



What is a Release Valve?

How-to-Fix a Stuck Piston

DIAMOND® HYDRAULIC TOOLS **FROM BN Products-USA™**

Q: What should I do if my hydraulic tool has a jammed or “stuck” piston?

A: One of the most commonly reported issues in such conditions is a piston becoming stuck during operation.

To address this, most DIAMOND hydraulic machines are equipped with a release valve (or release lever), which allows the piston to return to its original resting position.

What Is a Release Valve?

A release valve—referred to as a release lever on certain models—is a simple mechanism that maintains pressure within the hydraulic chamber. By releasing this pressure, the piston can return smoothly to its default position.

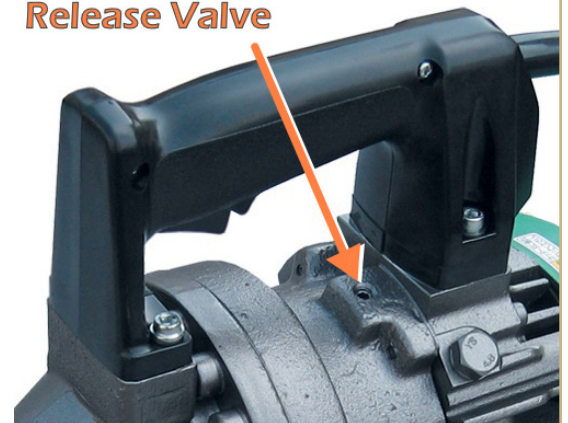
How to Operate the Release Valve

The release valve is typically located on the cylinder of the machine, near the oil refill port. For the exact location on your specific DIAMOND model, please refer to the parts diagram in the instruction manual.

To Operate the Valve:

- Locate the hex wrench supplied with the tool
- Rotate the release valve approximately 60° clockwise.
 - Do NOT open the valve too far (> 60°), as oil could spill
- This action release the internal pressure, allowing the piston to retract
- Once the piston has returned, securely tighten the valve; do not overtighten.

Release Valve



>> If the Piston Remains Stuck - If the above procedure does not resolve a stuck piston, consider the following causes:

- **Debris Contamination** - Fine particles, such as metal shavings or dust that may enter the hydraulic system
- **Blocked Air Passage** - The airway in the airbag bolt may become obstructed by debris, affecting pressure in the hydraulic chamber. If the airflow hole is blocked on this bolt, the tool will not function correctly
- **Internal Hydraulic Failure** - Mechanical failure within the hydraulic system (may require professional repair)
- Never strike the piston with a hammer or hard objects - this may result in equipment failure

Recommended Maintenance:

Most issues may be resolved through routine cleaning and regular maintenance:

- Clean the machine using a soft cloth using appropriate cleaning oil
- Remove any debris or buildup from external areas of the tool
- For more thorough cleaning, detach the cutter blocks from the piston to access unexposed areas of the housing
- If problems persist after cleaning, An oil change (use only proper hydraulic oil type) may restore proper function.

For Assistance, Contact BN Products-USA™ Customer Service:

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