

A close-up photograph of a black metal bucket broom attachment. The attachment is made of heavy-duty black metal plates and bolts. A blue brush strip is visible at the bottom. A silver chain is attached to the left side. The background is dark.

CLEANA BUCKET BROOM OPERATOR'S MANUAL

PM-000016-C

2 TO THE PURCHASER

Congratulations on the purchase of your new DIGGA Cleana Bucket Broom! This product was carefully designed and manufactured to give you years of dependable service. To keep it running efficiently please read the instructions in the manual to keep it in top working condition.

Be sure to observe all safety precautions and maintenance procedures as described in this manual.

No responsibility will be taken by Digga for any omissions or errors in this manual as all data is correct at time of print, however Digga reserve the right to revise this manual without further notice.

Please contact your DIGGA dealer for any further information pertaining to this product or for further information on other Digga products.

ABOUT THIS MANUAL

This manual has been designed to help you do a better, safer job. **Read this manual carefully and become familiar with its contents.** Remember; never let anyone operate this unit without reading the "Safety Precautions" and "Operating Instructions" sections of this manual. Unless noted otherwise, right and left sides are determined from the position of the operator when behind the product facing forward.

		
www.digga.com		
Model		
Serial No.		
Flow (max)		
Pressure (max)		
Power		
Weight		
☐ Approximate Oil Capacity:		
DE-500168 MADE IN AUSTRALIA		

YOUR DIGGA CLEANA BUCKET BROOM IS A USER SERVICEABLE PART.

IMPORTANT: WHEN SERVICING OR ASSEMBLING YOUR PRODUCT, REMEMBER TO USE ONLY GENUINE DIGGA REPLACEMENT PARTS. SUBSTITUTE PARTS MAY NOT MEET THE STANDARDS REQUIRED FOR SAFE, DEPENDABLE OPERATION. USE OF NON GENUINE DIGGA PARTS WILL VOID WARRANTY AND DIGGA WILL ACCEPT NO LIABILITY WHAT SO EVER FOR CONSEQUENTIAL OR SPECIAL DAMAGES.

MODEL _____

SERIAL NUMBER _____

DATE PURCHASED _____

The parts department needs this information to insure accurate parts can be sent to the authorised service agent.

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MODELS COVERED IN THIS MANUAL

CLEANA BUCKET BROOM HIGH FLOW & STANDARD FLOW	SIDE SWEEP ACCESSORY
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4 PREPARATION FOR USE

To avoid any inconvenience before operation, please check that you have received the following items which you may have ordered. Items may differ depending on type of machine the Cleana Broom is to be fitted to.

① CLEANA BROOM ATTACHMENT

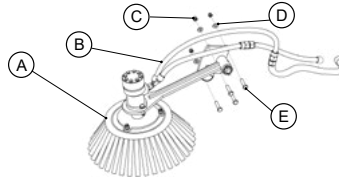
② DE-000327



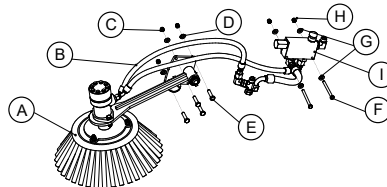
③ DE-000326



④ (OPTIONAL) SIDE BROOM ATTACHMENT FOR STANDARD FLOW CLEANA BROOM (KIT PART NO. BR-000820)



⑤ (OPTIONAL) SIDE BROOM ATTACHMENT FOR HIGH FLOW CLEANA BROOM (KIT PART NO. BR-000938)



REF	DESCRIPTION	QTY
1	CLEANA BROOM	1
2	DE-000327 DRILLING TEMPLATE - REGULATING VALVE	1
3	DE-000326 DRILLING TEMPLATE - SIDE SWEEPER MOUNTING	1
4	SIDE BROOM ATTACHMENT - FOR STANDARD FLOW CLEANA BROOMS	1
5	SIDE BROOM ATTACHMENT - FOR HIGH FLOW CLEANA BROOMS	1

REF	OPTIONAL SIDE BROOM - STANDARD FLOW	QTY
A	SIDE BROOM ATTACHMENT	1
B	HOSE KIT - STANDARD FLOW (REFER TO PAGE 21)	1
C	NUT NYLOC M10 CL8 ZINC PLATED	4
D	WASHER M10 ZINC PLATED	4
E	BOLT HEX M10 X 40 G8.8 ZINC PLATED	4

REF	OPTIONAL SIDE BROOM - HIGH FLOW	QTY
A	SIDE BROOM ATTACHMENT	1
B	HOSE KIT-HIGH FLOW (REFER TO PAGE 26)	1
C	NUT NYLOC M10 CL8 ZINC PLATED	4
D	WASHER M10 ZINC PLATED	4
E	BOLT HEX M10 X 40 G8.8 ZINC PLATED	4
F	BOLT HEX M8 X 90 G8.8 ZINC PLATED	2
G	WASHER M8 ZINC PLATED	4
H	NUT NYLOC CLS8 ZINC PLATED	2
I	PRESSURE COMPENSATED FLOW CONTROL VALVE	1

3 SAFETY PRECAUTIONS - GENERAL INFORMATION

This section is composed of various warnings and safety tips. **Read and learn all the information in this section before you attempt to use your attachment.** Also read your machine's owner's manual before using your equipment. This knowledge will help you operate your unit safely. **Do not take this information lightly, it is presented for your benefit and for the benefit of others working around you.**

The DIGGA Cleana Bucket Broom receives its power from the Parent Machine through the Auxiliary Valve circuit with Quick Release Couplers normally located on the machine arms near the front. Attaching points on the Cleana Bucket Broom are the same as the bucket attaching points on your machine.

If you are in any doubt contact your nearest DIGGA Dealer for assistance.

TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY OR OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH.

THIS SYMBOL MEANS:



**ATTENTION!
BECOME ALERT!
YOUR SAFETY IS INVOLVED!**

SIGNAL WORDS: Note the use of signal words DANGER, WARNING, and CAUTION with the safety messages. The appropriate signal word for each has been selected using the following guidelines:

DANGER: Indicates an imminently hazardous situation, which if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations, typically for machine components which, for functional purposes, cannot be guarded.

WARNING: Indicates a potentially hazardous situation, which if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

CAUTION: Indicates a potentially hazardous situation, which if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

TO THE OPERATOR

The primary responsibility for safety with this equipment falls to the operator. Make sure that the equipment is operated only by trained individuals that have read and understand this manual. Don't hurry the learning process or take the unit for granted. It is the skill, care, common sense, and good judgement of the operator that will determine how efficiently and safely the job is performed. Know your equipment before you start. Know its capabilities and how to operate all the controls. Visually inspect your equipment before you start, ensure correct assembly and installation of the attachment and never operate equipment that is not in proper working order. Practice the operation of your new attachment and become familiar with the controls and the way it handles on your machine. If there is any portion of this manual or function you do not understand, contact your local authorized dealer or the manufacturer.

3 SAFETY PRECAUTIONS - GENERAL INFORMATION

1. Never operate the Attachment without first reading and understanding the entire operator's manual.
2. **Do not paint over.** remove or deface any safety signs or warning decals on your equipment.
3. **Follow all safety decals.** Keep them clean and replace them if they become worn, damaged or illegible.
4. Know your equipment inside and out. Know how to operate all controls and know emergency shut down procedures.
5. **Keep all stepping surfaces, pedals, and controls free from dirt, grease and oil** to help avoid injury from slipping or a fall when getting on or off equipment.
6. Operate the attachment only in daylight or sufficient artificial light.
7. Always carry loads close to the ground. Do not step off machine platform with load raised.
8. **Turn off engine before performing maintenance.** All maintenance can be performed with the machine arms lowered. If lift arms must be left raised for any reason, use a positive lift arm lock to secure the arms in place. Serious damage or personal injury could result from lift arms accidentally lowering.
9. **Reduce speed when driving over rough terrain.** on a slope, or turning to avoid overturning the machine.
10. **Check your work area and know where all utility lines are.** Avoid hitting underground or overhead electrical wires, cables, pipes, fence posts, gas lines, etc.
11. **Never operate equipment while under the influence of** alcohol, prescription drugs or any other form of illegal recreational drugs which could inhibit physical and/or mental capacity.
12. Do not exceed rated operating capacity, as machine may become unstable resulting in loss of control.
13. **Always lower the loader arms or machine boom to the ground,** shut off the engine and remove the key before getting off the unit.
14. Operators, helpers, and other personnel working near Cleana Bucket Broom must wear steel-toe safety shoes, safety glasses, and hard hats as a minimum. Hearing protection, respirators, and personnel protective clothing will be specified in the site-specific Health and Safety Plan.
15. Do not smoke when refuelling machine. Allow room in the gas tank for expansion. Wipe up any spilt fuel. Secure cap tightly when done.
16. Be alert to others in the work area. Be sure others know when and where you will be working. Make sure no one is behind equipment or within 15 metres of it operating.
17. Loose fitting clothing, long hair, jewellery and equipment which might become entangled in moving equipment are prohibited while working near Cleana Bucket Broom.
18. Cleana Bucket Brooms must be shut down and properly locked-out and tagged before repairs or maintenance is performed. Only properly trained and qualified individuals are permitted to perform repairs and maintenance.
19. Site workers shall not be allowed on/in a Cleana Bucket Broom while it is in operation or the equipment is being moved.
20. Machinery must be shut down and the key removed before being left unattended.
21. Controls must be engaged slowly until hydraulic fluids and the unit are up to operating temperature. This is critical during cold weather. Impact or shock loading of the Cleana Bucket Broom is prohibited.
22. Cleana Bucket Brooms shall be used only for their designed intent and shall not be loaded beyond their rated capacity. Overloading or exceeding the manufacturers specifications will void all warranty.

3 SAFETY PRECAUTIONS - GENERAL INFORMATION

23. Sharp braking or hoisting is prohibited.
24. Only authorized, properly trained workers will be permitted to operate Cleana Bucket Broom. All unnecessary personnel will stand clear of Cleana Bucket Brooms or devices while they are in operation.
25. The operator shall verbally alert site workers and visually ensure all site workers are clear from dangerous parts of equipment before starting or engaging equipment.
26. Cleana Bucket Broom must be stationary before adding or removing Side Sweep Broom attachment, or making adjustments to the equipment.
27. Cleana Bucket Brooms shall be cleaned only when the mechanism is in neutral and stopped; long-handled shovels shall be used to move debris from the Cleana Bucket Broom. Materials heavier than 10kgs must be moved mechanically or by using at least two people.
28. Operations must be stopped in the event of local thunderstorm, or lightning activity. During operation, weather conditions shall be monitored: operations shall cease during electrical storms or when electrical storms are imminent.



WARNING! ONLY OPERATE THIS PRODUCT IN ACCORDANCE WITH DESIGN INTENTIONS.

- Never use Cleana Bucket Broom on a Loader that is not equipped with a cab or ROPS, and operator restraints (seat belts or equivalent devices).
- Know your machines safe operating weight limit, and the weight of loaded attachment.
- Use caution when working close to fences and ditches, or on uneven ground.



USE CAUTION WHEN ADJUSTING, SERVICING OR REPAIRING THIS PRODUCT.

- Make no modifications to your Cleana Bucket Broom.
- When making repairs, use only genuine Digga parts for fasteners, hydraulic hoses, or hydraulic fittings, use only properly rated parts.
- Replacement parts, for parts with safety signs attached, must also have safety signs attached.



USE CAUTION WHEN MOUNTING THIS PRODUCT TO YOUR MACHINE.

- Refer to the operator's manuals of your machine, and your quick-attach for special or detailed mounting instructions.
- This product should fit onto the quick-attach Frame or Hitch.
- If this product does not fit properly, contact your Digga Dealer before operating.
- Never place any part of your body into the mounting plate, frame, hitch or loader holes. A slight movement of the power unit or this product could cause serious injury.
- Where 'Dead Man' connections are connected or installed it is illegal to disengage, tamper with or remove them.

3 SAFETY PRECAUTIONS - GENERAL INFORMATION



WARNING! USE CAUTION WHEN DEALING WITH HYDRAULICS DURING ANY TYPE OF ASSEMBLY, OPERATION, MAINTENANCE, OR OTHER WORK ON OR NEAR THIS PRODUCT.

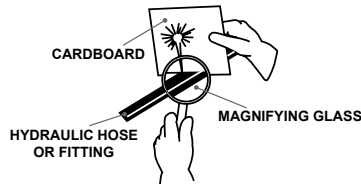
- Hydraulic fluid under pressure can penetrate the skin and cause serious injury or death. Hydraulic leaks under pressure may not be visible!
- If any fluid penetrates the skin, GET IMMEDIATE MEDICAL ATTENTION!!
- Wear safety glasses, protective clothing, and use a sound piece of cardboard or wood when searching for hydraulic leaks. **DO NOT USE YOUR HANDS!**
- Before connecting or disconnecting hydraulic hoses, read your machine or power unit's operator's manual for detailed instructions on connecting and disconnecting hydraulic attachments.
- Make certain that all parts meet the specifications for this product when installing or replacing hydraulic hoses or fittings.
- After connecting hydraulic lines:
 - Slowly and carefully raise the loader and cycle the rollback/dump cylinders to check hose clearances and to check for any interference.
 - Operate the hydraulics on this product to check hose clearances and to check for any interference.
 - Make certain that the hoses cannot interfere with or actuate the quick-attach mechanism.
 - Make certain that hoses will not be pinched, or get tangled, in any equipment.
- Do not lock the auxiliary hydraulics of your power unit in the "ON" position.
- Refer to your power unit's operator's manual and this manual for procedures and intervals, then inspect and maintain the entire hydraulic system to insure that the fluid remains clean, that all devices function properly, and that there are no fluid leaks.

Always wear safety goggles or glasses when inspecting equipment.

WARNING!



If injured by injected fluid, see a doctor at once. If your doctor is not familiar with this type of injury, ask him to research it immediately to determine proper treatment.



Escaping fluid under pressure can have sufficient force to penetrate the skin causing serious personal injury. Fluid escaping from a very small hole can be almost invisible. Use a piece of cardboard or wood, rather than hands to search for suspected leaks. Keep unprotected body parts, such as face, eyes, and arms as far away as possible from a suspected leak. Flesh injected with hydraulic fluid may develop gangrene or other permanent disabilities.

For additional safety information please see Risk Management booklet. To obtain a copy contact Digga Head Office on +61 7 3807 3330

5 INSTALLATION AND OPERATING INSTRUCTIONS

The DIGGA Cleana Broom attaches to the tool bar/quick-attach mechanism of your Machine. Due to this arrangement, thorough knowledge of the machinery controls is necessary for machine operation. Read and understand your machine operator's manual for information regarding machine operation before attempting to use the Cleana Broom. When a Cleana Broom is purchased from DIGGA or a DIGGA Dealer/Distributor the frame/attachment is matched for suitability and compatibility to the flow, pressures & load ratings of the original machine it was purchased for. For fitment of the Cleana Broom to other machines you must first contact your DIGGA dealer and receive written confirmation to ensure you do not incorrectly fit the Cleana Broom to a machine with higher, pressure or rated load capacities than what the Cleana Broom was designed for. Warranty will be void if the Cleana Broom is fitted to an alternative machine without first receiving written confirmation from your DIGGA dealer. Exceeding the recommended max flow, pressure, or rated load capacity of the Cleana Broom as stated on the serial tag will void all warranty. Check the work site and identify the extent of the work to be carried out and note any possible hazards or constraints. Underground cables, services etc. Check with relevant government departments on the location of these before commencement of any work. Review the job at hand and determine the Cleana Broom is appropriate for the intended conditions. *For example:* Do not use to collect rocks.

INSTALLATION INSTRUCTIONS

1. Remove the shipping banding from around the Cleana Bucket Broom and Frame.
2. Remove any attachments from the front of the Machine.
3. Ensure you have read the serial tag on the Cleana Bucket Broom to obtain the max flow and pressure ratings. Ensure you machine flow and pressure settings are aligned with the requirements of the Cleana Bucket Broom.



NOTE: NEVER EXCEED THE MAX FLOW AND PRESSURE RATINGS AS WARRANTY WILL BE VOID.

4. Following all standard safety practices and the instructions for installing an attachment in your machine operator's manual, install the Cleana Bucket Broom onto your Machine.



NOTE: IT IS IMPORTANT TO MAKE SURE THE LOCKING MECHANISM ON YOUR QUICK ATTACH IS ENGAGED, THEREFORE LOCKING THE ATTACHMENT ONTO THE MACHINE.

5. Lower the unit to the ground and remove the key from the parent machine.
6. Relieve any pressure from the auxiliary hydraulic system and after making sure that there is not any foreign matter on the hydraulic couplers, connect the power and return couplers to the auxiliary hydraulic system of your machine.
7. Route the hoses in such a fashion as to avoid pinching or chafing.
8. Use the adjusting handles connected to the axle, located at each end of the broom, to adjust the brushes to the correct position for use. (See Pg 11 - Brush Adjustment) Your attachment is now ready for use.

5 INSTALLATION AND OPERATING INSTRUCTIONS

CLEANA BUCKET BROOM OPERATION

1. Manoeuvre machine to required location for sweeping, lower the loader arms. Ensuring the brushes are approximately 30mm below the bucket edge and tilt the broom forward until the bucket cutting edge is just clear of the ground.
2. Start brushes rotating in the required direction via the auxiliary lever and move forward or reverse depending on the type of sweeping required.
3. Operate the machine at medium RPM. If excessive dust is being raised, reduce brush speed via lower RPM's and travel slower.
4. When the bucket requires emptying, stop rotation of the brushes, lift loaders arms and crowd bucket forward so the Cleana Bucket Broom hood swings away from the bucket.

CLEANA BUCKET BROOM OPERATION WITH THE SIDE BROOM INSTALLED

1. The optional side broom attachment has been installed and setup at the factory with your Cleana Bucket Broom, you will not need to make any modifications to the installation.
2. There are two optional side sweeper kits for Cleana Bucket Brooms. One kit is for the standard flow Cleana Bucket Broom and the other is for the high flow Cleana Bucket Broom . The two kits are different hence carry different part numbers:

THE STANDARD FLOW KIT – PART NUMBER BR-000820 (DEPICTED ON PAGE 3) cannot be set up at the factory as no pressure compensated flow control valve is provided on this kit. It is the responsibility of the end user to ensure that the hydraulic flow to the side sweeper broom maintains a recommended continuous flow of 60 litres per minute which equates to a side broom rotational speed of 300 rpm and does not operate at a higher flow rate than 75 litres per minute which will equate to a side broom rotational speed of 375 rpm.

THE HIGH FLOW KIT – PART NUMBER BR-000938 (DEPICTED ON PAGE 3) is set up at the factory to handle a continuous hydraulic flow rate of 60 litres per minute which equates to a side broom rotational speed of 300 rpm .The side sweeper motor will however handle a maximum continuous hydraulic flow of 75 litres per minute which will equate to a side broom rotational speed of 375 rpm. Flow to the side sweeper motor is controlled by the adjustment of the black knob on the pressure compensated flow control valve shown in the photo on page 28).



WARNING: THE SPEED OF THE SIDE BROOM HAS TO BE SET BY A PERSON OTHER THAN THE OPERATOR, WHEN CARRYING OUT THIS PROCEDURE EXTREME CARE MUST BE TAKEN DUE TO THE ROTATING BRUSH.

3. Your side broom is now ready for use in sweeping area's such as kerbs, alongside walls or ledges or where close access is restricted due to motor and cover protrusion.
4. On the pressure compensated flow control valve, the black knob on the valve should not be adjusted with the side sweeper broom in the vertical position.

5 INSTALLATION AND OPERATING INSTRUCTIONS



DANGER: DO NOT OPERATE THE SIDE SWEEPER BROOM WITH THE ARM IN THE VERTICAL POSITION.

REMOVAL AND STORAGE

1. Set the attachment on the ground and follow the standard shut down procedure in your loader operators manual.
2. With the loader OFF, disengage the attachment lock pins, release hydraulic pressure from the auxiliary hydraulic system and disconnect the hydraulic couplers from the loader.
3. Start the machines engine and make sure that the lift arm is lowered and in contact with the loader frame.
4. Roll the attachment mechanism forward and slowly back up until the attachment is free from the machine.
5. Remove and store the attachment in a dry and protected place. Leaving the Cleana Bucket Broom and Side Broom Attachment outside will materially shorten its life.

WHEN ATTACHMENTS NOT ON PARENT MACHINE

It is a requirement of the Australian Work place Health and Safety act 2011 that safe systems of work are employed when handling any attachments. Complete compliance with Work place Health and Safety issues is compulsory and all due care and attention must be observed at all times in any method of moving, transporting or storing any such device when not attached to a parent machine. We recommend attachments are well secured when being moved or in transit and furthermore prior to moving, storing, loading/unloading or parking it is suggested that the attachment is strapped/secured to a pallet or enclosed in a suitable container to minimise any movement or loss of the load during such activity. NO responsibility for loss or damage to persons or property in any regard can be attributed to Digga.

TRANSPORTING THE ATTACHMENT

1. Follow all federal, state and local regulations when transporting the unit on public roads.
2. Use extra care when loading or unloading the machine onto a trailer or truck. Disconnect hydraulic couplers during transportation.

6 MAINTENANCE

The key feature of your Digga Cleana Angle Broom is low maintenance. It contains user serviceable parts. When servicing your product remember to use only genuine Digga replacement parts. Use of non-genuine Digga parts will void warranty and Digga will accept no liability what so ever for consequential damages as a result thereof.



SAFETY FIRST!! READ AND UNDERSTAND THE SAFETY INSTRUCTIONS BEFORE BEGINNING ANY BROOM MAINTENANCE.

BEFORE FIRST USE

- Inspect the attachment for shipping damage. If damage does exist, do not operate until the damaged parts have been replaced or repaired.

BEFORE EACH USE

- Make sure that all nuts and bolts are in place and properly tightened.
- Make sure that all other fasteners are in place and are performing their specified function.
- Make sure that all hydraulic fittings are tightened and that there are no leaks in any fittings or hoses.
- Make sure that all safety signs are in place, are clean, and are legible. (SEE THE SAFETY SIGN SECTION)
- Check for wear and tear on pins, linkages, cutting edges and replace any damaged parts and excessively worn parts.
- Use only manufacturer recommended replacement parts. Other parts may be substandard in fit and quality.
- Always wear safety goggles or glasses when inspecting equipment.
- Grease all grease nipples at the start of the day.

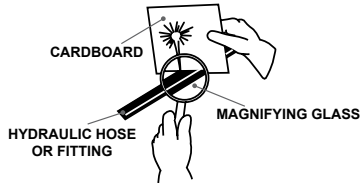
EVERY 10 HOURS OF USE

- Check the Broom axle is inline and adjust as necessary.

Always wear safety goggles or glasses when inspecting equipment.

WARNING!

If injured by injected fluid, see a doctor at once. If your doctor is not familiar with this type of injury, ask him to research it immediately to determine proper treatment.

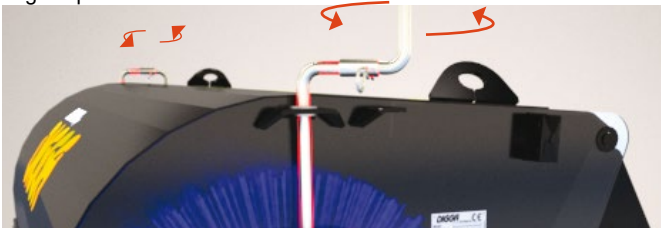


Escaping fluid under pressure can have sufficient force to penetrate the skin causing serious personal injury. Fluid escaping from a very small hole can be almost invisible. Use a piece of cardboard or wood, rather than hands to search for suspected leaks.

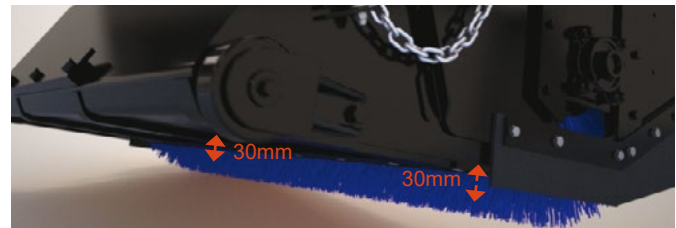
Keep unprotected body parts, such as face, eyes, and arms as far away as possible from a suspected leak. Flesh injected with hydraulic fluid may develop gangrene or other permanent disabilities.

BRUSH ADJUSTMENT

Remove handle pin, twist handle, and replace pin. Re-adjust the axle to the correct height using both handle adjusters. Return handles to their original position.



TIP: Set the height of the brush so the bottom of the brush is approximately 30mm lower than the bucket cutting edge. The brush must be level.



6 MAINTENANCE

MAINTAINING LIFE OF THE POLY BRUSH

BRUSH LEVEL

Brush life can decrease by 50% or more if you don't level your brush frequently. Brush level should be checked before operating.

BRUSH DOWN-PRESSURE

Improper down-pressure can decrease brush life by 95%. The tips of the bristles provide the most efficient sweep. When too much down-pressure is applied, the brush is working with the sides of the bristles, not the tips. This eliminates the natural flicking action of the tips and reduces sweeping effectiveness.

Check for correct down-pressure daily. Before starting a sweeping job, park your machine and Cleana Broom on a level area, lower the rotating brush down to the ground, and then lift. Check the cleaned area below the brush. A brush with correct down-pressure will clear a 25 to 75 mm path along the length of the brush.

SPEED OF VEHICLE WHEN SWEEPING

Improper ground speed not only damages the brush but can also damage sweeper components. If the ground speed is too fast, the debris piles up in front of the brush. Material is bulldozed rather than swept. Bulldozing causes excessive pressure on the brushes, core, drive lines, frame and can prematurely wear the rubber flaps on the sides and front of the Cleana Broom.

Always sweep at a high enough brush speed and low ground speed to effectively discharge the material being swept.

TO REPLACE POLY BRUSH

1. Following all standard safety practices and the instructions for removing an attachment in your machine operator's manual, remove and disconnect the Cleana Bucket Broom from your Machine.
2. Undo and remove the side retaining plates with rubber flaps (Fig 1), on both sides of the broom.
3. Using suitable lifting equipment lift the broom, via the lifting lugs, approximately 100 mm above the ground.
4. Rotate the handle extension (Fig 2), then rotate the broom handle (Fig 3) to lower the poly brush until it drops down to the ground.

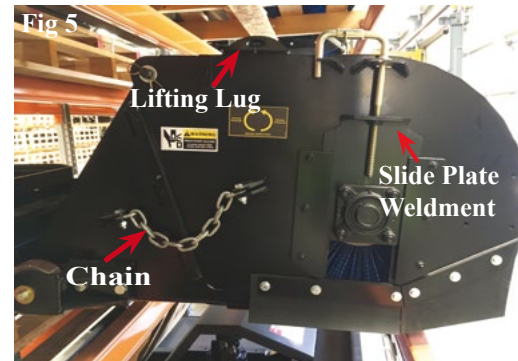
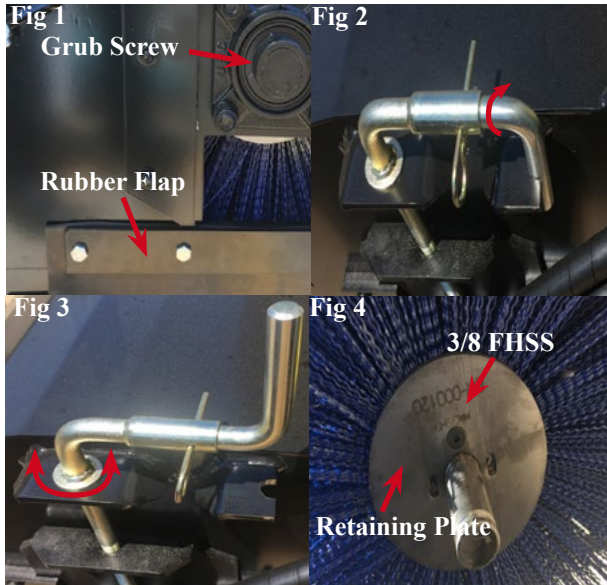


WIND DOWN BOTH SIDES OF THE BROOM SIMULTANEOUSLY TO ENSURE THAT THE POLY BRUSH SLIDES OUT EASILY.



TO REPLACE POLY BRUSH (CONT.)

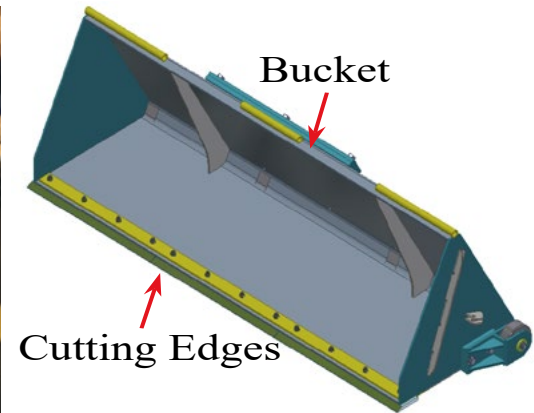
5. Using suitable lifting equipment lift the broom hood weldment, via the lifting lugs, leaving the brush remaining on the ground.
6. Lower the weldment to the ground in an area away from the brush to allow you to work on the brush.
7. Loosen the two grub screws which secure the bearing collar to the shaft (Fig 1).
8. Slide the bearing housing, with attached slide plate weldment (Fig 5), off the shaft.
9. Remove the two 3/8 inch flat head socket screws (FHSS) which secure the retaining plate to the shaft. (Fig 4)
10. Slide the retaining plate and then the worn poly brush off the bearing side of the shaft.
11. Replace the worn poly brush.
12. Reassemble all parts in the reverse order of above.
13. Readjust the axle to correct height using the adjusters. Remember to set the height of the brush so the bottom of the brush is approximately 30mm lower than the bucket cutting edge.



6 MAINTENANCE

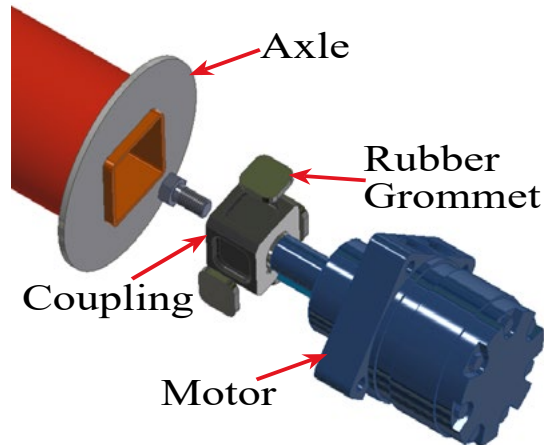
REPLACING CUTTING EDGES

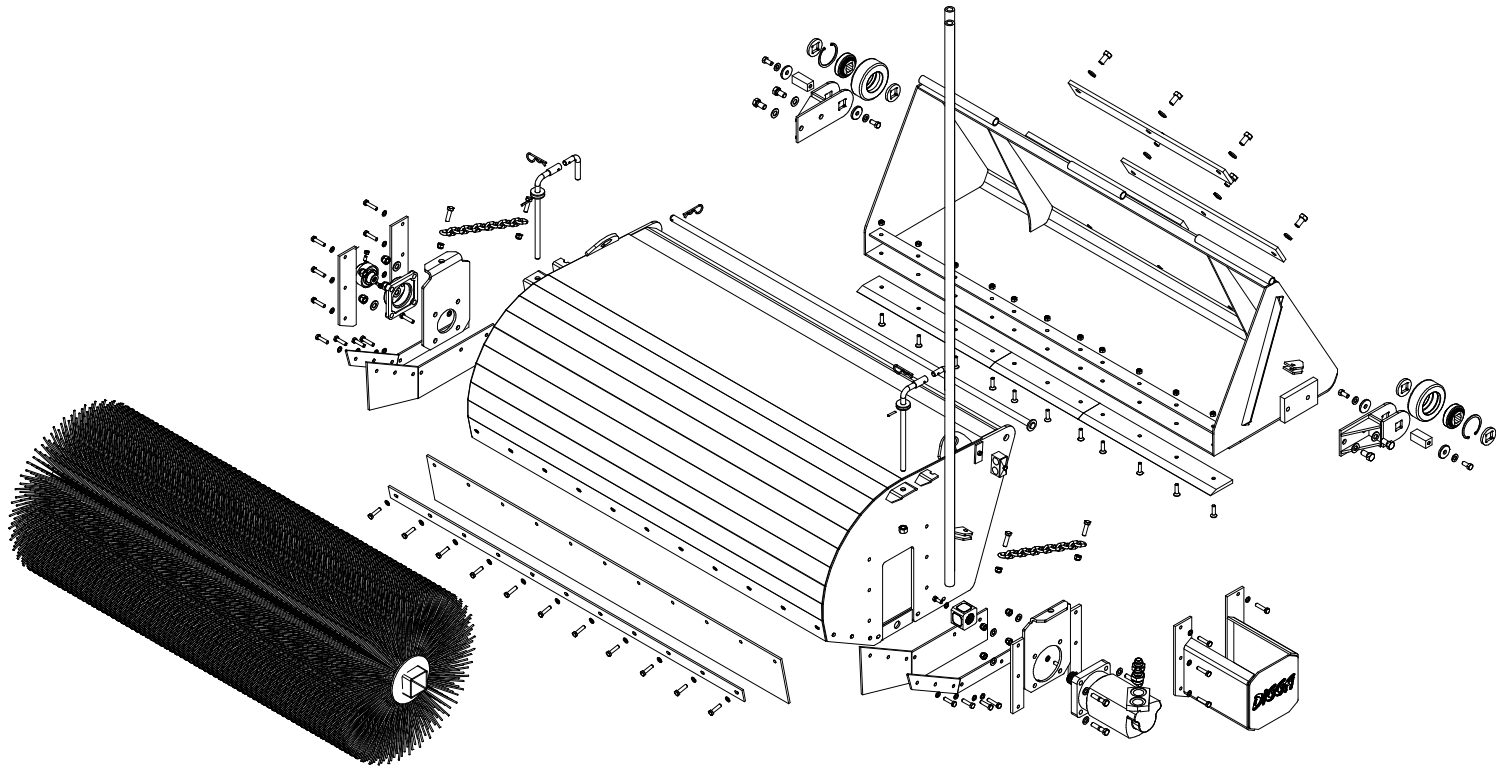
1. Following all standard safety practices and the instructions for removing an attachment in your machine operator's manual, remove and disconnect the Cleana Bucket Broom from your Machine.
2. Disconnect one side of the chain which runs between the hood and the bucket on either side of the broom.
3. Remove the hood pivot pin.
4. Using suitable lifting equipment lift the broom hood assembly, via the lifting lugs, leaving the bucket remaining on the ground.
5. Lower the hood assembly to the ground in an area away from the bucket to allow you to access the cutting edges.
6. Remove the flat head socket screws and nuts which secure the cutting edges to the bucket weldment.
7. Replace the worn cutting edges.
8. Reassemble all parts in the reverse order of above.



REPLACING AXLE OR HYDRAULIC COUPLINGS

1. Following all standard safety practices and the instructions for removing an attachment in your machine operator's manual, remove and disconnect the Cleana Bucket Broom from your Machine.
2. Remove your poly brush as per the above instructions.
3. When the hydraulic motor bolts are removed, the hydraulic motor and coupling can be slid from the axle.
4. Remove the bolt in the end of the motor shaft, and using a puller, remove the coupling from the motor shaft.
5. Replace the coupling by gently tapping the new one back onto the motor shaft until firm.
6. Replace the drive coupling square rubber grommets on the outside of the coupling.
7. Replace the bolt using a little Loctite and reassembly broom axle as set out previously.



CLEANA BUCKET BROOM EXPLODED VIEW

7 OPTIONAL SIDE BROOM INSTALLATION INSTRUCTIONS

There are two ways to get a side sweeper broom. They can be ordered as an optional attachment with the cleana broom at the time the cleana broom is ordered or can be ordered as an optional retrofit kit:

OPTION 1: RETROFITTING THE SIDE SWEEPER BROOM. (To standard flow Cleana Brooms)

If the Side Sweeper Broom is supplied as a retrofit kit, please take the time to read these installation instructions so that the installation will be completed efficiently and safely. The following steps are required for retrofitting the Side Sweeper Broom attachment to your standard Digga Cleana Broom:

1. POST AUG 2010 BROOMS:

The installation of the side sweeper broom attachment is relatively easy as long as these instructions are carefully followed. If your Cleana Broom was manufactured after August 2010 then there will already be nuts welded on the inside of the broom hood. This is to accommodate the 4 x M10 x 40mm long bolts through the flange mount of the side sweeper broom.

2. PRE AUG 2010 BROOMS:

If you are fitting a new side sweeper broom to a broom which was manufactured prior to August 2010, mounting holes will have to be drilled into the left hand side of the broom hood. (Use the supplied drilling template part number DE-000326 to drill the 4 x Ø11mm holes in the left hand side of the hood). Line up the datum reference point on the drilling template with the datum reference point shown in the photo on page 19. Using the drilling template, proceed to mark and drill the 4 holes in the broom hood as shown on the template. In order to affix the M10 flat washers and nyloc nuts on the inside of the hood, the broom will have to be lifted onto stands in order to gain access to the underside of the unit to hold the nuts whilst the bolts are installed from the outside of the unit (This is only required on Cleana Brooms that were manufactured prior to Aug 2010). Please take heed of the below warning notice. It is for your own safety!



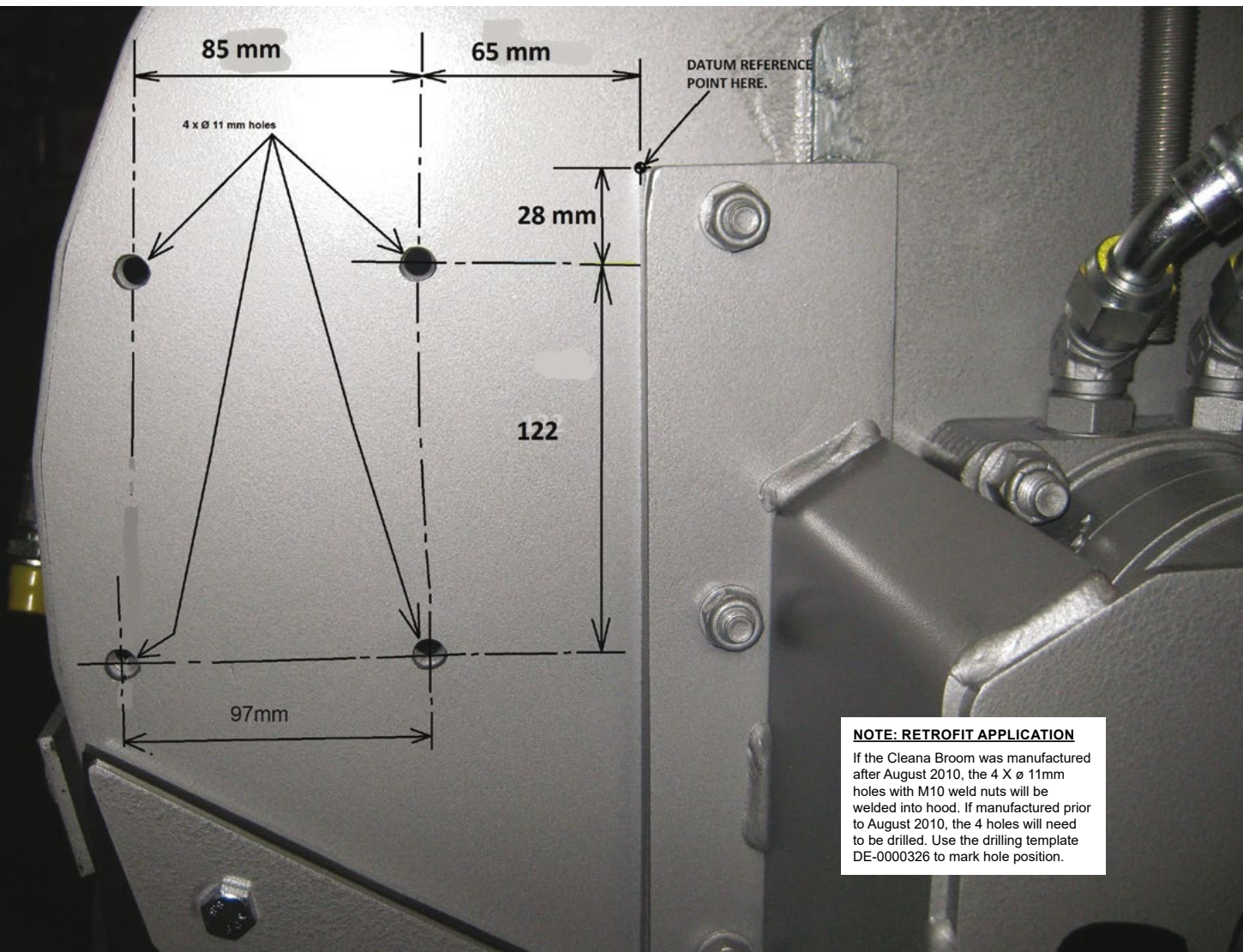
WARNING: DO NOT ATTEMPT TO WORK UNDER THE BROOM UNLESS THE BROOM IS SECURELY SUPPORTED AND THE BROOM IS STABLE AND SAFE TO WORK UNDER. DO NOT RELY ON THE SKID-STEER HYDRAULIC PRESSURE TO SUPPORT & HOLD THE BROOM OFF THE GROUND. THE CLEANABROOM MUST BE RESTING ON TIMBER BLOCKS OR RIGID SUPPORTS. (NOT ROCKS, BRICKS OR BESSA-BLOCKS AS THEY ARE KNOWN TO BREAK).

7 OPTIONAL SIDE BROOM INSTALLATION INSTRUCTIONS

3. **CONNECTING THE HYDRAULICS ON A SIDE SWEEPER BROOM ONTO A STANDARD FLOW CLEANA BROOM:**
Disconnect the return hose running from the main hydraulic motor (Port No A-see illustration on page 21) to the skid steer loader. This is one of the two original hoses (part no. HS-000201) supplied with the broom. The side sweeper broom is supplied with 4 new hoses which need to be installed. The supply hose (Hose E) connected to the port B on the main hydraulic motor does not need to be changed. Connect the Hose A to port A of the hydraulic motor. Hose A is a short hose and is to be connected to Hose C. Hose C is to be connected to the upper positioned port on the hydraulic motor of the side sweeper broom. The port is not identified by any markings or stampings on the hydraulic motor housing. Connect Hose D to the lower port on the hydraulic motor of the side sweeper broom. This port is not identified on the hydraulic motor with any markings or stampings on the hydraulic motor housing. Hose D connects to Hose B via a quick coupler. Then Hose B connects to the quick couplers of the skid steer loader. Remember to pass both the supply Hose E and return Hose B through the hose clamp mounted on the left hand side of the broom as how the hoses were fastened from the factory.

(See page 21 for the schematic of hydraulic circuit for the standard flow Cleana Broom.)

4. Connect the hydraulic hoses to the skid steer loader and remove the stands from under the Cleana Broom and perform a stationary test on the Cleana Broom to check for any oil leaks. Ensure that all bystanders are standing a minimum distance of 15m away from the attachment and that all necessary safety precautions are taken into account.

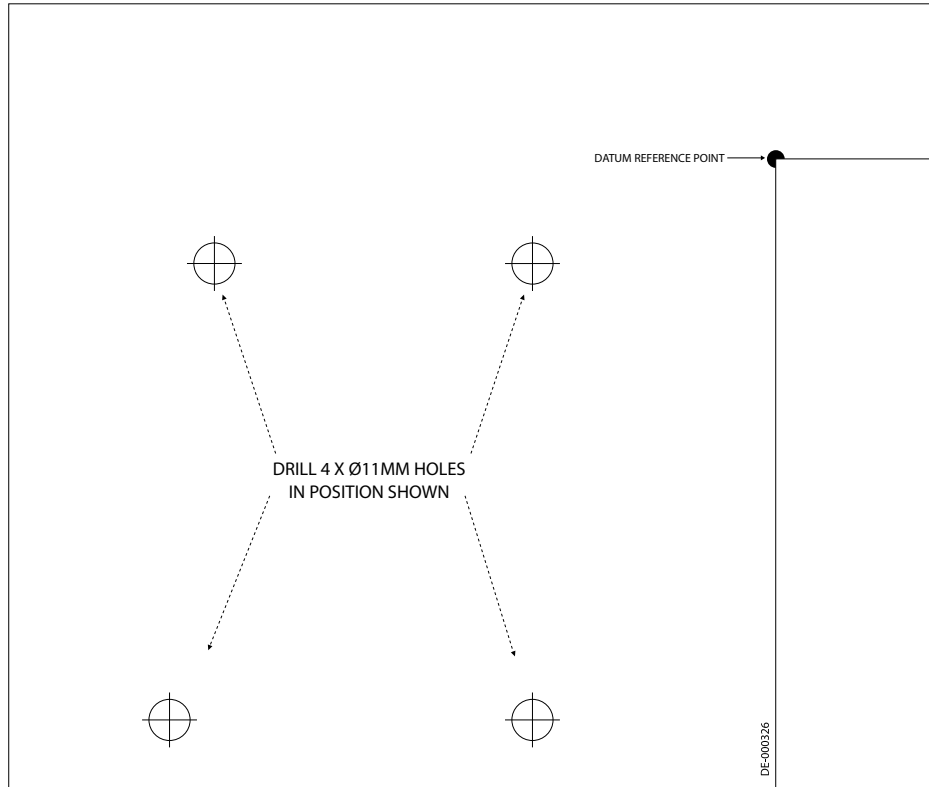


NOTE: RETROFIT APPLICATION

If the Cleana Broom was manufactured after August 2010, the 4 X Ø 11mm holes with M10 weld nuts will be welded into hood. If manufactured prior to August 2010, the 4 holes will need to be drilled. Use the drilling template DE-0000326 to mark hole position.

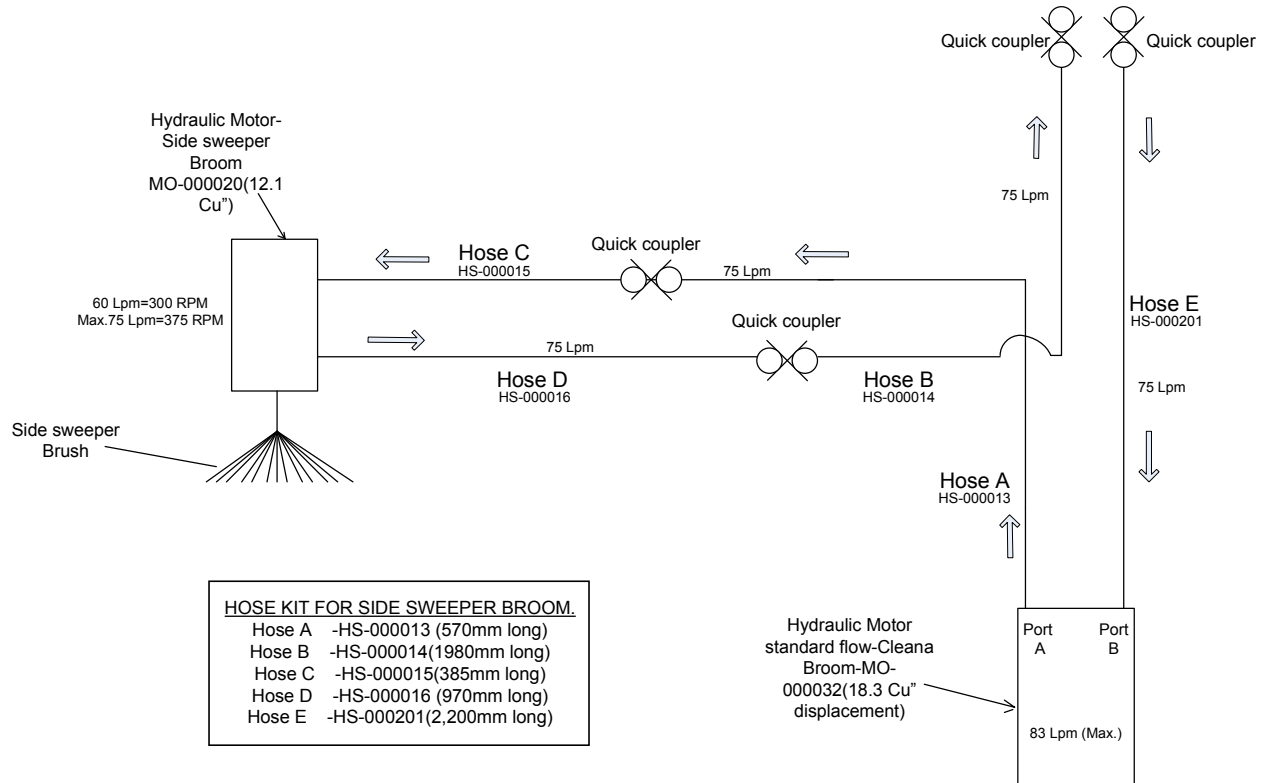
7 OPTIONAL SIDE BROOM INSTALLATION INSTRUCTIONS

DRILLING TEMPLATE - SIDE SWEEPER BROOM MOUNTING



7 OPTIONAL SIDE BROOM INSTALLATION INSTRUCTIONS

SCHEMATIC OF HYDRAULIC CIRCUIT FOR THE STANDARD FLOW CLEANA BROOM (KIT PART NO. BR-000820)



7 OPTIONAL SIDE BROOM INSTALLATION INSTRUCTIONS

OPTION 2: RETROFITTING THE SIDE SWEEPER BROOM. (To High flow Cleana Brooms)

The installation of the side sweeper broom attachment is relatively easy as long as these instructions are carefully followed. If your High Flow Cleana Broom was manufactured after August 2010 then there will already be nuts welded on the inside of the broom hood to accommodate the 4 x M10 x 40mm long bolts through the flange mount of the side sweeper broom. If your broom was manufactured prior to Aug 2010 and does not have holes provided for the side sweeper broom flange, then refer to point 2 on page 17 to perform the marking and drilling of the side sweeper broom mount. Refer to the photo on page 19 and use the supplied drilling template (part number DE-000326) to mark and drill the holes. (The drilling template is supplied as part of the side sweeper broom retrofit kit.)

1. Insert the 4 x M10x 40mm long bolts through the 4 mounting holes in the LHS of the broom housing. See illustration on page 3.
2. Disconnect the two hydraulic hoses which connect to the high flow hydraulic motor of the Cleana Broom. This will free up space and allow better access when fitting the regulating valve.
3. If your High Flow Cleana Broom was manufactured after April 2012 then there will already be 2 x pre-drilled holes with M8 nuts welded on the inside of the broom hood to accommodate the high flow regulator valve. All high flow Cleana Brooms manufactured prior to April 2012, were not provided with pre-drilled holes and weld nuts and therefore holes will have to be provided by the dealer or end user. Using the supplied template (part number DE-000327), position the drilling template and proceed to mark and drill the 2 x Ø8.5mm holes in the left hand side of the broom hood. In order to affix the M8 flat washers and nyloc nuts on the inside of the hood, the broom will have to be lifted onto stands in order to gain access to the underside of the unit to hold the nuts whilst the bolts are installed from the outside of the unit. Please take heed of the below warning notice. It is for your own safety!



WARNING: DO NOT ATTEMPT TO WORK UNDER THE BROOM UNLESS THE BROOM IS SECURELY SUPPORTED AND THE BROOM IS STABLE AND SAFE TO WORK UNDER. DO NOT RELY ON THE SKID-STEER HYDRAULIC PRESSURE TO SUPPORT & HOLD THE BROOM OFF THE GROUND. THE CLEANA BROOM MUST BE RESTING ON TIMBER BLOCKS OR RIGID SUPPORTS. (NOT ROCKS, BRICKS OR BESSA-BLOCKS AS THEY ARE KNOWN TO BREAK.)

4. **Installing the regulating valve:** In the side sweeper broom retrofit kit for the high flow broom is the regulating valve. By this stage your Cleana broom has either holes and weld nuts provided in the broom hood or you have already drilled the holes.
5. Mount the regulating valve to the side plate of the broom using the 2 x M8 x 95 long mounting bolts, flat and spring washers and M8 Nyloc nuts.
6. Connect the 2 hoses to the motor of the side sweeper broom as shown in the below schematic illustration as well as photo. Install the T-fitting into the outlet port of the main broom motor and connect the hose. Proceed to connect all the hoses as per the photo and the schematic on pages 26&27. Connect the supply and return hoses of the Side Sweeper Broom as per the schematic.

(See page 26 for schematic of hydraulic circuit for the High Flow Cleana Broom.)

7 OPTIONAL SIDE BROOM INSTALLATION INSTRUCTIONS

7. Connect the hydraulic hoses to the skid steer loader and remove the stands from under the Cleana Broom and perform a stationary test on the Cleana Broom to check for any oil leaks. Ensure that all bystanders are standing a minimum distance of 15m away from the attachment and that all necessary safety precautions are taken into account.
8. Set up the side sweeper broom to optimum brush speed and hydraulic flow. See note below.



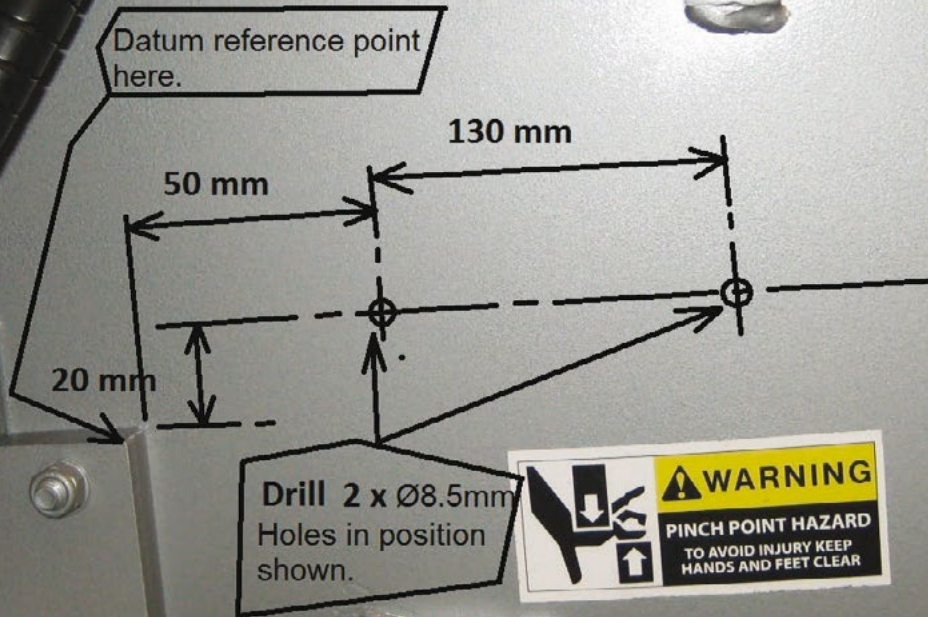
SPECIAL ATTENTIONS FOR USERS: DUE TO DIGGA NOT KNOWING WHAT HIGH FLOW MACHINE EACH CLEANA BROOM WILL BE INSTALLED ON, IT IS THE RESPONSIBILITY OF THE DEALER/CUSTOMER TO ENSURE THAT THE HYDRAULIC FLOW REGULATING VALVE (MOUNTED ON THE LEFT HAND SIDE OF THE BROOM) IS SET TO THE FOLLOWING SPECIFICATIONS.

ENSURE THAT THE FLOW THROUGH THE REGULATING VALVE IS SET AT APPROXIMATELY 60 LITRES /MIN WHICH WILL EQUATE TO THE SIDE SWEEPER BROOM ROTATING AT APPROXIMATELY 300 RPM. ENSURE THAT THE MAXIMUM FLOW DOES NOT EXCEED 75 LITRES/MIN. WHICH IS APPROXIMATELY 375 RPM OF THE SIDE SWEEPER BROOM.

THE REGULATING VALVE HAS A BLACK PLASTIC ADJUSTMENT KNOB WITH LOCKING ABILITY ON THE TOP OF THE VALVE. IT IS NOT PRESET AT THE DIGGA FACTORY. IT MUST BE SET BY THE DEALER OR END USER. (SEE PHOTO ON PAGE 28)

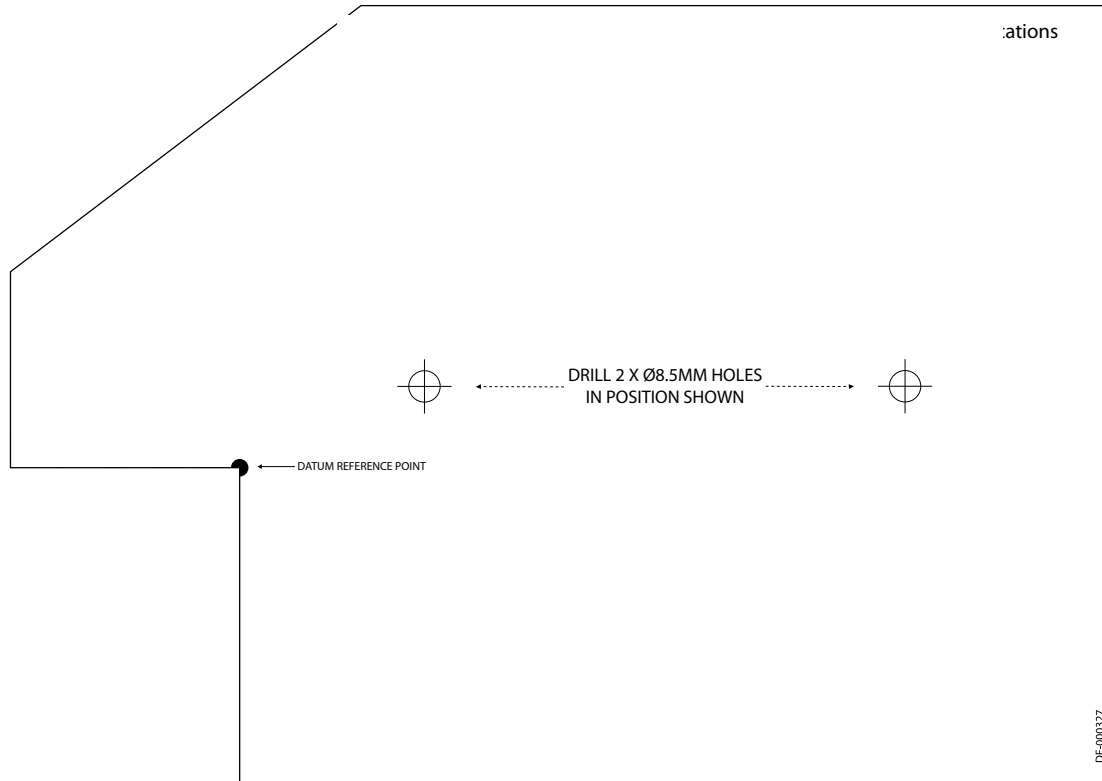
NOTE: RETROFIT APPLICATION

If the High Flow Cleana Broom was manufactured after April 2012 the 2 X $\varnothing$ 8.5mm holes with M8 weld nuts will be provided. If manufactured prior to April 2012, the 2 holes need to be drilled. Use the drilling template DE-000327 to mark the hole position.



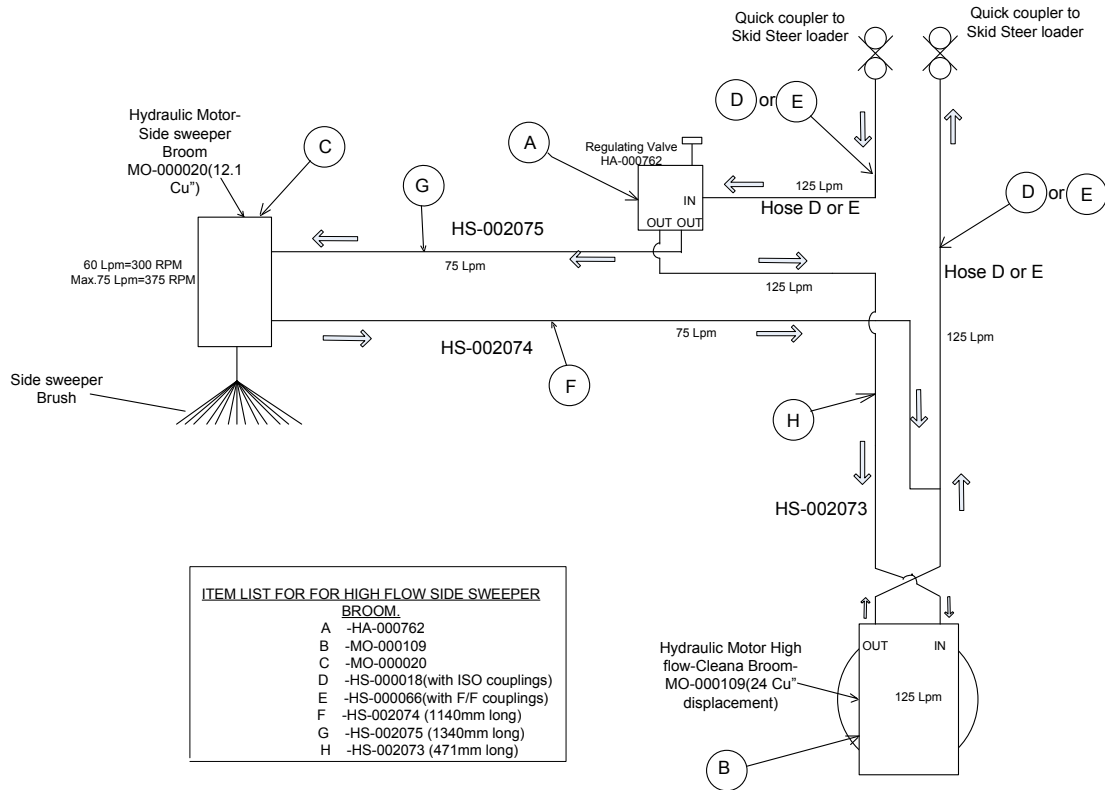
7 OPTIONAL SIDE BROOM INSTALLATION INSTRUCTIONS

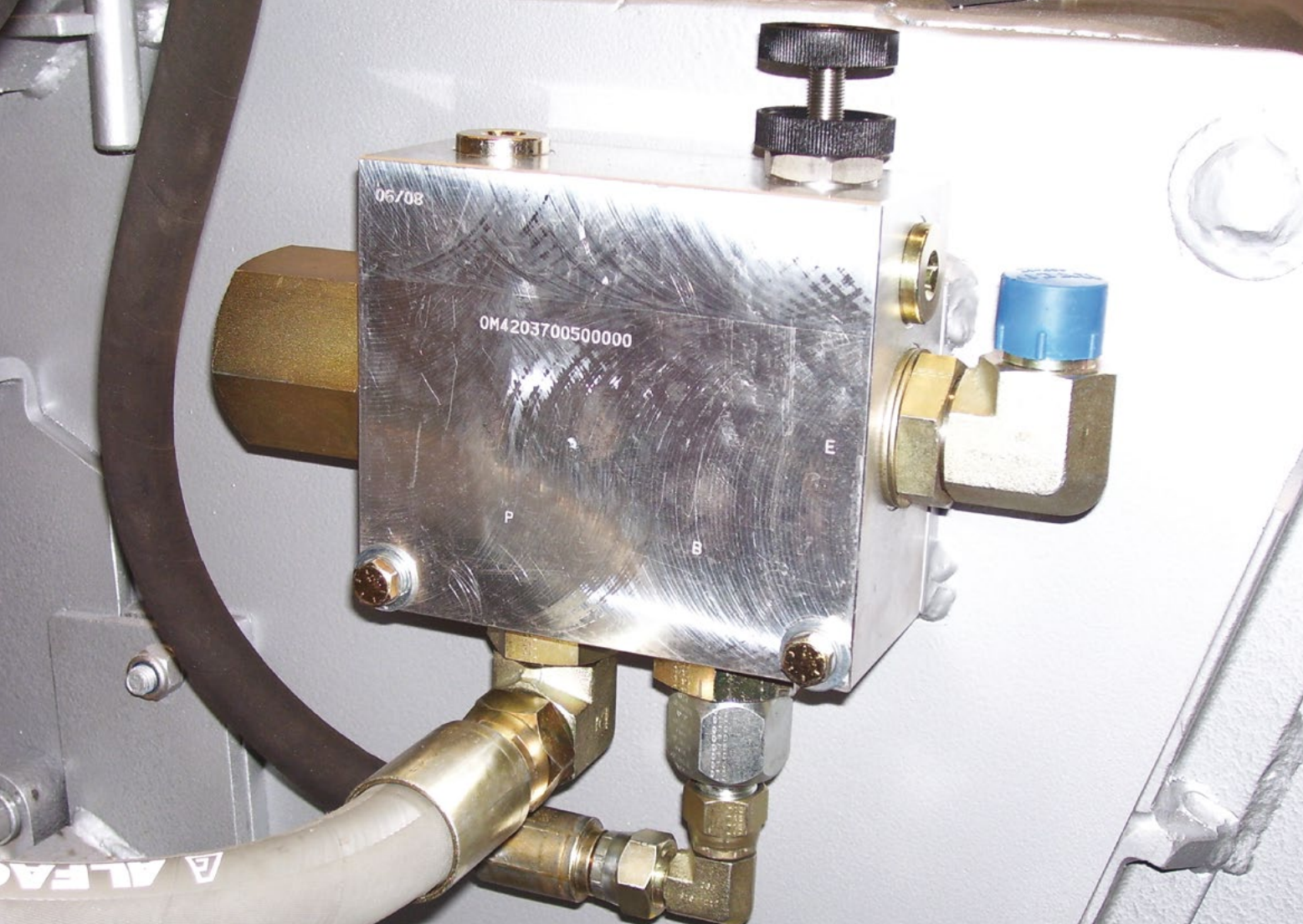
DRILLING TEMPLATE - REGULATING VALVE FOR HIGH FLOW APPLICATIONS



7 OPTIONAL SIDE BROOM INSTALLATION INSTRUCTIONS

SCHEMATIC OF HYDRAULIC CIRCUIT FOR THE HIGH FLOW CLEANA BROOM (KIT PART NO. BR-000938)





8 SAFETY - STICKER LOCATION

PLACEMENT OR REPLACEMENT OF SAFETY SIGNS

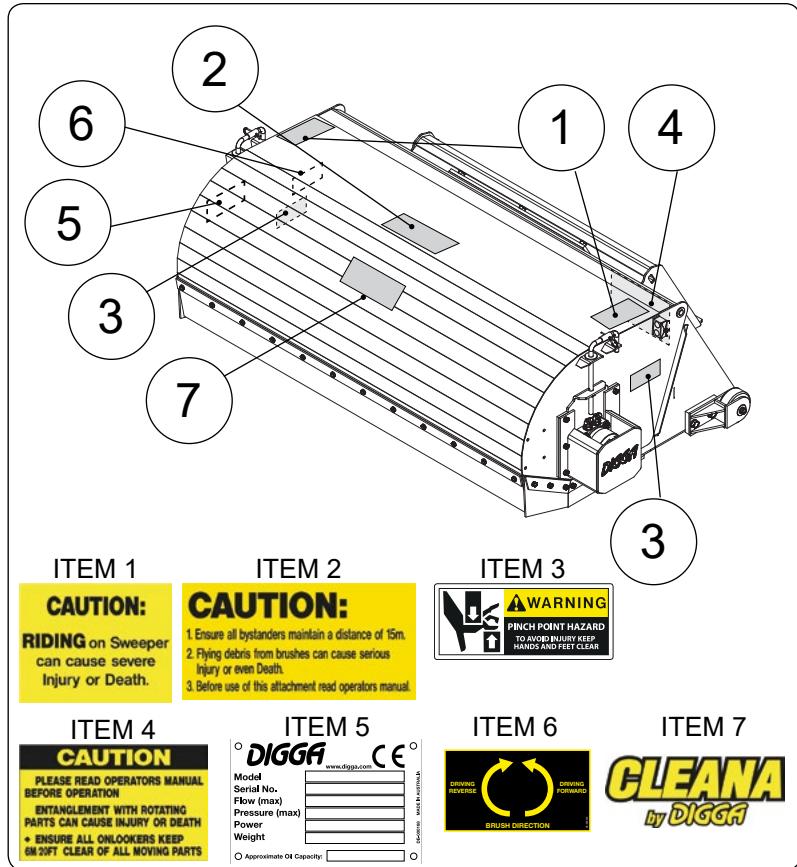
1. Clean the area of application with non-flammable solvent, then wash the same area with soap and water.
2. Allow the surface to fully dry.
3. Remove the backing from the safety sign, exposing the adhesive surface.
4. Apply the safety sign to the position shown in the diagram above and smooth out any bubbles.

INSTRUCTIONS

- Keep all safety signs clean and legible.
- Replace all missing, illegible or damaged safety signs.
- Replacement parts for parts with safety signs attached must also have safety signs attached.
- Safety signs are available from your dealer or from Digga Australia.

CLEANA ANGLE BROOM

NO	ORDER CODE	DESCRIPTION	QTY
1	DE-000040	CAUTION - RIDING ON SWEEPER	2
2	DE-000036	CAUTION - ENSURE BYSTANDERS 15M - BRUSHES	1
3	DE-000129	DECAL - PINCH POINT	2
4	DE-000038	CAUTION - PLEASE READ 15M CLEAR	1
5	DE-000168	DIGGA SERIAL TAG	1
6	DE-000323	BRUSH DIRECTION	1
7	DE-000043	CLEANA BY DIGGA	1



For further information on spare parts please contact one of the Digga sales office below your closest authorised Digga Dealer.

DIGGA INTERNATIONAL SALES OFFICES

ASIAPACIFIC

DIGGA HEAD OFFICE - BRISBANE

4 Octal St, Yatala QLD 4207

PH: (07) 3807 3330

EMAIL: info@digga.com

DIGGA NEW SOUTH WALES

20 Mckay Close,
Wetherill Park, NSW 2164

PH: 1300 2 DIGGA

EMAIL: nsw@digga.com

DIGGA VICTORIA

27 Metcalf Street,
Dandenong, VIC 3175

PH: 1300 2 DIGGA

EMAIL: vic@digga.com

WEB: www.digga.com

NORTH AMERICA

DIGGA NORTH AMERICA

2325 Industrial Parkway SW
Dyersville IA 52040

PH: + 1 563 875 7915

WEB: www.diggausa.com

EMAIL: info@diggausa.com

EUROPE

DIGGA EUROPE

Unit 6, Smitham Bridge Road
Hungerford Trading Estate,
Hungerford, Berkshire RG17 0QU
England, United Kingdom

PH: +44 (0) 1488 688 550

WEB: www.diggaeurope.com

EMAIL: info@diggaeurope.com

10 TROUBLESHOOTING

CLEANA BUCKET BROOM		
TROUBLE	POSSIBLE CAUSE	REMEDY
Brush does not turn.	Quick Couplers not engaged properly.	Check hoses and engage properly.
	Quick Coupler failure.	Replace faulty coupler.
	An Obstruction in the hoses.	Remove obstruction.
	Motor failure.	Contact your local Digga Dealer.
Does not sweep correctly.	Incorrect brush height adjustment.	Check and adjust.
	Worn brush.	Replace brush.
	Brush speed too fast or too slow.	Adjust brush R.P.M to suit conditions.
	Parent machine travel to Slow or too fast.	Adjust travel speed.
	Incorrect brush rotation and or travel direction.	Adjust brush rotation and travel speed.
Hydraulic oil over heating.	Relief valve set too low on parent machine.	Test and set as needed.
	Restriction in hose or quick coupler.	Inspect and Repair.
	Faulty coupler.	Inspect and Repair.
	Parent machine not equipped with oil cooler or sufficient oil capacity.	Stop, allow to cool when it gets hot.
Brush wearing quickly.	Brush RPM too high.	Reset or Lower RPM.
	Incorrect brush adjustment.	Check and adjust.
	Brushing highly abrasive material.	Contact your local Digga Dealer.
Bucket wear edges wearing quickly.	Broom being used at incorrect angle.	Adjust broom angle.
SIDE SWEEP ACCESSORY		
Oil Leak.	Loose connection.	Check.
	Damage to fittings.	Repair or Replace.
Oil leak at motor.	Damage to hoses.	Repair or Replace.
	Damage to motor.	Contact your local Digga Dealer.
	Blown seal.	Contact your local Digga Dealer.
Not Cleaning properly.	Worn Brush.	Replace.
	Incorrect rotation.	Reset flow for correct rotation.
	Incorrect brush angle.	Reset broom to correct angle.
Not Rotating.	Black knob on regulating valve been screwed all the way in.	Unscrew knob, Side Sweeper Broom reaches optimum speed 300RPM @ 60LPM.

WARRANTY

All new Digga products are warranted to be free from defects in materials or workmanship, for a period of twelve (12) months from date of original purchase, which may cause failure under normal usage and service when used for the purpose intended. Digga Australia Pty Ltd warrants its equipment for a period of twelve (12) months dating from delivery to the original user.

In the event of failure (excluding cable, ground engaging parts such as sprockets, digging chain, bearings, teeth, tamping and demolition heads, blade cutting edges, pilot bits, auger teeth, auger heads), if after examination, Digga determines failure was due to defective material and/or workmanship, parts only will be repaired or replaced. Digga may request defective product or products be returned prepaid to them for inspection at their place of business or to a location specified by Digga. The warranty will be considered void if the product or any part of the product is modified or repaired in any way not expressly authorized by Digga, or if closed components are disassembled prior to return. Closed components include, but are not limited to: gearboxes, hydraulic pumps, motors, cylinders and actuators. Any goods returned to Digga by the customer under warranty or repair must have all freight charges prepaid for on the customers account.

Any claims under this warranty must be made within fifteen (15) days after the Buyer learns of the facts upon which such claim is based. All claims not made in writing and received by Digga outside the time period specified above shall be deemed waived.

DAMAGE OR FAILURE THROUGH OPERATOR ABUSE OR NEGLIGENCE Voids Warranty

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED AND THERE ARE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL DIGGA BE LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGE. DIGGA'S LIABILITY FOR ANY AND ALL LOSSES AND DAMAGES TO BUYER, RESULTING FROM ANY CAUSE WHATSOEVER, INCLUDING DIGGA'S NEGLIGENCE, IRRESPECTIVE OF WHETHER SUCH DEFECTS ARE DISCOVERABLE OR LATENT, SHALL IN NO EVENT EXCEED THE PURCHASE PRICE OF THE PARTICULAR PRODUCTS WITH RESPECT TO WHICH LOSSES OR DAMAGES ARE CLAIMED, OR, AT THE ELECTION OF DIGGA, THE REPAIR OR REPLACEMENT OF DEFECTIVE OR DAMAGED PRODUCTS.



Australian Designed and Manufactured