
TM115-TM165 REPAIR MANUAL

COMPLETE CONTENTS

SECTION 00 - GENERAL	2
SECTION 10 - ENGINE	3
SECTION 18 - CLUTCH	4
SECTION 21 - TRANSMISSION	4
SECTION 23 - DRIVE LINES	8
SECTION 25 - MECHANICAL FRONT AXLE	8
SECTION 27 - MECHANICAL REAR WHEEL DRIVE	9
SECTION 31 - POWER TAKE-OFF	10
SECTION 33 - BRAKES	11
SECTION 35 - HYDRAULIC SYSTEMS	12
SECTION 41 - STEERING	18
SECTION 44 - FRONT AXLE AND WHEELS	18
SECTION 50 - AUXILIARY UNITS	19
SECTION 55 - ELECTRICAL SYSTEM	19

The following pages are the collation of the contents pages from each section and chapter of the TM Series Repair manual.

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. Each book will be labeled as to which sections are in the overall Repair manual and which sections are in each book.

The sections listed above are the sections utilized for the TM Series Tractors.

Sample of manual. Download All 1898 pages at:

<https://www.arepairmanual.com/downloads/new-holland-tm115-tm125-tm135-tm150-tm165-tractor-service-repair-manual/>

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SECTION 00 - GENERAL

BOOK 1 - 87015499

HEALTH AND SAFETY

CONTENTS

Section	Description	Page
	HEALTH AND SAFETY PRECAUTIONS	4
	ACIDS AND ALKALIS	5
	ADHESIVES AND SEALERS - see Fire	5
	ANTIFREEZE - see Fire, Solvents e.g. Isopropanol, Ethylene Glycol, Methanol.	5
	ARC WELDING - see Welding.	5
	BATTERY ACIDS - see Acids and Alkalies.	5
	BRAKE AND CLUTCH FLUIDS (Polyalkylene Glycols) - see Fire.	6
	BRAZING - see Welding.	6
	CHEMICAL MATERIALS - GENERAL - see Legal Aspects.	6
	DO'S	6
	DO NOTS	6
	CORROSION PROTECTION MATERIALS - see Solvents, Fire.	6
	DUSTS	7
	ELECTRIC SHOCK	7
	EXHAUST FUMES	7
	FIBRE INSULATION - see Dusts.	7
	FIRE - see Welding, Foams, Legal Aspects.	7
	FIRST AID	7
	FOAMS - Polyurethane - see Fire.	7
	FUELS - see Fire, Legal Aspects, Chemicals - General, Solvents.	8
	GAS CYLINDERS - see Fire.	8
	GENERAL WORKSHOP TOOLS AND EQUIPMENT	9
	LEGAL ASPECTS	9
	LUBRICANTS AND GREASES	9
	PAINTS - see Solvents and Chemical Materials - General.	10
	SOLDER - see Welding.	10
	SOLVENTS - see Chemical Materials - General Fuels (Kerosene), Fire.	10
	SUSPENDED LOADS	11
	WELDING - see Fire, Electric Shock, Gas Cylinders.	11

SECTION 10 - ENGINE

BOOK 1 - 87015499

Chapter 1 - Engine

CONTENTS

Section	Description	Page
10 000	Specifications	2
	Fuel Test Plans	10
	Tightening Torques	15
	Special Tools	16
	Greases and Sealants	17
	Fault Finding	18
	Description and Operation	22
	Engine stripdown - General	31
10 001	Engine removal and Installation	32
10 100	Engine disassembly and overhaul:-	
	Cylinder head	37
	Front cover and timing gears	43
	Oil pan removal	48
	Connecting rods, bearings pistons and rings	48
	Cylinder block overhaul	51
	Main bearings and flywheel	56
	Rear cover plate	58
	Oil pump and oil filter support	59
	Crankshaft	62
	Camshaft, tappets and camshaft bearings	65
	Engine compression test	67
10 200	Fuel system components:-	
	Fuel pump - Removal, Timing and Installation	68
	Injectors	69
	Electric lift pump	76
	Turbocharger	77
	Air cleaner	81
	Fuel tank	83
	Throttle cable	84
10 400	Cooling system components:	
	Radiator removal	86
	Thermostat removal, testing and installation	88
	Temperature warning sender	89
	Viscous clutch assembly	89
	Fan blade removal and installation	90
	Fan belt and tensioner removal and installation	90
	Water pump removal, overhaul and installation	91

SECTION 18 - CLUTCH

BOOK 1 - 87015499

Chapter 1 - Clutch

CONTENTS

Section	Description	Page
18 000	Specifications	1
	Tightening Torques	2
	Sectional Views	3
	Special Tools	4
	Description and Operation	4
	Troubleshooting	4
18 110	Clutch Removal-Installation	6
18 104	Hydraulic Control Assembly Removal-Installation	14
	Hydraulic Control Assembly Disassembly-Reassembly	16

SECTION 21 - TRANSMISSION

BOOK 2 - 87015500

Chapter 1 - Semi-Powershift Transmission (Range Command)

CONTENTS

Section	Description	Page
21 000	Specifications	1
	Tightening Torques	3
	Special Tools	5
	Sectional Views	10
	Description and Operation	13
	Troubleshooting	see Chapter 2
21 111	Removal - Installation - Overhaul	16

SECTION 21 - TRANSMISSION

BOOK 2 - 87015500

Chapter 2 - Range Command Transmission Calibrations, Fault Finding, Pressure Testing And Limp Home

CONTENTS

Section	Description	Page
21 000	Introduction	2
	Error Codes	3
	Error Codes and Fault Finding	6
	Limp Home Procedure	41
	Pressure Testing	42
	Calibrations	45

SECTION 21 - TRANSMISSION

BOOK 2 - 87015500

Chapter 3 - Dual Command Transmission (HI-LO)

CONTENTS

Section	Description	Page
21 000	Specifications	1
	Tightening Torques	4
	Special Tools	6
	Sectional Views	10
	Description and Operation	12
	Troubleshooting	see Chapter 4
21 112	Removal - Installation - Overhaul	15

SECTION 21 - TRANSMISSION

BOOK 2 - 87015500

Chapter 4 - Dual Command (Hi-Lo) Transmission - Calibrations, Fault Finding, Pressure Testing And Limp Home Procedures

CONTENTS

Section	Description	Page
21 000	Introduction	1
	Calibrations	3
	Pressure Testing	5
	Limp Home Procedure	8
	Error Codes	9
	Error Code Fault Finding Flow Diagrams	14

SECTION 21 - TRANSMISSION

BOOK 2 - 87015500

Chapter 5 - Shuttle Command (Mechanical Transmission)

CONTENTS

Section	Description	Page
21 000	Specifications	1
	Tightening Torques	3
	Special Tools	5
	Sectional Views	8
	Description and Operation	12
	Troubleshooting	12
21 114	Mechanical Transmission Housing Removal - Installation - Overhaul	13

SECTION 21 - TRANSMISSION

BOOK 2 - 87015500

Chapter 6 - Power Command Transmission

CONTENTS

Section	Description	Page
21 000	Specifications	2
	Tightening Torques	5
	Special Tools	10
	Transmission Cross Section	13
	Description and Operation and Power Flows	16
	Transmission Removal and Installation	34
	Transmission Overhaul - Disassembly	48
	Component Disassembly - Clutch Pack Exploded Views and Adjustments	
	Oil Manifold Bushes, Remove and Install	59
	Upper Speed Shaft End Float Adjustment	60
	Clutch Pack Exploded Views and Adjustments	61
	Transmission Overhaul - Reassembly	73
	Clutch Testing During Reassembly	80
	Output Shaft End Float Adjustment	81
	Medium Range clutch assembly, End Float Adjustment	82
	Clutch Calibrations	85
	Pressure Testing	89
	Error Codes and Fault Finding	93
	Limp Home Tool	136

SECTION 23 - DRIVE LINES

BOOK 3 - 87015501

Chapter 1 - Drive Lines

CONTENTS

Section	Description	Page
23 000	Specifications	1
	Tightening Torques	2
	Special Tools	2
	Sectional Views	4
	Description and Operation	5
	Troubleshooting	5
	Hydraulic Flow Diagrams	6
23 101	Removal-Installation-Overhaul	8

SECTION 25 - MECHANICAL FRONT AXLE

BOOK 3 - 87015501

Chapter 1 - Mechanical Front Axle

CONTENTS

Section	Description	Page
25 000	Specifications	1
	Tightening Torques	3
	Special Tools	4
	Sectional Views	7
	Description and Operation	8
	Troubleshooting	11
25 100	Standard Axle - Removal/Installation	12
	Suspended Axle - Removal/Installation	15
	Supersteer Axle - Removal/Installation	20
	Hub Cassette Seal Replacement	24
	Front Axle Overhaul - All Options	28
	Dog Clutch Differential Lock - Disassembly/Reassembly	34
	Multi Wet Plate Differential Lock - Disassembly/Reassembly	36
	Crown Wheel/Differential - Disassembly/Reassembly - All Options	38
	Pinion Shaft Removal - All Options	39
	Pinion Shaft Adjustment/Installation - All Options	42
	Crown Wheel Adjustments - All Options	50
	Swivel Pin & Potentiometer - Disassembly/Reassembly	53
	Axle Reassembly - All Options	57
	Checking the Alignment of Steering & Drive Wheels	58

SECTION 25 - FRONT AXLE

BOOK 3 - 87015501

Chapter 2 - Terraglide (Front Axle Suspension)

CONTENTS

Section	Description	Page
25 000	Specifications	2
25 000	Tightening Torques	2
25 000	Description and Operation	3
	System Schematics	7
	Valve Block Component Locations / Identification	9
	Terraglide Operation - Ride Control	10
	Terraglide Operation - Axle Levelling System	22
25 000	Automatic Calibration Procedure	27
25 000	Error Codes and Fault Finding	30
25 000	Error Code retrieval	30
25 000	Clearing Stored Error Codes	32
25 000	H9-Vehicle Sensor and Voltage Tests	33
25 000	Error Code Listing	35
	Wiring Diagram	37
25 100	Suspended Front Axle Assembly-Removal and Installation	62
25 100	Suspension Cylinder Removal and Overhaul	70
25 000	Suspension Control Valve Assembly-Overhaul	74

SECTION 27 - MECHANICAL REAR WHEEL DRIVE

BOOK 3 - 87015501

Chapter 1 - Mechanical Rear Wheel Drive

CONTENTS

Section	Description	Page
27 000	Specifications	1
	Tightening Torques	3
	Special Tools	5
	Sectional Views	8
	Description and Operation	10
	Troubleshooting	13
27 100	Removal - Installation - Overhaul	15

SECTION 31 - POWER TAKE-OFF

BOOK 3 - 87015501

Chapter 1 - Power Take-Off

CONTENTS

Section	Description	Page
31 000	Specifications	1
	Tightening Torques	3
	Special Tools	3
	Sectional Views	4
	Description and Operation	6
	Hydraulic Flow Diagrams	11
	Troubleshooting	14
31 100	Removal-Installation-Overhaul	16
	Ground Speed Interlock Switch Adjustment	27

SECTION 31 POWER TAKE-OFF

BOOK 3 - 87015501

Chapter 2 - Hydraulic Front Lift and Power Take-Off

CONTENTS

Section	Description	Page
31 000	Specifications	2
	Torques	2
	Description and Operation	
35 162	Front Hydraulic Lift.	3
31 146	Front P.T.O.	5
	Fault Finding	10
	Overhaul	
35 162	Front Hydraulic Lift	11
31 142	Front P.T.O.	16
	Hydraulic and Electrical Connections	24
	Engine Side Rails	28

SECTION 33 - BRAKES

BOOK 3 - 87015501

Chapter 1 - Tractor Brakes

CONTENTS

Section	Description	Pag.
33 000	Specifications	1
	Tightening Torques	2
	Sectional Views	2
	Special Tools	5
	Description and Operation	6
	Troubleshooting	7
33 202	Removal-Installation-Overhaul, Service Brakes	8
	Removal-Installation, Service Brake Master Cylinder	18
33 110	Removal-Installation-Overhaul, Parking Brake Assembly	26

SECTION 33 - BRAKES

BOOK 3 - 87015501

Chapter 2 - Air Trailer Brakes

CONTENTS

Section	Description	Page
33 000	Specifications	1
	Tightening Torques	2
	Description and Operation	7
	Fault Finding	10
33 000	Removal and Installation	12
33 000	Overhaul	17

SECTION 35 - HYDRAULIC SYSTEMS

BOOK 4 - 87015502

Chapter 1 - Hydraulic Circuits

CONTENT

Section	Description	Page
35 000	Introduction and Circuit Identification	3
	Closed Centre Load Sensing High Pressure Hydraulic Circuit	7
	Open Centre High Pressure Hydraulic Circuit	13
	Low Pressure Hydraulic Circuits	18
	Tractors with Power Command Transmission	20
	Tractors with Range Command Transmission	23
	Tractors with Dual Command Transmission	27
	Tractors with Shuttle Command Transmission	31

SECTION 35 - HYDRAULIC SYSTEMS

BOOK 4 - 87015502

Chapter 2 - Variable Flow Hydraulic Pump Assembly

CONTENTS

Section	Description	Page
35 000	Special Tools	3
	Specifications	4
	Tightening Torques	5
	Description and Operation	6
	Hydraulic Circuit Operation	12
	Low Pressure Standby	14
	High Pressure Circuit High Demand	16
	High Pressure Circuit Low Demand	17
	Controlling Maximum System Pressure	18
	Fault Finding	19
	Initial Fault Finding Check	19
	Transmission Low Pressure Warning Light 'ON'	21
	Charge Pressure Light	23
	Intake Filter Restriction Warning Light	23
	Power Steering	24
	Trailer Brakes	24
	Hydraulic Lift	25

SECTION 35 - HYDRAULIC SYSTEMS

BOOK 4 - 87015502

Chapter 2 - Variable Flow Hydraulic Pump Assembly (Continued)

CONTENTS

Section	Description	Page
	Remote Control Valves	26
	Pump Pressure and Flow Testing	27
	Low Pressure Standby	27
	High Pressure Standby	28
	Load Sensing Circuit Test	29
	Charge Pressure test	29
	Variable Flow Piston Pump Flow Test	30
	Steering Pump/Low Pressure Pump Test	31
	Hydraulic Pump Leak Test	32
35 106	Overhaul	33
	Charge Pressure Valve	34
	Charge Pressure Filter Dump Valve	34
	Steering Flow Control Valve	35
	Pressure and Flow Compensating Valve	36
	Pump Removal and Installation	38
	Steering Pump Overhaul	41
	Charge Pump Overhaul	43
	Variable Flow Piston Pump Overhaul	45
	Pump Drive Gear and Bearing Overhaul	49

SECTION 35 - HYDRAULIC SYSTEMS

BOOK 4 - 87015502

Chapter 3 - Fixed Displacement Gear Pumps

CONTENTS

Section	Description	Page
35 000	Specifications	1
	Tightening Torques	3
	Special Tools	4
	Sectional Views - Description and Operation	5
	Troubleshooting	see Chapter 5
35 104	Removal - Installation - Overhaul	6

SECTION 35 - HYDRAULIC SYSTEMS

BOOK 4 - 87015502

Chapter 4 - Electronic Draft Control

CONTENTS

Section	Description	Page
35 000	Specifications	2
	Special Tools	2
	Tightening Torques	3
	Description and Operation	4
	Principal of Draft Control	4
	Components	7
	Operation of Draft Control	13
	Hydraulic Operation of Lift Control Valve	16
	Trouble Shooting and Calibration	24
	Electronic Draft Control Error Codes - Power Command Tractors	27
	Electronic Draft Control Error Codes - Range/Dual Command Tractors	81
	Overhaul	
35 138	Electronic Draft Control Valve - Removal and Installation	134
35 138	Disassembly	136
35 130	Load Sensing Pin Replacement	141
35 134	Hydraulic Lift Cover - Removal and Installation	142
35 134	Disassembly	145

SECTION 35 - HYDRAULIC SYSTEMS

BOOK 4 - 87015502

Chapter 5 - Mechanical Rear Hydraulic Lift

CONTENTS

Section	Description	Page
35 000	Specifications	1
	Tightening Torques	3
	Special Tools	5
	Sectional Views	6
	Description and Operation	9
	Troubleshooting	13
35 114	Removal - Installation - Overhaul	15

SECTION 35 - HYDRAULIC SYSTEMS

BOOK 4 - 87015502

Chapter 6 - Closed Centre Remote Control Valves

CONTENTS

Section	Description	Page
35 000	Special Tools	2
	Specifications	2
	Tightening Torques	2
	Description and Operation	3
	Oil Flow In Neutral	8
	Oil Flow in Raising (Cylinder Extend)	10
	Oil Flow in Lowering (Cylinder Retract)	12
	Oil Flow in Float	14
	Operation of Detent Pressure Regulating Valve	16
	Operation of Two or More Control Valves Simultaneously	18
	Fault Finding and Pressure Testing	21
35 204	Overhaul	22
	Individual Valve Section Removal	22
	Complete Valve Stack Removal	24
	Remote Valve Disassembly	26

SECTION 35 - HYDRAULIC SYSTEMS

BOOK 4 - 87015502

Chapter 7 - Open Centre Remote Control Valves

CONTENTS

Section	Description	Page
35 000	Specifications -Tightening Torques	1
	Special Tools	2
	Sectional Views	3
	Description and Operation	6
35 204	Removal - Installation - Overhaul	11

SECTION 35 - HYDRAULIC SYSTEMS

BOOK 4 - 87015502

Chapter 8 - Trailer Brake Auxiliary Valve

CONTENTS

Section	Description	Page
35 000	Sectional views	1
	Description and operation	1
	Troubleshooting	11

SECTION 35 - HYDRAULIC SYSTEMS

BOOK 4 - 87015502

Chapter 9 - Assist Ram

CONTENTS

Section	Description	Page
35 000	Specifications	1
	Sectional Views	1
	Description and Operation	1
35 116	Removal - Installation - Overhaul	2

SECTION 35 - HYDRAULIC SYSTEM

BOOK 4 - 87015502

Chapter 10 - Hydraulic Pressure Testing

CONTENT

Section	Description	Page
35 000	Introduction	3
	Special Tools	4
	Specifications	5
	CCLS Hydraulic Pump Installation	6
	Open Centre Hydraulic Pump Installation	7
	Fault Finding	7
	Transmission Low Pressure Warning Light On	8
	Charge Pressure Light Flashing	9
	Intake Filter Restriction Light On	9
	Power Steering Not Working Correctly	10
	Trailer Brakes Not Working Correctly	10
	Hydraulic Lift Not Working Correctly	11
	Remote Control Valves Not Working	12

SECTION 35 - HYDRAULIC SYSTEM

BOOK 4 - 87015502

Chapter 10 - Hydraulic Pressure Testing (Continued)

CONTENT

Section	Description	Page
	Pump Pressure and Flow Testing	13
	Low Pressure Standby	13
	High Pressure Standby	14
	Lift Ram Pressure Test	15
	Load Sensing Circuit Test	16
	Charge Pressure Test	16
	Variable Flow Piston Pump Flow Test	17
	Hydraulic Pump Leak Test	18
	Steering Pump/Low Pressure Pump Test	19
	Steering Test	19
	Steering Circuit Pressure Test	19
	Steering Relief Valve Pressure Test	20
	Low Pressure Test	20
	Open Centre Lift Pressure Regulating Valve	22
	Power Command Transmission Clutch Pressure Test	23
	Range Command Transmission Clutch Pressure Test	26
	Dual Command Transmission Clutch Pressure Test	29
	Trailer Brake Testing and Troubleshooting	32
	Trailer Brake Valve Electro-Hydraulic Operation Diagram (Italy Only)	32
	Trailer Brake Disengagement Pressure Test (Italy Only)	33
	Trailer Brake System Pressure Test	34
	Trailer Brake System Leak Test	34
	Trailer Brake Engagement Test (Italy Only)	35
	Trailer Brake Circuit Safety Switch Test	35
	Cooler Bypass Valve - Lubrication Pressure	36
	Brake Booster Valve Pressure Test	36

SECTION 41 - STEERING

BOOK 5 - 87015503

Chapter 1 - Hydrostatic Steering System

CONTENTS

Section	Description	Page
41 000	Specifications	2
	Tightening Torques	3
	Special Tools	3
	Description and Operation	4
	Fault Finding	11
	System Testing	12
41 204	Steering Motor - Removal and Installation	14
	Steering Motor Overhaul	16
	Steering Column - Removal and installation	24
41 216	Two Wheel Drive Steering Cylinder - Removal and Installation	26
	Two Wheel Drive Steering Cylinder - Overhaul	27
	Four Wheel Drive Steering Cylinder - Removal and Installation	28
	Four Wheel Drive Steering Cylinder - Overhaul	29

SECTION 44 - FRONT AXLE AND WHEELS

BOOK 5 - 87015503

Chapter 1 - Front Axle and Wheels

CONTENTS

Section	Description	Page
44 000	Specifications	1
	Tightening Torques	2
	Special Tools	3
	Description and Operation	3
	Troubleshooting	3
	Sectional Views	4
44 101	Removal - Installation - Overhaul	5
44 511	Front Wheel Camber and Toe-in	14

SECTION 50 - AUXILIARY UNITS

BOOK 5 - 87015503

Chapter 1 - Air Conditioning

CONTENTS

Section	Description	Page
50 000	Specifications	1
	Tightening Torques	2
	Special Tools	2
	Safety Precautions	2
	Description and Operation	7
	Fault Finding and System Testing	14
	Leak Testing, Charging, Discharging and System Flushing	31
	Component Overhaul (excluding compressor)	36
50 200	Compressor Removal and Installation	43
50 200	Compressor Overhaul	43

SECTION 55 - ELECTRICAL SYSTEM

BOOK 6 - 87015504

Chapter 1 - Electrical Introduction

CONTENTS

Section	Description	Page
55 100	Electrical System and Fuses	2
55 000	System Precautions For Battery Charging and Welding	6
55 100	Temporary Wiring Repair	7

SECTION 55 - ELECTRICAL SYSTEM

BOOK 6 - 87015504

Chapter 2 - Electronic Management Unit

CONTENTS

Section	Description	Page
55 440	Introduction	1
	Worklamp Operation	2
	Functions controlled by the Electronic Management Unit	2
	Electronic Management Unit with Terralock™	3
	Electronic Management Unit without Terralock™	5
	Calibrations	6
	Brake Switch Adjustment	7
	Removal and Installation	7
	Error Codes	8

SECTION 55 - ELECTRICAL SYSTEM

BOOK 6 - 87015504

Chapter 3 - Electronic Instrument Cluster

CONTENTS

Section	Description	Page
55 100	Introduction	2
	Senders, sensors, & switches	9
	Programming central LCD	15
	Programming performance monitor	17
	Serviceability	19
	Fault code charts	20
	Fault finding flow charts	21
	Diagnostic memory	31

SECTION 55 - ELECTRICAL SYSTEM

BOOK 6 - 87015504

Chapter 4 - Analogue Electronic Instrument Cluster

CONTENTS

Section	Description	Page
55 100	Introduction	1
	Senders, sensors and switches	5
	Serviceability	11

SECTION 55 - ELECTRICAL SYSTEM

BOOK 6 - 87015504

Chapter 5 - Analogue Instrument Cluster

CONTENTS

Section	Description	Page
55 100	Introduction	1
	Senders, sensors & switches	4
	Servicability	9

SECTION 55 - ELECTRICAL SYSTEM

BOOK 6 - 87015504

Chapter 6 - Starting System

CONTENTS

Section	Description	Page
55 000	Specifications	1
	Tightening Torques	1
	Description and Operation	2
	Fault Finding	6
	System Testing	7
55 201	Removal and Installation	9
	Overhaul	10
	Bench Tests	11

SECTION 55 - ELECTRICAL SYSTEM

BOOK 6 - 87015504

Chapter 7 - Charging System

CONTENTS

Section	Description	Page
55 000	Specifications	1
	Tightening Torques	1
	Description and Operation	2
	Fault Finding	4
55 301	Removal, Installation and Overhaul	10

SECTION 55 - ELECTRICAL SYSTEM

BOOK 6 - 87015504

Chapter 8 - BATTERY

CONTENTS

Section	Description	Page
55 000	Specifications	1
	Description and Operation	1
55 300	Removal and Installation	2
	Battery Maintenance and Testing	3
	Battery Charging	4
	Common Causes of Battery Failure	6

SECTION 55 - ELECTRICAL SYSTEM

BOOK 7 - 87015505

Chapter 9 - Wiring Diagrams

CONTENTS

Description	Page
Wiring diagram circuit descriptions (All Models)	1
How to use the linear wiring diagrams	2
Symbols	4
Component identification and wiring diagram location key	5
Wiring Diagrams:	
Power Command Transmission, With Cab	11
Range Command Transmission, With Cab	59
Dual Command Transmission, With Cab	107
Shuttle Command Transmission, With Cab	155
Wire identification key	203
Electrical system diagrams	215

SECTION 55 - ELECTRICAL SYSTEM

BOOK 7 - 87015505

Chapter 10 - Component Testing

CONTENTS

Section	Description	Page
55 000	Thermostat Device	3
	Coolant Level Sensor	4
	Coolant Temperature Sender	5
	Alternator	6
	Engine Oil Pressure Switch	7
	Engine Oil Pressure Sender	8
	Air Filter Restriction Switch	9
	Batteries	10
	Water in Fuel Sensor	11
	Diff. Lock Pressure Switch	12
	4WD Pressure Switch	13
	Low Transmission Oil Pressure Switch	14
	Brake Fluid Level Switch	15
	Handbrake Switch	16
	Fuel Sender	17
	Oil Filter Restriction Switch (open centre)	18
	PTO Speed Sensor	19
	Forward / Reverse Shuttle Lever	20
	Clutch Pedal Potentiometer	22
	Clutch Pedal Disconnect Switch	23
	Radar	24
	Range Potentiometers	25
	Transmission Speed Sensors	26
	Dual Command Lever Selector	27
	Range Command Lever Selector	28
	PWM Valves A,B,C,D & E	29
	Pressure Switches - Dual Command	32
	Forward / Reverse Potentiometer - Dual Command	33
	Transmission Side Cover Solenoids	34
	40 Degree Switch - CCLS Pump	35
	Intake Filter Restriction Switch - CCLS Pump	36
	Low Charge Pressure Switch	37
	Steering Angle Potentiometer	38
	Brake Pressure Switches	39
	Transmission Oil Temperature Sender	40
	Load Sensing Pins	41
	EDC Control Unit	42
	EDC Raise & Lower Solenoids	43
	Lift Arm Potentiometer	44
	Transmission Range Clutch Pressure Switch	45
	Foot Throttle Potentiometer	46
	Engine Torque/RPM sensor	47
	Electronic Draft Control (EDC) Panel	48
	Multi-function Switch, Lights, Indicators, Horn	50
	Multi-function Switch, Wipers and Washers	51

SECTION 55 - ELECTRICAL SYSTEM

BOOK 7 - 87015505

Chapter 11 - Diagnostic H Routines

CONTENTS

Section	Description	Page
55 000	Introduction	2
	Power Command Transmission "H" Routine	3
	Range Command Transmission "H" Routine	20
	Dual Command Transmission "H" Routine	37
	Electronic Draft Diagnostic Test Routine	51

SECTION 55 - ELECTRICAL SYSTEM

BOOK 7 - 87015505

Chapter 12 - Electrical Harnesses

CONTENTS

Section	Description	Page
5500	Wiring Harnesses	2
	Main Connectors	3
	Wire Identification and colour coding	4
	Lighting Harness	6
	Front Main (Engine) Harness	10
	Rear Main (Transmission) Harness,.....	14
	Cab Main Harness, All Models	22
	Power Command Right Hand Console	34

GENERAL INSTRUCTIONS

IMPORTANT NOTICE

All maintenance and repair operations described in this manual should be carried out exclusively by New Holland authorised workshops. All instructions should be carefully observed and special equipment where indicated should be used.

Anyone who carries out service operations described without carefully observing these prescriptions will be directly responsible for any damage caused.

NOTES FOR EQUIPMENT

Equipment which NEW HOLLAND proposes and shows in this manual is:

- studied and designed expressly for use on NEW HOLLAND tractors;
- necessary to make a reliable repair;
- accurately built and strictly tested to offer efficient and long-lasting working life.

NOTICES

The words "front", "rear", "right hand", and "left hand" refer to the different parts as seen from the operator's seat oriented to the normal direction of movement of the tractor.

SAFETY RULES

PAY ATTENTION TO THIS SYMBOL



This warning symbol points out important messages involving personal safety. Carefully read the safety rules contained herein and follow advised precautions to avoid potential hazards and safeguard your safety.



In this manual you will find this symbol together with the following key-words:

WARNING - it gives warning about improper repair operations and potential consequences affecting the service technician's personal safety.

DANGER - it gives specific warning about potential dangers for personal safety of the operator or other persons directly or indirectly involved in the operation.

TO PREVENT ACCIDENTS

Most accidents and personal injuries taking place in workshops are due from non-observance of some essential rules and safety precautions.

The possibility that an accident might occur with any type of machines should not be disregarded, no matter how well the machine in question was designed and built.

A wise and careful service technician is the best precautions against accidents.

Careful observance of this only basic precaution would be enough to avoid many severe accidents.

————— **DANGER** —————

Never carry out any cleaning, lubrication or maintenance operations when the engine is running.

SECTION 00 - GENERAL - CHAPTER 1

SAFETY RULES

Generalities

- Carefully follow specified repair and maintenance procedures.
- Do not wear rings, wristwatches, jewels, unbuttoned or flapping clothing such as ties, torn clothes, scarves, open jackets or shirts with open zips which could get caught on moving parts. Use approved safety clothing such as anti-slipping footwear, gloves, safety goggles, helmets, etc.
- Wear safety glasses with side guards when cleaning parts using compressed air.
- Damaged or frayed wires and chains are unreliable. Do not use them for lifting or towing.
- Wear suitable protection such as approved eye protection, helmets, special clothing, gloves and footwear whenever welding. All persons standing in the vicinity of the welding process should wear approved eye protection. **NEVER LOOK AT THE WELDING ARC IF YOUR EYES ARE NOT SUITABLY PROTECTED.**
- Never carry out any repair on the machine if someone is sitting on the operator's seat, except if they are qualified operators assisting in the operation to be carried out.
- Never operate the machine or use attachments from a place other than sitting at the operator's seat or at the side of the machine when operating the fender switches.
- Never carry out any operation on the machine when the engine is running, except when

specifically indicated. Stop the engine and ensure that all pressure is relieved from hydraulic circuits before removing caps, covers, valves, etc.

- All repair and maintenance operations should be carried out with the greatest care and attention.
- Disconnect the batteries and label all controls to warn that the tractor is being serviced. Block the machine and all equipment which should be raised.
- Never check or fill fuel tanks or batteries, nor use starting liquid if you are smoking or near open flames as such fluids are flammable.
- The fuel filling gun should always remain in contact with the filler neck. Maintain this contact until the fuel stops flowing into the tank to avoid possible sparks due to static electricity build-up.
- To transfer a failed tractor, use a trailer or a low loading platform trolley if available.
- To load and unload the machine from the transportation means, select a flat area providing a firm support to the trailer or truck wheels. Firmly tie the machine to the truck or trailer platform and block wheels as required by the transporter.
- Always use lifting equipment of appropriate capacity to lift or move heavy components.
- Chains should always be safely fastened. Ensure that fastening device is strong enough to hold the load foreseen. No persons should stand near the fastening point.
- The working area should be always kept CLEAN and DRY. Immediately clean any spillage of water or oil.
- Never use gasoline, diesel oil or other flammable liquids as cleaning agents. Use non-flammable non-toxic proprietary solvents.
- Do not pile up grease or oil soaked rags, as they constitute a great fire hazard. Always place them into a metal container.

SECTION 00 - GENERAL - CHAPTER 1

START UP

- Never run the engine in confined spaces which are not equipped with adequate ventilation for exhaust gas extraction.
- Never bring your head, body, arms, legs, feet, hands, fingers near fans or rotating belts.

medical attention may result in serious infections or dermatitis.

- Always take system pressure readings using the appropriate gauges.

ENGINE

- Always loosen the radiator cap very slowly before removing it to allow pressure in the system to dissipate. Coolant should be topped up only when the engine is stopped.
- Do not fill up fuel tank when the engine is running.
- Never adjust the fuel injection pump when the tractor is moving.
- Never lubricate the tractor when the engine is running.

WHEELS AND TYRES

- Check that the tyres are correctly inflated at the pressure specified by the manufacturer. Periodically check for possible damage to the rims and tyres.
- Stay at the tyre side when inflating.
- Check the pressure only when the tractor is unloaded and tyres are cold to avoid wrong readings due to over-pressure.
- Never cut, nor weld a rim with the inflated tyre assembled.
- To remove the wheels, block both front and rear tractor wheels. Raise the tractor and install safe and stable supports under the tractor in accordance with regulations in force.
- Deflate the tyre before removing any object caught into the tyre tread.
- Never inflate tyres using flammable gases as they may originate explosions and cause injuries to bystanders.

ELECTRICAL SYSTEMS

- If it is necessary to use auxiliary batteries, cables must be connected at both sides as follows: (+) to (+) and (-) to (-). Avoid short-circuiting the terminals. GAS RELEASED FROM BATTERIES IS HIGHLY FLAMMABLE. During charging, leave the battery compartment uncovered to improve ventilation. Avoid sparks or flames near the battery area. Do no smoke.
- Do not charge batteries in confined spaces.
- Always disconnect the batteries before performing any type of service on the electrical system.

HYDRAULIC SYSTEMS

- Some fluid coming out from a very small port can be almost invisible and be strong enough to penetrate the skin. For this reason, NEVER USE YOUR HANDS TO CHECK FOR LEAKS, but use a piece of cardboard or a piece of wood for this purpose. If any fluid is injected into the skin, seek medical aid immediately. Lack of immediate

REMOVAL AND INSTALLATION

- Lift and handle all heavy components using lifting equipment of adequate capacity. Ensure that parts are supported by appropriate slings and hooks. Use lifting eyes provided to this purpose. Take care of the persons near the loads to be lifted.

HEALTH AND SAFETY**CONTENT**

Section	Description	Page
	HEALTH AND SAFETY PRECAUTIONS	4
	ACIDS AND ALKALIS	5
	ADHESIVES AND SEALERS - see Fire	5
	ANTIFREEZE - see Fire, Solvents e.g. Isopropanol, Ethylene Glycol, Methanol.	5
	ARC WELDING - see Welding.	5
	BATTERY ACIDS - see Acids and Alkalies.	5
	BRAKE AND CLUTCH FLUIDS (Polyalkylene Glycols) - see Fire.	6
	BRAZING - see Welding.	6
	CHEMICAL MATERIALS - GENERAL - see Legal Aspects.	6
	DO'S	6
	DO NOTS	6
	CORROSION PROTECTION MATERIALS - see Solvents, Fire.	6
	DUSTS	7
	ELECTRIC SHOCK	7
	EXHAUST FUMES	7
	FIBRE INSULATION - see Dusts.	7
	FIRE - see Welding, Foams, Legal Aspects.	7
	FIRST AID	7
	FOAMS - Polyurethane - see Fire.	7
	FUELS - see Fire, Legal Aspects, Chemicals - General, Solvents.	8
	GAS CYLINDERS - see Fire.	8
	GENERAL WORKSHOP TOOLS AND EQUIPMENT	9
	LEGAL ASPECTS	9
	LUBRICANTS AND GREASES	9
	PAINTS - see Solvents and Chemical Materials - General.	10
	SOLDER - see Welding.	10
	SOLVENTS - see Chemical Materials - General Fuels (Kerosene), Fire.	10
	SUSPENDED LOADS	11
	WELDING - see Fire, Electric Shock, Gas Cylinders.	11

HEALTH AND SAFETY PRECAUTIONS

Many of the procedures associated with vehicle maintenance and repair involve physical hazards or other risks to health. This section lists, alphabetically, some of these hazardous operations and the materials

and equipment associated with them. The precautions necessary to avoid these hazards are identified.

The list is not exhaustive and all operations and procedures and the handling of materials, should be carried out with health and safety in mind.