



## Instruction Manual

MNL-VAC-U-PULL-C Ver. 1.1



## About Pro Spot

Pro Spot International specializes in quality welding and repair products for the collision repair industry. Pro Spot owns numerous patents for special welding equipment and applications, and works with the largest auto manufacturers in the world. Pro Spot is a proud 'MADE IN THE USA' manufacturer in Carlsbad, CA. The turnkey facility includes Design, Engineering, Machine and Sheet Metal Shops, Powder Coating, Assembly, Training and Customer Support. The Pro Spot equipment line includes resistance spot welders, aluminum & steel dent repair systems, pulse MIG welders, rivet guns and tools, dust-free sanding systems, fume extraction and more.

## Pro Spot Training and Services

Pro Spot provides on-going training to all of our distributors and their technicians, therefore, all owners of Pro Spot products receive complete training first hand. Pro Spot has two ASE certified training programs that are I-CAR Alliance approved. Pro Spot has a fully equipped training facility at their Headquarters in Carlsbad, CA, as well as in Nashville, TN, and Denver, CO, for groups to come in and train on all products. To stay up-to-date, Pro Spot offers their unique [my.prospot.com](http://my.prospot.com) which includes interactive training courses for shops and technicians to access online.

Pro Spot is constantly striving to improve. Whether that means designing innovative equipment, implementing cutting edge technical support or further improving their already extensive training programs, Pro Spot is always looking for ways to better our customer's experiences.



# PRO SPOT

QUALITY WELDING SYSTEMS

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## 1.1 ABOUT VAC-U-PULL

Thank you for choosing Pro Spot's VAC-U-PULL. The VAC-U-PULL provides an excellent solution for dent repair on vehicles consisting of a portable pulling system that is fixed to the ground by means of a vacuum system. The 500 lbs pulling force, controlled by a winch system, provides the necessary force for each repair.

The correct operation of this equipment is subject to the correct connection of the different parts that make it up.

These operations must be carried out by trained and experienced personnel.

The manufacturer is not responsible for the safety of the equipment if the instructions for use, maintenance and repair in this manual are not followed, or if the equipment is used for other purposes.

The VAC-U-PULL system is simple to learn, easy to use, safe and very efficient.



**WARNING!** For your safety, read this manual carefully.

Be very careful, as incorrect handling can cause serious damage to materials and people. The necessary precautions for use and safety are listed below:

- Standing behind or in front of the equipment when it is under tension can cause serious injury. Always stand off to the side.
- Ensure the floor area is clean (dust, liquids or other elements) and without cracks to guarantee the correct sealing of the foam.
- When moving the VAC-U-PULL, tilt it back onto the rear wheels until the foam is off the ground to prevent damaging the foam seal.
- The equipment requires compressed air supply for its operation (recommended operating pressure 60 psi). Check that the base is fixed.



**WARNING!** Always use it with connected compressed air.

Always check the air connection before unscrewing the sheet metal, otherwise, the floor fastening will not be secured.

If the equipment will operate without compressed air, Pro Spot is not responsible for any damage to persons, materials or other items in the vicinity.

## 2.1 OPERATING VAC-U-PULL

All the following operations must only be carried out by trained and qualified personnel.

Failure to comply with the instructions below or tampering with the pneumatic connections, exempts the manufacturer from any liability for non-compliance or damage caused by malfunctioning of the equipment.

The following are the steps for the proper use of the VAC-U-PULL equipment:

1. Clean the area you intend to place the VAC-U-PULL.
2. Tilt back the unit onto its rear wheels until the foam base is off the ground then roll it to your intended work area and position it so it is pointing at the area of repair, as straight as possible.
3. Connect compressed air and press down on the base with your foot and the base should stick to the ground.
4. Adjust the height so that it is level with what the VAC-U-PULL will be pulling.
5. Attach the VAC-U-PULL hook or multi-hook attachment to the pulling point.
6. The pull force required will depend on the repair to be carried out with the limitation of 500 lbs. A higher pulling force could damage the mechanism or cause the base to lose its vacuum, resulting in the possible overturning of the base.



**WARNING!** Always use this system for pulling forces of less than 500 lbs.

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## 2.2 PRECAUTIONS

All the following operations must be carried out only by trained and qualified personnel. Failure to comply with the provisions below or tampering with the pneumatic connections, exempts the manufacturer from any liability for non-compliance or damage caused by malfunctioning of the equipment.

The following instructions must be observed by the operator.

The base does not empty sufficiently due to poor sealing of the base or rubber, excessive force, or failure of the compressed air supply or ejector. In such a situation, the VAC-U-PULL will lose its hold and may fall in the direction of the force being exerted.

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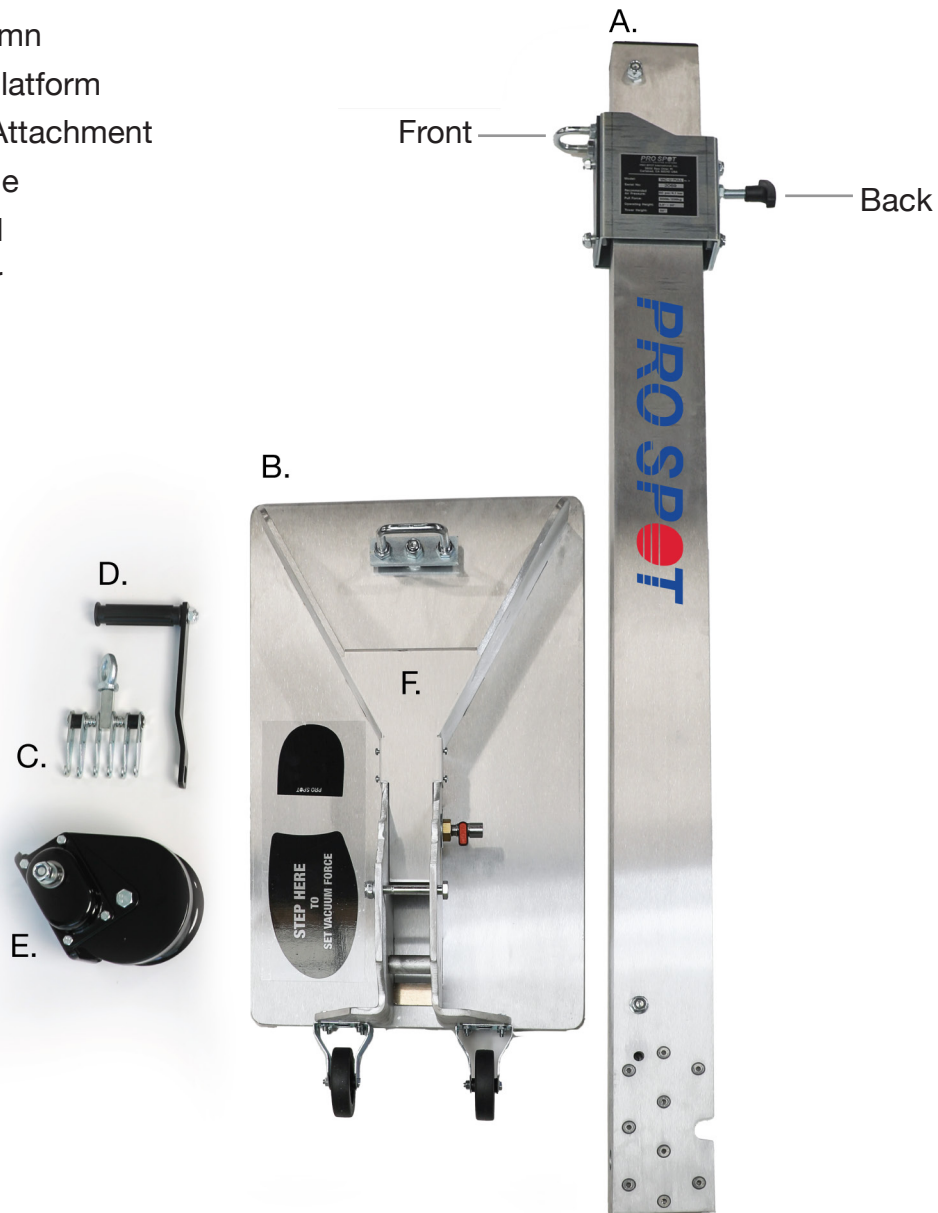


**WARNING!** When pulling the strap, no persons or materials should be placed around the equipment.

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### 3.1 VAC-U-PULL COMPONENTS

- A. Vertical Column
- B. Vac-U-Pull Platform
- C. Multi-Hook Attachment
- D. Winch Handle
- E. Winch Wheel
- F. Venturi Cover



### 3.2 TOOLS FOR ASSEMBLY (NOT INCLUDED)



1. 17mm socket
2. Ratchet for socket
3. 19mm open end wrench
4. 17mm open end wrench x 2
5. Phillips-head screwdriver

### 4.1 ASSEMBLY INSTRUCTIONS



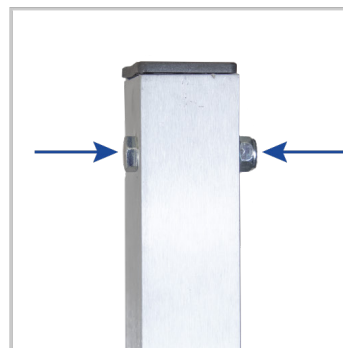
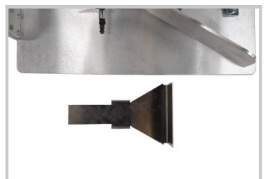
**1. BOLT REMOVAL**  
Remove the nut, bolt & washer from the vertical base walls.



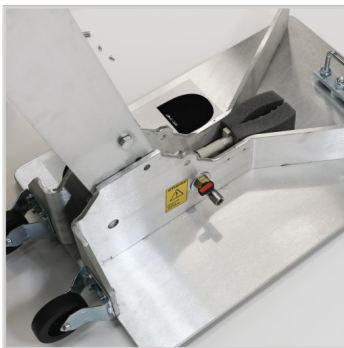
**5. REINSTALL THE VENTURI COVER**  
Reinstall the venturi cover using the same screws and the power drill to tighten the screws.



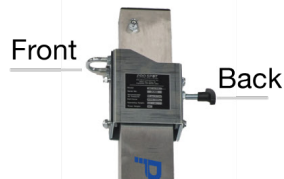
**2. COVER REMOVAL**  
Unscrew 4 screws to remove the venturi cover.



**6. WINCH INSTALLATION**  
6a. Remove the bolt from the top of the tower.



**3. VERTICAL COLUMN**  
Install vertical column: metal hook on top should be facing front.



6b. Use flat head screw driver to remove plastic cap on top of tower.



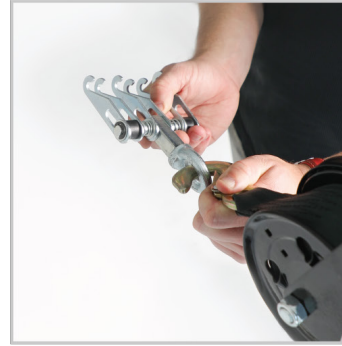
**4. SECURE COLUMN**  
Install the washer and nut onto bolt and tighten securely using a 17mm socket wrench and a 17mm open end wrench.



**NOTE:** When replacing the slider rails, place them so the edges will hold the tower edges. The sliders go between the bolts on the inside of the slider.



6c. Attach the winch to the slider using attachment bolts and 17mm open end wrenches.



**8. INSTALL HOOK**  
Place the multi hook attachment onto the winch hook.



6d. Position slider rails inside of the slider and replace the winch/slider assembly on the tower. Tighten lock down screw to secure the tower.



**NOTE:** The top hook above the winch can be used to hold and slide the winch on the vertical tower. The strap can be attached to this hook to secure it when VAC-U-PULL is moved. It can also be utilized to attach an additional pulling strap.



**7. INSTALL HANDLE**  
Remove the nut and washer from the winch crank bolt. With the handle pointing outward, align the slot in the handle crank with the crank bolt and push on. Install the washer and thread on the nut. Using a 19mm wrench, tighten while holding the crank handle.



**NOTE:** For downward pull, remove claw and place strap under holder on the base of the tower. Install the claw.



**7. RE-INSTALL COVER**  
Re-install top cover on the tower.



All maintenance and repair work must be carried out by trained personnel who have read this manual and the operating instructions.

The following are recommendations for possible repairs to the machine.

The machine should be located in a place that is preferably flat, free of scratches, cracks, and as clean and dust-free as possible.

The foam acts as a sealant and should be checked to ensure that it is watertight when the vacuum is applied.

If it is in poor condition, always use original consumables to ensure correct operation of the equipment.

If the problem persists, call the Pro Spot technical assistance service.

Inspect the condition of the foam gasket periodically to make sure the sufficient vacuum seal is achieved.

Check the condition of the strap and its fasteners before exerting traction forces on them. In case of damage or wear, always use original consumables to ensure correct operation of the equipment.



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