

Service Manual

01

Rough Terrain Crane

Model **GR-550XL-2**

Applicable Serial No. 540642 --

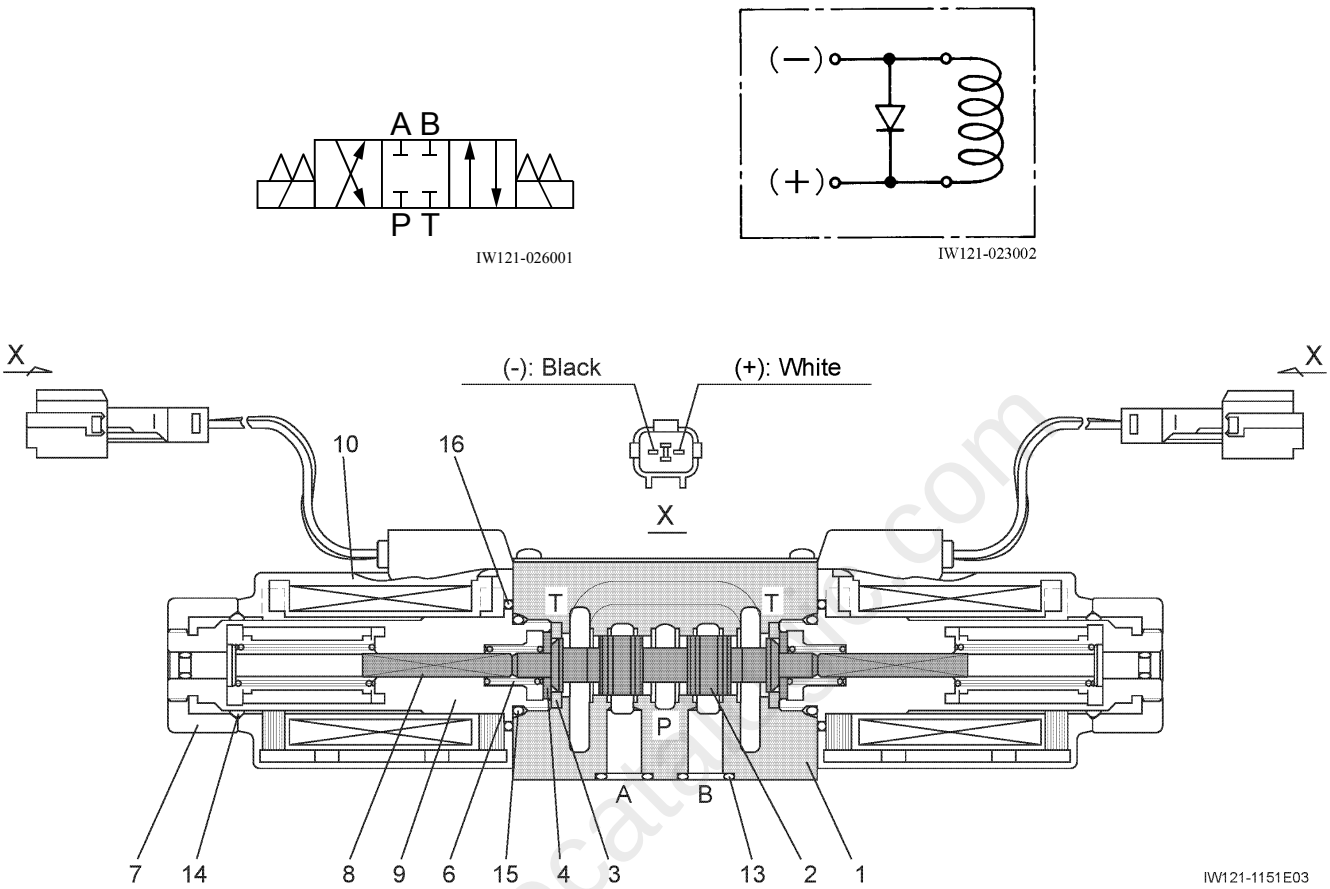
Foreword

5. Outline of specifications

No.	Item				Spec. No.	
					GR-550-2-00101 2M2D (North America)	GR-550-2-00104 2M2D (South America・South Africa)
1	No. of boom sections				4	
2	No. of jib stages				2	
3	Single top				Fitted	
4	Winch	Main winch			Fitted	
		Auxiliary winch			Fitted	
		Winch brake			Automatic brake (Neutral brake)	
		Drum rotation indicator	Visual and touch-type	Main	Fitted	
				Auxiliary	Fitted	
5	Counterweight				Fixed type	
6	Load moment indicator (AML)				AML-C	
7	Auto. stop solenoid valve energizing type				Normally energized	
8	Overwind cutout (anti-twoblock) device				Fitted	
9	External warning lamp				Fitted	
10	Oil cooler				Fitted	
11	Air conditioner				Fitted	
12	ICF (information controller)				Fitted	
13	SCT (satellite communications terminal)				Fitted	Option
14	GSMT (global system for mobile communications terminal)				-	Option
15	Eco mode system				Fitted	
16	Emergency steering				Option	
17	Engine model				MITSUBISHI 6M60-TLA3B	
18	Tires				23.5 × 25 - 32PR	

Solenoid Valve (Slide/Jack)

2.3 Solenoid valve (NACHI)



- | | | | |
|------------|---------------------------|---------------------------|-----------|
| 1.Body | 6.Spring | 10.Solenoid coil (24V DC) | 16.O-ring |
| 2.Spool | 7.Nut | 13.O-ring | |
| 3.Retainer | 8.Rod | 14.O-ring | |
| 4.Retainer | 9.Solenoid guide (24V DC) | 15.O-ring | |

Thread size and tightening torque

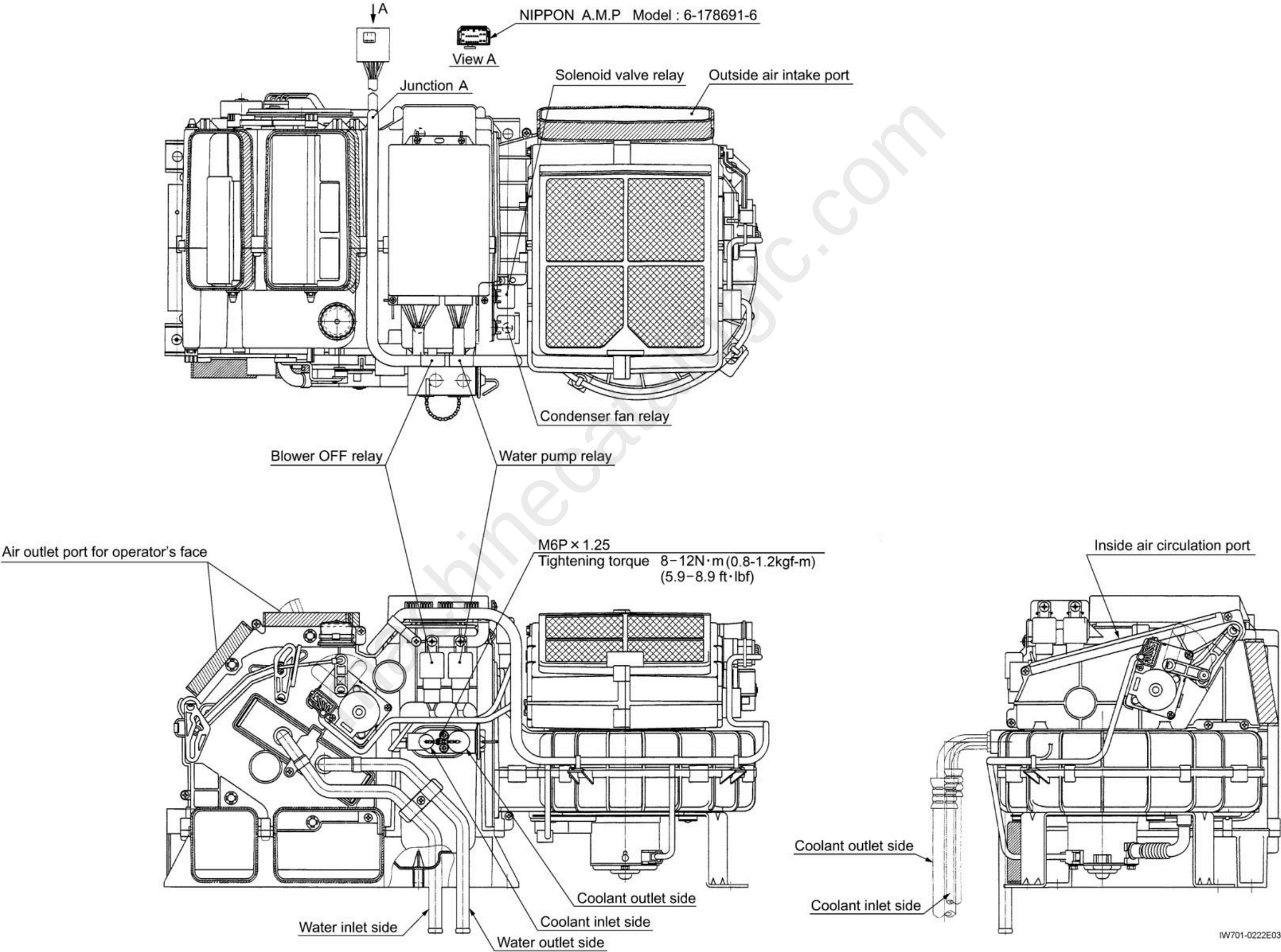
Sign / port	Thread size	Tightening torque		
		N-m	kgf-m	ft-lbf
7	-	5 - 7	0.5 - 0.7	3.7 - 5.1

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Air Conditioner

6. Evaporator Assy



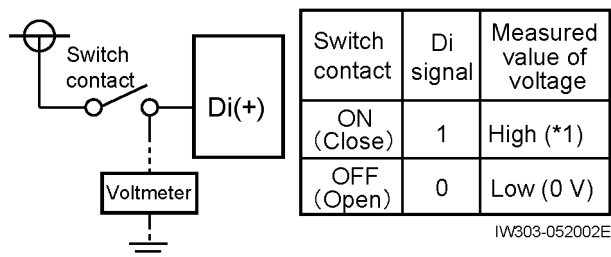
Signal Transmitter (STM-E)

5. Input/output signal list

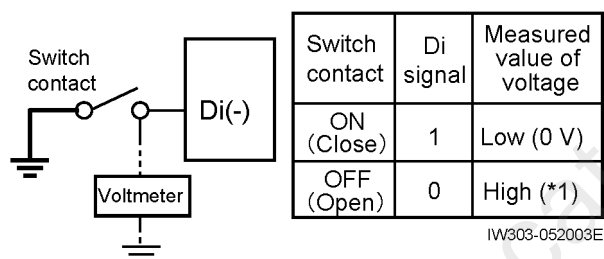
Digital input (Di) signal

The connection status of sink type and source type is shown in the figure below.

Di(+) : Sink type (Positive logic)



Di(-) : Source type (Negative logic)

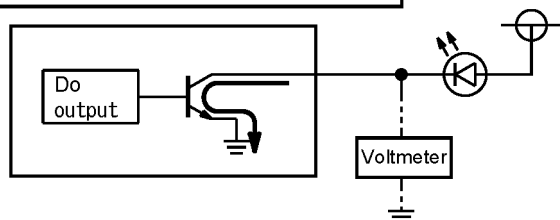


(*1): Voltage varies depending on unit equipment.

Digital output (Do) signal

The connection status of sink type is shown in the figure below.

Do : Sink type (Negative logic)



Do output	Do signal	Measured value of voltage
ON (High)	1	Low (0 V)
OFF (0 V)	0	High (*1)

IW303-052004E

(*1): Voltage varies depending on unit equipment.

Brake Chamber

2. Function

1. When compressed air is introduced behind the diaphragm, it pushes the diaphragm, and the push rod to release the brake.
2. When the compressed air is released to the outside air, the push rod is pushed back by a strong return spring, pulling the brake lever to effect the parking brake.

⚠ DANGER

- ⚠ Never attempt to disassemble the brake chamber without using the special jig. Doing so is extremely dangerous.
- ⚠ The spring is powerful. Be sure to use the special jig to pull the push rod out approximately 5 mm before disassembling.

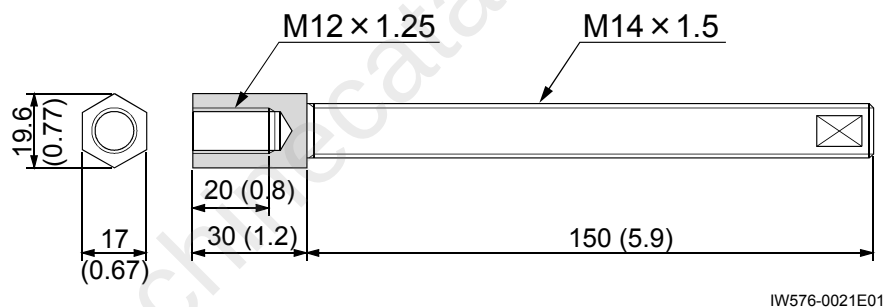
3. Disassembly

[NOTICE]

- ◆ Make alignment marks on the clamp bolts, non-pressure plate, and pressure plate before disassembling, so that they can be aligned correctly during reassembly.

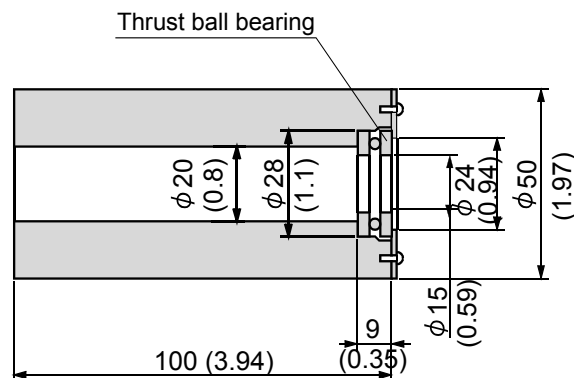
Dimensions of special jig (sample) (Unit : mm) (1mm=0.039in)

Rod



IW576-0021E01

Adapter



IW576-0021E02

Full Version Available

Tadano GR-550XL-2 Rough Terrain Crane Service Manual

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