

**BROOM BUCKET
OPERATORS MANUAL**

SERIAL NUMBER

OPERATORS MANUAL

FOREWORD

In these Safety and Operating Instructions the following words are defined as follows:-

'ATTACHMENT':- A bucket or attachment which is classed as a machine under the CE machinery Directive.

Attachments covered under these Safety and Operating Instructions are broom buckets, which are classed as a 'machine' under the CE Machinery Directive.

'MACHINE' or 'HOST MACHINE' :- A wheeled or tracked loading machine (skid steer, backhoe loader, articulated loader) which connects to and powers the attachment.



WARNING

INCORRECT USE OF THIS ATTACHMENT OR FAILURE TO FOLLOW INSTRUCTIONS CONCERNING SAFETY CAN LEAD TO SERIOUS INJURY OR DEATH.

BEFORE USING THIS ATTACHMENT :-

- 1. READ THIS MANUAL CAREFULLY.**
- 2. MAKE SURE THAT THIS ATTACHMENT IS SUITABLE FOR USE ON THE HOST MACHINE.**
- 3. CLEAR THE AREA OF OTHER PERSONS.**
- 4. LEARN AND PRACTICE SAFE USE OF THIS ATTACHMENT AND HOST MACHINE IN A CLEAR AREA BEFORE YOU OPERATE THIS MACHINE ON A JOB SITE.**
- 5. IT IS YOUR RESPONSIBILITY TO OBSERVE PERTINENT LAWS AND REGULATIONS IN RESPECT OF THE OPERATION OF THIS ATTACHMENT AND THE HOST MACHINE.**

TO THE OWNER

You are the owner of an attachment that has been built to operate correctly on your host machine.

The attachment conforms with current safety regulations (see OFFICIAL JUSTIFYING DOCUMENTS on the following page).

However, this does not exclude all risk of accidents, which is why it is essential to observe elementary safety rules and precautions.

Before putting this attachment into service please ensure that :-

1. The operator has read and fully understands this operator's manual.
2. The operator has received necessary training on the functions and capabilities of this attachment.
3. The information on the identification plate, which is fixed to the rear top left corner of the attachment, matches the information on the EC Declaration of Conformity.

OFFICIAL JUSTIFYING DOCUMENTS

EC DECLARATION OF CONFORMITY

-SAFETY (automatically certified as per 89/392/EEC.)

Attachment <input type="text"/>	Serial Number <input type="text"/>
Part Number <input type="text"/>	Date of Manufacture <input type="text"/>
S.W.L. <input type="text"/> Kg (pallet fork attachment)	Max Hyd Pressure <input type="text"/> Bar
MASS (WEIGHT) <input type="text"/> Kg	Capacity <input type="text"/> m³
To fit Machine <input type="text"/>	Model <input type="text"/>

ATTACHMENT IDENTIFICATION PLATE:- Part No. WH-CE-STD

LOADER MOUNTED ATTACHMENTS

1. SAFETY
2. OPERATING INSTRUCTIONS
3. MAINTENANCE
4. SUPPLEMENTARY INSTRUCTIONS

Broom Buckets

1. SAFETY

1.1 GENERAL: This attachment has been designed and built according to the state of the art and meets current safety regulations in force. However, this does not completely exclude the risk of accidents. It is therefore essential to follow basic safety rules and precautions.

The strict execution of the instructions provided in this manual will prevent accidents during attachment use and maintenance operations.

These instructions will only be effective if the attachment receives proper maintenance. Any defects or anomalies must be repaired immediately.

Only use this attachment for the purpose for which it was designed.

1.2 BEFORE YOU OPERATE THE ATTACHMENT: Please be aware that this attachment is designed to be used in conjunction with the host machine. It is essential, therefore, to be fully conversant with the correct operating procedures and safety instructions of the machine. Familiarise yourself with the attachment, and the loads to be carried.

Always follow the machine manufacturers instructions in relation to connection, disconnection and operation of attachments.

Be prepared for emergencies. Always carry a first aid kit and a good fire extinguisher with you and know how to use them.

1.3 OPERATING THE ATTACHMENT:

! NEVER GET ON OR OFF A MOVING MACHINE

Keep all tread plates clean and free from grease, mud and (in winter), snow and ice.

Get to know the machines possibilities and the working space required.

Always wear the correct protective clothing relevant to the working conditions.

Dust, fog, smoke etc. can reduce visibility and cause an accident. Operate with extreme caution in these conditions.

Before starting work, check that the attachment is properly connected to the host machine and that all the functions operate correctly. See the machine manufacturer's manual for the correct connecting procedure.

Never carry any person on the attachment.

Make sure there is nobody standing near the attachment.

Do not allow anyone to stand in the 'Danger Zone' (operating area).

Do not jump off the attachment - you can get hurt.

Keep away from dangerous areas, such as ditches, over-hangs, cliffs, etc. Look for hazards.

Use all the controls gradually so that the attachment works smoothly.

When operating or servicing an attachment, wear suitable protective clothing.

1.4 MAINTENANCE:

! BEFORE CARRYING OUT ANY SERVICE WORK ON THE ATTACHMENT:

Park the host machine on a hard level surface.

Lower the attachment to the ground.

Apply the parking brake and shut down the engine.

Block the machine to prevent any movement.

When servicing the attachment, place a 'DO NOT START UP' label on the control panel of the machine.

Modifying the attachment without prior permission can cause serious injury. Do not undertake any modification without prior authorisation from White's or their Approved Agent.

Always wear eye protection when using a tool that may project metal particles. Use a hammer with a soft face, such as copper, for installing pins.

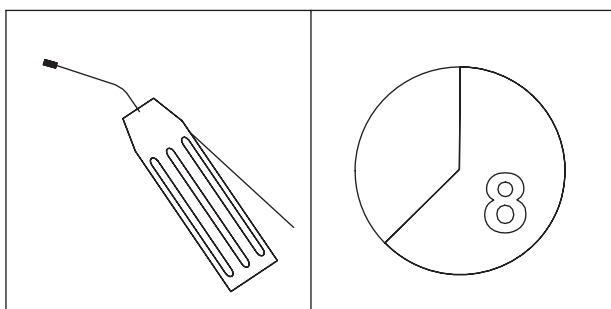
Pressurised hydraulic fluid or grease, which penetrates the skin can cause serious injury. Take the necessary safety precautions (safety clothing and protection for the face and hands) to avoid such risks. Also, before using these products, read the manufacturer's instructions for their use. If hydraulic fluid penetrates the skin, call a doctor immediately.

1.5 FAILURE DURING OPERATION: If an attachment failure occurs during operation, disconnect the attachment from the host machine and take measures against its use until a satisfactory repair has been carried out.

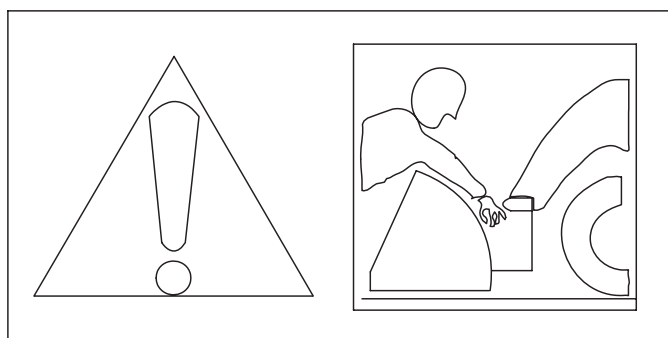
1.6 SAFETY DECALS:

! An illegible or missing decal may have serious consequences.

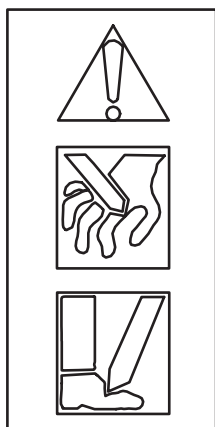
Replace safety decals that are missing or damaged.



IMPORTANT - GREASE EVERY 8 HOURS OF OPERATION:-
Part No. WH-CE-0004.



CAUTION - DANGER OF CRUSHING TO HAND & ARM:-
Part No. WH-CE-0002



WARNING - DANGER OF CUTTING TO FINGERS & HAND / FOOT:-
WH-CE-0003.

2. OPERATING INSTRUCTIONS

2.1. INSPECTION:

UPON DELIVERY :- Check for transit damage.
Check hydraulic system for any damage or leaks.

DAILY INSPECTIONS :- Check for hydraulic leaks.
Check for insecure bolts, nuts and pins.
Check for missing parts.

MONTHLY INSPECTIONS :- Check for excessive wear on cutting edges, teeth or tines. Replace with genuine spares when necessary.

2.2 APPLICATION: For all earth moving, and load handling operations refer to the machine manufacturer's handbook for correct use of machine and its controls.

Ensure that the attachment is suitable for the work in hand. e.g. check that the capacity of the attachment is matched to the density of the load.

Always carry the load low !

2.3. SITE FAMILIARITY: Before operating the machine and attachment on a new site, check and locate any holes, obstacles, and debris that could be in the machine area,

Locate any unavoidable 'danger areas' (electric power lines, bridges, tight corners, etc.) and make sure you can work safely in these areas.

Electric power lines, gas pipes, water pipes or other underground installations can cause injury or death. Find out about the location of underground installations before you operate the attachment in a new area.

Be aware of people in the vicinity of the attachment. Send away those whose presence is not required.

2.4. NORMAL USE:

! Hillside operation can be dangerous. Rain, snow, loose gravel or soft ground change working conditions. Before you work on a hillside, make sure the attachment can be operated safely.

This attachment is designed to operate with the host machine under normal working conditions. Care should be taken if weather or site conditions become difficult.

Operate the attachment carefully and smoothly in poor weather and on uneven sites.

2.5. OTHER USES: This attachment is designed for a specific application.

2.6. HANDLING AND TRANSPORTATION: Buckets and attachments can become unstable when not connected to their host machine. Great care should be taken when handling or transporting buckets and attachments. Personnel should be made aware of the risk of injury if due care is not taken. When transporting, always ensure that the attachments are securely strapped or roped to the carrying vehicle.

3. MAINTENANCE

! Never attempt to service a hydraulic circuit component without having first made sure it is no longer under pressure. To do this, carefully read the following instructions.

3.1. GENERAL INSTRUCTIONS: Attachments which operate with hydraulic power are supplied through the auxiliary hydraulic system of the host machine.

Connection to the auxiliary hydraulic circuit is by means of quick release couplers.

To connect or disconnect the quick couplers the operator has to relieve the hydraulic pressure in the host machine. To relieve pressure, please see machine manufacturer's instruction manual.

Regularly check the attachment for signs of damage or wear. Repair or replace damaged components immediately.

If welding repairs are necessary, please observe the following points :-

1. Remove attachment from host machine.
2. Always employ a competent and fully qualified welder to carry out the repair.

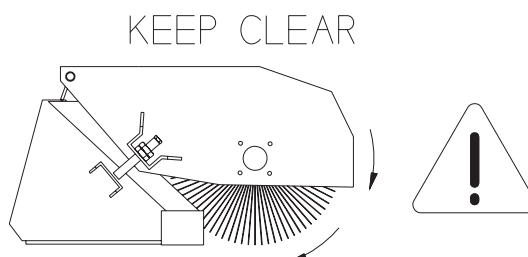
When ordering replacement parts always quote the part number and attachment serial number.

3.2. LUBRICATION: DAILY OR EVERY 8 HOURS OPERATION:- Grease all hinge and hydraulic cylinder swivel points with Molydisulphide Grease

3.3. GROUND ENGAGING COMPONENTS: Excessive wear to bucket cutting edges & teeth, and tines on fork and grapples will lead to reduced performance. Replacing these parts when necessary will increase performance, and reduce wear and tear to the host machine.

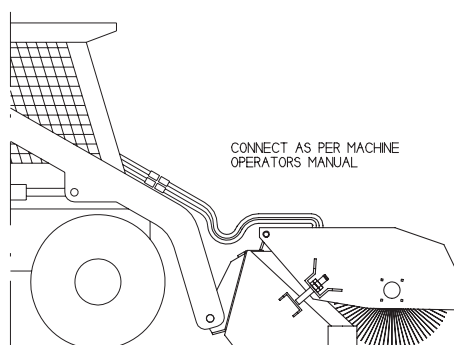
4. STANDARD BROOM BUCKETS AND BROOM BUCKET - PLANNING SPECIAL SAFETY

- 1) It is essential that before operating this attachment the operator is fully capable of safely operating the host machine.
- 2) The operator should also be aware that the rotary action of the broom shaft is potentially dangerous to bystanders.
- 3) The operator should ensure that no other persons are present in the working area.

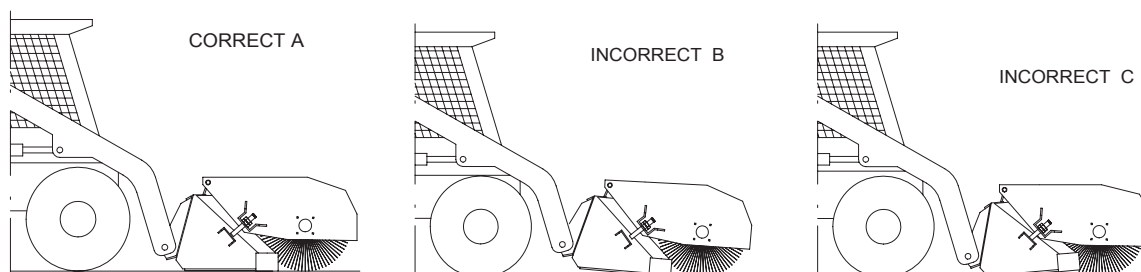


OPERATION

- 1) Each broom bucket is designed and manufactured to function on a specific machine.
- 2) The operator should ensure that the broom bucket is the correct unit for the host machine by checking the attachment identification plate which is attached to the rear of the bucket.
- 3) Connection of the broom bucket and the hydraulic hoses should be carried out as per the instructions in the host machines operating manual.

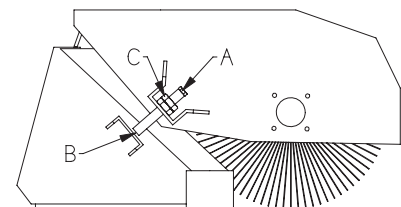


- 4) The broom bucket should operate in a level plane.

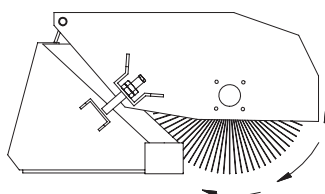


Operating in condition B and C will cause excessive wear to the cutting edge (C) and excessive wear to the base of the bucket (B). It will also reduce the efficiency of operation.

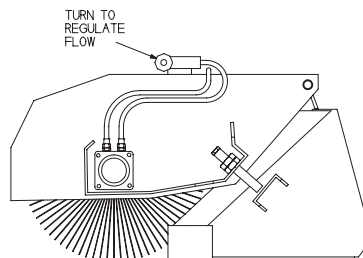
- 5) Adjustment of the broom height.
 a) Place the bucket on level ground.
 b) Turn the adjusting bolt 'A' so there is an 8mm gap at 'B' when the bristles are touching the ground.
 c) Tighten the locking nut 'C'



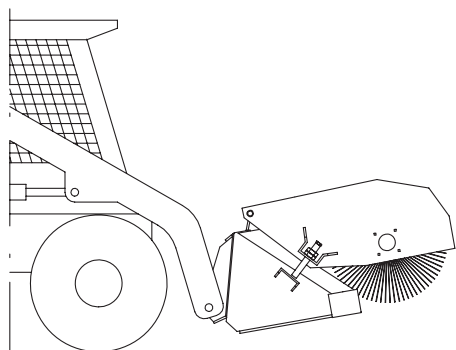
- 6) Direction of rotation of bristles.



- 7) Brushing operation
 a) The broom bucket will operate with the host machine travelling either forward or reverse.
 b) The speed of rotation of the brush is dependant on the following factors:
 c) The type of material to be swept
 ii Wet or dry conditions
 iii The host machine speed of travel
 d) The speed of rotation can be adjusted by the control valve (when fitted) on of the broom canopy.



- 8) Carry the broom bucket with the host machines loader arms fully down and the tilt cylinders fully retracted when not in use.



- 9) **DO NOT EXCEED THE OPERATING CAPACITY OF THE HOST MACHINE**
 10) When the bucket is to be discharged, reverse the brush direction and dump the bucket as normal

MAINTAINANCE

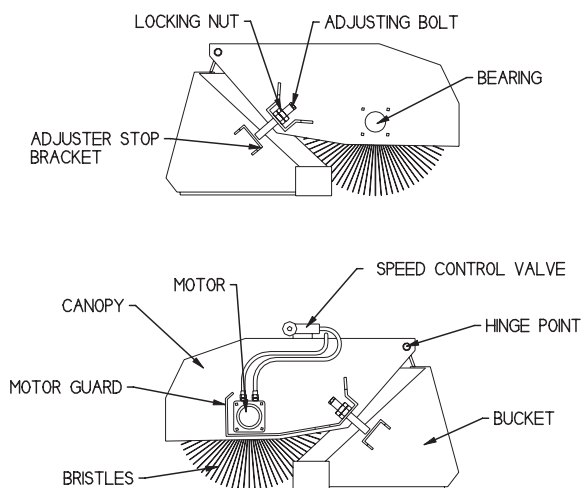
DAILY OR EVERY 8 HOURS OPERATION

Grease all hinge and Hydraulic swivel points with molydisulphide grease.
Check for damage or leakage of hydraulic motors, hoses and fittings.

MONTHLY

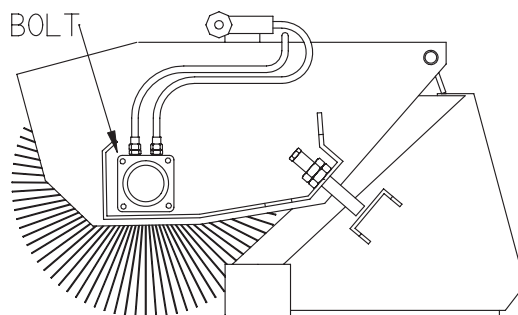
Check bearings, cutting edge, bucket and hinges for wear and damage.
Replace damaged or worn components immediately to ensure safe and efficient operations of this attachment.

BROOM BUCKET - MAIN COMPONENTS

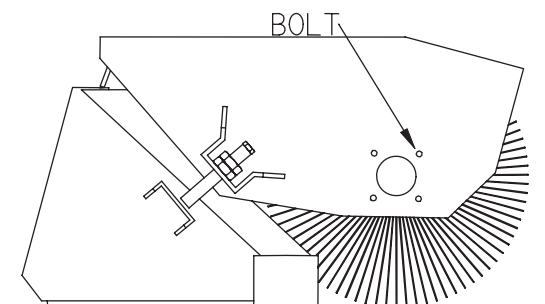


REPLACING BRISTLES & SPACERS ON BROOM BUCKET ATTACHMENTS

- 1) Raise the broom bucket canopy with the aid of the Adjusting bolt.
- 2) Unscrew and remove the 4 bolts holding the motor to the canopy, pull the motor off the main shaft.

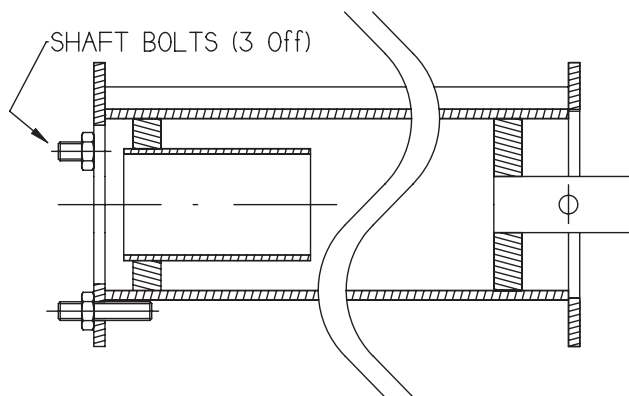


- 3) Unscrew and remove the 4 bolts holding the bearing to the canopy.



- 4) Remove the Shaft from the canopy with bearings, bristles and spacers; remove the bearing.

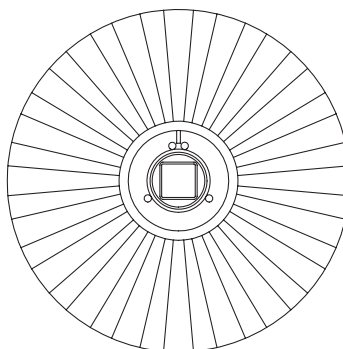
5) Unscrew and remove the 3 shaft bolts holding the bristle retaining plate, remove the retaining plate.



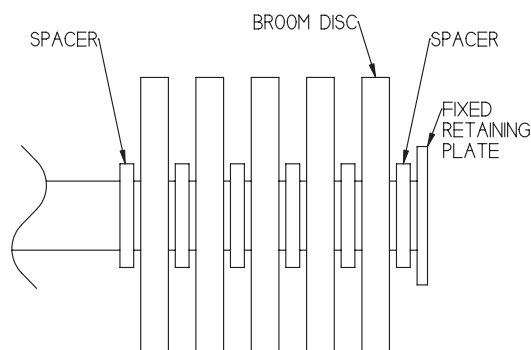
6) The spent bristles and spacers can be pulled from the shaft from the motor end.

7) When replacing the bristles, a spacer is the first part to be fitted on the shaft, and pushed to the motor end.

8) The second part to be fitted on the shaft is a brush segment, ensuring the tab is located in position between the pair of bars next to each other on the shaft.



9) Place spacers and bristles in turn, on the shaft, until the end of the shaft is reached, the final part must be a spacer and **MUST** stand proud from the end of the shaft by approx 25mm.



10) Replace the bristle retaining plate with the 3 bolts, ensuring that the bolts are holding all the brush segments and spacers tightly.

11) Fit the bearing to the end of the shaft and replace the shaft inside the canopy.

12) Replace the 4 bolts which hold the bearing to the canopy.

13) Replace the motor onto the main shaft and replace the 4 bolts which hold it to the canopy.

