

Articulated Truck 325

Service Manual

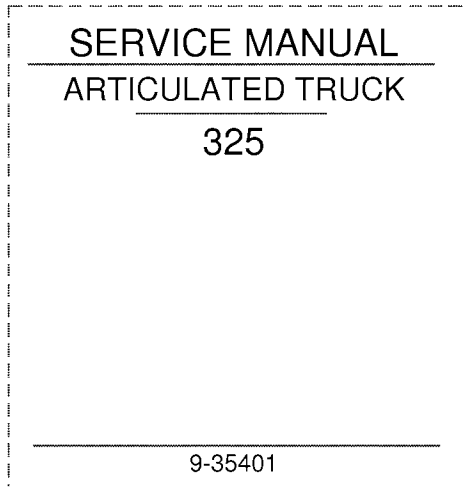
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CASE

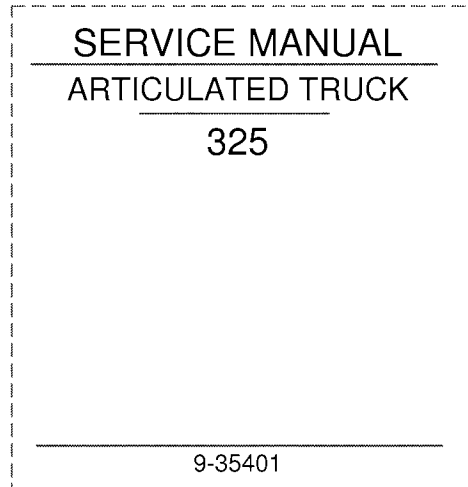
NOTE: CASE Company reserves the right to make changes in the specification and design of the machine without prior notice and without incurring any obligation to modify units previously sold.

The description of the models shown in this manual has been made in accordance with the technical specifications known as of the date of design of this document.



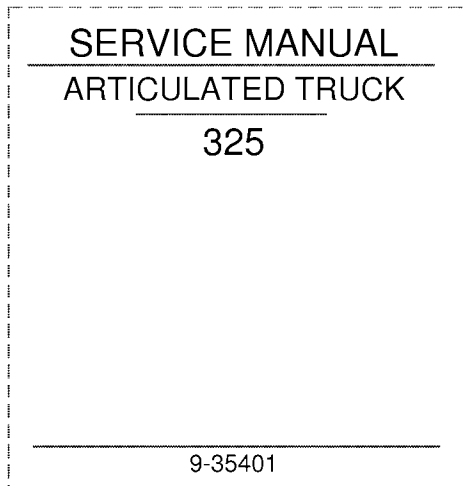
1. Trim along dashed line.
2. Slide into pocket on Binder Spine.

TYPE 1-4



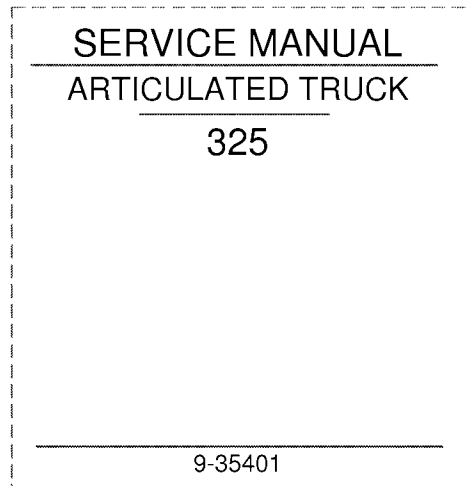
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TYPE 1-4

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INTRODUCTION

This manual contains a series of repair procedures relating to the articulated trucks.

Read this manual carefully before carrying out any repairs on the vehicle.

Scrupulous observance of the rules and instructions herein will ensure that repairs are carried out safely and efficiently.

GENERAL INSTRUCTIONS

INTENDED USE

The vehicle described in this manual was designed and made for the following use:

1. To haul excavation material in general.
2. To haul material resulting from demolition on industrial or civilian structures in general.
3. To haul material required for construction and/or industrial or civilian structures in general.

The vehicle must be used for such purposes.

The vehicle must be in proven and checked conditions of efficiency for the said use, in full consideration of the envisaged criteria and restrictions of use.

Specific care must be paid to the following aspects:

1. Do not exceed the payloads specified by the manufacturer.
2. Do not exceed the gradients specified by the manufacturer.
3. Do not drive the vehicle on loose terrain which can compromise stability.
4. Do not use the vehicle to remove objects or products.
5. Use the vehicle paying special care to the safety instructions and specifications.
6. Carry out the ordinary maintenance interventions specified by the manufacturer.
7. Carry out the extraordinary maintenance interventions which are required, specifically those related to safety of use.

IMPORTANT: *The manufacturer declines liability for injury to persons and for damage to the vehicle and/or to the transported goods in the event of other use or use in other conditions than those specified.*

VEHICLE REPAIR SERVICEPERSONNEL

Any repairs to the vehicle must be carried out exclusively by qualified repair servicepersonnel with the necessary ability and technical knowledge.

Vehicle servicepersonnel must:

1. Have the operative skills required for construction site vehicle maintenance.
2. Be fully aware of all appropriate safety instructions and precautions.

The servicemen must be made able to work in total safety by means of suitable training periods or courses, so that they are fully aware of the rules of professional conduct that must be followed during repairs to the vehicle.

The direct reporting manager must ensure respect of general safety instructions, specifically those contained in this handbook.

The manager will also assess the suitability of operating personnel, in terms of technical skills and psychological-physical conditions.

WASTE DISPOSAL

Collect and properly dispose of replaced material (brake pads, filters, etc.) and waste material, resulting from maintenance operations and repairs (material soaked in fuel, oil, powder, etc.) according to the laws in force, separately from normal waste.

Collect and dispose of used lubricants and fluids, according to the laws in force.

Collect and dispose of used batteries according to the laws in force.

Drain and recharge the air conditioning system using the specific devices, according to the laws in force.

Furthermore, you are advised to separate ferrous materials, light alloys and waste plastic materials for separate recycling.

SCRAPPING THE VEHICLE

The vehicle must be scrapped according to the laws in force, at the end of the vehicle's working life.

Demolish and recycle the vehicle according to the laws in force.

The vehicle must be demolished by expert personnel using suitable working tools to ensure the required safety conditions.

Demolish the vehicle by separating and collecting the various materials by type to allow recycling and disposal.

It is forbidden to abandon an obsolete vehicle at a quarry, building site, dump or in the environment.

Specific attention must be devoted to certain components and substances which can pollute the environment and/or cause injuries, i.e.:

1. Presence of fuels, coolant fluids, hydraulic oil and lubricating oils on board.
2. Presence of batteries and respective electrolyte;
3. Presence of pressurized gas (tires, suspension components, air conditioner).
4. Presence of solid polluting materials (tires, brake pads, plastic parts, filters) or hazardous materials (glass, windows).

Dispose of these materials according to the laws in force.

GENERAL OPERATING RULES

PRE-DISASSEMBLY PREPARATION

Cleaning before bringing the vehicle into the service shop

Remove mud and dirt completely before bringing the vehicle into the service shop. Carrying mud and dirt into the service shop impedes cleaning operations when disassembling and increases the possibility of contamination of parts during reassembly.

Preliminary survey before disassembly

Before disassembly, make an accurate preliminary survey and make a note of the results. This will save unnecessary labor and component costs and will be useful to give advice to the user to prevent problems in the future.

In particularly:

1. Check the type and number of the machine and hourmeter reading.
2. Check the reason for disassembly.
3. Check the symptom, location and cause of the problem and make another visual check if necessary.
4. Check for any contamination of the air cleaner and air leakage.
5. Check the characteristics of the fuel being used, contamination of the fuel filter and for any water in the fuel, loss of fuel, deformed pipes.
6. Check the oil level, oil contamination (viscosity, color and impurity) and the absence of any water in the oil, oil leakage and oil filter restriction.
7. Check the tension of the V belts.
8. Check for any faulty components or loosened connections.

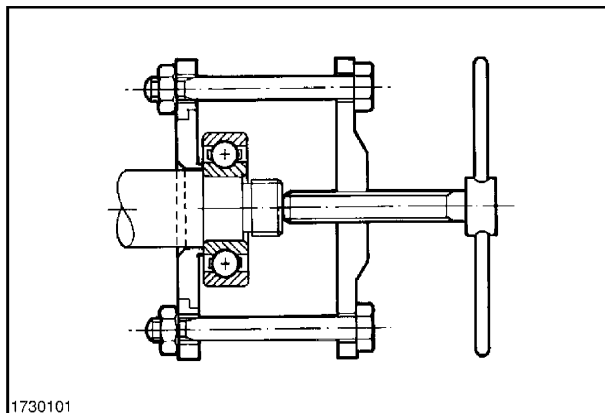
Disassembly preparation

To save unnecessary labor, make sure that the equipment, area and space on the shelves is available, according to the specific type of disassembly to be carried out, and clean the area beforehand.

DURING DISASSEMBLY**Removal of parts**

1. Before removing parts, check the assembly conditions and front/rear, left/right and up/down relationship, along with the removal procedures.
2. Make sure there are the relevant matching marks indicating the mounting positions and if necessary mark components clearly to avoid errors during reassembly.
3. Use the special disassembly tools where specified.
4. If it is difficult to remove a part even after the mounting screws have been removed, do not force it, but check the part to find where the problem lies.
5. All units, especially those which look alike, should be placed in order and tagged or marked when necessary.
6. Standard parts such as nuts and screws are to be kept, noting the assembly position and the quantity.
7. Shims and washers used to adjust clearances are to be kept so they can be re-assembled in the same conditions.
8. During disassembly, carefully inspect for any seizure, interference or contact with moving parts to find the cause of the problem.
9. When measuring, record all the values, such as end clearances, backlash or projection which only have significance if measured during disassembly.
10. Keep the same adjustment values for rods as far as possible. If it is necessary to disassemble adjustment devices, measure the length before disassembly and make a note of the value so as to be able to reassemble in identical conditions.
11. If tapered or fitted parts that should fit tightly come out easily, inspect the parts involved to find the cause so that the same problem does not occur again when reassembling.

12. Use an appropriate jig and do not try to force them.



1

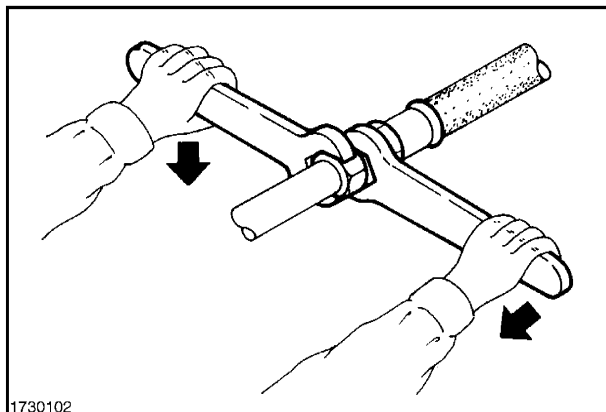
Disconnecting hydraulic lines



WARNING

Operate each control lever several times to relieve any pressure in the lines to be removed. Open the air bleeder cap on the hydraulic tank.

1. To disconnect a rigid tube from another, or a rigid tube from a hose, grasp the male end with a wrench and loosen the female nut side.
2. Plug the end of the removed tube or hose and the oil port on the part, to prevent foreign matter from entering.
3. Since the tube or hose to be removed contains oil, pour this off into a suitable container.
4. Clean up any oil spills in the working area.
5. Attach a tag with an appropriate marking to each tube, hose and hydraulic component line connection for easier reassembly.



2

AFTER DISASSEMBLY



When using detergents, make sure you fully understand the use instructions and take care not to bring them into contact with your eyes or skin. Dispose of used detergents correctly.

Cleaning

1. Clean the disassembled parts and arrange them in order. Completely remove sludge and dust from the oil ports of each part.
2. To clean more efficiently, divide the detergent into two containers; one to remove the dirt and one for finishing. When cleaning more significant parts, divide the containers further to avoid using dirty detergent.
3. When cleaning large castings, such as the cylinder head or block, immerse them in a container for 5 to 10 minutes with a pH 10-12 detergent, at a temperature of 50°C to 70°C (122 to 158°F), then rinse thoroughly.

Rust and dust prevention

1. Cover clean parts to avoid rusting.
2. Place caps on the ends of tubes and hoses.
3. If it will be some time before assembly, use rust inhibitor.

DURING ASSEMBLY

Installing the parts

1. Before starting to assemble, clean all the components and repair any damage. Dirt and dust have adverse effects on moving parts and can shorten the machine life, so take all precautions to limit their penetration.
2. Before assembly, remove the layer of rust inhibitor if present on new parts.
3. Parts with matching marks are to be mounted so that the marks are correctly aligned.
4. Use a press and appropriate tools when installing bearings, bushings, oil gaskets etc. When mounting special parts, use the specific special tools.
5. Coat the surface of press-fit parts with molybdenum disulphate grease or other specific lubricant, as prescribed.