

SERVICE ADVISORY # 10-157

Steel Wheel Inspection / Replacement

Keystone is conducting a voluntary RECALL notification campaign in accordance with the National Highway Transportation and Safety Act. It has been decided certain brand name “Arc” 15” x 6” white (spoke or modular design) steel wheels with a 6 hole bolt pattern manufactured by Xingmin Wheel bearing the rim stamp “07 10 06 Z” or “08 10 16 B” and installed as original equipment on Keystone recreational vehicles may have poor weld quality between the center disk and outer rim. The poor weld will cause the outer rim portion of the wheel and tire to separate from the vehicle, leading to an increased risk of property damage and/or vehicle crash.

Models and Serial Number Range Included:

2011 Model	Serial Number Range	Primary Wheel Type	Spare	Steel Wheel Part #
Cougar	B2504099 – B2505266	Steel Std/Alum - Opt	Steel Std	301169
Cougar X-Lite	BV504590 – BV505373	Steel Std/Alum - Opt	Steel Std	301169
Energy	BN830097 - BN830121	Steel Std/Alum - Opt	Steel Std	301168
Hornet & Hideout - IN	B7202075 - B7202611	HI – Steel HO - Alum	Steel Opt	301168
Hideout - OR	BN201902 - BN202237	Steel	Steel Opt	301168
Laredo TT	BV601514 - BV601833	Alum	Steel Std	301169
Laredo FW	BE601422 - BE601813	Alum	Steel Std	301169
Outback	BB451934 – BB452494	Alum	Steel Std	301168
Springdale – 3	B3103686 – B3103816	Alum	Steel Opt	301168
Springdale – 703	BW103121 – BW103745	Alum	Steel Opt	301168
Springdale - OR	BG102644 – BG103626	Alum	Steel Opt	301168
Sprinter	B1531984 – B1532490	TT – Steel FW – Steel Std/Alum Opt	Steel Opt	301168
Opt - Option		Std – Standard		

Parts Required per Unit – Either Wheel is an Acceptable Replacement for the Other

301168 – Rim Only - 15" x 6" White Mod

301169 – Rim Only - 15" x 6" White Spoke

Note: Please order sufficient quantity of wheels so they are available at the time of customer appointment. It is estimated 30% of the wheels will need to be replaced. Unused inventory may be returned through the normal RGA process.

Tools Required:

- Impact Wrench - ½” drive (removal of wheels only)
- Wheel chocks
- Torque Wrench – ½” drive
- Jack Stands
- Minimum 2” long socket extension, ½” drive
- Deep Socket 13/16”x ½” drive
- Floor Jack – adequate to trailer weight

INSPECTION INSTRUCTIONS**ONE: VERIFY THE WHEEL STAMPING**

Check the “Search Unit Info” in Key Express to verify the unit has not been repaired. Some units were inspected and repaired prior to shipment.

SPARE TIRE

Step 1 Remove the spare tire from the carrier and record the rim markings located on the back side of the wheel as indicated in Figure 1.



Fig. 1

Step 2 For wheels with the stamping “07 10 06 Z” or “08 10 16 B” the wheel must be replaced. All other stamping codes proceed to **WHEEL ASSEMBLY INSTALLATION** and file a claim for inspection.

UNITS WITH STEEL WHEELS

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

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. Elevate the frame just enough to take some of the weight off the wheel.

Step 7 Loosen the lug nuts on the forward wheel about a half turn. DO NOT remove lug nuts at this time.

Step 8 Raise the frame until the forward tire just clears the shop floor.

Step 9 Install a jack stand of sufficient capacity just forward of the front spring hanger.

Step 10 With the tires now slightly off the ground finish removing the lug nuts and the wheels from the trailer.

Step 11 Record the rim markings located on the back side of the wheel as indicated in Figure 1. For wheels with the stamping “07 10 06 Z” or “08 10 16 B” the wheel must be replaced. All other stamping codes proceed to **WHEEL ASSEMBLY INSTALLATION** and file a claim for inspection.

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

TWO: WHEEL ASSEMBLY INSTALLATION

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

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 Fig 2.

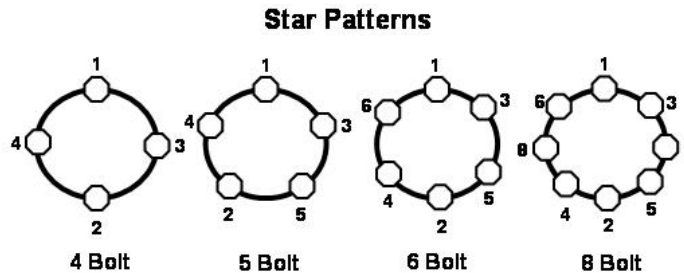


Fig 2

Step 4 Using the star pattern outlined in Fig 2, tighten the lug nuts until the 1st stage torque (20-25 ft-lbs) outlined in Fig 3 is achieved. Verify the lug nuts are properly positioned in the tapered seats of the wheel.

Wheel Torque Requirements		
1st Stage	2nd Stage	3rd Stage
20-25 ft-lbs	50-60 ft-lbs	110-120 ft-lbs

Fig 3

Step 5 Using the star pattern outlined in Figure 2, tighten the lug nuts until the 2nd stage torque (50-60 ft-lbs) outlined in Fig 3 is achieved.

Step 6 Lower the trailer to the ground.

Step 7 Using the star pattern outlined in Figure 2, tighten the lug nuts until the 3rd and final stage (110-120 ft-lbs) is achieved. See Fig 3.

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

THREE: WARRANTY REIMBURSEMENT***IMPORTANT – USE ONLY ONE OPERATION CODE!*****For Inspection Only – No Wheel Replacement Necessary**

Submit the claim on Key Express or on a Keystone Warranty claim form with **Flat Rate Code # 7115742F** and **Service Advisory # 10-157 along with the date codes from the wheel(s) inspected** noted in the customer complaint section of the form. The amount of time authorized for this repair is:

- Spare Tire Only – 0.3 hours
- Spare Tire and 4 Wheels on the Ground – 1.3 hours (Pre-Auth Required)
- All 4 tires on the Ground (No Spare) – 1.0 hours (Pre-Auth Required)

Inspection and at Least One Wheel Replacement

Submit the claim on Key Express or on a Keystone Warranty claim form with **Flat Rate Code # 7115742B** and **Service Advisory # 10-157 along with the date codes from the wheel(s) inspected** noted in the customer complaint section of the form. The amount of time authorized for this repair is:

- Spare Tire Only – 0.3 hours
- Spare Tire and 4 Wheels on the Ground – 1.3 hours (Pre-Auth Required)
- All 4 tires on the Ground (No Spare) – 1.0 hours (Pre-Auth Required)
- Plus an additional 0.3 hours (or sublet amount) for each wheel replaced (Pre-Auth Required)

FOUR: PART RETURN

Return all wheels replaced per the normal warranty return process.

If you have any questions, please call Keystone RV Customer Service

Energy, Sprinter, Springdale **(866) 273-1452**

Cougar, Hornet **(866) 273-1454**

Laredo, Outback **(866) 273-1456**