



MANUFACTURING, INC.

**EZ Hauler 55M
Training & Procedure Manual**

EZ Hauler 55M Safety

While the EZ Hauler 55M 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 55M. The EZ Hauler 55M is a powerful machine that should be operated with respect & caution. Misuse or carelessness can result in serious personal injury, property damage or death.

Personal Safety Equipment

Hard hats and protective gear must be worn by all personnel when using the EZ Hauler 55M.



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 55M is not electrically insulated until the fiberglass final boom extension is fully extended. Be sure to follow your company's safety procedures to protect against electrocution.
- The EZ Hauler 55M is not designed to carry passengers. Never ride on the machine.
- Operators must be properly trained before operating any part of the EZ Hauler 55M. Properly set the outriggers whenever the boom is in use.

Safety Guidelines

- Operate the EZ Hauler 55M in a well-ventilated area only. The engine emits exhaust gases, which can cause sickness and death.
- The EZ Hauler 55M's controls react to input rapidly. Know the location and function of all controls before starting the machine.
- The EZ Hauler 55M 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 55M is properly secured on its trailer before transporting it.

- The capacity of the EZ Hauler 55M is rated at 5500 pounds. This means that the most the boom will ever safely lift is 5500 pounds. Refer to the load capacity chart or on the machine itself for more specific indications of the mini-derrick's capacity.
- When operating any EZ Hauler, Weight of load must be known at all times . Boom capacity at any angle should never be exceeded. Please follow the load capacity chart posted on each EZ Hauler for weight capacity.
- Properly use all outriggers whenever the boom is in use. The EZ Hauler 55M boom must never be operated without the outriggers being properly set.



DANGER!

**ALL OUTRIGGERS MUST
BE PROPERLY
EXTENDED BEFORE
OPERATING THE BOOM!**

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 55M is 5500 lbs.
- The load capacity of the boom depends upon the distance from center line of boom turret!
- Consult this lift chart on the boom before making a lift.
- **CAUTION! UNIT MUST BE LEVEL.**
- **CAUTION! Weight of load must be known at all times. Boom capacity at any angle should never be exceeded.**



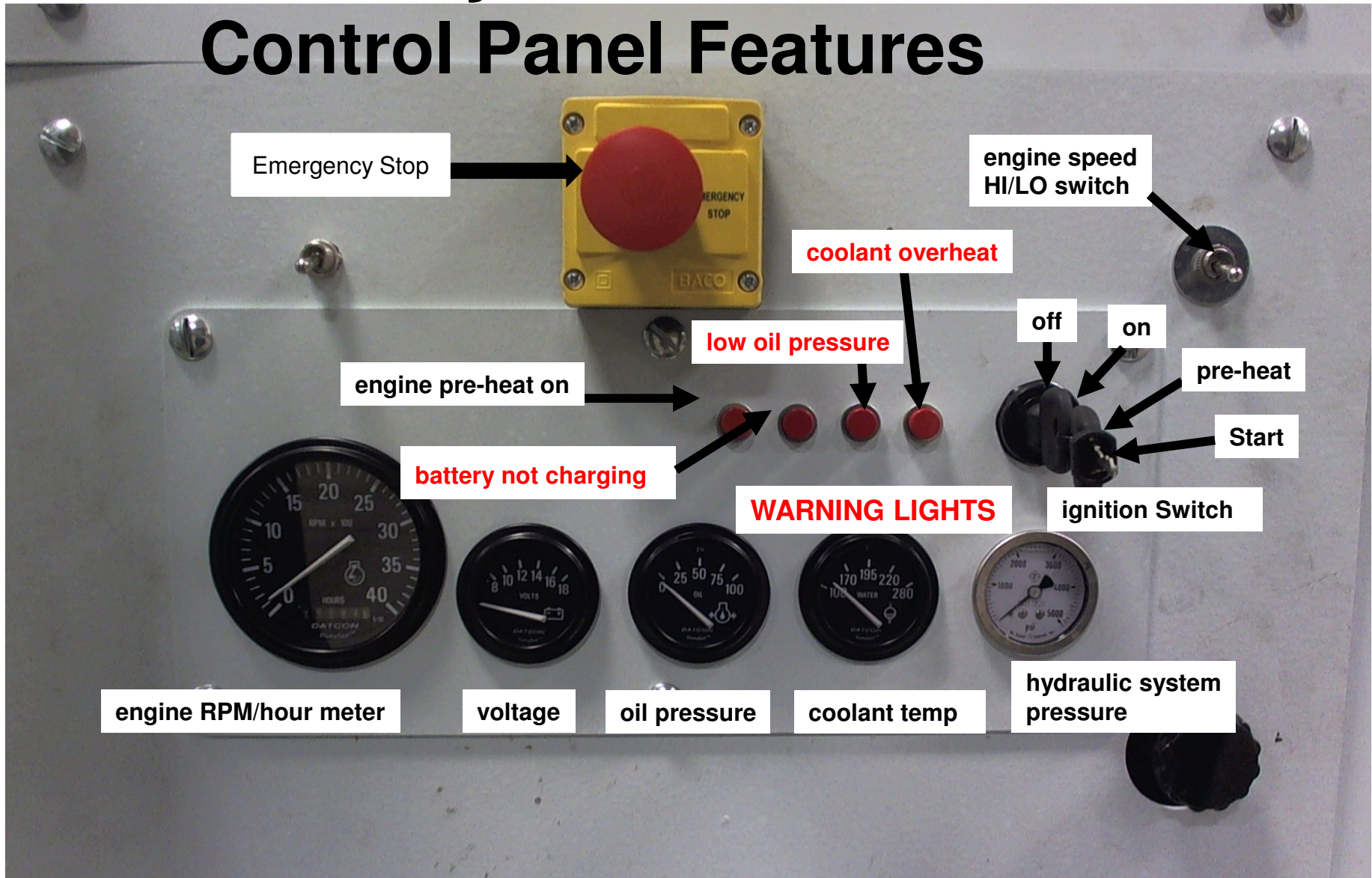
Before Operating the EZ Hauler 55M

You must be familiar with all the controls, their function and their location. Make sure the hydraulic selector valve is in the correct position. (IN)

Whenever you are starting a cold engine, allow 5 minutes for it to warm up to assure the smooth operation of the driven components. Use the pre-heat option in cold weather.



Familiarize yourself with these Control Panel Features



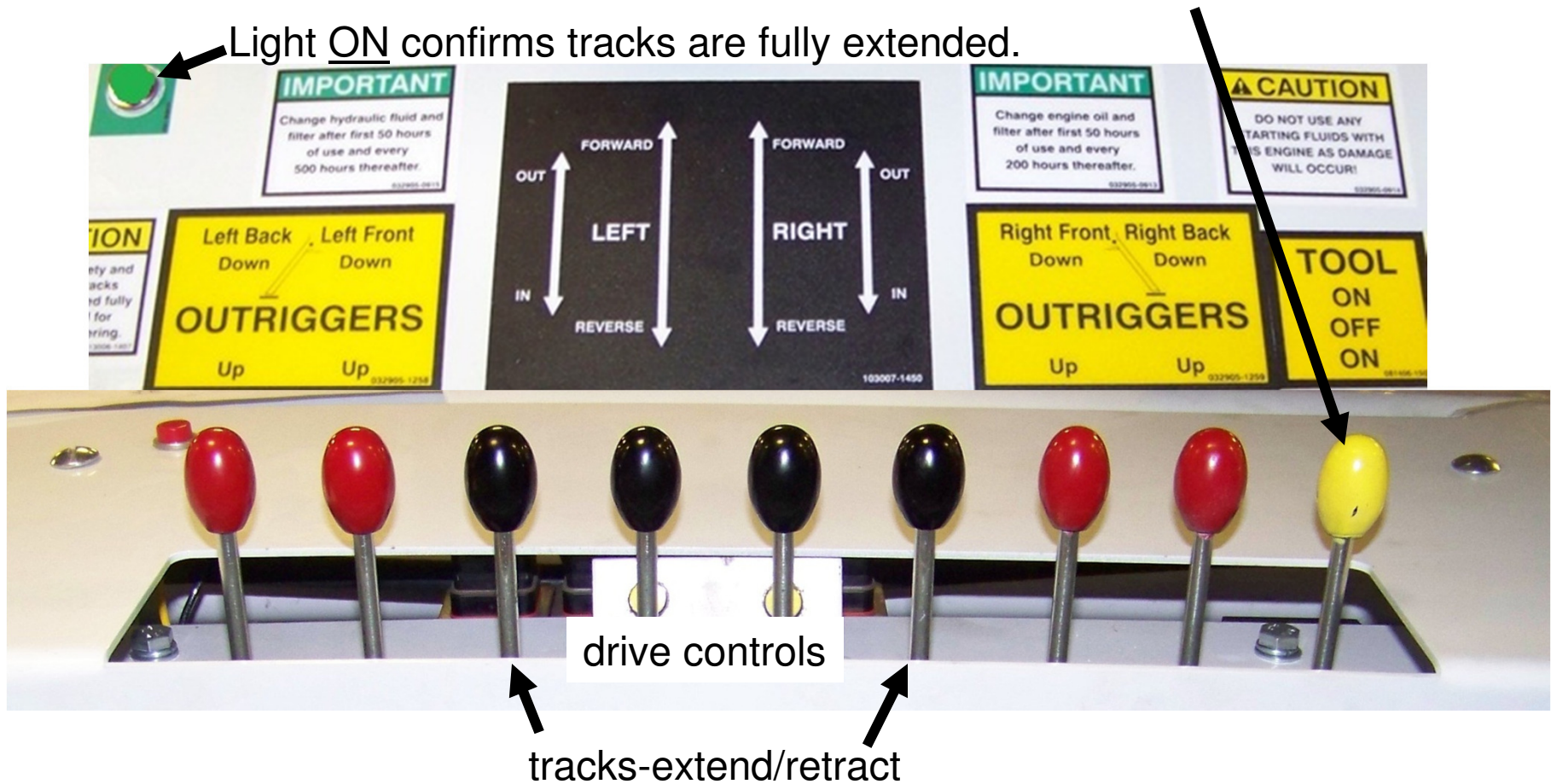
The ignition switch has three stationary positions: engine off - pre heat – on
Turn the key all the way to the right to start the engine.

There are nine manual valves mounted to the lower unit

They are used to drive the machine and operate the outriggers. These valves are proportional. The farther they are deflected from the center position, the higher the oil flow to the controlled component. Their functions are labeled below.

The yellow valve marked "TOOL" controls oil flow to the lower tool circuit.

Light ON confirms tracks are fully extended.



Safety Track Interlock System

- The track interlock system is an integral safety component that is designed to notify the operator of the tracks not being extended completely.

- The indicator light will be lit up when tracks are fully extended.

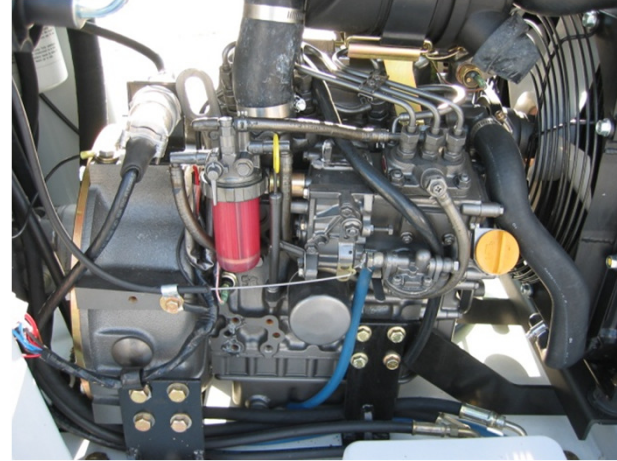
- **THE SYSTEM WILL SOUND AN AUDIBLE ALARM IF THE TRACKS ARE NOT FULLY EXTENDED!**

- **NOTE: Some systems are designed to cut off the hydraulic drive functions of the unit unless a manual override palm button is depressed.**



Pre-Operation Inspection

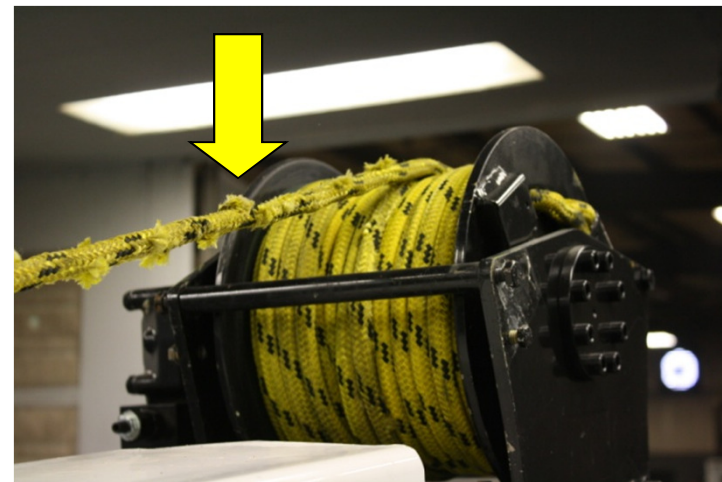
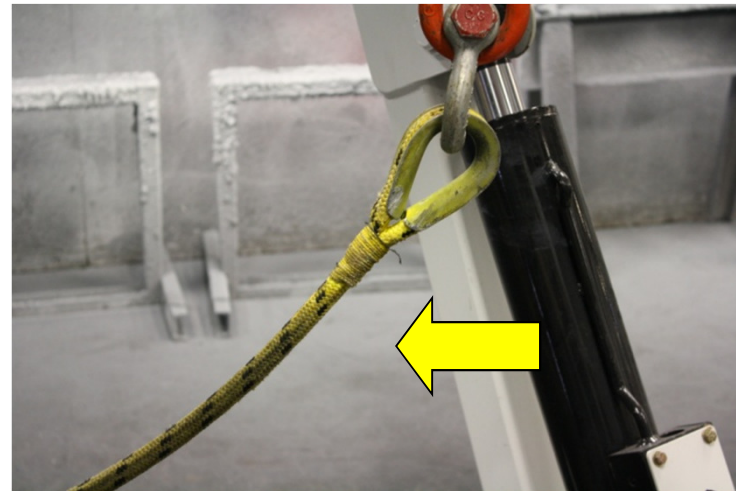
- Before each day's operation, the EZ Hauler 55M must be inspected by the operator.
- Do a visual inspection to check for loose, worn, missing or broken parts such as bolts, nuts, wires & retaining pins.
 - a. Check hydraulic hoses for cuts, wear, loose connections, leaks.
 - b. Check engine and hydraulic system.



Pictures may not be a true representation of your machine

Pre-Operation Inspection

Inspect the lift line and hook for signs of wear or damage. Replace any worn or damaged parts before using the EZ Hauler 55M.



Pre-trip Inspection



Check all tires on the 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



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

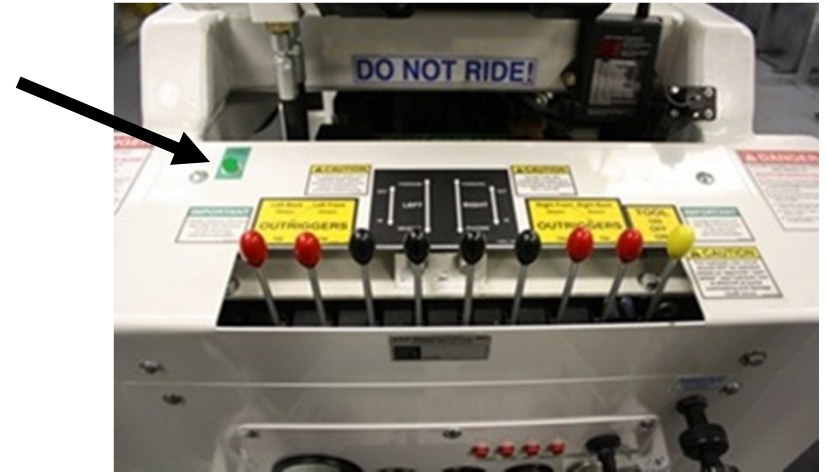
Driving the EZ Hauler 55M

Make certain the tracks are fully extended before driving the EZ Hauler 55M. A light (ON) shows the tracks are fully extended. The EZ Hauler may be driven using either the manual valves on the lower unit of the machine or the remote.

First, walk the route you will be taking, to look for rocks, holes or other obstructions that could cause problems in navigating the terrain. Be careful making turns and use a spotter if necessary to avoid anything that might be in your path.

Secure any payload to the EZ Hauler's deck for transporting.

Drive the EZ Hauler slowly. Make turns slowly and carefully.



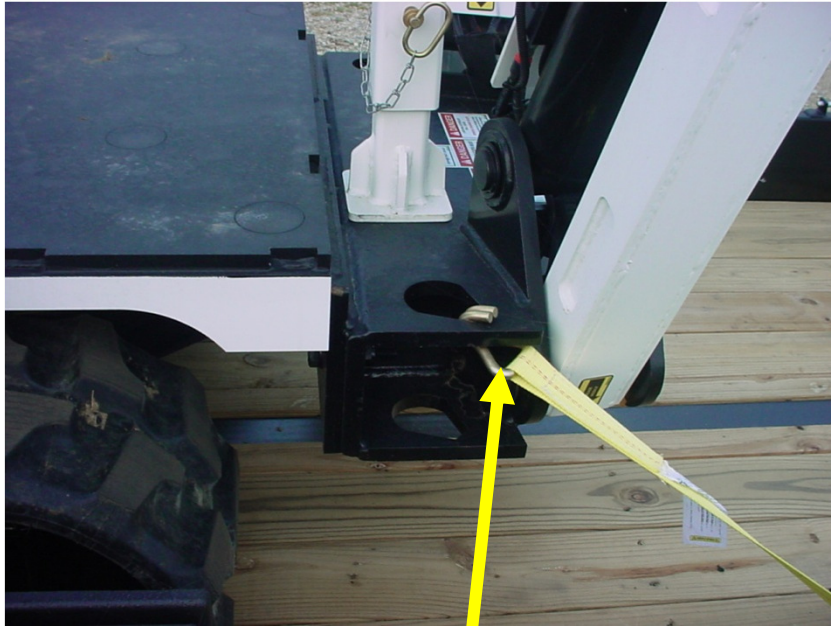
Loading the EZ Hauler 55M

Check that the rear trailer jack-stands are in place and they are set approximately 3 to 4 inches (7 to 10 cm) above the ground. Lower the trailer ramps.

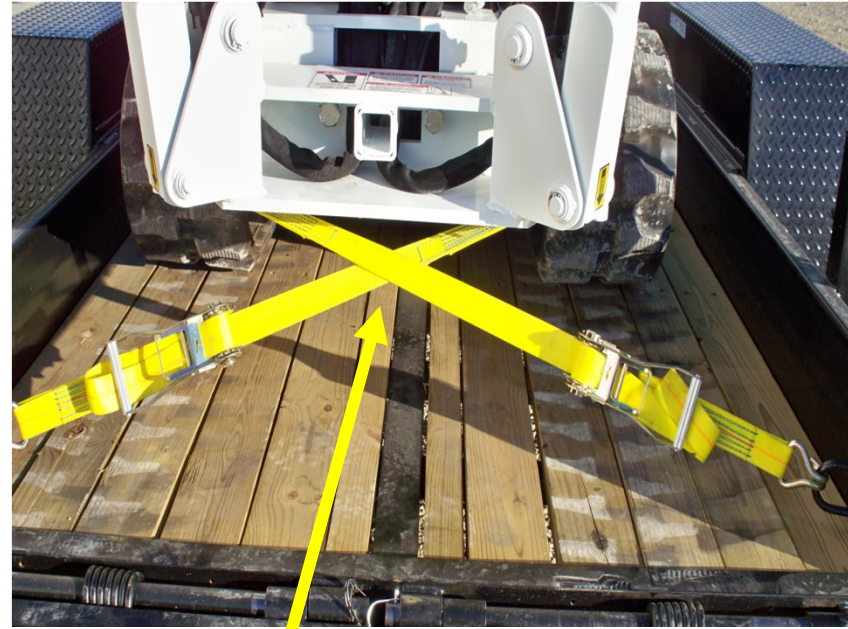
Start the unit's engine and allow 5 minutes for the engine to warm up in order to assure the smooth operation of the driven components. Make sure the hydraulic selector valve is in the correct position. (IN)

Drive the EZ Hauler 55M onto the trailer with the tracks fully extended and the boom in its lowest position. Connect the provided fixed length front tie-down straps to the unit and the anchor points on the trailer.

Back the unit slightly to apply tension to these straps. This procedure will place the EZ Hauler 55M in the correct position to balance its weight evenly over the trailer axles. This will assure the best trailer handling, braking and load distribution on the tires.



Front fixed length straps



Cross the rear straps

NOTE: The EZ Hauler 55M is secured for transport with provided straps at the front and back of the trailer.

Tie downs should always be attached with inside of hooks facing up!

Look inside the trailer toolbox & make sure it contains all tools & equipment necessary for operating the EZ Hauler 55M

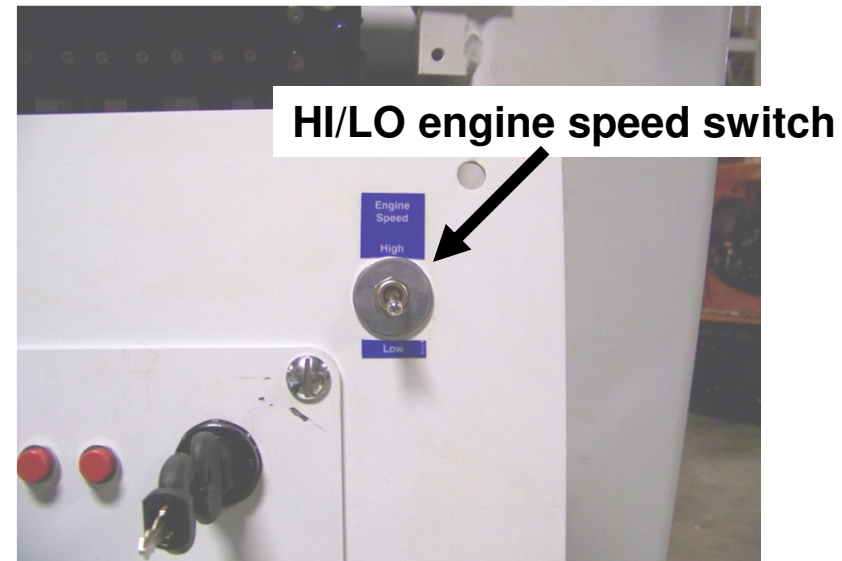
Unloading the EZ Hauler 55M

- Caution: While unloading the EZ Hauler 55M, 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 (7 to 10 cm) from the ground.
- Note: If the EZ Hauler 55M engine is not already 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.



Driving the EZ Hauler 55M



The EZ Hauler 55M 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. Some units are equipped with a switch to control engine RPM.

WARNING: The EZ Hauler 55M should only be driven with the tracks fully extended!

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: Position A to dig, position B to reverse (clean).



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

C

B

A

Driving the EZ Hauler 55M

Optional Remote Drive Function:

When operating the EZ Hauler 55M with the remote, pay close attention to the unit and the terrain that you are navigating.



Be Aware Of Terrain

- Pay close attention to the “side tip” angle indicator when navigating tough embankments. Do not exceed the described limits.



Moving the EZ Hauler 55M

Through a small opening:

- One of the advantages of the EZ Hauler 55M 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.

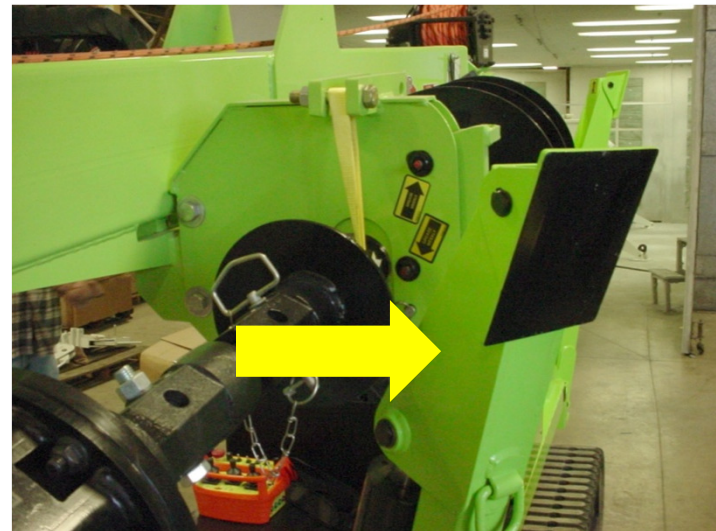


(Pictures may not be a true representation of your machine.)

Going through gates with The EZ Hauler 55M

- When preparing to go through a gate with the EZ Hauler 55M, 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 55M

- The track interlock system is an integral safety component that is designed to notify the operator of the tracks not being extended completely.
- The 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.



Moving the EZ Hauler 55M With a Load

Transporting a pole:

Lifting and transporting 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 55M outrigger arms as shown. Locate the chains inboard of the D-rings to minimize lateral strain on the outriggers.

(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 any load to the machine deck with the straps stored in the trailer toolbox. It may be necessary to rotate the boom slightly in order to carry a large transformer.

Drive the EZ Hauler 55M slowly.

Make turns slowly and carefully.



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

SAFETY FIRST!

An untrained operator subjects himself and others to Death or Serious Injury. You must not operate this machine UNLESS:

You have been trained in the safe operation of this machine.

You have read, understand and follow the safety and operating recommendations contained in the machine manufacturer's manuals, safety signs attached to the equipment, your employer's work rules and applicable government regulations.

You are sure the machine is operating properly and has been inspected and maintained in accordance with the manufacturer's manuals.

You are sure that all safety signs, guards and other safety features are in place and in proper condition.

Weight of load must be known at all times. Boom capacity at any angle should never be exceeded. Please follow the weight scale posted on each EZ Hauler for weight capacity.

Setting a Pole With the EZ Hauler 55M

- Remember: the EZ Hauler 55M 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.

Caution!! Weight of load must be known at all times . Boom capacity at any angle should never be exceeded.



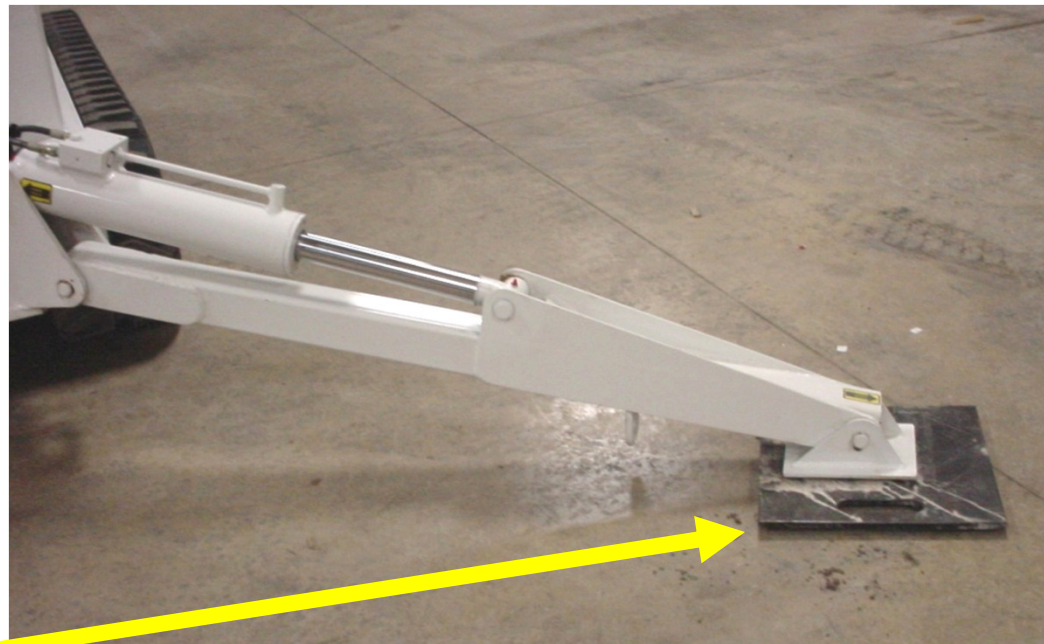
Setting the Outriggers

Lower outriggers to level and support the machine. The entire weight of the EZ Hauler 55M and its load must be supported by the outriggers.

Check the bubble levels and adjust outriggers.

THE MACHINE MUST BE LEVEL!

The provided oversized outrigger pads should be used at all times.

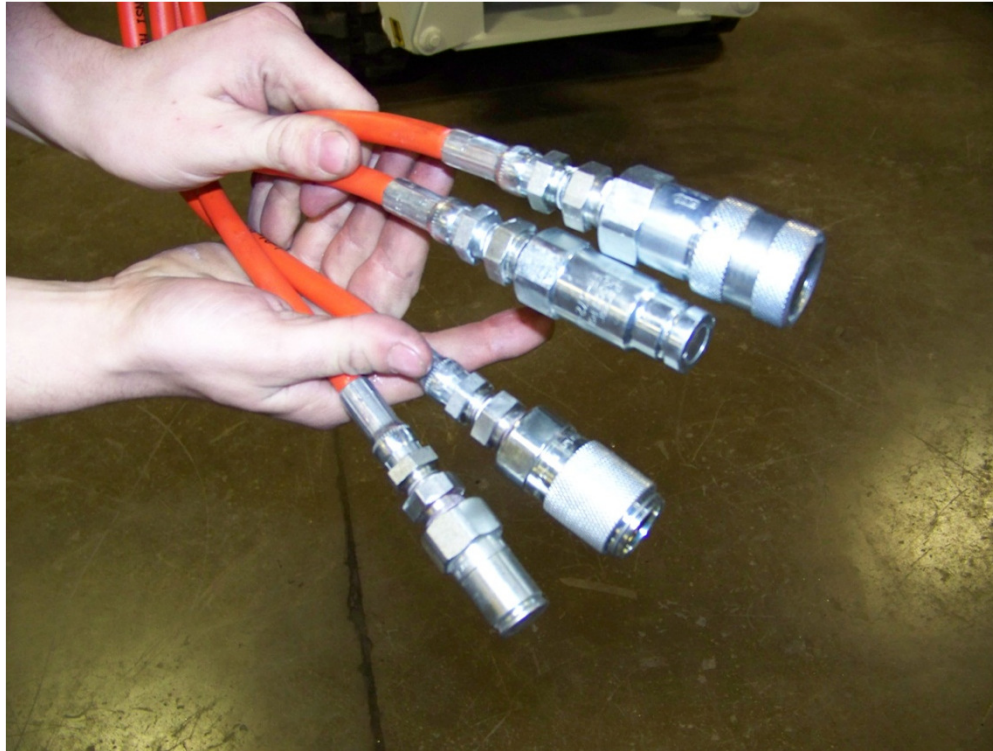


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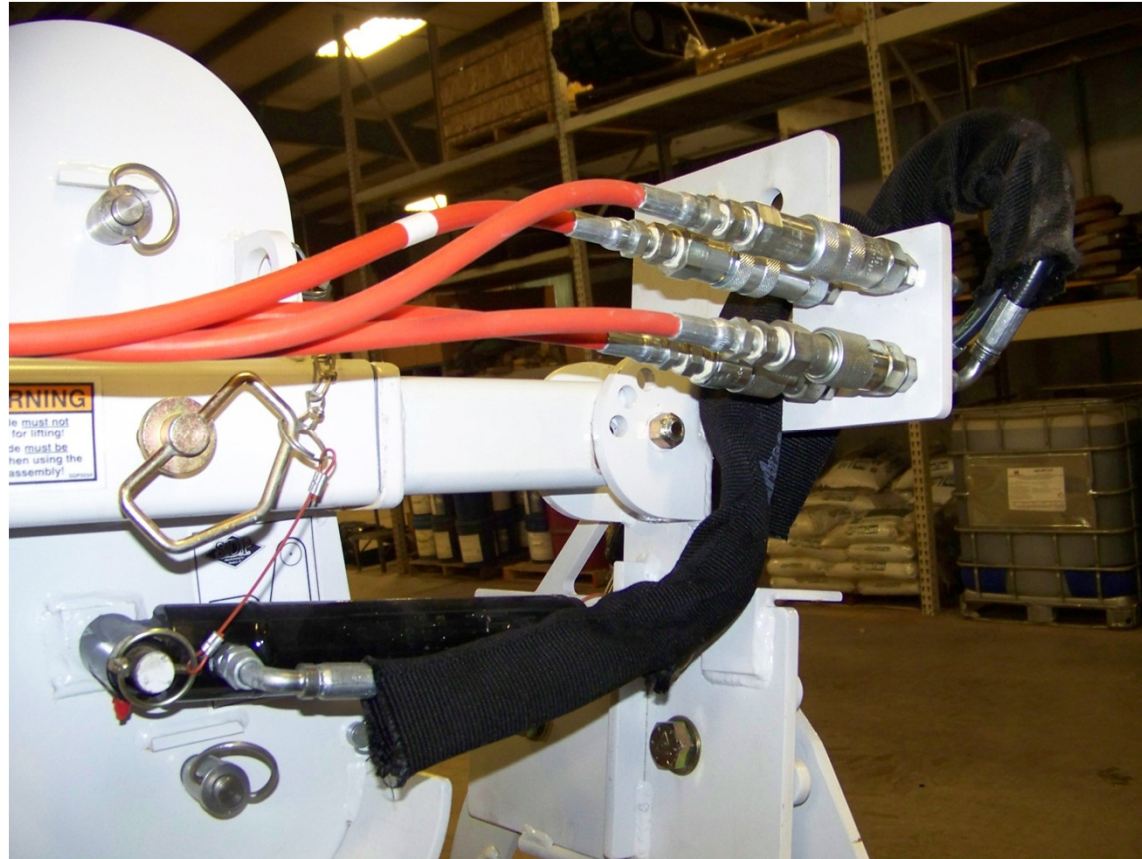
Hydraulic Pole Guide Procedure



**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



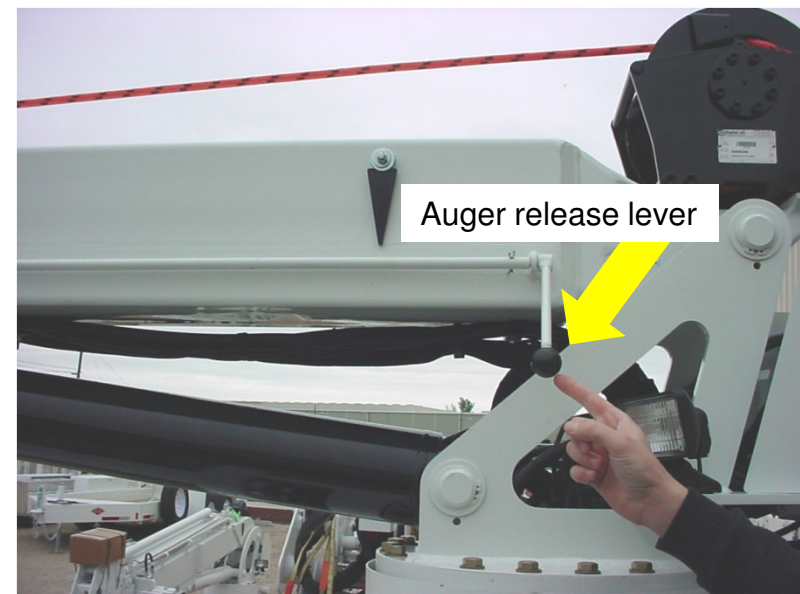
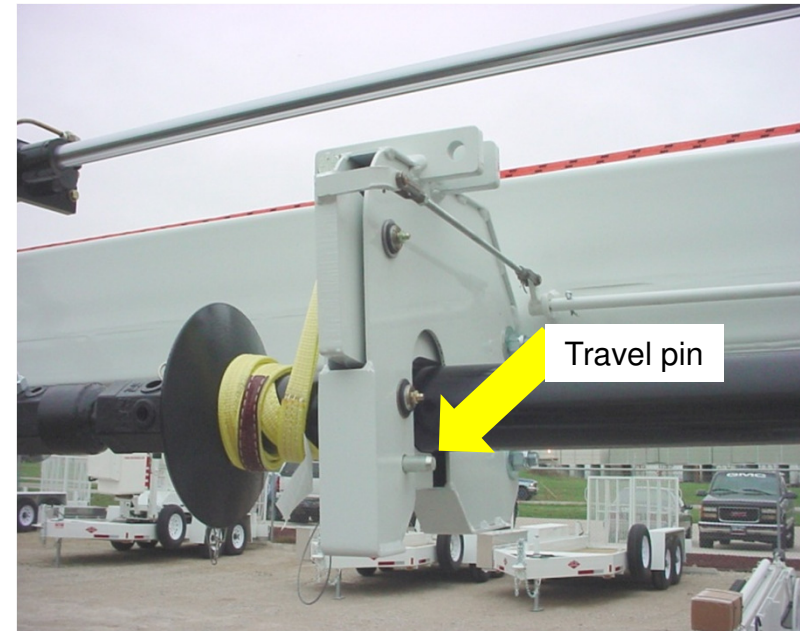
The pole guide is installed with hoses connected

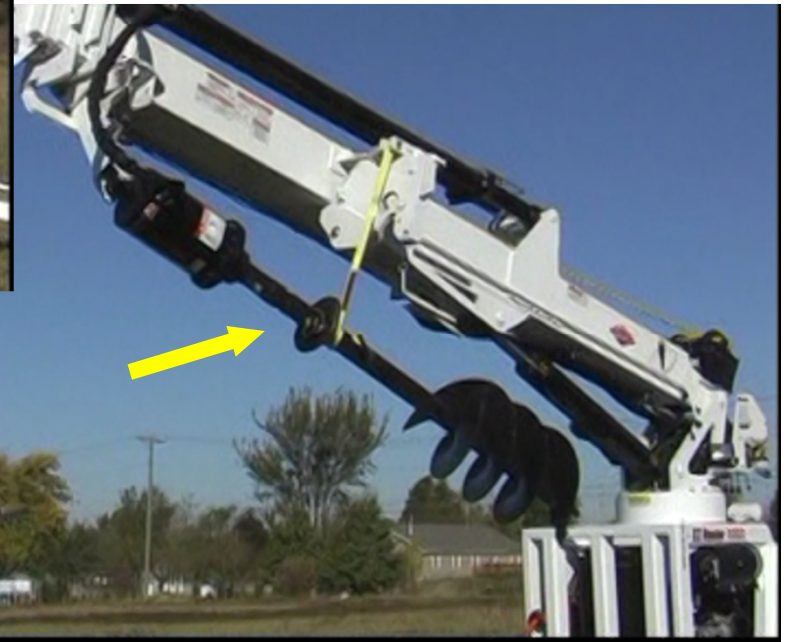
Auger Operation Procedure



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. Remove the travel pin and release the auger using the latch release handle.

NOTE: Use the flow control rheostat to control the speed of the auger.





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

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



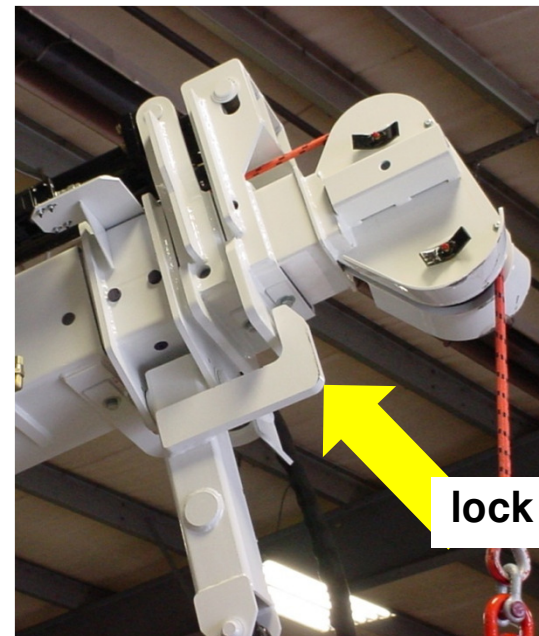
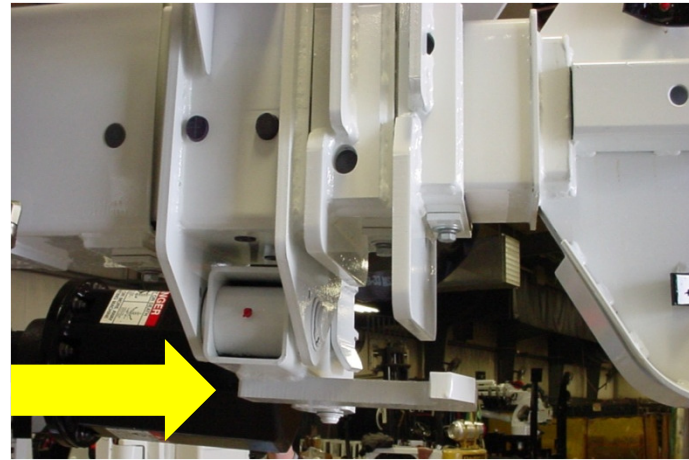
Carefully unwind the auger and remove the strap.

Verify the Auger Lock is engaged.

You are now ready to use the remote control to auger as needed.

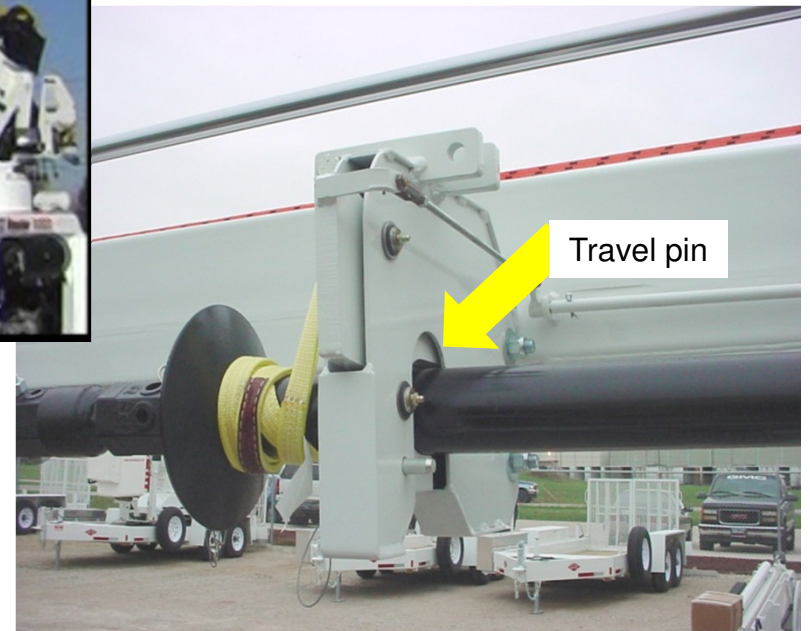
Setting the Auger Lock

- ***On the EZ Hauler 55M, 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 boom extension function to reach the maximum distance of 24' from center.***
- ***CAUTION: Make sure all extensions are retracted before using the auger function.***
- ***Unwind the winch line to accommodate extending the boom.***



- 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



Digging the Hole

- Position the machine over the desired hole replacement area. Extending boom 12 or 14 inches and allow 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 that of those around you.



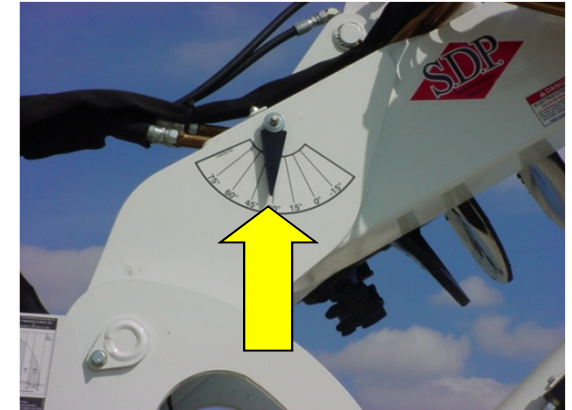
(Pictures may not be a true representation of your machine.)

If needed, the extension bar may be 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 to assure dielectric insulation!**

⚠ **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 shows a crane boom extending towards a utility pole with power lines. Red lightning bolts indicate electrical arcs between the boom and the lines, and between the boom and a person on the ground who is being struck. The crane's base is also shown with an arc towards the ground.

Remember that the pole guide is conductive so it will not be insulated against cross phasing, but with the fiberglass boom properly extended the EZ Hauler 55M and its operator will be substantially protected.

- Lift the pole straight up and secure it with the pole guide. Set the pole into the hole.
- **Always** operate EZ Hauler 55M from a safe distance using the remote control.
- **Never** use manual lever overrides for normal operation; they are for emergency use only.
- **Caution!!** Weight of load must be known at all times . Boom capacity at any angle should never be exceeded. Please follow the load capacity chart posted on each EZ Hauler for weight capacity.



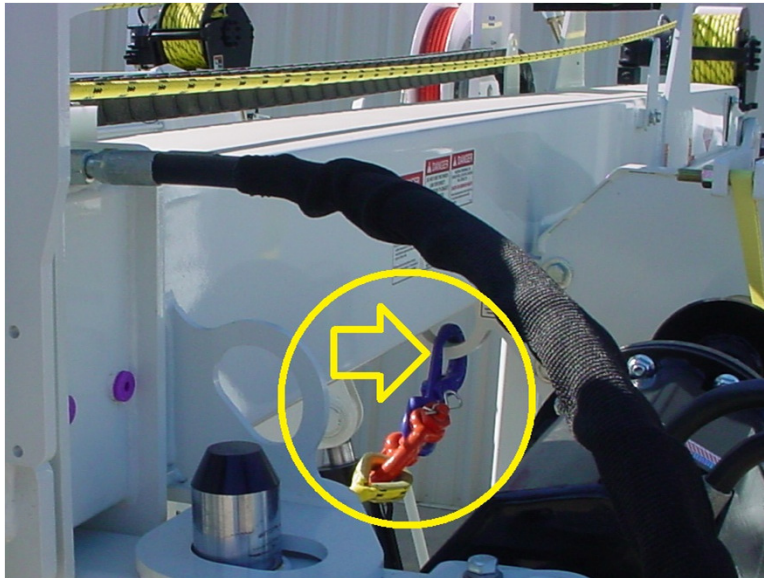
Bucket Assembly Standard Operating Procedure



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.

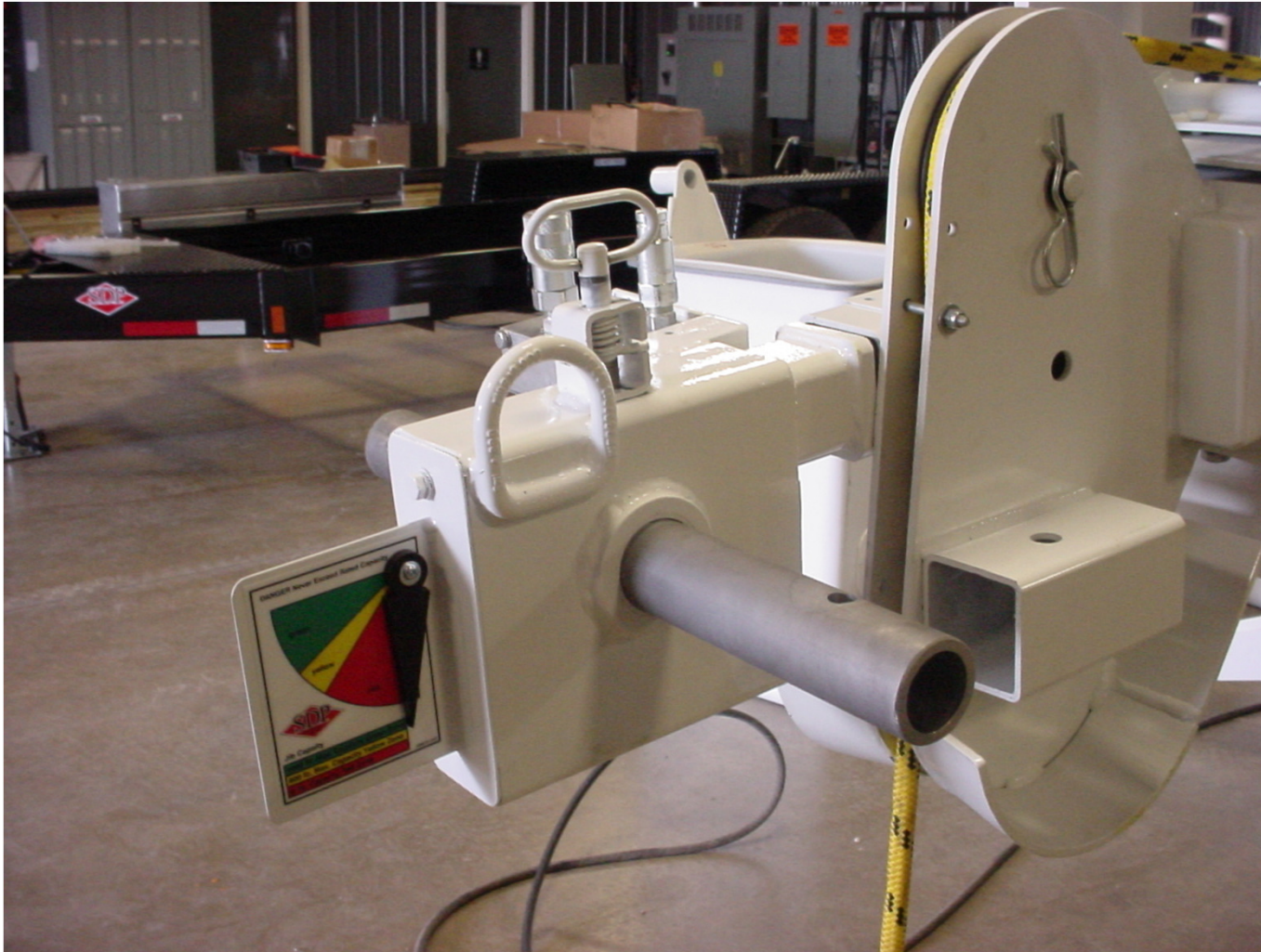
CAUTION! Stay clear of bucket while in operation.



Please retract winch ropes back to the stowed position if they are not in use.



Winch rope Kill Switch

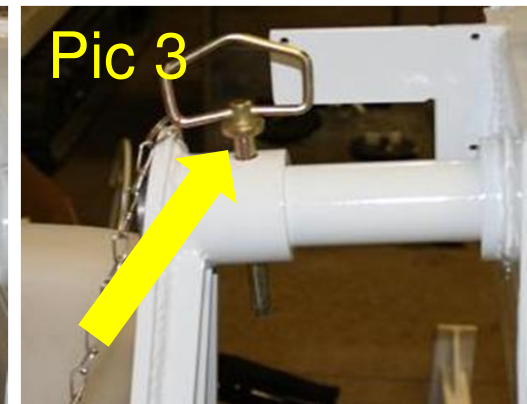
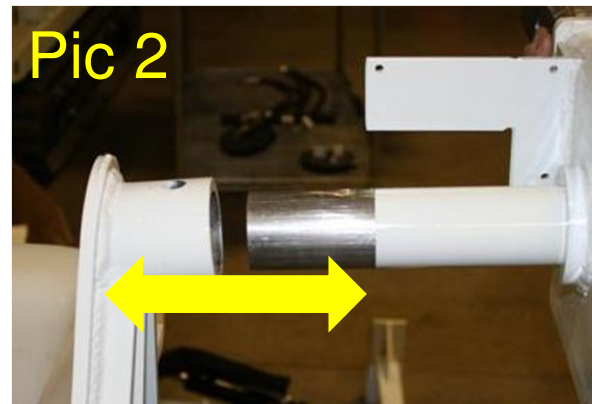
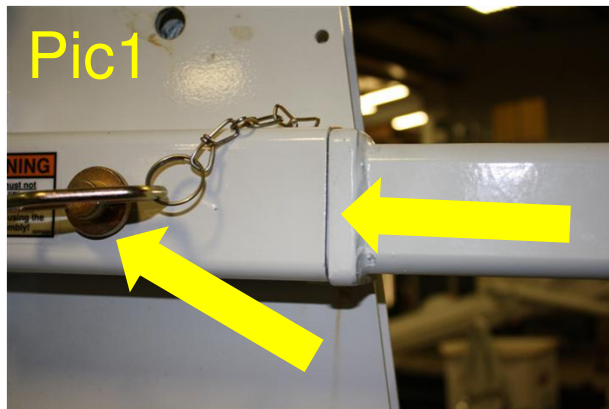


**Shows the bucket mount installed
and pinned in place**

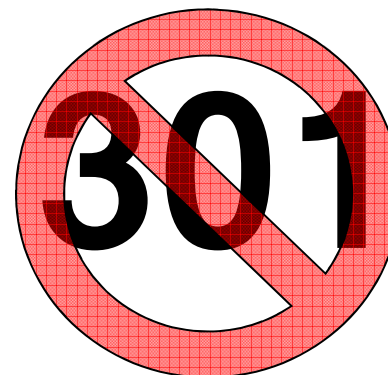


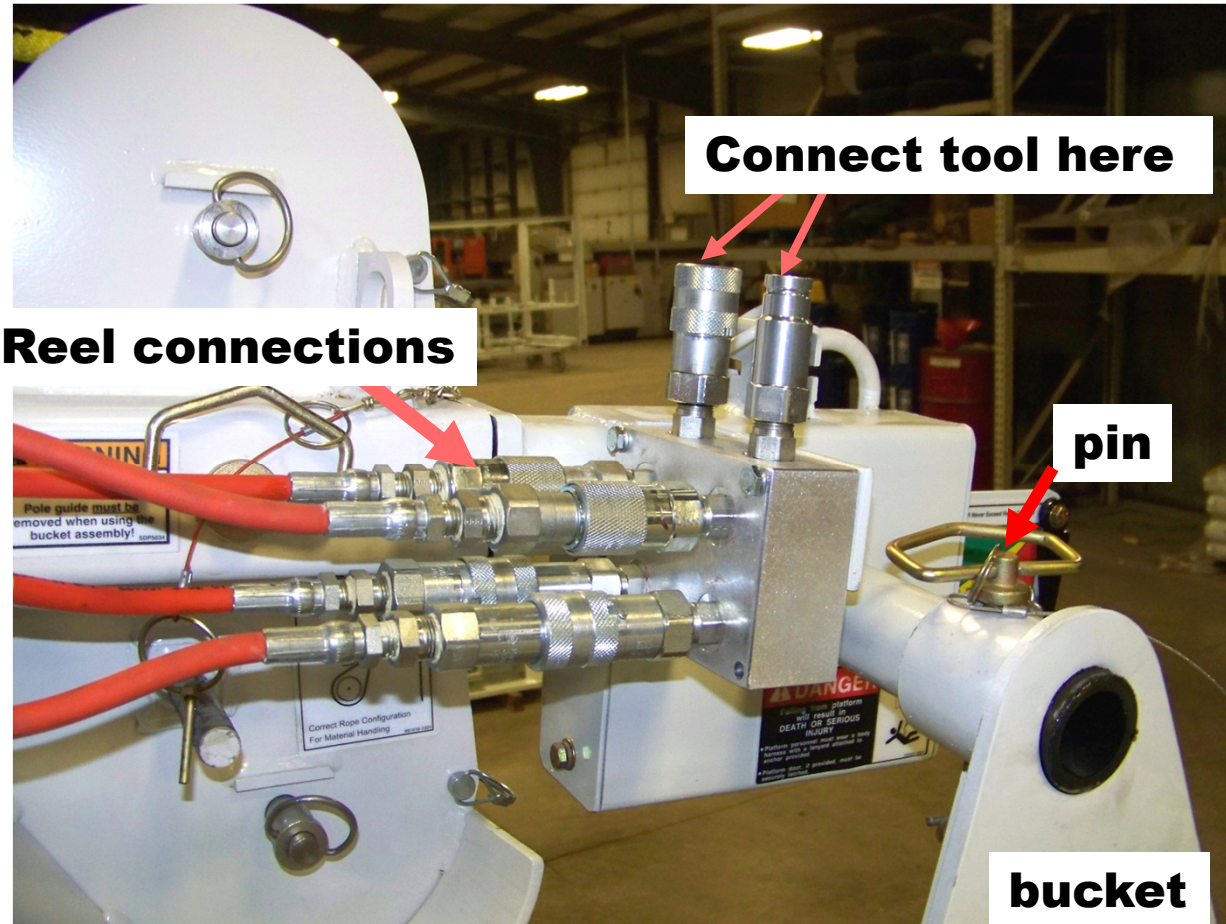
The bucket can now be mounted to either side of the mount to best accommodate working from it.

- Slide the bucket upper mount in to the machine's receiver. (pic 1)
- Pin the upper mount securely in place. (pic 1)
- Slide the bucket lower mount on to the upper mount. (pic 2)
- Pin the lower mount securely in place on either side of the upper mount. (pic 3)



DO NOT EXCEED BUCKET CAPACITY





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

5500 Material Handler

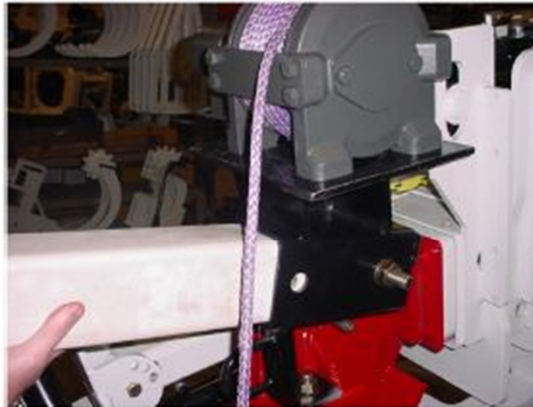
The EZ 5500 material handling pin on jib with winch is designed to be used while a man is in the bucket and has a maximum capacity of **1000 lbs.**

**DANGER! DO NOT USE IN
CONJUNCTION WITH MAIN CRANE
WINCH! DEATH OR SERIOUS INJURY
WILL OCCUR!**



5500 Material Handler

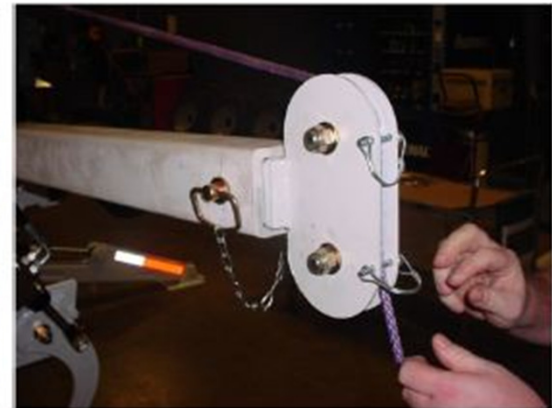
1. Attach jib and secure with pin.



2. Attach quick couplers



3. Secure rope around pulleys



5500 Material Handler

Use accessory toggle switches on remote control to operate the material handler winch.



Toggle switches on remote can be activated in dual operation mode by following the instructions listed in this decal.

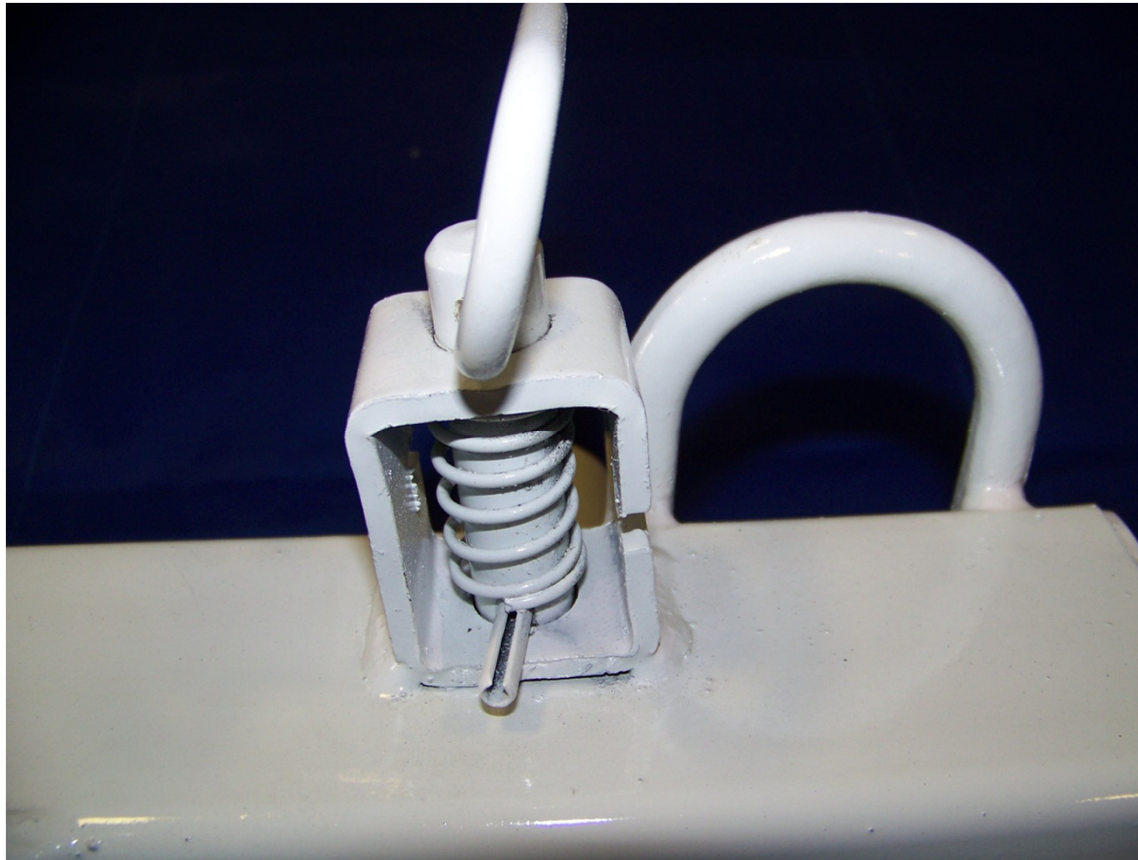


- ***CAUTION: Prior to using the bucket assembly, extend and secure all outriggers to the fullest settings.***
- **CAUTION:** The bucket assembly has the capability to safely lift 300 pounds. Besides the weight of the operator this includes all tools, parts or anything else in or on the bucket. Never use the bucket to perform any other lifting operation.
- The following instructions are provided to ensure safe operation of the bucket assembly.



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!

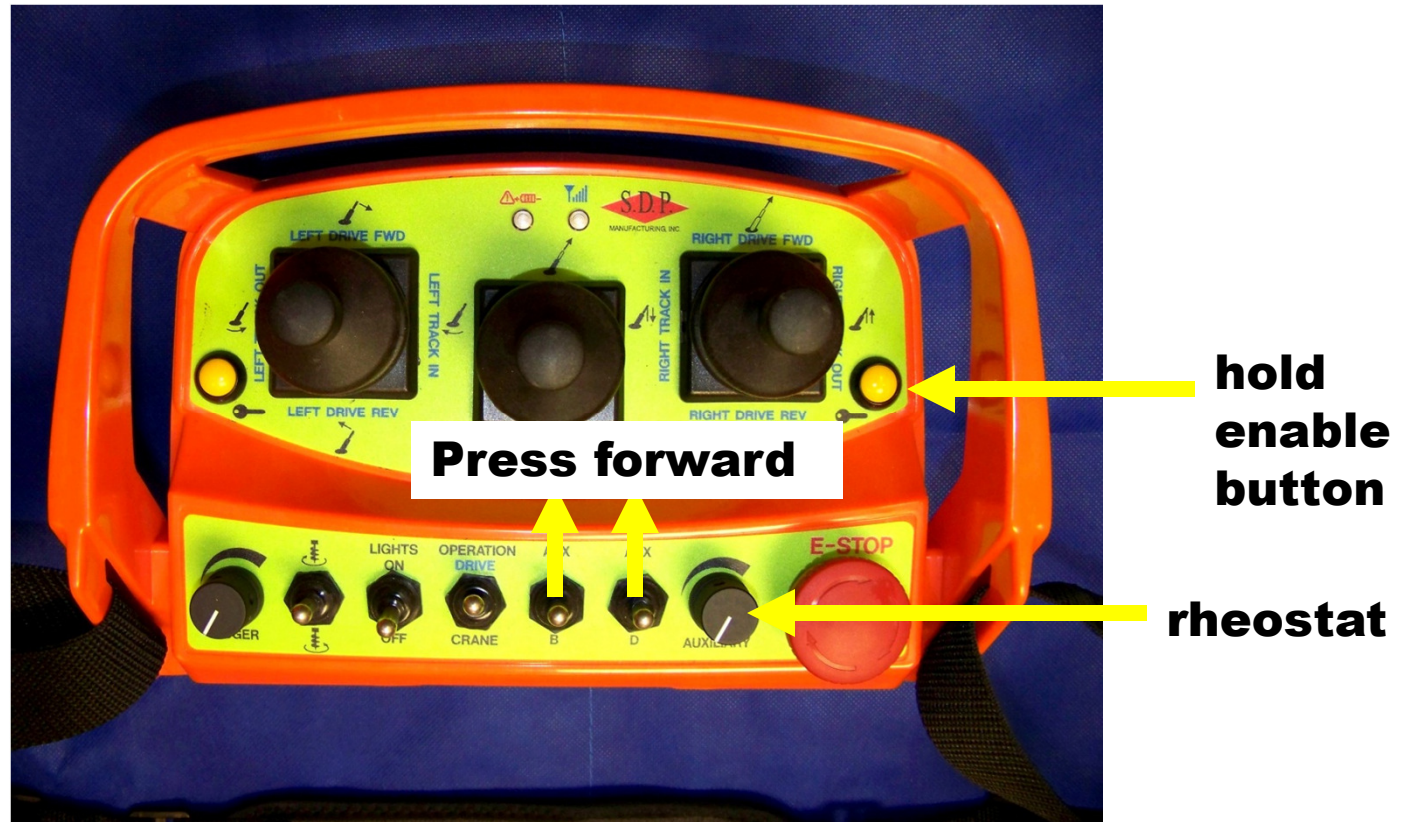
To Enable control of hydraulic tools
From the bucket





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. Hold for approximately 2 seconds

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

Pole Pulling

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

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



WARNING:

Never use the EZ Hauler for pole pulling and never pull the screw anchor; always use a secondary pole removal tool!
Structural damage will occur!



No Pole Pulling

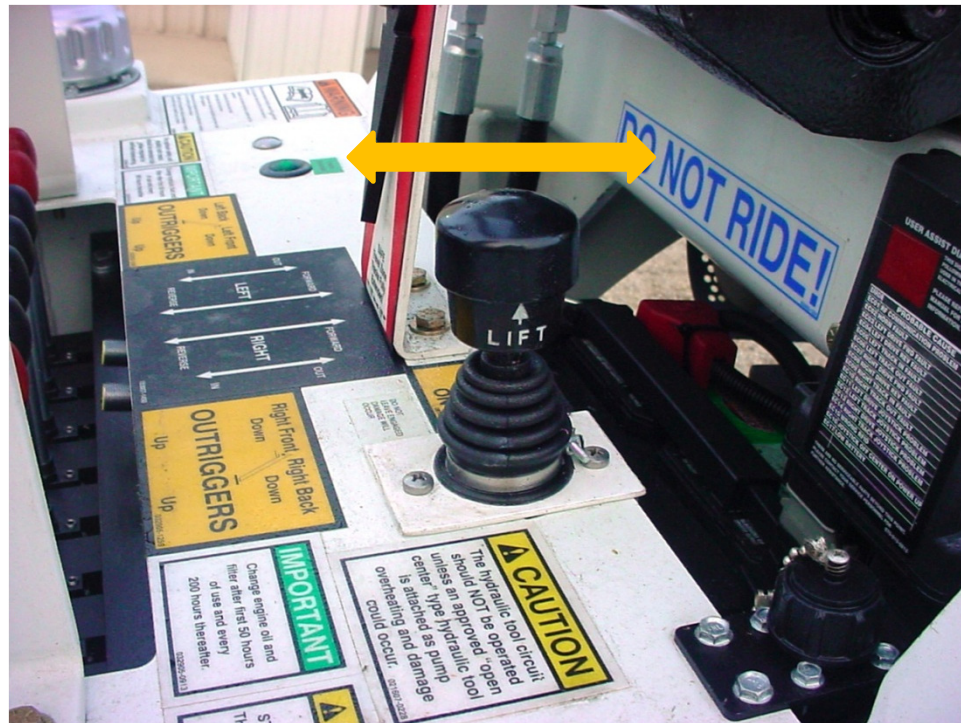
The pole must be able to lift freely from the hole before lifting with the EZ Hauler!

Tool Circuit

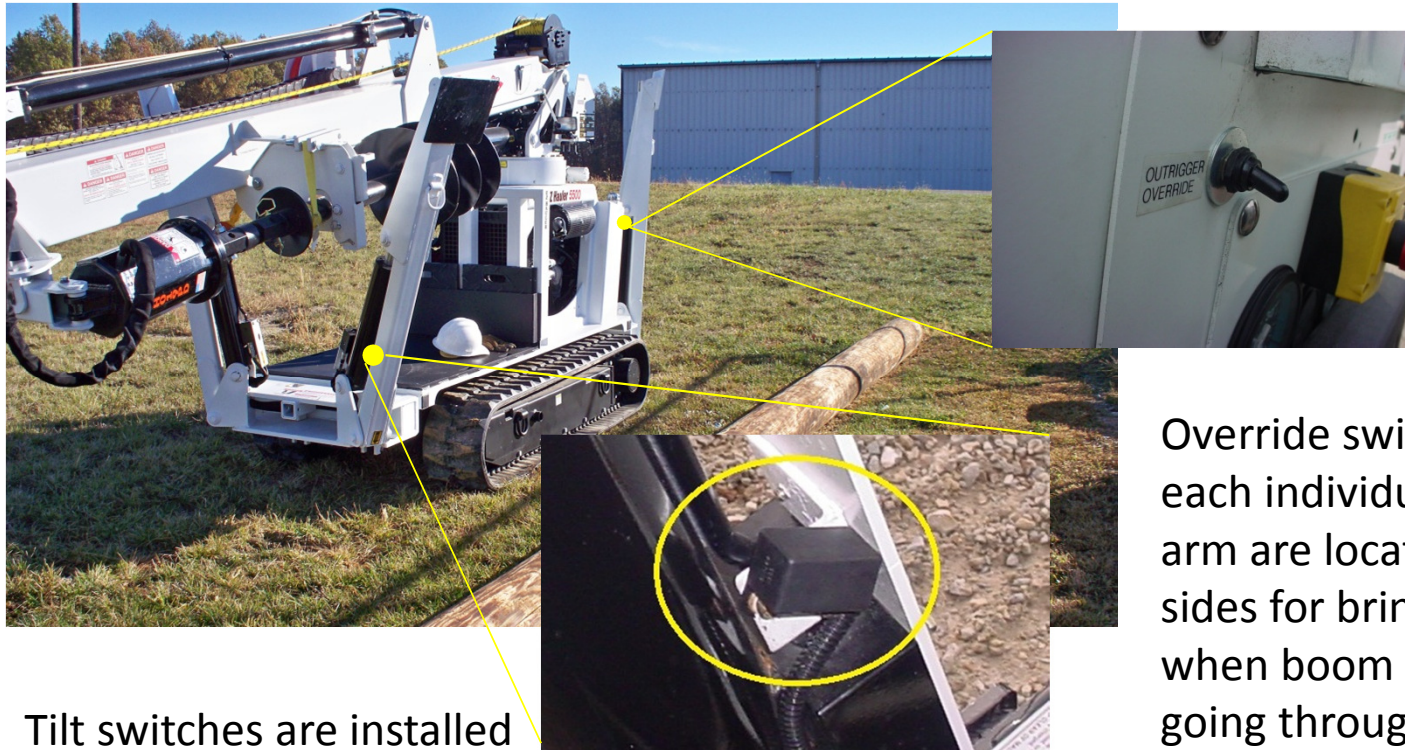
The lower tool circuit is available for use in the crane or drive position.

Lift to unlock and use open circuit tools only!

**WARNING: DO NOT LEAVE ON!
RETURN THE HANDLE TO THE
NEUTRAL POSITION!**



Auto Stop Outriggers



Tilt switches are installed to stop outriggers from hitting the boom .

Override switches for each individual outrigger arm are located on both sides for bringing arms up when boom is level for going through gates.

WARNING: THE OPERATOR MUST STILL KEEP CLOSE ATTENTION TO MAKE CERTAIN THAT OUTRIGGERS DOT NOT HIT THE BOOM!!

Tilt Sensor

This unit may be equipped with an optional 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 3400LP / 55M 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 on the EZ Hauler just as any other digger-derrick in a company’s fleet.

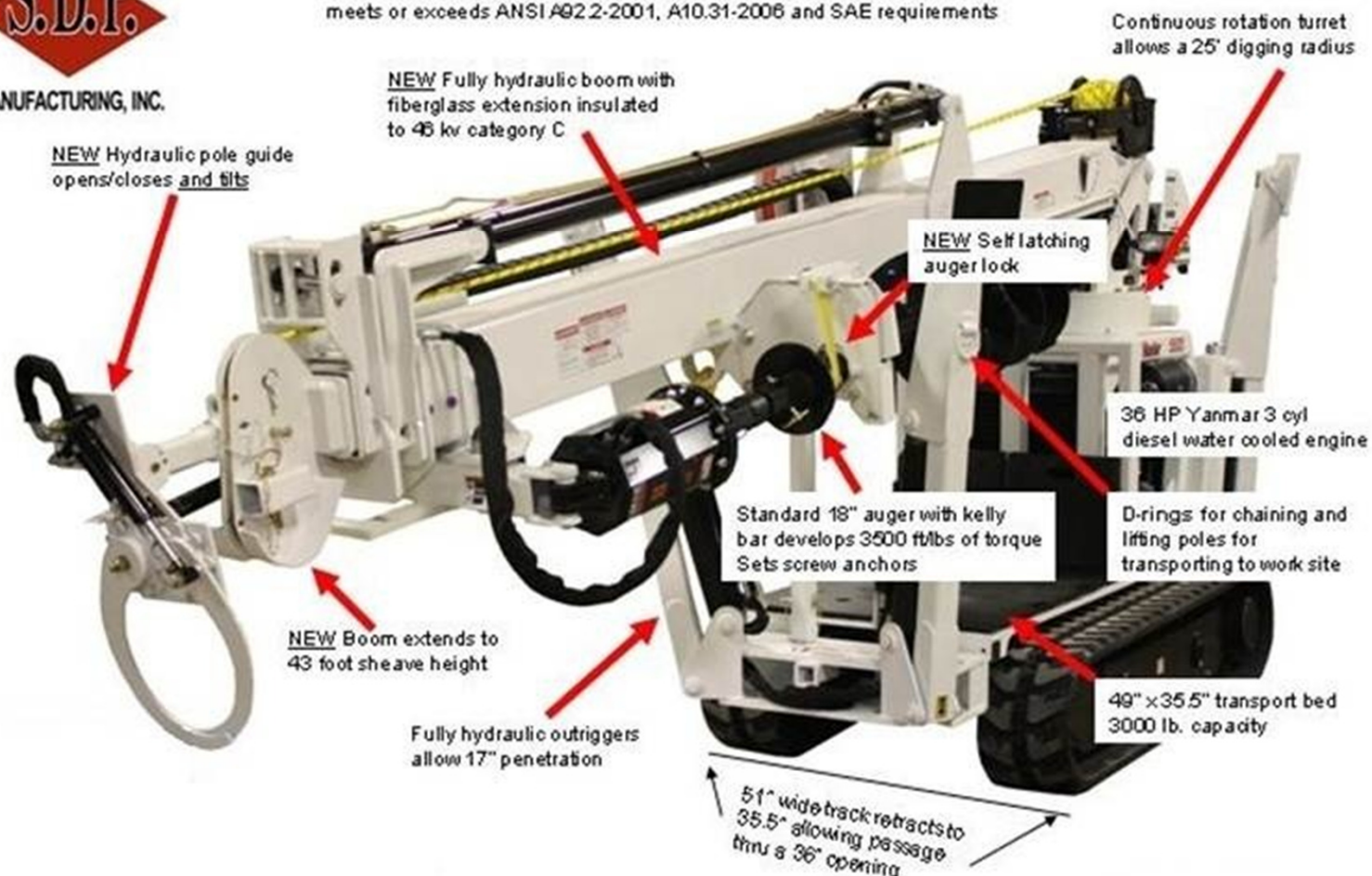
Weight of load must be known at all times . Boom capacity at any angle should never be exceeded. Please follow the weight scale posted on each EZ Hauler for weight capacity.



MANUFACTURING, INC.

Ez Hauler 55M

meets or exceeds ANSI A92.2-2001, A10.31-2006 and SAE requirements



Other new features

A 6 gpm tool circuit at the bucket

The bucket can be mounted on either side of the boom

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

EZ Hauler 55M

