



**Operator's
Manual**

**John Deere
Electric 90 Mower**

11,705 - 30,000

**DEALER
SERVICE SHOP
COPY**

**OM-M48498
Issue A4**





Safety Precautions

⚠ Improper use or maintenance of the Electric 90 Mower and its equipment can result in injury. To reduce this possibility, give complete and undivided attention to the job at hand and follow these safety precautions.

Preparation

Know your controls. Read this manual carefully. Learn how to stop the traction drive and mower motors quickly in an emergency.

Do not allow children to operate machine; nor adults to operate it without proper instructions.

Keep children and pets a safe distance away.

Never permit any person other than the operator to ride or board the riding mower at any time.

Clear work area of objects which might be picked up and thrown.

Always wear relatively tight and belted clothing when operating the Electric 90 Mower. Loose jackets, shirts, sleeves or other loose clothing should not be worn because of the danger of catching them in moving parts or controls.

Read and observe all "CAUTION" AND "WARNING" decals appearing on mower and equipment. See page 1.

Remove charging cord from wall receptacle before starting traction motor.

Operation

Give complete and undivided attention to the job at hand.

Do not attempt to operate riding mower when not on the seat.

Do not use mower unless discharge chute guard is in place.

Never direct discharge of any material toward bystanders nor allow anyone near machine while it is in operation.

Disengage clutch and shift into neutral before starting traction drive motor.

To stop ground travel, depress both the brake and clutch pedals. The Electric 90 Mower will coast if only the clutch pedal is depressed.

Always stop ground travel before shifting gears.

Do not mow or drive on steep slopes. Always winch Electric 90 onto a tilt-bed trailer.

Do not stop or start suddenly when going uphill or downhill. Mow up and down the face of slopes; never across the face.

Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.

Stay alert for holes in terrain and other hidden hazards. Always drive slowly over rough ground.

Stop and inspect riding mower and attachments for damage after striking a foreign object. Repair damage before restarting and operating the equipment.

Turn off mower motors and traction motor (1) before leaving operator position, (2) before making any repairs or adjustments, (3) when transporting or not in use, or (4) when unclogging mower discharge chute.

Take all possible precautions when leaving riding mower unattended; such as lowering attachments, shifting into neutral, setting parking brake, stopping all motors, and removing key.

Mow only in daylight or in good artificial light.

Never make a cutting height adjustment while motors are running if operator must dismount to do so.

Set mower at highest cutting height when mowing rough ground or tall weeds.

Avoid operating mower in wet grass.

Use care when pulling loads or using heavy equipment. Use only approved drawbar hitch points. Limit loads to those you can safely control. Do not turn sharply. Use care when backing.

Watch out for traffic when crossing or working near roadways.

Maintenance and Storage

Disconnect a battery cable from a negative terminal when working on the electrical system.

Keep vehicle and attachments in good operating condition and keep safety devices in place.

Keep all nuts, bolts, and screws tight to be sure equipment is in safe working condition.

Follow maintenance instructions in this manual. Have a competent serviceman inspect the mower each year.

Check blade mounting bolts for proper tightness at frequent intervals.

Charge batteries in a ventilated area.

Keep shroud raised while charging batteries until timer returns to "OFF."

Keep flames away and avoid smoking while working around batteries to avoid fires or explosion.

Do not tip mower on end unless batteries are first removed from the mower. Acid could cause injury or machine damage.

Do not remove battery cover except to disconnect battery cables.

Do not service battery while recharging.



CAUTION

1. Keep discharge chute guard in place.
2. Before servicing machine:
disengage power,
shut off motors,
make sure mower blades have
stopped revolving, remove key
from main switch.
3. Do not stand near machine while
blades are in motion.
4. Keep hands, feet and clothing
away from power-driven parts.

M12234



CAUTION

Rotating blades under this
entire mower deck.

Keep hands and feet away.

M12102



CAUTION

Do not operate mower with
discharge chute guard removed.

WIDTH OF CUT →

M12101

CHARGER OPERATION

1. Plug charger cord into grounded 110/125 volt "A.C." outlet after each use period. Leave charger connected for automatic battery maintenance.
2. After using mower, position charger timer knob to corresponding minutes of mower use.
3. Timer knob will return to STORE when batteries are fully charged. Do not reset until mower has been operated. Overcharge causes excessive water loss.
4. Mower is ready to use when meter pointer is in GREEN area.



CAUTION

1. Combustible gas produced when charging batteries. Do not charge in enclosed or unventilated area.
2. While charging, leave hood in raised position and keep sparks and open flame away.

M14070



CAUTION

1. Study your operator's manual before attempting to mow. Learn how to stop quickly.
2. Keep all shields in place.
3. This vehicle is not for street or highway use.
4. Keep people and pets a safe distance away.

5. Before dismounting: depress clutch and brake pedals, set parking brake, shift transmission into NEUTRAL, move both MAIN and MOWER switches to OFF position.
6. Remove MAIN switch key before servicing, adjusting, or leaving the vehicle unattended.

M12236



CAUTION

BATTERY CARE AND MAINTENANCE

1. Do not remove battery cover except for service.
2. Do not service while charging battery.

1. Always recharge batteries immediately after use.
2. Never store batteries in a discharged or partially discharged condition.
3. Electrolyte level—Check monthly or as necessary.
Before charging—Add water until plates are just covered.
After charging—Add water until level is to split ring. Do not overfill.

M12237



Contents

Page	Page
Safety Precautions.....Inside Front Cover	Adjustments and Service.....11-13
To The Purchaser.....3	Storage.....13
Controls.....4	Trouble Shooting.....13
Before Starting Mower.....5-6	Assembly.....14-15
Operation.....7-8	Activating Batteries.....16
General Maintenance.....9-10	Specifications.....17



John Deere Electric 90 Mower



To the Purchaser



M11678

This OPEI Seal certifies that your model of mower has been tested by an independent laboratory and that it complies with American National Standard B71.1.1972, "Safety Specification for Power Lawn Mowers, Lawn and Garden Tractors, and Lawn Tractors."

Read this operator's manual before you start the motors. You will be able to do a better, safer job of mowing.

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

The Electric 90 Mower is designed and manufactured to the traditionally high standards of John Deere. It has many quality features to bring you new mowing efficiency and convenience, as well

as greater ease of operation and maintenance. If given proper care, your mower will give you long, efficient service.

The Electric 90 Mower has an electric traction drive motor to power the 3-speed transaxle. The mower is driven by two individual electric motors, one on each blade. Cutting width is 34 inches.

When in need of parts or major service, see your John Deere Dealer. For prompt, efficient service, give the dealer the mower serial number, located on the rear of the battery box. Record this number in the space provided on the inside back cover, page 17.

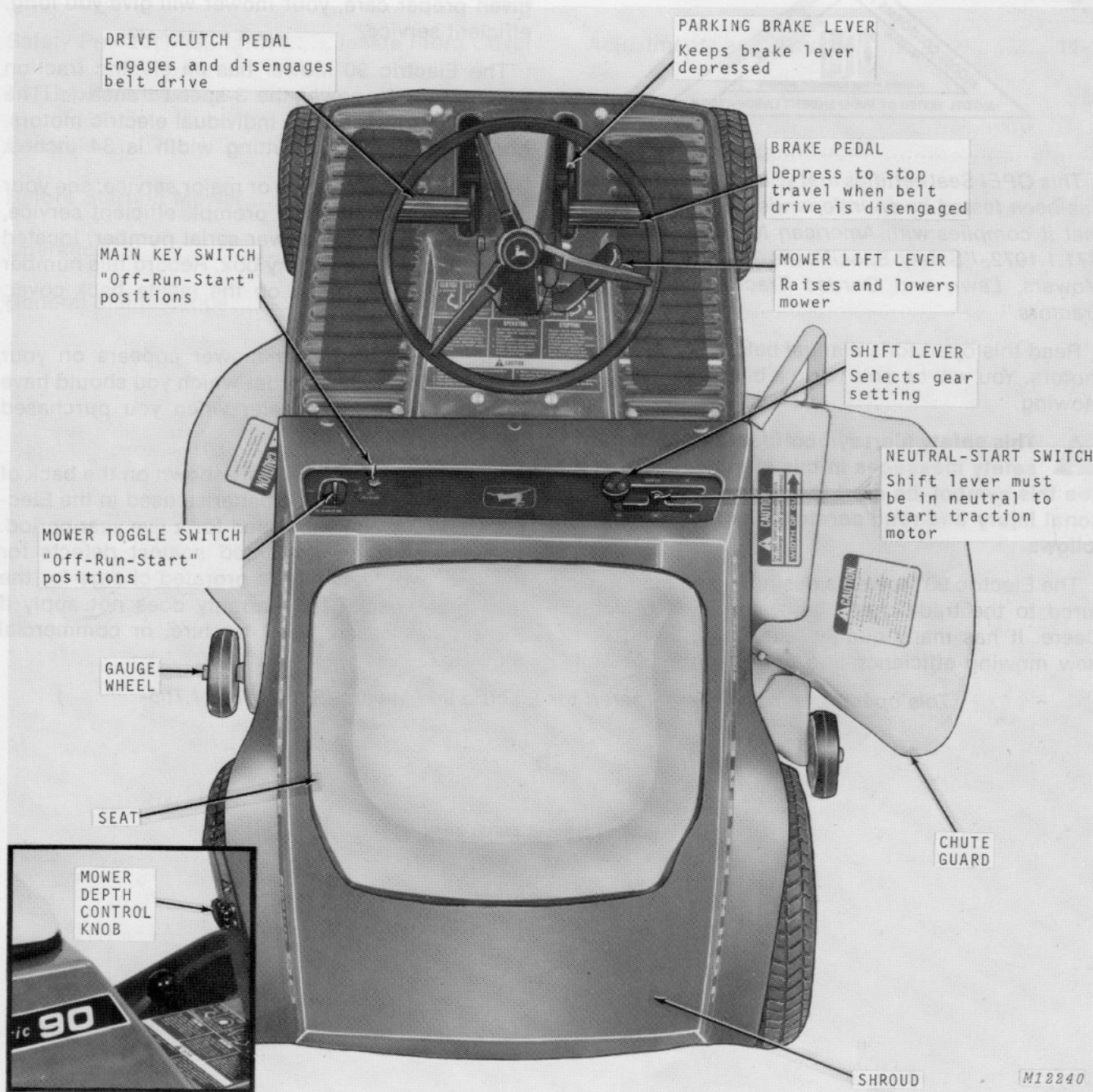
The warranty on this mower appears on your copy of the purchase order which you should have received from your dealer when you purchased the mower.

In addition to the warranty shown on the back of the purchase order, the batteries used in the Electric 90 Mower are warranted for a five year period. The batteries are warranted against defects for the first two years with a prorated charge for the last three years. This warranty does not apply if the unit is leased, used for hire, or commercial mowing.

This operator's manual is prepared for Electric 90 Mowers (Serial No. 11,705-).



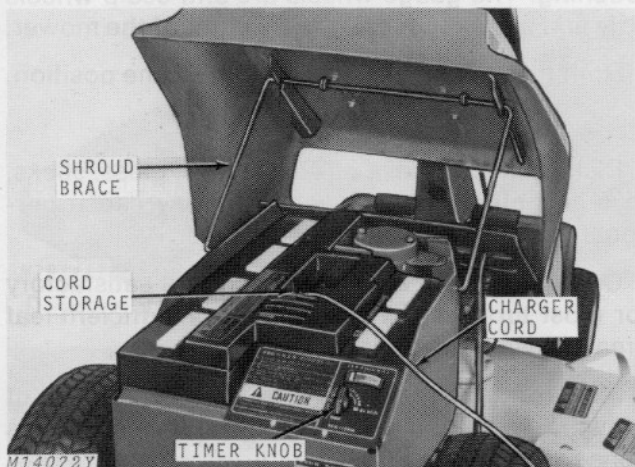
Controls





Before Starting Mower

PREPARING THE MOWER



Move charger control timer knob to "STORE", if not in that position. Unplug the charger cord from the electrical outlet. Coil the cord and store it in the compartment between the batteries.

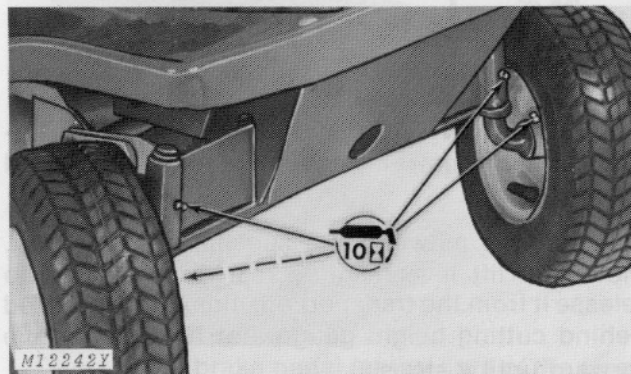
Raise the shroud slightly and pivot the shroud brace to the rear. Lower the shroud.

Checking Tire Pressure

Check tire pressures with a low-pressure tire gauge. Inflate front tires to 8 psi; rear tires to 6 psi.

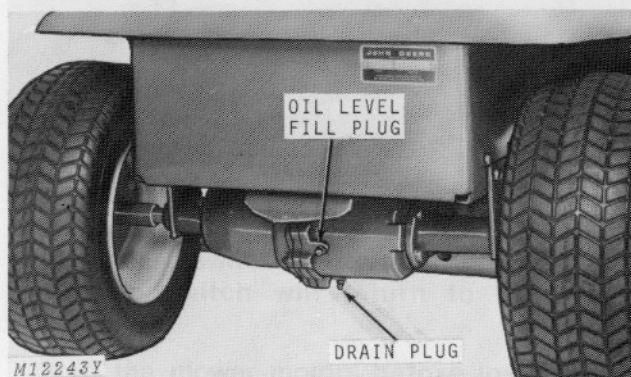
A JDST-13 Low-Pressure Tire Gauge is available from your John Deere dealer.

Lubricating Grease Fittings



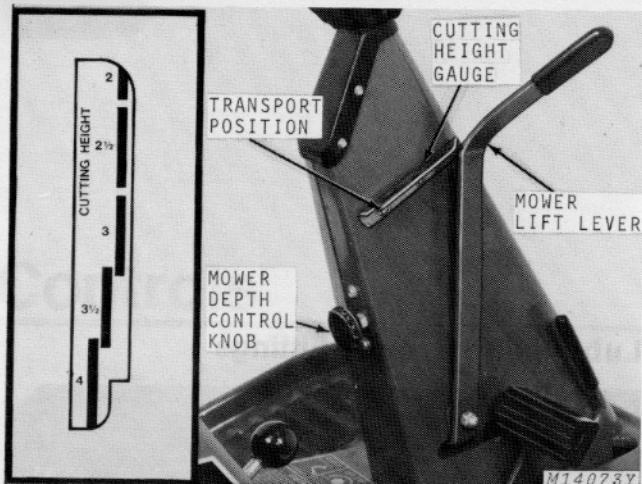
Lubricate the four grease fittings illustrated with John Deere Multi-Purpose Lubricant or an equivalent SAE multipurpose-type grease every 10 hours of operation. Use either a hand grease gun or the John Deere Pisto-Luber with flexible hose (available from your John Deere dealer.)

Checking Transaxle Lubricant



Check transaxle lubricant level periodically with mower parked on a level surface. Remove oil level-fill plug. Lubricant should be level with hole. If necessary add John Deere AM30200 Transmission Lubricant with a JD94 Pressure Oil Can until lubricant runs out of hole. John Deere SAE 90 Gear Lubricant or an equivalent SCL multipurpose-type gear oil also can be used in the transaxle.

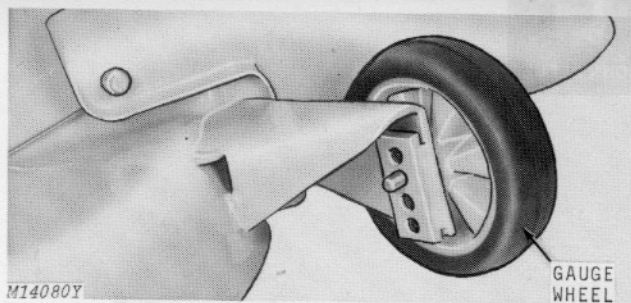
Adjusting Cutting Height



CAUTION: Turn off all motors before adjusting mower or gauge wheels to desired cutting height.

To set the mower for a specific height of cut, move the lift lever slightly rearward and out to release it from the transport position, that is, locked behind cutting height gauge. Let lift lever move forward until it stops.

Turn the depth control knob clockwise to raise, or counterclockwise to lower the mower until the lift lever is centered on the desired height of cut shown on the cutting height gauge. Adjustments can be made to any increment between numbers shown.



Adjust gauge wheels by removing cap screw and positioning gauge wheels as close to ground as possible without touching. The gauge wheels are anti-scalp wheels only and should not carry the weight of the mower.

Both gauge wheels must be in the same position.

MOWING TIPS

Pick up and remove all rocks, wire, glass, sticks, toys and other such objects that may cause personal injury or damage to the mower.

Cutting grass at 2 or 2-1/2 inches is satisfactory for most turfgrasses. This will leave sufficient leaf area to give a neat appearing lawn.

Mow often enough so that only one-third of growth is removed at each cutting. This promotes dense growth which helps shade out weedy grasses.

Cutting less often produces dense clippings which should be removed.

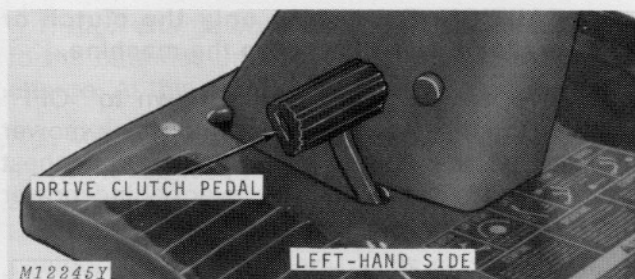
When mowing dense, tall grass, it may be desirable to mow only a partial swath.

Mow with the left-hand side of the mower next to borders so clippings are discharged away from fences, flower beds, sidewalks, driveways, etc. Use first "1" gear range for slow ground speed.

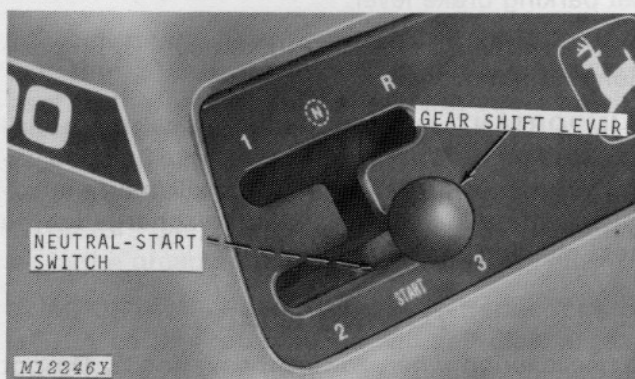


Operation

OPERATING THE MOWER



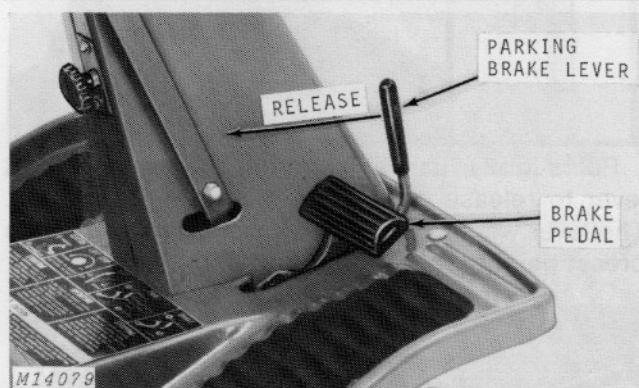
Depress the drive clutch pedal.



Shift the transaxle to neutral and press down on the shift lever to activate the neutral-start switch.



Turn the main key switch to the "START" position to start the traction drive motor. Release the switch as soon as the motor starts. The switch will return to the "RUN" position.



Depress the brake pedal (at the right of the steering console) and move the parking brake lever to the rear to release the parking brake.



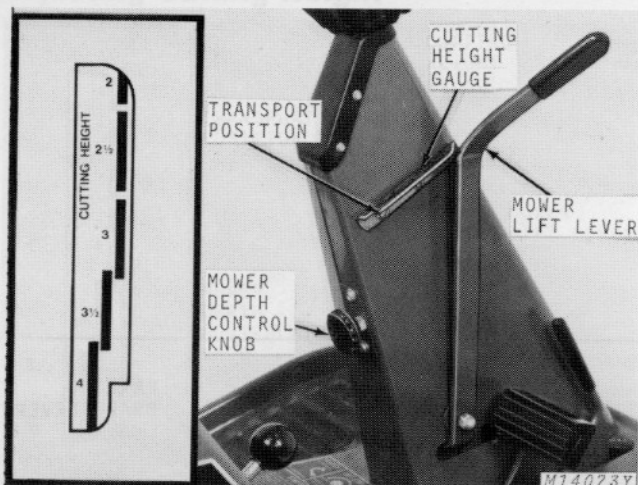
Raise mower toggle switch to the "START" position. Release switch after mower motors are running. The switch will return to the "RUN" position.

Start the mower motors before lowering the mower to cutting height, especially in tall or dense grass. Allow the blades to attain cutting speed before lowering the mower.

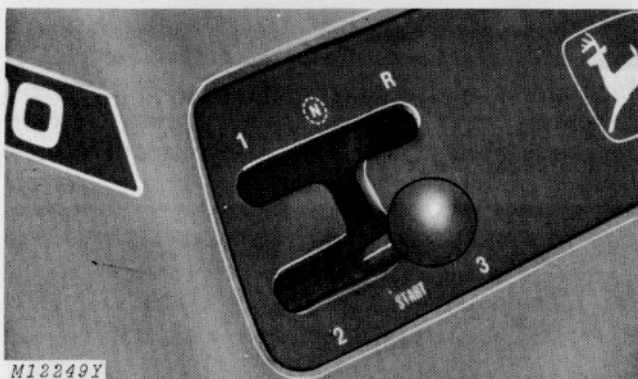
NOTE: Remember, the charger indicator dial can only be read when the timer knob is in the "ON" position.

CAUTION: Do not charge batteries with any other charger. Do not use the mower batteries to start other vehicles. Battery damage will result.

OPERATING THE MOWER—Continued



Pull slightly rearward and out on the mower lift lever to release it from the cutting height gauge. The lever will move forward lowering mower to the preset height (page 6).



With drive clutch pedal depressed, shift transaxle to select speed and direction of travel desired. The shift quadrant has a horizontal "H" pattern with 3 forward speeds and one reverse.

CAUTION: Do not attempt to shift gears on-the-go. Always stop ground travel before changing speeds.

It may be necessary to let out drive clutch pedal momentarily to rotate gears for easy engagement. Release the drive clutch pedal slowly for a smooth start.

Use the first speed "1" for mowing thick or tall grass, when trimming or mowing in close quarters, or when ground is rough. Use second speed "2" for normal mowing. Use third speed "3" for mowing thin grass or in open areas.

CAUTION: On slopes and terraces operate in first "1" speed to avoid need for gear changing.

IMPORTANT: Always move mower toggle switch to "OFF" position and raise the mower to transport position when driving from one area to another or crossing gravel driveways.

STOPPING THE MOWER

1. Fully depress BOTH the drive clutch (left-hand pedal) and brake (right-hand pedal) to stop ground travel.

CAUTION: Depressing only the clutch or brake pedal will not stop the machine.

2. Move mower toggle switch down to "OFF" position to stop mower motors. Pull back mower lift lever all the way to raise mower to highest position for transport. Lock lift lever behind mower cutting height gauge.

3. Drive mower to storage area near electric outlet. Stop ground travel. Shift to "NEUTRAL" and set parking brake lever.

4. Turn main key switch to vertical "OFF" position and remove key.

IMPORTANT: Place batteries on charge as instructed on next page when you have finished using your Electric 90 Mower. This will insure maximum battery life and provide a full charge for the next mowing.

TOWING LOADS

Use caution when towing heavy loads. Do not attempt to move loads in excess of the combined weight of the operator and the Electric 90 Mower.

Continuous towing of heavy loads can cause traction drive motor to overheat, which will trip a thermal overload mechanism causing the motor to stop. Allow motor to cool; then reduce load before proceeding.

LOADING MOWER ON TRAILER

CAUTION: When loading the Electric 90 on a tilt-bed trailer, use a winch. Driving the mower up a steep incline could result in the mower tipping backwards.



General Maintenance

CHARGING THE BATTERIES

How the Charger Operates

The charger is fully automatic and has three distinct cycles. These cycles occur in proper sequence only after the timer knob has been set to some "use" time. These cycles are:

1. *High charge output.* A high charge rate is sent to the batteries until they reach 80 percent of full charge. At this point:

2. *Medium charge rate.* The charge rate automatically reduces to about half as the battery voltage increases and the timer knob clock starts. This is a 6-hour clock if turned to the "30 OR MORE" position. At the low end of this cycle, the charge indicator needle should be in the green area. When timer knob switches to "STORE", then:

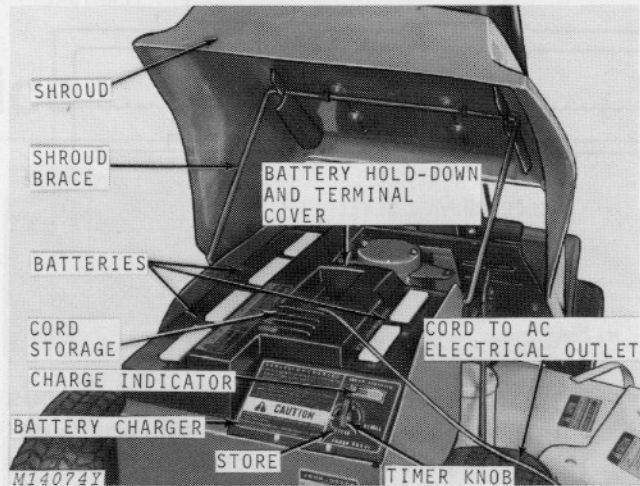
3. *Low charge rate (trickle).* When the timer knob is in the "STORE" position, only a trickle charge is sent to the batteries. This is about equal to what the batteries normal "at rest" discharge would be. This will maintain a charged battery. It will not charge a low or dead battery. With the knob set to "STORE", the charge indicator needle will always be in the green area because the output is low.

IMPORTANT: Do not remove batteries for storage. A battery left inactive will self-discharge. A long period of inactivity will destroy a battery. Leave the timer knob in the "STORE" position to keep the batteries fully charged.

NOTE: To find out if the batteries are ready for use, set timer knob to about "10". Wait 5 minutes. If the charge indicator needle is in the green area, the mower is ready to use, but turn timer knob to "STORE". If the needle remains in the yellow area, set the timer knob to the amount of time the mower was last used.

IMPORTANT: Abnormal temperatures, home AC voltage or battery age conditions can cause the charge indicator needle to not return to the green area when the batteries are fully charged. Further charging will cause water loss. If charge indicator needle does not move when timer knob has been set in the proper position, check home supply circuit. If there is current, have your dealer check charger fuse.

It is normal for the charger to become warm while in operation. A fuse within the charger prevents machine damage in the event the charger becomes too warm. Keeping the shroud raised and the air passage open helps cool the charger.



CAUTION: Highly combustible hydrogen gas is vented from the batteries during the charging cycle. Keep the shroud raised while charging batteries until timer returns to "STORE". Charge batteries in a ventilated area. Keep flames away from batteries. Do not smoke around batteries.

Operating the Charger

Charge your Electric 90 Mower after each use. Raise shroud and pivot the shroud brace forward.

The charger has three elements of concern to you:

1. *A line cord.* Remove line cord from compartment and plug it into a grounded, alternating current (AC) outlet supplying 110 to 125 volts. Be sure this is a "live" outlet, not switched off or burned out.

2. *The timer knob.* Set this knob at the number which nearest matches the amount of time the mower was last used.

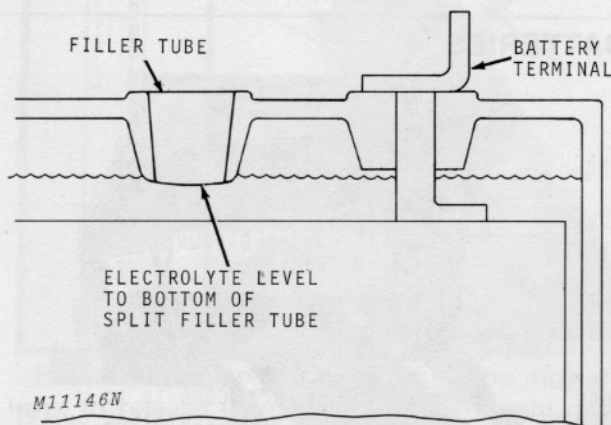
3. *The charge indicator.* This is the green/yellow dial. It indicates charger action only; and not battery condition. When the needle is in the yellow area, charge output is high. When the needle is in the green area, charge output is low and the mower is ready for use.

NOTE: Remember, the charge indicator dial can only be read when the timer knob is in the "ON" position.

CAUTION: Do not charge batteries with any other charger. Do not use the mower batteries to start other vehicles. Battery damage will result.

CHECKING BATTERIES

Check electrolyte level periodically (at least once each month). If necessary, add distilled water to bring level to top of circular split ledge in filler tube.



CAUTION: Battery electrolyte is poisonous and can be injurious to eyes, skin and clothing. Handle it carefully. If electrolyte is spilled, flush immediately with a solution of one part baking soda to four parts water.

Keep battery terminals clean and free of corrosion. Coat terminals with petroleum jelly. Keep connections tight to prevent arcing and pitting.

LUBRICATING GREASE FITTINGS

Lubricate the four grease fittings illustrated on page 5 with John Deere Multi-Purpose Lubricant or an equivalent SAE multipurpose-type grease every 10 hours of operation. Use either a hand grease gun or the John Deere Pisto-Luber with flexible hose (available from your John Deere dealer).

CHANGING TRANSAXLE LUBRICANT

Every 200 hours or two years, whichever comes first, remove transaxle drain plug and drain all oil. Replace plug and add three 8-ounce cans of AM30200 Transmission Lubricant or its equivalent through oil-level fill hole. See illustration on page 5.

John Deere SAE 90 Gear Lubricant or an equivalent SCL multipurpose-type gear oil can be used in the transaxle.

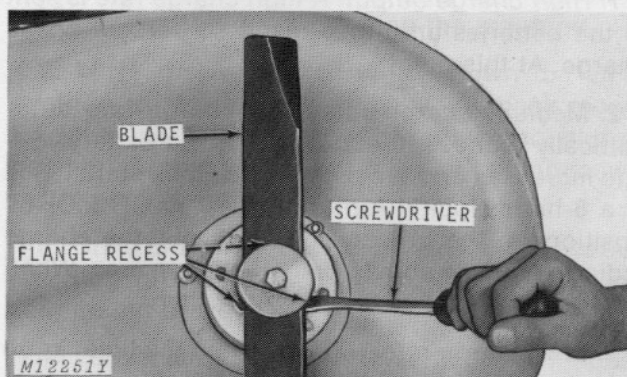
Check oil level periodically with mower parked on a level surface. Oil should be up to oil level-fill hole.

SERVICING MOWER BLADES

Keep blades sharp and in balance for uniform mowing with a minimum of power.

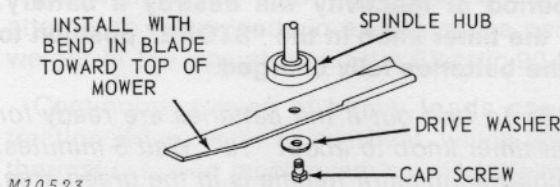
Sharpen blades leaving a 1/64-inch dull tip on the cutting edge. A razor-sharp cutting edge will roll over and dull more quickly. Maintain original bevel. Remove an equal amount of material from each end of the blade to maintain proper balance. Replace blade if extensively damaged or out of balance.

Excessive mower vibration indicates blades are out of balance or improperly installed.



CAUTION: Turn key to "OFF" and remove key from switch before removing blades.

Remove each blade by removing center cap screw and drive washer. If cap screw turns hub after blade is loosened, pry with screw driver in flange recess to hold hub while removing cap screw.



Install each blade as illustrated. Tighten cap screw to 55 foot-pounds torque.

LUBRICATING STEERING MECHANISM

At the beginning of each mowing season lubricate the steering gear pivot and the bushings at the top and bottom of the steering wheel shaft with oil.



Adjustments and Service

ADJUSTING SEAT



The seat may be adjusted to suit operator comfort.

Raise the shroud and pivot shroud brace upward. Loosen the cap screws holding the seat. Lower shroud and slide seat forward or backward as desired. Then raise shroud again and tighten cap screws. Be sure aligning buttons on shroud are in holes in support plate before tightening cap screws.

LEVELING MOWER

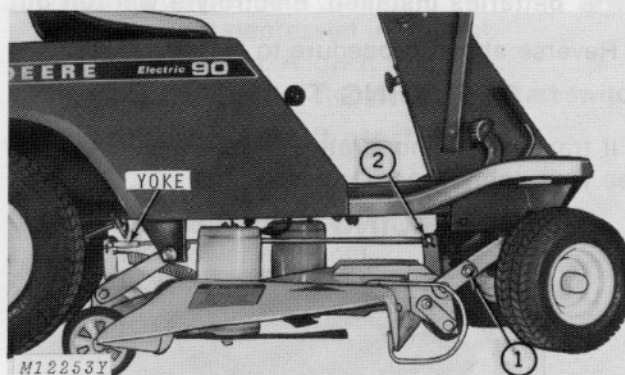
Park the mower on a flat surface such as a sidewalk or concrete driveway. Check to see that tires are inflated equally.

CAUTION: Turn key to "OFF" and remove key from switch before leveling mower.

With the mower in the lowered position, measure the distance of each blade tip from the ground. Rotate the blades and measure this distance at the front, rear and side of the mower.

When properly leveled, the dimensions on each side of the mower will be equal. The front of the mower should be 1/8-inch to 1/4-inch lower than the back for most efficient cutting.

1. To adjust for side-to-side level, loosen bolt on right front draft arm and raise or lower mower deck until blades are level. Tighten nut firmly.



2. To adjust for rear-to-front pitch, pull cotter pin in rod and remove rod from bracket. Turn rod into yoke to raise rear of mower, or out of yoke to lower rear of mower. Reinstall rod.

REMOVING AND INSTALLING MOWER



To remove mower, lower mower with lift lever and raise shroud. Then:

1. Disconnect both mower motor leads and thermostat lead.

2. Pull spring-locking pin and remove drilled pin to disconnect lift cable yoke.

Continued on page 12...

REMOVING AND INSTALLING MOWER – Continued

3. Pull spring-locking pin and remove drilled pin in rear draft link.
4. Pull spring-locking pins and remove drilled pins in front of machine.
5. Partially raise front of machine to remove mower.

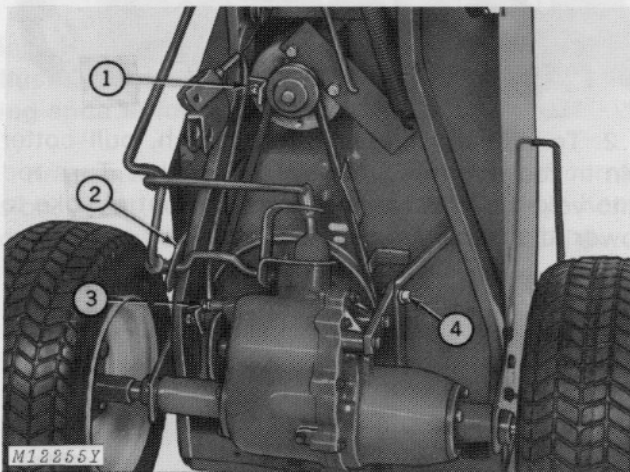
CAUTION: Do not tip Electric 90 on end with batteries installed. Electrolyte will run out.

Reverse above procedure to install mower.

SERVICING TRANSAXLE

If transaxle is inoperative or operates erratically see your John Deere Dealer.

REPLACING DRIVE BELT



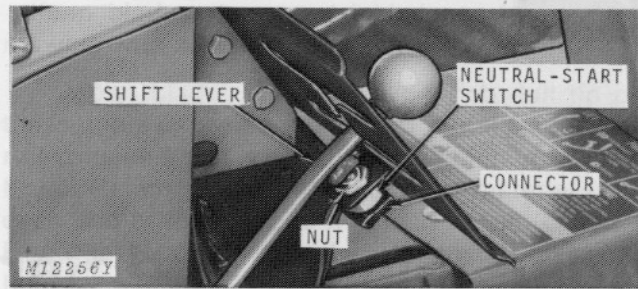
Remove mower to provide access.

Block up frame at right rear corner and remove right wheel.

1. Remove belt guide. Depress clutch and remove belt from motor sheave.
2. Remove shift lever bracket from frame.
3. Disconnect brake rod pivot.
4. Remove transaxle brace from frame. Pivot transaxle downward and remove belt from sheave.

Replace belt in reverse procedure. Be sure belt is inside all belt guides.

REPLACING NEUTRAL-START SWITCH

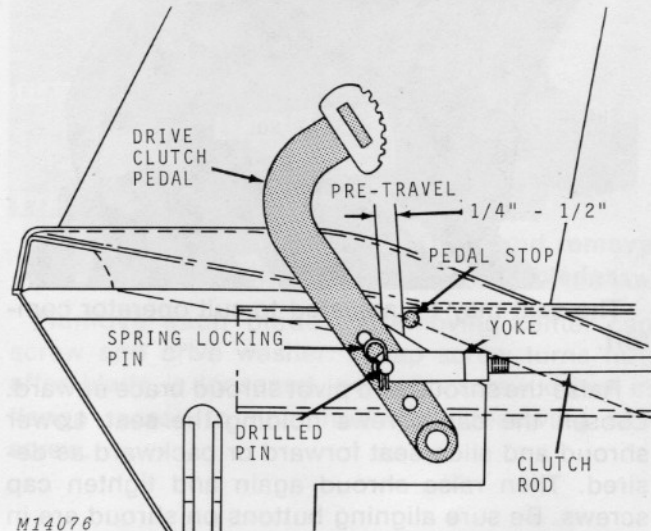


Shroud Removed for Clarity

Remove connector from switch terminals. Remove nut to remove switch from bracket.

Install new switch and adjust so that ball will depress when shift lever is pressed down. Install connector on terminals.

ADJUSTING CLUTCH



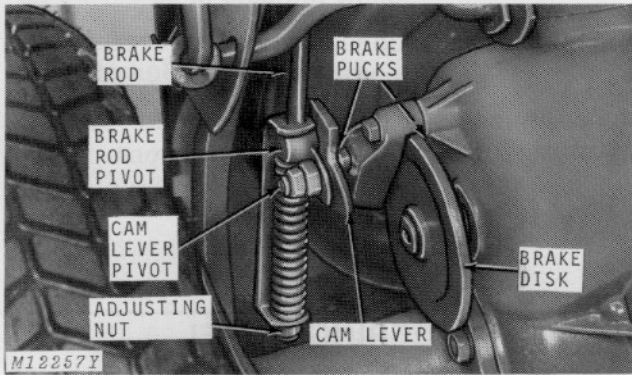
The clutch pedal should be adjusted so that the back edge of the pedal just contacts the pedal stop when in the engaged position.

When properly adjusted, 1/4 to 1/2-inch pre-travel should exist between pedal stop and back edge of pedal before traction motor drive belt starts to disengage.

To adjust, remove spring locking pin securing the drilled pin. Remove the drilled pin. Turn the yoke counterclockwise to increase pre-travel or clockwise to decrease pre-travel.

Reinstall drilled pin and spring locking pin.

ADJUSTING BRAKE

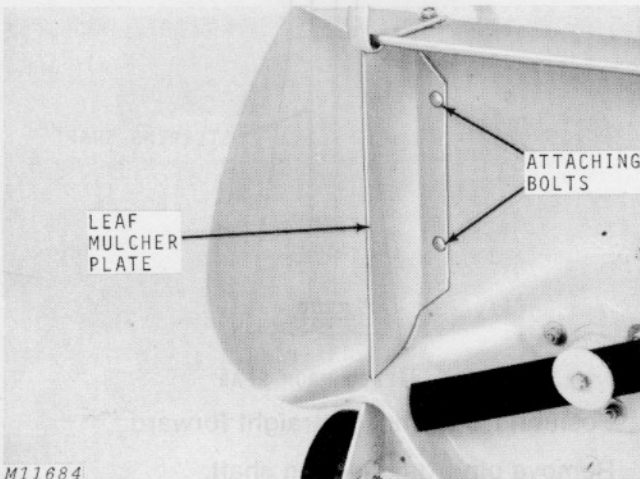


Bottom View—Right-Hand Side of Transaxle

If braking is ineffective, increase spring tension on brake rod by turning nut on end of rod.

If cam lever does not force brake pucks against disk, turn nuts on cam lever pivot stud. Loosen outer nut; then turn inner nut and tighten outer nut.

ATTACHING LEAF MULCHER PLATE (Extra Equipment)



Install the leaf mulcher plate with 1/4 x 1/2-inch carriage bolts and 1/4-inch wing nuts.

STORAGE

Clean all dirt and grease from your Electric 90 Mower. Repaint chipped or rusted spots.

IMPORTANT: Leave battery charger connected to electrical outlet to maintain batteries at full charge. See page 9.

TROUBLE SHOOTING

Traction drive motor won't start

- Batteries discharged.
- Shift lever not depressed in neutral.
- Motor overheated. Allow it to cool.*
- Defective main key switch or neutral-start switch.

Mower motors won't start

- Traction drive motor not running.
- Motors overheated. Allow them to cool.*
- Defective mower solenoid.

No ground travel

- Drive belt broken.
- Clutch linkage broken.
- Shift linkage broken.

Batteries not recharged

- Charger not working.
- No power to charger.

Uneven mowing

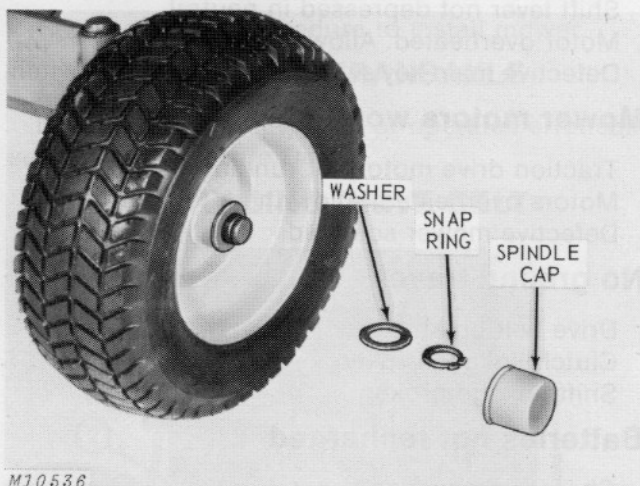
- Tires not inflated properly. See page 5.
- Mower not leveled properly. See page 11.
- Reduce ground speed on rough ground so mower does not bounce.

**Circuit breakers open when motors become overheated. Allow them to cool; then proceed under reduced speed or load.*



Assembly

FRONT WHEELS



M10536

Block up front axle.

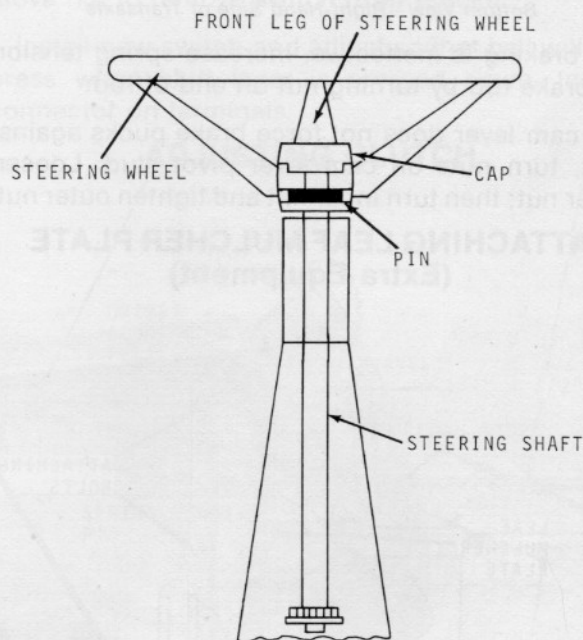
Grease axle and install wheel with valve stem toward mower.

Place washer on axle.

Install snap ring with sharp edge outward.

Press spindle cap over wheel hub.

STEERING WHEEL



M14077

VIEWED FROM REAR

Position front wheels straight forward.

Remove pin from steering shaft.

Lower steering shaft and rotate it until pin hole is perpendicular (90 degrees) to center line of machine.

Raise steering shaft and block it up to hold it in this position.

Install steering wheel over shaft and line up pin hole in steering wheel with pin hole in steering shaft.

NOTE: Steering wheel is correctly installed when front leg of steering wheel faces directly forward, parallel to front wheels.

Install pin until an equal distance exists in hole on each side of steering wheel.

Install round leaping deer decal on cap and press cap into hub of steering wheel.

NOTE: Use a wood block large enough to span entire diameter of cap if it is necessary to tap cap into place.

TIRE PRESSURE

Tires are over-inflated for shipping purposes.

Deflate tires to pressures listed below using a low-pressure tire gauge. A JDST-13 Low-Pressure Tire Gauge is available from your John Deere dealer.

Front.....8 psi
Rear.....6 psi

LEVELING MOWER

After adjusting tire pressure, level mower as instructed on page 11.

SEAT



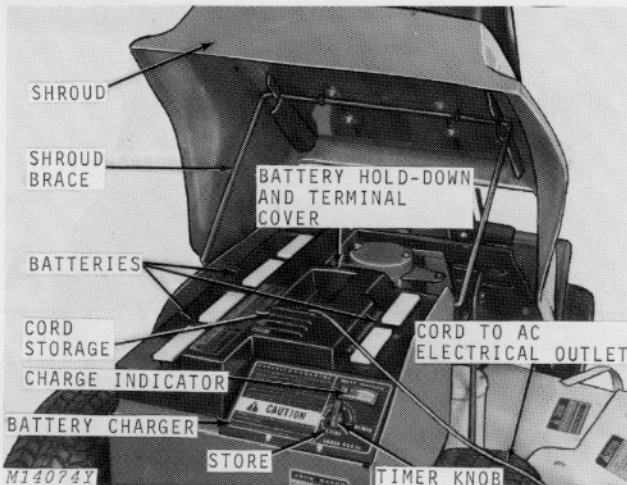
Remove shroud from mower by raising rear of shroud and lifting front of shroud slightly to unhook pivot arms. Move shroud to rear and lift to remove.

Remove and discard nuts on cap screws in shroud.

Position seat and shroud upside down on bench or table. Attach seat with cap screws using washers between shroud and seat and under cap screw heads. Be sure buttons on shroud are located in positioning holes in seat support plate.

Install shroud on mower and adjust seat to suit operator before tightening cap screws.

ACTIVATING BATTERIES



Raise shroud and pivot brace forward to hold shroud in raised position. Remove charger cord from storage compartment.

Depress battery cover hold-down and turn 1/4-turn right or left to unhook hold-down from base. Lift off cover. Remove batteries from compartment.

IMPORTANT: Be sure to remove batteries before filling with electrolyte. This will prevent damage in case of acid spill.

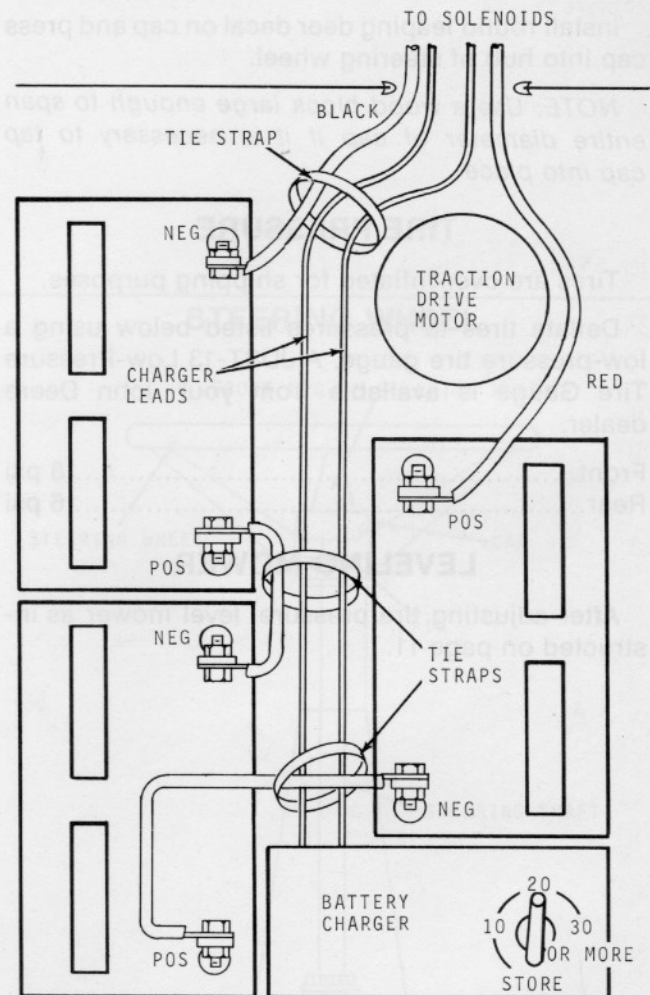
Fill batteries with electrolyte until level is ONLY 1/4-inch above plates. DO NOT fill to proper level until after charging.

CAUTION: Battery electrolyte is poisonous and can be injurious to eyes and clothing. Handle it carefully. If spilled, clean with a solution of one part baking soda to four parts water.

Electrolyte is not furnished with the Electric 90 Mower. It is available from your Parts Depot in the following quantities:

Part No.	Description
PT511	Z-Pak, 6 Qts.
PT509	EZE-Pak, 5 Gal.
PT510	F-Pak, 5 Gal.
TY5003	Hose for 5 Gal., F-Pak

Use only battery grade sulfuric acid electrolyte with 1.265 specific gravity plus or minus 0.005 corrected to 80 degrees Fahrenheit.



M14078

Clean and dry batteries and install them in battery compartment. Position batteries and make connections as shown in above illustration. Place three tie straps as indicated.

Replace battery cover, connect charger cord to electrical outlet, and turn timer knob to "30 OR MORE."

After a full charge cycle has been completed, add electrolyte until it is to the bottom of the split filler tubes. See illustration on page 10.

Remove tabs from batteries to indicate date batteries were activated.



Specifications

TRACTION MOTOR.....Permanent Magnet - 2 Pole,
3600 rpm
MOWER MOTORS (2)..Permanent Magnet - 2 Pole,
3200 rpm
MOTOR PROTECTION - TRACTION
AND MOWER.....Thermal overload
CHARGER PROTECTION.....Fuse
ELECTRICAL PROTECTION, 100 AMP...
Metal fuses (2)
BATTERIES (3).....John Deere 12-volt*
CHARGING TIME100% - 6 to 12 Hours

TRANSAXLE LUBRICANTSAE 90
AM30200 Lubricant
TRANSAXLE CAPACITY.....24 oz.
TRANSAXLE3 forward speeds;
1 reverse
BRAKE.....Disk type on transaxle,
pedal operated
CURB WEIGHT475 lbs.
TIRE PRESSURES:
Front - 11x4.00-58 psi
Rear - 16x6.50-86 psi

* The batteries are specially designed and constructed for motive power and are not suitable for engine starting service. Likewise, starter service batteries are not suitable for motive power service.

*(Specifications and design subject to
change without notice.)*

John Deere Electric 90 Mower

Mower Serial No. _____

Date of Purchase _____

(To be filled in by purchaser)

