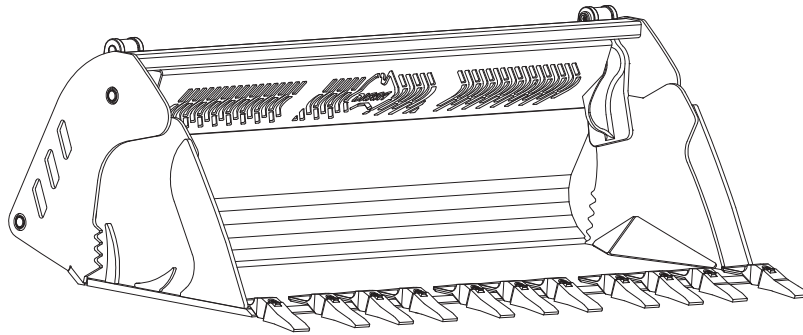


X-SERIES 4 IN 1 BUCKET

OPERATOR'S MANUAL



MY.DIGGA.COM



DECAL IS APPLIED TO THE
ATTACHMENT

MY.DIGGA.COM



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 4 in 1 Bucket.

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 authorised 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.**

Service

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



CAUTION

Never allow anyone to 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.

MODELS COVERED IN THIS MANUAL	
X SERIES	
XM SERIES	MINI 4 IN 1 BUCKET
XH SERIES	HEAVY DUTY 4 IN 1 BUCKET
XD SERIES	SUPER HEAVY DUTY 4 IN 1 BUCKET

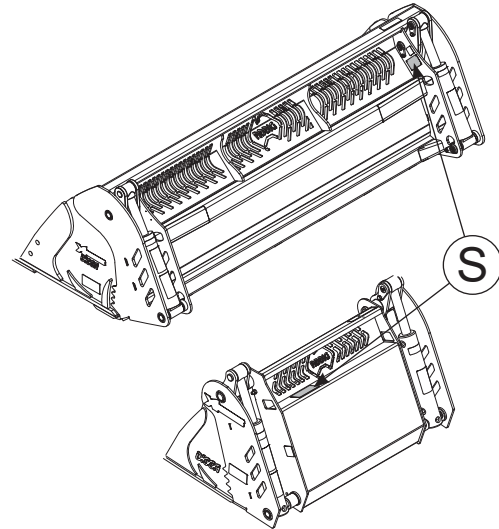
Your Digga 4 in 1 Bucket model provides important information about the product. Compare the model engraved on the serial plate to the list above.

Product Identification

Your Digga 4 in 1 Bucket is a user serviceable part. 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 whatsoever 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 serial plate (S) located on the product.

Serial	Make	Model	Code	Number
Type	Date			
Volume <small>(to 2nd cut)</small>	m ³ STRUCK	Volume <small>(to 2nd cut)</small>	m ³ HEAPED	
Tare				
DIGGA Australia Pty Ltd				
Tel: +61 7 3807 3330 www.digga.com				

DE-00062



Model: _____

Serial Number: _____

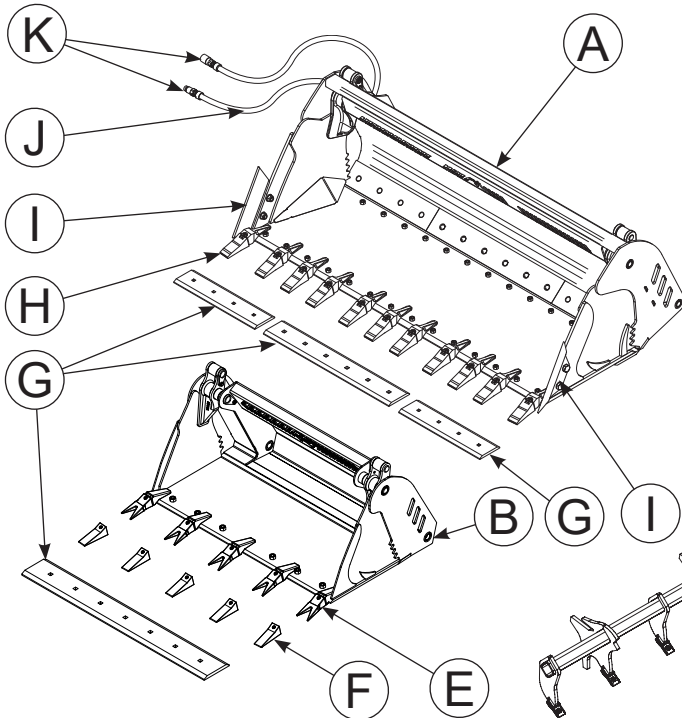
Purchase Date: _____

NOTE

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

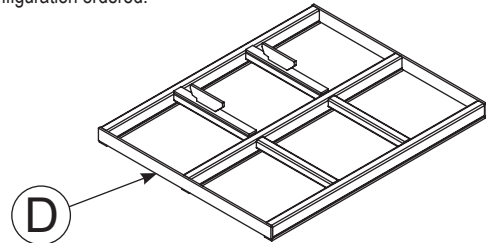
Preparation for use

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 type of machine the 4 in 1 Bucket is to be fitted to and the configuration ordered.



REF	DESCRIPTION	QTY
A	XH/XD 4 IN 1 BUCKET	1
B	XM 4 IN 1 BUCKET	1
C	KWIK RIPS (OPTIONAL)	-
D	SPREADER BARS (OPTIONAL)	-
E	TIGER TOOTH	set*
F	CHISEL TOOTH	set*
G	CUTTING EDGES	set*
H	ESCO TOOTH	set*
I	SIDE CUTTERS (ONLY XH & XD)	2*
J	HYDRAULIC HOSE KIT	1
K	QUICK RELEASE COUPLERS	2

*Teeth/cutting edges number/type/size are depending on the bucket width and configuration ordered.



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 immediately and 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 that 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.

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.

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.
- 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

End of Life Disposal

- At the completion of the useful life of the 4 in 1 Bucket, 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 4 in 1 Bucket

- 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.
- Do not exceed rated operating capacity (ROC) of the host machine, as machine may become unstable resulting in loss of control. 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 4 in 1 Bucket from the parent machine before transporting to and from the job site.

Safety Precautions - General Information

- 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). Although, this is not applicable when using this attachment on a stand-on mini loader.
- 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 4 in 1 Bucket in a safe transport position to prevent the uncontrolled movement.
- Drive slowly over rough ground and on slopes.
- Tether any accessory connected to the 4 in 1 Bucket 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.
- 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 4 in 1 Bucket .
- 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.

Safety Precautions - General Information

- The 4 in 1 Bucket shall be cleaned only when the mechanism is in neutral and stopped; long-handled shovels shall be used to move debris from the 4 in 1 Bucket. Materials heavier than 10 kg must be moved mechanically or by using at least two people.
- The 4 in 1 Bucket shall be used only for their designed intent and shall not be loaded beyond their rated capacity. Overloading or exceeding the manufacturers specifications will void all warranty.



CAUTION

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



DANGER

During 4 in 1 Bucket 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 4 in 1 Bucket.

Storing your 4 in 1 Bucket

- Seal hydraulic couplers from contaminants and secure all hoses off the ground to help 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 damage parts and perform the necessary repairs to avoid delays upon removal from storage.
- Check that hydraulic cylinders and hoses are full of clean oil and apply grease to all grease nipple points.
- Coat all pivot point pins liberally with grease to prevent rust and reduce wear.
- Tighten loose nuts, fasteners, 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 shorten its life.

Safety Precautions - General Information

Maintaining the 4 in 1 Bucket

- 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.

Transporting the 4 in 1 Bucket

- 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 and to ensure that the attachment is firmly fastened without causing any damage to it.
- Do not attach tie down accessories around cylinders or in any way that may damage hoses or hydraulic components.
- 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.
- Refer to the [NHVR Load Restraint Guide](#) for more information about how to safely transport your attachment.

Safety - Working with the Attachment

Complete a Risk Assessment

Your Digga 4 in 1 Bucket 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) 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.
 - 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 4 in 1 Bucket.
- When making repairs use only authorized Digga 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.

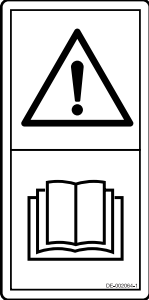
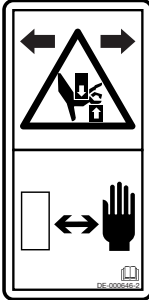
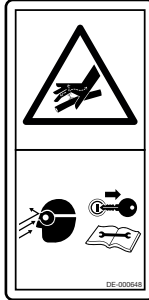





CAUTION

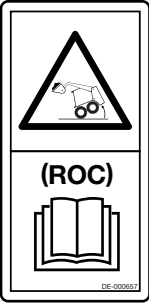

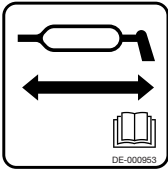

Wait for all moving parts to stop completely before making any adjustments or cleaning.

Safety - Decal Labels

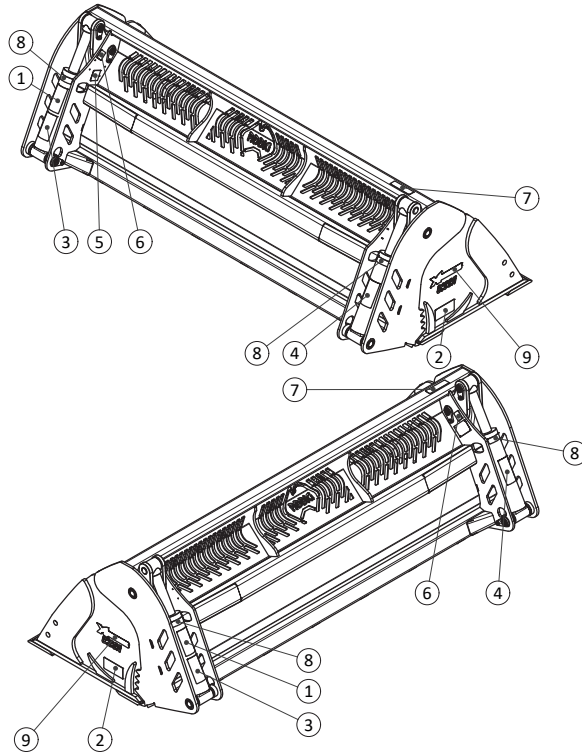
This section provides a glossary of safety labels found on your Digga 4 in 1 Bucket. These labels are important! Become familiar with both their meaning and location prior to operating the attachment. Ensure that each label is clean, visible, and legible at all times. To clean the decal, use a soft cloth, 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.

ITEM 1	READ OPERATOR'S MANUAL	ITEM 2	PINCH POINT HAZARD	ITEM 3	HIGH PRESSURE FLUID
					
	<p> DANGER</p> <p>Completely read and understand this operator's manual before using your attachment. Keep the manual with the attachment at all times.</p>		<p> WARNING</p> <p>Keep hands and body parts a safe distance from actuating parts.</p>		<p> WARNING</p> <p>Pressure injection risk of injury: This machine operates on high-pressure hydraulic fluid. Always wear eye protection and shut-off the engine before performing maintenance on this machine. See page 22.</p>

Safety - Decal Labels

ITEM 4	DO NOT EXCEED ROC	ITEM 5	MY.DIGGA.COM	ITEM 6	GREASE POINTS
					
	<p> DANGER</p> <p>Do not exceed the machine rated operational capacity. See "Rated Operating Capacity" on page 23.</p>		<p>NOTE Scan the QR-code to access: my.digga.com Find manuals, safety information, guides and more.</p>		<p>NOTE Lubricate the pivots regularly by the grease nipples. See "Greasing (XH & XD Series)" on page 35 and "Greasing (XM Series)" on page 36.</p>

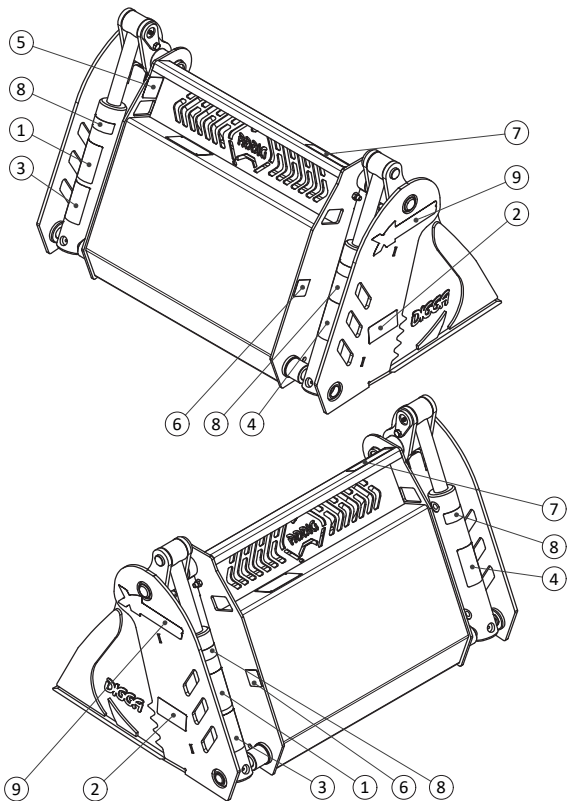
Safety - Decal Locations



DKIT1167			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	DE-002064-1	READ OPERATOR'S MANUAL - 60mmW x 120mmH
2	2	DE-000646	PINCH POINT HAZARD - 120mmW x 60mmH
3	1	DE-000648	HIGH PRESSURE FLUID - 60mmW x 120mmH
4	1	DE-000657	TIPPING - ROC/ REFER MANUAL - 60mmW x 120mmH
5	1	DE-000850	MY DIGGA (QR CODE) - 50mmW x 50mmH
6	2	DE-000953	GREASE POINTS - 40mmW x 40mmH
7	1	DE-000046	BEFORE YOU DIG - 120mmW x 31mmH
8	2	DE-000055	PRESSURE TESTED
9	2	DE-002261	X SERIES LOGO 197mmW x 53mmH

Item 7 is only applicable to Australia. Refer to "Know where utilities are" on page 9.

Safety - Decal Locations



DKIT1166			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	DE-002064-1-SM	READ MANUAL - 45mmW x 90mmH
2	2	DE-000646-1	PINCH POINT HAZARD - 90mmW x 45mmH
3	1	DE-000648-1	HIGH PRESSURE FLUID - 45mmW x 90mmH
4	1	DE-000657-1	TIPPING - ROC/ REFER MANUAL - 45mmW x 90mmH
5	1	DE-000850	MY DIGGA (QR CODE) - 50mmW x 50mmH
6	2	DE-000953	GREASE POINTS - 40mmW x 40mmH
7	1	DE-000046	BEFORE YOU DIG - 120mmW x 31mmH
8	2	DE-000055	PRESSURE TESTED
9	2	DE-002261	X SERIES LOGO 197mmW x 53mmH

Item 7 is only applicable to Australia. Refer to "Know where utilities are" on page 9.

The key feature of your Digga 4 in 1 Bucket 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 whatsoever 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 4 in 1 Bucket for shipping damage. If damage does exist, do not operate until the damaged parts have been replaced or repaired.

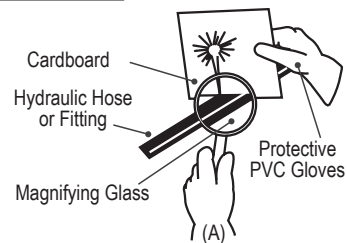
Before Each Use

- 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" on page 18).
- Lubricate all greasing points. Regrease all greasing point every 10 hours of use. See "Greasing (XH & XD Series)" on page 35 and "Greasing (XM Series)" on page 36.
- 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 4 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 4 in 1 Bucket.

When a 4 in 1 Bucket 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 4 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 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 4 in 1 Bucket 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 4 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. 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 9). Review the job at hand and determine the 4 in 1 Bucket is appropriate for the intended conditions. For example: Do not use it to extract or crush posts, rocks or other material from the ground.

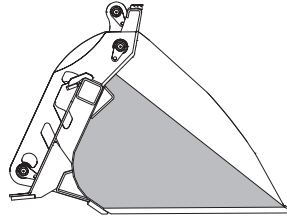
Rated Operating Capacity

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.

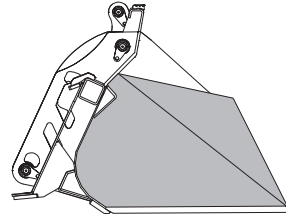
The sum of the mass of the material loaded plus the mass of the bucket shall never exceed the machine rated operating capacity.

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).

Commissioning Procedure



Heaped Volume



Struck Volume

MACHINE ROC BUCKET WEIGHT MAXIMUM LOAD WEIGHT

 minus (-) =

1. Enter your machines ROC in the blue box above - Check your machines operators manual.
2. Enter your bucket weight in the green box above - This can be found on your bucket's serial tag.
3. Using the above two figures, calculate your maximum allowable material load weight by subtracting the **bucket weight** from the **machine ROC**. Enter the result in the red box above.

DANGER

Do not exceed the maximum load weight limit when working with your bucket.

4. Locate your bucket volume - This can be found on your bucket's serial tag.
5. On the table of the following page, find the row which matches your bucket volume.
6. Find the material you will be working with.
7. Ensure the number in the table does not exceed the calculated **maximum load weight**.

Commissioning Procedure

WEIGHT OF MATERIAL BY BUCKET VOLUME (STRUCK) - XM SERIES											
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
0.1	52	72	109	144	152	160	160	183	192	192	252
0.103	54	74	112	149	157	165	165	188	198	198	259
0.124	65	89	135	179	189	199	199	227	239	239	312
0.128	67	92	140	185	195	205	205	234	246	246	322
0.132	69	95	144	191	201	212	212	241	254	254	332
0.144	75	104	157	208	219	231	231	263	277	277	363
0.153	80	110	167	221	233	245	245	280	294	294	385
0.166	86	120	181	240	253	266	266	303	319	319	418

Commissioning Procedure

WEIGHT OF MATERIAL BY BUCKET VOLUME (STRUCK) - XU, XUV, XH & XD SERIES											
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
0.21	109	152	229	303	320	337	337	384	404	404	529
0.224	117	162	244	323	341	359	359	409	431	431	564
0.232	121	167	253	335	353	372	372	424	446	446	584
0.239	124	172	261	345	364	383	383	437	460	460	602
0.243	127	175	265	351	370	390	390	444	467	467	612
0.25	130	180	273	361	381	401	401	457	481	481	629
0.301	157	217	328	435	459	483	483	550	579	579	758
0.314	163	227	342	453	478	504	504	574	604	604	790
0.328	171	237	358	473	500	526	526	600	631	631	826
0.328	171	237	358	473	500	526	526	600	631	631	826
0.343	179	247	374	495	523	550	550	627	660	660	863
0.349	182	252	381	504	532	560	560	638	671	671	879
0.356	185	257	388	514	542	571	571	651	685	685	896
0.365	190	263	398	527	556	585	585	667	702	702	919
0.372	194	268	406	537	567	597	597	680	716	716	936
0.372	194	268	406	537	567	597	597	680	716	716	936
0.388	202	280	423	560	591	622	622	709	746	746	977
0.401	209	289	437	579	611	643	643	733	771	771	1009
0.443	231	320	483	640	675	710	710	810	852	852	1115
0.458	238	330	499	661	698	734	734	837	881	881	1153

Installation instructions

1. Remove the shipping banding from around the 4 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 4 in 1 Bucket to obtain its weight and volume. Ensure your machine ROC is adequate to handle the job intended. See "Rated Operating Capacity" on page 23.



DANGER

Do not exceed the machine Rated Operating Capacity when working with your bucket.

4. Following all standard safety practices and the instructions for installing an attachment in your machine operator's manual, install the 4 in 1 Bucket onto your Machine.

NOTE

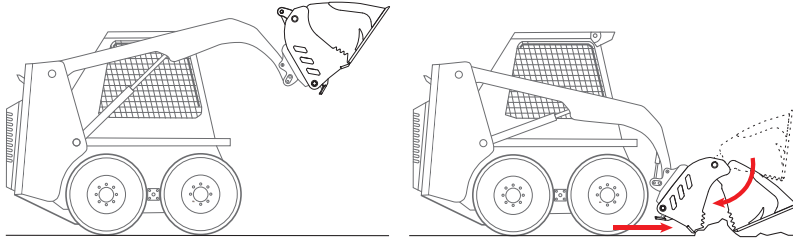
It is important to make sure the locking mechanism on your quick attach is engaged, therefore locking the attachment onto the machine..

5. Lower the unit to the ground and remove the key from the parent machine.
6. Relieve any pressure from the auxiliary hydraulic system and after making sure that there is not any foreign matter on the hydraulic couplers, connect the power and return couplers to the auxiliary hydraulic system of your machine.
7. Route the hoses in such a fashion as to avoid pinching or chafing.
8. 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 4 in 1 Bucket. See "Maintenance" on page 37.

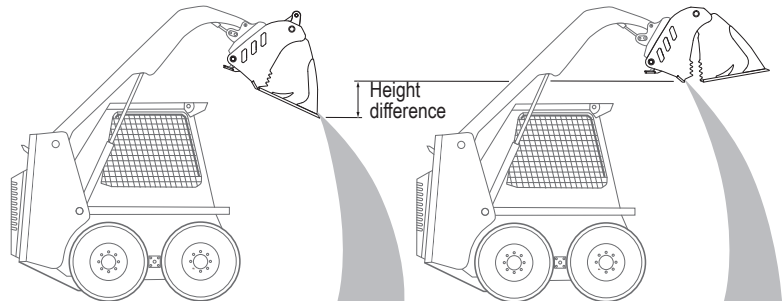
Operating Instructions

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.

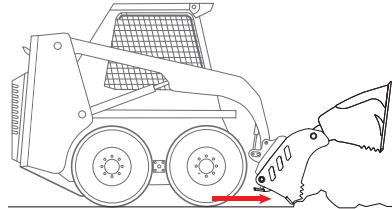


3. When dumping into a truck or similar application, this product can dump at a greater height than a standard bucket by opening the floor to release the material.



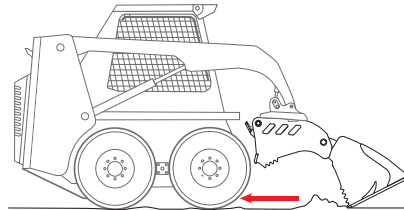
Dozing

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



Back dragging

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



CAUTION

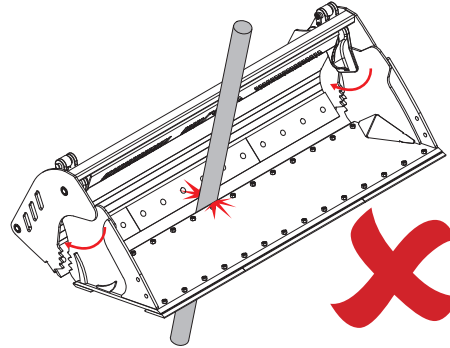
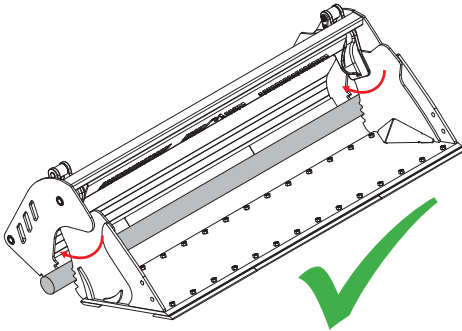
Back-dragging material or pushing or scooping with the floor partially open can result in damage to product and will void all Digga warranties.

Operating Instructions

Grapple

1. Open the floor sufficiently to clear the object being lifted.
2. Lower the bucket so that the object is between the side jaws.
3. 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 and repeat until the object remains stable during the entire process. Always lower the object to a stable position before opening the floor.



NOTE

Always use the side jaws to pick up objects. Do not use the floor to pick up or pull objects. This will cause damage to the floor/bucket and will void the warranty.

Tilting (only applicable to tilting 6 in 1 bucket)

There are two methods of operation for the tilt feature on a 6-way bucket.

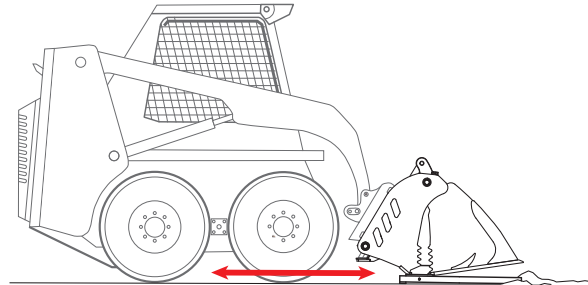
1. Direct connection of the tilt bucket harness to the skid steer loader.
2. Using the optional Plug and Go Kit (Part No. TC-000013) on skid steer loaders which are not equipped with an attachment service plug. See operators manual (Part No. PM-000080) for this kit.

NOTE

There is no need for an auto electrician to install this kit.

Spreader bar attachment (optional)

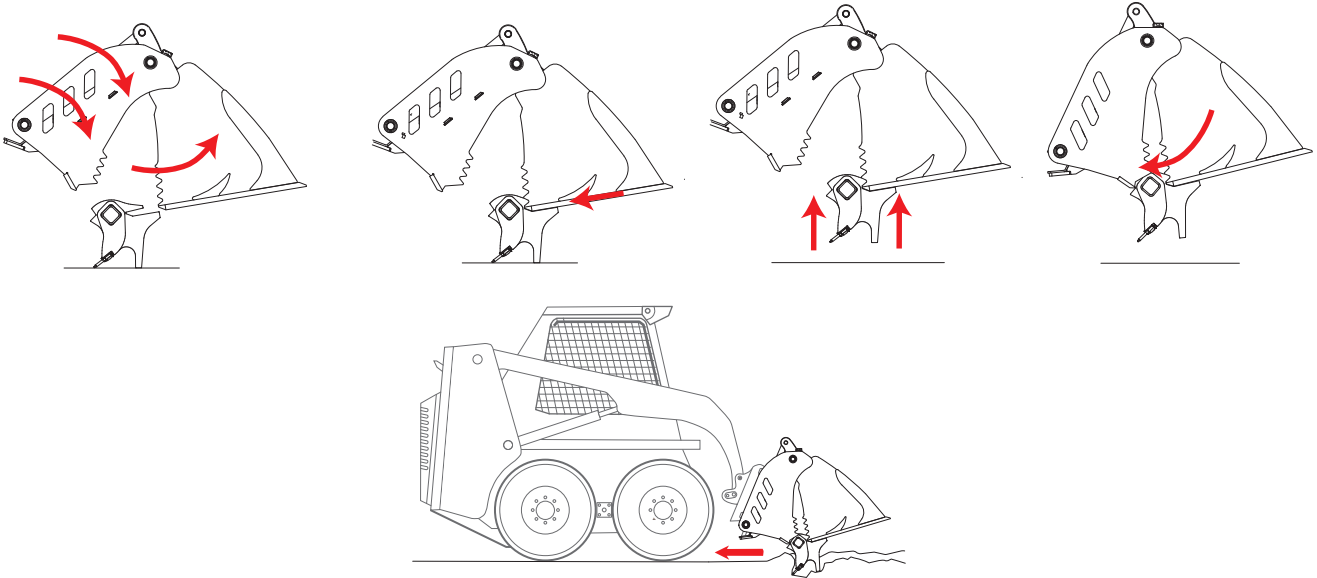
1. Open your 4 in 1 Bucket and lower onto the spreader bar with bucket back cutting edge resting against the back of the pickup lug.
2. Close the bucket so that the bucket floor locks into the front of the pickup lug on the spreader bar, adjust the angle of bucket if necessary.
3. Raise up and tilt forward to check that the spreader bars are locked in correctly.



Operating Instructions

Kwik rips attachment (optional)

1. Open your 4 in 1 Bucket and tilt it forward.
2. Slide the floor of the 4 in 1 Bucket into the pickup and raise it slightly before closing so that the back locks into the pickup lug.



NOTE

The use of Kwik Rips is limited to smaller skid steer loaders. Consult your Digga dealer for the correct application.

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 machine's 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.

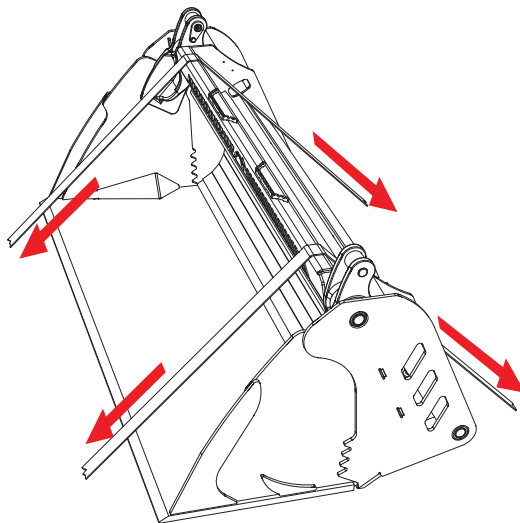
When attachments are not on the parent machine

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.

Operating Instructions

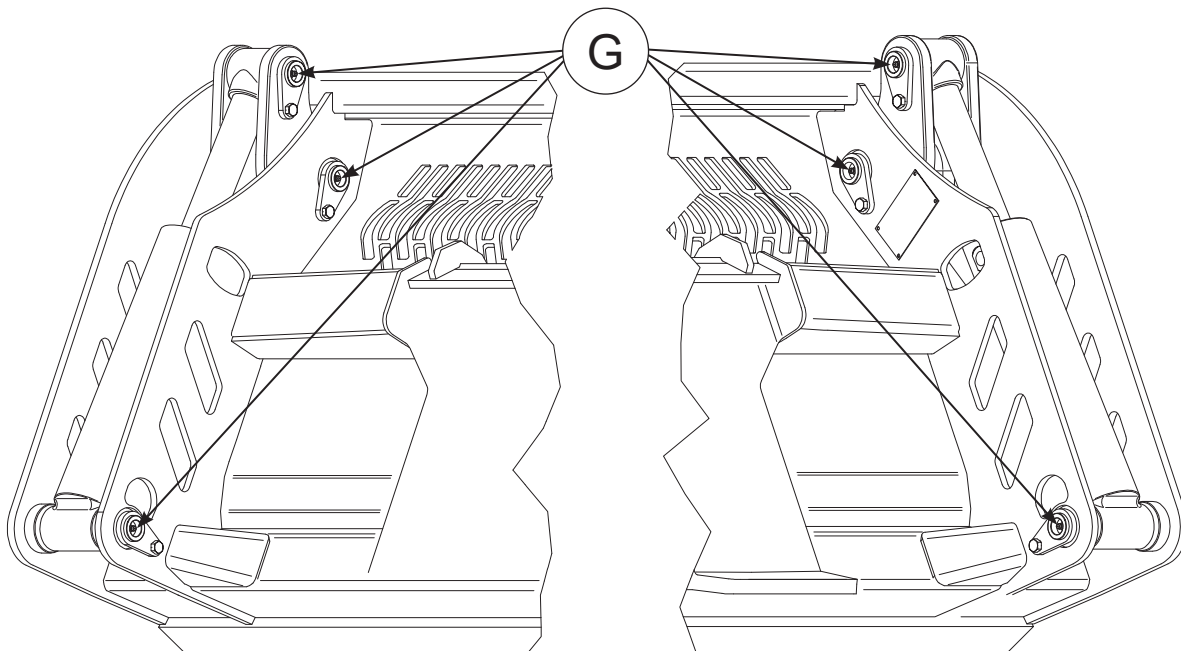
Transporting the attachment

1. Follow all federal, state and local regulations when transporting the unit on public roads.
2. See "Transporting the 4 in 1 Bucket" on page 13 for safety information.
3. Use extra care when loading or unloading the machine onto a trailer or truck. Disconnect hydraulic couplers during transportation.
4. Use tie-down straps as indicated on the figure below to secure the 4 in 1 Bucket to your vehicle.
5. Do not attach tie-down accessories around cylinders or in any way that may damage hoses or hydraulic components.



Greasing (XH & XD Series)

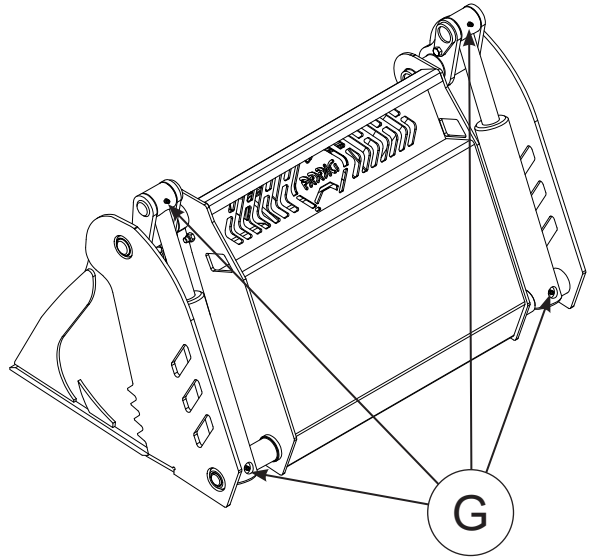
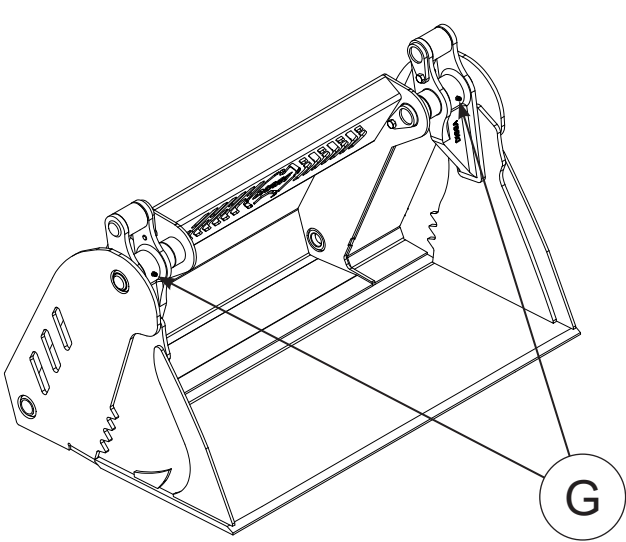
Grease all 6 greasing points (G) before use and every 10 hours of use.



Maintenance

Greasing (XM Series)

Grease all 6 greasing points (G) before use and every 10 hours of use.



Replacing the bolt-on cutting edges

Depending on the configuration, your bucket might be fitted with up to three replaceable cutting edges: front floor edge, rear floor edge and bulldozing edge. The lengths of the edges vary according to the size of the bucket. See "Spare Parts" on page 43 for more information. Some cutting edges have two useful edges and can be turned to extend their useful life. To replace or turn the cutting edges follow these instructions:

1. Support the product safely, allowing plenty access to the both sides of the cutting edge you intend to replace.



DANGER

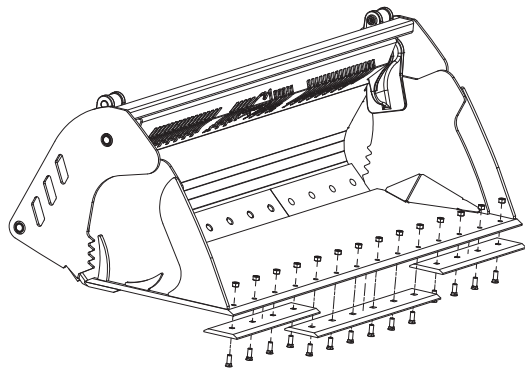
Do not rely on the hydraulic cylinders of the machine or the attachment to support the bucket while doing maintenance. Always use adequate mechanical supports to keep the attachments off the ground and the bucket open.

2. 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.
3. 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.
4. Install the new or reversed cutting edge by loosely securing each end of the cutting edge with a new bolt and nut.
5. Install all the remaining new nuts and bolts and tighten them all according to the torque table below:

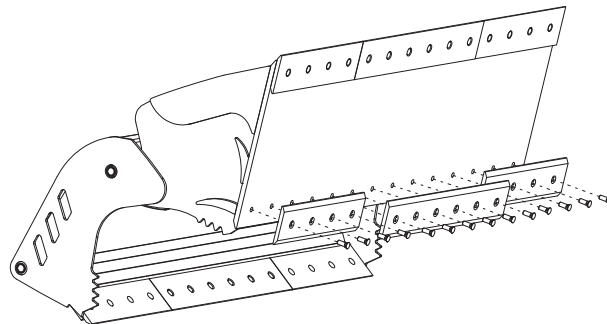
BOLT	TORQUE SETTING	TOLERANCE	TORQUE SETTING*	TOLERANCE
1/2" UNC	150 Nm	±14 Nm	110 ft·lbs	±10 ft·lbs
5/8" UNC	332 Nm	±34 Nm	245 ft·lbs	±25 ft·lbs
3/4" UNC	515 Nm	±55 Nm	380 ft·lbs	±40 ft·lbs

*Torque setting applicable to lightly lubricated fasteners. New fasteners are usually supplied lightly oiled. Apply a few drops of oil to the thread, otherwise.

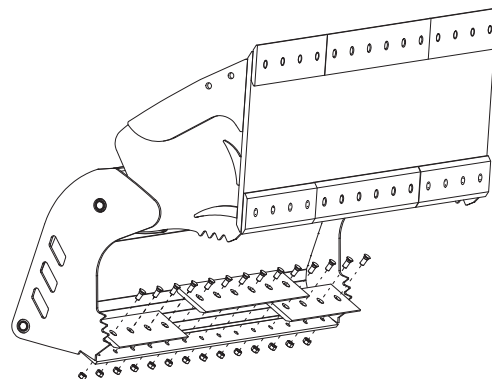
Maintenance



Front Floor Cutting Edge



Rear Floor Cutting Edge



Dozing Cutting Edge

Replace bucket teeth (spring pin type)

To replace bucket teeth with spring pins, follow these steps:

1. Knock the spring pin out using a chisel or similar tool (Figure 1).
2. Replace the worn tooth with a new one (Figure 2).
3. Insert the new spring pin and knock it in using a hammer. If necessary, use a chisel to finish inserting the pin into the tooth hole (Figure 3).
4. Ensure the tooth is firm in place. Repeat the procedure for the remaining teeth.

Fig 1

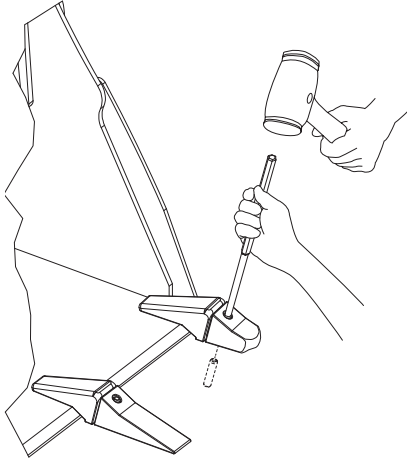


Fig 2

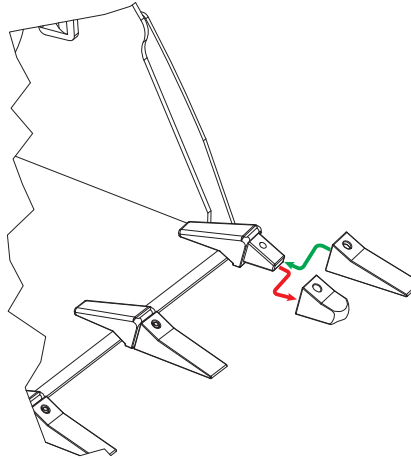
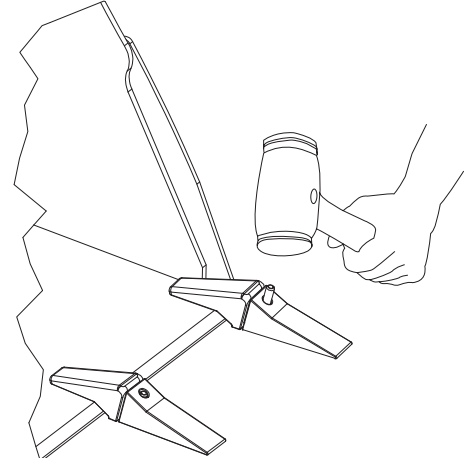


Fig 3



Maintenance

Replace bucket teeth (wedge pin type)

To replace bucket teeth with wedge pins, follow these steps:

1. Knock the wedge pin out using a punch or similar tool (Figure 4).
2. Remove the worn tooth and rubber from the tooth pocket (Figure 5).
3. Insert a new rubber (Figure 6) and replace the tooth.
4. Knock the wedge pin into the hole to hold the tooth in place (Figure 7).
5. Ensure the tooth is firmly in place. Repeat the procedure for the remaining teeth.

Fig 4

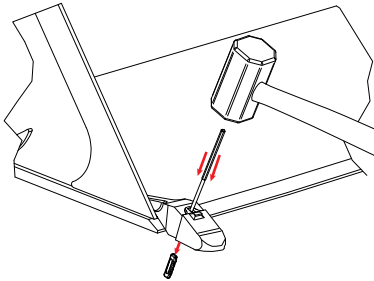


Fig 5

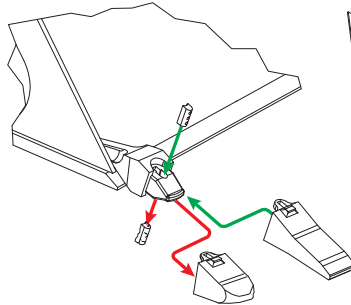


Fig 6

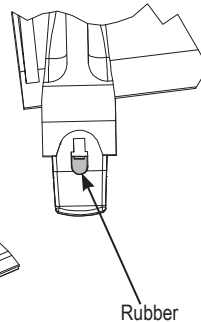
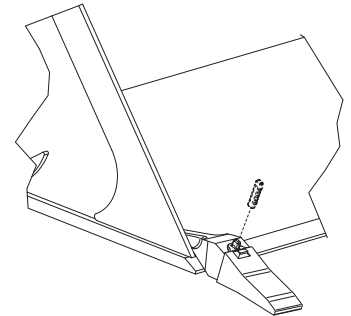
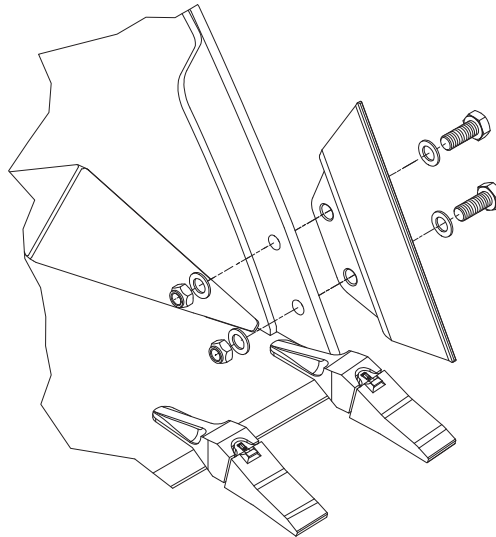


Fig 7



Replace side cutters

To remove the side cutters, first, remove the two 7/8" x 2.1/2" UNC G8 bolts. You can then swap the side cutters to utilise both cutting edges by turning them. Reinstall the side cutters or replace them if necessary. Before tightening, lightly lubricate the fasteners with oil. Tighten the bolts to $713\text{m} \pm 50\text{ Nm}$ ($525\text{ ft}\cdot\text{lbs} \pm 35\text{ ft}\cdot\text{lbs}$).



Maintenance

Replace teeth on Kwik Rips

To replace Kwik Rip's teeth follow these steps:

1. Knock the tooth out by hitting with a chisel in the tooth bevel (Figure 8).
2. Tap the new tooth (felt side down) to ensure felt is attached firmly (Figure 9).
3. Press felt on the front of the tooth to ensure felt is attached firmly (Figure 10).
4. Place the tooth in the pocket.
5. With the tooth placed in the pocket, knock the tooth in with a soft head mallet (Figure 11).
6. Continue until all teeth are replaced as necessary.

Fig 8

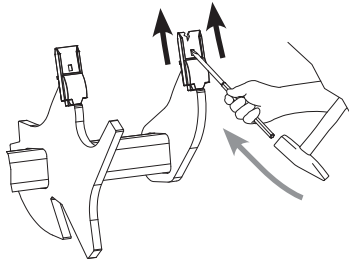


Fig 9

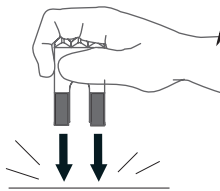


Fig 10

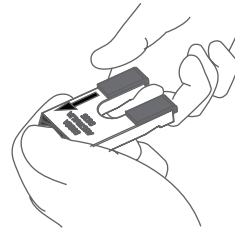
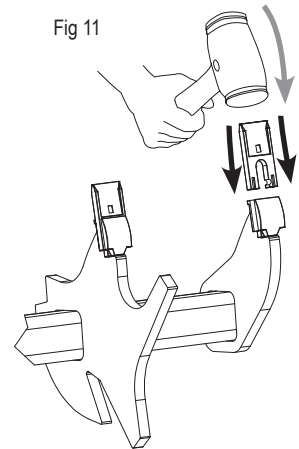


Fig 11



For spare parts of your 4 in 1 Bucket, obtain the serial number from the serial tag located on the rear of the 4 in 1 Bucket. The serial number allows Digga to trace all production and service records. Ensure all service and maintenance is performed by a competent service agent and all service records are kept. For spare parts contact your nearest Digga dealer or Digga Head Office.

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

4 in 1 Bucket

TROUBLE	POSSIBLE CAUSE	REMEDY
Damage to hydraulic cylinder rod.	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 your local Digga dealer.
	Wires have detached from Hirschman plug on hydraulic block valve.	Contact your local Digga dealer.

Spreader Bars

TROUBLE	POSSIBLE CAUSE	REMEDY
Damage to Spreader 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 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 and all its subsidiaries, including Digga North America LLC and Digga Limited, 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 teeth, blade cutting edges, side cutters), 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 authorised 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.

