SEN04670-05

Shop Manual

WHEEL LOADER **WA50-6**

SERIAL NUMBERS 60001 and up

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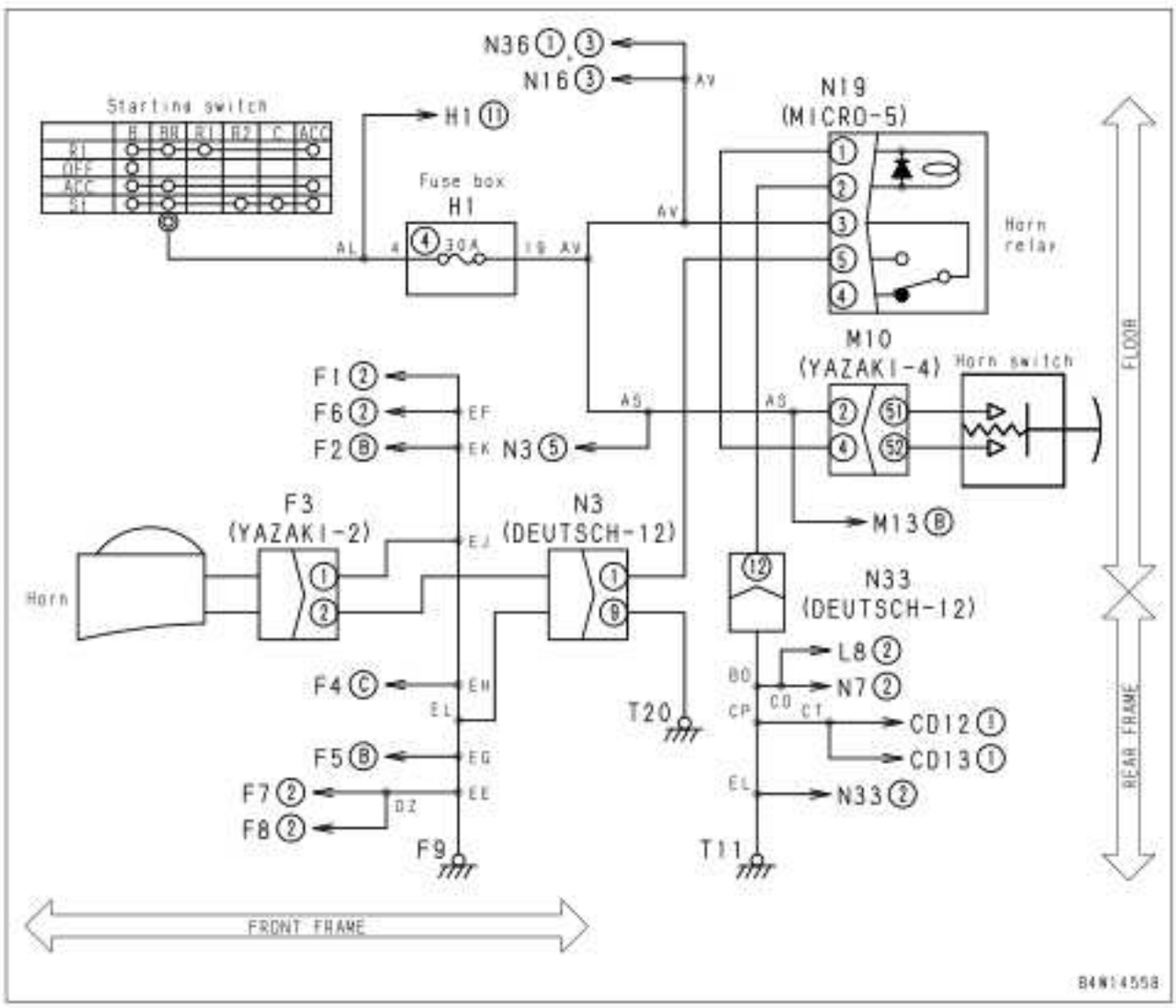
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Machine model name				WA50-6
Serial No.				60001 and up
Brake	Main	Braking method		Transmission output shaft brake
		Type of brake		Enclosed wet multiple disc type
		Drive method		Mechanical
		Operating method		Foot pedal
	Parking	Braking method		Transmission output shaft brake
		Type of brake		Enclosed wet multiple disc type
		Drive method		Mechanical
		Operating method		Hand lever
Steering	Steering method			Articulated chassis type
	Driving method			Fully hydraulic power steering (Orbit-roll)
Hydraulic equipment	Hydraulic pump	Work equipment and steering pump		
		• Type		Gear type
		• Delivery	cm³/rev	20.4
		Charge pump		
		• Type		Gear type
		• Delivery	cm³/rev	9.6
	Cylinder	Steering cylinder: Type		Double-acting piston type
		Steering cylinder: Cylinder bore	mm	65
		Steering cylinder: Piston rod outside diameter	mm	35
		Steering cylinder: Stroke	mm	230
		Steering cylinder: Max. distance between centers of pins	mm	711
		Steering cylinder: Min. distance between centers of pins	mm	481
		Lift cylinder: Type		Double-acting piston type
		Lift cylinder: Cylinder bore	mm	75
		Lift cylinder: Piston rod outside diameter	mm	45
		Lift cylinder: Stroke	mm	456
		Lift cylinder: Max. distance between centers of pins	mm	1,283
		Lift cylinder: Min. distance between centers of pins	mm	827
		Bucket cylinder: Type		Double-acting piston type
		Bucket cylinder: Cylinder bore	mm	75
		Bucket cylinder: Piston rod outside diameter	mm	45
		Bucket cylinder: Stroke	mm	353
		Bucket cylinder: Max. distance between centers of pins	mm	1,212
		Bucket cylinder: Min. distance between centers of pins	mm	859

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Possible causes and standard value in normal state	Causes		Standard value in normal state/Remarks on troubleshooting		
			★ If horn does not stop sounding, perform following troubleshooting. ★ Prepare with starting switch OFF, then turn starting switch ON and carry out troubleshooting.		
	7	Hot short (Contact with 12 V circuit) in wiring harness	Between wiring harness M10 (female) (4) – N19 (female) (1) and ground	Voltage	Max. 1 V
			Between wiring harness N19 (female) (5) – F3 (female) (2) and ground	Voltage	Max. 1 V

Related circuit diagram



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Method of using troubleshooting charts

The troubleshooting chart consists of the "questions", "check items", "causes", and "troubleshooting" blocks.
The questions and check items are used to pinpoint high probability causes by simple inspection or from phenomena without using troubleshooting tools.
Next, troubleshooting tools or direct inspection are applied to check the narrowed causes in order from the most probable one to make final confirmation according to the troubleshooting procedure.

Questions

Items to be drawn from the user or operator.
They correspond to **A** and **B** in the chart on the right.
The items in **A** are basic ones.
The items in **B** can be drawn from the user or operator, depending on their level.

Check items

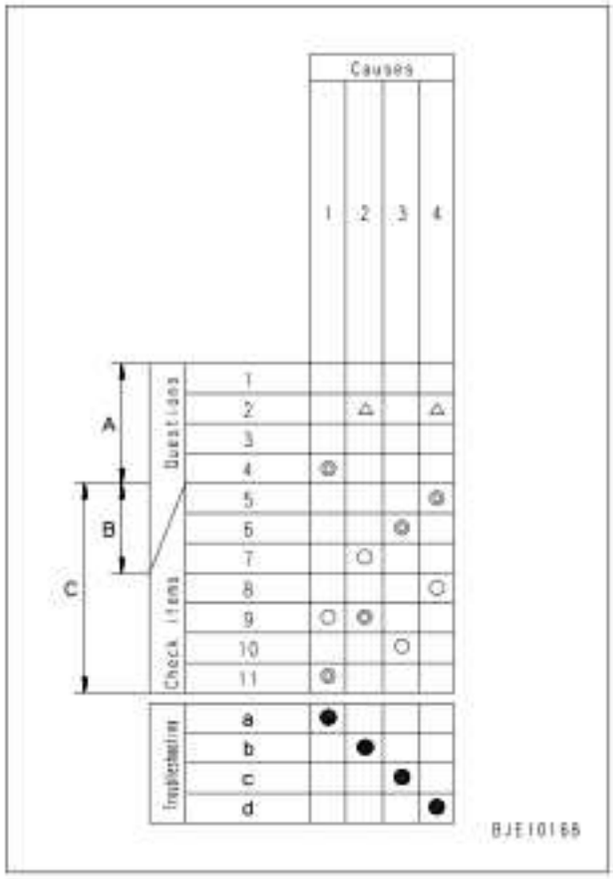
Items to be simply checked by the serviceman to narrow down causes.
They correspond to **C** in the chart on the right.

Causes

Items to be narrowed from the questions and check items.
The serviceman narrows down the probable causes from **A**, **B**, and **C**.

Troubleshooting

Items to finally verify whether the narrowed down causes are undoubtedly the real causes using the troubleshooting tools and direct inspections.



Items listed in the [Questions] and [Check items] and related to the [Causes] are marked with △, ○, or ◎.

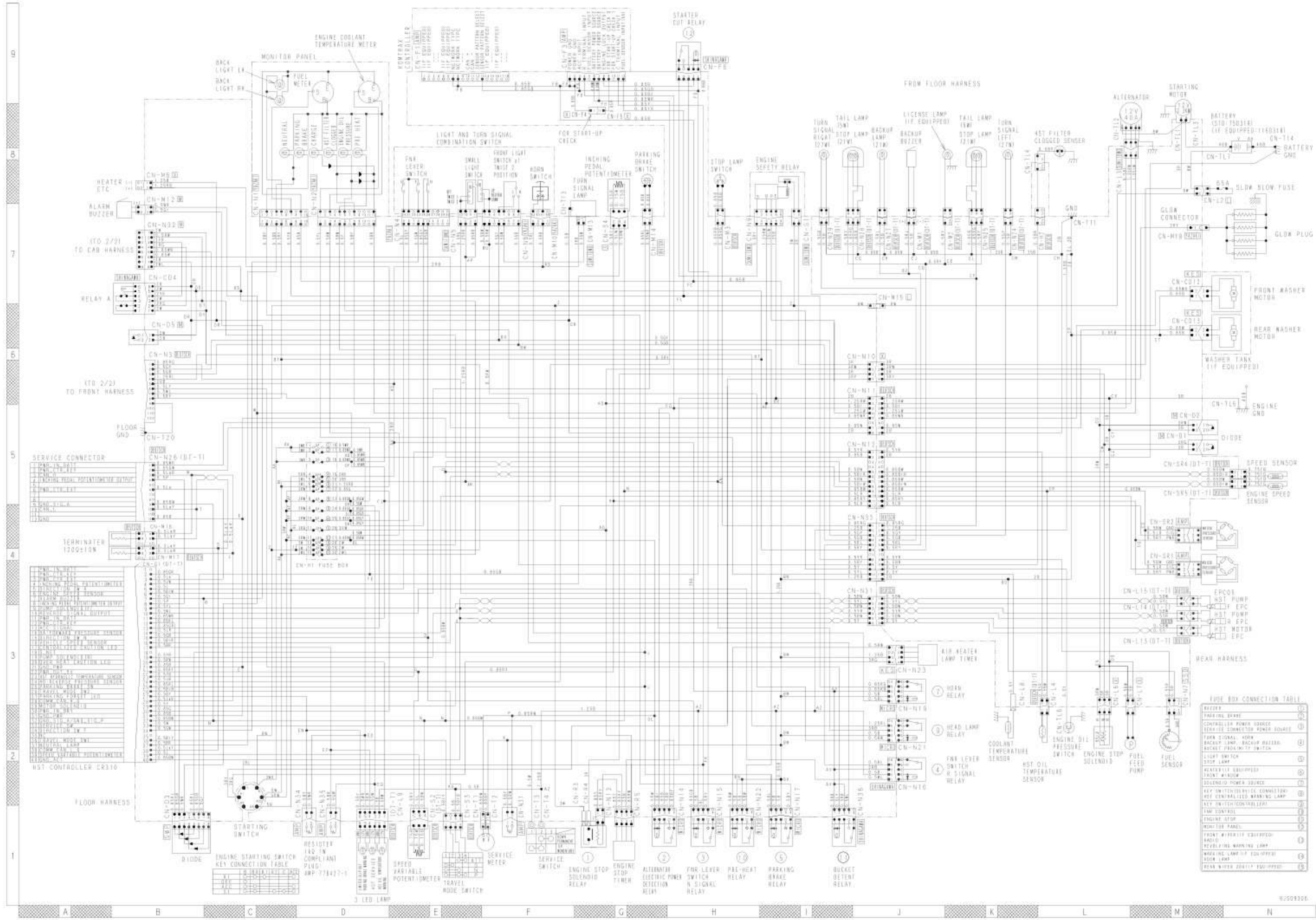
- △ : Causes to be referred to for questions and check items
- ○ : Causes related to questions and check items
- ◎ : Causes highly probable among ones marked with ○

★ When narrowing the "causes", apply the items marked with ◎ before those marked with ○.
When narrowing the causes, do not apply the items marked with △. (If no items have other marks and the causes cannot be narrowed, however, you may apply them.)

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Electrical circuit diagram (1/2)

★ This figure covers the equipment and devices that are unavailable as optional items in some areas.



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