

# EZ Hauler Training & Procedure Manual

After <u>completely</u> reading and reviewing this manual, it is <u>required</u> that you take an online test to ensure safe operation of the EZ Hauler unit. The steps below are how to access and complete the test.

- 1. Access <a href="https://www.testmoz.com/532566">www.testmoz.com/532566</a> through the nearest computer.
- 2. In the box labeled Your Name, place your name and the company that you are associated with and press continue.
- 3. Proceed to take the test by answering all questions.
- 4. Submit the test.
- 5. If a score of 100% is achieved you are ready to operate the EZ Hauler unit. If a score below 100% is achieved, please retake the test until a score of 100% is reached.

### Introduction



DANGER: Operators are required to read and understand this manual before operating the unit. Failure to do so could result in property damage, serious injury, or death.

This manual outlines important information that is essential to safely operate the EZ Hauler unit. Personnel operating the unit should be aware of all safety concerns and responsibilities outlined within this manual.

Maintenance is required on all EZ Hauler units for safe and efficient operation. Routine maintenance is extremely important in maintaining a reliable unit.

Users must read and understand all manuals included with the EZ Hauler unit.

The safety guidelines in this manual must be followed in addition to your companies safety guidelines. This includes working with potentially energized equipment.

### DANGER, WARNING, CAUTION, and NOTE

The signal words **DANGER**, **WARNING**, **CAUTION**, and **NOTE** are used to identify levels of hazard seriousness. The signal word **DANGER** is only used on product labels to signify an immediate hazard. The signal words **WARNING**, **CAUTION**, and **NOTE** will be used on product labels and throughout this manual and other manuals that may apply to the product.

**DANGER** - Immediate hazards which will result in severe personal injury or death.

**WARNING** - Hazards or unsafe practices which **could** result in severe personal injury or death. **CAUTION** - Hazards or unsafe practices which **may** result in minor personal injury or product or property damage.

**NOTE or IMPORTANT** - Used to highlight suggestions which will result in enhanced installation, reliability, or operation.

## 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 is not electrically insulated until final stage manual boom is extended into place. Be sure to follow your company's safety procedures to protect against electrocution. NEVER consider the unit to be totally insulated.

The EZ Hauler is not designed to carry passengers. Never ride on the machine.

Operators must be properly trained before operating any part of the EZ Hauler. Properly set the outriggers whenever the boom is in use.

## Safety Guidelines

Operate the EZ Hauler in a well-ventilated area only. The engine emits exhaust gases, which can cause sickness and death.

The EZ Hauler's controls react to input rapidly. Know the location and function of <u>all</u> controls before starting the machine.

The EZ Hauler can be shut down in an emergency by releasing all drive controls and turning the ignition switch to the "off" position.

Ensure the EZ Hauler is properly secured on its trailer before transporting it.

## **Load Capacity**

One of the most important considerations when operating this machine is the Load Capacity of the EZ Hauler's boom.

The load capacity of the boom depends upon the distance from center line of boom turret\*\*

CAUTION! UNIT MUST BE LEVEL.

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

<sup>\*\*</sup>See load capacity from load chart on machine.

## EZ Hauler Safety

While the EZ Hauler is smaller than a line truck, its function is the same. All safety precautions that would apply to a line truck also apply to the EZ Hauler. The EZ Hauler 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 <u>must</u> be worn by all personnel when operating the EZ Hauler.



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, the weight of a 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.



ALL OUTRIGGERS MUST
BE PROPERLY
EXTENDED BEFORE
OPERATING THE BOOM!

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

Before each day's operation, the EZ Hauler 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.

- 1. Check hydraulic hoses for cuts, wear, and loose connections.
- Check engine and hydraulic system.





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



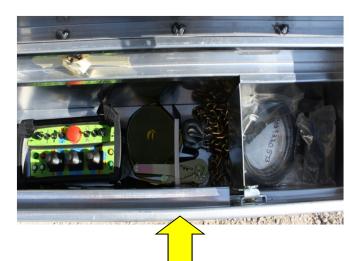
Test all turn signal, parking and brake lights by turning them on. Be sure to test the braking action on the trailer before traveling to the work site.



Check to make sure that EZ Hauler is properly secured to the trailer.

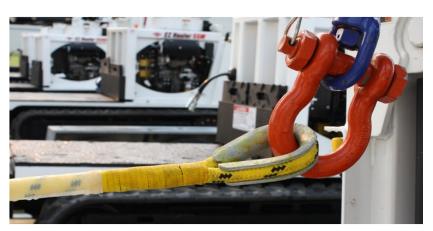


Look inside the trailer toolbox & make sure it contains all tools & equipment necessary for operating the EZ Hauler.



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





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



### **EZ Hauler Controls**



The ignition switch has three stationary positions: engine off – preheat – on

Turn the key all the way to the right to start the engine.

## Optional Crane Controls





For units equipped with the Load Monitoring Tilt Indicator System. Please see the manual supplied with your unit for operating instructions.

# Remote Control Basic Operation

- A. Turn E-stop counterclockwise 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.

# Remote Control Basic Operation

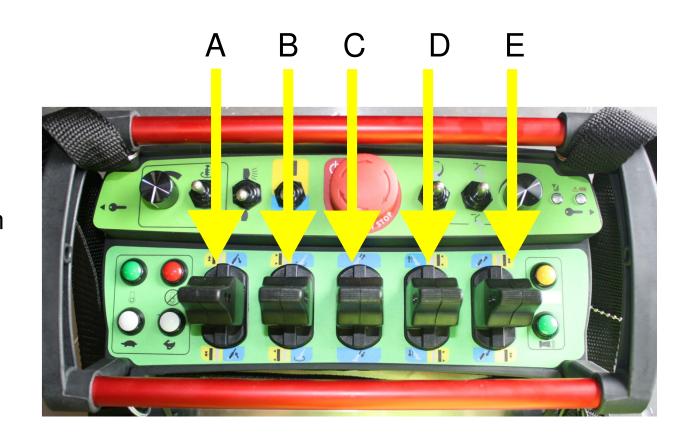
Removable battery for easy charging





## Remote Control Basic wer boom Operation

- A. Raise/Lower boom Left Track Forward/Reverse
- B. Rotate boom Left Track In/Out
- C. Extend/Retract boom
- D. Raise/Lower winch Right Track In/Out
- E. Extend/RetractfiberglassRight TrackForward/Reverse



## Driving the EZ Hauler

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





## Driving the EZ Hauler



The EZ Hauler 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.

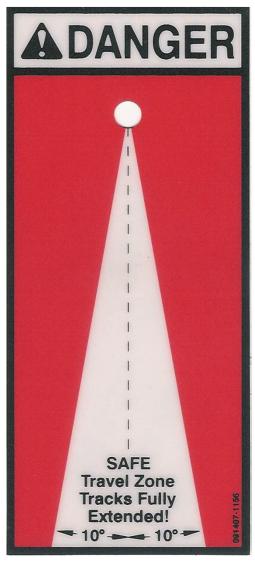
WARNING: The EZ Hauler should only be driven with the tracks fully extended.

## Driving The EZ Hauler

Pay close attention to the "side tip" angle indicator when navigating tough embankments.

Always stay within the safe operating zone.

Follow your machines travel indicator.



Picture may not be true representation of indicator on your unit

## Going through gates with the EZ Hauler

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

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

The green 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

### Through a small opening:

One of the advantages of the EZ Hauler 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.)

## Unloading the EZ Hauler

CAUTION: While unloading the EZ Hauler, 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 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 is secured for transport at the front and back of the trailer.

# Moving the EZ Hauler 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 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 slowly.

Make turns slowly and carefully.



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

## Setting a Pole With the EZ Hauler

Remember the EZ Hauler should <u>never</u> be considered electrically insulated. Use your company's insulation procedure to avoid electrocution. Before setting a pole the load capacity chart must be thoroughly understood.

See load capacity chart on machine

CAUTION!! 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 the Outriggers

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

Oversized outrigger pads should always be used.



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

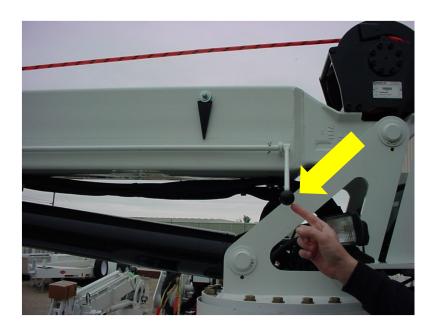
# Auger Operation Procedure



- 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.



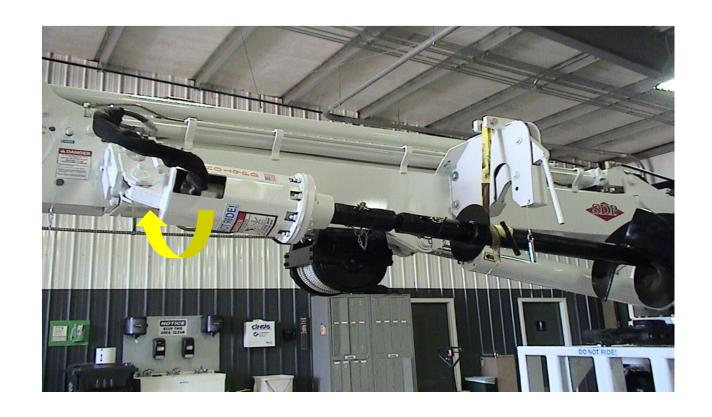






4. Raise the boom up to 30 degrees to avoid the auger making contact with the machine. Using the remote, reverse the auger rotation and slowly lower the auger.

*IMPORTANT:* You <u>must</u> raise the boom to safely lower auger assembly.



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

Reverse this procedure to store the auger, again making sure to have boom extensions fully retracted before stowing auger. DO NOT "OVER STORE" THE AUGER AS DAMAGE CAN OCCURE!



**NOTE:** Make sure to place boom extensions are retracted fully. Replace the travel pin

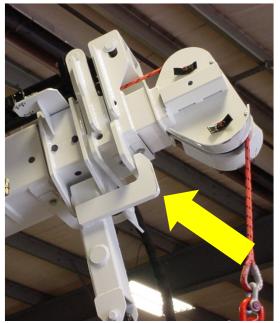
## Setting the Auger Lock

On the EZ Hauler 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.

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 hole straight 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. Never dig unless located.



(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.)

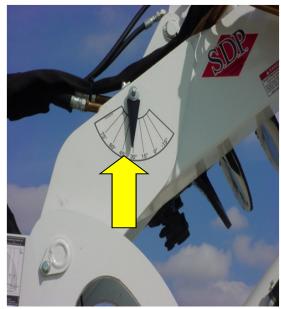
#### If needed, the extension bar may adjusted for more digging



(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!

- 6. Install hydraulic pole guide. (Refer to installation instructions.)
- 7. 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.
- 8. Install the lifting strap, remember to position the lifting strap according to pole weight for balance in lifting.







9. Lift the pole straight up and set into the hole.

**Always** operate EZ Hauler 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

CAUTION: Prior to using the bucket assembly, extend and secure all outriggers to the fullest settings.

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

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

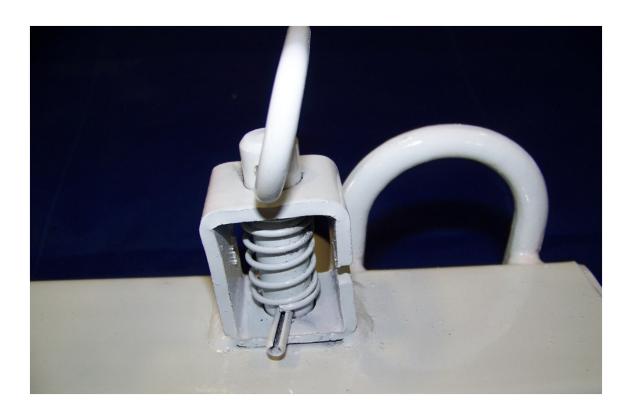
Always engage bucket attachment switch.





Make sure that locking mechanism on the bucket mount is <u>unlocked</u> by pulling it up and twisting counterclockwise into the position show.

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



Once the boom is 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!

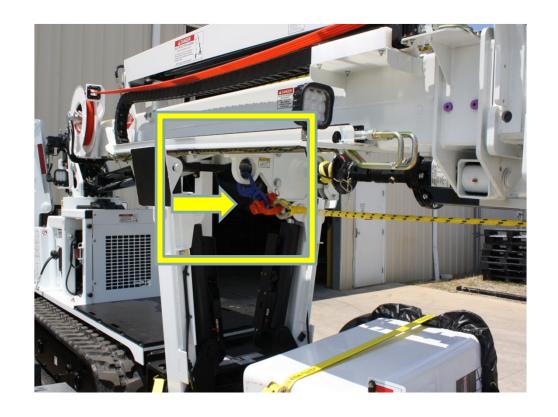


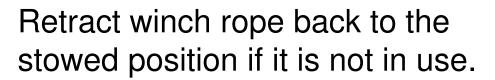


Lower and extend the boom to accommodate installation of the bucket mount.

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 the bucket while in operation.







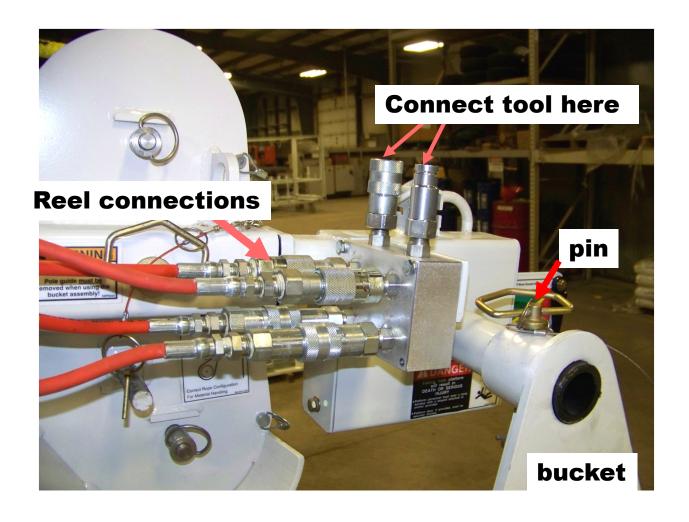
Winch rope kill switch



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.



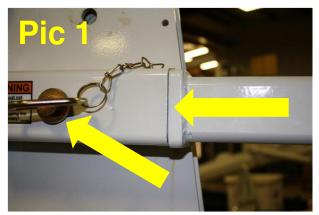
With the bucket mounted, connect the hoses from the tool reel. Connect tools to outlets.

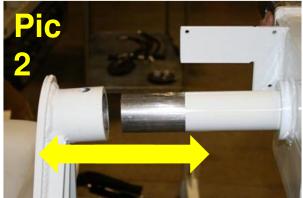
Slide the bucket upper mount in to the machines receiver. (Pic 1)

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!



Pin jib extension to receiver when pole guide is removed.

CAUTION! Jib is to be pinned to this receiver only and will not pin on opposite side receiver.

Remove winch rope from sheave pulleys and activate the winch override switch on back crane cover.

Pin bucket bracket to jib extension using the supplied pin.

CAUTION! Both ends must be securely pinned for bucket use!

CAUTION! If equipped with a tip mounted winch NEVER use winch with the bucket jib attachment.



\*This option is for 3400 LP units only.

#### Material Handler

The EZ material handling pin on jib which 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 CONJUCTION WITH MAIN CRANE WINCH! DEATH OR SERIOUS INJURY WILL OCCUR!



#### Material Handler

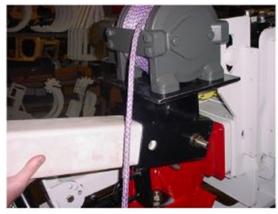
1. Attach jib and secure with pin

(Pic 1 and Pic 2)

2.Attach quick couplers (Pic 3)

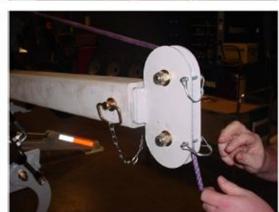
3.Secure rope around pulleys (Pic 4)

Pic 1 Pic 2









Pic 4

Pic 3

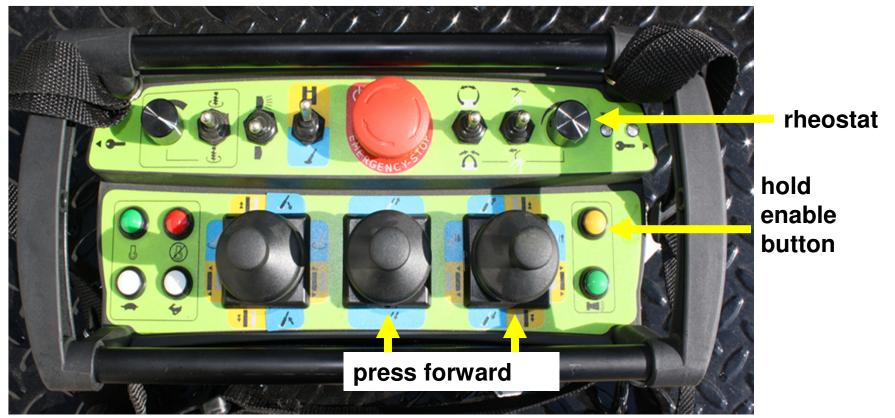
## To Enable control of hydraulic tools from the bucket





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** 

#### Material Handler

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



**DANGER!** Isolation tray must be used if using manual controls in a life threatening situation. Failure to do so will result in injury or death if machine becomes energized.

The manual controls are to be used only as a last resort to lower the platform. The remote control should always be the primary controls.

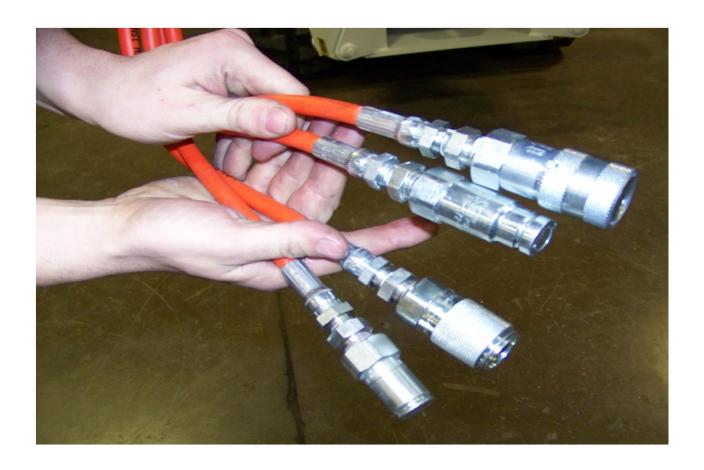


The supplied isolation tray can be pinned to three locations as shown depending upon boom position.

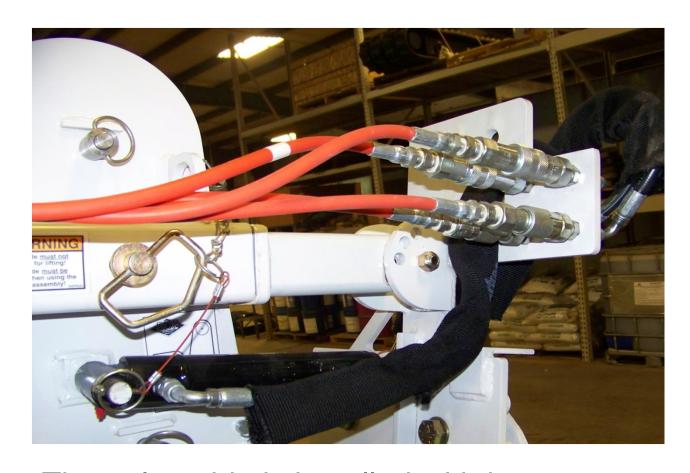
# Hydraulic Pole Guide Procedure



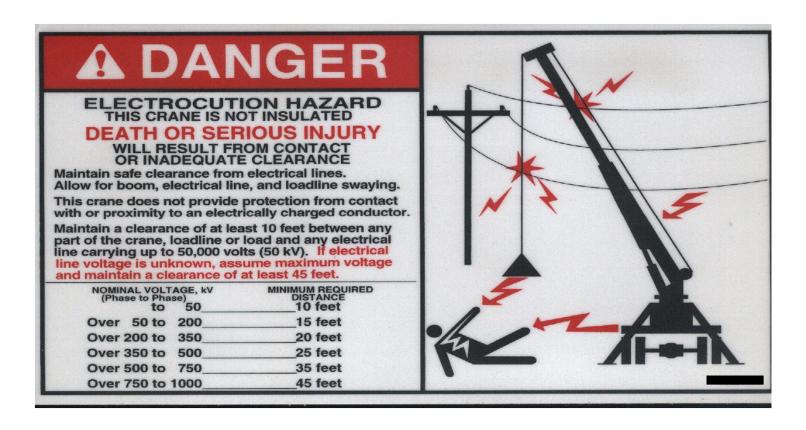
Install the pole guide and pin it in place. Connect the four hoses to operate it.



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



The pole guide is installed with hoses connected.



Remember that the pole guide is conductive so it will <u>not</u> be insulated against cross fazing, but with the fiberglass boom properly extended the EZ Hauler 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.



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

Structural damage will occur!

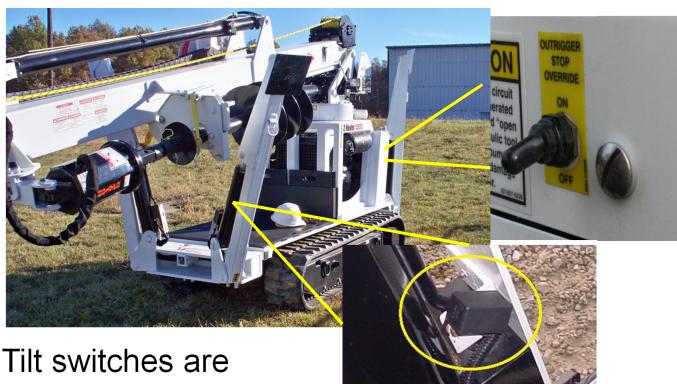


No Pole Pulling





### **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 DO NOT HIT THE BOOM!!

### Tilt Sensor

This unit is equipped with a pre set tilt sensor.

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



# **IMPORTANT!**

The EZ Hauler 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.

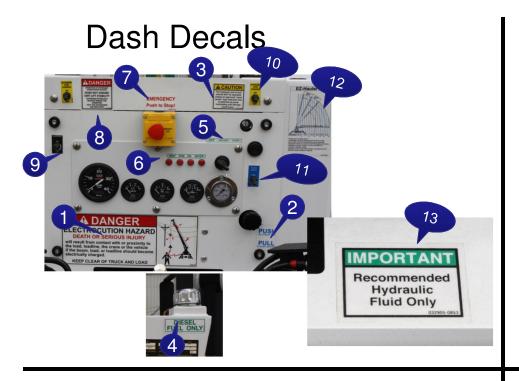
It is important that periodic tests be performed to the EZ Hauler just as any other digger-derrick in a companies fleet.

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

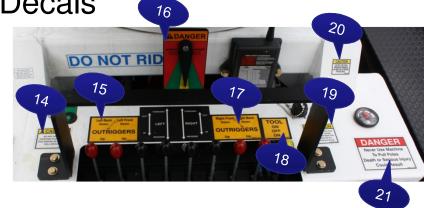
Follow the instructions in this manual for the safe operation of the S.D.P.

EZ Hauler





# Manual Control Decals 16



#### Outrigger Decals

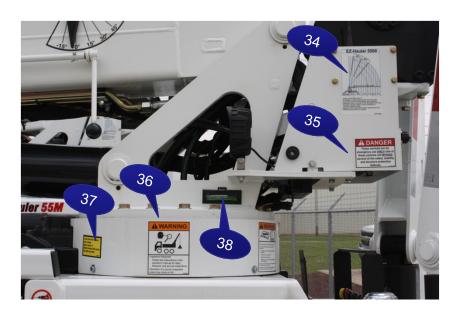




#### Rear Boom/Rotator Decals



#### Left Rotator Decals



#### Right Rotator Decals



Frame/Track Base Right Side





Frame/Track Base Front/Left



#### Boom Decals, Right Side

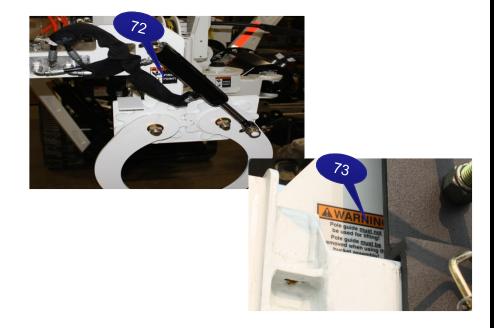




#### Boom/Auger Decals, Left



#### Pole Guide Decals



## Bucket Mount Decals, Left & Right Side



(Right side shown)

#### **Bucket Decals**



#### **Decal Serial Number Key**

20) 082805 - 0856 21) 080912 - 1635

	Outrigger Decals	Rotator Decals, Right Side
Dashboard Decals	22) 032805 - 0401	39) 032905 – 1252
	23) 030805 – 0408	40) 082405 - 0150
1) 060706 - 0231	24) 032905 – 1248	41) 082505 - 1245
2) 010713 – 1232	25) 032808 – 1207	Frame/Track Base Right Side
3) 021607 – 0228 4) 022005 0012	26) 032305 - 0223 (repeated	Decals
4) 032905 – 0912	on all outriggers)	<del>42) 120</del> 911 – 0728
5) 100710 – 1237 c) 022005 1247	27) 082505 - 0904	43) ) 101413 – 1341 (Repeated
6) 032905 – 1247 7) 032005 – 1254	<b>Boom Rear/Rotator Rear</b>	on the opposite side)
7) 032905 – 1254	<u>Decals</u>	44) 081312 - 0916
8) 011315 – 0903	28) 061110 - 0905	45) 082913 – 0913
9) 091306 – 1308	29) 082405 - 0140	46) 032905 – 0915
10) 063014 – 1826	30) 091306 – 1308	47) 032905 – 0913
11) 051508 – 1119	31) 032805 – 0359	48) 101413 - 1341 (Repeated
12) 081312 – 0916	32) 082505 – 1231	on the opposite side)
13) 032905 - 0853	33) 032905 - 0909	49) 013006 – 1407
Manual Control Decals	Rotator Decals, Left Side	Frame/Track Base Left Side
14) 032905 – 0914 15) 032005 – 1258	34) 081312 – 0916	Decals
15) 032905 - 1258	35) 071708 – 1023	50) 101413 – 1341
16) 042215 - 0922 17) 022005 - 1250	36) 082405 - 0140	51) 101413 – 1341
17) 032905 - 1259	37) 082805 – 0850	52) 070310 – 0929
18) 081406 – 1501	38) 082405 - 0150 (Repeated	53) 041108 - 1609
19) 013006 – 1407	on annosite side)	54) 060706 - 0231

on opposite side)

54) 060706 - 0231

#### Decal Serial Number Key Continued

#### **Boom Decals, Right Side**

- 55) 082505 0229
- 56) 072505 0915 (Repeated on opposite side)
- 57) 032905 0908 (Repeated on opposite side)
- 58) 060706 0231 (Repeated on opposite side)
- 59) 032905 0909 (Repeated on opposite side)
- 60) 032905 1256 (Repeated on opposite side)
- 61) 082505 0908 (Repeated on opposite side)

#### Boom / Auger Decals, Left Side

- 62) 082505 0231
- 63) 082505 0902 (Repeated on opposite side)
- 64) 082505 0904
- 65) 072505 0915 (Repeated on opposite side)
- 66) 032905 0908 (Repeated on opposite side)
- 67) 060706 0231 (Repeated on opposite side)
- 68) 032905 0909 (Repeated on opposite side)
- 69) 032905 1256 (Repeated on opposite side)
- 70) 082505 0908 (Repeated on opposite side)

#### **Pole Guide Decals**

- 71) 082505 0904
- 72) 032905 1301

#### **Bucket Mount Decals, Right/Left Side**

- 73) 032905 0905
- 74) 080912 1851

#### **Bucket Decals**

- 75) 071806 0139
- 76) 071806 0136
- 77) 032905 0910
- 78) 032905 0906
- 79) 091508 1124