



MACHINE CONSTRUCTION
AGRICULTURE IRRIGATION EARTH MOVING

MANUAL AP SILAGE BLOCK CUTTER, TYPES:

**FL 1000, FL 1200, FL 1400, FL 1600,
FL 1800, FL 2000, FL 2200, FL 2400**





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1. INTRODUCTION:

Before using the AP silage cutter, please read this manual carefully. Get acquainted with the regulations. Operating an AP silage cutter you are not acquainted with can result in accidents.

For the purposes of safety AP Machinebouw B.V. recommends the silage block cutter to be operated by skilled personnel only. In addition to this aspect the following regulations must be observed :

A youthful person, younger than 18 years, cannot perform any labor consisting of :

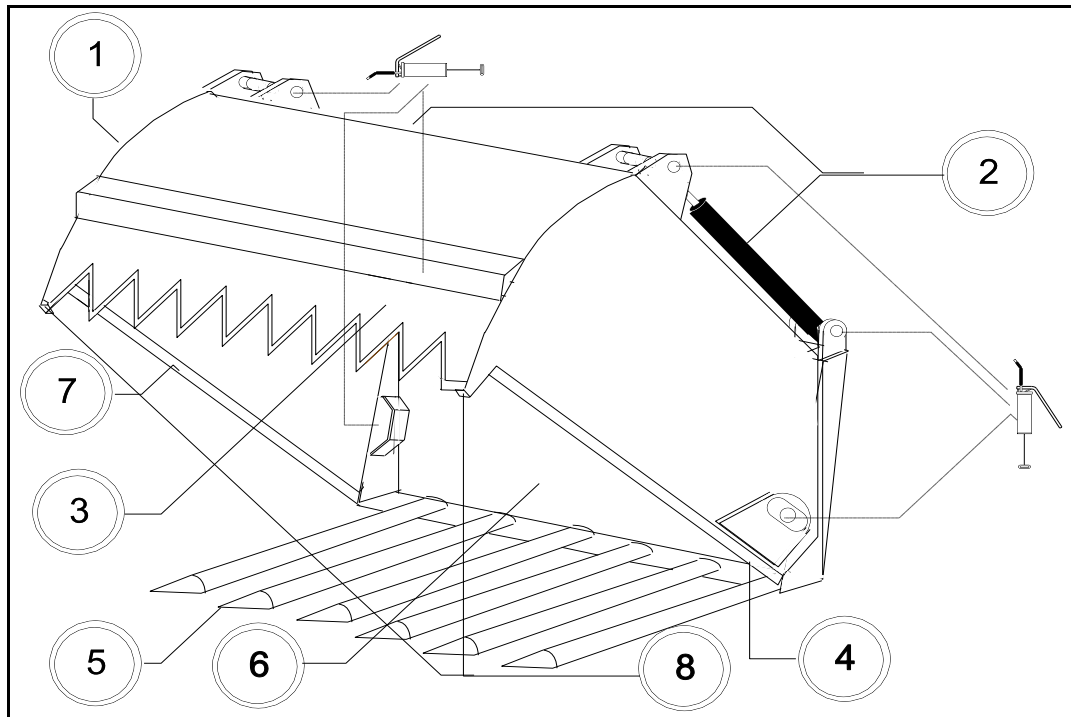
- the coupling or uncoupling of trailers or attachments to a towing vehicle,
- the driving of tractors.

In case you have, after reading this manual, questions considering safety, operating or maintenance instructions, please contact your AP dealer or AP Machinebouw B.V.

Provide this manual to anyone who operates the AP silage cutter.

AP Machinebouw B.V. reserves the right to carry out adjustments in design and implementation to any of the by AP to produce silage block cutter, without any obligation to adjustment regarding formerly delivered AP silage block cutters.

2. GREASING POINTS AND MOST IMPORTANT PARTS:



- 1 Cutting frame
- 2 Hydraulic cylinder
- 3 Front knife
- 4 Left side knife
- 5 Tines
- 6 Rear frame
- 7 Right side knife
- 8 Knife protector

3. PRODUCT INFORMATION:

3.1 General:

The AP silage block cutter is developed to take out all sorts of silage roughage and by-products like corn and grass. It can also be used to take out manure from deep stables. The FL series is developed for use with front loader, provided that the tractor has a power of at least 50 kW. (also see 'technical specifications', page 7). AP Machinebouw B.V. strongly advises to only use the AP silage block cutter with a four-wheel drive tractor.

3.2 Precautionary measures:

General regulations:

- * It is strictly forbidden to transport persons or animals with the AP silage block cutter.
- * Never climb into the AP silage block cutter.
- * The user of the AP silage block cutter must keep all bystanders out of the working area of the combination.
- * This manual should be available to every person who operates the AP silage block cutter; the owner is responsible.
- * The owner of the AP silage block cutter is responsible for the tractor or wheel loader and the AP silage cutter to meet the standing regulations during transport on public roads.
- * Follow all regulations and instructions in the manual of your tractor and/or wheel loader / mini loader.
- * Before leaving the tractor / mini loader always make sure it is in neutral position with the parking brake engaged.
- * Be careful when you work on sloping surfaces and / or on uneven terrain and make sure you maintain sufficient stability.
- * When driving on public roads with the AP silage block cutter the general traffic regulations apply. Make sure that the cutting frame of the AP silage cutter is completely closed and that the lifting arms of the wheel loader / mini loader are adjusted at a low enough level that the sight is not obstructed (see image 1).

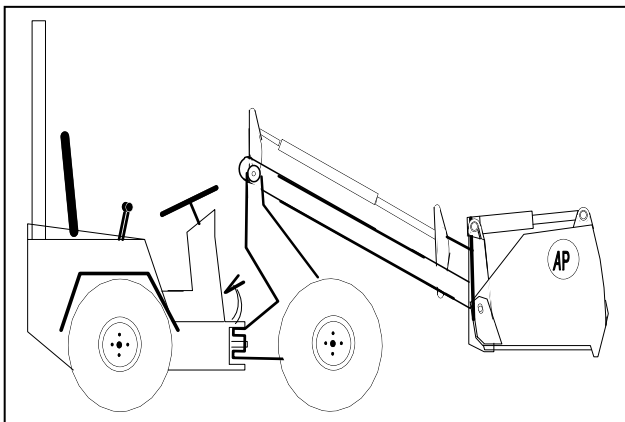


Image 1 :
Position when driving on public roads

- * It is not allowed to use the AP silage cutter on public roads for transportation purposes.

- * If oil leakage in the hydraulic system appears the oil can penetrate the skin and cause severe injuries. **Never** attempt to close a leak by hand. Immediately contact a physician when someone gets hurt.
- * It is strictly forbidden to alter the setting of the relief / safety valve (if present), this can i.a. lead to damaging of the system and / or personal injury.
- * Couple the AP silage cutter only with the regulated means. Be careful during coupling and uncoupling of the AP silage cutter.
- * In the absence of a quick attachment system must switch off the engine and engage the parking brake during coupling and uncoupling of the AP silage block cutter to the three point linkage, the front loader or the lifting arms of the wheel loader.
- * If you are not using the combination tractor / mini loader and AP silage block cutter, always place the AP silage block cutter horizontally on a flat surface, **the cutting frame** closed, also see image 2.

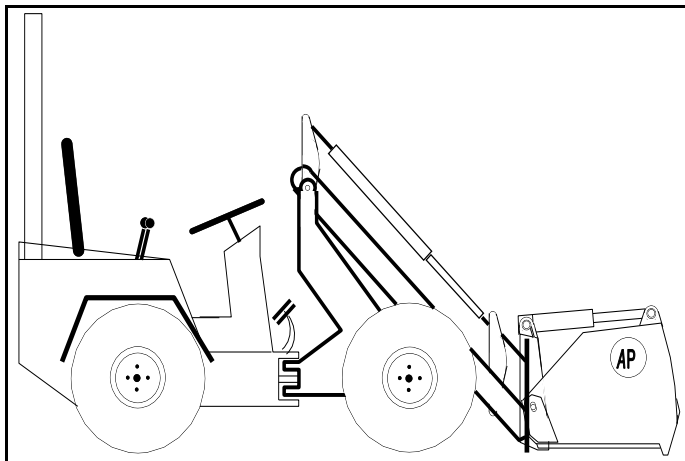
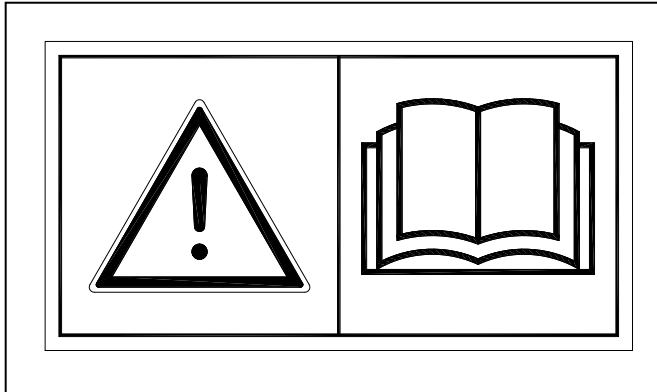


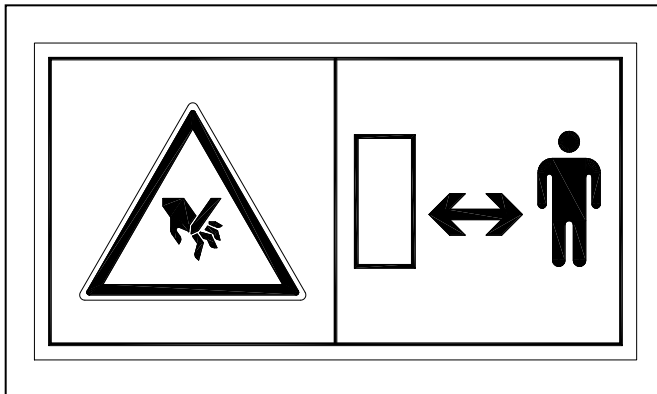
Image 2:
Combination in idle state

3.3 Explanation symbols and warnings:



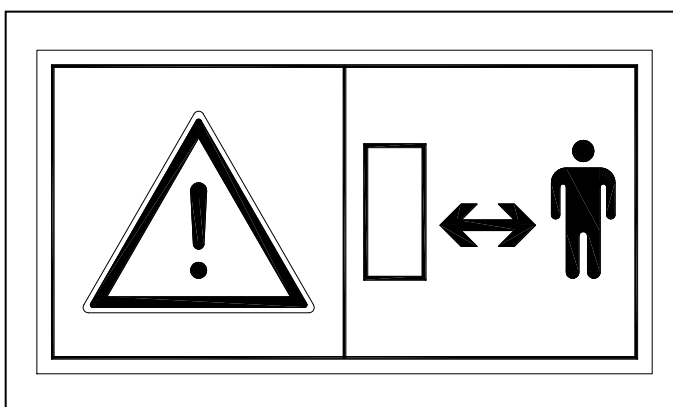
WARNING:

Before using the AP silage block cutter first read the instructions and precautionary measures in the manual and observe these.



WARNING:

Keep at a safe distance from the AP operating silage block cutter; there is danger of injury to limbs by sharp parts.



WARNING:

Keep at a safe distance from the AP operating silage block cutter.



3.4 Technical specifications:

Type	Width (cm.)	Height (cm.)	Depth (cm.)	Capacity (m ³)	Weight (kg)
FL 1000 (DB)	100	70	65	0,46	480 (510)
FL 1200 (DB)	120	70	65	0,55	540 (560)
FL 1400 (DB)	140	70	65	0,64	600 (610)
FL 1600 (DB)	160	70	65	0,73	650 (660)
FL 1800 (DB)	180	70	65	0,82	700 (710)
FL 2000 (DB)	200	70	65	0,91	705 (760)
FL 2200 (DB)	220	70	65	1,00	750 (810)
FL 2400 (DB)	240	70	65	1,09	860 (860)

Every type is suitable for use in combination with tractor, mini loader and skid steer loader.

Regarding the hydraulic system of the tractor or mini loader the following requirements apply :

- Minimum required hydraulic pressure= 180 Bar
- Maximum permitted hydraulic pressure = 250 Bar

3.5 Customer service:

Customer service is a responsibility of the AP dealer. You can turn to him for spare parts, complaints, wishes and imperfections. The AP dealer is in contact with **AP Machinebouw B.V.** (the manufacturer).

The complete address of **AP Machinebouw B.V.** is:

AP Machinebouw B.V.
Ambachtstraat 21
8313 AV RUTTEN
Netherlands
Telephone : 0031 527 618 246
Telefax : 0031 527 698 760

AP Machinebouw B.V. constantly aims to improve her products and therefore appreciates suggestions and remarks of the user which can lead to an improvement of her assortment.



4. INSTALLATION:

4.1 Transport instructions:

If the AP silage block cutter is transported detached from tractor / mini loader, the cutting frame always must be closed. This is a precautionary measure to avoid injuries to limbs by the tines and / or knives of the AP silage block cutter and to avoid damaging to the hydraulic cylinders. Make sure that the parts of the hydraulic system (including the hoses) cannot be damaged.

If you want to transport the AP silage block cutter on a lorry or similar there are two possibilities:

- 1: *You place the AP silage block cutter on a pallet, lash it and move it with a forklift truck on the lorry.*
- 2: *You lift the AP block silage cutter with the help of a hoist on the lorry.*

WARNING: **Use solid hoisting equipment and always attach the hoisting belts in a way, that the AP silage block cutter remains stable.**

During transport on the road the customer must pay particular attention to the lighting of the AP silage block cutter (see safety regulations).

4.2 Assembly instructions:

The AP silage block cutter is delivered fully operational by **AP Machinebouw B.V.**, including quick attachments for your front loader or mini loader. There are no further specific assembly regulations.

AP Machinebouw B.V. denies all responsibilities for replacement of spare parts by the user and as a result warranty will no longer apply. Replacing of spare parts must be exclusively done by the AP dealer.

4.3 Hydraulic connections in combination with front loader / mini loader :

To operate the AP silage cutter your front loader / mini loader only requires one double functioning control valve.

5. USE OF THE AP SILAGE BLOCK CUTTER IN COMBINATION WITH FRONT LOADER / MINI LOADER:

5.1 Coupling:

Because coupling systems for front loaders and mini loaders are not uniform it is not possible to completely describe the action “coupling” in this manual. For safety and general instructions with regard to the coupling of the AP silage block cutter we refer to the manual of your tractor, front loader or mini loader. We do mention some general important safety and operating instructions :

WARNING: **Always couple the AP silage block cutter to the front loader before you connect the hydraulic hoses.**

WARNING: **Never stand between the tractor / mini loader and the AP block silage cutter without having switched off the engine and having engaged the parking brake.**

WARNING: **Make sure that the hydraulic system of the AP silage block cutter cannot be damaged in any position of the front loader / lifting arms of the mini loader.**

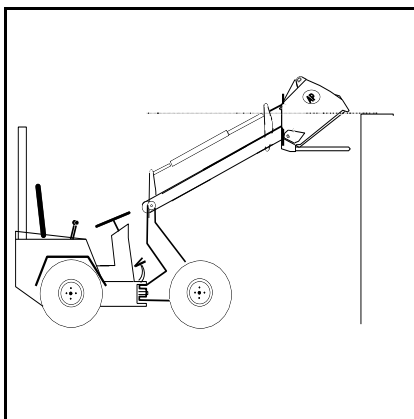
5.2 Using the AP silage cutter:

For using the AP silage cutter the following instructions must be followed accurately and in chronological order :

- 1 Start position: closed cutting frame,
- 2 Put the tines of the AP silage cutter horizontally at the height at which you want to take out the silage,
- 3 Once the cutting frame has reached the highest position put the vehicle in neutral position and open the cutting frame completely,
- 4 Make sure the silage block cutter is positioned in such a way the horizontal front knife overshoots the silage, see image 3,

WARNING:

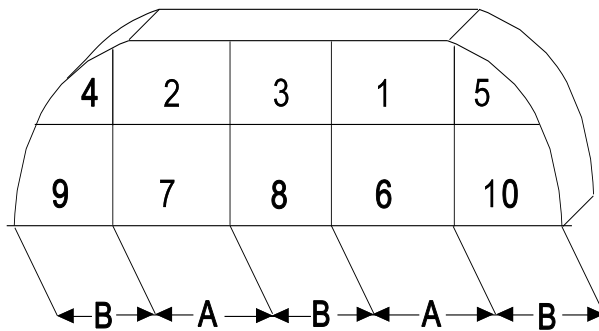
If you want to take out feed from the floor, make sure the tines cannot grab in the ground or in any other way can get stuck behind obstacles.



*Image 3:
Height during take out*

- Carefully drive the AP silage block cutter into the silage. Do not insert the tines completely in the silage but keep a 50 mm space from the tubular frame to the silage. Push the tines or the closed bottom down on the silage. This prevents possible bending of the tines or closed bottom,

WARNING: It is very important that the cutting frame is always loaded evenly, to avoid twisting of the machine! With regard to this follow the correct order during cutting of the blocks : divide the width of the silage always in an uneven number blocks to cut and keep the system in the cutting sequence as indicated in image 4. In this image 'A' stands for the working width of the AP silage block cutter and 'B' for the width of the AP silage block cutter minus a certain distance!



- Close the cutting frame of the AP silage block cutter completely,
 - Tilt the AP silage cutter slightly back,
- WARNING:** **Keep the filled AP silage cutter low during transport with regard to the stability.**
- Manoeuvre the filled AP silage block cutter to the location on which you want to place the cut silage block,
 - Open the cutting frame completely,
 - Drive backwards slowly, to avoid spilling,
 - At the filling of an auger bucket or feed mixer : Slightly tilt the AP silage cutter forwards and slowly open the cutting frame so that the feed slides gradually from the tines into the mixer,

WARNING: **Never use the AP silage block cutter to slide feed blocks over the feed passage.**



5.3 Uncoupling:

Because coupling systems for front loaders and mini loaders are not uniform it is not possible to completely describe the action “uncoupling” in this manual. For safety and general instructions with regard to the uncoupling of the AP silage block cutter we refer to the manual of your tractor, front loader or mini loader.

We do mention some general important safety and operating instructions:

For a safe uncoupling of the AP silage cutter please follow the instructions accurately and chronologically:

- 1 Make sure the surface is flat,
- 2 Lower the AP silage cutter with a cutting frame that is nearly closed, then switch off the engine of the tractor / mini loader, completely lower the cutting frame until the hydraulic system is completely depressurized,
- 3 Uncouple the hydraulic hoses between the tractor / mini loader and the AP silage block cutter,
- 4 Place the dust hoods on the quick-connectors,
- 5 Remove the coupling pins with which the AP silage cutter is attached to the front loader / mini loader,

WARNING: Make sure that the hydraulic hoses of the AP silage cutter cannot get caught on parts of the tractor / front loader



6. MAINTENANCE:

The AP silage block cutter requires low maintenance. During maintenance always observe the following safety measure :

- * Do **not** perform any type of maintenance work on the AP silage block cutter while it is coupled to the tractor / wheel loader or when the hydraulic system can be activated in any other way.

6.1 Maintenance of the hydraulic system:

Maintenance of the hydraulic system should only be done by the AP dealer. AP however commends the user to regularly check the hydraulic system for leaks.

WARNING: When leakage appears : stop immediately and contact the AP dealer.

6.2 Lubrication:

All hinged parts of the AP silage cutter must be lubricated weekly with an universal lubricant. For all greasing parts see Chapter 2, Greasing and most important parts.

6.3 Damages:

The coupling pins for attachment of the AP silage block cutter to the front loader or the tractor / mini loader must be checked for damages periodically (at least once per quarter, more often when used frequently). Although the AP silage block cutter is a solid construction, the rest of the machine should also be checked for damages and possible loose coming bolts and nuts. Particular attention is required to the nuts with which the tines are attached to the AP silage block cutter.

Damaged parts must be replaced by your AP dealer.



6.4 Cleaning of the AP silage cutter :

Animal feed (and natural manure) often obtain aggressive substances which can damage the AP silage block cutter. AP therefore recommends to thoroughly clean the entire AP silage block cutter after use, extending the service life. When using a high-pressure cleaner take care that it does not spray on parts of the hydraulic system.

WARNING: Do not use cleansers that may harm the health of persons and / or animals.

If you will not use the AP silage cutter for a longer period then lubricate the parts that turned blank with a protective oil. Store the AP silage block cutter with a closed cutting frame and make sure the chrome parts of the hydraulic cylinders are oiled properly.

6.5 How to keep the knives sharp:

Although the knives are made of tempered steel, they can become blunt due to intensive use. In that case it is more difficult to cut the feed. Have your AP dealer sharpen the knives in time.

6.6 Wear of the knife protectors:

The knife protectors protect the front and side knives against wear and damages when the cutting frame is being completely closed on the ground. Replace the knife protectors in time.

6.7 Readjustment pivot points cutting blade:

The pivot points of the AP silage cutter can be readjusted. The AP silage cutter is most effective when the mutual distance of the pivot points between the rear frame and the cutting frame is minimized.