



UTILITOUGH



Utilitough.com
803.597.6890
Breakers@Utilitough.com

HYDRAULIC BREAKERS

Floating Power Cell and Bolt-Free Enclosed Housing

- Prevents carrier boom and arm fatigue failure
- No metal-to-metal contact
- Floating and fully enclosed power cell
- Extended breaker and carrier service life
- Low noise
- Suitable for all applications, particularly trenching, quarry, and mining

Advanced Internal Valve System

- Built-in cylinder
- Energy efficiency
- Oil leakage free
- Thicker flesh cylinder block
- Lower maintenance and repair requirements

Work Mode Selector

- Optimizes power and speed for application requirements
- Enables maximum productivity in all applications from light- to heavy-duty material breaking
- Available for UT1000 and above

Large Capacity Accumulator and Diaphragm

- Proactively prevents carrier hydraulic part fatigue failure
- Accelerates striking performance
- Prevents cavitation
- Increases seal and diaphragm service life
- Available for UT650 and above

Tool Pin Hole Protector

- Minimizes direct contact between holes and material to breaker
- Protects tool pin hole damage from debris
- Extends tool pin and working tool wear life
- Prevents hole cover missing and debris/dust entry

Bottom Plate

- Non-abrasive high-tensile raw material
- Fully enclosed lower bushing and front headblock
- Minimize debris and dust entering percussion chamber
- Increases service life of housing, tool, lower bushing, and front head

Working Tool

- Heat-treated core surface
- Optimum balance for longer wear life and crack prevention
- Variety of conventional and special tool types

Dust Protector

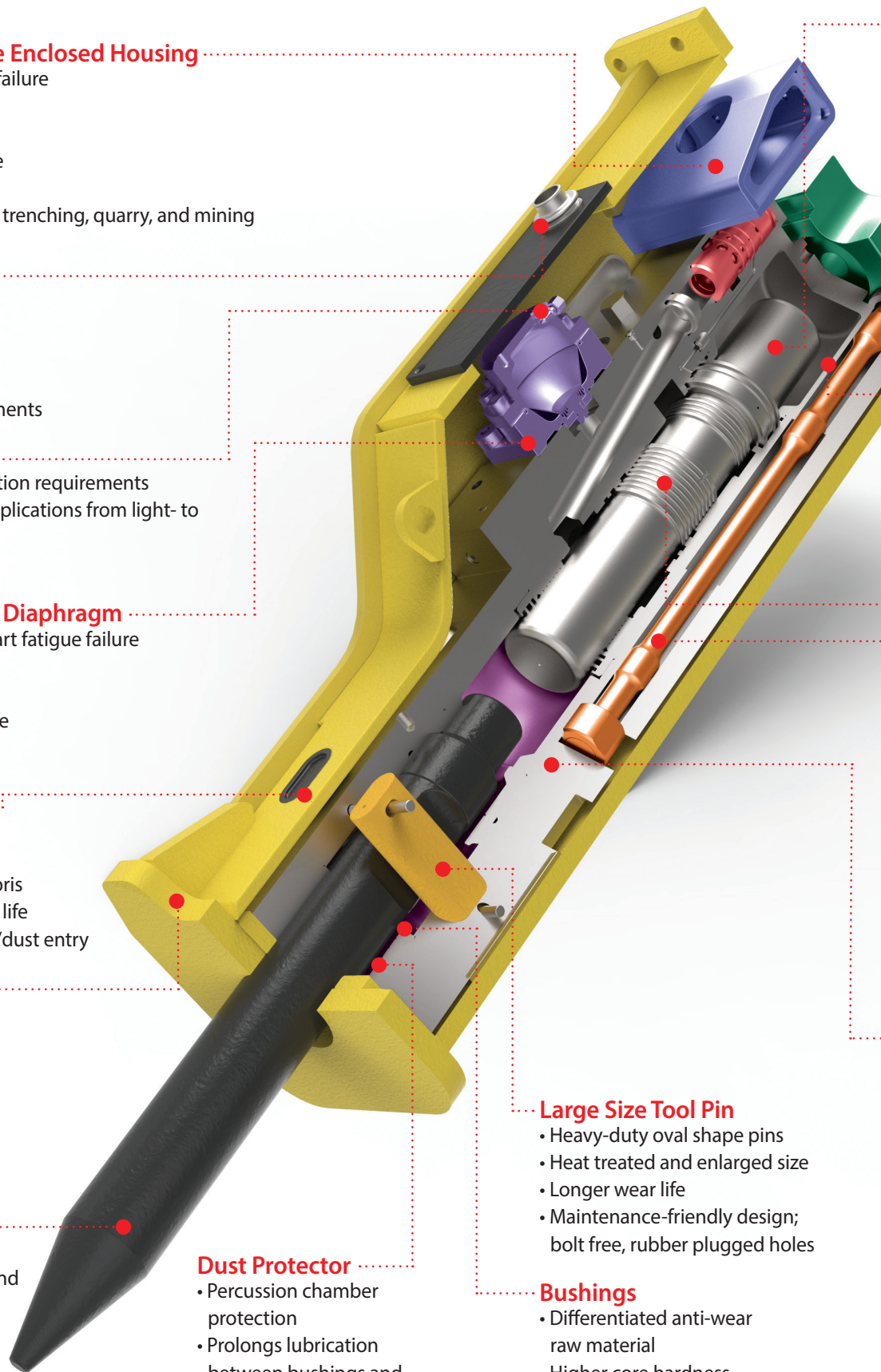
- Percussion chamber protection
- Prolongs lubrication between bushings and working tool
- Prevents contamination
- Increases life of seal, bushings, working tool, piston, and cylinder in severe dust applications

Large Size Tool Pin

- Heavy-duty oval shape pins
- Heat treated and enlarged size
- Longer wear life
- Maintenance-friendly design; bolt free, rubber plugged holes

Bushings

- Differentiated anti-wear raw material
- Higher core hardness
- Extended wear life



Larger Capacity Gas Chamber and Optimum Piston Size

- Hybrid energy-efficient design
- Higher impact power delivery
- Lower oil flow consumption
- Durable piston design; larger surface contacting working tool
- Dampens repercussion vibration force
- Prevents carrier structure fatigue failure

External Gas Charging

- Gas charging from external housing
- No need for housing or lubrication device disassembly
- Lower maintenance time
- Designed for easy maintenance at the job site

Anti-Blank Firing System (Auto-Stop)

- Automatically cuts off hydraulic power when the material is fully broken
- Ensures service life of tool pin, working tool, front head, piston, through bolt, and diaphragm, even with frequent dry-firing applications such as rental, secondary rock breaking, and scaling
- Standard for UT850, UT2200 and above

Air Supply Channel

- Built-in air supply channel
- Designed for underwater, tunneling, and severe dust applications

Heavy-Duty Front Headblock

- Significantly enhanced front head duty level
- Extended front head service life

Lubrication

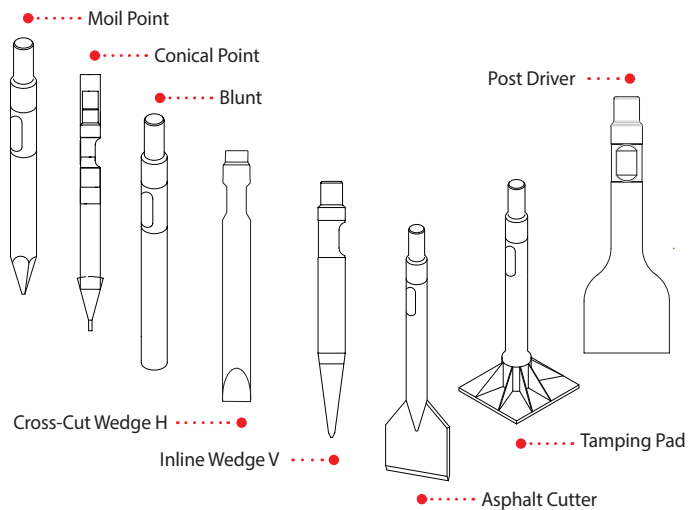
- Hydraulic auto-lube system standard on model UT1000 and above and optional for UT225 - UT850



Ultimate Performance

- Higher impact power
- Higher productivity
- Market-proven quality, durability, and life span
- Easy maintenance and repair
- Low-fatigue stress on carrier machines
- Reasonable cost
- Lower operating cost
- Higher return on investment

Working Tools



Special Working Tool	Application			
	Asphalt Removal	Compacting	Post Driving	Severe Duty (Rock Removal)
Asphalt Cutter	✓			
Tamping Pad		✓		
Post Driver			✓	

Conventional Working Tool	Application				
	Primary Breaking	Secondary Breaking	Hard Rock Removal	Soft Material and Rock Material	Demolition
Cross-Cut Wedge H	✓		✓	✓	✓
Inline Wedge V	✓		✓	✓	✓
Moil Point	✓		✓	✓	✓
Conical Point	✓		✓	✓	✓
Blunt Point		✓	✓		✓

✓ Highly-Recommended



Only breaker on the market offering auto-lube as standard on models UT1000 and above

23

23 breaker models that cover the entire CE industry carrier range from 0.8 to 100 tons



Five models exclusively designed for skid-steer loaders



Suitable for light-to-medium to hard- and severe-duty rock breaking applications



Three-year full warranty (wear parts excluded)



Mounting brackets available (Skid-Steer, Excavator Quick-Attach, and Excavator Pin-on)



Complete replacement parts inventory

Features and Advantages

Durability

- Longer chisel point and larger through bolt to improve durability
- Minimized welding on bracket fabrication process to strengthen durability

Performance

- Applied two-step stroke and idle blow preventing structure system
- Stronger impact power
- Low noise

Enhancements

- Prevention of chisel stop pin loosening
- No oil loss when changing the control valve
- Lower vibration and tighter fastening between power cell and bracket
- Models UT1000 and above include auto-greasing system

Convenience of use

- Operator-friendly design
- Simple assembly and disassembly
- Control valve can be replaced on-site with ease and speed
- Easy maintenance (time and cost saving)
- Longer lifetime of parts

All Models Include



Two Working Tools



Adequate Length Hydraulic Hoses and Fittings



Hose Set and Gas Charging Kit



Repair Tool Box



Owner's Manual



Parts Breakdown



SKID-STEER LOADER MODELS

UT225, UT500, UT650, UT850, and UT1000

Also for walk-behind mini loaders, compact track loaders, and compact wheel loaders.

Description	Unit	UT225	UT500	UT650	UT850	UT1000
Impact Energy Class	ft lb	225	500	650	850	1,000
Operation Weight	lb	359	551	716	1,069	1,179
Hose Length	in	.5 x 90	.5 x 110	.5 x 110	.75 x 110	.75 x 110
Blow Rate (long stroke)	bpm	540~1,000	600~1,490	550~1,300	380~1,100	380~1,000
Required Oil Flow	gpm	3.97~9.25	5.28~18.49	7.92~18.49	10.03~29.05	11.88~36.98
Operating Pressure	psi	1,280~1,707	1,280~2,702	1,565~2,702	1,707~2,702	1,991~2,702
Tool Diameter	in	1.77	2.24	2.75	2.95	3.14
Suitable Carrier	ton	.8~2.5	1.5~4	3~6	4.5~8	4.5~8.8
	lb	1,600~5,000	3,000~8,000	6,000~12,000	9,000~16,000	9,000~17,600

Warning: Chisel paste must be used with hydraulic breakers. Using high-temperature grease as substitution for chisel paste will cause damage to components of breaker. Weights may differ based on selected mount styles. Prices and specifications subject to change without notice.

Operating weight is the combined weight of the breaker unit housing, internal components, two working tools, hoses, and fittings.



EXCAVATOR MODELS - WHISPER SERIES

Designed for noise reduction and prevention of internal vibration. Works on material surface with vertical impact advantage for breaking stone and other materials.

Description	Unit	UT225	UT500	UT650	UT850	UT1000	UT1200	UT1800	UT2200	UT2800	UT3200
Impact Energy Class	ft lb	225	500	650	850	1,000	1,200	1,800	2,200	2,800	3,200
Operating Weight	lb	269	419	618	772	1,124	1,245	1,873	2,029	2,580	3,218
Hose Length	in	.5 x 90	.5 x 100	.5 x 100	.75 x 100	.75 x 100	.75 x 100	.75 x 100	.75 x 100	.75 x 100	1 x 100
Blow Rate	bpm long/s	540~1,000	600~1,490	550~1,300	380~1,100	490~1,100	480~1,000	360~650	350~600	320~550	320~480
	bpm short/s					490~1,100	480~1,000	600~950	600~900	400~700	400~650
Required Oil Flow	gpm	3.96~7.92	5.2~10.5	7.9~17.1	10~21.1	10~23.7	11~25	17~30	18.4~33	23.7~34.3	26.4~35.6
Operating Pressure	psi	1,280~1,707	1,280~1,707	1,565~2,347	1,707~2,347	1,991~2,418	1,991~2,418	1,991~2,560	1,991~2,560	2,276~2,702	2,276~2,702
Second-Relief Setting Pressure	psi	2,489	2,500	2,500	2,500	2,500	2,500	3,000	3,000	3,000	3,000
Tool Diameter	in	1.77	2.24	2.75	2.95	3.14	3.54	3.74	4.13	4.52	4.92
Accumulator Gas Pressure	psi			570~710	570~710	570~710	570~710	780~850	780~850	780~850	780~850
Suitable Carrier	ton	.8~2.5	1.5~4	3~6	4.5~8	4.5~8.8	6~10	8~12.5	10~15	12~18	16~22
	lb	1,600~5,000	3,000~8,000	6,000~12,000	9,000~16,000	9,000~17,600	12,000~20,000	16,000~25,000	20,000~30,000	24,000~36,000	32,000~44,000

COMPACT EXCAVATORS

BACKHOES

Operating weight is the combined weight of the breaker unit housing, internal components, two working tools, hoses, and fittings.



EXCAVATOR MODELS - WHISPER SERIES

Description	Unit	UT4000	UT4500	UT5000	UT6000	UT8000	UT11000	UT16000	UT18000
Impact Energy Class	ft lb	4,000	4,500	5,000	6,000	8,000	11,000	16,000	18,000
Operating Weight	lb	3,528	4,013	4,519	5,511	6,172	7,495	8,599	15,653
Hose Length	in	1 x 100	1 x 90.5	1.25 x 110	1.25 x 120	1.25 x 120	1.25 x 120	1.625 x 120	1.625 x 120
Blow Rate	bpm long/s	320~480	340~450	250~380	230~400	230~345	270~400	230~330	280~350
	bpm short/s	400~600	420~550	300~450	270~470	270~410	330~500	270~500	320~500
Required Oil Flow	gpm	31.6~40.9	31.6~43.5	38.3~55.4	46.2~64.6	50.1~66	60.7~73.9	63.4~84.5	92.4~111
Operating Pressure	psi	2,276~2,702	2,276~2,702	2,276~2,702	2,276~2,702	2,276~2,702	2,276~2,702	2,276~2,702	2,418~2,987
Second-Relief Setting Pressure	psi	3,000	3,000	3,000	3,300	3,000	3,000	3,300	3,556
Tool Diameter	in	5.31	5.31	5.70	5.90	6.10	6.49	6.88	8.07
Accumulator Gas Pressure	psi	780~850	780~850	780~850	780~850	780~850	780~850	780~850	780~850
Suitable Carrier	ton	18~24	20~26	25~36	24~36	28~42	34~50	40~60	60~100
	lb	36,000~48,000	40,000~52,000	50,000~72,000	48,000~72,000	56,000~84,000	68,000~100,000	80,000~120,000	120,000~200,000

MID AND LARGE EXCAVATORS

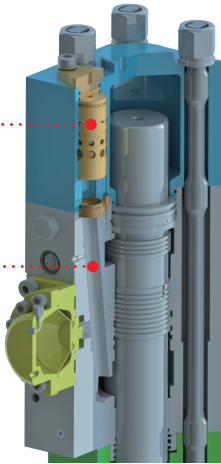
Warning: Chisel paste must be used with hydraulic breakers. Using high-temperature grease as substitution for chisel paste will cause damage to components of breaker. Weights may differ based on selected mount styles. Prices and specifications subject to change without notice.

Operating weight is the combined weight of the breaker unit housing, internal components, two working tools, hoses, and fittings.

UtiliTough Breaker Internal Valve

Can be replaced on job site

Simple & wide circuit



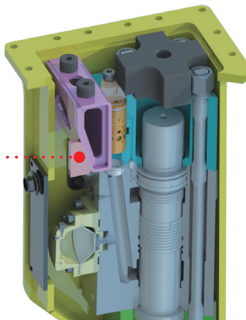
UtiliTough Breakers Edge Over the Competition

Power Cell - Internal Valve System

- The valve is integrated into breaker head cap
- Increases efficiency by 5~10% than external valve system
 - **more efficient and economic use of breaker power**
- Lower oil temperature that prevents damage to the seals
 - **lower maintenance costs**
- Simple and wide hydraulic oil path; fewer parts and components in the breaker
 - **lower repair & maintenance costs**
- The valve can be replaced on site without oil loss
 - **to change the control valve, all the parts do NOT require disassembly, resulting in longer life of parts**

Bracket

UtiliTough breaker power cell with a tapered type stop damper



Power Cell - Holding System

- UtiliTough breakers have a patented power cell holder with a tapered type stop damper
- Strength
 - **with no holding bolt easy to assemble & disassemble**
 - **lower repair & maintenance costs**
 - **lower cost of production**
- **less service time**
- **shorter production period**
- **no noise when operating**
- **stable operation**

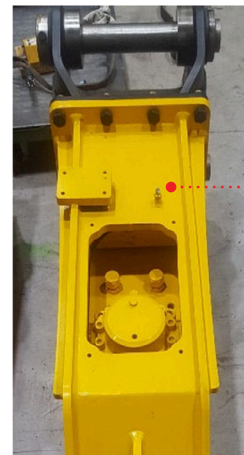
UtiliTough Breaker Side Gas Charging Port

Side gas charging port; no cover to be removed or loosening of bolts



UtiliTough Breaker Grease Charging Port

Grease charging point with ease and convenience; charging point is separated from back head gas charging point



✓ UtiliTough breaker has accumulator applied to models UT650 and above.

An accumulator is a pressure vessel that performs many task in a hydraulic system. It is used to maintain pressure, store and recapture energy, reduce pressure peaks, power chassis suspensions, and dampen shock, vibration and pulsations.