Keystone RV Company

1/8/19

SAFETY ADVISORY # 19-342

Montana Dexter Axle Spindle

Keystone is conducting a voluntary RECALL notification campaign in accordance with the National Highway Transportation and Safety Act. It has been decided that the vehicles in the recall population may have a defective weld on the spindle for the axle. Under certain conditions during travel, the spindle weld can fail allowing the spindle and wheel assembly to come off the axle. This condition can lead to an increased risk of property damage and poor vehicle handling.

Models Included: 2019 Montana Fifth Wheel: Models 3120RL, 3121RL, 3130RE, 3561RL, 3700LK, 3701LK, 3720RL, 3721RL, 3790RD, 3791RD, 3810MS, 3811MS, 3854BR, 3855BR

Serial Number Ranges: K4701995 - K4702239

Parts Required: 1 (per affected axle) – KRV # 297697- Axle - 7000# - Straight - D70 - 8 Lug - 12" Ele. - Bronze Bushing – EZ

Tools Required:

-Impact Wrench - ½" drive (removal of wheels only)
-Torque Wrench – ½" drive
-Minimum 2" long socket extension, ½" drive
-Floor Jack – adequate to trailer weight
-Wire cutters/crimpers
-Deep Socket 13/16"x ½" drive
-Box end wrench 11/16"
-Wheel chocks
-Jack Stands

This Safety Advisory requires a Photograph of both axle tags

Note – Check serial number on Key Express to verify the campaign is open. Some vehicles were repaired before they left Keystone.

When performing warranty or recall service, please make certain that appropriate Personal Protective Equipment (PPE) is used.

The remedy is to inspect axle tag serial number to determine if the axle is affected. Axles with serial number 133160828 will need to be replaced.

REPAIR INSTRUCTIONS

ONE: PREPARING THE TRAILER

Step 1 Locate the trailer on a level, flat, hard surface. Take clear pictures of the axle tags and inspect for the affected serial number of 133160828. If the serial number does not match this proceed to Warranty Reimbursement for inspection. If the serial number does match 133160828 then proceed to Step 2.

Step 2 Use a floor jack of sufficient capacity to raise one side of the trailer. Place the floor jack under the main frame rail behind the rear spring hanger, leaving enough room to install a jack stand immediately behind the spring hanger. Elevate the frame just enough to take some of the weight off the wheel.

Step 3 Loosen the lug nuts on the rear wheel about a half turn. DO NOT remove lug nuts at this time.

Step 4 Continue elevating the frame until the rear tire just clears the shop floor.

Step 5 Install a jack stand of sufficient capacity directly behind the rear spring hanger.

Step 6 Relocate floor jack to an area just forward of the front spring hanger, leaving enough room to install a jack stand immediately in front of the spring hanger.

Step 7 Use a floor jack of sufficient capacity to raise one side of the trailer. Place the floor jack under the main frame rail forward of the rear spring hanger, leaving enough room to install a jack stand immediately forward of the spring hanger. Elevate the frame just enough to take some of the weight off the wheel.

Step 8 Loosen the lug nuts on the forward wheel about a half turn. DO NOT remove lug nuts at this time.

Step 9 Raise the frame until the forward tire just clears the shop floor.

Step 10 Install a jack stand of sufficient capacity just forward of the front spring hanger.

Step 11 With both tires now slightly off the ground finish removing the lug nuts and the two wheels from the trailer.

Step 12 Repeat Steps 2 – 11 for the other side of the trailer.

TWO: **AXLE REPLACEMENT**

Step 1 Support one of the axle tubes with a hydraulic jack. See Figure 1.

Step 2 Disconnect the brake wires for the axle from the trailer wiring harness that runs along the inside of the frame on the off door side of the vehicle. Note: Do not disconnect the wires at the back of the brake assembly. See Figure 2.

Fig. 1

Fig. 2

Step 3 Remove the shackle bolts attaching the springs to the spring hangers or equalizer links. See Figure 3.

Fig. 3

Step 4 Carefully lower the axle and remove from under the vehicle.

Step 5 Slide the new axle under the trailer positioned so the free end of the brake wires on the axle can be connected to the trailer brake wiring harness on the off door side.

Step 6 Attach the spring using new shoulder bolts and lock nuts. Placing the box end wrench on the bolt head and the torque wrench on the nut, Torque to 30 – 50 ft.-lbs. Note – be sure shoulder portion of the bolt is installed correctly through the shackle links and spring hangers so the suspension parts can rotate freely.

Step 7 Reattach the brake wiring disconnected in Step 2 from the axle to the trailer wire harness using new wire connectors.

Step 8 Repeat steps 1 – 7 for the other axle.

THREE: WHEEL INSTALLATION

WHEEL & HUB PAINT MUST BE REMOVED PRIOR TO WHEEL REINSTALLATION

Step 1 The black paint that has transferred from the hub face to the mounting surface of the wheel must be fully removed.

Step 2 For the wheel, apply lacquer thinner to the back side (hub-mating surface) side of the wheel with a shop rag to soften the black paint. Rub the area with a type “A” very fine Scotch-Brite® pad until clean. Dry the surface completely. See Figures 4 & 5.

Warning: Do not allow solvent or equivalent to make contact with the tire. Do not use liquid paint remover as this will pit and damage the aluminum wheel. Do not use a wire wheel (brush) or grinder to remove the paint from the wheel as this will also damage the wheel.

Fig. 4 Before Cleaning

Fig. 5 After Cleaning

Step 3 For the hub face, apply liquid paint remover or equivalent to the wheel-mating surface of the hub. Use a wire wheel (brush) to clean all black paint from the wheel-mating surface, that is, all areas of the hub face that come in direct contact with the wheel. Avoid damaging the hub face with this process! After the paint is removed, wash off the area with water to remove any remaining residue. Dry the surface completely. See Figures 6 & 7.

Step 4 Make a final inspection of these surfaces before mounting the wheels. If any grease is present use a brake cleaner or degreaser. Rinse any cleaned areas with water to remove residue. Dry the surface completely. See Figure 7.

Warning: When using chemicals (paint remover, brake cleaner/degreaser) be sure to utilize the "Personal Protective Equipment" (PPE) recommended by the manufacturer through the Safety Data Sheet (SDS) and dispose in accordance with all Federal, State and Local Laws.

Warning: When cleaning the hub face with the wire wheel brush avoid excessive pressure on the studs. Applying too much force here could damage the threads on the studs.

Fig. 6 Before Cleaning

Fig. 7 After Cleaning

FOUR: WHEEL ASSEMBLY INSTALLATION

Step 1 Using a clean rag, wipe down all lug nuts and tapered nut seats on wheel to remove any foreign debris.

Step 2 Start the lug nuts on each stud by hand.

Step 3 You must use the star pattern and torque wrench when tightening the lug nuts to the wheel. This sequencing pattern shows how to progressively tighten the lug nuts to best achieve the proper torques and clamp load. See Figure 8.

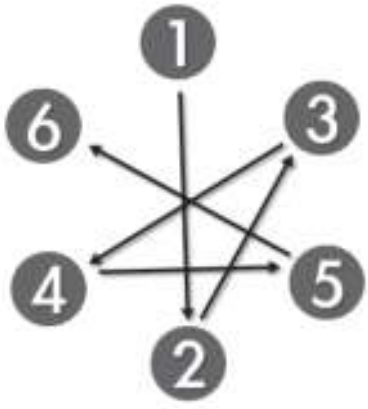

Fig. 8

Step 4 Using the star pattern outlined in Figure 8, tighten the lug nuts until the 1st stage torque (20-25 ft-lbs) outlined in Figure 9 is achieved. Verify the lug nuts are properly positioned in the tapered seats of the wheel.

Wheel Torque Requirements			
Wheel Size	**1st Stage**	**2nd Stage**	**3rd Stage**
15"	20-25 ft-lbs	55-60 ft-lbs	110-120 ft-lbs

Fig. 9

Step 5 Using the star pattern outlined in Figure 8, tighten the lug nuts until the 2nd stage torque (55-60 ft-lbs) outlined in Figure 9 is achieved.

Step 6 Lower the trailer to the ground.

Step 7 Using the star pattern outlined in Figure 8, tighten the lug nuts until the 3rd and final stage (110-120 ft-lbs) is achieved. See Figure 9.

Step 8 Use a dial or digital torque wrench to verify that the proper amount of torque has been applied.

NOTE: Reminder – Follow-Up re-torque required at 10, 25, and 50 miles.

WARRANTY REIMBURSEMENT

INSPECTION ONLY

Submit the claim with clear pictures of both axle tags on Key Express using **Flat Rate Code # 7134242F**

In the Complaint section note: Safety Advisory # 19-342

In the Cause section note: Spindle Weld Inspection

In the Correction section note: Serial number is XXXXXXXXX and is not affected. Inspection only

The amount of time authorized for this repair is **.5 hour** per unit.

REPAIR

Submit the claim with clear pictures of both axle tags on Key Express using **Flat Rate Code # 7134242B**

In the Complaint section note: Safety Advisory # 19-342

In the Cause section note: Spindle Weld

In the Correction section note: Affected serial number found. Replace axles. No part return.

The amount of time authorized for this repair is **2.5 hour** per axle.

PARTS DISPOSITION

Field destroy the axle after the claim has been processed.

Please call Keystone RV Customer Service at **(866) 273-1450** if you have any questions.