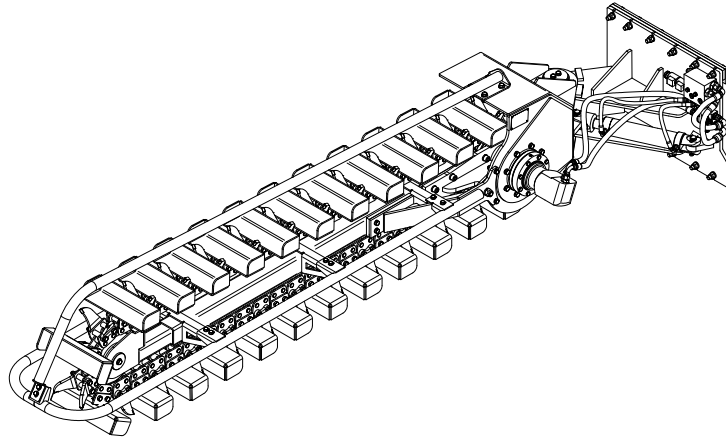


DEBRIS CLEANER OPERATOR'S MANUAL



MY.DIGGA.COM



DECAL IS APPLIED TO THE
ATTACHMENT

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DECAL TO BE APPLIED TO
WINDOW OF MACHINE

ACCESS OPERATOR MANUALS RISK ASSESSMENTS AND MORE

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To the Purchaser

Thank you and congratulations on the purchase of your new Digga Debris Cleaner.

This product was carefully designed and manufactured to give you years of dependable service. It is mandatory to read these instructions to keep the equipment running in top working condition.

Before Operation

Inspect the attachment for shipping damage and if any damage does exist, do not operate until the damaged parts have been replaced or repaired. The primary responsibility for safety with this equipment falls to the operator. Make sure the equipment is operated only by trained individuals that have read and understood this manual. If there is any portion of this manual or function you do not understand, contact your local authorized Digga dealer or the manufacturer to obtain further assistance. Keep this manual available for reference. Provide the manual to any new owners and/or operators.

About This Manual

This manual has been designed to help you do a better and safer job. **Read this manual carefully and become familiar with its contents before connecting and operating this unit.**

Additional parts

Debris Cleaner equipment options are available to help you do a better job in special conditions. These are noted throughout this manual and can be purchased from your Digga dealer e.g. chains, paddle blades, wearparts and spare parts.

Service

Use only manufacturer replacement parts. Substitute parts may not meet the required standards.



CAUTION

Never allow anyone operate this attachment without reading the “Safety precautions” and “Operating instructions” sections of this manual. Always choose hard and level ground to park the vehicle on and set the brake, so the unit cannot roll.


Product Identification

MODELS COVERED IN THIS MANUAL	
DEBRIS CLEANER	
REACH	MODEL
2.8m (9.2 ft)	DC-000016
3.3m (10.8 ft)	DC-000059

Your Digga Debris Cleaner model provides important information about the product. Compare the model engraved on the serial plate to the list above.

Product Identification

Your Digga Debris Cleaner is a user non-serviceable part. Unauthorised disassembly will void warranty. When servicing or assembling your product, use only genuine Digga replacement parts. Substitute parts may not meet the standards required for safe and dependable operation. Use of non genuine Digga parts will void warranty and Digga accept no liability what so ever for consequential or special damages. All service must be performed by qualified professionals. Contact your local Digga dealer for details. To facilitate warranty or service, record the model and serial number of your unit in the space provided on this page. This information may be obtained from the identification plate located on the product.

		Digga Australia PTY LTD 4 Dicker St, Marula QLD 4207 Australia	
Model	<input type="text"/>		
Name	<input type="text"/>		
Serial No.	<input type="text"/>		
Flow (max)	<input type="text"/>		
Pressure (max)	<input type="text"/>		
Power (max)	<input type="text"/>	RPM (max)	<input type="text"/>
Approx. Oil Capacity	Yr. Manuf	Weight	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

DE-000632 MADE IN AUSTRALIA

DE-000632

Model: _____

Serial Number: _____

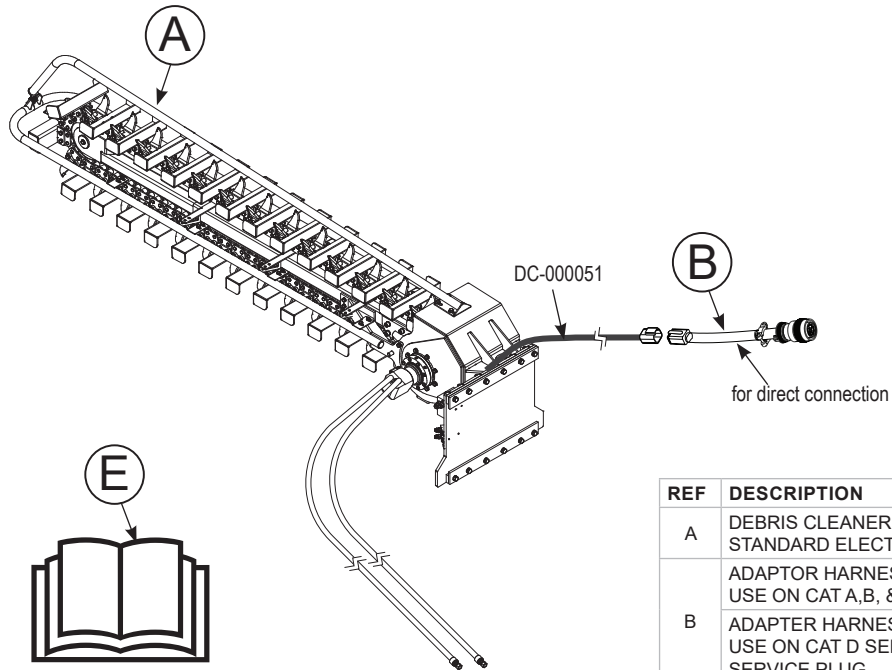
Purchase Date: _____

NOTE

The parts department needs this information to ensure accurate parts can be sent to the authorized service agent.

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 the type of machine the Debris Cleaner is to be fitted to.

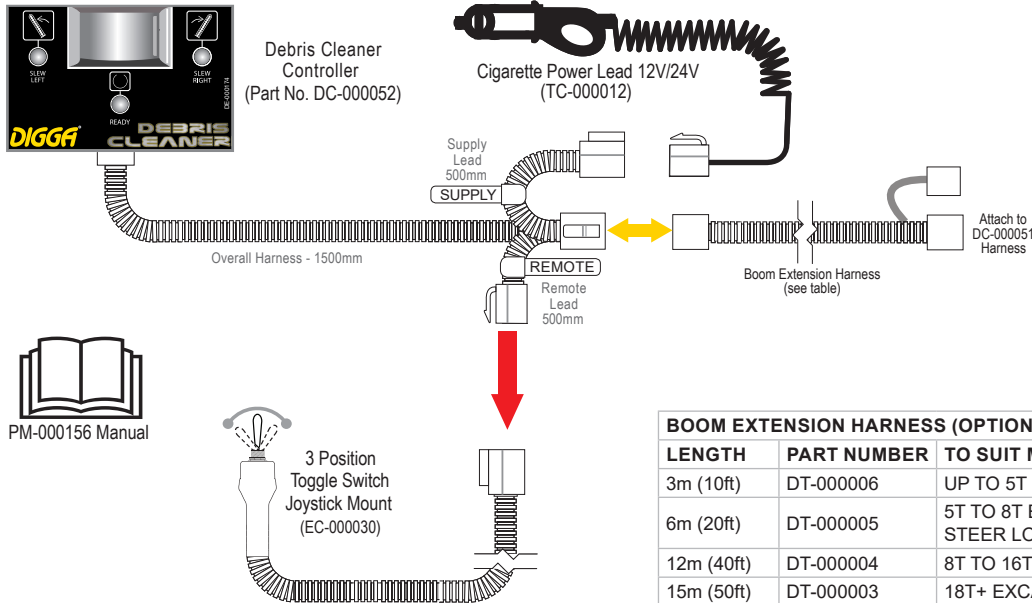


REF	DESCRIPTION	QTY
A	DEBRIS CLEANER ASSEMBLY WITH HOSES AND STANDARD ELECTRICAL HARNESS	1
B	ADAPTOR HARNESS KIT (EK-000003 - OPTIONAL) FOR USE ON CAT A,B, & C SERIES/ ASV/ TEREX SSL 8 PIN ADAPTER HARNESS KIT (EK-000001-OPTIONAL FOR USE ON CAT D SERIES AND ALL SSL WITH 14 PIN SERVICE PLUG	1
D	PLUG N GO HARNESS KIT (DC-000053 OPTIONAL)	1
E	OPERATORS MANUAL PM-000136	1

Preparation for use

DC-00053 Plug'n'go Kit (optional)

The Plug'n'go kit allows the connection of the Debris Cleaner to any machine with a 12/24 VDC lighter port available. The slew action can be controlled either by the rocker switch on the controller or by connecting the harness to a remote toggle switch conveniently installed on the machine joystick. Boom extension harness are available in 4 different lengths.



BOOM EXTENSION HARNESS (OPTIONAL)		
LENGTH	PART NUMBER	TO SUIT MACHINE (SUGGESTED)
3m (10ft)	DT-000006	UP TO 5T EXCAVATORS
6m (20ft)	DT-000005	5T TO 8T EXCAVATORS + SKID STEER LOADER
12m (40ft)	DT-000004	8T TO 16T EXCAVATORS
15m (50ft)	DT-000003	18T+ EXCAVATORS

Safety Precautions - General Information

You must understand all safety statements shown on your attachment and in this manual. Especially note the information called out by the designations shown below. Follow these safety precautions, when operating or maintaining the attachment.

DANGER

The **DANGER** designation indicates an imminently hazardous situation that, if not avoided, will result in death.

WARNING

The **WARNING** designation indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury.

CAUTION

The **CAUTION** designation indicates a potentially hazardous situation that, if not avoided, could result in minor or moderate injury or property damage.

NOTE

You will also see information called out with the **NOTE** designation. This additional safety or general information is important to the maintenance and operation of your loader.

During day-to-day operation of your attachment, you will encounter a variety of situations beyond those listed in this manual. We encourage you to assess the risk present at any job site and in every work task before beginning work. Apply appropriate risk mitigation strategies to make safety a first priority at all times, and if these are not sufficient, stop the job and immediately seek the help of a qualified safety consultant.

Safety Precautions - General Information

Know where utilities are

- Observe overhead electrical and other utility lines. Be sure the equipment will clear them.
- Before starting any digging project, lodge an enquiry with BYDA (Before you Dig Australia) or your local utilities location service for the identification of buried electrical, telephone, cable wires, gas, water and sewer lines are likely to be present. Unintentionally disrupting these hidden hazards while working with your loader can result in dangerous situations and property damage.
- Only commence works after having received and studied the underground plans and information thoroughly. Never begin work until the work area has been fully marked for underground utilities.
- For more information about digging best practices access www.byda.com.au. Many countries offer a similar service which advises the location of underground services in your area. If available use this service prior to digging, drilling, trenching or any form of excavating and earthmoving.



CAUTION

You must ensure that underground utilities have been officially marked before working in the area. Markings must be valid according to state law or practice.

Remove Paint Before Welding or Heating

- Hazardous fumes/dust can be generated when paint is heated by welding, soldering, or using a torch.
- Do all work outside or in a well ventilated area and dispose of paint and solvent properly.
- Remove paint before welding or heating. When sanding or grinding paint, avoid breathing the dust. Wear an approved respirator. If you use solvent or paint stripper, remove stripper with soap and water before welding.
- Remove solvent or paint stripper containers and other flammable material from area. Allow fumes to disperse at least 15 minutes before welding or heating.

Safety Precautions - General Information

Exposure to Respirable Crystalline Silica Dust Along with Other Hazardous Dusts

- It is recommended to use dust suppression, dust collection, and if necessary personal protective equipment during the operation of this or any other machine attachment that may cause high levels of dust.

End of Life Disposal

- At the completion of the useful life of the Debris Cleaner, drain all fluids and dismantle by separating the different materials (rubber, steel, plastic, etc.). Follow all federal, state and local regulations for recycling and disposal of the fluid and components.

Operating the Debris Cleaner

- The primary responsibility for safety with this equipment falls to the operator. Make sure that the equipment is operated only by trained individuals, who have read and understood this manual.
- An operator must not use drugs or alcohol, which can change his or her alertness or coordination. An operator taking prescription or over-the-counter drugs should seek medical advice on whether or not he or she can safely operate the equipment.
- Don't hurry the learning process or take the unit for granted.
- It is the skill, care, common sense, and good judgment of the operator that will determine how efficiently and safely the job is performed.
- Visually inspect your equipment, ensure correct assembly and installation is done and never operate the equipment that is not in proper working order.
- Know the capabilities of your equipment and practice its operation to become familiar with the controls, emergency shut down procedures, and the way it handles on your machine.
- Follow all safety decals and keep them clean. Replace them, if they become worn, damaged or illegible.
- Do not paint over, remove or deface any safety signs or warning decals on your equipment.
- Operate only from the operator's station and operate only in daylight or with sufficient artificial light.
- Always carry loads close to the ground and do not exit the machine with the loader arms raised.

Safety Precautions - General Information

- Do not exceed rated operating capacity (ROC) of the host machine, as machine may become unstable resulting in loss of control. Overloading or exceeding the manufacturers specifications will also void all warranty.
- Always lower the loader arms or the machine boom to the ground, shut off the engine and remove the key before getting off the unit.
- Remove the Debris Cleaner from the parent machine before transporting to and from the job site.
- Never use the attachment on a machine that is not equipped with a cab rollover protective structure (ROPS) and/or falling object protective structure (FOPS), and operator restraints (seat belts or equivalent devices).
- Establish and maintain a minimum 6 meters (20 feet) exclusion zone around the working area. No person other than the operator should enter the work zone, while the parent machine's engine is running.
- Do not allow site workers to climb on the attachment at any time, including while stationary, in operation or being moved.
- Avoid steep hillside operation which could cause the machine to overturn. Consult your machine operator's and safety manual for maximum allowable incline.
- Reduce speed when driving over rough terrain, on a slope or turning to avoid overturning the machine.
- Travel only with the Debris Cleaner in a safe transport position to prevent the uncontrolled movement.
- Drive slowly over rough ground and on slopes.
- Tether the any accessory connected to the Debris Cleaner with a chain if necessary, to prevent uncontrolled swinging of the attachments.
- Do not drive close to ditches and excavations, etc., as cave in could result.
- Flow and pressure gauges, fittings, and hoses must have a continuous operating pressure rating of at least 25% higher than the highest pressure of the system.
- All 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. Ground personnel and bystanders.

Safety Precautions - General Information

- Be alert to others in the work area. Be sure others know when and where you will be working.
- Loose fitting clothing, long hair, jewellery and equipment which might become entangled in moving equipment are prohibited while working near the Debris Cleaner .
- Operators, helpers, and other personnel working near the attachment must wear steel-toe safety shoes, safety glasses, and hard hats as a minimum. Hearing protection, respirators, and personal protective clothing will be specified in the site-specific Health and Safety Plan.
- The Debris Cleaner shall be cleaned only when the mechanism is in neutral and stopped;.
- The Debris Cleaner shall be used only for its designed intent and shall not be loaded beyond its rated capacity. Overloading or exceeding the manufacturers specifications will void all warranty.



CAUTION

Wait for the mechanism completely stop before making any adjustments or cleaning.



DANGER

Do not operate the Debris Cleaner without the safety bars installed.



DANGER

During Debris Cleaner operation, maintain a minimum “no-work zone” buffer of 10 feet (3 meters) from any overhead electrical service and 6 feet (2 meters) from any underground service . All bystanders should be kept at a minimum of 20 feet (6 meters) away from the working area of the Debris Cleaner.

Safety Precautions - General Information

Storing your Debris Cleaner

- Seal hydraulic couplers from contaminants and secure hydraulic hoses off the ground to prevent damage.
- Clean the unit thoroughly by removing all mud, dirt, grease, etc.
- Inspect for visible signs of wear, breakage, or damage. If required, order any damaged parts and perform the necessary repairs to avoid delays upon removal from storage.
- Check that hydraulic motor and hoses are full of clean oil and apply grease to all grease nipple points.
- Coat liberally with grease all connecting pins to prevent rust and reduce wear.
- Tighten loose nuts, cap screws, and hydraulic connections.
- Replace safety decals that are damaged or in an unreadable condition.
- Store unit in a dry and protected place, as leaving the unit outside will materially shorten its life.

Maintaining the Debris Cleaner

- All maintenance should be performed with the engine turned off, parking brakes applied, machine arms lowered, and hydraulic pressure relieved.
- Lock out and tag out the equipment before repairs or maintenance is performed.
- Only properly trained and qualified individuals are permitted to perform repairs and maintenance.
- 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.
- Never adjust a relief valve for pressure higher than recommended by the machine's manufacturer.

Safety Precautions - General Information

Transporting the Debris Cleaner

- When transporting your attachment, follow all local government regulations that may apply along with any equipment safety precautions provided in this manual.
- It is the responsibility of the operator that safe systems of work are employed while handling this attachment.
- Attachment should be well secured, when being moved or in transit and furthermore prior to moving, storing, loading/unloading, or parking.
- Verify that all tie down accessories (chains, slings, ropes, shackles, etc.) are capable of maintaining attachment stability during transporting and are attached in such a way to prevent unintended engagement or shifting of the unit.
- Use extra care when loading or unloading the attachment on to a trailer or truck and disconnect hydraulic couplers during the transportation. No responsibility for loss or damage to persons or property in any regard can be attributed to Digga.

Safety - Working with the Attachment

Complete a Risk Assessment

Your Digga Debris Cleaner is a versatile machinery attachment, capable of performing its tasks in a safe and effective manner. To ensure the safety of operators and others, it is important to document the work at hand for hazard and risk. Before beginning work, complete a risk assessment. The following steps provide a framework for this activity:

1	DOCUMENT THE ACTIVITY Assemble those involved in the activity. Write down the tasks required for the activity in step-by-step form.
2	IDENTIFY THE HAZARDS Next to each task, identify what part of the task may cause injury to those engaged in the task or others in the vicinity. Rate the consequences and likelihood of the hazard using the risk assessment matrix.
3	DOCUMENT THE CONTROL MEASURES Using the results from the risk assessment matrix, determine which hazards require attention. List all mitigation measures that are required to eliminate or minimize those hazards.
4	IDENTIFY THE RESPONSIBLE PERSON Document the name of the person responsible for implementation of the mitigation measure.
5	MONITOR AND REVIEW Ensure that the activity is supervised and that the documented process is being followed.

NOTE

Remember, Personal Protection Equipment (PPE) provides a level of protection during work, but PPE is the last level of hazard control and prevention. Always refer to the hierarchy of hazard control, when planning a safety process.

Safety - Working with the Attachment

Take Extreme Care When Dealing with Hydraulics - Whilst Assembling, Operating, Maintaining or Performing any work on or near this product.

- Hydraulic fluid under pressure can penetrate the skin and may develop gangrene or other permanent disabilities. **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 manual for detailed instructions on connecting and disconnecting hydraulic attachments.
- Ensure 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's arm(s) to ensure that the Debris Cleaner is raised off the ground.
 - Operate the hydraulics on this product to ascertain left and right slew.
 - Ensure that the hoses cannot interfere with or actuate the quick-attach mechanism.
 - Ensure that hoses will not be pinched, or get tangled, in any equipment.
- Do not lock the auxiliary hydraulics in the "ON" position.
- Refer to host machine operator's manual and this manual for procedures and service intervals, then inspect and maintain the entire hydraulic system to ensure that the fluid remains clean, that all devices function properly, and that there are no fluid leaks.

NOTE

For any additional safety information please see "Risk Management Booklet". To obtain a copy of this document please contact Digga Head Office.

Safety - Working with the Attachment

When Mounting this Product to Your Machine

- Refer to the operator's manual of your host machine for any special or detailed mounting instructions regarding quick-attach mechanism.
- This product should fit onto the quick-attach frame or hitch (machine mount). If this product does not fit properly, contact your Digga dealer before operating.
- Where enabler 'Dead Man' controls are installed it is illegal to disengage, tamper with, or remove them.



WARNING

Never place any part of your body into the mounting plate, frame, hitch or loader holes. A slight movement of the power unit and this product could cause serious injury.

When Adjusting Servicing or Repairing this Product

- Do not make any modifications to your Digga Debris Cleaner.
- When making repairs use competent service agents and use only genuine Digga parts. For fasteners, hydraulic hoses, or hydraulic fittings, use only properly rated parts.
- Replacement parts must also have safety signs attached.

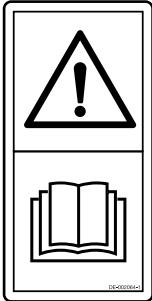
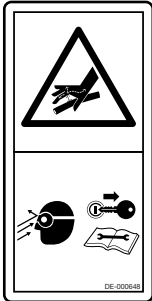






CAUTION



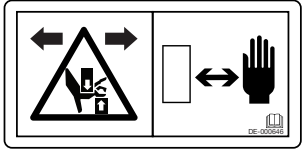



Wait for all moving parts to stop completely before making any adjustments or cleaning.

Safety - Decal Labels

This section provides a glossary of safety labels found on your Digga Debris Cleaner. These labels are important! Become familiar with both their meaning and location prior to operating the Debris Cleaner. Ensure that each label is clean, visible, and legible at all times. To clean the decal, use a soft cloth, water, and soap. Avoid the use of solvents, gasoline, or other harsh chemicals, as these may damage the decal. If a label has been damaged or removed, it must be replaced.

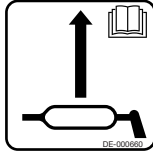
READ MANUAL	HIGH PRESSURE FLUID	ENTANGLEMENT/CRUSH HAZARD - KEEP DISTANCE
		
<p> DANGER Completely read and understand this operator's manual before using your attachment. Keep the manual with the attachment at all times.</p>	<p> DANGER Pressure injection risk of injury: Always wear hand and eye protection and shut-off the engine when performing maintenance on this machine. See page 24</p>	<p> DANGER Keep distance: risk of entanglement and laceration. All personnel are to stay 6 m (20 feet) from the machine.</p>

Safety - Decal Labels

DO NOT RIDE ON THE ATTACHMENT	DO NOT STEP	CRUSHING HAZARD
		
<p> <u>DANGER</u> Entanglement hazard: Always stay in the machine workstation. Only operating personnel may be present on the hosting machine. Never sit or ride on the attachment</p>	<p> <u>WARNING</u> Do not step on the attachment. It can cause serious personal injury or damage the attachment.</p>	<p> <u>WARNING</u> Keep hands and body parts a safe distance from actuating parts.</p>

Safety - Decal Labels

GREASE POINT ABOVE



MY.DIGGA.COM



SERIAL TAG

<input type="radio"/>	DIGGA www.digga.com	Digga Australia PTY LTD 4 Octal St. Yatala QLD 4207 Australia	<input type="radio"/>				
	Model	<input type="text"/>	DE-000602 MADE IN AUSTRALIA				
	Name	<input type="text"/>					
	Serial No.	<input type="text"/>					
	Flow (max)	<input type="text"/>					
	Pressure (max)	<input type="text"/>					
	Power (max)	<input type="text"/>	RPM (max)	<input type="text"/>			
<input type="radio"/>	Approx. Oil Capacity	<input type="text"/>	Yr. Manuf.	<input type="text"/>	Weight	<input type="text"/>	<input type="radio"/>

NOTE

See "Greasing" on page 30.

NOTE

Scan the QR-code to access:

my.digga.com

Find manuals, safety information, guides and more.

NOTE

The serial tag identifies the product and gives important information about its operation. See "Product Identification" on page 5.

Safety Decal Labels - Location

ITEM	ORDER CODE	DESCRIPTION	QTY
1	DE-002064-1	READ THE MANUAL	1
2	DE-000648	HIGH PRESSURE FLUID	1
3	DE-002081-2	DANGER - KEEP AWAY	2
4	DE-000653	DO NOT RIDE ON THE ATTACHMENT	1
5	DE-000054-1	DO NOT STEP	1
6	DE-000646	CRUSHING HAZARD - KEEP HANDS OFF	2
7	DE-000660	GREASE POINT ABOVE	1
8	DE-000850	MY.DIGGA.COM	1
9	DE-000632	SERIAL TAG	1
10	DE-000047	DIGGA LOGO	2

Item 1



Item 2



Item 3



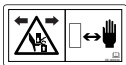
Item 4



Item 5



Item 6



Item 7



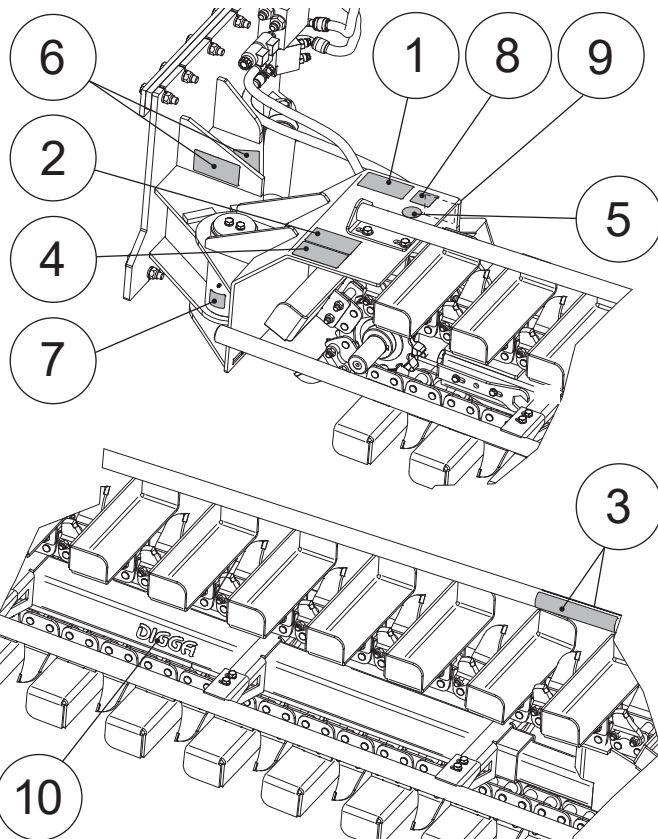
Item 8



Item 9



Item 10



The key feature of your Digga Debris Cleaner 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.



DANGER

Safety first!! Read and understand the safety instructions before beginning any maintenance.

Before First Use

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

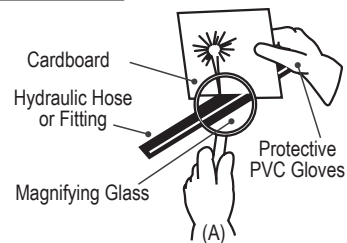
Before Each Use

- 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 "Safety Decal Labels - Location" on page 22).
- 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.
- Ensure any damage or excessively worn parts are replaced.
- Always wear safety goggles or glasses when inspecting equipment.

Before Use

WARNING

Escaping fluid under pressure as low as 100 PSI can have sufficient force to penetrate the skin up to 4" (100mm) away 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 (A). Keep unprotected body parts, such as face, eyes, and arms as far away as possible from a suspected leak and use heavy duty PVC protective gloves. Flesh injected with hydraulic fluid may develop gangrene or other permanent disabilities.



WARNING

Always wear the correct PPE, when operating or performing maintenance on this attachment. If a hydraulic fluid injection injury occurs, seek emergency medical attention immediately. Explain to medical staff that the injury is the result of pressurized fluid injection. Remember that even if the point of entry appears as a minor pin hole, this potentially could be a major injury, especially if not treated in time.

Commissioning Procedure

The Digga Debris Cleaner is designed to clear away debris from areas that are inconvenient to access or pose a risk due to falling objects from overhead structures, such as conveyors. The Digga Debris Cleaner 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 Debris Cleaner.

When a Debris Cleaner is purchased from Digga or a Digga Dealer/Distributor, the frame/attachment is matched for suitability and compatibility to the flow, pressures and load ratings of the original machine it was purchased for. For fitment of the Debris Cleaner to other machines you must first contact your Digga dealer and receive written confirmation to ensure you do not incorrectly fit the attachment to a machine with higher pressure, or lower rated load capacities than what the product was designed for.

Warranty will be void if the Debris Cleaner is fitted to an alternative machine without first receiving written confirmation from your Digga dealer. Exceeding the recommended maximum flow, pressure, or rated load capacity of the Debris Cleaner 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. Overhead cables, underground utilities, services, etc. Check with relevant service providers on the location of these before commencement of any work (see "Know where utilities are" on page 10). Review the job at hand and determine the Debris Cleaner is appropriate for the intended conditions. For example: Do not use it as a trencher.

Operating Parameters - HP (KW) Power Ratings

The hydraulic motor of your Debris Cleaner has a maximum power rating. Maximum pressure and flow cannot be achieved at the same time. Ensure you know and understand the maximum flow, pressure and power ratings of your Debris Cleaner and parent machine. Never exceed the maximum ratings listed on the serial tag attached to the left-hand side of the attachment.

Commissioning Procedure

Installation instructions

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

NOTE

Never exceed the maximum flow and pressure ratings as warranty will be void.

4. Check that all nuts and bolts are tightened on the frame or hitch and that the frame/hitch is correctly mounted on the Debris Cleaner.
5. Check the conditions of the safety bar and ensure all its bolts are properly tightened.
6. Following all standard safety practices and the instructions for installing an attachment in your machine operator's manual, install the Debris Cleaner 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..

7. Once the Debris Cleaner is connected via the frame/hitch, lower the unit to the ground and remove the key from the parent machine.
8. 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.
9. Connect the electrical harness.
10. Make sure the couplers and connectors are fully connected and locked.

Commissioning Procedure

11. Route the hoses and cables in such a fashion as to avoid pinching or chafing.
12. Check the chain teeth and paddles are not worn. Ensure all worn parts are replaced, as they will become ineffective and severely diminish the overall performance of the Debris Cleaner.
13. The machine is now ready for use.



WARNING

Do not lock the auxiliary hydraulics of your machine in the "on" position.



DANGER

While the chain is moving, all bystanders must be at a minimum of 6m (20ft) away. It is responsibility of the operator to ensure all safety procedures are followed.



WARNING

Never lift this attachment above the operator's eye level or to a height where the visibility is obstructed, whichever is lower.

Operating Instructions

Debris Cleaner Operation

- The Debris Cleaner is designed and manufactured to remove debris from areas which are difficult to access or dangerous to work under or both.
- The slewing of the boom might not work properly when the boom is suspended in free space. It requires load to be able to slew, i.e. resting or contacting the ground.
- It is normal to notice small chain speed reduction whilst the chain is rotating and the boom is slewed simultaneously.



CAUTION

Do not rapidly engage forward and reverse or on/off rotational movement to clear the debris cleaner. This action can cause cavitation in the motor and will void motor warranty.



DANGER

Do not operate the Debris Cleaner without the safety bars installed.

NOTE

The maximum flow that this attachment unit can handle is 130 LPM. The maximum pressure for this attachment is 240 bar.

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. See "Safety Precautions - General Information" on page 9.
3. No tie down points are provided on the attachment and its the responsibility of the operator to ensure that the attachment is firmly fastened without causing any damage to it.
4. Do not attach tie down accessories around cylinders or in any way that may damage hoses or hydraulic components.

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. Disconnect the electric connectors
4. Start the machine's engine and make sure that the lift arm is lowered and in contact with the loader frame.
5. Roll the attachment mechanism forward and slowly back up until the attachment is free from the machine.
6. Remove and store the attachment in a dry and protected place. Leaving the Debris Cleaner outside will materially shorten its life.

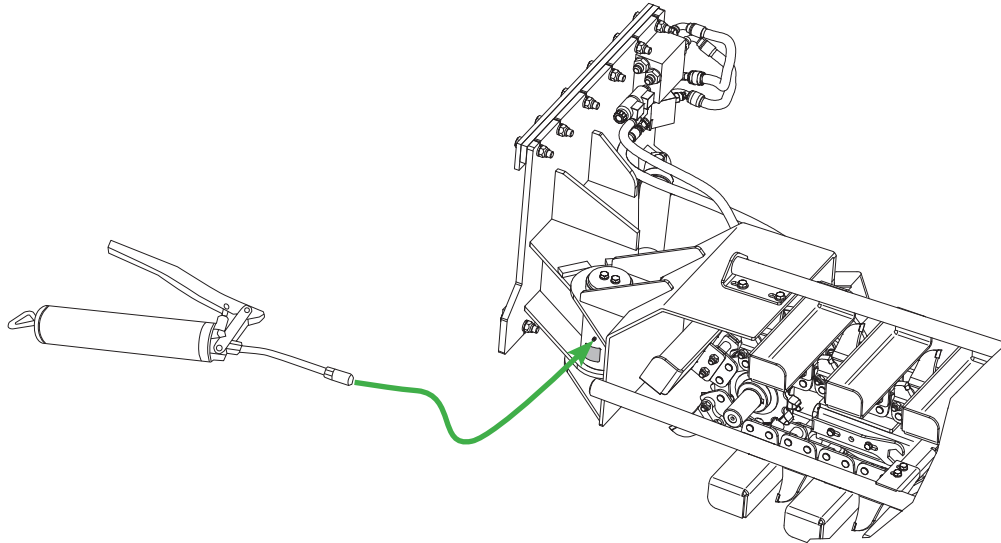
Maintenance

Greasing

The Debris Cleaner is equipped with a grease nipple that allows for the replacement of degraded grease from the slewing pivot. The grease nipple can be reached from the right hand side with the Debris Cleaner positioned straight.

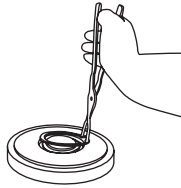
Always ensure that you clean the grease nipple and greasing gun nozzle before fitting them.

Grease the Debris Cleaner with multipurpose grease every 40 working hours. However, this interval should be shorter when operating in aggressive environments.

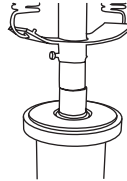


Nose roller bearing replacement

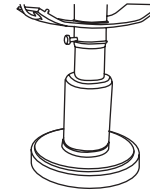
- To replace the nose roller bearing, firstly remove the circlip using a pair of straight circlip pliers **(B)**.
- Use a press to push the bearing out ensuring the pipe underneath is larger than the bearing **(C)**.
- When pressing the new bearing in, ensure the drift used is of the correct size. For example, the drift must sit against the outside shell of the bearing and does not damage the ring that holds the bearing together. Ensure that the bearing is sitting against the lip on the opposite side of the nose roller and replace circlip **(D)**.



(B)



(C)



(D)

NOTE

A hammer is not recommended for this procedure.



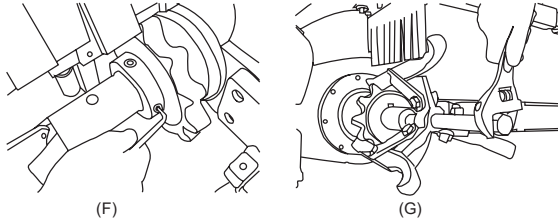
CAUTION

Always ensure that the hydraulic motor is primed with hydraulic fluid prior to use following any repairs to the Debris Cleaner or the parent machine. Do not allow the Debris Cleaner to run without oil at any time.

Maintenance

Sprocket replacement

- Firstly remove the 1/2" (12.7mm) bolt holding the auger and remove the auger. Remove the chain from around the sprocket and use a 3/16" (4.8mm) Allen key to loosen the two grub screws in the retaining collar and slide collar off the shaft **(F)**.
- Slide the sprocket off the shaft and replace with a new sprocket. It is recommended to apply anti-seize to shaft before the replacement of sprocket **(G)**.



NOTE

If the sprocket can not be removed by tapping with a copper hammer, then a puller with the aid of penetrating release lubricant may have to be used.

NOTE

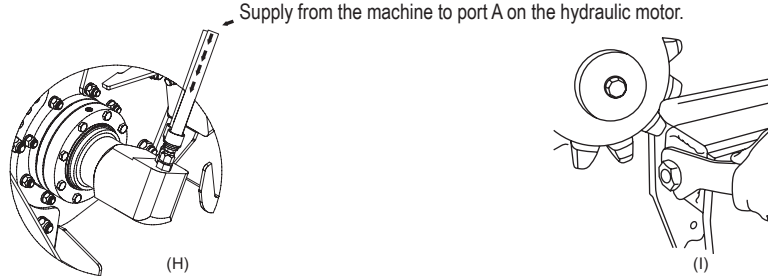
The illustrations and data used in this manual were current (according to the information available to us) at the time of printing; however, Digga reserves the right to redesign and change the attachment as may be necessary without notification.

Hydraulic Hose Connection

- The Debris Cleaner chain must rotate in an anti-clockwise direction (when viewed from the motor side of the Debris Cleaner).
- The supply line from the parent machine must be connected to the 'A' port on the Debris Cleaner motor (H).

Boom Adjustment

- For boom adjustment, use the supplied spanner to wind adjuster nut clockwise for loosening and anti-clockwise for tightening (I).



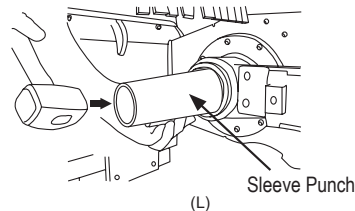
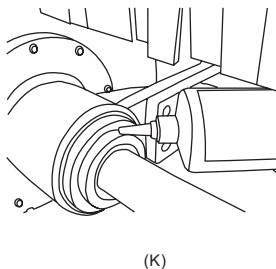
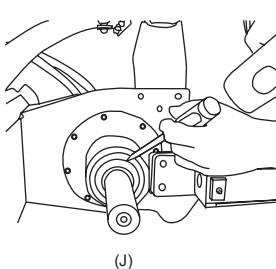
CAUTION

Shut down host machine and Debris Cleaner and relieve hydraulic pressure on the parent machine before any adjustments are made.

Maintenance

Seal Replacement

- Before the seal can be replaced remove retaining collar and sprocket as shown in "Sprocket replacement" on page 32. Then remove the key and seal protector. Use a pin-punch or round pointed awl and tap gently to pierce through the seal face and then lever out the seal **(J)**. Inspect the inside of the housing for damage and if damaged or burred, clean up with emery cloth.
- Before the seal can be replaced run some grease around the inside lip of the seal for lubrication to the shaft. Ensure there are no burrs on the shaft between the end of the shaft and the end of the housing. File if necessary, and run a small bead of Loctite 243 or equivalent, around the outside of the seal **(K)**.
- Proceed to fit the seal by using a large punch/sleeve/collar and gently tap the seal into place and ensure the seal is installed in evenly **(L)**. This is very important, as any misalignment could cause damage to the seal and promote a leak. The seal must be flush with the end of the housing. Replace the seal protector, key, sprocket and retaining collar. Refill the planetary with gear oil. See "Planetary gear oil" on page 36.

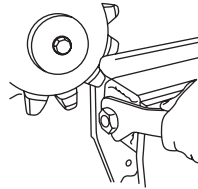


NOTE

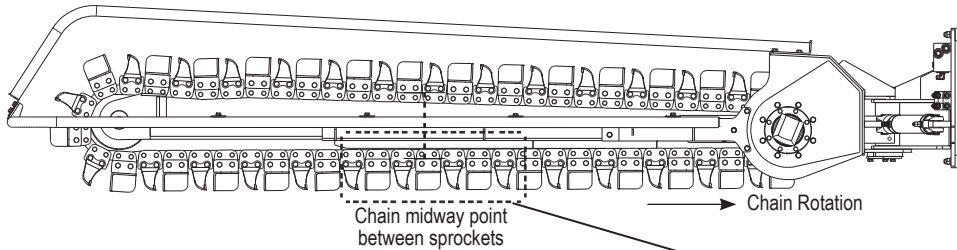
Make sure all gear oil is drained before removing the seal.

Chain adjustment

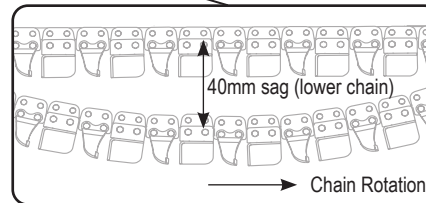
1. To either adjust chain or remove chain – remove two ½" bolts holding spanner to outer boom.



2. Use spanner supplied to wind adjuster nut clockwise for loosening, anti clockwise for tightening of the chain conveyor.



3. To achieve the correct chain tension: Adjust the tension on the lower chain section at the midway point between the sprockets to allow 40mm of vertical movement.



Measured mid way between sprockets on lower chain



Do not operate the Debris Cleaner without the safety bars installed. If removed for maintenance, reinstall the safety bar immediately afterwards.

Maintenance

Planetary gear oil

The Debris Cleaner planetary unit is a sealed unit. If there is any sign of oil leaks please contact your nearest Digga dealer before carrying out any repairs, as there can be other causes for seal leaks.

- During extended stationary periods (one month or more), the unit should be run monthly to immerse all internals in oil, thereby preventing corrosion.
- Oil should be changed when hot, to prevent a build up of sludge deposits. Flush interior of unit with fluid recommended by oil companies.
- Check for leaks regularly and if an oil leak is detected contact your nearest Digga dealer for remedy instructions.
- Use only extreme pressure gear oil (EP) ISO320 viscosity (mineral oil).
- Do not mix oil of different viscosity, not even those of the same brand.
- Do not mix mineral and synthetic oils.
- Cleanliness is necessary when changing oil.

Operating in Asia Pacific and Europe

The planetary drive unit in the Debris Cleaner when operating in Asia Pacific and Europe uses extreme pressure (EP) gear oil ISO320 viscosity (mineral oil) for lubrication of gears and bearings. Minimum and maximum gear oil operating temperatures for these regions is -9°C (16°F) to 120°C (248°F). Please contact your Digga specialist for the recommended gear oil if operating outside this range.

Operating in North America

The Planetary Drive Unit on the Debris Cleaner when operating in North America uses the gear oil Chevron Meropa ISO 320 (mineral oil) for lubrication of gears and bearings. Minimum and maximum gear oil operating temperatures for this region is -18°C (-0.4°F) to 107°C (225°F). Please contact your Digga specialist for the recommended gear oil if operating outside this range. Continuous operating temperature must not exceed 80°C.

OIL CHANGE SCHEDULE	MODERATE OPERATING CONDITIONS	SEVERE OPERATING CONDITIONS
First oil change.	Within 3 months or initial 50 hours of use.	Within the first 30 hours of use.
Second oil change plus subsequent oil changes.	After every 500 hours of use or 12 months of use.	After 300 hours of use thereafter (Drive requires a major strip down, inspection and rebuild).

NOTE

***Severe/extreme operating conditions include but not limited to ambient temperature conditions of +40°C (104°F) or below 0°C (32°F), working in hard ground, extended and continuous hours of operation. The gearbox oil capacity is engraved onto the serial tag located on the Debris Cleaner.**

Procedure for changing or re-filling gearbox oil level

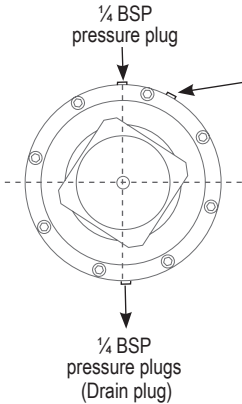
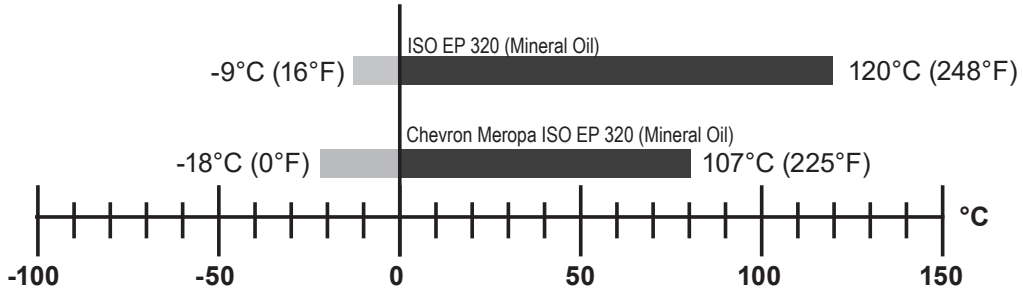
1. Ensure that Debris Cleaner boom is horizontal as well as the motor and gearbox being horizontal (not leaning to the right or left), before commencing to drain and replace the gearbox oil.
2. For filling the gearbox (from empty) ensure that a maximum quantity of 0.72 litres is applied. Remove the plug adjacent to the top plug to allow a vent point to assist the decanting process.

NOTE

If your unit is leaking oil after you have performed the daily checks consult your local authorised service agent.

Maintenance

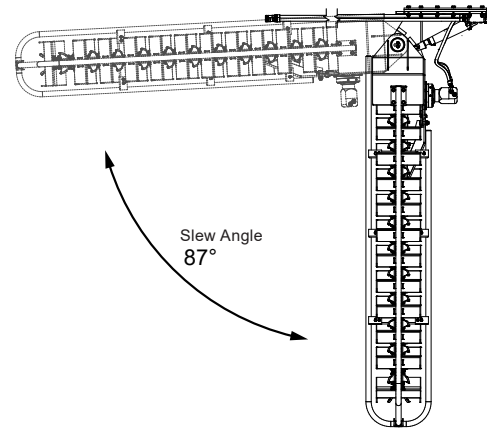
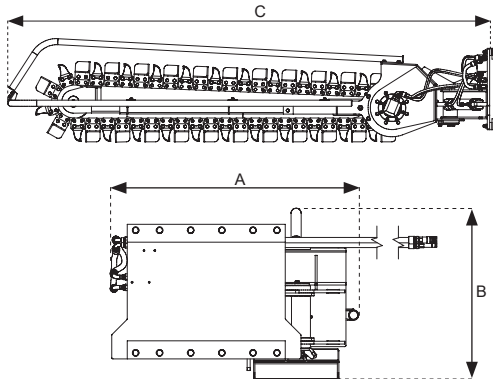
Planetary gearbox oil temperature range



DO NOT use this plug to determine if the gearbox is full as this plug is too high and overfilling the gearbox will result in costly repairs and void warranty.

Technical Specifications

SPECIFICATIONS	2800 REACH	3300 REACH
Width (Overall) A		1031mm
Height (Overall) B		714.5mm
Length (Overall) C	3325mm	3820mm
Slew Angle	87°	87°
Number of Paddle Blades	25	30
Paddle Blade Width	350mm	350mm
Hydraulic Pressure (Continuous)		205 bar
Hydraulic Pressure (Peak)		240 bar
Hydraulic Flow Requirement (Continuous)		75 lpm
Hydraulic Flow Requirement (Intermittent)		115 lpm
Weight	570 kg	635 kg



Spare Parts

For spare parts of your Debris Cleaner, obtain the serial number from the aluminium serial tag located on the side of the hood of the Debris Cleaner. The serial number allows Digga to trace all production and service records. Ensure all service and maintenance is performed by an authorized Digga service agent and all service records are kept. Below is a list of common replacement parts for your Debris Cleaner. For all other spare parts contact your nearest Digga dealer or Digga Head Office.

DESCRIPTION	2.8M		3.3M	
	QTY	PART NUMBER	QTY	PART NUMBER
2in DIGGATAC RIGHT	25	2TDR	30	2TDR
2in DIGGATAC LEFT	25	2TDL	30	2TDL
PADDLE BLADE - 350mm WIDE	25	DC-000004	30	DC-000004
PADDLE BLADE - 350mm WIDE HARDFACED		DC-000084		DC-000084
PIVOT PIN	1	DZ-000022	1	DZ-000022
SEAL PROTECTOR	1	TR-000046	1	TR-000046
DRIVE SPROCKET 2" PITCH 11 TOOTH	1	TR-000060	1	TR-000060
NOSE ROLLER BEARING W211-PP5-2"	1	BE-000017	1	BE-000017
NOSE ROLLER 2"	1	TR-000057	1	TR-000057
TRENCHER CHAIN ADJUSTMENT SPANNER	1	TR-001618	1	TR-001618
TOP BUMPER WELDMENT	1	DC-000038	1	DC-000073
MAIN BUMPER WELDMENT	1	DC-000078	1	DC-000071
HYDRAULIC CYLINDER	1	CY-000092	1	CY-000092
CHAIN - 2 IN	1	TC2-50-B	1	TC2-60-B
2" - 46MM CHAIN SPACER	100	CH-000032	120	CH-000032
CHAIN ASSEMBLY	1	DC-000025	1	DC-000077

For further information on spare parts, please contact one of the Digga sales offices shown below, or contact your local authorised Digga dealer.

DIGGA INTERNATIONAL SALES OFFICES

ASIA PACIFIC

DIGGA HEAD OFFICE - BRISBANE

4 Octal St, Yatala QLD 4207

Phone: +61 7 3807 3330

Email: info@digga.com

DIGGA NEW SOUTH WALES

19 Mckay Close,
Wetherill Park, NSW 2164

Phone: 1300 2 DIGGA

Email: nsw@digga.com

DIGGA VICTORIA

17-21 Babbage Dr,
Dandenong, VIC 3175
Phone: 1300 2 DIGGA
Email: vic@digga.com

Web: www.digga.com

NORTH AMERICA

DIGGA NORTH AMERICA

2325 Industrial Parkway SW
Dyersville IA 52040

Phone: + 1 563 875 7915

Email: infous@digga.com

Web: www.diggausa.com

EUROPE

DIGGA EUROPE

Unit 1, Nexus Park

Plenty Close

Newbury, RG14 5RL

England, United Kingdom

Phone: +44 (0) 1488 688 550

Email: infouk@digga.com

Web: www.diggaeurope.com

Troubleshooting

TROUBLE	POSSIBLE CAUSE	REMEDY
Chain does not turn	Quick Coupler not completely engaged	Check and complete engagement
	Quick Coupler failure	Replace faulty coupler
	An obstruction in one of the hoses	Remove obstruction
	Hydraulic motor failure	Repair or replace. Contact Digga dealer
	Chain drive failure	Check and repair. Contact Digga dealer
	Nose roller bearing failed	Replace bearing
	Conveyor chain too tight	Loosen chain tension
Does not clear debris fast enough	Sand or spoil material build up in tooth root of sprocket	Raise, reverse chain and run to clear build up or loosen chain tension
	Worn teeth	Replace teeth if necessary
	Relief valve set below specifications	Test and reset if necessary
	Quick coupler or Hose restriction	Inspect and repair as needed
	Hydraulic system too hot	Shut down and cool
Hydraulic oil overheating	Conveyor Chain too tight	Adjust to proper tension
	Relief valve set too low on parent machine.	Test and set as needed.
	Restriction in Quick Release Coupler or hose.	Inspect and repair as needed
	Hydraulic Motor or hoses not size balanced to parent machine	Check flows and recommendations and change if necessary (see Digga Dealer).
Debris Cleaner does not slew	Parent Machine not equipped with oil cooler or sufficient sump capacity	Stop and allow to cool naturally when it gets hot.
	Faulty electrical harness OR Faulty electrical switch	Contact Digga
	Faulty electrical switch (If optional Plug 'n Go kit is in use)	Contact Digga
	Incorrect pinouts selected when using adaptor harness to 8-pin or to 14-pin plug (This could be the result if end user fitted the plug).	Contact an auto electrician to assist
Debris Cleaner does not slew	Solenoids on hydraulic valve faulty	Contact Digga
	No power on switch box (If optional Plug 'n Go kit is in use)	Check the 10A fuse on spiral power lead if cigarette lighter plug is operational

Warranty Statement

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, paddle blades), 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.

