OWNER'S MANUAL

FOR

AMERGRAPH

AdVantage® 385 & 395

SCREEN EXPOSURE SYSTEMS

7/01 **SERIAL NUMBER:**_____-_____-_____

520 Lafayette Road•Sparta•NJ 973-383-8700 • fax-973-383-9225

web site: www.amergraph.com email: sales@amergraph.com

INTRODUCTION

Congratulations on the purchase of your new AMERGRAPH **AdVantage®** SCREEN EXPOSURE SYSTEM, one of the most technologically advanced exposure systems available. To make installation of your new machine easier and safer, we recommend the following:

- It is advisable to have the assistance of several individuals while unpacking and setting up your unit.
- Do not discard any packaging materials until installation has been completed.
- Extremely high voltage present! **Use extreme caution!**

Please call your dealer, or Amergraph Corporation at 1-973-383-8700, with any questions or problems that you may have concerning installation, setup, or operation.

Your new machine is designed to give you many years of reliable, trouble free service with "built to last" quality, for which Amergraph is known.

Before installing and operating your machine, carefully read the installation and operating procedures so that you are thoroughly familiar with its operation. Certain procedures under the troubleshooting section of this manual should be performed only by competent service technicians experienced in handling high voltage, high power electrical circuits.

Every effort has been made to make the installation as simple as possible so that you can place your new unit into operation easily. Your Amergraph dealer is a specialist in Amergraph products and will provide you with assistance in installation and operation.

A product number appears on the ***Serial Number Label***, which is attached to the right side of the panel near the lamp reflector of your unit (facing the front of the unit). Kindly refer to this serial number when contacting your dealer or ordering parts.

ELECTRICAL REQUIREMENTS

The AMERGRAPH **AdVantage® 385 & 395** SCREEN EXPOSURE SYSTEMS are rated at 240 volts, 60 Hz, single phase power and require a dedicated electrical service line of ***at least 40 amps***. (50 HZ units are available by special order.)

Wiring should be directly into the electrical box located at the right rear of the unit.

A wall disconnect switch is recommended.

Wiring should be performed by a licensed electrician in order to conform to all existing local electrical codes.

Failure to have sufficient power will result in damage to the power supply and **WILL VOID THE WARRANTY OF THE UNIT**. The unit must be connected to an approved electrical ground to protect the user from electrical shock hazard. See your local electrician for advice and service.

INSTANT START ULTRA VIOLET LAMP

Your AMERGRAPH **AdVantage®** SCREEN EXPOSURE SYSTEM is equipped with an instant start U.V. lamp that only operates during an exposure. Therefore, considerable savings in power costs result in comparison to other types of screen exposure units using lamps which operate continuously with the aid of a shutter. In addition, via the patented Megalume® lighting system, Amergraph's exclusive "true instant start" technology allows the lamp to restart at all times – even while the lamp remains hot. This *hot restrike* feature **eliminates** the cool down time required to restart the lamp for the next exposure. Since you can reload and expose screens in rapid succession, Amergraph's Megalume® instant start technology largely increases your production.

INSTALLATION

CAUTION – EXTREMELY HIGH VOLTAGE!

All AMERGRAPH **AdVantage®** SCREEN EXPOSURE SYSTEMS should be installed by competent service technicians experienced in servicing and operating *high voltage, high power electrical circuits*. Amergraph Corporation assumes no liability for injury resulting from operation or servicing of this equipment.

Your AMERGRAPH **AdVantage®** SCREEN EXPOSURE SYSTEM is completely assembled except for the following:

1. Lamp

2. Leveling Feet

3. Step
   These models come equipped with a step for convenient access to the blanket frame. The step is shipped on top of the unit in separate packaging.

SELECTING THE LOCATION

The location you select for your AMERGRAPH **AdVantage®** SCREEN EXPOSURE SYSTEM is important and should be coordinated with the workflow through your screen-making department. Proper placement of the unit will assure you maximum production efficiency. Refer to the list below for the width and depth of your particular unit.

MODEL 385: 80″ wide x 57″ deep

MODEL 395: 92″ wide x 69″ deep

To allow for blower exhaust and the opening of the access drawers, **MODELS 385 &** 3**95** require 6 inches minimum clearance at the *rear* and 36 inches at the *sides*.

REMOVAL FROM THE SHIPPING PALLET

NOTE: REMOVE ALL EXPOSED EXTERNAL NAILS AND STAPLES FIRST!

1. Remove the nail and staple fasteners along the bottom edge of the shipping carton. Then lift the carton off the pallet.

2. Remove all packing materials such as tape, etc. **DO NOT DISCARD ANY PACKAGING MATERIALS UNTIL INSTALLATION IS COMPLETED**.

3. Remove the 4 bolts securing the unit to the pallet. Use a 9/16″ socket wrench.

4. Shift the unit on the pallet so that the four corners are exposed, and install the 4 leveling feet, one in each corner. The leveling feet are packed in a bag taped inside the unit, and **MUST BE INSTALLED ON THE UNIT TO ENSURE PROPER VACUUM DRAWDOWN.**

5. You can now remove the unit from the pallet. It is advisable that **enough** individuals assist in the removal by firmly supporting each corner. **DO NOT LIFT THE UNIT BY THE VACUUM BLANKET FRAME**.

SET UP

NOTE: THE UNIT CAN BE SEPARATED TO PASS THROUGH A 30″ OPENING. SEE THE GUIDE FOLLOWING THE INSTALLATION SECTION.

1. Place the unit in the set-up location, adhering to the minimum clearances for blower exhaust explained in the 'SELECTING THE LOCATION' on the previous page. Blocking of these openings can affect the operation of the lamp and power supply, and **WILL VOID THE WARRANTY**.

2. Ease the blanket frame open to its natural stopping point. Then remove the brackets found near the front corners of the glass frame. *Do not discard the brackets.* Next push the blanket frame further upward, at which time the glass frame will start to rise. Grab hold of the glass frame and continue to open it to full extension.

3. Place a large size level on the top surface of the cabinet frame. Level the machine by adjusting the leveling feet at each of the four corners, according to readings taken at the front and sides of the top of the cabinet.

4. Check the electrical and vacuum connectors in the right front corner for full and proper connections.

5. Check the opening and closing of the blanket and glass frames to full extension, making certain that when closed the front sides remain even with the front side of the cabinet. The brackets that secure the glass frame must be reinstalled before closing and locking the blanket frame.

6. Place the unit on a **dedicated service line** of at least 40 amps, as required.

SELECTING THE PROPER OPERATING VOLTAGE

*****CAUTION*****

This procedure should only be performed by qualified service personnel experienced in servicing high voltage, high power, electrical circuits.

AMERGRAPH **AdVantage® 385 & 395** EXPOSURE SYSTEMS have two light sources and separate power supplies for EACH light source.

These models operate within a voltage range of 205-245 volts. To obtain maximum operating efficiency, an adjustment must be made at the each power supply to match the normal line voltage to the input of the power supply.

Before making any adjustment, disconnect the power to the machine by removing the wall plug or shutting off the disconnect switch. Then, remove the power supply cover - the middle panel of the service drawer.

The service drawers are on the sides of the unit and secured by two Allen cap screws requiring a 3/16″ Allen wrench. To open a drawer, loosen, but do not remove, the screws.

Locate the YELLOW wire #14 connected to the terminal board on the power supply bearing the tap values 208, 220, 240 volts. After measuring the line voltage, connect the YELLOW wire #14 to the terminal closest to the normal line voltage. **Should the line voltage be below 205 volts or above 245 volts, there is improper voltage and the unit should not be operated until the deficiency in power is corrected.** Your local electrician and power utility can assist you in this matter.

LINE VOLTAGE	TRANSFORMER TAP
205-214	208V
215-224	220V
225-245	240V

It is suggested to measure the voltage at the power outlet while the unit is operating. If the line voltage falls into a different range than when originally measured, move the YELLOW wire #14 to the next recommended tap.

*****IMPORTANT*****

Replace the cover on the power supply. Otherwise, damage to the power supply and lamp will result from inadequate cooling.

INSTALLING THE LAMP

CAUTION!

DO NOT INSTALL LAMP UNLESS THE POWER HAS BEEN TURNED OFF AT THE POWER SOURCE.

IMPROPER LAMP INSTALLATION WILL DAMAGE THE LAMP ENDS AND SOCKET.

DO NOT HANDLE THE GLASS QUARTZ SURFACE OF THE LAMP.

Handle the lamp only with cotton gloves or a clean cloth. If the lamp surface is accidentally touched, wash the lamp with isopropyl alcohol to remove all traces of fingerprints, grease or oil. (Be sure the lamp is dry before installation.) Failure to clean the lamp will result in premature failure.

IMPORTANT:
MODELS 385 & 395 USE ONLY **AMERGRAPH** LAMP P/N 10266.

THE USE OF SUBSTITUTE LAMPS will result in premature failure and possible damage to the electrical circuitry and WILL VOID ALL WARRANTIES!

A lamp must be installed in each light source.

Access to the lamp holders is by the service drawer on the sides of the unit.

Each drawer is secured by two Allen cap screws requiring a 3/16″ Allen wrench. Loosen the screws, but do not remove them. Then pull the drawer open to expose the lamp holder.

1. ***Carefully*** slide one end of the lamp into one of the lamp clips.

2. Then gently insert, *without* ***"snapping" or forcing,*** the other end of the lamp into the other lamp clip.

3. Without handling the glass quartz surface, position the lamp ***with the tip of the lamp pointing up.***

GUIDE FOR PASSAGE THROUGH A 30″ OPENING

1. Open the blanket frame to its natural stopping point. Then remove the brackets found near the front corners of the glass frame. *Do not discard the brackets.* Next push the blanket frame further upward, at which time the glass frame will start to rise. Grab hold of the glass frame and continue to open it to full extension.

2. To separate the unit into two sections, reach down into the right front corner of the unit, and disconnect the electrical connector and the vacuum hose.

3. Close the glass frame. Replace the brackets that secure the glass frame. Close and latch the blanket frame. Then, have enough individuals assist in the removal of each section from the pallet. Firmly support each corner. Do not lift the top section by the blanket frame.

4. Move both sections through the opening sideways, taking care to prevent movement of the blanket frame.

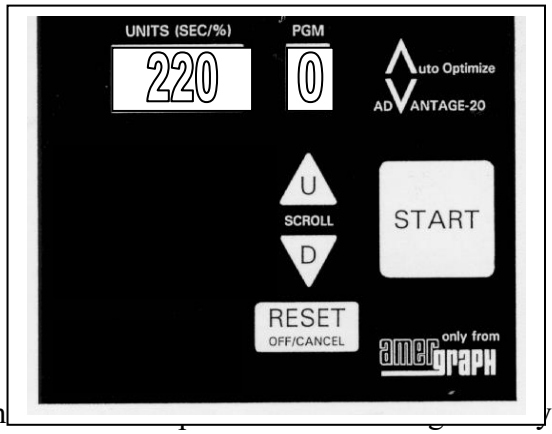
5. Reposition the sections in the set up area and open the blanket and glass frames as before. Reach down into the right corner and connect the electrical connector and the vacuum hose fitting.

6. Follow the appropriate **Set Up** instructions found three pages previous.

OPERATING INSTRUCTIONS FOR USING THE AdVantage® 20 INTEGRATOR

MAIN KEYS
Note: No Period After 0

This page will show you how to operate your exposure unit and how to find the best program to provide proper exposure for your materials. **The keys that are used are shown on the right.**



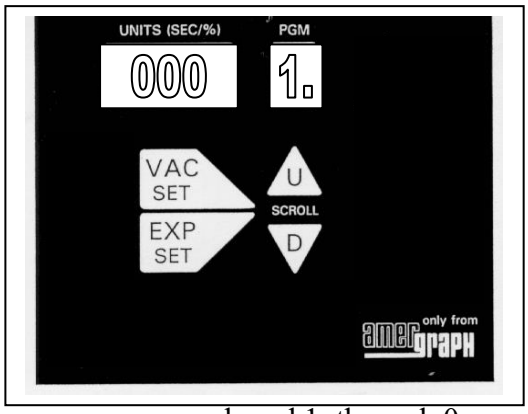
1. **TURN MAIN POWER ON.**
2. **LOAD THE VACUUM FRAME** with your material, and close the frame.
3. **SCROLL TO PROGRAM 0 (no period) FOR A TEST EXPOSURE** by using the **U** or **D** buttons for up and down, respectively. The display will read 220 units.
4. **PRESS THE START KEY TO RUN THE TEST EXPOSURE.**
5. **PRESS RESET WHEN THE TEST EXPOSURE IS COMPLETE**, indicated by a display reading of **EC**.
6. **EVALUATE THE TEST IMAGE** after processing your materials. One line on the Auto-Optimize® test image will show the "best image" for the emulsion and film combination. The number next to that line corresponds to a pre-set Program.
7. **SCROLL TO THE PRE-SET PROGRAM DETERMINED TO PROVIDE THE BEST IMAGE** by using the **U** or **D** buttons. *The pre-set Programs are marked by the absence of a period.*
8. **LOAD THE VACUUM FRAME WITH PRODUCTION MATERIALS**, and close it.
9. **PRESS THE START KEY TO RUN THE PRODUCTION**.
10. **PRESS RESET WHEN THE EXPOSURE IS COMPLETE**, indicated by **EC**.

Use the Auto-Optimize® Test Whenever You Introduce a New Set–Up.

CUSTOM PROGRAMMING

This page will show you how to custom set programs. Vacuum delay seconds and exposure units can be customized on the 10 program numbers followed by a period. **The keys used are shown on right.**

MAIN KEYS
Note: Period after 1



TO SET YOUR CUSTOM PROGRAM:

1. Scroll using the **U** (up) or **D** (down) arrows to any program numbered 1. through 0. (with a period following the number). These programs are left blank by the factory.

2. SET EXPOSURE UNITS IN THAT PROGRAM:
   - Press and hold **EXP SET**.
   - While holding, press **U** or **D** to scroll to the exposure units desired.
   - When the desired units appear, release **EXP SET**.

3. SET THE VACUUM DELAY:
   - Press and hold **VAC SET**.
   - While holding, press **U** or **D** to scroll to the desired seconds.
   - When the desired time appears, release **VAC SET**.

   To display the drawdown time in the current program, press and hold **VAC SET**.

TO RUN YOUR CUSTOM PROGRAM:

1. Scroll using the **U** (up) or **D** (down) arrows to the program (with a period following the number) you want to run.

2. Load the vacuum frame with production materials, and close it.

3. Press **START** to run the production.

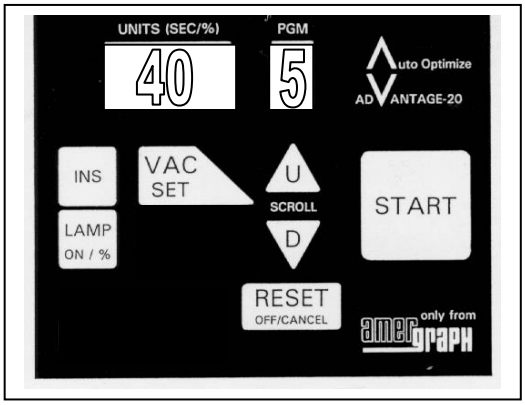
4. Press **RESET** when the exposure is complete, indicated by **EC**.

Be Sure To Note The Program Number For Each Material.

ADVANCED FEATURES

This page will show you how to use three advanced features: pausing drawdown for visual control, testing the lamp and how to set vacuum time in all programs at once.

MAIN KEYS



INSPECT: Allows you to manually control the vacuum drawdown and start the exposure when you are satisfied the drawdown is proper.

After '**START**' has been pressed to begin a program:

- Press '**INS**' to stop the vacuum delay countdown. The UNITS display will read "INS"**.** Inspect the vacuum as it continues to draw down.
- When you are satisfied with the vacuum drawdown, press '**START**' to begin the Exposure.

LAMP TEST: Allows you to manually turn on the lamp to approximate the amount of life left in the lamp.

- Press '**LAMP ON**'. Allow the lamp to remain lit for <u>2 to 3 minutes</u>.
- Press '**LAMP ON**' again. The display will rapidly count to a number and hold. This number approximates the percentage of life left in the lamp, *provided the unit was correctly calibrated with that particular lamp when that lamp was new.* NOTE: Optimum performance is obtained when the lamp life remains above 70%.
- Press '**RESET**' to turn the lamp OFF.

VACUUM SET: Allows you to change the vacuum delay time in <u>all programs at once</u>. (The factory pre-set vacuum time is 35 seconds.)

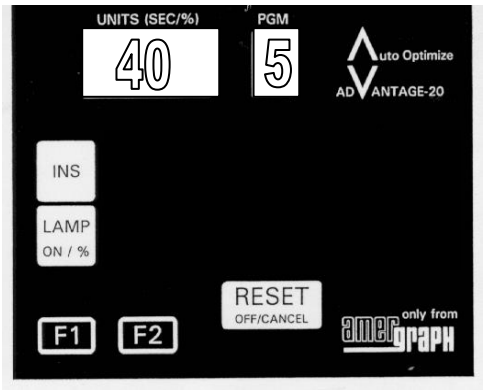
- Scroll to Program **U** using **U** (up) or **D** (down) arrow.
- Press <u>and hold</u> '**VAC SET**'.
- <u>While holding</u>, scroll with **U** or **D** to desired seconds.
- <u>Release</u> '**VAC SET**'.

*If you press and hold '**VAC SET**' after this procedure, you will see the drawdown time for all programs.

ADVANCED FEATURES
CONTINUED

MAIN KEYS

This page will show you how to manually control the lamp and how to define and use the function keys, F1 and F2.



MANUAL OPERATION: You may want to conduct a one time exposure and not save your settings. This function allows you to manually control the lamp as the integrator counts exposure units for you.

- Press '**LAMP ON**' to turn the lamp **on**. The display counts up exposure units.
- Press '**RESET**' to turn the lamp **off**.

FUNCTION KEYS: **F1** and **F2**. From the options shown below, you can choose which Function the keys will perform. Once selected, the key will act as a toggle switch (on or off) in the selected program.

A. PROGRAM SYMBOL ACTION

G	GO TO – Alternates with each push between the last program used, and Program 5.
E	Increases Exposure by 10% or compensates for an additional film base with density of 0.04. The exposure units on a current Program will be temporarily increased by 10% for each push of the Function Key.
. (Period)	Programs Exposure to tenths of a unit, or goes back to normal units on the programs with a period following the number.
▬	De-activates the function key. (Do Nothing)

B. TO MAKE A FUNCTION KEY DO THE ACTION OF YOUR CHOICE, (G, E, ·, or, ▬):

- Scroll to the Program Symbol (G, E, ·, or ▬) you wish to have the function key do.
- Press the function key you wish to perform the action.

C. To perform the programmed function, scroll to the desired program and press the function key you have selected. Then press **'START'**.

CALIBRATION for 3000 WATT UNITS

This page will show you how to calibrate your equipment **if necessary**. A new lamp should be used as this procedure will reset the "LAMP TEST" feature. You will want to measure your lamp's UV as compared to a new lamp.

The Integrator was calibrated at the factory and will not need recalibration unless the Lamp Test with a new lamp does not show a number between 80 and 120.

TO RECALIBRATE THE AdVantage® 20 INTEGRATOR:

- Press '**LAMP ON**'. Wait about 2 minutes for the lamp temperature to stabilize. *Make every effort to maintain the lamp's temperature throughout the entire procedure.*
- Press '**RESET**' to turn the lamp off.
- Press '**LAMP ON**' 2 times.
- Take note of the number to which the read out scrolls.
- Press '**RESET**' to turn the lamp off.
- Locate the photosensor by removing the two screws securing the front panel to the main frame of the unit, and allowing the panel to rest on its bottom hinge.
  - The sensor can be rotated by hand, but its holding screw many need loosening.
  - A slight rotation of the sensor greatly affects calibration.
- Rotate the photosensor based on the number noted above. Aim for the range 90-110.
  - If the number is low, you will need to slightly rotate the photosensor toward the light source to see more light.
  - If it is high, you will need to slightly rotate the photosensor away from the light source to see less light.

WARNING: *Light leaks with panel open.* Always *hold the panel* CLOSED *before pressing 'LAMP ON'.*

- Repeat pressing '**LAMP ON**' 2 times to see where the read out stops. If the number is not within range, rotate the photosensor as necessary and repeat the procedure.
- Once the read out stops at a number in range, allow the lamp temperature to stabilize, and perform the following steps in rapid succession.
- Scroll to Program **C**; then press and hold '**EXP SET**'.
- While holding '**EXP SET**', press '**START**'.
- Release '**EXP SET**' and '**START**'. The counter will increase to a number and hold. The number should be between 90 and 110, just as it was in the step above.
- Press '**START**'. The display will read "CAL".
- Calibration is now complete. Press '**RESET**' to resume normal operation.

BLANKET FRAME ADJUSTMENT PROCEDURE FOR THE AdVantage® SCREEN LINE

*****THIS PROCEDURE MUST BE DONE WITHOUT A SCREEN IN THE FRAME*****

Minor adjustment of the blanket frame can be helpful for any loss in vacuum pressure.
The rubber on the vacuum blanket is very soft and supple, so it is common for it to take a set.

- Disconnect the power to the machine.
- Open the blanket frame.
- Use a screwdriver to remove the cap on the knuckle of the gas cylinder. (Do not attempt to pry the knuckle off the pivot point without first removing the cap.) This knuckle is on the pivot point attached to the blanket frame.
- Remove the knuckle from the pivot point.
- If there is more than one gas cylinder, repeat the previous two steps.
- Close and latch the blanket frame.
- On the back of the blanket frame, there are hinges that attach the blanket frame to the glass frame assembly. There are two screws in the vertical slots on each hinge.
- Slightly loosen the screws in the vertical slots on one hinge. Apply pressure to the blanket frame directly above the hinge. (This increases the pressure between the glass and the blanket frame.) Tighten the screws.
- Repeat the above step for the other hinge, applying the same equal pressure as on the previous one.
- Finish the procedure by adjusting the two front latches that attach the single bar latching system to the frame of the unit as follows, keeping the blanket frame latched closed.
- Using a 5/32 allen wrench, slightly loosen the two screws on the one front latch. Adjust the latch position while applying pressure to the front corner of the blanket frame. (This increases the pressure between the glass and the blanket frame.) Tighten the screws.
- Repeat the above step for the other front latch, applying the same equal pressure as on the previous one.
- Open the blanket and replace the gas cylinder(s).
- Reconnect power to the machine.

MAINTENANCE

Your AMERGRAPH **AdVantage®** SCREEN EXPOSURE SCREEN SYSTEM has been designed to require a minimum of maintenance. Like all mechanical equipment, periodic maintenance will prolong the life of the unit. The glass and the vacuum blanket are of particular importance.

The GLASS should be kept clean using any commercial non-abrasive glass cleaner. Dust particles, emulsions, or threads from screens will cause spots of unexposed areas on your screen.

The BLANKET should be kept clean of dust by periodic vacuuming. The rubber seal should be cleaned with blanket wash. An occasional application of rubber roller rejuvenator will keep the seal pliable.

The VACUUM PUMP is oil-less and requires no service.

The REFLECTOR is made of a special material that reflects ultra violet light. It is therefore important that it be kept clean. A dirty reflector will cause longer exposures and uneven distribution of light across the vacuum frame.

CAUTION: *Be certain to disconnect power to the unit before cleaning the reflector to prevent an electrical shock from the terminals on the ends of the lamp.*

Use a non-abrasive glass cleaner to clean the reflector. **CAUTION:** *DO NOT SPRAY THE CLEANER ON THE SURFACE OF THE REFLECTOR.* Spray the cleaner on a cloth first and then apply it to the reflector.

The EXPOSURE LAMPS for your machine are designed to give you several thousand ignitions. However, lamps are unpredictable in life expectancy, and, as a result, may cease when least expected. *It is, therefore, recommended that a **spare set of lamps be kept on hand at all times** to prevent any inconvenience when the lamps require replacement*.

The dual light sources work in conjunction. Therefore, both lamps should be replaced at a time. You can purchase **authentic Amergraph spare lamps** from your authorized Amergraph dealer.

The IN-LINE AIR FILTER protects the vacuum system from damage due to dust and dirt. Replace the filter if it appears to be dirty. The air filter part # is 21783.

CAUTION: *Be certain to disconnect power to the unit before performing any maintenance function to prevent electrical shock.*

The air filter is located outside the right side drawer, near the front of the unit.

To open the drawer, loosen, but do not remove, the Allen caps with a 3/16" Allen wrench.

REPLACEMENT GLASS

Replacement glass for under the blanket frame cannot be shipped from the factory. In the event that the glass becomes either scratched or broken, contact your nearest glass manufacturer and order the following.

Clear (i.e. free of imperfections like knots, etc.)**, Not Tempered, Polished Plate glass, with Flat Ground edges and Dubbed corners,** according to the respective dimensions.

MODEL 385: 1/2″ x 56 1/8″ x 79 7/8″

MODEL 395: 1/2″ x 68 1/8″ x 91 7/8″

PARTS LIST

For AdVantage® Models 385, 395

AdVantage 20 Keypad	10820	Lamp	10266
Auto-Optimize Test Kit	22000	Lamp Clip	40065
Blanket Model 385	21864-3	Leveling Feet	20219
Blanket Model 395	21864-4	Photosensor	10323
Blower	10296	Power Supply	10343
Digital Board	10822A	Power Switch	10724
Drawer Safety Switch	10290	Proximity Magnet	21729
Exhaust Fan	10818	Proximity Sensor	10819
Fuse Holder	10745	Relay	10067
Fuse MDA 20	10146	Vacuum Gauge	21402
Fuse MDA 10	10147	Vacuum Pump	10915
Gas Springs - Blanket	21373	Vacuum Regulator Knob	21684
Gas Springs - Glass	22327	Vacuum Regulator Valve	20623
In-Line Air Filter	21783	Vacuum Switch	10723

TROUBLESHOOTING

This section contains troubleshooting information to determine the causes of common occurrences during operation, along with corrective action to be taken when the fault has been isolated.

CAUTION

Troubleshooting should be accomplished by qualified service personnel who are experienced with high voltage, high power electrical circuits. Care should be exercised at all times to prevent accidental electrical shocks and exposure to ultraviolet radiation. The Amergraph Corporation assumes no liability for injury resulting in the servicing or operation of this unit.

TROUBLE	PROBABLE CAUSE	REMEDY
During exposure sequence, lamp does not light.	1) Defective lamp	1) Replace lamp with correct lamp.
	2) Safety switches defective or not properly activated.	2) Check actuation of proximity sensor between blanket and glass frames. Also check actuation of drawer interlock switches.
	3) Lamp sockets corroded	3) Replace sockets.
	4) Blown fuse(s)	4) Replace fuses with proper replacement value.
	5) Defective relay	5) Replace relay
	6) Integrator not working	6) Have PC boards checked.
	7) Defective power supply	7) Check input voltage at power supply when relay is energized. If no voltage is present, have supply repaired.
Light comes on when cold, but will not restrike.	1) Not on dedicated power line	1) Place on dedicated line.
	2) Defective lamp	2) Replace lamps with correct lamps.
	3) Low line voltage	3) Measure voltage at wall or relay. If voltage is not correct, perform voltage adjustment.
	4) Defective power supply	4) Have power supply repaired.
Blower does not run when lamp is operating.	1) Blower defective	1) Replace blower.
	2) Defective wiring	2) Repair wiring.
Lamp comes on, but does not shut off.	1) Photosensor not properly calibrated	1) Recalibrate photosensor.
	2) Defective photosensor	2) Replace photosensor.
	3) Defective integrator	3) Have PC boards checked.

TROUBLE	PROBABLE CAUSE	REMEDY
Exposure times getting very long.	1) Lamp near end of life	1) Replace lamp with correct lamp.
	2) Dirty reflecter	2) Clean reflector.
	3) Low line voltage	3) Check line voltage as before.
Lamp does not light, and the integrator reads "AOP". The vacuum does not go higher than 15" of mercury.	1) Vacuum blanket not adjusted properly (blanket has taken a set)	1) Readjust blanket following procedure in manual.
	2) Leak in vacuum blanket (holes or cuts)	2) Replace blanket.
	3) Defective vacuum sensor on digital PC boards	3) Replace digital board.
Only slight vacuum is registered on gauge.	1) Vacuum valve open	1) Make sure vacuum regulator knob is fully closed. (clockwise)
	2) Blanket not properly adjusted	2) Readjust blanket following procedure in manual.
	3) Bad seal on rubber blanket	3) Wet surface of bead and check for leaks while vacuum draws down. If seal has leaks, replace blanket.
	4) Leak in vacuum hose	4) Check all hose fitting for leaks. Replace if necessary.
	5) Defective pump	5) Check vacuum at pump. Replace if pump cannot pull vacuum.
Vacuum gauge reads full vacuum, but frame lacks contact pressure.	1) Clogged vacuum hose line .	1) Place finger over hole in blanket while vacuum pump runs. If vacuum pull is weak, clean or replace hoses.
	2) Plugged air filter	2) Change filter.
Vacuum pump does not run.	1) Defective switch	1) Check continuity of vacuum switch. Replace if defective.
	2) Defective or blown fuse(s)	2) Replace fuse(s) with correct value.
	3) Defective pump	3) Replace pump.

520 Lafayette Avenue, Sparta NJ 07871 973-383-8700

3 YEAR LIMITED WARRANTY

The following is made in lieu of all warranties expressed or implied.

Amergraph Corporation warranties its products, with the exception of presses, vacuum blankets, lamps and consumable items, to be free of manufacturing defects for a period of three (3) years from date of manufacture. Lamps and vacuum blankets are consumable items and their warranty is covered below. Amergraph Corporation shall replace or repair at its discretion, any part exclusive of labor to diagnose, remove and install, which upon examination by Amergraph, is determined to be defective in material or workmanship, providing such claimed defective material is, upon written authorization, returned to Amergraph Corporation, freight pre-paid. All warranty items are F.O.B. factory.

All electrical, commercial supply parts and items not manufactured by Amergraph shall carry the warranty of the original manufacturer and no more, but under no circumstances to exceed the "limited warranty."

The warranty shall be void if an original Amergraph lamp is not used, and other parts replaced or substituted, not of Amergraph manufacture or supplied by Amergraph.

This warranty shall be of no force or effect if alterations or modifications of any nature are made by the purchaser without Amergraph's full knowledge and written consent.

Replacement parts shall be warrantied for a period of 90 days from the date of purchase.

If there is a defect in glass used in an Amergraph product, it must be reported within twenty-four (24) hours after receipt of the equipment. Amergraph assumes no responsibility for a claimed defect on the glass other than within the time period specified.

Warranty labor shall only apply if the machine, assembly or part is returned to the factory freight pre-paid and insured.

Amergraph assumes no responsibility for losses of material, labor, production time, any injury, loss or damage, direct or consequential resulting from the operation of, or use, or the inability to use the product other than specifically covered in this warranty.

Damage or breakage through misuse or while in-transit is not covered by this warranty.

All claims against the warranty shall be the final determination of the Amergraph Corporation.

LAMPS

Lamps UV output decreases with time of usage and can fail at any time. On the average, lamps should ignite several thousand times or have a service life of months. Because the UV output degrades with time, a lit lamp may not be a good lamp. A blackened lamp housing clearly indicates a post-service life condition, and signals time for replacement. Abnormally long exposure times also indicate a post-service life condition.

Amergraph lamps that fail in the first 90 days from the date of manufacture should be returned to Amergraph, postage prepaid and insured, accompanied by an explanation of the type of failure. Amergraph will inspect the lamp and if the failure was, in Amergraph's opinion, due to faulty material or workmanship, a partial or full replacement will be provided.

VACUUM BLANKETS

Blankets become less flexible and resilient and require replacement over time. Proper precautionary measures should be taken to ensure the life of the vacuum blanket.

Amergraph vacuum blankets that appear to have defects in material or workmanship, within the first 90 days from the date of manufacture, should be returned to Amergraph freight prepaid and insured, accompanied by an explanation of the type of defect. Amergraph will inspect the vacuum blanket and if the defect was, in Amergraph's opinion, due to faulty material or workmanship, it will be repaired or a partial or full replacement will be provided.