CHAMP®

Frame Straightening Equipment, Inc

1540 - Knock Out Dent Removal System

Made In USA

"The Champ"

Auto Body Toolmart
Champ Frame Straightening Equipment, Inc.
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www.autobodytoolmart.com

Instructions for Connection, Safe Use & Maintenance

Operating Specifications

Primary Input: 110 Volt

Primary Amps: 20

Duty Cycle: 2.0%

Output: 2.2kva

Manufactured in the United States of America Specifically for Auto Body Tool Mart

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Safety Instructions

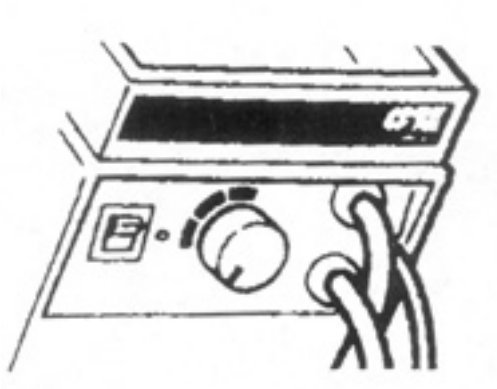
1. READ ALL INSTRUCTIONS CAREFULLY. Before connecting or operating the tool.
2. ALWAYS WEAR SAFETY GLASSES. Use a dust mask if the operation creates dust. Caution is the key to safety.
3. PROTECT YOURSELF FROM NOISE. Noise levels vary with work. If noise level is high, wear ear protection.
4. WEAR GLOVES AND PROTECTIVE CLOTHING. To avoid injuries form hot metal chips.
5. ONLY USE ACCESSORIES THAT ARE DESIGNED SPECIFICALLY FOR THIS TOOL. Modifications to this tool may cause injury and may cause the tool to malfunction, voiding any warranties.
6. HANDLE THE TOOL SAFELY. Do not operate the tool if it is damaged or in a wet condition.
7. WHEN NOT IN USE-DISCONNECT THE TOOL FROM THE POWER SUPPLY.
8. DO NOT ALTER ANY PART OR COMPONENT OF THIS TOOL IN ANY WAY, SHAPE OR FORM.

******DISCLAIMER******

Auto Body Tool Mart is not responsible for accidents and/or damage due to the misuse of this product.

Operation

1. READ ALL SAFETY INSTRUCTIIONS
2. Grind paint or rust from area to be worked on. It is important that the panel be clean to bare shiny metal for good weld contact. Attach the ground cable to a bare metal surface on the same panel that is to be repaired. Never allow the welding electrode to make contact with the grounding clamp. A magnetic grounding clamp has been provided, please make sure that the ground is kept clean and free of metal debris that will be attracted. Ground must be kept quality will be lessened.
3. Plug the power cord into appropriate 110-volt outlet and flip switch to on position.
4. Select appropriate pull electrode: Short rod in conjunction with lever puller or by itself for straight pulls by hand. Long electrode in conjunction with slide weight may be purchased separately for heavier damage. The copper electrode is used for shrinking and applying wiggle wire. Wiggle wire is used for pulling creases evenly. This item may be purchased separately. Please contact customer service for further details.



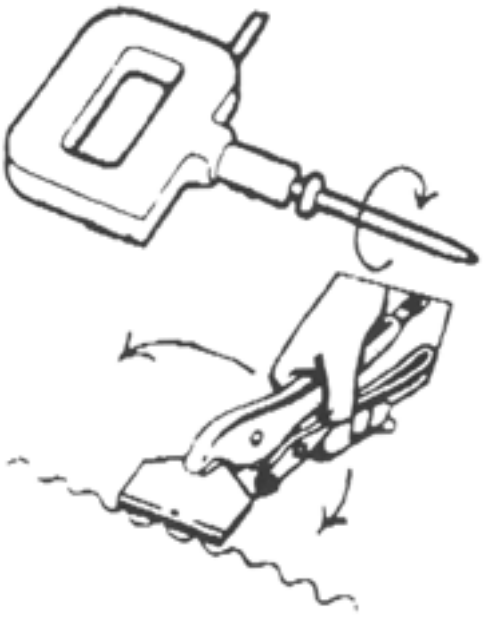
5. Always start welding with minimum welding time. Increase weld time only when necessary. Long electrode may need a slight increase in weld time over the short rod. Wiggle wire of 1/16 (.60). Thickness should be welded with a shorter time than 3/16 (.90) wire. When proper weld time is used it will be very easy to remove the wire by simply wiggling it up and down.

Shrinking can be done with the attached wiggle wire electrode on top of the pull handle. Use the wiggle tip when only a few high spots need shrinking. Wetting the panel with a spray bottle first can enhance the shrinking effect. As with anything, practice and experience will lead to greater control.

Longer weld times do not increase adhesion of the pull rods and wiggle wire.

Note: Extensive shrinking may cause the unit to overheat. The transformer has a temperature fuse and will switch off temporarily.

After welding, the best way to break off the pulling rod is by twisting. Wiggling from side to side may cause a hole in the panel. Wiggle wire is removed by rocking up and down.



Dent Pulling

1. Turn the machine on.
2. Touch the narrowed end of the electrode against the exposed and clean metal at the precise point where you want to begin pulling and then press the button located on the handle. The electrode will then be welded onto the metal ready to be pulled.

DO NOT ROCK OR TILT THE ELECTRODE ONCE IT IS ATTACHED TO THE METAL AS THIS WILL WEAKEN THE WELD AND IMPAIR THE PERFORMANCE OF THE UNIT

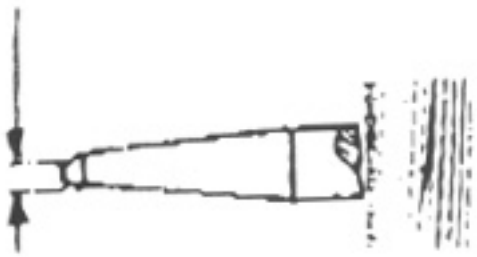
3. Small dents such as hail can be pulled "free-hand" without the use of the leverage bar. Once the electrode is attached to the bottom of the dent, firmly pull the handle directly away from the panel while simultaneously taking a bodyman's hammer in the other hand and tapping on the high spots on the perimeter of the dent. Continue this tapping process until the dent is pulled to the desired position.
4. To remove the electrode, a simple twist left or right while holding the handle will break the contact to the panel.
5. Repeat the process until the panel is pulled to your satisfaction.

USING THE LEVERAGE BAR

The leverage bar is generally, the easiest way to pull most dents. The leverage bar, when used correctly, allows you to finesse a damaged panel back to an original state.

6. With the leverage bar in one hand, place the padded foot on the sturdiest section of metal closest to the desired pull point as is possible.
7. Using the other hand, hold the handle and place the electrode through the two rails of the leverage bar, ideally 3" to 6" away from the foot.
8. Gently pull up on the handle of the leverage bar until the spot is pulled out as desired. When using the leverage bar, make sure the electrode is pulled straight back from the metal and not at an angle.
9. The same hammer-tapping technique on high spots can be used with the leverage bar.

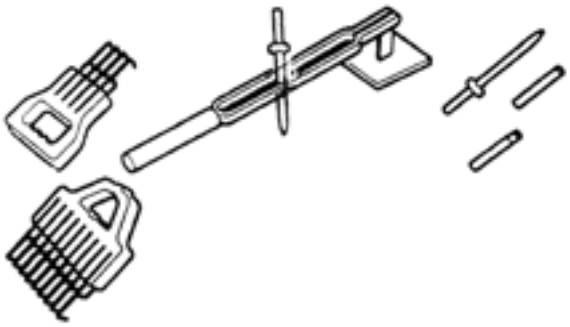
While using the tool it is periodically necessary to clean and regrind the tips of the pull rods. The tips are not being worn down, but actually are adding material that needs to be removed. The rods work better with a sharpened point of 3/32 to 1/8 of an inch across the top.



General Maintenance

"The Champ" contains no customer serviceable parts. Only a qualified electrician should open the unit. Electrode tips will need to be cleaned and occasionally replaced.

Bear Claws are purchased separately.



Thank you for choosing the Knock Out Dent Removal System.

Look for other items manufactured by Auto Body Tool Mart.