

# HANDY GATE ASSEMBLY, INSTALLATION AND OPERATING INSTRUCTIONS



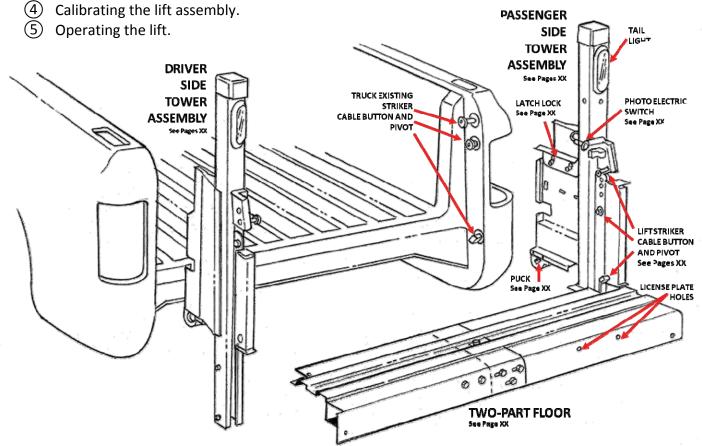
BEFORE INSTALLING OR USING THE HANDY GATE, REVIEW THE VEHICLE LOADING LIMITATIONS OUTLINED IN THE VEHICLE OWNER'S MANUAL AND THE SAFETY COMPLIANCE CERTIFICATION LABEL LOCATED ON THE DRIVER'S DOOR PILLAR.

DO NOT EXCEED RATED LIFT CAPACITY OF 1,000 LBS OR 435 KGS

The HANDY GATE is designed to attach to all Ford, Dodge and GMC/Chevy vehicles from 2008 through 2016. Each truck line consists of specific unique position installation requirements as noted in the following pictorial assembly guides.

There are 5 steps to the assembly, installation and operation of the HANDY GATE.

- $\bigcirc$  Opening cartons, reading the instructions, identifying the parts and hardware.
- (2) Pre-assembly of lift sides and floor.
- Installation of lift components on truck and connecting electrical harness.



#### **REQUIRED TOOLS**

- PHILLIPS HEAD SCREWDRIVER
- 15MM SOCKET
- 17MM SOCKET
- TAPE MEASURE

- T40 TORX HEAD DRIVER
- 15MM WRENCH
- 17MM WRENCH



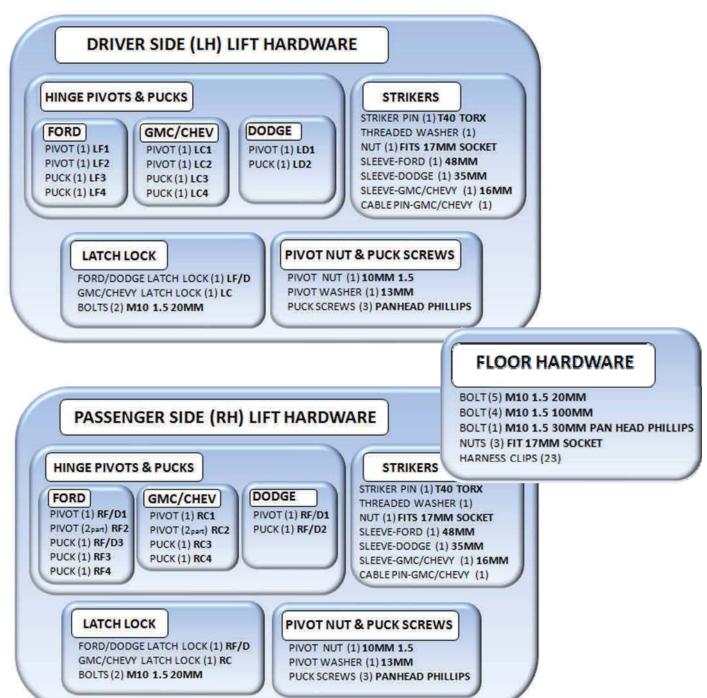
### (1) OPENING CARTONS & IDENTIFYING PARTS AND HARDWARE

Each carton of the HANDY GATE includes a **MASTER HARDWARE BAG** specific to the contents of each carton.

It is best to assemble each section of the HANDY GATE (passenger –RH- side, driver –LH- side and floor) one at a time.



PLEASE READ THE INSTRUCTIONS AND BECOME FAMILIAR WITH THE MAIN PARTS, HARDWARE, AND FASTENERS. SHOULD YOU NEED ASSEMBLY OR SERVICE INFORMATION CONTACT ULTRA-FAB PRODUCTS FOR ASSISTANCE. (800) 860-7571. DO NOT CALL THE DISTRIBUTOR.



www.handyliftgate.com



Use these charts to determine the correct hinge pivot and puck parts for your truck. The charts are organized by the OE truck, model, year and whether or not the tailgate has a torsion bar assist. All Ford and Dodge trucks have a torsion assist.

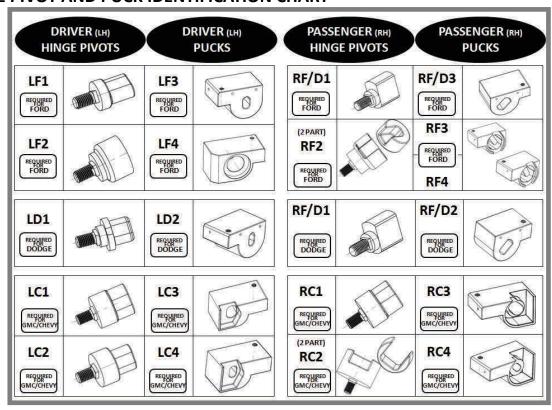
Example: **2012 Ford F150** LH Hinge Pivot: **LF1** RH Hinge Pivot: **RF/D1** 

LH Puck: **LF3** RH Puck: **RF/D3** 

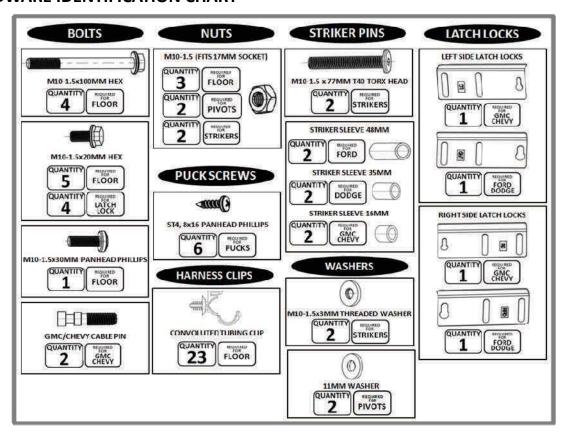
MAKE	MODEL	YEAR	DRIVER SIDE (LH)		PASSENGER SIDE (RH)	
			HINGE PIVOT	PUCK	HINGE PIVOT	PUCK
FORD	F150	2008-2014	LF1	LF3	RF/D1	RF/D3
	F150 w/o remote	2015-2016	LF2	LF4	RF2	RF3
	F150 w remote	2015-2016	LF2	LF4	RF2	RF4
	F250	2008-2016	LF1	LF3	RF/D1	RF/D3
	F350	2008-2016	LF1	LF3	RF/D1	RF/D3
	F450	2008-2016	LF1	LF3	RF/D1	RF/D3
DODGE	RAM 1500	2009-2016	LD1	LD2	RF/D1	RF/D2
	RAM 2500	2009-2016	LD1	LD2	RF/D1	RF/D2
	RAM 3500	2009-2016	LD1	LD2	RF/D1	RF/D2
	SILVERADO 1500 w/o assist	2008-2016	LC1	LC3	RC1	RC3
GMC/CHEV	SILVERADO 1500 with assist	2008-2013	LC2	LC4	RC1	RC3
	SILVERADO 1500 with assist	2014-2016	LC2	LC4	RC2	RC4
	SILVERADO 2500 w/o assist	2008-2016	LC1	LC3	RC1	RC3
	SILVERADO 2500 with assist	2008-2013	LC2	LC4	RC1	RC3
	SILVERADO 2500 with assist	2014-2016	LC2	LC4	RC2	RC4
	SILVERADO 3500 w/o assist	2008-2016	LC1	LC3	RC1	RC3
	SILVERADO 3500 with assist	2008-2013	LC2	LC4	RC1	RC3
	SILVERADO 3500 with assist	2014-2016	LC2	LC4	RC2	RC4
	GMC SIERRA 1500 w/o assist	2008-2016	LC1	LC3	RC1	RC3
	GMC SIERRA 1500 with assist	2008-2013	LC2	LC4	RC1	RC3
	GMC SIERRA 1500 with assist	2014-2016	LC2	LC4	RC2	RC4
	GMC SIERRA 2500 w/o assist	2008-2016	LC1	LC3	RC1	RC3
	GMC SIERRA 2500 with assist	2008-2013	LC2	LC4	RC1	RC3
	GMC SIERRA 2500 with assist	2014-2016	LC2	LC4	RC2	RC4
	GMC SIERRA 3500 w/o assist	2008-2016	LC1	LC3	RC1	RC3
	GMC SIERRA 3500 with assist	2008-2013	LC2	LC4	RC1	RC3
	GMC SIERRA 3500 with assist	2014-2016	LC2	LC4	RC2	RC4



#### HINGE PIVOT AND PUCK IDENTIFICATION CHART



#### HARDWARE IDENTIFICATION CHART





### PRE-ASSEMBLY OF LIFT SIDES AND FLOOR

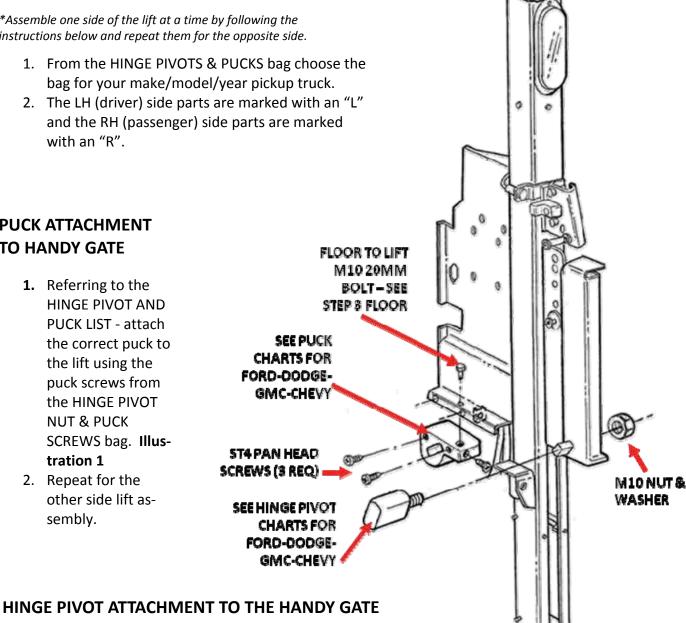
#### PUCK AND HINGE PIVOT ATTACHMENT TO THE **HANDY GATE**

\*Assemble one side of the lift at a time by following the instructions below and repeat them for the opposite side.

- 1. From the HINGE PIVOTS & PUCKS bag choose the bag for your make/model/year pickup truck.
- 2. The LH (driver) side parts are marked with an "L" and the RH (passenger) side parts are marked with an "R".

#### **PUCK ATTACHMENT TO HANDY GATE**

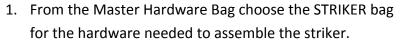
- **1.** Referring to the HINGE PIVOT AND PUCK LIST - attach the correct puck to the lift using the puck screws from the HINGE PIVOT **NUT & PUCK** SCREWS bag. Illustration 1
- 2. Repeat for the other side lift assembly.



- 1. Referring to the HINGE PIVOT AND PUCK LIST attach the correct hinge pivot to the lift using the hinge pivot washer then the nut from the HINGE PIVOT NUT & PUCK SCREWS bag.
- 2. If the vehicle make is a GMC/Chevy determine if the tailgate is made with assist or without assist. An assist is a torsion spring inside the tailgate. All Ford and Dodge tailgates are made with assist.
- 3. Repeat for the other side lift assembly.

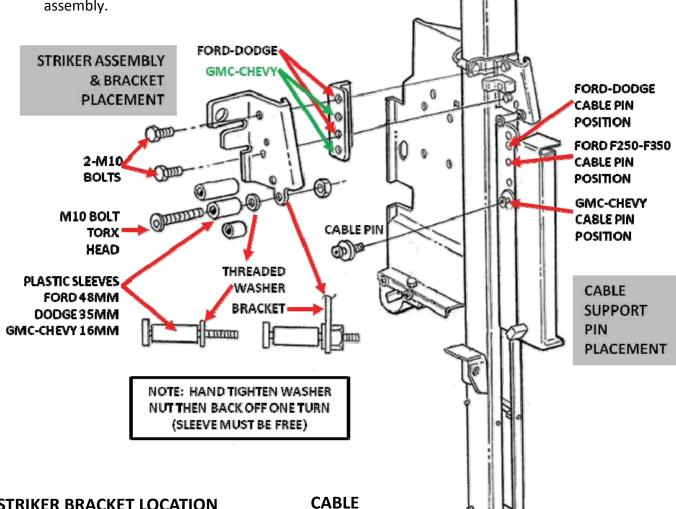


#### **STRIKER ASSEMBLY**



For the right hand (RH) side (passenger) of the lift assembly, choose the striker pin, the threaded washer, the 17mm nut and either the Ford (48MM) sleeve, Dodge (35MM) sleeve or the GMC/Chevy (16MM) sleeve – for the make of vehicle you are installing the lift on.

3. Repeat the above for the left hand (LH) (driver) striker assembly.



**SUPPORT PIN** 

# STRIKER BRACKET LOCATION AND ATTACHMENT

- Attach the RH striker bracket to the RH lift assembly at the proper location according to
- 2. Repeat the above for the LH striker plate.
- Attach the large tailgate cable pin to the lift side in the appropriate location for Ford/Dodge OR the small cable pin for GMC/Chevy according to Illustration 4.
- 2. Repeat the above for the LH Lift.



#### FLOOR ASSEMBLY AND VEHICLE ADJUSTMENT

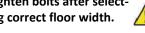
All of the floor fasteners are in the Floor Hardware Bag in the carton marked "3 FLOOR". Assemble floor according to the following steps.

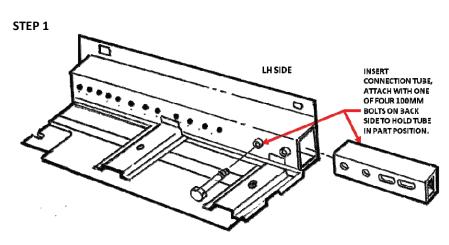


The floor assembly is designed for multiple ing correct floor width.



vehicle truck bed widths. Tighten bolts after select-





and slide 75MM square connecting tube into the LH FLOOR PANEL. Align elongated holes on the LH FLOOR PANEL with the elongated holes in the inserted portion of the 75MM tube.

STEP 1 Flip the LH FLOOR PANEL upside down

STEP 2 Flip the RH FLOOR PANEL upside down and slide it onto the 75MM tube. The RH FLOOR PANEL will slide in between the LH FLOOR PLAT-FORM and the 75MM tube. Align holes in LH FLOOR PLATFORM with holes on 75MM tube and holes in RH FLOOR PLATFORM. Insert two (2) 100MM bolts and hand tighten only.

WIRE HARNESS CLIPS 23 wire harness clips are in the FLOOR hardware bag. Install the clips in the holes in the backside of the connecting tube

STEP 3 After the LH and RH FLOOR PANELS are attached with 75MM connecting tube, flip the floor assembly over to attach 40MM adjustment bolt through elongated adjustment hole.

Hand tighten only. All floor platform fasteners need to be tightened after expanding the floor assembly to fit the vehicle truck bed widths. For Ford/Dodge applications, expand floor assembly to the Ford/Dodge position. For GMC/Chevy, contract the floor assembly to

GMC/Chevy position.

Lay floor assembly in the truck bed to make sure it fits before tightening floor assembly bolts. The width may need some adjustment due to OE truck manufacturing tolerances.

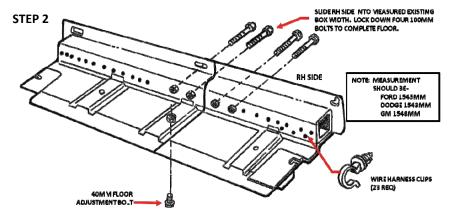


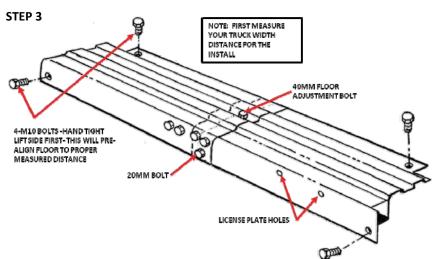
For all OE applications make sure the floor is expanded as far as possible which will ensure a tight fit. Failure to do so may result in damage.

Attach 20MM bolt to assembled floor platform.

Since the floor front will partially cover your license plate, remove your license plate and relocate it on the front of the floor. Use the fasteners you currently use to attach the license plate to the front of the floor.

Remove the floor from the truck bed and go to next step.







# (3) INSTALLATION OF LIFT COMPONENTS ON TRUCK & CONNECTING ELECTRICAL HARNESS

#### **REMOVING THE TAILGATE**



CAUTION: For pickup truck tailgates that come equipped with a rear camera or auto-lock, you MUST DISCONNECT the camera or auto-lock cords from the tailgate.

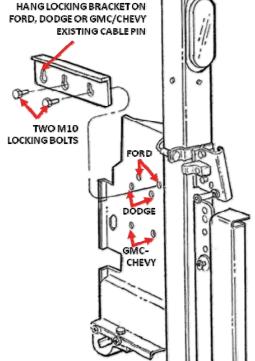
See OEM Owner's Manual for instructions to disconnect camera and auto lock cords.

- Open the tailgate and locate the cable supports on both sides, located below the tailgate latch striker.
   Slightly raise the tailgate enough to relieve the tension on the cables. Unhook the cables from the truck body while supporting the tailgate.
- 2. Raise the tailgate to approximately 45 degrees and hold it. Slide the right side of the tailgate upward and outward, following the 45 degree angle, until the right-side bushing comes free from the hinge pivot on the truck body. Support the tailgate and raise tailgate almost to the closed position in order to slide off the left pivot. Slide it to the right until the left side of the tailgate disengages from the hinge pivot on the truck body.
- 3. Lay the tailgate aside on a blanket or other soft surface to prevent damage to the finish.
- 4. **Measure and write down** the distance between the LH and RH truck hinge pivots, you will need this measurement as explained in "Installing the Floor and Connecting the Wire Harness"

#### **VEHICLE INSTALLATION**

PRIOR TO VEHICLE INSTALLATION THE FOLLOWING ITEMS MUST BE ATTACHED TO THE LH AND RH LIFT GATE SIDE ASSEMBLIES AND THE FLOOR ASSEMBLED IN SPECIFIC LOCATIONS AS DIRECTED TO ACCOMMODATE THE MAKE AND MODEL OF THE VEHICLE.

- Two striker pins with associate sleeves, threaded washer/nut
- RH/LH striker brackets
- RH/LH Handygate hinge pivots and pucks
- Two cable support pins
- Floor assembly
- 1. Prior to installing the lift assembly to vehicle, choose appropriate LATCH LOCK PLATE and bolts according to the vehicle make and side (LH or RH).
- 2. Slide lift puck over truck hinge pivot.
- 3. Locate lift over truck cable pin and slide plate down to lock in place with appropriate LATCH LOCK PLATE.
- 4. Repeat the above for the other lift side assembly.



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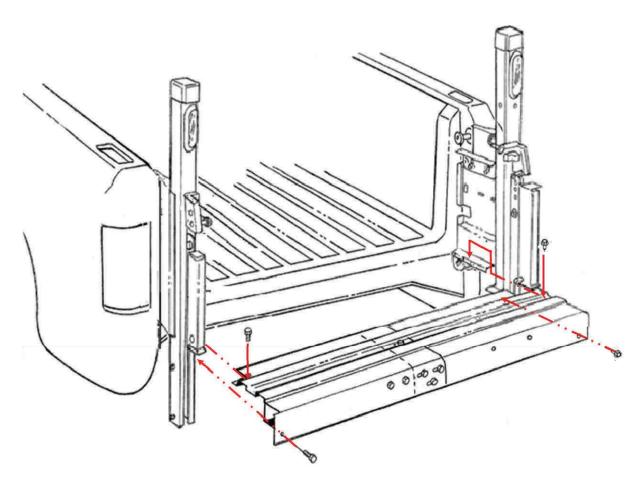
CAUTION: LIFT SIDE <u>MUST</u> BE HELD IN PLACE AT ALL TIMES BY INSTALLER(S) UNTIL THE LATCH LOCK HAS BEEN FIRMLY SECURED WITH BOLTS OR IT <u>WILL</u> FALL OFF THE TRUCK AND COULD RESULT IN PERSONAL INJURY.



CAUTION: MAKE SURE TO THOROUGHLY TIGHTEN LATCH LOCK BOLTS. THE PURPOSE OF THE LATCH LOCK IS TO HOLD THE LIFT SECURELY TO THE TRUCK. IF THE BOLTS ARE NOT TIGHTENED, THERE IS A POSSIBILITY THAT THE LIFT CAN RELEASE FROM THE TRUCK AND CAUSE PERSONAL INJURY.



#### INSTALLING THE FLOOR AND CONNECTING THE WIRE HARNESS



- 1. Before installing floor to lift, install as many tubing clips as necessary. See Page 7, Step 2. Tubing clips are in the floor hardware bag. Tubing clips snap into holes on the backside of floor assembly. These tubing clips are necessary to hold wire harness in place.
- 2. The floor is designed for multiple vehicle truck bed widths. Tighten bolts after selecting correct floor width. To determine the correct floor width, first measure the distance between the LH and RH lift pivots and compare to the measurement taken in #4 on page 8. If the lift pivots measurement is more than the "truck" pivot measurement, decrease the floor width by the amount of the difference by sliding the halves together. If the lift pivot measurement is less than the "truck" pivot measurement, slide the floor halves apart by the difference in the two measurements. It is very important to maintain the truck pivot distance on the lift to make sure there is a tight fit.



FAILURE TO COMPLY WITH THE MEASUREMENT COULD RESULT IN THE TAILGATE FALLING OFF THE TRUCK AND CAUSING PERSONAL INJURY.

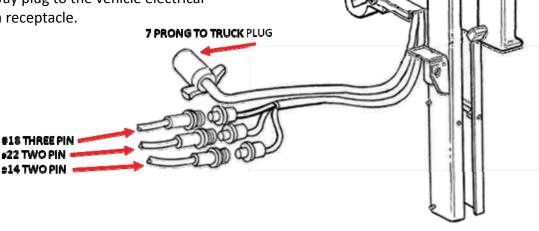
3. Install and secure the floor assembly to the vehicle via four (4) 20MM bolts on each side.

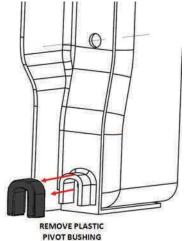


#### CONNECTING THE ELECTRICAL HARNESS

1. Connect the RH and LH lift assembly electrical harness.

2. Attach the 7-way plug to the vehicle electrical 12-volt system receptacle.





#### **CHEVROLET TAILGATE ONLY**



Remove the factory plastic tailgate pivot bushing from the passenger (RH) tailgate

pivot before reinstalling into the RC2 hinge pivot.

#### ATTACHING THE TAILGATE TO THE LIFT SIDE ASSEMBLIES

- 1. Install the left side of the tailgate by sliding the LH tailgate bushing onto the hinge pivot on the LH lift assembly. Lower the tailgate to 45 degrees and slide the right-side bushing onto the hinge pivot.
- 2. Support the tailgate in its 45-degree position with the support cable attachments exposed. Engage the support cables with their attachment points.

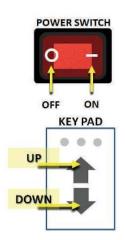


### (4) CALIBRATION

Before initial operation, the HANDY GATE must be calibrated so that the tailgate can correctly engage the striker in the closed position.



ONCE CALIBRATION HAS BEEN STARTED, YOU MUST COM-PLETE ALL FOUR (4) STEPS TO EXIT THE CALIBRATION MODE. WHEN LIFT IS IN CALIBRATION MODE AND INSTALLER WAITS MORE THAN TWO (2) MINUTES WITHOUT PROCEED-ING TO NEXT STEP, THE CALIBRATION MODE WILL TIME OUT. INSTALLER WILL HAVE TO START CALIBRATION OVER STARTING WITH STEP 1.



#### STEP 1 ENTERING CALIBRATION MODE

#### MAKE SURE 7-WAY PLUG IS SECURE TO THE TRUCK

- Turn power switch ON. Press and hold both up and down arrows on the keypad simultaneously for four (4) beeps, then release. The first indicator light will be a steady RED and the second and third indicator lights will be flashing YELLOW. This indicates that the lift is in CALIBRATION MODE.
- 2. Holding the tailgate up with one hand, press the up or down buttons to position the tailgate's fish mouth latch opening in front of the new lift striker (this position should be a close approximation to final location).



#### STEP 2 FINE TUNE TO RH STRIKER LOCATION (RH MASTER SIDE)

Press and hold both up and down arrows on the keypad simultaneously for four (4) beeps, then release. The left indicator light will be a steady RED and the middle indicator light will be flashing YELLOW while the right indicator light will be off. This indicates that the lift is in **FINE TUNE CALIBRATION MODE** for the RH (Master) Lift. Use the UP or DOWN buttons to position the tailgate fish mouth latch directly in front of the new lift striker.



#### STEP 3 FINE TUNE TO LH STRIKER LOCATION (LH SLAVE SIDE)

Press and hold both up and down arrows on the keypad simultaneously for four (4) beeps, then release. The left indicator light will be a steady RED and the middle indicator light will be off while the right indicator light will be flashing YELLOW. This indicates that the lift is in **FINE TUNE CALIBRATION MODE** for the LH (Slave) Lift. Use the UP or DOWN buttons to position the tailgate fish mouth latch directly in front of the new lift striker.



#### **STEP 4 EXITING CALIBRATION MODE**

Press and hold both arrows on the keypad simultaneously for four (4) beeps then release. The left indicator light will be a steady RED and the middle and right indicator lights will be off. This is also the normal OPERATING mode.





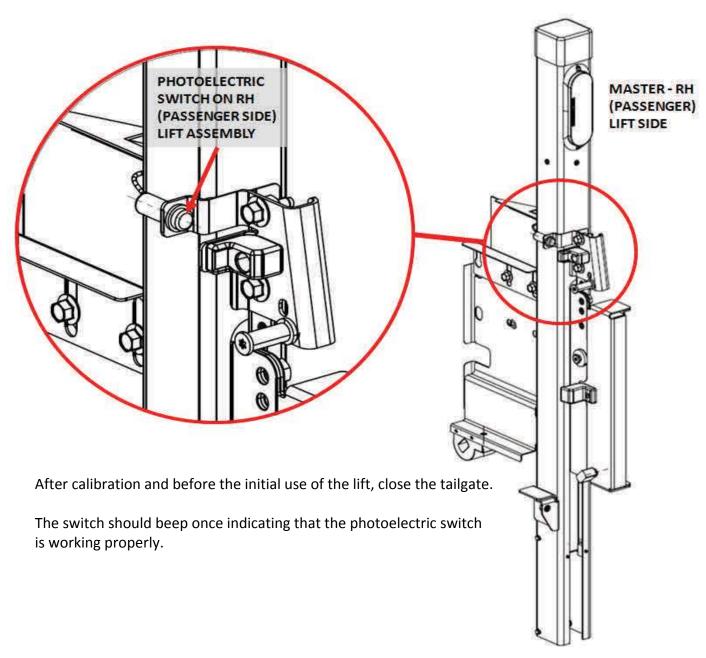
Gently close the tailgate engaging the strikers to make sure the tailgate lift is properly calibrated. If the tailgate does not close repeat steps 1 through 4.

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#### PHOTOELECTRIC SWITCH

The HANDY GATE comes with a photoelectric proximity switch attached to the RH/Passenger Lift Side (Master). The purpose of the photoelectric proximity switch is to prevent inadvertent use of the lift when the tailgate is in the closed position.





### (5) OPERATION

- 1. Open tailgate.
- 2. Press ON button to turn on Lift. Red light will turn on.
- 3. Press and hold UP or DOWN buttons on the key pad to move both lift legs to desired height. The red light and both yellow lights are on when legs are traveling.
- 4. The upper limit is the calibrated striker position.
- 5. The down limit is the ground. If vehicle is on a hill and lift does not touch ground, place wood blocks under lift legs. The lift leg will always touch ground first before tailgate with a 2" clearance.
- 6. To protect tailgate finish make sure ground is clear of objects (rocks, boards, etc.)
- 7. The legs stop when the UP/DOWN key is released.
- 8. After using lift, the tailgate must be raised and securely closed to strikers. Closing the tailgate will prevent damage during vehicle travel.
- 9. If a slow flashing RED light comes on in Extend/Retract operation, a low voltage situation exists and the battery needs to be fully charged.
- 10. If the RED light flashes quickly, a high amp situation exists and lift will turn off after three (3) seconds. The lift will reset itself in three (3) seconds and can be used again until a high amp situation occurs.
  - The high amp draw situation can be caused by too much load.
     Reduce the load on the lift.
  - The high amp draw can also be caused by worn parts and the lift needs to be serviced. Owner should call Ultra-Fab for service options.



### **WARNINGS**

- MUST COMPLY WITH MEASUREMENT INSTRUCTIONS IN #4 PAGE 8 AND #2 PAGE 9.
- CENTER YOUR LOAD ON PLATFORM.
- WHEN NOT IN USE OR UNATTENDED CLOSE TAILGATE.
- STAND TO THE SIDE OF THE LIFT WHILE IT IS IN OPERATION.
- READ ASSEMBLY AND SERVICE INFORMATION.
- READ OPERATOR'S INSTRUCTIONS
- FREQUENTLY CHECK CABLES AND OTHER COMPONENTS FOR WEAR OR DAMAGE AND REPAIR AS NECESSARY WITH PARTS PROVIDED BY ULTRA-FAB PRODUCTS.
- CHECK ALL SAFETY DEVICES FOR PROPER OPERATION.
- DO NOT RIDE OR PERMIT ANYONE TO RIDE ON LIFT. THE LIFT IS NOT A PERSONNEL OR WHEEL-CHAIR LIFT.
- DO NOT MAKE ANY MODIFICATIONS TO THE LIFT OR ITS SAFETY FEATURES.
- DO NOT ALLOW USE OF LIFT BY A PERSON WHO HAS NOT HAD PROPER TRAINING IN ITS OPERATION.
- DO NOT TRY TO LIFT OF LOWER MORE THAN THE RATED 1,000 POUND CAPACITY OF THE LIFT.
- DO NOT ADD TO OR REMOVE PARTS OF LIFT AS IT WILL VOID YOUR WARRANTY.
- DO NOT MOVE VEHICLE UNLESS TAILGATE IS IN CLOSED POSITION.
- DO NOT SHOW CHILDREN OR UNAUTHORIZED PERSONNEL HOW TO OPERATE LIFT.
- DO NOT LEAVE PLATFORM OPEN, OR UNLATCHED WHEN LIFT IS NOT IN USE OR UNATTENDED.
- NEVER LEAVE PLATFORM DOWN TO BE USED AS A STEP.





## **ONE-YEAR LIMITED WARRANTY**

## **HANDY GATE**



## THE MANUFACTURER NAMED BELOW MAKES THE FOLLOWING WARRANTY WITH RESPECT TO THE ABOVE ULTRA-FAB PRODUCTS

This Warranty is made only to the first Purchaser (hereinafter called the "Original Purchaser") who acquires this product for their own use.

This Warranty will be in effect for one year from the date of purchase by the Original Purchaser. It is suggested that the Original Purchaser retain a copy of the dated bill of sale as proof of the date of purchase.

This Warranty covers only specified parts which shall be free from defects in material and workmanship under normal use. This Warranty does not cover conditions unrelated to the material and workmanship of the product. Such unrelated conditions include, but are not limited to (a) faulty installation and any damage resulting from such; (b) the need for normal maintenance and any damage resulting from the failure to provide such maintenance; (c) failure to follow Manufacturer's instructions for use of this product, and (d) any accident to, or misuse of, any part of this product and any alteration by anyone other than the Manufacturer or its authorized representative.

In order to obtain the benefits of this Warranty, you should return the product which you find defective to the Manufacturer named below during the period that this Warranty is in effect. All charges incurred in delivery of the product to the Manufacturer, and in picking it up after the Warranty service has been completed, must be paid by the Original Purchaser.

Any item returned in the manner described in paragraph 4 will be examined by the Manufacturer. If it is found that the returned item was defective in material or workmanship, the Manufacturer will repair it without charge for material and labor.

Ultra-Fab will pay freight on replacement parts during the first 90 days of ownership by the Original Purchaser.

The Manufacturer does not authorize any person or company to create any Warranty obligation or liability on their behalf.

IN NO EVENT SHALL THE MANUFACTURER BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

ANY IMPLIED WARRANTY, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR ANY PURPOSE, IS LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.



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