



**Technical Service Bulletin 19 002
Spartan Motors**

Date: 07/17/2019

REV: OR

Subject: Upper Shock Mounting Hardware

Condition: The upper shock mounting hardware may come loose over time due improper joint clamp load.

Applies To: Fire Truck IFS 20k and 24k Models

Mfg Date Range: October 31st 2014 to July 1st 2019.

Vocation: Fire Apparatus

Purpose: To provide instruction for inspection and repair of the effected joint.

Please Read the Entire Tech Tip Before Proceeding With Any Work. Follow industry standards regarding safety equipment and procedures.

Inspection and Repair should be conducted immediately.

Tools Needed:

1. 5/8” hex (Allen) drive socket. Example Snap-On item # SA20E
2. 1/2” or 3/4” drive torque wrench – 250 ft-lbs capable
3. 1/2” or 3/4” breaker bar
4. 1/2” drive, 12” long extension
5. 1 1/16” box end wrench or similar torque drive adaptor for a socket.

Parts: Kit #K715180 that includes the following:

- (2) 714189-01 – Long Spacers
- (2) 714190-01 – Short Spacers
- (2) 715176-01 – Socket head bolts
- (2) 710356-01 – Ny-lock nuts

Also include in the above kit are shims to address any variations in the width of cradle pocket (reference Step 2 and 5 below).

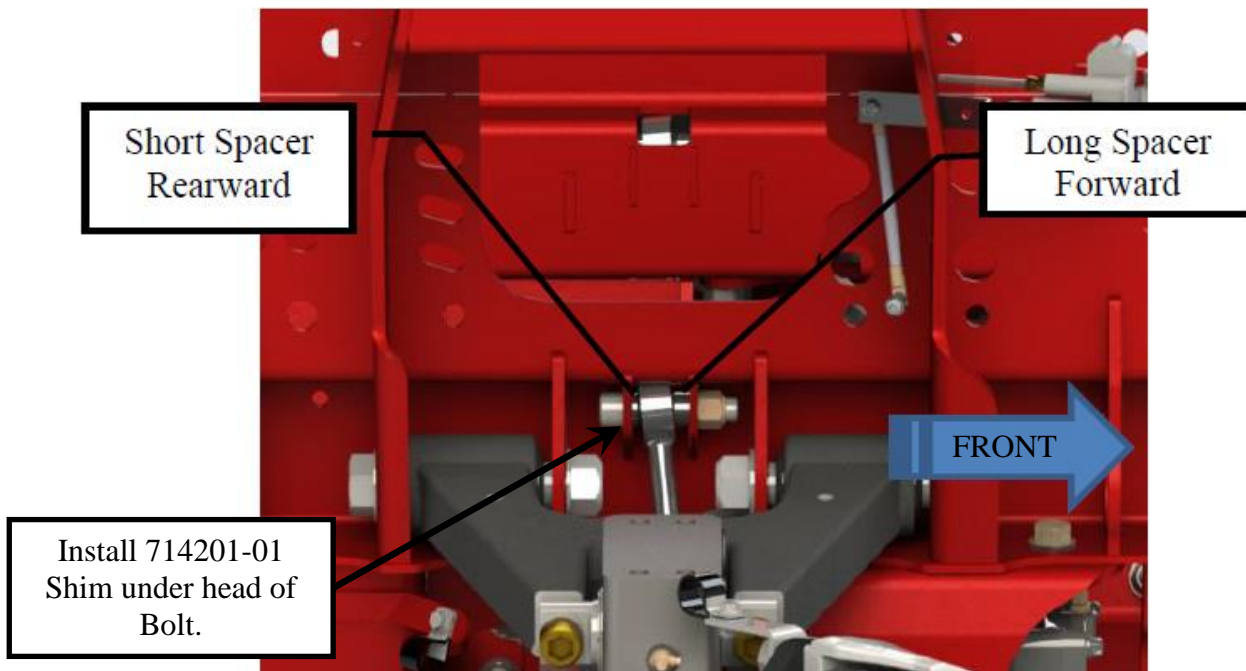
- (2) 714198-01 – 0.020” Shim
- (2) 714199-01 – 0.032” Shim
- (2) 714200-01 – 0.062” Shim
- (3) 714201-01 – 0.125” Shim
- (1) 715181-01 – “Go-No Go” Gage for use in Step 2.

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Replacement:

1. Remove and discard upper shock absorber eyelet hardware (nut, bolt, and spacers).
2. Use the 715181-01 “Go-No Go” Gage to check the width of the pocket near the bolt holes.
 - a. If the gage slips into the pocket, then the pocket is too wide and a shim will be needed to close the gap.
 - b. If needed, add shims between one of the spacers and the pocket inside face during reassembly such that the gap between the spacer and the pocket wall is minimized. Use one of the 0.062 shims (#714200-01) if necessary to check that the gap is less than 0.062” (Placing the shims against either the front or rear mount is acceptable).
3. Install new hardware including spacers and shims from kit #K715180 as shown below.
 - a. **Note:** One 714201-01 shims must be installed under the head of each 715176-01 Bolt.
 - b. **Assembly tip:** Insert bolt through the rear tab enough to hang needed shims and short spacer, place shock in position, advance bolt to engage shock, position long spacer, push bolt through front tab, and install nut.



Right side assembly shown

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4. Using a socket extension thru the access holes in the cradle, torque the head of the bolt to between 245 and 260 ft-lbs while holding the nut with a wrench.
5. Repeat Steps 1 through 4 on the opposite side.

Labor Allowance: 0.7 hr not to exceed \$85.00.

Note: To further assist our customers, if three (3) or more trucks are in close proximity, please contact Reyco Granning Warranty at (417) 466-1015 or email akuiken@reycogranning.com to arrange for a Reyco Granning Field Service Representative to conduct the repair.

For coverage please supply the following info with warranty claim and submit to chassis manufacturer.

1. Suspension serial number, located on tag at front of suspension
2. In Service Date
3. Inspection/repair date
4. Vehicle mileage