SEBM000207

Shop Manual

KOMATSU®

D275A-2

BULLDOZER

SERIAL NUMBERS **D275A-2 - 10001** and up

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10 STRUCTURE AND FUNCTION

General 10- 2
Power train 10- 3
Power train unit 10- 4
Power train unit mount 10- 5
Power train piping 10- 7
Power train hydraulic circuit diagram ... 10- 8
Damper and universal joint 10-10
Torque converter - PTO 10-12
Torque converter valve 10-16
Transmission 10-24
Transmission control 10-29
Transmission control valve 10-30
Transmission lubrication relief valve 10-37
Scavenging pump 10-38
Oil strainer 10-39
Power train oil filter and lubrication oil filter 10-40
Steering unit 10-42
Transfer, bevel pinion 10-44
Bevel gear, steering clutch and steering brake 10-46
Steering control 10-51
Steering control valve 10-52
Final drive 10-60
Main frame 10-63
Track group 10-64
Recoil spring 10-65
Suspension 10-66
Hydraulic piping 10-69
- Blade 10-69
- Variable multiple shank ripper 10-70
- Variable giant ripper 10-70-1

Hydraulic control 10-71
- Blade control 10-71
- Blade control (for dual tilt dozer) 10-72
- Ripper control 10-73

Hydraulic circuit system 10-74
Hydraulic circuit diagram 10-75
Hydraulic tank 10-77
Blade lift control valve 10- 78
Blade tilt control and ripper low valve ... 10- 82
Ripper high valve 10- 84
Ripper tilt suction valve 10- 86
Piston valve 10-104
Quick drop valve 10-105
Cylinder stay 10-106
Semi U-dozer 10-108
Ripper 10-110
- Variable multiple shank ripper 10-110
- Variable giant ripper 10-112

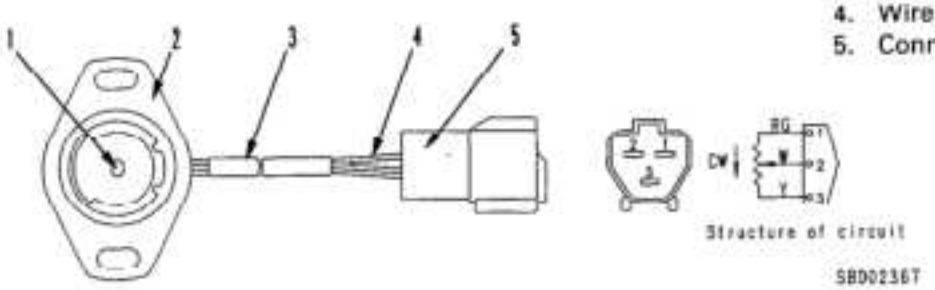
Pin-puller solenoid valve 10-112-2
Electrical circuit diagram 10-114
- Chassis electrical circuit diagram 10-114
- Cab electrical circuit diagram 10-118-4
- Air conditioner electrical circuit diagram 10-118-6

EVMS (Electrical vehicle monitoring system) ... 10-119
APS control system 10-132
Torque converter lock-up control system 10-133
For SSC system
Machine monitor system (with SSC system) 10-137
Model selection system 10-142
Engine control system 10-151
ELPC controller 10-152
ELPC actuator 10-154
Torque converter lock-up control system 10-161

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MANUAL POTENTIOMETER

1. Shaft
2. Potentiometer
3. Tube
4. Wire
5. Connector

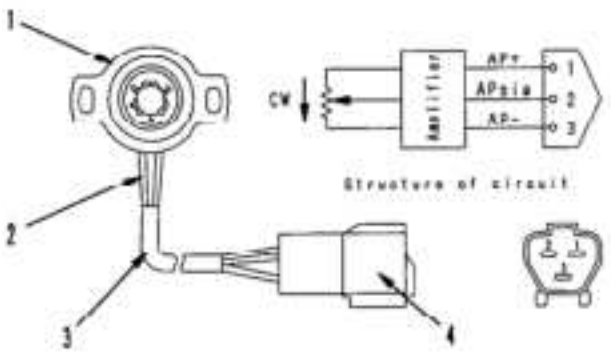


Function

- The manual potentiometer is installed to the opposite side of the ELPC actuator input lever. The decelerator pedal and ELPC actuator input lever are connected by a link.
- When the decelerator pedal is moved, shaft (1) of the manual potentiometer is rotated through the link, ELPC actuator input lever, and input shaft, and the resistance changes. A constant voltage is applied between pins 1 – 3 of the potentiometer, and a voltage signal corresponding to the position of the fuel control lever is sent to the ELPC controller from the No. 2 pin.

FEEDBACK POTENTIOMETER

1. Potentiometer
2. Wire
3. Tube
4. Connector

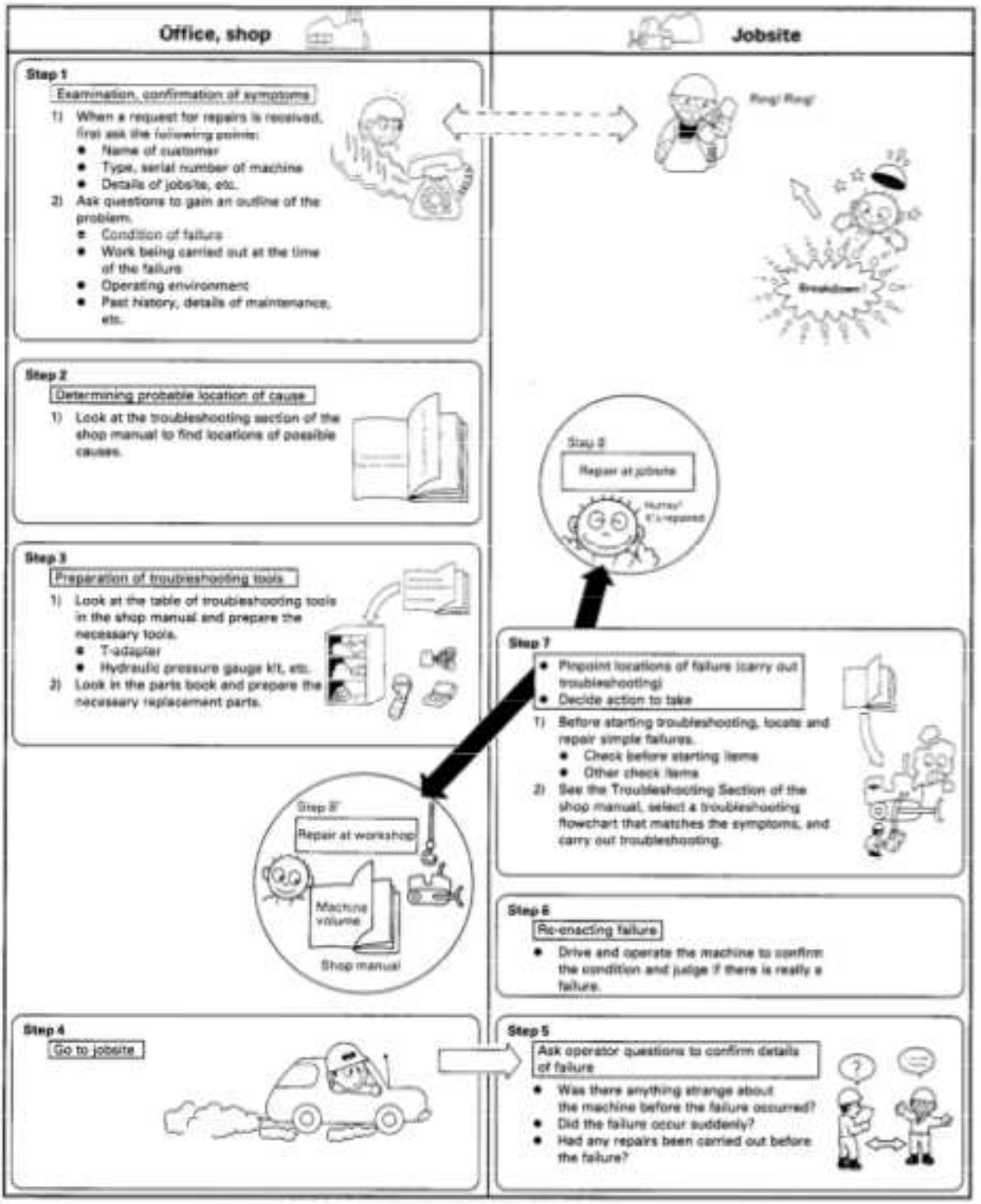


Function

- The feedback potentiometer is installed to the opposite side of the ELPC actuator output lever. The fuel injection pump governor lever and ELPC actuator output lever are connected by a link.
- When the ELPC actuator output lever (fuel injection pump governor lever) is rotated by the command from the ELPC controller, the rotating body of the feedback potentiometer is rotated through the output lever and output shaft, and the resistance changes. A constant voltage is applied between pins 1 – 3 of the potentiometer, and a voltage signal corresponding to the position of the output lever is sent through the amplifier to the ELPC controller from the No. 2 pin.

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SEQUENCE OF EVENTS IN TROUBLESHOOTING



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4) Use tools **Y** and **Z** to knock the large and small plug into the pin.
   i) Insert plug into hole in guide through plug insertion window. (Coat the plug with oil.)
   ii) Push bar by hand and insert the plug as far as it will go.
   iii) Push plug with bar, and push guide itself against pin.
   iv) Hit in bar with a hammer.

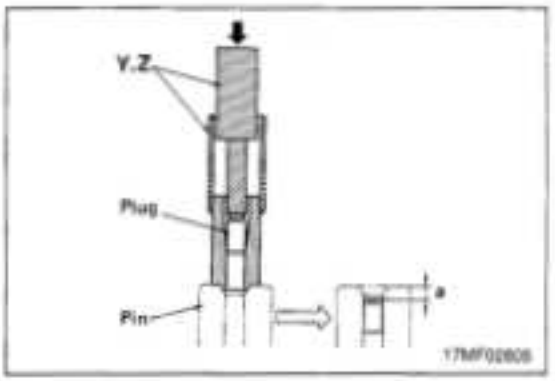
★ Dimension "**a**" to knock in the plug from end face of pin: Small plug: 7.5 ± 1 mm
Large plug: 11 ± 2 mm

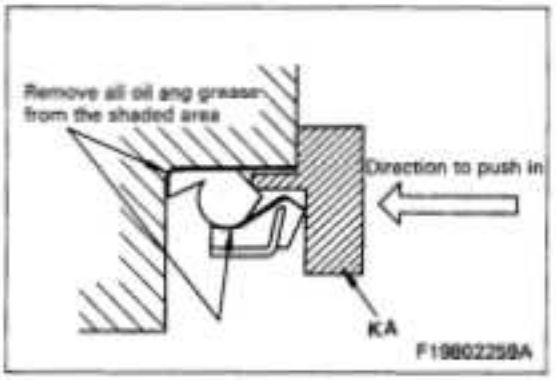
★ If the plug is not removed from the pin during disassemiby, it can be used as it is.

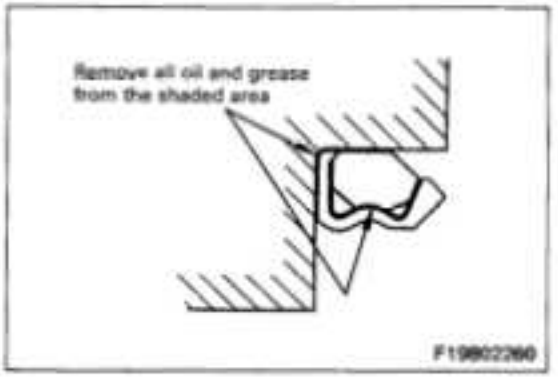
5) Clean any part where outside diameter of the pin, front face of the spacer, end face or inside diameter of the bushing are dirty.
6) Coat the outside diameter of the pin and the front face of the spacer with grease.

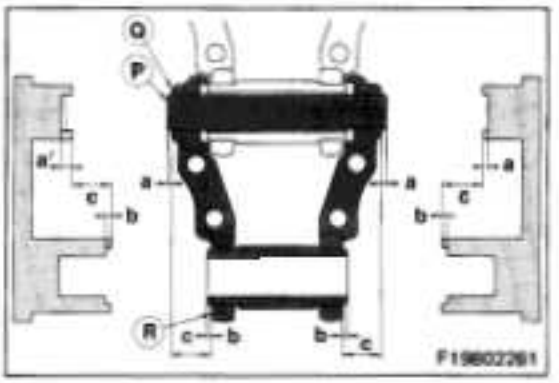
7) Installation of seal assembly
   - Machines equipped with F3 type seal
     Clean the link counterbore, then use tool **KA** to push the seal in fully to the bottom.
     ★ If there is grease stuck to the link counterbore and seal assembly, the seal will rotate and its sealing performance will drop, so do not coat with grease.
   - Machines equipped with W7 type seal
     When reusing the link and replacing the seal with a new part, clean the link counterbore, then push the seal in fully to the bottom.
     ★ If there is grease stuck to the link counterbore and seal assembly, the seal will rotate and its sealing performance wil drop, so do not coat with grease.

8) In order to keep the protrusion of the pin and bushing constant and the installation dimensions of the steel within the specified value during assembly, adjust the press-fitting jig dimensions of the link press.
   ★ For details of the standard dimensions, see PRESS-FITTING JIG DIMENSION TABLE FOR LINK PRESS.
   ★ If the end face of the pin (portion **P**) or the end face of the link (portions **Q**, **R**) are worn, add the amount of wear to the standard dimension when adjusting the dimension of the press-fitting jig so that the amount of protrusion of the left and right pin and bushing is uniform.



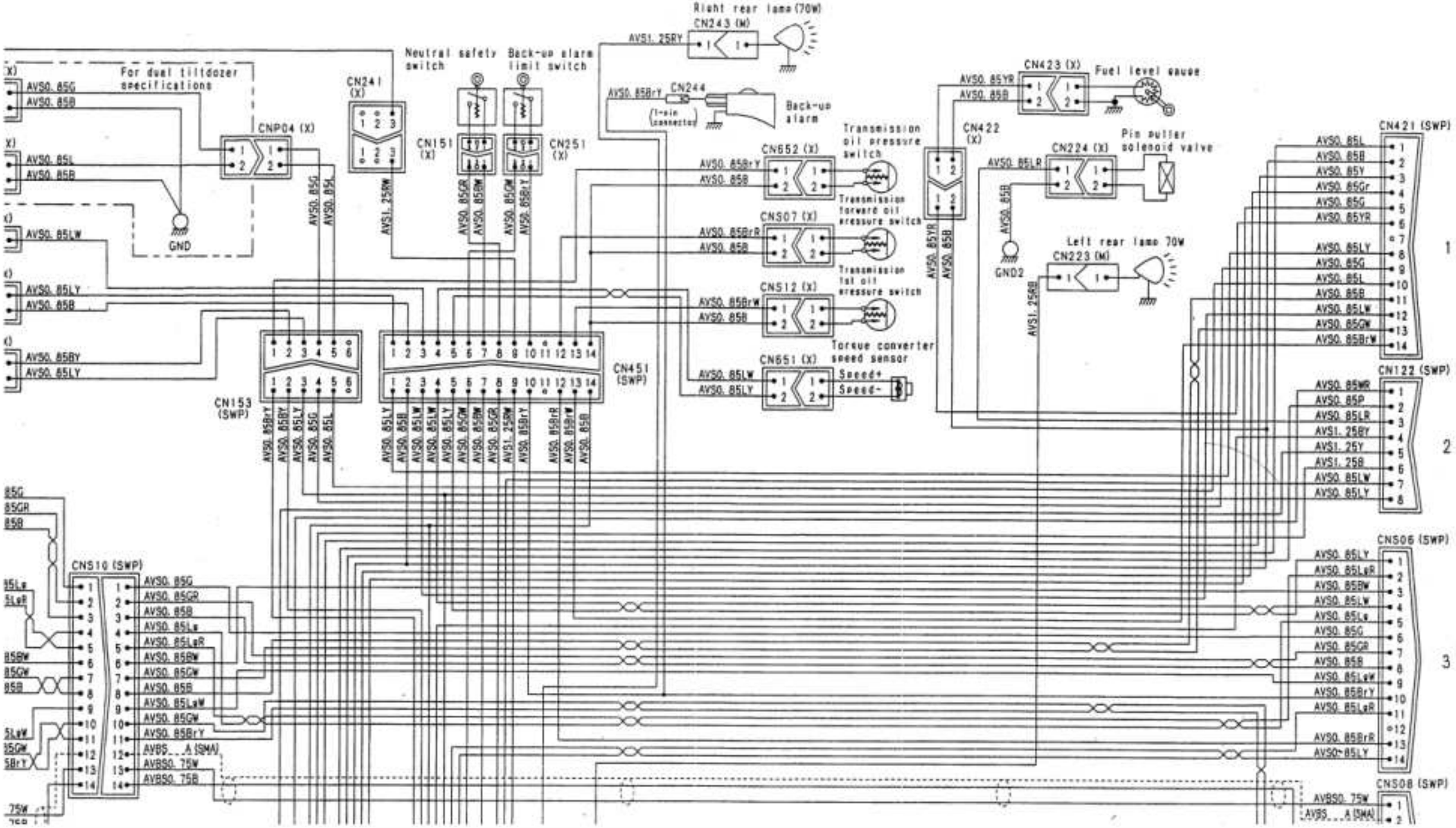






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