



**NEW HOLLAND**



# **TD60D - TD70D - TD80D - TD90D - TD95D MODEL TRACTORS SERVICE MANUAL**

<b>SECTIONS</b>	
<b>GENERAL</b> .....	<b>00</b>
<b>ENGINE</b> .....	<b>10</b>
<b>CLUTCH</b> .....	<b>18</b>
<b>GEARBOX</b> .....	<b>21</b>
<b>TRANSMISSION OF MOTION</b> .....	<b>23</b>
<b>FRONT MECHANICAL TRANSMISSION</b> .....	<b>25</b>
<b>REAR MECHANICAL TRANSMISSION</b> .....	<b>27</b>
<b>POWER TAKE-OFF</b> .....	<b>31</b>
<b>BRAKES</b> .....	<b>33</b>
<b>HYDRAULIC SYSTEMS</b> .....	<b>35</b>
<b>STEERING</b> .....	<b>41</b>
<b>AXLE AND WHEELS</b> .....	<b>44</b>
<b>AUXILIARY EQUIPMENT</b> .....	<b>50</b>
<b>ELECTRICAL SYSTEM</b> .....	<b>55</b>
<b>CAB</b> .....	<b>90</b>

**S E R V I C E**

## **INTRODUCTION**

- ◇ *This manual is divided into sections identified by two-figure numbers. Each section has independent page numbering.  
For ease of reference, these sections have the same numbers and names as the Repairs Rate Book sections.*
- ◇ *The different sections can easily be found by consulting the table of contents on the following pages.*
- ◇ *The document number of the manual and the edition/update dates are given at the bottom of each page.*
- ◇ *The information contained in this manual was current on the date printed on each section. As NEW HOLLAND constantly improves its product range, some information may be out of date subsequent to modifications implemented for technical or commercial reasons or to meet legal requirements in different countries.  
In the event of conflicting information, consult the NEW HOLLAND Sales and Service Departments.*

## **IMPORTANT WARNINGS**

- ◇ *All maintenance and repair work described in this manual must be performed exclusively by NEW HOLLAND service technicians in strict accordance with the instructions given and using any specific tools necessary.*
- ◇ *Anyone who performs the operations described herein without strictly following the instructions is personally responsible for resulting injury or damage to property.*
- ◇ *The Manufacturer and all organisations belonging to the Manufacturer's distribution network, including but not restricted to national, regional or local distributors, will accept no responsibility for personal injury or damage to property caused by abnormal function of parts and/or components not approved by the Manufacturer, including those used for maintenance and/or repair of the product manufactured or marketed by the Manufacturer.  
In any case, the product manufactured or marketed by the Manufacturer is covered by no guarantee of any kind against personal injury or damage to property caused by abnormal function of parts and/or components not approved by the Manufacturer.*

TEXT AND ILLUSTRATIONS ARE THE PROPERTY  
OF CNH ITALIA S.p.a.



No part of the text or illustrations  
may be reproduced

PRINTED IN FRANCE

**CNH ITALIA S.p.a. - Viale delle Nazioni, 55 - 41100 MODENA - Italia**  
TECHNICAL SUPPORT - Technical Information  
Print no. **87616423** - 01 - 2007

# NEW HOLLAND

## Repair Manual - TD Series Tractors

---

### CONTENTS

#### GENERAL

#### SECTION 00

##### General Instructions and Health and Safety

##### Chapter 1

Section	Description	Page
00 000	General instructions .....	1
	Notes for spare parts .....	2
	Notes for equipment .....	2
	Safety rules .....	3
	Consumables .....	6

#### ENGINE

#### SECTION 10

##### Engine System

##### Chapter 1

Section	Description	Page
10 000	General specification .....	2
	Injection pump calibration data .....	5
	General specifications .....	16
	Tightening torques .....	24
	Tools .....	25
	Cross-sectional views .....	28
	Lubrication and cooling system diagrams .....	32
	Fault diagnosis .....	35
10 001 10	Engine <i>Removal-Installation</i> .....	39
10 001 54	Engine <i>Bench overhaul</i> .....	53
	Checks, measurements and repairs .....	78
10 406 10	Radiator <i>Removal-Installation</i> .....	102
10 102 70	Crankshaft front oil seal <i>removal installation</i> .....	106
10 402 10	Coolant pump <i>removal installation</i> .....	112
10 402 30	Cooling system thermostat .....	115
10 206 14	Bosch injection pump <i>removal installation</i> .....	118
	Bosch injection pump <i>timing</i> .....	121
	Bosch injection pump <i>air bleeding</i> .....	123
10 218 30	Injectors <i>removal installation</i> .....	124

**<https://www.ebooklibonline.com>**

Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.

The full manual is available for immediate download.

**<https://www.ebooklibonline.com>**

<b>10 106 12</b>	Valve clearance adjustment .....	126
<b>10 402 28</b>	Coolant pump overhaul .....	129
<b>10 001 30</b>	Compression test .....	130

## CLUTCH

## SECTION 18

### Clutches

### Chapter 1

Section	Description	Page
<b>18 000</b>	General specifications .....	1
	Tightening torques .....	4
	Tools .....	5
	Cross-sectional views .....	6
	Clutch Troubleshooting .....	8
<b>18 110 10</b>	Removal - Installation .....	9
	Overhaul .....	17
	Minimum permissible dimensions after refacing .....	21
	Adjustments .....	22
<b>18 100 40</b>	Adjustment of the main and PTO clutch control linkage .....	24

## GEARBOX

## SECTION 21

### Mechanical Transmission (12x4)

### Chapter 1

Section	Description	Page
<b>21 000</b>	Main data .....	1
	Tightening torques .....	2
	Tools .....	3
	Section views .....	3&5
	Description and operation .....	8
	Fault diagnosis .....	8
<b>21 110</b>	Removal - Refitting .....	see sect 27

### Reverser (12x12)

### Chapter 2

Section	Description	Page
<b>21 000</b>	Main data .....	1
	Tightening torques .....	2
	Tools .....	3
	Section views .....	3
	Description and operation .....	5
	Fault diagnosis .....	5
<b>21 110</b>	Removal-Refitting .....	6

### Reverser and Creeper (20x12)

### Chapter 3

Section	Description	Page
<b>21 000</b>	Main data .....	1
	Tightening torques .....	2
	Tools .....	3
	Section views .....	3
	Description and operation .....	5
	Fault diagnosis .....	5
<b>21 110</b>	Removal-Refitting .....	6

## DRIVE LINES

## SECTION 23

### Drive Lines

### Chapter 1

Section	Description	Page
23 000	Main specification .....	1
	Torque settings and Tools .....	2
	Cross-Sectional views .....	3
23 101 26	Transmission shafts and guard (Disassembly - Assembly) .....	4
23 101 40	Drive gear housing (Removal - Installation) .....	5
23 101 42	Drive gear housing removed (Disassembly - Assembly) .....	7

## FRONT AXLE MECHANICAL TRANSMISSION

## SECTION 25

### Front Axle Mechanical Transmission

### Chapter 1

Section	Description	Page
25 000	Main data .....	1
	Tightening torques .....	4
	Tools .....	6
	Cross-sectional views .....	7
	Description and operation .....	9
25 100 30	Complete front axle. Removal - Installation .....	10
25 100 38	Front axle. Removal - Installation .....	14
25 108 46-47	Steering knuckle bearing pins. Replacement .....	24
	Stub axle adjustment .....	25
	Wheel hub bearing adjustment .....	27
	Bevel drive adjustment .....	29
25 102 24	Front axle differential. Overhaul .....	36
25 100 27	Front axle differential with LIM-SLIP. Overhaul .....	37
	Front axle differential with NO SPIN. Overhaul .....	39
44 511 80	Leading drive wheels toe-in check .....	42

## REAR AXLE AND TRANSMISSION

## SECTION 27

### Rear Axle And Transmission

### Chapter 1

Section	Description	Page
27 000	Main data .....	1
	Tightening torques .....	3
	Special tools .....	5
	Cross-sectional views .....	7
	Description and operation and troubleshooting .....	9
21.118.10 - 12	Transmission-gearbox casing Removal-Installation .....	10
21.118.85	Transmission-gearbox casing Disassembly-Overhaul .....	27
	Gearbox driven shaft end float adjustment .....	35
	Differential lock engagement sleeve adjustment .....	36
	Determining the bevel pinion positioning adjustment ring .....	37
	Adjusting the taper roller bearings for the bevel pinion shaft .....	39
	Adjusting the bearings and checking the backlash .....	40
	Differential pinion and side gear backlash adjustment .....	44

## POWER TAKE-OFF

## SECTION 31

### Mechanical Power Take - Off

### Chapter 1

Section	Description	Page
31 000	Main specification .....	1
	Tools .....	3
	Torque settings .....	4
	Sectional drawings .....	5
	Description and operation .....	10
	Troubleshooting .....	12
	Removal - Refitting .....	13
31 101	Bench overhaul .....	16

## BRAKING SYSTEM

## SECTION 33

### Braking System

### Chapter 1

Section	Description	Page
33 000	Main data .....	1
	Tightening torques .....	2
	Cross-sectional views .....	2
	Description & Operation .....	9
	Tools - Troubleshooting .....	10
33.206	Front brake assembly mod. TD60D and TD70D removal and refitting - overhauling on the bench .....	11
33.202.60	Service brake removal and refitting .....	14
33.202.50	Removal-Refitting of front brake pumps .....	19
33.202.40	Bleeding air from the front braking system .....	23
33.120.08	Adjusting service brake pedals travel .....	24
33.110.08	Parking brake travel adjustment .....	24

## HYDRAULIC SYSTEM

## SECTION 35

### Rear Mechanical Hydraulic Lift

### Chapter 1

Section	Description	Page
35 000	Main specification .....	1
	Tightening torques .....	3
	Tools .....	6
	Cross-sectional views .....	7
	Description & Operation .....	9
	Hydraulic circuit .....	9
	Description and operation of lift phases .....	10
	Fault diagnosis .....	13
35 110.30	Hydraulic lift - disassembly reassembly .....	15
35.110.40-42-46	Hydraulic lift - bench overhaul .....	21
	Adjusting the lift .....	26
35.110.08	Linkage adjustment .....	32
35.110.30	Pressure relief valve - disassembly reassembly .....	34
35.110.32	Pressure relief valve - setting .....	34
35.110.14	Lift control valve - disassembly assembly and overhaul on bench .....	36
35.0101.10	Lift pump .....	41

## Open Centre System Auxiliary Control Valves

## Chapter 2

Section	Description	Page
35 000	Main data – Tools .....	1
	Auxiliary control valves – sectional views .....	2
	Description and operation .....	3
	Fault diagnosis .....	see chapter 1
35 204 46	Auxiliary control valves – Assembly-Disassembly .....	7
	Spool binding test .....	15
	Spool leakage test .....	16
	Adjustment of the automatic detent release pressure .....	17

## Trailer Brake Auxiliary Control Valve

## Chapter 3

Section	Description	Page
35 000	Section views .....	1
	Description and operation .....	1
	Hydraulic diagram .....	2
	Description and operation of valve phases .....	3
	Trailer brake auxiliary control valve linkage adjustment .....	6

## STEERING

## SECTION 41

### Steering

### Chapter 1

Section	Description	Page
41 000	Principal data .....	1
	Tightening torques .....	3
	Section views .....	4
	Hydraulic diagram .....	6
	Operation .....	7
	Fault diagnosis .....	9
	Tools .....	6
41 204 30	Hydrostatic steering control valve – Removal-Installation .....	11
41 204 34	Hydrostatic steering control valve – Disassembly-Assembly .....	14
41 204 38	Hydrostatic steering control valve – Bench testing .....	28
	Hydrostatic steering oil pump – Disassembly-Assembly .....	30
41 216 20	Steering cylinder (two-wheel drive axle) – Removal-Refitting .....	32
	Steering cylinder (four wheel drive axle) – Removal-Refitting .....	33

## FRONT AXLE AND WHEELS

## SECTION 44

### Front Axle And Wheels

### Chapter 1

Section	Description	Page
44 000	Principal data .....	1
	Sectional views .....	3
	Torque settings .....	3
	Equipment – Fault diagnosis .....	5
44 101 30	Removal-Refitting-Overhaul .....	6
44 101 22	Wheel hub disassembly-assembly .....	9
44 101 46	Stub axle overhaul .....	16
44 101 80	Checking wheel alignment .....	20

## AUXILIARY UNITS

## SECTION 50

### Auxiliary Units

### Chapter 1

Section	Description	Page
50 000	Safety instructions .....	2
	General characteristics .....	3
	Equipment .....	4
	Operating principles .....	5
	Fault diagnosis .....	7
	Cab controls .....	11
	Use .....	14
	Main components of the cab air conditioning system .....	15
	Refrigerant recovery-recycling and evacuation-charging stations .....	20
50 200 04	Drying recharging and checking cooling .....	22
50 200 03	Functional testing of air conditioning system .....	27
	Summary of the cab air-conditioning system charging operations .....	28
	Checking for refrigerant leaks using an electronic leak detector .....	30
	Summary of fault diagnosis and maintenance .....	31
	Air conditioning and heating pipes - Replacement .....	33
50 200 04-74	Receiver-drier - Replacement .....	36
50 200 04-72	Condenser - Replacement .....	38
50 200 04-26	Compressor - Removal-Refitting .....	39
50 200 10	Compressor drive belt tension adjustment .....	41

## ELECTRICAL SYSTEM

## SECTION 55

### Instruments

### Chapter 1

Section	Description .....	Page
55 418	Analogue instruments and introduction .....	1
	Transmitter and switches .....	4

### Components

### Chapter 2

Section	Description .....	Page
55 500	Introduction .....	1
	Component description .....	1

### Starting System

### Chapter 3

Section	Description	Page
55 000	Technical information .....	1
	Tightening torques .....	1
	Description and operation .....	2
	Starting circuit .....	3
	System tests .....	5
55 201	Removal and re-installation of starter motor .....	8
	Servicing .....	9
	Bench tests .....	10

## Charging System

## Chapter 4

Section	Description	Page
55 000	Technical information	1
	Tightening torques	1
	Description and operation	2
	System testing and trouble-shooting	4
55 301	Removal, re-installation and servicing	10

## Battery

## Chapter 5

Section	Description	Page
55 000	Technical information	1
	Description and operation	1
55.301.040	Removal and re-installation	2
	Battery checking and maintenance	3
	Charging the battery	4
	Battery problems - Frequent causes	7

## Electrical Circuits

## Chapter 6

Section	Description	Page
<b>Section</b>	<b>Description</b>	<b>Page</b>
55 100	Contents	1
	Fuses (all versions)	2
	Symbols used in electrical circuits	4
	Electrical wire colour coding	5
	Ground locations	5
	Electrical diagrams	
	- General diagrams (W/Cab)	9
	- General diagrams (W/Out Cab)	15
	- Analogue instrument circuit and connector overview	19
	- Start-up circuit and connector overview	21
	- Direction indicator & hazard warning light circuit and connector overview	25
	- Windscreen and rear window wiper/washer circuit and connector overview	31
	- Brake light circuit and connector overview	35
	- Heating and air-conditioning system circuit and connector overview	41
- Work lamp (without cab circuit and connector overview)	45	
- Work lamp (without cab circuit and connector overview)	49	
- Side lights, main and dipped headlights, parking light circuit and connector overview	53	

## BODYWORK AND DRIVER POSITION

## SECTION 90

### Bodywork And Driver Position

### Chapter 1

Section	Description	Page
90 000	Disassembly-Assembly	1

## GENERAL INSTRUCTIONS

### IMPORTANT NOTICE

All maintenance and repair operations described in this manual should be carried out exclusively by the NEW HOLLAND authorised workshops. All instructions detailed should be carefully observed and special equipment indicated should be used if necessary.

Everyone who carries out service operations described without carefully observing these prescriptions will be directly responsible of deriving damages.

### SHIMMING

At each adjustment, select adjusting shims, measure them individually using a micrometer and then sum up recorded values. Do not rely on measuring the whole shimming set, which may be incorrect, or on rated value indicated for each shim.

### ROTATING SHAFT SEALS

To correctly install rotating shaft seals, observe the following instructions:

- Let the seal soak into the same oil as it will seal for at least half an hour before mounting;
- Thoroughly clean the shaft and ensure that the shaft working surface is not damaged;
- Place the sealing lip towards the fluid. In case of a hydrodynamic lip, consider the shaft rotation direction and orient grooves in order that they deviate the fluid towards the inner side of the seal;
- Coat the sealing lip with a thin layer of lubricant (oil rather than grease) and fill with grease the gap between the sealing lip and the dust lip of double lip seals;
- Insert the seal into its seat and press it down using a flat punch. Do not tap the seal with a hammer or a drift;
- Take care to insert the seal perpendicularly to its seat while you are pressing it. Once the seal is settled, ensure that it contacts the thrust element if required.;
- To prevent damaging the sealing lip against the shaft, place a suitable protection during installation.

### O RINGS

Lubricate the O rings before inserting them into their seats. This will prevent the O rings from rolling over and twine during mounting which will jeopardise sealing.

### SEALERS

Apply one of the following sealers: RTV SILMATE, RHODORSIL CAF 1, or LOCTITE PLASTIC GASKET over the mating surfaces marked with an X.

Before applying the sealer, prepare the surface as follows:

- remove possible scales using a metal brush;
- thoroughly degrease the surfaces using one of the following cleaning agent: trichlorethylene, petrol or a water and soda solution.

### BEARINGS

It is advisable to heat the bearings to 80 to 90°C before mounting them on their shafts and cool them down before inserting them into their seats with external tapping.

### ROLL PINS

When fitting straight roll pins, ensure that the pin notch is oriented in the direction of the effort to stress the pin. Coil roll pins can be installed in any position.

### NOTES FOR SPARE PARTS

Use exclusively **genuine NEW HOLLAND spare parts**, the only ones that guarantee same quality, life, safety as original components as they are the same as mounted in production.

Only **genuine spare parts** can offer this guarantee.

All spare parts orders should be complete with the following data:

- tractor model (commercial name) and frame number;
- engine type and number;
- part number of the ordered part, which can be found on the "Microfiches" or the "Spare Parts Catalogue", which is the base for order processing.

### NOTES FOR EQUIPMENT

Equipment which NEW HOLLAND proposes and shows in this manual are as follows:

- 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 means.

We also remind the Repair Personnel that having these equipment means:

- work in optimal technical conditions;
- obtain best results;
- save time and effort;
- work more safely.

### NOTICES

Wear limits indicated for some details should be intended as advised, but not binding values. The words "front", "rear", "right hand", and "left hand" referred to the different parts should be intended as seen from the operator's seat oriented to the normal sense of movement of the tractor.

### HOW TO MOVE THE TRACTOR WITH THE BATTERY REMOVED

Cables from the external power supply should be connected exclusively to the respective terminals of the tractor positive and negative cables using pliers in good condition which allow proper and steady contact.

Disconnect all services (lights, wind-shield wipers, etc.) before starting the tractor.

If it is necessary to check the tractor electrical system, check it only with the power supply connected. At check end, disconnect all services and switch the power supply off before disconnecting the cables.

## 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 and personal integrity.*

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

**WARNING** - it gives warning about improper repair operations and deriving 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.



## TO PREVENT ACCIDENTS

Most accidents and personal injuries taking place in workshops are due from non-observance of some simple and essential prudential rule and safety precautions. For this reason, **IN MOST CASES THEY CAN BE AVOIDED**. It suffices to foresee possible causes and act consequently with necessary caution and care.

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.

## 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 hold into moving parts. We advise to use approved safety clothing such as anti-slipping footwear, gloves, safety goggles, helmets, etc.
- ◇ Never carry out any repair on the machine if someone is sitting on the operator's seat, except

if they are certified operators to assist 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.
- ◇ 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.
- ◇ Service stairs and platforms used in a workshop or in the field should be built in compliance with the safety rules in force.
- ◇ 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 and accumulator batteries, nor use starting liquid if you are smoking or near open flames as such fluids are flammable.
- ◇ Brakes are inoperative when they are manually released for maintenance purposes. In such cases, the machine should be kept constantly under control using blocks or similar devices.
- ◇ The fuel filling gun should remain always 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 buildup.

## SECTION 10 - ENGINE

## Chapter 1 - Engine

## CONTENTS

Section	Description	Page
<b>10 000</b>	General specification .....	2
	Injection pump calibration data .....	5
	General specifications .....	16
	Tightening torques .....	24
	Tools .....	25
	Cross-sectional views .....	28
	Lubrication and cooling system diagrams .....	32
	Fault diagnosis .....	35
<b>10 001 10</b>	Engine <i>Removal-Installation</i> .....	39
<b>10 001 54</b>	Engine <i>Bench overhaul</i> .....	53
	Checks, measurements and repairs .....	78
<b>10 406 10</b>	Radiator <i>Removal-Installation</i> .....	102
<b>10 102 70</b>	Crankshaft front oil seal <i>removal installation</i> .....	106
<b>10 402 10</b>	Coolant pump <i>removal installation</i> .....	112
<b>10 402 30</b>	Cooling system thermostat .....	115
<b>10 206 14</b>	Bosch injection pump <i>removal installation</i> .....	118
	Bosch injection pump <i>timing</i> .....	121
	Bosch injection pump <i>air bleeding</i> .....	123
<b>10 218 30</b>	Injectors <i>removal installation</i> .....	124
<b>10 106 12</b>	Valve clearance adjustment .....	126
<b>10 402 28</b>	Coolant pump overhaul .....	129
<b>10 001 30</b>	Compression test .....	130

GENERAL SPECIFICATIONS	3 cylinders	4 cylinders
<b>Engine type:</b>		
- mod. TD60D normally aspirated - type 8035.05D.939 (BOSCH pump) .....	see data pages 6-7	-
- mod. TD70D turbocharged - type 8035.25C.939 (BOSCH pump) .....	see data pages 8-9	-
- mod. TD80D normally aspirated - type 8045.05R.939 (BOSCH pump) .....	-	see data pages 10-11
- mod. TD90D turbocharged - type 8045.25.939 (BOSCH pump) .....	-	see data pages 12-13
- mod. TD95D turbocharged - type 8045.25L.939 (BOSCH pump) .....	-	see data pages 14-15
Cycle .....	Diesel, 4-stroke	
Fuel injection .....	Direct	
Number of cylinders in line .....	3	4
Cylinder liners .....		dry force-fitted in cylinder block
Piston diameter		
- mod. TD60D .....	104 mm (4.0945 in.)	-
- mod. TD70D .....	104 mm (4.0945 in.)	-
- mod. TD80D .....	-	104 mm (4.0945 in.)
- mod. TD90D .....	-	104 mm (4.0945 in.)
- mod. TD95D .....	-	104 mm (4.0945 in.)
Piston stroke .....	115 mm (4.5276 in.)	
Total displacement:		
- mod. TD60D-TD70D .....	2931 cm <sup>3</sup> (178.8496 in. <sup>3</sup> )	-
- mod. TD80D-TD90D-TD95D .....	-	3908 cm <sup>3</sup> (238.4662 in. <sup>3</sup> )
Compression ratio .....	17 to 1 normally aspirated 16.5 to 1 turbocharged	
Maximum power 2000/25 EC at 2500 rpm:		
- mod. TD60D .....	43.4 kW (59 hp)	-
- mod. TD70D .....	50.7 kW (69 hp)	-
- mod. TD80D .....	-	58.8 kW (80 hp)
- mod. TD90D .....	-	65.5 kW (89 hp)
- mod. TD95D .....	-	69.1 kW (94 hp)
Maximum power ECE R 24 at 2500 rpm:		
- mod. TD60D .....	41.2 kW (56 hp)	-
- mod. TD70D .....	47.8 kW (65 hp)	-
- mod. TD80D .....	-	55.9 kW (76 hp)
- mod. TD90D .....	-	63.3 kW (86 hp)
- mod. TD95D .....	-	66.9 kW (91 hp)
Fast idling speed .....	2500 rpm.	
Maximum torque (daNm) at 1500 rpm: TD60D model .....	20.7 (152.6753 ft lb)	-
Maximum torque (daNm) at 1500 rpm: TD70D model .....	25.0 (184.3905 ft lb)	-
Maximum torque (daNm) at 1500 rpm: TD80D model .....	-	27.9 (205.9778 ft lb)
Maximum torque (daNm) at 1500 rpm: TD90D model .....	-	32.0 (236.0194 ft lb)
Maximum torque (daNm) at 1500 rpm: TD95D model .....	-	33.7 (248.5584 ft lb)
Number of main bearings .....	4	5
Sump .....	Structural, cast iron	

**ENGINE****Removal - Installation (Operation 10 001 10)****DANGER**

Lift and handle all heavy parts using suitable lifting equipment.

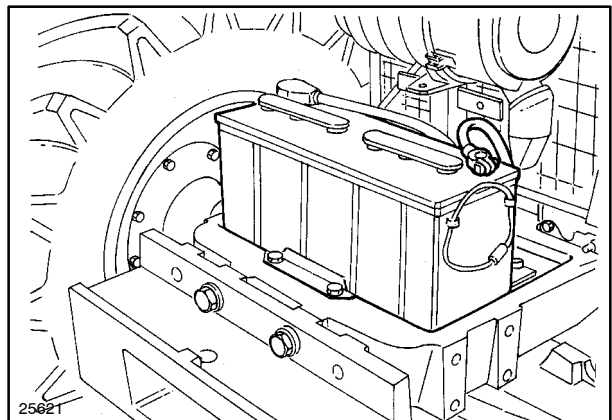
Make sure that assemblies or parts are supported by means of suitable slings and hooks.

Check that no one is in the vicinity of the load to be lifted.

**WARNING**

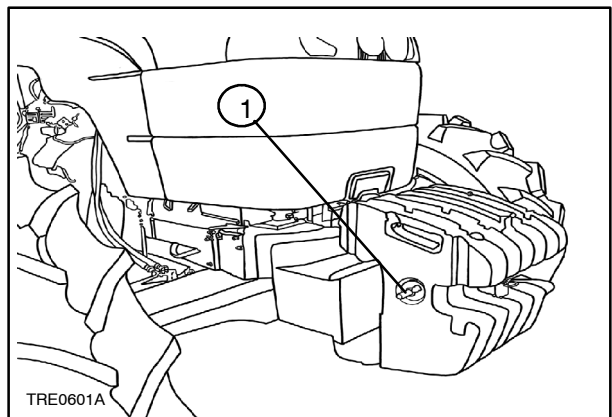
Always use suitable tools to align holes in parts.  
**NEVER USE FINGERS OR HANDS.**

1. Disconnect the battery negative cable.
2. Drain oil from the transmission/gearbox.
3. Drain the cooling system.



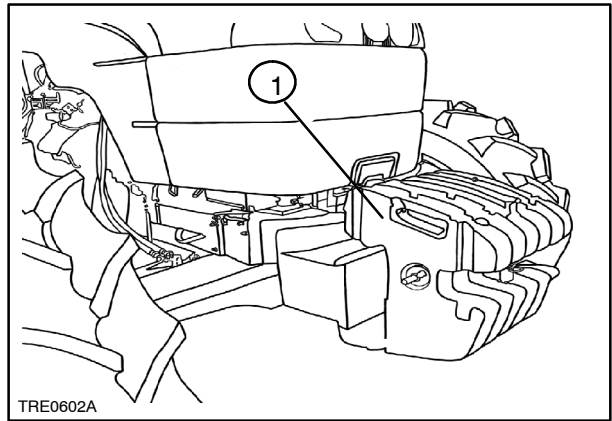
10

4. Unscrew the nut (1) from the weight retaining pin.



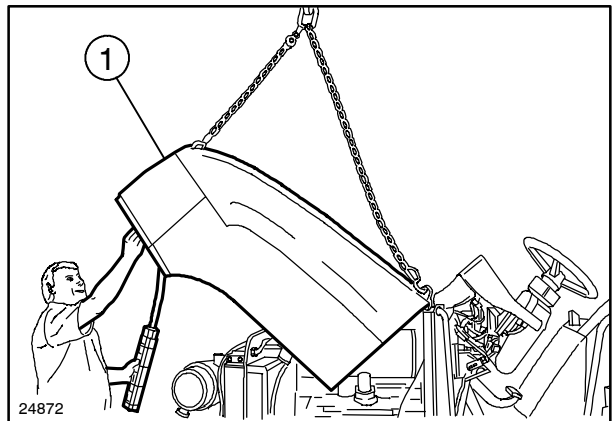
11

5. Remove the weights (1) from the front support.



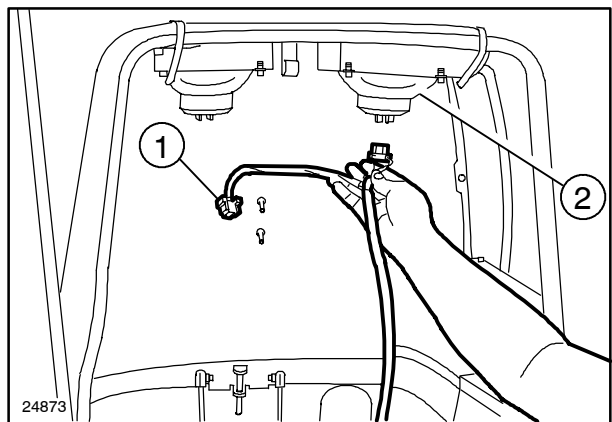
12

6. Remove the exhaust pipe, attach lifting chains to the bonnet (1) and attach the chain to the hoist.



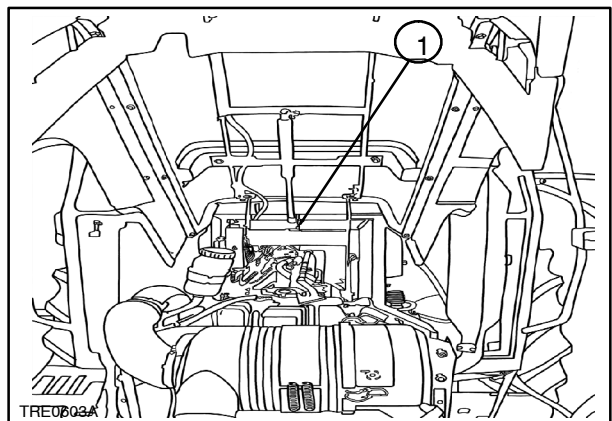
13

7. Disconnect the electrical leads (1) from headlamps (2).



14

8. Detach the gas struts (1) from the bonnet.



15



**Suggest:**

**If the above button click is invalid.**

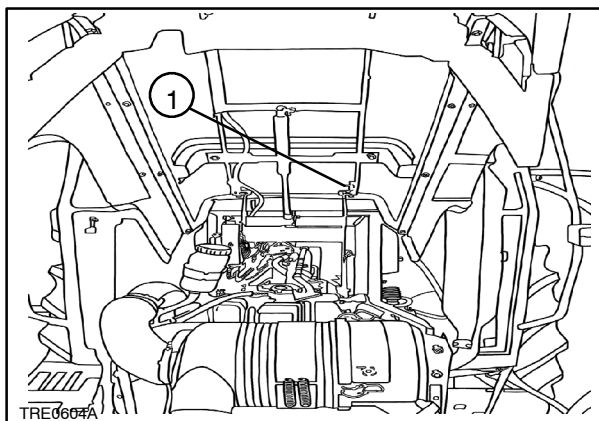
**Please download this document**

**first, and then click the above link**

**to download the complete manual.**

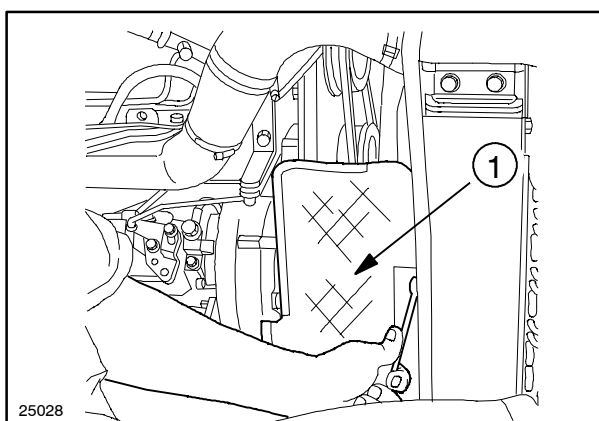
**Thank you so much for reading**

9. Remove the four bonnet hinge bolts (1) and lift the bonnet clear.



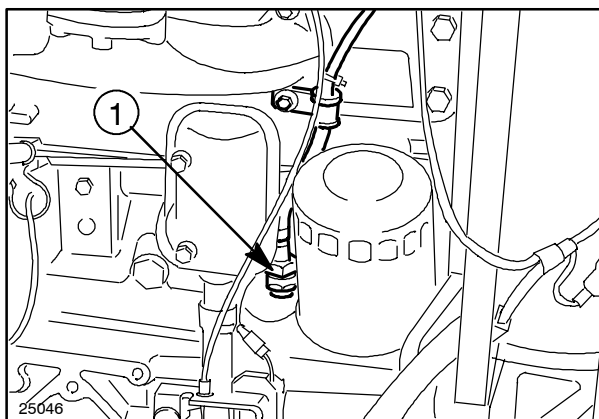
16

10. Remove the wire mesh guard (1) from right-hand side of the fan.



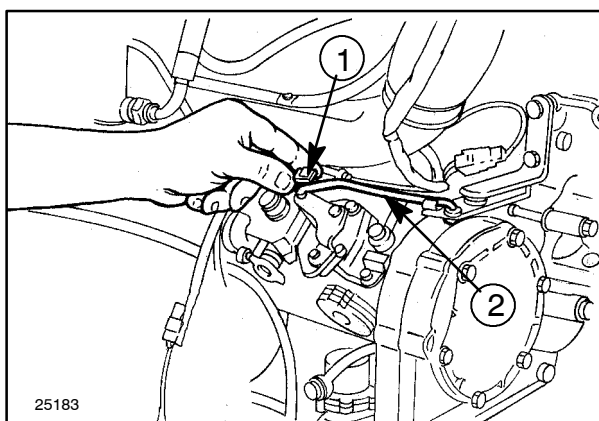
17

11. Disconnect the tachometer cable (1) and remove the retaining ring and sleeve.



18

12. Detach the throttle control spring (1) and remove the throttle lever (2).



19

**<https://www.ebooklibonline.com>**

Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.

The full manual is available for immediate download.

**<https://www.ebooklibonline.com>**