

Removing and Installing a Platform and/or Torsion Spring

All G2 Series Liftgates

All EA Platforms

All 1046-1650 Original Series Liftgates (after serial # M-340999 and serial # M16-27999)

Releasing the Torsion Spring

1. **Close and Latch** the platform.
2. **Apply** pressure to the passenger side torsion spring arm in the counter-clockwise direction.
Use an open-end wrench, crescent wrench, or vice grip (Figure 1).
3. **Remove** the 1/2" bolt and nut from the platform.
Continue to hold counter-clockwise torque on the torsion spring arm.
4. **Slowly Rotate** the torsion spring arm clockwise until no resistance is felt.

Removing the Torsion Spring/Platform

WARNING: The platform may require up to 100 lbs. of force when lowering without torsion assist.

1. **Unlatch and Unfold** the platform.
If the platform has a folding extension, leave it in the folded position.
2. **Remove** the platform drop chains and **ROTATE** the platform until it hangs vertically (Fig. 2).
3. **Lower** the liftgate until the platform rests on the ground (Figure 2).
4. **Disconnect** the #4 power cable from the positive side of the battery or manually **Trip** the circuit breaker (Figure 3).
5. **Observe** the position of the torsion spring arms with respect to each other.
This is important when re-installing the torsion spring.
6. **Remove** the 1/2" bolt and lock washer from the driver side torsion spring arm (Figure 4).
7. **Check** for adequate platform support before removing the torsion spring arms.
Without adequate support the platform could drop suddenly.
8. **Remove** the driver side torsion spring arm (Figure 4).
9. **Remove** the torsion spring from the driver side upright front (Figure 5).

Note: The torsion spring could be round or square depending on the liftgate model.
27" platforms may or may not have a torsion spring.

Note: Shims are used between the sub-assembly upright front and each end of the platform on aluminum platforms. Label which side each shim was located (Figures 4 and 6).

10. **Check** for adequate platform support before removing the torsion spring arms.
Without adequate support the platform could drop suddenly.

11. **Remove** the passenger side torsion spring arm (Figure 6).

12. **Remove** the platform.

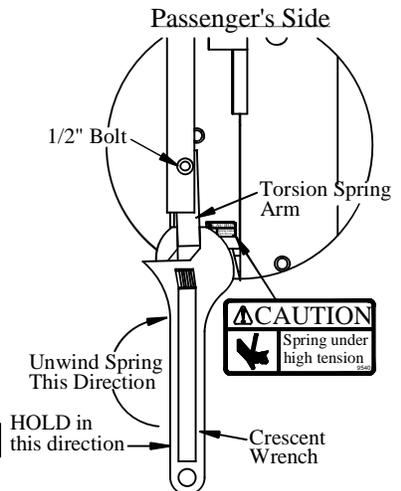


Figure 1: Release the Torsion Spring.

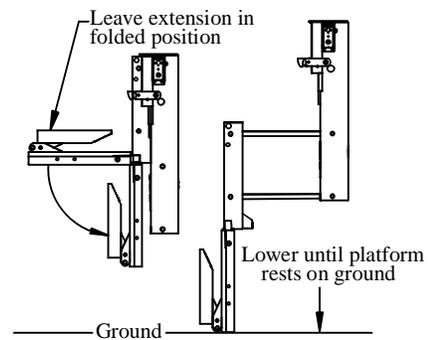


Figure 2: Lower the Platform.

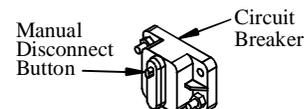


Figure 3: Circuit breaker.

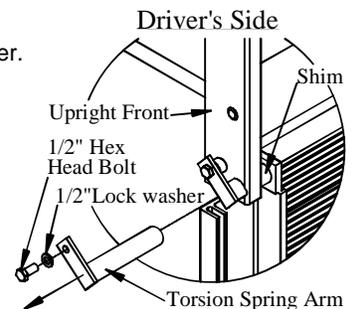


Figure 4: Driver side torsion spring arm.

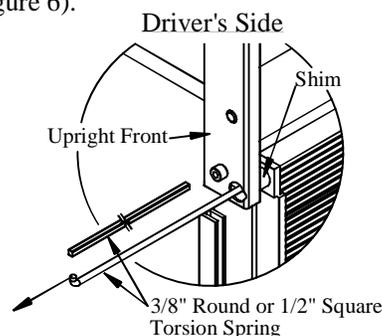


Figure 5: Torsion spring.

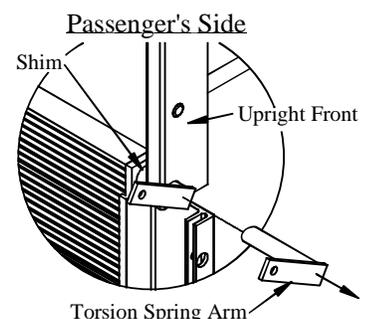


Figure 6: Passenger side torsion spring arm.

Removing and Installing a Platform and/or Torsion Spring

Installing the Torsion Spring/Platform

1. Place the platform on end and support it to keep the platform from falling over (Figure 7).
2. Position the platform so that the platform hinge tube is aligned with the sub-assembly hinge tube holes (Figure 7).
3. Apply anti-seize to the outside surfaces of both torsion spring arm tubes.
4. Insert the passenger side torsion spring tube assembly through the upright front and into the platform hinge tube. Be sure to install the passenger side shim (aluminum platform only) that was previously removed.
5. Apply anti-seize to the outside surfaces of each end of the torsion spring (square torsion spring only).
6. Insert the torsion spring through the driver side hinge tube hole (27" platform may or may not have a torsion spring). Be sure to install the driver side shim (aluminum platform only) that was previously removed.
7. Insert the driver side torsion spring arm through the upright front and into the platform hinge tube.
8. Install a 1/2" hex head bolt and lock washer on the driver side torsion spring arm.
9. Connect the #4 power cable to the positive side of the battery or manually **Engage** the circuit breaker.
10. Raise the liftgate to the top of it's travel.
11. Disconnect the #4 power cable from the positive side of the battery or manually **Trip** the circuit breaker.

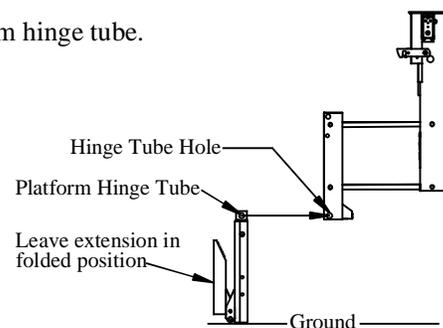


Figure 7: Platform and sub-assembly.

Setting the Torsion Spring

1. Close and **Latch** the platform.
2. Position the passenger side torsion spring arm as indicated in (Figure 8) and (Table 1) for your application.

Table 1: Torsion spring arm position.

X° Platform and Torsion Spring Description

65	33+4 EA, 38/39+6 EA, G2 27+4 TP, G2 38+4 TP (round spring)
80	37+6 EA, 41/42+6 EA, 48+6 EA, G2-42+6 TP (round spring)
172	64SB Steel and 72 Steel (round spring)
19	80/81 Steel (square spring)
33	86/87 Steel and 91/92 Steel (square spring)

Note: 27" EA platform does not require a torsion spring.

3. Push the passenger side torsion spring arm toward the center of the platform until it stops. This ensures that the torsion spring is fully engaged.
4. Determine how to attach the passenger side torsion spring arm to the platform for your application using (Figures 9 and 10).
5. Rotate the passenger side torsion spring arm until it aligns with the hole in the platform. Use an open-end wrench, crescent wrench, or vice grip (Figure 8).
6. Install the 1/2" bolt and lock nut as shown in (Figure 9 or 10).
7. Tighten all 1/2" bolts and lock nuts to 75 ft-lb.

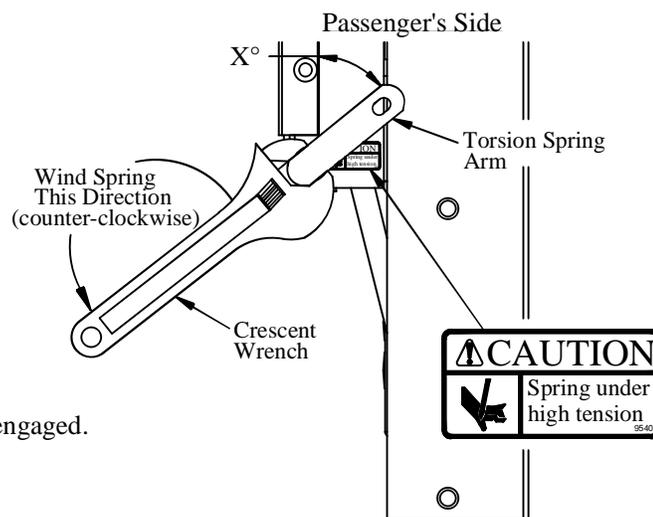


Figure 8: Torsion spring arm installation.

Removing and Installing a Platform and/or Torsion Spring

Installing the Platform Drop Chains

1. **Unlatch** the platform.
2. **Unfold** the platform partially and **Support** it in the partially open position.
3. **Install** the drop chains as shown in (Figure 11 or 12) if they are not already installed.
For steel platforms, the lock nuts should be on the under-side of the platform.
4. **Install** the drop chains on the cable chain rivets (Figure 13).
G2 Series drop chains may need to be rotated to align with a flat spot on the rivet.

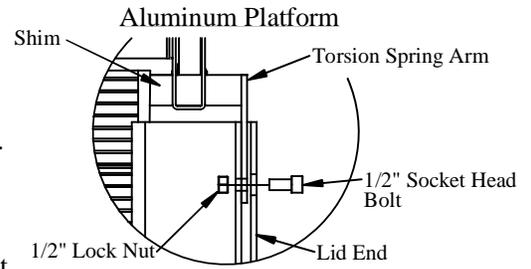


Figure 9: Torsion spring arm installation.

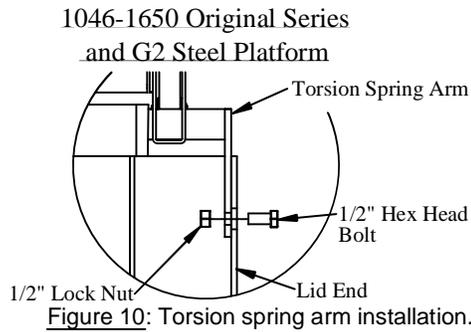


Figure 10: Torsion spring arm installation.

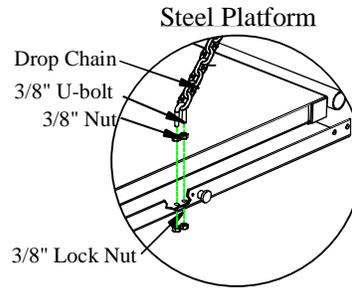


Figure 11: Platform drop chain.

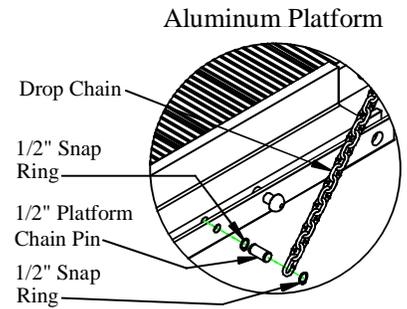


Figure 12: Platform drop chain.

Adjusting the Latches (G2 Series only)

1. **Loosen** the platform latch pins with a screw driver and wrench (Figure 14).
2. **Raise** the liftgate to the fully raised position.
3. **Close** and **Latch** the platform.
4. **Position** each latch pin in the latch hole/slot (Figure 15):
 - Centered vertically.
 - With an 1/8" gap toward the rear of the vehicle.
5. **Tighten** each latch pin to approximately 20 ft-lb.

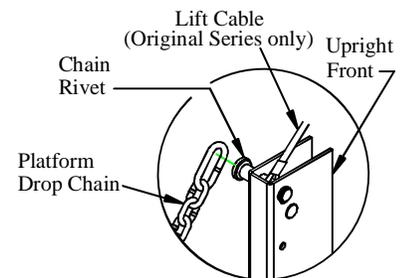


Figure 13: Platform drop chain installation.

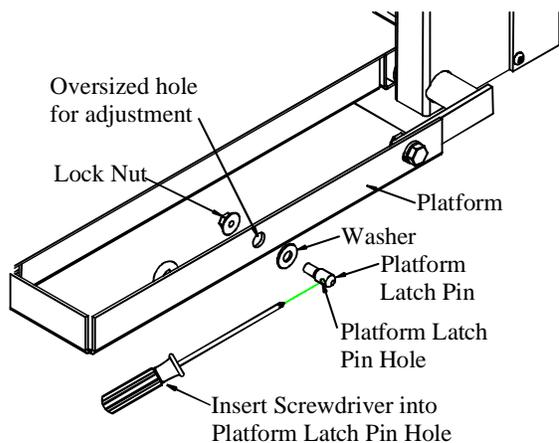


Figure 14: Platform latch pin.

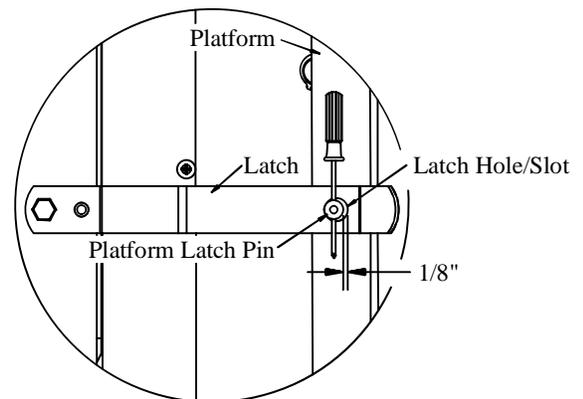


Figure 15: Platform latch pin position.

Finishing the Repair

1. **Connect** the #4 power cable to the positive side of the battery or manually **Engage** the circuit breaker.
2. **Close** and **Latch** the platform.