLDER ASSY W/ YOKE W/ LAMP (610221) QD LEAD
100633 -- LAMPHOLDER ASSY W/ YOKE W/ LAMP (610221) NO LEAD

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

CABLE ROUTING SECTIONS 1-4

MAXI LITE ML 20B SERIES

12/22/2010



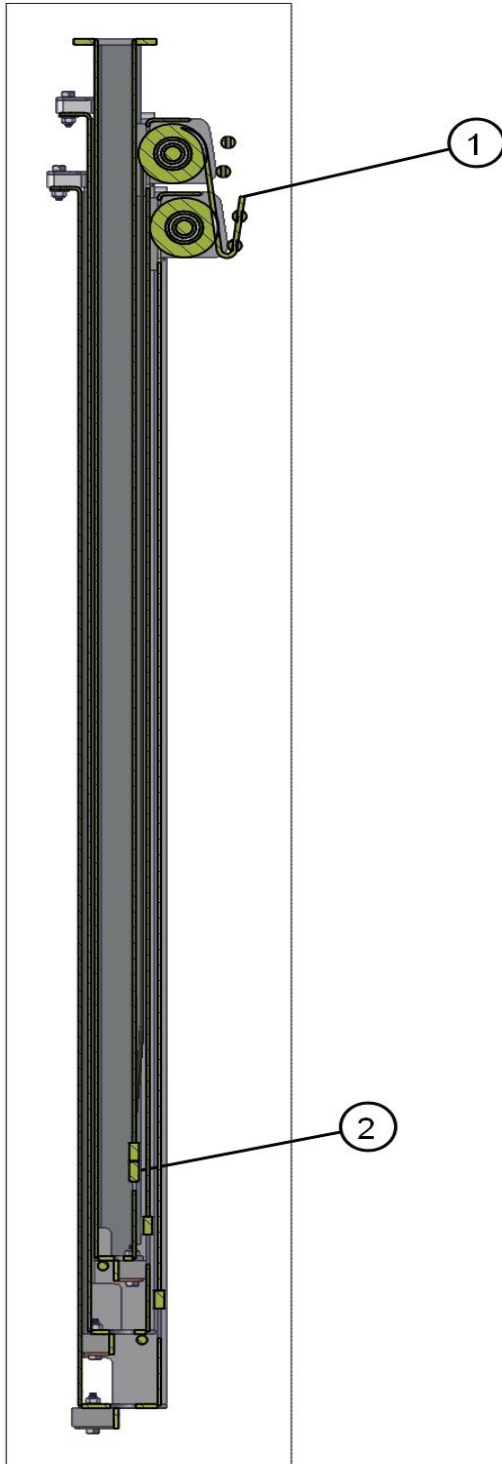
NO	QTY	PARTNO	DESCRIPTION
1	1	100149B	3/16 X 60 CABLE
2	2	650133B	STEEL SLEEVE
3	2	022150	FERRULE 10-12 AWG
4	4	620084	1/4 CABLE CLIP

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

CABLE ROUTING SECTIONS 5-7

MAXI LITE ML 20B SERIES

12/22/2010

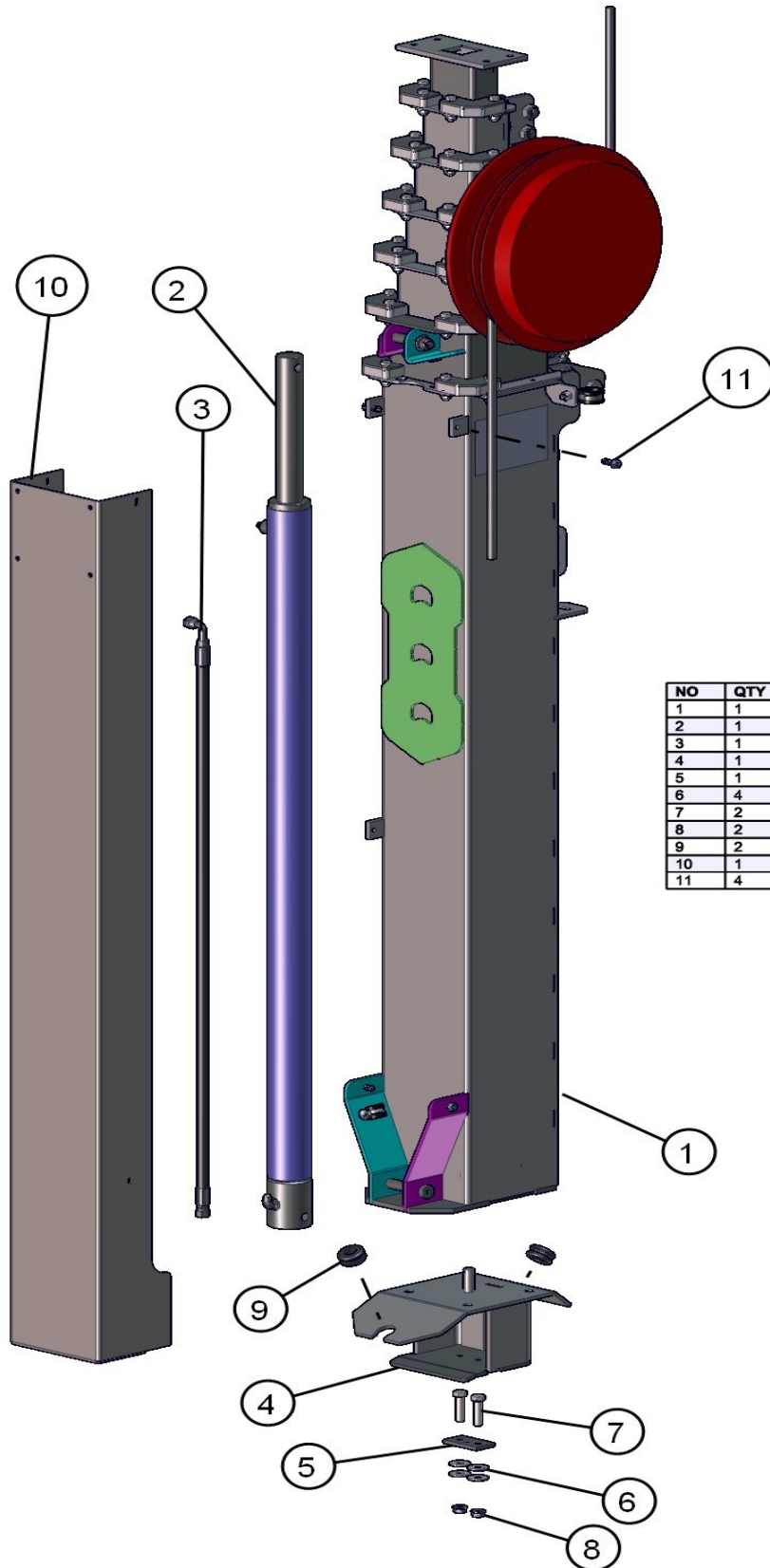


NO	QTY	PARTNO	DESCRIPTION
1	1	100149A	3/16 x 60 CABLE
2	1	650133B	STEEL SLEEVE

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

HYDRAULIC TOWER MAXI LITE ML 20B SERIES

12/22/2010

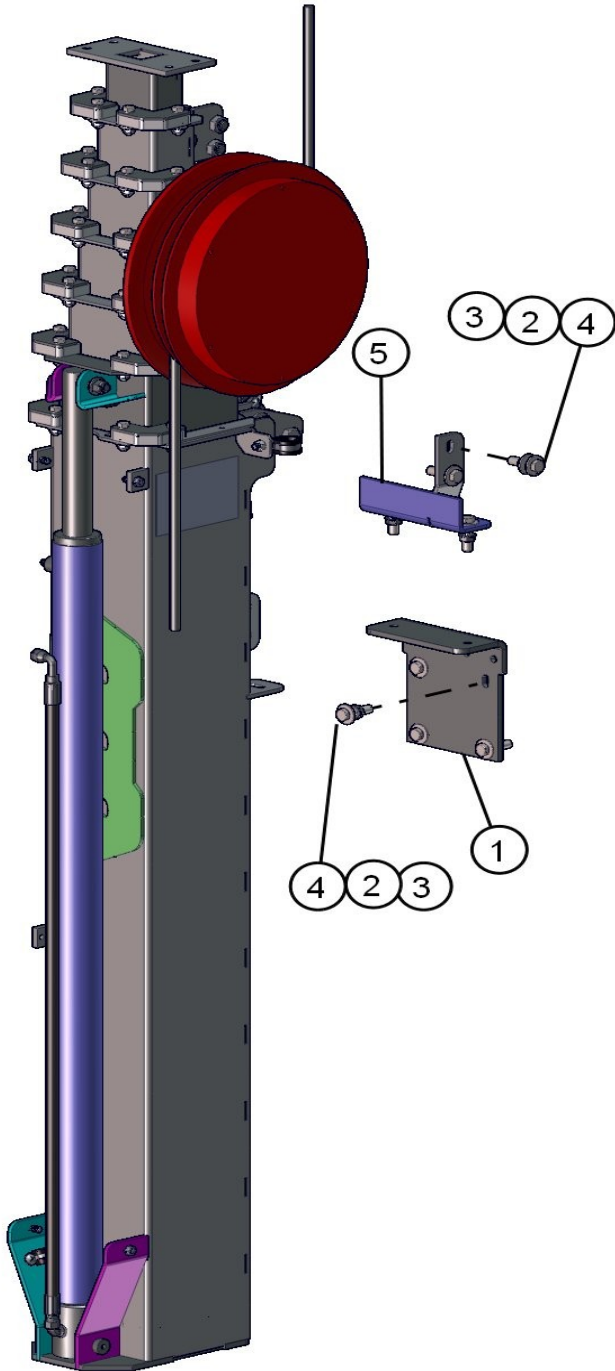


NO	QTY	PARTNO	DESCRIPTION
1	1	102086	HYDRAULIC TOWER
2	1	101375P	CYLINDER, VERT TOWER
3	1	101356	HYDRAULIC HOSE
4	1	101406P	TOWER PLATFORM
5	1	101629P	COVER PLATE
6	4	047015	3/8 FLAT WASHER
7	2	046120	3/8-16 X 1 1/2 HHCS GR5 PL
8	2	044036	3/8-16 KEPS HEX NUT
9	2	330463	11/16 RUBBER GROMMET
10	1	100245P	CYLINDER COVER
11	4	041070	1/4-20 X 3/4 SL- SELF TAPPING SCREW

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

HYDRAULIC TOWER MOUNT MAXI LITE ML 20B SERIES

12/22/2010



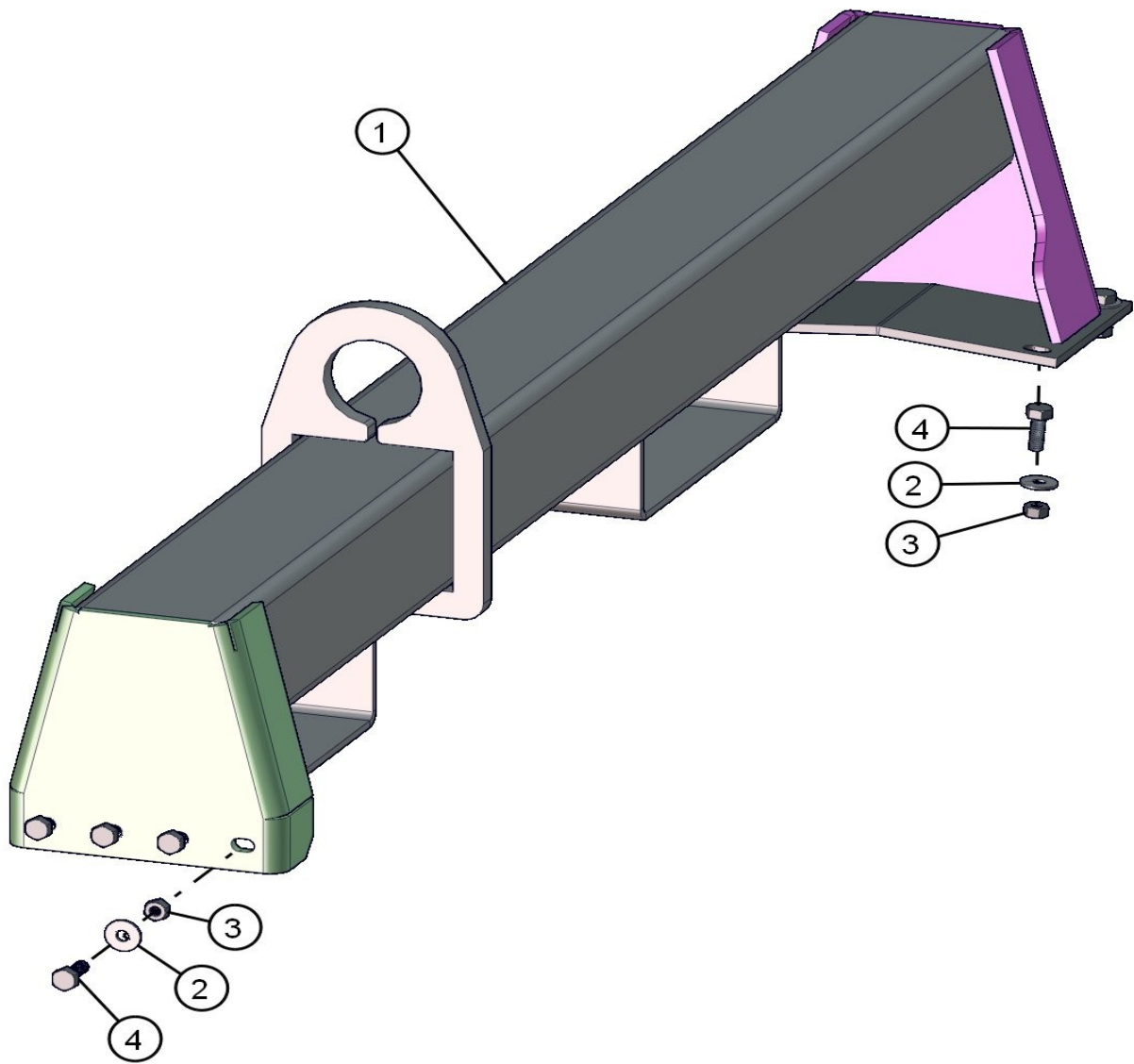
NO	QTY	PARTNO	DESCRIPTION
1	1	100244P	ANGLE MOUNTING BRKT
2	14	047015	3/8 FLAT WASHER
3	8	044036	3/8-16 KEPS HEX NUT
4	8	046120	3/8-16 X 1 1/2 HHCS GR5 PL
5	1	101410P	TOWER MOUNT

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

LIFT ARM

MAXI LITE ML 20B SERIES

12/22/2010

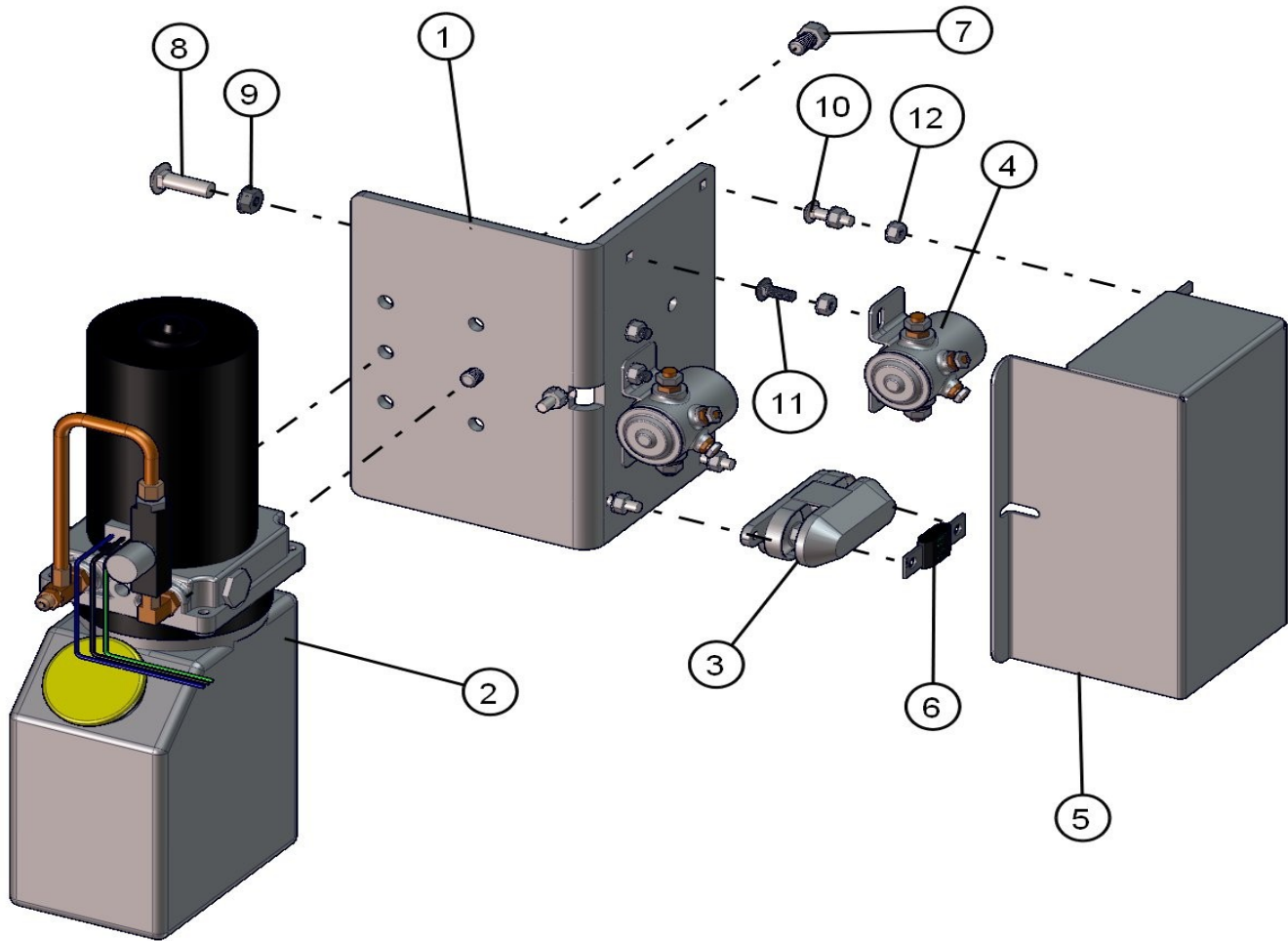


NO	QTY	PARTNO	DESCRIPTION
1	1	101917P	LIFT BAR
2	10	047010	5/16 FLAT WASHER
3	10	044030	5/16-18 HEX NUT
4	10	046050	BOLT CS 5/16-18 X 1 HEX GR5 PL

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

HYDRAULIC PUMP MAXI LITE ML 20B SERIES

12/22/2010



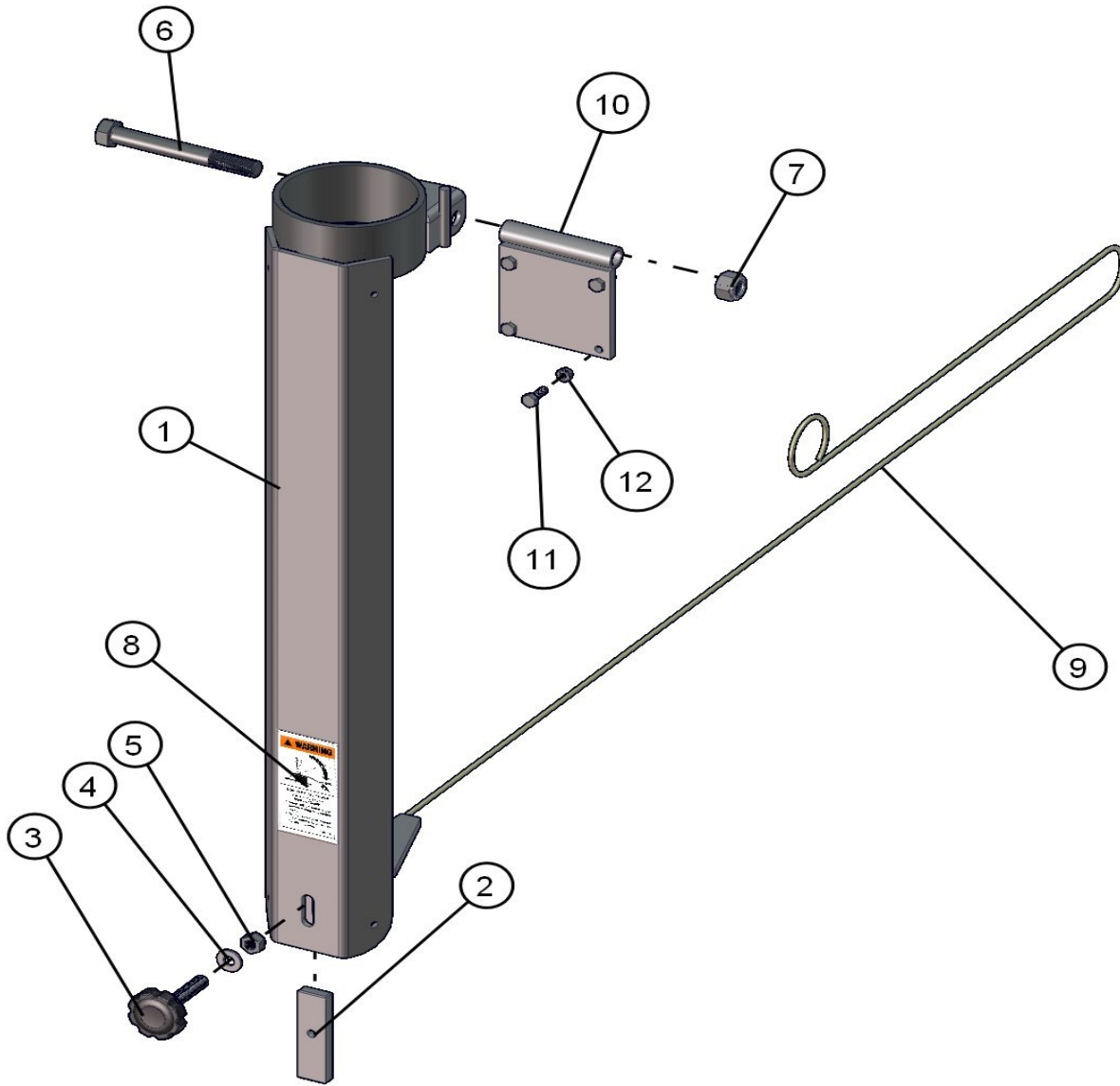
NO	QTY	PARTNO	DESCRIPTION
1	1	101839P	BRACKET
2	1	101383	HYDRAULIC POWER UNIT
3	1	100235	FUSE HOLDER
4	2	100236	12 VDC RELAY
5	1	102191P	COVER
6	1	100234	125A FUSE LINK
7	2	101384	3/8-16 X 5/8 HHCS PL
8	2	100670	3/8-16 X 1 1/4 CARRIAGE BOLT
9	2	044036	3/8-16 KEPS HEX NUT
10	4	100342	1/4-20 X 1" CARRIAGE BOLT
11	4	053006	1/4-20 X 3/4 RHSSN BOLT
12	9	044021	1/4-20 KEPS NUT

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

MANUAL TOWER PIVOT SECTION

MAXI LITE ML 20B SERIES

12/22/2010



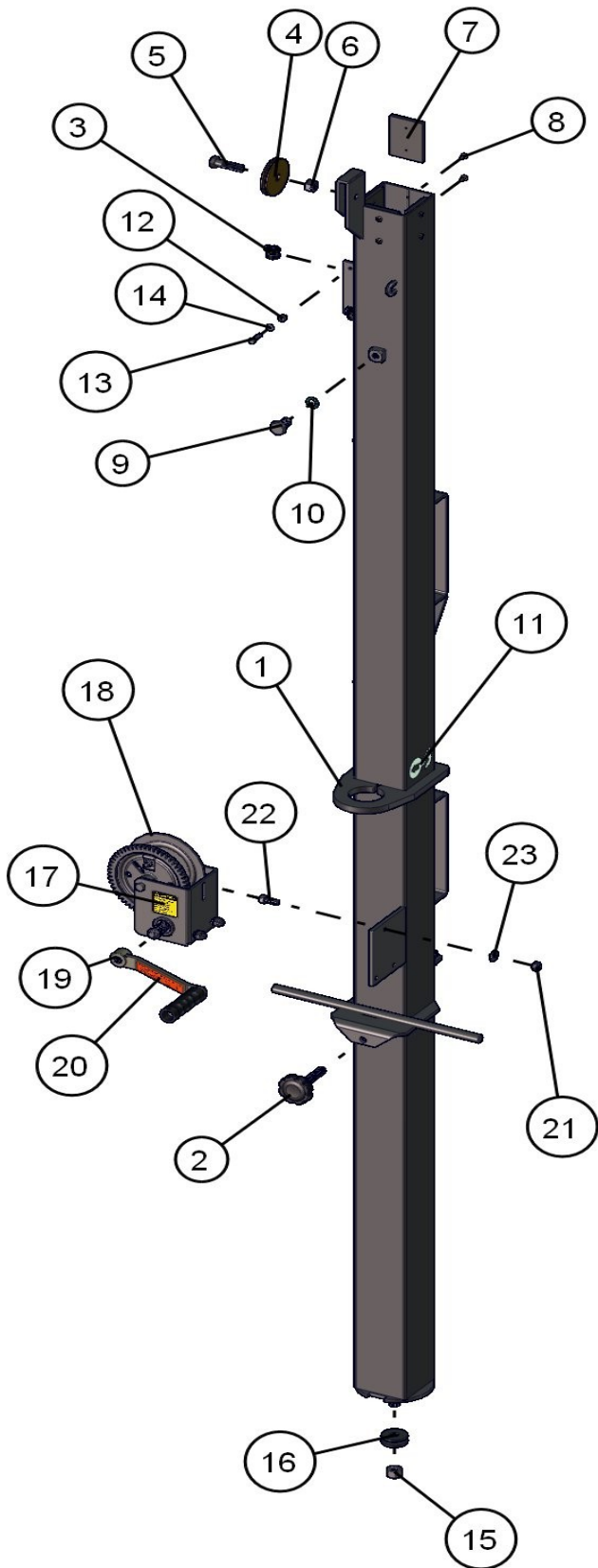
NO	QTY	PARTNO	DESCRIPTION
1	1	620511P	TOWER SUPPORT
2	1	650145	LOCKING BAR
3	1	620550	1/2-13 X 2 1/8" LOCKING KNOB
4	1	047025	1/2 FW PL
5	1	044048	NUT NYLOCK 1/2-13 HEX PL
6	1	046286	3/4-10 X 6 1/2 HEX BOLT GR 5
7	1	044058	3/4-10 NYLOCK PLATED HEX NUT
8	1	090164	DEATH OR INJURY DECAL
9	1	320185	WINCH CABLE
10	1	680111P	TOWER PIVOT
11	4	046050	BOLT CS 5/16-18 X 1 HEX GR5 PL
12	4	044031	5/16 -18 KEPS NUT

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

MANUAL TOWER SECTION 1

MAXI LITE ML 20B SERIES

12/22/2010



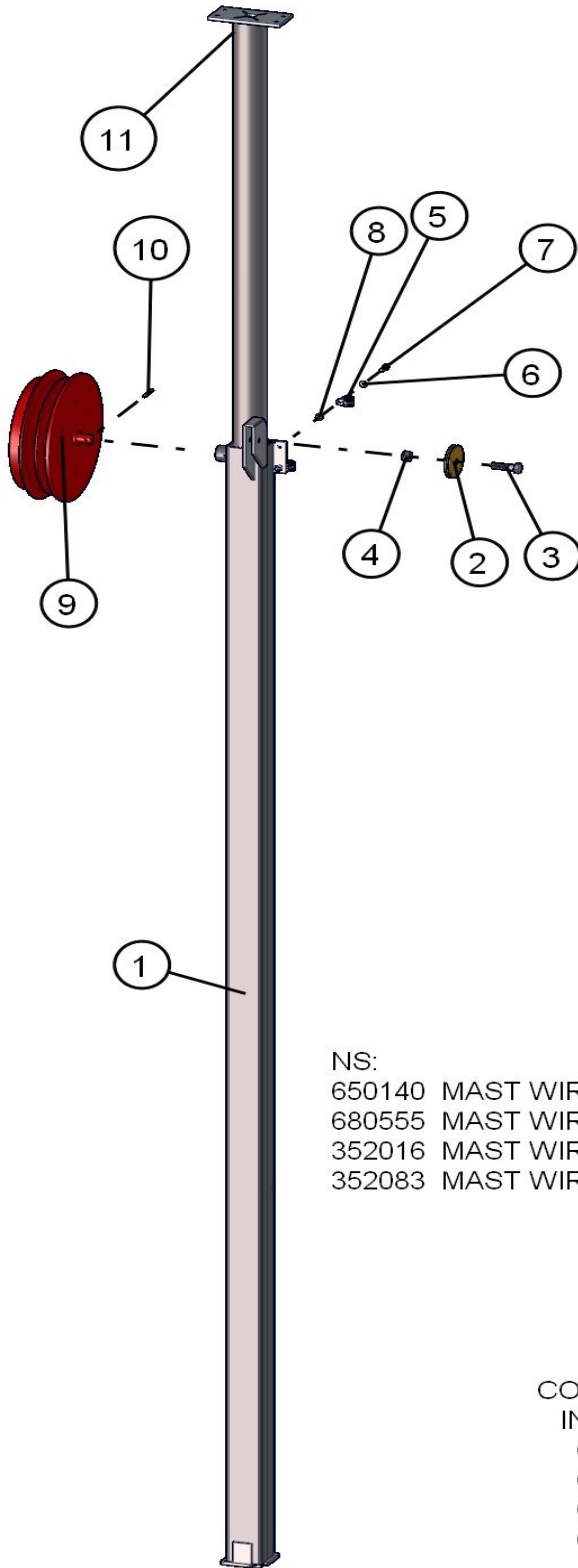
NO	QTY	PARTNO	DESCRIPTION
1	1	680102P	4" SECTION MANUAL TOWER
2	1	620550	1/2-13 X 2 1/8" LOCKING KNOB
3	5	310212	#10 CUSH CLAMP 1/4 HOLE
4	1	320110	PULLEY 3 OD W/BUSHING
5	1	046200	1/2-13 X 2 1/4 HHCS GR5 (PLATED)
6	1	044048	NUT NYLOCK 1/2-13 HEX PL
7	4	650110	TOWER PAD .312
8	8	041023	#10 X 3/8 PLS
9	1	046242	5/8-11 X 1" GR 5 HEX BOLT
10	1	043100	5/8 INT LOCK WASHER
11	2	090136	LIFT POINT DECAL
12	5	044023	1/4-20 NYLOCK NUT
13	5	046015	1/4-20 X 1 HEX BOLT
14	5	047009	1/4 SAE SS FW
15	1	044053	5/8-11 NC NYLON INSERT NUT
16	2	047030	5/8 FLAT WASHER
17	1	090474	WINCH CAUTION DECAL
18	1	610531	DBL 1200 WINCH
19	1	712032	WINCH DBL 1200 7
20	1	204358C	WINCH ACCIDENT DECAL
21	3	044038	3/8-16 NYLOCK HNUT
22	3	046110	3/8-16 X 1 HHCS GR5 PL
23	3	047010	5/16 FLAT WASHER

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

MANUAL TOWER SECTION 2 & 3

MAXI LITE ML 20B SERIES

12/22/2010



NO	QTY	PARTNO	DESCRIPTION
1	1	680180P	3" SECTION MANUAL TOWER
2	1	320110	PULLEY 3 OD W/BUSHING
3	1	046200	1/2-13 X 2 1/4 HHCS GR5 (PLATED)
4	1	044048	NUT NYLOCK 1/2-13 HEX PL
5	2	310212	#10 CUSH CLAMP 1/4 HOLE
6	2	047009	1/4 SAE SS FW
7	2	046015	1/4-20 X 1 HEX BOLT
8	2	044023	1/4-20 NYLOCK NUT
9	1	320410P	CORD REEL (OPTIONAL)
10	1	320453	3/16 X 1 3/4 ROLL PIN (OPTIONAL)
11	1	352017P	2 5/8" ROUND SECTION

NS:

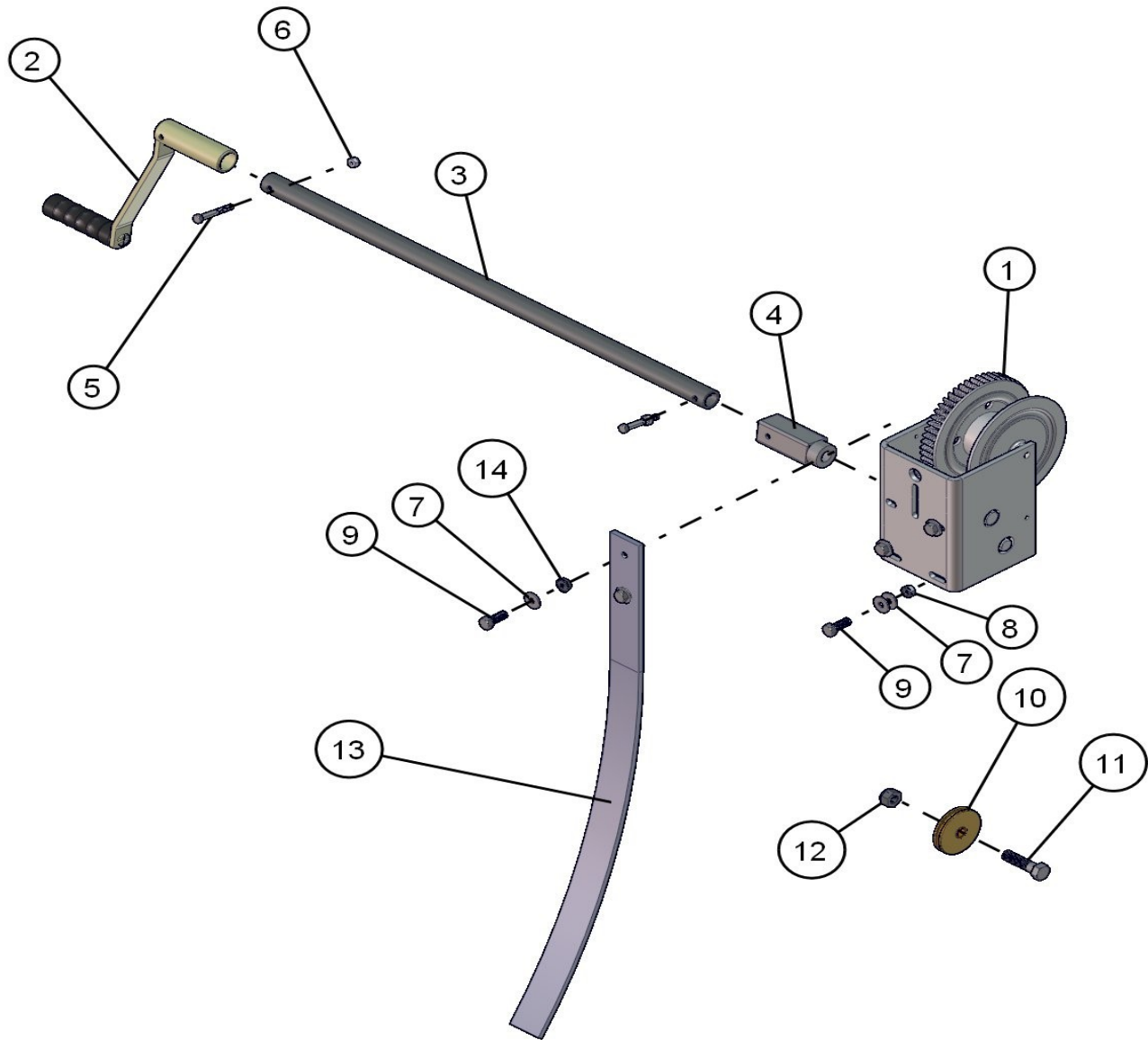
- 650140 MAST WIRING - 14/7 X 324" (STRAIGHT CORD 4 LIGHT)
- 680555 MAST WIRING - 16/10 X 336" (STRAIGHT CORD 6 LIGHT)
- 352016 MAST WIRING - 16/8 X 344" (CORD REEL 4 LIGHT)
- 352083 MAST WIRING - 16/10 X 344" (CORD REEL 6 LIGHT)

- COMPLETE MANUAL TOWER ASSEMBLIES,
INCLUDING LIGHT BAR ASSEMBLY.
- 680209P MANUAL WINCH TOWER (4 LIGHT)
 - 680210P MANUAL CORD REEL (4 LIGHT)
 - 680213P MANUAL WINCH TOWER (6 LIGHT)
 - 680214P MANUAL CORD REEL (6 LIGHT)

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

MANUAL WINCH MAXI LITE ML 20B SERIES

12/22/2010



NO	QTY	PARTNO	DESCRIPTION
1	1	352482	WINCH 2500 DLB
2	1	650470	HANDLE
3	1	680474P	HANDLE EXTENSION
4	1	660144P	DRIVE HUB
5	2	046035	BOLT, HCS, PL, GR 5, 1/4-20 X 2
6	2	044023	1/4-20 NYLOCK NUT
7	8	047010	5/16 FLAT WASHER
8	3	044031	5/16 -18 KEPS NUT
9	5	046110	3/8-16 X 1 HHCS GR5 PL
10	1	320112	2-1/2" Steel Sheave
11	1	046200	1/2-13 X 2 1/4 HHCS GR5 (PLATED)
12	1	044048	NUT NYLOCK 1/2-13 HEX PL
13	1	630555P	KICK OUT SPRING
14	2	044036	3/8-16 KEPS HEX NUT

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

INSTRUCTIONS FOR REPLACING STEEL CABLES

MAXI LITE ML 20B SERIES

12/22/2010

MANUAL WINCH ONLY

NS	REQ'D	PART NO	DESCRIPTION
	2	620084	WIRE ROPE CLIP 3/16"
	1	045040	WIRE ROPE THIMBLE 1/4"
	1	620076	STEEL CABLE 3/16 X 11'
	1	650133	STEEL CABLE 3/16 X 17'9"
	1	320185	STEEL CABLE 3/16 X 10'

3/16 X 11'

REMOVE THE CUSHION CLAMPS AND MAST WIRING FROM 3" MAST SECTION.
REMOVE THE WIRE ROPE CLIPS AT TOP END OF THE 4" MAST SECTION.
REMOVE THE 3" PULLEY AT THE END OF THE 3" MAST SECTION.
REMOVE THE 2 5/8" ROUND MAST SECTION.
REMOVE ALL THE BROKEN AND FRAYED CABLE.
REPLACE NEW CABLE THROUGH SLOT AND EYELET IN THE ROUND MAST SECTION.
REPLACE 2 5/8" ROUND MAST SECTION IN THE 3" MAST SECTION.
ROUTE CABLE THROUGH PULLEY AND BRACKETS AND INSTALL 3" PULLEY.
WITH ALL SECTIONS PUSHED TOGETHER TIGHT, INSERT CABLE THROUGH HALF-LINK
AND INSTALL WIRE ROPE CLIPS.
REINSTALL CUSHION CLAMPS AND MAST WIRING ON THE 3" MAST SECTION.

3/16 X 17' 9"

REMOVE MAST WIRING FROM BALLAST COMPARTMENT.(SEE ELECTRICAL SCHEMATIC)
REMOVE THE CUSHION CLAMPS AND MAST WIRING FROM 4" MAST SECTION.
REMOVE STOP BOLT AND WASHER.
REMOVE 4 TOWER PADS AND 3" PULLEY AT THE END OF THE 4" MAST SECTION.
REMOVE THE 2 5/8" ROUND AND THE 3" MAST SECTIONS TOGETHER.
REMOVE ALL THE BROKEN AND FRAYED CABLE.
REPLACE NEW CABLE THROUGH SLOT AND EYELET IN THE 3" MAST SECTION AND
THROUGH PULLEY BRACKETS.
REPLACE 2 5/8" ROUND AND 3" MAST SECTIONS.
REPLACE 3" PULLEY AND TOWER PADS.
ATTACH CABLE TO WINCH AND WIND IN A CLOCKWISE DIRECTION UNTILL ALL SLACK
IS OUT.
REPLACE STOP BOLT AND WASHER.
REPLACE CUSHION CLAMPS AND MAST WIRING ON 4" MAST SECTION.
REPLACE MAST WIRING IN BALLAST COMPARTMENT.(SEE ELECTRICAL SCHEMATIC)

3/16 X 10'

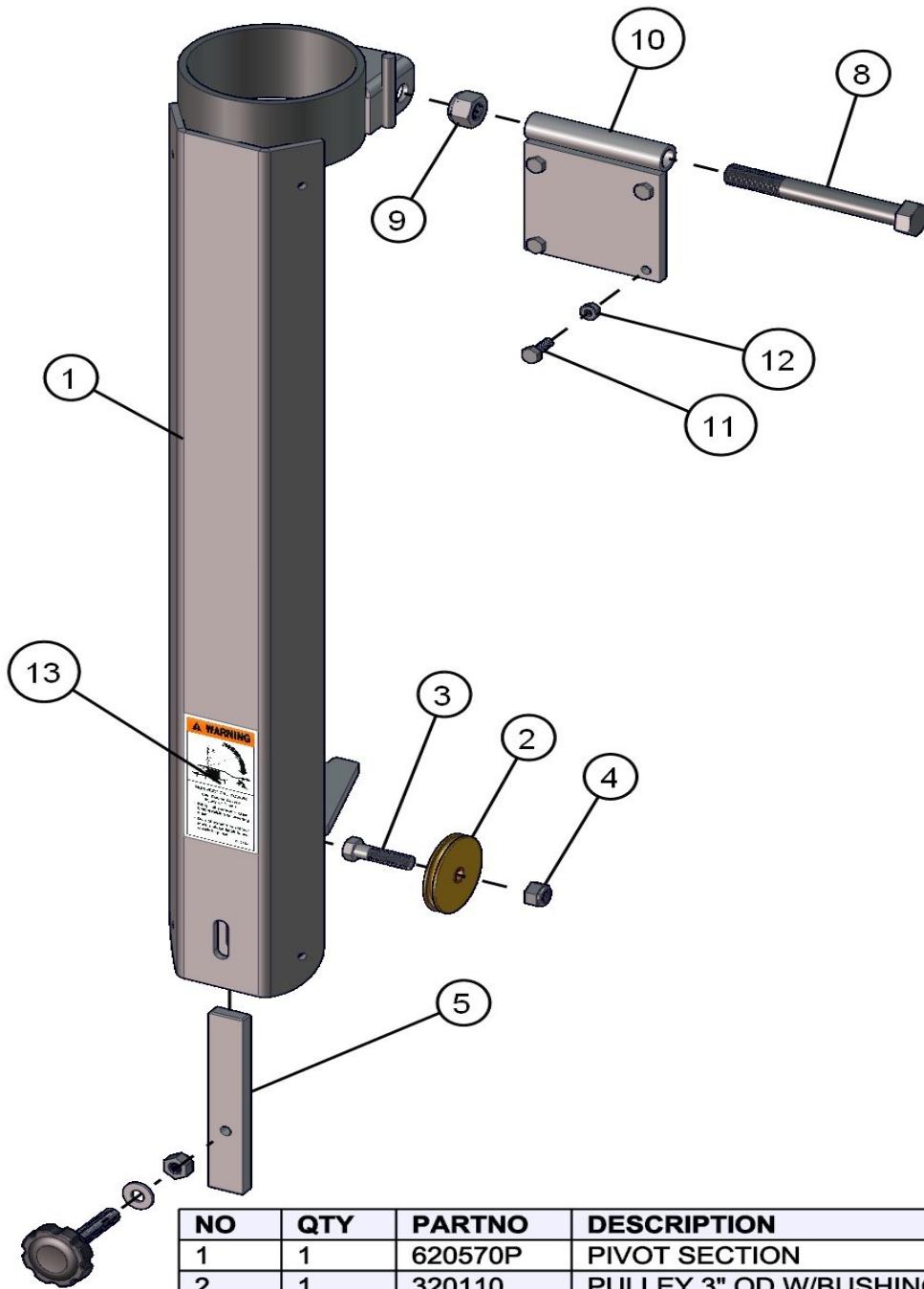
REMOVE ALL BROKEN AND FRAYED CABLE.
FEED NEW CABLE THROUGH EYELET IN MAST PIVOT SECTION.

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

ELECTRIC TOWER PIVOT SECTION

MAXI LITE ML 20B SERIES

12/22/2010



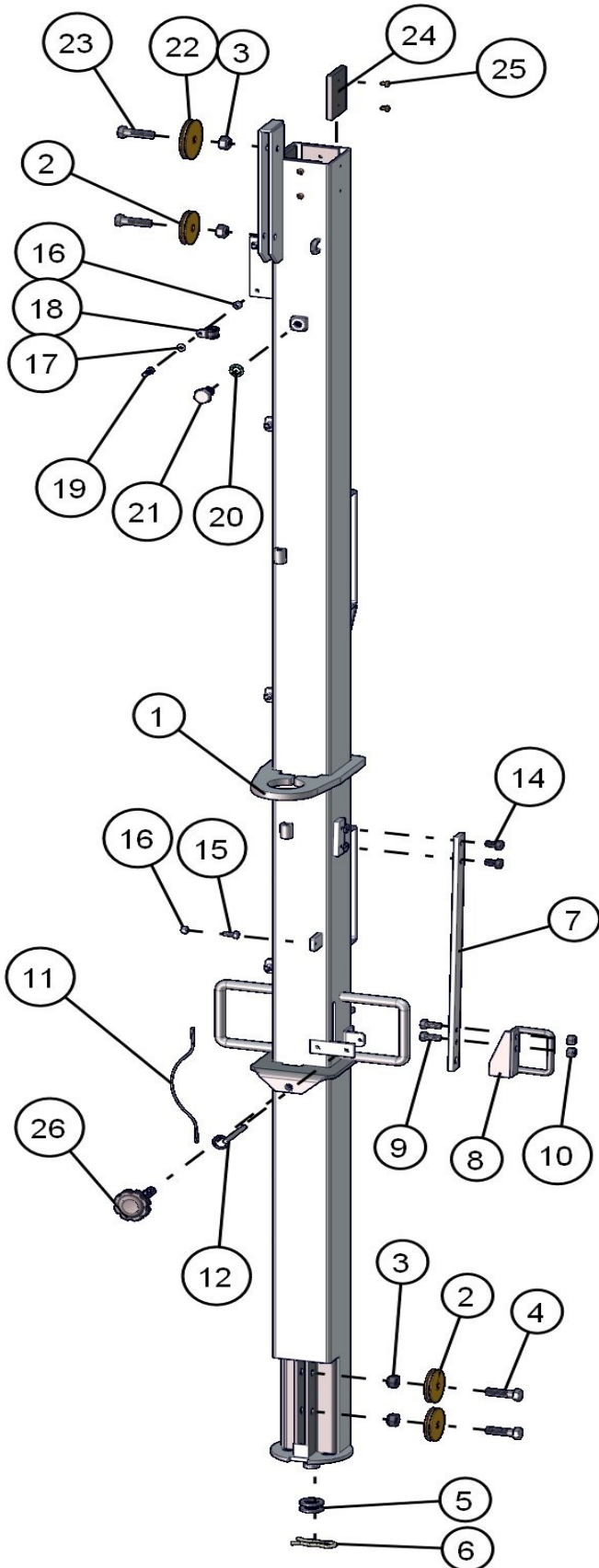
NO	QTY	PARTNO	DESCRIPTION
1	1	620570P	PIVOT SECTION
2	1	320110	PULLEY 3" OD W/BUSHING
3	1	046200	1/2-13 X 2 1/4 HHCS GR5 (PLATED)
4	2	044048	NUT NYLOCK 1/2-13 HEX PL
5	1	352168	LOCKIN BAR
8	1	046286	3/4-10 X 6 1/2 HEX BOLT GR 5
9	1	044058	3/4-10 NYLOCK PLATED HEX NUT
10	1	680111P	TOWER PIVOT
11	4	046050	BOLT CS 5/16-18 X 1 HEX GR5 PL
12	4	044031	5/16 -18 KEPS NUT
13	1	090164	DEATH OR INJURY DECAL

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

SECTION 1 ELECTRIC TOWER

MAXI LITE ML 20B SERIES

12/22/2010



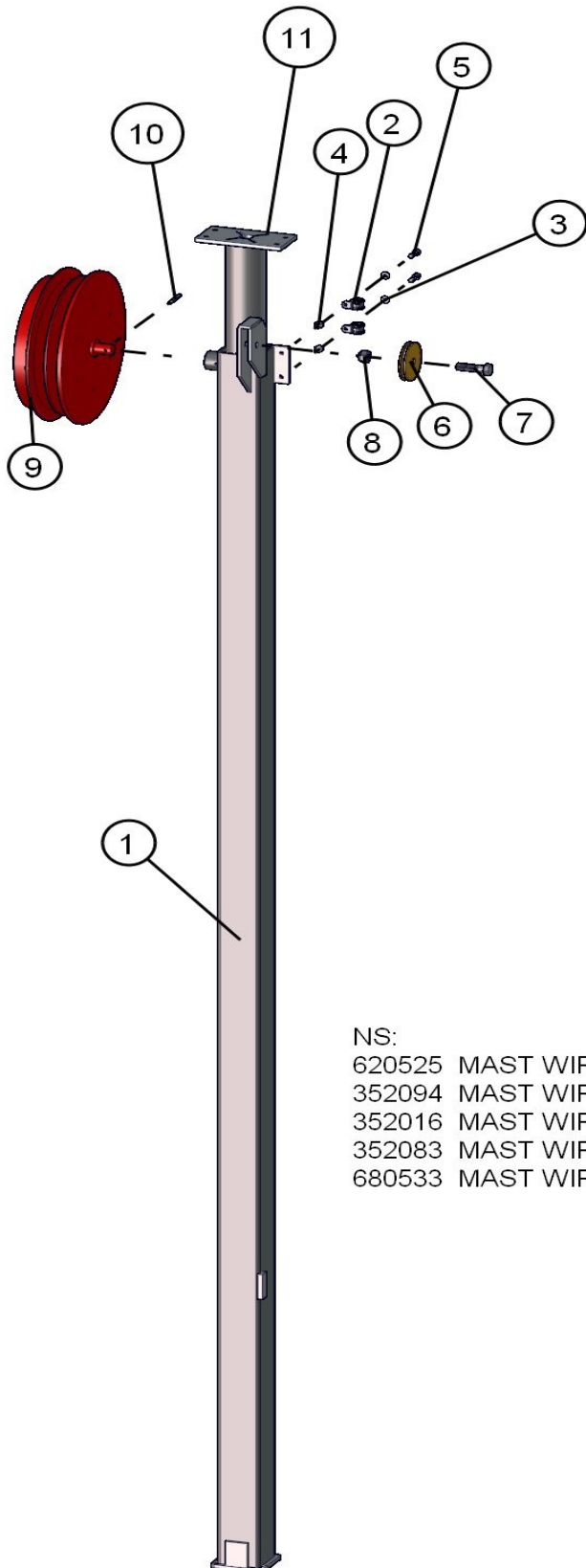
NO	QTY	PARTNO	DESCRIPTION
1	1	650184P	4" ELECTRIC TOWER
2	3	320112	2-1/2" Steel Sheave
3	4	044048	NUT NYLOCK 1/2-13 HEX PL
4	2	046200	1/2-13 X 2 1/4 HHCS GR5 (PLATED)
5	2	047055	BUSHING, 1" NARROW RIM
6	1	620545	3/4" HAIR PIN CLIP PLATED
7	1	620579P	SPRING LEAF 1 X 1/4 X 19" LONG
8	1	620577P	SPRING LATCH
9	2	046110	3/8-16 X 1 HHCS GR5 PL
10	2	044080	3/8-16 NYLOCK HEX BOLT
11	1	712061	LANYARD, STEEL
12	1	046438	1/4" x 3" QUICK RELEASE PIN
14	2	046105	3/8 - 16 x 3/4" HEX BOLT GR 5
15	1	046010	1/4-20 X 3/4" HEX BOLT
16	7	044023	1/4-20 NYLOCK NUT
17	6	047009	1/4 SAE SS FW
18	6	022022	#8 CUSH CLAMP 1/4 HOLE
19	6	046015	1/4-20 X 1 HEX BOLT
20	1	043100	5/8 INT LOCK WASHER
21	1	046242	5/8-11 X 1" GR 5 HEX BOLT
22	1	320110	PULLEY 3 OD W/BUSHING
23	2	046200	1/2-13 X 2 1/4 HHCS GR5 (PLATED)
24	4	650110	TOWER PAD .312
25	8	041023	#10 X 3/8 PLS
26	1	620550	1/2-13 X 2 1/8" LOCKING KNOB

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

ELECTRIC TOWER SECTION 2 & 3

MAXI LITE ML 20B SERIES

12/22/2010



NO	QTY	PARTNO	DESCRIPTION
1	1	680105P	3" SQ TOWER SECTION
2	2	022022	#8 CUSH CLAMP 1/4 HOLE
3	2	047009	1/4 SAE SS FW
4	2	044023	1/4-20 NYLOCK NUT
5	2	046015	1/4-20 X 1 HEX BOLT
6	1	320110	PULLEY 3 OD W/BUSHING
7	1	046200	1/2-13 X 2 1/4 HHCS GR5 (PLATED)
8	1	044048	NUT NYLOCK 1/2-13 HEX PL
9	1	320410P	CORD REEL (OPTIONAL)
10	1	320453	3/16 X 1 3/4 ROLL PIN (OPTIONAL)
11	1	352050P	2 5/8" TOWER SECTION ROUND

NS:

- 620525 MAST WIRING - 14/7 X 324" (4 LIGHT STRAIGHT CORD)
- 352094 MAST WIRING - 16/10 X 324" (6 LIGHT STRAIGHT CORD)
- 352016 MAST WIRING - 16/8 X 344" (4 LIGHT CORD REEL)
- 352083 MAST WIRING - 16/10 X 344" (6 LIGHT CORD REEL)
- 680533 MAST WIRING - 16/10 X 326" (4 LIGHT CORD REEL 3 PHASE)

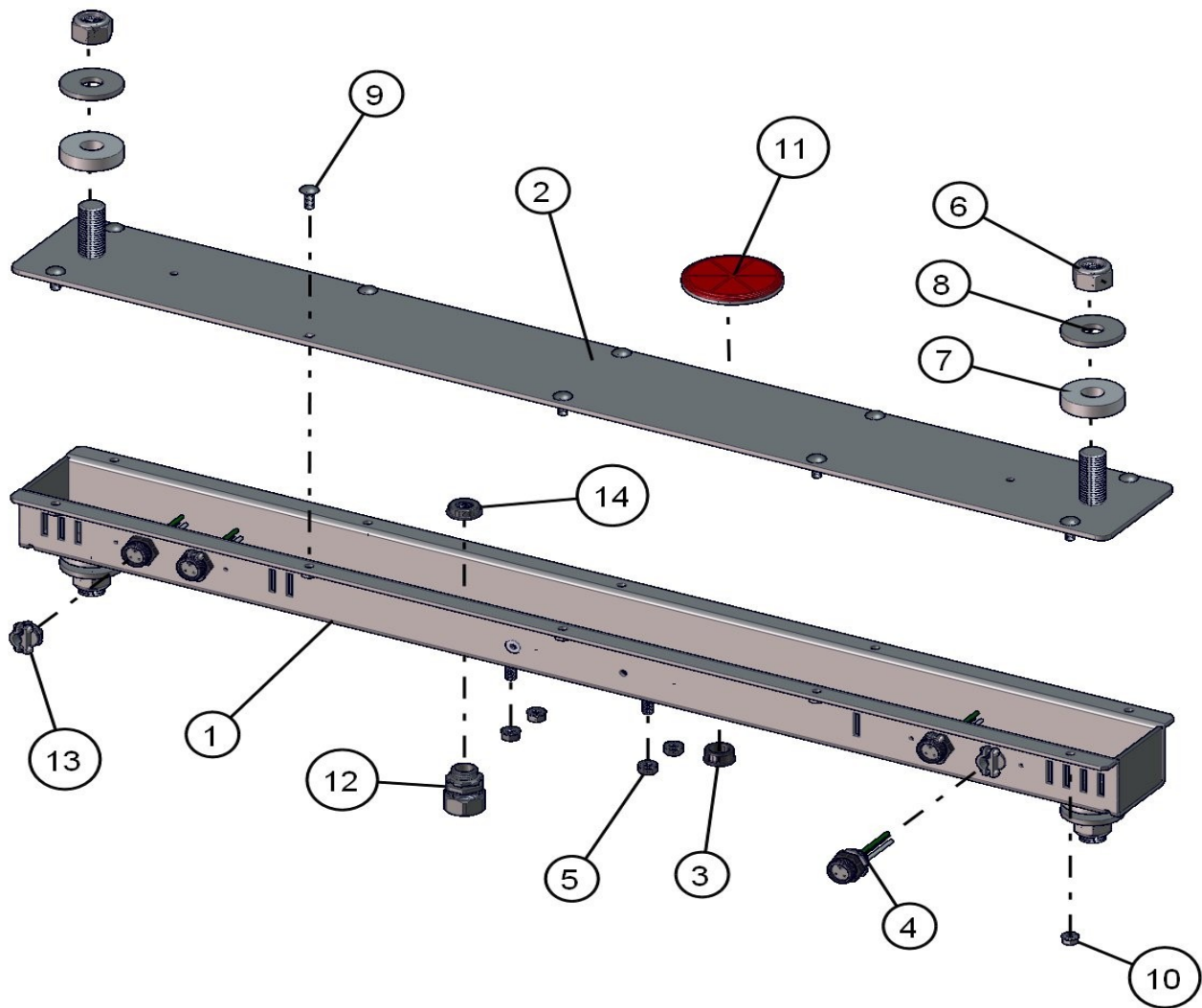
COMPLETE ELECTRIC TOWER ASSEMBLIES,
INCLUDING LIGHT BAR ASSEMBLY.

- 680204P ELE. STRAIGHT CORD TOWER (4 LIGHT)
- 680203P ELE. CORD REEL TOWER (4 LIGHT)
- 680207P ELE. STRAIGHT CORD TOWER (6 LIGHT)
- 680208P ELE. CORD REEL TOWER (6 LIGHT)

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

LIGHT BAR 4 LIGHT MAXI LITE ML 20B SERIES

12/22/2010



LAYDOWN TOWER ONLY

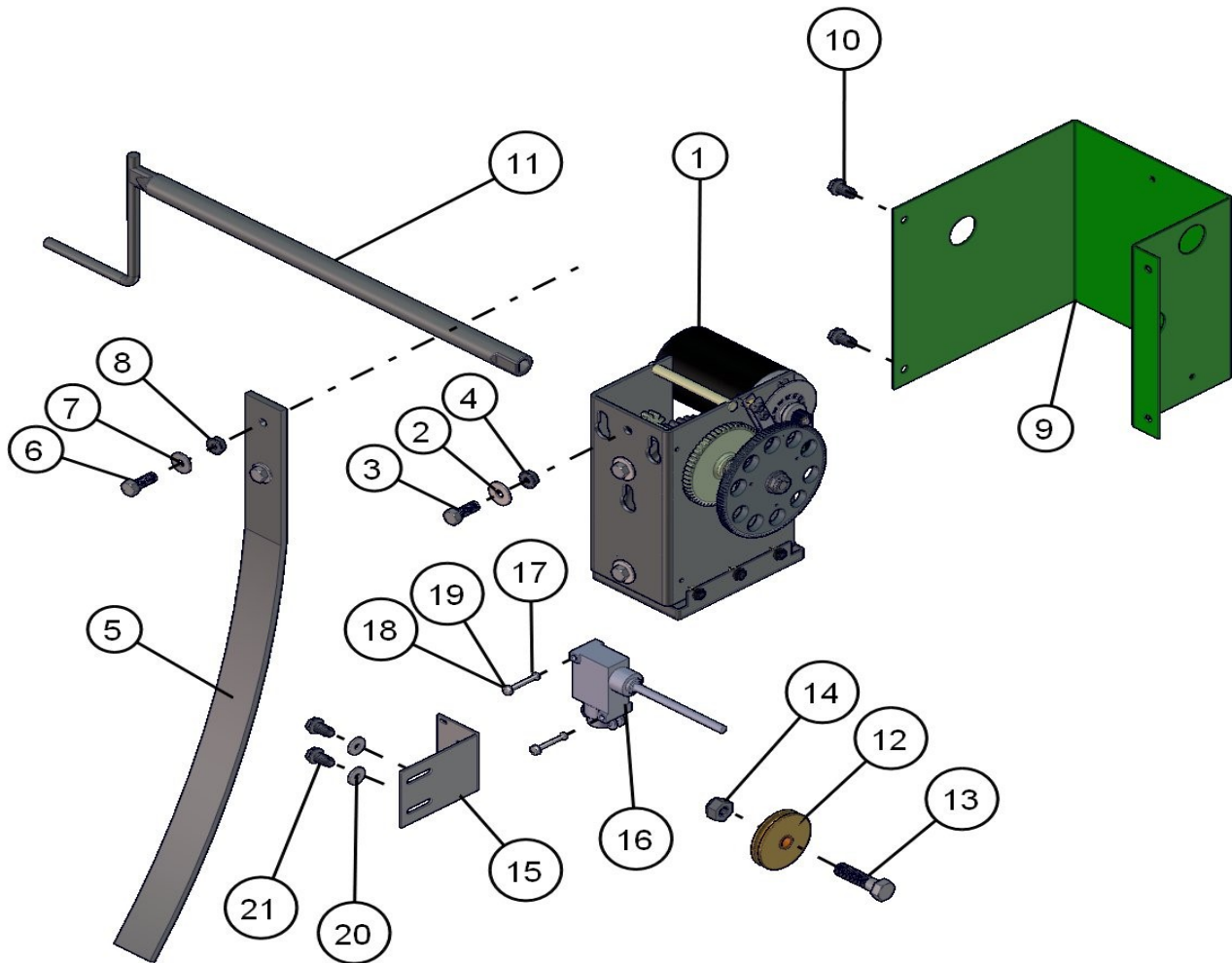
NO	QTY	PARTNO	DESCRIPTION
1	1	650319P	REMOVEABLE LIGHT BAR FRAME
2	1	620537P	LIGHT BAR COVER
3	1	711029	7/8" LOCKING HOLE PLUG
4	4	310414	QD CONNECTOR FEMALE
5	4	044031	5/16 -18 KEPS NUT
6	4	044058	3/4-10 NYLOCK PLATED HEX NUT
7	4	101813	.781"ID x 2"OD x 1/2" HDPE WASHER
8	4	047035	3/4 FLAT WASHER PLTD
9	10	053006	1/4-20 X 3/4 RHSSN BOLT
10	10	044021	1/4-20 KEPS NUT
11	1	330037	REFLECTOR RED 3"
12	1	310033	1/2 CORD GRIP
13	4	022020	2 SCREW CLAMP, 3/8" (HARD WIRED ONLY)
14	1	022415	BUSHING THREADED

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

ELECTRIC WINCH

MAXI LITE ML 20B SERIES

12/22/2010



NO	QTY	PARTNO	DESCRIPTION
1	1	630157	WINCH ELECTRIC
2	3	047015	1/4 FLAT WASHER
3	3	046110	3/8-16 X 1 HHCS GR5 PL
4	3	044036	3/8-16 KEPS HEX NUT
5	1	352089P	SPRING KICKOUT SHORT
6	2	046110	3/8-16 X 1 HHCS GR5 PL
7	2	047010	5/16 FLAT WASHER
8	2	044036	3/8-16 KEPS HEX NUT
9	1	680142P	COVER
10	2	041075	5/16-18 X 3/4 SELF TAP SL-HHMS
11	1	352478	EMERGENCY WINCH HANDLE

NO	QTY	PARTNO	DESCRIPTION
12	1	320112	2-1/2" Steel Sheave
13	1	046200	1/2-13 X 2 1/4 HHCS GR5 (PLATED)
14	1	044048	NUT NYLOCK 1/2-13 HEX PL
15	1	352056P	BRACKET
16	1	466093	SWITCH SLACK CABLE
17	2	041007	6-32 X 1-1/2 CR-PHMS
18	2	047047	#8 SS FLAT WASHER
19	2	044004	#6-32 KEPS NUT
20	2	047009	1/4 FLAT WASHER
21	2	041075	5/16-18 X 3/4 SELF TAP SL-HHMS

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

INSTRUCTIONS FOR REPLACING STEEL CABLES

MAXI LITE ML 20B SERIES

12/22/2010

ELECTRIC WINCH ONLY

NS	REQ'D	PART NO	DESCRIPTION
	2	620084	WIRE ROPE CLIP 3/16"
	1	045040	WIRE ROPE THIMBLE 1/4"
	1	620076	STEEL CABLE 3/16 X 10'
	1	650133	STEEL CABLE 7/32 X 26'

3/16 X 10'

REMOVE THE CUSHION CLAMPS AND MAST WIRING FROM 3" MAST SECTION.
REMOVE LIGHT BAR BY REMOVING 4 NUTS ON AND LAY BAR ON GROUND.
REMOVE THE WIRE ROPE CLIPS AT TOP END OF THE 4" MAST SECTION.
REMOVE THE 3" PULLEY AT THE END OF THE 3" MAST SECTION.
REMOVE THE 2 5/8" ROUND SECTION.
REMOVE ALL BROKEN AND FRAYED CABLE.
REPLACCE NEW CABLE THROUGH SLOT AND EYELET IN THE ROUND MAST SECTION.
REPLACE 2 5/8" ROUND MAST SECTION IN THE 3" MAST SECTION.
ROUTE CABLE THROUGH PULLEY BRACKETS AND INSTALL 3" PULLEY.
WITH ALL SECTIONS PUSHED TOGETHER TIGHT, INSERT CABLE THROUGH HALF-LINK
AND REINSTALL WIRE ROPE CLIPS.
REINSTALL CUSHION CLAMPS AND MAST WIRING ON THE 3" MAST SECTION.

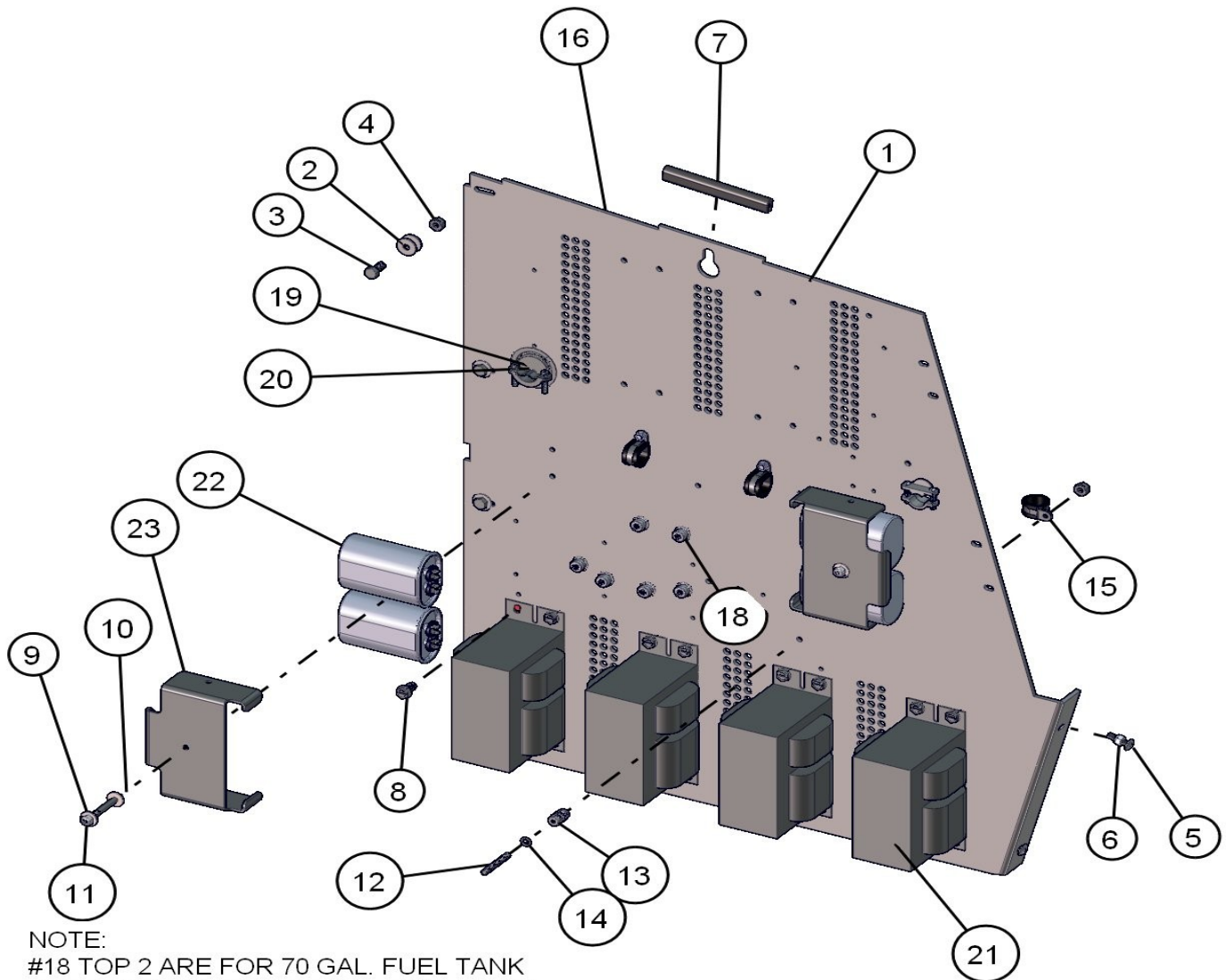
7/32 X 26'

REMOVE CABLE FROM WINCH.
REMOVE MAST WIRING FROM BALLAST COMPARTMENT.(SEE ELECTRICAL SCHEMATIC)
REMOVE TOWER ASSEMBLY FROM TRAILER.
REMOVE STOP BOLT AND WASHER.
REMOVE 4 NYLON ROLLERS AND 3" PULLEY AT TOP END OF 3" SQUARE SECTION.
REMOVE THE 2 5/8" ROUND AND 3" MAST SECTIONS TOGETHER.
REMOVE 2 1/2" PULLEY FROM END OF 4" MAST SECTION.
REMOVE ALL BROKEN AND FRAYED CABLE.
REPLACE NEW CABLE THROUGH SLOT AND EYELET IN THE 3" MAST SECTION AND
TRHOUGH PULLEY BRACKETS.
REPLACE 2 5/8" ROUND AND 3" MAST SECTIONS.
REPLACE STOP BOLT AND WASHER.
RUN NEW CABLE ON OUTSIDE OF 4" MAST SECTION.
REPLACE 2 1/2" PULLEY.
REPLACE TOWER ASSEMBLY ON TRAILER.
REPLACE MAST WIRING IN BALLAST COMPARTMENT.(SEE ELECTRICAL SCHEMATIC)
RUN NEW CABLE TROUGH PULLEY BRACKETS IN FRONT OF TRAILER.
ATTACH CABLE TO WINCH.
WIND IN A CLOCKWISE DIRECTION UNTILL ALL SLACK IS OUT.

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

BALLAST 1000W 4 LIGHT MAXI LITE ML 20B SERIES

12/22/2010



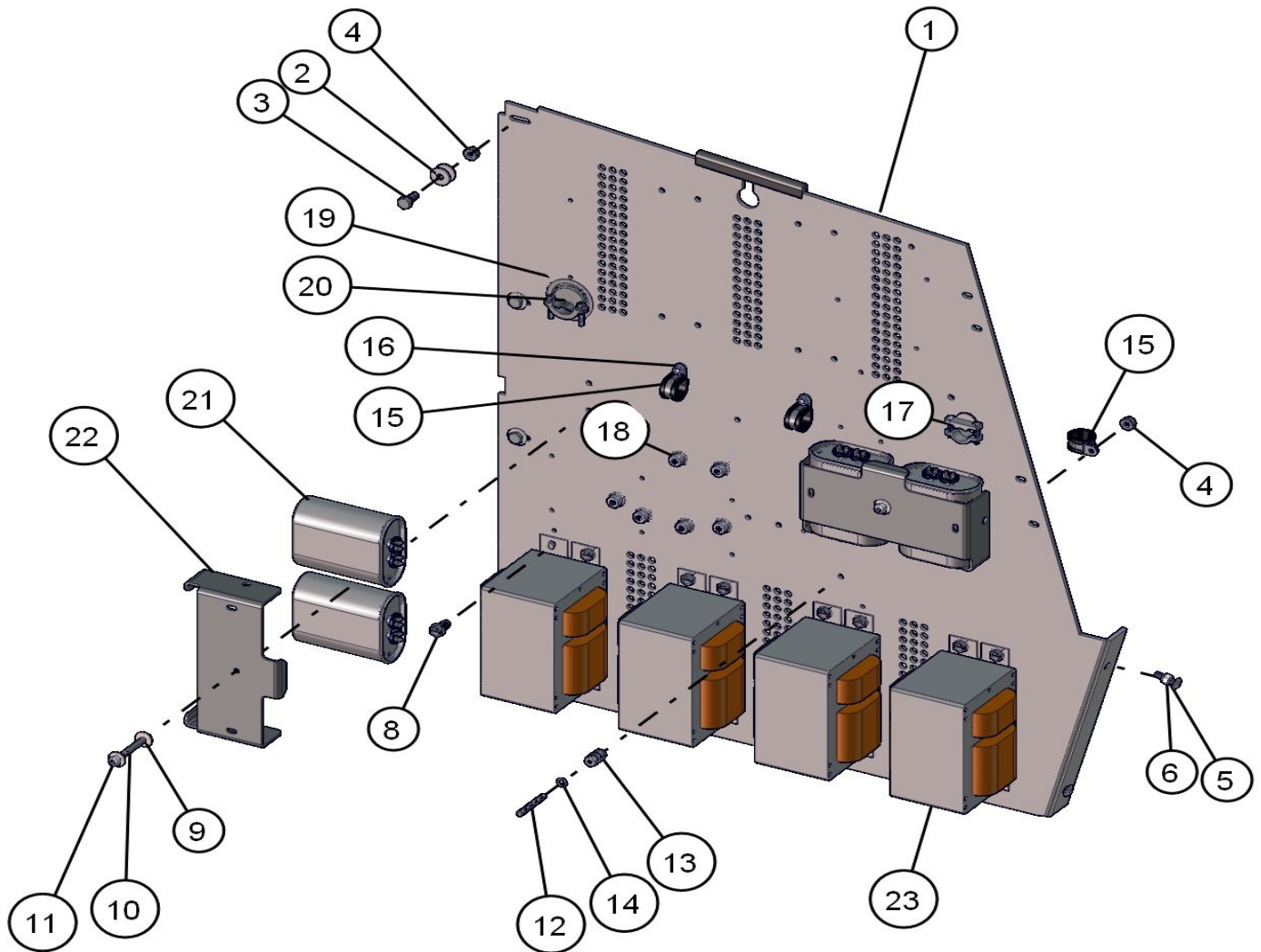
NOTE:
#18 TOP 2 ARE FOR 70 GAL. FUEL TANK
BOTTOM 4 ARE FOR 50 GAL. FUEL TANK

NO	QTY	PARTNO	DESCRIPTION
1	1	109663P	BALLAST PANEL
2	8	047010	5/16 FLAT WASHER
3	4	046045	5/16-18 X 3/4 HHCS GR5 PLATED
4	9	044031	5/16 -18 KEPS NUT
5	2	041080	1/4 - 20 X 1 THCS
6	2	044023	1/4-20 NYLOCK NUT
7	1	030057	TRIM LOCK 5"
8	16	041075	5/16-18 X 3/4 SELF TAP SL-HHMS
9	4	047009	1/4 FLAT WASHER
10	2	046036	1/4 - 20 X 2 1/2 HHCS
11	2	044023	1/4-20 NYLOCK NUT
12	1	045004	1/4-20 X 2" STUD
13	3	044021	1/4-20 KEPS NUT
14	1	043050	1/4 INT TOOTH WASHER
15	7	022024	#12 CUSH CLAMP 1/4 HOLE
16	2	041070	1/4-20 X 3/4 SL- SELF TAPPING SCREW
18	6	045131	3/8-16 RIVNUT
19	2	022350	1 1/4 X 1 WASHER REDUCER
20	1	022028	1" ROMEX CABLE CLAMP W/2 SC
21	4	310124	TRANSFORMER 60 HZ
22	4	310116A	CAPACITOR 26uF
23	2	680608P	TABBED CAPACITOR CLAMP

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

BALLAST 1250W 4 LIGHT MAXI LITE ML 20B SERIES

12/22/2010



NOTE:
#18 TOP 2 ARE FOR 70 GAL. FUEL TANK
BOTTOM 4 ARE FOR 50 GAL. FUEL TANK

NO	QTY	PARTNO	DESCRIPTION
1	1	109663P	BALLAST PANEL
2	8	047010	5/16 FLAT WASHER
3	4	046045	5/16-18 X 3/4 HHCS GR5 PLATED
4	9	044031	5/16 -18 KEPS NUT
5	2	041080	1/4 - 20 X 1 THCS
6	2	044023	1/4-20 NYLOCK NUT
8	16	041075	5/16-18 X 3/4 SELF TAP SL-HHMS
9	4	047009	1/4 FLAT WASHER
10	2	046036	1/4 - 20 X 2 1/2 HHCS
11	2	044023	1/4-20 NYLOCK NUT
12	1	045004	1/4-20 X 2" STUD
13	3	044021	1/4-20 KEPS NUT

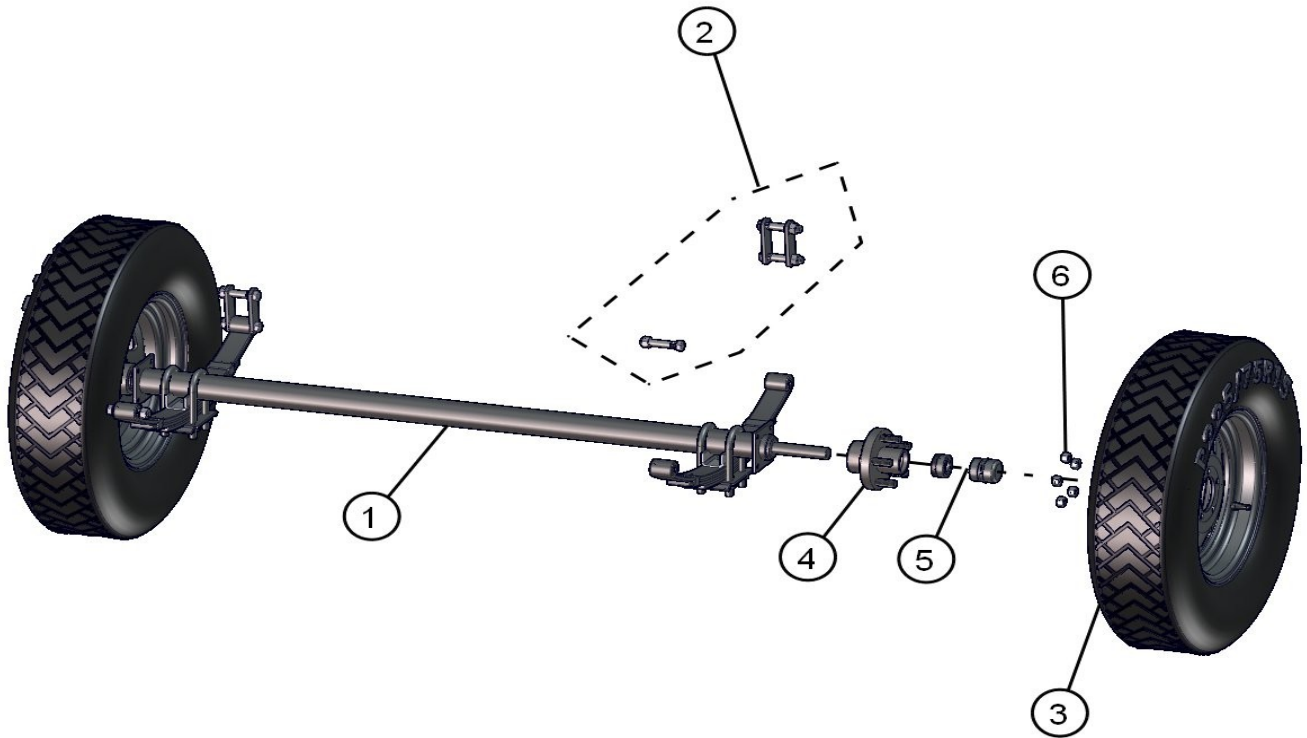
NO	QTY	PARTNO	DESCRIPTION
14	1	043050	1/4 INT TOOTH WASHER
15	7	022024	#12 CUSH CLAMP 1/4 HOLE
16	2	041070	1/4-20 X 3/4 SL- SELF TAPPING SCREW
17	1	022025	3/4 2-SCREW ROMEX CLAMP
18	6	045131	3/8-16 RIVNUT
19	2	022350	1 1/4 X 1 WASHER REDUCER
20	1	022028	1" ROMEX CABLE CLAMP W/2 SC
21	4	100329	CAPACITOR 28 uF (HD 1250W)
22	2	100392P	TABBED CAPACITOR CLAMP
23	4	109606	BALLAST 1250W DUAL TAP 60Hz 120/240

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

AXLE

MAXI LITE ML 20B SERIES

12/22/2010



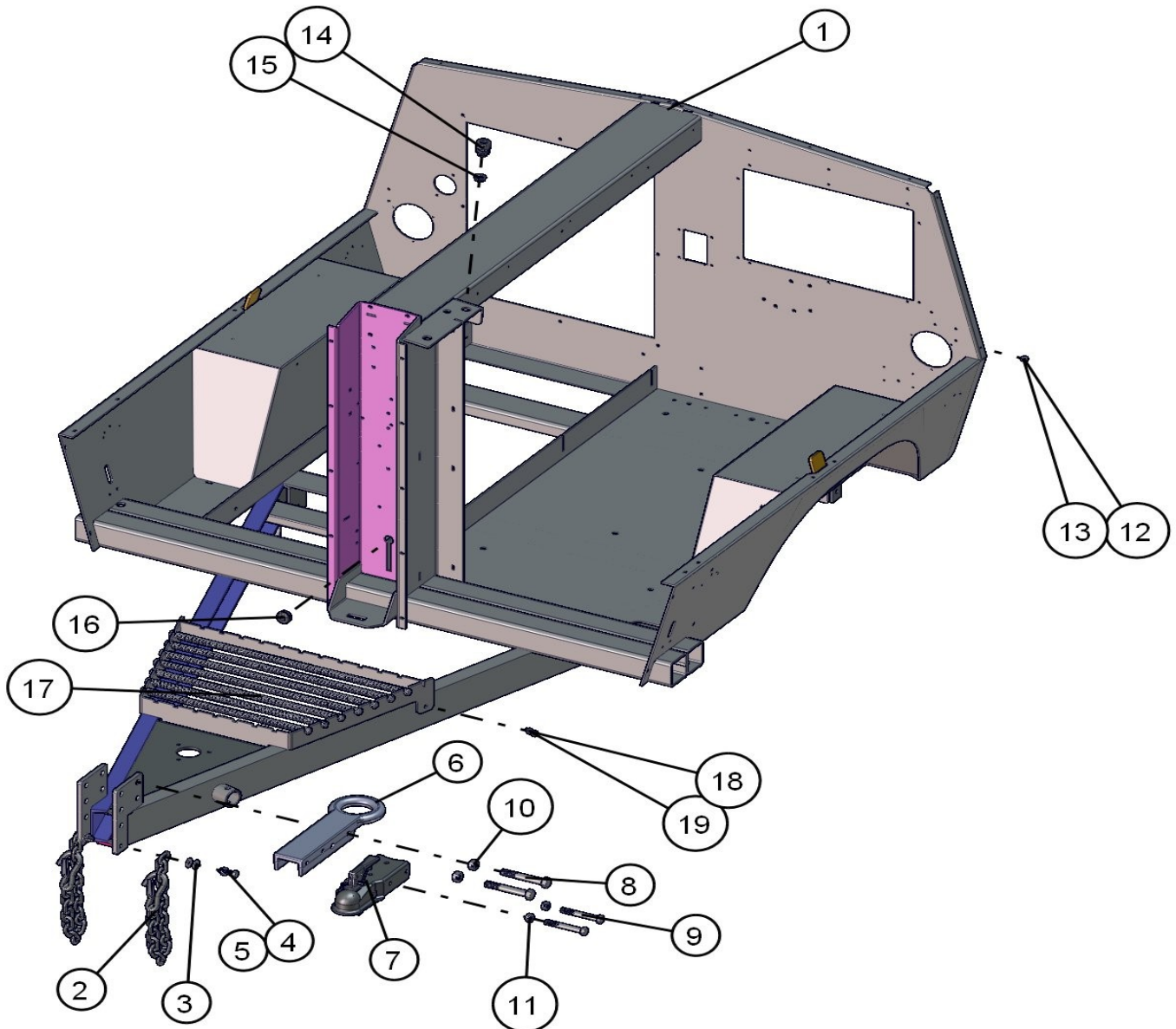
NO	QTY	PARTNO	DESCRIPTION
1	1	352021	AXLE
2	2	032025	AXLE MOUNTNIG HARDWARE KIT
3	2	680124-13	ASSY, WHEEL & TIRE, 15"
4	2	330007	HUB W/ RACES
5	2	330005	BEARING SET
6	10	032048	1/2-13 LUG NUT

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

CHASSIS

MAXI LITE ML 20B SERIES

12/22/2010



NS 650169 REPLACEMENT COUPLER LATCH KIT
352037 TAILLIGHT WIRING HARNESS

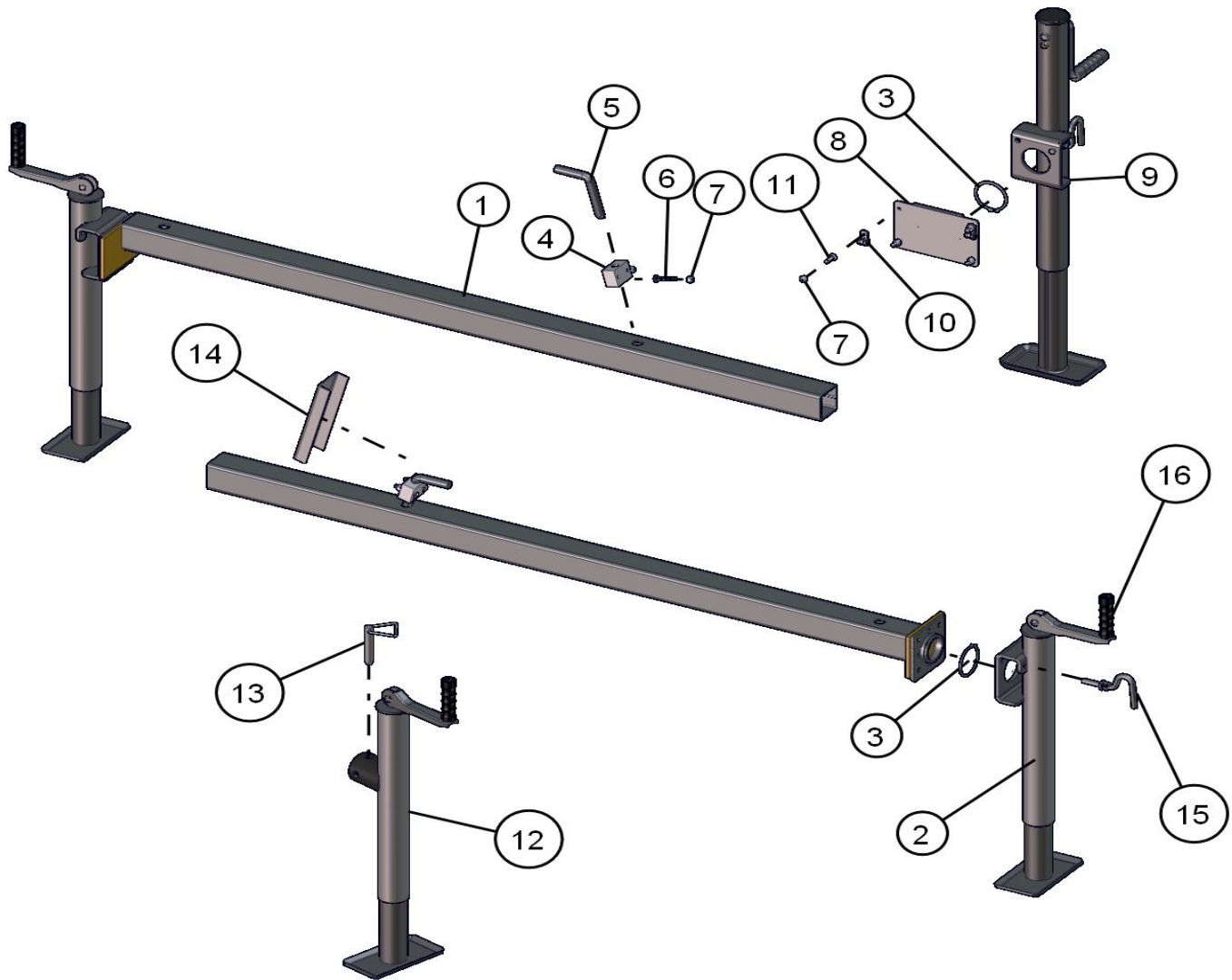
NO	QTY	PARTNO	DESCRIPTION
1	1	102524P	CHASSIS
2	2	049040	SAFETY CHAIN
3	4	047015	3/8 FLAT WASHER
4	2	046160	7/16-14 X 1 1/2 HHCS GR5
5	2	044043	7/16-14 NYLOCK NUT
6	1	712540-15	CASTING, PINTLE
7	1	712021	2" BALL SAE CLASS 2
8	2	046250	5/8-11 X 4 1/2 HHCS PL
9	2	046220	1/2-13 X 4 HHCS GR5 PL
10	2	044061	5/8-11 LOCK NUT
11	2	044062	1/2-13 LOCK NUT
12	2	041250	1/4-20 X 1/2 SBHMSN NYLON
13	2	044023	1/4-20 NYLOCK NUT
14	1	310033	1/2 CORD GRIP
15	1	022415	BUSHING THREADED
16	1	330463	11/16 RUBBER GROMMET
17	1	101847P	PLATFORM STEP (HYDRAULIC TOWER ONLY)
18	4	046050	BOLT CS 5/16-18 X 1 HEX GR5 PL
19	4	044030	5/16-18 HEX NUT

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

OUTRIGGERS & JACKS

MAXI LITE ML 20B SERIES

12/22/2010



NO	QTY	PARTNO	DESCRIPTION
1	2	680113P	OUTRIGGER
2	2	330010	LONG JACK
3	3	330014	2 5/6 XT JACK SNAP RING
4	2	330430	GUIDE BLOCK
5	2	330455	OUTRIGGER PIN
6	4	041053	1/4-20 x 1 3/4 PH TRUSS SCREW
7	8	044023	1/4-20 NYLOCK NUT
8	1	680112P	JACK MOUNT
9	1	352072	JACK SIDE CRANK SNAP RING

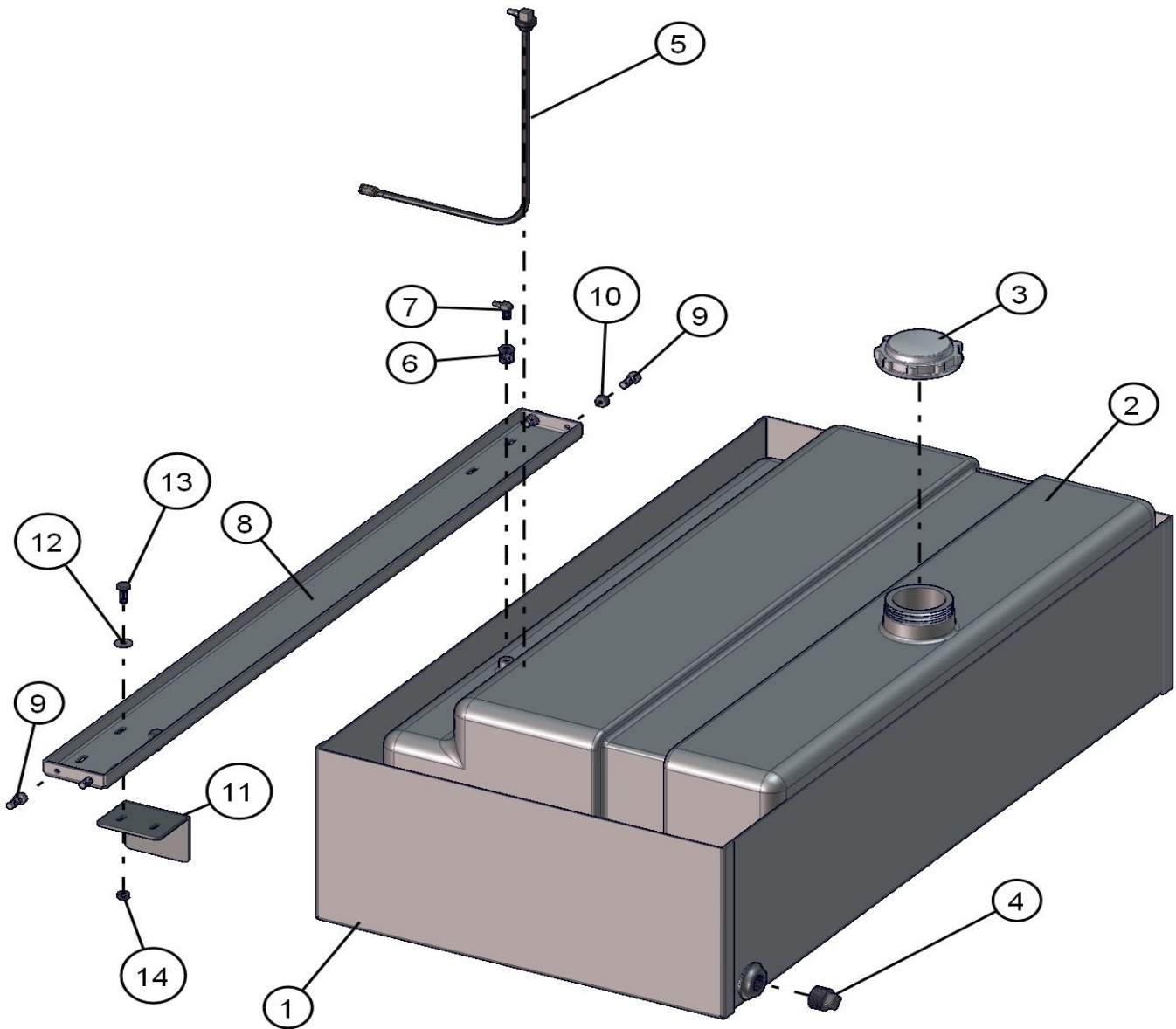
NO	QTY	PARTNO	DESCRIPTION
10	2	022015	#4 CUSHION CLAMP
11	4	041080	1/4 - 20 X 1 THCS
12	1	680879	TOP CRANK JACK, TUBE MOUNT
13	1	330013	LOCK PIN, TUBE MOUNT
14	1	109666P	SHIELD, SPLASH
15	1	330012A	LOCK HANDLE REPLACEMENT KIT
16	1	330012	REPLACEMENT JACK HANDLE KIT

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

50 GALLON FUEL TANK W/ CONTIANMENT

MAXI LITE ML 20B SERIES

12/22/2010



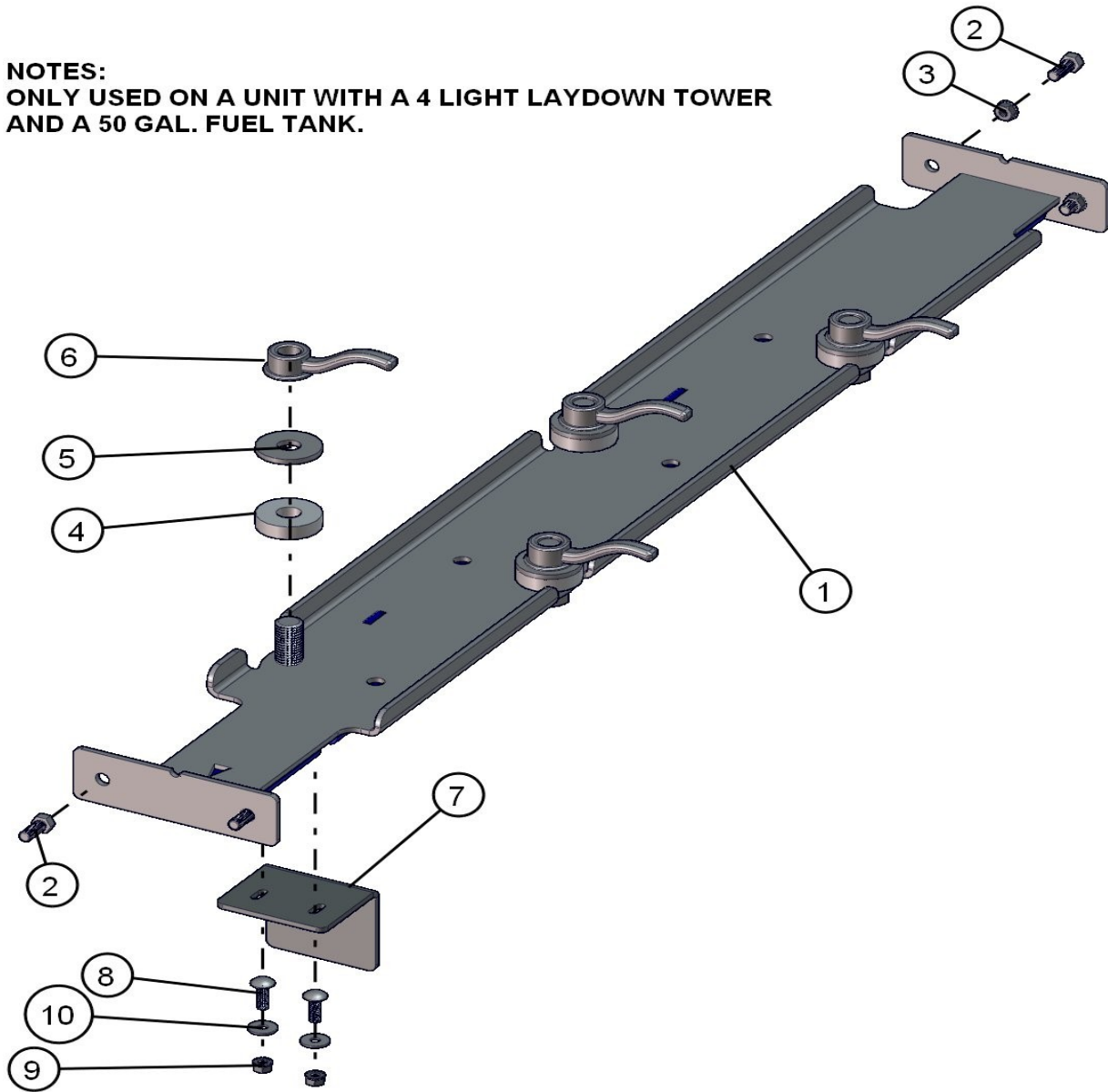
NO	QTY	PARTNO	DESCRIPTION
1	1	109739P	WLDMNT 50-GAL FUEL
2	1	340440	50 GAL FUEL TANK
3	1	340441	FUEL CAP
4	1	026108	1" NPT SQ HD PLUG
5	1	340025	FUEL SUCTION TUBE ASSEMBLY
6	1	100358	REDUCER 3/8 NPT X 1/8 NPT
7	1	930151	90 DEG HOSE BARB
8	1	109722P	HOLD DOWN
9	4	046110	3/8-16 X 1 HHCS GR5 PL
10	2	044036	3/8-16 KEPS HEX NUT
11	1	109748P	STOP, MOVEABLE
12	4	047010	5/16 FLAT WASHER
13	2	046050	BOLT CS 5/16-18 X 1 HEX GR5 PL
14	2	044031	5/16 -18 KEPS NUT

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

INSIDE SHO LIGHT STORAGE MAXI LITE ML 20B SERIES

12/22/2010

**NOTES:
ONLY USED ON A UNIT WITH A 4 LIGHT LAYDOWN TOWER
AND A 50 GAL. FUEL TANK.**



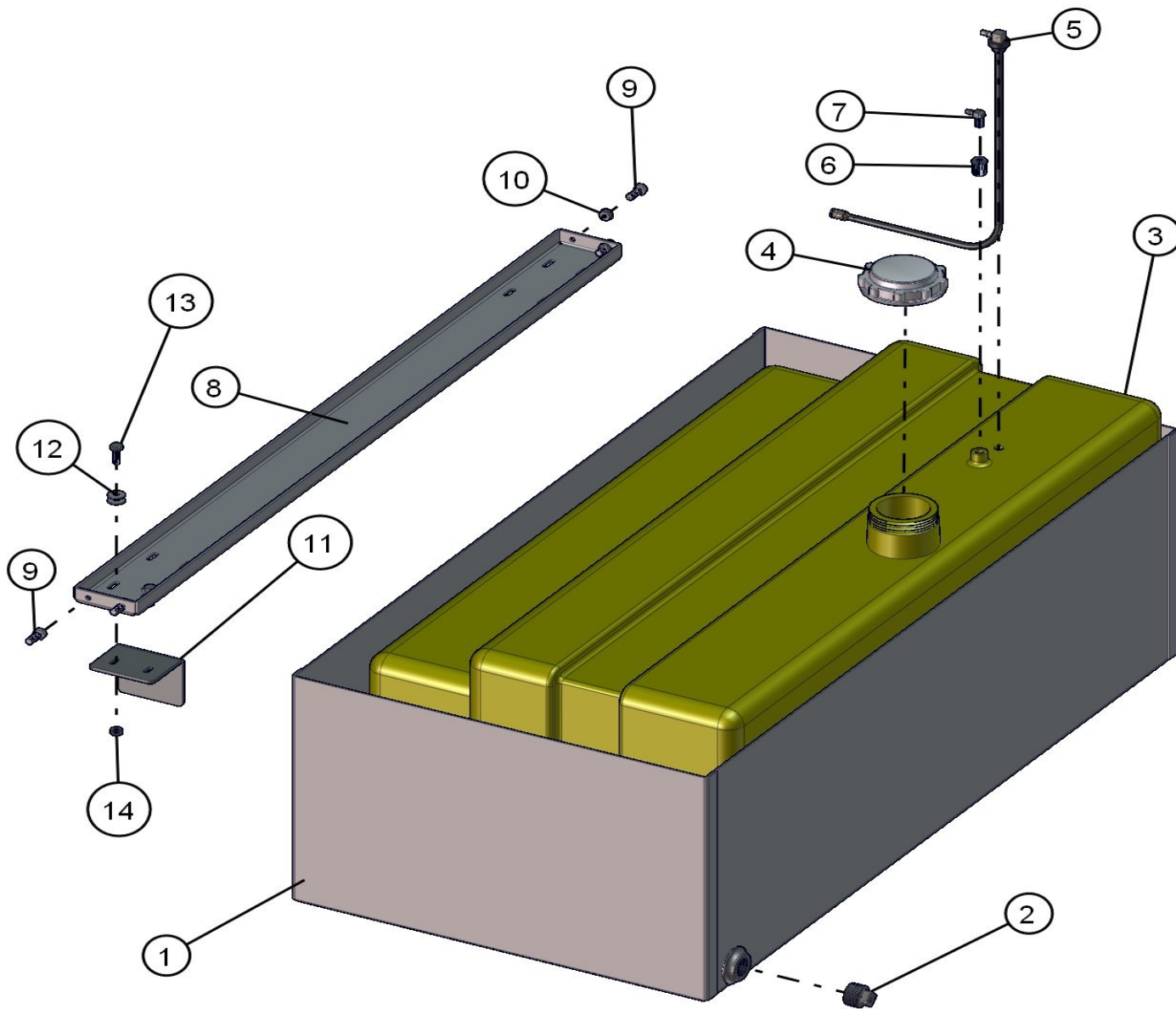
4, 5, 6 INTERCHAGE WITH LIGHT BAR MOUNTS

NO	QTY	PARTNO	DESCRIPTION
1	1	109751P	INSIDE LIGHT STORAGE
2	4	046110	3/8-16 X 1 HHCS GR5 PL
3	2	044036	3/8-16 KEPS HEX NUT
4	4	101813	.781"ID x 2"OD x 1/2" HDPE WASHER
5	4	047035	3/4 FLAT WASHER PLTD
6	4	630728	SHO HANDLE NUT
7	1	109748P	STOP, MOVEABLE
8	2	053020	5/16-18 X 1" CARR BOLT
9	2	044031	5/16 -18 KEPS NUT
10	2	047010	5/16 FLAT WASHER

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

70 GAL FUEL TANK W/ CONTAINMENT MAXI LITE ML 20B SERIES

12/22/2010



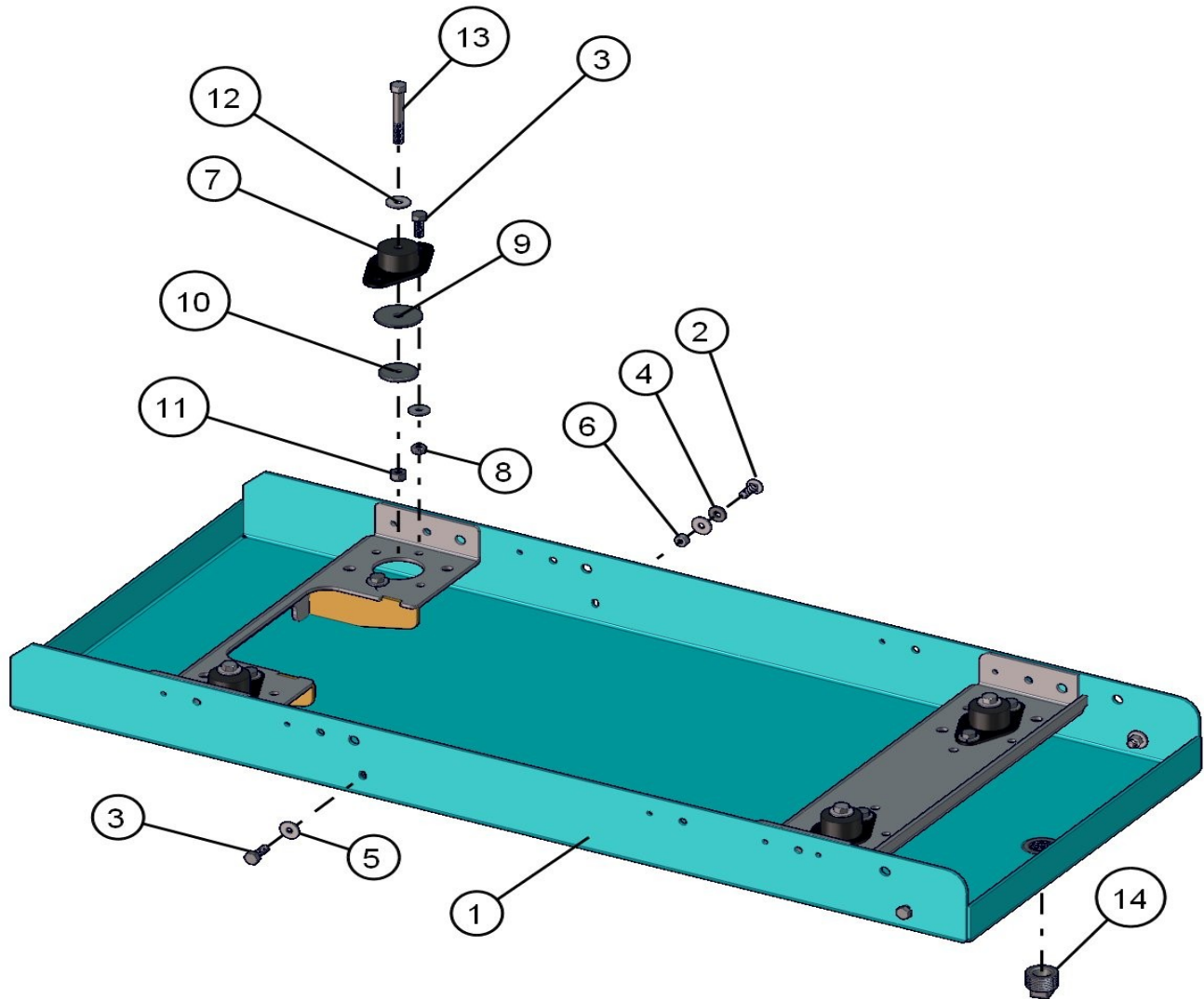
NO	QTY	PARTNO	DESCRIPTION
1	1	109674P	FUEL CONTAINMENT TRAY
2	1	026108	1" NPT SQ HD PLUG
3	1	101143	PLASTIC FUEL TANK
4	1	340441	FUEL CAP
5	1	340025	FUEL SUCTION TUBE ASSEMBLY
6	1	100358	REDUCER 3/8 NPT X 1/8 NPT
7	1	930151	90 DEG HOSE BARB
8	1	109722P	HOLD DOWN
9	4	046110	3/8-16 X 1 HHCS GR5 PL
10	2	044036	3/8-16 KEPS HEX NUT
11	1	109748P	STOP, MOVEABLE
12	4	047010	5/16 FLAT WASHER
13	2	046050	BOLT CS 5/16-18 X 1 HEX GR5 PL
14	2	044031	5/16 -18 KEPS NUT

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

ENGINE/ GENERATOR BUNDED TRAY

MAXI LITE ML 20B SERIES

12/22/2010

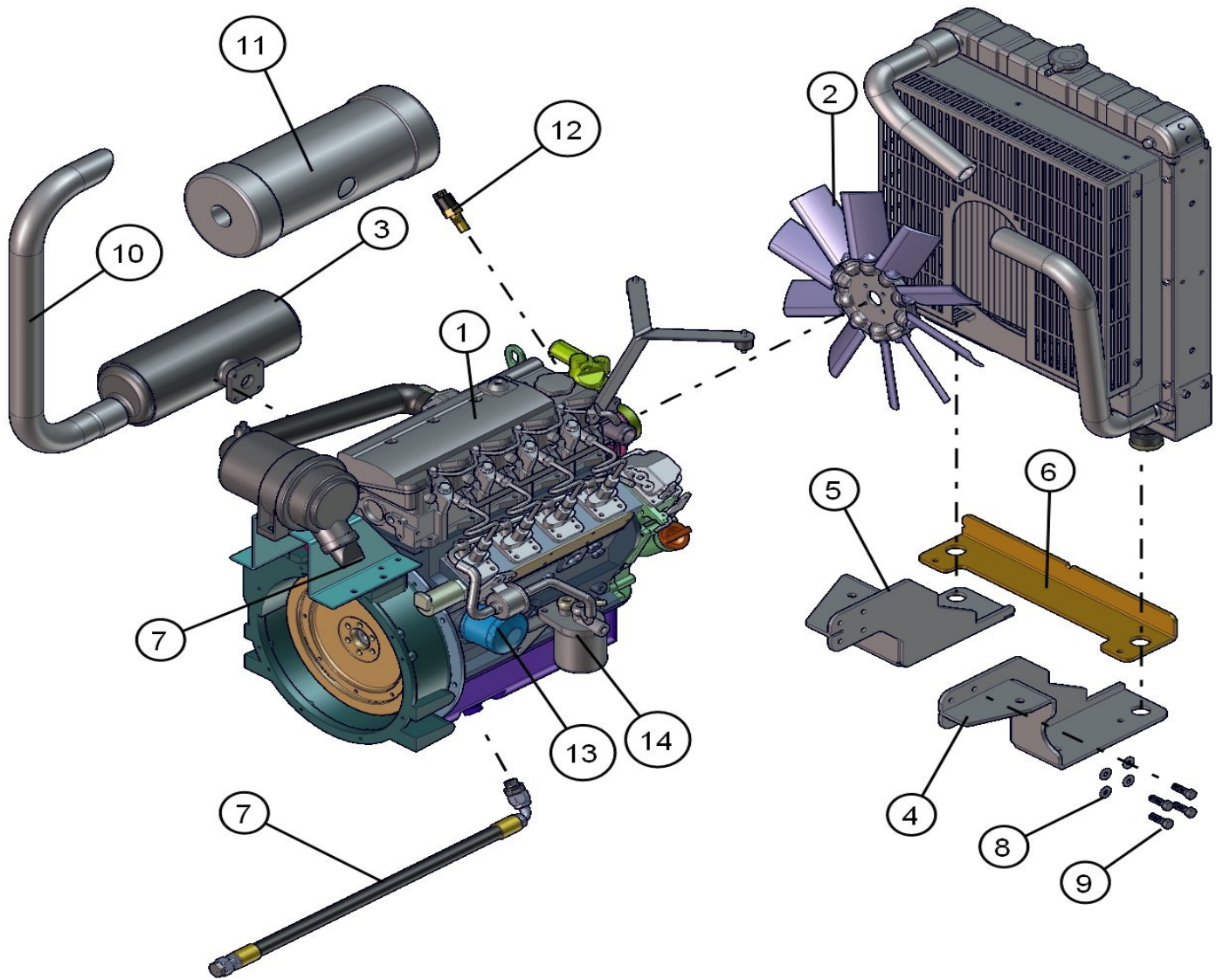


NO	QTY	PARTNO	DESCRIPTION
1	1	109675P	TRAY
2	2	053020	5/16-18 X 1" CARR BOLT
3	10	046050	BOLT CS 5/16-18 X 1 HEX GR5 PL
4	4	100644	RUBBER WASHER
5	12	047010	5/16 FLAT WASHER
6	4	044031	5/16-18 KEPS NUT
7	4	848997	VIBRATION ISOLATOR MOUNT
8	8	044031	5/16-18 KEPS NUT
9	4	640565	ENGINE MOUNT WASHER
10	4	650260	SNUBBING WASHER
11	4	044038	3/8-16 NYLOCK HNUT
12	4	047015	1/4 FLAT WASHER
13	4	046137	3/8-16 X 3 HEX BOLT GR 5
14	1	026108	1" NPT SQ HD PLUG

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

ISUZU 4LE ENGINE MAXI LITE ML 20B SERIES

12/22/2010



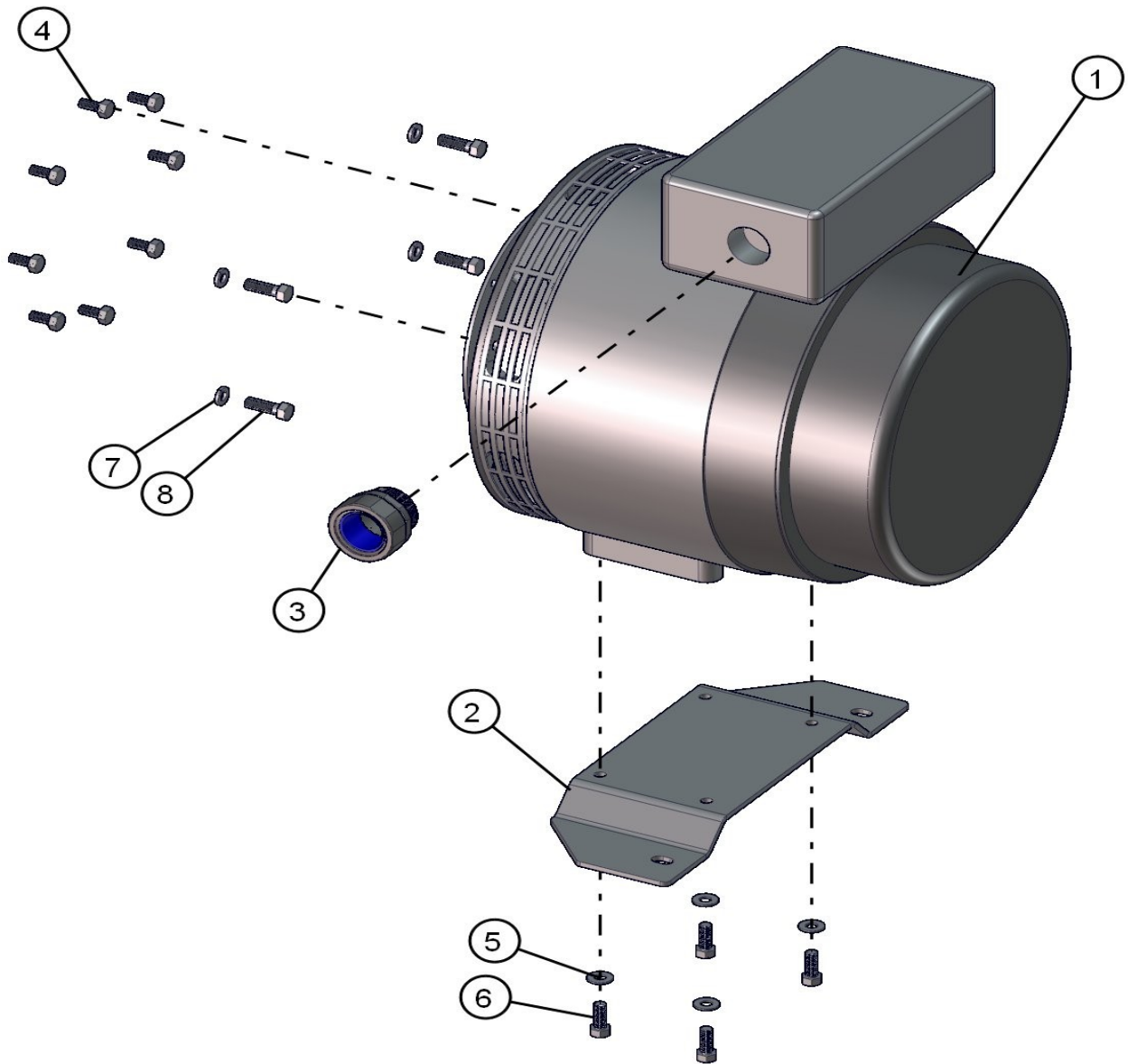
NO	QTY	PARTNO	DESCRIPTION
1	1	109697	ISUZU ENGINE 4LE
2	1	109696	BREEZA FAN ASSEMBLY
3	1	680427	ISUZU MUFFLER
4	1	109727P	ENGINE MOUNT RT
5	1	109681P	ENGINE MOUNT LT
6	1	109698P	CROSS-MEMBER
7	1	680857	REMOTE OIL DRAIN
8	8	047016	3/8 SAE FLAT WASHER
9	8	042038	10mm X 1.25 x20mm GR 8.8 HEX BOLT
10	1	680298	TAIL PIPE
11	1	101365	INSULATED MUFFLER BLANKET
12	1	680334	TEMP SWITCH 230R NASON ISUZU
13	1	650221	OIL FILTER
14	1	650220	FUEL FILTER

NS: 100683 EXTENDED DIPSTICK

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

MARATHON GENERATOR MAXI LITE ML 20B SERIES

12/22/2010

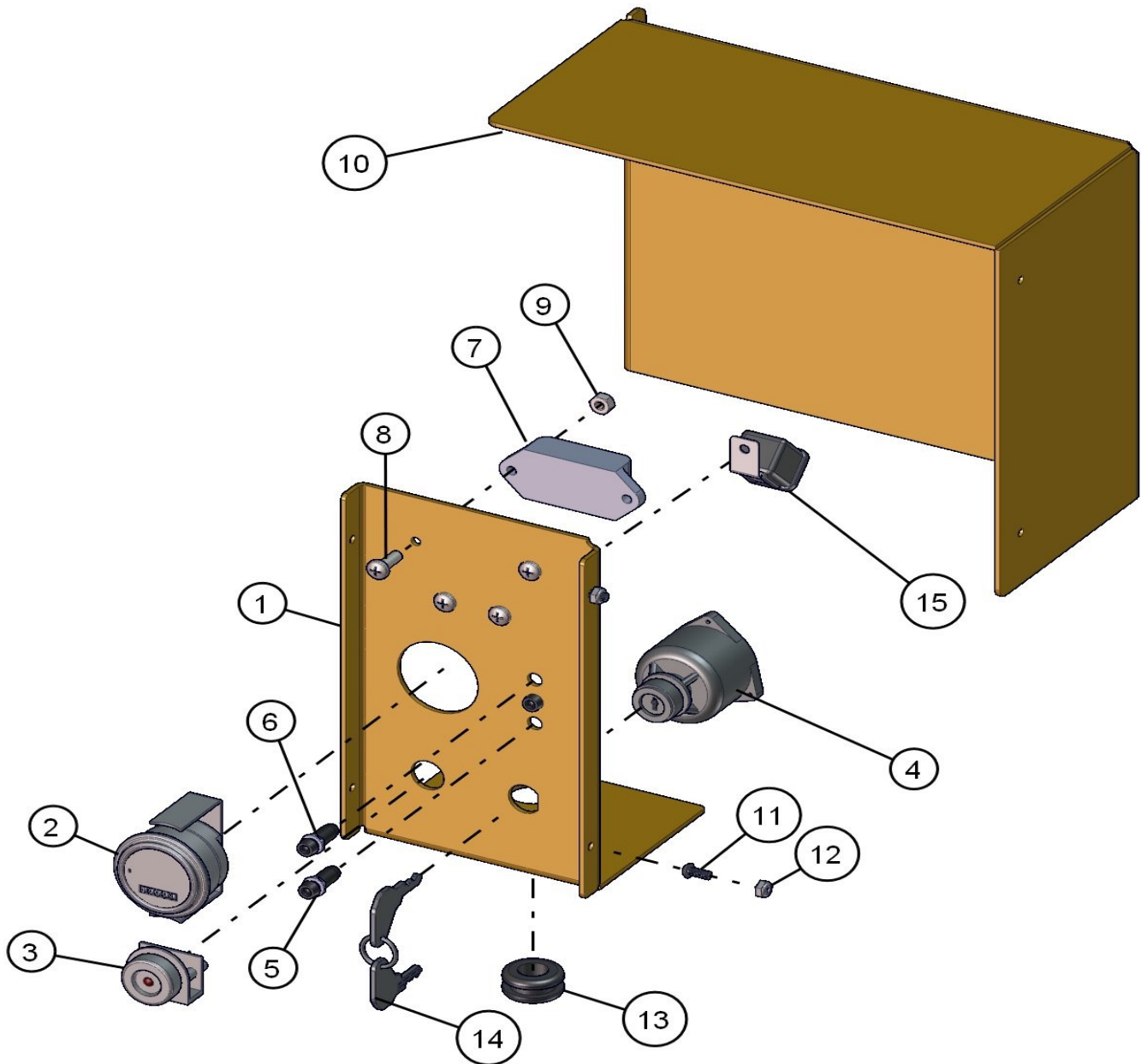


NO	QTY	PARTNO	DESCRIPTION
1	1	350356	15/20KW 1PH MARATHON GENERATOR
2	1	102509P	GENERATOR MOUNT
3	1	101376	1 1/2 STRAIN RELIEF
4	8	042027	8mm X 1.25 X 16mm GR 10.9 HEX BOLT
5	4	047016	3/8 SAE FLAT WASHER
6	4	046110	3/8-16 X 1 HHCS GR5 PL
7	4	043065	3/8 SPLIT LOCK WASHER
8	4	046115	3/8-16 X 1 1/4 HHCS

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

ISUZU CONTROL PANEL MAXI LITE ML 20B SERIES

12/22/2010

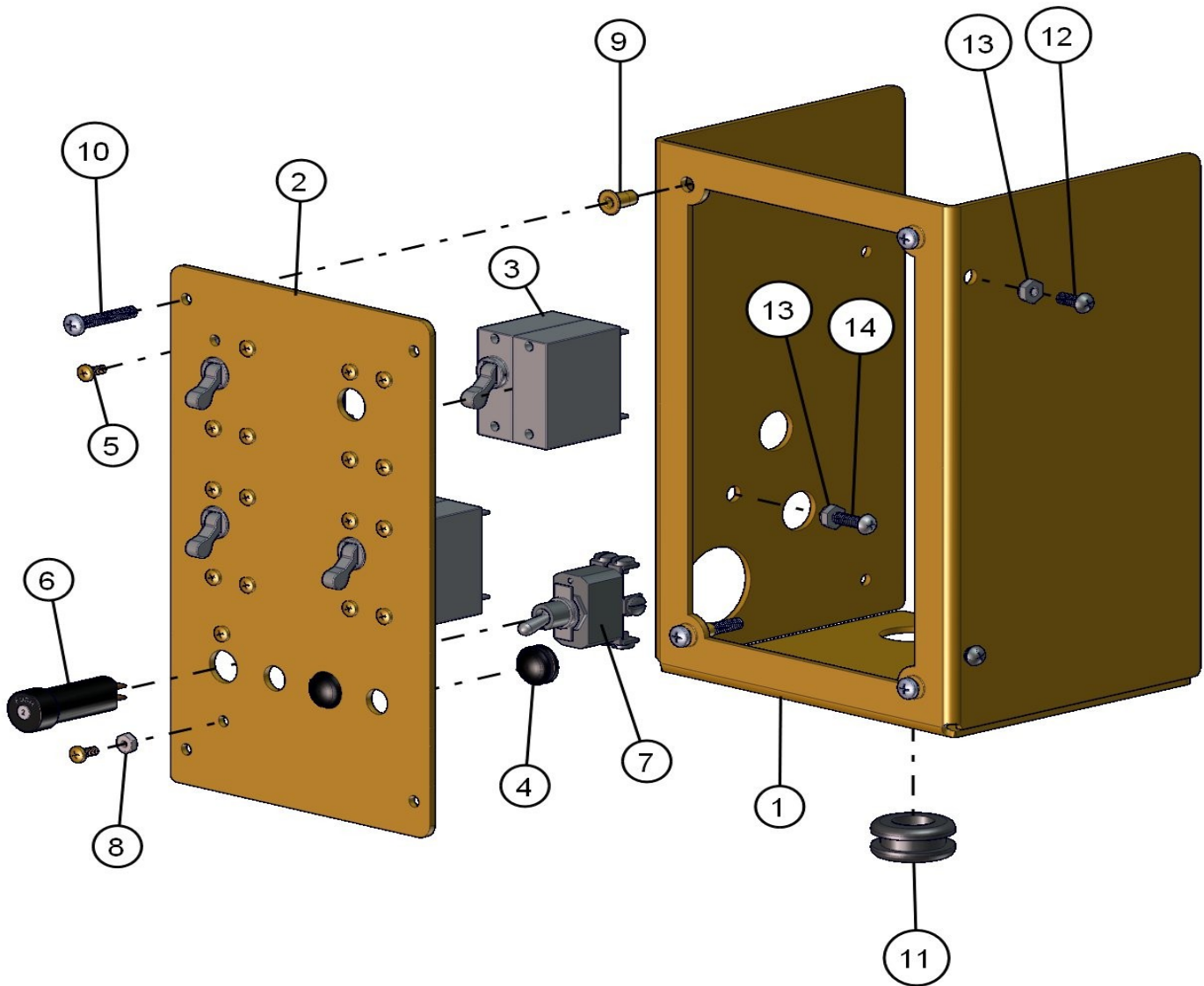


NO	QTY	PARTNO	DESCRIPTION
1	1	101372P	ISUZU CONTROL PANEL
2	1	340014	HOUR METER
3	1	921433	GLOW PLUG LAMP
4	1	922004	IGNITION SWITCH
5	2	921435	PILOT LAMP AMBER
6	1	921434	PILOT LAMP RED
7	1	921432	TIMER
8	4	SUPPLIED BY ISUZU	1/4-20 X 3/4 CR-PHMS
9	4	SUPPLIED BY ISUZU	1/4-20 HEX NUT
10	1	100798P	COVER, REAR,
11	2	041021	10-24 X 1/2 CR-RDHDMS PL
12	2	044018	10-24 NYLOC NUT
13	1	330463	11/16 RUBBER GROMMET
14	1	922005	ISUZU KEYS W/ TUMBLER
15	2	650423	RELAY

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

4 LIGHT SWITCH ENCLOSURE MAXI LITE ML 20B SERIES

12/22/2010

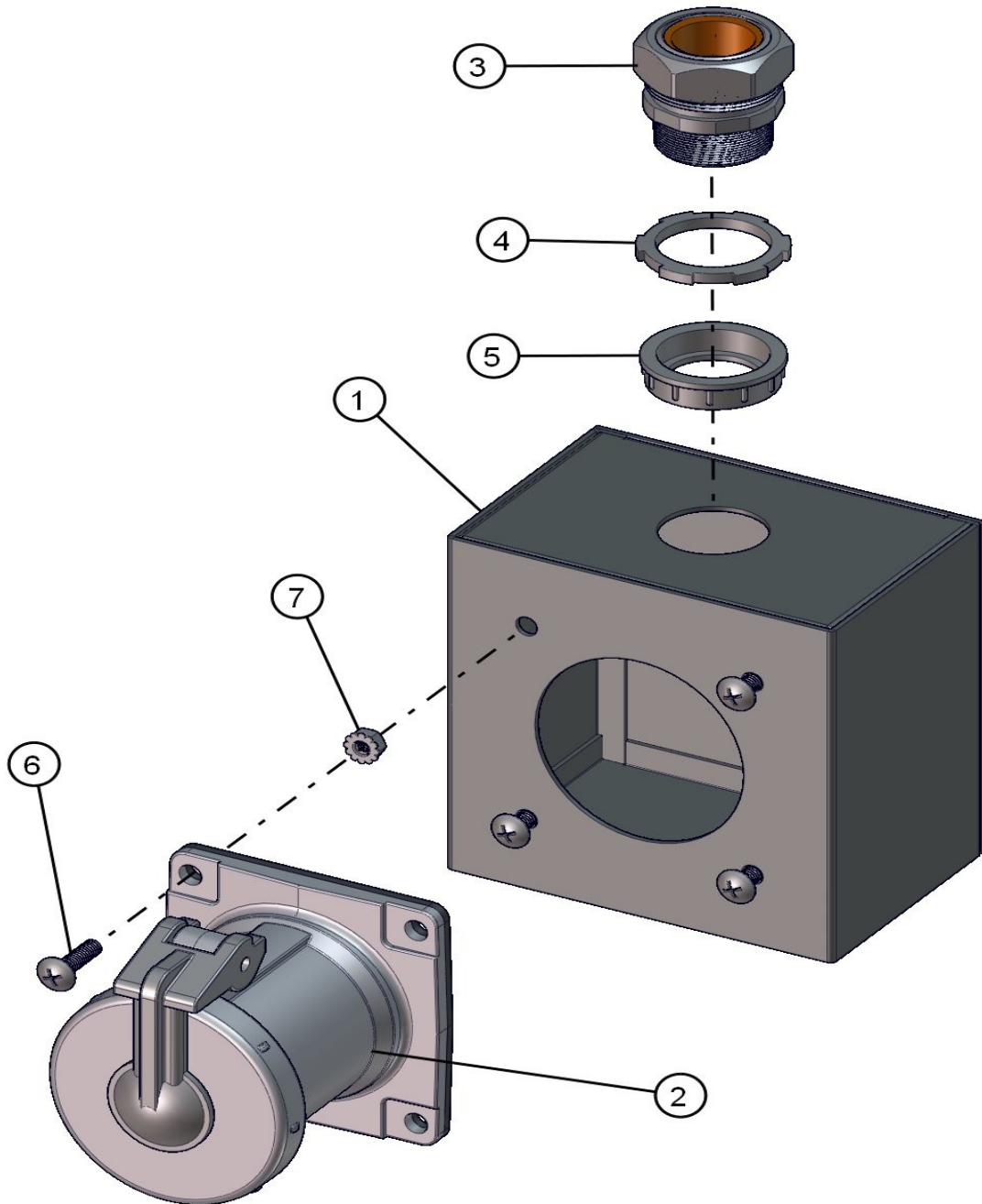


NO	QTY	PARTNO	DESCRIPTION
1	1	100797P	ENCLOSURE, LIGHT SWITCH
2	1	100801P	FACE PLATE, 4-LIGHT
3	4	330459	DPST, Carlingswitch
4	2	433328	1/2" PLASTIC PLUG
5	18	041017	6-32 X 3/8 MACH SCREW PLT
6	1	352466	CIRCUIT BREAKER 2 AMP
7	1	310544	TOGGLE SWITCH
8	2	044004	#6-32 KEPS NUT
9	4	045135	RIVNUT 10-24 UNC
10	4	041036	10-24 X 1 1/4 SS RHMSPH
11	2	330463	11/16 RUBBER GROMMET
12	2	041021	10-24 X 1/2 CR-RDHDMS PL
13	4	044018	10-24 NYLOC NUT
14	2	041027	10-24 x 3/4" PHILIPS HEAD MACHINE SCREW

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

REAR RECEPTICLEBOX MAXI LITE ML 20B SERIES

12/22/2010

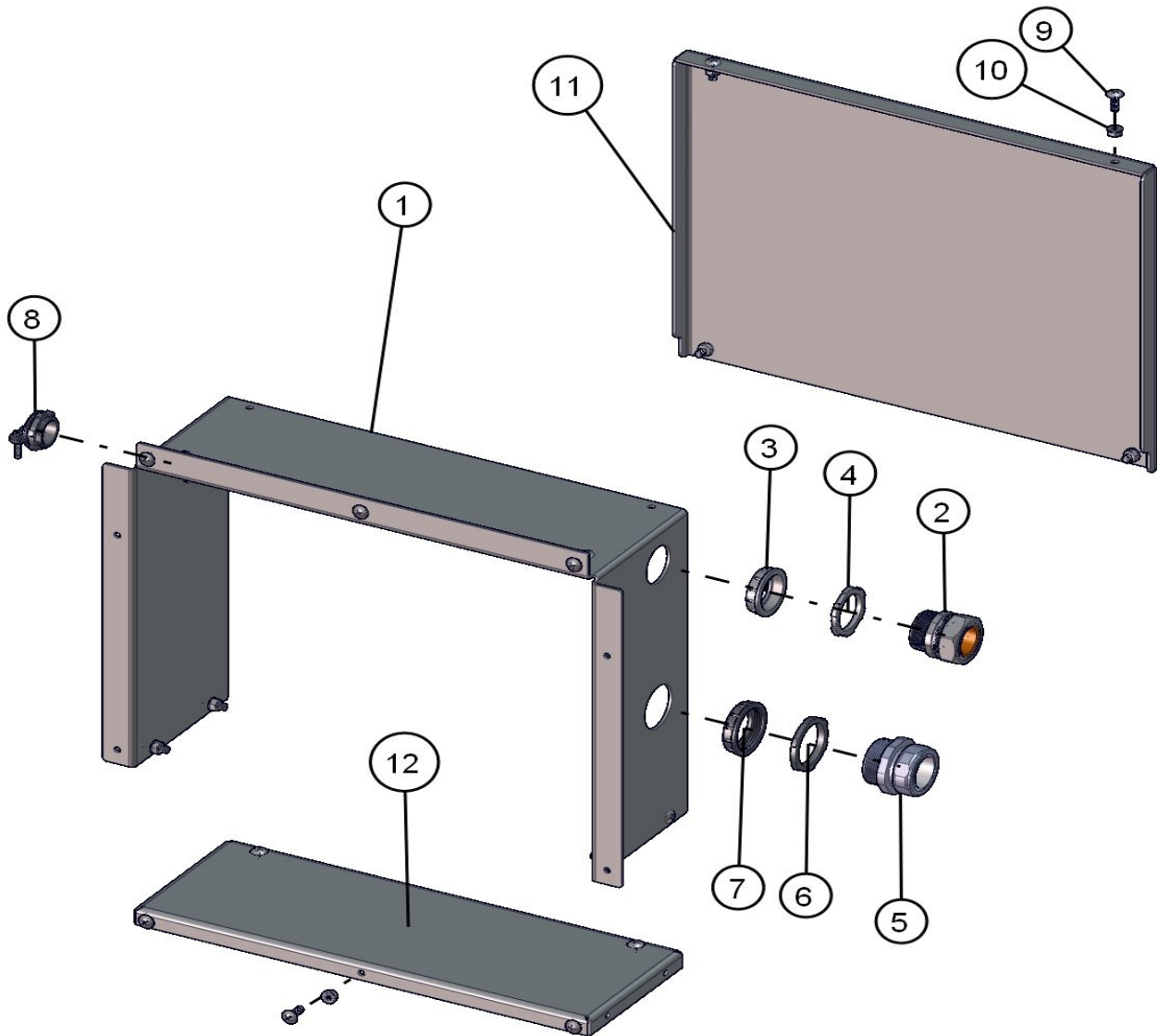


NO	QTY	PARTNO	DESCRIPTION
1	1	022424	JUNCTION BOX
2	1	680870	RECEPTICLE
3	1	350361	CORD GRIP, 1 1/4 NPT X 1.050-1.150
4	1	350363	LOCK NUT 1 1/4" NPT
5	1	022072	PLASTIC BUSHING 1 1/4
6	4	041080	1/4 - 20 X 1 THCS
7	4	044021	1/4-20 KEPS NUT

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

REAR OUTLET ENCLOSURE MAXI LITE ML 20B SERIES

12/22/2010

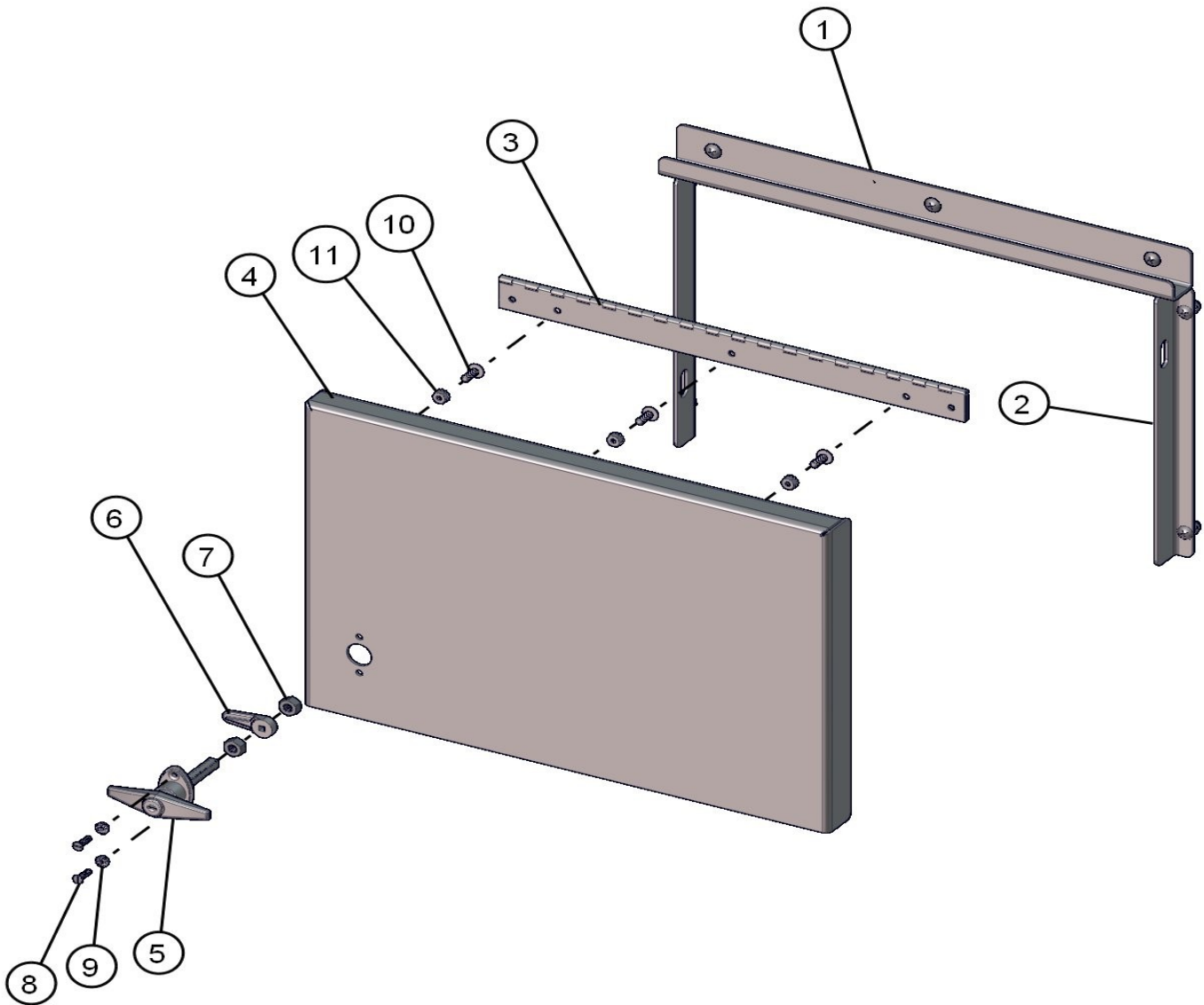


NO	QTY	PARTNO	DESCRIPTION
1	1	109716P	OUTLET ENCLOSURE
2	1	350361	1 1/4" CORD GRIP
3	1	022072	PLASTIC BUSHING 1 1/4
4	1	350363	LOCK NUT 1 1/4" NPT
5	1	022231	1 3/8" CORD GRIP
6	1	022232	1 1/2" LOCK NUT
7	1	022233	1 1/2" PLASTIC NUT
8	1	022028	1" ROMEX CABLE CLAMP W/2 SC
9	18	041050	1/4-20 X 3/4 TRUSS BOLT
10	18	044021	1/4-20 KEPS NUT
11	1	109720P	REAR ENCLOSURE COVER
12	1	109721P	BOTTOM PANEL

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

REAR OUTLET PANEL DOOR MAXI LITE ML 20B SERIES

12/22/2010

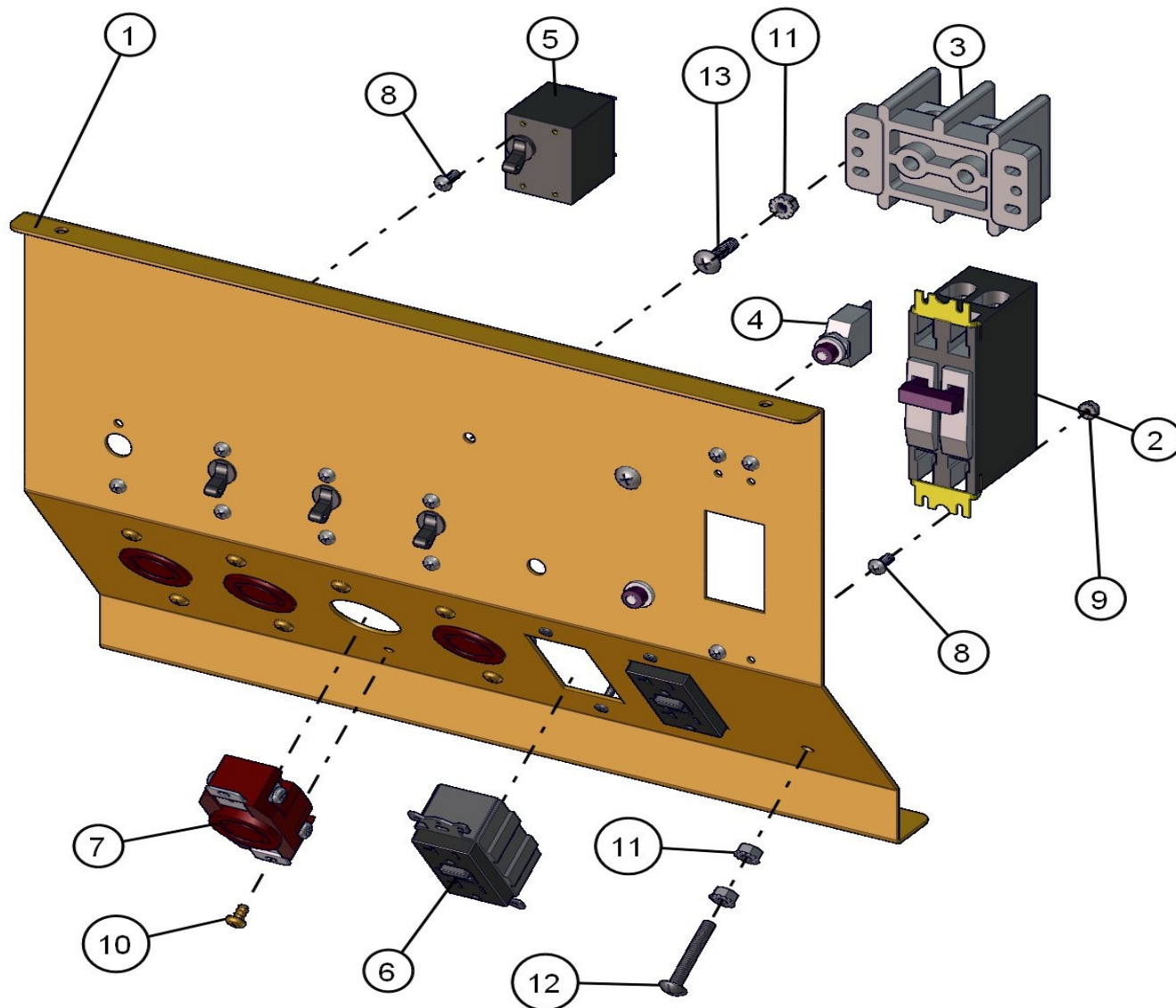


NO	QTY	PARTNO	DESCRIPTION
1	1	109723P	TOP GUTTER
2	2	109719P	SIDE GUTTER
3	1	353045	HINGE
4	1	109715P	DOOR
5	1	650131	DOOR LOCK ASSEMBLY
6	1	650132	DOOR LATCH CAM
7	2	044042	3/8-24 PLATED NUT
8	2	041026	10-24 X 3/4 SL-FHMS
9	2	044016	10-24 KEPS NUT
10	10	041050	1/4-20 X 3/4 TRUSS BOLT
11	10	044021	1/4-20 KEPS NUT

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

240V REAR OUTLET PANEL MAXI LITE ML 20B SERIES

12/22/2010

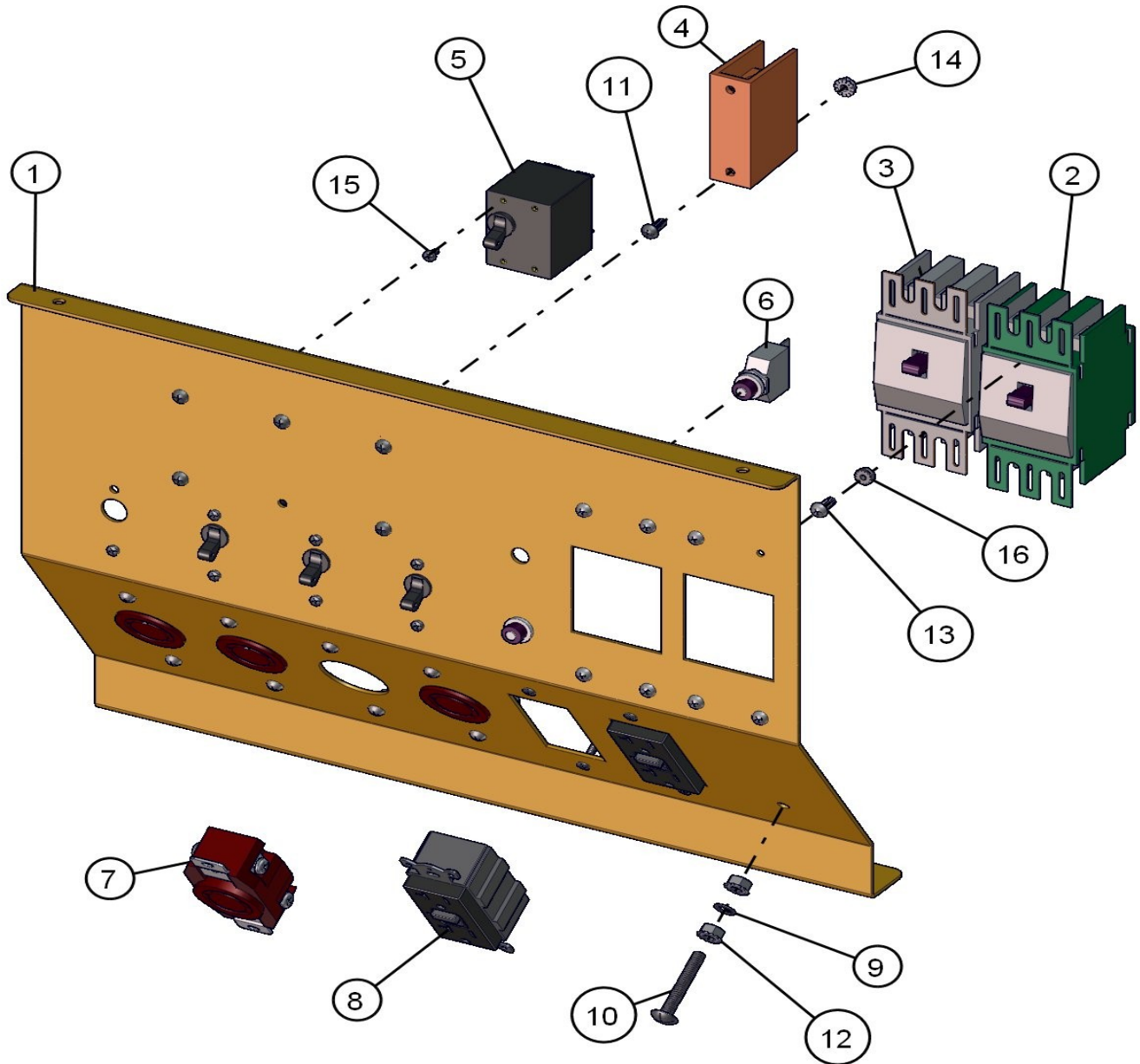


NO	QTY	PARTNO	DESCRIPTION
1	1	109745P	240V 1-PHASE OUTLET PANEL
2	1	353301	90 AMP 2 POLE BREAKER
3	1	350360	POWER DISTRIBUTION BLOCK
4	2	650138	CIRCUIT BREAKER 20A PUSH BUTTON
5	4	330456	30A DPST CIRCUIT BREAKER
6	2	330499	20 A GFCI RECEPTICAL
7	4	650102	OUTLET 125-250V 30A
8	12	041013	SCREW MS #8-32 X 1/2 PL
9	12	044003	#8-32 NC KEPS NUT
10	8	041023	#10 X 3/8 PLS
11	4	044021	1/4-20 KEPS NUT
12	1	041053	1/4-20 x 1 3/4 PH TRUSS SCREW
13	2	041080	1/4 - 20 X 1 THCS

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

208V 3 PHASE REAR OUTLET PANEL MAXI LITE ML 20B SERIES

12/22/2010

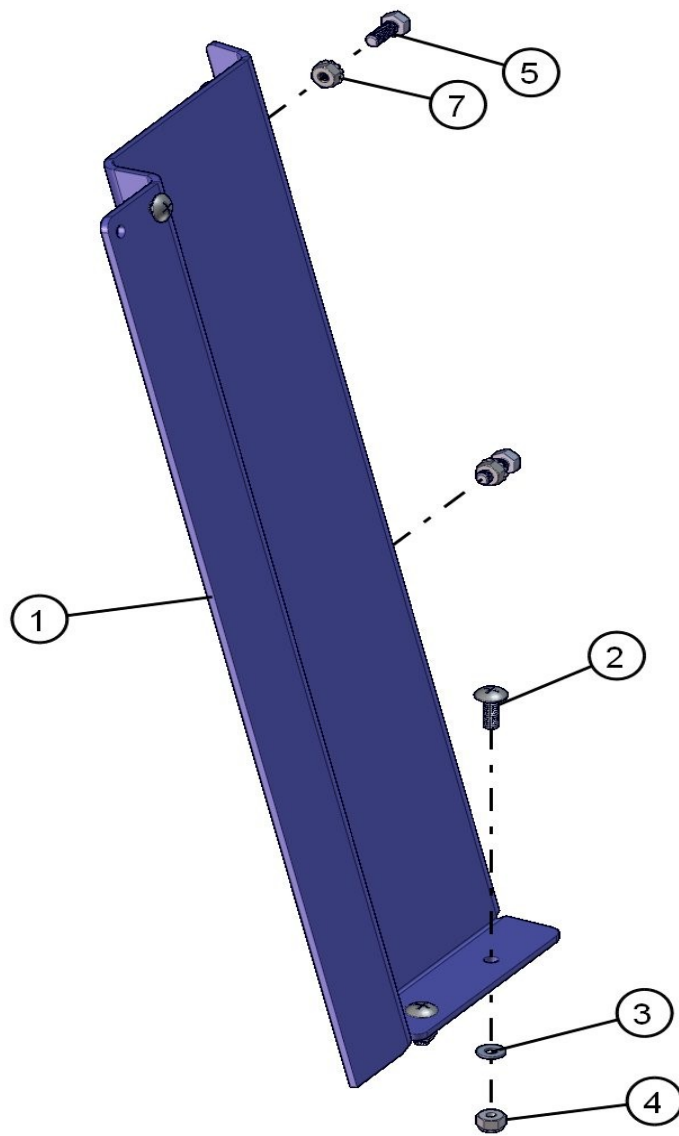


NO	QTY	PARTNO	DESCRIPTION
1	1	109717	208V 3 PHASE OUTLET PANEL
2	1	022235	BREAKER 60A 3PH 208V
3	1	022236	BREAKER 50A 3PH 208V
4	3	352397	DISTRIBUTION BLOCK 208V
5	4	330456	30A DPST CIRCUIT BREAKER
6	2	650138	CIRCUIT BREAKER 20A PUSH BUTTON
7	4	650102	OUTLET 125-250V 30A
8	2	330499	20 A GFCI RECEPTICAL
9	1	043050	1/4 INT TOOTH WASHER
10	1	041053	1/4-20 x 1 3/4 PH TRUSS SCREW
11	6	041021	10-24 X 1/2 CR-RDHDMS PL
12	2	044021	1/4-20 KEPS NUT
13	16	041013	SCREW MS #8-32 X 1/2 PL
14	6	044016	10-24 KEPS NUT
15	8	041018	6-32 X 1/4 PHHMS
16	16	044003	#8-32 NC KEPS NUT

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

LEFT FRONT QUARTER PANEL MAXI LITE ML 20B SERIES

12/22/2010

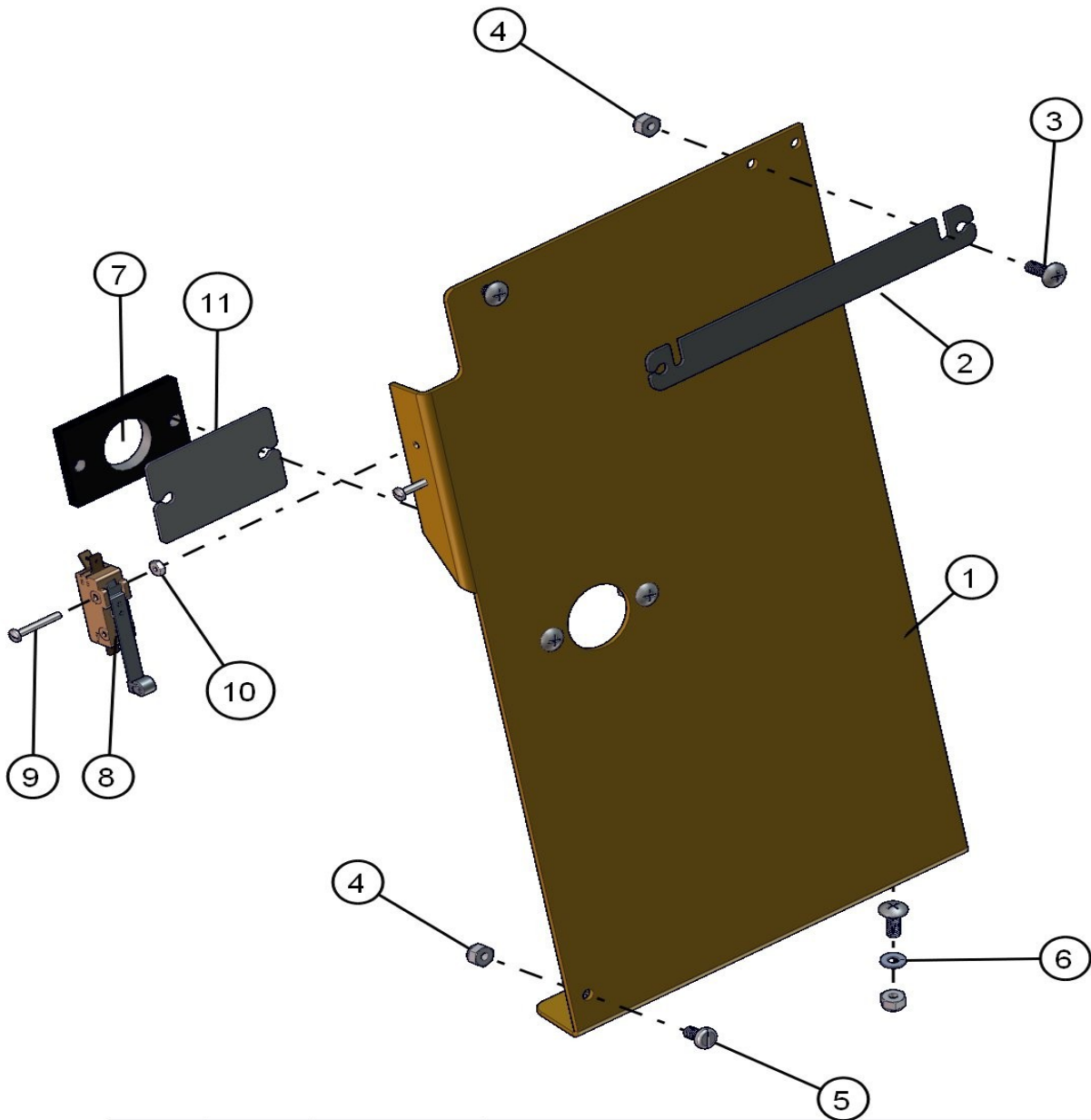


NO	QTY	PARTNO	DESCRIPTION
1	1	109714P	QUARTER PANEL
2	3	041050	1/4-20 X 3/4 TRUSS BOLT
3	2	047009	1/4 SAE SS FW
4	3	044023	1/4-20 NYLOCK NUT
5	2	046010	1/4-20 X 3/4" HEX BOLT
7	1	044021	1/4-20 KEPS NUT

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

RIGHT FRONT QUARTER PANEL MAXI LITE ML 20B SERIES

12/22/2010



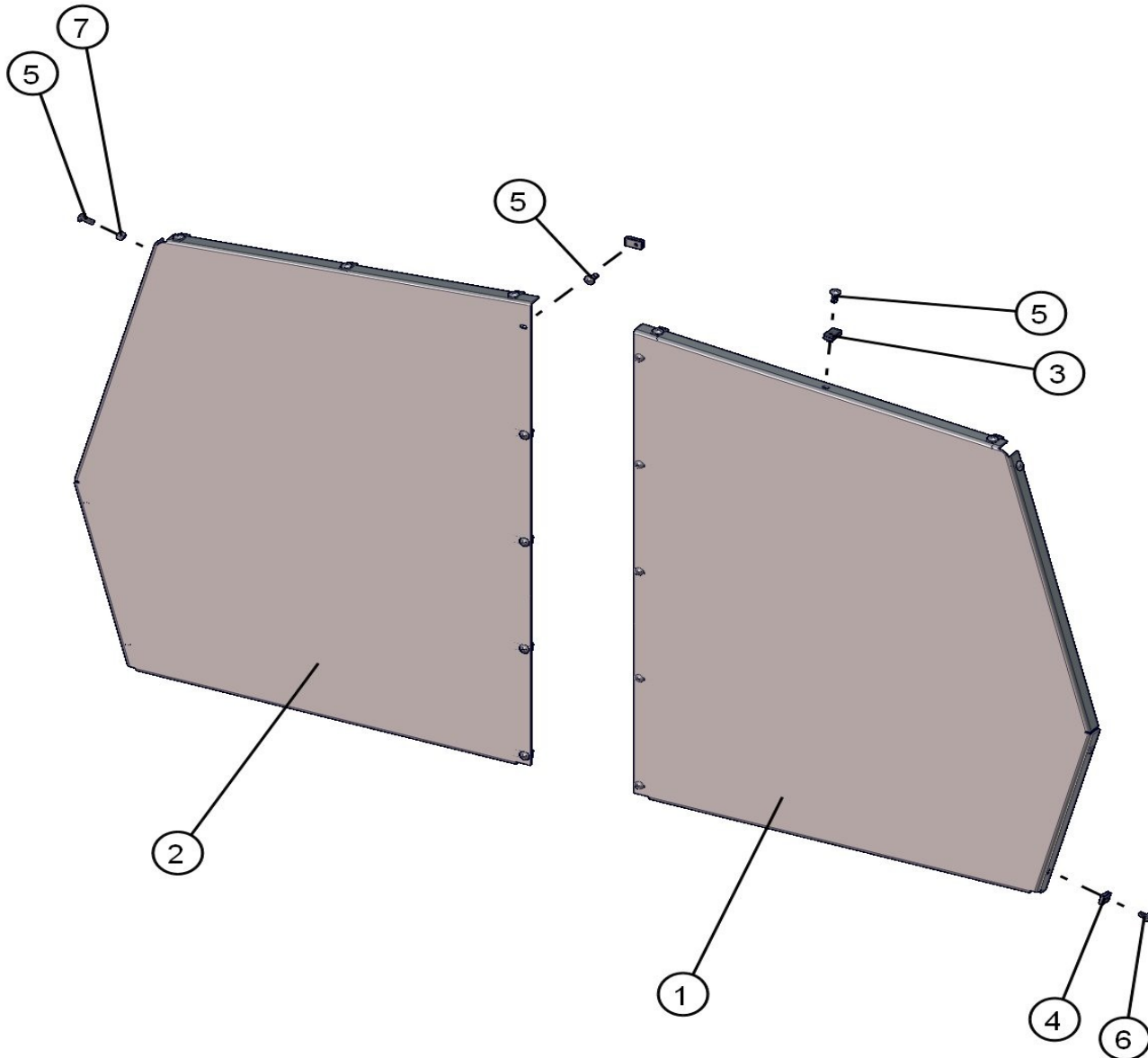
NO	QTY	PARTNO	DESCRIPTION
1	1	109708P	QUARTER PANEL
2	1	680341P	FRONT SPACER
3	6	041050	1/4-20 X 3/4 TRUSS BOLT
4	7	044023	1/4-20 NYLOCK NUT
5	1	041250	1/4-20 X 1/2 SBHMSN NYLON
6	2	047009	1/4 SAE SS FW
7	1	630547	GUIDE BLOCK (MANUAL WINCH ONLY)
8	1	830165	ROCKER SWITCH W/ ROLLER
9	2	102018	#8-32 X 1 1/4 MACHINE SCREW
10	2	044004	#6-32 KEPS NUT
11	1	680329P	COVER PLATE (USED ON ELEC., HYD. ONLY)

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

FRONT PANELS

MAXI LITE ML 20B SERIES

12/22/2010



NO	QTY	PARTNO	DESCRIPTION
1	1	109665P	LEFT FRONT PANEL
2	1	109744P	RIGHT FRONT PANEL
3	16	044106	1/4-20 TINNERMAN NUT
4	5	045216	1/4-20 TINNERMAN NUT
5	18	041050	1/4-20 X 3/4 TRUSS BOLT
6	4	041078	1/4-20 X 1/2 CR-THMS PL
7	1	044023	1/4-20 NYLOCK NUT

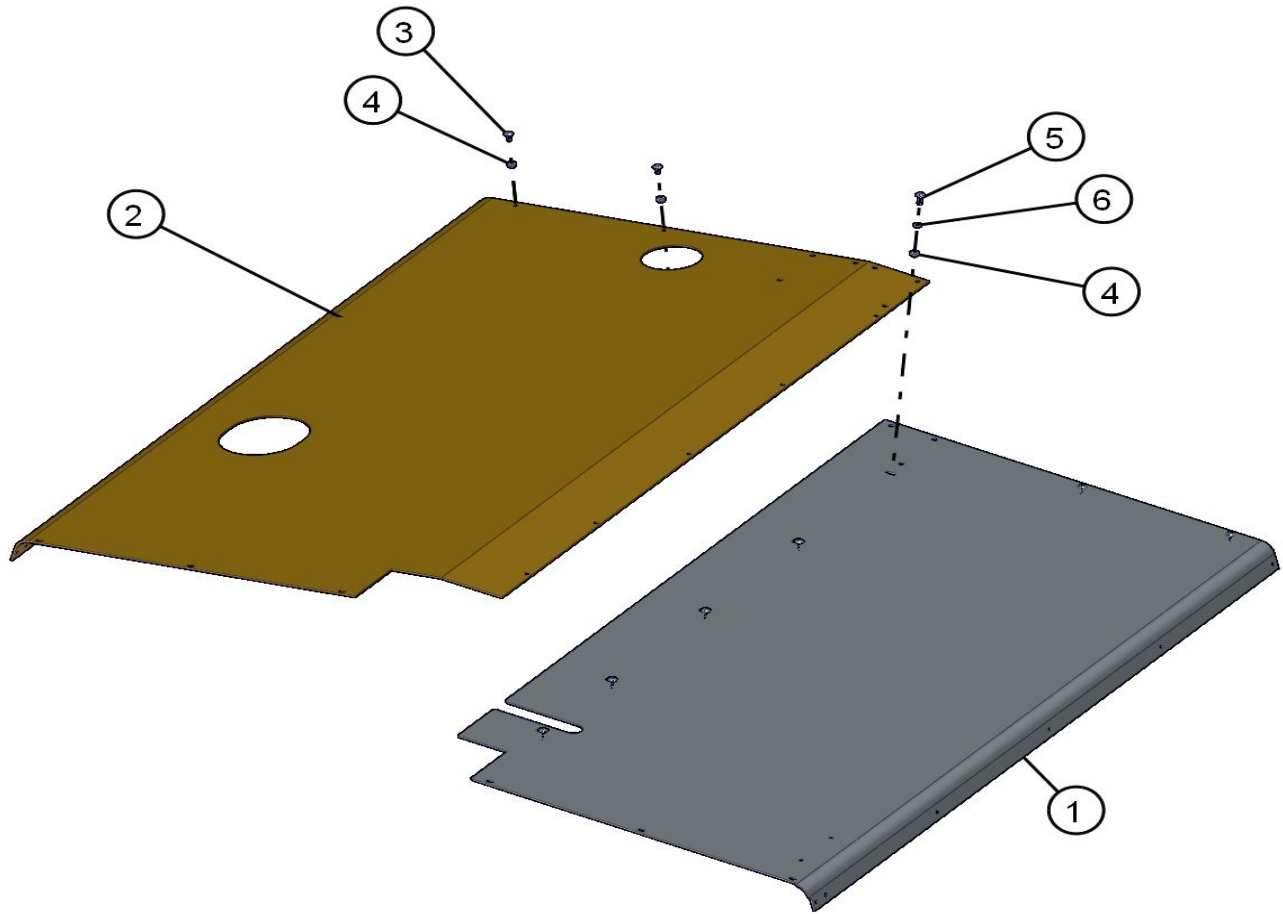
NS: 109744-00 RIGHT FRONT PANEL SPEEDLINER COATED (OPTION)
 109665-00 LEFT FRONT PANEL SPEEDLINER COATED (OPTION)

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

ROOF PANELS

MAXI LITE ML 20B SERIES

12/22/2010



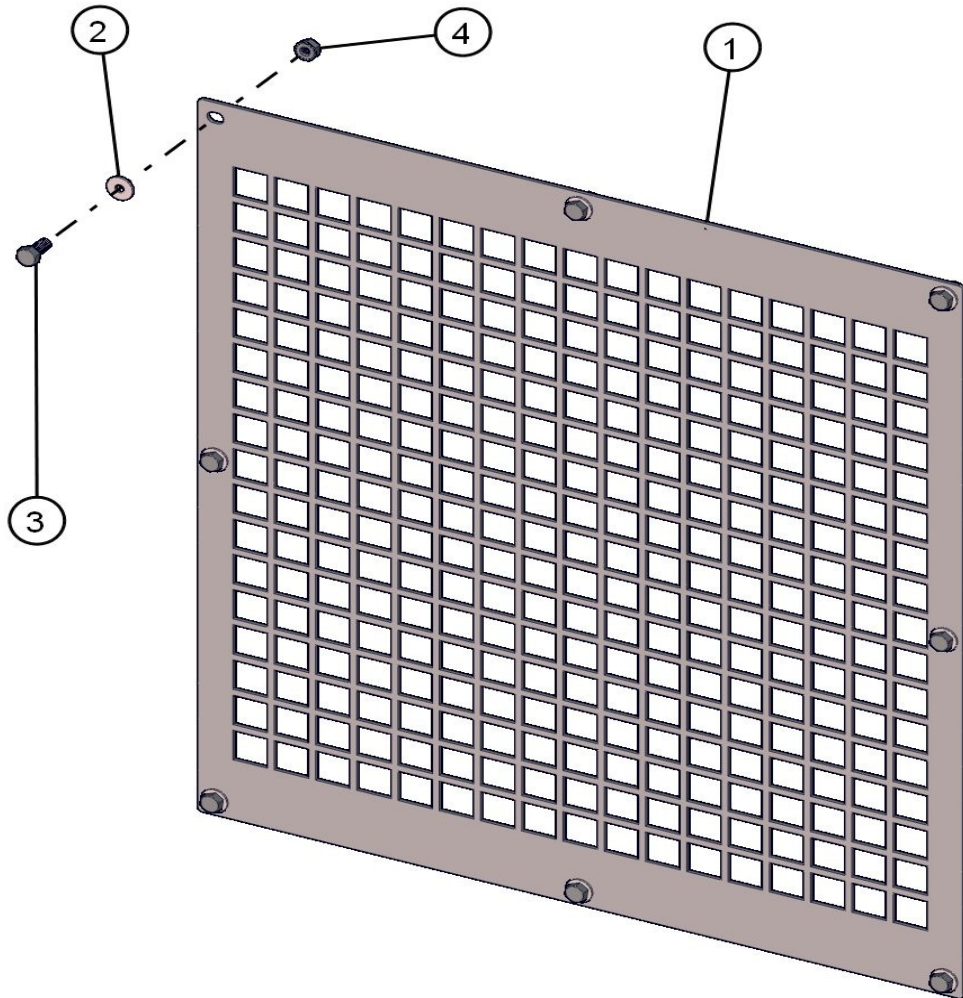
NO	QTY	PARTNO	DESCRIPTION
1	1	109660P	LEFT ROOF PANEL
2	1	680271P	ROOF PANEL
3	4	041078	1/4-20 X 1/2 CR-THMS PL
4	9	044023	1/4-20 NYLOCK NUT
5	5	041050	1/4-20 X 3/4 TRUSS BOLT
6	5	047009	1/4 SAE SS FW

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

RADIATOR PANEL

MAXI LITE ML 20B SERIES

12/22/2010

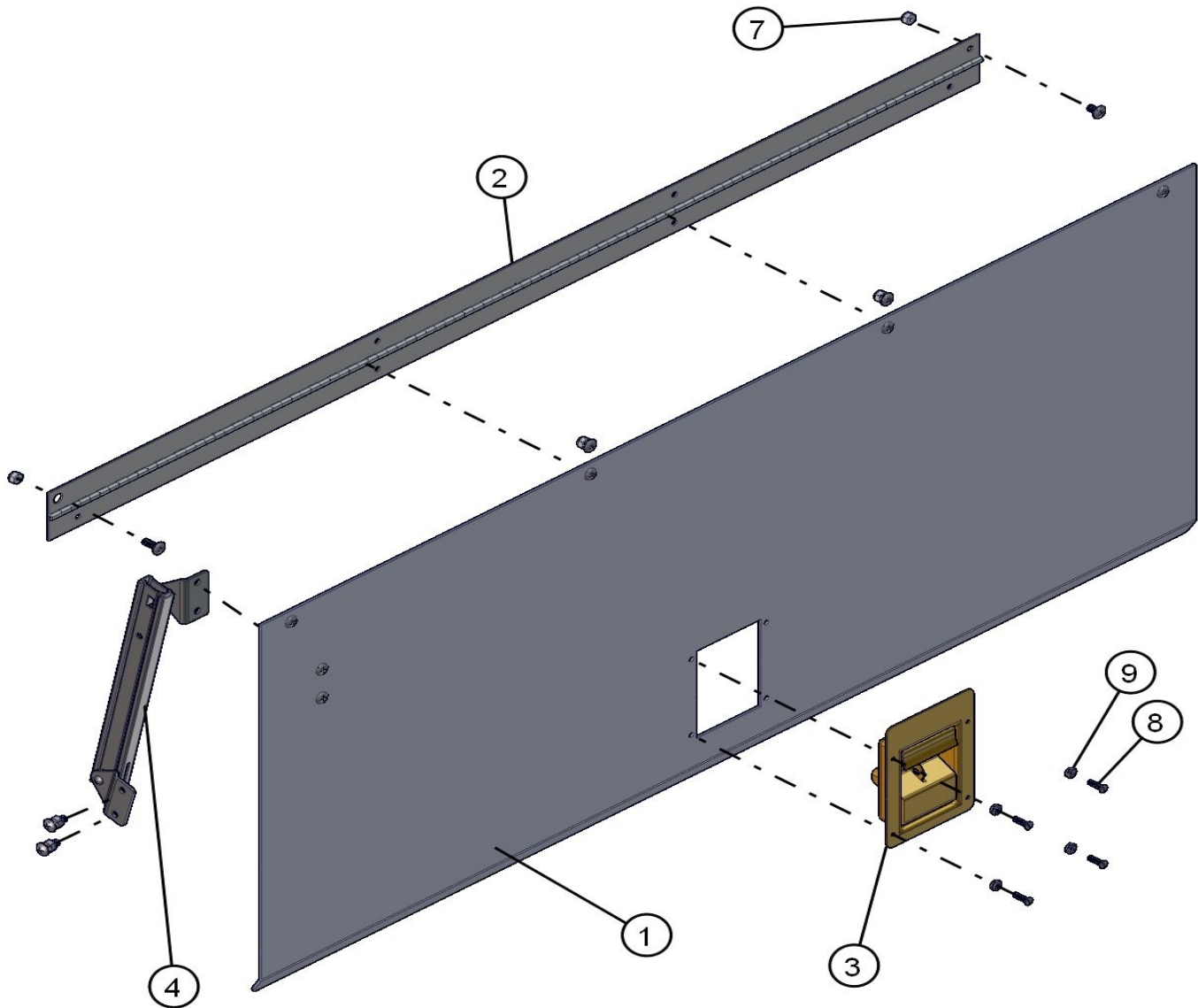


NO	QTY	PARTNO	DESCRIPTION
1	1	109662P	RADIATOR PANEL
2	8	047009	1/4 FLAT WASHER
3	8	046045	5/16-18 X 3/4 HHCS GR5 PLATED
4	8	044031	5/16 -18 KEPS NUT

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

RIGHT DOOR MAXI LITE ML 20B SERIES

12/22/2010

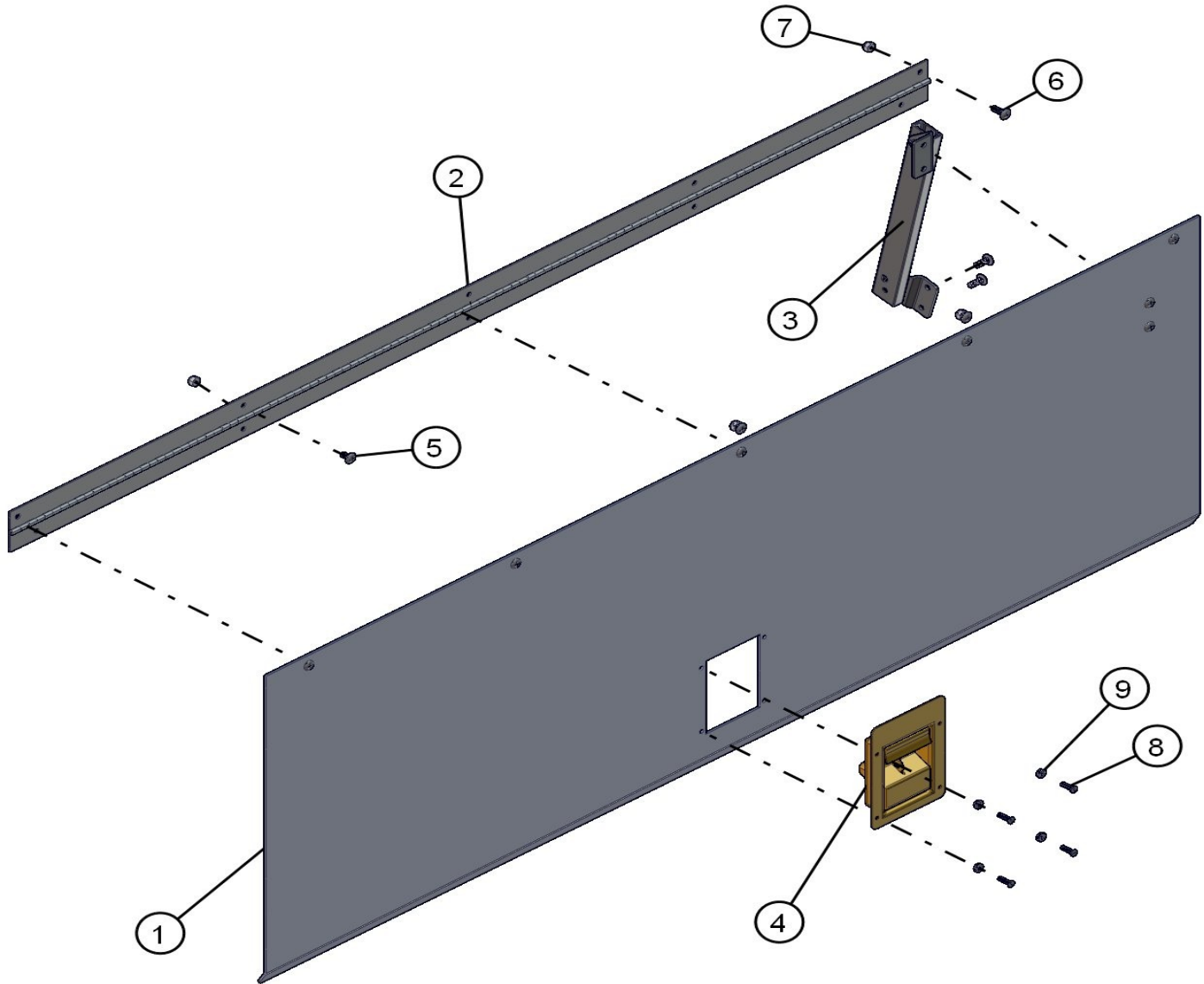


NO	QTY	PARTNO	DESCRIPTION
1	1	109664P	RIGHT SHORT DOOR
2	1	680258	RIGHT HINGE
3	1	680459	SLAM LATCH
4	1	352057	TELESCOPIC DOOR PROP
7	12	044023	1/4-20 NYLOCK NUT
8	4	041026	10-24 X 3/4 SL-FHMS
9	4	044016	10-24 KEPS NUT

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

LEFT DOOR MAXI LITE ML 20B SERIES

12/22/2010

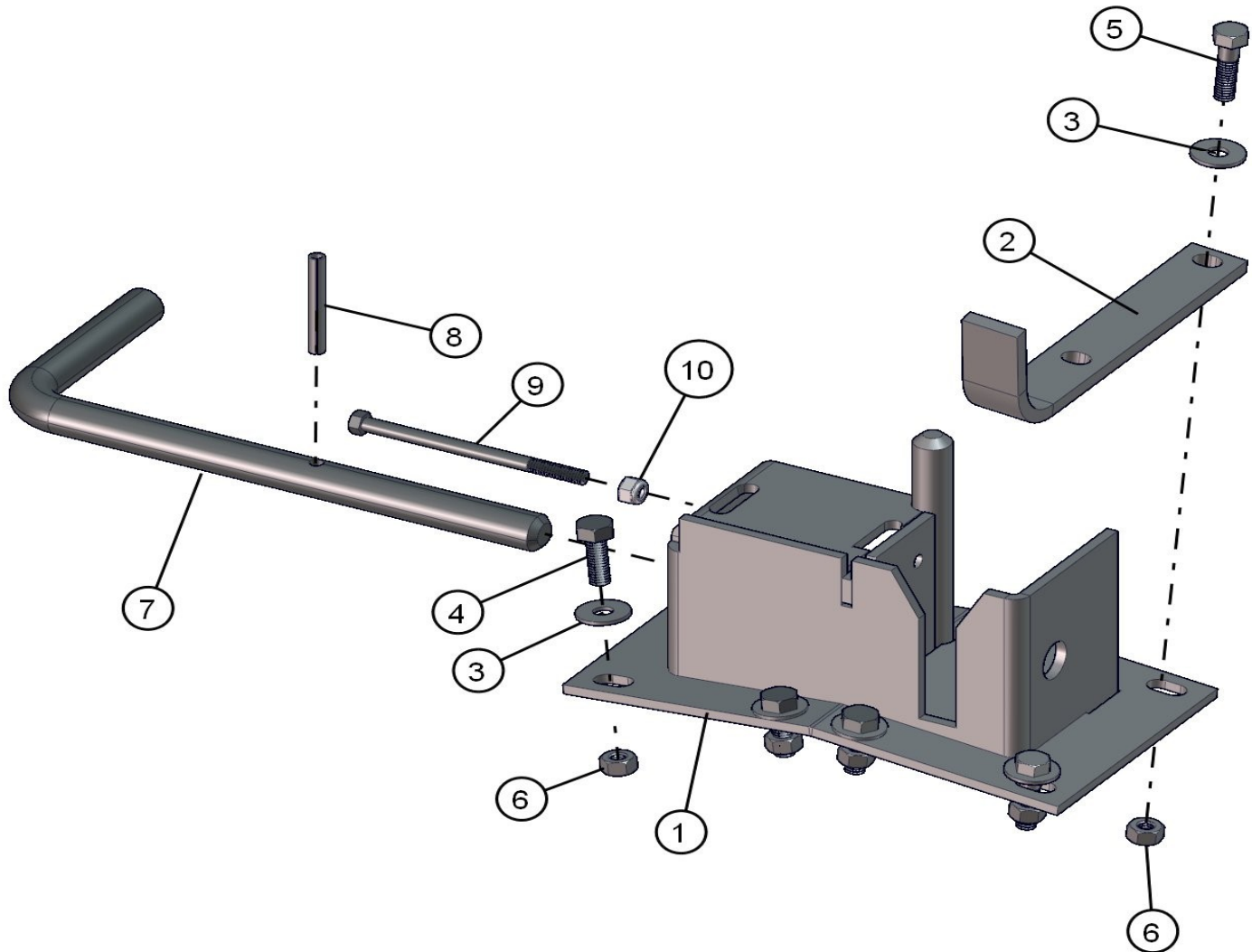


NO	QTY	PARTNO	DESCRIPTION
1	1	109656P	LEFT DOOR
2	1	352023	MAXI DOOR HINGE
3	1	352057	TELESCOPIC DOOR PROP
4	1	680459	SLAM LATCH
5	8	041078	1/4-20 X 1/2 CR-THMS PL
6	5	041050	1/4-20 X 3/4 TRUSS BOLT
7	13	044023	1/4-20 NYLOCK NUT
8	4	041026	10-24 X 3/4 SL-FHMS
9	4	044016	10-24 KEPS NUT

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

REAR TOWER SUPPORT MAXI LITE ML 20B SERIES

12/22/2010



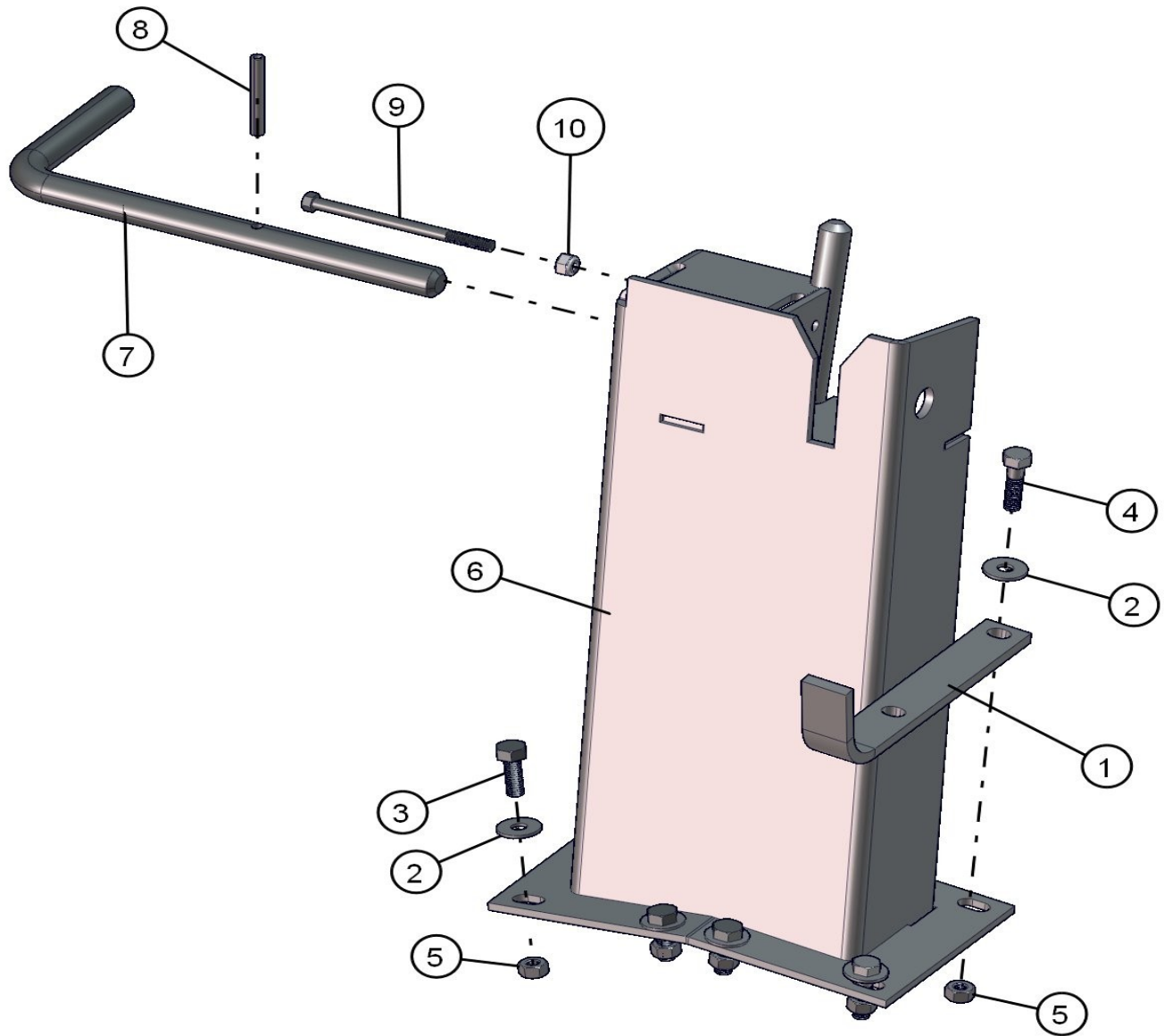
USED ONLY WITH ELECTRIC OR MANUAL TOWERS

NO	QTY	PARTNO	DESCRIPTION
1	1	680110P	REAR TOWER SUPPORT
2	1	680105P	CORD HOLDER
3	6	047010	5/16 FLAT WASHER
4	4	046050	BOLT CS 5/16-18 X 1 HEX GR5 PL
5	2	046055	5/16-18 X 1 1/4 HHCS
6	6	044031	5/16-18 KEPS NUT
7	1	330450	LOCKING PIN
8	1	045156	1/4" x 2" PLATED ROLL PIN
9	1	046039	1/4-20 X 4 HHCS
10	1	044023	1/4-20 NYLOCK NUT

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

EXTENDED REAR TOWER SUPPORT MAXI LITE ML 20B SERIES

12/22/2010



OPTION USED ONLY WITH ELECTRIC OR MANUAL TOWER

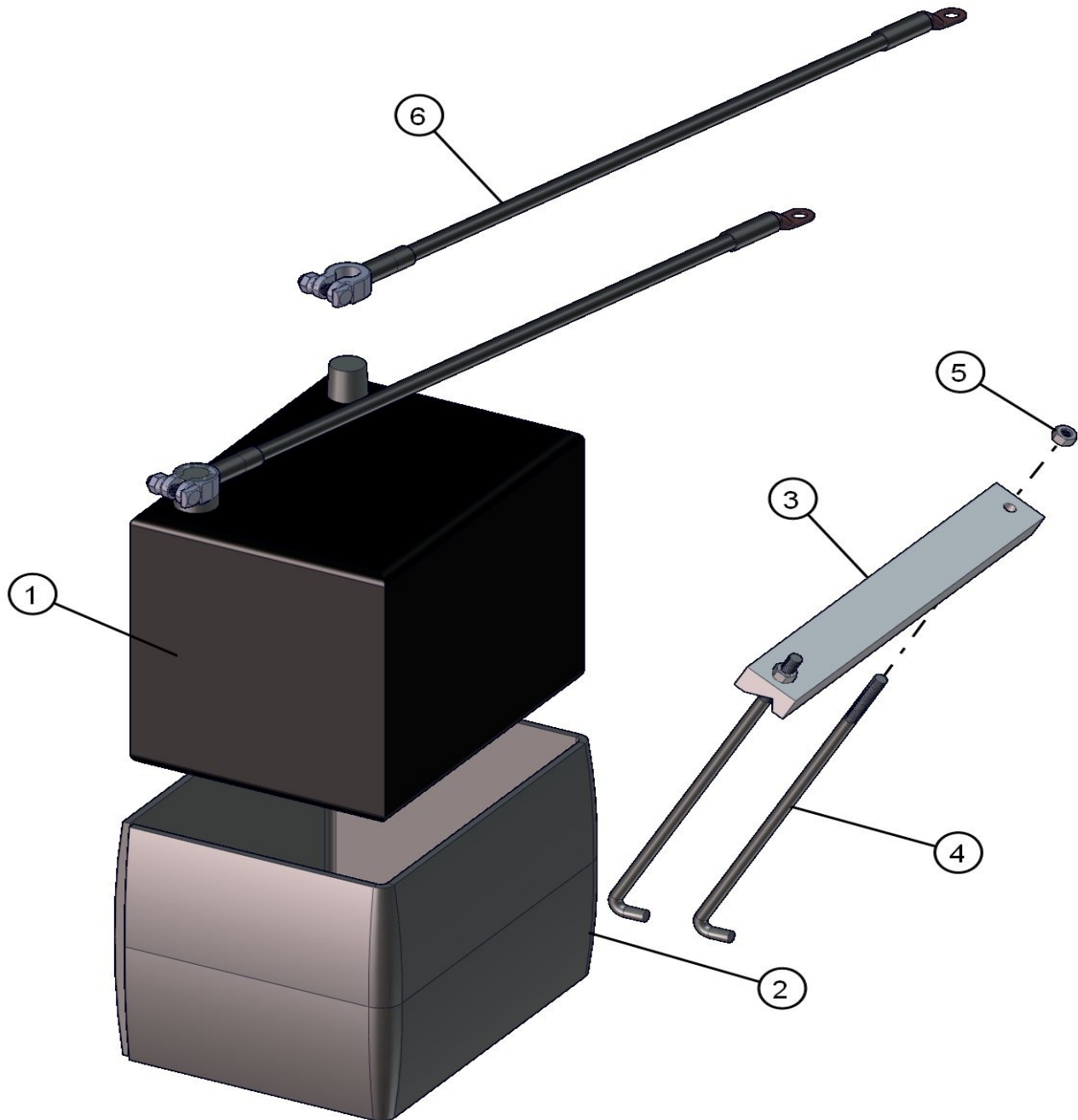
NO	QTY	PARTNO	DESCRIPTION
10	1	044023	1/4-20 NYLOCK NUT
8	1	045156	1/4" x 2" PLATED ROLL PIN
9	1	046039	1/4-20 X 4 HHCS
3	4	046050	BOLT CS 5/16-18 X 1 HEX GR5 PL
4	2	046055	5/16-18 X 1 1/4 HHCS
2	6	047010	5/16 FLAT WASHER
7	1	330450	LOCKING PIN
1	1	680105P	CORD HOLDER
6	1	680540P	EXTENDED TOWER
5	6	044031	5/16-18 KEPS NUT

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

BATTERY

MAXI LITE ML 20B SERIES

12/22/2010

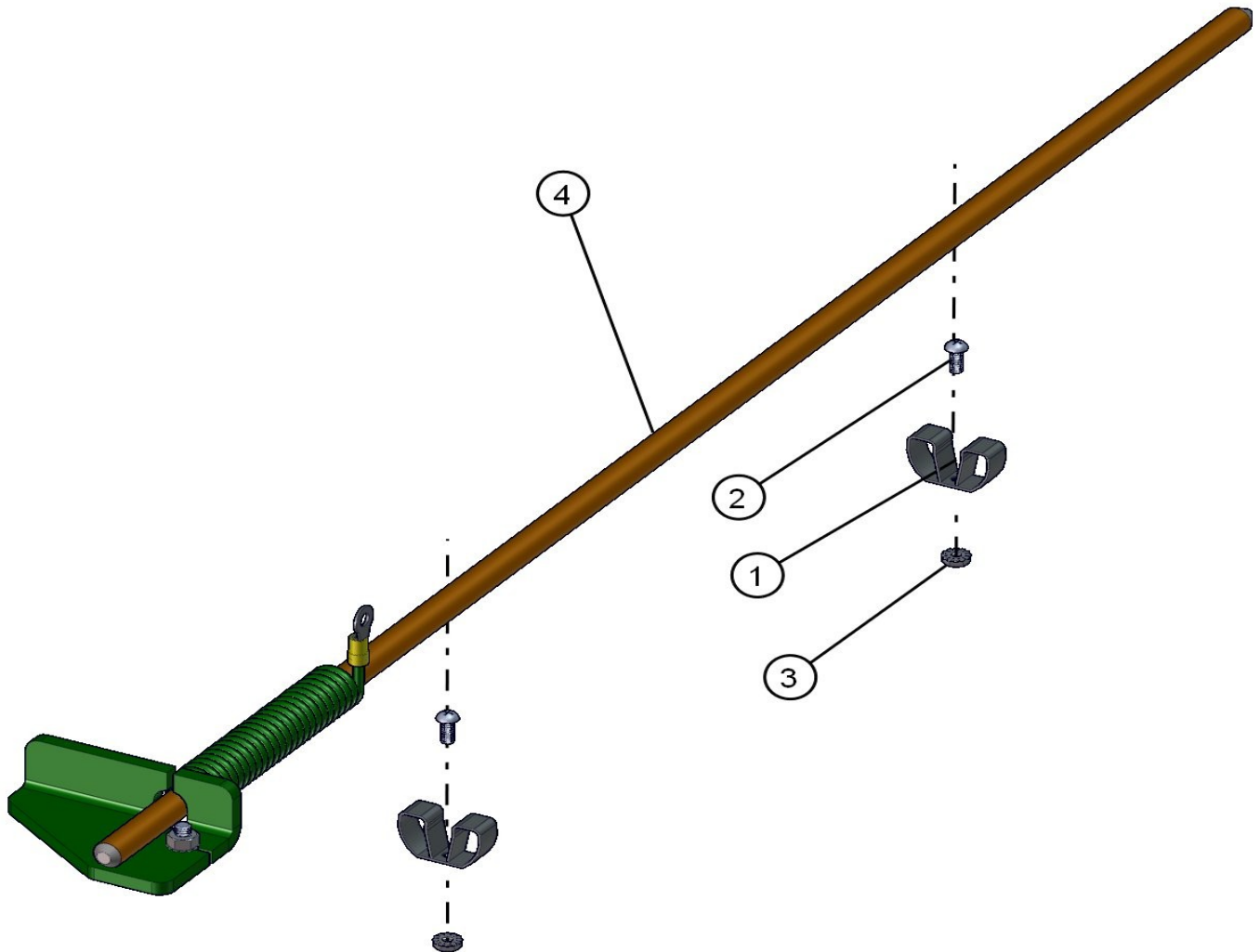


NO	QTY	PARTNO	DESCRIPTION
1	1	NOT SOLD BY ABI	BATTERY 12 VOLT HD 75
2	1	024010	BATTERY BLANKET 80W
3	1	340017	HOLD DOWN
4	2	433507	J BOLT 5/16-18
5	2	044031	5/16-18 KEPS NUT
6	2	027010	BATTERY CABLE

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

GROUND ROD MAXI LITE ML 20B SERIES

12/22/2010



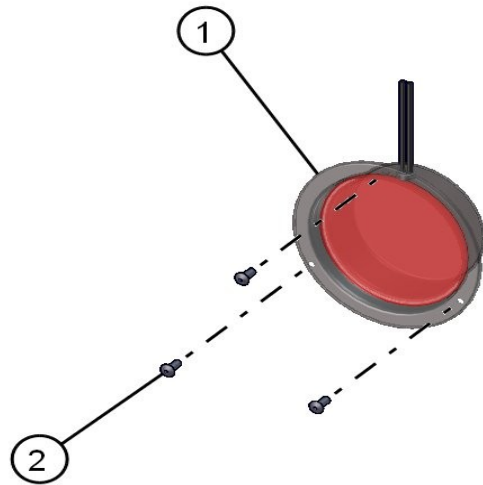
NO	QTY	PARTNO	DESCRIPTION
1	2	330481	GROUND ROD CLIP
2	2	041024	10-24 X 1/2 SL-RDHDMS SS
3	2	044016	10-24 KEPS NUT
4	1	340058	GROUND ROD

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

TAILLIGHTS

MAXI LITE ML 20B SERIES

12/22/2010



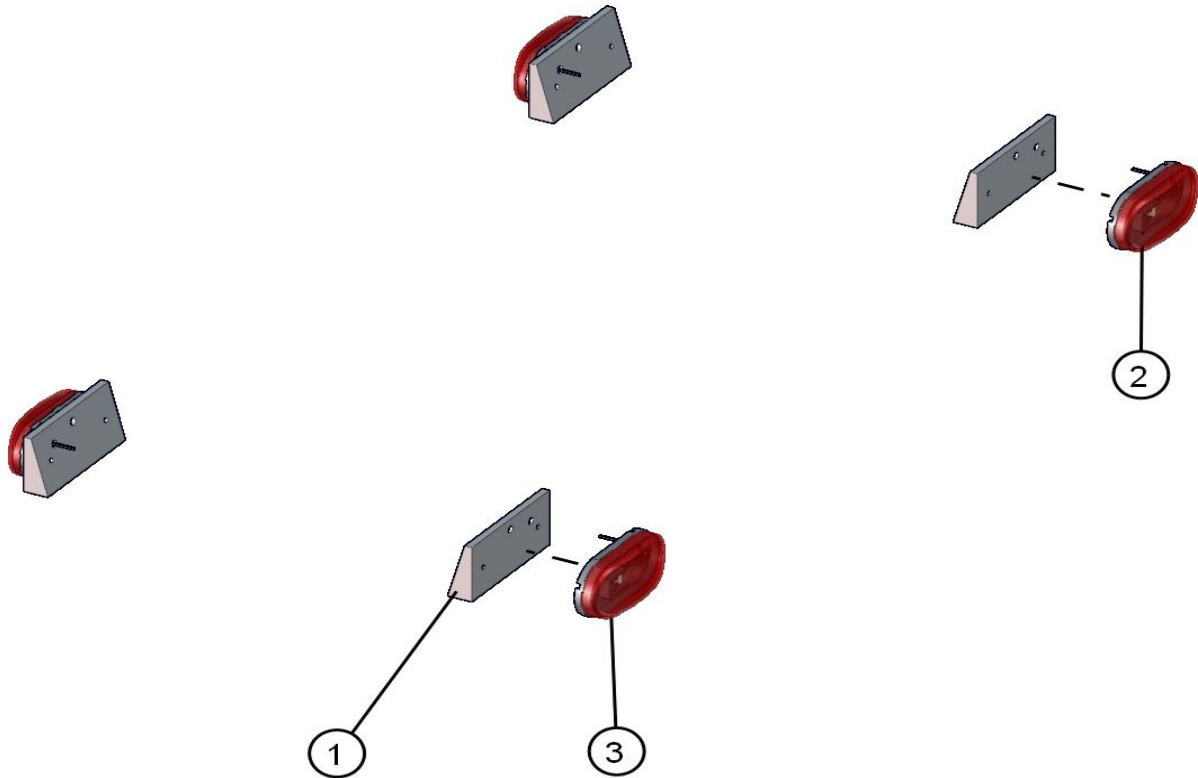
NO	QTY	PARTNO	DESCRIPTION
1	2	650129	TAIL LIGHT
2	6	0450110	3/16 RIVET

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

CLEARANCE LIGHTS

MAXI LITE ML 20B SERIES

12/22/2010

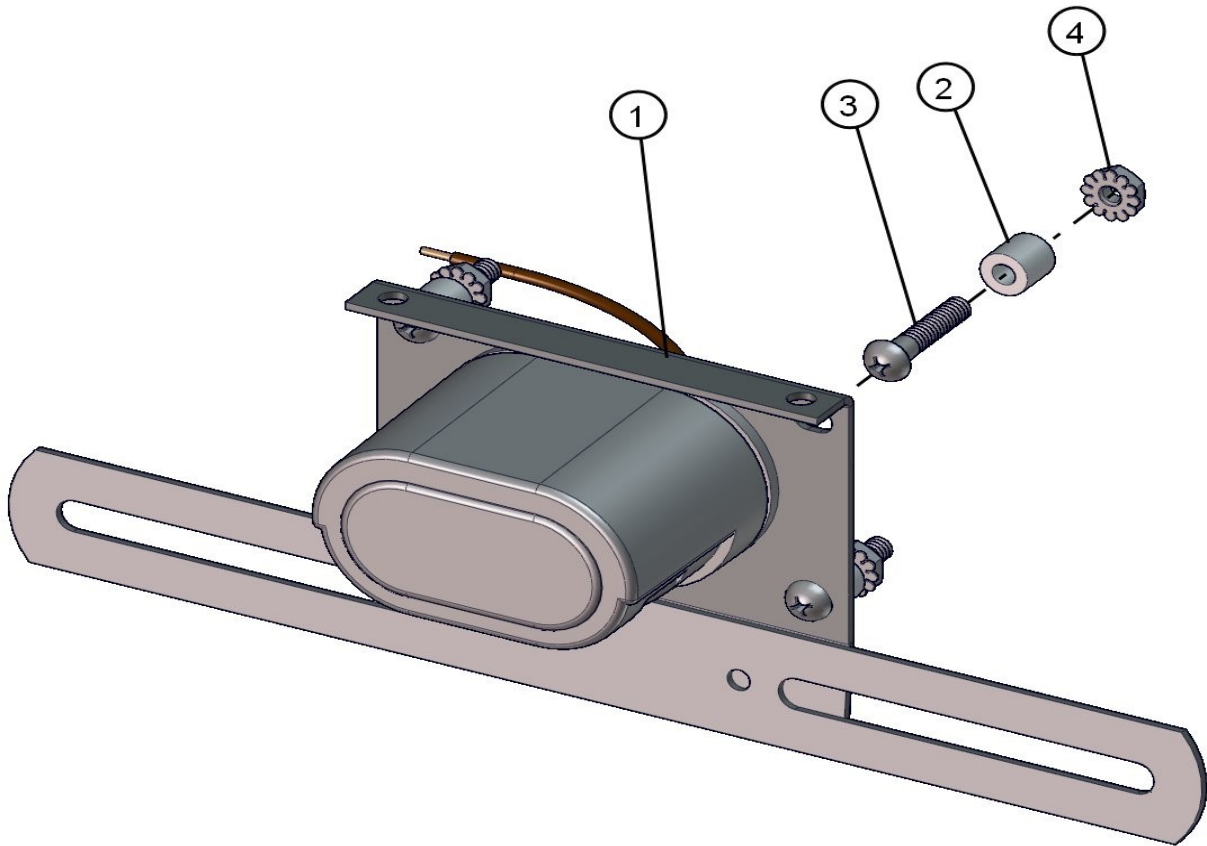


NO	QTY	PARTNO	DESCRIPTION
1	4	064080	LIGHT SPACER
2	2	022300	RED CLEARANCE LIGHT
3	2	022301	AMBER CLEARANCE LIGHT

NOTE: CLEARANCE LIGHTS ARE A VIN PACKAGE OPTION.

LICIENCE PLATE BRACKET MAXI LITE ML 20B SERIES

12/22/2010



NO	QTY	PARTNO	DESCRIPTION
1	1	032035	LICENSE PLATE BRACKET W/ LIGHT
2	4	022180	SPACER
3	4	041030	#10-24 x 1 CR-RHMS PL
4	4	044016	10-24 KEPS NUT

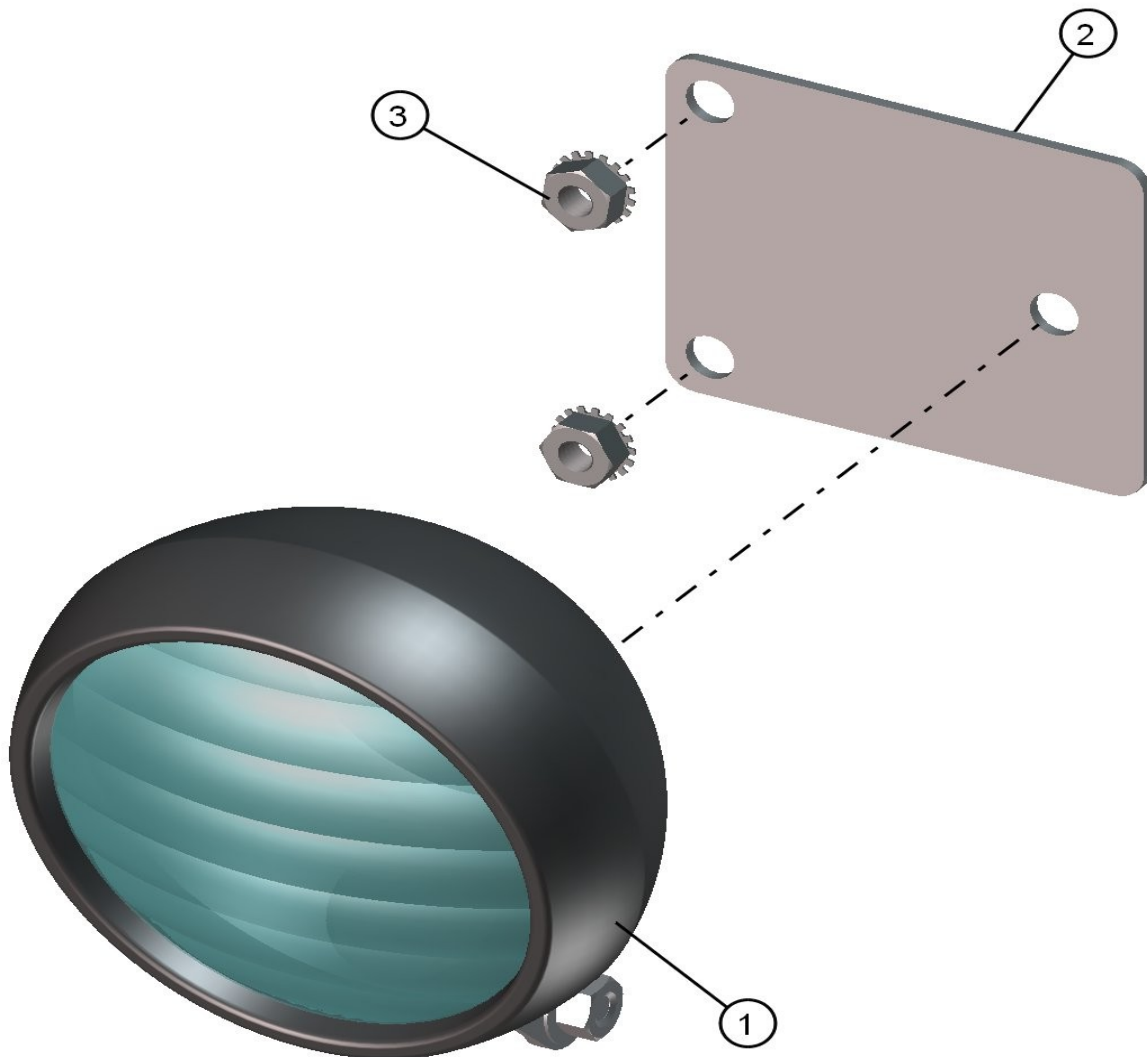
NOTE: LICIENCE PLATE BRACKET IS A VIN PACKAGE OPTION.

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

INTERIOR WORK LIGHT (OPTION)

MAXI LITE ML 20B SERIES

12/22/2010



NO	QTY	PARTNO	DESCRIPTION
1	1	352151	WORK LAMP
2	1	352146P	FIXTURE BRACKET
3	2	044036	3/8-16 KEPS HEX NUT

NS: 711405 INLINE FUSE HOLDER

711028 9/16ID X 7/8 OD GROMMET

830165 INTERLOCK SAFETY SWITCH (SHOWN ON RIGHT QUARTER PANEL)

NOTE: NS = NOT SHOWN. WHEN ORDERING, SPECIFY THE COLOR WANTED ON PARTS CONTAINING THE LETTER "P"

Maxi-Lite ML 20B SERIES

LIMITED WARRANTY

ALLMAND LIGHTING SYSTEMS LIMITED WARRANTY UNITED STATES and U.S. TERRITORIES

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED INCLUDING WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR PURPOSE, AND ANY EXCEPTIONS ARE DESCRIBED IN THE PUBLISHED LIMITED WARRANTY ADDENDUM, AVAILABLE UPON REQUEST.

COMPONENTS, SUB-ASSEMBLIES, AND DEVICES MANUFACTURED BY OTHER MANUFACTURERS ARE NOT COVERED BY THIS WARRANTY. ALL WARRANTY INFORMATION FROM SUCH OTHER MANUFACTURERS IS PROVIDED WITHIN OR ACCOMPANY THESE GOODS.

Subject to the foregoing, the manufacturer, Allmand Bros. Inc., hereby warrants all equipment manufactured by Allmand Bros. Inc. to be free from defects in material and workmanship for a period of (1) year after delivery to the original purchaser. Additionally, Allmand Bros. Inc. hereby warrants all replacement parts supplied by Allmand Bros. Inc. to be free from defects in material and workmanship for a period of 90 days after date of invoice. Delivery shall be deemed for the purposes of this warranty to have occurred no later than five days following the date of sale agreement or invoice unless the purchase agreement or invoice specifically states a later delivery date in which case such delivery date shall control. The original purchaser shall be deemed to be a person who places the goods or products in actual use, and any person holding such goods solely for wholesale or retail sale purposes shall not constitute an original purchaser. PROVIDED, any leasing of these goods or other use beyond normal demonstration of same shall be deemed to be in use by an original purchaser and all warranty periods shall commence at the time of such use. During the warranty period any defective goods or parts hereof shall be repaired or replaced at manufacturer's discretion. In the event it is necessary to return such goods or parts to the factory, all transportation charges shall be prepaid. The manufacturer shall in no event pay mileage expenses, but will warrant outbound ground freight.

The obligations of the manufacturer is solely to repair or replace defective goods or parts or to refund the cost of the same if it is determined by the manufacturer that repair or replacement will not return the goods to proper working order or utility. **THE REMEDIES SET FORTH HEREIN ARE EXCLUSIVE AND MANUFACTURER SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES. THE OBLIGATIONS OF THE MANUFACTURER HEREUNDER SHALL IN NO WAY EXCEED THE PRICE OF THE EQUIPMENT OR PART UPON WHICH SUCH LIABILITY IS BASED.**

The warranty shall not extend to tires, lamps, batteries, or parts that have been altered, changed, damaged, or improperly installed, repaired, operated or maintained. Provided, this exclusion shall not apply to installations, repairs or other work done at the manufacturer's plant or under direct manufacturer's supervision. The Operator's Manual, to the extent covered therein, is deemed to set forth the proper procedures for operation, repair, installation, and maintenance of these goods.

No representative, dealer or distributor of the company is authorized to make any changes or exceptions to this warranty unless expressly authorized in writing from the manufacturer. All warranty claims must be filed within forty-five (45) days of the failure.

ALLMAND BROS. INC., 1502 W 4TH AVENUE, P.O. BOX 888, HOLDREGE, NE 68949 (308) 995-4495