PART NO.

TATA HITACHI

Reliable solutions

Technical Manual

Operation Principle

ZAXIS 470H

GI - SERIES

Hydraulic Excavator

Serial No. :
ZX470H - 000001 ONWARDS

MidWestTech | Hitachi Zaxis 470H GI Series Excavator Operational Principle Technical Serv... Order the manual at mid-west-tech.com >

SECTION 1

GENERAL

CONTENTS

Group 1 Specifications

Specifications T1-1-1
Working Ranges T1-1-4

Group 2 Component Layout

Main Component T1-2-1
Electrical System (Overview) T1-2-3
Electrical System (Rear Tray) T1-2-4
Electrical System (Switch Panel) T1-2-5
Electrical System (Cab Behind Side) T1-2-6
Isolation Switch (Optional) T1-2-8
Engine T1-2-10
Pump Device T1-2-11
Control Valve T1-2-12
Check Valve / Accumulator T1-2-14
Signal Control Valve T1-2-14
4-Spool Solenoid Valve Unit T1-2-17
2-Spool Solenoid Valve Unit T1-2-17
Layout of Attachment Spec. Parts
(Hydraulic System) T1-2-18

Group 3 Component Specifications

Engine T1-3-1
Engine Accessories T1-3-5
Hydraulic Component T1-3-6
Electrical Component T1-3-10

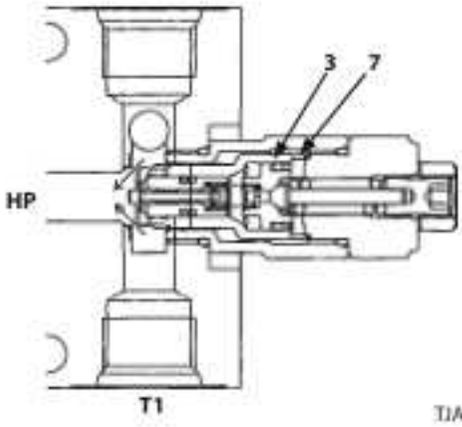
MidWestTech | Hitachi Zaxis 470H GI Series Excavator Operational Principle Technical... Order the manual at mid-west-tech.com >

FRONT ATTACHMENT PILOT VALVE	Model	HVP07C-040-101
	Plunger Stroke	Ports 1, 3: 6.5 mm (0.26 in), Ports 2, 4: 8.0 mm (0.32 in)
TRAVEL PILOT VALVE	Model	HVP08A-040-101
	Plunger Stroke	Ports 1, 2, 3, 4: 4.6 mm (0.18 in)
4-SPOOL SOLENOID VALVE UNIT	Type	4-Spool Proportional Solenoid valve
	Rated Voltage	DC 24 V
	Coil Resistance	22 Ω
2-SPOOL SOLENOID VALVE UNIT	Type	2-Spool Proportional Solenoid Valve
	Rated Voltage	DC 24 V
	Coil Resistance	22 Ω
SIGNAL CONTROL VALVE	Model	KVSS-10-HB
	Rated Pressure	3.72 MPa (38 kgf/cm^2, 540 psi)
PILOT SHUT-OFF SOLENOID VALVE	Type	ON/OFF Solenoid Valve
	Rated Voltage	DC 24V
	Coil Resistance	49 Ω
LOW-PRESSURE RELIEF VALVE	Relief Set Pressure	150±37 kPa (1.5±0.4 kgf/cm^2, 22±5 psi)
BYPASS CHECK VALVE	Relief Set Pressure	350±38 kPa (3.6±0.4 kgf/cm^2, 51±6 psi)
FILTER	Air Cleaner (Filtration)	-
	Full-Flow Filter (Filtration)	β10≥2.0
	Suction Filter (Filtration)	177 µm (80 mesh)
	Drain Filter (Filtration)	10 µm
	Pilot Filter (Filtration)	10≥1.4

MidWestTech | Hitachi Zaxis 470H GI Series Excavator Operational Principle Technical... Order the manual at mid-west-tech.com >

Make-Up Operation

1. When pressure in port HP (actuator circuit) decreases lower than pressure in port T1 (hydraulic oil tank), sleeve (3) is moved to the right.
2. Hydraulic oil in port T1 flows to port HP and cavitation is prevented.
3. When pressure in port HP increases to the specified pressure, sleeve (3) is closed by the force of spring C (7).

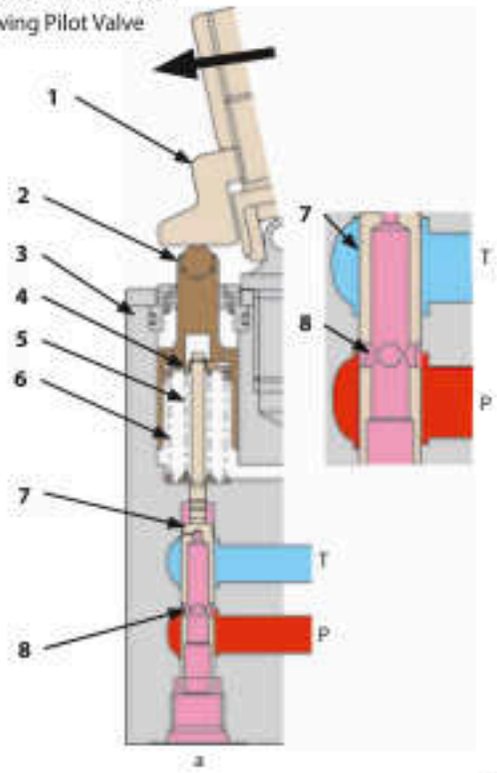


TJAA-03-07-004

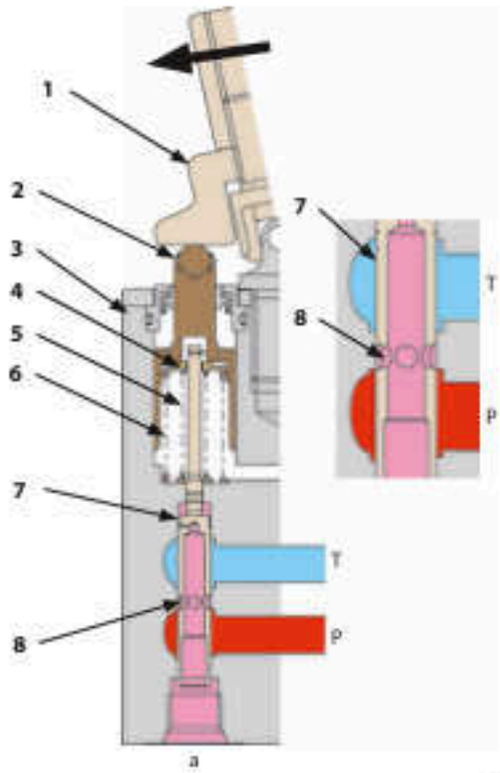
HP- Fun Circuit
T1 Port T1(To Hydraulic Oil Tank)
3- Sleeve
7- Spring C

MidWestTech | Hitachi Zaxis 470H GI Series Excavator Operational Principle Technical... Order the manual at mid-west-tech.com >

Front Attachment /
Swing Pilot Valve

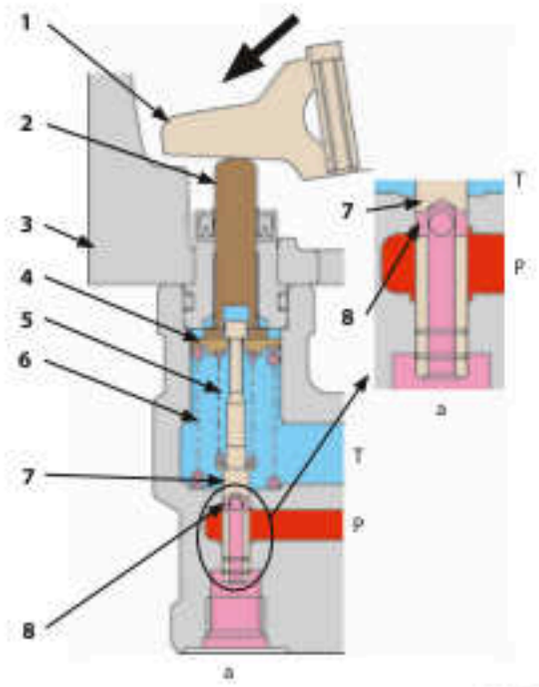


TPPP-03-04-007

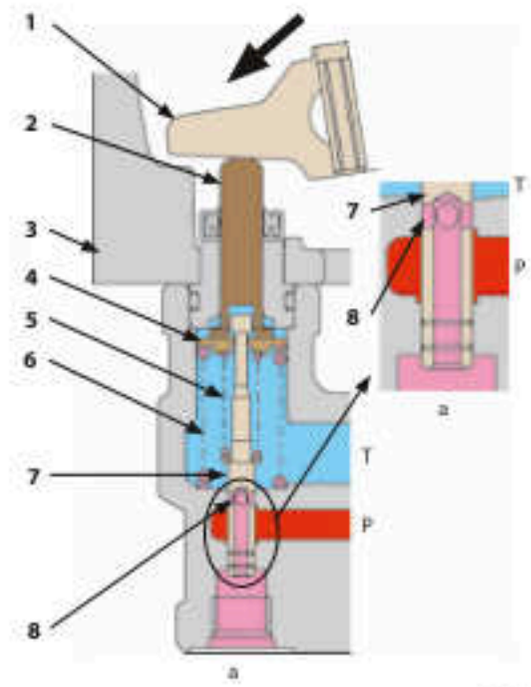


TPPP-03-04-008

Travel Pilot Valve



TPPP-03-04-012

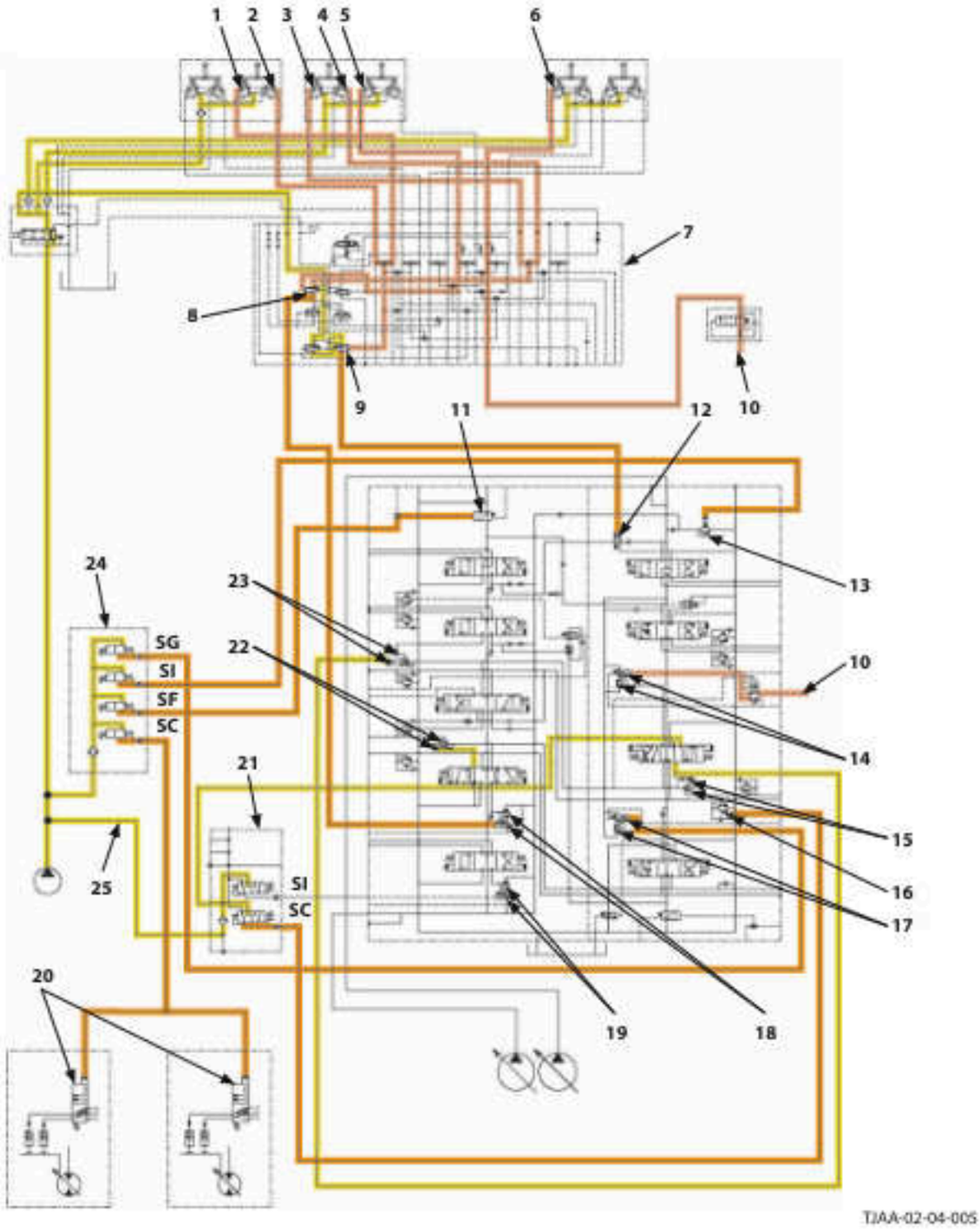


TPPP-03-04-013

P- Port P
T- Port T
a- Output Port

1- Cam
2- Pusher
3- Casing
4- Spring Guide
5- Balance Spring
6- Return Spring
7- Spool
8- Hole

MidWestTech | Hitachi Zaxis 470H GI Series Excavator Operational Principle Technical... Order the manual at mid-west-tech.com >



TJAA-02-04-005

1- Travel (Right Reverse)
2- Travel (Right Forward)
3- Swing (Right)
4- Swing (Left)
5- Arm Roll-In
6- Boom Lower
7- Signal Control Valve
8- Arm Flow Rate Control Valve Control Spool
9- Flow Combiner Valve Control Spool
10- Boom Lower Pilot Pressure
11- Bypass Shut-Out Valve
12- Flow Combiner Valve
13- Main Relief Valve
14- Boom Flow Rate Control Valve
15- Boom 1 Anti-Drift Valve
16- Boom Overload Relief Control Valve
17- Arm 2 Flow Rate Control Valve
18- Arm 1 Flow Rate Control Valve
19- Swing Flow Rate Control Valve
20- Travel Motor Displacement Angle Control Valve
21- 2-Spool Solenoid Valve Unit
22- Arm 1 Anti-Drift Valve
23- Boom 2 Anti-Drift Valve
24- 4-Spool Solenoid Valve Unit
25- Pilot Pressure from Pilot Pump

MidWestTech | Hitachi Zaxis 470H GI Series Excavator Operational Principle Technical... Order the manual at mid-west-tech.com >

MODEL 使用機種	SYM 記号	REVISIONS 来歴	DATE 年月日	REVD 訂正	CHKD 審査
ZX470GI	7	No.1873,1874：回路追加．／No.1869：回路変更．SMCZ(C17→C16)／コネクタ追加．HP_MODE／テーピング追加．／No.1430：誤記訂正．SIZE:5→3／合計訂正数．11／適用：2013/12 納入分より適用 No.1873,1874:CIRCUIT ADDED./No.1869:CIRCUIT REVD.SMCZ(C17→C16)/CONNECTOR ADDED.HP_MODE/TAPE WINDING ADDED./No.1430:DESCRIPTION CORRECTED.SIZE:5→3/TOTAL REVISION:11/APPLICATION:PRODUCTS TO BE SHIPPED IN AND AFTER 2013/12	2013.12.02	SHU.KOBAYASHI	KE.TASHIRO

YA00013324

製缶品 普通寸法差 GEN.TOLERANCE IN WELDING	
寸法L／区分 DIMENSION	寸法差 DEVIATION
L < 63	± 1.6
63 ≦ L < 125	± 2.0
125 ≦ L < 250	± 2.5
250 ≦ L < 500	± 3.15
500 ≦ L < 1000	± 4.0
1000 ≦ L < 2000	± 5.0
2000 ≦ L < 4000	± 6.3
4000 ≦ L < 8000	± 8.0
8000 ≦ L < 16000	± 10.0

機械加工 普通寸法差中級 GEN.TOLERANCE IN MACHINING	
寸法L／区分 DIMENSION	寸法差 DEVIATION
L ≦ 4	± 0.1
4 < L ≦ 16	± 0.2
16 < L ≦ 63	± 0.3
63 < L ≦ 250	± 0.5
250 < L ≦ 1000	± 0.8
1000 < L ≦ 4000	± 1.25

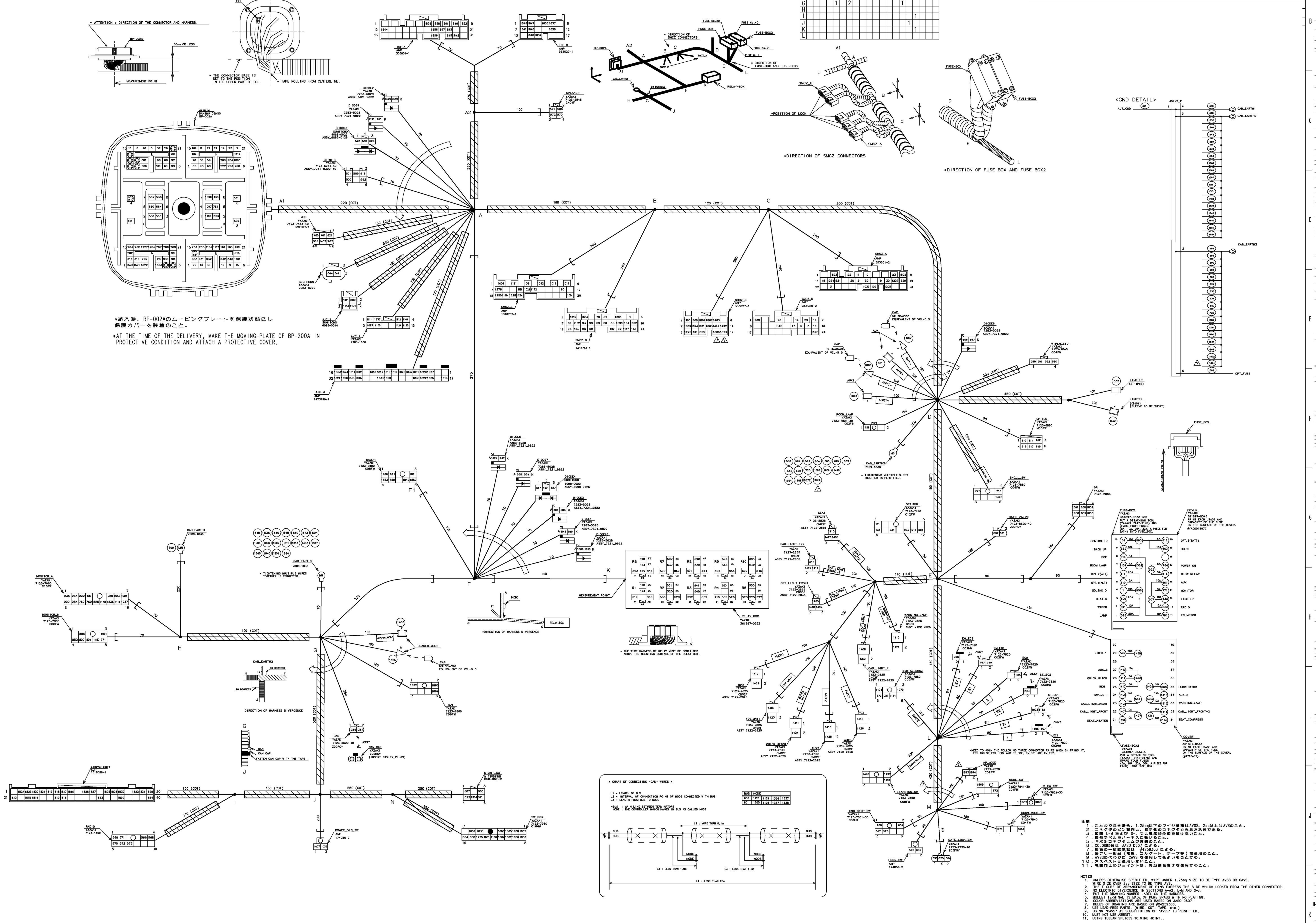
次ノ規格ヲ適用スルコト： TES 900-025
COMPLY WITH THE STANDARD.

納入資材ヘノ含有禁止物質ノ使用ナキコト。
詳細ハ、図番9964633ニヨル。
DON'T USE THE PROHIBITED CHEMICAL SUBSTANCES IN SUPPLIES.
REFER TO DWG. NO.9964633 FOR DETAILS.

作業工程欄

NO.	SIZE	COL.	CIRCUIT FROM		CIRCUIT TO		KIND	COMMENT
1	2	R	(2)(1603)(1604)		FUSE_BOX	4-	AVS	
2	1.25	R	(1)		SMCZ	D6	AVSS	
3	0.5	LgR	SMCZ	A23	MAIN/H	E18	AVSS	
6	0.5	G	SMCZ	B14	MAIN/H	E16	AVSS	
7	0.5	YG	SMCZ	B15	MAIN/H	F21	AVSS	
9	0.5	Lg	SMCZ	A18	MAIN/H	B5	AVSS	
10	0.5	W	SMCZ	A5	MAIN/H	E15	AVSS	
11	0.5	Lg	SMCZ	A4	MAIN/H	F16	AVSS	
14	0.5	WY	SMCZ	B5	MAIN/H	F19	AVSS	
15	0.5	VG	SMCZ	A10	MAIN/H	B6	AVSS	
16	0.5	LR	SMCZ	B16	MAIN/H	B2	AVSS	
17	0.5	R	SMCZ	B13	MAIN/H	F17	AVSS	
19	0.5	LG	SMCZ	B7	MAIN/H	B4	AVSS	
20	0.5	LgB	SMCZ	A14	MAIN/H	E17	AVSS	
21	0.5	RB	SMCZ	A15	MAIN/H	F18	AVSS	
22	0.5	LB	SMCZ	A3	MAIN/H	B1	AVSS	
23	0.5	LgR	SMCZ	A8	MAIN/H	F20	AVSS	
26	0.5	WR	SMCZ	B3	MAIN/H	A10	AVSS	
29	0.5	YB	SMCZ	B6	MAIN/H	E20	AVSS	
30	0.5	LY	SMCZ	A19	MAIN/H	B3	AVSS	
32	0.5	Y	SMCZ	A16	MAIN/H	E19	AVSS	
39	0.85	L	SMCZ	E3	FUSE_BOX	10-	AVSS	
58	0.3	BW	MAIN/H	F1	SMCZ	D13	AVSS	
59	0.3	YR	MAIN/H	F9	SMCZ	D4	AVSS	
60	0.3	L	SMCZ	D7	MAIN/H	E5	AVSS	
66	0.3	GB	MONITOR_A	4	MAIN/H	E14	AVSS	
68	0.3	P	MAIN/H	F3	SMCZ	D20	AVSS	
69	0.3	O	SMCZ	D11	MAIN/H	E11	AVSS	
70	0.3	YB	MAIN/H	F7	SMCZ	D3	AVSS	
80	0.3	RB	MAIN/H	F8	SMCZ	D12	AVSS	
88	0.5	RB	SMCZ	E10	(764)		AVSS	
90	0.3	LY	SMCZ	E16	MAIN/H	A14	AVSS	
92	0.3	YL	SMCZ	D22	MAIN/H	E12	AVSS	
93	0.3	WG	MAIN/H	F2	SMCZ	D9	AVSS	
96	0.3	GR	MAIN/H	E10	SMCZ	D17	AVSS	
98	0.3	RG	MAIN/H	A12	SMCZ	D19	AVSS	
99	0.3	GY	SMCZ	D10	MAIN/H	E6	AVSS	
100	0.3	L	MAIN/H	E4	SMCZ	E26	AVSS	
102	0.3	YB	MAIN/H	F15	SMCZ	D21	AVSS	
104	0.3	W	MAIN/H	F13	SMCZ	D18	AVSS	
138	0.5	GB	OPTION2	6	MAIN/H	B21	AVSS	
141	0.5	WY	OPTION2	1	(610)		AVSS	
155	0.5	O	DIODE9	K	(530)		AVSS	
164	0.3	L	MAIN/H	B19	SMCZ	D15	AVSS	
165	0.3	G	MAIN/H	B20	SMCZ	D24	AVSS	
202	0.5	LY	MONITOR_A	8	MAIN/H	A13	AVSS	
222	0.3	Br	MONITOR_A	3	MAIN/H	F4	AVSS	
223	0.3	WV	MONITOR_A	6	MAIN/H	F5	AVSS	
234	0.3	GL	MONITOR_A	2	MAIN/H	B15	AVSS	
235	0.3	WL	MONITOR_A	1	MAIN/H	B16	AVSS	
250	0.3	WB	MONITOR_A	5	MAIN/H	F6	AVSS	
254	0.5	WR	MONITOR_A	9	MAIN/H	F11	AVSS	
500	3	B	JOINT_E	4	CAB_EARTH1	1	AVS	
501	3	B	JOINT_E	1	MAIN/H	D6	AVS	
503	0.5	B	OPTION2	12	CAB_EARTH3	1	AVSS	
505	2	WB	R4	D4	MAIN/H	C3	AVSS	
506	5	W	MAIN/H	D3	FUSE_BOX	1+	AVS	
508	2	W	DIODE3	K	MAIN/H	C2	AVSS	
509	3	B	JOINT_E	2	CAB_EARTH3	1	AVS	
510	2	W	DIODE1	K	(508)		AVSS	
511	3	R	START_SW	6	MAIN/H	C1	AVS	
515	0.5	GR	QOS	4	MAIN/H	B14	AVSS	
516	0.5	GY	FUSE_BOX	16-	MAIN/H	A7	AVSS	
517	0.5	Br	ENG_STOP_SW	3	DIODE4	1	AVSS	
518	3	B	JOINT_E	3	CAB_EARTH2	1	AVS	
519	1.25	R	R1	A1	(511)		AVSS	
520	2	R	R1	A3	(511)		AVS	
522	3	L	START_SW	4	FUSE_BOX	16+	AVS	
523	0.85	R	R5	E1	(1)		AVSS	
524	2	W	R1	A5	(508)		AVS	
525	0.5	V	R5	E4	R2	B5	AVSS	
526	0.5	VG	R4	D2	ENG_STOP_SW	4	AVSS	
527	0.5	VR	R5	E2	DIODE4	3	AVSS	
528	0.5	Br	DIODE5	1	(517)		AVSS	
529	0.5	VW	DIODE5	3	R2	B2	AVSS	
530	0.5	O	DIODE5	2	GATE_LOCK_SW	1	AVSS	
531	0.5	PB	R2	B3	GATE_VALVE	2	AVSS	
532	0.85	R	(1)		GATE_VALVE	1	AVSS	
533	0.85	R	R2	B1	(1)		AVSS	
534	2	WB	DIODE7	K	(505)		AVSS	
535	2	B	DIODE7	A	CAB_EARTH2	1	AVSS	
536	2	RL	R8	H5	MAIN/H	C8	AVSS	
537	2	LR	R7	G5	MAIN/H	C7	AVSS	
538	0.5	GR	DIODE2	A	(515)		AVSS	
539	0.5	GY	DIODE2	K	(516)		AVSS	
540	0.5	B	R3	C5	CAB_EARTH2	1	AVSS	
541	0.5	PG	R3	C3	SEC_HORN	2	AVSS	
542	0.85	P	R10	J5	MAIN/H	B10	AVSS	
544	0.5	RL	(552)		SEC_HORN	1	AVSS	
545	0.5	WV	R10	J2	HORN_SW	1	AVSS	
546	0.5	V	R9	I5	MAIN/H	B11	AVSS	
548	2	B	DIODE1	A	CAB_EARTH2	1	AVSS	
550	0.5	B	R5	E3	CAB_EARTH2	1	AVSS	
552	0.85	RL	R3	C1	FUSE_BOX	9-	AVSS	
560	3	R	(511)		FUSE_BOX	10+	AVS	
561	5	W	(506)		FUSE_BOX2	23+	AVS	
562	3	B	JOINT_E	6	CAB_LIGHT_R	2	AVS	
566	0.5	YR	RADIO	3	FUSE_BOX	12-	AVSS	
568	0.5	RL	RADIO	4	(552)		AVSS	
569	0.5	O	RADIO	1	SPEAKER	2	AVSS	
570	0.5	Br	RADIO	5	SPEAKER	4	AVSS	
571	0.5	GyB	RADIO	2	SPEAKER	1	AVSS	
572	0.5	WB	RADIO	6	SPEAKER	3	AVSS	
573	0.5	B	RADIO	7	CAB_EARTH2	1	AVSS	
589	0.85	BP	R6	F4	WIPER_STD	1	AVSS	
590	0.85	BY	R6	F3	WIPER_STD	4	AVSS	
591	0.85	BR	FUSE_BOX	2-	WIPER_STD	2	AVSS	
592	0.85	B	CAB_EARTH3	1	WIPER_STD	3	AVSS	
593	0.5	RB	R6	F1	(764)		AVSS	
594	0.85	B	R6	F5	CAB_EARTH2	1	AVSS	
595	0.5	RB	R9	I1	(764)		AVSS	
596	0.5	BR	R9	I3	(591)		AVSS	
597	3	G	R7	G3	FUSE_BOX2	29-	AVS	
598	3	G	R8	H3	FUSE_BOX	1-	AVS	
599	0.5	RB	R7	G1	(764)		AVSS	
601	0.5	G	R8	H1	(598)		AVSS	
602	0.5	W	R10	J1	(603)		AVSS	
603	0.85	W	R10	J3	FUSE_BOX	19-	AVSS	
604	0.5	B	CAB_EARTH3	1	GATE_LOCK_SW	3	AVSS	
605	0.5	B	CAB_EARTH3	1	HORN_SW	2	AVSS	
606	2	L	DIODE3	A	(522)		AVSS	
607	3	W	START_SW	1	FUSE_BOX	12+	AVS	
609	2	RG	A/C_1	2	FUSE_BOX	3-	AVS	
610	1.25	WY	OPTION	1	FUSE_BOX	5-	AVSS	
611	2	R	OPTION	2	FUSE_BOX	6-	AVS	
612	1.25	LgR	OPTION	3	FUSE_BOX	20-	AVSS	
615	3	B	OPTION	6	CAB_EARTH3	1	AVS	
616	1.25	LR	OPTION	4	(537)		AVSS	
617	1.25	RL	OPTION	5	(536)		AVSS	
618	2	RL	CAB_LIGHT_F+2	1	(536)		AVS	
621	1.25	BW	QOS	3	(505)		AVSS	
632	1.25	LY	LIGHTER	+	FUSE_BOX	13-	AVS	
633	1.25	B	LIGHTER	-	CAB_EARTH3	1	AVSS	
634	0.5	B	ENG_STOP_SW	2	CAB_EARTH3	1	AVSS	
660	1.25	R	FUSE_BOX2	35-	MAIN/H	C5	AVSS	
661	1.25	G	AUX	+	FUSE_BOX	15-	AVSS	
662	1.25	B	AUX	-	CAB_EARTH3	1	AVSS	
664	1.25	WY	(610)		MAIN/H	C6	AVSS	
665	0.5	WY	(610)		MAIN/H	B7	AVSS	
666	1.25	B	DIODE6	A	(662)		AVSS	
667	1.25	G	DIODE6	K	(661)		AVSS	
713	0.5	Gy	ENG_L_SW	2	MAIN/H	A9	AVSS	
725	0.5	B	ENG_L_SW	1	CAB_EARTH3	1	AVSS	
760	0.5	WY	MONITOR_A	10	MAIN/H	F10	AVSS	
762	0.3	BG	QOS	6	MONITOR_A	11	AVSS	
764	0.5	RB	MAIN/H	A15	FUSE_BOX	17-	AVSS	
766	0.3	GyL	EM_EC2	2	MAIN/H	A20	AVSS	
767	0.3	OL	EM_EC1	1	MAIN/H	A19	AVSS	
768	0.5	GyR	MAIN/H	A16	ENG_STOP_SW	1	AVSS	
769	0.3	RL	EM_EC1	2	MAIN/H	A21	AVSS	
771	0.5	LB	MONITOR_B	8	FUSE_BOX	14-	AVSS	
781	1.25	GyR	MAIN/H	D5	FUSE_BOX	11-	AVSS	
800	0.5	G	MONITOR_B	5	MAIN/H	E3	AVSSCS	SHIELD TWIST PAIR TO 801
801	0.5	L	MONITOR_B	6	MAIN/H	E9	AVSSCS	SHIELD TWIST PAIR TO 800
810	0.5	L	MAIN/H	A8	FUSE_BOX	8-	AVSS	
825	0.5	RB	MONITOR_A	12	GATE_LOCK_SW	2	AVSS	
845	0.5	GyR	R6	F2	SMCZ	B11	AVSS	
850	0.5	Y	R7	G2	SW_BOX	15	AVSS	
852	0.5	GB	R3	C2	MONITOR_B	4	AVSS	
854	0.5	RY	R8	H2	SW_BOX	16	AVSS	
855	0.5	BL	R9	I2	SMCZ	C15	AVSS	
856	0.5	O	R1	A2	MONITOR_B	2	AVSS	
900	2	WR	START_SW	3	R4	D3	AVS	
910	1.25	WR	(900)		R4	D1	AVSS	
930	0.5	BR	SMCZ	B1	MAIN/H	A11	AVSS	
931	0.5	LB	OPTION2	8	MAIN/H	B8	AVSS	
932	0.3	RW	OPTION2	10	MAIN/H	B9	AVSS	
1003	0.85	B	MONITOR_A	7	CAB_EARTH2	1	AVSS	
1006	0.5	B	SW_BOX	4	CAB_EARTH2	1	AVSS	
1007	0.5	B	POWER_DIG_SW	1	CAB_EARTH2	1	AVSS	
1008	0.85	B	SMCZ	E1	CAB_EARTH3	1	AVSS	
1009	2	B	(1015) - (1017)		CAB_EARTH3	1	AVS	
1011	2	B	A/C_1	1	CAB_EARTH2	1	AVS	
1013	2	B	DIODE8	A	CAB_EARTH2	1	AVSS	
1015	1.25	B	(1009)		SMCZ	D1	AVSS	
1016	1.25	B	(1009)		SMCZ	E5	AVSS	
1017	1.25	B	(1009)		SMCZ	E6	AVSS	
1021	0.5	R	SMCZ	E11	SERIAL_SMCZ	4	AVSS	
1023	0.85	RY	ST_EC1	1	MAIN/H	D2	AVSS	
1031	0.5	GL	MONITOR_B	3	DIODE4	2	AVSS	
1039	0.3	GB	POWER_DIG_SW	2	SMCZ	A27	AVSS	
1062	0.85	L	SMCZ	E4	(39)		AVSS	
1070	0.3	BY	(1153)		SERIAL_SMCZ	2	AVSS	
1074	0.3	Lg	BOOM_MODE_SW	1	SMCZ	C8	AVSS	
1096	0.5	B	(1011)		MAIN/H	D7	AVSS	
1097	0.5	GB	A/C_2	5	MAIN/H	D4	AVSS	
1098	0.5	GR	SMCZ	D14	MAIN/H	F12	AVSS	
1104	0.3	BrL	A/C_2	4	MAIN/H	B17	AVSS	
1105	1.25	W	A/C_2	6	MAIN/H	D1	AVSS	
1111	0.3	O	A/C_2	1	MONITOR_A	15	AVSS	
1112	0.3	RY	A/C_2	3	MAIN/H	B18	AVSS	
1113	2	RG	A/C_1	3	(609)		AVS	
1117	0.5	WV	SMCZ	D23	MAIN/H	F14	AVSS	
1119	0.5	RY	SMCZ	E19	(1023)		AVSS	
1120	0.5	G	SMCZ	A28	(800)		AVSSCS	SHIELD TWIST PAIR TO 1205
1121	0.85	B	SMCZ	E2	(1008)		AVSS	
1124	0.5	G	A/C_2	9	(800)		AVSSCS	SHIELD TWIST PAIR TO 1125
1125	0.5	L	A/C_2	10	(801)		AVSSCS	SHIELD TWIST PAIR TO 1124
1134	0.5	B	SMCZ	E21	SERIAL_SMCZ	5	AVSS	
1148	0.5	RL	MONITOR_A	13	(552)		AVSS	
1153	0.85	BY	ST_EC2	2	MAIN/H	D8	AVSS	
1157	0.5	YW	SMCZ	B24	MONITOR_B	7	AVSS	
1159	0.5	WR	ROOM_LAMP	1	FUSE_BOX	7-	AVSS	
1160	0.3	G	SMCZ	C14	SW_BOX	12	AVSS	
1172	0.5	W	SMCZ	E12	SERIAL_SMCZ	3	AVSS	
1174	0.3	RY	(1023)		SERIAL_SMCZ	1	AVSS	
1176	0.5	RB	A/C_1	4	(764)		AVSS	
1182	0.3	W	ST_EC1	2	SMCZ	D8	AVSS	
1190	0.5	YG	DIODE9	A	SMCZ	C1	AVSS	
1205	0.5	L	SMCZ	A29	(801)		AVSSCS	SHIELD TWIST PAIR TO 1120
1218	0.3	BR	OPTION2	11	(930)		AVSS	
1225	0.3	BL	SMCZ	C13	SW_BOX	14	AVSS	
1227	0.5	GW	SMCZ	A20	MAIN/H	A17	AVSS	
1228	0.5	BY	SMCZ	E20	(1153)		AVSS	
1237	0.3	YR	A/C_2	2	MONITOR_A	16	AVSS	
1242	1.25	W	DIODE8	K	(1105)		AVSS	
1254	0.5	PG	SMCZ	A11	MAIN/H	A18	AVSS	
1255	0.5	BY	SMCZ	E18	(1153)		AVSS	
1276	0.5	RY	SMCZ	E7	(1023)		AVSS	
1314	3	W	START_SW	5	(607)		AVS	

NO.	SIZE	COL.	CIRCUIT FROM		CIRCUIT TO		KIND	COMMENT
1332	1.25	WR	(607)		FUSE_BOX	7+	AVSS	
1356	0.5	G	CAN	1	(800)		AVSSCS	SHIELD TWIST PAIR TO 1357
1357	0.5	L	CAN	2	(801)		AVSSCS	SHIELD TWIST PAIR TO 1356
1400	0.5	GY	QOS	1	(516)		AVSS	
1401	0.5	L	QOS	2	MAIN/H	B12	AVSS	
1403	0.5	B	QOS	5	CAB_EARTH2	1	AVSS	
1405	0.5	RL	(618)		OPT_LIGHT_FRONT	1	AVS	
1406	2	R	SEAT	3	FUSE_BOX2	21-	AVS	
1407	2	R	FUSE_BOX2	22-	OPT_LIGHT_FRONT	3	AVS	
1408	2	R	CAB_LIGHT_R	1	FUSE_BOX2	23-	AVS	
1409	2	R	12V_UNIT	1	FUSE_BOX2	24-	AVS	
1410	1.25	RB	IMOBI	1	FUSE_BOX2	25-	AVSS	
1411	1.25	RB	QUICK_HITCH	1	FUSE_BOX2	26-	AVSS	
1412	1.25	RB	AUX3	1	FUSE_BOX2	27-	AVSS	
1413	2	R	SEAT	1	FUSE_BOX2	31-	AVS	
1414	2	R	CAB_LIGHT_F+2	3	FUSE_BOX2	32-	AVS	
1415	2	R	WARNING_LAMP	1	FUSE_BOX2	33-	AVS	
1416	2	R	AUX2	1	FUSE_BOX2	34-	AVS	
1417	2	B	SEAT	2	(562)		AVS	
1418	2	B	(562)		OPT_LIGHT_FRONT	2	AVS	
1419	2	B	CAB_LIGHT_F+2	2	(562)		AVS	
1421	2	B	WARNING_LAMP	2	(562)		AVS	
1422	2	B	IMOBI	2	(562)		AVS	
1423	2	B	12V_UNIT	2	(562)		AVS	
1424	2	B	QUICK_HITCH	2	(562)		AVS	
1425	2	B	AUX2	2	(562)		AVS	
1426	2	B	AUX3	2	(562)		AVS	
1427	3	W	(561)		FUSE_BOX2	21+	AVS	
1428	3	W	(561)		FUSE_BOX2	25+	AVS	
1429	3	W	(561)		FUSE_BOX2	35+	AVS	
1430	7 3	W	(561)		FUSE_BOX2	29+	AVS	
1431	3	W	(561)		FUSE_BOX2	31+	AVS	
1432	3	W	(561)		FUSE_BOX2	33+	AVS	
1463	0.5	GR	LOADER_MODE	F	SMCZ	C5	AVSS	
1490	0.3	B	LEARNING_SW	1	CAB_EARTH3	1	AVSS	
1491	0.3	GB	LEARNING_SW	6	SMCZ	C11	AVSS	
1492	0.3	RY	LEARNING_SW	2	SMCZ	C12	AVSS	
1495	0.3	GB	ENG_L_SW	6	(1491)		AVSS	
1520	0.5	PB	SMCZ	A21	MAIN/H	A1	AVSS	
1521	0.5	PW	SMCZ	A12	MAIN/H	A2	AVSS	
1522	0.5	GB	SMCZ	A9	MAIN/H	A3	AVSS	
1523	0.5	BrY	SMCZ	A2	MAIN/H	A4	AVSS	
1525	0.5	B	LOADER_MODE	M	CAB_EARTH2	1	AVSS	
1554	0.5	B	BOOM_MODE_SW	4	CAB_EARTH3	1	AVSS	
1603	1.25	R	(1)		SMCZ	D5	AVSS	
1604	1.25	R	(1)		SMCZ	D2	AVSS	
1800	0.3	W	SMCZ	C2	SW_BOX	6	AVSS	
1801	0.3	RW	SMCZ	C9	SW_BOX	13	AVSS	
1802	0.3	RB	SMCZ	D16	SW_BOX	10	AVSS	
1803	0.3	GB	SMCZ	C7	SW_BOX	8	AVSS	
1804	0.85	BY	(1805)		SW_BOX	11	AVSS	
1805	0.85	BY	EC2	2	SW_BOX	3	AVSS	
1806	0.85	RY	(1807)		SW_BOX	9	AVSS	
1807	0.85	RY	EC1	1	SW_BOX	1	AVSS	
1808	0.3	W	EC1	2	SW_BOX	2	AVSS	
1809	0.5	Y	DIODE10	A	(850)		AVSS	
1810	0.5	RY	DIODE10	K	(854)		AVSS	
1811	0.3	RB	AIRCON_UNIT	28	A/C_3	14	AVSS	
1812	0.3	WR	AIRCON_UNIT	27	A/C_3	13	AVSS	
1813	0.3	RL	AIRCON_UNIT	21	A/C_3	17	AVSS	
1814	0.3	GW	AIRCON_UNIT	24	A/C_3	30	AVSS	
1815	0.3	Lg	AIRCON_UNIT	23	A/C_3	29	AVSS	
1816	0.5	G	AIRCON_UNIT	9	A/C_3	11	AVSSCS	SHIELD TWIST PAIR TO 1817
1817	0.5	L	AIRCON_UNIT	8	A/C_3	10	AVSSCS	SHIELD TWIST PAIR TO 1816
1818	0.3	BrY	AIRCON_UNIT	7	A/C_3	9	AVSS	
1819	0.3	Sb	AIRCON_UNIT	6	A/C_3	8	AVSS	
1820	0.3	YR	AIRCON_UNIT	4	A/C_3	31	AVSS	
1821	0.3	GR	AIRCON_UNIT	5	A/C_3	32	AVSS	
1822	0.3	GyL	AIRCON_UNIT	18	A/C_3	20	AVSS	
1823	0.3	O	AIRCON_UNIT	3	A/C_3	16	AVSS	
1824	0.3	P	AIRCON_UNIT	2	A/C_3	15	AVSS	
1825	0.3	WB	AIRCON_UNIT	14	A/C_3	19	AVSS	
1826	0.3	RB	AIRCON_UNIT	11	A/C_3	7	AVSS	
1827	0.3	YL	AIRCON_UNIT	12	A/C_3	3	AVSS	
1828	0.3	RW	AIRCON_UNIT	15	A/C_3	4	AVSS	
1829	0.3	BrL	AIRCON_UNIT	20	A/C_3	25	AVSS	
1830	0.3	GB	AIRCON_UNIT	36	A/C_3	21	AVSS	
1831	0.3	OB	AIRCON_UNIT	19	A/C_3	5	AVSS	
1832	0.3	OrB	AIRCON_UNIT	16	A/C_3	6	AVSS	
1833	0.3	B	AIRCON_UNIT	33	(1834)		AVSS	
1834	0.3	B	AIRCON_UNIT	40	A/C_3	26	AVSS	
1835	0.85	LR	(616)		SW_BOX	5	AVSS	
1836	0.5	LR	MONITOR_A	14	(616)		AVSS	
1837	0.5	G	ICF	C5	(800)		AVSSCS	SHIELD TWIST PAIR TO 1838
1838	0.5	L	ICF	C11	(801)		AVSSCS	SHIELD TWIST PAIR TO 1837
1839	0.5	B	ICF	C15	(1840)		AVSS	
1840	0.5	B	ICF	C14	CAB_EARTH2	1	AVSS	
1841	0.5	RB	ICF	C7	(764)		AVSS	
1842	0.85	B	ICF	A30	(1845)		AVSS	
1843	0.85	B	ICF	A19	(1845)		AVSS	
1844	0.85	B	ICF	A10	(1845)		AVSS	
1845	0.85	B	ICF	A29	CAB_EARTH2	1	AVSS	
1846	0.85	L	ICF	C1	(552)		AVSS	
1847	0.85	L	ICF	C2	(1846)		AVSS	
1848	0.5	LY	ICF	C8	(202)		AVSS	
1849	0.3	BW	ICF	A8	GSM/H	7	AVSS	
1850	0.3	RW	ICF	C4	GSM/H	5	AVSS	
1851	0.5	B	CAB_EARTH2	1	GSM/H	3	AVSS	
1852	0.3	WL	ICF	A9	GSM/H	8	AVSS	
1853	0.5	LY	(1848)		GSM/H	4	AVSS	
1854	0.5	L	(1846)		GSM/H	2	AVSS	
1855	0.5	RB	(1841)		GSM/H	1	AVSS	
1856	0.3	BG	ICF	A17	DR	6	AVSS	
1857	0.3	B	ICF	A18	DR	5	AVSS	
1858	0.85	BP	ICF	A5	DR	4	AVSS	
1859	0.3	BL	ICF	A28	DR	3	AVSS	
1860	0.3	RB	ICF	A6	DR	2	AVSS	
1861	0.3	R	ICF	A7	DR	1	AVSS	
1862	0.3	Lg	D/I	1	SMCZ	C3	AVSS	
1863	0.3	GR	D/I	2	SMCZ	C10	AVSS	
1864	0.5	B	D/I	6	CAB_EARTH2	1	AVSS	
1865	1.25	G	(661)		AUX1	+	AVSS	
1866	1.25	B	(662)		AUX1	-	AVSS	
1867	0.5	GW	VIEW_SW	1	SMCZ	C4	AVSS	
1868	0.5	B	VIEW_SW	2	CAB_EARTH3	1	AVSS	
1869	0.3	GR	MODE_SW	1	SMCZ	7 C16	AVSS	
1872	0.5	B	MODE_SW	4	CAB_EARTH3	1	AVSS	
1873	0.3	RB	HP_MODE	1	SMCZ	C17	AVSS	7
1874	0.5	B	HP_MODE	2	CAB_EARTH3	1	AVSS	7



NOTES
1. UNLESS OTHERWISE SPECIFIED, WIRE UNDER 1.25sq SIZE TO BE TYPE AVSS OR CAVS. WIRE SIZE OVER 2sq SIZE TO BE TYPE AVS.
2. THE FIGURE OF ARRANGEMENT OF PINS EXPRESS THE SIDE WHICH LOOKED FROM THE OTHER CONNECTOR.
3. NO ELECTRIC DIVERGENCE IN SECTIONS A-A2, L-M AND G-J.
4. PUT THE DRAWING NUMBER LABEL ON THE HARNESS.
5. BULLET TERMINAL IS MADE OF PURE BRASS WITH NO PLATING.
6. COLOR ABBREVIATIONS ARE USED BASED ON JASO D607.
7. RULES OF DRAWING ARE BASED ON #X4259303.
8. USE LEAD-FREE PARTS. (WIRE, COT, TAPE, etc.)
9. USING "CAVS" AS SUBSTITUTION OF "AVSS" IS PERMITTED.
10. MUST NOT USE ASBEST.
11. USING TUBLAR SPLICES TO WIRE JOINT..

図面枚 : 339

ZX470GI CAB/H

RELATED DWG.	部署 SHOP	材質 MATERIAL	素材形状 MATERIAL SHAPE	仕上質量 FIN.MASS	長サ LENGTH	書ニシタ図 REF DWG	尺度 SCALE
4710407	B	NTG	CAB/H	6.00		YA00003360	N.T.S

DWN	DRAW.DATE	品名	付加記号 ADD.CODE	投影法
SHU.KOBAYASHI	2012.09.10	ハーネス；ワイヤ	ZX470GI	3rd ANGLE P.
CHKD KE.TASHIRO	入庫 REGD 2012.09.18	PART NAME HARNESS;WIRE	図番 DWG.# YA00013324	来歴 REV 7 / 頁 P 1/1
APPD KE.TASHIRO		Hitachi Construction Machinery Group		

I-DEAS LA0400-B

Order the manual at mid-west-tech.com >