CEAM003501

Operation & Maintenance Manual

KOMATSU®

WA320-3

WHEEL LOADER

SERIAL NUMBERS WA320-3 A31001 and up

ENGINE 6D114E-1

April 2016

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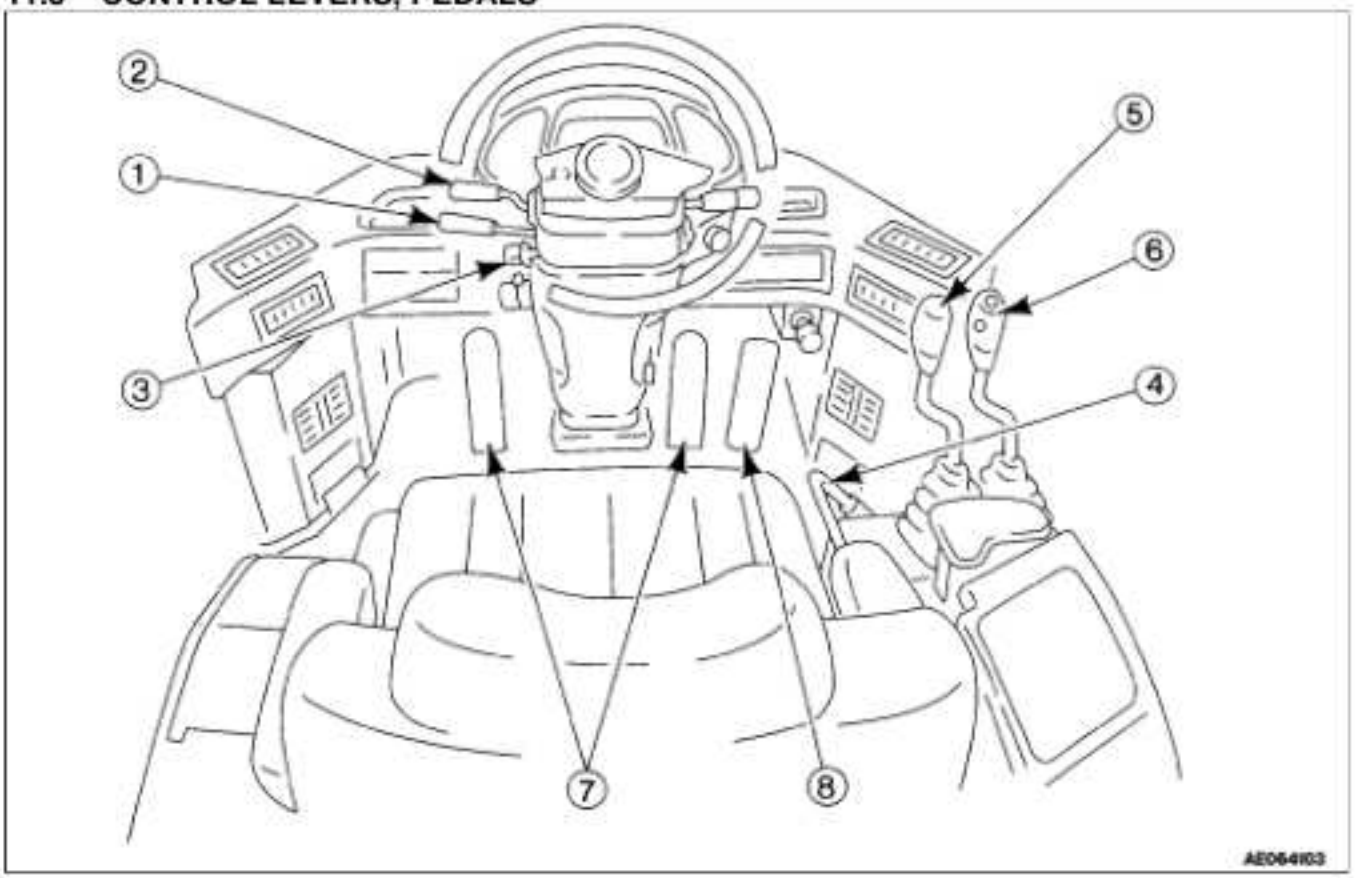
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11.3 CONTROL LEVERS, PEDALS



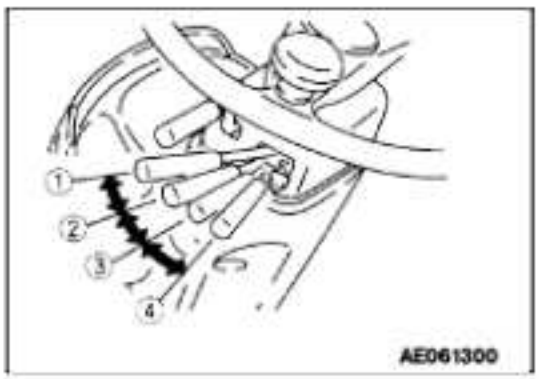
1. SPEED CONTROL LEVER

MANUAL SHIFT

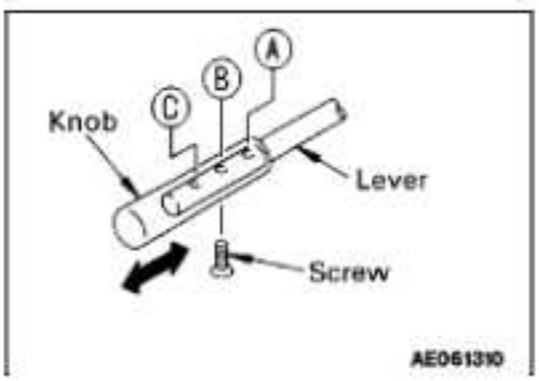
This lever controls the travel speed of the machine.
This machine has a 4-FORWARD, 4-REVERSE speed transmission.
Place the speed control lever in a suitable position to obtain the desired speed range.
1st and 2nd speeds are used for working.
3rd and 4th speeds are used for traveling.

However, the speed control lever stopper prevents the shift to 3rd or 4th. Disengage the stopper before trying to shift gears.

Position (1): 1st
Position (2): 2nd
Position (3): 3rd
Position (4): 4th



REMARKS:
The length of the lever can be adjusted to 3 stages (position (A), (B) or (C)). To adjust the length, remove the screw at the bottom of the lever knob, slide the knob to the desired position, then tighten the screw again.
(The machine is shipped with the lever at position (B).)



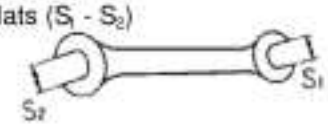
AUTO SHIFT FUNCTION

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21. STANDARD TIGHTENING TORQUE FOR NUTS AND BOLTS

21.1 INTRODUCTION OF NECESSARY TOOLS

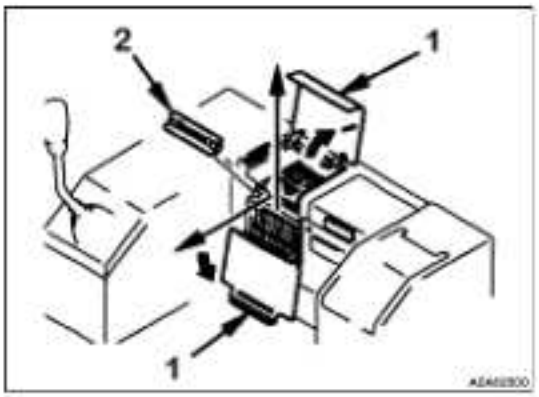
The following tools are needed when carrying out maintenance.

No.	Name of tool	Part No.	Remarks
1	Wrench set	09000-30006	Applicable width across flats (S_1 - S_2) 8 mm - 10 mm 12 mm - 14 mm 13 mm - 17 mm 19 mm - 22 mm 24 mm - 27 mm 30 mm - 32 mm 
2	Socket wrench set	09020-10284	
3	Screwdriver	09033-00190	Crosshead/flat head interchangeable type
4	Wrench	09014-10200	
5	Pliers	09036-00150	
6	Wrench	09001-03600	36jaw
7	Tire wrench	417-98-11121	
8	Filter wrench	09019-08035	For filter cartridge
9	Bar	417-98-11110	
10	Tire gauge	09289-00000	
11	Grease pump	07952-70004	For greasing work
12	Nozzle	07951-41017	Hose nozzle for grease pump
13	Grease cartridge	07950-90403	(Lithium base grease: 400 g)
14	Thickness gauge	09054-00009	
15	Hammer	09039-00150	
16	Plate	09963-03000	Warning tag

If any of the above tools are broken, please order replacements from your distributor.

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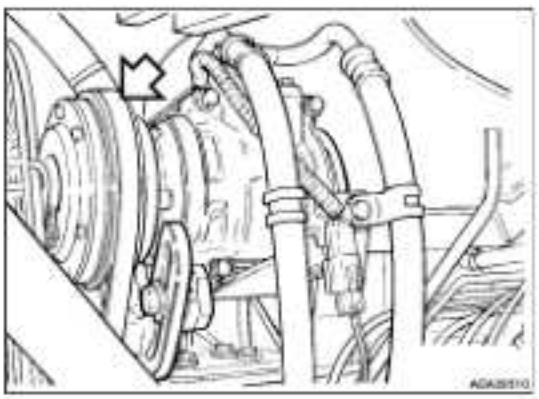
24.6.3 CLEAN ELEMENT IN AIR CONDITIONER RECIRCULATION FILTER



1. Open the filter inspection cover, remove the filter cover, then remove the filter in the direction of the arrow. When removing the filter to the side, put your weight on the seat, and push down.

2. Direct compressed air, less than 7 kg/cm^2 (100 psi), to the filter from the inside along its folds, then direct it from the outside along its folds and again from the inside. Check the filter for damage and/or deterioration. If the filter is extremely dirty, rinse it in water. After rinsing filter, dry it completely before installing it again.

24.6.4 CHECK AIR CONDITIONER COMPRESSOR BELT TENSION, ADJUST

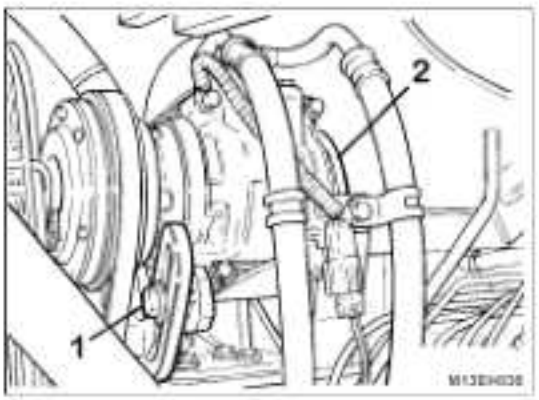


Checking

The deflection of the belt should be
when pressed with the thumb force of
midway between the air conditioner compressor pulley and fan pulley.

When belt tension gauge is used, it is considered normal for tension to remain in the range of 353 to 530 N (79 to 119 lbf).

Check When Installing a new V-Belt



The deflection of the belt should be approximately 8 to 11.5 mm (0.315 to 0.5 in) when pressed with the thumb force of approximately 98 N (22 lbf) at a point midway between the air conditioner compressor pulley and fan pulley.

Tension for a new, unstretched belt, measured with a belt tension gauge, may be higher in the range of 530 to 745 N (119 to 167 lbf).

Adjusting

Loosen bolt (1) and move compressor (2) to adjust the belt tension.

Check each pulley for damage, wear of the v-groove, and wear of the v-belt. In particular, be sure to check that the v-belt is not touching the bottom of the v-groove.

Replace the v-belt if cut or cracked or if it has stretched leaving no allowance for adjustment.

When adjusting the v-belt, do not push the compressor directly with a bar. Use a wrench.

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