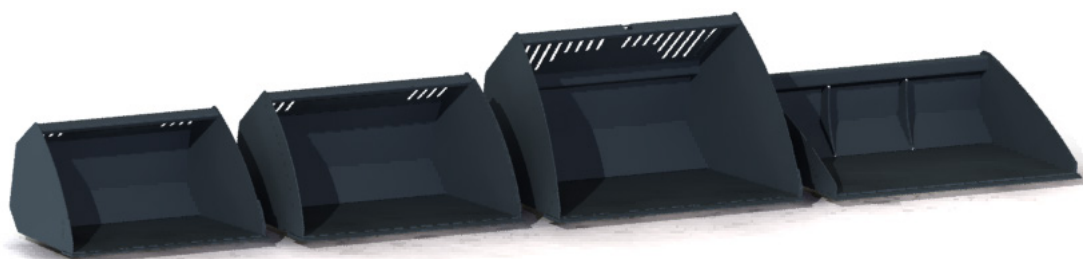




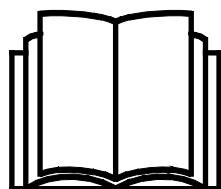
Operator's Manual for Attachment



Bucket

General buckets, light material buckets, and levelling buckets for Avant loaders

Product number	200 series 1	900 mm	1050 mm	1150 mm	1300 mm	1350 mm	1450 mm	1600 mm	1800 mm
General Bucket 200 series 2			A36702						
General Bucket With teeth	A33032 (960 mm)	A36711 A36716	A36710 A36780	A36709 A36779	A36698 A36778	A36996 A36997			
General bucket, HD With teeth					A36713 A36747		A36712 A36746	A36535 A36745	
General bucket, XL-HD								A437578	
Light material bucket				A36715	A36714		A36703	A36476	A36343 A437601
Levelling bucket							A36717	A36706	



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

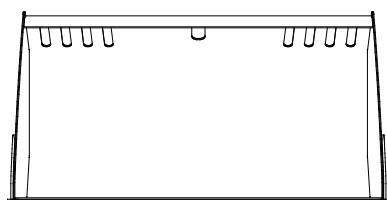
Keep this manual for later reference.

Manufacturer:

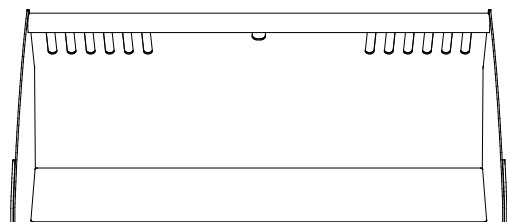
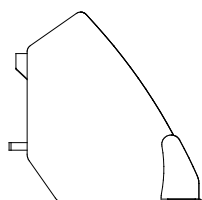
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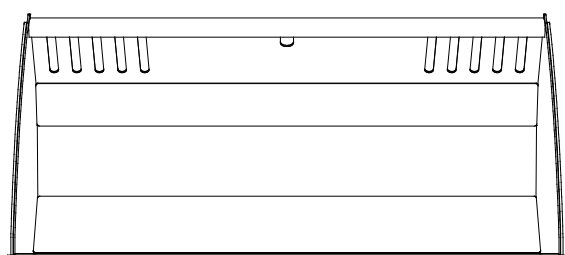
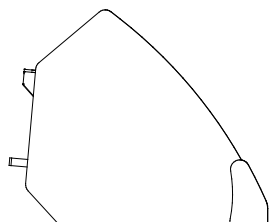
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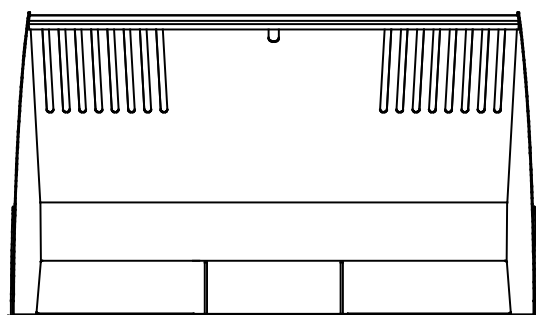
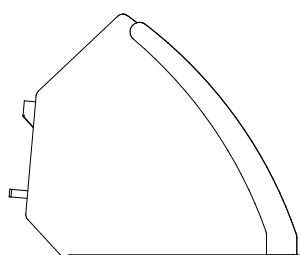
A36702



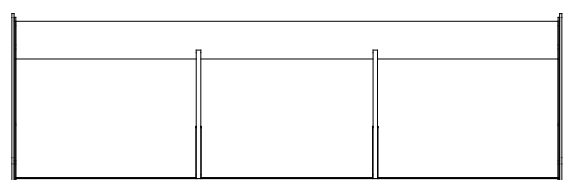
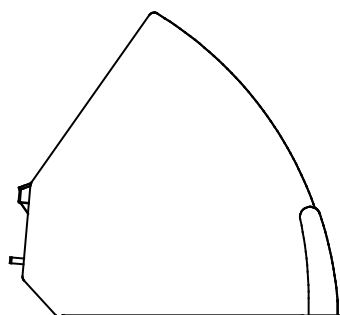
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A36476 A36343



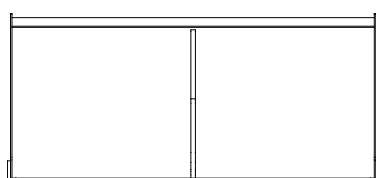
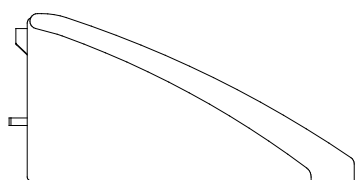
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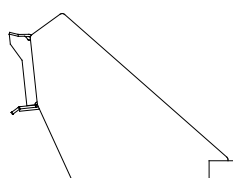
A437601



A36717 A36706



A33032



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I. Foreword

Avant Tecno Oy would like to thank you for your purchase of this attachment for your Avant loader. It has been designed and manufactured based on years of experience on product development and manufacturing. By familiarizing 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

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, each attachment that are used, 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 your Avant dealer or from the manufacturer.

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. Contact your Avant dealer for more information about local requirements before you operate the loader on road areas.

Contact your local AVANT dealer for any questions, service, spare parts or about any problems that may occur with the operation of your machine.

This manual contains the original instructions in English. Due to continuous product development some of the details shown in this manual may differ from your equipment. Pictures may also depict optional equipment or features that are not currently available. We reserve the right to change the contents of the manual without notification. Copyright © 2019 Avant Tecno Oy. All rights reserved.

Warning symbols used in this manual

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



WARNING SAFETY ALERT SYMBOL

This symbol means: **“Warning, be alert! Your safety is involved!”**

Carefully read the message that follows, it warns of an immediate hazard that could cause serious personal injury.

The safety alert symbol by itself and with related safety statement indicates important safety messages throughout this Manual. It is used to draw attention to instructions involving your personal safety or the safety of others. When you see this symbol, be alert, your safety is involved, carefully read the message that follows, and inform other operators.

DANGER

This signal word indicates a hazardous situation which, if not avoided, will cause death or serious injury.

WARNING

This signal word indicates a potentially hazardous situation which, if not avoided, could cause serious injury or death.

CAUTION

This signal word is used when minor injury could result if the instructions are not followed properly.

NOTICE

This signal word 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.

2. Designed purpose of use

The AVANT General buckets, Light material buckets and Levelling buckets are attachments designed and manufactured to fit AVANT multi purpose loaders for general earth-moving tasks, material handling, levelling and snow clearing work. Original Avant buckets offer excellent visibility to the bucket edge and they are designed to meet the capabilities of Avant loaders in optimum way. The renewed range of buckets gives great flexibility to choose the best bucket for different applications and loader models.

General buckets are available with teeth, as are also the reinforced, more robust Heavy Duty buckets. The HD buckets are well suited for the larger loaders. A specially designed general bucket for the new 200 series loaders is optimised for the boom geometry of the 200 series. The edge plates of all buckets are made of very high strength and wear resistant steel, and on HD buckets, also the side cutting edges are reinforced through their length. Light material buckets, also called as Snow buckets, have a longer base and are larger in volume. The low profile and long base of the levelling bucket enable excellent visibility to the tip of the bucket. The straight rear end of the levelling bucket makes it possible to use the bucket effectively when reversing with the loader.

Various width options are available to best suite each task and loader model. When choosing a bucket, the intended use of the bucket, and the model of the loader should be considered, as shown in Table 1. If the loader is fitted with other than standard tyres, or differs from original specifications, consult your Avant dealer to choose the best bucket. Other available bucket types with hydraulic features make various tasks with the loader easier or more versatile. For example, the High tip bucket is an excellent all-round bucket and especially useful when piling material frequently. The 4-in-1 bucket is a versatile landscaping tool, which makes it easy to do all levelling and material handling easy with the same attachment.

The buckets are maintenance free, except for cleaning, monitoring the condition of the bucket, and occasional paint retouch if needed. Larger repair work must be left for professional maintenance. Please contact your AVANT retailer if you have additional questions about the operation or maintenance of the equipment.

Compatibility with Avant Loaders

Compatibility recommendations are based on the width of the loader and available lifting capacity. Do not use too wide bucket when handling heavy loads, as the actual breakout force (bucket tilting capacity) decreases with wide buckets and the overall performance will decrease. To estimate the lifting capacity of the loader the Table 5 can be used together with the load diagram shown in the operator's manual of the loader.

Table 1 - Bucket - Compatibility with Avant loaders

Avant		216 218 220	220 ^{series 2} 225 225LPG	313S 320S 420 423	520 523 R20 525LPG	R28 528 530	630 R35 635 640	745 750 755i 760i	850 860i	e5 e6
General bucket										
960 mm	A33032	•	-	-	-	-	-	-	-	-
900 mm	A36711	-	•	•	•	•	•	(•)	(•)	•
990 mm	A36702*	-	•	•	•	•	•	(•)	(•)	•
1050 mm	A36710	-	•	•	•	•	•	(•)	(•)	•
1150 mm	A36709	-	•	•	•	•	•	(•)	(•)	•
1300 mm	A36698	-	•	•	•	•	•	(•)	(•)	•
1350 mm	A36996	-	•	•	•	•	•	(•)	(•)	•
1300 mm HD	A36713	-	-	-	-	(•)	•	•	•	-
1450 mm HD	A36712	-	-	-	-	(•)	•	•	•	-
1600 mm HD	A36535	-	-	-	-	(•)	•	•	•	-
1600 mm XL-HD	A437578	-	-	-	-	-	-	(•)	•	-
General bucket, with teeth										
900 mm	A36716	-	•	•	•	•	•	(•)	(•)	•
1050 mm	A36780	-	•	•	•	•	•	(•)	(•)	•
1150 mm	A36779	-	•	•	•	•	•	(•)	(•)	•
1300 mm	A36778	-	•	•	•	•	•	(•)	(•)	•
1350 mm	A36997	-	•	•	•	•	•	(•)	(•)	•
1300 mm HD	A36747	-	-	-	-	(•)	•	•	•	-
1450 mm HD	A36746	-	-	-	-	(•)	•	•	•	-
1600 mm HD	A36745	-	-	-	-	(•)	•	•	•	-
Light material bucket										
1150 mm	A36715	-	-	•	•	•	•	•	(•)	•
1300 mm	A36714	-	-	(•)	•	•	•	•	(•)	•
1450 mm	A36703	-	-	-	(•)	(•)	•	•	•	(•)
1600 mm	A36476	-	-	-	(•)	(•)	•	•	•	(•)
1800 mm	A36343	-	-	-	(•)	(•)	•	•	•	(•)
1800 mm	A437601	-	-	-	-	-	-	(•)	•	-
Levelling bucket										
1450 mm	A36717	-	-	-	•	•	•	•	•	•
1600 mm	A36706	-	-	-	•	•	•	•	•	•

It is recommended to use the attachment only with loaders marked with • in Table 1. 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 dealer.

* The buckets marked with the asterisk should be used as light material buckets with the 200 series loaders.

3. Safety instructions for using the attachment

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



DANGER

Misuse, careless use, or using an attachment that is in poor condition, may cause risk of serious injuries. Familiarise yourself with the controls of the loader, correct coupling procedure, and the correct way to operate the attachment at a safe area. Study especially how to stop the equipment in a safe manner. Read all safety precautions carefully.

Read all safety instructions carefully before handling the attachment



WARNING

- When attaching an attachment to the loader, **ensure that the locking pins of the loader's quick attach plate are in the lower position and that they have locked the attachment to the loader.** Never lift or move an unlocked attachment.
- The Bucket is designed to be used by one operator at a time. Do not let others near the danger area of the equipment when it is in use.
- Always transport the attachment as low as possible to keep the centre of gravity low, and keep the telescopic boom retracted during driving.
- **Sudden movements can cause the loader to tip over - Operate the controls of the loader in a slow and calm manner.** Be careful when lifting load to high level or lifting load from high. Avoid sudden changes in speed or direction to maintain balance of the loader especially when handling heavy loads. Drive slowly and carefully especially on inclined terrain or slippery surfaces.
- **Risk of tipping over - Keep loads close to ground while driving.** Carrying heavy loads can shift the centre of gravity of the loader and lead to tipping over of the loader. For the best stability always transport loads as low and close to the loader as possible, with the telescopic boom completely retracted, to keep the centre of gravity low.
- **Risk of crushing - Never go or allow anyone else to go under the loader boom or attachment.** The stability of the loader may change when leaving the driver's seat, leading to tipping over of the machine. Always remember that the boom may lower unexpectedly due to loss of stability, mechanical fault, or if another person operates the controls of the loader, leading to crushing hazard. The loader is not intended to be left to keep a load elevated for longer periods. Lower the attachment firmly on the ground before leaving the driver's seat and never allow anyone to be under the boom or attachment.
- **Risk of crushing under the attachment or the loader boom - Lower the attachment firmly on the ground before leaving the driver's seat.** Make sure that the attachment is properly supported during any 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 if another person operates the controls of the loader.
- Keep the loader articulation in straight position when handling heavy loads. When turning the articulation, the loader may tilt forward.



- Observe maximum load indicated in the operator's manual of the loader. Be especially careful when the load sensor indicator is activated, if your loader is fitted with a load sensor system.
- Make sure that the surface can bear the total load. Also follow the correct tyre pressure settings.
- Pay attention to the surroundings and any other persons and machines moving in the vicinity. Pay attention to the contours of the terrain and other hazards, such as branches and trees that can reach to the driver's area, loose rocks, and slippery surfaces.
- Make sure that overhead clearance is sufficient. Hitting an overhead obstacle may cause the loader to tip over. Keep a safe distance from electric cables, lamps, or other electric systems; hitting live parts may cause electric shock.
- Ensure that ventilation is sufficient when operating indoors. Do not operate the loader in closed spaces regardless of the engine or fuel type. Exhaust gases may concentrate to hazardous levels.
- Never use the attachment to lift or to transport persons or as any kind of work platform even temporarily.
- Make sure to use only an attachment that is in good condition. Check the attachment thoroughly in regular intervals. Do not modify the attachment in a manner that would affect its safety. It is prohibited to drill holes on the attachment, and welding or other means of fixing hooks or other objects on the attachment is strictly prohibited.
- Use the attachment only for its intended purpose. Other use may create unnecessary safety risks, and the equipment may get damaged.
- Make sure that the loader is equipped with necessary safety components, and that they are in working condition. Seat belt must be used. If there are specific hazards related to the operating area, use appropriate safety equipment.
- Also read the safety instructions and correct use of the loader from the operator's manual of the loader.



Risk of crushing - Going under the loader boom or an attachment can cause serious injury or death. Never go under the loader boom and prevent others from getting near lifted boom or attachment. Going under a raised attachment or loader boom is dangerous, as the boom may lower due to loss of stability, mechanical fault or when other person operates the controls of the loader. Lower the attachment firmly on the ground before leaving the driver's seat.



Risk of crushing - Never allow anyone to get under a lifted attachment or loader boom. Keep in mind that the loader boom can be lowered or tilted even if the engine has been shut down (crushing hazard). The loader is not intended to be left to keep a load elevated for longer periods. Always lower the attachment to a safe position before leaving the driver's seat.



Remember to wear proper personal protective equipment:

- The noise level at the driver's seat may exceed 85 dB(A) depending on loader model and operating cycle. Extended exposure to loud noise can cause hearing impairment. Wear hearing protection while working with the loader.



- Wear protective gloves.



- Wear safety boots whenever working with the loader.

Safe position of the attachment, before going near the loader boom:**WARNING**

Always set the attachment to a safe position before going near the attachment.

Safe position will prevent unintentional movements of the attachment and the loader boom. Note that the attachment can move even if the engine of the loader is turned off.

Safe stopping procedure:

- Lower the boom completely down and lower the attachment flat on the ground.
- Shut down the loader engine and lock the parking brake.
- Prevent starting of the machine, remove ignition key.

4. Technical specifications

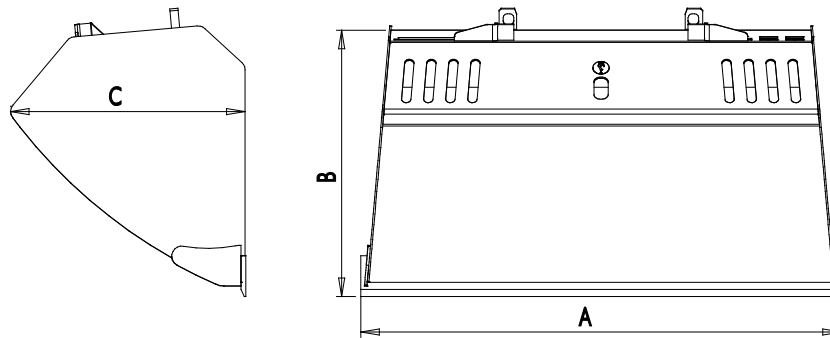


Table 2 - General buckets - Technical data

Product number	A33032	A36702	A36710	A36780	A36709	A36779	A36698	A36778
Working width:	890 mm	1010 mm	1050 mm		1150 mm		1300 mm	
Number of teeth:	-	-	-	4	-	5	-	5
Total width (A):	960 mm	1040 mm	1080 mm		1180 mm		1330 mm	
Base length (B):		486 mm	557 mm		557 mm		557 mm	
Total height (C):		508 mm	578 mm		578 mm		578 mm	
Weight :	52 kg	50 kg	73 kg	83 kg	78 kg	91 kg	86 kg	98 kg
Heaped capacity:		130 l	200 l		220 l		250 l	
<i>With grille:</i>	110 l	160 l	240 l		260 l		300 l	
Struck capacity:		90 l	140 l		160 l		180 l	
<i>With grille:</i>		120 l	190 l		210 l		240 l	
Intended AVANT loader models:	200 series 1	200 series 2	See Table 1					
Teeth cover:	-	-	-	A417347	-	A420132	-	A417320

Product number	A36996	A36997
Working width:	1350 mm	
Number of teeth:	-	5
Total width (A):	1380 mm	
Base length (B):	557 mm	
Total height (C):	578 mm	
Weight :	90 kg	102 kg
Heaped capacity:	260 l	
With grille:	310 l	
Struck capacity:	190 l	
With grille:	240 l	
Intended AVANT loader models:	See table 1	
Teeth cover:	-	A421097

Table 3 - Heavy Duty General buckets - Technical data

Product number	A36713	A36747	A36712	A36746	A36535	A36745
Working width:	1300 mm		1450 mm		1600 mm	
Number of teeth:	-	5	-	5	-	6
Total width (A):	1330 mm		1480 mm		1630 mm	
Base length (B):	627 mm		627 mm		627 mm	
Total height (C):	653 mm		653 mm		653 mm	
Weight :	130 kg	140 kg	140 kg	155 kg	155 kg	165 kg
Heaped capacity:	300 l		340 l		370 l	
<i>With grille:</i>	370 l		420 l		460 l	
Struck capacity:	210 l		230 l		260 l	
<i>With grille:</i>	310 l		350 l		390 l	
Intended AVANT loader models:	See Table 1					
Teeth cover:	-	A417320	-	A417321	-	A419977

Product number	A437578
Working width:	1600 mm
Number of teeth:	-
Total width (A):	1630 mm
Base length (B):	668 mm
Total height (C):	773 mm
Weight :	190 kg
Heaped capacity:	430 l
<i>With grille:</i>	600 l
Struck capacity:	300 l
<i>With grille:</i>	460 l
Intended AVANT loader models:	See Table 1
Teeth cover:	-

Table 4 - Light material buckets - Technical data

Product number	A36715	A36714	A36703	A36476	A36343	A437601
Working width:	1150 mm	1300 mm	1450 mm	1600 mm	1800 mm	1800 mm
Total width (A):	1180 mm	1330 mm	1480 mm	1630 mm	1830 mm	1830 mm
Base length (B):	828 mm	828 mm	938 mm	938 mm	950 mm	978 mm
Total height (C):	761 mm	761 mm	864 mm	864 mm	864 mm	1059 mm
Weight:	125 kg	135 kg	150 kg	175 kg	195 kg	254 kg
Heaped capacity:	325 l	370 l	515 l	560 l	650 l	920 l
With grille:	430 l	495 l	710 l	780 l	900 l	1300 l
Struck capacity:	225 l	260 l	355 l	390 l	450 l	660 l
With grille:	340 l	390 l	560 l	610 l	700 l	1050 l
Intended AVANT loader models:	See Table 1					

Table 5 - Levelling buckets - Technical data

Product number	A36717	A36706
Working width:	1450 mm	1600 mm
Total width (A):	1480 mm	1630 mm
Base length (B):	894 mm	894 mm
Total height (C):	460 mm	460 mm
Weight:	175 kg	190 kg
Heaped capacity:	380 l	420 l
Struck capacity:	250 l	280 l
Intended AVANT loader models:	See Table 1	

4.1 Safety labels and main components of the attachment

Listed below are the labels and markings on the attachment. They must be visible and readable on the equipment. Replace any unclear or missing label. New labels are available via your retailer or contact information provided on the cover.



WARNING

Make sure all warning decals are readable. 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

Avant Tecno Oy Ylötie 1 FIN-33470 YLÖJÄRVI		
TYPE	No.	
kg	Max load	kg
2015	Made in EU www.avanttecno.com	

Attachment identification plate

To apply a new label: Clean the surface thoroughly to remove all grease. Allow it to dry completely. Peel off the protective film of the label and press firmly to apply. Take care not to touch the glue of the label.

Table 7 - Decal locations and warning messages

	Decal	Warning message
1	A36771	Misuse hazard - Read instructions before use.
2	A36772	Crushing hazard - Do not go under a raised attachment; stay away from raised equipment.
3		Attachment identification plate

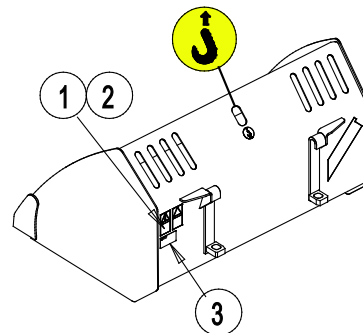
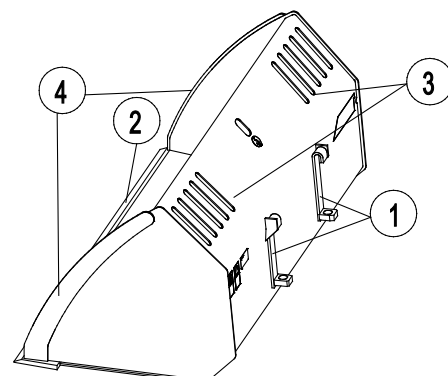


Table 8 - Main components of the Bucket

1	Frame with quick attach brackets
2	Cutting edge
3	Grille for better visibility and for preventing falling of material
4	Reinforced side edges (HD bucket shown)



5. Attaching the attachment

Attaching the attachment to the loader is quick and easy, but it must be done carefully. The attachment is mounted to the loader boom by using the quick attach plate on the loader boom and the counterpart on the attachment.

If the attachment is not locked to the loader, it may detach from the loader and cause a hazardous situation. The loader must not be driven and the boom must never be lifted when the attachment has not been locked. To prevent hazardous situations, always follow the coupling procedure shown below. Also remember the safety instructions shown in this manual. The attachment is mounted to the loader as follows:



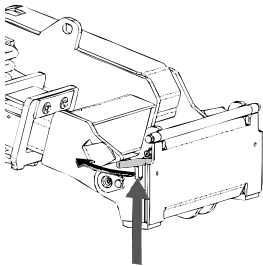
WARNING

Crushing risk - Make sure that an unlocked attachment will not move or fall over.

Do not stay in the area between the attachment and the loader. Mount the attachment only on level surface.

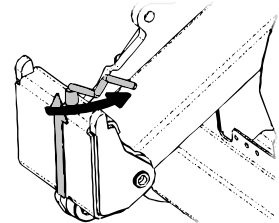
Never move or lift an attachment that has not been locked.

200-700 series loaders:

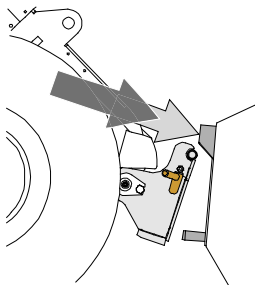


Step 1:

- Lift the quick attach plate locking pins up and turn them backwards into the slot 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.
- Ensure that the hydraulic hoses (and the electric harness, if applicable) are not in the way during installation.

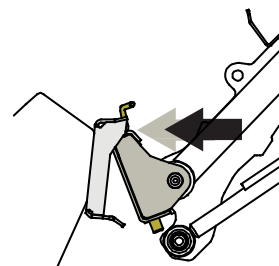


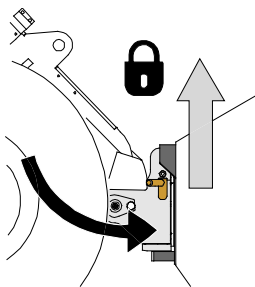
200 (series 1) loaders:



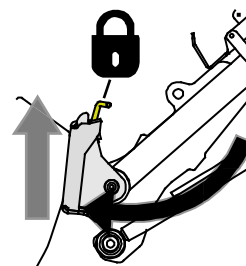
Step 2:

- 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.
- Align the upper pins of the loader's quick coupling plate so that they are under the corresponding brackets of the attachment.

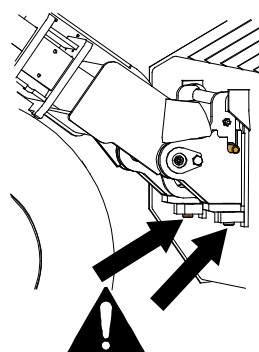


Step 3:

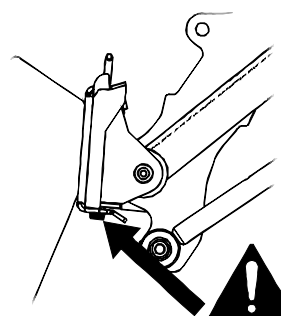
- Lift the boom slightly – pull the boom control lever backward to raise the attachment off the ground.
- Turn the boom control lever left to turn the bottom section of the quick attach plate onto the attachment.
- Lock the locking pins manually or lock the hydraulic locking.
- **Always check the locking of both locking pins.**

**Risk of falling objects - Prevent dropping of attachment.**

An attachment that has not been completely locked to the loader may fall on the boom or towards the operator, or fall under the loader during driving, causing loss of control of the loader. Never move or lift an attachment that has not been locked.



**200-700 series
loaders**



**200 (series 1)
loaders**



Risk of crushing - Avoid tipping over the attachment. Excessive tilting or lifting of an unlocked attachment increases the risk of tipping the attachment over. Do not use the automatic locking of the locking pins when the attachment is lifted more than one meter from the ground. If the locking pins do not return to the normal position when tilting, do not tilt or raise the attachment any more. Lower the attachment on the ground and secure the locking manually.

6. Instructions for use

Practise the use of the attachment and the controls of the loader in a safe area. If you are unfamiliar with the particular loader model, it is recommended to practice its use without any attachments.



Risk of tipping over - Avoid overload. Loader can tip over when handling too heavy loads, or because of dynamic movements caused by driving with and handling of a heavy load. Do not extend the telescopic boom when the load approaches the lifting capacity of the loader, or when the loader boom is in horizontal position. When you notice that the rear wheels of the loader are about to lift from the ground, or if the load indicator of the loader (if fitted) signals:

- Lower the load calmly and retract the telescopic boom
- Avoid sudden changes in speed or direction whenever load is lifted
- Use additional counterweights as needed



Risk of falling from height and crushing under bucket or loader - Never use a bucket as a lifting platform or to carry people. Never use the loader or its attachments to lift persons or as any kind of work platform even temporarily. Never climb on the attachment.

Always lower the bucket on the ground before leaving the driver's seat. The loader is not intended to hold loads lifted for longer periods of time.



6.1 Checks before use

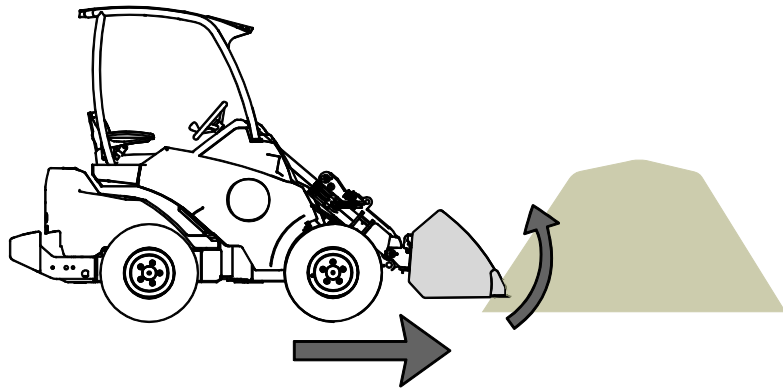
- Ensure that bystanders are at a safe distance when operating the equipment. Do not let anyone to enter danger area of the boom or to stay directly in front of the loader. Also make sure that it is safe to reverse with the loader. Never assume that bystanders will remain where you last saw them; especially children are often attracted to the moving equipment.
- 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.
- Operate the attachment and the controls of the loader only when seated on the driver's seat. Ensure that the loader and the attachment are used in a safe manner and as intended. Do not allow children to operate the equipment.
- Never operate the loader or attachments while under the influence of alcohol, drugs, medication that may impair judgement or cause drowsiness, or if not otherwise medically fit to operate the equipment.
- Remember correct working methods and avoid leaving the driver's seat unnecessarily.

6.2 Using a bucket

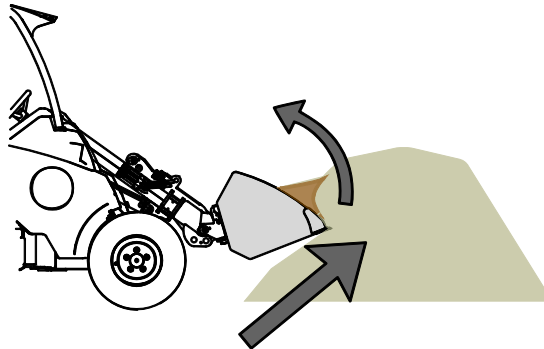
Correct working method is important when lifting material from a pile, as lifting material from a pile requires the most power from the loader. Use high engine rpm and read the instructions how to operate the loader correctly from the operator's manual of the loader.

Filling a bucket by pushing towards a pile of heavy material and then trying to lift or tilt the bucket is not possible with any loader type. The most effective way to fill a bucket is to push only the tip of the bucket into a pile, and then material is cut into the bucket by simultaneous driving, lifting and tilting of the bucket, as illustrated in the following figures. The same basic technique is also applicable when digging material from ground.

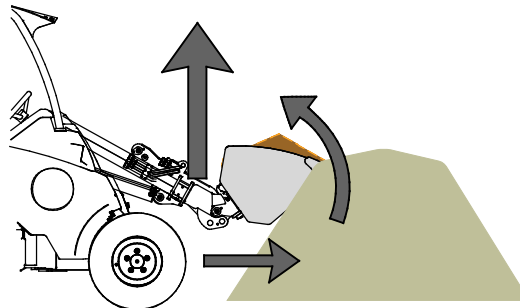
- 1
 - Drive slowly, using moderate to high engine rpm.
 - Once the tip of the bucket is in the pile, begin to tilt the bucket.



- 2
 - Scoop the bucket full by simultaneous driving forward, tilting, and lifting the bucket.

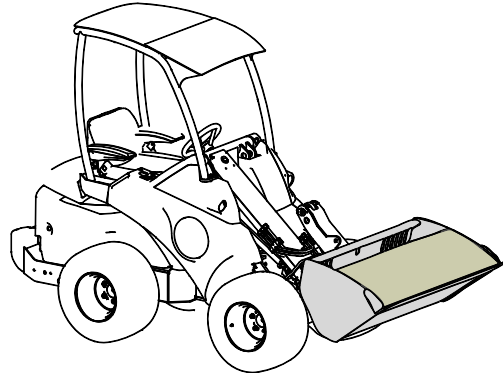


- 3
 - Once the bucket is almost full, lift the bucket with loader boom.
 - Keep driving slowly forward.





Keep the loader stable. Always transport the bucket as low and close to the ground as possible. Lift only at unloading location. Keep the telescopic boom retracted during drive.



Risk of sudden stop - Drive slow when bucket is placed against the ground. Avoid hazards related to sudden stopping of the loader. Hitting an obstacle will stop the loader suddenly, for example in snow clearing work. Check the operating area before operation and use the seat belt.

If the loader is not equipped with the boom self levelling:



Prevent material from falling on you - Monitor the position of the bucket. When lifting material to a high level, the bucket 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 repeated loading work easier.



Avoid sudden loss of stability - Never drag loads from e.g. a shelf. If the load that you want to lift from height is too heavy, the loader can tip forward when reversing with the loader. Never reverse and drag with the loader before making sure that the loader can handle the load that is being lifted.

6.3 Material handling

Use maximum load indicated in the diagram of the operator's manual of the loader as a guideline. Remember that the actual load carrying capacity varies according to operating conditions, especially unevenness of operating area has a great effect. Be especially careful when the load sensor indicator is activated. Also, make sure that the ground surface is firm and follow recommended tire pressures.



WARNING

Risk of tipping over - Avoid overload and keep heavy load close to the loader. Keep loads close to the ground whenever driving, especially during turns and uneven terrain. Pay attention that a heavy load or long distance between the loader and the centre of gravity of the load will affect the balance and handling of the loader. The use of additional counterweights is recommended especially when operating smaller loader models. For 200 series loader the wheel weights are recommended. With heavy loads, the telescopic boom must be kept retracted while moving with the loader. Always wear seat belt.

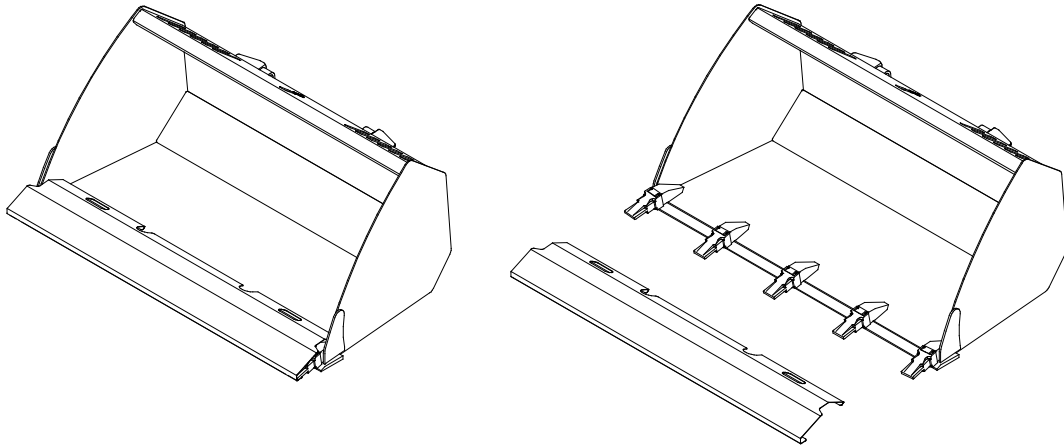
The information shown in Table 9 can be used to estimate the weight of the load and to avoid too heavy loads. The values shown in table are intended to serve as general guidelines. Actual material densities may vary greatly according to factors such as moisture content and compactness of the material.

Table 9 - Typical material densities

Material	Density of material, (indicative), kg / l (t / m ³)	
Snow	0,2 - 0,8	Example: General bucket A36709 (volume 220 l, empty weight 78 kg) is filled with gravel. The weight of the load, depending on the actual density of the material, is roughly between $1,7 * 220 + 79 = 450$ kg and $1,9 * 220 + 79 = 500$ kg. The load carrying capacity must be estimated by taking in account the compactness of the material and the evenness of the load
Wood chips	0,15 - 0,3	
Wood pellet	~ 0,65	
Peat	0,4 - 0,7	
Soil	1,5 - 1,8	
Gravel	1,7 - 1,9	
Sand	1,5 - 2	
Concrete, dry	1,7 - 2,5	
Crushed rock	1,65 - 2,6	

6.4 Teeth cover plate

For buckets with teeth, an optional protection plate is available. The cover plate is intended to be used when operating the loader in areas where the teeth could make an accident more serious, such as when operating on road traffic areas.

**NOTICE**

The protection plate must be removed before using the bucket.

7. Inspections, maintenance and service

It is recommended to empty the bucket completely right after using it. Do not store the bucket directly against the ground; place it on blocks of wood or on a pallet, for example. Leave the attachment to a position where water will not stay in the attachment.

A pressure washer and mild detergent can be used for cleaning the bucket. Do not use strong solvents or spray directly at the labels on the attachment. Before longer storage periods touch up the paint where needed to prevent rust damage.

7.1 Inspection of metal structures

Also the metal structures of the attachment must be inspected regularly. Check visually for damages and inspect the quick attach brackets and their surrounding area carefully. The attachment must not be used if it is deformed, cracked, or torn.

Welding repairs are only allowed to be carried out by professional welders. When welding, only methods and additives suited for steel used in attachment must be used. For more information about repairs contact your nearest service point.

8. Warranty terms

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

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 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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