Shop Manual

SEBM009501

KOMATSU®

WA700-1

WHEEL LOADER

SERIAL NUMBERS **WA700-1 - 15001** and up

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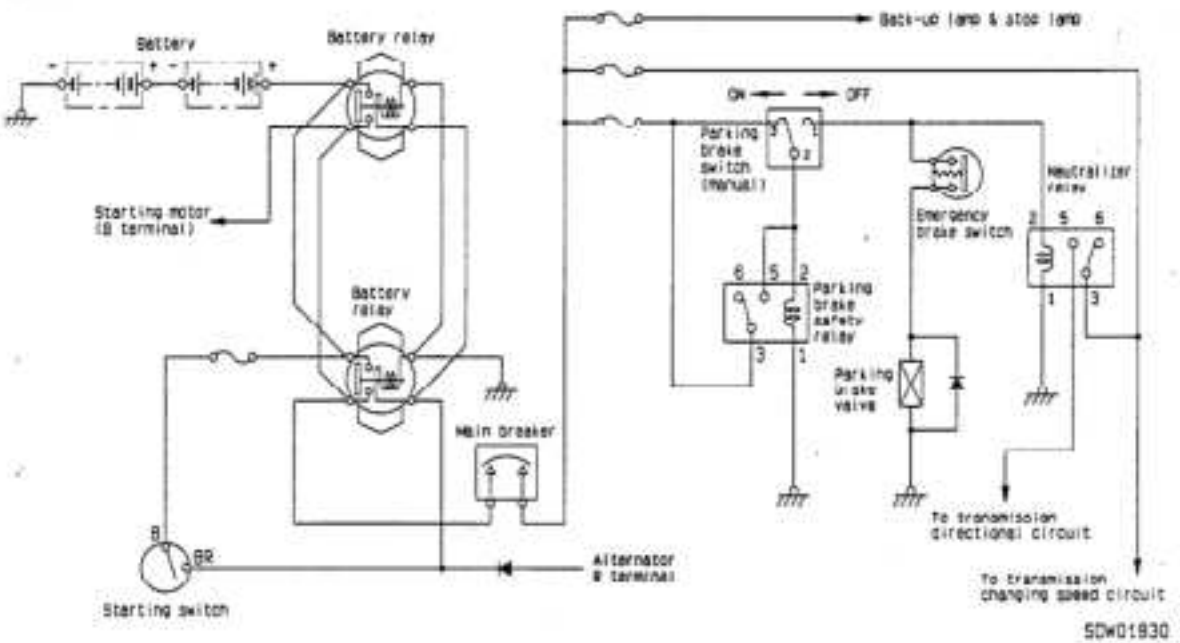
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1. STARTING SWITCH OFF



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- When the starting switch is turned OFF, the battery relay is opened, so no electricity flows to the parking brake circuit. For this reason, if the starting switch is OFF, no electricity flows to the parking brake valve regardless of whether the parking brake switch is ON (actuated) or OFF (released). As a result, the parking brake is actuated. (Automatic parking brake)

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3. METHOD OF USING MATRIX TROUBLESHOOTING TABLES.

The troubleshooting tables use the same method as for other troubleshooting table (YES/NO type) to locate the causes of failures in the machine. The troubleshooting tables are divided broadly into categories for the main components, such as the steering system and work equipment hydraulic system. Follow the procedure given below and carry out troubleshooting to locate the problems accurately and swiftly.

Step 1: Questioning the operator

The questions to ask the operator are given below the failure symptom. If the answers to the questions match the information given, follow the arrow to reach the probable cause of the failure.

Consider the contents of the questions and consult the table while proceeding to Steps 2 and 3 to grasp the true cause.

1. Steering does not work – Symptom [Example]

Ask the operator about the following points.

- Did the steering suddenly stop working? → Breakage in steering equipment
- Had the steering gradually been becoming heavy? → Internal wear of steering equipment, defective seal

Step 2. Checks before troubleshooting

Before starting the main troubleshooting and measuring the hydraulic pressure, first check the Checks before Starting items, and check for oil leakage and loose bolts. These checks may avoid time wasted on unnecessary troubleshooting.

The items given under Checks before Starting are items which must be considered particularly for that symptom before starting troubleshoting.

Checks before starting [Example]

- Is the oil level and type of oil in the hydraulic tank correct?
- Is there any leakage of oil from the steering control valve?

Step 3 Using cross-reference table

1) Operate the machine to carry out the checks in the troubleshooting item column.
   Mark the items where the results match the symptom.
   * It is not necessary to follow the troubleshooting checks in order; follow an order which is easiest to carry out troubleshooting.
2) Find the appropriate cause from the cause column. If the symptom appears, the ○ marks on that line indicate the possible causes. (For item No. 2 in the table on the right, the possible causes are **c** or **e**.)
   If there is only one ○:
   Carry out the other troubleshooting items (where the same cause is marked with ○), check if the symptom appears, then repair.
   If there are two ○s:
   Go on to Step 3) to narrow down the possible causes.

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[Example 1]

No.	Problems / Remedy
1	Steering does not work to the left or right.
2	Same as Item 1, but abnormality in actuation of work equipment.
3	Steering can only be operated to one side.
4	Steering wheel is heavy and cannot be turned.

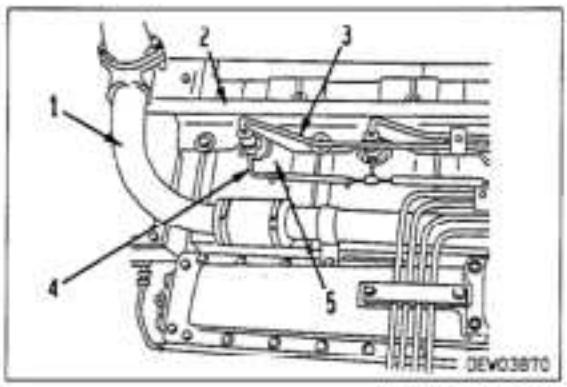
[Example 2]

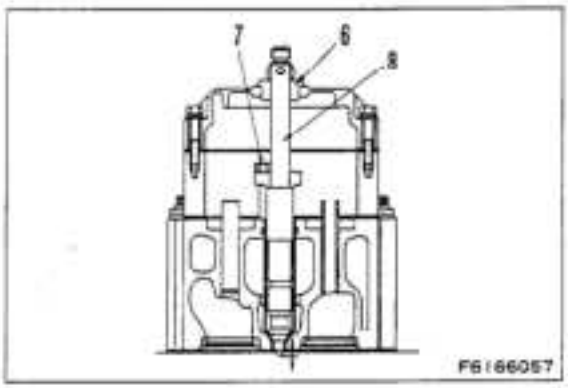
	Cause				
Remedy / Problems	a	b	c	d	e
	X	C	⇑ X	A	⇑ X
1	○	○	○	○	
2	– – –	– – –	●	– – –	●
3		○		○	
4	○			○	
5		○			○

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REMOVAL OF NOZZLE HOLDER ASSEMBLY

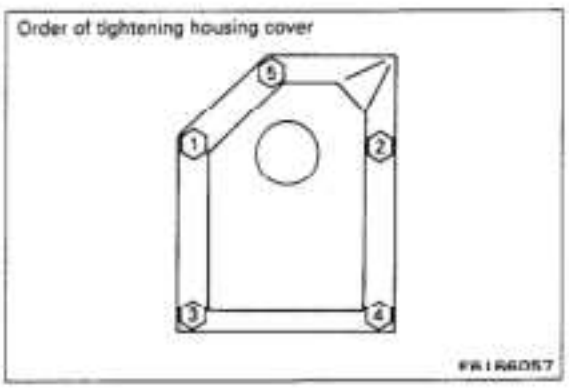
1. Remove Komaclone tube (1) and fire prevention cover (2).
2. Remove fuel injection tube (3) and spill tube (4).
3. Remove rocker arm housing cover (5).
   * Remove rubber packing (6) from the rocker arm housing cover.
   * When assembling again, replace the rubber packing with a new part.
4. Remove bolt (7), then remove nozzle holder assembly (8).





INSTALLATION OF NOZZLE HOLDER ASSEMBLY

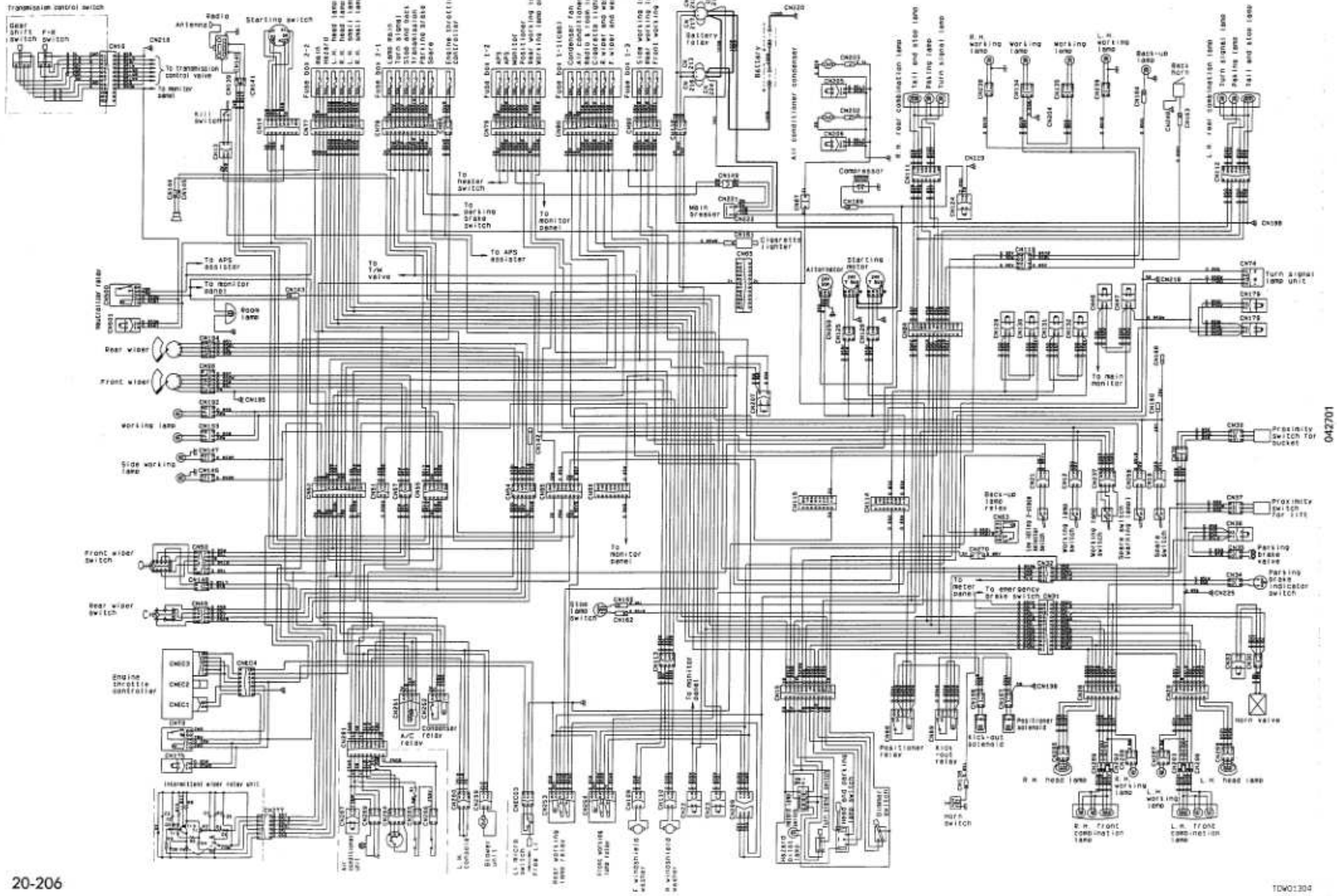
1. Install nozzle holder assembly (8) with bolt (7).
   Bolt : (Target) 27 Nm (2.75 kgm)
   : (Range) 24.5 – 29.4 Nm (2.5 – 3.0 kgm)
2. Replace rubber packing (6) with a new part, then install rocker arm housing cover (5).
   Bolt : (Target) 31.9 Nm (3.25 kgm)
   : (Range) 29.4 – 31.9 Nm (3.0 – 3.5 kgm)
3. Install spill tube (4) and fuel injection tube (3).
   Spill tube:
   (Target) 15.7 Nm (1.6 kgm)
   (Range) 13.7 – 17.7 Nm (1.4 – 1.8 kgm)
   Sleeve nut:
   (Target) 53.9 Nm (5.5 kgm)
   (Range) 49 – 58.0 Nm (5 – 6 kgm)
4. Install fire prevention cover (2) and Komaclone tube (1).



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ELECTRICAL CIRCUIT SYSTEM



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