

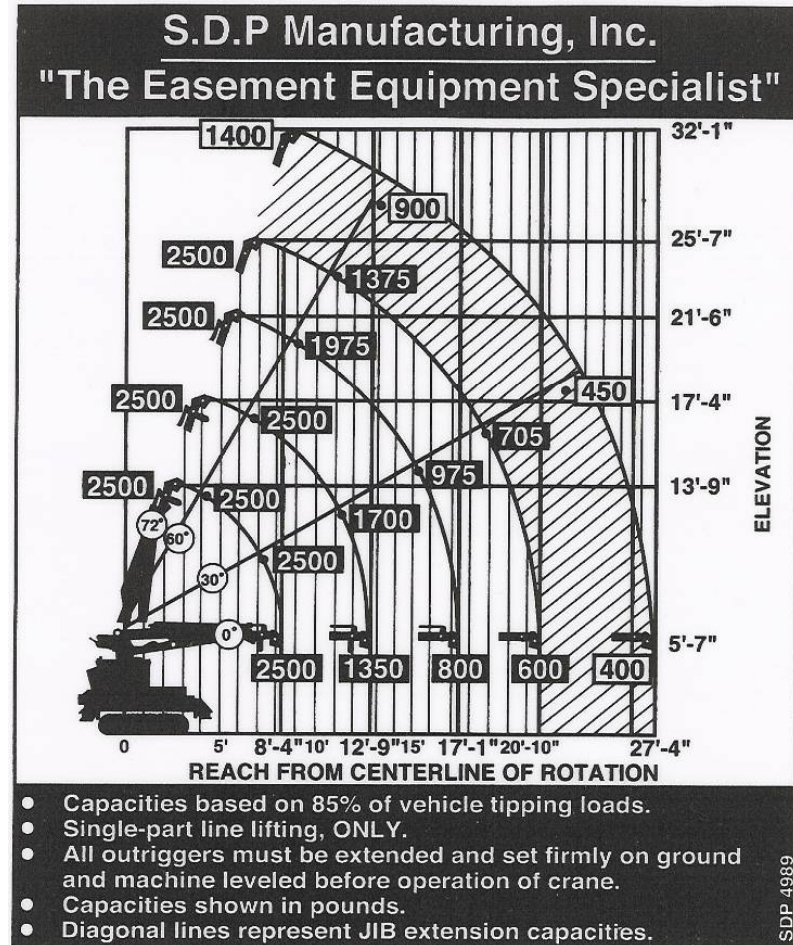


**MANUFACTURING, INC.**

**EZ Hauler 2500  
Training & Procedure Manual**

# Load Capacity

- One of the most important considerations when operating this machine is the Load Capacity of the EZ Hauler 2500's boom. The maximum weight capacity of the EZ Hauler 2500 is 2500 lbs.
- The load capacity of the boom depends upon two considerations: How far the boom is extended, and its angle of elevation.





# EZ Hauler 2500 Safety

- While the EZ Hauler 2500 is smaller than a line truck, its function is the same and all safety precautions that would apply to a line truck also apply to the EZ Hauler 2500. The EZ Hauler 2500 is a powerful machine that should be operated with respect & caution. Misuse or carelessness can result in serious injury, property damage or death.

- Hard hats and protective gear must be worn by all personnel when using the EZ Hauler 2500.



- The capacity of the EZ Hauler 2500 is rated at 2500 pounds which means that the most the boom will ever safely lift is 2500 pounds. Refer to the load capacity chart or on the machine itself for more specific indications of the mini-derrick's capacity.



- Properly use all outriggers whenever the boom is in use. The EZ Hauler 2500s boom must never be operated without the outriggers being properly set.



# Safety Guidelines

- Before operating any heavy machine, it is important to learn its safety rules. All of your existing in-house safety precautions must be followed as well as the precautions listed in this manual.
- The EZ Hauler 2500 is not totally electrically insulated. Be sure to follow your company's safety procedures to protect against electrocution.
- The EZ Hauler 2500 is not designed to carry passengers. Never ride on the machine.
- Operators must be properly trained before operating any part of the EZ Hauler 2500. Properly set the outriggers whenever the boom is in use.

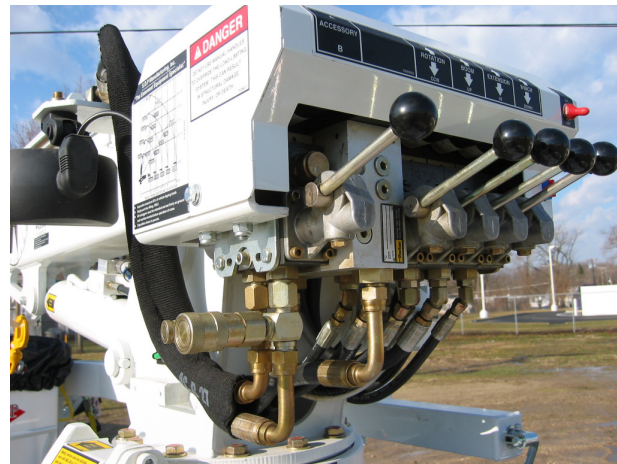
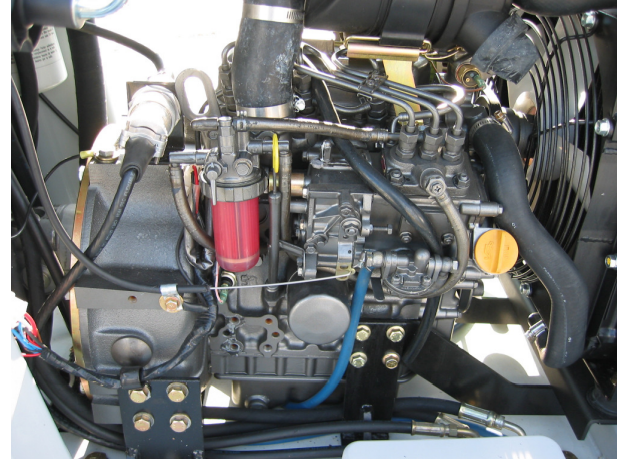
# Safety Guidelines

- Operate the EZ Hauler 2500 in a well-ventilated area only. The engine emits exhaust gases, which can cause sickness and death.
- The EZ Hauler 2500's controls react to input rapidly. Know the location and function of ***all*** controls before starting the machine.
- The EZ Hauler 2500 may shut be shut down in an emergency by releasing all drive controls and turning the ignition switch to the "off" position.
- Take care that the EZ Hauler 2500 is properly secured on its trailer before transporting it.



# Pre-trip Inspection

- Before each day's operation, the EZ Hauler 2500 must be inspected by the operator.
- Do a visual inspection to check for lose, worn, missing or broken parts such as bolts, nuts, wires & retaining pins.
- A. Check hydraulic hoses for cuts, wear, loose connections.
- B. Check engine and hydraulic system.



# Pre-trip Inspection

- Check all tires on the EZ Hauler 2500 trailer for wear & proper inflation.



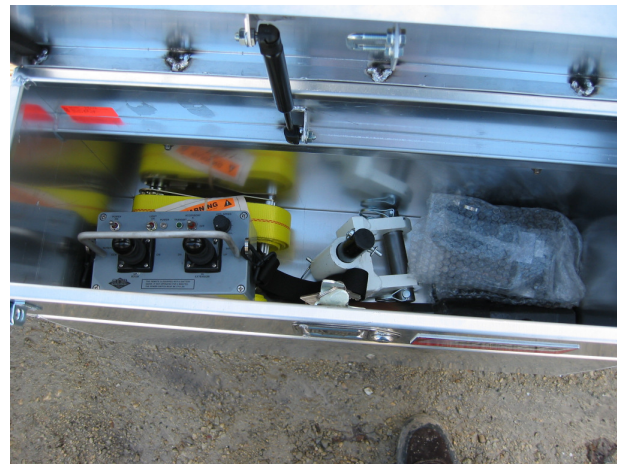
# Pre-trip Inspection

- Test all turn signal, parking and brake lights by turning them on. Be sure to test the braking action on the trailer before traveling to the work site.



# Pre-trip Inspection

- Check to make sure that EZ Hauler 2500 is properly secured to the trailer.
- Look inside the trailer toolbox & make sure it contains all tools & equipment necessary for operating the EZ Hauler 2500.





# Pre-trip Inspection

- Turn on the remote control & check the function of all controls.





# Pre-trip Inspection

- Inspect the lift line and hook for signs of wear or damage. Replace any worn or damages parts before using the EZ Hauler 2500.



# EZ Hauler 2500 Controls

## Controls



## ITEMS ON THE CONTROL PANEL

- Drive controls
- Engine RPM/hour meter
- Oil pressure gauge
- Water temperature gauge
- Fuel level gauge
- Hydraulic Pressure Gauge (psi)
- Indicator lights (heat-chg.-oil-water)
- Ignition switch (heat-off-on-start)
- Identification decals
- Engine speed control (throttle)

- Picture may not accurately represent your machine.

# Remote Control Basic Operation

- A. Turn E-stop counter-clockwise to turn on remote and press to shut off remote.
- B. Operation switch must be in crane position (drive is non-functional) to operate boom.
- C. Auger switch is non-functional on the EZ Hauler 2500.



**C**

**B**

**A**

# Driving the EZ Hauler 2500



The EZ Hauler 2500 does not require its full engine power when moving. Set the engine speed relatively low when driving the unit, reserving the higher engine speeds for powering hydraulic accessories.

*WARNING: The EZ Hauler 2500 should only be driven with the tracks fully extended.*

# Unloading the EZ Hauler 2500

- Caution: While unloading the EZ Hauler 2500, always have the trailer hitched to a truck and the boom in its lowest position.
- Note: If the EZ Hauler 2500 engine is not started, start it and let it warm up for 5 minutes. This procedure applies to the wheeled unit also.







***NOTE: The EZ Hauler 2500 is secured for transport at the front and back of the trailer.***

# Moving the EZ Hauler 2500

## Through a small opening.

- One of the advantages of the EZ Hauler 2500 is that it is small enough to operate in areas which are too confined to use a line truck.
- A standard gate opening is 36 inches wide. The tracks can be retracted to make movement through a gate quick and easy.
- Once through the gate the tracks should be moved to full extension.





# Moving the EZ Hauler 2500 With a Load

Moving a pole:

Unit with manual outriggers.

- Use the boom to place the pole evenly onto the two carrying arms. Note that the EZ Hauler 2500 has carrying arm brackets on either side. Secure the pole with the straps, which are stored in the trailer toolbox.
- Since a pole is much longer than the wheelbase of the EZ Hauler 2500, there are additional considerations to take into account when carrying a pole.



- In navigating uneven terrain, for instance, one crewmember should push the end of the pole down to provide ground clearance as the EZ Hauler 2500 approaches a hill.
- NOTE: The pole will swing wide when turning.
- When driving across the side of a hill, the pole should be carried only on the uphill side.





Moving a pole:  
Unit with hydraulic outriggers.

Lifting and carrying a pole can be performed easily with the EZ Hauler 2500 equipped with hydraulic outriggers.



Attach the provided lifting chains to the pole and to the d-rings on the EZ Hauler 2500 outrigger arms as shown.



Using the outrigger control levers lift both outriggers equally until pole is securely in place.

***NOTE:*** Pole must clear tracks when completely lifted



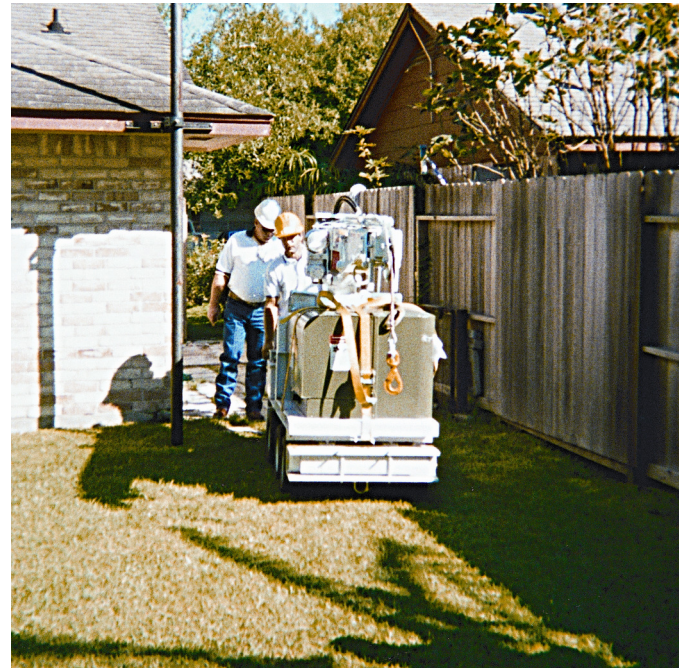
❖ ***Reverse procedure when pole is ready to be lowered to the ground.***

# Moving a Transformer

Always secure a transformer to the machine with the straps stored in the trailer toolbox. It may be necessary to rotate the boom slightly in order to carry a transformer.

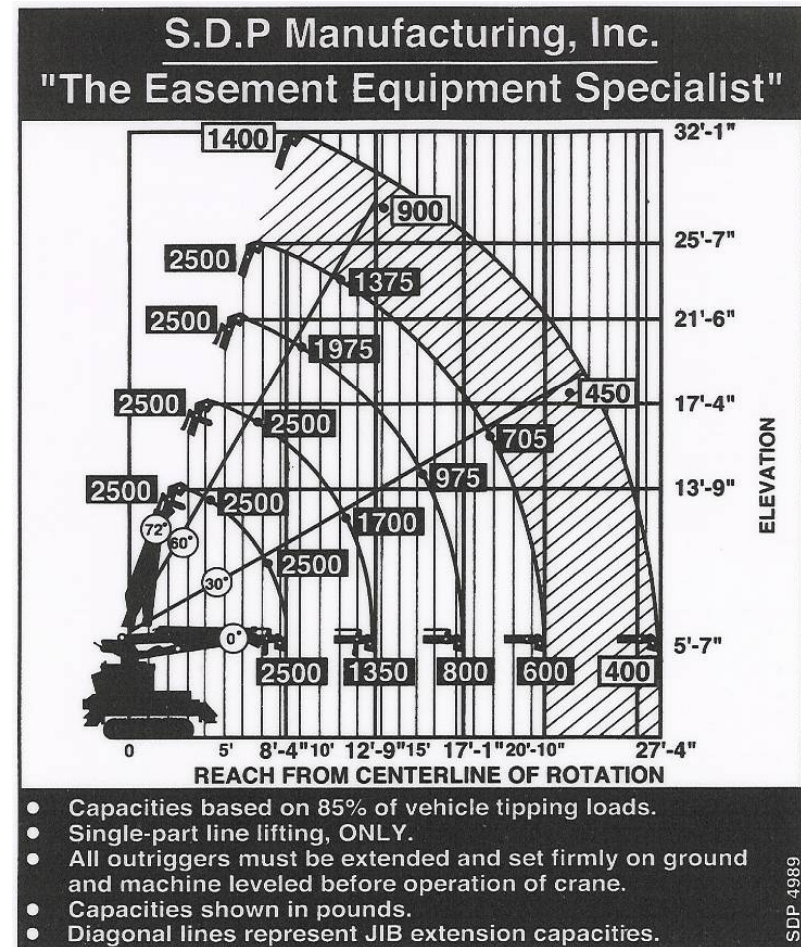
Drive the EZ Hauler 2500 slowly.

Make turns slowly and carefully.



# Setting a Pole With the EZ Hauler 2500

- Remember the EZ Hauler 2500 is ***not totally*** electrically insulated. Use your company's insulation procedure to avoid electrocution. Before setting a pole the load capacity chart must be thoroughly understood.





# Setting the Outriggers

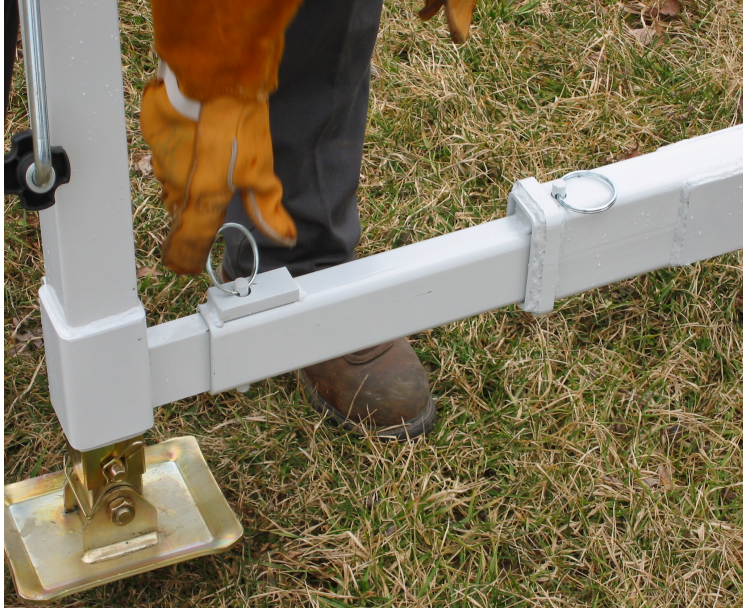
Remove the retaining pin that holds the outrigger struts in their stowed position.

Unfold each strut and pin them into their open position.

Before operating, you must set the outriggers. If possible try to keep the machine on level ground.





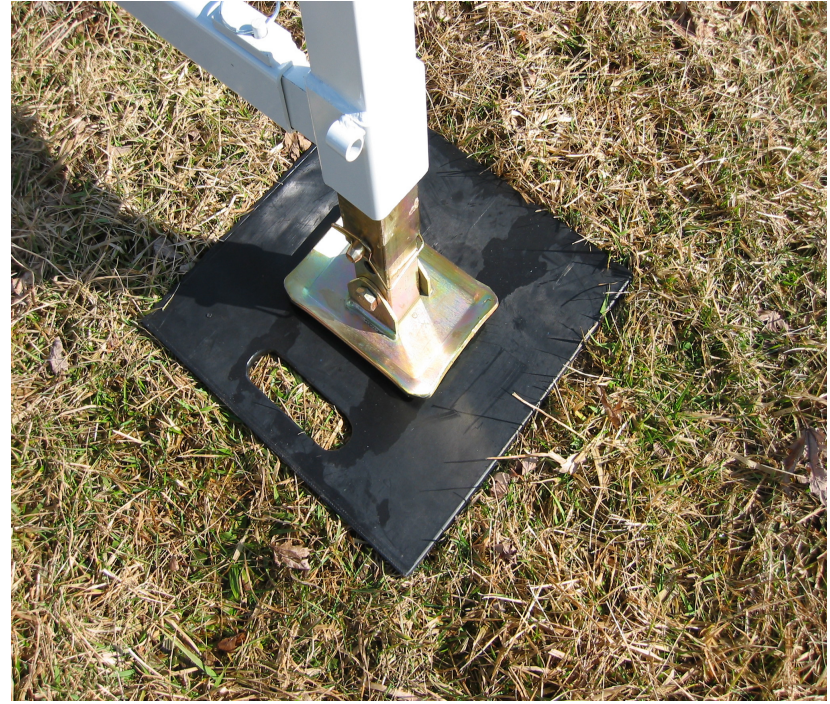


***NOTE: Retaining pins hold the outrigger arms & legs in place during transport and use.***

***NOTE: Outriggers must be fully extended before put into operation.***







Crank the jack handles to level and support the machine. Oversized outrigger pads might be required depending on soil conditions.



# Digging the Hole

- After attaching auger unit to the EZ Hauler 2500, position the machine over the desired hole replacement area. Extending boom 12 or 14 inches and allowing enough slack in rope to drill a straight hole down.
- Turn on the remote and toggle the accessory switch to the correct direction then lower the auger to begin digging.
- **NOTE:** It may be required to lower the auger speed to allow for booming down of the boom while digging.
- **CAUTION:** *Buried lines may be in your digging area.*



Take small bites and let the auger dig at its own pace until the hole is the proper depth. Different regions have many different soil compositions; familiarize yourself with your digging surface for your safety and those around you.





If needed, an extension bar may be added to reach proper depth.



- Before installing an extension bar to the auger bit, the bit must be disconnected from the driver motor. Two extension bars can be transported to the work site on the trailer.

# Setting the Pole

- Unpin 3<sup>rd</sup> stage and extension lock pin
- Allow boom stop to catch
- Secure 3<sup>rd</sup> stage
- Do not operate with boom stop engaged





- Pin pole guide to 3<sup>rd</sup> stage.



- Raise the boom into position so that the lift line will be lifting straight up following load chart specifications on weight vs. angles.

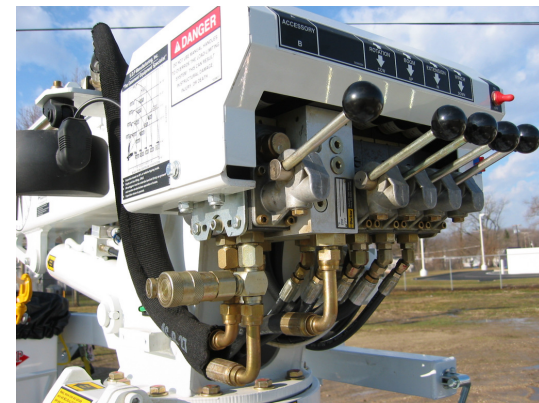


- Install the lifting strap, remember to position the lifting strap according to pole weight for balance in lifting.





- Lift the pole straight up and set into the hole.
- Always operate EZ Hauler 2500 from a safe distance using the remote control.
- Never use manual lever overrides for normal operation, they are for emergency use only.

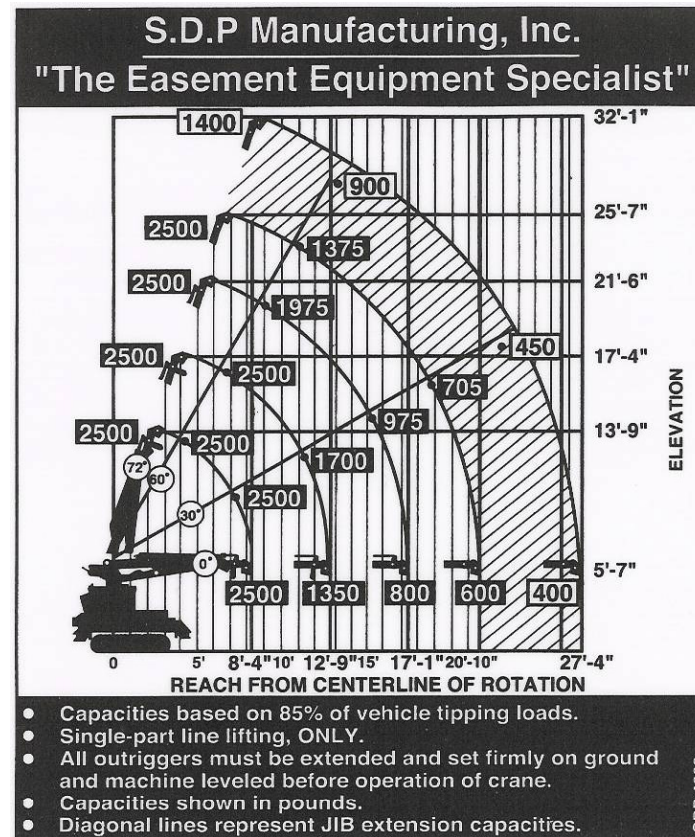


# **Jib Extension Procedure**



The outriggers on the EZ Hauler 2500 must be fully extended and properly pinned before use.

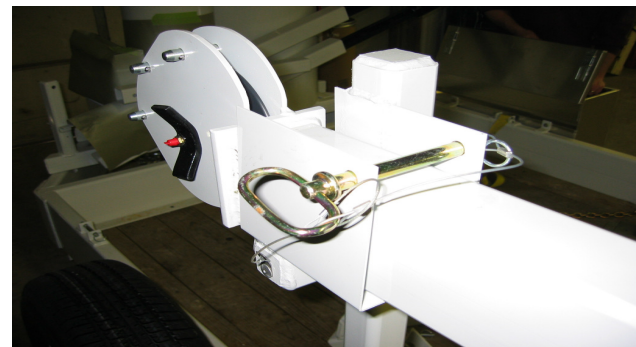
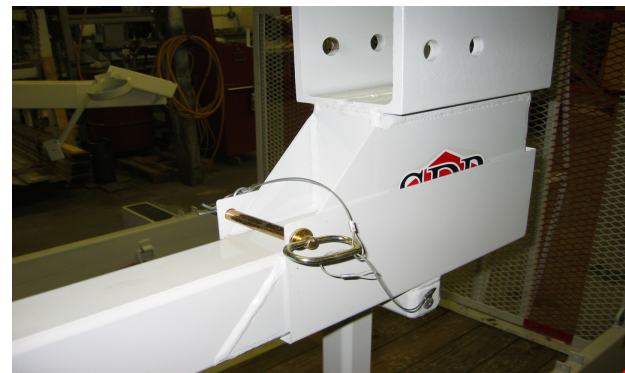
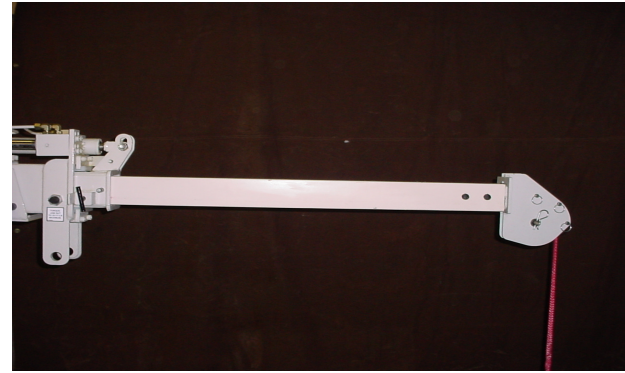
Before attempting to pin jib, make sure that you and your co-worker have the ability to lift at least 50 lbs. each.



1. Follow the load chart specifying the jib as close as possible. Overloading the EZ Hauler 2500 will greatly reduce machine stability and may result in injury.

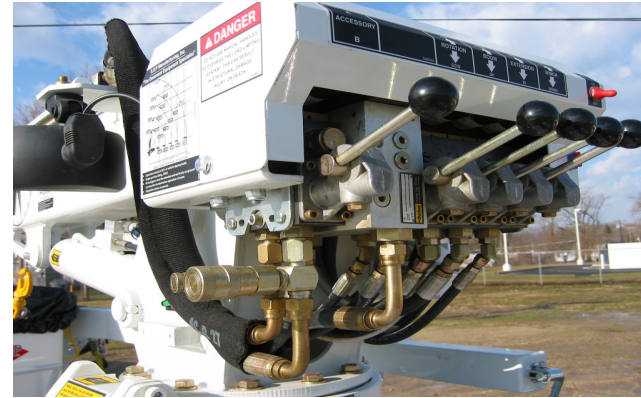


2. Extend approximately 5ft of rope. Now manually extend the 3<sup>rd</sup> stage boom and pin it properly.
3. Unpin all fasteners from jib trailer bracket. Don't lift the jib until your ready to pin it to the boom.
4. Have someone help you to easily left the jib up off trailer brackets and pin it the 3<sup>rd</sup> stage boom. Exercise proper lifting techniques to avoid injury to yourself or others.





5. Extend the rope out far enough that it can be pinned into the jib sheave assembly. Inspect the rope as you do this, a contaminated rope may cause it to lose its dielectric properties. Now the jib is ready to go to work.



6. Always use the radio remote control to operate the boom. Never use the manual lever override controls to operate the EZ Hauler 2500 because it bypasses the hydraulic pressure overload and can bend the boom sections or tip the machine. These levers are for emergency use only.



# Danger

**⚠ DANGER**

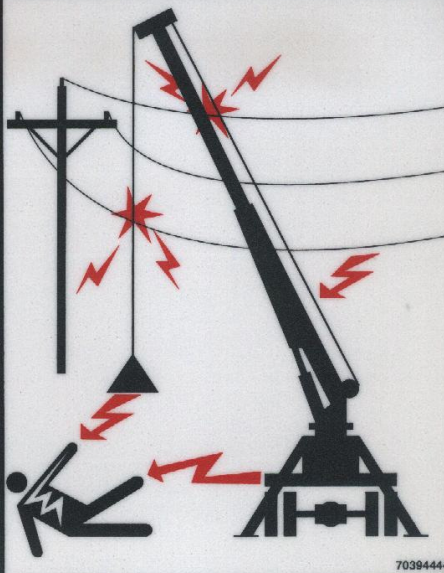
**ELECTROCUTION HAZARD**  
THIS CRANE IS NOT INSULATED  
**DEATH OR SERIOUS INJURY**  
WILL RESULT FROM CONTACT  
OR INADEQUATE CLEARANCE

Maintain safe clearance from electrical lines.  
Allow for boom, electrical line, and loadline swaying.

This crane does not provide protection from contact with or proximity to an electrically charged conductor.

Maintain a clearance of at least 10 feet between any part of the crane, loadline or load and any electrical line carrying up to 50,000 volts (50 kV). **If electrical line voltage is unknown, assume maximum voltage and maintain a clearance of at least 45 feet.**

NOMINAL VOLTAGE, kV (Phase to Phase) to	MINIMUM REQUIRED DISTANCE
50	10 feet
Over 50 to 200	15 feet
Over 200 to 350	20 feet
Over 350 to 500	25 feet
Over 500 to 750	35 feet
Over 750 to 1000	45 feet



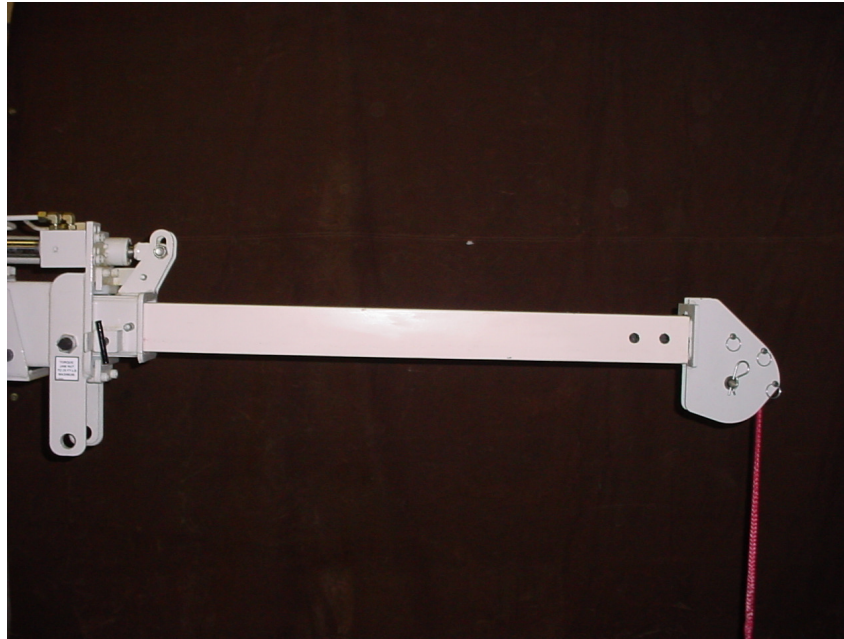
The diagram illustrates a crane operating near high-voltage power lines. Red lightning bolts indicate electrical arcs between the crane's boom and the power lines, and between the crane's base and the ground. A worker is shown being struck by an arc from the crane's base. The crane is positioned to the right of the power lines, and the worker is to the left. The power lines are represented by horizontal lines with a vertical support pole. The crane's boom is angled upwards towards the power lines. The crane's base is on the ground, and a worker is lying on the ground near the base, having been struck by an arc. The diagram is labeled with the number 70394444 in the bottom right corner.

- Remember even though the the jib is non-conductive, care must be taken to prevent cross fazing. All normal safety procedures must be followed when working with energized lines.

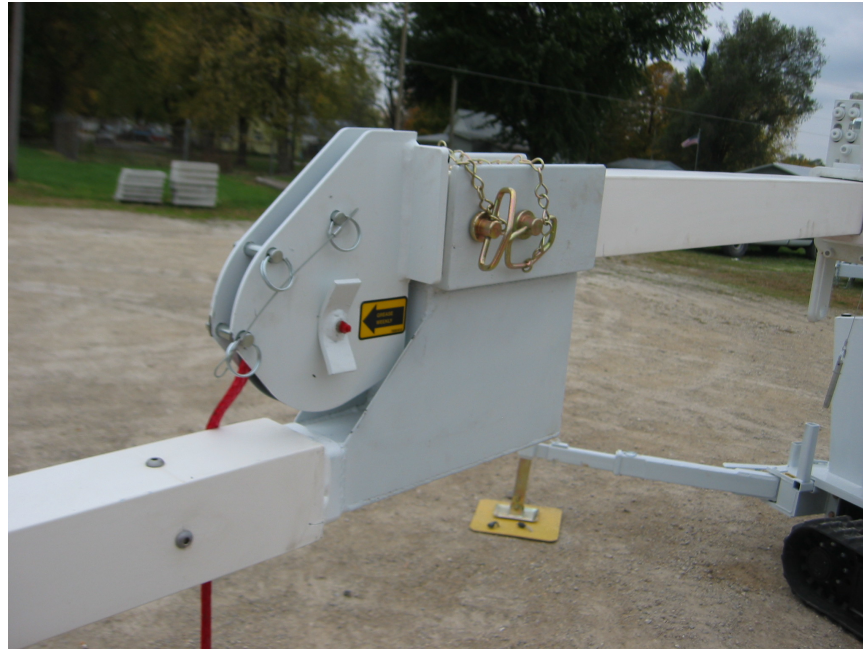


# Bucket Assembly Standard Operating Procedure

- **CAUTION:** *Prior to using the bucket assembly, extend and secure all outriggers to the fullest settings.*
- **NOTATION:** The bucket assembly has the lifting capabilities of 300 pounds.
- The following instructions are provided to ensure safe operation of the bucket assembly.



1. Manually extend the fiberglass boom extension fully (leaving the two hydraulic boom extensions retracted) and pin the last securable position. **(DO NOT EXTEND HYDRAULIC STAGES.)**



2. Pin bucket extension arm into the fiberglass 3<sup>rd</sup> stage boom.

**CAUTION!** Do not try to lift bucket jib alone, always lift bucket jib with at least two people.



3. Position bucket in cart for pinning bucket jib to the bucket.



4. Insert bucket assembly into the end of the bucket jib and secure it with supplied pins and clips.





5. Follow all safety procedures and weight charts when operating the bucket.

**CAUTION!** Stay clear of bucket while in operation.

6. After completing the tasks, return the hydraulic boom sections to the retracted “stowed” position before lowering the bucket to a flat surface.

*NOTICE:* Place bucket assembly on storage cart before detaching bucket assembly from the EZ Hauler 2500.





- All of the bucket procedures can be found listed on the side of the bucket.
- **NOTICE:** Always use the radio remote control to operate the boom. Never use the manual lever override controls to operate the EZ Hauler 2500 because it bypasses the hydraulic pressure overload & can bend the boom sections or tip machine. These levers are for emergency use only.

# IMPORTANT

## BUCKET ASSEMBLY STANDARD OPERATING PROCEDURE

The following instructions are provided to ensure safe operation of the bucket assembly.

**NOTATION:** The bucket assembly has the lifting capabilities of 300 pounds.

**CAUTION:** PRIOR TO ATTACHING THE BUCKET ASSEMBLY, EXTEND AND SECURE ALL OUTRIGGERS TO THE FULLEST SETTINGS. (SEE OWNERS MANUAL.)

1. Manually extend the fiberglass boom extension fully (leaving the 2 hydraulic boom extensions retracted) and pin into last securable position. (DO NOT EXTEND HYDRAULIC STAGES).
2. Pin bucket extension arm into the fiberglass 3<sup>rd</sup> stage boom of crane.
3. Lift the pinned bucket to an angle setting of 60 to 75 degrees; you may now extend the hydraulic boom sections.
4. Once all three (3) boom extensions are extended and operating in the angle safe zones of 60 - 75 degrees, you are now able to safely maneuver the bucket assembly.
5. After completing the tasks, return the hydraulic boom sections to the retracted "stowed" position before lowering the bucket to a flat surface.
6. Place bucket assembly on storage cart before detaching bucket assembly from the EZ Hauler.

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# Auger Attachment Procedure



- ❖ Before attempting to pin auger or attachments, make sure that you have the ability to lift at least 50 lbs.



1. Pin universal joint to the auger motor head.
2. Use the remote control to align boom and pin auger head to the brackets built into the bottom of the boom.







3. Carefully lift auger from the storage tubs.



4. Clean the surface of the auger hose and the couplers on the boom. Then attach the auger hose couplers



5. Slide extension into auger and pin it in place. Once the extension is in place, align the auger head above it and pin it to the extension.





6. . Carefully lift auger assembly from the storage tubs.



7. For safe transport, the auger is fastened into the position with the four-foot auger chain supplied in the trailer toolbox.



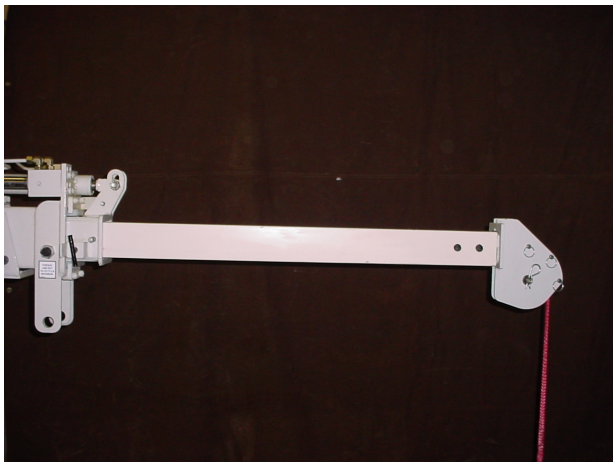
8. Now you may safely transport the EZ Hauler 2500. Once in position to drill, carefully unfasten the auger assembly and begin.



# Pole Guide Attachment Procedure

❖ **Before attempting to pin pole guide, make sure that you have the ability to lift at least 30 lbs.**

1. Extend approximately 5 ft of rope. Now manually extend the 3<sup>rd</sup> stage boom and pin it properly. Have your attachment pins handy for the next step.





2. Unpin pole guide attachment from trailer and pin to the 3<sup>rd</sup> stage boom section.



3. Once in place, the pole guide becomes a very useful tool in assisting the operator with setting the pole.



4. Remember to lift the pole up slowly to ensure that it rests on the inside of the pole guide and not the outside where it may become unstable.



5. Always use the radio remote control to operate the boom. Never use the manual lever override controls to operate EZ Hauler 2500 because it bypasses the hydraulic pressure overload and can bend the boom sections or tip the machine. These levers are for emergency use only.





⚠ **DANGER**

**ELECTROCUTION HAZARD**  
THIS CRANE IS NOT INSULATED  
**DEATH OR SERIOUS INJURY**  
WILL RESULT FROM CONTACT  
OR INADEQUATE CLEARANCE

Maintain safe clearance from electrical lines.  
Allow for boom, electrical line, and loadline swaying.  
This crane does not provide protection from contact  
with or proximity to an electrically charged conductor.  
Maintain a clearance of at least 10 feet between any  
part of the crane, loadline or load and any electrical  
line carrying up to 50,000 volts (50 kV). **If electrical  
line voltage is unknown, assume maximum voltage  
and maintain a clearance of at least 45 feet.**

NOMINAL VOLTAGE, kV (Phase to Phase)	MINIMUM REQUIRED DISTANCE
to 50	10 feet
Over 50 to 200	15 feet
Over 200 to 350	20 feet
Over 350 to 500	25 feet
Over 500 to 750	35 feet
Over 750 to 1000	45 feet

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The diagram illustrates a crane's boom and loadline positioned near several high-voltage power lines. Red lightning bolts indicate electrical arcs striking the crane's boom and the worker. The worker is shown falling away from the crane, having been struck by an arc from the power lines. The crane's base is labeled 'EZ HAULER'.

6. Remember that the pole guide is conductive so it will not be insulated against cross fazing, but with the fiberglass 3<sup>rd</sup> stage boom properly pinned in place the EZ Hauler 2500 and its operator will be substantially protected.



# **Hydraulic Pole Guide Procedure**

1. Remove all pins and sheave from horse head.



2. Adapt hydraulic guide to horse head as shown, with pins provided.



3. Connect hose reel lines to hydraulic claw quick couplers.



4. Make sure quick couplers are secure.

