

TAB A



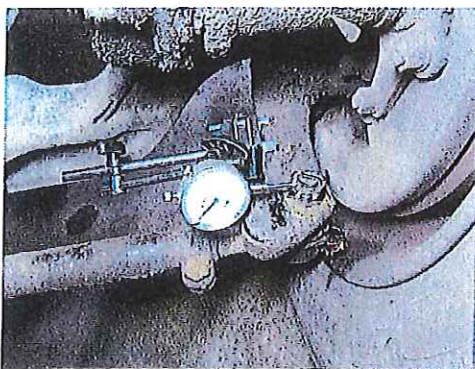
Tie Rod Arm Taper Inspection Procedure

Steer Axle Models Affected:

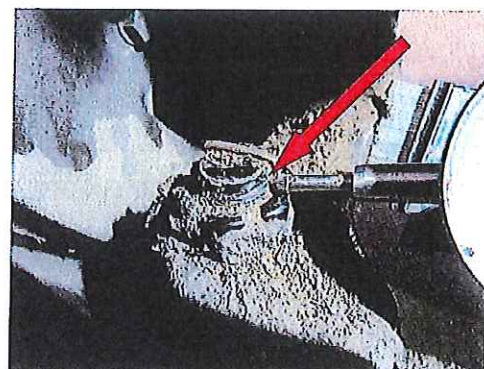
E1202I	D1461I
E1202W	D850F
E1202IC	E1234WC
E1202XW	E1462I
E1002I	E1462W
E1002W	E1462XW
E1002XW	D600
E1302I	D700F
E1302W	D800
E1322I	D800F
E1322IC	D850B
E1322W	D2000F
E1322XW	D2000W
EFA-20F4	D2200F
I160W	D2200W
I180W	E1402I
I200W	

Inspection Procedure:

1. Block the forward and rear of at least one of the drive axle tires so the vehicle cannot move during this procedure.
2. With a flexible, magnetic base dial indicator, mount the base of the indicator on the tie rod arm so that the indicator tip can be centered on the threads of the stud just above the nut.



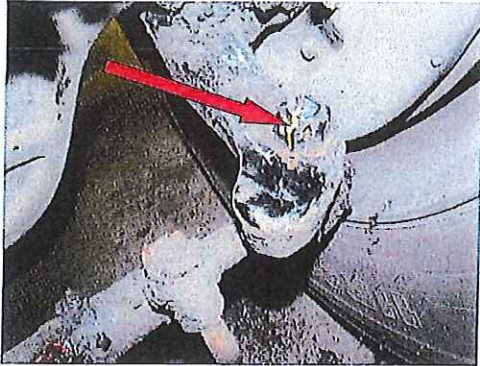
Dial Indicator Mounting Position



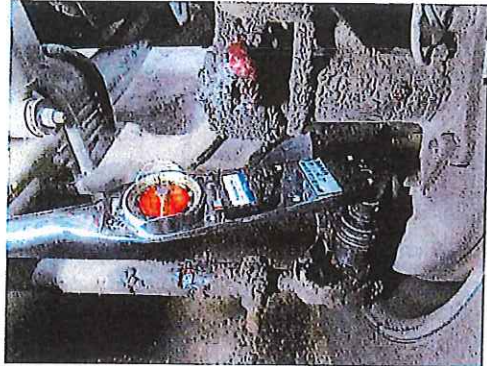
Dial Indicator Tip Must be Placed on The Stud

3. With someone in the cab of the truck turning the steering wheel (engine off) just enough to cause movement in the wheels, document how much movement is found on each side of the steer axle. Record results on the supplied spreadsheet.

- The next step is to remove the cotter pins and check for proper nut torque. Put a paint mark across one side of the nut and top of the stud. With a DIAL torque wrench and a 1 ¼" socket, torque the nut in a clockwise (tighten) direction until the nut just starts to rotate or you reach 130 ft. lbs. **Important: Do not exceed 170 ft. lbs.** Record your findings on the spreadsheet.



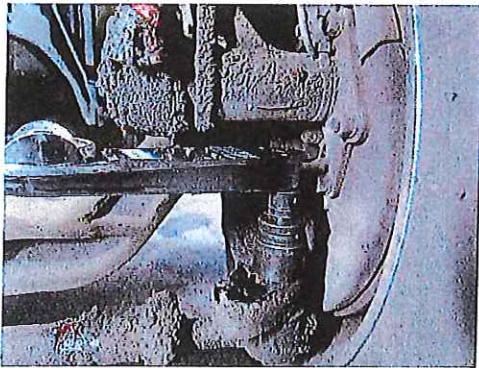
Paint Mark to Identify Nut Rotation



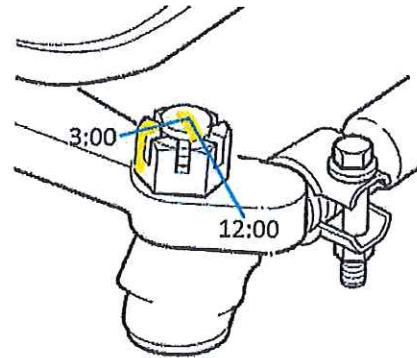
Check Nut Torque – Do Not Exceed 170 ft. lbs.

- If there is no rotation of the nut at 130 ft. lbs. install a new cotter pin and return the truck to service.

- If you found rotation of the nut before you reached 130 ft. lbs., we can now torque the nut to 130 ft. lbs. Using the paint mark, record the amount of movement to the nut. Example: Use the paint mark as the 12:00 position, if the nut rotates ¼ turn to reach 130 ft. lbs., document the nut rotated as the 3:00 position.

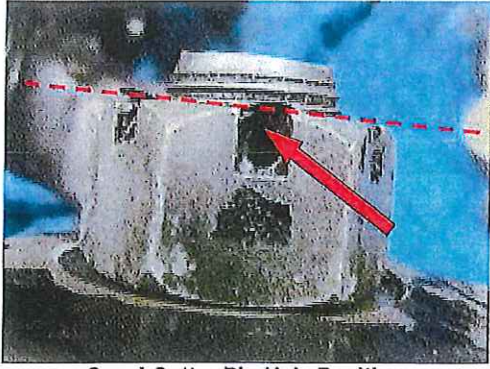


Retorque to 130 ft. lbs.

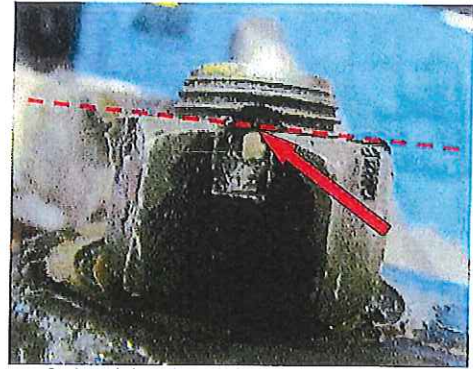


Record Rotation on Nut

- With the nut torque to 130 ft. lbs. advance the nut so that the cotter pin hole is aligned with a slot in the nut, reinstall the dial indicator and check for tie rod stud movement once again. Record results.
Note: Never back the nut off to align the cotter pin hole to the nut slot. Torque may reach 170 ft. lbs. to obtain proper alignment.
- Important:** Any tie rod stud with movement after proper nut torque and alignment will require the replacement of that knuckle and tie rod assembly.
- Important:** One last check. After the nut has been aligned with a slot in the nut, the cotter pin hole **CAN NOT** be above the top of the nut as shown below. Any cotter pin hole that is above the top of the nut surface will require the replacement of the knuckle and tie rod end assemblies.



Good Cotter Pin Hole Position



Cotter Pin Hole at *Maximum Height*

TAB B

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[Insert OE Letterhead]

[DATE]

**SAFETY RECALL NOTICE
ACTION REQUIRED**

VIA FIRST CLASS MAIL

[dealer address]

Re: Dana, Inc. Recall ID# 17E041

Dear [dealer]:

Dana, Inc. ("Dana"), in conjunction with the National Highway Traffic Safety Administration ("NHTSA"), is conducting a voluntary safety recall of the following model steer axles manufactured between March 1, 2015 and May 17, 2015 for commercial vehicles:

E1202I	D1461I
E1202W	D850F
E1202IC	E1234WC
E1202XW	E1462I
E1002I	E1462W
E1002W	E1462XW
E1002XW	D600
E1302I	D700F
E1302W	D800
E1322I	D800F
E1322IC	D850B
E1322W	D2000F
E1322XW	D2000W
EFA-20F4	D2200F
I160W	D2200W
I180W	E1402I
I200W	

The issue may not exist in every unit described above.

Dana is conducting this recall to address a potential issue in the tie rod attachment that connects the tie rod taper joint to the knuckle in certain steer axles. In those subject steer axles that are affected, the tie rod can become loose, which should cause significant auditory warning and/or looseness in steering. If a vehicle operator continues to operate the vehicle in spite of this warning, the tie rod may disconnect from the steering knuckle, which could cause the driver to lose full control of a vehicle wheel (normally the right front tire). Any vehicle operator who experiences the

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described warnings, or has other evidence of this concern, should immediately cease operation of the vehicle.

Given this potential issue, Dana is voluntarily recalling the subject steer axle models. The recall remedy is immediately available. Owners of vehicles that contain the subject steer axles will be asked to bring their vehicles to their chosen fleet service centers as soon as possible. If a vehicle is presented to you for repair under this recall, at no charge to the vehicle owner, you must inspect the steer axle to determine whether the castellated nuts in the tie rods are adequately torqued. If the inspection reveals that the castellated nuts are not sufficiently torqued, you should torque the nuts. If doing so secures the nuts, you should install a new cotter pin and return the vehicle to service. If the nuts do not become properly secured and aligned after being adequately torqued, you should replace the knuckle and tie rod end assemblies. Complete directions for performing this repair are attached hereto as Attachment A.

To promote participation in this recall, and to most effectively reach vehicle owners with the recalled steer axles, we ask that you send the customer notification letter, attached hereto as Attachment B, to each customer to whom you have sold a vehicle with a recalled steer axle, or for whom you have serviced a vehicle with a recalled steer axle.

To discuss implementation of this recall, please contact 1-877-777-5360, choose prompt 3 as soon as possible.

Please note that it is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment covered by this notification until the issue described in this notice has been remedied.

We regret this inconvenience. We at Dana are committed to the highest standards of safety and product quality, and our interest is in your safety and satisfaction with your equipment. We look forward to working with you to enable this recall to be completed in a timely manner with minimal disruption to your customers. Thank you.

Sincerely,

ATTACHMENT A



Tie Rod Arm Taper Inspection Procedure

Steer Axle Models Affected:

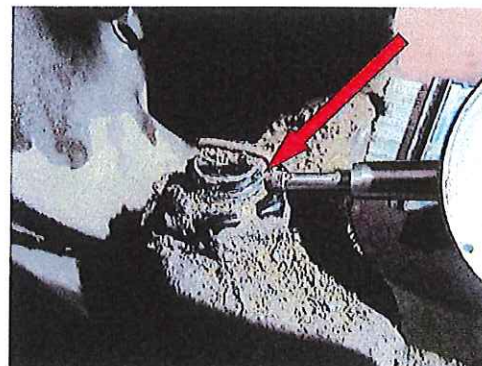
E1202I	D1461I
E1202W	D850F
E1202IC	E1234WC
E1202XW	E1462I
E1002I	E1462W
E1002W	E1462XW
E1002XW	D600
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E1322W	D2000F
E1322XW	D2000W
EFA-20F4	D2200F
I160W	D2200W
I180W	E1402I
I200W	

Inspection Procedure:

1. Block the forward and rear of at least one of the drive axle tires so the vehicle cannot move during this procedure.
2. With a flexible, magnetic base dial indicator, mount the base of the indicator on the tie rod arm so that the indicator tip can be centered on the threads of the stud just above the nut.



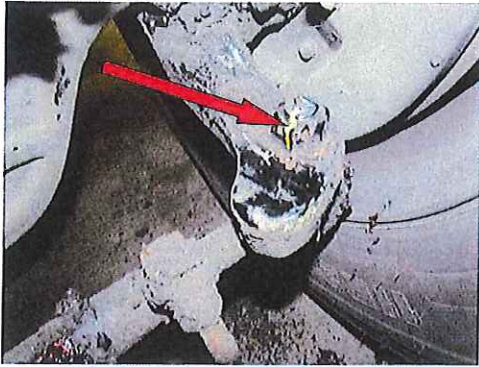
Dial Indicator Mounting Position



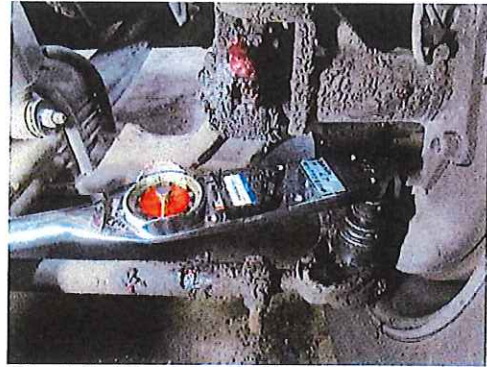
Dial Indicator Tip Must be Placed on The Stud

3. With someone in the cab of the truck turning the steering wheel (engine off) just enough to cause movement in the wheels, document how much movement is found on each side of the steer axle. Record results on the supplied spreadsheet.

4. The next step is to remove the cotter pins and check for proper nut torque. Put a paint mark across one side of the nut and top of the stud. With a DIAL torque wrench and a 1 ¼" socket, torque the nut in a clockwise (tighten) direction until the nut just starts to rotate or you reach 130 ft. lbs. **Important: Do not exceed 170 ft. lbs.** Record your findings on the spreadsheet.



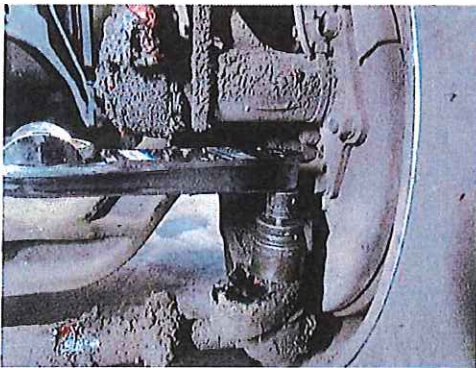
Paint Mark to Identify Nut Rotation



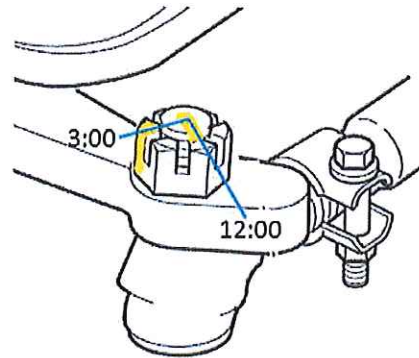
Check Nut Torque – Do Not Exceed 170 ft. lbs.

5. If there is no rotation of the nut at 130 ft. lbs. install a new cotter pin and return the truck to service.

6. If you found rotation of the nut before you reached 130 ft. lbs., we can now torque the nut to 130 ft. lbs. Using the paint mark, record the amount of movement to the nut. Example: Use the paint mark as the 12:00 position, if the nut rotates ¼ turn to reach 130 ft. lbs., document the nut rotated as the 3:00 position.

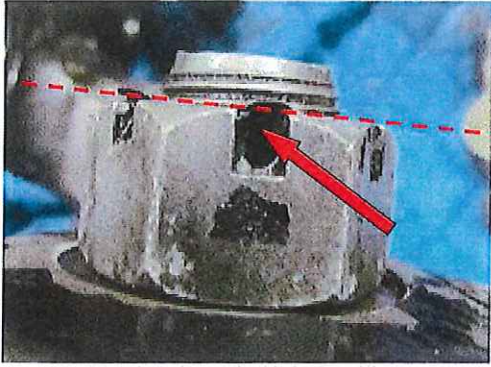


Retorque to 130 ft. lbs.

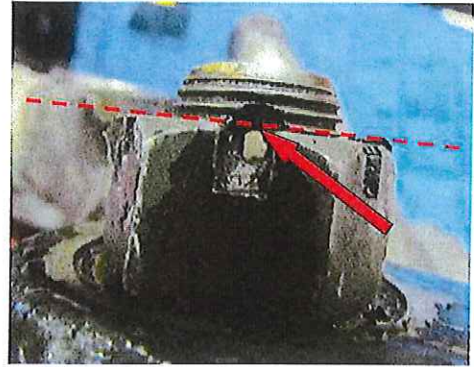


Record Rotation on Nut

7. With the nut torque to 130 ft. lbs. advance the nut so that the cotter pin hole is aligned with a slot in the nut, reinstall the dial indicator and check for tie rod stud movement once again. Record results.
Note: Never back the nut off to align the cotter pin hole to the nut slot. Torque may reach 170 ft. lbs. to obtain proper alignment.
8. **Important:** Any tie rod stud with movement after proper nut torque and alignment will require the replacement of that knuckle and tie rod assembly.
9. **Important:** One last check. After the nut has been aligned with a slot in the nut, the cotter pin hole **CAN NOT** be above the top of the nut as shown below. Any cotter pin hole that is above the top of the nut surface will require the replacement of the knuckle and tie rod end assemblies.



Good Cotter Pin Hole Position



Cotter Pin Hole at Maximum Height

ATTACHMENT B

[insert OE or Dealer letterhead]

[DATE]

VIA FIRST CLASS MAIL

[customer address]

Re: NHTSA Recall #

Dear [customer]:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

[OE] has decided that a defect which relates to motor vehicle safety exists in the tie rod attachment that connects the tie rod taper joint to the knuckle in the following model steer axles manufactured between March 1, 2015 and May 17, 2015 for commercial vehicles:

E1202I	D1461I
E1202W	D850F
E1202IC	E1234WC
E1202XW	E1462I
E1002I	E1462W
E1002W	E1462XW
E1002XW	D600
E1302I	D700F
E1302W	D800
E1322I	D800F
E1322IC	D850B
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EFA-20F4	D2200F
I160W	D2200W
I180W	E1402I
I200W	

The issue may not exist in every unit described above.

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In those subject steer axles that are affected, the tie rod can become loose, which should cause significant auditory warning and/or looseness in steering. If a vehicle operator continues to operate the vehicle in spite of this warning, the tie rod may disconnect from the steering knuckle, which could cause the driver to lose full control of a vehicle wheel (normally the right front tire). Any vehicle operator who experiences the described warnings, or has other evidence of this concern, should immediately cease operation of the vehicle.

Given this potential issue, the steer axle manufacturer, Dana, Inc., is voluntarily recalling the subject steer axle models. To promote your safety and satisfaction with your vehicles, we ask that you bring all vehicles equipped with the described steer axles to [OE to define entity responsible for repair] as soon as possible. At no charge to you, the dealer will inspect the steer axle to determine whether the castellated nuts in the tie rods are adequately torqued. If the inspection reveals that the castellated nuts are not sufficiently torqued, the dealer will torque the nuts. If doing so secures the nuts, the dealer will install a new cotter pin and return the vehicle to service. If the nuts do not become properly secured and aligned after being adequately torqued, the dealer will replace the knuckle and tie rod end assemblies.

It will take approximately X time to inspect your vehicle, and torque the castellated nuts. Approximately Y time is needed if the knuckle and tie rod assemblies must be replaced.

Should you have any questions, please call [OE at phone]. In the event you believe we have failed or are unable to perform the castellated nut inspection and perform any needed repair without charge to you within sixty (60) days after you seek an inspection, you may so notify the Secretary of Transportation at the following address: 1200 New Jersey Avenue, SE, Washington, DC 20590, or phone NHTSA's Vehicle Safety Hotline at 1-888-327-4236 (TTY 1-800-424-9153; or go to <http://www.safercar.gov>).

We regret this inconvenience. We at [OE] are committed to the highest standards of safety and product quality, and our interest is in your safety and satisfaction with your equipment. Please bring this letter to your dealer immediately for a free inspection and, if needed, repair of your steer axles. Thank you.

Sincerely,