

NEW HOLLAND

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1465

REPAIR MANUAL



NEW HOLLAND

SERVICE

SECTION 00 - GENERAL INFORMATION**Chapter 1 - General Information****CONTENTS**

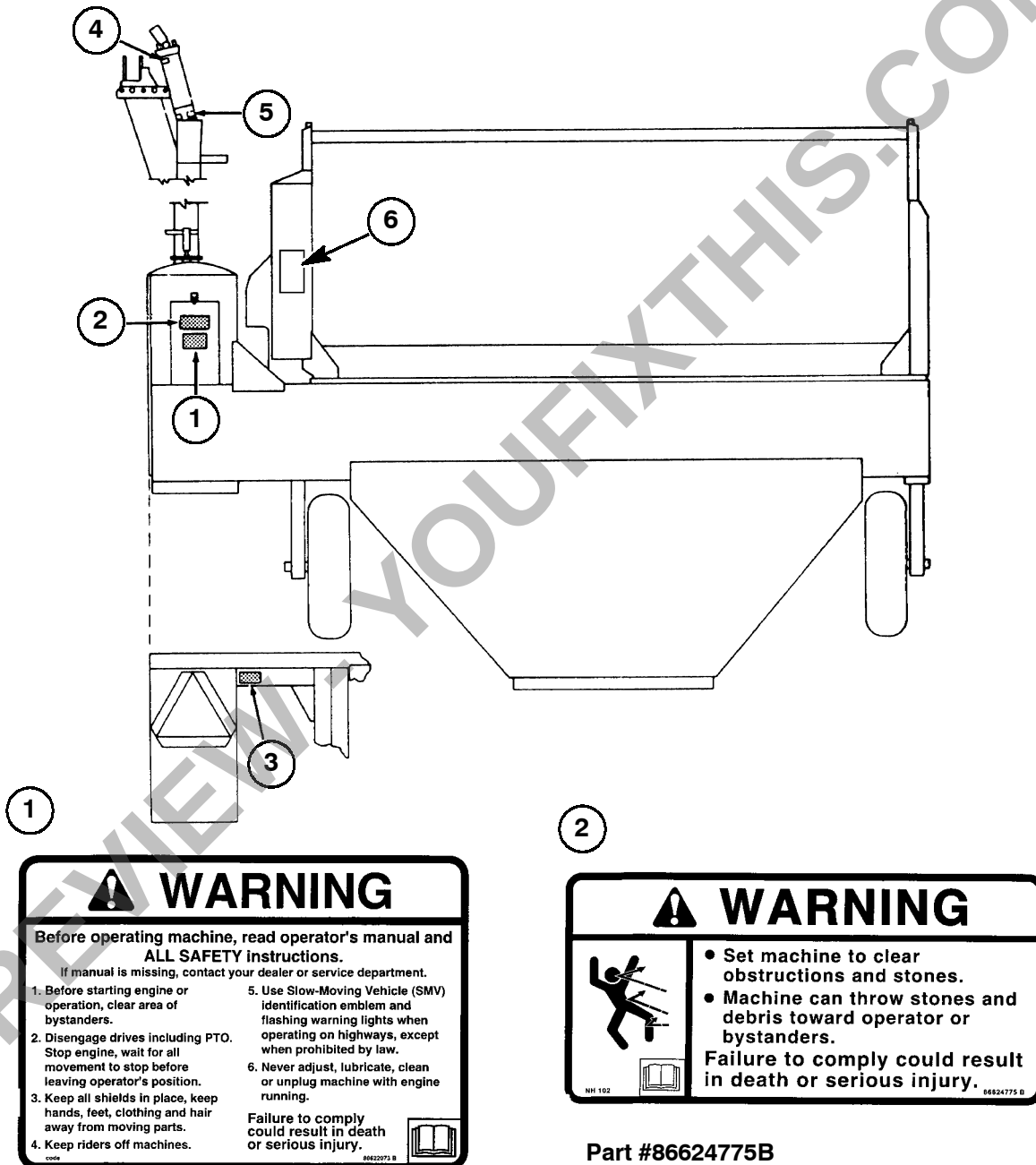
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SAFETY DECALS

The following safety decals have been placed on your machine in the areas indicated. They are intended for your personal safety and for those working with you. Please take this manual and walk around your machine to note the content and location of these warning signs. Review these warning signs

and the operating instructions detailed in this manual with your machine operators.

Keep the decals legible. If they are not, obtain replacements from your authorized dealer. The decal replacement part numbers are listed with each decal.



Part #86622073B

WARNING: Read the complete Operator's Manual and become familiar with starting, operating and safety instructions in the manual and on the unit.

Part #86624775B

WARNING: Operate the unit in such a manner that stones or obstructions will not be encountered.

MINIMUM HARDWARE TIGHTENING TORQUES IN NEWTON-METERS (FOOT POUNDS) FOR NORMAL ASSEMBLY APPLICATIONS

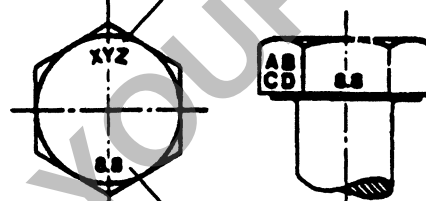
METRIC HARDWARE AND LOCKNUTS

NOMINAL SIZE	CLASS 5.8		CLASS 8.8		CLASS 10.9		LOCKNUT CL.8 w/CL8.8 BOLT
	UNPLATED	PLATED W/ZnCr	UNPLATED	PLATED W/ZnCr	UNPLATED	PLATED W/ZnCr	
M4	1.7 (15*)	2.2 (19*)	2.6 (23*)	3.4 (30*)	3.7 (33*)	4.8 (42*)	1.8 (16*)
M6	5.8 (51*)	7.6 (67*)	8.9 (79*)	12 (102*)	13 (115*)	17 (150*)	6.3 (56*)
M8	14 (124*)	18 (159*)	22 (195*)	28 (248*)	31 (274*)	40 (354*)	15 (133*)
M10	28 (21)	36 (27)	43 (32)	56 (41)	61 (45)	79 (58)	30 (22)
M12	49 (36)	63 (46)	75 (55)	97 (72)	107 (79)	138 (102)	53 (39)
M16	121 (89)	158 (117)	186 (137)	240 (177)	266 (196)	344 (254)	131 (97)
M20	237 (175)	307 (226)	375 (277)	485 (358)	519 (383)	671 (495)	265 (195)
M24	411 (303)	531 (392)	648 (478)	839 (619)	897 (662)	1160 (855)	458 (338)

NOTE: Torque values shown with * are inch pounds.

IDENTIFICATION HEX CAP SCREW AND CARRIAGE BOLTS CLASSES 5.6 AND UP

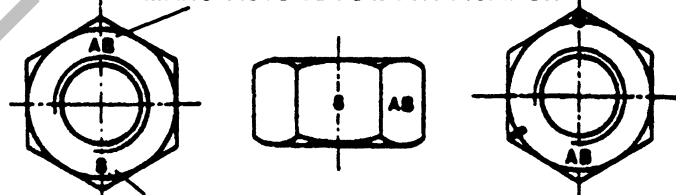
MANUFACTURER'S IDENTIFICATION



PROPERTY CLASS

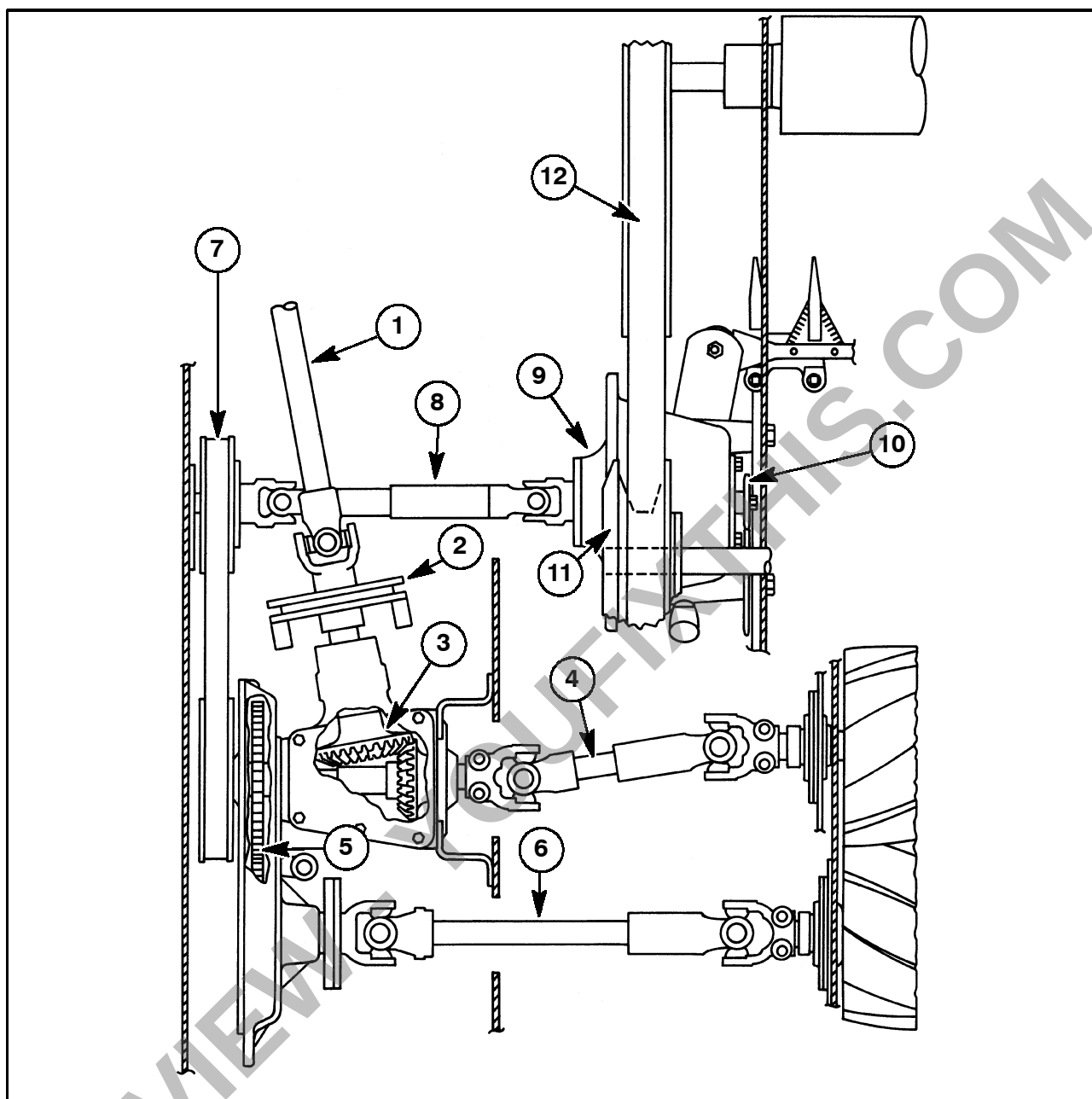
HEX NUTS AND LOCKNUTS CLASSES 05 AND UP

MANUFACTURER'S IDENTIFICATION



PROPERTY CLASS

CLOCK MARKING



5

POWER DISTRIBUTION

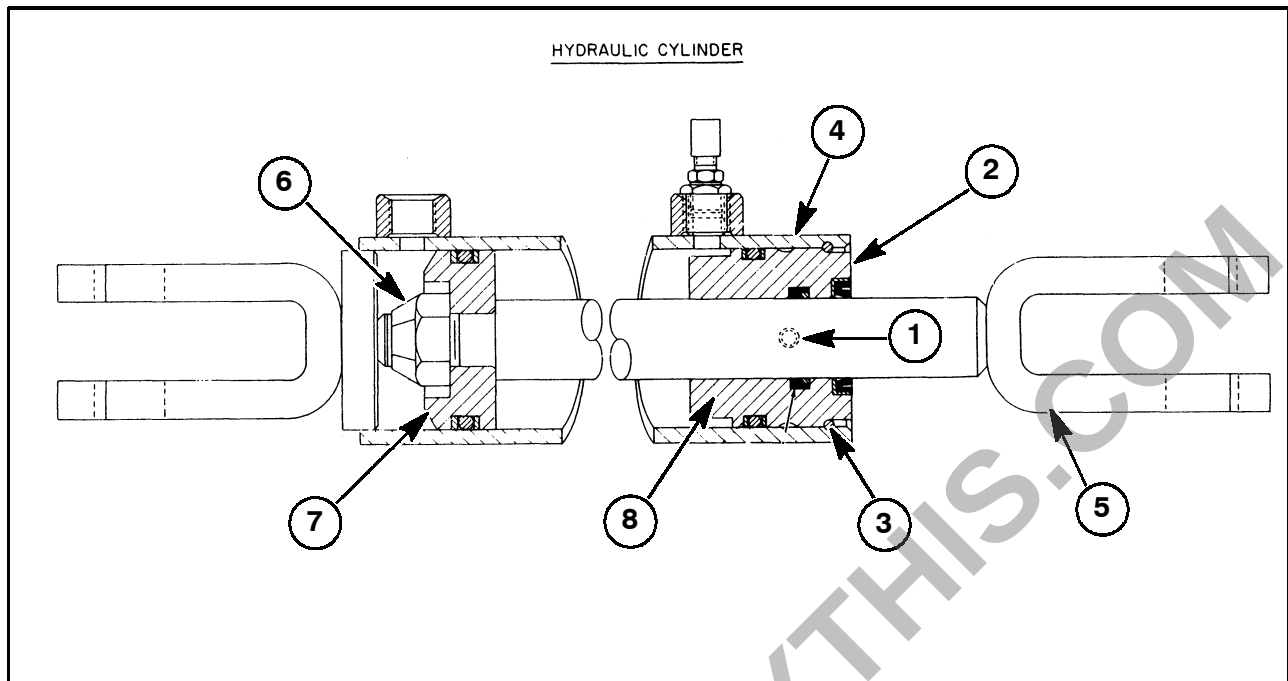
The drive shaft, 1, from the PTO is connected through the slip clutch, 2, to a 100° bevel gearbox, 3.

A PTO, 4, attached to the right of the gearbox drives the upper conditioning roll.

A spur gearbox, 5, at the left of the bevel gearbox supplies power to drive a PTO, 6, for the lower conditioning roll.

A sheave at the left of the spur gearbox drives a belt, 7, that supplies power to a PTO, 8, that drives the enclosed wobble drive gearbox, 9.

A sprocket, 10, at the right of the wobble drive gearbox supplies power to a chain that drives a variable sheave, 11. A belt, 12, from the variable sheave drives the reel.



2

Disassembly

Drain the oil out of the cylinder.

Clean the cylinder to reduce the possibility of damage to cylinder components.

Clamp the base of the cylinder in a vise. DO NOT clamp the barrel in a vise as it may be distorted by pressure from the vise.

Remove setscrew, 1, from the barrel.

Use a large punch and hammer to tap the head, 2, into the barrel until the snap ring, 3, is clear of the head.

Use a blunt screwdriver (remove all sharp edges from the tip) to work the snap ring up and out of the groove in the cylinder, 4. Remove the snap ring. Use emery cloth to remove any nick made in the cylinder

when removing the snap ring. Clean the end of the cylinder.

Cover the port near the head with a rag to catch any residual oil that may be forced out as the piston is removed.

Remove the rod, 5, and head by grasping the rod end and rapidly pulling the assembly out of the cylinder.

Clamp the clevis end of the rod in a vise to remove the piston nut, 6, piston, 7, and head, 8, from the rod.

DO NOT clamp on the piston or rod as it could be damaged.

Remove all seals, O rings, and backup washers from the head and piston.

WOBBLE DRIVE

NOTE: If the internal parts in the wobble gearbox, 1, are worn, the complete gearbox and arm assembly must be replaced. Damaged seals in the bearing caps or the mount may be replaced. An indication of a worn wobble gearbox would be any vertical movement in the shaft where the arm is attached or horizontal movement in the flywheel mounting shaft. The knife arm should move when the flywheel is moved. If there is a delay in arm movement, the internal parts are worn.

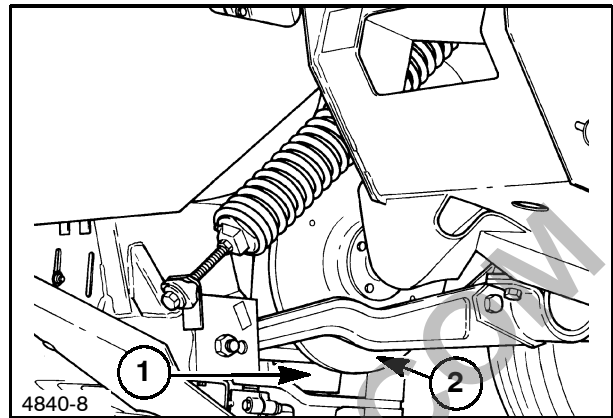
Worn internal parts will cause knife head failures or yoke pins to loosen, creating a knocking noise.

IMPORTANT: Complete wobble gearboxes are shipped without oil. The gearbox must be filled with API-GL5, 80W-90 oil after it is installed on the machine.

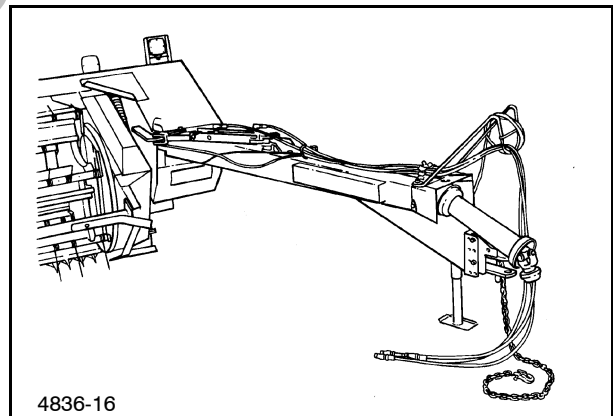
The flywheel, 2, reel drive sprocket, and knife arm weights are not included with a new gearbox. They must be transferred from the original gearbox unless they are damaged or worn in which case they should be replaced with new parts.

Removing the Wobble Drive Gearbox

Shift the tongue to the operating position and lower the header.



1



2

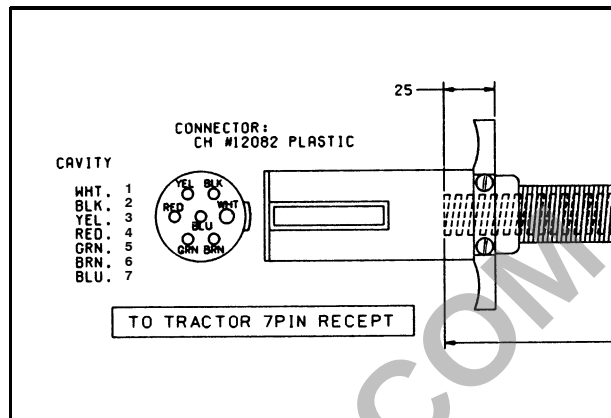
LIGHT WIRING HARNESS, MODEL 1465

The light wiring harness contains the wiring for both the standard amber flashing lights and optional red brake and taillights. It includes an SAE J560 standard 7-pin connector wired as listed below. If the tractor does not have a matching socket, a connector can be installed on the tractor.

If the tractor connector is wired differently, use the wire identification to rearrange the wires in the harness connector plug to match the tractor. The wires in the light harness are color coded and have an identification number printed on them every 50 mm (2"). Use the tractor wiring diagram or, if necessary, use a test light to identify the tractor circuit for each pin in the tractor connector.

The amber lights are used for the flashers and turn signals.

The optional red lights are used for the brake and taillights.



1

PIN	CONNECTOR ID	WIRE ID	ATTACHED TO
1	WHT-WHITE	LM 7A	GROUND
2	BLK-BLACK		NOT USED
3	YEL-YELLOW	LM 6	LEFT TURN AND FLASHER
4	RED-RED	LM 1	BRAKE
5	GRN-GREEN	LM 5	RIGHT TURN AND FLASHER
6	BRN-BROWN	LM 3	TAILLIGHT
7	BLU-BLUE		NOT USED

FOREWORD

Appropriate service methods and correct repair procedures are essential for the safe, reliable operation of all equipment, as well as the personal safety of the individual performing the repair.

This Repair Manual provides troubleshooting and overhaul instructions using recommended procedures and equipment. Following these instructions will ensure the safe, efficient, and timely completion of the service or repair.

The manual is divided into sections which are subdivided into chapters. Each chapter contains information on general operating principles, detailed inspection, overhaul and, where applicable, specific troubleshooting, special tools, and specifications.

Any reference in this manual to right, left, rear, front, top, or bottom is determined by standing behind the machine and looking in the direction of travel.

All data and illustrations in this manual are subject to variations in build specification. This information was correct at the time of issue, but New Holland policy is one of continuous improvement, and the right to change specifications, equipment, or design at any time, without notice, is reserved.

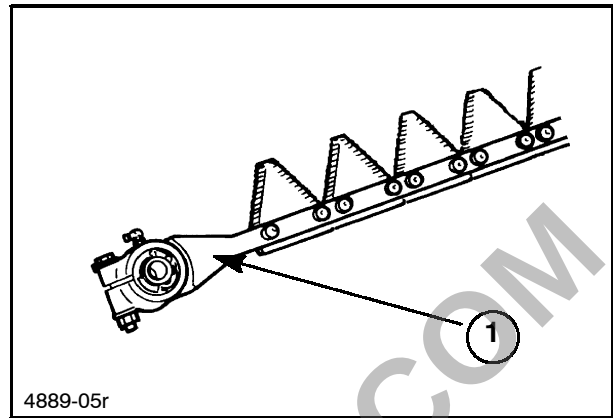
REPAIR TIME SCHEDULE

Procedure	Time
Lift cylinder	
R&R	0.50
Rebuild	1.00
Shift cylinder	
R&R	0.50
Rebuild	1.00

KNIFE HEAD

The knife head, 1, is fastened to the knife back using the same bolts or rivets as the knife sections at the left of the knife assembly. The knife head can be replaced using the same procedures as for replacing a knife section and the knife head bushing. Be sure to use the correct length bolt when replacing the knife head bolts or rivets. The bolted knife head uses six 7/8" long bolts, five 1-1/8" long bolts, and eleven locknuts. Torque the locknuts to a maximum of 8 - 11 N·m (70 - 100 in. lbs.).

The knife head bushing height must be adjusted after the knife assembly is installed in the machine. Refer to "Knife Installation" earlier in this section.



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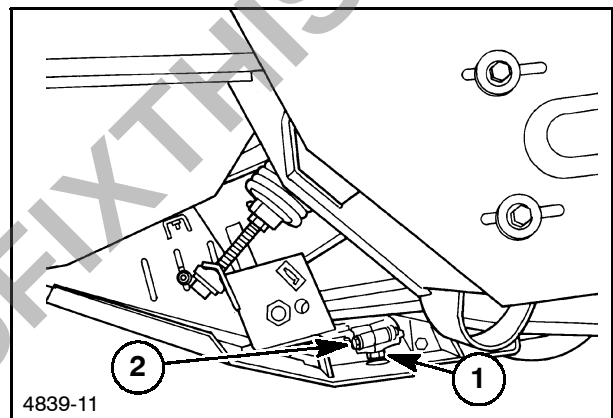
KNIFE HEAD BUSHING

The knife head bushing assembly consists of a housing, bronze bushing, steel spacer, retaining rings, seals, and a roll pin.

To remove the bushing:

Remove the knife head bolt, 1, and slide the knife to the left.

Loosen the bushing clamping bolt, 2, and remove the bushing assembly.



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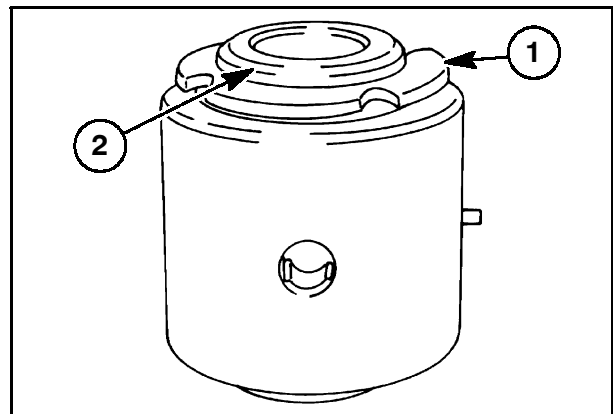
To disassemble the bushing:

Remove a retaining ring, 1, from one end of the bushing center spacer, 2.

Push the spacer out of the housing. Remove the other retaining ring if the spacer is to be replaced.

Remove the seals from the housing.

Remove the bronze bushing from the housing if it is to be replaced.



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