

SERVICE MANUAL

T4.75F / T4.85F / T4.95F / T4.105F
T4.75LP / T4.85LP / T4.95LP / T4.105LP
Tractor

Part number 47888360
English
July 2016





SERVICE MANUAL

**T4.105F With cab [ZDJD11527 -], T4.105F Without cab [ZDJD11911 -],
T4.105LP With cab [ZFJD00717 -], T4.105LP Without cab [ZEJD00007 -
], T4.75F With cab [ZDJD10166 -], T4.75F Without cab [ZDJD10836 -],
T4.75LP With cab [ZFJD01559 -], T4.75LP Without cab [ZFJD01319 -],
T4.85F With cab [ZDJD11099 -], T4.85F Without cab [ZDJD11022 -], T4.85LP
With cab [ZFJD01714 -], T4.85LP Without cab [ZFJD00163 -], T4.95F With
cab [ZDJD10640 -], T4.95F Without cab [ZDJD10215 -], T4.95LP With cab
[ZFJD01191 -], T4.95LP Without cab [ZFJD00162 -]**

Link Product / Engine

Product	Market Product	Engine
T4.105F With cab [ZDJD11527 -]	Middle East Africa	F4CE9484
T4.105F With cab [ZDJD11527 -]	Europe	F4CE9484
T4.105F Without cab [ZDJD11911 -]	Middle East Africa	F4CE9484
T4.105F Without cab [ZDJD11911 -]	Europe	F4CE9484
T4.75F With cab [ZDJD10166 -]	Europe	F5AE9484B
T4.75F With cab [ZDJD10166 -]	Middle East Africa	F5AE9484B
T4.75F Without cab [ZDJD10836 -]	Europe	F5AE9484B
T4.75F Without cab [ZDJD10836 -]	Middle East Africa	F5AE9484B
T4.85F With cab [ZDJD11099 -]	Middle East Africa	F5AE9484G
T4.85F With cab [ZDJD11099 -]	Europe	F5AE9484G
T4.85F Without cab [ZDJD11022 -]	Europe	F5AE9484G
T4.85F Without cab [ZDJD11022 -]	Middle East Africa	F5AE9484G
T4.95F With cab [ZDJD10640 -]	Middle East Africa	F4CE9484
T4.95F With cab [ZDJD10640 -]	Europe	F4CE9484
T4.95F Without cab [ZDJD10215 -]	Europe	F4CE9484
T4.95F Without cab [ZDJD10215 -]	Middle East Africa	F4CE9484
T4.105LP With cab [ZFJD00717 -]	Middle East Africa	F4CE9484
T4.105LP With cab [ZFJD00717 -]	Europe	F4CE9484
T4.105LP Without cab [ZEJD00007 -]	Middle East Africa	F4CE9484
T4.105LP Without cab [ZEJD00007 -]	Europe	F4CE9484
T4.75LP With cab [ZFJD01559 -]	Europe	F5AE9484B
T4.75LP With cab [ZFJD01559 -]	Middle East Africa	F5AE9484B
T4.75LP Without cab [ZFJD01319 -]	Europe	F5AE9484B
T4.75LP Without cab [ZFJD01319 -]	Middle East Africa	F5AE9484B
T4.85LP With cab [ZFJD01714 -]	Europe	F5AE9484G
T4.85LP With cab [ZFJD01714 -]	Middle East Africa	F5AE9484G
T4.85LP Without cab [ZFJD00163 -]	Europe	F5AE9484G
T4.85LP Without cab [ZFJD00163 -]	Middle East Africa	F5AE9484G
T4.95LP With cab [ZFJD01191 -]	Europe	F4CE9484
T4.95LP With cab [ZFJD01191 -]	Middle East Africa	F4CE9484
T4.95LP Without cab [ZFJD00162 -]	Middle East Africa	F4CE9484
T4.95LP Without cab [ZFJD00162 -]	Europe	F4CE9484

<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>

Contents

INTRODUCTION

Engine.....	10
[10.001] Engine and crankcase	10.1
Clutch	18
[18.104] Clutch hydraulic release control.....	18.1
[18.110] Clutch and components	18.2
[18.100] Clutch mechanical release control	18.3
Transmission.....	21
[21.114] Mechanical transmission	21.1
[21.118] Transmission/Rear drive	21.2
[21.140] Mechanical transmission internal components.....	21.3
[21.112] Power shuttle transmission.....	21.4
[21.134] Power shuttle transmission external controls	21.5
[21.154] Power shuttle transmission internal components	21.6
[21.160] Creeper	21.7
[21.162] Reverser	21.8
[21.168] Hi-Lo unit.....	21.9
Four-Wheel Drive (4WD) system	23
[23.202] Electro-hydraulic control	23.1
[23.304] Four-Wheel Drive (4WD) gearbox	23.2
[23.314] Drive shaft.....	23.3
Front axle system	25
[25.100] Powered front axle	25.1
[25.102] Front bevel gear set and differential	25.2
[25.108] Final drive hub, steering knuckles, and shafts	25.3
[25.310] Final drives	25.4

Rear axle system	27
[27.100] Powered rear axle.....	27.1
[27.106] Rear bevel gear set and differential.....	27.2
[27.120] Planetary and final drives	27.3
[27.126] Spur gear and final drives.....	27.4
Power Take-Off (PTO)	31
[31.101] Rear mechanical control	31.1
[31.146] Front Power Take-Off (PTO)	31.2
Brakes and controls	33
[33.202] Hydraulic service brakes	33.1
[33.110] Parking brake or parking lock	33.2
[33.220] Trailer brake hydraulic control.....	33.3
Hydraulic systems	35
[35.000] Hydraulic systems.....	35.1
[35.300] Reservoir, cooler, and filters.....	35.2
[35.104] Fixed displacement pump.....	35.3
[35.204] Remote control valves	35.4
[35.600] High flow hydraulics.....	35.5
[35.100] Main lift system.....	35.6
[35.114] Three-point hitch control valve	35.7
[35.116] Three-point hitch cylinder	35.8
[35.160] Front hitch controls and lines	35.9
[35.410] Header or attachment height system	35.10
Hitches, drawbars, and implement couplings	37
[37.110] Rear three-point hitch	37.1
[37.162] Front hitch.....	37.2
Steering	41
[41.101] Steering control	41.1

[41.200] Hydraulic control components.....	41.2
Wheels	44
[44.511] Front wheels.....	44.1
Cab climate control	50
[50.100] Heating	50.1
[50.104] Ventilation	50.2
[50.200] Air conditioning.....	50.3
Electrical systems	55
[55.000] Electrical system	55.1
[55.100] Harnesses and connectors.....	55.2
[55.201] Engine starting system	55.3
[55.301] Alternator.....	55.4
[55.302] Battery.....	55.5
[55.202] Cold start aid	55.6
[55.640] Electronic modules	55.7
[55.048] Rear Power Take-Off (PTO) control system	55.8
[55.051] Cab Heating, Ventilation, and Air-Conditioning (HVAC) controls.....	55.9
[55.050] Heating, Ventilation, and Air-Conditioning (HVAC) control system.....	55.10
[55.523] Cab hitch controls	55.11
[55.130] Rear three-point hitch electronic control system	55.12
[55.518] Wiper and washer system.....	55.13
[55.404] External lighting	55.14
[55.514] Cab lighting	55.15
[55.511] Light harnesses	55.16
[55.408] Warning indicators, alarms, and instruments	55.17
[55.DTC] FAULT CODES.....	55.18
Platform, cab, bodywork, and decals	90
[90.150] Cab.....	90.1

[90.151] Cab interior..... 90.2

[90.154] Cab doors and hatches 90.3

[90.160] Cab interior trim and panels..... 90.4



INTRODUCTION

Contents

INTRODUCTION

Note to the Owner WARNINGS FOR AIR CONDITIONING SYSTEM REPAIR OPERATIONS (*)	3
Advice Important notice	4
Safety rules SAFETY REGULATIONS	5
Personal safety CAB AIR CONDITIONING SYSTEM (*)	8
Basic instructions	9
Consumables	11
Consumables	12

(*) See content for specific models

Safety rules SAFETY REGULATIONS

TO PREVENT ACCIDENTS

Most accidents or injuries that occur in workshops are the result of non-observance of simple and fundamental safety regulations.

For this reason, IN MOST CASES THESE ACCIDENTS CAN BE AVOIDED: by foreseeing possible causes and consequently acting with the necessary caution and care.

Accidents may occur with all types of vehicle, regardless of how well it was designed and built.

A careful and judicious service technician is the best guarantee against accidents.

Precise observance of the most basic safety rule is normally sufficient to avoid many serious accidents.

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

GENERAL

- Carefully follow specified repair and maintenance procedures.
- Do not wear rings, wristwatches, jewellery, unbuttoned or loose articles of clothing such as: ties, torn clothing, scarves, open jackets or shirts with open zips that may remain entangled in moving parts.
It is advised to wear approved safety clothing, e.g: non-slip footwear, gloves, safety goggles, helmets, etc.
- Do not carry out repair operations with someone sitting in the driver's seat, unless the person is a trained technician who is assisting with the operation in question.
- Operate the vehicle and use the implements exclusively from the driver's seat.
- Do not carry out operations on the vehicle with the engine running, unless 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 must be carried out using extreme care and attention.
- Service steps 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 indicate that the vehicle is being serviced. Block the machine and all equipment which should be raised.
- Do not check or fill fuel tanks, accumulator batteries, nor use starting liquid when smoking or near naked flames, as these fluids are inflammable.
- Brakes are inoperative if manually released for repair or maintenance purposes.
In such cases, the machine should be kept constantly under control using blocks or similar devices.
- The fuel nozzle should always be in contact with the filling aperture. Maintain this position until filling operations are completed in order to avoid possible sparks caused by the accumulation of static electricity.
- Only use specified towing points for towing the tractor, connect parts carefully. Make sure that all pins and/or locks are secured in position before applying traction.
Never remain near the towing bars, cables or chains that are operating under load
- Transport vehicles that cannot be driven using a trailer or a low-loading platform trolley, if available.
- When loading or unloading the vehicle from the trailer (or other means of transport), select a flat area capable of sustaining the trailer or truck wheels, firmly secure the tractor to the truck or trailer and lock the wheels in the position.
- Electric heaters, battery-chargers and similar equipment must only be powered by auxiliary power supplies with efficient ground insulation to avoid electrical shock hazards.
- Always use suitable hoisting or lifting devices when raising or moving heavy parts.
- Take extra care if bystanders are present.
- Never pour gasoline or diesel oil into open, wide and low containers.
- Never use gasoline, diesel oil or other inflammable liquids as cleaning agents. Use non-flammable non-toxic proprietary solvents.
- Wear safety goggles with side guards when cleaning parts with compressed air.
- Limit the air pressure to a maximum of **2.1 bar (30.5 psi)**, according to local regulations.

INTRODUCTION

- Do not run the engine in confined spaces without suitable ventilation.
- Do not smoke, use naked flames, or cause sparks in the area when fuel filling or handling highly inflammable liquids.
- Never use naked flames for lighting when working on the machine or checking for leaks.
- All movements must be carried out carefully when working under, on or near the vehicle and wear protective equipment: helmets, goggles and special footwear.
- When carrying out checks with the engine running, request the assistance of an operator in the driver's seat. The operator must maintain visual contact with the service technician at all times.
- If operating outside the workshop, position the vehicle on a flat surface and lock in position. If working on a slope, lock the vehicle in position and move to a flat area as soon as is safely possible.
- Damaged or bent chains or cables are unreliable. Do not use them for lifting or towing.
Always use suitable protective gloves when handling chains or cables.
- Chains should always be safely secured. Ensure that fastening device is strong enough to hold the load foreseen. No persons should stop near the fastening point, trailing chains or cables.
- Maintenance and repair operations must be carried out in a CLEAN and DRY area, eliminate any water or oil spillage immediately.
- Do not create piles of oil or grease--soaked rags as they represent a serious fire hazard; store them in a closed metal container.
Before starting the vehicle or implements, make sure that the driver's seat is locked in position and always check that the area is free of persons or obstacles.
- Empty pockets of all objects that may fall unobserved into the vehicle parts when disassembled.
- In the presence of protruding metal parts, use protective goggles or goggles with side guards, helmets, special footwear and gloves.
- Handle all parts carefully, do not put your hands or fingers between moving parts, wear suitable safety clothing -- safety goggles, gloves and shoes.

WELDING OPERATIONS

- When welding, use protective safety devices: tinted safety goggles, helmets, special overalls, gloves and footwear. All persons present in the area where welding is taking place must wear tinted goggles.
NEVER LOOK AT THE WELDING ARC IF YOUR EYES ARE NOT SUITABLY PROTECTED.
- Where possible, remove the part or tool that requires arc welding from the tractor.
- Disconnect both battery leads. Isolate the cable ends to avoid contact with each other and the tractor.
- Position the welder ground clamp as near as possible to the area where welding is taking place.
- Remove the electronic control units located on the tractor if welding is to be carried out near these control units.
- Never allow welding cables to lay on, near or across any electrical wiring or electronic component while welding is in progress.
- Metal cables tend to fray with repeated use. Always use suitable protective devices (gloves, goggles, etc.) when handling cables.

START UP

- Never start the engine in confined spaces that are not equipped with adequate ventilation for exhaust gas extraction.
- Never place the head, body, limbs, feet, hands or fingers near fans or rotating belts.

ENGINE

- Always loosen the radiator cap slowly before removing it to allow any remaining pressure in the system to be discharged. Coolant should be topped up only when the engine is stopped or idle if hot.
- Never fill up with fuel when the engine is running, especially if hot, in order to prevent the outbreak of fire as a result of fuel spillage
- Never check or adjust fan belt tension when the engine is running.
Never adjust the fuel injection pump when the vehicle is moving.



SERVICE MANUAL

Engine

**T4.105F With cab [ZDJD11527 -], T4.105F Without cab [ZDJD11911 -],
T4.105LP With cab [ZFJD00717 -], T4.105LP Without cab [ZEJD00007 -],
T4.75F With cab [ZDJD10166 -], T4.75F Without cab [ZDJD10836 -],
T4.75LP With cab [ZFJD01559 -], T4.75LP Without cab [ZFJD01319 -],
T4.85F With cab [ZDJD11099 -], T4.85F Without cab [ZDJD11022 -], T4.85LP
With cab [ZFJD01714 -], T4.85LP Without cab [ZFJD00163 -], T4.95F With
cab [ZDJD10640 -], T4.95F Without cab [ZDJD10215 -], T4.95LP With cab
[ZFJD01191 -], T4.95LP Without cab [ZFJD00162 -]**

Contents

Engine - 10

[10.001] Engine and crankcase	10.1
-------------------------------------	------



Engine - 10

Engine and crankcase - 001

**T4.105F With cab [ZDJD11527 -], T4.105F Without cab [ZDJD11911 -],
T4.105LP With cab [ZFJD00717 -], T4.105LP Without cab [ZEJD00007 -
], T4.75F With cab [ZDJD10166 -], T4.75F Without cab [ZDJD10836 -],
T4.75LP With cab [ZFJD01559 -], T4.75LP Without cab [ZFJD01319 -],
T4.85F With cab [ZDJD11099 -], T4.85F Without cab [ZDJD11022 -], T4.85LP
With cab [ZFJD01714 -], T4.85LP Without cab [ZFJD00163 -], T4.95F With
cab [ZDJD10640 -], T4.95F Without cab [ZDJD10215 -], T4.95LP With cab
[ZFJD01191 -], T4.95LP Without cab [ZFJD00162 -]**

Contents

Engine - 10

Engine and crankcase - 001

SERVICE

Engine	
and crankcase - Remove	3
Install	9

Engine and crankcase - Remove

⚠ DANGER

Heavy objects!

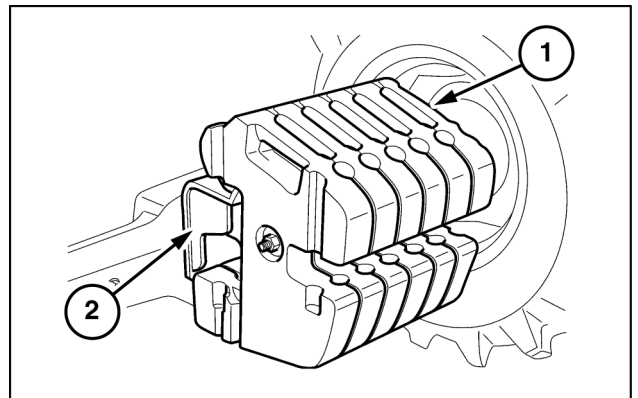
Lift and handle all heavy components using lifting equipment with adequate capacity. Always support units or parts with suitable slings or hooks. Make sure the work area is clear of all bystanders.

Failure to comply will result in death or serious injury.

D0076A

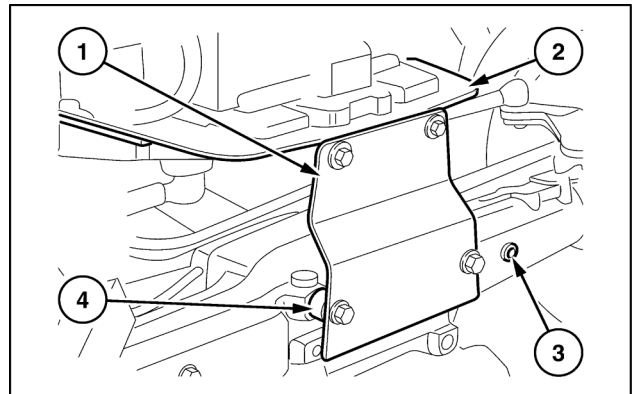
ATTENTION: Use suitable tools to align the holes. Never use fingers or hands.

1. Remove the cab as described in operation **Cab - Remove (90.100)**.
2. Extract the fixing pin and remove the ballast (1), unscrew the retaining screws and retrieve the ballast support (2).



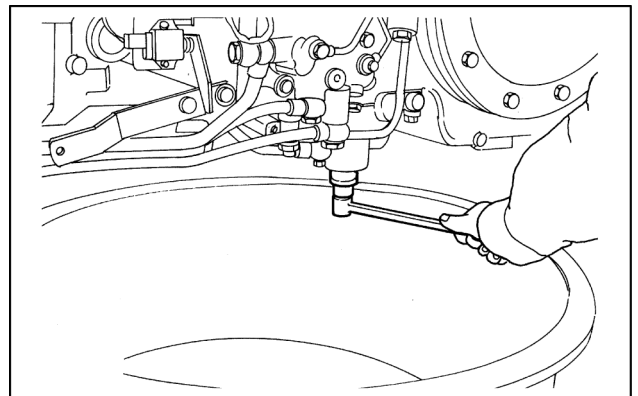
MOL11F0001AB 1

3. Position and secure the bracket **380001613 (1)** complete with spacers **50162 (4)** on the front axle (3) and the related support (2).



MOL11F0002AB 2

4. Unscrew the plug and drain the oil from the rear transmission casing (the prescribed quantity is **42 l**).



MOL11F0003AA 3



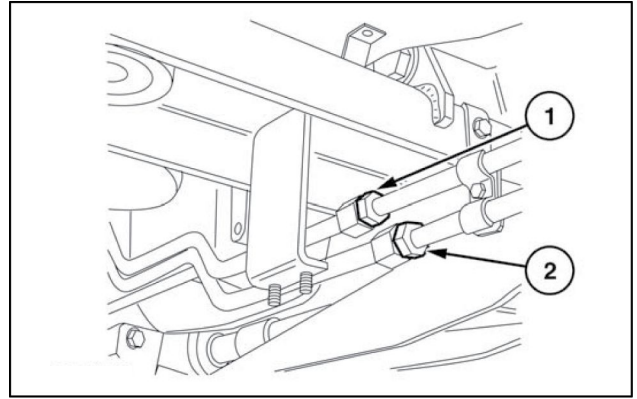
Suggest:

If the above button click is invalid.

**Please download this document
first, and then click the above link
to download the complete manual.**

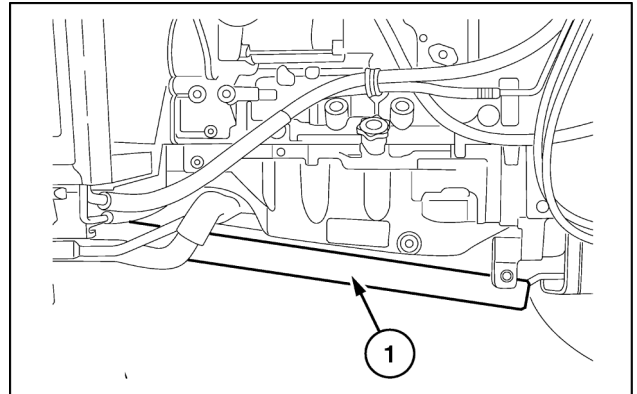
Thank you so much for reading

5. Disconnect the pipes **(1)** and **(2)** of the transmission oil cooler and of the front axle differential lock.



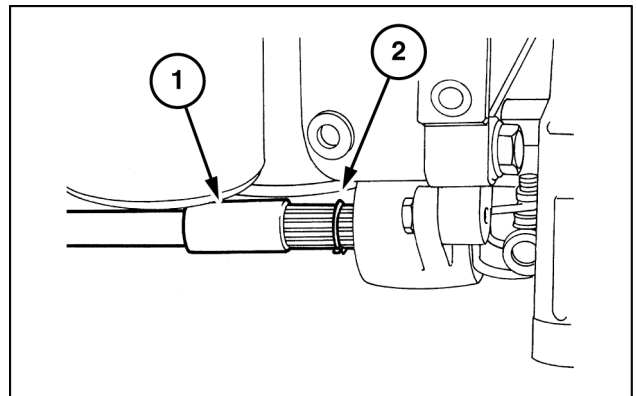
MOLI11F0004AB 4

6. Unscrew the front and rear retaining bolts, unscrew the front pivot pin retaining screw and remove the bracket **(1)**.
Unscrew the relative retaining bolts and remove the rear guard.



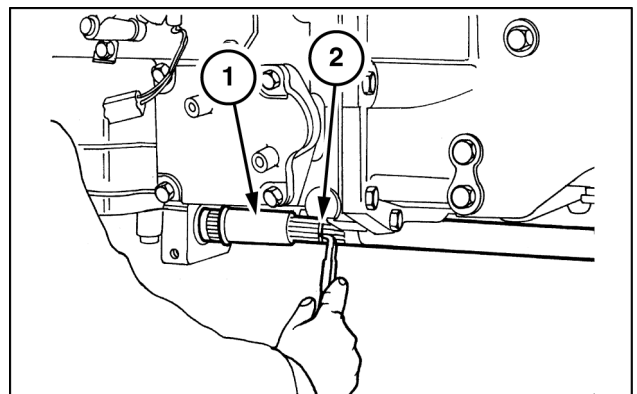
MOLI11F0005AB 5

7. Remove the circlip **(2)** and move the front sleeve **(1)** backwards in order to free it from the groove on the front axle.



MOLI11F0006AB 6

8. Remove the circlip **(2)** and move the rear sleeve **(1)** in order to release it from the groove on the drive.



MOLI11F0007AB 7

<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>