

The PitBull Big Dog™

Operation, Safety, and Instruction Manual



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Warning!

Not following all of the instructions and warnings in this manual may result in Injury or Death. Omega Diamond, Inc. and all related companies and personnel cannot be held responsible for any damages incurred by the installation, use, and/or maintenance of this product.

Operating and Safety Instructions



IMPORTANT: Read Before Operating Equipment

1. To avoid accidents or injury, keep the work area clean, well-lit, and well Ventilated.
2. Always wear eye, hand, and all other appropriate protective apparel when operating the machine.
3. Keep all other people, children, and small animals away while operating the machine.
4. Ensure that the electrical system in your work location meets all codes and regulations before operating the machine.
5. If the power cord or any other part of the machine is damaged, discontinue the use immediately until damaged parts can be replaced.
6. Do not force bolts; most have been assembled with an adhesive, such as a Loctite® thread-locker adhesive for safety.

*Loctite is a registered trademark of Henkel Corporation.

7. If the hydraulic hose or chiseling tool is damaged, immediately stop using until the damaged parts can be replaced.
8. Do not continue operation past the breaking point of the stone to avoid jamming the tool.
9. See the Troubleshooting section of this manual for more information.

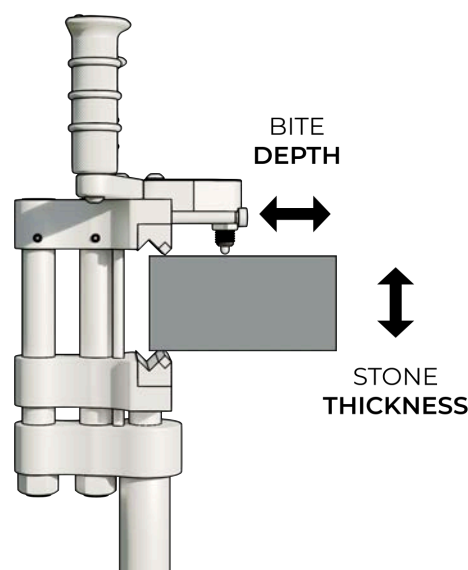
Before You Start



The most important things you need to know about your PitBull Stone Chiseler:

1. Do NOT run your machine without oil in the pump.
2. Do NOT press down on the spring loaded nose. Use it to level the PitBull on the stone only.
3. If you are biting through laminated stone, replace the default teeth and use the Laminated Stone Teeth included with your PitBull

Stone Thickness	Recommended Bite Depth
2cm	1/4 inch
3cm	5/16 inch
4cm	1/2 inch
6cm	3/4 inch
8cm	7/8 inch



For an interactive copy of this manual find it online at:
omegadiamond.com/documentation

Specifications

Model: PBBD Stone Chiseler v2024

Included Teeth: 3 in. Soft Stone
3 in. Laminated
1.5 in. Laminated

Min Biting Depth: 0.35 in. (9 mm)

Max Biting Depth: 3.5 in. (9 cm)

Weight: 19.6 lbs. (8.9 kg)

Model: Electric Hydraulic Pump HHB-700A

Motor: 110V, 11.5Amp, 60Hz, 1 HP

Oil: ISO 15 Grade Hydraulic Fluid

Tank: 1.85 gal. (7 liters)

Pressure: 10,000 PSI (70 Mpa)

Weight: 56.2 lbs. (25.5 kg)

Choosing the Right Teeth



3 in. Grooved Teeth

sku: 365-421

Best on:
Soft Stone

Use on natural stone or soft stone.



3 in. Laminated

sku: 980-304

Best on:
Laminated Stone

Use on any laminated stone. The sunk carbide tooth allows the tooth to grab the stone and keep it from moving as the carbide sinks in.



1.5 in. Laminated

sku: 673-582

Best for:
Laminated Stone

Half the surface area, twice the pressure. Use on any laminated stone that is too hard for the 3 in. tooth. The increase in pressure makes this 2X stronger than the 3 in. tooth.

How To Use

Getting Started

Note: Make sure your slab overhangs your workbench by at least 2 inches. (5 cm)

Preparing the stone

1. Start by laying down a strip of thin template material on top and against the edge of the stone. This protects the surface of the stone against any accidental scratching.
2. Lay a straight 2x4, or length of angle aluminum, parallel to the face of the stone, and about 3 inches from the edge as an alignment guide. This should give you a ¼ inch bite depth. Make sure to adjust distance depending on your required bite depth.
3. Mark every 3 inches (or 1½" if using the narrow tooth) on the guide.

* Laminated stone will require a deeper bite to shear through cleanly. No bite should ever exceed 1 1/8 inch;

* Stone should NEVER rest against Stone Stop Rods.

Operating the Jaws

The hydraulic pump shipped with your PitBull can be activated two ways:

1. Use the activation buttons on the wireless handles. Right handle activates the pump to bite down on stone. Left handle releases the pressure to retract the jaw.
2. There is a backup foot pedal that can be attached to the pump for emergency use, such as when the battery in the wireless handles runs out.

Try opening and closing the jaws before chiseling the stone. Do this several times until you are comfortable with how the machine should feel.

Chiseling the Stone

1. Pick up the chiseler and fully open the jaws.
2. Clean off all debris and stone powder from the nose and jaws of the chiseler.
3. Select, and install, the tooth type best suited for your job and stone.
4. Carefully set the chiseler onto the edge of the slab, setting down the nose first. Be sure not to scrape the jaws across the surface of the stone.
5. Gently push the chiseler so that the alignment pins are touching the alignment guide. If needed, lift the nose off the stone to prevent dragging across the surface and potentially marring the finish.

6. Set the top jaw down. This should cause the tooth to be resting on the template material. Push against the alignment bar at the mark.
7. Activate the pump to bring the bottom jaw up slowly until it starts to bite the stone.
8. Increase pressure until the stone makes a “popping” sound. Immediately stop applying further pressure, but do not release. Verify that both the top and bottom jaws have broken the stone. If not, then continue applying pressure until both sides have broken.
9. Once both sides are broken, immediately release the pressure, and remove the chiseler from the stone.
10. Remove the debris from the chiseler. Tilting the tool to one side is usually all that is required.
11. Continue this process along the edge until done. Overlapping the breaks by $\frac{1}{4}$ inch can help create a cleaner edge.

Tips for Varied Looks

1. Instead of breaking a straight edge, try rotating the chiseler by 45 degrees and breaking the edge every 2 or so inches. This will create a kind of “mountain-edge” look.
2. Scalloped edges: Install the Scallop, or Reverse Scallop Tooth and break every 3 inches. Try combining forward and reverse for a wavy edge.

Maintenance

Make sure that the steel rods are clean and free of debris. Do not allow dust and stone fragments to stay on contact parts. Continued use without cleanup will result in excessive parts wear, and will make repair more difficult and expensive.

Frequently Asked Questions

What is the largest bite size for the Pitbull?

The Pitbull chiseler can bite up to 8 cm of laminated stone. If biting at these depths, be sure to use the 1.5" wide laminated tooth set to concentrate forces for a clean bite.

Why is my cylinder and jaws not retracting or extending?

Check to make sure your pump is working properly. If your pump is working properly, remove the quick disconnect where the hose screws onto the chisel unit. Remove both pieces so that the hydraulic fluid can flow freely from the pump to the cylinder. The Quick disconnect can sometimes restrict flow and cause the cylinder and jaws to lock up and not move.

Does the Pitbull work on laminated edges?

Yes, We have designed teeth to be used on laminated stones and these should be included in your purchase with the Pitbull chiseler.

Does the Pitbull work on all stone types?

Not all stone types are able to be sheared cleanly, especially stones that have patches of crystal or are a solid single crystal structure. Please test on your specific stone or send a sample of the stone, already laminated or not as your job requires, so that we can test and tell you the results. While the Pitbull Big Dog Stone Chiseler should be able to shear the stone, the break on such stones may be chaotic. Marble and natural quartzite are the most risky: the chance of breaking slabs using ANY chisel, not just ours, is just too high.

Why is my pump not releasing pressure?

This may be caused by the Solenoid being jammed (The green cylinder on the top of your pump reservoir.) You can press the end of the solenoid with a tool or screwdriver for a manual release of the solenoid and your pump should then release the pressure and fluid from your line. If your pump continues to not release with the pedal, you may need to replace the solenoid. Please contact us to talk to a technician.

What kind of oil does the Pitbull take?

The hydraulic pump takes 1 gallon ISO 15 grade oil, or AW-15. We include Enerpac LX-101. If you cannot find ISO 15 grade oil, you can purchase a half gallon of AW-32 hydraulic fluid from a local auto-parts store AND a half gallon of diesel. Dilute your AW-32 hydraulic fluid with the diesel at a 50/50 ratio (a total of 1 gallon of mixed fluid) to provide your pump with thinner hydraulic fluid to ensure proper pump operations.

I would like to upgrade from the foot pedal to the new button handle design, can this be done?

You have two options: 1) you can send in your old pump and we will upgrade it to work with the new wireless handles, or 2) you can purchase a new pump and request the handles as an add-on upgrade.

Troubleshooting

Pump is running, but the jaw doesn't move or moves too slow.

- Verify that all hydraulic fittings are securely tightened.
- Check the hydraulic fluid level. See pump instructions.

If the pump is building pressure, but the jaw is not moving

- Remove the Quick Disconnect and connect the pump directly to the cylinder 90 degree elbow.

Jaw tooth is chipped or dull.

- Remove the carbide tooth by heating enough to weaken bond, cool tooth, then rotate the carbide to an undamaged edge and re-glue using epoxy resin. (CAUTION! Cool tooth before touching!)

I have no undamaged edges left on the carbide.

- Contact our sales department for new PitBull™ Stone Chiseler teeth.

Hydraulic fluid sprays from connectors during operation!

- Make sure all connectors are tightened securely, and are undamaged.

Everything is tight, but there is still a leak.

Contact our service technicians, and/or a local hydraulic specialist, to see if the problem can be easily repaired and what further steps to take.

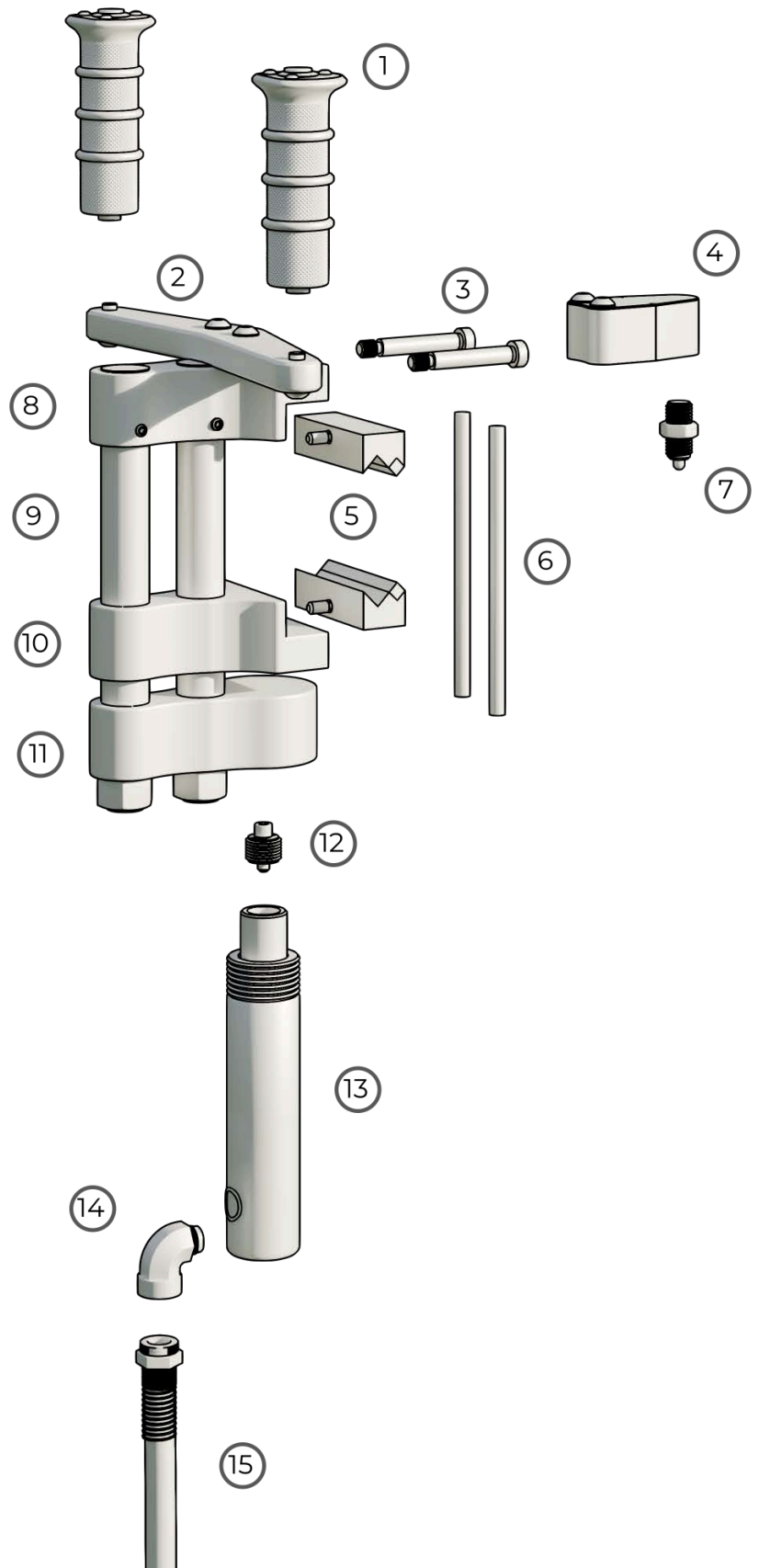
Everything is tight, there are no leaks, but the jaws will not move.

- If the hose stiffens when the pump is running, then check for excessive stone powder being packed into the tool's mechanism.
- If the hose does not stiffen, then either call us, or your local hydraulic specialist, for more information. Your pump may be malfunctioning.

Replacement Parts

For a complete list of replacement parts for your machine, visit our website at www.omegadiamond.com/replacement-parts

1. Wireless Handle Assembly
sku: 147-524
2. Handle Mounting Plate
sku: 085-587
3. Guide Screws
sku: 030-754
4. PitBull Shear Leveling Nose
sku: 266-337
5. PitBull Soft Stone Teeth
sku: 365-421
6. Stone Stop Rod
sku: 686-249
7. Spring Leveling Plunger
sku: 451-434
8. PitBull Upper Jaw
sku: 512-616
9. Heavy Duty Guide Rods
sku: 220-783
10. PitBull Lower Jaw
sku: 531-974
11. PitBull Rod Mounting Bar
sku: 438-164
12. Piston Attaching Thread
sku: 869-469
13. Hydraulic Cylinder Ram
sku: 335-311
14. Hydraulic Angle Connector
sku: 864-708
15. Hydraulic Hose
sku: 178-307



16. Electric 120V Hydraulic Pump

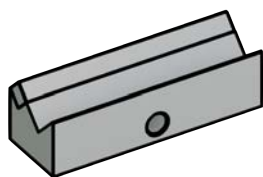
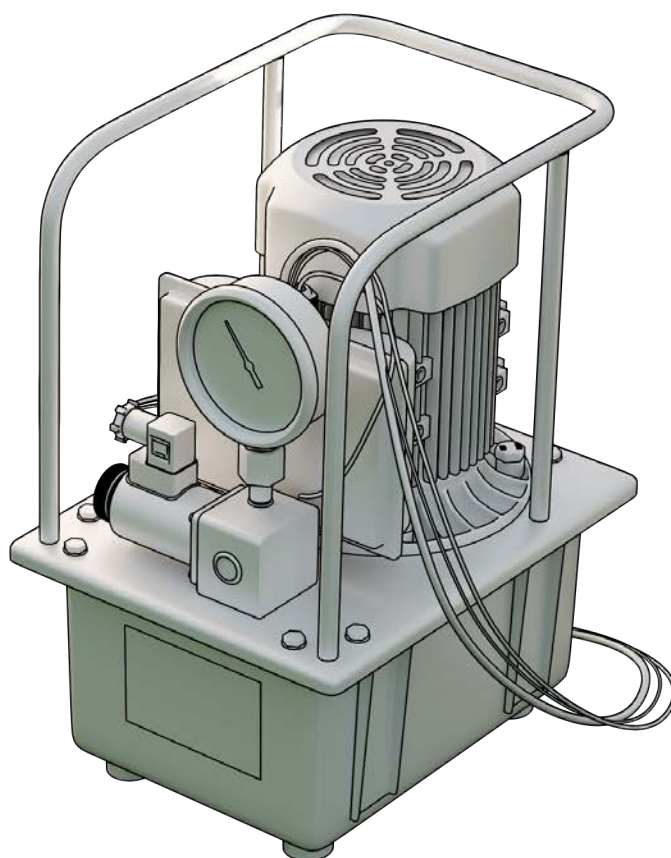
sku: 673-889

17. Hydraulic Oil

sku: 732-184

18. Hydraulic Hose

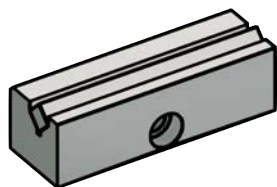
sku: 178-307



19. Soft Stone 3 inch Teeth

sku: 365-421

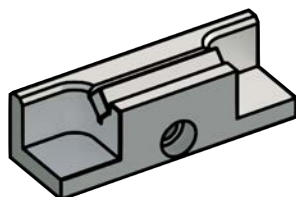
Use on natural stone or soft stone.



20. Laminated 3 in. Teeth

sku: 980-304

Use on any laminated stone. The sunk carbide tooth allows the tooth to grab the stone and keep it from moving as the carbide sinks in.



21. Laminated 1.5 inch Teeth

sku: 673-582

Half the surface area, twice the pressure. Use on any laminated stone that is too hard for the 3 in. tooth. The increase in pressure makes this 2X stronger than the 3 in. tooth.

Limited Warranty

For warranty information, please visit our website at omegadiamond.com/warranty

Please record the Date of Purchase and the Serial Number of your machine here for future reference:

Date of Purchase: _____

Serial Number: _____

Contact Us

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Outside USA: 1-530-889-8977

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