CEBM005201

Shop Manual

KOMATSU®

avance® plus

WA180PT-3MC

WHEEL LOADER

SERIAL NUMBERS **WA180PT-3MC - A88001** and UP

This material is proprietary to Komatsu America International Company and is not to be reproduced, used, or disclosed except in accordance with written authorization from Komatsu America International Company.

It is our policy to improve our products whenever it is possible and practical to do so. We reserve the right to make changes or add improvements at any time without incurring any obligation to install such changes on products sold previously.

Due to this continuous program of research and development, periodic revisions may be made to this publication. It is recommended that customers contact their distributor for information on the latest revision.

January 2002
①

Copyright 2002 Komatsu
DataKom Publishing Corporation

MidWestTech | Komatsu Avance Plus WA180PT-3MC Wheel Loader Service Manual | Publication CEBM005201
Order the manual at mid-west-tech.com >

CONTENTS

01	GENERAL	01-1
10	STRUCTURE AND FUNCTION	10-1
20	TESTING, ADJUSTING AND TROUBLESHOOTING	20-1
30	DISASSEMBLY AND ASSEMBLY	30-1
40	MAINTENANCE STANDARD	40-1
90	OTHER	90-1

MidWestTech | Komatsu Avance Plus WA180PT-3MC Wheel Loader Service Manual | Publ... Order the manual at mid-west-tech.com >

PRODUCT PUBLICATIONS INFORMATION

Various product Parts and Service Publications are available to all **KOMATSU** construction equipment owners, including operation and maintenance manuals, parts books and service manuals.

Special publications, such as service tool, air conditioning and turbocharger service manuals are also available as well as selected Operation and Service manuals in foreign languages.

The Publications listed below are available for this particular machine(s).

DESCRIPTION	FORM NUMBER
PARTS BOOK - PAPER:	
Chassis and Engine	BEPB008600
OPERATION AND MAINTENANCE MANUAL:	
Chassis and Engine	CEAM007601
SHOP MANUAL	
Chassis	CEBM005201
Engine	SEBM010011
SAFETY MANUAL	
Machine specific	WLT70-1

Parts and Service Publications can *only* be acquired by authorized KOMATSU distributors using the Komatsu America International Company Parts Inventory Processing System (PIPS) or the Extranet Literature Ordering System.

If the PIPS system is not available at the distributor location, then the following Requisition for Technical Service Publications and Service Forms can be used. Form KDC91E is shown on the reverse side of this page.

MidWestTech | Komatsu Avance Plus WA180PT-3MC Wheel Loader Service Manual | Publ... Order the manual at mid-west-tech.com >

MEMORANDUM

MidWestTech | Komatsu Avance Plus WA180PT-3MC Wheel Loader Service Manual | Publ... Order the manual at mid-west-tech.com >

METHOD OF USING TROUBLESHOOTING CHARTS

CATEGORY OF TROUBLESHOOTING CODE NUMBER

Troubleshooting code No.	Component
A - 00	Troubleshooting of Transmission Controller System
D - 00	Troubleshooting of ECSS (Electronically Controlled Suspension System)
E - 00	Troubleshooting of Electrical System
S - 00	Troubleshooting of Engine System
T - 00	Troubleshooting of Hydraulic & Mechanical Systems

METHOD OF USING TROUBLESHOOTING TABLE FOR EACH TROUBLESHOOTING MODE.

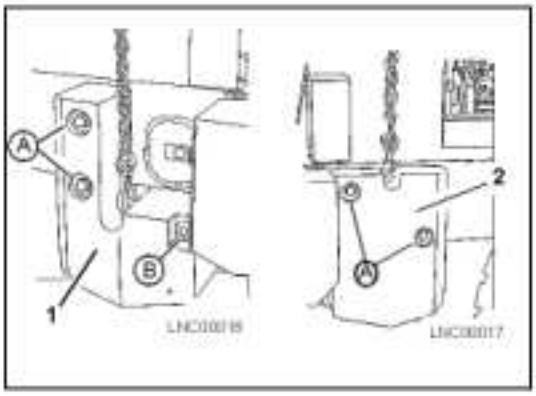
1. Troubleshooting code number and problem.
   The title of the troubleshooting chart gives the troubleshooting code, service code and failure mode (problem with the machine). (See Example (1)).

2. Distinguishing conditions.
   Even with the same failure mode (problem), the method of troubleshooting may differ according to the model, component, or problem. In such cases, the failure mode (problem) is further divided into sections marked with small letters (for example, (a)), so go to the appropriate section to carry out troubleshooting.
   If the troubleshooting table is not divided into sections, start the troubleshooting from the first check item in the failure mode. (See Example (2)).

3. Method of following troubleshooting chart.
   - Check or measure the item inside □ and according to the answer, follow either the YES line or the NO line to go to the next □ condition box. (Note: The number at the top right corner of the □ condition box is an index number; it does not indicate the order to follow.)
   - Following the YES or NO lines according to the results of the check or measurement will lead finally to the Cause column. Check the cause and take the action given in the Remedy column on the right. (See Example (3))
   - Below the □ condition box, there are the methods for inspection or measurement, and the judgement values.
     If the judgement values below the □ condition box are correct or the answer to the question inside the □ condition box is YES, follow the YES line. If the judgement value is not correct, or the answer to the question in NO, then follow the NO line.
   - Below the □ condition box is given the preparatory work needed for inspection and measurement, and the judgement values. If this preparatory work is neglected, or the method of operation or handling is mistaken, there is the danger that it may cause mistaken judgement or the equipment may be damaged. Therefore, before starting inspection or measurement, always read the instructions carefully, and start the work in order from the first item 1.

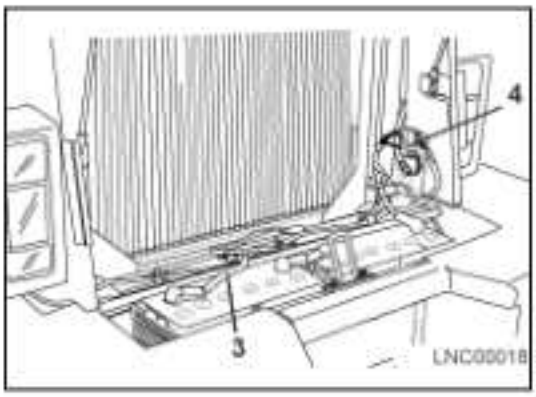
MidWestTech | Komatsu Avance Plus WA180PT-3MC Wheel Loader Service Manual | Publ... Order the manual at mid-west-tech.com >

COUNTERWEIGHT



WARNING! Stop the machine on level ground and install the safety bar on the frame. Lower the bucket to the ground and stop the engine. Then apply the parking brake and put blocks under the wheels to prevent the machine from moving.

REMOVAL OF LEFT AND RIGHT COUNTERWEIGHTS



1. Remove left (1) and right (2) counterweights.
   A. Sling counterweights.
   B. Remove mount bolts.

kg
Counterweight left: 100 kg (220.5 lb)
Counterweight right:170 kg (374.8 lb)

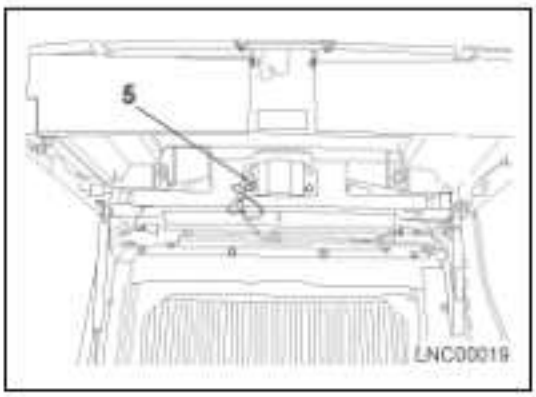
INSTALLATION OF LEFT AND RIGHT COUNTERWEIGHTS

Remark

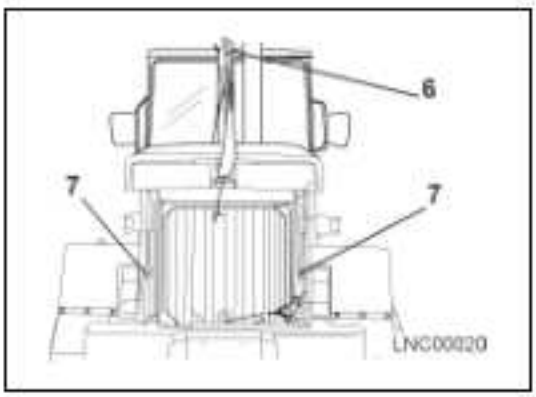
Install left and right in reverse order of removal.

Mount bolt (A): 549 ± 59 N m (404.9 ± 43.5 lbf ft)
Mount bolt (B): 279 ± 29 N m (205.7 ± 21.3 lbf ft)

REMOVAL OF REAR COUNTERWEIGHT

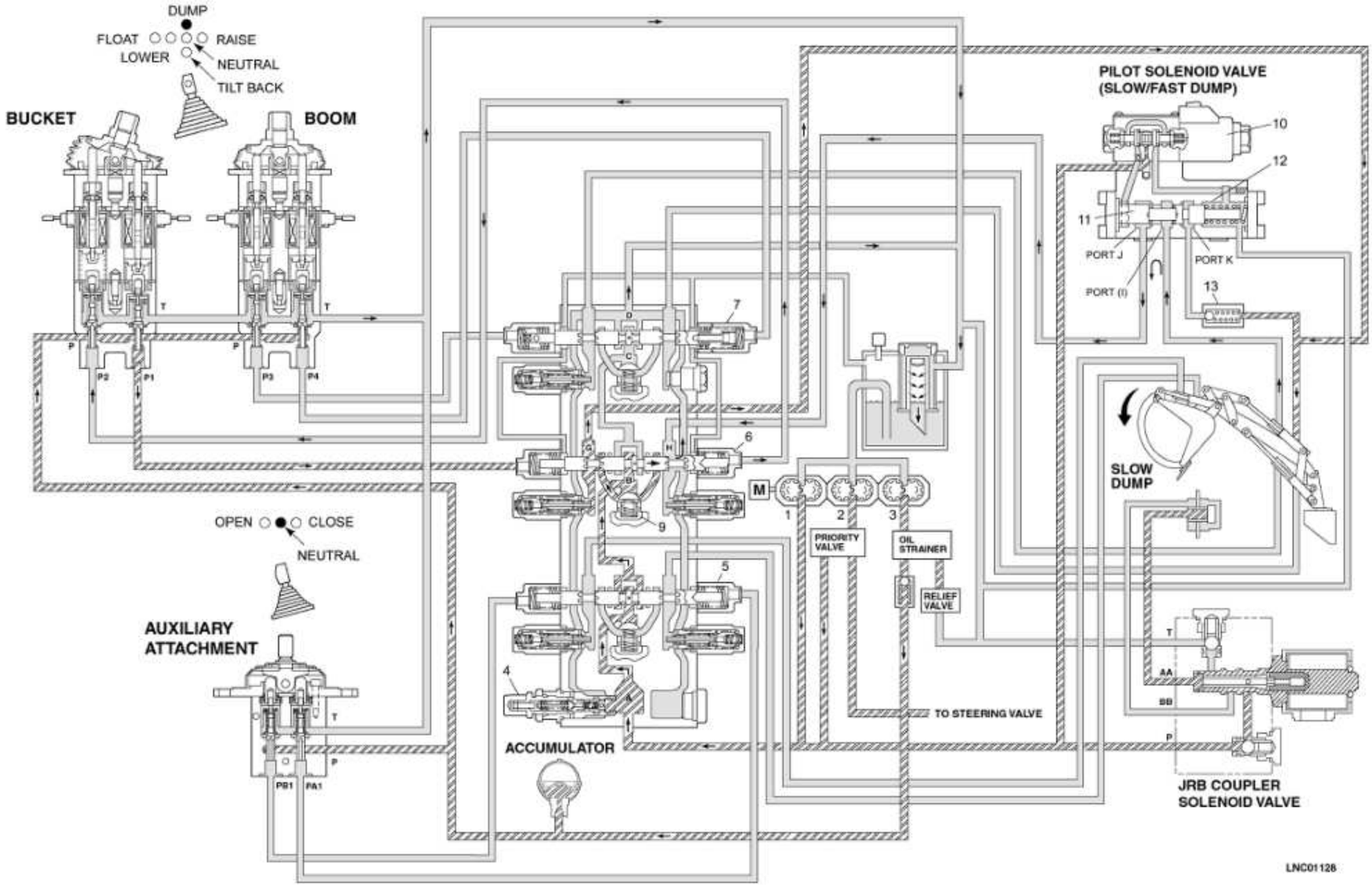


1. Removal of radiator grill.
   A. Disconnect battery cables at the battery (3).
   B. Disconnect electrical connections (4).
   C. Disconnect backup warning horn (power and ground wires) (5).
2. Connect hoist (6) to radiator guard cover.
   A. Disconnect gas spring cylinders at the frame (7).
   B. Disconnect top mounting bracket.
3. Tilt radiator guard cover from machine and set to the side.



MidWestTech | Komatsu Avance Plus WA180PT-3MC Wheel Loader Service Manual | Publ... Order the manual at mid-west-tech.com >

BUCKET / FORK SPOOL IN DUMP POSITION - SLOW SPEED



MidWestTech | Komatsu Avance Plus WA180PT-3MC Wheel Loader Service Manual | Publication CEBM005201 Order the manual at mid-west-tech.com >