

SERVICE MANUAL

TD5.85 / TD5.95 / TD5.105 / TD5.115 Tractor

Part number 48194617

English
September 2017



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Product: New Holland TD5.85/TD5.95/TD5.105/TD5.115 Tractor Service Repair Manual(Part number 48194617)

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Link Product / Engine

Product	Market Product	Engine
TD5.105 TD5.105 CAB 4WD	Europe	F5DFL413J*A001
TD5.105 TD5.105 ROPS 4WD	Europe	F5DFL413J*A001
TD5.115 TD5.115 CAB 4WD	Europe	F5DFL413H*A002
TD5.115 TD5.115 ROPS 4WD	Europe	F5DFL413H*A002
TD5.85 TD5.85 ROPS 4WD	Europe	F5DFL413L*A001
TD5.85 TD5.85 CAB 4WD	Europe	F5DFL413L*A001
TD5.95 TD5.95 CAB 2WD	Europe	F5DFL413K*A001
TD5.95 TD5.95 ROPS 4WD	Europe	F5DFL413K*A001
TD5.95 TD5.95 CAB 4WD	Europe	F5DFL413K*A001

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INTRODUCTION

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Note to the Owner

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® PIASTIC 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 – 90 °C (176 – 194 °F)** 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.

Only genuine parts guarantee same quality, life, safety as original components as they are the same as mounted in production.

Only the NEW HOLLAND 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.
- Use exclusively specified towing points for towing the tractor. Connect parts carefully. Ensure that foreseen pins and/or locks are steadily fixed before applying traction. Do not stop near towing bars, cables or chains working under load.

- 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 mean, 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 forwarder.
- For electrical heaters, battery-chargers and similar equipment use exclusive auxiliary power supplies with a efficient ground to avoid electrical shock hazard.
- Always use lifting equipment and similar of appropriate capacity to lift or move heavy components.
- Pay special attention to bystanders.
- Never pour gasoline or diesel oil into open, wide and low containers.
- Never use gasoline, diesel oil or other flammable liquids as cleaning agents. Use nonflammable nontoxic proprietary solvents.
- Wear protection goggles with side guards when cleaning parts using compressed air.
- Do not exceed a pressure of **2.1 bar (30.45 psi)**, in accordance with local regulations.
- Do not run the engine in a closed building without proper ventilation.
- Do not smoke, use open flames, cause sparks in the nearby area when filling fuel or handling highly flammable liquids.
- Do not use flames as light sources when working on a machine or checking for leaks.
- Move with caution when working under a tractor, and also on or near a tractor. Wear proper safety accessories: helmets, goggles and special footwear.
- During checks which should be carried out with the engine running, ask an assistant to seat at the operator's seat and keep the service technician under visual control at any moment.
- In case of operations outside the workshop, drive the tractor to a flat area and block it. If working on an incline cannot be avoided, first block the tractor carefully. Move it to a flat area as soon as possible with a certain extent of safety.
- Ruined or plied cables and chains are unreliable. Do not use them for lifting or trailing. Always handle them wearing gloves of proper thickness.
- Chains should always be safely fastened. Ensure that fastening device is strong enough to hold the load foreseen. No persons should stop near the fastening point, trailing chains or cables.
- The working area should be always kept CLEAN and DRY. Immediately clean any spillage of water or oil.
- Do not pile up grease or oil soaked rags, as they constitute a great fire hazard. Always place them into a metal container. Before starting the tractor or its attachments, check, adjust and block the operator's seat. Also ensure that there are no persons within the tractor or attachment operating range.
- Do not keep into your pockets any object which might fall unobserved into the tractor's inner compartments.
- Whenever there is the possibility of being reached by ejected metal parts or similar, use protection eye mask or goggles with side guards, helmets, special footwear and heavy gloves.
- Wear suitable protection such as tinted eye protection, helmets, special clothing, gloves and footwear whenever it is necessary to carry out welding procedures. All persons standing in the vicinity of the welding process should wear tinted eye protection. NEVER LOOK AT THE WELDING ARC IF YOUR EYES ARE NOT SUITABLY PROTECTED.
- Metal cables with the use get frayed. Always wear adequate protections (heavy gloves, eye protection, etc.)
- Handle all parts with the greatest caution. Keep your hands and fingers far from gaps, moving gears and similar. Always use approved protective equipment, such as eye protection, heavy gloves and protective footwear.

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.

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 or idle if hot.
- Do not fill up fuel tank when the engine is running, mainly if it is hot, to avoid ignition of fires in case of fuel spilling.
- Never check or adjust the fan belt tension 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.

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 checking the battery charge by means of “jumpers” made by placing metallic objects across the terminals. Avoid sparks or flames near the battery area. Do not smoke to prevent explosion hazards.
- Prior to any service, check for fuel or current leaks. Remove these leaks before going on with the work.
- Do not charge batteries in confined spaces. Ensure that ventilation is appropriate to prevent accidental explosion hazard due to build up of gases released during charging.
- Always disconnect the batteries before performing any type of service on the electrical system.

Hydraulic systems

- Some fluid slowly 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 to this purpose. If any fluid is injected into the skin, seek medical aid immediately. Lack of immediate medical attention, serious infections or dermatosis may result.
- Always take system pressure readings using the appropriate gauges.

Wheels and tires

- Check that the tires are correctly inflated at the pressure specified by the manufacturer. Periodically check possible damages to the rims and tires.
- Keep off and stay at the tire side when correcting the inflation pressure.
- Check the pressure only when the tractor is unloaded and tires are cold to avoid wrong readings due to over-pressure. Do not reuse parts of recovered wheels as improper welding, brazing or heating may weaken the wheel and make it fail.
- Never cut, nor weld a rim with the inflated tire 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 tire before removing any object caught into the tire tread.
- Never inflate tires using flammable gases as they may originate explosions and cause injuries to bystanders.

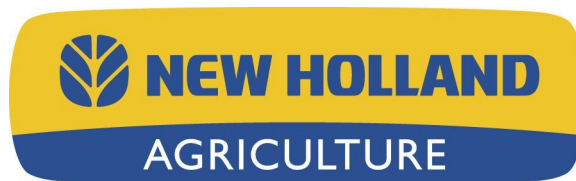
Removal and installation

- 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.
- Handle all parts with great care. Do not place your hands or fingers between two parts. Wear approved protective clothing such as safety goggles, gloves and footwear.
- Do not twine chains or metal cables. Always wear protection gloves to handle cables or chains.

Consumables

COMPONENT TO BE FILLED OR TOPPED UP	QUANTITY		RECOM- MENDE D PRODUCTS	INTERNA- TIONAL SPECI- FICATION
	liters/dm ³	US gal		
Cooling system: without cab: with cab:	. 14 16	3.7 4.2	NEW HOLLAND AMBRA ACTIFULL™ OT EXTENDED LIFE COOLANT	-
Windscreen washer bottle	2	0.53	Water & cleaning liquid	-
Fuel tank.	121	29.06	Decanted and filtered diesel fuel	-
Engine sump:	8.5	2.25	NEW HOLLAND AMBRA UNITEK MASTERGOLD SBL CJ-4 SAE 10W-40 or NEW HOLLAND AMBRA UNITEK MASTERGOLD SSL CJ-4 SAE 0W-40	API CJ-4 ACEA E7 ACEA E9
Brake control circuit	0.4	0.11	NEW HOLLAND AMBRA BRAKE LHM NH 610 A	ISO 7308
Front axle: - axle housing: - final drives (each):	7.0 1.25	1.8 0.3	NEW HOLLAND AMBRA MULTI G™ HYDRAULIC TRANSMISSION OIL NH 410B	API GL-4 ISO 32/46 SAE 10W - 30
Rear transmission (bevel drive and brakes), gearbox, hydraulic lift and PTO	46	12.15		
Rear final drives (each)	5.3	1.40		
Front wheel hubs	-	-	Grease NEW HOLLAND AMBRA GR-9 MULTI-PURPOSE GREASE	NLGI 2
Grease fittings	-	-		

NOTICE: Use only heavy-duty, low silicate coolant such as **NEW HOLLAND AMBRA ACTIFULL™ OT EXTENDED LIFE COOLANT** anti-freeze. Automotive antifreeze purchased at local supply store outlets most likely is not low silicate and must not be used in heavy-duty diesel engines. Always have a minimum of 50% ethylene glycol coolant in the cooling system, adjusting the concentration based on ambient temperature, according to coolant label instructions. Use good quality water. Deionized water is ideal for cooling systems and is contained in some prepackaged coolants labeled as pre-mixed with water. If the low silicate ethylene glycol coolant is not pre-charged with supplemental diesel coolant additive/inhibitor, this must be added to the solution to provide protection against corrosion and pitting.



SERVICE MANUAL

Engine

TD5.105

TD5.115

TD5.85

TD5.95

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TD5.105

TD5.115

TD5.85

TD5.95

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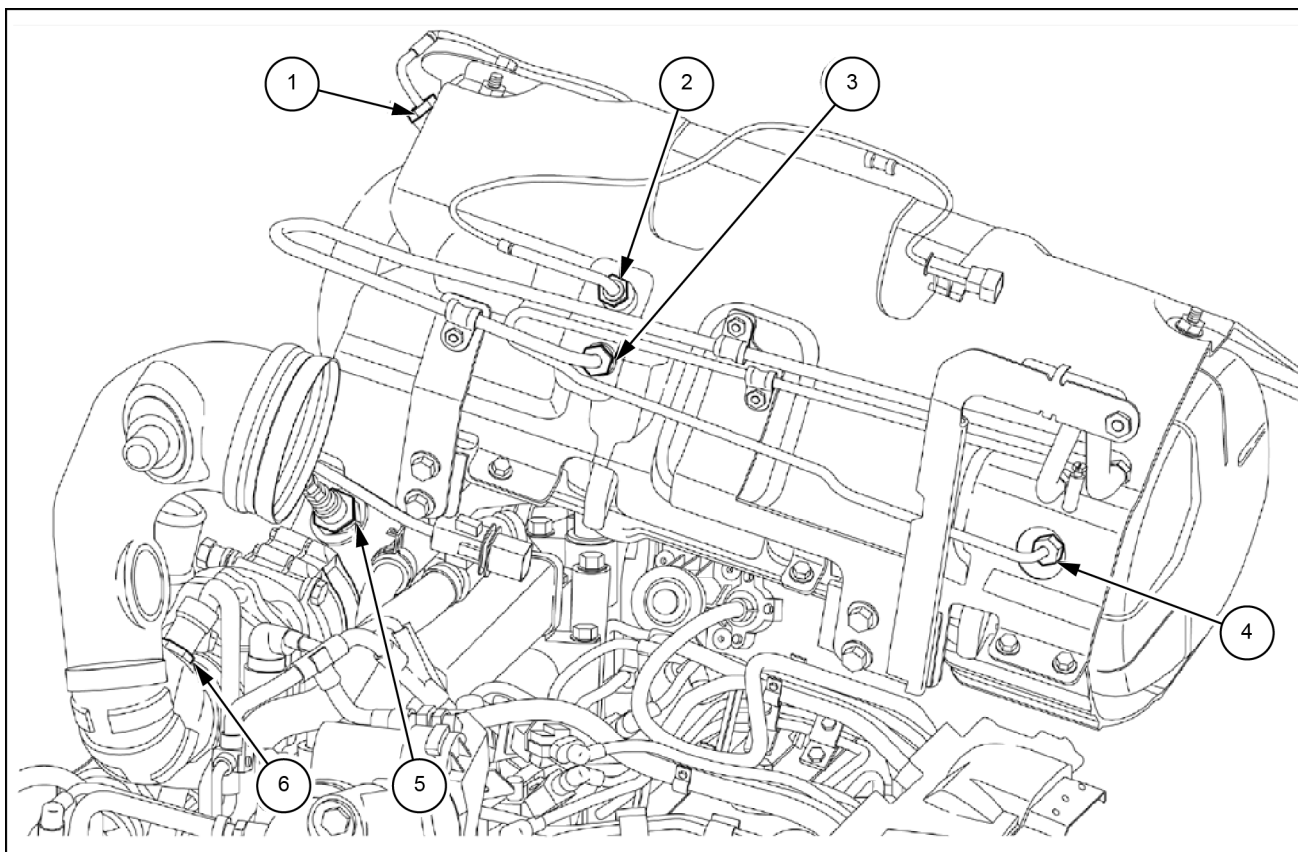
SERVICE

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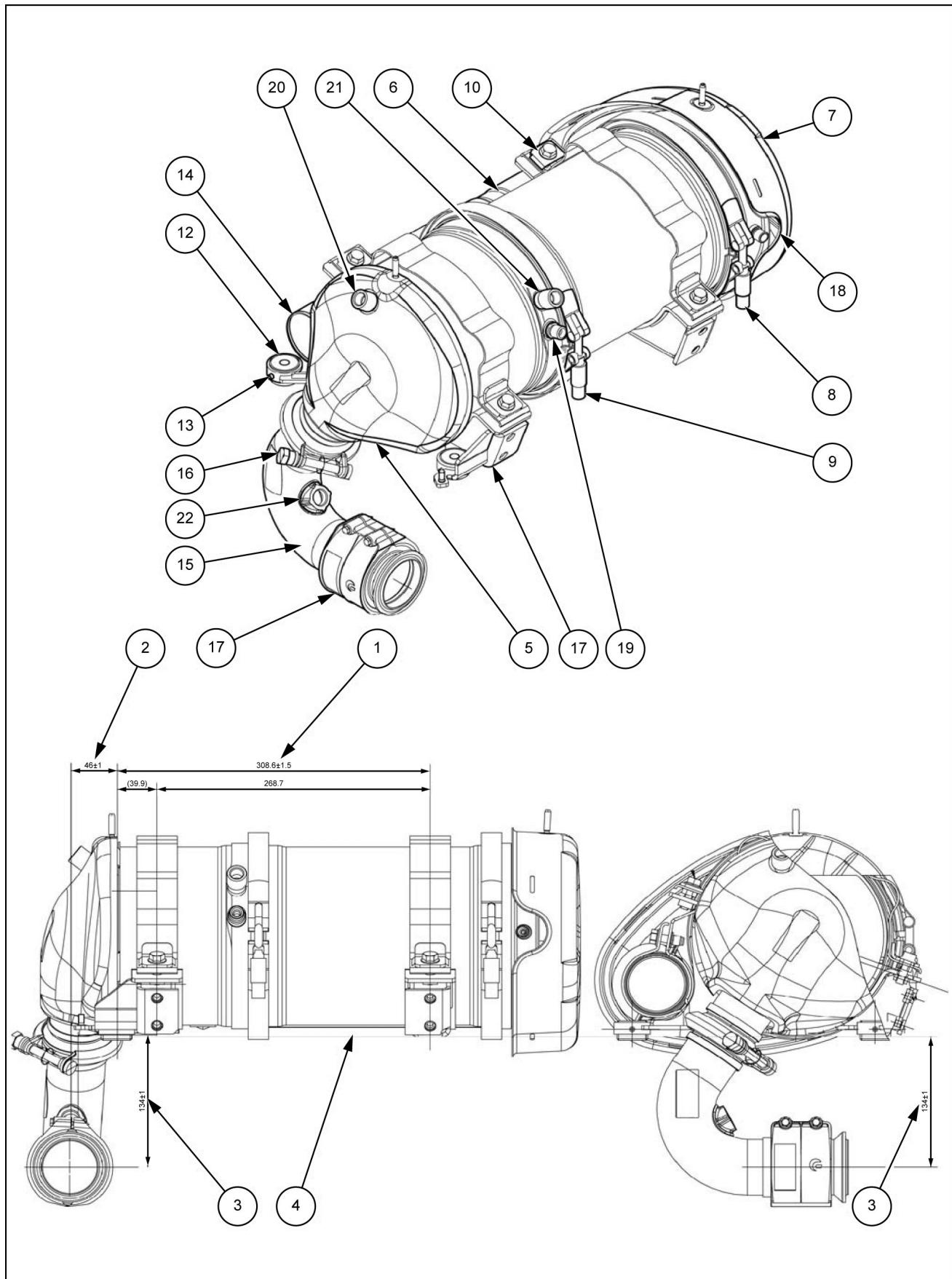
Diesel Particulate Filters (DPF) - Torque



ANIL15TRO1984FB 1

No	Part to tighten	Thread size	Torque settings	
1.	Gas temperature sensor on DPF intake	M14 x 1.5	40.50 – 49.50 N·m (29.87 – 36.51 lb ft)	4.14 – 5.12 kg (9.13 – 11.29 lb)
2.	DPF filter first section temperature sensor	M14 x 1.5	40.50 – 49.50 N·m (29.87 – 36.51 lb ft)	4.14 – 5.12 kg (9.13 – 11.29 lb)
3.	Pressure pipe fitting on turbine side	M14 x 1.5	40.50 – 49.50 N·m (29.87 – 36.51 lb ft)	4.14 – 5.12 kg (9.13 – 11.29 lb)
4.	Pressure pipe fitting on muffler side	M12 x 1.5	27.00 – 33.00 N·m (19.91 – 24.34 lb ft)	2.80 – 3.42 kg (6.17 – 7.54 lb)
5.	Lambda sensor	M18 x 1.5	45.00 – 55.00 N·m (33.19 – 40.57 lb ft)	4.66 – 5.70 kg (10.27 – 12.57 lb)
6.	Air temperature sensor	M12 x 1.5	15.00 – 25.00 N·m (11.06 – 18.44 lb ft)	1.55 – 2.59 kg (3.42 – 5.71 lb)

Diesel Particulate Filters (DPF) - General specification



ANIL15TRO1985HB 1

Measurements to respect for installing the filter - Legend of components - Legend of sensor fixing holes:

1. **308.6000 – 1.5000 mm (12.1496 – 0.0591 in)** Distance between the two bands of the cradle, the one with the set fixing holes **(10)** and the one with the adjustable fixing holes **(11)**.
2. **1.0000 – 46.0000 mm (0.0394 – 1.8110 in)** Distance between the centre of the turbine or the centre of the union of the decoupler / turbine and the adjustable filter fixing bushings **(12)**.
3. **134 – 1.0000 mm (5 – 0.0394 in)** Distance between the centre of the turbine or the centre of the union / turbine and the band supporting surface **(4)** with set fixing holes on the filter support.
4. Band supporting surface with set fixing holes.
5. Initial part of the DPF filter, connected with the sleeve **(15)** to the turbine.
6. Middle part of the DPF filter, inside which there is the ceramic part to clean.
7. End part of the DPF filter, connected with the sleeve **(14)** to the exhaust pipe.
8. Clamp retaining the middle part **(6)** \ end part **(7)**.
9. Clamp retaining the middle part **(6)** \ initial part **(5)**.
10. Band with the set fixing holes.
11. Band with the adjustable fixing holes.
12. Threaded bushings, screwing them in or out enables changing the adjustment distance **(3)**.
13. Grub screw fixing the bushing **(12)**.
14. Filter outlet union, it is inserted on the exhaust pipe.
15. Union joining the filter to the turbine.
16. Clamp fixing the union **(15)** to the filter.
17. Tutor, protects the decoupler during the handling from the supplier, it is dismantled after assembly (it is advised to keep one to hand and to reassemble it before starting to disassemble the filter so that the decoupler undergoes no deformation).
18. Gas pressure detection after the middle part of the filter, the pipe that goes on the differential pressure sensor is connected here.
19. Gas pressure detection before the middle part of the filter, the pipe that goes on the differential pressure sensor is connected here.
20. Exhaust gas temperature sensor from the turbine.
21. Exhaust gas temperature sensor to the intake of the middle part of the filter.
22. Lambda sensor.

Diesel Particulate Filters (DPF) - Dynamic description

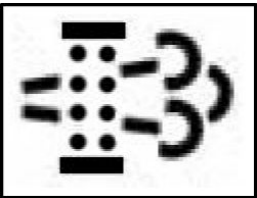
A diesel particulate filter (DPF) is a device designed to remove polluting diesel engine particulate from exhaust gas when clogged, it needs to be regenerated.

The diesel particulate filter can be regenerated automatically or by forcing.

The regeneration process is signaled to the operator on the central monitor of the dashboard and with an acoustic signal. The indication is necessary for the purposes of safety to warn the operator about the high exhaust temperature reached during the process.

The automatic regeneration shall not affect engine performance. During the procedure, the operator can continue working normally.

Under certain operating conditions automatic regeneration might not be completed (engine continuously stopping and starting, lengthy periods at idle speed) and it must then be repeated.



The start of automatic regeneration, if set, is highlighted with the following warning light blinking on the dashboard and the same symbol appears every 5 minutes on the central monitor with the word “ON” combined with a single beep. On concluding the operation the symbol appears with the word “OFF”.

When the level of soot exceeds a certain level, the electronic control unit asks you to proceed with manual filter regeneration.

NOTICE: If the filter is not regenerated when required, whether manually or by forcing, the functionality of the filter is impaired. Continuing to ignore this request, besides greatly reducing engine horsepower, damages the filter to such an extent that it is necessary for the dealer to replace the filter with a new one.





When the following warnings appear on the dashboard it is necessary to proceed as follows:

DPF to be regenerated

Start of automatic regeneration or with the control, start of forced regeneration

Image legend:





- A. Warning light on the dashboard
- B. Flasher
- C. On
- D. Off
- E. Central display

Spia su cruscotto (A)			
	Lampeggiante (B)	Accesa (C)	Spenta (D)
Display centrale (E)			

ANIL15TRO1986AA 1

DPF to be regenerated Low severity





Automatic regeneration inhibited, only start of forced re-generation with control

Spia su cruscotto			
	Lampeggiante	Spenta	Accesa
Display centrale	 3435		

ANIL15TRO1987AA 2

DPF to be regenerated High severity





Automatic regeneration inhibited, only start of forced re-generation with control

Spia su cruscotto			
	Lampeggiante	Spenta	Accesa
Display centrale	 3433		

ANIL15TRO1988AA 3

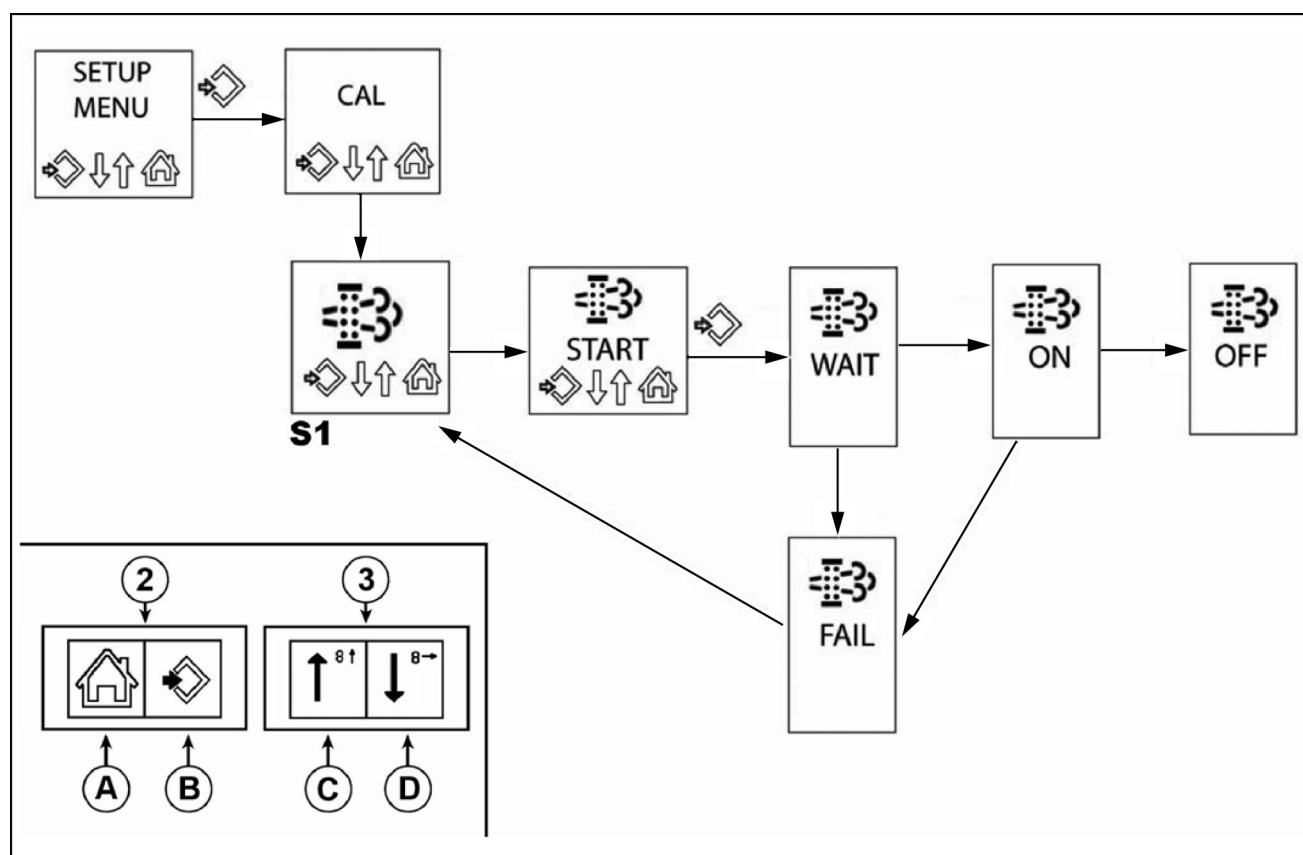
DPF damaged technical support required

Automatic and forced regeneration inhibited

Spia su cruscotto			
	Lampeggiante	Spenta	Accesa
Display centrale	 3434		

ANIL15TRO1989AA 4

Manual regeneration of the diesel particulate filter DPF



ANIL15TRO1990FB 5

To be able to activate the procedure of manual regeneration when required, it is necessary to stop work for the entire duration of the procedure **15 – 20 min** and get into the following conditions:

1. Engine running, machine stationary and hand brake on
2. Hand throttle at minimum position
3. Foot throttle released
4. PTO not engaged
5. Hydraulic system not active

NOTE: If the conditions described above are changed, throughout the entire process of regeneration, the operation is stopped.

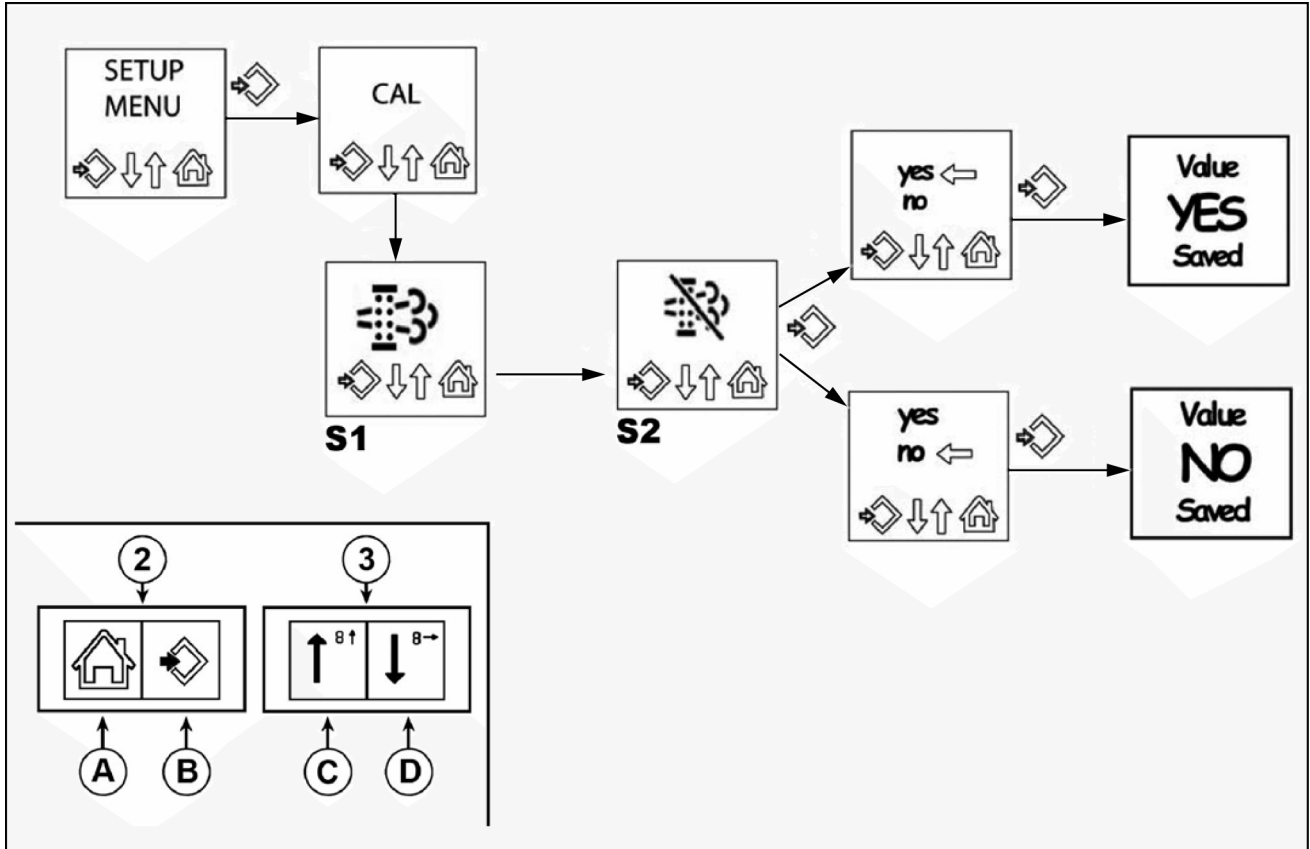
To activate forced regeneration, proceed as follows:

1. Press the switch **(2)** on the symbol **(B)** for more than three seconds to enter the programming menu. The central monitor will show "SETUP MENU". Release the symbol **(B)**.
2. Press the switch **(3)** on the symbol **(D)** a number of consecutive times until the monitor shows the symbol of the filter **(S1)**.
3. Press the switch **(2)** on the symbol **(B)**.
4. If manual filter regeneration is required, the monitor will automatically display "START" with the symbol of the filter.
5. Press the switch **(2)** on the symbol **(B)** to move on to the message "WAIT". Filter regeneration now commences. In this phase, if everything proceeds normally, the operator must give no commands and the electronic control unit will automatically display the various phases of the procedure.
6. At the end of regeneration the monitor will show "OFF" with the filter symbol. After two seconds the control unit automatically returns to the initial situation. Press the switch **(2)** on the symbol **(A)** a number of times until you exit the programming menu.

NOTE: If during manual regeneration the operator modifies the conditions described above, or other conditions connected with the engine are not satisfactory, regeneration is stopped. The stop is signaled to the operator by the

monitor displaying the filter symbol together with "FAIL" and a single acoustic signal. After 2 seconds, the control unit goes back into the situation at the start of regeneration "START". From this situation, after restoring the necessary conditions to carry out the operation it is necessary to press the switch (2) on the symbol (B) to restart the regeneration procedure.

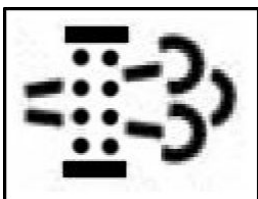
Automatic diesel particulate filter regeneration inhibition DPF



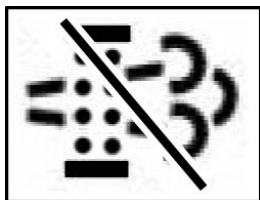
ANIL15TRO1991FB 6

If you want to inhibit or enable automatic regeneration of the diesel particulate filter, proceed as described below:

1. Press the switch (2) on the symbol (B) for more than three seconds to enter the programming menu. The central monitor will show "SETUP MENU". Release the symbol (B).
2. Press the switch (3) on the symbol (D) a number of consecutive times until the monitor shows the symbol of the filter (S1).
3. Press the switch (2) on the symbol (B) and press the switch (3) on the symbol (D) to display the screen (S2) then press button (B)
4. YES = automatic regeneration of the filter INHIBITED
5. NO = automatic regeneration of the filter ENABLED
6. It is possible to change the setting status by moving with the direction keys of the switch (3) on the symbols (C) and (D) to pass from "yes" to "no" and vice versa, then confirm by pressing the switch (2) on the symbol (B).



If automatic regeneration is disabled the following warning light on the dashboard remains on steady



and every 5 minutes the central monitor shows the following symbol combined with a single beep.

If the setting in the system matches the needs of the work to perform, press the switch **(2)** on the symbol **(A)** a number of times to exit the programming menu.

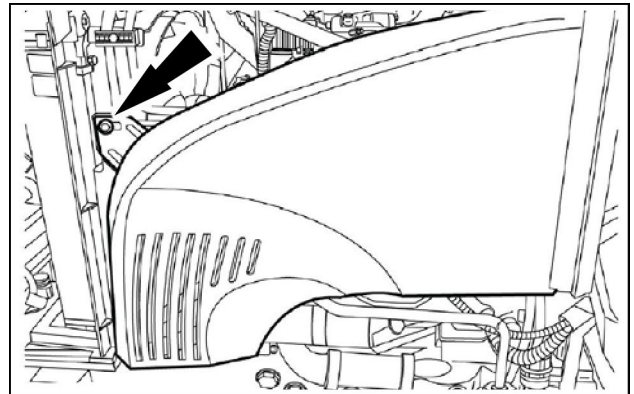
NOTICE: *It is always advisable to have the automatic regeneration function ENABLED.*

Diesel Particulate Filters (DPF) - Remove

1. Raise the bonnet, disconnect the headlights connector from the engine cable. Remove the hood. See **Trailer brake pneumatic control - Remove (33.224)**.

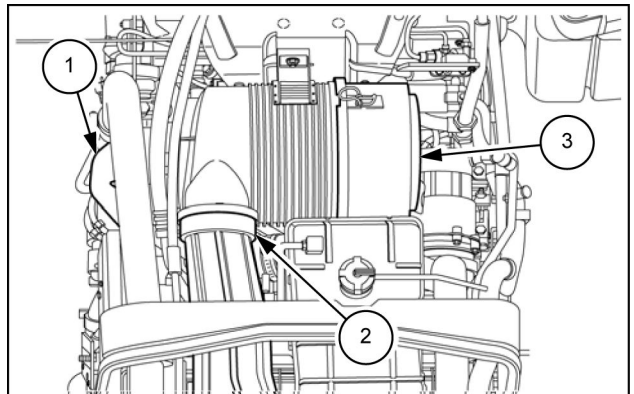
NOTE: Remove the hinge from the support leaving this under the bonnet.

2. Remove the side panels on both sides.



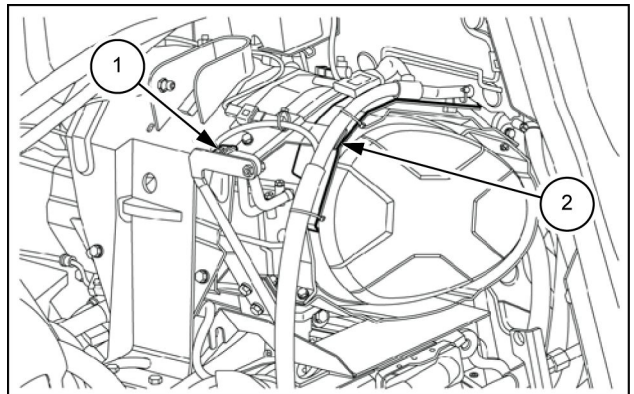
ANIL15TRO1943AB 1

3. Loosen the clamp of the connection pipe (1) between the air cleaner (3) and turbine, unscrew the retaining screws of the air intake pipe (2) then slide it towards the front so that it comes out of the filter inlet. Then, after disconnecting the clogged filter sensor connection, remove the filter from the bonnet support.



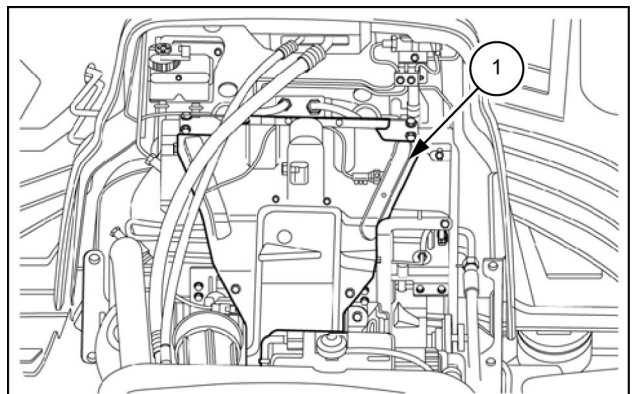
ANIL15TRO2012AB 2

4. Disconnect the connectors on the pressure differential sensor (1), on the two temperature sensors, and on the lambda sensor. Loosen the system heat shield (2). Position everything on the left-hand side of the engine.



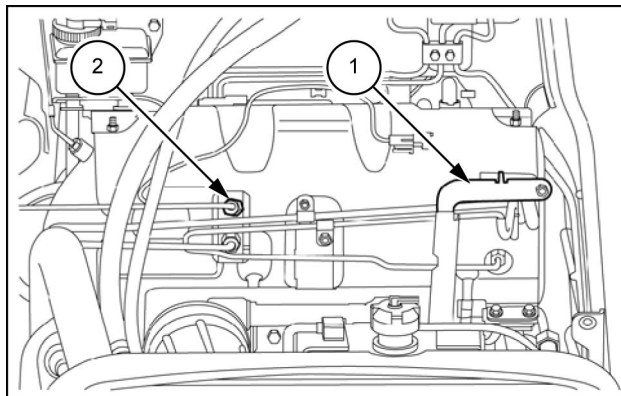
ANIL15TRO2016AB 3

5. Remove the bonnet support (1).



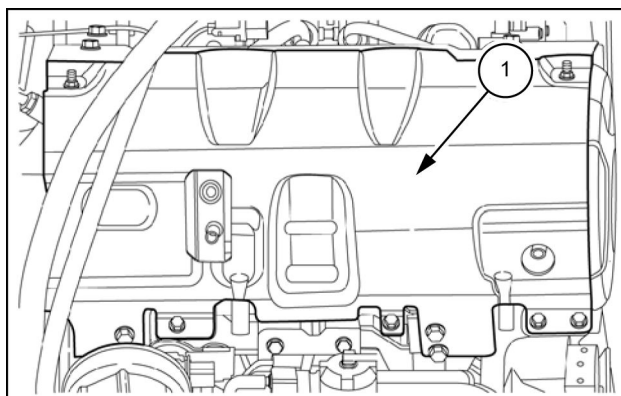
ANIL15TRO2010AB 4

6. Unscrew the pressure differential unit **(1)** with its pipes, brackets, clamps and sensor.
7. Unscrew the temperature sensor **(2)**.



ANIL15TRO1996AB 5

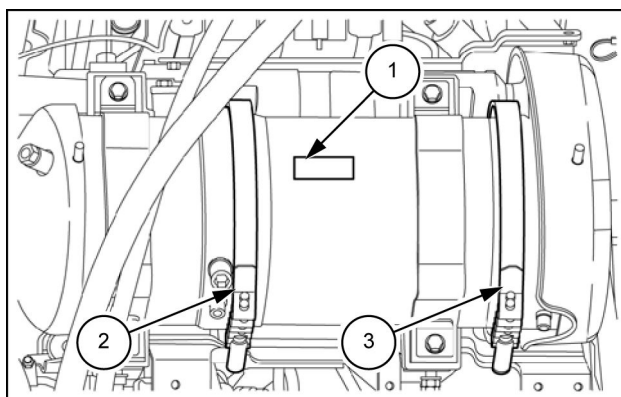
8. Unscrew the filter's upper heat shield **(1)**, the lower one stays in position.



ANIL15TRO1997AB 6

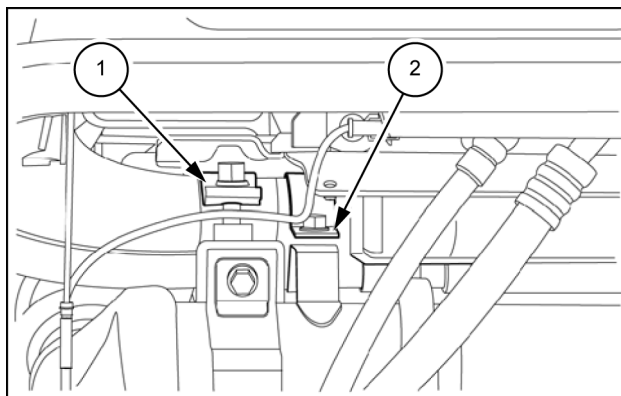
9. Mark the filter as shown in the figure.

NOTE: The right-hand marking must include the first part of the filter, the central part of the filter **(1)**, and the clamp that joins them **(2)**. The left-hand marking will include the central part, the left-hand part, and the clamp **(3)**.



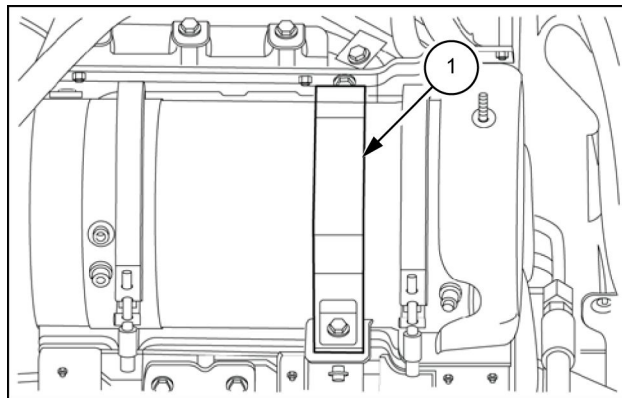
ANIL15TRO1998AB 7

10. Loosen the clamp **(1)** joining the muffler to the DPF outlet pipe. The clamp **(2)** that keeps the outlet tube of the filter parallel to the first section of the filter.



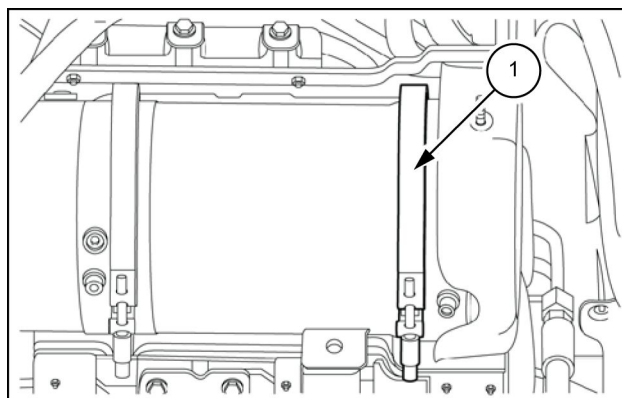
ANIL15TRO1999AB 8

11. Remove the left-hand clamp **(1)** fastening the filter to the machine.



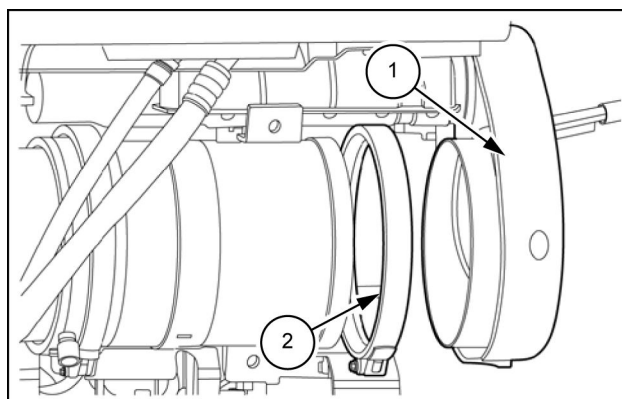
ANIL15TRO2000AB 9

12. Loosen the left-hand clamp **(1)** fastening the middle and left parts of the filter.



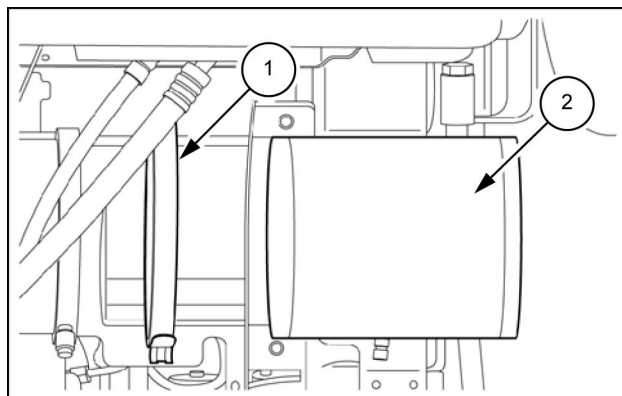
ANIL15TRO2001AB 10

13. Remove the left-hand part of the filter **(1)**, with the clamp **(2)**, retrieving the copper seal.



ANIL15TRO2002AB 11

14. Then, after you have loosened the right-hand clamp **(1)**, remove the central part of the filter **(2)**.

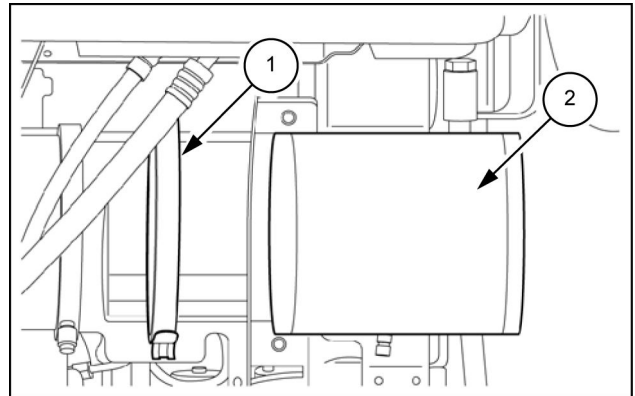


ANIL15TRO2003AB 12

Diesel Particulate Filters (DPF) - Install

NOTE: For the torque settings please refer to, **Diesel Particulate Filters (DPF) - Torque (10.501)**.

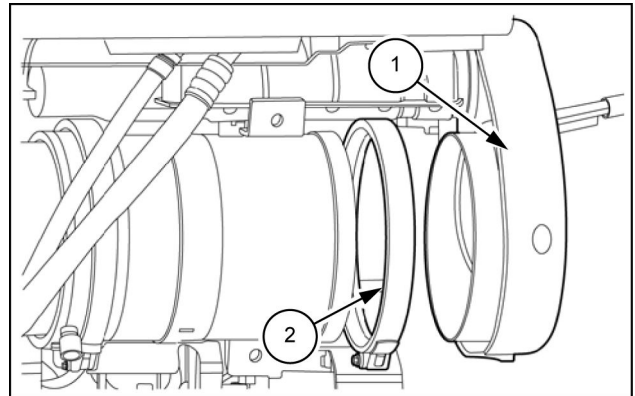
1. Re-assemble the central part of the DPF filter (2) with the relevant clamp (1), paying attention to the orientation of the parts.



ANIL15TRO2003AB 1

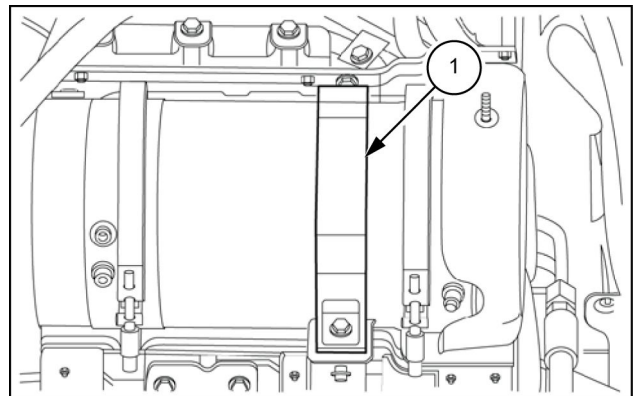
2. Re-assemble the left-hand part of the DPF filter (1) with the relevant clamp (2). Tighten the clamp, paying attention to the orientation of the parts.

NOTE: If the clamp and the seal are rusty or in a poor condition, change the clamp and the seal.



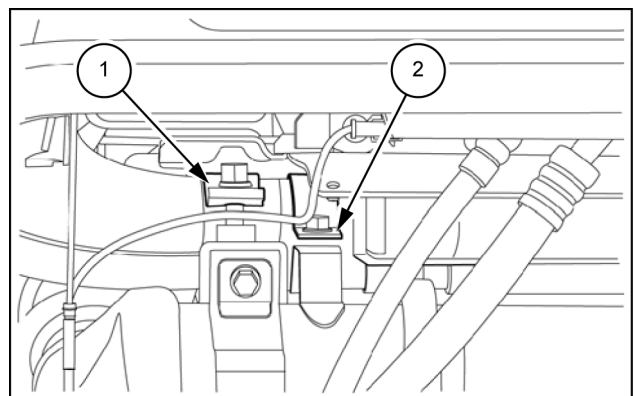
ANIL15TRO2005AB 2

3. Reassemble the left-hand clamp (1) fastening the filter on the cradle.



ANIL15TRO2006AB 3

4. Position the collar (1) fastening the filter pipe to the muffler. Tighten it. Also tighten the top of the collar (2) that fixes the pipe to the cradle.



ANIL15TRO2007AB 4

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