### **RIGHT OR LEFT TRAVEL IS IMPOSSIBLE.**



# 1. Inspect the operation of actuators other than the travel motor.

If operation of the right or left travel motor is impossible, operate each respective actuator in accordance with the table at right. If operation is faulty, inspect the main relief valve and pump.

#### 2. Inspect spool operation.

- Spool Stroke : 6.0 mm
- If the spool is sticking, take it out and inspect it. If it can't be taken out, or if it is scratched, replace the housing block.

Another cause of the spool not operating properly could be that the return spring installation bolt is loose.

	Lever Operated	Place Inspected	
If left travel is impossible	Boom	Main Relief valve R1	Pump P1
If right travel is impossible	Arm	Main Relief valve R2	Pump P2



Y3-E101

3. Inspect the linkage.

To inspect the linkage, remove the yoke connecting the spool and lever, then inspect lever movement.

- 4. Inspect the swivel joint.
  - a. Inspect the operation of the push pin (1). Inspect if the push pin of the swivel joint's selector (2) moves smoothly, making sure that its stroke is 5 mm.
    - If the push pin won't operate at all, the travel speed will be low and when it is pushed in, the travel speed will be high.
  - b. Inspect the supply pressure from the swivel joint.
    - Disconnect the hose between the swivel joint and the counterbalance valve from the counterbalance valve side and set a pressure gauge in the hose.
    - Operate the travel lever and measure the pressure.
    - The swivel joint is normal if the pressure gauge reading indicates the standard value.
       "II. Specifications, Standards for Judging Performance"
- 5. Inspect the counterbalance valve.
  - If neither forward nor reverse travel is possible, the spool (1) of the counterbalance valve could be sticking in the neutral position.
  - If either forward or reverse travel is possible, the spool (1) of the counterbalance valve could be sticking in a position other than the neutral position.
  - Disconnect the counterbalance valve plug (2) and try pushing the spool (1) with a finger. It is normal if it moves smoothly about 6 mm.
- Inspect the travel motor.
   "IV. Hydraulic Units, Travel Motor"



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C3-E102

#### SPEED DROPS IN THE LEFT OR RIGHT TRAVEL, CAUSING THE MACHINE TO TRAVEL IN A CURVE.



# TROUBLESHOOTING

1. Is the amount of travel curve within standard?

If the amount of travel curve is within standards, then operation is normal and the variation depends on the combination of equipment.

- ( "II. Specifications, Standards for Judging Performance"
- Adjust the tension of the crawler belt.
   "II. Specifications, Standards for Judging Performance"
- 3. Inspect the operation of the spool.
- 4. Switch the left and right pump discharge hoses.

Switch the discharge hoses for Pump P1 and Pump P2. The pump is faulty if the direction in which the machine curves during travel is in the opposite direction.

Disassemble and inspect the pump.
 "IV. Hydraulic Units, Hydraulic Pump"



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B5E006

B5E007

5. Switch the left and right main relief valves and test.

Switch the left and right main relief valves and test. If the direction in which the machine curves during travel changes to the opposite direction, the main relief valve is faulty.

- Inspect the main relief valve
- Inspect the swivel joint.
  W-8"
- 7. Inspect the counterbalance valve. Inspect if the counterbalance valve's plunger moves smoothly.
   W-8"
- 8. Inspect the travel motor.

#### MACHINE WON'T ACCELERATE DURING TRAVEL.



- Inspect if low speed travel is normal. Inspect if the low speed travel speed is normal.
   "II. Specifications, Standards for Judging Performance"
- 2. Inspect the operation of the spool.  $\mathbb{C}^{\infty}$  "V-7"
- 3. Inspect the linkage. Inspect the operation of the travel block of the control valve and the yoke connected to the lever for travel acceleration.
  - Remove the pin connecting the yoke and the spool or the pin connecting the yoke and the lever, to inspect.
- Inspect the swivel joint. Inspect the operation of the push pin.
  W-8"



## NO SLEWING CAN BE DONE.



 Inspect the operation of actuators other than the slew motor. Inspect if the operation of only the slew motor is

faulty by the following table. If its operation is faulty, inspect the main relief valve and pump.

Lever Operated	Place Inspected	
Arm	Relief Valve R2	Pump P2