SERVICE MANUAL

EH35
Compact Excavator

NEW HOLLAND
CONSTRUCTION

6-75740NA

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Book Code No. S5PW02 02E ①

NEW HOLLAND EH35

PW02

Model Cross-reference:
SK35SR-2 is NEW HOLLAND Model EH35

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PW03

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PW11

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11. ENGINE SPECIFICATIONS

11.1 SPECIFICATIONS

■ SK30SR-2

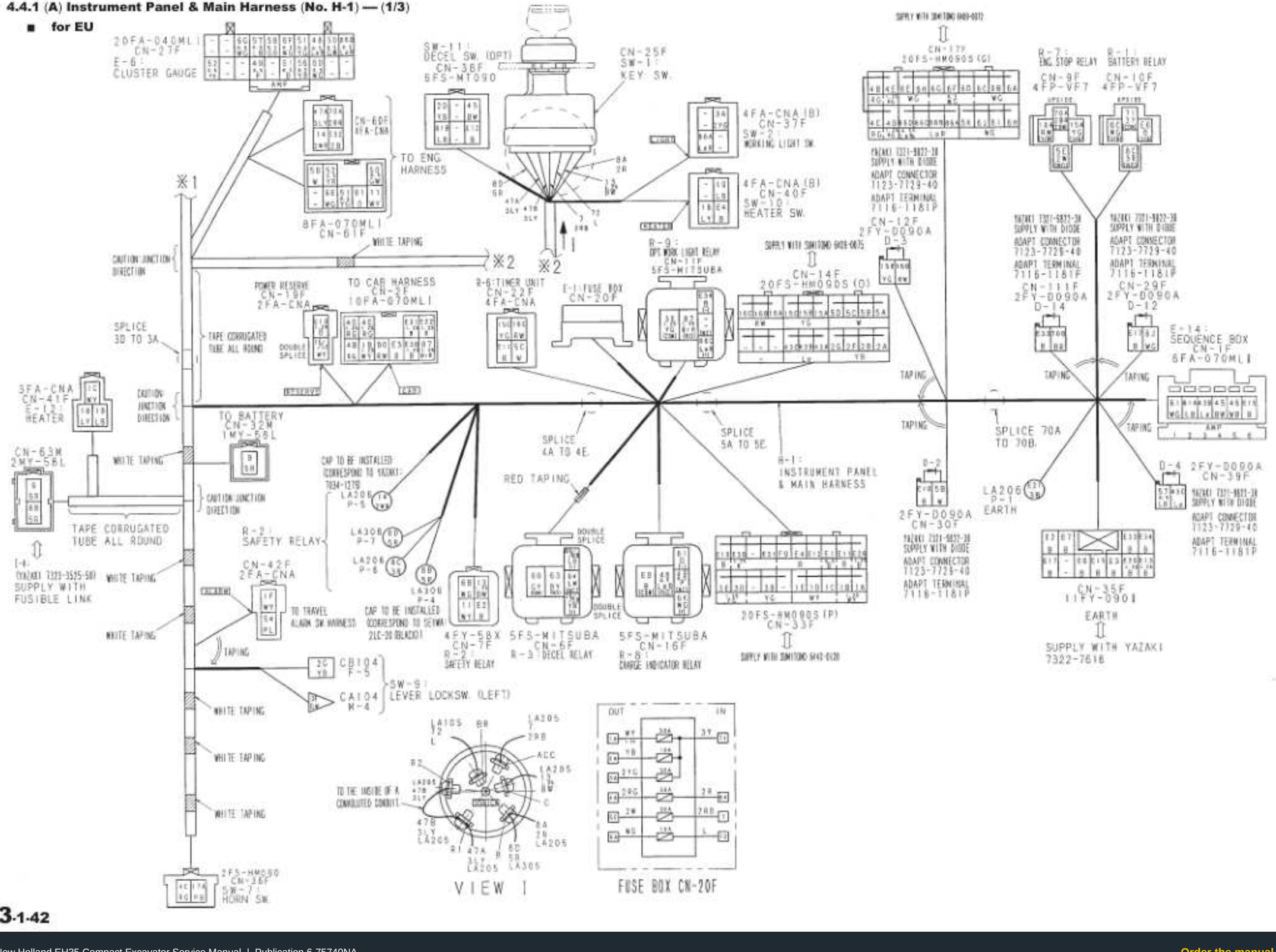
Item \ Model		SK30SR-2	
Engine Model		3TNE82A-YBC	
Type		Vertical, 4-cycle water-cooled diesel engine	
No. of cylinders - Bore X Stroke		3 - 82mm (3.23 in) X 84 mm (3.31 in)	
Total displacement		1.33 liter (81.2 cu·in)	
Compression ratio		18	
Rated output		23 PS (16.9 kW) at 2300 rpm	
Maximum torque		8.1 ~ 8.5 kgf·m (58.6 ~ 61.5 lbf·ft) at 1400 rpm	
Low idling		1200 ± 25 rpm	
High idling		2500 ± 25 rpm	
Fuel consumption rate		Less than 175 g / PS·h	
Allowable tilting angles		Back and forth, left and right 25° (momentary 30°)	
Rotating direction		Counterclockwise as seen from flywheel side	
Firing order		1-3-2-1	
Fuel injection timing (FID, b.T.D.C.)		12 ± 1°	
Fuel injection pressure		200 $^{+10}_{0}$ kgf / cm^2 (2840 $^{+140}_{0}$ psi)	
Valve action		Open	Close
	Intake valve	b.T.D.C. 15 ± 5°	a.B.D.C. 45 ± 5°
	Exhaust valve	b.T.D.C. 56 ± 5°	a.B.D.C. 18 ± 5°
Valve clearance	Intake valve	0.2 mm (0.008 in) in cold condition	
	Exhaust valve	0.2 mm (0.008 in) in cold condition	
Thermostat action		Start 71 ± 1.5°C (160 ± 3°F) / Full open 85°C (185°F)	
Compression pressure		35 ± 1 kgf / cm^2 (500 ± 14 psi) at 250 rpm	
Lubrication oil pressure		3.7 kgf / cm^2 (53 psi) at 2300 rpm	
Dimensions L X W X H		566 X 509 X 551 mm (22.3 X 20.0 X 21.7 in)	
Dry weight		130 kg (290 lb)	
Governor		Mechanical centrifugal governor (All speed type)	
Lubrication system		Forced lubrication with trochoid pump	
Cooling system		Liquid cooling / Radiator	
Starter capacity		12 V X 1.2 kW	
Generator capacity		12 V X 40 A	
Cooling water capacity : Max / Engine		2.5 / 1.8 liter (0.66 / 0.48 gal)	
Engine oil volume : Max / Effective		3.9 / 1.2 liter (1.03 / 0.32 gal)	

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4.4 DETAIL HARNESS & CABLE

4.4.1 (A) Instrument Panel & Main Harness (No. H-1) — (1/3)

■ **for EU**



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1.2.2 Cab removal

(1) Removing cover installed on rear of cab
Unscrew three M6 SEMS bolts (23) to remove the cover (22).
: Plus screwdriver

(2) Removing mounting screws on rear of cab
Unscrew one M16 capscrew (25) fastening the guard bracket to the cab to remove the shims (8) of 1.6, 2.3, and 3.2 (optional) in thickness and the spacer (24).
: 24 mm

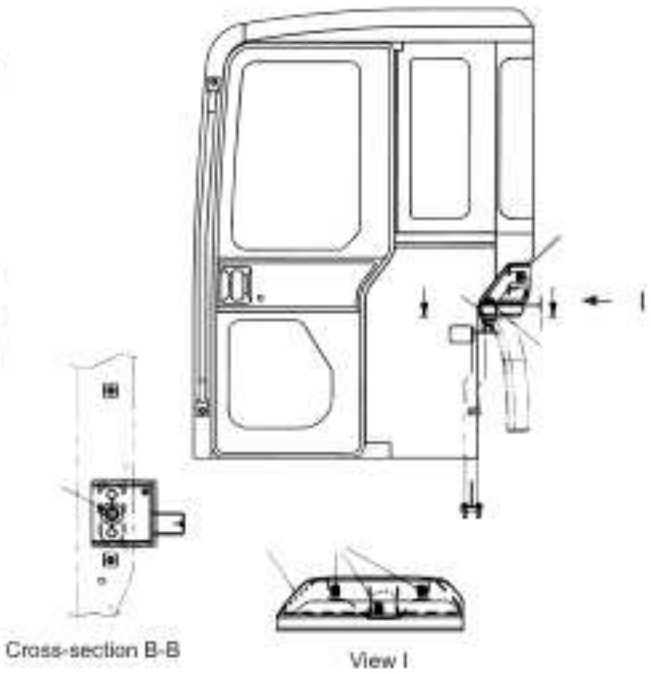


Fig. 1-4 Outside of cab

(3) Removing mounting screws inside cab
1) Unscrew M10X30 capscrew (3) fastening the cab to the floor plate.
: 17mm

2) Unscrew one M16X85 capscrew (1) and two M16X50 capscrews (2) fastening the cab to the upper frame.
: 24 mm

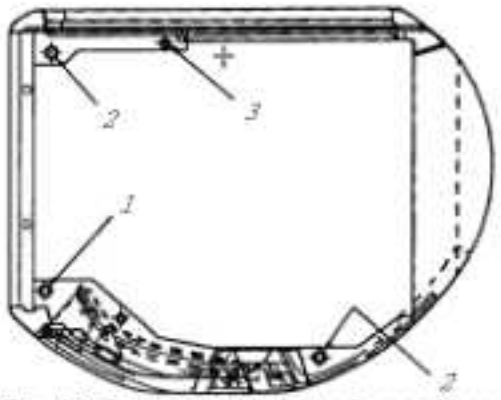


Fig. 1-5 Cab assembly fastening positions

(4) Lifting cab
Put slings through the lifting eyes on the cab top.
Cab weight: 194 kg (428 lb)

(5) Installing cab
Install the cab in reverse order of the removal.
Tighten screws to the torque specified below.
For M6: T=0.45 kgf•m (3.3 lbf•ft)
For M10: T=4.7 kgf•m (34 lbf•ft)
For M16: T=19.5 kgf•m (141 lbf•ft)

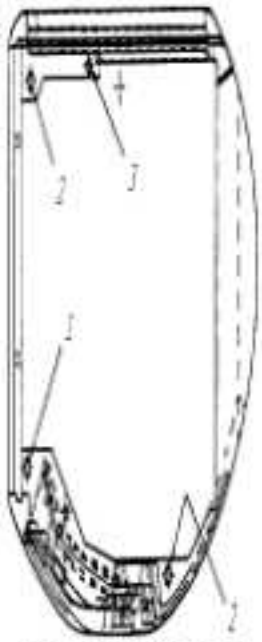
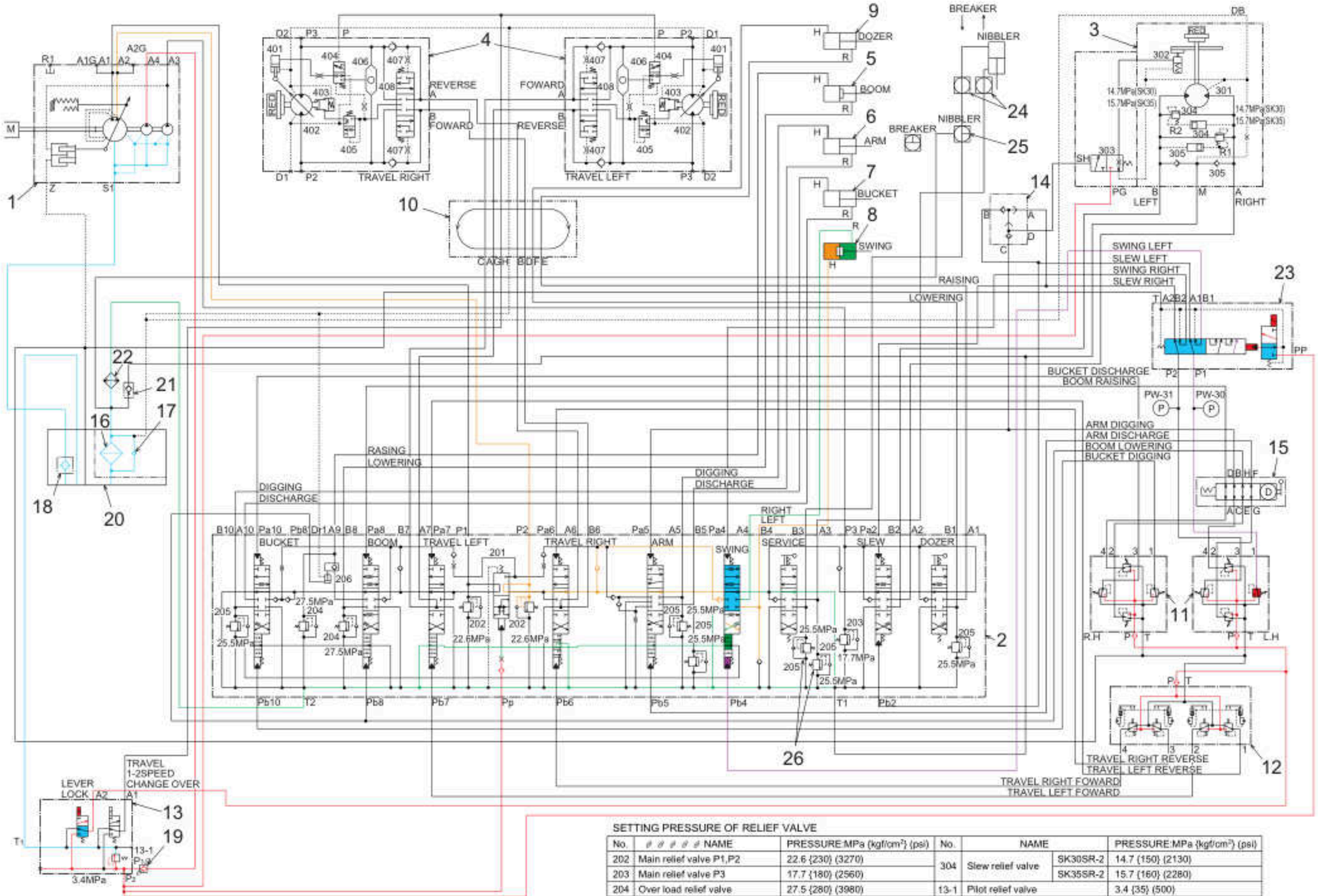


Fig. 1-6 Lifting cab

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SETTING PRESSURE OF RELIEF VALVE

No.	NAME	PRESSURE:MPa {kgf/cm²} (psi)	No.	NAME		PRESSURE:MPa {kgf/cm²} (psi)
202	Main relief valve P1,P2	22.6 {230} (3270)	304	Slew relief valve	SK30SR-2	14.7 {150} (2130)
203	Main relief valve P3	17.7 {180} (2560)			SK35SR-2	15.7 {160} (2280)
204	Over load relief valve	27.5 {280} (3980)	13-1	Pilot relief valve		3.4 {35} (500)
205	Over load relief valve	25.5 {260} (3700)				

Fig.14 Swing circuit : Swing (left) operation [USA]

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