DIGGA®



4 IN 1 TILTING BUCKET/6 IN 1 BUCKET

OPERATORS & PARTS MANUAL

PM-000053-D

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Congratulations on the purchase of your new DIGGA product! This product was carefully designed and manufactured to give you many years of dependable service. Only minor maintenance is required to keep it in top working condition. Be sure to observe all maintenance procedures and safety precautions in this manual and on any safety decals located on the product and on any equipment on which the attachment is mounted.

This manual has been designed to help you do a better, safer job. Read this manual carefully and become familiar with its contents.

WARNING!



Never let anyone operate this unit without reading the “Safety Precautions” and “Operating Instructions” sections of this manual. Always choose hard, level ground to park the vehicle on and set the brake so the unit cannot roll. Unless noted otherwise, right and left sides are determined from the operator’s control position when facing the attachment.

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

BEFORE OPERATION

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 understand this manual. If there is any portion of this manual or function you do not understand, contact your local authorized dealer or the manufacturer to obtain further assistance. Keep this manual available for reference.

Provide the manual to any new owners and/or operators.

SAFETY ALERT SYMBOL



This is the “Safety Alert Symbol” used by this industry. This symbol is used to warn of possible injury. Be sure to read all warnings carefully. They are included for your safety and for the safety of others working with you.

SERVICE

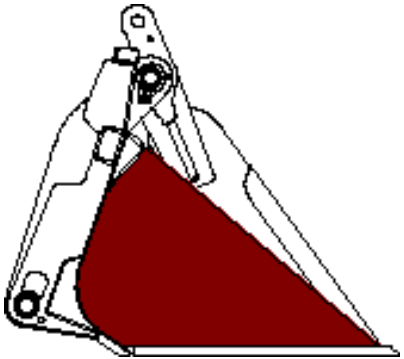
Use only manufacturer replacement parts. Substitute parts may not meet the required standards. Record the model and serial number of your unit on page 4. The parts department needs this information to insure that you receive the correct parts.

3 MAX LOAD WEIGHT CALCULATIONS

WHEN WORKING WITH A BUCKET, CONSIDER THE MACHINES RATED OPERATING CAPACITY (ROC), THE MASS OF THE BUCKET, THE VOLUME OF THE BUCKET AND THE MASS OF THE MATERIAL WHICH YOU WILL BE WORKING WITH.

THE MASS OF THE MATERIAL + THE MASS OF THE BUCKET SHOULD NEVER EXCEED THE MACHINE ROC

Use the worksheet on the following pages to calculate the mass of different materials which fit inside your bucket. The mass is calculated using the struck volume of the bucket. (as illustrated below)



MAX LOAD WEIGHT		MACHINE ROC		BUCKET WEIGHT
	=		MINUS (-)	

(1) Enter your machines ROC in the box above - Check your machines operators manual
(2) Enter your bucket weight above - This can be found on your buckets serial tag
(3) Using the above two figures, calculate your maximum allowable material load weight. Enter it in the red box above.
DO NOT EXCEED THIS WEIGHT LIMIT WHEN WORKING WITH YOUR BUCKET
(4) Locate your buckets volume - This can be found on your buckets serial tag
(5) Find the row below which matches your bucket volume
(6) Find the material you will be working with from the table below
(7) Ensure the number in the table does not exceed the calculated Max load weight

		WEIGHT OF MATERIAL BY BUCKET VOLUME (STRUCK)										
	BUCKET VOLUME	Wood chips - dry	Asphalt Crushed	Clay, dry excavated	"Earth, Excavated, Moist"	Earth, Packed	Earth, Wet Excavated	Sand, Dry	Clay Wet Excavated	Gravel with Sand	Sand Wet	Stone, Common, generic)
	m^3	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg
STANDARD TILT BUCKETS	0.218	113.5	157.3	237.7	314.7	332.1	349.6	349.6	398.5	419.4	419.4	548.8
	0.225	117.1	162.4	245.2	324.7	342.7	360.7	360.7	411.2	432.8	432.8	566.3
	0.229	119.3	165.4	249.8	330.7	349.1	367.4	367.4	418.8	440.8	440.8	576.8
	0.236	122.7	170.1	256.9	340.1	359.0	377.9	377.9	430.7	453.4	453.4	593.2
	0.246	127.9	177.4	267.9	354.8	374.5	394.1	394.1	449.3	472.9	472.9	618.8
HIGH VOLUME TILT BUCKETS	0.261	135.9	188.4	284.6	376.8	397.8	418.7	418.7	477.2	502.3	502.3	657.3
	0.273	141.7	196.5	296.8	393.1	414.9	436.7	436.7	497.7	523.9	523.9	685.5
	0.285	148.1	205.4	310.3	410.8	433.6	456.4	456.4	520.2	547.6	547.6	716.5
	0.303	157.8	218.7	330.4	437.5	461.7	486.0	486.0	554.0	583.1	583.1	763.0
	0.310	161.0	223.2	337.1	446.4	471.1	495.9	495.9	565.2	594.9	594.9	778.5
	0.323	168.2	233.2	352.2	466.3	492.2	518.1	518.1	590.5	621.6	621.6	813.4

4 SERVICE & PREPARATION FOR USE

All DIGGA Buckets are designed and manufactured to give dependable service. To keep it running efficiently read the instructions in this operator's manual. Each section is clearly identified so that you can easily find the information you need - whether it is operation, lubrication or maintenance.

Bucket 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 eg. wearparts.

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.

ALL SERVICE FOR WARRANTY MUST BE PERFORMED BY AN AUTHORISED DIGGA SERVICE AGENT. CONTACT YOUR LOCAL DIGGA DEALER FOR DETAILS.

MODEL _____

SERIAL NUMBER _____

DATE PURCHASED _____

IMPORTANT: ALL SERVICE AND REPAIR FOR WARRANTY AND ASSESSMENT FOR WARRANTY MUST BE PERFORMED BY AN AUTHORISED DIGGA SERVICE AGENT, ONLY GENUINE DIGGA REPLACEMENT PARTS CAN BE USED. SUBSTITUTE PARTS WILL 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.

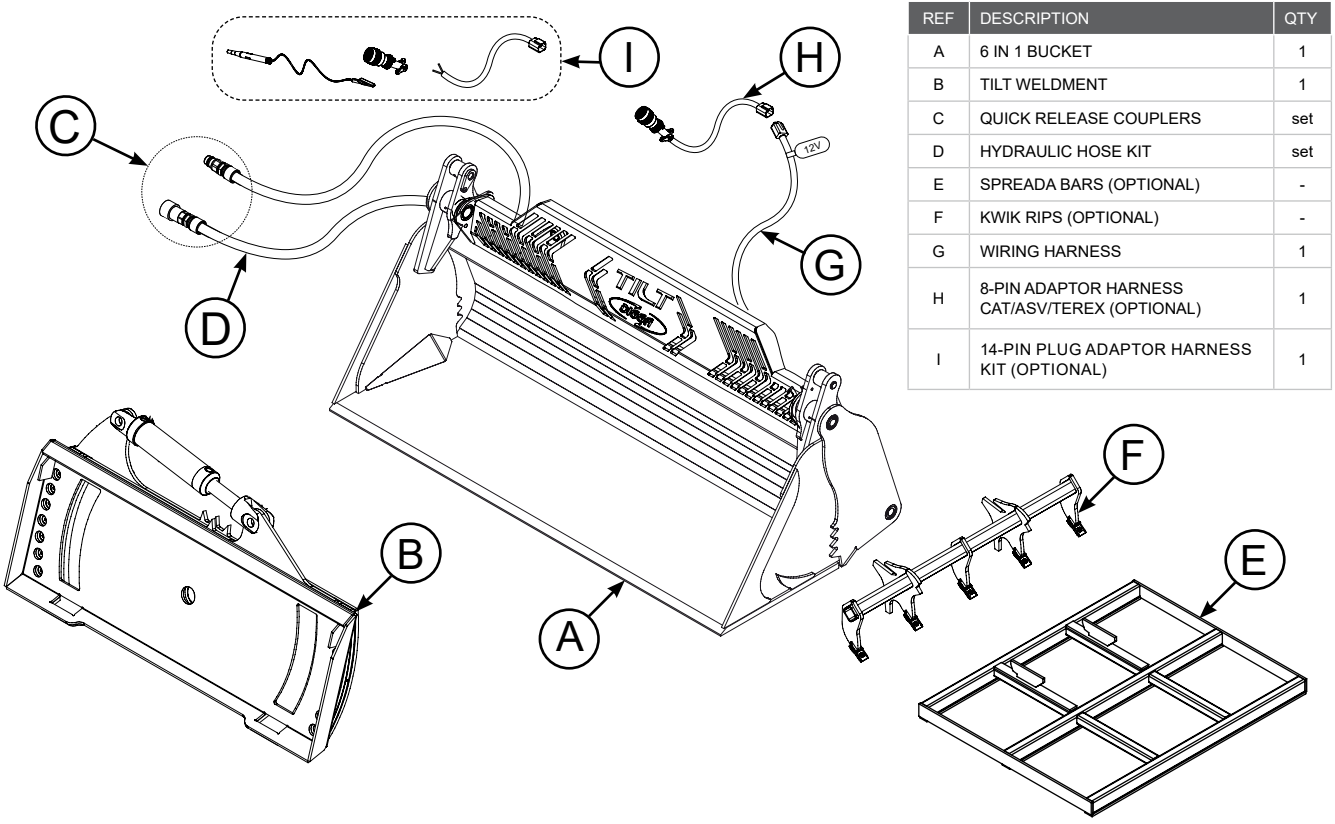


The parts department needs this information to insure accurate parts can be sent to the authorised service agent.

MODELS COVERED IN THIS MANUAL

BUCKETS	ACCESSORIES	TEETH
6 in 1 Bucket	Kwik rips Spreada bars	TS-1 TSC-3

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 6 in 1 Bucket is to be fitted to.



REF	DESCRIPTION	QTY
A	6 IN 1 BUCKET	1
B	TILT WELDMENT	1
C	QUICK RELEASE COUPLERS	set
D	HYDRAULIC HOSE KIT	set
E	SPREADA BARS (OPTIONAL)	-
F	KWIK RIPS (OPTIONAL)	-
G	WIRING HARNESS	1
H	8-PIN ADAPTOR HARNESS CAT/ASV/TEREX (OPTIONAL)	1
I	14-PIN PLUG ADAPTOR HARNESS KIT (OPTIONAL)	1

5 SAFETY PRECAUTIONS - GENERAL INFORMATION

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 and indicate potential failure or damage to equipment.

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.

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 machines 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 "Safety Alert Symbol"  will be used throughout this manual. It will appear with the word **DANGER, WARNING,** or **CAUTION**, and a safety message pertaining to the specific topic being covered. Take the time to read these messages as you come across them.

WARNING



KNOW WHERE UTILITIES ARE

Observe overhead electrical and other utility lines. Be sure equipment will clear them. When digging, call DIAL BEFORE YOU DIG ON 1100 (in Australia), or your local UTILITIES location service provider for location of buried utility lines, gas, water, and sewer, as well as any other hazard you may encounter.

WARNING



EXPOSURE TO RESPIRABLE CRYSTALLINE SILICA DUST ALONG WITH OTHER HAZARDOUS DUSTS MAY CAUSE SERIOUS OR FATAL RESPIRATORY DISEASE.

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

WARNING



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.

WARNING



END OF LIFE DISPOSAL

At the completion of the useful life of the unit, 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. Consider our environment.

WARNING



OPERATING THE 6 IN 1 BUCKET

- 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 equipment.
- All bystanders should be kept a minimum of 20 feet (6 meters) away from the working area of the bucket.
- Do not allow Site workers to climb or ride on bucket at any time, including while stationary, in operation or being moved.
- Operate only from the operator's station.
- Avoid steep hillside operation which could cause the machine to overturn. Consult your machines operator's and safety manuals for maximum incline allowable.

WARNING



- Reduce speed when driving over rough terrain, on a slope, or turning, to avoid overturning the vehicle.
- Travel only with the bucket in a safe transport position to prevent uncontrolled movement. Drive slowly over rough ground and on slopes.
- Do not drive close to ditches, excavations, etc., cave in could result.
- Before exiting the machine, lower the attachment to the ground, apply the parking brakes, turn off the prime mover's engine, and remove the key.
- Flow and pressure gauges, fittings, and hoses must have a continuous operating pressure rating of at least 25% higher than highest pressures of the system.

WARNING



- Do not smoke when refueling the prime mover. Allow room in the fuel tank for expansion. Wipe up any spilled fuel. Secure cap tightly when done.
- Remove the 6 in 1 Bucket from the prime mover before transporting to and from the job site.
- 6 in 1 Bucket shall be used only for their designed intent and shall not be loaded beyond the machine's rated operating capacity. Overloading or exceeding the manufacturers specifications will void all warranty.

WARNING



OPERATING THE 6 IN 1 BUCKET CONT....

- The 6 in 1 Bucket must be stopped before making adjustments to the attachment.
- All Excavation 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.

STORAGE OF THE 6 IN 1 BUCKET

WARNING



- Seal hydraulic couplers from contaminants and secure all hydraulic hoses off the ground to help prevent damage.
- Clean the unit thoroughly, removing all mud, dirt, and grease.
- Inspect for visible signs of wear, breakage, or damage. Order any parts required and make the necessary repairs to avoid delays upon removal from storage.
- Coat liberally with grease pivot points pins to prevent rust and reduce wear.
- Tighten loose nuts, cap screws and hydraulic connections.
- Replace decals that are damaged or in unreadable condition.
- Store unit in a dry and protected place. Leaving the unit outside will materially shorten its life.

WARNING



GROUND PERSONNEL AND BYSTANDERS

- 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 6 metres of it operating.
- Loose fitting clothing, long hair, jewellery and equipment which might become entangled in moving equipment are prohibited while working near the bucket.
- Operators, helpers, and other personnel working near 6 in 1 Bucket 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.

WARNING



MAINTAINING THE TRENCHER

- Before performing maintenance, lower the attachment to the ground, apply the parking brakes, turn off the engine, and remove the key.
- Never adjust a relief valve for pressure higher than recommended by the machine's manufacturer.

WARNING



TRANSPORTING

Follow all local government regulations that may apply along with recommended tie down points and any equipment safety precautions at the front of this handbook when transporting your attachment.

WARNING



TIE DOWN POINTS

- Tie down points are identified by tie down decals where required. Securing to trailer at other points is unsafe and can damage attachment.
- Do not attach tie down accessories around cylinders or in any way that may damage hoses or hydraulic components.
- Attach tie down accessories to unit as recommended.
- Check unit stability before transporting.

Verify that all tie down accessories (chains, slings, ropes, shackles and etc.) are capable of maintaining attachment stability during transporting and are attached in such a way to prevent unintended disengagement or shifting of the unit. Failure to do so could result in serious personal injury or death.

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.

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. Keep equipment clean to help avoid injury from slipping or a fall when getting on or off equipment.
6. Operate the attachment only in daylight or with 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. Do not exceed rated operating capacity of the host machine, as machine may become unstable resulting in loss of control.
10. Always lower the loader arms or machine boom to the ground, shut off the engine and remove the key before getting off the unit.
11. Never use the 6 in 1 Bucket on a machine that is not equipped with a cab or ROPS, and operator restraints (seat belts or equivalent devices).

6 SAFETY - WORKING WITH THE ATTACHMENT

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 loaders arm/s and cycle the rollback / dump cylinders to check hose clearances and to check for any interference.
  - ○ Operate the hydraulics on this product to ascertain forward and reverse.
  - ○ 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 Machines operator 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.

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 tool bar/quick-attach mechanism of your machine.
- If this product does not fit properly, contact your Digga Dealer before operating.
- Where 'Dead Man' connections are connected or installed it is illegal to disengage, tamper with or remove them.

WHEN ADJUSTING, SERVICING OR REPAIRING THIS PRODUCT

- Make no modifications to your 6 in 1 Bucket.
- When making repairs use only authorised Digga service agents, and genuine Digga parts. For fasteners, hydraulic hoses, or hydraulic fittings, use only properly rated parts.
- Replacement parts must also have safety signs attached.

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

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

BEFORE FIRST USE

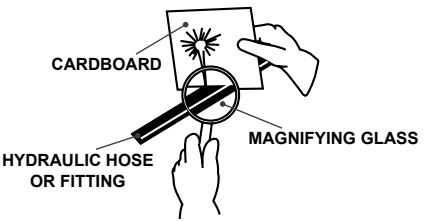
- Inspect the attachment for shipping damage. If damage does exist, do not operate until the damaged parts have been replaced or repaired.

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 any oil leaks.
- Wear and tear on pins, linkages, clips, bushes and hood.
- Ensure any damage or excessively worn parts are replaced.
- 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.

8 INSTALLATION AND OPERATING INSTRUCTIONS

The DIGGA 6 in 1 Bucket 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 6 in 1 Bucket. When a 6 in 1 Bucket is purchased from Digga or a DIGGA Dealer/Distributor the frame/attachment is matched for suitability and compatibility to the flows and pressure of the original machine it was purchased for. For Fitment of the 6 in 1 Bucket to other machines you must first contact your DIGGA dealer and receive written confirmation to ensure you do not incorrectly fit the 6 in 1 Bucket to a machine with higher flows or pressure than what the 6 in 1 Bucket was designed for. Warranty will be void if the 6 in 1 Bucket is fitted to an alternative machine without first receiving written confirmation from your DIGGA dealer. Exceeding the recommended max flow and pressure of the 6 in 1 Bucket 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 6 in 1 Bucket is appropriate for the intended conditions.

INSTALLATION INSTRUCTIONS

1. Remove the shipping banding from around the 6 in 1 Bucket and Frame.
2. Remove any attachments from the front of the machine.
3. Ensure you have read the serial tag on the 6 in 1 Bucket to obtain the max flow and pressure ratings. Ensure your machine flow and pressure settings are aligned with the requirements of the 6 in 1 Bucket.

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 6 in 1 Bucket onto your machine.



NOTE: IT IS IMPORTANT TO MAKE SURE THE LOCKING MECHANISM ON YOUR QUICKATTACH 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. Carefully raise the loader and cycle the tilt cylinders to check clearances and to verify that all mounting procedures have been successfully completed. The machine is now ready for use.
9. Check the cutting edges or teeth are not worn. Ensure all worn parts are replaced. Worn parts will be come ineffective and severely diminish the overall performance of the 6 in 1 Bucket.



IMPORTANT: BACK-DRAGGING MATERIAL OR PUSHING OR SCOOPING WITH THE FLOOR PARTIALLY OPEN CAN RESULT IN DAMAGE TO PRODUCT AND WILL VOID ALL DIGGA WARRANTIES.

OPERATING PROCEDURES

STANDARD BUCKET OPERATION

1. Fully close the floor against the bulldozer weldment and this product can be used as a standard bucket.
2. When picking up small quantities of material, the floor should be opened. This product can be lowered to the ground so the material is between the bulldozer weldment and the back edge of the floor. The floor can then be closed to pick up nearly all of the material.
3. When dumping into a truck or similar application, this product can dump at a greater height than a standard bucket by opening the floor to release the material.

BULLDOZING OPERATION

1. With the floor open, tilt the bulldozer weldment forward so that the front cutting edge penetrates the desired depth into the soil or materials being moved or levelled.

BACK DRAGGING OPERATION

1. With the floor fully open, tilt the bulldozer weldment forward so that the back cutting edge of the floor is on the ground and the bulldozer weld ment is off the ground. The angle of the back cutting edge permits the operator to cut sod or other vegetation.

GRAPPLE OPERATION

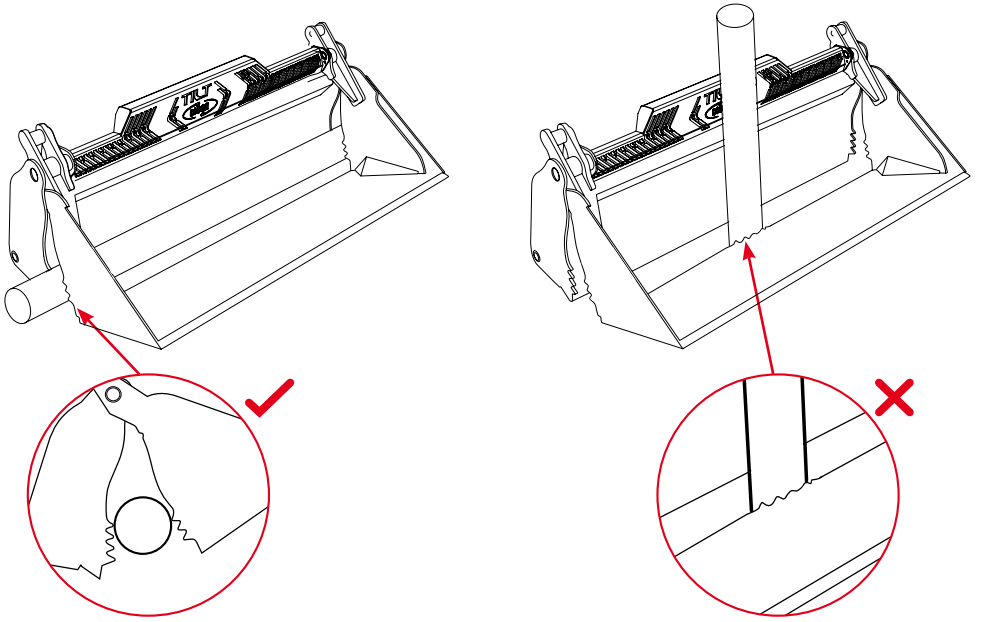
1. Open the floor sufficiently to clear the object being lifted. Lower the bucket so that the object is between the side jaws. Close the floor as completely as practical for the object being lifted and slowly begin lifting. If the object is too unstable, lower the object back to the ground andrepeat until the object remains stable during the entire process. Always lower the object to a stable position before opening the floor. (See page 17 for more information on correct grappling technique)

TILTING OPERATION

1. There are two methods of operation for the tilt feature on a 6-way bucket.
   - Direct connection of the tilt bucket harness to the skid steer loader.
   - Using the **optional** Plug and Go Kit (Part No. TC-000013) on skid steer loaders which are not equipped with an attachment service plug. See operators manual (Part No. PM-000080) for this kit.
   NOTE: There is no need for an auto electrician to install this kit.

CORRECT GRAPPLING

IMPORTANT: ALWAYS USE THE SIDE JAWS TO PICK UP OBJECTS. DO NOT USE THE FLOOR TO PICK OR PULL OBJECTS. THIS WILL CAUSE DAMAGE TO THE FLOOR/BUCKET AND WILL VOID THE WARRANTY.



KWIK RIPS ATTACHMENT (OPTIONAL)

1. Open your 6 in 1 Bucket and tilt forward.
2. Slide the floor of the 6 in 1 Bucket into the pickup and raise it slightly before closing so that the back locks into the pickup lug.

SPREADA BARS ATTACHMENT (OPTIONAL)

1. Open your 6 in 1 Bucket and lower onto the spreada bar with bucket back cutting egde resting against the back of the pickup lug.
2. Close the bucket so that the bucket floor locks into the front of the pickup lug on the spreada bar, adjust the angle of bucket if necessary.
3. Raise up and tilt forward to check that the spreada bars are locked in correctly.

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/s in a dry and protected place. Leaving the attachment/s 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 1995 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.

The key feature of your Digga 6-way Bucket is low maintenance. It contains no user serviceable parts, unauthorised disassembly will void warranty.

SAFETY FIRST!! READ AND UNDERSTAND THE SAFETY INSTRUCTIONS BEFORE BEGINNING ANY 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)
- Wear and tear on Pins, linkages, cutting edges
- 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

EVERY 10 HOURS OF USE

- Grease 9 fittings: one on each of the two pivot points for the floor and one on each end of the three hydraulic cylinders.

Note: Some of the hydraulic cylinders have two grease fittings on the cross tube end of the barrel section of the cylinder. Only one of these two fitting must be greased.

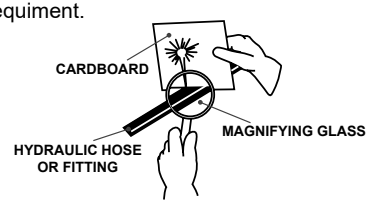
- Grease the Tilting plate pivot. There is a grease nipple located in the centre of the pivot plate
- Grease each grease nipple on the spacer plate remove and the ends of the Tilt plate

See Page 20

Always wear safety goggles or glasses when inspecting equiment.

WARNING!

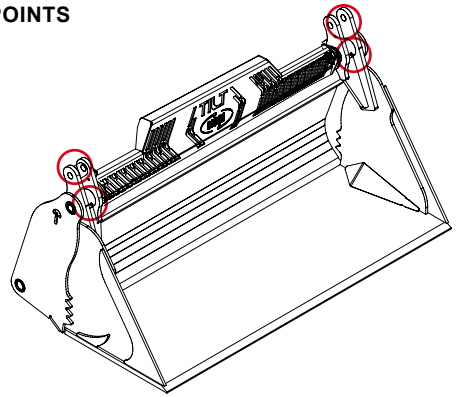
If injured by injected fluid, see a doctor at once. If your doctor is not familiar with this type of injury, ask him to research it immediately to determine proper treatment.

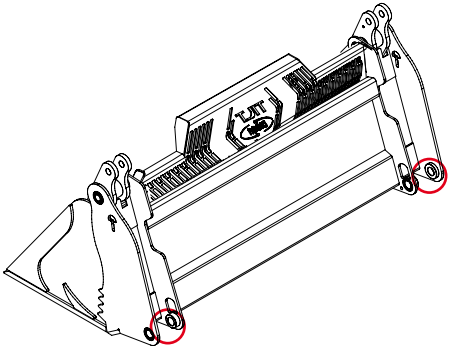


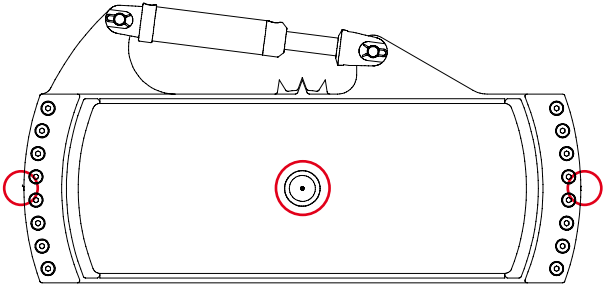
Escaping fluid under pressure can have sufficient force to penetrate the skin causing serious personal injury. Fluid escaping from a very small hole can be almost invisible. Use a piece of cardboard or wood, rather than hands to search for suspected leaks. Keep unprotected body parts, such as face, eyes,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

9 MAINTENANCE

GREASE POINTS







REPLACING THE BOLT ON CUTTING EDGE

FRONT OF THE FLOOR

1. Park your power unit on a level surface with this product properly attached.
2. Place your power unit's transmission in "Park" and engage the parking brake.
3. Lower this product onto pre-placed blocking as specified below:



DANGER: DO NOT USE BLOCKING MADE OF CONCRETE BLOCKS, LOGS, BUCKETS, BARRELS OR ANY OTHER MATERIAL THAT COULD SUDDENLY COLLAPSE OR SHIFT POSITIONS.
DO NOT USE WOOD OR STEEL BLOCKING THAT SHOWS ANY SIGNS OF MATERIAL DECAY.
DO NOT USE BLOCKING THAT IS WRAPPED, TWISTED OR TAPERED.

COMPRESSIVE STRENGTH OF EACH BLOCKING UNIT:
1,000psi - 68 bar or the capability to support 1,000lb - 453.6kg without crushing or collapsing when the load is applied.

QUALITY AND LOCATION OF BLOCKING UNITS:
One block, the full width of the bucket, or two blocks at least 1' - 6" - (457mm) under each end of the bucket, all placed immediately behind the front cutting edge of the floor.

DIRECTION OF PLACEMENT:
The length should be parallel to that edge.

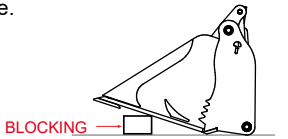
DIMENSIONS OF EACH BLOCKING UNIT.
Length: 66" (1700mm minimum) - greater than the bucket width preferred
Height: 6" (150mm)
Base width: 27.5" (700mm)

4. Shut off your power unit's engine, remove the starter key, wait for all moving parts to come to a stop, and relieve all pressure in the hydraulic lines.
5. Remove all nuts from the bolts that secure the cutting edge to the floor. Begin in the centre and remove the end nuts last. Use of a pipe wrench or hand grinder may be necessary to safely remove extremely worn or damaged nuts.
6. Remove the cutting edge and either turn the cutting edge end-for-end or, if this process has already occurred, properly dispose of the cutting edge. Properly dispose of all bolts and nuts.
7. Install the new or reversed cutting edge by loosely securing each end of the cutting edge with a new bolt and nut.
8. Install all the remaining new nuts and bolts and tighten all the new nuts to 380 ft. lbs.(51.52nm), + or – 40ft. lbs. (5.42nm)

REPLACING THE BOLT ON CUTTING EDGE

REAR OF THE FLOOR

1. Horizontally place a 4 x 4 x 2'-0" (minimum) block of wood on blocking or on another type of stand so that the 4x4 is at least 8" above the ground and so that one end of the 4x4 has no support under at least the first 10" of that end.
2. Start your power unit, raise the bucket, and open the floor of the bucket.
3. Position the bucket so that the unsupported end of the 4x4 is between one end of the bulldozer weldment and that same end of the floor. The 4x4 should be above the floor tooth area.
4. Close the floor to grasp the 4x4 between the bulldozer weldment and the floor. Having the floor teeth below the 4x4 will prevent the 4x4 from slipping down out of the grasp of the floor.
5. Park your power unit on a level surface with this product properly attached. (Allow ample open area around this product.)
6. Place your power unit's transmission in "Park" and engage the parking brake.
7. Lower this product onto preplaced blocking as specified on below.
   (Blocking is a solid piece of wood used to elevate the front or back)



DANGER: DO NOT USE BLOCKING MADE OF CONCRETE BLOCKS, LOGS, BUCKETS, BARRELS OR ANY OTHER MATERIAL THAT COULD SUDDENLY COLLAPSE OR SHIFT POSITIONS.
DO NOT USE WOOD OR STEEL BLOCKING THAT SHOWS ANY SIGNS OF MATERIAL DECAY.
DO NOT USE BLOCKING THAT IS WRAPPED, TWISTED OR TAPERED.

COMPRESSIVE STRENGTH OF EACH BLOCKING UNIT:
1,000psi - 68 bar or the capability to support 1,000lb - 453.6kg without crushing or collapsing when the load is applied.

QUALITY AND LOCATION OF BLOCKING UNITS:
One block, the full width of the bucket, or two blocks at least 1' - 6" - (457mm) under each end of the bucket, all placed immediately behind the front cutting edge of the floor.

DIRECTION OF PLACEMENT:
The length should be parallel to that edge.

DIMENSIONS OF EACH BLOCKING UNIT.
Length: 66" (1700mm minimum) - greater than the bucket width preferred
Height: 6" (150mm)
Base width: 27.5" (700mm)

REPLACING THE BOLT ON CUTTING EDGE (CONT)

8. Shut off your power unit's engine, remove the starter key, wait for all moving parts to come to a stop, and relieve all pressure in the hydraulic lines.
9. Disconnect the two hydraulic lines from this product to your power unit.
10. Refer to the operator's manual(s) for your power unit, loader, quick-attach and follow the instructions contained therein for disconnecting this product from the loader.
11. Restart your power unit and move your power unit in front of this product while staying to one side of this product.
12. Move at an angle toward this product so that one of the two front tyres of your power unit rolls up onto the front cutting edge of the floor.
13. When that tyre is completely supported by the floor, place your power unit's transmission in "Park" and engage the parking brake. This weight on the front cutting edge of the floor should hold the rear cutting edge of the floor and the bulldozer weldment cutting edge up off of the level surface
14. Shut off your power unit's engine, remove the starter key, wait for all moving parts to come to a stop, and relieve all pressure in the hydraulic lines.
15. Remove all nuts from the bolts that secure the cutting edge to the floor or the bulldozer weldment. Begin in the centre and remove the end nuts last. Use of a pipe wrench or hand grinder may be necessary to remove extremely worn or damaged nuts
16. Remove and properly dispose of the cutting edge. The cutting edge on the rear of the floor may be turned end-for-end if only one side of the cutting edge is worn out. Properly dispose of all bolts and nuts.
17. Install the new or reversed cutting edge by loosely securing each end of the cutting edge with a new bolt and nut.
18. Install all the remaining new nuts and bolts and tighten all the new nuts on rear of the floor to 380 ft. lbs., = or -40 ft. lbs. or all the new nuts on the bulldozer weldment to 245 ft. lbs., = or – 25ft. lbs. for 5/8" dia. bolts and 110ft. lbs., = or – 10 ft. lbs. for ½" dia. bolts.

TO REPLACE TEETH ON KWIK RIPS

1. Tap Tooth (felt side down) to ensure felt is attached firmly.
2. Press felt on the front of the Tooth to ensure felt is attached firmly.
3. Place tooth in the pocket ensuring the tooth cutting edge is facing the same direction as the pilot.
4. With the tooth placed in the pocket, knock the tooth in with a soft head Mallet.
5. Continue until all teeth are replaced as necessary.

10 SAFETY - STICKER LOCATION

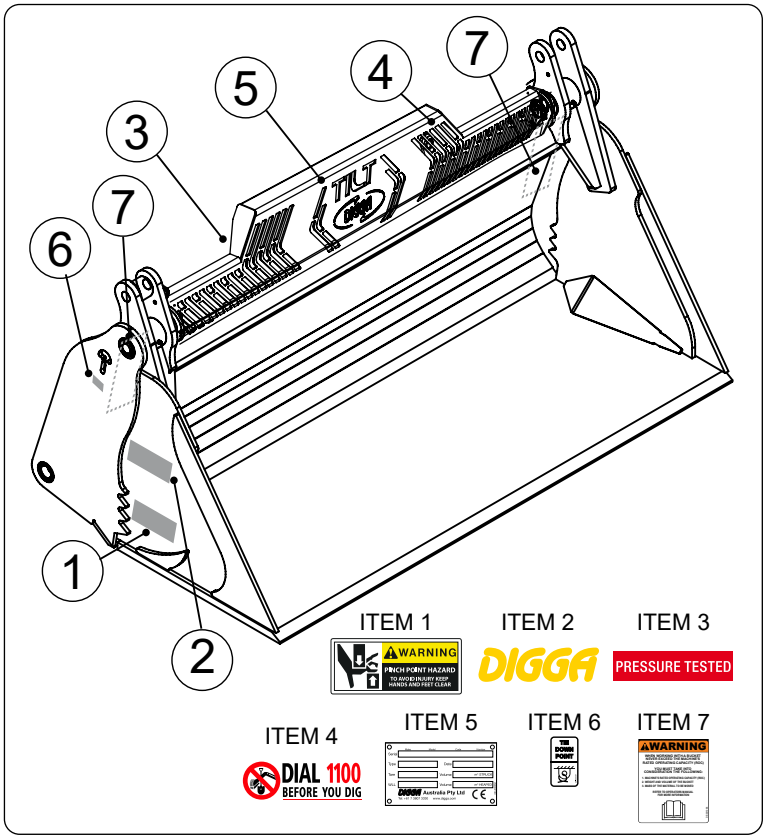
PLACEMENT OR REPLACEMENT OF SAFETY SIGNS

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.
1. Apply the safety sign to the position shown in the diagram 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.hh

NO.	ORDER CODE	DESCRIPTION	QTY
1	DE-000129	Decal-Pinch Point	2
2	DE-000781	Digga Logo	2
3	DE-000055	Decal-Pressure Tested	2
4	DE-000046	Decal-Dial Before You Dig	1
5	DE-000062	Serial Tag	1
6	DE-000467	Decal-Tie Down	2
7	DE-001096	Rated Operating Capacity	2



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

DIGGA INTERNATIONAL SALES OFFICES

ASIA PACIFIC

DIGGA HEAD OFFICE - BRISBANE
4 Octal St, Yatala QLD 4207

PH: (07) 3807 3330

EMAIL: info@digga.com

DIGGA NEW SOUTH WALES
19 Mckay Close,
Wetherill Park, NSW 2164

PH: 1300 2 DIGGA

EMAIL: nsw@digga.com

DIGGA VICTORIA
17-21 Babbage Dr,
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

12 TROUBLESHOOTING

BUCKET

TROUBLE	POSSIBLE CAUSE	REMEDY
Damage to Hydraulic Cylinder Rod or Oil.	Spoil build up between cylinder and bucket.	Repair or replace cylinder.
Oil Leak.	Loose Fittings or Hoses.	Inspect and Repair or Replace.
	Damage to Fittings or Hoses.	Inspect and Repair or Replace.
	Damage to cylinder.	Inspect and Repair or Replace.
	Damaged cylinder seal.	Inspect and Repair or Replace.
Damage to Bucket.	Abuse.	Contact your local Digga dealer.
	Bucket not fitting to parent machine correctly.	Contact your local Digga dealer.

TILT ASSEMBLY

TROUBLE	POSSIBLE CAUSE	REMEDY
Bucket will not Tilt.	Bucket Harness not plugged into skid steer loader.	Plug harness into the machine.
	Pinouts on bucket harness plug is not compatible with skid steer loader.	Contact Digga.
	Wires have detatched from Hirschman plug on hydraulic block valve.	Contact Digga.

SPREADA BARS

TROUBLE	POSSIBLE CAUSE	REMEDY
Damage to Spreada Bars.	Abuse.	Contact your local Digga Dealer.

KWIK RIPS

TROUBLE	POSSIBLE CAUSE	REMEDY
Bent.	Abuse.	Contact your local Digga Dealer.
Not ripping soil effectively.	Worn Teeth.	Inspect and replace.

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.
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.

NOTES

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Australian Designed and Manufactured