



WORKHORSE PRODUCTS

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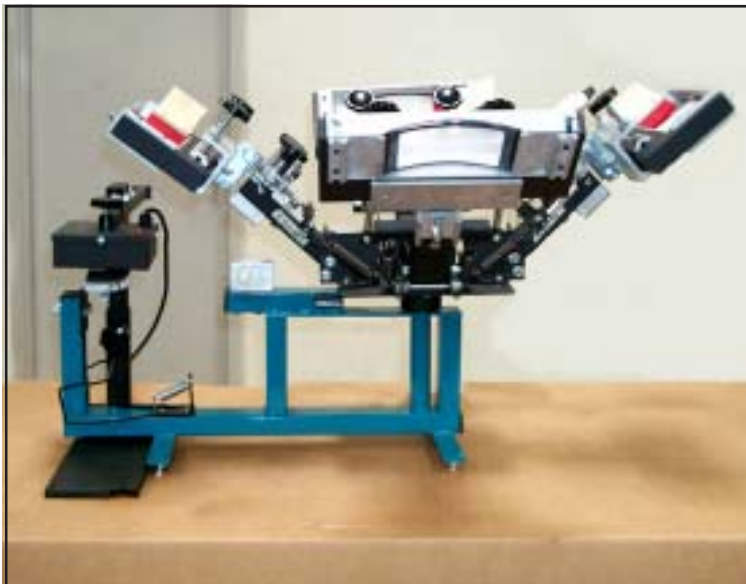
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CAPMAX Series Convex Cap Printing Systems



The CAPMAX Bench Model Cap Printer with optional Bench Top Cap Dryer.



The CAPMAX Attachment Model Cap Printer with optional Floor Stand Cap Dryer.

CAPMAX 4/1 Model #10201

CAPMAX 4/4 Model #10202

CAPMAX 2/1 Model #10203

CAPMAX 1/1 Model #10204

CAPMAX cap printing Att.
Model #12610

CAPMAX Bench Top Cap Dryer
Model # 11007 115vac.

CAPMAX Bench Top Cap Dryer
Model # 11008 230vac.

CAPMAX Floor Spot Dryer Cap Dryer
Model # 11005 115vac

CAPMAX Floor Spot Dryer Cap Dryer
Model # 11006 230vac

Introduction

Congratulations on your purchase of the CAPMAX Printing Equipment from WORKHORSE PRODUCTS.

Check the boxes for damage, DO NOT accept the crate if damaged during shipment. Report any damage to the carrier at once as well as WORKHORSE at 800-778-8779

Inspect the box contents IMMEDIATELY while the carrier is still there. Our packaging has been carefully designed to handle normal shipping conditions. However, we cannot assume responsibility for damage during shipment. Upon discovery of freight damage notify driver, note damage on paperwork and file claim with the carrier, then notify WORKHORSE at 800-778-8779

Read Instructions first

First read the instructions completely before you attempt to assemble the Press, this will familiarize you with the parts and the sequence of assembly. This will make assembly go even faster!

Features

- Printer is equipped with an OFF CONTACT adjustment. This feature allows the screen frame and back clamp to be raised and lowered while staying level with the shirt board.
- The Micro - Adjust screen angle feature allows you to raise or lower the FRONT end of the Screen also allows for quick and easy "X" and "Y" axis adjustments for precise registration. Each print head Micro's are centered at the factory for you.
- The CAPMAX Attachment fits most Manual Printers and allows for easy interchangeability between caps and T-Shirts.
- CAPMAX Cap Dryers have special curved heating elements to give even heat across the printed surface of the cap.

Contents

| | |
|------------|---|
| Page 2 | CapMax packaging and parts |
| Page 3-4 | Attaching print heads to the CAPMAX Bench Printer |
| Page 5-6 | Installing screen in Sub Frame |
| Page 6-8 | Setting up to print caps |
| Page 9 | Using the Bench Cap Dryer |
| Page 10-11 | Set up of Cap Attachment for manual printers |
| Page 12-14 | Set up of CAPMAX Floor Cap Dryer |
| Page 15-16 | Using and Maintaining the Micro's |
| Page 17-21 | Art work and layout, screen coating and screen exposure |
| Page 21 | Printing Caps |
| Page 22 | CAPMAX Accessories and parts list |
| Page 23 | Maintenance and trouble shooting |
| Page 25 | Limited Warranty and Warranty Registration |



The CAPMAX Printing Press (CapMax 4/1 or Capmax 2/1) Capmax 4/1 consists of 3 boxes, 1 large 2 small Photo1. CapMax 2/1 consists of 2 small boxes, Photo 2

The large box contains the CAPMAX printing base and carousel plus either 2 or 4 sub frames (holds the Screens), 2 or 4 cap screens and 2 or 4 cap squeegees. (See parts on Pg 2 for other screen and cap platens available)

Also see photo below for the bolts, washers and nuts included in the taller box.

The carousel contains brackets for four CAPMAX print heads whether you purchase the two head or the four head model.



Parts that are in the bag in the large box:

4 or 8 print head springs

4 or 8 hog rings for attaching springs

8 or 16 washers

Set of 4 or 8 print head pivot and up stop bolts

4 Leg leveling bolts



Step 1 Attach Heads

To attach the print heads line up the TOP HOLE on the carousel bracket with the hole on the print head. (Photo 1).

Then put one of the bolts with a washer through the bracket and print head.

Put a washer and nut on the other end and tighten the nut by hand for now. (photo 2)



Step 2 Attach Heads

Using two 1/2" wrenches tighten the TOP bolt.

DO NOT OVER TIGHTEN

Tighten just enough so you can pivot the head easily but with a little resistance.



Step 3 Attach Springs

To attach the print head springs insert a hog ring with the open end facing the print head into the holes on the spring bracket on either side of the print head (photo 1)

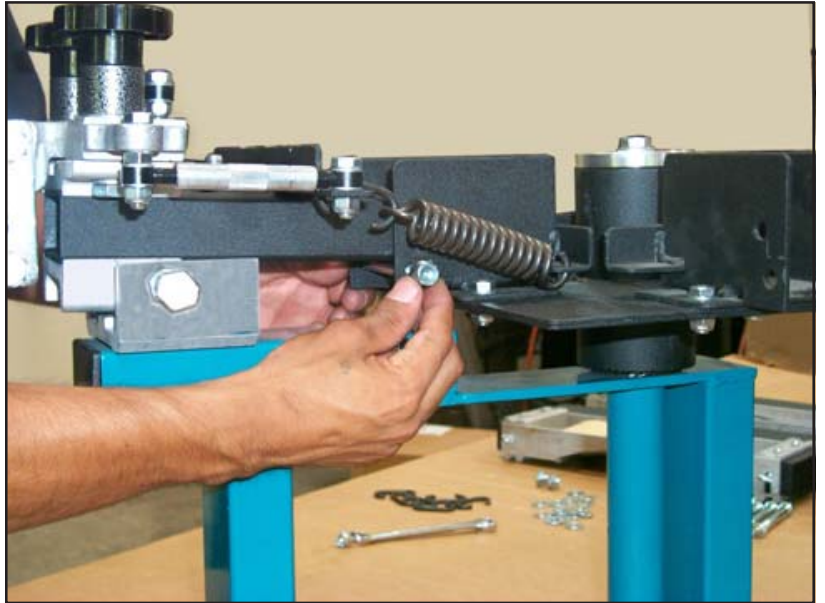
Insert the springs in the hole on the carousel bracket. (inserting from the side works best) Then attach to the hog ring (photo 2 and 3)



Step 4 Install Up Bolts

After installing the print head and springs pull the print head down into the register gate then put the up stop bolt through the BOTTOM hole in the carousel print head bracket.

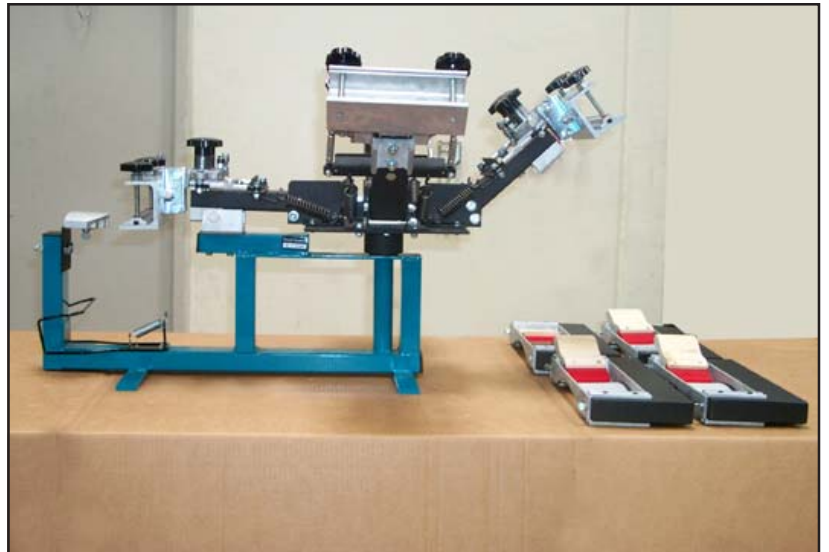
Tighten BY HAND ONLY! Do not use wrench!



The CAPMAX with four heads attached.

CAPMAX comes in the following configurations

- A. CapMax 1/1 - 1 Print Head 1 Station
- B. CapMax 2/1 - 2 Print Heads 1 Station
- C. CapMax 3/1 - 3 Print Heads 1 Station
- D. CapMax 4/1 - 4 Print Heads 1 Station



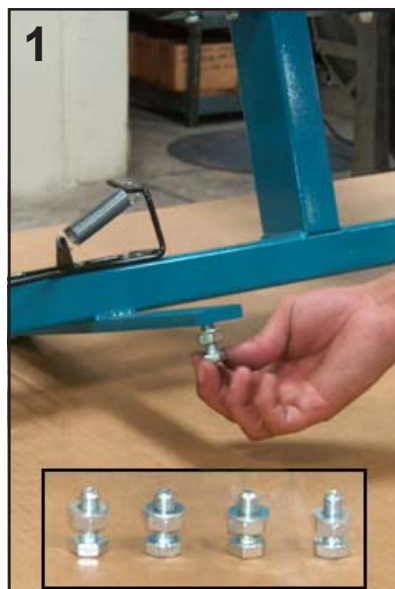
Step 5 Attach leveling Bolts

Put a washer on top of the jam nuts and line up the four leg leveling bolts (insert photo 1).

Adjust the jam nut so all the washers are the same height on each leg leveling bolt (insert photo 1).

Then screw a bolt into the threaded hole on the leg bracket. (photo 1).

Then using a wrench tighten the bolt up against the washer and Leg bracket. (photo 2)



Step 6a Screen Set Up

Place the screen in the sub-frame which attaches to the print head in much the same way a screen does.

Screens come in mesh counts from 80 to 300 see Page 22 for screens and other accessories.

To place a screen in the sub-frame, loosen both thumb screws on the front of the sub-frame.



Step 6b Screen Set Up Cont'd

Lift the gate from the side that has the Slot. Open up and turn on it's side with the opened end up.



Step 6c Screen Set Up Cont'd

Take the screen and bend it slightly so it fits into the two slots on either side of the ink trough. (insert photo)

Make sure the glue side of the screen is facing the bottom of the sub-frame.

Press the screen down all the way till it goes into the curved etched slot at the base of the Ink trough. (main Photo)

Once screen is in the sub-frame tighten both thumb screws.



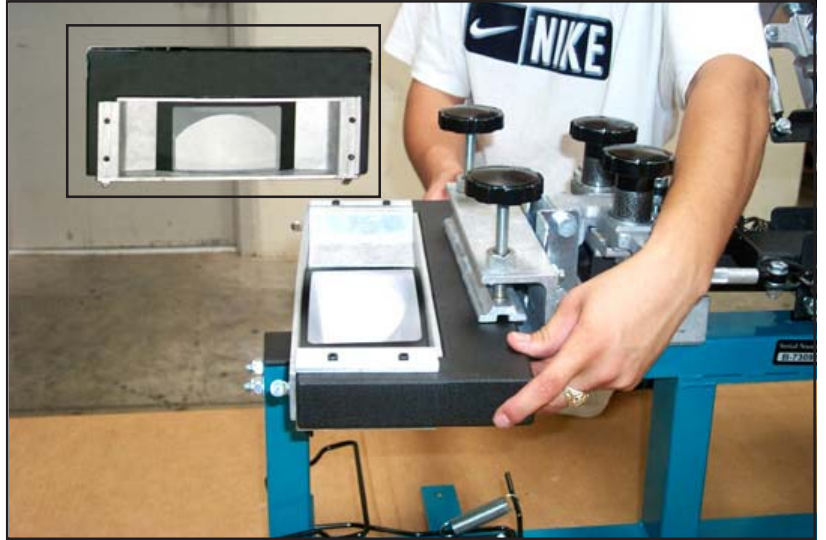
Step 6d Screen Set Up Cont'd

To install the sub- frame loosen up the screen hold-down knobs and lift the screen clamp so you can fit the sub-frame into the print head.

Make sure the Micro's are centered then you can tape the Art Work on the Cap Platen at this point or later on the Cap itself.

Register the Sub Frame with Art Work or the Cap Platen. (see insert photo) and clamp down on the Sub Frame.

DON'T OVER TIGHTEN



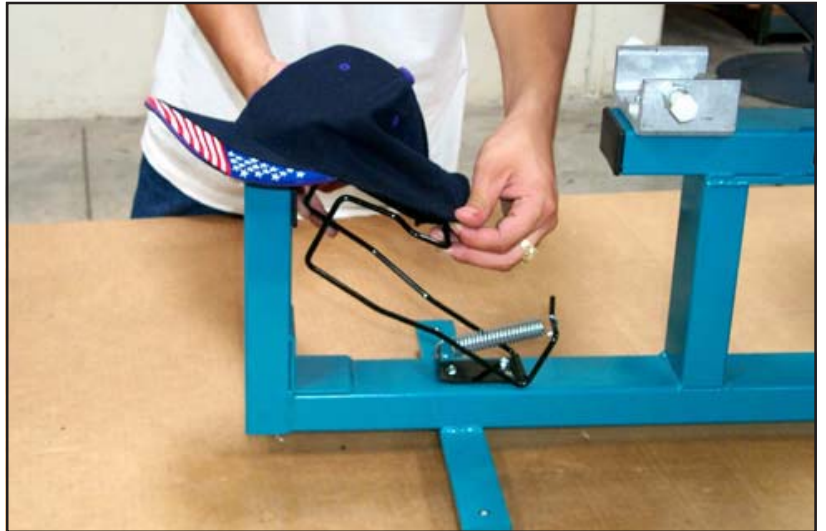
See Page 10 for additional sizes of Cap Platens and screen Meshes.

Step 7a Printing Cap

Use spray adhesive on the cap platen to help hold down the cap if necessary.

Place the cap over the cap platen and lift the spring loaded cap hold down.

Place cap hold down inside of back of cap



Step 7b Printing Cap cont'd

Make sure to pull out the sweat band on the cap so it does not create an uneven surface on the cap platen.

Then adjust the cap so it is square and centered on the cap platen and the surface to be printed is smooth with no uneven surfaces.



Step 7c Printing Cap Cont'd

After you have adjusted the cap, push down on the spring loaded cap hold down to make the cap taught on the cap platen.

Adjust the cap and check for smoothness if necessary.

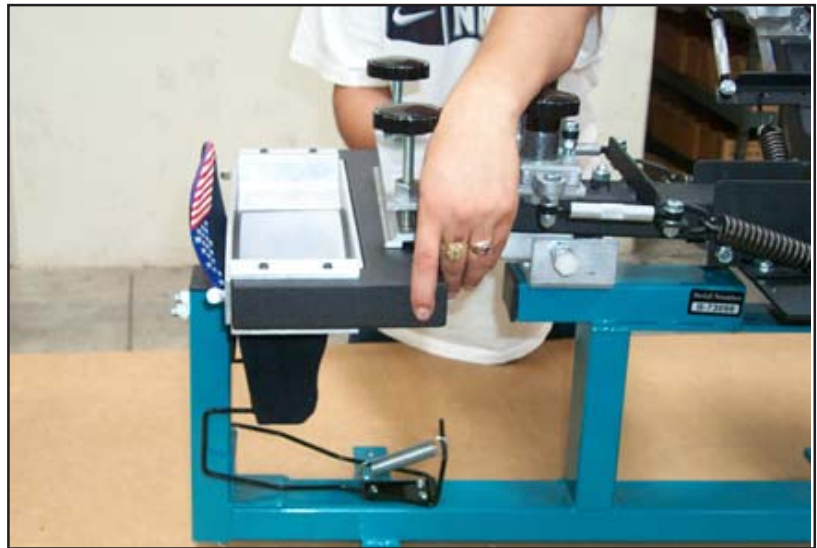


Step 7d Printing Cap Cont'd

Once you have the cap in place, make sure the Micro's have been centered and if you have not put on the key line artwork already and registered the artwork, line up the sub-frame, making sure you have it squared and centered it.

Then loosen the screen clamp knobs and adjust the sub frame and get as close to register as you can.

Tighten the screen clamp on the sub frame.



Step 7e Printing Cap Cont'd

To use the Micro's loosen the Micro knobs and make sure you have centered the Micro's.



Step 7f Printing Cap Cont'd

Once you have loosened the Micro Knobs, use the X and Y Micro Adjusters to put the screen in register with the artwork

See page 15-16 for details on using the Micro's.

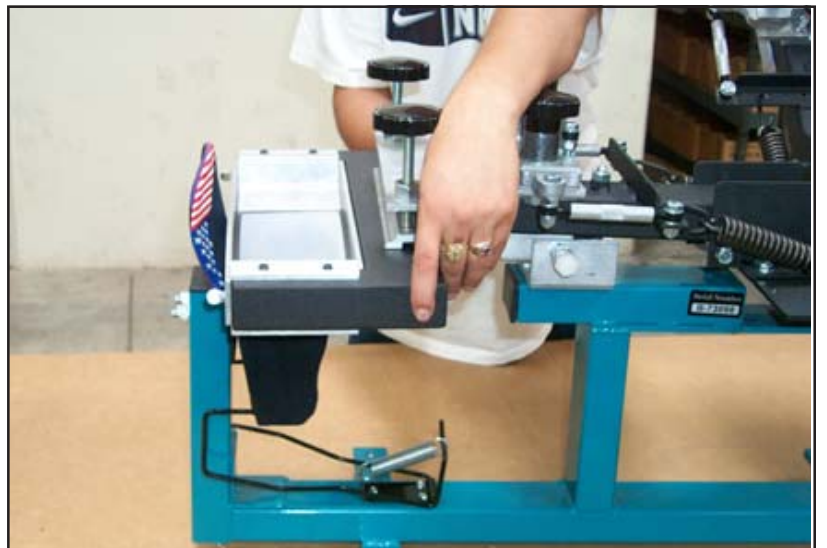


Step 7g Printing Cap Cont'd

Once you have the cap in place, make sure the Micro's have been centered and if you have not put on the key line artwork already and registered the artwork, line up the Sub Frame, making sure you have it squared and centered it.

Then loosen the Screen Clamp Knobs and adjust the Sub Frame and put as close to register as you can.

Tighten the Screen Clamp on the Sub Frame.



Step 7h Printing Cap Cont'd

After the screen has been micro adjusted, relock knobs before printing

See page 14 - 20 for details on Art Design and Layout, Screen Coating, Screen Exposure and PRINTING OF CAPS.

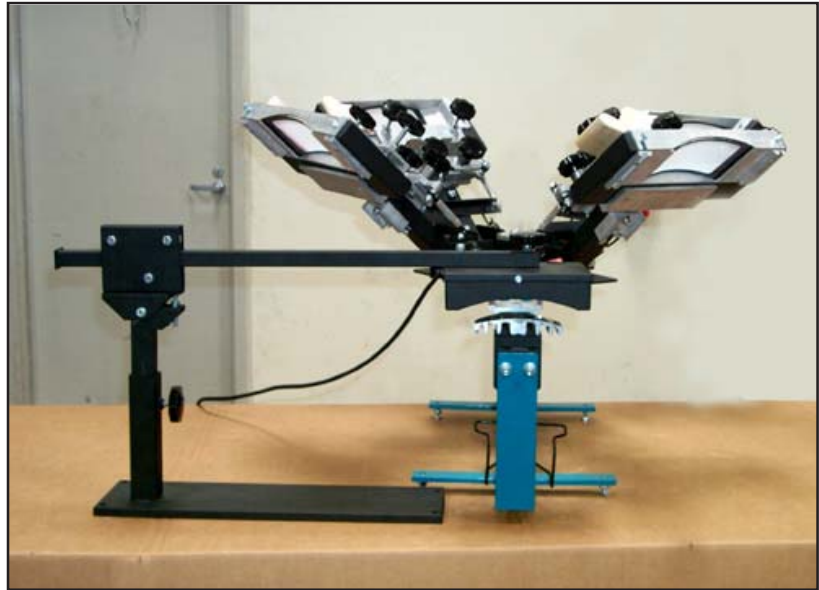


Step 8a Using the Cap Dryer

If you purchased the specialized Cap Dryer for the Table Top CAPMAX. The CAPMAX Table Top Dryer has a sliding arm that has a very smooth glide.

Extend the glide arm so it is nearly fully extended and set the head of the CAP MAX Heater so it is over the platen and printed area of the Cap.

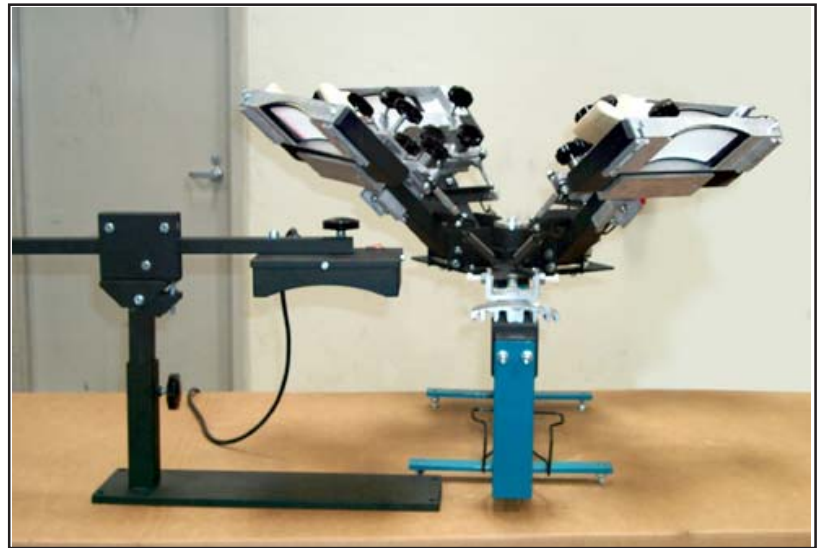
Set the height of the CAPMAX Dryer so it is about 1/2" over the cap platen. Adjust the dryer to the right height after you do some testing.



Step 8b Using the Cap Dryer

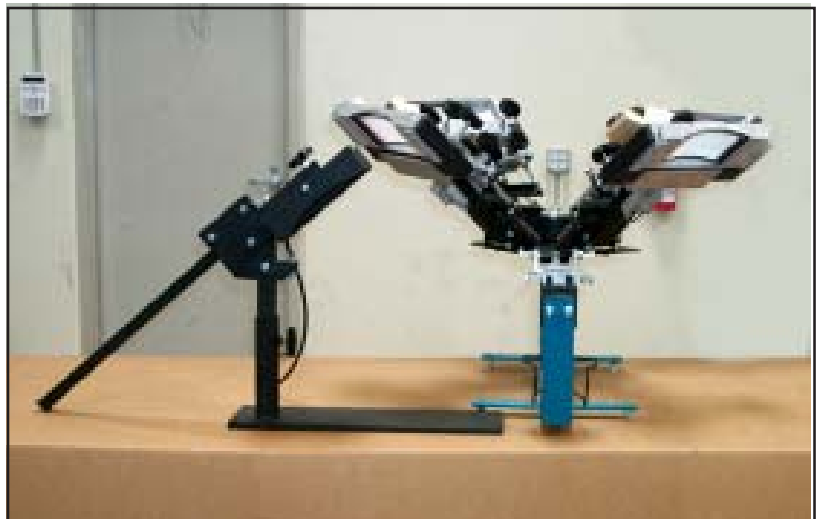
To put the heater into the print position just slide the glide arm back far enough so the head of the heater is out of the way of the Screen when in the print position.

Once a print is made slide the glide arm so the head of the heater is over the cap.



Step 8c Using the Cap Dryer

The glide arm also tilts. By tilting the arm it will glide back out of the way of the print head and screen.



CAPMAX Attachment Photo 1

The CAPMAX Attachment fits on most Manual Presses.

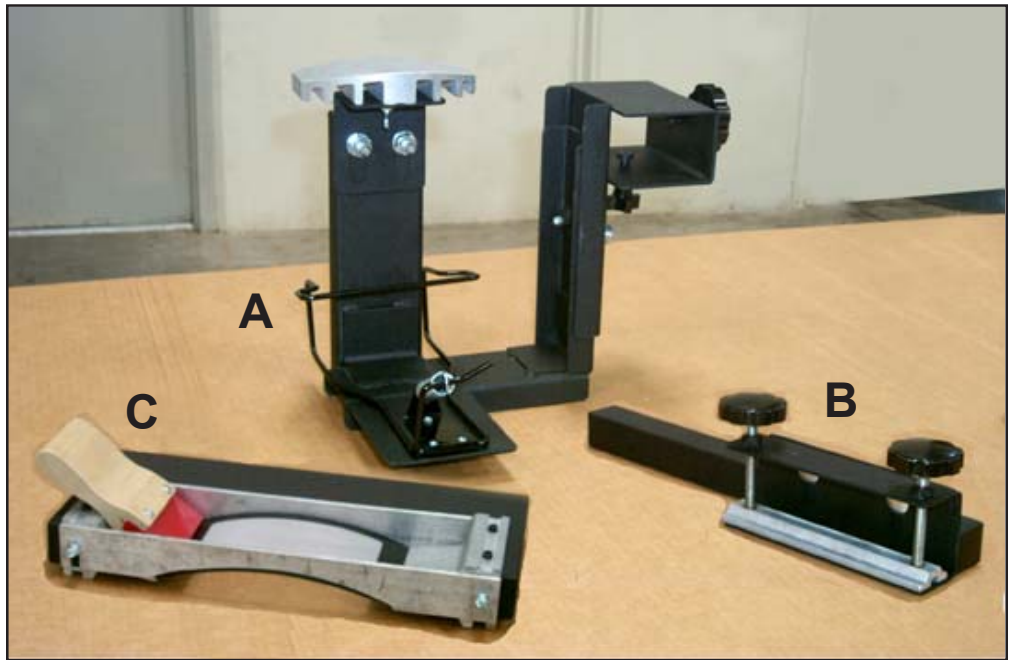
CAPMAX Attachment consists of three parts

A. CAPMAX platen and Cap Holder Attachment.

B. Back clamp attachment

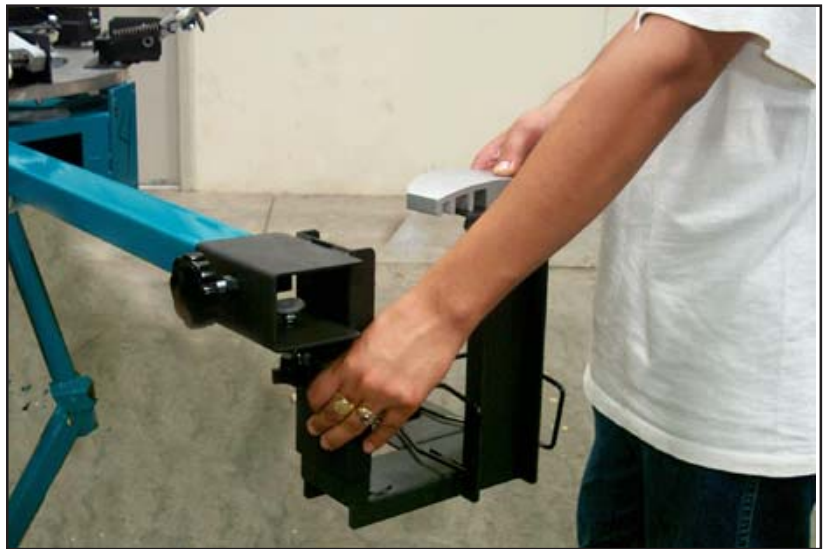
C. Sub-frame w/ 110 mesh screen and squeegee.

See Pg. 22 for other mesh count Screens



CAPMAX Attachment Photo 2

Place the CAPMAX platen and cap holder attachment on the print arm and slide it in about 10 inches.



CAPMAX Attachment Photo 3

Take the back clamp attachment and place it into the back clamp of the press.

Push the back clamp attachment extension all the way to the back of the clamp and line it up with the edge of the press back clamp so it is straight



CAPMAX Attachment Photo 4

Once you have the back clamp attachment secured in the press print head screen clamp, loosen the hold down knobs on the back clamp attachment and slide in the sub-frame so it rests against the back clamp attachment extension.

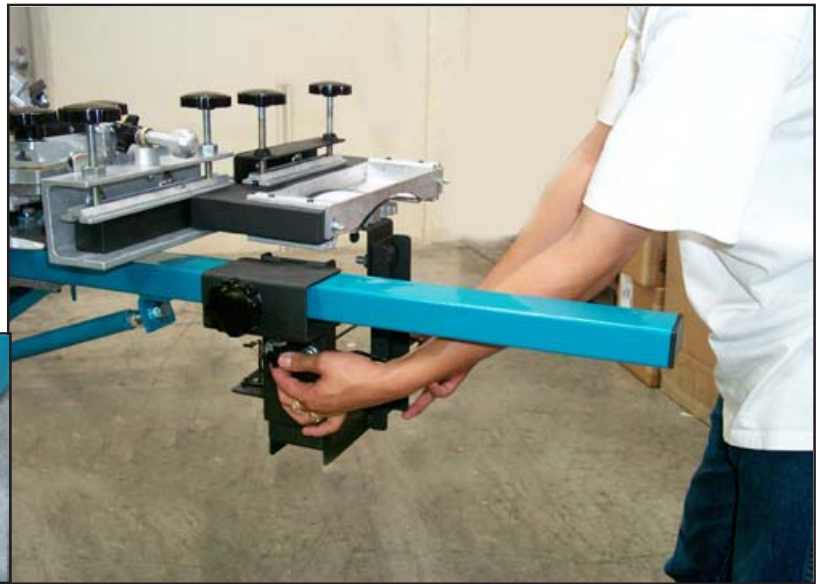
Center the Sub Frame and loosely tighten the hold down knobs.



CAPMAX Attachment Photo 5

Slide the CAPMAX platen and cap holder attachment until it is under the sub-frame and screen.

Push the CAPMAX platen and cap holder attachment to the right and then tighten the thumb screw on the side of the print arm, then tighten the one on the bottom of the print arm. (see insert)



CAPMAX Attachment Photo 6

If the Screen needs adjustment, loosen the hold down knobs, move the sub-frame so that the screen is centered and square over the cap platen, with about 3/16" over the edge of the cap platen. (see insert).



CAPMAX Floor Heater Photo 1

The CAPMAX Cap Floor Heater comes in two models:

115vac
230vac.

The single box contains:

4- Legs with Casters
1 Outside extension
1 L Shape extension
1 Heater element with extension arm
1 Bag of bolt sets and two knobs



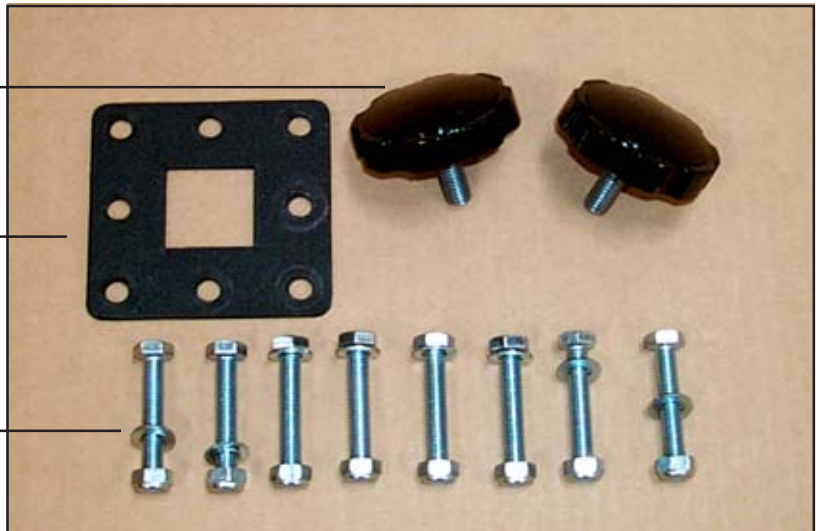
CAPMAX Floor Heater Photo 2

Bag contains:

2 - Extension Securing Knobs

1 - Leg Attachment Plate

8 - Leg attachment Bolt sets



CAPMAX Floor Heater Ph 3/4

Attach the legs to the outside extension between the attached plate and the one that came in the bag.

Put the leg so the caster faces the away from you. Line up with the **FIRST TWO** bolt holes, put in a bolt and washer, then the nut. (photo 1)

When all four legs are attached tighten with two 1/2" wenches. (photo 2)



CAPMAX Floor Heater Photo 5/6

Place the outer extension with the legs attached on the floor. Then Insert the knob on to the outer extension (the one you put the legs on. (photo 5).

Then insert the inner L shaped extension and adjust the height. Tighten the knob.



CAPMAX Floor Heater Photo 7

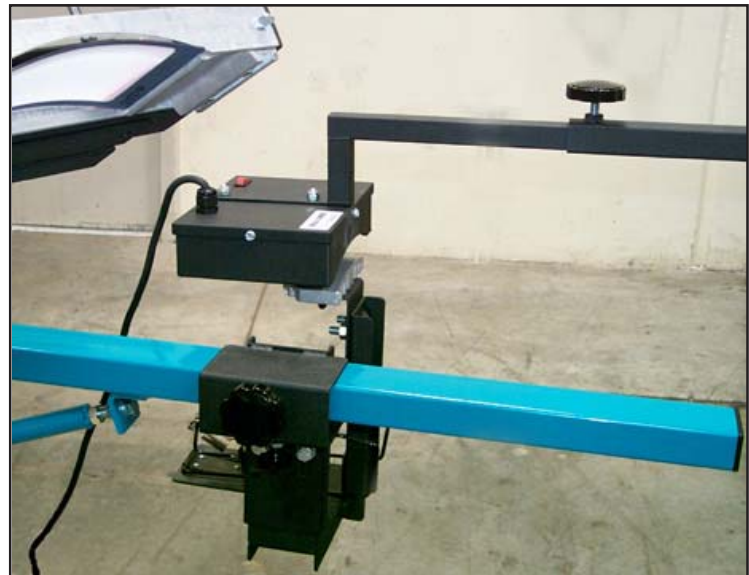
Slide the CAPMAX heater extensionaArm into the inner L shaped extension and attach the other knob.

Slide the heater head in to the inner L shaped extension about 6" and tighten the knob.



CAPMAX Floor Heater Photo 8

Adjust the Cap Dryer height so it is about 1/2" above the cap platen, line up the back edge of the heater element leaving room for the bill of the cap.



CAPMAX Floor Heater Photo 9

Index the print arm to the right of where you will be printing the caps. Then move the cap dryer after adjusting the height and placement so it is over the cap platen.

Index the print arm with the cap attachment on it back into the print position.



CAPMAX Floor Heater Photo 10

See page 15 - 16 for using the Micro's to register the artwork.

Make a print on the cap. See page 21 for the details on setting up the artwork and layout.

Index the print arm with the cap attachment on it.



CAPMAX Floor Heater Photo 11

Once a print is made, index the print arm with the cap attachment so it goes under the cap dryer element.

See page XXX for using dryer and drying temperature.



Print Head and Micros Adjustments

Locking Down Screen: (C)

To place a screen in the print head, loosen the two (C) screen lock down knobs using a 1/2" wench, and raise the (G) screen lock down clamp bar, so you can fit the screen in, push the screen all the way to the back of the screen clamp and then tighten the two (C) screen lock down knobs. don't over tighten.

Tip: When using a BACK CLAMP printing press always measure the design height from the BACK of the screen that way even if you are using different size screens the design will register.

Adjusting the Off Contact: (F & G)

Your Odyssey comes from the factory leveled and the standard off contact set. But when you need to adjust the off contact, loosen the two (G) off contact adjustment bolts, using a 1/2" wench and then raise or lower the (F) off contact clamp and screen holder to the desired off contact, tighten the two knobs. Don't over tighten.

Tip: To set the off contact consistently, get yourself two 16" by 1"10mm thick strips of plastic (Screen Door Window Plastic) for each of your standard off contact distance. Then when you loosen the (G) off contact adjustment bolts, place one strip on the SHIRT BOARD at the front of the Screen, and one at the back of the screen.

Adjust the Screen so it makes contact with the plastic strips front and back. By doing this you will be able to tell if the FRONT end of the screen is parallel with the back. If not do the following:

Adjusting the Screen Tilt: (E)

Loosen the two (E) screen tilt bolts using a 1/2" wench. With the (G) off contact adjustment bolts, tightened press the FRONT of the screen until it makes contact with your plastic off contact strip. Make sure the REAR of the Screen makes contact with the rear plastic off contact strip if not you might have to loosen the (G) off contact adjustment bolts and reset the off contact then tighten them. When done tighten the two (E) screen tilt bolts.

Using the X and Y Micro Adjusters: (D)

ALWAYS LOOSEN the MICRO LOCK DOWN KNOBS (B) before you attempt to adjust the Micros. Adjust the registration by turning the (D) X and Y Micro Adjusters. Use the left or right Micro adjuster to move the screen left or right, up or down. If you turn both Micro Adjusters together you can move the Screen up and down without the left or right movement. When done tighten the MICRO LOCK DOWN KNOBS, but don't over tighten.

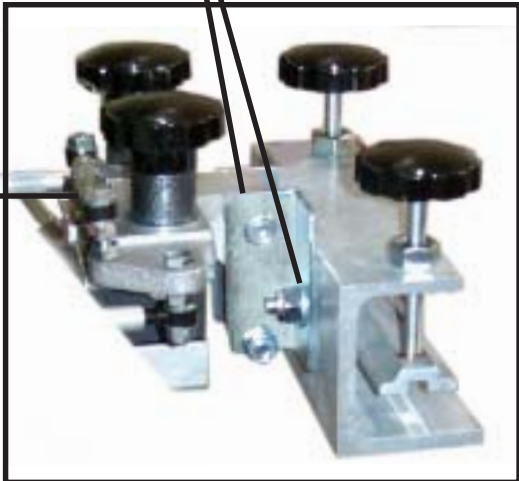
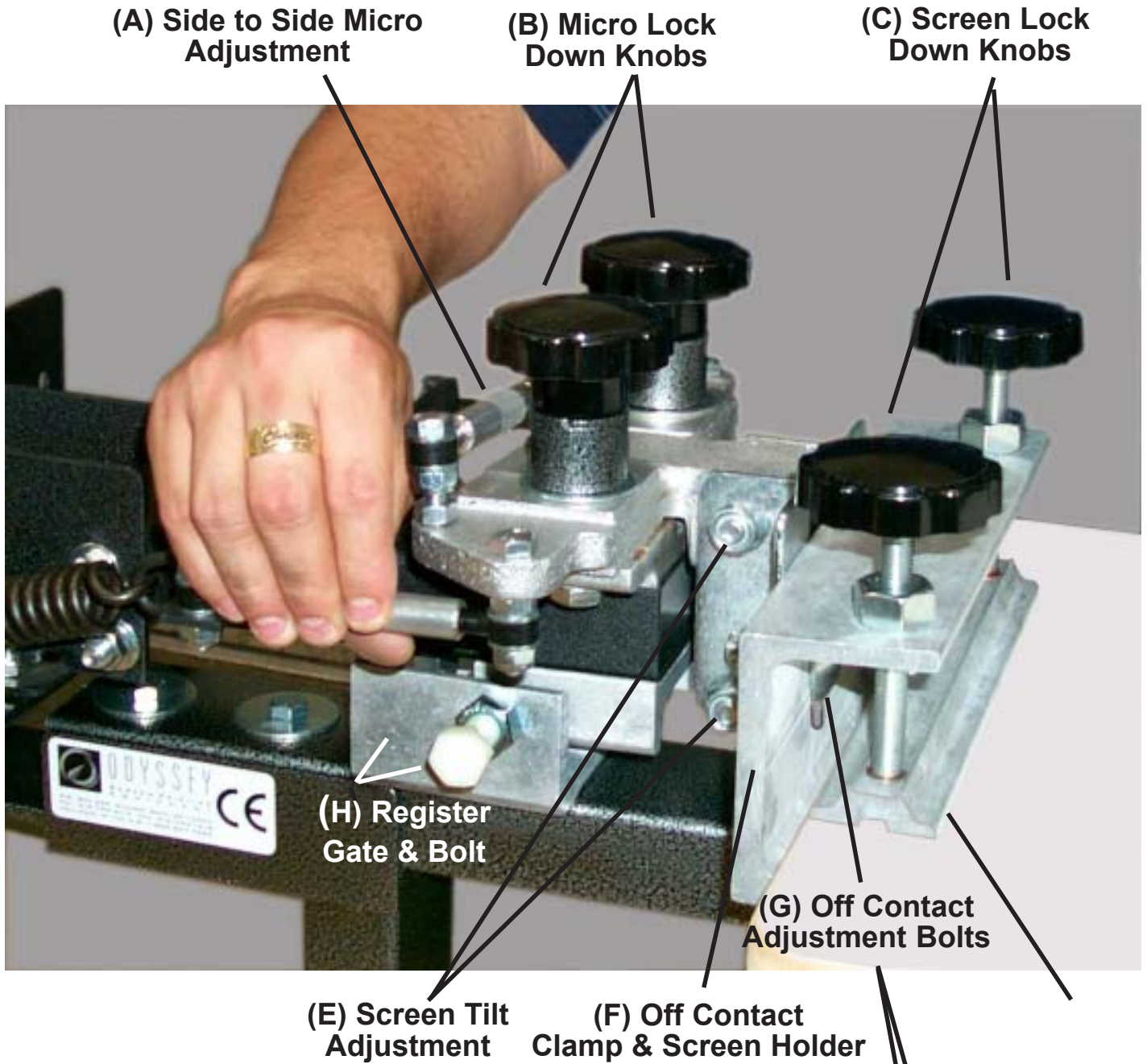
Using the Side to Side Micro Adjuster: (A)

ALWAYS LOOSEN the MICRO LOCK DOWN KNOBS (B). By turning the Side to Side Micro Adjuster you can move the Screen side to side, use in conjunction with the X and Y Micro Adjusters. Using both sets of adjusters will give you a full range of movement. All ways try to Center the Micros when done with the Job or before setting up the next Job, this saves a lot of movement.

The Register Gate and Bolt: (H)

The Print Head has a Register Locator attached under the MICRO LOCK DOWN KNOBS (B) this fits into the Register Gate to center the Screen. The two plastic bolts are used to adjust the Centering of the Screen. As they wear down adjust the Bolts to keep the Screen centered.

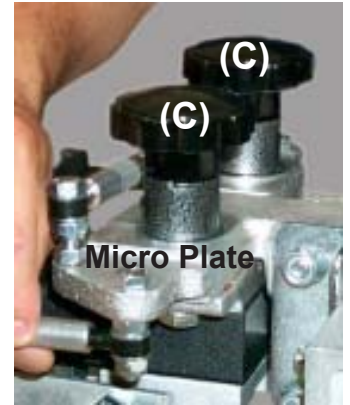
Using the Off Contact and Micros Adjustments



MAINTENANCE and TROUBLE SHOOTING

The CAPMAX line of printing presses require very little maintainance. But periodic lubrication and cleaning will insure smooth operation and extended life of the components. Wipe the press daily to remove spray adhesive and lint. DON'T let the spray adhesive and lint accumulate.

To lubricate use heavy duty wheel bearing grease. Unscrew the (C) Micro Lock Down Knobs and both of the Nuts that attach the Micro Adjusters to the Micro Plate, lift up a little and put grease under the Micro Plate to provide easy movement of the micros.



To lubricate the Micros back off the Adjusters so most of the thread shows apply a small dab of grease and work into threads, then screw down to reveal the other side and do the same thing on the other side. Then re-center the micros.

Don't forget to grease the off contact bolt head on the inside of the Screen Clamp Holder by loosening the off contact bolt and pulling the large bolt head out a little and put grease on the threads also put grease on the print head pivot bolt.



Do NOT grease the white Plastic Print Head Centering Bolts

To lubricate the Carousel center Float Arms just apply grease under the Arms DO NOT ATTEMPT TO LOOSEN OR ADJUST THE CENTER CAP.

TROUBLE SHOOTING

If you have any trouble turning any of the Knobs or Micro Adjusters check to see that they are not gummed up with spray adhesive or Ink. If they are clean with a oil based solvent and lubricate. If the Carousel becomes stiff or to easy to rotate check to see that the Resistant Nut is not to tight or loose of if the tapered bearings need grease. Remove jam nut to gain access to the resistant nut.

The Plastic Print Head Bolts (White Plastic) wear out from the Print Head Registration Gate, (H) hitting them every once and a while square them off and adjust them to keep the Print Head in the center. To order call WORKHORSE 800 - 557-7889. Keep these on hand in case one breaks or becomes to worn to use.



Please take a moment and fill out the following information:

Find the Serial Number on your Machine located at _____ and write it in the space provided below.

Serial Number: _____ Date of Purchase _____ Product Name _____

Company Purchased from _____ Assembled by _____

Please keep this information in a safe place for future reference

LIMITED WARRANTY AND WARRANTY REGISTRATION

Although every effort has been made to provide accurate specifications, Workhorse Products/Odyssey does not assume any liability for damages, whether consequential or incidental, that may result from the use or misuse of the indicated specifications. Workhorse Products/Odyssey requires the use of a licensed industrial electrician for the installation of electrical service to equipment requiring electrical power.

Workhorse Products/Odyssey reserves the right to alter specifications in the manufacture of its products.

It is understood and agreed that Seller’s liability for any equipment whether liability in contract, in tort, under any warranty, in negligence, in strict liability or otherwise shall not exceed the return of the amount of the purchase price paid by Buyer. Notwithstanding the foregoing provision, under no circumstances shall Seller be liable for special, indirect or consequential damages. The price stated for the equipment is a consideration in limiting Seller’s liability. No action regardless of form, arising out of the transactions under this Agreement may be brought by Buyer more than one (1) year after the cause of action has occurred. Our warranty is specified is exclusive and no other warranty, whether written or oral, is expressed or implied. Workhorse Products specifically disclaims the implied warranties of merchantability and fitness for a particular purpose.

Equipment manufactured or sold by Workhorse Products/Odyssey is warranted against defects in workmanship and materials for a period of one year from receipt by customer. All warranties initiate from date of shipment to original customer.

Replacement parts are covered for the term of the equipment warranty period. Parts not under warranty are covered for thirty (30) days from receipt by customer. Any part found by Workhorse/Odyssey to be defective in material or workmanship within the stated warranty period will be replaced or repaired at Workhorse’s option without charge. **AFTER OBTAINING AN RMA# SEND RETURNED FREIGHT PREPAID TO 3730 E. Southern Avenue, PHOENIX, AZ 85040 USA.** Written authorization must be obtained from Workhorse/Odyssey before any part will be accepted. Replacement parts are sent out freight collect. **Parts sent out prior to receiving defective part will be sent C.O.D., cost plus freight. Upon return of defective part, if it is deemed that the part was not damaged by customer but failed, the cost of the replacement part will be refunded.**

This warranty does not extend to expendable parts such as filters, fuses, elements and brushes. Workhorse does not warrant failure of parts or components resulting from misuse or lack of proper maintenance. Installation, inspection, and maintenance costs are the sole responsibility of the purchaser.

Registration Form

| | |
|-----------------------------|-----------------------------|
| Company Name: _____ | Contact Name: _____ |
| Address: _____ | Phone Number: _____ |
| _____ | Fax Number: _____ |
| City: _____ | Email : _____ |
| State: _____ | Cell Number: _____ |
| Country: _____ | Serial Number: _____ |
| Zip Code: _____ | Date Recivied: _____ |
| Model Number: _____ | |
| Date Purchased _____ | |

Please Fax Registration Form for warranty to take place