PART NO. W4GB-E-00

HITACHI

Workshop Manual

ZW

220
250

Wheel Loader
(EU Specification)

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TO4GB-E
Technical Manual (Troubleshooting)	: Vol. No.TT4GB-E
Workshop Manual	: Vol. No.W4GB-E

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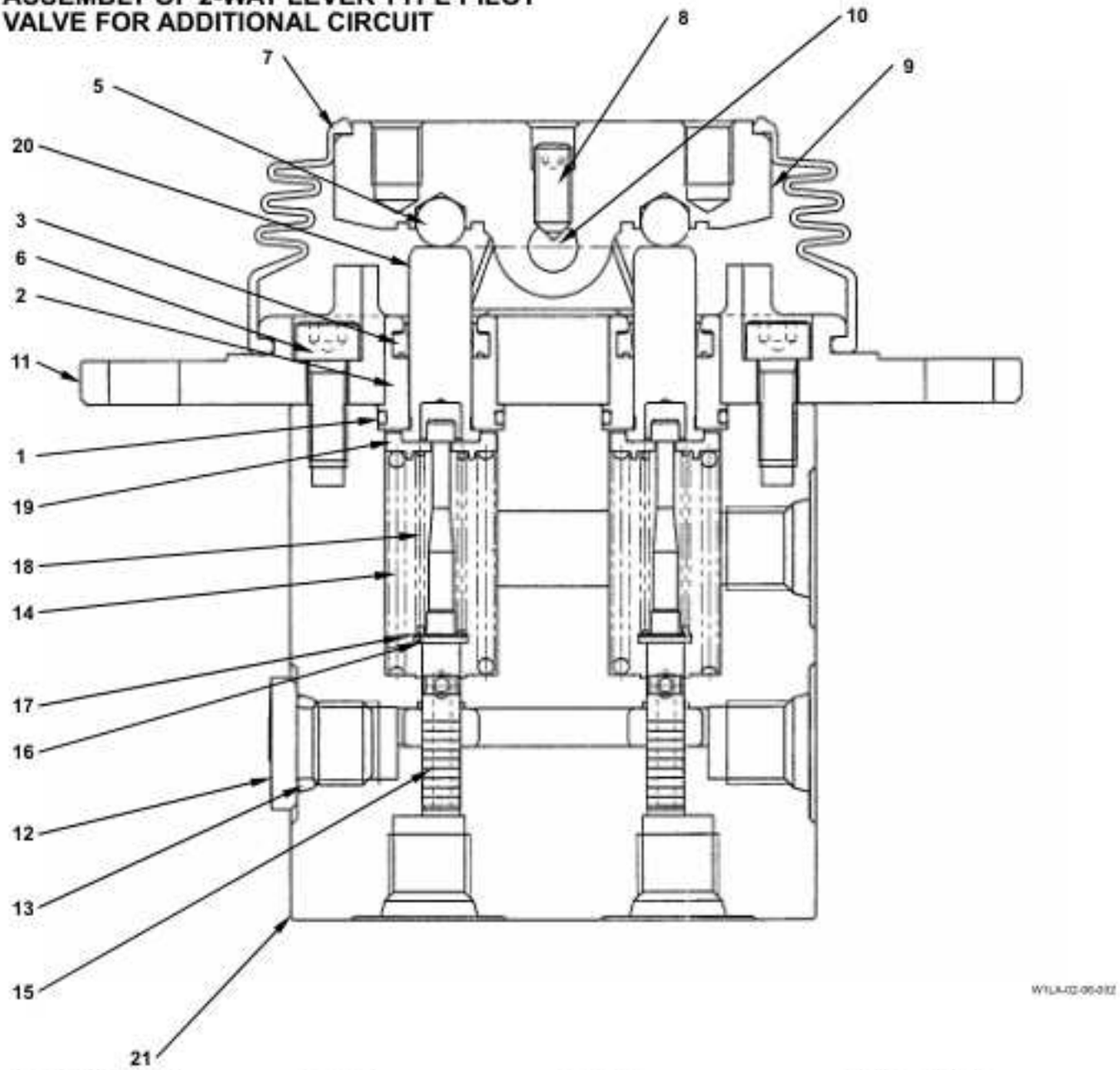
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ASSEMBLY OF 2-WAY LEVER TYPE PILOT VALVE FOR ADDITIONAL CIRCUIT



1 - O-Ring (2 Used)
2 - Bushing (2 Used)
3 - Packing (2 Used)
4 - *Bushing (2 Used)
5 - Steel Ball (2 Used)
6 - Socket Bolt (2 Used)
7 - Boot
8 - Set Screw
9 - Cam
10 - Pin
11 - Cover
12 - Plug
13 - O-Ring
14 - Spring (2 Used)
15 - Spool (2 Used)
16 - Washer (2 Used)
17 - Shim (2 Used)
18 - Spring (2 Used)
19 - Spring Guide (2 Used)
20 - Pusher (2 Used)
21 - Casing

NOTE: As for the part with mark, refer to W2-7-16.*

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Installation

CAUTION: Tire and rim weight: 500 kg (1150 lb)

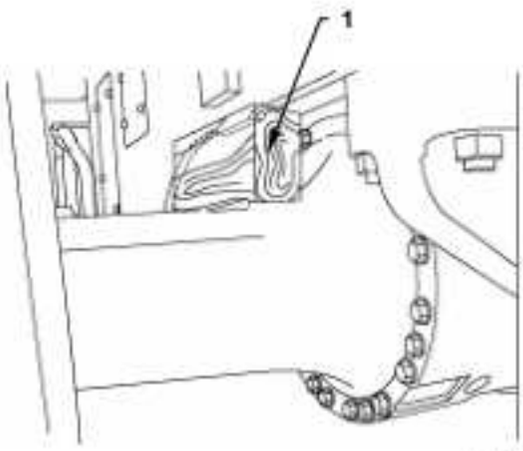
1. Hoist and install tire (3) to the axle. Face the air valve side of tire (3) outward.
2. Install wheel bolts (2) and the washers (ZW220: 18 used, ZW250: 20 used for each) to the tire (3). Tighten tire (3) lightly.



3. Lower the machine. Tighten the wheel bolts to the specified torque in the order as illustrated to the right.
   : 36 mm
   : 890 N·m (91 kgf·m, 660 lbf·ft)



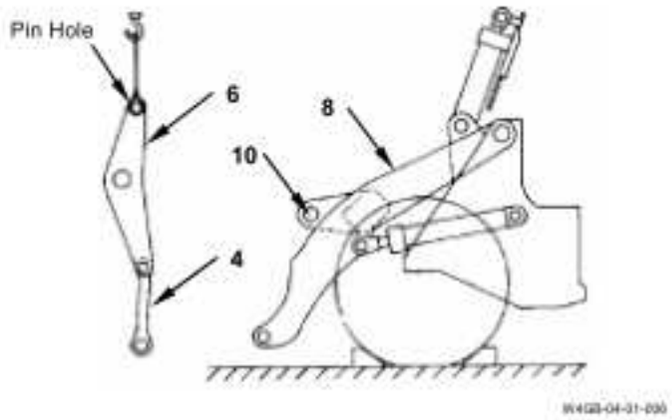
4. Remove wooden block (1) between the rear frame and the rear axle on both left and right sides.



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CAUTION: Bellcrank (6) weight:
ZW220: 300 kg (665 lb)
ZW250: 330 kg (730 lb)
Bucket link (4) weight:
ZW220: 60 kg (135 lb)
ZW250: 70 kg (150 lb)

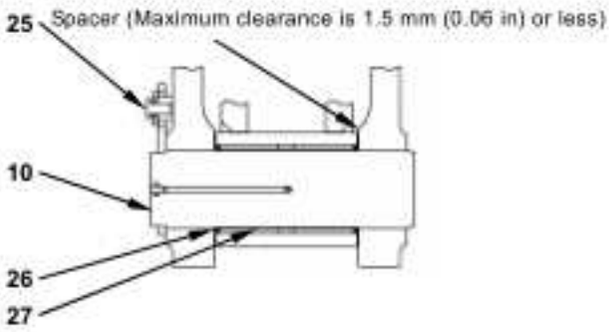
5. Hoist and place bellcrank (6) and the bucket link (4) sub-assy onto the mounting position on lift arm (8).



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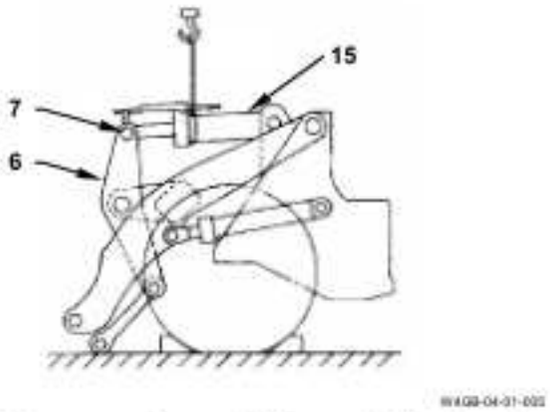
(The connection part between lift arm and bellcrank pin: C)

6. The connection part between lift arm and bellcrank pin: C
Press fit bushing (27) into the center of the boss.
Apply grease onto the lip part of dust seal (26).
Press fit dust seal (26) into both side of the bushing.
Apply grease and insert pin (10). Install the spring washer, washer and bolt (25).
: 24 mm
: 87 N·m (9 kgf·m, 64 lbf·ft)



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7. Attach a nylon sling to the cap part of bucket cylinder (15). Hoist and place the bucket cylinder onto the mounting position on bellcrank (6).

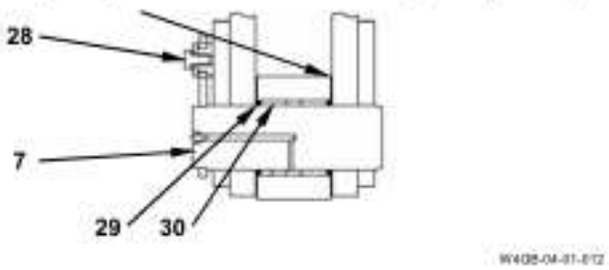


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(The connection part between bellcrank and bucket cylinder: D)

8. The connection part between bellcrank and bucket cylinder: D
Press fit bushing (30) into the center of the boss.
Apply grease onto the lip part of dust seal (29).
Press fit dust seal (29) into the both side of the bushing.
Apply grease and insert pin (7). Install the spring washer, washer and bolt (28).
: 24 mm
: 87 N·m (9 kgf·m, 64 lbf·ft)

Spacer (Maximum clearance is 1.5 mm (0.06 in) or less)



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