PART NO. W4FJ-E-00

HITACHI

Workshop Manual

ZW

100
120

Wheel Loader

Service Manual consists of the following separate Part No.
Technical Manual (Operational Principle) : Vol. No.TO4FJ-E
Technical Manual (Troubleshooting) : Vol. No.TT4FJ-E

MidWestTech | Hitachi ZW100, ZW120 Wheel Loader Workshop Service Manual | Publicati... Order the manual at mid-west-tech.com >

SECTION 1
GENERAL

— CONTENTS —

Group 1 Precautions for Disassembling and Assembling

Precautions for Disassembling and Assembling W1-1-1

Group 2 Tightening

Tightening Bolts and Nuts W1-2-1

Piping Joint W1-2-4

Group 3 Painting

Painting W1-3-1

Group 4 Bleeding Air from Hydraulic Circuit

Bleeding Air from Hydraulic Oil Tank W1-4-1

Bleeding Air from Hydraulic System W1-4-2

Group 5 Hydraulic Circuit Pressure Release Procedure

Hydraulic Circuit Pressure Release Procedure W1-5-1

Group 6 Preparation

Preparations for Inspection and Maintenance W1-6-1

MidWestTech | Hitachi ZW100, ZW120 Wheel Loader Workshop Service Manual | Pub... Order the manual at mid-west-tech.com >

TECHNICAL MANUAL (Operational Principle)

SECTION 1 GENERAL

Group 1 Specification
Group 2 Component Layout
Group 3 Component Specifications

SECTION 2 SYSTEM

Group 1 Controller
Group 2 Control System
Group 3 ECM System
Group 4 Hydraulic System
Group 5 Electrical System

SECTION 3 COMPONENT OPERATION

Group 1 Pump Device
Group 2 Control Valve
Group 3 Priority Valve
Group 4 Steering Valve
Group 5 HST Motor
Group 6 Transmission
Group 7 Axle
Group 8 Brake Valve
Group 9 Others
Group 10 Ride Control Valve (Optional)

TECHNICAL MANUAL (Troubleshooting)

SECTION 4 OPERATIONAL PERFORMANCE TEST

Group 1 Introduction
Group 2 Standard
Group 3 Engine Test
Group 4 Wheel Loader Test
Group 5 Component Test

SECTION 5 TROUBLESHOOTING

Group 1 Diagnosing Procedure
Group 2 Dr. ZX
Group 3 e-Wheel
Group 4 Component Layout
Group 5 Troubleshooting A
Group 6 Troubleshooting B
Group 7 Troubleshooting C
Group 8 Electrical System Inspection

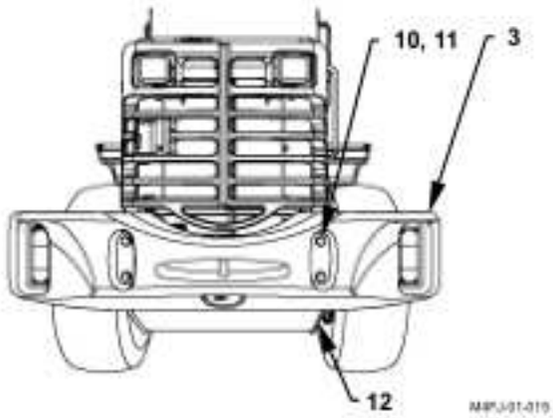
MidWestTech | Hitachi ZW100, ZW120 Wheel Loader Workshop Service Manual | Pub... Order the manual at mid-west-tech.com >

Installation

CAUTION: Counterweight (3) weight:
ZW100: 550 kg (1215 lb)
ZW120: 560 kg (1235 lb)

1. Attach a wire rope onto counterweight (3). Hoist counterweight (3).Fit counterweight (3) to the mounting hole of rear frame (12).

2. Install counterweight (3) to rear frame (12) with washers (11) (4 used) and bolts (10) (4 used).
   (ZW100)
   : 30 mm
   : 450 N·m (45 kgf·m, 330 lbf·ft)
   (ZW120)
   : 36 mm
   : 780 N·m (78 kgf·m, 570 lbf·ft)

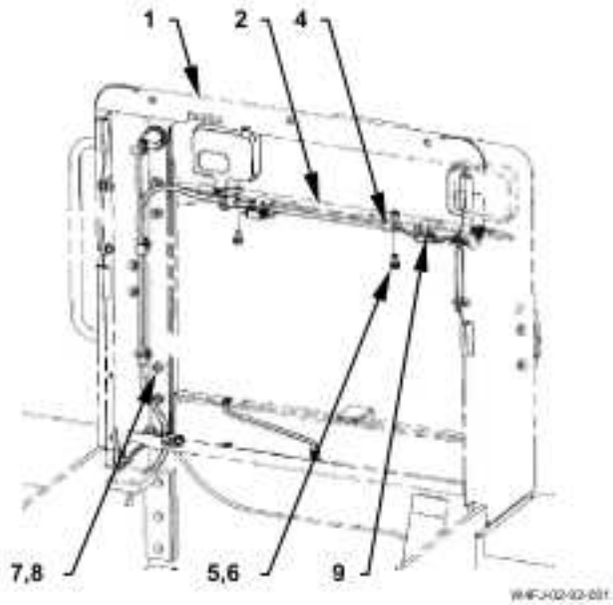


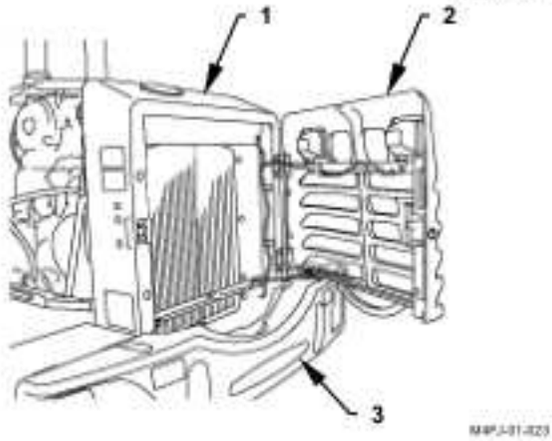
3. Install rear grill (2) to grill support (1) with washers (8) (4 used) and bolts (7) (4 used).
   : 19 mm
   : 35 N·m (3.5 kgf·m, 26 lbf·ft)

4. Install clamps (4) (2 used) to rear grill (2) with spring washers (6) (2 used) and bolts (5) (2 used).
   : 17 mm
   : 50 N·m (5 kgf·m, 37 lbf·ft)

5. Connect connectors (9) (2 used).

6. Close rear grill (2).



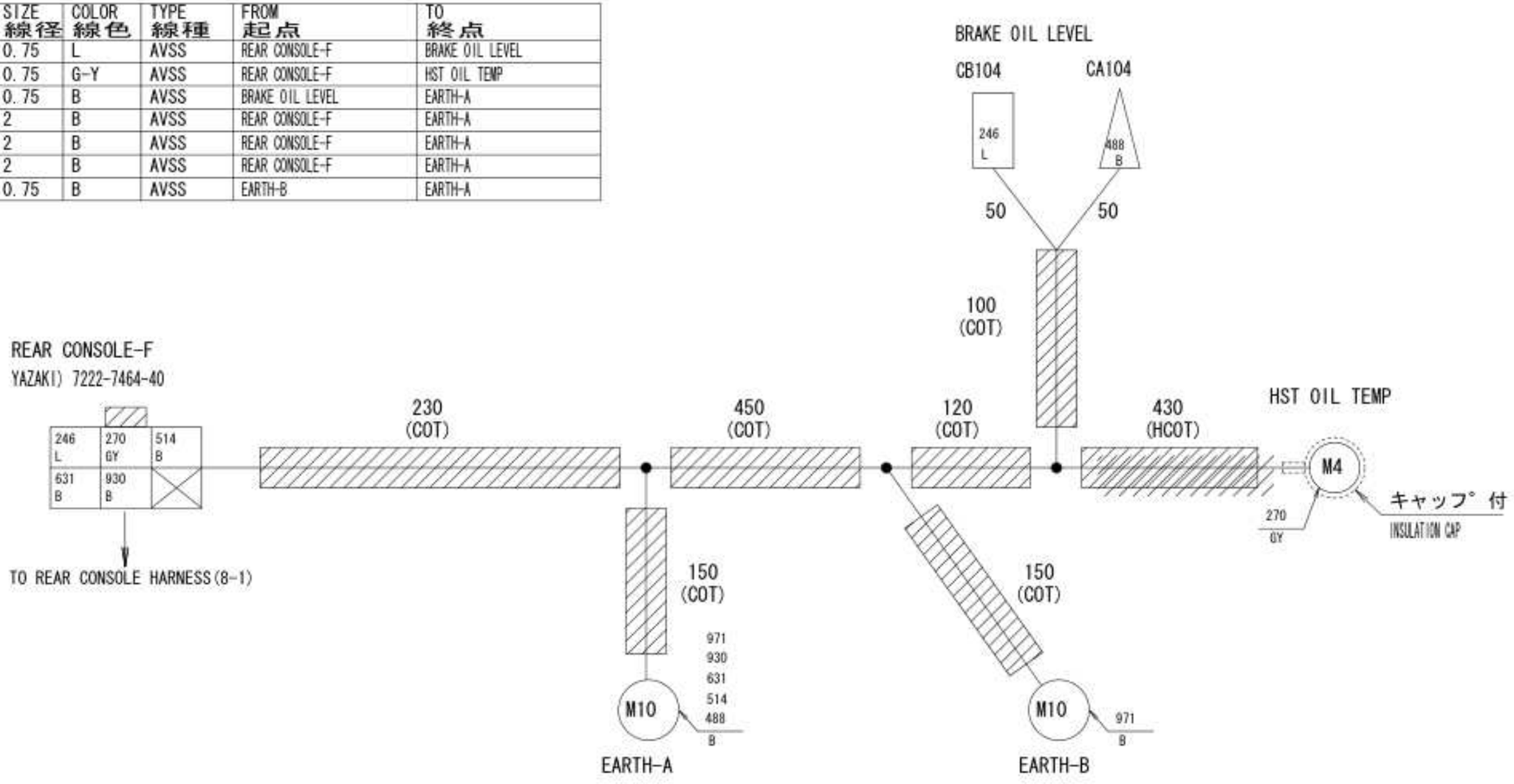


MidWestTech | Hitachi ZW100, ZW120 Wheel Loader Workshop Service Manual | Pub... Order the manual at mid-west-tech.com >

Attach to Part No. : TT4FJ-E-00

ZW100/120 REAR FRAME HARNESS 2

No.	SIZE 線径	COLOR 線色	TYPE 線種	FROM 起点	TO 終点
246	0.75	L	AVSS	REAR CONSOLE-F	BRAKE OIL LEVEL
270	0.75	G-Y	AVSS	REAR CONSOLE-F	HST OIL TEMP
488	0.75	B	AVSS	BRAKE OIL LEVEL	EARTH-A
514	2	B	AVSS	REAR CONSOLE-F	EARTH-A
631	2	B	AVSS	REAR CONSOLE-F	EARTH-A
930	2	B	AVSS	REAR CONSOLE-F	EARTH-A
971	0.75	B	AVSS	EARTH-B	EARTH-A



注記）
1．端子は圧着又はハンダ付けとし、引張強さ　１０Ｋｇ以上。
2．ハッチング部はコルゲートチューブ巻きとし、素線はビニールテープで螺旋巻きとする。
3．特にことわりの無い限り、寸法は端子の先端から分岐点中心までとする。
4．多極コネクタ の端子位置は相手コネクタ側から見る。
5．コネクタ ロック部が空白の場合はメス端子を示し、斜線の場合はオス端子を示す。
6．防水コネクタ の空き端子部には、うめ栓を入れること。
7．ＡＶＳＳの代わりにＡＶＳを使用しても構わない。
8．０．７５ｓｑの代わりに０．８５ｓｑを使用しても構わない。
9．ハンダ及びハーネスは、鉛フリー品を使用すること。
10．全ての丸端子には長さ２０ｍｍの黒ビニールチューブを通し、コードの結合部を被覆すること。
11．すべてのＣＡ、ＣＢ端子には、透明ビニルチューブを付けること。
12．すべてのＣＡ、ＣＢ端子は、スズメッキが施されていること。

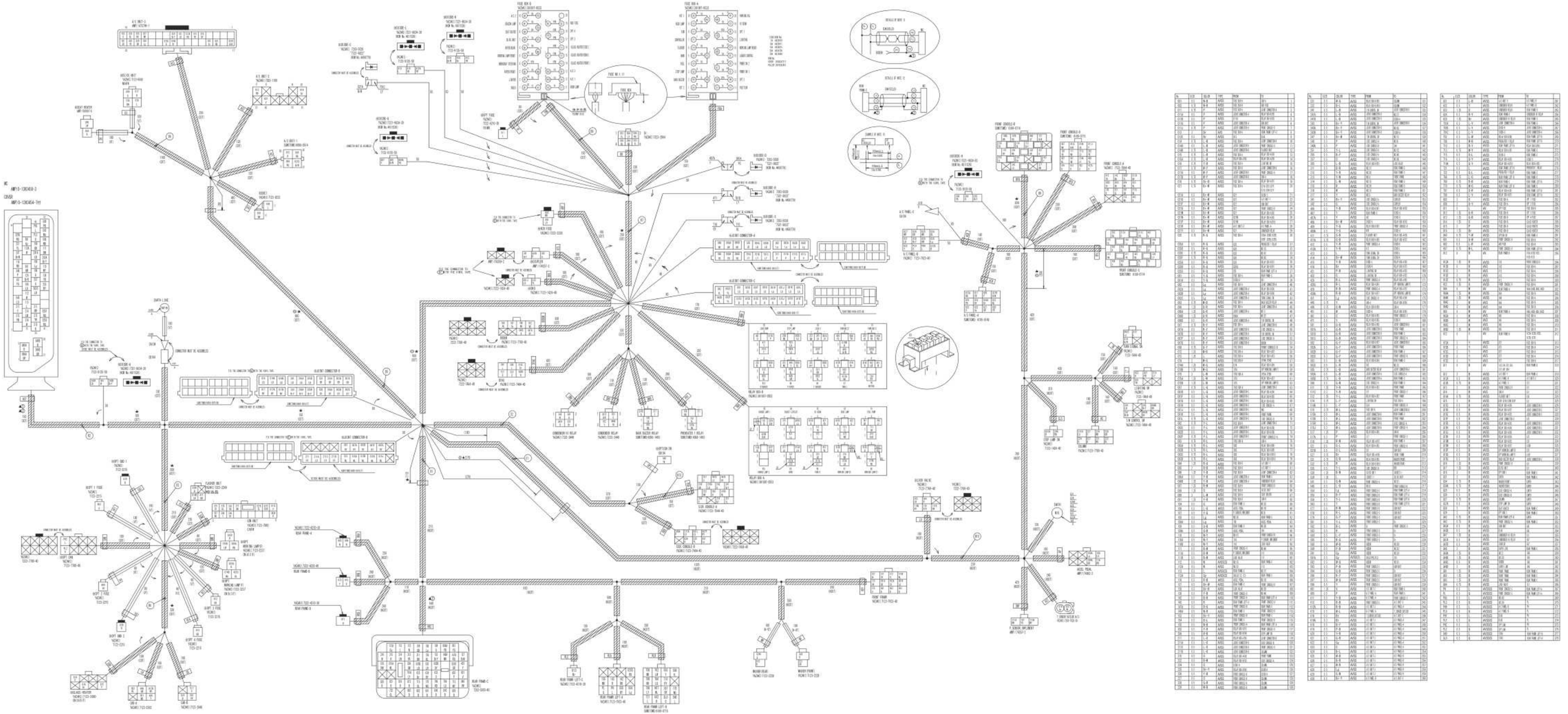
NOTES:
1. SOLDER OR CRIMP TERMINAL.
   TENSILE STRENGTH : MORE THAN 10 Kg.
2. COVER HATCHING PART IN THE CORRUGATED TUBE.
   COVER SOURCE LINE IN THE SPIRAL WITH THE VINYL TAPE.
3. BASICALLY, THE SIZE SHOWS LENGTH FROM THE POINT OF TERMINAL TO THE CENTOR OF DIVERGENCE POSITION.
4. ARRANGEMENT OF TERMINAL SHOWS VIEW FROM THE OTHER COUPLER.
5. WHEN THE CONNECTOR LOCK PART IS BLANK, THE TERMINAL IS FEMALE
   AND, WHEN THE CONNECTOR LOCK PART IS SLASH, THE TERMINAL IS MALE.
6. PUT THE STOPPER IN EMPTY TERMINAL OF THE WATERPROOF CONNECTOR.
7. AVS CAN BE USED INSTEAD OF AVSS.
8. 0.85sq CAN BE USED INSTEAD OF 0.75sq.
9. SOLDER AND THE CABLE MUST USE LEAD FREE.
10. COVER ALL JOINT OF CRIMP TERMINAL AND WIRE WITH BLACK VINYL TUBE 20mm IN LENGTH.
11. COVER ALL CA OR CB-TERMINAL WITH INSULATORS.
12. COVER ALL CA OR CB-TERMINAL WITH TIN.

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

REAR CONSOLE HARNESS

Applicable Machine

Attach to vol. No.	Model
TTNCC-EN-00	ZW120-5B



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