



# **WORKHORSE PRODUCTS**

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Shown ODYSSEY 6600 Printing Press



Odyssey 6600

Odyssey 6400

Odyssey 4400

## Introduction

Congratulations on your purchase of the Odyssey Series Printing Press.

Check the Crate for damage, DO NOT accept the crate if damaged due to improper handling during shipping. Report any damage to the Carrier at once as well as WORKHORSE at 800-778-8779.

Inspect the Crate contents IMMEDIATELY while the carrier is still there. Our packaging has been carefully designed to handle normal shipping conditions. However, we cannot be responsible for damage by the carrier. Upon discovery of freight damage notify driver AND note damage on all paperwork File a claim with the carrier, then notify WORKHORSE at 800-778-8779.

## Read Instructions first

Read the instructions completely before you attempt to assemble the Press, this will familiarize you with the parts and the sequence of assembly and will make the easy 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
- The Micro - Registration feature 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 Micro - Registration Side to Side feature allows for quick and easy side to side adjustments for precise registration. Each Print Head Micro’s are centered at the factory for you

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## REPLACEMENT PARTS

Please refer to page 14 for specific locations

Complete arm assembly. Includes everything on Pg. 14	21001R	
Nylon Registration bolt kit. Includes Lock nut Package of 12	73007R	Pg 14, H
Spring and Ext. Hog Ring kit. Package of 12 NOTE: these should be replaced annually !! <b>(not sold separate)</b>	71006R	
Y-axis Adjusting assy. Knob and nylon eye bolts Package of 3	21008R	Pg 14, A
Knob, micro cinch Package of 2	74006R	Pg 14, B
Screen Clamp Knob Package of 2	74011R	Pg 14, C
Back clamp steel insert Package of 6	60079R	Pg 14, C

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



The WORKHORSE Floor Model Odyssey Printing Press (6600, 6400, 4400) Ships in one wooden Crate (Photo 1). Uncrate using a power Screwdriver (Photo 2). Being very careful unwrap using a sissors to cut the plastic wrapping, (Photo 3). The Finished Uncrating (Photo 4).



Unpack the Boxes - 6 Shirt Board boxes, 1 Small Parts Box and 6 Print Arms.( Photo 5). Remove press from Pallet - requires two people at least. (Photo 6)

Layout all the Parts, you should have 6 Print Arms for the 6600 4 Print Arms for the 6400 and 4400 Odyssey Print Presses.

6 Shirt Boards for the 6600 or 4 Shirt Boards for the 6400 and 4400. Models. Plus a small Box of Spring's and Nut's and Bolt's.



67-1450 uncrating inst.

## Parts for the ODYSSEY 6600 Floor Printing Press

You will need 2 - 1/2" and  
2 - 3/4" open/close end wrenches

12 - 3.75" Bolts w/.5" Lock Nuts

12 - 2" Flat Washers

6 - 3.75" Bolts w/.5" Lock Nuts

4 - 1.75" Leveling Leg Bolts

12 - .5" Flat Washers

12 - Print Head Springs

12 - Hog Rings

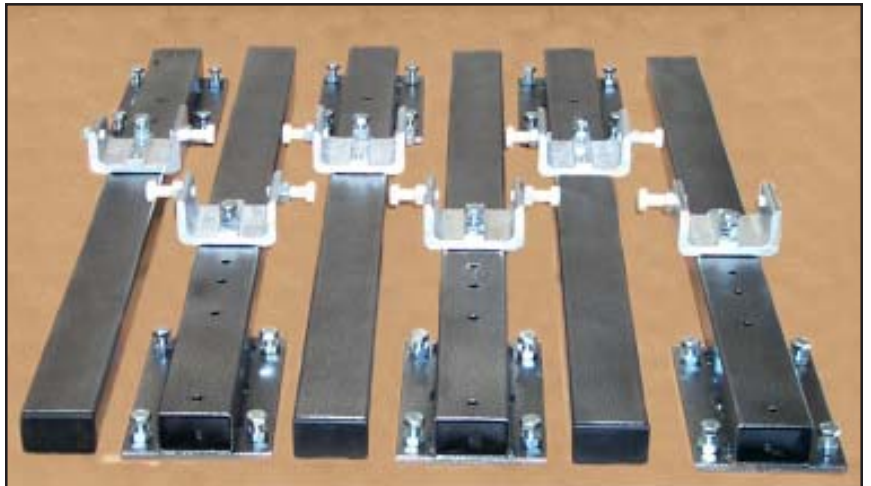
**\*\*Quantities will vary depending  
on the model you purchased**



6 - Print Arms for the 6600

4 - Print Arms for the 6400 and  
models. 4400 Model

All have Shirt Board Registration  
Gate and Plastic Print Head  
Centering Bolts installed



6 - Shirt Boards for the 6600 model

4 - Shirt Boards for the 6400 and  
4400 Models

All Shirt Boards come with Print  
Arm Bracket and Lock Screws  
installed



**Step 1 Install Leveling leg / Photo 1**

Screw the Leveling nut until it is 1" from the Bolt Head. (Insert) Use a ruler to make sure all four Leg Bolts are the same height

While someone holds up the Printing Press Base screw in Bolt up to the Nut

**Step 2 Install Leveling leg / Photo 2**

Use a 3/4" wrench on the head of the bolt and a 3/4" wrench on the Nut. While holding the Bolt Head tighten the Nut up against the Press Base

Repeat for each leg on the Press Base

**Odyssey 6600 Press as shipped**

In order to attach the Print Arms you first need to remove the Print Head Carousel. Follow the next 4 Photos.



**Step 3 Remove Carousel / Photo 2/3**

To remove the Print Head Carousel first remove the Jam Nut (top nut) that holds the Tension Nut in place with a 1/2" closed end of the wrench (Photo 2)

Then remove the Tension Nut (Bottom Nut) with a 1/2" closed end of the wrench

The Tension Nut controls the resistance when you spin the Print Head (Photo 3)

**Step 4 Remove Carousel / Photo 4/5**

Next unscrew the Aluminum Top Cap to expose the Tapered Bearing (Photo 4)

To remove the Tapered Bearing rock the Print Carousel very gently to break the seal, then lift the tapered bearing out with YOUR HAND do not use a screwdriver or any prying device (Photo 5)

**Step 5 Remove Carousel Photo 6**

Once you have removed the Tapered Bearing very carefully lift the Carousel off the center shaft with two people and place carefully on floor



### Step 6 Attach Springs / Ph 1/2

Raise the Print Head and put one of the Hog Rings into the left side hole located on the Print Head Attachment Arm Bracket at either side of the Print Head (Photo 1)

Put one of the Springs into the left side hole located on the bracket at either side of the Carousel Print Head Slot (Photo 2)

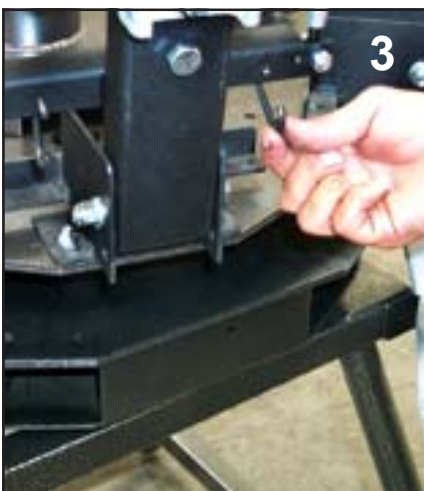


### Step 7 Attach Springs / Ph 3/4

Once you have a Spring in place, attach a Hog Ring on the other side of the Print Head Attachment Arm Bracket.

It does not matter which way the spring and Hog Ring faces. (Photo 3)

Then raise the Print Head all the way so you can hook the Hog Ring and Spring together (Photo 4)

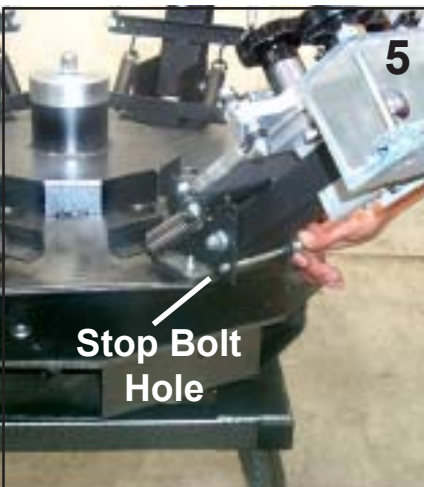


### Step 8 Attach Springs / Ph 5/6

Once you have both sets in place pull down the Print Head so you can see through both Stop Bolt holes. Support the Print Head then slide a 3 3/4" Bolt through (Photo 5)

Then put on a nut and tighten by HAND not with a wrench (Photo 6)

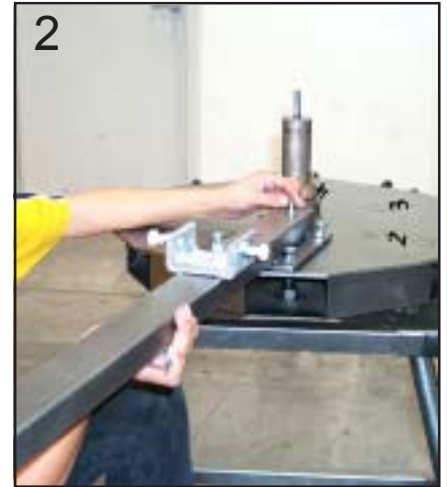
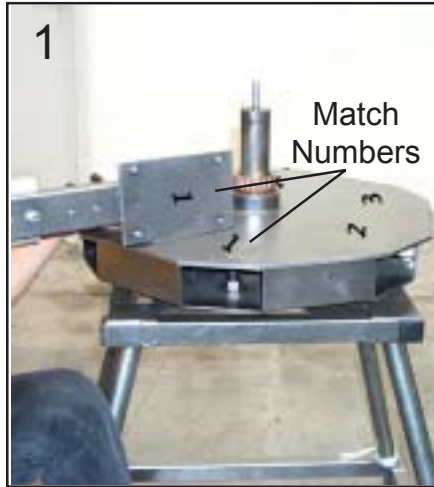
Repeat Steps 6-8 for the rest of the print heads



### Step 9 Attach Arms / Ph 1/2

It's very IMPORTANT that you **MATCH the NUMBERS** on the Print Arm with the numbers on the Print Arm Base. These are factory set for the proper leveling and alignment (photo 1)

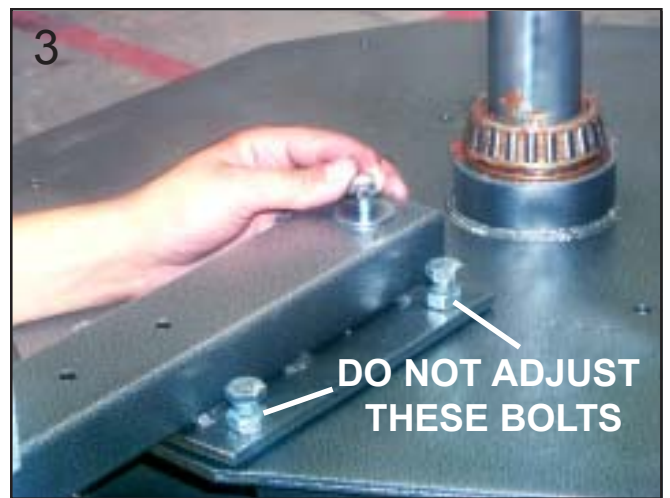
From the TOP, place a 3 3/4" Bolt with a 2" flat washer in the rear hole (Photo 2 and 3 below)



### Step 10 Attach Arms / Photo 3

Notice that there are 4 Bolts and Nuts attached to each Print Arm. **DO NOT ADJUST OR MOVE THESE BOLTS** these Bolts and Nuts are set at the factory to level the Print arm, that's why it is important to match the numbers

One of the advantages to the Odyssey Presses is when constructed each Press is fully assembled, leveled and checked, then it is disassembled and crated, this saves you time and makes set up quick and easy



### Step 11 Attach Arms / Photo 4/5

Put your hand into the slot to hold the Lock Nut while you tighten the Bolt by hand (Photo 4)

After putting the second Bolt from the TOP with a 2" flat washer hold the second Lock Nut by hand and tighten (Photo 5)



### Step 12 Attach Arms / Photo 6

After installing the two Bolts, washers, and Nuts, tighten the bolts with two 1/2" wrenches. DO NOT OVER TIGHTEN as you can compress the Print Arm. Just tight enough to be snug, the Lock Nuts will prevent the Bolts from coming loose



### Step 13 Attach Arms / Photo 7

Repeat steps 9-12 (Photos 1 - 6) for all the other arms.



### Step 14 Putting Carousel on / Photo 1

Once all the Print Arms are installed and checked lift the Print head carousel and very carefully put on the center shaft (requires two people)

Lower on center shaft until you engage the lower Tapered Bearing, rock the carousel gently to seat the bearing



**Step 15 Putting Carousel on/Ph 2/3**

Once you have put the carousel on the center shaft center it and then put in the top Tapered Bearing. Rock the Carousel gently so that the Tapered bearing fits all the way in properly. (Photo 2)

Then screw on the Aluminium Top Cap as far as you can, making sure the Carousel is seated as far as possible (Photo 3)

**Step 16 Putting Carousel on/Ph 4/5**

Use an open end 3/4" wrench and tighten down the Tension Nut on top of the Aluminium Top Cap. Over Tighten the Tension Nut just a little, then spin the Carousel to see if it rotates easily. If tight back off the Tension Nut. Tighten the Tension Nut if it is too loose. (Photo 4)

When you get the tension just right put on the Jam Nut and tighten against the Tension Nut to hold it in place (Photo 5)

**Step 17 Putting Carousel on/Photo 6**

The Odyssey with the Carousel and Arms attached. All that remains is putting on the Shirt Boards



### Step 18 Putting on ShrtBoard /Ph 4/5

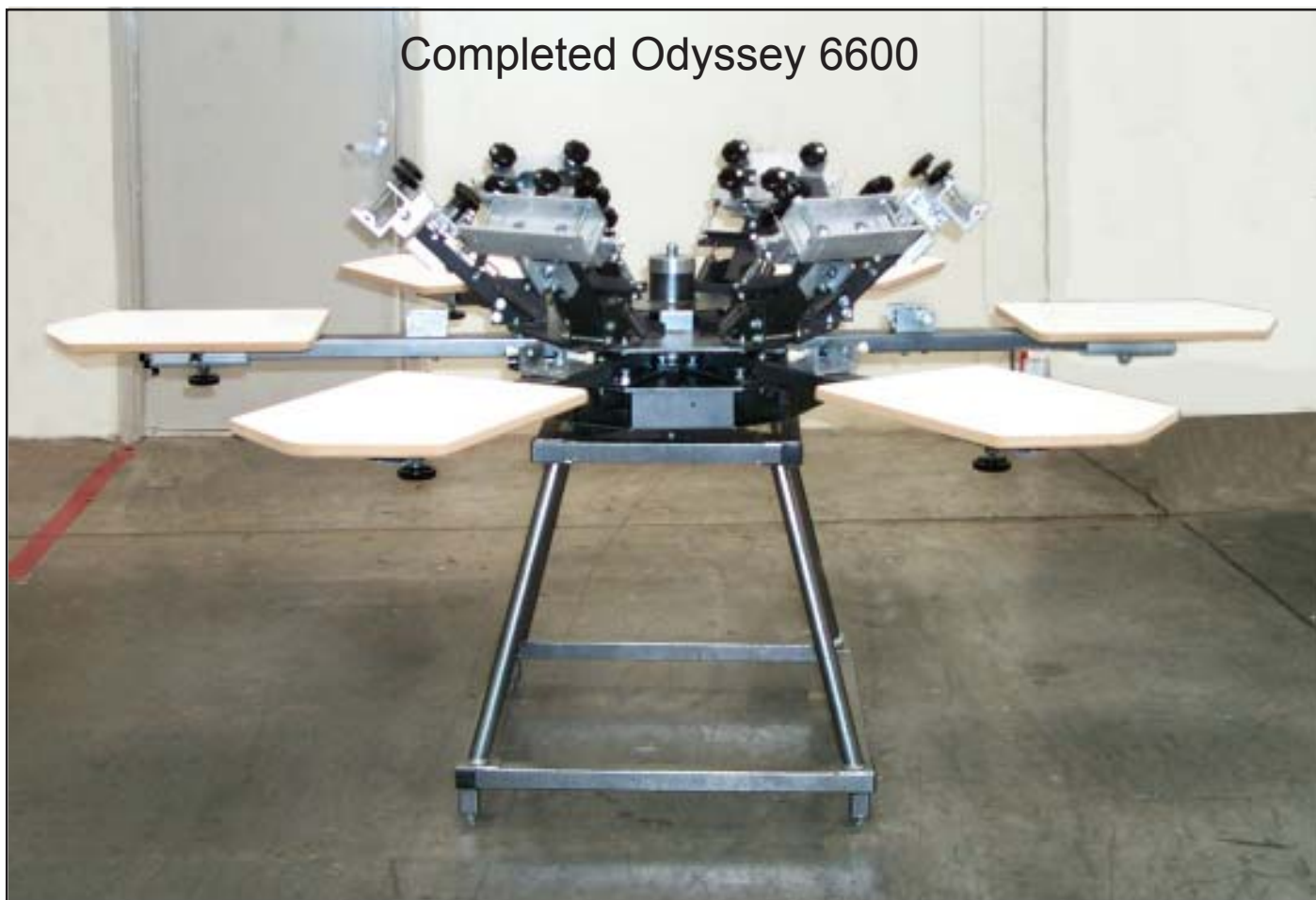
To put on the Shirt Boards lower one of the Print heads then loosen the bottom Knob on the Shirt Board and slide on to the print Arm. until it is 1/2" from the end of the Screen Clamp.

Tighten , but do not over tighten the Bottom Knob. Then tighten the smaller Lock Knob.

Repeat for all Heads to complete the assembly



### Completed Odyssey 6600



## MAINTENANCE and TROUBLE SHOOTING

The Odyssey line of printing presses does not require much maintenance. 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 (B) 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 (F) Off Contact Clamp and Screen 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

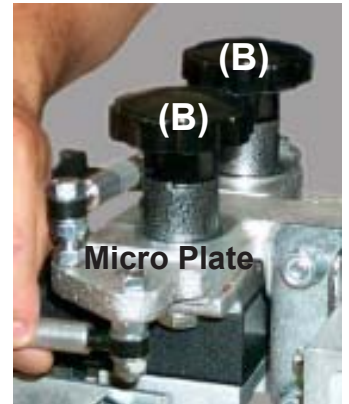
To lubricate the Carousel Tapered Bearings top and bottom refer to pages 6 to remove the Carousel. (Do twice a year unless the rotation becomes tight or uneven) pack the Tapered Bearing with a lot of grease working it into the bearings. Be careful not to damage the race on the Bearings.

When cleaning the Press try not to use any alcohol based solvents, an oil based Paint thinner is better, so It won't cut and dry out the grease.

### 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 too easy to rotate check to see that the Resistant Nut is not too tight or loose or if the Tapered Bearings need grease. First take off the Jam nut to get to the Resistant nut.

The Plastic Print Head Bolts (White Plastic) wear out over time. Order part # 73007R from WORKHORSE 800 -778-8779. Keep these on hand in case one breaks or becomes too worn to use.



# Using the Off Contact and Micros Adjustments

## Locking Down Screen: (C)

To place a Screen in the Print Head, loosen the two (C) Screen Lock Down Knobs, and raise the 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 till 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 the 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. Always 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.

# Print Head and Micros Adjustments

(A) Side to Side Micro Adjustment

(B) Micro Lock Down Knobs

(C) Screen Lock Down Knobs



(H) Register Gate & Bolt

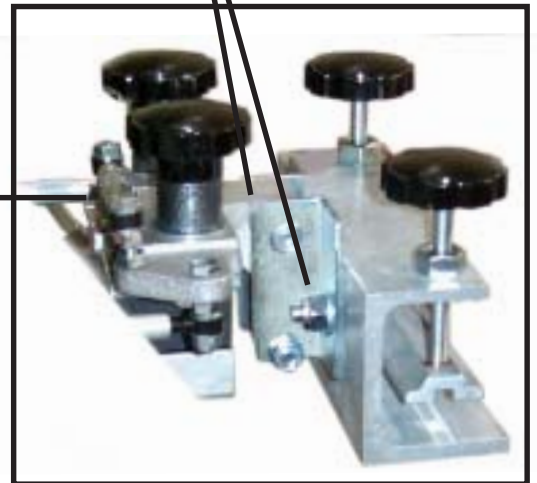
(G) Off Contact Adjustment Bolts

(E) Screen Tilt Adjustment

(F) Off Contact Clamp & Screen Holder

(D) X & Y Micro Adjusters 2x

(A) Side to Side Micro Adjustment



# ODYSSEY ACCESSORIES

## Manual Printing Accessories

Expand your profit potential....

### Pallets:

Description:	Top w/ bracket	Standard Top	Aluminum Top
10 x 14 youth	12010	12110	12180
15 x 18 adult	12015	12120	12181
18 x 20 oversize	12020	12130	12182
4 x 18 sleeve - leg	12070	12170	12183
Pallet bkt. only	12200		

### Vacupallet Graphics Printing Pallet:

Vacuum Pallet with bracket, pump and footswitch 18 x 24

Order no. 12513

### EZ-CAP Cap Printing Pallet:

E-Z Cap Pallet 3 x 4.75 w/110 Cap Screen and Squeege

Order no. 12011

E-Z Cap Screen #110 Mesh

Order no. 12012

E-Z Cap Screen #124 Mesh

Order no. 12013

E-Z Cap Screen #155 Mesh

Order no. 12014

### Gripper Jacket Printing Pallet:

Gripper Jacket hold down with bracket, 16 x 16

Order no. 12512

### EZ-Pocket Pocket Printing Attachment:

E-Z Pocket Pallet EZP 4 x 4

Order no. 12005

**Please see our extensive line of Cap Printers, attachments and screens in our full color catalog, or visit:**

**WWW.WORKHORSEPRODUCTS.COM**

# 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: _____	
Zip Code: _____	Serial Number: _____
	Date Recivied: _____
Model Number: _____	
Date Purchased _____	

**Please Fax Registration Form for warranty to take place**