

JOHN DEERE JD760-A SCRAPER



JOHN DEERE

OPERATORS MANUAL JOHN DEERE JD760-A SCRAPER

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ENGLISH





To the Purchaser


This new scraper was carefully designed and manufactured to give years of dependable service. To keep it running efficiently, read the instructions in this operator's manual. Each section is clearly identified so you can easily find the information you need - whether it is operation, lubrication or service.

Read the Contents to learn where each section is located. Use the alphabetical index for fast reference.

Throughout this manual, right hand and left hand sides are determined by facing in the direction of scraper forward travel.

Record serial numbers in the spaces provided on page 82. Your dealer needs this information to give you prompt, efficient service when you order parts. If your scraper requires replacement parts, go to your John Deere dealer where you can obtain Genuine John Deere parts—accept no substitutes.

The warranty on this scraper appears on your copy of the purchase order which you received from your dealer when you purchased the scraper.

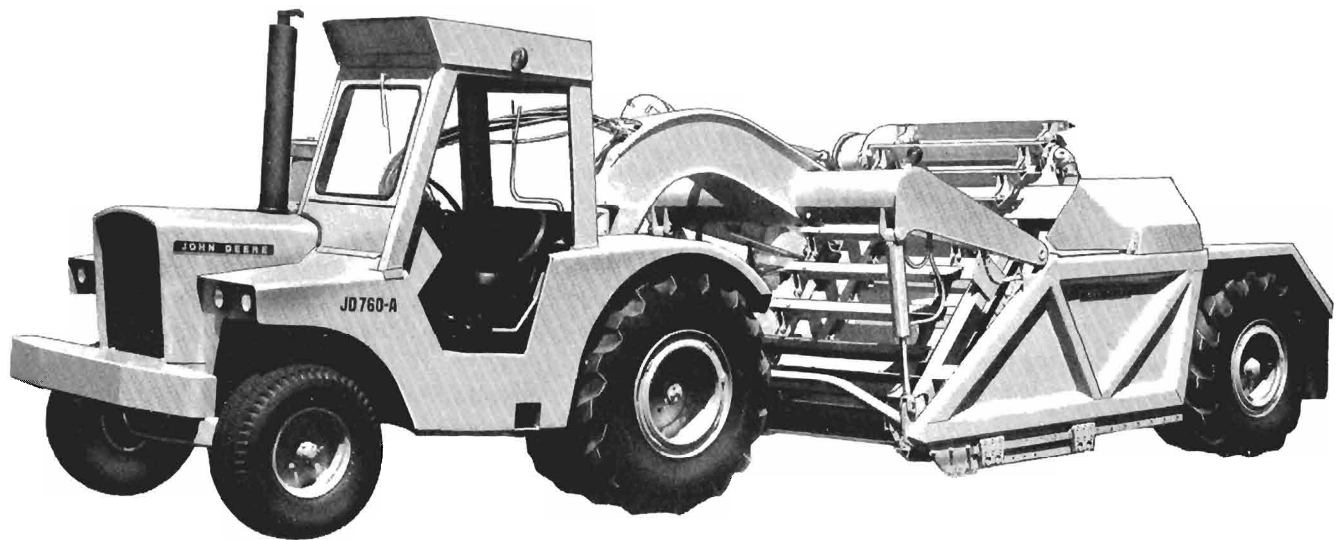
 This safety alert symbol indicates important safety messages in this manual. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.





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John Deere JD760-A Scraper



Safety Rules

⚠ The safety of the operator is a prime consideration in the design of this machine. Guards, shields, non-skid work areas and other safety features are built in wherever possible. However, reports on accidents show that careless use of machinery causes a high percentage of accidents. You can avoid many accidents by observing the safety rules on these pages. Study these rules carefully and enforce them on the job.

Before starting the engine, be sure the area is well ventilated. Never operate the engine in a closed shed or garage.

Walk completely around the scraper making sure everyone and everything is clear before starting to work.

Do not operate a machine with an unsafe condition. If one is noticed, tag the steering wheel so that other operators will also know of it.

Provide a first-aid kit for use in case of accident. Use the proper antiseptics on scratches, cuts, and other injuries without delay to prevent the possibility of infection.

When transporting or driving on a road or highway at night or during the day, use accessory lights and devices for adequate warning to the operators of other vehicles. In this regard, check local government regulations. Various safety lights and devices are available from your John Deere dealer.

Keep a firm grip on the steering wheel at all times when speed is increased.

Do not allow anyone near the scraper while the driver is in the tractor seat with the engine running.

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

Reduce speed before turning quickly or applying brakes. When making an emergency stop without a scraper, be sure both wheels are braked simultaneously.

Always keep the tractor in gear when going down steep grades. Under poor traction conditions, use the scraper brakes only to slow or stop the tractor-scraper unit. Sudden application of the tractor brakes only, could cause the unit to jackknife.

When driving out of a ditch, gully, excavation or up a steep hillside, engage the inching pedal slowly. Be prepared to disengage the inching pedal promptly if the front wheels rise off the ground. Observe the same precautions if the rear wheels become mired in soft ground or drop into a hole. Back out of these situations.

Keep haul roads smooth. Reduce speed when traveling over rough terrain.

Maximum safe load limit for the scraper is 23,750 pounds [10772.8 kg]. Do not exceed this limit.

When transporting an empty scraper, travel at reasonable speeds. Carry the scraper in the highest raised position.

When hauling a load with the scraper, travel at speeds consistent with conditions. Carry the bowl as low as ground conditions will permit for best stability.

Never operate PTO when turning scraper at angles exceeding 30 degrees.

It is a good practice to mount a fire extinguisher on the scraper. Be sure that the extinguisher is properly maintained and be familiar with its proper use.

Daily remove all trash accumulation from engine and operator's compartments.

In areas where flashing lights are prohibited by local regulations, be sure the flashers for the warning lamps, mounted on the draft frame and the operator's compartment, are disconnected.

When hitching drawn equipment to the drawbar, back past the clevis. Then move forward so that, in making the connection, the tractor will be moving away from the equipment.

Always hitch a heavy load to the drawbar and be sure to take up the slack in a chain slowly.

When watching rear equipment work, be sure your path ahead is clear to avoid collision with other equipment.

Do not oil or grease the scraper while the engine is running or while the bowl is raised.

Since loose clothing might catch in moving parts, always keep sleeves, jackets, or other clothing relatively tight and belted.

Always be sure all PTO guards or shields are used properly.

Use proper shear pins specified for this machine.

Securely block the bowl when adjusting cutting edge or skid shoes.

Keep brakes properly adjusted at all times.

Do not attempt to disconnect or remove the accumulators without first relieving the oil pressure in the unit. See page 58 for instructions.

The accumulator unit is charged with dry nitrogen at a pressure of 500 psi [3.4 mPa]. Only dry nitrogen may be used to charge the unit.

Do not leave equipment in the raised position when it is not in use. Always lower it to the ground.

Before using booster batteries, read instructions on page 9. If a battery needs recharging, avoid sparks by turning off the charger before connecting or disconnecting the charger.

Do not leave the engine running while adjustments or repairs are being made unless a running engine is specifically recommended.

Add coolant to the radiator only when the engine is stopped or slowly idling. To avoid being scalded when the pressure-type filler cap is being removed, turn the cap slightly to the stop to relieve pressure before removing the cap.

Always disconnect the battery cables before making adjustments on the electrical system, the engine and before welding on any part of the unit. This prevents dangerous sparks which create a fire hazard and may cause harm or damage. This also prevents accidental starter operation.

Use caution in handling any type of fuel. Never refuel when the engine is hot or is running. Do not smoke while filling the fuel tank or servicing the fuel system.

Before dismounting, always stop the elevator by disengaging the PTO clutch, lower the scraper to the ground, place the shift lever in park, and stop the engine. Discharge the accumulator by operating the bowl or gate control levers back and forth until there is no response.

Escaping fluid under pressure can have sufficient force to penetrate the skin, causing serious personal injury. Before disconnecting lines, be sure to relieve all pressure. Before applying pressure to the system, be sure all connections are tight and that lines, pipes and hoses are not damaged. Fluid escaping from a very small hole can be almost invisible. Use a piece of cardboard or wood, rather than hands, to search for suspected leaks.

If injured by escaping fluid, see a doctor at once. Serious infection or reaction can develop if proper medical treatment is not administered immediately.

Be sure all tire rim parts are correctly assembled and interlocking before inflating tires. Use an inflation cage, safety cables, or some other device during inflation.

Keep hands, floors, and controls free from water, grease, and mud to insure non-slip control.

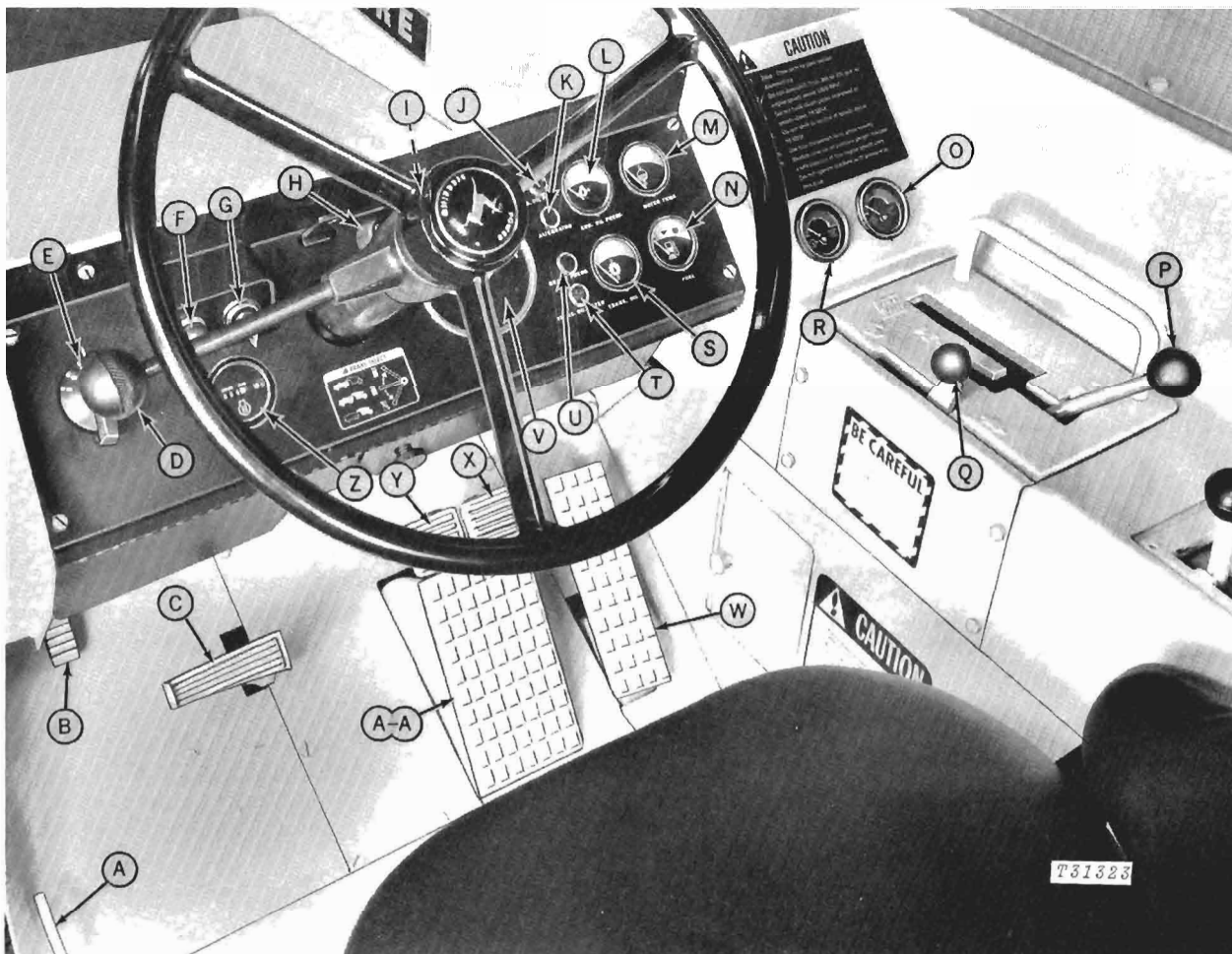
Check for loose electrical connections or faulty wiring.

Never drive too close to the edge of a ditch or excavation.

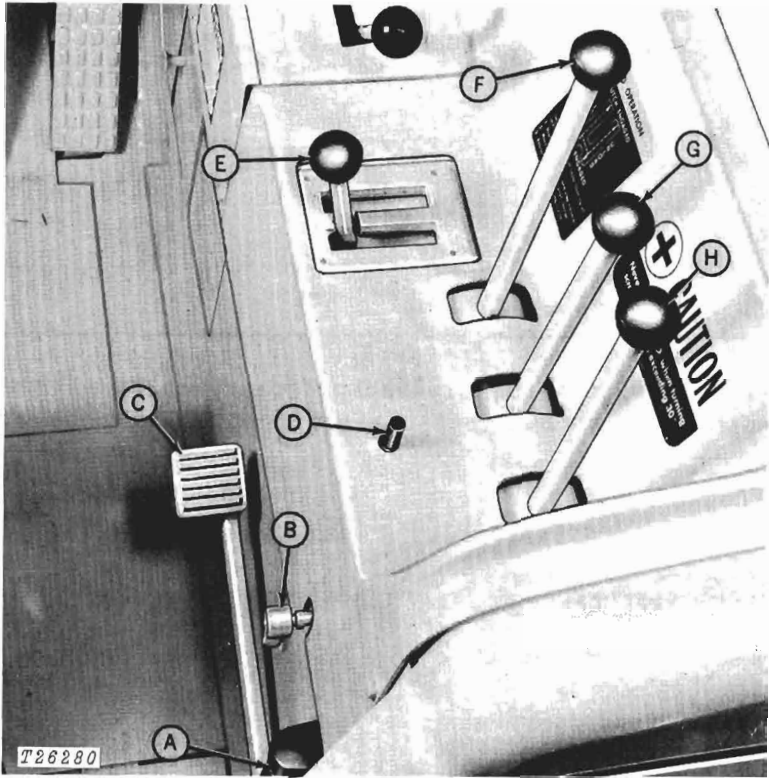


Controls and Instruments

For safe and efficient operation, first become familiar with the location and purpose of all controls and instruments. Study the next few pages carefully, regardless of your previous experience.



- | | | |
|-------------------------------------|---------------------------------------------------------|---------------------------------------------------|
| A —Battery Compartment Lever | J —Engine Oil Pressure Light | S —Transmission Oil Temperature Gauge |
| B —Differential Lock Pedal | K —Alternator Indicator Light | T —Transmission Oil Filter Indicator Light |
| C —Clutch Pedal | L —Engine Oil Pressure Gauge | U —Low Brake Pressure Warning Light |
| D —Brake Selector Lever | M —Engine Coolant Temperature Gauge (Water Temp) | V —Speedometer |
| E —Light Switch | N —Fuel Gauge | W —Foot Throttle |
| F —Horn Button | O —Transmission Oil Pressure Gauge | X —Right Brake Pedal |
| G —Key Switch | P —Speed Selector | Y —Left Brake Pedal |
| H —Cigaret Lighter | Q —Hand Throttle | Z —Hour Meter |
| I —Speedometer Knob | R —Transmission Lube Pressure Gauge | AA —Brake Treadle |



- A—Cold Weather Starting Aid Adapter
- B—Float Lockout Lever
- C—Transmission Disconnect Pedal
- D—Transmission Disconnect Release Button

- E—Elevator Control Lever
- F—Bowl Control Lever
- G—Ejector Gate Lever
- H—Scarifier or Auxiliary Lever



Operation

Complete instructions for operating your scraper safely and efficiently are given on the following pages. By following these directions carefully, you can be sure that you are taking full advantage of the many features built into your scraper.

OPERATING THE ENGINE

PRESTARTING CHECKS

Perform the following checks and services before starting the engine for the first time each day.

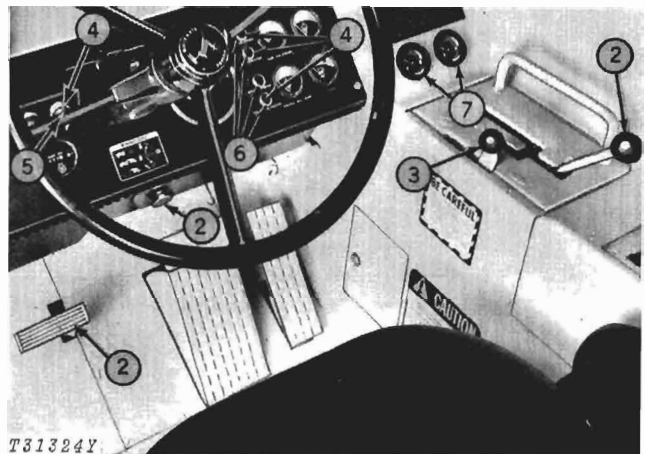
1. Check the engine crankcase and transmission oil level.
2. Check the radiator coolant level.
3. If the engine is protected from dust and dirt by a pre-cleaner, check the bowl.
4. Check the fuel filter sediment bowl.
5. Lubricate the front axle pivot pins, steering knuckle pins, steering bell crank, tie rod ends, and steering cylinder end fittings.
6. Check the air cleaner restriction indicator.
7. Check emergency brake operation.

IMPORTANT: Immediately after starting the scraper and before moving the scraper, check the steering and brake systems. If either system is not working, do not attempt to move the scraper until the problem is corrected.

STARTING THE ENGINE

NOTE: If the prevailing temperature is 40°F. [4°C.] or lower, it may be necessary to use a cold weather starting aid to start the engine - see pages 8 and 9.

1. Make sure that the fuel shut-off valve at the bottom of the fuel tank is open. See page 49.
2. Open the vandal cover. Set the speed selector lever in "PARK" position. Depress the inching pedal.
3. Set the hand throttle approximately one third of its travel forward.



Starting Controls

4. Turn the key switch clockwise to the first position. The alternator, oil pressure, and transmission oil filter indicator lights should glow. Turning the key switch further to the start position should cause the oil filter indicator light to glow and the alternator indicator light to go out. If any light fails to glow, turn off the key switch and determine the cause.

5. Turn the key switch all the way to the right to start the engine. Do not operate the starter for more than 20 seconds at a time. To do so may overheat the starter. If the engine does not start the first time, wait two minutes before trying again. If it does not start after four attempts, see "Trouble Shooting."

If the key switch is released before the engine starts, wait until the starter and the engine stop before trying again. This will prevent possible damage to the starter.

Before the starter will operate, the speed selector lever must be in "PARK" or neutral.

6. After the engine starts, the transmission oil filter indicator light will glow if the oil is cold; all other indicator lights should go out. If the engine oil, alternator or brake pressure indicator light continues to glow after the engine has been running 10 seconds, stop the engine and determine the cause.

7. The transmission lube pressure gauge and transmission oil pressure gauge will register in the green (operating) zone when the transmission is warmed up sufficiently.

If the engine disconnect clutch was disengaged, engage the clutch immediately after starting the engine. This will prevent damage to the tractor.

WARM-UP PERIOD

Warm-up engine before operating under full load. Oil will then circulate freely, preventing excessive wear on piston rings, cylinders and bearings. Do not race or idle the engine during warm-up.

It is good practice to operate the engine under a lighter load and lower speeds than normal for the first 30 minutes.

NOTE: Do not operate unit under load when transmission oil filter indicator light glows.

ENGINE IDLING

Avoid unnecessary engine idling. Prolonged idling may cause the engine coolant temperature to fall below its normal range. This causes crankcase oil dilution due to incomplete fuel combustion, permitting formation of lacquer or gummy deposits on valves, pistons, and piston rings. It also promotes rapid accumulation of engine sludge and unburned fuel in the exhaust system.

When the engine is to remain idle for a considerable length of time, shut off the engine.

ENGINE SPEEDS

The engine is designed to operate at working speeds ranging from 1500 to 2200 rpm. The engine can be operated at any speed in this range to meet various operating conditions. Slow idle speed is approximately 800 rpm. To check engine idle speeds, see page 44.

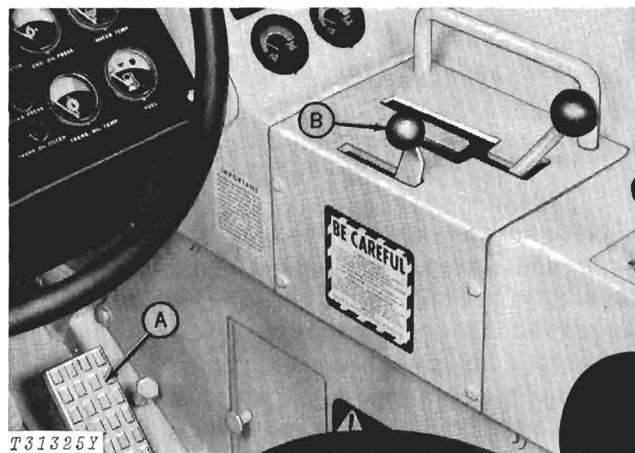
BREAK-IN PERIOD

The FIRST 100 hours of operation is designated as the unit break-in period. During this period, warm the engine up thoroughly before operating under full load. Do not race or idle the engine. Operate the unit under a lighter load and lower speeds than normal for the first 30 minutes of daily operation.

Before the unit was shipped from the factory, all bearings and friction surfaces were correctly fitted and lubricated as required. The crankcase was filled with John Deere Torq-Gard Supreme 10W-20 oil.

Check the crankcase oil level frequently during the first 100 hours of operation. If it becomes necessary to add oil during the break-in period, use John Deere Torq-Gard Supreme 10W-20 oil.

FOOT THROTTLE



A—Foot Throttle

B—Hand Throttle

The foot throttle is used to control engine speed during normal scraper operation. The engine operates at the 2200 rpm load speed when the foot throttle is pushed all the way down.

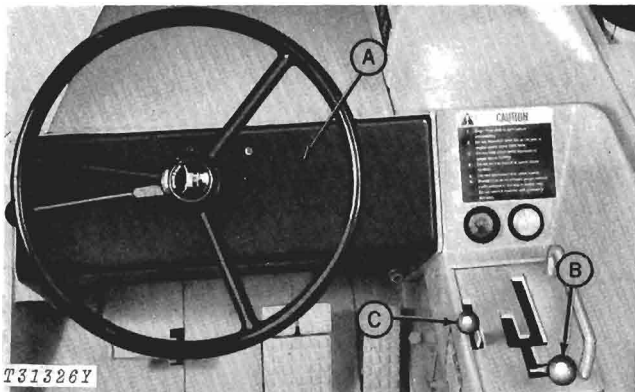
The foot throttle raises engine speed above the speed selected by the hand throttle. Therefore, to obtain maximum braking effect from the engine, move the hand throttle all the way rearward.

An adjustable footrest is provided to assist foot throttle operation. Adjust the footrest by loosening the lock nut, screwing the rest in or out, and tightening the lock nut.

HAND THROTTLE

The hand throttle may be used to select continuous operating speeds. Move the throttle all the way forward to raise engine speed to the 2200 rpm load speed. During normal scraper operation, move the throttle all the way rearward to the 800 rpm slow idle speed for maximum engine braking.

STOPPING THE ENGINE



A—Vandal Cover Locked

B—Speed Selector Lever
C—Hand Throttle

Place the speed selector lever in "PARK" and allow the engine to idle a few minutes. Sudden stopping of a hot engine may allow some parts to overheat momentarily and cause possible damage.

Turn the key switch counterclockwise to the off position to stop the engine.

After stopping the engine, remove the key from the switch to prevent tampering and unauthorized operation. Removing the key also prevents the switch from being accidentally left in the on (clockwise) or the accessory (counterclockwise) position and causing battery discharge.

Before dismounting, be sure all equipment is lowered to the ground, the light switch and other accessory switches are off, and the transmission is in "PARK." Discharge the hydraulic oil accumulator by operating the scraper bowl or gate lever back and forth until there is no response.

Loosen the knob, raise the vandal cover from the lowered position, and lock it to prevent damage from vandals.

COLD WEATHER STARTING AIDS

CAUTION: At low temperatures, the PTO shaft will turn for several seconds after starting the engine.

The scraper is equipped with an ether starting fluid adapter and a disconnect clutch. A crankcase oil heater can be purchased from your John Deere dealer.

These aids are effective at low temperatures if the engine is operating satisfactorily. They will not correct such deficiencies as incorrect diesel fuel, low battery charge, heavy viscosity crankcase oil, and high electrical resistance which may prevent the engine from starting.

Starting Fluid Adapter

This adapter is used to inject atomized starting fluid into the engine air intake system. Pressurized cans of starting fluid are available from your John Deere dealer.

To use the can of starting fluid, remove the safety cap and plastic spray button from the can. Remove the cap from the adapter and position the can under the adapter.

To inject starting fluid, momentarily push up on the can.

IMPORTANT: To avoid damaging engine, turn the engine with the starter one or two revolutions before injecting starting fluid and inject starting fluid only while the engine is turning.

Relax pressure on the can between "shots" of starting fluid. Stop injecting the fluid after the engine starts. If the engine begins to die during the first few



A—Engine Disconnect Pedal

B—Engine Disconnect Release Button

C—Starting Fluid Adapter

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