

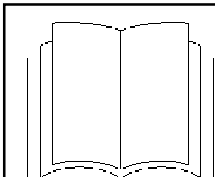
AVANT®

Operator's manual for Attachment



Stone collecting bucket

Product number: 1050 mm: A2999
1370 mm: A415432



Please read this manual carefully before using the equipment, and follow all instructions.

Keep this manual for later reference.

Manufacturer:

AVANT[®]
AVANT TECNO OY
e-mail: sales@avanttecono.com

Ylötie 1
33470 Ylöjärvi
FINLAND
Tel. +358 3 347 8800
Fax +358 3 348 5511

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1. Foreword

Avant Tecno Oy would like to thank you for your purchase of this AVANT attachment. It has been designed and manufactured on the basis of years of experience and product development. By familiarising yourself with this manual and following the instructions, you ascertain your safety and ensure the reliable operation and long service life of the equipment. Read the instructions carefully before starting to use the equipment or performing maintenance.

The purpose of this manual is to help you to:

- operate the equipment in a safe and efficient manner
- observe and prevent any hazardous situations
- keep the equipment intact and ensure a long service life

The following warning symbols are used throughout this manual to indicate factors that must be taken into account to reduce the risk of personal injury or damage to property:

	<p>Warning:</p> <p>This safety symbol refers to important safety information in this manual. It warns of an immediate hazard that could cause serious personal injury or property damage.</p>
	<p>Read the warning text accompanying the symbol carefully and ensure that other operators are also familiar with the warnings, since personal safety is at stake.</p>

Notice:

This notice symbol indicates information about the correct operation and maintenance of the equipment.



Failure to observe the instructions accompanying the symbol can lead to equipment breakdown or other property damage.

With these instructions, even an inexperienced user can use the attachment and loader safely. The manual includes important instructions for experienced AVANT operators as well. Ensure that all persons using the loader have received proper guidance and familiarised themselves with the manual of the loader and attachment and all safety instructions before using the equipment. Using the equipment for other purposes or use in any other way than described in this manual is prohibited. Keep this manual at hand throughout the service life of the equipment. If you sell or transfer the equipment, be sure to hand over this manual to the new owner. If the manual is lost or damaged, you can request a new one from the retailer or manufacturer. Original instructions.

In addition to the safety instructions included in this manual, you must observe all occupational safety regulations, local laws and other regulations concerning the use of the equipment. Particularly the regulations concerning the use of the equipment on public road areas must be observed. We reserve the right to change the contents of the manual without notification.

2. Designed purpose of use

The AVANT stone collecting bucket is an attachment designed and manufactured to be attached to AVANT multi purpose loaders. The stone collecting bucket is intended mainly for quick collecting of loose stones. With an Avant 400, 500, 600 or 700 series it is easy and fast to collect stones from nearby fields after the field has been harrowed. The stone collecting bucket is not intended to lift or to loosen single heavy stones.

The attachments have been designed to require as little maintenance as possible. The operator can perform regular maintenance tasks, but more demanding maintenance or repairment tasks must be left to qualified professionals

Read the maintenance and servicing instructions in this manual. Please contact your AVANT retailer if you have additional questions about the operation or maintenance of the equipment or if you require spare parts or maintenance services.

Table 1 – Stone collecting buckets 1050 A2999 and 1370 A415432 compatibility with Avant loaders

Model	216 218 220	313S 320S 320S+	419 420	520	525LPG	528 R28	630 R35 635640	745 750
1050 A2999	-	(●)	•	•	•	•	•	•
1370 A415432	-	-	-	(●)	(●)	(●)	•	•

When using with models marked with (●), full performance may not be achieved. Additional counterweights may also be required. For compatibility with a model not shown in table, contact your Avant retailer.

3. Safety instructions for using the buckets

Please bear in mind that safety is the result of several factors. The loader-attachment combination is highly powerful, and improper or careless use may cause serious personal injury or property damage. Due to this, you should carefully familiarise yourself with the manuals of both the loader and the attachment before starting operation. Do not use the attachment if you have not familiarised yourself with its operation and the related hazards.



Misuse, careless use, or using an attachment that is in bad condition, may cause serious injuries. Familiarise yourself with the controls of the loader and coupling and safe operation of the attachment at a safe area. Read the following safety precautions carefully.

Read all safety instructions carefully before handling the attachment



- When attaching the attachment to the loader, **ensure that the locking pins of the loader's quick attach plate are positively in the lower position** and that they have **locked the attachment to the loader**.
- Ensure that an uncoupled bucket is supported properly. Avoid moving the bucket manually as the bucket may tip over. Move the bucket only when it is coupled to the loader.
- Lower the attachment firmly on the ground before leaving the driver's seat. Make sure that the attachment is properly supported during maintenance or inspections. Do not leave the driver's seat when the loader boom is lifted. Going under a raised attachment or loader boom is dangerous, as the boom may lower due to loss of stability, mechanical fault or by other person operating the controls of the loader.
- Pay attention to the surroundings and any other persons and machines moving in the vicinity. Pay attention to the contours of the terrain as well as other hazards, such as loose rocks, or branches and trees that reach the driver's area.
- Always transport the bucket as low and as close to the machine as possible to keep the centre of gravity low. Operate the controls of the loader carefully and calmly especially on uneven terrain. Pay particular attention to safety when lifting the bucket high.
- When driving, Keep the bucket in a position so that the tines of the bucket will not touch the ground causing the loader to stop abruptly.
- Fill the bucket so that the centre of balance will not shift too much sideways to help to maintain the balance of the loader.
- Do not modify the attachment in a manner that would affect its durability or safety.
- Do not use the bucket as an access platform or to move persons even temporarily. Never climb into the bucket. The loader is not intended to lift persons when a specific personnel lifting platform attachment is not used.
- Make sure that the loader is equipped with necessary safety equipment, and that they are in order. Seat belt must be used. If there are specific risks at the operating area, appropriate safety equipment must be used.
- Also read the safety instructions for the loader from the operator's manual of the loader.



Note that the loader boom moves down and may be tilted even if the engine has been stopped. Never go under a raised attachment or boom or to the danger area between the boom and the attachment.



Note the effects of heavy load to the handling characteristics of the loader, especially when working with lighter 300-500 –series loaders. When driving, keep the telescopic boom retracted and keep the load close to the ground. Use additional counterweights as needed. Read the operator's manual of the loader.



Remember to wear proper protective clothing:



- The noise level in the driver's seat may exceed 85 dB(A). Wear hearing protection while working with the loader.

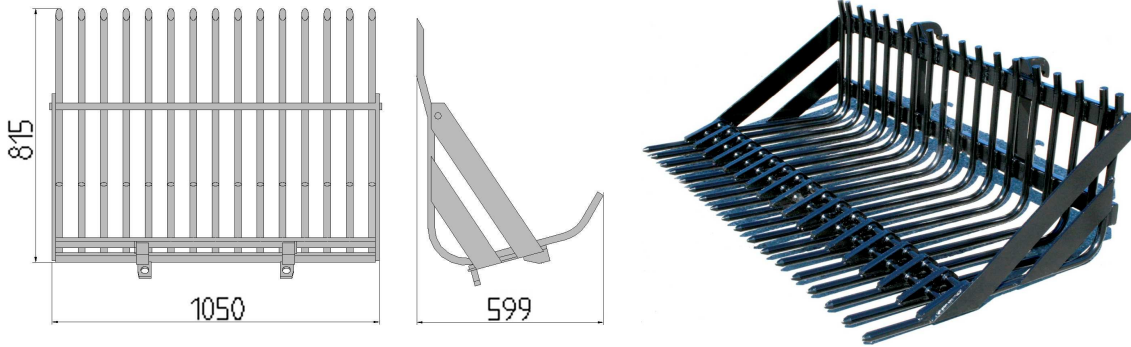


- The use of safety boots is recommended while working with the loader. Wear also protective gloves.
- Wear protective gloves.

4. Specifications

Table 2 – Stone collecting bucket technical data

Product number	A2999	A415432
Width:	1050 mm	1370 mm
Weight:	95 kg	250 kg
Number of tines:	15 pcs	18 pcs
Tine clearance:	50 mm	49 mm
Bar diameter:	22 mm	30 mm
Safe Working Load:	Depends on loader model, see load diagram from the operator's manual of the loader.	
Suitable AVANT loader:	See Table 1	



4.1. Safety labels and markings

Listed below are the markings and labels fastened to the attachment, and they must be visible on the equipment. Replace the warning labels, if they have become unclear or detached completely. New labels are available via your retailer or contact information provided on the cover page.



The warning labels contain important safety information and they help to identify and remember the hazards related to the equipment. Replace damaged or missing warning labels with new ones.



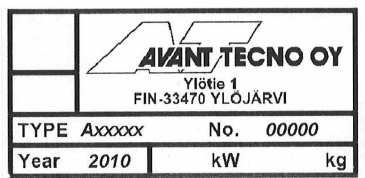
A46771



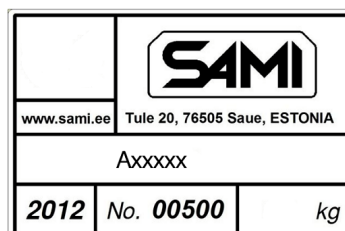
A46772

Label 3 –Decal warning messages

Decal	Explanation
A46771	Read instructions before use.
A46772	Do not go under a raised attachment or loader boom; stay away from raised equipment.
	Identification plate of the attachment



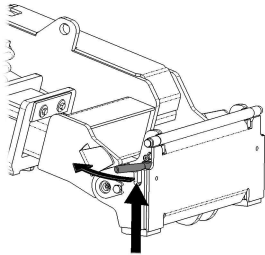
Identification plate of A2999



Identification plate of A415432

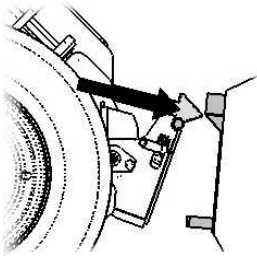
5. Mounting the bucket to the loader

Mounting the attachment to the loader is quick and easy, but it must be done carefully. An attachment that has not been locked may come off from the loader and cause hazardous situations. The attachment is mounted to the loader boom by using the quick attach plate and the counterpart on the attachment. In the worst case, the attachment may slide onto the driver along a raised boom. For this reason, the attachment must under no circumstances be raised to a height of over one metre when it has not been locked. To prevent hazardous situations, always follow the attachment mounting instructions provided in the following pages. Also remember the safety instructions in Section 3 and the instructions provided in the operator's manual of the loader.



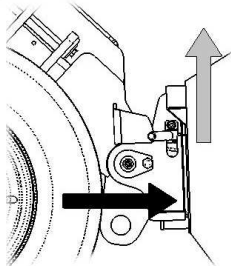
Step 1:

- Lift the quick attach plate locking pins up and turn them so that they are locked in the upper position.
- If your loader is equipped with a hydraulic attachment locking system, see additional instructions about the use of the locking system from the relevant manuals.



Step 2:

- Turn the quick attach plate hydraulically to an obliquely forward position.
- Drive the loader onto the attachment. If your loader is equipped with a telescopic boom, you can utilise this.

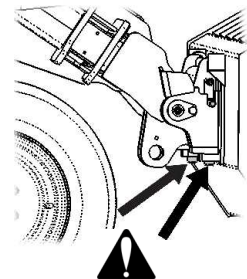


Step 3:

- Turn the boom control lever left to turn the bottom section of the quick attach plate onto the attachment.
- Lift the boom slightly – pull the boom control lever backward to raise the attachment slightly off the ground.
- Lock the locking pins manually or lock the hydraulic locking – do not use the automatic locking pin release.
- Always make sure that the attachment is fully locked.



An attachment that has not been completely locked to the loader may fall on the boom or operator, or under the loader during driving, and cause serious injuries. Before moving or lifting the attachment, make sure that the locking pins are in the lower position and come through the fasteners on both sides. Never move or lift an attachment that has not been locked.



Do not use the automatic locking of the locking pins at a height of over one metre. If the locking pins do not return to the normal position when the front plate is tilted, do not raise the attachment any more. Lower the attachment on the ground and secure the locking manually.

6. Instructions for use

6.1. Checks before use

- Check the general condition of the attachment and the loader, and check for possible hydraulic oil leaks. The attachment must not be used, if there is a fault in the hydraulic system of the loader or the attachment. Refer to Chapter 7 for maintenance instructions.
- Ensure that the loader and the attachment are used in a safe and intended manner. Operate the controls of the loader only when sitting on the driver's seat. Do not allow children to operate the machine.
- If transporting objects with the bucket, ensure that the load will stay in the bucket by using, for example, load-securing straps.

6.2. Using the bucket

With the stone collecting bucket picking up stones from fields will not require leaving the driver's seat. Reduce driving speed enough so that possible contact with ground will not cause a hazard of sudden stopping of the loader.



The stone collecting bucket is not intended for removing single large or heavy rocks or tree stumps. The attachment may get damaged. For removing large objects from the ground we recommend the Avant Ripper.



Note that the loader may stop suddenly when using the collecting bucket. Drive slowly whenever picking up stones. Keep the bucket tilted so that it will not stick on the ground unexpectedly.



Do not use the buckets to lift persons or as any kind of work platforms even temporarily.



When lifting load from a high level, the loader could tip forward when reversing with the loader. Do not reverse with the loader while simultaneously dragging the load. Make sure that the loader can handle the load that is being lifted from high platform.



In case the loader is not equipped with the boom self levelling:

When lifting the bucket to a high level, the front plate must be simultaneously tilted to prevent the load from falling from on the loader or the operator. Fitting the loader with the boom self-levelling option makes the repeated lifting work easier.

Operating on slopes and uneven terrains

When using the equipment on inclined terrains and slopes extra caution is required. On inclined terrains the load should not be lifted high. Turning the articulation of the loader during lifting will affect the stability of the loader and may lead to overturning the machine. Use low speed and do not make sudden changes in speed or direction. Operate the boom with careful and smooth movements. Keep the articulation of the loader straight and telescopic boom retracted for maximum stability.

Operating bucket with tilt adapter

The tilt adapter A34148 can be fitted in between the bucket and the quick coupling plate of the loader. The adapter allows the bucket to be tilted sideways for ± 12.5 degrees. This makes it easier to collect stones with the edge of the bucket, and then the stones can be distributed evenly in the bucket by tilting it. Read the instructions provided with the tilt adapter. More information about the tilt adapter is available from your AVANT retailer or the AVANT web pages at www.avanttecno.com.

7. Maintenance and servicing

Clean the bucket regularly. You may use a pressure washer and a mild detergent to clean the bucket. Do not use strong solvents or spray directly at the labels on the attachment. For longer storage periods touch up the paint where needed to prevent rust damage. Do not store the bucket directly against the ground; place it on blocks of wood or on a pallet, for example.

8. Warranty terms

Avant Tecno Oy grants a warranty of one year (12 months) for the attachment from the date of purchase.

The warranty covers repair costs as follows:

- Work costs are covered, if the repair is not performed at the factory.
- The factory replaces any defective components or consumables.

The factory may reimburse the price of components purchased by the customer in special cases that have been agreed in advance.

The warranty does not cover:

- Normal maintenance work, such as the replacement of blades or the belts, or parts and consumables required for it.
- Damages caused by unusual operating conditions or ways of use, negligence, structural changes made without the consent of Avant Tecno Oy, use of non-original parts or lack of maintenance.
- Consequences of a defect, such as interruption of work or other possible additional damages.
- Travel and/or freight costs caused by the repair.



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