

3. WEIGHT AND COMPONENTS

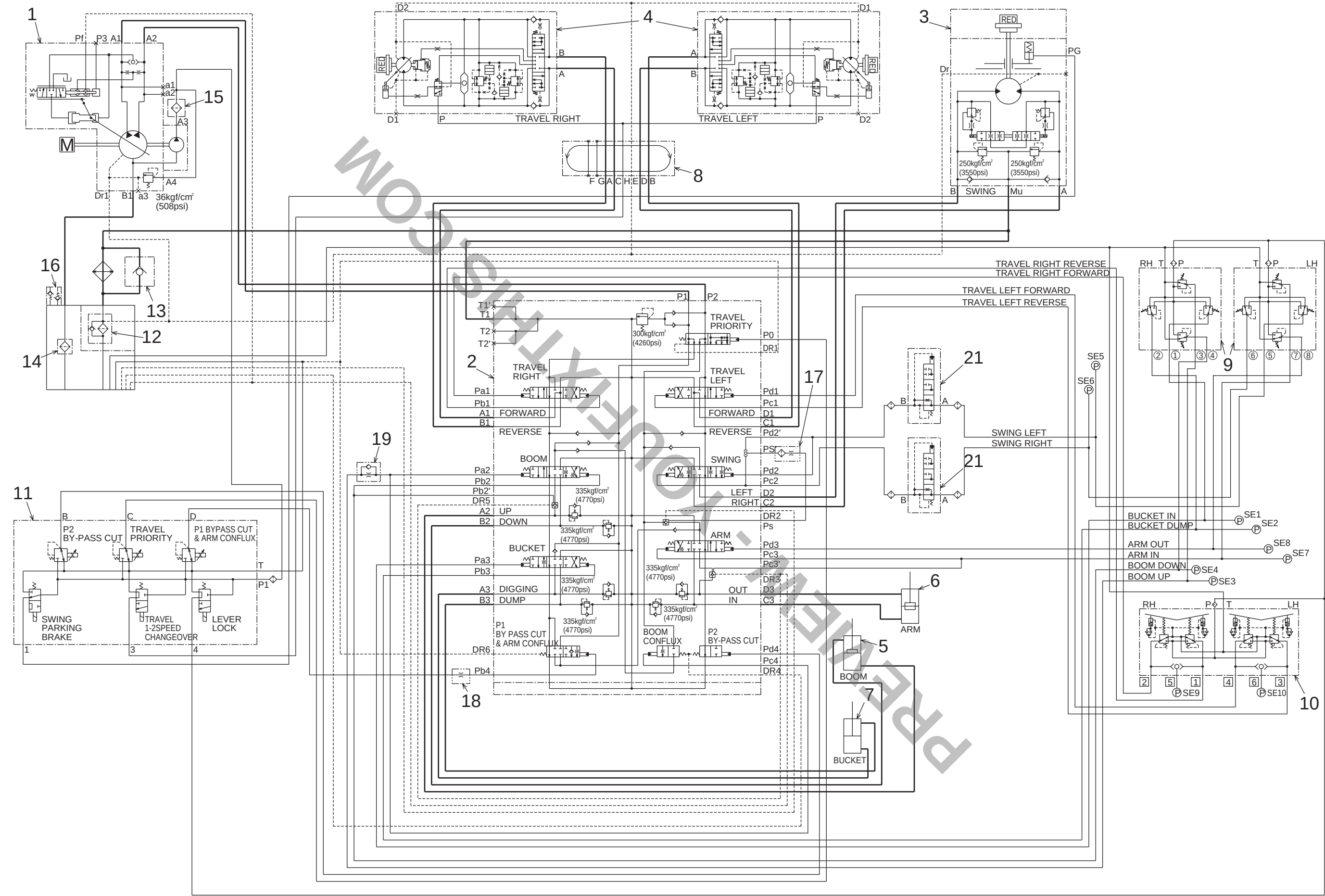
Unit: kg (lbs)

ITEM	MODEL	2.07 M (6 ft-9 in) Arm +600 mm (23.6 in shoe)	1.65 M (5 ft-5 in) Arm +450 mm (17.7 in shoe)
Machine complete		7,180 (15,830)	6,940 (15,300)
1. Upper frame assy (including the following):		3,250 (7,160)	←
1.1 Counterweight		820 (1,810)	←
Counterweight (add-on)		400 (880)	←
1.2 Cab		210 (460)	←
1.3 Engine		* 250 (550)	←
1.4 Hydraulic oil tank		* 64 (140)	←
1.5 Fuel tank		* 53 (120)	←
1.6 Slewing motor (including reduction unit)		67 (150)	←
1.7 Control valve		42 (93)	←
1.8 Boom cylinder		* 92 (200)	←
1.9 Pin (2pcs. for mounting boom)		14 (31)	←
1.10 Pump		41 (90)	←
1.11 Radiator	Including 125 kg (276 lbs) of grease, water, etc	* 44 (97)	←
2. Lower frame assy (including the following):		2,590 (5,710)	2,370 (5,230)
2.1 Slewing bearing		115 (250)	←
2.2 Travel motor (including reduction unit)		90 (200) X 2	←
2.3 Upper roller		4 (9) X 2	←
2.4 Lower roller		15 (33) X10	←
2.5 Front idler		44 (97) X 2	←
2.6 Track tension adjuster		28 (62) X 2	←
2.7 Sprocket		27 (59) X 2	←
2.8 Swivel joint		21 (46)	←
2.9 Track link with 450 mm (17.7 in) shoes assy		420 (926) X 2	←
Track link with 600 mm (23.6 in) shoes assy		530 (1,170) X 2	←
Track link with 600 mm (23.6 in) triangle shoes assy		470 (1,040) X 2	←
2.9.1 Track link assy		155 (340) X2	←
3. Attachment			←
{3.72 m (12 ft-2 in) Boom+2.07 m (6 ft-9 in) Arm+0.22 m³ (0.28 cu-yd) Bucket}		1,110 (2,450)	←
{3.72 m (12 ft-2 in) Boom+1.65 m (5 ft-5 in) Arm+0.28 m³ (0.37 uc-yd) Bucket}		—	1,080 (2,380)
3.1 Bucket assy		190 (420)	200 (440)
3.2 Arm assy (including the following):		290 (640)	250 (550)
3.2.1 Arm		180 (400)	130 (290)
3.2.2 Bucket cylinder		44 (97)	←
3.2.3 Idler link		6 (13) X 2	←
3.2.4 Bucket link		8 (17) X 2	←
3.2.5 Pin (2 pcs. for mounting bucket cylinder / 2 pcs. for mounting bucket)		* 17 (37)	←
3.3 Boom assy (including the following):		630 (1,390)	←
3.3.1 Boom		390 (860)	←
3.3.2 Arm cylinder		72 (160)	←
3.3.3 Pin (Mounting arm · Mounting arm cylinder)		16 (35)	←
4. Lubricant and water (including the following):		130 (290)	←
4.1 Hydraulic oil		* 49 (108)	←
4.2 Engine oil		5 (11)	←
4.3 Fuel		71 (157)	←
4.4 Water		5 (11)	←

NOTE:

Numerical values marked * indicate the dry weight.

2.1 STANDARD SPECIFICATION



1. ELECTRIC CIRCUIT

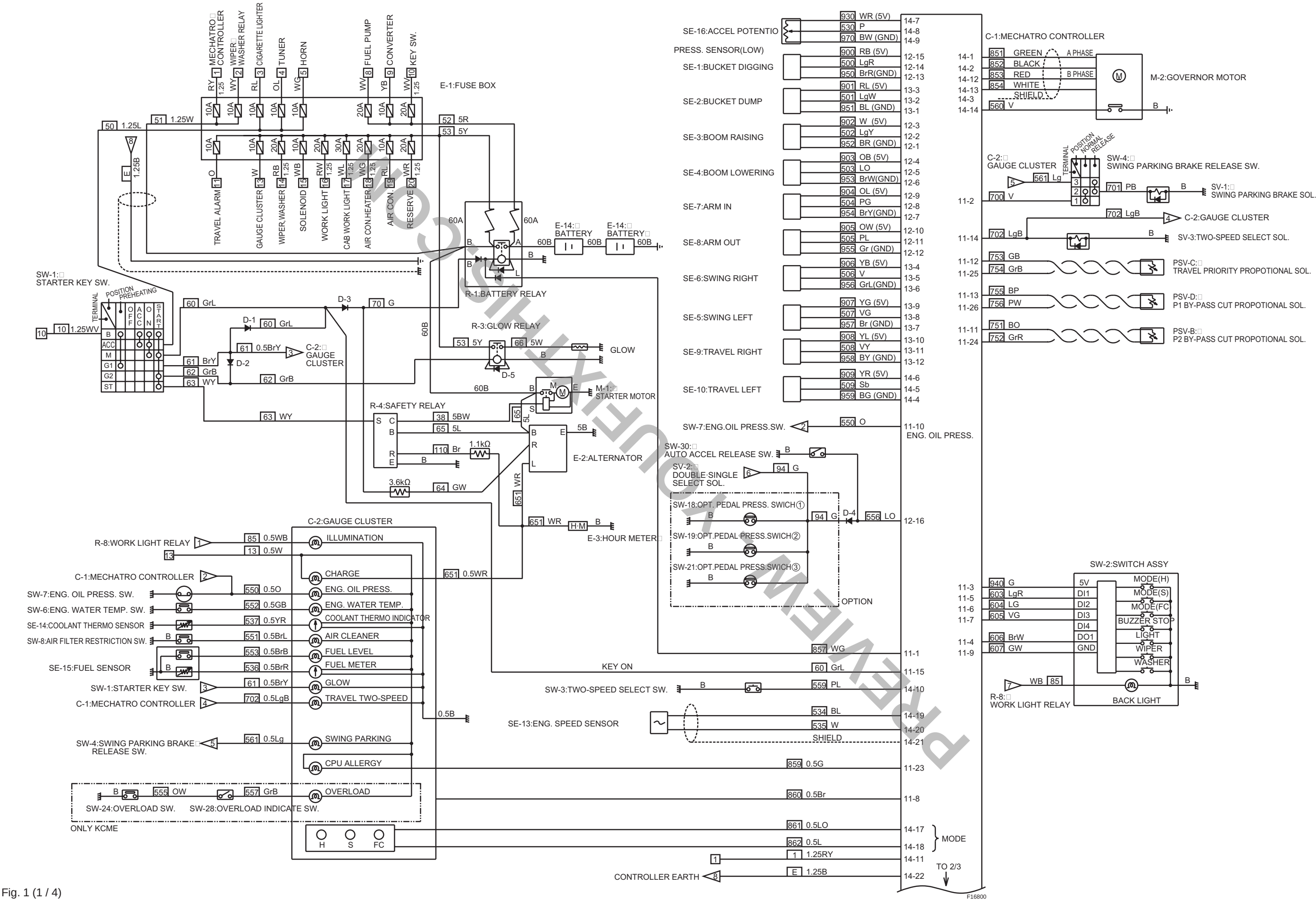


Fig. 1 (1 / 4)

3. ARM

3.1 REMOVING ARM

- (1) Put the machine in position to remove arm.
Fold arm, and the bucket cylinder is retracted and the arm is put on the ground.

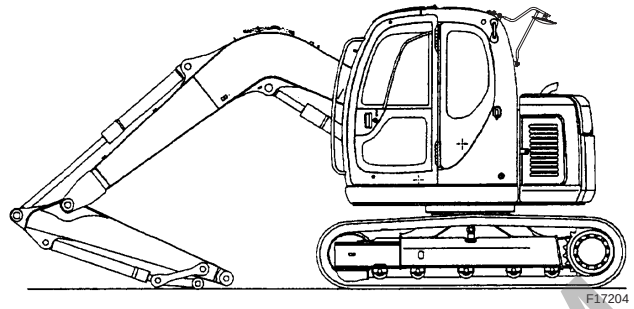


Fig. 3-1 Position to remove arm

- (2) Separating piping of bucket cylinder
Release pressure of hydraulic tank, place oil pan to prepare for oil leaking, and separate pipes.



WARNING

Plug both section of separated pipes.
Plug: M30

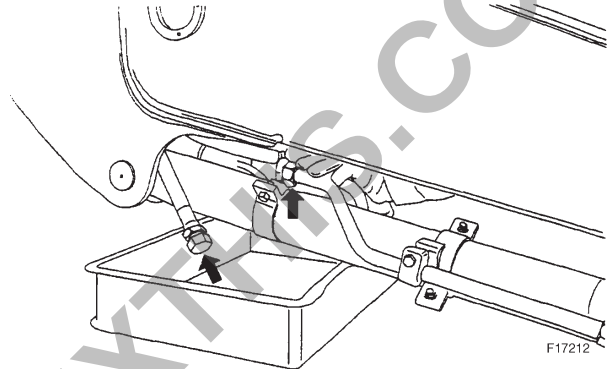


Fig. 3-2 Separating piping of bucket cylinder
(Illustration shows E75SR EVOLUTION)

- (3) Removing bucket cylinder rod pin (H)

- 1) Loosen nut (9), remove capscrew M12 X 100 (8), and push out pin (H).

: 19 mm

- 2) Retract cylinder rod.

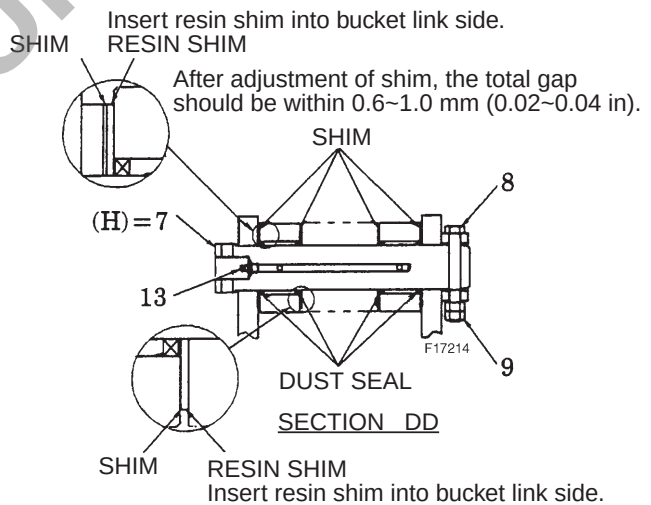


Fig. 3-3 Detail of bucket cylinder rod pin (H)

- (4) Removing cylinder head pin (G)

- Loosen nut (3), remove capscrew M12 X 100 (2), and push out pin (G).

: 19 mm

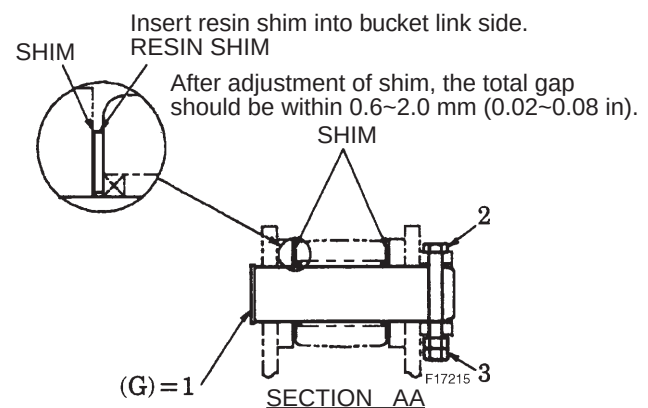


Fig. 3-4 Detail of bucket cylinder rod pin (H)

1. HYDRAULIC PUMP - REGULATOR

[illegible]

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1. TIGHTENING TORQUES FOR CAPSCREWS AND NUTS

Tables 1-1 and 1-2 indicate tightening torques applicable to cases where no special note is given. Overtightening of bolts may result in a twist-off and a fracture under load.

Insufficient tightening may lead to a loosening or loss of bolts. Always tighten bolts to proper torques.

Table 1-1 Standard tightening torques for metric coarse screw threads

Unit: kgf·m (lbf·ft)

	4.8 T		7 T		10.9 T	
M6 P=1	0.45±0.05(3.2±0.4)	0.38±0.04(2.7±0.3)	0.98±0.1(7.1±0.7)	0.83±0.08(6.0±0.6)	1.77±0.18(12.8±1.3)	1.5±0.15(10.8±1.1)
M8 P=1.25	1.09±0.11(7.9±0.8)	0.92±0.09(6.6±0.7)	2.4±0.2(17.3±1.4)	2.0±0.2(14.4±1.4)	4.3±0.4(31±2.9)	3.6±0.4(26±2.9)
M10 P=1.5	2.2±0.2(15.9±1.4)	1.83±0.18(13.2±1.3)	4.7±0.5(34±3.6)	4.0±0.4(29±2.9)	8.5±0.9(61±6.5)	7.2±0.7(52±5.1)
M12 P=1.75	3.7±0.4(27±2.9)	3.2±0.3(23±2.2)	8.1±0.8(59±5.8)	6.8±0.7(49±5.1)	14.6±1.5(105±10.8)	12.3±1.2(89±8.7)
M14 P=2	5.9±0.6(43±4.3)	5.0±0.5(36±3.6)	12.8±1.3(93±9.4)	10.8±1.1(78±7.9)	23±2(166±14.5)	19.5±1.9(140±13.7)
M16 P=2	9.0±0.9(65±6.5)	7.6±0.7(55±5.1)	19.5±2(140±14.4)	16.4±1.6(118±11.5)	35±4(252±29)	29±3(209±22)
M18 P=2.5	12.4±1.2(90±8.7)	10.5±1.0(76±7.2)	27±3(195±22)	23±2(166±14.5)	49±5(354±36)	41±4(296±29)
M20 P=2.5	17.5±1.7(126±12.3)	14.7±1.4(106±10.1)	38±4(274±29)	32±3(231±22)	68±7(491±51)	57±6(412±43)
M22 P=2.5	23±2(166±14.5)	19.6±2(142±14.5)	51±5(368±36)	43±4(310±29)	92±9(665±65)	77±8(557±58)
M24 P=3	30±3(217±22)	24±3(173±22)	65±7(470±51)	53±5(383±36)	118±12(852±87)	93±10(673±72)
M27 P=3	44±4(318±29)	36±3(260±22)	96±10(694±72)	78±8(563±58)	173±17(1250±123)	140±14(1010±100)
M30 P=3.5	60±6(433±43)	50±5(361±36)	131±13(948±94)	110±11(796±79)	235±24(1700±174)	198±20(1430±145)
M33 P=3.5	81±8(585±58)	68±7(491±51)	176±18(1270±130)	148±15(1070±110)	317±32(2290±230)	266±27(1920±195)
M36 P=4	105±10(758±72)	88±9(636±65)	227±23(1640±170)	190±19(1370±140)	409±41(2960±300)	343±34(2480±250)

Table 1-2 Standard tightening torques for metric fine screw threads

Unit: kgf·m (lbf·ft)

	4.8 T		7 T		10.9 T	
M8 P=1.0	1.15±0.11(8.3±0.8)	0.97±0.1 (7.0±0.7)	2.5±0.2 (18.0±1.4)	2.1±0.2 (15.2±1.4)	4.5±0.4 (33±2.9)	3.8±0.4 (27±2.9)
M10 P=1.25	2.3±0.2 (16.6±1.4)	1.91±0.19(13.8±1.4)	4.9±0.5 (35±3.6)	4.2±0.4 (30±2.9)	8.9±0.9 (64±6.5)	7.5±0.7 (54±5.1)
M12 P=1.25	4.0±0.4 (29±2.9)	3.4±0.3 (25±2.2)	8.7±0.9 (63±6.5)	7.3±0.7 (53±5.1)	15.7±1.6 (114±11.6)	13.2±1.3 (95±9.4)
M16 P=1.5	9.4±0.9 (68±6.5)	7.9±0.8 (57±5.8)	20±2 (144±14.5)	17.2±1.7 (124±12.3)	37±4 (268±29)	31±3 (224±22)
M20 P=1.5	19±1.9 (137±13.7)	15.8±1.6 (114±11.6)	41±4 (296±29)	34±3 (246±22)	74±7 (535±51)	62±6 (448±43)
M24 P=2	32±3 (231±22)	27±3 (195±22)	70±7 (506±51)	58±6 (420±43)	126±12 (911±87)	105±10 (759±72)
M30 P=2	65±6 (470±43)	54±5 (391±36)	142±14(1030±100)	118±12 (852±87)	255±26 (1840±188)	212±21 (1530±150)
M36 P=3	109±11 (788±79)	91±9 (658±65)	238±23(1720±166)	198±20 (1430±145)	428±43 (3100±310)	357±36 (2580±260)

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E70SR *EVOLUTION*

WORKSHOP MANUAL
ENGLISH

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EVOLVING TECHNOLOGY

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TO THE READER

- This manual has been written for a skilled technician, in order to give him the information necessary to repair this machine.

- **Read this manual carefully for correct information about repair procedures.**

- **For any question or comment, or in case you notice a mistake in this manual content, please contact:**

FIAT KOBELCO CONSTRUCTION
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San Mauro Torinese (TO)
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PRODUCT SUPPORT
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ADDITIONAL REFERENCE MANUALS

- In addition to this Workshop Manual, refer also to the following:
 - **Operation and maintenance instruction manual**
 - **Spare parts catalog**

DESCRIPTION OF THE COMPLETE WORKSHOP MANUAL

- The complete repair manual consists of two volumes:

- ***E70SR EVOLUTION* - Workshop Manual "Excavator"**

- "Excavator" and "Engine" Workshop Manuals contain the technical information necessary for machine/engine service and repair, service

equipment, information on maintenance standards, remove and install procedures, disassembly and assembly procedures.

- The complete Workshop Manual for the excavator model *E70SR EVOLUTION* consists of the following volumes identified by print number as shown herebelow:

VOLUME	MACHINE TYPE	PRINT No.
Workshop Manual - "Excavator"	<i>E70SR EVOLUTION</i>	604.13.252

AVOID ACCIDENTS

Most accidents, whether they occur in industry, on the farm, at home or on the highway, are caused by the failure of some individuals to follow simple and fundamental safety rules or precautions. For this reason **MOST ACCIDENTS CAN BE PREVENTED** by recognising the real cause and doing something about it before the accident occurs.

Regardless of the care used in the design and construction of any type of equipment there are conditions that cannot be completely safeguarded against without interfering with reasonable accessibility and efficient operation.

Carefully read indications, cautions and safety warning quoted in the "SAFETY RULES" section.

A careful operator is the best insurance against an accident.

The complete observance of one simple rule would prevent many thousand serious injuries each year.

That rule is:

Never attempt to clean, oil or adjust a machine while it is in motion.



ATTENTION

On machines having hydraulically, mechanically and/or cable controlled equipment (such as showels, loaders, dozers, scrapers etc.) be certain the equipment is lowered to the ground before servicing, adjusting and/or repairing.

If it is necessary to have the equipment partially or fully raised to gain access to certain items, be sure the equipment is suitably supported by means other than the hydraulic lift cylinders, cable and/or mechanical device used for controlling the equipment.

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10. BOOM FOOT PIN PULLING TOOLS

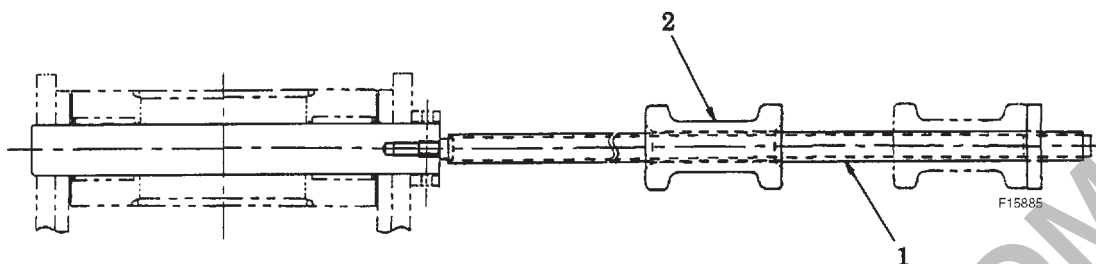


Fig. 10-1 Slide hammer for boom foot pin

Tools accessoires assy

Table 10-1

No.	TOOL NAME	SKETCH	APPLICABLE
1	Rod		Boom foot pin pulling
2	Hammer		Boom foot pin pulling

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1. SUMMARY

The hydraulic circuits are built up with the following functions and features in order to achieve easy operability, safety, mass volume handling and low fuel consumption.

Table. 1-1

PERFORMANCE	DEVICE	FUNCTION	FEATURES
EASY OPERABILITY AND SAFETY	TRAVEL	<ul style="list-style-type: none"> • Travel straight. • 2-speed travel changeover. • Auto parking brake. • Motor overrun protection. • Travel pilot operation. 	<ul style="list-style-type: none"> • Travel straight at composite operation. • 2-speed changeover of travel speed. • Automatic braking when parking. • Secure people from danger caused by overruning of motor on the slope. • Slow start and stop.
	SWING	<ul style="list-style-type: none"> • Reverse rotation protective function. • Swing priority circuit. (simultaneous operation of arm digging and swing motions). • Automatic swing parking brake. 	<ul style="list-style-type: none"> • Easy positioning to protect it from swinging back when stops swinging. • Easy operation of stable swing speed, arm slanted leveeing, swing press digging. • Protect it from swing drift on the slope.
	ATTACHMENT	<ul style="list-style-type: none"> • Hydraulic pilot control system. • Pilot lock system. • Lock valve (boom / arm). 	<ul style="list-style-type: none"> • Delicate operability. • Cut out of pilot circuit by safety lock lever. • Protect boom and arm from natural drop when parking.
	OTHERS	<ul style="list-style-type: none"> • Closed pressure type hydraulic oil tank. • Suction strainer. • Line filter: pilot circuit. • Return circuit. • Cooling hydraulic oil by oil cooler. 	<ul style="list-style-type: none"> • To prevent hydraulic oil from being contaminated and to promote self suction ability of pump. • Remove dust on suction side. • To prevent pilot operating circuit from malfunctioning. • To prevent hydraulic oil from fouling. • To prevent hydraulic oil from being deteriorated.
MASS HANDLING CAPABILITY	PUMP	<ul style="list-style-type: none"> • Total power shift control variable displacement pump. 	<ul style="list-style-type: none"> • Use engine power effectively with 2 variable displacement pumps (delivery side).
	ATTACHMENT	<ul style="list-style-type: none"> • Boom raise confluent circuit. • Arm confluent circuit. 	<ul style="list-style-type: none"> • Speed up for boom raise operation. • Speed up for arm operation.
LOW FUEL CONSUMPTION	MICRO COMPUTER	<ul style="list-style-type: none"> • Auto accel. 	<ul style="list-style-type: none"> • Reduce fuel consumption and noise by lowering engine speed when control lever is in neutral position.

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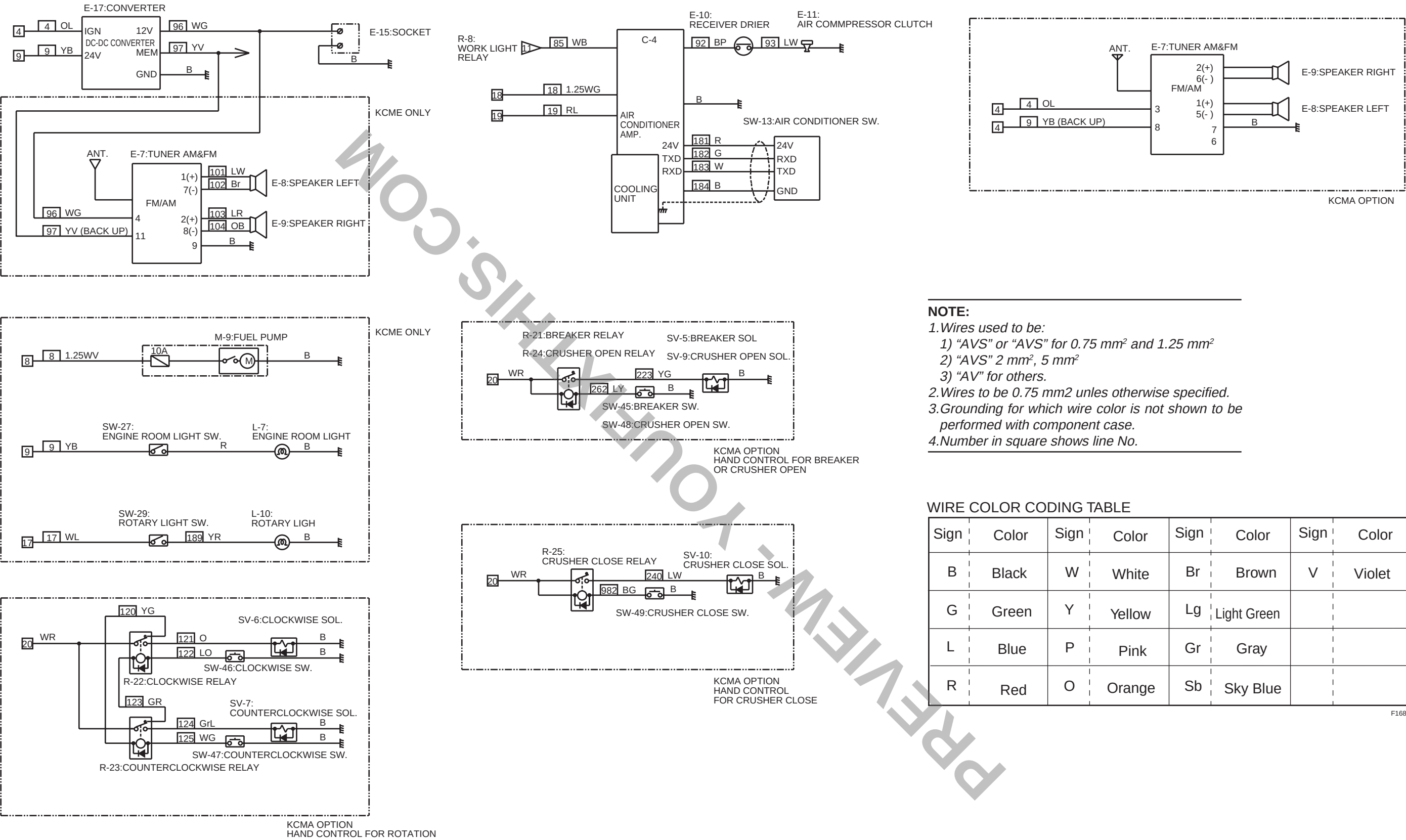


Fig. 1 (3 / 4)

4.2 CONSTRUCTION

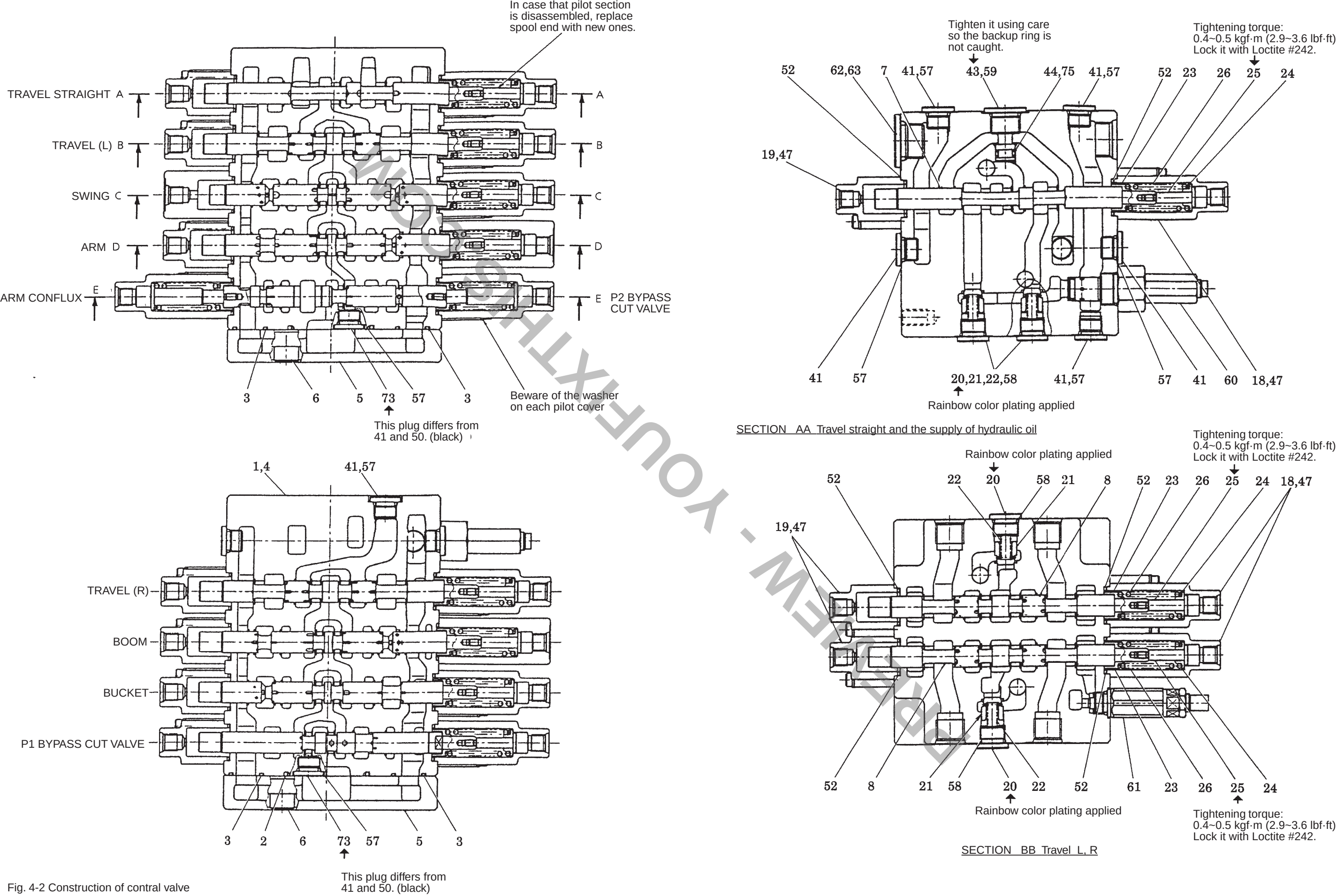
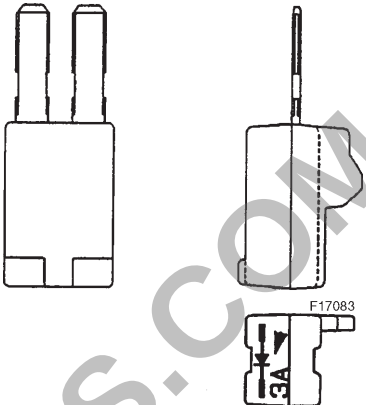
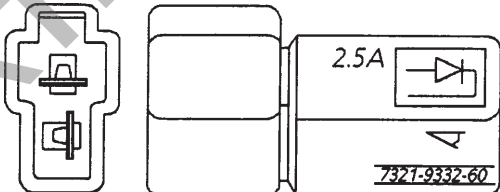
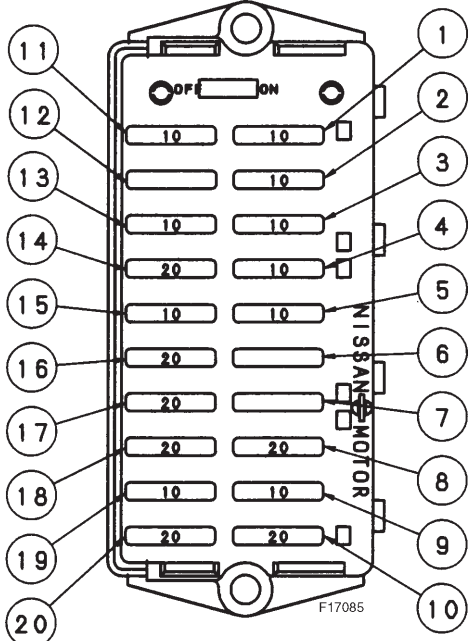


Fig. 4-2 Construction of contral valve

Code No. Parts Name Use	Specifications	Description																																																															
D-1~4	<table><tr><td>Peak reverse voltage</td><td>400 V</td></tr><tr><td>Mean output current</td><td>3 A</td></tr><tr><td>Surge current</td><td>200 A</td></tr></table>	Peak reverse voltage	400 V	Mean output current	3 A	Surge current	200 A																																																										
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Key switch relay Battery relay Gauge cluster Pedal pressure switch																																																																	
D-5	<table><tr><td>Rated current</td><td>2.5 A</td></tr></table>	Rated current	2.5 A																																																														
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Glow relay																																																																	
E-1	Fuse capacity and circuit name																																																																
Fuse box	<table><tr><th>No.</th><th>Capacity</th><th>Name of circuit</th></tr><tr><td>①</td><td>10A</td><td>Mechatro controller</td></tr><tr><td>②</td><td>10A</td><td>Wiper washer relay</td></tr><tr><td>③</td><td>10A</td><td>Cigarette lighter</td></tr><tr><td>④</td><td>10A</td><td>Tuner</td></tr><tr><td>⑤</td><td>10A</td><td>Horn</td></tr><tr><td>⑥</td><td>—</td><td>Blank</td></tr><tr><td>⑦</td><td>—</td><td>Blank</td></tr><tr><td>⑧</td><td>20A</td><td>Power window (back-up option)</td></tr><tr><td>⑨</td><td>10A</td><td>Tuner (buck-up), room lamp</td></tr><tr><td>⑩</td><td>20A</td><td>Key switch</td></tr><tr><td>⑪</td><td>5A</td><td>Fuel pump (option)</td></tr><tr><td>⑫</td><td>—</td><td>Blank</td></tr><tr><td>⑬</td><td>10A</td><td>Gauge cluster Power window (option)</td></tr><tr><td>⑭</td><td>20A</td><td>Wiper, washer</td></tr><tr><td>⑮</td><td>10A</td><td>Solenoid valve (lever lock, option select)</td></tr><tr><td>⑯</td><td>20A</td><td>Work light</td></tr><tr><td>⑰</td><td>20A</td><td>Cab work light (option)</td></tr><tr><td>⑱</td><td>20A</td><td>Air conditioner, heater (option)</td></tr><tr><td>⑲</td><td>10A</td><td>Air conditioner</td></tr><tr><td>⑳</td><td>20A</td><td>Spare</td></tr></table>	No.	Capacity	Name of circuit	①	10A	Mechatro controller	②	10A	Wiper washer relay	③	10A	Cigarette lighter	④	10A	Tuner	⑤	10A	Horn	⑥	—	Blank	⑦	—	Blank	⑧	20A	Power window (back-up option)	⑨	10A	Tuner (buck-up), room lamp	⑩	20A	Key switch	⑪	5A	Fuel pump (option)	⑫	—	Blank	⑬	10A	Gauge cluster Power window (option)	⑭	20A	Wiper, washer	⑮	10A	Solenoid valve (lever lock, option select)	⑯	20A	Work light	⑰	20A	Cab work light (option)	⑱	20A	Air conditioner, heater (option)	⑲	10A	Air conditioner	⑳	20A	Spare	
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⑰	20A	Cab work light (option)																																																															
⑱	20A	Air conditioner, heater (option)																																																															
⑲	10A	Air conditioner																																																															
⑳	20A	Spare																																																															
Fuse																																																																	

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8. AIR CLEANER

8.1 PREPARATION FOR REMOVAL

- (1) Opening bonnet assy (5)
 - 1) Unlock it with starter key.
 - 2) Open bonnet (5) and support it with stay (15).

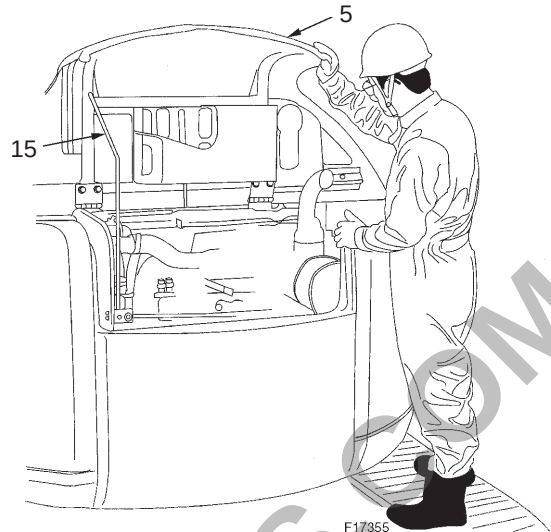


Fig. 8-1 Opening bonnet assy (5)

- (2) Opening cover assy (4)
- (3) Unplug terminals on indicator lines (5-5) (see Fig. 8-4)

8.2 REMOVAL

- (1) Pulling out hose (2)
 - 1) Loosen clip (8) on air cleaner side.
 - 2) Pulling out hose (2)

—  : Flat-blade screw driver

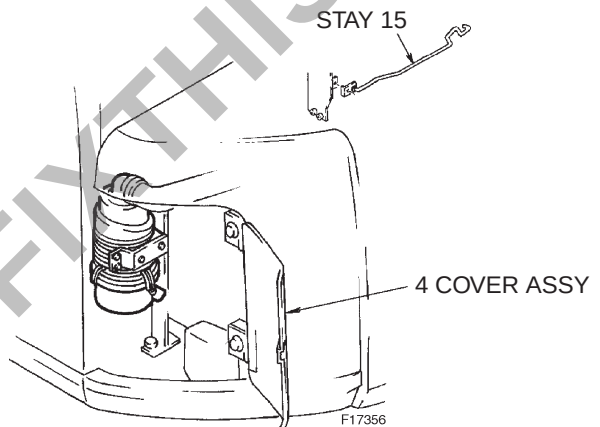


Fig. 8-2 Opening cover assy (4)

- (2) Pulling out hose (1)
 - 1) Loosen clip (8) on air cleaner side.
 - 2) Pulling out hose (1)

—  : Flat-blade screw driver

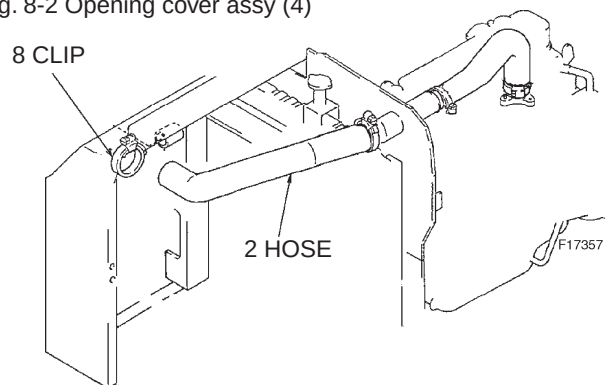


Fig. 8-3 Pulling out hose (2)

- (3) Remove air cleaner assy (5)
 - (3) Remove 2 capscrews (14) M8X20
 - (4) Remove air cleaner assy (5) together with bracket (4).
-  : 13 mm

8.3 INSTALLATION

- (1) Installing is done in the reverse order of removing.
- (2) Spare parts for deteriorated elements

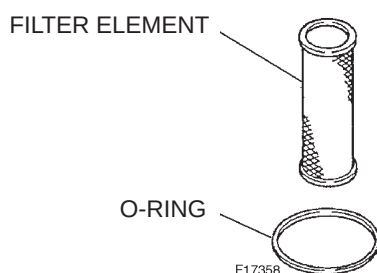
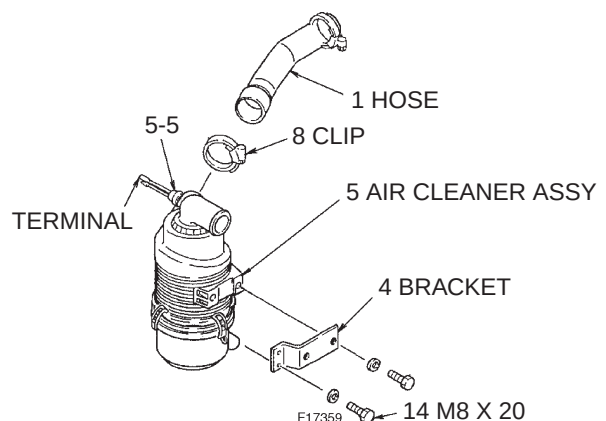


Fig. 8-4 Pulling out hose (1)

3.3 MAINTENANCE STANDARDS

- (1) Parts replacement standards
 - 1) Replace O-ring and other seals at each disassembly and assembly.
 - 2) Replace worn parts if leaks affects the operating system.
 - 3) Replace spools having excessive wear on their sliding portion.
 - 4) Replace a push rod that is worn to 1mm (0.04in) or over on its top end (see Fig. 3-7).
 - 5) Replace operating lever and handle pins that have a play of 2mm (0.08 in) or over.
 - 6) Replace such parts that arise abnormal sounds, hunting and drops in the primary pressure.

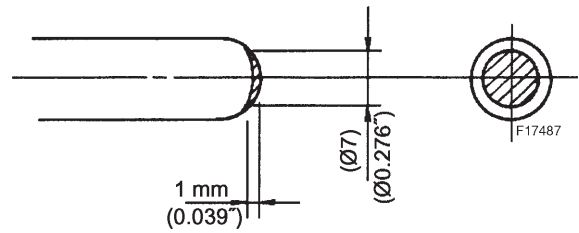


Fig. 3-7 Wear of push rod

3.4 TROUBLESHOOTING

TROUBLE	POSIBLE CAUSE	REMEDY
Secondary pressure does not rise.	1) Primary pressure is insufficient. 2) Springs (241-1, 241-2) are broken or fatigued. 3) Clearance between spool (201-1, 201-2) and valve body (101) is abnormally large. 4) Play of handle portion is too much.	1) Secure primary pressure. 2) Replace with new ones. 3) Replace assembly. 4) Disassembly and reassembly or replace handle portion.
Secondary pressure is unstable.	1) Sliding parts are caught. 2) Tank line pressure varies. 3) Air has contained into pipeline.	1) Correct. 2) Return directly to oil tank. 3) Release air.
Secondary pressure is high.	1) Tank line pressure is high. 2) Sliding parts are caught.	1) Return directly to oil tank. 2) Correct.

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8. SWING BEARING

8.1 SWING BEARING ASSY

No.	PARTS	Q'TY	REMARKS
1	SWING BEARING	1	-
2	CAPSCREW	30	M16 X 90

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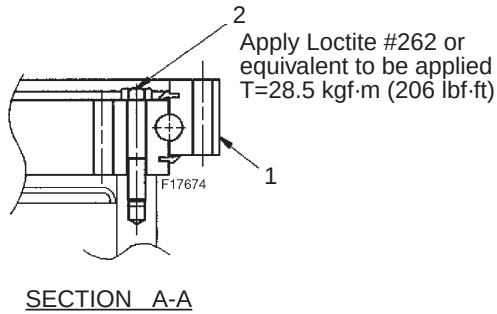
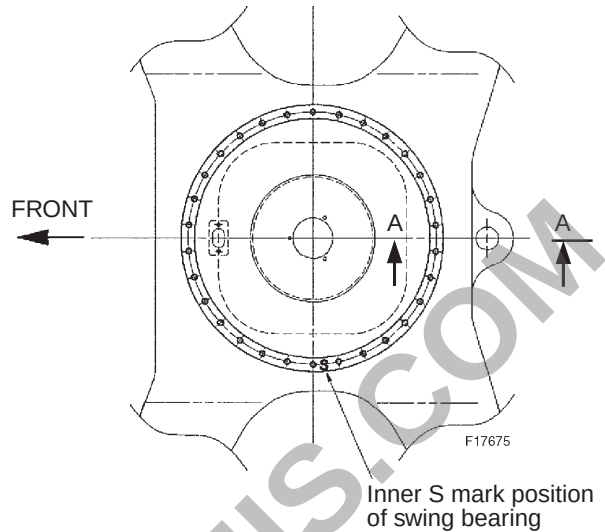


Fig. 8-1 Swing bearing assy

NOTE:

Fill grease bath with 5 kg (11 lbs) of grease NLGI-2 (molybdenum disulfide grease) or equivalent

8.2 REMOVING

- (1) Matchmarks
Remove upper structure, apply matchmarks on inner race of swing bearing and lower frame.
- (2) Remove thirty capscrews (2) M16 X 90 for installation inner race.
- (3) Drawing out grease
Remove grease in grease bath.
- (4) Removing swing bearing
Attach eyebolt on swing bearing (1) and sling it.
Weight of swing bearing: 110 kg (240 lbs)

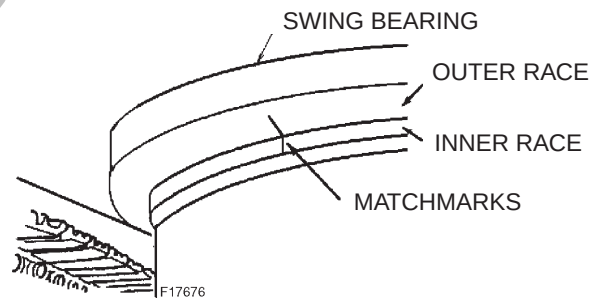


Fig. 8-2 Matchmarks

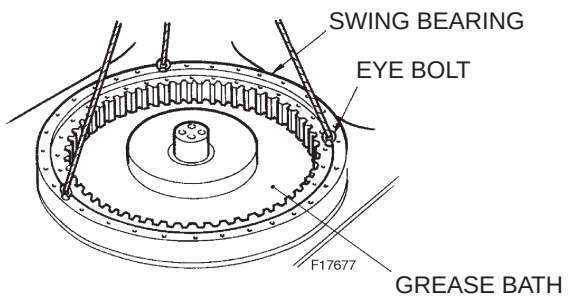


Fig. 8-3 Removing and installing swing bearing

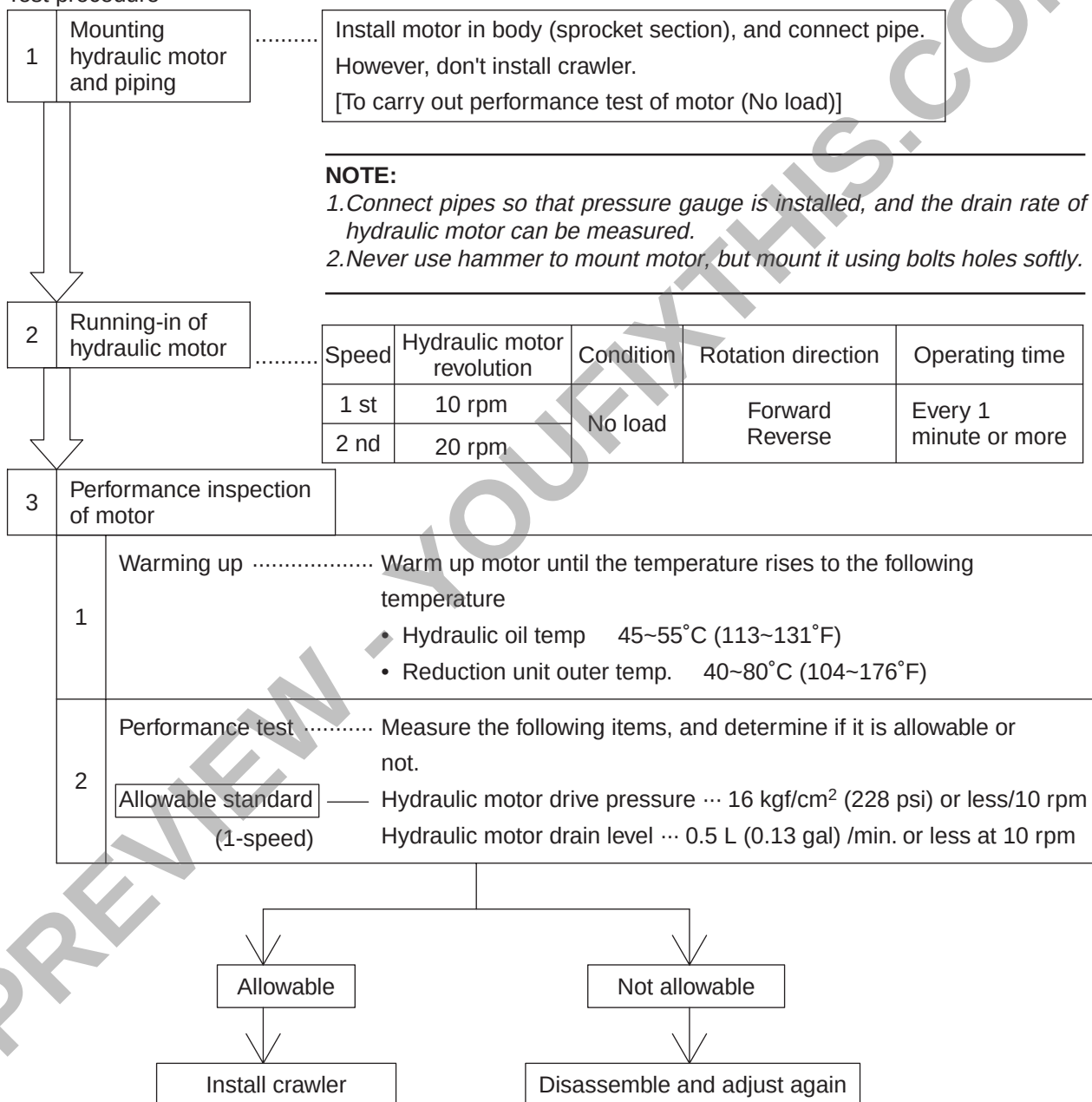
1.7 PERFORMANCE INSPECTION

- After completing the maintenance, carry out the performance inspection in the following procedure

1) Required measuring instrument

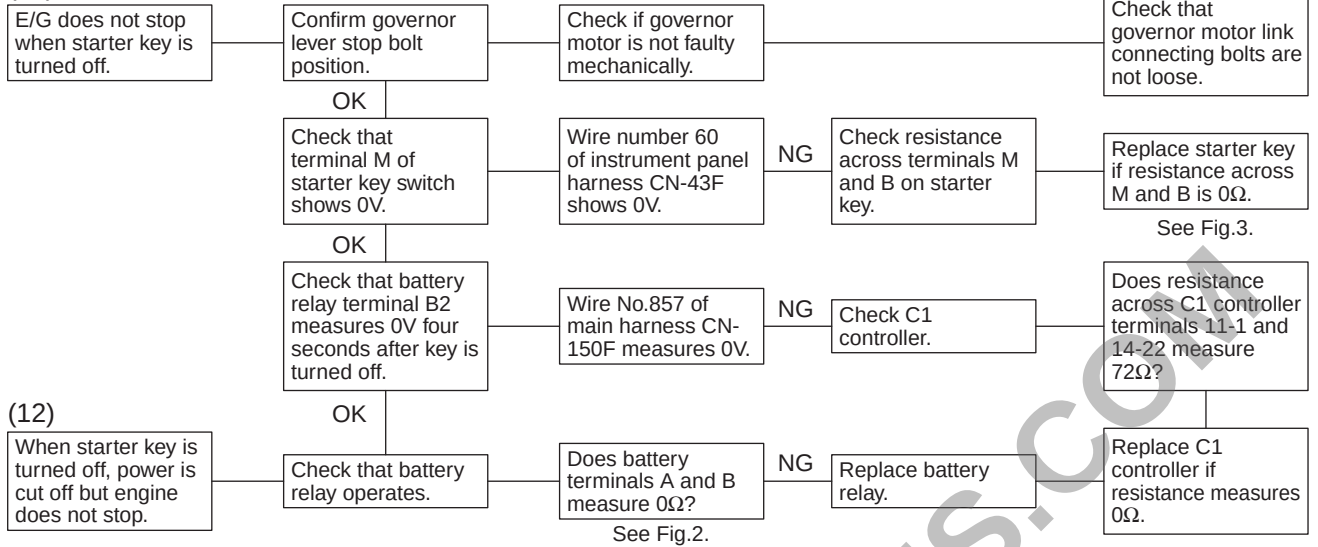
1	Pressure gauge [35 kgf/cm ² (500 psi)]	2 pcs
2	Measuring cylinder [5L (1.3 gal)]	1 pc
3	Stop watch	1 pc

2) Test procedure



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(11)



Checking condition; Starter key is off.

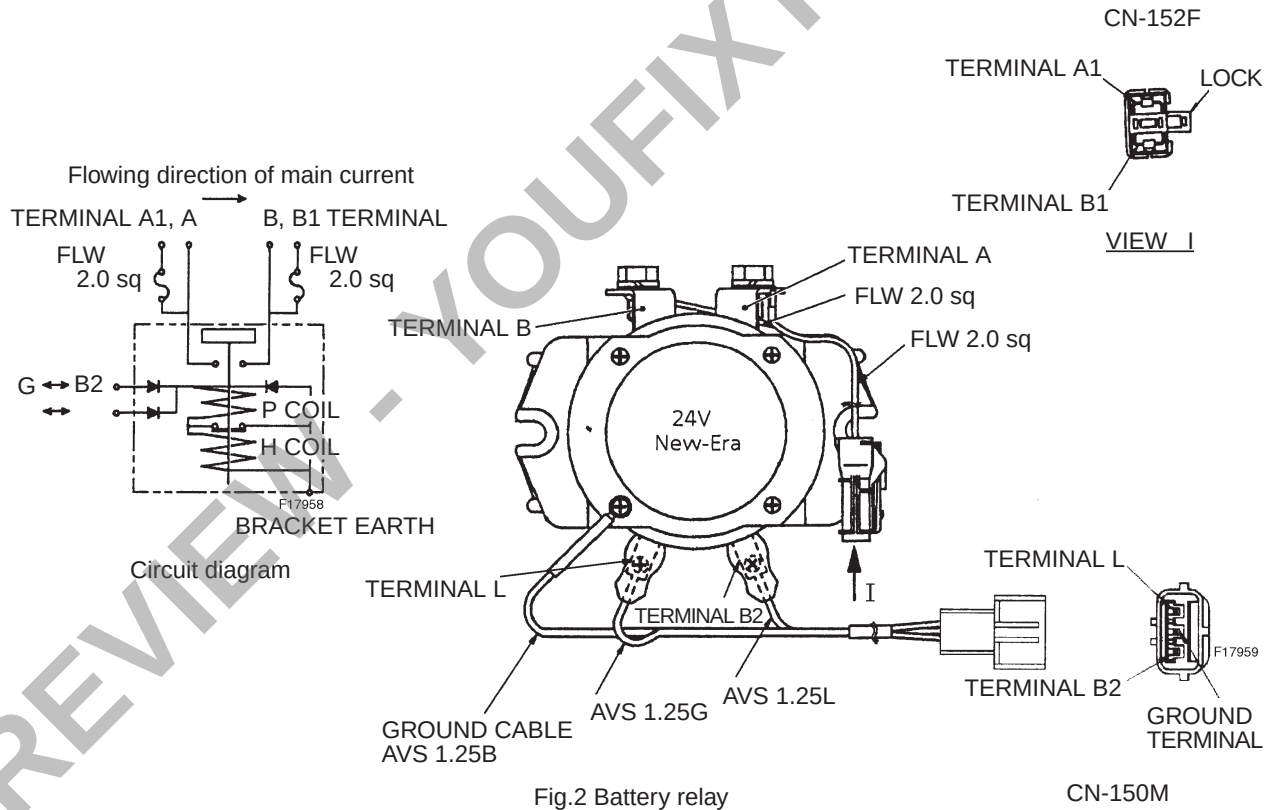
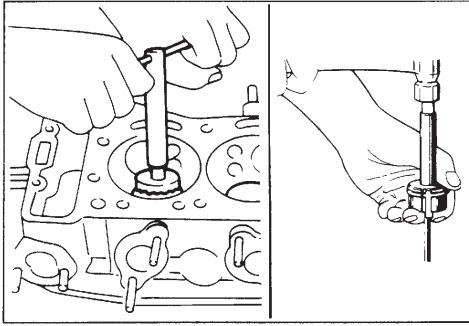
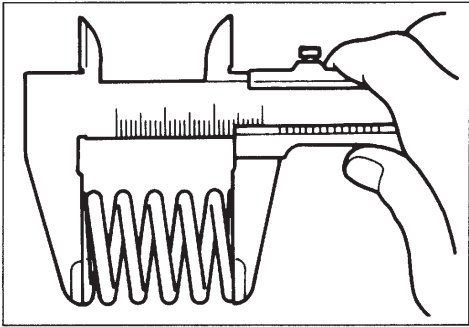


Fig.3 Key SW. terminal



3. Apply abrasive compound to the valve seat insert surface.
4. Insert the valve into the valve guide.
5. Turn the valve while tapping it to fit the valve seat insert.
6. Check that the valve contact width is correct.
7. Check that the valve seat insert surface is in contact with the entire circumference of the valve.



VALVE SPRING

Valve Spring Free Height

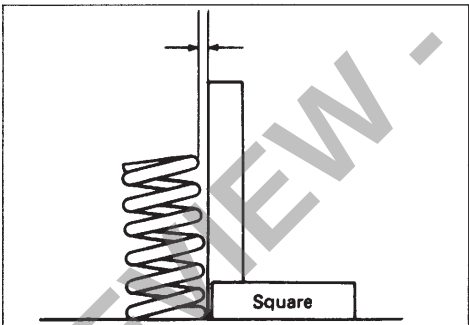


Use a vernier caliper to measure the valve spring free height.

If the measured value is less than the specified limit, the valve spring must be replaced.

Valve Spring Free Height mm(in)

Standard	Limit
49.7 (1.96)	48.2 (1.90)



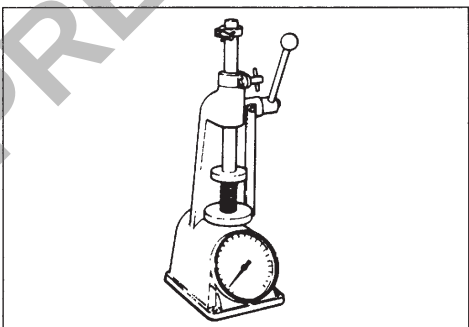
Valve Spring Inclination

Use a surface plate and a square to measure the valve spring inclination.

If the measured value exceeds the specified limit, the valve spring must be replaced.

Valve Spring Inclination mm(in)

Standard	Limit
1.5 (0.06) or less	2.5 (0.098)



Valve Spring Tension

Use a spring tester to measure the valve spring tension.

If the measured value is less than the specified limit, the valve spring must be replaced.

Valve Spring Tension N(kgf/lb)

Compressed Height	Standard	Limit
38.9 mm (1.53 in)	254 (25.9/57)	225 (23/51)

SECTION 6: LUBRICATING SYSTEM

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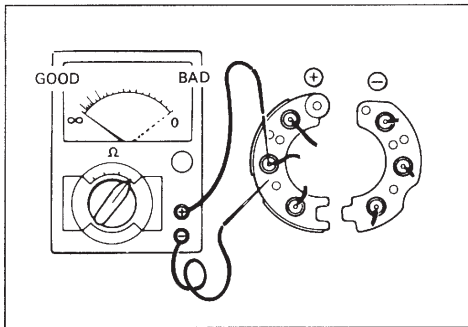
Main data and specifications	110
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- Note the meter reading for each diode terminal.

All of the diode should show continuity.

If a diode shows no continuity, it is open circuit. The rectifier assembly must be replaced.



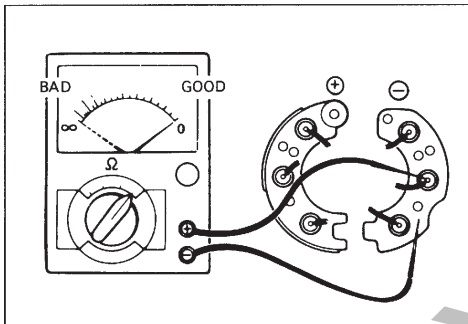
- Touch the circuit tester negative probe to the rectifier holder.

- Touch the circuit tester positive probe to each of the diode terminals in turn.

- Note the meter reading for each diode terminal.

None of the diodes should show continuity.

If a diode shows continuity, it is shorted. The rectifier assembly must be replaced.



Rectifier (Negative Diode) Continuity Test



Use a circuit tester to test the rectifier continuity.

- Touch the circuit tester negative probe to the rectifier holder.

- Touch the circuit tester positive probe to each of the diode terminals in turn.

- Note the meter reading for each diode terminal.

All of the diode should show continuity.

If a diode shows no continuity, it is open. The rectifier assembly must be replaced.

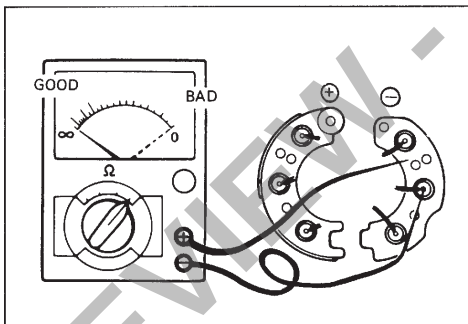
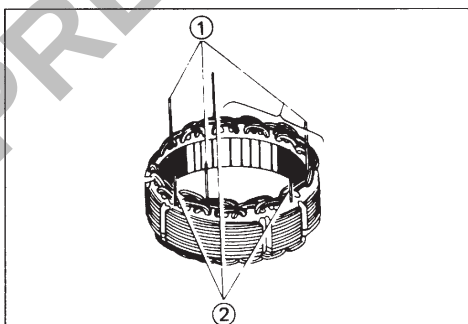
- Touch the circuit tester positive probe to the rectifier holder.

- Touch the circuit tester negative probe to each of the diode terminals in turn.

- Note the meter reading for each diode terminal.

None of the diode should show continuity.

If a diode shows continuity, it is shorted. The rectifier assembly must be replaced.



Rectifier Assembly Replacement Procedure



Use the Rectifier Service Kit to replace the rectifier assembly in the following steps.

- Connect the three inside lead wires to the "N" terminals ①.

- Connect the three outside lead wires ② to the outside terminals.

- Wind the stator lead wires around the rectifier lead wires (included in the Rectifier Service Kit) and solder them.

SECTION 63

MOUNTING THE BREAKER AND NIBBLER AND BREAKER

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