



Disassembly & Assembly

D4D Tractor Engine

7R1 - UP
47H1 - UP
49J1 - UP

59J1 - UP
60J1 - UP
61J1 - UP

65J1 - UP
66J1 - UP
69K1 - UP

74U1 - UP
82J1 - UP
83J1 - UP

97F1 - UP



INTRODUCTION

This publication has instructions and procedures for the subject on the front cover. The information, specifications, and illustrations in this publication are on the basis of information that was current at the time this issue was written.

The "Alphabetical Index" is a list of all components and service operations in this manual section. It gives page numbers and also the operations numbers as found in the "Service Index".

The "Service Index" is a list of all component operations found in this manual section. All operations in the column "Component Operation" are removal and installation instructions, unless other descriptions are given for the operation. The arrangement of the components in this list is by location on the machine or engine. The column "Other Needed Operations" gives the number of all other component operations that are necessary to do the respective job.

Correct operation, maintenance, test and repair procedures will give this product a long service life. Before starting a test, repair or rebuild job, the serviceman must read the respective sections of the Service Manual, and know all the components he will work on.

Your safety, and the safety of others, is at all times very important. When you see this symbol  or this symbol  in the manual, you must know that caution is needed for the procedure next to it. The symbols are warnings. To work safely, you must understand the job you do. Read all instructions to know what is safe and what is not safe.

It is very important to know the weight of parts. Do not lift heavy parts by hand. Use a hoist. Make sure heavy parts have a good stability on the ground. A sudden fall can cause an accident. When lifting part of a machine, make sure the machine has blocks at front and rear. Never let the machine hang on a hoist, put blocks or stands under the weight.

When using a hoist, follow the recommendation in the manual. Use correct lift tools as shown in illustrations to get the correct balance of the component you lift. This makes your work safer at all times.

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 **DISCONNECT BATTERIES BEFORE PERFORMING SERVICE WORK**

ALTERNATOR

REMOVE ALTERNATOR

11-1405

1. Remove four bolts (4) from panel (3). Remove two bolts (1) and washers from panel (2). Remove panel (2) and panel (3) (if so equipped).

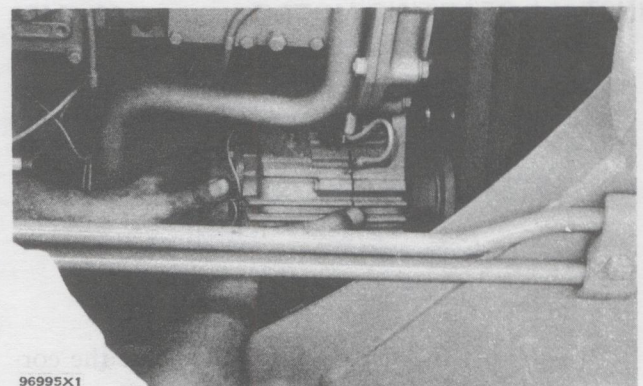
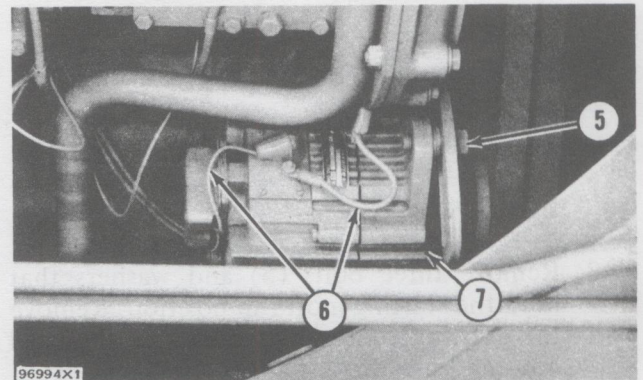
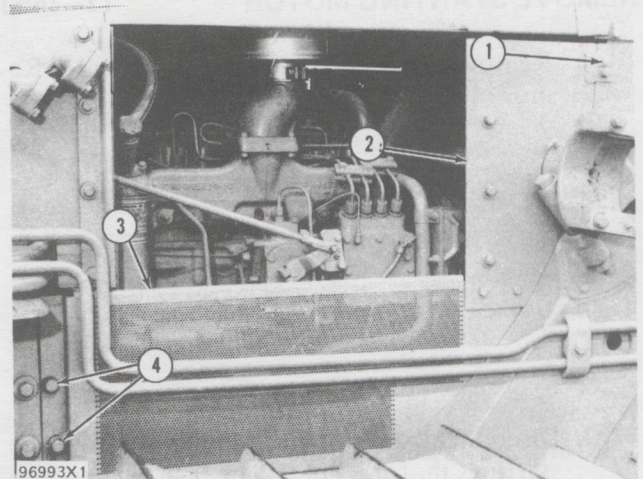
2. Remove wires (6) from the alternator. Put identification on the wires to prevent mixing at installation.

3. Loosen bolt (5). Remove the two bolts and washers that hold the alternator in position. Remove the belts from the pulley on the alternator. Remove alternator (7).

INSTALL ALTERNATOR

12-1405

1. Put the alternator in position on the engine. Install the two bolts and washers that hold the alternator in position.
2. Connect the wires to the correct terminals on the alternator.
3. Put the belt on the pulley of the alternator. Make an adjustment to the belt tension. The movement of a used belt is $7/8$ in. (22 mm) when a force of 25 lb. (11.3 kg) is made halfway between the pulleys. The movement of a new belt is $3/4$ in. (19 mm) when the same force is made halfway between pulleys.
4. Install the two panels (if so equipped).

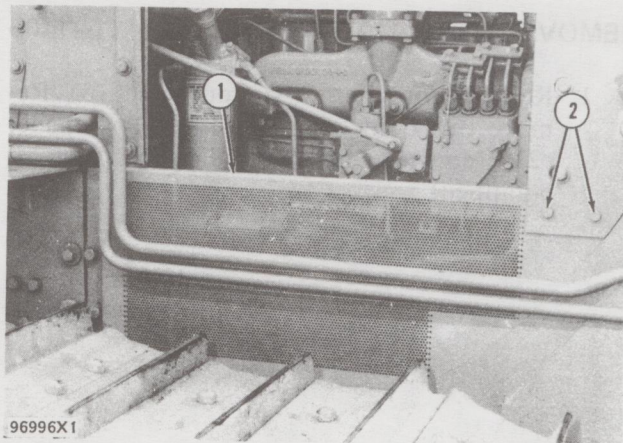


STARTING MOTOR

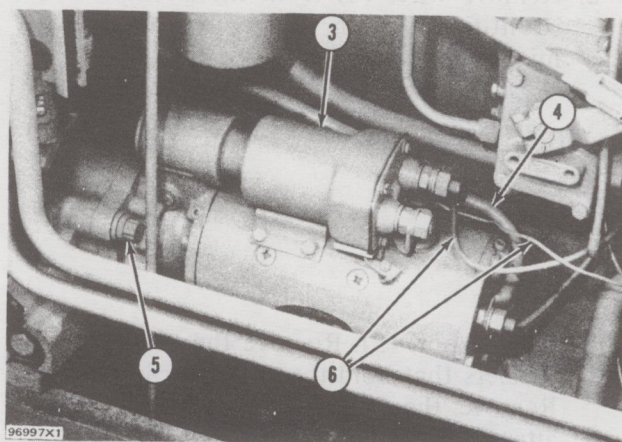
REMOVE STARTING MOTOR

11-1453

1. Remove four bolts (2) from panel (1). Remove the panel (if so equipped).



2. Disconnect wires (6) and cable (4) from the starting motor. Put identification on the wires to prevent mixing at installation.

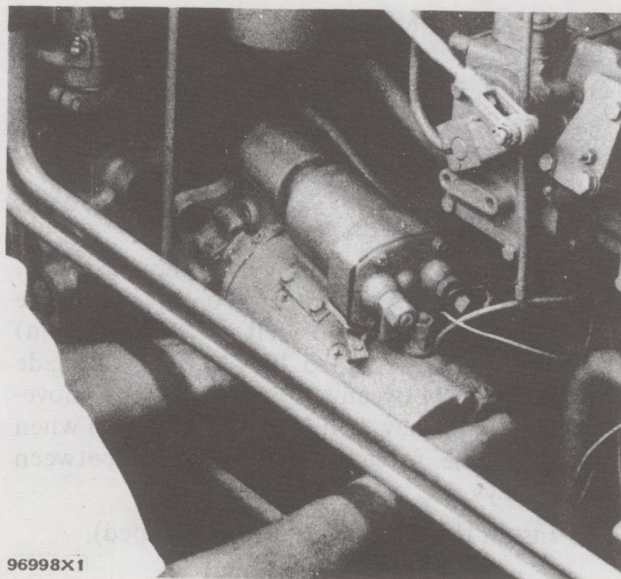


3. Remove three bolts (5) and washers that hold the starting motor in position. Remove the starting motor (3) from the flywheel housing.

INSTALL STARTING MOTOR

12-1453

1. Put the starting motor into position in the flywheel housing. Install the three bolts and washers that hold the starting in position.



2. Connect the wires and the cable to the correct terminals on the starting motor.

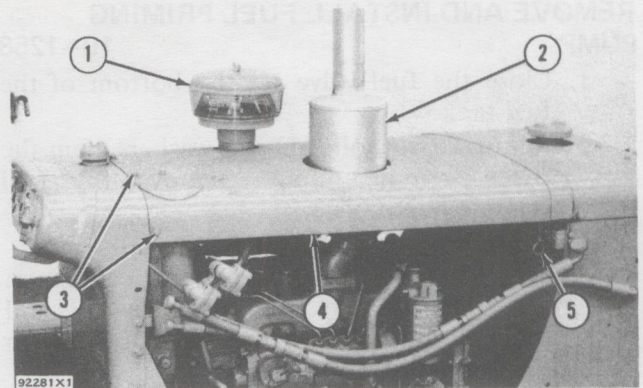
3. Install the panel (if so equipped).

HOOD, AIR CLEANER

REMOVE HOOD

11-7251

1. Loosen the clamp on the precleaner (1). Remove the precleaner.
2. Loosen the clamp on the exhaust pipe. Remove exhaust pipe (2).
3. Remove four bolts (3) and washers from the hood. Disconnect two fasteners (5) from the hood. Remove hood (4).



INSTALL HOOD

12-7251

1. Put the hood in position on the tractor. Connect the two fasteners to the hood. Install the four bolts and washers.

REMOVE AIR CLEANER

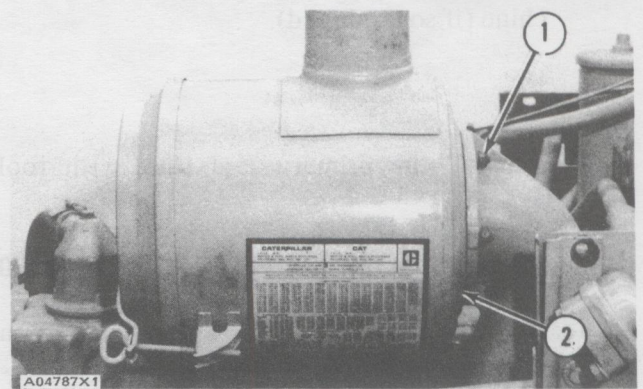
11-1051

start by:

- a) remove hood

1. Remove six nuts (1) and washers from the air cleaner.

2. Remove air cleaner (2).



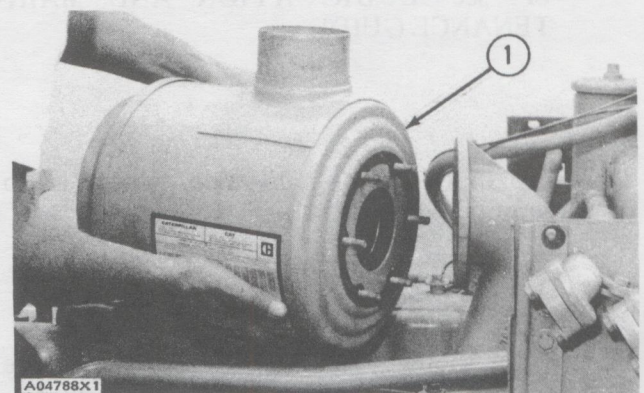
INSTALL AIR CLEANER

12-1051

1. Put air cleaner (1) in position on the pipe.
2. Install the six washers and nuts that hold the air cleaner in position.

end by:

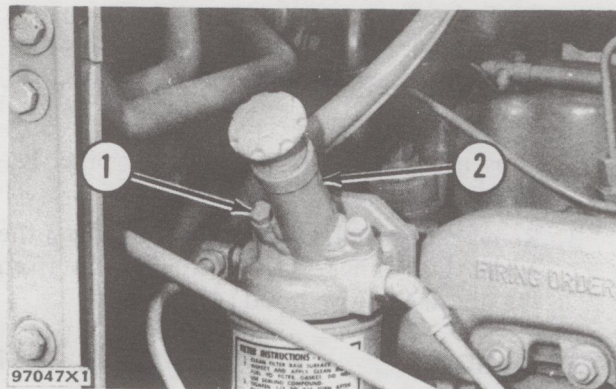
- a) install hood



FUEL PRIMING PUMP, PRIMARY FUEL FILTER

REMOVE AND INSTALL FUEL PRIMING PUMP 10-1258

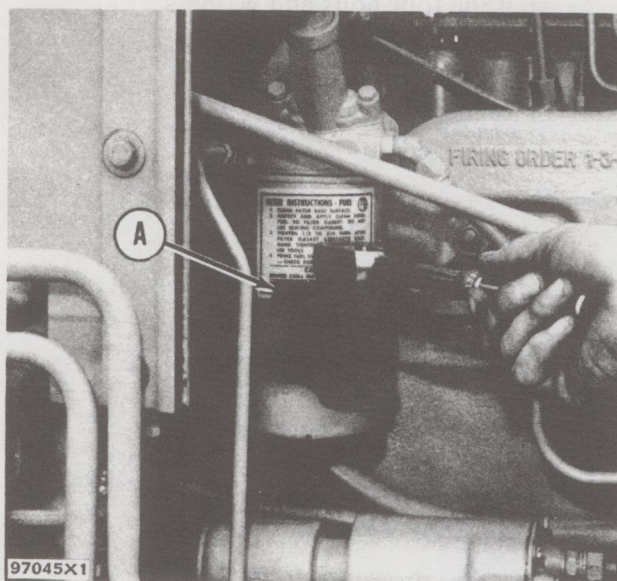
1. Close the fuel valve on the bottom of the fuel tank.
2. Remove two bolts (1) and washers from the fuel priming pump. Remove the fuel priming pump (2).
3. Put a new gasket on the fuel priming pump. Put the fuel priming pump in position on the fuel filter base. Install the two bolts and washers that hold the fuel priming pump in position.
4. Open the fuel valve on the bottom of the fuel tank.



REMOVE PRIMARY FUEL FILTER 11-1260

Tools Needed		A
2P8250	Strap Wrench	1

1. Close the fuel valve on the bottom of the fuel tank.
2. Remove the right side panel from the machine (if so equipped).
3. Remove the primary fuel filter with tool (A).



INSTALL PRIMARY FUEL FILTER 12-1260

1. Put the primary fuel filter (1) in position on the fuel filter base. Follow the instructions on the fuel filter for the correct installation or see LUBRICATION AND MAINTENANCE GUIDE.
2. Install the two right side panel (if so equipped).
3. Open the fuel valve on the bottom of the fuel tank.

