Lock Assembly Kit Replacement Instructions

**Lock Assembly Kit (ARMORLAK)**

**Warning!**
- Keep hands away from throat of operating fifth wheel
- Wear Personal Protective Equipment (PPE)
- Make sure the wheel is disarmed before maintenance
- Follow all instructions
- Read operating manual before use
- Use proper procedures
- Use proper tools

**Lock Assembly Kit Video available at:**
fifthwheel.com/armor
Choose “Training” then “Lock Assembly Replacement”

**Lock Assembly Kit**
Part # **ARMORLAK**
Standard Repair Time: 1 Hour

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Stationary jaw</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Locking jaw</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Torsion spring</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Trigger</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Secondary lock</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Operating handle</td>
<td>1</td>
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<tr>
<td>7</td>
<td>Main spring</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Spring tensioner</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Cover plate</td>
<td>1</td>
</tr>
</tbody>
</table>

**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

**For instructional video scan or go to**
fifthwheel.com/maintenance/
Choose “Lock Assembly Replacement”

All kits include hardware
Disassembly

Hint: If you need help with parts identification see pages 9-11.

1

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

Hint: A fifth wheel is closed when the locking jaw is completely across the throat of the 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 two 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.

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.

9

Pull the locking jaw out of the top surface of the wheel.

Unscrew knockout rod until it clears the stationary jaw.

All kits include hardware

See video at fifthwheel.com/maintenance/
Choose “Lock Assembly Replacement”
Unfasten the four stationary jaw nuts starting with the two rear nuts toward the toes.

Helpful hint: Keep the bolt from turning using a 1/4" allen wrench from below.

Remove operating handle nut and bolt.

Remove air cylinder/secondary lock bolt.

Remove trigger assembly.

All kits include hardware

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

1. Insert new trigger assembly into top plate.

2. Fasten air cylinder bolt and tighten nut.
   - Proper secondary lock bolt hole
   - Do not use this outside bolt hole
   - Position secondary lock between air shaft bolt holes
   - Fasten air cylinder to the correct secondary lock bolt hole. Outside hole in secondary lock is for manual operation. Inside hole is for the air cylinder bolt.

3. Install operating handle bolt.

4. Install stationary jaw.
   - Fasten the four stationary jaw nuts starting with the two rear nuts toward the toes.
   - Helpful hint: Keep the bolt from turning using a 1/4" allen wrench from below.

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

All kits include hardware
Assembly

5. Turn in the knockout rod all the way until it bottoms out.

6. Install lock washers before installing new cover plate.

7. Fasten the two cover plate nuts and bolts.

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

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

All kits include hardware

See video at fifthwheel.com/maintenance/
Choose “Lock Assembly Replacement”
10. Close the fifth wheel by pulling the main spring.

11. Install both wear plates.

12. 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.

13. 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).

14. Install the cotter pin.

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

All kits include hardware.

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

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Included in kit</th>
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<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>
</tr>
<tr>
<td>7</td>
<td>Locking jaw</td>
<td>1</td>
<td>ARMORJRK, ARMORLAK</td>
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<tr>
<td>8</td>
<td>Torsion spring</td>
<td>1</td>
<td>ARMORTAK, ARMORLAK, ARMORSRK</td>
</tr>
<tr>
<td>9</td>
<td>Trigger</td>
<td>1</td>
<td>ARMORTAK, ARMORLAK</td>
</tr>
<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>
<td>1</td>
<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>15</td>
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<tr>
<td>16</td>
<td>Cover plate</td>
<td>1</td>
<td>ARMORTAK, ARMORLAK, ARMORCPK</td>
</tr>
</tbody>
</table>

Parts 8-13 are pre-assembled in kit.
Part Identification – Bottom View

- Three way air valve
- 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
- Operating Handle
- Wear Plate
- Cover Plate
- Locking Jaw
- Torsion Spring

Serial Number (Behind air cylinder)

Knockout rod
Knockout rod nut

Month
Year
Sequence of Month Above

Example serial number 09140028

28th fifth wheel manufactured in September, 2014

28th fifth wheel manufactured in September, 2014

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Part Identification – Top View

- **Wear Plates** (removable for easy maintenance)
- **Air cylinder bolt access** (under wear plate)
- **Locking jaw access** (under wear plate). Locking jaw slides in for easy maintenance.
- **Knockout rod access** (under wear plate). Slot for easy knockout rod maintenance.

Stationary Jaw  Locking Jaw

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