

TECHNICAL BULLETIN

LICENSE PLATE RISER INSTALLATION

Affected Products: AL901 and AL904

Estimated Labor Time: 30 Minutes

Parts List:

- 4 - Washers
- 4 - External Tooth Washers
- 4 - 1" Hex-Head Self Tapping Screws
- 8 - 1/4-20 Nylon Locknuts
- 8 - .75" Hex-Head Bolts
- 1 - License Plate Riser Wiring Harness
- 5 - Cable Ties
- 4 - Heat shrink Sleeves
- 2 - Pan Head Screws
- 2 - 6-32 Nylon Locknuts

Tools Required:

- 3/8" Ratchet
- Imperial Wrench Set
- Phillips head screwdriver or bit
- Torque Wrench
- Drill
- 1/4" Drill Bit
- Socket Bit
- Safety Glasses

Performance: Maintenance Safety Operation Reliability Other:

Type: Upgrade Repair Retrofit Other:

Instructions for New style Motor head

LOWER PLATFORM

1. Insert Key and switch to "ON" position. Press DOWN on toggle switch. The platform will unfold.

Continue to lower until platform reaches the ground and becomes level, see Fig. 1

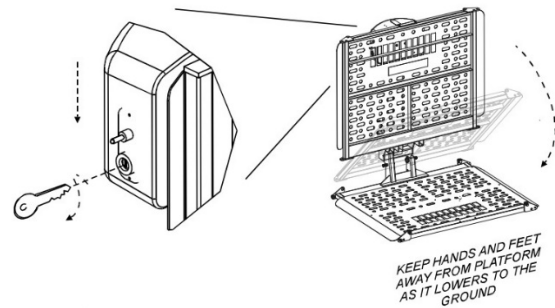


Fig. 1

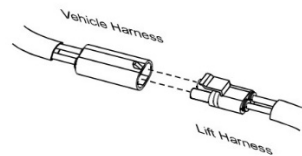


Fig. 2

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2. Using a 3/8" socket or nut driver bit, remove the 4 screws for the license plate. Then unfasten the 4 screws securing the motor head from the main mounting bracket, one at a time, and replace them with the new longer screws provided, See Fig 3.

Make sure to leave a small amount of the screw exposed to hang the Riser on, see Fig. 4.



Fig. 3

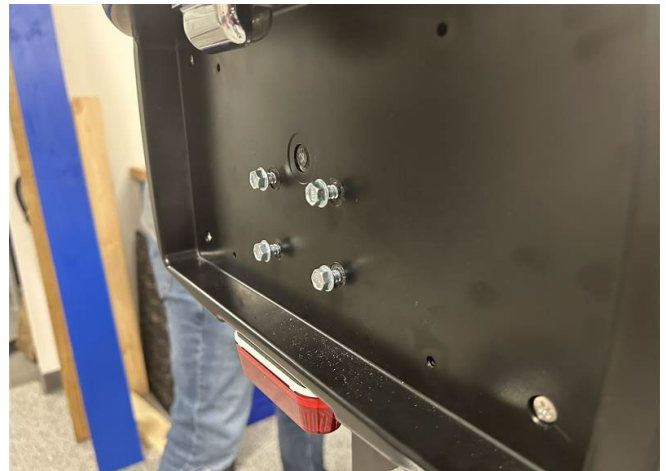


Fig. 4

3. Once all 4 screws are replaced, but before hanging the riser, remove the 2 screws that attach the license plate light and set them aside, see Fig. 5.



Fig. 5

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4. Pull the light away from the housing and to the side, then hang the riser on the 4 screws, see Fig. 6.



Fig. 6

5. Tighten the 4 screws to secure the riser in place, see Fig. 7.



Fig. 7

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6. Attach the License plate light, facing up, using the 2 bolts and nuts provided, to the riser, see Fig 8.



Fig. 8

7. Attach license plate to Riser with provided bolts and nuts, see Fig 9.



Fig. 9

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Instructions for Older style Motor head

LOWER PLATFORM

1. Insert Key and switch to "ON" position. Press DOWN on toggle switch. The platform will unfold.

Continue to lower until platform reaches the ground and becomes level, see Fig. 1

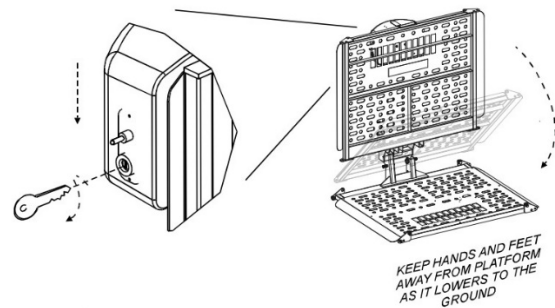


Fig. 1

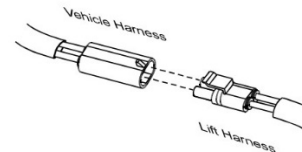


Fig. 2

REMOVE MOTOR COVER

2. Using a 3/8" socket or nut driver bit, unfasten the four screws securing the motor head from the main mounting bracket, see Fig. 3.



Fig. 3: Using a drill to unfasten the motor head from the bracket.

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3. Once the motor cover is removed from the support column. Move the motor cover to a comfortable work surface. Use a Phillips head screwdriver to unfasten the 4 screws that hold the motor cover together, see Fig. 4.



Fig. 4: Using a drill to remove Phillips head screws.

4. Use a flathead screwdriver, a 5/16" socket or a 5/16" nut-driver bit to remove the 4 license plate screws on the face of the cover, see Fig. 5.



Fig. 5: Using a screwdriver to remove license plate screws

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5. Remove back of motor cover to expose wiring assembly. Locate the black/white wires that connect the license plate light to the overall wiring in the motor cover, see Fig. 6.



Fig. 6: Separation of motor head revealing license plate light wiring.

WIRING

6. Disconnect the black/white wire connectors from the wiring assembly power source (black/red wires) by removing the black tape.

7. Be sure to put on the heat shrink (included in hardware pack) to both ends of the supplied wiring harness before joining each connector.

8. Connect the female end of the supplied wiring harness, to the power source (black to black, white to red), Fig. 7.

9. Connect the male end of wiring harness to the license plate light (black to black and white to white), see Fig. 7.

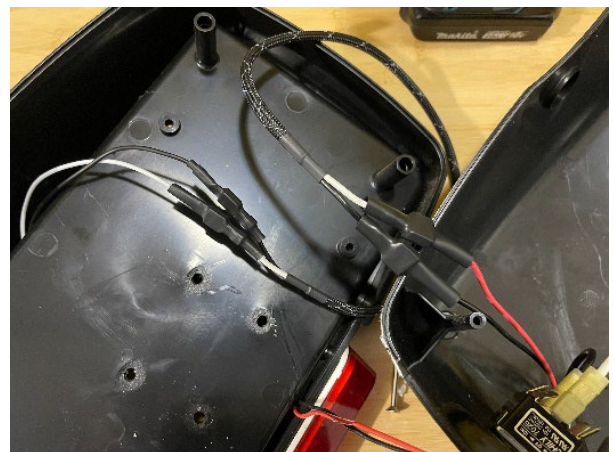


Fig. 7: Configuration of wires, extension, and heat shrink

10. After both connections are made, slide the heat shrink on to the connection point and use a heating element to shrink them, see Fig. 8.



Fig. 8: Using a heating element to tighten the heat shrink.

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MOVING THE LICENSE PLATE LIGHT

11. Using a Phillips head screwdriver/drill, unfasten the 2 screws securing the license plate light, see Fig. 9. Pull the light out as much as the wiring will allow.



Fig. 9: Using a drill to unfasten the license plate light

12. Hang the light over the motor cover so that it is hanging over the back, out of the way from other actions needing to be completed, see Fig. 10.



Fig. 10: Hang the extension cord and light over the back of the motor head cover.

REATTACH MOTOR COVER

13. Once the wiring has been extended and the connections are sealed, use a Phillips head screwdriver/drill to reinsert and fasten the four screws to assemble the motor head cover, see Fig. 11.



Fig. 11: Using a drill, reassemble the motor cover.

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14. Using a 3/8 socket/drill, fasten the License Plate Riser to the motor head and support column using 4 screws (#14 x 1.00 hex head self-tapping screws) on front of the motor cover, see Fig. 12. To simplify the process, use a screwdriver to align the holes of the front motor cover to the support column and start the screws in. Once all 4 screws are started, place the plate riser's teardrop holes over the heads of the screws and let it drop into position. Then fasten the screws to the mounting bracket of the lift to 12 ft-lb.

NOTE: If a Self-Tapping screw does strip out a mounting hole, additional 1/4-20 x 0.75 hex head bolts, washers, and nuts have been supplied. APPENDIX 1 at the end of the instructions will instruct what to do in case the mounting holes are stripped out.



Fig. 12: Use a drill to mount the motor cover and license plate riser.

15. Fasten the license plate light with the light facing up to the license plate using the supplied hardware, 6-32 x 0.75 pan head screws and 6-32 nuts, see Fig. 13. The process is simplified if the nut is held by pliers while a drill is used to tighten the screw. Cut off excess threads if necessary or possible. For the AL904, use the supplied cable ties to tie the wiring harness along the license plate riser.



Fig. 13: Use a drill to mount the license plate light.

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APPENDIX 1

OPEN MOUNTING HOLES AND MOTOR COVER HOLES, AND MOUNT MOTOR COVER AND LICENSE PLATE RISER

1. Using a drill and 1/4" drill bit, carefully open the stripped hole on the mounting bracket of the lift, and the same hole location on the motor cover, see Fig. 16.
2. Repeat for any other stripped holes.
3. Using a 1/4-20 x 0.75 hex head bolt, washer, and 1/4-20 Nut, fasten the motor cover, and license plate riser to the mounting bracket of the lift to 8 ft-lb, see Fig. 17.
4. Repeat for each hole that had to be reworked to complete the install. Discard any unused hardware.

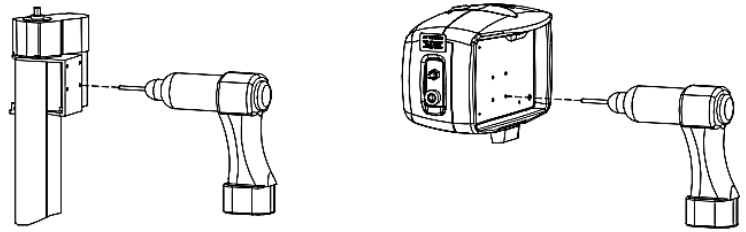
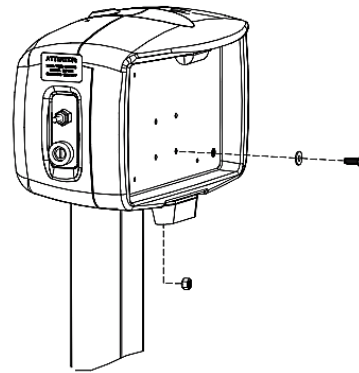


Fig. 16: Use a drill to mount the motor cover and license plate riser.



Use a drill to mount the motor cover and license plate riser.

Fig. 17