655, 755, and 855 Tractors

John Deere Horicon Works
OMM79644 Issue B9
machines up to Serial No. (Serial No. 615,001-))
LITHO IN U.S.A.
ENGLISH

Introduction

THANK YOU for purchasing a John Deere product.

READ THIS MANUAL carefully to learn how to operate and service your machine correctly. Failure to do so could result in personal injury or equipment damage.

THIS MANUAL SHOULD BE CONSIDERED a permanent part of your machine and should remain with the machine when you sell it.

MEASUREMENTS in this manual are U.S. customary units and their metric equivalents.

RIGHT-HAND AND LEFT-HAND sides are determined by facing in the direction the implement will travel when going forward.

WRITE IDENTIFICATION NUMBERS in the Specifications section. Accurately record all the numbers to help in tracing the machine should it be stolen. Your dealer also needs these numbers when you order parts. If this manual is kept on the machine, also file the identification numbers in a secure place off the machine.

WARRANTY is provided as part of John Deere's support program for customers who operate and maintain their equipment as described in this manual. The warranty is explained on the warranty certificate which you should have received from your dealer.

This warranty provides you the assurance that John Deere will back its products where defects appear within the warranty period. In some circumstances, John Deere also provides field improvements, often without charge to the customer, even if the product is out of warranty. Should the equipment be abused, or modified to change its performance beyond the original factory specifications, the warranty will become void and field improvements may be denied. Setting fuel delivery above specifications or otherwise overpowering machines will result in such action.

THE TIRE MANUFACTURER'S warranty supplied with your machine may not apply outside the U.S.

M39547 -UN-29AUG88

MX,IFC,79644 -19-06FEB89

Contents

Continued on next page

Predelivery Checklist

DEALER'S RECORD

Owner's Name _____

Address _____

City _____

State _____ Zip _____

Date Sold _____

Skid-Steer Loader _____

Product Identification Number _____

Engine Serial Number _____

MX,DCDF,A -19-06FEB89

PREDELIVERY CHECKLIST

Check the following before you deliver the loader to the customer.

- ☐ 1. Guards and shields fastened in place.
- ☐ 2. Decals in place and legible.
- ☐ 3. Tire pressure.
- ☐ 4. Lubrication points
- ☐ 5. Transmission oil level.
- ☐ 6. Engine oil level.
- ☐ 7. Radiator coolant level.
- ☐ 8. Air cleaner.
- ☐ 9. Battery terminal cover fastened over positive (+) terminal.
- ☐ 10. Battery electrolyte level.
- ☐ 11. Battery charge.
- ☐ 12. Add fuel. Start engine. Test drive.
- ☐ 13. Service-park brake pedal, speed control pedals, and safety switch functions.
- ☐ 14. Steering.
- ☐ 15. Brakes.
- ☐ 16. Controls operate correctly.
- ☐ 17. Optional ballast required.
- ☐ 18. Touch up any scratches in tractor finish.
- ☐ 19. Clean and polish tractor.

Date Set Up

Signature

M21,DCDF,B -19-16JUL86

DELIVERY CHECKLIST

Review the operator's manual with the customer. Explain the following:

☐ 1. John Deere warranty.

☐ 2. Safe operation and service.

☐ 3. How to use controls.

☐ 4. Operating the machine correctly.

☐ 5. Transporting the tractor on a trailer.

☐ 6. Correct fuel and lubricants.

☐ 7. Daily and periodic inspections.

☐ 8. Changing engine oil and filter after first 50 hours of operation.

☐ 9. Servicing the tractor regularly and correctly.

☐ 10. Using correct ballast.

☐ 11. Storing the tractor correctly.

☐ 12. John Deere parts and service.

☐ 13. Have the customer record serial numbers in the Specifications section.

☐ 12. Remove and file this page.

☐ 13. Give the customer the operator's manual. Encourage the customer to read the manual.

Date Set Up

Signature

MX,DCDF,C -19-30SEP85

Safety

RECOGNIZE SAFETY INFORMATION

This is the safety-alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating practices.

T81389 -UN-07DEC88

O53,ALERT -19-16JUN87

UNDERSTAND SIGNAL WORDS

A signal word—DANGER, WARNING, or CAUTION—is used with the safety-alert symbol. DANGER identifies the most serious hazards.

Safety signs with signal word DANGER or WARNING are typically near specific hazards.

General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.

TS187 -19-30SEP88

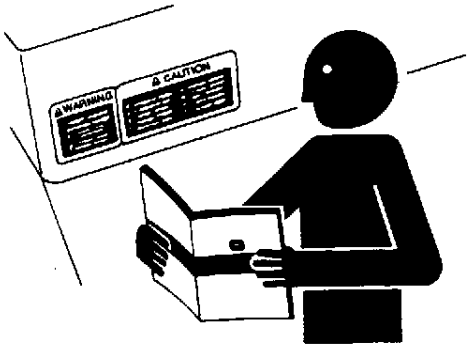
O53,SIGNAL -19-07OCT85

FOLLOW SAFETY INSTRUCTIONS

Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs.

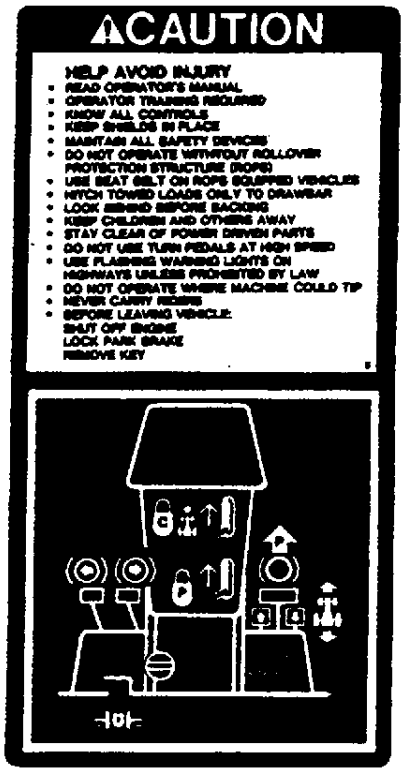
Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.



TS201 -UN-23AUG88

O53,READ -19-23APR87



Platform Safety Sign-Operator's Platform

M39755 -19-28FEB89

MX,SADF,A -19-06FEB89

PTO Safety Sign-Rear PTO Master Shield

M39587 -19-28FEB89

MX,SADF,B -19-06FEB89

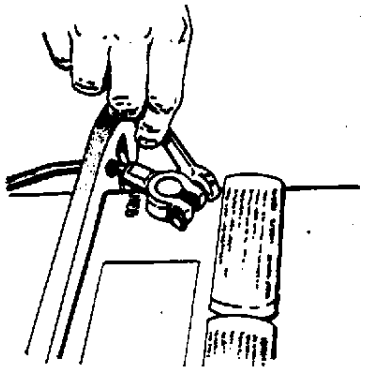
SERVICE TRACTOR SAFELY

Disconnect battery ground cable (—) before servicing if starting engine could possibly injure operator.

Do not smoke or allow an open flame around fuel or battery.

Use support stands when working under the tractor.,

Fix damage immediately. Replace worn or broken parts.



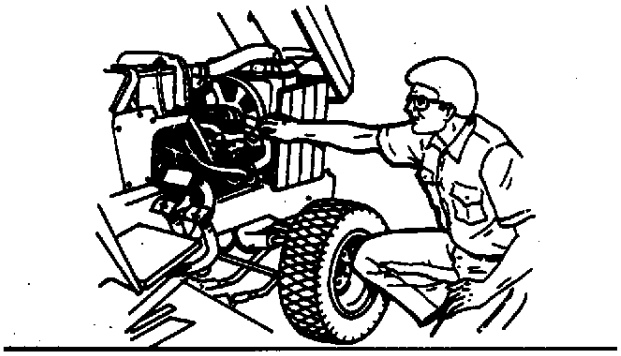
M34435 -UN-07SEP88

MX,SADF,C -19-06FEB89

Before working on any part of the engine, stop the engine, and let it cool down. Hot engine components can burn skin on contact.

Never run engine unless park brake is engaged.

Be careful to prevent clothing, jewelry, or long hair from getting caught in the fan blades, drive belts, or any other moving engine parts.



M39683 -UN-09SEP88

MX,SADF,D -19-06FEB89

PREVENT BATTERY EXPLOSIONS

Battery gas can explode. Keep sparks and flames away from batteries. Use a flashlight to check battery electrolyte level.

Never check battery charge by placing a metal object across the posts. Use a voltmeter or hydrometer.

Always remove grounded (—) battery clamp first and replace it last.

TS204 -UN-23AUG88

MX,SADF,E -19-06FEB89

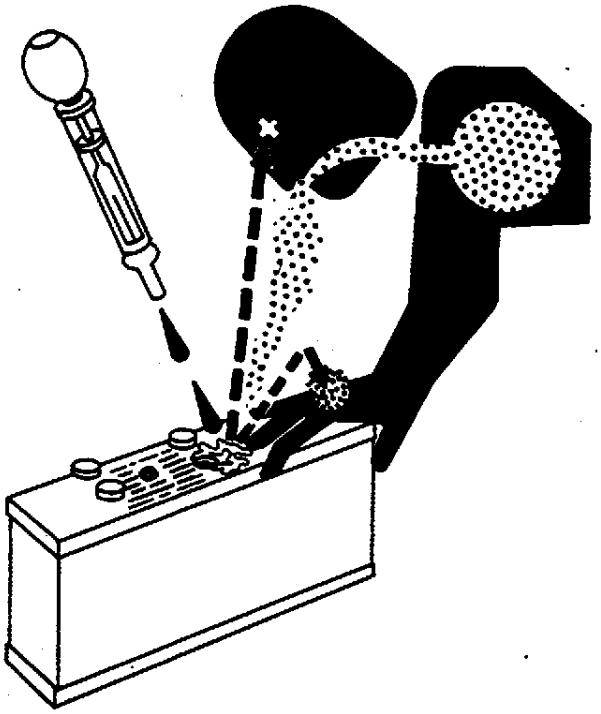
AVOID ACID BURNS

Sulfuric acid in battery electrolyte is poisonous. It is strong enough to burn skin, eat holes in clothing, and cause blindness if splashed into eyes.

Avoid the hazard by:
1. Filling batteries in a well-ventilated area.
2. Wearing eye protection and rubber gloves.
3. Avoiding breathing fumes when electrolyte is added.
4. Avoiding spilling or dripping electrolyte.
5. Use proper jump start procedure.

If you spill acid on yourself:
1. Flush your skin with water.
2. Apply baking soda or lime to help neutralize the acid.
3. Flush your eyes with water for 10—15 minutes. Get medical attention immediately.

If acid is swallowed:
1. Drink large amounts of water or milk.
2. Then drink milk of magnesia, beaten eggs, or vegetable oil.
3. Get medical attention immediately.



TS203 -UN-23AUG88

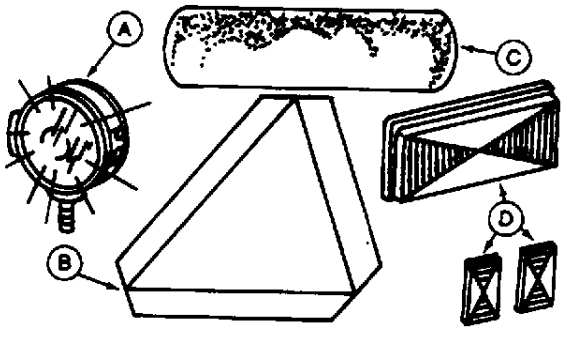
MX,SADF,F -19-06FEB89

USE SAFETY LIGHTS AND DEVICES

Use of flashing warning lights and turn signals are recommended when towing this equipment on public roads unless prohibited by state or local regulations. An implement safety lighting kit is available from your John Deere dealer.

Keep safety items in good condition. Replace missing or damaged items.

A—Lights
B—Slow Moving Vehicle Emblem
C—Reflector Tape
D—Reflectors



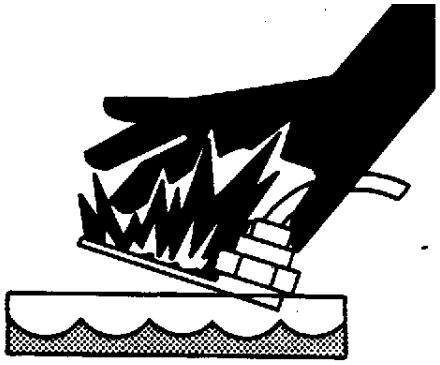
N36564 -UN-10FEB89

O53,FLASH -19-11OCT85

TEST COOLANT HEATER IN LIQUID ONLY

Only plug coolant heater into electrical power if heating element is immersed in coolant. Sheath could burst and result in personal injury.

Use a heavy-duty grounded cord to connect coolant heater to electrical power.



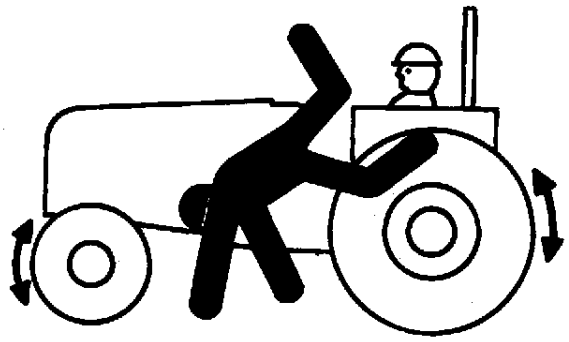
TS210 -UN-23AUG88

MX,SADF,G -19-06FEB89

KEEP RIDERS OFF MACHINE

Only allow the operator on the machine. Keep riders off.

Riders on machine are subject to injury such as being struck by foreign objects and being thrown off of the machine. Riders also obstruct the operator's view resulting in the machine being operated in an unsafe manner.



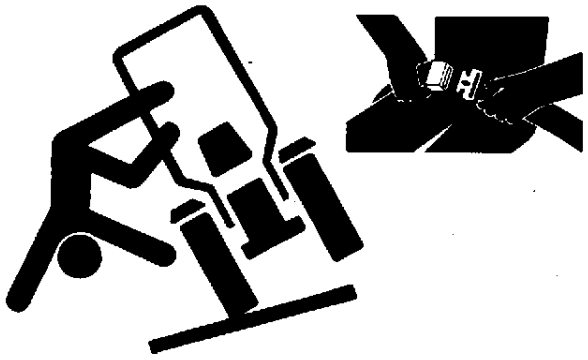
TS290 -UN-23AUG88

O53,RIDER -19-03MAY88

USE SEAT BELT PROPERLY

Use a seat belt when you operate with a roll-over protective structure (ROPS) to minimize chance of injury from an accident such as an overturn.

Do not use a seat belt if operating without a ROPS.



TS205 -UN-23AUG88

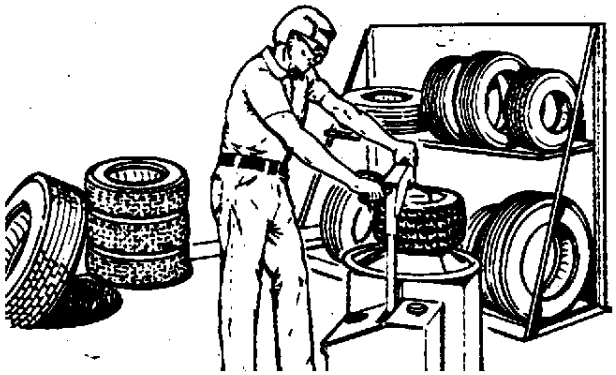
O53,ROPS1 -19-23APR87

SERVICE TIRES SAFELY

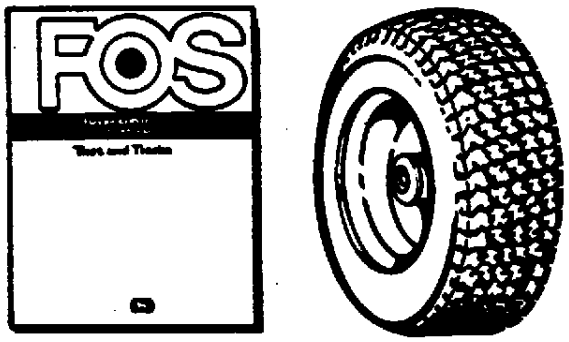
Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious injury or death. Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job. Have it done by your John Deere dealer or a qualified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

When sealing tire beads or 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 dangereous 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 instruction, 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.



M34163 -UN-25AUG88



M34164 -UN-25AUG88

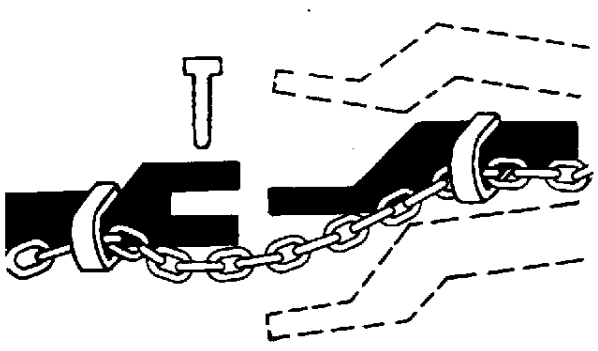
MX,SADF,H -19-06FEB89

USE A SAFETY CHAIN

A safety chain will help control drawn equipment should it accidentally separate from the drawbar.

Using the appropriate adapter parts, attach the chain to the tractor drawbar support or other specified anchor location. Provide only enough slack in the chain to permit turning.

See your John Deere dealer for a chain with a strength rating equal to or greater than the gross weight of the towed machine. Do not use safety chain for towing.



TS217 -UN-23AUG88

O53,CHAIN -19-17DEC87

HANDLE FUEL SAFELY—AVOID FIRES

Handle fuel with care: it is highly flammable. Do not refuel the machine while smoking or when near open flame or sparks.

Always stop engine before refueling machine. Fill fuel tank outdoors.

Prevent fires by keeping machine clean of accumulated trash, grease, and debris. Always clean up spilled fuel.

-UN-23AUG88
TS202

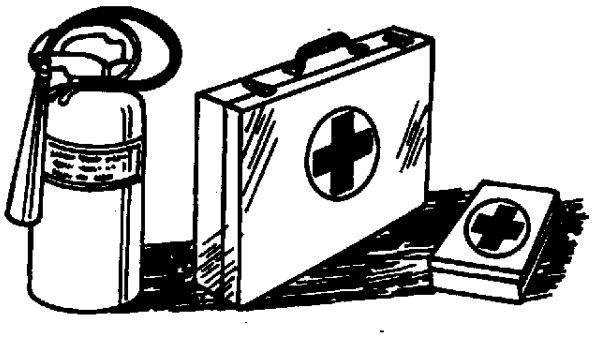
O53,FIRE1 -19-23APR87

PREPARE FOR EMERGENCIES

Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.



-UN-23AUG88
TS291

O53,FIRE2 -19-03MAR88

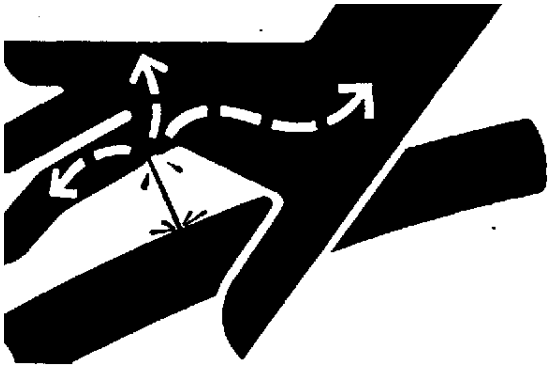
AVOID HIGH-PRESSURE FLUIDS

Escaping fluid under pressure can penetrate the skin causing serious injury.

Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.

Search for leaks with a piece of cardboard. Protect hands and body from high pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury may call the Deere & Company Medical Department in Moline, Illinois, or other knowledgeable medical source.



-UN-23AUG88
X9811

O53,FLUID -19-01DEC88

STAY CLEAR OF ROTATING DRIVELINES

Entanglement in rotating driveline can cause serious injury or death.

Keep tractor master shield and driveline shields in place at all times. Make sure rotating shields turn freely.

Wear close fitting clothing. Stop the engine and be sure PTO driveline is stopped before making adjustments, connections, or cleaning out PTO driven equipment.

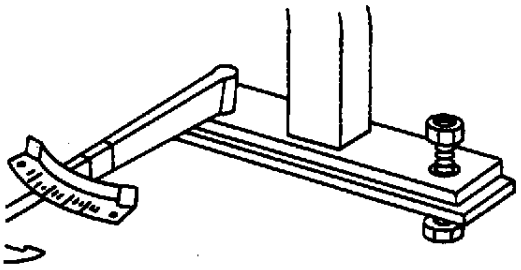
TS198 -UN-23AUG88

O53,PTO -19-16JUN87

KEEP ROPS INSTALLED PROPERLY

Make certain all parts are reinstalled correctly if the roll-over protective structure (ROPS) is loosened or removed for any reason. Tighten mounting bolts to proper torque.

The protection offered by ROPS will be impaired if ROPS is subjected to structural damage, is involved in an overturn incident, or is in any way altered by welding, bending, drilling, or cutting. A damaged ROPS should be replaced, not reused.

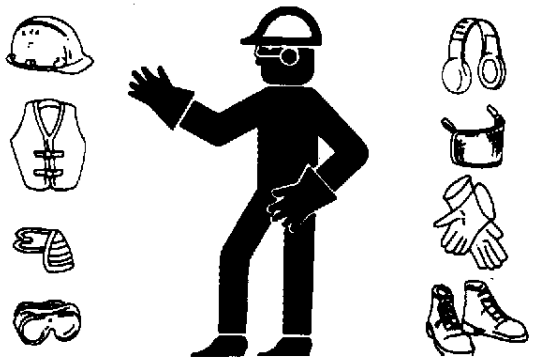


TS212 -UN-23AUG88

O53,ROPS3 -19-23APR87

WEAR PROTECTIVE CLOTHING

Wear close fitting clothing and safety equipment appropriate to the job.



TS206 -UN-23AUG88

O53,WEAR2 -19-23APR87

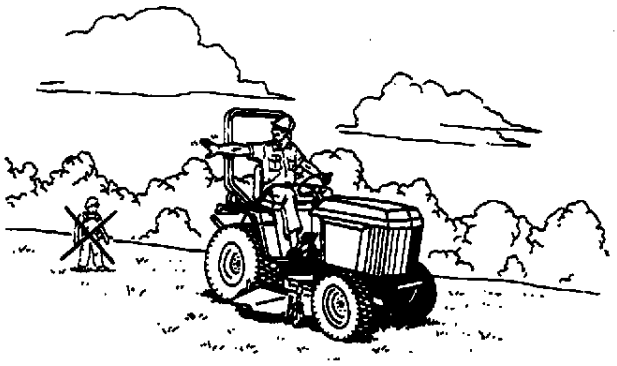
PROTECT CHILDREN

Keep children and others away when you operate machine.

BEFORE YOU BACK UP:
—Stop the PTO.
—Look behind tractor for children.

Do not let children operate tractor.

Do not let children ride on tractor or any implement.



M39679 -UN-09SEP88

MX,SADF,I -19-06FEB89

AVOID TIPPING

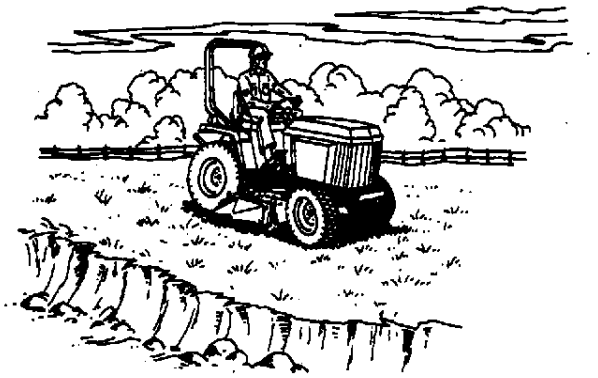
Do not drive where machine could slip or tip.

Stay alert for holes, rocks, and roots in the terrain, and other hidden hazards. Keep away from drop-offs.

Slow down before you make a sharp turn.

Driving forward out of a ditch or mired condition or up a steep slope could cause tractor to tip over backward. Back out of these situations if possible.

Use care when pulling loads or using heavy equipment. Use counterweights or wheel weights suggested in this operator's manual.



M39680 -UN-09SEP88

MX,SADF,J -19-06FEB89

OPERATE SAFELY ON SLOPES

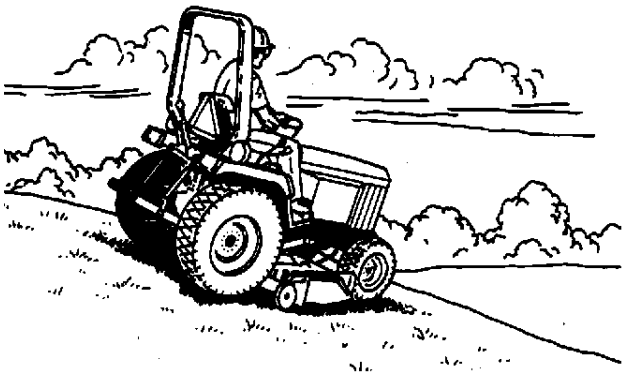
To prevent tipping or losing control of tractor: slow down and be very careful when you drive on slopes or make a sharp turn.

Be very careful when you change directions on a slope.

DO NOT start or stop suddenly as you drive up or down a slope.

If engine stops as you drive up a slope:
—Shut off PTO.
—Back down slowly.

Operate up and down—not across—a slope.



M39681 -UN-09SEP88

MX,SADF,K -19-06FEB89

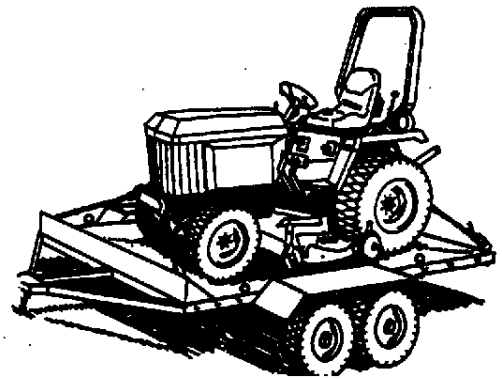
TRANSPORT TRACTOR SAFELY

Use a heavy duty trailer to transport tractor.

Do not pull tractor behind any other vehicle.

Be sure trailer has all the necessary lights and signs required by local, state, provincial, or federal laws.

Fasten the tractor to the trailer with straps, chains, or cables.



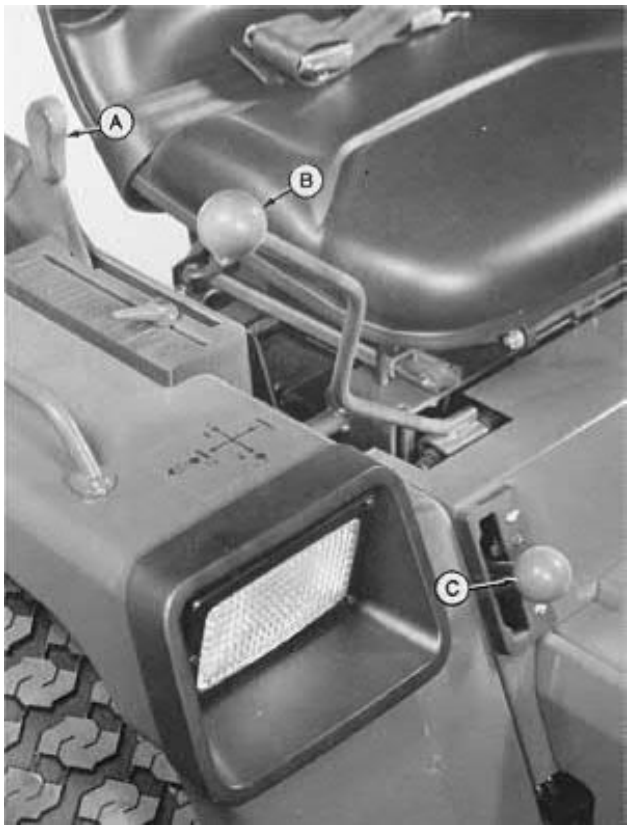
M39682 -UN-09SEP88

MX,SADF,L -19-06FEB89

HYDRAULIC AND TWO-SPEED AXLE CONTROL LEVERS

NOTE: Model 755 Tractor shown.

A—Rockshaft Control Lever
***B—Selective Control Valve Lever**
C—Two-Speed Axle Control Lever
***—Optional Equipment**

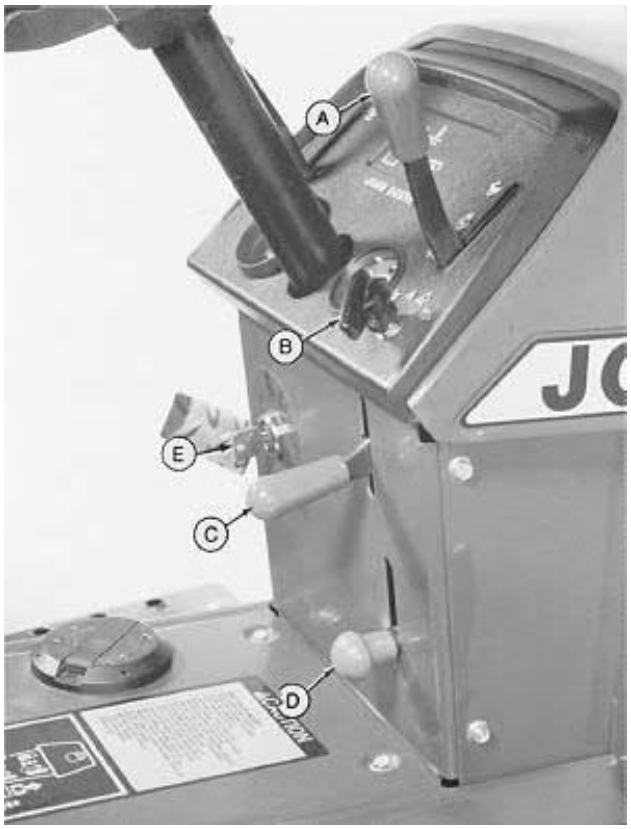


M39542 -UN-29AUG88

MX,CTDF,A -19-06FEB89

CONSOLE CONTROL LEVERS AND SWITCHES

A—Throttle Lever
B—Light Switch
C—Cruise Control Lever
D—Park Brake Lever
E—Key Switch

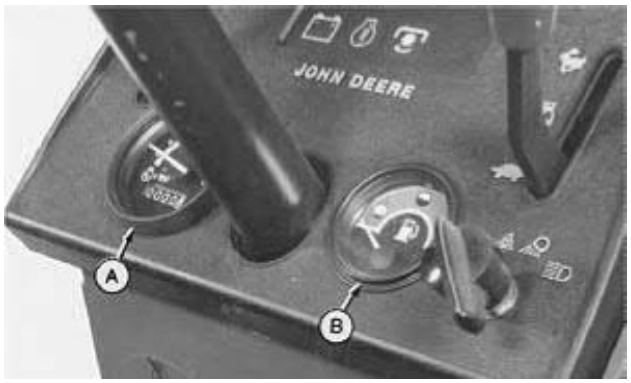


M39543 -UN-29AUG88

MX,CTDF,B -19-06FEB89

GAUGES

A—Tachometer and Hour Meter
B—Fuel Gauge



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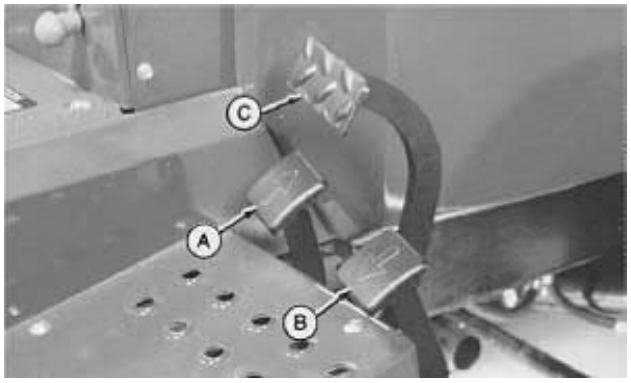
MX,CTDF,C -19-06FEB89

CONTROL PEDALS

A—Forward Speed Control Pedal
B—Reverse Speed Control Pedal
C—Service-Park Brake Pedal



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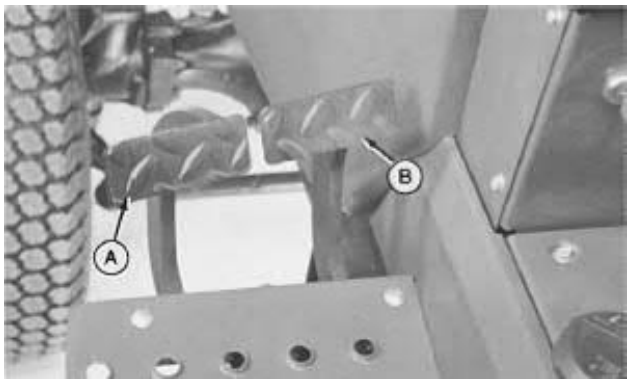
MX,CTDF,D -19-06FEB89

TURN BRAKE PEDALS

A—Left Turn Brake Pedal
B—Right Turn Brake Pedal



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M39546

MX,CTDF,E -19-06FEB89

PTO (POWER TAKE-OFF) LEVER

A—PTO Lever

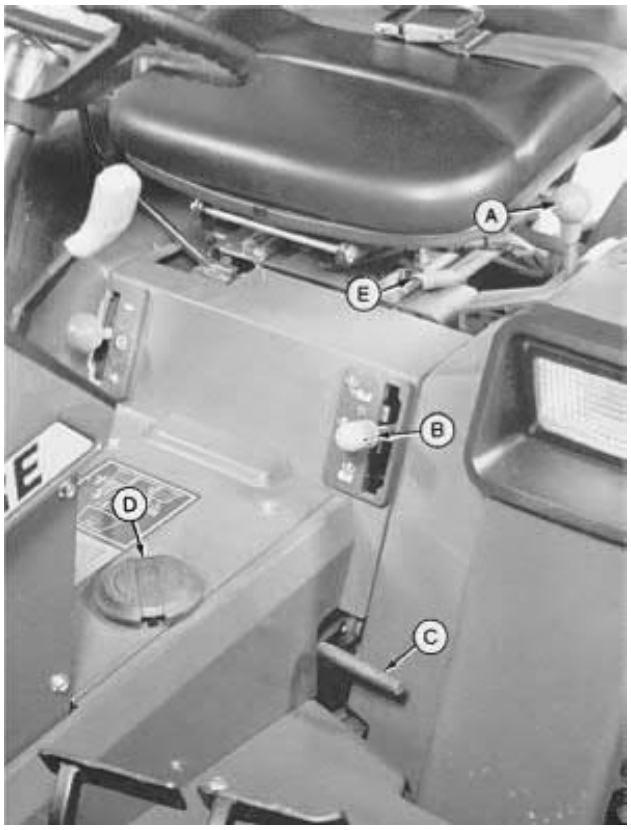
-UN-29AUG88
M39548

MX,CTDF,F -19-06FEB89

CONTROL LEVERS, DIFFERENTIAL LOCK AND MOWER DEPTH CONTROL

NOTE: Model 755 Tractor shown.

A—Optional MFWD (Mechanical Front Wheel Drive) Lever
B—PTO Selector Lever
C—Differential Lock
D—Mower Depth Control
E—Seat Adjusting Lever

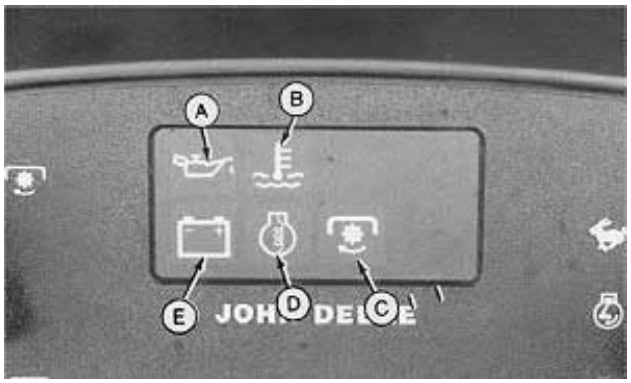


M39549 -UN-29AUG88

MX,CTDF,G -19-06FEB89

INDICATOR LIGHTS

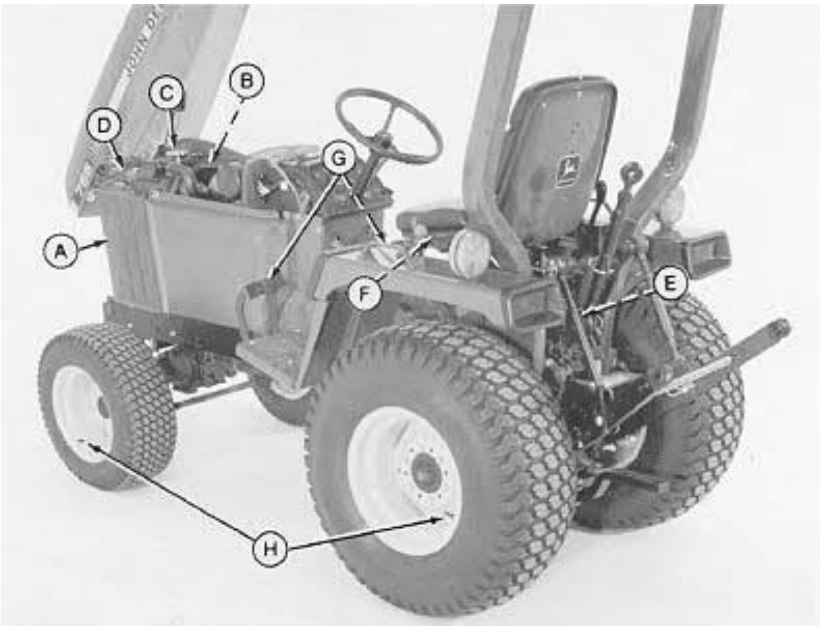
A—Engine Oil Pressure Light
B—Water Temperature Light
C—Battery Discharge Light
D—Engine Preheat Light
E—PTO Light



M39550 -UN-29AUG88

MX,CTDF,H -19-06FEB89

Prestarting Checks



Check	When	Reference	Section
A—Grille and Radiator Screen	Daily	Cleaning Grille and Radiator Screen	Service/10-Hours or Daily
B—Engine oil level	Daily	Checking Engine Oil Level	Service/10-Hours or Daily
C—Coolant level	Daily	Checking Coolant Level	Service/10-Hours or Daily
D—Fill fuel tank	As Necessary	Fuel	Fuels and Lubricants
E—Transmission oil level	Daily	Checking Transmission Oil Level	Service/10-Hours or Daily
F—Adjust seat	As Necessary	Adjusting Seat	Service/As Necessary
G—Safety Interlock System	Daily	Checking Safety Interlock System	Service/10-Hours or Daily
H—Tire Pressure	As Necessary	Checking Tire Pressure	Service/50-Hours
Engine compartment for debris	Daily		
Leaking oil or fuel	Daily		
Loose hardware or damaged parts	Daily		

MX,PCDF,A -19-06FEB89

Operating the Engine

STARTING ENGINE

CAUTION: Start engine ONLY outdoors or in a well ventilated place. Exhaust fumes are dangerous.

IMPORTANT: To prevent damage, do not use any type of starting fluid.

1. Move PTO lever all the way back in bottom of slot to disengage PTO.

MX,OEDF,A -19-06FEB89

2. Move throttle lever between 1/2 to fast position.

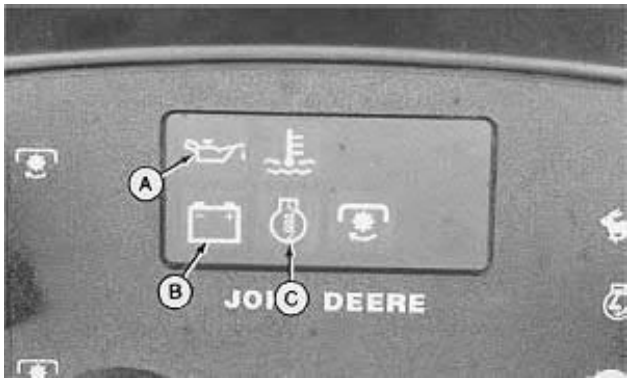
MX,OEDF,B -19-06FEB89

3. Turn key switch to first position, but do not start engine.

a. Oil pressure indicator (A) will be on.
b. Battery discharge indicator (B) will be on.
c. The engine preheat indicator (C) on 655 and 755 Tractors will come on for approximately 8 seconds. The indicator light on 855 Tractor will not come on until ambient temperature is below 64˚F (18˚C) and then will stay on for about 18 seconds. If engine has been run and then cooled, the time may be less. If engine has been run and is hot, the light will not come on.


M39554 -UN-29AUG88

IMPORTANT: Do not operate starter more than 20 seconds. If engine does not start, wait 2 minutes before you try again. Not doing so can damage the starter. If engine does not start after four tries, see Electrical Problems in Troubleshooting section.



M39555 -UN-29AUG88

4. As soon as engine preheat light goes out, turn key switch fully clockwise.

5. As soon as engine starts, release key. The key will return to first position.

6. After engine starts, check indicator lights:

a. Oil pressure indicator should go out within 5 seconds.

b. Battery discharge indicator should go out within 10 seconds. If indicator does not go out after 10 seconds, move throttle to 3/4 position.

If indicators stay on longer than the given time interval, stop engine, find cause, and correct problem. (See your John Deere dealer.)

MX,OEDF,C -19-06FEB89

ENGINE WARM-UP

IMPORTANT: In cold weather, run engine a few minutes to allow engine oil and transmission hydraulic oil to warm-up.

It is normal that the engine noise level is louder during the warm-up period.

It is also normal that whitish-blue smoke will be seen coming from the exhaust after starting and during warm-up. The amount of smoke depends on the outside temperature.

1. Run engine at half throttle for 5 minutes without putting tractor under a full load.

MX,OEDF,D -19-06FEB89

ENGINE IDLING

Allowing engine to idle for long periods of time will:

a. Waste fuel, and
b. cause a build-up of carbon.

Idle engine with throttle in Slow position.

MX,OEDF,E -19-06FEB89

COLD WEATHER STARTING

RECOMMENDATIONS:

—Install optional engine block heater if you operate tractor in temperatures below 0˚F (-18˚C).

—Install optional hydraulic oil heater if you operate tractor below -15˚F (-26˚C).

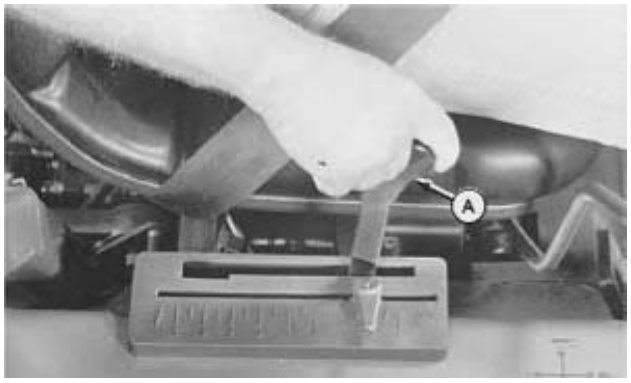
MX,OEDF,F -19-06FEB89

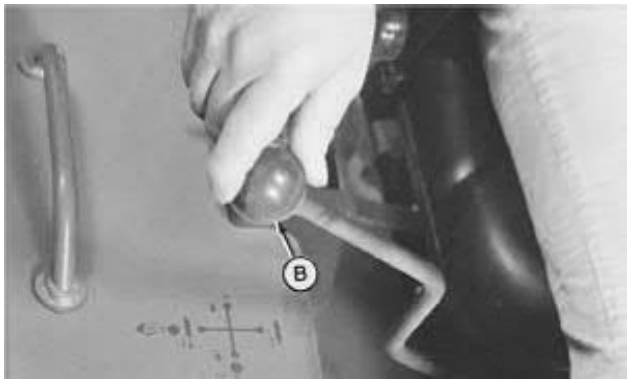
STOPPING THE ENGINE

1. Pull PTO lever to the rear to disengage PTO.

MX,OEDF,G -19-06FEB89

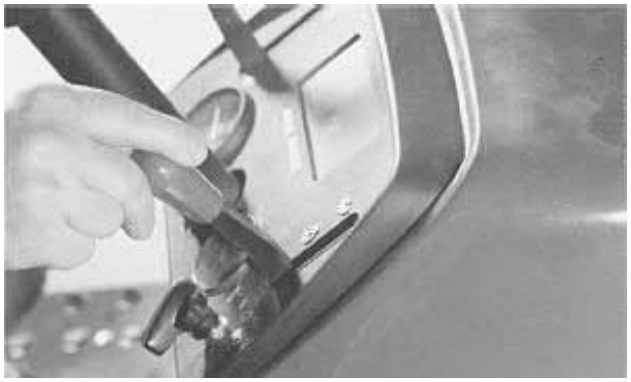
2. Lower all attaching equipment to the surface with rockshaft control lever (A) and/or optional SCV lever (B). (See USING ROCKSHAFT CONTROL LEVER or USING OPTIONAL SCV LEVER in Driving the Tractor section.)





MX,OEDF,H -19-06FEB89

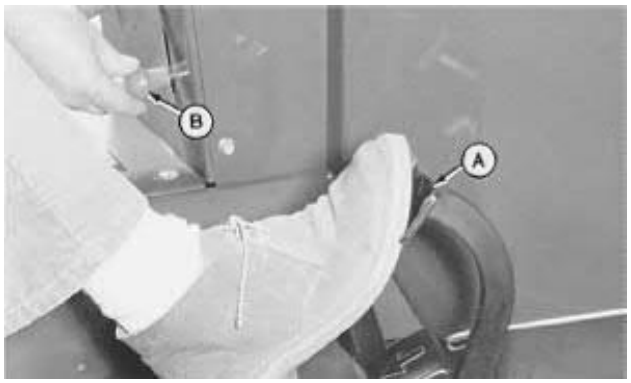
3. Move throttle to slow position.



MX,OEDF,I -19-06FEB89

4. Push and hold service-park brake (A) all the way down.

5. Lift park brake lever (B). Take foot off service-park brake pedal to lock brake.



MX,OEDF,J -19-06FEB89

IMPORTANT: Do not stop engine immediately after hard or extended operation. Keep engine running at low idle (1500 rpm) for about 2 minutes to prevent heat build-up.

6. Let engine idle for 2 minutes.

7. Turn key switch to off position.

MX,OEDF,K -19-06FEB89

8. Remove key.

MX,OEDF,L -19-06FEB89

Driving the Tractor

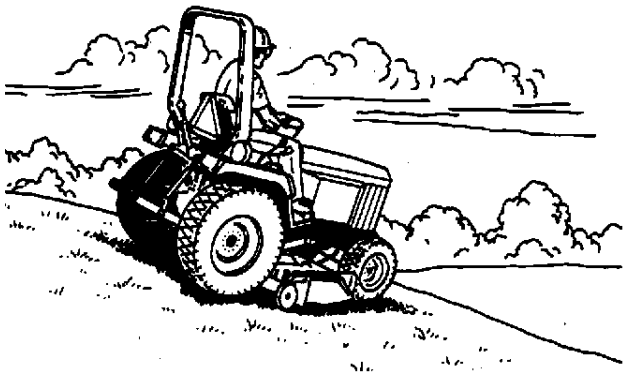
OPERATOR TRAINING REQUIRED

1. Study operation section of this manual before operating the tractor.

2. Operate tractor in an open, unobstructed area under the direction of an experienced operator.

3. Learn the use of all controls.

4. Operator experience is required to learn the moving, stopping, turning and other operating characteristics of the tractor.



MX,DTDF,A -19-06FEB89

OPERATING ON SLOPES

CAUTION: Improper operation on slopes can cause injury:
—Operate up and down—not across—slopes.
—Avoid sudden starts and stops on slopes.
—Be especially careful when you change directions on a slope; slow down.
—Do not drive where machine could slip or tip.
Stay alert for holes, rocks, and roots in the terrain, and other hidden hazards. Keep away from drop-offs.

When operating on slopes, do the following:

—Install front frame weights and rear wheel weights.
—Have your John Deere dealer add fluid to all tires.
—Move front wheels to wide position. (See ADJUSTING WHEEL SPACING in this section.)

The angle of slope that the tractor can be safely operated on will vary with the type of terrain and speed.

Do not park tractor on a slope.

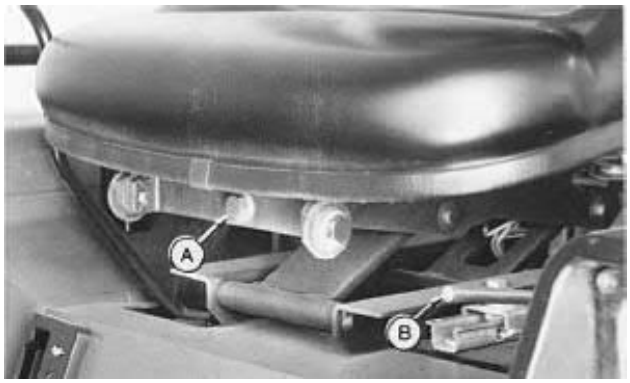
If tractor stops going uphill, shut off PTO and back down slowly.

MX,DTDF,B -19-06FEB89

ADJUSTING SEAT

1. Before starting engine to drive tractor, move seat positioning lever (B) and slide seat forward or rearward to most comfortable position. Release lever to lock seat in position.

2. Turn cap screw (A) to adjust seat for weight of operator. Turn cap screw clockwise for heavier operator; counterclockwise for a lighter weight operator.



M41356 -UN-06SEP88

MX,DTDF,C -19-06FEB89

USING SEAT BELT

CAUTION: Use a seat belt when you operate with a roll-over protective structure (ROPS) to minimize chance of injury from an accident such as an overturn.

Do not use a seat belt if operating without a ROPS.

1. Fasten seat belt.

M39565 -UN-29AUG88

MX,DTDF,D -19-06FEB89

DRIVING THE TRACTOR

1. Start the engine. (See STARTING THE ENGINE in Operating the Engine Section).

2. Pull back on rockshaft lever to lift attachment. If tractor is equipped with optional selective control valve. (See USING OPTIONAL (SCV) SELECTIVE CONTROL VALVE in this section.)

M39562 -UN-29AUG88

MX,DTDF,E -19-06FEB89

3. Push service-park brake down to release park brake lock (A).

M39563 -UN-29AUG88

MX,DTDF,F -19-06FEB89

NOTE: The 2-speed axle shift lever must be in FAST or SLOW position before the tractor will move.

4. For light loads such as cutting short grass or operating at transport speeds, move lever to FAST position (A). For heavy loads such as cutting long grass, using a tiller, a loader, or using a snow blower, move lever up to SLOW position (B).

(755 Tractor shown)

TRAVEL SPEEDS AT FULL ENGINE RPM

	655 Tractor mph (km/h)	755 Tractor mph (km/h)	855 Tractor mph (km/h)
Forward High	0-10.0 (0-16.1)	0-10.6 (0-17.1)	0-11 (0-17.7)
Forward Low	0-5.4 (0-8.7)	0-5.8 (0-9.3)	0-6.0 (0-9.7)
Reverse High	0-5.0 (0-8.0)	0-5.3 (0-8.5)	0-5.5 (0-8.9)
Reverse Low	0-5.4 (0-8.7)	0-5.9 (0-9.3)	0-6.0 (0-9.7)

MX,DTDF,G -19-06FEB89

5. Move throttle lever to desired position. When you operate an attachment, run the engine at full throttle (3200 rpm) for best engine and attachment performance.

MX,DTDF,H -19-06FEB89

NOTE: Arrow on speed control pedals indicates direction of travel.

6. Slowly push forward speed control pedal down to travel forward. The farther you push the pedal down the faster the tractor will travel.

M39567 -UN-29AUG88

MX,DTDF,I -19-06FEB89

7. To travel in reverse:
a. Let tractor slow down from forward travel.
b. Carefully check the area behind the tractor.
c. Slowly push reverse speed control pedal down.

The farther you push the pedal down, the faster the tractor will travel.

M39568 -UN-29AUG88

MX,DTDF,J -19-06FEB89

USING CRUISE CONTROL

The cruise control operates only in forward travel.

1. To engage cruise control:
a. Push down on forward speed control pedal to attain desired travel speed.
b. Hold cruise control lever up.
c. Remove foot from forward speed control pedal.
d. Remove hand from cruise control lever.

2. To disengage cruise control, tap forward speed control pedal, push down on cruise control lever, or depress service-park brake pedal.

3. Operate the tractor in a large, open area to learn how the controls work.

M39569 -UN-29AUG88

MX,DTDF,K -19-06FEB89

OPERATING DIFFERENTIAL LOCK

CAUTION: To prevent tipping, do not attempt to turn on slopes and hills with differential lock engaged.

The differential lock is used to provide better traction when rear wheels start to slip. Engaging the differential lock will cause both rear wheels to turn equally.

IMPORTANT: To prevent damage to the differential, do not engage the differential lock at high speeds.

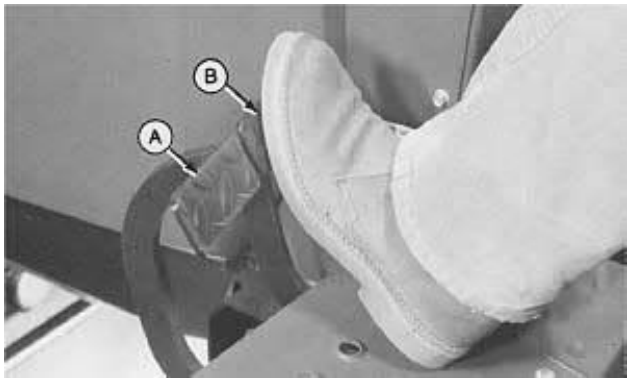
1. To engage differential lock:
a. Stop or slow the tractor down.
b. Push down on differential lock pedal. Lock will remain engaged as long as there is rear wheel slippage or pedal is depressed.

NOTE: Turning radius is increased when differential is engaged. To assist turning, release differential lock and use turn brake pedals (See USING TURN BRAKE PEDALS in this section.)

2. To disengage differential lock, remove foot from differential lock pedal.

MX,DTDF,L -19-06FEB89

USING TURN BRAKE PEDALS



CAUTION: To prevent tipping, do not apply turn brake pedals at high speeds when making a turn; slow down.

Turn brake pedals can be used for tighter turns. Using the turn brake pedals may also avoid unnecessary backing.

1. To make a tighter left turn, push down on turn brake pedal (A).

2. To make a tighter right turn, push down on turn brake pedal (B).

MX,DTDF,M -19-06FEB89

OPERATING OPTIONAL FRONT-WHEEL DRIVE

CAUTION: Front-wheel drive greatly increases traction. Extra caution is needed on slopes. Compared to 2-wheel drive, a front-wheel drive tractor maintains traction on steeper slopes, increasing the possibility of a tip-over.

Front-wheel drive enables you to operate in conditions which would make it difficult or impossible to work with a standard rear wheel drive tractor.

Always disengage front wheels when driving on a paved surface, or when moving tractor without engine running.

BALLAST

See your attachment operator's manual for required ballast.

IMPORTANT: 1. To insure proper MFWD tire performance in all field conditions, maintain front tire pressure at maximum allowable level.

2. To increase front tire life, disengage front wheels when transporting tractor. To provide 4-wheel braking, engage MFWD.

MX,DTDF,N -19-06FEB89

The front-wheel drive can be engaged and disengaged on-the-go and under load.

NOTE: Disengage front wheel drive before driving at fast speeds or on paved surfaces.

Push lever forward to engage front wheel drive. Pull lever rearward to disengage front wheel drive. It may be necessary to reduce load to disengage MFWD.

M39571 -UN-29AUG88

MX,DTDF,O -19-06FEB89

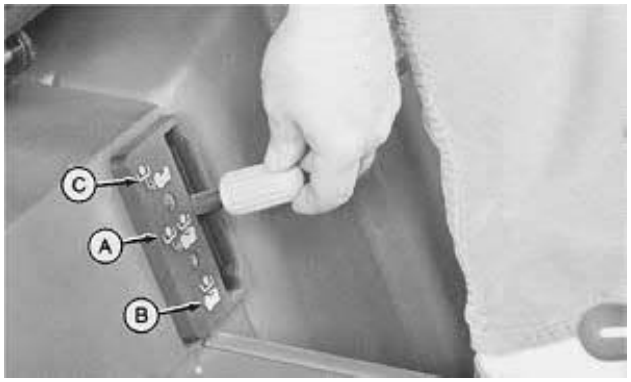
USING PTO (POWER TAKE-OFF)

The tractor is equipped with a 2100 rpm mid PTO and a 540 rpm rear PTO.

To use PTO (operator on the seat):

1. Place PTO selector lever in one of the following positions:

A—Mid and Rear PTO Position
B—Mid PTO Position
C—Rear PTO Position



M39572 -UN-29AUG88

MX,DTDF,P -19-06FEB89

2. Push PTO lever on console forward to engage PTO. Pull lever rearward to disengage PTO.

MX,DTDF,Q -19-06FEB89

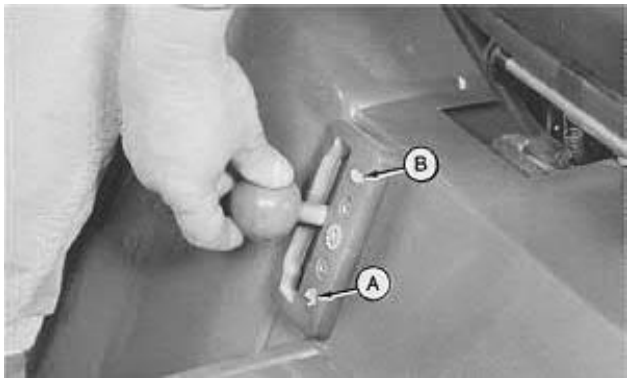
USING STATIONARY REAR PTO (OPERATOR OFF SEAT)

CAUTION: Lock service-park brake and put 2-speed axle shift lever in "N" neutral position.

1. Push and hold service-park brake (A) all the way down.

2. Lift park brake lever (B). Take foot off service-park brake pedal to lock brake.

3. Move 2-speed axle shift lever from fast position (A) or slow position (B) to "N" neutral position shown.



MX,DTDF,R -19-06FEB89

3. Lift seat and place it against steering wheel.

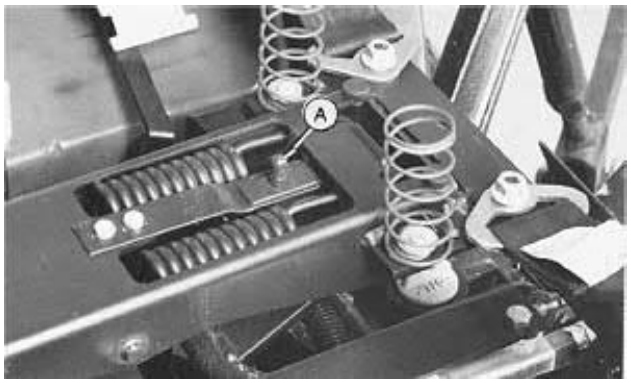
4. Place PTO selector lever in rear PTO position. (See USING PTO in this section.)

M41354 -UN-06SEP88

MX,DTDF,S -19-06FEB89

5. Pull up seat switch plunger (A).

6. Start engine and engage PTO lever on console to operate rear PTO. (See USING PTO in this section.)



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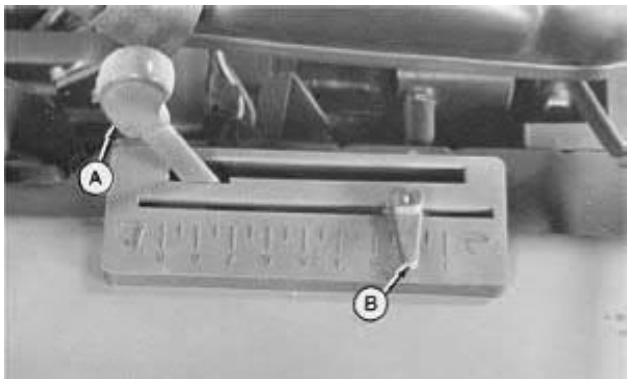
MX,DTDF,T -19-06FEB89

USING ROCKSHAFT CONTROL LEVER



Use rockshaft control lever (A) to operate mid-mounted rockshaft and 3-point hitch equipped tractors.

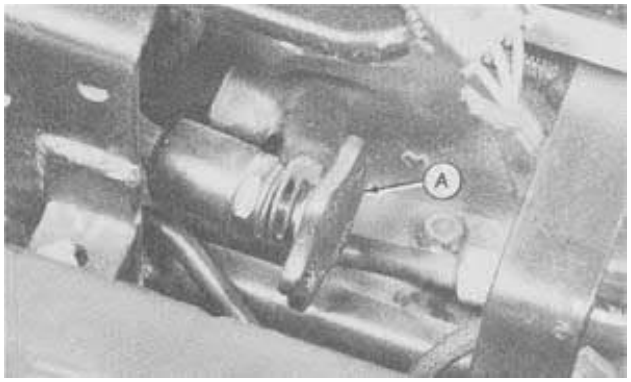
Push lever forward to lower equipment. Pull lever rearward to raise equipment.

When equipment is lowered to desired operating position, lift up on adjustable depth stop lever (B), and move it against rockshaft control lever. Push depth stop lever down to lock in position.

The equipment will then return to same pre-set operating depth each time it is lowered.

MX,DTDF,U -19-06FEB89

USING SPEED OF DROP/LOCK VALVE



CAUTION: Excessive speed-of-drop may cause damage or injury. Fully lowering implement should take at least 2 seconds.

The rockshaft drops faster when a heavy implement is attached. Adjust speed-of-drop so it is slow enough to be safe. Turn knob (A, under seat) clockwise to slow speed of drop.

CAUTION: DO NOT use the rockshaft lock valve for holding an implement in raised position for service work.

You can lock the rockshaft in position by closing rockshaft lock valve. Turn knob clockwise until tight.

IMPORTANT: To prevent overheating the hydraulic oil and damaging tractor, do not raise rockshaft when lock valve is closed.

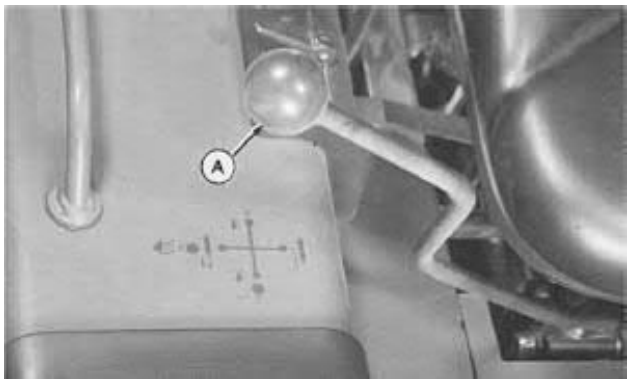
MX,DTDF,V -19-06FEB89

USING OPTIONAL (SCV) SELECTIVE CONTROL VALVE

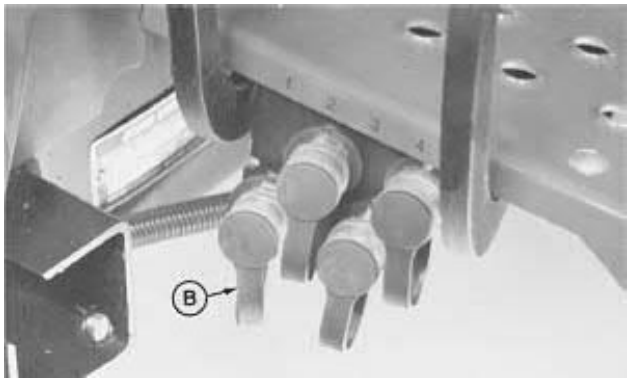
The tractor can be equipped with optional SCV lever (A), hydraulic cylinder, and hydraulic outlets (B) to operate mid-mounted rockshaft or attachments equipped with a hydraulic cylinder.

When the attachment hydraulic cylinder hoses are connected to outlets 1 and 2, move SCV lever to the left to raise attachment or to the right to lower attachment. When hoses are connected to outlets 3 and 4, move lever forward to lower attachment and rearward to raise attachment.

The valve is equipped with a “float” position to permit attachments such as blades or loaders to follow ground contours when lowered to operating position. Push the lever (A) past the valve detent to attain “float” position. The detent can be felt when moving the lever forward or to the right.



M39575 -UN-29AUG88



M39576 -UN-29AUG88

MX,DTDF,W -19-06FEB89

USING LIGHTS

A. All lights OFF.

B. Warning lights.

C. Rear Work Light (Optional).

D. Headlights and warning lights.

Turn switch to operate lights.

M39577 -UN-29AUG88

MX,DTDF,X -19-06FEB89

USING MOWER DEPTH CONTROL

1. Park tractor on a hard, level surface.

2. Adjust mower wheels. See mower operator's manual.

3. Raise mower as high as it will go using hydraulic control lever.

4. Turn depth control lever counterclockwise far enough to permit mower to be lowered to the surface.

5. Lower mower to desired cutting height with hydraulic control lever.

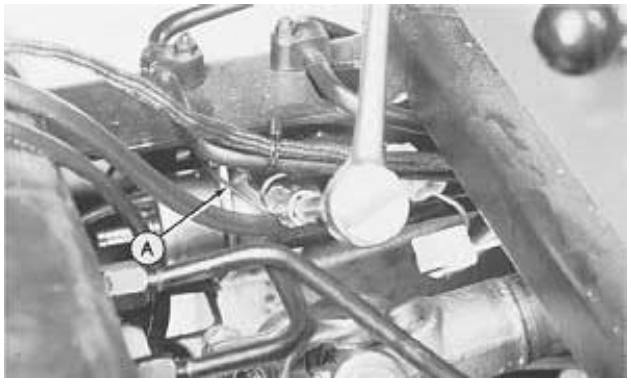
6. Turn depth control clockwise until it is tight to lock mower in set cutting height.

NOTE: To lock mower in completely raised position:
a. Raise mower as high as it will go.
b. Turn depth control clockwise until it is tight.

The tractor can now be used to operate another attachment without removing the mower.

MX,DTDF,Y -19-06FEB89

STOPPING TRACTOR



CAUTION: After you release speed control pedal, tractor should stop in less than three seconds. If stopping time is more than three seconds or is uncomfortable, see your John Deere dealer for adjustment.

NOTE: Weight of equipment mounted on tractor (mower, snowblower, loader, etc.) may increase stopping time. After you install equipment, check stopping time.

1. For normal stopping, release foot from speed control pedal.

NOTE: For emergency stopping, push down on service-park brake.

2. If unit creeps, push down on service-park brake. If unit continues to creep, see your John Deere dealer.

3. Disengage PTO and lock park brake (A).

MX,DTDF,Z -19-06FEB89

INDICATOR LIGHTS

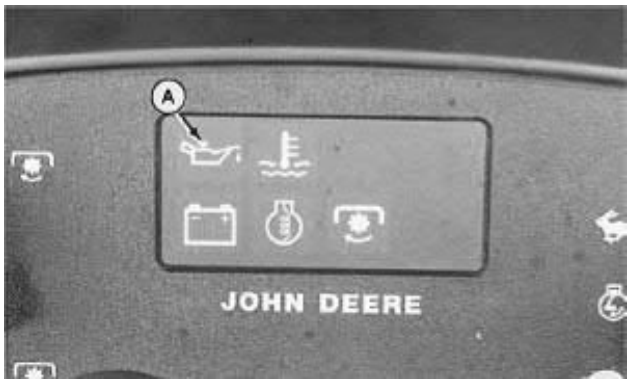
The oil pressure indicator light (A) will come on when the engine oil pressure is too low.

1. If the oil pressure indicator comes on during operation, stop the engine.

IMPORTANT: Do not use the oil pressure indicator as a way to tell you that the engine oil is low. Check daily using engine oil dipstick.

2. Check the engine oil level. (See CHECKING ENGINE OIL LEVEL in Service/Daily section.) Add oil if necessary.

3. Start engine. If indicator is still on, do not operate the tractor. Stop the engine and see your John Deere dealer.



-UN-29AUG88
M39580

MX,DTDF,AA -19-06FEB89

The battery discharge indicator light (A) will come on when alternator output is too low.

1. If the battery discharge indicator comes on during operation, move throttle to fast position. Stop the engine if light remains on.

2. See ELECTRICAL SYSTEM in Troubleshooting section to determine the cause. If problem cannot be corrected, see your John Deere dealer.

-UN-29AUG88
M39581

MX,DTDF,AB -19-06FEB89

The water temperature indicator light (A) will come on when engine temperature rises above 230˚F (110˚C).

1. If the water temperature indicator comes on during operation, stop the engine.

2. See ENGINE in Troubleshooting section to determine the cause. If problem cannot be corrected, see your John Deere dealer.

-UN-29AUG88
M39582

MX,DTDF,AC -19-06FEB89

USING REAR WEIGHTS

Use rear weights to control rear wheel slip and to make tractor more stable.

To determine amount of rear weight to use, check tread marks in soil.

a. Clear tread marks mean too much rear weight.

b. Tread marks wiped out by wheel slip means not enough rear weight.

c. Clear tread marks with a small amount of tread wiped out by wheel slip means rear weight is correct.

MX,DTDF,AD -19-06FEB89

REAR WHEEL WEIGHTS—CAST IRON

1. Put wheels in narrow or wide-tread position.

2. Fasten optional 60-lb (20 kg) weight to each wheel. A total of three weights per wheel may be used. See your attachment operator's manual for required number of weights to use.

M39591 -UN-29AUG88

MX,DTDF,AE -19-06FEB89

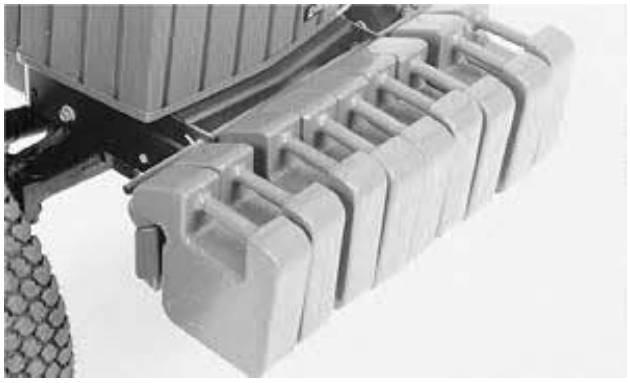
USING FRONT WEIGHTS

Use optional front weights to improve front end stability and steering control.

Weight bracket and extension holds up to nine weights.

Each weight weighs 42 lb (19 kg).

See your attachment operator's manual for required number of weights to use.



M39821 -UN-09SEP88

MX,DTDF,AF -19-06FEB89

USING LIQUID BALLAST

A solution of water and calcium chloride provides safe, economical ballast. Used properly, it will not damage tires, tubes or rims.

Use calcium chloride to prevent water from freezing. A mixture of 0.4 kg calcium chloride per liter (4 lb per gallon) will not freeze solid up to -45˚C (50˚F).

NOTE: Use of alcohol as liquid ballast is not recommended. Calcium chloride solution is heavier and more economical.

CAUTION: Installing liquid ballast requires special equipment and training. Have the job done by your John Deere dealer or a tire service store.

Fill tubeless tires at least to valve level (minimum 75 percent full). Less solution would expose part of rim, possibly causing corrosion. Tube-type tires may be filled to any level below 90 percent. Radial-ply and bias-ply tires hold the same amount of liquid. Chart shows how much each size holds if filled to 75 percent full (3.5 lb/gal water).

IMPORTANT: Never fill any tire to more than 90 percent full. More solution would leave too little air space to absorb shocks. Damage to tire could occur.

Liquid Weight Per Tire

Tire Size	(75 Percent Fill)	
	kg	(lb)
7.2-16 R1	34	75
8.3-16 R1	40	88
9.5-16 R1	54	119
11.2-16 R1	95.5	210
27x10.50-15	48	106
31x12.50-15	80	177
31x12.50-12	80	177
31x15.50-15	91	201
33x12.50-15	102	224
36x13.50-15	137	302

MX,DTDF,AG -19-06FEB89

SELECTING TIRE TREAD WIDTH

The tractor wheels can be adjusted for different tread widths. Always put wheels in the wide position when operating on slopes. Refer to one of the following charts to determine tread width for your particular tractor. (See ADJUSTING WHEEL SPACING in this section to position wheels.)

MX,DTDF,AH -19-06FEB89

FRONT TURF-TYPE TIRE TREAD WIDTH

Tire Size	20x8.00-10	23x8.50-12	25x8.50-14
Narrow Position Outside Width	1093.7 mm	1174.3 mm	
Narrow Position Inside Width	675.5 mm	709.4 mm	
Narrow Position Centerline Width	883.4 mm	941 mm	
Wide Position Outside Width			1256.6 mm
Wide Position Inside Width			789.4 mm
Wide Position Centerline Width			1023 mm

NOTE: 20 x 8.00-10 and 23 x 8.50-12 tires must be installed in narrow position. 25 x 8.50-14 must be installed in the wide position.

MX,DTDF,AI -19-06FEB89

FRONT RIB AND BAR-TYPE TIRE TREAD WIDTH

Tire Size	4x12*	4x15*	5X12**	6x12**	7x12**
Narrow Position Outside Width	994.1 mm	1018.1 mm	989.9 mm	1057.6 mm	
Narrow Position Inside Width	729.5 mm	753 mm	705.4 mm	713.6 mm	
Narrow Position Centerline Width	861 mm	885 mm	847 mm	885 mm	
Wide Position Outside Width	1170.1 mm	1146.1 mm	1193.5 mm	1185.6 mm	1170.6 mm
Wide Position Inside Width	905.5 mm	881 mm	909.4 mm	841.6 mm	783.6 mm
Wide Position Centerline Width	1037 mm	1013 mm	1051 mm	1013 mm	977 mm

*Rib-Type Tires **Bar Type Tires

NOTE: 7 x 12 Tires cannot be put in narrow position.

MX,DTDF,AJ -19-06FEB89

REAR TURF-TYPE TIRE TREAD WIDTH

Tire Size	27x10.50-15	31x12.50-15	31x15.50-15	33x12.50-15	36x13.50-15
Narrow Position Outside Width	1096 mm	1173.3 mm	1307.9 mm	1173.3 mm	1275.9 mm
Narrow Position Inside Width	578 mm	553.5 mm	571.3 mm	553.5 mm	574.9 mm
Narrow Position Centerline Width	837 mm	863.4 mm	939.6 mm	863.4 mm	925.4 mm
Wide Position Outside Width	1308 mm	1332.5 mm		1332.5 mm	1311.1 mm
Wide Position Inside Width	790 mm	712.7 mm		712.7 mm	610.1 mm
Wide Position	1049 mm	1022.6 mm		1022.6 mm	960.6 mm

MX,DTDF,AK -19-06FEB89

REAR BAR-TYPE TIRE TREAD WIDTH

Tire Size	7.2-16	8.3-16	9.5-16	11.2-16
Narrow Position Outside Width	1031.9 mm	1059.8 mm	1081.9 mm	1128 mm
Narrow Position Inside Width	666.1 mm	638.2 mm	584.1 mm	589 mm
Narrow Position Centerline Width	849 mm	849 mm	833 mm	833 mm
Wide Position Outside Width	1219.9 mm	1247.8 mm	1301.9 mm	1348 mm
Wide Position Inside Width	854.1 mm	826.2 mm	804.1 mm	758 mm
Wide Position Centerline Width	1037 mm	1037 mm	1053 mm	1053 mm

MX,DTDF,AL -19-06FEB89

ADJUSTING WHEEL SPACING

See SELECTING TIRE TREAD WIDTH in this section to determine the best tread for your operation.

Before you operate tractor on slopes, install wheels in wide position.

1. Park on level surface.

2. Put blocks in front and back of front wheels.

3. Engage park brake.

4. Loosen wheel bolts.

IMPORTANT: DO NOT place lifting device under transmission. Transmission case could become damaged.

5. Lift wheels off the ground using a jack. Place jack under tractor frame or drawbar support.

MX,DTDF,AM -19-06FEB89

6. Remove wheel bolts (A).

7. Install wheels as follows:

a. High flotation turf tires: Install wheel on same side of tractor with valve stem inside.

b. Bar tread tires: Install each wheel on opposite side of tractor. Bars on tires must point forward.

8. Tighten rear wheel bolts 80 to 90 lb-ft (90 to 102 N·m).

9. Tighten front wheel hardware 60 to 70 lb-ft (68 to 79 N·m) torque.

MM,DTDF,AN -19-06FEB89

USING DRAWBAR HITCH

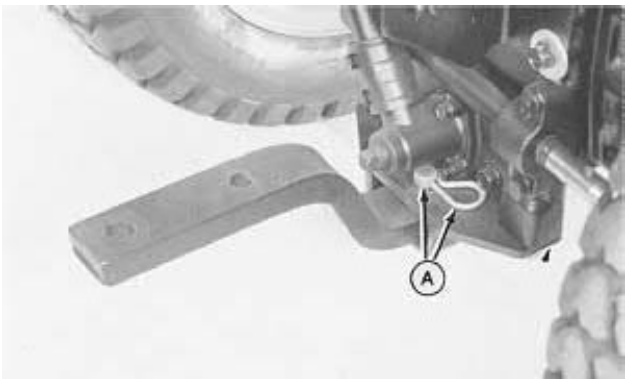
CAUTION: Use only the drawbar provided with the tractor. DO NOT install or use a floating-type drawbar or any other type drawbar.

IMPORTANT: Certain heavy equipment such as a loaded single-axle trailer can place excessive strain on drawbar. Strain is greatly increased by speed and rough ground. Maximum static vertical load on drawbar should not exceed 675 lbs (306 kg). Drive slowly with heavy loads.

For maximum traction and efficiency, drawbar hitch point should usually be as near as possible to line of draft between tractor and implement. This is often the short position shown. Check implement operator's manual for more information.

IMPORTANT: For drawn PTO-driven implements, drawbar must be in the long position.

The drawbar is shown in the short position. Remove pins (A) and slide drawbar out to next hole for long position. Install pins.



M39603 -UN-29AUG88

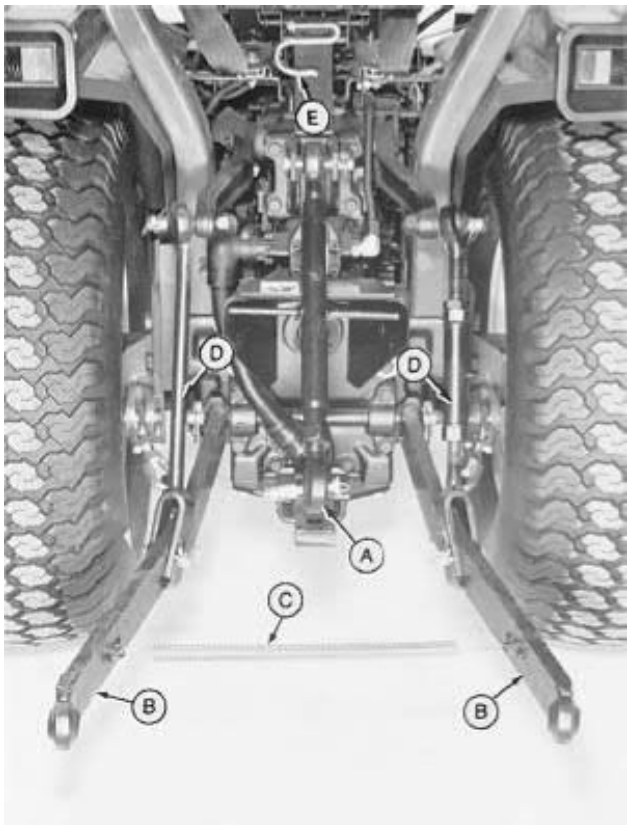
MX,DTDF,AO -19-06FEB89

USING 3-POINT HITCH

CAUTION: Use only the 3-point hitch provided with or for the 655, 755 and 855 Tractor. Do not install a floating-type drawbar on the 3-point hitch draft links or any other type drawbar mechanism.

NOTE: The 3-point hitch is standard equipment on 855 Tractor and optional on 655 and 755 Tractor.

The Category 1 3-point hitch consists of a center link (A), draft links (B), spring (C) and lift links (D). The right lift link is adjustable as well as the center link. The spring should be used when attachment is removed to keep draft links from moving laterally. Put center link up in hook latch (E) when not in use.



M39604 -UN-29AUG88

MX,DTDF,AP -19-06FEB89

The rockshaft control lever is used to operate 3-point hitch.

Move the lever forward to lower hitch or rearward to raise the hitch.

The adjustable depth stop (A) can be adjusted to maintain implement operating depth. See your attachment operator's manual for adjusting depth stop.

M39605 -UN-29AUG88

MX,DTDF,AQ -19-06FEB89

To level implement front-to-rear:

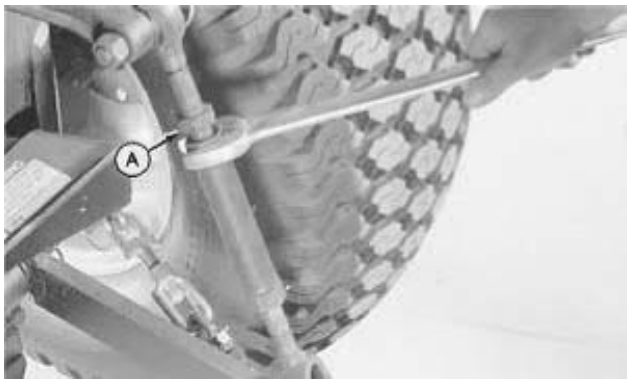
a. Lower implement to surface.
b. Loosen lock nut (A).
c. Turn center link body to lengthen or shorten center links. Do not turn body past stops or threads may be damaged.
d. Tighten lock nut (A).

M39606 -UN-29AUG88

MX,DTDF,AR -19-06FEB89

To level implement side-to-side:

a. Loosen lock nut (A).
b. Turn right-hand lift link body to raise or lower draft link until implement is level side-to-side.
c. Tighten lock nut (A).



M39607 -UN-29AUG88

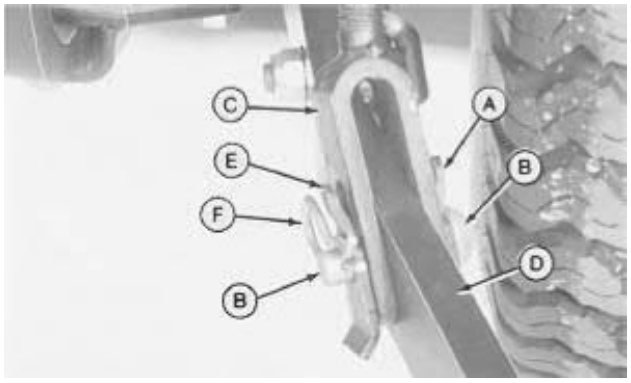
MX,DTDF,AS -19-06FEB89

To adjust draft links for lateral float:

1. Install float stop (A), with tabs turned out, on pin (B).

2. Fasten lift link (C) to lower draft link (D) with pin (B).

3. Install float stop (E), with tabs turned out, and spring pin (F) on pin (B).



M39736 -UN-09SEP88

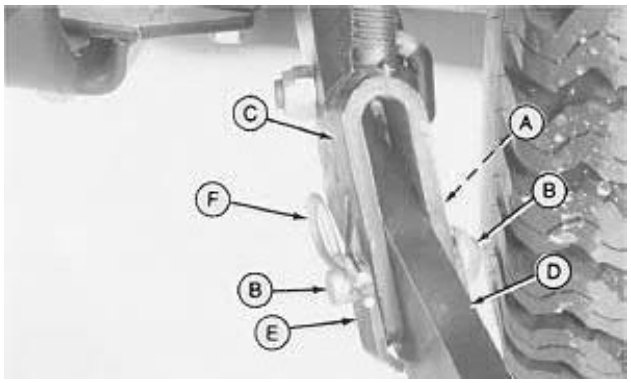
MX,DTDF,AT -19-06FEB89

To adjust draft links for no lateral float:

1. Install float stop (A), with tabs turned in, on pin (B).

2. Fasten lift link (C) to lower draft link (D) with pin (B).

3. Install float stop (E), with tabs turned in, and spring pin (F) on pin (B).



M39737 -UN-09SEP88

MX,DTDF,AU -19-06FEB89

Transporting

PUSHING TRACTOR

IMPORTANT: DO NOT pull or tow tractor. Be sure to put 2-speed axle shift lever (A) in "N" neutral position to prevent transmission damage.

To move tractor when engine is not running:

1. Put 2-speed axle shift lever in "N" neutral position.

2. Disengage MFWD on tractors so equipped.

3. Unlock service-park brake.

4. Push tractor to desired location.

5. Put 2-speed axle shift lever in one of two operating positions and engage park brake.

M39585 -UN-29AUG88

M39571 -UN-29AUG88

MX,TRDF,A -19-06FEB89

DRIVING THE TRACTOR

CAUTION: Observe the following precautions when operating the tractor on a road.

Use caution when towing loads at transport speeds. Reduce speed if towed load weighs more than the tractor and is not equipped with brakes. Avoid hard braking applications. Consult implement operator's manual for recommended transport speeds.

Use additional caution when transporting towed loads under adverse surface conditions, when turning or on inclines.

1. Be sure SMV emblem (A) and warning lamps (B) are clean and visible. If towed or rear-mounted equipment obstructs these safety devices, install SMV emblem and warning lamps on equipment. See your John Deere dealer.

M38592 -UN-29AUG88

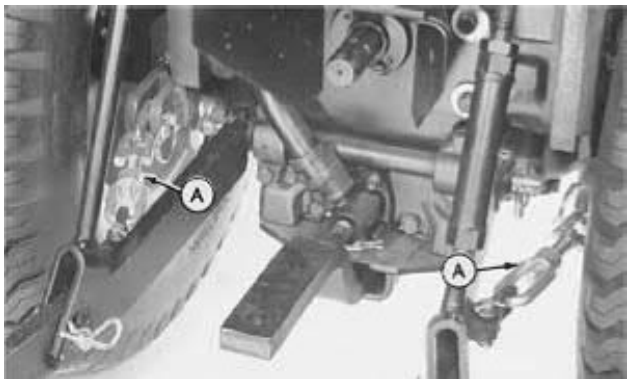
MX,TRDF,B -19-06FEB89

2. Drive slowly enough to maintain safe control at all times. Slow down for hillsides, rough ground, and sharp turns, especially when transporting heavy, rear-mounted equipment.

3. Be sure wheel tread is adjusted to provide maximum stability.

4. To reduce tire wear, be sure to disengage front-wheel drive (if equipped).

5. Adjust optional 3-point hitch sway chains (A) to eliminate implement side sway.



M39589 -UN-29AUG88

MX,TRDF,C -19-06FEB89

TRANSPORTING TRACTOR ON A TRAILER

IMPORTANT: Do not pull or push the tractor a long distance. Transport the machine on a trailer.

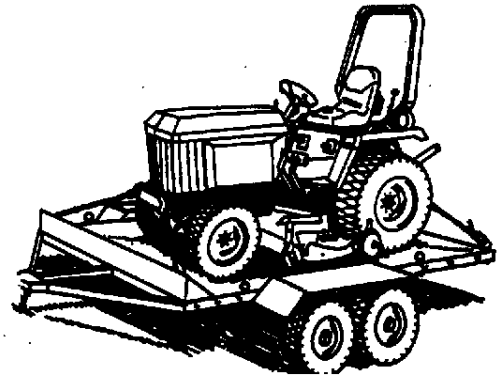
1. Drive tractor forward onto a trailer.

2. Use heavy-duty straps, chains, or cables to fasten tractor to the trailer. Both front and rear straps must be directed down and outward from the trailer.

3. Trailer must have signs and light required by local, state, provincial, or federal laws.

NOTE: Most state laws require that SMV sign on tractor be covered or removed when transporting tractor on a trailer.

4. Cover or remove SMV sign.



M39682 -UN-09SEP88

MX,TRDF,D -19-06FEB89

Fuels and Lubricants

FUEL SPECIFICATIONS

Use ONLY clean, high-quality fuel.

Use Grade No. 2-D fuel at temperatures above 40˚F (4˚C).

Use Grade No. 1-D fuel at temperatures below 40˚F (4˚C).

Use Grade No. 1-D fuel for all air temperatures at altitudes above 5000 ft (1500 m).

IMPORTANT: Use fuel with less than 1.0 per cent sulfur. If possible, use fuel with less than 0.5 per cent sulfur.

If fuel sulfur is more than 0.5 per cent, change engine oil and filter every 100 hours.

For maximum filter life, sediment and water should not be more than 0.10 per cent.

The cetane number should be 40 minimum. If you operate your machine where air temperatures are normally low or where altitudes are high, you may need fuel with a higher cetane number.

Cloud Point—For cold weather operation, cloud point should be 10˚F (6˚C) below lowest normal air temperature.

MX,FLDF,A -19-06FEB89

FUEL STORAGE

NOTE: Diesel fuels stored for a long time may form gum and plug filters.

Keep fuel in a clean container in a protected area. Water and sediment must be removed before fuel gets to the engine. Do not use de-icers to remove water from fuel. Do not depend on fuel filters to remove water.

If possible, install a water separator at the storage tank outlet. (See your John Deere dealer for this part.)

IMPORTANT: Keep all dirt, scale, water or other foreign material out of fuel.

Store fuel drum on its side with plug up.

MX,FLDF,B -19-06FEB89

DO NOT USE GALVANIZED CONTAINERS

IMPORTANT: Diesel fuel stored in galvanized containers reacts with zinc coating on the container to form zinc flakes. If fuel contains water, a zinc gel will also form. The gel and flakes will quickly plug fuel filters and damage fuel injectors and fuel pumps.

DO NOT USE a galvanized container to store diesel fuel.

Store fuel in:
—plastic containers
—aluminum containers
—specially coated steel containers made for diesel fuel.

DO NOT USE brass-coated containers: brass is an alloy of copper and zinc.

MX,FLDF,C -19-06FEB89

FILLING THE FUEL TANK

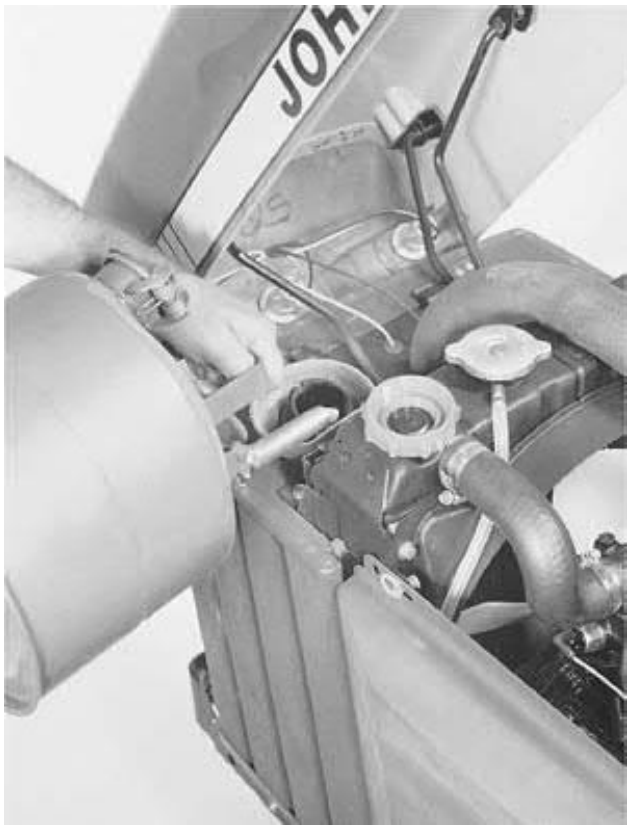
CAUTION: Handle fuel carefully. Do not smoke while you fill the fuel tank or service the fuel system. Fill fuel tank only to bottom of filler neck.

NOTE: 755 Tractor illustrated. 855 Tractor fuel tank is located in front of console.

Fuel tank capacity:

655 Tractor	3.9 U.S. gal (15 L)
755 Tractor	4.3 U.S. gal (16.4 L)
855 Tractor	6.6 U.S. gal (25 L)

1. Fill fuel tank at end of each day's operation or when fuel gauge shows 1/4 or less fuel in tank. Fill fuel tank only to bottom of filler neck.



MX,FLDF,D -19-06FEB89

HYDRAULIC TRANSMISSION OIL

JOHN DEERE LOW VISCOSITY HY-GARD® transmission and hydraulic oil is recommended.

Oils that meet JOHN DEERE standards, or other oils meeting JOHN DEERE Standard JDMJ20B may be used.

See your John Deere dealer for information.

MX,FLDF,E -19-06FEB89

DIESEL ENGINE OIL

Use oil viscosity based on the expected air temperature range during the period between oil changes.

John Deere TORQ-GARD SUPREME PLUS-50™ engine oil is recommended. This oil is specially formulated to provide superior protection against high temperature thickening and wear as well as exceptional cold weather starting performance; these properties allow an extended drain interval and may result in longer engine life.

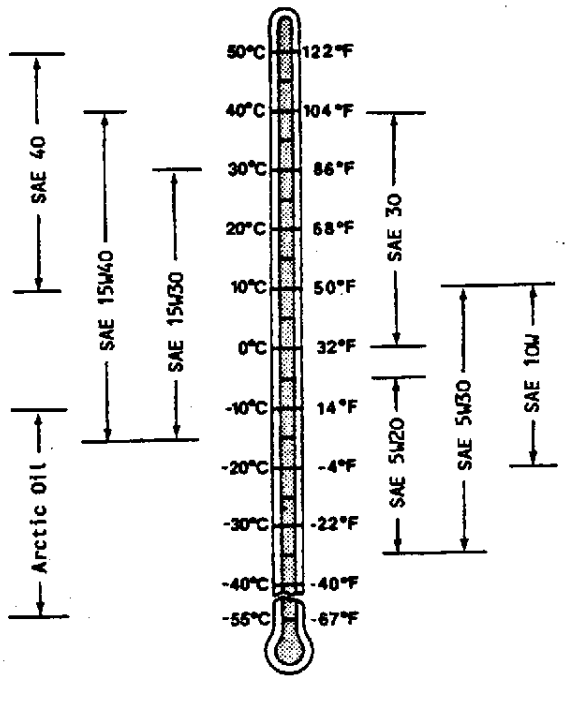
If John Deere TORQ-GARD SUPREME PLUS-50 engine oil and a John Deere oil filter are used, the oil and filter change interval may be extended by 50 hours.

John Deere TORQ-GARD SUPREME® engine oil is also recommended. Other oils may be used if they meet one or more of the following:

- API Service Classification CE or CD
- Military Specification MIL-L-2104D or MIL-L-2104C

SAE 5W20, SAE 5W30, and arctic oil viscosity grades meeting API Service Classification CC may be used, but oil and filter must be changed at one-half the normal interval.

Oils meeting Military Specification MIL-L-46167A may be used as arctic oils.

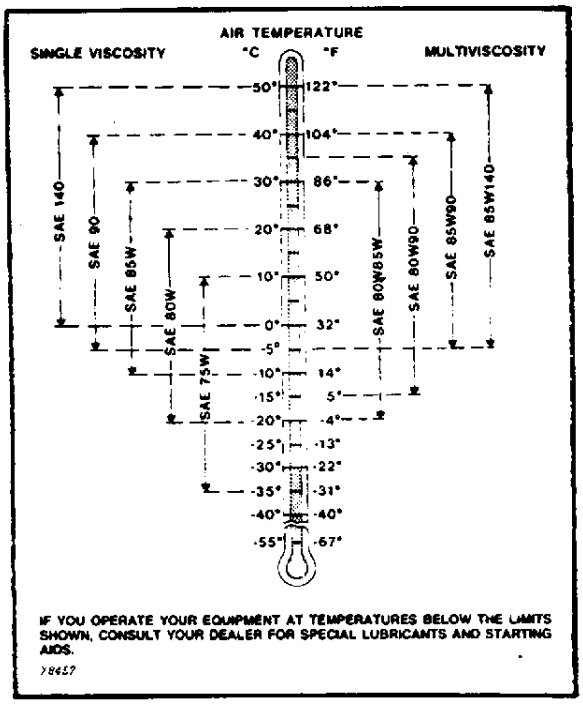


O53,ENOIL -19-22FEB88

GEAR CASE OIL

John Deere API GL-5 Gear Oil is recommended. If other oils are used, they must meet performance requirements of:

—API Service Classification GL-5
—Military Specification MIL-L-2105C



-19-16MAR89

MX,FLDF,F -19-06FEB89

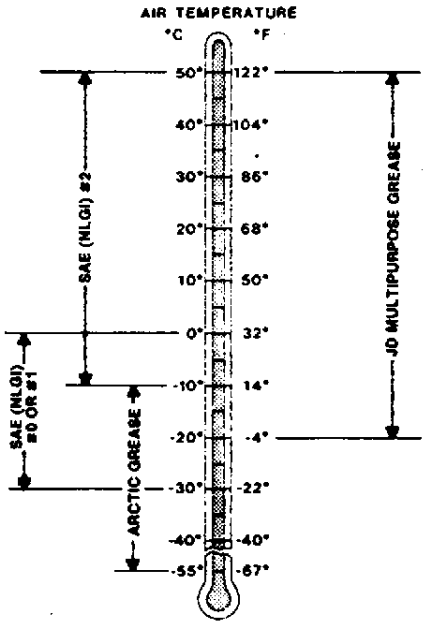
GENERAL PURPOSE GREASE

Depending upon the expected air temperature range during the service interval, use grease as shown on the adjoining temperature chart.

John Deere Multipurpose Grease is recommended. If other greases are used, use:

—SAE Multipurpose Grease
—SAE multipurpose Grease containing 3 to 5 per cent molybdenum disulfide.

At temperatures below —30˚C (—22˚F), use arctic grease such as those meeting Military Specification MIL-G-10924C.



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MX,FLDF,G -19-06FEB89

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PN=52

ALTERNATIVE LUBRICANTS

Conditions in certain geographical areas may require special lubricants and lubrication practices which do not appear in this operator's manual. If you have any questions, consult your John Deere dealer to obtain the latest information and recommendations.

MX,FLDF,H -19-06FEB89

STORING LUBRICANTS

Your tractor can operate at top efficiency only if clean lubricants are used. Use clean containers to handle all lubricants. Store them in an area protected from dust, moisture, and other contamination.

MX,FLDF,I -19-06FEB89

Troubleshooting

ENGINE

Symptom	Problem	Solution
Engine hard to start or will not start.	No fuel.	Check for fuel in tank.
	Leaks in fuel system.	Check fuel system connections.
	Cold weather.	Use cold weather starting options.
	Slow starter speed.	See Starter Cranks Slowly in Electrical System.
	Engine oil viscosity too high.	Use oil of proper viscosity.
	Improper type of fuel.	Consult fuel supplier; use proper type of fuel for operating conditions.
	Water, dirt, or air in fuel system	Drain, flush, fill and bleed system.
	Plugged fuel filter.	Replace filter element.
	Dirty or faulty injectors.	Have John Deere dealer check injectors.
	Fuel shut-off solenoid.	Have John Deere dealer check solenoid for bent or sticking plunger.
Engine runs irregularly or stalls frequently.	Vent on fuel tank neck obstructed.	Check that notch on neck is open.
	Low coolant temperature.	Have John Deere dealer check thermostat.
	Plugged fuel filter.	Replace filter element.
	Water, dirt, or air in fuel system.	Drain, flush, fill and bleed system.
	Dirty or faulty injectors.	Have John Deere dealer inspect injectors.
	Improper type of fuel.	Use proper fuel for operating conditions.
	Plugged air intake system.	Check grille, radiator screen, and air filter.
Engine knocks.	Engine oil level low.	Check engine oil level.
	Injection pump out of time.	See your John Deere dealer.
	Low coolant temperature.	Have John Deere dealer check thermostat.

Continued on next page

Symptom	Problem	Solution
	Engine overheating.	See Engine Overheats.
	Idle speed too slow.	Check idle speed.
Lack of engine power.	Engine overloaded.	Reduce load or reduce speed.
	Plugged air intake system.	Check grille, radiator screen and air filter.
	Plugged fuel filter.	Replace filter element.
	Improper type of fuel.	Use proper fuel for operating conditions.
	Engine overheating.	See Engine Overheats.
	Engine oil viscosity too high.	Use oil of proper viscosity.
	Low coolant temperature.	Have John Deere dealer check thermostat.
	Improper valve clearance.	See your John Deere dealer.
	Dirty or faulty injectors.	Have John Deere dealer check injectors.
	Injection pump out of time.	See your John Deere dealer.
	Attachment improperly adjusted.	See attachment operator's manual.
	Improper weight.	Adjust weight to load.
Engine overheats.	Engine overloaded	Reduce load or reduce speed.
	Low coolant level.	Fill cooling system to proper level; check radiator and hoses for loose connections or leaks.
	Faulty radiator cap.	Have service person check cap.
	Loose or defective alternator belt.	Adjust alternator belt.
	Dirty grille, radiator screen, or radiator core.	Clean grill and radiator screen.
	Cooling system needs flushing.	Flush cooling system.
	Defective thermostat.	Have John Deere dealer check thermostat.

Continued on next page

Symptom	Problem	Solution
	Defective water temperature indicator or sender.	Replace indicator or sender.
Low oil pressure.	Engine oil level low.	Check engine oil level.
	Plugged oil filter.	Change oil filter.
	Improper type of oil.	Drain, fill engine crankcase with oil of proper viscosity and quality.
	Oil leaks.	Check for leaks.
Engine uses too much oil.	Engine oil viscosity too low.	Use oil of proper viscosity.
	Oil leaks.	Check engine drain plug and filter.
	Plugged air intake system.	Check grille, radiator screen and air filter.

MX,TSDF,A -19-07FEB89

ELECTRICAL SYSTEM

Symptom	Problem	Solution
Battery will not charge.	Loose or corroded connections.	Clean and tighten loose connections.
	Defective battery.	Check electrolyte level.
	Dead cell in battery.	Replace battery.
	Loose or defective alternator belt.	Adjust belt tension or replace belt.
	Defective alternator.	Have your John Deere dealer check alternator.
Battery discharge indicator stays on with engine running.	Low engine speed.	Increase speed.
	Defective battery.	Check electrolyte level.
	Defective alternator.	Have your John Deere dealer check alternator.
	Loose alternator belt.	Adjust belt tension.
Starter will not work.	Loose or corroded connections.	Clean and tighten loose connections.
	Fuse blown.	Check wiring and replace fuse.
	Low battery output.	Check electrolyte level.
	Neutral start switch faulty or not adjusted properly.	See your John Deere dealer.
	Key switch or starter faulty.	See your John Deere dealer.
Starter turns slowly.	Low battery output.	Check electrolyte level.
	Low battery power.	Charge battery.
	Engine oil viscosity too heavy.	Use oil of proper viscosity.
	Loose or corroded connections.	Clean and tighten loose connections.
One lighting circuit does not work.	Fuse blown.	Replace fuse.

MX,TSDF,B -19-07FEB89

TRACTOR

Symptom	Problem	Solution
Excessive tractor vibration.	Engine speed too low	See your John Deere dealer.
	Drive shaft universal joint bearings worn.	See your John Deere Dealer.
	Throttle linkage out of adjustment.	See your John Deere dealer.
Tractor will not move with engine running.	Park brake locked.	Release park brake.
	Transmission oil level low.	Add oil.
	Transmission oil cold.	Use cold starting aids.
	Engine cold.	Allow engine to warm up several minutes.
	Two-speed axle shift lever in “N” (neutral).	Move shift lever to FAST or SLOW position.
Tractor moves with engine running when speed control pedals are in neutral position.	Linkage out of adjustment.	See your John Deere dealer.

MX,TSDF,C -19-07FEB89

BRAKES

Symptom	Problem	Solution
Rear wheel brakes not working.	Brakes out of adjustment.	See your John Deere dealer.
	Worn or damaged brake linkage	See your John Deere dealer.

MX,TSDF,D -19-07FEB89

STEERING

Symptom	Problem	Solution
Steering not working	Improper tire inflation pressure.	Check tire inflation pressure.
	Steering linkage needs lubrication.	Lubricate steering linkage.
	Excessive play in steering.	See your John Deere dealer.
	Bent wheel spindle.	See your John Deere dealer.

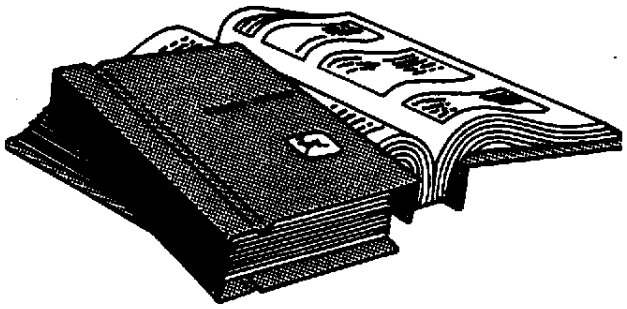
MX,TSDF,E -19-07FEB89

Periodic Service Chart

ADDITIONAL SERVICE INFORMATION

This operator's manual is not a detailed service manual. It contains only information needed for operation and routine maintenance.

If you want more detailed service information, use the form in the back of this manual to order a technical manual.



RW408 -UN-13DEC88

MX,SEDF,A -19-07FEB89

HOUR METER/TACHOMETER

1. The hour meter (A) shows the number of hours the engine has run. The tachometer shows engine rpm.

2. After you have done ALL the services in an interval section, write the hours from the hour meter and the date in spaces provided.

M39593 -UN-29AUG88

MX,SEDF,B -19-07FEB89

REMOVING AND INSTALLING ENGINE SHIELDS

1. Open hood.

2. Open and turn the two spring-loaded fasteners to horizontal position to disconnect shield.

3. Lift shield off two lower rod supports to remove.

M39594 -UN-29AUG88

MX,SEDF,C -19-07FEB89

TORQUE CHART FOR STANDARD HARDWARE

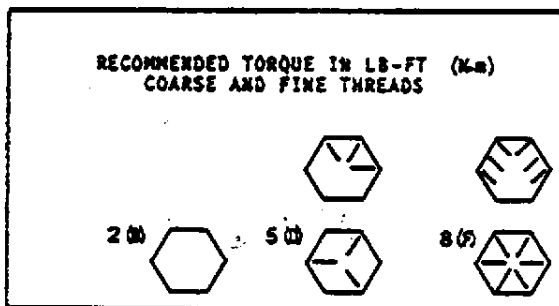
This chart gives torque values for various bolts and cap screws.

Tighten hardware to specifications listed in chart unless a special torque is given.

Check tightness of hardware regularly.

IMPORTANT: Replace hardware only with same strength bolts or cap screws.

RECOMMENDED TORQUE IN LB-FT (N·m)
COARSE AND FINE THREADS



Bolt Diameter	Plain Head	Three Dashes	Six Dashes
1/4	Not used	10 (14)	14 (19)
5/16	Not used	20 (27)	30 (41)
3/8	Not used	35 (47)	50 (68)
7/16	35 (47)	55 (75)	80 (108)
1/2	55 (75)	85 (115)	120 (163)
9/16	75 (102)	130 (176)	175 (237)
5/8	105 (142)	170 (230)	240 (325)
3/4	185 (251)	300 (407)	425 (576)
7/8	160 (217)	445 (603)	685 (929)
1	250 (339)	670 (908)	1030 (1396)
1-1/8	330 (447)	910 (1234)	1460 (1979)
1-1/4	480 (651)	1250 (1695)	2060 (2793)

M40163 -19-28FEB89

MX,SEDF,D -19-07FEB89

TORQUE CHART FOR METRIC HARDWARE

This chart gives torque values for various bolts and screws.

Tighten hardware to specifications listed in chart unless a special torque is given.

Check tightness of hardware regularly.

IMPORTANT: Replace hardware only with same strength bolts or cap screws.

CAUTION: Use only metric tools on metric hardware. Other tools may not fit properly. They may slip and cause injury.

RECOMMENDED TORQUE IN Nm(LB-FT)
COARSE AND FINE THREADS

Bolt Diameter	8.8	10.9	12.9
M5	7 (5)	9 (6)	11 (8)
M6	12 (8)	16 (11)	20 (14)
M8	30 (22)	40 (29)	45 (33)
M10	55 (40)	75 (55)	90 (66)
M12	100 (73)	135 (99)	160 (118)
M14	160 (118)	215 (158)	260 (191)
M16	245 (180)	335 (247)	400 (295)
M20	480 (354)	650 (479)	780 (575)
M24	825 (608)	1125 (829)	1350 (995)
M30	1640 (1209)	2240 (1652)	2690 (1984)
M36	2870 (2116)	3910 (2883)	4700 (3466)

M34183 -19-07OCT88

MX,SEDF,E -19-07FEB89

BREAK-IN

After 50 hours of operation:
—Change engine oil and filter.
—Check fan belt tension.
—Check hose clamps.

During first 100 hours of operation, check:
—Tightness of wheel bolts.
—Alternator belt tension
—Hose clamps on air intake and cooling system hoses.

SERVICE/EVERY 10 HOURS OR DAILY

—Check engine oil level.
—Check hydraulic oil level.
—Check coolant level.
—Clean grille and radiator screen.
—Check fuel filter sediment bowl.
—Check safety interlock system.
—Lubricate grease fittings.*
*Only necessary when operating in extremely wet and muddy conditions.

SERVICE/50 HOURS

—Check wheel bolt torque
—Check optional MFWD oil level
—Check battery
—Check for loose nuts and bolts.
—Inspect tires and check pressure.
—Lubricate grease fittings.

SERVICE/200 HOURS

—Change engine oil and filter.
—Service air cleaner.
—Inspect fan belt.
—Lubricate 3-point hitch.
—Clean fuel filter sediment bowl.
—Clean radiator and oil cooler.

SERVICE/300 HOURS

—Have your John Deere dealer adjust engine valves.

SERVICE/500 HOURS

—Change hydraulic oil and filter.
—Clean transmission vent tube.
—Change MFWD oil.
—Repack front wheel bearings.
—Check engine speeds.
—Tighten air intake hose clamps.
—Replace fuel filter.
—Have your John Deere dealer:
a. Inspect fuel injectors.
b. Check front axle pivot pin.

SERVICE/EVERY 2 YEARS

—Flush cooling system.
—Replace coolant.

SERVICE/AS NECESSARY

—Air cleaner.
—Fuel sediment bowl.
—Bleed fuel system.
—Clean or replace battery.
—Charge battery.
—Adjust throttle.
—Jump start engine.
—Replace fuses.
—Replace indicator light bulb.
—Replace hood headlight bulb.
—Replace fender headlight.
—Replace taillight bulb.
—Replace warning light bulb.
—Adjust seat.
—Lubricate depth control.
—Adjust toe-in.

Have your John Deere dealer:
a. Check injection pump and nozzles.

MX,SEDF,F -19-07FEB89

ENGINE BREAK-IN

1. After the first 50 hours of operation, change engine oil and filter.

2. See CHANGING ENGINE OIL AND FILTER in Service/200-Hours section.

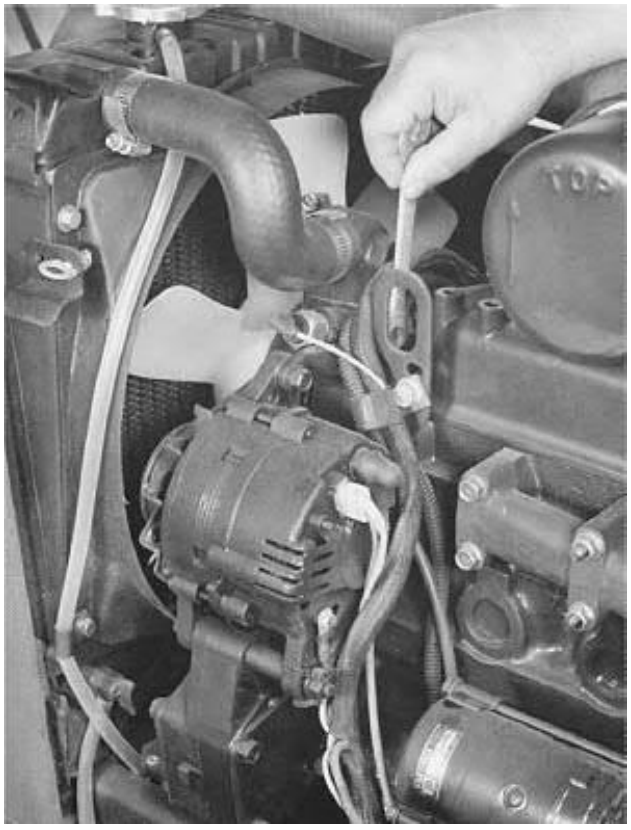
MX,SEDF,G -19-07FEB89

3. During first 50 hours of operation:

a. Check fan belt tension. (See CHECKING FAN BELT TENSION in Service/200 Hours section.)

b. Check hose clamps on air intake and cooling system hoses. Tighten clamps if necessary.

c. Tighten engine coupler bolts to 37 lb-ft (50 N·m) torque.



MX,SEDF,H -19-07FEB89

TRACTOR BREAK-IN

1. When machine is new or any time wheel bolts are loosened, tighten as follows:

a. Tighten rear wheel bolts 80 to 90 lb-ft (90 to 102 N·m) torque. Tighten front wheel bolts 60 to 70 lb-ft (68 to 79 N·m).
b. Retighten after traveling 100 ft (30 m) changing direction several times.
c. Retighten after 3 and 10 hours use.
d. Check wheel bolt torque often during the first 100 hours operation.

MX,SEDF,I -19-07FEB89

CHECKING ENGINE OIL LEVEL

1. Park tractor on a level surface.

2. Check engine oil when oil is cold.

3. Lift hood.

4. On 655 and 755 Tractors, disconnect two fasteners and remove right-hand engine shield for access to dipstick. The shield does not have to be removed on 855 Tractor.

M39599 -UN-29AUG88

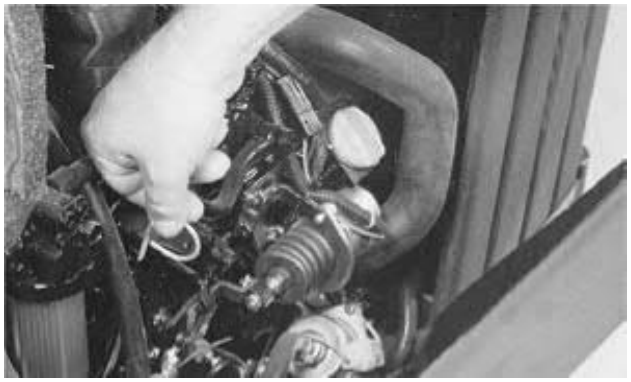
MX,SEDF,J -19-07FEB89

5. Remove dipstick. Wipe dipstick with a clean rag.

6. Install dipstick.

7. Remove dipstick. Check oil level on dipstick.

8. Oil level should be between “F” (full) mark and “L” (low) mark on dipstick.



M39600 -UN-29AUG88

M35585 -UN-26AUG88

MX,SEDF,K -19-07FEB89

9. If oil level is low, remove oil filler cap.

MX,SEDF,L -19-07FEB89

IMPORTANT: If oil level is at or below “L” mark, DO NOT run the engine.

10. Add oil to bring oil level no higher than the “F” mark on dipstick. (See ENGINE OIL in Fuels and Lubricants section for correct oil.)

11. Install dipstick. Install and tighten oil filler cap. Lower hood.

MX,SEDF,M -19-07FEB89

CHECKING HYDRAULIC OIL LEVEL

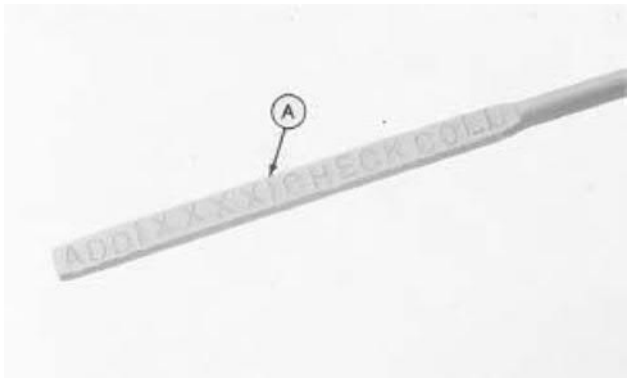
1. Park tractor on a level surface.

2. Lower attachments and stop engine.

3. Check hydraulic oil level before operating tractor when oil is cold.

4. Remove dipstick. Check oil level on dipstick.

5. Oil level should be to top of mark (A) on dipstick.

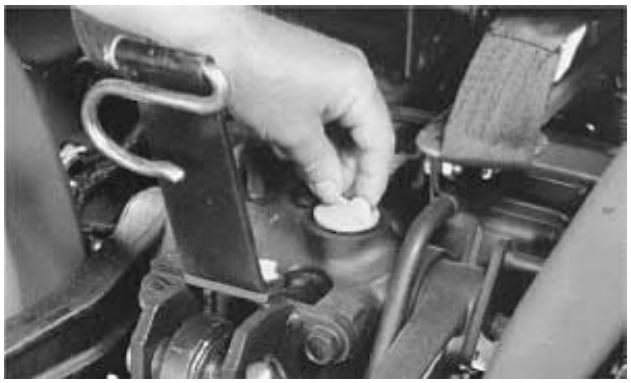


MX,SEDF,N -19-07FEB89

IMPORTANT: If oil level is low, DO NOT run engine.

6. If oil level is low, remove oil filler cap.

7. Add oil to bring oil level no higher than top level mark on dipstick. (See HYDRAULIC TRANSMISSION OIL in Fuels and Lubricants section for correct oil.)



MX,SEDF,O -19-07FEB89

CHECKING COOLANT LEVEL

CAUTION: Do not remove radiator cap unless the engine is cool. Then turn the cap slowly to the stop. Release all pressure before you remove the cap.

IMPORTANT: Do not pour coolant into the radiator when the engine is hot, or you may damage the cylinder head or block. Do not operate engine without coolant.

1. Lift hood.

2. Slowly remove radiator cap.

3. Coolant must be 1/2 to 1 in. (13 to 25 mm) below bottom of filler neck.

MX,SEDF,P -19-07FEB89

4. If coolant is low, add ethylene glycol (without stop-leak additive) antifreeze and water in the ratio specified on the antifreeze container.

5. Install and tighten radiator cap.

6. Check condition of hoses. Check for leaks or loose connections.

MX,SEDF,Q -19-07FEB89

CLEANING GRILLE AND RADIATOR SCREEN ON 655 AND 755 TRACTORS

IMPORTANT: Grille must be clean from debris to prevent engine from overheating and to allow good air intake for air cleaner.

1. Check that grille is clean from grass clippings and debris.

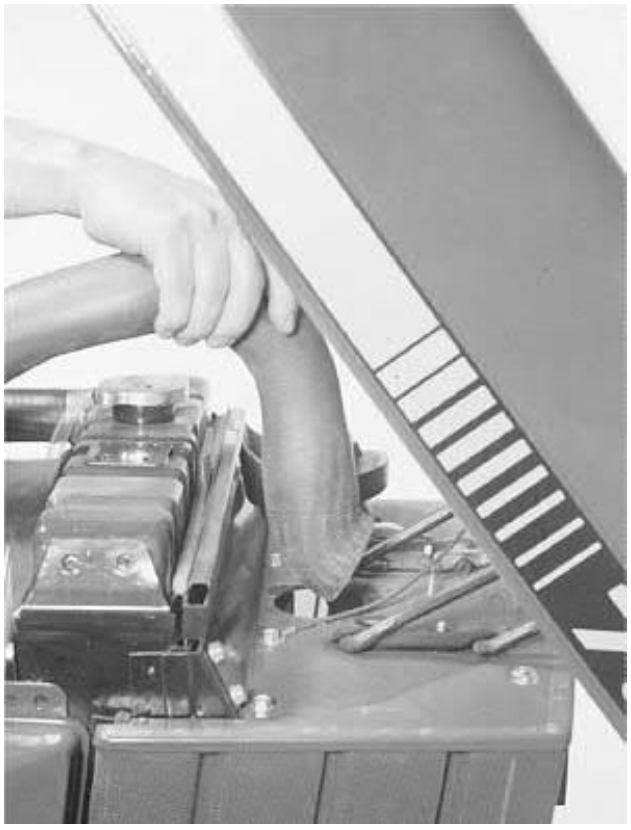
2. If grille is dirty, clean grille with a brush or cloth.

M39613 -UN-29AUG88

MX,SEDF,R -19-07FEB89

3. Lift hood.

4. Remove air intake hose from hole in cowling.



M39631 -UN-29AUG88

MX,SEDF,S -19-07FEB89

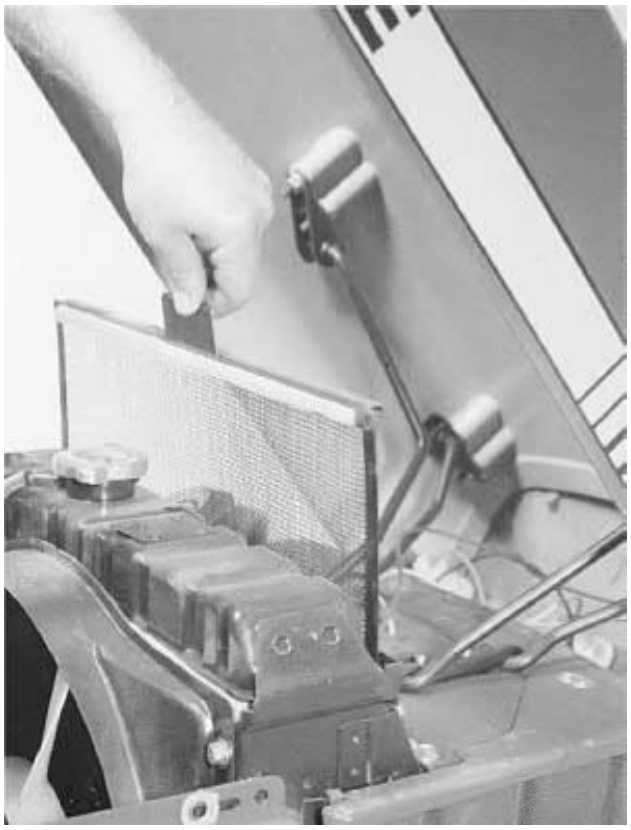
5. Remove radiator screen

6. Clean screen with compressed air, brush or cloth.

7. Install screen.

8. Install air intake hose through hole in cowling.

9. Close hood.



M39616 -UN-29AUG88

MX,SEDF,T -19-07FEB89

CLEANING GRILLE AND RADIATOR SCREEN ON 855 TRACTOR

IMPORTANT: Grille must be clean from debris to prevent engine from overheating and to allow good air intake for air cleaner.

1. Check that grille is clean from grass clippings and debris.

2. If grille is dirty, clean grille with a brush or cloth.

M39613 -UN-29AUG88

MX,SEDF,T1 -19-07FEB89

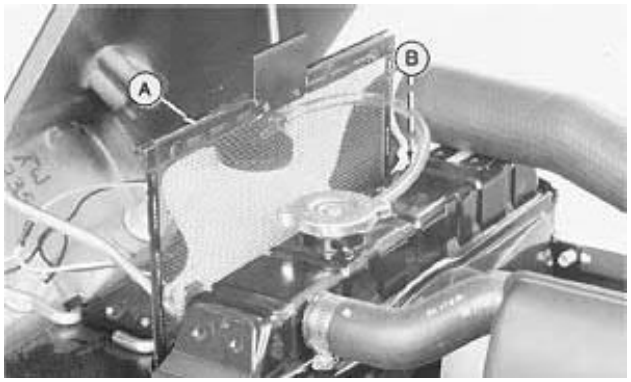
3. Lift hood and remove both engine shields.

4. Remove radiator screen (A) and (B).

NOTE: Slide screen (B) to the left under air intake hose to remove.

5. Clean screens with compressed air. Clean radiator with compressed air.

6. Install screens, engine shields, and close hood.



M61892 -UN-12JAN89

MX,SEDF,T2 -19-07FEB89

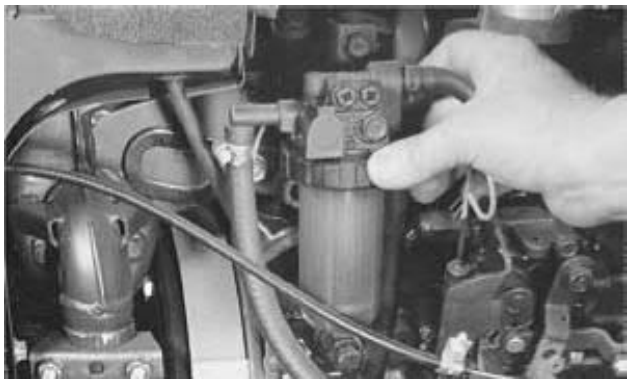
CHECKING SEDIMENT BOWL

1. Lift hood.

2. Remove right hand engine shield.

LOOK: Check for water in sediment bowl.

3. If necessary, clean bowl and replace filter. (See CLEANING FUEL FILTER SEDIMENT BOWL in Service/200 Hours section.)



MX,SEDF,U -19-07FEB89

SAFETY INTERLOCK SYSTEM CHECKOUT PROCEDURE

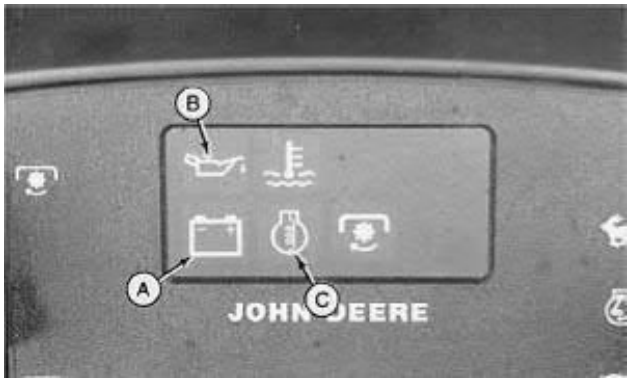
Use the following checkout procedure to check for normal operation of the tractor. If there is a malfunction during one of these procedures, do not operate tractor. See your John Deere dealer for service.

1. Check operation of indicator lights. Turn key switch clockwise to first position.

LOOK AND LISTEN: Three lights (A through C) must come on. Engine preheat indicator light (C) on 655 and 755 Tractors will go out after approximately 8 seconds. The light on 855 Tractor will not come on unless ambient temperature is below 40˚F (23˚C). The electric fuel pump will be audible.

If one indicator light does not come on, see REPLACING INDICATOR LIGHT BULB in Service/As Necessary section.

If new indicator bulb does not light, see your John Deere dealer.



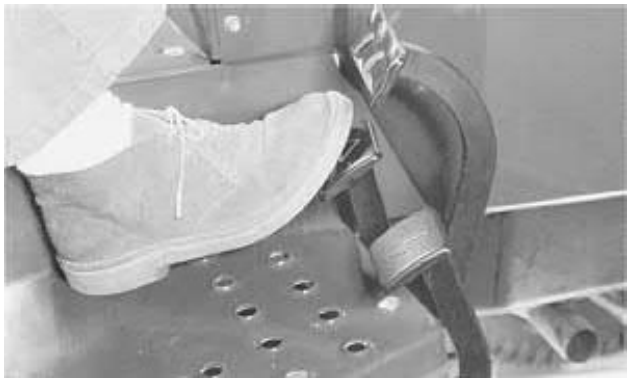
A—Battery Discharge
B—Oil Pressure
C—Engine Preheat

MX,SEDF,V -19-07FEB89

Test 1

Sit on tractor seat.

Push and hold down either speed control pedal.



MX,SEDF,W -19-07FEB89

Turn key switch to start position.

LISTEN: The starter must not engage.

Turn key switch off.

-UN-29AUG88 M39554

MX,SEDF,X -19-07FEB89

Test 2

Sit on tractor seat.

Turn key switch to first position.

-UN-29AUG88 M39554

MX,SEDF,Y -19-07FEB89

Engage PTO.

LOOK: PTO indicator (A) must come on.

-UN-29AUG88 M39573

-UN-29AUG88 M39624

MX,SEDF,Z -19-07FEB89

Raise off seat.

LOOK AND LISTEN: PTO indicator must go out and audible noise heard as PTO disengages. PTO lever will not return to disengaged position.

Turn ignition switch to OFF position.

Put PTO lever in disengaged position.

MX,SEDF,AA -19-07FEB89

LUBRICATING GREASE FITTINGS

If you operated the tractor in extremely wet and muddy conditions, lubricate grease fittings. (See LUBRICATING GREASE FITTINGS in Service/50 Hours section.)

MX,SEDF,AB -19-07FEB89

CHECKING WHEEL BOLT TORQUE

Check and tighten wheel bolts to torque specified in Service/Break-In section.

MX,SEDF,AC -19-07FEB89

CHECKING ENGINE COUPLER BOLT TORQUE

Tighten engine coupler bolts to 37 lb-ft (50 N·m) torque.

MX,SEDF,AD -19-07FEB89

CHECKING OPTIONAL MFWD OIL LEVEL

1. Park tractor on a level surface.

2. Remove dipstick. Wipe dipstick with a clean cloth.

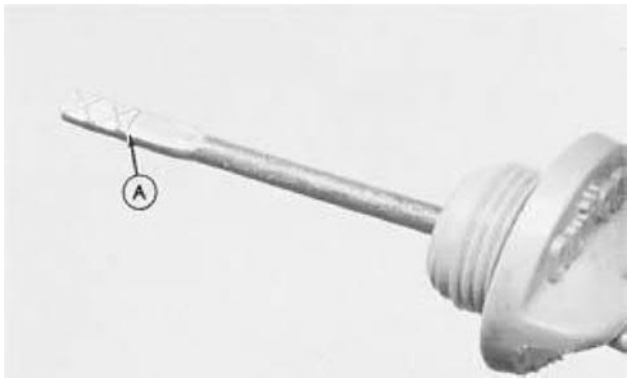
3. Insert dipstick. DO NOT screw dipstick into case to check oil level.

4. Remove dipstick. Check oil level on dipstick.

5. Oil level should be to top of mark (A) on dipstick.

IMPORTANT: If oil level is low, DO NOT operate tractor.

M39618 -UN-29AUG88



M39638 -UN-09SEP88

MX,SEDF,AE -19-07FEB89

CHECKING BATTERY ELECTROLYTE LEVEL

CAUTION: Sulfuric acid in battery electrolyte is poisonous. It is strong enough to burn skin, eat holes in clothing, and cause blindness if splashed into eyes.

Avoid the hazard by:

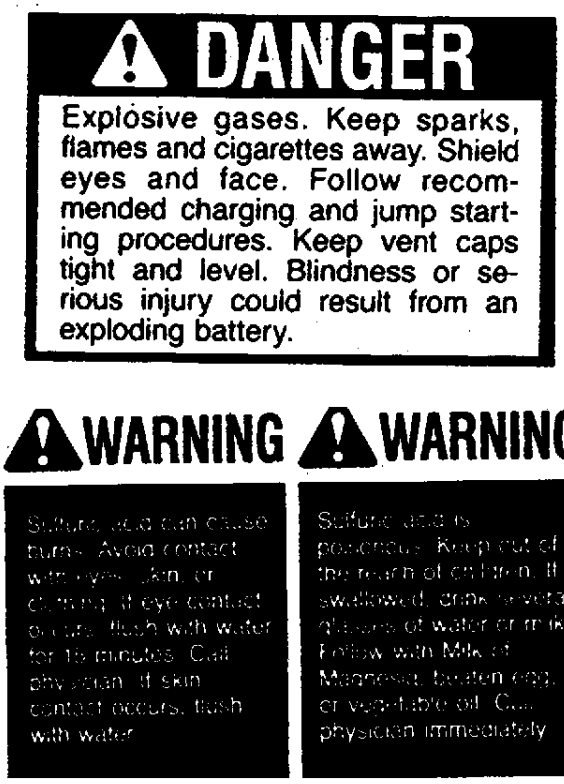
1. Filling batteries in a well-ventilated area.
2. Wearing eye protection and rubber gloves.
3. Avoiding breathing fumes when electrolyte is added.
4. Avoiding spilling or dripping electrolyte.
5. Use proper jump start procedure.

If you spill acid on yourself:

1. Flush your skin with water.
2. Apply baking soda or lime to help neutralize the acid.
3. Flush your eyes with water for 10—15 minutes. Get medical attention immediately.

If acid is swallowed:

1. Drink large amounts of water or milk.
2. Then drink milk of magnesia, beaten eggs, or vegetable oil.
3. Get medical attention immediately.



M34587 -19-30NOV88
M34592 -19-30NOV88

MX,SEDF,AF -19-07FEB89

NOTE: 655 and 755 Tractors illustrated. The battery for 855 Tractor is located in front of the radiator. Remove grille to check battery on 855 Tractor.

To check electrolyte level:

1. Lift hood.

2. Remove battery caps.

M39619 -UN-29AUG88

MX,SEDF,AG -19-07FEB89

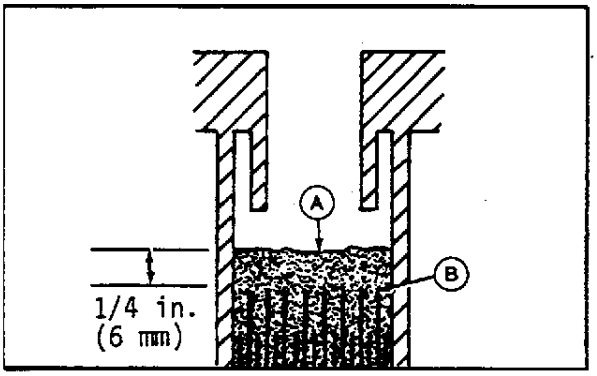
IMPORTANT: DO NOT fill cells to the bottom of the filler neck. Electrolyte can overflow when battery is charged and cause damage.

3. Electrolyte (A) should be 1/4 in. (6 mm) above plates (B).

4. If necessary, add distilled water.

5. Install caps.

6. Lower hood.



M39771 -UN-09SEP88

MX,SEDF,AH -19-07FEB89

CHECKING HARDWARE

NOTE: If bolts are tapped into aluminum or plastic, DO NOT tighten to torque specified in chart. Tighten hardware to listed specification at point of use.

Check tightness of tractor nuts and bolts. Use the metric torque chart and tighten hardware to specifications.

RECOMMENDED TORQUE IN Nm(LB-FT)
COARSE AND FINE THREADS

	D1	F1	G1
	8.8	10.9	12.9
Bolt Diameter	8.8	10.9	12.9
M5	7 (5)	9 (6)	11 (8)
M6	12 (8)	16 (11)	20 (14)
M8	30 (22)	40 (29)	45 (33)
M10	55 (40)	75 (55)	90 (66)
M12	100 (73)	135 (99)	160 (118)
M14	160 (118)	215 (158)	260 (191)
M16	245 (180)	335 (247)	400 (295)
M20	480 (354)	650 (479)	780 (575)
M24	825 (608)	1125 (829)	1350 (995)
M30	1640 (1209)	2240 (1652)	2690 (1984)
M36	2870 (2116)	3910 (2883)	4700 (3466)

M34183 -19-07OCT88

MX,SEDF,AI -19-07FEB89

CHECKING TIRE PRESSURE


M39620 -UN-29AUG88

NOTE: When tractor is equipped with an attachment, see attachment operator's manual for correct tire pressure.

1. Check tires for damage.

2. Check tire pressure with an accurate tire gauge.

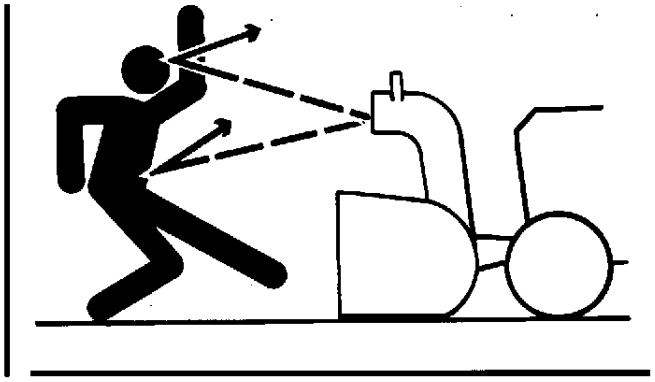
3. Keep tires at pressures shown below.

TIRE PRESSURE SPECIFICATIONS

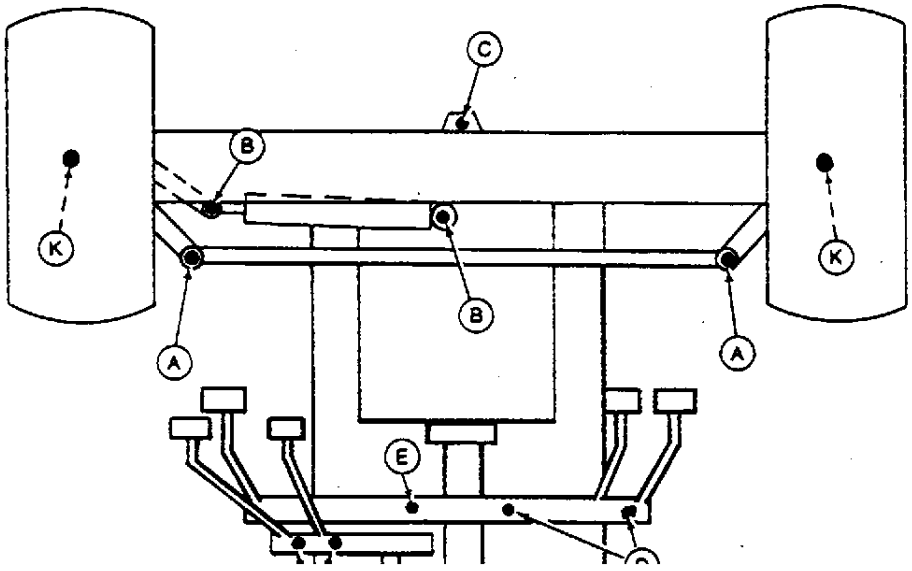
Turf Tires	Front	Rear
	8—24 psi (56-165 kPa)	6—20 psi (42-140 kPa)
R-1 Tires	Front	Rear
5x12	12—45 psi (84-315 kPa)	
6x12	12—45 psi (84-315 kPa)	
7x12	12—45 psi (84-315 kPa)	
7.2x16		12—26 psi (84-182 kPa)
8.3x16		12—22 psi (84-154 kPa)
9.5x16		12—20 psi (84-140 kPa)
11.2x16		12—20 psi (84-140 kPa)
F-2 Tires	Front	
4.00x12	12—45 psi (84-315 kPa)	
4.00x15	12—45 psi (84-315 kPa)	

MX,SEDF,AJ -19-07FEB89

LUBRICATING OPTIONAL MFWD TRACTOR GREASE FITTINGS



M41359 -UN-08SEP88 300 LS MX 504.0 488.0



M41360 -UN-08SEP88

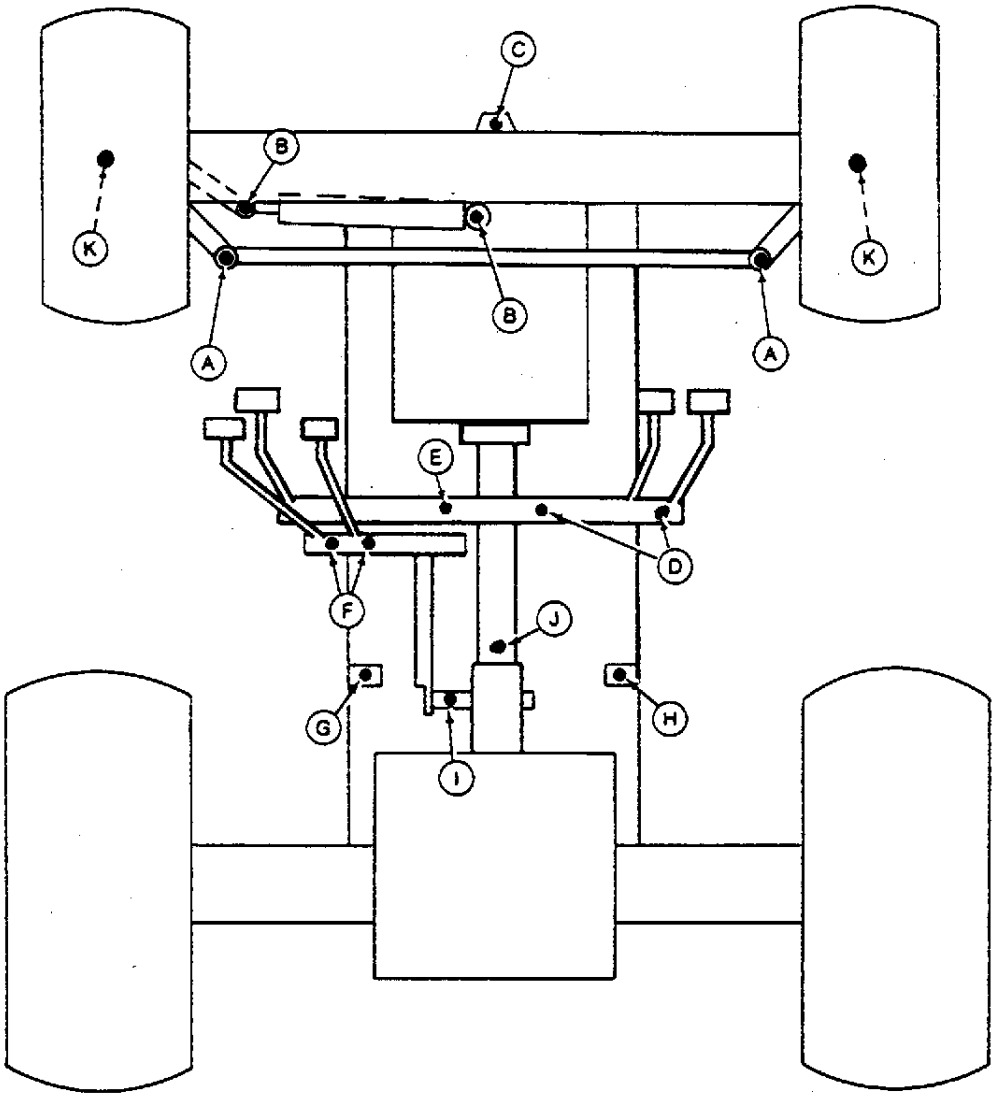
Lubricate all grease fittings with John Deere Multipurpose Grease (See GENERAL PURPOSE GREASE in Fuels and Lubricants section.)

A—Tie Rod (2 Fittings)
B—Power Steering Cylinder (2 Fittings)
C—Front Axle Pivot
D—Turn Brake Pedals (2 Fittings)
E—Service-Park Brake Pedal
F—Speed Control Pedals (2 Fittings)
G—Brake Bell Crank
H—Brake Bell Crank
I—Control Cam Pivot
J—Drive Shaft U-Joint*

*NOTE: Remove four screws and platform panel for access to universal joint (J). Lubricate U-joint fitting only once every 500 hours of operation.

MX,SEDF,AK -19-07FEB89

LUBRICATING STANDARD TRACTOR GREASE FITTINGS



M41359 -UN-08SEP88

Lubricate all fittings with John Deere Multipurpose Grease. (See GENERAL PURPOSE GREASE in Fuels and Lubricants section.)

A—Tie Rod (2 Fittings)
B—Power Steering Cylinder (2 Fittings)
C—Front Axle Pivot
D—Turn Brake Pedals (2 Fittings)
E—Service-Park Brake pedal
F—Speed Control Pedals (2 Fittings)
G—Brake Bell Crank
H—Brake Bell Crank
I—Control Cam Pivot
J—Drive Shaft U-Joint*
K—Front Axle Spindles (2 used)

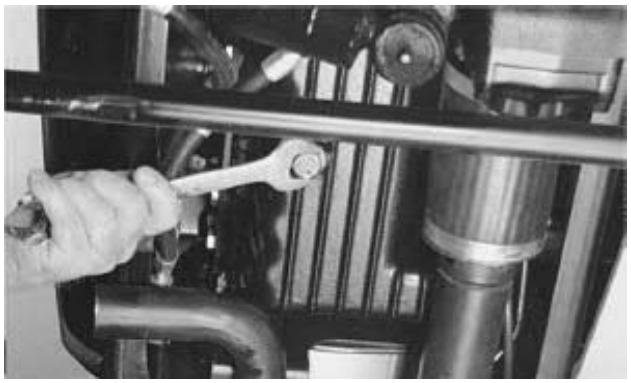
*NOTE: Remove four screws and platform panel for access to universal joint (J). Lubricate U-joint fitting only once every 500 hours of operation.

MX,SEDF,AL -19-07FEB89

CHANGING ENGINE OIL AND FILTER

NOTE: Change engine oil and filter after first 50 hours of operation.

1. Park tractor on a level surface.
2. Run engine a few minutes to warm the oil.
3. Stop engine.
4. Remove drain plug to drain oil. While oil is draining, change engine oil filter.



M39622 -UN-29AUG88

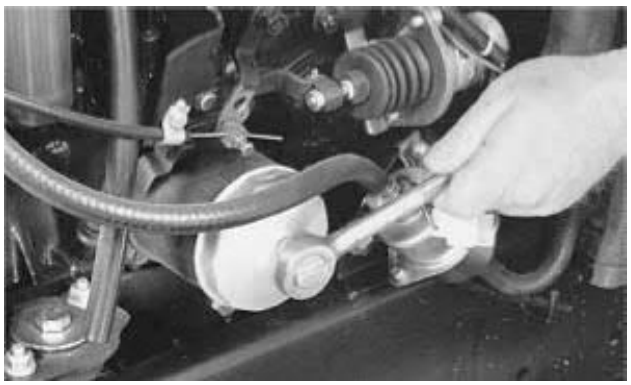
MX,SEDF,AM -19-07FEB89

5. Lift hood.

6. Remove right-hand engine shield.

7. Remove and discard filter. Turn filter counter-clockwise with a filter wrench to remove.

M39599 -UN-29AUG88



M39596 -UN-29AUG88

MX,SEDF,AN -19-07FEB89

8. Apply a film of clean engine oil on seal of new filter.

9. Install filter. Turn filter until seal contacts mounting surface. Then turn filter BY HAND 1/2 turn more.

10. Install and tighten drain plug.

M33792 -UN-07SEP88

MX,SEDF,AO -19-07FEB89

11. Remove filler cap.

OIL CAPACITIES

Tractor	Capacity With Filter
655	2.5 qt (2.4 L)
755	2.86 qt (2.7 L)
855	3.28 qt (3.1 L)

12. Add oil. (See ENGINE OILS in Fuels and Lubricants section for correct oil.)

13. Install filler cap.

M39601 -UN-29AUG88

M39602 -UN-29AUG88

MX,SEDF,AP -19-07FEB89

14. Start engine. Run engine at slow speed and check for leaks around filter.

15. Stop engine. Remove dipstick and check oil level. Add oil only to “F” mark on dipstick.

16. Install dipstick. Install engine shield. Lower hood.

M39600 -UN-29AUG88

M35585 -UN-26AUG88

MX,SEDF,AQ -19-07FEB89

CLEANING THE AIR CLEANER

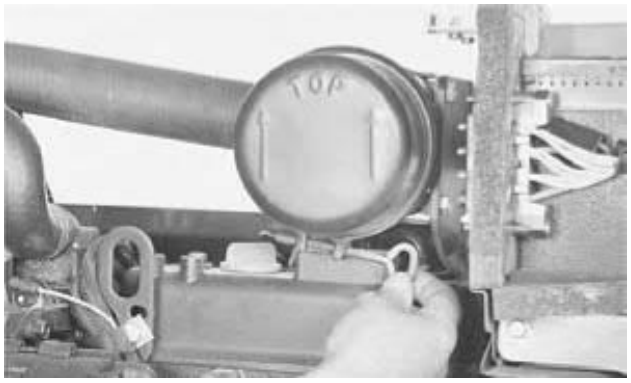
Clean the air cleaner before 200 hours operation if:
—You operate tractor in dusty conditions.
—Engine loses power.
—Engine smokes too much.

Replace air cleaner element:
—At least once a year.
—after element has been cleaned six times.

MX,SEDF,AR -19-07FEB89

REMOVING ELEMENT ON 655 AND 755 TRACTORS

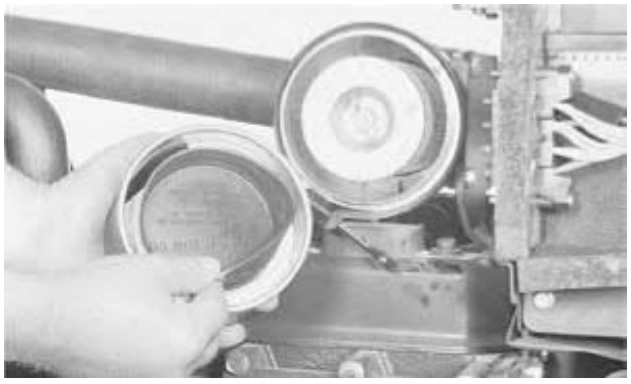
1. Loosen retaining ring to remove air cleaner cover.



-UN-29AUG88 M39626

MX,SEDF,AS -19-07FEB89

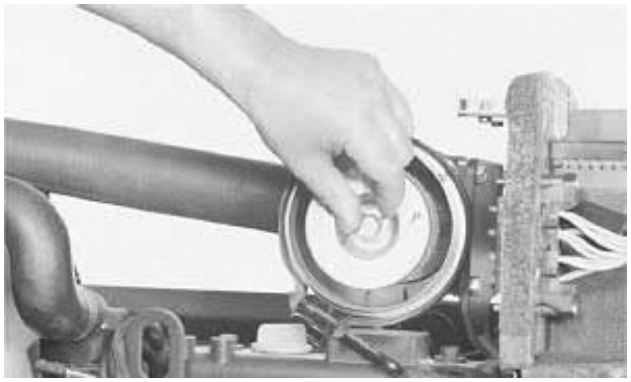
2. Remove baffle from cover. Clean the baffle and cover.



-UN-29AUG88 M39627

MX,SEDF,AT -19-07FEB89

3. Remove wing nut to remove element.



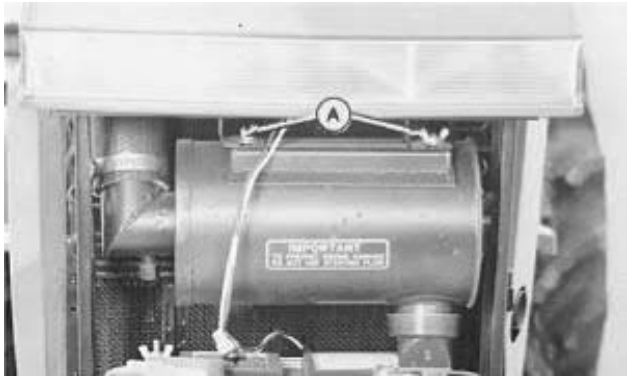
-UN-29AUG88 M39628

MX,SEDF,AU -19-07FEB89

REMOVING ELEMENT ON 855 TRACTOR

1. Remove grille .(See CLEANING OIL COOLER AND RADIATOR COOLING FINS in this section.)

2. Loosen two wing nuts (A) to remove air cleaner assembly.

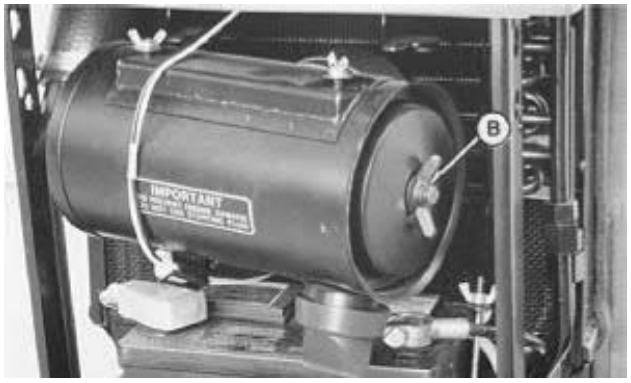


M62073 -UN-02FEB89

MX,SEDF,AU1 -19-07FEB89

3. Pull air cleaner assembly outward and remove wing nut (B) to remove element or cover.

4. Remove wing nut (C) to remove air cleaner element (D).

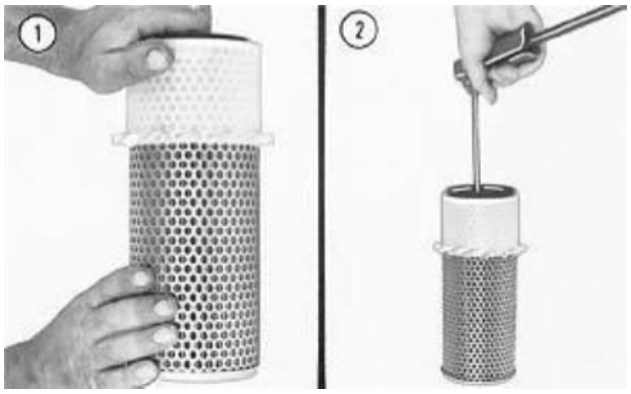


M61894 -UN-12JAN89

M61896 -UN-12JAN89

MX,SEDF,AV -19-07FEB89

CLEANING DUSTY ELEMENT



1. Remove element. Pat element with the palm of your hand, NOT ON HARD SURFACE.

2. If this does not remove dust, use compressed air under 30 psi (210 kPa).

3. Direct air up and down the pleats, blowing from inside to outside. Be careful not to make a break in the element.

4. After you clean the element, put a lighted bulb inside it. Inspect the element and gasket for damage. Throw away an element that has the smallest break. If the gasket is broken or missing, install a new element.

5. Before you install the element, clean the inside of the air cleaner housing with a damp cloth.

MX,SEDF,AW -19-07FEB89

OILY OR SOOTY ELEMENT

IMPORTANT: DO NOT wash the element in fuel oil, oil, gasoline, or solvent. DO NOT use compressed air to remove water from an element.

1. Add John Deere R36757 Filter Element Cleaner or an equivalent non-sudsing detergent to water. Move the element up and down in this solution to loosen dirt.

2. Flush with clean water. Use water pressure under 40 psi (280 kPa).

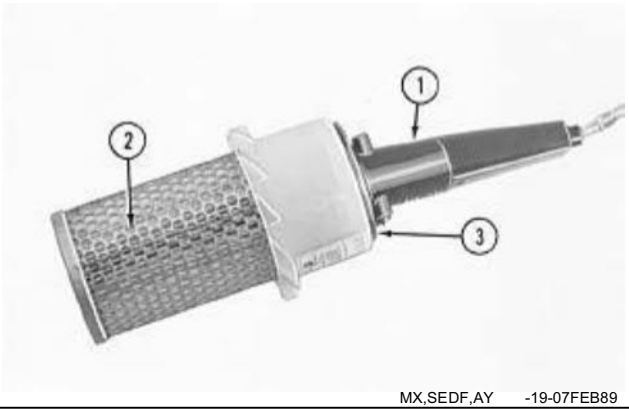
3. Shake the element to remove water. Do not install element in the machine until it is dry.

MX,SEDF,AX -19-07FEB89

INSPECTING ELEMENT

1. Hold a bright light inside outer element. Check carefully for holes. Discard element if it has the slightest hole.

2. Be sure filter gasket is in good condition. If gasket is damaged or missing, replace element.



RW470 -UN-13DEC88

MX,SEDF,AY -19-07FEB89

CHECKING FAN BELT TENSION

CAUTION: Stop the engine before you check belt tension. Allow engine to cool.

1. Stop engine. Remove key.

2. Apply moderate thumb pressure to belt halfway between pulleys.

3. Belt should deflect approximately 1/2 in. (13 mm).

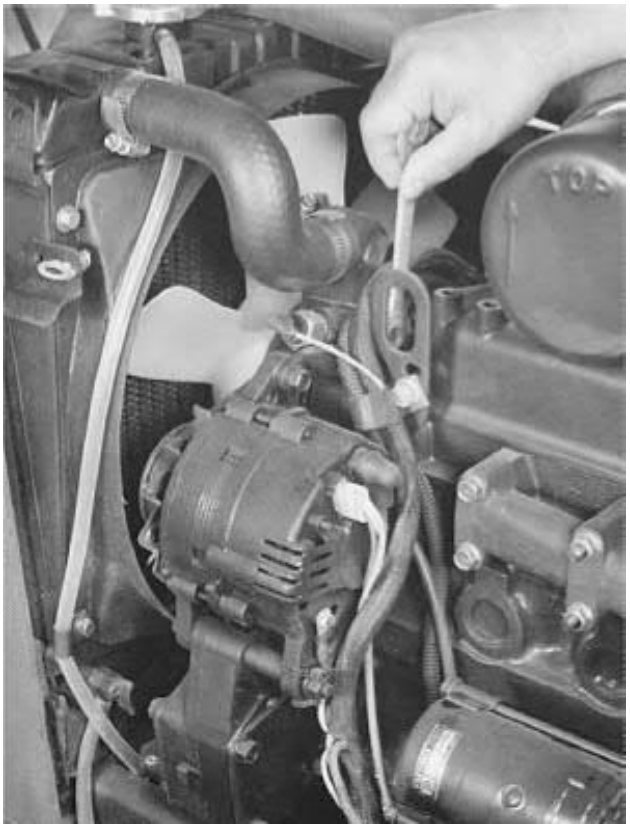
4. To tighten belt, loosen adjusting nut.

5. Apply pressure on rear of alternator housing.

6. Tighten nut.

7. Check belt tension again.

8. Replace fan belt if it is damaged.



M39597 -UN-29AUG88

MX,SEDF,AZ -19-07FEB89

LUBRICATING 3-POINT HITCH

NOTE: The 3-point hitch is regular on 855 Tractor and optional on 655 and 755 Tractors.

1. Lubricate right-hand adjustable link body with several shots of grease. (See GENERAL PURPOSE GREASE in Fuels and Lubricants section.)

M39629 -UN-29AUG88

MX,SEDF,BA -19-07FEB89

2. Lubricate ball joints with clean engine oil.

MX,SEDF,BB -19-07FEB89

CLEANING FUEL FILTER SEDIMENT BOWL

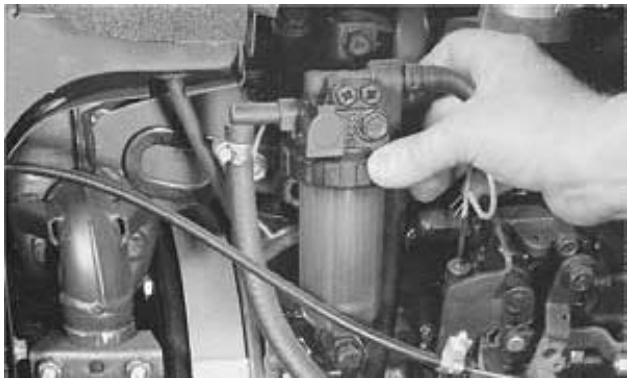
1. Raise hood and remove right-hand engine side panel.

2. Turn collar counterclockwise to remove bowl and filter. Discard filter.

3. Clean the bowl.

4. Install new filter and bowl.

5. Bleed fuel system. (See BLEEDING FUEL SYSTEM in Service/As Necessary section.)



MX,SEDF,BC -19-07FEB89

CLEANING OIL COOLER AND RADIATOR COOLING FINS

1. Remove air intake hose, radiator screen, and grille. (See CLEANING GRILLE AND RADIATOR SCREEN in Service/10-Hours or Daily section.

2. Pull grille forward to remove it.

3. Remove dirt and chaff from oil cooler and radiator fins using compressed air or water. Check for bent cooling fins.

4. Clean grille and radiator screen.

5. Install grille, radiator screen, and air intake hose.

6. Close hood.

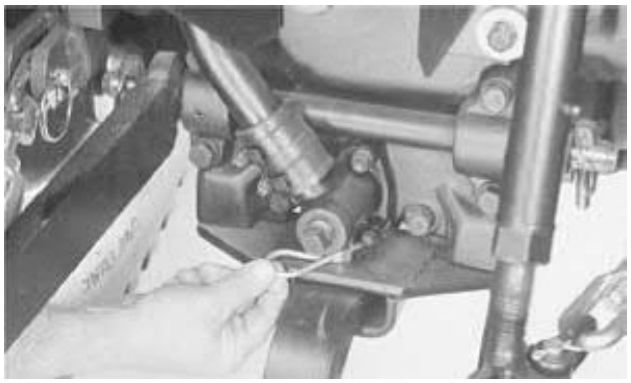
M39615 -UN-29AUG88

M39617 -UN-29AUG88

MX,SEDF,BD -19-07FEB89

CHANGING HYDRAULIC OIL AND FILTER

1. Remove pins and drawbar.



MX,SEDF,BE -19-07FEB89

IMPORTANT: Run engine a few minutes to warm oil.

2. Remove transmission drain plugs on side of case and on rear housing to drain oil.
3. After oil has drained, remove cap screws (A) to remove housing. Remove housing.
4. Remove screen from housing. Clean screen in a safe parts cleaning solvent. Dry screen thoroughly.
5. Install screen and housing. Install and tighten both drain plugs.

MX,SEDF,BF -19-07FEB89

6. Turn transmission filter counterclockwise, using a filter wrench, to remove it. Some oil may come out of filter and filter base during removal. Use a drain pan to prevent an oil spill. Discard filter.

MX,SEDF,BG -19-07FEB89

7. Put a film of clean transmission oil on seal of new filter.

8. Fill the filter 1/3 to 1/2 full with John Deere Low Viscosity HY-GARD transmission and hydraulic oil.

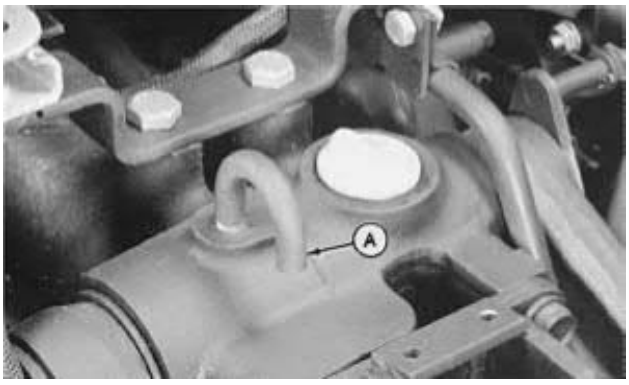
9. Tighten the filter QUICKLY until it contacts the mounting surface. Tighten filter BY HAND an additional 1/2 turn.

M33797 -UN-07SEP88

M33753 -UN-07SEP88

MX,SEDF,BH -19-07FEB89

10. Turn vent tube counterclockwise to remove. Remove vent tube and clean in a safe parts solvent. Install vent tube.



M39634 -UN-09SEP88

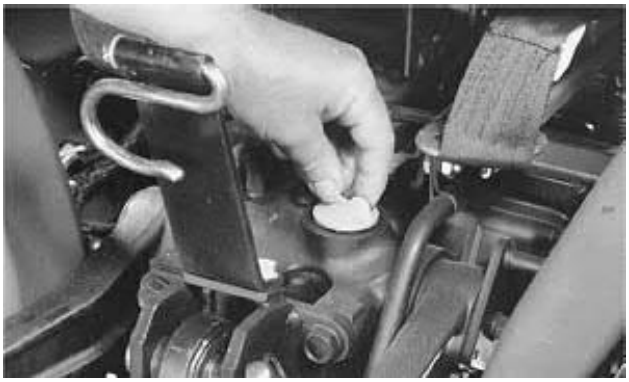
MX,SEDF,BI -19-07FEB89

11. Remove fill cap.

12. Add approximately 3.7 gal (14 L) of John Deere Low Viscosity HY-GARD transmission and hydraulic oil. Install and tighten fill plug.

13. Start engine and check for oil leaks around filter base and drain plug.

14. Move hydraulic levers back and forth several times.



M39609 -UN-29AUG88

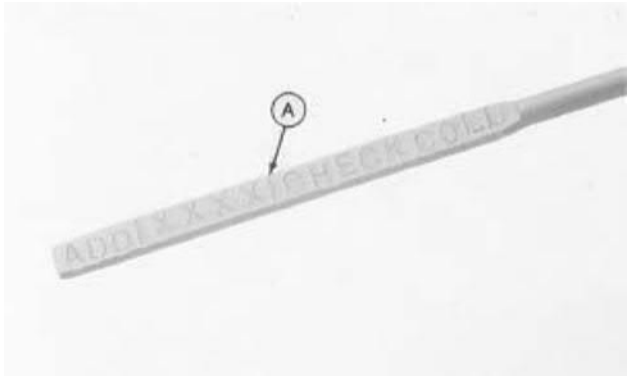
MX,SEDF,BJ -19-07FEB89

15. Stop engine.

16. Remove dipstick. Wipe dipstick with a clean rag. Install dipstick and then remove to check oil level.

17. Oil level should be up to top mark (A). Add oil if necessary.

M39608 -UN-29AUG88



M39610 -UN-29AUG88

MX,SEDF,BK -19-07FEB89

CHANGING OPTIONAL MFWD OIL

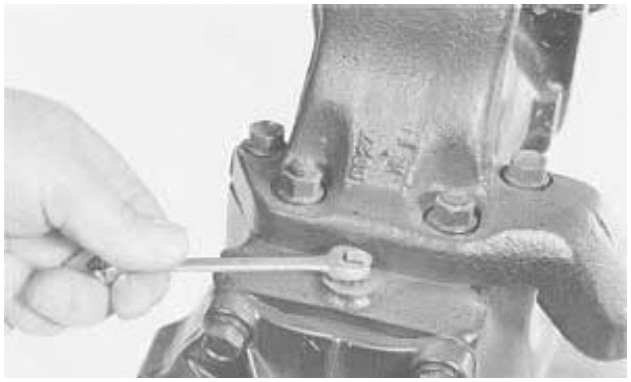
NOTE: Drain oil immediately after operating tractor when oil is still warm.

1. If front wheels are in the narrow position, remove bolts and wheel from both side of axle for access to vent plugs.

M39694 -UN-09SEP88

MX,SEDF,BL -19-07FEB89

2. Remove vent plug from top of both sides of axle.

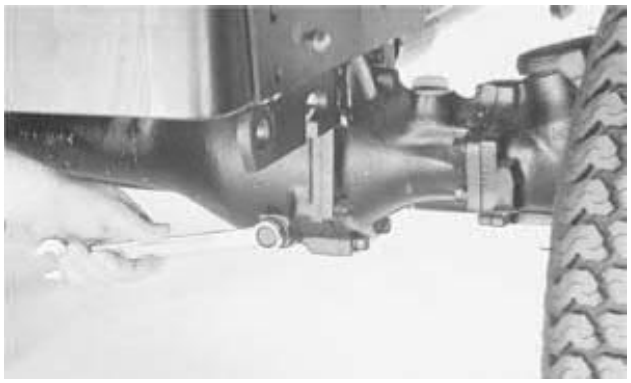


M39636 -UN-09SEP88

MX,SEDF,BM -19-07FEB89

3. Remove differential drain plug (shown), and wheel spindle housing drain plug from each wheel spindle. Drain oil into a suitable container.

4. Install and tighten the three drain plugs after all oil is drained.



M39637 -UN-09SEP88

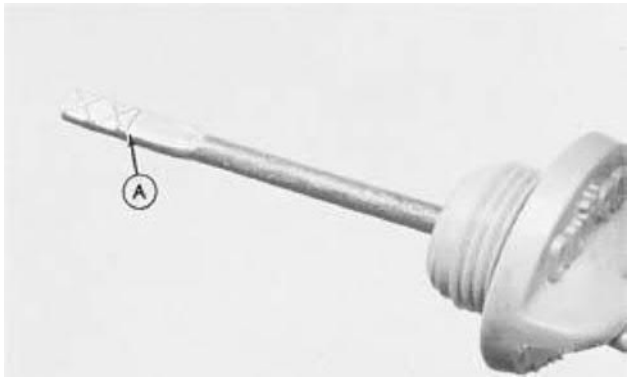
MX,SEDF,BO -19-07FEB89

5. Remove dipstick fill cap.

6. Add approximately 2.25 qts (2.13 L) of John Deere API GL-5 Gear Oil or its equivalent. (See GEAR CASE OIL in Fuels and Lubricants section.)

7. Check oil level. Wipe dipstick clean with a rag. Insert dipstick into axle hole but DO NOT screw it into axle. Remove dipstick. Oil level should be to top mark (A) on dipstick. Add oil if necessary.

M39618 -UN-29AUG88

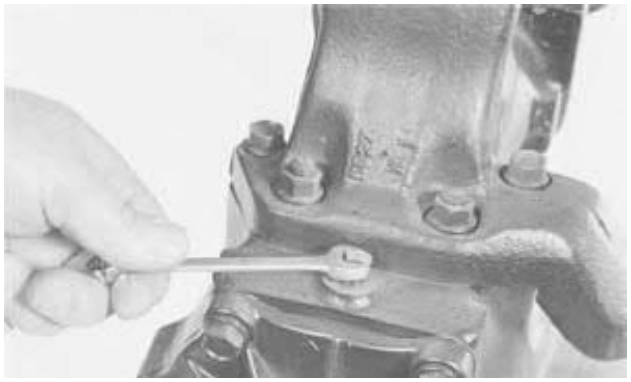


M39638 -UN-09SEP88

MX,SEDF,BP -19-07FEB89

8. Install dipstick fill cap and screw in tight.

9. Install both vent plugs tight.



MX,SEDF,BQ -19-07FEB89

10. Install front wheels if they were removed.

11. Tighten wheel bolts to 60 to 70 lb-ft (67 to 79 N·m) torque.

IMPORTANT: Check bolt torque. (See TRACTOR BREAK-IN in Service/Break-In section of manual.)

MX,SEDF,BR -19-07FEB89

REPACKING FRONT WHEEL BEARINGS (TWO WHEEL DRIVE TRACTORS ONLY)

1. Lock service-park brake.

2. Loosen five nuts (A) on each wheel.

3. Jack up front of tractor.

CAUTION: Put safety stands or adequate blocks under front axle to prevent tractor from falling on you.

4. Remove five nuts (A) and front wheel from both sides of tractor.

M39635 -UN-09SEP88

MX,SEDF,BS -19-07FEB89

5. Remove hub cap using screwdriver and hammer.

M39640 -UN-09SEP88

MX,SEDF,BT -19-07FEB89

6. Remove cotter pin.

M39641 -UN-09SEP88

MX,SEDF,BU -19-07FEB89

7. Remove castellated nut.

M39642 -UN-09SEP88

MX,SEDF,BV -19-07FEB89

8. Slip washer, bearing, and wheel hub off shaft.

M39643 -UN-09SEP88

MX,SEDF,BW -19-07FEB89

9. Clean axle spindle and parts with a parts cleaning solvent.

M39644 -UN-09SEP88

MX,SEDF,BX -19-07FEB89

10. Remove and discard seal from hub.

M39645 -UN-09SEP88

MX,SEDF,BY -19-07FEB89

11. Install new seal using a seal driver.

MX,SEDF,BZ -19-07FEB89

12. Pack bearing and inside of wheel hub with John Deere Multipurpose Lubricant or an equivalent. (See GENERAL PURPOSE GREASE in Fuels and Lubricants section.)

13. Install hub bearing and washer on axle spindle.

MX,SEDF,CA -19-07FEB89

14. Install and tighten nut until a slight drag is felt when hub is turned. Back nut off 1/4 turn or just enough to install cotter pin.

MX,SEDF,CB -19-07FEB89

15. Install cotter pin. Spread ends of cotter pin until they wrap around nut and do not interfere when hub cap is installed.

MX,SEDF,CC -19-07FEB89

16. Install hub cap.

MX,SEDF,CD -19-07FEB89

17. Install front wheels.

18. Tighten nuts to 60 to 70 lb-ft (68 to 79 N·m) torque.

MX,SEDF,CE -19-07FEB89

CHECKING ENGINE SPEEDS

Check engine speeds when engine is warmed up and not under load.

Observe tachometer.

Engine Speed Specification

Fast idle (no load)	3425 rpm
Slow idle (no load)	1450 rpm

If above engine speed are not to specifications, see your John Deere dealer.

MX,SEDF,CF -19-07FEB89

TIGHTENING HOSE CLAMPS

1. Tighten air intake hose clamps. Replace hoses if cracked or leaks are observed.

2. Check cooling system hoses for leaks. Tighten clamps.

M39698 -UN-09SEP88

MX,SEDF,CG -19-07FEB89

REPLACE FUEL FILTER

Replace fuel filter. (See CLEANING FUEL FILTER SEDIMENT BOWL in Service/200 Hours section.)

MX,SEDF,CH -19-07FEB89

DRAINING, FLUSHING, AND FILLING COOLING SYSTEM

1. Stop the engine. Let engine cool.
2. Lift hood. Remove both engine shields.

CAUTION: Do not remove radiator cap unless engine is cool. Then turn the cap slowly to the stop. Release all pressure before you remove the cap.

3. Slowly remove radiator cap.

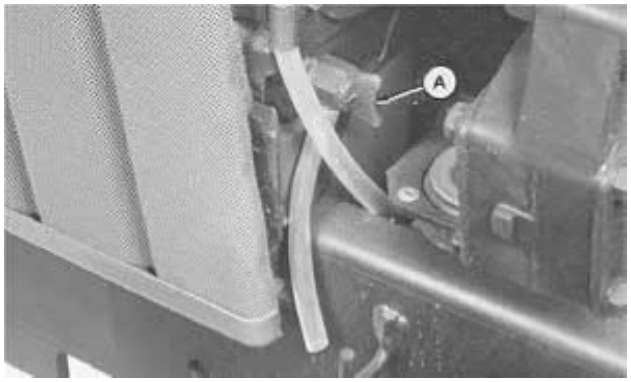
M39611 -UN-29AUG88

MX,SEDF,CI -19-07FEB89

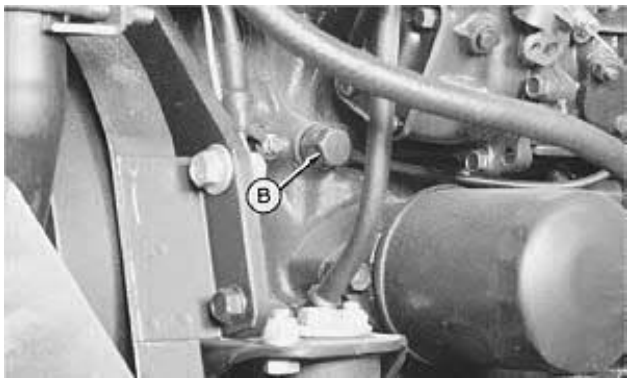
4. Open the radiator petcock (A) on left-hand side. Drain coolant into a bucket.

5. Loosen block drain (B) on right-hand side of engine one or two turns and drain coolant from engine block.

6. After all coolant is drained, close radiator petcock (A) and block drain (B).



M39649 -UN-09SEP88



M39650 -UN-09SEP88

MX,SEDF,CJ -19-07FEB89

IMPORTANT: Do not pour water into a hot engine or you may damage the cylinder head or block. Do not operate the engine without coolant.

8. Fill the cooling system with clean water and PT500 John Deere Cooling System Cleaner or PT592 John Deere Cooling System Quick Flush or an equivalent. Follow directions on the can.

9. Install and tighten radiator cap.

10. Start and run engine until it reaches operating temperature.

CAUTION: Engine and coolant will be hot. Turn radiator cap using a thick rag or glove to protect your hand.

11. Drain the cooling system immediately before rust and dirt settle.

12. Close radiator petcock.

M39651 -UN-09SEP88

MX,SEDF,CK -19-07FEB89

13. Fill the cooling system. Capacity is 1 gal (3.8 L). For cold weather, use a solution of only ethylene glycol antifreeze (without a stop-leak additive) and clean, soft water. A chart on the antifreeze container tells how much antifreeze to use for the freeze protection needed in your area. (If you operate your engine in extremely cold temperatures, see your John Deere dealer for information on arctic operation.)

For temperatures above freezing, fill the cooling system with clean, soft water and T19566 John Deere Engine Coolant Conditioner.

PT504 John Deere System Sealer or its equivalent may be added to the radiator to seal leaks. Do not use any other additives in the cooling system.

14. Install and tighten radiator cap.

15. Run engine until it reaches operating temperature.

16. Stop the engine. After engine cools, check coolant level. Add coolant if necessary.

17. Check condition of coolant system hoses. Install new hoses periodically. Tighten hose clamps regularly.

18. Install engine shields and close hood.

MX,SEDF,CL -19-07FEB89

REPLACING THERMOSTAT

See your John Deere dealer for this service.

MX,SEDF,CM -19-07FEB89

Service/As Necessary

CLEANING AIR CLEANER

When you operate tractor in extremely dusty, dirty conditions, the air cleaner will require service more often. (See SERVICING AIR CLEANER in the Service/200-Hour section.) Service air cleaner as often as necessary for best performance.

MX,SEDF,CN -19-07FEB89

CLEANING FUEL SEDIMENT BOWL

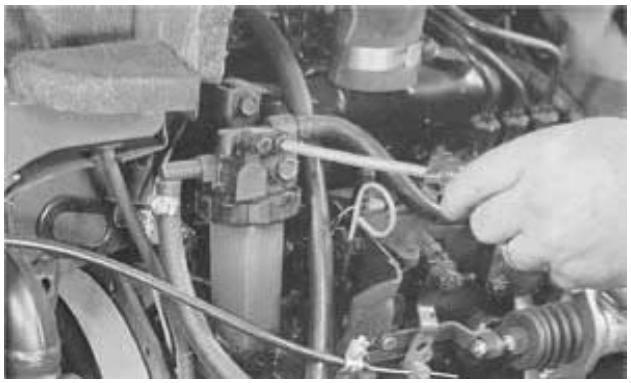
Clean fuel sediment bowl when you find wear or sediment in the bowl. (See CLEANING FUEL FILTER SEDIMENT BOWL in Service/200-Hours section.)

MX,SEDF,CO -19-07FEB89

BLEEDING FUEL SYSTEM

IMPORTANT: Modification or alteration of the injection pump, the injection pump timing, or the fuel injectors in ways not recommended by the manufacturer will terminate the warranty obligation to the purchaser. See warranty information inside front cover.

Do not attempt to service injection pump or fuel injectors yourself. Special training and special tools are required. See your John Deere dealer.



Bleed air from fuel system:
—after you service fuel system
—if you run out of fuel.

1. Loosen both bleed screws above filter.

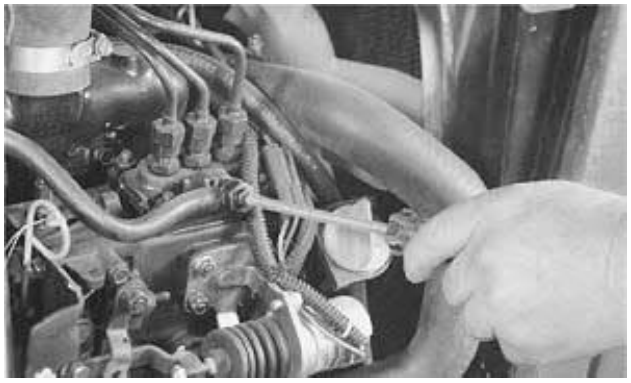
2. Turn key switch to first position on 655 and 755 Tractors. Fuel pump will run. On 855 Tractor, move fuel transfer pump lever up and down. The fuel transfer pump is located by injection pump.

3. Tighten screws when fuel flows free of bubbles.

MX,SEDF,CP -19-07FEB89

4. Loosen bleed screw on injection pump.

5. Tighten screw when fuel flows free of bubbles. Start engine. If it will not start, repeat procedure, including steps 6 through 9.



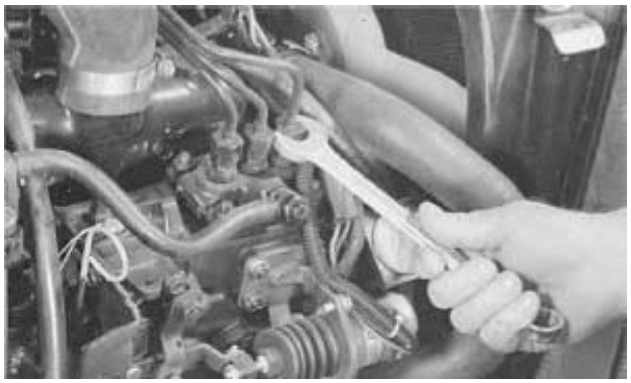
MX,SEDF,CQ -19-07FEB89

6. Loosen all injector nuts using a 17 mm wrench. Be sure bottom nut of injector does not loosen.

7. Use starter to turn engine over.

8. When fuel appears at injectors, tighten injector nuts.

9. Start engine. If engine does not start, repeat bleed procedure.



MX,SEDF,CR -19-07FEB89

CLEANING OR REPLACING BATTERY ON 655 AND 755 TRACTORS

CAUTION: Battery gases can explode. Keep cigarettes, sparks, and flames away from battery. Protect eyes and face when you work around battery.

1. Stop engine. Lift hood.

2. Disconnect black negative (—) cable from battery first.

MX,SEDF,CS -19-07FEB89

3. Slide positive terminal cover off terminal.

4. Disconnect red positive (+) cable.

MX,SEDF,CT -19-07FEB89

5. Clean the battery with a damp cloth or rag. Keep dirt out of battery cells.

6. Remove corrosion from terminals and cable clamps with a wire brush.

MX,SEDF,CU -19-07FEB89

7. If necessary, remove battery to thoroughly clean it:
a. Loosen battery hold-down bolt (A) on both sides of battery.
b. Remove battery

8. Clean battery, battery terminals, cable ends, hold-down cover, battery box, and other parts with a solution of 1 part baking soda to 4 parts water. KEEP solution out of battery cells.

9. Rinse all parts with clean water and let dry.

MX,SEDF,CV -19-07FEB89

10. Clean vent holes in cell caps.

NOTE: If you need a new battery, install a John Deere battery or a battery of equal specification. (See your John Deere dealer.)

11. Install battery and tighten battery hold-down bolts.

12. Connect red positive cable (+) to battery. Slide positive terminal cover over end of cable and terminal.

13. Connect black negative cable (—) to battery. Be sure connections are tight.

14. Apply petroleum jelly or silicone spray to terminals to prevent corrosion.

MX,SEDF,CW -19-07FEB89

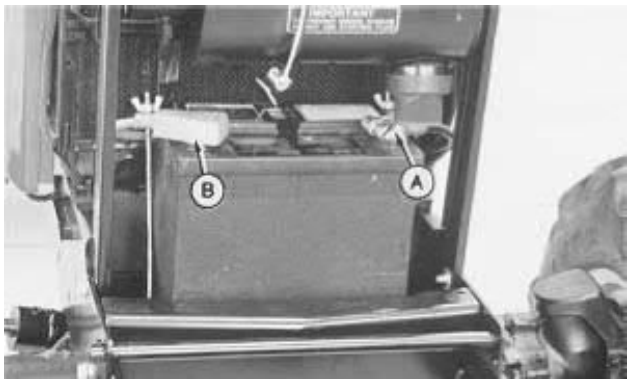
CLEANING OR REPLACING BATTERY ON 855 TRACTOR

CAUTION: Battery gases can explode. Keep cigarettes, sparks, and flames away from battery. Protect eyes and face when you work around battery.

1. Stop engine. Remove grille. (See CLEANING OIL COOLER AND RADIATOR COOLING FINS.)

2. Disconnect black negative (—) cable from battery first.

3. Lift red cover and disconnect red positive (+) cable (B).

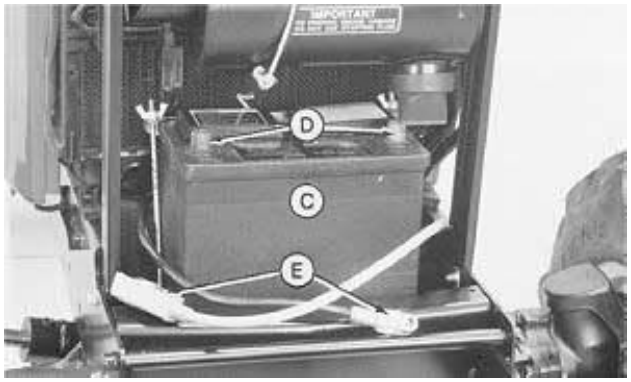


-UN-12JAN89
M61898

MX,SEDF,CX -19-07FEB89

4. Clean the battery (C) with a damp cloth or rag. Keep dirt out of battery cells.

5. Remove corrosion from terminals (D) and cable clamps (E) with a wire brush.



-UN-12JAN89
M61899

MX,SEDF,CY -19-08FEB89

6. If necessary, remove battery to thoroughly clean it.
a. Loosen battery wing nuts (A) to remove battery hold-down.
b. Remove battery.

7. Clean battery, battery terminals, cable ends, hold-down cover, battery box, and other parts with a solution of 1 part baking soda to 4 parts water. KEEP solution out of battery cells.

8. Rinse all parts with clean water and let dry.

9. Clean vent holes in cell caps.

NOTE: If you need a new battery, install a John Deere battery or a battery of equal specification. (See your John Deere dealer.)

10. Install battery and battery hold-down.

11. Connect red positive cable (+) to battery. Slide positive terminal cover over end of cable and terminal.

12. Connect black negative cable (—) to battery. Be sure connections are tight.

13. Apply petroleum jelly or silicone spray to terminals to prevent corrosion.

M61900 -UN-12JAN89

MX,SEDF,CZ -19-08FEB89

CHARGING BATTERY

Keep the battery fully charged.

CAUTION: Do not charge a frozen battery. Battery gases can explode. Keep cigarettes, sparks and flames away from battery. Remove cell caps before charging.

1. Remove and clean battery. (See CLEANING OR REPLACING BATTERY in this section.)

2. Check electrolyte level. (See CHECKING BATTERY ELECTROLYTE LEVEL in Service/50 Hours section.)

3. Leave cell caps off battery while you charge it.

CAUTION: Before you connect or disconnect charger cables to battery, unplug charger cord.

4. Connect positive (+) charger cable to positive (+) battery terminal.

5. Connect negative (—) charger cable to negative (—) battery terminal.

M35163 -UN-29AUG88

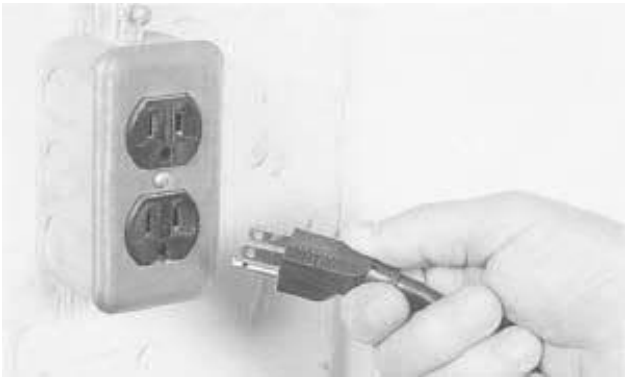
MX,SEDF,DA -19-08FEB89

6. Plug in charger cord.

7. If battery needs complete charging, charge at 30 amps for 10 minutes or at 15 amps for 20 minutes.

8. Unplug charger cord. Remove charger cables.

9. Install battery cell caps. Install battery.



M33770 -UN-07SEP88

MX,SEDF,DB -19-08FEB89

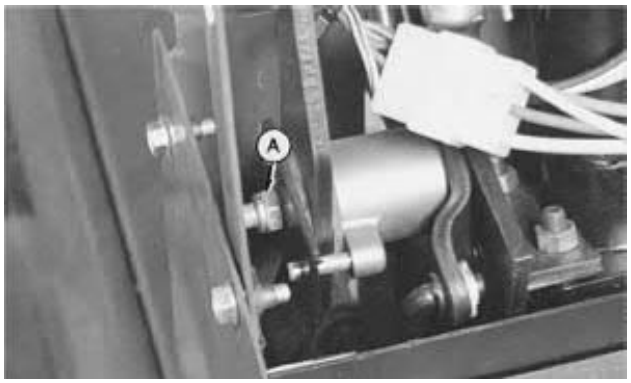
ADJUSTING THROTTLE

NOTE: Battery removed for clarity of photo.

To adjust throttle lever friction:

a. Lift hood.

b. Tighten nut (A) to increase throttle lever friction drag. Loosen nut to decrease drag.



M39660 -UN-09SEP88

MX,SEDF,DC -19-08FEB89

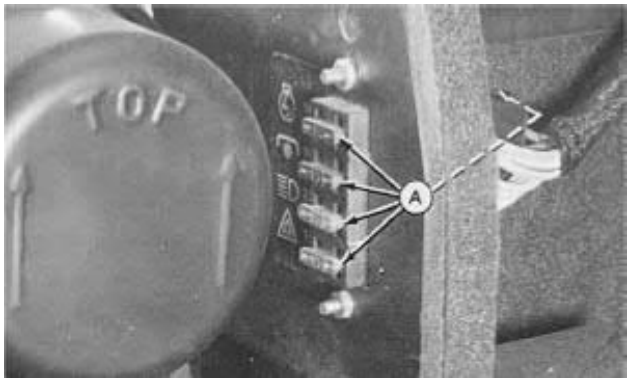
REPLACING FUSES

1. Raise hood for access to five fuses (A) on 655 and 755 Tractors or fuses (B) on 855 Tractor.

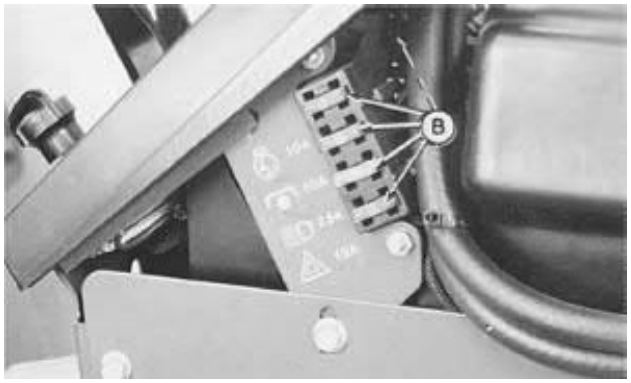
NOTE: The in-line fuse behind panel is for optional work light kit.

2. Pull defective fuse out of socket. A metal clip in the fuse will be broken.

3. Push new fuse into socket. Make sure to replace fuse of proper amperage. (See your John Deere dealer or an automotive parts store for fuse replacement.)



M61901 -UN-12JAN89



M61902 -UN-12JAN89

MX,SEDF,DD -19-07FEB89

REPLACING INDICATOR LIGHT BULB

1. Lift hood.

2. Remove battery. (See CLEANING OR REPLACING BATTERY in this section.)

3. Turn socket counterclockwise to remove it.

M39663 -UN-09SEP88

MX,SEDF,DE -19-07FEB89

4. Pull bulb from socket.

5. Push new bulb into socket.

John Deere part number AM39267
Industry part number W194

6. Install socket.

7. Install battery. (See CLEANING OR REPLACING BATTERY in this section.

MX,SEDF,DF -19-07FEB89

REPLACING HOOD HEADLIGHT BULB

1. Lift hood.

2. Turn socket counterclockwise to remove it.

MX,SEDF,DG -19-07FEB89

3. Turn bulb counterclockwise to remove it.

4. Install new bulb

John Deere part number AD2062R
Industry part number GE1156

5. Install socket.

MX,SEDF,DH -19-07FEB89

REPLACING FENDER HEADLIGHT

1. Disconnect wiring couplers.

MX,SEDF,DI -19-07FEB89

2. Remove three screws and headlight.

3. Install new headlight with screws.

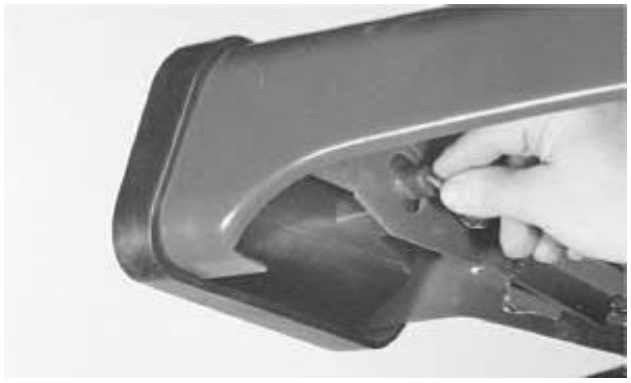
4. Connect wiring couplers.

M39700 -UN-09SEP88

MX,SEDF,DJ -19-07FEB89

REPLACING TAILLIGHT BULB

1. Turn socket counterclockwise to remove it.



M39667 -UN-09SEP88

MX,SEDF,DK -19-07FEB89

2. Turn bulb counterclockwise to remove it.

3. Install new bulb.

John Deere part number AM35424
Industry part number GE194

4. Install socket.

M39668 -UN-09SEP88

MX,SEDF,DL -19-07FEB89

REPLACING WARNING LIGHT BULB

1. Remove three screws to remove lens.

M39672 -UN-09SEP88

MX,SEDF,DM -19-07FEB89

2. Turn bulb counterclockwise to remove it.

3. Install new bulb.

John Deere part number AD2062R
Industry part number GE1156

4. Install lens.

MX,SEDF,DN -19-07FEB89

LUBRICATING SEAT SLIDE RAILS

1. Lift seat.

2. Lubricate seat slides with SAE 30 engine oil.

MX,SEDF,DO -19-07FEB89

LUBRICATING DEPTH CONTROL

1. Remove four cap screws to remove platform panel.

2. Remove panel.

MX,SEDF,DP -19-07FEB89

3. Lubricate depth control adjusting bolt threads with SAE 30 engine oil.

4. Install platform panel.

M39670 -UN-09SEP88

MX,SEDF,DQ -19-07FEB89

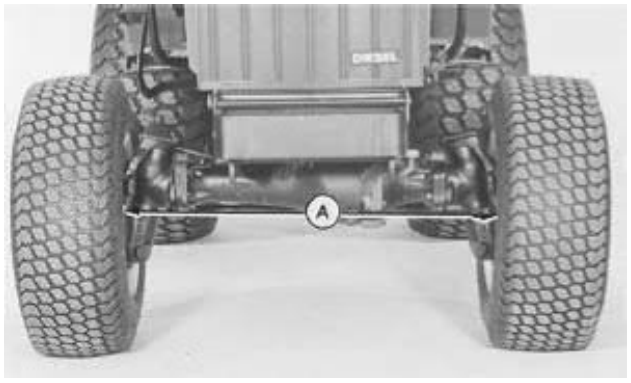
ADJUSTING TOE-IN

1. Park tractor on level surface.

2. Turn steering wheel so front wheels are in the straight-ahead position.

3. Lower attachment to ground. Lock park brake. Stop engine. Remove key.

4. Measure distance between tire beads (A) at front of tire, hub height.

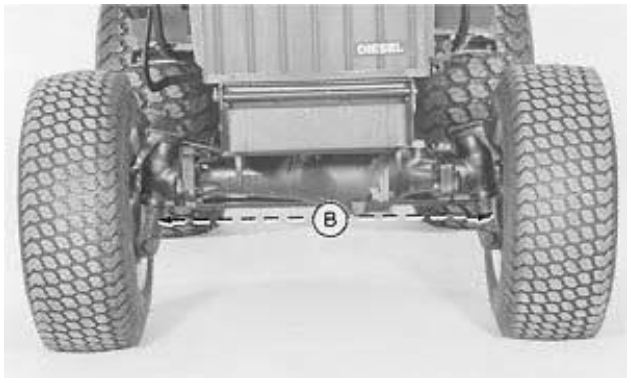


M39674 -UN-09SEP88

MX,SEDF,DR -19-07FEB89

5. Measure distance between tire beads (B) at rear of tire, hub height.

6. Front distance should be 1/8 to 3/8 in (3 to 9 mm) less than rear distance. If not adjust tie rod length.



M39675 -UN-09SEP88

MX,SEDF,DS -19-07FEB89

7. Loosen tie rod nut (A) on both tie rod ends.

8. Turn tie rod until toe-in is to correct specification.

IMPORTANT: Ball joints must move freely after you tighten tie rod nuts.

9. Tighten tie rod nuts.

MX,SEDF,DT -19-07FEB89

DO NOT CHANGE INJECTION PUMP

IMPORTANT: DO NOT clean a warm injection pump with steam or water. Clean trash regularly from under injection pump.

Changing the injection pump in any way not approved by the manufacturer will end the warranty. See your copy of the John Deere warranty on this machine.

Do not service an injection pump that is not operating correctly. See your John Deere dealer for service.

MX,SEDF,DU -19-07FEB89

DO NOT SERVICE INJECTION NOZZLES

IMPORTANT: DO NOT service or remove injection nozzles. The service life of the injection nozzles may be shortened by:
A-Overheating
B-Improper operation
C-Poor quality fuel
D-Excessive idling

If injection nozzles are not working correctly or are dirty, the engine will not run normally. See your John Deere dealer for service.

MX,SEDF,DV -19-07FEB89

Storage

USING ENGINE STORAGE KIT

See your John Deere dealer for an AR41785 Engine Storage Protection Kit or equivalent.

Follow directions on the tag in this kit.

IMPORTANT: Inhibitor easily changes to gas. Seal or tape an opening immediately after you use inhibitor.

T85452 -UN-06DEC88

MX,STDF,A -19-07FEB89

STORING THE TRACTOR

1. Repair worn or damaged parts. Install new parts if necessary.

2. Loosen alternator belt.

3. Service the air cleaner.

4. Apply multi-purpose lubricant on exposed hydraulic cylinder rods.

5. Lubricate all grease points.

6. Wash the tractor.

7. Clean the engine and the area around it. Remove oil, grease, and dirt.

8. Apply paint to areas that need it to prevent rust.

CAUTION: Store battery where children cannot reach it.

9. Remove the battery. Clean it. Check the electrolyte level. Charge the battery. Store battery in a cool, dry place.

10. Move hydraulic levers back and forth to release pressure.

11. Store the tractor in a dry, protected place. If you store tractor outside, put a waterproof cover over it.

12. Put blocks or stands under tractor to take weight off tires. Let 1/3 of air out of tires.

MX,STDF,B -19-07FEB89

REMOVING TRACTOR FROM STORAGE

1. Check tire pressure.

2. Remove blocks or supports from under tractor.

3. Wipe grease off cylinder rods.

4. Check battery electrolyte level. Charge battery if necessary. Install battery.

5. Check engine oil level.

6. Check transmission oil level.

7. Lubricate all grease points

8. Make sure shields and guards are in place.

CAUTION: Start engine ONLY in a well-ventilated place.

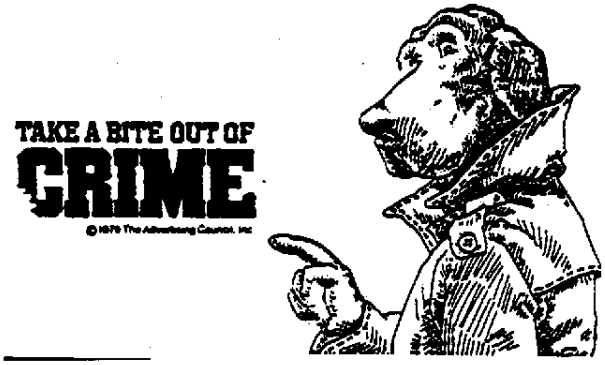
9. Run engine 5 minutes before you put engine under load.

MX,STDF,C -19-07FEB89

Crime Prevention Tips

HELP PREVENT CRIME

You can help take a bite out of crime by properly documenting ownership and discouraging theft.



TS140 -19-07OCT88

O53,CRPRV,A -19-20NOV87

RECORD IDENTIFICATION NUMBERS

1. Mark your machines with your own unique numbering system.

2. Record the Product Identification Number (PIN) of the unit and also individual component identification numbers for engines, axles, pumps, etc.

3. Include the identification numbers on all documentation, such as insurance, financial, and warranty papers.

TS161 -UN-23MAR89

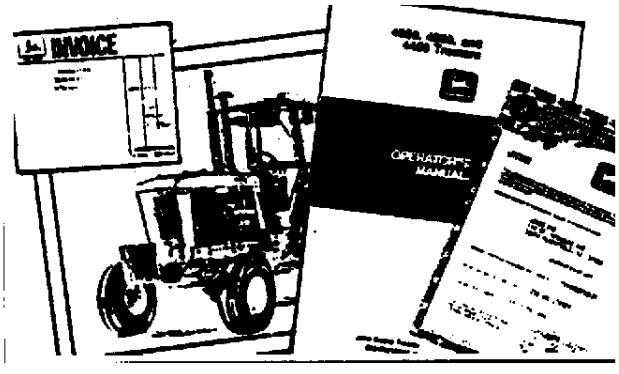
O53,CRPRV,B -19-20NOV87

KEEP PROOF OF OWNERSHIP

1. Take color photographs from several angles of each machine.

2. Maintain an up-to-date inventory of all your machines.

3. Keep your documented identification numbers, color photographs, and inventory in a safe, secure location.

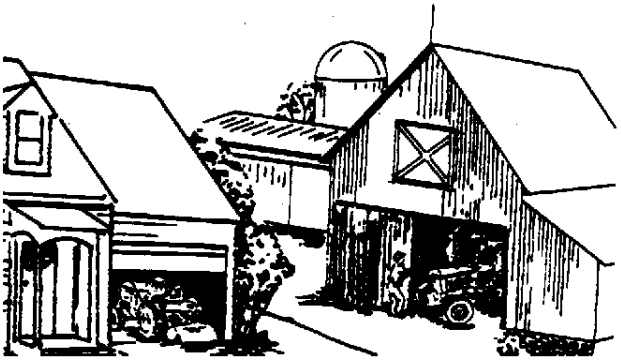


TS142 -UN-23MAR89

O53,CRPRV,C -19-11NOV87

PARK INDOORS OUT OF SIGHT

Make machines hard to move:
• Park hard-to-move equipment in front of exits.
• Lower all equipment to the ground.
• Remove ignition key. Remove battery if unit is stored for a long period.
• Lock cab doors, windows, and vandal protection devices.
• Set wheels in widest position, when possible, making loading more difficult.
• Lock storage building.

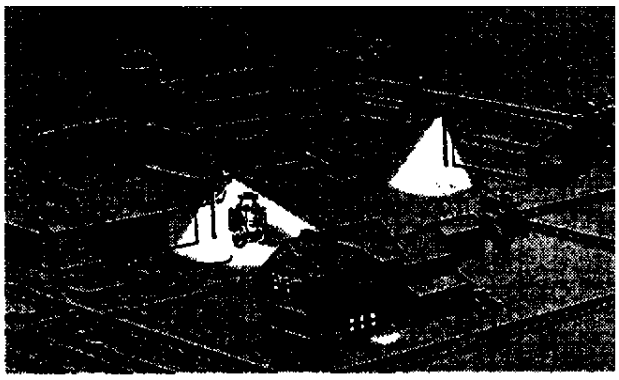


TS143 -UN-23AUG88

O53,CRPRV,D -19-09FEB88

WHEN PARKING OUTDOORS

Make machines hard to move:
• Park in a well-lighted, fenced area.
• Lower all equipment to the ground.
• Remove ignition key. Remove battery if unit is stored for a long period.
• Lock cab doors, windows, and vandal protection devices.
• Set wheels in widest position, when possible, making loading more difficult.



TS155 -UN-23AUG88

O53,CRPRV,E -19-09FEB88

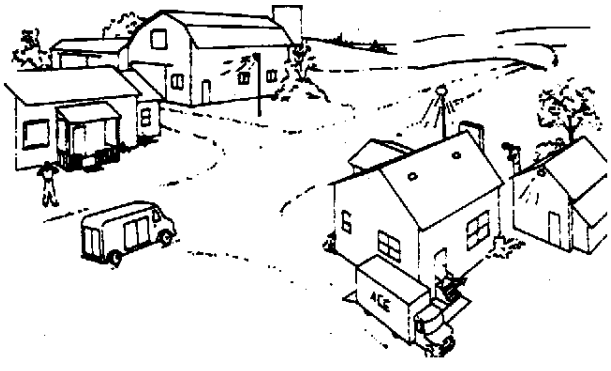
REDUCE VANDALISM

1. Install vandal protection devices

2. Participate in a neighborhood watch program.

3. Take written notes of suspicious vehicles or persons and report your findings to law enforcement agency.

4. Regularly verify that identification plates have not been removed. If they have, notify law enforcement agency. Order duplicate plates from your John Deere dealer.



TS145 -UN-23AUG88

O53,CRPRV,F -19-12NOV87

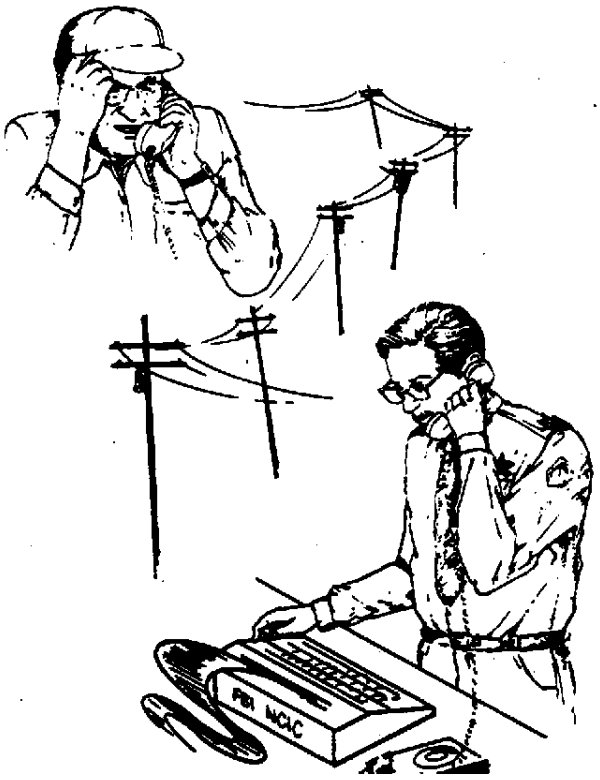
REPORT THEFTS IMMEDIATELY

1. Immediately notify your local law enforcement agency and insurance agent.

2. Provide a complete description of the machine, all of the documented identification numbers and color photographs.

3. Request verification of the identification numbers after they have been entered with any regional or national crime information center. Double check the numbers to be sure they are correct.

4. Notify your John Deere dealer of the theft and request that its loss be posted with full description and identification numbers.



TS146 -UN-09JAN89

O53,CRPRV,G -19-12NOV87

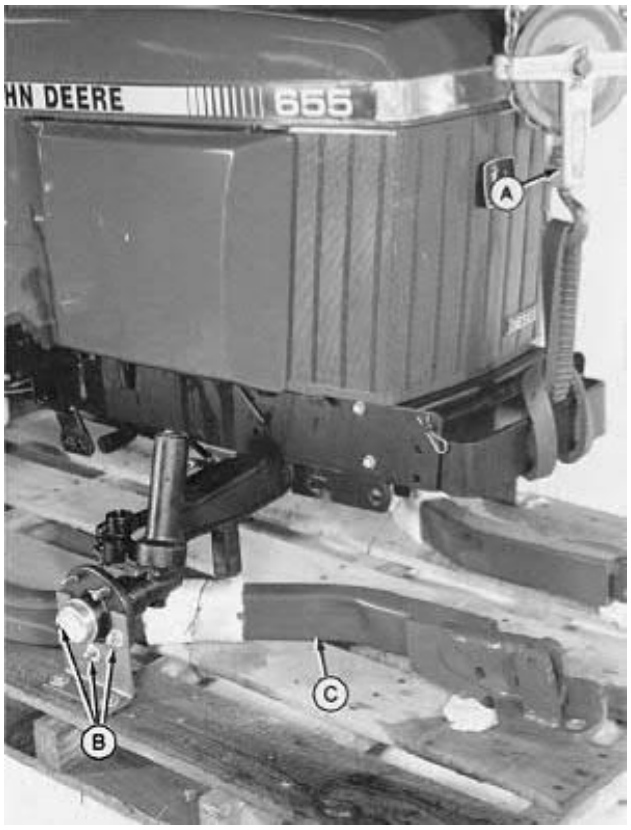
UNPACKING PARTS

1. Remove top and sides of shipping crate.

2. Attach a safe lifting device (A) to front weight bracket on tractor.

3. Remove hardware (B) from both wheel hubs. Save lug bolts and nuts to install wheels. Other lug bolts and nuts are in bag of parts. Lift front of tractor enough to install front wheels.

4. Remove ROPS (C).



M39684 -UN-09SEP88

MX,ASDF,A -19-07FEB89

INSTALLING FRONT WHEELS

NOTE: All turf tires except 25 x 8.50-14 tires cannot be installed in wide-tread position. Other tires can be installed in wide-tread position. (See SELECTING TIRE TREAD WIDTH AND ADJUSTING WHEEL SPACING in Driving the Tractor section.)

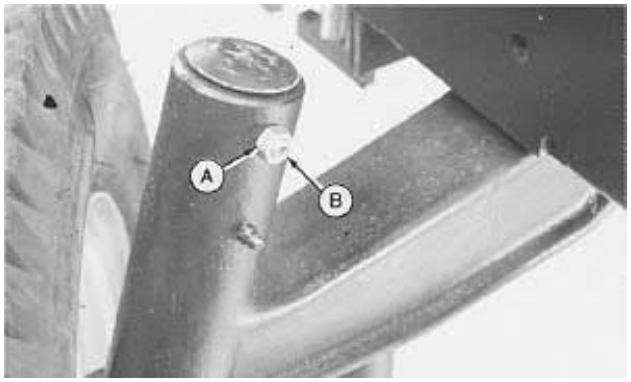
1. Install front wheels on standard axle tractors with nuts. Install wheels with lug bolts on MFWD tractors.

2. Tighten nuts or bolts to 60 to 70 lb-ft (68 to 79 N·m) torque.

3. Remove lifting device.

4. Check standard axle spindle set screws. Loosen lock nut (A). Turn set screw (B) clockwise until it bottoms out. Back set screw out 1/8 to 1/4 turn. Tighten lock nut.

M39685 -UN-09SEP88



M39744 -UN-09SEP88

MX,ASDF,B -19-07FEB89

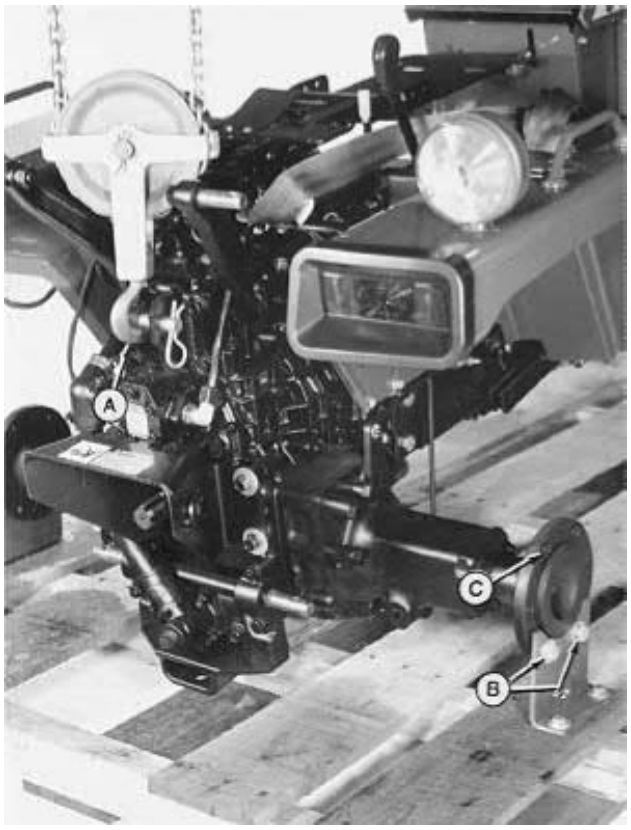
INSTALLING ROPS AND REAR WHEELS

IMPORTANT: To prevent transmission damage, DO NOT place a jack or hoist under transmission case.

1. Attach a safe lifting device to 3-point hitch center link bracket (A). Lift rear of tractor.

2. Remove hardware (B) from both rear axle hubs. Save lug bolts and nuts to install wheels. Other lug bolts and nuts are in bag of parts.

3. Remove and discard plastic wheel bolt plugs (C) from both wheel hub bolt holes.



M39686 -UN-09SEP88

MX,ASDF,C -19-07FEB89

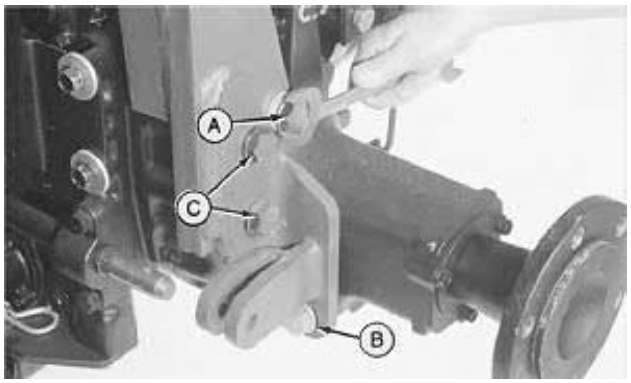
4. Remove three bolts with spacer washers and lock washers from both sides of transmission case. Discard spacer washers only.

IMPORTANT: DO NOT pinch electrical wiring between ROPS and transmission.

5. Place ROPS in position. Install M16 x 130 bolt with lock washer in top front hole (A). Install M16 x 40 bolt and flat washer in hole (B).

6. Install M16 x 140 bolts with lock washers in holes (C).

7. Tighten all bolts to 159 lb-ft (215 N·m).



M40341 -UN-30AUG88

MX,ASDF,D -19-07FEB89

NOTE: Wheels can be installed in narrow or wide-tread position. Always install wheels in wide tread position when operating on slopes. (See SELECTING TIRE TREAD WIDTH AND ADJUSTING WHEEL SPACING in Driving the Tractor section.)

8. Install each wheel with six lug bolts. Bolts must be installed in chamfered holes of wheel. Tighten bolts 80 to 90 lb-ft (90 to 102 N·m).

9. Push tractor off shipping crate.

M39688 -UN-09SEP88

MX,ASDF,E -19-07FEB89

INSTALLING STEERING WHEEL ON 655 AND 755 TRACTORS

1. Remove and discard plastic cap from steering wheel shaft.

2. Install steering wheel on shaft.

3. Install and tighten nut to 10 to 12 lb-ft (13 to 16 N·m).

M34491 -UN-07SEP88

MX,ASDF,F -19-07FEB89

4. Remove backing paper from decal. Apply decal to cap.

5. Install O-ring on cap. Apply a light coat of multipurpose lubricant on O-ring.

6. Install cap in place.

M34492 -UN-07SEP88

MX,ASDF,G -19-07FEB89

INSTALLING STEERING WHEEL ON 855 TRACTOR

1. Remove and discard plastic cap from steering wheel shaft.

2. Install steering wheel on shaft.

3. Install and tighten nut (A) 10 to 12 lb-ft (13 to 16 N·m).

4. Install plastic insert (B).

M62094 -UN-23FEB89

MX,ASDF,G1 -19-13FEB89

5. Install cap (C).

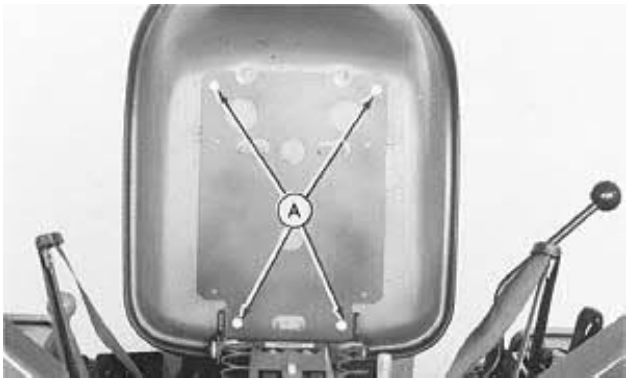
M62095 -UN-23FEB89

MX,ASDF,G2 -19-13FEB89

INSTALLING SEAT

NOTE: Hardware used is in bag of parts.

Fasten plate to seat with four cap screws (A).



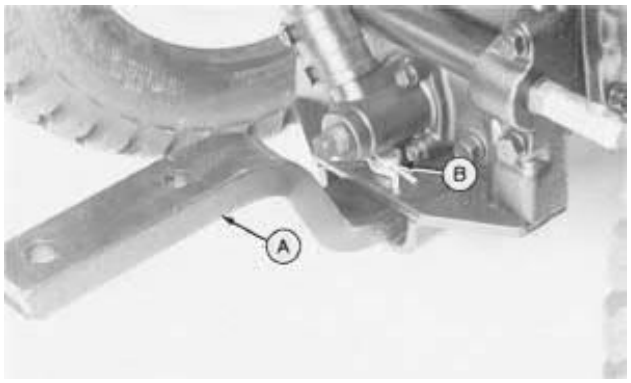
M41358 -UN-08SEP88

MX,ASDF,H -19-07FEB89

INSTALLING DRAWBAR

NOTE: Install drawbar (A) with offset up as shown.

Install drawbar in hole closest to offset with drilled pin and spring locking pin (B) from bag of parts.



-UN-09SEP88
M39689

MX,ASDF,K -19-07FEB89

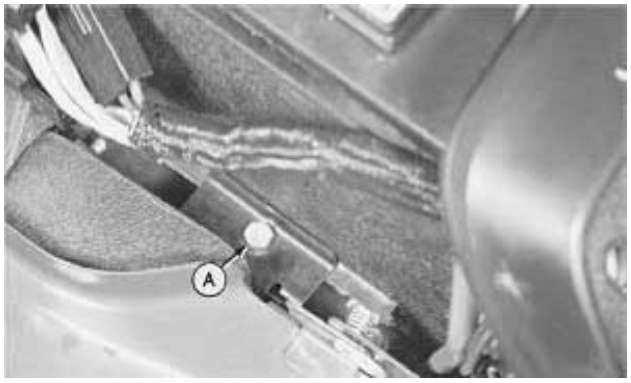
SERVICING BATTERY

CAUTION: The battery shipped with the tractor may have a dry-charge of 10 to 12.5 volt. Handle battery carefully.

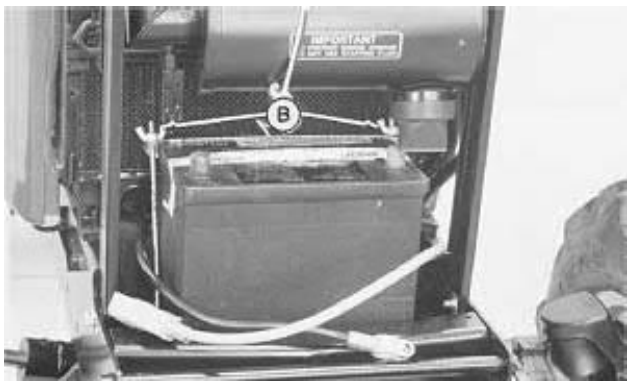
IMPORTANT: Battery must be removed from tractor to prevent damage from spilled electrolyte.

1. Open hood and loosen hold-down bolt (A) on both sides of battery for 655 and 755 Tractor. Remove grille and loosen wing nuts (B) for 855 Tractor.

2. Remove battery from tractor.



-UN-09SEP88
M39659



-UN-12JAN89
M61903

MX,ASDF,L -19-07FEB89

3. Remove tape and six plastic plugs.

CAUTION: Battery acid is a poison and could cause burns. Avoid contact with skin, eyes, and clothes. Do not drink battery fluid. When you work around battery, protect eyes and face from battery fluid. Battery gases can explode. Keep cigarettes, sparks, and flames away from battery.

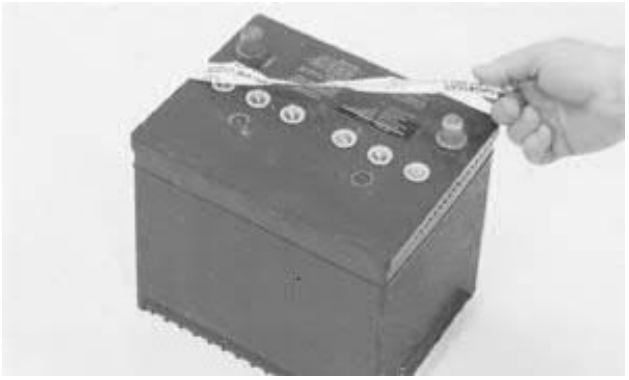
4. Use only battery-grade sulfuric acid electrolyte with 1.265 specific gravity.

IMPORTANT: Do not fill cells to bottom of filler neck.

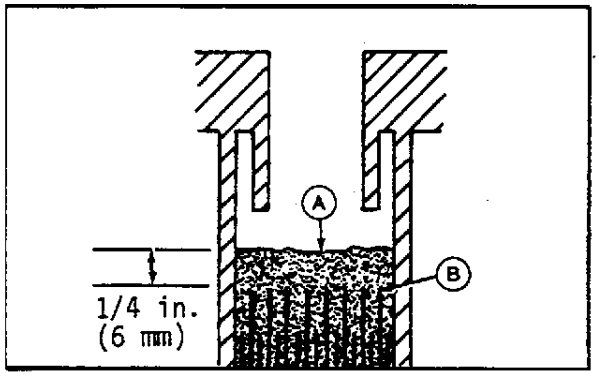
5. Slowly add electrolyte (A) to each cell until plates (B) are just covered.

6. Charge battery at 30 amps for 10 minutes or at 15 amps for 20 minutes. DO NOT over-charge.

7. If electrolyte bubbles excessively, reduce charging rate. At full charge, electrolyte must have a specific gravity reading of 1.265 at 80° F (27°C).



M35169 -UN-29AUG88



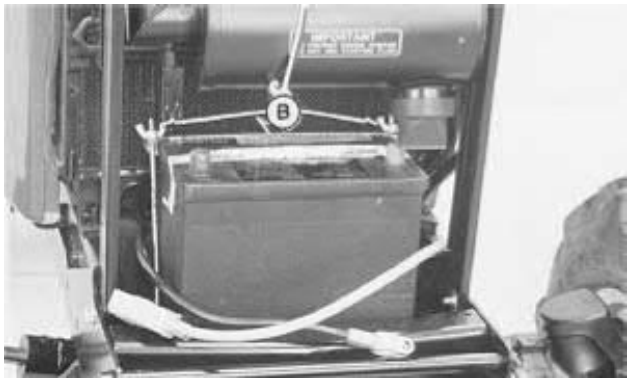
M39771 -UN-09SEP88

MX,ASDF,M -19-07FEB89

NOTE: Install battery in tractor so posts on battery face forward.

8. Tighten hold-down bolts (A) on each side of battery for 655 and 755 Tractors or wing nuts (B) on hold-down for 855 Tractor.

M39659 -UN-09SEP88



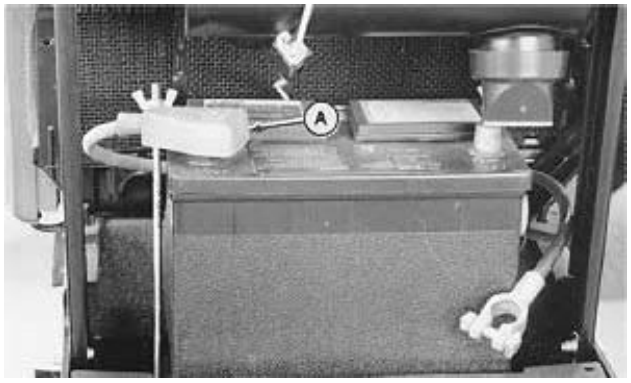
M61903 -UN-12JAN89

MX,ASDF,Q -19-07FEB89

NOTE: On 855 Tractor, route black negative battery cable around back of battery as shown.

9. Attach red battery cable to positive (+) battery terminal. Apply petroleum jelly on terminal. Slide red cover over positive (+) battery cable.

M39657 -UN-09SEP88



M61904 -UN-12JAN89

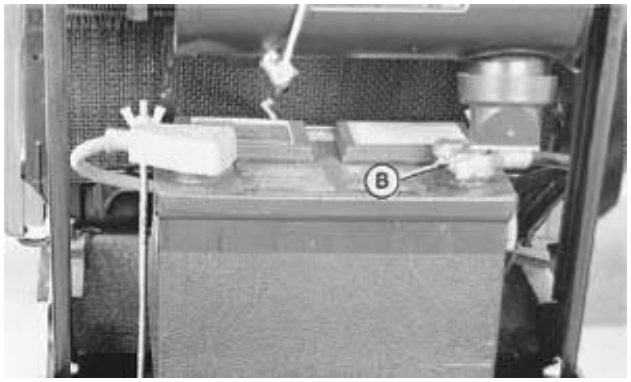
MX,ASDF,R -19-07FEB89

NOTE: On 855 Tractor, route black negative battery cable around back of battery as shown.

10. Attach black cable (B) to negative (—) battery terminal.

11. Apply petroleum jelly on terminal.


M39656 -UN-09SEP88



M61905 -UN-12JAN89

MX,ASDF,S -19-07FEB89

ADJUST TIRE PRESSURE

If attachment will be installed on tractor, see attachment operator's manual for adjusting tire pressure to that attachment's specific requirement.

If attachment will not be installed, adjust tire pressure in both front and rear turf tires to 12 psi (84 kPa) or both front and rear R-1 tires to 20 psi (140 kpa). (See CHECKING TIRE PRESSURE in Service/50-Hours section.)

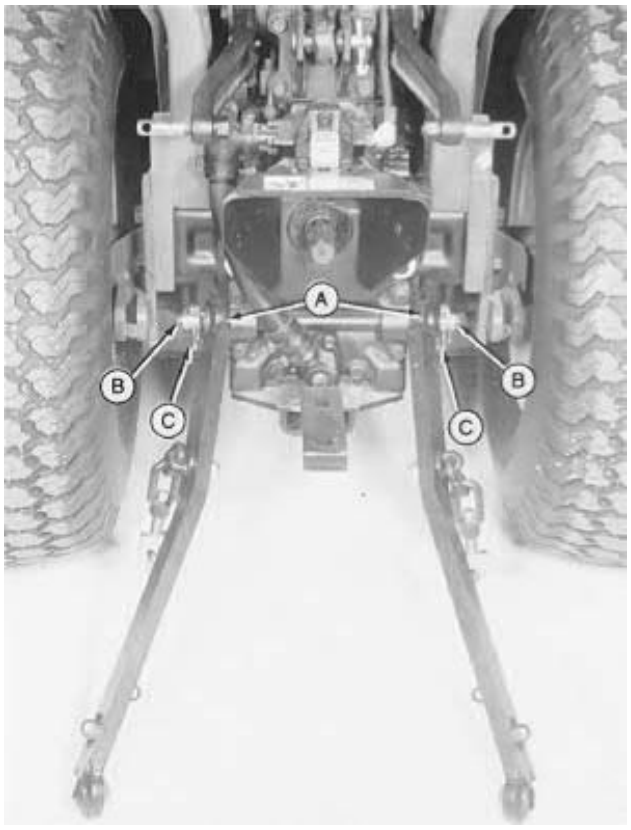

M39620 -UN-29AUG88

MX,ASDF,T -19-07FEB89

INSTALLING 3-POINT HITCH

NOTE: The 3-Point Hitch is regular equipment on 855 Tractor and optional on 655 and 755 Tractors.

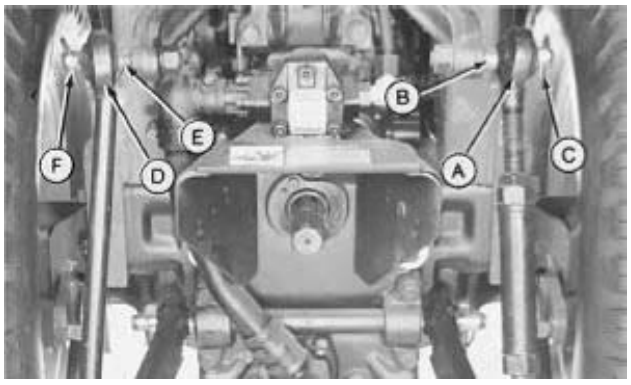
1. Slide ends of lower draft links (A) over lower pins (B) of transaxle. Fasten with locking pins (C).



MX,ASDF,U -19-07FEB89

2. Slide end of adjustable lift link (A) over upper pin (B). Fasten with locking pin (C).

3. Slide end of lift link (D) over upper pin (E). Fasten with locking pin (F).



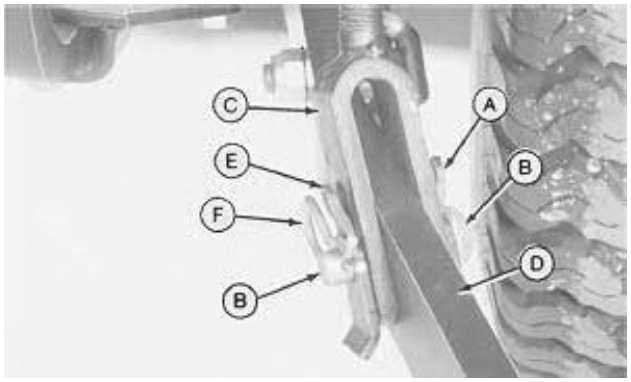
MX,ASDF,V -19-07FEB89

INSTALL FLOAT STOPS TO ALLOW FLOAT

1. Install float stop (A), with tabs turned out, on pin (B).

2. Fasten lift link (C) to lower draft link (D) with pin (B).

3. Install float stop (E), with tabs turned out, and spring pin (F) on pin (B).



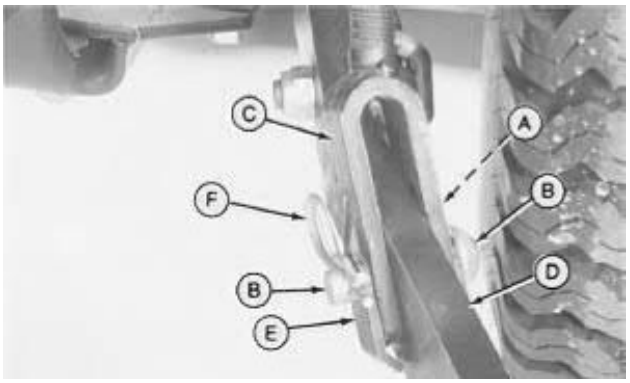
MX,ASDF,W -19-07FEB89

INSTALL FLOAT STOPS TO STOP FLOAT

1. Install float stop (A), with tabs turned in, on pin (B).

2. Fasten lift link (C) to lower draft link (D) with pin (B).

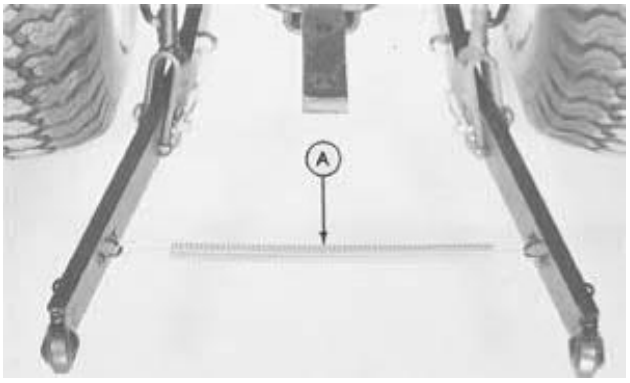
3. Install float stop (E), with tabs turned in, and spring pin (F) on pin (B).



MX,ASDF,X -19-07FEB89

INSTALL SPRING

1. Install spring (A) with open ends up through the bottom of loops.

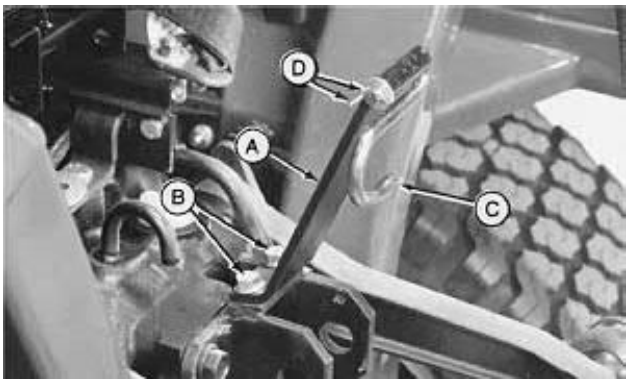


MX,ASDF,Y -19-07FEB89

INSTALL CENTER LINK

1. Fasten support (A) with cap screws (B). Tighten cap screws to 25 lb-ft (34 N·m).

2. Install clip (C). Fasten it with washer and small cotter pin (D).



MX,ASDF,Z -19-07FEB89

3. Install center lift link (A) with nut (B) toward attachment. Fasten center lift link with drilled pin (C) and locking pin (D).

4. Fasten center lift link (A) in clip (E).

5. Install drilled pin (F) and locking pin (G).

M39740 -UN-04AUG89

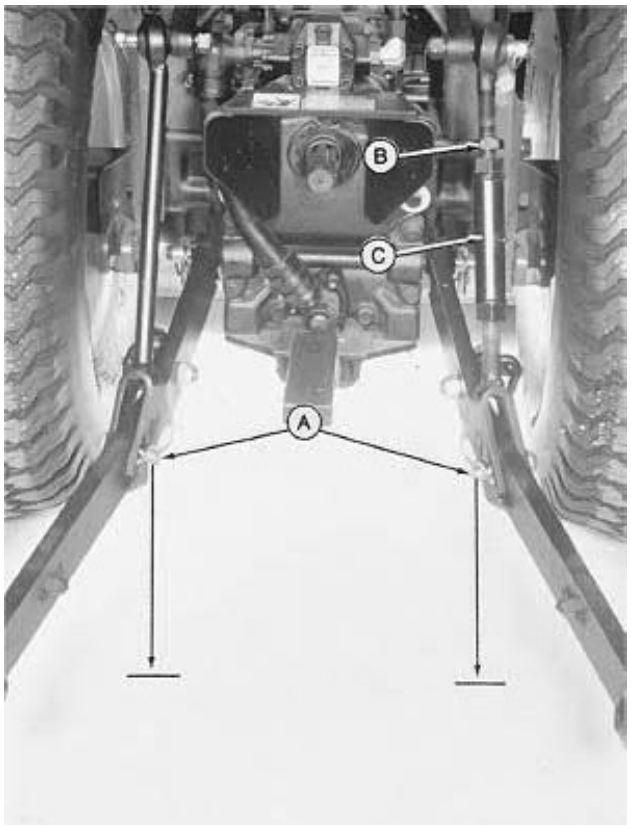
MX,ASDF,AA -19-07FEB89

ADJUST LOWER DRAFT LINKS

1. Park the tractor on a level surface. Lower rockshaft all the way.

2. Bottom pins (A) must be the same distance from the surface.

3. If not, adjust right-hand link:
a. Loosen jam nut (B).
b. Turn adjuster (C) clockwise to lower draft link or counterclockwise to raise draft link.
c. Tighten jam nut.



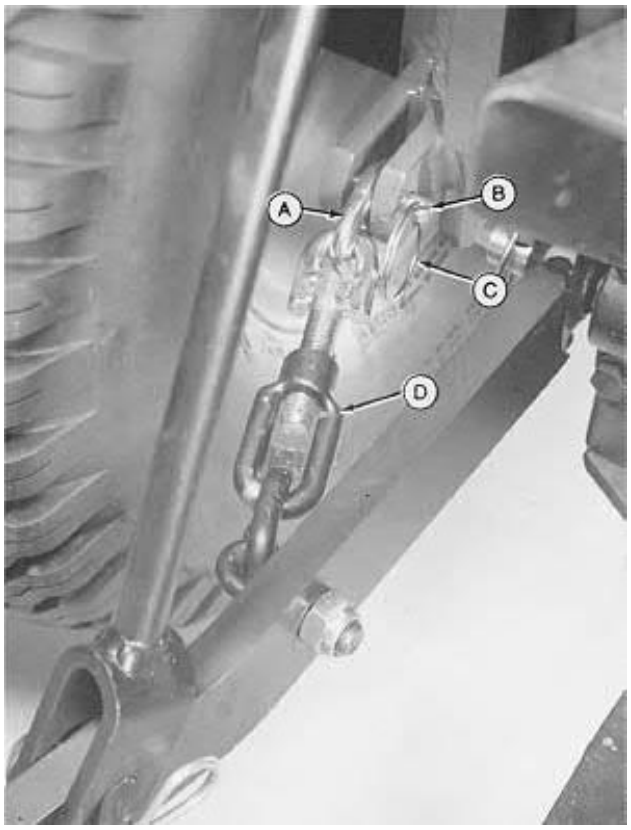
M39741 -UN-09SEP88

MX,ASDF,AB -19-07FEB89

INSTALL SWAY CHAIN ANCHORS

1. Fasten chain link (A) with drilled pin (B) and locking ring (C).

2. Adjust chain link end (A) in turnbuckle (D), if necessary.



MX,ASDF,AC -19-07FEB89

CHECKING FLUID LEVELS

Review Service sections of manual and check the following:

—Engine oil level
—Transmission oil level
—Radiator coolant level
—MFWD oil level (optional equipment)
—Fuel level

MX,ASDF,AD -19-07FEB89

Specifications

	655	755	855
ENGINE:			
Horsepower	16 (11.9 kW)	20 (14.9 kW)	24 (17.9 kW)
PTO Horsepower	10.6 (8.1 kW)	15 (11.2 kW)	19 (14.2 kW)
Rated Engine Speed	3200 rpm	3200 rpm	3200 rpm
Type	Diesel	Diesel	Diesel
Operating Range	1400-3425 rpm	1400-3425 rpm	1400-3425 rpm
Number of Cylinders	3	3	3
Displacement	40.2 cu in (658 cm^3)	53.6 cu in. (879 cm^3)	60.7 cu in. (995cm^3)
Bore and Stroke	66x64.2 mm (2.59x2.53 in.)	72x72 mm 2.83x2.83 in.)	75x75 mm (2.95x2.95 in.)
Compression Ratio	22.4:1	22.3:1	17.8:1
Lubrication	Pressurized by gear pump	Pressurized by gear pump	Pressurized by gear pump.
Cooling System	Water-centrifugal pump	Water-centrifugal pump	Water-centrifugal pump
Air Cleaner	Dry element	Dry element	Dry element
Engine Shutoff	Key	Key	Key
ELECTRICAL SYSTEM:			
Type	12 volt	12 volt	12 volt
Battery Size	491 Cold cranking amps @—18˚C 102 min @ 25 amps @ 27˚C	475 Cold cranking amps @—18˚C 102 min @ 25 amps @ 27˚C	475 Cold cranking amps @—18˚C 102 min @ 25 amps @ 27˚C
Alternator	40 Amp	40 Amp	40 Amp
FUEL SYSTEM:			
Type	Indirect Injection	Indirect Injection	Direct Injection
Injection Pump Type	In-line w/ electric shutoff	In-line w/ electric shutoff	In-line with electric shutoff
DRIVE TRAIN:			
Transmission Type	Hydrostatic 2-range	Hydrostatic 2-range	Hydrostatic 2-range
Number of Speeds	Infinite	Infinite	Infinite
Travel Speeds at Full Engine RPM-mph (km/hr)			
Forward High	0-10.0 (0-16.1)	0-10.6 (0-17.1)	0-11 (0-17.7)
Forward Low	0-5.4 (0-8.7)	0-5.8 (0-9.3)	0-6.0 (0-9.7)
Reverse High	0-5.0 (0-8.0	0-5.3 (0-8.5)	0-5.5 (0-8.9)
Reverse Low	0-5.4 (0-8.7)	0-5.8 (0-9.3)	0-6.0 (0-9.7)
Final Drive	Planetary	Planetary	Planetary
Brakes	Wet disk	Wet disk	Wet disk
Steering	Power	Power	Power
HYDRAULIC SYSTEM:			
Type of System	Open center	Open center	Open center
Working Pressure	2050 psi (14135 kPa)	2050 psi (14135 kPa)	2050 psi (14135 kPa)
Pump (Type)	Gear	Gear	Gear
Pump Capacity	4 gpm (0.25 L/s)	5.6 gpm (0.35 L/s)	5.6 gpm (0.35 L/s)
Cat. 1 3-Pt. Hitch	(Attachment)	(Attachment)	(Standard)
Hitch Lift Capacity at 24 In. Behind Link Ends	785 lbs (357 kg)	785 lbs (357 kg)	785 lbs (357 kg)

MX,SPDF,A -19-07FEB89

	655	755	855
PTO:			
Type	Live independent	Live independent	Live independent
Speed (PTO rpm at 3200 engine rpm)			
Mid	2100	2100	2100
Rear	540	540	540
Clutch	Hydraulic Multi-Disk	Hydraulic Multi-Disk	Hydraulic Multi-Disk
Brake	Hydraulically Controlled	Hydraulically Controlled	Hydraulically Controlled
CAPACITIES:			
Fuel Tank	3.95 gal (15 L)	4.33 gal (16.4 L)	6.6 gal (25 L)
Cooling System	4 qt (3.8 L)	4 qt (3.8 L)	4 qt (3.8 L)
Crankcase (with filter)	2.5 qt (2.4 L)	3.4 qt (3.2 L)	4.1 qt (3.9 L)
Transmission and Hydraulic System	4.5 gal (17 L)	4.5 gal (17 L)	4.5 gal (17 L)
Front Axle Gearcase	2.25 qt (2.13 L)	2.25 qt (2.13 L)	2.25 qt (2.13 L)
TIRES (BASE EQUIPMENT):			
F-2 Rib (Ag)	4x12	4x15	4x15
R-1 (Ag) Rear	7.2x16	8.3x16	9.5x16
Turf Front	20x8.00-10	23x8.50-12	23x8.50-12
Turf Rear	27x10.50-15	31x12.50-15	33x12.50-15
DIMENSIONS (WITH TWO-WHEEL DRIVE BASE EQUIPMENT TIRES):			
Wheelbase	50.98 in. (1295 mm)	57.08 in. (1450 mm)	64.04 in. (1626.5 mm)
Turning Radius With Brakes 2WD (Outside)*	73 in. (1995 mm)	79 in. (2007 mm)	86.7 in. (2202 mm)
Without Brakes 2WD (Inside)**	27 in. (686 mm)	36 in (914 mm)	39 in (991 mm)
Ground Clearance Front Axle			
2WD	10.98 in (278.9 mm)	12.68 in. (322 mm)	12.68 in. (322 mm)
4WD	8.9 in. (225 mm)	9.9 in. (251 mm)	9.9 in (251 mm)
Overall Length			
With 3-Pt. Hitch	101.1 in. (2544 mm)	103.3 in. (2625 mm)	110.3 in. (2801.5 mm)
Without 3-Pt Hitch	83.9 in (2130 mm)	88 in (2236 mm)	95.9 in (2437 mm)
Width (Turf Tires)	43-51 in. (1096-1304 mm)	46.2-52.3 in. (1173.5-1328.5 mm)	46.2-52.3 in. (1173.5-1328.5 mm)

**Outside turning radius is measured to the outside of front wheel farthest from the center of turn.*

***Inside turning radius is measured from the inside of the rear wheel closest to the center of turn.*

(Specifications and design subject to change without notice)

MX,SPDF,B -19-07FEB89

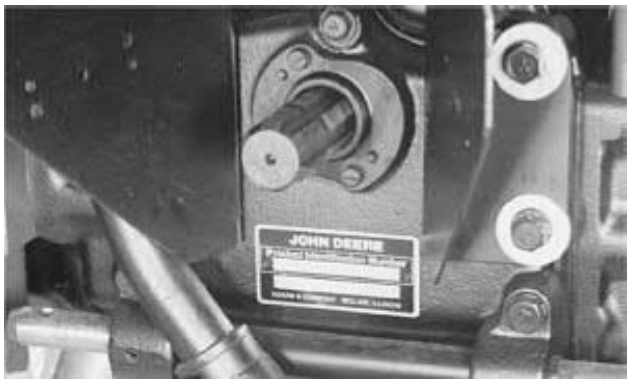
	655	755	855
WHEEL TREAD:			
Base Equipment Tires, Front	33.3-41.2 in. (847-1047 mm)	34.8-39.7 in (885-1009 mm)	34.8-39.7 in. (885-1009 mm)
Base Equipment Tires, Rear	33.4-40.7 in. (849-1033 mm)	33.4-40.7 in. (849-1033 mm)	34.8-41.4 in. (883-1049 mm)
Turf Tires, Front	34.5 in. (876 mm)	36.9 in. (937 mm)	36.9 in (937 mm)
Turf Tires, Rear	33-41.4 in. (884-1045 mm)	34-40.1 in. (863.5-1018.5mm)	34-40.1 in. (863.5-1018.5 mm)
Weight	1584 lbs (718 kg)	1696 lbs (769 kg)	1800 lbs (816 kg)
Weight (MFWD)	1680 lbs (762 kg)	1750 lbs (794 kg)	1890 lbs (857 kg)
Height (R-1 Tires)			
To Top of Hood	50.9 in. (1293 mm)	51.6 in (1311 mm)	52.3 in (1329 mm)
To Top of Roll-Gard (ROPS)	74.2 in (1885 mm)	74.9 in. (1903 mm)	75.6 in. (1921 mm)

MX,SPDF,C -19-07FEB89

RECORDING PRODUCT IDENTIFICATION NUMBER

Record the tractor's 13 digit product identification number located below rear PTO on transmission case in the space provided. Your John Deere dealer will need to know this number when ordering parts.

Product Identification Number _____



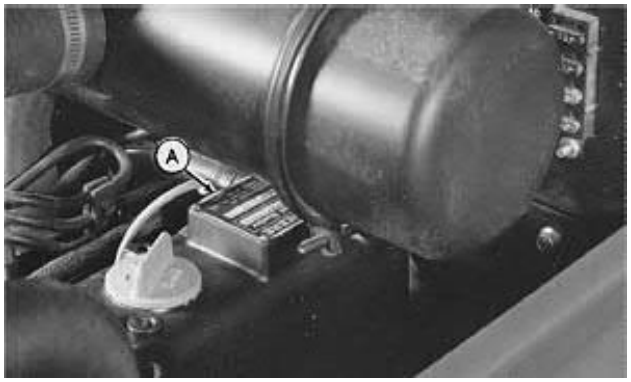
M39695 -UN-09SEP88

MX,SPDF,E -19-07FEB89

RECORDING ENGINE SERIAL NUMBER

Record the tractor's engine serial number (A) in the space provided. Your John Deere dealer will need to know this number when ordering parts.

Engine Serial Number _____



M39696 -UN-09SEP88

MX,SPDF,F -19-07FEB89

John Deere Service Literature Available

PARTS CATALOG

The parts catalog lists service parts available for your machine with exploded view illustrations to help you identify the correct parts. It is also useful in assembling and disassembling.

TS189 -UN-17JAN89

O53,PARTS -19-27NOV85

OPERATOR'S MANUAL

The operator's manual provides safety, operating, maintenance, and service information about John Deere machines.

An extra copy of the operator's manual is important if the copy furnished with your machine is misplaced.

TS190 -UN-17JAN89

O53,OM -19-27NOV85

FUNDAMENTALS OF SERVICE MANUALS

These basic manuals cover most makes and types of machines. FOS manuals tell you how to service machines. Each manual starts with basic theory and is fully illustrated with colorful diagrams and photographs. Both the "whys" and "hows" of adjustments and repairs are covered in this reference library.

TS194 -UN-02DEC88

O53,CPFOS -19-27NOV85

TECHNICAL AND SERVICE MANUALS

Technical and service manuals are service guides for your machine. Included in the manual are specifications, diagnosis, and adjustments. Also illustrations of assembly and disassembly procedures, hydraulic oil flows, and wiring diagrams.

Component technical manuals are required for some products. These supplemental manuals cover specific components.

TS224 -UN-17JAN89

O53,TM -19-21DEC87