MACK TRUCKS, INC.
WORLD HEADQUARTERS
2100 MACK BOULEVARD
BOX M
ALLENTOWN, PA 18105-5000
TELEPHONE: 610.709.3011

May 14, 1999

Mr. Kenneth Weinstein, Associate Administrator
Safety Assurance NSA-11
National Highway Traffic Safety Administration
400 Seventh Street, S.W., Room 5319
Washington, DC 20590

SUBJECT: Vehicle Recall Campaign - SC0257 (NHTSA ID# 99V-014)
Improperly Machined Inner Wheel Bearing Cone for the Steering Axle

Dear Mr. Weinstein:

9. Notices, Bulletins and Communications:

Attached are copies of the owner and dealer notifications. Also included is a copy of the repair instructions dated 4/9/99 and 5/4/99. The instructions dated 5/4/99 supersede the ones dated 4/9/99.

On April 9, 1999, advanced information was mailed to our dealers. Customer cards were mailed April 26, 1999.

Sincerely yours,

MACK TRUCKS, INC.

D.L. Murphy
Campaign Administrator

MACK TRUCKS, INC.
WORLD HEADQUARTERS
2100 MACK BOULEVARD
BOX M
ALLENTOWN, PA 18105-5000
TELEPHONE: 610.709.3011

DEAR MACK TRUCK OWNER:

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

Mack Trucks, Inc. has determined that a defect which relates to motor vehicle safety exists in the inner wheel bearing cone for the steering axle wheel hub assembly. The vehicles affected are Mack class 8 CL, RD, RB, DM, MR, and LE models manufactured from March 1, 1998 through October 6, 1998. The affected chassis are equipped with Mack 16,000 lb, 18,000 lb., and 20,000 lb. heavy duty steering axles.

A condition exists on certain chassis where the steering axle wheel hub inner wheel bearing cone, manufactured by NTN Bearing Corporation of America, was not properly machined, resulting in an improper fit onto the Mack steering axle spindle assembly. Improper fit of the bearing to the spindle increases the stress levels to the steering axle spindle which may cause spindle failure. There is also the potential for the bearing to be cocked (not running square to the bearing cup). Additionally, the bearing may move once the vehicle is put into service resulting in increased bearing end play. If the spindle fails there could be, without warning, a loss of driver control and possibly a vehicle crash. A bearing that is operating with excessive end play and/or not running square to the bearing cup can fail prematurely. This may be noticeable to the driver as a wobble or shimmy in the steering axle, along with physical signs of the wheel seal leaking oil.

To prevent an in-service failure, we urge you to call the nearest Mack Parts and Service Center and make an appointment to have the left and right hub/drum assemblies removed from the steering axles and replace, at no charge (free), the inner wheel bearing cones and cups. Time required to perform the repair is 3.0 hours. All Mack Parts and Service Centers have been sent a bulletin covering all the details required to perform this campaign. If the Mack dealer you select to perform this recall does not have the campaign parts in stock when you call, he can order the parts and also schedule a service date to coincide with delivery of campaign parts.

If you experience any difficulty in obtaining the corrective service, you should contact the Mack Regional Service Office in your area (listed under "Regional Offices" in the Mack Sales, Parts & Service Center Directory) for assistance. The Regional Office will take the necessary action to ensure prompt correction of your vehicle.

If Mack Trucks, Inc. has not fixed your truck free within a reasonable time, you may submit a complaint to: Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, S.W., Washington, DC 20590, or call the toll-free Auto Safety Hotline at (800) 424-9393 (Washington, DC area residents may call (202) 366-0123).

If you no longer own the truck, please help us update our records. Complete the "Vehicle Disposition Record" portion of the enclosed postage-free Notice of Mandatory Safety Campaign card and mail it to us.

MACK TRUCKS, INC.
WARRANTY DEPARTMENT

MACK TRUCKS, INC.
WORLD HEADQUARTERS
2100 MACK BOULEVARD
BOX M
ALLENTOWN, PA 18105-5000
TELEPHONE: 610.709.3011

March 1999

TO: SUBSIDIARY MANAGERS
DISTRIBUTOR PRINCIPALS

SUBJECT: Vehicle Recall Campaign - SC0257
NTN/Bower Improperly Machined Inner Wheel Bearing Cone
For Steering Axle

Mack Trucks, Inc. is conducting a voluntary recall of certain CL, DM, LE, MR, RB, RD models, built between February 23, 1998 and October 6, 1998, to replace potentially defective steering axle inner wheel bearing cones, manufactured by NTN Bearing Corporation of America. The wheel bearing cones used on the above chassis models equipped with Mack 16,000 lb., 18,000 lb., and 20,000 lb. steering axles may exhibit an improper fit onto the Mack steering axle spindle assembly because of not being machined properly. Improper fit of the bearing to the spindle increases the stress levels to the steering axle spindle which may cause spindle failure. There is also the potential for the bearing to be cocked (not running square to the bearing cup). Additionally, the bearing may move once the vehicle is put into service resulting in increased bearing end play. If the spindle fails there could be, without warning, a loss of driver control and possibly a vehicle crash. A bearing that is operating with excessive end play and/or not running square to the bearing cup can fail prematurely. This may be noticeable to the driver as a wobble or shimmy in the steering axle, along with physical signs of the wheel seal leaking oil.

A copy of the service bulletin covering campaign procedures is enclosed.

It is important that preparation be made immediately to assure prompt inspection and/or correction of all vehicles involved. The U.S. Department of Transportation through its intra-agency, the National Highway Traffic Safety Administration has amended the National Traffic and Motor Vehicle Safety Act to require dealers to insure that all new and used vehicles are free of safety defects and comply with all Federal Motor Vehicle Safety Standards at the time of delivery to the consumer. All vehicle recalls which affect new or used inventory must be performed before it is sold or leased. Please refer to Service Operations Service Letter #SL-004-001 dated 11/19/92 regarding the aforementioned amendment.

Please use the enclosed Notice of Mandatory Safety Campaign card(s) to report sold or transferred trucks. Make sure these cards are returned to us and not directly to the customer or to another dealer. A notice to campaign will be mailed to all identified registrants of affected vehicles. To avoid warranty denial of your claim for reimbursement of expenses connected with this campaign, first, make sure the truck presented for campaign work is on your list. If not, check for campaign authorization on the MACKnet claims history inquiry. Also check that the campaign was not completed previously by another Mack dealer.

Mack Trucks, Inc., recommends a follow-up by telephone or a personal visit, of all owners of vehicles subject to recall who fail to bring the vehicle(s) in for this correction. Your District Service Manager will be contacting you to assure that this campaign attains the visibility we feel is necessary to ensure 100% completion of this campaign. Please be prepared to review your progress and/or any problems associated with the campaign.

If you have any questions about this campaign which may not have been covered in this letter or enclosures, please contact the Campaign Administrator in Allentown, (610) 709-3337.

Very truly yours,

MACK TRUCKS, INC.

D.L. Murphy
Campaign Administrator

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Enclosures: Customer Notice
Service Bulletin
Notification Cards

cc: Regional Vice Presidents, District Managers, Regional Service Managers, District Service Managers, District Parts Sales Managers, Subsidiary/Distributor Service Managers, Subsidiary/Distributor Parts Managers.

VEHICLE RECALL

DATE: 5/4/99 (Supersedes SC257 Dated 4/9/99) **SC257**
TO: ALL MACK DISTRIBUTORS AND SUBSIDIARIES

SUBJECT: FRONT WHEEL BEARING REPLACEMENT — CL, RD, RB, DM, MR AND LE MODEL CHASSIS EQUIPPED WITH 16,000, 18,000 AND 20,000 LB. HEAVY-DUTY STEERING AXLES

INFORMATION:

It has been determined that front wheel bearing cones (part No. 62AX469) used on 16,000, 18,000 and 20,000 lb. heavy-duty steering axles were incorrectly machined during the manufacturing process. The inside radius of the inner bearing cone race was not ground correctly. Because of this, the bearing cone will not seat properly on the axle spindle. Premature wheel bearing failure may result because the cone is not running squarely in the bearing cup, or the bearing cone may move once the vehicle is placed in service, resulting in excessive wheel bearing end play. Excessive wobble or shimmy in the steering, along with oil leakage at the wheel seals may be noticed. Long term effects of this condition may result in premature axle spindle failure.

Approximately 8,025 chassis (CL, RD, RB, DM, MR and LE models), manufactured between March 1, 1998 through October 12, 1998, are involved in this campaign. A list of affected chassis has been sent to all applicable dealers.

PROCEDURES:

Both inner front wheel bearings on these affected vehicles must be replaced. Procedures for replacement are as follows:

NOTE

For additional information concerning wheel bearing removal, installation, adjustment, etc., refer to the *Wheel Bearing Service Manual*, 15-701.

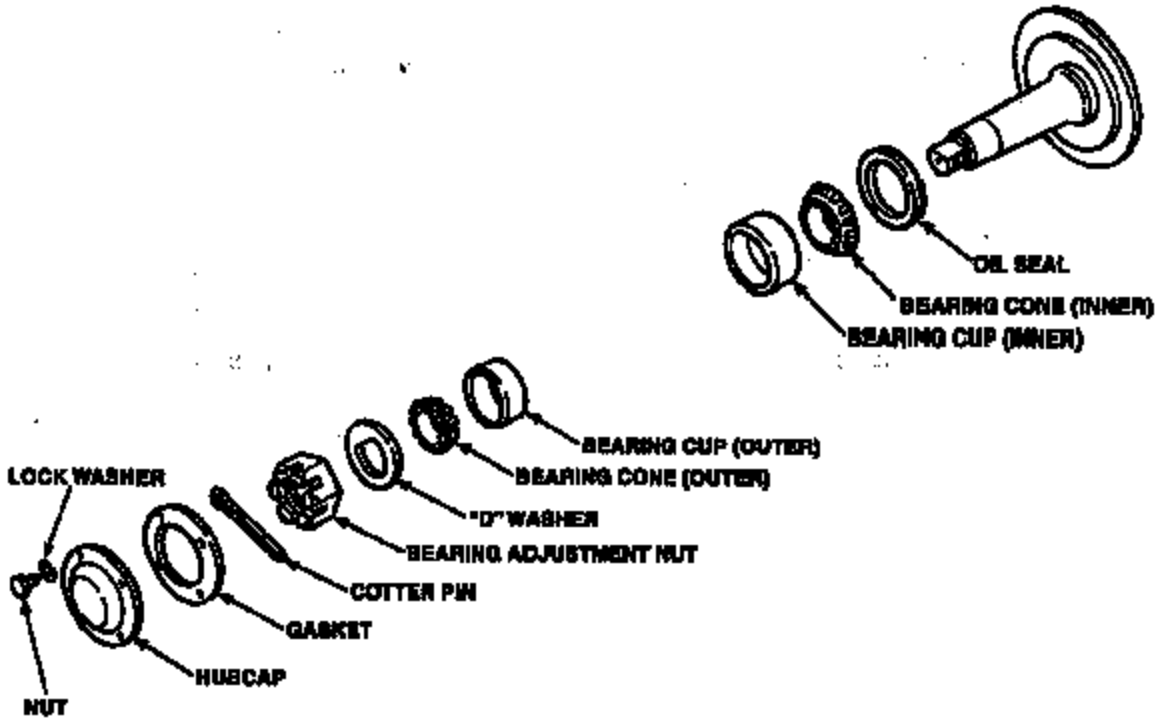
1. Secure the vehicle for service; apply the parking brakes and raise the front of the vehicle so that the front tires are off the ground.
2. Support the vehicle on suitable jack-stands of adequate capacity for the weight of the vehicle.

SERVICE PUBLICATIONS, ALLENTOWN, PA. 18105

⚠CAUTION

Do NOT rely on hydraulic jacks to support the vehicle, as they can fail unexpectedly, resulting in severe personal injury.

3. Back-off the steering axle brake slack adjusters to provide clearance between the brake shoes and brake drums. Refer to the *Air and Brake System Service Manual*, 16-104, if additional information is necessary.
4. Remove the grease hubcaps from both wheel hub assemblies.
5. Remove the cotter pin, adjusting nut, "D" washer and the outer bearing cones from the axle spindle.



NOTE

The tire, wheel/rim and hub should be removed as an assembly. Do not disassembly the tire and wheel/rim from the hub.

6. Using a wheel dolly, remove the tire, wheel/rim and hub as a unit.

NOTE

Because of the improper fit between the inner wheel bearing cone on the axle spindle, it may be difficult to remove the tire, wheel/rim and hub assembly. The assistance of a second person may be required.

7. With the wheel dolly in place and one person at the front of the wheel and a second person at the back of the wheel, remove the tire, wheel/rim and hub assembly by alternately pulling on the inside edge of the tire. Continue alternately wiggling the tire back and forth until the wheel seal is pulled from the hub bore. Once the seal is free of the hub bore, the tire, wheel/rim and hub assembly will be removed.

8. After the tire, wheel/rim and hub assembly is removed, the inner bearing cone may remain jammed on the spindle with the wheel seal trapped behind the cone. Remove the bearing cone from the spindle by tapping on the wheel seal against the backside of the bearing.

⚠CAUTION

Do NOT wedge a chisel, or pry with a pry bar between the backside of the bearing cone and the seal flange on the spindle, as this may cause damage to the edge of the sealing surface.

NOTE

It may be necessary, in some instances, to remove the brake shoes from the front axle to properly dislodge the bearing. If the brake shoes are removed, refer to the *Air and Brake System Service Manual*, 16-104, or service bulletin SB-512-002 for the correct reinstallation of the brake shoes return springs.

9. After removing the inner bearing cones from the axle spindles, thoroughly clean the spindles with a suitable spray degreaser and blow dry with compressed air.

NOTE

The replacement wheel seals listed for this campaign are manufactured by Chicago Rawhide. If the chassis is equipped with Stemco wheel seals, be sure to remove the wear ring from the spindle flange. The wear ring is not used with Chicago Rawhide wheel seals.

10. Remove the inner wheel bearing cups from both wheel hub assemblies. Do not remove the outer bearing cups unless inspection shows that they are damaged and need replacement.
11. Wash the outer bearing cones in a suitable, non-flammable solvent, and dry with a clean lint-free cloth or dry compressed air. If compressed air is used, however, take care not to allow the bearing to spin, or damage to the bearing may result.
12. Inspect the outer wheel bearing cone for damage. Damage to either the outer bearing cup or cone requires that both cup and cone be replaced as a set.

NOTE

If the outer wheel bearing cup or cone requires replacement, replace as a set. Do NOT install a new cone with a used cup, or a used cone with a new cup.

13. Thoroughly clean the wheel hub bores with spray degreaser, then install the new wheel bearing cups (part No. 64AX29).

NOTE

After the new cups are installed, the wheel hub bores must be recleaned with spray degreaser in order to remove any metal chips or other contaminants. The hub seal bores must also be clean and free of any nicks or burrs.

14. If the wheel bearings are grease-lubricated, fill the hub cavity and coat the inner and outer bearing cones with grease as outlined in the *Wheel Bearings Service Manual*, 15-710.
15. Coat the new inner wheel bearing cone (part No. 62AX469) with gear oil. If grease-lubricated wheel bearings, pack the inner wheel bearing cone with grease.
16. Position the inner wheel bearing cone into the inner wheel bearing cup inside the wheel hub bore.

17. Apply a thin coating of RTV silastic sealer to the outside diameter of the new wheel seal (part No. 32QJ252).

18. Using the correct Chicago Rawhide wheel seal installation tool and a hammer, squarely drive the wheel seal into the hub bore until the seal is bottomed.

NOTE

Chicago Rawhide provides seal installation tools at no charge. If these installation tools are required, contact Chicago Rawhide at 1-800-882-0008. The Chicago Rawhide tool part Numbers. for the 32QJ252 wheel seal are: driver handle part No. 450237, driver plate part No. 465 and centering plug part No. 708.

19. Lightly oil the axle spindles and seal flange. If the wheel bearings are grease-lubricated, coat the axle spindles with grease, and lightly oil the seal flange. When installing the tire, wheel/rim and hub, slide the assembly onto the spindle until the wheel seal comes into contact with the outside edge of the seal flange.

NOTE

Do NOT push the wheel seal onto the seal flange at this time. The wheel seal will be drawn over the flange when the outer bearing cone and wheel bearing adjusting nut is installed and tightened.

20. Coat the outer wheel bearing cone with gear oil. If wheel bearings are grease-lubricated, pack the outer bearing cone with grease. Slide the bearing cone onto the axle spindle until it squarely contacts the outer wheel bearing cup.

21. Install the "D" washer and the wheel bearing adjusting nut onto the spindle. Using a proper socket and ratchet, continue tightening the adjusting nut until the hub assembly is bottomed.

22. Remove the tire dolly.

23. Tighten the wheel bearing adjusting nut to value of 200 lb-ft (271 N•m). At this point, resistance should be felt when the front wheel is rotated as all bearing surfaces will be in contact.

24. Back-off the adjusting nut 1/4 turn, then rotate the wheel one complete revolution. The wheel should now rotate freely.

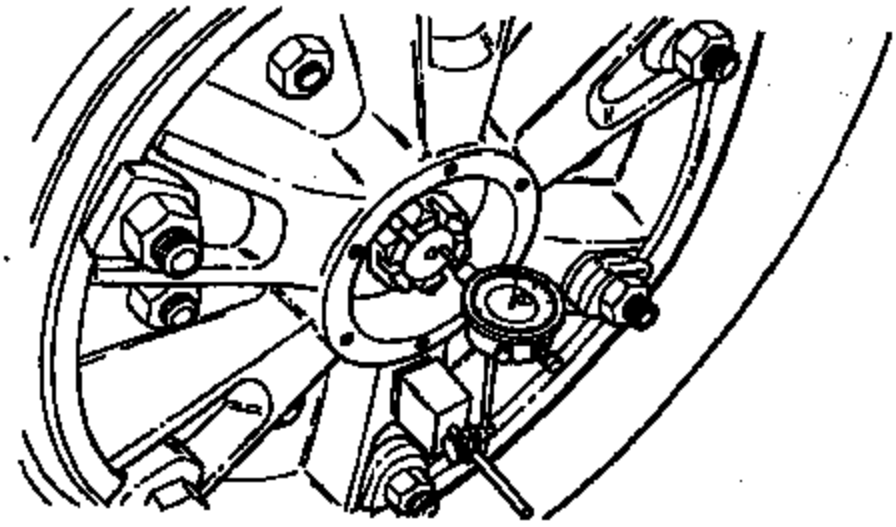
25. Using a dial indicator installed as shown in the illustration below, check wheel bearing end play. End play must be between 0.001–0.005 inch (0.025–0.13 mm). Once wheel bearing end play is set, install new adjusting nut cotter pins (part No. 29AX88).

NOTE

If equipped with aluminum disc wheels, install the dial indicator magnetic base onto the axle spindle and position the dial indicator head on the disc wheel.

NOTE

When measuring wheel bearing end play, the wheel/tire assembly must be pushed and pulled straight. Do not rock or rotate the assembly, or an incorrect end play reading will result.



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26. Using new gaskets (part No. 94RU263), install the grease hubcaps.

27. If the wheel bearings are oil-lubricated, fill the hubs with oil.

28. Readjust the brakes. (Refer to the *Air and Brake System Service Manual*, 16-104, for brake adjustment procedures.0

PARTS REQUIRED:

Order vehicle recall parts on a separate stock order and process through the parts distribution center normally serving your area. Do not include parts on this requisition that are not required for this recall campaign.

International orders are to be prefixed — V.O.R.

Required Part Numbers:

Qty.	Part Number	Description
2	62AX469	Cone, inner wheel bearing
2	64AX29	Cup, inner wheel bearing
2	94RU263	Gasket, grease hubcap
2	32QJ252	Wheel seal
2	29AX88	Cotter pin, wheel bearing adjusting nut

REMOVED PARTS:

Using standard warranty parts return procedures, removed wheel bearings must be returned to the following location:

In the U.S.:

Mack Trucks, Inc.
C/O Dana Corporation
Attention: Warranty Department
Spicer Heavy Axle Division
2919 Old Tree Road
Lancaster, PA 17603

In Canada:

Dana Corporation via Westkota Systems Inc.
1064 South Service Road East
Oakville, Ontario
L6J 2X7

REIMBURSEMENT:

All expenses incurred as a result of this campaign are to be recovered through normal warranty claim procedures. Enter the following information on the warranty claim:

UNDER	ENTER
Failed Part Number	SC0257
Labor Code/Allowance	423 4A 4C 95 3.0 hr. R & R inner front wheel bearings (does not include take-charge time).

VEHICLE RECALL

DATE: 4/9/99 **SC257**
TO: ALL MACK DISTRIBUTORS AND SUBSIDIARIES

SUBJECT: FRONT WHEEL BEARING REPLACEMENT — CL, RD, RB, DM, MR AND LE MODEL CHASSIS EQUIPPED WITH 16,000, 18,000 AND 20,000 LB. HEAVY-DUTY STEERING AXLES

INFORMATION:

It has been determined that front wheel bearing cones (part No. 62AX469) used on 16,000, 18,000 and 20,000 lb. heavy-duty steering axles were incorrectly machined during the manufacturing process. The inside radius of the inner bearing cone race was not ground correctly. Because of this, the bearing cone will not seat properly on the axle spindle. Premature wheel bearing failure may result because the cone is not running squarely in the bearing cup, or the bearing cone may move once the vehicle is placed in service, resulting in excessive wheel bearing end play. Excessive wobble or shimmy in the steering, along with oil leakage at the wheel seals may be noticed. Long term effects of this condition may result in premature axle spindle failure.

Approximately 6,025 chassis (CL, RD, RB, DM, MR and LE models) are involved in this campaign. A list of affected chassis has been sent to all applicable dealers.

PROCEDURES:

Both inner front wheel bearings on these affected vehicles must be replaced. Procedures for replacement are as follows:

NOTE

For additional information concerning wheel bearing removal, installation, adjustment, etc., refer to the *Wheel Bearing Service Manual*, 15-701.

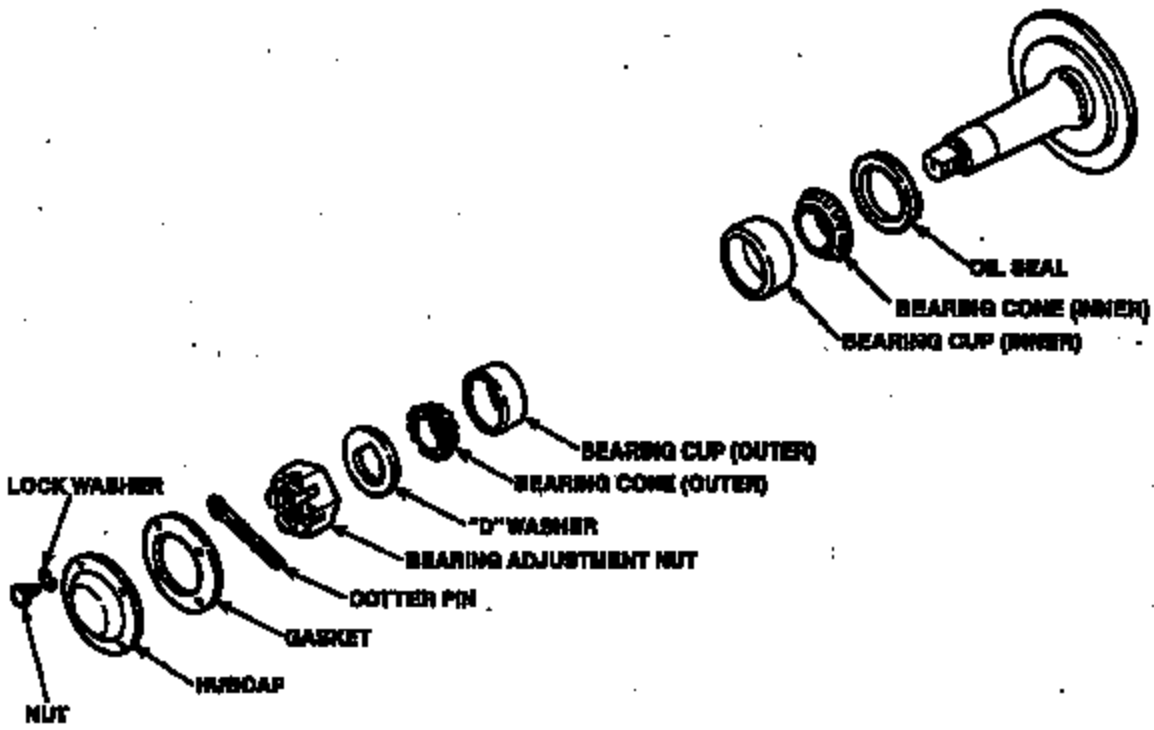
1. Secure the vehicle for service; apply the parking brakes and raise the front of the vehicle so that the front tires are off the ground.
2. Support the vehicle on suitable jack-stands of adequate capacity for the weight of the vehicle.

SERVICE PUBLICATIONS, ALLENTOWN, PA. 18105

▲CAUTION

Do NOT rely on hydraulic jacks to support the vehicle, as they can fail unexpectedly, resulting in severe personal injury.

3. Back-off the steering axle brake slack adjusters to provide clearance between the brake shoes and brake drums. Refer to the *Air and Brake System Service Manual*, 16-104, if additional information is necessary.
4. Remove the grease hubcaps from both wheel hub assemblies.
5. Remove the cotter pin, adjusting nut, "D" washer and the outer bearing cones from the axle spindle.



NOTE

The tire, wheel/rim and hub should be removed as an assembly. Do not disassembly the tire and wheel/rim from the hub.

6. Using a wheel dolly, remove the tire, wheel/rim and hub as a unit.

NOTE

Because of the improper fit between the inner wheel bearing cone on the axle spindle, it may be difficult to remove the tire, wheel/rim and hub assembly. The assistance of a second person may be required.

7. With the wheel dolly in place and one person at the front of the wheel and a second person at the back of the wheel, remove the tire, wheel/rim and hub assembly by alternately pulling on the inside edge of the tire. Continue alternately wiggling the tire back and forth until the wheel seal is pulled from the hub bore. Once the seal is free of the hub bore, the tire, wheel/rim and hub assembly will be removed.
8. After the tire, wheel/rim and hub assembly is removed, the inner bearing cone may remain jammed on the spindle with the wheel seal trapped behind the cone. Remove the bearing cone from the spindle by tapping on the wheel seal against the backside of the bearing.

▲CAUTION

Do NOT wedge a chisel, or pry with a pry bar between the backside of the bearing cone and the seal flange on the spindle, as this may cause damage to the edge of the sealing surface.

NOTE

It may be necessary, in some instances, to remove the brake shoes from the front axle to properly dislodge the bearing. If the brake shoes are removed, refer to the *Air and Brake System Service Manual*, 16-104, or service bulletin SB-512-002 for the correct reinstallation of the brake shoes return springs.

9. After removing the inner bearing cones from the axle spindles, thoroughly clean the spindles with a suitable spray degreaser and blow dry with compressed air.

10. Remove the inner wheel bearing cups from both wheel hub assemblies. Do not remove the outer bearing cups unless inspection shows that they are damaged and need replacement.

11. Wash the outer bearing cones in a suitable, non-flammable solvent, and dry with a clean lint-free cloth or dry compressed air. If compressed air is used, however, take care not to allow the bearing to spin, or damage to the bearing may result.

12. Inspect the outer wheel bearing cone for damage. Damage to either the outer bearing cup or cone requires that both cup and cone be replaced as a set.

NOTE

If the outer wheel bearing cup or cone requires replacement, replace as a set. Do NOT install a new cone with a used cup, or a used cone with a new cup.

13. Thoroughly clean the wheel hub bores with spray degreaser, then install the new wheel bearing cups (part No. 64AX29).

NOTE

After the new cups are installed, the wheel hub bores must be recleaned with spray degreaser in order to remove any metal chips or other contaminants. The hub seal bores must also be clean and free of any nicks or burrs.

14. If the wheel bearings are grease-lubricated, fill the hub cavity and coat the inner and outer bearing cones with grease as outlined in the *Wheel Bearings Service Manual*, 15-710.

15. Coat the new inner wheel bearing cone (part No. 62AX469) with gear oil. If grease-lubricated wheel bearings, pack the inner wheel bearing cone with grease.

16. Position the inner wheel bearing cone into the inner wheel bearing cup inside the wheel hub bore.

17. Apply a thin coating of RTV silastic sealer to the outside diameter of the new wheel seal (part No. 32QJ262).

18. Using the correct Chicago Rawhide wheel seal installation tool and a hammer, squarely drive the wheel seal into the hub bore until the seal is bottomed.

NOTE

Chicago Rawhide provides seal installation tools at no charge. If these installation tools are required, contact Chicago Rawhide at 1-800-662-0008. The Chicago Rawhide tool part Numbers. for the 32QJ252 wheel seal are: driver handle part No. 450237, driver plate part No. 465 and centering plug part No. 708.

19. Lightly oil the axle spindles and seal flange. If the wheel bearings are grease-lubricated, coat the axle spindles with grease, and lightly oil the seal flange. When installing the tire, wheel/rim and hub, slide the assembly onto the spindle until the wheel seal comes into contact with the outside edge of the seal flange.

NOTE

Do NOT push the wheel seal onto the seal flange at this time. The wheel seal will be drawn over the flange when the outer bearing cone and wheel bearing adjusting nut is installed and tightened.

20. Coat the outer wheel bearing cone with gear oil. If wheel bearings are grease-lubricated, pack the outer bearing cone with grease. Slide the bearing cone onto the axle spindle until it squarely contacts the outer wheel bearing cup.

21. Install the "D" washer and the wheel bearing adjusting nut onto the spindle. Using a proper socket and ratchet, continue tightening the adjusting nut until the hub assembly is bottomed.

22. Remove the tire dolly.

23. Tighten the wheel bearing adjusting nut to value of 200 lb-ft (271 N•m). At this point, resistance should be felt when the front wheel is rotated as all bearing surfaces will be in contact.

24. Back-off the adjusting nut 1/4 turn, then rotate the wheel one complete revolution. The wheel should now rotate freely.

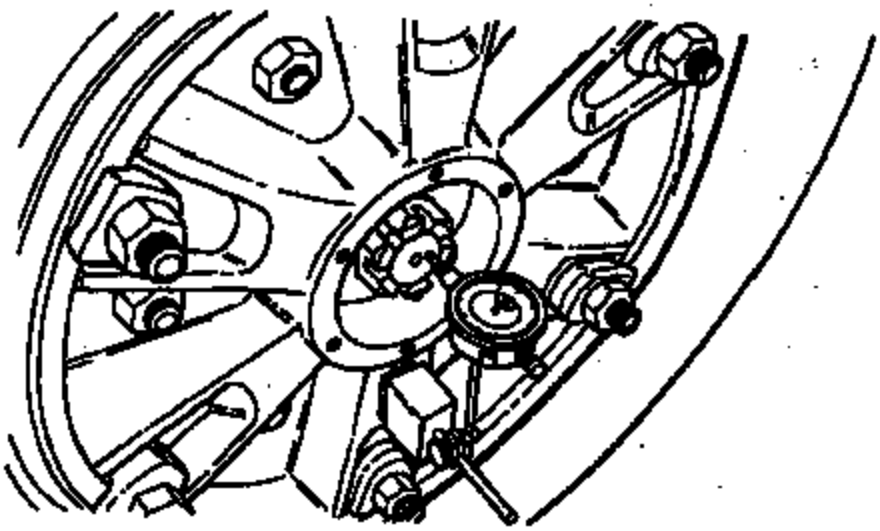
25. Using a dial indicator installed as shown in the illustration below, check wheel bearing end play. End play must be between 0.001–0.005 inch (0.025–0.13 mm). Once wheel bearing end play is set, install new adjusting nut cotter pins (part No. 29AX88).

NOTE

If equipped with aluminum disc wheels, install the dial indicator magnetic base onto the axle spindle and position the dial indicator head on the disc wheel.

NOTE

When measuring wheel bearing end play, the wheel/tire assembly must be pushed and pulled straight. Do not rock or rotate the assembly, or an incorrect end play reading will result.



26. Using new gaskets (part No. 94RU263), install the grease hubcaps.

27. If the wheel bearings are oil-lubricated, fill the hubs with oil.

28. Readjust the brakes. (Refer to the *Air and Brake System Service Manual*, 16-104, for brake adjustment procedures.0

PARTS REQUIRED:

Order vehicle recall parts on a separate stock order and process through the parts distribution center normally serving your area. Do not include parts on this requisition that are not required for this recall campaign.

International orders are to be prefixed — V.O.R.

Required Part Numbers:

Qty.	Part Number	Description
2	62AX489	Cone, inner wheel bearing
2	64AX29	Cup, inner wheel bearing
2	94RU263	Gasket, grease hubcap
2	32QJ252	Wheel seal
2	29AX88	Cotter pin, wheel bearing adjusting nut

REMOVED PARTS:

Using standard warranty parts return procedures, removed wheel bearings must be returned to the following location:

In the U.S.:

Mack Trucks, Inc.
C/O Dana Corporation
Attention: Warranty Department
Spicer Heavy Axle Division
2919 Old Tree Road
Lancaster, PA 17603

In Canada:

Dana Corporation via Westkota Systems Inc.
1064 South Service Road East
Oakville, Ontario
L6J 2X7

REIMBURSEMENT:

All expenses incurred as a result of this campaign are to be recovered through normal warranty claim procedures. Enter the following information on the warranty claim:

UNDER	ENTER
Failed Part Number	SC0257
Labor Code/Allowance	423 4A 4C 95 3.0 hr. R & R inner front wheel bearings (does not include take-charge time).

99V-014.001

VEHICLE RECALL

DATE: 4/9/99 **SC257**
TO: ALL MACK DISTRIBUTORS AND SUBSIDIARIES

SUBJECT: FRONT WHEEL BEARING REPLACEMENT — CL, RD, RB, DM, MR AND LE MODEL CHASSIS EQUIPPED WITH 16,000, 18,000 AND 20,000 LB. HEAVY-DUTY STEERING AXLES

INFORMATION:

It has been determined that front wheel bearing cones (part No. 62AX469) used on 16,000, 18,000 and 20,000 lb. heavy-duty steering axles were incorrectly machined during the manufacturing process. The inside radius of the inner bearing cone race was not ground correctly. Because of this, the bearing cone will not seat properly on the axle spindle. Premature wheel bearing failure may result because the cone is not running squarely in the bearing cup, or the bearing cone may move once the vehicle is placed in service, resulting in excessive wheel bearing end play. Excessive wobble or shimmy in the steering, along with oil leakage at the wheel seals may be noticed. Long term effects of this condition may result in premature axle spindle failure.

Approximately 8,025 chassis (CL, RD, RB, DM, MR and LE models) are involved in this campaign. A list of affected chassis has been sent to all applicable dealers.

PROCEDURES:

Both inner front wheel bearings on these affected vehicles must be replaced. Procedures for replacement are as follows:

NOTE

For additional information concerning wheel bearing removal, installation, adjustment, etc., refer to the *Wheel Bearing Service Manual*, 15-701.

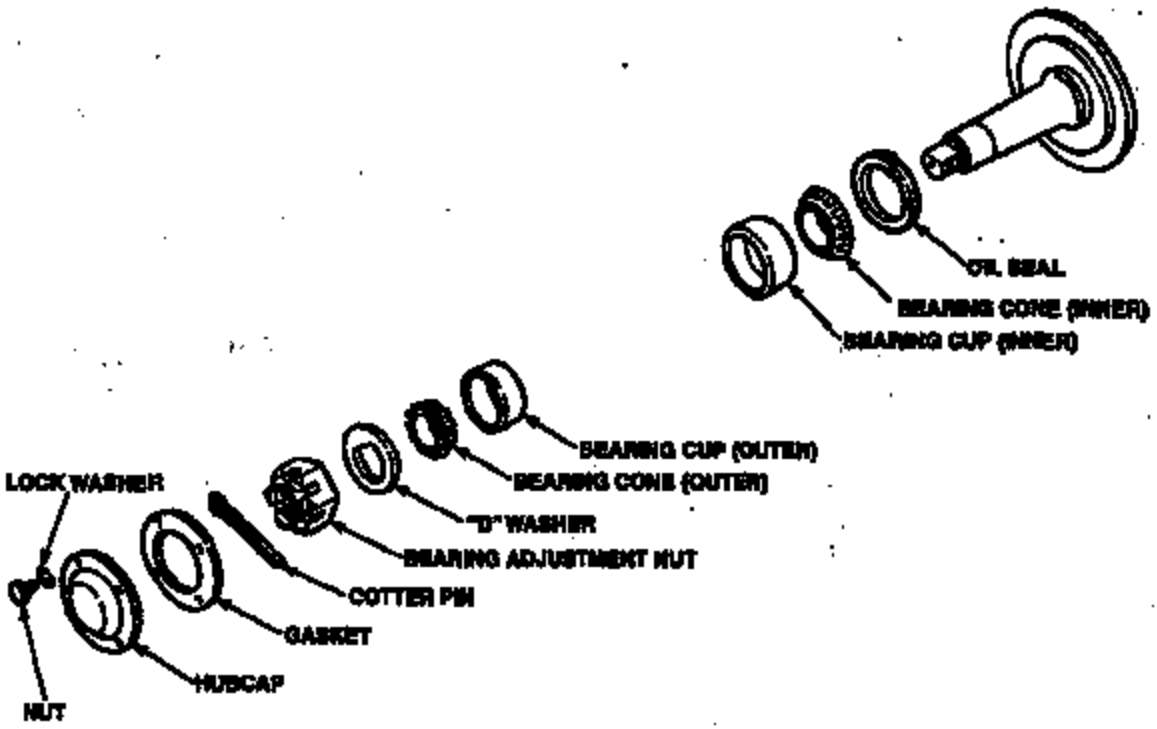
1. Secure the vehicle for service; apply the parking brakes and raise the front of the vehicle so that the front tires are off the ground.
2. Support the vehicle on suitable jack-stands of adequate capacity for the weight of the vehicle.

SERVICE PUBLICATIONS, ALLENTOWN, PA. 18105

▲CAUTION

Do NOT rely on hydraulic jacks to support the vehicle, as they can fail unexpectedly, resulting in severe personal injury.

3. Back-off the steering axle brake slack adjusters to provide clearance between the brake shoes and brake drums. Refer to the *Air and Brake System Service Manual*, 16-104, if additional information is necessary.
4. Remove the grease hubcaps from both wheel hub assemblies.
5. Remove the cotter pin, adjusting nut, "D" washer and the outer bearing cones from the axle spindle.



NOTE

The tire, wheel/rim and hub should be removed as an assembly. Do not disassembly the tire and wheel/rim from the hub.

6. Using a wheel dolly, remove the tire, wheel/rim and hub as a unit.

NOTE

Because of the improper fit between the inner wheel bearing cone on the axle spindle, it may be difficult to remove the tire, wheel/rim and hub assembly. The assistance of a second person may be required.

7. With the wheel dolly in place and one person at the front of the wheel and a second person at the back of the wheel, remove the tire, wheel/rim and hub assembly by alternately pulling on the inside edge of the tire. Continue alternately wiggling the tire back and forth until the wheel seal is pulled from the hub bore. Once the seal is free of the hub bore, the tire, wheel/rim and hub assembly will be removed.
8. After the tire, wheel/rim and hub assembly is removed, the inner bearing cone may remain jammed on the spindle with the wheel seal trapped behind the cone. Remove the bearing cone from the spindle by tapping on the wheel seal against the backside of the bearing.

▲CAUTION

Do NOT wedge a chisel, or pry with a pry bar between the backside of the bearing cone and the seal flange on the spindle, as this may cause damage to the edge of the sealing surface.

NOTE

It may be necessary, in some instances, to remove the brake shoes from the front axle to properly dislodge the bearing. If the brake shoes are removed, refer to the *Air and Brake System Service Manual*, 16-104, or service bulletin SB-512-002 for the correct reinstallation of the brake shoes return springs.

9. After removing the inner bearing cones from the axle spindles, thoroughly clean the spindles with a suitable spray degreaser and blow dry with compressed air.

10. Remove the inner wheel bearing cups from both wheel hub assemblies. Do not remove the outer bearing cups unless inspection shows that they are damaged and need replacement.

11. Wash the outer bearing cones in a suitable, non-flammable solvent, and dry with a clean lint-free cloth or dry compressed air. If compressed air is used, however, take care not to allow the bearing to spin, or damage to the bearing may result.

12. Inspect the outer wheel bearing cone for damage. Damage to either the outer bearing cup or cone requires that both cup and cone be replaced as a set.

NOTE

If the outer wheel bearing cup or cone requires replacement, replace as a set. Do NOT install a new cone with a used cup, or a used cone with a new cup.

13. Thoroughly clean the wheel hub bores with spray degreaser, then install the new wheel bearing cups (part No. 64AX29).

NOTE

After the new cups are installed, the wheel hub bores must be recleaned with spray degreaser in order to remove any metal chips or other contaminants. The hub seal bores must also be clean and free of any nicks or burrs.

14. If the wheel bearings are grease-lubricated, fill the hub cavity and coat the inner and outer bearing cones with grease as outlined in the *Wheel Bearings Service Manual*, 15-710.

15. Coat the new inner wheel bearing cone (part No. 62AX469) with gear oil. If grease-lubricated wheel bearings, pack the inner wheel bearing cone with grease.

16. Position the inner wheel bearing cone into the inner wheel bearing cup inside the wheel hub bore.

17. Apply a thin coating of RTV silastic sealer to the outside diameter of the new wheel seal (part No. 32QJ252).

18. Using the correct Chicago Rawhide wheel seal installation tool and a hammer, squarely drive the wheel seal into the hub bore until the seal is bottomed.

NOTE

Chicago Rawhide provides seal installation tools at no charge. If these installation tools are required, contact Chicago Rawhide at 1-800-882-0008. The Chicago Rawhide tool part Numbers. for the 32QJ252 wheel seal are: driver handle part No. 450237, driver plate part No. 485 and centering plug part No. 708.

19. Lightly oil the axle spindles and seal flange. If the wheel bearings are grease-lubricated, coat the axle spindles with grease, and lightly oil the seal flange. When installing the tire, wheel/rim and hub, slide the assembly onto the spindle until the wheel seal comes into contact with the outside edge of the seal flange.

NOTE

Do NOT push the wheel seal onto the seal flange at this time. The wheel seal will be drawn over the flange when the outer bearing cone and wheel bearing adjusting nut is installed and tightened.

20. Coat the outer wheel bearing cone with gear oil. If wheel bearings are grease-lubricated, pack the outer bearing cone with grease. Slide the bearing cone onto the axle spindle until it squarely contacts the outer wheel bearing cup.

21. Install the "D" washer and the wheel bearing adjusting nut onto the spindle. Using a proper socket and ratchet, continue tightening the adjusting nut until the hub assembly is bottomed.

22. Remove the tire dolly.

23. Tighten the wheel bearing adjusting nut to value of 200 lb-ft (271 N•m). At this point, resistance should be felt when the front wheel is rotated as all bearing surfaces will be in contact.

24. Back-off the adjusting nut 1/4 turn, then rotate the wheel one complete revolution. The wheel should now rotate freely.

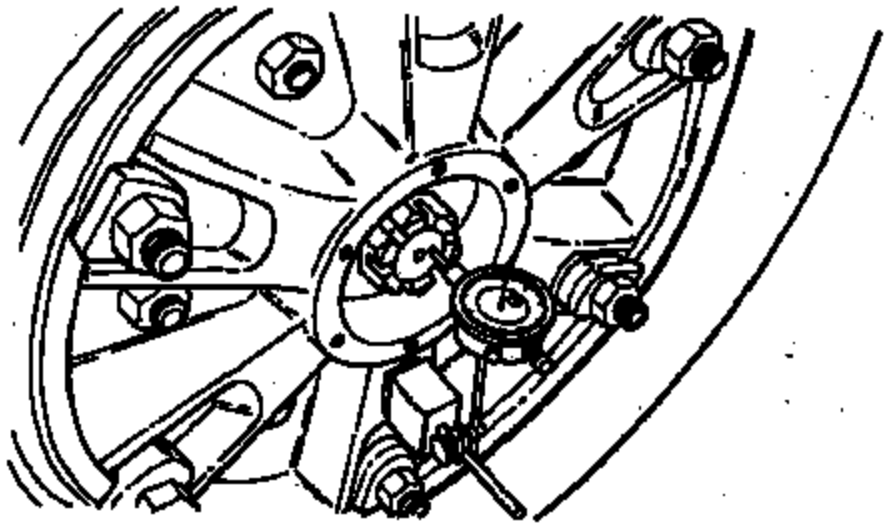
25. Using a dial indicator installed as shown in the illustration below, check wheel bearing end play. End play must be between 0.001–0.005 inch (0.025–0.13 mm). Once wheel bearing end play is set, install new adjusting nut cotter pins (part No. 29AX88).

NOTE

If equipped with aluminum disc wheels, install the dial indicator magnetic base onto the axle spindle and position the dial indicator head on the disc wheel.

NOTE

When measuring wheel bearing end play, the wheel/tire assembly must be pushed and pulled straight. Do not rock or rotate the assembly, or an incorrect end play reading will result.



26. Using new gaskets (part No. 94RU263), install the grease hubcaps.

27. If the wheel bearings are oil-lubricated, fill the hubs with oil.

28. Readjust the brakes. (Refer to the *Air and Brake System Service Manual*, 16-104, for brake adjustment procedures.0

PARTS REQUIRED:

Order vehicle recall parts on a separate stock order and process through the parts distribution center normally serving your area. Do not include parts on this requisition that are not required for this recall campaign.

International orders are to be prefixed — V.O.R.

Required Part Numbers:

Qty.	Part Number	Description
2	62AX469	Cone, inner wheel bearing
2	64AX29	Cup, inner wheel bearing
2	94RU263	Gasket, grease hubcap
2	32QJ252	Wheel seal
2	29AX88	Cotter pin, wheel bearing adjusting nut

REMOVED PARTS:

Using standard warranty parts return procedures, removed wheel bearings must be returned to the following location:

In the U.S.:

Mack Trucks, Inc.
C/O Dana Corporation
Attention: Warranty Department
Spicer Heavy Axle Division
2919 Old Tree Road
Lancaster, PA 17603

In Canada:

Dana Corporation via Westkota Systems Inc.
1064 South Service Road East
Oakville, Ontario
L6J 2X7

REIMBURSEMENT:

All expenses incurred as a result of this campaign are to be recovered through normal warranty claim procedures. Enter the following information on the warranty claim:

UNDER	ENTER
Failed Part Number	SC0257
Labor Code/Allowance	423 4A 4C 95 3.0 hr. R & R inner front wheel bearings (does not include take-charge time).

99V-014.001

VEHICLE RECALL

DATE: 5/4/99 (Supersedes SC257 Dated 4/9/99) SC257
TO: ALL MACK DISTRIBUTORS AND SUBSIDIARIES

SUBJECT: FRONT WHEEL BEARING REPLACEMENT — CL, RD, RB, DM, MR AND LE MODEL CHASSIS EQUIPPED WITH 16,000, 18,000 AND 20,000 LB. HEAVY-DUTY STEERING AXLES

INFORMATION:

It has been determined that front wheel bearing cones (part No. 62AX469) used on 16,000, 18,000 and 20,000 lb. heavy-duty steering axles were incorrectly machined during the manufacturing process. The inside radius of the inner bearing cone race was not ground correctly. Because of this, the bearing cone will not seat properly on the axle spindle. Premature wheel bearing failure may result because the cone is not running squarely in the bearing cup, or the bearing cone may move once the vehicle is placed in service, resulting in excessive wheel bearing end play. Excessive wobble or shimmy in the steering, along with oil leakage at the wheel seals may be noticed. Long term effects of this condition may result in premature axle spindle failure.

Approximately 8,025 chassis (CL, RD, RB, DM, MR and LE models), manufactured between March 1, 1998 through October 12, 1998, are involved in this campaign. A list of affected chassis has been sent to all applicable dealers.

PROCEDURES:

Both inner front wheel bearings on these affected vehicles must be replaced. Procedures for replacement are as follows:

NOTE

For additional information concerning wheel bearing removal, installation, adjustment, etc., refer to the *Wheel Bearing Service Manual*, 15-701.

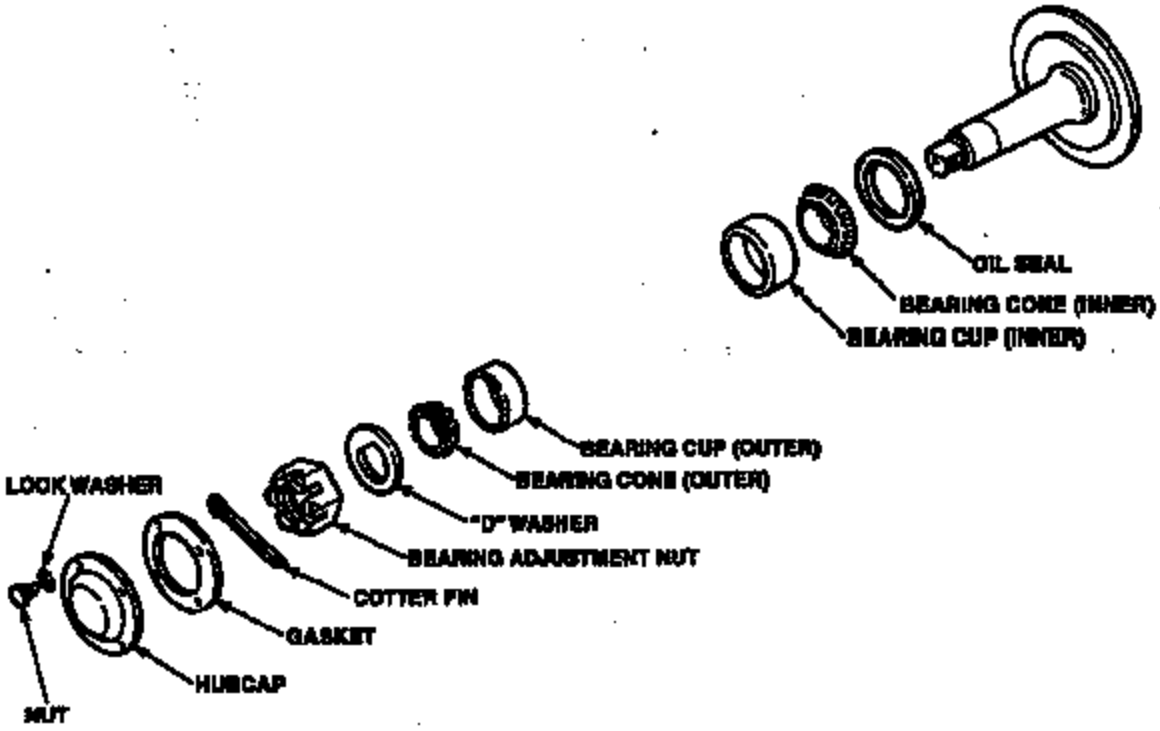
1. Secure the vehicle for service; apply the parking brakes and raise the front of the vehicle so that the front tires are off the ground.
2. Support the vehicle on suitable jack-stands of adequate capacity for the weight of the vehicle.

SERVICE PUBLICATIONS, ALLENTOWN, PA. 18105

▲CAUTION

Do NOT rely on hydraulic jacks to support the vehicle, as they can fail unexpectedly, resulting in severe personal injury.

3. Back-off the steering axle brake slack adjusters to provide clearance between the brake shoes and brake drums. Refer to the *Air and Brake System Service Manual*, 16-104, if additional information is necessary.
4. Remove the grease hubcaps from both wheel hub assemblies.
5. Remove the cotter pin, adjusting nut, "D" washer and the outer bearing cones from the axle spindle.



NOTE

The tire, wheel/rim and hub should be removed as an assembly. Do not disassembly the tire and wheel/rim from the hub.

6. Using a wheel dolly, remove the tire, wheel/rim and hub as a unit.

NOTE

Because of the improper fit between the inner wheel bearing cone on the axle spindle, it may be difficult to remove the tire, wheel/rim and hub assembly. The assistance of a second person may be required.

7. With the wheel dolly in place and one person at the front of the wheel and a second person at the back of the wheel, remove the tire, wheel/rim and hub assembly by alternately pulling on the inside edge of the tire. Continue alternately wiggling the tire back and forth until the wheel seal is pulled from the hub bore. Once the seal is free of the hub bore, the tire, wheel/rim and hub assembly will be removed.
8. After the tire, wheel/rim and hub assembly is removed, the inner bearing cone may remain jammed on the spindle with the wheel seal trapped behind the cone. Remove the bearing cone from the spindle by tapping on the wheel seal against the backside of the bearing.

⚠CAUTION

Do NOT wedge a chisel, or pry with a pry bar between the backside of the bearing cone and the seal flange on the spindle, as this may cause damage to the edge of the sealing surface.

NOTE

It may be necessary, in some instances, to remove the brake shoes from the front axle to properly dislodge the bearing. If the brake shoes are removed, refer to the *Air and Brake System Service Manual*, 16-104, or service bulletin SB-512-002 for the correct reinstallation of the brake shoes return springs.

9. After removing the inner bearing cones from the axle spindles, thoroughly clean the spindles with a suitable spray degreaser and blow dry with compressed air.

NOTE

The replacement wheel seals listed for this campaign are manufactured by Chicago Rawhide. If the chassis is equipped with Stemco wheel seals, be sure to remove the wear ring from the spindle flange. The wear ring is not used with Chicago Rawhide wheel seals.

10. Remove the inner wheel bearing cups from both wheel hub assemblies. Do not remove the outer bearing cups unless inspection shows that they are damaged and need replacement.
11. Wash the outer bearing cones in a suitable, non-flammable solvent, and dry with a clean lint-free cloth or dry compressed air. If compressed air is used, however, take care not to allow the bearing to spin, or damage to the bearing may result.
12. Inspect the outer wheel bearing cone for damage. Damage to either the outer bearing cup or cone requires that both cup and cone be replaced as a set.

NOTE

If the outer wheel bearing cup or cone requires replacement, replace as a set. Do NOT install a new cone with a used cup, or a used cone with a new cup.

13. Thoroughly clean the wheel hub bores with spray degreaser, then install the new wheel bearing cups (part No. 64AX29).

NOTE

After the new cups are installed, the wheel hub bores must be recleaned with spray degreaser in order to remove any metal chips or other contaminants. The hub seal bores must also be clean and free of any nicks or burrs.

14. If the wheel bearings are grease-lubricated, fill the hub cavity and coat the inner and outer bearing cones with grease as outlined in the *Wheel Bearings Service Manual*, 15-710.
15. Coat the new inner wheel bearing cone (part No. 62AX469) with gear oil. If grease-lubricated wheel bearings, pack the inner wheel bearing cone with grease.
16. Position the inner wheel bearing cone into the inner wheel bearing cup inside the wheel hub bore.

17. Apply a thin coating of RTV silastic sealer to the outside diameter of the new wheel seal (part No. 32QJ252).

18. Using the correct Chicago Rawhide wheel seal installation tool and a hammer, squarely drive the wheel seal into the hub bore until the seal is bottomed.

NOTE

Chicago Rawhide provides seal installation tools at no charge. If these installation tools are required, contact Chicago Rawhide at 1-800-882-0008. The Chicago Rawhide tool part Numbers. for the 32QJ252 wheel seal are: driver handle part No. 450237, driver plate part No. 465 and centering plug part No. 708.

19. Lightly oil the axle spindles and seal flange. If the wheel bearings are grease-lubricated, coat the axle spindles with grease, and lightly oil the seal flange. When installing the tire, wheel/rim and hub, slide the assembly onto the spindle until the wheel seal comes into contact with the outside edge of the seal flange.

NOTE

Do NOT push the wheel seal onto the seal flange at this time. The wheel seal will be drawn over the flange when the outer bearing cone and wheel bearing adjusting nut is installed and tightened.

20. Coat the outer wheel bearing cone with gear oil. If wheel bearings are grease-lubricated, pack the outer bearing cone with grease. Slide the bearing cone onto the axle spindle until it squarely contacts the outer wheel bearing cup.

21. Install the "D" washer and the wheel bearing adjusting nut onto the spindle. Using a proper socket and ratchet, continue tightening the adjusting nut until the hub assembly is bottomed.

22. Remove the tire dolly.

23. Tighten the wheel bearing adjusting nut to value of 200 lb-ft (271 N•m). At this point, resistance should be felt when the front wheel is rotated as all bearing surfaces will be in contact.

24. Back-off the adjusting nut 1/4 turn, then rotate the wheel one complete revolution. The wheel should now rotate freely.

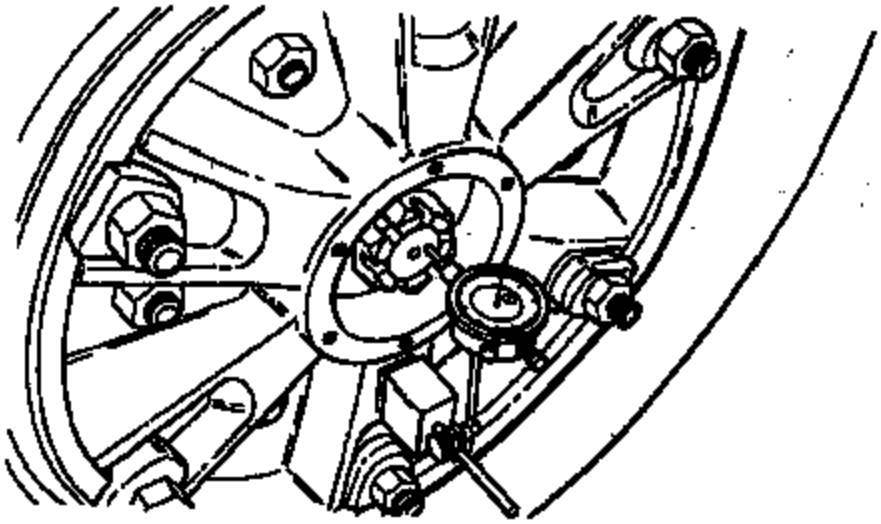
25. Using a **dial indicator** installed as shown in the illustration below, check wheel bearing end play. End play must be between 0.001–0.005 inch (0.025–0.13 mm). Once wheel bearing end play is set, install new adjusting nut cotter pins (part No. 29AX88).

NOTE

If equipped with aluminum disc wheels, install the dial indicator magnetic base onto the axle spindle and position the dial indicator head on the disc wheel.

NOTE

When measuring wheel bearing end play, the wheel/tire assembly must be pushed and pulled straight. Do not rock or rotate the assembly, or an incorrect end play reading will result.



26. Using new gaskets (part No. 94RU263), install the grease hubcaps.
27. If the wheel bearings are oil-lubricated, fill the hubs with oil.
28. Readjust the brakes. (Refer to the *Air and Brake System Service Manual*, 16-104, for brake adjustment procedures.0

PARTS REQUIRED:

Order vehicle recall parts on a separate stock order and process through the parts distribution center normally serving your area. Do not include parts on this requisition that are not required for this recall campaign.

International orders are to be prefixed — V.O.R.

Required Part Numbers:

Qty.	Part Number	Description
2	62AX469	Cone, inner wheel bearing
2	64AX29	Cup, inner wheel bearing
2	94RU263	Gasket, grease hubcap
2	32QJ252	Wheel seal
2	29AX88	Cotter pin, wheel bearing adjusting nut

REMOVED PARTS:

Using standard warranty parts return procedures, removed wheel bearings must be returned to the following location:

In the U.S.:

Mack Trucks, Inc.
C/O Dana Corporation
Attention: Warranty Department
Spicer Heavy Axle Division
2919 Old Tree Road
Lancaster, PA 17603

In Canada:

Dana Corporation via Westkota Systems Inc.
1064 South Service Road East
Oakville, Ontario
L6J 2X7

REIMBURSEMENT:

All expenses incurred as a result of this campaign are to be recovered through normal warranty claim procedures. Enter the following information on the warranty claim:

UNDER	ENTER
Failed Part Number	SC0257
Labor Code/Allowance	423 4A 4C 95 3.0 hr. R & R inner front wheel bearings (does not include take-charge time).

99V-018.00

VEHICLE RECALL

DATE: 6/22/99 (Supersedes SC257 Dated 5/4/99) SC257
TO: ALL MACK DISTRIBUTORS AND SUBSIDIARIES

SUBJECT: FRONT WHEEL BEARING REPLACEMENT — CL, RD, RB, DM, MR AND LE MODEL CHASSIS EQUIPPED WITH 16,000, 18,000 AND 20,000 LB. HEAVY-DUTY STEERING AXLES

INFORMATION:

It has been determined that front wheel bearing cones (part No. 62AX469) used on 16,000, 18,000 and 20,000 lb. heavy-duty steering axles were incorrectly machined during the manufacturing process. The inside radius of the inner bearing cone race was not ground correctly. Because of this, the bearing cone will not seat properly on the axle spindle. Premature wheel bearing failure may result because the cone is not running squarely in the bearing cup, or the bearing cone may move once the vehicle is placed in service, resulting in excessive wheel bearing end play. Excessive wobble or shimmy in the steering, along with oil leakage at the wheel seals may be noticed. Long term effects of this condition may result in premature axle spindle failure.

Approximately 8,025 chassis (CL, RD, RB, DM, MR and LE models), manufactured between March 1, 1998 through October 12, 1998, are involved in this campaign. A list of affected chassis has been sent to all applicable dealers.

PROCEDURES:

Both inner front wheel bearings on these affected vehicles must be replaced. Procedures for replacement are as follows:

NOTE

For additional information concerning wheel bearing removal, installation, adjustment, etc., refer to the *Wheel Bearing Service Manual*, 15-701.

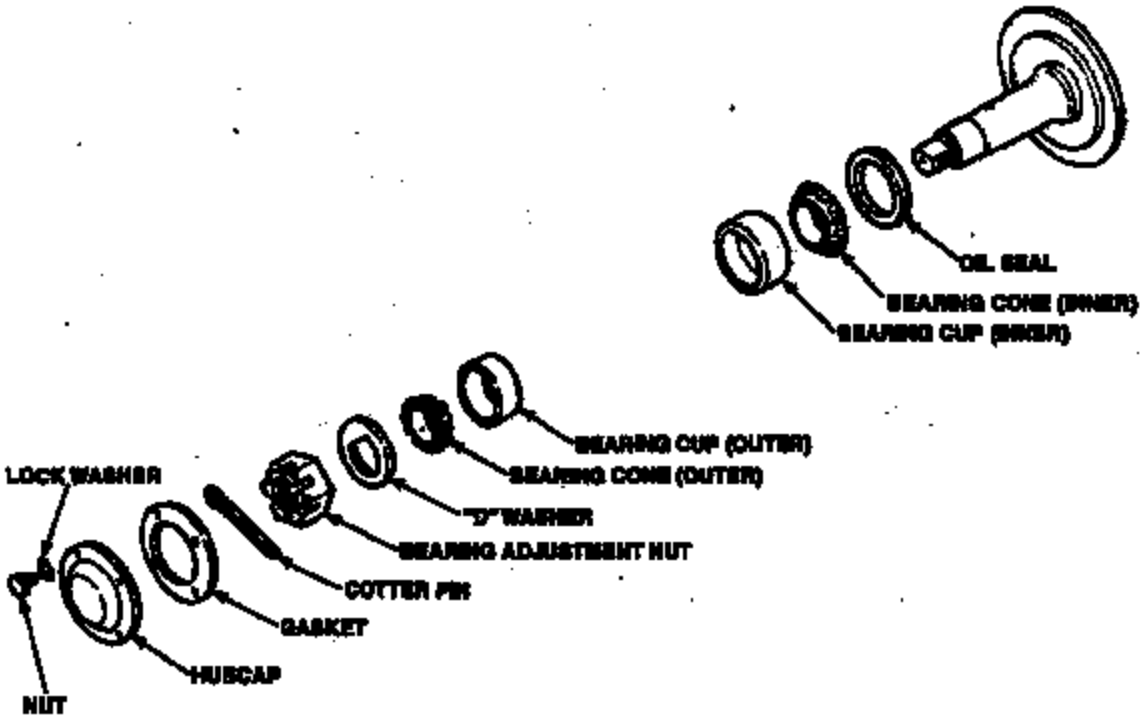
1. Secure the vehicle for service; apply the parking brakes and raise the front of the vehicle so that the front tires are off the ground.
2. Support the vehicle on suitable jack-stands of adequate capacity for the weight of the vehicle.

SERVICE PUBLICATIONS, ALLENTOWN, PA 18105

⚠CAUTION

Do NOT rely on hydraulic jacks to support the vehicle, as they can fail unexpectedly, resulting in severe personal injury.

3. Back-off the steering axle brake slack adjusters to provide clearance between the brake shoes and brake drums. Refer to the *Air and Brake System Service Manual*, 16-104, if additional information is necessary.
4. Remove the grease hubcaps from both wheel hub assemblies.
5. Remove the cotter pin, adjusting nut, "D" washer and the outer bearing cones from the axle spindle.



NOTE

The tire, wheel/rim and hub should be removed as an assembly. Do not disassembly the tire and wheel/rim from the hub.

6. Using a wheel dolly, remove the tire, wheel/rim and hub as a unit.

NOTE

Because of the improper fit between the inner wheel bearing cone on the axle spindle, it may be difficult to remove the tire, wheel/rim and hub assembly. The assistance of a second person may be required.

7. With the wheel dolly in place and one person at the front of the wheel and a second person at the back of the wheel, remove the tire, wheel/rim and hub assembly by alternately pulling on the inside edge of the tire. Continue alternately wiggling the tire back and forth until the wheel seal is pulled from the hub bore. Once the seal is free of the hub bore, the tire, wheel/rim and hub assembly will be removed.

8. After the tire, wheel/rim and hub assembly is removed, the inner bearing cone may remain jammed on the spindle with the wheel seal trapped behind the cone. Remove the bearing cone from the spindle by tapping on the wheel seal against the backside of the bearing.

⚠CAUTION

Do NOT wedge a chisel, or pry with a pry bar between the backside of the bearing cone and the seal flange on the spindle, as this may cause damage to the edge of the sealing surface.

If the bearing cone cannot be dislodged from the spindle by tapping on the wheel seal, the following procedure should be used:

a. Use a torch to cut the roller cage from the bearing cone.

NOTE

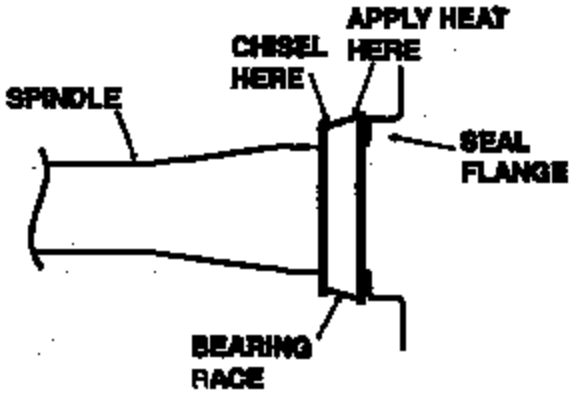
Take care not to blow slag from the melted steel in the direction of the spindle seal flange.

b. Remove the cage and rollers from the bearing cone.

c. Using the torch, heat one focused spot on the cone raceway at the 12:00 o'clock

position on the inside edge nearest the seal flange. Apply heat for approximately 30 seconds.

d. After heating the spot on the raceway for 30 seconds, use a hammer and chisel to dislodge the cone raceway from the spindle.



NOTE

It may be necessary, in some instances, to remove the brake shoes from the front axle to properly dislodge the bearing. If the brake shoes are removed, refer to the *Air and Brake System Service Manual*, 16-104, or service bulletin SB-512-002 for the correct reinstallation of the brake shoes return springs.

9. After removing the inner bearing cones from the axle spindles, thoroughly clean the spindles with a suitable spray degreaser and blow dry with compressed air.

NOTE

The replacement wheel seals listed for this campaign are manufactured by Chicago Rawhide. If the chassis is equipped with Stemco wheel seals, be sure to remove the wear ring from the spindle flange. The wear ring is not used with Chicago Rawhide wheel seals.

10. Remove the inner wheel bearing cups from both wheel hub assemblies. Do not remove the outer bearing cups unless inspection shows that they are damaged and need replacement.

11. Wash the outer bearing cones in a suitable, non-flammable solvent, and dry with a clean lint-free cloth or dry compressed air. If compressed air is used, however, take care not to allow the bearing to spin, or damage to the bearing may result.

12. Inspect the outer wheel bearing cone for damage. Damage to either the outer bearing cup or cone requires that both cup and cone be replaced as a set.

NOTE

If the outer wheel bearing cup or cone requires replacement, replace as a set. Do NOT install a new cone with a used cup, or a used cone with a new cup.

13. Thoroughly clean the wheel hub bores with spray degreaser, then install the new wheel bearing cups (part No. 64AX29).

NOTE

After the new cups are installed, the wheel hub bores must be recleaned with spray degreaser in order to remove any metal chips or other contaminants. The hub seal bores must also be clean and free of any nicks or burrs.

14. If the wheel bearings are grease-lubricated, fill the hub cavity and coat the inner and outer bearing cones with grease as outlined in the *Wheel Bearings Service Manual*, 15-710.
15. Coat the new inner wheel bearing cone (part No. 82AX469) with gear oil. If grease-lubricated wheel bearings, pack the inner wheel bearing cone with grease.
16. Position the inner wheel bearing cone into the inner wheel bearing cup inside the wheel hub bore.
17. Apply a thin coating of RTV silastic sealer to the outside diameter of the new wheel seal (part No. 32QJ252).
18. Using the correct Chicago Rawhide wheel seal installation tool and a hammer, squarely drive the wheel seal into the hub bore until the seal is bottomed.

NOTE

Chicago Rawhide provides seal installation tools at no charge. If these installation tools are required, contact Chicago Rawhide at 1-800-882-0008. The Chicago Rawhide tool part Numbers. for the 32QJ252 wheel seal are: driver handle part No. 450237, driver plate part No. 465 and centering plug part No. 708.

19. Lightly oil the axle spindles and seal flange. If the wheel bearings are grease-lubricated, coat the axle spindles with grease, and lightly oil the seal flange. When installing the tire, wheel/rim and hub, slide the assembly onto the spindle until the wheel seal comes into contact with the outside edge of the seal flange.

NOTE

Do NOT push the wheel seal onto the seal flange at this time. The wheel seal will be drawn over the flange when the outer bearing cone and wheel bearing adjusting nut is installed and tightened.

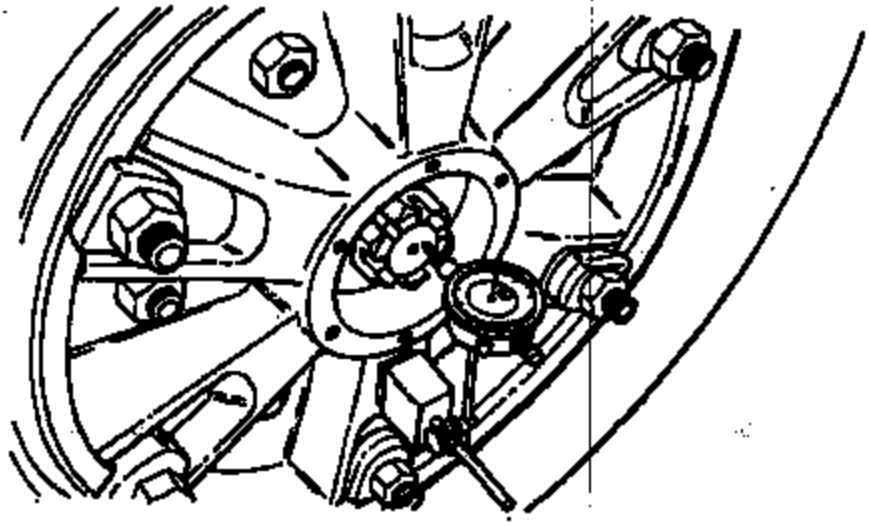
20. Coat the outer wheel bearing cone with gear oil. If wheel bearings are grease-lubricated, pack the outer bearing cone with grease. Slide the bearing cone onto the axle spindle until it squarely contacts the outer wheel bearing cup.
21. Install the "D" washer and the wheel bearing adjusting nut onto the spindle. Using a proper socket and ratchet, continue tightening the adjusting nut until the hub assembly is bottomed.
22. Remove the tire dolly.
23. Tighten the wheel bearing adjusting nut to value of 200 lb-ft (271 N•m). At this point, resistance should be felt when the front wheel is rotated as all bearing surfaces will be in contact.
24. Back-off the adjusting nut 1/4 turn, then rotate the wheel one complete revolution. The wheel should now rotate freely.
25. Using a dial indicator installed as shown in the following illustration, check wheel bearing end play. End play must be between 0.001–0.005 inch (0.025–0.13 mm). Once wheel bearing end play is set, install new adjusting nut cotter pins (part No. 29AX88).

NOTE

If equipped with aluminum disc wheels, install the dial indicator magnetic base onto the axle spindle and position the dial indicator head on the disc wheel.

NOTE

When measuring wheel bearing end play, the wheel/tire assembly must be pushed and pulled straight. Do not rock or rotate the assembly, or an incorrect end play reading will result.



26. Using new gaskets (part No. 94RU263), install the grease hubcaps.

27. If the wheel bearings are oil-lubricated, fill the hubs with oil.

28. Readjust the brakes. (Refer to the *Air and Brake System Service Manual*, 16-104, for brake adjustment procedures.)

29. On chassis equipped with ABS, be sure to reset the wheel speed sensor by pushing the sensor until it contacts the tone wheel.

PARTS REQUIRED:

Order vehicle recall parts on a separate stock order and process through the parts distribution center normally serving your area. Do not include parts on this requisition that are not required for this recall campaign.

International orders are to be prefixed — V.O.R.

Required Part Numbers:

Qty.	Part Number	Description
2	62AX469	Cone, inner wheel bearing
2	64AX29	Cup, inner wheel bearing
2	94RU263	Gasket, grease hubcap
2	32QJ252	Wheel seal
2	29AX88	Cotter pin, wheel bearing adjusting nut

REMOVED PARTS:

Using standard warranty parts return procedures, removed wheel bearings must be returned to the following location:

In the U.S.:

Mack Trucks, Inc.
C/O Dana Corporation
Attention: Warranty Department
Spicer Heavy Axle Division
2919 Old Tree Road
Lancaster, PA 17603

In Canada:

Dana Corporation via Westkota Systems Inc.
1084 South Service Road East
Oakville, Ontario
L6J 2X7

REIMBURSEMENT:

All expenses incurred as a result of this campaign are to be recovered through normal warranty claim procedures. Enter the following information on the warranty claim:

UNDER	ENTER		
Failed Part Number	SC0257		
Labor Code/Allowance	423 4A 4C 95	3.0 hr.	R & R inner front wheel bearings (does not include take-charge time). Includes time to R & R brake shoes if required, and additional help of a second technician to assist in the hub removal step.