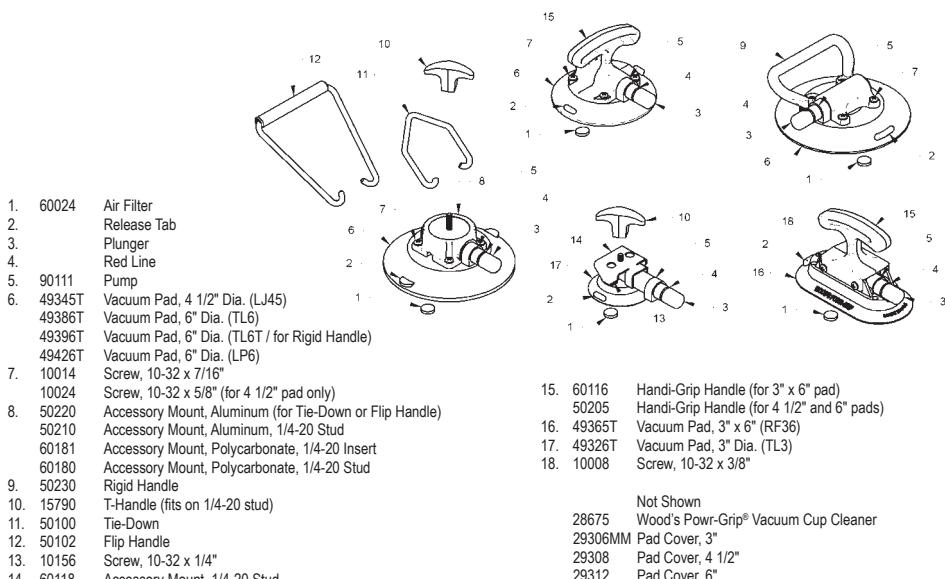


VACUUM CUP INSTRUCTIONS

- for all cup sizes listed hereafter -

Rev. 1.2 / 02-09 Instruction Sheet 32630 SC



SPECIFICATIONS

Product Description

Vacuum cups use vacuum to mount loads temporarily or to lift and carry loads, as follows: A manual pump removes air from between the rubber pad and the contact surface; a red line on the pump's plunger serves as a vacuum indicator; a check valve allows the user to repump the cup without removing it from the contact surface; and a release mechanism allows the cup to disengage completely.

Nominal Size

Maximum Load Capacity*	
3" [77 mm] diameter	15 lbs [7 kg]
3" x 6" [77 mm x 153 mm]	40 lbs [18 kg]
4 1/2" [115 mm] diameter	40 lbs [18 kg]
6" [153 mm] diameter	70 lbs [32 kg]

*Maximum Load Capacity includes a 3:1 safety factor and requires the following: attachment on clean, smooth, nonporous flat surfaces; a minimum vacuum level of 17½" Hg [-59 kPa]; and a friction coefficient of 1. This rating is based on tests of new vacuum cups attached to the upper, horizontal surface of static objects in ideal conditions. Many factors can reduce the capacity, including: attaching cups on vertical or inclined surfaces to lift a load or to mount a load; dynamic loading (eg, mounting loads on moving vehicles); or attaching loads that apply leverage to the cup. See www.powrgrip.com for more information.

Contact Surface and Environmental Conditions

Use the cup on clean, relatively smooth, nonporous surfaces, at temperatures from 0° to 120° Fahrenheit [-18° to 49° Celsius]. Moisture or contaminants can reduce the slip resistance of the cup. The red-line indicator may not perform reliably at elevations above 5000 feet [1524 meters]; see Service.

OPERATION

To Attach

- Clean the contact surface and, if needed, the face of the vacuum cup (see Cleaning). CAUTION: Test the cup for staining or deformation of surfaces with light colors or soft coatings.
- Position the cup so the red line will be visible if it should appear while the cup is attached.
- Pump the plunger until the cup attaches completely. When the red line is hidden, the cup is ready for use.
- Check the plunger frequently to make sure the cup remains securely attached. If the red line appears, pump the plunger until the red line is hidden again (see WARNINGS).

To Release

- Secure the load.
- Pull a release tab until the cup disengages completely. CAUTION: Remove the cup when not in use. If the cup remains attached to a hot surface (eg, in direct sunlight) for an extended time, the rubber pad could bond with the surface, resulting in damage to the surface or to the pad when it is removed.

MAINTENANCE

Service

Regularly make sure the vacuum cup's air filter is in place. If not, discontinue use until the filter is replaced.

Since aging and wear reduce the capacity of the rubber pad, it should be replaced at least once every 2 years or whenever damage is discovered.

If the cup does not function normally, the cup face may be dirty or damaged, or the pump may require service. First clean the cup face according to the directions to follow. If the problem persists, contact an authorized dealer or visit www.powrgrip.com for assistance.

Cleaning

- Remove the air filter from the cup face.
- Use a clean sponge or lint-free cloth to apply Wood's Powr-Grip® Vacuum Cup Cleaner to the cup face. Soapy water or other mild cleansers may also be used; see WARNINGS and www.powrgrip.com for more information. CAUTION: To prevent liquid from contaminating the pump, hold the cup face-down or cover the suction hole in the filter recess.
- Wipe all residue from the cup face.
- Allow the cup to dry and reinstall the air filter.

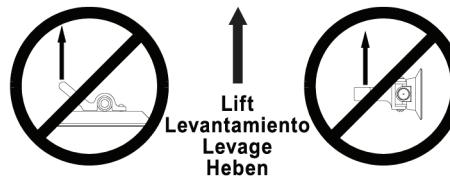
Storage

Store in a clean, dry location out of direct sunlight. Protect the cup face from damage using the pad cover (when supplied) or another appropriate means.

WARNINGS

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

- Do not use the cup to support loads that exceed the Maximum Load Capacity or the effective capacity (see SPECIFICATIONS).
- Do not use the cup to support a person.
- Do not use the cup to support loads which could injure people if the cup disengages unexpectedly.
- Do not place the cup face against surfaces which could damage the sealing edge of the rubber pad.
- Avoid conditions that could cause the cup to slip or to disengage prematurely, such as: contaminants, cuts or scratches in the cup face or contact surface; applying the cup to porous materials; or applying pressure against the cup edge.
- Do not use the cup 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 any release tab while using the cup.
- Do not leave the cup in use and unattended.
- Do not use harsh chemicals (such as solvents or gasoline) or unauthorized rubber cleaners and conditioners to clean the cup.



WARNINGS

Wood's Powr-Grip has taken great care to produce the most reliable vacuum-operated handling and mounting devices available. Nevertheless, mistreatment or misuse may damage a vacuum cup or otherwise create conditions which could cause the vacuum 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 with loads that exceed the load capacity.
- Do not use the cup to support a person.
- Do not use the cup to support loads which could injure people if the cup disengages unexpectedly.
- Do not place the pad face 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 mounting surface; applying the cup to porous materials; or applying pressure against the pad edge.
- Do not use the cup 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 using the cup.
- Do not leave the cup in use and unattended.
- Do not use harsh chemicals (such as solvents or gasoline) or unauthorized rubber cleaners and conditioners to clean the cup. See www.powrgrip.com for more information.