Trigger Assembly Replacement Instructions

Trigger Assembly Kit (ARMORTAK)

All kits include hardware.

- Keep hands away from throat of operating fifth wheel.
- Wear Personal Protective Equipment (PPE).
- Make sure the wheel’s locks is in the closed position.
- Follow all instructions.
- Read operating manual before use.
- Use proper procedures.
- Use proper tools.
- Do not mix parts from other trigger kit assemblies.

**Warning!**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>①</td>
<td>Torsion spring</td>
<td>1</td>
</tr>
<tr>
<td>②</td>
<td>Trigger</td>
<td>1</td>
</tr>
<tr>
<td>③</td>
<td>Secondary lock</td>
<td>1</td>
</tr>
<tr>
<td>④</td>
<td>Operating handle</td>
<td>1</td>
</tr>
<tr>
<td>⑤</td>
<td>Main spring</td>
<td>1</td>
</tr>
<tr>
<td>⑥</td>
<td>Spring tensioner</td>
<td>1</td>
</tr>
</tbody>
</table>

See video at fifthwheel.com/maintenance/ Choose “Trigger Assembly Replacement”

Tools Required

- Crowbar
- Pliers
- 3/4” deep well socket with 2” extension
- 9/16” socket
- 11/16” socket
- 1/4” allen wrench
- Kingpin tool

Personal Protective Equipment

- Safety glasses
- Work gloves
- Steel toe boots

**Tools Required**

- Crowbar
- Pliers
- 3/4” deep well socket with 2” extension
- 9/16” socket
- 11/16” socket
- 1/4” allen wrench
- Kingpin tool

Choose “Training” then “Trigger Assembly Replacement”

For instructional video scan or go to fifthwheel.com/maintenance/

See video at fifthwheel.com/maintenance/ Choose “Trigger Assembly Replacement”

All kits include hardware
Disassembly

1. Trip the wheel closed using a crowbar. **NEVER use hands to trip an activated fifth wheel.**

2. Raise the yard truck boom for easy access, then remove the air hose from the air cylinder quick release valve.

3. Remove spring tension by removing the cotter pin with pliers. Then remove the two spring tensioner nuts. **Hint:** You can place a screwdriver in the main spring loop to prevent spring from rotating when unbolting nuts (see video).

4. Tilt the top plate down to access the two front bolts from the opposite side of the top plate. Remove the eight wear plate nuts and washers. Note all eight nut locations in photo.

**Hint:** If you need help with parts identification see pages 8-10.

**Air Cylinder Quick Release Valve**

**Air Cylinder Vent Screen**

**Cotter Pin**

**Spring Tensioner Nuts (2)**

**Wear Plate Bolts (8 total)**

All kits include hardware
Disassembly

5. Remove both wear plates.

6. Tilt wheel down in rear to access secondary lock.
   Pull the secondary lock to open the fifth wheel.

7. Notice locking jaw is now visible because wear plate is off and fifth wheel is in open position.

8. Remove both cover plate nuts.
   Push up cover plate to access the two cover plate nuts.
   Remove cover plate from below.

9. Remove operating handle nut and bolt.

All kits include hardware

See video at fifthwheel.com/maintenance/
Choose “Trigger Assembly Replacement”
Disassembly

10. Remove air cylinder/secondary lock bolt.

11. Remove trigger assembly.

See video at fifthwheel.com/maintenance/
Choose “Trigger Assembly Replacement”

All kits include hardware
Assembly

1. Insert new trigger assembly into top plate (make sure one end of the spring is connected to the bumper).

2. Fasten air cylinder to the correct secondary lock bolt hole. Outside hole in secondary lock is for manual release of lock in case of air system failure. Inside hole is for the air cylinder bolt.

3. Install operating handle bolt assembly (Bolt, nut, washer, spacer bushing and hair pin cotter).

4. Insert lock washers onto cover plate screws before inserting into the fifth wheel. Lock washers are installed underneath the fifth wheel.

5. Make sure cover plate is oriented properly with the angled side pointing towards you.

Fasten the two cover plate nuts and bolts.

See video at fifthwheel.com/maintenance/
Choose “Trigger Assembly Replacement”
Assembly

6. Position the jaw pin into the slot of the operating handle.

7. Trip the trigger off the stationary jaw stop. It pushes in.

8. Close the fifth wheel by pulling the loose end of the main spring.

9. Install both wear plates.

10. Install the eight wear plate nuts and washers. You can tilt fifth wheel up and down for easy access. Note all bolt locations in photo.

11. Insert the spring tensioner through the hole. Install the TWO spring tensioner nuts. Hint: You can place a screwdriver in the main spring loop to prevent spring from rotating when bolting on nuts (see video).

All kits include hardware

See video at fifthwheel.com/maintenance/
Choose “Trigger Assembly Replacement”
Assembly

12

Install the cotter pin.

* Cotter Pin

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Connect the air hose to the air cylinder quick release valve.

* Air Cylinder Quick Release Valve*

* Please note: the air cylinder quick release valve is critical to the operation of the fifth wheel. Do not replace with any other 90° elbows.

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Tilt the fifth wheel down and lower the yard truck boom.

Test the wheel using the Fontaine kingpin tool (ARMORKPK) by frequently opening and closing the fifth wheel (see video). It is suggested that you test the fifth wheel at least three times.

Test Kingpin Tool
Part # ARMORKPK

See video at fifthwheel.com/maintenance/
Choose “Trigger Assembly Replacement”
### Part Identification

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Included in kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wear plate</td>
<td>2</td>
<td>ARMORWPK</td>
</tr>
<tr>
<td>2</td>
<td>Knockout rod</td>
<td>1</td>
<td>ARMORKRK</td>
</tr>
<tr>
<td>3</td>
<td>Knockout rod clip</td>
<td>1</td>
<td>ARMORKRK</td>
</tr>
<tr>
<td>4</td>
<td>Knockout rod spring</td>
<td>1</td>
<td>ARMORKRK</td>
</tr>
<tr>
<td>5</td>
<td>Knockout rod nut</td>
<td>1</td>
<td>ARMORKRK</td>
</tr>
<tr>
<td>6</td>
<td>Stationary jaw</td>
<td>1</td>
<td>ARMORSJK, ARMORLAK</td>
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<tr>
<td>7</td>
<td>Locking jaw</td>
<td>1</td>
<td>ARMORSJK, ARMORLAK</td>
</tr>
<tr>
<td>8</td>
<td>Torsion spring</td>
<td>1</td>
<td>ARMORTAK, ARMORLAK, ARMORSRK</td>
</tr>
<tr>
<td>9</td>
<td>Trigger</td>
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<td>ARMORTAK, ARMORLAK</td>
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<tr>
<td>10</td>
<td>Secondary lock</td>
<td>1</td>
<td>ARMORTAK, ARMORLAK</td>
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<tr>
<td>11</td>
<td>Operating handle</td>
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<td>ARMORTAK, ARMORLAK</td>
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<tr>
<td>12</td>
<td>Main spring</td>
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<tr>
<td>13</td>
<td>Spring tensioner</td>
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<td>ARMORTAK, ARMORLAK, ARMORSRK</td>
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<tr>
<td>14</td>
<td>Air cylinder</td>
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<td>ARMORACK</td>
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<tr>
<td>15</td>
<td>3-way air valve</td>
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<tr>
<td>16</td>
<td>Cover plate</td>
<td>1</td>
<td>ARMORLAK, ARMORCPK</td>
</tr>
</tbody>
</table>

Parts 8-12 are pre-assembled in kit.
Part Identification – Bottom View

- Air Cylinder
- Main Spring
- Stationary Jaw
- Trigger
- Tertiary lock (for use outside private yard)
- Manual Override Pull Handle Hole. Also used for tertiary locking.
- Secondary Lock
- Three way air valve
- Knockout rod
- Knockout rod nut
- Cover Plate
- Locking Jaw
- Torsion Spring
- Operating Handle
- Wear Plate

Serial Number
(Behind air cylinder)

Month Year
Sequence of Month Above

28th fifth wheel manufactured in September, 2014

Example serial number 09140028

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Part Identification – Top View

- Wear Plates (removable for easy maintenance)
- Locking jaw access (under wear plate)
- Stationary Jaw
- Locking Jaw
- Air cylinder bolt access (under wear plate)
- Knockout rod access (under wear plate)
- Slot for easy knockout rod maintenance