SEN06605-04

Shop Manual

DUMP TRUCK

HD465-8
HD605-8

SERIAL NUMBERS

HD465-30001 and up
HD605-30001 and up

KOMATSU®

MidWestTech | Komatsu HD465-8, HD605-8 Dump Truck Service Manual | Publication SEN06605-04

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

CONTENTS

ABBREVIATIONS ---- 01-3
SPECIFICATIONS ---- 01-8
DIAGRAM SPECIFICATION ---- 01-8
DIAGRAM SPECIFICATION: HD465-8 ---- 01-8
DIAGRAM SPECIFICATION: HD605-8 ---- 01-10
SPECIFICATIONS ---- 01-12
SPECIFICATIONS: HD465-8 ---- 01-12
SPECIFICATIONS: HD605-8 ---- 01-17
WEIGHT TABLE ---- 01-22
WEIGHT TABLE: HD465-8 ---- 01-22
WEIGHT TABLE: HD605-8 ---- 01-23
TABLE OF APPROVED FUEL, COOLANT, AND LUBRICANTS ---- 01-24

MidWestTech | Komatsu HD465-8, HD605-8 Dump Truck Service Manual | Publication... Order the manual at mid-west-tech.com >

CONTENTS

ABBREVIATIONS - 10-6
BOOT-UP SYSTEM - 10-11
BOOT-UP SYSTEM DIAGRAM - 10-11
SYSTEM IN OPERATION LAMP - 10-12
OPERATION LAMP SYSTEM DIAGRAM - 10-12
FUNCTION OF OPERATION LAMP SYSTEM - 10-12
BATTERY DISCONNECT SWITCH - 10-13
BATTERY DISCONNECT SWITCH DIAGRAM - 10-13
FUNCTION OF BATTERY DISCONNECT SWITCH - 10-14
ENGINE SYSTEM - 10-17
ENGINE SYSTEM DIAGRAM - 10-17
FUNCTION OF ENGINE SYSTEM - 10-18
ENGINE CONTROL SYSTEM - 10-19
ENGINE CONTROL SYSTEM DIAGRAM - 10-19
AUTOMATIC IDLE STOP SYSTEM - 10-23
FUNCTION OF AUTOMATIC IDLE STOP SYSTEM - 10-23
ENGINE COMPONENTS - 10-25
OUTPUT SHAFT - 10-25
VGT - 10-26
EGR SYSTEM - 10-30
EGR valve - 10-32
EGR COOLER - 10-34
KCCV SYSTEM - 10-35
KCCV VENTILATOR - 10-37
KDPF - 10-39
COOLING SYSTEM - 10-43
COOLING SYSTEM DIAGRAM - 10-43
SPECIFICATIONS OF COOLING SYSTEM - 10-44
RADIATOR FAN CONTROL SYSTEM - 10-45
RADIATOR FAN CONTROL SYSTEM DIAGRAM - 10-45
FUNCTION OF RADIATOR FAN CONTROL SYSTEM - 10-45
COOLING SYSTEM COMPONENTS - 10-47
COOLING FAN PUMP - 10-47
CONTROL SYSTEM - 10-61
CONTROL SYSTEM DIAGRAM - 10-61
RETARDER AND HOIST CONTROL SYSTEM - 10-62
RETARDER AND HOIST CONTROL SYSTEM DIAGRAM - 10-62
MACHINE MONITOR SYSTEM - 10-64
MACHINE MONITOR SYSTEM DIAGRAM - 10-64
FUNCTION OF MACHINE MONITOR SYSTEM - 10-65
REARVIEW MONITOR SYSTEM - 10-66
REARVIEW MONITOR SYSTEM DIAGRAM - 10-66
FUNCTION OF REARVIEW MONITOR SYSTEM - 10-66
KOMTRAX PLUS SYSTEM - 10-67
KOMTRAX PLUS SYSTEM DIAGRAM - 10-67
FUNCTION OF KOMTRAX PLUS SYSTEM - 10-69
PAYLOAD METER SYSTEM - 10-72
PAYLOAD METER SYSTEM DIAGRAM - 10-72
PAYLOAD METER SYSTEM DIAGRAM - 10-73

MidWestTech | Komatsu HD465-8, HD605-8 Dump Truck Service Manual | Publication... Order the manual at mid-west-tech.com >

FUNCTION OF PAYLOAD METER SYSTEM - 10-73
MEASUREMENT PRINCIPLE OF LOADING MASS - 10-74
CONTROL SYSTEM COMPONENTS - 10-83
MACHINE MONITOR - 10-83
SWITCH PANEL - 10-100
REARVIEW MONITOR - 10-101
REARVIEW CAMERA - 10-102
KOMTRAX TERMINAL - 10-103
KOMTRAX PLUS CONTROLLER - 10-105
STRUCTURE OF KOMTRAX PLUS CONTROLLER - 10-105
INPUT AND OUTPUT SIGNALS OF KOMTRAX PLUS CONTROLLER - 10-105
WIRELESS LAN UNIT - 10-109
STRUCTURE OF WIRELESS LAN UNIT - 10-109
FUNCTION OF WIRELESS LAN UNIT - 10-109
INPUT AND OUTPUT SIGNALS OF WIRELESS LAN UNIT - 10-109
TRANSMISSION CONTROLLER - 10-110
RETARDER AND HOIST CONTROLLER - 10-114
MONITOR CONTROLLER - 10-118
ENGINE CONTROLLER - 10-123
ACCELERATOR PEDAL - 10-135
GEAR SHIFT LEVER - 10-136
RETARDER CONTROL LEVER - 10-137
HYDRAULIC SYSTEM - 10-138
HYDRAULIC SYSTEM DIAGRAM - 10-138
HYDRAULIC SYSTEM COMPONENTS - 10-139
HYDRAULIC TANK - 10-139
STEERING AND HOIST PUMP - 10-140
LS VALVE - 10-146
CO VALVE - 10-147
POWER TRAIN AND BRAKE COOLING DUPLEX PUMP - 10-150
BRAKE COOLING, CONTROL TRIPLE PUMP - 10-151
HOIST VALVE - 10-153
POWER TRAIN SYSTEM - 10-159
POWER TRAIN DIAGRAM - 10-159
TRANSMISSION CONTROL SYSTEM - 10-160
TRANSMISSION CONTROL SYSTEM DIAGRAM - 10-160
GEAR SHIFT LEVER POSITIONS AND AUTOMATIC GEAR SHIFT RANGE - 10-162
GEAR SHIFT CONTROL SYSTEM - 10-166
AUTOMATIC GEAR SHIFT CONTROL OF GEAR SHIFT CONTROL SYSTEM - 10-166
DIRECTION CONTROL SYSTEM - 10-168
RIM PULL LIMIT FUNCTION FOR OVERLOAD PREVENTION OF DIRECTION CONTROL SYSTEM - 10-168
FUNCTION OF THROTTLE LIMIT FUNCTION AT F1 START AT D POSITION SETTING OF DIRECTION CONTROL SYSTEM - 10-168
KOMATSU TRACTION CONTROL SYSTEM (KTCS) - 10-169
KOMATSU TRACTION CONTROL SYSTEM (KTCS) SYSTEM DIAGRAM - 10-169
FUNCTION OF KOMATSU TRACTION CONTROL SYSTEM (KTCS) - 10-169
OPERATION OF KOMATSU TRACTION CONTROL SYSTEM (KTCS) SYSTEM LOGIC - 10-170
TRAVEL SPEED LIMITATION SYSTEM - 10-171
SYSTEM DIAGRAM OF TRAVEL SPEED LIMITATION SYSTEM - 10-171
FUNCTION OF TRAVEL SPEED LIMITATION SYSTEM - 10-172

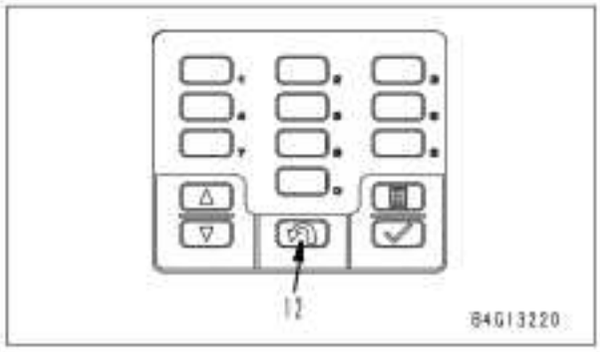
MidWestTech | Komatsu HD465-8, HD605-8 Dump Truck Service Manual | Publication... Order the manual at mid-west-tech.com >

- When there is a problem when you measure the machine weight it stops. NG screen is shown when the error occurs in the oil pressure sensor at each suspension or angle sensor.
  When NG screen is shown, perform troubleshooting.



9. When "Measuring of Machine Weight with No Load Completed" is shown, stop the machine and push RETURN switch (12).





10. After the "Input of Machine Weight with Load" screen is shown, perform the load operation.

REMARK

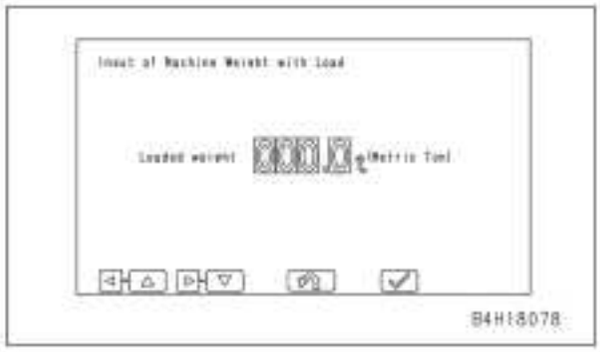
- For maximum payload, see Operation and Maintenance Manual or "Specification drawing" in Outline.
- To examine the load quantity, go to the standard screen temporarily.

11. Measure the total machine weight with maximum load using the load meter, and write it down.

REMARK

Take notes of total mass.

12. Move the machine to the travel path.



MidWestTech | Komatsu HD465-8, HD605-8 Dump Truck Service Manual | Publication... Order the manual at mid-west-tech.com >

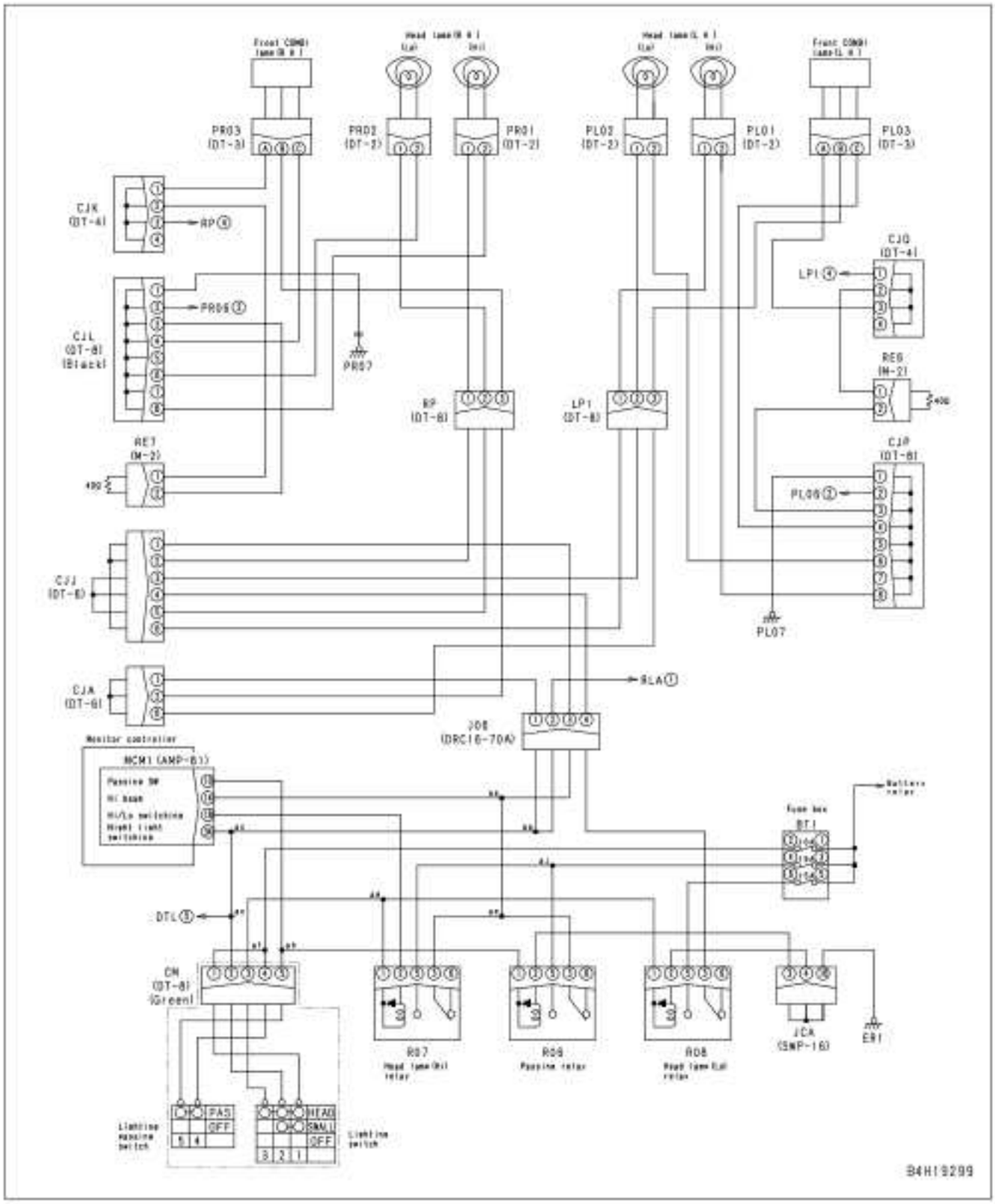
10. Make sure that this failure code is not shown.

REMARK

- If this failure code is not shown, the repair is completed.
- If this failure code is shown, go back to the troubleshoot procedures.

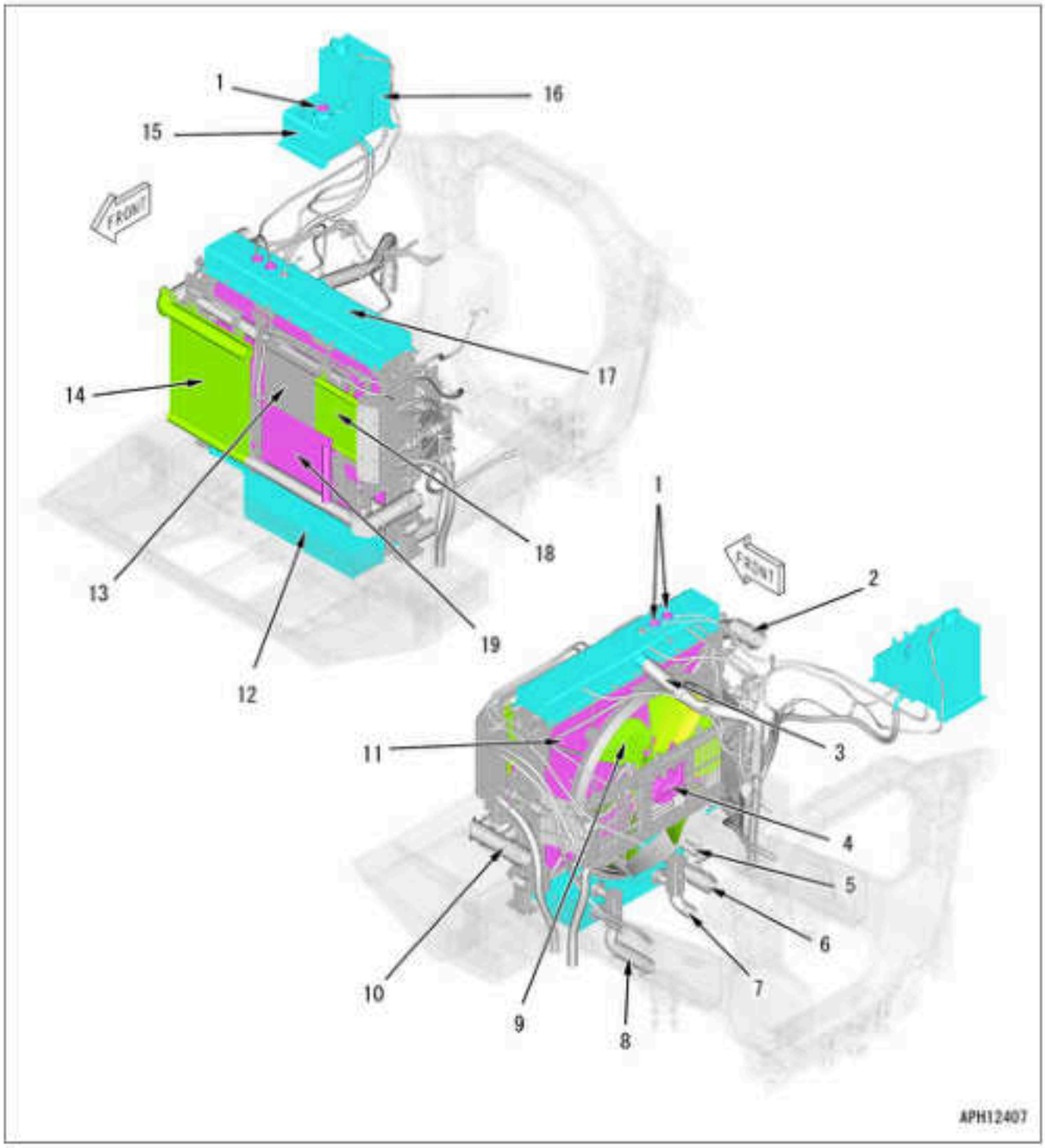
MidWestTech | Komatsu HD465-8, HD605-8 Dump Truck Service Manual | Publication... Order the manual at mid-west-tech.com >

Circuit diagram related to the head lamp



MidWestTech | Komatsu HD465-8, HD605-8 Dump Truck Service Manual | Publication... Order the manual at mid-west-tech.com >

COOLING SYSTEM
COOLING SYSTEM DIAGRAM

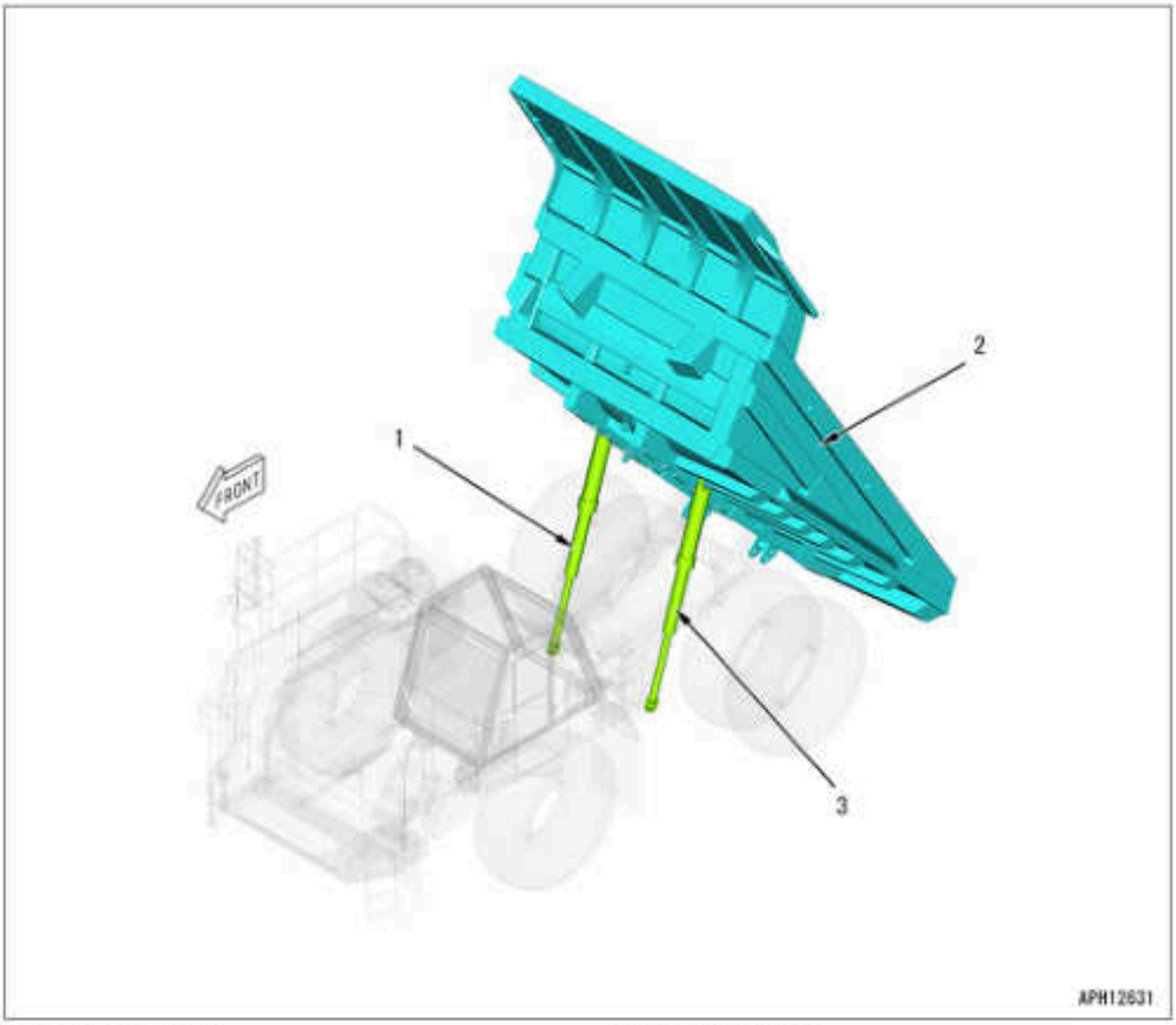


1: Pressure valve cap
2: Aftercooler inlet hose
3: Radiator inlet hose (from engine)
4: Cooling fan motor
5: Bypass hose (from engine: at a low temperature)
6: Radiator outlet hose (to engine)
7: Oil cooler inlet hose
8: Oil cooler outlet hose
9: Fan
10: Aftercooler outlet hose
11: Radiator
12: Lower tank (a power train and a break cooling oil cooler are integrated)
13: Aftercooler A

MidWestTech | Komatsu HD465-8, HD605-8 Dump Truck Service Manual | Publication... Order the manual at mid-west-tech.com >

WORK EQUIPMENT
STRUCTURE OF WORK EQUIPMENT

General view



1: Hoist cylinder (right)
2: Body
3: Hoist cylinder (left)

FUNCTION OF WORK EQUIPMENT

The body has functions of load, and unload by lift of the dump body with hoist cylinder.

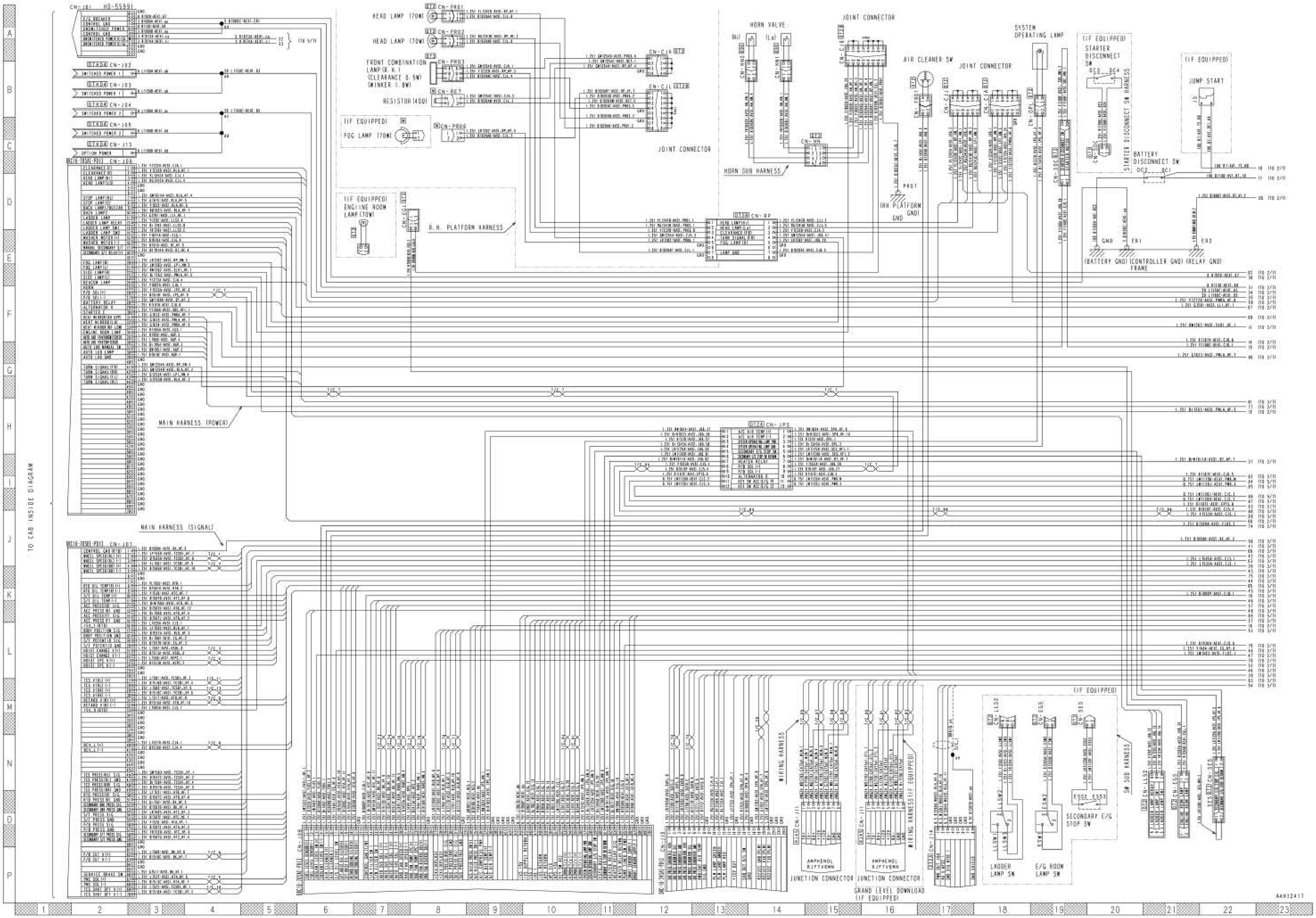
MidWestTech | Komatsu HD465-8, HD605-8 Dump Truck Service Manual | Publication... Order the manual at mid-west-tech.com >

EXTERNAL CAB ELECTRICAL DIAGRAM (1/7)

HD465-8, HD605-8

REMARK

This figure covers the equipment and devices that are not available as optional items in some areas.



MidWestTech | Komatsu HD465-8, HD605-8 Dump Truck Service Manual | Publication SEN06605-04

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