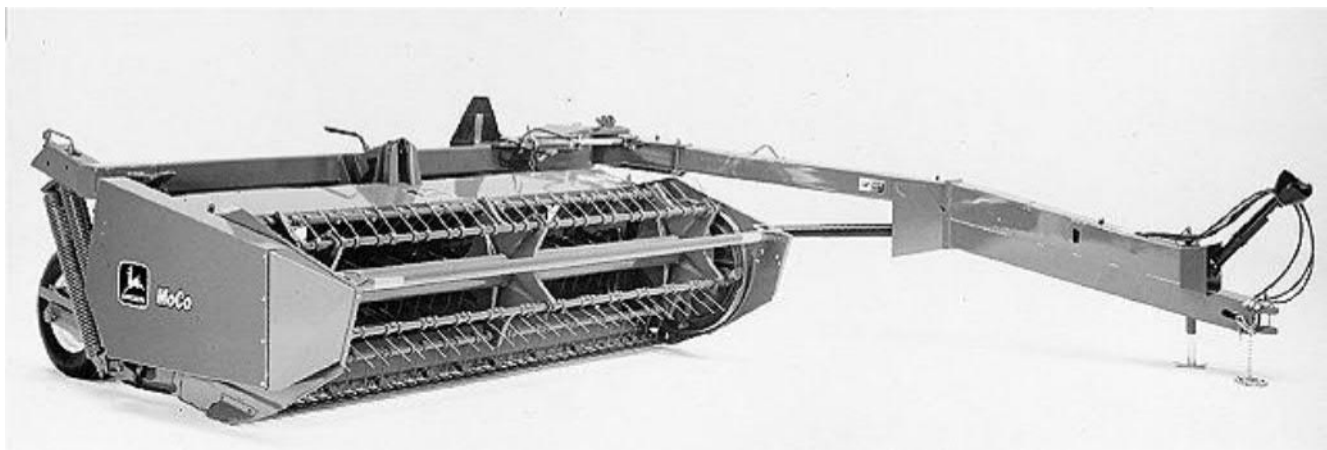


820 Mower-Conditioner

(Serial No. 986001-)

John Deere Ottumwa Works
OME86450 Issue A5
(Mark old manual OME85075 H4 for
machines up to Serial No. 986000)

LITHO IN U.S.A.
ENGLISH



John Deere 820 Mower-Conditioner

E37360
-JUN-01 JAN94

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 and safety signs on your machine may also be available in other languages. (See your John Deere dealer to order.)

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 given in both metric and customary U.S. unit equivalents. Use only correct replacement parts and fasteners. Metric and inch fasteners may require a specific metric or inch wrench.

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

WRITE PRODUCT IDENTIFICATION NUMBERS (P.I.N.) in the Specification 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. 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 applicable to your machine may not apply outside the U.S.

Contents

| Page | Page | | |
|--|------|---|----|
| Safety | 1 | Operating Tips for Making Right-Hand Turn | 30 |
| Safety Signs | 8 | Operating Tips for Making 180 Degree Turn | 32 |
| Preparing the Tractor | | Producing Uniform Windrows | |
| Checking Ballast | 11 | Cutterbar | 34 |
| Selecting Tractor PTO Speed | 11 | Knife Hold-Downs | 34 |
| Using Drawbar Shield | 11 | Platform Guard Angle | 35 |
| Preparing the Mower-Conditioner | | Gauge Shoes and Carrier Frame Height | 35 |
| Installing Tongue Positioner | 12 | Reel | 35 |
| Checking Tire Inflation | 13 | Conditioner | 35 |
| Checking Wheel Bolt Torque | 14 | Platform Float | 36 |
| Cutterbar Knife Storage | 14 | Ground Speed | 36 |
| Attaching and Detaching | | Cutting | |
| Adjusting the Drawbar | 15 | Alfalfa | 37 |
| Adjusting Mower-Conditioner Hitch Clevis | 15 | Grass | 38 |
| Determining Need For Turn Limiters | 17 | Tall Crop | 39 |
| Installing Narrow Turn Limiters | 18 | Dirt and Mud Buildup | 39 |
| Installing Wide Turn Limiters | 18 | Adjusting Windrow Width | 39 |
| Attaching to Tractor Drawbar | 18 | Adjusting Gauge Shoes | 40 |
| Attaching PTO Driveline | 19 | Adjusting Carrier Frame Height | 41 |
| Installing Safety Chain | 19 | Adjusting Cut Height | 42 |
| Attaching to Tractor Hydraulic System | 19 | Adjusting Platform Float | 43 |
| Storing Jackstand | 20 | Adjusting Reel Speed | 43 |
| Attaching Tongue Positioner Rope | 20 | Adjusting Reel Cam | 45 |
| Detaching Mower-Conditioner from Tractor | 21 | Adjusting Conditioner Roll Pressure | 46 |
| Transporting | 22 | Adjusting Roll Spacing | 48 |
| Operating the Mower-Conditioner | | Attachments | 50 |
| Prestarting Checks | 26 | Lubrication and Maintenance | 53 |
| Breaking in the Mower-Conditioner | 27 | Troubleshooting | 61 |
| Starting and Driving | 27 | Service | |
| Positioning the Tongue for Field Operation | 28 | Practice Safe Service Procedures | 65 |
| | | Unplugging Machine | 65 |
| | | Servicing Cutterbar Area | 66 |
| | | Adjusting Wheel Bearing | 67 |

Continued on next page

All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

OME86450 A5-19-19JAN95

COPYRIGHT© 1995
 DEERE & COMPANY
 Moline, Illinois
 All rights reserved
 A John Deere ILLUSTRATION™ Manual
 Previous Editions
 Copyright 1994, 1993 Deere & Company

<https://www.ebooklibonline.com>

Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.

The full manual is available for immediate download.

<https://www.ebooklibonline.com>

Contents

| | Page |
|--|------|
| Care of Chains | 68 |
| Adjusting Reel Drive Chain | 68 |
| Installing Reel Slow-Down Sprocket | 69 |
| Adjusting Reel Drive Belt | 71 |
| Adjusting Cutterbar Drive Belt | 72 |
| Replacing Reel Drive Belt | 73 |
| Replacing Cutterbar Drive Belt | 73 |
| Adjusting Cam Followers | 75 |
| Adjusting Slip Clutch | 76 |
| Replacing Slip Clutch Lining | 76 |
| Slipping the Clutch | 79 |
| Replacing Reel Teeth | 80 |
| Removing Knives | 83 |
| Installing Knives | 83 |
| Replacing Bolt-On Knife Sections | 83 |
| Installing Regular Cutterbar Parts | 84 |
| Installing Non-Clog Cutterbar Parts | 87 |
| Adjusting Regular Knife Hold-Downs | 88 |
| Adjusting Non-Clog Knife Hold-Downs | 89 |
| Changing Tire | 89 |
| Storage | |
| Storing Mower-Conditioner | 90 |
| Removing Mower-Conditioner From Storage | 91 |
| Specifications | |
| Inch Bolt and Cap Screw Torque Values | 92 |
| Metric Bolt and Cap Screw Torque Values | 93 |
| Specifications | 94 |
| Record Serial Numbers | 95 |
| Crime Prevention Tips | 96 |
| Index | |

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.



DX,ALERT -19-03MAR93

T81389 -UN-07DEC68

UNDERSTAND SIGNAL WORDS

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

DANGER or WARNING safety signs are located near specific hazards. General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.



DX,SIGNAL -19-03MAR93

TS187 -19-30SEP88

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. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from your John Deere dealer.

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.

If you do not understand any part of this manual and need assistance, contact your John Deere dealer.



DX,READ -19-03MAR93

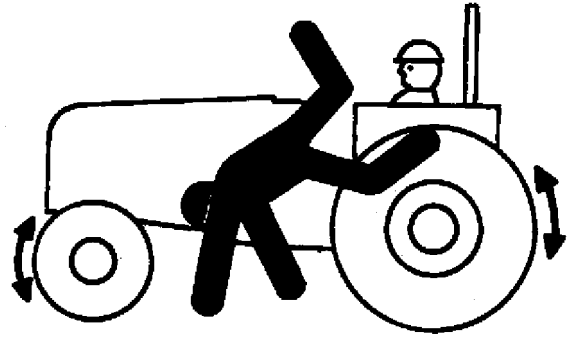
TS201 -UN-23AUG88



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.



DX,RIDER -19-03MAR93

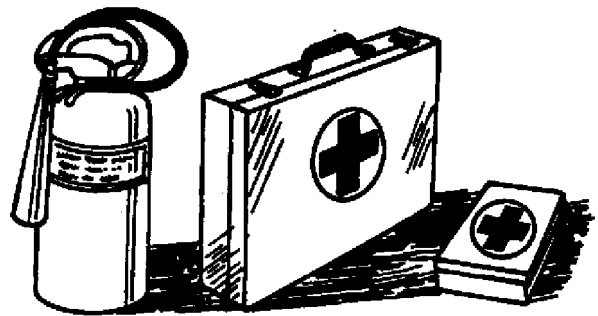
TS290 -UN-23AUG88

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.



DX,FIRE2 -19-03MAR93

TS291 -UN-23AUG88

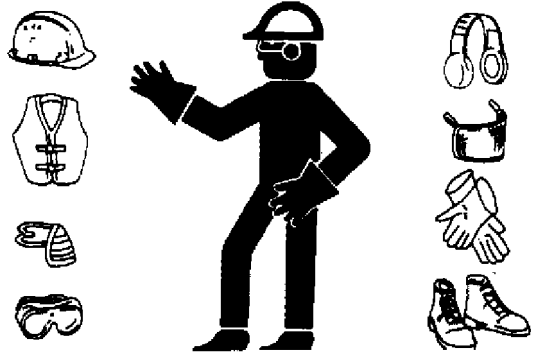
WEAR PROTECTIVE CLOTHING

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

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

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

Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating machine.



DX,WEAR -19-10SEP90

TS206 -UN-23AUG88



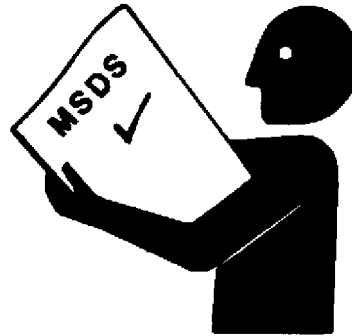
HANDLE CHEMICAL PRODUCTS SAFELY

Direct exposure to hazardous chemicals can cause serious injury. Potentially hazardous chemicals used with John Deere equipment include such items as lubricants, coolants, paints, and adhesives.

A Material Safety Data Sheet (MSDS) provides specific details on chemical products: physical and health hazards, safety procedures, and emergency response techniques.

Check the MSDS before you start any job using a hazardous chemical. That way you will know exactly what the risks are and how to do the job safely. Then follow procedures and recommended equipment.

(See your John Deere dealer for MSDS's on chemical products used with John Deere equipment.)



DX,MSDS,NA -19-03MAR93

TS1132 -UN-26NOV90

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.



DX,PTO -19-03MAR93

TS198 -UN-23AUG88

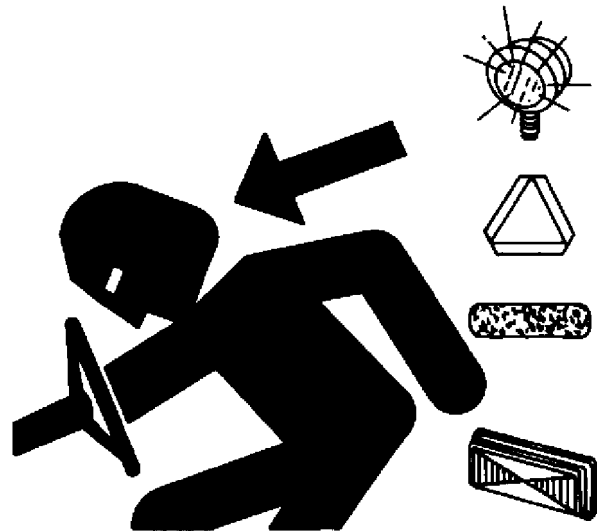


USE SAFETY LIGHTS AND DEVICES

Slow moving tractors, self-propelled equipment and towed implements or attachments can create a hazard when driven on public roads. They are difficult to see, especially at night. Avoid personal injury or death resulting from collision with a vehicle.

Whenever driving on public roads, use flashing warning lights and turn signal according to local regulation. To increase visibility, use the lights and devices provided with your machine. For some equipment, install extra flashing warning lights.

Keep safety items in good condition. Replace missing or damaged items. An implement safety lighting kit is available from your John Deere dealer.



DX,FLASH -19-15MAR93

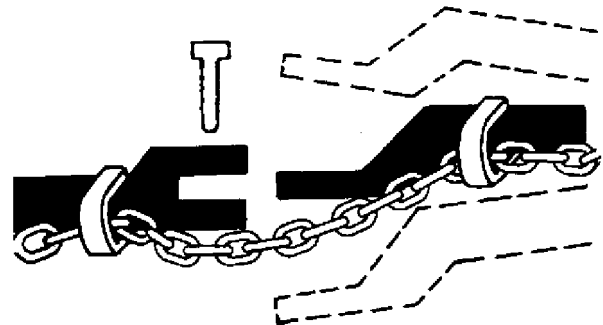
TS951 -UN-12APR90

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.



DX,CHAIN -19-03MAR93

TS217 -UN-23AUG88

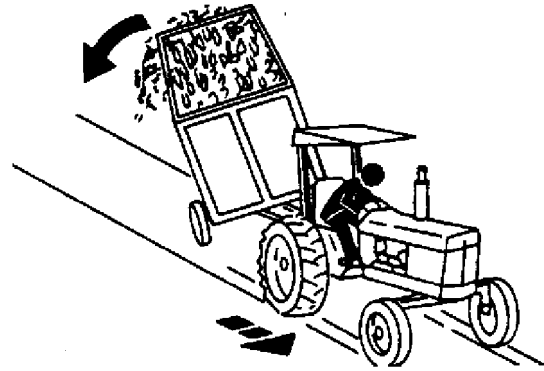


REDUCE SPEED WHEN TOWING LOADS

Braking to stop towed loads from transport speeds can cause the towed load to swerve and upset. Reduce speed if towed load weighs more than the tractor and is not equipped with brakes.

Follow recommended speed-weight ratio guidelines:

- Maximum speed is 32 km/h (20 mph) when towing load equal to or less in weight than the tractor.
- Reduce speed to 16 km/h (10 mph) when towing load up to double the tractor weight.
- Do not tow loads exceeding double the tractor weight.
- Use additional caution when towing loads under adverse surface conditions, when turning, and on inclines.



TS216 -UN-23AUG88

DX,TOW -19-03MAR93

PRACTICE SAFE MAINTENANCE

Understand service procedure before doing work. Keep area clean and dry.

Never lubricate, service, or adjust machine while it is moving. Keep hands, feet, and clothing from power-driven parts. Disengage all power and operate controls to relieve pressure. Lower equipment to the ground. Stop the engine. Remove the key. Allow machine to cool.

Securely support any machine elements that must be raised for service work.

Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.

Disconnect battery ground cable (-) before making adjustments on electrical systems or welding on machine.



TS216 -UN-23AUG88

DX,SERV -19-03MAR93



Suggest:

For more complete manuals. Please go to the home page.

<https://www.ebooklibonline.com>

If the above button click is invalid. Please download this document first, and then click the above link to download the complete manual.

Thank you so much for reading



REMOVE PAINT BEFORE WELDING OR HEATING

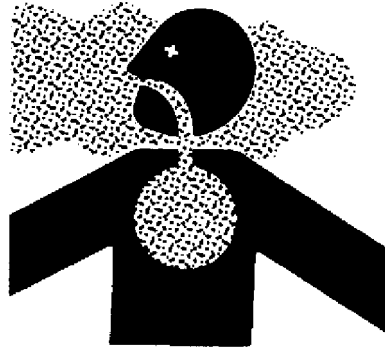
Avoid potentially toxic fumes and dust.

Hazardous fumes can be generated when paint is heated by welding, soldering, or using a torch.

Do all work outside or in a well ventilated area. Dispose of paint and solvent properly.

Remove paint before welding or heating:

- If you sand or grind paint, avoid breathing the dust. Wear an approved respirator.
- If you use solvent or paint stripper, remove stripper with soap and water before welding. Remove solvent or paint stripper containers and other flammable material from area. Allow fumes to disperse at least 15 minutes before welding or heating.



DX,PAINT -19-03MAR93

TS220 -UN-23AUG68

AVOID HEATING NEAR PRESSURIZED FLUID LINES

Flammable spray can be generated by heating near pressurized fluid lines, resulting in severe burns to yourself and bystanders. Do not heat by welding, soldering, or using a torch near pressurized fluid lines or other flammable materials. Pressurized lines can be accidentally cut when heat goes beyond the immediate flame area.



DX,TORCH -19-03MAR93

TS953 -UN-15MAY90



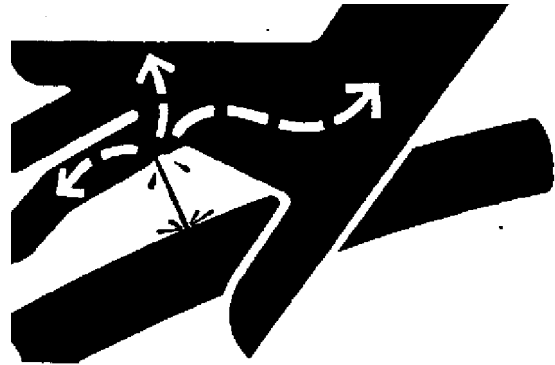
AVOID HIGH-PRESSURE FLUIDS

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 should reference a knowledgeable medical source. Such information is available from Deere & Company Medical Department in Moline, Illinois, U.S.A.



X9811 -UN-23AUG88

DX,FLUID -19-03MAR93

DISPOSE OF WASTE PROPERLY

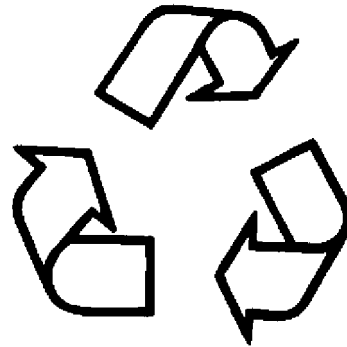
Improperly disposing of waste can threaten the environment and ecology. Potentially harmful waste used with John Deere equipment include such items as oil, fuel, coolant, brake fluid, filters, and batteries.

Use leakproof containers when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them.

Do not pour waste onto the ground, down a drain, or into any water source.

Air conditioning refrigerants escaping into the air can damage the Earth's atmosphere. Government regulations may require a certified air conditioning service center to recover and recycle used air conditioning refrigerants.

Inquire on the proper way to recycle or dispose of waste from your local environmental or recycling center, or from your John Deere dealer.



TS1133 -UN-26NOV90

DX,DRAIN -19-03MAR93

<https://www.ebooklibonline.com>

Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.

The full manual is available for immediate download.

<https://www.ebooklibonline.com>