MARSH®

UNICORN®

Technical Manual

Videojet Technologies Inc., Wood Dale, IL 60191 U.S.A.; Tel: (618) 234-1122; Tel: (800) 527-6275; Fax: (618) 234-1529.

©Videojet Technologies Inc. 2002. All Rights Reserved. “Marsh” is a registered trademark of Videojet Technologies Inc. Printed in U.S.A.

P-3076

Table of Contents

Table of Contents . . . i

Introduction . . . 1

Specifications . . . 1

Maintenance . . . 2

Startup . . . 2
Shutdown . . . 2

Troubleshooting . . . 3

Servicing . . . 6

Preparing the Unicorn for Servicing . . . 6
Special Notes for Reassembling the Unicorn Printhead . . . 6
Standard Unicorn Assembly . . . 7
Printhead Assembly . . . 8
Controller Assembly . . . 9
Backflushing a Nozzle . . . 10
Backflushing a Valve . . . 11
Replacing the Nozzle Block . . . 12
Optional 7 mm, 15 mm, and 20 mm Nozzle Blocks . . . 13
Replacing a Valve . . . 13
Replacing the Regulator . . . 14
Replacing the Valve/Photocell Board . . . 15
Replacing the Display . . . 17
Replacing the Battery . . . 18
Replacing the Circuit Board . . . 19

Parts List . . . 20

Introduction . . . 20
Unicorn 100/240V with US Power Cord . . . 21
Unicorn 100/240V with International Power Cord . . . 21
Unicron 100/240V Arabic . . . 21
Unicorn 100/240V Chinese . . . 21
Unicorn Printhead Assembly . . . 23
Unicorn Controller Assembly . . . 25
Rebuilt Parts (Exchange Only) . . . 27
Consumables – Porous . . . 27
Consumables – Non-Porous . . . 27
Other Components . . . 27

Introduction

This Unicorn Technical Manual provides you with complete maintenance, troubleshooting and servicing information for the Marsh Unicorn Ink Jet Printer. It also contains a replacement parts list.

CAUTION: To avoid serious injury or damage to the equipment, perform procedures in this manual only if you are a qualified technician.

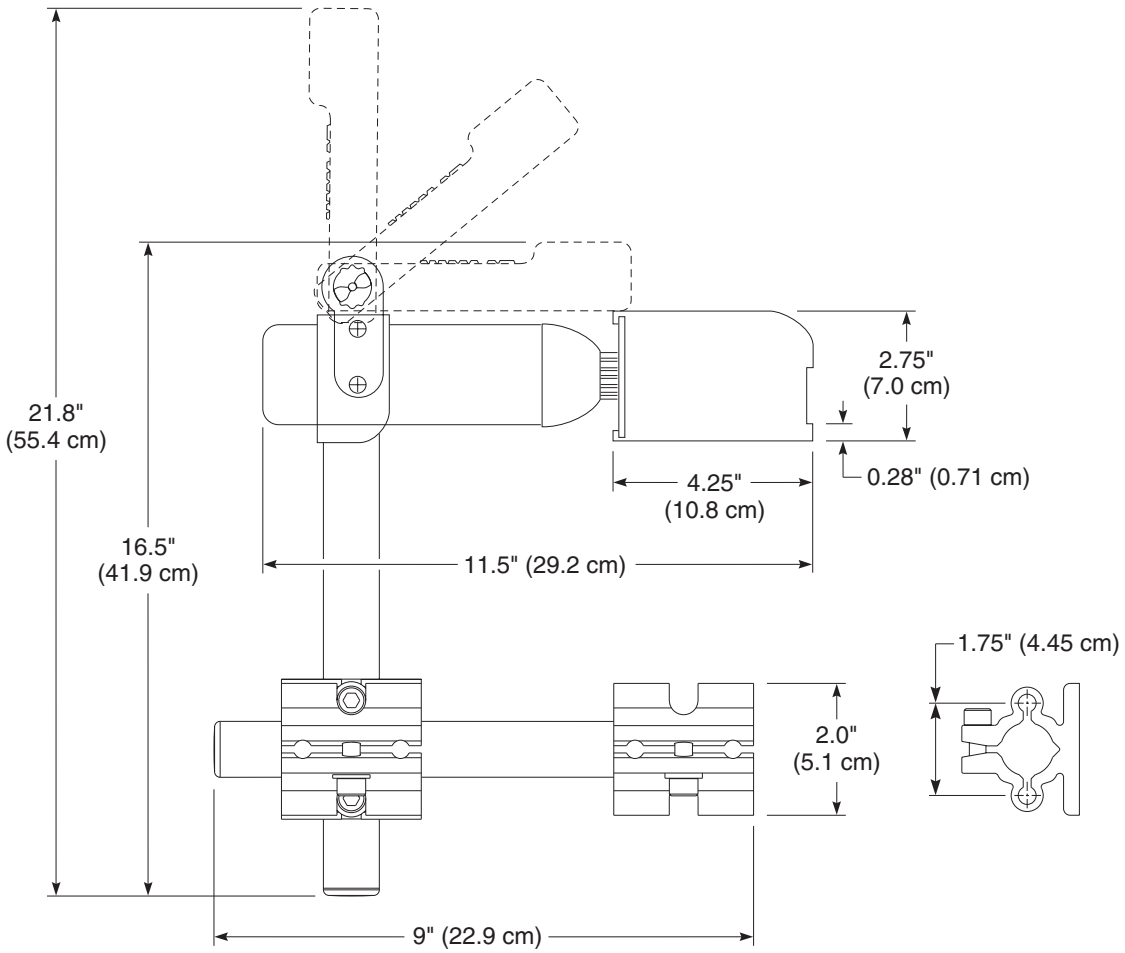
For more information or assistance contact your local distributor or Marsh Technical Support any time at (800) 851-3441.

The Unicorn will support porous or non-porous ink applications. To use non-porous ink, you will need to order a quart ink kit and an ADS Ink System. (See the parts list on page 20.)

CAUTION: Once porous or non-porous ink is introduced into the printhead, do not change the ink type. Doing so can damage printhead components and void your warranty.

Specifications

Figure A: Unicorn Dimensions



Maintenance

Startup

At beginning of each shift:

1) With the spray cap on the solvent bottle, spray the nozzles with solvent. Be sure you are using the correct type of solvent (porous or non-porous). In harsh environments, you may need to spray the nozzles more often than once per shift.
2) Purge the printhead.
3) Check the ink level in the bottle; install a new bottle if necessary. In harsh environments, or if print quality declines, replace the ink bottle with solvent and purge solvent through the unit.

Shutdown

CAUTION: Be sure you are using the correct type of solvent. Porous and non-porous inks and solvents cannot be used interchangeably in a printhead.

Porous

If you are shutting down a porous unit for less than two weeks, simply turn off the controller. You do not need to purge the printheads with ink or solvent. Also, do not remove any ink that may have caked on the nozzle block. This will keep contaminants from entering the nozzles. When you restart the unit, follow the daily maintenance procedures on page 2.

If you are shutting down a porous ink system for more than two weeks purge the printheads with porous solvent. Leave the solvent in the ink lines until you restart the unit.

Non-porous

If you are shutting down a non-porous unit for more than three days, the printhead should be purged with non-porous solvent to prevent nozzle clogs. Leave the solvent in the ink lines until you restart the unit. For shutdown periods of less than three days, perform routine maintenance as described on page 2.

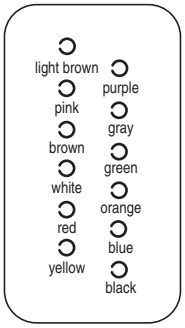
Troubleshooting

Problem	Possible Cause	Solution
Row of keys fail to work.	Chips loose on the circuit board.	Make sure the RAM chip (U3) and the software (U2) are properly installed, and that the Zilog chip is not loose.
	Printed circuit board is defective.	Replace the printed circuit board. (See page 19.)
The green light is on, but the unit will not print.	Wires loose from the barrel terminals.	Reseat any loose wires in the barrel terminals. (See Figure B.)
The unit prints intermittently.	Wires disconnected from the barrel terminals.	Reseat any loose wires in the barrel terminals. (See Figure B.)
The print light is constantly orange.	Printhead photocell board defective.	Replace the printhead photocell board. (See page 15.)
The machine resets itself.	Valve shorted out.	Replace the defective valve. (See page 13.)
The unit will purge but not print.	Wires loose from the barrel terminals.	Reseat any loose wires in the barrel terminals. (See Figure B.)
A dot or dots missing.	Unit ran out of ink.	Replace the ink bottle.
	Nozzle clogged.	1. Spray the nozzle block with solvent. 2. Backflush the nozzle. (See page 10.) 3. Replace nozzle block. (See page 12.)
	Tube and jewel assembly in the nozzle block cracked,	Replace the nozzle block. (See page 12.)
	Worn valve.	Increase dot size to temporarily adjust for worn valve.
	Valve became loose from the valve board.	Reseat the valve on the valve board.
	Valve is defective.	Replace the valve. (See page 13.)
	Ink line became loose.	Reattach the ink line.
	Wires loose from the barrel terminals.	Reseat the wires in the barrel terminals. (See Figure B.)
One or more valves fail to work, resulting in missing dots	Cable from the controller to the printhead touched the valve board causing a short.	Secure the cable from the controller to the printhead with a tie wrap.
	Valve is defective.	Replace the valve. (See page 13.)
	Valve/photocell board is defective.	Replace the valve/photocell board. (See page 15.)

Problem	Possible Cause	Solution
The unit comes on and the print key is orange.	Unit locked up.	1. Unplug the power supply from the unit, then plug it back in. 2. Zap the controller by keying in Z A P Shift A. ***CAUTION: Zapping the controller will result in the loss of all print parameter settings (dot size, character width, print delay). These will need to be reset after the ZAP routine.*** ***Note: Always perform the ZAP routine after replacing software.***
The dots are splattering on the print sample.	Printhead too far away from the product.	Position the printhead as close as possible to the product without rubbing against it and no further than 3/8" (9.5 mm) away. ***Note: Avoid contact between the printhead and the product as this may cause print quality to suffer.***
No power.	Unit is not properly plugged in.	Plug unit into an appropriate power source.
Ink is leaking from the regulator.	Regulator is cracked or defective.	Replace the regulator. (See page 14.)
The bottle will not engage when replacing the bottle.	Regulator is not properly seated in the saddle of the printhead base.	Reseat the regulator in the printhead base.
	Regulator is cracked.	Replace the regulator. (See page 14.)
Display screen is blank or garbled.	Display is defective.	Replace the display. (See page 17.)
Prints unrecognizable characters when displayed correctly.	Power supply has recycled and the Unicorn has defaulted to the Hebrew language.	1. Type in the correct language code for the language you are using. (If English is the language being used type ENGL.) 2. Zap the controller by keying in ZAP Shift A. ***CAUTION: Zapping the controller will result in the loss of all print parameter settings (dot size, character width, print delay). These will need to be reset after the ZAP routine.***

Problem	Possible Cause	Solution
Message prints backwards or is too long.	One of the two photocells are dirty.	1. Clean the photocells. 2. If you have software version 4.0 or above, you can manually set the conveyor direction, eliminating the need for two photocells. See your Owner's Manual for instructions on setting the conveyor direction.
	Photocell is defective.	Replace the photocell board. (See page 15.)
Keyboard is not responding.	Contacts on the PC board are dirty.	Clean the contacts.
	Contacts on the back of the keypad are dirty.	Clean the contacts.

Figure B: Barrel Terminal Wiring Diagram



Servicing

Preparing the Unicorn for Servicing

Before beginning work on the Unicorn, follow these steps. Failure to follow these steps may result in serious injury or damage to the unit.

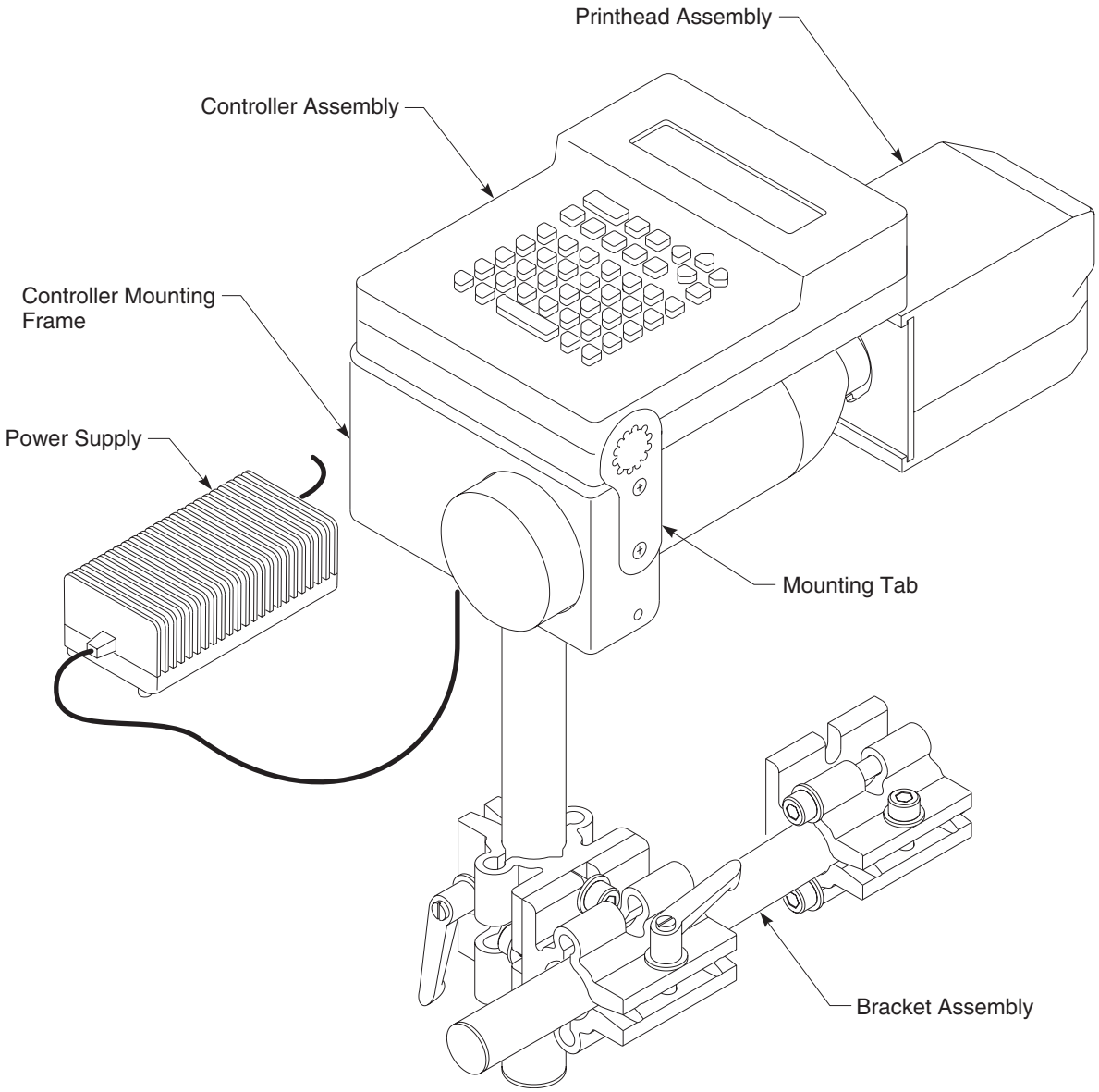
To begin servicing the Unicorn:

1) Remove the ink bottle.
2) Cover the front of the printhead with an absorbent cloth and purge the printhead to remove any ink from the system.
3) Remove the Unicorn and power supply to a well-lit, static-free workbench.

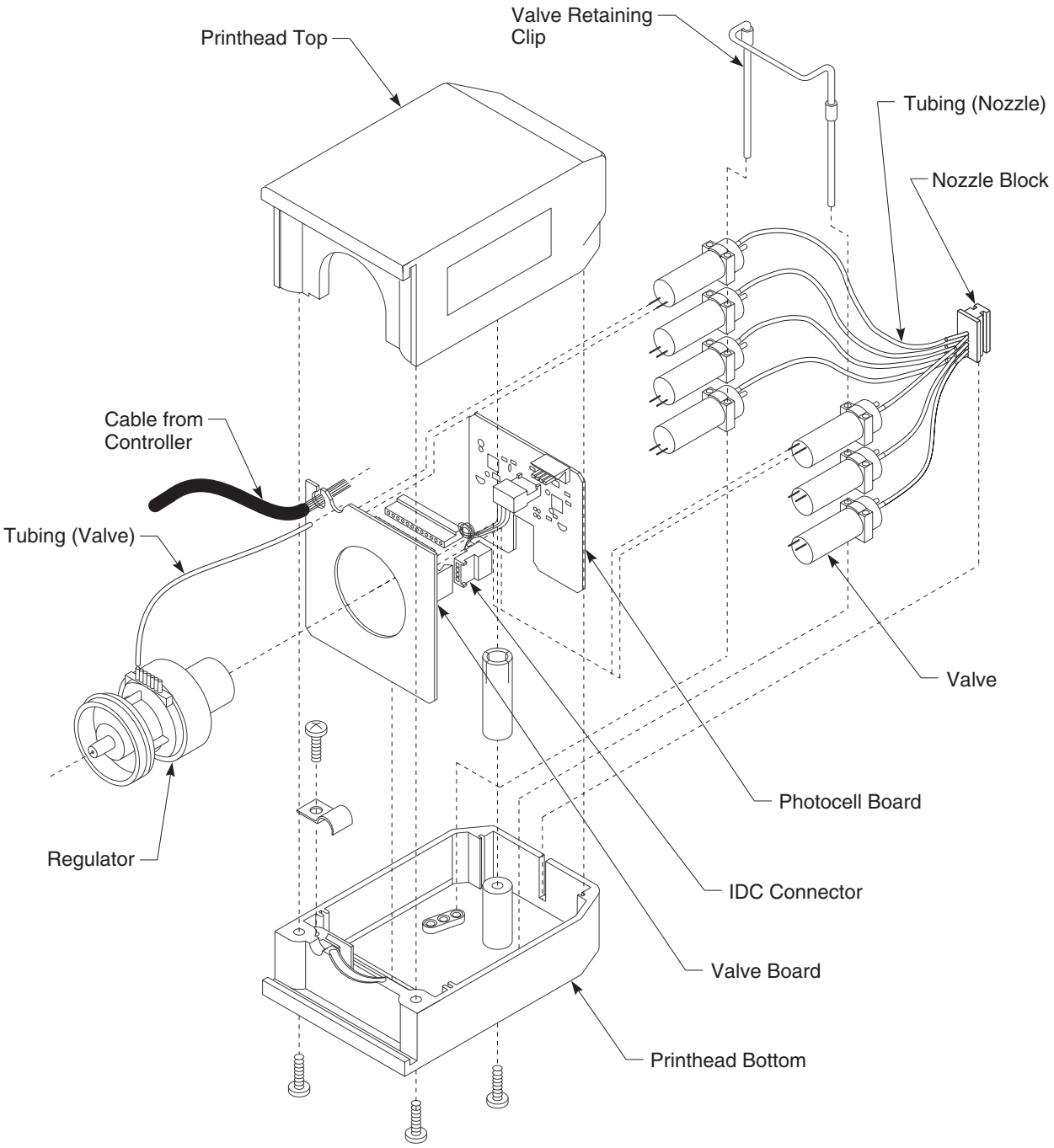
Special Notes for Reassembling the Unicorn Printhead

Make sure the regulator is properly seated in the saddle of the printhead base to allow proper connection of ink bottles. Also ensure that the valve retaining clip offset is facing the valve board to prevent valves unseating from the valve board. Finally, make sure that valves are properly oriented and seated in the valve board, and that all wiring and tubing will not be kinked when the printhead cover is replaced.

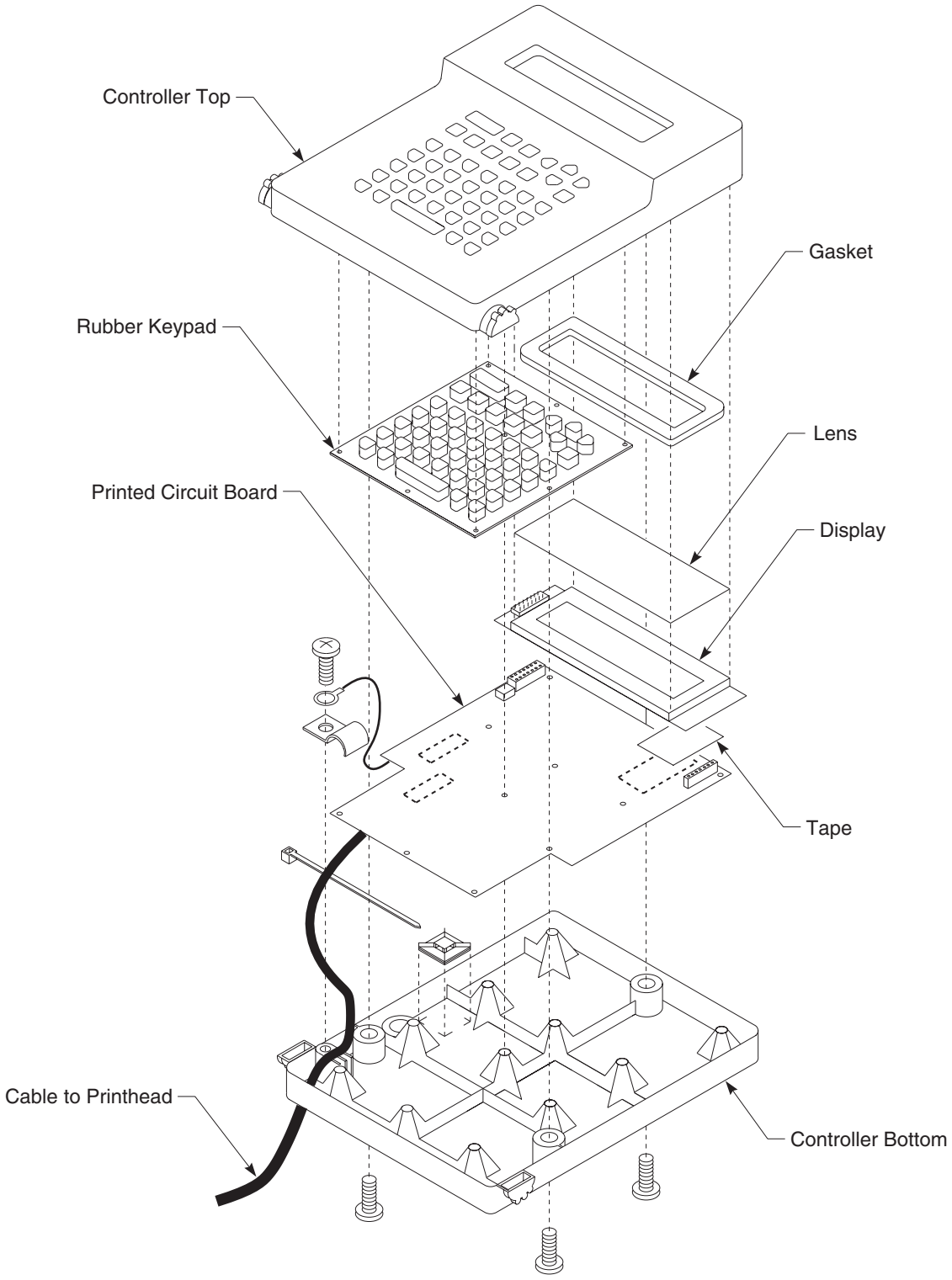
Standard Unicorn Assembly



Printhead Assembly



Controller Assembly



Backflushing a Nozzle

1) Prepare the Unicorn for servicing. (See page 6.)
2) Remove the printhead cover by removing the three screws from the bottom of the printhead. With the unit flat on the workbench, place your thumb on the regulator and press down lightly as you lift up the top half of the printhead.

   Note: Hold the components in place with your finger if necessary. Make sure the valve/photocell board assembly remains in the printhead base. Also, avoid unnecessary flexing of the cable between the two boards to prevent damaging the cable connections.

3) From a print sample, locate the nozzle that needs backflushing.
4) Slide out the photocell board.
5) Disconnect the tubing connected between the valve and the nozzle from the valve end only; allow it to hang free.

   CAUTION: Remaining ink pressure may cause ink to shoot out of the tubing.

6) Place a cloth at the open end of the tubing.
7) Install the cleaner assembly nozzle (from the service kit) on a bottle of solvent.
8) Press the solvent bottle against the clogged nozzle and spray solvent through it for several seconds.
9) Reconnect the tubing to the valve.
10) Slide the photocell board back into place, photocells facing out.
11) Replace printhead cover, remount, and purge for several minutes.

Backflushing a Valve

1) Prepare the Unicorn for servicing. (See page 6.)
2) Remove the printhead cover by removing the three screws from the bottom of the printhead. With the unit flat on the workbench, place your thumb on the regulator and press down lightly as you lift up the top half of the printhead.

   Note: Hold the components in place with your finger if necessary. Make sure the valve/photocell board assembly remains in the printhead base. Also, avoid unnecessary flexing of the cable between the two boards to prevent damaging the cable connections.

3) Slide out the photocell board.
4) Locate the valve that needs backflushing. (Valves requiring backflushing can be identified by a print sample or by drooling or leaking ink.)
5) Disconnect the tubing between the regulator and the valve from the regulator.

   CAUTION: Remaining ink pressure may cause ink to shoot out of the tubing.

6) Remove the tubing between the valve and the nozzle from the valve.
7) Install the cleaner assembly nozzle (from the service kit) on a bottle of solvent.
8) Install tubing (from the service kit) on the cleaner assembly nozzle.
9) Connect the tubing from the cleaner assembly nozzle to the outlet (center) port of the valve.
10) Place an absorbent cloth around the open end of the other tubing connected to the valve.
11) Plug in the power supply and purge. (See the Owner's Manual for how to purge.)

    Note: If the Unicorn is not purging, you will not be able to run solvent through the valve.

12) Spray solvent through the valve for several seconds.
13) Disconnect the solvent bottle from the valve port.
14) Reconnect the tubing from the inlet (off-center) port of the valve to the regulator; reconnect the tubing from the nozzle to the outlet (center) port of the valve.
15) Slide the photocell board back into place, photocells facing out.
16) Replace the printhead cover, remount, and purge for several minutes.

Replacing the Nozzle Block

Removing the Nozzle Block

1) Prepare your Unicorn for servicing. (See page 6.)
2) Remove the printhead cover by removing the three screws from the bottom of the printhead. With the unit flat on the workbench, place your thumb on the regulator and press down lightly as you lift up the top half of the printhead.

   Note: Hold the components in place with your finger if necessary. Make sure the valve/photocell board assembly remains in the printhead base. Also, avoid unnecessary flexing of the cable between the two boards to prevent damaging the cable connections.

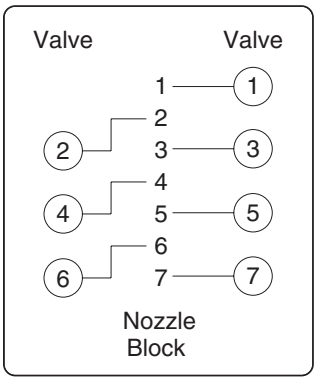
3) Carefully lift the controller mounting frame off the bottom half of the printhead.
4) Carefully slide up the photocell board.
5) Slide out the nozzle block.

Installing the New Nozzle Block

1) Pull off the ink tubes one at a time. As you disconnect an ink tube from the old nozzle block, connect it to the corresponding nozzle of the replacement nozzle block. (See Figure C.)
2) Slide the newly connected nozzle block into its slot in the printhead.
3) Replace the photocell board and printhead cover. Be careful not to pinch any of the wires in the printhead.
4) Install an ink bottle, plug the system in, and purge the Unicorn with ink to remove any air introduced into the system.

Your unit is ready to return to normal operation.

Figure C: Valve Board to Nozzle Block Diagram



Front View

Optional 7 mm, 15 mm, and 20 mm Nozzle Blocks

An optional 7 mm, 15 mm and 20 mm nozzle block is available for the Unicorn printhead. If you wish to install a 7 mm, 15 mm or 20 mm nozzle block, see the Parts List section of this manual for ordering information and follow the procedure for replacing the nozzle block.

Note: The 15 mm and 20 mm nozzle blocks require a photocell board (PN 15876) with a revision level of L or later. If your Unicorn does not have a photocell board with revision level L or later, you must order a new photocell board with the 15 mm or 20 mm nozzle block.

Replacing a Valve

Removing the Valve

1) Prepare your Unicornn for servicing. (See page 6.)
2) Remove the printhead cover by removing the three screws from the bottom of the printhead. With the unit flat on the workbench, place your thumb on the regulator and press down lightly as you lift up the top half of the printhead.

   Note: Hold the components in place with your finger if necessary. Make sure the valve/photocell board assembly remains in the printhead base. Also, avoid unnecessary flexing of the cable between the two boards to prevent damaging the cable connections.

3) Slide out the photocell board.
4) Locate the defective valve. (If a valve has shorted, it will usually be locked open with ink leaking. A good valve has a resistance reading of approximately 16 ohms.)
5) Remove the valve retaining clip.
6) If necessary move aside functioning valves to get to the defective valve.
7) Disconnect both pieces of tubing from the valve.

   CAUTION: Remaining ink pressure may cause ink to shoot out of the tubing.

8) Disconnect the old valve from the valve board.

Installing the New Valve

1) Connect the tubing from the ink manifold to the intake (off-center) port on the new valve.
2) Connect the tubing from the nozzle to the outlet (center) port on the new valve.
3) Plug the new valve into the valve board.
4) Replace the valve retaining clip.
5) Slide the photocell board back into place, photocells facing out.
6) Replace the printhead cover, remount, and purge for several minutes.

Replacing the Regulator

Removing the Regulator

1) Prepare your Unicorn for servicing. (See page 6.)
2) Remove the printhead cover by removing the three screws from the bottom of the printhead. With the unit flat on the workbench, place your thumb on the regulator and press down lightly as you lift up the top half of the printhead.

   Note: Hold the components in place with your finger if necessary. Make sure the valve/photocell board assembly remains in the printhead base. Avoid unnecessary flexing of the cable between the two boards to prevent damaging the cable connections.

3) Carefully lift the controller mounting frame off the bottom half of the printhead.
4) Carefully pull the tubing off the regulator ports.

   Note: Over time the tubing end may stretch. You must trim the tubing to ensure a snug fit on the new regulator ports.

5) Remove the regulator through the valve board.

Installing the New Regulator

Note: The new regulator has been factory adjusted. Any additional adjustment will void your warranty and cause operating difficulties.

1) Position the new regulator through the opening in the valve board.
2) Using pliers, carefully slide the tubing onto the regulator ports, one at a time.
3) Replace the printhead cover. Be careful not to pinch any of the wires in the printhead.
4) Secure the printhead halves with the three screws.
5) Install an ink bottle, plug the system in, and purge the Unicorn with ink to remove any air introduced into the system.

Your unit is ready to return to normal operation.

Replacing the Valve/Photocell Board

Removing the Valve/Photocell Board

1) Prepare your Unicorn for servicing. (See page 6.)
2) Remove the printhead cover by removing the three screws from the bottom of the printhead. With the unit flat on the workbench, place your thumb on the regulator and press down lightly as you lift up the top half of the printhead.

   Note: Hold the components in place with your finger if necessary. Make sure the valve/photocell board assembly remains in the printhead base. Also, avoid unnecessary flexing of the cable between the two boards to prevent damaging the cable connections.

3) Carefully lift the controller mounting frame off the bottom half of the printhead.
4) Carefully pull the tubing off the regulator ports.

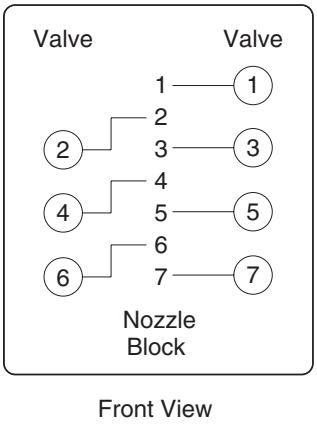
   Note: Over time the tubing end may stretch. You must trim the tubing to ensure a snug fit on the new regulator ports or you may need to replace the tubing.

5) Pull the tubing (all of it) through the opening in the valve board.
6) Disconnect the IDC connector from the valve board.
7) Remove the regulator.
8) Slide out the nozzle block; leave the valves connected to the nozzle block.
9) Slide out the valve/photocell board assembly.
10) Remove the valve retaining clip.
11) Disconnect the valves from the old valve board taking care not to bend or break valve leads.

Installing the New Valve/Photocell Board

1) Plug the valves in on the new valve board. (See Figure D.)
2) Carefully slide in the new valve/photocell board assembly.
3) Slide the nozzle block into position.
4) Slide in the valve retaining clip and seat the valves.
5) Reposition the regulator.
6) Plug in the IDC connector.
7) Pull the tubing back through the opening in the valve board.
8) Reconnect the tubing to the regulator.
9) Replace the printhead cover, remount, and purge for several minutes.

Figure D: Valve Board to Nozzle Block Diagram



Front View

Replacing the Display

Removing the Display

1) Prepare your Unicorn for servicing. (See page 6.)
2) Remove the controller from the controller mounting frame.
3) Remove the three screws from the controller bottom to remove the controller top.
4) Remove the tape that holds the display in place.
5) Disconnect the display from the connector on the printed circuit board.

Installing the New Display

1) Plug the new display connector into the printed circuit board.
2) Secure the display in place with tape.
3) Reconnect the halves of the controller.
4) Remount the controller to its mounting frame.
5) If necessary, adjust the intensity of the display screen by adjusting the potentiometer on the back side of the circuit board.

Replacing the Battery

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

VORSICHT! Explosionsgefahr bei unsachgemäßem Austausch der Batterie. Ersatz nur durch denselben oder einen vom Hersteller empfohlenen gleichwertigen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

Removing the Battery

1) Prepare your Unicorn for servicing. (See page 6.)
2) Remove the controller from the controller mounting frame by removing the two screws in the mounting tabs.
3) Remove the three screws from the controller bottom to remove the controller bottom.
4) Using a small screw driver, carefully remove the battery.

Installing the New Battery

1) Install the new battery. Make sure to line up the mark on the battery with the notch on the chip holder.
2) Reinstall the bottom cover, and secure with three screws.
3) Reinstall the controller onto the mounting frame.
4) Reinstall the mounting frame on the conveyor bracketry.
5) Plug the power cable into the controller.
6) Plug in the power supply.
7) Reinstall the ink bottle.

Replacing the Circuit Board

Removing the Circuit Board

1) Prepare your Unicorn for servicing. (See page 6.)
2) Remove the controller from the controller mounting frame by removing the two screws in the mounting tabs.
3) Remove the three screws from the controller bottom to remove the controller top.

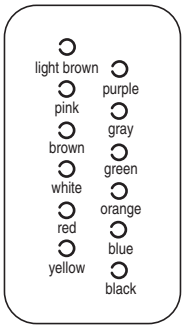
   Note: Avoid handling the new circuit board as much as possible; repeated handling could damage it.

4) Using pliers, carefully pull out the wires from the barrel terminals one at a time.
5) Remove the old circuit board.
6) Remove the display from the old circuit board, disconnecting the connector.
7) Remove the PROM if necessary, by carefully prying it out. Be careful not to bend the legs. Make note of the direction of the notch on the PROM. This notch must match up to the notch on the socket on the new circuit board.

Installing the New Circuit Board

1) Insert the PROM into its connector on the new circuit board. Match up the notch on the PROM with the notch on the socket to make sure the PROM is pointing in the proper direction.
2) Replace the display in the new circuit board.
3) Place the new circuit board in the top half of the controller.
4) Reconnect the barrel terminals. Next to each barrel terminal on the circuit board, is printed the color code of the wire that must be installed into that specific terminal. (See Figure E.)
5) If necessary, adjust the intensity of the display screen by adjusting the potentiometer on the back side of the circuit board.

Figure E: Barrel Terminal Wiring Diagram



Parts List

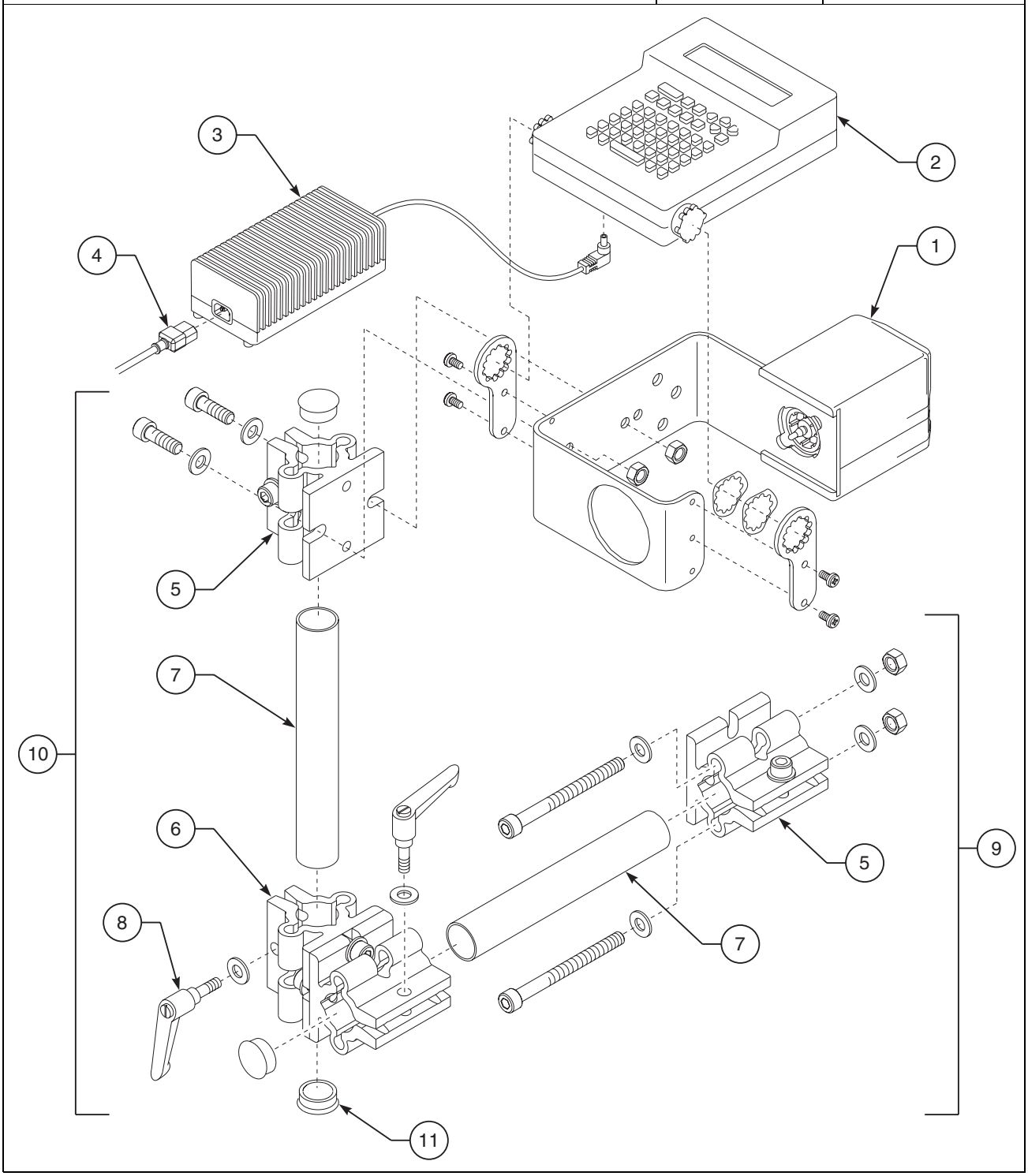
Introduction

Use the Parts List to obtain whatever you might need to expand, upgrade, repair, or maintain your system. The Parts List includes exploded illustrations of system components with a textual parts listing.

To place an order, provide your local distributor or Videojet Technologies Inc. with part numbers and quantities.

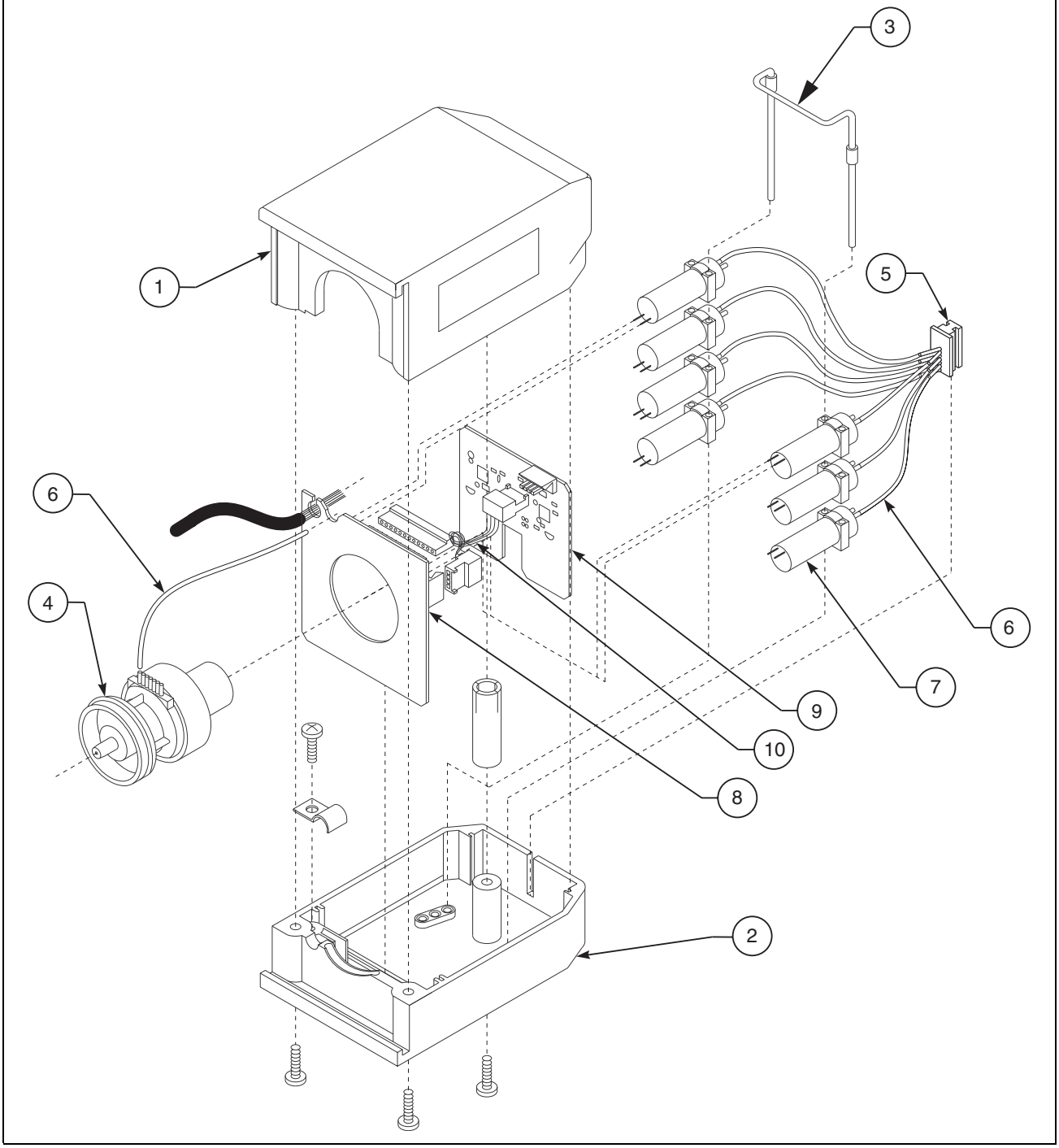
Description	Part Number	Quantity per Package
Unicorn 100/240V with US Power Cord	21493	1
Unicorn 100/240V with International Power Cord	21494	1
Unicron 100/240V Arabic	23457	1
Unicorn 100/240V Chinese	21941	1
1. Printhead Assembly	RP21507	1
2. Controller Assembly	RP15906	1
3. Power Supply, with US Power Cord Power Supply, with International Power Cord	RP16061 RP19706	1 1
4. Cord, Power US Cord, Power International	RPJ500-0043-001 RPJ500-0043-002	1 1
5. Clamp, Mounting	RP28800	1
6. Clamp, Cross	RP28801	1
7. Tubing, 1" x 9" (2.5 cm x 22.9 cm) Tubing, 1" x 15" (2.5 cm x 38.1 cm)	RP19161 RP19160	1 1
8. Ratchet Handle	RP19321	1
9. Bracket Assembly	RP21506	1
10. Kit, Bracket and Frame	21809	1
11. Plug, Pry-Out 7/8"	RP19757	1

Description	Part Number	Quantity per Package
Unicorn Standard Assembly		



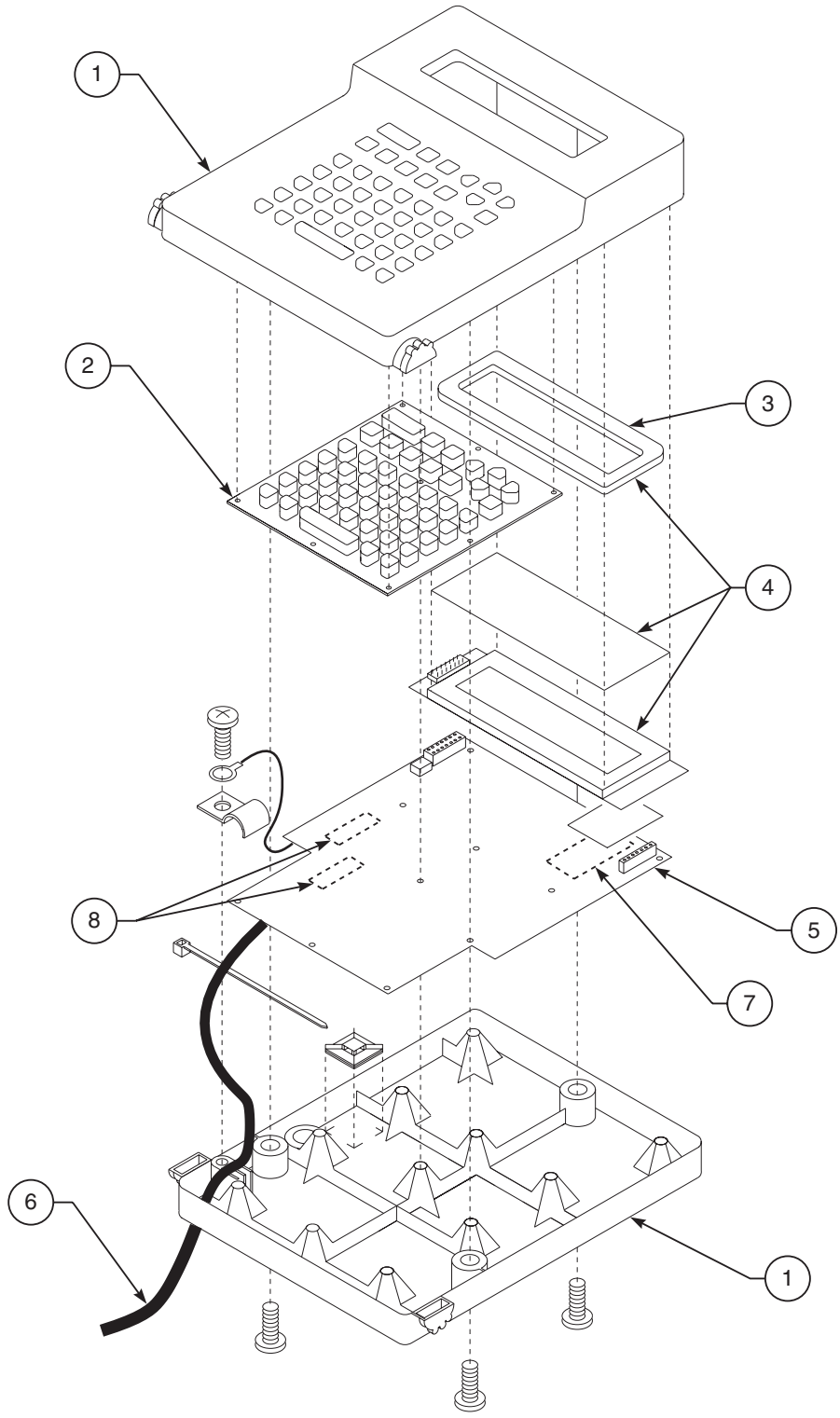
Description	Part Number	Quantity per Package
Unicorn Printhead Assembly		
1. Housing, Printhead Top	RP15875	1
2. Housing, Printhead Bottom	RP21849	1
3. Clip, Valve Retaining	RP16053	1
4. Regulator Assembly	RP15884	1
5. Nozzle Block, 10 mm Nozzle Block, 7 mm (Optional) Nozzle Block, 15 mm (Optional) Nozzle Block, 20 mm (Optional)	RP15894A18078 22836 18154 18217	1 1 1 1
6. Tubing, Valve 713, 14H, 16H	RPJ501-0030-004	1
7. Valve, 600LT 12V 600Hz Square Pin	RP27339	1
8. Board, Square Pin Valve	RP21501	1
9. Board, Photocell	RP15876	1
10. Cable, Valve/Photocell Board	RP17020	1

Description	Part Number	Quantity per Package
Unicorn Printhead Assembly		



Description	Part Number	Quantity per Package
Unicorn Controller Assembly		
1. Housing, Controller Top and Bottom	RP15907	1
2. Keypad, Rubber	RP15788	1
3. Gasket, LCD	RP15909	1
4. Display, LCD	RP16166	1
5. Board, PC with Software	RP15912	1
6. Cable, Controller to Printhead 1 ft. Cable, Controller to Printhead 20 ft.	RP15914 RP15989	1 1
7. RAM, 8K Time Keeping	RP25123	1
8. Chip, Driver	RP28477	1

Description	Part Number	Quantity per Package
Unicorn Controller Assembly		



Description	Part Number	Quantity per Package
Rebuilt Parts (Exchange Only)		
1. Printhead Assembly	15873-R	1
2. Controller Assembly	15906-R	1
Consumables – Porous		
1. Ink, Porous Cartridge Black	20943	12
2. Ink, Porous Cartridge Blue	20944	12
3. Ink, Porous Cartridge Red	20945	12
4. Ink, Porous Cartridge Green	20946	12
5. Solvent, Porous Cartridge	20947	12
Consumables – Non-Porous		
1. Ink, Non-porous Quart Black	20133	12
2. Ink, Non-porous Quart Red	IJ-NP-R-Q	12
3. Ink, Non-porous Quart Blue	20151	12
4. Ink, Non-porous Quart Green	IJ-NP-G-Q	12
5. Ink, Non-porous Quart Brown	20596	12
6. Ink, Non-porous Quart Violet	20597	12
7. Ink, Non-porous Quart Yellow	IJ-NP-Y-Q	12
8. Ink, Non-porous Quart Orange	IJ-NP-O-Q	12
9. Ink, Non-porous Quart Ultraviolet	IJ-NP-U-Q	12
10. Solvent, Non-porous Quart	IJ-NP-S-Q	12
Other Components		
1. Ink System, ADS	26278	1
2. Kit, Quart Ink/Solvent	28636	1
3. Adapter, Quart Ink/Solvent	RP28659	1
4. Cover, Controller Harsh Environment	16283	1
5. Cleaner, Nozzle	RP15943	1
6. Kit, Printhead Service	16040	1
7. Kit, Unicorn Hardware	RP21823	1
8. Frame Kit, Controller Mount	RP15773	1
9. Bracket Kit, Long Reach	15990	1
10. Bracket Kit, Remote	15916	1
11. Hanger, Power Supply	RP16568	1
12. Overlay, Keypad Greek	27392	1
13. Overlay, Keypad Arabic	27393	1
14. Overlay, Keypad Hebrew	27394	1
15. Manual, Unicorn Owners	P-3015	1

Description	Part Number	Quantity per Package
16. Manual, Unicorn Technical	P-3076	1
17. Card, Unicorn Quick Reference	P-3013	1
18. Card, Unicorn Quick Reference Cyrillic	28737C	1