

**EAGLE LIFT**  
*America's Standard in Liftgates*

## **OWNER'S MANUAL**

**Installation, Operating, Safety, and Maintenance  
Instructions with Parts Lists**

# **CABLE LIFT LIFTGATE 38 SERIES for Down Sized Pickups**

**MODELS 38-48, 38-52, 38-54, & 38-58  
1000 # CAPACITY, 38" TRAVEL**



**ATTENTION:**

**IT IS IMPORTANT TO  
FOLLOW THE  
INSTRUCTIONS SET  
FORTH IN THIS MANUAL  
TO ENSURE PROPER  
OPERATION OF THIS  
EQUIPMENT.**



**IMPORTANT:**

**AS FINAL STAGE MANUFACTURER,  
INSTALLER OF THIS LIFTGATE IS  
RESPONSIBLE FOR COMPLIANCE  
WITH ALL PERTINENT STATE AND  
FEDERAL SAFETY STANDARDS AS  
WELL AS FOR FOLLOWING  
RECOMMENDATIONS OF CHASSIS  
MANUFACTURER.**

## **EAGLE LIFT**

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# **EAGLE LIFT'S LIMITED WARRANTIES**

## **EAGLE LIFT LIFTGATES**

These warranties cover the following products: all models of liftgates manufactured by Eagle Lift.

### **3-YEAR LIMITED WARRANTY**

Eagle Lift warrants to the original owner that the pump and motor unit used in this products shall be free from defects in material and workmanship for THREE YEARS from the date of purchase. If such a defect appears during the warranty period, Eagle Lift will repair or replace (at its option) these components without charge if applicable claim procedures are followed.

### **1-YEAR LIMITED WARRANTY**

As to defects not related to the components specified above, Eagle Lift warrants to the original owner that this product shall be free from defects in material and manufacturing workmanship for ONE YEAR from the date of purchase. If such a defect appears during the warranty period, Eagle Lift will repair or replace (at its option) your product without charge if applicable claim procedures are followed.

The product must be properly installed, maintained, and serviced in order to eligible for warranty.

The warranties apply only to Eagle Lift manufactured products and exclude add-on attachments and modifications.

The warranties do not cover defects or damage to products that have been improperly installed, abused, misused, or damage caused by the carrying of corrosive materials or by reason of an accident.

The above stated warranties are exclusive. There are no warranties which extend beyond the above stated warranties. There are no implied warranties of merchantability or fitness for any purpose. Incidental damages and consequential damages are excluded.

Claims may be made by contacting an authorized Eagle Lift distributor, or Customer Service Department, Eagle Lift, P.O. Box 876, Council Bluffs, IA 51502. All claims must be made in writing on the proper form submitted to Eagle Lift.

Eagle Lift or its authorized representative reserves the right to inspect products claimed to be defective for warranty purposes and dispose of the claim as it sees fit, including repair or replacement. Unauthorized repair or replacement prior to inspection may void the warranty.

All products or components claimed to be defective must be returned to the factory for warranty consideration within 30 days of the claim. All items shipped out from the factory for warranty reasons will be sent freight prepaid and all items returned to the factory for warranty must be sent freight prepaid.

Labor performed for warranty reasons must be done by an authorized Eagle Lift distributor or by a person or company pre-approved by Eagle Lift in writing.

## Foreword

This manual provides installation and operating procedures to help you obtain efficient and dependable use from your Eagle Lift Liftgate. This manual also contains specifications, parts lists, maintenance information, safety suggestions, and other general information. Eagle Lift's policy is one of continuous improvement, and it reserves the right to make changes in design and specifications at any time without notice and without obligation to modify equipment previously built.

Please read this manual carefully and understand it before attempting to install, operate, maintain, or repair your liftgate. Keep this manual with the liftgate for future reference. If at any time you have any questions you should contact your Eagle Lift dealer. The dealer has trained service technicians and Eagle Lift replacement parts to keep your Eagle Lift liftgate in top operating condition at all times.

Throughout this manual you will see the following symbol:  This is the Safety-Alert Symbol:

**Meaning: ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**

The terms **CAUTION!**, **WARNING!**, and **DANGER!** are used in conjunction with the Safety-Alert Symbol to identify the hazard level for items of personal safety.

 **CAUTION!** means hazards or unsafe practices that could result in minor personal injury or product or property damage.

 **WARNING!** means hazards or unsafe practices that could result in severe personal injury or death.

 **DANGER!** means immediate hazards that will result in severe personal injury or death.



### **SAFETY FIRST!!!**



Before using an Eagle Lift Liftgate, you should consult all applicable safety standards and instruct the operator fully in its use. Be sure that all personnel who intend to operate the liftgate read and understand this manual fully and comply with it and all safety standards.

### **OWNER'S INFORMATION**

**DATE PURCHASED:** \_\_\_\_\_

**GATE SERIAL NUMBER:** \_\_\_\_\_

**INSTALLED BY:** \_\_\_\_\_

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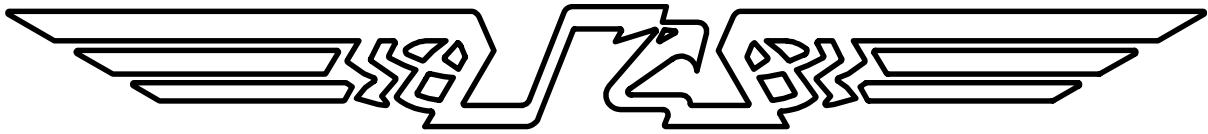


Eagle Lift liftgates are the finest on the market today. In order to provide years of service, it is very important that you operate and maintain your liftgate properly.

This manual contains information necessary for the proper operation and maintenance of your cable lift liftgate.

Before operating the liftgate, please study this manual carefully and keep it in a handy place for future reference. Above all remember – **SAFETY FIRST!**

1. **Always** stand clear of liftgate when operating. **Always** make certain FEET and HANDS are clear of space between liftgate and truck when raising, and clear of space between liftgate and ground when lowering. Also, keep clear of lifting linkage (arms) when liftgate is in operation.
2. This is not a passenger lift – **DO NOT RIDE!**
3. **⚠ WARNING!** Improper operation can result in serious injury – read operating instructions **before** use.
4. Any alteration of liftgate voids warranty and may void compliance with Federal Motor Vehicle Safety Standards (FMVSS).
5. Only authorized, properly trained **adults** should operate this liftgate.
6. When not in use, always **store platform in closed position** with both storage lock latches secured.
7. **Never** leave liftgate unattended with key in ignition.
8. Decals **must** remain on liftgate for safety purposes. Replace any damaged or missing decals immediately.
9. **Never** exceed rated load capacity. **Always** center load on platform and as close to truck as possible.
10. **Always** disconnect negative (–) battery cable terminal when welding on liftgate or truck.

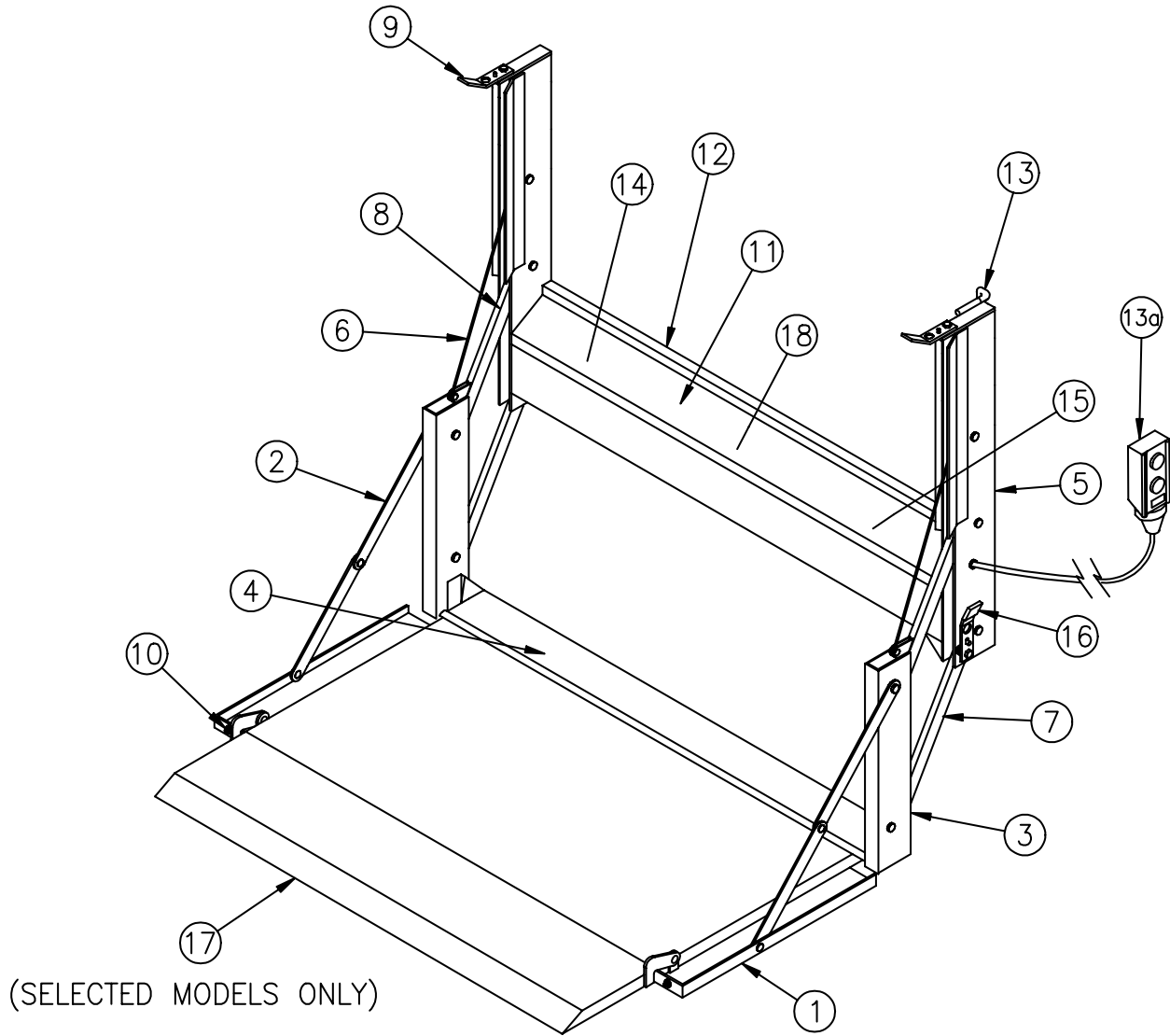


**EAGLE LIFT**  
**GENERAL SPECIFICATIONS**  
**AND CAPACITIES**

<b>OVERALL HEIGHT</b> .....	32"
<b>OVERALL WIDTH:</b>	
<b>MODEL E38-48/52</b> .....	50"
<b>MODEL E38-54/58</b> .....	56"
<b>WIDTH BETWEEN UPRIGHTS:</b>	
<b>MODEL E38-48/52</b> .....	46 1/2"
<b>MODEL E38-54/58</b> .....	52 1/2"
<b>TRUCK BED TO BOTTOM OF UPRIGHT</b> .....	13 1/2"
<b>RATED PLATFORM TRAVEL</b> .....	38"
<b>RATED LOAD CAPACITY</b> , (both lifting and lowering)..... (spread load out uniformly about center of platform)	1000 lbs.
<b>HYDRAULIC CYLINDER SIZE</b> .....	1 3/4" BORE x 11 3/8" STROKE
<b>PUMP/MOTOR RESERVOIR CAPACITY</b> .....	approx. 79 cu. in.
<b>PUMP OPERATING PRESSURE</b> .....	3300 psi max.
<b>ELECTRICAL SYSTEM</b> .....	12 VDC, 170 amp. max. draw @ 3300 psi

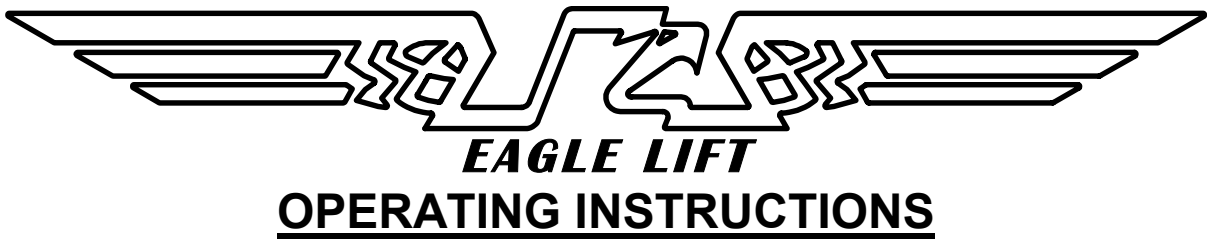
# EAGLE LIFT

## LIFTGATE TERMS



ITEM	DESCRIPTION	ITEM	DESCRIPTION
1	PLATFORM	11	HOUSING COVER
2	PLATFORM SUPPORT LINKS	12	MAIN HOUSING
3	PLATFORM UPRIGHT (CBSD)	13	CONTROL HANDLE
4	FALSE FLOOR	13a	(OPTIONAL) HAND HELD REMOTE CONTROL
5	HOUSING UPRIGHT (CBSD)	14	HYDRAULIC CYLINDER (inside main housing)
6	CABLE (RDS)	15	HYDRAULIC POWER UNIT (inside main housing)
7	PARALLEL ARM	16	FOLD DOWN LATCH
8	LIFT ARM	17	FOLD-OUT EXTENSION
9	STORAGE LATCH (RDS)	18	RELAY / ELECTRICAL HARNESS SYSTEM
10	STORAGE LATCH PIN		(inside main housing)

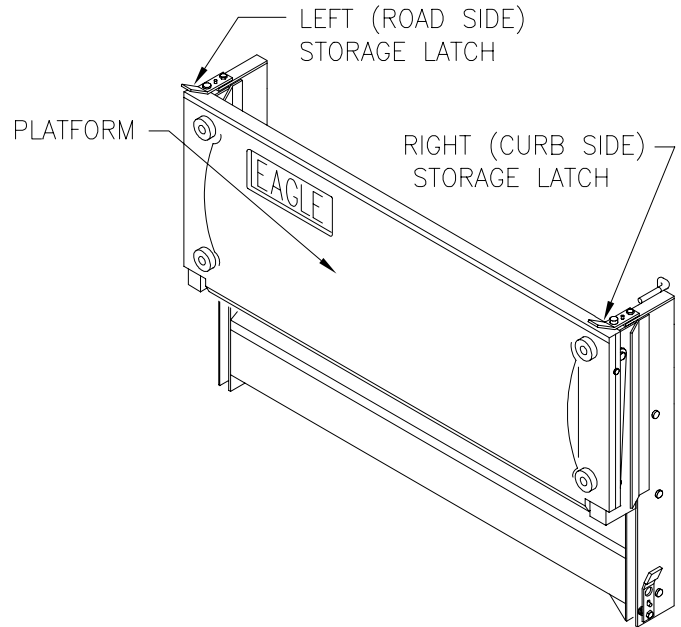
**Figure 1**



# EAGLE LIFT

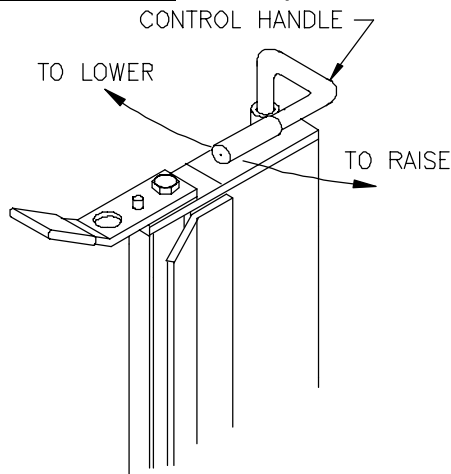
## OPERATING INSTRUCTIONS

1. To operate the liftgate, turn the vehicle's parking lights "ON". This will activate the electrical system on the liftgate, supplying 12 VDC power.
1. Unlatch left (RDSD) storage latch by lifting up and turning outward.
2. Unlatch right [curb side (CBSD)] storage latch by lifting up.
3. **To lower platform to ground:** Rotate control handle inward (See Figure 3) and liftgate will begin to descend toward ground. You may stop platform at any desired height by releasing control lever or slow descent by allowing lever to partially return to neutral (home) position.



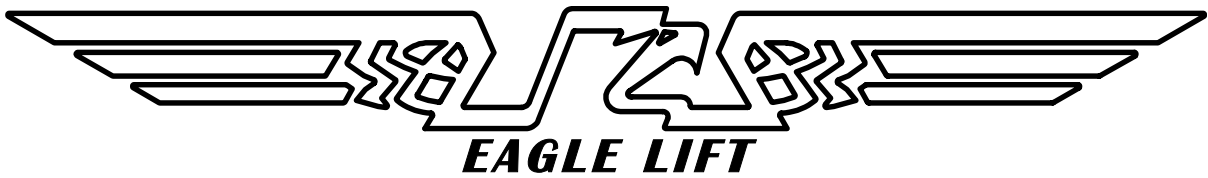
**Figure 2**

4. **To raise platform to truck bed:** Rotate control lever outward (See Figure 3) to raise liftgate. (**NOTE:** An audible safety alarm sounds when you raise liftgate. This is an important safety feature for benefit of operator and public). You may stop platform at any desired height by releasing control lever; it will return to neutral (home) position
5. **To store gate:** Raise platform until level with truck bed. Manually lift platform to closed position. CBSD storage latch will engage latch pin with pressure on platform. Lift and pivot RDSD storage latch onto platform latch pin.



**Figure 3**

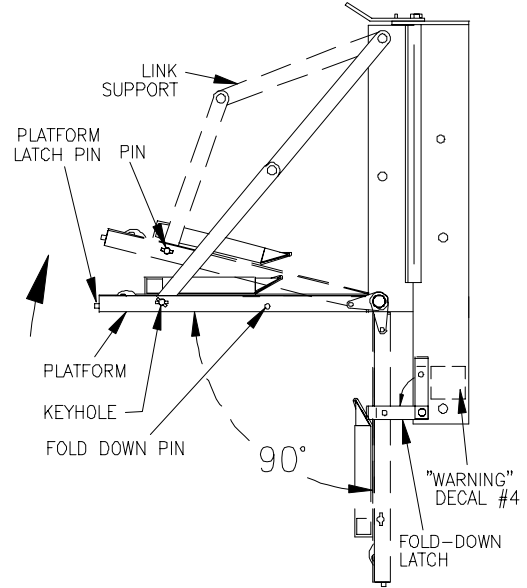
6. When finished using the liftgate, turn the vehicle's PARKING LIGHTS "OFF". This will disconnect the power to the liftgate.



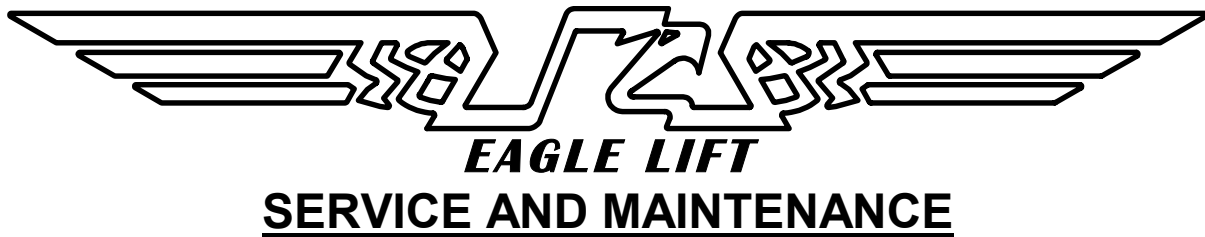
1. **To place platform in drop-away position:** Manually lift platform and at same time, lift RDSD platform link support upward at hinge point. This allows keyhole of platform and link support pin to line up. Disconnect link support from platform. Repeat procedure for CBSD link support. Platform will now drop-away for dock or forklift loading. Secure platform with fold-down latch (located near bottom of CBSD upright).

**⚠ CAUTION!** PLATFORM IS SPRING LOADED AND UNDER CONSIDERABLE COMPRESSION WHEN LOCKED IN DOWN POSITION FOR DOCK LOADING. USE EXTREME CARE WHEN LATCHING AND UNLATCHING TO PREVENT INJURY.

**⚠ CAUTION!** USE OF DROP-AWAY IS ONLY FOR LOADING AT DOCKS OR WITH FORKLIFTS. DO NOT STORE PLATFORM IN THIS POSITION!



**Figure 4**



**NOTE:** Service liftgate every 3 months, or when engine oil is changed on vehicle.

**A. Preventative and Regular Service:**

- 1) Check pins and retaining rings for wear and damage.

**▲ CAUTION! REPLACE IMMEDIATELY IF MISSING OR IF ANY SIGN OF WEAR IS OBSERVED.**

- 2) Inspect all pins, shafts, retaining rings, bolts, nuts, and roll pins.

**▲ CAUTION! REPLACE IMMEDIATELY IF MISSING OR IF ANY SIGN OF WEAR IS OBSERVED.**

- 3) Inspect all welds for cracks or fatigue. If found, repair welds as required (recommend taking to an authorized Eagle Lift distributor).

- 4) Check oil level in reservoir of pump.

- a) Proper fluid level is approximately 1" below top of reservoir tank with cylinder fully retracted (platform lowered to ground).

- b) Fill reservoir with an ISO grade 32 hydraulic oil (equivalent to 10w). Use a special high viscosity oil in cold weather climates. (Unit shipped with cold weather Hydraulic Oil).

- 5) Inspect fittings, hoses, pump assembly, and cylinder for leakage. Repair or replace as needed. (See Cylinder Seals Replacement Section, Page 11).

- 6) Inspect all electrical connections for tightness, corrosion, or damage. Make repairs as necessary.

- a) Check battery terminals for proper connections, tightness, and corrosion.

- b) Inspect battery cell fluid levels according to manufacturer's instructions.

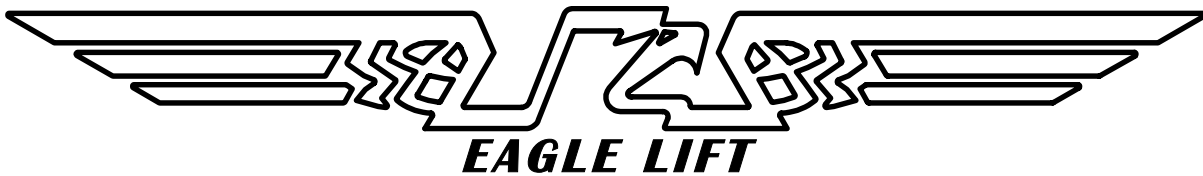
**B. Checklist for safety features:**

- 1) Warning alarm sounds when gate is lifting.

- 2) Gate does not operate unless parking lights are "ON". Make sure to shut parking lights "OFF" when finished using liftgate.

- 3) When stored, safety storage latches hold liftgate platform securely in place.

- 4) All decals are in place and undamaged.



## **LIFTGATE TROUBLESHOOTING**

### **1. Liftgate does not raise to proper height, but unit is still running:**

- a. Check fluid level in reservoir. Add fluid if level is more than 1" below top of reservoir tank with cylinder fully retracted.
- b. Platform overloaded. Remove some or all of load.

**⚠ CAUTION! DO NOT EXCEED 1000 LB. LIMIT OF LIFTGATE!**

- c. Pressure setting possibly set too low. Reference pump operating pressure on page 2 for proper psi setting. Contact Eagle Lift if pressure is not set correctly.

### **2. Platform will not raise, but warning alarm is working:**

Indicates that there is electrical power to unit, but not enough to raise liftgate.

- a. Battery charge is low. Start vehicle so alternator will supply enough charge to raise platform. Charge battery or replace with a higher amp output battery.
- b. Problem in vehicle's electrical charging system. Diagnose and repair as necessary.

### **3. Platform will not raise and warning alarm is not working:**

#### **a. Check electrical system:**

- 1) Check for blown fuse. Replace 2 amp fuse in liftgate wiring harness. (See Figures 5 and 6, Pages 9 and 10).
- 2) Relay unit defective. Turn parking lights "ON". Use a test light to check for 12 VDC at small terminal on motor solenoid. If 12 VDC is present at the 2 amp fuse and not present at the solenoid, the relay unit is faulty. Replace the relay and/or harness assembly. Figures 5 and 6, Pages 9 and 10).

**⚠ WARNING! REPLACE DEFECTIVE RELAY AND/OR HARNESS ASSEMBLY IMMEDIATELY!**

#### **b. Short in electrical cable:**

Electrical cable pinched or cut by a sharp object on truck frame or burned by exhaust system. The 150 amp circuit breaker will be tripped (located under vehicle hood by battery). Repair the problem as necessary, reset the 150 amp circuit breaker, and check for proper operation.

**⚠ WARNING! SHORTING OF ELECTRICAL CABLE MAY CAUSE EXTENSIVE DAMAGE TO VEHICLE'S ELECTRICAL SYSTEM!**

#### **c. Short in electrical wiring system:**



Wire pinched or cut by sharp object in liftgate housing or by cable lifting system. Relay and/or harness 2 amp fuse may fail (See 3a on previous page). Repair wire, replace 2 amp fuse, and test system for proper operation.

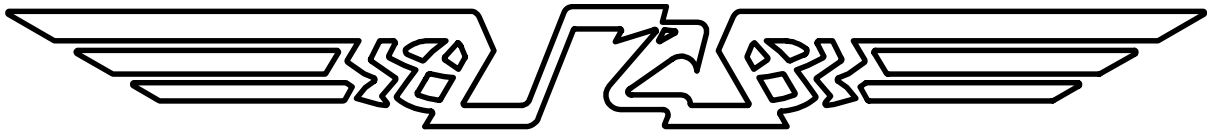
d. **Bad solenoid on liftgate pump/motor:**

Replace solenoid and check all the following items:

- 1) Battery charge low. Charge battery or replace with higher amp output battery. Check vehicle's electrical charging system.
- 2) Poor connection on battery terminals. Tighten terminal connections or replace cables.
- 3) Poor ground from battery to vehicle frame. Inspect ground connection and repair as necessary.
- 4) Electrical short in vehicle's or liftgate's electrical wiring system. See 3b and 3c above.
- 5) Poor grade replacement electrical wiring. Use only good quality, 105° C approved electrical wire.
- 6) Use di-electric grease on all terminals to prevent corrosion and poor electrical connections.

**NOTE:** If you have trouble with this product and are unable to make repairs, please consult an authorized distributor or the factory.

**⚠ WARNING!** REPLACE ALL ABUSED OR MALFUNCTIONING PARTS IMMEDIATELY!



# EAGLE LIFT

## ELECTRICAL WIRING DIAGRAM

### MANUAL CONTROL

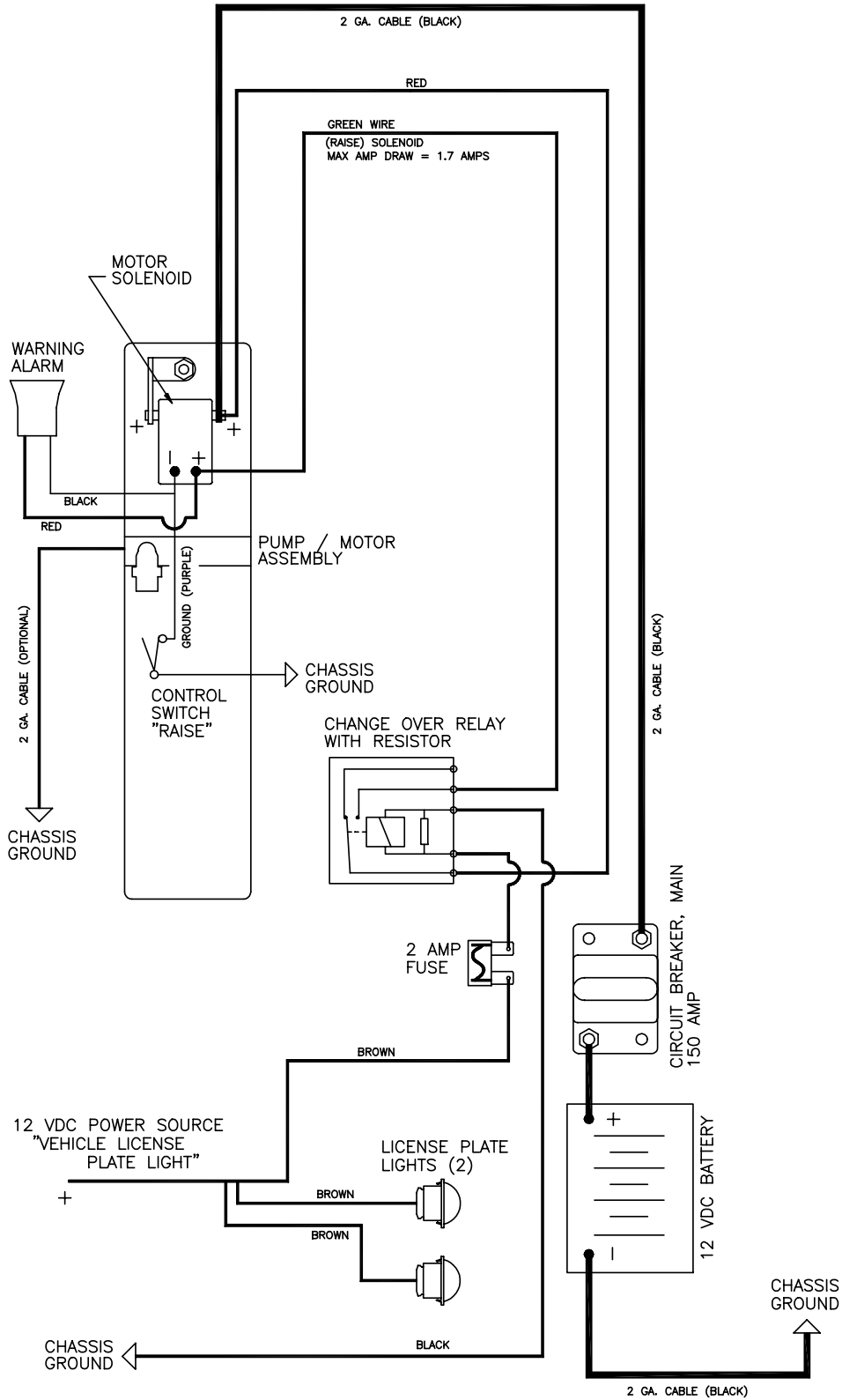
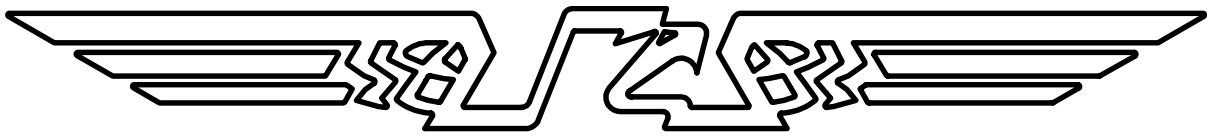


Figure 5

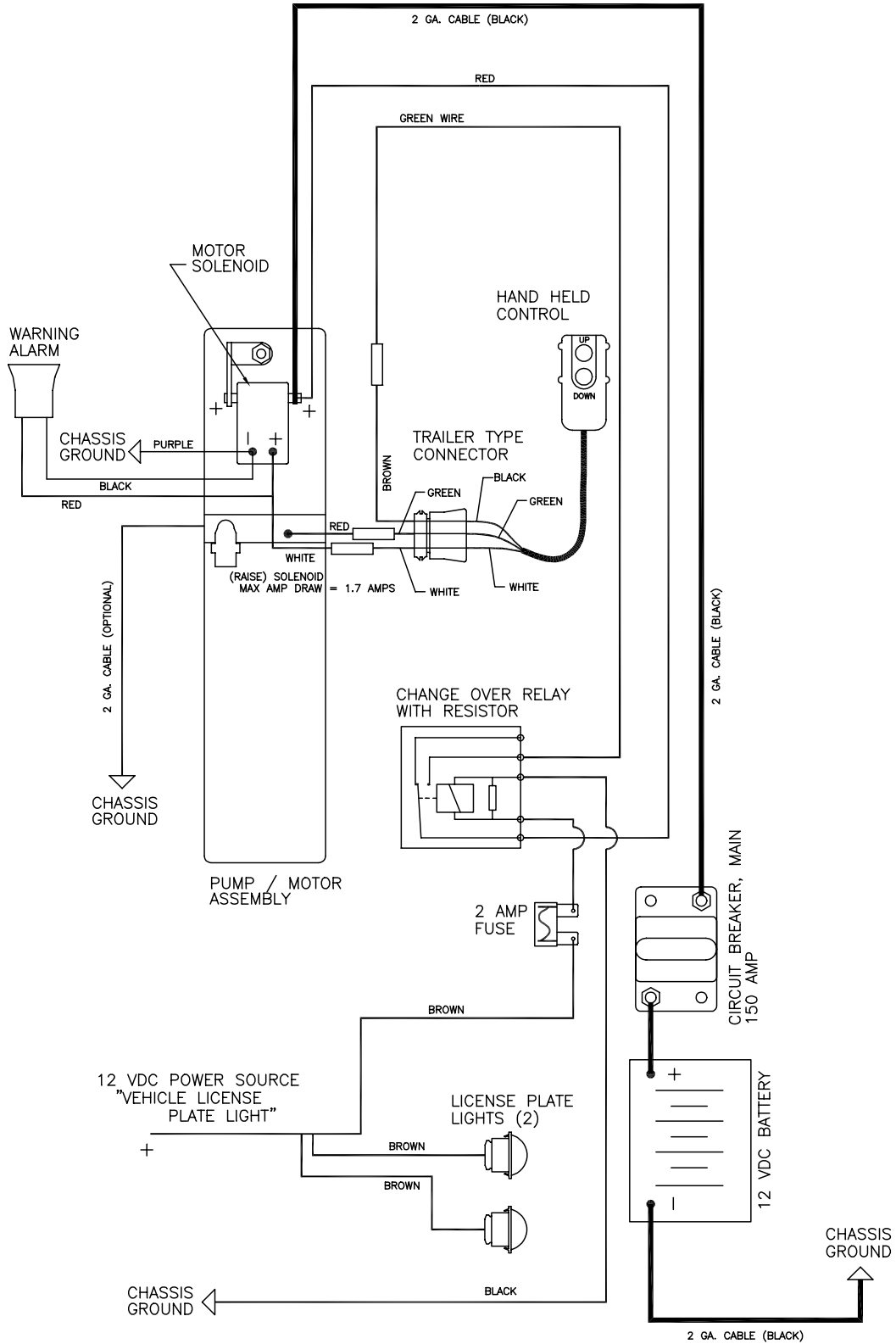
1-800-USA-GATE (872-4283)



**EAGLE LIFT**

**ELECTRICAL WIRING DIAGRAM**

**OPTIONAL REMOTE CONTROL (Hand Held Push Button)**



**Figure 6**

**1-800-USA-GATE (872-4283)**



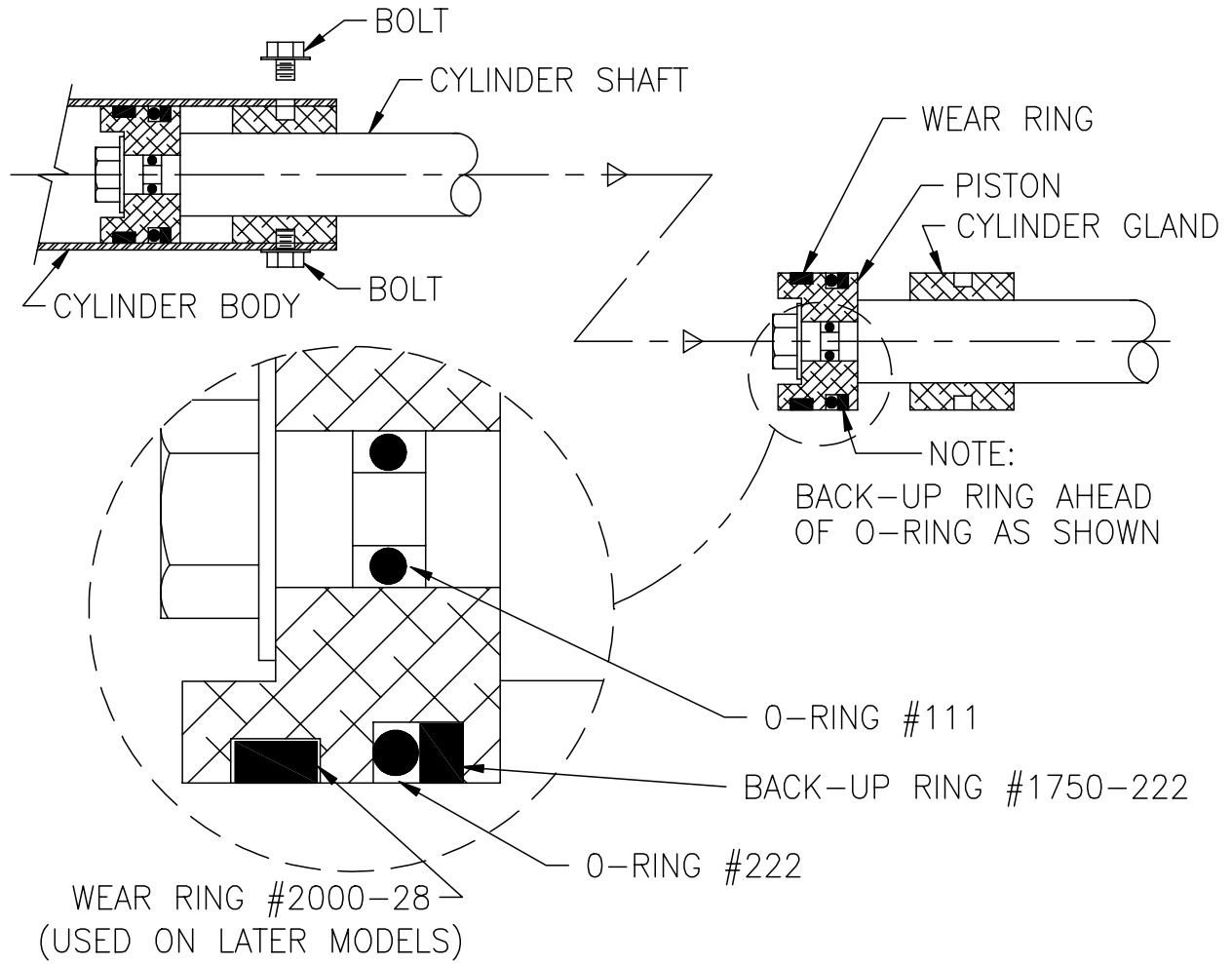
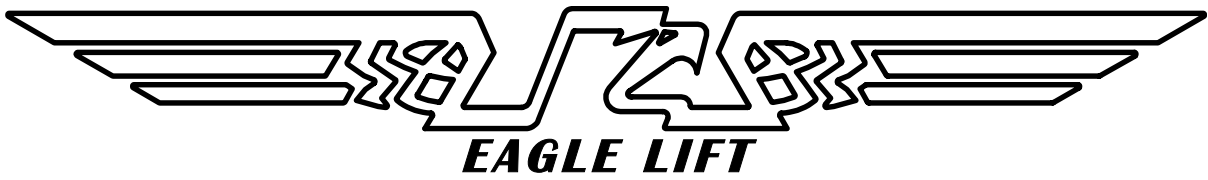
## **CYLINDER SEALS REPLACEMENT**

**(See Figure 7, Page 12)**

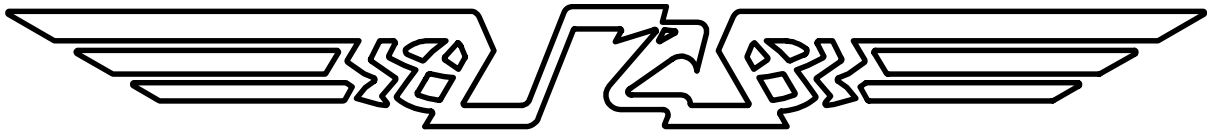
**▲ CAUTION!** **CYLINDER REBUILD SHOULD ONLY BE DONE BY AN AUTHORIZED DEALER OR SKILLED PROFESSIONAL FAMILIAR WITH HYDRAULIC PRODUCTS. CONTACT FACTORY BEFORE ATTEMPTING REPAIR.**

1. Lower platform to ground and remove main housing cover.
2. Remove hose from cylinder; hose remains attached to pump fitting.
3. Remove four (4) cable clamps and pull cables through cylinder's double groove pulley.  
**NOTE:** Refer to cable replacement instructions (Pages 13-15).
4. Remove snap rings and cylinder pivot pin. Remove complete cylinder from liftgate housing.
5. Clamp cylinder in a vise. **Do not overclamp!** Place hose end into a container to catch hydraulic fluid and stroke cylinder back and forth to empty all fluid inside.
6. Remove (2) bolts holding cylinder gland in place.
7. Pull cylinder shaft, gland, and piston assembly out of cylinder case.
8. Replace seals:
  - a. Remove all seals and o-rings from piston. Note location of each.
  - b. Install new o-rings and seals on piston assembly. (See Figure 7, Page 12.)  
**NOTE:** Some earlier models do not use wear ring.
  - c. Apply Loctite™ to piston capscrew threads and replace piston with capscrew onto cylinder shaft. Torque capscrew to 18 ft-lbs.
9. Apply lubricant to piston seals. Reinsert cylinder shaft, gland, and piston assembly into cylinder case.
10. Replace (2) bolts to secure gland in place. **Do not** over tighten bolts.
11. Reinstall cylinder into liftgate housing with pivot pin and snap rings.
12. Apply pipe thread sealant to hose end and reconnect to cylinder fitting.
13. Operate liftgate up and down several times to purge air out of cylinder, lower liftgate to ground, and fill reservoir to recommended level.

## **CYLINDER SEAL REPLACEMENT DIAGRAM**



**Figure 7**



## **EAGLE LIFT**

# **CABLE REPLACEMENT**

**(See Figure 8, Page 15)**

### **1. Removing Damaged Cable(s):**

- a) Lower platform to ground or to a supported surface area. Remove main housing cover (item #11 on page 3) and force cylinder completely closed while lever is held in down "lower" position.
- b) Note how cables are routed before disassembly.
- c) Loosen cable clamps securing lift cable(s) near base of cylinder.
- d) Remove snap ring and pin securing lift cable(s) to upper lift arm. Note direction and position of cable thimble opening.
- e) Pull cable(s) from liftgate.

### **2. Replacing Cables:**

#### **a) Road Side (RDSD) Lift Cable:**

- 1) Insert bare cable end over top and down back side of single groove RDSD upright pulley.
- 2) Attach cable thimble eyelet to upper lift arm with pin and secure with internal snap ring.  
**NOTE:** Install eyelet with thimble in same position as old cable. Cable end must face down. (See Figure 8, Page 15).
- 3) Thread cable end into frame under RDSD housing pulley and on outside groove (outside groove is groove closest to you standing at rear of vehicle).
- 4) Thread cable under and back around outside groove of cylinder pulley.
- 5) Thread cable through cable guide located above cylinder.
- 6) Allow cylinder to extend 3/8" to 1/2" from complete collapse, and secure. Once cylinder is in correct position, pull cable tight and tighten the two cable clamps near base of cylinder. Do not completely torque the cable clamps at this time. The CBSD cable may require adjustment also.
- 7) Run the liftgate up and down to ensure proper closing of uprights. (see NOTE: on page 14)
- 8) When both sides close evenly, torque all cable clamp nuts to **7.5 ft-lbs.**
- 9) Lubricate both cables by placing white lithium grease in pulley grooves.

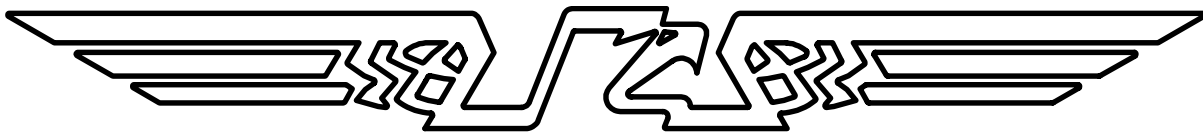
#### **b) Curb Side (CBSD) Lift Cable:**



- 1) Insert bare cable end over top and down back side of single groove CBSD upright pulley.
- 2) Attach cable thimble eyelet to upper lift arm with pin and secure with internal snap ring.  
**NOTE:** Install eyelet with thimble in same position as old cable. Cable end must face down. (See Figure 8, Page 15).
- 3) Thread cable end into frame under CBSD housing pulley and on inside groove (inside groove is groove farthest from you standing at rear of vehicle).
- 4) Thread cable over top and back around inside groove of RDSD housing pulley.
- 5) Insert cable under and back around inside groove of cylinder pulley.
- 6) Allow cylinder to extend 3/8" to 1/2" from complete collapse, and secure. Once cylinder is in correct position, pull cable tight and tighten two cable clamps near base of cylinder. Do not completely torque the cable clamps at this time. The RDSD cable may require adjustment also.
- 7) Run the liftgate up and down to ensure proper closing of uprights. (see NOTE: below)
- 8) When both sides close evenly, torque all cable clamp nuts to **7.5 ft-lbs**.
- 9) Lubricate cables by placing white lithium grease in pulley grooves.

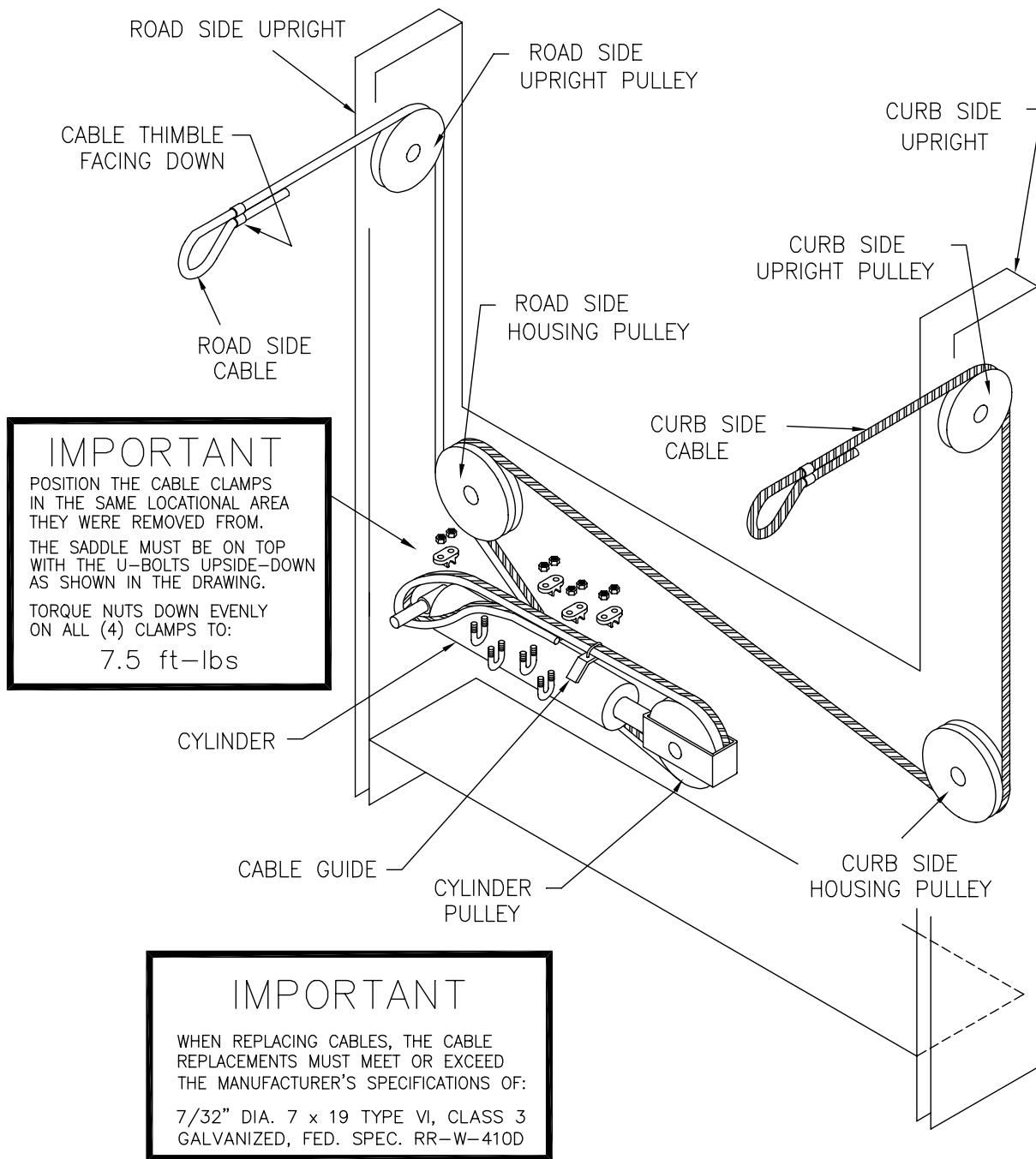
**NOTE: WHEN ADJUSTING CABLES, MAKE SURE CBSD UPRIGHT HOUSING CONTACTS MAIN HOUSING APPROXIMATELY 1/8" BEFORE RDSD UPRIGHT HOUSING. . DOUBLE CHECK ROUTING AND ADJUSTMENT OF CABLES. OPERATE LIFTGATE TO MAKE SURE CABLES ARE FREE AND DO NOT RUB ANYWHERE.**

**CAUTION! NEVER CROSS CABLES AT ANY LOCATION.**



**EAGLE LIFT**

**CABLE REPLACEMENT DIAGRAM**



NOTE: BEFORE REMOVAL OF DAMAGED CABLE, NOTE HOW CABLES ARE ROUTED IN LIFTGATE.

**Figure 8**