

### Scope

This bulletin clarifies the reasons for excessive vertical and horizontal movement between the fifth wheel top plate and fixed mounting bracket or slider mounting bracket (saddle). It will help determine the correct thickness bracket pad required and define corrective maintenance for excessive vertical and horizontal movement at the bracket connection.

### Reasons for Excessive Vertical and Horizontal Movement

The primary reasons for excessive vertical and horizontal movement between the Simplex Series fifth wheel top plate and bracket connections are:

1. Worn bracket pads.
2. Worn bracket shoes.
3. Worn bracket pins.
4. Worn bracket pin holes in the top plate.
5. Worn bracket pin holes in the mounting bracket.
6. Casting variation in the bracket pockets.

There are various bracket pad thicknesses which can be used to control the vertical and horizontal movement in the bracket connection. These pads can be used to compensate for wear and component variation in the bracket mounting connection.

#### Kit Part No./Bracket Pad Thickness Table

Kit Part No.	Bracket Pad Thickness
4000640	0.33"
4000528	0.38"
4000587	0.42"

**NOTE:** Kit 4000528 is the standard production kit.

### Determining Requirements for Replacing Bracket Pads

The bracket pads should be replaced when the clearance between the fifth wheel top plate and mounting bracket exceeds 5/16" vertical or 3/8" horizontal movement.

The vertical movement can be measured (see *Figure 1*) by prying up on the top plate and measuring the movement in the bracket connection.

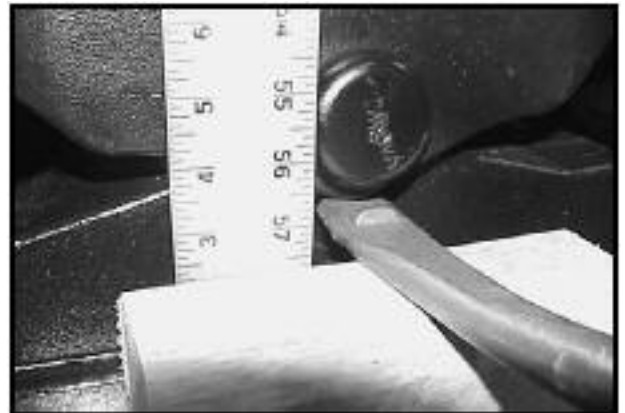
When measuring the top plate vertical lift on a slider, make sure to isolate the top plate and not include any lift from the saddle plate in the slider's rail segments.

To measure the horizontal movement between the fifth wheel and bracket, apply the trailer brakes and move the tractor forward (stretched units). Scribe two lines, one on the side of the bracket below the pin hole and another line on the fifth wheel even with the line on the bracket. Move the tractor rearward (compressed units) and scribe another line on the bracket even with the line on fifth wheel (*Figure 2*). The horizontal movement between the fifth wheel and bracket is the distance between the two scribed lines on the bracket. Horizontal movement must not exceed 3/8".

**NOTE:** There are three areas where horizontal movement may occur.

1. The jaw and kingpin; reference XL-FW499, XL-FW468, XL-FW456.
2. The fifth wheel and bracket described here; reference XL-FW480.
3. The slider bracket (saddle) and slider base; reference XL-FW480.

When excessive vertical or horizontal movement is present, it is recommended that the bracket pads be replaced with the correct thickness pads, per the table. At the time the bracket pads are replaced, the bracket pins should be inspected for wear. Both bracket pins should be replaced if either one of them has worn 1/8" from the 1.5" original size. It is also recommended that the polyurethane bracket shoes be inspected for any signs of damage or wear. Replace as needed.



*Figure 1*

# SIMPLEX® Bracket Connection Inspection

**NOTE:** DO NOT measure plate lift immediately after a trailer has been uncoupled from the fifth wheel. A temporary set of the bracket pads may have occurred. The bracket pads will recover after a short period of time.

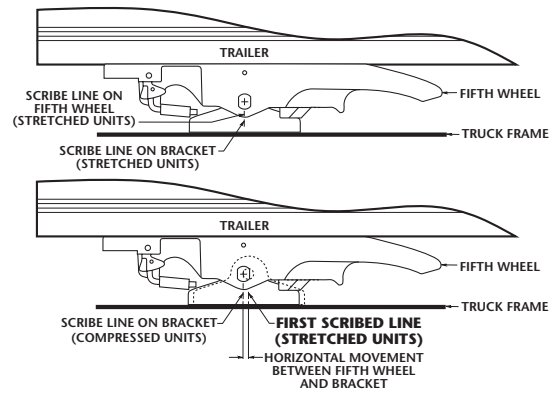
## Maintenance

Following are the steps necessary to correct the excessive vertical and horizontal movement condition:

1. Remove the clinch pins and bracket pins that attach the fifth wheel top plate to the mounting bracket.
2. Remove the fifth wheel top plate from mounting brackets and expose the underside of top plate.
3. Rotate the bracket shoes out of the bracket pockets (*Figure 4*).
4. Use a suitable tool to pop one end of the bracket pad out of the bracket pocket and remove the pads.
5. Install the new bracket pads into the pockets (*Figure 3*). It may be necessary to use a block and hammer to seat the bracket pads under the bracket pocket end stops.
6. Rotate bracket shoes in place against the bracket pocket end stops (*Figure 4*).
7. Reinstall fifth wheel top plate onto mounting brackets. Reinstall bracket pins and clinch pins. It may be necessary to compress the bracket connection in order to install the bracket pins.

After the maintenance has been performed, the fifth wheel top plate should articulate smoothly. No lubrication at the bracket connection is required.

Additional service information is available in Holland's Simplex Maintenance and Rebuilding Manual (XL-FW456), available on our website.



*Figure 2*



*Figure 3*



*Figure 4*



**GO THE DISTANCE.**

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