

# Optional Equipment - Square Spring Installation Instructions

These instructions will assist you in replacing or upgrading the torsion spring on an Original Series Tommy Gate lift.

DRIVER SIDE

## Releasing a Round Torsion Spring

Use this method if your lift gate has a round torsion spring (Figure 1).

1. **CLOSE** and **LATCH** the platform.
2. **REMOVE** the 3/8" bolt from the safety clip only (Figure 1).

**CAUTION:** The torsion spring is under high tension.  
Care must be taken to ensure the vise grip does not slip off the lug in the next steps.  
Failure to do so could result in personal injury or property damage.

3. **CLAMP** a plate or angle to the lid end (Figure 2), (46-inch and 50-inch travel lift gates only).
4. **APPLY** pressure to the driver side torsion spring lug in the counter-clockwise direction.  
Use a large vice grip (Figure 1) and continue to hold pressure on the lug while performing the next steps.
5. **REMOVE** the 3/8" bolt from the upright.
6. **SLOWLY ROTATE** the torsion spring lug clockwise until the torsion spring lug contacts the lid end or no resistance is felt.

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

7. **UNLATCH** and **UNFOLD** the platform.

**CAUTION:** The torsion spring may still be under tension, proceed with caution.

8. **LOOSEN** but do not remove the 5/16" u-bolt on the passenger side lid end.
9. **INSTALL** a pipe 3 foot or longer over the passenger side end of the torsion spring, (46-inch and 50-inch travel lift gates only).  
Use a pipe with an inside diameter as close to the size of the spring as possible.
10. **APPLY** pressure to the pipe in the counter-clockwise direction while removing the u-bolt in the next step, (46-inch and 50-inch travel lift gates only).
11. **REMOVE** the 5/16" u-bolt from the platform.
12. **SLOWLY ROTATE** the pipe clockwise until no resistance is felt.
13. **REMOVE** the cotter pins and old round spring from the platform.
14. **DISCONNECT** the 4ga power cable from the battery, or manually **TRIP** the circuit breaker (Figure 3).

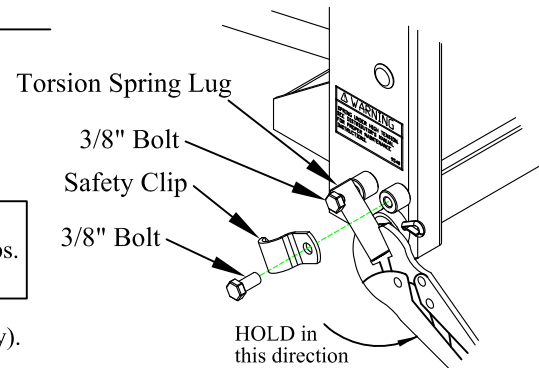


Figure 1: Release the round torsion spring.

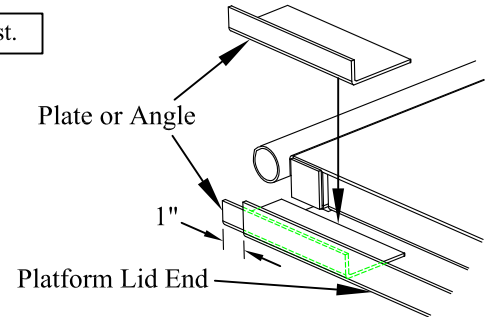


Figure 2: Clamped plate location.

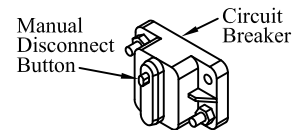


Figure 3: Circuit breaker.

## Releasing a Square Torsion Spring

Use this method if your lift gate has a square torsion spring (Figure 4)

1. **CLOSE** and **LATCH** the platform.
2. **APPLY** pressure to the passenger side torsion spring lug in the counter-clockwise direction.  
Use an open-end wrench, crescent wrench, or vice grip (Figure 4).
3. **REMOVE** the two (2) 3/8" bolts from the platform (Figure 4).  
Continue to hold counter-clockwise torque on the torsion spring lug.
4. **SLOWLY ROTATE** the torsion spring holder clockwise until no resistance is felt.
5. **REMOVE** the torsion spring holders and torsion spring from the platform.
6. **DISCONNECT** the 4ga power cable from the battery, or manually **TRIP** the circuit breaker (Figure 3).

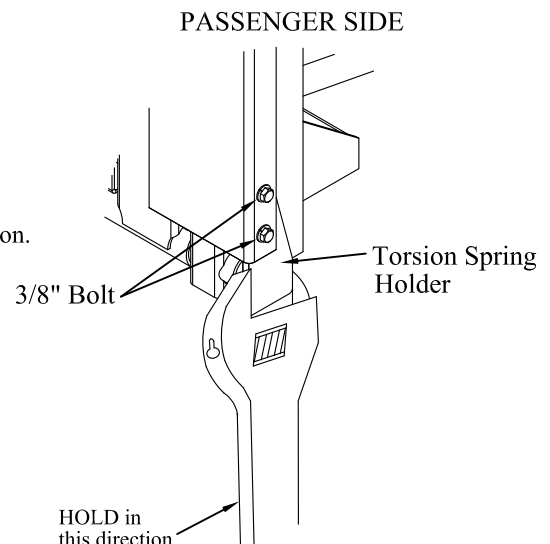


Figure 4: Release the square torsion spring.

# Optional Equipment - Square Spring Installation Instructions

## Installing the New Square Torsion Spring

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

1. **UNLATCH** and **UNFOLD** the platform.
2. **INSERT** the new square spring into the hinge tube.
3. **INSERT** the spring into the torsion spring holder that has two threaded holes on the passenger side of the platform (Figure 4).
4. **INSERT** the machined end of the torsion spring holder into the hinge tube (Figure 4).
5. **POSITION** the torsion spring holder against the platform lid end (Figure 4).
6. **MARK** the position of the two threaded holes on the platform lid end (if holes in platform do not already exist).
7. **DRILL** two (2) 3/8" holes in the locations marked in the previous step (if holes in platform do not already exist).
8. **INSERT** the driver side torsion spring holder into the hinge tube.  
Be sure that the torsion spring holder engages the torsion spring.
9. **INSTALL** two (2) 3/8" bolts and lock washers through the torsion spring holder into the two (2) threaded bosses on the lift gate.
10. **ADJUST** the position of the passenger side torsion spring holder so that it engages the spring with the 1/4" plate almost vertical.
11. **CLOSE** and **LATCH** the platform.
12. **ROTATE** the passenger side torsion spring holder until it aligns with the holes in the platform.  
Use an open-end wrench, crescent wrench, or vice grip (Figure 4).
13. **INSTALL** the 3/8" bolts and lock washers as shown in (Figure 4).
14. **TIGHTEN** all bolts.
15. **UNLATCH** and **UNFOLD** the platform to test the spring.  
Note: If the platform is unfolded beyond the horizontal position, it may weaken the spring.
16. **RECONNECT** the 4ga power cable to the battery,  
or manually **ENGAGE** the circuit breaker (Figure 2).

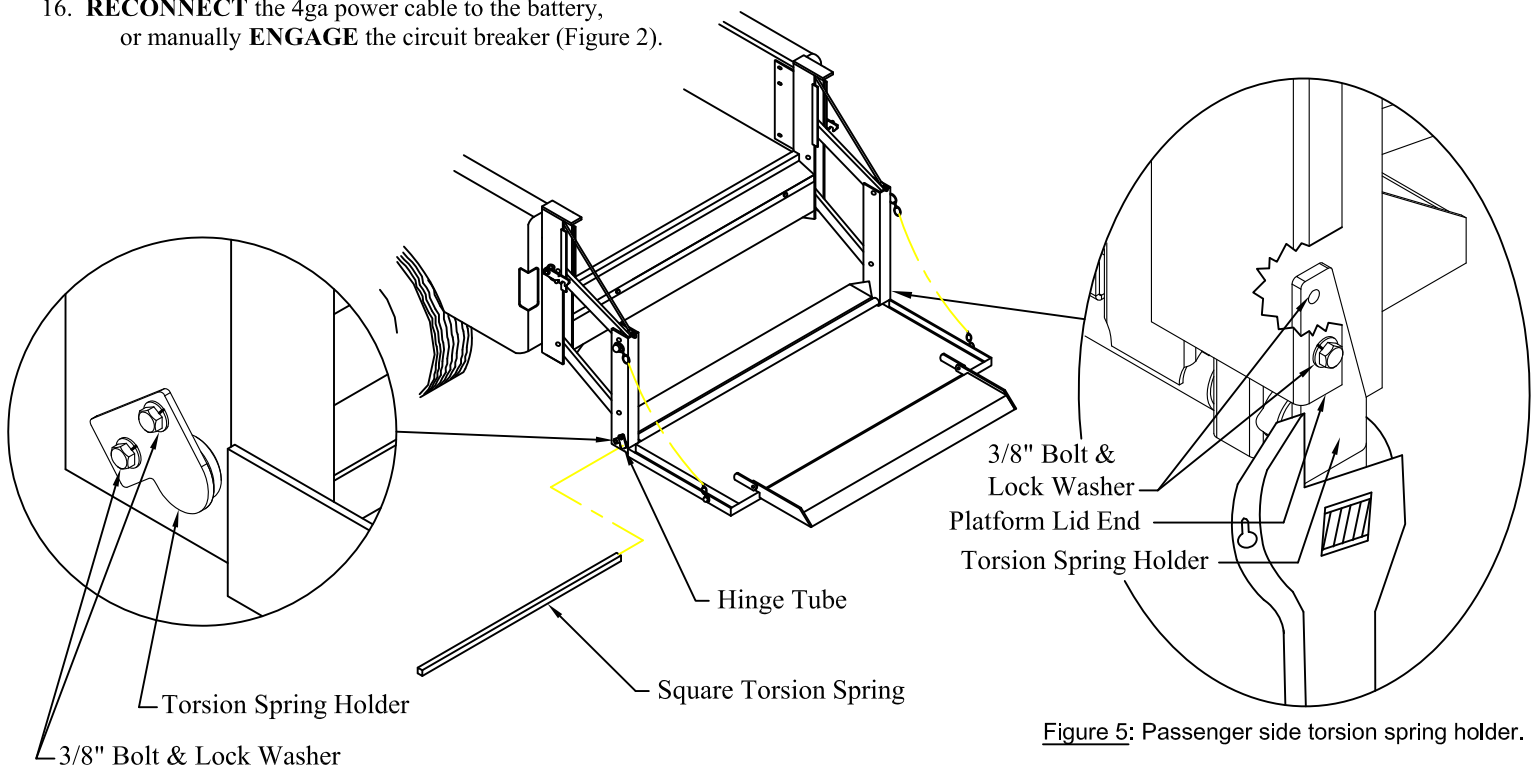


Figure 5: Passenger side torsion spring holder.

Figure 6: Driver side torsion spring holder.