NEW HOLLAND

WHEEL LOADER

W110
W130

OPERATOR'S MANUAL

87359375 NA

Issued 03-2006

NEW HOLLAND

www.newhollandconstruction.com

MidWestTech | New Holland W110, W130 Wheel Loader Operator's Manual | Publication 8... Order the manual at mid-west-tech.com >

TABLE OF CONTENTS

CHAPTER 1
GENERAL INFORMATION
To the Owner 1-1
Machine Components 1-5

CHAPTER 2
SAFETY, DECALS, AND HAND SIGNALS
Table of Contents 2-1
Safety Rules 2-3
Personal Safety 2-3
Utility Safety 2-4
Decals 2-10

CHAPTER 3
INSTRUMENTS AND CONTROLS
Table of Contents 3-1
Cab 3-3
Right side console 3-12
Dashboard Gauges And Indicators 3-14
Access doors and Covers 3-28
Operator's Seat Adjustment 3-29
Seat Belt 3-30

CHAPTER 4
OPERATING INSTRUCTIONS
Table of Contents 4-1

CHAPTER 5
LUBRICATION, FILTERS, AND FLUIDS
Table of Contents 5-1
Servicing Instructions 5-3
Support strut for loader lift arms 5-4
Fluids and Lubricants 5-5
Daily Inspections 5-8
Access Doors And Fill Locations 5-10

CHAPTER 6
MAINTENANCE AND ADJUSTMENTS
Table of Contents 6-1
Maintenance and Adjustments 6-3

CHAPTER 7
ELECTRICAL
Table of Contents 7-1
Electrical 7-3
Starter Motor 7-3
Fuses 7-3
Relays 7-3
Fuse And Relay Box 7-3
Battery 7-4

MidWestTech | New Holland W110, W130 Wheel Loader Operator's Manual | Publication 8... Order the manual at mid-west-tech.com >

CHAPTER 8
SPECIFICATIONS
Table of Contents 8-1
Specifications 8-3
Hydraulic system 8-4
Transmission 8-4

CHAPTER 9
INDEX

MidWestTech | New Holland W110, W130 Wheel Loader Operator's Manual | Publication 8... Order the manual at mid-west-tech.com >

Chapter 2

SAFETY, DECALS, AND HAND SIGNALS

TABLE OF CONTENTS

SAFETY RULES 2-3
PERSONAL SAFETY 2-3
UTILITY SAFETY 2-4
- Personnel 2-5
- General 2-5
- Mounting and Dismounting Precautions 2-5
- Starting and Stopping Precautions 2-5
- Operating Precautions 2-6
- Maintenance Precautions 2-7
- Fuel Handling Precautions 2-7
- Burn Prevention 2-8
- Hazardous Chemical Precautions 2-8
- Transporting Precautions 2-8
- Roll-Over Protective Structure (If Equipped) 2-8
- Fire Extinguisher 2-8
- Seat Belt Precautions 2-8
- Specific Precautions to this Machine 2-9

DECALS 2-10

MidWestTech | New Holland W110, W130 Wheel Loader Operator's Manual | Publication 8... Order the manual at mid-west-tech.com >

CAB POST SWITCHES / MULTI FUNCTION DISPLAY (IF EQUIPPED)

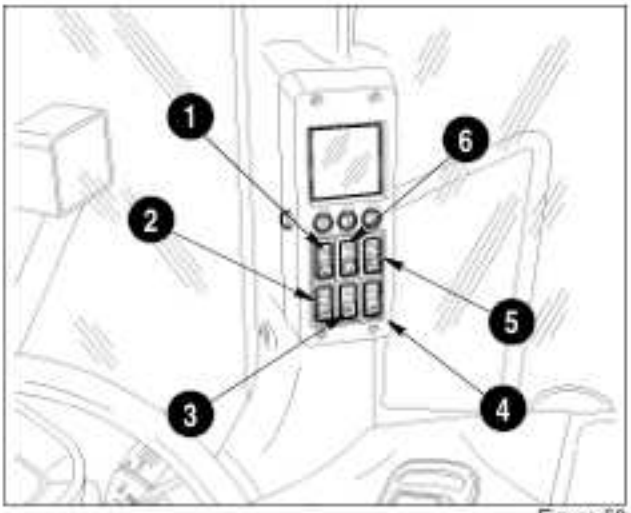


Figure 53

1. ROTARY BEACON SWITCH (IF EQUIPPED)
2. FRONT WORK LIGHT SWITCH
3. REAR WORK LIGHT SWITCH
4. TWO-POSITION, HEAD AND LOW BEAM LIGHTS
5. REAR WIPER SWITCH
6. REAR WASHER SWITCH

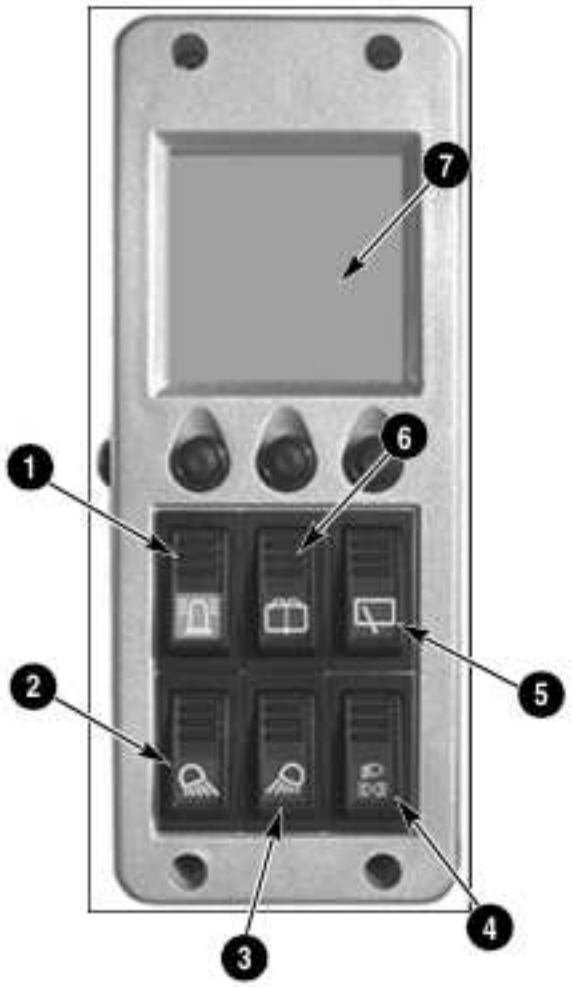


Figure 54

1. ROTARY BEACON SWITCH (IF EQUIPPED)
2. FRONT WORK LIGHT SWITCH
3. REAR WORK LIGHT SWITCH
4. TWO-POSITION, HEAD AND LOW BEAM LIGHTS
5. REAR WIPER SWITCH
6. REAR WASHER SWITCH
7. MULTI FUNCTION DISPLAY (If Equipped)

MidWestTech | New Holland W110, W130 Wheel Loader Operator's Manual | Publication 8... Order the manual at mid-west-tech.com >

Replace Fuel Filter



BO03J020 Figure 47

NOTE: *The W130 will have two filters.*

Clean the filter head area, the outside of the filter (s) and any dirt and debris around the area that might contaminate the system.

1. Turn the filter (s) counterclockwise and remove. Be sure to capture any fuel remaining in the lines or the filter and discard properly.
2. Apply a thin layer of clean oil to the gasket on the new filter.
3. Install the filter. Use your hands to tighten the filter 1/2 to 3/4 turn after the filter makes contact with the filter head.

IMPORTANT: *Never use a filter wrench to tighten a new filter on install.*

WARNING: *Engine fuel is flammable and can cause a fire or an explosion. Do not fill the fuel tank or service the fuel system near an open flame, welding, burning cigars, cigarettes, pipes, etc.*

Figure 48

Drain Fuel Tank Condensation

Every 500 hours of operation the condensation must be removed from the fuel tank.

1. Park the machine on level ground and follow the required safety procedures with the equipment on the ground.
2. Have a suitable container ready to capture the condensation and fuel that will spill. Dispose of the waste following local regulations.
3. Open the fuel tank drain slowly and allow the condensation to flow until only fuel is discharged.
4. Secure the tank drain plug.

NOTE: *In certain geographic regions and climates it may be necessary to drain off condensation more frequently.*

MidWestTech | New Holland W110, W130 Wheel Loader Operator's Manual | Publication 8... Order the manual at mid-west-tech.com >

W130 Z - BAR PERFORMANCE DATA PIN ON BUCKET

KEY	Bucket Type/Size	Excavating w/Bolt on edge and standard counterweight 1 285 lb (584 kg)	Excavating with bolt on edge and optional counterweight 2 136 lb (970 kg)	General Purpose w/Bolt-on edge and standard counterweight 1 285 lb (584 kg)	Stockpiling w/Bolt on edge and standard counterweight 1 285 lb (584 kg)
	Capacity, heaped (SAE)	2.55 yd^3 (1.96 m^3)	2.55 yd^3 (1.96 m^3)	2.75 yd^3 (2.1 m^3)	3.0 yd^3 (2.29 m^3)
	Capacity, Struck (SAE)	2.17 yd^3 (1.66 m^3)	2.17 yd^3 (1.66 m^3)	2.32 yd^3 (1.77 m^3)	2.56 yd^3 (1.96 m^3)
	Bucket Width	102.4" (2 602 mm)	102.4" (2 602 mm)	102.4" (2 602 mm)	102.4" (2 602 mm)
	Bucket Weight	1 792 lb. (813 kg)	1 792 lb. (813 kg)	1 856 lb. (842 kg)	1 951 lb. (885 kg)
	Bucket Force	26 567 lb. (12 049 kg)	26 567 lb. (12 049 kg)	24 817lb. (11 267 kg)	23 239 lb. (10 541 kg)
	Tipping load, straight	20 644 lb. (9 364 kg)	22 687 lb. (10 291 kg)	20 464 lb. (9 282kg)	20 291 lb. (9 204 kg)
	Tipping load @ 40° full turn	18 101 lb. (8 210 kg)	19 817 lb. (8 989 kg)	17 934 lb. (8 135 kg)	17 758 lb. (8 055 kg)
I	Dump clearance, 45° dump angle-full height	114.2" (2 900 mm)	114.2" (2 900 mm)	112.2" (2 850 mm)	110.4" (2 804mm)
J	Reach, 45° dump angle, full height	36.2" (919 mm)	36.2" (919 mm)	38.1" (968 mm)	39.9" (1 013 mm)
K	Overall height, bucket @ full height	194.0" (4 929 mm)	194.0" (4 929 mm)	195.1" (4 956 mm)	198.2" (5 033 mm)
L	Hinge pin height, fully raised	150.8" (3 832 mm)	150.8" (3 832 mm)	150.8" (3 832 mm)	150.8" (3 832 mm)
M	Overall length, bucket on ground	271.5" (6 896 mm)	271.5" (6 896 mm)	274.5" (6 972 mm)	277.1" (7 039 mm)
N	Clearance circle, bucket @ carry	451.4" (11 465 mm)	451.4" (11 465 mm)	453.1" (11 508 mm)	454.6" (11 547 mm)
	Hydraulic lifting capacity @ full height	14 522 lb. (6 587 kg)	14 558 lb. (6 603 kg)	14 453 lb. (6 556 kg)	14 353 lb. (6 511 kg)
	Hydraulic lifting capacity @ max. reach	20 557 lb. (9 324 kg)	20 556 lb. (9 324 kg)	20 482 lb. (9 291 kg)	20 377lb. (9 243 kg)
	Hydraulic lifting capacity @ ground level	25 643 lb. (11 641 kg)	25 738 lb. (11 674 kg)	24 217 lb. (10 985 kg)	22 693 lb. (10 293 kg)
	Max. dump angle @ full height	55°	55°	55°	55°
	Max. rollback @ full height	55°	55°	55°	55°
	Max. rollback @ max. reach	53°	53°	53°	53°
O	Max. rollback @ carry	44°	44°	44°	44°
	Max. rollback @ ground	40°	40°	40°	41°
P	Digging depth	2.8" (72 mm)	2.9" (73 mm)	3.1" (80 mm)	3.3" (84 mm)
	Operating weight	25 380 lb. (11 512 kg)	26 231 lb. (11 898 kg)	25 444 lb. (11 541 kg)	25 539 lb. (11 584 kg)

Figure 7

ADJUSTMENTS TO OPERATING WEIGHTS AND TIPPING LOADS WITH PIN-ON BUCKETS

Add (+) or deduct (-) lb. (kg) as indicated

For loader with:	Operating Weight	Tipping Load, Straight	Tipping Load, 40° Full Turn
20.5x25 12 ply L2	-100 lb. (-45 kg)	-76 lb. (-35 kg)	-67 lb. (-31 kg)
20.5x25 12 ply L3	+228 lb. (+103 kg)	+173 lb. (+78 kg)	+152 lb. (+69 kg)
20.5R25 XHA TL	+380 lb. (+172 kg)	+288 lb. (+131 kg)	+254 lb. (+115 kg)
20R25 GP-2B TL	+112 lb. (+51 kg)	+85 lb. (+39 kg)	+75lb. (+34 kg)
20.5R25 RT-3B TL	+455 lb. (+207 kg)	+345 lb. (+157 kg)	+305 lb. (+138 kg)

Figure 8

NOTE: *Specifications based on loader equipped with 20.5R25 XTLA Michelin radial tires, ROPS cab with heater and A/C, auxiliary steering, front and rear fenders, full fuel, 175 lb (79 kg) operator. Per ISO 13497 unless noted.*

MidWestTech | New Holland W110, W130 Wheel Loader Operator's Manual | Publication 8... Order the manual at mid-west-tech.com >