

# SERVICE MANUAL

**T1560 / T1570**  
Compact Tractors

Print No. 84205613A



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

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# INTRODUCTION

This repair manual provides the technical information needed to properly service the New Holland T1560 and T1570 tractor. Use this manual in conjunction with the operator's manual for complete operation, adjustment, and maintenance information.

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

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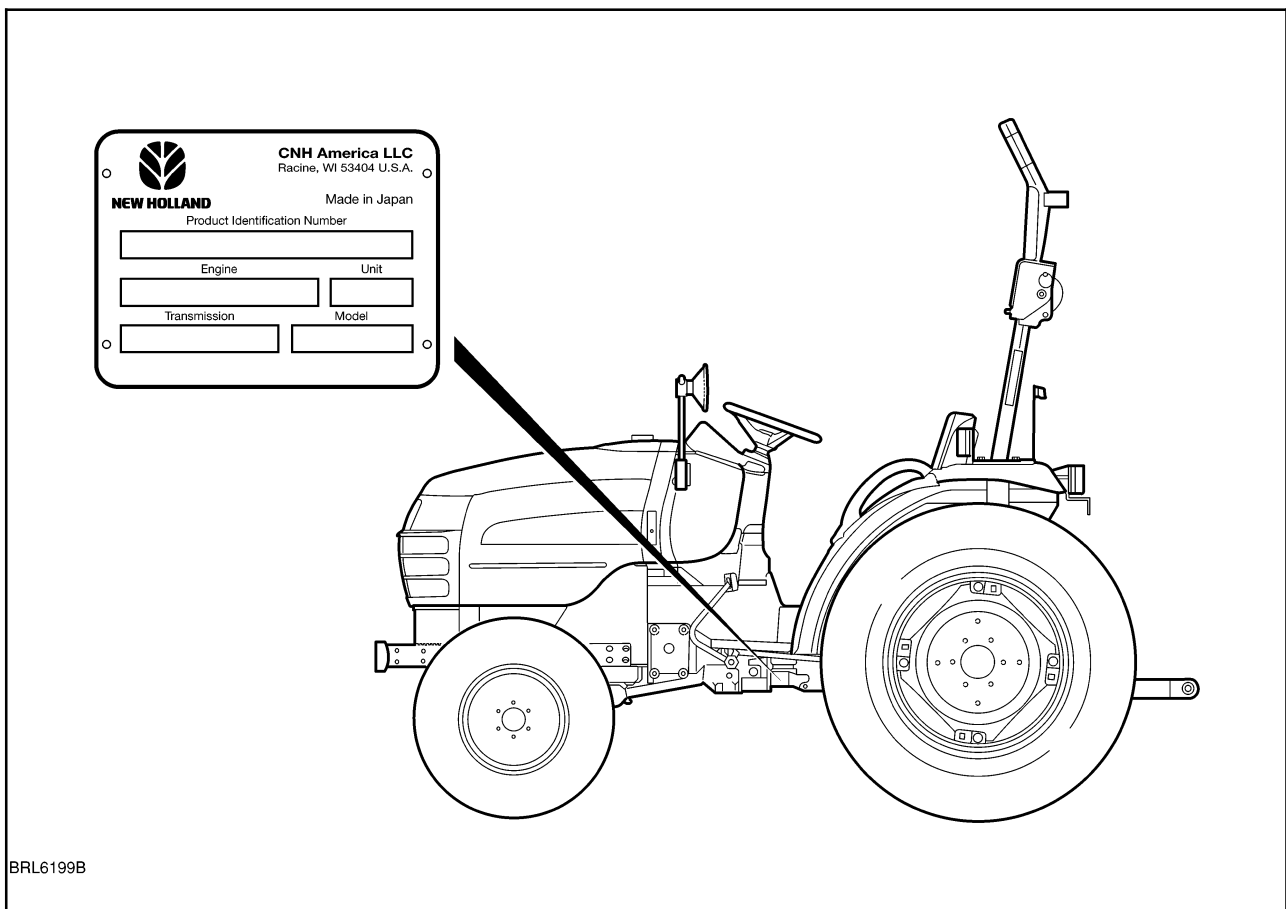
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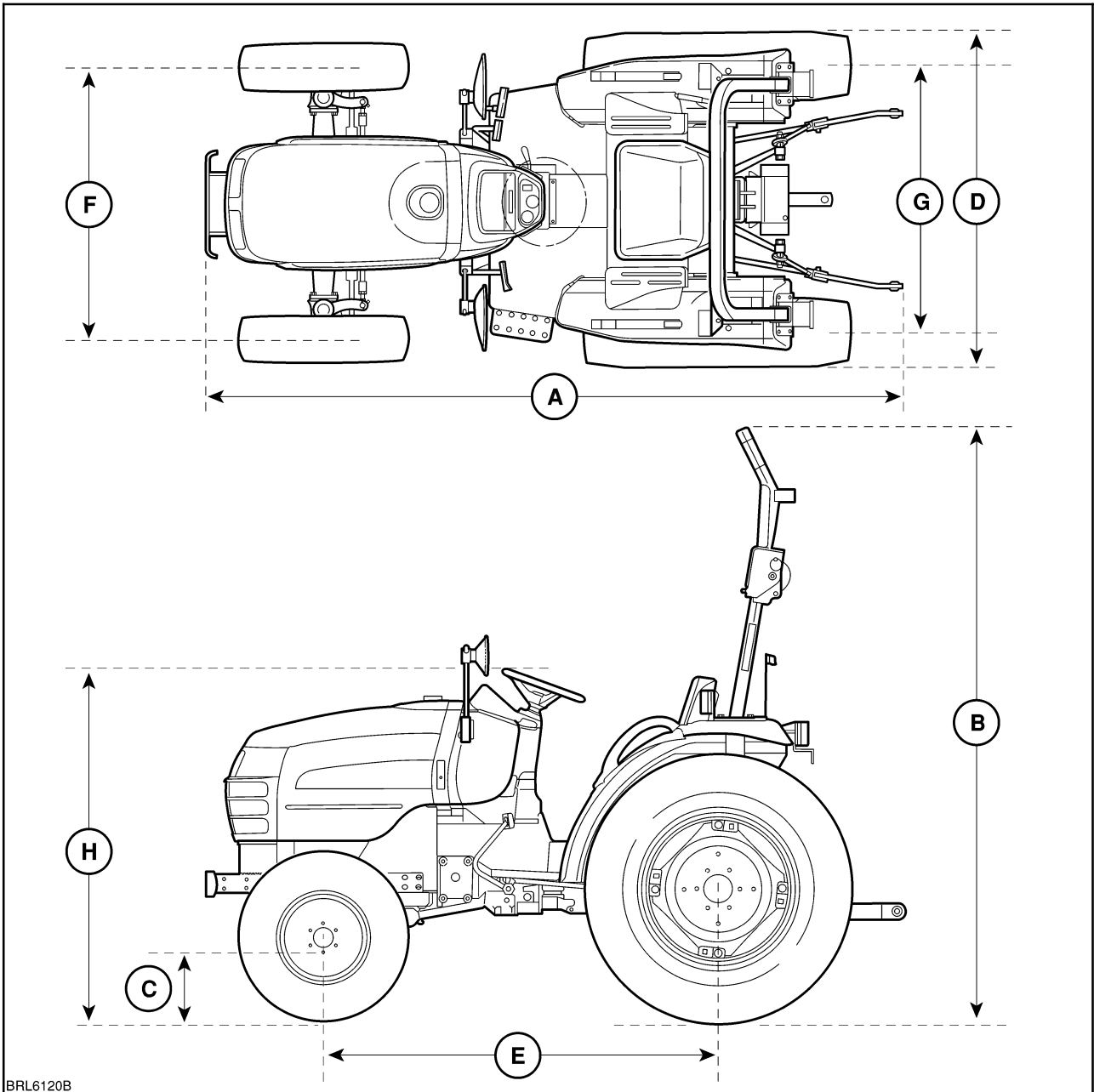
A PRODUCT IDENTIFICATION PLATE is located on the *left-hand side of the transmission housing*. The numbers on the plate are important in the event your tractor should require future service. For your convenience, have your dealer record these numbers in the appropriate spaces below.

New Holland North America, Inc. is continually striving to improve its products. We reserve the right to change prices, specification, or equipment at any time without notice.

All data given in this book is subject to production variations. Dimensions and weights are approximate only, and the illustrations do not necessarily depict tractors in standard condition. For exact information about any particular tractor, please consult your New Holland dealer.

**T1560 & T1570 ID PLATE LOCATION**

**GENERAL DIMENSIONS FOR T1560 & T1570**



BRL6120B

**Model T1560/T1570**

**(A)—LENGTH: (3 pt. Horizontal)**

4WD

Turf Tyres .....	2825mm
Ag. Tyres .....	2825mm

**(B)— TO TOP OF ROPS:**

Turf Tyres .....	2425mm
Ag. Tyres .....	2490mm

**(C)- MINIMUM GROUND CLEARANCE:**

Turf Tyres .....	250mm
Ag. Tyres .....	310mm

**GENERAL DIMENSIONS Contd:**

**Model T1560/T1570**

**(D)—WIDTH: REAR AXLE:**

**Outside to Outside:**

Turf Tyres .....	1510mm (Narrow setting)
Ag. Tyres .....	1387mm (Narrow setting)

**(E)—WHEEL BASE:**

FWD .....	1600mm
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**(F)— FRONT WHEEL CENTRES:**

Turf Tyres .....	1100mm
Ag. Tyres .....	1150mm

**(G)— REAR WHEEL CENTRES:**

Turf Tyres .....	1390mm
Ag. Tyres .....	1500mm

**(H)— HEIGHT TO TOP OF STEERING WHEEL:**

Turf Tyres .....	1350mm
Ag. Tyres .....	1415mm

**WHEEL TREAD SETTINGS:**

*FRONT:*

Agricultural:

FWD	
9x3 Transmission .....	1100mm
HST Transmission .....	1100mm

Turf:

FWD	
9x3 Transmission .....	1150mm
HST Transmission .....	1150mm

*REAR:*

Agricultural:

FWD	
9x3 Transmission .....	1070mm
HST Transmission .....	1070mm

Turf:

FWD	
9x3 Transmission .....	1120mm
HST Transmission .....	1120mm

**WEIGHT:**

With ROPS & Ag Tyres:

FWD .....	HST	9 x 3
Ag Tyres .....	1056 kg 2328 lbs	1050 kg 2315 lbs
Turf Tyres .....	1048 kg 2311 lbs	1042 kg 2298 lbs

## SECTION 10 - ENGINE

### Chapter 1 - Engine

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## SPECIFICATIONS

<b>GENERAL</b>	<b>T1560</b>	<b>T1570</b>
Gross Engine in Kw(Hp)	22.4 (30)	24.6 (33)
PTO in Kw(Hp)		
w/9 x 3	17.7 (23.7)	26.0 (34.8)
w/HST	17.2 (23.1)	19.0 (25.5)
Engine Model	N843	N843
Number of Cylinders	3	3
Bore x Stroke in mm	84 x 90	84 x 90
Displacement in Litres	1.496	1.496
Compression Ratio	22.2:1	22.2:1
Rated Speed in rpm	2800	2800
Muffler Location	Under Hood	Under Hood
Firing Order	1-2-3	1-2-3
Low Idle Speed in rpm	1000 - 1100	1000 - 1100
High Idle Speed in rpm	3000	3000
Cylinder Arrangement	In-line Vertical	In-line Vertical
Valve Arrangement	Overhead	Overhead
<b>CYLINDER BLOCK</b>		
Bore Standard in mm	84 - 84.019	84 - 84.019
Bore Maximum in mm	84.2	84.2
Head Surface Warp Standard in mm	0.05	0.05
Head Surface Warp Maximum in mm	0.12	0.12
<b>CYLINDER HEAD</b>		
Head Warp in mm		
Standard	0.05	0.05
Maximum	0.12	0.12
Valve Seat Width in mm		
Standard Intake	1.66 - 1.87	1.66 - 1.87
Exhaust	1.66 - 1.73	1.66 - 1.73
Maximum	2.5	2.5
Valve Seat Face Angle	45°	45°
Valve Seat Sink in mm		
Standard	0.85 - 1.15	0.85 - 1.15
Maximum	1.8	1.8

<b>PISTON</b>	<b>T1560</b>	<b>T1570</b>
Diameter in mm		
Standard	83.948 - 83.963	83.948 - 83.963
Minimum	83.7	83.7
Bore Clearance in mm		
Standard	0.038 - 0.072	0.038 - 0.072
Maximum	0.25	0.25
Piston Pin Bore in mm		
Standard	27.999 - 28.005 (1.10231 - 1.1026)	27.999 - 28.005 (1.10231 - 1.1025)
Maximum	28.02 (1.1031)	28.02 (1.1031)
Piston Pin Clearances in mm (in.)		
Standard	-0.001 +0.007	-0.001 +0.007
Maximum	0.02	0.02
<b>PISTON PIN</b>		
Diameter in mm		
Standard	27.996 - 28.0	27.996 - 28.0
Maximum	27.98	27.98
Pin-to-Bushing Clearance in mm		
Standard	0.01 - 0.025	0.01 - 0.025
Maximum	0.08	0.08
<b>PISTON RING END GAP</b>		
1st Compression in mm		
Standard	0.2 - 0.35	0.2 - 0.35
Maximum	1.0	1.0
2nd Compression in mm		
Standard	0.20 - 0.40	0.20 - 0.40
Maximum	1.0	1.0
Oil Ring in mm		
Standard	0.20 - 0.40	0.20 - 0.8
Maximum	1.0	1.0

<b>PISTON RING COMPRESSION RING TO GROOVE SIDE CLEARANCE</b>	<b>T1560</b>	<b>T1570</b>
1st Compression in mm		
Standard	0.07 - 0.11	0.07 - 0.11
Maximum	0.25	0.25
2nd Compression in mm		
Standard	0.04 - 0.08	0.04 - 0.08
Maximum	0.25	0.25
Oil Ring in mm (in.)		
Standard	0.02 - 0.06	0.02 - 0.06
Maximum	0.15	0.15
<b>PISTON RING WIDTH</b>		
1st Compression in mm	2.0	2.0
2nd Compression in mm	1.5	1.5
Oil Ring in mm	4.0	4.0
<b>CONNECTING ROD</b>		
Rod Twist in mm		
Standard	< 0.08	< 0.08
Maximum	> 0.2	> 0.2
Rod Bend in mm		
Standard	< 0.05	< 0.05
Maximum	> 0.15	> 0.15
Rod Side Play in mm		
Standard	0.1 - 0.3	0.1 - 0.3
Maximum	0.7	0.7
Crankshaft Bearing Clearance in mm		
Standard	0.035 - 0.085	0.035 - 0.085
Maximum	0.2	0.2

<b>CRANKSHAFT</b>	<b>T1560</b>	<b>T1570</b>
Journal Diameter in mm		
Standard	67.957 - 67.97	67.957 - 67.97
Minimum	67.9	67.9
Crankpin Diameter in mm		
Standard	51.964 - 51.975	51.964 - 51.975
Minimum	51.9	51.9
Runout in mm		
Standard	< 0.03	< 0.03
Maximum	> 0.06	> 0.06
End Play in mm		
Standard	0.1 - 0.4	0.1 - 0.4
Minimum	0.5	0.5
Thrust Washer Thickness in mm		
Standard	2.95 - 3.0	2.95 - 3.0
Maximum	2.8	2.8
<b>CAMSHAFT</b>		
Cam Height - Valve mm		
Standard	34.441 - 34.5076	34.441 - 34.5076
Minimum	34.1	34.1
Bend in mm		
Standard	< 0.03	< 0.03
Maximum	> 0.1	> 0.1
Cam Height - Fuel mm		
Standard	42.99 - 43.01	42.99 - 43.01
Minimum	42.8	42.8
<b>VALVES</b>		
Stem Diameter - Intake in mm		
Standard	6.955 - 6.97	6.95 - 6.97
Minimum	6.89	6.89
Stem Diameter - Exhaust in mm		
Standard	6.94 - 6.955	6.94 - 6.955
Minimum	6.84	6.84
Guide Clearance - Intake in mm		
Standard	0.03 - 0.06	0.03 - 0.06
Maximum	> 0.2	> 0.2
Guide Clearance-Exhaust in mm		
Standard	0.05 - 0.075	0.05- 0.075
Maximum	> 0.25	> 0.25
Valve Margin in mm		
Standard	0.775 - 1.075	0.775 - 1.075
Allowable Limit	0.5	0.5

<b>VALVES Contd;</b>	<b>T1560</b>	<b>T1570</b>
Valve Clearance (Inlet/Exhaust) in mm	0.2	0.2
Valve Spring-Free Height in mm		
Standard	35	35
Allowable Limit	33.5	33.5
Valve Spring-Squareness in mm		
Standard	< 1.2	< 1.2
Allowable Limit	2.0	2.0
Valve Spring-Compressed Height in mm		
Standard @ 8.1 kg	30.4	30.4
Allowable Limit @ 7 kg	30.4	30.4
Valve Timing - Intake		
Open Before TDC	13°	13°
Close After BDC	43°	43°
Valve Timing - Exhaust		
Open Before TDC	43°	43°
Close After BDC	13°	13°
<b>PUSH RODS</b>		
Length in mm	177.6-178.0	177.6-178.0
Diameter in mm	6.3	6.3
<b>ROCKER ARM</b>		
Shaft Diameter in mm	14.95 - 14.97	14.95 - 14.97
Allowable Limit	14.87	14.87
Shaft to Rocker Clearance in mm		
Standard	0.032 - 0.068	0.032 - 0.068
Allowable Limit	0.2	0.2
<b>LUBRICATION SYSTEM</b>		
Relief Valve - Opening Pressure in Bar	2.4 - 3.4	2.4 - 3.4
Rotor to Vane Clearance in mm		
Standard	0.1 - 0.15	0.1 - 0.15
Allowable Limit	0.25	0.25
Rotor to Cover Clearance in mm		
Standard	0.1 - 0.15	0.1 - 0.15
Allowable Limit	0.2	0.2

**COOLING SYSTEM**

Type of System .....	Pressurized liquid w/recirculating by-pass
Water Pump:	
Type .....	Centrifugal
Drive .....	V-belt
Belt Deflection (tension) .....	5 to 10mm when 5 kg is applied midway between pulleys
Fan Diameter .....	340 mm
Thermostat:	T1560/T1570
Starts to Open .....	82°C
Fully Open .....	95°C
Radiator Cap Pressure	
Rating .....	0.9 bar (13 psi)
Coolant .....	Ethylene glycol and water in a 50/50 mixture
Capacity .....	5.0 Litres



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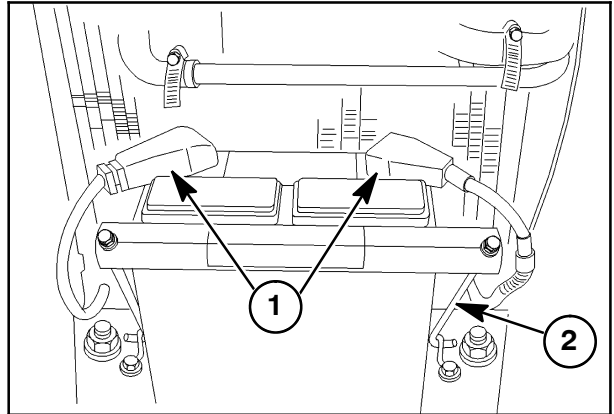
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## OVERHAUL - ENGINE

## ENGINE

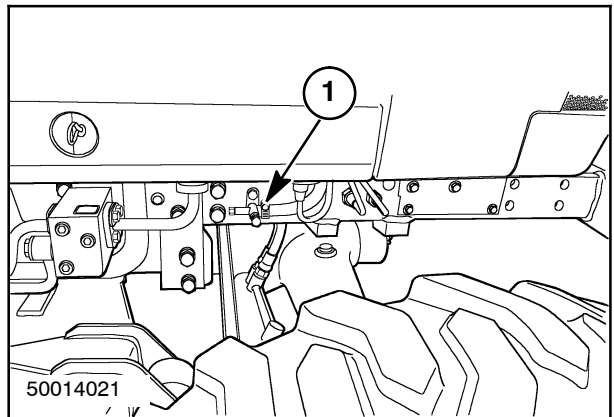
## Preparation

1. Disconnect the battery leads (1) and battery hold down bracket (2) to remove the battery.
2. Remove tractor hood and side panels.



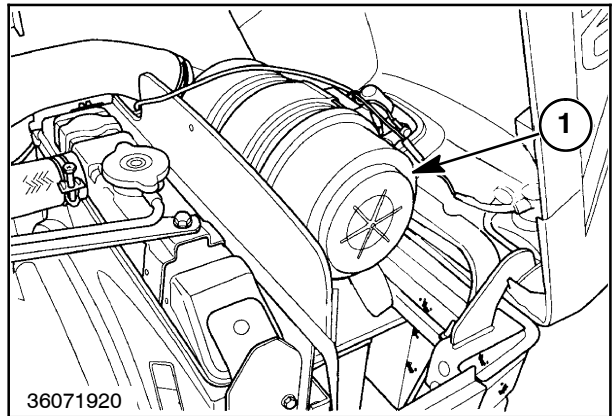
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3. Turn coolant tap bolt (1) counterclockwise to drain fluid. Remove the radiator assembly. See "Radiator Removal", discussed later in this section.



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4. Remove the air cleaner assembly (1) along with the air cleaner hoses.



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