PART NO. W4GD-E-00

HITACHI

Workshop Manual

ZW

180

Wheel Loader

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TO4GD-E
Technical Manual (Troubleshooting)	: Vol. No.TT4GD-E
Workshop Manual	: Vol. No.W4GD-E

MidWestTech | Hitachi ZW180 Wheel Loader Workshop Service Manual | Publication W4GD-E-00

Order the manual at mid-west-tech.com >

SECTION 1
GENERAL

— CONTENTS —

Group 1 Precautions for Disassembling and Assembling

Precautions for Disassembling and Assembling W1-1-1
Maintenance Standard Terminology W1-1-7

Group 2 Tightening

Tightening Torque Specifications W1-2-1
Torque Chart W1-2-2
Piping Joint W1-2-5
Periodic Replacement of Parts W1-2-9

Group 3 Painting

Painting W1-3-1

Group 4 Bleeding Air from Hydraulic Oil Tank

Bleeding Air from Hydraulic Oil Tank W1-4-1

MidWestTech | Hitachi ZW180 Wheel Loader Workshop Service Manual | Publication... Order the manual at mid-west-tech.com >

TECHNICAL MANUAL (Operational Principle)

SECTION 1 GENERAL
- Group 1 Specification
- Group 2 Component Layout
- Group 3 Component Specifications

SECTION 2 SYSTEM
- Group 1 Control System
- Group 2 ECM System
- Group 3 Hydraulic System
- Group 4 Electrical System

SECTION 3 COMPONENT OPERATION
- Group 1 Pump Device
- Group 2 Control Valve
- Group 3 Hydraulic Fan Motor
- Group 4 Steering Pilot Valve
- Group 5 Steering Valve
- Group 6 Pilot Valve
- Group 7 Charging Block
- Group 8 Ride Control Valve
- Group 9 Drive Unit
- Group 10 Axle
- Group 11 Brake Valve
- Group 12 Others

TECHNICAL MANUAL (Troubleshooting)

SECTION 4 OPERATIONAL PERFORMANCE TEST
- Group 1 Introduction
- Group 2 Standard
- Group 3 Engine Test
- Group 4 Wheel Loader Test
- Group 5 Component Test
- Group 6 Adjustment

SECTION 5 TROUBLESHOOTING
- Group 1 Diagnosing Procedure
- Group 2 Dr. ZX
- Group 3 e-Wheel
- Group 4 Component Layout
- Group 5 Troubleshooting A
- Group 6 Troubleshooting B
- Group 7 Troubleshooting C
- Group 8 Electrical System Inspection

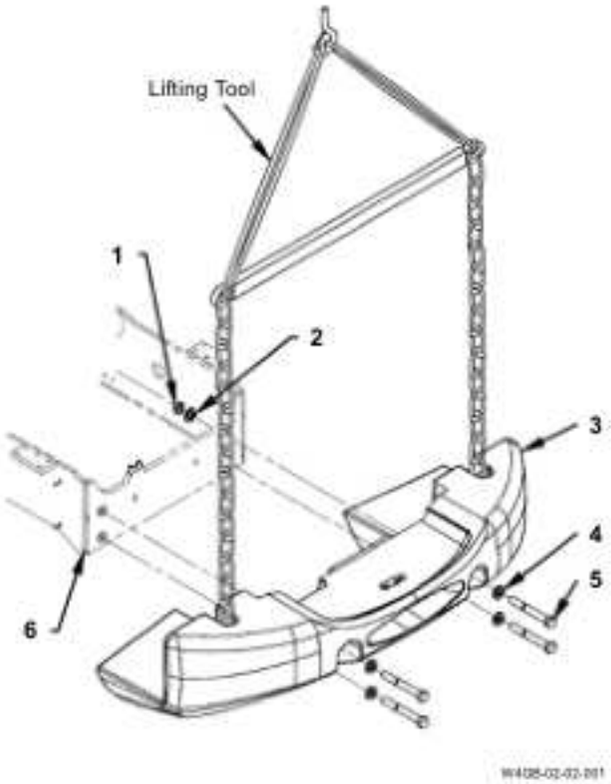
MidWestTech | Hitachi ZW180 Wheel Loader Workshop Service Manual | Publication... Order the manual at mid-west-tech.com >

Installation

CAUTION: Counterweight (3) weight: 1300 kg (2900 lb)

CAUTION: When hoisting counterweight (3) too much, it difficult to remove bolt (5) and the screw part may be damaged.

1. Hoist counterweight (3) by using a lifting tool.
2. Align counterweight (3) with the bolt (5) hole on frame (6).
3. Install counterweight (3) to frame (6) with bolts (5) (4 used) and washers (4) (4 used).
   : 46 mm
   : 1510 N·m (154 kgf·m, 1110 lbf·ft)
4. Install nuts (1) (2 used) and washers (2) (2 used) to bolts (5) (2 used) on the upper side.
   : 46 mm
   : 1510 N·m (154 kgf·m, 1110 lbf·ft)
5. Close the rear grill.

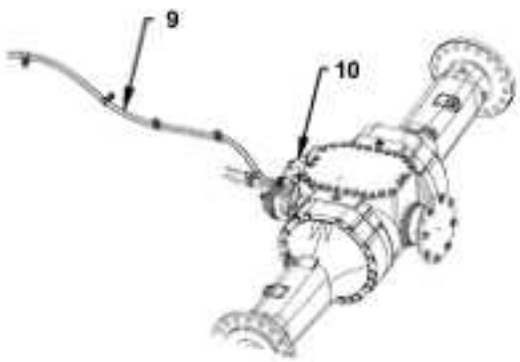


MidWestTech | Hitachi ZW180 Wheel Loader Workshop Service Manual | Publication... Order the manual at mid-west-tech.com >

Removal of Rear Axle

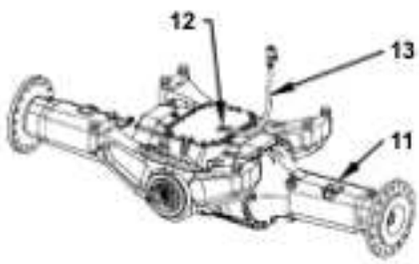
CAUTION: As the accumulator is installed to the brake hydraulic circuit, depress the brake pedal at least 50 strokes in order to reduce the pressure.

1. Remove the rear tires (2 used). (Refer to W3-1.)
2. Remove the propeller shaft. (Refer to W3-4.)
3. Disconnect hose (9) from block (10).
   : 19 mm



W4GB-03-03-109

4. Remove clip (12) from hose (13). Disconnect hose (13) from rear axle (11).



W4GB-03-03-110

MidWestTech | Hitachi ZW180 Wheel Loader Workshop Service Manual | Publication... Order the manual at mid-west-tech.com >