

2360 WindRower and 160 Platform



JOHN DEERE

TECHNICAL MANUAL 2360 WindRower and 160 Platform

TM1300 (01JUN85) English

John Deere Welland Works
TM1300 (01JUN85)

LITHO IN U.S.A.
ENGLISH



TM-1300

**2360 WINDROWER AND 160 PLATFORM
TECHNICAL MANUAL**

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INTRODUCTION

This technical manual is part of a twin concept of service:

FOS Manuals—for reference

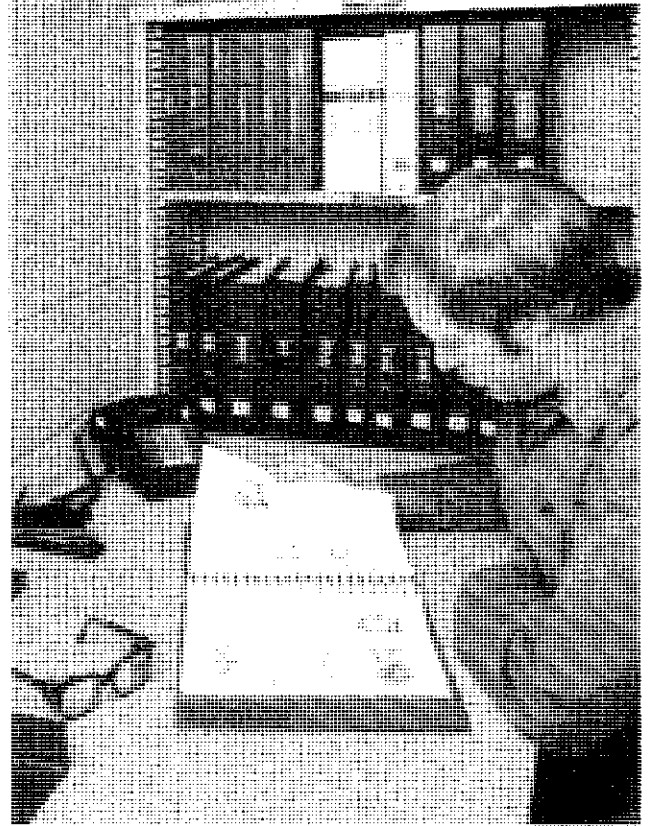
Technical Manuals—for actual service

The two kinds of manuals work as a team to give you both the general background and technical details of shop service.

Fundamentals of Service (FOS) manuals cover basic theory of operation, fundamentals of trouble shooting, general maintenance, and basic types of failures and their causes. FOS Manuals are for training new people and for reference by experienced technicians.

Technical Manuals are concise service guides for a specific machine. Technical Manuals are on-the-job guides containing only vital information needed by an experienced technician.

Using the technical manual as a guide, will reduce error and costly delay. It will also assure you the best in finished service work.

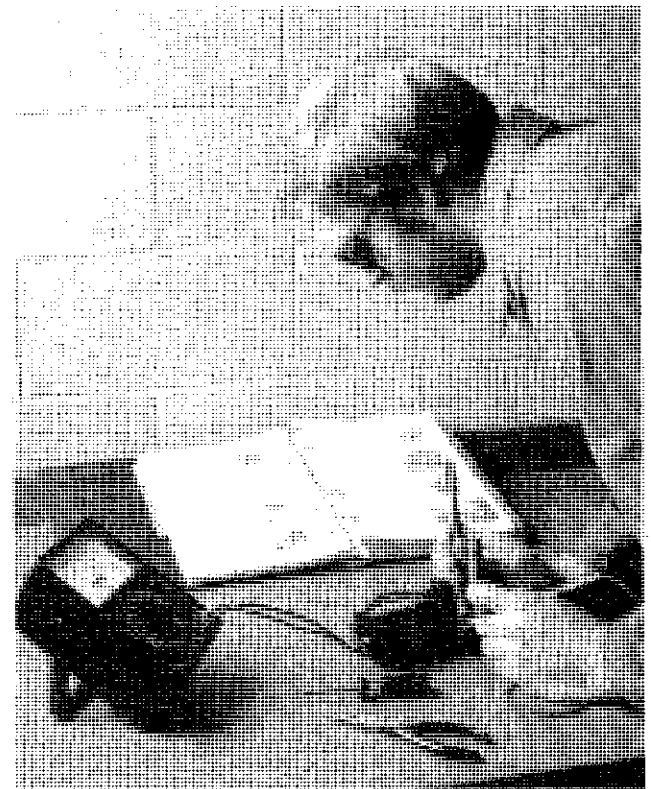


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FEATURES OF THIS TECHNICAL MANUAL

- **John Deere ILLUSTRATION format emphasizing more detailed pictures and fewer words.**
- **Instructions and illustrations grouped together in easy-to-use modules with exploded views showing parts relationship.**
- **Categorized by two sections: Repair Sections identified by green tabs and Operation and Tests Sections identified by yellow tabs.**
- **Removal and installation groups preceding some repair groups. These groups show how to remove and install components from the machine rather than from major components. They also show how to acquire access to major components of a machine.**

This technical manual was planned and written for you—an experienced technician. Keep it in a permanent binder in the shop where it is handy. Refer to it whenever in doubt about correct service procedures or specifications.



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OBSERVE IMPORTANT MESSAGES

Messages labeled IMPORTANT will appear in this manual and/or on the machine to provide specific instructions for performing adjustments, services, etc. If these instructions are not followed, it could result in damage to the machine.

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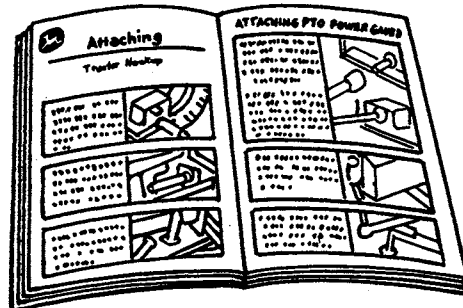
OBSERVE NOTES

The word NOTE is followed by a statement that identifies a qualification or exception to a previous statement. A NOTE may also identify nice-to-know information pertinent to, but not directly related to the previous statement.

5EA; W02;;0000 F 230484

OPERATE WINDROWER SAFELY

Refer to the windrower operator's manual for complete operating instructions.



5EA;W9756 W07;;0000 D 031284

METRIC AND ENGLISH DESIGN

The 2360 Windrower, except the diesel engine, is of U.S. customary design. The diesel engine is of metric design. Most hardware is U.S. customary and must be replaced with identical hardware. Measurements in this manual will appear with metric first, followed by U.S. customary equivalents.

W07;;0000 E 031284

DO NOT MODIFY MACHINE

Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

W01;;12SY H 040485

NEW OR REVISED PAGES

Whenever new or revised pages are provided, insert them into the manual immediately. This way your technical manual will always be up to date and be a valuable asset to your Service Department.

5EA; W02;;0000 E 230484

SPECIAL TOOLS

Special tools required to perform service or adjustment, are found in the beginning of each group throughout the manual.

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OBSERVE SAFETY SIGNS AND MESSAGES



CAUTION: This message is used for general reminders of good safety practices or to direct attention to unsafe practices. The message will appear in your operator's manual and/or the sign will appear on the machine with the color combination of yellow and black.

WARNING: This message denotes a specific potential hazard. The sign will be displayed on the machine in areas of potential hazard. The sign will have the color combination of yellow and black.

DANGER: This message denotes the most serious specific potential hazard. The sign will be displayed on the machine in areas of potential hazard. The sign will have the color combination of red and white.



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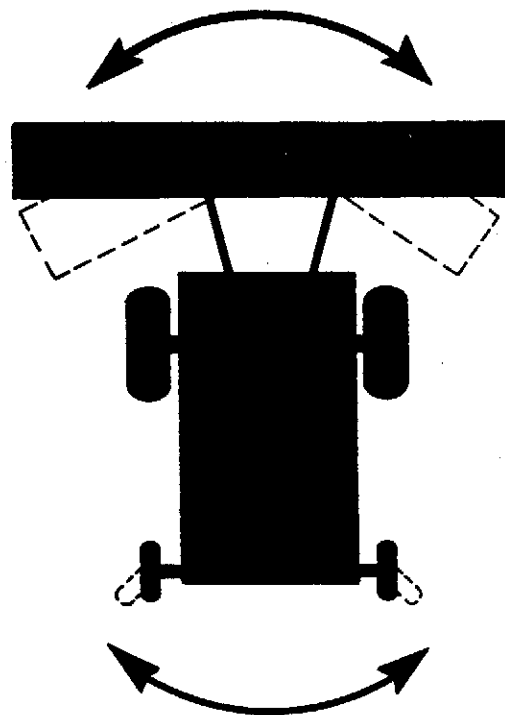
STAY CLEAR OF MOVING WINDROWER

Be sure everyone is clear of windrower and platform before starting engine or moving steering wheel. Windrower will move if steering wheel is turned even if ground speed control lever is in neutral.

Never try to get on or off a moving windrower.

Before dismounting, place the ground speed control lever in NEUTRAL, engage the parking brake and lower the platform to the ground. Stop the engine and remove the key.

Never attempt to start or operate the Windrower except from operator's station.

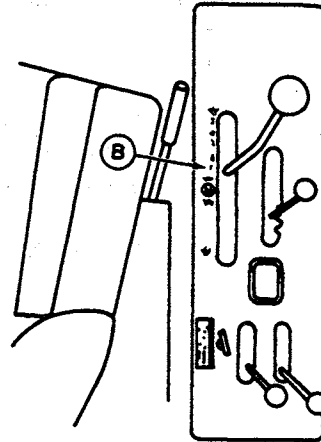
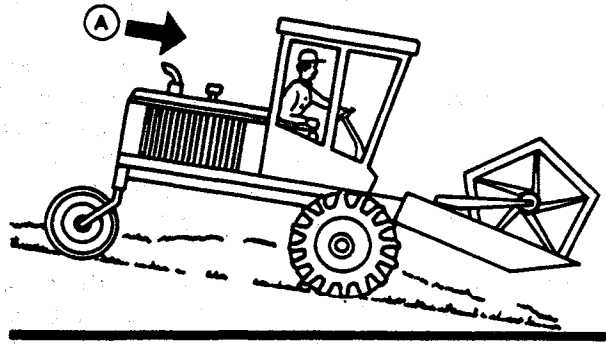


3MA;W9743 W07;;2SY P 051084

TRANSPORT WINDROWER SAFELY DOWNHILL

Use care when driving windrower down steep grades (A). Move ground speed control lever (B) to reduce speed.

Lower platform to maintain stability. Raise completely at bottom of grade.



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PRACTICE SAFE MAINTENANCE

Know where the first aid kit and fire extinguisher are located and how to use them.

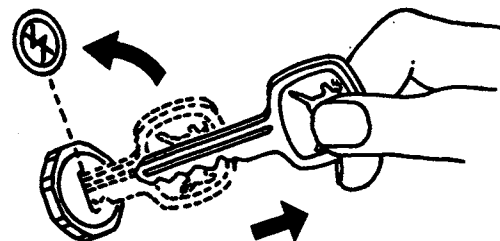
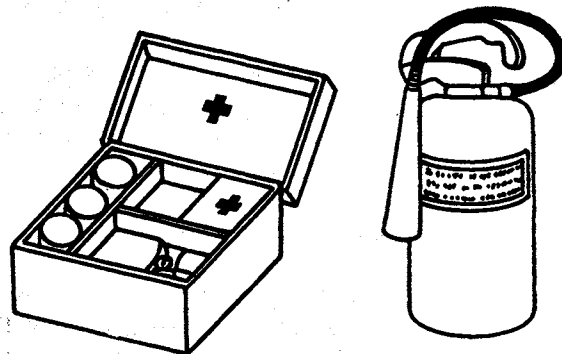
Always park windrower on level ground, shut off engine, engage parking brake, and remove key before servicing.

Use lifting equipment and safety stands having adequate strength for job being performed.

When working on wheels or tires, be sure to place jack and safety stands under axle and block wheels to prevent machine from rolling.

Determine if a mechanism has stored energy before disassembly.

Replace all shields removed for servicing.

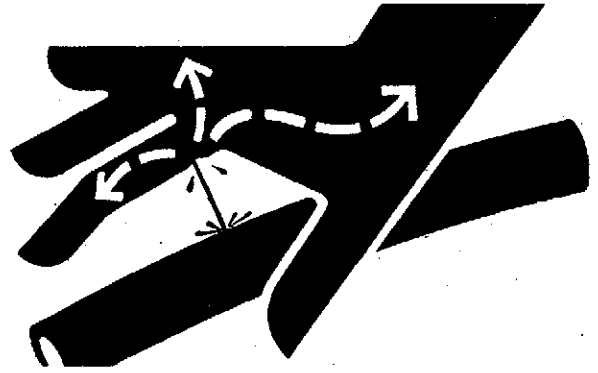


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AVOID HIGH-PRESSURE FLUIDS

Escaping fluid under pressure can penetrate the skin causing serious injury. Relieve pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Keep hands and body away from pinholes and nozzles which eject fluids under high pressure. Use a piece of cardboard or paper to search for leaks.

If ANY fluid is injected into the skin, it must be surgically removed within a few hours by a doctor familiar with this type injury or gangrene may result.



AB6;X9811 053;FLUID 100584

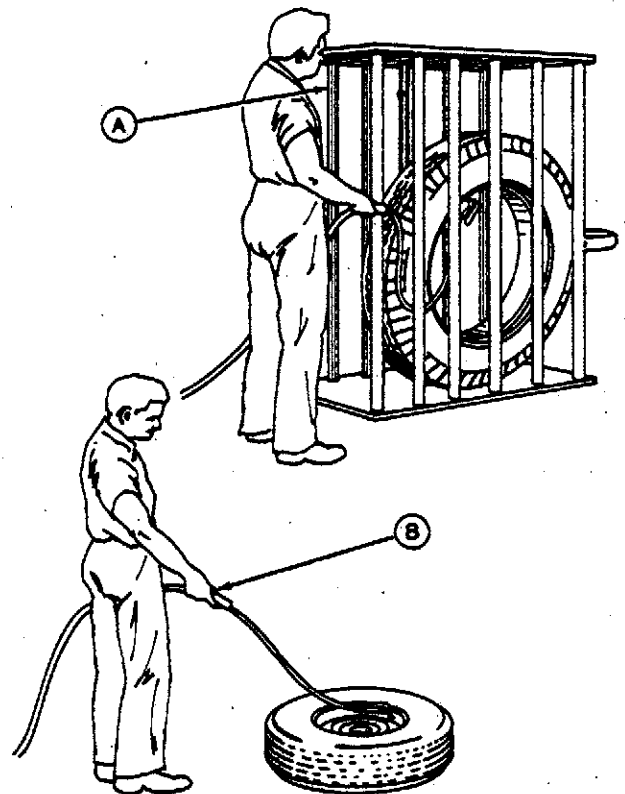
SERVICE TIRES SAFELY

Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious injury or death. Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job. Have it done by your John Deere dealer or a qualified tire repair service.

When sealing tire beads on rims, never exceed 35 psi (241 kPa) (2.4 bar) or maximum inflation pressures specified by tire manufacturers for mounting tires. Inflation beyond this maximum pressure may break the bead, or even the rim, with dangerous explosive force. If both beads are not seated when the maximum recommended pressure is reached, deflate, reposition tire, relubricate bead and reinflate.

Detailed tire mounting instructions, including necessary safety precautions, are contained in John Deere Fundamentals of Service (FOS) Manual 55, Tires and Tracks, available through your John Deere dealer. Such information is also available from the Rubber Manufacturers Association and from tire manufacturers.

- A—Use a Safety Cage If Available.
- B—Do Not Stand Over Tire. Use a Clip-on Chuck and Extension Hose.



AB6;TS0123 053;TIRE 100584

KEEP SERVICE AREA CLEAN

Keep the service area clean and dry; wet or oily floors are slippery. Wet spots can be dangerous when working with electrical equipment.

Be sure all electrical outlets and tools are properly grounded.

Use adequate light for the job at hand.



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AVOID EXPLOSIONS OR FIRE

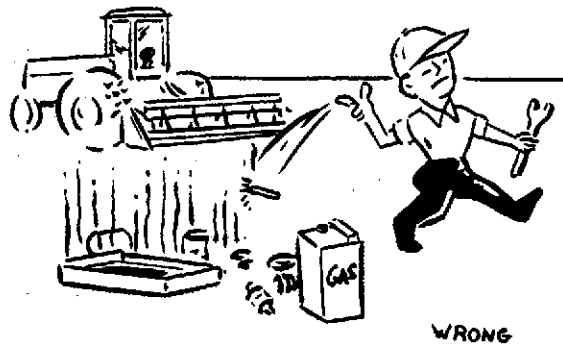


CAUTION: Batteries produce explosive gas. Before using booster batteries, read instructions in Operator's Manual.

Before connecting or disconnecting battery charger, turn the charger off to avoid sparks. See Instructions in Operator's Manual.

Be careful with starting fluid or any type of fuel.

Never smoke while handling fuel.



WRONG

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WEAR PROPER PROTECTIVE EQUIPMENT

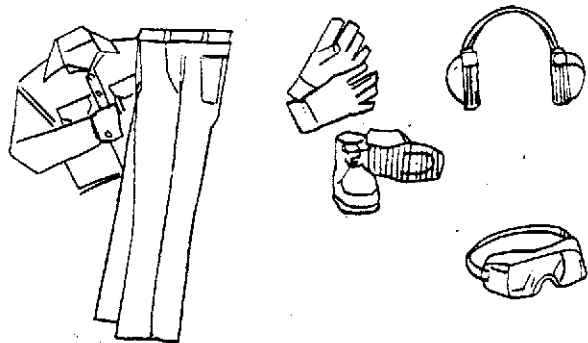
Ear plugs or ear muffs.

Heavy work gloves (when handling sharp objects or parts).

Safety shoes with slip-resistant soles.

Close fitting work clothes.

Safety glasses or goggles.

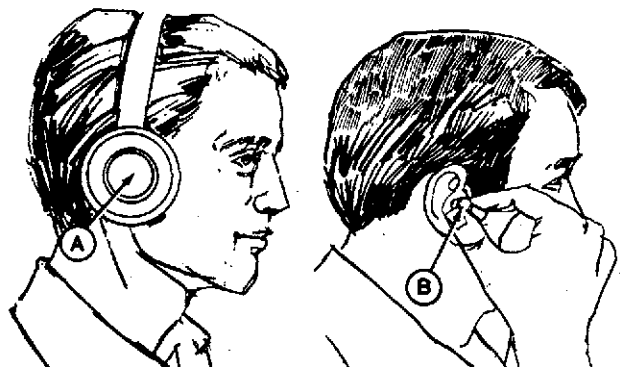


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PROTECT AGAINST NOISE

Prolonged exposure to loud noise can cause impairment or loss of hearing.

Wear a suitable hearing protective device such as earmuffs (A) or earplugs (B) to protect against objectionable uncomfortable loud noises.



AB6;X7662 053;NOISE 150584

Section 20

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SPECIAL TOOLS

NOTE: Order tools from your SERVICE-GARD® Catalog, unless otherwise indicated.

Number	Name	Use
T26509	Lift Bracket	Engine removal and installation
T26508	Lift Bracket	Engine removal and installation

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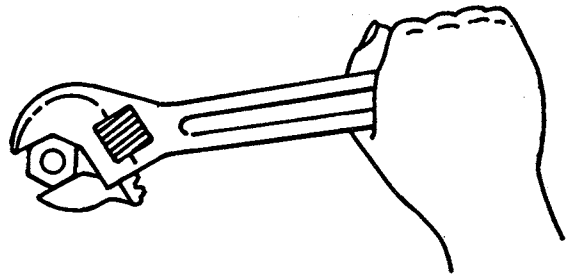
TORQUES

Engine Support Bolts 210 N·m (155 lb-ft)
Manifold Exhaust Locknut 5/16-in.

W07;;2001 B 060685

Most service procedures on the engine can be accomplished with the engine in the windrower. If the crankshaft is to be removed or engine overhauled, remove the engine as follows.

IMPORTANT: Be certain to plug all openings and cap all holes or lines that are disconnected to prevent contamination of a particular system.

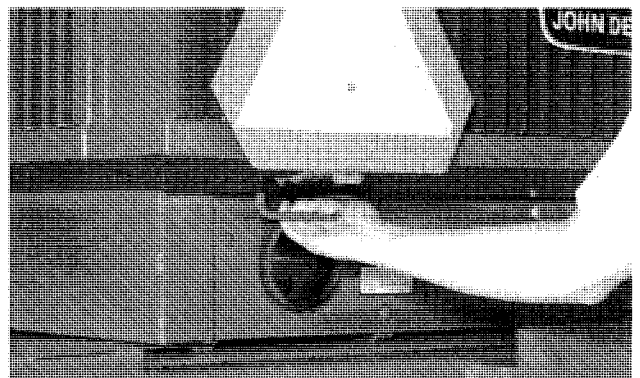


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REMOVE ENGINE

If windrower is equipped with platform, remove it.

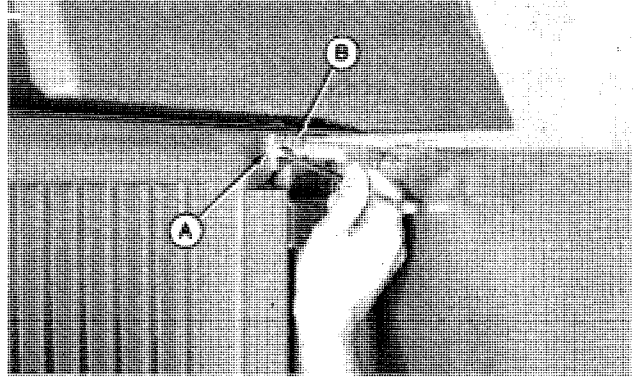
1. Open rear shielding.



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Engine Removal and Installation

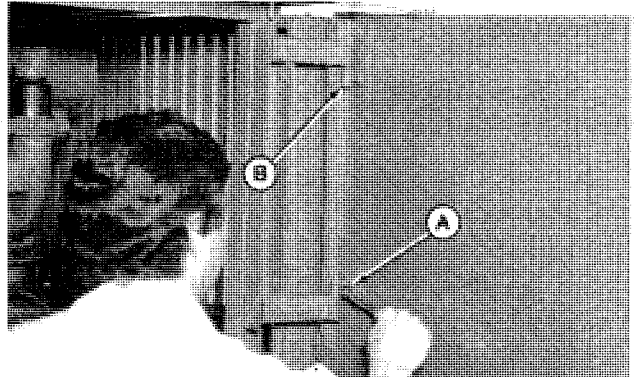
2. Remove flanged nut (A) and detach stop cable (B) from windrower.



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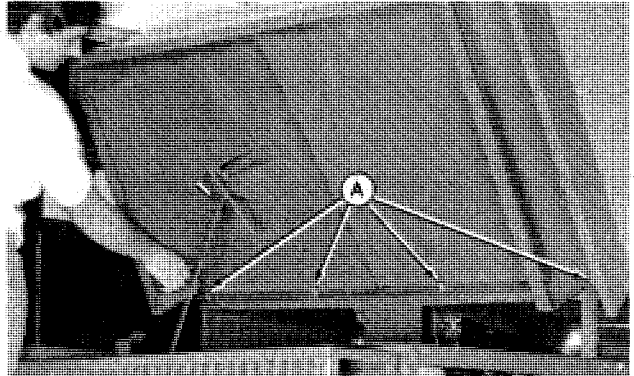
3. While supporting rear panel, remove cap screw and hinge bracket (A).

Let rear panel drop downwards from hinge pin (B) and remove from windrower.



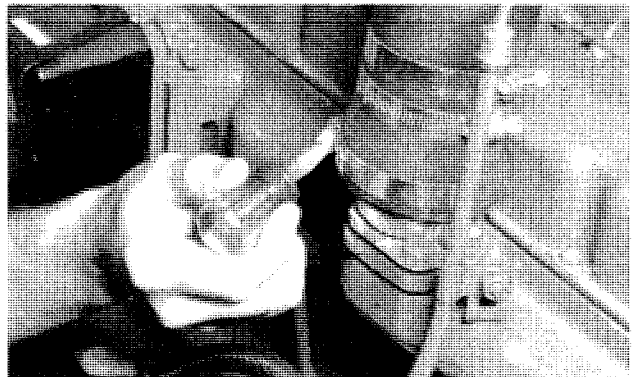
2MA;W10415 W07;;2505 F 191284

4. Support hinged hood and remove four flanged nuts (A). Remove hood from windrower.



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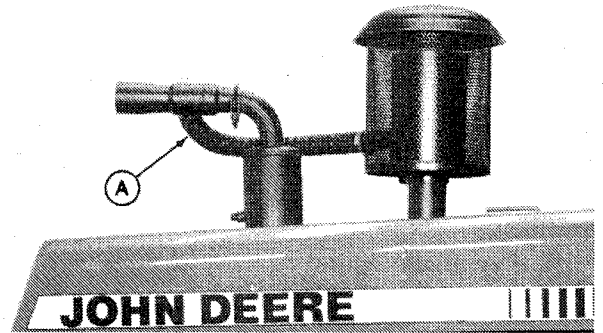
5. Loosen clamp and separate canister hose from manifold.



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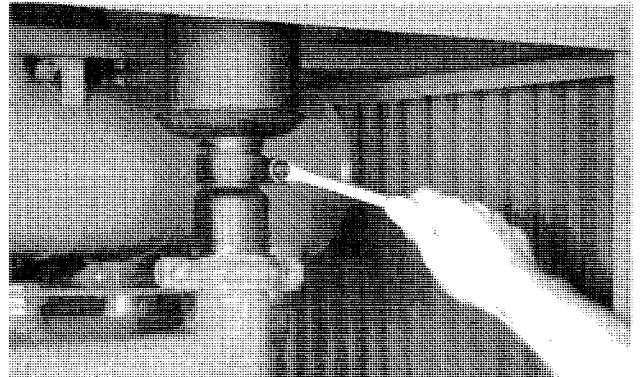
Engine Removal and Installation

6. If windrower is equipped with optional aspirated air cleaner, disconnect hose (A) from muffler or air cleaner.



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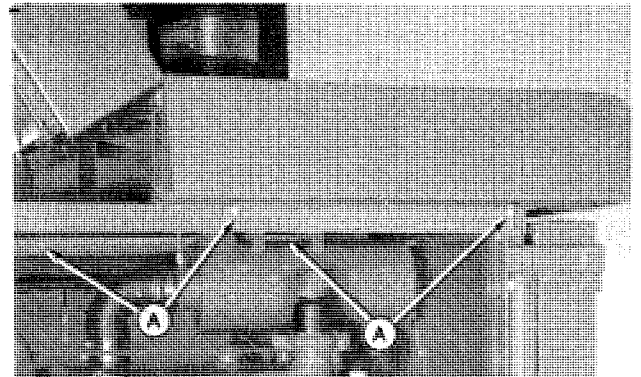
7. Loosen muffler clamp and remove muffler from exhaust manifold.



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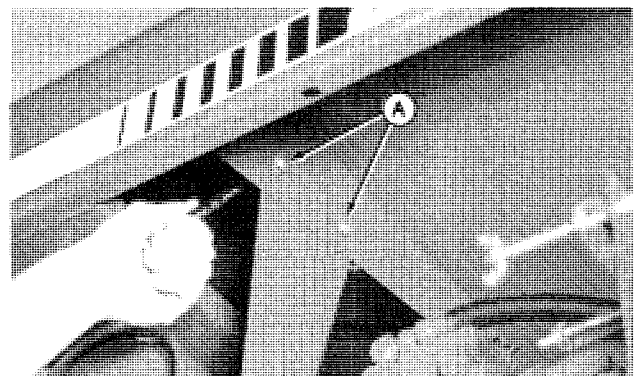
8. Remove four nuts (A) from underside of stationary hood.

NOTE: Leave bolts in position until stationary hood is removed.



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9. Open right side panel and support it. Remove two fasteners (A) from valve support bracket.

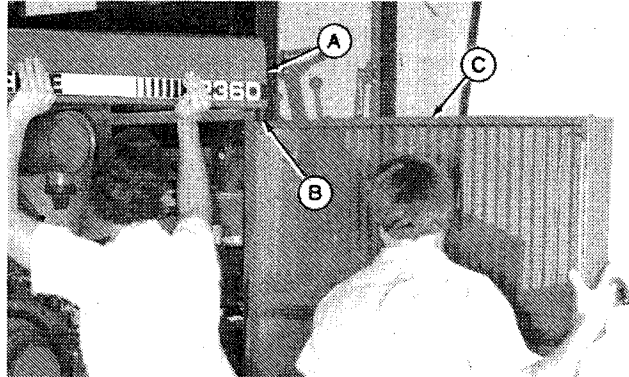


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Engine Removal and Installation

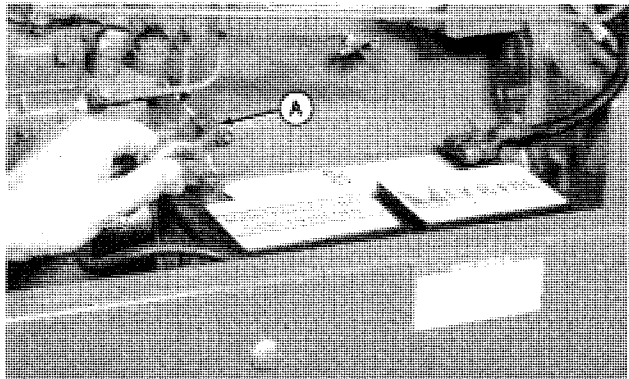
10. Push up on stationary hood (A) until it clears hinge pin (B) on side panel (C).

Remove side panel and then stationary hood.



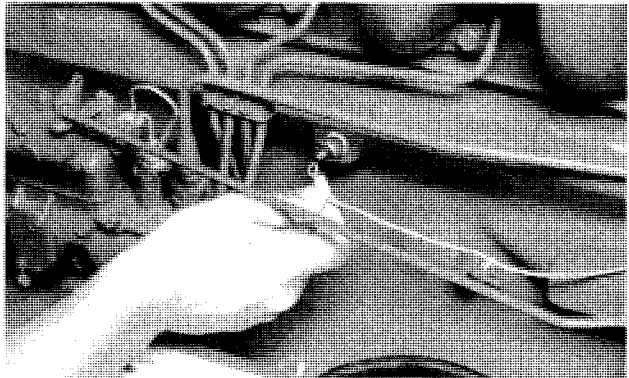
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11. Disconnect negative (-) ground cable (A) from battery.



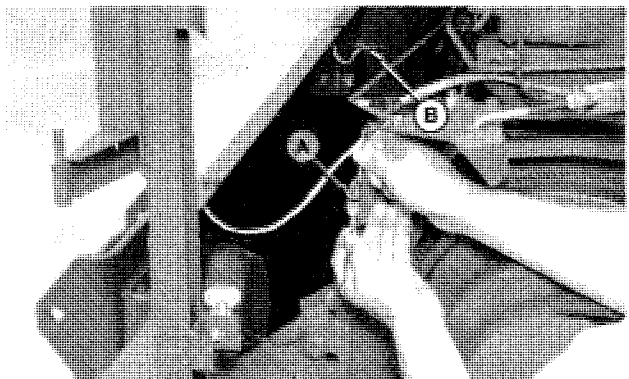
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12. Disconnect temperature gauge wire from sending unit.



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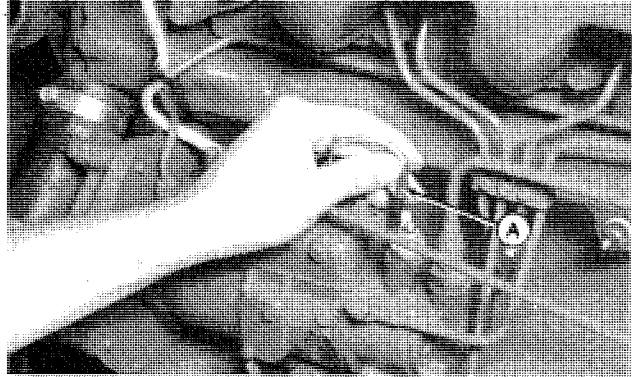
13. Disconnect working light wire (A) and red taillight wire (B).



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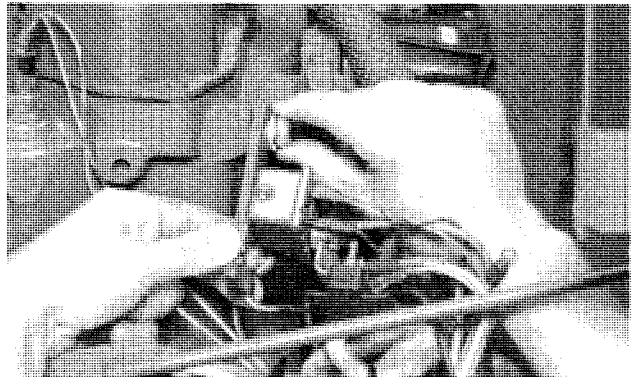
Engine Removal and Installation

14. Disconnect electric fuel shutoff cable (A) from fuel pump.



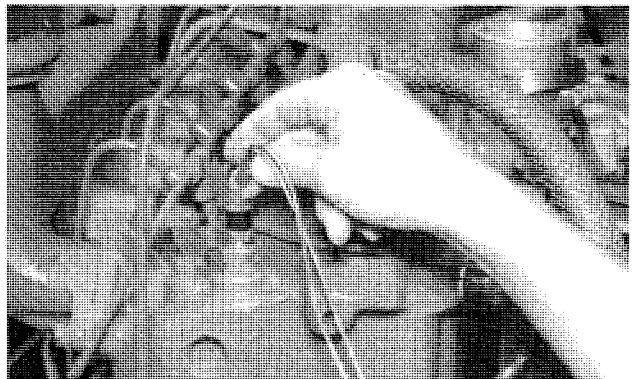
2MA;W10383 W07;;2001 H 030185

15. Remove 1/2-in. bolt, lock washer, and main circuit breaker from engine.



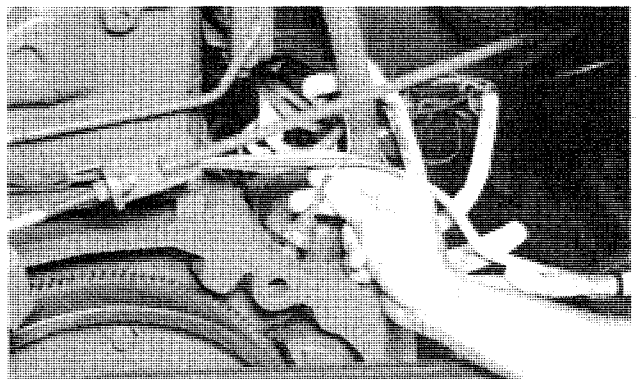
2MA;W10441 W07;;2001 I 030185

16. Remove temperature buzzer wire from engine switch.



2MA;W10443 W07;;2001 J 030185

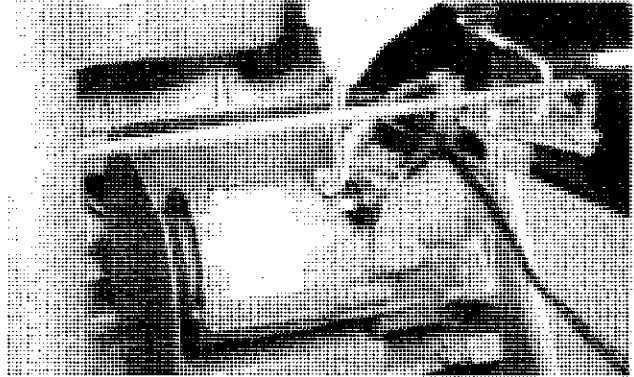
17. Remove oil pressure buzzer wire from sending unit.



2MA;W10444 W07;;2001 K 030185

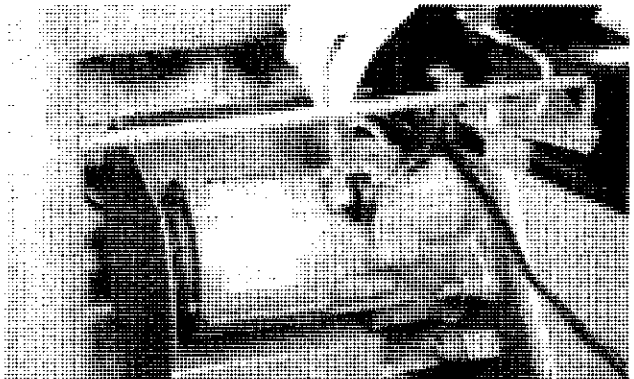
Engine Removal and Installation

18. Remove nut, washer, plastic shield, and positive (+) battery cables from starter solenoid.



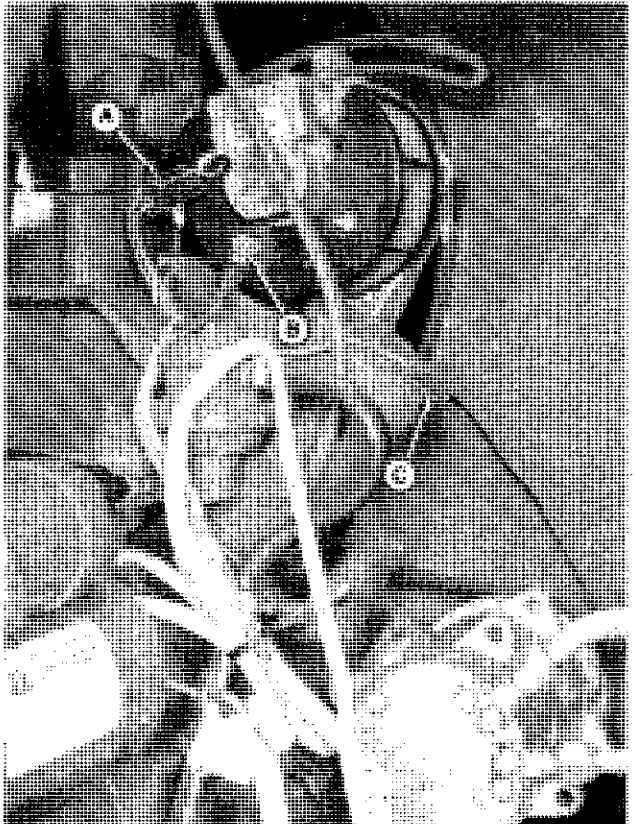
2MA;W10602 W07;;2001 L 030185

19. Remove nut and negative (-) wire from starter solenoid.



2MA;W10654 W07;;2001 M 030185

20. Disconnect wires from voltage regulator (A), alternator (B), and A-C compressor (C).



2MA;W10446 W07;;2001 N 030185

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MANUAL. NO WAITING**



NOTE:

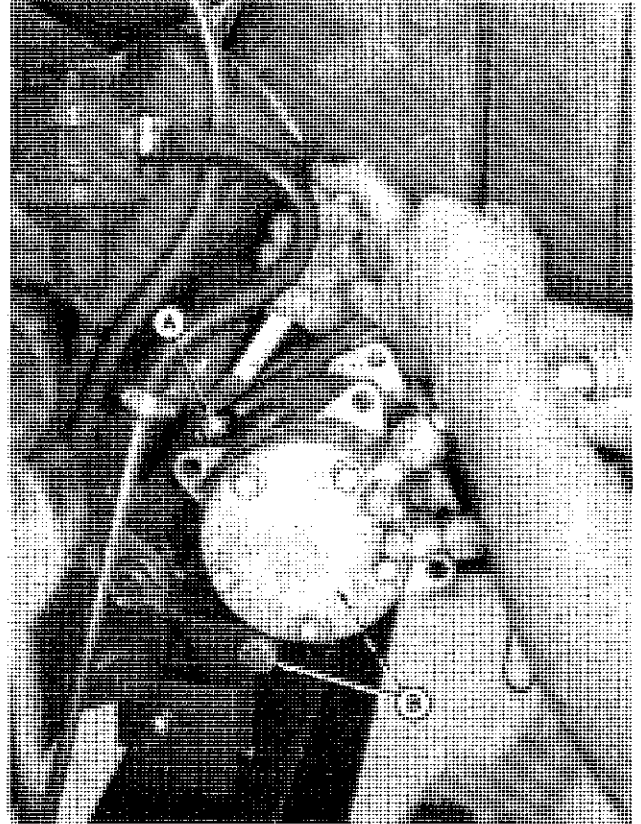
**If there is no response to
click on the link above,
please download the PDF
document first and then
click on it.**

Engine Removal and Installation

21. Remove belt tensioning hardware (A) and pivot hardware (B).

Remove compressor from support and drive belt. Secure to windrower frame clear of engine compartment.

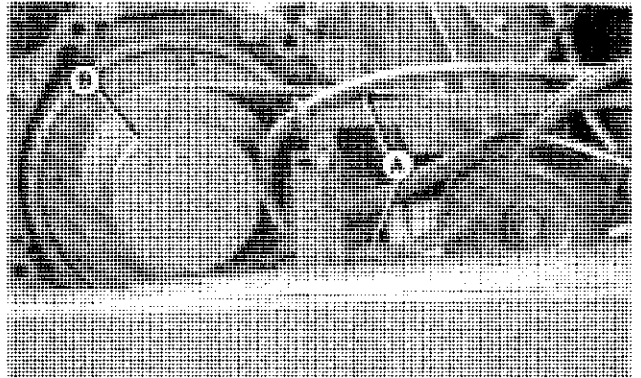
IMPORTANT: Be sure not to disconnect, kink, or damage refrigerant hoses when repositioning compressor.



2MA;W10447 W07;;2001 Q 030185

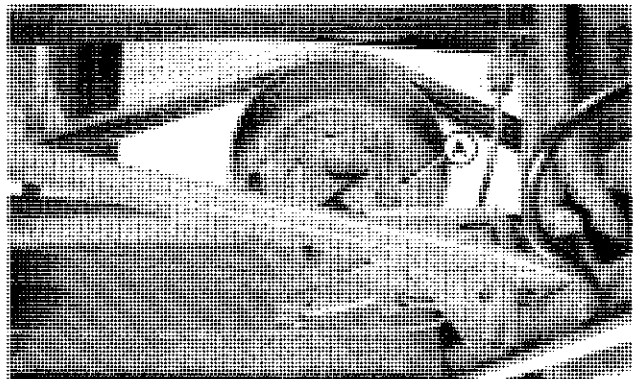
22. Remove platform drive belt (A) from engine flywheel (B).

NOTE: Platform drive must be disengaged.



2MA;W10423 W07;;2001 P 120485

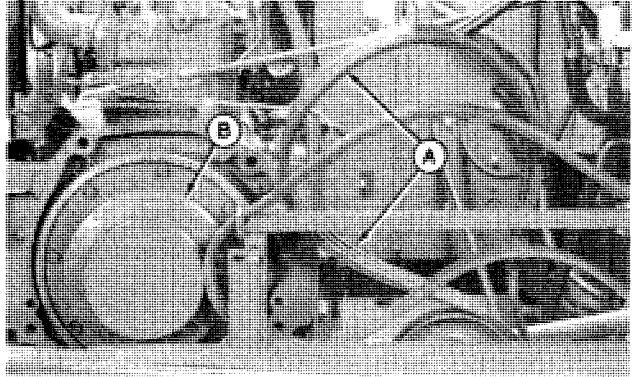
23. Loosen adjusting nuts (A) on tractor drive belt tensioner until belt will clear engine flywheel.



2MA;W10422 W07;;2001 Q 030185

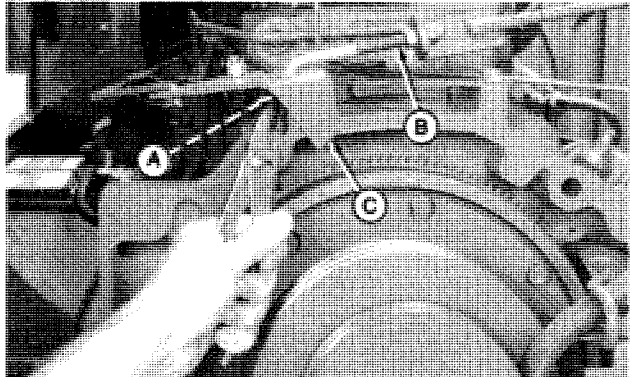
Engine Removal and Installation

24. Remove tractor drive belt (A) from engine flywheel (B).



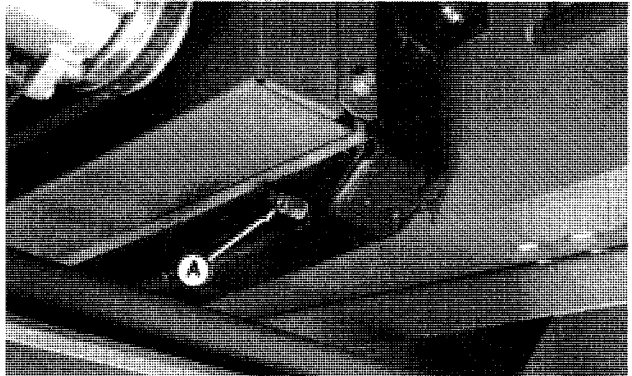
2MA;W10424 W07;;2001 R 030185

25. Remove cotter pin (A) and disconnect throttle linkage (B) from pivot plate (C).



2MA;W10448 W07;;2001 S 030185

26. Drain engine coolant from radiator by opening drain valve (A).



2MA;W10449 W07;;2001 T 030185

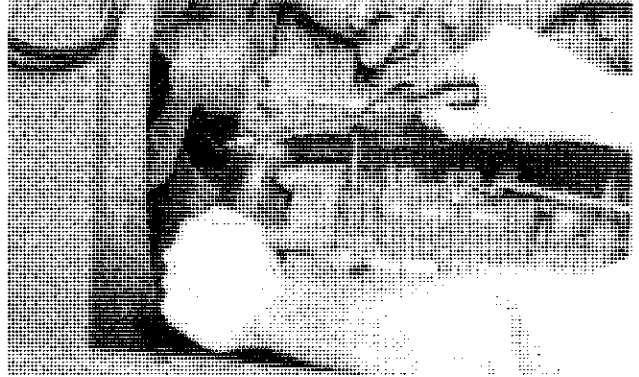
27. Loosen clamp and disconnect coolant return hose from radiator.



2MA;W10450 W07;;2001 U 030185

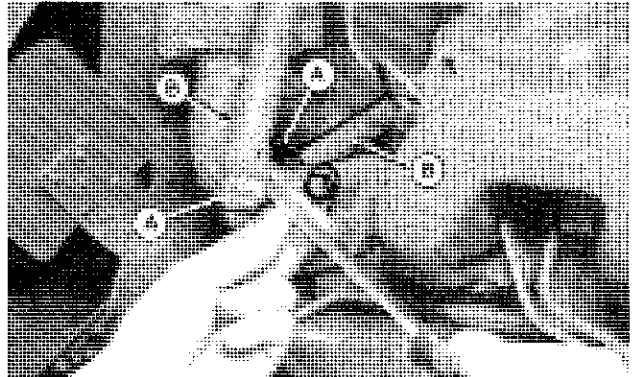
Engine Removal and Installation

28. Loosen clamp and remove coolant supply hose from water pump.



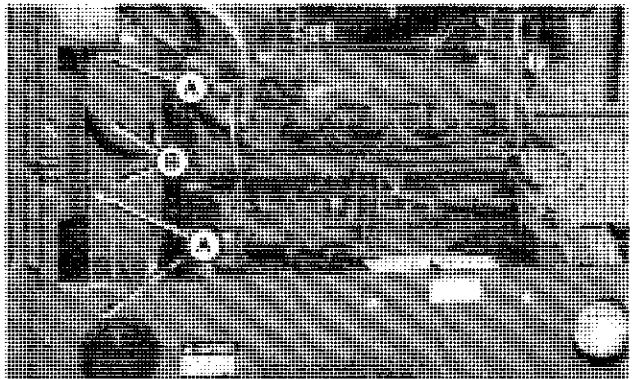
2MA;W10429 W07;;2001 V 030185

29. Loosen clamps (A) and remove heater hoses (B).



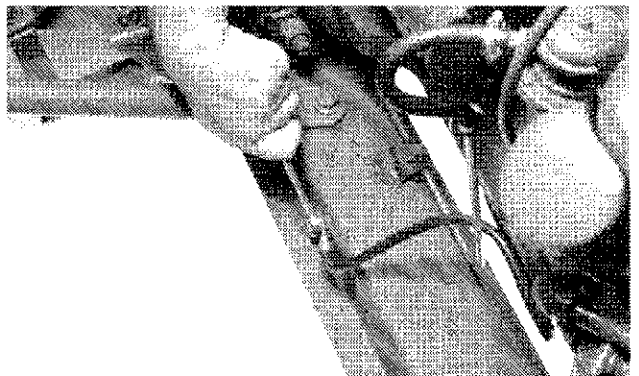
2MA;W10451 W07;;2001 W 030185

30. Remove fasteners (A) and strap (B) from fan shroud. Repeat steps on other side and separate fan shroud from radiator. Support shroud on fan.



2MA;W10452 W07;;2001 X 030185

31. Disconnect engine negative (-) ground cable from frame.



2MA;W10454 W07;;2001 Y 030185