

This guide is intended for you, the ROAD HAULAGE PROFESSIONAL.

It outlines the essential recommendations for use and maintenance of the system to ensure operation in optimum conditions of safety.

This guide describes normal conditions of use. If you want additional explanations concerning the contents of the guide or any particular conditions of use of this vehicle, please get in touch with us.

Please keep this booklet in a safe place.



High Productivity transport solutions.....

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All illustrations and photos are non-contractual and simply offer examples.



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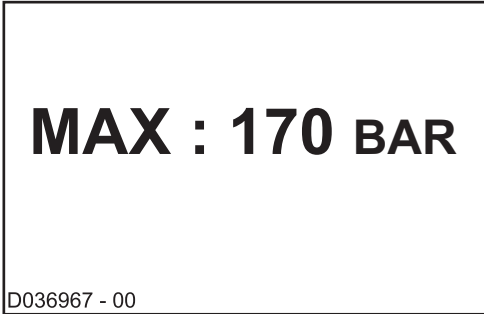


Fig. 3-1

Couple the semi-trailer to the tractor unit or the trailer to the straight-truck according to the instructions given in the general instruction manual.

Unless otherwise specified on the hydraulic pressure indicator plate (fig. 3-1), the equipment in our dump bodies is designed to operate at a maximum working pressure of 170 bar.

Optional equipment

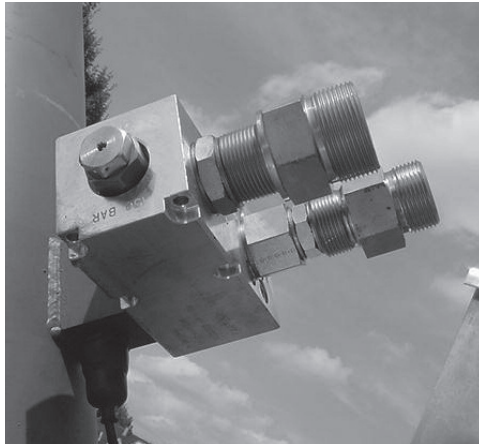


Fig. 3-2

Certain hydraulic devices deliver a higher pressure, in which case a sealed pressure limiter (fig. 3-2) should be fitted to the circuit so that it delivers a maximum of 170 bar to the hoist.

COUPLING

Connect the hoist hydraulic circuit, ensuring:

- that the tractor unit hoses are in perfect condition,
- that the coupling is free of all foreign bodies which could damage the hydraulic system,
- that the supply hose coupling is completely tightened and blocked,
- that the oil level in the tank is sufficient to enable the hoist to be raised,
- that the oil contains neither water nor impurities which could damage the seals or scratch the hoist tubes.

If a pressure limiter is mounted on the hoist, connect:

- the "supply" hose (fig. 4-1),
- then the "boost oil return" hose (fig. 4-2).



Fig. 4-1

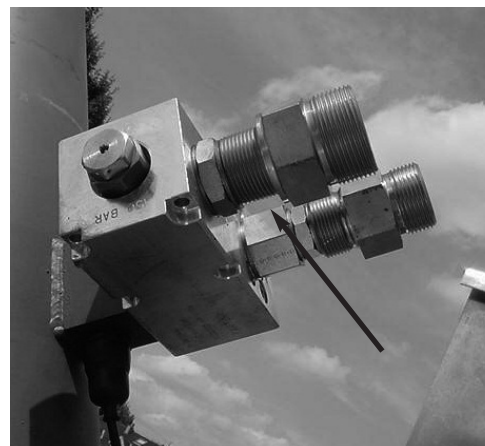


Fig. 4-2

UNCOUPLING

A semi-trailer or a dumper trailer is uncoupled in accordance with the instructions given in the general instruction manual.

The hydraulic circuit may only be uncoupled:

- with dump body resting on the chassis,
- with pump disengaged so that the hydraulic circuit is not pressurised..



In the uncoupled vehicle position, raising with load is strictly prohibited.

ESSENTIAL SAFETY AND OPERATING INSTRUCTIONS

GENERAL

Dumping operations are the responsibility of the operator who, as an experienced professional, must abide by the essential safety rules recalled below:



YOU MUST NEVER STAND UNDER A RAISED DUMP BODY, WHETHER EMPTY OR LADEN, OR IN ITS IMMEDIATE VICINITY.

Prior to any unladen maintenance work, it is **ESSENTIAL** to install a safety support leg.

- ⇒ Avoid carrying out dumping operations in stormy, windy conditions as this could compromise the stability of the articulated assembly.
- ⇒ All the articulation and running gear elements must be in good working order.
- ⇒ The tyres must be inflated to the operating pressure recommended by the manufacturer.
- ⇒ **Never leave the dumping area before the dump body has been completely lowered.**

An extract from the instructions in this manual is recalled on the plate or self-adhesive label stuck on the front of the dump body (page 7).

ESSENTIAL SAFETY AND OPERATING INSTRUCTIONS

REMINDER OF ESSENTIAL DUMPING INSTRUCTIONS

1. THE LOAD MUST BE EVENLY DISTRIBUTED

2. BEFORE DUMPING

The tractor unit and its front wheels must be aligned with the semi-trailer and on flat, horizontal, stable, hard ground.

When the vehicle is equipped with rear stability legs, they **MUST** be used.

3. DURING DUMPING

Ensure that nobody is in the immediate vicinity of the vehicle.

The operator must remain at the controls to supervise smooth running of the operation.

Jolting the ram or making any movements with the vehicle is prohibited.

If the product does not flow out, immediately stop dumping and slowly and **SMOOTHLY** lower the dump body or tanker.

4. AFTER DUMPING

Do not leave the dumping zone until the dump body or tanker has been completely lowered.

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ESSENTIAL SAFETY AND OPERATING INSTRUCTIONS

Audible movement warning device

When the dump body is raised, this triggers an audible warning device.

Pressurising the hoist allows contact by a pressure switch which supplies the warning device, which will only stop when the body is lowered onto the chassis.

Ensure that hydraulic circuit decompression is sufficient to prevent inadvertent start-up of the system (pressure switch calibrated to 3 bar). To do this, keep the control in the down position for a few seconds after the dump body has come to rest on the chassis.

The pressure switch must be electrically supplied by a 24V current delivered to pin 4 of the 24S connector.



Fig. 8-1

ESSENTIAL SAFETY AND OPERATING INSTRUCTIONS

LOADING

The variety of materials transported means that they can be influenced by various climatic conditions (frost, partial wetting of the product).

These circumstances can cause balance problems at dumping (product clumping) which could cause overtipping.

It is essential to consult the loader for a definition of the product to be placed between the dump body and the load to facilitate flowing for risk-free dumping.

It may also be necessary to place a product between the bottom and the load owing to the corrosive or other nature of the product transported.

The load must always be evenly distributed longitudinally (fig. 10-1) and transversely (fig. 10-2) within the authorised payload limits, rather than concentrated at the front or back (fig. 10-3) or on the same side (fig. 10-4).

If the load is not homogeneous, then the heaviest items should be at the bottom of the dump body rather than at the top.

Loads resting against the doors should not be too great.

The load must not protrude above the sidewalls.

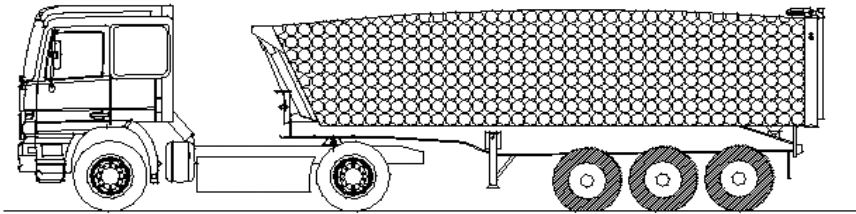
Complying with these basic instructions will improve running and unloading conditions.



ESSENTIAL SAFETY AND OPERATING INSTRUCTIONS

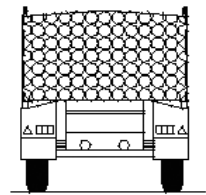
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Fig. 10-1



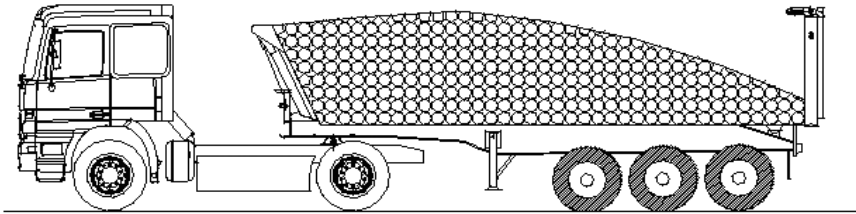
YES

Fig. 10-2



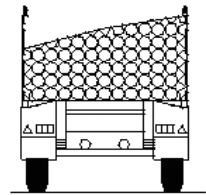
YES

Fig. 10-3



NO

Fig. 10-4



NO

DANGER

DANGER



ESSENTIAL SAFETY AND OPERATING INSTRUCTIONS

LOADING (cont.)

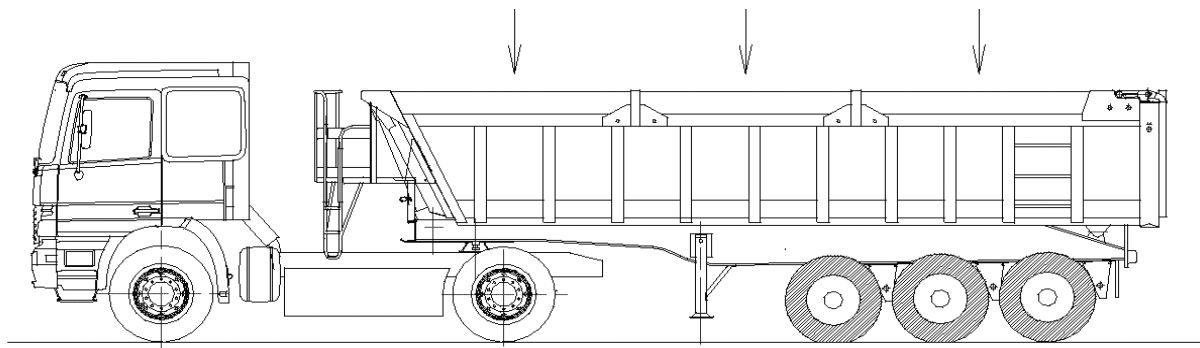


Fig. 11-1

Certain dump bodies are pre-equipped with height extender mountings for increasing the initial payload volume, within the payload limits, according to the density of the materials to be transported (fig. 11-1).

Transporting certain products requires installation of a protective net or tarpaulin; In this case, before departure, check that they are correctly tied down by elastic straps, hasps, bars or spacer chains, or bracing bows, which must be in good condition.

In any case, installing a tarpaulin will bring down tractor unit fuel consumption.



ESSENTIAL SAFETY AND OPERATING INSTRUCTIONS

INSTRUCTIONS PRIOR TO DUMPING

Dumping **MUST** be carried out:

1. With semi-trailer coupled and not uncoupled as shown in Fig. 12-1.
2. On flat, horizontal, stable and hard ground, unlike in Fig. 12-2.
3. All tyres must be fully bearing on the ground, unlike in Fig. 12-3.



ESSENTIAL SAFETY AND OPERATING INSTRUCTIONS

Fig. 13-1



Fig. 13-2



INSTRUCTIONS PRIOR TO DUMPING

(cont.)

4. The tractor unit and steering wheels must be aligned with the longitudinal axis of the semi-trailer (fig. 13-1). No dumping is allowed if the tractor unit is not in line (fig. 13-2).
5. No infrastructure should impede dumping (to be checked).
6. All work done below overhead electrical wires constitutes a lethal hazard and requires authorisation and supervision by the Official Organisation.
7. All work done below overhead railway power lines also constitutes a lethal hazard and is subject to authorisation by the railway authority.
8. The articulated assembly must be braked.
9. The hydraulic coupling brackets must be fully screwed-in.
10. When the vehicle is equipped with them, the use of rear stability legs is **MANDATORY**.



OPENING THE REAR DOOR



When unlocking the doors, and before opening them, take care to keep clear of any falling materials. Beware of sudden opening of the operating devices, particularly the lock bars (fig. 14-1), or of the doors under the pressure of the materials behind them.



Fig. 14-1

Manual opening of the rear double-doors

- unlock the doors and open them (fig. 14-2),
- fold back the doors and secure them against the sidewalls of the dumper body before starting dumping (fig. 14-3 & 14-4).

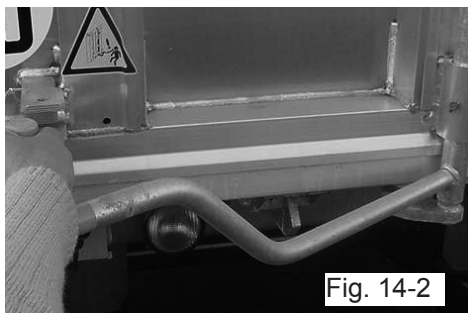


Fig. 14-2

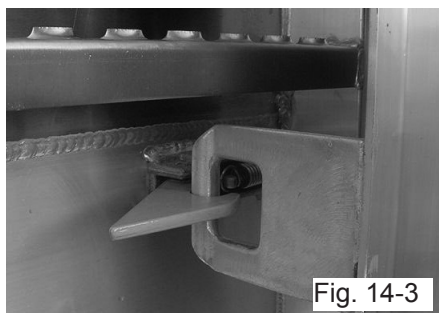


Fig. 14-3



Fig. 14-4

When closing the door, make sure that the mechanism is properly locked. Do not forget to install the safety pin (Fig. 14-5) or any other security device (blocking pin, etc.).

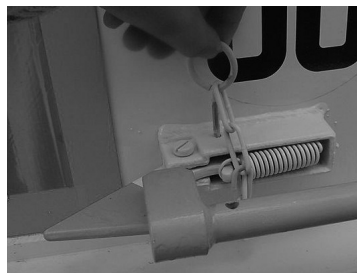


Fig. 14-5





OPENING THE REAR DOOR

SAMPLING HATCH

When the rear door is equipped with one or two sampling hatches, they must be open to partly remove some of the materials pressing against the doors before they are opened (fluid flow products).

Take all safety measures to keep clear of falling product (Fig. 15-1).

To complete unloading via the rear hatches, they must be opened symmetrically to allow satisfactory product flow (fig. 15-2).

Total unloading through a single hatch **IS PROHIBITED** owing to the risk of overturning.

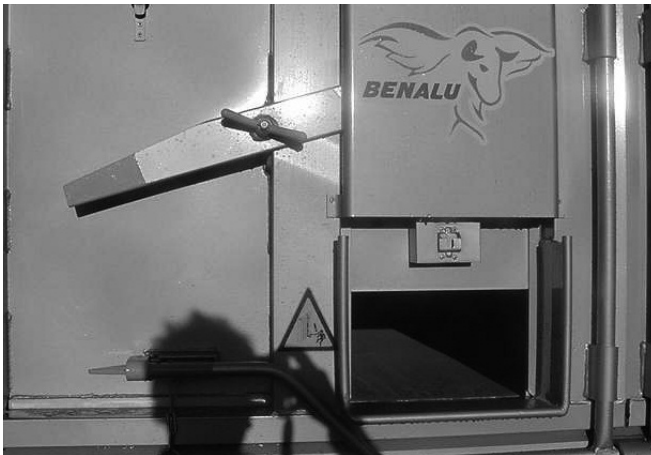


Fig. 15-1



Fig. 15-2





OPENING THE REAR DOOR

Universal door swing function

The door frame is unlocked by hooks which are mechanically or pneumatically actuated by raising the dump body (fig. 16-1).

Opening occurs when the hoist reaches 1.5 Expansion MAX. (Fig. 16-2 & 16-3).

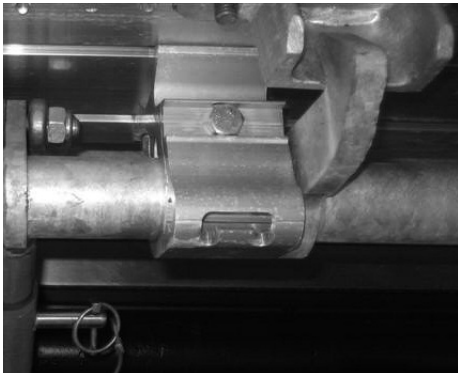


Fig. 16-1

If the rear frame fails to open:

- stop dumping immediately and smoothly,
- lower the dump body,
- adjust the opening of the rear hooks.



Fig. 16-2



Fig. 16-3



OPENING THE REAR DOOR

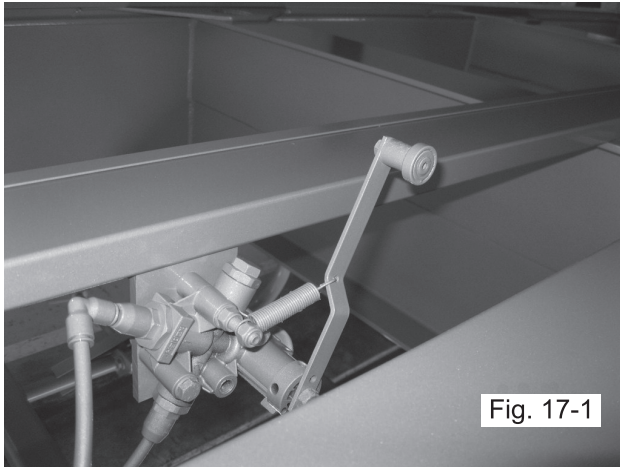


Fig. 17-1

Pneumatic hook opening swing function

Unlocking one of the doors is by means of hooks actuated pneumatically by raising the dump body.

A distributor controlled by a lever which comes into contact with the bottom of the body supplies a pneumatic hoist when dumping starts (fig. 17-1).

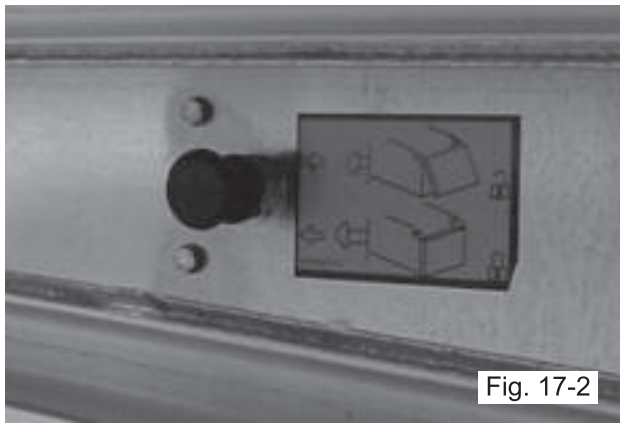


Fig. 17-2

An isolating valve is used to neutralise opening of the hooks, for example when the sample hatch is being used.

A sticker describes operation of the valve (Fig. 17-2).

OPENING THE REAR DOOR

Use of double-door on swing frame

Set the door hook locking bolt (A) in unlocked position, fig. 18-1 and fig. 18-2.

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Beware of sudden opening of the operating system, in particular the lock bars.

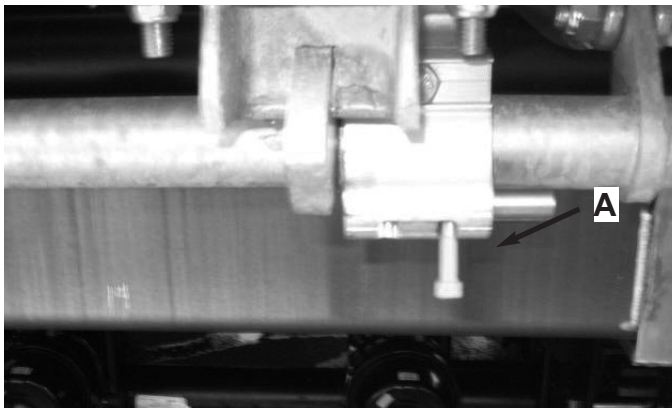


Fig. 18-1 : Pneumatic opening door

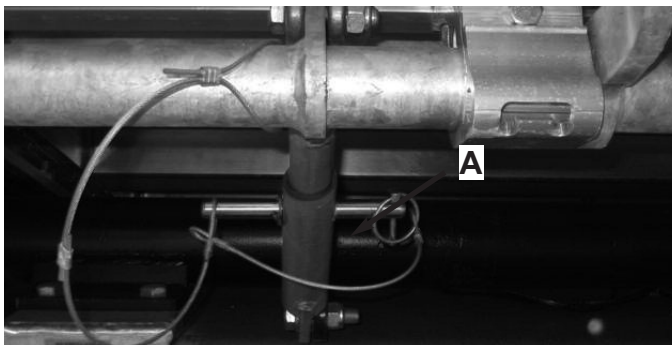


Fig. 18-2 : Mechanical opening door

OPENING THE REAR DOOR

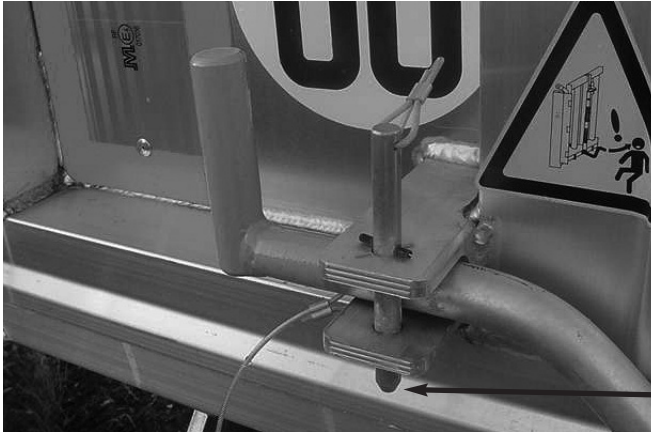


Fig. 19-1

When closing the double-door

- Ensure that the mechanism is locked.
- Do not forget to put back the safety pin (C) (fig. 19-1).



When the vehicle is running, the door hook locking bolts (A) must always be in place to prevent any opening.

OPENING THE REAR DOOR

Fig. 20-1 : Mechanical opening secured by pin (C)

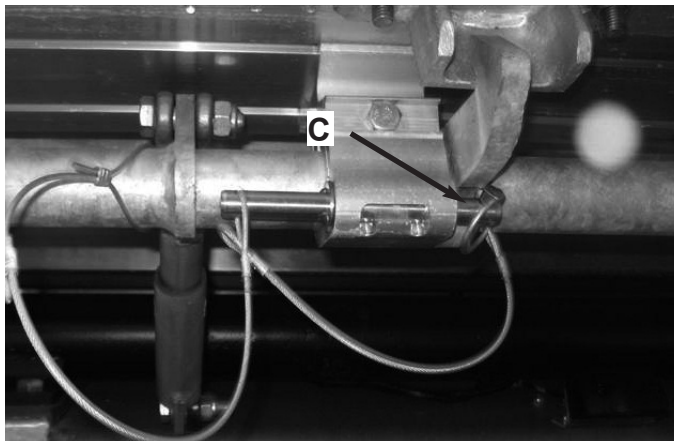
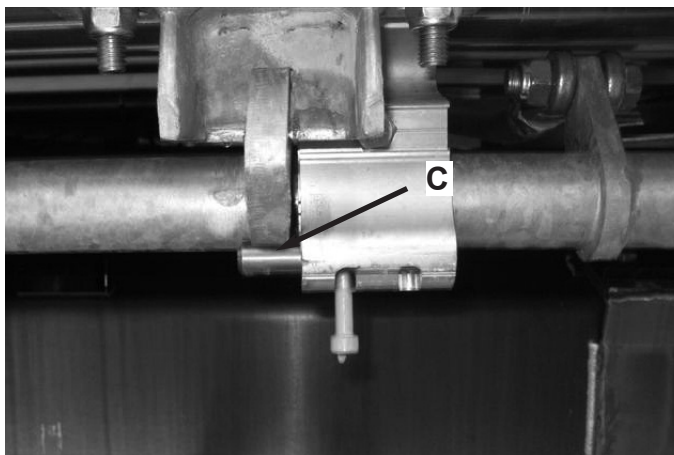


Fig. 20-2 : Pneumatic opening secured by pin (C)





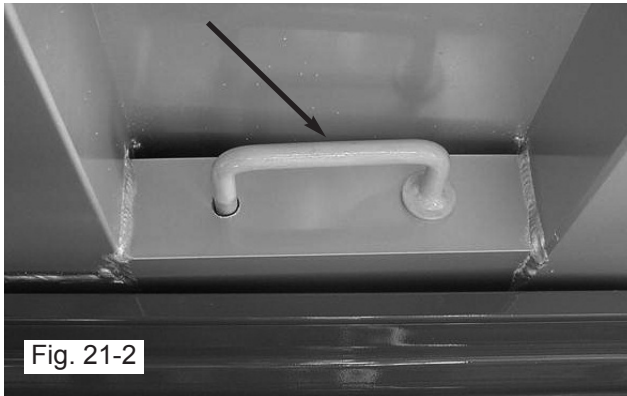
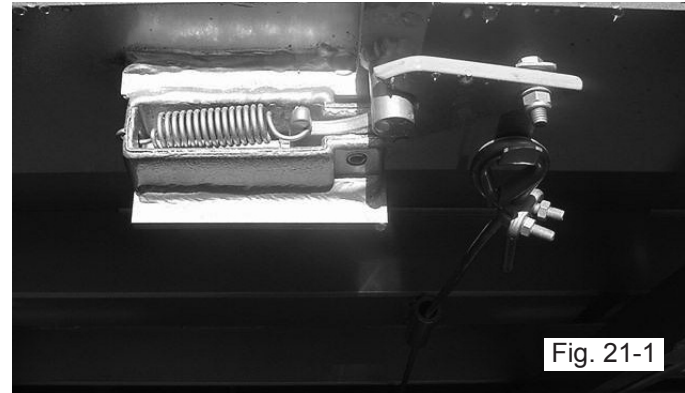
OPENING THE REAR DOOR

Using the side locking device

This device placed on the side enables the user to work from an area of safety when unlocking the double-doors (Fig. 21-1).

Operation

- Release the lock bars (see door opening in double-door function only).
- Pull on the lever (Fig. 21-2).



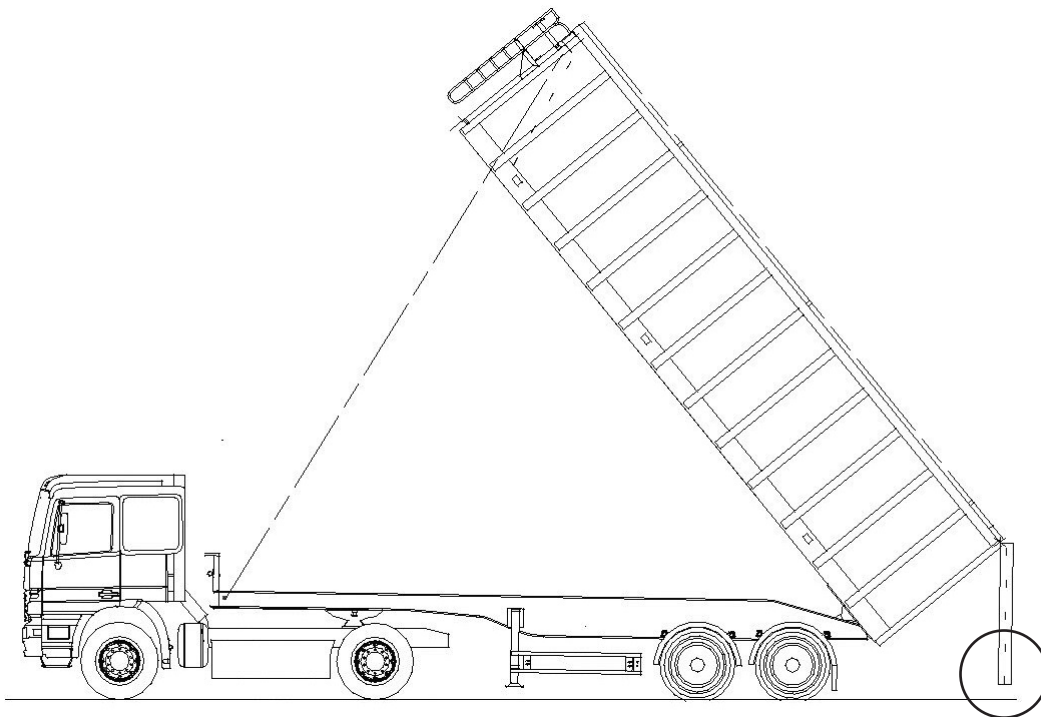
If the swing function is used for dumping, the cable **MUST** be uncoupled (fig. 21-3).



OPENING THE REAR DOOR



In the case of a high vehicle with swing or universal door, we would draw your attention to the fact that the ground clearance is **nil, or even negative** in the maximum dumping position, which could lead to contact with the ground and therefore instability



Only for use with a pit, or in a specially designed location.

OPENING THE REAR DOOR

CAUTION DANGER

**SINGLE OR DOUBLE
ACTING**

**Before and during each operation,
it is VITAL
to stay clear of the operating area
of the hydraulic tailgate.**

**E
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H**

OPENING THE REAR DOOR

SINGLE ACTION hydraulic tailgate

The tractor unit requires no particular hydraulic installation. A sequential valve gives priority to door opening before dumping.

If the hatch is used, a shut-off valve can be used to lock the door (fig. 24-1 and 24-2).

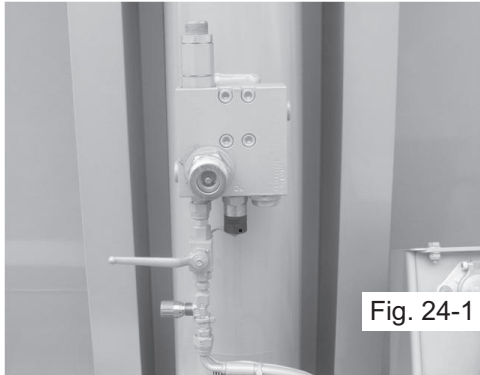


Fig. 24-1

DANGER
Refer to
recommendation on
page 21

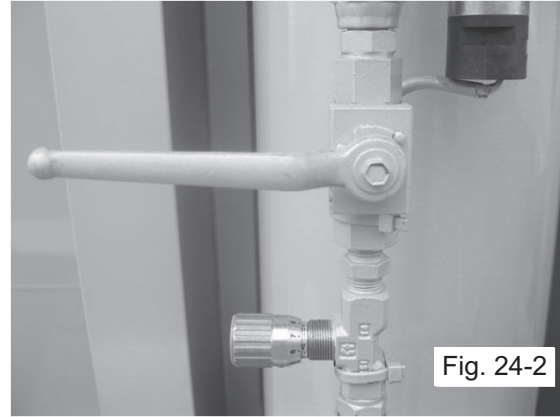


Fig. 24-2

When the vehicle enters service, or when the tractor unit is changed, make sure that the sequence is still correct.

It may be necessary to adjust the sequential valve. In this case, consult our technical department (fig. 24-3).

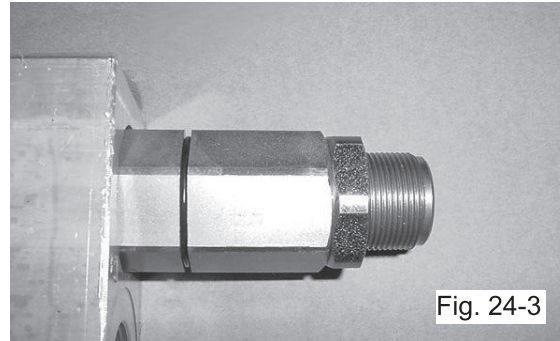


Fig. 24-3

OPENING THE REAR DOOR



DOUBLE ACTION hydraulic tailgate

The tractor unit requires DOUBLE ACTION hydraulic distribution dedicated to the door.

Before any dumping operation, make sure that the tailgate is raised.

DUMPING INSTRUCTIONS

The operator must remain at the controls in the cab to supervise correct operation of the dumping cycle and adapt it to all circumstances such as:

- hoist raising speed,
- normal outflow of product,
- vehicle stability.

He must make sure that nobody is in the immediate vicinity of the dump body during dumping.

Correct unloading of a product depends on its ability to flow. In this respect, the diversity of products transported means that the operator must assess the potential for unloading without a risk of overturning, in particular by ensuring the best possible flow of the materials during dumping.

DUMPING: Raising the dump body (example of a tractor unit system)

- Set the engine to idle and the gearbox to neutral. Before doing anything else, make sure that the air pressure is at least 6 bar.
- Declutch the engine and wait for 3 to 4 seconds before engaging the power take-off. The light should come on.
- Move the control lever from neutral (Fig. 26-1) to raised (fig. 26-2).

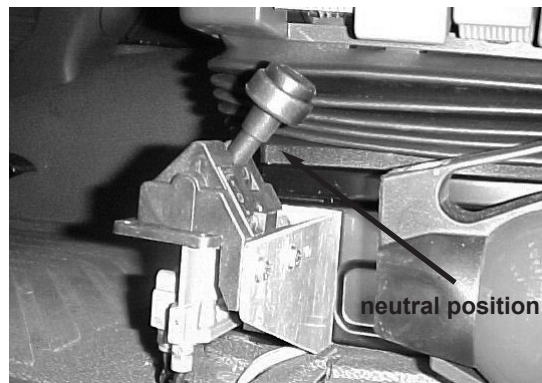


Fig. 26-1

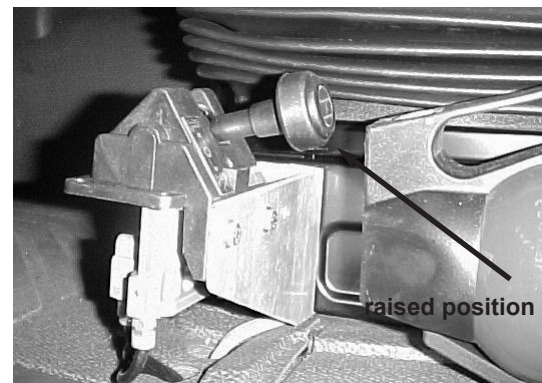


Fig. 26-2

DUMPING INSTRUCTIONS

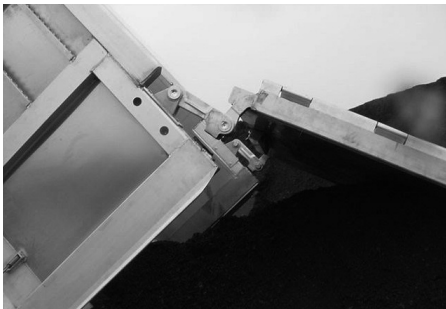
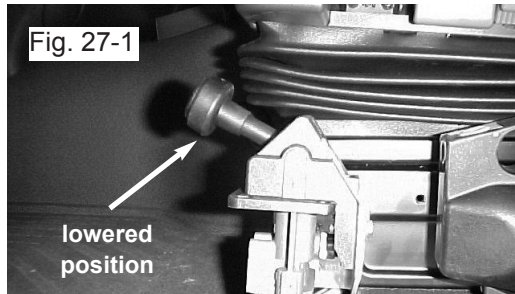


Fig. 27-3

- Engage the clutch and gradually and smoothly accelerate the tractor unit (or straight truck) to an engine speed of about 1000 rpm.
The body should rise smoothly and regularly.
- Supervise body raising. If the product does not flow out and the hoist is at mid-stroke (materials stuck to the bottom and sides of the body), immediately stop dumping by means of the control lever (Fig . 27-1).
- Slowly and smoothly lower the body and then empty it by any other means.

Whatever the lifting height, the following are PROHIBITED

- . jolting the hoist using the hydraulic distributor,
- . alternating forward/backward movements, to attempt to free the load. This could damage the hydraulic system and/or tip the dumper over.
- Make sure that the tailgate does not come into contact (fig. 27-2 & 27-3) with the pile of materials emptied or any other obstacle, in order to prevent instability which could cause the vehicle to tip over or damage the rear frame and its hinges.



DUMPING INSTRUCTIONS

Vehicle without rear stabiliser leg only

Only a slight movement limited to a few tens of centimetres is authorised to release the tailgate from the dumper body.

At the end of travel, stop raising: distributor in neutral position (fig. 26-1). The hoist stops automatically.

Lowering the dumper body

Place the hydraulic distributor control lever in the down position (fig. 27-1). As the hoist and reservoir communicate, the body will descend under its own weight. This operation also has the effect of uncoupling the power take-off and the light goes out. If not, uncouple the power take-off.

Important

When the dumper body is resting on the chassis side rails, wait a few seconds for the hydraulic circuit to decompress before returning the control lever to the neutral position (fig. 26-1). This will prevent any inadvertent raising of the dumper body with the vehicle running, and will prevent any entry of air which could damage the seals.

**NEVER LEAVE THE CONTROLS
BEFORE THE DUMPER BODY HAS BEEN
COMPLETELY LOWERED**

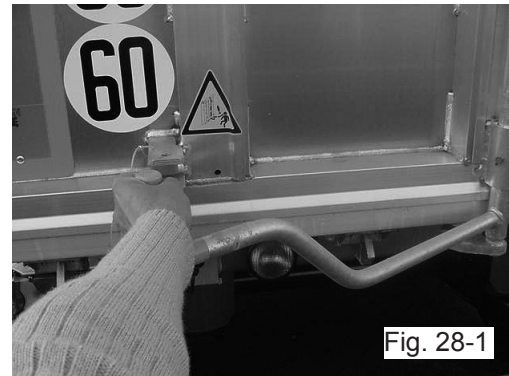
Rear doors: close the doors (fig. 28-1)

Universal door and automatically opening tailgate

Relock the frame which is not unhooked.

Hydraulic tailgate

Close the tailgate, setting the control lever to the close position.



OPERATING INSTRUCTIONS

The vehicles are equipped with a regulation rear underride guard.

This device may be fixed, fold-away or pneumatic, if used on the edge of a pit, finisher, low wall, etc.



In accordance with the EC Directive, the rear underride guard **MUST** be deployed and mechanically locked when the vehicle is in movement (fig. 29-1).

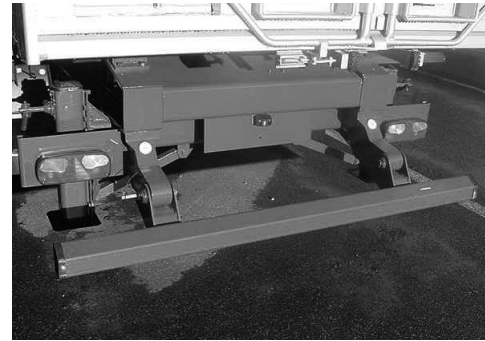
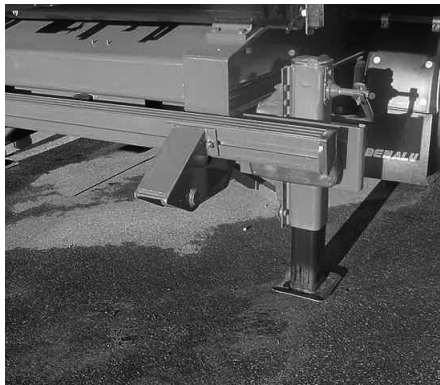


Fig. 29-1

Vehicle with rear stabilisation leg

Long vehicles equipped with rear stabilisation legs. These legs **MUST** be deployed in contact with firm ground before dumping begins (figures below)

See stabiliser leg servicing and operating manual.





OPERATING INSTRUCTIONS

Retaining chain or straps

Owing to the considerable height of the truck box, it is **essential**, when the box is loaded, to install the internal retaining chains or straps, to prevent outwards bowing of the outer rails and side walls caused by pressure from the product (Fig. 30-1).

Side-winding sheeting

To prevent damage to the tarpaulin bows during loading, these should be placed in the lateral position.

Before dumping, it is **essential** to totally or partially unsheet to prevent negative pressure in the truck box, which could lead to deformation of the roof and even of the side walls in the case of products that do not flow easily.

Driving with the tarpaulin wound laterally or with the retainers in place, (Fig. 30-2) is prohibited (breach of Highway Code).

During loading, we recommend using offset retainers with the tarpaulin sheeting roll clear of the body, because in certain cases, the product could damage the tarpaulin (example: scrap metal).



OPERATING INSTRUCTIONS

Sheeting (cont.)

When operating the sheeting mechanism, the specifically designed items (Fig. 31-1), must be used **in all cases**.

- Platform
- Unsheeting handle
- Unsheeting rod

Prior to each departure, ensure that the tarpaulin is correctly secured by all the accessories on the side wall, (Fig. 31-2), front, (Fig. 31-3) and doors, (Fig. 31-4).



Fig. 31-1



Fig. 31-2



Fig. 31-3



Fig. 31-4



OPERATING INSTRUCTIONS

Sheeting (cont.)

Loosen the unsheeting batten (depending on version: tautened by straps or bungees), fig. 32-1, ref. 1.

Remove the attachments on the front and the door (fig. 32-1 ref. 2 and 32-2).

Turn the handle (fig. 32-3) to wind the tarpaulin around the batten.

To re-sheet

Turn the handle in the opposite direction to place the tarpaulin back over the body.

At the sides, tauten the tarpaulin with the straps or bungees and then secure at the front and rear.

Stow the handle in its support.



Fig. 32-1



Fig. 32-2

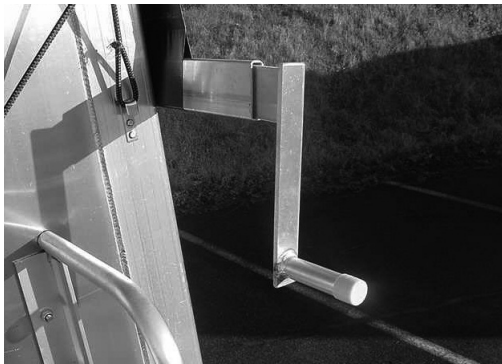


Fig. 32-3



Easy Tarp® cover sheet display

Easy Tarp® is a side rolling cover sheet system, driven by a 24V gear motor (fig 33-1).

Power requires a connection via an extension to the tractor batteries with the correct polarity of the control box. A 30 amp must protect the circuit fuse. Disconnect the plug when driving.



Fig 33-1

The control box is located at the left hand side at the front of the vehicle (fig 33-2).

The box includes :

1. The power switch and the emergency stop
2. The cover / uncover knob
3. Thermal safety reset control

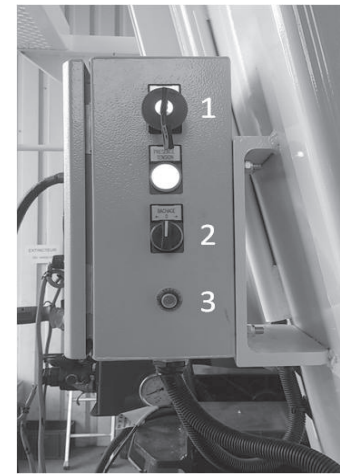


Fig. 33-2

OPERATING INSTRUCTIONS



Fig. 34-1

Never drive with partially open sheet and ensure it is properly tightened after every opening and closing (fig. 34-1).



Fig. 34-2

Two tensioning straps in front and rear seal the system (fig. 34-2).



Fig. 34-3

If the vehicle is equipped with a door top cross member, it should not be open when the cover is in place (fig. 34-3).

OPERATING INSTRUCTIONS

Fig. 35-1



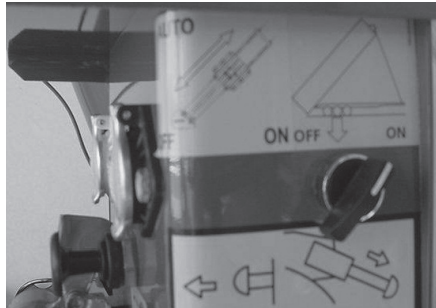
Particularities of the pneumatic suspension circuits for dumping

Deflation of the suspension via the EBS logic controller

As soon as the body is raised, and the jack pressure switch is enabled (A, fig. 35-1) and the vehicle's speed is lower than 10 km/h

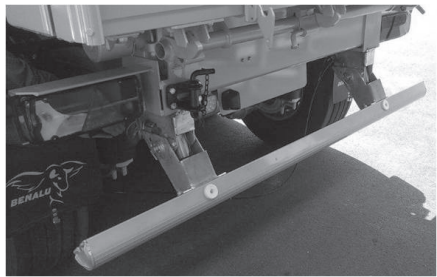
-> **the suspension will deflate.**

Fig. 35-2



A switch is provided on the coupling head support part to neutralize the function (e.g.: finisher, fig. 35-2).

Fig. 35-3



If the vehicle is fitted with a pneumatic bumper, (fig. 35-3), the bumper is systematically automated.

As soon as the dumping operation starts, the suspension deflates automatically and the bumper is retracted.

As soon as the body is seated on the chassis, or if the vehicle is running faster than 10 km/h, the suspension inflates again automatically and the bumper is extended.

OPERATING INSTRUCTIONS

Mechanically controlled pneumatic suspension deflation variant

A distributor controlled by a lever in contact with the bottom of the body empties the suspension as soon as dumping begins (fig. 36-1).

An isolating valve (fig.35-2) can be used to neutralise this function if deflation is incompatible with use of the vehicle.

Rapid vent valve

All vehicles are equipped as standard with a rapid vent valve for the air suspension system.

The purpose of this system is, via 2 valves (fig. 36-2), to accelerate venting of the air springs during dumping.

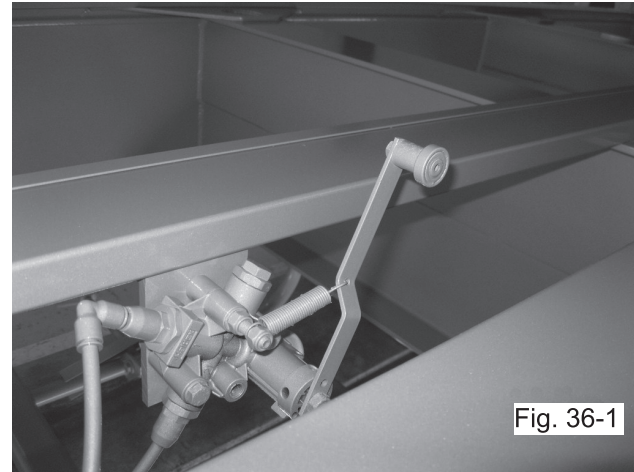


Fig. 36-1

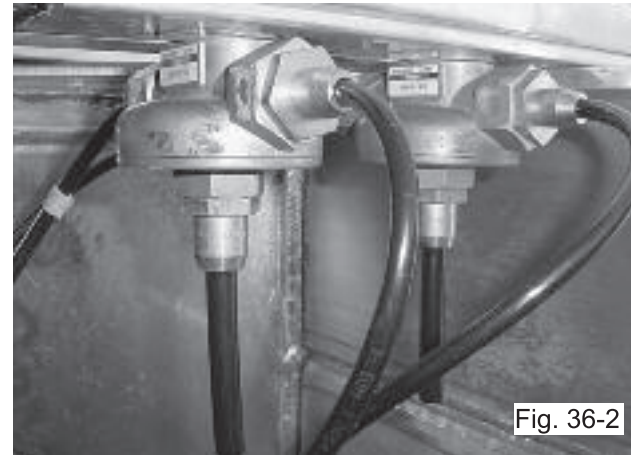


Fig. 36-2

PARTICULARITIES OF STRAIGHT TRUCKS

Fig. 37-1



Safety support leg

For straight trucks, as required by the "Machines" Directive, a safety strut must be used if the vehicle requires servicing with "Dump body raised / empty".

In this case, a strut is provided and must be placed between the chassis and the body during maintenance operations (fig. 37-1 & 37-2).

Fig. 37-2





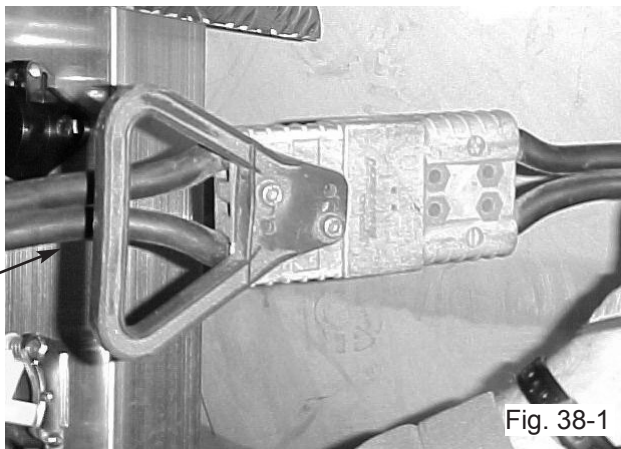
PARTICULARITIES OF CEREAL DUMPERS

24V electric motor hydraulic unit

It is essential:

- to leave the tractor unit engine running during dumping when loaded,
- for the battery capacity to be sufficient and for the battery to be in good condition (for a 3000 W engine, we recommend a battery capacity of 150 Ah).

Connect the electrical connector

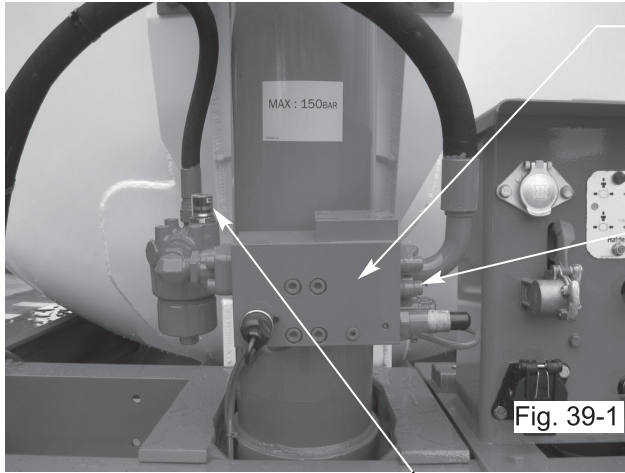


Power relay

Electric pump



PARTICULARITIES OF CEREAL DUMPERS



The HYDRAULIC DISTRIBUTOR MOUNTED ON THE HOIST performs the following functions:

- incorporation of a non-return valve which stops the body from lowering,
- protection of the hoist by a pressure limiter calibrated at 150 bar,
- the body can be lowered by a manual control in the case of a system failure.

At the distributor inlet, a pressure filter protects the installation.

If the filter cartridge is fouled, a visual clogging indicator goes from green to red.

PARTICULARITIES OF CEREAL DUMPERS

Because of its long cable, the remote control enables the operator to move out of the immediate vicinity of the body during dumping operations.

To ensure a long service life for the installation, do not run the hydraulic unit continuously for more than 10 minutes.

In the event of overheating, a thermal safety device prevents the electric pump from being used until the temperature returns to normal.

IN ANY CASE

NEVER BLOCK THE REMOTE CONTROL BUTTONS. DURING DUMPING, HOLD THE CONTROL AT ALL TIMES.

ONLY APPROACH THE VEHICLE WHEN THE BODY IS PLACED ON THE CHASSIS.

Function of the remote control pushbuttons

(fig 40-1)

Top button (A): raise body

Bottom button (B): lower body



Fig. 40-1

PALLET-CARRIER VEHICLES

Vehicles that can carry pallets may be loaded using a fork-lift truck with a weight not exceeding 5 tons per axle, truck + load (standard floor 8 mm thick).

For any other type of load, contact the manufacturer.

Any exceeding of the authorised weight of load plus fork-lift truck will cause deformation of the floor of the dump body and the under-body cross-members.

TIPPING CONTAINER CARRIER

The Multiliner Ultra PCB tipping container carrier chassis.

This chassis is designed to transport containers or swap bodies with load transfer zones. This arrangement avoids exerting stresses not designed into the chassis. For example, this chassis may not be used to transport a container or swap body resting only on the 4 twist-locks rather than on the chassis.

This chassis may only tip **self-supporting containers or swap bodies** for which the manufacturer has confirmed dumping operations while laden with use of the twist locks provided.

LOADING BY PLACING CONTAINER/SWAP BODY on CHASSIS

Ensure that the chassis is as horizontal as possible.

TRANSPORT

Before departing, check:

- that the suspension is at its normal height. Never drive with suspension deflated or insufficiently inflated,
- that the 4 twist-locks holding the container/swap body are correctly locked and tightened,
- that the safety latch preventing inadvertent loosening of the lock is correctly in place.

DUMPING

Apart from the dumping instructions and before dumping, check:

- that the 4 twist-locks are correctly locked and tightened,
- that the rear stabiliser legs (if installed) are placed on flat, stable and hard ground. Use a spirit level to check horizontality.

UNLOADING THE CHASSIS BY REMOVING CONTAINER/SWAP BODY

Before letting the unloading mechanisms hook onto the container or swap body, ensure that the 4 twist-locks are loosened: the mobile part of the lock must be perfectly free and the lock released, to prevent the container or swap body snagging when raised.

TIPPING CONTAINER CARRIER

OPERATIONS CONCERNING CONTAINER/SWAP BODY

Refer to the manufacturer's instruction manual.

MAINTENANCE OF CONTAINER CARRIER CHASSIS

Periodically grease moving parts such as:

- articulated hinge bearings (front and rear),
- front landing gear and rear stabiliser legs
- twist-locks.

SAFETY

If a shock is received as a result of violent loading, leading to deformation or cracking, particularly on the chassis front or rear twist-lock support cross members, contact the nearest agency for diagnosis and repair.

NEVER RAISE THE DECK WITHOUT A CONTAINER OR SWAP BODY!!

POSITION OF REAR TWIST-LOCK



Safety latch preventing unlocking of the TWIST LOCK

REAR TWIST-LOCK OPEN: handle longitudinal position and visual indicator outside vehicle gauge.



The handle securing the TWIST-LOCK handle in closed position must be fully tightened.

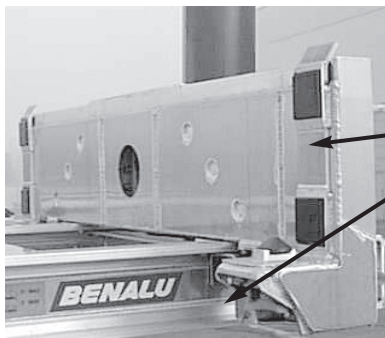
REAR TWIST-LOCK CLOSED: handle transverse position and visual indicator inside vehicle gauge.

NOTE: no handle on FRONT TWIST-LOCK



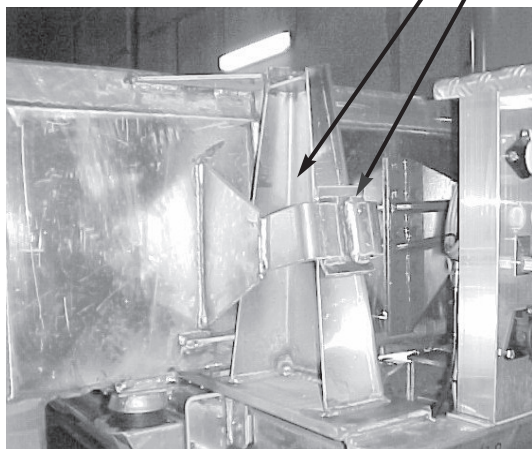
TIPPING CONTAINER CARRIER

ENGLISH

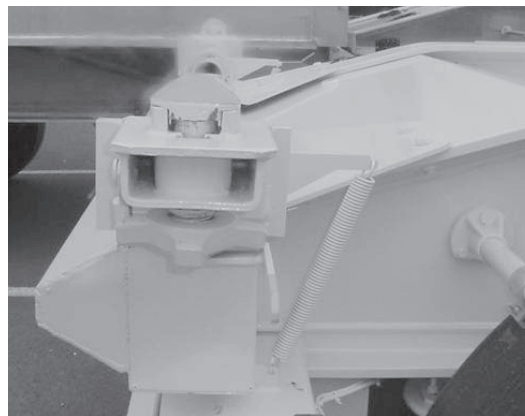


Tipping deck equipped with 2 TWIST-LOCKS.

Ensure that the deck front centring devices and hoist bearings are greased.



Optional equipment: see product definition

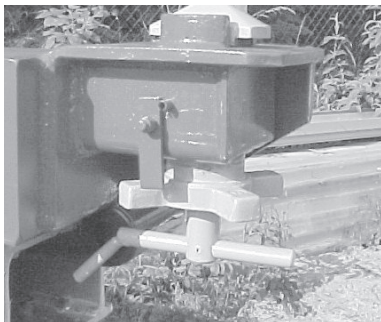


Clean and grease every 15 days using grease that does not retain water.
Check operation of the twist-lock.
Visually check for any operational damage.
Check for SCREW+NUT wear and replace if necessary (FRONT AND REAR TWIST-LOCKS).





TIPPING CONTAINER CARRIER - optional equipment



The chassis may be equipped with an additional tipping safety device. A proximity detector checks that the twist-lock is turned to the tightened position. Until this is done, tipping is not possible. The detector is housed in the metal box. Connection is by a protected electrical cable.



**INCORRECT AND
DANGEROUS
POSITION**

**(THE NUT IS CLAMPING
NOTHING!)**



**CORRECT
POSITION**

**THE NUT MUST BE
CORRECTLY
TIGHTENED**

Any attempt to neutralise the detector will prevent tipping from taking place!

Even if this safety device is installed, the nut still has to be tightened.





TIPPING CONTAINER CARRIER - BENALU MULTILINER Ultra

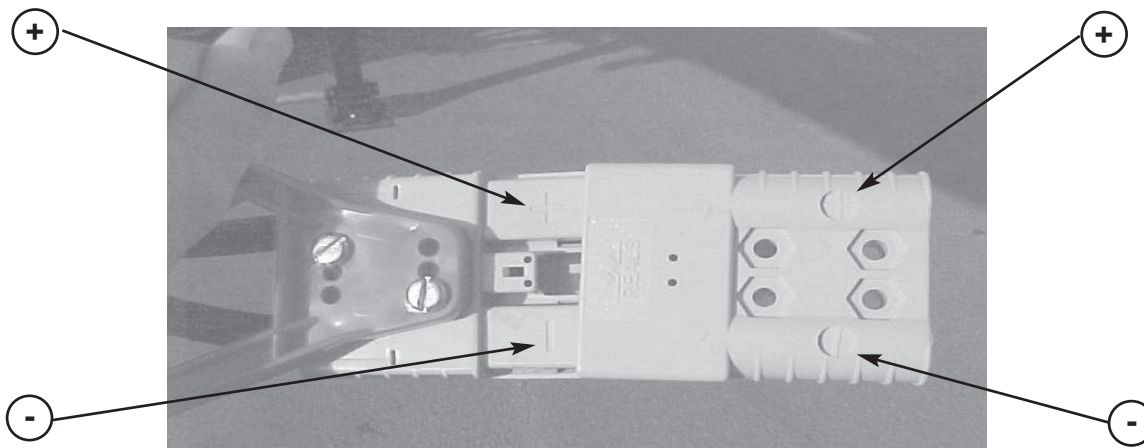
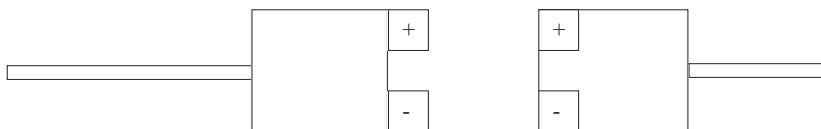
USING THE SAFETY DEVICE

Instructions concerning electricity

When the chassis is equipped with the safety device on the rear twist-locks, you should:

Check the polarity of the electrical unit, failing which the safety system will prevent any dumping,

Check that the polarity is correct if the connector is replaced after delivery of the equipment.



SERVICING



Any servicing of the hydraulic installation must be carried out in a specialised workshop.

Never attempt to readjust the pressure limiter.

In general, prior to any servicing work, make sure that the body is resting on the chassis and that the circuit is decompressed.

AFTER USE, IT IS ESSENTIAL TO DISCONNECT THE ELECTRICITY SUPPLY CIRCUIT BEFORE DRIVING OFF AGAIN.

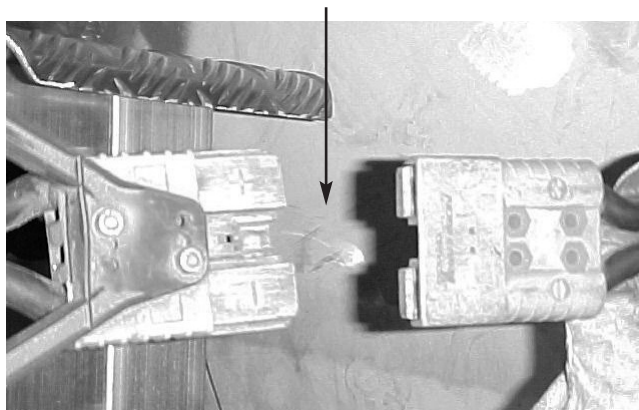


Fig. 47-1

SERVICING

WARNING

Any exceptional operation requiring working underneath a raised dump body, must be carried out by qualified personnel.

For any work required between the chassis and the dump body, safety dictates the following:

body laden: **work prohibited**

body unladen: **chocking required between chassis and body** using a jack-stand of sufficient dimensions.

PERIODICALLY

Check and if necessary top up the tank oil level. At each dumping operation, it is accepted that a certain quantity of oil can be lost as a result of friction between the barrel at each expansion and the hoist seals.

OILS RECOMMENDED

As a general rule, ISO 22 hydraulic oils are suitable for temperatures between -18°C and +32°C.

ISO 10 for regularly low temperatures,

ISO 32 for regularly high temperatures.

Always use clean oil to top up the oil level or for an oil change.

Never mix oils of different brands and types.

CHANGE THE OIL IN THE TANK ABOUT EVERY 250 DUMPING OPERATIONS OR EVERY YEAR

SERVICING

Regularly check all threaded fasteners on the chassis and dump body after the first 1000 kilometres and every 6 months thereafter.

Tightening torques	380 Nm	Tanker articulation link bearing
	260 Nm	Dump body articulation link bearing
	180 Nm	Suspension brackets
	180 Nm	Hoist lower bearing
	380 Nm	Telescopic hoist upper bearing
	180 Nm	Jack hoist upper bearing
	380 Nm	Articulation link
	70 Nm	Coupling plate
	500 Nm	Wheel nuts
	130 Nm	Kingpin

Grease the body articulating links, the lower and upper hoist bearings, the landing gear and parking brake with category 1 grease (fig. 50-1 to 50-5).

Oil or grease the articulating links of the rear doors and closure hinges.
More particularly grease the articulating points subjected to stresses during dumping.

For running gear servicing, refer to the brand maintenance and operating manual (SMB, BPW, SAF, FOR, DAIMLER, etc.)

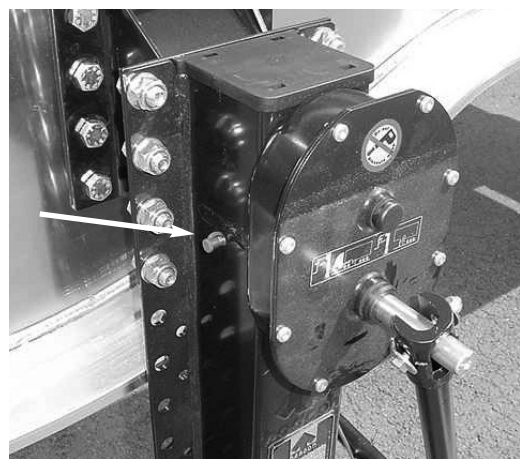
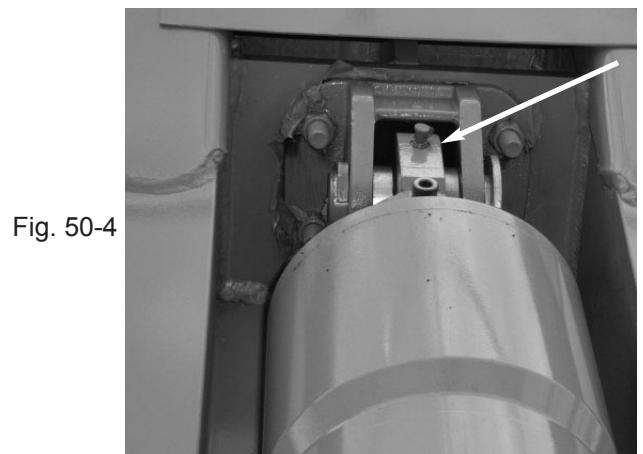
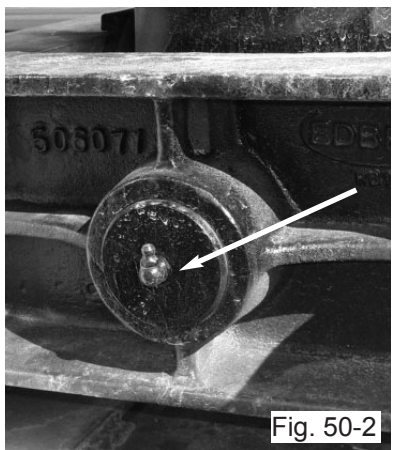
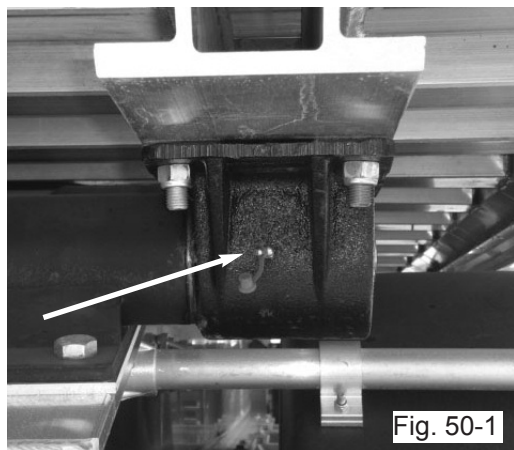
For servicing of any other system, refer to the manual delivered with the vehicle.

The lubrication frequency depends on vehicle utilisation: mileage, number of dumping operations.



SERVICING

ENGLISH



PERIODICALLY

Check that all the hose connections are tight.

In workshop

- Check:
 - . the calibration of the tractor unit or semi-trailer pressure limiter (after each calibration, a lead seal must be affixed to the limiter,
 - . the wear on the hoist articulations and the dump body bearings,
 - . the wear on the body bottoms.
- Have the condition of the guides checked and replace them if necessary (fig. 51-1 & 51-2).



Fig. 51-1

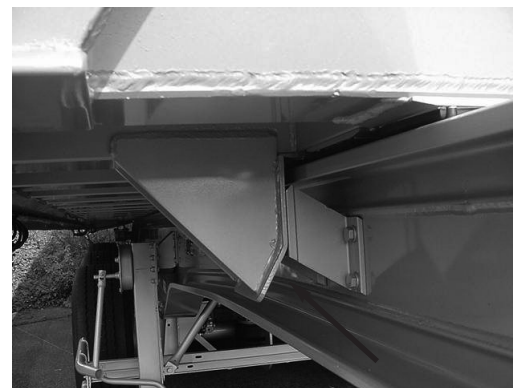


Fig. 51-2

SERVICING

- Have the correct adjustment of the body blocking device checked (fig. 52-1 & 52-2) (optional equipment depending on type of vehicle).

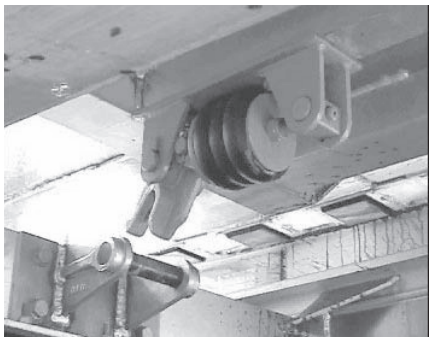


Fig. 52-1

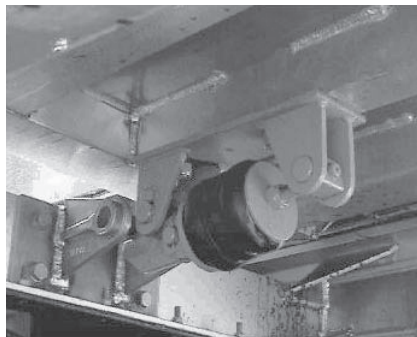
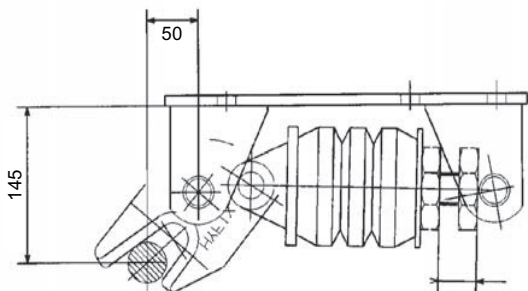


Fig. 52-2



Position of the body blocking device at the moment the locking bar touches the hook. Distance 50 mm.

Compression setting	Vehicle
40 mm	Multirunner - Astrorunner sidérale BULKLINER
51 mm	OPTILINER 106 and 114
62 mm	OPTILINER 124 and 133

- Clean the hydraulic tank and change the oil at least once a month.
- Change the filter cartridge and flush the circuit.



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