

# N-SERIES 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.

**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 valve release lever until the cup disengages completely.

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



SCAN OR CLICK TO WATCH  
INSTRUCTIONAL VIDEO

## 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 5,000' (1,524 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 17-1/2" Hg (-59 kPa)
- Friction coefficient of 1

Model	Rubber Pad	Nominal Diameter	Max. Load Capacity <sup>2</sup>	Load Surface
W4000(LM) H4300(LM) W4950(LM)	VPFS8L	8" (20 cm)	125 lbs (57 kg)	flat, smooth
TS8P TS8M	G0695TS	8" (20 cm)	75 lbs (34 kg)	flat, textured <sup>3</sup>
H5300 W5450	G0725	9" (23 cm)	150 lbs (68 kg)	flat, smooth
W5450CS	VPCS9	9" (23 cm)	150 lbs (68 kg)	curved or flat
H6300 W6450	G0750	10" (25 cm)	175 lbs (79 kg)	curved or irregular <sup>3,4</sup>

<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 attached to horizontal surfaces. Many factors can reduce the capacity, such as lifting a load when the cup is attached to a vertical or inclined surface, or lifting a load that applies leverage to the cup. Contact an authorized dealer or visit [crlaurence.com](http://crlaurence.com) for more information.

<sup>3</sup> Extreme surface variation may prevent these cups from attaching or remaining attached.

<sup>4</sup> **Caution:** Do not attach these cups to thin, fragile materials.

## 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 air filter 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).
- 3) Wipe all residue from the pad face.
- 4) Allow the pad to dry and reinstall the air filter.



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INSTRUCTIONAL VIDEO

### 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
- air 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.

## 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 valve 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 products are guaranteed to be free of any defects in manufacturing or materials for **1 year 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 Guide  
Metal Hand Cups



Troubleshooting Video  
Metal Hand Cups



Troubleshooting Guide  
Industrial Plastic Hand Cups

## KEEP FOR YOUR RECORDS

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

Date of Purchase:

Purchased From:

Model Number:

Stock Number:



**C.R. LAURENCE CO., INC.**  
PHONE TOLL FREE (800) 421-6144  
FAX TOLL FREE (800) 262-3299  
[crlaurence.com](http://crlaurence.com)



## VERTICAL HANDLE AND ANGLE-GRIP 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.  
**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) Pull a release tab until the cup disengages completely.  
**Caution:** Remove the cup when not in use.

### 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 a 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 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 lifting.
- Do not use harsh chemicals (such as solvents or gasoline) or rubber cleaners and conditioners to clean the pad.

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

#### Environmental Conditions

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- Elevation: up to 5,000' (1,524 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 17½" Hg (-59 kPa)
- Friction coefficient of 1



Model	Rubber Pad	Nominal Diameter	Max. Load Capacity <sup>2</sup>	Load Surface
W6100 W6100WBP <sup>3</sup>	LJ6	6" (15 cm)	70 lbs (32 kg)	flat or curved
TL6AG	TL6			

<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 lifting under controlled conditions with new hand cups attached to horizontal load surfaces. Many factors can reduce the capacity, such as lifting a load when the cup is attached to a vertical or inclined surface, or lifting a load that applies leverage to the cup. Contact an authorized dealer or visit [crlaurence.com](http://crlaurence.com) for more information.

<sup>3</sup> See separate instructions about the Low Vacuum Audio Alarm.

### 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 Inspection and TROUBLESHOOTING.

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

#### Cleaning

- 1) Remove the air filter 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 air filter.



SCAN OR CLICK TO WATCH  
INSTRUCTIONAL VIDEO

#### 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.
- air filter missing from pad face.

Correct any faults before using the cup.

#### Storage

Store the cup in a clean, dry location out of direct sunlight. Use the cover to protect the pad face from damage.

### LIMITED WARRANTY

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Warranty does **NOT** cover:

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- ✓ Parts damaged by customer.
- ✓ Abnormal wear and tear.
- ✓ Abuse, misuse or neglect.
- ✓ Modified products.

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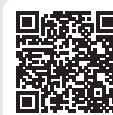
Purchased From:

Model Number:

Stock Number:

### TROUBLESHOOTING

Scan or click the following code for:



Troubleshooting Guide  
& Replacement Parts



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LOW VACUUM AUDIO  
ALARM INSTRUCTIONS



PLUNGER ASSEMBLY  
WITH AUDIO ALARM  
PLUNGER CAP WITH  
SOUND EMISSION HOLES  
RED LINE

**Note:** If you are retrofitting a hand cup with an audio alarm, follow the relevant Troubleshooting Guide (see TROUBLESHOOTING) to remove the old plunger assembly, install the new one, and leak-test the cup.

SPECIFICATIONS

**Hand Cup Models**  
W6100WBP, W4950WBP, W5450WBP, W6450WBP  
**Note:** See hand cup instructions for all other pertinent information.

**Volume**  
70 dBA at 36" (91 cm)



**Power Source**  
one AAA size, 1.2-1.5-volt alkaline battery; automatic on/off function

OPERATION

**Warning:** Do not expose a battery to excessive heat, because the battery could explode (see SPECIFICATIONS: Environmental Conditions in hand cup instructions). Exposure to moisture can also damage the audio alarm or reduce its life.

TESTING

Before using the hand cup, make sure the audio alarm is functioning correctly and can be heard clearly over ambient sound in the work environment:

While leaving the sound emission holes uncovered, depress the plunger slightly. The audio alarm should sound; if not, see MAINTENANCE.

USE

Use the hand cup as directed in its instructions. Pump the plunger until the audio alarm stops sounding. If the audio alarm sounds while lifting, set down the load immediately and pump the plunger until the audio alarm is silent again.

**Note:** If the audio alarm sounds frequently, discontinue use and see MAINTENANCE: Service in the hand cup instructions.

STORAGE

If the audio alarm is used once a month or less often, remove the battery and store it separately, to prevent corrosion (see MAINTENANCE: BATTERY REPLACEMENT).

MAINTENANCE

INSPECTION

Inspect the audio alarm regularly for:

- failure to function correctly (see OPERATION).
- corrosion or other indications of battery leakage.

**Warning:** Avoid contact with battery leaks because they could damage eyes, skin, clothing or the plunger assembly.

Correct any faults before using the audio alarm (see BATTERY REPLACEMENT).

BATTERY REPLACEMENT

**Caution:** Follow the manufacturer's instructions for correct handling, storage and disposal of batteries.

- 1) Turn the plunger cap counter-clockwise to loosen it.
- 2) Remove the plunger cap and the old battery.
- 3) Install a new battery, making sure to orient the positive end (+) toward the red line and the negative end (-) toward the plunger cap.

**Caution:** Do not reverse battery polarity, because the audio alarm will not function.

- 4) Reinstall the plunger cap, turning clockwise to tighten it securely.

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TROUBLESHOOTING

Scan or click the following codes for:



Troubleshooting Guide &  
Replacement Parts: Metal Hand Cups



Troubleshooting Video: Metal Hand Cups



Troubleshooting Guide &  
Replacement Parts: Vertical Handle  
and Angle-Grip Hand Cups

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