CASE CONSTRUCTION

SERVICE MANUAL

CRAWLER EXCAVATOR

CX75SR
CX80
TIER 3

87676026A NA

Issued 01Aug 08

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CRAWLER EXCAVATOR CX75SR/CX80 TIER 3
SERVICE MANUAL

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* *Consult the Engine Service Manual*

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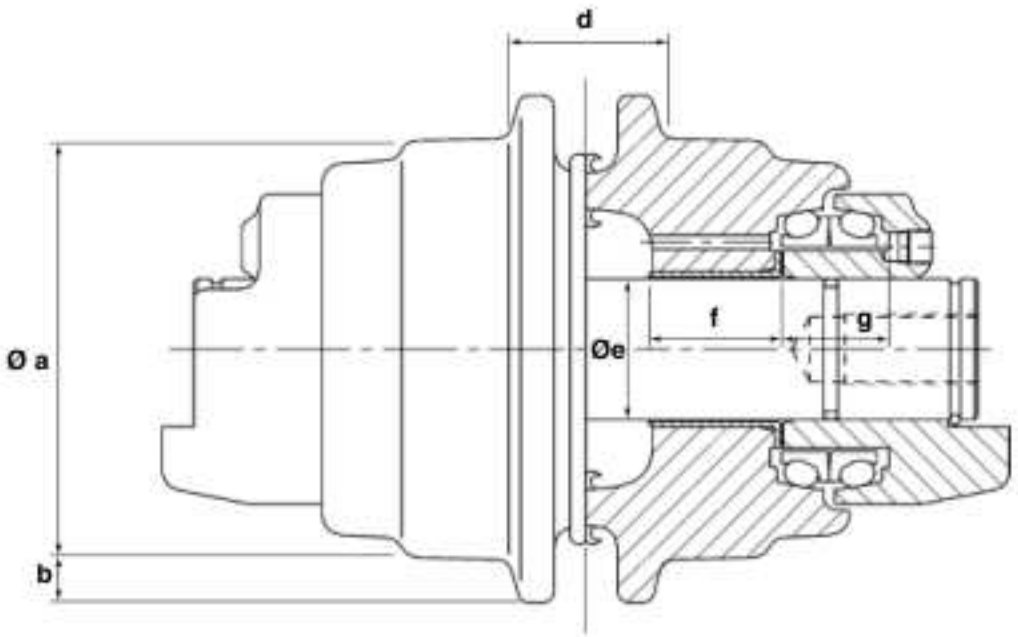
NOTE: CNH Company reserves the right to make changes in the specification and design of the machine without prior notice and without incurring any obligation to modify units previously sold.

The description of the models shown in this manual has been made in accordance with the technical specifications known as of the date of design of this document.

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Lower roller

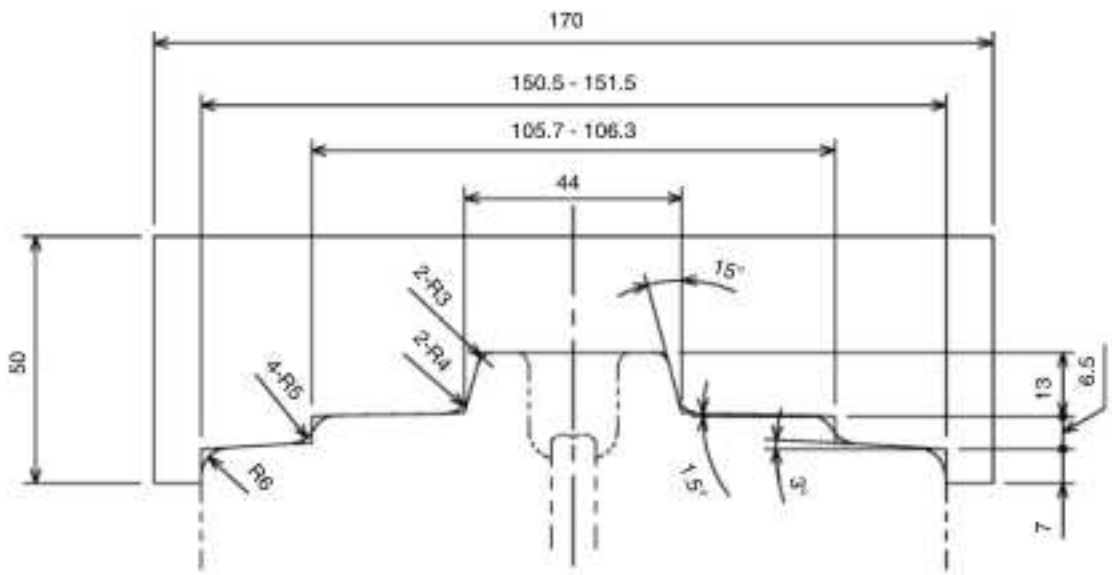
Dimensions



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Mark		Dimension (mm)	Mark		Dimension (mm)
Ø a	Standard	118	Ø e (ring)	Standard	40
	Limit	112		Limit	40.8
b	Standard	13	f	Standard	38
	Limit	11		Limit	37.6
d	Standard	44	g	Standard	30.2
	Limit	40		Limit	29.7
Ø e (shaft)	Standard	40			
	Limit	39			

Gauge

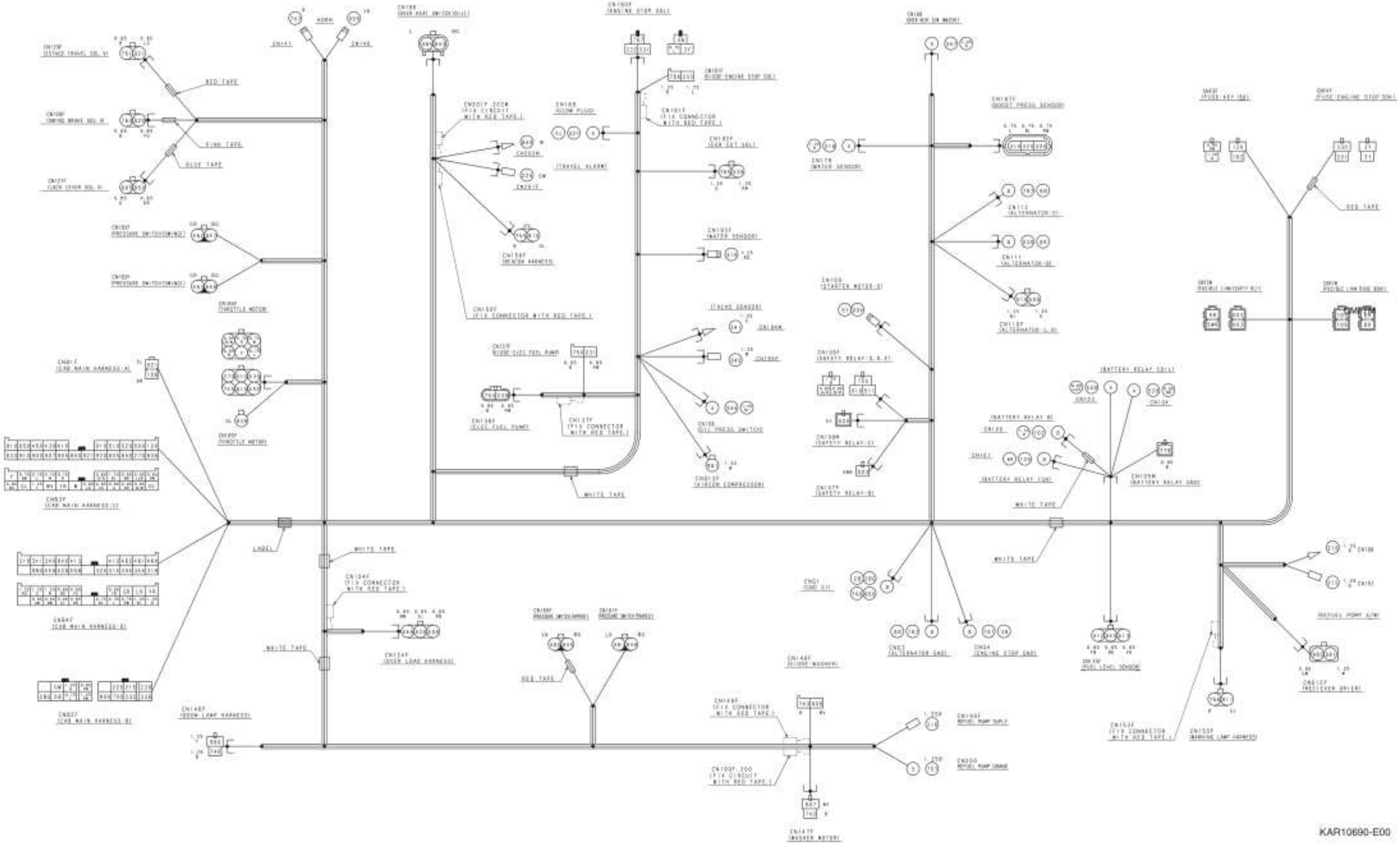


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ELECTRICAL CONNECTOR WIRING DIAGRAM

Main Frame Harness (CX75SR)



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Item	Symptom	Related parts	Error item	Preventive/remedy measures
4	4-2 Internal oil leakage makes the piston rod extend or retract or fall abnormally while operating or can not give specified speed output.	Piston seal	Damage such as scratches and wear is found.	Replace with a new one. Also check the cylinder's inner face.
		Cylinder tubes	Scratches and rust on the inside surface.	1) Remove scratches and rust by honing or with oilstone to smooth the surfaces. If scratches are too big to repair, replace cylinder tubes with new ones. 2) Replace piston seals with new ones.
		Piston nut	Loose tightening.	Fasten with specified tightening torque. Refer to Tightening torque.
		Valves	Leakage from valves.	Check the valve leakage volume and repair if necessary.
		WARNING: Hydraulic oil tends to expand and shrink according to changes in temperature and pressure. This also causes cylinders to extend and retract; therefore, we sometimes see this as internal oil leakage. Check internal oil leakage under a given pressure condition.		
	4-3 Operation is not stable.	Air	Air remains in the cylinder.	1. Bleed air. 1) Cylinder without air bleeder: Bleed air by operating the cylinder several full strokes under low pressure and at a slow speed. 2) Cylinder with air bleeder: To prevent high temperature inside the cylinder, remove the load and loosen air bleeder to release air fully. When the cylinder stops suddenly, it can extend or retract to a certain extent. This phenomenon is caused by hydraulic oil compressibility. This phenomenon tends to occur especially on long stroke cylinders.
	4-4 Strong impact when switching over between extension and retraction.	Pin bushing Pin	Too much clearance between the fitting section and pin bushing.	Measure the dimensions of pin and pin bushing, replace the parts that exceed the measured dimensions.
	4-5 Cylinder sliding operation makes noise.	Lubrication	Lack of lubrication.	Lubricate.
		Pin bushing Pin	Scuffing on fitting surfaces.	Replace with a new one and lubricate.
	WARNING: Hydraulic oil tends to expand and shrink according to changes in temperature and pressure. This also causes cylinders to extend and retract; therefore, we sometimes see this as internal oil leakage. Check internal oil leakage under given temperature and pressure conditions.			

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3 Assembly Procedures

1 Preparations

[1] As with disassembly, prepare a work platform, tools and materials.

2 General work precautions

[1] Observe the same general work precautions as with disassembly.

[2] When performing assembly, remove metal fragments and foreign matter from all parts, and check that there are no burrs or nicks on parts. If there are burrs or nicks, use a whetstone to remove them.

[3] As a rule, replace all O-rings and backup rings with new parts.

[4] When installing O-rings and backup rings, be careful not to damage them. (Apply a thin layer of grease to ensure smooth installation.)

[5] When installing parts, using grease is good for preventing parts from falling.

[6] Tighten bolts, etc. to the torque values indicated in "Attached diagram 1. Remote control valve assembly cross-section diagram". Use the torque wrench to measure the tightening torque.

[7] After assembly is complete, place plugs in all of the ports to prevent entry of debris.

3 Assembly procedures

[1] Assemble the bushing (131) and O-ring (122) in the casing (101).



M025001-108

[2] Fit the port plate (111) to the casing (101) using the hexagon socket head bolts (125) and seal washers (121).

- Check the assembling positions so that the spring pin (126) are inserted into the casing holes.

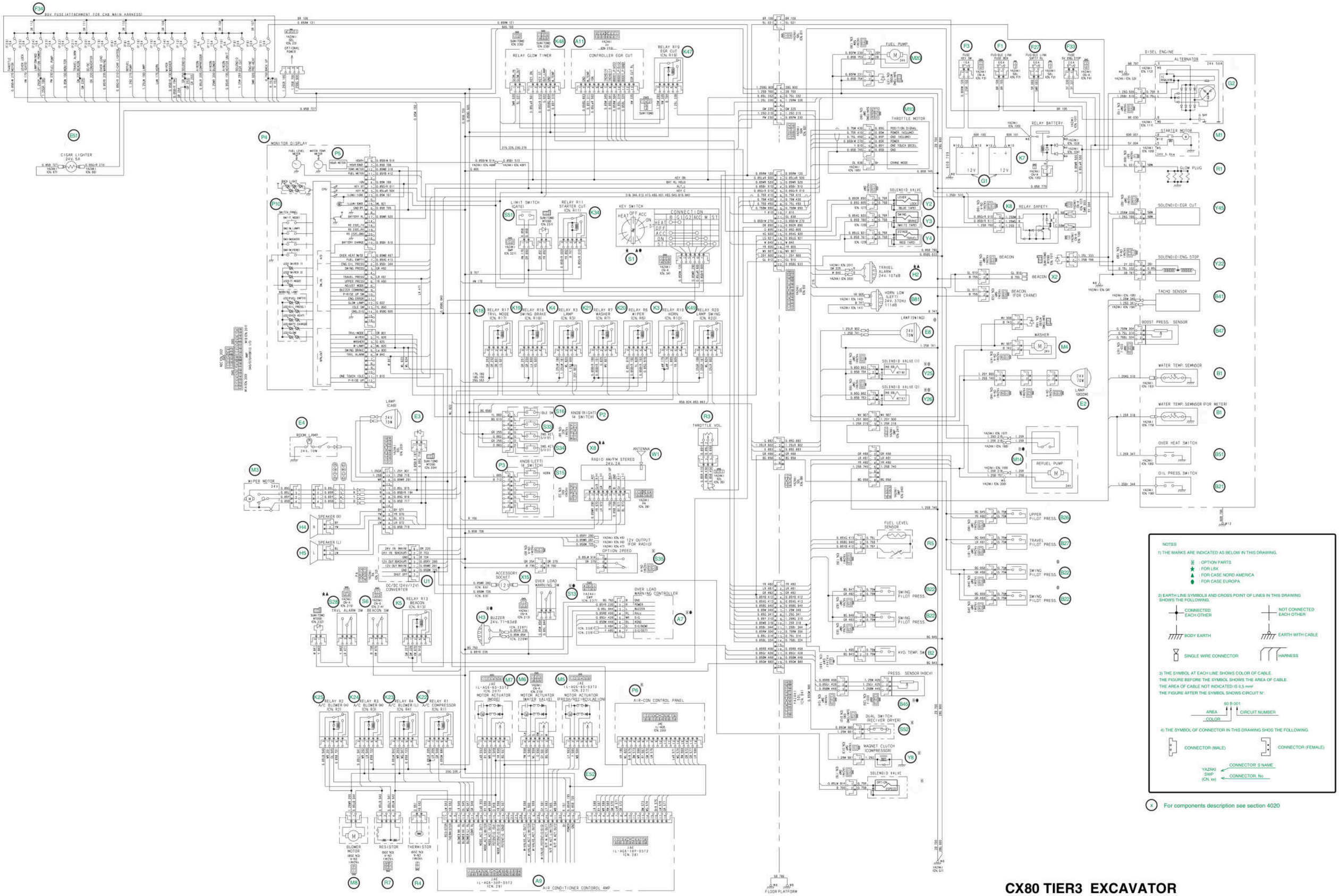


- Replace the seal washers (121).



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