

# Comfort Ride Pn 308

Fifth Wheel Hitch

## Installation Instructions

*All specifications are subject to change without notice.*

Thank you for choosing the Roadmaster Comfort Ride Fifth Wheel Hitch system. Like other products in the Roadmaster line, your new hitch was made in America using the highest quality materials, components and engineering standards.

The Roadmaster Comfort Ride Fifth Wheel Hitch was designed to be installed on any standard fifth wheel rail mounting system (Reese, etc.) that is bolted to the bed of the truck. It can also be attached to any factory under-body using Roadmaster's puck adapter system.

Roadmaster Comfort Ride offers manufacturer-specific puck mount adapters for Chevy/GM, RAM and Ford heavy-duty trucks applications (available separately):

<b>Chevy/GM adapters (up to '19):</b>	Part number 23100
<b>Chevy/GM adapters ('20 and later):</b>	Part number 23120
<b>Ram adapters:</b>	Part number 23200
<b>Ford adapters:</b>	Part number 23400

### NOTE

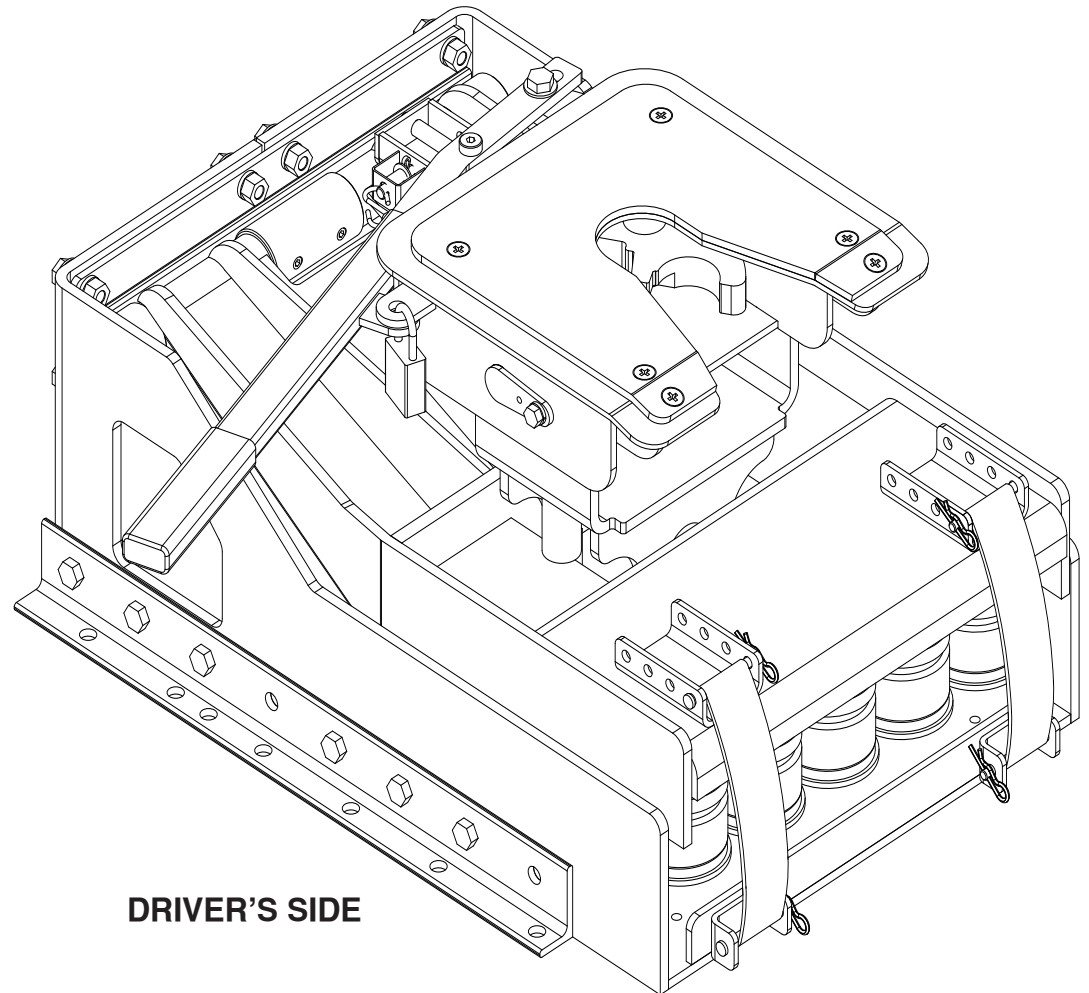
*If your truck is already equipped with an integrated gooseneck hitch system (B&W or similar), use adapter part number 23850.*

### Parts List

We have made every effort to make sure that your Comfort Ride Fifth Wheel Hitch System ships with all necessary hardware. Please confirm that your kit is complete before proceeding with the installation. If you find that any parts/hardware is missing, please call Roadmaster at (800) 669-9690.



FRONT OF  
VEHICLE



DRIVER'S SIDE

## Safety Definitions

These instructions contain information that is very important to know and understand. This information is provided for **safety** and to **prevent equipment problems**. To help recognize this information, observe the following symbols:

### WARNING

**WARNING** indicates a potentially hazardous situation which, if not avoided, could result in property damage, serious personal injury or even death.

### CAUTION

**CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in property damage, or minor or moderate personal injury.

### ATTENTION

**ATTENTION** indicates a note of special importance regarding a potential fit issue of which you should be aware.

### NOTE

*Refers to important information and is placed in italic type. It is recommended that you take special notice of these items.*



ROADMASTER, Inc. • 6110 N.E. 127th Ave.  
Vancouver, WA 98682 • 800-669-9690  
Fax 360-735-9300 • roadmasterinc.com  
855994-04 02.20

## Before You Begin...

Before placing the hitch assembly into the bed of the truck, it may be desirable to reduce the weight of the assembly by removing the hitch head first. Please refer to "Hitch Head Removal" near the end of these instructions.

### CAUTION

The model 308 Roadmaster Comfort Ride Fifth Wheel Hitch System was neither designed nor intended for use on trucks with a bed length of less than 6-1/2' (standard bed). Use of the hitch on short bed (5-1/2') trucks can result in interference between the truck cab and the front cap of trailer during sharp turns, resulting in severe damage to truck and/or trailer. Roadmaster will not be held responsible for damage resulting from misapplication.

### WARNING

The hitch assembly weighs 300 pounds. Do not attempt to lift the hitch assembly into the truck bed by yourself. Use a hoist, forklift or other device, or solicit the help of others. Attempting to lift the hitch assembly without assistance of some kind could result in personal injury.

## For Direct Mounts

The 308 can be directly mounted to the truck frame. The hitch head can be moved closer or further away from the cab as needed to gain the necessary clearance between the front cap of the trailer and the cab of the truck.

Further adjustment can be achieved by unbolting the angle iron mounts and placing them in the desired mounting position. Then, use the angle iron mounts as templates and mark the holes, drill each one, and secure the angle iron mounts to the truck frame.

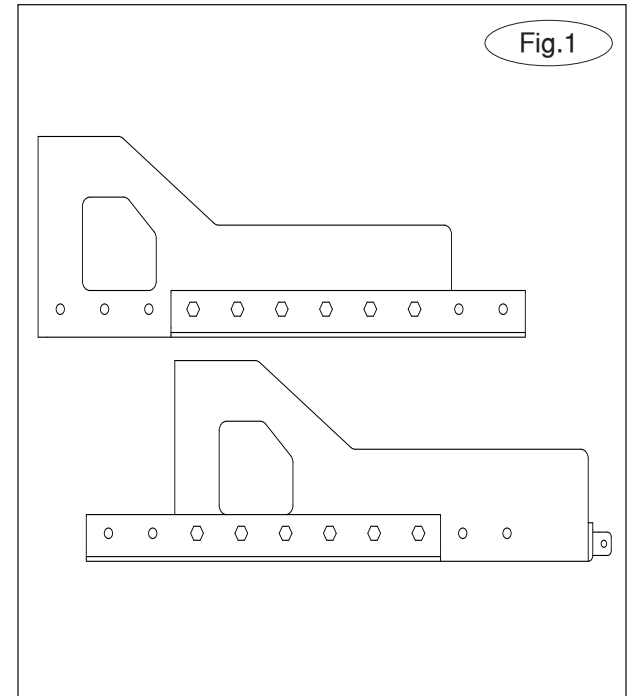


Fig.1

Hardware to secure the angle iron mounts to the truck frame is **NOT** included, as different lengths of bolts are required depending upon the vehicle frame.

Now, re-attach the angle iron mounts to the hitch using at least six bolts (#19), lock washers (#29), and nuts (#23) on each side. Tighten to 100 ft-lb. The two most 'extreme' positions that are possible while still retaining the use of six mounts are depicted in Figure 1. Be sure all bolts attaching the angle iron mounts to the frame and fifth wheel are tightened before proceeding.

### NOTE

*If the hitch rail mounting system or puck adapter system is not already in place in the bed of the truck, please refer to the instructions that came with your mounting system and install it before continuing with the hitch installation. Try to center it over the axle, for weight distribution purposes.*

*continued on next page*

## For Puck Mounts

Note that the 308 can be mounted to the Puck Adapter Plates in multiple positions to move the hitch closer or further away from the cab as needed to gain the necessary clearance between the front cap of the trailer and the cab of the truck. Install all six bolts (#19), lock washers (#29), and nuts (#23) on each side and tighten to 100 ft-lb.

## For Rail Mounts

Optional rail adapter kit 23196 will replace the angle iron mounts, allowing you to attach the 308 to standard bed rails. Attach the 308 to the optional rail adapter kit 23196 using the bolts (#19), lock washers (#29), and nuts (#23) from the angle iron mounts on each side and tighten to 100 ft-lb.

Pin the hitch to the rail mounts using the four hitch pins and clips included with the 23196.

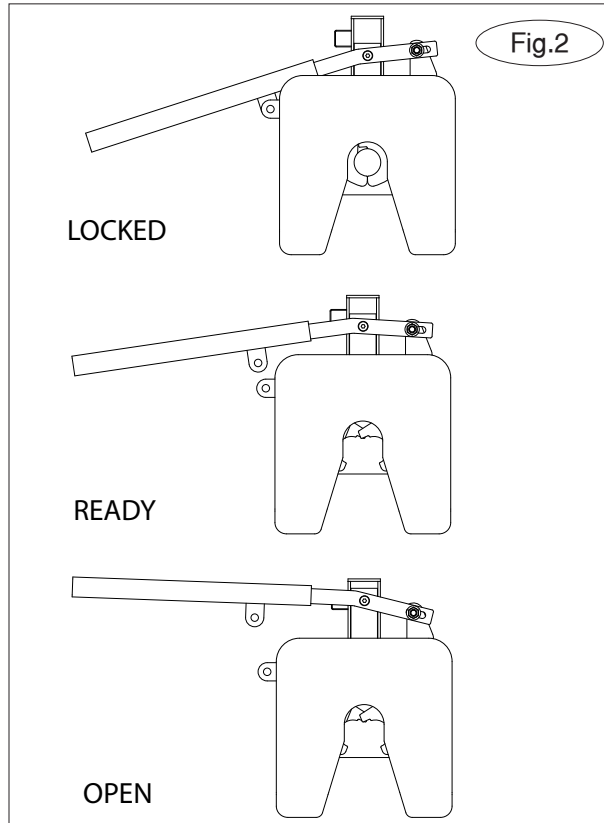
## Installing the Handle

1. Locate the handle (#56) and remove the packaging. Slide the handle over the lever (#39) with the D-tab on the handle facing the D-tab on the hitch head. Secure the handle by connecting the carabiner (#1) on the handle to the small length of chain (#12).

When installed correctly, the two D-tabs should line up when the handle is pulled rearward to the locked position, so that the supplied padlock can be inserted.

## Hitch Handle Positioning

The hitch handle has three different operating positions LOCKED, READY and OPEN. Figure 2 depicts the proper angle for each position.



## Hitching Instructions



**Always install wheel chocks on both the front and rear of the trailer tires to prevent trailer movement while hitching/unhitching. Failure to chock the wheels may result in the vehicle rolling freely and may result in property damage or severe personal injury.**

### ATTENTION

**If the trailer kingpin is fitted with an add-on plastic anti-friction disc, remove it. The Comfort Ride Fifth Wheel Hitch is already equipped with a black anti-friction plate (#40). Leaving the add-on anti-friction disc in place will create interference that will prevent successful hitch coupling.**

2. When the handle is in the READY position, the hitch is ready for hook up. To put the handle into this position, remove the padlock and slide the handle toward you. The chain on the end of the handle will disengage the locking pin (#46), thereby allowing the handle to move to the READY position.

3. Back your truck to the trailer and use the fifth wheel jacks to adjust the kingpin plate height to just above the anti-friction plate on the hitch head (#49).

4. When backing in, the hitch jaws (#51, #52) will close around the trailer's kingpin.

5. If the handle will not move to the LOCKED position, the kingpin is not fully engaged. You may need to use your truck to apply substantial force between the hitch and the kingpin to properly lock the jaws. It is only safe to tow when the handle is in the LOCKED position and the padlock can lock the two D-tabs.



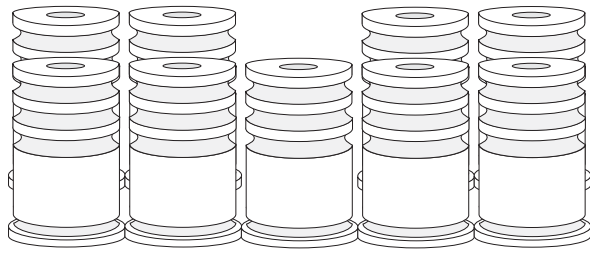
**Improperly locked jaws will cause the trailer to disconnect and fall on the tow vehicle, causing severe damage to truck and trailer that will not be covered under product warranty.**

### ATTENTION

**If you have followed all of the above procedures to hitch the trailer and you still cannot lock the hitch, make sure that the trailer kingpin is free of any paint, powder coating or burrs that may be causing interference. These may be carefully removed with sandpaper or fine file.**

6. Once you have verified that the hitch is locked, fully retract the trailer jacks. While the jacks are retracting, you will notice that the hitch head will gradually lower and compress the air cells (#2), which is normal. The air cells should compress approximately 1" to 1-1/2". If the cells do not compress at least one inch, raise the trailer and remove air cells (they are easily pried off) until the proper compression is achieved.

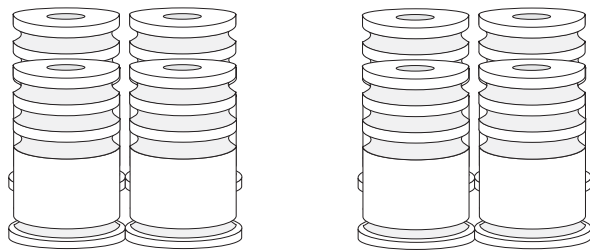
Fig.3



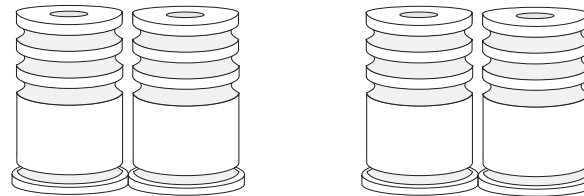
nine air cell configuration



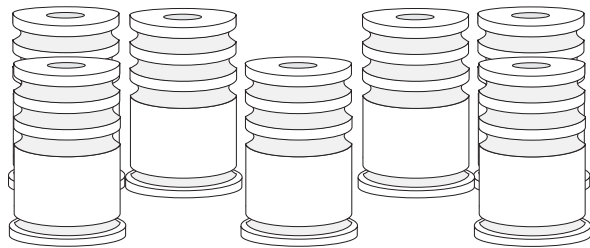
five air cell configuration



eight air cell configuration



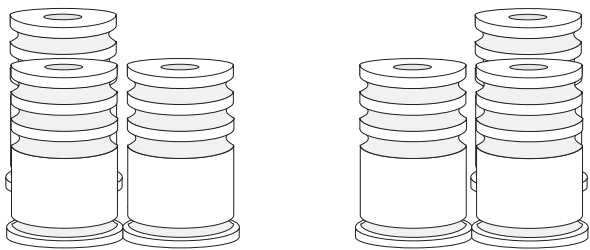
four air cell configuration



seven air cell configuration



three air cell configuration



six air cell configuration



two air cell configuration

## IMPORTANT

The 308 is equipped with nine air cells. If you need to remove cells, see Figure 3 for the proper configuration (next page). Do not use fewer than two cells.

## Inspect the Truck and Trailer

7. With the appropriate number of air cells installed, completely lower the trailer onto the fifth wheel hitch.

## ⚠ WARNING

If the fifth wheel does not have at least six inches of clearance, major, non-warranty property damage or personal injury could occur.

8. If the trailer is roughly level and you have at least six inches of clearance: move to steps 12 through 15 (“Unhitching Instructions”).

If not: you will need to adjust the hitch height. Follow the instructions in steps 9 through 11 (“Hitch Height Adjustment”) to level the trailer.

## Hitch Height Adjustment

The 308 is shipped at its highest hitch head height. If necessary, use the following methods to achieve the desired height.

## Lowering the Swingarm

9. Begin by unpinning the yellow retention straps (#45). Note that the swingarm (#54) is bolted to the front of the hitch base (#53) with a total of eight bolts (#28), flat washers (#27), lock washers (#29) and nuts (#23). The eight bolts can be removed and the swingarm moved down into one of three lower sets of holes to achieve the desired height.

With the swingarm bolted in the new position, you may need to adjust the air cell height that most closely allows the swingarm to be roughly level with the hitch base.

## Lowering the Air Cell Height

**10.** Hinge the swingarm up and support it by temporarily placing a 2" x 4" wooden block between the bottom of the swingarm and the hitch base. Unbolt and completely remove the spacer block (#55) so that the air cells sit on the bottom of the hitch base.

If you remove the spacer block, ensure that the swingarm is roughly level to the hitch base.

**Before proceeding, ensure that all loosened bolts have been re-tightened.**

Now, re-secure the yellow retaining straps using the holes that result in the least amount of slack possible.

### NOTE

*In some configurations, the yellow strap may need to double back and be pinned in place using the extra retaining pins included with your 308.*

## Adjusting the Pin Box

**11.** If more adjustment is required, the trailer's pin box typically offers height adjustments in two-inch increments.

Proper height is achieved when the fifth wheel is roughly level and there are at least six inches of clearance between the truck and the fifth wheel.

## Unhitching Instructions

**Always install wheel chocks on both the front and rear of the trailer tires to prevent trailer movement while hitching/unhitching. Failure to**

**chock the wheels may result in property damage or severe personal injury.**

**12.** Lower the trailer jacks to raise the trailer so that the kingpin plate just clears the anti-friction plate on the hitch head.

**13.** Next, it will be necessary to relieve tension on the hitch jaws. To do this, place the truck's transmission into Neutral, release the parking brake, and remove your foot from the brake pedal momentarily to relieve pressure on the hitch jaws.

**14.** Re-apply the brakes, place the transmission into Park and set the parking brake. Removing pressure from the hitch jaws will ensure easier operation of the handle (#56). **If you are parked on an incline such that the truck is uphill from the trailer, it may be necessary to back the truck toward the trailer to relieve any tension on the hitch jaws.**

**15.** Pull the handle toward you to release the locking pin (#46) so you can move the handle to the OPEN position. This will disengage the hitch jaws from the kingpin. Only when the locking handle is in the OPEN position are you ready to move the tow vehicle away from the trailer.

### NOTE

*The jaws may or may not open. But if the handle is in the OPEN position, they are disengaged and you may move the tow vehicle.*

Once completely disconnected, it is recommended to put the hitch handle in the READY position so the hitch is ready to use the next time you hook up.

## Hitch Head Removal

### NOTE

*It may be desirable to remove the hitch head (#49) prior to installation (to reduce the weight), when removing the hitch assembly from the truck bed, or for inspection/maintenance purposes.*

**To remove the hitch head:**

**16.** Remove the two bolts (one per side, #17) then pull out each retainer pivot pin (#47). Note that the pivot pins have two holes in them, one of which is threaded. If the pivot pin(s) are binding, insert the bolt(s) you just removed into the threaded hole(s) in the pivot pin. As you tighten the bolt(s), it will draw the pivot pin(s) out.

**17.** After the pivot pins are removed, carefully lift the head from the yoke (#50) with the right and left hand torsion head springs (#10, #11). The springs are specifically designed for right and left positions.

## Hitch Head Reinstallation

**18.** Verify that the torsion head springs are in their correct right/left positions by inserting the small, bent leg of the spring in the hole on the yoke so that the long leg of the spring is facing toward the cab of the truck. Carefully place the hitch head onto the yoke, keeping the springs in place as you set it down. It may be necessary to jiggle the hitch head to align the holes for pivot pin placement. Install one side pin first, leaving the pin sticking out 1/2". Install the other side.

**19.** Carefully tap the pivot pins in place with a hammer. After both pivot pins are fully in place, tighten the two 3/8" bolts, securing the pivot pins into position on the hitch head.

## Hitch Maintenance

### NOTE

*DO NOT use an anti-friction plate on your trailer, as the hitch already has one on it. DO NOT use any oil or grease on the anti-friction plate. If the plate becomes dirty, use only water and a cloth to wipe it clean.*

*continued on next page*

## Troubleshooting Guide

### Hitch won't lock

- a. If the trailer kingpin is already fitted with an anti-friction disc, remove it or it will cause binding. This hitch is fitted with an anti-friction plate from the factory.
- b. If the handle will not move to the LOCKED position, the kingpin is not fully engaged. You may need to use your truck to apply substantial force between the hitch and the kingpin to properly lock the jaws. It is only safe to tow when the handle is in the LOCKED position and the padlock can lock the two D-tabs.
- c. Sometimes, when the hitch will not lock around the kingpin, the problem is caused by paint, powder coat or dents/burrs/other damage to the trailer's kingpin OR hitch jaws. Use sandpaper or a fine file to remove them.

### Hitch won't release

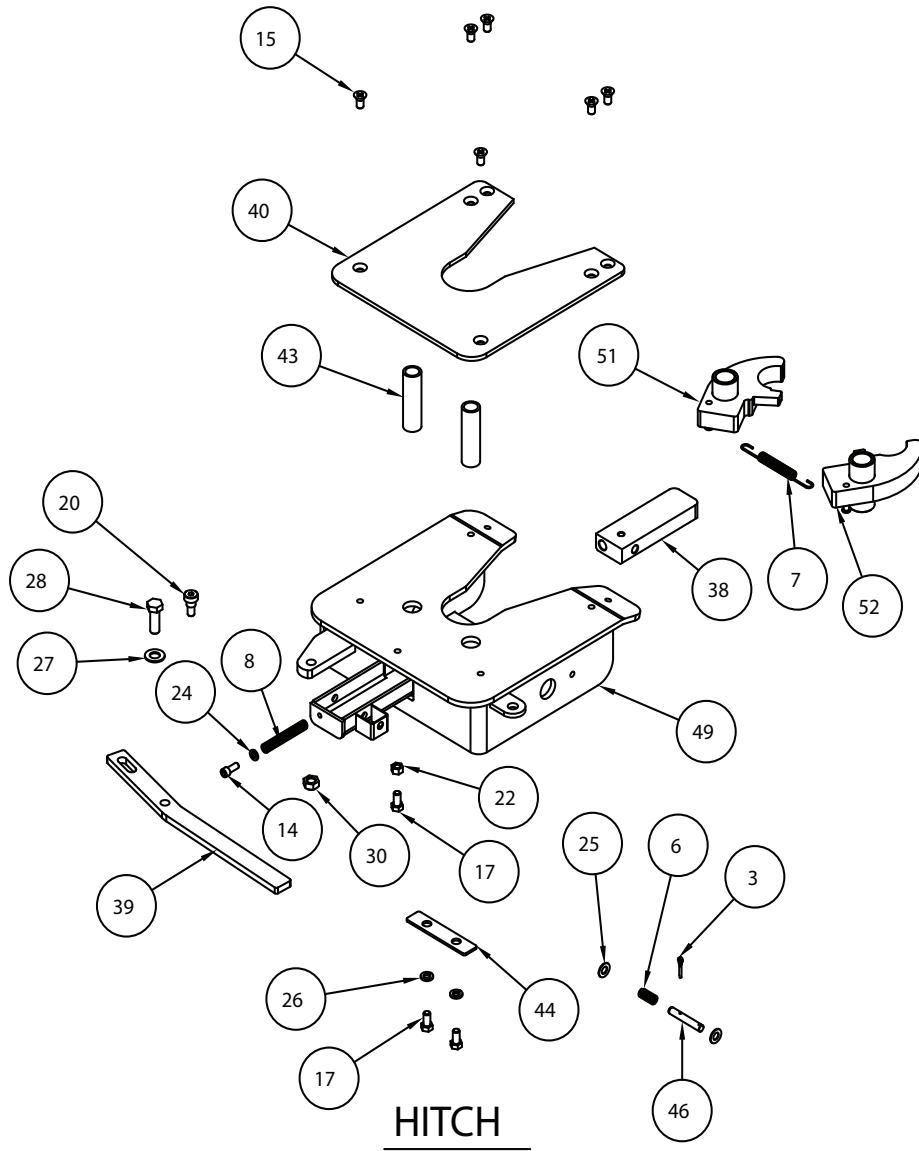
- a. Make sure that the tongue jacks haven't raised the kingpin too high or it will cause binding. See Step 12 in the "Unhitching Instructions."
- b. Relieve pressure on the hitch jaws by placing the transmission in Neutral, releasing the parking brake and brake pedal momentarily. **If you are parked on an upward incline, it may be necessary to back the truck toward the trailer to relieve any tension on the hitch jaws.** See Step 14 in the "Unhitching Instructions."

### Handle is in the OPEN position but jaws aren't open

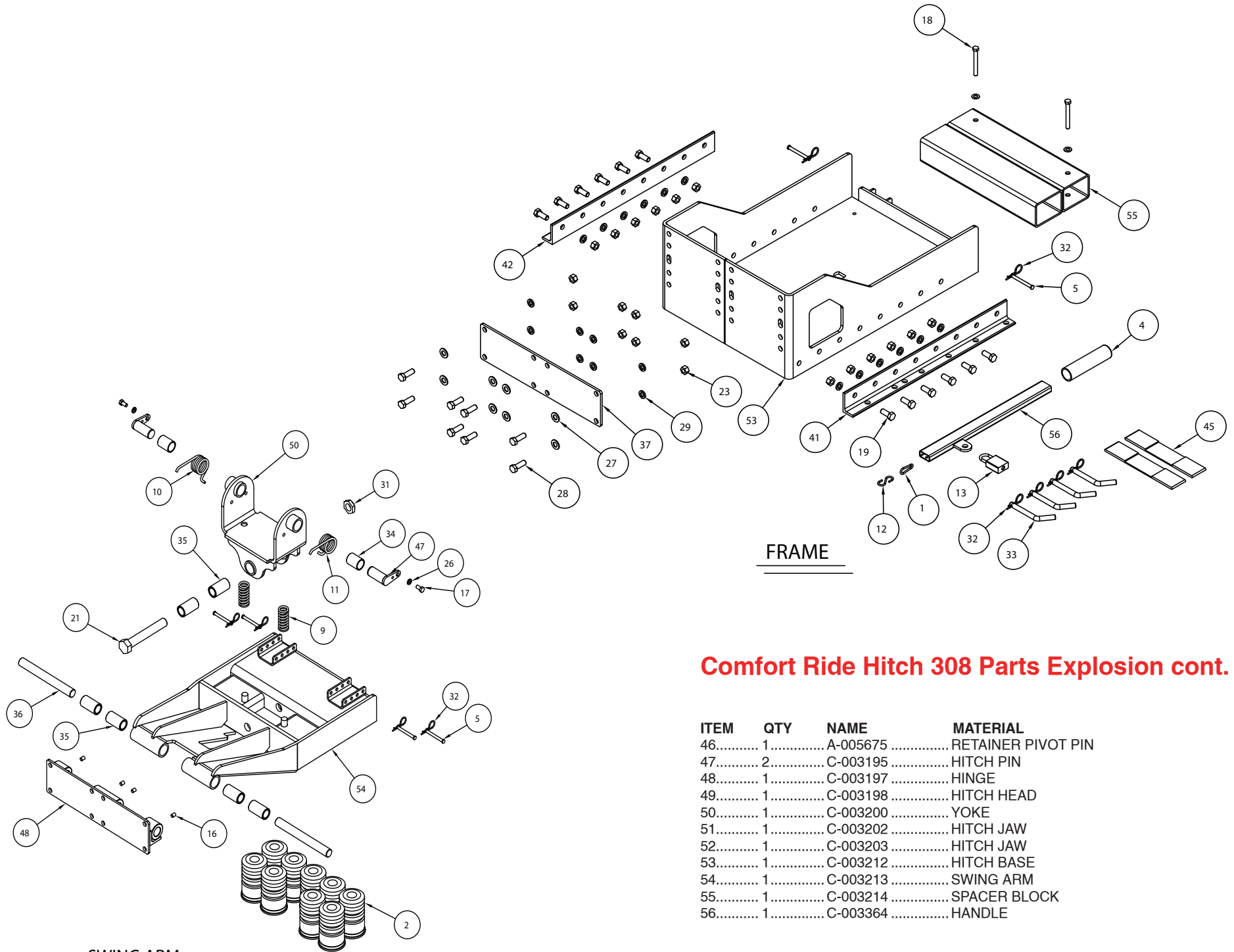
Once the handle is in the OPEN position, the hitch is unlocked, but the jaws may not be open, especially during the break-in period. Pull the truck forward slightly and the jaws will open, releasing the kingpin.

# Comfort Ride Hitch 308 Parts Explosion

Hardware to secure the angle iron mounts is NOT included, as different lengths of bolts are required depending upon the vehicle frame.



ITEM	QTY	NAME	MATERIAL
1.....	1.....	200017-00.....	CARABINER
2.....	9.....	205259-00.....	AIR CELL
3.....	1.....	220001-00.....	COTTER PIN
4.....	1.....	220002-00.....	1 1/4" I.D. x 6" FOAM RUBBER HANDLE GRIP
5.....	6.....	220005-00.....	5/16" x 3" CLEVIS PIN ZINC PLATED
6.....	1.....	220008-00.....	SPRING-1/2" x 1"
7.....	1.....	220009-00.....	SPRING-DOUBLE ENDED
8.....	1.....	220010-00.....	SPRING-1/2" x 4 1/2"
9.....	2.....	220011-00.....	SPRING-1 1/4" x 2 9/16"
10.....	1.....	220012-00.....	TORSION SPRING RH
11.....	1.....	220013-00.....	TORSION SPRING LH
12.....	1.....	220027-00.....	CHAIN
13.....	1.....	301.....	PADLOCK
14.....	1.....	350033-60.....	5/16-18 x 3/4" SOCKET HEAD MACHINE SCREW YELLOW ZINC
15.....	6.....	350051-00.....	3/8-16 x 1/2" COUNTERSUNK PHILLIPS HEAD SCREW
16.....	4.....	350051-10.....	3/8-16 x 1/2" SET SCREW
17.....	5.....	350053-20.....	3/8-16 x 3/4" BOLT GRD 8 ZELLOW ZINC
18.....	2.....	350070-325.....	3/8-24 x 3 1/4" BOLT GRD 8 YELLOW ZINC
19.....	12.....	350094-80.....	1/2-13 x 1 1/4" BOLT GRD 8 YELLOW ZINC
20.....	1.....	350104-00.....	1/2" x 3/8" SHOULDER BOLT GRD 8 YELLOW ZINC
21.....	1.....	350195-20.....	1-14 x 6 1/2" GRADE 8 HEX BOLT YELLOW ZINC
22.....	1.....	350254-15.....	3/8-16 HEX NUT GRD 8 YELLOW ZINC
23.....	20.....	350258-03.....	1/2-13 HEX NUT GRD 8 YELLOW ZINC
24.....	1.....	350303-40.....	5/16-18 GRD 8 LOCK WASHER YELLOW ZINC
25.....	4.....	350305-50.....	3/8" FLAT WASHER GRD 8 YELLOW ZINC
26.....	4.....	350305-80.....	3/8" LOCK WASHER GRD 8 YELLOW ZINC
27.....	9.....	350308-25.....	1/2" FLAT WASHER GRD 8 YELLOW ZINC
28.....	9.....	350701-00.....	1/2-13 x 1 1/2" BOLT GRD 8 YELLOW ZINC
29.....	20.....	350733-00.....	1/2" LOCK WASHER GRD 8 YELLOW ZINC
30.....	1.....	350735-00.....	1/2-13 LOCK NUT GRD 8 YELLOW ZINC
31.....	1.....	350805-00.....	1-14 LOW PROFILE GRADE 2 NYLON INSERT LOCKNUT
32.....	10.....	357030-00.....	0.120" R-CLIP
33.....	4.....	357038-00.....	HITCH PIN
34.....	2.....	A-005556.....	SHORT NYLATRON BUSHING
35.....	6.....	A-005557.....	LONG NYLATRON BUSHING
36.....	2.....	A-005560.....	PIN
37.....	1.....	A-005567.....	PLATE
38.....	1.....	A-005585.....	LOCK BLOCK
39.....	1.....	A-005595.....	LEVER
40.....	1.....	A-005599.....	ANTI-FRICTION PLATE
41.....	1.....	A-005622.....	DRIVER SIDE ANGLE MOUNT
42.....	1.....	A-005623.....	PASSENGER SIDE ANGLE MOUNT
43.....	2.....	A-005638.....	JAW TUBE
44.....	1.....	A-005639.....	JAW PIN RETAINER
45.....	2.....	A-005662.....	12" STRAP



## Comfort Ride Hitch 308 Parts Explosion cont.

ITEM	QTY	NAME	MATERIAL
46.....	1.....	A-005675 .....	RETAINER PIVOT PIN
47.....	2.....	C-003195 .....	HITCH PIN
48.....	1.....	C-003197 .....	HINGE
49.....	1.....	C-003198 .....	HITCH HEAD
50.....	1.....	C-003200 .....	YOKE
51.....	1.....	C-003202 .....	HITCH JAW
52.....	1.....	C-003203 .....	HITCH JAW
53.....	1.....	C-003212 .....	HITCH BASE
54.....	1.....	C-003213 .....	SWING ARM
55.....	1.....	C-003214 .....	SPACER BLOCK
56.....	1.....	C-003364 .....	HANDLE