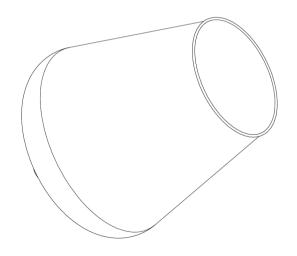
CEMENT MIXER Operator's Manual





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DECAL IS APPLIED TO THE ATTACHMENT

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DECAL TO BE APPLIED TO WINDOW OF MACHINE

ACCESS OPERATOR MANUALS RISK ASSESSMENTS AND MORE

Table of Contents

1	Table of Contents	3
2	To the Purchaser	4
3	Preparation for Use	5
4	Safety Precautions - General Information	7
5	Safety - Working with the Attachment	11
6	Safety - Decal Labels	13
7	Installation and Operating Instructions	14
8	Maintenance	20
9	Spare Parts	21
10	Notes: Operator's Manual	22
	Warranty Statement	23

2 To the Purchaser

Thank you and Congratulations on the purchase of your new Digga product!

The Digga Cement Mixer can mix anything such as cement, mulch, animal feed, and fertilizer. It is suitable for Skid steer loaders, Mini Loaders, Tele-handlers, and Excavators. It fits quickly and easily to your Digga Planetary auger drive by simply pinning cradle to existing auger frame and add mixer bowl (Digga Auger drives are sold separately). For excavators, simply an adapter is attached around the linkage between existing Digga hitch and Digga Auger drive unit and mixer bowl is attached to the drive shaft.

This product was carefully designed and manufactured to give you many years of dependable service. Only minor maintenance (such as visual checking) is required to keep it in top working condition. Be sure to observe all safety precautions and any maintenance procedures described in this manual. This manual has been designed to help you to do a better and safer job. Read this manual carefully and become familiar with its contents.

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 understood this manual. If there is any portion of this manual or function you do not understand, contact your local authorized Digga dealer or the manufacturer to obtain further assistance. Keep this manual available for reference. Provide the manual to any new owners and/or operators.

Service

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



CAUTION

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

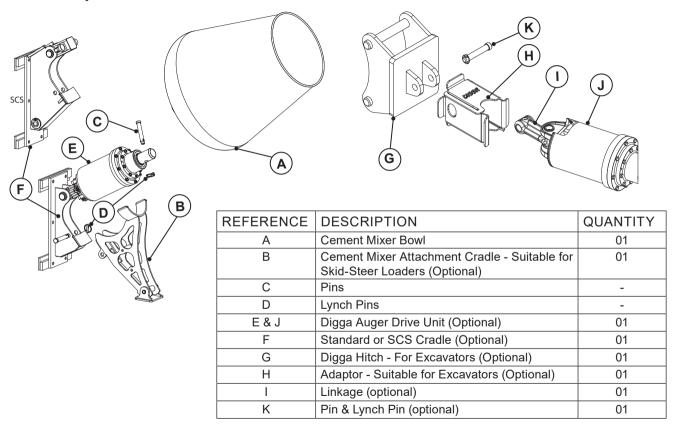
3 Preparation for Use

MODELS COVERED IN THIS MANUAL						
AGRICULTURE MODELS	EXCAVATOR MODELS	MINI LOADERS MODELS	SKID STEER LOADER MODELS			
MI-000012	MI-000173	MI-000051	MI-000136			
MI-000020	MI-000174	MI-000053	MI-000137			
MI-000019	MI-000175		MI-000138			
MI-000018	MI-000176		MI-000139			
MI-000011			MI-000141			
MI-000017			MI-000140			
MI-000016			MI-000012			
MI-000015			MI-000020			
			MI-000011			
			MI-000017			

Except for general cleaning of the attachment, all service for warranty and assessment for warranty must be performed by an authorised Digga service agent. Substitute parts will not meet the standards required for safe and dependable operation. Use of non genuine Digga parts will void warranty and Digga will accept no liability whatsoever for consequential damages. For details contact your local Digga dealer.

To avoid any inconvenience before operation, please check that you have received the items shown on next page, which you may have ordered. Items may differ depending on the type of machine on which Digga Cement Mixer is to be fitted. Inspect the attachment for shipping damage and if any damage does exist, do not operate until the damaged parts have been replaced or repaired.

3 Preparation for Use



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.



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



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



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 access the risk present at any job site and in every work task before beginning work. Apply appropriate risk mitigation strategies to make safety a first priority at all times, and if these are not sufficient, stop the job and immediately seek the help of a qualified safety consultant.

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 attachment, as the process of cement mixing can cause high levels of dust which may contain silica or other harmful chemicals.

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.

End of Life Disposal

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

Operating the Cement Mixer

- 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.

Operating the Cement Mixer (Continued)

- It is the skill, care, common sense, and good judgement 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 the safety decals and keep them clean. If they become worn, damaged or illegible replace them.
- Do not paint over, remove or deface any safety signs or warning decals on your equipment.
- When the cement mixer bowl is spinning, establish and maintain a minimum 4 meter (13 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 exceed rated operating capacity (ROC) of the host machine, as machine may become unstable resulting in loss of control. Overloading or exceeding the manufacturers specifications will void all warranty.
- All maintenance should be performed with engine turned off, parking brakes applied, machine arms lowered, and hydraulic pressure relieved.
- · 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.



All bystanders should be kept at a minimum of 4 meters (13 feet) away from the working area of the Cement Mixer, when the bowl is spinning.

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 with this attachment.
- Operators, helpers, and other personnel working near cement mixer 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.

Storing of the Cement Mixer

- Clean the unit thoroughly, removing all mud, dirt, and grease.
- 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.
- Replace any decals that are damaged or in unreadable condition.
- Store unit in a dry and protected place, as leaving the unit outside will materially shorten its life.

Transporting the Attachment

- When transporting your attachment on public roads, follow all federal, state, and local regulations that
 may apply along with any equipment safety precautions provided in this manual.
- No tie down points are provided on this attachment and its responsibility of the operator to ensure that the attachment is firmly fastened without causing any damage to the attachment.
- · Check the stability of the unit before transporting.
- Verify that all tie down accessories (chains, slings, ropes, and shackles 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.

5 Safety - Working With the Attachment

Complete a Risk Assessment

Your Digga Cement Mixer is a versatile earthmoving 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.

5 Safety - Working With the Attachment

Take Extreme Care When Dealing with Hydraulics - Whilst Assembling, Operating, Maintaining or Performing Any Work on this Product

- This attachment is used by attaching it to your Digga planetary drive, which operates on hydraulic fluid under pressure.
- 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 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.
- Ensure that all parts meet the specifications for your Digga Auger drive, when installing or replacing hydraulic hoses or fittings.
- Do not lock the auxiliary hydraulics of your power unit in the "ON" position.

When Mounting this Product to Your Machine

- This product should fit onto Digga planetary drive unit, refer to the operator's manuals of your drive unit and host machine for special or detailed mounting instructions.
- 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 and this product could cause serious injury.
- Where 'Dead Man' connections are connected or installed it is illegal to disengage, tamper with or remove them.

NOTE

For any additional safety information please see "Risk Management Booklet", and to obtain a copy contact Digga Head Office.

6 Safety - Decal Labels

The Digga Cement Mixer attaches to the Auger drive unit on your host machine, therefore become familiar with all the safety labels on your drive unit and cement mixer attachment cradle or adaptor. These labels are important and become familiar with the meaning and location of these decals prior to operating your host machine. These labels must be maintained and each label is clean, visible, and legible. To clean the decals use a soft cloth, water, and soap. Avoid the use of solvents, gasoline, or other harsh chemicals, as these may damage the decals. If a label has been damaged or removed, it must be maintained.



NOTE

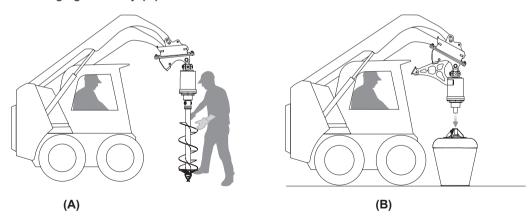
The above shown figure and table show typical safety decal labels and their location for adapter (HI-004207). The actual position and quantity of the labels on your product may differ.

1. How to Mount Cement Mixer to Your Machine - Skid Steer, Mini Loader, Telehandler and Tractor

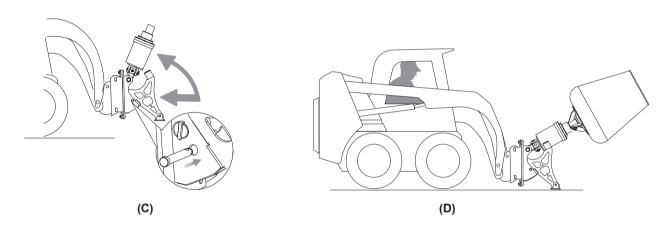
The Digga Cement mixer attaches to the Digga Auger drive unit on the host machine. Due to this arrangement, thorough knowledge of the machinery controls is necessary for machine operation. Read and understand your machine and Digga Auger drive operator's manual before attempting to use the Cement mixer. Check the work site and identify the extent of the work to be carried out and note any possible hazards or constraints. Review the job at hand and determine the Cement mixer is an appropriate equipment for the intended conditions. For example, do not use the Cement mixer to dig and carry material, or to lift heavy items.

Installation Instructions

- Remove the shipping banding from around the Cement mixer bowl and attachment cradle.
- Remove any Digga augers from the auger drive unit and ensure the auger is stored securely (A).
- Place Cement mixer bowl vertical (open end) on the ground. Raise the drive unit and crowd forward until the drive unit is hanging vertically **(B)**.



- Lower drive unit and insert drive shaft into Cement mixer bowl hub. Fasten pin and lynch pin to secure cement mixer bowl (C).
- Raise drive unit and bowl, pin Cement mixer attachment Cradle into place. Fasten pin and lynch pin to secure cradle.
- Raise the complete Cement mixer attachment, crowd back fully and lower to the ground resting on the cement mixer attachment cradle foot. The unit is now ready for use **(D)**.

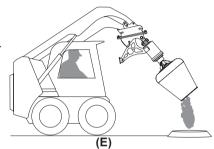


<u>NOTE</u>

If you purchased a new Digga Auger drive unit with your Cement mixer, please refer to the Drive unit operator's manual for installation before fitting the Cement mixer onto the Auger drive unit.

Operating Instructions

- Position the Cement mixer on solid level ground with the attachment cradle foot resting on ground.
- Engage parent machine auxiliary hydraulics to start the cement mixer before adding the material.
- Add material to the rotating drum and leave the mixer running the entire time it contains cement. Do not overload the Cement mixer!
- Raise the loader arms and crowd forward to empty the drum while it is rotating (E).
- Wash out all debris from the inside of the Cement mixer.





Use a positive lift arm lock to secure the arms in place. Serious damage or personal injury could result from lift arms accidently lowering.



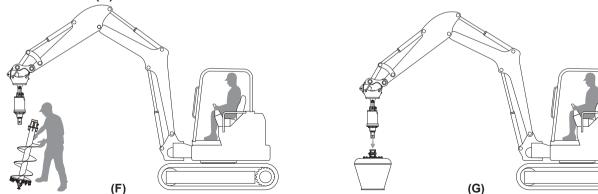
Do not lock the auxiliary hydraulics of your host machine in the "ON" position. Failure to obey this warning could result in death or serious injury.

2. How to Mount Cement Mixer to Your Machine - For Excavators Up to 8 Tonne

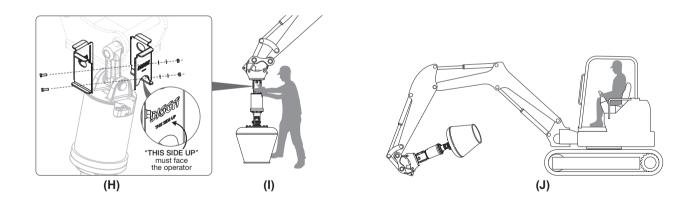
For Excavators, the Digga Cement mixer attaches to the Digga Auger drive unit. It is only suitable for **PD3-PD7 Digga Auger drives** with excavator linkage (150 mm between pin holes). Due to this arrangement, read and understand your host machine and Digga Auger drive operator's manual before attempting to use the Cement mixer. Check the work site and identify the extent of the work to be carried out and note any possible hazards or constraints. Review the job at hand and determine the Cement mixer is an appropriate equipment for the intended conditions.

Installation Instructions

- Remove the shipping banding from around the Cement mixer bowl and Adaptor.
- Remove any Digga augers from the auger drive unit and ensure the auger is stored securely (F).
- Place Cement mixer bowl vertical (open end) on the ground. Raise the drive unit and crowd forward until the drive unit is hanging vertically. Lower the drive unit and insert the drive shaft into the Cement mixer bowl hub (G).

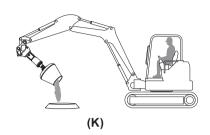


- Fasten pin and lynch pin to secure cement mixer bowl. Raise drive unit and bowl, attach and secure the adaptor (HI-004207) with the provided bolts between the excavator hitch and Digga auger drive (H, I).
- The flush end of the adaptor (HI-004207) must be on the hitch plate side, and the 15° angle end must must contact the hood of the drive unit. Ensure that the Digga name faces the excavator operator. This will ensure that the Digga Cement mixer bowl will be angled 15° to the left or to the right of the operator, allowing better access for loading and unloading of concrete/cement.
- Raise the complete Cement mixer attachment, crowd back fully and lower to the ground resting on the Excavator hitch support. The unit is now ready for use (I,J).



Operating Instructions

- Engage parent machine auxiliary hydraulics to start the cement mixer before adding the material.
- Add material to the rotating drum and leave the mixer running the entire time it contains cement. Do not overload the Cement Mixer!
- Raise the loader arms and crowd forward to empty the drum while it is rotating (K).
- · Wash out all debris from the inside of the Cement mixer.





Do not drill with Adaptor (HI-004207) in place. This can cause serious personal injury and damage to your Digga Auger drive and Adaptor.

Removal and Storage of Attachment

- Set the cement mixer bowl vertical (open end) on the ground and follow the standard shut down procedure in your host machine operator's manual.
- With the host machine **OFF**, remove the pin between the bowl hub and Digga Auger drive shaft. Raise the host machine arms lifting the drive unit from the bowl.
- Raise the drive unit and remove the pin between the Digga Auger drive cradle & the mixer attachment foot cradle. Remove the foot cradle.
- For excavators, unscrew and remove the adaptor from Digga Auger drive and hitch.
- Place the Digga Auger back onto the drive unit if desired. For drive unit removal please refer to the drive unit operators' manual.

8 Maintenance

Before First Use

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

Before Each Use

Cardboard

Hydraulic Hose or Fitting

- Make sure all the nuts and bolts are placed 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 there are no leaks in any fittings or hoses.
- Make sure that all safety signs are in place, and are clean and legible.
- Check for any oil leaks.
- Ensure any damage or excessively worn parts are replaced.
- Always wear safety goggles or glasses when inspecting equipment.

This attachment is used by fitting it to your Digga planetary drive, which operates on hydraulic fluid under pressure. 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 **(L)**. 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.



This attachment operates on high pressure hydraulic fluid. Always wear eye protection when operating or performing maintenance on this attachment. If injured see a Doctor.

Magnifying Glass

9 Spare Parts

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

Notes: Operator's Manual 10 Notes:

Warranty Statement

Bowl, Attachment Cradle, and Adaptor - Warranty up to 12 months subject to manufacturers inspection.

All new Digga products are warranted to be free from defects in material and workmanship, for a period of twelve (12) months from the date of original purchase, which may cause failure under normal usage and service when used for the purpose intended. The warranty does not extend to transportation cost of parts nor does it cover consequential loss, damage to Hydraulic Hoses or ground-engaging parts such as Sprockets, Digging Chain, Bearings, and Teeth.

Digga equipment must be operated in accordance with the recommended procedures and within the ranges as specified both on the unit and contained in the operating manual.

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 claims under this warranty must be made within fourteen (14) days after the buyer learns of the facts upon which claim is based. All claims not made in writing and not received by Digga within the time specified above may be deemed waived. Digga will not be responsible for or accept any charges for work carried out by any repairers, or for charges for any spare parts fitted to any Digga products without written approval from Digga.

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 or merchant ability or of fitness for a particular purpose. In no event shall Digga be liable for consequential or special damages. Digga's liability for any and all losses and damages to buyer resulting from any cause whatsoever, including Digga negligence irrespective of whether such defects are discoverable or latent, shall in no event exceed the purchase price of the particular parts, with respect to which losses or damages are claimed, or, at the discretion of Digga the repair or replacement of defective or damaged parts. Any goods returned to Digga by the customer under warranty or repair must have all freight charges prepaid for on the customer's Account.

V3.0 23



V3.0 PM-000044-B