# WOOD'S POWR-GRIP® GUIDE TO MAINTENANCE, TROUBLESHOOTING AND REPAIR



LJ6VH(WBP)

VERTICAL HANDLE

AND TL6AG

ANGLE-GRIP™ HAND

CUPS

# **General Maintenance**

# Inspect the Hand Cup Regularly:

- Make sure the air filter is in place; if not, discontinue use until the filter is replaced.
- Examine the plunger assembly and handle for dents, cracks or other damage.
- Make sure the face of the vacuum pad feels grippy (not slick). Otherwise, replace the pad.
- Examine the vacuum pad for cuts or roughness on the sealing edge (see Inspect the Sealing Edge below).
- Periodically test the cup for excessive leakage (see Leak-Test the Hand Cup below), sluggishness in plunger action or radical changes in the number of strokes needed to keep the red line hidden.
- If the cup does not function normally, review the TROUBLESHOOTING GUIDE (overleaf) to determine
  what corrective action is needed.

## Clean the Vacuum Pad:

- · Remove the air filter from the pad face.
- Use a clean sponge or lint-free cloth to apply soapy water or another mild cleanser to the pad face.

  \*Never use solvents or rubber conditioners as a cleaning agent (see WARNINGS).
- To prevent liquid from contaminating the pump during cleaning, hold the cup facedown or cover the suction inlet in the filter recess.
- Wipe all residue from the pad face and allow the cup to dry.
- Reinstall the air filter.



# **Inspecting and Testing the Cup for Leakage**

# Inspect the Sealing Edges:

- Slowly draw your finger along the entire length of the sealing edge, to check for roughness or foreign material.
- Examine the sealing edge for cuts by bending the edge of the pad face towards you to create a hump, turning the hand cup as necessary.
- If cuts or cracks are present in a sealing edge, a V-shaped gap will appear.
- Any pad that exhibits a gap or excessive roughness in a sealing edge must be replaced.

### **Leak-Test the Hand Cup:**

- Attach the cup to a clean, smooth, scratch-free piece of glass or metal for approximately 2 hours.
- The red line on the plunger serves as a vacuum indicator:
  - If the red line *does not* appear during the test period, the cup is usable.
  - If the red line *does* appear, perform general maintenance and repeat the test.
- If the problem persists, check the TROUBLESHOOTING GUIDE (overleaf) to identify possible causes and appropriate corrective actions.
- If these measures do not restore the cup to normal performance, contact the Wood's Powr-Grip Customer Service department or an authorized dealer for assistance.



THE ORIGINAL & TRUSTED NAME

IN VACUUM LIFTING EQUIPMENT

800.548.7341

WPG.com

Wood's Powr-Grip products are sold through authorized dealers.

Rev. 0.7/ 02-23 VH and AG Troubleshooter



Based on product information at time of publication. Environmental conditions can affect product performance and longevity; consult the product instructions on www.WPG.com or contact a Technical Sales Representative for more information.

# PARTS AND ASSEMBLY

190115Handle, Vertical261130RPHandle, Angle-Grip™390520AMPlunger Assembly, Metal

90524AM Plunger Assembly, Metal with Audio Alarm (WBP)

4 90154AM Plunger Assembly, Industrial-Grade Plastic
 5 49416T Vacuum Pad, 6" (15 cm) Dia., Concave (LJ6)
 6 49386T Vacuum Pad, 6" (15 cm) Dia., Concave (TL6)

7 Air Filter\* 8 Red Line

9 Check Valve Retainer\*

10 Check Valve\*11 Release Tab

12 <u>10006</u> Screws, 10-32 x 5/16" (4) 13 <u>10014</u> Screws, 10-32 x 7/16" (4) 14 Button and U-Cup

Not Shown

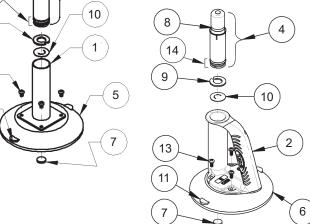
29312 Pad Cover, 6" (15 cm)

Plunger Lube\*



Click or scan to order Replacement Parts online





# TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	CORRECTION
Slow leakage	Cuts on sealing edge	Replace vacuum pad.
	Dirt or lint inside pump	Wipe inside of handle with a soft cloth. Check for contamination on U-cup or button.
	Dry pump	Apply a light coating of plunger lube inside handle.
	Contaminated pad face	Clean vacuum pad.
Severe leakage	Severe contamination	Clean plunger assembly and inside of handle.
	Gouges or cuts on sealing edges	Replace vacuum pad.
Jammed or sluggish pump	Obstructed valve inlet	Remove obstruction from suction inlet (behind air filter) or from space between handle and pad.
	Severe contamination	Clean plunger assembly and inside of handle.
	Dented or cracked handle	Replace handle.
	Bent or cracked plunger	Replace plunger assembly.
Pad slips when attached	Contaminated load surface	Wipe surface clean. If necessary, wash and allow to dry.
	Contaminated pad face	Clean vacuum pad.
	Slick or worn pad face	Replace vacuum pad (at least once every two years)
More than 10 strokes needed to apply	Any of the above	Perform general maintenance.
	Dirt or lubricant on check valve	Remove, clean and reinstall plunger assembly, retainer and check valve as directed in Disassembly and Assembly sections.

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# **Disassembly Procedures**





- Grasp the head of the plunger assembly and pull it straight out from the handle. If the plunger assembly is too tight to be removed this way, return the hand cup for repair.
   Note: Disassembly of the plunger assembly is not recommended.
- Replace the plunger assembly if the plunger housing is bent, cracked or otherwise damaged.
- Otherwise, wipe the plunger assembly clean with a soft, lint-free cloth, paying particular attention to the U-cup and button. Be careful to keep the plunger assembly clean when it is not in the handle.



### Remove Handle from Vacuum Pad

- Remove the 4 screws, and separate the handle from the pad.
- Wipe off the contact surfaces between the handle and pad, to ensure a good seal during reassembly.
- · Make sure the pad's suction inlet is clean, dry and free of contaminants.



### Remove Retainer and Check Valve from Handle

- Remove the retainer and check valve using a hooked scribe or similar tool. **Be careful not to scratch the inside of the handle!**
- With a soft, lint-free cloth, carefully clean these parts.
- Wrap a small dowel or rod with a soft, lint-free cloth and gently wipe the inside of the handle, to make sure it is clean and dry (lubricant-free).

# **Assembly Procedures**



# Inspect Handle, and Reinstall Check Valve and Retainer

- · Carefully examine the inside of the handle for scratches and contaminants, using a flashlight:
  - Scratches between the midpoint and the closed end of the handle can cause leakage.
  - Scratches near the open end of the handle rarely present a problem.
  - Make sure that no lubricant remains inside the handle.
- Drop the check valve inside the handle so that it lies flat against the closed end.
- Using a dowel or other tool that will not scratch the sides of the handle, push the retainer all the way into the handle to hold the check valve securely in place.



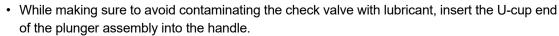
# **Attach Handle to Vacuum Pad**

- Align the screw holes in the handle with those on the pad.
- · Reinstall the screws and tighten them securely.



# **Reinsert Plunger Assembly into Handle**

- Using a soft swab, apply light coating of plunger lube in a ring around the inside of the handle, at a point about 1" (2.5 cm) from the closed end. Keep the open end of the handle as dry (lubricant-free) as possible.
- Plunger lube is recommended; contact Wood's Powr-Grip Customer Service to order this. **Do not use improper lubricants in the handle!**



- Push the plunger assembly until it begins to tighten; then seat the plunger assembly with one strong, swift motion.
- Operate the plunger, turning it to spread the plunger lube thoroughly on the U-cup.
- · Now the cup is assembled and ready for testing.



# **WARNINGS**

Wood's Powr-Grip has taken great care to produce the most reliable vacuum-operated handling devices available. Nevertheless, mistreatment or misuse may damage a hand cup or otherwise create conditions which could cause the hand cup to fail, resulting in an unexpected release. The following warnings are offered to help users avoid most potential hazards.

# Failure to observe WARNINGS could damage the cup or the load, or cause injury to the user.

- Do not use the cup to lift loads that exceed the load capacity.
- Do not use the cup to support a person.
- Do not leave a cup unattended which could injure people if it disengages unexpectedly.
- Do not place the vacuum pad against surfaces which could damage the sealing edge.
- Avoid conditions that could cause the cup to slip or to disengage prematurely, such as: contaminants, cuts or scratches in the pad face or load surface; attaching the cup to porous materials; or applying pressure against the pad edge.
- Do not use the cup to lift when the red line is visible. If the red line reappears frequently, discontinue use and follow the instructions for general maintenance and testing.
- Do not allow anything to interfere with free movement of the plunger while the cup is attached. This could prevent the red line from warning the user of vacuum loss.
- · Do not touch any release tab while lifting.
- Do not use harsh chemicals (such as solvents or gasoline) or rubber cleaners and conditioners to clean the pad. See www.WPG.com for more information.

