



Dear Customer,

It has been determined that you have a Rosenbauer Commander with IFS (independent front suspension) equipped truck that falls under a recall that has been brought to Rosenbauer's attention.

This Safety Recall Notice was received from Reyco Granning Suspensions. Stating that there is a potential improper securement of the Central Steering Ball Joints on IFS equipped trucks.

The issue is as follows.

Reyco Granning has learned that IFS modules manufactured during the affected timeframe could contain loose ball joints. If loose ball joints are not detected, they may eventually separate from their mating part, which could result in a partial loss of steering control. Reyco Granning has notified NHTSA of this condition.

Reyco Granning will support the inspection and repair effort as set forth in the attached Service Bulletin, and is ready to begin that support immediately. Please review the Service Bulletin attached to this letter, which addresses:

- Proper Correction Method
- Authorized Labor Allocation
- Inspection Tools Required
- Repair Tools Required
- Inspection and Repair Instructions

Respectfully,

Bradley D. Johnson

Warranty & Service Manager

Rosenbauer Motors, LLC.

www.rosenbaueramerica.com

info@rosenbaueramerica.com

ROSENBAUER SOUTH DAKOTA, LLC.
100 THIRD STREET
P.O. BOX 57
LYONS, SOUTH DAKOTA 57041
P: 605.543.5591

ROSENBAUER MINNESOTA, LLC.
5181 260TH STREET
P.O. BOX 549
WYOMING, MINNESOTA 55092
P: 651.462.1000

ROSENBAUER MOTORS, LLC.
5190 260TH STREET
P.O. BOX 549
WYOMING, MINNESOTA 55092
P: 651.462.1000

ROSENBAUER AERIALS, LLC.
870 SOUTH BROAD STREET
FREMONT, NEBRASKA 68025
P: 402.721.7622



Technical Service Bulletin

Ref: TSB 01-009-15 Date 9/2/15 Page 1 of 7

Please read the entire Bulletin before proceeding with any work. Contact Rosenbauer Motors if there are any concerns with the procedures contained in this document.

Subject: Potential improper securement of central steering ball joints.

Applies To: Commander Chassis with Reyco Granning IFS.

Condition: Possible loose ball joints. If loose ball joints are not detected, they
May eventually separate from their mating part, which could
Result in a partial loss of steering control.

Correction: Ball joints must be inspected following the attached bulletin
Instructions

Contact info: Reyco Granning 765-838-0361 ext. 6
Rosenbauer Motors, LLC. 651-462-1000

This Technical Service Bulletin is intended to be used as a written guide, for trained Professional Technicians in performing service of a specific nature to a specific product. Technicians should have the appropriate training to complete the work to industry standards. They shall also have the tools and equipment to do the work in a safe and proper manner.

- SUBJECT:** IFS Ball Joints
- CONDITION:** For a select group of IFS units, it is possible that the central steering system ball joints were not properly torqued or secured into the relay rod
- APPLIES TO:** This bulletin applies to ReycoGranning IFS models IFS20-XXXXX and IFS24-XXXXX used on Fire Apparatus.
- CORRECTION:** Inspect per instruction and tighten if required
- LABOR ALLOCATION:** 1.0 hrs. for inspection
3.0 hrs. labor for defect

TOOLS REQUIRED:

1. For Inspection

- a. Feeler gauge of 0.001 inch, wire type preferred
- b. Small punch and hammer

2. If Repair Required

- a. Pliers, sockets in the following sizes 36 mm, 1 5/16" 1/2 inch torque wrench
- b. Ball joint tools 708116-03, 708116-06, and Loctite® 242® Thread locker
- c. 3/4 inch drive torque wrench

NOTE: Suspension serial number and VIN must be on invoice, completed with information of facility that performed the service. A description of condition found and service performed each side documented.

GENERAL INSTRUCTIONS:

Please thoroughly review entire work procedure before starting work. If there are questions and/or concerns with steps defined in this procedure, contact ReycoGranning at 765-838-0361 ext. 6

All applicable industry safety standards must be followed when performing work identified in this procedure.

INSPECTION OF BALL JOINTS INSTRUCTIONS:

1. Follow normal maintenance and safety procedures to gain access to the pitman arm ball joints. Refer to FIG. 2-1.

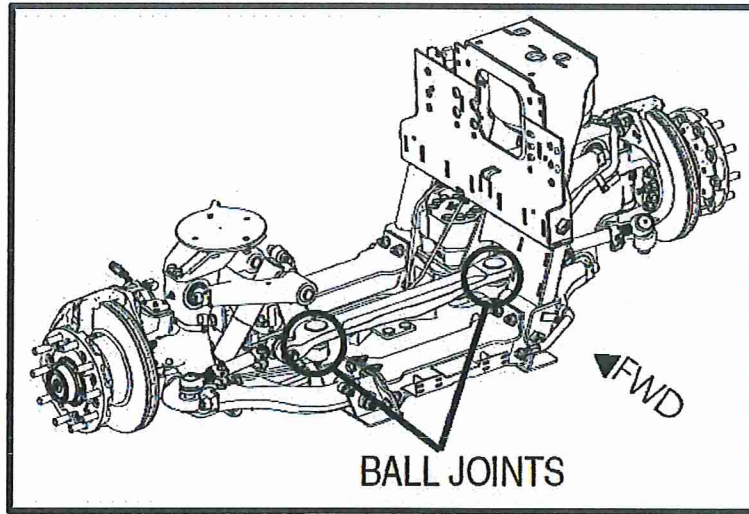


FIG. 2-1

2. Visually inspect the ball joints located in pitman arms, the ball joints will be seated in both pitman arms off of the steering gears. The ball joint shall be fully engaged with the notched flange in contact with the spot face surface of the relay rod. If it is not, please proceed to the repair procedure. Refer to FIG. 2-2 and 3-1 (pictures may not represent suspension you are working on).



FIG. 2-2



FIG. 3-1

3. If the ball joint appears to be seated, using a 0.001 inch feeler gauges to check under the notched flange. If the feeler gauge slides under the flange, please proceed to the step by step instructions.
4. With a punch and hammer use moderate force in an effort to tighten the ball joint in place (clockwise). If it moves proceed to the step by step instructions. If it is tight this will finish the inspection and vehicle can be returned to service.

STEP-BY-STEP INSTRUCTIONS:

NOTE: Below steps are to be used for ball joints not seated or loose.

NOTE: Ensure to not damage the sealing boot of the ball joints.

1. If a ball joint is found loose contact Mark Bachman at 765-838-0361 ext. 6 to acquire loaner tools 708116-03, 708116-06. Credit card information will be required for security on tools.
2. Using industry standards means lift the front of the truck high enough to remove the front tires. Secure the truck and remove the front tires.
3. Turn the steering to full left lock to gain access to the relay rod from the passenger side. Starting on the passenger side remove the following from the relay rod. Refer to FIG. 4-1:
 - Inner tie rod joint
 - Relay rod ball joint from the pitman arm.
 - Pitman arm from steering gear (only needed on the passenger side).

Page 3 of 7

Technical Service Bulletins are intended for use by Professional Technicians only. They are written to guide Professional Technicians in performing service to vehicles of product specific nature in conjunction with industry standards. Professional Technicians are appropriately trained on industry standards and have the tools and equipment to perform procedures safely and properly.

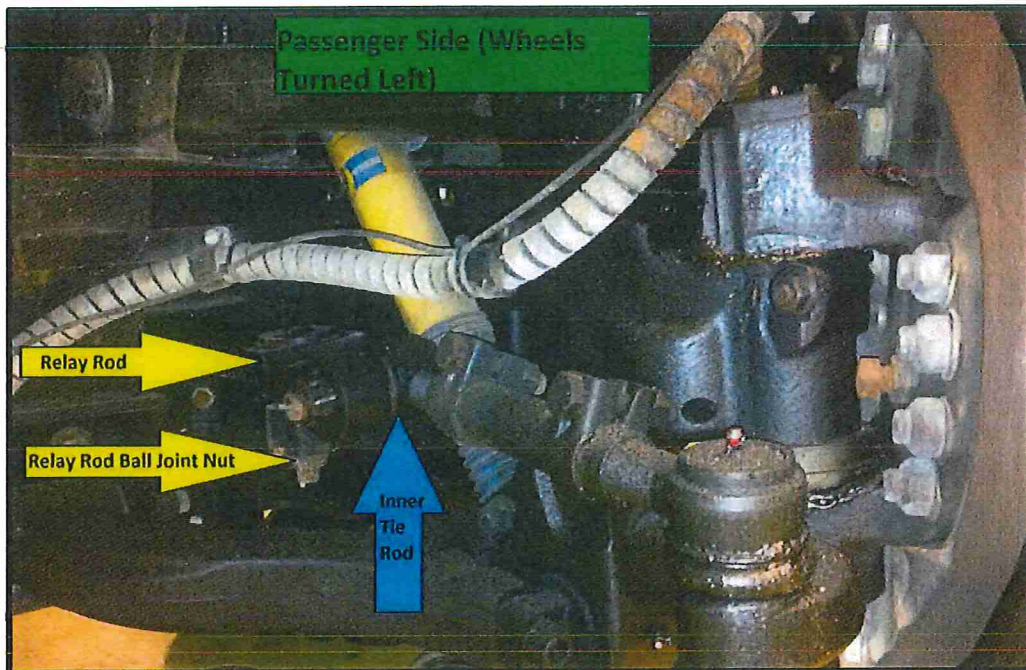


FIG. 4-1

NOTE: Mark the pitman arm to gear timing marks for aid in reinstallation. Refer to FIG. 4-2. There are two sets of marks; you will line up the outward set of marks.

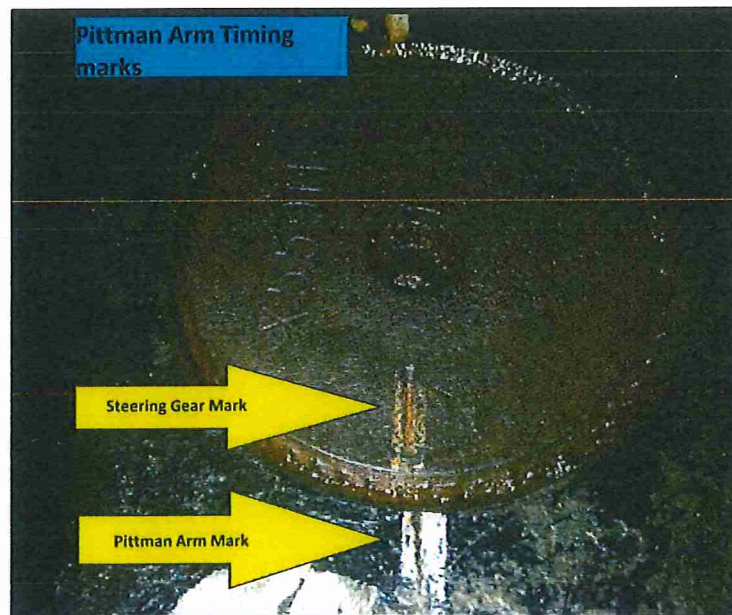


FIG. 4-2

4. Turn the steering wheel full right lock to gain access to the relay rod from the driver's side.

NOTE: Guide the relay rod through the cradle while steering to the right to avoid damage to ball joint.

Remove the following from the driver's side end of the relay rod:

- Inner tie rod joint
- Relay rod ball joint from the pitman arm

5. Remove the relay rod assembly from the cradle and secure in a vise for repair. Refer to FIG. 5-1.

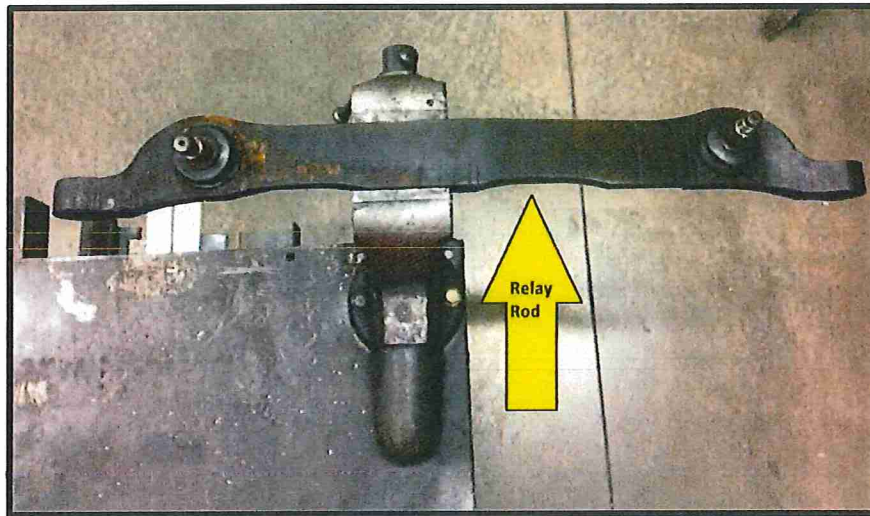


FIG. 5-1

6. Back the ball joints out of the relay rod and clean the threads. Apply Loctite 242 to ball joint threads and thread ball joint back into the relay rod. Set up provided ball joint tooling, using castle nut to loosely secure tooling. Refer to FIG. 6-1. Place a torque wrench 90° to ball joint tool and torque to 425 lbs.-ft. Refer to FIG. 6-2. Be sure that tooling set up is not binding when tightening, castle nut should come off freely after ball joint is torqued.

FIG. 6-1

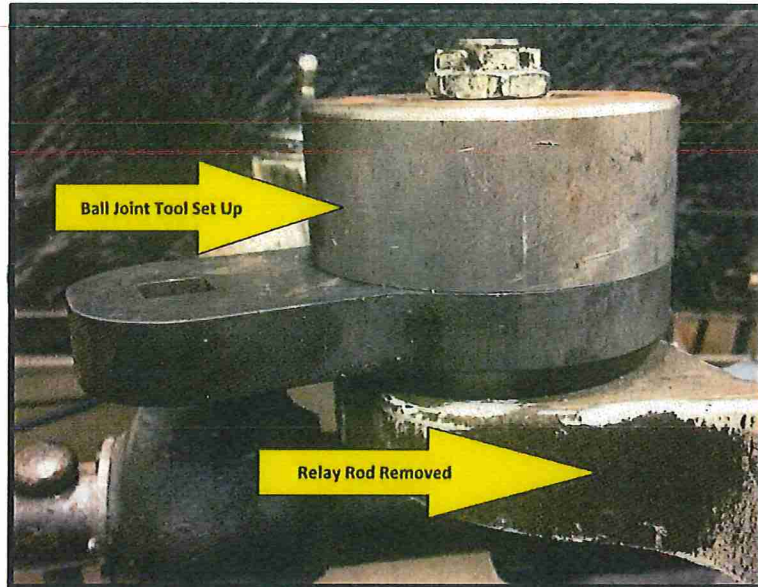
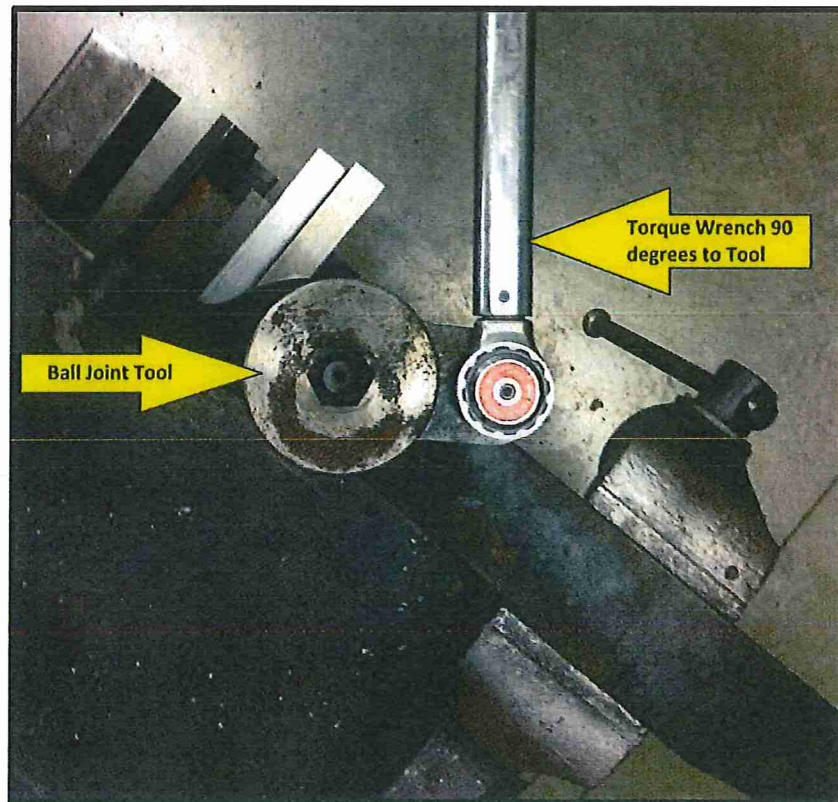


FIG. 6-2



7. Reinstall the relay rod to the front suspension in reverse order to removal using new cotter pins and the following torque specs:

- Tie rod castle nut – 90-100 lbs.-ft.
- Ball joint castle – 225-245 lbs.-ft.
- Pitman arm attachment bolt – 295-315 lbs.-ft.

Note: Never back off castle nuts to install cotter pins

8. Reinstall front wheels and torque lugs to 450-500 lbs.-ft.