

Service Manual

04

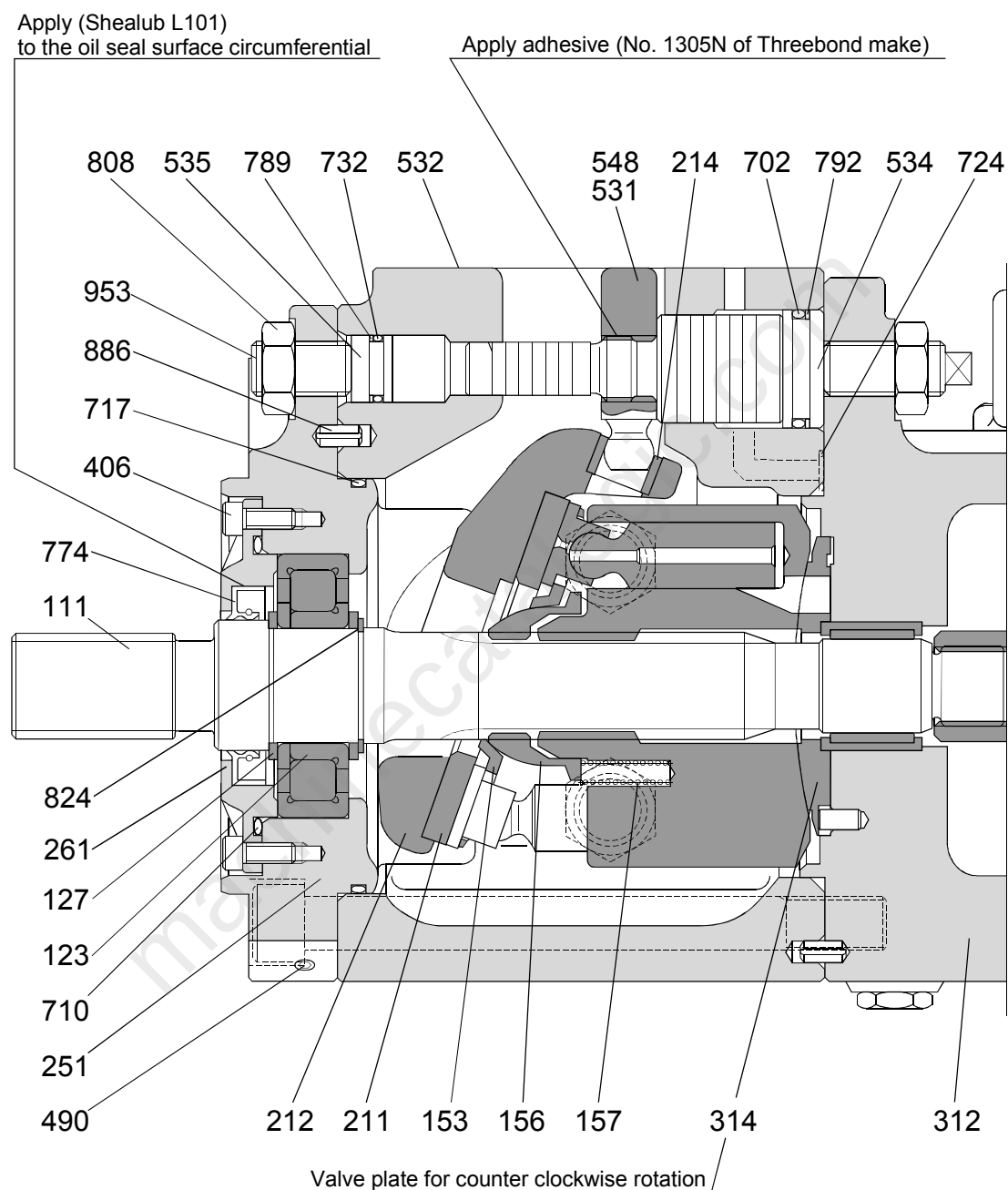
Rough Terrain Crane

Model **TR-450XL-4**

Applicable Serial No. 540294 ~

Hydraulic Pump (Double Variable Displacement Pump) (#540335~)

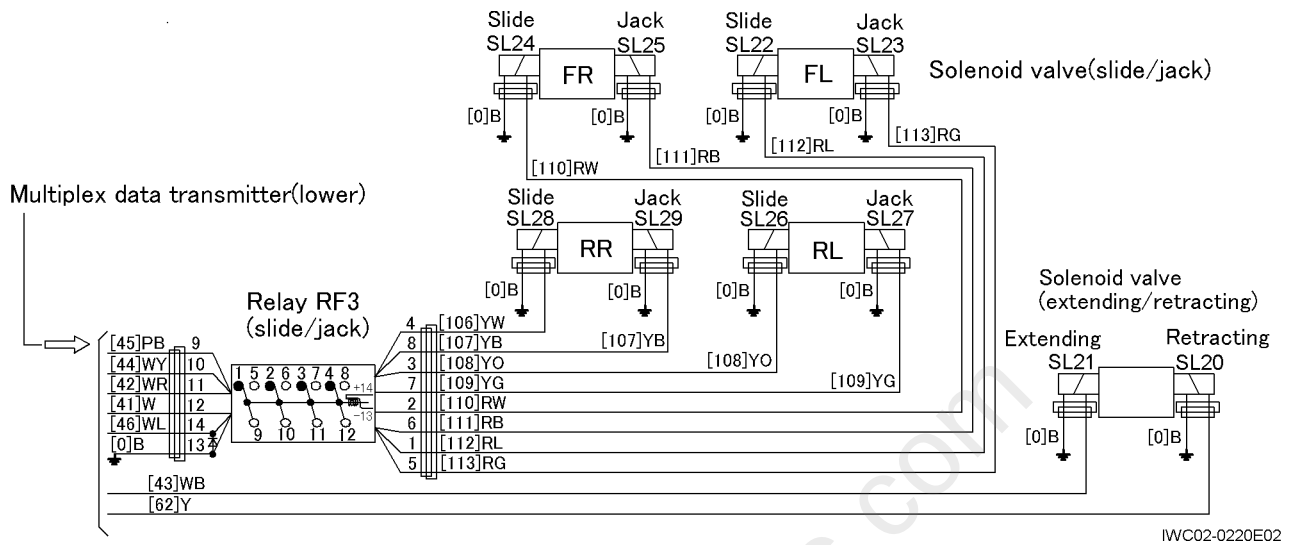
Enlarged view of the main body (the left side)



IW101-0270E02

Outrigger System

Electric Circuit (Relay RF3, Solenoid Valve)



1. The solenoid valve (extending/retracting) and the four solenoid valves (slide/jack) are switched according to the outputs from the multiplex data transmitter (lower). The outputs to the four solenoid valves (slide/jack) are transmitted via the relay RF3.

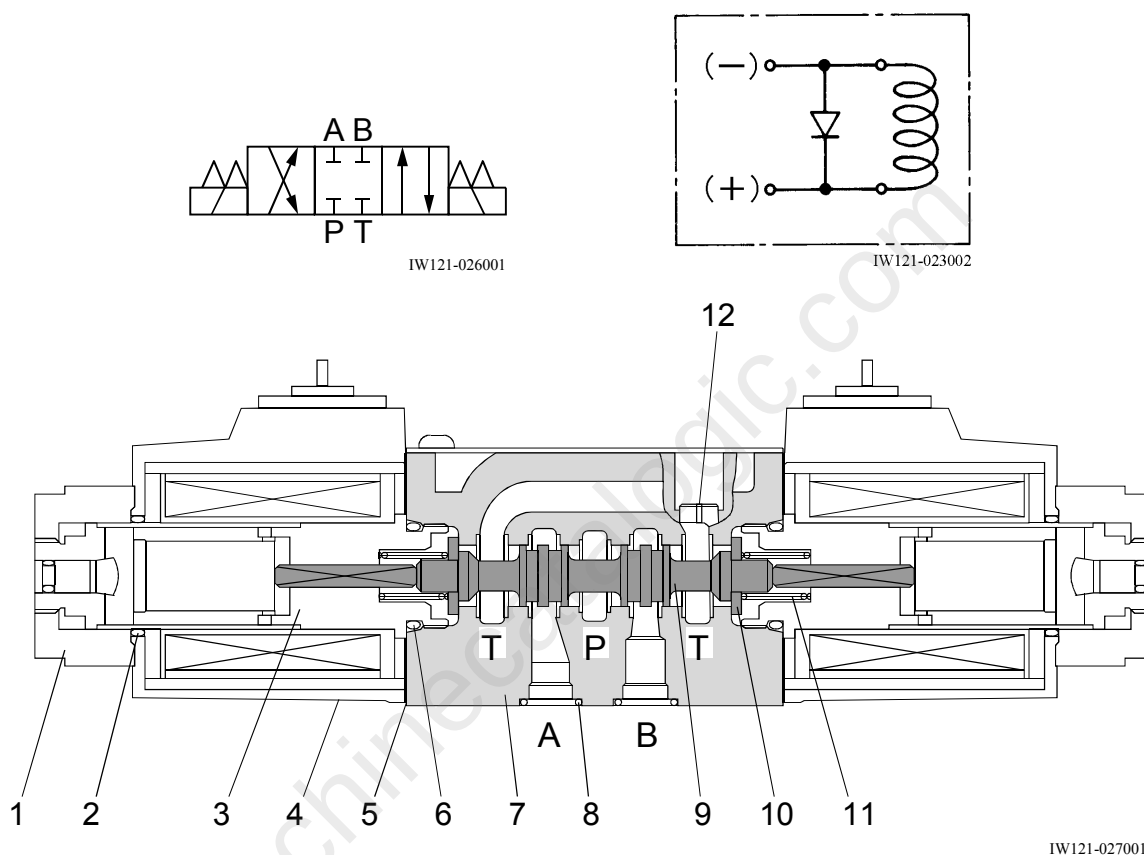
Solenoid Valve (Slide/Jack) (TOKIMEC)

C-6 Solenoid Valve (Slide / Jack) (TOKIMEC)

[NOTICE]

◆ There is a case that the appearance and so on differ from the parts for this machine. Although there is not so much difference in functions and disassembly procedures, make sure of the serial number of this machine and the part sales unit described in the parts catalog before starting disassembling operations.

1. Structure



Note: Install the centering washer (10) with its slit directed toward the body (7).

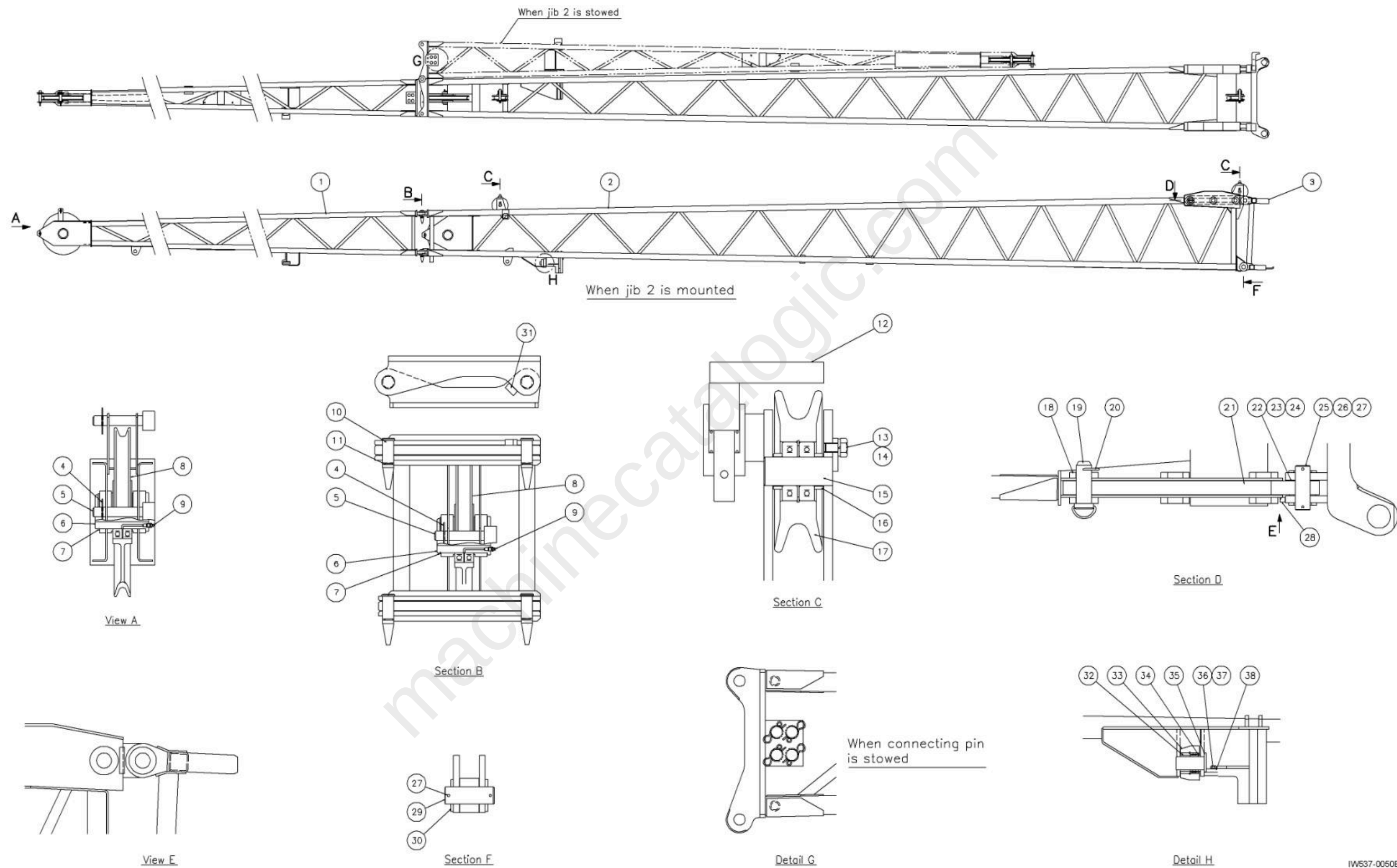
- | | | | |
|--------------------------|--------------------------|-----------|----------------------|
| 1. Nut | 4. Solenoid coil (DC24V) | 7. Body | 10. Centering washer |
| 2. O-ring | 5. Packing | 8. O-ring | 11. Spring |
| 3. Solenoid core (DC24V) | 6. O-ring | 9. Spool | 12. Spring pin |

Thread size and tightening torque

Thread	Thread size	Tightening torque	
		N-m	ft-lbf
1	-	9 - 11	6.5 - 8
3	-	18 - 22	13 - 16
Mounting bolt	M5	7 - 8	5 - 6

Jib

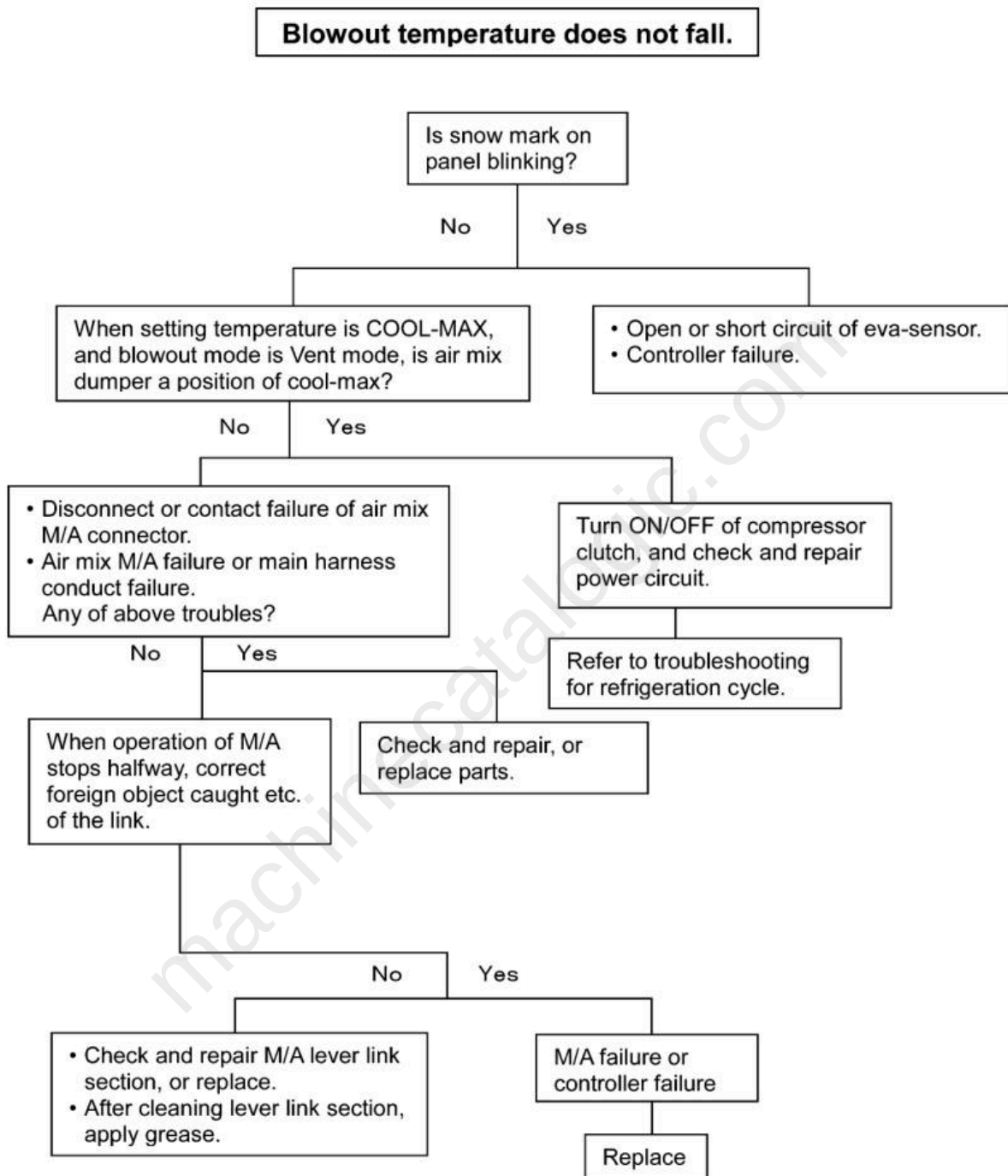
1.2 Jib main body



IW537-0050E02

Air Conditioner

13.Troubleshooting



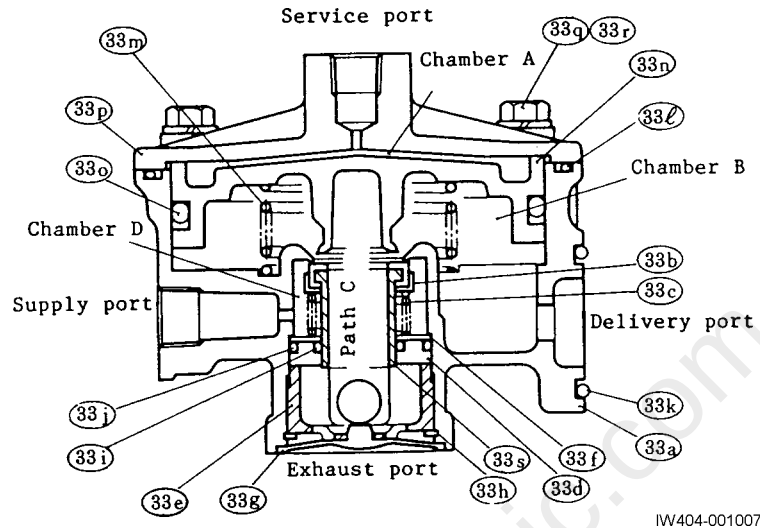
M/A: Motor Actuator

IW701-0160E18

Booster (Brake)

3. Principles of operation

3.1 Relay valve



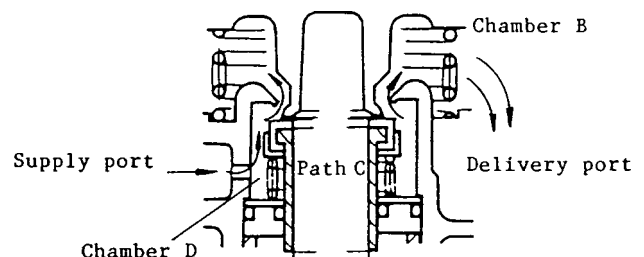
1. Booster not in operation

The above figure shows the state of the relay valve when the booster is not in operation. Since chamber A is open to the atmosphere via the brake valve, piston 33n is held in its raised position by return spring 33m. In this state, chamber B is also open to the atmosphere through path C.

2. Booster in operation for assisting braking

When the brake pedal is depressed, the signal pressure is applied to the service port. This pressure acts on piston 33n and the piston compresses return spring 33m, bringing the piston seat in contact with valve ass'y 33s. This causes chamber B to shut off path C, and simultaneously the valve ass'y is pressed down. As a result, the body seat opens, allowing compressed air to flow from chamber D to chamber B, to delivery port, and then to the air cylinder.

Booster in operation



Full Version Available

Tadano TR-450XL-4 Rough Terrain Crane Service Manual

Tadano TR-450XL-4 rough terrain crane service manual with repair procedures, adjustments and troubleshooting. 12 PDF files. Instant PDF download.

VIEW THE FULL MANUAL

<https://machinecatalogic.com/tadano-tr-450xl-4-rough-terrain-crane-service-manual/>

File Pages: 1,585 · File Count: 12 · File Language: English