

HAY CONDITIONER AND NO. 8 OR 9 MOWER HOOK-UP AND DRIVE (FOR 540 RPM PTO)



JOHN DEERE

OPERATORS MANUAL

**HAY CONDITIONER AND NO. 8 OR 9
MOWER HOOK-UP AND DRIVE (FOR 540
RPM PTO)**

OMH90535H (01AUG60) English

OMH90535H (01AUG60)

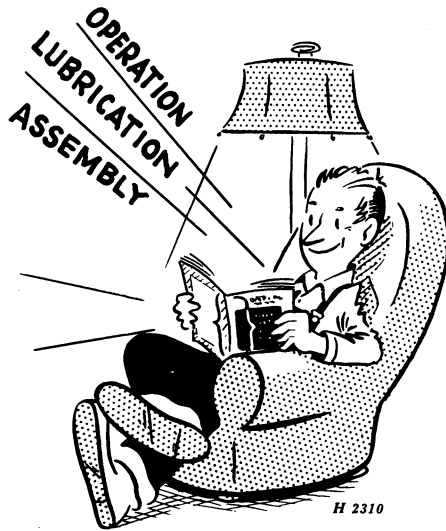
**LITHO IN THE U.S.A.
ENGLISH**



TO THE PURCHASER

With this new Hook-Up and Drive Equipment, the John Deere Hay Conditioner can be used with the Nos. 8, 8W, 9 and 9W Mowers. One quick trip over the field is all that's required to cut and condition your hay crop.

This manual has been carefully prepared and illustrated to provide you with the necessary information to hook up, lubricate and operate your Hay Conditioner with a John Deere No. 8, 8W, 9 or 9W Mower to best advantage.



STUDY THIS MANUAL CAREFULLY AND KEEP IT HANDY IN A SAFE PLACE FOR FUTURE REFERENCE.

If you should find that you require information not covered in this manual, consult your John Deere dealer. He will be glad to answer any question that may arise regarding the operation and service of this drive equipment. Your John Deere dealer has trained mechanics who are kept informed on the best John Deere service methods and will render you prompt service if needed.

Should this equipment require replacement parts, go to your John Deere dealer where you will receive Genuine John Deere parts—accept no substitutes.

John Deere parts fit properly and insure satisfactory service because they are made from the original patterns and from the same material as used in new machines.

LOCATION REFERENCE

“Right-hand” and “left-hand” sides are determined by facing in the direction the attachment will travel when in use.

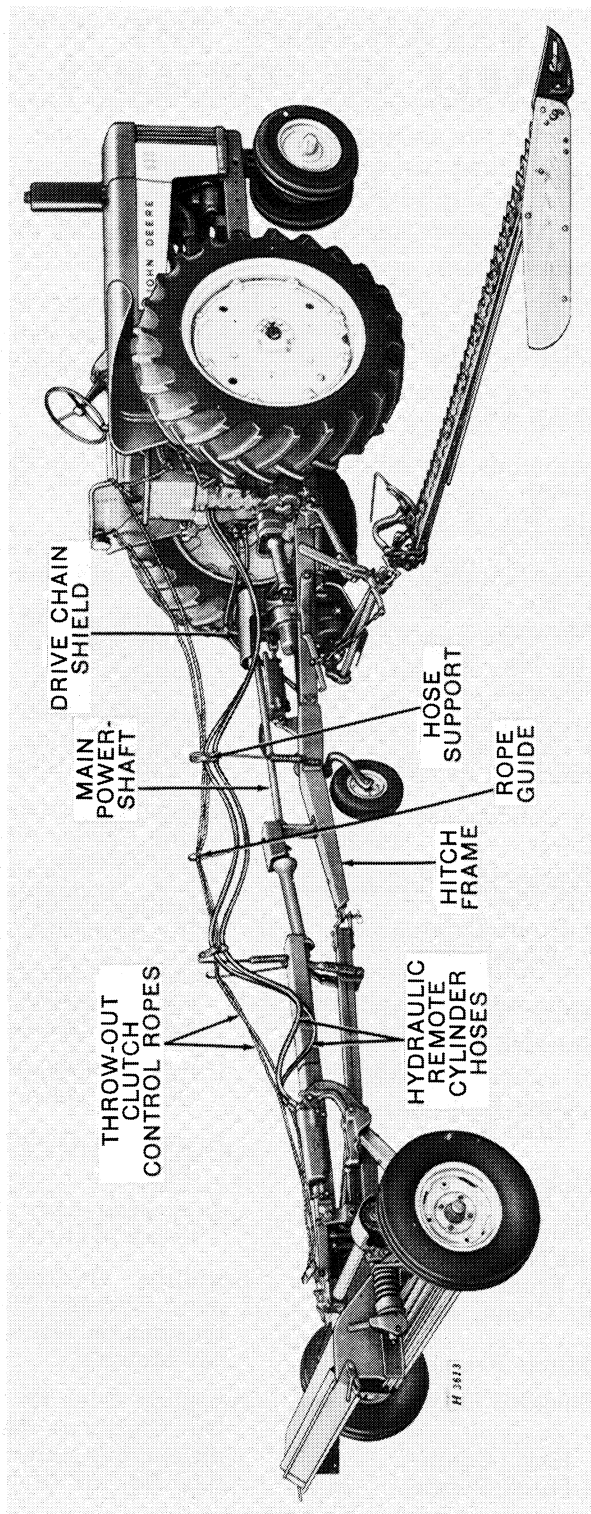
“Clockwise” refers to parts turning to the right like the hands of a clock.

“Counter-clockwise” refers to parts turning to the left.

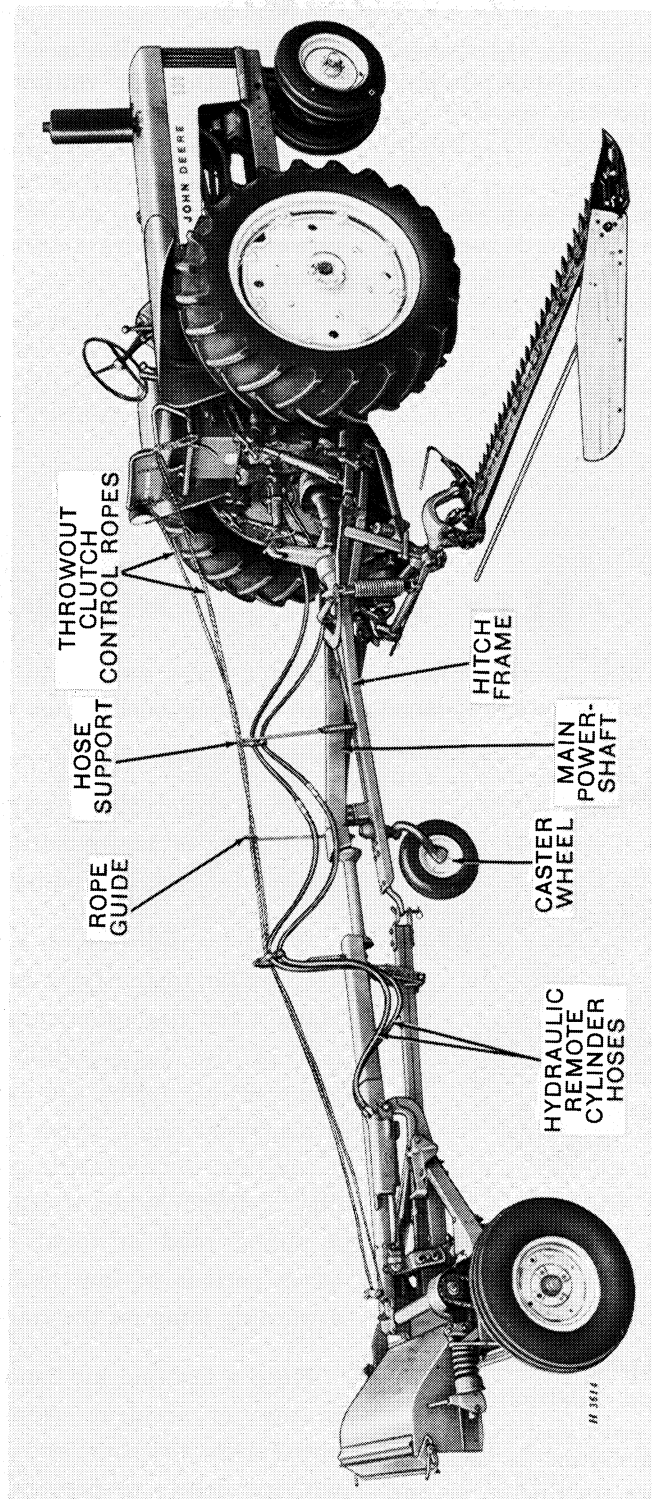
Date of Purchase.....

TABLE OF CONTENTS

	<i>Page</i>		<i>Page</i>
COMPLETE VIEWS.....	2-3	Installing Hydraulic Re-	
OPERATION.....	4	mote Cylinder Hose	
SAFETY SUGGESTIONS.	4	Extensions on No. 8 or	
LUBRICATION.....	5	No. 8W Mowers.....	26
ADJUSTMENTS AND		Installing Control Rope for	
SERVICE.....	6	Throw-Out Clutch on Hay	
Care of Pneumatic Tires...	6	Conditioner Attached to	
ASSEMBLY.....	7-39	No. 8 or No. 8W Mow-	
Shipping Packages.....	7-15	ers.....	27
Attaching to No. 8 or		Attaching Hay Conditioner	
No. 8W Mowers.....	7	to No. 9 or No. 9W	
Tractor Hookup Shipping		Mowers.....	28-37
Packages—No. 8 or		Replacing Powershaft	
No. 8W Mowers.....	7-12	and Draft Link Pins..	28
Attaching to No. 9 or		Installing Front Drive	
No. 9W Mowers.....	13	Shaft Bearing Housing	
Tractor Hookup Shipping		Support.....	29
Packages—No. 9 or No.		Installing Front Drive	
9W Mowers.....	13-15	Shaft Shields, Drive	
Attaching Hay Conditioner		Chain and Shield.....	30
to No. 8 Mower	16-20	Assembling Hitch Frame	
Replacing Shielded Pow-		and Caster Wheel on	
ershaft with New One—		No. 9 Mower.....	31
Installing Front Drive		Installing Drive Shaft on	
Assembly, Chain, and		No. 9 Mower.....	32
Shield.....	16	Assembling Hitch Frame	
Installing Hitch Frame.	16-17	and Caster Wheel on	
Installing Shielded Drive		No. 9W Mower.....	33
Shaft.....	18-19	Installing Drive Shaft on	
Attaching Hay Condi-		No. 9W Mower.....	34
tioner to Hitch Frame	20	Installing Drive Shaft	
Attaching Hay Conditioner		Shields.....	35
to No. 8W Mower....	21-25	Attaching Hay Condi-	
Replacing Shielded Pow-		tioner to Hitch Frame.	36-37
ershaft with New One—		Installing Hydraulic Re-	
Installing Front Drive		mote Cylinder Hose Ex-	
Assembly, Chain, and		tensions on No. 9 or No.	
Shield.....	21	9W Mowers.....	38
Installing Hitch Frame.	21-22	Installing Rope for Throw-	
Installing Shielded Drive		Out Clutch on Hay Con-	
Shaft.....	23-24	ditioners Attached to No.	
Attaching Hay Condi-		9 or No. 9W Mowers....	39
tioner to Hitch Frame	25		



John Deere Hay Conditioner with No. 8W Mower



John Deere Hay Conditioner with No. 9 Mower

OPERATION

The instructions in this manual apply only when both the hay conditioner and the mower are equipped for 540 rpm PTO operation.

The operation of the mower and hay conditioner hooked together should be no different from operation of the two implements independently of each other. The speed at which they will be operated together depends largely upon the condition of the crop.

Shorten grass board stick 12 inches to permit clearance when making a 90° turn.

CAUTION: Reduce speed at corners. Do not make a sharp turn, of more than 90°, either to the right or left. Should mower or hay conditioner become clogged at corners, straighten out powershaft before attempting to clean out.

IMPORTANT: Before operating Hay Conditioner with a No. 8 or a No. 8W Mower inflate caster wheel tire to 40 pounds pressure.



SAFETY SUGGESTIONS



Investigation of thousands of farm machinery accidents shows that careless use of farm machinery causes nearly 1/3 of all farm accidents. You can make your farm a safer place to live and work if you observe these safety suggestions. Study them carefully and insist that they be followed by those working with you and for you.

Machinery should be operated only by responsible persons who have been delegated to do so.

Clothing worn by operator should be fairly tight and belted. Loose jackets, skirts, shirts, or sleeves should never be worn because of the danger of getting into moving parts.

Be sure powershaft shields are in place and in good condition.

Make sure everyone is clear of machinery before starting so no one can be struck by moving parts.

Don't allow anyone to stand behind the hay conditioner while it is running.

Never clean, oil, or adjust either the mower or hay conditioner with the tractor engine running.

When transporting on a highway, keep as far to the right as possible. Hang a red flag prominently on the rear of the hay conditioner when transporting during the day. Never transport at night unless the tractor is equipped with lights in good working condition. When transporting on a public road at night or during other periods of low visibility, use a warning lamp on the tractor.

Keep a first-aid kit handy for use in case of accident. Apply proper antiseptics to cuts and scratches without delay, to prevent the possibility of infection.

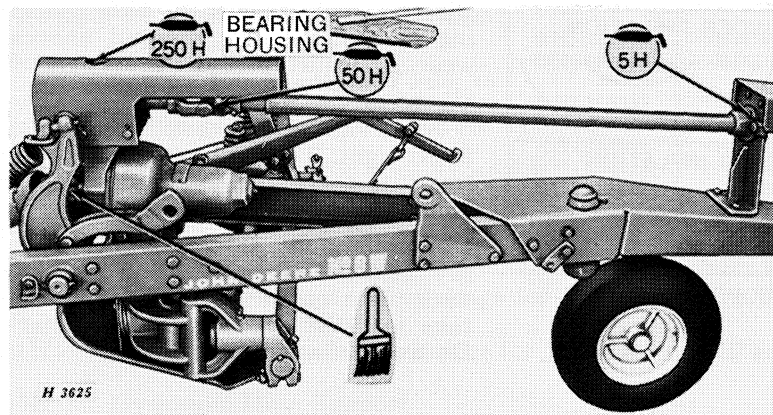
LUBRICATION

The economical and efficient operation of any machine or equipment is dependent upon regular and proper lubrication. Neglect leads to reduced efficiency, heavy draft, wear, breakdown, and replacement of parts.

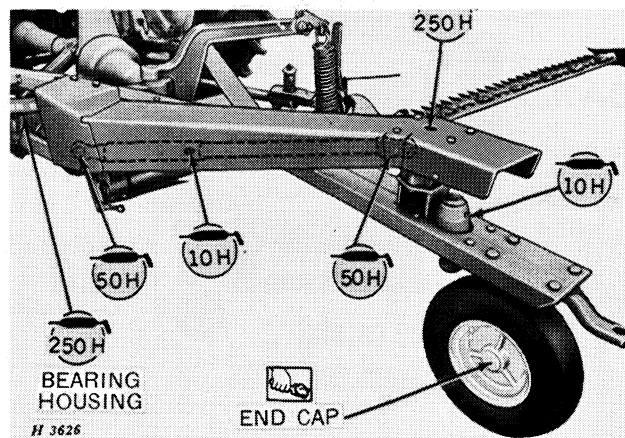
Lubricate the Nos. 8, 8W, 9 and 9W Mowers and the Hay Conditioner

as instructed in the Operator's Manuals furnished with those machines.

Wipe dirt from grease fittings and nozzle of grease gun before greasing. Use SAE multipurpose grease in grease gun. Grease each fitting periodically, as specified. Replace all missing grease fittings immediately.



Hookup and Drive for No. 8W Mower



Hookup and Drive for No. 9W Mower

SYMBOLS



Grease every 5 hours of operation.



Grease every 10 hours of operation.



Grease every 50 hours of operation.



Grease every 250 hours of operation.



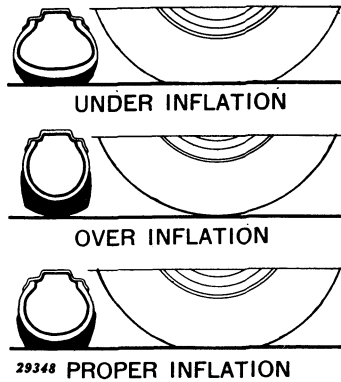
Brush chain with SAE 20 engine oil periodically. Do not lubricate chain in dusty or sandy conditions.



Hand-pack every 250 hours of operation with SAE multipurpose grease.

ADJUSTMENT AND SERVICE

CARE OF PNEUMATIC TIRES



Proper inflation is essential to the long life of a tire. The proper pressure for the 4.00 x 8, 4-ply rated tire on the caster wheel of your No. 9 or No. 9W Hitch Frame is 24 pounds. Lack of pressure allows the tire to slip on the rim, and buckles the side walls, resulting in torn valve stems and uneven tread wear. Too much pressure causes undue strain on tire.

Keep valve cap screwed onto valve stem, finger-tight. This will prevent dirt from getting into the valve core and will assure the sealing of the compressed air in the tube.

Avoid stumps, stones, deep ruts, and other tire hazards. When season is over, store in a dark place and jack up the hitch frame to take load off tire or remove caster wheel. **Do not deflate tire.**



be careful.....
avoid accidents



ASSEMBLY

SHIPPING PACKAGES

ATTACHING HAY CONDITIONER TO No. 8 OR No. 8W MOWERS

Description	No. 8 Mower	No. 8W Mower
Drive Chain Shield.....	H24913H	H24913H
Front Drive Shaft with Sprocket, Etc., for Hay Conditioner.....	BH50220H BH50221H	BH50220H BH50222H
Bearing Support.....		
Rear Universal Shield for Hay Conditioner, Prior to Serial No. 20501.....	AH12365H	AH12365H
Rear Universal Shield for Hay Conditioner, Serial No. 20501 and Up.....	AH13619H AH12361H	AH13619H AH13646H
Hitch Frame.....	BH50197H	BH50197H
Main Drive Shaft with Joint and Shield Tube.....		

If Hay Conditioner Is Equipped with Hydraulic Remote Cylinder, Order:

BH50003H Hydraulic Hoses and Couplings for all John Deere Tractors
or
Except 3010 and 4010

BH50291H Hydraulic Hoses and Couplings for John Deere 3010 and 4010
with

BH50004H Hydraulic Hose Support

If Hay Conditioner Is Equipped with Throw-Out Clutch, Order:

BH50148H Throw-Out Rope and Guide

TRACTOR HOOKUP SHIPPING PACKAGES

No. 8 AND No. 8W MOWERS

Tractor	Extension Drawbar	Shielded Powershaft (Prior to Serial No. 8-20501)	Shielded Powershaft (Serial No. 8-20501 and Up)	Optional Cutter Bar Lift Equipment Choose One*	Miscellaneous
John Deere 1010 Single Row-Crop	BH10036H	BH50008H	BH50110H	106, 111 or 112	
John Deere 1010 Utility Equipped with 14.9-24 Tires	A2348H	BH50008H	BH50110H	106, 111 or 112	Two Z9585H Extension Drawbar Filler Plates
John Deere 2010 Row-Crop and Row-Crop Utility	BH50249H	BH50008H	BH50110H	106, 111 or 112	

*OPTIONAL CUTTER BAR LIFT EQUIPMENT

106 (BH50076H Hydraulic Remote Cylinder Adapting Parts 14903HH Hydraulic Remote Cylinder Hose Support	111 BH50070H Hand Lift Parts 112 BH50251H Rockshaft Lift Parts
--	---

TRACTOR HOOKUP SHIPPING PACKAGES—Continued

No. 8 AND No. 8W MOWERS

Tractor	Extension Drawbar	Shielded Powershaft (Prior to Serial No. 8-20501)	Shielded Powershaft (Serial No. 8-20501 and Up)	Optional Cutter Bar Lift Equipment Choose One*	Miscellaneous
John Deere 420 Standard, Serial No. 100,001 and Up; 430 Standard, 330 Standard, and 320 Standard	BH10036H	BH50008H	BH50110H	106, 108, or 111	
John Deere 420 Standard Prior to Serial No. 100,000 and 40 Standard	A2347HH	BH50008H	BH50110H	106, 108, or 111	
John Deere 430 Tricycle, 420 Tricycle, and 40 Tricycle	A2346HH	BH50008H	BH50110H	106, 108, or 111	
John Deere 435 Diesel; 430 Row-Crop Utility, 420 Row-Crop Utility, and 40 Two-Row Utility	A2348HH	BH50008H	BH50110H	106, 108, or 111	
John Deere 430 Utility, 420 Utility, 40 Utility, 330 Utility, and 320 Utility	A2348HH	BH50008H	BH50110H	106, 108, or 111	
John Deere 420 Utility, Serial No. 100,001 and Up; and 430 Utility; Equipped with 11-26 or 12-26 Tires	A2348HH	BH50008H	BH50110H	106, 108, or 111	Two Z9385H Extension Drawbar Filler Plates

TRACTOR HOOKUP SHIPPING PACKAGES—Continued

No. 8 AND No. 8W MOWERS

Tractor	Extension Drawbar	Shielded Powershaft (Prior to Serial No. 8-20501)	Shielded Powershaft (Serial No. 8-20501 and Up)	Optional Cutter Bar Lift Equipment Choose One*	Miscellaneous
John Deere 3010 Row-Crop, Row-Crop Utility, Standard, and Orchard	BH50250H	BH50007H	BH50109H	106, 111, or 112	
John Deere 4010 Row-Crop and Standard	BH50250H	BH50007H	BH50109H	106, 111, or 112	
John Deere 530 Tricycle, 520 Tricycle, 630 Standard, 730 Standard, 620 Standard, and 720 Standard; 630 Tricycle, and 730 Tricycle; 620 Tricycle, and 720 Tricycle without 3-Point Hitch	A2314HH	BH50007H	BH50109H	106, 110, or 111	
John Deere 630 Standard, 730 Standard, 620 Standard, and 720 Standard; 530 Tricycle, 630 Tricycle, 730 Tricycle, 520 Tricycle, 620 Tricycle, and 720 Tricycle with 3-Point Hitch	BH50053H	BH50007H	BH50109H	106, 110, or 111	

***OPTIONAL CUTTER BAR LIFT EQUIPMENT**

106 BH50076H Hydraulic Remote Cylinder Adapting Parts	110 BH50077H Rockshaft Lift Parts
14903HH Hydraulic Remote Cylinder Hose Support	BH10035H Rockshaft Arm Extension
108 BH50077H Rockshaft Lift Parts	111 BH50070H Hand Lift Parts
	112 BH50251H Rockshaft Lift Parts

TRACTOR HOOKUP SHIPPING PACKAGES—Continued
No. 8 AND No. 8W MOWERS

Tractor	Extension Drawbar	Shielded Powershaft (Prior to Serial No. 8-20501)	Shielded Powershaft (Serial No. 8-20501 and Up)	Optional Cutter Bar Lift Equipment Choose One*	Miscellaneous
John Deere 730 Standard; 730 Tricycle, 720 Standard, and 720 Tricycle with Heavy-Duty Drawbar	A2409HH	BH50008H	BH50110H	106, 110, or 111	
John Deere 50, 60 Standard, Serial No. 6043000 and Up, 70 Standard; 60 Tricycle, and 70 Tricycle; with Direct Engine Driven PTO	A2314HH	BH50007H	BH50109H	106, 109, or 111	
John Deere 70 Standard, and 70 Tricycle with Transmission Driven and Direct Engine Driven PTO, and Heavy-Duty Drawbar	A2409HH	BH50008H	BH50110H	106, 109, or 111	
John Deere 50, 60 Standard Serial No. 6043000 and Up, 70 Standard; 60 Tricycle, and 70 Tricycle; with Transmission Driven PTO	A2254HH	BH50007H	BH50109H	106, 109, or 111	

TRACTOR HOOKUP SHIPPING PACKAGES—Continued**No. 8 AND No. 8W MOWERS**

Tractor	Extension Drawbar	Shielded Powershaft (Prior to Serial No. 8-20501)	Shielded Powershaft (Serial No. 8-20501 and Up)	Optional Cutter Bar Lift Equipment Choose One*	Miscellaneous
John Deere 60 Standard, Prior to Serial No. 6043000; and 60 Orchard	A2324HH	BH50008H	BH50110H	106 or 111	
John Deere A, AN, and AW, Serial No. 561902 and Up; B, BN, and BW, Serial No. 186134 and Up, G, Serial No. 43352 and Up	A2254HH	BH50007H	BH50110H	106, 109, or 111	
John Deere AR and AO, Serial No. 272670 and Up	AZ3536H	BH50009H	BH50111H	106, 109, or 111	
John Deere R	A2259HH	BH50009H	BH50111H	106 or 111	

***OPTIONAL CUTTER BAR LIFT EQUIPMENT**

106	BH50076H Hydraulic Remote Cylinder Adapting Parts	109	BH50077H Rockshaft Lift Parts
	14903HH Hydraulic Remote Cylinder Hose Support		A2345HH Rockshaft Lift Arm
108	BH50077H Rockshaft Lift Parts	110	BH50077H Rockshaft Lift Parts
			BH10035H Rockshaft Arm Extension
		111	BH50070H Hand Lift Parts
		112	BH50251H Rockshaft Lift Parts

TRACTOR HOOKUP SHIPPING PACKAGES—Continued**No. 8 AND No. 8W MOWERS**

Tractor	Extension Drawbar	Shielded Powershaft (Prior to Serial No. 8-20501)	Shielded Powershaft (Serial No. 8-20501 and Up)	Optional Cutter Bar Lift Equipment Choose One*	Miscellaneous
Farmall H, Serial No. 118,000 and Up; M and MD, Serial No. 59,956 and Up; Super H, Super M, Super MD, Super M-TA, 300, 350, 400, and 450	A2409HH	BH50009H	BH50111H	106 or 111	
Allis-Chalmers CA without Snap Coupler	A2310HH	BH50008H	BH50110H	106 or 111	
Allis-Chalmers WD and WD-45	A2357HH	BH50008H	BH50110H	106 or 111	
Allis-Chalmers D14 and D17	BH50151H	BH50008H	BH50010H	106, 108, or 111	
Fordson Major Diesel	A2362HH	BH50009H	BH50111H	106, 108, or 111	
Cockshutt 30	A2362HH	BH50009H	BH50111H	106 or 111	A2363HH (Bag of Miscellaneous Parts)
Cockshutt 40 and 50	A2362HH	BH50007H	BH50109H	106 or 111	
Minneapolis-Moline 445 Universal	A2362HH	BH50009H	BH50111H	106, 108, or 111	
Oliver 66, 77, or 88	A2315HH	BH50009H	BH50111H	106 or 111	

***OPTIONAL CUTTER BAR LIFT EQUIPMENT**

106	BH50076H Hydraulic Remote Cylinder Adapting Parts	108	BH50077H Rockshaft Lift Parts
	14903HH Hydraulic Remote Cylinder Hose Support	111	BH50070H Hand Lift Parts

SHIPPING PACKAGES

ATTACHING HAY CONDITIONER TO No. 9 OR No. 9W MOWERS

Description	No. 9 Mower	No. 9W Mower
Hitch Frame.....	BH50122H	BH50133H
Drive Shaft Supports.....	BH50123H	BH50123H
Rear Drive Shaft.....	BH50126H	BH50126H
Front Drive Shaft and Bearing Housing Support.....	BH50124H	BH50124H
Bundle of Miscellaneous Shields.....	BH50125H	BH50138H
Pneumatic Tired Caster Wheel with Axle.....	BH50065H	BH50065H
Universal Joint Shield for Hay Conditioner, Prior to Serial No. 20501.....	H24129H	H24527H
Universal Joint Shield for Hay Conditioner, Serial No. 20501 and Up.....	H24130H	H24528H

If Hay Conditioner Is Equipped with Hydraulic Remote Cylinder, Order:
 BH50003H Hydraulic Hoses and Couplings for all John Deere Tractors
 or Except 3010 and 4010
 BH50291H Hydraulic Hoses and Couplings for John Deere 3010 and 4010
 with
 BH50004H Hydraulic Hose Support

If Hay Conditioner Is Equipped with Throw-Out Clutch, Order:
 BH50148H Throw-Out Rope and Guide

TRACTOR HOOKUP SHIPPING PACKAGES

No. 9 AND No. 9W MOWERS

Tractor	Shielded Powershaft (Prior to Serial No. 9-9501)	Shielded Powershaft (Serial No. 9-9501 and Up)	Attaching Clamps	Miscellaneous
John Deere 1010 Single Row-Crop	BH50006H	BH50108H	BH50063H	
John Deere 1010 Utility	BH50007H	BH50109H	BH50063H	
John Deere 2010 Row-Crop and Row-Crop Utility	BH50007H	BH50109H	BH50144H or BH50064H†	***A2411HH†

†Used with Tractor with Telescoping Draft Links

***Load Control Yoke Lockout

TRACTOR HOOKUP SHIPPING PACKAGES—Continued**No. 9 AND No. 9W MOWERS**

Tractor	Shielded Powershaft (Prior to Serial No. 9-9501)	Shielded Powershaft (Serial No. 9-9501 and Up)	Attaching Clamps	Miscellaneous
John Deere 40, 320, 330, 420, and 430 Utility	BH50007H	BH50109H	BH50063H	
John Deere 40, 320, 330, 420, and 430 Standard; 40, 420, and 430 Tricycle; 420 and 430 Row-Crop Utility; 435 Diesel; 440 Industrial Wheel; Oliver Super 55; Ferguson TO-35 and Ferguson 35	BH50006H	BH50108H	BH50063H	
John Deere 3010 Row-Crop, Row-Crop Utility, Standard and Orchard	BH50006H	BH50108H	BH50064H	**A2411HH
John Deere 4010 Row-Crop and Standard	BH50006H	BH50108H	BH50248H	**BH50021H
John Deere 520, 530, 620, and 630 Tricycle; 620 and 630 Standard	BH50006H	BH50108H	BH50064H	***BH50199H **BH50021H
John Deere 720 Tricycle, Serial No. 7202435 and Up, and 730 Tricycle; 720 Standard, Serial No. 7202435 and Up, and 730 Standard	BH50006H	BH50108H	BH50064H	***BH50191H **BH50021H
John Deere 720, Prior to Serial No. 7202435	BH50006H	BH50108H	BH50064H	***BH50190H **BH50021H

*Also Contains Mast Extension Bracket

**Draft Link Adaptors

***Load Control Yoke Lockout.

TRACTOR HOOKUP SHIPPING PACKAGES—Continued**No. 9 AND No. 9W MOWERS**

Tractor	Shielded Powershaft (Prior to Serial No. 9-9501)	Shielded Powershaft (Serial No. 9-9501 and Up)	Attaching Clamps	Miscel- laneous
John Deere 50 Tricycle, 60 Tricycle, and 60 Standard, 70 Tricycle, and 70 Standard with 800 Series Hitch	BH50006H	BH50108H	*BH50213H	
(For Tractors with 1-3/8 PTO) Ford 600, 700, 800, and 900 Series, Serial No. 110926 and Up and 601, 701, 801, and 901 Series	BH50007H	BH50109H	BH50144H	
(For Tractors with 1-1/8 PTO) Ford 600, 700, 800, and 900 Series, Prior to Serial No. 110926	BH10070H	BH50170H	BH50144H	
Ford 8N and NAA; Ford-Ferguson 2N and 9N; and Ferguson TO-30	BH10070H	BH50170H	BH50063H	
Ferguson TE-20, TO-20	BH10070H	BH50170H	BH50144H	
Minneapolis-Moline 445 Universal	BH50007H	BH50109H	BH50144H	**A2411HH

*Also Contains Mast Extension Bracket.

**Draft Link Adaptors.

***Load Control Yoke Lockout.

ATTACHING HAY CONDITIONER TO No. 8 MOWER

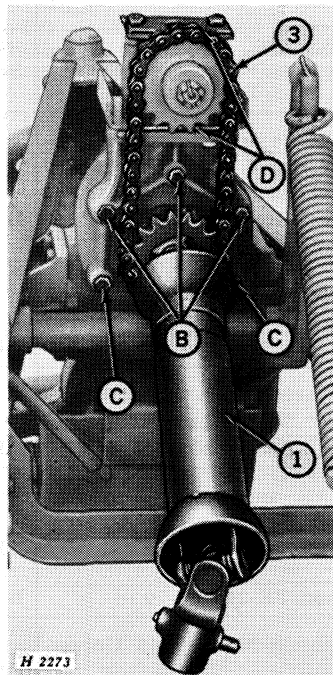
REPLACING SHIELDED POWERSHAFT WITH NEW ONE— INSTALLING FRONT DRIVE ASSEMBLY DRIVE CHAIN AND SHIELD

1. Install shielded powershaft on mower drive shaft. Be sure hole in clamp lines up with groove in shaft. Tighten clamp bolt to 75-80 foot-pounds torque.

2. Remove all but the extreme lower cap screw holding the drive chain housing cover in place and discard cap screws and curved safety shield. Set drive assembly over cover and bolt in place with three 7/16 x 3-inch cap screws at "B" and two 7/16 x 2-1/2-inch cap screws at "C." Tighten to 50-55 foot-pounds torque.

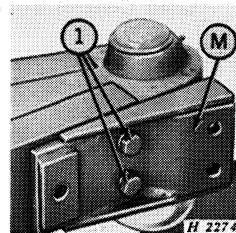
IMPORTANT: Use 1-3/8-inch flat washers between drive assembly and cover at "B" and "C" to align sprockets.

3. Attach drive chain. *NOTE:* Chain should be snug. If not, place one or more spacers "D" between bearing housing and shield support bracket.



INSTALLING HITCH FRAME

1. Remove the three cap screws which hold the left-hand mower frame to the caster wheel support and attach hitch frame reinforcement plate to mower frame with two 1/2 x 1-3/4-inch cap screws and lock washers. Tighten to 75-85 foot-pounds torque.



2. Remove and discard the three cap screws which hold the right-hand mower frame to the caster wheel support. Attach hitch frame to mower. The hardware involved is identified as follows:

E—Three 1/2 x 1-1/4-inch cap screws and 1/2-inch lock washers.

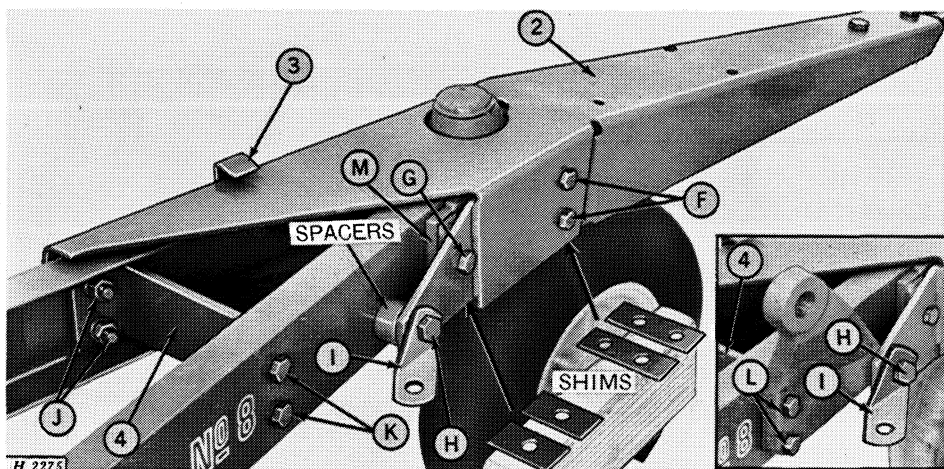
F—Two 1/2 x 1-3/4-inch hex. head bolts, 1/2-inch nuts and lock washers.

G—One 1/2 x 2-1/4-inch cap screw and 1/2-inch lock washer.

H—One 1/2 x 2-1/4-inch hex. head bolt and 1/2-inch nut and lock washer.

ATTACHING HAY CONDITIONER TO No. 8 MOWER—Continued

INSTALLING HITCH FRAME—Continued



NOTE 1: Use four or less shims at point "F" and "G" to provide a snug fit against reinforcement plate "M."

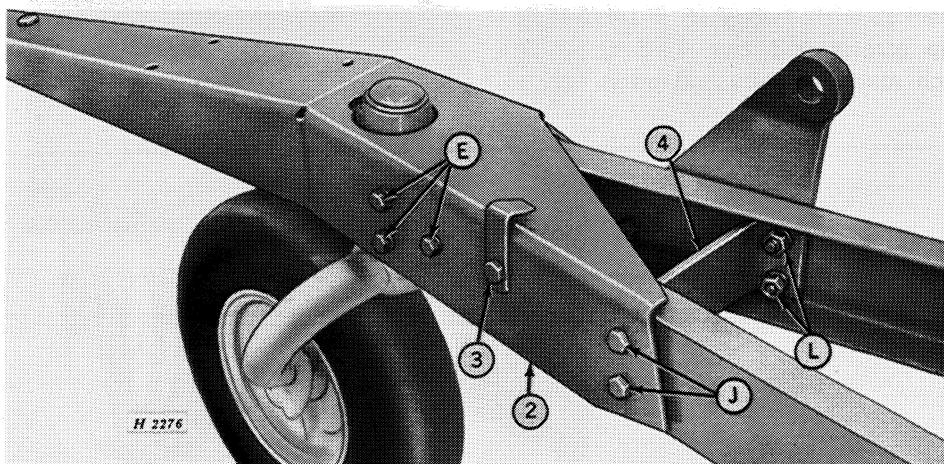
NOTE 2: If mower is not equipped with hydraulic remote cylinder, use round spacer at "H." On mowers prior to Serial No. 8-26635, latch rod clip "I" attaches on outside of hitch frame at "H."

Tighten cap screws and bolts to 75-85 foot-pounds torque.

3. On mowers prior to Serial No. 8-26635, attach new (shorter) latch rod clip to mower with 1/2 x 1-1/4-

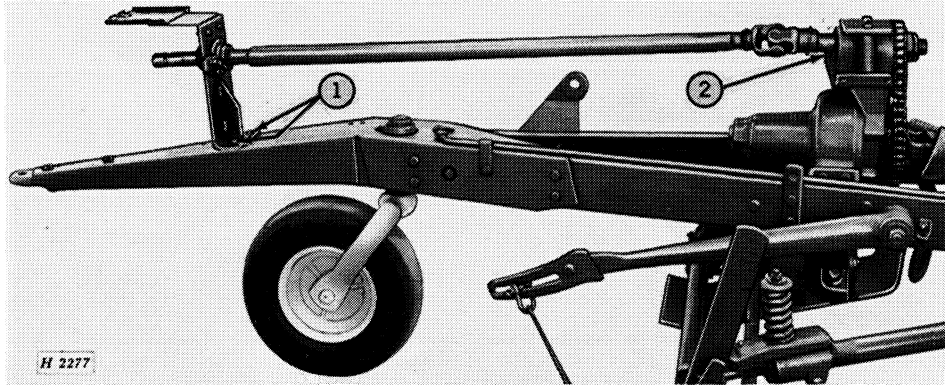
inch bolt and 1/2-inch nut and lock washer. Tighten to 75-85 foot-pounds torque.

4. Assemble brace between mower frames, using two 1/2 x 1-3/4-inch bolts with nuts and lock washers on the right-hand side as shown at "J." On the left-hand side, use two 1/2 x 1-1/4-inch bolts as shown at "K." On mowers equipped with hydraulic remote cylinder anchor bracket, use 1/2 x 2-inch bolts as shown at "L." Tighten bolts to 75-85 foot-pounds torque.



ATTACHING HAY CONDITIONER TO No. 8 MOWER—Continued

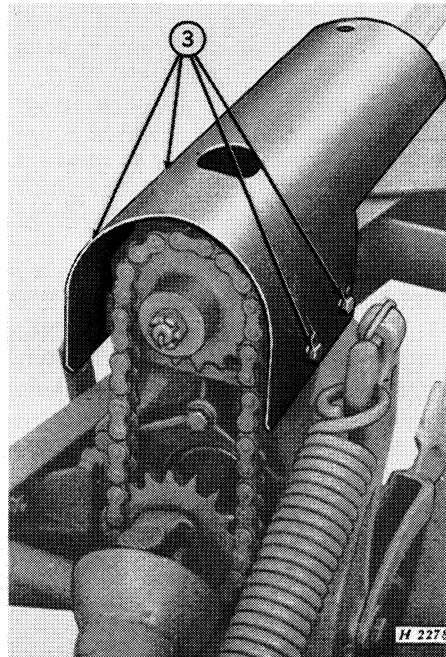
INSTALLING SHIELDED DRIVE SHAFT



1. Slip bearing support plate onto main powershaft and attach to hitch frame with two $\frac{7}{16}$ x $1\frac{1}{4}$ -inch bolts and $\frac{7}{16}$ -inch nuts and lock washers.

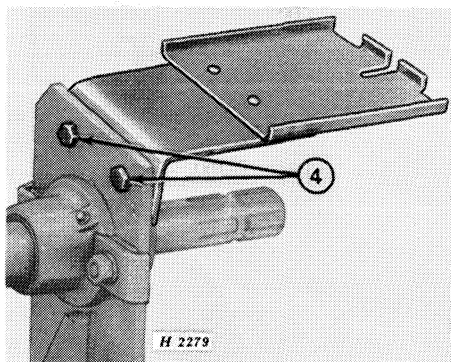
2. Insert Woodruff Key in keyway on shaft. Slide universal joint onto keyed shaft, insert $\frac{5}{16}$ -inch drilled steel pin through yoke and shaft assembly, and insert wire through holes in pin.

3. Bolt chain shield to support bracket with two $\frac{9}{16}$ x $1\frac{1}{2}$ -inch cap screws and two $\frac{9}{16}$ x $1\frac{1}{2}$ -inch machine bolts and nuts.



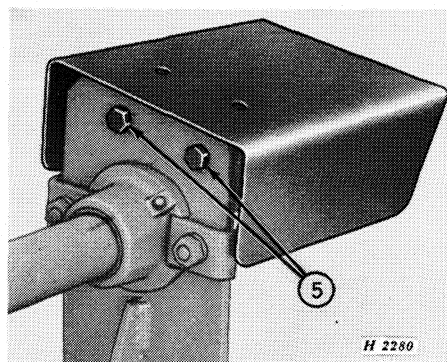
ATTACHING HAY CONDITIONER TO No. 8 MOWER—Continued

INSTALLING SHIELDED DRIVE SHAFT—Continued



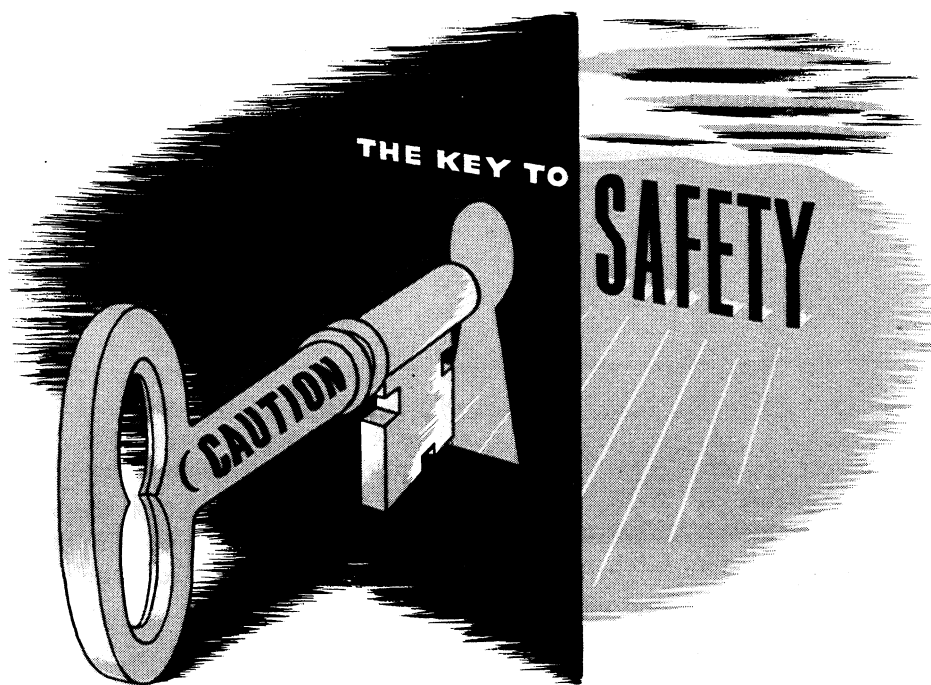
*Hay Conditioner Prior to Serial
No. 20501*

4. When attaching Hay Conditioner, prior to Serial No. 20501 to No. 8 Mower, bolt rear universal joint shield to bearing support with two $3/8 \times 1-1/4$ -inch machine bolts and nuts furnished.



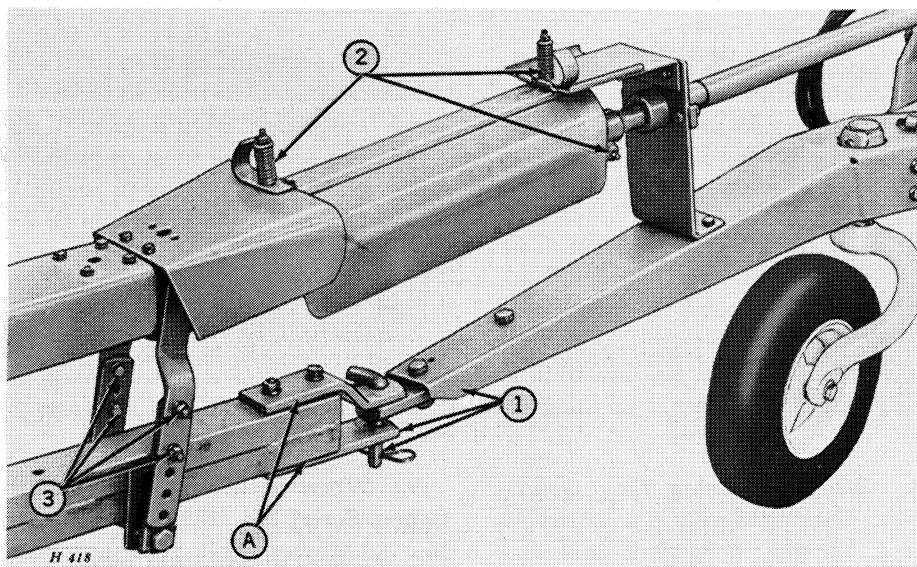
*Hay Conditioner Serial No. 20501
and Up*

5. When attaching Hay Conditioner, Serial No. 20501 and Up, to No. 8 Mower, bolt rear universal joint shield to bearing support with two $3/8 \times 1-1/4$ -inch machine bolts and nuts furnished.

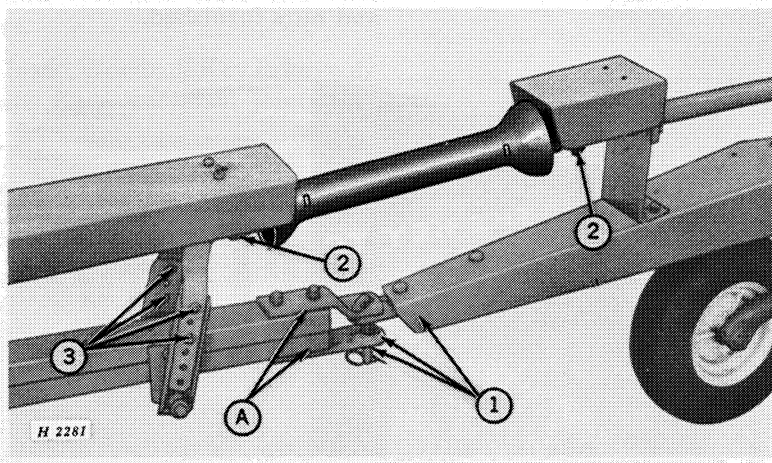


ATTACHING HAY CONDITIONER TO No. 8 MOWER—Continued

ATTACHING HAY CONDITIONER TO HITCH FRAME



Hay Conditioner, Prior to Serial No. 20501



Hay Conditioner, Serial No. 20501 and Up

1. Be certain that hay conditioner hitch plates "A" are bolted in the position shown. Connect hay conditioner to tandem hitch.

2. Depress lock pin and connect

universal joint to splined shaft.

3. Adjust the height of the hay conditioner powershaft so it runs in a straight line as seen from the side. Be sure nuts are tight.

ATTACHING HAY CONDITIONER TO No. 8W MOWER

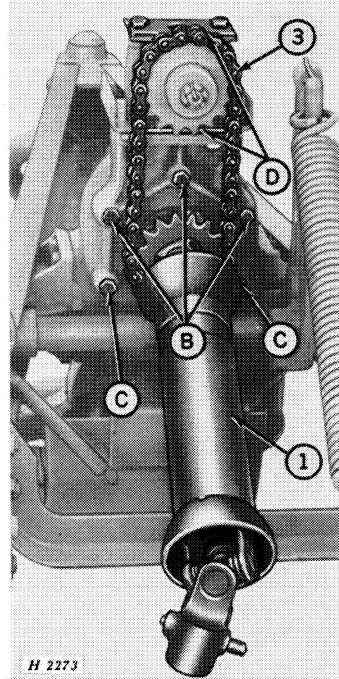
REPLACING SHIELDED POWERSHAFT WITH NEW ONE— INSTALLING FRONT DRIVE ASSEMBLY DRIVE CHAIN AND SHIELD

1. Install shielded powershaft on mower drive shaft. Be sure hole in clamp lines up with groove in shaft. Install and tighten clamp bolt—to 75-80 foot-pounds torque.

2. Remove all but the extreme lower cap screw holding the drive chain housing cover in place and discard cap screws and curved safety shield. Set drive assembly over cover and bolt in place with three 7/16 x 3-inch cap screws at "B" and two 7/16 x 2-1/2-inch cap screws at "C." Tighten to 50-55 foot-pounds torque.

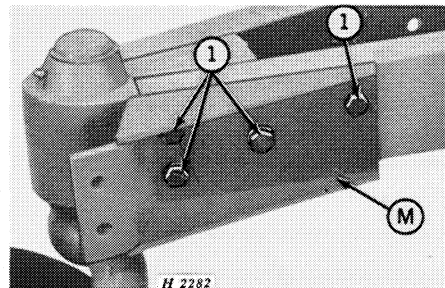
IMPORTANT: Use 1-3/8-inch flat washers between drive assembly and cover at "B" and "C" to align sprockets.

3. Attach drive chain. *NOTE: Chain should be snug. If not, place one or more spacers "D" between bearing housing and shield support bracket.*



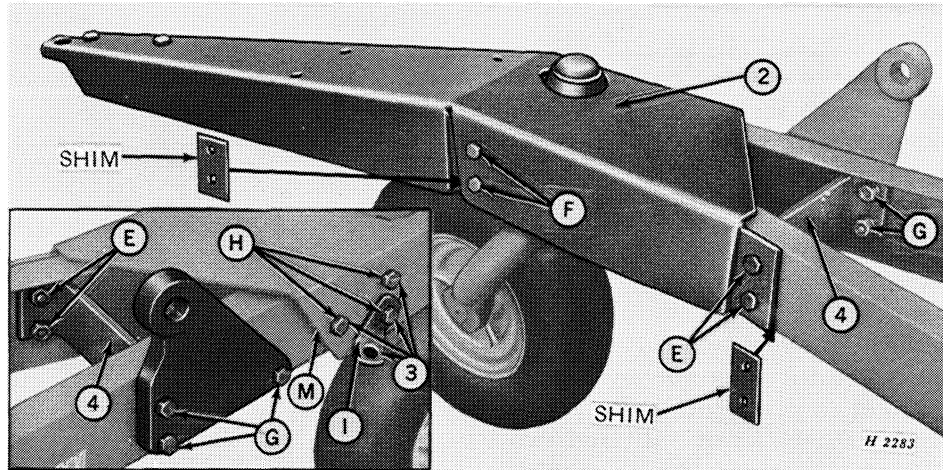
INSTALLING HITCH FRAME

1. Remove cap screws which hold the right-hand frame to the caster wheel support and attach hitch frame reinforcement to plate to mower frame with three 1/2 x 1-3/4-inch cap screws and one 1/2 x 1-1/2-inch machine bolts and nuts. Tighten to 75-85 foot-pounds torque.



ATTACHING HAY CONDITIONER TO No. 8W MOWER—Continued

INSTALLING HITCH FRAME—Continued



2. Remove and discard the three cap screws which hold the left-hand mower frame to the caster wheel support. Attach hitch frame to mower. The hardware involved is identified as follows:

- E. Two 1/2 x 1-1/2-inch cap screws with washers and nuts.
- F. Two 1/2 x 1-3/4-inch cap screws with lock washers and nuts.
- G. (With Hand Lift) Two 1/2 x 1-1/4-inch cap screws with nuts and washers.
(With Power Lift) Three 1/2 x 2-inch cap screws with nuts and washers.
- H. Three 1/2 x 1-3/4-inch cap screws with lock washers.

I. Transport rod clip.

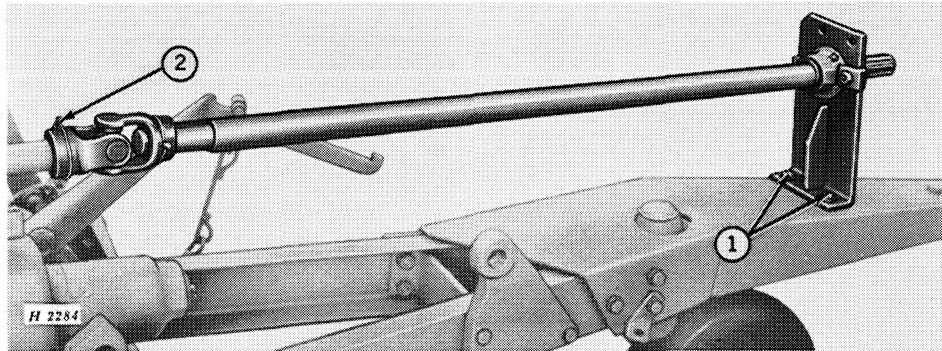
NOTE: Use two or less shims at point "E" and "F" to provide a snug fit against reinforcement plate "M."

3. On mowers, Serial No. 8-20501 and up, secure latch rod clip "I" to mower with three 1/2 x 1-3/4-inch cap screws, nuts, and lock washers.

4. Assemble brace between mower frames, using two 1/2 x 1-1/2-inch cap screws with washers and nuts on the right-hand side as shown at "E." On left-hand side, use three 1/2 x 2-inch cap screws with washers and nuts as shown at "G." On mowers equipped with hand lift, use two 1/2 x 1-1/4-inch cap screws with washers and nuts.

ATTACHING HAY CONDITIONER TO No. 8W MOWER—Continued

INSTALLING SHIELDED DRIVE SHAFT

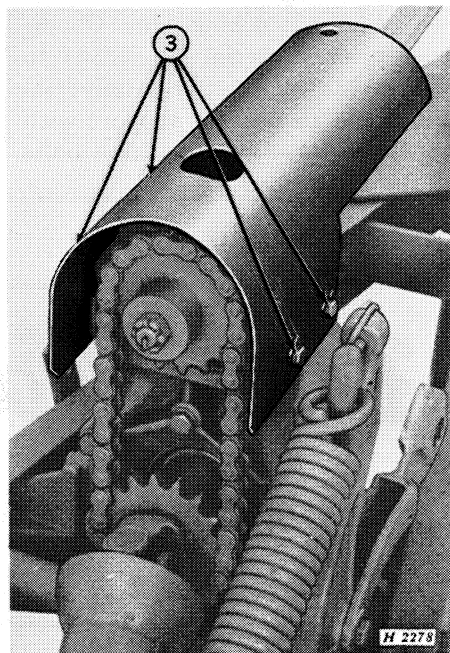


1. Slip bearing support plate onto main powershaft and attach to hitch frame with two 7/16 x 1-1/4-inch bolts, 7/16-inch nuts, and lock washers.

2. Insert Woodruff Key in keyway on shaft.

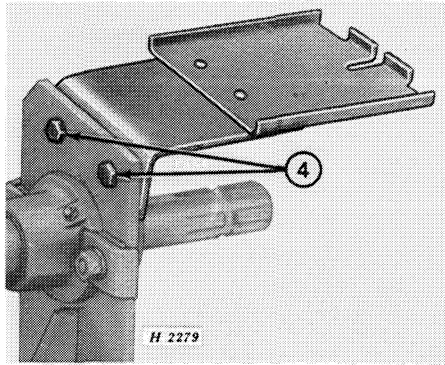
Slide universal joint onto keyed shaft, insert 5/16-inch drilled steel pin through yoke and shaft assembly and insert wire through holes in pin.

3. Bolt chain shield to support bracket with two 9/16 x 1-1/2-inch cap screws, two 9/16 x 1-1/2-inch machine bolts and nuts.



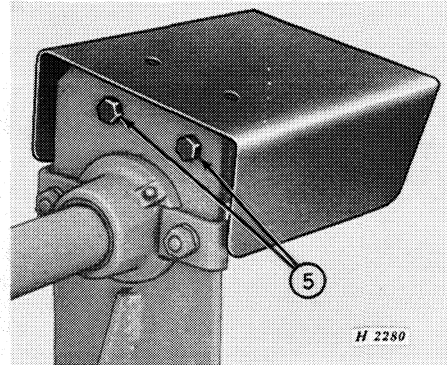
ATTACHING HAY CONDITIONER TO No. 8W MOWER—Continued

INSTALLING SHIELDED DRIVE SHAFT—Continued



*Hay Conditioner, Prior to Serial No.
20501*

4. When attaching Hay Conditioner prior to Serial No. 20501 to No. 8W Mower, bolt rear universal joint shield to bearing support with two $\frac{3}{8}$ x 1- $\frac{1}{4}$ -inch machine bolts and nuts furnished.



*Hay Conditioner, Serial No. 20501
and Up*

5. When attaching Hay Conditioner, Serial No. 20501 and up, to No. 8W Mower, bolt rear universal joint shield to bearing support with two $\frac{3}{8}$ x 1- $\frac{1}{4}$ -inch machine bolts and nuts furnished.

Be Careful

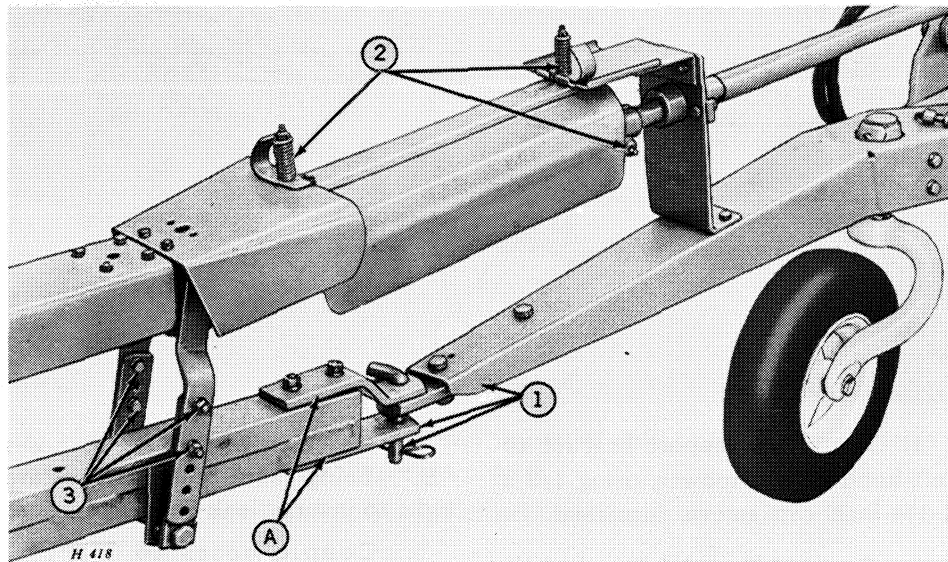


THE LIFE YOU SAVE MAY BE YOUR OWN...

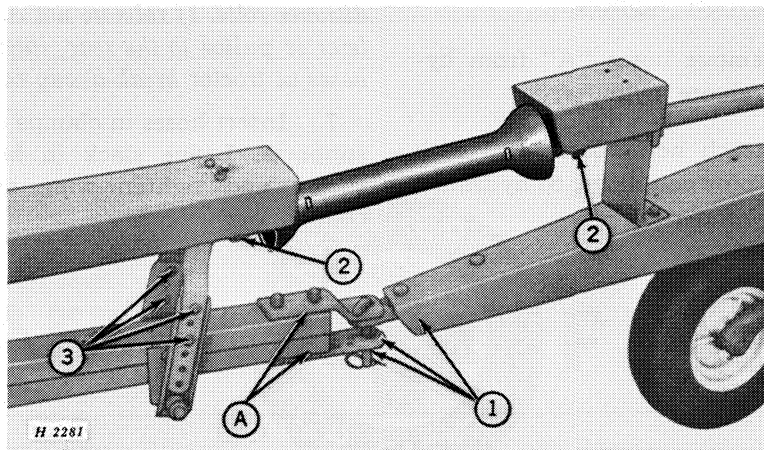
NATIONAL SAFETY COUNCIL

ATTACHING HAY CONDITIONER TO No. 8W MOWER—Continued

ATTACHING HAY CONDITIONER TO HITCH FRAME



Hay Conditioner, Prior to Serial No. 20501



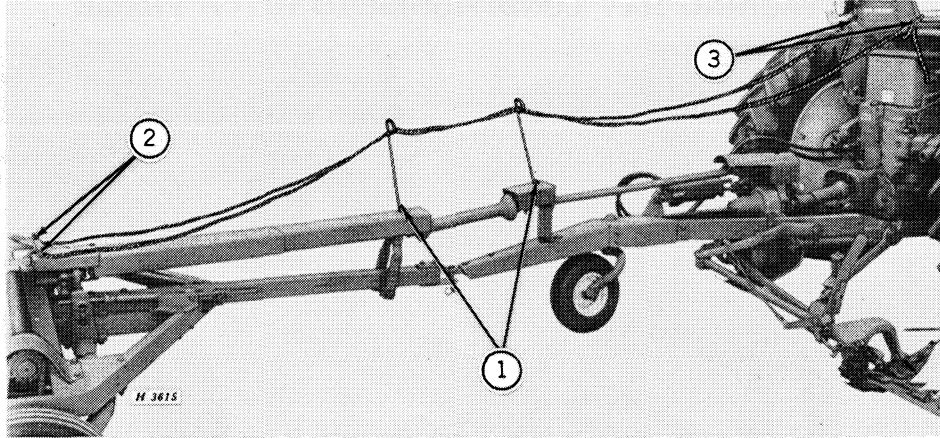
Hay Conditioner, Serial No. 20501 and Up

1. Be certain that hay conditioner hitch plates "A" are bolted in the position shown. Connect hay conditioner to tandem hitch.
2. Depress lock pin and connect

universal joint to splined shaft.

3. Adjust the height of the hay conditioner powershaft so it runs in a straight line as seen from the side. Be sure nuts are tight.

INSTALLING HYDRAULIC REMOTE CYLINDER HOSE EXTENSIONS ON No. 8 AND No. 8W MOWERS



1. Bolt hose support bracket to left-hand side of mower, using 1/2 x 1-1/4-inch cap screws furnished.

2. Insert 1/2 x 1-1/2-inch bolt through bracket and screw into plug in end of hose support.

3. Remove hoses "A" from hydraulic remote cylinder.

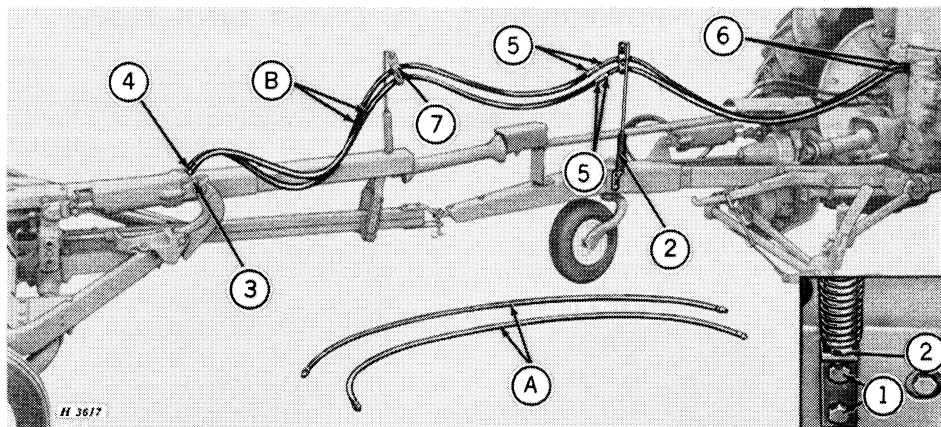
4. Attach new hoses "B," with 1/2-inch pipe couplings, to hydraulic remote cylinder.

5. Reattach hoses "A" to hoses "B," being sure connections are tight to insure "leak-free" operation.

6. Couple hoses to tractor.
NOTE: Pulling control lever on tractor to the rear should raise hay conditioner rolls. If rolls do not rise when lever is pulled to the rear, interchange hoses at tractor break-a-way coupling.

7. Insert hoses in clamps on hose supports. Leave slack in hoses as shown and tighten wing nuts on clamps.

**INSTALLING CONTROL ROPE FOR THROW-OUT
CLUTCH ON HAY CONDITIONER ATTACHED
TO No. 8 AND No. 8W MOWERS**

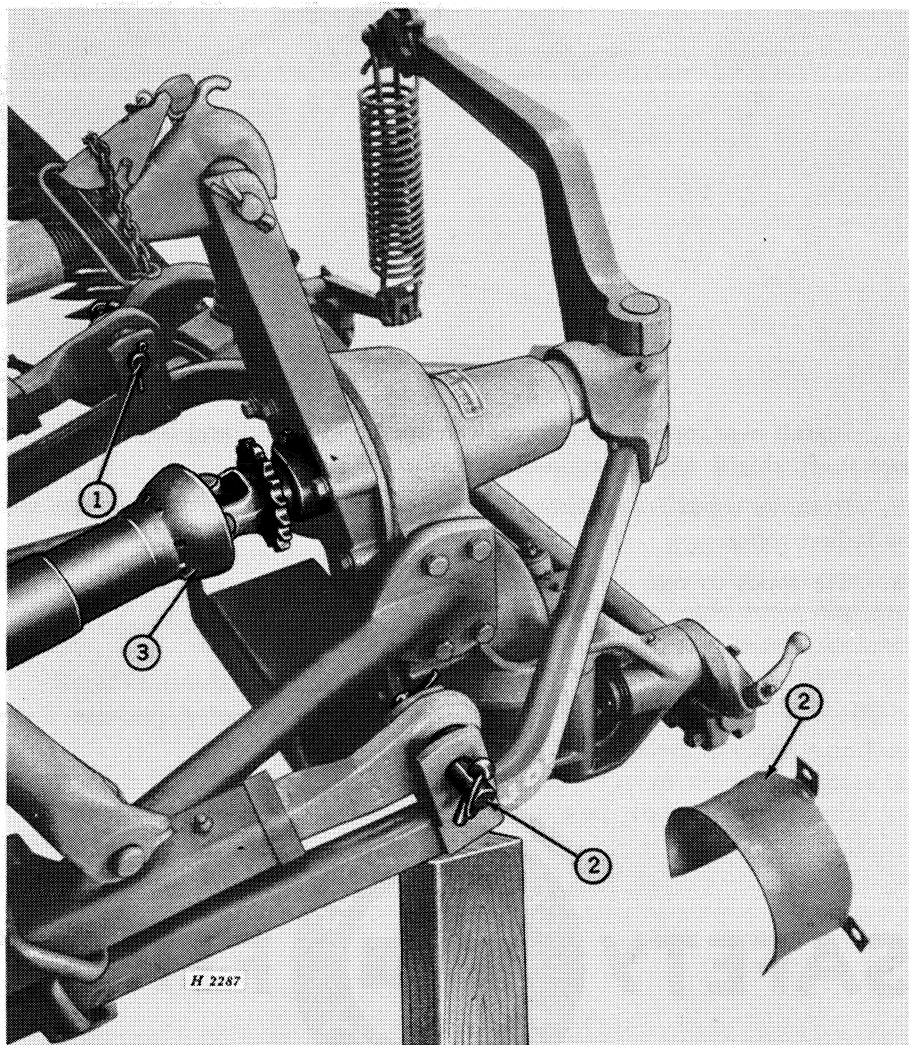


1. Install new rope guides to mower universal shield and hay conditioner powershaft shield with hardware furnished.
2. Remove ropes from throw-out clutch shifting lever, and replace with new longer ropes.
3. Tie ropes to rear of tractor operator's seat.



ATTACHING HAY CONDITIONER TO No. 9 AND No. 9W MOWERS

REPLACING POWERSHAFT AND DRAFT LINK PINS



1. Place blocking under left-hand side of mower. Replace left-hand draft link pin with longer one furnished. Remove blocking and replace the right-hand pin in the same way. Be sure locking pins are to the outside.

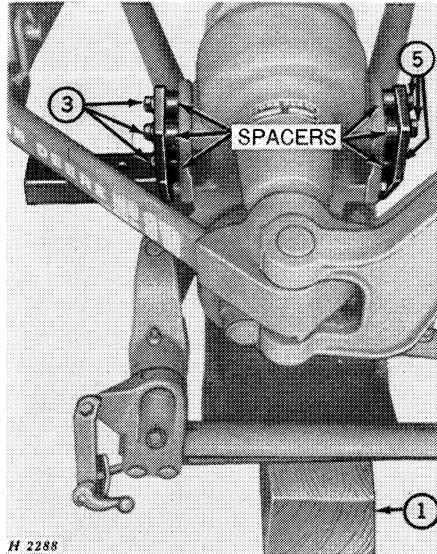
2. Remove curved safety shield.

3. Install shielded powershaft on mower drive shaft. Be sure hole in clamp lines up with groove in shaft.

Tighten clamp bolt to 75-80 foot-pounds torque.

ATTACHING HAY CONDITIONER TO No. 9 AND No. 9W MOWERS—Continued

INSTALLING FRONT DRIVE SHAFT BEARING HOUSING SUPPORT



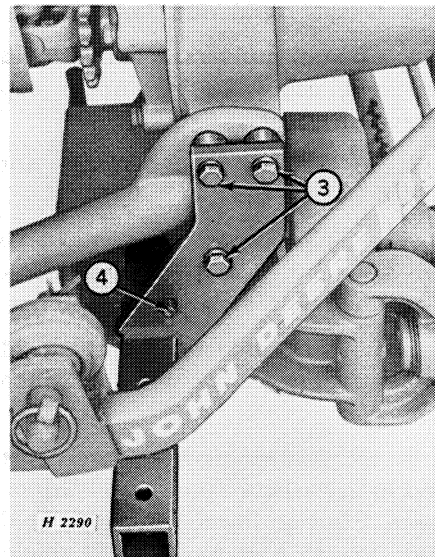
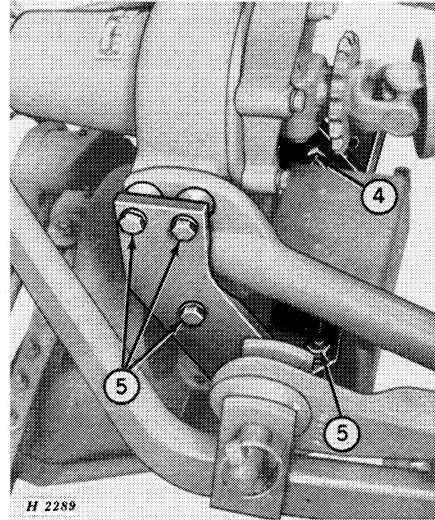
1. Place blocking under flywheel shield so weight of mower is resting firmly on blocking.

2. (Not Illustrated.) Remove the lower front and the two upper cap screws holding support arms to chain drive housing.

3. Attach support tube assembly to left-hand side of chain drive housing using three $1/2 \times 2-3/4$ -inch cap screws and $1/2$ -inch lock washers. Position the $5/8$ -inch spacers between assembly and chain drive housing. Tighten cap screws to 75-80 foot-pounds torque.

4. Thread $1/2$ -inch jam nut onto the $2-3/4$ -inch bolt and then screw bolt into threaded hole in support tube assembly.

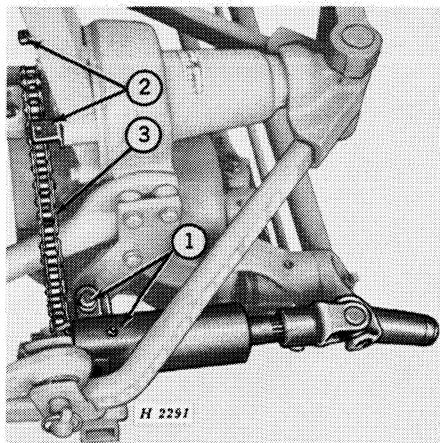
5. Slip clamp assembly over tube and attach to right-hand side of chain drive housing using three $1/2 \times 2-3/4$ -inch cap screws and $1/2$ -inch lock washers. Position the $5/8$ -inch spacers between assembly and chain drive housing. Tighten clamp by using $1/2 \times 3-1/2$ -inch bolt and $1/2$ -inch nut and lock washer. Tighten cap screws to 75-80 foot-pounds torque.



6. (Not Illustrated.) Remove latch rod. Bolt latch rod mounting bracket to hinge casting using a $1/2 \times 1-1/2$ -inch machine bolt, lock washer, and nut. Slip latch rod through hole in mounting bracket and secure with latch nut.

ATTACHING HAY CONDITIONER TO No. 9 AND No. 9W MOWERS—Continued

INSTALLING FRONT DRIVE SHAFT SHIELDS, DRIVE CHAIN, AND DRIVE CHAIN SHIELD



1. Attach front drive shaft bearing housing to support tube assembly with one 1/2 x 6-1/2-inch bolt, lock washer, and nut.

2. Install universal joint shield brackets, using the two upper cap screws in mast.

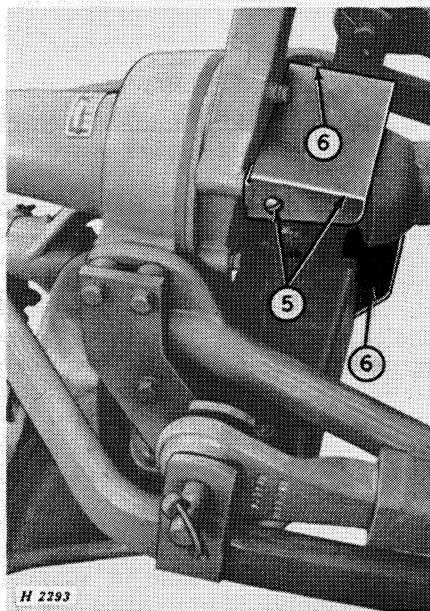
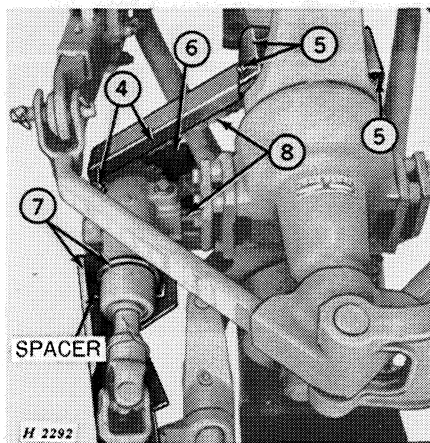
3. Attach drive chain. Do not adjust at this time.

4. Fasten drive chain shield to drive assembly loosely with 1/2 x 6-1/2-inch bolt, lock washer, and nut.

5. Attach universal joint shield to brackets with two 1/4 x 1/2-inch bolts.

6. Remove the two 1/2-inch nuts and lock washers from the 6-1/2-inch bolts. Position lower sprocket shield and lower universal joint shield against under side of support tube. Replace lock washers and nuts.

7. Attach lower universal joint shield to drive shaft bearing housing

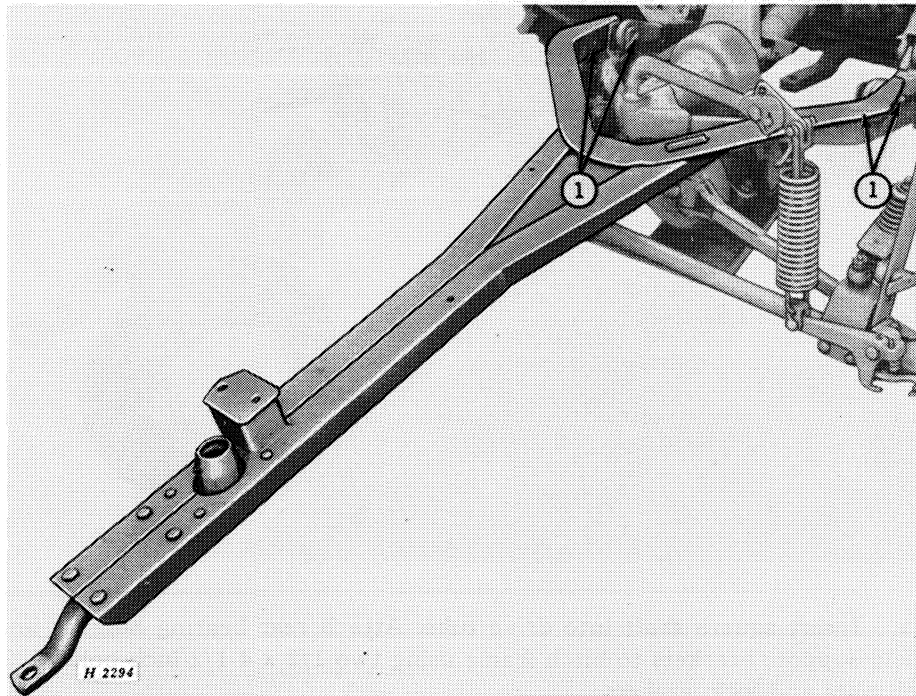


with U-bolt and two 5/16-inch nuts. Spacer goes between shield and bearing housing.

8. Adjust drive chain, so it is snug. Then tighten jam nut. Tighten the two 1/2 x 6-1/2-inch bolts.

ATTACHING HAY CONDITIONER TO No. 9 MOWER—Continued

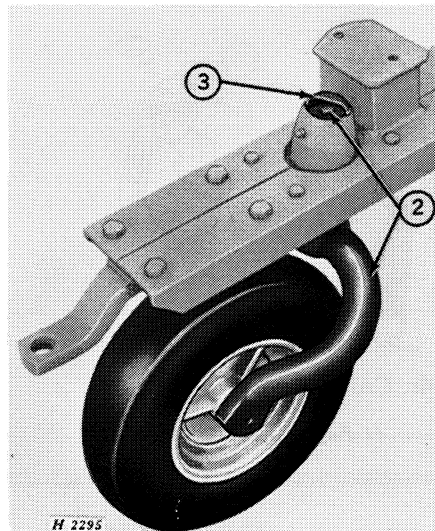
ASSEMBLING HITCH FRAME AND CASTER WHEEL



1. Attach hitch frame to mower, making use of longer draft link pins. Retain in place by inserting locking pins into draft link pins.

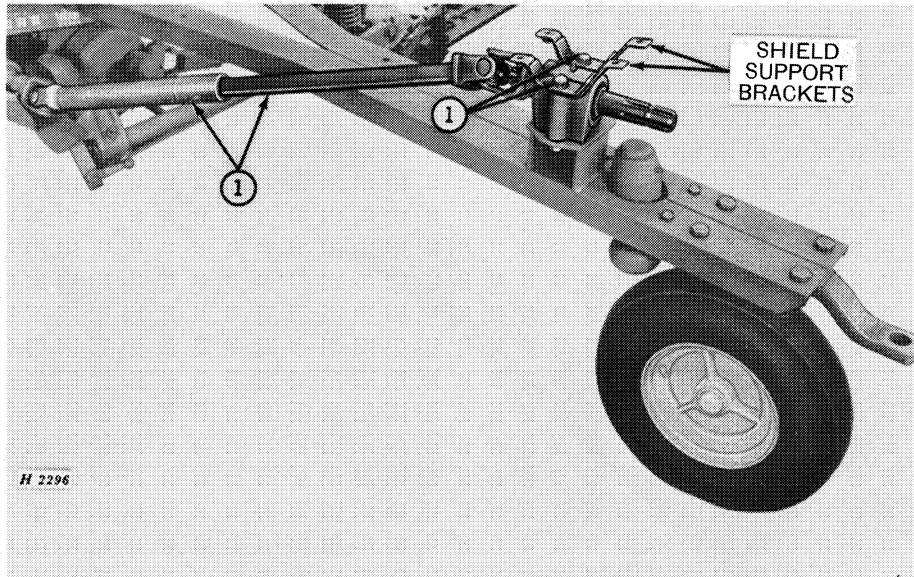
2. Remove cap screw and small washer from stem of caster wheel axle. Make sure that 1-15/32 x 2-inch washer is on stem of axle. Raise rear end of hitch frame and slide stem of axle into support bracket. Replace small washer and cap screw.

3. Slip dust cap into support bracket. (Dust cap cut away in illustration to show cap screw and washer.)



ATTACHING HAY CONDITIONER TO No. 9 MOWER—Continued

INSTALLING DRIVE SHAFT



1. Insert square shaft into drive tube. Attach rear bearing housing and shield support brackets to hitch frame using two $1/2 \times 4-1/2$ -inch bolts, $1/2$ -inch nuts and lock washers.



Mr. Careful₅₆₈₇₁ Mr. Careless

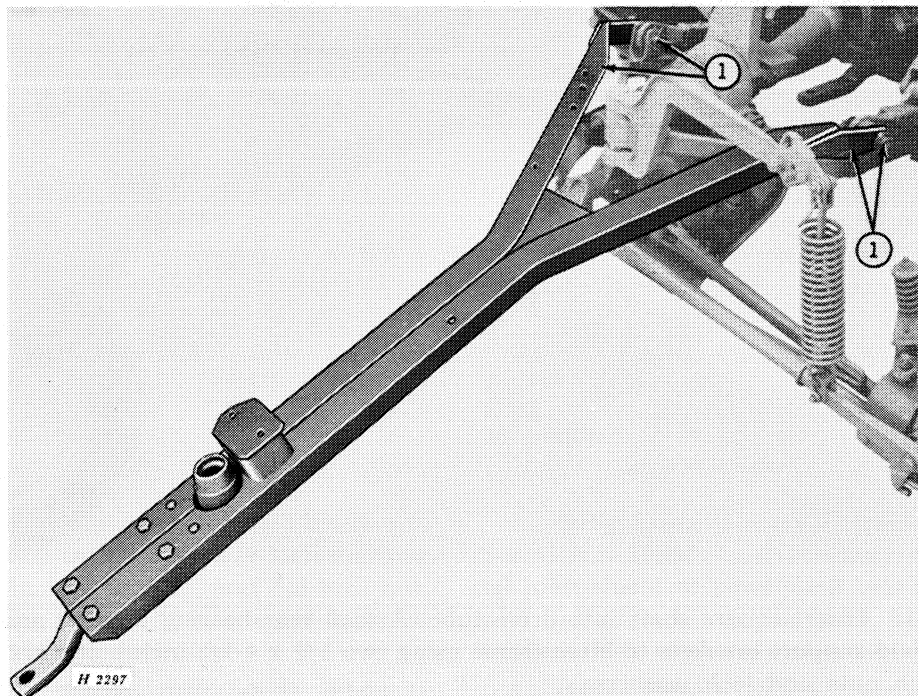
It Pays to be Careful

BE SAFE

It pays to be careful,
It costs to be careless!

ATTACHING HAY CONDITIONER TO No. 9W MOWER

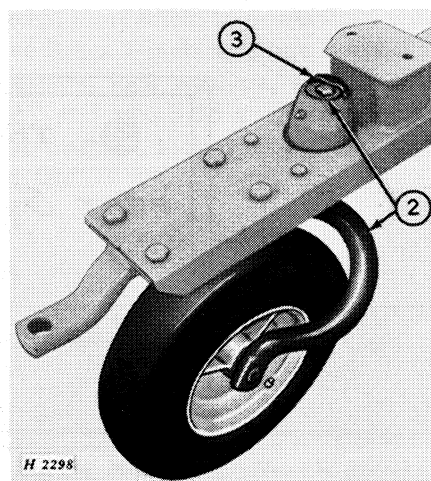
ASSEMBLING HITCH FRAME AND CASTER WHEEL



1. Attach hitch frame to mower, making use of longer draft link pins. Retain in place by inserting locking pins into draft link pins.

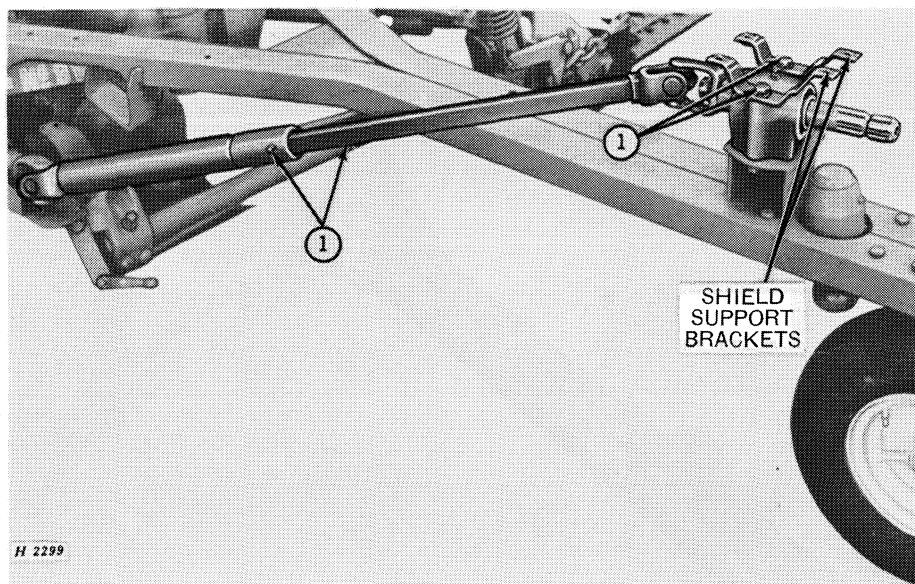
2. Remove cap screw and small washer from stem of caster wheel axle. Make sure that 1-15/32 x 2-inch washer is on stem of axle. Raise rear end of hitch frame and slide stem of axle into support bracket. Replace small washer and cap screw.

3. Slip dust cap into support bracket. (Dust cap cut away in illustration to show cap screw and washer.)



ATTACHING HAY CONDITIONER TO No. 9W MOWER—Continued

INSTALLING DRIVE SHAFT

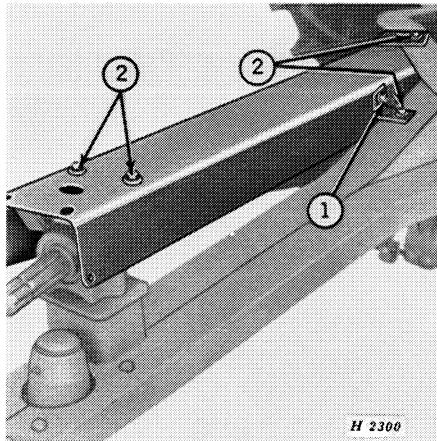


1. Insert square shaft into drive tube. Attach rear bearing housing and shield support brackets to hitch frame using two 1/2 x 4-1/2-inch bolts, 1/2-inch nuts and lock washers.

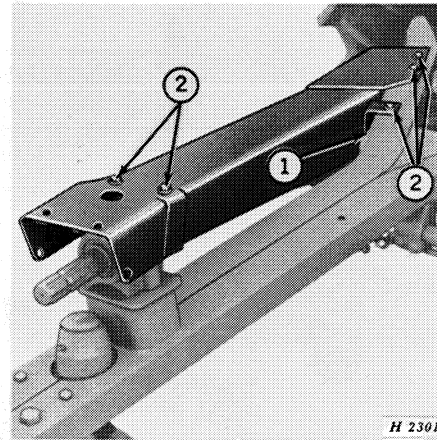


ATTACHING HAY CONDITIONER TO No. 9 AND No. 9W MOWERS—Continued

INSTALLING DRIVE SHAFT SHIELDS



No. 9 Mower



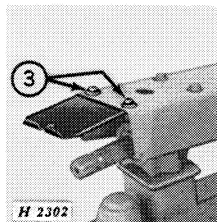
No. 9W Mower

1. Attach "L" shaped bracket to shield with a 3/8 x 3/4-inch machine bolt, lock washer, and 3/8-inch nut, being certain to use a 3/8-inch flat washer on each side.

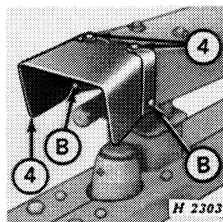
2. Fasten drive shaft shield in place with 3/8 x 1-inch machine bolts, flat washers, lock washers, and nuts. (Four used on No. 9; five used on No. 9W.)

3. (Hay Conditioners Prior to Serial No. 20501.) Attach universal joint shield to powershaft shield with 3/8 x 1-inch machine bolts, flat washers, lock washers, and nuts.

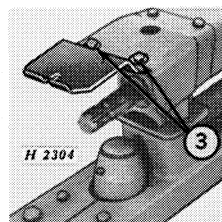
4. (Hay Conditioners, Serial No. 20501 and Up.) Attach universal joint shield to powershaft with two 3/8 x 1-inch machine bolts, flat washers, lock washers, and nuts at "A" and two 5/16 x 1/2-inch bolts, flat washers, lock washers, and nuts at "B."



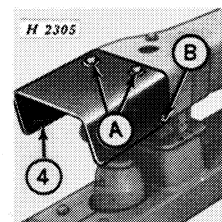
No. 9 Mower with Hay Conditioner, Prior to Serial No. 20501



No. 9 Mower with Hay Conditioner, Serial No. 20501 and Up



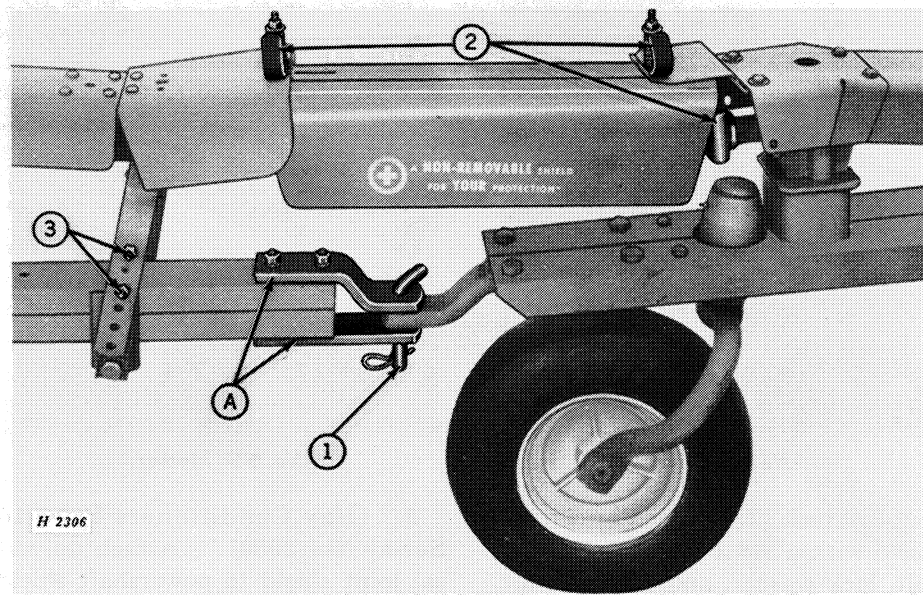
No. 9W Mower with Hay Conditioner, Prior to Serial No. 20501



No. 9W Mower with Hay Conditioner, Serial No. 20501 and Up

ATTACHING HAY CONDITIONER TO No. 9 AND No. 9W MOWERS—Continued

ATTACHING HAY CONDITIONER TO HITCH FRAME

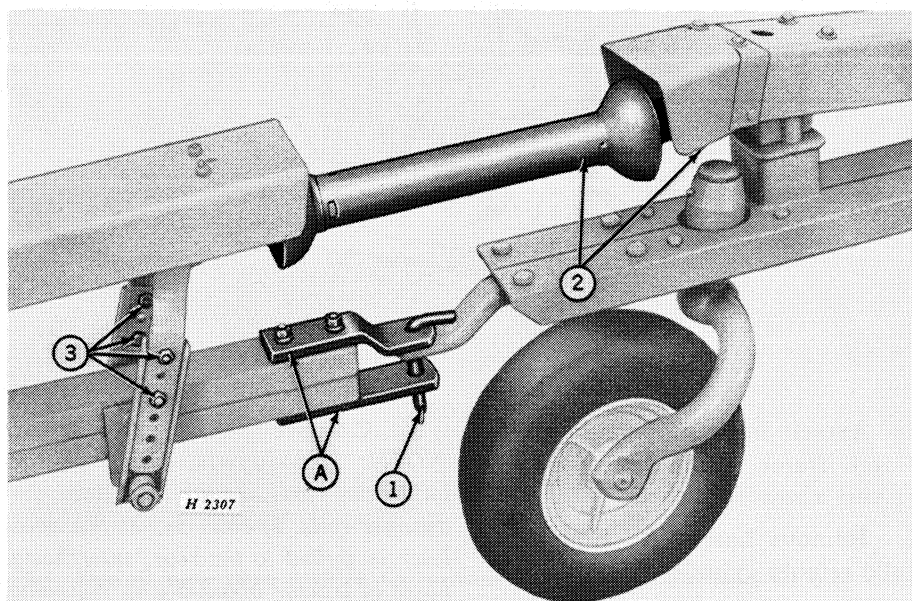


Hay Conditioner Prior to Serial No. 20501

1. Be certain that hay conditioner hitch plates "A" are bolted in the position shown. Line up holes in hitch plates with hole in hitch frame and insert hinge pin. Secure with spring-locking pin.

2. Depress lock pin and connect universal joint to splined shaft. Attach safety shield as shown.

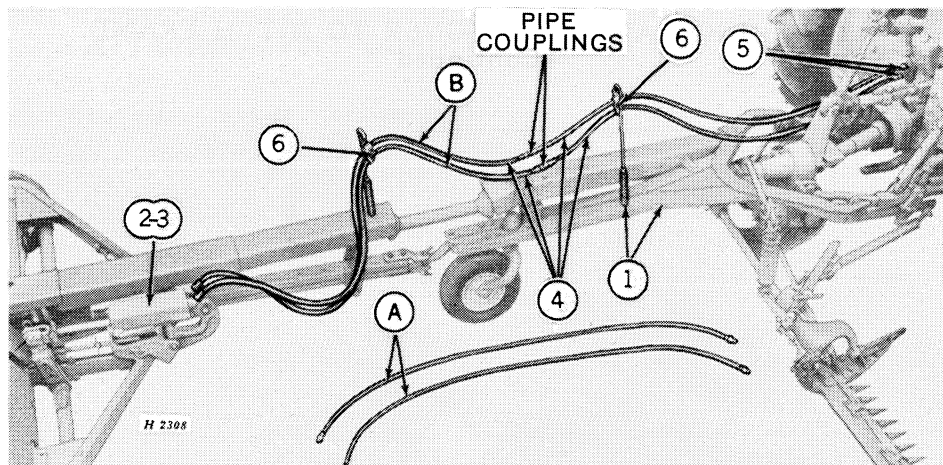
3. Adjust the height of the hay conditioner powershaft so it runs in a straight line as seen from the side. Be sure nuts are tight.

**ATTACHING HAY CONDITIONER TO No. 9 AND No. 9W
MOWERS—Continued****ATTACHING HAY CONDITIONER TO HITCH FRAME
—Continued**

Hay Conditioner Serial No. 20501 and Up

1. Be certain that hay conditioner hitch plates "A" are bolted in the position shown. Line up holes in hitch plates with hole in hitch frame and insert hinge pin. Secure with spring-locking pin.
2. Depress lock pin and connect universal joint to splined shaft.
3. Adjust the height of the hay conditioner powershaft so it runs in a straight line as seen from the side. Be sure nuts are tight.

INSTALLING HYDRAULIC REMOTE CYLINDER HOSE EXTENSION ON No. 9 AND No. 9W MOWERS



1. Attach hose support bracket to hitch frame, using 1/2 x 1-1/2-inch cap screw furnished.

2. Remove hoses "A" from hydraulic remote cylinder.

3. Attach new hoses "B" to hydraulic remote cylinder.

4. Reattach hoses "A" to hoses "B" (with 1/2-inch pipe couplings), being certain the connections are tight to insure "leak-free" operation.

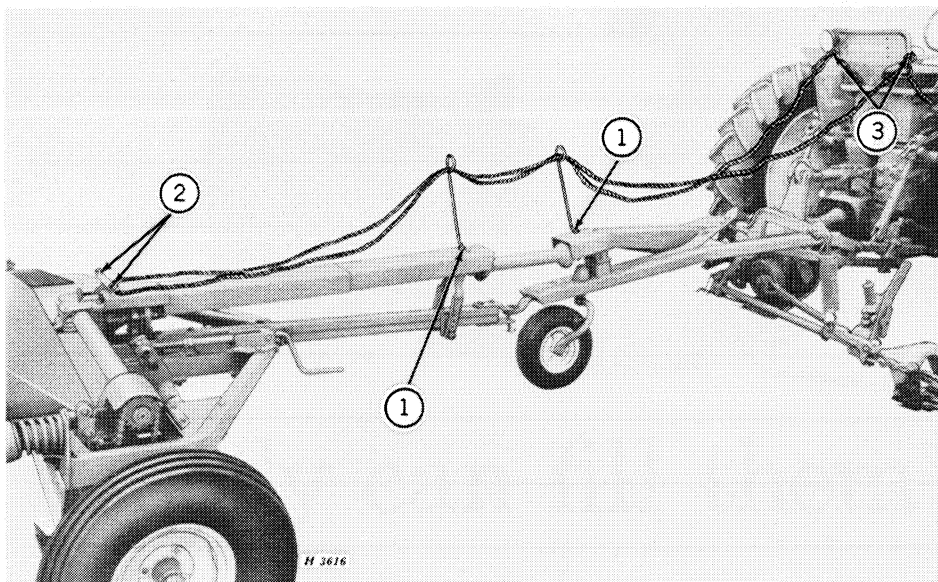
5. Couple hoses to tractor.

NOTE: Pulling control lever on tractor to the rear, should raise hay conditioner rolls. If rolls do not rise when lever is pulled to the rear, interchange hoses at tractor break-a-way coupling.

6. Insert hoses in clamps on hose supports. Leave slack in hoses, as shown, and tighten wing nuts on clamps.

An accident is usually caused by someone's carelessness, neglect, or oversight.

**INSTALLING CONTROL ROPE FOR THROW-OUT
CLUTCH ON HAY CONDITIONER ATTACHED
TO No. 9 AND No. 9W MOWERS**



1. Install new rope guides to mower universal shield and to hay conditioner powershaft shield with hardware furnished.
2. Remove ropes from throw-out clutch shifting lever, and replace with new longer ropes.
3. Tie ropes to rear of tractor operator's seat.

Safety is more than a slogan.
It is an attitude of mind
and a way of life.

MEMORANDA

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



nobody can fill them like you can!

That's what the owner of this pair of work shoes is finding out—the hard way. Through a careless action, he has become the victim of an accident. It's a mighty tough way to find out that nobody else can wear your shoes or practice safety for you. And a needless, costly lesson to learn that safety is an everyday need.

Put safety into each of your workdays; read the operator's manual thoroughly; know how to operate each machine properly and safely; take the safety precautions specified; think before you act.

Make sure you wear your "shoes" everyday. Outfit yourself with a safety program now.

As a member of the National Safety Council, we are privileged to use the Green Cross for Safety to designate not only our interest in Safety, but to emphasize and call attention to the safety precautions in this manual.



