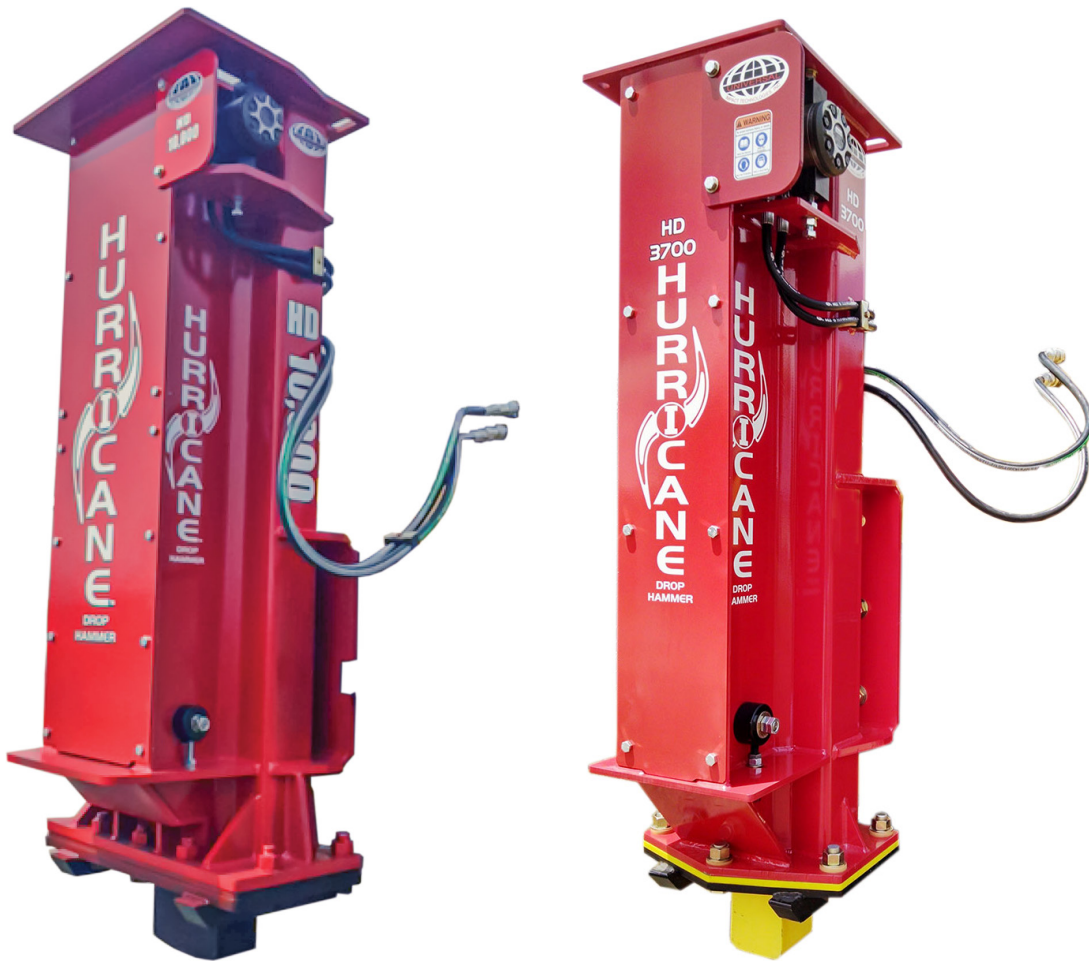




HD3700 and HD10000 DROP HAMMER OPERATOR AND MAINTENANCE MANUAL



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1. INTRODUCTION

1.1 The Universal Impact Technologies HD3700 and HD10000 have been developed specifically for the demolition and recycling industry to break up and crack concrete slabs. This enables the broken concrete to be removed in smaller more easily handled sizes. This has many benefits, including using smaller excavators to pull up the slab, smaller loaders to fill dump trucks, providing better compaction for stockpiling and transportation, and sizing the material for crusher feed. The HD3700 and HD10000 are designed to be attached to suitably sized excavators, rubber-tired backhoes or skid steer loaders.

1.2 The HD3700 and HD10000 incorporate a number of innovative and patented design features, including:

- A movable hammer connecting pin for adjusting the impact energy.
- A skid system for easy maneuvering over flat surfaces.
- The use of special steel alloys to provide extended service life in a high stress application where normal steels would fail prematurely.
- A heavy-duty buffer system to absorb the impact of a miss-hit.
- Minimal maintenance requirements, which can be simply carried out in the field with no special tools.

1.3 This manual provides information on the safe operation, installation and maintenance of the HD3700 and HD10000.

2. SAFETY

2.1 This section of the manual is intended to illustrate only basic safety procedures. Additional precautions may be necessary for the safe operation of the carrier machine. The information contained in this section is not intended to replace safety codes, insurance requirements, federal, state and local laws, rules or regulations.

2.2 Safety of operators and maintenance personnel is of prime concern. It is the responsibility of the operator to know what specific hazards exist, and to discuss them with his/her supervisor. To ensure the safe operation of this equipment, all personnel involved, should reach a common understanding of the safety requirements.

A good understanding of safety precautions helps prevent serious injury and damage to property. STOP ACCIDENTS BEFORE THEY STOP YOU.

2.3 In order to alert management or operators and maintenance personnel, any dangerous or hazardous operations are shown in this manual with CAUTION notes.

2.4 The safest machine must still be operated with care and with knowledge of its performance capabilities. The most comprehensive safety program must still be followed. Remember that on any job, YOU are the key to

safety. Good safety practices not only protect the people around you, they are also your own best protection. Study this section and any relevant manufacturer's operation manuals covering your equipment. Read all warning and caution instructions.

Practice safe operation. Insist that your fellow workers do, too. Be alert to possible hazards before they cause trouble, and remember – SAFETY IS UP TO YOU!

2.5 The following paragraphs indicate some safety considerations to remember:

DO YOU KNOW YOUR EMPLOYER'S SAFETY PROGRAM?

Most accidents are caused by a disregard of simple rules. Study and get to know your employer's safety program, and consult your supervisor for specific instructions when starting a job.

ARE YOU DRESSED PROPERLY FOR THE JOB?

Protective clothing may be required at all times: safety hat, shoes, glasses, ear protective devices, etc. If it is necessary wear it! Loose clothing can catch in moving parts so keep sleeves buttoned and jackets belted. Wrist-watches and rings can also be dangerous. Keep your pockets free of objects that may fall out.

DO YOU HAVE KNOWLEDGE OF WORKING AREAS?

Before operating your machine learn as much about your working area as possible. Know the clearances in the work area. A little time spent checking side and overhead clearances, including power lines, can save a lot of trouble later. Also be aware of dust, smoke or fog, which may obscure your vision.

DO YOU UNDERSTAND YOUR MACHINERY?

Read the manual provided with your equipment to learn its operating and maintenance characteristics, capacities and limitations. Learn the location and function of ALL controls, indicators, warning devices and caution instructions. Learn to recognize the machine's warning and safety devices. This will alert you to conditions that may make it hazardous to continue operating.

ARE YOU PREPARED FOR EMERGENCIES?

Plan ahead, stay alert, operate sensibly, and you will avoid having and causing injury to personnel or accidental equipment damage. If an emergency does occur react quickly with the tools and skills at hand. Know the location of fire extinguishers and first aid kits. Know where to get prompt assistance.

HAVE YOU COMPLETED A STARTING CHECK?

Equipment not properly prepared for operation is unsafe equipment. Run a careful check at the beginning of your shift. If you find something that needs attention, THINK TWICE before deciding to "let it go this time". Even minor mechanical defects can lead to personal injury and accidents.

2.6 DO NOT allow unauthorized personnel to operate the machine.

2.7 ENSURE all guards and other protective devices are in place, secured and not damaged.

2.8 NEVER TAMPER with safety devices.

2.9 CHECK the machine thoroughly for visible defects.

2.10 INSPECT your machine according to the operator's manual and your supervisor's instructions.

2.11 BEFORE STARTING ensure there is no one next to, under, or on the machine. Warn any personnel nearby that you are starting up.

3. STARTUP SAFETY

3.1 Check the equipment for any warning tags and follow recommended starting procedures. After the carrier has been started, check all instruments to be sure that everything is operating properly. SHUT DOWN immediately if any improper readings are observed.

3.2 Test all controls for proper functioning. Listen for and report any unusual noises.

3.3 Re-check alarms or other warning and safety devices. Do not take a chance with a defective machine. REPORT IT TO YOUR SUPERVISOR. Report or correct any unsafe conditions immediately and do not operate the machine until they have been corrected.

3.4 Report necessary repairs. If your daily check uncovers any item that needs attention, repair, replacement or adjustment; REPORT IT NOW! The most minor defects could result in more serious trouble. If the machine is operated, only perform the work you are authorized to do. Do not attempt repairs you do not understand.

3.5 Do not drink alcoholic beverages and/or medication before coming to work or while on the job. DO NOT TAKE medicines, tranquilizers or other drugs that make you sleepy or less alert prior to coming to work.

4. EQUIPMENT

4.1 Use the right tool for the job; handle tools and heavy parts sensibly. Use sensible lifting equipment.

4.2 Keep all tools and equipment (including hand levers) free of dirt, oil and grease. Do not drop or toss them.

4.3 Use hoisting equipment for heavy lifting. Lower parts, do not drop them. Save your back.

4.4 Check for broken, defective or missing parts and replace them. Keep equipment clean and free of dirt and oil so you can spot loose or defective parts.

4.5 When using cables to move a load, be sure cables are of adequate size - replace worn, badly frayed, broken or kinked ones. Check connections for wear.

5. FIRE HAZARDS

5.1 DO NOT smoke while refueling or when handling fuel containers.

5.2 SHUT OFF engine when refueling and use extra caution if engine is hot.

5.3 When refueling ground the funnel or spout against the filler neck to avoid a static electric spark.

5.4 DO NOT use gasoline or diesel fuel for cleaning parts. Good commercial, non-flammable solvents are preferred.

5.5 DO NOT smoke while using cleaning solvents.

5.6 DO NOT let greasy, oily rags accumulate in a poorly ventilated area. Store oily rags and other combustible material in a safe place.

5.7 NEVER use an open flame to check fuel, battery electrolyte, or coolant levels, or to look for hydraulic leaks anywhere on the equipment. Use a flashlight.

5.8 STORE dangerous fluids in a suitable place away from unauthorized personnel. ALLOW NO SMOKING IN THIS AREA.

5.9 NEVER start a diesel or gasoline engine within an enclosed area unless there is adequate ventilation. Exhaust fumes can kill!

5.10 KNOW where fire extinguishers are kept. Check regularly - at least monthly - to ensure they are in the working area and are fully charged.

6. TEN COMMANDMENTS OF SAFETY

6.1. Support efforts to make your workplace safe and healthy. Do your part, observe safety regulations and established work practices.

6.2. Act responsibly and with concern for the safety of others, as well as yourself.

6.3. Check all tools and protective equipment frequently, to make sure they are in safe working order.

6.4. Educate yourself and others in the hazards associated with your job and safe ways to perform familiar tasks.

6.5. Ask others how to perform tasks with which you are unfamiliar. Playing it "by ear" can lead to costly accidents.

- 6.6. Think over accident and injury possibilities before starting on any project. Take appropriate precautions to protect yourself and others.
- 6.7. Warn others of the possibility of accidents and injuries if you see them working unsafely or creating potential hazards.
- 6.8. Stay alert for changes in work conditions and the work process.
- 6.9. Report unsafe acts and conditions immediately to your supervisor. Don't assume that someone else will do it.
- 6.10. Keep your work area clean. Keep tools and materials tidy and properly stored.

7. INSTALLATION

7.1 TRANSPORT AND LIFTING

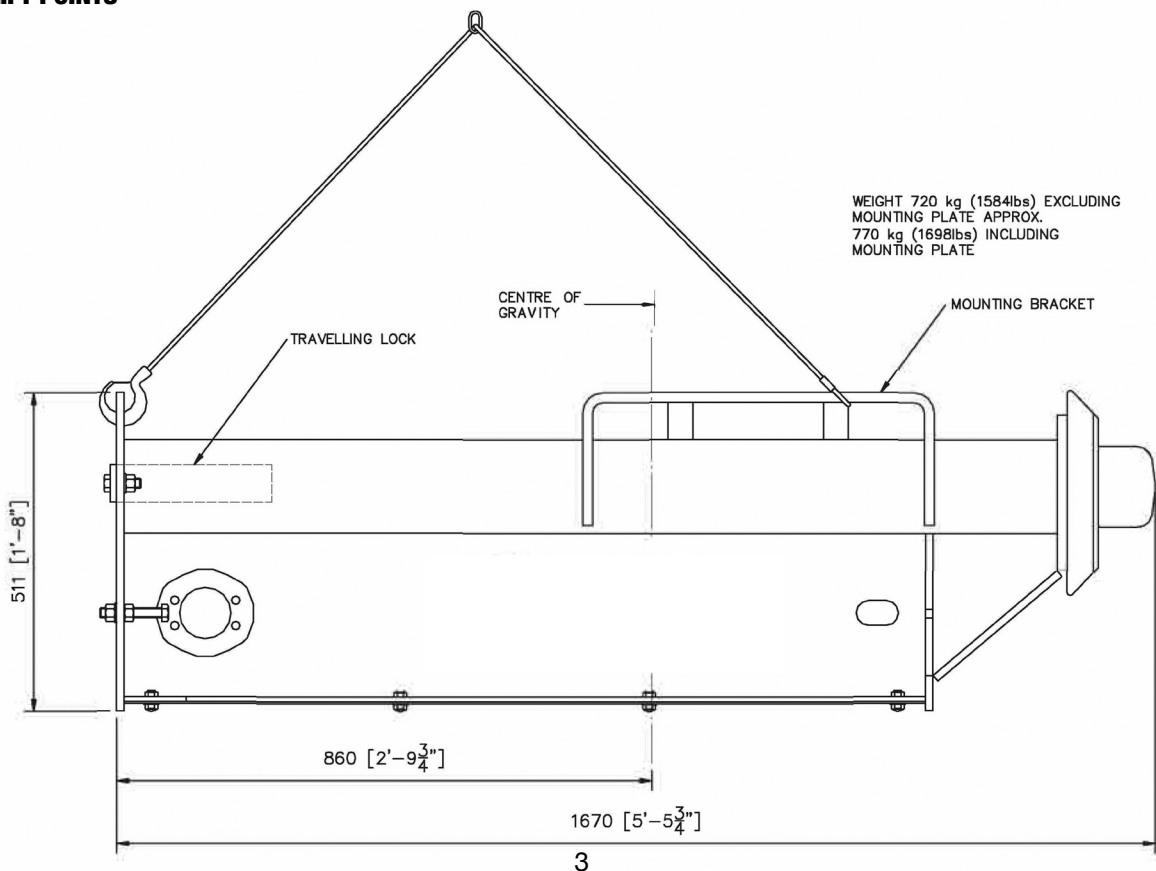
- 7.1.1 When not in use or when being transported the HD3700 and HD10000 sit with the mounting bracket facing up. It is vital that the HD3700 and HD10000 are laid on firm and level ground to ensure that it cannot topple over.
- 7.1.2 It is vital that the *Traveling Lock* is bolted in place during any lifting or transporting operation. Without this, the hammer weight is free to slide in the bodies of the HD3700 and HD10000. This could cause serious injury or death.

- 7.1.3 The HD3700 and HD10000 may be lifted with a forklift through the mounting bracket or by feeding chains through the points shown in Drawing 1. Always lift the HD3700 and HD10000 with machinery and lifting equipment that is rated to carry the weight of the machine.

7.2 MOUNTING TO THE CARRIER

- 7.2.1 With the HD3700 and HD10000 laying on a flat level surface bolt the mounting plate to the mounting bracket. Ensure these bolts are torqued to the recommended give rate.
- 7.2.2 Bring the carrier up to the HD3700 and HD10000 from the bottom or impact end. If you have a quick attachment systems maneuver the mount plate on the carrier until it engages with the adaption plate. Then actuate the slides or levers to lock the plates together. With a pin mount system; maneuver the carrier until the pinholes are aligned and slide in the connection pins. Ensure the pins are bolted in place. Grease these pivots as per the carrier manufactures recommendations. Never operate the HD3700 and HD10000 with a loose or ill-fitting attachment.
- 7.2.3 Carefully raise the HD3700 and HD10000 to the vertical position keeping the base of the machine close to the ground throughout the lifting movement. Slowly move the HD3700 and HD10000 through the full extent of rotation and lift to ensure no part of the machine or any hydraulic hosing foul the carrier arms or cylinders.

Drawing 1: LIFT POINTS



Ensure hoses are:

1. Long enough so they do not pull tight in any part of the rotation.
2. Short enough to stay clear of the ground or operating area.

An external observer will be of assistance with this check. Once the HD3700 and HD10000 are securely mounted to the carrier the *Traveling Lock* may be removed. Be sure to store this plate safely for future use.

7.3 HYDRAULICS

7.3.1 The hydraulic system of the HD3700 and HD10000 ideally require a minimum flow of 40Ltr/min (10.6 US Gal/min) at a maximum of pressure of 158 bar (2,300 PSI) to achieve optimum operating rate. It is possible some carriers may have flows above or below these ideals. If the flow is lower the HD3700 and HD10000 will simply cycle at a slower rate. If the flow rate is higher the control valve on the HD3700 and HD10000 will limit the flow to prevent the chain over-speeding and catching the weight as it drops.

7.3.2 Before connecting the HD3700 and HD10000 to the carrier hydraulic system; it is important to determine which are the pressure and tank lines of the carrier and connect the hoses appropriately. The pressure and tank lines are marked where they enter the *Valve Bank*. If the hydraulics are connected incorrectly, the motor will rotate in the wrong direction. This will not damage the machine but it will not lift. Correct rotation is clockwise looking in direction of Arrow A (Drawing 2: Hydraulic System).

7.3.3 Once the hoses are connected, slowly rotate the HD3700 and HD10000 between horizontal and vertical to ensure the hoses do not get jammed or stretched. With the machine in the vertical position, and the skids placed on the concrete, actuate the auxiliary hydraulic circuit. The HD3700 and HD10000 should start cycling. Note that some carriers may require full engine RPMs to actuate the

HD3700 and HD10000. Cycle the machine two or three times, stop the carrier and check for oil leaks.

7.3.4 The *Accumulator Hose* (which returns from the *Valve Block* to the *Accumulator Hose Bracket*) is fitted to reduce any hydraulic over-pressure. It is not usually required, but in some instances may need bleeding of entrapped air. Bleeding is achieved by loosening the hose fitting, attached at the *Accumulator Bracket*, and cycling the hydraulics of the carrier until any air bubbles in the hydraulic oil cease. Re-tighten the fitting before normal operation.

8. OPERATING YOUR HD3700 AND HD10000

8.1 Ensure that the HD3700 and HD10000 are operated at a safe distance from other personnel and equipment.

8.2 The HD3700 weighs 1,587 lbs/ 720 kg and the HD10000 weighs 1,907 pounds / 865 kg and are normally rested on the skids during use. However when moving about, the HD3700 and the HD10000 may represent a heavy load for the carrier. Therefore care must be taken when moving about a job site or when loading or unloading from a transporter. Both the HD3700 and HD10000 should be carried as low as possible and special care taken when negotiating uneven surfaces. Know the limits of your carrier.

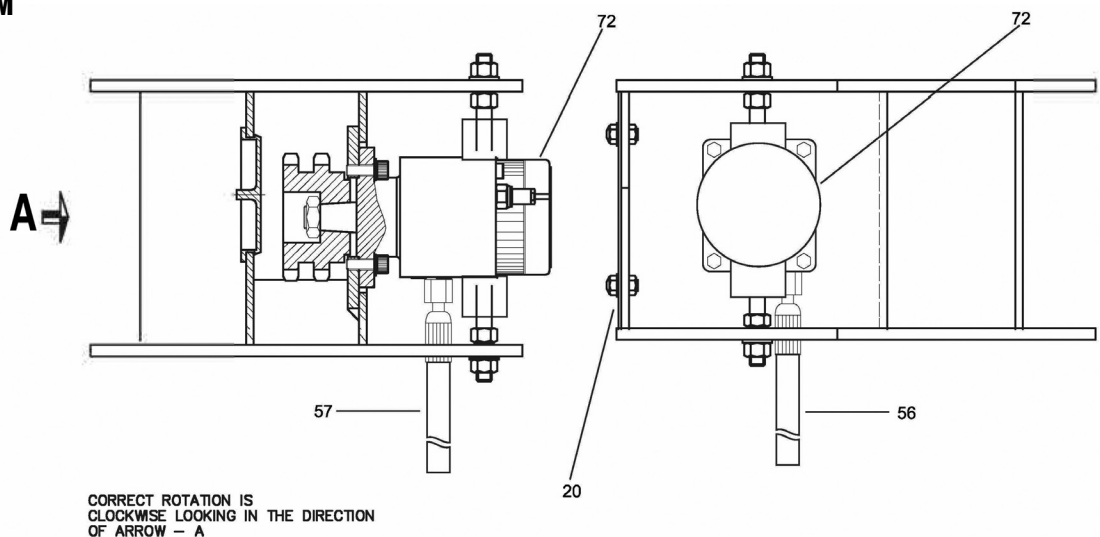
The general technique for breaking slab is as follows.

- Rest the HD3700 and HD10000 in a vertical position on the concrete to be broken. The skids should be just resting on the concrete with some of the weight taken by the carrier. If a crack appears in the top surface of the concrete you can be sure it is broken all the way through.
- Actuate the hydraulics and the HD3700 and HD10000 will start to cycle. As the concrete cracks or breaks move the carrier.

DRAWING 2: HYDRAULIC SYSTEM

Parts List

- 20 Manifold Guard
- 56 Pressure Hose to Motor
- 57 Return Hose to Motor
- 72 Motor HD Flange



- It is best to move while the hammer is raised and pause momentarily as the hammer strikes.
- Generally all that is required is to hit the concrete until it cracks and then move 150-300mm 6-12 inches. Sitting in one place will pulverize the concrete and eventually the hammer will hit onto the column buffers. This is felt as a hard jarring action through the machine.
- With skid steers movement can be in any direction but generally moving in a reverse direction provides the best control.
- On excavators setting the machine down and moving in arc with the slew drive is usually the quickest method.
- It is important to keep the HD3700 and HD10000 as vertical as possible during operation as this provides the greatest impact.
- When breaking thinner concrete, the HD3700 and HD10000 may hit too hard and punch completely through. In this instance the hammer sticking into the concrete and stopping the carrier traveling can slow production. If this occurs adjust the impact of the HD3700 and HD10000 as described below.

9. MAINTENANCE

9.1 It is recommended that only genuine Universal Parts are used. A replacement part for any item should always be of comparable SIZE, TYPE AND QUALITY as the part being discarded. Genuine Universal HD3700 and HD10000 parts are all checked for allowable tolerances.

REMEMBER YOU ARE ENTRUSTED WITH THE OPERATION AND MAINTENANCE OF A VALUABLE PIECE OF EQUIPMENT. TREAT IT AS SUCH!

9.2 Although the HD3700 and HD10000 are simple machines, they are subject to severe stresses and shocks during normal operation. A five-minute daily check will ensure that your HD3700 and HD10000 remain in good condition and will prevent unscheduled down time.

9.3 DAILY INSPECTION

- Check that all the mount plate bolts that connect the HD3700 and HD10000 to the carrier are tight and torqued to the recommended rate.
- Check that the motor flange bolts are tight and secure.
- Check the chain adjustment bolts and secure the nuts if required.

- Check the *Housing Cover* plate bolts and tighten if needed.
- Check the hydraulic hoses, fittings and valves for any leaks and repair as required.
- With the machine turned off, oil (see Table 1 page 6) the chain over the top sprocket.

TABLE 1: RECOMMENDED CHAIN OIL. DO NOT USE GREASE

Ambient Temperature	Lubricant Rating	
Celsius	SAE	854231
-5 to +5	20	46 to 68
5 to 40	30	100
40 to 50	40	150 to 220
50 to 60	50	320

9.4 MONTHLY CHECK

- With the HD3700 and HD10000 in a vertical position and the carrier turned off remove the *Housing Cover Plate*.
- Check the chain tension. The chain should move about 10-15mm (1/2") at its center point. To adjust the chain, loosen the *Tensioning Bolt Lock Nuts* and the *Clamp Nut*. Adjust the *Tension Bolts* evenly so that the lower shaft/sprocket are kept parallel. Note in the first month of operation this should be done weekly until the chain beds in.
- Remove the *Rubber Inspection Cover* at the top of the HD3700 and HD10000 and check the *Motor Castle Nut* is tight (see page 4). Replace the *Inspection Cover*.
- Standing clear of the machine, start the HD3700 and HD10000 and SLOWLY rotate the chain until the chain *Connecting Plate Assembly* (see Drawing 5 page 7) is accessible. Turn the carrier off.
- Check this assembly for signs of excessive wear, and replace as required (see Drawing 4, page 6).
- Lubricate this assembly and the chain (section 9.3 and Table 1).
- Replace the *Housing Cover*.
- Tip the HD3700 and HD10000 forward and slide the weight out as described (section 8.4). Inspect the *Hammer Connecting Pin* and replace if excessively worn.

- Liberally grease the *Hammer Connecting Pin*. USE A LITHIUM-BASED GREASE WITH NGLI 1 or 2 RATING (Mobilgrease HP or Shell Alvania EP) and replace the hammer as described in Section 8.4
- It is worthwhile at this stage to dress the hammer tip and remove any excessive burring.

10. CHAIN/CONNECTING PLATE REPLACEMENT

10.1 The chain and *Connecting Plate Assembly* (see Drawing 5 page 7) will need to be renewed after around 500 hours use. This is done as described below:

- Remove the *Housing Cover*.
- Stand clear and rotate the chain until the *Connecting Plate Assembly* is accessible and near the top of the machine. Turn the carrier off.
- Disconnect the hydraulic lines.
- Loosen the *Lower Sprocket Clamp Nut* (see Drawing 3 below), then slacken the chain Tension Bolts.
- Remove the *Rubber Inspection Cover*.
- Manually rotate the chain by using a socket/ratchet on the *Motor Lock Nuts*. This will allow the *Connecting Plates* to be accessed.
- Remove the bolts of the *Connecting Plates*.
- Remove the *Connecting Plates* and chain and replace as required.

- Reassembly is the reverse of above.
- On re-assembly fully rotate the chain manually and ENSURE the chain *Connecting Assembly* is not obstructed.

11. MOTOR /TOP SPROCKET REMOVAL

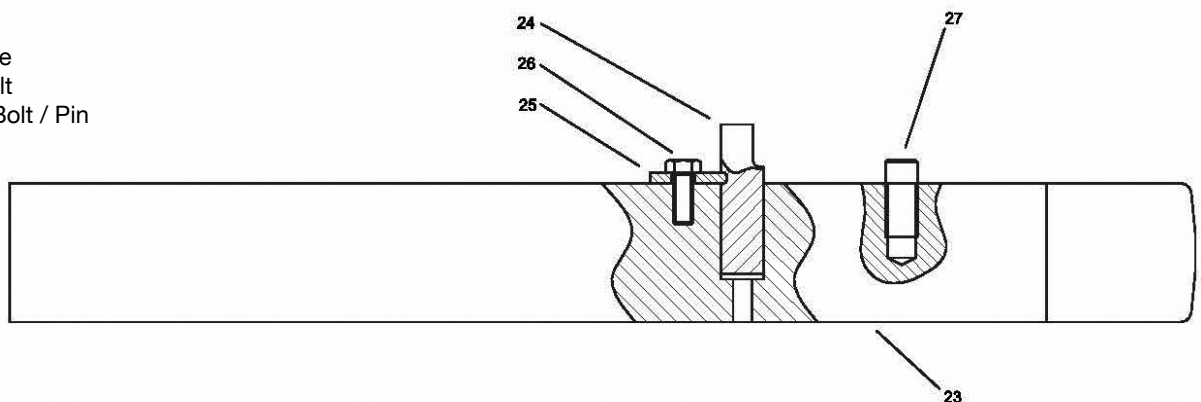
11.1 The procedure for removal of the motor or top sprocket is as follows:

- Remove the rubber inspection cover and undo and remove the *Motor Lock Nuts* (see page 4).
- Remove the chain as described (see pages 7).
- Undo and remove the *Motor Support Bolt*.
- Undo and remove the *Motor Flange Bolts*.
- The motor and sprocket can now be separated and the motor extracted from the side.
- Reverse the procedure for reassembly.

DRAWING 3: HAMMER IMPACT ADJUSTMENT

Parts List

- 23 Hammer Weight
- 24 Hammer Peg
- 25 Peg Locking Plate
- 26 Locking Plate Bolt
- 27 Hammer Safety Bolt / Pin



12. LOWER SPROCKET/ SHAFT REMOVAL

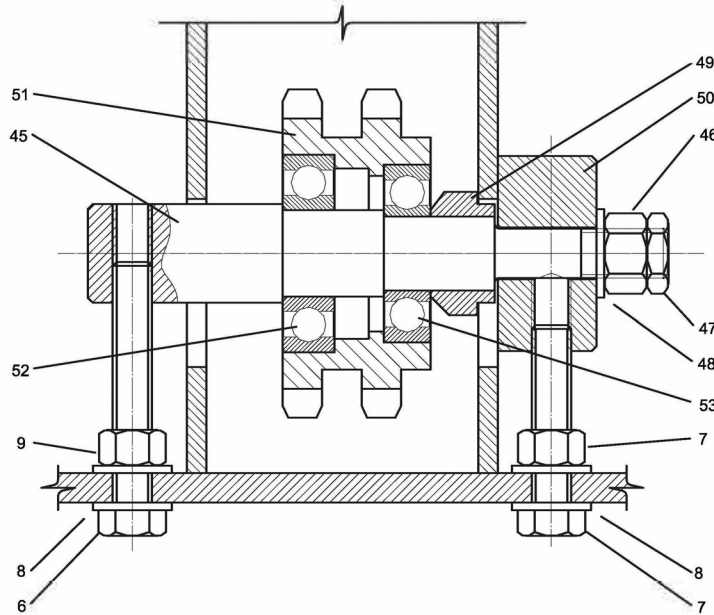
12.1 The procedure for removal of the lower sprocket and shaft is as follows:

- Remove the chain as described in Section 10.1.
- Completely remove the chain *Tension Bolts* and *Clamp Nut* (see page 6 Drawing 4).
- Remove the chain *Adjuster Bracket*.
- Gently tap/slide the shaft out of the *Sprocket/Bearing Assembly* and out through the side of the housing.
- The *Lower Sprocket and Bearing Assembly* can now be removed.
- Reverse the procedure for reassembly.

DRAWING 4: LOWER SPROCKET ASSEMBLY

Parts List

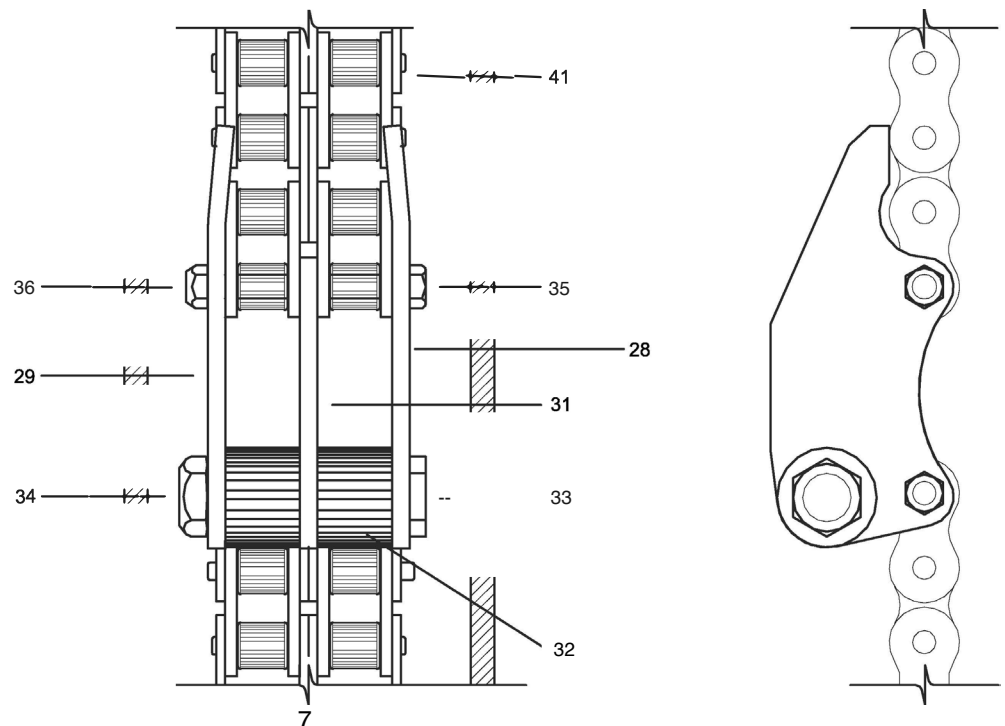
- 7 Tension Bolt, Short
- 8 Tension Bolt, Washer
- 9 Tension Bolt, Nut
- 46 Nut, M20 / Shaft
- 47 Half Nut, M20 / Shaft
- 48 Washer / Shaft
- 49 Sprocket Spacer
- 50 Adjuster Bracket
- 51 Adjuster Sprocket
- 52 Bearing 6307C3
- 53 Bearing 6306C3



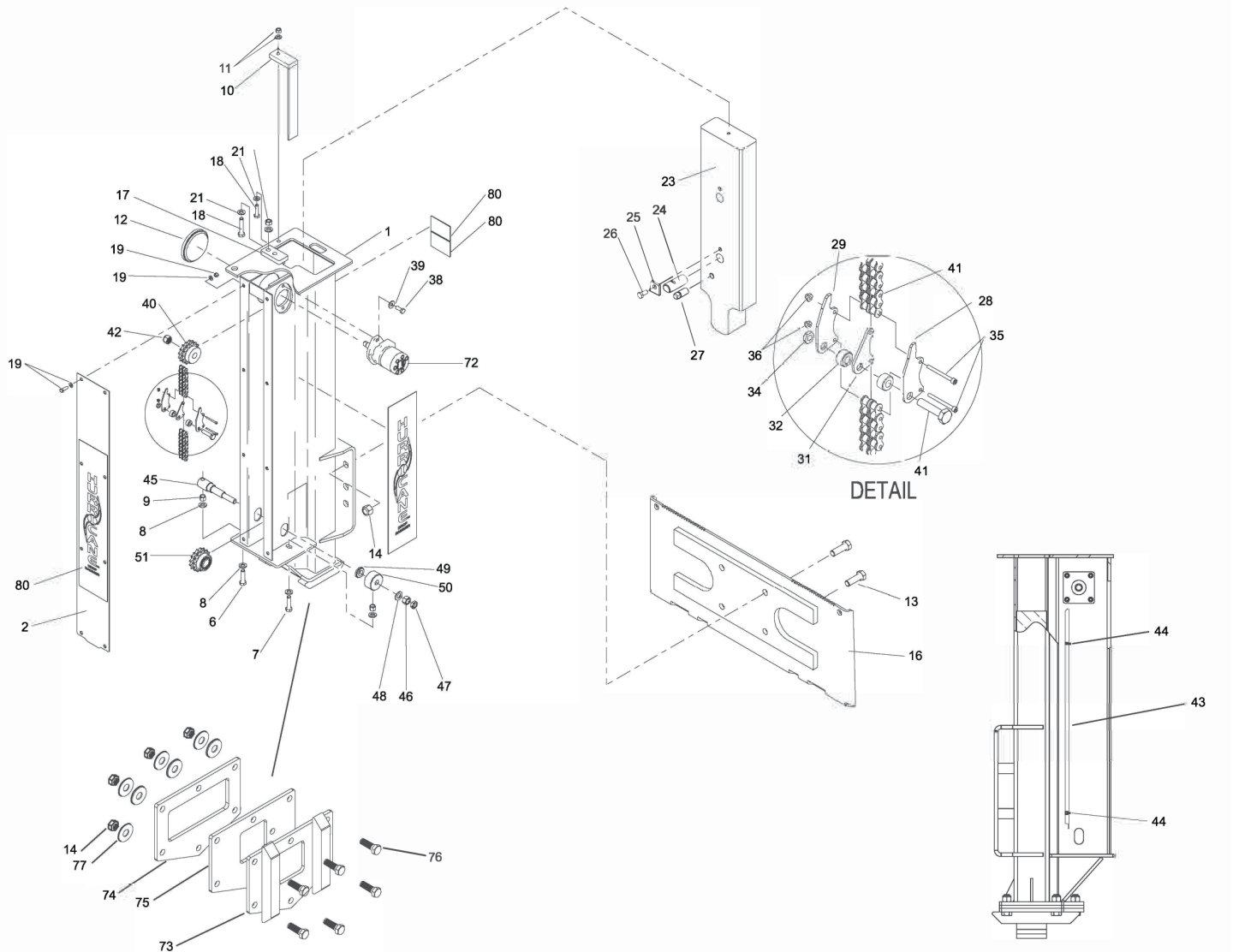
DRAWING 5: CHAIN/CONNECTING PLATE ASSEMBLY

Parts List

- 28 Lift Lug Assembly
- 29 Side Lift Lug - Right
- 31 Center Lift Lug
- 32 Lift Lug spacer (2)
- 33 Screw for Spacer
- 34 Nut for Chain
- 35 Screw for Chain (2)
- 36 Nut for Chain (2)
- 41 Chain



13. HD3700 PARTS ILLUSTRATION AND PARTS LIST



HOUSING ASSEMBLY

1	Housing	1601A
2	Front Cover Plate	1102A
3	Front Cover Plate Bolt	1103A
4	Front Cover Plate Nut	1104A
5	Front Cover Plate Washer	1105A
6	Tension Bolt, Long	1106A
7	Tension Bolt, Short	1107A
8	Tension Bolt, Washer	1108A
9	Tension Bolt, Nut	1120A
10	Travel Stop	1109A
11	Travel Stop Bolt Set	1110A
12	Rubber Inspection Cover	1611Y
13	Mounting Bracket Bolt	1112A
14	Mounting Bracket Nut	1113A
15	Mounting Bracket Washer	1114A
16	Mounting Bracket	1115A
17	Hammer Stop	1116A
18	Hammer Stop Bolt (2)	1117A
19	Cover Plate Bolt Set	1118A
20	Manifold Guard	1119A
21	Hammer Stop Nut (2)	1121A
22	Hammer Stop Washer (2)	1123A

HAMMER ASSEMBLY

23	Hammer Weight	1701A
24	Hammer Peg	1202A

25	Peg Locking Plate	1203A
26	Locking Plate Bolt	1204A
27	Hammer Safety Bolt	1205A

MOTOR SPROCKET / LIFT LUG ASSEMBLY

28	Lift Lug Assembly*	1300K
29	Side Lift Lug - Right	1301A-R
30	Side Lift Lug - Left	1301A- L
31	Center Lift Lug	1302A
32	Lift Lug spacer (20	1303A
33	Screw for Spacer	1304A
34	Nut for Chain	1305A
35	Screw for Chain (2)	1306A
36	Nut for Chain (2)	1307A
37	Disc Lock Washer	1309A
38	Motor Flange Bolt	1608A
39	Motor Sprocket Nut	1604A
40	Motor Sprocket	1312A
41	Chain	1313A
42	Motor Nut	1316A
43	Chain Wear Pad	1317A
44	Chain Wear Pad Bolt / Nut Set of 4	1318A
45	Shaft Complete	1320A
46	Nut, M20 / Shaft	1321A
47	Half Nut, M20 / Shaft	1322A
48	Washer / Shaft	1323A

49	Sprocket Spacer	1203A
50	Adjuster Bracket	1204A
51	Adjuster Sprocket	1205A
52	Bearing 6307C3	
53	Bearing 6306C3	

HYDRAULIC COMPONENT

56	Pressure Hose to Motor	1620A
57	Return Hose to Motor	1622A
58	Side Hose Clamp	1624A
59	Accumulator Hose	1601A
60	Accumulator Fitting	1601A / 01
61	Motor Cradle Insert	1402A / 01
62	Motor Cradle Buffer / Upper / (2)	1402A
63	Accumulator Hose Bracket	1405A
64	Coupler Set	1406A
65	Valve Bank, Complete	1607A
66	Valve Bank, Bare	1607A / 01
67	Valve Mounting Bolt Set (Qty 2)	1627A
68	Relief Valve	1407A / 03
69	Dampening Orifice 1/16 Pipe	1407A / 04
70	Flow Control Orifice 1/8 Pipe	1607A / 06

71	Hose Adapter Fittings Pressure / Return (4)	1625A
72	Motor HD Flange	1608HD
73	Lower Skid Long (Bolt On)	1809B
74	Bottom Plate Assembly (Bolt On)	1811B
75	Plate Gasket	1801B
76	Bottom Plate Bolts (6)	1802B
77	Bottom Plate Washers (6)	1803B
79	Hose Assembly (2) to Carrier	451TC
80	Decals	DECALS

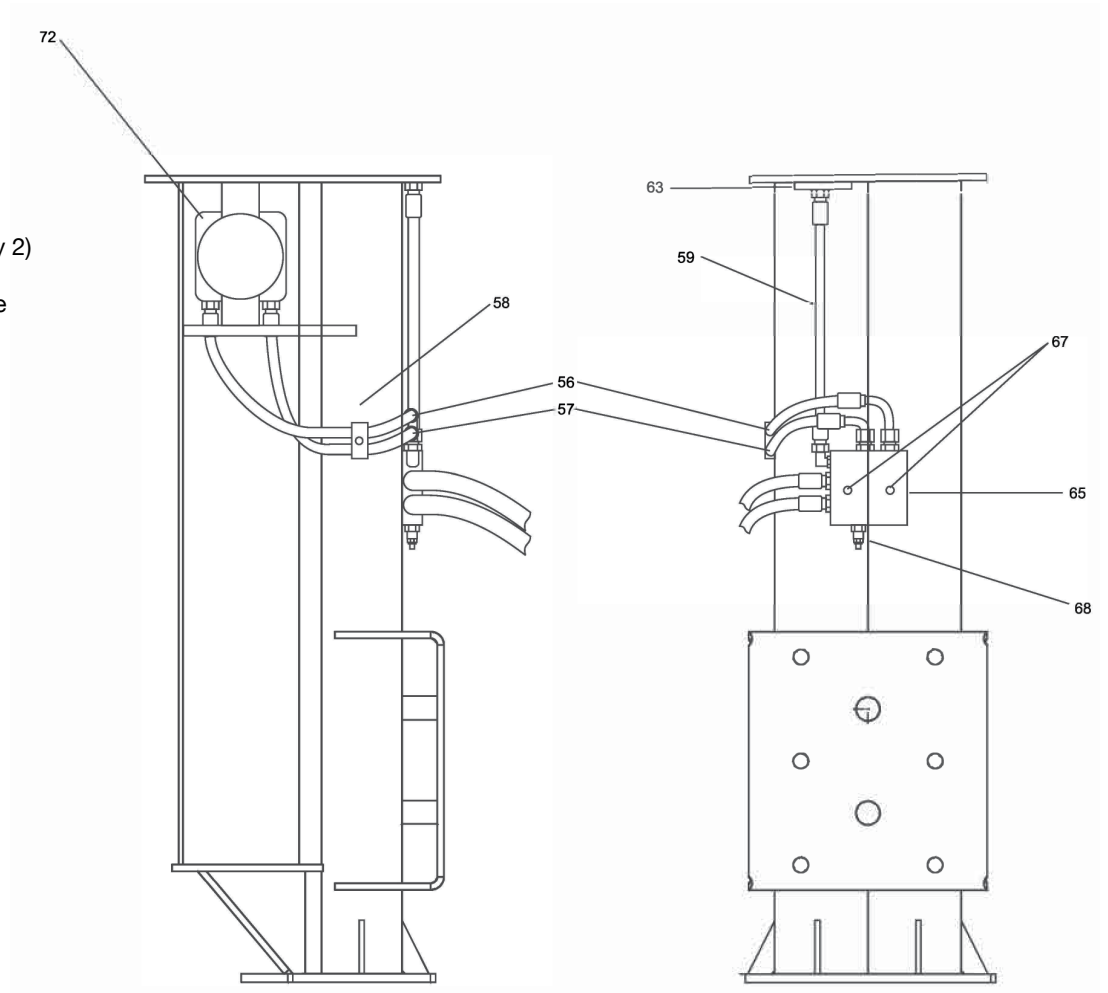
* Lift Lug Assembly Parts

29	Side Lift Lug - Right	1301A-R
30	Side Lift Lug - Left	1301A- L
31	Center Lift Lug	1302A
32	Lift Lug spacer (20	1303A
33	Screw for Spacer	1304A
34	Nut for Chain	1305A
35	Screw for Chain (2)	1306A
36	Nut for Chain (2)	1307A

14. HYDRAULIC COMPONENTS

Parts List

- 56 Pressure Hose to Motor
- 57 Return Hose to Motor
- 58 Side Hose Clamp
- 59 Accumulator Hose
- 65 Valve Bank, Complete
- 67 Valve Mounting Bolt Set (Qty 2)
- 68 Relief Valve
- 70 Flow Control Orifice 1/8 Pipe
- 72 Motor HD Flange





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HD10000 DROP HAMMER

The Hurricane drop hammer HD10000 is a high-production and low-maintenance drop-hammer for breaking concrete. Manufactured by Universal Impact Technologies, Inc., a Thunder Attachments company, the HD10000 is easily connected to a skid steer or an excavator and efficiently breaks concrete in industrial tear-outs, as well as parking lots, curbs, roads, runways and aprons, sidewalks up to 32 inches thick.*

- **EASY OPERATION** reduces operator error and fatigue. The operator simply guides the skid steer in a straight line – and does not aim or continually reposition the hammer.
- **SHOCK-FREE** ground engagement platform system keeps the HD10000 grounded and focuses the shock into the pulverized concrete.
- **COMPACT DESIGN**, light weight and easily transported.
- **SIMPLE CONNECTION** allows for easy attachment changes.
- **LOW MAINTENANCE** and minimal wear items enhance productivity.
- **HIGH PRODUCTION** due to the striking surface's broad face and coverage area.
- **LOW INVESTMENT** and high-volume production results in the lowest cost per yard ton of broken concrete when compared to traditional hydraulic hammer production.

THE HD10000 ADVANTAGE

- Highest impact-to-weight ratio in the industry.
- The bolt-on-ground engagement end plate makes maintenance accessible and easy.
- Low maintenance because there are no points, bushings, seals and accumulators to replace.



HD10000 TECHNICAL DATA

Impact Class	10,000 Foot Pounds
Impacts Per Minute	23
Total Impacts Per Minute	250,000 Foot Pounds
Hydraulic Pressure Minimum	2,200 PSI
Operating Height	8 Feet 11 Inches
Hammer Weight	3,360 Pounds
Maximum Concrete Thickness	Up to 32 Inches*

* Performance varies based on reinforcement.

Hurricane Drop Hammer is a trademark of Universal Impact Technologies, Inc., a Thunder Attachments Company
Due to policy of continuous development and improvement, the right is reserved to make changes without notice in specifications and design.



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HD3700 DROP HAMMER

The Hurricane drop hammer HD3700 is a high-production and low-maintenance drop-hammer for breaking concrete. Manufactured by Universal Impact Technologies, Inc., a Thunder Attachments company, the HD3700 is easily connected to a skid steer or an excavator and efficiently breaks concrete in industrial tear-outs, as well as parking lots, curbs, roads, runways and aprons, sidewalks up to 10 inches thick.

- **EASY OPERATION** reduces operator error and fatigue. The operator simply guides the skid steer in a straight line – and does not aim or continually reposition the hammer.
- **SHOCK-FREE** ground engagement platform system keeps the HD3700 grounded and focuses the shock into the pulverized concrete.
- **COMPACT DESIGN**, light weight and easily transported.
- **SIMPLE CONNECTION** allows for easy attachment changes.
- **LOW MAINTENANCE** and minimal wear items enhance productivity.
- **HIGH PRODUCTION** due to the striking surface's broad face and coverage area.
- **LOW INVESTMENT** and high-volume production results in the lowest cost per yard ton of broken concrete when compared to traditional hydraulic hammer production.

THE HD3700 ADVANTAGE

- Highest impact-to-weight ratio in the industry.
- The bolt-on-ground engagement end plate makes maintenance accessible and easy.
- Low maintenance because there are no points, bushings, seals and accumulators to replace.



HD3700 TECHNICAL DATA

Impact Class	3,700 Foot Pounds
Impacts Per Minute	30
Total Impacts Per Minute	112,000 Foot Pounds
Hydraulic Pressure Minimum	2,200 PSI
Operating Height	7 Feet 6 Inches
Hammer Weight	2,200 Pounds
Concrete Thickness - Up To	10 Inches

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