Ezy-Lift™

EZY 2000 8.0 PT
Installation Guide and Service Manual

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INTRODUCTION

Installation of the Ezylift must only be performed by qualified personnel with the proper tools in a properly equipped facility.

Throughout the manual you will see advisory signs that indicate special attention to various procedures in installation and operation.

⚠ DANGER The DANGER sign indicates an imminently hazardous situation which, if not avoided, will result in serious injury or death.

⚠ WARNING The WARNING sign indicates a potentially hazardous situation which, if not avoided, could result in serious injury or death.

⚠ CAUTION The CAUTION sign indicates a potentially hazardous situation which, if not avoided could result in minor or moderate injury.

Read and obey all Danger, Warning, Caution, and Operating Instructions on the Ezy-Lift and in this manual. Make sure that all placards are in place and legible. Failure to comply with safety precautions in this manual and on the Ezy-Lift is a safety violation that may result in serious injury, death, or property damage.

⚠ CAUTION Read this entire manual before beginning work. Always wear safety glasses and use care when working with power tools. Safety is a primary concern in the design and manufacturing of our products. But remember that all efforts to provide safe equipment can be totally negated by a single careless act of an installer or operator. Accident prevention and safety are dependent upon the awareness and proper training of the personnel who operate and maintain this equipment. The best safety device is a careful and informed owner/operator. Taking precedence over any specific rule, however, is the most important rule of all: SAFETY

⚠ WARNING **The Ezy-Lift model 2000 lifting systems have a rated lift capacity of 2000 lbs. Overloading your vehicle can create safety hazards!**

PRODUCT SPECIFICATIONS

Lifting Capacity	2000 Pounds for 8 foot cargo beds
Power Supply	12 VDC operation from vehicle battery, 150 AMP fuse at vehicle battery
Hydraulic System	Bi-Directional hydraulic pump & flow control valve, two 3” hydraulic cylinders provide lift rotation of the boom arms
Winch	Designed for lifting with 159:1 gear rotation, full load mechanical brake, 5:1 safety factor
Winch Wire Rope	1/4” diameter 7x19 construction, galvanized, 35 foot length with 1.5 ton eye hoist hook, latch and handling strap
Frame	11 gauge steel with black powder finish
Lifting Boom Arms	High strength structural steel
Hub Bushings	Self-lubricating bronze sleeve bushings
Remote Control	2 button 4-way control: up & down (Winch Wire), in & out (Boom), 10 foot cable
Operating Time	From fully retracted (parked) to fully extended in approximately 45 seconds
Hydraulic Fluid	ATF, OD18 or other clean hydraulic oil with a viscosity of 150 to 360 SUS at 38°C (100°)F
Operating Temperature	Range between 20°F to 140°F
System Weight	Approximately 320 Pounds
Warranty	One Year

Specification and features are subject to change without notice as models are upgraded.

Ezy-Lift™

EZY 2000 8.0 PT
Installation Guide

PREPARE FOR INSTALLATION

Completely empty the truck bed. Once empty it is recommended that the bed be power washed prior to installation.

Bed Liners Spray-in bed liners provide an acceptable mounting surface for Ezy-Lift installations. **However, hard plastic drop-in bed liners must be removed from the truck bed in order to provide a solid mounting suitable for installing Ezy-Lift.**

CAUTION **It Takes Two.** Several steps in the installation require the help of another person, for example placing components properly, or attaching backing plates under the bed. **Identify all components** supplied in the installation kit and match them with the parts list. If any components are missing, contact Ezy-Lift Tech Support at 713.589.9449 before beginning installation.

WARNING **Park the truck on a level surface, set the parking brake and chock the wheels for safety.**

Tools Needed

Rivet Nut Tool (Included—Dodge Only)	Standard Open End Wrench Set
Drill	Metric Open End Wrench Set
Tape Measure	Drill Bit Set
Ratchet	1” Metal Hole Saw Bit
Rasp	Saw
Standard Deep Socket Set	5 Foot 2 x 4 Lumber
Standard Hex Socket Set	Rubber Mallet
Electrical Cord	#2 Phillips Drill Bit

Attaching Pieces Included (Hardware Package)

Qty	Description	Qty	Description
18	5/16x1-1/4 Button Head Screw	6	5/16 Nylon Lock Nuts
17	1/4x3/4 Button Head Screw	18	5/16 Nuts
16	3/4 Self Tapping Screw	5	Rubber Grommets
6	5/16 x 4 Hex Head Bolts	20	Black Tie Wraps
19	5/16 Flat Washer	2	Crossbar End Caps
20	5/16 Lock Washer	8	Rivet Nuts (Dodge Only)
10	1/4 Flat Washer	4	Anchor Points (Chevrolet Only)

Extra Parts The Ezy-Lift is shipped with a few extra attaching parts i.e. screws, washers, nuts, and bolts to ensure that there is enough to complete the installation. Having leftover attaching parts is normal.

Read the instructions completely before installation. It is recommended not to skip steps. We have carefully considered the order of each step to ensure the best possible installation with the fewest possible problems.

WARNING **Prior to installation, park the truck on a level surface, set the parking brake and chock the wheels for safety.**

Before beginning the installation remove the packing material to expose the Ezy Lift on the pallet. LEAVE BOTH FRAMES SECURED TO THE PALLET. Carefully inventory the items identified in the illustration above. Check the items in the hardware package against the list on page 3 of this manual. If any items are missing contact Ezy Lift tech support at 713.589.9449.

Each of the parts and quantities listed below should be on the pallet

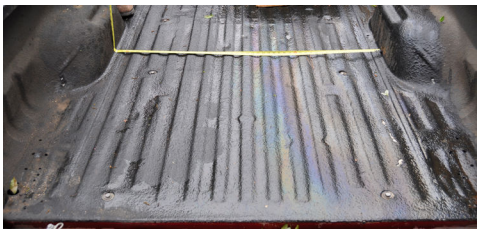
2 - Unit Arm Frames	1 - Winch Cross Bar	2 - Side Fillers	1 - 90° Square
2 - Access Covers	2 - L Spacers	2 - 3 Hole Brackets	1 - Hardware Package
1 - Red Power Cord	1 - Unit Remote Control		

BEGINNING STEPS

LEAVE EZYLIFT FRAMES SECURED TO PALLET

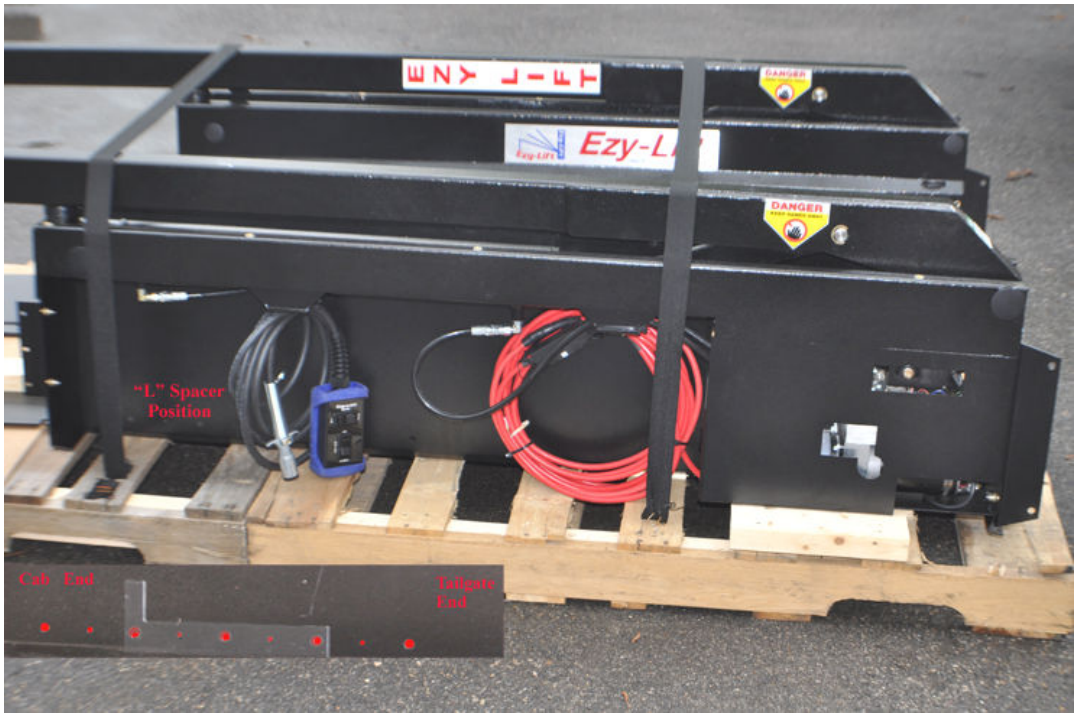
Remove the tailgate and remove the tail light assemblies. **(Do not remove tail lights for Chevrolet Installs)**

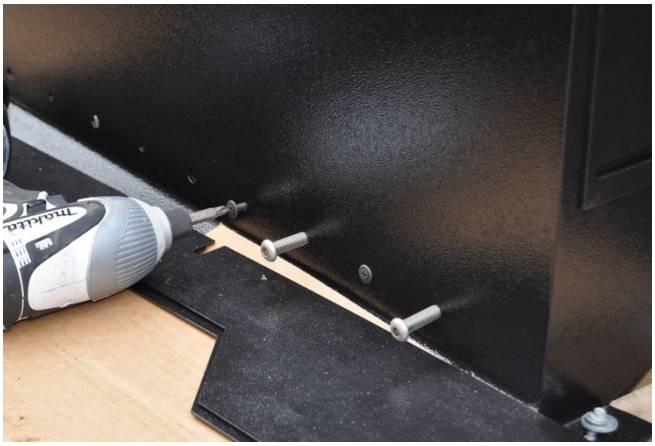
If installing the unit in a Chevrolet Pick Up truck turn to pages 8 through 13 for Arm Frame installation instructions.



Measure the distance between the pick up truck wheel wells. If the distance exceeds 50" it is necessary to mount the "L" Spacers to each of the unit Arm Frames.

If it is necessary to mount the "L" Spacers install them with the unit frames still secured to the pallet. On the front end of the unit frame there are 9 pre-dilled holes, 5 large and 4 small. Count back from the front (cab end) of the frame and position the vertical end of the "L" Spacer so that the large hole at the axis of the "L" Spacer is aligned with the second large hole in the frame. Take two of the self tapping screws and attach the "L" Spacer using the two small holes. Note the illustrations below.





Note the illustration to the left. The large pre-drilled holes are used to attach the frame to the wheel well with 5/16" screws at a later stage in the installation. The small holes are used, along with the self tapping screws, to attach the "L" Spacer to the unit frame before installation.

The installation will be done in four steps:

- **Measure the wheel well distance and determine the need for the "L" Spacer and, if needed, mount the "L" Spacer. Leave the unit Boom Arm Frames attached to the pallet but unpack the rest of the pieces and make sure that they are all there. (Refer to the list on page 4)**
- **Installation of the unit Arm Frames to the truck bed**
- **Running and connecting the Hydraulic Hoses and Electrical Cords**
- **Mounting of the Winch Crossbar and connecting the Winch Electrical Leads**

The installation of the Boom Arm Frames after the mounting of the "L" Spacers will differ slightly for the Dodge, Ford and Toyota and for the Chevrolet pick up trucks. The installation instructions for the Chevrolet trucks are found in a separate section beginning on the next page and continuing through page 13.

Pages 8 through 13 will apply to Chevrolet trucks only.

If installing the Boom Arm Frames for a <u>Dodge, Ford or Toyota, please turn to page 14</u> of the manual and continue the installation.

Chevrolet Truck Boom Arm Frames Installation Section

The following section (pages 8 through 13) provide Boom Arm Frames installation instructions for <u>Chevrolet</u> <u>trucks only</u>.

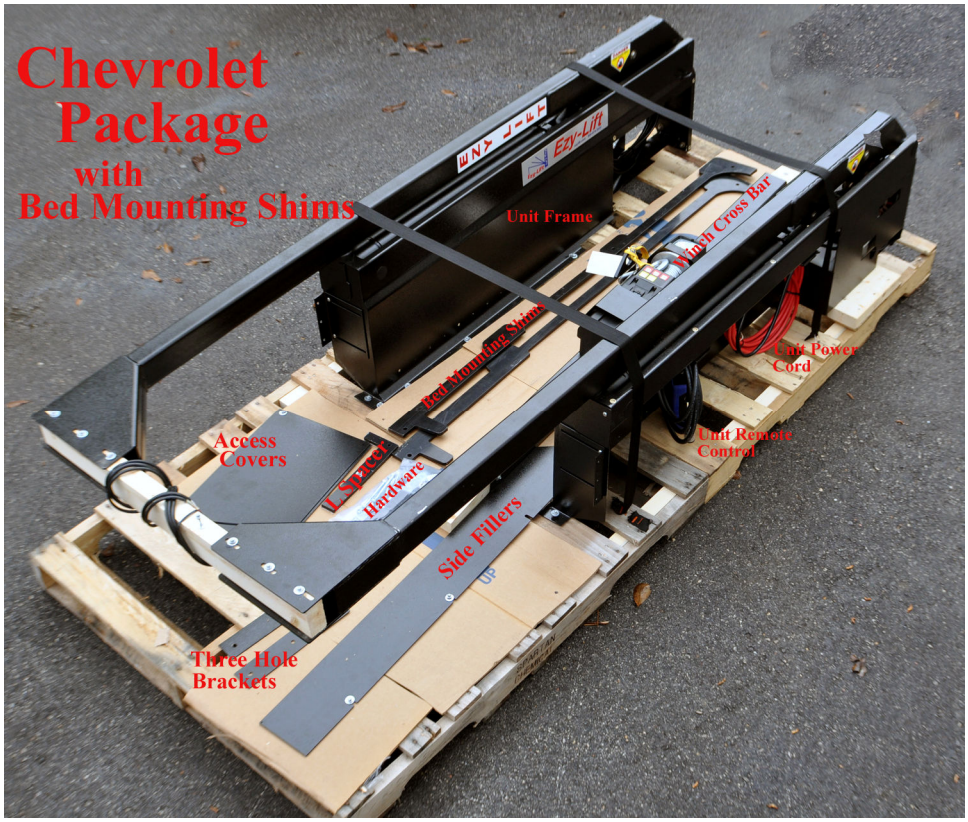
If the Ezy-Lift is being installed in a Ford, Toyota or Dodge truck please turn to page 14 to continue Boom Arm Frames installation instructions.

Chevrolet Frame Installation

The installation of the unit Arm Frames in a Chevrolet pick up truck differs from that of other pick up trucks. After the frames are installed the remainder of the installation is the same for other truck makes and models. The next seven pages address Chevrolet Arm Frame installations only.

Strip away the packaging materials but **leave the unit frames bolted and strapped to the pallet.** Check the contents of the package. Compare to the list and photo below.

2 - Unit Arm Frames	1 - Winch Cross Bar	2 - Side Fillers	2 - Bed Mounting Shims
2 - Access Covers	2 - L Spacers	2 - 3 Hole Brackets	1 - Hardware Package
1 - Red Power Cord	1 - Unit Remote Control	1 - 90° Square	



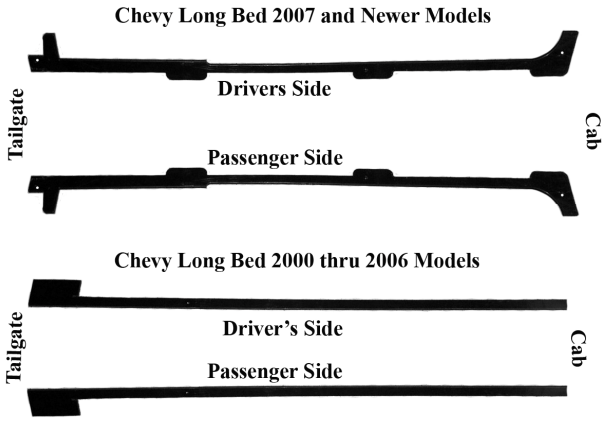
Back out the screws securing all of the unit pieces except the unit arm frames and set the items aside.

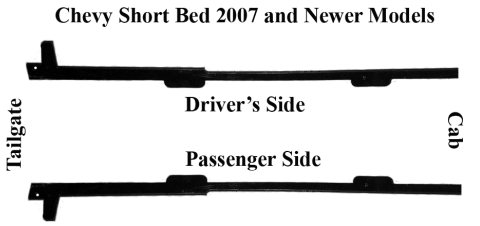
BEGINNING STEPS

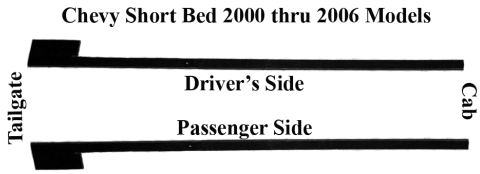
LEAVE EZYLIFT SECURED TO PALLET

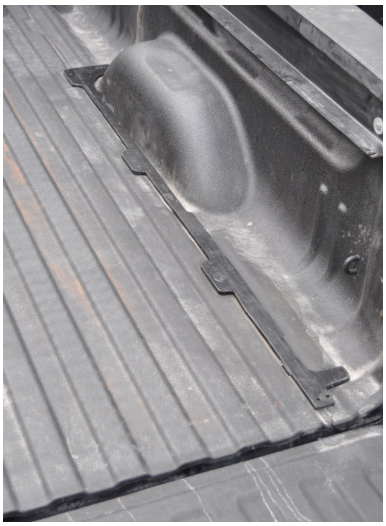
Remove the tailgate before installation.

Set the Bed Mounting Shims in the bed grooves nearest the wheel wells. See illustrations below for positioning.









Set the Bed Mounting Shims in the grooves nearest the pick up truck wheel wells. There is no need to secure the shims at this stage.

Mount the Side Fillers

Unlike the Side Fillers which are used to fill gaps between the unit Arm Frames and bed side walls on every other truck, the Chevrolet Side Filler is one of four mounting brackets for the unit Arm Frame.

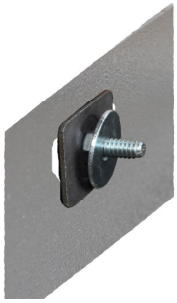
Lay the Driver's Side Filler in the bed of the truck in the position illustrated in the picture to the left.

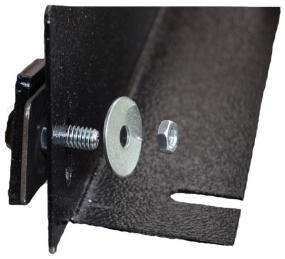
Note the three plastic holes and caps on each side of the truck bed's side walls. Use the rear two holes to mount the unit Frame Side Fillers. Use a knife and carefully remove the caps. If the caps were numbered 1, 2 and 3 with 1 being closest to the truck cab, numbers 2 and 3 would be removed.

Locate the four Anchor Points in the Hardware Package and set them in the bed of the truck.

Disassemble two of the Anchor Points and set them down in front of the holes in the truck bed sides. Install one of the Anchor Points in one of the holes. See instructions below.

Place the Anchor Point Base inside the side wall hole and position vertically slip the Anchor Point Plate over the bolt and position horizontally. Tightly secure the two pieces together with the jam nut and slip the washer over the bolt. See the illustration to the right. Make sure the screw driver slot in bolt face is in the horizontal position when tightening.





Take hold of the Side Filler and position it as shown in the illustration at the top of the page. Align the two holes on the side with the two Anchor Point bolts and slide it on. Take the washer and slide it on the bolt and then the 5/16 nut on to the bolt and leave **loosely secured**. The Side Filler will be positioned as illustrated to the right. Repeat these step for the passenger side.

Take the unit frame that has the hydraulic pump and place it on the drivers side of the pick up truck bed with the arm end pointing forward toward the truck cab. Take the remaining unit frame and place it on the truck bed on the passenger side. Be careful not to set the unit on the hydraulic pump hoses.

Lift the unit Arm Frame with the hydraulic pump upright with the arm on top. Lean the arm end slightly forward and move the top end up under the Side Filler. Push the bottom of the Arm Frame in on top of the plastic Mounting Shim and flush with the wheel well. It will be necessary to lift up the Side Filler which should have been attached to the truck bed wall only loosely.

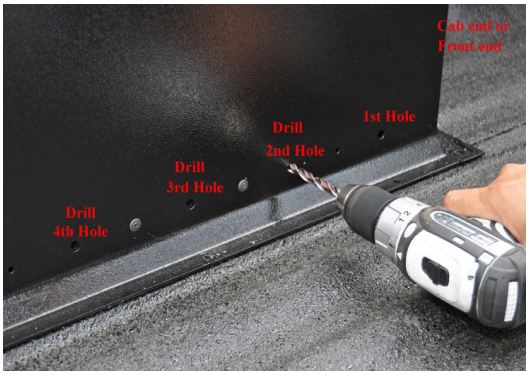
Use the 2 x 4 as a brace to hold the two unit frames in position until they are secured to the truck bed.

Once the unit Arm Frame is in position under the Side Filler, pull it completely back towards the tail gate. Make sure that both frames are equal distance from the rear of the truck bed.

Once the Brace has been placed between the two Arm Frames and the unit Arm Frames are pulled back to the tailgate posts align the holes on top and use two of the 1/4” screws and washers and loosely attach the Arm Frame to the Side Filler Bracket to hold the frame into position. Repeat these steps on the passenger side.

MOUNT THE FRAME TO THE WHEEL WELLS

Now that the unit Arm Frames are secured to the Side Filler brackets undertake the following steps to attach the frames to the truck wheel wells.

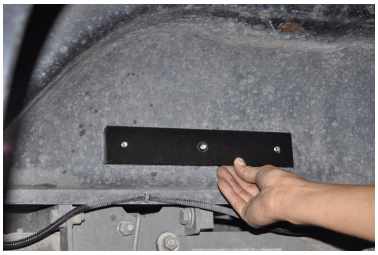


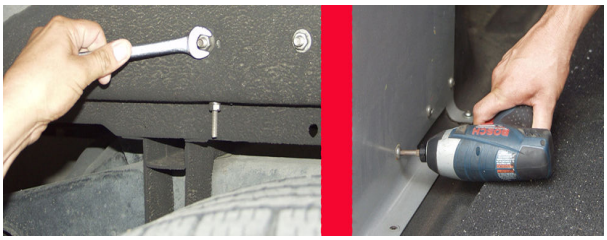
Count back one from the truck cab end or front end. The **second hole** is the first hole to drill through. If the "L" Spacer was mounted correctly this hole will pass through the hole at the apex of the "L" Spacer. Drill holes through the 2nd, 3rd and 4th holes.

Use the drill with a 5/16" bit and align the bit with the screw holes in the side panel. **(Caution, on most trucks the holes will be located above the tire height. Check the position of the tire relative to the holes you are drilling into the wheel well before proceeding.)** Drill three holes that pass through the holes in the "L" Spacer. Repeat process on the other frame.

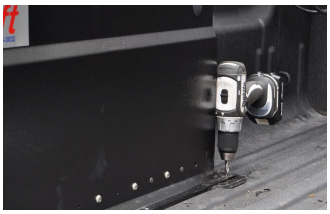
Set the Three Hole Wheel Well Bracket

Push the three 5/16 screws through the 3 Hole Bracket on the inside of the wheel well. Put a flat washer, lock washer and 5/16 nut on each of the screws and with one person operating an impact on the inside of the truck bed and another under the truck in the wheel well with the open end wrench, securely tighten each of the three screws. Note illustrations below.





Set the Rear and Front Foot Brackets



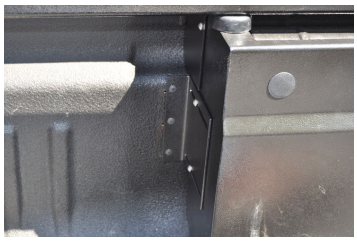
Align the 5/16" drill bit through the holes in the brackets and drill through the truck bed for both the front and rear Foot Brackets. Run the screws through the holes and put the washers and nuts on from the under side but only hand tighten.

Use the disposable 90° Square and square up the unit Arm Frame with the bottom of the truck bed. Once the frame is square with the bed begin to tighten the 1/4" screws that secure the frame to the Side Filler Brackets. Tighten these completely the length of the frame.

Set the screws in the brackets by having one person in the truck bed with an impact to drive the 5/16" screws and another person under the truck with an open end wrench. Use washers on each screw under the truck between the nut and the underside of the truck bed. **Do not tighten completely.**

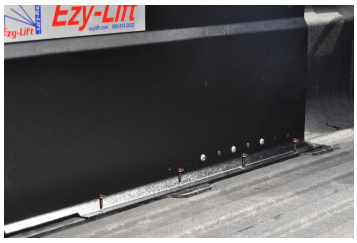
Set the Front Slide Brackets

Loosen the two screws holding the Front Slide Bracket. Tighten the two screws attaching the Front Slide Bracket to the frame. Use three of the self-tapping screws to secure the bracket to the bed wall of the truck. Back out the screw that secures the small Fill Plate to the frame for shipping. Flip the Fill Plate so that it is in the opposite position, as illustrated above, and re-secure to the Arm Frame.



The Front Slide Bracket should be positioned as illustrated in the photo on the left. Tighten all of the bracket screws and then insert the self tapping screws in the bottom of the Arm Frame as shown to the left and below.

After these steps are complete securely tighten the 3/4" screws that secure the Side Filler to the unit Arm Frame.



Once all screws are securely tightened the wood brace may be removed and discarded.

Turn To Page 19 To Continue Installation Instructions

Boom Arm Frames Installation
Ford, Dodge & Toyota Section

This section applies to the Boom Arm Frame installation on Ford, Dodge and Toyota trucks only. After finishing these steps proceed with the installation covered in the sections for hydraulic and electrical installation.

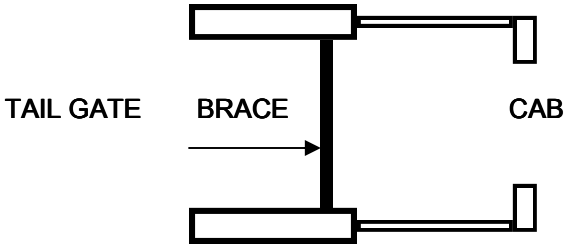
Dodge, Toyota and Ford truck Boom Arm Frame Installations

Take the unit frame that has the hydraulic pump and place it on the drivers side of the pick up truck bed with the arm end pointing forward toward the truck cab. Take the remaining unit frame and place it on the truck bed on the passenger side. Be careful not to set the unit on the hydraulic pump hoses.

Lift the unit Arm Frame with the hydraulic pump upright with the arm on top. Lean the arm end slightly forward and move the top end up under the Side Filler. Push the bottom of the Arm Frame in on top of the plastic Mounting Shim and flush with the wheel well. It will be necessary to lift up the Side Filler which should have been attached to the truck bed wall only loosely.

Once the unit Arm Frame is in position under the Side Filler, pull it completely back towards the tail gate. Make sure that both frames are equal distance from the rear of the truck bed.

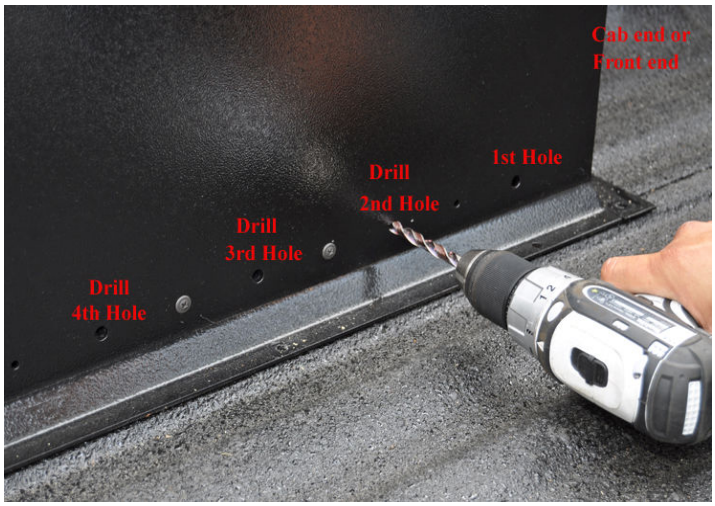
Use the 2 x 4 as a brace to hold the two unit frames in the upright position until they are secured to the truck bed.



Once the Brace has been placed between the two Arm Frames pull the two Arm Frames all the way back to the tailgate posts.

MOUNT THE FRAME TO THE WHEEL WELLS

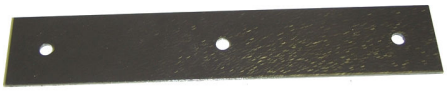
Now that the unit Arm Frames are secured to the Side Filler brackets undertake the following steps to attach the frames to the truck wheel wells.



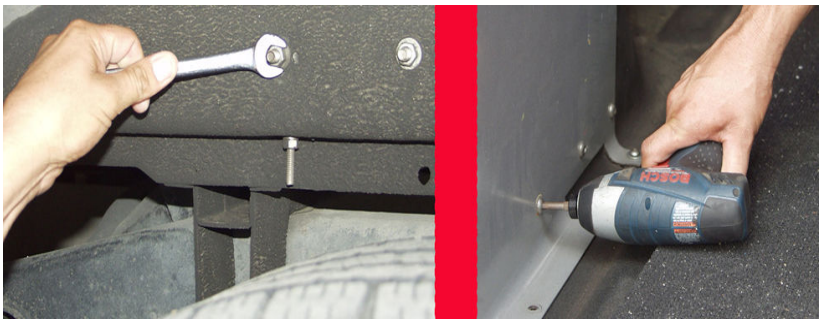
Count back one from the truck cab end or front end. The **second hole** is the first hole to drill through. If the "L" Spacer was mounted correctly this hole will pass through the hole at the apex of the "L" Spacer. Drill holes through the 2nd, 3rd and 4th holes.

Use the drill with a 5/16" bit and align the bit with the screw holes in the side panel. **(Caution, on most trucks the holes will be located above the tire height. Check the position of the tire relative to the holes you are drilling into the wheel well before proceeding.)** Drill three holes that pass through the holes in the "L" Spacer. Repeat process on the other frame.

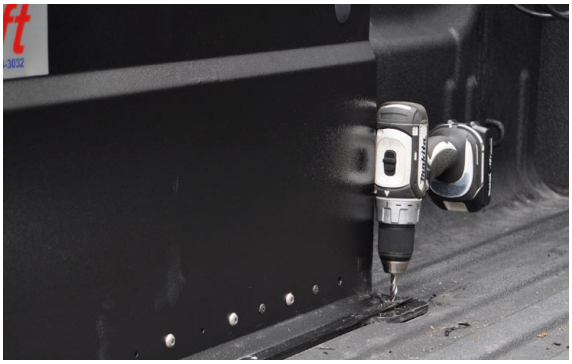
Set the Three Hole Wheel Well



Push the three 5/16 screws through the 3 Hole Bracket on the inside of the wheel well. Put a flat washer, lock washer and 5/16 nut on each of the screws and with one person operating an impact on the inside of the truck bed and another under the truck in the wheel well with the open end wrench, securely tighten each of the three screws. Note illustrations below.



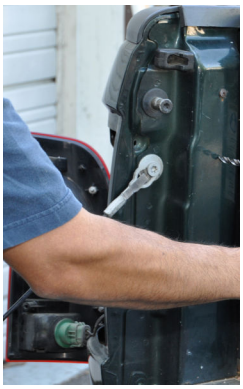
Set the Rear and Front Foot Brackets



Align the 5/16” drill bit through the holes in the brackets and drill through the truck bed for both the front and rear Foot Brackets. Run the screws through the holes and put the washers and nuts on from the under side but only hand tighten.

Since there is no room to hold a wrench in the tail gate housing of Dodge pick up trucks, Rivet Nuts will need to be installed. Please refer to the directions below to install the Rivet Nuts.

Use a 5/16” drill bit and drill through the holes in the Vertical Post Bracket and into the post of the pick up truck bed. Next remove the bracket and use a 17/32” drill bit to widen the holes in the bed post in order to install the rivet nuts.



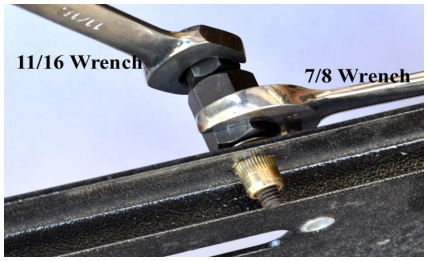
Installing Rivet Nuts

Use the drill with the 5/16” drill bit and, using the screw holes in the Vertical Post Mounting Bracket to align, drill the holes into the side of the bed post. After the holes are drilled remove the side bracket from the arm frame. Replace the drill bit with a 17/32” drill bit and enlarge the two holes in the side of the bed post. If the truck has a spray on bed liner, remove the liner around the holes so the rivet head will directly butt up to the sheet metal around the 17/32” drilled hole. Once this is done insert the 5/16” Rivet Nut with the Rivet Nut Tool.

How to use the RNHT Rivet Nut Hand tool

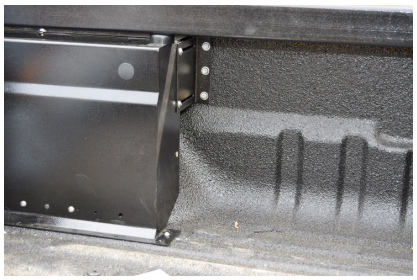
The RNHT hand tool comprises 3 parts, the upper body (figure A), the lower body (figure B) and the socket head cap screw (figure C). Put the socket head cap screw through the tool in the orientation shown in figure C. Thread the rivet nut on to the screw until it rests against the underside of the bottom.

Insert the rivet nut into the hole of your application while it is threaded onto the tool. Use the 7/8 inch wrench to keep the bottom body from turning. Next, put an 11/16 inch socket wrench over the top body and turn clockwise. This will thread the top body out of the bottom body. This lifts the threads of the rivet nut and
collapses the rivet nut forming a bubble on the backside, holding the rivet nut.
Continue turning the wrench until it comes to a firm stop. Reverse the socket wrench to break the tension in the tool. Remove the socket and thread the screw
out of the installed rivet nut. Screw the top body into the bottom before installing another rivet nut.

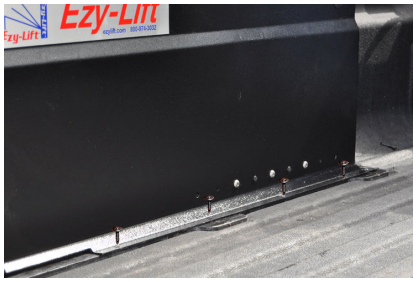


We recommend performing a test installation before installing into your application. Failing to perform a test could cause the threads to strip by over torque.

After the two rivet nuts are placed in the truck bed move the unit Arm Frame up against the side of the truck bed. Use the 90° square and line the unit Arm Frame with the bed bottom. When this alignment is complete tighten the screw into the rivet nut.



Loosen the two screws holding the Front Slide Bracket. Take the 90° square and put side on the bed floor towards the rear of the frame with the vertical side pushed up against the Arm Frame adjust the vertical angle of the Arm Frame to square it to the truck bed. Do the same thing towards the front of the Arm Frame. Once the frame is square, slide the bracket against the truck bed wall. Tighten the two screws attaching the Front Slide Bracket to the frame. Use three of the self-tapping screws to secure the bracket to the bed wall of the truck.



Insert the self tapping screws in the bottom of the Arm Frame as shown to the left and below.

Once all screws are securely tightened the wood brace may be removed and discarded.

HYDRAULIC HOSES & POWER CORDS

Feed and attach hydraulic hoses

On the driver's side (pump side) drill **three** 1" holes through the bottom of the truck bed using a hole-saw**.** Insert a rubber grommet in each hole.

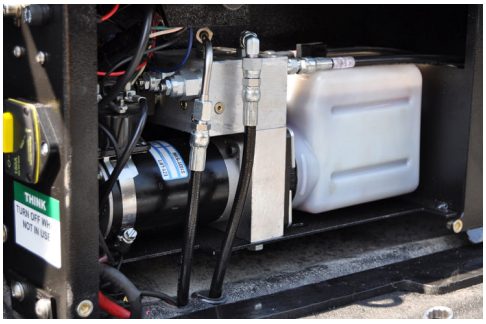
(Note Make sure to check under the truck for an open area before drilling.)

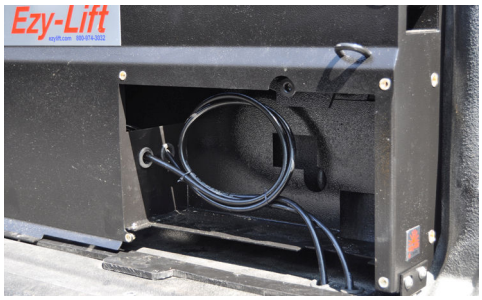
On the passenger side drill **two** 1" holes and insert two rubber grommets. Cut and discard the tie wraps securing the hose loops.

Feed the hoses down through the holes on the passenger side of the truck (one hose per hole) and pass them under the truck bed, up through the two holes in the driver's side that are the farthest from the tailgate and set the ends next to the Pump Counter Balance Valve.

Remove the hose plugs with a 9/16 and a 1/2 inch open end wrenches. Have a cloth or shop towel ready. Some fluid will drip out of the hoses. Place the 9/16 wrench on the hose end and the 1/2 wrench on the hose cap and turn in opposite directions.

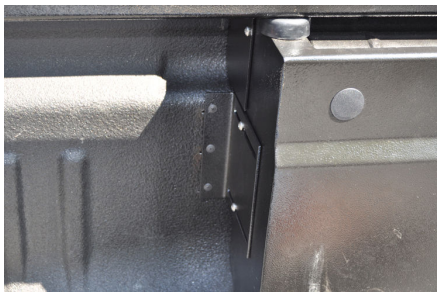
Use a 9/16 and 5/8 open end wrench to secure the hose ends to the fittings on the pump. Each of the two fittings are different, one male and one female. It is not possible to hook them up incorrectly.





After the hoses are securely connected to the pump pull the slack back through the feed holes towards the passenger side frame. Roll the extra length of the hoses and use the smaller tie wraps to secure the coil.

Secure the front of the frame by tightening the screws on the front Boom Arm Frame Slide Brackets.



Loosen the screws holding the bracket to the frame. Slide the bracket all the way to the bed side. Tighten the screws. Use the self tapping screws to secure the bracket to the wall of the bed. Remove the small frame filler above the bracket, turn it over and reattach to fill the gap between the bed wall and the unit frame.

Connecting the Electrical Cords

Open the red Power Cord package. Locate the long red Power Cord and lay it out the length of the truck along side the driver's side. Find the Fuse Box and Fuse and the short Power Cord. Position the short cord from the battery to a clear area of the truck's engine compartment firewall. Mount the Fuse Box to the firewall in this area. Connect the short cord to the Fuse Terminal closest to the battery. Pass the end of the long up into the engine compartment and connect it to the other Fuse Terminal. Place the Fuse Box cover on the Fuse Box and secure.

Run the long Power Cord under the truck bed and attach it to the chassis with the supplied tie wraps.

Feed the positive up through the remaining hole, which should be the hole closest to the tail-gate. Attach the red power to the power terminal marked "Line" on the On/Off Switch. Run the ground line from where it is secured on the lift frame run it down through the same hole and mount it to the chassis under the truck. Insure that the terminal attaching points are clean to bare metal. Connect the Power Cord to the truck's battery terminal.

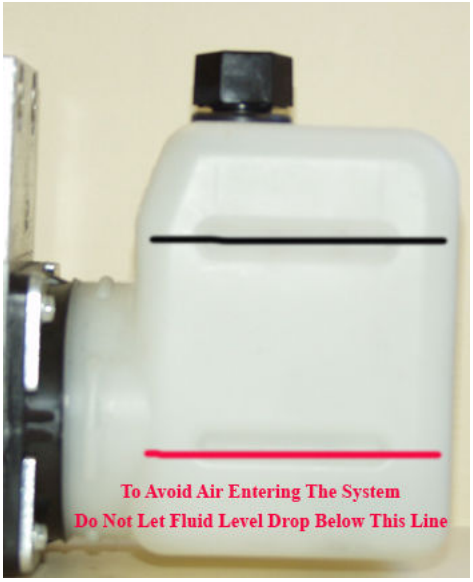
Check the Remote Control and the Hydraulic Fluid in the Lift Pump

Plug the female fitting into the receptacle on the rear of the pump side frame. Depress and

Both of the unit arms will begin to move up and back towards the rear of the truck bed. It is normal that the arm on the pump side should move at a brisker pace than the other side.

Note. It is important to watch the fluid level in the pump reservoir for the entire movement of the arms. If the fluid level drops too low during the arm movement it will be necessary to bleed the system.

When the pump side arm reaches a height slightly above the cab roof, hold the pump side arm down while depressing the “Boom Out” button until the passenger side arm reaches an equal height.

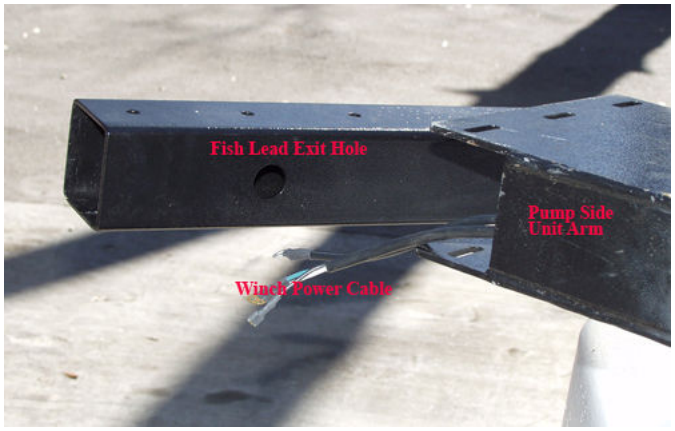


As the arms come out, the hydraulic fluid level in the pump reservoir will drop towards the bottom indentation in the reservoir (indicated by the red line in the illustration). Allowing the fluid level to drop below the bottom indentation may lead to air entering the system. As the level approaches the bottom indentation release the "Boom Out" button to stop the arms. Use the hydraulic fluid provided to refill the reservoir up to the level of the top reservoir indentation indicated by the black line in the illustration.

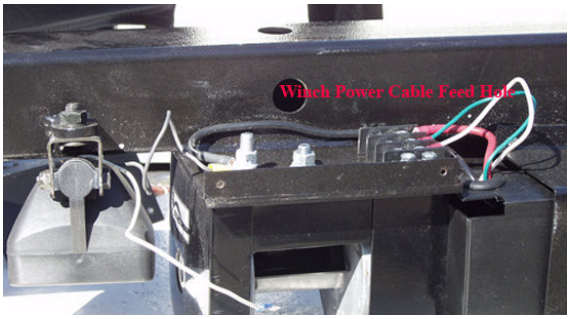
MOUNT THE WINCH CROSSBAR

Back out the three screws that secure the Winch Terminal Block Cover. Remove the cover and set it aside.

Place the crossbar in the arm bracket on the passenger side and do not secure.



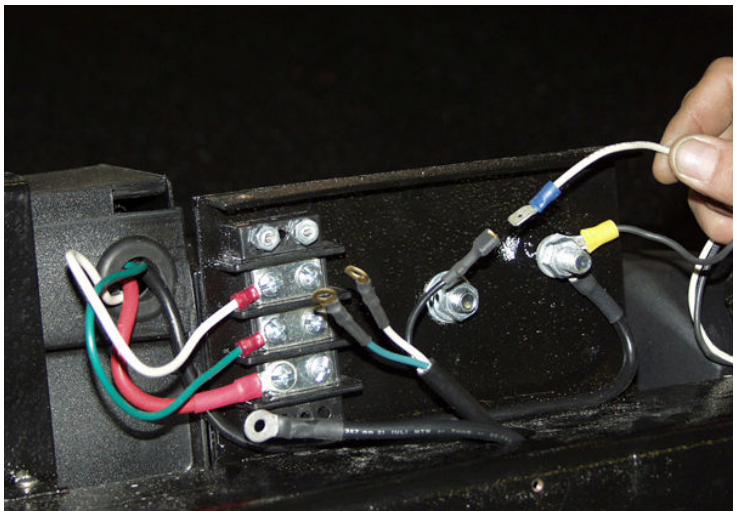
A fish lead will extend out of the Winch Power Cable Feed Hole on the driver's side of the cross bar and run through the crossbar towards the end that abuts to the pump side arm. There the fish lead exits the cross bar. Attach the winch cable leads to the fish.



Locate the Winch Power Cable in the pump side arm and pull the ends out of the arm. Connect the power cable to the fish lead and pull the fish lead through the Winch Power Cable Feed Hole. Set the electrical leads aside.

Loosely secure the crossbar to the unit arm brackets with the 5/16" x 4" bolts, flat washers (on top and bottom) and the 5/16 nylon lock nuts. The crossbar fit into the bracket is extremely tight. It may be necessary to tap it in place with the rubber mallet.

Connect the Winch Power Cable leads to the winch terminal block. The black lead connects to the red lead. Connect the green lead to green, the white to white and finally, the blade connection to the blade receptacle.

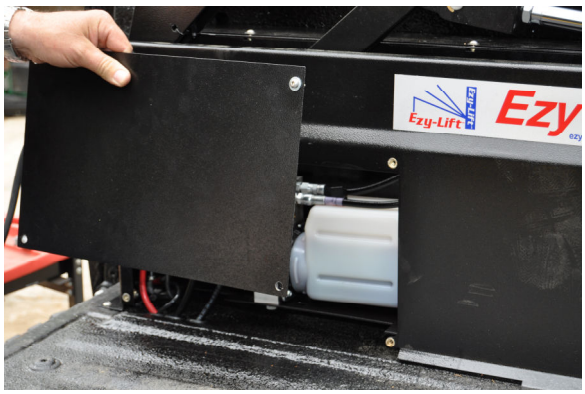


It will probably be necessary to tap in the cross bar end caps with the rubber mallet.

Securely tighten the six bolts securing the crossbar to the arms.

Finish Frame Construction

Place the Frame Side Filler (Except Chevrolet) in between the Boom Arm and the bed side wall. Secure to the Frame with the 1/4 inch screws.



Finally, attach the Side Access Panels to both sides of the Unit Arm Frames.

The installation is complete and the unit is ready to lift, load and go.

Technical Support call: 713.589.9449
Email: techsupport@ezylift.com

KNOW YOUR EZY-LIFT

SAFETY

It is the Owner's/Operator's responsibility to use good judgment in the operation and maintenance of this equipment.

It is the Owner's/Operator's responsibility to instruct and ensure that all operators fully understand the safe operation and maintenance of the Ezy-Lift lifting system. Anyone who operates the equipment must read and fully understand this manual, prior to operating the lift. Failure to observe these instructions and safety procedures can result in serious injury and/or property damage.

Train Ezy-Lift inspection and maintenance personnel for routine and periodic inspections and maintenance. Such training requirements should also provide information for compliance with any Federal, State and Local Code Requirements, existing company safety rules and regulations and instructions furnished for the Ezy-Lift system.

WARNING

Because Ezylift, Inc. has no direct involvement or control over the Ezy-Lift operation and application, conforming to good safety practices is the responsibility of the owner, the user, and its operating personnel.

It is the responsibility of the Owner/Operator to require that all personnel that will install, inspect, test, maintain, and operate the Ezy-Lift devise read the contents of this Owner's Manual.

Only those authorized and qualified personnel who have shown that they have read and have understood the owner's manual and that they understand the proper operation and maintenance of the Ezy-Lift should be permitted to operate the Ezy-Lift.

General Safety Information

Read and save all instructions

Do not engage in any practice that will divert attention while operating the Ezy-Lift.

⚠ WARNING Do not overload. Overloads can cause damage and create unsafe operating conditions. Ensure that the rated load capacity of any sling, lifter or fitting is not exceeded.

Take time to practice operations so that you are comfortable with the operating system prior to working with a load.

⚠ WARNING Do not allow the wire winch rope to slide through bare hands when spooling or un-spooling. Use leather gloves and the strap when handling the rope.

⚠ DANGER

Never allow children or unauthorized personnel to operate the system at any time.

Never use the unit for lifting, supporting or transporting people!

Never stand beneath the load or Ezy-Lift frame or use over areas where people

Do not work under the load unless the load is supported by blocks, jacks or solid footing that will support a weight greater than the weight of the entire load.

Use caution, keep people, pets and property clear of the path of the load. Keep your work area clear and free of obstructions.

Do not use for supporting an unattended loads.

Do not use for towing other vehicles.

BEFORE OPERATING

Visually inspect the hook, winch cable, winch and accessories for any damage or wear. Do not use nylon slings with abnormal wear, torn stitching, broken or cut fibers or discoloration or deterioration. Reject wire cable with kinking, crushing, bird-caging, or other distortions, evidence of heat damage, cracks, deformation, or worn end attachments, six randomly broken wires in a single cable lay, three broken wires in one strand of cable, cracked hooks and hooks open more than 15% at the throat.

Ensure that the truck's cargo bed and suspension systems are in good condition, i.e., shocks, springs, etc.

Check to see that all frame fastening screws are secure.

Check for any evidence of hydraulic fluid leaks.

MOVING A LOAD

Center the hook over the load to keep the cable from slipping out of the drum grooves and overlapping, and to prevent the load from swinging when it is lifted. Inspect the drum to verify that the cable is in the grooves. Lift the load only high enough to clear the tailgate or rear of the cargo bed.

⚠ WARNING Avoid putting fingers or arms in the pinch points between the boom arms and the frame.

Do not stand in cargo bed when loading and unloading.

Avoid side pulls. These can cause the winch cable to slip out of the drum groove, damaging the wire or destabilizing the winch.

Never leave suspended loads unattended. In an emergency where the Ezy-Lift has become inoperative and the load must be left suspended for any length of time, barricade and post signs under the load and on three sides. Turn off the truck and lock it so that it cannot be moved.

NEVER MOVE A TRUCK WITH A SUSPENDED LOAD.

OPERATION

Your Ezy-Lift system operates from the vehicle's 12 volt battery which provides power to the crane winch and the hydraulic power unit. The hydraulic unit is completely self-contained with a DC motor, gear pump, reservoir, load hold checks and relief valves to prevent over-loading. Flow from the pump to a pair of double acting cylinders provides the lift and rotation necessary to extend and retract the lift arms via the hand held remote control. **Using the unit under low voltage conditions can reduce the life of the hydraulic pump and winch.**

TURN THE OFF/ON SWITCH TO THE ON POSITION

Step 1: Position your truck to allow the entire loading or unloading operation to be performed without having to move the vehicle. Ideally, the truck will be on level solid ground. Make sure that there is adequate overhead clearance for the boom arms.

Step 2: Set the truck's parking brake and leave the engine running to prevent the battery from discharging.

Step 3: **Open the truck tailgate.** This is very important to prevent damage to the truck or even the cargo. In some instances it might be necessary to remove the tailgate prior to loading.

Step 4: Plug the remote control plug into the power/control receptacle that is located on the drive side tailgate end of the unit frame. The unit is ready to operate.

The remote control has two rocker buttons, one for the boom and one for the winch. Each button is double acting with the following commands: Boom In, Boom Out, Hoist Down and Hoist Up. To activate the boom arms press and hold the "Boom Out" control button. This will cause the arms to rise from the parked position and rotate out over the truck bed to approximately 150°. To reverse the process and return the boom to it's parked position, simply press and hold the "Boom In" button. Similarly, to activate the winch, press and hold the "Hoist Down" button to unspool the wire rope and "Hoist Up" to re-spool it. Both the boom and the winch will cease to operate when the respective button is released.

Become comfortable with operating the system. Practice moving the boom in and out and unspooling and spooling the winch cable. With the winch cable become familiar with re-spooling the wire rope with the tension necessary to rewind evenly without the wire overlapping.

Step 5: Now that you are familiar with the controls, press and hold the "Boom Out" button to lift the boom arm out of the bed and over the cargo.

Ensure that the winch is positioned directly over the cargo so that the cable drops down directly over the load to prevent swinging as it is hoisted from the ground. A swinging load could cause injury and or property damage.

For larger loads it might be necessary to remove the tailgate in order to correctly position the winch above the load. Failure to do so may cause damage to your vehicle or the cargo.

Step 6: With the boom arm and winch now centered over the load, depress the "Hoist Down" button to lower the wire rope's hoist hook into position for attaching to the load. Keeping tension on the wire cable while it unwinds will prevent slippage of the wire cable once the load is attached.

Never wrap the wire cable around the load. Use a nylon sling or metal chain to secure the load to the hoist hook. Wrapping the wire rope around the load and hooking it back onto itself can damage the cable and create a potential safety hazard.

Never attach a sling or chain link on the tip of the hoist hook or attempt to lift from the tip of the hook. Make sure that the nylon or chain is properly seated in the hoist hook saddle.

Step 7: With the load now attached, press and hold the "Hoist Up" button. Slowly take up any slack in the wire rope until it becomes taut. Keep tension on the wire cable during this process and insure that the rope spools evenly across the drum. Stop. Recheck all lifting connections before proceeding to lift the load.

Step 8: When convinced that all lifting connections are secure, slowly hoist the load off of the ground high enough to clear the truck bed floor.

Step 9: Depress the "Boom In" button to move the load over and into the truck bed. Use the "Hoist Down" button to unspool the wire rope just enough to keep the load low, just slightly over the truck bed. Once the load is in its desired position release the "Boom In" to stop the boom arms.

Step 10: Slowly lower the load onto the truck bed by depressing the "Hoist Down" button until the load is resting safely and securely in the truck bed.

Step 11: Return the boom arm to the parked position. Draw the wire rope taut to help secure the load during transport.

Step 12: Remove the remote control from the cord receptacle and store in a clean dry place. Turn the Off/On switch to the Off position.

To prevent unauthorized use of the unit never leave the truck unattended with the remote control plugged into the receptacle.

Avoid pulls from angles as this can damage the frame and lift arms. Continuous pulls at angles will also cause the wire rope to pile at one end of the drum. This can cause the wire rope to jam and damage the winch or wire rope.

Always maintain at least five (5) wraps of the wire rope on the winch drum, otherwise the wire rope drum fasteners will not withstand the weight of the load.

Ezy-Lift Inspection & Maintenance

Ezy-Lift is designed to give years of carefree operation. However, as with any mechanical product, periodic inspection and maintenance is require keep the unit in optimal operating condition.

Here are a few tips that owner/operators should periodically perform to keep the unit in top operating condition. Please review this information. If you should have any questions please contact us during normal business hours, Central Standard Time, Monday through Friday, excluding holidays.

INSPECTIONS

Routinely check the six screws at the winch cross bar and boom arms which attach the two together. Lifting vibration can cause one or more of the screws to loosen over time. Loose screws could result in the separation of the cross bar from the boom arms under load.

Winch Wire Rope

Wire rope consists of a core, strands, and wires that comprise a strand. The wire rope fits and wraps into grooves on the circumference on the winch drum that transmits motion to the rope.

Routinely check the winch wire rope has not become loosely wound. Under load, a loosely wound rope allows the rope to work its way down into the layers of wrap on the drum.

This can cause the rope to become wedged within the body of the wraps on the drum and damage the wire rope. Keep tension on the wire rope during spooling and unspooling. A good practice is to inspect and rewind the wire rope under tension after each use.

Routinely check to see that the wire rope is evenly wound on the drum and not bunched to one side or the other of the winch drum.

Routinely check the wire rope for evidence of kinking or fraying. Fraying and kinking reduces the load capacity of the wire rope. Replace the wire rope immediately is either condition is found.

When replacing the wire rope be sure to insert the attaching end of the wire rope into the correct end of the drum hole (See Figure 2). Tighten the set screw securely. To insure the correct wire rope replacement part, obtain the part from Ezy-Lift.

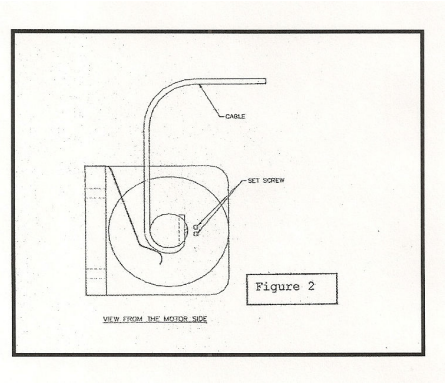


Figure 2

Use heavy leather gloves when handling the wire rope. Do not allow the wire rope through bare hands.

Hydraulic Maintenance

Ezy-Lift's hydraulic unit is completely self-contained and requires no maintenance. However, periodic inspection of hydraulic cylinders, hoses and fittings for any sign of leakage is recommended.

Periodically check the oil level in the fluid reservoir and add as needed to maintain full capacity. The hydraulic pump and fluid reservoir are located directly behind the access panel on the rear driver's side of the unit. With the cylinders fully retracted (lift arms in the parked position), the reservoir should be approximately 2/3 full 1 to 1-1/2 inches below the filler inlet. (See Figure 3) Do not overfill. Adding too much oil will cause the reservoir to overflow. Use automatic transmission fluid with a viscosity range of 150-300 SSU at 100°F.

MAINTENANCE

Your Ezy-Lift lifting system should b serviced every 2 years or 400 hours of normal operation. That maintenance includes:

Inspect and lubricate bearings

Check all hydraulic fittings for leaks or signs of wear, tighten or replace as necessary.

Inspect hydraulic power unit and reservoir for leaks or damage, repair or replace as necessary. Replace hydraulic fluid and inspect old fluid for signs of problems

Check cylinder for leaks and inspect cylinder rod for evidence of wear or damage, repair or replace as necessary.

Inspect for corrosion and treat as necessary

Inspect electrical system for corrosion or damage and repair or replace as necessary.

Inspect all bolts, including frame attachment to cargo bed, frame to arm assemblies, gusset and winch, tighten and/or replace as necessary.

Inspect winch housing and motor for any signs of wear or problems, repair or replace as necessary.

TROUBLE SHOOTING

Problem	Possible Cause	Possible Solution
Lift Arms will not raise or lower	Unit Off/On switch is "Off"	Turn the switch "On"
	A.) Remote Control assembly not properly plugged in	Remove and re-insert the Remote Control assembly
	B.) Poor electrical connection	Check & repair or replace the Remote Control assembly
	C.) Vehicle battery charge is low	Recharge or replace battery
	D.) Fuse at vehicle battery blown	Replace Fuse
	E.) Faulty contactor	Contact factory authorized agent for repair or replacement
Winch will not operate or it runs in one direction	A.) Remote Control assembly not properly plugged in	Remove and re-insert the Remote Control assembly
	B.) Poor electrical connection	Check & repair or replace the Remote Control assembly
	C.) Vehicle battery charge is low	Recharge or replace battery
	D.) Fuse at vehicle battery blown	Replace Fuse

WARRANTY

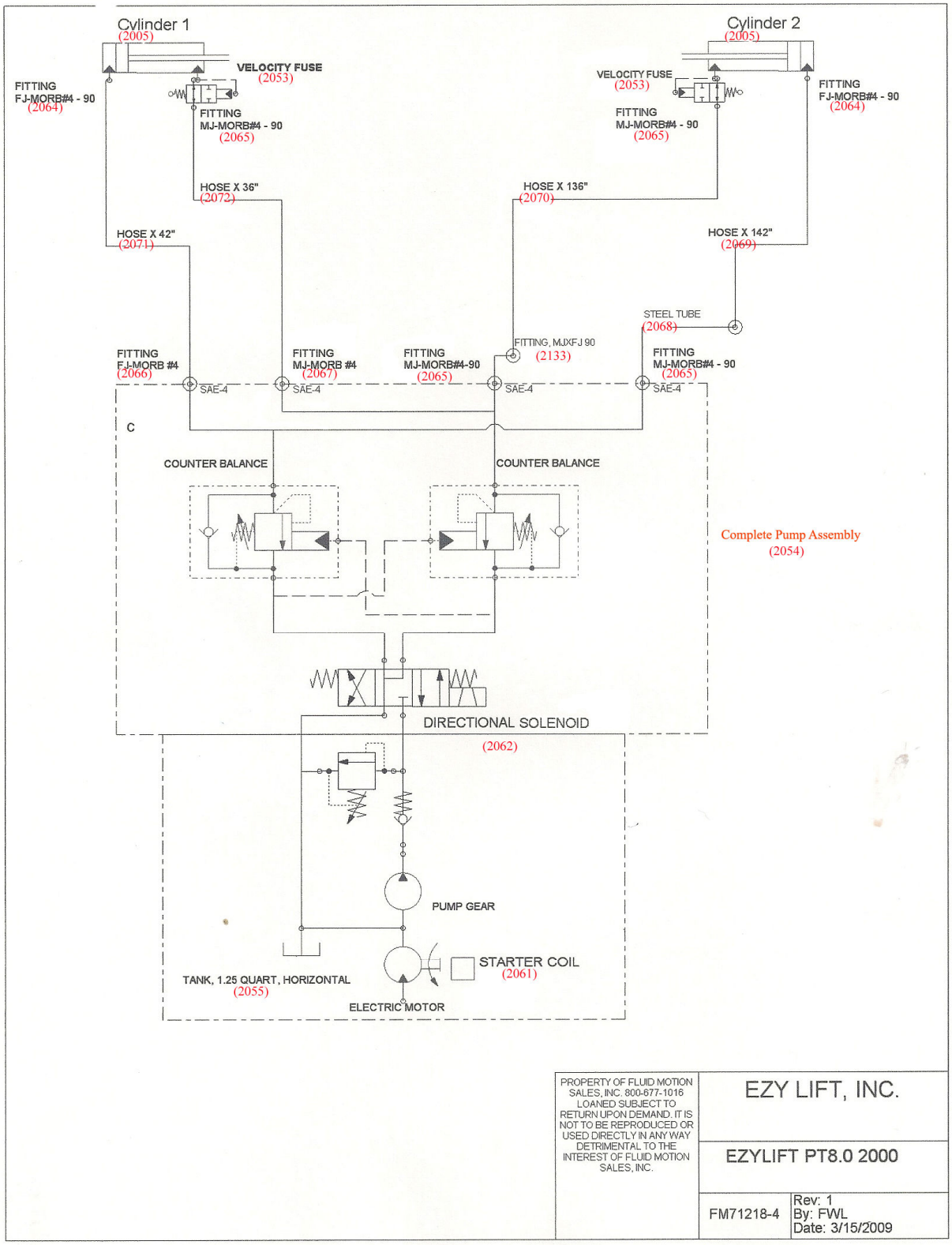
Ezy-Lift, Inc. warrants the Ezy-Lift product to the original Buyer against defective materials and parts for one (1) year from the date of purchase Ezy-Lift's sole and exclusive liability, and the Buyer's sole and exclusive remedy, under this warranty, is the repair or replacement of any materials or parts determined to be defective. In no event shall Ezy-Lift be liable for incidental or consequential damages, including, but not limited to, inspection or transportation cost, cost of cover, loss of profits, loss of use, and damages or injury of any kind based upon claim for breach of warranty.

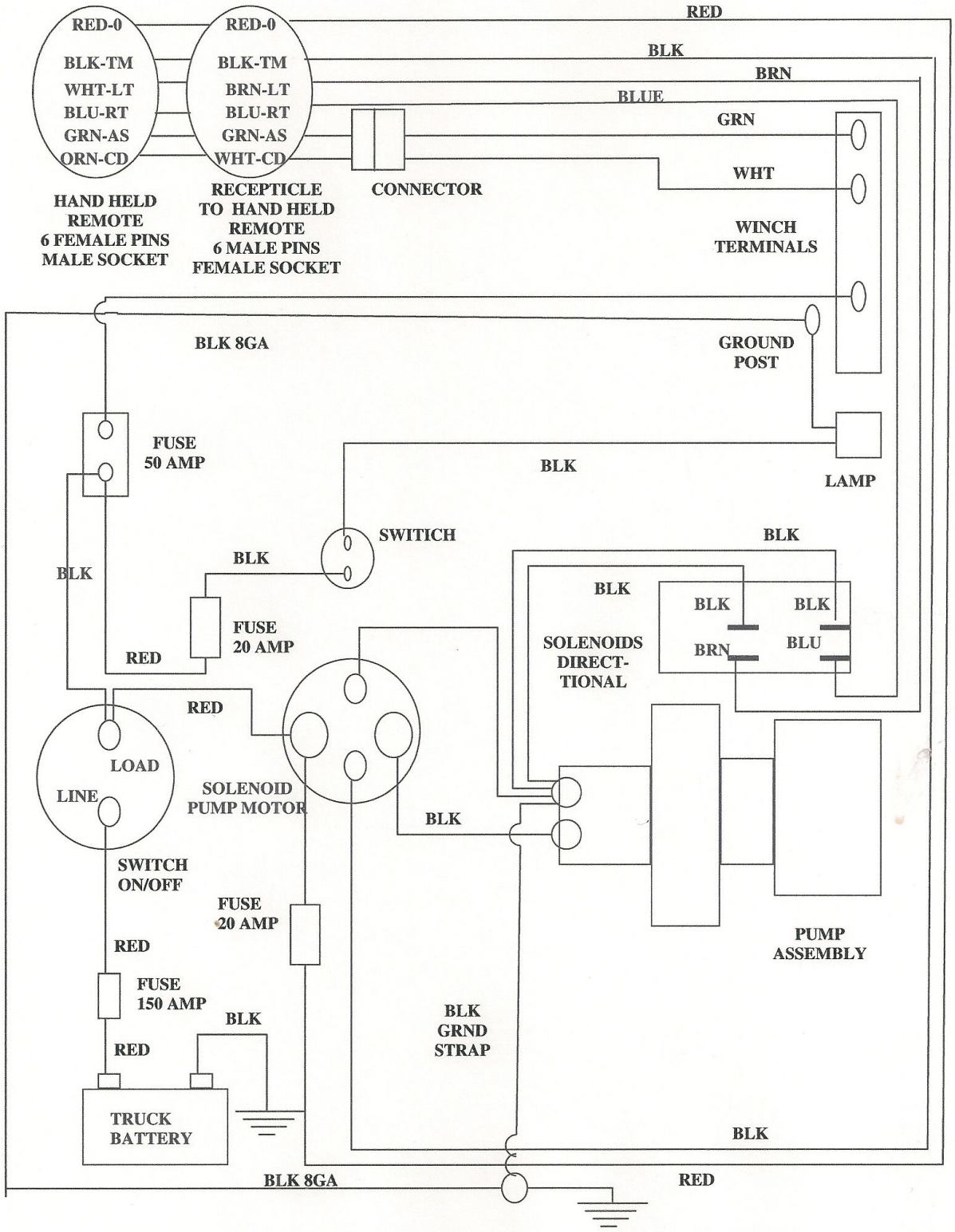
This warranty does not cover breaking or fraying of the wire cable, cost of labor for field repairs, transportation charges in connection with replacement or repairs of defective parts, or nay damage as a result of misuse, neglect, overloading, accident, improper installation, maintenance or repair, unauthorized alteration, or use of the product beyond the range of normal usage.

To obtain warranty service, contact EZY-LIFT at 713.589.9449 during business hours, 8:00 AM till 5:00 PM, Central Standard Time, Monday thru Friday, excluding holidays. Be prepared to provide: (1) name, address, and phone number; (2) proof of purchase; (3) unit serial number; and (4) an explanation of the problem.

This warranty is the only warranty made by Ezy-Lift and it cannot be amended or amplified by any party.

HYDRUALIC DIAGRAM

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BLU-RT
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ORN-CD
HAND HELD
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MALE SOCKET
RED-0
BLK-TM
BRN-LT
BLU-RT
GRN-AS
WHT-CD
RECEPTICLE
TO HAND HELD
REMOTE
6 MALE PINS
FEMALE SOCKET
CONNECTOR
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TRUCK
BATTERY
BLK
BLK 8GA
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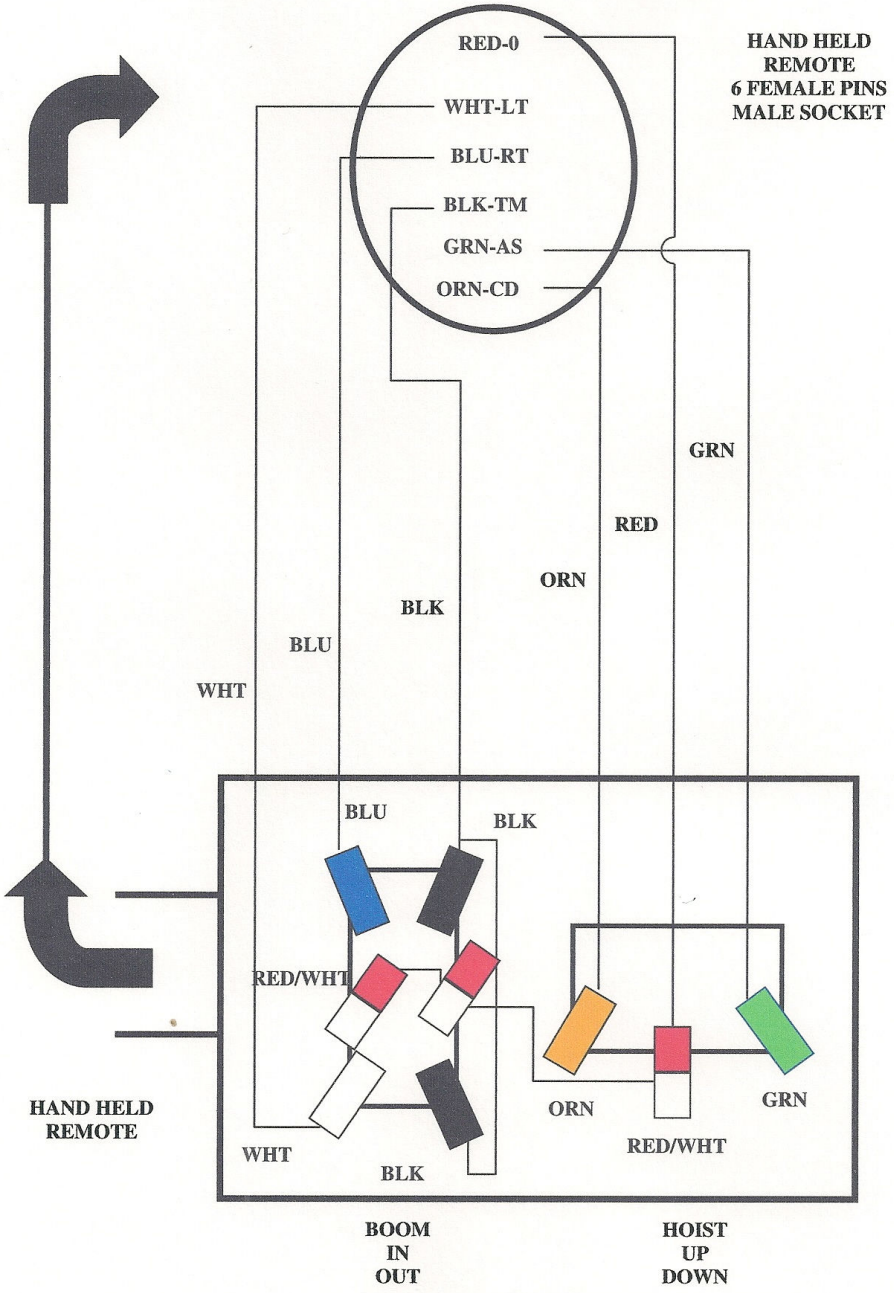
RED-0
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BLK-TM
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ORN-CD
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6 FEMALE PINS
MALE SOCKET
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RED/WHT
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GRN
RED/WHT
WHT
BLK
HAND HELD
REMOTE
BOOM
IN
OUT
HOIST
UP
DOWN

Ezy-Lift Parts List

1-Jan-10

2000 LB

Item #	Description
2001	Drive Side Arm 2000 8.0
2002	Passenger Side Arm 2000 8.0
2003	Cross Bar 2000 8.0
2004	Cross Bar End Cap
2005	Cylinder 3.0"
2006	Clevis Bracket, Cylinder
2007	Cylinder Rod Jam Nut
2008	Linking Arm, High Side 16"
2009	Connecting Rod, Low Side 16"
2010	Linking Arm, High Side 21"
2011	Connecting Arm, Low Side 21"
2012	Arm Bushing Flare
2013	Arm Bushing 1-1/4
2014	Arm Bushing 3/4
2015	Arm Bushing 7/16
2016	Clevis Pin
2017	Clevis Pin
2018	Clevis Pin
2019	E Clip
2020	Shoulder Bolt 3-1/2
2021	Shoulder Bolt 4-14
2022	Rubber Cusion Frame Top/Arm
2023	Clevis Pin Plastic Cover Small
2024	Clevis Pin Plastic Cover Large
2025	Frame Top Filler Plate, Pass Chevy Long Bed Tool Box 2007 Newer
2026	Frame Top Filler Plate, Drive Chevy Long Bed Tool Box 2007 Newer
2027	Frame Top Filler Plate, Pass Chevy Long Bed 2007 Newer
2028	Frame Top Filler Plate, Drive Chevy Long Bed 2007 Newer
2029	Frame Top Filler Plate, Chevy long Bed 2006 Older
2030	Frame Top Filler Plate, Dodge Long Bed
2031	Frame Top Filler Plate, Dodge Long Bed Tool Box
2032	Frame Top Filler Plate, Ford F-150 Long Bed
2033	Frame Top Filler Plate, Ford F-250/F-350 Long Bed
2034	Frame Top Filler Plate, Ford F-150 Long Bed Tool Box
2035	Frame Top Filler Plate, Ford F-250/F-350 Long Bed Tool Box
2036	Frame Top Filler Plate, Pass Toyota Long Bed
2037	Frame Top Filler Plate, Drive Toyota Long Bed
2038	Rear Post Bracket-Drive Side
2039	Rear Post Bracket-Passenger Side
2040	Rear Foot Bracket Chevrolet, Drive Side
2041	Rear Foot Bracket Chevrolet, Passenger Side
2042	Front Frame Slide Bracket - Universal
2043	Front Frame Slide Bracket - Chevy Pass Side-4-2009
2044	Front Frame Slide Bracket - Chevy Drive Side-4-2009
2045	Front Frame Universal Bracket
2046	3 Hole Wheel Well Frame Mounting Bracket

2047	Chevy Front Frame Filler Plate
2048	Side Access Panel PT6.5/8.0
2049	Winch Protection Plate
2050	Terminal Block Protection Plate 3 Inch
2051	Flat Bed Pump Mounting Bracket
2052	Rear Foot Bracket Universal
2053	Cylinder Velocity Fuse
2054	Hydraulic Pump-1500/2000 Lbs
2055	Reservoir, Hydraulic Pump - 2000 1.2
2056	Reservoir, Breather Cap
2057	Reservoir, Grommet
2058	Reservoir, Clamp
2059	Reservoir, Bolt
2060	Reservoir, Tank Seal Ring
2061	Solenoid, Starter Coil
2062	Solenoid, Directional
2063	HOSE-KIT-100R7XPT8.0
2064	Fitting, 90° Female FJ-MAORB #4-90
2065	Fitting, 90° Male MJ-MAORB #4-90
2066	Fitting, Female Straight FJ-MORB #4
2067	Fitting, Male Straight MJ-MORB #4
2068	Fitting, 90° Extension Female Flare
2069	Hose - 142" - Male to Male - PT 8.0
2070	Hose - 136" - Female to Female - PT 8.0
2071	Hose - 42" - Male to Male - PT 8.0
2072	Hose - 36" Female to Female - PT 8.0
2073	Remote Control
2074	Remote Control Recptacle w/Wiring Harness
2075	Remote Control Fuse - 20 AMP
2076	Cross Bar Light Switch
2077	Cross Bar Light Switch Fuse Holder
2078	Cross Bar Light Switch Fuse - 20 AMP
2079	Winch Overload Switch
2080	Unit On/Off Switch w/Overload
2081	Cable, Main Power
2082	Cable, Main Power Flat Bed
2083	Cable, Main Power Battery
2084	Cable, Main Power Fuse Holder
2085	Cable Main Power Fuse - 150 AMP
2086	Wiring Harness, Pump Solenoid Pick Up
2087	Wiring Harness, Winch Pick Up
2088	Unit Ground Wire 3 Foot
2089	Winch Ground Wire 13 Foot
2090	Pump Solenoid Ground Wire 1 Foot
2091	Cross Bar Light
2092	Winch Terminal Block
2093	Winch
2094	Plastic Winch Cover
2095	Winch Cable with Hook
2096	Winch Solenoid
2097	Gromet, 1-1/2"
2098	Bolt, Cushion - SS Hex Head 5/16 x 1

2099	Flat Washer, Fender - SS 5/16
2100	5/16 x 4 High Tinsel Hex Head Bolt
2101	5/16 Flat Washer SS
2102	5/16 Lock Washer SS
2103	5/16 Nylon Lock Nut SS
2104	Screw, Button Head SS 1/4 x 3/4
2105	Screw, Button Head SS 5/16 x 1-1/4
2106	1/4 Flat Washer SS
2107	5/16 Fin Nut SS
2108	Self Tapping Screw 3/4
2109	Rivet Nut Tool
2110	5/16 - 18 Blind Rivet Nut
2111	1/4 - 20 Blind Rivet Nut
2112	1/2 x 13 Hex Head Bolt
2113	1/2 Nylon Lock Nut
2114	Pully Block
2115	Pully Strap
2116	Chevy 2007 Long Bed Mount Shim - 3/8 HDPE
2117	Chevy Older Long Bed Mount Shim
2118	L Spacer - 3/8 HDPE
2119	Cross Bar RKI
2120	Winch Cable Stabalizer
2121	Anchor Point Chevrolet
2122	Decal, Think Turn Off...
2123	Decal, Think Lower Tailgate...
2124	Decal, Danger Keep Hands...
2125	Decal, Ezy-Lift Silver 15"
2126	Decal, Ezy-Lift White
2127	Decal, Warning Avoid Injury...
2128	Decal, Be Careful Overhead...
2129	1/4 Nut
2130	3/8 Screw
2131	Front Slide Bracket Ford Drive Side 4-2009
2132	Front Slide Bracket Ford Pass Side 4-2009
2133	Fitting Male-MJXFJ90
2134	Shoulder Bolt 5"
2135	Terminal Block Protection Plate 1000
2136	Cross Bar Light Replacement Bulb