

SAFETY ADVISORY # 15-224**Hickory Springs Quad Steps**

Keystone RV Company is conducting a voluntary RECALL notification campaign in accordance with the National Traffic and Motor Vehicle Safety Act. It has been decided certain rivets marked as 96 or 55 which connect the 2nd & 3rd step at the hinge point and the inboard (rear) rivets marked as 08 (or 80) which connect the top step tread to the upper hinge bracket on the quad step may shear or pull out during use causing the step assembly to separate. If the rivet shears and causes a person to fall it will lead to an increased risk of personal injury. This safety advisory explains how to correct.

Model and Serial Numbers Included: 2013 - 2015 Montana Fifth Wheels
2014 - 2015 Raptor Fifth Wheels
2015 Voltage Fifth Wheels

Serial Number Range: 2013 - 2015 Montana Fifth Wheels
2013 - D4701315 – D4702416
2014 - E4700000 – E4701893
2015 - F4700000 – F4700334
2014 – 2015 Raptor Fifth Wheels
2014 - ER801144 – ER801314
2015 - FR800000 – FR800818
2015 – Voltage Fifth Wheels
2015 FZ990107 – FZ991176

Note – Check serial number on Key Express to verify the campaign is open.

Parts Required per Unit: (1) KRV # 472341 Step - Hardware Kit - Recall 15-224 - Hickory Springs Quad Step Recall - Gloss Black Rust-Oleum Protective enamel Spray Paint (pick up locally)

Tools Required: - Safety glasses - Drill With 1/2" chuck - 3/8" Drill Bit, Metal -
7/16" Drill Bit, Metal - 3/8" Drive Air Ratchet Wrench - 3/8" Drive Torque Wrench - 9/16" Deep
Socket, 3/8 drive - 5/8" Deep Socket, 3/8 drive - (2) - 9/16" Boxed End Wrench's - 5/8" Boxed
End Wrench - 11/16" Boxed End Wrench - 1/4" Dia. Drift punch - 16 oz. Ball
Peen Hammer

IDENTIFICATION & SETUP

Step 1 Locate the trailer on a level, flat and hard surface. Chock the wheels.

Step 2 Review figures 1 - 3 all three features must be confirmed to verify the step is a Hickory Springs step.



Fig. 1



Fig. 2 – Perforated or raised tread plate

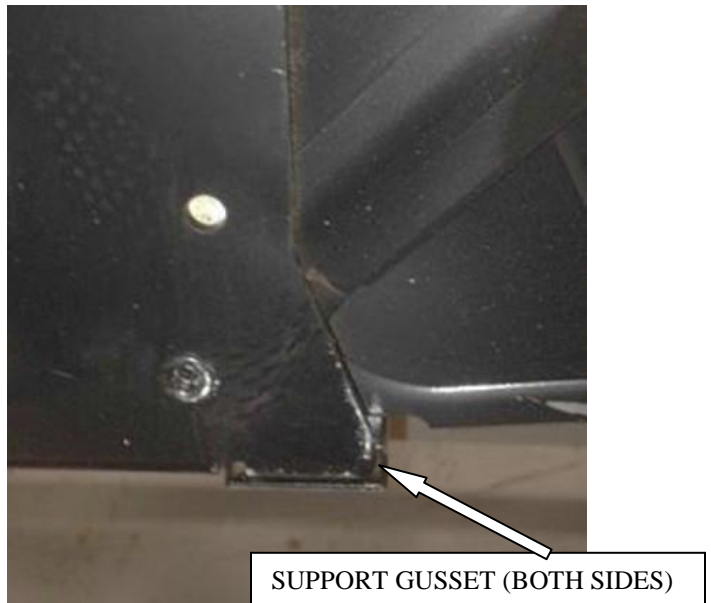


Fig. 3 – Lower gusset on the outboard side of step mounting plate

Step 3

Inspect the step date label located inside the RH end plate. Extend the steps for best access to the label. Steps dated between **10/18/12** and **1/9/15** are to be repaired. See figure 4.

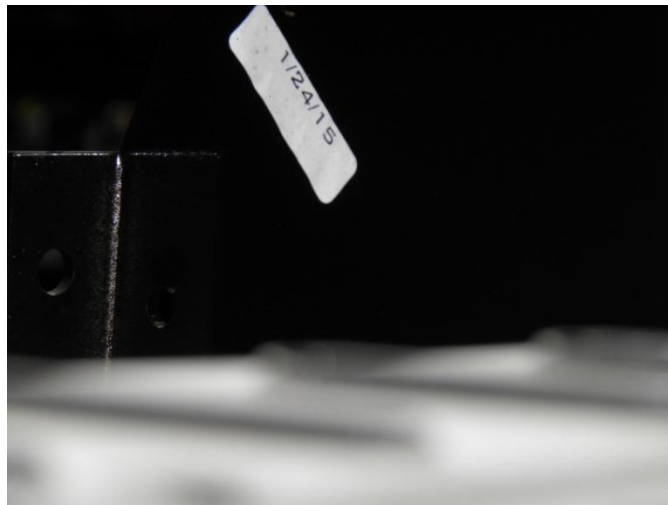


Fig. 4

Step 4

Determine the rivet number on the rivet located at the 2nd and 3rd step connection point. See figure 5, 6 & 7. Inspect the rivet located between the 2nd and 3rd step (2nd & 3rd step defined as the 2nd step from the ground level and the 3rd step from the ground level). Note which rivet is present (#55 or #96) ; _____.

Note: The supplied hardware kit contains parts to service (2) #08 (or 80) rivets, (2) #55 Rivets, and (2) #96 rivets. Dependant on which rivet was identified, there will be unused parts upon completion of the service advisory.

Select the hardware package associated with the identified rivet. **If the rivet is # 96;** select the hardware package labeled - “96 Rivet Kit”. This package will include (2)- 3/8-16 x 1 Hex Bolts, (2) 3/8-16 Stover nuts, (2) 3/8 Steel Flat Washers, (2) 3/8 Nylon Washers.

If the rivet is # 55; select the hardware package labeled - “55 Rivet Kit”. This package will include (2)- 7/16-14 x 1 Hex Bolts, (2) 7/16-14 Stover nuts, (2) 7/16 Steel Flat Washers, (2) 7/16 Nylon Washers.

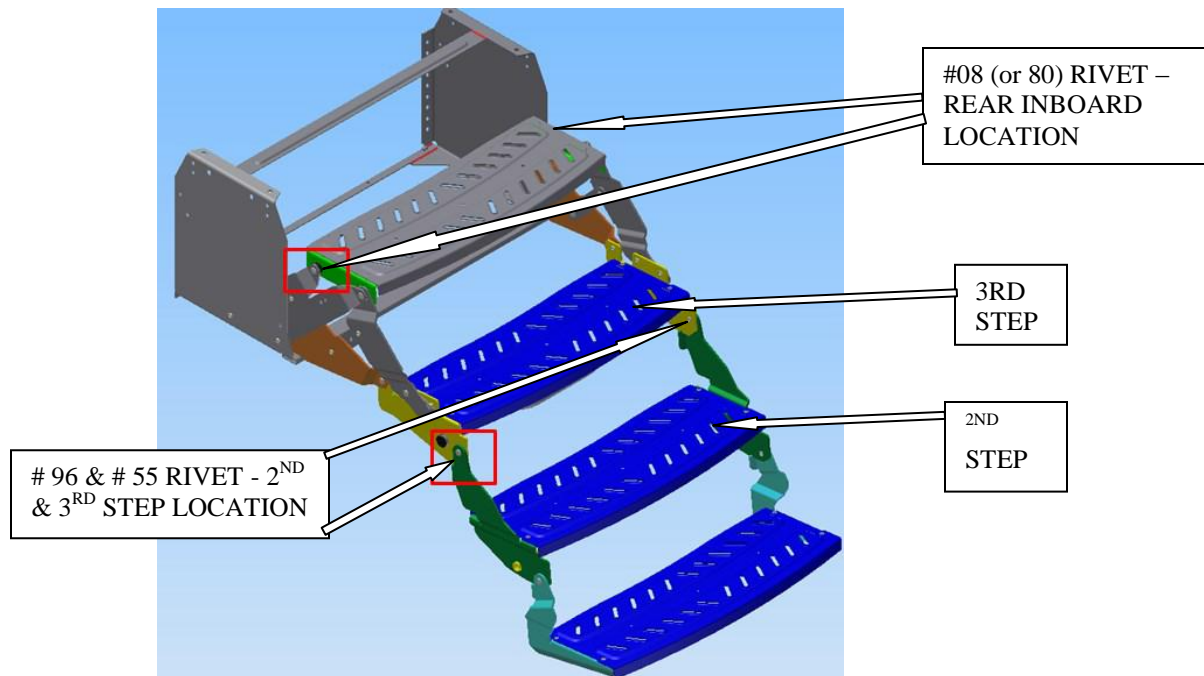


Fig. 5



Fig. 6 - #96 RIVET



Fig. 7 - #55 RIVET

2nd AND 3rd STEP RIVET REPLACEMENT

Step 1 Extend the steps for best access. Deploy from the stowed position, extending the steps to the first unfolded resting position. Do not extend the lower step treads from their stowed position.

Note: *Replace one rivet joint at a time, this will make reassembly easier.*

Step 2 Drill the rivet – using a 3/8” drill bit, drill out the right hand hinge rivet on the inner side of the step. Remove the hinge rivet from the step bracket. If necessary use the 1/4” drift punch and ball peen hammer to drive the rivet from the mounting hole. See figure 8 & 9.



Fig. 8



Fig. 9

Step 3 Enlarge the step hole -Refer to the noted rivet number from step 4 of the inspection process. If the rivet was # 96; use a 3/8” drill bit to enlarge the holes in the 2nd & 3rd steps. If the Rivet was # 55 use a 7/16” drill bit to enlarge the holes in the 2nd & 3rd step. See figure 10.



Fig. 10

- Step 4** Using the hardware from the identified kit in the identification step, reassemble the RH step hinge. Align the step mounting hole at the right hand side of the step. If necessary insert the 1/4" drift punch through the hinge hole as an alignment guide. Insert the nylon washer, between the lower step hinge bracket and the upper step hinge bracket. Insert the bolt from the outside of the hinge bracket hole. This should place the threaded end of the bolt toward the interior of the step assembly. Make sure the nylon washer is located between the inner and outer brackets. Install the steel washer and Stover nut onto the end of the bolt. See figure 11 for correct placement of hardware.
- Step 5** Repeat step 3 & 4 to complete the Left hand side of the step.

NOTE; torque to 12-16 ft.lbs. for proper step operation. If a torque wrench is not available tighten the bolt and nut to be snug so the step function is fluid without end play or being loose.

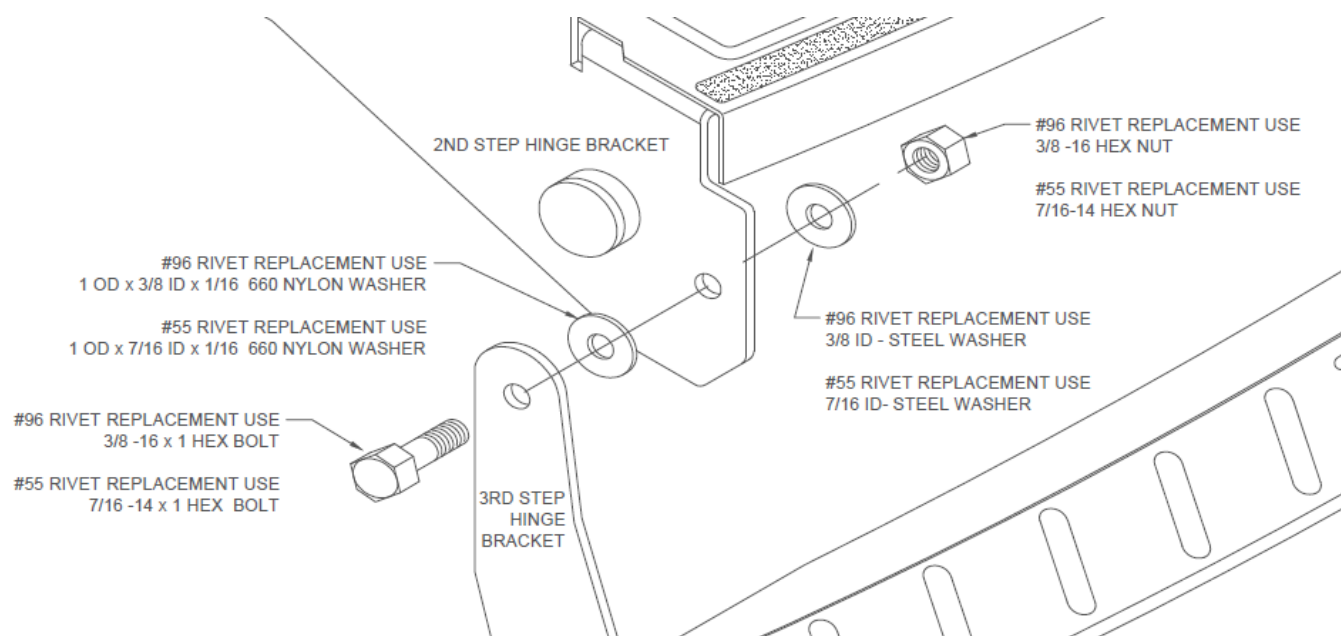


Fig. 11

TOP STEP REAR RIVET #08 (or 80) REPLACEMENT

- Step 1** Extend the steps for best access. Deploy from the stowed position, extending the steps to the first unfolded resting position. Do not extend the lower step treads from their stowed position.
- Step 2** Locate the rear rivet of the top step. The rivet will be identified with # 08 (or 80). See figure 12 & 13.

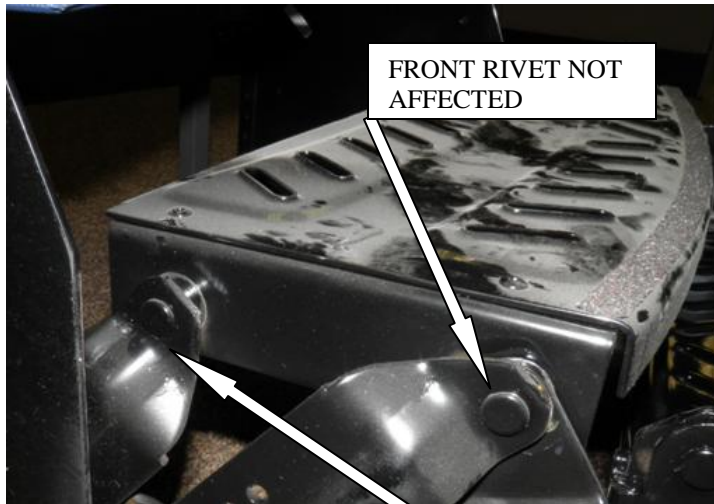


Fig. 12

#08 (or 80) RIVET – REAR LOCATION ONLY

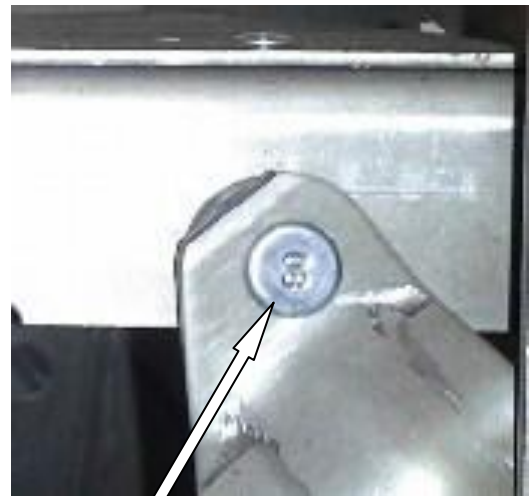


Fig. 13

NOTE: Only replace one rivet joint at a time, this will make reassembly easier.

Step 3

Drill the rivet -Position yourself below the step, using a 3/8" drill bit, drill through the flange area of the top tread inboard rivet. See figure 14.



Fig.14



Fig. 15

Step 4

Remove the mounting rivet from the step bracket. If necessary use the 1/4" drift punch and ball peen hammer to drive the rivet from the mounting hole.

Step 5

Using a 3/8 drill bit, enlarge the hole of the step plate assembly. The linkage arm can be used as a guide by lifting the steps with one hand to line up the holes of the linkage arm and step plate assembly. See figure 15.

Step 6

Align the step mounting hole at the RH side of the step. If necessary insert the 1/4" drift punch through the linkage hole as an alignment guide.

Step 7

Using the hardware from the 08 (or 80) Rivet Kit - insert the nylon spacer between the linkage arm and the upper step plate assembly.

Step 8

From outside the linkage arm; insert the 3/8-16 x 1 1/4 hex head bolt through the linkage arm hole, nylon spacer and the upper step plate assembly hole. This should place the threaded end of the bolt toward the interior of the step assembly. See figure 16.

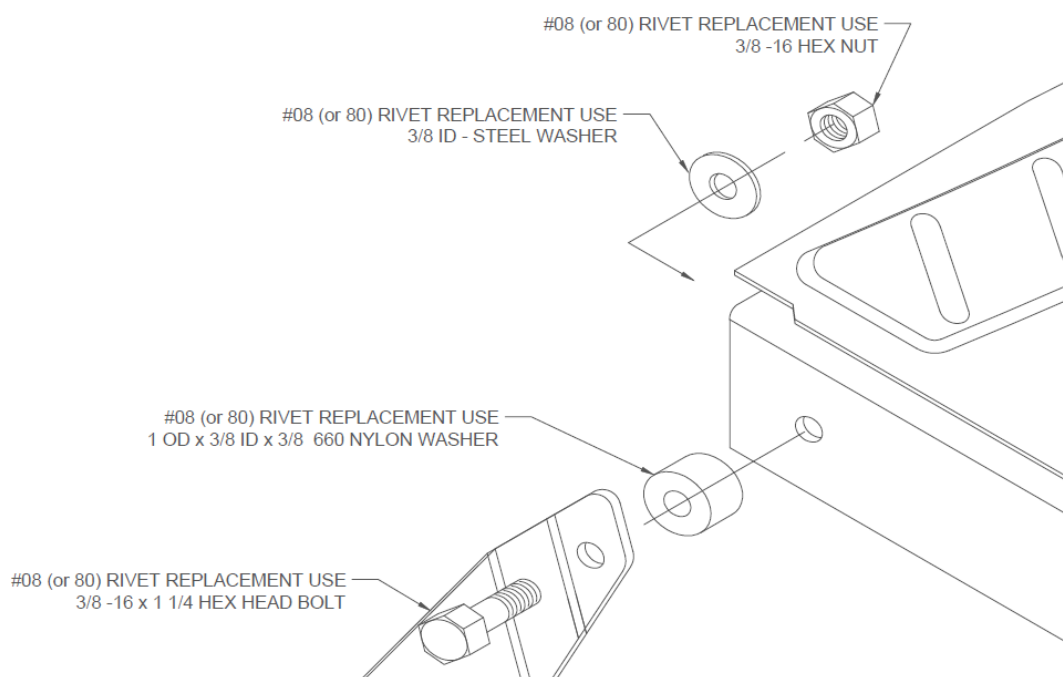


Fig. 16

- Step 9** Install the 3/8 steel washer and 3/8-16 Stover nut onto the end of the 3/8-16 x 1 ¼ hex head bolt. See figure 16.
- Step 10** Repeat step 8 & 9 to complete the Left hand side of the step
- NOTE; torque to 12-16 ft.lbs. for proper step operation. If a torque wrench is not available tighten the bolt and nut to be snug so the step function is fluid without end play or being loose.**
- Step 11** Refinish painted surface at the repaired areas of the step, as needed.

WARRANTY REIMBURSEMENT

Submit the request on Key Express using **Flat Rate Code # 7122442A** with **Service Advisory #15-224** noted in the customer complaint section. The time authorized for this repair is **.5 hours**.

If you have any questions, please call Customer Service at **(866) 273 - 1450**