

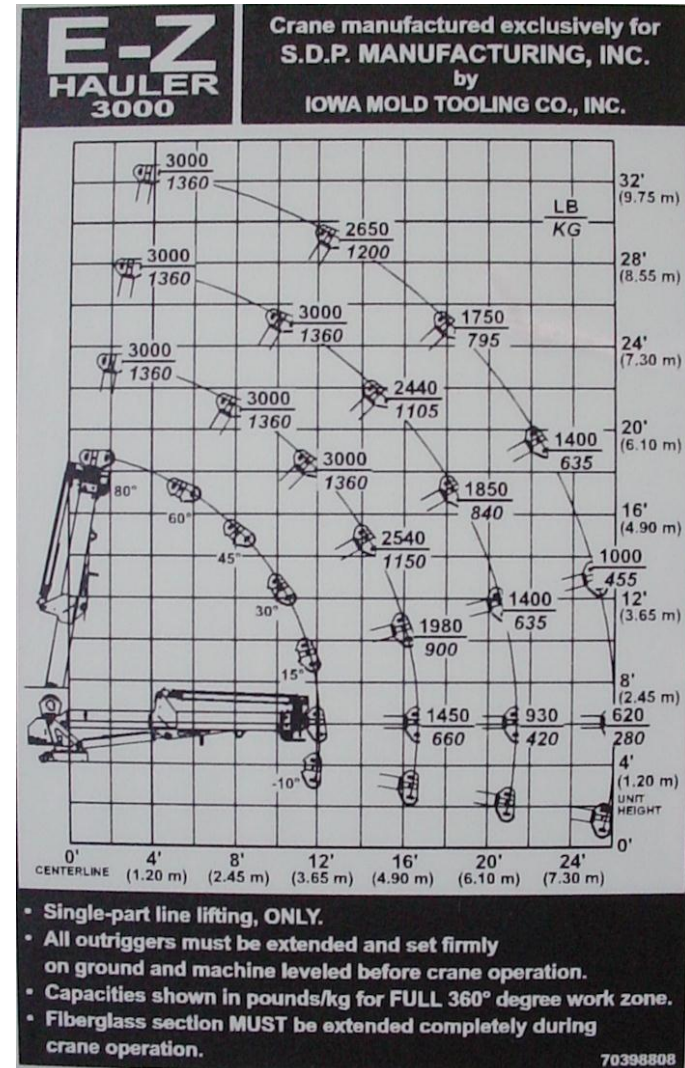


MANUFACTURING, INC.

EZ Hauler 3000
Training & Procedure Manual

Load Capacity

- One of the most important considerations when operating this machine is the Load Capacity of the EZ Hauler's boom. The maximum weight capacity of the EZ Hauler 3000 is 3000 lbs.
- The load capacity of the boom depends upon the distance from center line of boom turret!
- **CAUTION! UNIT MUST BE LEVEL.**



EZ Hauler 3000 Safety

While the EZ Hauler 3000 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 3000. The EZ Hauler 3000 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 3000.



- The capacity of the EZ Hauler 3000 is rated at 3000 pounds which means that the most the boom will ever safely lift is 3000 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 Haulers 3000 boom must never be operated without the outriggers being properly set.



DANGER!

**ALL OUTRIGGERS MUST
BE FULLY EXTENDED
BEFORE OPERATING
THE CRANE!**

Safety Guidelines

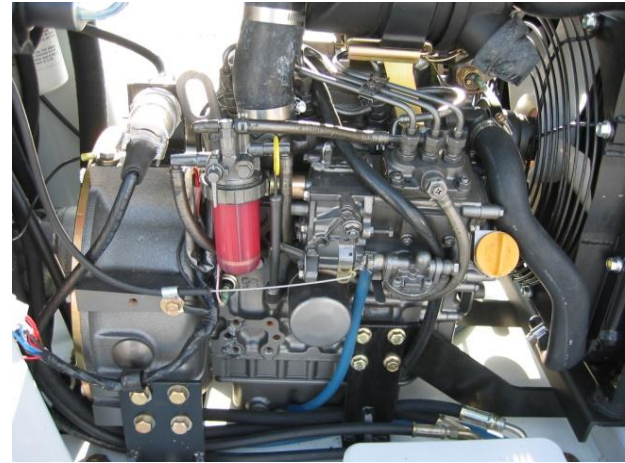
- Before operating any heavy machine, it is important to learn its safety rules. All of your existing in-house safety precautions must be followed as well as the precautions listed in this manual.
- The EZ Hauler 3000 is not electrically insulated until final stage manual boom is extended and pinned into place. Be sure to follow your company's safety procedures to protect against electrocution.
- The EZ Hauler 3000 is not designed to carry passengers. Never ride on the machine.
- Operators must be properly trained before operating any part of the EZ Hauler 3000. Properly set the outriggers whenever the boom is in use.

Safety Guidelines

- Operate the EZ Hauler 3000 in a well-ventilated area only. The engine emits exhaust gases, which can cause sickness and death.
- The EZ Hauler 3000's controls react to input rapidly. Know the location and function of ***all*** controls before starting the machine.
- The EZ Hauler 3000 can 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 3000 is properly secured on its trailer before transporting it.

Pre-trip Inspection

- Before each day's operation, the EZ Hauler 3000 must be inspected by the operator.
- Do a visual inspection to check for loose, 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 3000 trailer for wear & proper inflation.



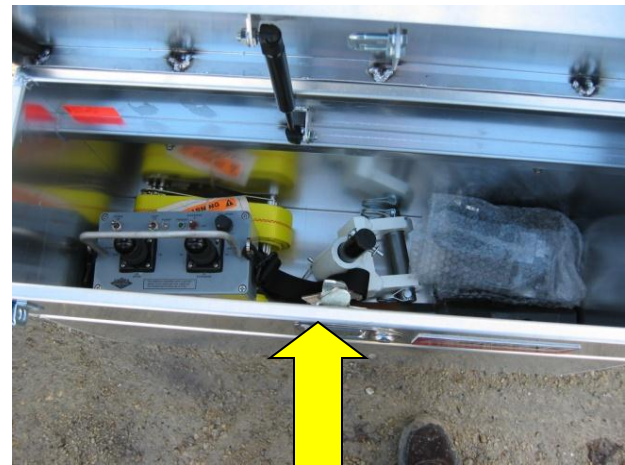
Pre-trip Inspection

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 3000 is properly secured to the trailer.
- Look inside the trailer toolbox & make sure it contains all tools & equipment necessary for operating the EZ Hauler 3000.



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 damaged parts before using the EZ Hauler 3000.



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 to operate digger derrick.
- C. Auger switch: A position to dig, B position to reverse (clean).



NOTE: Auger will stop digging during overload, reverse auger to stop overload. Audible alarm will sound.

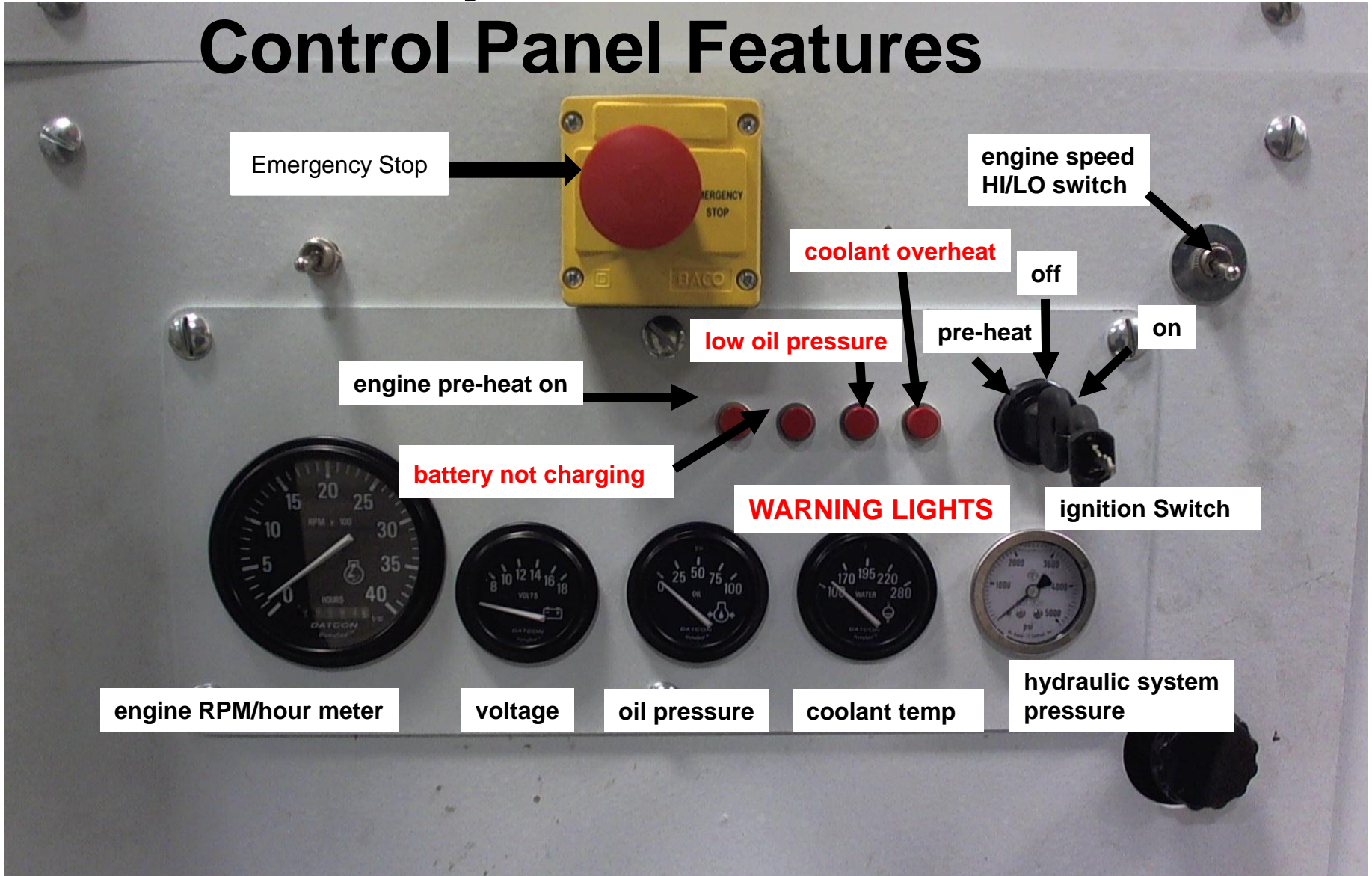
C

B

A

Familiarize yourself with these

Control Panel Features



The ignition switch has three stationary positions: engine pre heat - off – on
Turn the key all the way to the right to start the engine.

Driving the EZ Hauler 3000



The EZ Hauler 3000 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 3000 should only be driven with the tracks fully extended.*

Driving the EZ Hauler 3000

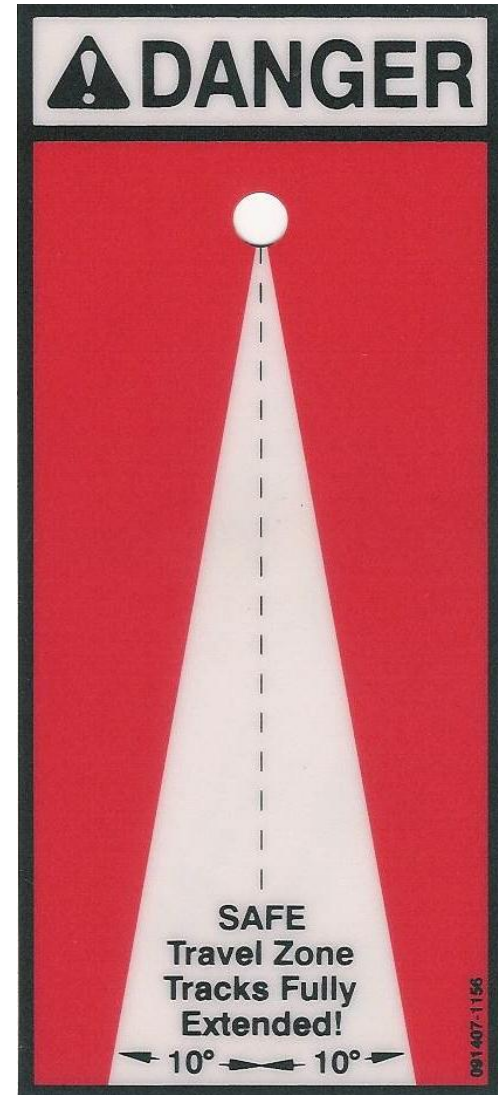
Remote Drive Function (optional)

When operating the EZ Hauler 3000 with the remote, pay close attention to the unit and the terrain that you are navigating.



Driving The EZ Hauler 3000

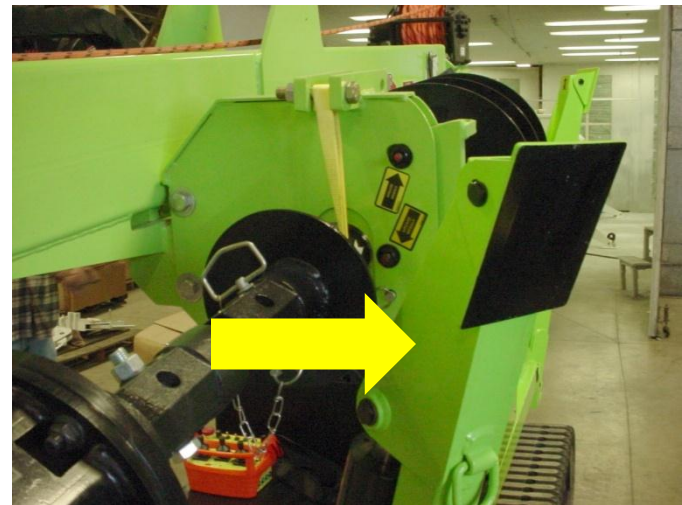
- Pay close attention to the “side tip” angle indicator when navigating tough embankments.
- Always stay within the safe operating zone.



Going through gates with The EZ Hauler 3000

- When preparing to go through a gate with the EZ Hauler 3000, always make certain the boom is level as shown by the level indicator.

NOTE: Boom must be level to allow outriggers to retract fully.



Going through gates with The EZ Hauler 3000

- The track interlock system is an integral safety component that is designed to notify the operator of the tracks not being extended completely.
- The red indicator light will be lit up when tracks are fully extended.
- **THE SYSTEM WILL SOUND AN AUDIBLE ALARM IF THE TRACKS ARE NOT FULLY EXTENDED!**
- **NOTE:** Some systems are designed to cut off the hydraulic drive functions of the unit unless a manual override palm button is depressed.



Unloading the EZ Hauler 3000

- Caution: While unloading the EZ Hauler 3000, always have the trailer attached to a truck and the boom in its lowest position. The rear jacks should be lowered to within 4 inches from the ground.
- Note: If the EZ Hauler 3000 engine is not started, start it and let it warm up for 5 minutes.



NOTE: Unit shown may not be an actual representation of the unit you are operating.



(Pictures may not be a true representation of your machine.)

NOTE: The EZ Hauler 3000 is secured for transport at the front and back of the trailer.

Moving the EZ Hauler 3000

Through a small opening.

- One of the advantages of the EZ Hauler 3000 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 must be moved to full extension to improve stability.



(Pictures may not be a true representation of your machine.)

Moving the EZ Hauler 3000 With a Load

Moving a pole:

Lifting and carrying a pole can be performed easily with the hydraulic outriggers.



Attach the provided lifting chains to the pole and to the d-rings on the EZ Hauler 3000 outrigger arms as shown.

(Picture may not be a true representation of your machine.)

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

NOTE: Pole must clear tracks when completely lifted



(Picture may not be a true representation of your machine.)

❖ ***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 3000 slowly.

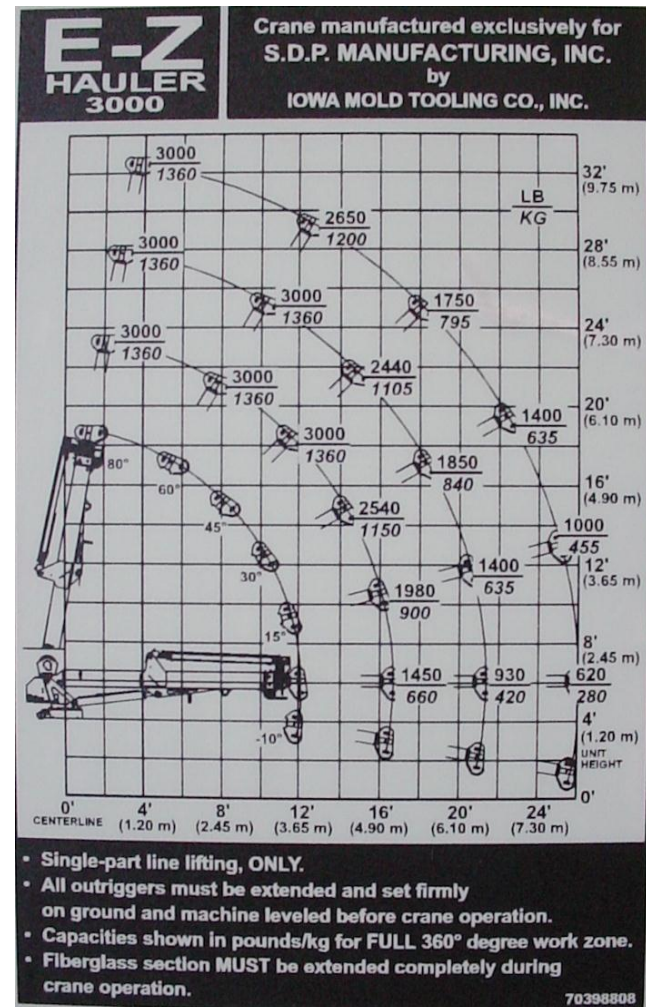
Make turns slowly and carefully.



(Picture may not be a true representation of your machine.)

Setting a Pole With the EZ Hauler 3000

- Remember the EZ Hauler 3000 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

Use the outrigger controls to lower outriggers to level and support the machine.

Oversized outrigger pads might be required depending on soil conditions.

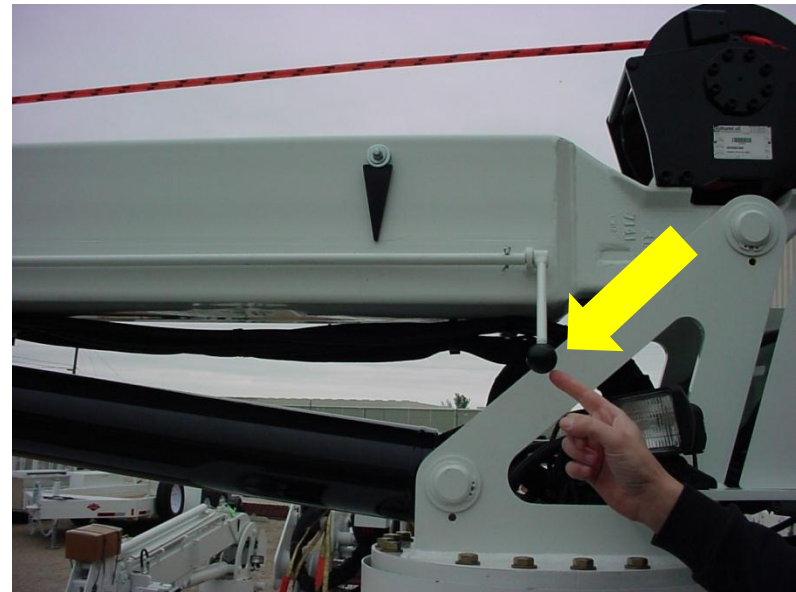


(Picture may not be a true representation of your machine.)

Auger Operation Procedure



1. Make sure that boom sections are fully retracted
2. Using the auger remote circuit wind up the auger slightly to release tension on latch locking pin.
3. Pull pin and release auger using latch release handle.



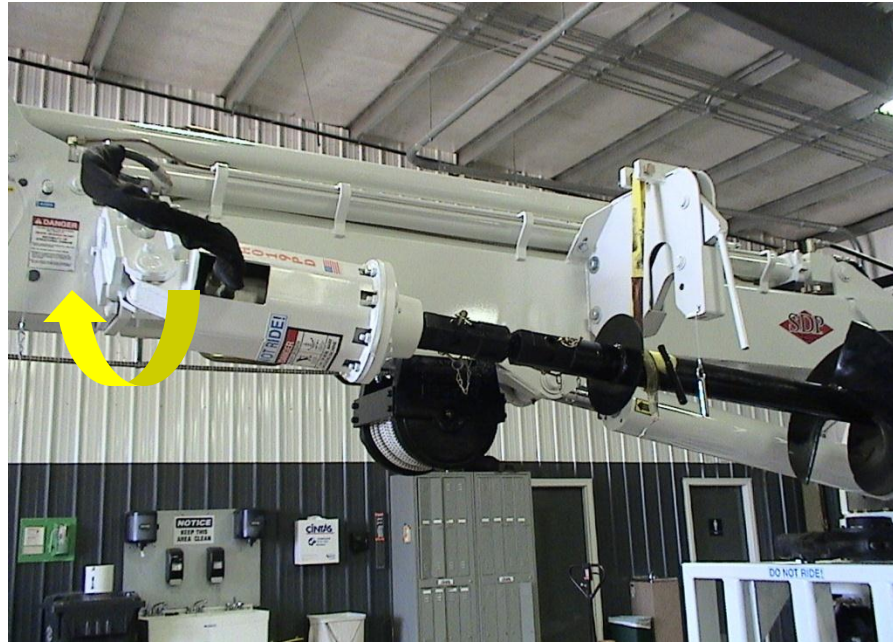
NOTE: Use the flow control on the remote control to control the speed of the auger.





IMPORTANT: You must raise boom to safely lower auger assembly.

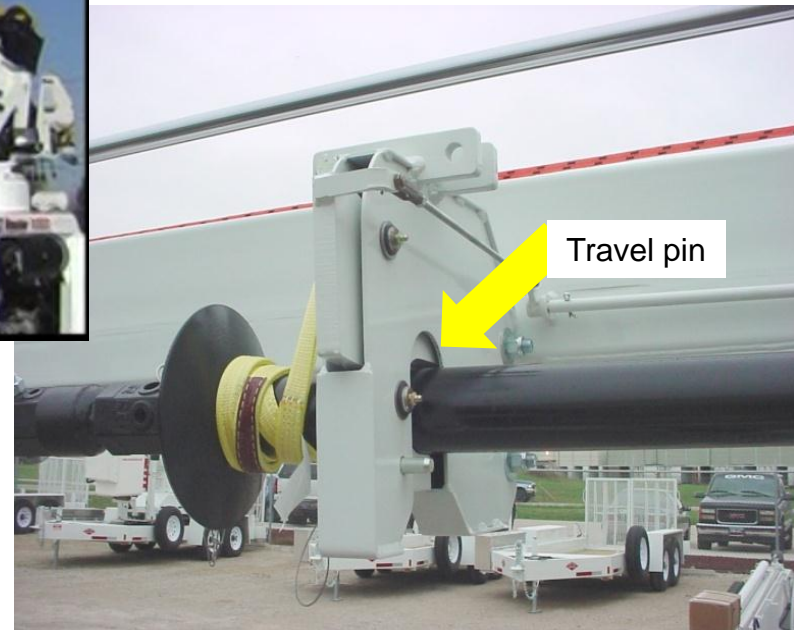
4. Raise the boom up to 30 deg. To avoid auger making contact with the machine. Using the remote, reverse the auger rotation. Then slowly lower the auger.



Carefully unwind the auger and remove the strap. You are now ready to use the remote control to auger as needed.

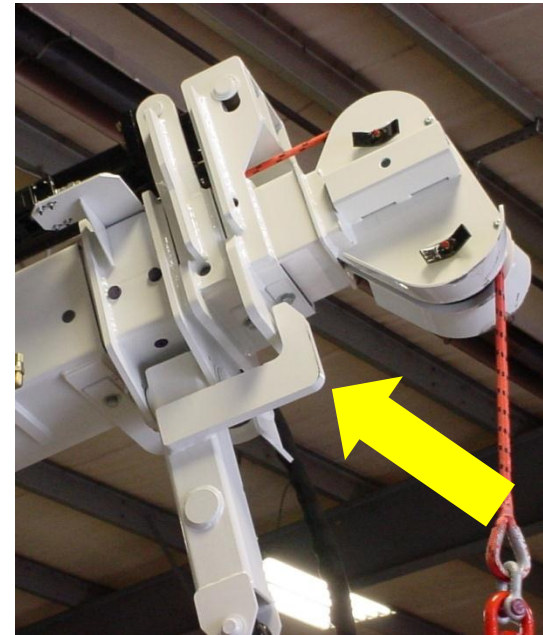
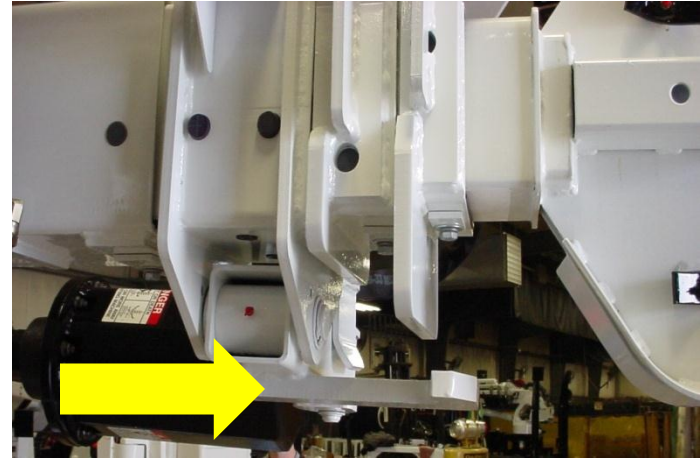
5. Reverse this procedure to store the auger. Again making sure to have boom extensions fully retracted before stowing auger. **DO NOT “OVER STOW” THE AUGER AS DAMAGE CAN OCCUR!**

Replace the safety Travel pin



Setting the Auger Lock

- ***On the EZ Hauler 3000 the auger lock is set automatically when the auger is brought down from the stowed position.***
- ***When the lock is engaged the auger can then travel with the extension function to reach the maximum distance of 15' from center.***
- ***CAUTION: Make sure all extensions are retracted before using the auger function.***



Digging the Hole

- 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 Auger 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 digger derrick while digging.
- **CAUTION:** *Buried lines may be in your digging area.*



(Pictures may not be a true representation of your machine.)

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.



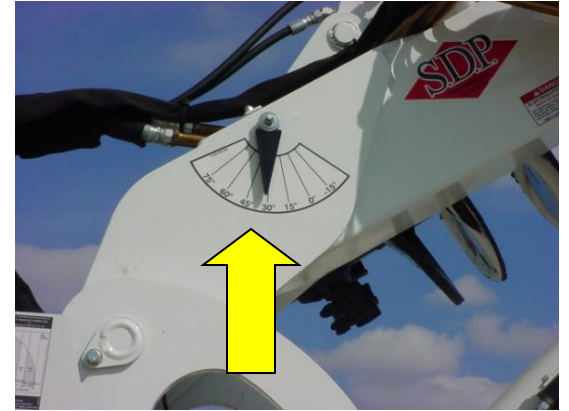
(Pictures may not be a true representation of your machine.)

If needed, the extension bar may adjusted for more digging depth.



(Pictures may not be a true representation of your machine.)

Setting the Pole



1. Set the outriggers and level the machine.
2. Unwind winch line to avoid two-blocking.
3. Extend the boom out until the unit stops.
4. Raise the boom to at least 60 degrees elevation.
5. **Fiberglass final stage must be fully extended for dielectric insulation!**

- Install hydraulic pole guide. Refer to installation instructions.



- Raise the boom into position so that the lift line will be lifting straight up. Follow load chart specifications on weight in relationship to boom angle.



- 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 3000 from a safe distance using the remote control.



- **Never use manual lever overrides for normal operation, they are for emergency use only.**



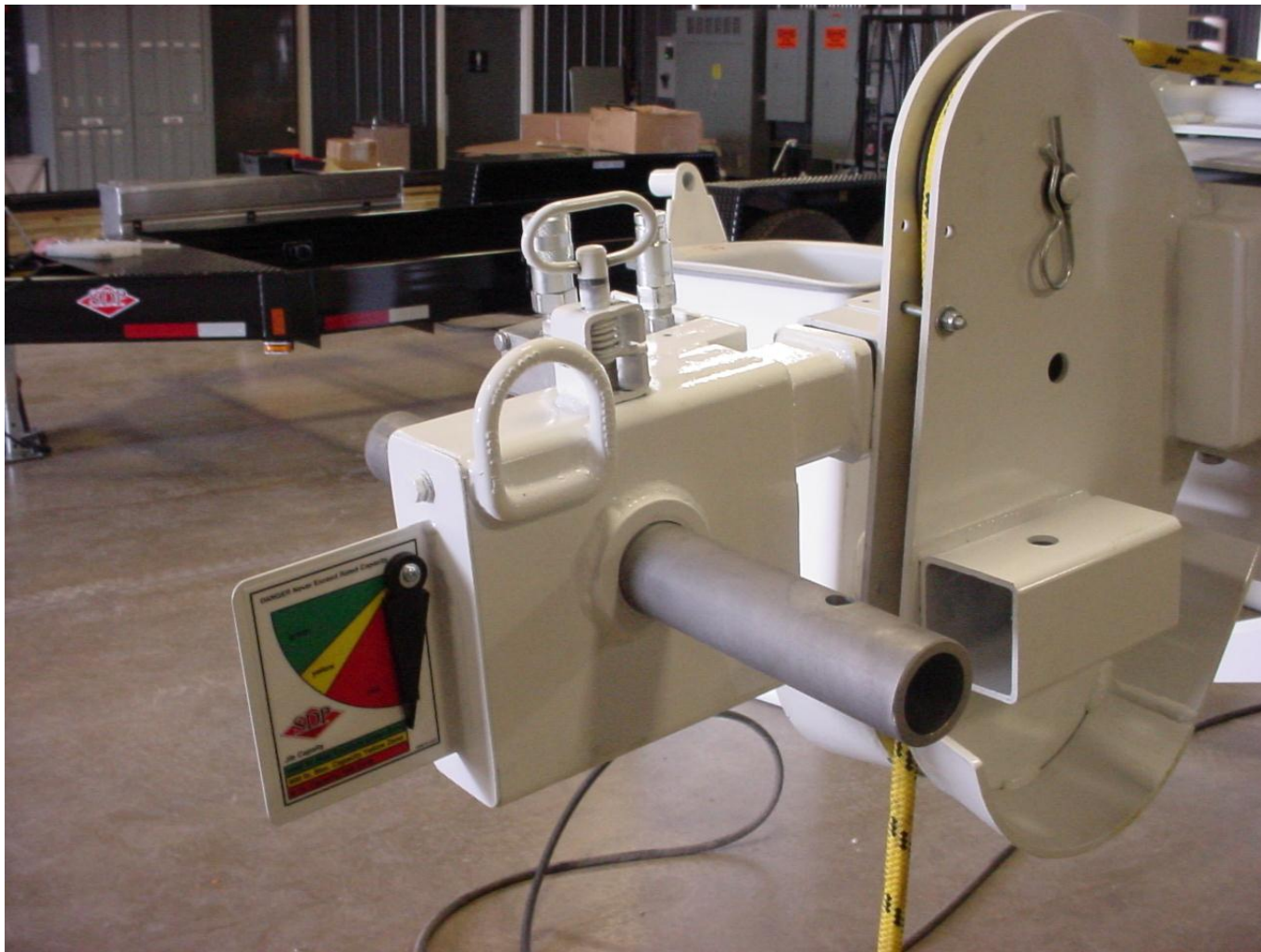
Bucket Assembly Standard Operating Procedure



Lower and extend the boom to accommodate installation of the bucket mount.

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

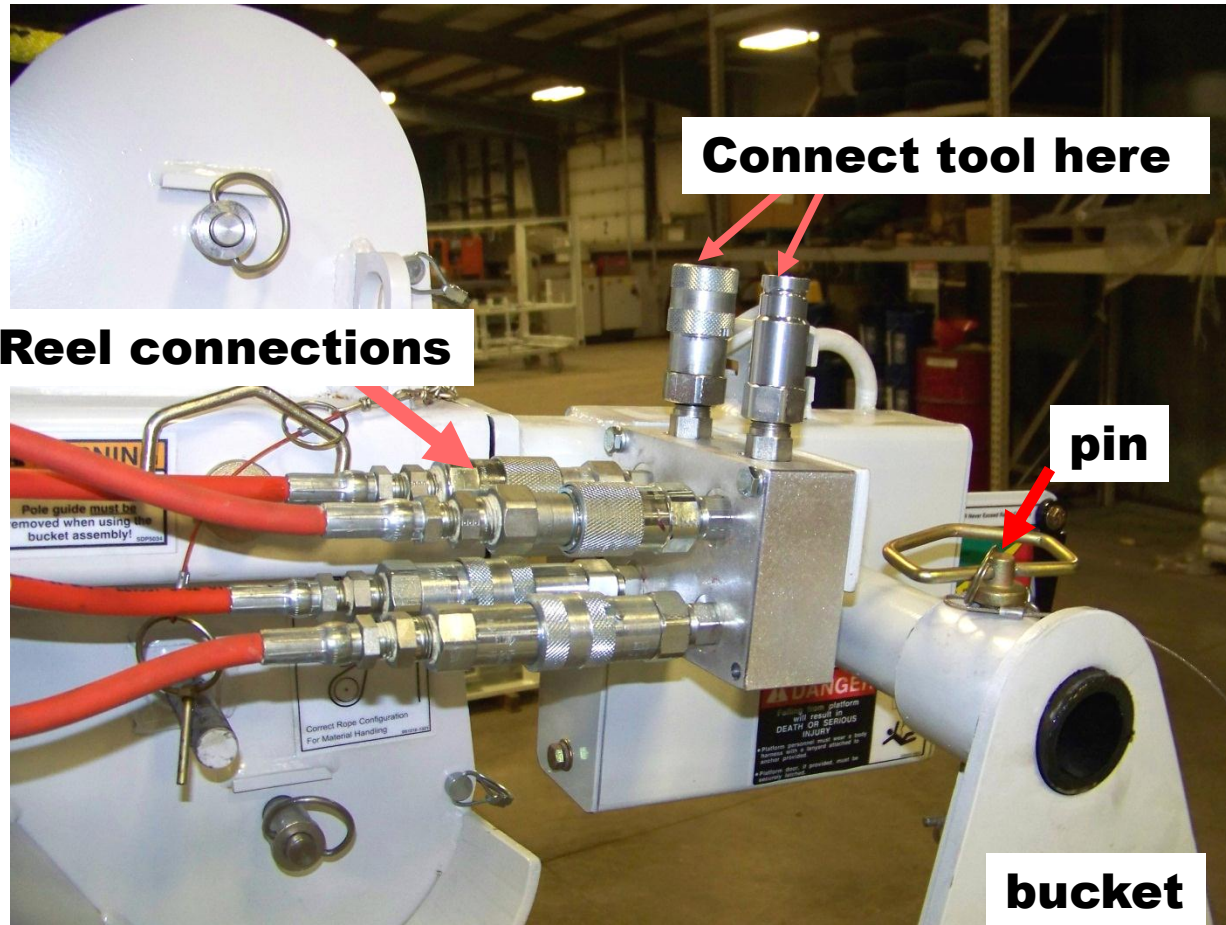
CAUTION! Stay clear of bucket while in operation.



**Shows the bucket mount installed
and pinned it in place**



The bucket can now be mounted to either side of the mount to best accommodate working from it.



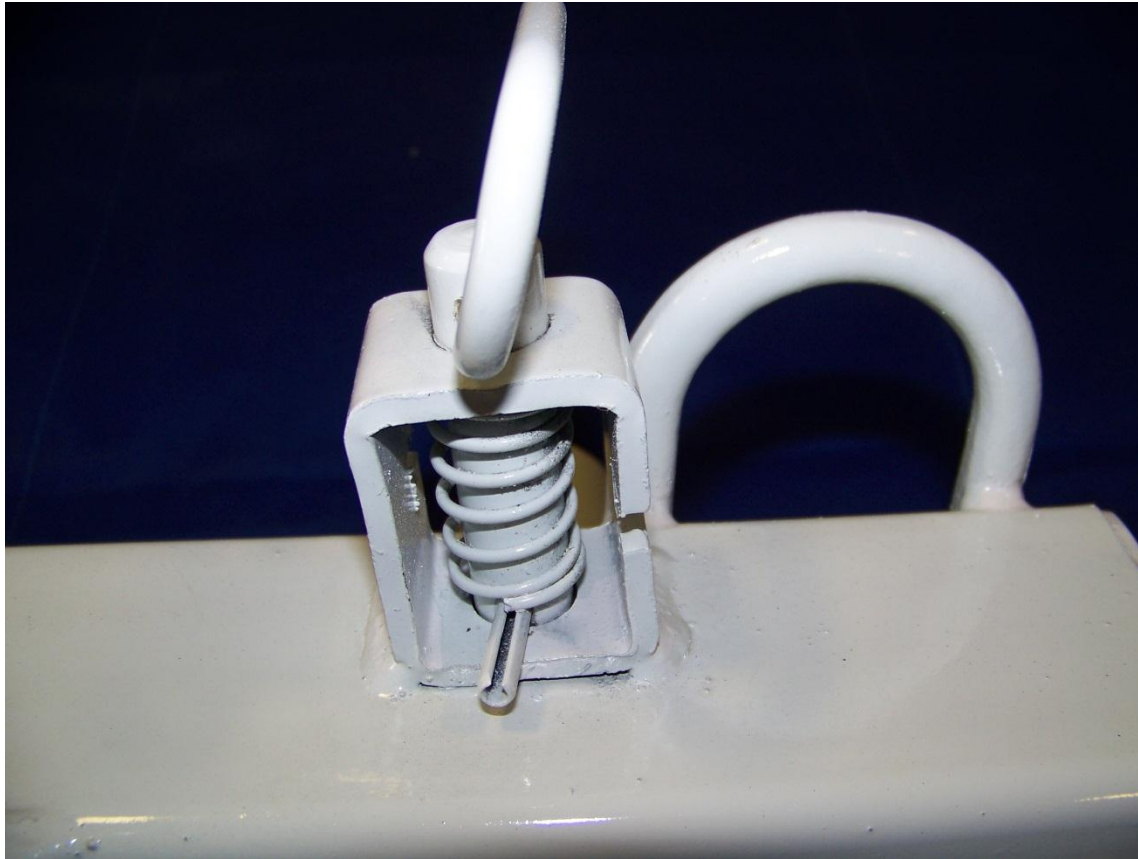
With the bucket mounted, connect the hoses from the tool reel. Connect tool to outlets.

- ***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.
- Always engage bucket attachment switch .



Make sure the locking mechanism on the bucket mount is unlocked by pulling it up and twisting counterclockwise into the position shown.

This allows the bucket to swing freely and remain perpendicular while the boom is being raised or lowered.



Once the boom is at working height lock the bucket in place by rotating the mechanism clockwise allowing the spring to engage the working parts of the lock.

Remember to unlatch the lock each time before raising or lowering the boom!

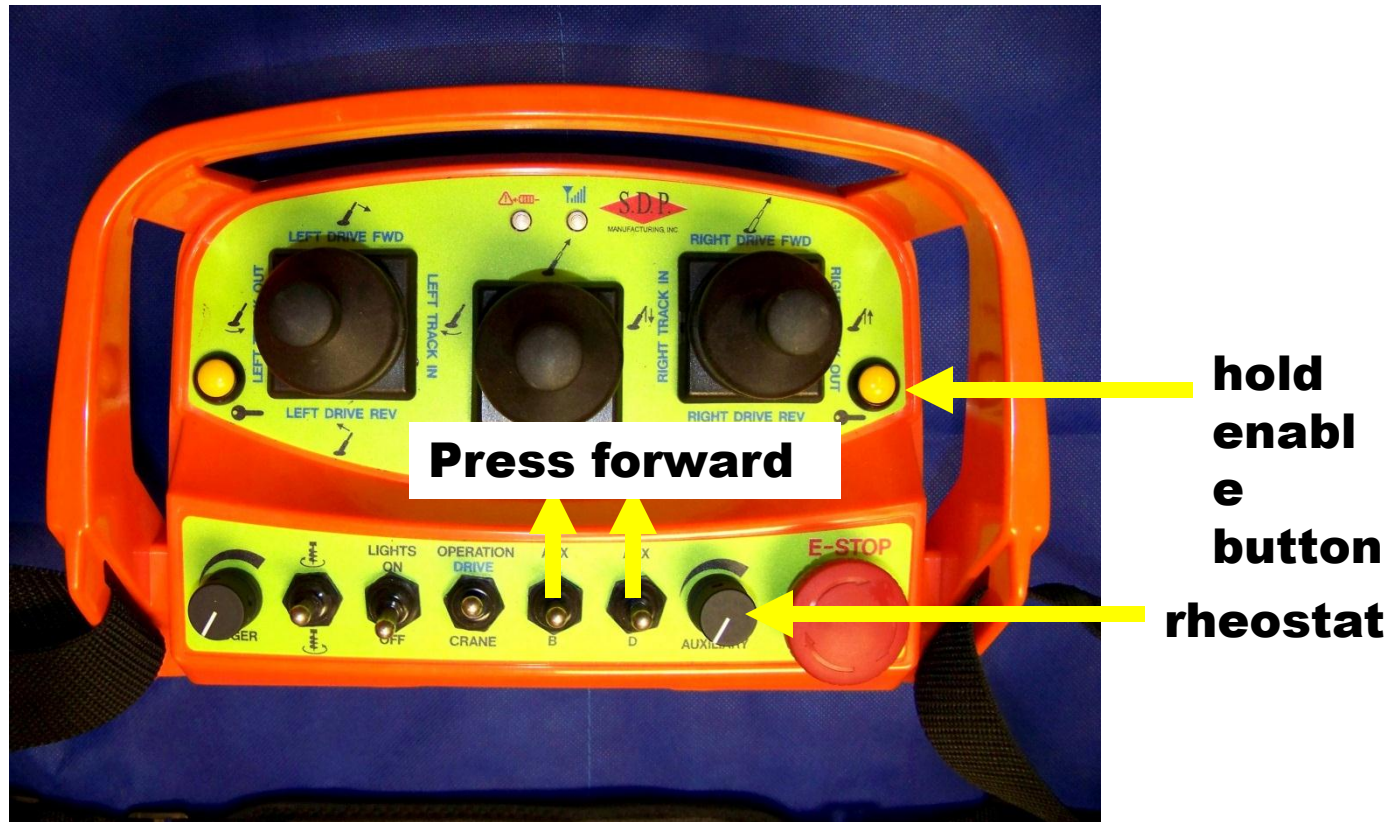
To Enable control of hydraulic tools
From the bucket





1. Turn this rheostat counter clockwise to off position

WARNING! USE OPEN CENTER TOOLS ONLY



2. While holding the yellow “enable” button down press both momentary auxiliary switches forward.

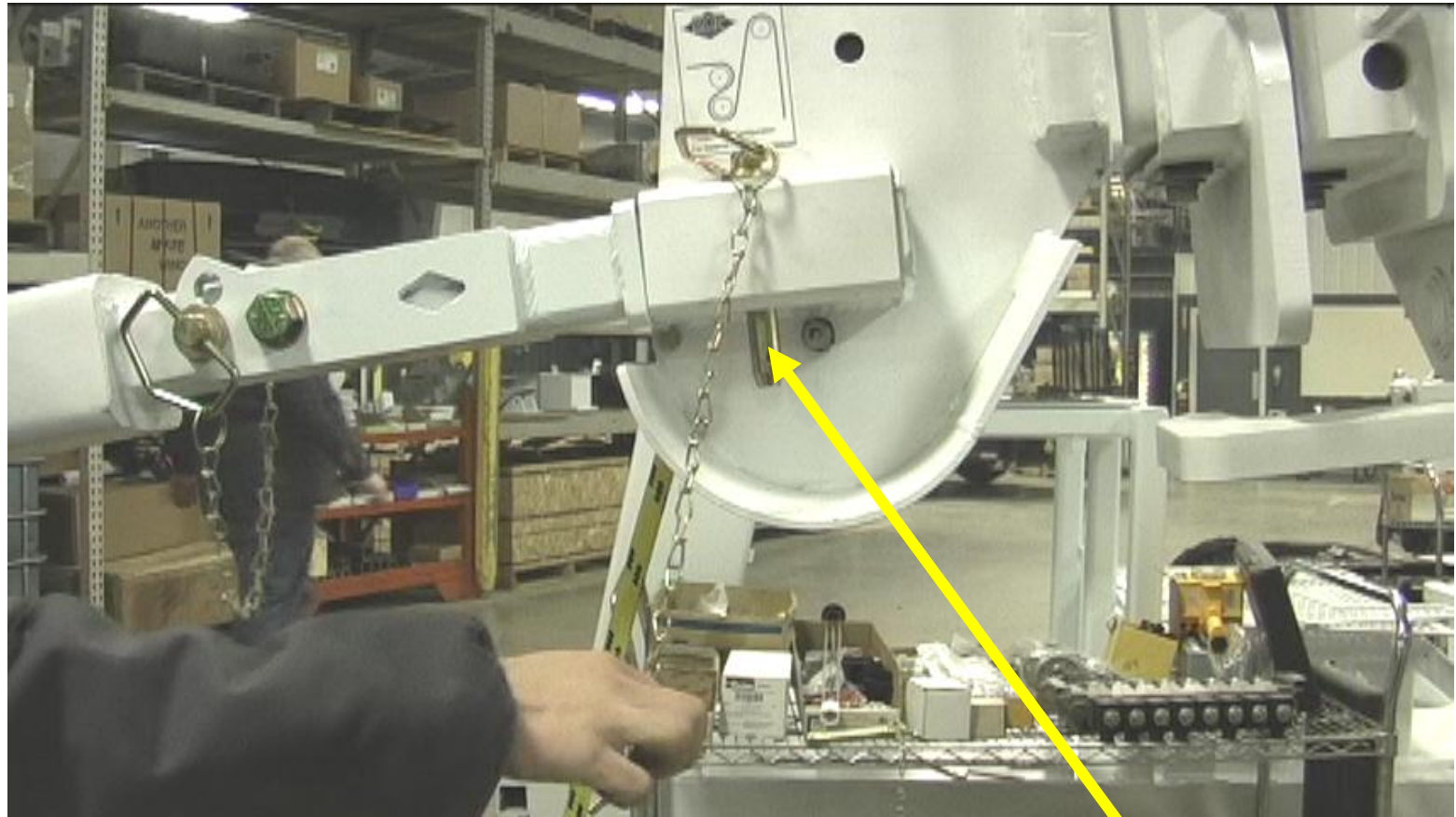
You may now control oil flow to the upper tool reel using the rheostat on the right of the remote panel.

WARNING! USE OPEN CENTER TOOLS ONLY

Material Handler Attachment



Attach the material handler jib to the boom by inserting the shaft into the receiver.



Secure it in place with the provided pin.



Rethread the rope behind the lower boom pulley and over the jib pulley.

This is accomplished by removing the pin and the pulley and replacing the pulley with the rope in the new position.



Remove this pin and raise the jib to its upward position. Replace the pin.



The material handling jib is now in the position for the maximum lifting capacity allowed by the boom angle. Consult the lift charts before making any lift.



The Material Handling Jib Attachment will allow additional functionality to the aerial bucket assembly.

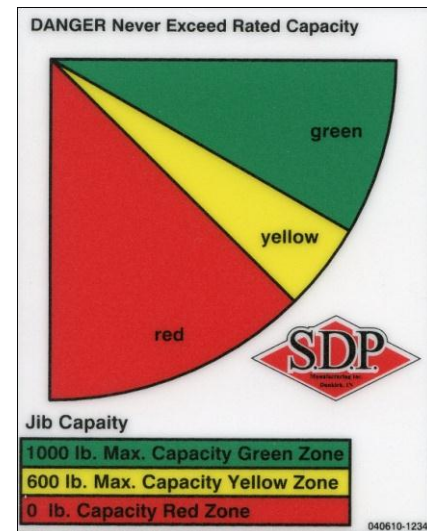
The Material Handling Attachment Jib has a rated capacity of:

60 dg. angle and above: **1000 lbs. max**

45 – 60 dg. angle. : **600 lbs. max**

Under 45dg.. : **0 lbs. NO LIFT**

Consult the lift guide



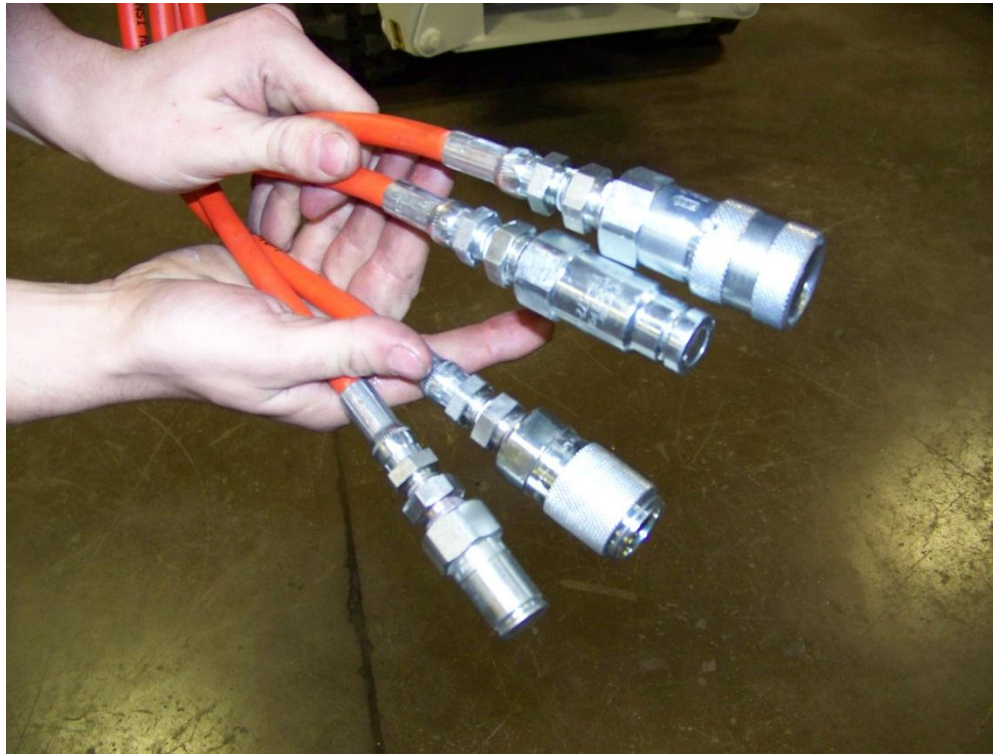
DO NOT use in situations under 45 dg. angle!



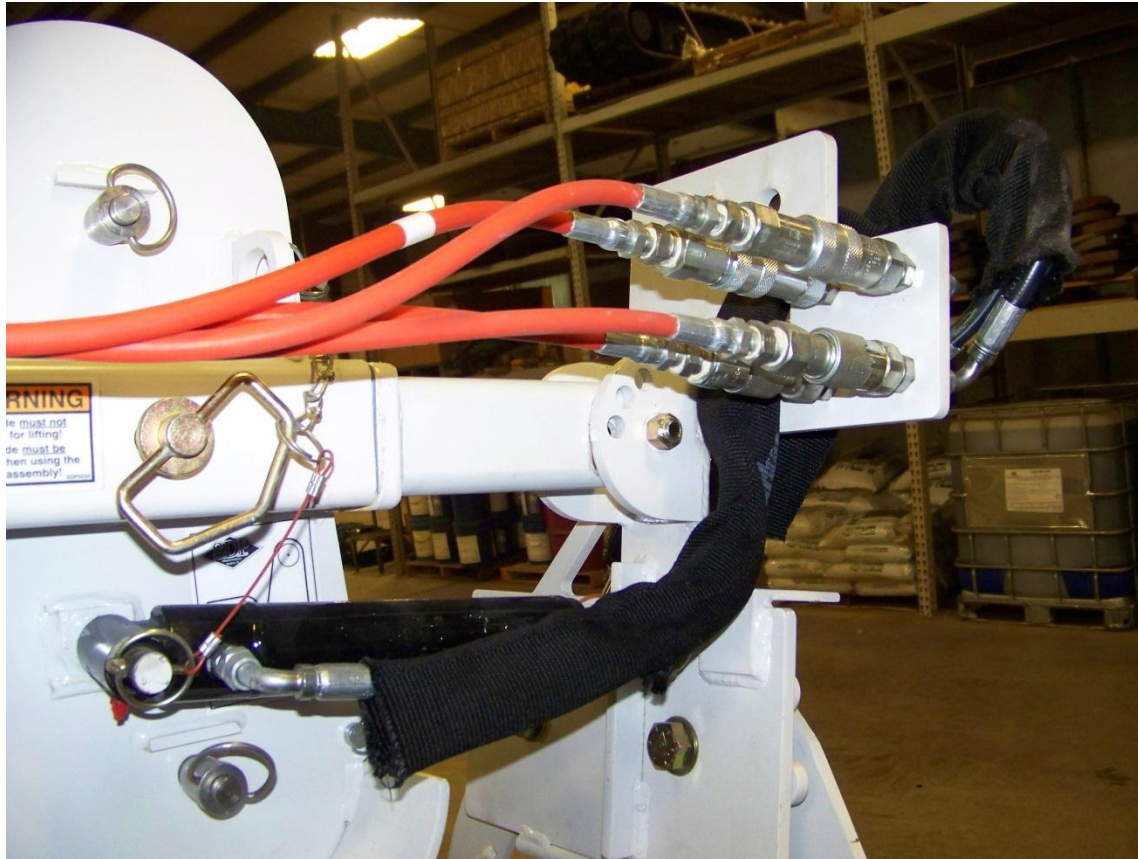
Hydraulic Pole Guide Procedure



**Install the pole guide and pin it in place
Connect the four hoses to operate it**



The hoses are each fitted with connectors that match the correct fittings on the pole guide



The pole guide is installed with hoses connected

⚠ **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

The diagram on the right shows a crane boom extending towards several horizontal power lines. Red lightning bolts indicate electrical arcs between the crane's boom and the power lines. A worker is shown on the ground, being struck by a red lightning bolt that originates from the crane's base, illustrating the danger of electrocution from the crane's structure.

5. Remember that the pole guide is conductive so it will not be insulated against cross fazing, but with the fiberglass boom properly extended the EZ Hauler 3000 and its operator will be substantially protected.

Pole Pulling

Always use a suitable open center “pole pulling” tool for pole removal!

The EZ Hauler can be used as a guide and steady the pole as the pole pulling tool is in use.

WARNING:

Never use the EZ Hauler in conjunction with a pole pulling tool or as a secondary pole removing tool!

Structural damage will occur!

The pole must be completely free of the hole before lifting with the EZ Hauler!



Tilt Sensor

This unit is equipped with a 10 degree tilt sensor.

If the unit exceeds a 10 degree slope, an audible alarm will sound. This indicates that the unit is in danger of tipping over.



IMPORTANT!

The EZ Hauler 3000 / 5500 series of machines are all dielectrically tested to 46kv category “C” guidelines. This qualification test is performed at the factory in accordance with ANSI A10.31 guidelines.

It is important that periodic tests be performed to the EZ Hauler just as any other digger-derrick in a companies fleet.

Follow the instructions in this manual
for the safe operation of the S.D.P.

EZ Hauler 3000

