Keystone RV Company

SAFETY ADVISORY # 20-388

Hideout 209LHS Axles Tires Rims

Keystone is conducting a voluntary RECALL notification campaign in accordance with the National Highway Transportation and Safety Act. It has been decided that vehicles in this population have 3500 pound axles and ST205/75R14D tires and rims rather than the 4400 pound axles and ST255/75R15D tires and rims as specified on the Federal Identification Tag. Incorrectly installed axles, tires, and rims can be unintentionally overloaded which may lead to an increased risk of a crash.

Models Included:	2020 Hideout Travel Trailers: 290LHS
Serial Number Range:	L7242323 - L7242332
Parts Required:	2 – KRV # 248744 - Axle - 4400# - Straight - D-44 - 6 Lug - TM - UL - 10"E
	5 – KRV # 568972 - Tire - Karrier - ST225/75R15 - D/6H - Mod - Black
	4 – KRV # 492757 - Tire - Center Cap - 4.25" - Chrome - w/Chrome Plug
	12 – KRV # 238533 - Axle - AP Kit - 7/16-20 - Flange Nut
Tools Required:	

-Impact Wrench - $\frac{1}{2}$ " drive (removal of wheels only)	-Deep Socket 13/16"x 1⁄2" drive
-Torque Wrench – $\frac{1}{2}$ " drive	-Box end wrench 11/16"
-Deep Socket 11/16"x ½" drive	-Minimum 2" long socket extension, ½" drive
-Wheel chocks	-Floor Jack – adequate to trailer weight
-Jack Stands, adequate to trailer weight	-Wire cutters/crimpers

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

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

The remedy is to check the serial number on Key Express to verify the campaign is open and replace the axles along with the correct tire and rim package.

REPAIR INSTRUCTIONS

AXLE REPLACEMENT

Step 1

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

Step 2

Remove battery positive wire.

Step 3

Replace spare tire with KRV # 568972 - Tire - Karrier - ST225/75R15 - D/6H - Mod - Black.

Step 4

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. Do the same with the front spring hanger.

<u>Note</u>: Never raise the unit by placing a jack under an axle beam, this can cause damage to the axle beam.

Step 5

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

Step 6

Continue elevating the frame until the tire just clears the shop floor.

Step 7

Install jack stands of sufficient capacity directly behind the rear spring hanger and one directly in the front of the forward spring hanger.

Step 8

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

Step 9

Repeat Steps 4 - 8 for the other side of the trailer.

Step 10

Remove the AP kit hardware from the axles and replace the existing axles with KRV part number 248744 - Axle - 4400# - Straight - D-44 - 6 Lug - TM - UL - 10"E.

Step 11

Reinstall the AP kit hardware into the new axles replacing the old mounting flange lock nuts with new using KRV part number 238533 - Axle - AP Kit - 7/16-20 - Flange Nut.

Step 12

Proceed to wheel assembly installation and install KRV # 568972 - Tire - Karrier - ST225/75R15 - D/6H - Mod – Black, and KRV # 492757 - Tire - Center Cap - 4.25" - Chrome - w/Chrome Plug for tires and wheels on the ground.

WHEEL ASSEMBLY 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

<u>For the wheel</u>, apply lacquer thinner to the back side (hub-mating surface) 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 1 & 2.

<u>Warning</u>: 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. 1 Before Cleaning



Fig. 2 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 3 & 4.

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 4.

- <u>Warning:</u> 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.
- <u>Warning</u>: 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. 3 Before Cleaning WHEEL REINSTALLATION



Step 1

Using a clean rag, wipe down all lug nuts and tapered nut seats on wheel to remove any remaining residue.

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 5.



Step 4

Using the star pattern outlined in Figure 5, tighten the lug nuts until the 1st stage torque (20-25 ft/lbs) outlined in Figure 6 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	
14", 15" & 16"	20-25 ft/lbs	50-60 ft/lbs	110-120 ft/lbs	

Figure 6

Step 5

Using the star pattern outlined in Figure 5, tighten the lug nuts until the 2nd stage torque (50-60 ft/lbs) outlined in Figure 6 is achieved.

Step 6

Lower the trailer to the ground.

Step 7

Using the star pattern outlined in Figure 5, tighten the lug nuts until the 3rd and final stage (110-120 ft/lbs) is achieved. See Figure 6.

Step 8

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

<u>Note</u>: Reminder – Follow-Up re-torque required at 10, 25, and 50 miles.

WARRANTY REIMBURSEMENT

REPAIR

Submit the claim on Key Express using Flat Rate Code # 7138842B

In the <u>Complaint</u> section note:	Safety Advisory # 20-388
In the <u>Cause</u> section note:	Incorrect axles, tires, and rims installed
In the Correction section note:	Replace with correct parts as listed on the advisory

The amount of time authorized for this repair is **3.0 hours**.

PARTS DISPOSITION

No return parts. Removed axles should not be used again for RV use.

Please call Keystone RV Customer Service at 855-895-4422 if you have any questions.