

# HI-ELEVATION HAND CUP INSTRUCTIONS



## OPERATION

### To Attach

- 1) Position the hand cup on the contact surface so the red line will be visible if it should appear while lifting the load.



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**Caution:** Some rubber compounds may stain light surfaces or deform soft coatings. When in doubt, test a sample of such materials for permanent effects.

- 2) Press the rubber pad against the load as needed to form a continuous seal.

**Caution:** Make sure the load is supported as needed to prevent breakage.

- 3) Pump the plunger until the cup attaches completely. When the red line is hidden, vacuum is sufficient for lifting.

- 4) Check the plunger frequently to make sure the cup remains securely attached. If the red line appears while lifting, set down the load immediately and pump the plunger until the red line is hidden again (see WARNINGS).

### To Release

- 1) Set the load on a secure support.
- 2) Press the release lever until the cup disengages completely.

**Caution:** Remove the cup when not in use.

## MAINTENANCE

### Service

If the hand cup does not function normally, first clean the rubber pad according to the directions to follow. If the condition persists, see TROUBLESHOOTING.

**Note:** Replace the pad at least once every 2 years or whenever damage is discovered (see Inspection).

### Cleaning

- 1) Remove the felt filter from from the rubber pad.
- 2) Use a clean sponge or lint-free cloth to apply soapy water or another mild cleanser to the pad face (see WARNINGS).  
**Caution:** To prevent liquid from contaminating the pump, hold the cup face-down or cover the suction hole in the filter recess.
- 3) Wipe all residue from the pad face.
- 4) Allow the pad to dry and reinstall the felt filter.



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### Inspection

Inspect the cup regularly for the following faults:

- cuts or damage to sealing edges of rubber pad
- cracks or dents in handle or pump
- reappearance of red line soon after attaching cup
- sluggishness or dramatic changes in pump action
- slick surface or stiffness of rubber pad.
- felt filter missing from pad face

Correct any faults before using the cup (see Service).

### Storage

Store the cup in clean, dry condition within its protective carrying case.

## SPECIFICATIONS

### Product Description

These tools use vacuum to support loads for manual handling, as follows:

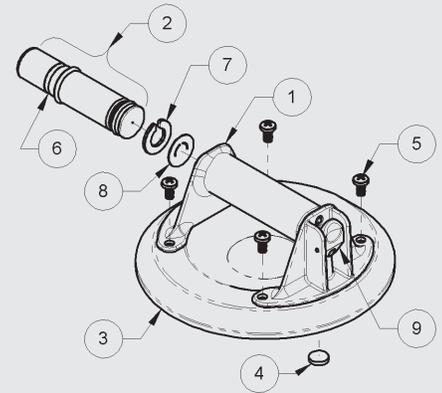
### Environmental Conditions

- Temperatures: 10° to 120° F (-12° to 49° C)
- Elevation: up to 12,000' (3,658 m).

**Note:** Maximum Load Capacity includes a 3:1 design factor and requires:

- Attachment on clean, dry, relatively smooth, flat, nonporous surfaces<sup>1</sup>
- Minimum vacuum level of 13½" Hg (-46 kPa)
- Friction coefficient of 1

1. [90151AM](#) Handle / Valve Assembly,
  2. [90158AM](#) Plunger Assembly, High Elevation
  3. [49480T](#) Rubber Pad, 8" (20 cm) Diameter, Flat, Lipped (VPFS8L)
  4. Felt Filter\*
  5. [10002](#) Handle Screw
  6. Red Line
  7. Check Valve Retainer\*
  8. Check Valve\*
  9. Release Lever
- Not Shown  
[29330](#) 8" (20 cm) Case, Yellow



\* Maintenance Kit [90160](#) for Industrial Plastic Cups (4, 7, 8 and Plunger Lube)

Model	Rubber Pad	Nominal Diameter	Max. Load Capacity <sup>2</sup>	Load Surface
N4100	VPFS8L	8" (20 cm)	100 lbs (45 kg)	flat, smooth

<sup>1</sup> Moisture or contaminants can reduce the slip resistance of the rubber pad.

<sup>2</sup> The Maximum Load Capacity is based on testing under controlled conditions with new hand cups. Many factors can reduce the capacity, such as loads with curved, irregular, or low-friction surfaces. Contact an authorized dealer or WPG for more information.

## WARNINGS

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

- Do not use the cup to lift loads that exceed the Maximum Load Capacity (see SPECIFICATIONS).
- 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 rubber pad against surfaces which could damage the sealing edges.
- 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 see Service.
- Do not allow anything to interfere with free movement of the plunger while the cup is attached.
- Do not touch the release lever while lifting.
- Do not use harsh chemicals (such as solvents or gasoline) or rubber cleaners and conditioners to clean the pad.

## LIMITED WARRANTY

Wood's Powr-Grip vacuum cups are guaranteed to be free of any defects in manufacturing or materials for **3 years from the date of purchase.**

Warranty does **NOT** cover:

- ✓ Cut or scratched rubber parts
- ✓ Parts damaged by customer
- ✓ Abnormal wear and tear
- ✓ Abuse, misuse or neglect
- ✓ Modified products



## TROUBLESHOOTING

Scan or click the following codes for:



Troubleshooting Video



Troubleshooting Guide



Ordering Replacement Parts

## KEEP FOR YOUR RECORDS

Record this information, in case you need to claim Warranty service.

Date of Purchase:

Purchased From:

Model Number:

Stock Number:

For additional warranty information, please scan or click this code or visit [wpg.com/service/warranty](http://wpg.com/service/warranty).

