CEBM003902

Shop Manual

KOMATSU®

GD530A(W)-2
GD650A(W)-2
GD670A(W)-2

MOTOR GRADER

SERIAL NUMBERS

GD530A(W)-2EY	210098	and UP
GD650A(W)-2EY	210098	and UP
GD670A(W)-2EY	210098	and UP

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June 2009
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TESTING AND ADJUSTING TOOL LIST

No.	Test Item	Tool	Part Number	Remarks
1	Engine Speed	Multi-tachometer	799-203-8000	Digital display L: 60 to 2,000 RPM H: 80 to 19,999 RPM
2	Water, Oil and Intake Temperature	Digital Thermometer	790-101-6000	-50 to 1,200° C (-122 to 2192° F)
3	Lubricant Pressure	Hydraulic Tester D	799-101-5000	25, 60, 400, 600 kg/cm^2 (355.58, 853.40, 5689.34, 8534.01 psi)
4	Compression Pressure	Compression Gauge, adaptor	795-502-1590 795-502-1360	0 to 70 kg/cm^2 (995.63 psi) Kit No. 795-502-1205
5	Blow-by Pressure	Blow-by Pressure Gauge Manometer	3822566 ST-1111-3	0 to 500 mmH_2O
6	Valve Clearance	Feeler Gauge	795-125-1360	IN 0.33, EX 71mm
7	Exhaust Gas Color	Handy Smoke Checker	799-201-9000	Discoloration 0 to 70% with standard color (Discoloration % X 1/10 = Bosch Index)
8	Lubricant Pressure	Hydraulic Tester D	799-101-5000	25, 60, 400, 600 kg/cm^2 (355.58, 853.40, 5689.34, 8534.01 lb/in^2)
9	Operating Force	Push-pull Scale	79A-262-0020	0 to 25kg (0 to 55.12 lb)
10	Brake Pedal Operating Force	Depression Meter	799-101-1001	0 to 110kg (0 to 242.51 lb)
11	Brake Distance	Tape Measure	Commercially Available	30mm
12	Brake Shoe Clearance	Feeler Gauge	Commercially Available	0.1 to 3.0mm (0.002 to 0.118in)
13	Pedal Travel	Convex Scale	Commercially Available	2m (2.187yd)
14	Operating Force	Push-pull Scale	Commercially Available	0 to 50kg (110.23 lb)
15	Nitrogen (N_2) Accumulator gas chargE	Charging Tool	792-610-1700	-

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AWD HYDRAULIC SYSTEM PRESSURE TEST

AWD SYSTEM SPECIFICATION

Charge Pump Pressure	250 to 290 PSI @ 1,000 RPM
Forward Stall Pressure	4,200 to 4,600 PSI @ 1,000 RPM
Reverse Stall Pressure	4,200 to 4,600 PSI @ 1,000 RPM

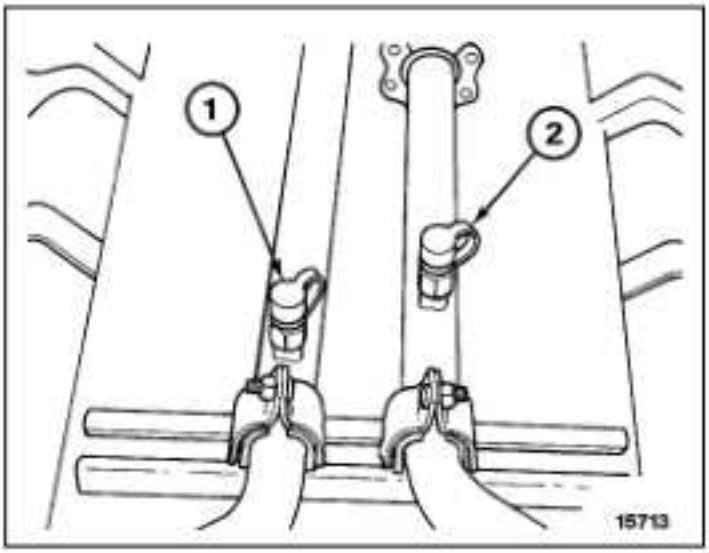
NOTE: Actual desired pressure values recorded in this manual may vary slightly to those values shown in the hydraulic schematics. When discussing a system, schematic values will be used. However, when testing a system, use the desired values. The restrictions in the system — hose lengths, fittings, etc. — cause the different values.

TEST PORT LOCATIONS

CHARGE PUMP PRESSURE
Located at the AWD filter.

REVERSE PRESSURE (TEST PORT 1)
Located on the left top side of the main frame in front of the operator's cab.

FORWARD PRESSURE (TEST PORT 2)
Located on the right top side of the main frame in front of the operator's cab.



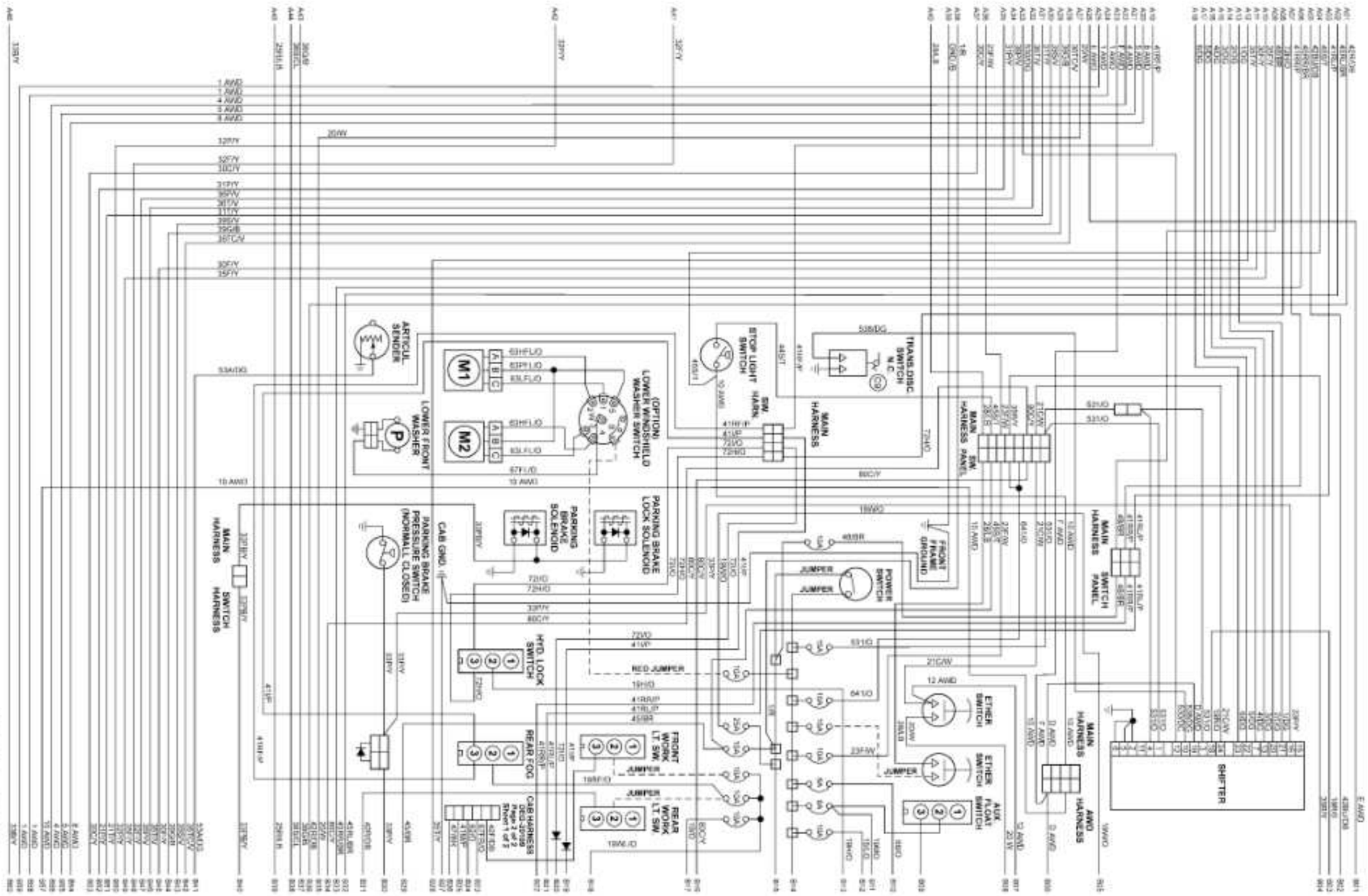
WARNING! The system develops full force during this test. Keep clear of the area in front of and behind the machine.

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7. Remove the bolts (18), ring (19), drive plates (20), and converter drive-plate assembly (21).
8. Remove the torque converter assembly (22).
9. Remove the bolts (24, 25, 26, 27, 28 and 29) and gasket (30).
10. With a nylon strap, sling the front cover (23) and separate it from the transmission case (2).

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