

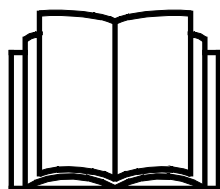
AVANT®

Operator's Manual for Attachment



Weed brush

Product number A36594



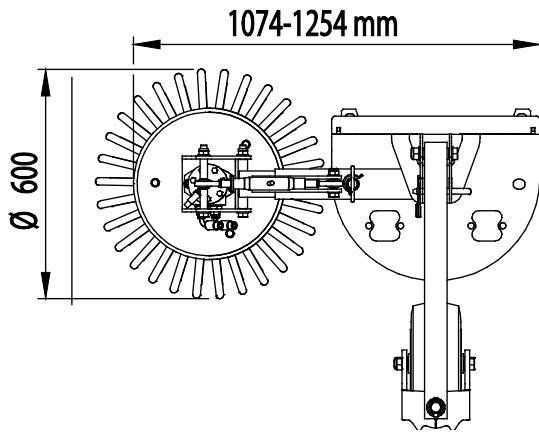
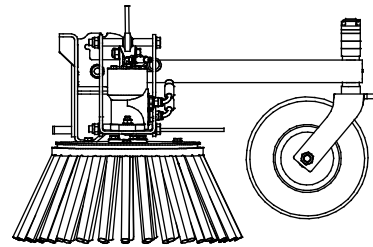
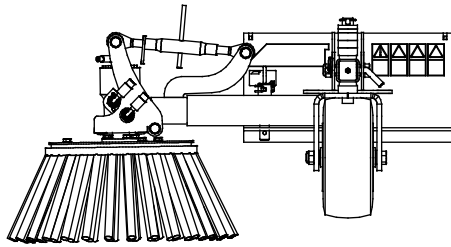
Please read this manual carefully before using the equipment, and follow all instructions.

Keep this manual for later reference.

Manufacturer:

AVANT®
AVANT TECNO OY
e-mail: sales@avanttecno.com

Ylötie I
33470 YLÖJÄRVI
FINLAND
Tel. +358 3 347 8800
Fax +358 3 348 5511



CONTENTS

1. FOREWORD	4
Warning symbols used in this manual	5
2. DESIGNED PURPOSE OF USE.....	6
3. SAFETY INSTRUCTIONS FOR USING THE EDGE TRIMMER.....	7
4. TECHNICAL SPECIFICATIONS	10
4.1 Safety labels and main components of the attachment	10
5. ATTACHING THE ATTACHMENT	12
5.1 Connecting and disconnecting hydraulic hoses	13
6. OPERATING THE ATTACHMENT	15
6.1 Checks before use	15
6.2 Use	16
6.2.1 Using boom floating	17
6.3 Adjustments	17
6.3.1 Brush position.....	18
6.3.2 Orientation.....	19
6.3.3 Side reach.....	19
6.3.4 Support wheel.....	20
6.4 Transport position	20
6.5 Storage	21
7. MAINTENANCE AND SERVICE	22
7.1 Inspection of hydraulic components	22
7.2 Cleaning the attachment.....	23
7.3 Inspection of metal structures	23
8. WARRANTY TERMS	24

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 © 2020 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

This AVANT Weed brush is an attachment that is suitable for use with AVANT multi purpose loaders that are shown in Table 1. The Weed brush is an efficient tool for removal of weeds on all kinds of paved areas. The manually adjustable, telescoping arm of the rotating brush makes it easy to remove unwanted weed from pathways and around cornerstones, and allows working near buildings. The weed brush is equipped with a support wheel as standard, which can be lifted and locked up to transport position if needed.

The weed brush is equipped with a steel brush which can be extended manually and turned in three different positions: to the front, to the right side, or to the left side. The brush arm should be set to front position for storage of the attachment. The weed brush is intended only for maintenance of level ground surfaces. Other tools than the brush must not be installed on the attachment. The Weed brush is not designed for any other use than what is specified in this manual and must not be used for any other purposes than what is intended for.

The attachment has been designed to require as little maintenance as possible. The operator can perform regular maintenance tasks. All repair work can't be performed by the operator, and demanding repair and maintenance operations are to be left for professional maintenance. All maintenance work must be done using proper safety equipment. Spare parts must be identical with original specifications, which can be ensured by using only original spare parts. A separate spare parts catalogue may be available, consult your Avant dealer.

Familiarise yourself with the manual's instructions regarding service and maintenance. 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 - Weed brush - Compatibility with Avant loaders

Avant	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
A36594	•	-	•	•	•	•	•	•

3. Safety instructions for using the edge trimmer

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.



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



- 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.
- This attachment 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.
- **Impact hazard - Thrown objects.** Do not let bystanders stand closer than the safety distance of 5 metres from the machine. Stop the attachment if others get within the safety distance.
- **Hazard of entanglement - Rotating parts.** Never leave the driver's seat when the attachment is running or if the auxiliary hydraulics control is locked on. Always keep a safe distance between persons and machinery that may start or move. Stop the equipment following the safe stopping procedure and lower the attachment firmly on the ground before leaving the driver's seat, or when other persons are present at the working area.
- **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 hands and feet away from moving components. Wearing loose clothes, such as loose shoelaces, or long scarves, should be avoided when working with the attachment.
- Stop the attachment by following the safe stopping procedure before going near the attachment or the loader boom.
- Always transport the attachment as low and close to the machine as possible to keep the centre of gravity low. On slippery surfaces drive slowly and deliberately. Operate the controls of the loader slowly and calmly especially on inclined terrain.
- Use the attachment only for its intended use and only with original tools on the attachment.



- Shut down the loader and place the attachment to a safe position as shown in Safe stopping procedure before any cleaning, maintenance, or adjustments.
- 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 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.



Wrong, improper, or careless use of the attachment causes serious risk of severe injuries or death. Familiarise yourself with the controls of the loader in a safe area. Pay particular attention to the safe stopping of the attachment and the loader; follow the safe stopping procedure shown in this manual before leaving the driver's seat.



Hazard of thrown objects - Keep bystanders away. Note that the attachment can throw stones, gravel, or other objects found in the area at high speed. Always keep a safety distance of at least 5 metres to other persons.



Entanglement hazard - Keep away from moving parts. Keep a safety distance of at least 5 metres from the attachment when it is running and stop the attachment immediately if anyone gets too close. Beware of the rotating parts which create entanglement hazard. Never reach into a running attachment by any means. Shut down the loader engine following the safe stopping procedure if reaching into the work tools of the attachment.



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.



- At some areas or surfaces the brush may throw debris. Wear safety glasses.
- Wear safety glasses when handling hydraulic components.



- Wear respirator mask when operating in dusty conditions.

Safe stopping of the attachment, before going near the attachment:**WARNING**

Always stop the attachment following safe stopping procedure before leaving the driver's seat. Safe stopping procedure prevents all unintentional movements of the attachment. Note that the loader boom can move down even if the engine of the loader is turned off. Safe stopping procedure:

- Lower the boom and the attachment on the ground.
- Shut down the loader engine and lock the parking brake.
- Release residual pressure from the hydraulic system; move all hydraulic control levers to their extreme positions a couple of times.
- Prevent starting of the machine, remove ignition key.

4. Technical specifications

Table 2 - Weed brush - Specifications

Product number	A36594
Brush diameter:	600 mm
Brush material:	Steel wire
Minimum width in working position:	1074 mm
Weight:	85 kg
Recommended hydraulic flow:	15-25 l/min, 20,0 MPa (200 bar)
Maximum input of hydraulic energy:	40 l/min, 20,0 MPa (200 bar)
Suitable Avant loaders:	See Table 1
Options	
Heavy duty wire rope brush	A422665

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.



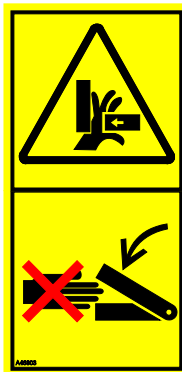
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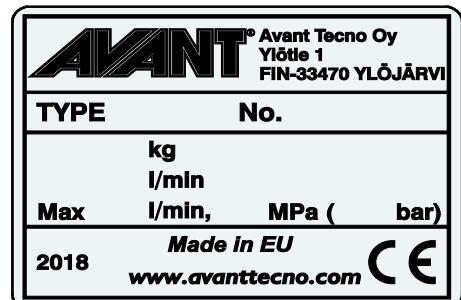
A46772



A46799



A46803



Attachment identification plate A420010

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 3 - Decal locations and warning messages

Decal		Warning message
1	A46771	Misuse hazard - Read instructions before use.
2	A46772	Crushing hazard - Do not go under a raised attachment; stay away from raised equipment.
3	A46799	Beware of thrown objects; keep a safe distance from the equipment (2 m minimum, up to 30 m).
4	A46803	Pinching and cutting hazard, keep clear of moving parts, do not leave the equipment running. Operate the attachment only from the driver's seat.
5	A420010	Attachment identification plate

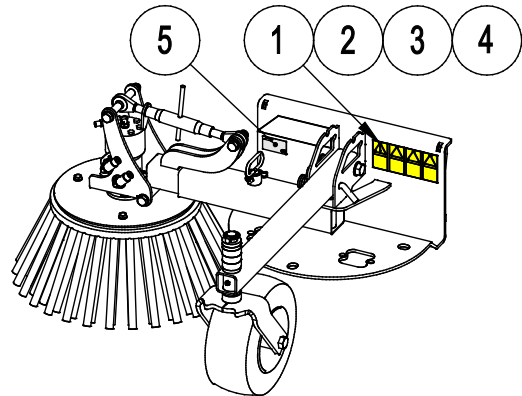
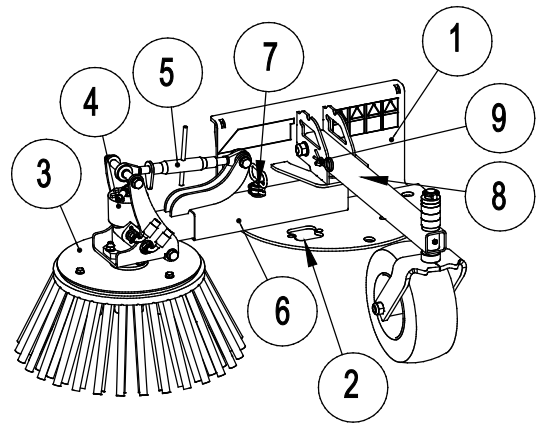


Table 4 - Weed brush - Main components

1	Frame with quick coupling brackets
2	Multiconnector holder (2 holders on frame)
3	Steel wire brush
4	Hydraulic motor of brush
5	Brush angle adjustment
6	Extendable trimmer arm
7	Arm locking pin: extension and left/right/front positions
8	Support wheel in front position
9	Support wheel pin



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:



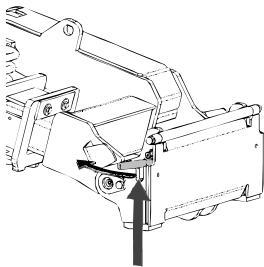
WARNING

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.

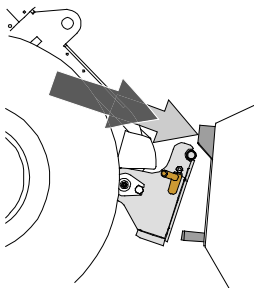
Never move or lift an attachment that has not been locked.

Avant quick coupling system:



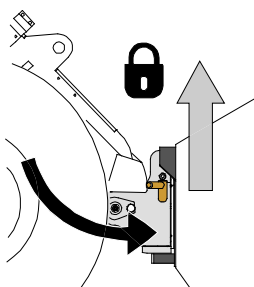
Step 1:

- 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 are not in the way during installation.



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.**



WARNING

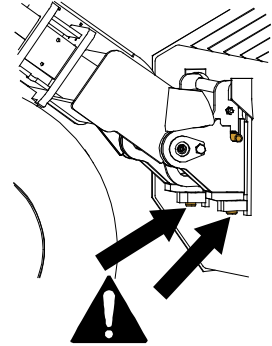
Risk of crushing - Avoid tipping over the attachment. Excessive tilting or lifting of an unlocked attachment increases the risk of tipping the attachment over. Do not use the automatic locking of the locking pins when the attachment is lifted more than one meter from the ground. If the locking pins do 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.



WARNING

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. Before moving or lifting the attachment, make sure that the locking pins are in the lower position and come through the fasteners on the attachment on both sides.



WARNING

Make sure the loader is compatible with the attachment. Stability of the loader, possible overload of the attachment, and compatibility of loader control systems must be ensured in addition to mechanical compatibility of the attachment. If you use the attachment with a loader that is not fit to be used with the attachment model you have, risks include tipping over, damage to attachment due to overload, and risks related to uncontrolled motion of attachment and its parts. If your loader is not listed in Table 1 on page 6, ask your Avant dealer before using this attachment.

5.1 Connecting and disconnecting hydraulic hoses

On Avant loaders the hydraulic hoses are connected using the multi connector system. If you have an Avant 300-700 series loader with the conventional quick couplers and wish to change to the multi connector system, contact your Avant dealer or service point for instructions or installation services.



WARNING

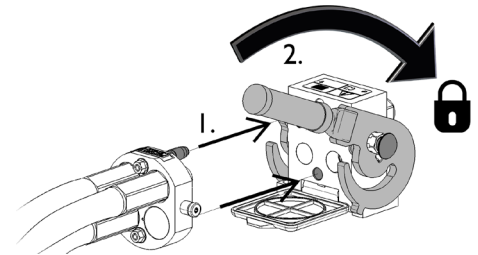
Risk of movement of the attachment and ejection of hydraulic oil - Never connect or disconnect quick couplings or other hydraulic components while the control lever of the auxiliary hydraulics control lever is locked on or if the system is pressurized. Connecting or disconnecting the hydraulic couplings while the system is pressurized may lead to unintended movements of the attachment, or ejection of high-pressure fluid, which can cause serious injuries or burns. Follow safe stopping procedure before disconnecting hydraulics.

NOTICE

Keep all fittings as clean as possible; use the protective caps on both the attachment and the loader. Dirt, ice, etc. may make using the fittings significantly more difficult. Never leave the hoses hanging on the ground; place the couplings onto the holder on the attachment.

Connecting the multiconnector system:

1. Align the pins of the attachment connector with corresponding holes of the loader connector. The multiconnector will not connect if the attachment connector is upside down.
2. Connect and lock the multiconnector by turning the lever towards the loader.

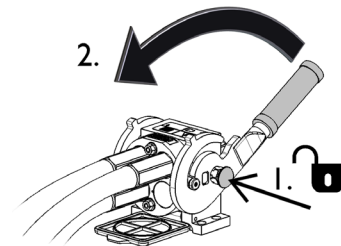


The lever should move easily all the way to its locking position. If the lever does not slide smoothly, check the alignment and position of the connector and clean the connectors. Also shut down the loader and release the residual hydraulic pressure.

To disconnect the multiconnector system:

Before disconnecting put the attachment down on a solid and even surface.

1. Switch off the auxiliary hydraulics of the loader.
2. While pushing unlock button, turn the lever to disconnect the connector.
3. After ending operation put the multiconnector on its holder on the attachment.


Disconnecting hydraulic hoses:

Before disconnecting the fittings, lower the attachment to safe position on solid and level surface. Turn the control lever of the auxiliary hydraulics to its neutral position.

NOTICE

When uncoupling the attachment, always disconnect the hydraulic couplings before unlocking the quick coupling plate, to prevent hose damage and any oil spills. Reinstall the protective caps on the fittings to prevent impurities from entering the hydraulic system.

Releasing residual hydraulic pressure:

In case residual pressure is left in the hydraulic system of the attachment, it is often possible to disconnect the hydraulic couplings, but it may be difficult to connect them the next time. If the fittings will not connect, the residual pressure must be released by turning the auxiliary hydraulics control lever of the loader, when the engine is turned off. To make sure that there will not be residual pressure in the hydraulic system of the attachment, shut down the loader engine and move the auxiliary hydraulics control lever of the loader back and forth before disconnecting the couplings.

6. Operating the attachment

Check the attachment and the operating environment once more before starting to work, and that all obstacles have been removed from the operating area. Quick inspection of the equipment and the operating area before use are parts of ensuring safety and the best performance of the equipment.



Hazard of thrown objects - Keep bystanders away. Note that the attachment can throw stones, gravel, or other objects found in the area at high speed. Always keep a safety distance of at least 5 metres to other persons.



Entanglement hazard - Never leave the driver's seat when the broom is in operation. Keep a safe distance between the broom and other persons and stop the broom and lower it down completely whenever others are in proximity with the broom. Never perform any maintenance or adjustments if the broom can start by accident. Shut down the loader engine, turn off auxiliary hydraulics and lower the loader boom before going near the attachment.



Risk of crushing or entanglement from contact with moving parts - Never leave the equipment unattended while the engine is running. Follow safe stopping procedure.

6.1 Checks before use

- Check that the brush can rotate freely and that there is no string or other foreign material coiled around it.
- Use only when all pins are locked and secured in place.
- 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. 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.

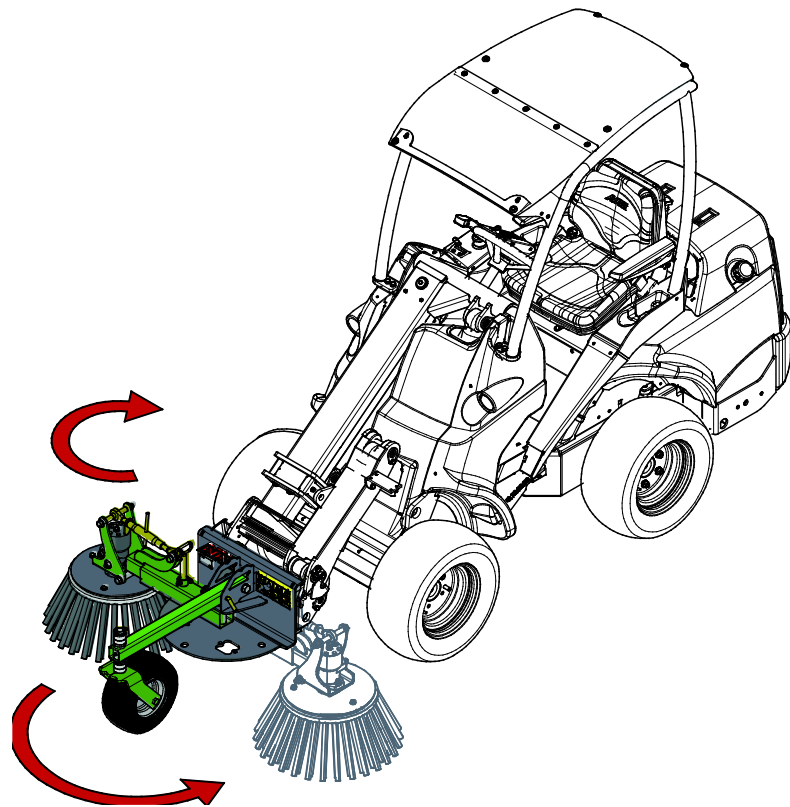


Risk of uncontrolled movement - Lock the brush arm before starting the attachment. Check that the brush is properly locked on either side before use. Also make sure that the hydraulic hoses are secured against contact with moving parts.

6.2 Use

Before starting the Weed brush:

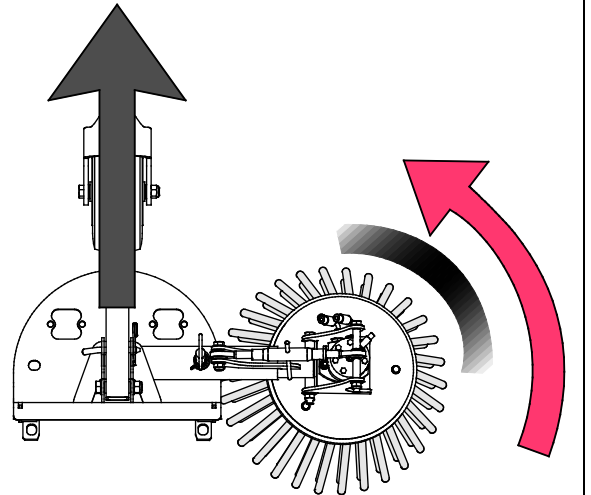
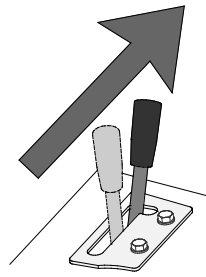
Set and adjust the Weed brush to working position. Lock the brush arm on either side of the loader as indicated in the adjacent figure. Also see the following chapters about adjustments.



Operating the brush:

As standard, the weed brush will rotate counter-clockwise when the auxiliary hydraulics control lever is moved to its locking position (or red button of electric joystick is depressed, if equipped).

In correct operating position only the front corner of the brush is in contact with the ground. See chapter Adjustments.



- Adjust the loader engine rpm so that the auxiliary hydraulics flow is within the recommended range for the attachment.
- Adjust the drive speed according to the operating conditions and the material being handled.
- Always drive slowly while operating the brush.
- If your loader is equipped with a telescopic boom, you can utilize it for a better view to the working area.
- Typically the support wheel should be set down to operating position for easier control of the attachment. However, in some cases it might be easier to operate the brush with the support wheel lifted to upper position.
- The Weed brush can be operated while driving forward or reversing, depending on operating conditions.

NOTICE

Avoid pressing the brush hard against the ground. If the front wheels of the loader tend to lift off the ground, the attachment is pressed too hard against the ground. To avoid damaging the attachment, make sure it is operated as intended.

NOTICE

Adjust the rotating speed according to operating surface. Too fast rotation combined with hard pressing against the ground can cause the brush to wear down quickly.

NOTICE

Use the brush only while it is rotated. Using the brush to push material without rotating it can cause damage to the brush.

6.2.1 Using boom floating

After setting the brush to correct operating position, the boom floating option of the loader can be switched on. This helps to push the brush against the ground at constant force, making it easier to operate over long distances. The floating must be switched on only after the brush is pressed correctly against the ground. Boom floating is available for some loader models as an option.

6.3 Adjustments

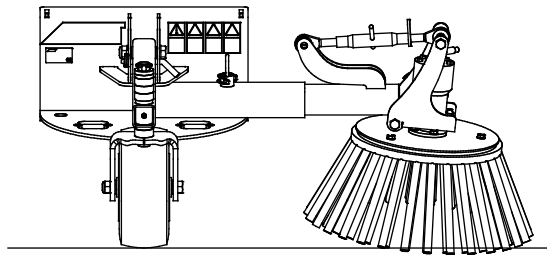
The brush can be adjusted in many ways, as shown in the following chapters. Best way to operate the brush depends on the surfaces the trimmer is operated, and the direction of travel.

6.3.1 Brush position

Recommended operating position:

In correct operating position the brush is tilted both sideways and forward, as shown in following figures.

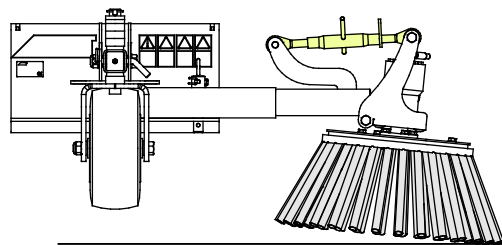
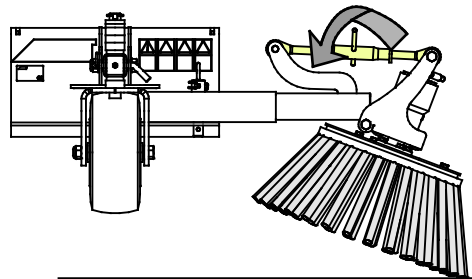
This ensures that material is moved efficiently aside, and not rotated around with the brush.



Sideways tilt:

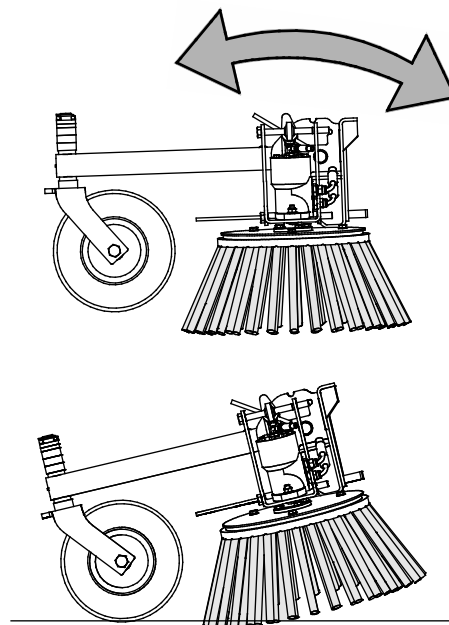
Adjust the sideways tilt so that the outer edge of the brush is angled as shown in lower adjacent figure.

The adjustment is made by turning the top link from its middle part.



Forward tilt:

While operating, keep the brush tilted slightly forward by operating the loader boom.

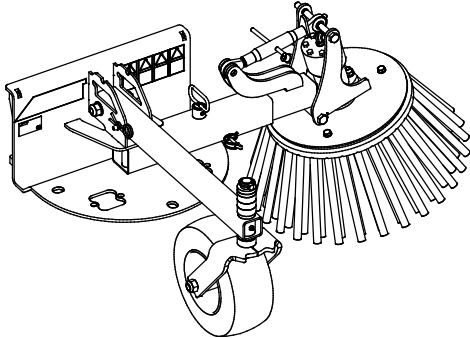


6.3.2 Orientation

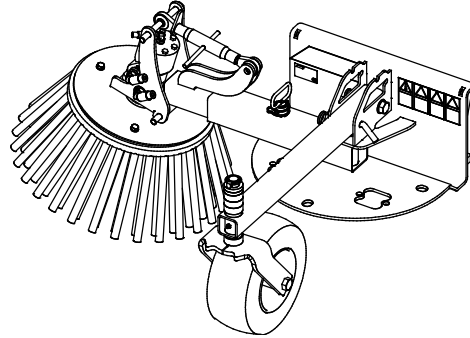
The brush arm can be locked on either side, for easier use in different operating areas.

For transport, lock the arm on the middle position and lock the support wheel to its upper position.

Left side



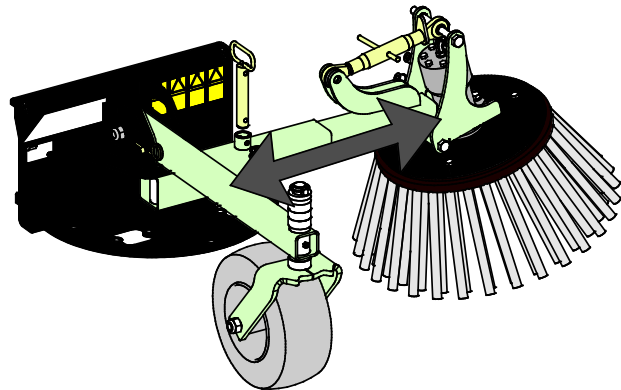
Right side



6.3.3 Side reach

The side reach can be adjusted as needed by unlocking the same pin on the arm that is used to lock the orientation of the arm.

Make sure to lock the pin after adjusting the reach.

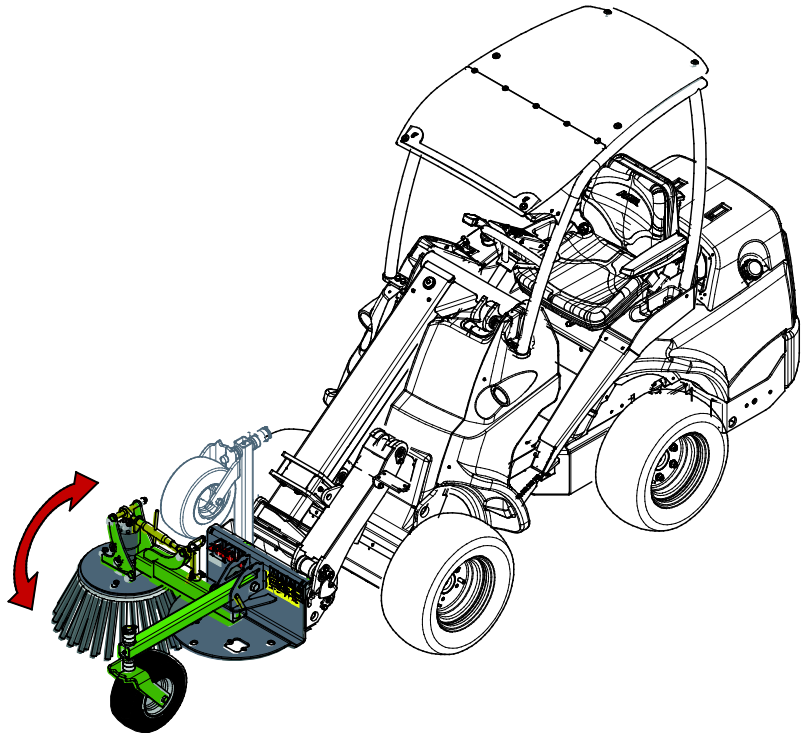


6.3.4 Support wheel

The support wheel can be locked either transport or operation position as shown in the adjacent figure.

The correct operating position is reached when the wheel slightly touches the ground. For transport, the support wheel is lifted up.

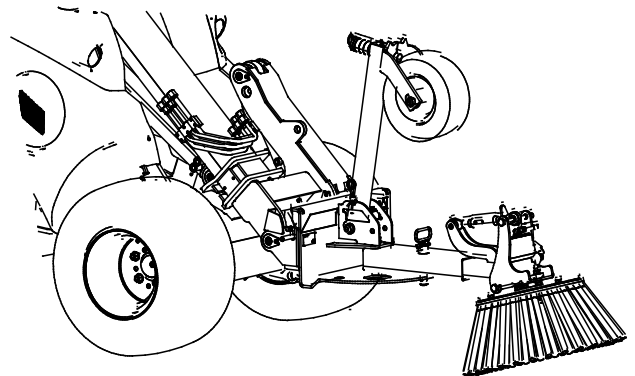
Make sure to lock the support wheel with pin after reaching the desired position.



6.4 Transport position

When driving with the loader, keep the weed brush in the position shown in adjacent figure.

Make sure the trimmer arm and the support wheel are locked with locking pins.



CAUTION

Keep the loader stable. Always transport the attachment as low and close to the ground as possible. Keep the telescopic boom retracted during transport drive.

6.5 Storage

Uncouple and store the attachment on level ground. The best way to store the attachment is a place where it is protected from direct sunlight, rain, and extreme temperatures.

- Avoid leaving the attachment laying directly on the ground. Place it on blocks of wood or on a pallet, for example.
- Place the multiconnector on to its holder as indicated with an arrow in the figure below. Never leave the hydraulic connector on the ground.
- Make sure that the attachment is secured against all movements during storage.

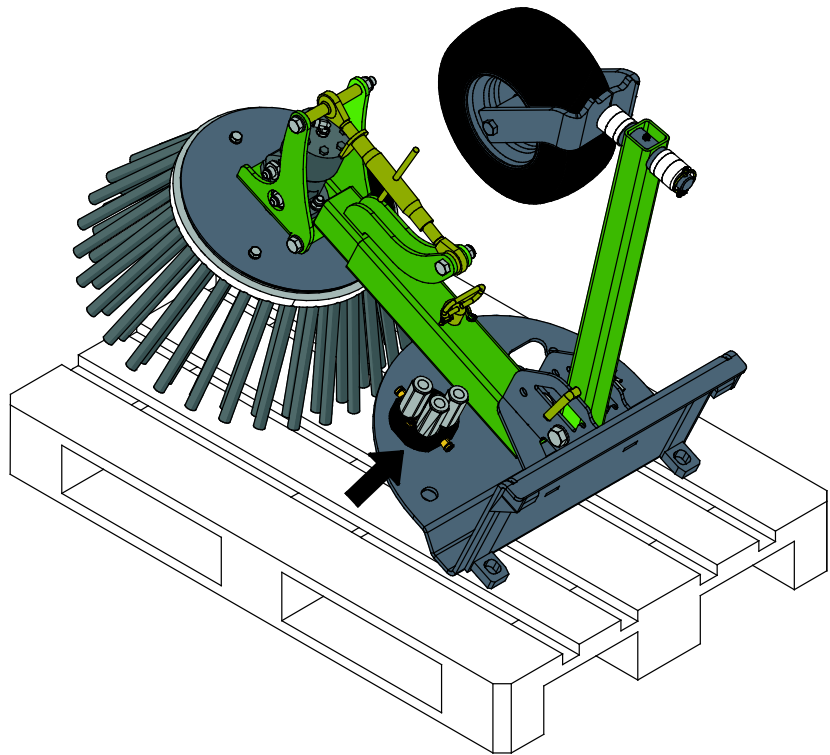
Never climb on the attachment.

To ensure the stability of the attachment during storage, lay it down on a pallet so that the quick coupling plate is easily accessible with the loader, as shown in figure below.

Correct storage position:

To ensure the stability of the attachment during storage, turn the brush arm in front position as shown in the adjacent figure.

Make sure that hydraulic hoses will not be left under the attachment. Place the multiconnector to its holder as indicated with an arrow in the adjacent figure.



Risk of crushing - Uncoupled attachment may tip over; keep a safe distance during coupling. Ensure stability of uncoupled attachment placing it firmly on a pallet so that the quick coupling plate is easily accessible with the loader.



7. Maintenance and Service

The attachment has been designed to be as maintenance free as possible. Continuous maintenance includes regular cleaning and lubrication, and monitoring the condition of the attachment. Because of the crushing hazard caused by lowering machine parts, all maintenance work must be done when moving parts have been lowered down completely and the attachment is lowered flat against the ground.



Risk of crushing - Never go under lifted attachment. Make sure the attachment is properly supported during all maintenance work. Never go under a lifted attachment. The loader boom may lower unexpectedly during maintenance causing serious injuries from crushing or impact even when the loader engine is not running. All maintenance and service must be performed when the attachment has been lowered down to a safe position.

7.1 Inspection of hydraulic components

Check the condition of the hydraulic hoses and components when the engine has been turned off, system has cooled down, and the pressure has been relieved. Do not use the equipment, if you have discovered a leak in the hydraulic system of the attachment or the loader. Leaking hydraulic fluid may penetrate skin and cause serious injuries. Seek medical attention immediately in case hydraulic fluid penetrates the skin. Wash any part of body that has been in contact with hydraulic oil carefully with water and soap. Hydraulic fluid is also harmful to the environment and any leak to the environment must be prevented. Repair all leaks immediately after detecting them; a small leak can quickly grow into a big one. Operate the attachment only with type of hydraulic oil that is accepted for use in Avant loaders.



Risk of high pressure fluid injection through skin - Release residual pressure before maintenance. Never handle hydraulic components when the hydraulic system is pressurised, since a fitting may break or become loose and the released oil may cause serious injuries. Do not use the equipment, if you have discovered a fault in the hydraulic system.



Check hoses visually for cracks or abrasions. If there are signs of leaks, to check a component, hold up a piece of cardboard in the area where a leak is suspected. Do not use hands to search for leaks. Monitor the wearing of the hoses and stop the use, if the surface layer of any hose has worn off. Check the routing of the hoses; adjust the hose clamps to avoid abrasion to the hoses. The hoses have limited service life. Depending on operating conditions all hoses must be inspected thoroughly no later than after 3 to 5 years of use, and if required, they must be replaced with new ones.

Finding any fault means that the hydraulic hose or component must be replaced and the equipment must not be used until it is repaired. Spare parts are available from your nearest AVANT retailer or authorised service point. Leave the repair work to professional service technicians, if you don't have adequate knowledge and experience about hydraulic assemblies and how to perform the repairing safely.

7.2 Cleaning the attachment

Clean the attachment regularly to prevent accumulation of dirt which is more difficult to remove. A pressure washer and mild detergent can be used for cleaning. Do not use strong solvents, and do not spray directly at the hydraulic components, or at the labels on the attachment.

7.3 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.

FI EY-vaatimustenmukaisuusvakuutus Alkuperäinen kieliversio
 SE EG-försäkran om överensstämmelse Originalversion
 EN EC Declaration of Conformity Original language

AVANT[®]
 www.avanttecno.com

Valmistaja / Tillverkare / Manufacturer
 Osoite / Adress / Address

AVANT TECNO OY
 Ylötie 1
 33470 YLÖJÄRVI, FINLAND

Vakuutamme täten, että alla mainitut tuotteet täyttävät konedirektiivin turvallisuus- ja terveysvaatimukset (direktiivi 2006/42/EY muutoksineen). Seuraavia yhdenmukaistettuja standardeja on sovellettu /

Vi försäkrar härmed att nedan beskrivna produkter överensstämmer med hälso- och säkerhetskrav i EG-maskindirektiv (EG-direktiv 2006/42/EG som ändrat). Följande harmoniserade standarder har tillämpats /

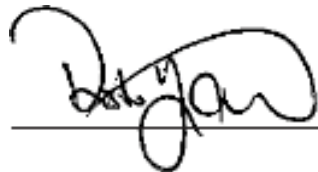
We hereby declare that the products listed below are in conformity with the provisions of the Machinery Directive (directive 2006/42/EC as amended). The following harmonized standards have been applied:

SFS-EN ISO 12100, SFS-EN ISO 4413

Mallit / Modeller / Models

Avant	
Hydraulitoiminen rikkaruohoharja; Avant-kuormaajan työlaite Hydraulisk ogräsborste; arbetsredskap för Avant lastare Hydraulic weed brush; attachment for Avant loaders	A36594

CE



30.12.2019 Ylöjärvi, Finland

Risto Käkelä,
 Toimitusjohtaja / Verkställande direktör /
 Managing Director



AVANT[®]