

ML 6/ML 8 OPERATOR'S MANUAL

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Part No. 103406

For Parts and Updates visit Allmand on the Web at www.allmand.com

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FOR PREPARING THE MAXI LITE FOR DELIVERY OR RENTAL

The **MAXI LITE** 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.

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.

<u>VINIONE CONTINUE NEVER ALLOW ANYONE TO OPERATE THE EQUIPMENT WITHOUT PROPER TRAINING!</u>
ALWAYS READ THE INSTRUCTIONS FIRST!

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- This manual provides the information necessary for the safe operation of the Allmand Bros., Inc., MAXI-LITE light tower.
- The **MAXI-LITE** standard tower configuration is operated with two manual crank winches or single electric winch used to erect, extend, and lower the tower.
- 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.



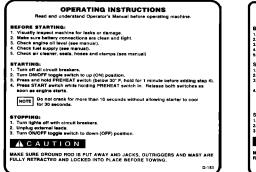
FAILURE TO UNDERSTAND AND COMPLY WITH SAFETY RELATED INFORMATIONAL INSTRUCTIONS MAY RESULT IN INJURY TO OPERATOR OR OTHERS. IF YOU DO NOT UNDERSTAND ANY PART OF THIS INFORMATION CONTACT YOUR DEALER FOR CLARIFICATION PRIOR TO OPERATING EQUIPMENT.

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.



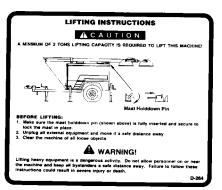
ALWAYS REPLACE ANY SAFETY AND INSTRUC-TION DECALS THAT BECOME DAMAGED, PAINTED, OR OTHERWISE ILLEGIBLE. Refer to these representations of the safety warning decals used on the MAXI-LITE to insure correct ordering if replacing becomes necessary.



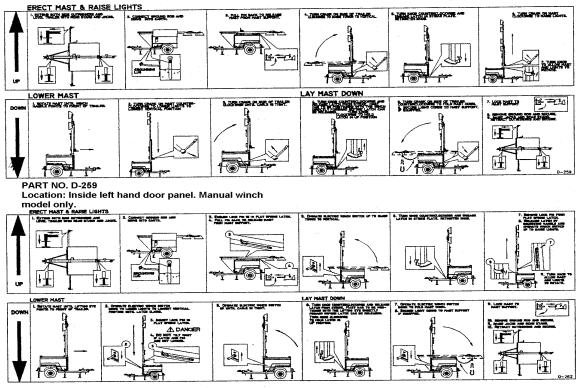
PART NO. D-151 Location: Inside left hand door panel of Lister Petter engine units.



PART NO. D-249 Location: Inside left hand door panel of Kubota engine units.



PART NO. D-264 Location: Inside left hand door panel.



PART NO. D-262

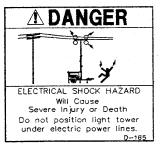
Location: Inside left hand door panel. Electric winch model only.

SAFETY AND WARNING DECALS

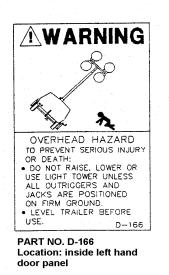


- Avoid unsafe operation or maintenance.
- Do not operate or work on this machine without reading and understanding the operator's manual.
- If manual is lost, contact your nearest dealer for a new manual. D-158

PART NO. D-158 Location: AC control panel



PART NO. D-165 Location: Inside left hand door panel





PART NO. D-084 Location: AC control panel



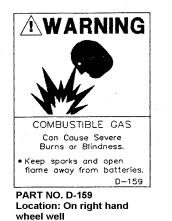
PART NO. D-163 Location: On left side wheel well



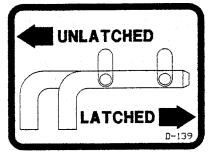
PART NO. D-162 Location: On left front ABS panel



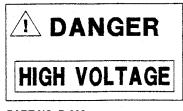
PART NO. D-133 Location: On left side panel below ground lug



SAFETY AND WARNING DECALS



PART NO. D-139 Location: On rear panel under the rear tower support.



PART NO. D-002 Location: Light bar cover

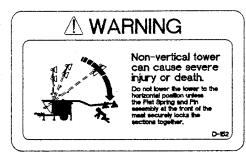
To Prevent Injury or Machine Damage • Pull pin back to release mast from mast support before operating winch. D-263

PART NO. D-263 Location: Inside left hand door panel



Do not stand in front of Mast or underneath rear of Mast when raising or lowering.

PART NO. D-003 Location: Inside left hand door panel



PART NO. D-152 Location: Inside left hand door panel

Check for overhead obstructions before raising or lowering mast.

PART NO. D-005 Location: Inside left hand door panel



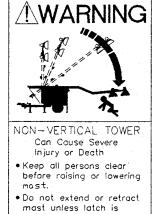
D-160

PART NO. D-160 Location:On pintle hitch

CALIFORNIA

Proposition 65 Warning Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

PART NO. D-179 Location: Inside left hand door panel



securely in place. D-164

PART NO. D-164 Location: On mast pivot section

DESCRIPTION OF OPERATION

The Allmand **MAXI-LITE** 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.



- 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 SUP-PORT 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 STUDY-ING 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.



- 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)

 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 EN-GAGED.

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 Allmand MAXI-LITE 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.

- ALWAYS CHECK FOR OVERHEAD OB-STRUCTIONS BEFORE RAISING AND LOWERING MAST. ALLOW 35' CLEAR-ANCE. AVOID ALL OVERHEAD ELECTRI-CAL 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 EQUIP-MENT FOR DAMAGE OR WEAR. FAMILIARIZE YOURSELF WITH THE LOCATION AND FUNCTION OF ALL OPERATING PARTS BY STUDYING THIS MANUAL. OBSERVE ALL CAUTION DECALS LO-CATED 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.

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)

 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 EN-GAGED.

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.
- 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.

NOTE. In testing the Lister-Petter engine at the factory, the manufacturer uses an oil for moderate and low temperatures. This oil is specially formulated to assist in the break in period, and we would like it to be left in the engine for the first 100 hours. Additional information on fuel and lubrication specifications is found in the Lister Petter Industrial Engine Operators Handbook.

	OIL VISCOSITY				FUEL	
TEMPERATURE ON						
STARTING	• C	۰F	MONOGRADE	MULTIGRADE	ASTM D-975-77	
BELOW	-15	5	5W	5W/20	#1 Diesel Fuel	
BETWEEN AND	-15 4	5 39	10 W	10W/30	#1 Diesel Fuel	
BETWEEN AND	4 30	39 86	20/20W	15W/40	#1 Diesel Fuel	
ABOVE	30	86	30	15W/40 20W/40	#1 Diesel Fuel	

See the KUBOTA 905 EBG1 or 1105 EBG1 Engine Operators Handbook or the PERKINS 103-10 Engine Operators Handbook for information on oil and fuel requirements.

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 chain secure).
- 2. All outriggers and jacks are retracted and secured.
- 3. Tower is lowered and the rear tower support pin is in place.
- 4. Light fixtures are positioned for transport.
- 5. Doors are closed and se
 - cure.
- 6. Check for adequate tire
- pressure.
- 7. Taillights are connected and operating (if equipped).
- 8. Ground rod is removed from ground and secured in the trailer

GROUND ROD INSTRUCTIONS

- 1. Remove ground rod stowed aside 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 fue! 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/STOPPING INSTRUCTIONS STARTING THE LISTER PETTER ENGINE

NOTE: LPW-3 Lister includes a glow plug and cold start system controlled by the start assist switch on the control panel. This switch also activates the fuel solenoid for quick starts. Use the switch routinely during engine starts.

- 1. Turn ON/OFF toggle switch to the up (ON) position.
- 2. Depress preheat, start-assist switch engaging the fuel solenoid and powering the glow plug. Hold in until step 3 (next column) has been completed

NOTE: At temperatures below 30 F. depress the preheat switch for approximately one minute before going on to step 3.

3. Depress start switch until the engine fires. Release

start assist switch and start switch as soon as the engine starts.

NOTE: To prevent equipment damage, do not hold start switch in for more thon 10 seconds Allow cool down time between cranking intervals.

STOPPING THE LISTER PETTER ENGINE

1. Turn ON/OFF toggle switch to the down (OFF) position.

STARTING THE KUBOTA AND PERKINS ENGINES

NOTE: The Kubota and the Perkins engines 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 cooi-down between each. After 3 attempts allow to cool to ambient temperature.

STOPPING THE KUBOTA AND PERKINS EN-GINES

- 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.

MODEL AND SERIAL NUMBERING SYSTEM

SERIAL NUMBER LOCATION

Trailer: All MAXI-LITE models have a serial number plate located just below the rear tower support on the rear panel.

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

Engine: Plate attached to the engine. **LPW – 3** Top of intake manifold.

KUBOTA D905-BG and D1105-BG Left side, between

manifold and starter.

ISUZU 3LB1 and PERKINS 103-10: Upper right front corner behind injector pump

DESCRIPTION OF MODELS AND OPTIONS

The **MAXI-LITE** light tower uses four 1000 Watt Metal Halide lamps with the exclusive Allmand SHO lighting system to produce a total of 334,204 lumens (83,551 lumens per fixture). Optional reflective visors and 6-light units are available. The lights are mounted on either a manual winch or electric winch tower. The manual tower is operated by two hand crank winches. One winch, mounted on the trailer frame, erects the mast from the horizontal towing position to vertical. The second winch, mounted on the tower, extends the mast vertically to the desired height. The second tower is operated by a 120V electric winch located inside the trailer housing. The electric winch erects the mast from horizontal to vertical and by releasing a lock handle extends the mast vertically to the desired height. The tower power cords are available as either straight cord or a cord reel. Inside fixture storage is offered for the 4-light option.

The heavy duty trailer shell has 12 gauge doors and roof panels. The shell houses the 15" wheels and tires inside the side panels. The front panels are rust proof ABS plastic. The **MAXI-LITE** light tower is powered by either a Lister Petter LPW-3 16.5 hp water cooled engine, one of two Kubota water cooled engines, 10.5 hp or 13.6 hp., or an Isuzu water cooled 16 hp diesel engine. Each engine mounts to either the 6KW or 8KW generator. The trailer houses a 50 gallon poly fuel tank and an optional sound attenuation package.

ELECTRICAL

Hard wired electrical circuits Easily serviceable componentized ballast assemblies. Ground rod. Hour meter. Voltmeter (optional) External 120V and 240V outlets (optional).

FLOOD LIGHT ASSEMBLY

Four or six 1000 watt lamp fixtures sealed for all weather use. Lamps can be either the SHO 1000 fixture, 1250 watt fixture or PowerLite fixture.

SHO 1000 FIXTURE - BT-37 lamp, Metal Halide, Laboratory rated life is 10,000 hours.

Lumen rating: 110,000 Warm-up time: 2-4 minutes Restart time: 10-15 minutes

POWERLITE FIXTURE = BT=56 1000 watt Multi-Vapor lamp, Metal Halide, Laboratory rated life is 12,000 hours.

Lumen rating: 110,000 Warm-up time: 2-4 minutes Restart time: 10-15 minutes

POWERLITE FIXTURE - E-25 1000 watt High Pressure Sodium lamp (often referred to as H.P.S), Laboratory rated life is 24,000 hours.

Lumen rating: 140,000 Warm-up time: 4-6 minutes Restart time: 1 minute **NOTE**: A trailer equipped with Metal Halide lights and a trailer equipped with High Pressure Sodium lights use different ballasts and starters. Therefore, it is not advisable to interchange bulb types.

MAST

Three-section steel tube mast, which extends to 30 feet. The mast is extended with either two manual winches or one Dutton-Lainson electric winch. The assembly includes self-lubricating nylon guide rollers and 360° rotating light bar.

TRAILER

The complete generator 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.

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. This system was engineered to allow the light plant to remain operational in sustained winds of 65 MPH with the mast extended to full height and the outriggers in position.

The design includes an adjustable-height reversible hitch, which includes a 2" ball and pintle hook hitch.

STABILIZERS

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

MAXI-LITE DIMENSIONS

Height lowered:	6'6" (1.98 m)
Height extended:	30' (9.14 m)
Length:	14'9" (4.49 m)
Width:	6'4"(1.92 m)
Outrigger width:	11'6"(3.5 m)
Trailer:	Structural steel frame
	Leaf spring axle
Wheels & tires:	15"

However, if the running ambient temperatures are much higher than the starting temperatures, a compromise must be made and a higher viscosity oil used (provided starting is satisfactory). Multigrade oils overcome the problem, provided they have a suitable specification.

DOMESTIC SHIPPING WEIGHT

FUEL AND LUBRICATING OIL

The temperatures mentioned in the table are the ambient temperatures at the time the engine is started.

Fixtures:	15 lbs. ea. = 60 lbs.
Trailer with mast:	1,990 lbs. (902.7 kg)
Total weight:	2,050 lbs. (929.9 kg)

LPW-3 ENGINE

LISTER LPW-3 Alpha Series, direct injection 3 Cylinder

Displacement:	85.13 cu. (1396.13 cc)
Bore:	3.38 in. (8.6 cm)
Stroke:	3.15 in.(8.0 cm)
Power output:	16.5 BHP continuous
Power output derating:	3.5% for every 1000 ft
	altitude (305 m)
Air inlet temp: 2% per IO°F Fuel: Fuel consumption: 1.25 ga (4 Oil sump capacity (excluding fi Starting:	

Low oil pressure shutdown, high engine temp. shutdown, and glow plug cold start assist are standard.

KUBOTA D 1105-EBG1 ENGINE

Kubota D1105-EBG1, indirect injection 3 Cylinder

Displacement:		68.53 cu. (1.1 cm)
Bore:		3.07 in. (78 mm)
Stroke:		3.09 in. (78.4 mm)
Power output:		13.6 @ 1800 rpm
Power output dera	ating:	3.0% for every1000 ft.
		altitude (305 m)
		above 360 ft.
Ambient temp:	1% per 10°F (5.	6°C) above 77°F (25°C)
Fuel:		Diesel
Fuel consumption:	:	.63 gal (2.39 L)/hr
Starting: G	low plugs needed	below 45 F. 12V electric
Oil sump capacity	(excluding filter):	5.4 US qt. (5.14 L)

Low oil pressure shutdown, high engine temp. shutdown, and glow plug cold start assist are standard.

KUBOTA D905-EBG1 ENGINE

Kubota D905-EBG1, indirect injection 3 Cylinder				
Displacement:	54.80 cu. in.(898 cm)			
Bore:	2.83 in. (72 mm)			
Stroke:	2.90 in. (73.6 mm)			
Power output:	10.5 BHP@ 1800 rpm			
Power output derating:	3.0% for every1000 ft.			
altitude	(305 m) above sea level			
Ambient temp: 1% per 10° F (5	.6°C) above 77°F (25°C)			
Fuel:	Diesel			
Fuel consumption:	0.63 US gal (2.39 L/hr)			
Starting: Glow plugs needed	below 45' F. 12V electric			
Oil sump capacity (excluding filter)	5.40 US qt. (5.14L)			

Low oil pressure shutdown, high engine temp. shutdown, and glow plug cold start assist are standard.

PERKINS 103.10 ENGINE

Perkins 103.10, Indirect	injection 3 Cylinder
Displacement:	58.3 cu. in. (954 cc)
Bore:	. 75 mm
Stroke:	72 mm
Power output:	10.7 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
	hand all a sume that when a second second

Low oil pressure shutdown, high engine temp. shutdown, and glow plug cold start assist are standard.

CONTROLS AND COMPONENTS

NOTE: COMPONENTS SHOWN ARE STANDARD. PICTURES MAY VARY WITH DIFFERENT OPTIONS.



FIGURE 1

FIGURE 2

FIG. 1. A.C. CONTROL PANEL

- 1. Switch, Circuit Breaker (Lights 1 through 4)
- 2. Switch, Circuit Breaker (24OV Receptacle)
- 3. Switch, Circuit Breaker (120V Receptacles)



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.

FIG. 2. D.C. CONTROL PANEL

- 4. Voltmeter (optional)
- Indicates charging circuit voltage
- 5. Hour Meter
 - Shows total elapsed hours of engine operation.
- 6. Momentary Contact Switch (Electric Winch Model) Lift up to raise and extend the tower. Press down to lower and fold the tower.
- 7. Ignition ON/OFF Switch
- 8. Start Assist Switch
 - Push to activate fuel solenoid and glow plug prior to and while depressing start switch.
- 9. Start Switch
- Push to start.
- 10. 1.5 AMP Circuit Breaker (Electric Winch Model)

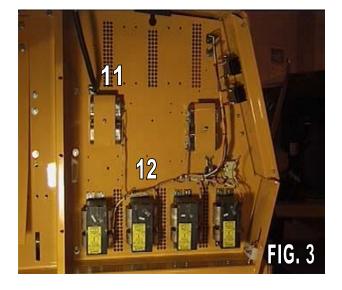


FIG. 3 BALLAST PANEL 11. Ballast, Capacitors 1 through 4 12. Ballast, Transformers 1 through 4

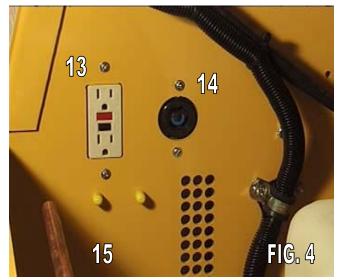


FIG. 4 CONVENIENCE PANEL 13. 120 Volt/ 15 Amp Outlet Receptacles (Ground fault) 14. 240 Volt/ 15 Amp D.C. Outlet Receptacle 15. Power Cord Access Hole



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

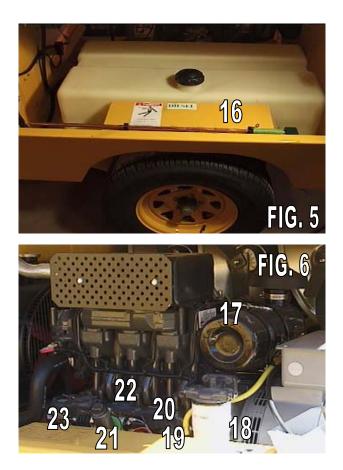


FIG. 5 GROUND ROD

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 code.

FIG. 6 ENGINE (Left Side)

Air Cleaner
 Fuel Filter
 Fuel Lift Pump
 Fuse (10 Amp)
 Oil fill
 Stop Solenoid
 Oil Filter

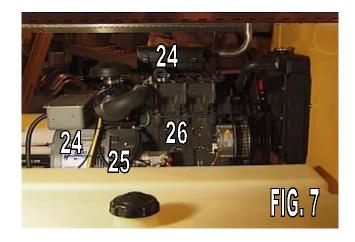


FIG. 7 ENGINE (Right Side)

- 24. Fuel Return Line
- 25. Fuel Suction Line 26. Starter
- 20. Starter 27. Glow Plug



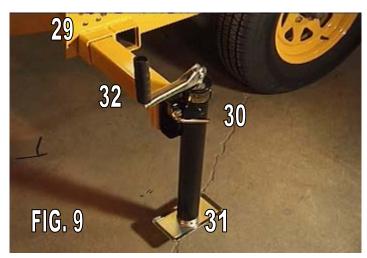


FIG. 8 REAR JACK 28. RearJack



WHEN EXTENDING REAR JACK, WATCH TO INSURE YOU ARE CLEAR OF THE OVERHANGING ENDS OF THE MAST BEFORE

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.



FIG. 10 REAR TOWER SUPPORT 33. Pin—*Locks tower into rear tower support* 34. Rear Tower Support

CONTROLS AND COMPONENTS

NOTE: COMPONENTS SHOWN ARE STANDARD. PICTURES MAY VARY WITH DIFFERENT OPTIONS.

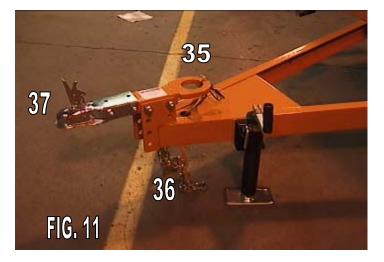


FIG. 11 TONGUE ASSEMBLY 35. Taillight Wiring Harness 36. Safety Tow Chains 37. Reversible Hitch (2" Ball and Pintle Hitch)



FIG. 12 FORKLIFT POCKETS 38. Forklift Pockets 39. Lifting Eye

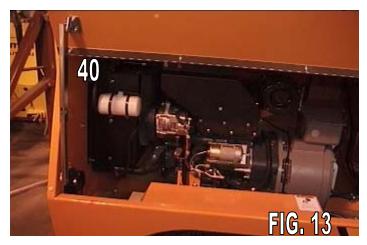


FIG. 13 DOOR PROP 40. Door Prop—Locks Door Panel in Open Position

CONTROLS AND COMPONENTS

NOTE: COMPONENTS SHOWN ARE STANDARD. PICTURES MAY VARY WITH DIFFERENT OPTIONS.



FIG. 14 KICKOUT SPRING 41. Kickout Spring—*Tilts mast off center when folding mast down*



FIG. 15 TOWER LOCKING BAR LATCH

42. Mast Locking Bar Latch --Locks mast in vertical position and allows tower to rotate.

NOTE: Tower must be positioned with the two black triangles on the tower assembly, near the mast handles, pointing at each other. Then the locking bar can be released from the strike plate allowing the tower to rotate toward horizontal towing position.



FIG. 16 MANUAL WINCH HANDLE 43. Winch Handle--Use to raise and fold mast.

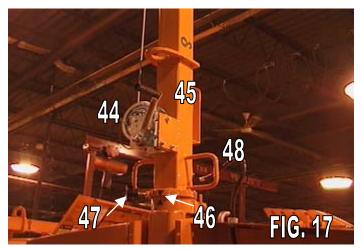


FIG. 17 TOWER CONTROLS

- 44. Manual Winch Use to extend and lower mast..
- 45. Tower Winch Handle
- 46. Alignment Arrows—*Must be aligned to unlock the tower.*
- 47. Lock Knob—Locks tower in position.
- 48.Mast Handles—Use to rotate tower and lights.



FIG. 18 Cord Reel 49. Cord reel —*Available on either Electric or Manual winch models*

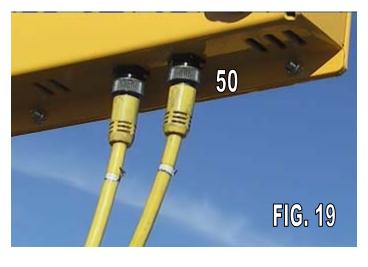


FIG. 19 Cord Reel

50. Lamp Connector Lead—For quick connecting/disconnecting of the lamp fixtures

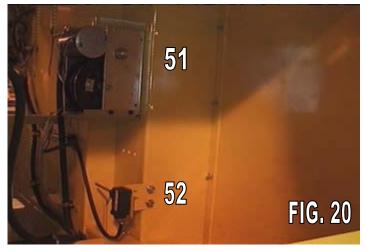


FIG. 20 Electric Winch

- 51. Dutton-Lainson Strong Arm Winch—Used to raise and extend, lower and fold mast.
- 52. Slack Limit Switch—*Shuts off winch when cable slack is sensed by sensor arm.*

NOTE: See pages 10-11, Strong Arm Electric Winch Mast Operation, for correct operating procedures.



FIG. 21 Electric Mast

- 53. Mast Handle—Use to rotate mast.
- 54. Lock Handle—Pull to unlock tower
- sections when raising tower.
- 55. Lock Pin—Prevents accidental release of lock when rotating mast.

LISTER-PETTER LPW-3 INSPECTION AND LUBRICATION SCHEDULE

Check condition of the steel cable and make sure it is properly secured. Check hydraulic fluid level.

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
	Fuel level	Check and fill as necessary.
Daily or 10 Hr.	Lubricating oil	Check level and condition.
	Air Cleaner	Clean under very dusty conditions.
	All 10 Hr. items	As above
125 Hr.	Air Cleaner	Change element if necessary or clean under moderately dusty conditions.
	Battery	Check level of electrolyte.
	Engine Generator assembly	Check for fuel and lubricating oil leaks.
	All 125 Hr. items	As above
250 Hr.	Engine lubricating oil system	Drain lubricating oil, flush out system, renew filter element and refill with correct grade and type oil.
	Fuel Injector Nozzles	Clean if the exhaust is dirty
	Fuel Filter	Renew filter element if fuel not perfectly
		clean.
500 Hr.	All 250 Hr. Items	As above
000 111.	Fuel Filter	Renew filter element.
	All 500 Hr. Items	As above
	Engine Service	Decarbonize if the engine shows loss of compression or blow-by past the piston. Do not disturb otherwise.
	Engine Valves	Adjust clearance.
1000 hr. or yearly	Engine Service	Clean the cylinder and cylinder head finning under dusty conditions if necessary.
	Cable pulley at the bottom of the front mast support	Remove, clean, and grease.
	Cable pulleys on mast	Inspect for wear. Clean and lubricate.
	Axle wheel bearings	Clean and repack.
	Fuel System	Clean sediment from tank.

KUBOTA D905 and D1105 and PERKINS 103-10

INSPECTION AND LUBRICATION SCHEDULE

Check condition of the steel cable and make sure it is properly secured. Check hydraulic fluid level.

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	
	Fuellevel	Check and fill as necessary	
Daily or 10 Hr.	Lubricating oil	Check level and condition	
	All 10 Hr. items	As above	
	Air Cleaner	Service as required. Service	
100 Hr.		requirements may be accelerated	
100 111.	Battery	Check level of electrolyte	
	Engine Generator assembly	Check for fuel and lubricating oil	
		leaks	
	All 100 Hr. items	As above	
		Drain lubricating oil, flush out	
200 Hr.	Engine lubricating oil system	system, renew filter element and	
200		refill with correct grade and type	
		oil	
	Coolant	Check level and condition	
400 Hr.	Fuel Filter	Replace with new.	
	All 200 Hr. Items	As above	
500 Hr.	Fan belt	Check tension and condition	
	Radiator	Clean out fins with water or air	
	All 500 Hr. Items	As above	
	Engine Valves	Adjust clearance	
	Cable pulley at the bottom of	Remove, clean, and grease	
1000 hr. or yearly	the front mast support	Remove, clean, and grease	
Tooo III. of yearly	Cable pulleys on mast	Inspect for wear. Clean and	
	Cable pulleys on mast	lubricate	
	Axle wheel bearings	Clean and repack	
	FuelSystem	Clean sediment from tank	

KUBOTA AND ISUZU

PERKINS ONLY

- i - i	<i>'</i>			8 hours					
	First			(20/50 hc					
		Every 100 hours or 3 months							
		[Every 200 hours or 6 months						
				Every 40	00 hours or 12 months				
				Eve	ery 600 hours or 18 months				
•	•	•	•	•	Check level of coolant (Top up with coolant only)				
				•	Check concentration of coolant				
					Renew Coolant (FILL SLOWLY, ENSURE CORRECT QUANTITY IS USED)				
•			•	• •	Check engine lubricating oil level				
	٠	•	•	• •	Renew engine oil (FILL SLOWLY, ENSURE CORRECT QUANTITY IS USED)				
	•	•	•	••	Renew engine oil filter				
	٠	•	1	• •	Drain water from fuel filter and pre-filter				
			•		Renew fuel filter canister (N.B. Air vent screws on filter and fuel pump)				
	٠	•	•	• •	Check tension of alternator drive belt				
· .				•	Check alternator drive belt for wear				
					Renew alternator drive belt				
		•			Check and adjust idle speed				
					Tighten cylinder head				
				•	Check and adjust valve clearances				
				•	Check electrical systems				
					Check all nuts/bolts for tightness				
				•	Check injectors for performance				
	٠	•	•		Clean air filter (earlier check may be necessary)				
					Renew air filter element				
•	•	•	•		Check and correct any leaks or engine damage				



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.

When one lamp does not light, **TURN OFF THE GENERATOR** and test the lamp by switching leads with a lamp that **DOES** light. **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.	 Circuit breakers in the outlet box are not turned on or have tripped. 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. The lam or lamps are burned out or broken. One or more of the lamps are not screwed in securely. Plug and socket at light bar not securely pushed together and locked. 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. Low electrical system voltage. A loose connection in the back of the lamp socket in the lamp holder. A loose connection on the terminal board. The engine and generator are not running up to speed (1800 RPM) A wrong style replacement lamp (requiring a different ballast) has been installed. Too much power is being drawn from the auxiliary outlets. Corrosion has occurred on the lamp bases.



ML 6/ML 8 PARTS MANUAL

ALLMAND BROS. INC P.O. BOX 888 HOLDREGE, NE 68949

PHONE: 308/995-4495, 1-800/562-1373 ALLMAND FAX: 308/995-5887 ALLMAND PARTS FAX: 308/995-4883



For Parts and Updates visit Allmand on the Web at www.allmand.com

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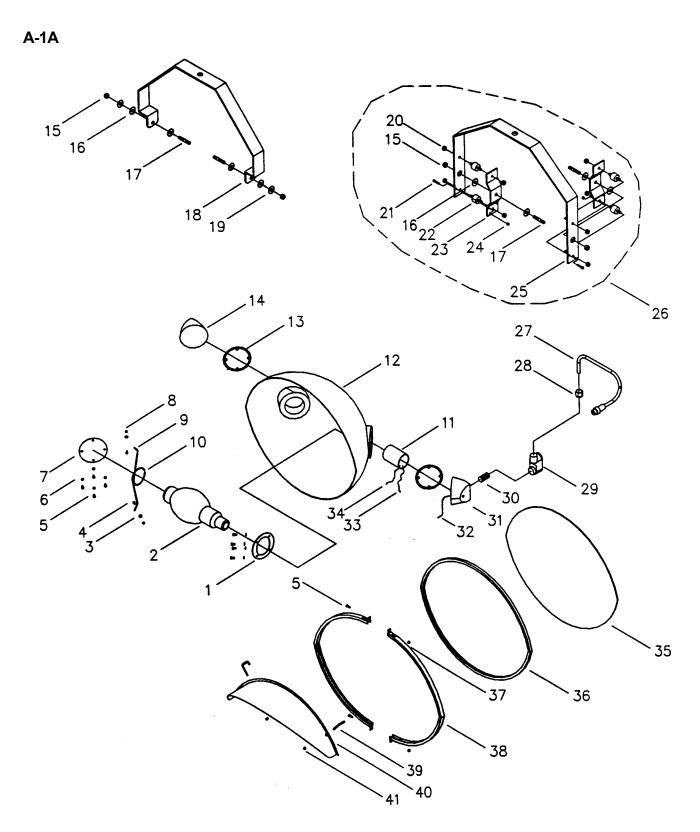
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MAXI-LITE SERIES

SHO 1000 METALLIC VAPOR LAMP SHO 1000 HIGH PRESSURE SODIUM LAMP



MAXI-LITE SERIES SHO 1000 METALLIC VAPOR LAMP SHO 1000 HIGH PRESSURE SODIUM LAMP

NO	REQ'D	PART NO	DESCRIPTION A-1B	
NS		610250	LAMP HOLDER ASS'Y WITH YOKE AND LAMP (SOLID MT.) (REM. FIXTURES)	
NS		610265	LAMP HOLDER ASS'Y WITH YOKE AND LAMP (SOLID MT.) (HPS)	
NS		610255	LAMP HOLDER ASSEMBLY W/YOKE, LAMP AND CUSHIONS	
NS		610253	(CUSHION MT.) LAMP HOLDER ASSEMBLY W/YOKE, LAMP AND CUSHIONS (CUSHION MT.) (HPS)	
NS		650144	LAMP HOLDER ASSEMBLY WITH YOKE AND LAMP	
NS		610263	LAMP HOLDER ASSEMBLY WITH YOKE AND CUSHIONS, W/ HPS LAMP (CUSHION MOUNT)	
1	1	610208	ALUMINUM RING	
2	1	610211	LAMP BT-37	
2A	1	610218	LAMP 1000W SHO ED37 (HPS)	
3	2	**	#8 WASHER (STAINLESS STEEL)	
4	2	**	#8-32 NC X 1/2 HEX HEAD BOLT (STAINLESS STEEL)	
5	8	041028	#10-24 NC X 1/2 HEX HEAD BOLT (STAINLESS STEEL)15	
6	8	043017	#10 INTERNAL TOOTH WASHER	
7	1	610207	ALUMINUM PLATE	
8	2	044013	#8 -32 NC NYLON INSERT NUT (STAINLESS STEEL)	
9	1	610209		
NS	1	650250	LAMP TIP SUPPORT (HIGH PRESSURE SODIUM)	
10 11	1 1	610210 610212	LAMP TIP SUPPORT TUBE CERAMIC SOCKET	
12	1	610201	REFLECTOR	
13	2	610213	END HOUSING GASKET	
14	1	610206	RH SOLID END CASTING	
15	2	044037	3/8 - 24 NF NYLON INSERT NUT	
16	4	047019	.75 OD x.385 ID x.20 NYLON WASHER	
17	2	045142	3/8 - 24 NF X 3/8 - 16 NC X 2" STUD	
18	1	680493	SOLID MOUNT YOKE	
19	2	047016	3/8 SAE WASHER	
20		044031	5/16-18 KEPS NUT	
21	2	041035	#10 - 24 NC X 1 1/4 ROUND HEAD BOLT	
22	4	610260	RUBBER SHOCK MOUNT SHO 1000	
23	2	610235	SHO CUSHION MOUNT PLATE	
24	2	044018	10-24 NYLON LOCK NUT	
25	1	610234	SHO 1000 CUSHION MOUNT YOKE	
26		610236	SHO 1000 CUSHION MOUNT YOKE ASSEMBLY	
27	1	650159	16/3 PORTABLE CORD 66	
27A 28	1	310434	LAMP CONNECTOR AND LEAD (REMOVEABLE FIXTURE ONLY) 1/2-CORD GRIP	
28 29	1	510007 610214	1/2" ENTRANCE ELBOW	
30	1	610215	1/2 CONDUIT NIPPLE	
31	1	610205	LH SOCKET END CASTING	
32	1	**	GREEN HEAT TEMP WIRE	
33	1	**	BLACK HEAT TEMP WIRE LEGEND: NS= Not Shown	
34	1	**	WHITE HEAT TEMP WIRE ** =Purchase locally	
35	1	610203	LENS	
36	1	610217	LENS GASKET (SILICONE)	
37	2	044019	#10-24 NYLON INSERT NUT (STAINLESS)	
38	1	610202	LENS CHANNEL SET	
39	2	045070	#10-24 NC SQ BD HOOK BOLT (W/VISOR)	
40	1	610017	SHO 1000 LIGHT VISOR (OPTIONAL	n d ·
41	2	044016	#10-24 NC KEPS NUT * Use these codes to designate color neede	:0:
			01-White 06-Allmand Gold 02-Gloss Black 09-Elat Black	

 01-White
 06-Allmand Gold

 02-Gloss Black
 09-Flat Black

 03-Gray
 10-High temp Black

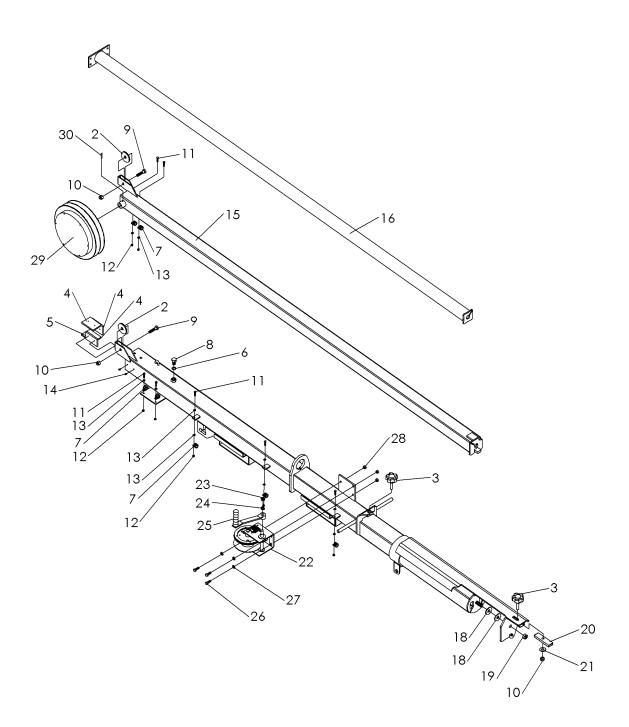
 04-Allmand Yellow
 11-Red

 05-Orange
 11-Red

MAXI-LITE SERIES

MANUAL WINCH TOWER ASSEMBLY

B-1A



MAXI-LITE SERIES

MANUAL WINCH TOWER ASSEMBLY

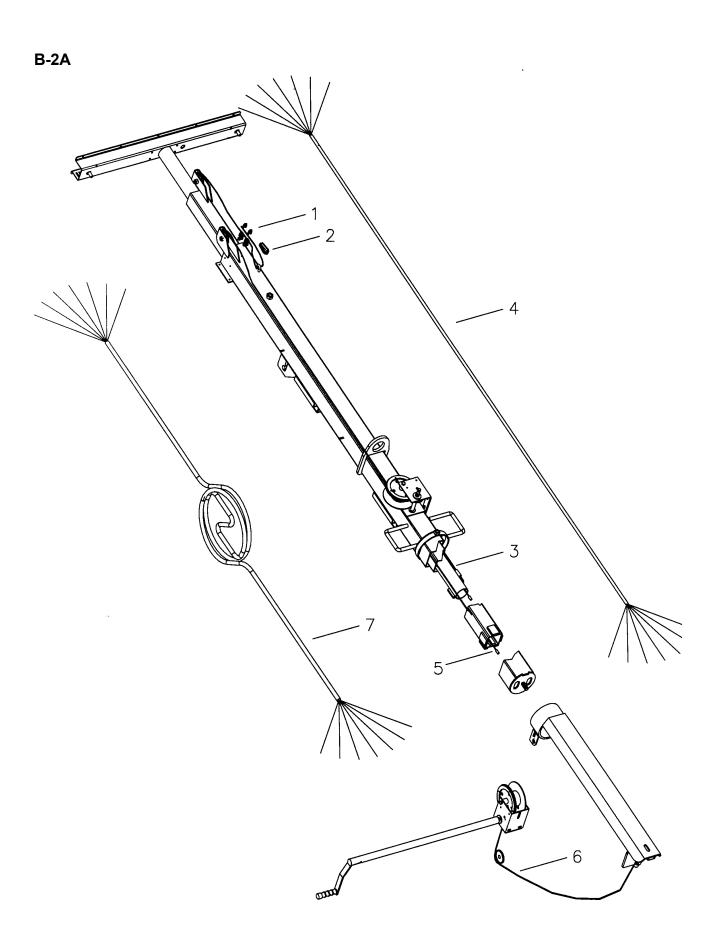
B-1B

NO	REQ'D	PART NO	DESCRIPTION
1	1	680102*	4" MANUAL WINCH TOWER WELDMENT
2	2	320110	3" PULLEY W/BUSHING
3	2	620550	1/2 - 13 NC X 2 1/8 LOCKING KNOB
4	3	650110	.312 TOWER PAD
5	1	352280	PLASTIC TOWER PAD
6	1	043100	5/8 INTERNAL TOOTH LOCK WASHER
7	8	310212	#8 CUSHION CLAMP
8	1	046242	5/8 - 11 NC X 1 GRADE 5 BOLT
9	2	046200	1/2 - 13 NC X 2 1/4 GRADE 5 BOLT
10	3	044048	1/2 -13 NC NYLON INSERT NUT
11	8	046015	1/4 - 20 NC X 1" GRADE 5 HEX BOLT
12	8	044023	1/4 - 20 NC NYLON INSERT NUT
13	14	047009	1/4" FLATWASHER STAINLESS STEEL
14	8	041023	#10 X 3/8 SELF-TAPPING PLASTIC SCREW
15	1	680180*	3" TOWER WELDMENT MANUAL WINCH
16	1	352017*	2-5/8" MANUAL TOWER WELDMENT FOR REM. LIGHT BAR
17	1	620511	WELDMENT, TOWER SUPPORT
18	2	047030	5/8 FLAT WASHER (with painted tower)
	1	047030	5/8 FLAT WASHER (with galvanized tower)
19	1	044053	5/8 - 11 NC NYLON INSERT NUT
20	1	650145	MAST LOCKING BAR
21	1	047025	1/2" PLATED FLAT WASHER
22	1	610531	DLB 1200 BRAKE WINCH - PLATED
23	1		1/2" NUT (SUPPLIED WITH WINCH)
24	1		WINCH SPRING (SUPPLIED WITH WINCH)
25	1	712032	HANDLE FOR DLB 1200 - 7"
26	3	046110	3/8 - 16 NC X 1 GRADE 5 BOLT
27	3	047010	5/16" FLAT WASHER
28	3	044038	3/8 -16 NC NYLON INSERT NUT
29	1	320410	CORD REEL (OPTIONAL)
30	1	320453	3/16" X 1-3/4" ROLL PIN

* Use these codes to designate color needed:

06-Allmand Gold 10-High temp Black 11-Red

MAXI-LITE SERIES MANUAL WINCH TOWER CABLE ROUTING



MAXI-LITE SERIES MANUAL WINCH TOWER CABLE ROUTING

NO	REQ'D	PART NO	DESCRIPTION	B-2B
1	2	620084	WIRE ROPE CLIP 3/16"	D-2D
2	1	045040	WIRE ROPE THIMBLE, ¼"	
3	1	620076	STEEL CABLE 3/16- X 11'	
4	1	650140	MAST WIRING - 14/7 X 324" (STRAIGHT CORD)	
5	1	650133	STEEL CABLE 3/16" X 17' 9"	
6	1	320185	STEEL CABLE 3/16" X 10'	
7	1	352016	MAST WIRING 16/8 X 344" (CORD REEL 4 LIGHT)	
	1	352083	MAST WIRING 16/10 X 344" (CORD REEL 6 LIGHT)	
		680209*	MANUAL WINCH TOWER (4 Light) Complete W/Light Ba	ar Assy
		680210*	MANUAL CORD REEL TOWER (4 Light) Complete W/Li	ght Bar Assy
		680213*	MANUAL WINCH TOWER (6 Light) Complete W/Light Ba	ar Assy
		680214*	MANUAL CORD REEL TOWER (6 Light) Complete W/Li	ght Bar Assy

INSTRUCTIONS FOR REPLACING STEEL CABLES.

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 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 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.

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 3" MAST SECTIONS TOGETHER.

REMOVE ALL 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 4 TOWER PADS.

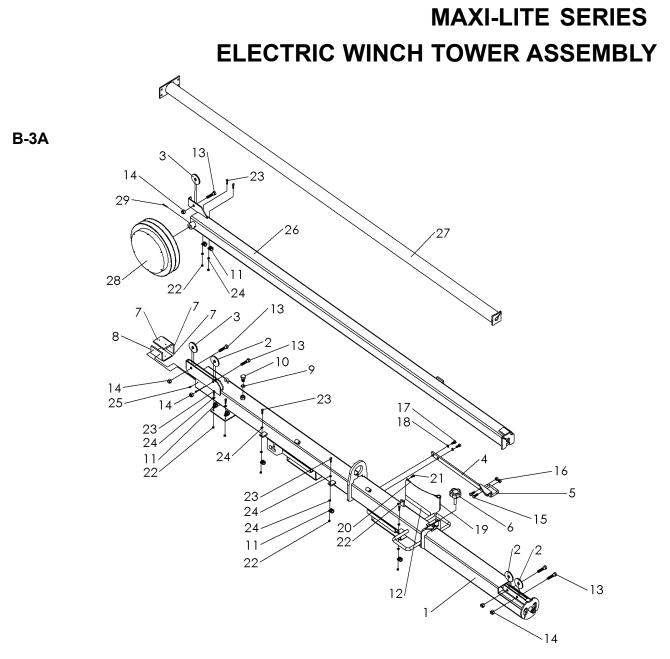
ATTACH CABLE TO WINCH AND WIND IN CLOCKWISE DIRECTION UNTIL ALL SLACK IS OUT. REPLACE STOP BOLT AND WASHER.

REPLACE CUSHION CLAMPS AND MAST WIRING ON 4" MAST SECTION.

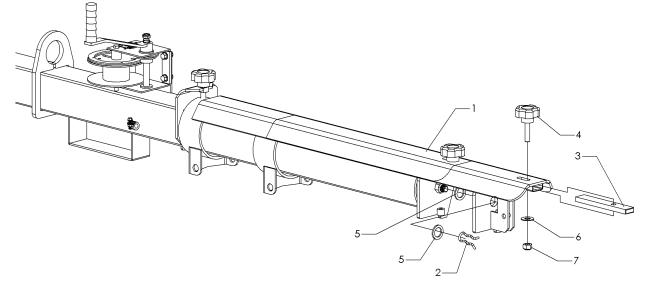
REPLACE MAST WIRING IN BALLAST COMPARTMENT. (SEE ELECTRICAL SCHEMATIC)

3/16 X 10'

REMOVE ALL BROKEN AND FRAYED CABLE. FEED NEW CABLE THROUGH EYELET IN MAST PIVOT SECTION. FEED THROUGH PULLEY BRACKETS AND AROUND PULLEY IN FRONT UPRIGHTS. ATTACH CABLE TO WINCH AND WIND IN CLOCKWISE DIRECTION UNTIL ALL SLACK IS OUT.



ELECTRIC WINCH MAST PIVOT SECTION ASSEMBLY



ELECTRIC WINCH TOWER ASSEMBLY

NO	REQ'D	PART NO	DESCRIPTION	B-3B
1	1	680184*	WELDMENT, 4" TOWER, ELECTRIC	0-00
2	3	320112	2 1/2" PULLEY W/BUSHING	
3	2	320110	3" PULLEY	
4	1	620579	LOCK SPRING	
5	1	620577	LOCK HANDLE	
6	1	620550	LOCKING KNOB 1/2 - 13 NC X 2 1/8"	
7	2	650110	PLASTIC TOWER PAD, .312	
8	1	352280	PLASTIC TOWER PAD 5/16 SHORT	
9	1	043100	5/8 INTERNAL TOOTH LOCK WASHER	
10	1	046242	5/8 - 11 NC X 1 GRADE 5 BOLT	
11	8	022022	#8 CUSHION CLAMP	
12	1	090309	SPRING LATCH RELEASE DECAL	
13	5	046200	1/2 - 13 NC X 2 1/4 GRADE 5 BOLT	
14	5	044048	1/2 - 13 NC NYLON INSERT NUT	
15	2	046110	3/8 - 16 NC X 1 GRADE 5 BOLT	
16	2	044080	3/8 - 16 NC TOPLOCK NUT	
17	2	046105	3/8 - 16 NC X 3/4 GRADE 5 BOLT	
18	2	043070	3/8 INTERNAL TOOTH LOCK WASHER	
19	1	046438	1/4" X 3" QUICK RELEASE PIN	
20	1	712061	STEEL LANYARD	
21	4	046010	1/4 - 20 NC X 3/4 GRADE 5 BOLT	
22	9	044023	1/4 - 20 NC NYLON INSERT NUT	
23	8	046015	1/4 - 20 NC X 1" GRADE 5 BOLT	
24	14	047009	1/4" SS FLAT WASHER	
25	8	041023	#10 X 3/8 SELF TAPPING PLASTIC SCREW	
26	1	680185*	3" ELECTRIC WINCH TOWER WELDMENT	
27	1	352050*	REMOVEABLE LIGHT BAR 2 5/8" ROUND TOWER W	/ELDMENT
28	1	320410*	CORD REEL (used on cord reel towers only)	
29	1	320453	3/16 X 1 3/4 ROLL PIN (used on cord reel towers only)	

ELECTRIC WINCH MAST PIVOT SECTION ASSEMBLY

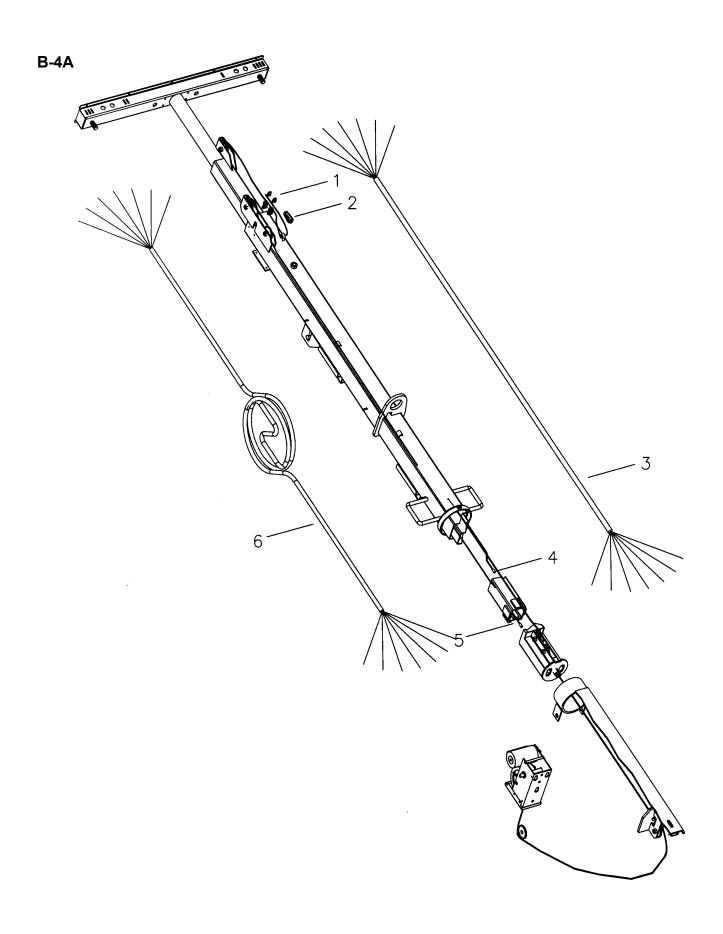
NO	REQ'D	PART NO	DESCRIPTION
1	1	620570*	TOWER SUPPORT WELDMENT, ELECTRIC WINCH
2	1	620545	3/4 PLATED HAIRPIN CLIP
3	1	352168	MAST LOCKING BAR, ELECTRIC WINCH
4	1	620550	LOCKING KNOB 1/2 - 13 NC X 2 1/8"
5	2	047055	1" NARROW RIM PLATED MACHINE BUSHING
6	1	047025	1/2" PLATED FLAT WASHER
7	1	044048	1/2 - 13 NC NYLON INSERT NUT

* Use these codes to designate color needed:

LEGEND: NS= Not Shown ** =Purchase locally 01-White 02-Gloss Black 09-Flat Black 03-Gray 04-Allmand Yellow 11-Red 05-Orange

06-Allmand Gold 10-High temp Black

ELECTRIC WINCH TOWER CABLE ROUTING



MAXI-LITE SERIES ELECTRIC WINCH TOWER CABLE ROUTING

NO	REQ'D	PART NO	DESCRIPTION
1	2	620084	WIRE ROPE CLIP 3/16 B-4B
2	1	045040	WIRE ROPE THIMBLE, 1/4
3	1	620525	MAST WIRING - 14/7 X 324" (4-LIGHT STRAIGHT CORD)
		352094	MAST WIRING - 16/10 X 324" (6-LIGHT STRAIGHT CORD)
4	1	320185	STEEL CABLE 3/16" X 10'
5	1	352054	STEEL CABLE 7/32" X 26'
6	1	352016	MAST WIRING 16/8 X 344" (cord reel 4 light)
	1	352083	MAST WIRING 16/10 X 344" (cord reel 6 light)
NS		680204*	ELECTRIC ST. CORD TOWER (4 Light) Complete W/Light Bar Assy
		680203*	ELECTRIC CORD REEL TOWER (4 Light) Complete W/Light Bar Assy
		680207*	ELECTRIC ST. CORD TOWER (6 Light) Complete W/Light Bar Assy
		680208*	ELECTRIC CORD REEL TOWER (6 Light) Complete W/Light Bar Assy

INSTRUCTIONS FOR REPLACING STEEL CABLES.

3/16 X 10'

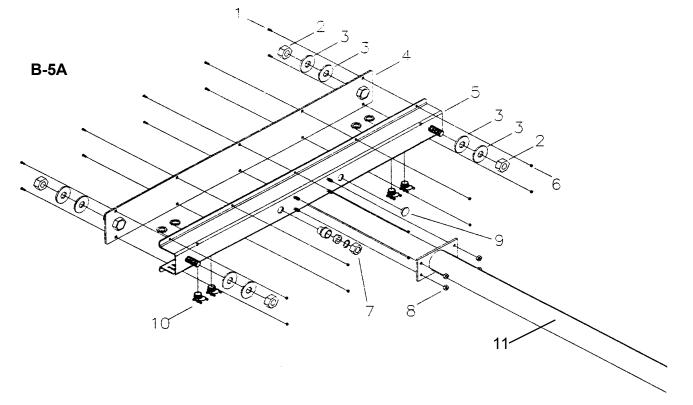
REMOVE THE CUSHION CLAMPS AND MAST WRING FROM 3" MAST SECTION. REMOVE LIGHT BAR BY REMOVING 4 NUTS ON BAR AND LAY BAR ON GROUND. REMOVE THE WIRE ROPE CLIPS AT TOP END OF THE 4" MAST SECTION. REMOVE THE 3" PULLEY AT THE END OF THE 3" MAST SECTION. REMOVE THE 2 5/8" ROUND MAST SECTION. REMOVE ALL BROKEN 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 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- SECTION. REMOVE ALL 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 4 NYLON ROLLERS. REPLACE STOP BOLT AND WASHER. RUN NEW CABLE ON OUTSIDE OF 4" SECTION. REPLACE 2 1/2" PULLEY. REPLACE TOWER ASSEMBLY ON TRAILER. REPLACE MAST WIRING IN BALLAST COMPARTMENT. (SEE ELECTRICAL SCHEMATIC) RUN NEW CABLE THROUGH PULLEY BRACKEIS IN FRONT OF TRAILER. ATTACH CABLE TO ELECTRIC WINCH. WIND IN CLOCKWISE DIRECTION UNTIL ALL SLACK IS OUT. 01-White 06-Allmand Gold 02-Gloss Black 09-Flat Black

LEGEND: NS= Not Shown ** =Purchase locally * Use these codes to designate color needed:

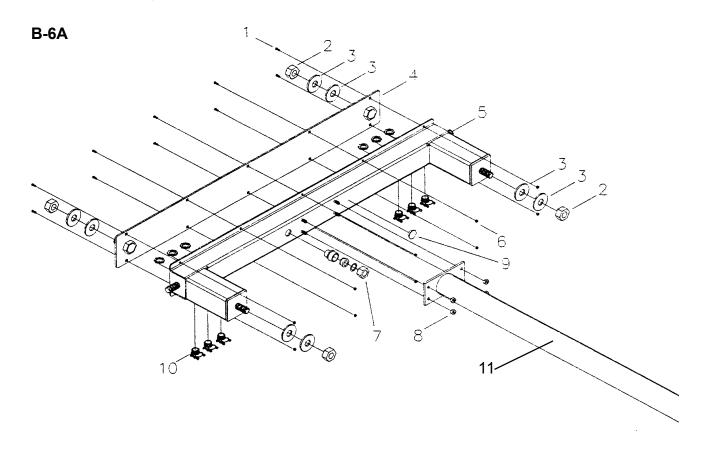
03-Gray 04-Allmand Yellow 05-Orange

10-High temp Black 11-Red

4-LIGHT REMOVABLE LIGHT BAR ASSEMBLY



6-LIGHT REMOVABLE LIGHT BAR ASSEMBLY



4-LIGHT REMOVABLE LIGHT BAR ASSEMBLY

B-5B

NO	REQ'D	PART NO	DESCRIPTION
		352042*	LIGHT BAR ASSEMBLY, 4-LIGHT
1	10	**	1/4 - 20 NC X 1/2 CARRIAGE BOLT
2	4	**	3/4 - 10 NC NYLON INSERT NUT
3	8	**	3/4 FLAT WASHER
4	1	620537*	LIGHT BAR COVER PLATE
5	1	650319*	LIGHT BAR FRAME ONLY
6	10	**	1/4 - 20 NC KEPS NUT
7	1	310033	CORD GRIP NUT - METAL
7A	1	022039	1/2" BUSHING
8	4	**	5/16 - 18 NC KEPS NUT
9	1	711029	LOCKING HOLE PLUG
10	4	310414	LAMP CONNECTOR, FEMALE
11	1	325017*	2 5/8 ROUND TOWER SECTION (Manual removeable light bar)
	1	352050*	2 5/8 ROUND TOWER SECTION (Electric removeable light bar)

LEGEND: NS = Not Shown

** =Purchase locally

6-LIGHT REMOVABLE LIGHT BAR ASSEMBLY

B-6B

NO	REQ'D	PART NO	DESCRIPTION
		352045*	LIGHT BAR ASSEMBLY, 6-LIGHT
1	10	**	1/4 - 20 NC X 1/2 CARRIAGE BOLT
2	4	**	3/4 - 10 NC NYLON INSERT NUT
3	8	**	3/4 FLAT WASHER
4	1	352031*	LIGHT BAR COVER PLATE
5	1	352030*	LIGHT BAR FRAME ONLY
6	10	**	1/4 - 20 NC KEPS NUT
7	1	310033	CORD GRIP NUT - METAL
7A	1	022039	1/2" BUSHING
8	4	**	5/16 - 18 NC KEPS NUT
9	1	711029	LOCKING HOLE PLUG
10	6	310414	LAMP CONNECTOR, FEMALE
11	1	325017*	2 5/8 ROUND TOWER SECTION (Manual removeable light bar)
	1	352050*	2 5/8 ROUND TOWER SECTION (Electric removeable light bar)

LEGEND: NS = Not Shown ** =Purchase locally

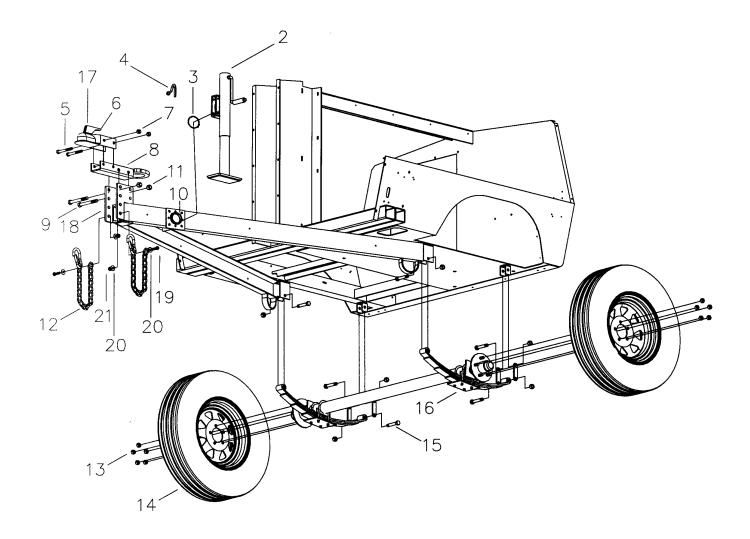
* Use these codes to designate color needed:

01-White	06-Allmand Gold
02-Gloss Black	09-Flat Black
03-Gray	10-High temp Black
04-Allmand Yellow	11-Red
05-Orange	

TRAILER ASSEMBLY PARTS AND ACCESSORIES

AXLE ASSEMBLY, HITCH ASSEMBLY AND TONGUE JACK

C-1A



TRAILER ASSEMBLY PARTS AND ACCESSORIES

AXLE ASSEMBLY, HITCH ASSEMBLY AND TONGUE JACK C-1B

NO	REQ'D	PART NO	DESCRIPTION
2	1	650235	SIDE CRANK JACK, SNAP RING (SHOWN)
-	1	680558	SIDE CRANK JACK, TUBE MOUNT (NOT SHOWN)
	1	680879	TOP CRANK JACK, TUBE MOUNT (NOT SHOWN)
	1	330013	JACK LOCK PIN (USE WITH 680558 and 680879)
3	1	330014	JACK SNAP RING 2 5/16 XT (USE WITH 650235)
4		330012A	JACK HOLE PIN KIT
5	2	**	1/2 - 13 NC X 4 GRADE 5 BOLT
6	1	712021	BALL COUPLER ONLY
7	2	**	1/2 - 13 NC TOPLOCK NUT
8	1	712540*	PINTLE HITCH WELDMENT
9	2	**	5/8 - 11 NC X 5 GRADE 5 BOLT
10		330009	JACK MOUNTING BRACKET W/SNAP RING
11	2	**	5/8 - 11 NC TOPLOCK NUT
12		049040	SAFETY CHAIN SET
13	10	**	AXLE LUG NUT
14	2	680124*	WHEEL & TIRE 15" ORANGE SPOKE
		352157	WHEEL ORANGE SPOKE
		680136	WHEEL SPOKE (ALLMAND GOLD)
		032020	TIRE P225/75R15
		032075	TIRE VALVE STEM
15	1	032025	AXLE MOUNTING HARDWARE KIT
16	1	352021	AXLE 3000 LB. 56"/44"
17		712021	2" BALL COUPLING KIT
18	-	712552	HITCH PLATE, ONE EACH
19	2		7/16-14NC X 1 1/2" GRADE 5 BOLT
20	4	**	3/8 FLAT WASHER
21	2		7/16-14NC NYLON LOCK NUT
NS		600770*	REVERSIBLE HITCH ASSY.
NS		330007	HUB W/RACES
NS		330005	BEARING SET
NS		330004	HUB W/RACES AND BEARING SET
NS		650236	PLASTIC JACK CAP

LEGEND: NS= Not Shown ** =Purchase locally

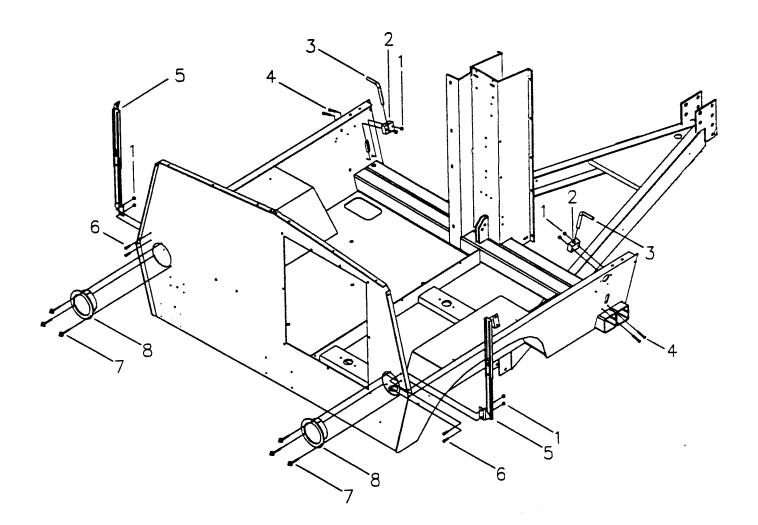
* Use these codes to designate color needed:

01-White	06-Allr
02-Gloss Black	09-Fla
03-Gray	10-Hig
04-Allmand Yellow	11-Rec
05-Orange	

TRAILER ASSEMBLY PARTS AND ACCESSORIES

TAILLIGHTS, DOOR PROPS AND OUTRIGGER LOCKS

C-2A



TRAILER ASSEMBLY PARTS AND ACCESSORIES

TAILLIGHTS, DOOR PROPS AND OUTRIGGER LOCKS C-2B

NO	REQ'D	PART NO	DESCRIPTION
1	8	**	1/4-20 NC NYLON INSERT NUT
2	2	330430	OUTRIGGER PIN BLOCK
3	2	330455	OUTRIGGER PIN
4	4	* *	1/4 - 20 NC X 1 3/4 SS SCREW
5	2	352057	TELESCOPIC PROP
6	4	* *	1/4 - 20 NC X 1 SS SCREW
7	6	* *	3/16 ALUMINUM RIVETS
8	2	650129	TAILLIGHT
		352037	TAILLIGHT WIRING HARNESS
		680190	TAILLIGHTASSEMBLY

LEGEND: NS= Not Shown ** =Purchase locally

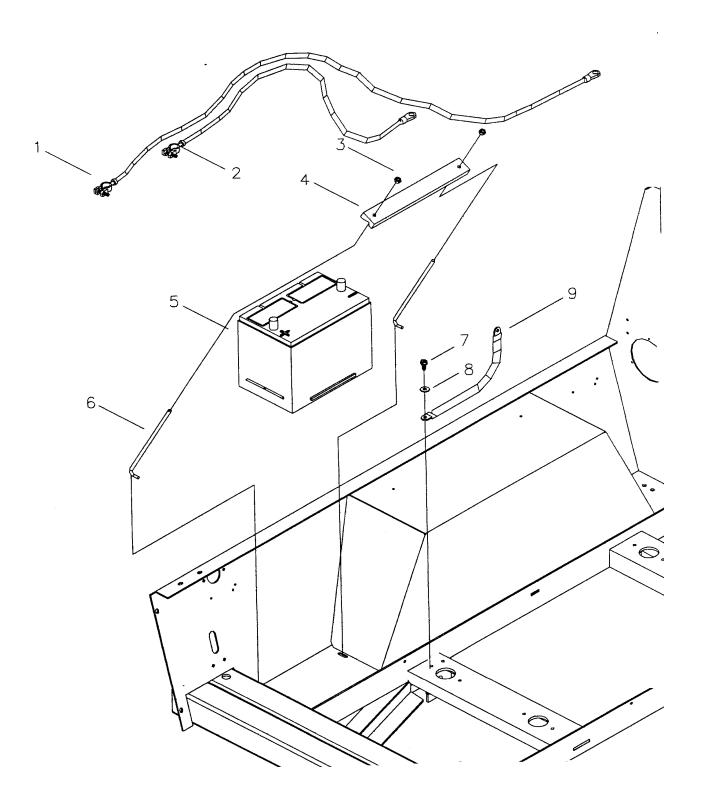
* Use these codes to designate color needed:

01-White0602-Gloss Black0903-Gray1004-Allmand Yellow1105-Orange

TRAILER ASSEMBLY PARTS AND ACCESSORIES

BATTERY, CABLES, AND GROUND STRAP

C-3A



TRAILER ASSEMBLY PARTS AND ACCESSORIES

C-3B

BATTERY, CABLES, AND GROUND STRAP

NO	REQ'D	PART NO	DESCRIPTION
1	1	713098	36" BATTERY CABLE
2	1	027010	21" BATTERY CABLE
3	2	**	5/16 - 18 NC NYLON INSERT NUT
4	1	340017	NYLON BATTERY HOLD DOWN
5	1	024002	12 VOLT BATTERY
	1	024003	12 VOLT BATTERY (ARCTIC SPL. ONLY)
6	2	433507	J-B0LT 5/16 X 11"
7	1	**	1/4-18 NC X 1 BOLT W/ KEPS NUT
8	2	**	1/4 FLAT WASHER
9	1	340105	GROUND STRAP

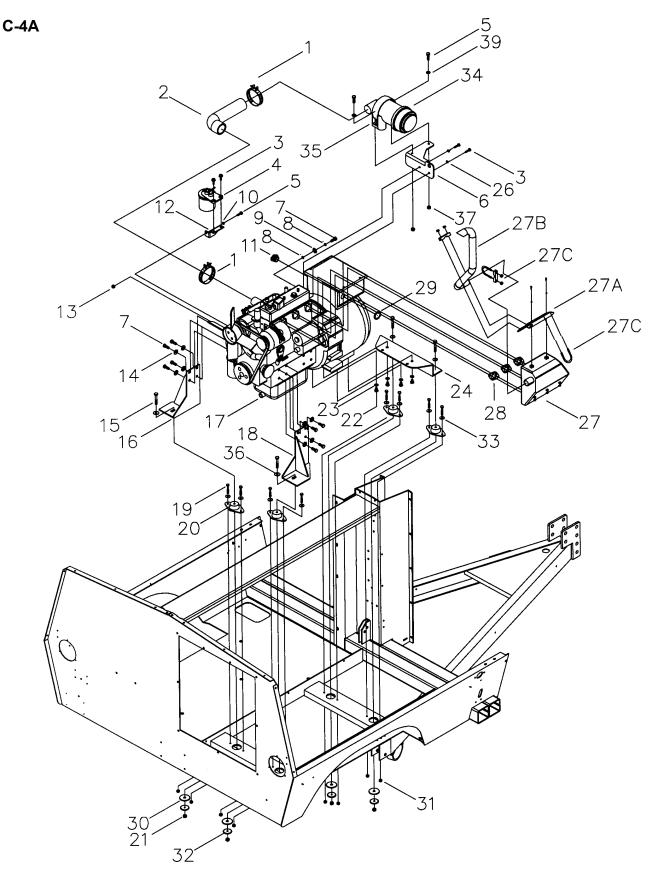
LEGEND: NS= Not Shown ** =Purchase locally

* Use these codes to designate color needed:

01-White0602-Gloss Black0503-Gray1004-Allmand Yellow1105-Orange

TRAILER ASSEMBLY PARTS AND ACCESSORIES

KUBOTA/PERKINS ENGINE/GENERATOR SET



TRAILER ASSEMBLY PARTS AND ACCESSORIES

KUBOTA/PERKINS ENGINE/GENERATOR SET

C-4B

NO	REQ'D	PART NO	DESCRIPTION
1	2	045038	HOSE CLAMP #32
2	1	650272	AIR INTAKE HOSE, KUBOTA
3	2	**	8mm X 20mm X 1.25 GRADE 8.8 BOLT
4	1	920745	KUBOTA FUEL FILTER
5	2	**	5/16 - 18 NC X 1 1/4 GRADE 5 BOLT
6	1	650291*	AIR CLEANER MOUNT PLATE, KUBOTA
7	9	**	10mm X 20mm X 1.25 GRADE 8.8 BOLT
8	2	**	3/8 FLAT WASHER
9	1	**	3/8 INTERNAL TOOTH LOCK WASHER
10	2	**	5/16 INTERNAL TOOTH LOCK WASHER
11	1	022025	2-SCREW ROMEX CLAMP 3/4
NS		022036	3/4" STEEL LOCK NUT
12	1	@@@	FUEL FILTER MOUNTING PLATE
13	5	**	5/16 - 18 NC KEPS NUT
14	8	**	3/8 SAE FLAT WASHER
15	4	**	3/8 - 16 NC X 2 1/4 GRADE 5 BOLT
16	1	640283*	ENGINE MOUNT BRACE, RIGHT KUBOTA
	1	680127*	ENGINE MOUNT BRACE, RIGHT PERKINS
17	1	100990	KUBOTA 1105 WITH DEEP SEA PANEL
18	1	640282*	ENGINE MOUNT BRACE, LEFT KUBOTA
	1	680126*	ENGINE MOUNT BRACE, LEFT PERKINS

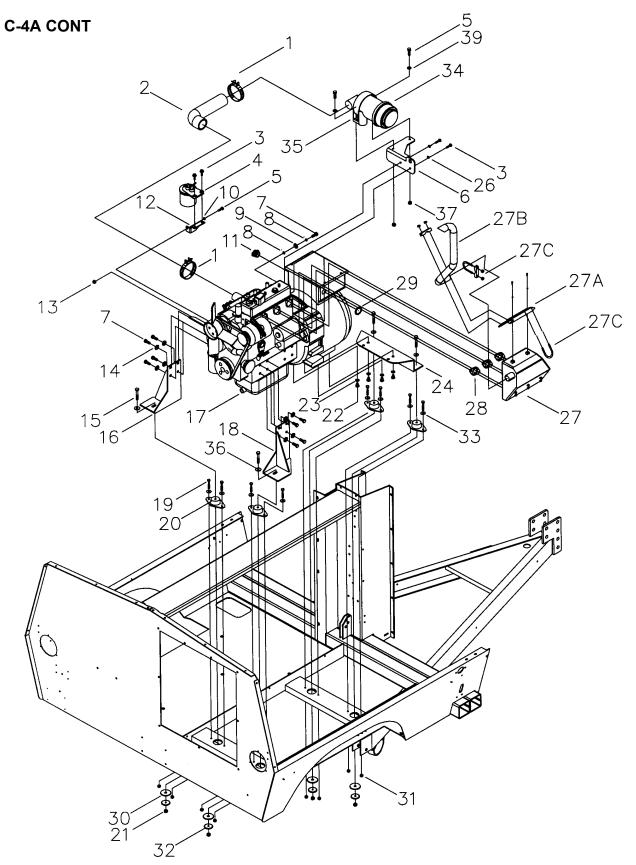
LEGEND: NS= Not Shown ** =Purchase locally @@@ =See Kubota Dealer

* Use these codes to designate color needed:

01-White 02-Gloss Black 03-Gray 04-Allmand Yellow 05-Orange

TRAILER ASSEMBLY PARTS AND ACCESSORIES

KUBOTA/PERKINS ENGINE/GENERATOR SET



TRAILER ASSEMBLY PARTS AND ACCESSORIES

KUBOTA/PERKINS ENGINE/GENERATOR SET C-4B CONT

NO	REQ'D	PART NO	DESCRIPTION
19	8	**	5/16-18 NC X 1 GRADE 5 BOLT
A.S.	4	640565	WASHER MUSHROOM CUSHION MOUNT
A.S.	4	650260	WASHER SNUBBING
NS	4	640500	MUSHROOM CUSHION MOUNT
20	4	650259	RUBBER ENGINE MOUNTS-120 LB (KUBOTA)
21	4	**	3/8-16 NC NYLON INSERT NUT
22	2	**	3/8-16 NC X 1 GRADE 5 BOLT
23	2	**	3/8 SPLIT LOCK WASHER
24	1	680128*	GENERATOR MOUNT PLATE, KUBOTA/PERKINS
A. S.	1	680232*	GENERATOR MOUNT PLATE, NEWAGE
25	4	**	8mm X 25mm X 1.25 GRADE 8.8 BOLT
26	5	**	5/16 SPLIT LOCK WASHER
NS	1	651232	KUBOTAMUFFLER
27	1	352139	KUBOTA BOX MUFFLER KIT
27A	1	352126-10	KUBOTA BOX MUFFLER HEAT SHIELD
27B	1	352140	KUBOTA EXHAUST PIPE
27C	1	313086	MUFFLER CLAMP
28	1	352135	EXHAUST MANIFOLD MOUNT GASKET (KUBOTA)
29	1	**	CAP PLUG
30	4	640565	ENGINE MOUNT WASHER
31	8	**	5/16 - 18 NYLON INSERT NUT
32	4	650260	SNUBBING WASHER
33	4	**	3/8 FLAT WASHER
34	1	650262	AIR CLEANER RADIAL SEAL (KUBOTA ONLY)
35	2	650263	AIR CLEANER BAND RADIAL SEAL (KUBOTA ONLY)
36	4	**	3/8 FLAT WASHER
NS	1	651232	CATMUFFLER
NS	1	100898	FUEL/ WATER SEPERATOR
NS	1	101022P	WATER SEPERATOR BRACKET
NS	1	654000	8Kw AVR MARATHON GENERATOR

LEGEND: NS= Not Shown ** =Purchase locally @@@ =See Kubota Dealer @@@@ =See Perkins Dealer

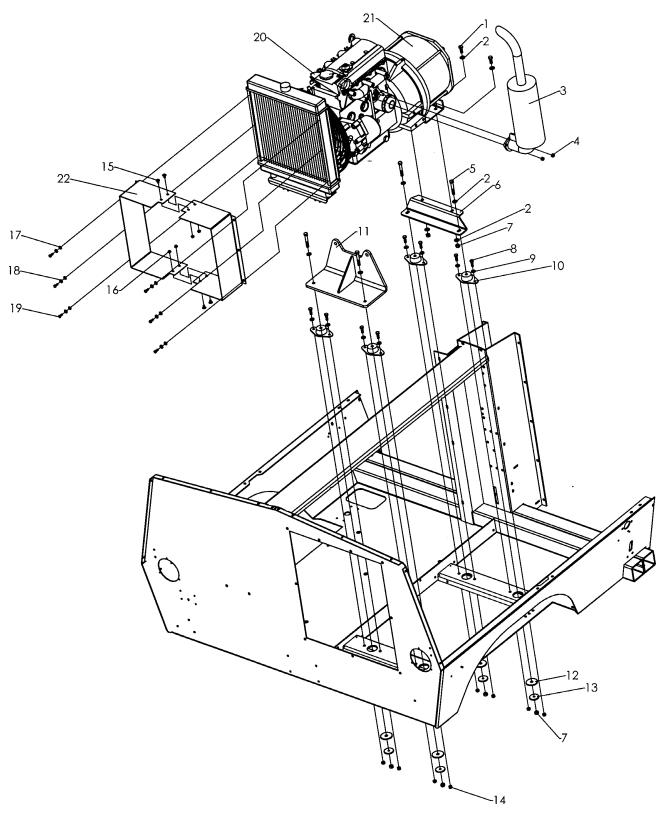
* Use these codes to designate color needed:

01-White 02-Gloss Black 03-Gray 04-Allmand Yellow 05-Orange

TRAILER ASSEMBLY PARTS AND ACCESSORIES

LOMBARDINI ENGINE/GENERATOR SET





TRAILER ASSEMBLY PARTS AND ACCESSORIES

LOMBARDINI ENGINE/GENERATOR SET

C-4D

NO	REQ'D	PART NO	DESCRIPTION
1	2	046110	3/8 - 16 NC X 1" GRADE 5 BOLT
2	6	047016	3/8" FLAT WASHER
3	1	651236	MUFFLER
4	2	042082	8mm X 1.25 HEX NUT
5	4	046124	3/8 - 16 NC X 2 - 1/2" GRADE 5 BOLT
6	1	680479*	LOMBARDINI MAXI GENERATOR MOUNT PLATE
7	6	044038	3/8 - 16 NC NYLON INSERT NUT
8	8	046050	5/16 - 18 NC X 1" GRADE 5 BOLT
9	8	047011	5/16" FLAT WASHER
10	4	650259	RUBBER ENGINE MOUNT120 LB.
11	1	680478*	LOMBARDINI MAXI ENGINE MOUNT PLATE
12	4	640565	ENGINE MOUNT WASHER
13	4	650260	SNUBBING WASHER
14	8	044033	5/16 - 18 NC NYLON INSERT NUT
15	4	041078	1/4 - 20 X 1/2" PHILLIPS HEAD TRUSS SCREW
16	4	044021	1/4 - 20 KEPS NUT
17	6	047070	10mm FLAT WASHER
18	6	043020	1/4" SPLIT LOCK WASHER
19	6	042019	6mm X 1.0 X 16mm HEX BOLT
20	1	650830	LOMBARDINI LDW 903 ENGINE
21	1	650592	POWRGARD 6 KW GENERATOR
22	2	650567*	RADIATOR SHROUD
NS	1	650010	FUEL FILTER
NS	1	650011	OIL FILTER
NS	1	650012	AIR FILTER
NS	3	650013	GLOW PLUG
NS	1	101898	FUEL/WATER SEPERATOR
NS	1	101022P	WATER SEPERATOR BRACKET

LEGEND: NS= Not Shown ** =Purchase locally

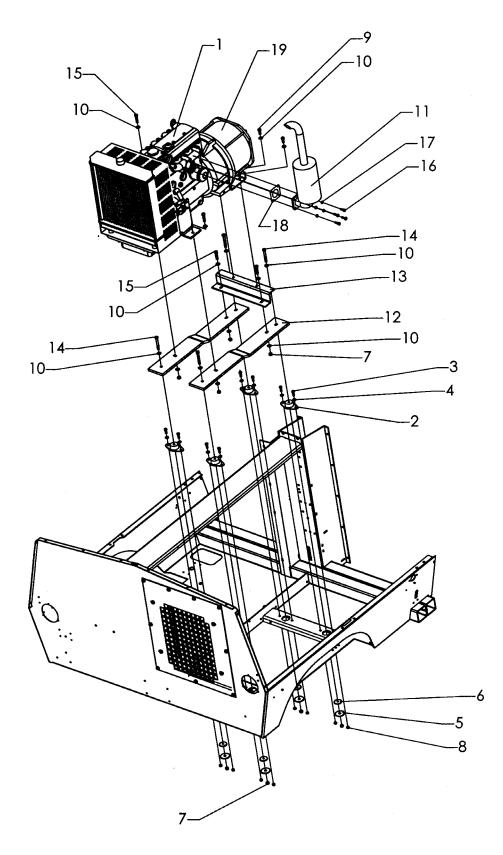
* Use these codes to designate color needed:

01-White06-Allma02-Gloss Black09-Flat03-Gray10-High04-Allmand Yellow11-Red05-Orange10-High

TRAILER ASSEMBLY PARTS AND ACCESSORIES

CAT 3011C ENGINE/GENERATOR SET

C-4E



TRAILER ASSEMBLY PARTS AND ACCESSORIES

CAT 3011C ENGINE/GENERATOR SET

C-4F

NO	REQ'D	PART NO	DESCRIPTION
1	1	352097	CAT 3011C D RATE
		352236	CAT 3011C NON-D RATE
2	4	650259	RUBBER ENGINE MOUNT120 LB.
3	8	046050	5/16 - 18 NC X 1" GRADE 5 BOLT
4	8	047011	5/16" FLAT WASHER
5	4	640565	ENGINE MOUNT WASHER
6	4	650260	SNUBBING WASHER
7	8	044038	3/8 - 16 NC NYLON INSERT NUT
8	8	044033	5/16 - 18 NC NYLON INSERT NUT
9	2	046110	3/8 - 16 NC X 1" GRADE 5 BOLT
10	14	047016	3/8" FLAT WASHER
11	1	651232	MUFFLER
12	2	680550	MAXI BRIDGE PLATE
13	1	680549*	CAT 3011C MAXI GENERATOR MOUNT PLATE (for Baldor and Marathon
14	4	046096	3/8 - 16 NC X 3" GRADE 8 BOLT
15	4	046126	3/8 - 16 NC X 1-3/4" GRADE 8 BOLT
16	4	042031	8mm X 1.25 X 25mm HEX BOLT
17	4	043055	5/16" PLATED SPLIT LOCK WASHER
18	1	**	MUFFLER GASKET
19	1	650592	BALDOR 6 KW GENERATOR
	1	640144	BALDOR 8 KW GENERATOR
	1	654000	8Kw AVR MARATHON GENERATOR
NS	1	100898	FUEL WATER SEPERATOR
NS	1	101022P	WATER SEPERATOR BRACKET

LEGEND: NS= Not Shown ** =Purchase locally

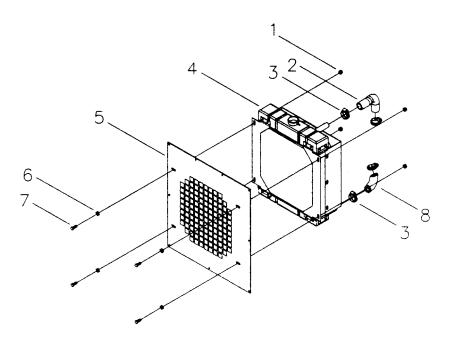
* Use these codes to designate color needed:

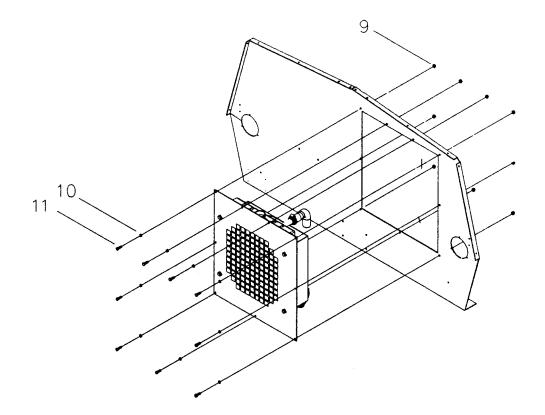
01-White06-Allma02-Gloss Black09-Flat03-Gray10-High04-Allmand Yellow11-Red05-Orange10-High

TRAILER ASSEMBLY PARTS AND ACCESSORIES

KUBOTA RADIATOR AND MOUNTING PLATE

C-5A





TRAILER ASSEMBLY PARTS AND ACCESSORIES

KUBOTA RADIATOR AND MOUNTING PLATE

C-5B

NO	REQ'D	PART NO	DESCRIPTION
1	4	**	3/8 - 16 NC KEPS NUT
2	1	@@@	UPPER RADIATOR HOSE
3	4	045035	#20 HOSE CLAMP
4	1	Call Factory	KUBOTA RADIATOR
5	1	680122*	KUBOTA/PERKINS RADIATOR MOUNT PLATE
6	4	**	3/8 FLAT WASHER
7	4	**	3/8 - 16 NC X 1 GRADE 5 BOLT
8	1	000	LOWER RADIATOR HOSE
9	9	**	5/16 - 18 NC KEPS NUT
10	9	**	1/4 FLAT WASHER
11	9	**	5/16 - 18 NC X 3/4 GRADE 5 BOLT

LEGEND: NS= Not Shown ** =Purchase locally

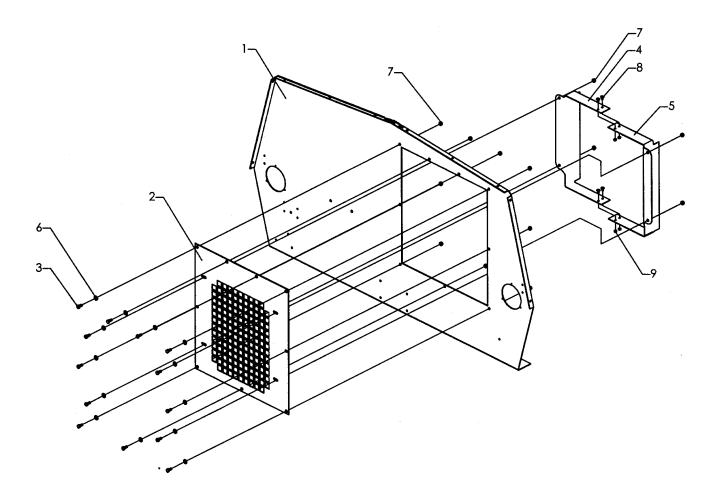
* Use these codes to designate color needed:

01-White06-Allma02-Gloss Black09-Flat03-Gray10-High04-Allmand Yellow11-Red05-Orange10-High

TRAILER ASSEMBLY PARTS AND ACCESSORIES

CAT 3011C RADIATOR MOUNTING PLATE

C-5C



TRAILER ASSEMBLY PARTS AND ACCESSORIES

C-5D

CAT 3011C RADIATOR MOUNTING PLATE

NO	REQ'D	PART NO	DESCRIPTION
1	1	352000C	MAXI REAR PANEL
2	1	680552*	CAT 3011C RADIATOR PLATE
3	13	046045	5/16 - 18 NC X 3/4 GRADE 5 BOLT
4	1	680547	CAT 3011C RAD SHROUD LEFT SIDE
5	1	680548	CAT 3011C RAD SHROUD RIGHT SIDE
6	13	047010	5/16 FLAT WASHER
7	13	044031	5/16 - 18 NC PLATED KEPS NUT
8	4	041078	1/4 - 20 X 1/2" PLATED PHILLIPS TRUSS HEAD SCREW
9	4	044021	PLATED KEPS NUT

LEGEND: NS= Not Shown ** =Purchase locally

* Use these codes to designate color needed:

 01-White
 06

 02-Gloss Black
 09

 03-Gray
 10

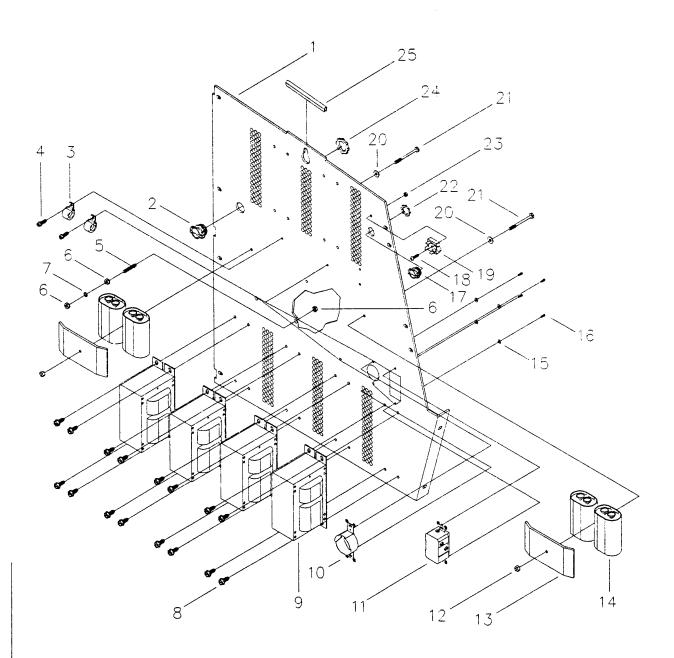
 04-Allmand Yellow
 11

 05-Orange
 11

TRAILER ASSEMBLY PARTS AND ACCESSORIES

4-LIGHT BALLAST ASSEMBLY

C-6A



TRAILER ASSEMBLY PARTS AND ACCESSORIES

4-LIGHT BALLAST ASSEMBLY

C-6B

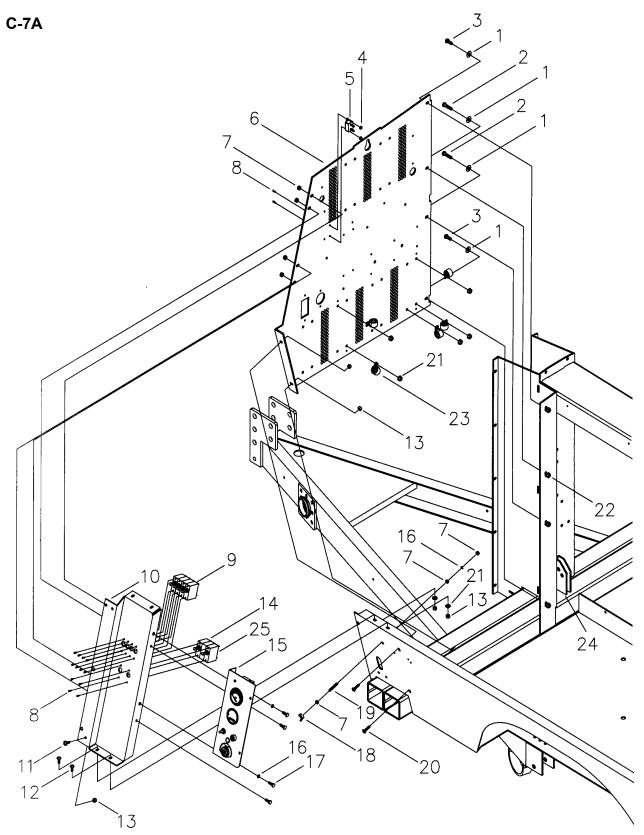
NO	REQ'D	PART NO	DESCRIPTION
		310118	HPS TRANSFORMER, CAPACITOR, AND STARTER
		310119	HPS CAPACITOR AND STARTER ONLY
1	1	680119*	BALLAST PANEL, ONLY
2	1	022025	2-SCREW ROMEX CLAMP, 3/4
3	2	**	7/8 CUSHION CLAMP
4	2	* *	1/4 - 20 NC SELF TAPPING SCREW
5	1	* *	1/4 - 20 NC X 1 1/2 STUD BOLT
6	3	**	1 4 20 NC KEPS NUT
7	1	**	1 4 INTERNAL TOOTH LOCK WASHER
8	16	* *	5/16 - 18 NC INTERNAL TOOTH LOCK WASHER
9	4	310124	TRANSFORMER ONLY
10	1	330490	RECEPTACLE 240V. 15A (6KW ONLY)
	1	330491	RECEPTACLE 250V. 30A (8KW ONLY)
		330501	RECEPTACLE 120V. 30A
11	1	630132A	RECEPTACLE 120V. GFCI
	1	330499	20 AMP DUPLEX GFCI (8KW ONLY)
NS	1	330432	RECEPTACLE COVER FOR GFCI RECEPTACLE
12	2	**	1/4 - 20 NC NYLON INSERT NUT
13	2	610570-03	DUAL CAPACITOR MOUNTING CLAMP
14	4	310115	CAPACITOR ONLY, 24 UF (for Models 683, 883, 895XL)
		310391	CAPACITOR ONLY, 28 UF (for Models 695 and 895)
15	4	**	#8 STAINLESS STEEL FLAT WASHER
16	4	**	#6 - 32 NC X 3/8 ROUND HEAD SCREW
17	1	022020	2-SCREW ROMEX CLAMP, 3/8 (ELECTRIC WINCH)
S	1	711029	7/8 HOLE PLUG (MANUAL WINCH)
18	1	**	#10 - 24 NC X 3/4 ROUND HEAD SCREW
19	1	630157A	BRIDGE ASSEMBLY (ELECTRIC WINCH)
S		352466	2 AMP BREAKER (USED W/630157A)
20	2	**	1/4 FLAT WASHER
21	2	**	1/4 - 20 NC X 24 GRADE 5 BOLT
22	1	022034	STEEL LOCK NUT, 3/8"
23	1	**	#10 - 24 NC KEPS NUT
24	1	022036	STEEL LOCK NUT, 3/4"
25	1	030054	RUBBER EDGE TRIM 3/16 X 5" LONG

LEGEND: NS= Not Shown ** =Purchase locally

* Use these codes to designate color needed:

TRAILER ASSEMBLY PARTS AND ACCESSORIES

4-LIGHT AC GAUGE PANEL ASSEMBLY



TRAILER ASSEMBLY PARTS AND ACCESSORIES

4-LIGHT AC GAUGE PANEL ASSEMBLY C-7B

NO	REQ'D	PART NO	DESCRIPTION
1	4	**	5/16 FLAT WASHER
2	2	**	5/6 - 18 NC X 1 1/4 GRADE 5 BOLT
3	2	**	5/6 - 18 NC X 3/4 GRADE 5 BOLT
4	2	**	#6 - 32 NC KEPS NUT
5	1	650139	30 AMP CIRCUIT BREAKER, KUBOTA ONLY
6	1	680119*	BALLAST PANEL, ONLY
7	7	**	1/4-20 NC KEPS NUT
8	14	**	#6-32 NC X 3/8 ROUND HEAD SCREW
9	4	330458	CIRCUIT BREAKER SWITCH, 15 AMP SP
10	1	680118*	LEFT QUARTER PANEL 4-LIGHT
11	1	**	1/4 - 20 NC X 1 ROUND HEAD NYLON SCREW
12	2	**	1/4 - 20 NC X 3/4 SCREW
13	3	**	1/4 - 20 NC NYLON INSERT NUT
14	1	330459	CIRCUIT BREAKER SWITCH , 15 AMP DP (6KW ONLY)
	1	330453	CARLING SWITCH 20 AMP SP (8KW ONLY)
15	1	680123*	KUBOTA DC GAUGE PANEL
		680129*	PERKINS DC GAUGE PANEL
16	3	**	1/4 INTERNAL TOOTH LOCK WASHER
17	4	**	1/4 - 20 NC X 3/4 GRADE 5 BOLT
18	1	**	1/4 - 20 NC WING NUT
19	1	**	1/4 - 20 NC X 1 1/2 STUD
20	2	**	1/4 - 20 NC X 1 SCREW
21	2	**	1/4 STAINLESS STEEL FLAT WASHER
22	9	**	5/16 - 18 NC KEPS NUT
23	5	022024	3/4" CUSHION CLAMP WITH 3/8 HOLE
24			PULLEY BRACKET (NOTE: USE LOWER HOLE FOR MANUAL
			WINCH AND UPPER HOLE FOR ELECTRIC WINCH)
25	1	330458	CARLING SWITCH, 15 AMP DP (6KW ONLY)
	1	330456	CARLING SWITCH, 30AMP DP (8KW ONLY)

LEGEND: NS= Not Shown ** =Purchase locally

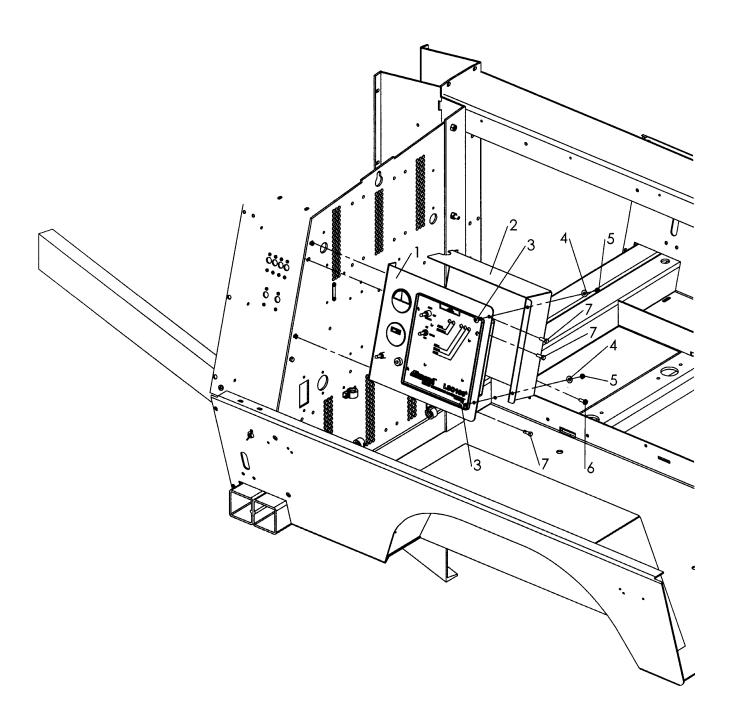
* Use these codes to designate color needed:

01-White	06-Allmand Gold
02-Gloss Black	09-Flat Black
03-Gray	10-High temp Black
04-Allmand Yellow	11-Red
05-Orange	

TRAILER ASSEMBLY PARTS AND ACCESSORIES

4-LIGHT AC GAUGE PANEL AND LSC 100 LIGHT SEQUENCE COMMANDER CONTROLLER PANEL ASSEMBLY

C-7C



TRAILER ASSEMBLY PARTS AND ACCESSORIES

4-LIGHT AC GAUGE PANEL AND LSC 100 LIGHT SEQUENCE COMMANDER CONTROLLER PANEL ASSEMBLY C-7D

NO	REQ'D	PART NO	DESCRIPTION
1	1	680391	LSC 100 CONTROL PANEL ASSEMBLY (STANDARD)
		680392	PANEL FOR ELECTRIC OR HYDRAULIC TOWERS (OPTIONAL)
2	1	650715	LSC 100 COVER BACK
3	2	041050	1/4 - 20 NC X 3/4 ROUND HEAD SCREW
4	2	047005	1/4" FLAT WASHER
5	2	044021	1/4" KEPS NUT
6	1	041070	1/4 - 20 NC X 3/4 MACHINE SCREW
7	3	046010	1/4 - 20 NC X 3/4 HEX BOLT

LEGEND: NS= Not Shown ** =Purchase locally

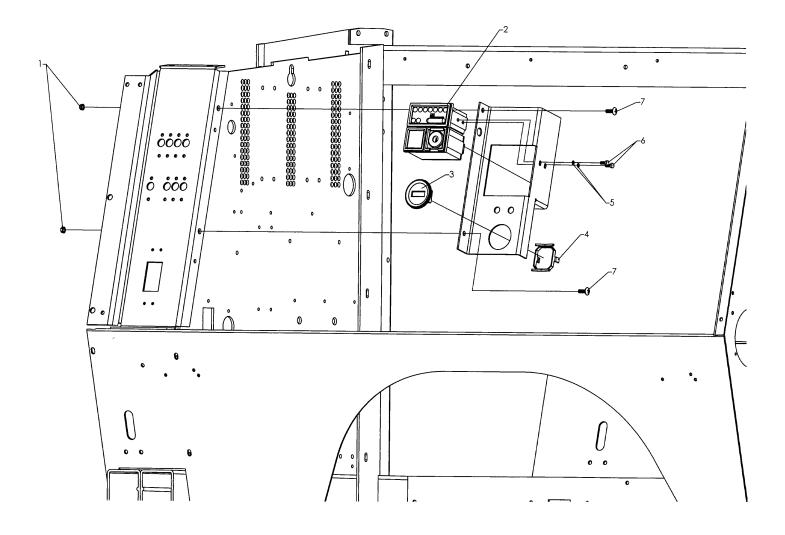
* Use these codes to designate color needed:

01-White002-Gloss Black003-Gray104-Allmand Yellow105-Orange

TRAILER ASSEMBLY PARTS AND ACCESSORIES

LOMBARDINI GAUGE PANEL ASSEMBLY

C-7E



TRAILER ASSEMBLY PARTS AND ACCESSORIES

LOMBARDINI GAUGE PANEL ASSEMBLY

C-7F

NO	REQ'D	PART NO	DESCRIPTION
1	2	044021	1/4" KEPS NUT
2	1	@@@@@@	LOMBARDINI CONTROL PANEL
3	1	340014	HOUR METER
4	1	***	HOUR METER RETAINING BRACKET
5	2	**	#10 INTERNAL TOOTH LOCK WASHER
6	2	**	5mm X .8 X 12mm HEX CAP SCREW
7	2	**	1/4 - 20 NC X 3/4 PHILLIPS HEAD TRUSS SCREW

LEGEND: NS= Not Shown ** =Purchase locally ***=Comes with Hour Meter @@@@@=See Lombardini Dealer

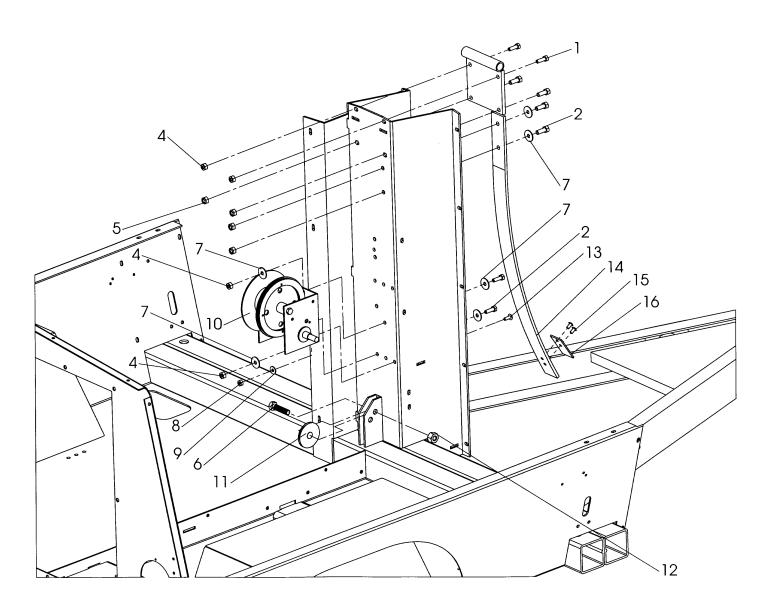
* Use these codes to designate color needed:

01-White 02-Gloss Black 03-Gray 04-Allmand Yellow 05-Orange

TRAILER ASSEMBLY PARTS AND ACCESSORIES

MANUAL WINCH, WINCH HANDLE, AND TOWER SUPPORT ASSEMBLY

C-8A



TRAILER ASSEMBLY PARTS AND ACCESSORIES

C-8B

MANUAL WINCH, WINCH HANDLE, AND TOWER SUPPORT ASSEMBLY

NO	REQ'D	PART NO	DESCRIPTION
1	4	046050	5/16 -18 NC X 1 GRADE 5 BOLT
2	4	046110	3/8 - 16 NC X 1 GRADE 5 BOLT
3	1	680111*	TOWER PIVOT WELDMENT
4	4	044031	5/16 - 18 NC KEPS NUT
5	4	044036	3/8 -16 NC KEPS NUT
6	1	046200	1/2 - 13 NC X 2 1/4 GRADE 5 BOLT
7	6	047010	5/16 FLAT WASHER
8	4	044021	1/4 - 20 NC KEPS NUT
9	1	047005	1/4 FLAT WASHER
10	1	352482	WINCH, PLATED 2500 LBS
11	1	320112	2 1/2 PULLEY W/BUSHING
12	1	044048	1/2 - 13 NC NYLON INSERT NUT
13	1	041050	1/4 - 20 NC X 3/4 SS TRUSS HEAD BOLT
14	1	630555*	TOWER KICK OUT SPRING
15	2	045118	1/4" RIVET
16	1	650621	KICKOUT SPRING PAD

LEGEND: NS= Not Shown ** = Purchase locally

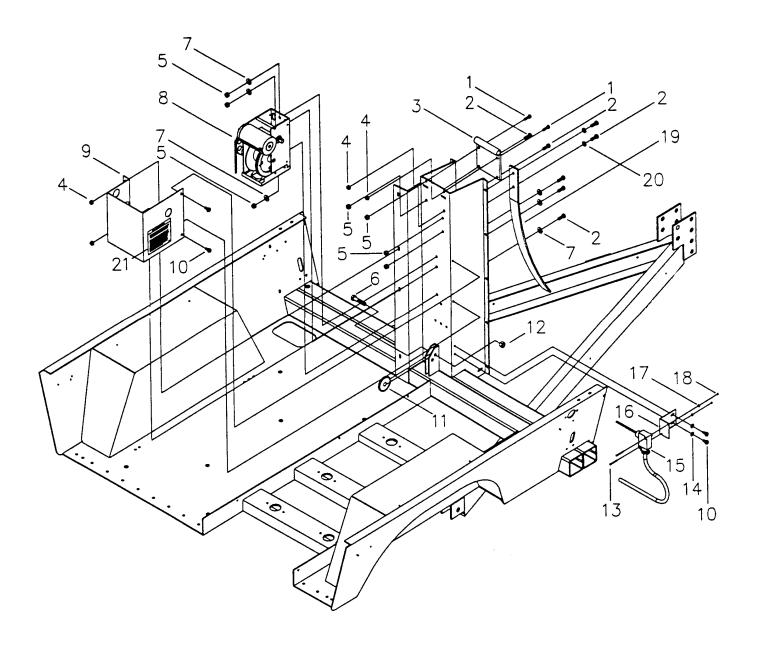
* Use these codes to designate color needed:

01-White 02-Gloss Black 03-Gray 04-Allmand Yellow 05-Orange

TRAILER ASSEMBLY PARTS AND ACCESSORIES

ELECTRIC WINCH, SLACK LIMIT SWITCH, AND TOWER SUPPORT ASSEMBLY

C-8C



TRAILER ASSEMBLY PARTS AND ACCESSORIES

C-8D

ELECTRIC WINCH, SLACK LIMIT SWITCH, AND TOWER SUPPORT ASSEMBLY

NO	REQ'D	PART NO	DESCRIPTION
1	2	**	5/16 -18 NC X 1 GRADE 5 BOLT
2	7	**	3/8 - 16 NC X 1 GRADE 5 BOLT
3	1	680111*	TOWER PIVOT WELDMENT
4	4	**	5/16 - 18 NC KEPS NUT
5	7	**	3/8 -16 NC KEPS NUT
6	1	**	1/2 - 13 NC X 2 1/4 GRADE 5 BOLT
7	6	**	3/8 FLAT WASHER
8	1	630157	STRONG ARM ELECTRIC WINCH
9	1	680142*	STRONG ARM WINCH COVER
10	4	**	5/16 - 18 NC SELF TAPPING SCREW
11	1	320112	2 1/2 PULLEY W/BUSHING
12	1	**	1/2 - 13 NC NYLON INSERT NUT
13	2	**	#6 - 32 NC X 1 1/2 ROUND HEAD SCREW
14	2	**	1/4 FLAT WASHER
15	1	466093	SLACK LIMIT SWITCH
16	1	352056*	SLACK LIMIT SWITCH MOUNT BRACKET
17	2	**	#6 FLAT WASHER
18	2	**	#6 - 32 NC HEX NUT
19	1	352089*	TOWER KICK OUT SPRING
20	2	**	5/16 FLAT WASHER
21	1	090232	DECAL-CORRECT WINCH OPERATION
A.S	6.(NS) 1	352151	OPTIONAL WORKLIGHT
A.S	S.(NS) 1	352146	WORKLIGHT MOUNTING BRACKET

LEGEND: NS= Not Shown ** = Purchase locally

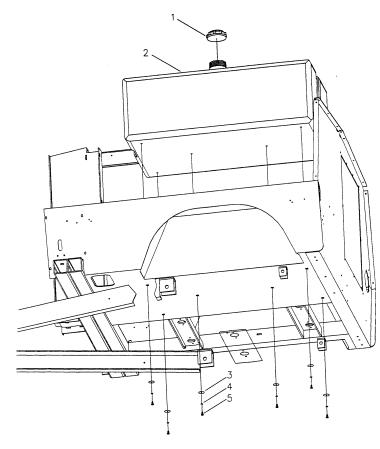
* Use these codes to designate color needed:

01-White0602-Gloss Black0503-Gray1004-Allmand Yellow1105-Orange

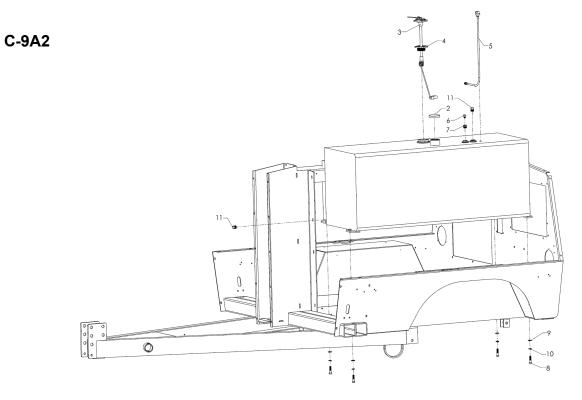
TRAILER ASSEMBLY PARTS AND ACCESSORIES

50 GALLON FUEL TANK ASSEMBLY

C-9A



70 GALLON FUEL TANK ASSEMBLY



TRAILER ASSEMBLY PARTS AND ACCESSORIES

50 GALLON FUEL TANK ASSEMBLY

C-9B

NO	REQ'D	PART NO	DESCRIPTION
1	1	340441	FUEL TANK FILLER CAP
2	1	340440	FUEL TANK, 50 GALLON
3	6	**	1/4 X 1 1/4 FENDER WASHER
4	6	**	1/4 INTERNAL TOOTH LOCK WASHER
5	6	**	1/4 - 20 NC X 1/2 GRADE 5 BOLT

70 GALLON FUEL TANK ASSEMBLY

NO	REQ'D	PART NO	DESCRIPTION	C-9B2
1	1	100024	70 GALLON FUEL TANK	
2	1	100380	FUEL TANK CAP 2.25" NECK BEFORE 1/08	
	1	100854	FUEL TANK CAP 4.3" NECK AFTER 1/08	
3	1	100025	FUEL LEVEL GAUGE/SENDER	
4	1	848967	GAUGEADAPTER	
5	1	340025	FUEL SUCTION TUBE ASSEMBLY	
6	1	713050	90° 1/8 NPT X 1/4" PUSH LOCK FITTING	
7	1	100358	3/8 NPT X 1/8 NPT REDUCING BUSHING	
8	4	046120	3/8-16 X 1 1/2" GR 5 HEX BOLT	
9	4	047010	5/16" PLATED FLAT WASHER	
10	4	043065	3/8" SPLIT LOCK WASHER	
11	2	* *	3/8" NPT PIPE PLUG	

* Use these codes to designate color needed:

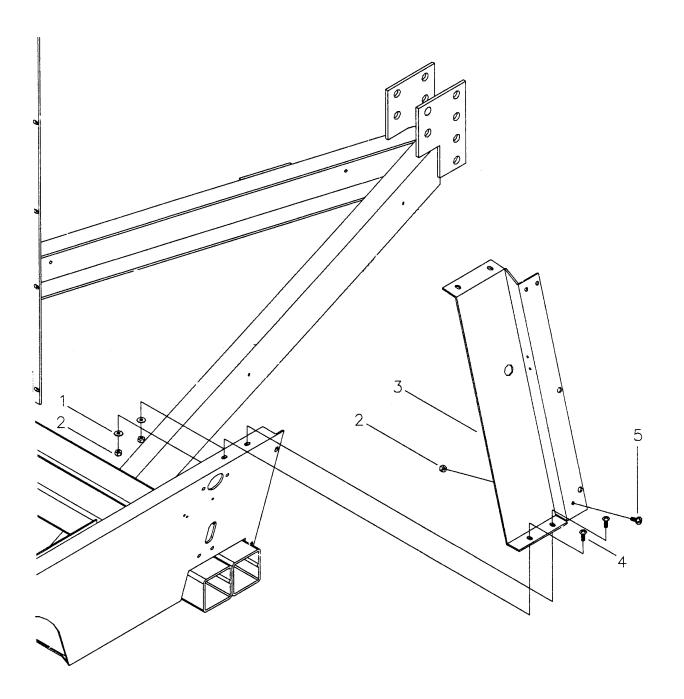
01-White	06-Allmand Gold
02-Gloss Black	09-Flat Black
03-Gray	10-High temp Black
04-Allmand Yellow	11-Red
05-Orange	

LEGEND: NS= Not Shown ** = Purchase locally

TRAILER ASSEMBLY PARTS AND ACCESSORIES

RIGHT QUARTER PANEL ASSEMBLY

C-10A



TRAILER ASSEMBLY PARTS AND ACCESSORIES

RIGHT QUARTER PANEL ASSEMBLY

C-10B

NO	REQ'D	PART NO	DESCRIPTION
1	2	**	1/4 STAINLESS STEEL FLAT WASHER
2	3	**	1/4 -20 NC NYLON INSERT NUT
3	1	680108*	RIGHT QUARTER PANEL
4	2	**	1/4 - 20 NC X 3/4 SCREW
5	1	**	1/4 - 20 NC X 1 ROUND HEAD NYLON SCREW
NS	1	830165	SNAP SWITCH
NS	1	711028	9/16 X 7/8 GROMMET
NS	2	**	#6 X 1 1/2 TRUSS HEAD CAP SCREW
NS	2	**	#6 KEPS NUT

LEGEND: NS= Not Shown ** = Purchase locally

* Use these codes to designate color needed:

 01-White
 06-A

 02-Gloss Black
 09-F

 03-Gray
 10-H

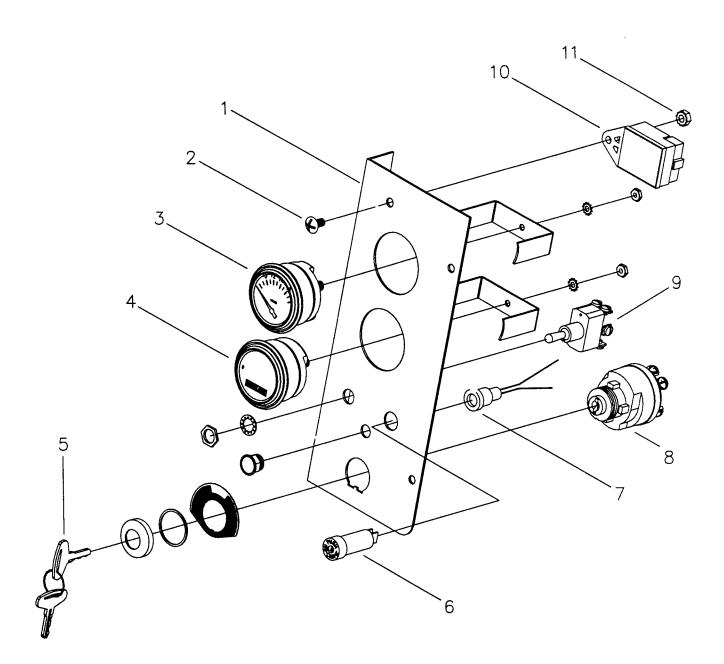
 04-Allmand Yellow
 11-R

 05-Orange
 11-R

TRAILER ASSEMBLY PARTS AND ACCESSORIES

KUBOTA/ PERKINS ENGINE DC GAUGE PANEL ASSEMBLY

C-11A



TRAILER ASSEMBLY PARTS AND ACCESSORIES

KUBOTA/PERKINS ENGINE DC GAUGE PANEL ASSEMBLY

C-11B

NO	REQ'D	PART NO	DESCRIPTION
1	1	680123*	KUBOTA DC GAUGE PANEL
	1	680129*	PERKINS DC GAUGE PANEL
2	1	**	1/4 - 20 NC X 1/2 SCREW
3	1	340413	VOLT METER
4	1	340014	HOUR METER, 12 VOLT
5	1	920474	IGNITION KEY (KUBOTA)
	1	650307	IGNITION KEY (PERKINS)
6	1	352466	2 AMP CIRCUIT BREAKER (ELECTRIC WINCH ONLY)
7	1	@@@	GLOW PLUG LAMP (KUBOTA)
	1	@@@@	GLOW PLUG LAMP (PERKINS)
8	1	920475	KUBOTA KEY SWITCH W/2 KEYS
	1	650306	PERKINS KEY SWITCH W/2 KEYS
9	1	310544	DPDT MOMENTARY CONTACT SWITCH
10	1	@@@	GLOW LAMP TIMER (KUBOTA)
	1	@@@@	REGULATOR (PERKINS)
11	1	**	1/4 - 20 NC KEPS NUT
NS	1	650363*	GAUGE PANEL COVER KUBOTA
NS	1	352344*	GAUGE PANEL COVER PERKINS

LEGEND: NS= Not Shown

** = Purchase locally @@@ = See local Kubota Dealer @@@@@ = See local Perkins Dealer

* Use these codes to designate color needed:

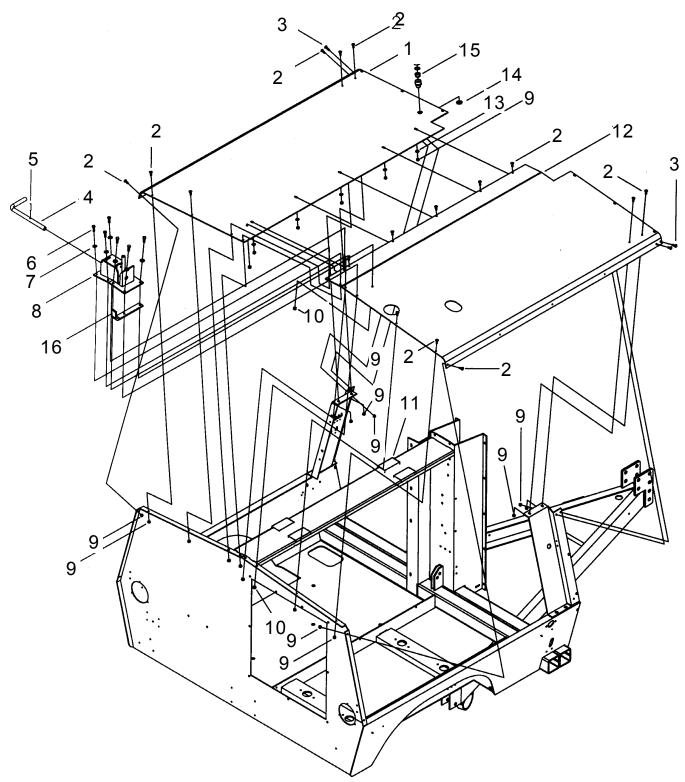
01-White	06-/
02-Gloss Black	09-l
03-Gray	10-l
04-Allmand Yellow	11-F
05-Orange	

Allmand Gold Flat Black High temp Black Red

TRAILER ASSEMBLY PARTS AND ACCESSORIES

ROOF PANEL AND REAR TOWER SUPPORT ASSEMBLY





TRAILER ASSEMBLY PARTS AND ACCESSORIES

ROOF PANEL AND REAR TOWER SUPPORT ASSEMBLY

C-12B

REQ'D	PART NO	DESCRIPTION
1	680106*	LEFT ROOF PANEL
15	041050	1/4 - 20 NC X 3/4 SCREW
2	041080	1/4 - 20 NC X 1 SCREW
1	330450	REAR TOWER SUPPORT PIN
1	045156	1/4 X 2 ROLL PIN
6	046050	5/16 - 18 NC X 1 GRADE 5 BOLT
6	047010	5/16 FLAT WASHER
1	680110P	REAR TOWER SUPPORT
	680540	REAR TOWER SUPPORT EXTENDED (Optional)
17	044023	1/4-20 NC NYLON INSERT NUT
6	044033	5/16-18 NC NYLON INSERT NUT
4	030007	RUBBER PAD 1 1/4 X 7/16 X 4
1	101006P	RIGHT ROOF PANEL
1	352159P	RIGHT ROOF PANEL (PERKINS)
5	047008	1/4 STAINLESS STEEL FLAT WASHER
1	022035	STEEL LOCK NUT, 1/2"
1	310033	1/2" CORD GRIP
1	680105	CORD HOLDER (STRAIGHT CORD ONLY)
	1 15 2 1 1 6 6 1 17 6 4 1 5 1	$\begin{array}{cccccc} 15 & 041050 \\ 2 & 041080 \\ 1 & 330450 \\ 1 & 045156 \\ 6 & 046050 \\ 6 & 047010 \\ 1 & 680110P \\ & 680540 \\ 17 & 044023 \\ 6 & 044033 \\ 4 & 030007 \\ 1 & 101006P \\ 1 & 352159P \\ 5 & 047008 \\ 1 & 022035 \\ 1 & 310033 \\ \end{array}$

LEGEND: NS= Not Shown ** = Purchase locally

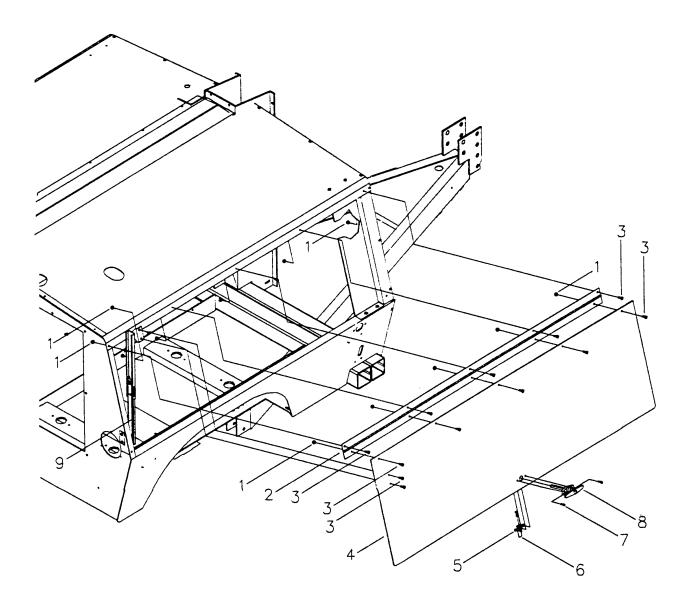
* Use these codes to designate color needed:

01-White0602-Gloss Black0903-Gray1004-Allmand Yellow1205-Orange12

TRAILER ASSEMBLY PARTS AND ACCESSORIES

RIGHT AND LEFT DOOR PANEL ASSEMBLY

C-13A



TRAILER ASSEMBLY PARTS AND ACCESSORIES

RIGHT AND LEFT DOOR PANEL ASSEMBLY

C-13B

NO	REQ'D	PART NO	DESCRIPTION
1	24	**	1/4 - 20 NC NYLON INSERT NUT
2	2	352023	DOOR HINGE
3	24	**	1/4 - 20 NC X 3/4 SCREW
4	1	680109*	RIGHT DOOR PANEL
NS	1	680114*	LEFT DOOR PANEL
5	4	**	#10 - 24 NC KEPS NUT
6	2	650132	LATCH CAM, W/SQUARE HEAD SET SCREW
7	4	**	#10 - 24 NC X 3/4 FLAT HEAD SCREW
8	2	650131	LOCKING T-HANDLE
9	2	352057	TELESCOPIC PROP

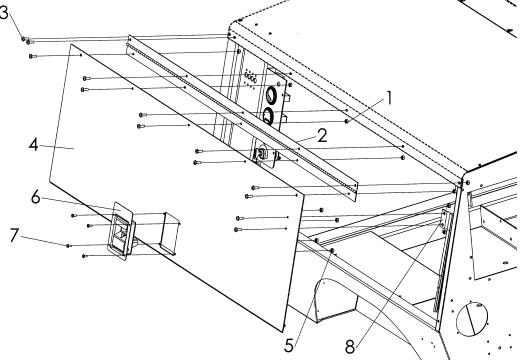
LEGEND: NS= Not Shown ** = Purchase locally

* Use these codes to designate color needed:

01-White 02-Gloss Black 03-Gray 04-Allmand Yellow 05-Orange

TRAILER ASSEMBLY PARTS AND ACCESSORIES

RIGHT SLAM LATCH DOOR PANEL ASSEMBLY C-13A2 -3 -2 5 8 C-13A3 LEFT SLAM LATCH DOOR PANEL ASSEMBLY 3



TRAILER ASSEMBLY PARTS AND ACCESSORIES

RIGHT SLAM LATCH DOOR PANEL ASSEMBLY PARTS

C-13B2

NO	REQ'D	PART NO	DESCRIPTION
1	12	044023	1/4 - 20 NC NYLON INSERT NUT
2	1	352023	DOOR HINGE
3	12	041050	1/4 - 20 NC X 3/4 SCREW
4	1	680453*	RIGHT SLAM LATCH DOOR PANEL
5	4	044019	#10 - 24 NC NYLON INSERT NUT
6	1	680459	SLAM LATCH
7	4	**	#10 - 24 NC X 1/2 FLAT HEAD SCREW
8	1	352057	TELESCOPIC PROP

LEFT SLAM LATCH DOOR PANEL ASSEMBLY PARTS

NO REQ'D PART NO DESCRIPTION 1 13 044023 1/4 - 20 NC NYLON INSERT NUT 2 1 352023 DOOR HINGE 3 13 1/4 - 20 NC X 3/4 SCREW 041050 4 1 680444* LEFT SLAM LATCH DOOR PANEL 5 4 #10 - 24 NC NYLON INSERT NUT 044019 6 1 680459 SLAM LATCH ** 7 4 #10 - 24 NC X 1/2 FLAT HEAD SCREW 8 1 **TELESCOPIC PROP** 352057

* Use these codes to designate color needed:

01-White	06
02-Gloss Black	09
03-Gray	10
04-Allmand Yellow	11
05-Orange	

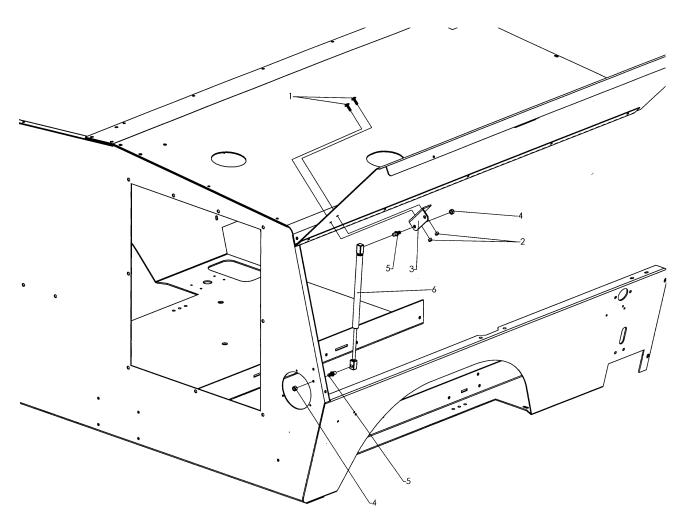
06-Allmand Gold 09-Flat Black 10-High temp Black 11-Red

C-13B3

MAXI-LITE SERIES TRAILER ASSEMBLY PARTS AND ACCESSORIES

GAS SHOCK DOOR PROP ASSEMBLY

C-13C



TRAILER ASSEMBLY PARTS AND ACCESSORIES

GAS SHOCK DOOR PROP ASSEMBLY

C-13D

NO	REQ'D	PART NO	DESCRIPTION
1	2	041050	1/4 - 20 NC X 3/4 PHILLIPS TRUSS HEAD SCREW
2	2	044023	1/4 - 20 NC NYLON INSERT NUT
3	1	680485	GAS SPRING DOOR BRACKET
4	2	330437	10mm BALL STUD
5	2	044033	5/16 - 18 NC NYLON INSERT NUT
6	1	680813	GAS DOOR SHOCK

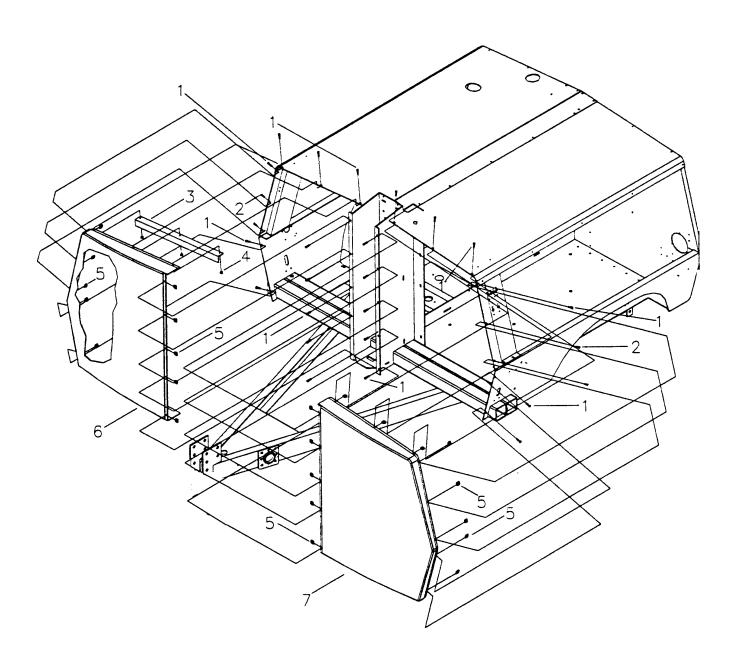
* Use these codes to designate color needed:

01-White	C
02-Gloss Black	C
03-Gray	1
04-Allmand Yellow	1
05-Orange	

TRAILER ASSEMBLY PARTS AND ACCESSORIES

PLASTIC FRONT PANEL ASSEMBLY

C-14A



TRAILER ASSEMBLY PARTS AND ACCESSORIES

PLASTIC FRONT PANEL ASSEMBLY

C-14B

REQ'D	PART NO	DESCRIPTION
22	**	1/4 - 20 NC X 1 SCREW
4	**	1/4 - 20 NC X 3/4 FLAT HEAD MACHINE SCREW
1	680115*	ROOF SUPPORT
3	**	1/4 - 20 NC NYLON INSERT NUT
23	045216	TINNEMAN FASTENER
1	680103	RIGHT FRONT ABS PANEL (ORANGE)
1	352183	RIGHT FRONT ABS PANEL (ALLMAND GOLD)
1	352106	RIGHT FRONT ABS PANEL (WHITE)
1	680104	LEFT FRONT ABS PANEL (ORANGE)
1	352184	LEFT FRONT ABS PANEL (ALLMAND GOLD)
1	352107	LEFT FRONT ABS PANEL (WHITE)
1	680440*	RIGHT FRONT PANEL (STEEL)
1	680441*	LEFT FRONT PANEL (STEEL)
	22 4 1 3 23 1 1 1 1 1 1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

LEGEND: NS= Not Shown

** = Purchase locally

* Use these codes to designate color needed:

 01-White
 06-

 02-Gloss Black
 09-

 03-Gray
 10-

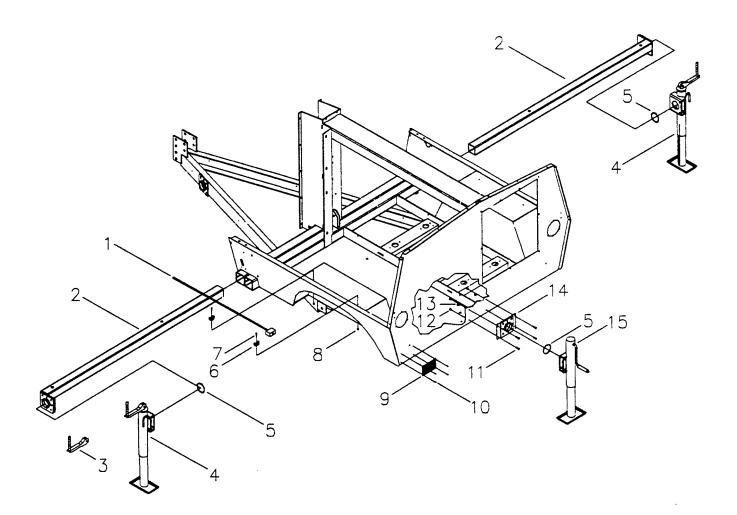
 04-Allmand Yellow
 11-F

 05-Orange
 11-F

TRAILER ASSEMBLY PARTS AND ACCESSORIES

OUTRIGGERS AND REAR JACK MOUNT ASSEMBLY

C-15A



TRAILER ASSEMBLY PARTS AND ACCESSORIES

OUTRIGGERS AND REAR JACK MOUNT ASSEMBLY

C-15B

NO	REQ'D	PART NO	DESCRIPTION
1	1	340058	GROUND ROD
2	1	680113*	LEFT/RIGHT OUTRIGGER
3		330012	REPLACEMENT HANDLE
4	2	330010	LONG JACK
5	3	330014	JACK SNAP RING 2 5/16 XT
6	2	330481	GROUND ROD CLIP
7	2	**	#10 - 24 NC X 1/2 SCREW
8	2	**	#10 - 24 NC KEPS NUT
9	1	**	SERIAL NUMBER PLATE
10	4	045108	BLIND RIVET
11	4	**	1/4 - 20 NC X 1 SCREW
12	4	**	1/4 - 20 NC NYLON INSERT NUT
13	2	**	#4 CUSHION CLAMP
14	1	680112*	REAR JACK MOUNT WELDMENT
15	1	352072	SWIVEL MOUNT JACK WITH SIDE CRANK

LEGEND: NS= Not Shown ** = Purchase locally

* Use these codes to designate color needed:

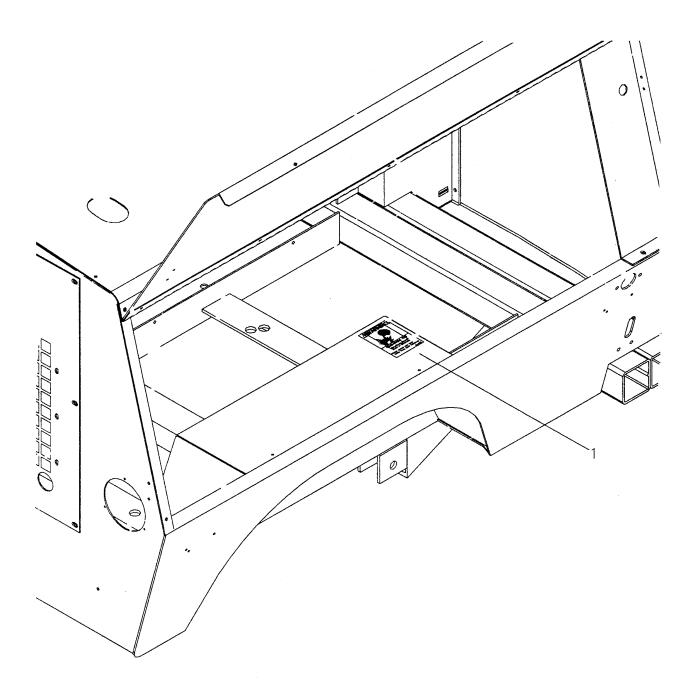
01-White 02-Gloss Black 09-Flat Black 03-Gray 04-Allmand Yellow 11-Red 05-Orange

06-Allmand Gold 10-High temp Black

TRAILER ASSEMBLY PARTS AND ACCESSORIES

DECAL PLACEMENT

D-1A



TRAILER ASSEMBLY PARTS AND ACCESSORIES

DECAL PLACEMENT

D-1B

NO REQ'D PART NO DESCRIPTION	NO	REQ'D	PART NO	DESCRIPTION
------------------------------	----	-------	---------	-------------

1 1 090159 DECAL-WARNING COMBUSTIBLE GAS

LEGEND: NS= Not Shown ** = Purchase locally

* Use these codes to designate color needed:

 01-White
 06

 02-Gloss Black
 09

 03-Gray
 10

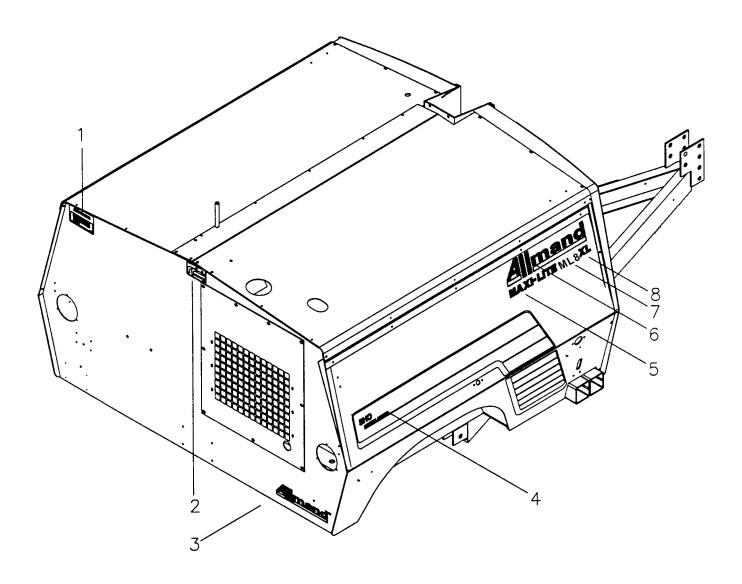
 04-Allmand Yellow
 11

 05-Orange
 11

TRAILER ASSEMBLY PARTS AND ACCESSORIES

DECAL PLACEMENT

D-2A



TRAILER ASSEMBLY PARTS AND ACCESSORIES

DECAL PLACEMENT

D-2B

NO	REQ'D	PART NO	DESCF	RIPTION
1	1	090003	DECAL -	DO NOT STAND
2	1	090139	DECAL -	UNLATCHED/LATCHED
3	1	090269	DECAL -	ALLMAND YELLOW TO ORANGE 11.75"
4	1	352026	DECAL -	GRADATION STRIPE SET
5	2	090255	DECAL -	MAXI-LITE
6	2	090256	DECAL -	ALLMAND, YELLOW TO ORANGE
NS	2	090490	DECAL -	ML 6
7		090491	DECAL -	ML 8
8	2	090267	DECAL -	XL
NS	1	090065	DECAL -	ARCTIC SPECIAL
NS	1	090164	DECAL -	WARNING NON-VERTICAL
NS	1	090161	DECAL -	MOVING PART HAZARD

LEGEND: NS= Not Shown ** = Purchase locally

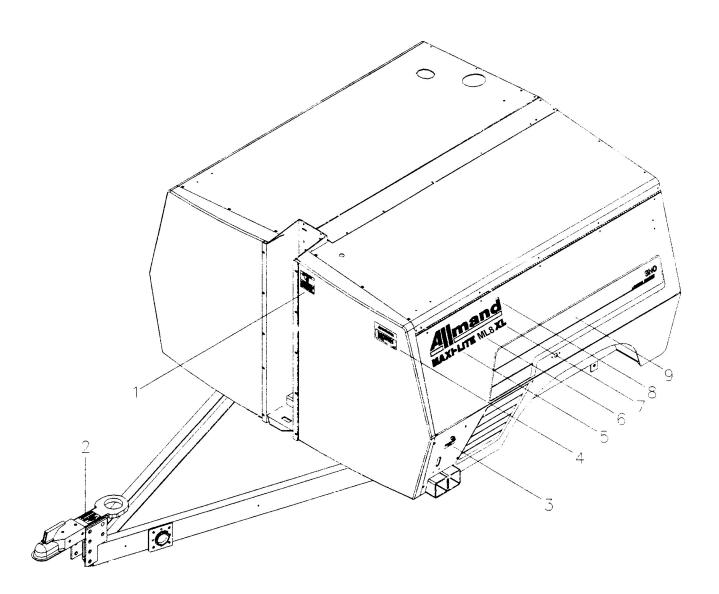
* Use these codes to designate color needed:

01-White06-Allma02-Gloss Black09-Flat03-Gray10-High04-Allmand Yellow11-Red05-Orange10-High

TRAILER ASSEMBLY PARTS AND ACCESSORIES

DECAL PLACEMENT

D-3A



TRAILER ASSEMBLY PARTS AND ACCESSORIES

DECAL PLACEMENT

D-3B

NO	REQ'D	PART NO	DESCRIPTION
1	1	090162	DECAL - DANGER HAZARDOUS VOLTAGE
2	1	090160	DECAL - WARNING EXCESSIVE TOW SPEED
3	1	090133	DECAL - GROUND LUG
4	1	090003	DECAL - DO NOT STAND
5	2	090255	DECAL - MAXI-LITE
NS	2	090490	DECAL - ML 6
6	2	090491	DECAL - ML-8
7	2	090267	DECAL - XL
NS	2	090065	DECAL - ARCTIC SPECIAL
9	1	352026	DECAL - GRADATION STRIPE SET

LEGEND: NS= Not Shown ** = Purchase locally

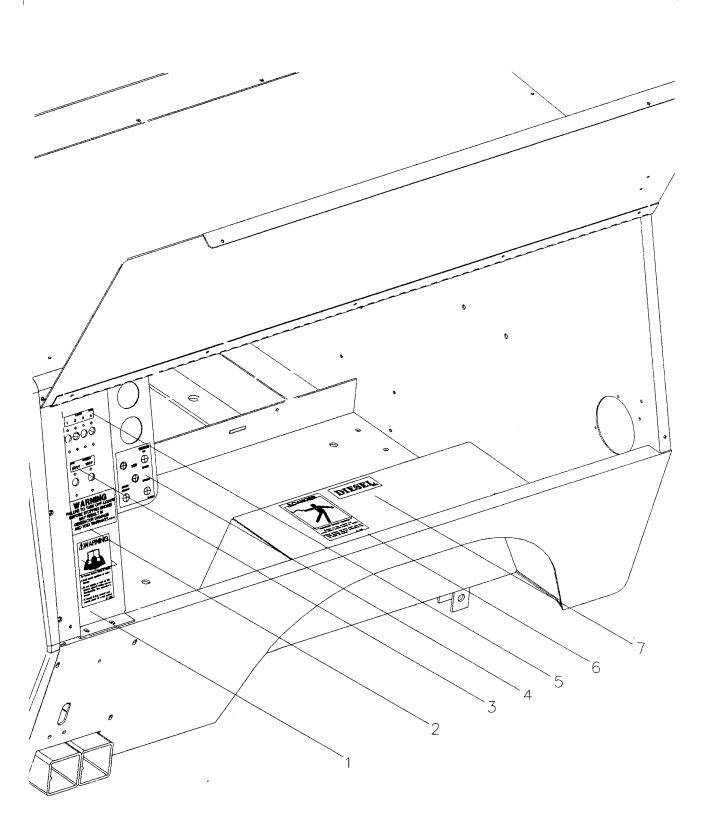
* Use these codes to designate color needed:

01-White0602-Gloss Black0903-Gray1004-Allmand Yellow1105-Orange

TRAILER ASSEMBLY PARTS AND ACCESSORIES

DECAL PLACEMENT

D-4A



TRAILER ASSEMBLY PARTS AND ACCESSORIES

DECAL PLACEMENT

D-4B

NO	REQ'D	PART NO	DESCRIPTION
1	1	090158	DECAL - WARNING OPERATORS MANUAL
2	1	090084	DECAL - WARNING FAILURE TO TURN OFF LIGHTS
3	1	090283	DECAL - OUTLETS
4	1	090261	DECAL - IGNITION START, ELECTRIC WINCH
5	1	090169	DECAL - LIGHTS 1,2,3,4 (4-LIGHT OPTION)
	1	090282	DECAL - LIGHTS 1,2,3,4 ,5,6 (6-LIGHT OPTION)
6	1	090163	DECAL – DANGER ELECTRIC SHOCK
7	1	090034	DECAL - DIESEL

LEGEND: NS= Not Shown ** = Purchase locally

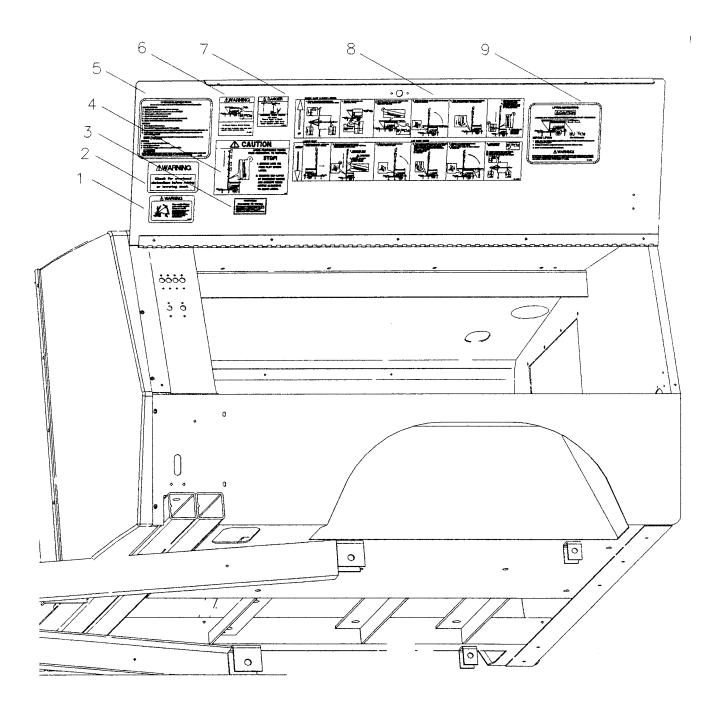
* Use these codes to designate color needed:

01-White 02-Gloss Black 03-Gray 04-Allmand Yellow 05-Orange

TRAILER ASSEMBLY PARTS AND ACCESSORIES

DECAL PLACEMENT

D-5A



TRAILER ASSEMBLY PARTS AND ACCESSORIES

DECAL PLACEMENT

D-5B

REQ'D	PART NO	DESCRIPTION
1	090152	DECAL - NON-VERTICAL TOWER
1	090005	DECAL - CHECK FOR OVERHEAD OBSTRUCTIONS
1	090179	DECAL - PROPOSITION 65, DIESEL
1	090205	DECAL - CAUTION, RED LATCH (ELECTRIC WINCH)
1	090151	DECAL - OPERATING INSTRUCTIONS
1	090263	DECAL - WARNING, PULL PIN
1	090165	DECAL - DANGER, ELECTRIC SHOCK
1	090262	DECAL - PICTORIAL OPERATOR, ELECTRIC WINCH
1	090259 090264	DECAL - PICTORIAL OPERATOR, MANUAL WINCH DECAL - LIFT INSTRUCTIONS
	REQ'D 1 1 1 1 1 1 1 1 1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

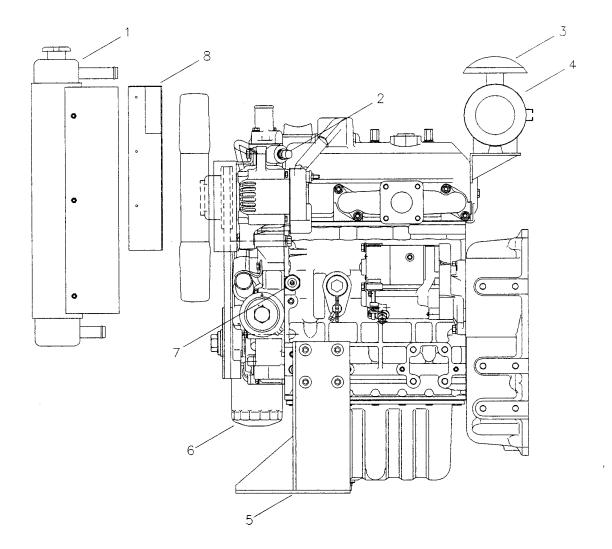
LEGEND: NS= Not Shown ** = Purchase locally

* Use these codes to designate color needed:

01-White 02-Gloss Black 03-Gray 04-Allmand Yellow 05-Orange

KUBOTA ENGINE

E-1A



MAXI-LITE SERIES KUBOTA ENGINE

E-1B

REF#		PART NO	DESCRIPTION
NS		680120*	KUBOTA D905-EBG1 ENGINE/MARATHON 6 KW GEN. SET SAE)
NS		350127*	KUBOTA D1105-EBG1 ENGINE/MARATHON 6 KW GEN. SET SAE)
NS		680131*	KUBOTA D1105-EBG1 ENGINE/MARATHON 8 KW GEN. SET SAE)
NS		340304	KUBOTA D905-EBG1 ENGINE ONLY (SAE)
NS		352081	KUBOTA D1105-EBG1 ENGINE ONLY (SAÉ)
NS		640146	MARATHON 6 KW GENERATOR ONLY (SAE)
NS		640157	MARATHON 8 KW GENERATOR ONLY (SAE)
NS		650592	POWRGARD 6 KW GENERATOR ONLY
A.S.		830196	NEWAGE 8KW GENERATOR ONLY
NS	1	920745	KUBOTA FUEL FILTER
NS	1	081016	FUEL LINE (1/4" FUEL LINE 72")
NS	1	081005	RETURN LINE (NYLON HOSE 80")
NS	1	081018	FUEL LINE (5/16" FUEL LINE 14")
NS	1	081018	FUEL LINE (5/16" FUEL LINE 10")
NS	1	680224*	ENGINE WIRING HARNESS - DC GAUGE PANEL/ENGINE (KUBOTA)
NS	1	680128*	GENERATOR MOUNT PLATE, KUBOTA
NS	1	000	TOP RADIATOR HOSE
NS	1	@@@	BOTTOM RADIATOR HOSE
NS	1	340105	GROUND STRAP
1	1	Call Factory	RADIATOR
2	1	340302	HIGH TEMPERATURE SWITCH
3	1	650290	AIR CLEANER ELEMENT ONLY
4	1	650262	AIR CLEANER/FILTER ELEMENT ASSEMBLY
5	1	640282*	ENGINE MOUNT BRACE (LEFT)
	1	640283*	ENGINE MOUNT BRACE (RIGHT)
6	1	930743	KUBOTA OIL FILTER
7	1	340301	OIL PRESSURE SWITCH
8	1	650168-10	KUBOTA FAN GUARD
NS	1	920472	KUBOTA RECOVERY TANK

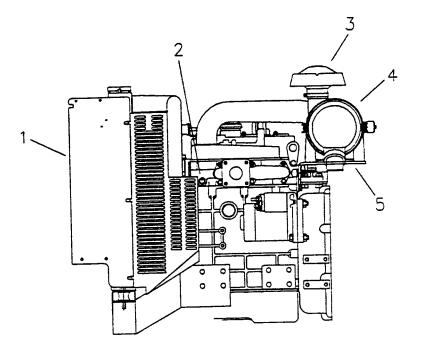
FOR ENGINE PARTS NOT SHOWN, SEE KUBOTA D905 PARTS LIST. FOR GENERATOR PARTS NOT SHOWN, SEE MANUFACTURER'S LIST OR CALL 800-562-1373 FOR ASSISTANCE.

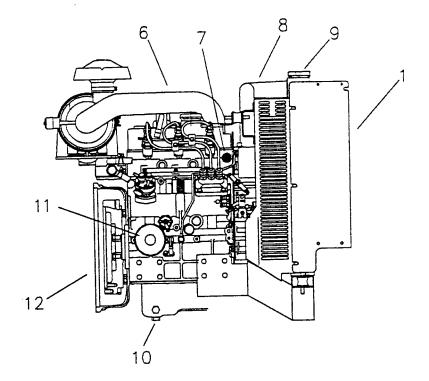
LEGEND: NS= Not Shown ** = Purchase locally @@ = See local Kubota Dealer

* Use these codes to designate color needed:

01-White 02-Gloss Black 03-Gray 04-Allmand Yellow 05-Orange

PERKINS 103.10





PERKINS 103.10

E-2B

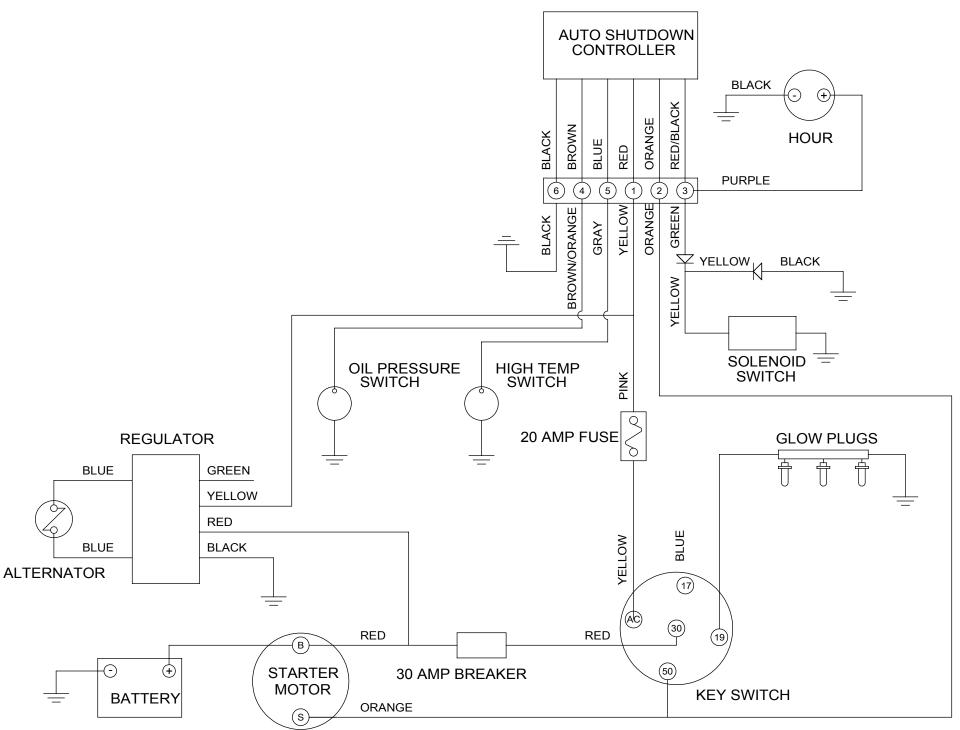
NO	REQ'D	PART NO	DESCRIPTION
1	2	650284*	RADIATOR SHROUD, PERKINS, SIDE
2	1	@@@@	HIGH TEMPERATURE SWITCH
3	1	@@@@	AIR CLEANER DUST CAP
4	1	@@@@	AIR CLEANER
5	1	@@@@	AIR CLEANER, MOUNTING BRACKET
6	1	@@@@	AIR INTAKE HOSE
7	1	@@@@	OIL PRESSURE SWITCH
8	1	@@@@	UPPER RADIATOR HOSE
9	1	@@@@	RADIATOR
10	1	@@@@	OIL DRAIN PLUG
11	1	650304	OIL FILTER (PERKINS)
12	1		PERKINS 103.10 ENGINE / MARATHON GENERATOR
	1	352160	PERKINS 103.10 ENGINE ONLY
	1	640146	MARATHON 6KW GENERATOR ONLY
	1	650592	POWRGARD 6KW GENERATOR ONLY
NS	1	650279*	RADIATOR SHROUD, PERKINS, UPPER
NS	1	650280*	RADIATOR SHROUD, PERKINS, LOWER
NS	1	030052	TRIM LOCK NTH RUBBER SEAL
NS	8	**	M12-1.25 X 20 GRADE 10.9 BOLT
NS	8	**	1/4-20 X .75 STAINLESS STEEL PAN SCREWS
NS	8	* *	1/4 SPLIT LOCK WASHER
NS	8	**	1/4-20 NYLON INSERT NUT
NS	1	352169	PERKINS ENGINE WIRING HARNESS
			(SEE WRING SCHEMATIC)
NS	52"	081005	NYLON RETURN LINE
NS	20"	081016	1/4 FUEL LINE
NS	1	650278	GTMUFFLER
NS	1	@@@@	MUFFLER GASKET
NS	4	**	M8-1.25 X 20 GRADE 8.8 BOLT
NS	4	**	3/8 SPLIT LOCK WASHER
NS	1	680128*	MARATHON GENERATOR MOUNT PLATE
NS	1	680126*	LEFT ENGINE MOUNT FOOT
NS	1	680127*	RIGHT ENGINE MOUNT FOOT
NS	1	680122*	KUBOTA RADIATOR MOUNT PLATE
NS	1	650303	PERKINS AIR CLEANER ELEMENT
NS	1	650304	PERKINS OIL FILTER
NS	1	650305	PERKINS FUEL FILTER

LEGEND: NS= Not Shown ** = Purchase locally @@@@ = See local Perkins Dealer

* Use these codes to designate color needed:

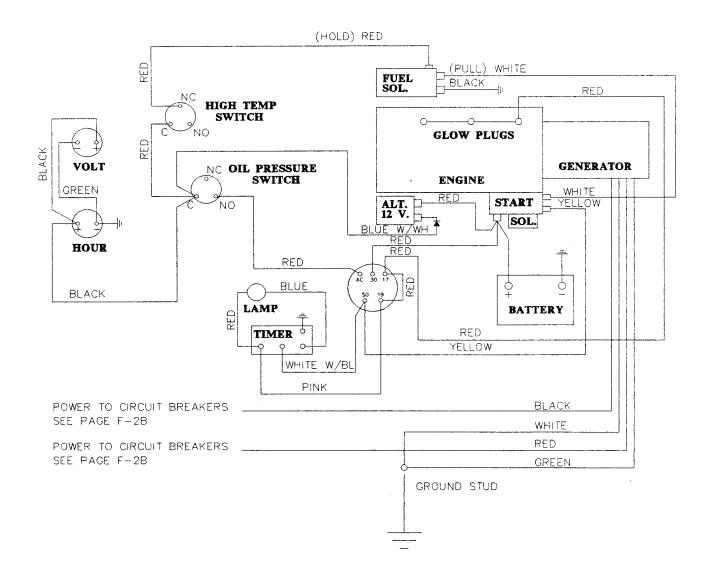
01-White 02-Gloss Black 03-Gray 04-Allmand Yellow 05-Orange

CAT C1.1 ENGINE WIRING HARNESS



ELECTRICAL DIAGRAMS

KUBOTA ENGINE/GENERATOR SET



ELECTRICAL DIAGRAMS

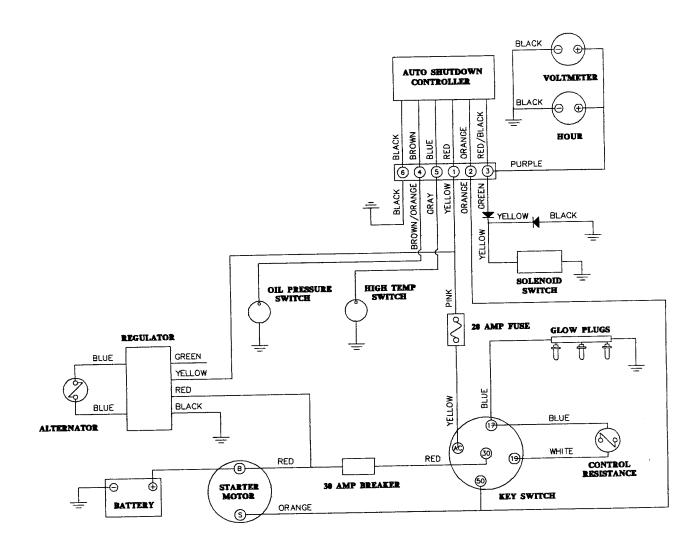
F-1B

PERKINS 103.10 ENGINE

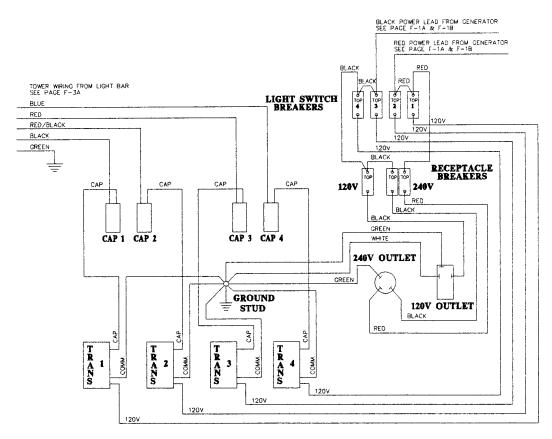
PART# DESCRIPTION

.

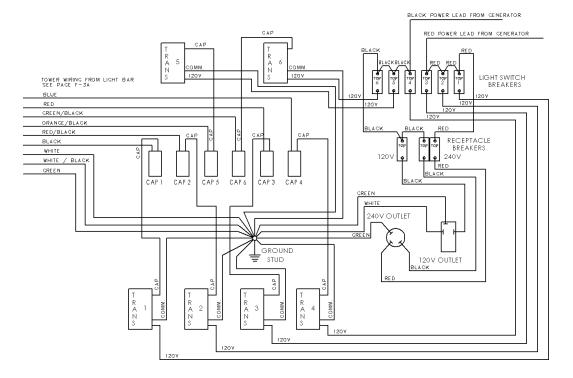
352169 PERKINS ENGINE WIRING HARNESS



BALLAST ASSEMBLY, 4-LIGHT



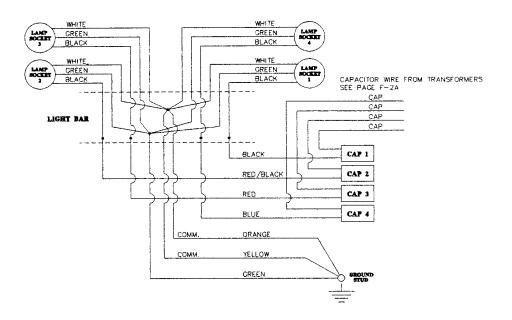
BALLAST ASSEMBLY, 6-LIGHT



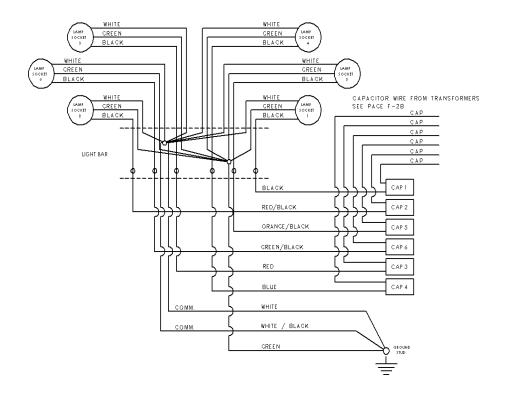
F-2A

ELECTRICAL DIAGRAMS

LAMP SOCKET/BALLAST COMPARTMENT WIRING, 4-LIGHT

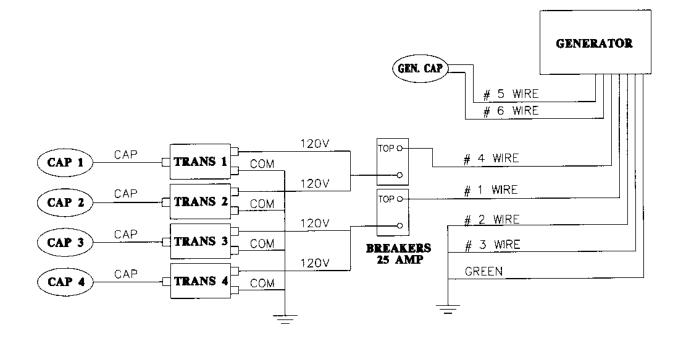


LAMP SOCKET/BALLAST COMPARTMENT WIRING, 6-LIGHT



ELECTRICAL DIAGRAMS

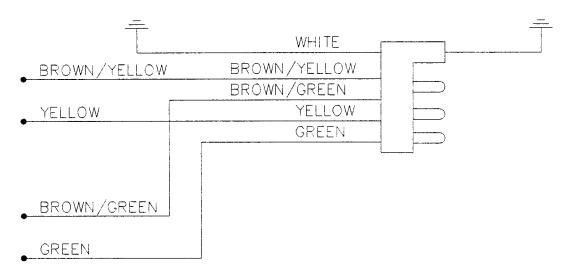
F-3A POW'R GARD GENERATOR SCHEMATIC



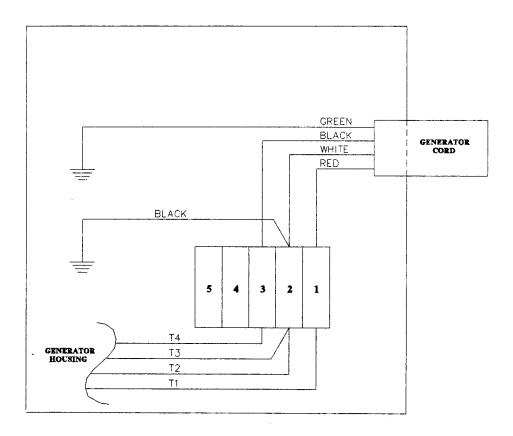
ELECTRICAL DIAGRAMS

F-3B

352037 TAILLIGHT WIRING HARNESS

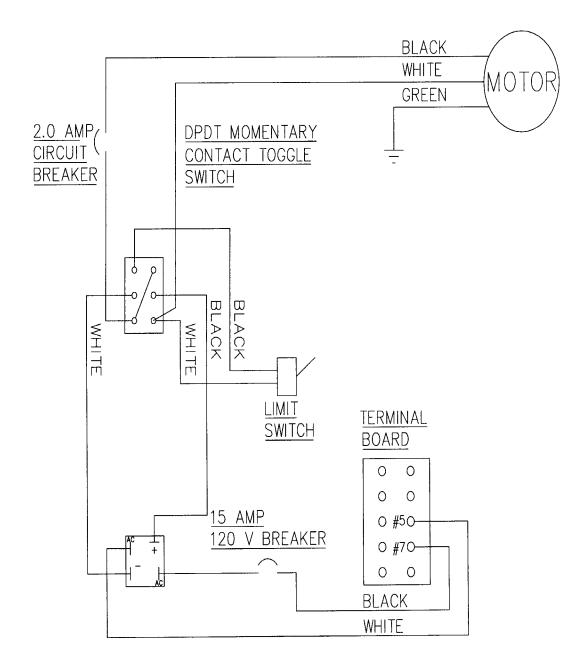


MARATHON GENERATOR ELECTRICAL BOX WIRING



ELECTRICAL DIAGRAMS

DUTTON-LAINSON STRONG ARM WINCH SCHEMATIC



F-4A

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

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED INCLUDING WARRAN-TIES 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 CONSEQUEN-TIAL DAMAGES. THE OBLIGATIONS OF THE MANUFACTURER HEREUNDER SHALL IN NO WAY EXCEED THE PRICE OF THE EQUIPMENT OR PART UPON WHICH SUCH LI-ABILITY 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

ALLMAND LIMITED WARRANTY 1YR LIGHTING SYSTEMS 07.03.doc