CEBM000301

Shop Manual

KOMATSU®

D32E/P-1
D38E/P-1
D39E/P-1

BULLDOZER

SERIAL NUMBERS **D32E/P-1 - P075501**
D38E/P-1 - P085501 and up
D39E/P-1 - P095501

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March 1997

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○	New page to be added	Add
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( )	Page to be deleted	Discard

Pages without marks were previous additions or revised pages.

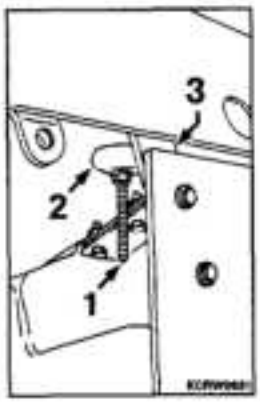
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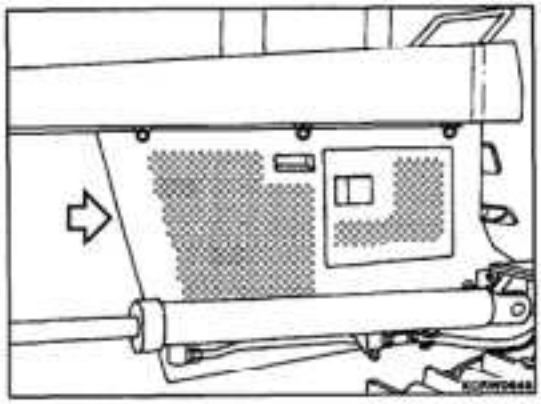
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94. From inside of engine compartment, install hood tie down brackets (3). Torque bolts to 10 N•m (8 lbf ft) ±10%. Install hook rod (1) and ball (2) to hood and bracket and tighten nut until ball compresses. Repeat for other side. Torque hood rear mounting hardware to 92 N•m (70 lbf ft) ±10%.

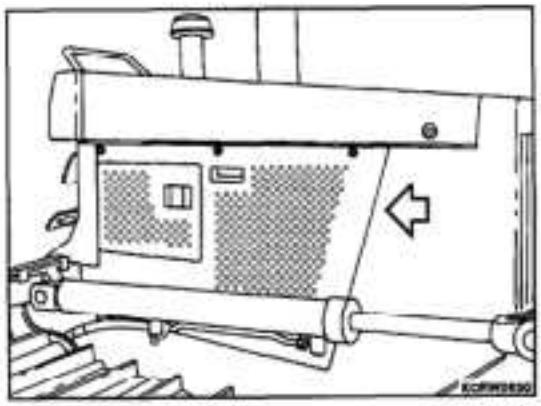


95. Install engine left side door. Torque bolts to 38 N•m (28 lbf ft) ±10%.



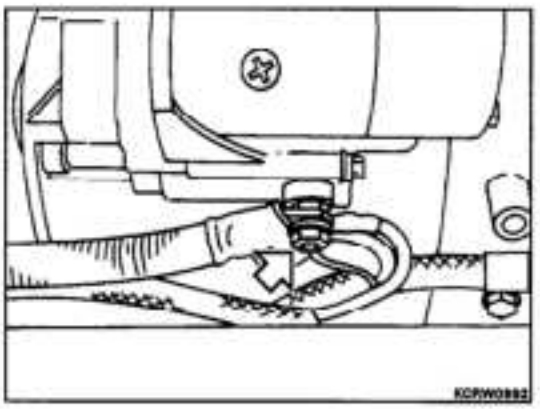
96. Install engine right side door. Torque bolts to 38 N•m (28 lbf ft) ±10%.

97. Refill hydraulic and drive train systems with proper fluid, refer to the OPERATION & MAINTENANCE MANUAL. Test transmission per Section 7.

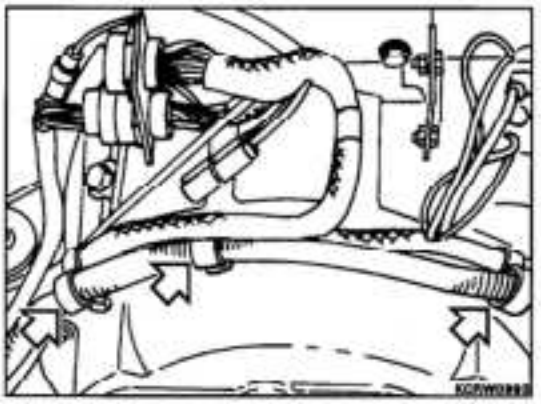


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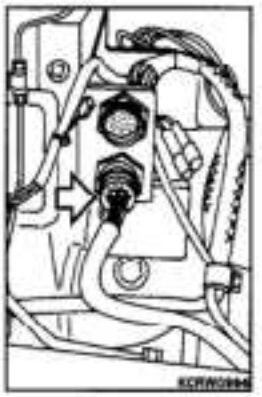
47. Disconnect and remove battery cable at cranking motor terminal.



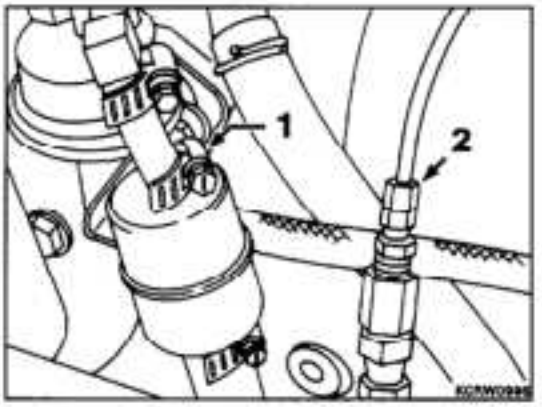
48. Unclip battery cable from converter housing and position out of the way.



49. Disconnect rear harness from mounting block.

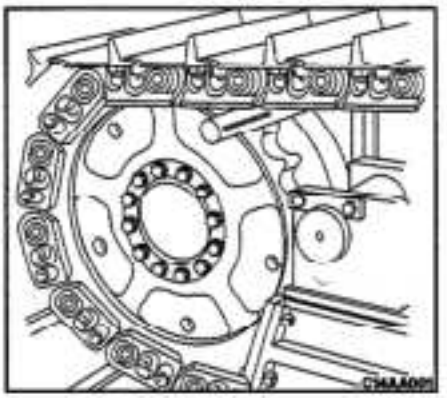


50. Disconnect, plug and cap fuel inlet (1) and outlet (2) lines.



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GENERAL

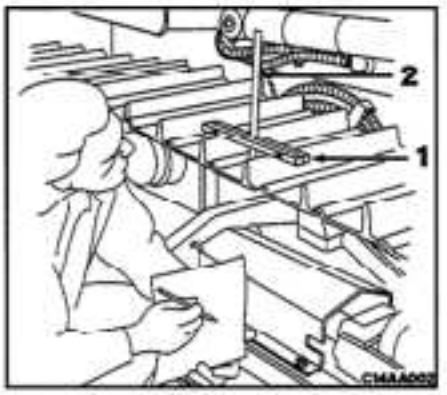


Track components have a certain dimension when new. As wear occurs dimensions will decrease (or increase in case of track pitch and front idler flange height) until a decision must be made whether to rebuild or recondition components. replace them or run them to destruction. For each component or condition, five different dimensions are given. 100% is dimension of component when new. 075%, 050% and 025% indicate % of wear remaining before a maintenance action should be taken. 000% is point at which either maintenance must take place or components run to destruction. Before inspecting, chain tension on both sides must be tightened. To do this, blocks of wood or metal should be placed in sprocket tooth under chain. Machine should then be moved backward so sprocket can grab block and tighten chain. This pulls chain tight off top idler.

REMARK

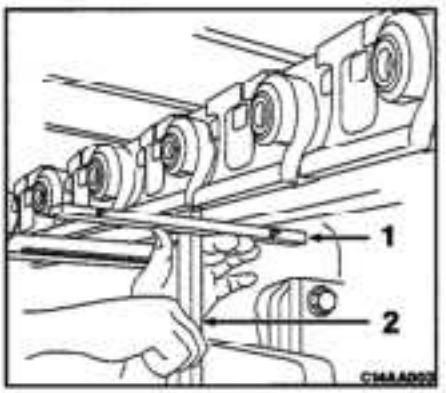
Tools used to measure undercarriage components are included in Track Specialist Kit 637985C91.

TRACK SHOE GROUSER HEIGHT



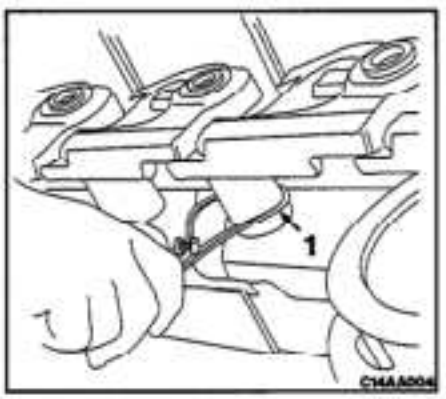
Clean off all materials on shoe plate and grouser tops. Lay squeeze bar (2) across grousers approximately ¼ of way in from end of shoe. Insert 305 mm (12 in) scale (1) in squeeze bar so that scale is against top of track plate and take a reading. Measure two or more shoes to get an average. Refer to SPECIFICATIONS.

LINK HEIGHT



Clean out all materials between links. Place squeeze bar (1) across center of links. Insert 305 mm (12 in) scale (2) in squeeze bar so that scale is against bottom of track shoe plate and take a reading. Measure two or more place along chain to get an average. Refer to SPECIFICATIONS.

BUSHING OUTSIDE DIAMETER



Close 102 mm (4 in) outside caliper (1) around bushing with a minimum amount of drag, making certain that one of caliper tips is positioned in forward drive side wear area. Slide caliper off bushing and measure distance between caliper tips using 305 mm (12 in) scale. Repeat on reverse drive side wear area. Measure two or more bushings to get an average. Refer to SPECIFICATIONS.

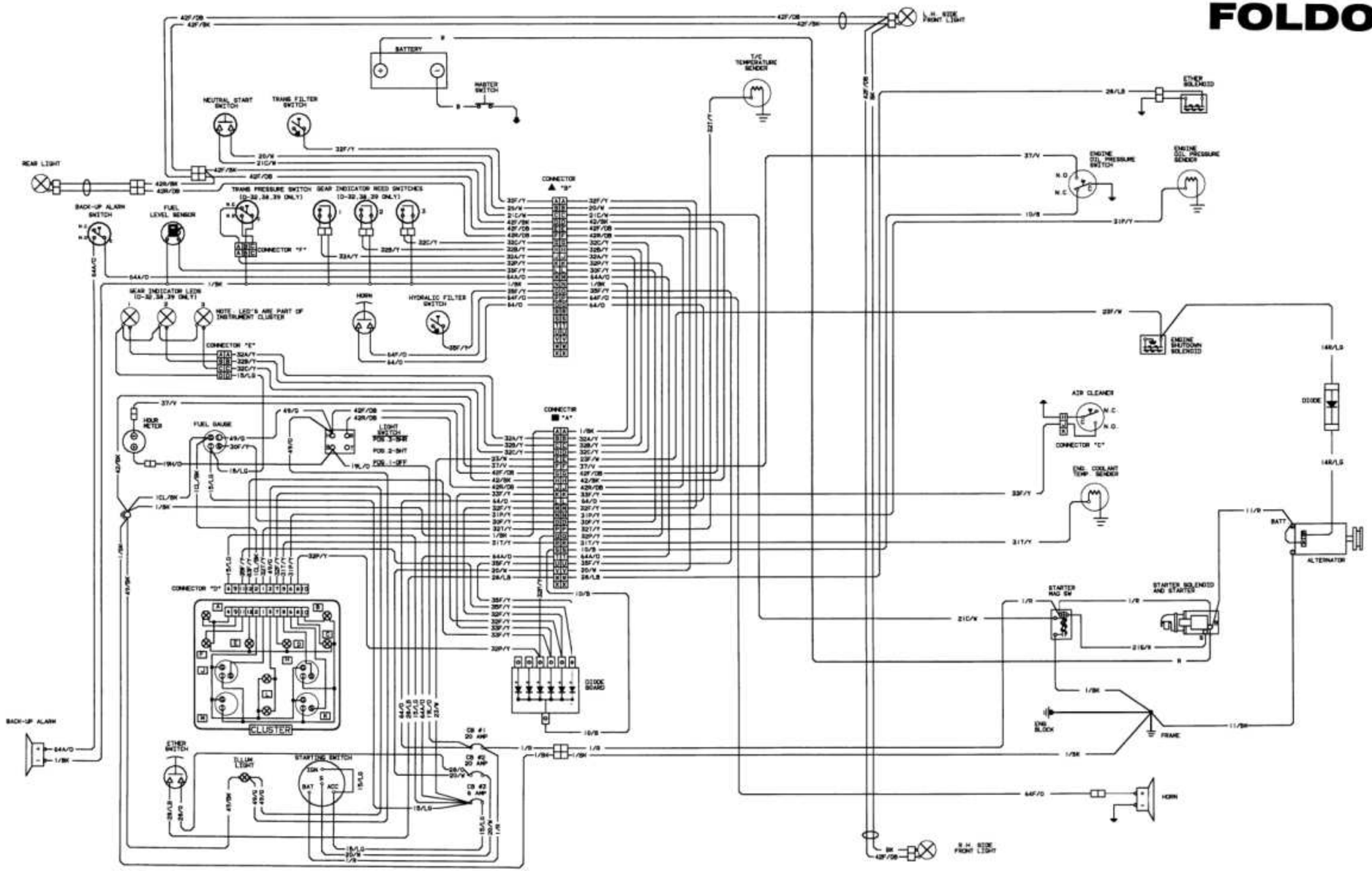
REMARK

Whichever wear is greater, forward or reverse, determines percentage of wear remaining.

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FOLDOUT 8-3

WIRING DIAGRAM



NOTES:
1. DIAGRAM SHOWS ALL ATTACHMENTS.
2. CIRCUIT NOMENCLATURE ON HARNESS CORRESPONDS TO CIRCUIT DIAGRAM.
3. CIRCUIT DIAGRAM SHOWN WITH MACHINE PARKED AND POWER OFF.

CIRCUIT DIAGRAM LEGEND:

- CIRCUIT IDENTIFICATION
- COLOR

42/DB-CIRCUIT IDENTIFICATION
- INDICATES CIRCUIT CONNECTION.
- INDICATES CIRCUIT CROSSING NOT CONNECTED.
- INDICATES INTERNAL CONNECTION.
- INDICATES DIODE ASSEMBLY.
- INDICATES MOMENTARY CONTACTS.
- INDICATES SINGLE IN LINE CONNECT.
- INDICATES INTERNALLY GROUND UNIT.
- INDICATES EXTERNAL GROUND.

COLOR ABBREVIATIONS

ABBREVIATIONS	COLOR
R	RED
T	TAN
W	WHITE
Y	YELLOW
B	BLACK
BR	BROWN
G	GRAY
O	ORANGE
P	PINK
V	PURPLE(VIOLET)
DB	DARK BLUE
LB	LIGHT BLUE
DG	DARK GREEN
LG	LIGHT GREEN

INSTRUMENT CLUSTER

A. LIGHT-NOT USED.
B. LIGHT-NOT USED.
C. LIGHT-TRANS PRESSURE(10-32,38,39 ONLY)
D. LIGHT-TRANSMISSION FILTER.
E. LIGHT-AIR CLEANER FILTER.
F. LIGHT-HYDRAULIC FILTER.
H. GAUGE-ENGINE COOLANT TEMPERATURE.
J. GAUGE-TRANSMISSION TEMPERATURE.
K. GAUGE-ENGINE OIL PRESSURE SENDER.
L. LIGHTS-ILLUMINATION.
M. GAUGE-VOLTMETER.

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