

Source: Leece-Neville Heavy Duty Systems Division - Arcade, NY USA

Date: July 7, 2017

Bulletin No: TSB-1105

Models: All 8SC/ SCJ

Subject: K183103997S Overhaul Kit Procedure.

This procedure will show you how to install items supplied with K183103997S overhaul kit. Use procedure TSB-1068 to properly disassemble and assemble the alternator.

Front bearing change:

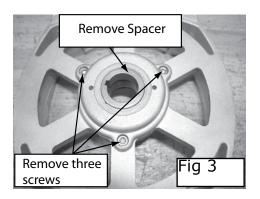
Step 1: Remove steel washer and felt seal from shaft. (Fig 1)

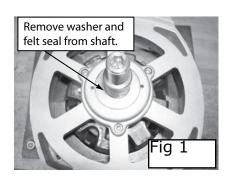
Step 2: Press rotor from front housing. (Fig 2)

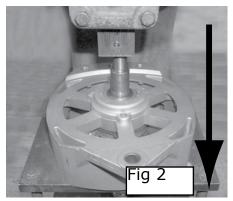
Step 3: Remove spacer and three front bearing retaining screws.

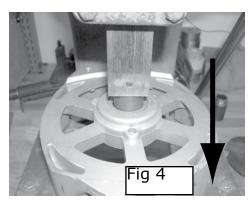
(Fig 3)

Step 4: Press front bearing and seals from front housing. (Fig 4)











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Step 5: Remove seal from front housing. (Fig 5)

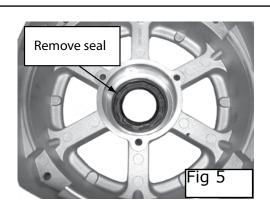
Step 6: Remove seal from front bearing retainer. (Fig 6)

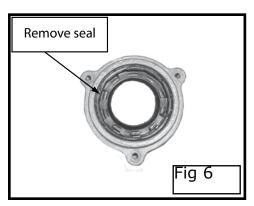
Note: On opposite sides of the front housing and bearing retainer are two holes. Insert a punch into these holes and tap with a hammer to remove the seals.

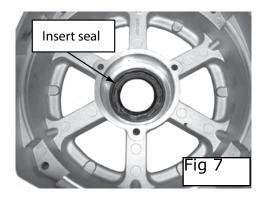
Step 7: Insert front housing seal. (Fig 7)

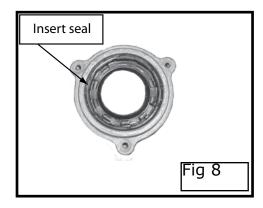
Step 8: Insert front bearing retainer seal. (Fig 8)

Note: When installing seals, press on the outer diameter. Failure to do this can cause damage to the seals.











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Step 9: Press bearing into front housing. (Fig 9)

Note: When installing bearings, press on the outer diameter. Failure to do this can cause damage to the bearing.

Step 10: Install front bearing retainer. (Fig 10)

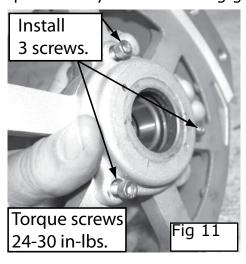
Step 11: While holding front bearing retainer in place, turn over housing. Apply blue locktite to three mounting screws and install into front housing. (Fig 11)

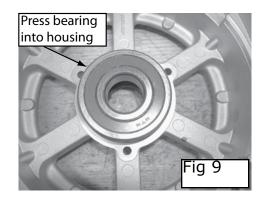
Step 12: With a grease needle, inject grease between the seal and the bearing.

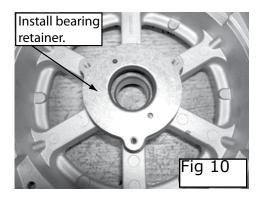
Note: Grease needle can be purchased at any auto parts store.

Recommended grease:

High temperature synthetic bearing grease.











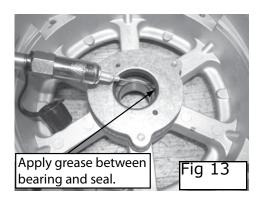
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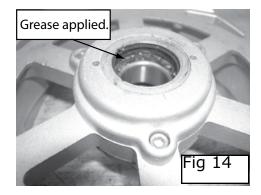
Step 13: Turn housing over and with the grease needle inject grease between the seal and the bearing. (Fig 13)

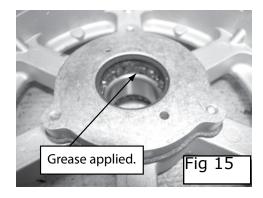
Step 14: Figure 14 and 15 shows the proper amount of grease that needs to be applied.

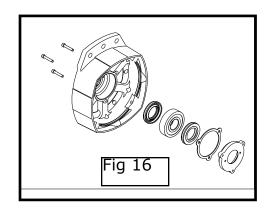
Note: The grease added between the bearing and the seals adds an additional protective measure in preventing dust from penetrating the bearing. This grease provides no lubricating properties to the front bearing.

Figure 16 shows you the proper arrangements of components in the front housing.











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Slip ring/ rear bearing inner race change:

Inspect rotor and measure key items in Fig 17.

If Dim A or B is out of tolerance a new rotor will need to be purchased. Refer to SP-1017 to determine correct replacement part number.

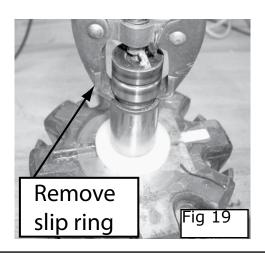
If Dim C or D is out of tolerance or excessive wear is present then proceed with this procedure.

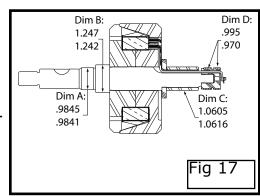
Note: Use caution not to damage field wires during the following procedures.

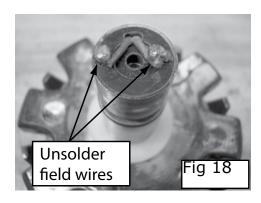
Step 15:Unsolder field wires from slip ring. (Fig 18)

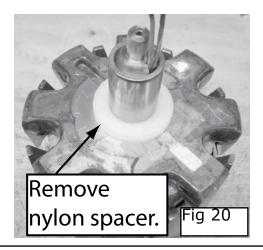
Step 16: Remove slip ring from shaft. (Fig 19) Note: Use caution not to damage end of shaft during slip ring removal.

Step 17: Cut nylon spacer off shaft and discard. (Fig 20)











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Step 18: Clamp on bearing separator and press bearing inner race off shaft. (Fig 21)

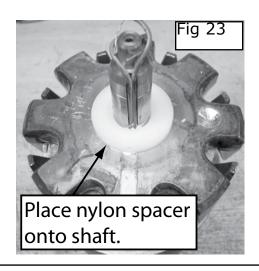
Note: Use caution not to damage shaft or field wires.

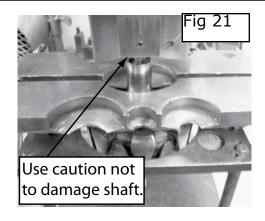
Step 19: Apply high temperature silicone sealant on rotor. (Fig 22)

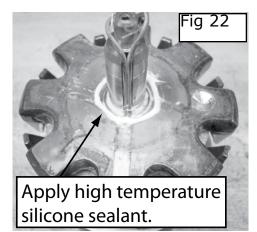
Step 20:Place new nylon spacer on shaft. (Fig 23)

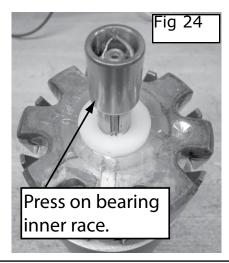
Step 21: Press bearing inner race onto shaft. (Fig 24)

Note: Use caution not to damage field wires during installation.











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Step 22:Insert field wires through slip ring. (Fig 25)

Step 23: Press slip ring onto shaft. (Fig 26)

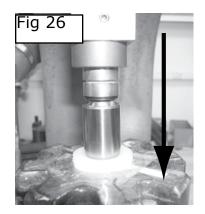
Note: Use caution not to damage field wires while performing Step 23 and press on slip ring outer diameter to prevent damage.

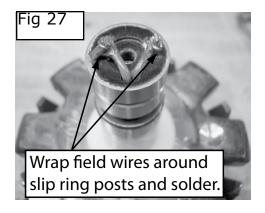
Step 24: Wrap field wires around slip ring posts and solder.

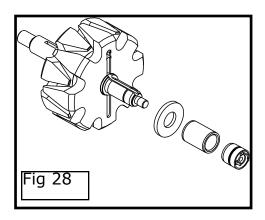
Recommended solder: SN15PB85

Figure 28 shows you the proper arrangements of components in the rotor.











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Rear bearing change:

Step 25: Remove snap ring from rear housing.

(Fig 29)

Step 26: Press old seals and bearing from rear

housing. (Fig 30)

Step 27: Pack new bearing and seal cavities with

grease. (Fig 31)

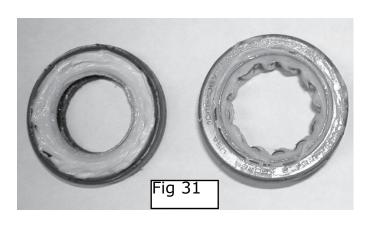


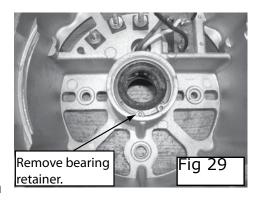
High temperature synthetic bearing grease.

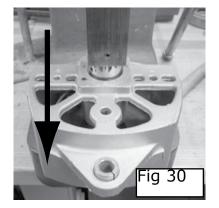
Step 28: Press seal into real housing. (Fig 32)

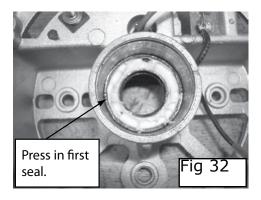
Note: When installing seals, press on the outer diameter. Failure to do this can cause damage to the seals.

Use caution not to contaminate grease.











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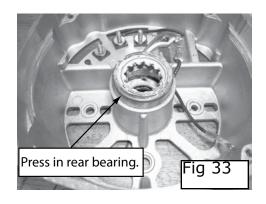
Step 29: Press bearing into rear housing. (Fig 33)

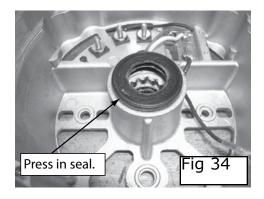
Note: When installing bearings, press on the outer diameter. Failure to do this can cause damage to the bearing.

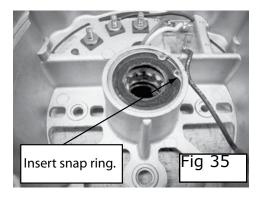
Step 30: Press seal into rear housing. (Fig 34)

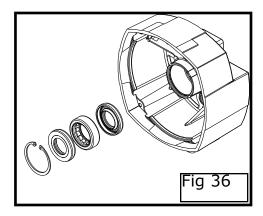
Step 31: Install snap ring into rear housing. (Fig 35)

Figure 36 shows you the proper arrangements of components in the rear housing.











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Installing rotor into front housing:

Step 32: Press rotor into front housing. (Fig 37)

Note: When pressing rotor support front housing as close to the bearing as possible to prevent damage to the front housing.

Use caution not to damage slip ring when pressing rotor into front housing.

Step 33: Slide spacer onto shaft. (Fig 38)

Step 34: Slide felt and steel washer on shaft. (Fig 39)

To assemble the alternator please refer to TSB-1068.

