# Fontaine<sup>®</sup> Fifth Wheel Ultra HR & Ultra HD Rebuild Procedures

- Disassembly
- Assembly
- Adjustments



Ultra HD



www.fifthwheel.com • 800-874-9780

#### **Dissassembly**

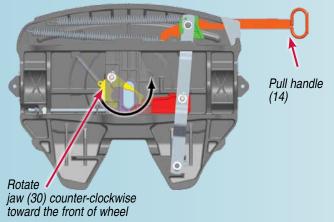


Cover plate removed for clarity. Refer to exploded view of assembly on page 6 to identify item number and parts.

#### Degrease fifth wheel before installing new parts

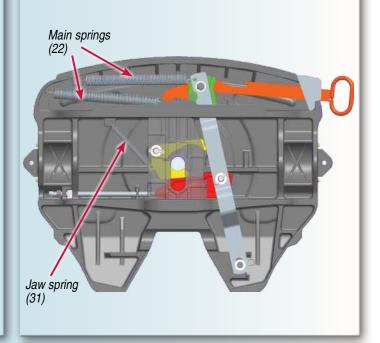
#### 1. Set the fifth wheel in the closed position

To do this, rotate the locking jaw (item 30) towards the front of the fifth wheel with a screw driver of adequate length to keep hands and fingers out of the throat of the wheel. This will partially close the wheel. Now pull out on the pull handle (item 14) a small amount and complete the rotation of the jaw toward the front of the wheel. Allow the pull handle to go in slowly for the wheel to completely close.



#### 2. Remove the jaw spring

Remove the jaw spring (item 31). Now remove main springs (item 22) from the operating handle and pull handle.

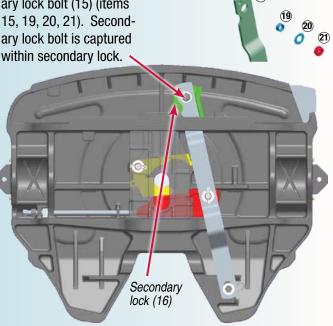


#### 3. Remove pull handle

Remove the 1/2" hex head bolt, spacer, washer and lock nut (items 17, 13, 12, 11) which secures the pull handle (item 14) to the secondary lock (item 16). Secondary lock (16) Pull handle (14)

#### 4. Remove secondary lock hardware

Remove the 5/8" hex nut (21), washer (20), and spacer (19) from secondary lock bolt (15) (items 15, 19, 20, 21). Secondary lock bolt is captured within secondary lock.

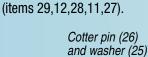


#### **Dissassembly**

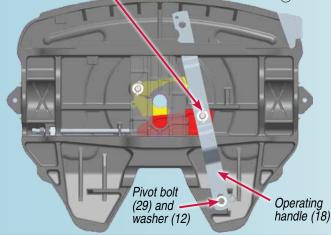


Cover plate removed for clarity. Refer to exploded view of assembly on page 6 to identify item number and parts.

#### **5. Remove the operating handle** hardware Remove the locking wedge cotter pin (item 26) washer (25) and operating handle pivot bolt, washers, spacer,

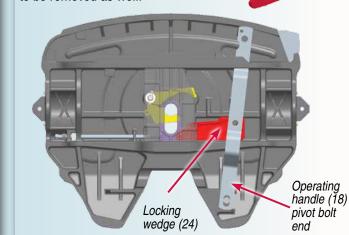


lock nut, and cotter pin



#### 6. Remove the operating handle and locking wedge

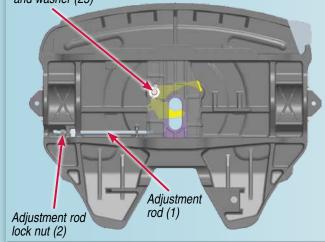
Slide locking wedge (item 24) towards outside of wheel and lift operating handle (item 18) from pivot bolt end. This will allow operating handle to be separated from locking wedge pin (item 23) while other end of operating handle is still in slot in fifth wheel. Once operating handle is free from pin remove from slot. This will allow the locking wedge and locking wedge pin to be removed as well.



#### 7. Back out adjustment rod and remove pivot pin clip

Back out adjustment rod (item 1) approximately 2" by first loosening locknut (item 2) and then turning counterclockwise. This will eliminate interference when removing and installing the rotating locking jaw. Remove the rotating locking jaw cotter pin (item 26) and washer (25).

Cotter pin (26) and washer (25)

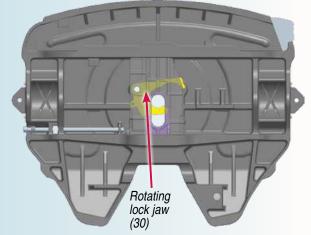


#### 8. Remove the rotating locking jaw

Raise the top plate and remove the pivot pin (item 7) that secures the rotating locking jaw (item 30). Remove the rotating locking jaw.



3



#### **Assembly**

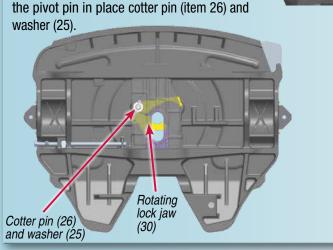
Before rebuilding the assembly, check to make sure that there are no cracks in the casting or other components. Also check bracket pin holes to ensure they are not worn oversize (pins should fit snugly). Refer to exploded view of assembly on page 6 to identify item number and parts.



#### Adequate lubrication should be used

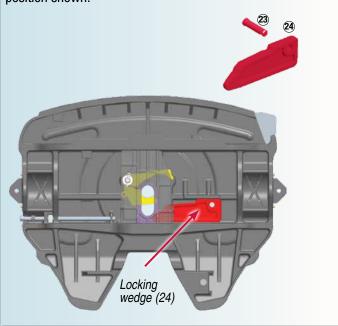
#### 1. Insert rotating locking jaw

Insert the rotating jaw (item 30) after applying a light coating of grease. Note: Insert the jaw so that the hole in the cover plate lines up with the hole in the rotating jaw. Raise the fifth wheel and then insert the pivot pin (item 7) into the fifth wheel and then into the rotating jaw. Note: Make sure the cotter pin hole side of the pivot pin is inserted into the fifth wheel first. Secure



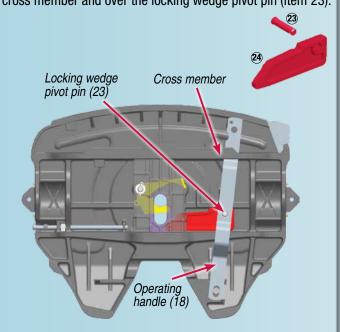
#### 2. Insert locking wedge

Insert the new pivot pin (item 23) into the locking wedge (item 24) after applying a light coat of grease. Insert the locking wedge (item 24) into the wheel in position shown.



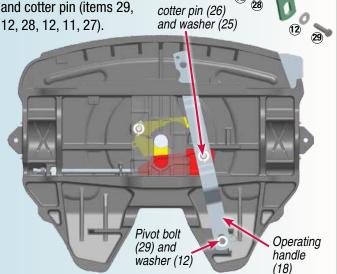
#### 3. Insert operating handle

With the locking wedge (item 24) slid out away from the center of the wheel insert the end of the operating handle (item 18) into the slot at the top of the fifth wheel through cross member and over the locking wedge pivot pin (item 23).



## 4. Attach operating handle Attach the operating handle

Attach the operating handle (item 18) to the locking wedge and pivot pin (item 23, 24) using a cotter pin and washer (item 26, 25) to secure the connection. Install the operating handle pivot bolt, washers, spacer, lock nut, and cotter pin (items 29, cotter



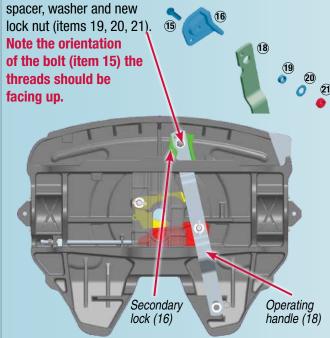
#### **Assembly**



Refer to exploded view of assembly on page 6 to identify item number and parts.

#### 5. Attach the secondary lock

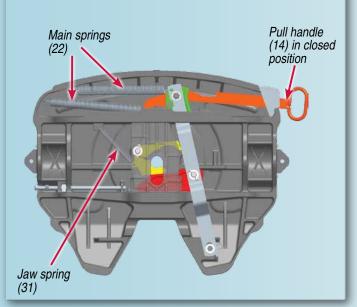
Attach the secondary lock (item 16) to the operating handle (item 18) using the 5/8" hex head bolt (item 15) which fits into secondary lock. Install



# **2**1

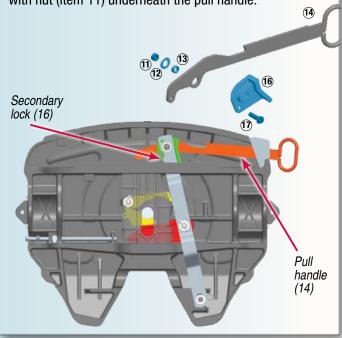
#### 6. Attach springs

Make sure the fifth wheel is completely closed. Attach the jaw spring (item 31) to the rotating locking jaw. Now install pull handle main spring (item 22) and operating handle main spring (item 22).



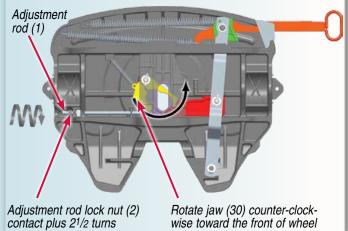
#### 6. Attach pull handle

Attach pull handle (item 14) to secondary lock (item 16) using hex bolt, spacer, washer, and lock nut (items 17, 13, 12, 11). Note that bolt (item 17) should be facing down with nut (item 11) underneath the pull handle.



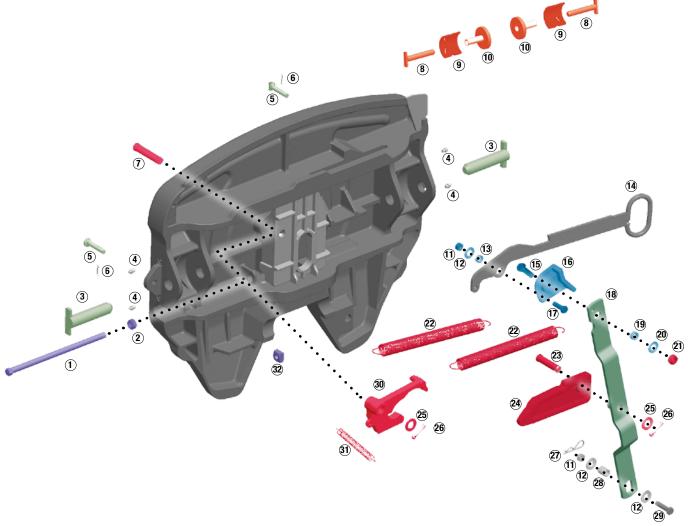
#### 7. Adjust fifth wheel

Open the fifth wheel, insert a 2" kingpin and close the wheel. Turn the adjustment rod (item 1) clockwise (inward) until it contacts the end of the locking wedge (item 24). Now turn the adjustment rod clockwise (inward) an additional 21/2 complete revolutions. This will give the recommended 0.525 mm (.02") running clearance. Tighten the adjuster rod jam nut (item 2). The fifth wheel should operate freely and smoothly without binding or interference.



# PARTS CONNECTION

### Ultra HD and Ultra HR rebuild diagram



Repair Item 30 31 7 23 24 22 21 25	kit (KIT-RPR-UHH-L) Description Rotating locking jaw Jaw spring Pivot pin, long Pivot pin, short Locking wedge Main spring Lock nut, 5/8-11 Washer, 3/4"	Quantity  1 1 1 1 2 1 2		
26	Cotter pin	2		
Spring 22 31	kit (KIT-SPR-ULHH) Main spring Jaw spring	2 1		
Adjuster rod kit (KIT-ROD-UHH)				
① ② ③2	Adjustment rod Adjustment rod nut Square nut	1 1 1		
Pull ha	ndle kit (KIT-PUL-UL-L)			
14 17 11 12 13	Pull handle Hex head bolt, 1/2"-13 x 1.5" Lock nut, 1/2"-13 Washer, 1/2" Bushing, 5/16"	1 1 1 2 1		

Secondary lock kit (KIT-SEC-ULHH-L) Ultra LT, Ultra HD and Ultra HR				
Item	Description	Quantity		
16	Secondary lock	1		
15	Hex head bolt, 5/8-11 x 1.75	1		
(5) (19) (20) (21) (17) (13) (12) (11)	Spacer bushing	1		
20	Flat washer 5/8"	1		
21)	Lock nut, 5/8-11	1		
17	Hex head bolt, 1/2-13 X 1.5	1		
13	Bushing, 5/16"	1		
12	Washer, 1/2"	1		
11	Lock nut, 1/2"	1		
Operating lever kit (KIT-OPR-UL)				
18	Operating handle	1		
15	Hex head bolt, 5/8"-11 x 1.75	5" 1		
19	Spacer bushing	1		
20	Flat washer 5/8"	1		
(15) (19) (20) (23) (25)	Pivot pin, short	1		
25	Washer, 3/4"	1		
26	Split cotter pin	1		

		12 29
	HD mounting pin kit PIN-UHD) Description Bracket pin Bracket retainer pin Cotter Pin	Quantity 2 2 2
Hollar	HR mounting pin kit for a lower assemblies PIN-UHR-H) Description Bracket pin, Holland Bracket retainer pin Cotter pin Holland bracket liner	Quantity 2 2 2 2 2
<b>Fonta</b>	HR mounting pin kit for ine lower assemblies  PIN-UHR-F) Description Bracket pin Bracket petainer pin Cotter pin Fontaine bracket spacer	Quantity 2 2 2 2 2



### Ultra HD and Ultra HR diagram key

Item	Description	Quantity
	Adjustment rod	1
2	Adjustment rod nut	i
3	Bracket pin	2
4	Grease fitting	4
<u>(5)</u>	Bracket retainer pin	2
6	Cotter Pin	2
$\tilde{\overline{7}}$	Pivot pin, long	1
8	Bracket pin, Holland	2
9	Holland bracket liner	2
(10)	Fontaine bracket spacer	2
① 3 4 5 6 7 8 9 10 13 14	Lock nut, 1/2"	2
(12)	Washer, 1/2"	3
(13)	Bushing, 5/16"	1
14	Pull handle	1
15	Hex head bolt, 5/8-11 x 1.75	1
16	Secondary lock	1
17	Hex head bolt, 1/2"-13 x 1.5'	' 1
18	Operating handle	1
19	Spacer bushing	1
20	Flat washer 5/8"	1
<b>21</b>	Lock nut, 5/8-11	1
22	Main spring	2
23	Pivot pin, short	1
24	Locking wedge	1
25	Washer, 3/4"	2
20 21 22 23 24 25 26 27 28 29 30	Cotter pin	2
27	Hair pin cotter	1
28	Pivot spacer	1
29	Hex head bolt, 1/2-13 x 2.00	1
30	Rotating locking jaw	1
31 32	Jaw spring	1
<b>32</b> )	Square nut	1

7





Fontaine Parts Connection • 7574 Commerce Circle • Trussville, AL 35173 800-874-9780 • Fax: 205-655-9982

www.fifthwheel.com

