SERVICE MANUAL

E45B SR
E50B SR
Hydraulic Mini Excavators

Print No. 84526500A

NEW HOLLAND CONSTRUCTION

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E50B SR

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1. DESCRIPTION

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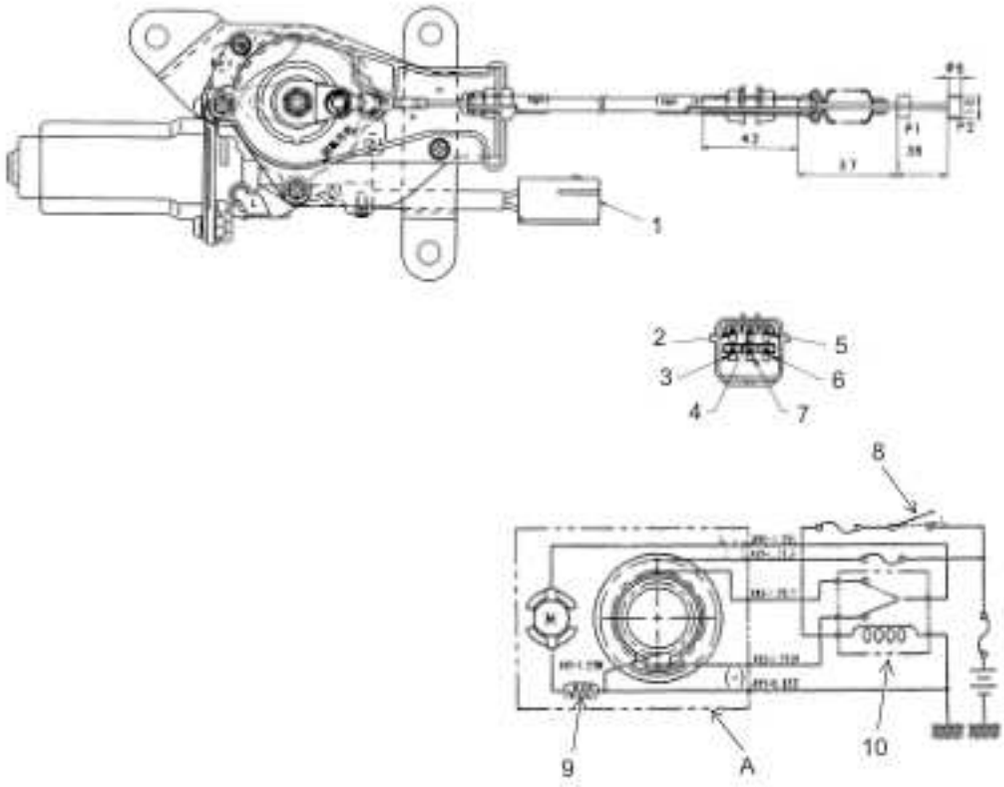
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Name	Specifications
M-4 Decelerator	



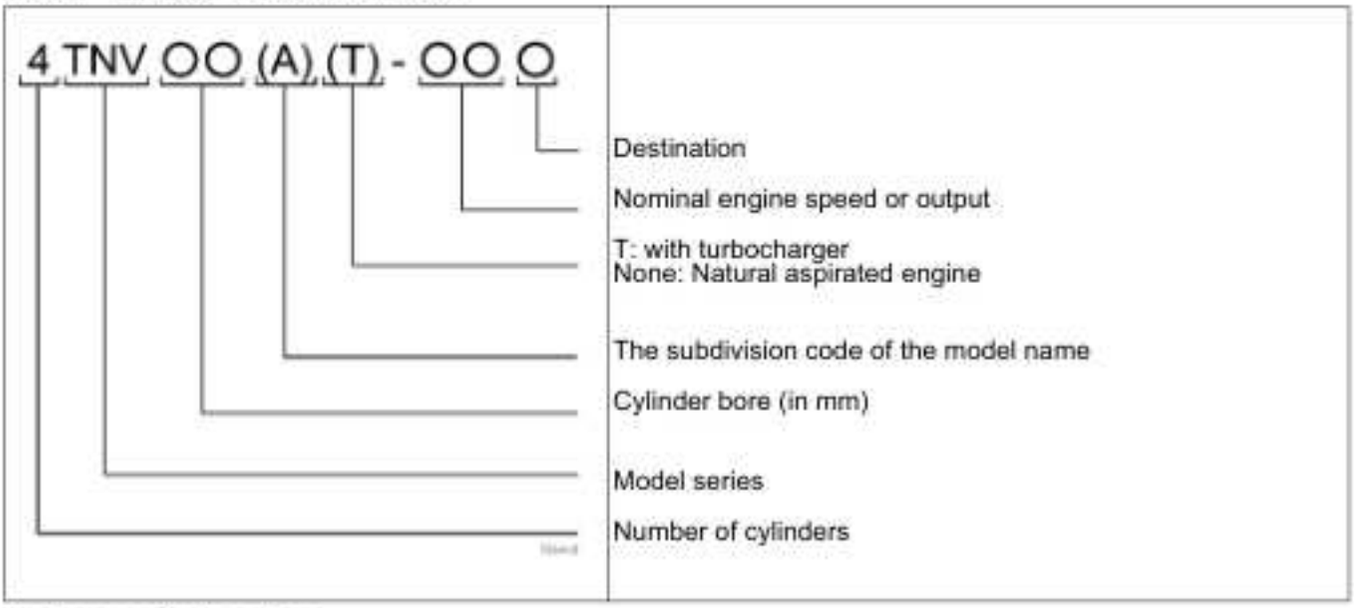
No.	NAME
1	Ampère connector
2	AVS-0.85L
3	AVS-0.85LR
4	AVS-0.85LW
5	Cap
6	AVS-0.85B
7	AVS-0.85LY
8	Switch ON: P1 OFF: P2
9	PTC Thermistor
10	Relay
A	Circuit diagram

Rated voltage	12 V
Stroke	36 ± 2 mm
Working force	11 Kg or more
Working time	1 or less
Working current	8.5 A or lower

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51.1 GENERAL

51.1.1 ENGINE NOMENCLATURE



Engine specification class

Classification	Load	Engine speed	Available engine speed (rpm)
CL	Constant load	Constant speed	1500/1800
VL	Variable load	Variable speed	2000-3000

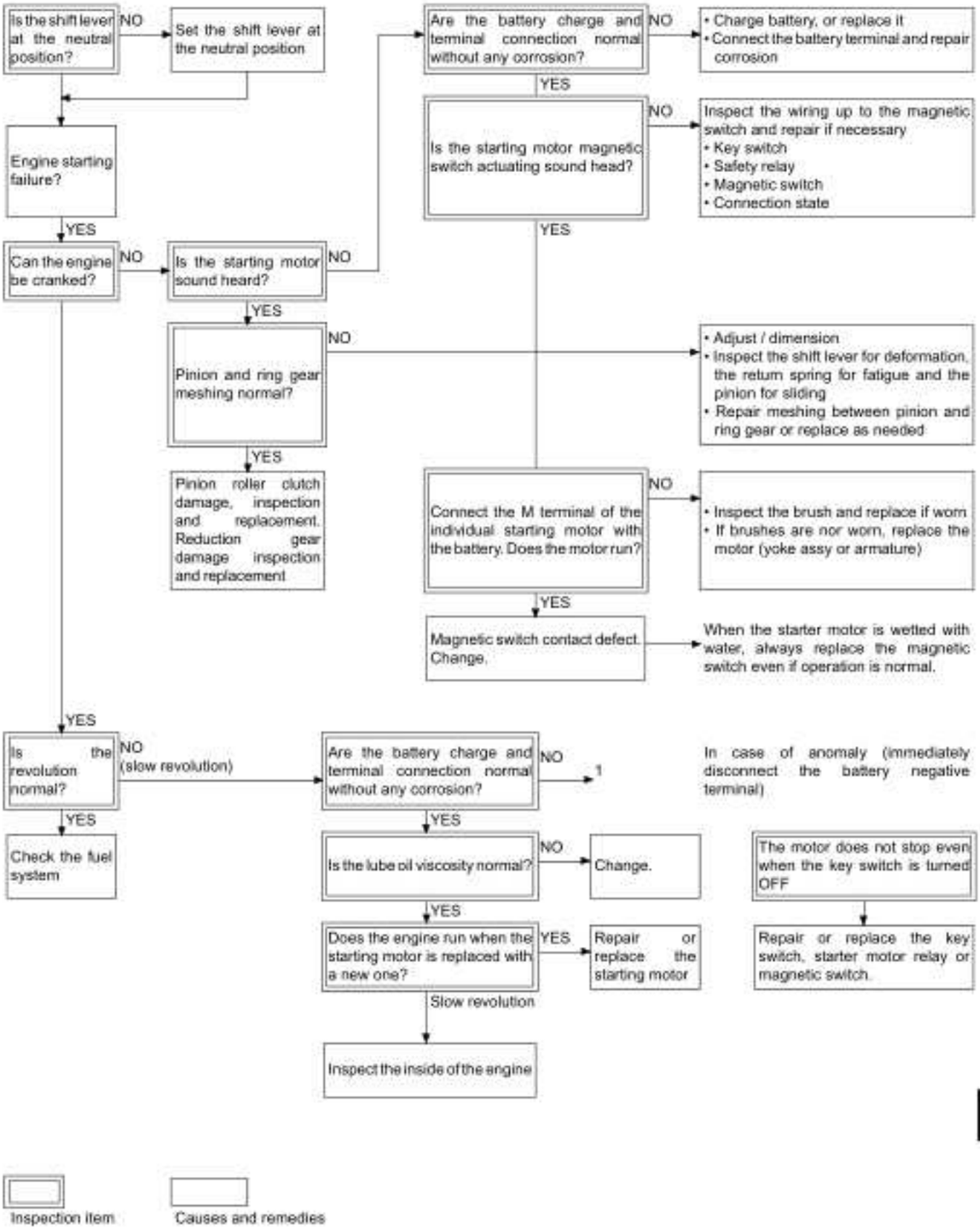
*The engine specification class (CL or VL) is described in the specifications table.

51.1.2 SPECIFICATIONS

1. The information described in the engine specifications tables (the next page and after) is for standard engine. To obtain the information about the engine installed in each machine, refer to the manual provided by the Manufacturer.
2. Engine rating conditions are as follows (SAE J 1349, ISO 3046/1)
   - Atmospheric condition: Ambient temperature 25°C (77 °F), atmospheric pressure 100 kPa (750 mm Hg), relative humidity 30%
   - Fuel temperature: 25 °C (77 °F) (Fuel injection pump inlet)
   - With cooling fan, air cleaner, exhaust silencer (Yanmar standard part)
   - After running-in hours. Output allowable deviation: ± 3%

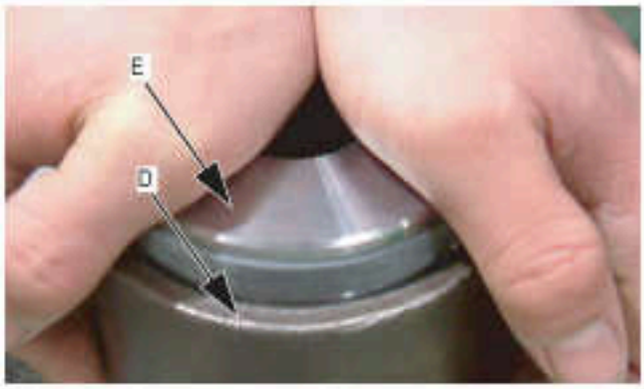
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51.9.1.3 Troubleshooting



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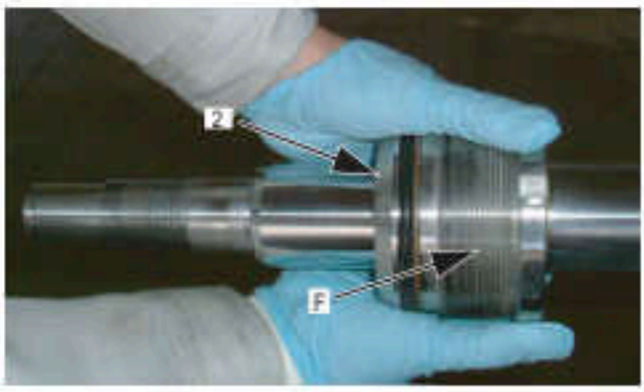
3) The O-ring of seal ring was extremely stretched at the installation, insert the piston subassembly (E) from the taper side of reforming jig (D) to reform the ring.



(4) Cylinder rod assembly

1) Keep clevis of cylinder rod (2) horizontal, and install the head sub-assembly (F).

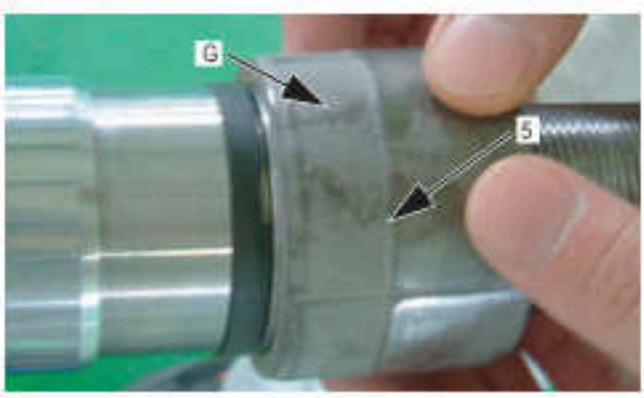
- Apply a light coat of hydraulic oil to the seal ring.
- Take care not to hit the seal against the thread of piston.



2) Face the slit of seal ring (12) to the thread, and install the seal ring into groove of rod.
Install the cushion bearing (5) on the rod from taper (G) side as shown in the photo.

- Take care of the direction of seal ring and cushion bearing.
If the direction is mistaken, the cushion effect is not obtained.





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(6) Assembling hydraulic motor section

1) Put three rollers (151) into the holes of the cylinder block (104).

2) Place the thrust ball (108) on the cylinder block (104).

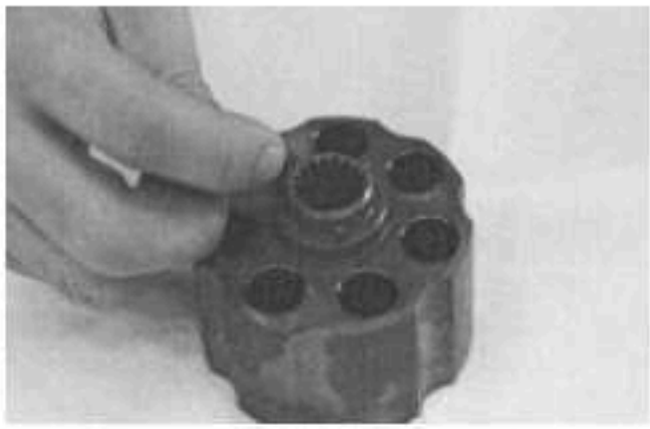


Fig. 34-168 Installing rollers (151)

3) Fit seven piston assemblies to the retainer plate (107).

- After assembling, immerse the whole unit in hydraulic oil.

4) Fit the retainer plate (107) and the seven piston assemblies to the cylinder block (104).

- Carefully match the retainer plate (107) with the spherical part of the thrust ball (108) for installation.

5) Insert the cylinder block (104) onto the drive shaft (102).

- For installation, align the spline hole in the cylinder block (104) with the spline shaft of the drive shaft (102).
- After installing the cylinder block, turn it by hand to make sure that it fits properly. If not, inspect it.
- Do not take up the cylinder block (104). Otherwise the thrust balls (108) may come off, leading to abnormality in rotation.



Fig. 34-169 Assembling piston assembly into retainer plate

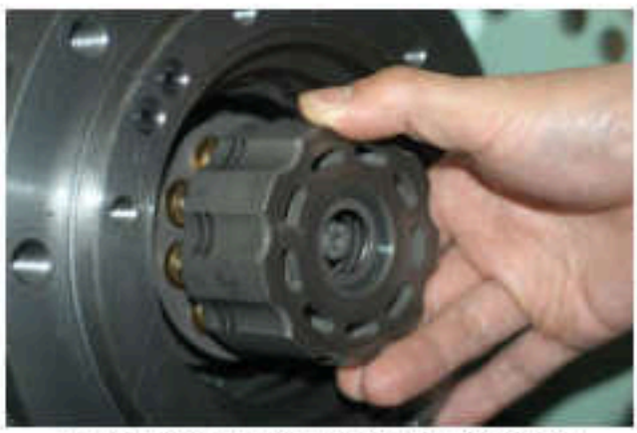


Fig. 34-170 Inserting cylinder block (104)

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