



Kubota

KUBOTA BX BUCKET

OPERATORS & PARTS MANUAL

THANK YOU

Congratulations on the purchase of your new DIGGA product! This product was carefully designed and manufactured to give you years of dependable service. To keep it operating in top working condition please read the instructions in this manual, observe all safety precautions and maintenance procedures as described in the following pages.

Optional Extras are available for special applications or extreme conditions: these are noted throughout the manual. Contact your DIGGA dealer for any further information pertaining to this product or for further information on other products available in the DIGGA range.

ABOUT THIS MANUAL

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

Serial N°	Make	Model	Code	Number
Type	Date			
Tare	Volume	STRUCK		
WLL	Volume	HEAPED		
DIGGA Australia Pty Ltd Tel: (07) 3807 3330 www.digga.com				

Your Digga Kubota BX Bucket is a **user non serviceable part. Unauthorised disassembly will void warranty.** All service and warranty must be performed by an authorised DIGGA service agent. Contact your local Digga dealer for details. To facilitate warranty or service, record the model and serial number of your unit in the space provided on this page. This information may be obtained from the identification plate located on the product.

MODEL _____

SERIAL NUMBER _____

DATE PURCHASED _____

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

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

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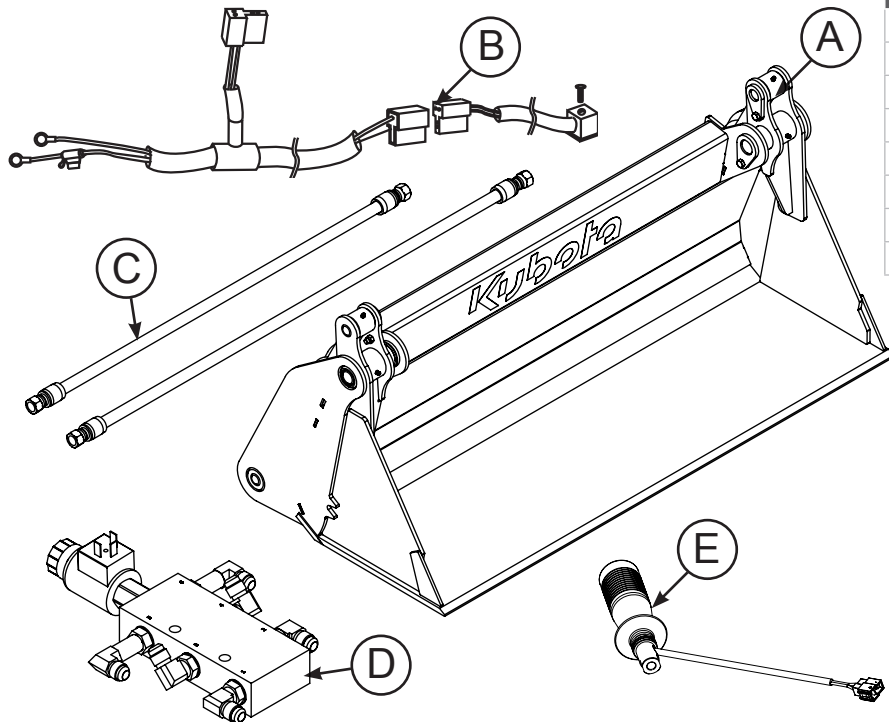
MODELS COVERED IN THIS MANUAL

4 in 1 Kubota BX Bucket

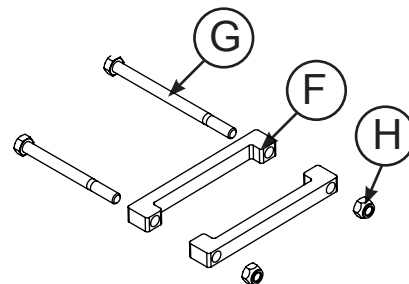
DIMENSIONS			WEIGHT		
Width (bucket cutting)	1225mm	48"	BX Bucket	130Kg	286lbs
Width (overall)	1240mm	49"	OPERATIONAL		
Height	556mm	22"	Holding Volume	0.1m ³	
Length	575mm	23"			

3 PREPARATION FOR USE

To avoid any inconvenience before operation, please check that you have received the following items which you may have ordered in your Kubota BX Bucket 3rd service kit



REF	DESCRIPTION	QTY
A	4 IN 1 KUBOTA BX BUCKET	1
B	WIRING HARNESS	1
C	ASSEMBLY HOSES	4
D	HYDRAULIC VALVE KIT	1
E	CONTROLLER HANDLE ASSEMBLY	1
F	MOUNTING BRACKET	4
G	BOLT	4
H	NUT	4



4 INSTALLATION AND OPERATING INSTRUCTIONS

The DIGGA Kubota BX Bucket attaches to the main/lifting boom 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 Kubota BX Bucket. When a Kubota BX Bucket is purchased from Digga or a DIGGA Dealer/Distributor the frame/attachment is matched for suitability and compatibility to the flow, pressures & load ratings of the original machine it was purchased for. For fitment of the Kubota BX Bucket to other machines you must first contact your DIGGA dealer and receive written confirmation to ensure you do not incorrectly fit the Kubota BX Bucket to a machine with higher, pressure or rated load capacities than what the Kubota BX Bucket was designed for. Warranty will be void if the Kubota BX Bucket is fitted to an alternative machine without first receiving written confirmation from your DIGGA dealer. Exceeding the recommended max flow, pressure, or rated load capacity of the Kubota BX 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 Kubota BX Bucket is appropriate for the intended conditions.

INSTALLATION INSTRUCTIONS

1. Remove the shipping banding from around the Kubota BX Bucket and frame.
2. Remove any attachments from the front of the machine.
3. Ensure you have read the serial tag on the Kubota BX Bucket to obtain the max flows, pressure and load ratings. Ensure your machine flow and pressure settings are aligned with the requirements of the Kubota BX 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 Kubota BX 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, following all procedures on the following page to fit the Kubota BX Bucket 3rd Service kit.
6. 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.
7. Check the cutting edges or teeth are not worn. Ensure all worn parts are replaced. Worn parts will become ineffective and severely diminish the overall performance of the Kubota BX 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

4 INSTALLATION AND OPERATING INSTRUCTIONS

INSTALLATION OF KUBOTA BX BUCKET KIT FOR KUBOTA BX TRACTOR

This bucket and kit was developed to enable a Digga 4-in-1 bucket to be adapted to a Kubota BX mini tractor without the need of engaging hydraulics and auto electrical specialists. The Owners Manual for this BX bucket kit does not cover the Kubota tractor and its controls and maintenance. Please refer to the Kubota tractor owners manual for safe operation.

FITTING THE KUBOTA BX BUCKET 3rd Service KIT FOR KUBOTA BX TRACTOR

1. Connect the bucket to the machine. Ensure that all locking pins are secured and firmly locked in position
2. Remove the existing rubber handle from the control lever on the Kubota BX mini Tractor and replace with the joystick controller (part no: EC-000093) supplied in the BX Kit. Tighten the two M6 grub screws on the joystick adapter to lock it to the control stalk. Wrap the section of the harness to the control joystick with insulation tape (insulation tape not supplied) (Fig:4)
3. Mount the hydraulic solenoid valve block and clamp it to the right hand inside of the lift arm directly above where the rubber hoses connect to the steel lines as shown in the operating procedures.
4. Under the right hand side of the lift boom you will find where the hydraulic hoses from the machine connect to the steel tubes this is where the solenoid valve is to be mounted and connect into.
5. With the boom on the ground slowly release the pressure in the hydraulic lines disconnect the yellow and white hoses from the steel lines here.
6. The yellow hose then connects to port 2 on solenoid valve. The white hose then connects to port 5 on solenoid valve.
7. Connect hose 1 from the kit to port 1 of valve block, then connect the end to the yellow steel tube on lift boom.
8. Connect hose 6 from the kit to port 6 on solenoid valve, then connect the end to the white steel line on the lift boom.
9. Connect hose 3 from the kit to port 3 on solenoid valve, then connect the end to the upper tee on the Kubota BX bucket.
10. Connect hose 4 from the kit to port 4 on solenoid valve, then connect the end to the lower tee on the Kubota BX bucket.
11. Ensure all hoses can't fowl on anything and are not twisted then ensure all hose and fittings and the mounting of the solenoid valve are tight.
12. Refer to Kubota tractors manual and remove the battery cover from the tractor. Mark and drill a Ø 15mm hole and notch it out in the position shown in Fig:2. Allowing the harness which runs to the joystick to easily slot into the battery cover when the cover is installed or removed.
13. Run the wiring harness starting from the square black plug (Hirschmann plug) on the hydraulic solenoid valve and work towards the battery. The harness exits/enters the engine bay adjacent to where the hydraulic quick couplers are mounted and enters the battery compartment through the engine bay firewall and then connects to the battery. Attach the harness using cable ties, after leaving them loose to determine that there is sufficient slack in the harness to allow for the maximum movement of the boom.
14. Remove the battery and connect the positive and negative terminals of the harness to the corresponding battery terminals NOTE: Ensure that the 10A inline fuse is accessible inside the battery compartment. (Fig:1)
15. Feed the section of the harness (which has the plastic 2-pin female connector) through the notch in the battery cover and plug into the mating plug on the lead of the joystick controller Fig :2
16. Secure the harness in the battery compartment so that it can't get pinched or jammed on any of the other controls.

Fig:3



FIG 1.



FIG 2.



FIG 3



FIG 4

4 INSTALLATION AND OPERATING INSTRUCTIONS

MOUNTING THE HYDRAULIC SOLENOID VALVE BLOCK

1. With bucket and arm at rest on the ground, disconnect the white and yellow quick release couplings (found under the right hand side of the boom FIG 1).
2. Under the right hand side of the lift boom you will find where the hydraulic hoses connect to steel tubes, this is where the soleniod valve is to be mounted and connected into.
3. Then disconnect the yellow and white hoses from the steel lines (FIG 2)
4. Remove yellow hose and connect to Port 2 in valve block.
5. Remove white hose and connect to Port 5 in valve block
6. Connect Hose 3 to the upper tee on the Kubota BX Bucket to Port 3 on the soleniod valve block (FIG 3).
7. Connect Hose 4 to the lower tee on the Kubota BX Bucket to Port 4 on the soleniod valve block (FIG 3).
8. Connect Hose 1 to Port 1 in the valve block and the free end to the yellow steel tube (where the yellow hose previously was removed)
9. Connect Hose 6 to Port 6 in the valve block and the free end to the white steel tube (where the white hose previously was removed)
10. Mount the soleniod valve on the inside of the right hand arm where the yellow and white hose lengths permit, directly above the lift cylinder on your machine
11. Use the 2 longer bolts to mount through the soleniod valve on the lower side of the lift boom and the two shorter bolts on the top side of the boom.



FIG 1



FIG 2



FIG 3

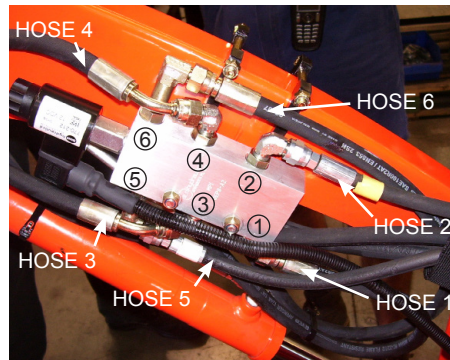


FIG 4

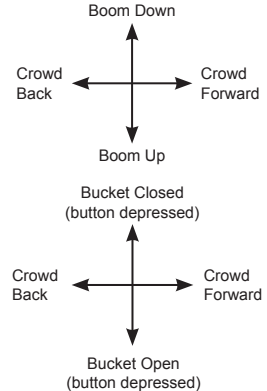
OPERATING PROCEDURES



WARNING: DO NOT OPERATE THE KUBOTA BX BUCKET BEFORE READING THE INSTRUCTIONS BELOW

OPERATING THE KUBOTA BX BUCKET USING THE JOYSTICK CONTROLLER

1. Start the Machine; adjust the engine speed above idle. Proceed to lift and crowd the bucket by moving the joystick as follows.
2. Push the joystick forward the lower the boom down
3. Pull the joystick back towards operator to lift boom up
4. Pull the joystick left towards the operator to crowd the bucket back
5. Push the joystick to the right, away from operator to crowd the bucket forward.



OPENING AND CLOSING THE KUBOTA BX BUCKET USING THE JOYSTICK CONTROLLER

1. Push the joystick forward and depress the button (on top of the joystick) to close the bucket
2. Pull the joystick towards the operator and depress the button to open the bucket.
3. Pull the joystick left towards the operator to crowd the bucket back
4. Push the joystick to the right, away from operator to crowd the bucket forward.

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 weldment is off the ground. The angle of the back cutting edge permits the operator to cut sod or other vegetation.

4 INSTALLATION AND OPERATING INSTRUCTIONS

GRAPPLE OPERATION

1. Open the floor sufficiently to clear the object being lifted. Lower the bucket so that the object is between the bulldozer weldment and the back cutting edge of the floor. Close the floor as completely as practical for the object being lifted and slowly begin lifting. If the object is to 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.

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. Remove the 3 mount pivot pins starting with centre tilt pivot pin, then remove the 2 outer ones.
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 vehicle. Disconnect hydraulic couplers during transportation.

5 MAINTENANCE

The key feature of your Digga Kubota BX Bucket is low maintenance. 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.

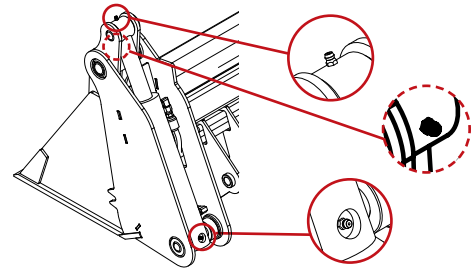
BEFORE EACH USE

- 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)
- Check for 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 6 fittings: one on each of the two pivot points for the floor and one on each end of the two hydraulic cylinders.

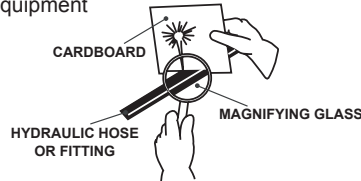
Note: Some of the hydraulic cylinders have two grease fittings on the cross tube end of the barrel section of the cylinder.
Only one of these two fitting must be greased



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.

6 SAFETY - STICKER LOCATION

PLACEMENT OR REPLACEMENT OF SAFETY SIGNS

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

INSTRUCTIONS

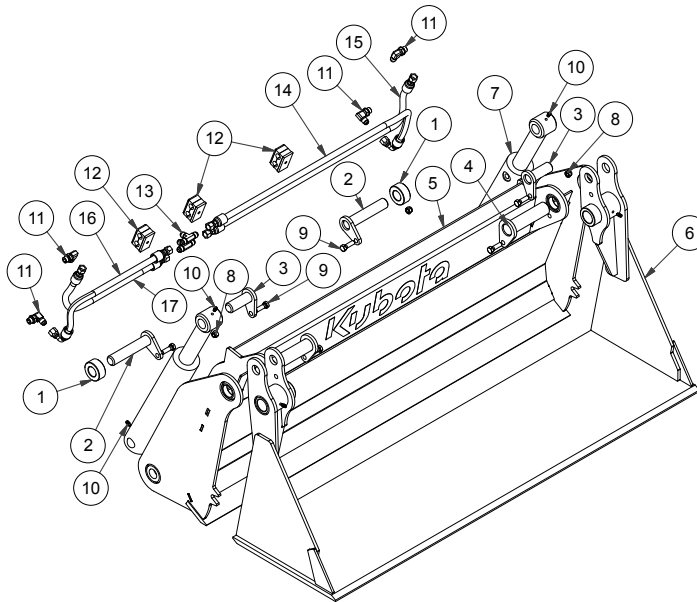
- Keep all safety signs clean and legible.
- Replace all missing, illegible, or damaged safety signs.
- Replacement parts for parts with safety signs attached must also have safety signs attached.
- Safety signs are available from your dealer or from Digga Australia.

NO.	ORDER CODE	DESCRIPTION	QTY
1	DE-000129	Decal-Pinch Point	2
2	DE-000055	Decal-Pressure Tested	2
3	DE-000046	Decal-Dial Before You Dig	1
4	DE-000062	Serial Tag	1



7 SPARE PARTS

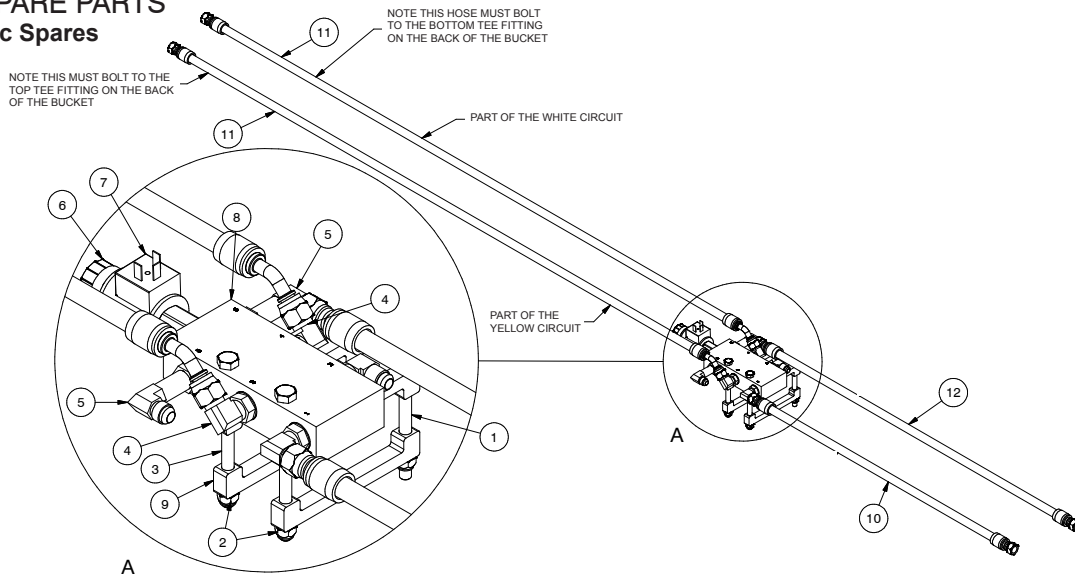
Bucket Spares



NO	ORDER CODE	DESCRIPTION	QTY
1	BU-001869	BUCKET- LIGHT MINI - FLOATING CYLINDER BUSH	2
2	BU-000085	BUCKET - MINI - CLEVIS PIN BOTTOM	2
3	BU-000077	BUCKET - MINI - CLEVIS PIN CYLINDER	2
4	BU-000084	BUCKET - MINI - CLEVIS PIN MAIN	2
5	BU-001896	BUCKET - LIGHT MINI - BACK WELDMENT	1
6	BU-001942	BUCKET - LIGHT MINI - FLAT FLOOR WELDMENT	1
7	CY-000078	HYDR. CYLINDER-6" STROKE 1.5" SHAFT 2" BORE	2
8	FA-000093	NUT NYLOC 3/8" ZINC PLATED	6
9	FA-000149	BOLT HEX 3/8 X 1.1/4 G8 UNC ZINC PLATED	6
10	FA-000401	GREASE NIPPLE	6
11	HA-000031	S91 90DEG 9/16 MALE FITTING	4
12	HA-000375	STAUFF CLAMP	3
13	HA-000450	TEE - S19 JICM	2
14	HS-000521	KUBOTA BUCKET-RIGHT BOTTOM HOSE AS- SEMBLY	1
15	HS-000522	KUBOTA BUCKET-RIGHT TOP HOSE ASSEMBLY	1
16	HS-000523	KUBOTA BUCKET-LEFT BOTTOM HOSE ASSEMBLY	1
17	HS-000524	KUBOTA BUCKET-LEFT TOP HOSE ASSEMBLY	1

7 SPARE PARTS

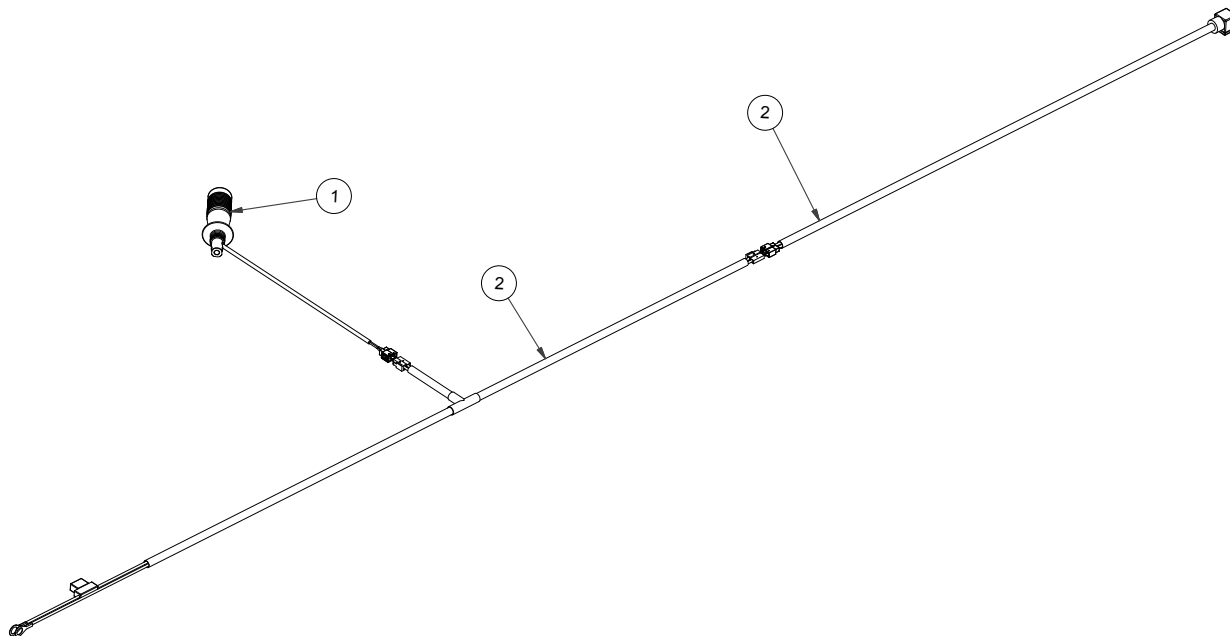
Hydraulic Spares



NO	ORDER CODE	DESCRIPTION	QTY
1	FA-000067	BOLT HEX 5/16 X 3.1/2 G8 UNC ZINC PLATED	2
2	FA-000094	NUT NYLOC 5/16" UNC ZINC PLATED	4
3	FA-000492	BOLT HEX 5/16 X 4.1/2 G8 UNC ZINC PLATED	2
4	HA-000031	S91 90DEG MALE FITTING	4
5	HA-000070	S12 JICM UNOM LONG 90DEG ELBOW	2
6	HA-000161	DNDY-XXN SOLENIOD CARTRIDGE TO SUIT T-61A	1
7	HA-000165	SUN 12V SOLENOID	1
8	HA-000226	VALVE BLOCK - TO SUIT DNDY CARTRIDGE	1
9	HB-000018	HYDRAULIC MOUNTING BRACKET - KUBOTA LA 243	4
10	HS-000324	HOSE ASSEMBLY - KUBOTA BX - HOSE 1 - 797MM LONG	1
11	HS-000323	HOSE ASSEMBLY - KUBOTA BX - HOSE 3 AND 4 - 1374MM LONG	2
12	HS-002047	HOSE ASSEMBLY - KUBOTA BX - HOSE 6 - 900MM LONG	1

7 SPARE PARTS

Electrical Spares



NO	ORDER CODE	DESCRIPTION	QTY
1	EC-000093	ASSEMBLY - CONTROLLER FOR BX LOADER	1
2	EC-000005	ELECTRICAL COMPONENT - KUBOTA WIRE HARNESS COMPLETE WITH DIN CONNECTOR & 10A INLINE FUSE	1

8 TROUBLESHOOTING

KUBOTA BX BUCKET		
TROUBLE	POSSIBLE CAUSE	REMEDY
Damage to Hydraulic Cylinder Rod or Oil	Soil 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.
Damage to Bucket	Abuse	Contact your local Digga dealer.
	Bucket not fitting to parent machine correctly	Contact your local Digga dealer.
Bucket Movement in reverse to what is stated in operators manual on page 9	Hose N° 2 and Hose N° 5 may be connected to the hydraulic valve in opposite to instructions. See page 8, figure 4.	Hose N° 2 must (yellow band) must connect to port N° 2 and Hose N°5 must connect to port N° 5 on the hydraulic valve

10 SAFETY PRECAUTIONS - GENERAL INFORMATION

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

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

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

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

THIS SYMBOL MEANS:



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

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

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

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

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

TO THE OPERATOR

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

10 SAFETY PRECAUTIONS - GENERAL INFORMATION

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

10 SAFETY PRECAUTIONS - GENERAL INFORMATION

23. Only authorized, properly trained workers will be permitted to operate Kubota BX Buckets and Spreada Bars. All unnecessary personnel will stand clear of Kubota BX Buckets and Spreada Bars or devices while they are in operation.
24. The operator shall verbally alert site workers and visually ensure all site workers are clear from dangerous parts of equipment before starting or engaging equipment.
25. Kubota BX Bucket must be stationary before making adjustments to the equipment.
26. Kubota BX Buckets shall be cleaned only when the mechanism is in neutral and the Kubota BX Bucket stopped; long-handled shovels shall be used to move cuttings from the bucket. Materials heavier than 10kgs must be moved mechanically or by using at least two people.
27. During operation, weather conditions shall be monitored: operations shall cease during electrical storms or when electrical storms are imminent.

WHEN MOUNTING THIS PRODUCT TO YOUR MACHINE

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

BEFORE EACH USE, THOROUGHLY INSPECT THIS PRODUCT AND

- Make certain that all safety signs are in place and legible. Refer to the safety sign page in this manual for the placement of safety signs for this product.
- Replace all damaged or excessively worn parts and hardware only with genuine Digga parts or with properly rated fasteners, hydraulic hoses, or fittings.
- Make certain that all locking pins, latches, and connection devices are properly installed and secured.
- Make certain that all protective guards, canopies, doors, etc., are in place and secure.

WHEN ADJUSTING, SERVICING OR REPAIRING THIS PRODUCT

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

WHEN DEALING WITH HYDRAULICS DURING ANY TYPE OF ASSEMBLY, OPERATION, MAINTENANCE, OR OTHER WORK ON OR NEAR THIS PRODUCT



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

WHEN OPERATING THIS PRODUCT IN ACCORDANCE WITH DESIGN INTENTIONS

- Never use Kubota BX Bucket on a Loader that is not equipped with a cab or ROPS, and operator restraints (seat belts or equivalent devices).
- Know your machines safe operating weight limit, and the weight of loaded attachment.
- Use caution when working close to fences and ditches, or on uneven ground.
- Never get between the floor and the bulldozer weldment.
- Do not roll back this product so far that materials fall towards the operator.
- Always close the floor securely against the bulldozer weldment before setting the unit down on the ground.

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

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.



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