521G
Tier 4B (final)
Wheel Loader

SERVICE MANUAL

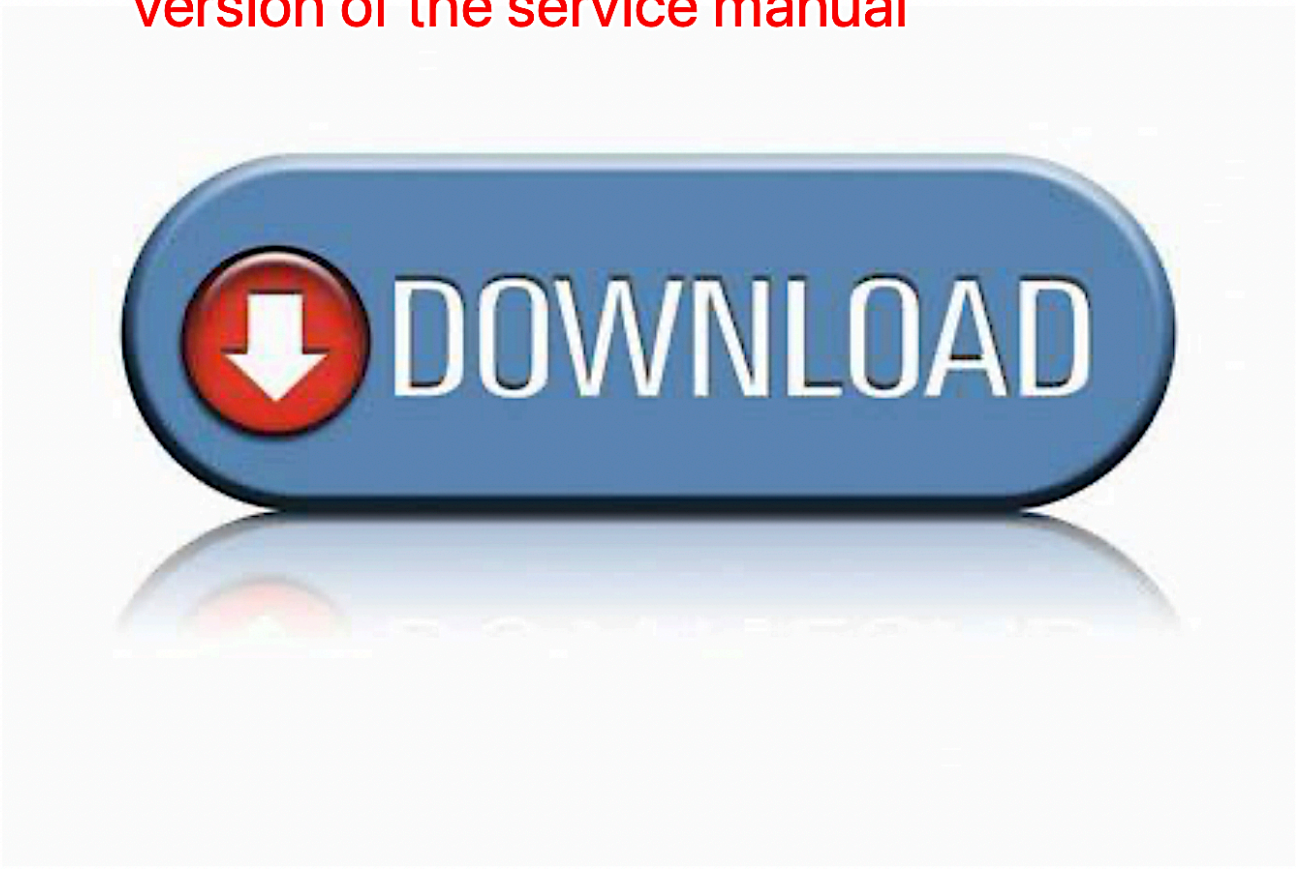
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CASE CONSTRUCTION

SERVICE MANUAL

521G WHEEL LOADER XR-EH, NEW CAB TIER4B NA
521G WHEEL LOADER XT-EH, NEW CAB TIER4B NA
521G WHEEL LOADER ZBAR-EH, NEW CAB TIER4B NA

Click on the image link below for the full version of the service manual



Contents

INTRODUCTION

Engine 10

[10.001] Engine and crankcase 10.1

[10.216] Fuel tanks 10.2

[10.202] Air cleaners and lines 10.3

[10.500] Selective Catalytic Reduction (SCR) exhaust treatment 10.4

[10.400] Engine cooling system 10.5

[10.414] Fan and drive 10.6

[10.310] Aftercooler 10.7

[10.304] Engine lubrication system 10.8

Transmission 21

[21.113] Powershift transmission 21.1

[21.135] Powershift transmission external controls 21.2

[21.155] Powershift transmission internal components 21.3

Four-Wheel Drive (4WD) system 23

[23.314] Drive shaft 23.1

Front axle system 25

[25.100] Powered front axle 25.1

[25.102] Front bevel gear set and differential 25.2

[25.108] Final drive hub, steering knuckles, and shafts 25.3

[25.310] Final drives 25.4

Rear axle system 27

[27.100] Powered rear axle 27.1

[27.106] Rear bevel gear set and differential 27.2

[27.120] Planetary and final drives 27.3

[27.124] Final drive hub, steering knuckles, and shafts 27.4

Brakes and controls 33
[33.202] Hydraulic service brakes 33.1
[33.110] Parking brake or parking lock 33.2
Hydraulic systems 35
[35.000] Hydraulic systems 35.1
[35.300] Reservoir, cooler, and filters 35.2
[35.106] Variable displacement pump 35.3
[35.359] Main control valve 35.4
[35.357] Pilot system 35.5
[35.204] Remote control valves 35.6
[35.752] Hydraulic fan drive cooling system 35.7
[35.701] Front loader arm hydraulic system 35.8
[35.723] Front loader bucket hydraulic system 35.9
[35.734] Tool quick coupler hydraulic system 35.10
Frames and ballasting 39
[39.100] Frame 39.1
Steering 41
[41.200] Hydraulic control components 41.1
[41.216] Cylinders 41.2
[41.910] Auxiliary steering 41.3
Wheels 44
[44.511] Front wheels 44.1
[44.520] Rear wheels 44.2
Cab climate control 50
[50.200] Air conditioning 50.1
Electrical systems 55
[55.000] Electrical system 55.1
[55.100] Harnesses and connectors 55.2

[55.201] Engine starting system 55.3
[55.301] Alternator 55.4
[55.302] Battery 55.5
[55.988] Selective Catalytic Reduction (SCR) electrical system 55.6
[55.989] Exhaust Gas Recirculation (EGR) electrical system 55.7
[55.530] Camera 55.8
[55.DTC] FAULT CODES 55.9
Front loader and bucket 82
[82.100] Arm 82.1
[82.300] Bucket 82.2
Platform, cab, bodywork, and decals 90
[90.150] Cab 90.1
[90.105] Machine shields and guards 90.2

INTRODUCTION

Contents

INTRODUCTION

Safety rules 3
Personal safety 4
Basic instructions - Important notice regarding equipment servicing 13
Basic instructions - How to use the maintenance standard and precautions 14
Basic instructions - Precaution for disassembly and assembly 16
Basic instructions - Electrical equipment precautions 18
Consumables - Biodiesel Fuel 19
Consumables 20
Hydraulic contamination 21
Product identification 22
Product identification - Identification of machine components 23

Safety rules

Personal safety



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible death or injury.

Throughout this manual you will find the signal words DANGER, WARNING, and CAUTION followed by special instructions. These precautions are intended for the personal safety of you and those working with you.

Read and understand all the safety messages in this manual before you operate or service the machine.

⚠ DANGER indicates a hazardous situation that, if not avoided, will result in death or serious injury.

⚠ WARNING indicates a hazardous situation that, if not avoided, could result in death or serious injury.

⚠ CAUTION indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

FAILURE TO FOLLOW DANGER, WARNING, AND CAUTION MESSAGES COULD RESULT IN DEATH OR SERIOUS INJURY.

Machine safety

NOTICE: *Notice indicates a situation that, if not avoided, could result in machine or property damage.*

Throughout this manual you will find the signal word Notice followed by special instructions to prevent machine or property damage. The word Notice is used to address practices not related to personal safety.

Information

NOTE: *Note indicates additional information that clarifies steps, procedures, or other information in this manual.*

Throughout this manual you will find the word Note followed by additional information about a step, procedure, or other information in the manual. The word Note is not intended to address personal safety or property damage.

Personal safety

Carefully read this Manual before proceeding with maintenance, repairs, refuelling or other machine operations.

Repairs have to be carried out only by authorized and instructed staff; specific precautions have to be taken when grinding, welding or when using mallets or heavy hammers.

Non-authorized persons are not allowed to repair or carry out maintenance on this machine. Do not carry out any work on the equipment without prior authorization.

Ask your employer about the safety instructions in force and safety equipment.

Nobody should be allowed in the cab during machine maintenance unless he is a qualified operator helping with the maintenance work.

If it is necessary to move the equipment to carry out repairs or maintenance, do not lift or lower the equipment from any other position than the operator's seat.

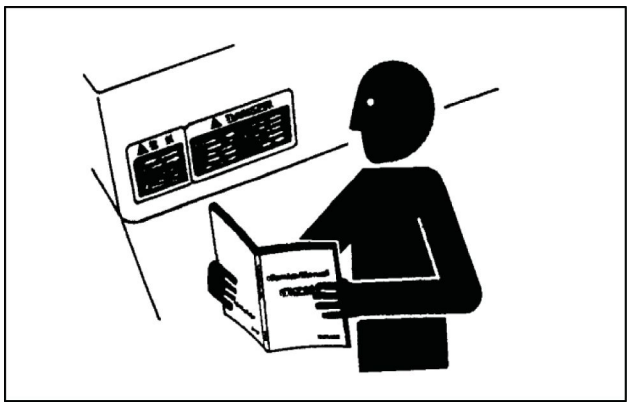
Never carry out any operation on the machine when the engine is running, except when specifically indicated.

Stop the engine and ensure that all pressure is relieved from hydraulic circuits before removing caps, covers, valves, etc.

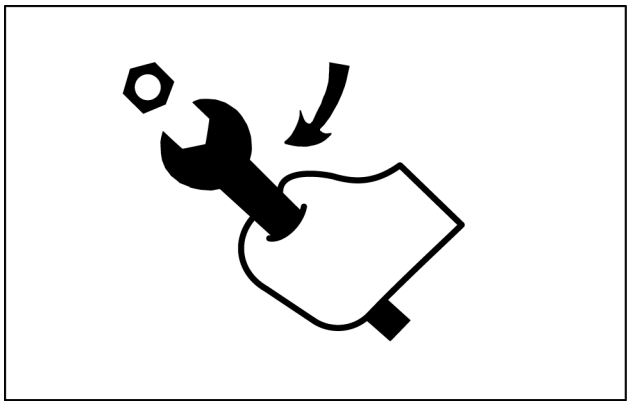
All repair and maintenance operations should be carried out with the greatest care and attention.

Service stairs and platforms used in a workshop or in the field should be built in compliance with the safety rules in force.

Any functional disorders, especially those affecting the safety of the machine, should therefore be rectified immediately.



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TULI12WEX2005AA 2

⚠ DANGER

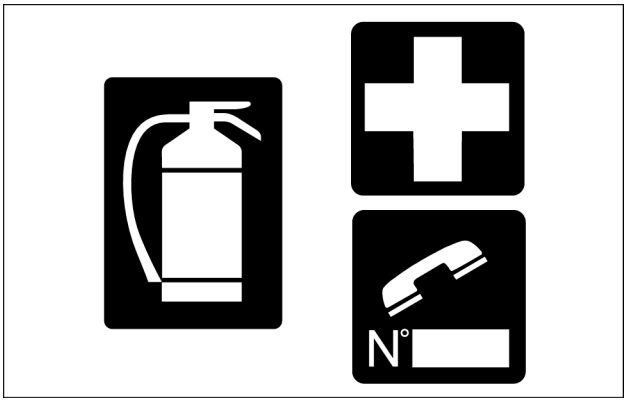
Unexpected movement!
Make sure parking brake is applied. Secure machine with wheel chocks.
Failure to comply will result in death or serious injury.

D0013A

Before performing any work on the machine, attach a maintenance in progress tag. This tag can be applied on the left-hand control lever, safety lever or cab door.

Emergency

Be prepared for emergencies. Always keep a fire extinguisher and first aid kit readily available. Ensure that the fire extinguisher is serviced in accordance with the manufacturer's instructions.



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Equipment

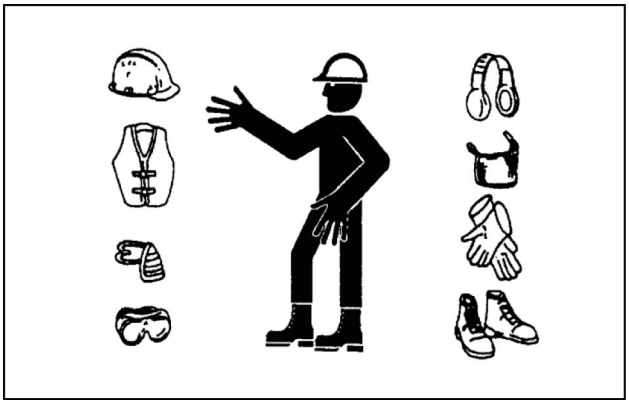
Wear close fitting clothing and safety equipment appropriate for the job:

- Safety helmet
- Safety shoes
- Heavy gloves
- Reflective clothing
- Wet weather clothing

If working conditions require, the following personal safety equipment should be on hand:

- Respirators (or dust proof masks)
- Ear plugs or acoustic ears protections
- Goggles with lateral shield or masks for eye protection

Do not wear rings, wristwatches, jewelry, unbuttoned or flapping clothing such as ties, torn clothes, scarves, open jackets or shirts with open zips which could get caught into moving parts.



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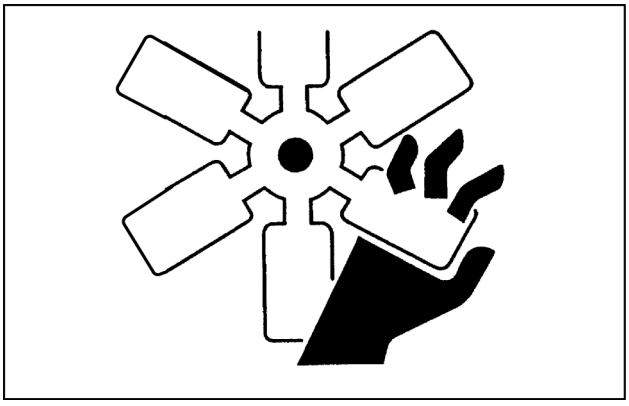
Engine - Radiator

Never leave the engine running in enclosed spaces without proper ventilation which is able to evacuate toxic exhaust gases- Keep the exhaust manifold and tube free from combustible materials.

Do not refuel with the engine running, especially if hot, as this increases fire hazard in case of fuel spillage.

Never attempt to check or adjust the belts when the engine is running.

Never lubricate the machine with the engine running.



TULI12WEX2009AA 5