

**NEW HOLLAND**

**346W**

**356W**

**366W**

**REPAIR  
MANUAL**



**NEW HOLLAND**

**SERVICE**

# **346W, 356W, 366W REPAIR MANUAL CONTENTS**

**SECTION 00 - GENERAL INFORMATION**

**SECTION 14 - LIVE PTO**

**SECTION 21 - TRANSMISSION**

**SECTION 39 - FRAMES**

**SECTION 60 - PRODUCT FEEDING**

The sections used through out all New Holland product Repair manuals may not be used for each product. Each Repair manual will be made up of one or several books.

The sections listed above are the sections utilized for the 346W, 356W and 366W Headers.

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**SECTION 00 - GENERAL INFORMATION**

**Chapter 1 - General Information**

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## GENERAL INFORMATION

References to the RIGHT and LEFT sides of the header are determined by facing the direction of forward travel.

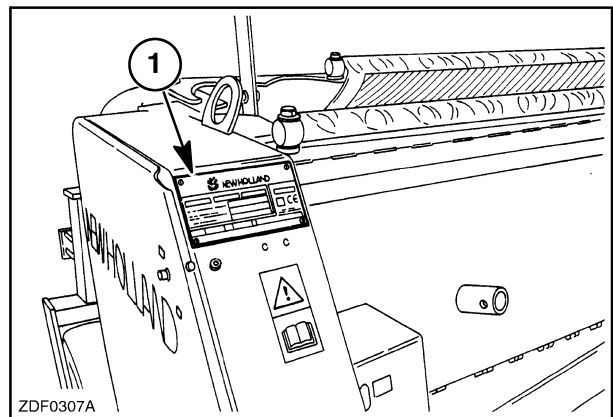
All data given in this manual are subject to production variations. Dimensions and weights are approximate. Illustrations do not necessarily show headers in standard condition. For exact information, please ask your authorized New Holland dealer.

The pictures in this manual may not be of your windrow pickup. This manual covers three models of windrow pickups sold in different areas and with different options. The decals shown may be different than on your unit due to requirements in different countries. Check the operator's manual to determine the correct decals for your windrow pickup.

## PRODUCT IDENTIFICATION NUMBER

The product identification number plate, 1, is located on the rear of the header.

The pickup is assembled using metric hardware wherever possible. English hardware is used as required to use New Holland standard parts. Most of the English hardware is in the reel.



# PRECAUTIONARY STATEMENTS

## PERSONAL SAFETY

Throughout this manual and on machine decals, you will find precautionary statements (“**DANGER**”, “**WARNING**”, and “**CAUTION**”) followed by specific instructions. These precautions are intended for the personal safety of you and those working with you. Please take the time to read them.



**DANGER**



This word “**DANGER**” indicates an immediate hazardous situation that, if not avoided, will result in death or serious injury. The color associated with Danger is **RED**.

---



**WARNING**



This word “**WARNING**” indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury. The color associated with Warning is **ORANGE**.

---



**CAUTION**



This word “**CAUTION**” indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. The color associated with Caution is **YELLOW**.

---

**FAILURE TO FOLLOW THE “DANGER”, “WARNING”, AND “CAUTION” INSTRUCTIONS MAY RESULT IN SERIOUS BODILY INJURY OR DEATH.**

## MACHINE SAFETY

The precautionary statement (“**IMPORTANT**”) is followed by specific instructions. This statement is intended for machine safety.

**IMPORTANT:** *The word “IMPORTANT” is used to inform the reader of something he needs to know to prevent minor machine damage if a certain procedure is not followed.*

## INFORMATION

**NOTE:** *Instructions used to identify and present supplementary information.*

# SAFETY

## PRECAUTIONARY STATEMENTS

A careful operator is the best operator. Most accidents can be avoided by observing certain precautions. To help prevent accidents, read the following precautions before operating this equipment. Equipment should be operated only by those who are responsible and instructed to do so.

Carefully review the procedures given in this manual with all operators. It is important that all operators be familiar with and follow safety precautions.

**You can help to avoid farm accidents by following these precautions:**

- 1. Do not attempt to lubricate or make any adjustments on the harvester or attachment while it is in motion or if the engine is running.**
- 2. Do not permit anyone to ride on the harvester or attachment.**
- 3. Keep all shields in place while the harvester or attachment is in operation.**
- 4. If the feeding area of the harvester or attachment becomes plugged, do not attempt to unplug or remove any material while the machine is in operation or if the engine is running.**
- 5. Do not attempt to force material into the harvester or attachment with your feet or hands while it is in operation.**
- 6. After making adjustments, be sure all tools are removed from the attachment and check the attachment thoroughly for loose parts or bolts.**
- 7. Do not work under the attachment when it is in the raised position unless it is properly blocked.**
- 8. Be sure that the brakes are locked before leaving the cab.**
- 9. Use flashing lights or reflectorized signs to help prevent highway accidents.**

# MINIMUM HARDWARE TIGHTENING TORQUES

IN FOOT POUNDS (NEWTON-METERS) FOR NORMAL ASSEMBLY APPLICATIONS

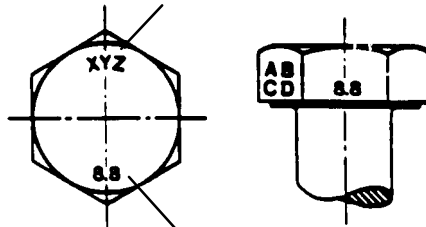
## METRIC HARDWARE AND LOCKNUTS

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

NOTE: Torque values shown with \* are inch pounds.

### IDENTIFICATION HEX CAP SCREW AND CARRIAGE BOLTS CLASSES 5.6 AND UP

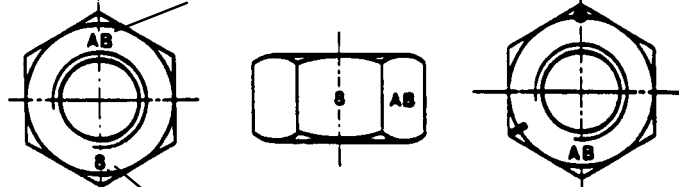
#### MANUFACTURER'S IDENTIFICATION



#### PROPERTY CLASS

### HEX NUTS AND LOCKNUTS CLASSES 05 AND UP

#### MANUFACTURER'S IDENTIFICATION



#### PROPERTY CLASS

#### CLOCK MARKING

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

## INCH HARDWARE AND LOCKNUTS

NOMINAL SIZE	SAE GRADE 2		SAE GRADE 5		SAE GRADE 8		LOCKNUTS		NOMINAL SIZE
	UNPLATED or PLATED SILVER	PLATED W/ZnCr GOLD	UNPLATED or PLATED SILVER	PLATED W/ZnCr GOLD	UNPLATED or PLATED SILVER	PLATED W/ZnCr GOLD	GR.B w/GR5 BOLT	GR.C w/GR8 BOLT	
1/4	55* (6.2)	72* (8.1)	86* (9.7)	112* (13)	121* (14)	157* (18)	61* (6.9)	86* (9.8)	1/4
5/16	115* (13)	149* (17)	178* (20)	229* (26)	250* (28)	324* (37)	125* (14)	176* (20)	5/16
3/8	17 (23)	22 (30)	26 (35)	34 (46)	37 (50)	48 (65)	19 (26)	26 (35)	3/8
7/16	27 (37)	35 (47)	42 (57)	54 (73)	59 (80)	77 (104)	30 (41)	42 (57)	7/16
1/2	42 (57)	54 (73)	64 (87)	83 (113)	91 (123)	117 (159)	45 (61)	64 (88)	1/2
9/16	60 (81)	77 (104)	92 (125)	120 (163)	130 (176)	169 (229)	65 (88)	92 (125)	9/16
5/8	83 (112)	107 (145)	128 (174)	165 (224)	180 (244)	233 (316)	90 (122)	127 (172)	5/8
3/4	146 (198)	189 (256)	226 (306)	293 (397)	319 (432)	413 (560)	160 (217)	226 (306)	3/4
7/8	142 (193)	183 (248)	365 (495)	473 (641)	515 (698)	667 (904)	258 (350)	364 (494)	7/8
1	213 (289)	275 (373)	547 (742)	708 (960)	773 (1048)	1000 (1356)	386 (523)	545 (739)	1

NOTE: Torque values shown with \* are inch pounds.

### IDENTIFICATION CAP SCREWS AND CARRIAGE BOLTS



SAE GRADE 2



SAE GRADE 5



SAE GRADE 8



REGULAR NUTS

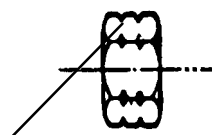


SAE GRADE 5  
HEX NUTS

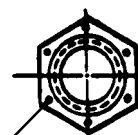


SAE GRADE 8  
HEX NUTS

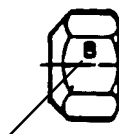
### LOCKNUTS



GRADE IDENTIFICATION  
GRADE A NO NOTCHES  
GRADE B ONE CIRCUMFERENTIAL NOTCH  
GRADE C TWO CIRCUMFERENTIAL NOTCHES



GRADE IDENTIFICATION  
GRADE A NO MARKS  
GRADE B THREE MARKS  
GRADE C SIX MARKS  
MARKS NEED NOT BE LOCATED AT CORNERS



GRADE IDENTIFICATION

GRADE A NO MARK  
GRADE B LETTER B  
GRADE C LETTER C



**SECTION 00 - GENERAL INFORMATION**

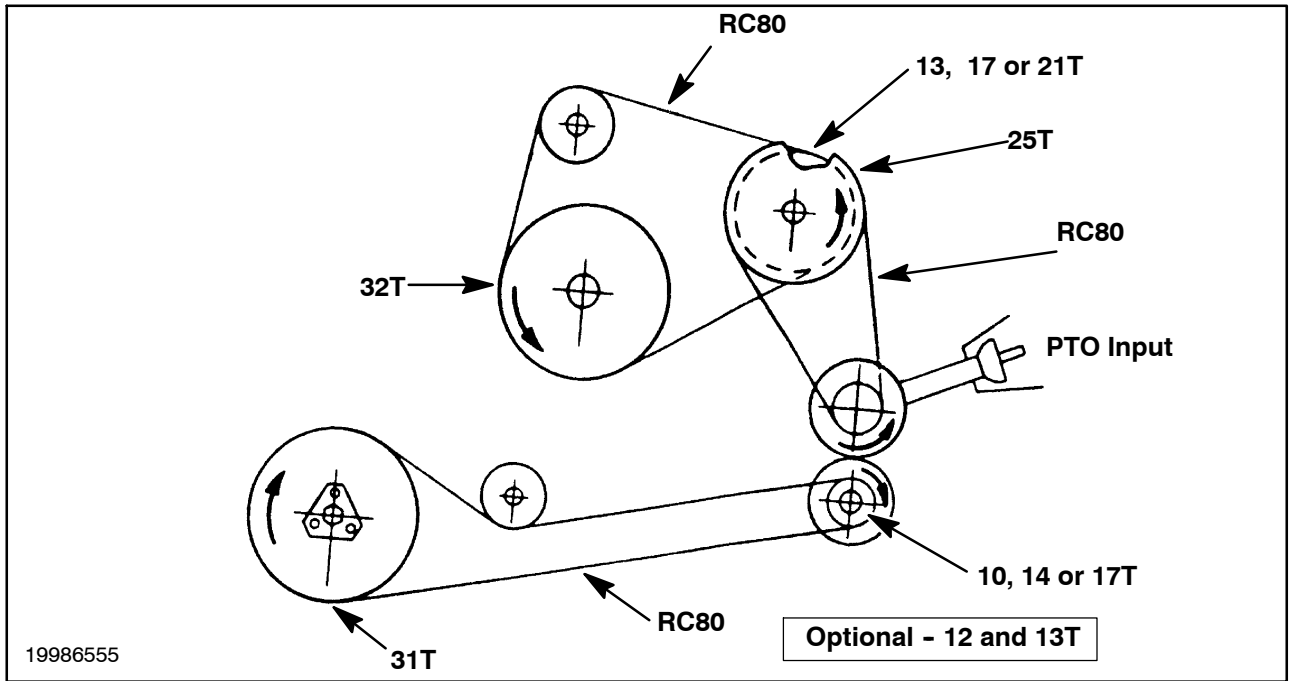
**Chapter 2 - Specifications**

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**SPECIFICATIONS**

<b>Model</b>	<b>346W</b>	<b>356W</b>	<b>366W</b>
Dimensions			
Overall width	297 cm (117 in)	351 cm (138 in)	478 cm (188 in)
Operating width (tine to tine)	246 cm (97 in)	300 cm (118 in)	418 cm (165 in)
Overall length	179 cm (70 in)		
Overall Height	155 cm (61 in)	155 cm (61 in)	161 cm (63 in)
Weight (kg)	1020	1220	1492
Auger			
Auger diameter	56 cm (22 in)		
Retractable fingers	20		
Drive protection	Radial pin clutch		
Reel			
Number of tines	152	184	256
Drive protection	Friction disc clutch and Overrunning clutch		
Gauge wheels	20.5 x 8.0 - 10		
Tire pressure	2.48 bar (36 psi)		



**Thanks very much for your reading,  
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