NEW HOLLAND

Repair Manual – 544 and 548 Round Balers

CONTENTS

00 - GENERAL INFORMATION Chapter 1 - General Information

Section	Description	Page
00.100	Introduction,	
	Important Information,	
	General Instruction,	
	Spare Parts,	(
	Safety Regulations,	
	Product Identification	
Chapter 2 –	- Technical Information	
	Description	Page
	General Information,	
	Driveline Schematic,	
	Drive Line Schematic,	
	Conversion Chart,	
	Tightening Torques,	
	Lubricants To Be Used,	
	Specifications,	
	Dimensions,	
	Technical Data,	10
	Hauling The Baler,	12
	Low Hitch,	13

-----18 High Hitch, ------18

31 - IMPLEMENT POWER TAKE-OFF DRIVELINE

Chapter	1 –	P.T.O	Clutch
---------	-----	-------	--------

Section	Description	Page
31.100	Cut Out Clutch,	1
	Clutch Removal,	3
	Clutch Assembly,	5
Chapter 2 -	- Driveline Gearbox	
Section	Description	Page
	GEARBOX (US)	
	Removal,	
	Disassembly And Inspection,	
	Assembly,	
	Reinstallation,	
31.201	GEARBOX (COMER)	6 to 22
	Disassembly And Check,	9
	Front Pinion Disassembly And Check,	9
	Main Gearbox Disassembly,	16
	Main Gearbox Assembly,	18
	Assembly Of The Two Half-boxes,	21
	Gearbox Installation,	21
33 – BRAK	KES	
Chapter 1 -	- Hand Brake	
Section	Description	Page
33.100	Description and Operation,	1
	Brake Components,	2
35 – HYDF	RAULIC SYSTEMS	
Chapter 1 -	- Hydraulics	
Section	Description	Page
35.100	Pick-up Lift Cylinder,	1
	Cylinder Seal Kit Replacement,	
	Lock-out Valve Replacement	

604.66.111.00 – 09 – 2002

CONTENTS 3

35 - HYDRAULIC SYSTEMS

Chapter 1 - Hydraulics

Section	Description	Page
35.100	Tailgate Lift Cylinders,	3
	Checking Cylinder Characteristics,	5
	Density Cylinders,	5
	Checking The Oil And Accumulator Pressure,	9
	Accumulator Filling,	10
	Cylinder Seal Kit Replacement,	11
	· Cylinder Filling,	13
	Automatic Oiler,	14
	Greasing Lines And Metering Units,	15

44 - WHEELS AND TYRES

Chapter 1 – General

Section	Description	Page
44.100	Tyre Specifications,	1
	Axle Components,	2

55 - ELECTRICAL SYSTEM

Chapter 1 – Electrics

Section	Description	Page
55.100	Bale Command Plus TMonitors,	2
	Set-up And Diagnostics,	4
	Bale Density Sensors Mounting,	5
	Diagnostics, 7, 16, 22, 2	7, 32, 34
	Calibration,9, 1	7, 23, 28
	Duckbill/Knife (Net) Actuator Sensor (Page 12 In The Set-up/Diagnostic Mode),	12
	Sensor And Actuator Disassembly/Assembly,	14
	Twine Actuator Sensor (Page 19 On The Set-up/Diagnostic Mode),	20
	CropCutter Tactuator Sensor (Page 14 In The Set-up/Diagnostic Mode),	25
	Tailgate Switches (Page 15 Of The Set-up/Diagnostic Mode),	32
	Net Metering Boll Sensor (Page 16 Of The Set-up/Diagnostic Mode)	34

55 - ELECTRICAL SYSTEM

Chapter 1 – Electrics

Section	Description	Page
	Bale Shape Sensitivity (Page 17 Of The Set-up/Diagnostic Mode),	36
	Software Revision Number (Page 18 Of The Set-up/Diagnostic Mode),	37
	Operator Panel Test (Page 19 Of The Set-up/Diagnostic Mode),	38
	Keypad Check,	39
	Supply Voltage Check (Page 20 Of The Set-up/Diagnostic Mode),	41
	The Twine Wrap,	44
	Wiring Diagram,	45
	CropCutter Wifing Diagram,	48
	Serviceable Operator Panel Components,	49
	Serviceable Controller Components,	50
	Harness Connector Repair,	51
	Troubleshooting,	54
	Twine/Net Actuator Test Procedure,	61
	Dealer Pre Delivery Set-up,	62

60 - PRODUCT FEEDING

Chapter 1 - Pick Up

Section	Description	Page
60.100	Standard Pick-up,	1
	Pick Up Removal And Installation,	1
	Installation,	2
	Cam Track Replacement,	3
	Assembly,	4
	Pick-up Reel,	5
	Reel Drive (Left-hand Side),	7
	Reel Drive (Right-hand Side),	9
	Cam Track Disassembly,	13
	Cam Track Assembly,	15
	Cam Track Roll Disassembly And Assembly,	18
	Pick-up Tine Replacement,	20

CONTENTS 5

60 - PRODUCT FEEDING

Chapter	2 –	Rotor	Module
---------	-----	--------------	--------

60.200	Cross Drive Shaft (Wide Pick-up Units),	1
	Intermediate Shaft,	3
	Overrun Clutch,	3
	Rotor Bearings,	5
	Rotor And Scrapers,	8
	Rotor Scrapers,	9
	Rotor,	11
	Stub Augers,	14
	Cropcutter ¬System,	16
Chapter 3	– Conveyor Chain Group	
60.300	Replacing A Roller Bearing / Conveyor Bar,	1
	Chain Removal,	5
	Chain Installation,	7
	Chain Replacement,	12
	Conveyor Chain Drive Shaft,	15
	Conveyor Chain Idlers And Tensioner Shaft,	17
	Conveyor Chain Lower Top Idlers,	18
	Lower Idler Shaft,	22
	Conveyor Chain Tensioner Shaft,	21, 24
Chapter 4	– Rolls Group	
	Floor Roll,	
	Installation,	3
	Bearing Replacement,	
	Stripper Roll,	6

60 - PRODUCT FEEDING

Chapter 5 – Net/Twine Wrap System

Section	Description	Page
60.500	Twine Wrapper,	1, 8
	Net - Plastic Wrap System (Duckbill),	3
	Replacement Of The Spreader Roll Bearings,	5
	Replacement Of The Counter Roll Bearings,	6
	Duckbill Reassembly,	6
	Chain Disassembly,	9
	Driven Pinion Disassembly–🗵 ,	10
	Drive Pinion And Drive Mechanism Disassembly-assembly,	13
	Drive Pinion,	15
	Twine Spreader Hook 🛭 ,	15
	Twine Feed Roller 🛭 ,	16
	Wrapper Unit Assembly,	19

88 ANCILLIARY EQUIPMENT

Section	Description	Page
88.000		1

SECTION 00 – TECHNICAL INFORMATION

Chapter 2 – Technical

CONTENT

Section	Description	Page
00 200	General Information,	1
	Driveline Schematic,	2, 3
	Drive Line Schematic,	4
	Conversion Chart,	6
	Tightening Torques,	7
	Lubricants To Be Used,	8
	Specifications,	8
	Technical Data,	10
	Dimensions,	9
	Hauling The Baler,	17
	Low Hitch,	17
	High Hitch,	18

GENERAL

This Repair Manual provides the technical information needed to properly service these Roll Bar $^{\text{TM}}$ round balers.

Use this manual in conjunction with the Operator's Manual for complete operation, adjustment and maintenance information.

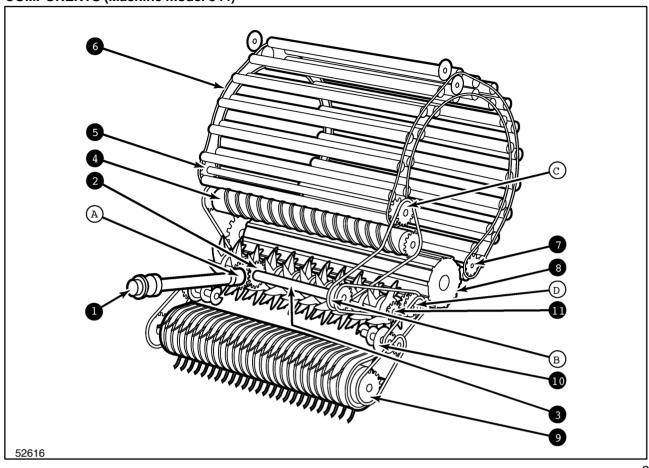
On this equipment, left and right are determined by standing behind the unit, looking in the direction of travel.

The descriptions and specifications contained in this manual were in effect at the time the manual was released for printing. The company reserves the right to discontinue models at any time, or to change specifications and design without notice and without incurring obligation.

NOTE: Some illustrations in this manual were made of prototype or previous production models. Current production models may vary in some detail.

DRIVELINE SCHEMATIC

COMPONENTS (Machine model 544)



CLUTCHES AND SHEARBOLTS

Α	Cut-out clutch (1300 Nm)
В	Overrun clutch
С	Conveyor chain shearbolt (CropCutter™ only) (old units)
D	Pick-up shearbolt

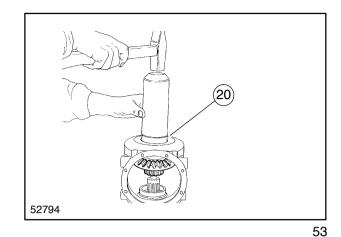
COMPONENTS

1	P.T.O (540 revs/min)
2	Gearbox
3	Cross drive shaft (300 revs/min)
4	Stripper roll (164.5 revs/min)
5	Conveyor drive shaft (164.5 revs/min)
6	Conveyor chain
7	Conveyor chain tensioner (164.5 revs/min)
8	Floor roll (98.7 revs/min)
9	Pick-up reel (106.5 revs/min)
10	Stub auger (360.5 revs/min)
11	Feed rotor (137.8 revs/min)

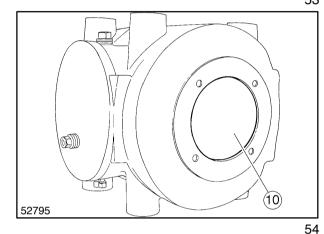
Remove the retaining ring (19) and fit the suitable shims, then fit again the retaining ring (19).

With a drift, fit the seal ring (20) in its housing.

Check that there is no end float, otherwise repeat the above procedures.



On the opposite side, fit the new cap (10).

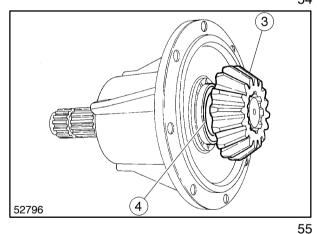


ASSEMBLY OF THE TWO HALF-BOXES

Fit the front assembly on the gearbox.

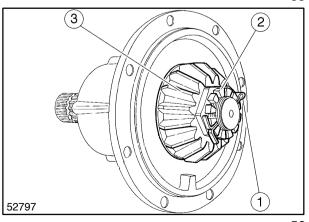
The bevel gear pair must rotate freely, without any clearance.

Otherwise, increase or decrease the shims (4) under the pinion (3).

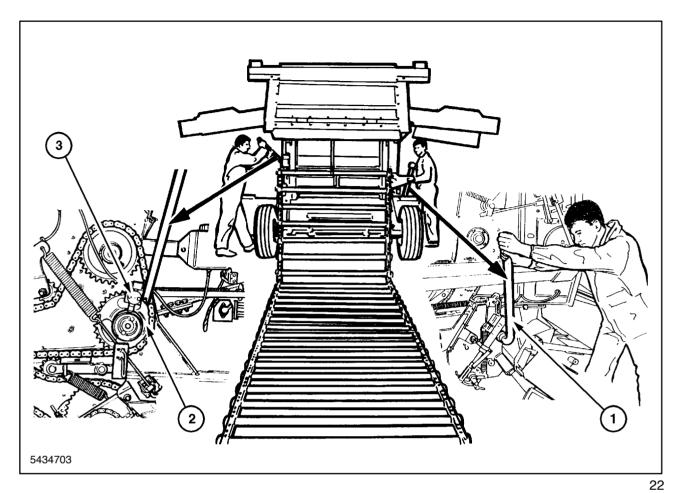


Fit again the pinion (3) and lock the nut (2) at 1 Nm; then, fit the split pin (1).

Repeat the procedure until getting a good mating between the two pinions.



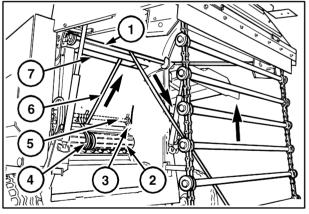
56



- 7. Now attach a second strap (6) (5 m) to the first conveyor bar (5). Route the second strap into the bale chamber (between the stripper roll (2) and the chamber sheet (3), then through the hole (7) in the chamber sheet, over the tailgate idler bar (1) back into the bale chamber. Guide the strap UNDER the chain part that is still laying on the ground, and attach it to a tractor drawbar (Figure 24 & 25).
- 8. Now remove the first strap (4) from the stripper roll. Lay off the main drive chain again.
- 9. Slowly drive the tractor forward to pull the conveyor chain further in the baler. Observe proper engagement of the chain in the conveyor drive sprocket (1) (Figure 24 & 25).

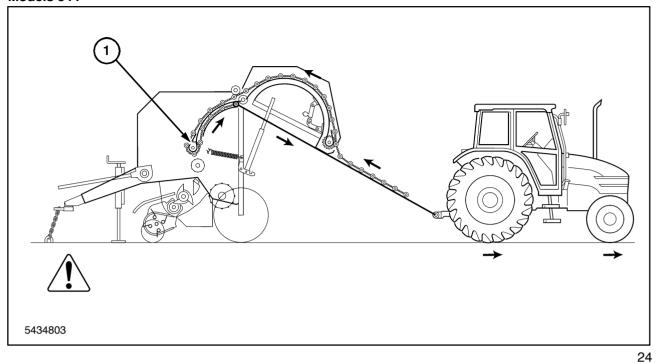
NOTE: Anchor the baler properly to prevent it from moving when pulling the chain with the tractor.

NOTE: As the strap is put under tension by the tractor, it will lift the chain part that lays on the ground. Keep this chain part in balance and make it engage properly in the idler sprockets of the tailgate nose.

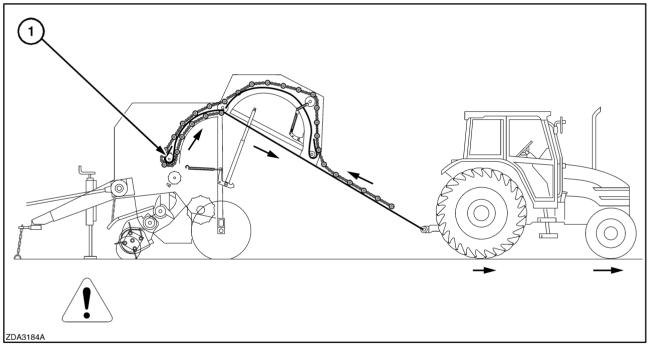


23

Models 544



Models 548



25