

Service Training

**Fendt CARGO 3X front loader (Standard),
Fendt CARGO 4X/5X front loader (Standard and Profi),
Fendt CARGO R rear loader**



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1 Serial number

The serial number is shown on the factory label (arrow).



Fig. 1.

I023647

2 Maintenance instructions



DANGER:

Only carry out maintenance work (e.g. lubrication) on a jib mounted on the tractor when lowered to the ground. Hand brake applied and engine switched off.



CAUTION:

Never search for leaks in the hydraulic system with your fingers. Use appropriate tools (piece of wood or cardboard). Hydraulic oil escaping under high pressure can penetrate the skin and cause severe injuries. In the event of injuries, seek medical attention immediately.

- After 50 tractor operating hours, have all bolts on the front loader console tightened in a specialist workshop!
- After 50 operating hours, have all remaining bolted connections on the front loader checked in a specialist workshop and tighten if necessary!
- Every 500 tractor operating hours, check bolted connections on the front loader console and all remaining bolted connections on the front loader and tighten if necessary.
- If necessary, grease the threaded spindles and sliding contact areas on supports.
- Lubricate the front loader every 10 operating hours.
- Check the hydraulic hoses for damage and abrasions, and if there are any, contact a FENDT workshop as soon as possible.
- Check hydraulic lines, hydraulic cylinders and connections regularly for wear and leaks. Have worn or leaking hydraulic lines, hydraulic cylinders and connections replaced as soon as possible in a FENDT workshop.

NOTE: When retrofitting or removing and remounting the front loader console, the inspection intervals at 50 operating hours and then every 500 subsequent operating hours must be observed.

3 Bolt tightening torques

FENDT 200 Vario

Front loader console	M16 — 8.8	Nm	210
Front loader console	M16 — 10.9	Nm	295
Front loader (nuts)	M 27	Nm	450

FENDT 300 Vario

Front loader console	M16 — 8.8	Nm	210
Front loader console	M20 — 8.8	Nm	410
Front loader console	M20 — 10.9	Nm	580
Console bolted connection — support plate	M20 — 10.9	Nm	540
Front loader (nuts)	M 27	Nm	450

FENDT 300 SCR Vario

Front loader console	M16 — 8.8	Nm	210
Front loader console	M20 — 8.8	Nm	410
Front loader console	M20 — 10.9	Nm	580
Console bolted connection — support plate	M20 — 10.9	Nm	540
Front loader (nuts)	M 27	Nm	450

FENDT 400 Vario

Front loader console	M16 — 8.8	Nm	210
Front loader console	M20 — 10.9	Nm	580
Front loader (nuts)	M 27	Nm	450

FENDT 500 SCR Vario

Front loader console	M16 — 8.8	Nm	210
Front loader console	M20 — 10.9	Nm	580
Front loader (nuts)	M 27	Nm	450

FENDT 700 Vario

Front loader console	M16 — 8.8	Nm	210
Front loader console	M20 — 10.9	Nm	580
Front loader (nuts)	M 27	Nm	450

FENDT 700 SCR Vario

Front loader console	M16 — 8.8	Nm	210
Front loader console	M20 — 10.9	Nm	580
Front loader (nuts)	M 27	Nm	450

FENDT 800 Vario

Front loader console	M16 — 8.8	Nm	210
Front loader console	M20 — 10.9	Nm	580
Front loader (nuts)	M 27	Nm	450

4 Lubrication points

Lubricate after 10 front loader operating hours

At the top of the external front loader frame.

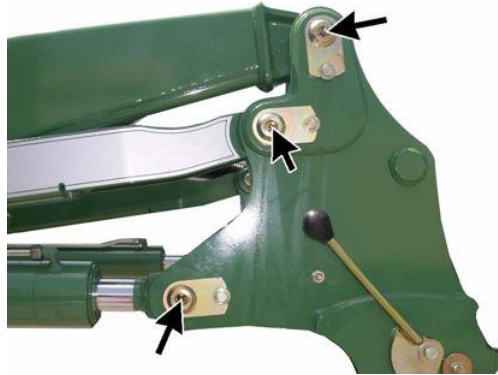


Fig. 2.

I023841

At the top of the internal front loader frame.



Fig. 3.

I023842

At the top of the front loader rocker.

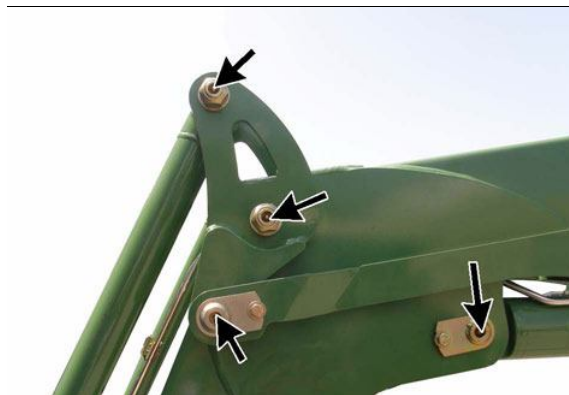


Fig. 4.

I023843

At the bottom on the implement mounting.

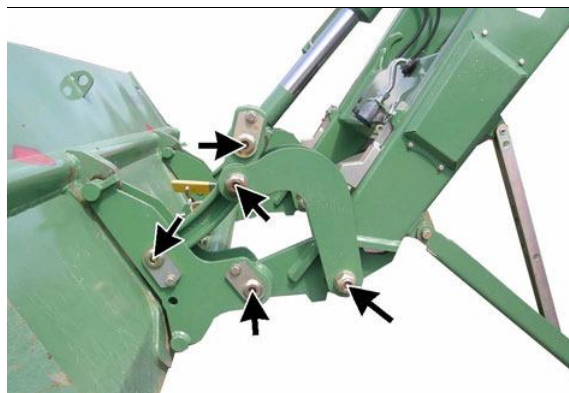


Fig. 5.

I023844

NOTE: The number of lubrication points varies with the loader model version.

Clean the front loader

- Never leave the engine running when hosing down the front loader.
- Maintain a sufficient distance from seals and paintwork when using a high-pressure cleaner (minimum 10 cm). Maximum water temperature 50° C. Do not use a spray booster (dirt cutter). Follow the manufacturer's instructions!
- After cleaning the tractor, lubricate all lubrication points, joints and bearings. We recommend waxing painted surfaces after cleaning.
- Do not use cleaning agents containing a high percentage of alcohol—such as spirit or acetone—or scouring agents!

Winter service operation

When operating the front loader in winter or similar circumstances, wax it with a washable protective wax, Custos 80-16-5 A.

NOTE: You can purchase this product from the Fendt spare parts division.

5 Implement range

⚠ DANGER:
Only use implements for their intended purpose.

⚠ DANGER:
Do not use implements for transporting people.

⚠ DANGER:
Use only special implements for transporting big bags. Currently not part of the FENDT implement range.

⚠ CAUTION:
Risk of injury from sharp-edged, protruding components (e.g. tines)

NOTE: Safe attachment and operation is only ensured with original FENDT implements.

Keep an eye out for changes to the implement range.

You can obtain details of the current implement range from the price list.

Operating with big bags is only permitted for front loaders with a pipe rupture safety feature.

Sign plate on implement	
UNI	Universal bucket
SG	Heavy-duty bucket
LG	Light-duty bucket
Example:	
2400	Interior bucket dimension in mm



Fig. 6.

1024136

Universal bucket (UNI)

Width (interior dimension)	Volume (flush volume filled)
1600 mm	0,538 m ³
1850 mm	0,622 m ³
2100 mm	0,706 m ³
2400 mm	0,807 m ³

Light-duty bucket (LG)

Width (interior dimension)	Volume (flush volume filled)
1850 mm	0,976 m ³
2400 mm	1,265 m ³

Heavy-duty bucket (SG)

Width (interior dimension)	Volume (flush volume filled)
1600 mm	0,512 m ³
2100 mm	0,672 m ³



Fig. 7.

1024146

Silage fork

Width (interior dimension)	Weight
1500 mm	135 kg
2100 mm	180 kg



Fig. 8. 1024149

Silage gathering bucket

Width (interior dimension)	Weight	Contents
1500 mm	310 kg	0,75 m ³
1900 mm	410 kg	0,95 m ³



Fig. 9. 1024142

Pallet fork

Permissible weight	1500 kg
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Fig. 10. 1024147

Pallet fork

Permissible weight	2000 kg
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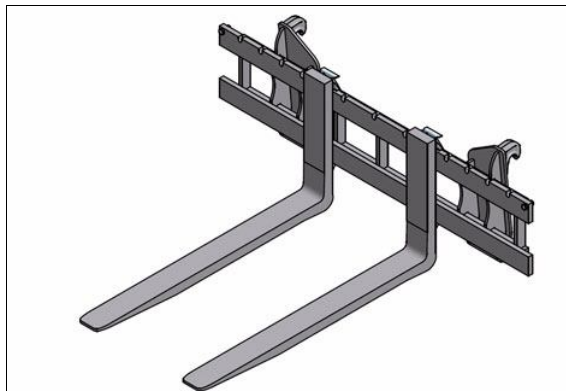


Fig. 11. 1025068

Bale fork (3 tines)

Width	Weight
1500 mm	125 kg



Fig. 12.

I024141

Round bale grab

Width	Weight
1300 mm	240 kg



Fig. 13.

I024140

6 Operation with pallet fork

The following points should be noted for safe operation with the pallet fork:

- The further forward the load is attached, the lower the permissible load.
- If transporting heavy or protruding loads, do not use the fast tilt setting.

NOTE: Deactivate fast tilt (if available) for operation with a pallet fork.

Version I



Fig. 14.

I024147

- Maximum permissible load of 1500 kg, maximum load per tine of 750 kg with the centre of gravity at a distance of:
 - 500 mm for a FENDT pallet fork (see dimension B)
 - 800 mm for all other pallet forks (see dimension A)

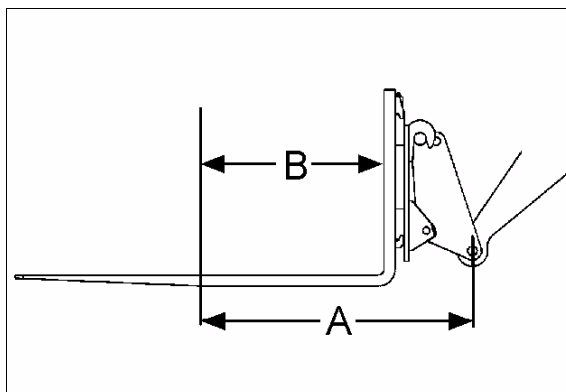


Fig. 15.

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Version II

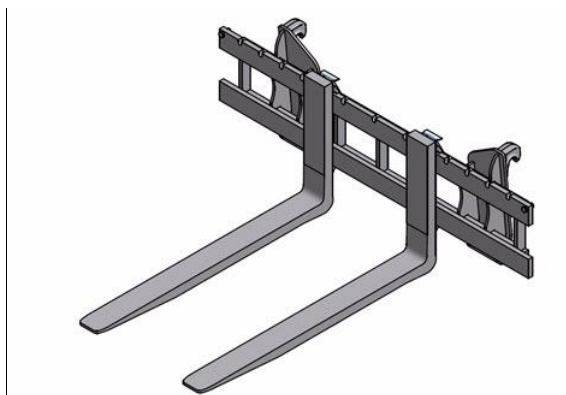


Fig. 16.

I025068

- Maximum permissible load of 2000 kg with a centre of gravity at a distance of 500 mm (see dimension A).

NOTE: Tine length (see dimension B) 1100 mm.

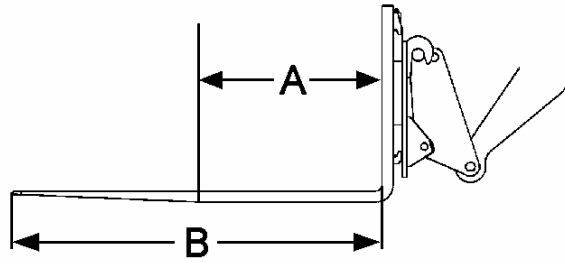


Fig. 17.

I025130

7 Tractor ballasting



CAUTION:

When working with the front loader, always use a counterweight at the rear of the tractor. This is required for operating safety and safety on the road. Make sure that you can still steer and that minimum braking distance is ensured even when working with the front loader (vehicle licensing regulations).

NOTE: An additional weight at the rear also reduces the load on the front axle.

Series		200 Vario	300 Vario 300 SCR Vario	400 Vario 500 SCR Vario	700 Vario 700 SCR Vario	800 Vario
Front loader						
3X/65	kg	870	870			
3X/70	kg	-	870			
4X / 75	kg		870	1250	-	-
4X / 80	kg		-	1250	-	-
4X / 85 ⁽¹⁾	kg		-	-	1800	-
5X / 85	kg		-	-	1800	1800
5X / 90	kg		-	-	1800	1800

1. only with 28" front tyres

A	General	Fendt CARGO 3X front loader (Standard)
B	Faults	
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1 Remove and attach the CARGO front loader (3X)

Removing the front loader



WARNING:

Only remove the front loader together with an implement attached (e.g. bucket or fork), on firm and level ground.

Danger from unintended lowering of the front loader. Risk of injury!

The front loader must be parked and secured in such a way as to prevent unauthorised persons or children playing from causing it to tip over.

FENDT 200/300 Vario

- Use the crossgate lever (arrowed) to put the hydraulic valve (yellow and blue) into floating position.
 The lift and tilt cylinders are de-pressurised.

NOTE: Apply the hand brake.
 Remove the lower links of the front hydraulics.
 Close windscreen.

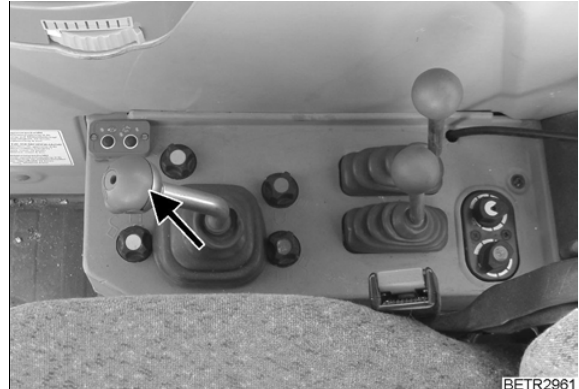


Fig. 1.

BETR2961
1007166

- Place the bucket horizontally.

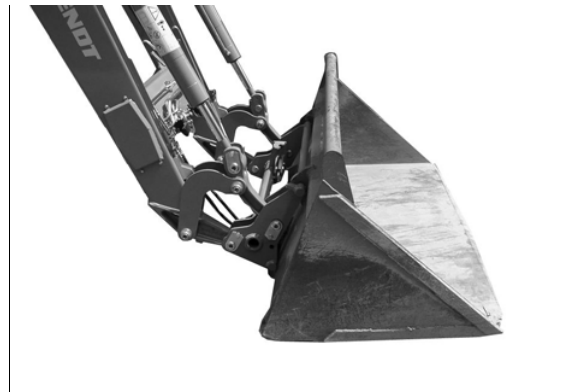


Fig. 2.

1005159

Loosen the locking system

- Pull lever (A) on both sides in the direction of the cab until it engages.



Fig. 3.

BETR2780
1005160

Lower foldaway supports

- Press catch (A) on both sides.
Lower the foldaway supports (B) on both sides until they snap into place.

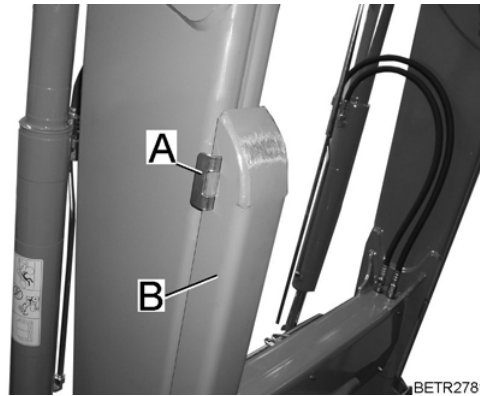


Fig. 4.

BETR2781
I005161

- Set bucket at top position (inclined by about 10-20 cm).

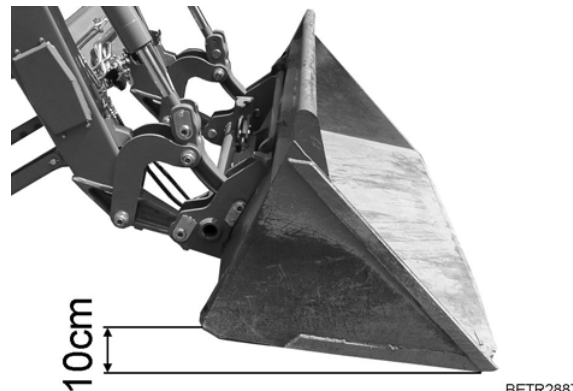


Fig. 5.

BETR2887
I005162

- Press the transmission neutral button (transmission neutral).
- Release hand brake.
- **Retract the lift cylinder. This moves the attachment plate out of the mounting console (Item A)**
- **Tilt mounted implement (horizontal position). This lifts the attachment plate out of the mounting console (Item B)**
- Slowly drive the tractor backwards until the front loader moves out of the mounting socket.

NOTE: Do not damage the hydraulic lines when driving out!

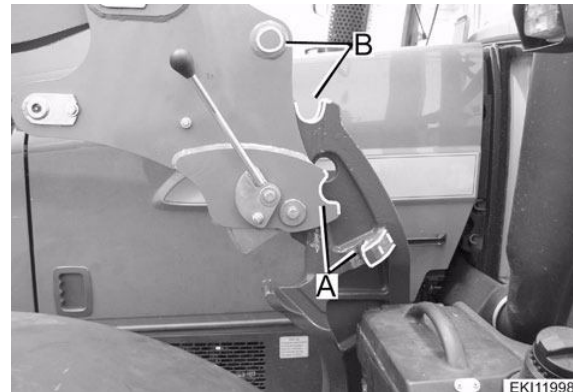


Fig. 6.

EK111998
I024148

- Press catch (A).
- Swivel bracket up.
- Remove multi-coupler from guide pins by pulling upwards.



Fig. 7.

I005164

- Attach the multi-coupler to the retaining bracket on the front loader jib.
- Drive the tractor out of the front loader.



Fig. 8. 1023678

Attach the front loader

⚠ WARNING:
Before attaching the multi-coupler, unplug or unload the rear hydraulic connections.

Preliminary work:

- Apply the hand brake.
- Raise and fold up the lower links of the front hydraulic power lift (FENDT 400/700/800 Vario)
- Check front air pressure and track adjustment.
- Drive the tractor slowly into the front-loader console.
- Clean the mating faces of the multi-coupler.
- Insert the multi-coupler with integrated electric lines.
- Swivel the bracket downwards until catch (A) snaps into place.



Fig. 9. 1005164

NOTE: Do not load the foldaway supports by using the DA function to lift the front loader out of the mounting console. Doing this may damage the fold-away supports.

- Position the front-loader jib above the **bucket tilt cylinder** until the front loader moves into the support fork.
- **Raise** the front-loader jib using the **lift cylinder** until the foldaway supports disengage and lever (A) automatically locks.

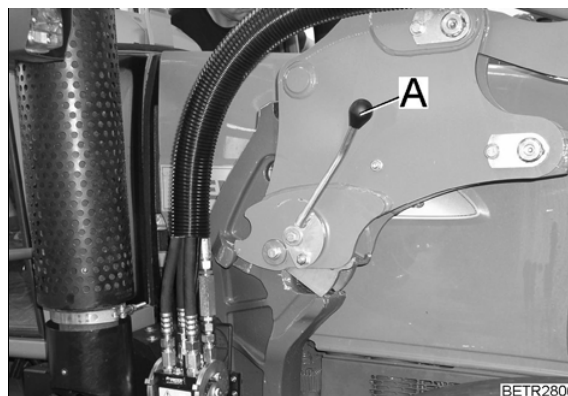


Fig. 10. 1005171

Locking indicator (CARGO Lock)

The locking indicator must be located in the green range (arrow).

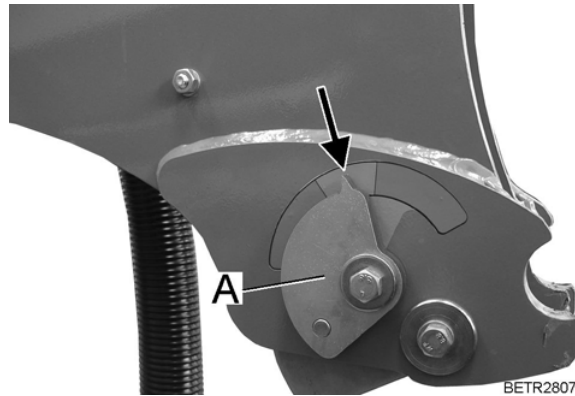


Fig. 11.

- Fold in foldaway supports (B). Catch (A) must snap into place.

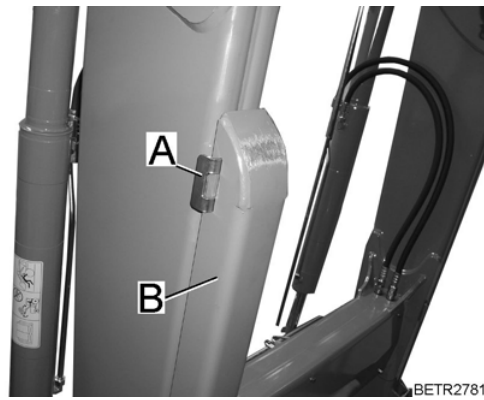


Fig. 12.

Raise locking device on the crossgate lever

FENDT 200 (S) Vario



WARNING:

For safety reasons (risk of accident), lever (A) must be moved into the inner position before operating the front loader.

NOTE: Also see decal



Fig. 13.

FENDT 300 Vario



WARNING:

For safety reasons (risk of accident), lever (A) must be moved into the front position before operating the front loader.

NOTE: Also see decal



Fig. 14.

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