https://truckmanualshub.com/

Service Manual

Fuller Mechanical Transmissions TRSM0992

October 2007

Powering Business Worldwide

BACKED BY Roadranger SUPPORT

For parts or service call us
Pro Gear & Transmission, Inc.

1 (877) 776-4600

(407) 872-1901

parts@eprogear.com

906 W. Gore St.

Orlando, FL 32805



https://truckmanualshub.com/

Introduction

Warnings and Precautions



Before starting a vehicle always be seated in the driver's seat, place the transmission in neutral, set the parking brakes and disengage the clutch.

Before working on a vehicle place the transmission in neutral, set the parking brakes and block the wheels.

Before towing the vehicle place the transmission in neutral, and lift the rear wheels off the ground, remove the axle shafts, or disconnect the driveline to avoid damage to the transmission during towing.

The description and specifications contained in this service publication are current at the time of printing.

Eaton Corporation reserves the right to discontinue or modify its models and/or procedures and to change specifications at any time without notice.

Any reference to brand name in this publication is made as an example of the types of tools and materials recommended for use and should not be considered an endorsement. Equivalents may be used.



This symbol is used throughout this manual to call attention to procedures where carelessness or failure to follow specific instructions may result in personal injury and/or component damage.

Departure from the instructions, choice of tools, materials and recommended parts mentioned in this publication may jeopardize the personal safety of the service technician or vehicle operator.

Warning: Failure to follow indicated procedures creates a high risk of personal injury to the servicing technician.

Caution: Failure to follow indicated procedures may cause component damage or malfunction.

Note: Additional service information not covered in the service procedures.

Tip: Helpful removal and installation procedures to aid in the service of this unit.

Always use genuine Eaton replacement parts.

https://truckmanualshub.com/

Table of Contents

General Information

Description 1
Specifications 2
Lubrication 3
Preventative Maintenance Check List 4
Tool Reference 5
Torque Ratings 6

Removal and Disassembly

General Instructions for Disassembly 7
How to Remove the Mainshaft Assembly 8
How to Remove the Shifting Bar and Yoke 12
How to Remove and Disassemble the
Drive Gear Assembly 13
How to Remove and Disassemble the
Countershaft Assembly Model 2-A-92 Only 15

Assembly and Installation

Inspection and General Instructions
for Reassembly 18
To Reassemble and Install the
Countershaft Assembly Model 2-A-92 Only 20
To Reassemble and Install the
Drive Gear Assembly 22
How to Install the Shifting Yoke and Bar 23
How to Reassemble and Install the
Mainshaft Assembly 24
How to Install the Drive Gear Housing Assembly 28
How to Complete Installation of the
Shifting Yoke and Bar 30

https://truckmanualshub.com/

https://truckmanualshub.com/

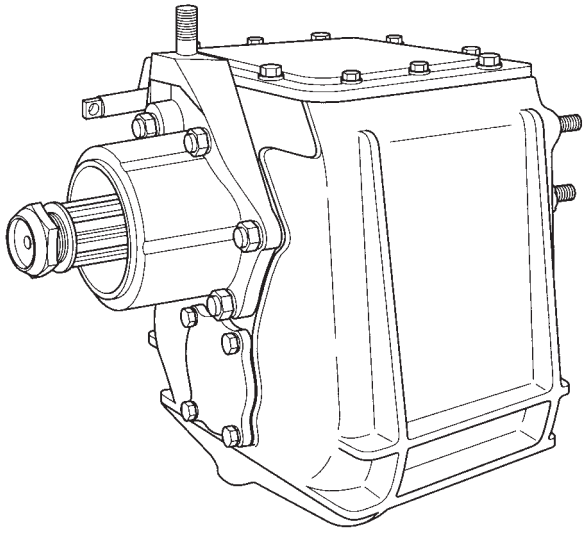
Description

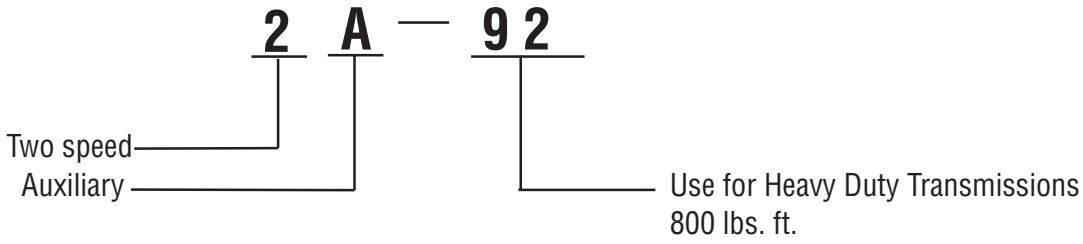
The 2-A-92 model is a two-speed auxilliary transmission, designed primarily for use with heavy-duty transmissions.

This transmission contains two sets of gears, thus giving the reduction (low) ratio when power is delivered through the two sets of gears. The other speed is obtained by direct (high) drive through the auxiliary.

A single shift bar in the right side of the case controls the speed changes. When the shift bar is moved 7/8" forward from neutral, the mainshaft sliding gear locks the mainshaft to the drive gear and shaft, thus delivering power directly through the transmission. When the shift bar is moved 7/8" to the rear from neutral, the sliding clutch locks the mainshaft bushed gear to the mainshaft, thus transferring power through the two sets of gears to obtain the reduction ratio.

The 2-A-92 has a solid countershaft with an integral low speed gear and a press-fit drive gear.





https://truckmanualshub.com/

Specifications

Specification Information

Gear Ratios	2-A-92
Direct	1.00
Low (Reduction)	2.30

Mountings
Front - One vertical stud in front bearing housing. An optional mounting consists of a nose piece machined for trunnion mounting.

Rear - Four 5/8" studs with nuts and lockwashers in rear face of case.

Control
Single shifting bar in right side of case. Forward position of shifting bar shifts transmission into direct drive, rear position shifts transmission into the reduction gear. A shift lever can be mounted on an extended brake shaft on the main transmission to operate a control rod to the auxiliary transmission shifting bar.

Speedometer Drive
Provision is made in the rear bearing cover for the installation of a speedometer gear and the attachment of a cable. An electronic sensor may also be installed by adding the correct cover and rotor.

Weight	330 pounds
Oil Capacity	12 pints
Installation length	16-3/16 inches

https://truckmanualshub.com/

Lubrication Specifications

Note: For a list of Eaton Approved Synthetic Lubricants, see TCMT-0021 the list of approved lubricants and TCMT-0021 the list of lube intervals, or call 1-800-826-HELP (4357). Recommended lubricants for the 2-A-92 are currently the E500 and the E250, which list a mileage, a year, and a hour change interval.

Note: The use of lubricants not meeting these requirements will affect warranty coverage.

Note: Additives and friction modifiers must not be introduced.

Note: Never mix engine oils and gear oils in the same transmission.

Buy from a reputable dealer

For a complete list of approved and reputable dealers, write to: Eaton Corporation, Worldwide Marketing Services, P.O. Box 4013, Kalamazoo, MI 49003

Transmission Operating Angles

If the transmission operating angle is more than 12 degrees, improper lubrication will occur. The operating angle is the transmission mounting angle in the chassis plus the percent of upgrade (expressed in degrees). For operating angles over 12 degrees, the transmission must be equipped with an oil pump or cooler kit to insure proper lubrication.

Mixing of Oil Types

CAUTION: Never mix engine oils & gear oils in the same transmission.

Engine oils and gear oils may not be compatible; mixing can cause breakdown of the lubricant and affect component performance. When switching between types of lubricants, all areas of each affected component must be thoroughly flushed.

https://truckmanualshub.com/

Preventative Maintenance Check List

The following maintenance checks can be made without removing the transmission from the chassis. Items 1 through 5 can be performed without any prior mechanical work; items 6 through 8 require the dropping of the output driveline and the input driveline where possible.

1. Oil Leaks

- Make visual checks for oil leakage from mainshaft openings, gaskets at bearing covers, top cover, and from front rear shifting bar bores. Check drain plugs for losseness.

2. Gear Lubricant

- Remove filler plug in right side and check oil level at regular service intervals.
- Change oil at specified intervals, using grade and type recommended.

Note: See Lubrication section for inspection, oil type, grade, and oil capacity.

3. Gear Shift Lever and Linkage

- Check the auxiliary gear shift lever for wear at mounting.
- Check shifting linkage for wear and looseness.
- Check to make sure exact neutral position of auxiliary gear shift lever corresponds to neutral position of auxiliary shifting bar.

4. Capscrews and Nuts

- Check capscrews in top cover and bearing covers for looseness which might be the cause of oil leakage.
- Check nuts on rear support bracket or plate for looseness.

5. Mountings

- Check mounting bolts and nuts for looseness.

6. Universal Joint Companion Flange Retaining Nuts

- With output driveline dropped, and front driveline dropped, where possible, check nuts for looseness. Tighten to recommended torque.

7. Splines on Shafts

- Check input and output shafts for wear from movement and chucking action of universal joint companion flange.

8. Mainshaft Rear Bearing

- Pry upward against output shaft to check radial clearance of mainshaft rear bearing.

https://truckmanualshub.com/

Tool Reference

Some illustrations in this manual show the use of specialized maintenance tools. These tools are recommended for transmission repair as they make repair easier, faster, and prevent costly damage to such critical parts as bearings and sleeves.

Listed below are charts which list these specialized tools, the tool name and how it can be obtained.

General Tools

Tool	Purpose
0-100 lbs.ft. 1/2" drive Torque Wrench	General torquing of fasteners.
0-600 lbs.ft. 3/4" or 1" drive Torque Wrench	Torquing of output nut.
Snap Ring Pliers - large standard external	To remove snap rings at the auxiliary drive gear, input shaft bearing, and countershaft.
Rolling Head (Crow's foot) prybar	To remove the auxiliary drive gear bearing.

Aftermarket Tools

Tool	Purpose	Eaton Part Number
Seal Driver Kit	To install seal	K-2413

Special Tools

Reference Number	Tool	Purpose	G and W Tool Number	Great Lakes Tool Number
T-1	Seal Driver	Used to install the oil seals	G-112	T-101 #2
T-2	Bearing Driver	Used to install the rear countershaft bearing	G-810	*
T-3	Bearing Driver	Used to install the front countershaft bearing	G-200P and G-200H	T-101 #6,10
T-4	Bearing Driver	Used to install rear mainshaft bearing	G-810	*
T-5	Bearing Driver	Used to install input shaft rear bearing	G-810	*
T-6	Bearing Driver	Used to install inut shaft front bearing	G-810	*
* Indicates no tool listed at time of publication				

Specialty Tool Manufacturers
Below are the addresses and phone numbers of the companies that make tools specifically for Eaton®Fuller® transmissions:

G and W Tool Company
1105 E. Louisville, Broken Arrow, OK 74012-5724, Phone: 800-247-5882, or 918-258-6881

Great Lakes Tool
8530 M-89, Richland, MI 49083, Phone: 800-877-9618, or 269-629-9628

https://truckmanualshub.com/

Torque

Torque Ratings

Recommended torque ratings, location, and thread sizes of capscrews and nuts used on 2-A-92 auxiliary transmissions are listed below. Capscrew lengths are given for reference purposes.

Correct torque application is extremely important to assure long transmission life and dependable performance. Over-tightening or under-tightening can result in a loose installation and, in many instances, eventually cause damage to gears, shafts, or bearings.

Capscrews

	Thread Size and Length	Torque Rating LB. FT.
Countershaft front bearing cover	3/8-16 x 1	35-45
Rear bearing cover	3/8-16 x 1-1/2 3/8-16 x 2	35-45
Top cover	3/8-16 x 1-1/4	35-45
Top cover	1/2-13 x 1-1/4	75-90
Countershaft bearing retainer plate	1/2-20 x 1	100-115

Nuts

	Thread Size and Length	Torque Rating lbs. ft.
Drive gear bearing housing	1/2 - 20	100-115
Companion flange styles:		
Elastic stop nut	1-1/2 - 18	400-450
Slotted type nut	1-1/2 - 18	250-300

https://truckmanualshub.com/

General Instructions for Disassembly

Important: Read this section before starting the detailed disassembly procedures.

It is assumed in the detailed disassembly instructions that the transmission has been removed from the chassis, the lubricant has been drained, the parking brake removed, if so equipped, and both universal joint companion flanges have been removed.

Follow each procedure closely in each section, making use of both the text and pictures. Use certain precautions, as listed below, during disassembly.

Cleanliness

- Provide a clean place to work. It is important that no dirt or foreign material enters the unit during repairs. The outside of the unit should be carefully cleaned before starting the disassembly. Dirt is abrasive and can damage highly polished parts such as bearings, sleeves, and bushings.

Bearings

- Carefully wash and re-lubricate all bearings as removed and protectively wrap until ready for use. Remove all bearings with pullers designed for this purpose. Do not remove bearings with hammer and punch.

When Driving

- Apply force to shafts, bearings, and housings with restraint. Movement of some parts is restricted. Do not apply force after the part being driven stops solidly. Use soft hammers, soft bars, and mauls for all disassembly work.

Snap Rings

- Remove snap rings with pliers designed for this purpose. Rings removed in this manner may be reused.

https://truckmanualshub.com/

How to Remove the Mainshaft Assembly

Special Instructions

None

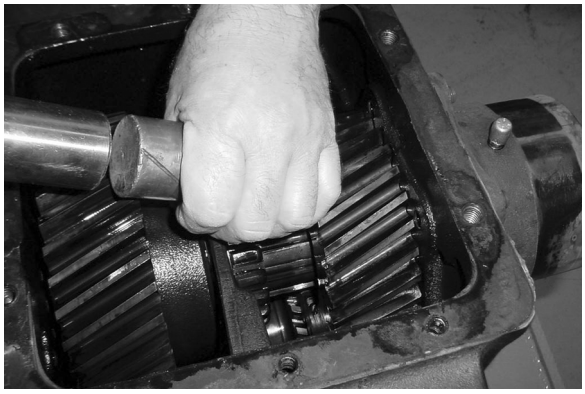
Special Tools

- Typical service tools



Procedure -

1. Turn out the attaching capscrews and remove the top cover.
2. Remove the nuts and lockwashers from studs which attach the front bearing housing to the case. Do not remove the housing.



3. From inside the case, use maul and soft bar to force the drive gear forward until its front face strikes the inside wall of case.



4. Turn out the attaching capscrews and remove the rear bearing cover from rear of case. Remove the oil seal from cover, if necessary.
5. Remove the speedometer gear or replacement spacer from the rear of the mainshaft.
6. Remove the speedometer gear washer from the rear of mainshaft.

https://truckmanualshub.com/

7. From inside the case, use maul and soft bar to force the mainshaft assembly to the rear until rear face of low speed gear strikes the inside wall of case.

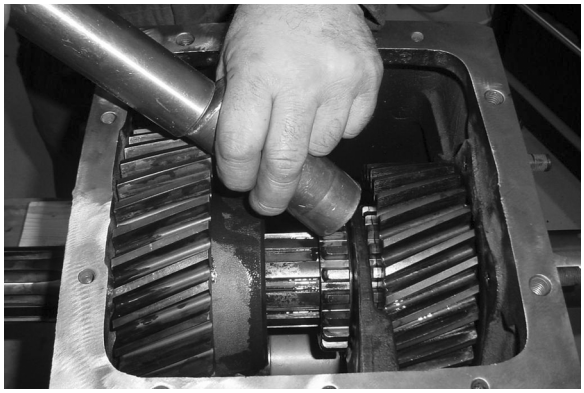


8. Remove the tension spring screw, tension spring, and the tension spring ball from the vertical bore in the right side of the case.

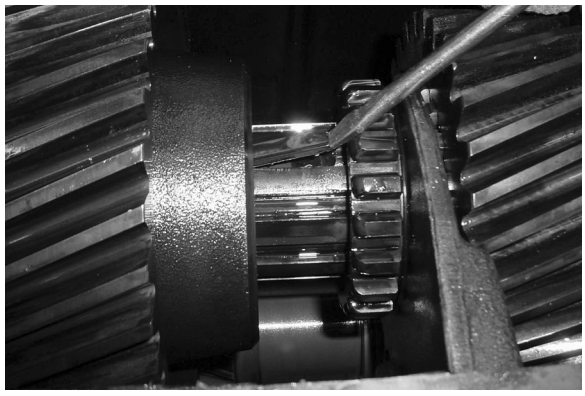
9. Locate the mainshaft washer key which is installed in keyway between the splines of the mainshaft under the sliding clutch gear. Turn the shaft so the key is in the uppermost position.



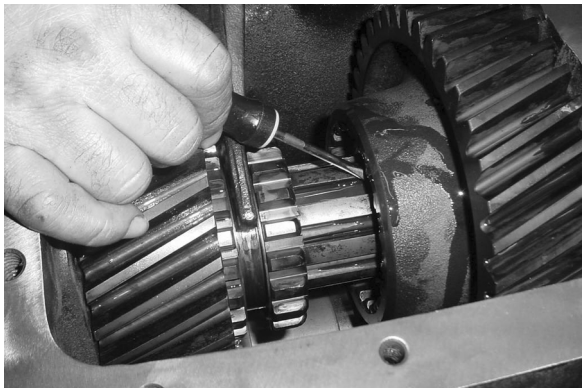
10. With the mainshaft held in its rearmost position, drive against the sliding clutch gear with a soft bar to move the pilot bearing forward on the mainshaft until the mainshaft key is completely exposed.



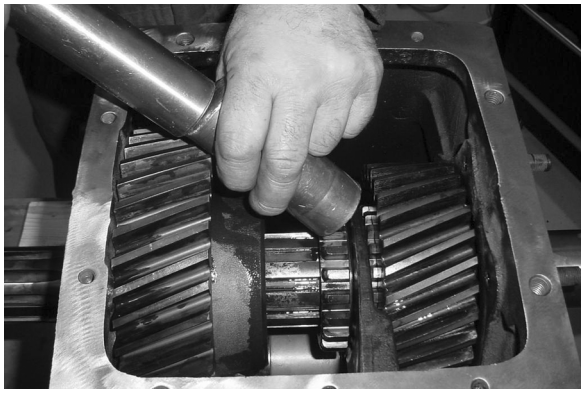
11. Remove the mainshaft key from its keyway between the splines of the shaft.



https://truckmanualshub.com/



12. Inside the pocket of the low speed gear, turn the splined thrust washer in its groove until the lugs on its inside diameter line up with the grooves in the mainshaft.



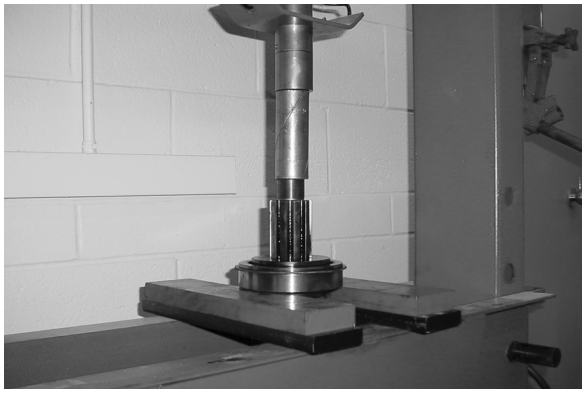
13. Move the mainshaft to the rear, sliding the splined thrust washer forward along the splines of the mainshaft.

14. Move the pilot bearing forward with the sliding clutch gear into the pocket of the drive gear to completely unseat pilot bearing from the mainshaft.



15. Pull mainshaft out through rear bore of case.

16. Remove the loose parts consisting of the pilot bearing, sliding clutch gear, splined washer, and low speed gear from the case.



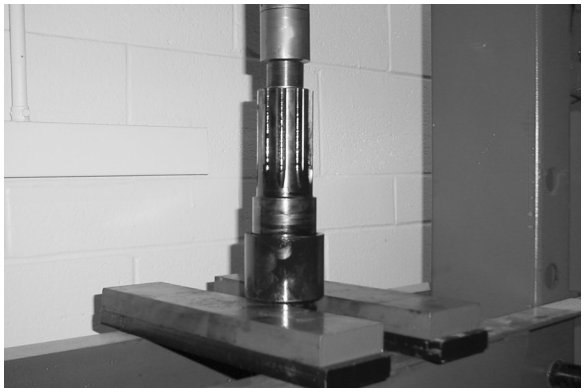
17. Press the rear bearing from the mainshaft.

18. Remove the low speed gear rear thrust washer from the shaft.

https://truckmanualshub.com/

19. Press the low speed gear sleeve from the mainshaft.

20. Remove the Woodruff key from the mainshaft.



https://truckmanualshub.com/

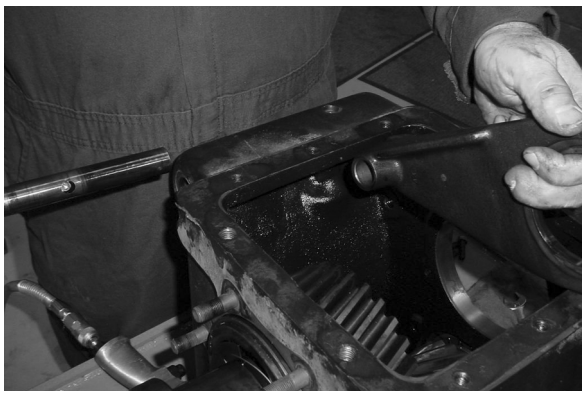
How to Remove the Shifting Bar and Yoke

Special Instructions

None

Special Tools

- Typical service tools



Procedure -

1. Cut the lockwire and remove the lockscrew from the shifting yoke.
2. Withdraw the shifting bar out through the front bore of the case and remove the shifting yoke from the case.
3. If necessary, remove the shifting bar packing and packing retainer from the front shifting bar bore in the case and remove the Welch plug from the rear shifting bar bore.
4. If necessary, remove the pipe plug from the bore in the top of the case.

https://truckmanualshub.com/

How to Remove and Disassemble the Drive Gear Assembly

Special Instructions

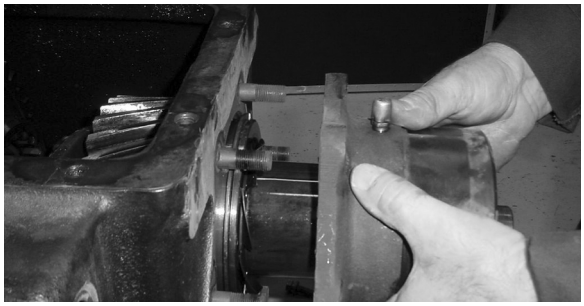
None

Special Tools

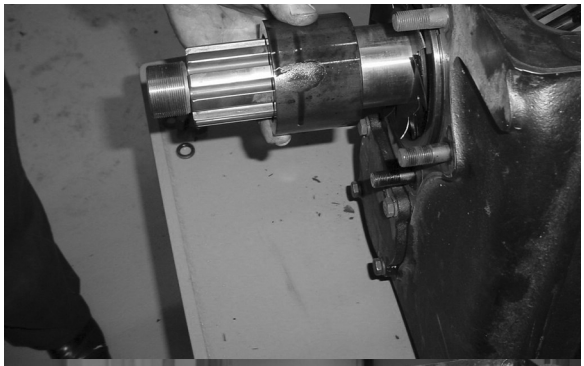
- Typical service tools

Procedure -

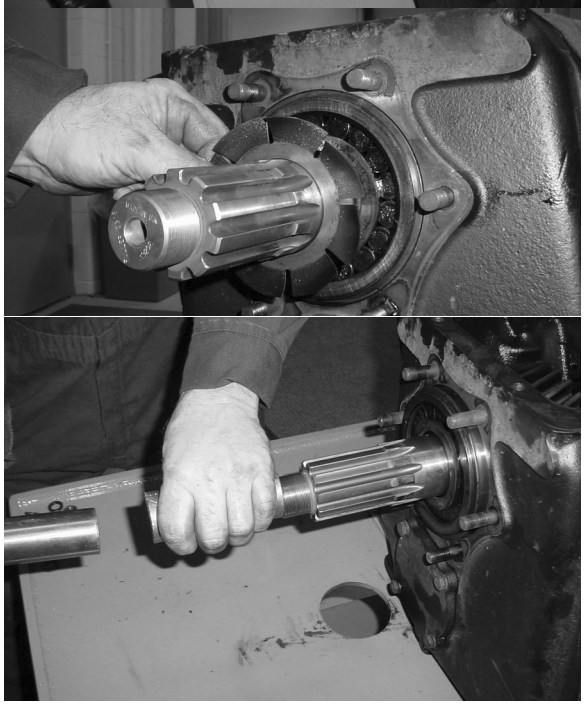
1. Tap lightly and pull forward evenly to remove the front bearing housing from the case studs.



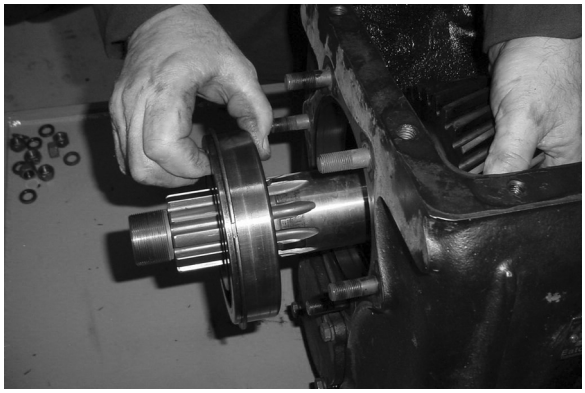
2. Remove the spacer and oil deflector. These parts will be loose either in the housing or on the drive gear shaft.



3. Using a soft bar, drive against the front end of the drive gear shaft to force the drive gear to the rear and through the bearings and housing.



https://truckmanualshub.com/



4. Move the drive gear forward to lightly tap the main bearing forward and out of the case bore.



5. Remove the drive gear from inside the case.

6. Remove the outer bearing in the front bearing housing out through the rear of the housing. Jar the housing on a wood block or use a bearing driver to remove.

7. Remove the oil seal from the front bearing housing. Move the seal forward and out of the housing.

8. If necessary, remove the breather from the bearing housing.

https://truckmanualshub.com/

How to Remove and Disassemble the Countershaft Assembly

Special Instructions

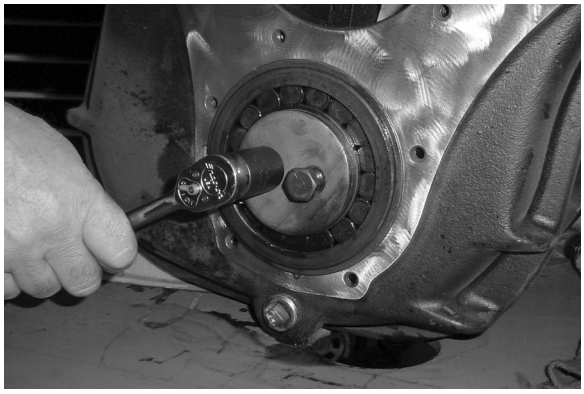
None

Special Tools

- Typical service tools

Procedure -

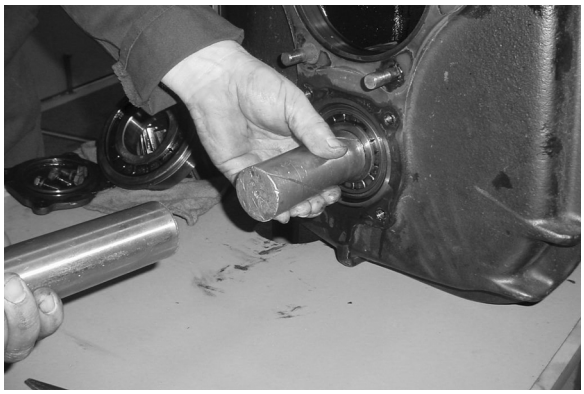
1. Cut lockwire, turn out capscrews, and remove the bearing retainer plate from the rear of the countershaft.



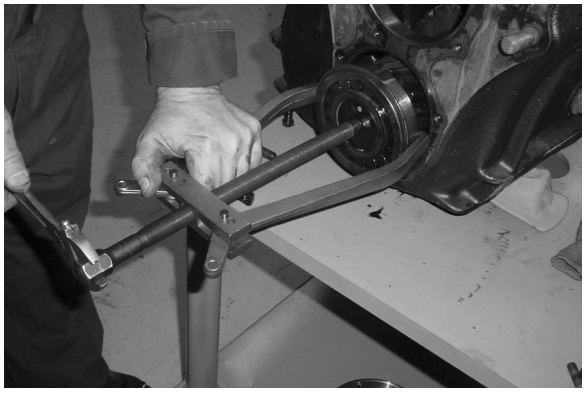
2. Turn out the capscrews and remove the countershaft front bearing cover and front bearing spacer.



3. Move countershaft assembly to the rear to expose the rear bearing outside of the case bore.



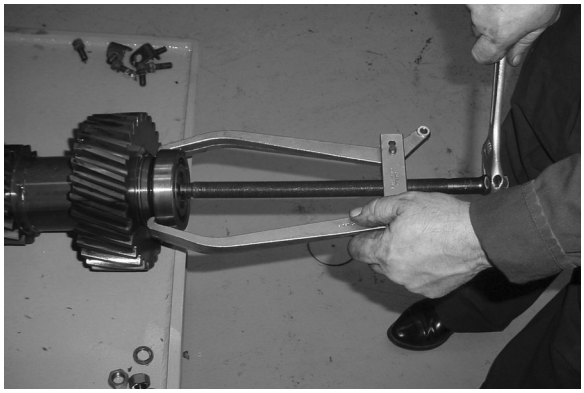
https://truckmanualshub.com/



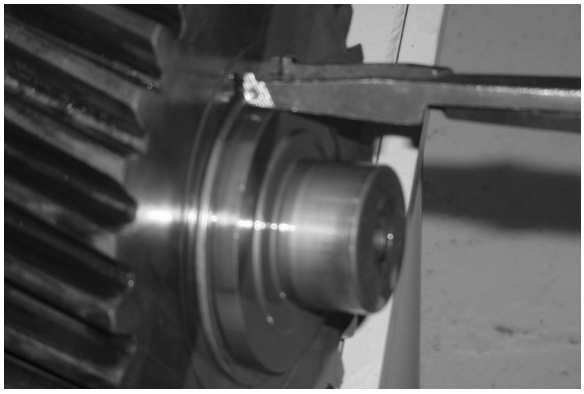
4. Remove the rear bearing from the countershaft.



5. Tilt the countershaft and remove through the top of the case.



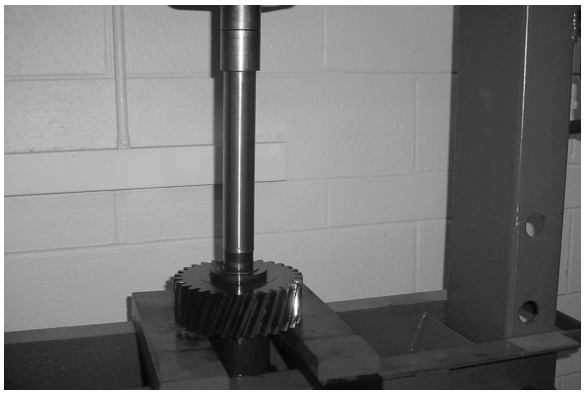
6. Remove the front bearing from the countershaft.



7. Remove the gear retaining snap ring from the front of the countershaft.

https://truckmanualshub.com/

8. Press the drive gear from the countershaft.
9. Remove the key from the keyway in the countershaft.



https://truckmanualshub.com/

Inspection and General Instructions for Reassembly

Before reassembling the transmission, the individual parts should be carefully checked to eliminate those damaged from previous service. This inspection procedure should be carefully followed to insure the maximum of wear life from the rebuilt unit.

The cost of a new part is generally a small fraction of the total cost of downtime and labor, should the use of a questionable part make additional repairs necessary before the next regularly scheduled overhaul.

Recommended inspection procedures are set forth in the check list which follows:

Bearings

- Wash all bearings in clean solvent. Check balls, rolls, and races for pits and spalled areas. Check the bearing shields for damage. Replace bearings which are pitted, spalled, or damaged.
- Lubricate bearings and check for axial and radial clearances. Replace the bearings with excessive clearances.
- Check fits of the bearings in the case bores. If the outer races turn freely in the bores, the case should be replaced.

Gears

- Check the operating gear teeth for pitting on the tooth faces. Gears with pitted teeth should be replaced.
- Check all engaging gear teeth both internal and external. Gears with teeth worn, tapered, or reduced in length from clashing in shifting should be relpaced.
- Check the radial clearance of the bushed gear. If excessive radial clearance is found, replace the bushing.

Splines

- Check the splines on all the shafts for wear. If sliding gears or companion flanges have worn into the sides of the splines, shafts, or gears they should be replaced.

Gray Iron Parts

- Check all gray iron parts for cracks and breaks. Replace or repair parts found to be damaged. Heavy castings may be welded or brazed providing the cracks do not extend into the bearing bores or bolting surfaces.

Washers

- Check the surfaces of the washers. Washers scored or reduced in thickness should be replaced.

Shifting Bar Assembly

- Check the yoke for alignment and straighten if sprung.
- Check the lockscrew in the yoke and tighten and rewire if found loose.
- Check the neutral notches of the shifting bar for wear from the tension spring ball.
- Check yoke for wear at pads and replace if worn.
- Check yoke for excessive wear and replace if worn.

Bearing Covers

- Check the covers for wear from the thrust of adjacent bearing. Replace the covers that are worn or grooved from the thrust of the bearing outer race.
- Check bores of covers for wear and replace those worn oversize.

Oil Seals

- Check the lip seal in the front and rear for wear, cracks, or breaks. Check the tension of the lip on the sealed surface. Replace seals if the lip is damaged or shows no wiping action from the lip due to a lack of tension.

https://truckmanualshub.com/

General Instructions for Reassembly

Make sure the interior of the case and the other housings are clean. It is important that dirt be kept out of the transmission during reassembly. Dirt is abrasive and can damage polished surfaces of sleeves, bushings, and bearings. Use certain precautions, as listed below, during reassembly.

Gaskets

- Use new gaskets throughout the transmission as it is being rebuilt. Make sure all gaskets are installed. Omission of gaskets can result in oil leakage or improper stack-up of bearing covers. Seat gasket on part to be installed with adhesive to hold in place during installation.

Capscrews

- To prevent oil leakage, use adhesive sealant on all capscrews. See Torque Ratings chart on page 6 for recommended torque applications.

Initial Lubrication

- Coat gear bushings, washers, and splines of mainshaft with Lubriplate during installation to provide initial lubrication, thus preventing scoring and galling.

Bearings

- Use of flanged-end bearing drivers is recommended for installation of bearings. These drivers apply equal force to both inner and outer races of the bearing, preventing damage to the balls along with maintaining the correct bearing aligment with the shaft and bore. If a tubular or sleeve driver is used, apply force evenly to the inner race and drive through the tubing of the correct diameter.

Universal Joint Companion Flanges

- Make sure the companion flanges are pulled tightly into place with the retaining nuts. Failure to tighten the retaining nuts, or omission of parts between flanges and bearings will premit the shafts to move axially, with resultant damage to the pilot bearing, mainshaft, and drive gear.
- When installing the companion flanges, tighten the retaining nuts with 400-450 lbs. ft. of torque if elastic stop nut is used. With slotted type nut, use 250 to 300 lbs. ft. of torque. Make sure the speedometer gear has been installed between the rear flange and the bearing. If the speedometer gear is not used, a replacement spacer of the same width must be used. Make sure the speedometer gear washer is installed between the speedometer gear and bearing.

Oil Filling

- Remember to fill the transmission with the correct amount of lubricant. Refer to TCMT-0021 for lubrication information.

Sliding Clutch

- Check yoke and yoke slot in sliding clutch for extreme wear or discoloration from heat.
- Check engaging teeth of sliding clutch for partial engagement pattern.

https://truckmanualshub.com/

How To Reassemble and Install the Countershaft Assembly

Special Instructions

None

Special Tools

- Typical service tools

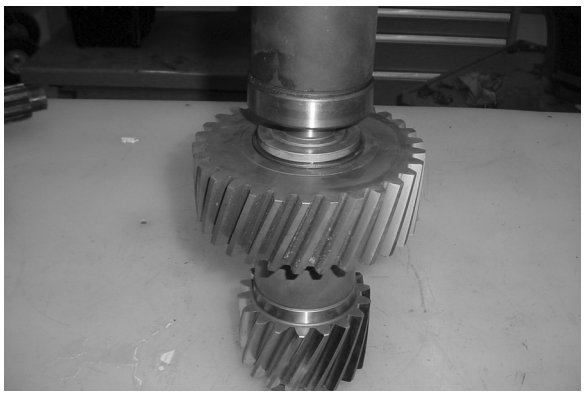


Procedure -

1. Install the key in the countershaft keyway.
2. Press the drive gear on the countershaft with the long hub to the rear.



3. Install the snap ring on the front of the countershaft.

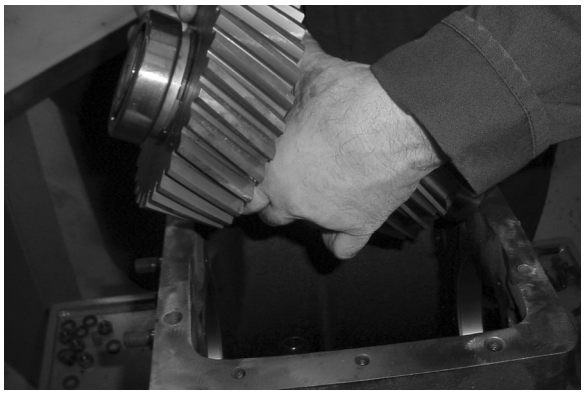


4. Install the front bearing on the countershaft.

   Note: Install bearing wtih chamfered side facing the shaft. This helps start the bearing onto the shaft and reduces the possibility of damage to the bearing.

https://truckmanualshub.com/

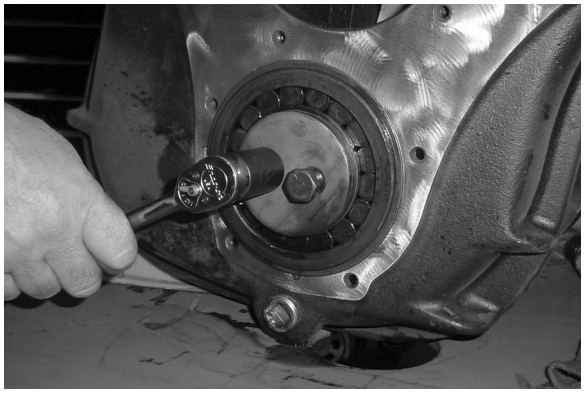
5. Lower the countershaft into position in the case inserting the front bearing into the front bore of the case.



6. Block against the front of the countershaft (not bearing) and install the rear bearing on the shaft. Place into bore.



7. Install the rear bearing retainer plate on the rear of the countershaft. Tighten the capscrews to specification and install the lockwire.



8. Install the front bearing spacer in the front of the countershaft bore.



9. Install the countershaft front bearing cover and tighten capscrews to specifications.

https://truckmanualshub.com/

How To Reassemble and Install the Drive Gear Assembly

Special Instructions

None

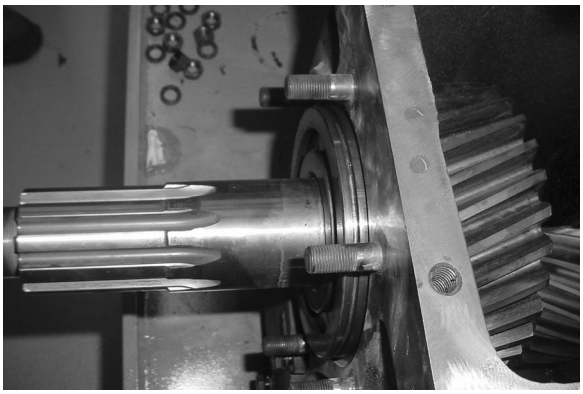
Special Tools

- Typical service tools



Procedure -

1. Remove the snap ring from the main drive gear bearing.
2. Press the bearing on the drive gear, seating the bearing against the shoulder of the gear with the snap ring groove towards the front.



3. Install the drive gear and bearing from inside the case, moving the bearing forward in the bore until the snap ring groove in the bearing is exposed.



4. Install the snap ring into the groove in the bearing. Leave the drive gear in this position in order to provide space for installation of the mainshaft assembly.

https://truckmanualshub.com/

How to Install the Shifting Yoke and Bar

Special Instructions

None

Special Tools

- Typical service tools

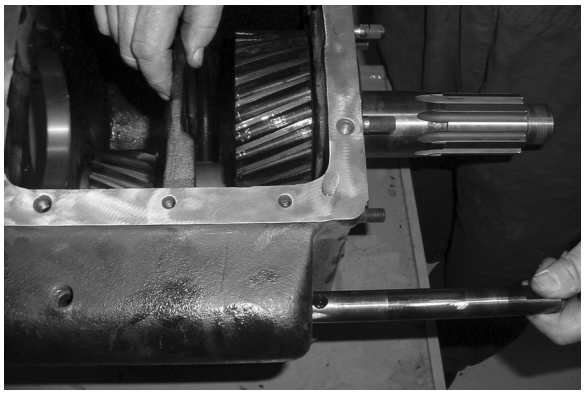
Procedure -

1. If previously removed, install a new one piece oil scraper in the front of the shifting bar bore. Install it flush with the front face of the case.

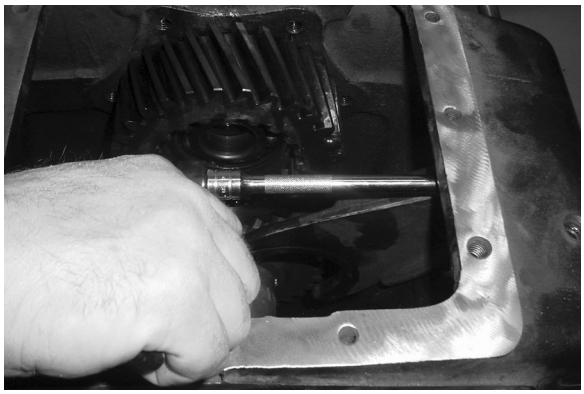


2. If previously removed, install Welch plug in the rear shifting bar bore. Seat plug with sealant to prevent oil leakage.

3. Insert shifting bar through the front bore and through the shifting fork. Position the yoke with the lockscrew bore towards the rear.



4. Install the yoke lockscrew and safety wire securely.



https://truckmanualshub.com/

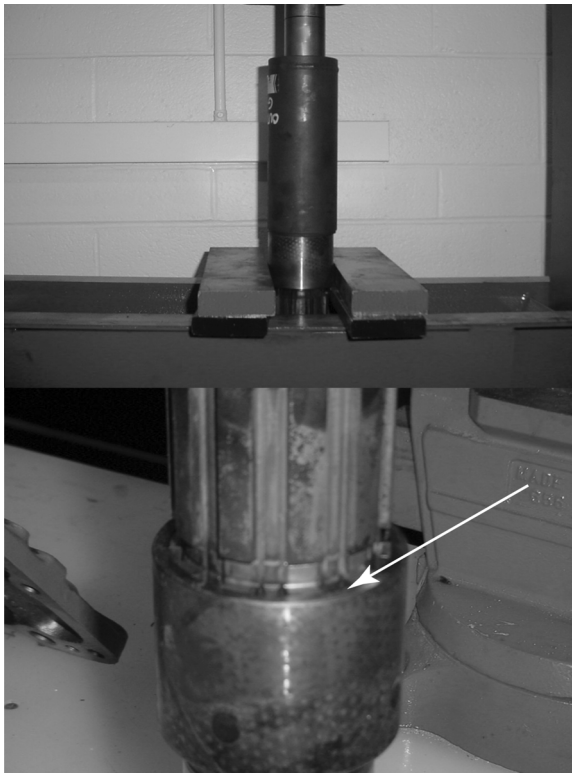
How to Reassemble and Install the Mainshaft Assembly

Special Instructions

None

Special Tools

- Typical service tools



Procedure -

1. Install the low speed gear sleeve on mainshaft.

   Note: Front edge of sleeve should be flush with rear edge of splined thrust washer groove in mainshaft as splined washer must be able to turn in groove when installed.

2. Make sure the drive gear is moved forward so that the drive gear is against the inside wall of the case.

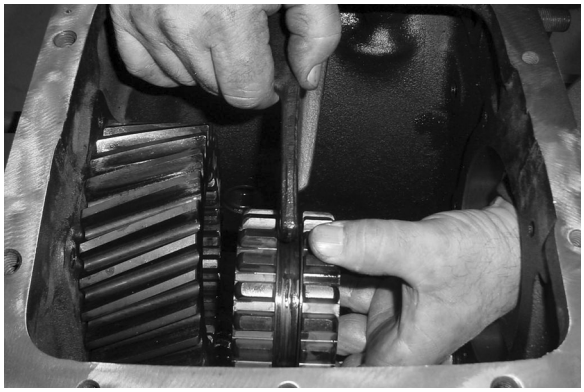


3. Install the mainshaft pilot bearing into the pocket of the drive gear.

https://truckmanualshub.com/

4. Install the sliding clutch gear into position in the case and into engagement with the drive gear. Install with the recess to the rear. At the same time insert the shifting yoke into the yoke slot in the gear.

5. Install the low speed gear into position in the case with the clutching teeth to the front.

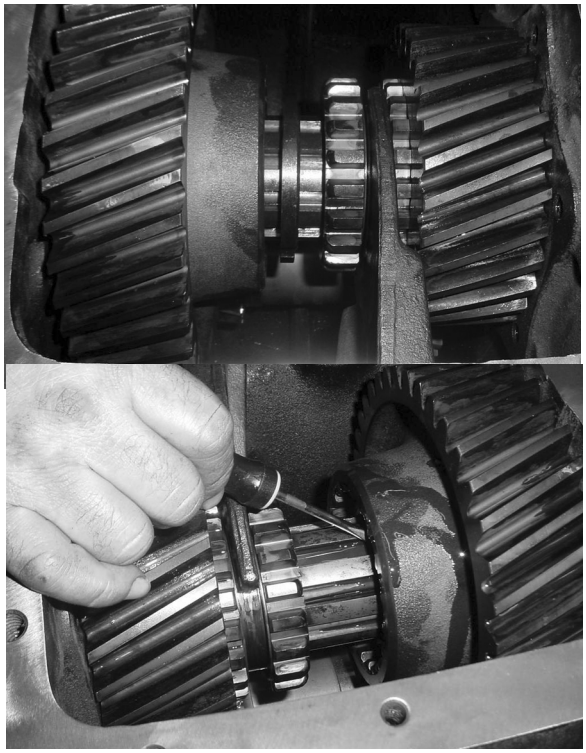


6. Install the mainshaft through the rear bore of the case and through the low speed gear. As the mainshaft is moved forward through the gear, fit the splined washer into the grooves of the mainshaft. The shoulder of the washer is to the front.

7. Continue to move the mainshaft forward through the sliding clutch gear, so it starts to seat in the pilot bearing in the main drive gear. Move the shaft forward until the splined thrust washer is seated in the groove in the mainshaft.

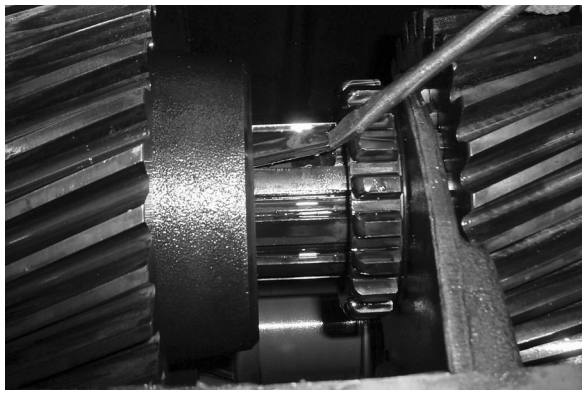
8. Turn the splined washer in its groove on the mainshaft until the lugs on its inner diameter line up with the raised splines of the mainshaft.

   Note: Use a screwdriver to turn the washer.

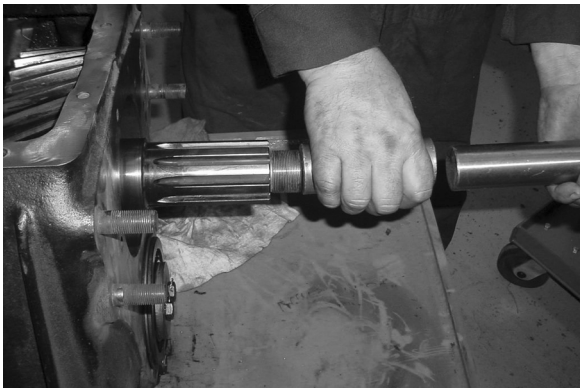


9. Install the washer retaining key in its keyway between the splines of the mainshaft, inserting the lower end of the key between the lugs of the washer.

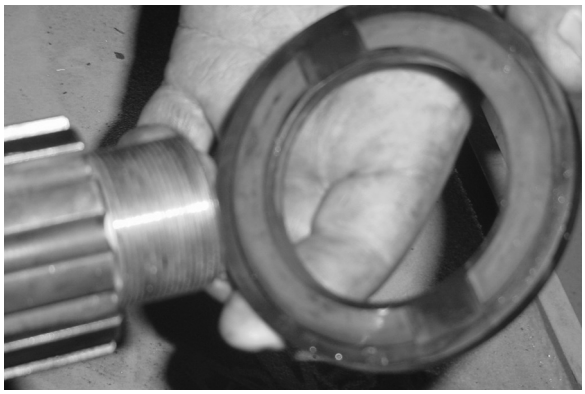
   Note: Do not use excessive force to install the key.



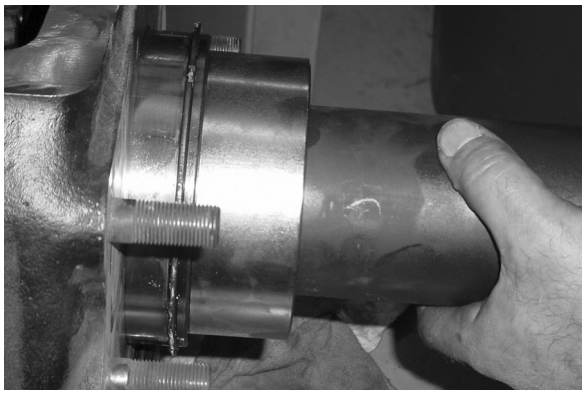
https://truckmanualshub.com/



10. Continue to move the mainshaft forward in order to completely seat the pilot bearing on the front of the mainshaft, and at the same time move the sliding clutch gear back on the mainshaft.



11. Install the low speed gear rear washer over the rear of the mainshaft and against the low speed gear with the oil slots toward the gear.

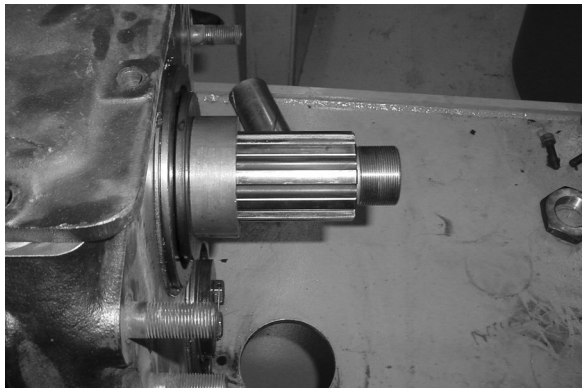


12. Install the mainshaft rear bearing, seating the bearing onto the shaft and into the case bore. When correctly seated the washer between the bearing and gear hub should be tight.

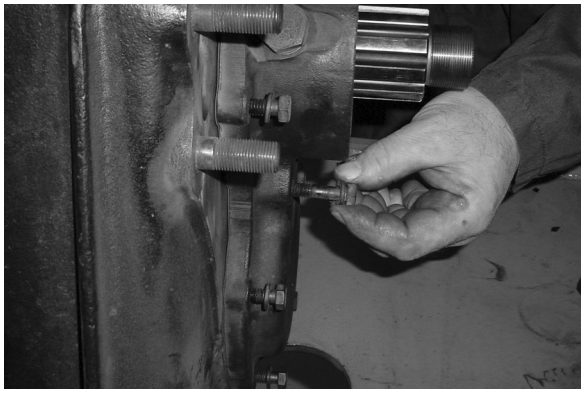
13. Install the speedometer gear washer over the rear of the shaft and against the bearing, chamfered inner diameter towards the bearing.

https://truckmanualshub.com/

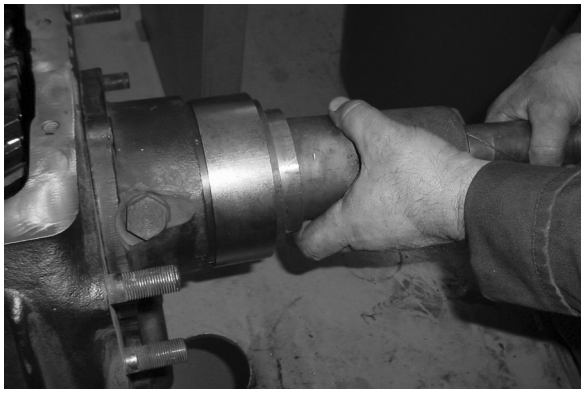
14. Install the speedometer gear or replacement spacer on the mainshaft.



15. Install the rear bearing cover and tighten the capscrews to specifications. Install capscrews in a staggered or opposite sequence.



16. If previously removed, install the oil seal in the rear bearing cover. The seal should be flush with the rear face of the cover.



https://truckmanualshub.com/

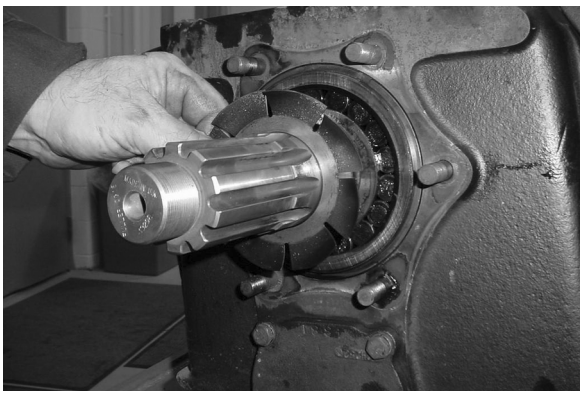
How to Install the Drive Gear Housing Assembly

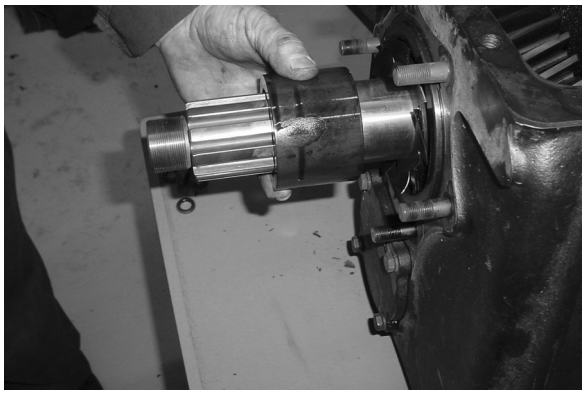
Special Instructions

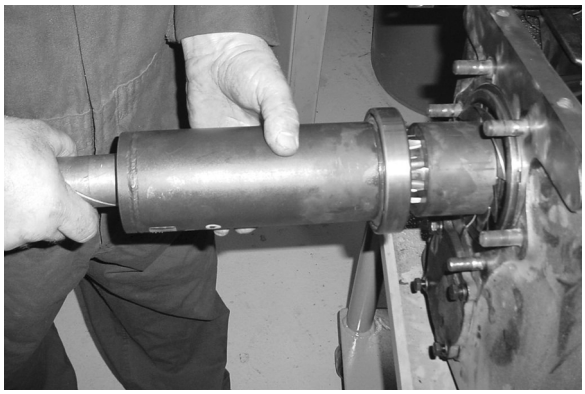
None

Special Tools

- Typical service tools







Procedure -

1. Move the drive gear to the rear and into the correct position, seating the snap ring of the bearing into the recess in the case bore. Recheck the mainshaft pilot bearing for correct seating in the drive gear bore.

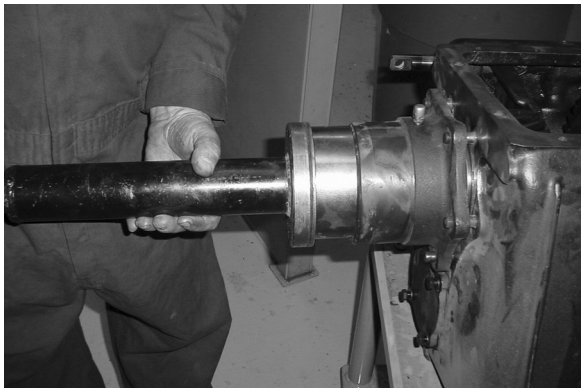
2. Install the oil deflector on the shaft and against the bearing with the fins toward the front.

3. Install the bearing spacer on the drive gear shaft and against the oil deflector.

4. Install the outer bearing on the drive gear shaft, so it seats tightly against the spacer shield of the bearing to the front or facing away from the case.

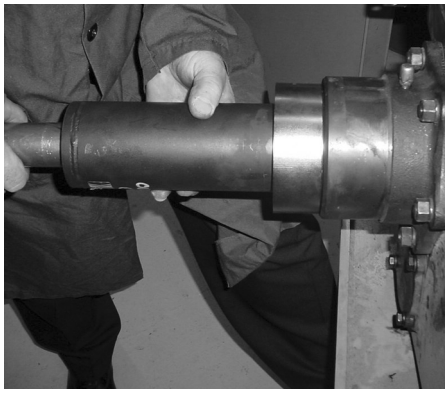
https://truckmanualshub.com/

5. Install the front bearing housing, seating the outer bearing in the housing. Secure the housing with lockwashers and nuts.



6. Install the oil seal in the front bore of the bearing housing. The seal should protrude 13/64" from the face of the housing.

7. If previously removed, install the breather in the housing.



https://truckmanualshub.com/

How to Complete Installation of the Shifting Yoke and Bar

Special Instructions

None

Special Tools

- Typical service tools





Procedure -

1. Instal the tension ball, tension spring, and tension screw in the vertical bore in the side of the case. Make sure the shifting bar is in the neutral position.

2. If previously removed, install the pipe plug in the top bore in the case.

3. Install the top cover onto the case and tighten the capscrews to specifications.

https://truckmanualshub.com/

https://truckmanualshub.com/

Copyright Eaton Corporation, 2012. Eaton hereby grant their customers, vendors, or distributors permission to freely copy, reproduce and/or distribute this document in printed format. It may be copied only in its entirety without any changes or modifications. THIS INFORMATION IS NOT INTENDED FOR SALE OR RESALE, AND THIS NOTICE MUST REMAIN ON ALL COPIES.

Note: Features and specifications listed in this document are subject to change without notice and represent the maximum capabilities of the software and products with all options installed. Although every attempt has been made to ensure the accuracy of information contained within, Eaton makes no representation about the completeness, correctness or accuracy and assumes no responsibility for any errors or omissions. Features and functionality may vary depending on selected options.

For spec'ing or service assistance, call 1-800-826-HELP (4357) or visit www.eaton.com/roadranger. In Mexico, call 001-800-826-4357.

Roadranger: Eaton and trusted partners providing the best products and services in the industry, ensuring more time on the road.

Eaton Corporation
Vehicle Group
P.O. Box 4013
Kalamazoo, MI 49003 USA
800-826-HELP (4357)
www.eaton.com/roadranger

Printed in USA

EATON
Powering Business Worldwide

BACKED BY
Roadranger
SUPPORT

For parts or service call us
Pro Gear & Transmission, Inc.

1 (877) 776-4600

(407) 872-1901

parts@eprogear.com

906 W. Gore St.

Orlando, FL 32805

