SERVICE MANUAL

E18SR
Mini Excavator

Print No. 84345202

NEW HOLLAND CONSTRUCTION

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1. OUTLINE

TABLE OF CONTENTS

1.1 GENERAL PRECAUTIONS FOR REPAIRS 1-3
1.1.1 PREPARATION BEFORE DISASSEMBLING 1-3
1.1.2 SAFETY IN DISASSEMBLING AND ASSEMBLING 1-3
1.1.3 DISASSEMBLING AND ASSEMBLING HYDRAULIC EQUIPMENT 1-4
1.1.4 ELECTRICAL EQUIPMENT 1-6
1.1.5 HYDRAULIC PARTS 1-7
1.1.6 WELDING REPAIR 1-7
1.1.7 ENVIRONMENTAL MEASURE 1-7
1.2 INTERNATIONAL UNIT CONVERSION SYSTEM (Based on MARKS' STANDARD HANDBOOK FOR MECHANICAL ENGINEERS) 1-8

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2. SPECIFICATIONS

TABLE OF CONTENTS

2.1 COMPONENTS NAME 2-3
2.2 MACHINE DIMENSIONS 2-4
2.3 SPECIFICATIONS AND PERFORMANCE 2-5
2.4 MACHINE & COMPONENTS WEIGHT (DRY) 2-6
2.5 TRANSPORTATION 2-8
2.6 TYPE OF CRAWLER SHOES 2-11
2.7 TYPE OF BUCKET 2-12
2.8 ENGINE SPECIFICATIONS 2-13
2.8.1 SPECIFICATIONS 2-13
2.8.2 ENGINE PERFORMANCE CURVE 2-14

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3. ATTACHMENT DIMENSIONS

TABLE OF CONTENTS

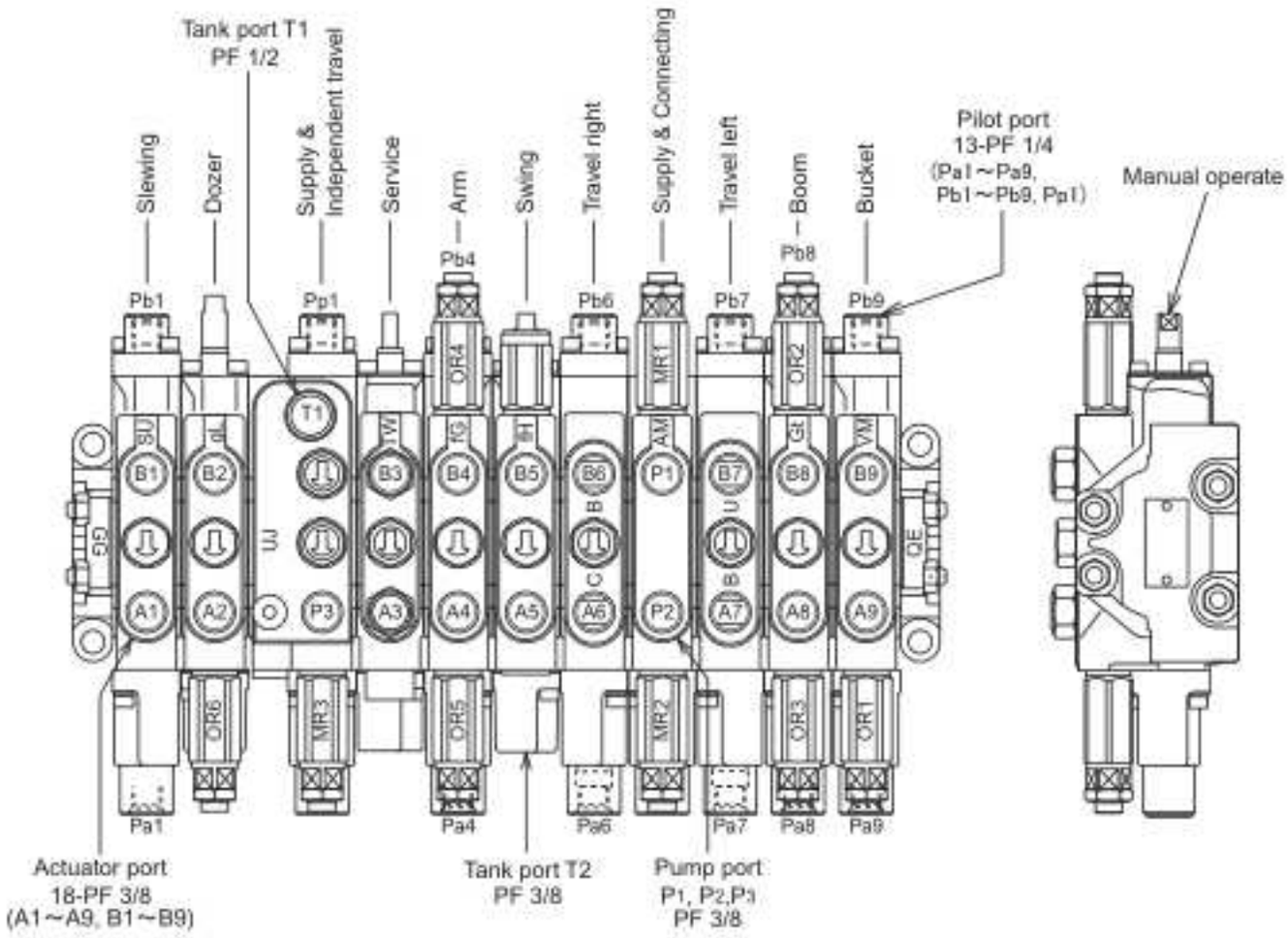
3.1 BOOM 3-3
3.1.1 BOOM DIMENSIONAL DRAWINGS 3-3
3.1.2 BOOM MAINTENANCE STANDARDS 3-4
3.2 ARM 3-8
3.2.1 ARM DIMENSIONAL DRAWINGS 3-8
3.2.2 ARM MAINTENANCE STANDARDS 3-10
3.3 BUCKET 3-14
3.3.1 BUCKET DIMENSIONAL DRAWINGS 3-14
3.3.2 DETAIL DIMENSIONAL DRAWINGS OF LUG SECTION 3-15
3.3.3 DETAIL DIMENSIONAL DRAWINGS OF BOSS SECTION 3-15
3.4 DOZER 3-16
3.4.1 DOZER DIMENSIONAL DRAWINGS 3-16
3.4.2 DOZER MAINTENANCE STANDARDS 3-18
3.5 SWING 3-20
3.5.1 SWING BRACKET DIMENSIONAL DRAWINGS 3-20
3.5.2 SWING PORTION MAINTENANCE STANDARDS 3-21

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24.1.4 CONTROL VALVE

24.1.4.1 SPECIFICATION

(1) GENERAL VIEW AND HYDRAULIC PORTS No.



24.1.4.2 SPECIFICATIONS

Model (Type)		BCV35-JAJ11
Valve operation	Manual	Swing, Dozer, Service
	Pilot	Travel left, Travel right, Boom, Arm, Bucket Slewing, Independent travel and conflux
Flow rate		P1, P2 - 16.3 L/min (4.3 gal/min), P3 → 20.6 L/min(5.4gal/min)
Setting pressure at main relief valve P1, P2, P3		P1, P2: 21.6 $^{+0.5}_{0}$ MPa (3130 $^{+72}_{0}$ psi) at 16.3 L/min (4.3 gal/min) (MR1, MR2) P3:20.6 $^{+0.5}_{0}$ MPa (2990 $^{+72}_{0}$ psi) at 11.4 L/min (3.0 gal/min) (MR3)
Setting pressure at over load relief valve		A4, B4, A8, A9 port (OR5, OR4, OR3, OR1) 24.5 $^{+0.5}_{0}$ MPa (3560 $^{+72}_{0}$ psi) at 5 L/min (1.3 gal/min) A2, B8 port (OR3, OR2) 27.5 $^{+0.5}_{0}$ MPa (4000 $^{+72}_{0}$ psi) at 5 L/min (1.3 gal/min)

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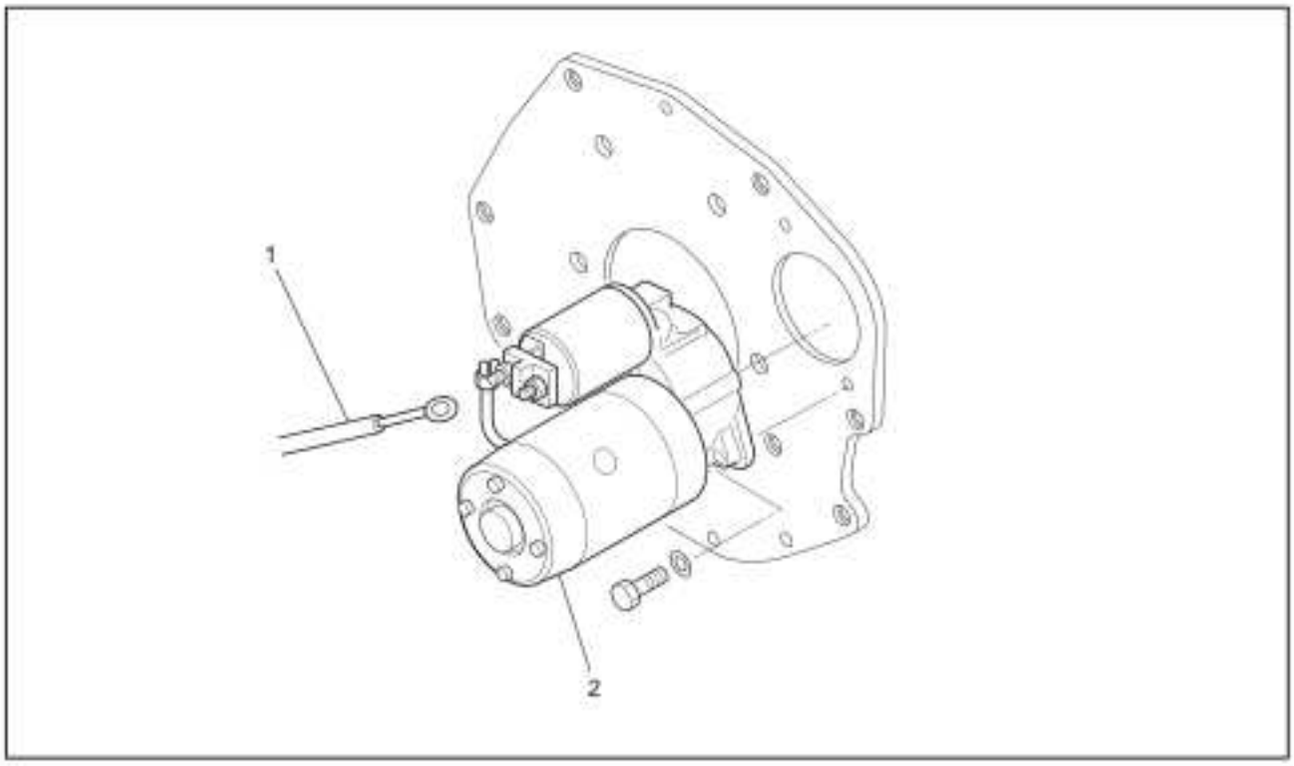
(4) Explanation of the cause of trouble

1. Explain the cause of trouble to the user.
   For example, explain the oil leakage through the piston is caused by defect on the piston rod. And the proper operating manner of the machine should be explained to the user to prevent reoccurrence of the same kind of trouble.
2. Handling of damaged parts
   The damaged parts to be claimed and returned are the evidence, so they should be handled with care. For example, protect them from invasion of water, soil, etc., into ports on a hydraulic equipment, etc., at the returning them. And also use care not to give any damages and breakage for transport.

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1. Removing electrical system

1.1 Removing starter



Removing starter

Removing sequence

1 Harness
2 Starter

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⚠ CAUTION

About warning labels

Maintenance of warning labels

Make sure all warning/caution labels are legible.

Clean or replace the warning/caution labels the description and/or illustration of which cannot be seen clearly.

For cleaning the warning/caution labels, use a cloth, water and soap. Do not use cleaning solvents, gasoline or other chemicals to prevent the letters from getting blurred or the adhesion from being weakened.

Replace damaged or fractured labels with new ones.

If any engine part on which a warning label is attached is replaced with a new one, attach a new identical warning label to the new part.

To obtain replacement warning labels, contact a Mitsubishi dealer.



Warning labeles

X

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2.1 Removing flywheel

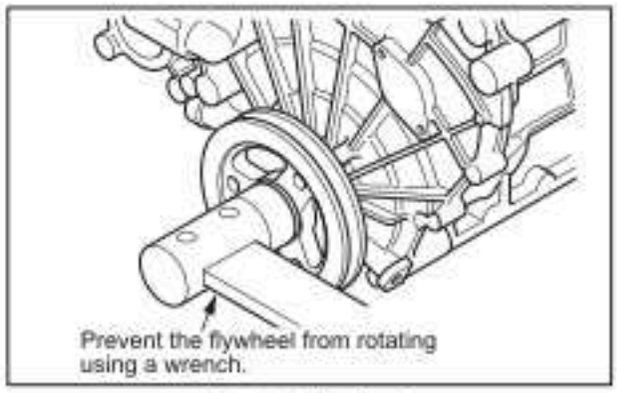
⚠ CAUTION

(a) Be careful not to cut your hands with the ring gear when pulling out the flywheel.
Be careful not to drop or hit the flywheel when removing.

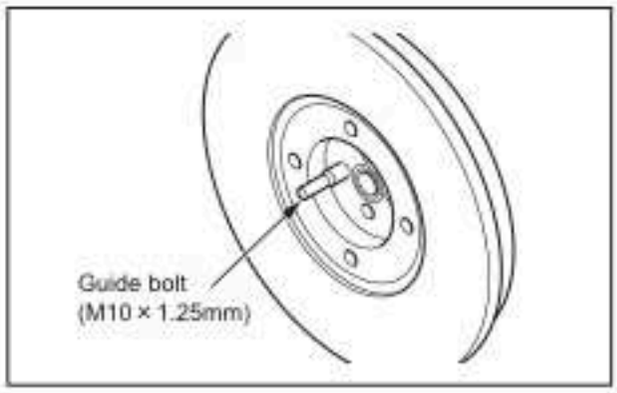
(b) The personnel who holds the pulley must pay due attention to safety.
Also, personnel must stay in close contact with each other during work.

(1) One personnel must firmly hold the pulley with a wrench to prevent the flywheel from turning.
(2) Remove one bolt from the flywheel.
(3) Screw a guide bolt into the threaded hole of the bolt that has been removed.
(4) Remove remaining bolts from the flywheel.
(5) Hold the flywheel firmly with both hands, and by moving it back and forth, pull it out straight.

Note: The ring gear is shrink fitted to the flywheel. Do not remove it unless defective.



Detent of flywheel

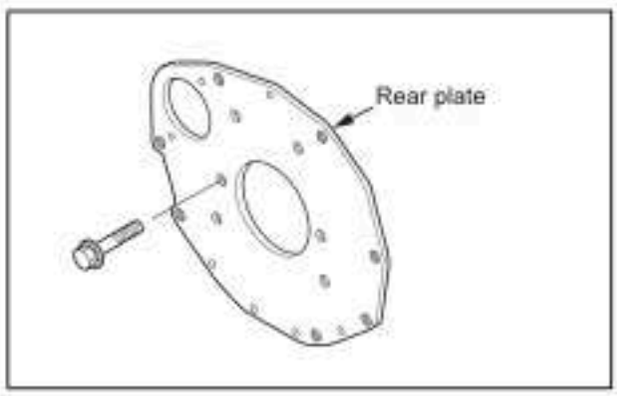


Removing flywheel

2.2 Removing rear plate

Remove the rear plate mounting bolt, and remove the rear plate.

Note: When removing the rear plate, firmly hold the rear plate with both hands and pull the rear place straight out by moving it back and force, as the rear plate is positioned by knock bushing.



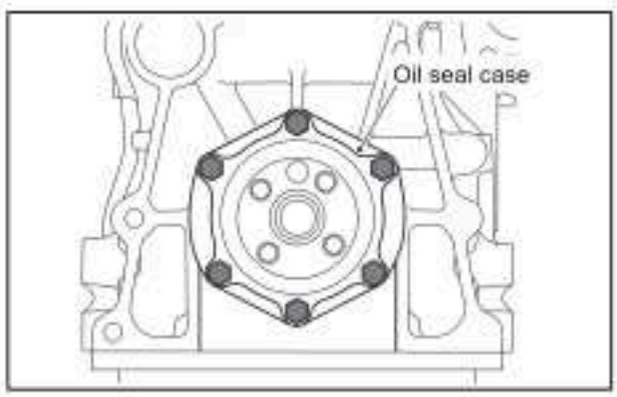
Removing rear plate

2.3 Removing oil seal case

CAUTION

Be very careful not to damage the oil seal.

(1) Remove bolts from the oil seal case.
(2) Pry the oil seal case from the cylinder block using a screwdriver.



Removing oil seal case

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