

**710 and 720**  
**Mower-Conditioners**  
(Serial No. 10001- )

**John Deere Ottumwa Works**  
**OME85380 Issue C5**

LITHO IN U.S.A.  
ENGLISH



*John Deere 720 Mower-Conditioner*

-UN-15MAR95  
E38232

**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
<b>Safety</b> .....	1	Operating Tips for Making 180 Degree Turn .....	32
<b>Safety Signs</b> .....	8	Producing Uniform Windrows	
<b>Preparing the Tractor</b>		Cutterbar .....	34
Checking Ballast .....	10	Knife Hold-Downs .....	34
Selecting Tractor PTO Speed .....	10	Platform Guard Angle .....	35
Using Drawbar Shield .....	10	Gauge Shoes .....	35
<b>Preparing the Mower-Conditioner</b>		Reel .....	35
Checking Tire Inflation .....	11	Conditioner .....	35
Checking Wheel Bolt Torque .....	11	Platform Float .....	36
Cutterbar Knife Storage .....	11	Ground Speed .....	36
Installing Hydraulic Cylinder .....	12	Cutting	
Routing Hydraulic Hose .....	13	Alfalfa .....	37
<b>Attaching and Detaching</b>		Grass .....	38
Adjusting the Drawbar .....	15	Tall Crop .....	39
Adjusting Mower-Conditioner Hitch Clevis .....	15	Dirt and Mud Buildup .....	39
Determining Need For Turn Limiters .....	18	Adjusting Windrow Width .....	39
Installing Narrow Turn Limiters .....	19	Adjusting Gauge Shoes .....	40
Installing Wide Turn Limiters .....	20	Adjusting Cut Height .....	41
Attaching to Tractor Drawbar .....	21	Adjusting Cutterbar Angle .....	42
Attaching PTO Driveline .....	21	Adjusting Platform Float .....	44
Installing Safety Chain .....	22	Adjusting Reel Speed .....	44
Attaching to Tractor Hydraulic System .....	22	Adjusting Reel Cam .....	46
Storing Jackstand .....	22	Adjusting Conditioner Roll Pressure .....	47
Attaching Tongue Positioner Rope .....	23	Adjusting Roll Spacing .....	48
Detaching Mower-Conditioner from Tractor .....	23	<b>Attachments</b> .....	50
<b>Transporting</b> .....	24	<b>Lubrication and Maintenance</b> .....	54
<b>Operating the Mower-Conditioner</b>		<b>Troubleshooting</b> .....	61
Prestarting Checks .....	27	<b>Service</b>	
Breaking in the Mower-Conditioner .....	28	Practice Safe Service Procedures .....	65
Starting and Driving .....	28	Unplugging Machine .....	65
Positioning Tongue for Field Operation .....	29	Adjusting Wheel Bearing .....	66
Operating Tips for Making Right-Hand Turn .....	30	Care of Chains .....	66
		Adjusting Reel Drive Chain .....	66
		Installing Reel Speed-Up Sprocket .....	67
		Adjusting Reel Drive Belt .....	69
		Adjusting Cutterbar Drive Belt .....	70

Continued on next page

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OME85380 C5-19-01MAR02

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A John Deere ILLUSTRATION™ Manual

Contents

	Page
Replacing Reel Drive Belt . . . . .	71
Replacing Cutterbar Drive Belt . . . . .	71
Adjusting Cam Followers . . . . .	75
Adjusting or Replacing Wear Pad for Float Spring Bolt . . . . .	75
Adjusting Slip Clutch . . . . .	76
Replacing Slip Clutch Lining . . . . .	76
Slipping the Clutch . . . . .	80
Replacing Reel Teeth . . . . .	81
Removing Knives . . . . .	84
Installing Knives . . . . .	84
Replacing Bolt-On Knife Sections . . . . .	84
Installing Regular Cutterbar Parts . . . . .	85
Installing Non-Clog Cutterbar Parts . . . . .	90
Adjusting Regular Knife Hold-Downs . . . . .	91
Adjusting Non-Clog Knife Hold-Downs . . . . .	92
Changing Tire . . . . .	93
<b>Storage</b>	
Storing Mower-Conditioner . . . . .	94
Removing Mower-Conditioner From Storage . . . . .	95
<b>Specifications</b>	
Inch Bolt and Cap Screw Torque Values . . . . .	96
Metric Bolt and Cap Screw Torque Values . . . . .	97
Specifications . . . . .	98
Record Serial Numbers . . . . .	99
<b>Crime Prevention Tips</b> . . . . .	100
<b>Index</b>	

# 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

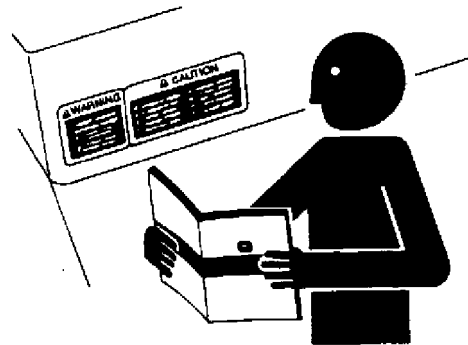
## FOLLOW SAFETY INSTRUCTIONS

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

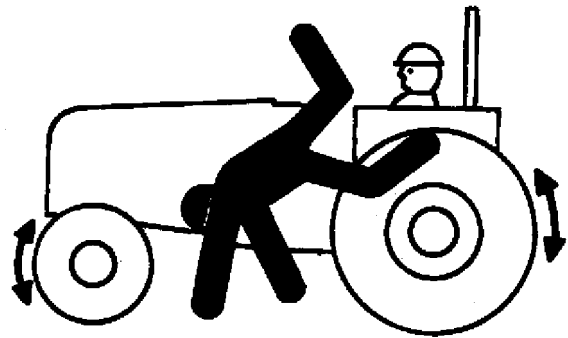
TS201 -UN-23AUG88



## 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

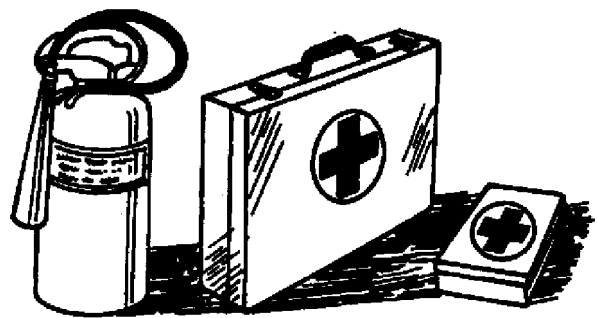
TS290 -UN-23AUG88

## 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

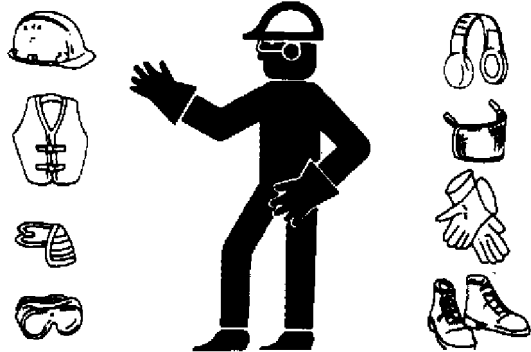
## WEAR PROTECTIVE CLOTHING

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



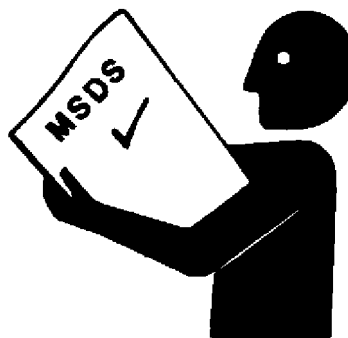
## HANDLE CHEMICAL PRODUCTS SAFELY

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

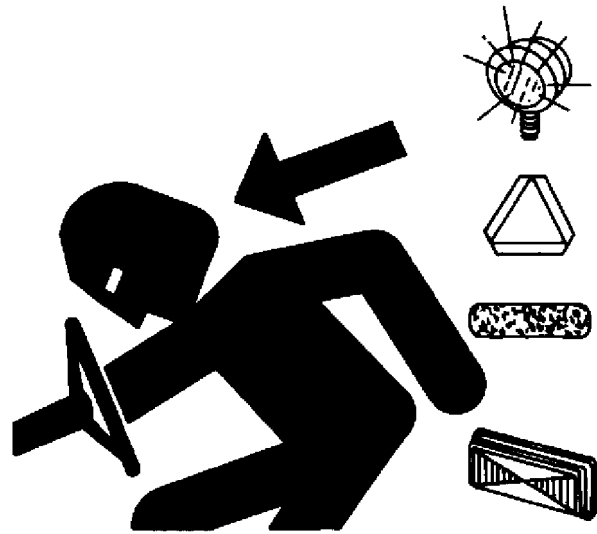


## USE SAFETY LIGHTS AND DEVICES

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

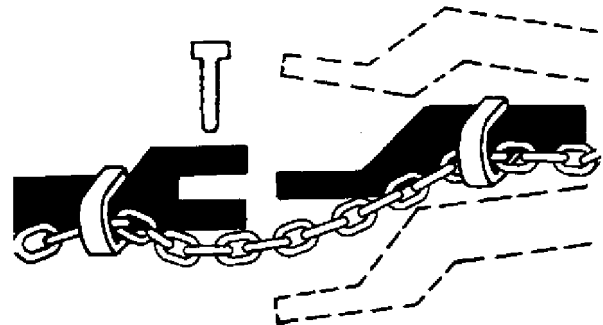
TS951 -UN-12APR90

## 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



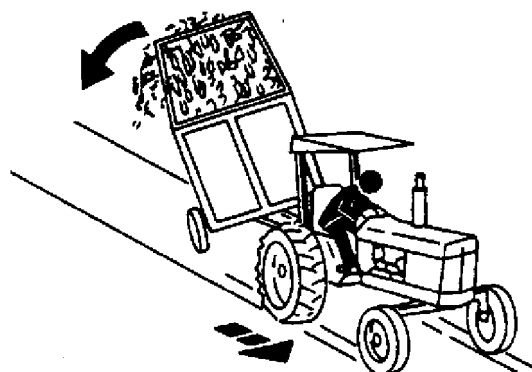


## REDUCE SPEED WHEN TOWING LOADS

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.



DX,TOW -19-03MAR93

TS216 -UN-23AUG88

## 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.



DX,SERV -19-03MAR93

TS216 -UN-23AUG88



## REMOVE PAINT BEFORE WELDING OR HEATING

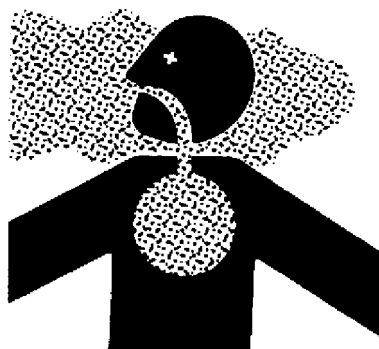
Avoid potentially toxic fumes and dust.

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



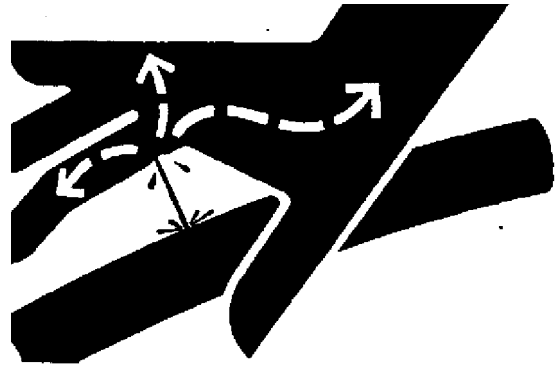
## AVOID HIGH-PRESSURE FLUIDS

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 -JUN-23AUG88

DX,FLUID -19-03MAR93

## DISPOSE OF WASTE PROPERLY

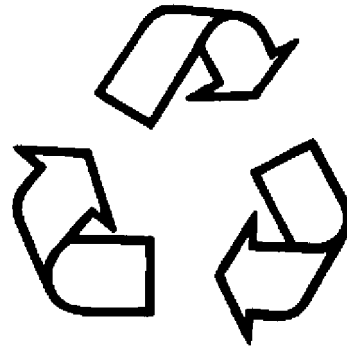
Improperly disposing of waste can threaten the environment and ecology. Potentially harmful waste used with John Deere equipment include such items as oil, fuel, coolant, brake fluid, filters, and batteries.

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.



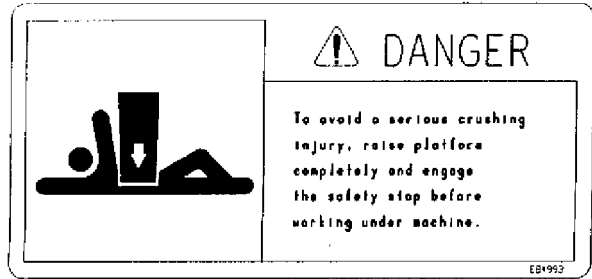
TS1133 -JUN-26NOV90

DX,DRAIN -19-03MAR93

# Safety Signs

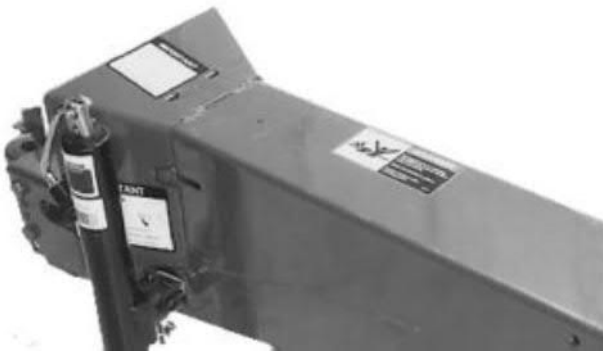


E38365 -UN-10MAR95



E38842 -19-27MAR95

EX.720Z.A -19-24MAR95



E38366 -UN-10MAR95



E37349 -19-30SEP93



E38378 -UN-13MAR95

EX.720Z.B -19-11MAR95

Safety Signs



E38363 -UN-10MAR95

**⚠ WARNING**

See instructions in operator's manual for adjusting conditioner roll gap.

To avoid bodily injury while performing this adjustment:

1. Keep all shields in place.
2. Lower machine to ground.
3. Position tongue in field position.
4. Reduce tractor throttle to minimum.
5. Keep hands, feet and clothing away from moving parts.

E37354 -19-30SEP93



E38364 -UN-10MAR95

EX,720Z,C -19-15MAR95



E38840 -UN-27MAR95

**⚠ WARNING**

**DO NOT DRIVE PIN OUT**

Platform may tip unexpectedly.

Make sure pin is loose before removing.

See operator's manual and instructions on machine.

E38841 -19-27MAR95

EX,720Z,D -19-24MAR95

# Preparing the Tractor

## CHECKING BALLAST

Provide sufficient weight to stabilize tractor when operating on hilly land or other adverse conditions. (See your tractor operator's manual.)

EX,1600V,C -19-20MAR89

## SELECTING TRACTOR PTO SPEED

**IMPORTANT:** Never operate a mower-conditioner equipped for 540 rpm PTO drive with a tractor equipped with 1000 rpm PTO.

**Always run tractor at rated PTO speed. Overspeed will cause damage to drive system.**

Mower-Conditioner	Tractor Recommended
710	22 kW (30 hp) or larger
720	26 kW (35 hp) or larger

EX,720V,A -19-30JAN95

## USING DRAWBAR SHIELD

If a tractor drawbar catches and disturbs the windrow under the tractor, a drawbar shield can be used.

Order drawbar shield from your John Deere dealer.



E26072 -JUN-12SEP88

EX,375V,H -19-03SEP93

# Preparing the Mower-Conditioner

## CHECKING TIRE INFLATION

MOWER-CODITIONER	TIRE SIZE	TIRE PRESSURE
710	6.70 x 15 - 6 ply	44 psi (300 kPa) (3.0 bar)
720	9.5L X 14 - 6 ply	32 psi (220 kPa) (2.2 bar)

EX.720I,A -19-27JAN95

## CHECKING WHEEL BOLT TORQUE

**IMPORTANT:** Wheels should be installed with valve stems to the outside. If not, damage to tire may occur.

Check wheel bolt torque after the first 10 hours of use.

Whenever a wheel has been removed and installed, check torque after one hour of operation. Wheel bolts should be tightened to 115 N·m (85 lb-ft).

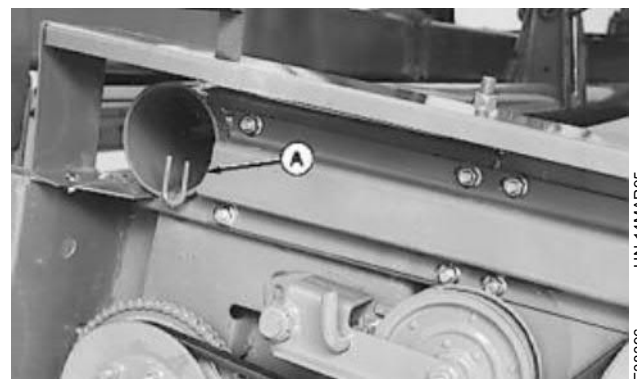


E38833 -UN-20MAR95

EX.720I,I -19-20MAR95

## CUTTERBAR KNIFE STORAGE

Storage area (A) is provided to carry an extra cutterbar knife while operating in the field.



E38396 -UN-14MAR95

EX.720I,B -19-14MAR95

## INSTALLING PLATFORM LIFT HYDRAULIC CYLINDER

**IMPORTANT:** An orifice must be installed in the rod end of cylinder. This prevents the platform from raising too fast and causing machine damage. Platform lift time should not be less than 2 seconds.

**NOTE:** Hydraulic lift hose should be a minimum length of 7420 mm (292 in.).

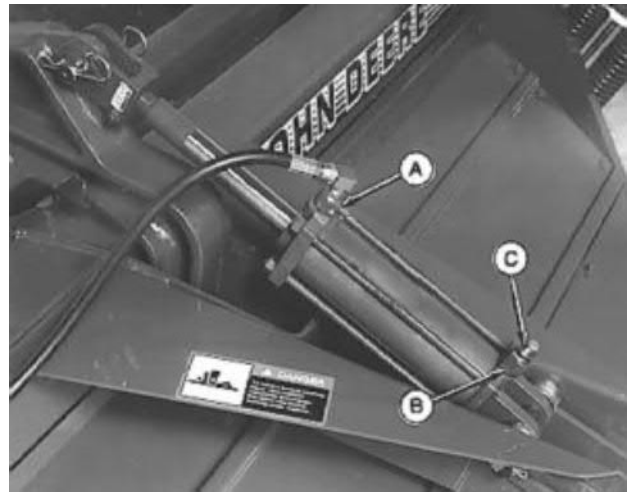
A 3 x 8-in. double-acting cylinder may be installed.

Attach hydraulic lift pressure hose from the tractor to the rod end (A) of cylinder. Tighten fittings.

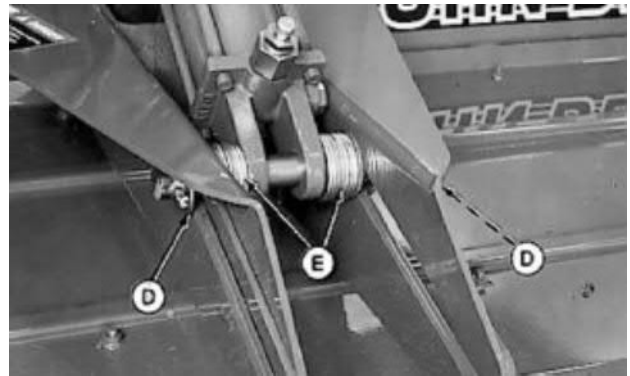
A hydraulic hose at the head end (B) of cylinder is not required. Install breather (C) in cylinder port if hydraulic hose is not used.

Attach rod end of cylinder to center link. Fasten with pin and spring pins.

Attach head end of cylinder to cylinder support. Fasten with cylinder pin, washers, and cotter pins. Install one washer (D) on each side of cylinder support and install washers (E), as needed, to center cylinder inside cylinder support.



E38803 -JUN-16MAR95



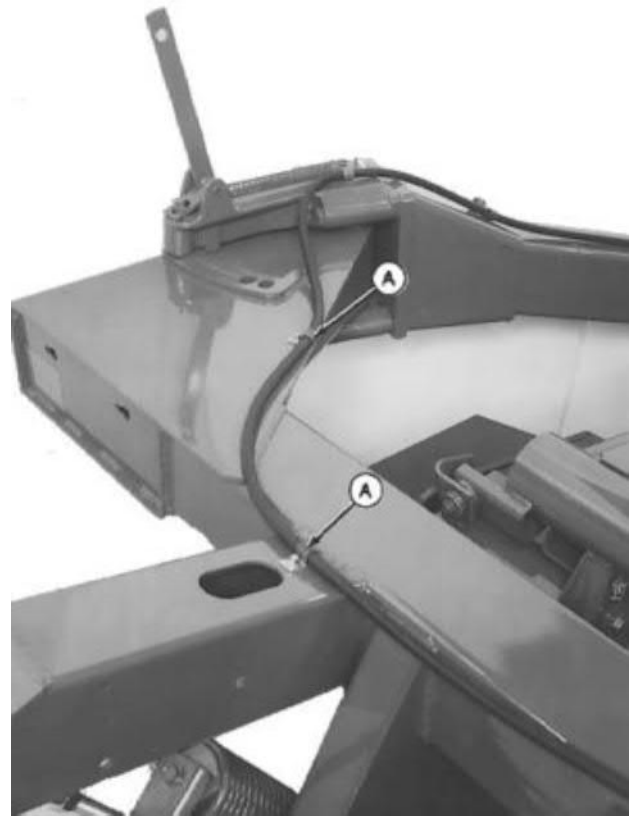
E38804 -JUN-16MAR95

- A—Cylinder Rod End
- B—Cylinder Head End
- C—Breather
- D—Washer
- E—Washers (As Required)



## ROUTING PLATFORM LIFT HYDRAULIC HOSE

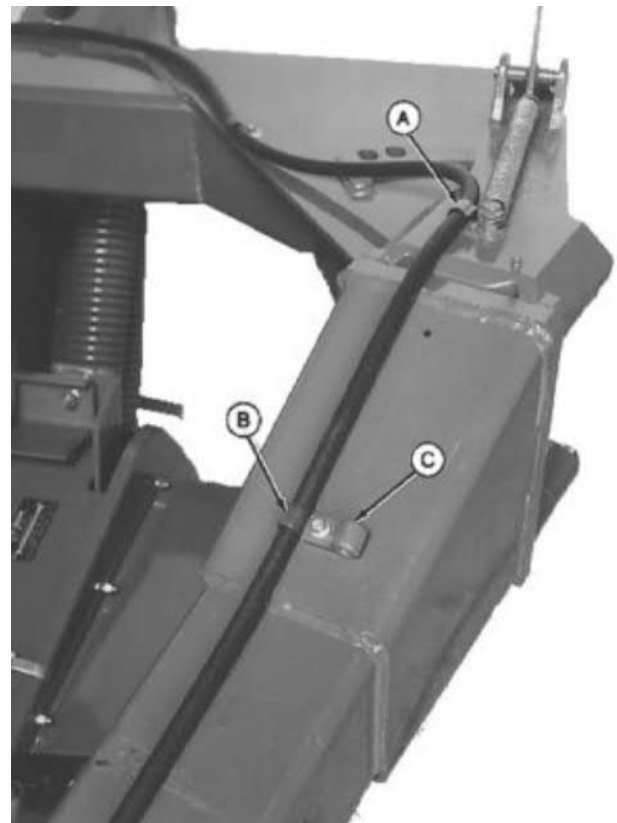
1. Route hose along carrier frame and down tongue.
2. Install hose clamps (A). Fasten with M8 x 20 self-tapping screws.



EX,720I,D -19-15MAR95

E38352 -UN-10MAR95

3. Route hydraulic hose through clamp (A).
4. Install hose clamp (B) and rope guide (C). Fasten with M8 x 20 self-tapping screw.



EX,720I,E -19-14MAR95

E38353 -UN-13MAR95

*Preparing the Mower-Conditioner*

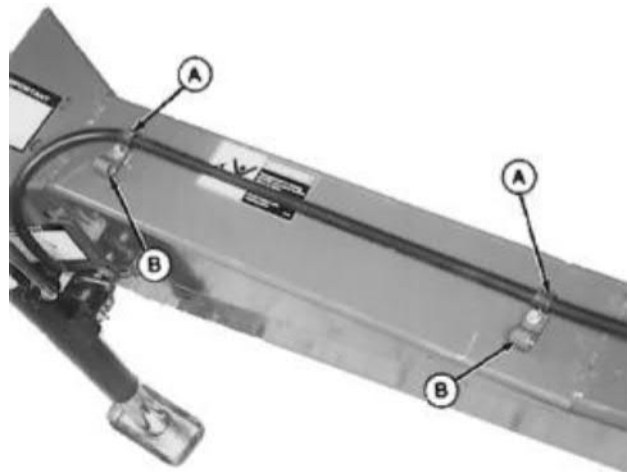
5. Install hose clamp (A) and rope guide (B). Fasten with M8 x 25 cap screw and flange nut.



EX,720I,F -19-27MAR95

E38354  
-UN-10MAR95

6. Install hose clamps (A) and rope guides (B). Fasten with two M8 x 20 self-tapping screws.



EX,720I,G -19-14MAR95

E38355  
-UN-13MAR95

7. Install hose clamp (A). Fasten with M8 x 25 cap screw and flange nut.



EX,720I,H -19-14MAR95

E38356  
-UN-10MAR95

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