

Keystone RV Company SAFETY ADVISORY # 20-391

Updated: 2/24/21

Outback 335CG and 340BH Frame

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 section of frame rail with inadequate support where the draw bar is attached. Under certain conditions during travel, the frame rail may yield and buckle possibly leading to an increased failure and vehicle crash.

Models Included: 2019-2021 Outback Travel Trailers: Model 335CG, 340BH

Serial Number Ranges: 2019 KB451063 - KB452951

2020 LB450012 - LB4539632021 MB450019 - MB452323

Parts Required: Model 340BH – VIN KB451063 - KB452341

1- KRV # 676599 - Frame - Service Kit - Reinforcement Plate Only - 21700163 - For 20101112 (VIN required for part order)

1 – KRV # 673277 - Frame - Service Kit - Hardware Only - (24 Bolts & 24 Nuts) – 21700158 (VIN required for part order)

<u>If inspection determines that the frame rails are needed on KB451063 - KB452341:</u>

1 – KRV # 676601 - Frame - Service Kit - Drop rails - LH & RH - 12700164 - For 20101112 (*VIN required for part order*)

1 – KRV # 676609 - Frame - Service Kit - Hardware - 21700260 - Drop Rail Hardware Kit (*VIN required for part order*)

All other Models and 340BH VIN KB452444 - MB452323:

1 – KRV # 673276 - Frame - Service Kit - Plate Only - 21700159 (VIN required for part order)

1 – KRV # 673277 - Frame - Service Kit - Hardware Only - (24 Bolts & 24 Nuts) - 21700158 (*VIN required for part order*)

<u>If inspection determines that the frame rails are needed on KB452444 - MB452323</u>

- 1 KRV # 676607 Frame Service Kit Drop rails 21700162 (VIN required for part order)
- 1 KRV # 676609 Frame Service Kit Hardware 21700260 Drop Rail Hardware Kit (*VIN required for part order*)

Tools Required:

- Screw gun Caulk Gun Jack Stands Torch, Plasma Cutter, Or Grinder
- 3/8" Drill Bit Drill Hammer Cold Chisel 9/16" Socket Ratchet
- 9/16" Wrench

If frame rail is cracked take clear pictures and submit an authorization.

<u>Note – Check serial number on Key Express to verify the campaign is open. Some vehicles were</u> 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 VIN and determine what parts are needed as listed above for reinforcement plates. If the frame rail is buckled adding the reinforcement plates as outlined in this advisory will eliminate the buckle if properly installed. If the frame rails are cracked at the buckle take clear pictures. The frame rail section will need to be replaced and reinforcement plates added to the frame rails where the drawbar connects to the frame as outlined in this advisory.

REPAIR INSTRUCTIONS

Step 1

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

Step 2

Disconnect the 120VAC and 12VDC power from the unit.

Step3

Inspect the VIN, verify correct parts were ordered. 340BH models in the <u>VIN sequence between KB451063 - KB452341</u> will use 1- KRV # 676599 - Frame - Service Kit - Reinforcement Plate Only and 1 - KRV # 673277 - Frame - Service Kit - Hardware Only - (24 Bolts & 24 Nuts). Use the following repair labeled <u>20101112 DROP RAIL REPAIR.</u>

All other models and 340BH models in the <u>VIN sequence between KB452444 - MB452323</u> will use 1 – KRV # 673276 - Frame - Service Kit - Plate Only and 1 – KRV # 673277 - Frame - Service Kit - Hardware Only - (24 Bolts & 24 Nuts). <u>DROP RAIL REPAIR</u>

Step 4

Support the frame with jack stands just behind the drop frame. Remove underbelly in the front section of the frame back to the second u-channel support on the frame.

Step 5

Using the following Norco Industries instructions, install the reinforcement plates as outlined.

<u>Please note:</u> if the frame is buckled the support plates when installed properly will remove the buckle in the frame as designed.

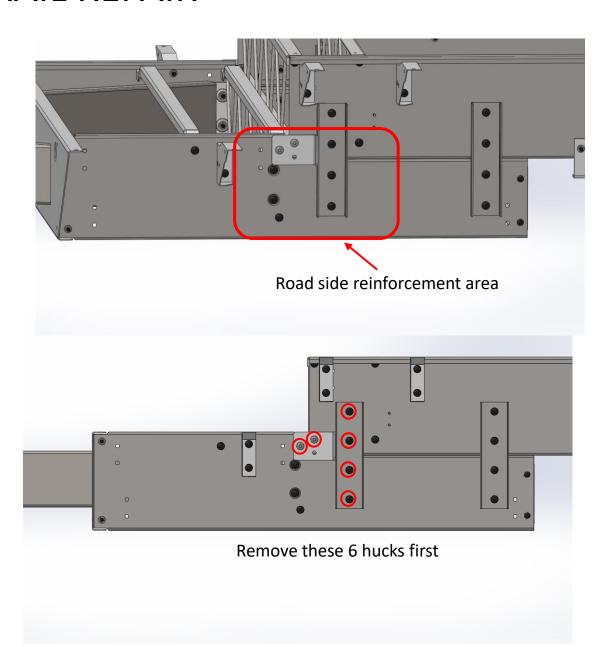
If the frame is buckled and cracked please see Step 6.

20101112 DROP RAIL REPAIR

- Identify repair area road side of the frame is shown
- If the area is deformed, a reinforcement plate should be installed.
- If the area is deformed and cracked, the drop rail should be replaced, and reinforcement plates installed.
- Using jack stands, support the unit rearward of the repair area to remove load from the tongue jack and a-frame.

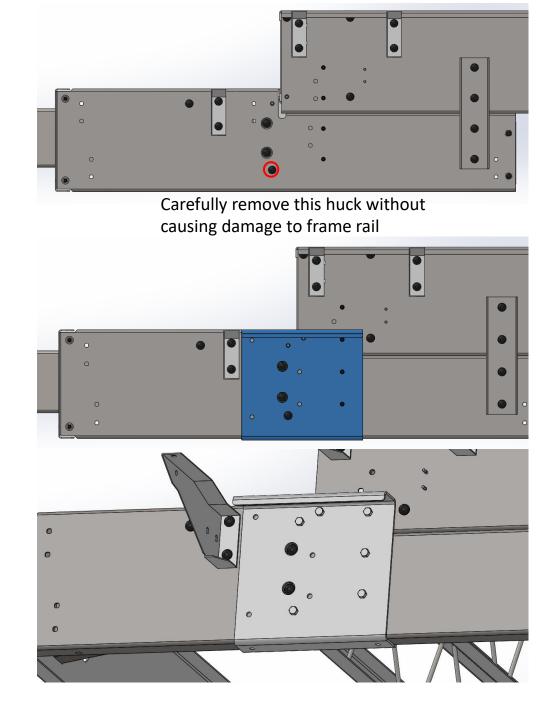
NOTE: Huck fasteners are under tension and will pop apart when cut loose. Use safety glasses and be aware that the hot fastener could cause injury if it hits you.

 The heads of the first 6 hucks can be cut off with a torch, plasma, or grinder from the outside of the frame. The u-channel and L-bracket will be discarded, it is ok if these parts are gouged during removal since they won't be reused. Do not gouge or cut the frame rail behind these parts.



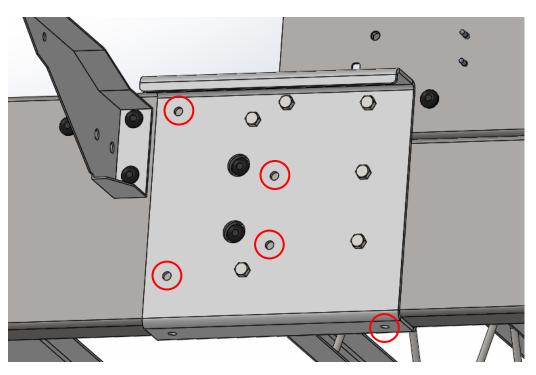
• Carefully remove the last huck without gouging or cutting the frame rail. Torching or plasma cutting in this area is not recommended. Either grind the head off or use a 3/8" drill bit to drill the center of the head until it comes off.

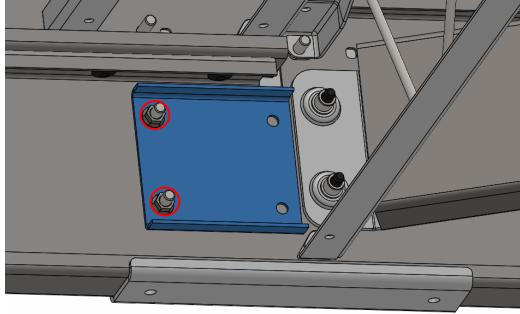
- With 7 hucks removed from the rail, clamp the appropriate repair plate on the frame rail aligning the holes with the existing holes in the rail as shown.
- Verify that 6 holes in the repair plate properly align with the current holes in the rail. If the holes are slightly misaligned, it may be necessary to chase the holes with a 3/8" drill bit, ideally from the inside of the frame outward.
- Install hardware in these 6 holes and snug by hand.



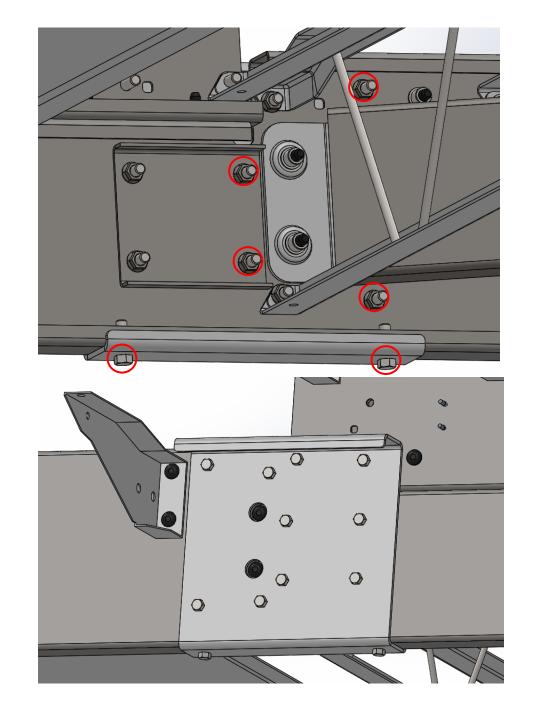
• With fasteners installed in 6 holes, use the reinforcement plate as a template to drill the remaining 6, 3/8" holes, 4 through the web, 2 through the bottom flange.

 Install inside backer plate on the inside of the frame rail. Two previously installed nuts will need removed and replaced over the backer.

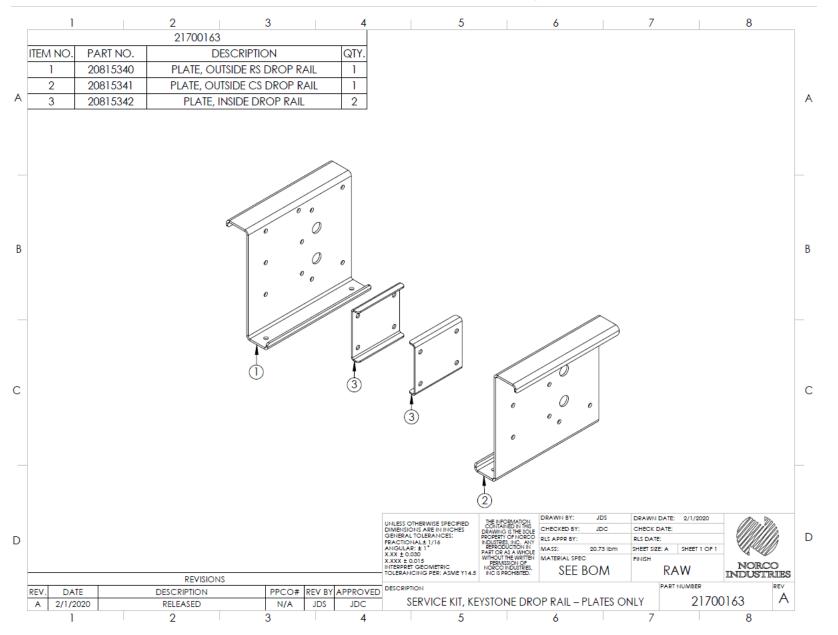




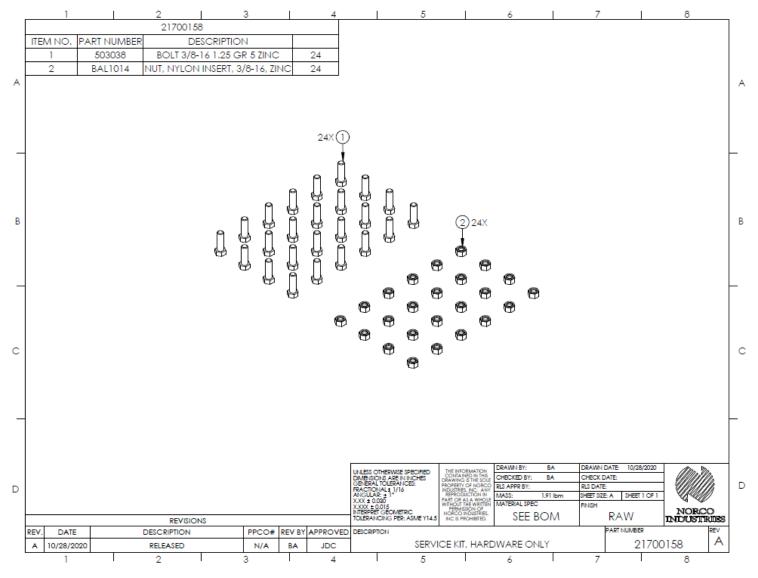
- Install hardware in remaining holes.
- Torque all fasteners to 23 ft*lbs to flatten the frame rail between reinforcement plates.
- Repeat previous steps on opposite side of the frame.



Service Kit – Plates Only (21700163)



Service Kit – Hardware Only (21700158)

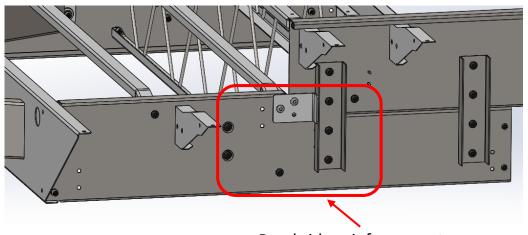


DROP RAIL REPAIR

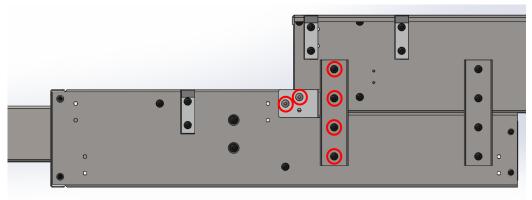
- Identify repair area road side of the frame is shown
- Support the front of the frame on the tongue jack and front leveling legs or jack stands rearward of the repair area.

NOTE: Huck fasteners are under tension and will pop apart when cut loose. Use safety glasses and be aware that the hot fastener could cause injury if it hits you.

• The heads of the first 6 hucks can be cut off with a torch, plasma, or grinder from the outside of the frame. The u-channel and L-bracket will be discarded, it is ok if these parts are gouged during removal since they won't be reused. Do not gouge or cut the frame rail behind these parts.

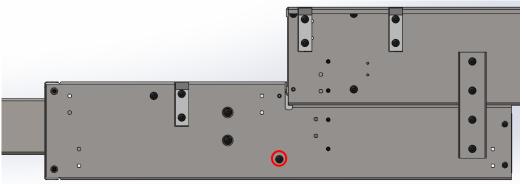


Road side reinforcement area



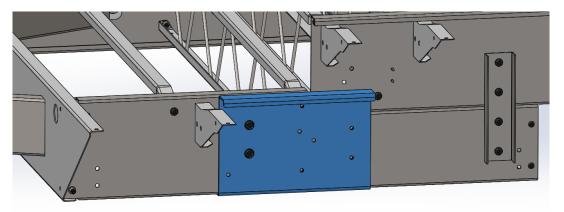
Remove these 6 hucks first

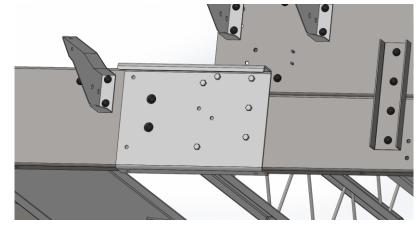
 Carefully remove the last huck without gouging or cutting the frame rail. Torching or plasma cutting in this area is not recommended. Either grind the head off or use a 3/8" drill bit to drill the center of the head until it comes off.



Carefully remove this huck without causing damage to frame rail

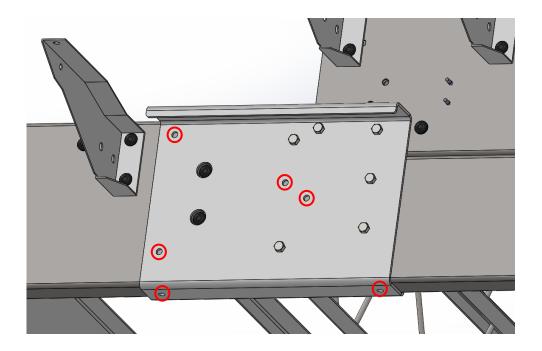
- With 7 hucks removed from the rail, clamp the appropriate repair plate on the frame rail aligning the holes with the existing holes in the rail as shown.
- Verify that 6 holes in the repair plate properly align with the current holes in the rail. If the holes are slightly misaligned, it may be necessary to chase the holes with a 3/8" drill bit, ideally from the inside of the frame outward.
- Install hardware in these 6 holes and snug by hand.

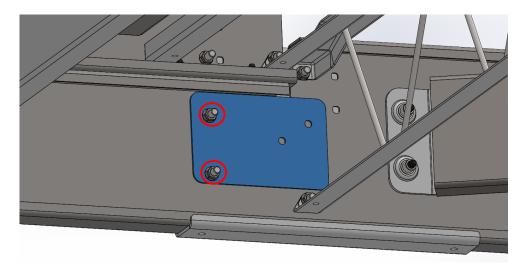




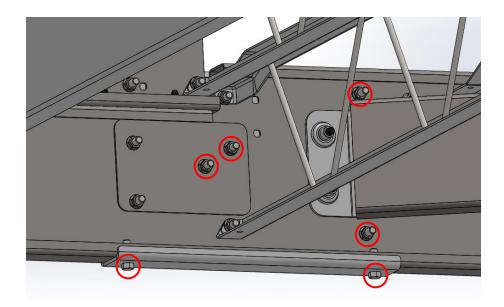
 With fasteners installed in 6 holes, use the reinforcement plate as a template to drill the remaining 6, 3/8" holes, 4 through the web, 2 through the bottom flange.

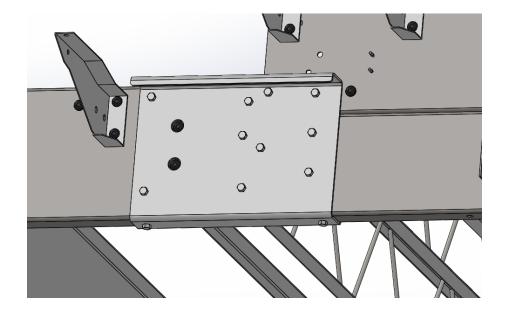
 Install inside backer plate on the inside of the frame rail. Two previously installed nuts will need removed and replaced over the backer.



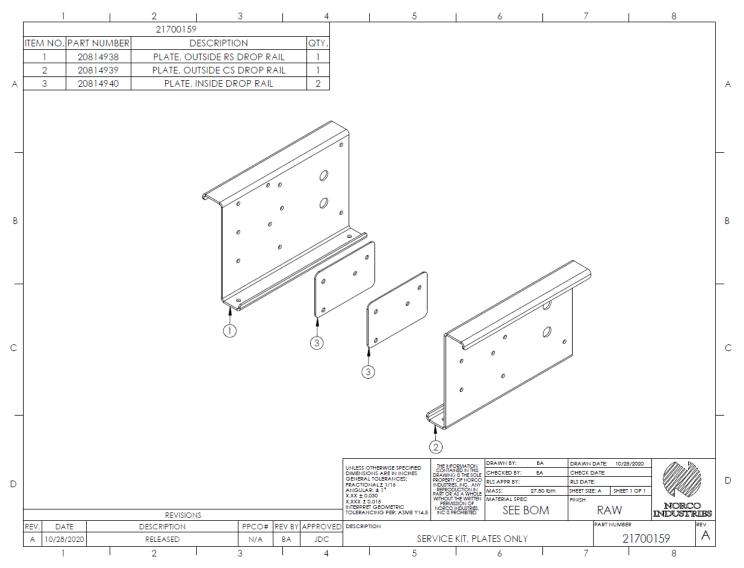


- Install hardware in remaining holes.
- Torque all fasteners to 23 ft*lbs to flatten the frame rail between reinforcement plates.
- Repeat previous steps on opposite side of the frame.

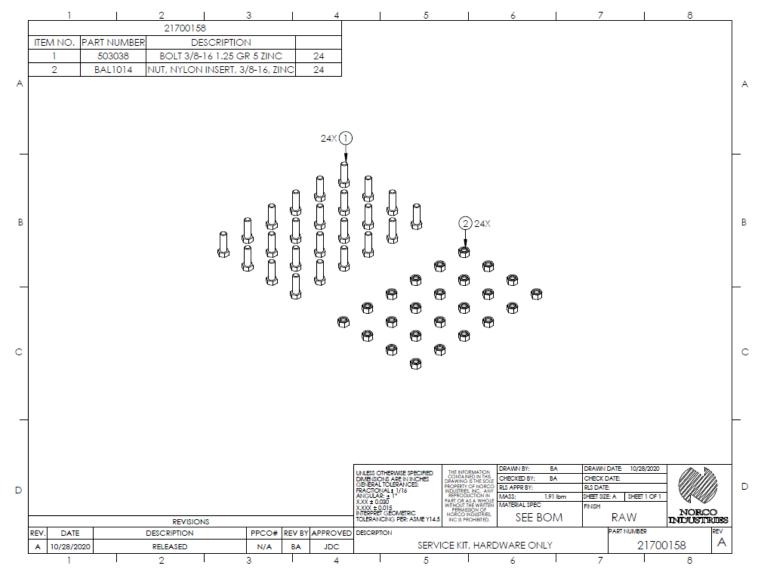




Service Kit – Plates Only (21700159)



Service Kit – Hardware Only (21700158)



Step 6

<u>Please note:</u> if the buckled frame section is cracked <u>take clear pictures</u> and follow the Norco Industries instructions labeled 20101112 DROP RAIL REPLACEMENT to remove the cracked frame section and replace with the following parts.

Model 340BH - VIN KB451063 - KB452341

1 – KRV # 676601 - Frame - Service Kit - Drop rails - LH & RH - 12700164 - For 20101112 (*VIN required for part order*)

1 – KRV # 676609 - Frame - Service Kit - Hardware - 21700260 - Drop Rail Hardware Kit (*VIN required for part order*)

All other Models and 340BH VIN KB452444 - MB452323:

1 – KRV # 676607 - Frame - Service Kit - Drop rails – 21700162 (VIN required for part order)

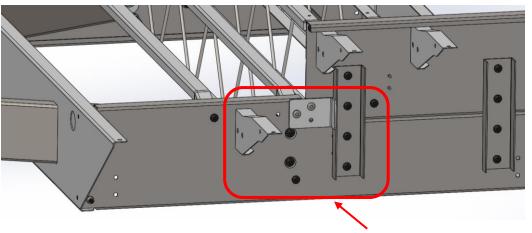
1 – KRV # 676609 - Frame - Service Kit - Hardware - 21700260 - Drop Rail Hardware Kit (*VIN required for part order*)

20101112 DROP RAIL REPLACEMENT

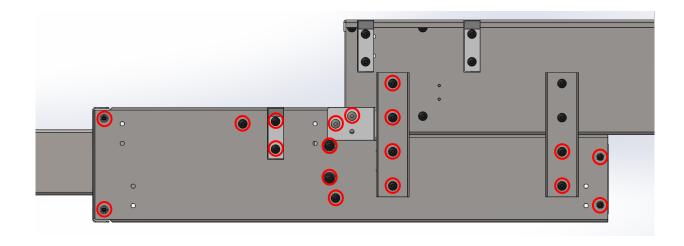
- Identify repair area road side of the frame is shown
- If the area is deformed, a reinforcement plate should be installed.
- If the area is deformed and cracked, the drop rail should be replaced, and reinforcement plates installed.
- Using jack stands, support the unit rearward of the repair area to remove load from the tongue jack and a-frame.

NOTE: Huck fasteners are under tension and will pop apart when cut loose. Use safety glasses and be aware that the hot fastener could cause injury if it hits you.

- Repair one side of the frame at a time so the a-frame doesn't need to be removed.
- The heads of the circled hucks can be cut off with a torch, plasma, or grinder from the outside of the frame. The front u-channel and L-bracket will be discarded, it is ok if these parts are gouged during removal since they won't be reused.

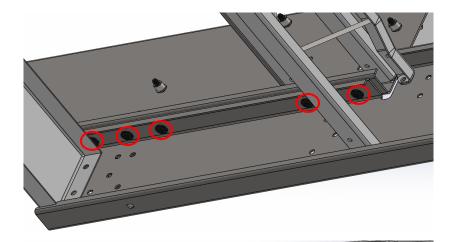


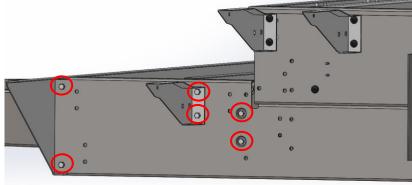
Road side reinforcement area

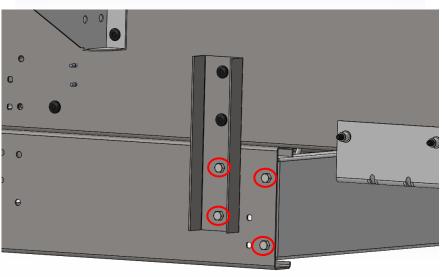


- Support a-frame and front crossmember with a jack stand before removing the drop rail.
- With the a-frame supported, remove the remaining 5 hucks in the rail flange and remove the rail.
- Install the replacement drop rail and attach it to the main rail with 5 bolts through the top flange. Hand tighten.
- Install hardware to attach the drop rail to the front crossmember, reattach the outrigger, and attach a-frame to the drop rail. Hand tighten.

 Install hardware to attach the rear u-channel and rear crossmember to the drop rail. Hand tighten.

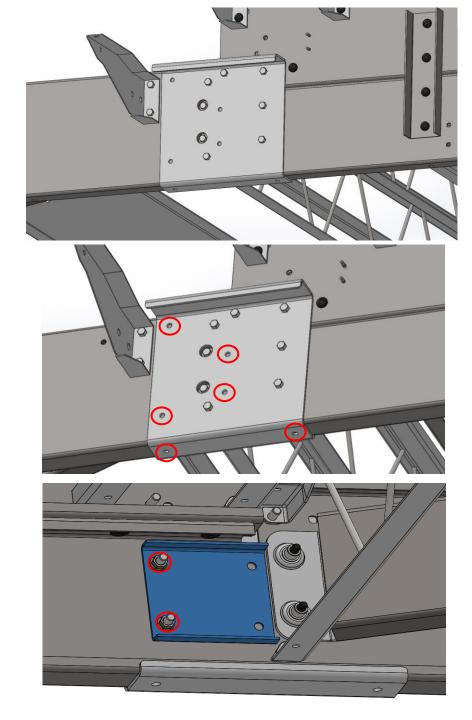




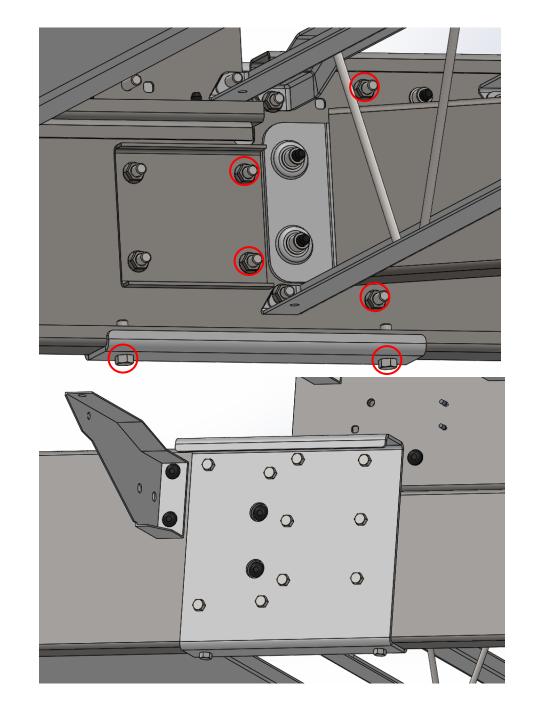


- Install the repair plate and align with the current 6 holes in the rail. It may be necessary to chase the holes with a 3/8" drill bit if there is misalignment. Install hardware in these holes and hand tighten.
- With fasteners installed in 6 holes, use the reinforcement plate as a template to drill the remaining 6, 3/8" holes, 4 through the web, 2 through the bottom flange.

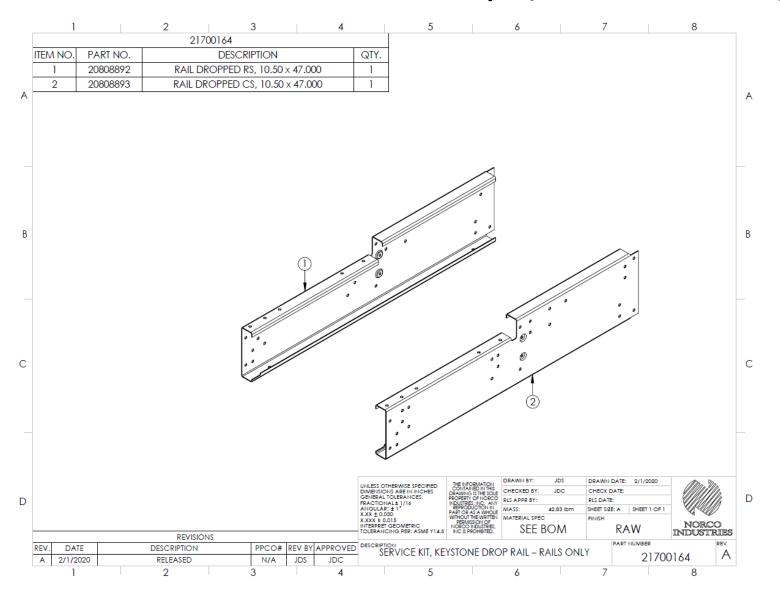
 Install inside backer plate on the inside of the frame rail. Two previously installed nuts will need removed and replaced over the backer.



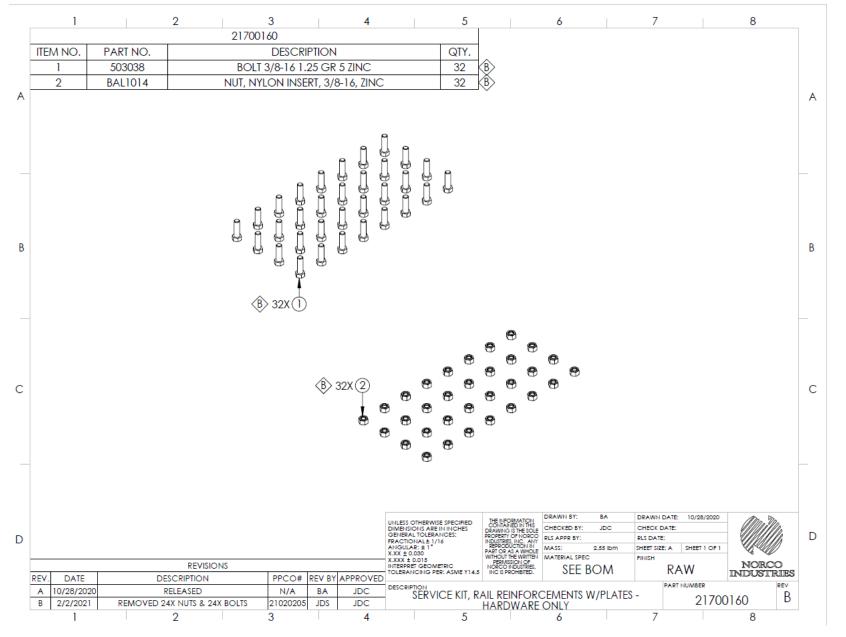
- Install hardware in remaining holes.
- Torque all fasteners to 23 ft*lbs.
- Repeat previous steps on opposite side of the frame.



Service Kit – Rails Only (21700164)



Service Kit – Hardware Only (21700160)



Step 7

Proceed to Warranty Reimbursement.

WARRANTY REIMBURSEMENT

REPAIR – Adding Reinforcement Plates Only

Submit the claim on Key Express using Flat Rate Code # 7139142B

In the Complaint section note: Safety Advisory # 20-391

In the <u>Cause</u> section note: Safety Advisory # 20-391

In the <u>Correction</u> section note: Add reinforcement plates as directed.

The amount of time authorized for this repair is **4.0 hours**.

REPLACEMENT - Replacing Frame Rail and Adding Reinforcement Plates

Submit pictures of the cracked frame on a preauthorization and then claim on Key Express using Flat Rate Code # 7139142A

In the Complaint section note: Safety Advisory # 20-391

In the <u>Cause</u> section note: Safety Advisory # 20-391

In the Correction section note: Frame cracked. Replace frame section and add

reinforcement plates.

The amount of time authorized for this repair is **7.0 hours**.

PARTS DISPOSITION

No return parts.

Please call Keystone RV Customer Service at (866)-273-1456 if you have any questions.