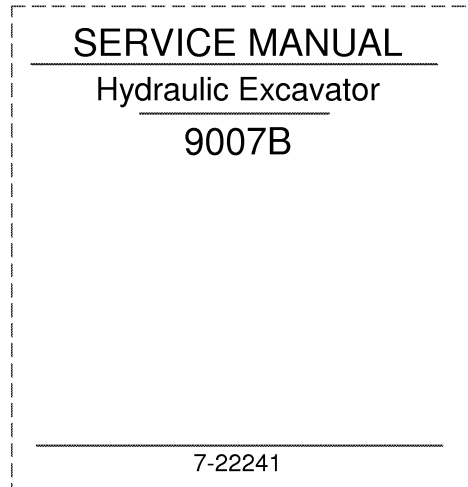


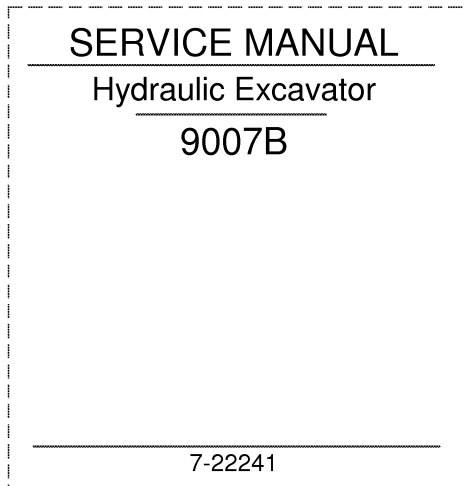
1. Trim along dashed line.
2. Slide into pocket on Binder Spine.

TYPE 1-4



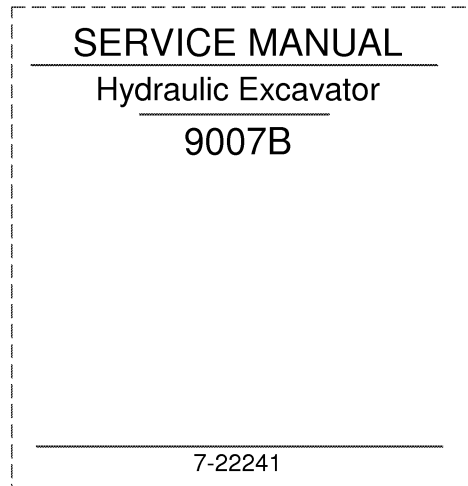
1. Trim along dashed line.
2. Slide into pocket on Binder Spine.

TYPE 1-4



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

TYPE 1-4



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

TYPE 1-4

9007B HYDRAULIC EXCAVATOR

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Sections to be distributed at a later date

Reprinted

Section

1001

SAFETY, GENERAL INFORMATION AND TORQUE SPECIFICATIONS

<https://www.ebooklibonline.com>

Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.

The full manual is available for immediate download.

<https://www.ebooklibonline.com>

GENERAL INFORMATION

Cleaning

Clean all metal parts except bearings, in a suitable cleaning solvent or by steam cleaning. Do not use caustic soda for steam cleaning. After cleaning, dry and put oil on all parts. Clean oil passages with compressed air. Clean bearings in a suitable cleaning solvent, dry the bearings completely and put oil on the bearings.

Inspection

Check all parts when the parts are disassembled. Replace all parts that have wear or damage. Small scoring or grooves can be removed with a hone or crocus cloth. Complete a visual inspection for indications of wear, pitting and the replacement of parts necessary to prevent early failures.

Bearings

Check bearings for easy action. If bearings have a loose fit or rough action replace the bearing. Wash bearings with a suitable cleaning solvent and permit to air dry. **DO NOT DRY BEARINGS WITH COMPRESSED AIR.**

Needle bearings

Before you press needle bearings in a bore always remove any metal protrusions in the bore or edge of the bore. Before you press bearings into position put petroleum jelly on the inside and outside diameter of the bearings.

Gears

Check all gears for wear and damage. Replace gears that have wear or damage.

Oil seals, O-rings and gaskets

Always install new oil seals, O-rings and gaskets. Put petroleum jelly on seals and O-rings.

Shafts

Check all shafts that have wear or damage. Check the bearing and oil seal surfaces of the shafts for damage.

Service parts

Always install genuine Case service parts. When ordering refer to the Parts Catalog for the correct part number of the genuine Case replacement items. Failures due to the use of other than genuine Case replacement parts are not covered by warranty.

Lubrication

Only use the oils and lubricants specified in the Operator's or Service Manuals. Failures due to the use of non-specified oils and lubricants are not covered by warranty.

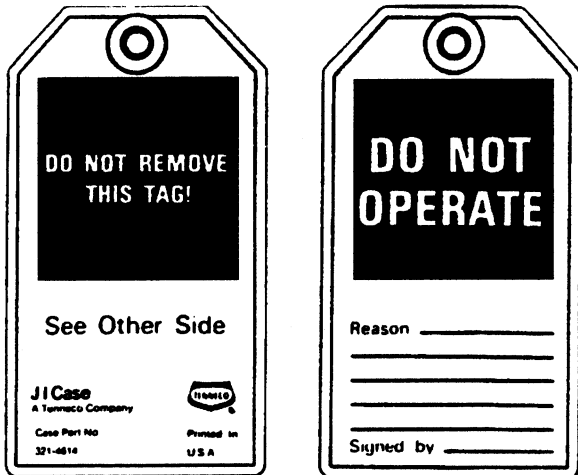
SAFETY



*This symbol means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED.** The message that follows the symbol contains important information about safety. Carefully read the message. Make sure you fully understand the causes of possible injury or death.*

To prevent injury always follow the Warning, Caution and Danger notes in this section and throughout the manual.

Put the warning tag shown below on the key for the keyswitch when servicing or repairing the machine. One warning tag is supplied with each machine. Additional tags Part Number 331-4614 are available from your service parts supplier.



JS00480A



WARNING: Read the operator's manual to familiarize yourself with the correct control functions.



WARNING: Operate the machine and equipment controls from the seat position only. Any other method could result in serious injury.



WARNING: This is a one man machine, no riders allowed.



WARNING: Before starting engine, study Operator's Manual safety messages. Read all safety signs on machine. Clear the area of other persons. Learn and practice safe use of controls before operating.

It is your responsibility to understand and follow manufacturers instructions on machine operation, service and to observe pertinent laws and regulations. Operator's and Service Manuals may be obtained from your Case dealer.



WARNING: If you wear clothing that is too loose or do not use the correct safety equipment for your job, you can be injured. Always wear clothing that will not catch on objects. Extra safety equipment that can be required includes hard hat, safety shoes, ear protection, eye or face protection, heavy gloves and reflector clothing.



WARNING: When working in the area of the fan belt with the engine running, avoid loose clothing if possible, and use extreme caution.



WARNING: When doing checks and tests on the equipment hydraulics, follow the procedures as they are written. **DO NOT** change the procedure.



WARNING: When putting the hydraulic cylinders on this machine through the necessary cycles to check operation or to remove air from a circuit, make sure all people are out of the way.



WARNING: Use insulated gloves or mittens when working with hot parts.



WARNING: Lower all attachments to the ground or use stands to safely support the attachments before you do any maintenance or service.



WARNING: Pin sized and smaller streams of hydraulic oil under pressure can penetrate the skin and result in serious infection. If hydraulic oil under pressure does penetrate the skin, seek medical treatment immediately. Maintain all hoses and tubes in good condition. Make sure all connections are tight. Make a replacement of any tube or hose that is damaged or thought to be damaged. **DO NOT** use your hand to check for leaks, use a piece of cardboard or wood.



WARNING: When removing hardened pins such as a pivot pin, or a hardened shaft, use a soft head (brass or bronze) hammer or use a driver made from brass or bronze and a steel head hammer.



WARNING: When using a hammer to remove and install pivot pins or separate parts using compressed air or using a grinder, wear eye protection that completely encloses the eyes (approved goggles or other approved eye protectors).



WARNING: Use suitable floor (service) jacks or chain hoist to raise wheels or tracks off the floor. Always block machine in place with suitable safety stands.



WARNING: When servicing or repairing the machine, keep the shop floor and operator's compartment and steps free of oil, water, grease, tools, etc. Use an oil absorbing material and/or shop cloths as required. Use safe practices at all times.



WARNING: Some components of this machine are very heavy. Use suitable lifting equipment or additional help as instructed in this Service Manual.



WARNING: Engine exhaust fumes can cause death. If it is necessary to start the engine in a closed place, remove the exhaust fumes from the area with an exhaust pipe extension. Open the doors and get outside air into the area.



WARNING: When the battery electrolyte is frozen, the battery can explode if (1), you try to charge the battery, or (2), you try to jump start and run the engine. To prevent the battery electrolyte from freezing, try to keep the battery at full charge. If you do not follow these instructions, you or others in the area can be injured.

Section 2000

ENGINE REMOVAL AND INSTALLATION

ENGINE

Removal and installation

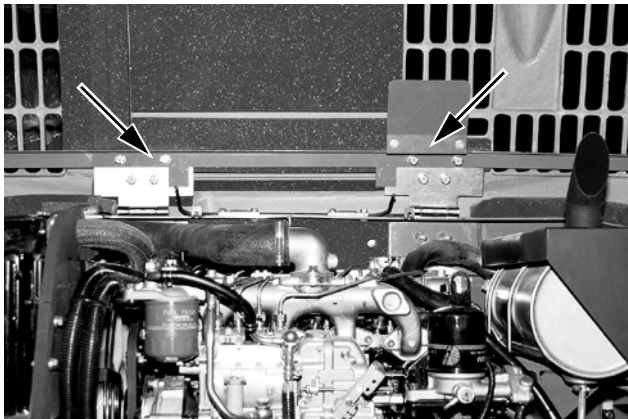
Before carrying out any operation on the machine, perform the following operations in the order shown:

- Park the machine on hard, flat ground.
- Lower the attachment to the ground.
- Shut down the engine and allow it to cool down.



WARNING: When the machine is operating, the components of the engine and the hydraulic pump reach high temperatures. To avoid being burnt by hot metal or scalded by high temperature water or oil, allow the machine to cool down before starting any operation.

STEP 1



CK99C015

Remove the 8 engine hood retaining screws and, with help from another operator, remove the engine hood from the machine.

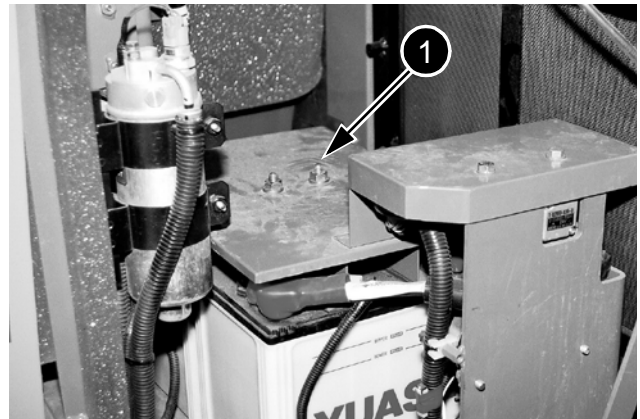
STEP 2

Remove the access panels located under the engine.

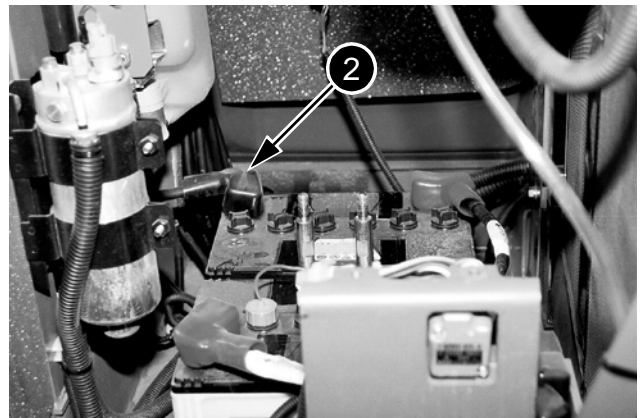
STEP 3

Remove the hydraulic pump (see Section 8002).

STEP 4



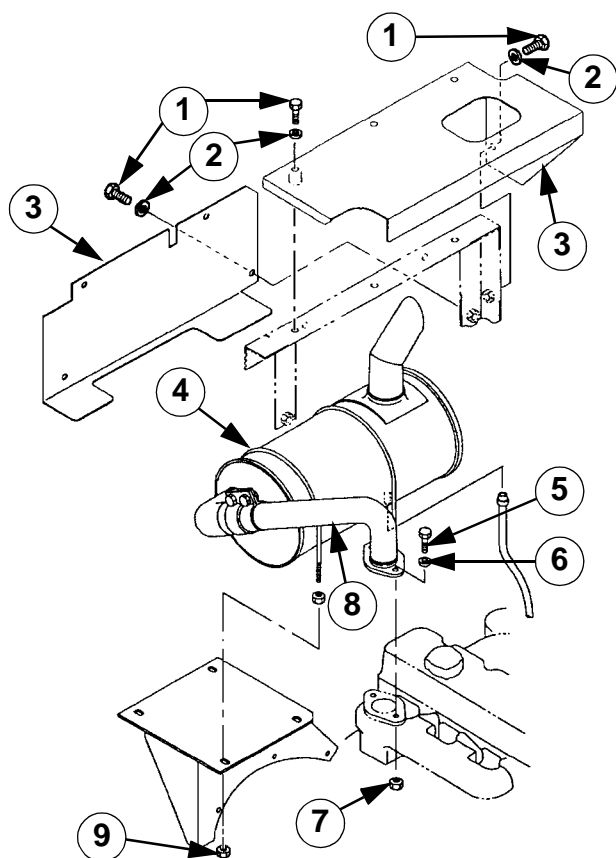
CK99C006



CK99C007

Remove the protective plate (1) from the batteries. Disconnect the battery cables. Always disconnect the negative cable (2) first.

NOTE: When installing, always connect the negative cable (2) last.

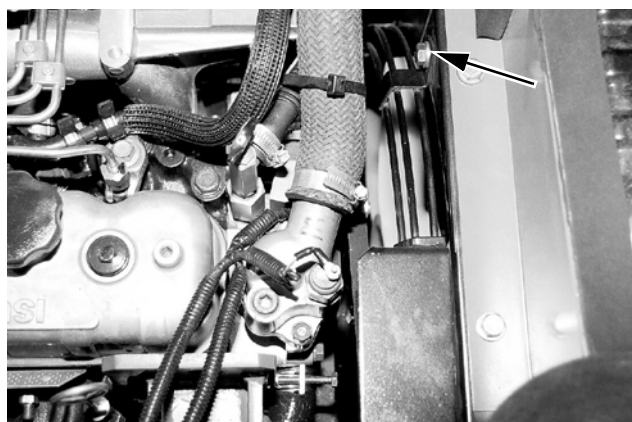
STEP 5

CI99C530

Remove the screws (1) and the washers (2), then remove the protective plates (3) from the exhaust silencer (4).

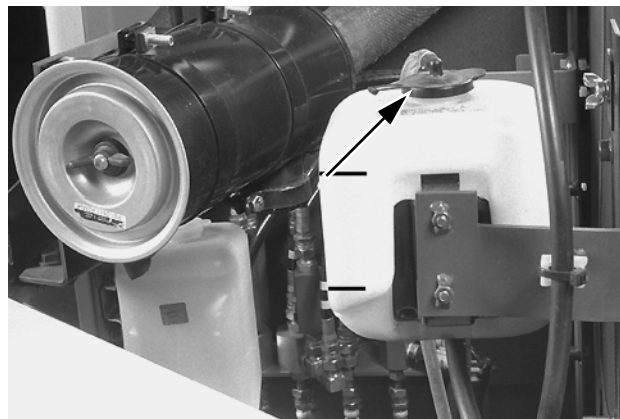
Remove the screws (5), the washers (6) and the nuts (7) from the manifold (8).

Remove the nuts (9) and remove the exhaust silencer (4) and the manifold (8) from the machine in one piece.

STEP 6

CK99C016

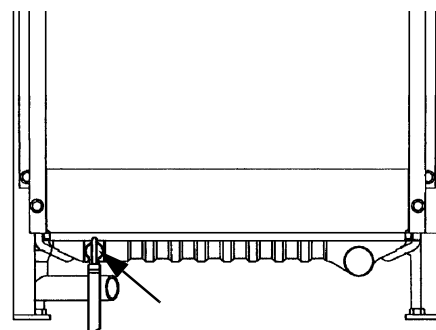
Remove the fan protective grille retaining hardware and remove the grille.

STEP 7

CK98M019

Remove the expansion reservoir cap.

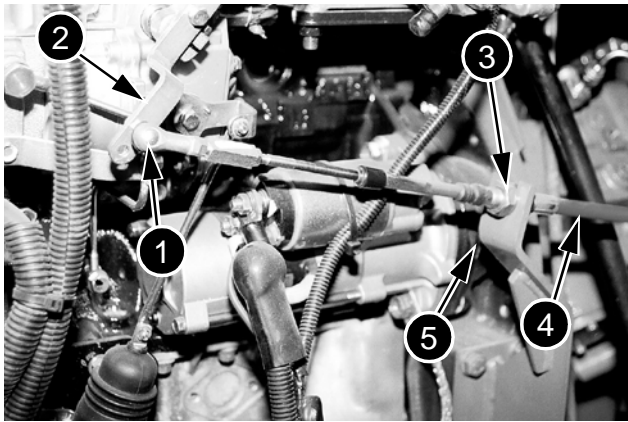
NOTE: Do not remove the cap when the engine is hot. The system is then under pressure and you could be scalded.

STEP 8

CS98M616

Place a receptacle of a suitable capacity under the radiator. Open the drain valve located under the radiator and allow the coolant solution to flow out. Close the drain valve when the radiator is completely empty.

STEP 9



CK99C017

Remove the ball-joint (1) from the injection pump accelerator lever (2). Loosen the nuts (3) and remove the accelerator cable (4) from the bracket (5).

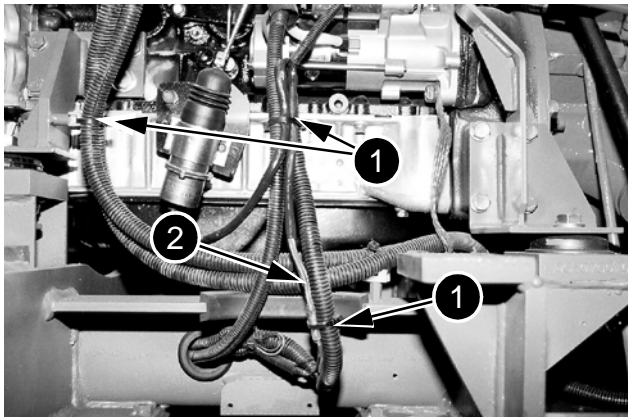
STEP 10



CK99C018

Disconnect the engine earthing cable.

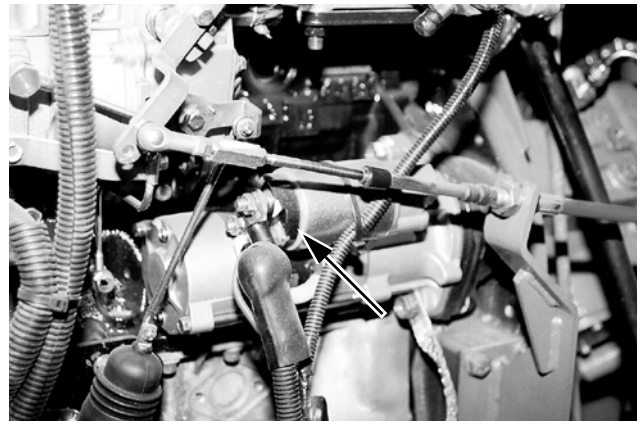
STEP 11



CK99C019

Cut through the plastic clips (1) and identify and disconnect the electric cables (2) from the engine stop solenoid valve.

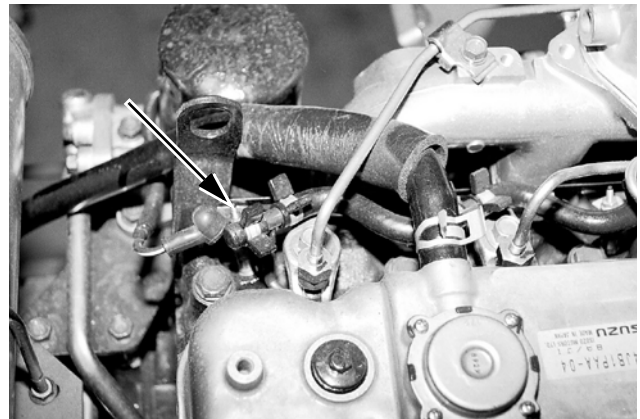
STEP 12



CK99C017

Identify and disconnect the electric cables on the starter motor.

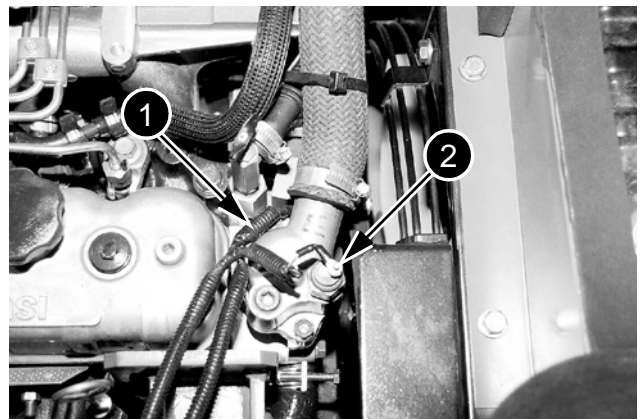
STEP 13



CK99C020

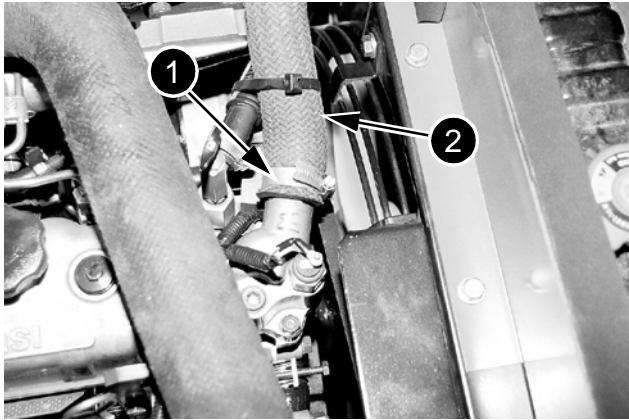
Identify and disconnect the pre-heat plug supply electric cable.

STEP 14



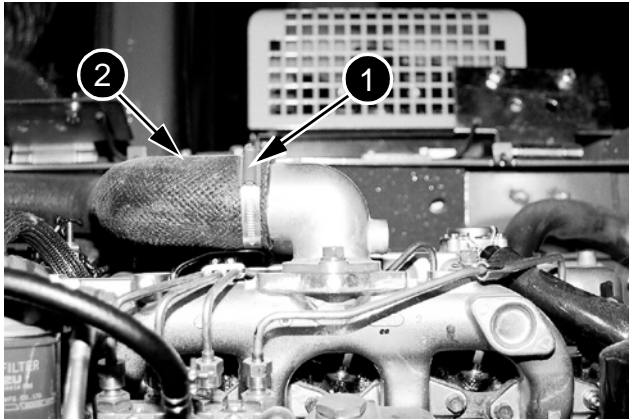
CK99C016

Identify and disconnect the electric cable from the thermostat (1) and the electric cable from the engine coolant solution temperature sensor (2).

STEP 15

CK99C021

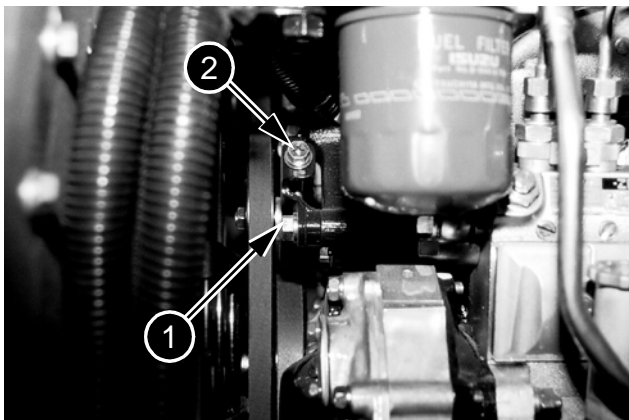
Loosen the clip (1) and remove the coolant return hose (2).

STEP 16

CK99C027

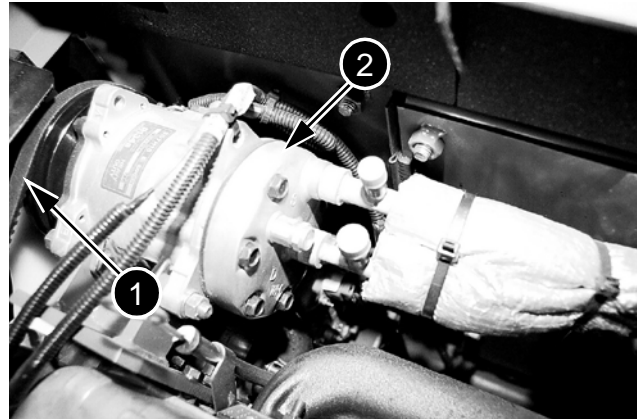
Loosen the clip (1) and remove the intake hose (2).

NOTE: Carry out Steps 17 and 18 only if your machine is equipped with air-conditioning, otherwise pass to Step 19.

STEP 17

CK99C022

Loosen the screw (1), then loosen the adjusting screw (2) so as to release the air-conditioning compressor drive belt tension.

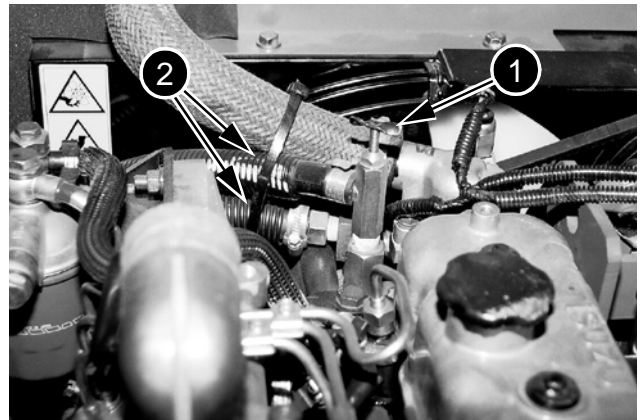
STEP 18

CK99C023

Remove the belt (1) from the air-conditioning compressor drive pulley (2).
Remove the air-conditioning compressor retaining screws, washers and nuts (2).
Separate and attach the air-conditioning compressor in such a position as not to obstruct the correct operation of the following steps.

STEP 19

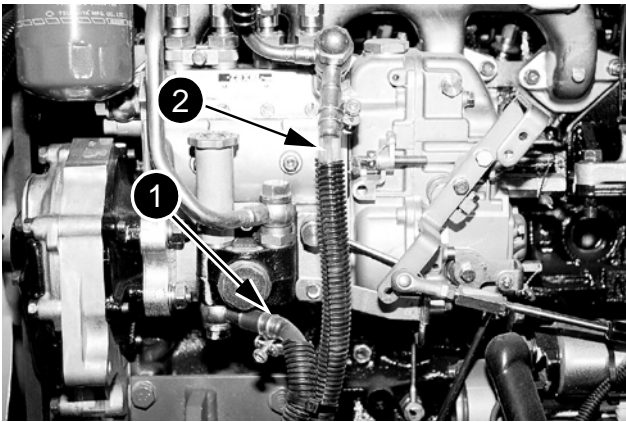
Identify and disconnect the electric cables on the alternator.

STEP 20

CK99C024

Close the engine heater valve (1), then remove the heater hoses (2).

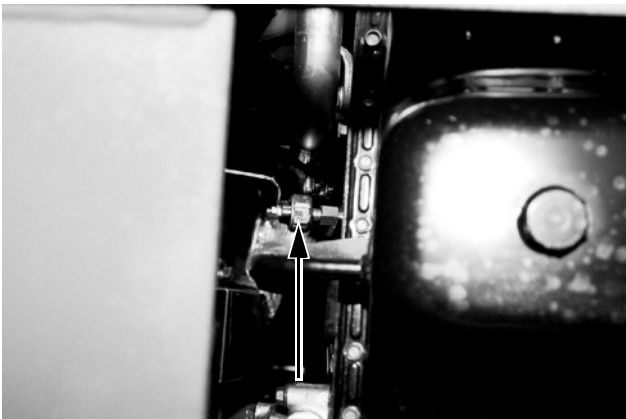
STEP 21



CK99C025

Remove the fuel feed pipe (1) and plug it. Disconnect the fuel return pipe (2) and plug it.

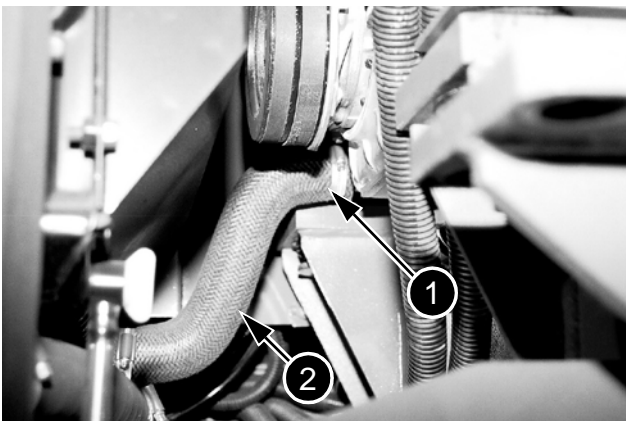
STEP 22



CK99C026

Identify and disconnect the electric cable from the engine oil pressure switch.

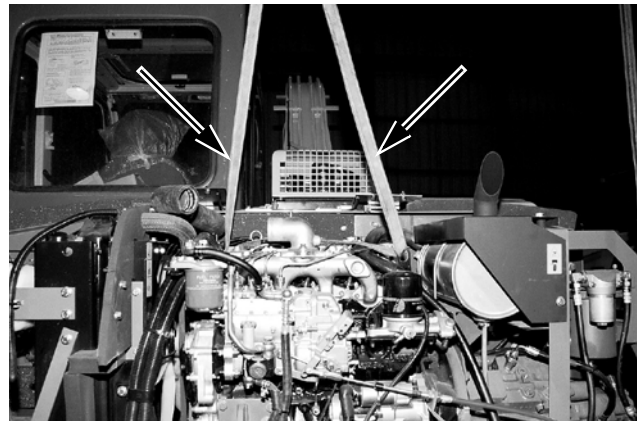
STEP 23



CK99C011

Loosen the clip (1) and remove the coolant solution supply hose (2).

STEP 24

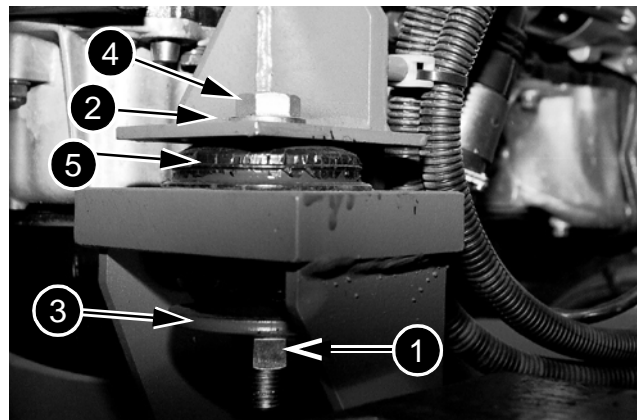


CK99C028

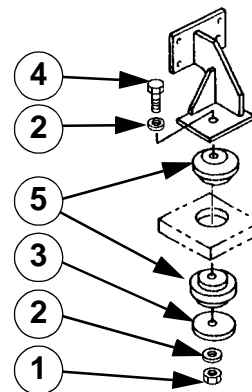
Install a suitable lifting device on the engine lifting eyes.

Engine weight: 220 kg.

STEP 25



CK99C029



CI99C531

Remove the nut (1), the washers (2), the washer (3) and the screw (4). Repeat this step for the other 3 engine mountings.

NOTE: When installing, make a visual inspection of the condition of the flexible mountings (5), replace them if necessary, tighten the engine retaining screws (3) to a torque of 167 Nm (123 lb-ft).

STEP 26

Raise the engine carefully, move it so as to disengage the cooling fan from the radiator shroud, then remove the engine from the machine.

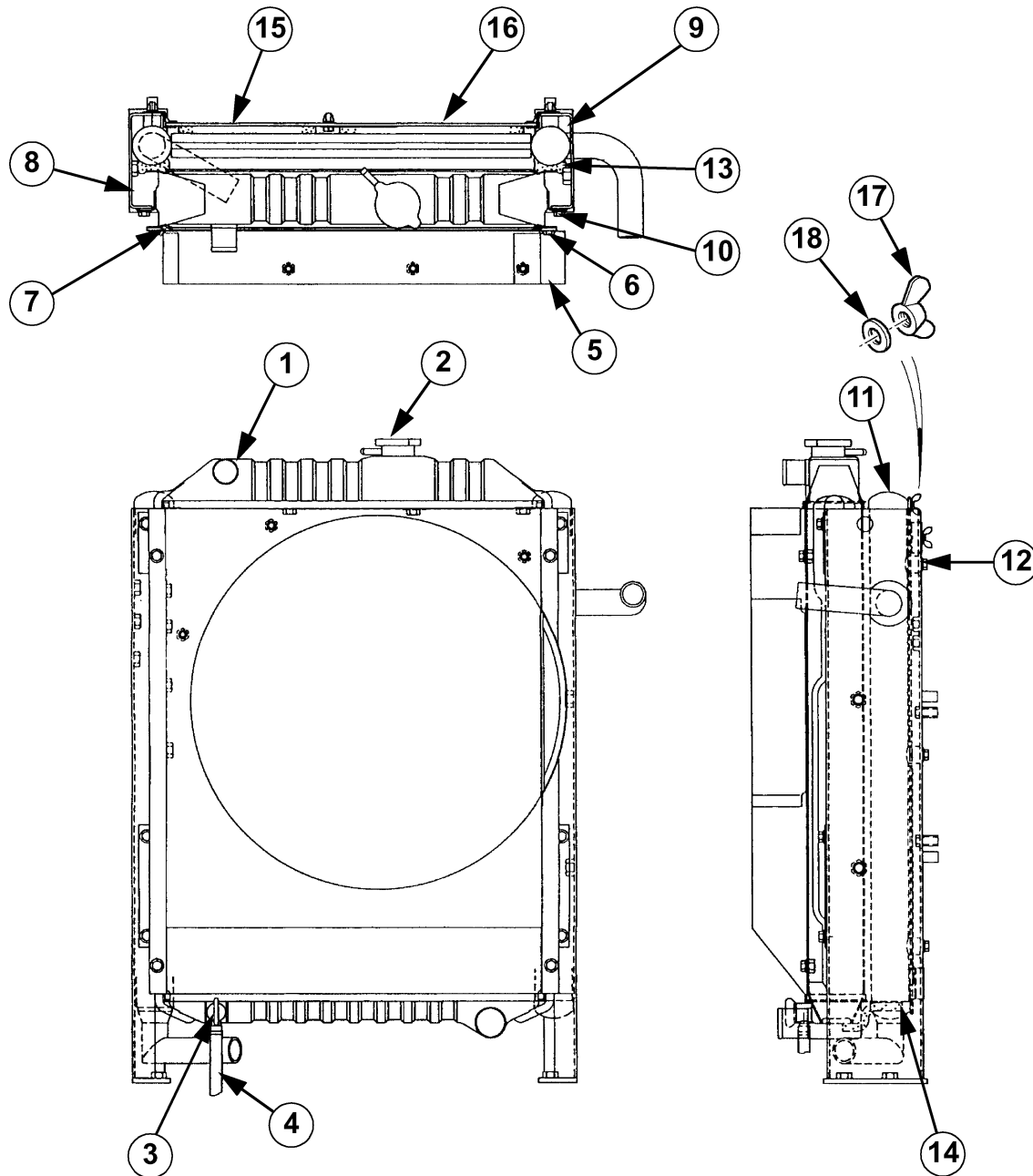
NOTE: *Installation of the engine is carried out in the reverse order from that of removal.*

Before using the machine, carry out the following operations:

- Fill the cooling system with coolant solution (see the operator's manual).
- Bleed and re-prime the fuel system (see the operator's manual).
- Check that the engine oil pressure indicator lamp goes out when the engine is running.
- Bleed the cooling system (see the operator's manual).
- Check for leaks in the hydraulic, fuel and cooling systems.
- Shut down the engine and check all the fluid levels. Top up if necessary.

RADIATOR AND OIL COOLER

Description



- 1. Radiator
- 2. Plug
- 3. Drain plug
- 4. Hose
- 5. Shroud
- 6. Screw

- 7. Seal
- 8. Retaining bracket
- 9. Retaining bracket
- 10. Screw
- 11. Oil cooler
- 12. Screw

- 13. Seal
- 14. Seal
- 15. Plate
- 16. Plate
- 17. Wing nut
- 18. Washer

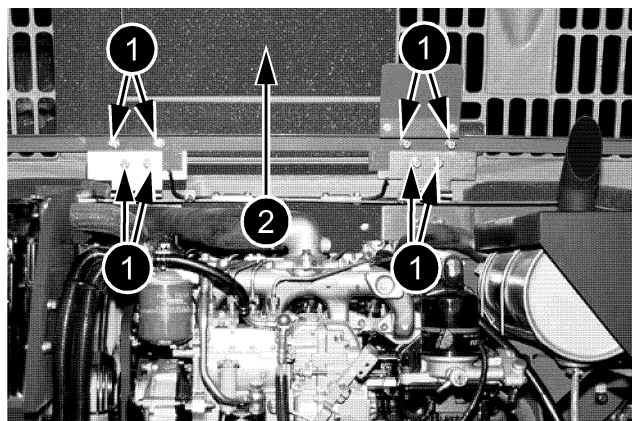
CI99C504

Before carrying out any service work on the machine, the following steps must be performed:

- Park the machine on hard, flat ground.
- Lower the attachment to the ground.
- Shut down the engine.
- Place the starter switch in the "ON" position.
- Lower the left-hand control arm function locking lever.
- Check that the function locking indicator lamp on the console is not lit.
- Operate the control levers ten times to the left and right and backwards and forwards.
- Place the starter switch key in the "OFF" position.

Removal and installation

STEP 1



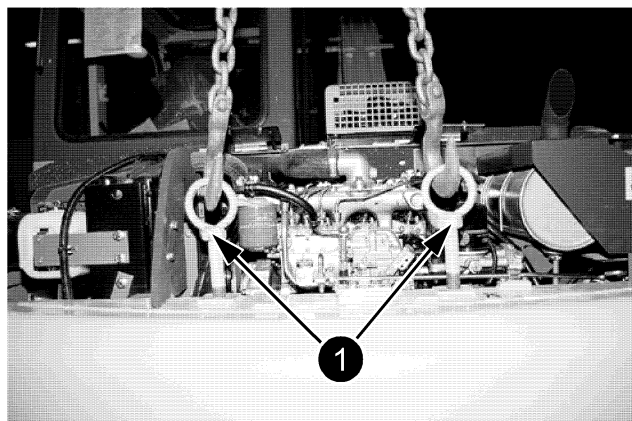
CK99C015

Remove the eight retaining screws (1) from the engine hood (2) and remove the hood.

STEP 2

Remove the plate to gain access to the four counterweight retaining screws.

STEP 3



CK99C005

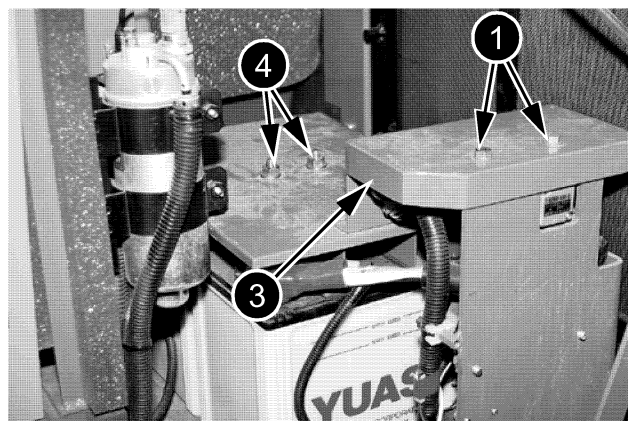
Remove the plugs and install the lifting eyes (1).

Using a suitable lifting device, support the counterweight so as to keep it in place while removing the retaining screws. Remove the four counterweight retaining screws and remove the counterweight.

NOTE: Mark the position of the shims.

Weight of counterweight: 700 kg.

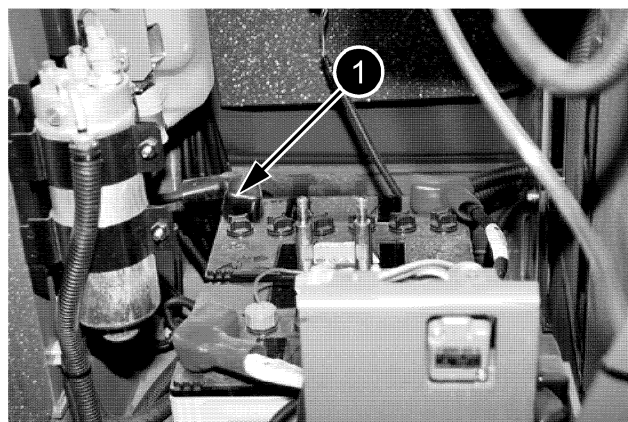
STEP 4



CK99C006

Remove the two screws (1) and the washers which retain the plate (3) on the relay bracket. Remove the two nuts (4) and the two washers which attach the plate (3) to the two threaded rods, then remove the plate.

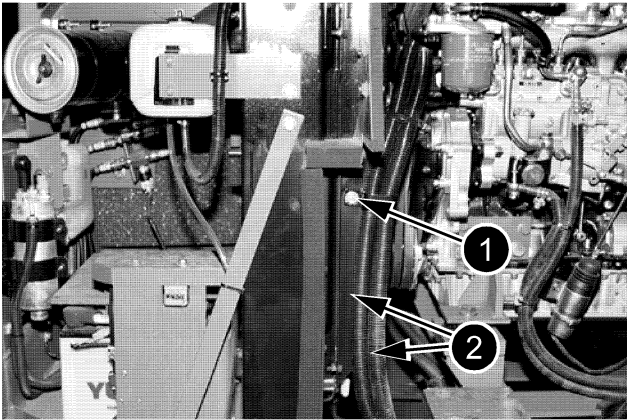
STEP 5



CK99C007

Disconnect the negative cable (1) first from the battery, then disconnect the others.

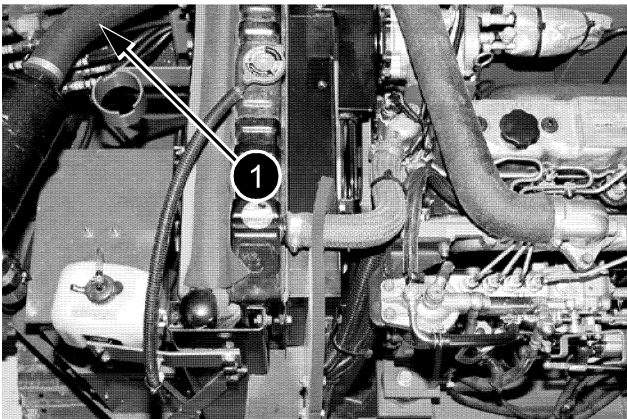
STEP 6



CK99C008

Remove the heater pipe (2) retaining hardware (1).

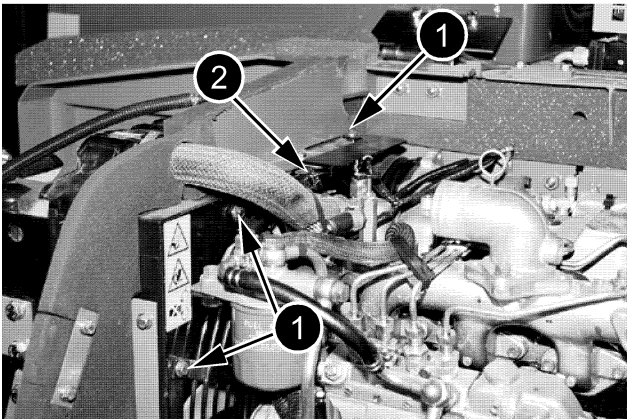
STEP 7



CK99C009

Remove the air filter hose (1).

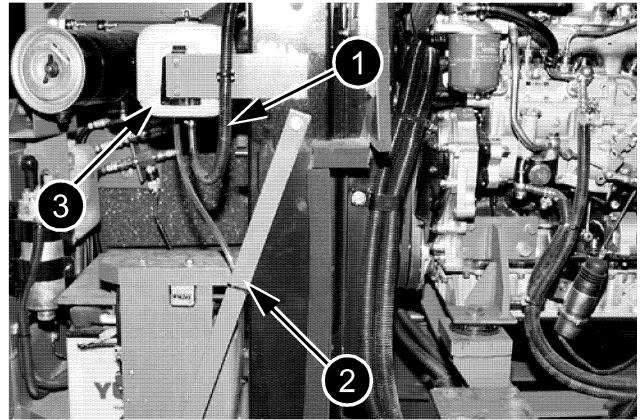
STEP 8



CK99C010

Remove the three retaining screws (1) from the grille (2) and remove the grille.

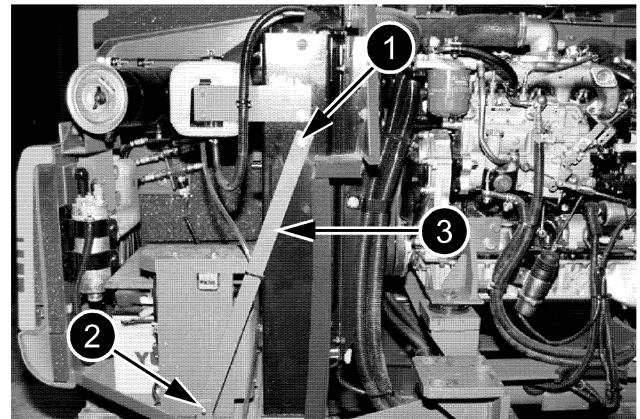
STEP 9



CK99C008

Disconnect the radiator intake hose (1), cut through the clip (2) and remove the expansion reservoir (3).

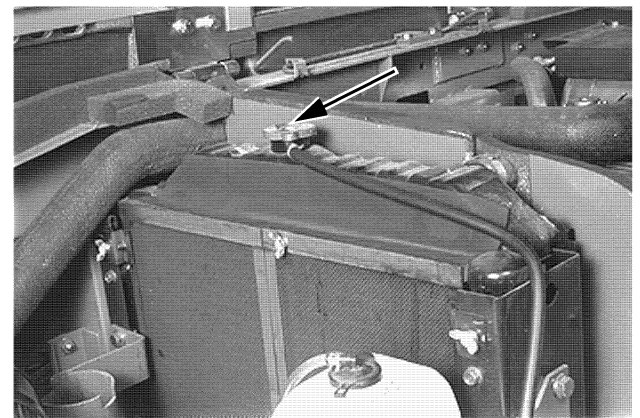
STEP 10



CK99C008

Remove the screws (1) and (2) from the radiator retaining bar (3) and remove the bar.

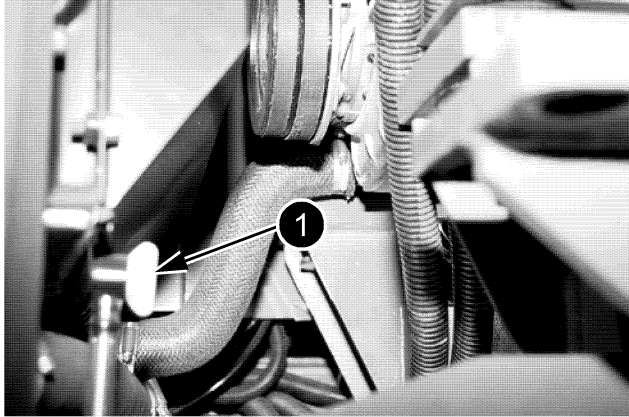
STEP 11



CK98M021

Remove the radiator cap.

STEP 12

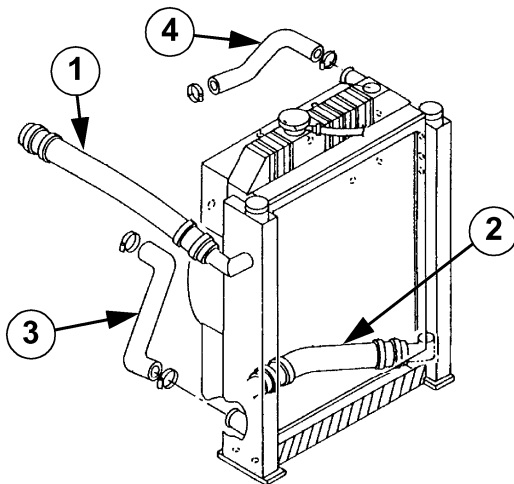


CK99C011

Drain the radiator via the bleed valve (1).

NOTE: Provide a receptacle of a suitable capacity.

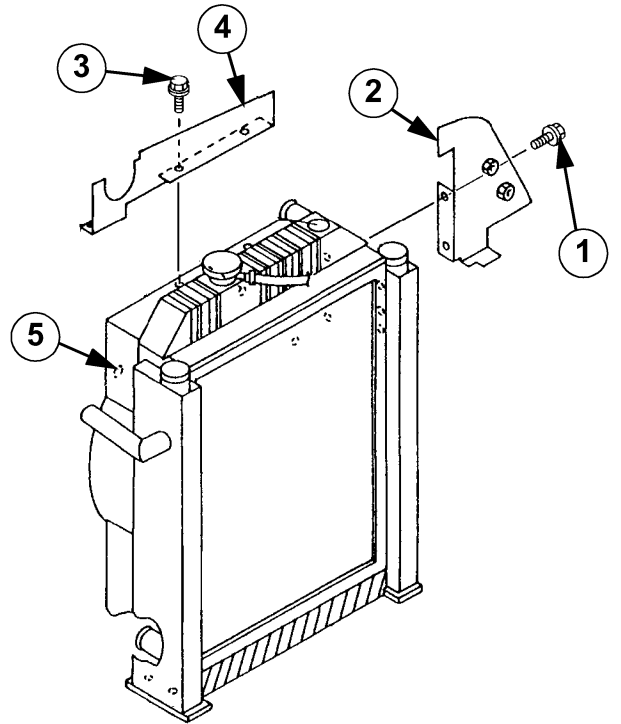
STEP 13



C199C505

Remove and plug the hydraulic system hoses (1) and (2) and recover the oil from the radiator in a clean receptacle. Disconnect the hoses (3) and (4) from the radiator.

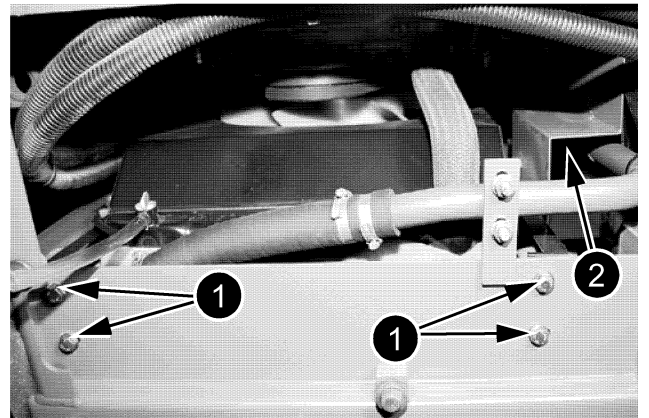
STEP 14



C199C506

Remove the two screws (1) which retain the bracket (2) on the shroud (5) and remove the bracket (2). Remove the two screws (3) which attach the bracket (4) to the shroud (5) and remove the bracket (4).

STEP 15



CK99C012

Remove the four screws (1) and the two screws (2) which attach the radiator/oil cooler assembly to the frame.



Suggest:

If the above button click is invalid.

Please download this document

first, and then click the above link

to download the complete manual.

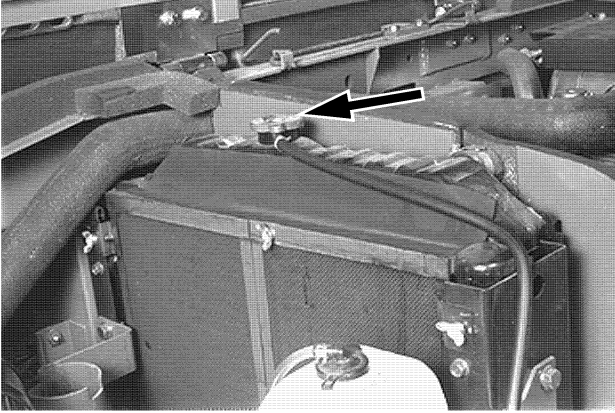
Thank you so much for reading

STEP 16

Using a suitable lifting device, remove the radiator and oil cooler assembly.

NOTE: When installing, proceed in the reverse order from removal.

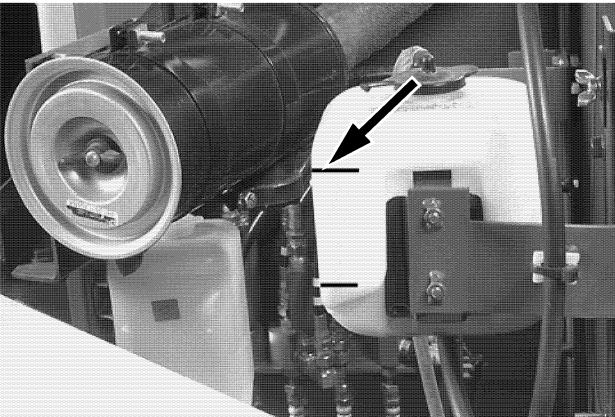
STEP 17



CK98M021

Fill the system with coolant solution via the radiator until it overflows, then install the cap (1).

STEP 18



CK98M019

Fill the expansion reservoir (1) up to the "FULL" mark and then install the cap.

NOTE: Use the coolant solution specified in Section 1002.

NOTE: Check the level of oil in the hydraulic reservoir. Top up if necessary.

STEP 19

Run the engine at idle speed for five minutes, then check the level of the coolant solution. Top up if necessary. Bleed the cooling system.

NOTE: Do not fill the expansion reservoir higher than the "FULL" mark.

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