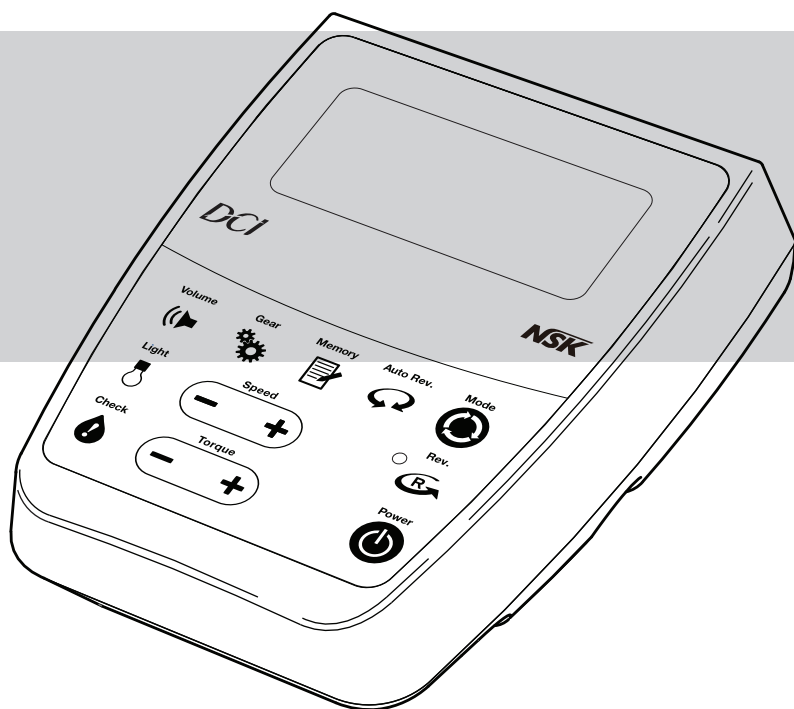


# NLZ E RETROFIT KIT

FOR A DCI EDGE DELIVERY SYSTEM

## Installation Instructions





# INTRODUCTION

## BEFORE YOU BEGIN

Verify that the product you have received is the correct one for mounting to your intended DCI Edge delivery unit.

Review the applicable section of this booklet and check to ensure that you have the correct tools needed to perform the installation as shown in the “Tools Needed” section.

Ensure that all parts are present as shown in the “Included Tools” and “Included Parts” sections.

## SYMBOLS USED IN THIS MANUAL

The following symbols may be used throughout this product manual:



**WARNING:** Failure to carefully follow the described procedure may result in damage to the equipment or the operator.



**CAUTION:** Failure to carefully follow the described procedure may result in damage to the equipment.



**NOTE:** Take note of additional important information. Not a warning or caution.



**ELECTRICAL HAZARD:** Risk of electrical shock present. Ensure that power is disconnected before attempting procedure.

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## REGULATORY INFORMATION

Regulatory information is delivered with DCI Edge dental equipment as mandated by agency requirements and can be found in the accompanying Instructions for Use for this device.

## RETROFIT TO SERIES 5 DELIVERY

### TOOLS NEEDED FOR INSTALLATION

#2 Philips head screw driver  
Small cutting pliers  
Sleeve pusher  
Allen wrench set, imperial

### INCLUDED TOOLS

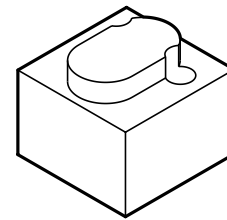
Drill guide (see right)  
3/16" drill bit  
9/16" to 1" Step Bit

### INCLUDED PARTS

Device tray w/ motor control box & terminal strip  
DCI / NSK Display Assembly  
Micromotor cord  
NLZ E micromotor  
1 ft 4 hole tubing with terminal and nut  
Holder bar with holders  
3 - 6-32 x 3/8" long machine screws

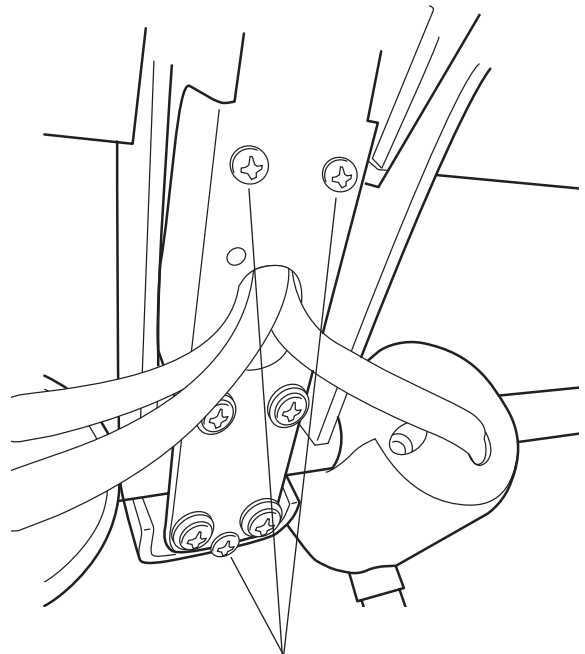
### PREPARATION

- 1** Read the entire section of this manual that pertains to the Series 5 delivery.
- 2** Identify the drill guide included in this kit (shown above right).
- 3** Remove the top cover to access the internals of the delivery head.
- 4** Remove the 3 screws securing the snout cover to the chassis on the underside of the snout. Remove the snout by lifting the nose and pulling forward (shown right).



Drill guide for steps 6&7 on p5

### Underside of snout on head chassis

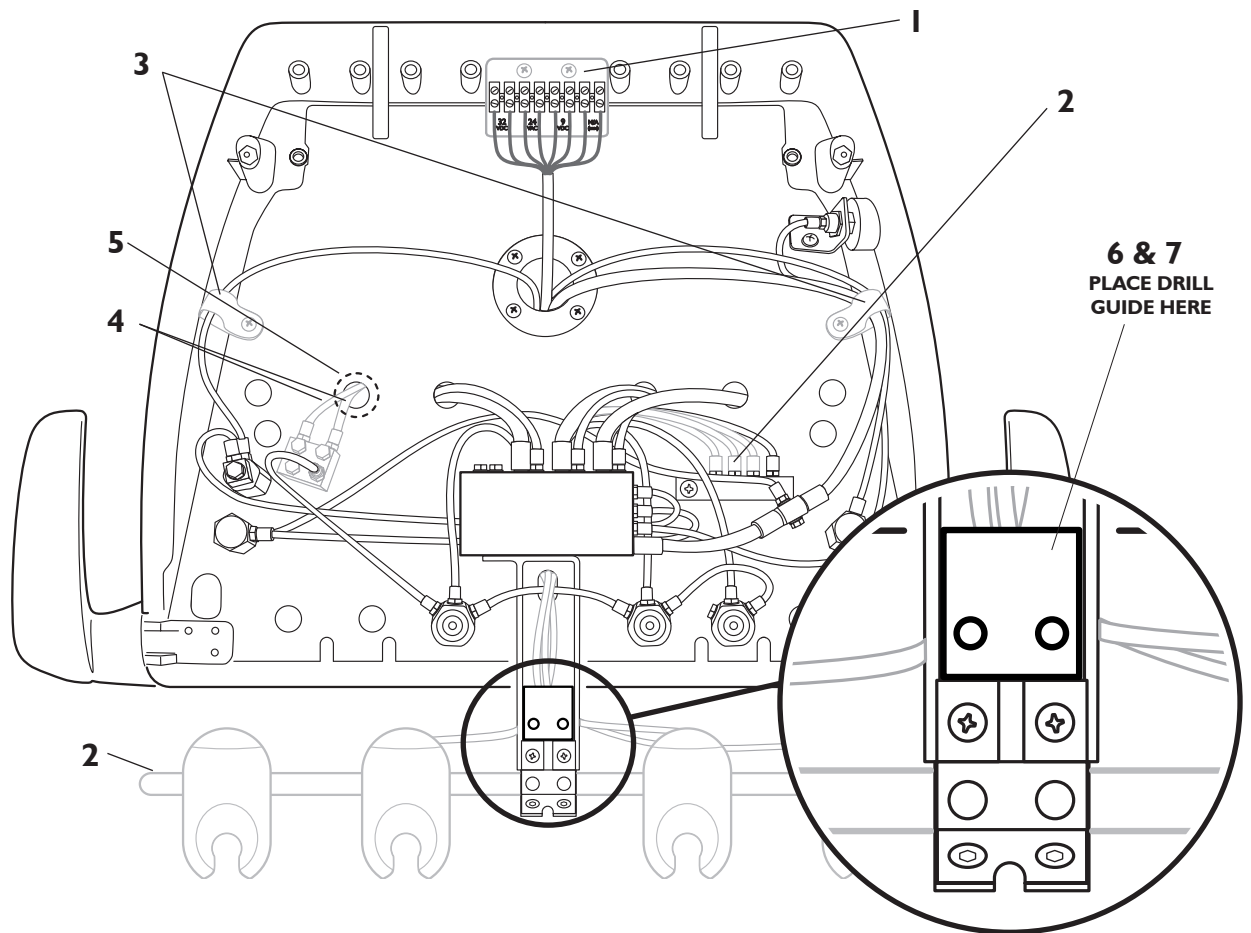


3 SCREWS TO REMOVE SNOOT COVER

## RETROFIT TO SERIES 5 DELIVERY

### REMOVE PARTS

- 1** Remove the bracket and terminal strip assembly from the back end of the delivery head and disconnect the 8-conductor wire harness from the terminal strip.
- 2** Disconnect the signal tubing from the autoblock and the distribution block and then pull the tubing through the slot in the snout.
- 3** Remove the 2 screws which attach the tubing managers.
- 4** Disconnect the syringe tubing from the syringe block and remove the syringe block.



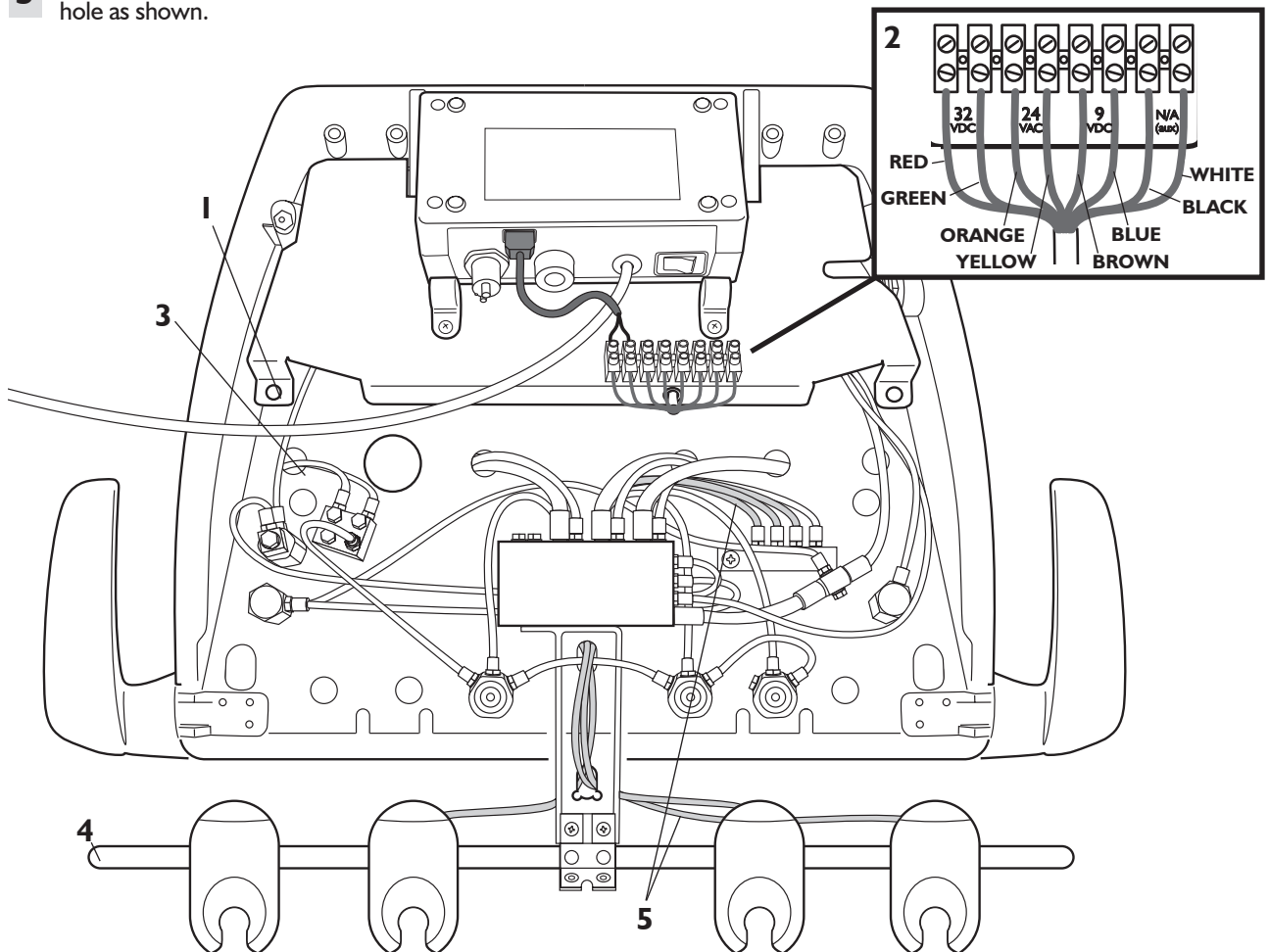
### DRILL HOLES

- 5** Using a step drill or 1" drill bit, enlarge the 2nd egress hole to a 1" diameter.
- 6** Insert the drill guide to the back side of the snout block as shown.
- 7** Using a 3/16" drill bit, add the two holes located on the drill guide. Ensure signal tubing is clear of the drill bit.

## RETROFIT TO SERIES 5 DELIVERY

### INSTALL

- 1** Place the device tray in position with the 2 tabs aligned with the holes in the chassis (right) and use a Philips head screw driver to attach the screws.
- 2** Re-attach the harness to the new terminal strip located on the device tray, following the wiring diagram.
- 3** Reinstall syringe block and reconnect syringe tubing through the 1st egress hole as shown.



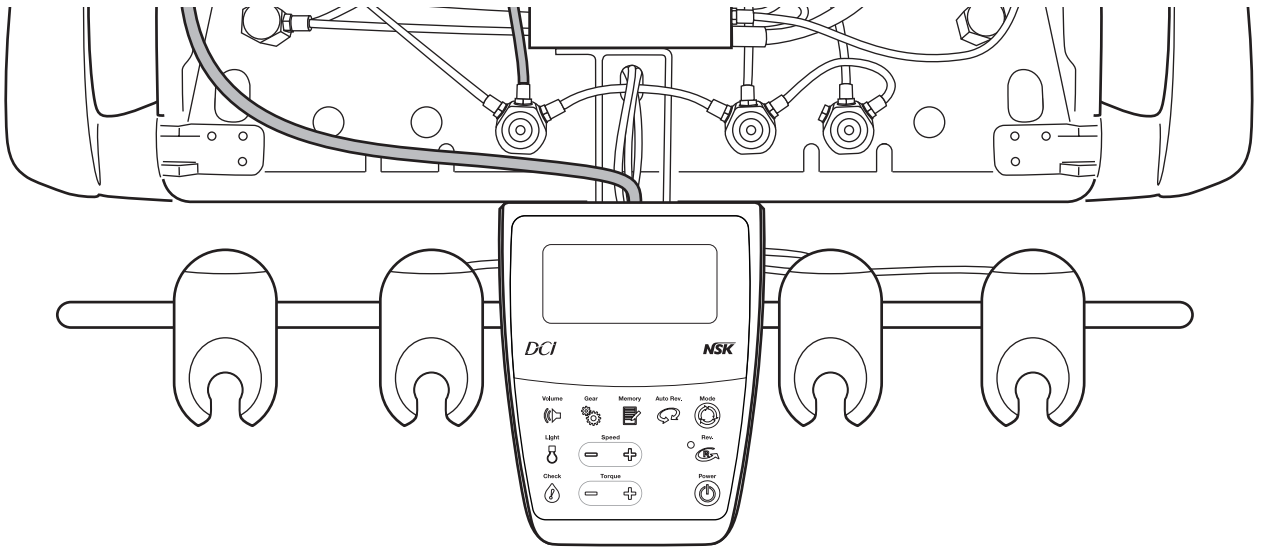
### BAR AND HOLDERS

- 4** Replace the new holder bar with the one included in this kit which is longer to accommodate more than 4 instrument holders. Do so by removing the 4 additional screws on the bottom of the snout as shown in the illustration on page 4.
- 5** Connect the signal tubings to the autoblock and distribution block.

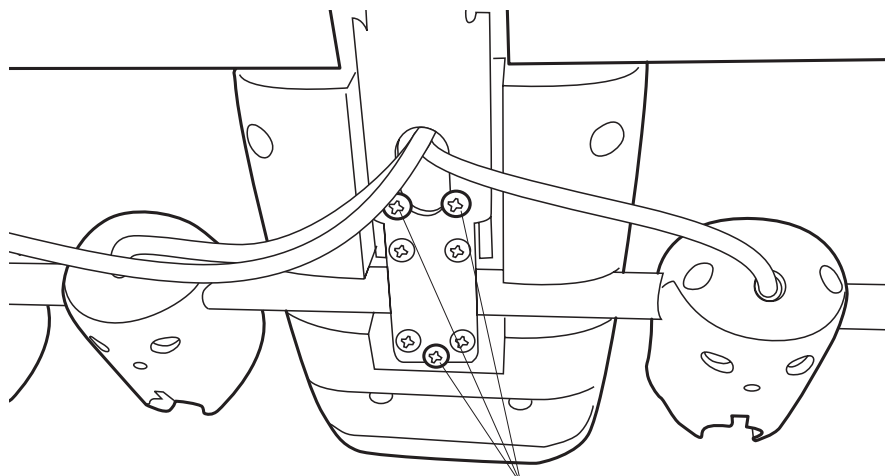
## RETROFIT TO SERIES 5 DELIVERY

### ATTACH DISPLAY

- I Assemble the NSK display to the snout using the 3 included #6 machine screws.



Underside of snout on head chassis

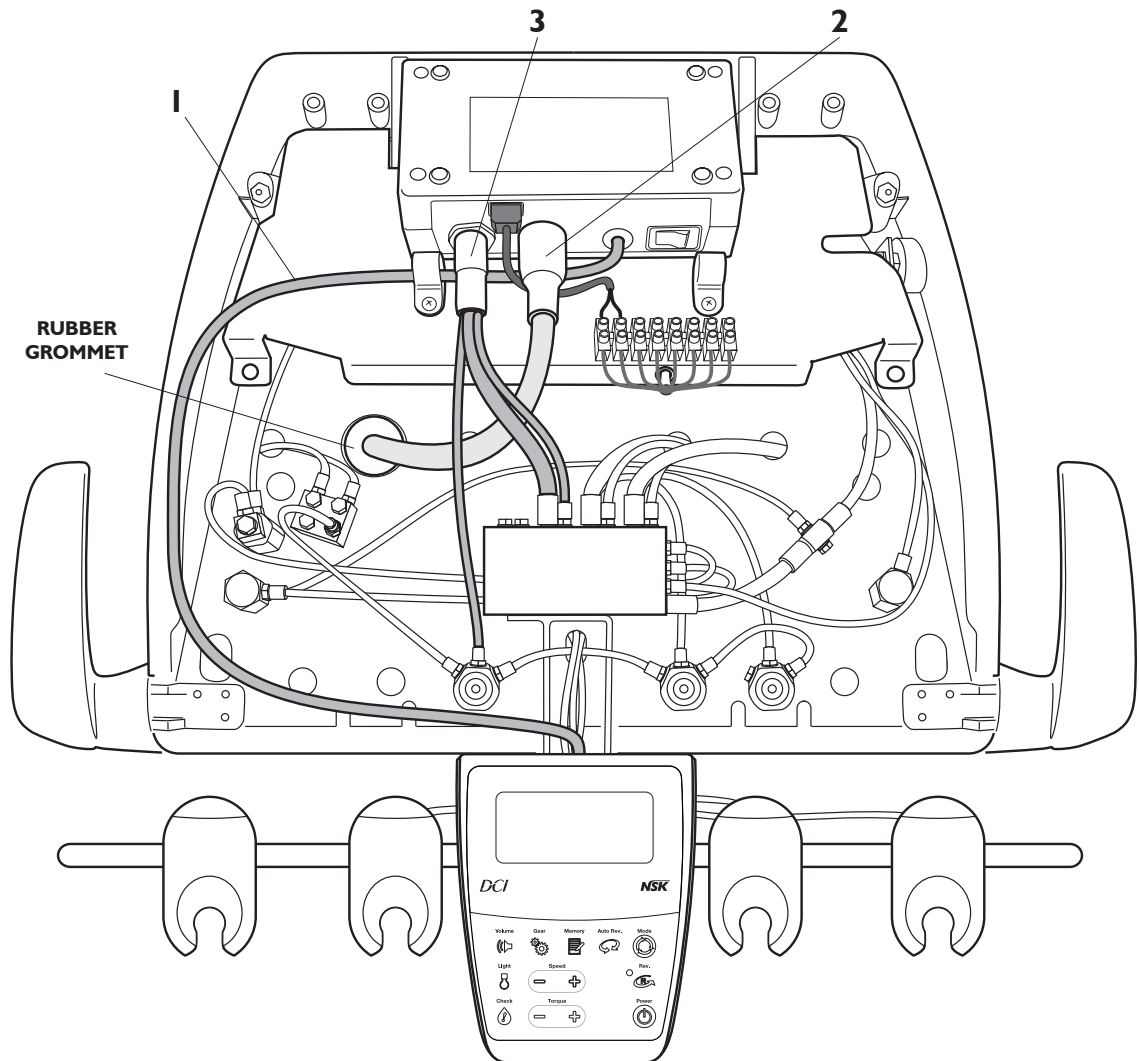


ATTACH USING 3 SCREWS

## RETROFIT TO SERIES 5 DELIVERY

### MAKE CONNECTIONS

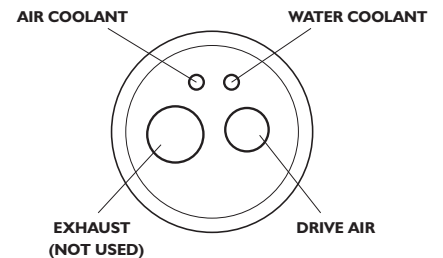
- 1** Route the display cable between the motor control box and the display as shown below.



- 2** Route the motor cord through the 1" hole that you have drilled. Use cutting pliers to create a split in the 1" rubber grommet. Add the grommet onto the cord and plug it in to fill the 1" hole. Connect the motor cord to the motor control box.

- 3** Connect the 4 hole tubing with terminal nut included in this kit to the motor control box and then make connections to the auto-block and the water combo valve as shown.

#### 4 HOLE TERMINAL DIAGRAM





## RETROFIT TO SERIES 4 DELIVERY

### TOOLS NEEDED FOR INSTALLATION

#2 Philips head screw driver  
Small cutting pliers  
Sleeve pusher  
Tubing stringer

### INCLUDED PARTS

Bracket w/ motor control box & display assembly  
Micromotor cord  
NLZ E micromotor  
2 ft 4 hole tubing with terminal and nut  
2 - 10-32 x 1/2" long machine screws  
2 - #10 lock washers  
2 - 10-32 nuts

### PREPARATION

- 1** Read the entire section of this manual that pertains to the Series 4 delivery.
  
- 2** Open the top cover of the delivery head by removing the screw on the underside of the head just left of the snout.

## RETROFIT TO SERIES 4 DELIVERY

### MOUNTING TO THE DELIVERY

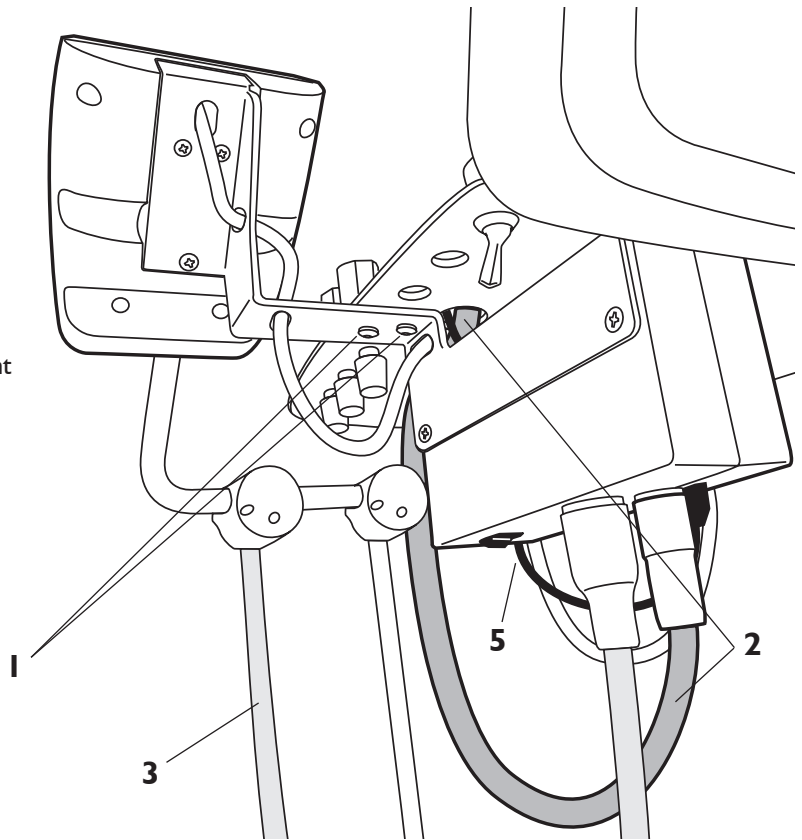
**1** Assemble the display and control box assembly to the underside of the control head using the included hardware:

- 2 - 10-32 x 1/2" screws
- 2 - #10 lock washers
- 2 - 10-32 nuts

Attach through the 2 small holes on the right side of the control head as shown (right).

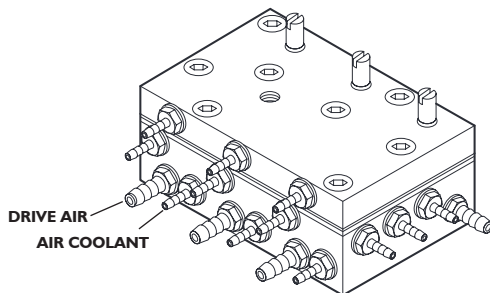
**2** Connect the 4 hole tubing with terminal and nut (included) to the motor control box and route through the large hole in the bottom of the chassis adjacent to the mounting holes.

**3** Attach the motor cord to the motor control box and hang the micromotor in the right-most holder.

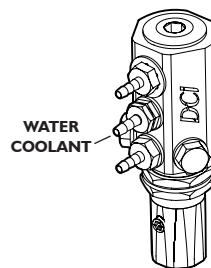


**4** Connect the 4 hole tubing to the auto-block and the water combo valve according to the below diagrams.

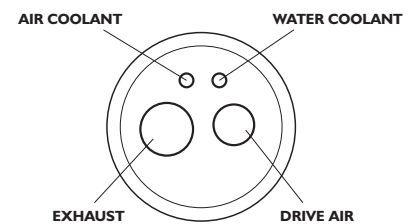
#### AUTO-BLOCK CONNECTIONS



#### WATER COMBO VALVE



#### 4 HOLE TERMINAL DIAGRAM



**5** Place the included NSK power supply in the j-box of the chair and route the power cable up through the chair and through the arms to the control head. Continue to route the cable through the large hole in the chassis and connect to the female connector on the bottom of the motor control box.

## RETROFIT TO 12 O'CLOCK MOBILE DELIVERY

### TOOLS NEEDED FOR INSTALLATION

#2 Philips head screw driver  
Small cutting pliers  
Sleeve pusher  
Tape  
Hammer

### INCLUDED TOOLS

23/64" drill bit and stop collar  
2 part epoxy

### INCLUDED PARTS

Bracket w/ motor control box & display assembly  
Micromotor cord  
NLZ E micromotor  
2 - #10-32 x 3/8" long machine screws  
2 - #10 lock washers  
2.5 ft 4 hole tubing with terminal and nut  
2 10-32 inserts

### PREPARATION

- 1 Read the entire section of this manual that pertains to the 12 o'clock mobile delivery.

### ADD INSERTS

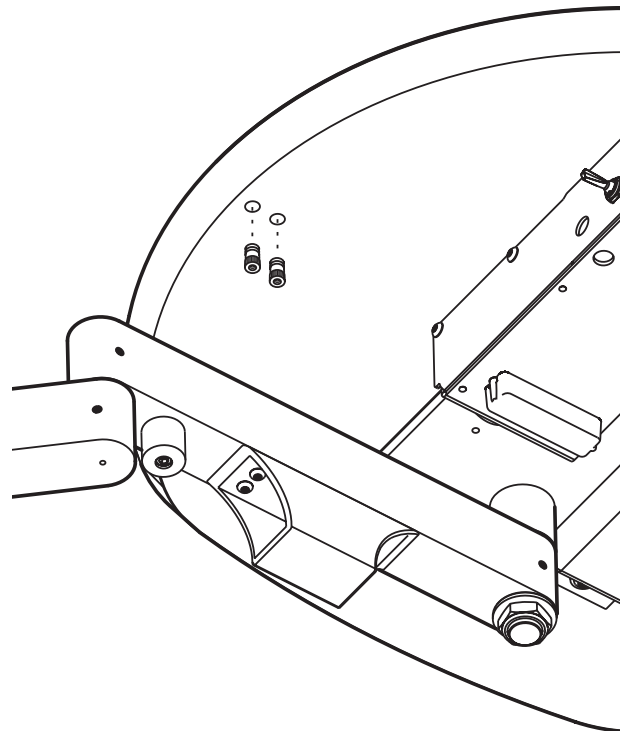
- 1 If the underside of the mobile work surface does not have inserts for mounting the NSK bracket, remove the 12 O'clock Delivery Template on page 17, align it according to the instructions, and use tape to secure it.
- 2 Use the 23/64" drill bit and bit stop to drill 2 holes to a 3/4" depth according to the template.
- 3 Apply 2 part epoxy to the holes.
- 4 Using a mallet or hammer, drive the inserts into the holes with the serrated end nearest the opening.



**CAUTION:** When drilling holes in the work surface, be careful not to exceed a depth of 3/4". Doing so may cause visual damage to the top side of the work surface.



**CAUTION:** When applying epoxy, only apply small amount that is sufficient to coat the outside surface of the threaded insert. Otherwise, epoxy may fill into the inserts and hinder the insertion of the screws.

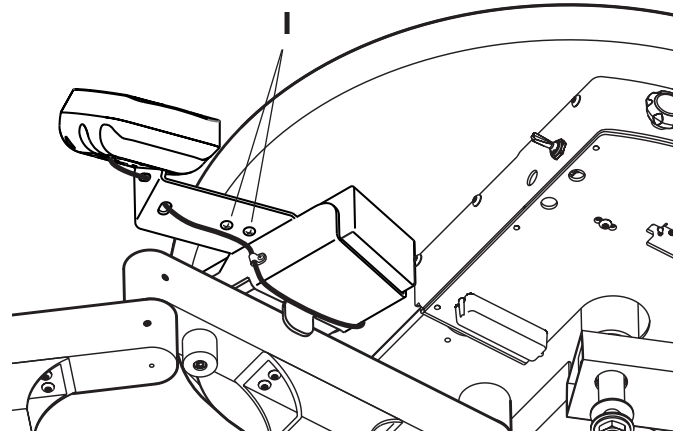


## RETROFIT TO 12 O'CLOCK MOBILE DELIVERY

### MOUNTING TO THE DELIVERY

- 1** Assemble the display and control box assembly to the threaded inserts on the underside of the work surface using the included hardware:

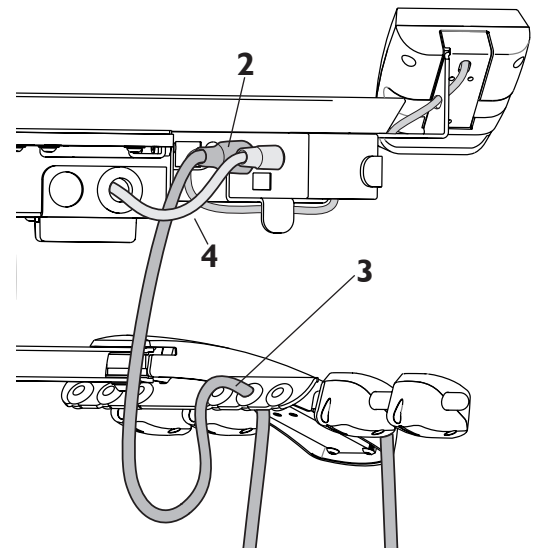
2 - 10-32 x 1/2" screws  
2 - #10 lock washers



### MAKE CONNECTIONS

- 2** Connect the motor cord to the motor control box and hang the cord in the 2nd holder from the left (HP position 1).

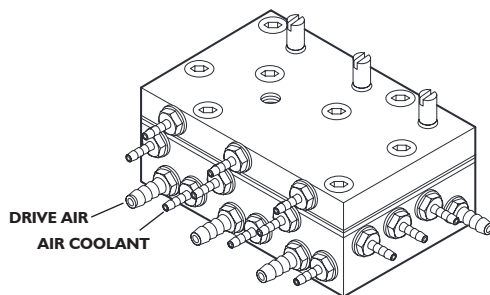
- 3** Remove the rubber grommet that is 2nd from the left from the tubing management comb that is positioned behind the holders. Use cutting pliers to split the grommet and then attach it to the motor cord. Then insert the motor cord with grommet back into the comb, ensuring that there is adequate reach for the motor cord to the head of the patient chair. Avoid setting a cord length that would allow the motor cord to drag on the floor.



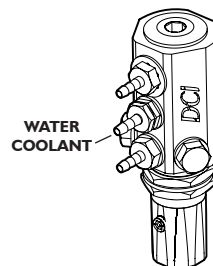
- 4** Connect the 4 hole tubing with terminal and nut included in this kit to the motor control box as shown and route into the back of the unit drawer.

- 5** Connect the individual lines from the 4 hole tubing to the auto-block and the water combo valve according to the below diagrams.

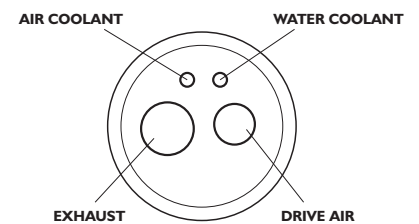
#### AUTO-BLOCK CONNECTIONS



#### WATER COMBO VALVE



#### 4 HOLE TERMINAL DIAGRAM



- 6** Place the included power supply in the sub-base of the cabinet and route the power cable through the arms to the motor control box. Insert the connector of the power cable into the corresponding female connector on the motor control box.

## RETROFIT TO UNDER COUNTER DELIVERY

### TOOLS NEEDED FOR INSTALLATION

#2 Philips head screw driver  
Small cutting pliers  
Sleeve pusher  
Drill bit lubricant

### INCLUDED TOOLS

#21 Pre-drill bit  
10-32 Tap

### INCLUDED PARTS

Bracket w/ motor control box  
Bracket w/ display assembly  
Micromotor cord  
NLZ E micromotor  
2.5 ft 4 hole tubing with terminal and nut  
3 - #10 3/8" long machine screws  
3 - #10 lock washers  
Adhesive-backed cable manager

### PREPARATION

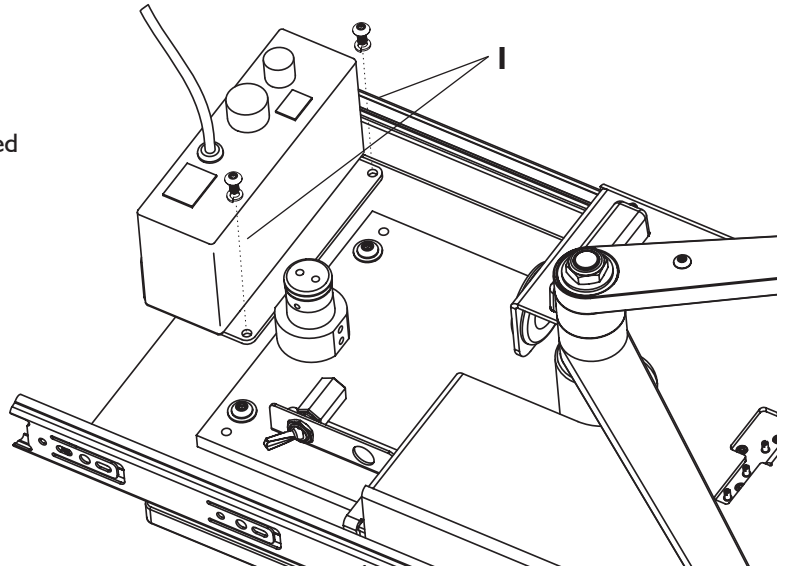
- 1** Read the entire section of this manual that pertains to the 12 O'Clock Under Counter Delivery units which comprise DR40-- series (slideout deliveries) and the DR 41-- series (fixed mount deliveries).
- 2** Remove the fixed mount unit from the mount by unscrewing the unit from the countertop, or remove the slideout unit by releasing the black lever on each drawer slide to allow the drawer slides to separate.
- 3** Remove the Under Counter Delivery Template on page 16, align it according to the instructions, and use tape to secure it.
- 4** Using the provided #21 drill bit, pre-drill 2 holes as indicated on the template. Use a tap handle with the provided 10-32 tap to form the threads. Use drill bit lubricant to reduce the possibility of breaking the bit or tap.

## RETROFIT TO 12 O'CLOCK UNDER COUNTER DELIVERY

### MOUNTING TO THE DELIVERY

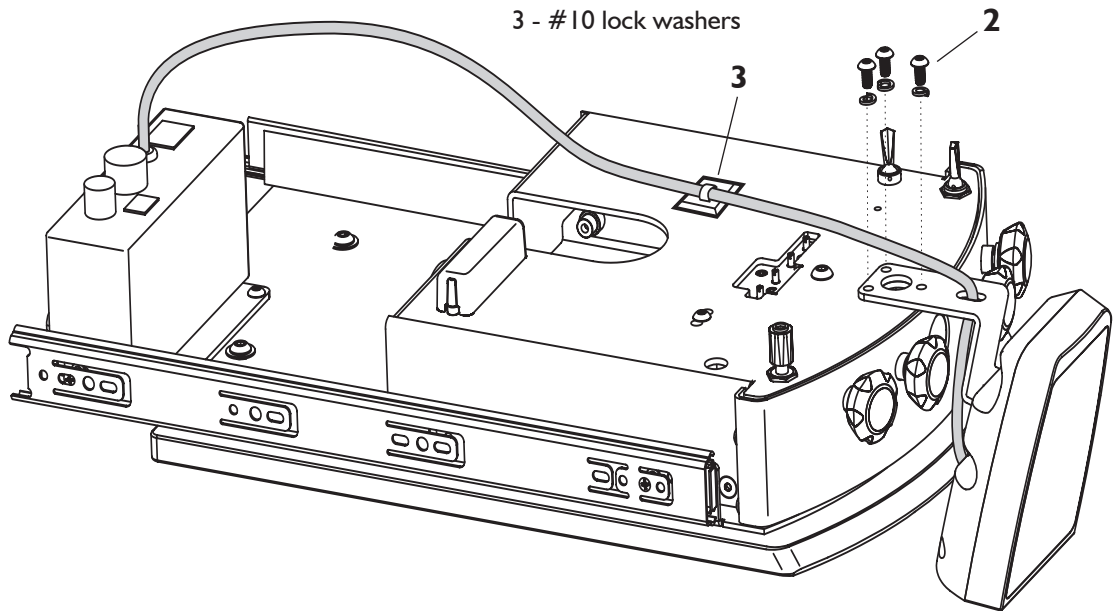
- 1** Assemble the control box and bracket assembly to the newly drilled and tapped holes using the included hardware:

2 - 10-32 x 3/8" screws  
2 - #10 lock washers



- 2** Assemble the display and bracket assembly to the 3 tapped holes at on the underside of the unit drawer near the front using the included hardware:

3 - 10-32 x 1/2" screws  
3 - #10 lock washers



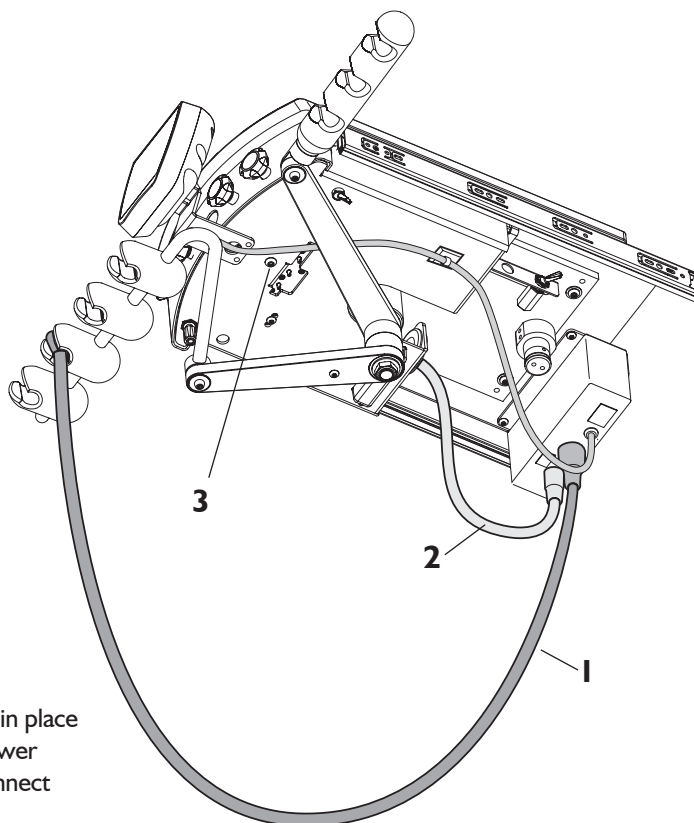
- 3** Apply the included adhesive-backed cable manager to support the display cable under the unit drawer. Ensure that there is sufficient slack between the motor control box and the cable manager to allow the unit drawer to be pulled out for servicing the unit.

- 4** Reinstall the the unit onto the drawer slide for a slideout delivery or screw back up to the underside of the countertop in the case of a fixed mount delivery.

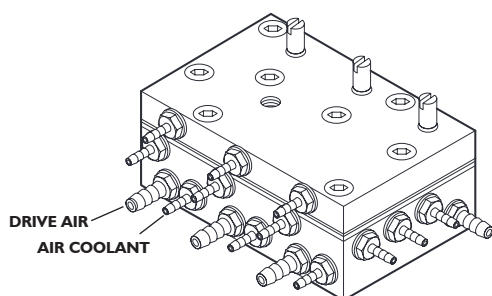
## RETROFIT TO UNDER COUNTER DELIVERY

### MAKE CONNECTIONS

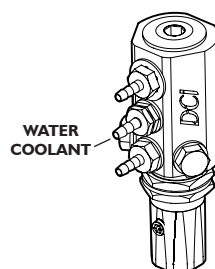
- 1** Connect the motor cord to the motor control box and insert into the holder for handpiece position 1 next to the syringe.
- 2** Connect the 4 hole tubing with terminal and nut included in this kit to the motor control box as shown and route into the back of the unit drawer.
- 3** Remove the screw holding the unit drawer in place on the bottom of the drawer. Slide the drawer forward to access the internal components. Connect the individual lines from the 4 hole tubing to the auto-block and the water combo valve according to the below diagrams.



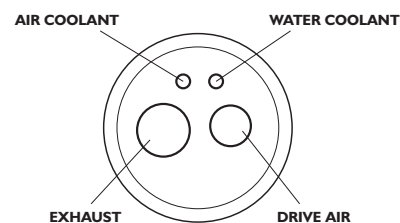
#### AUTO-BLOCK CONNECTIONS



#### WATER COMBO VALVE



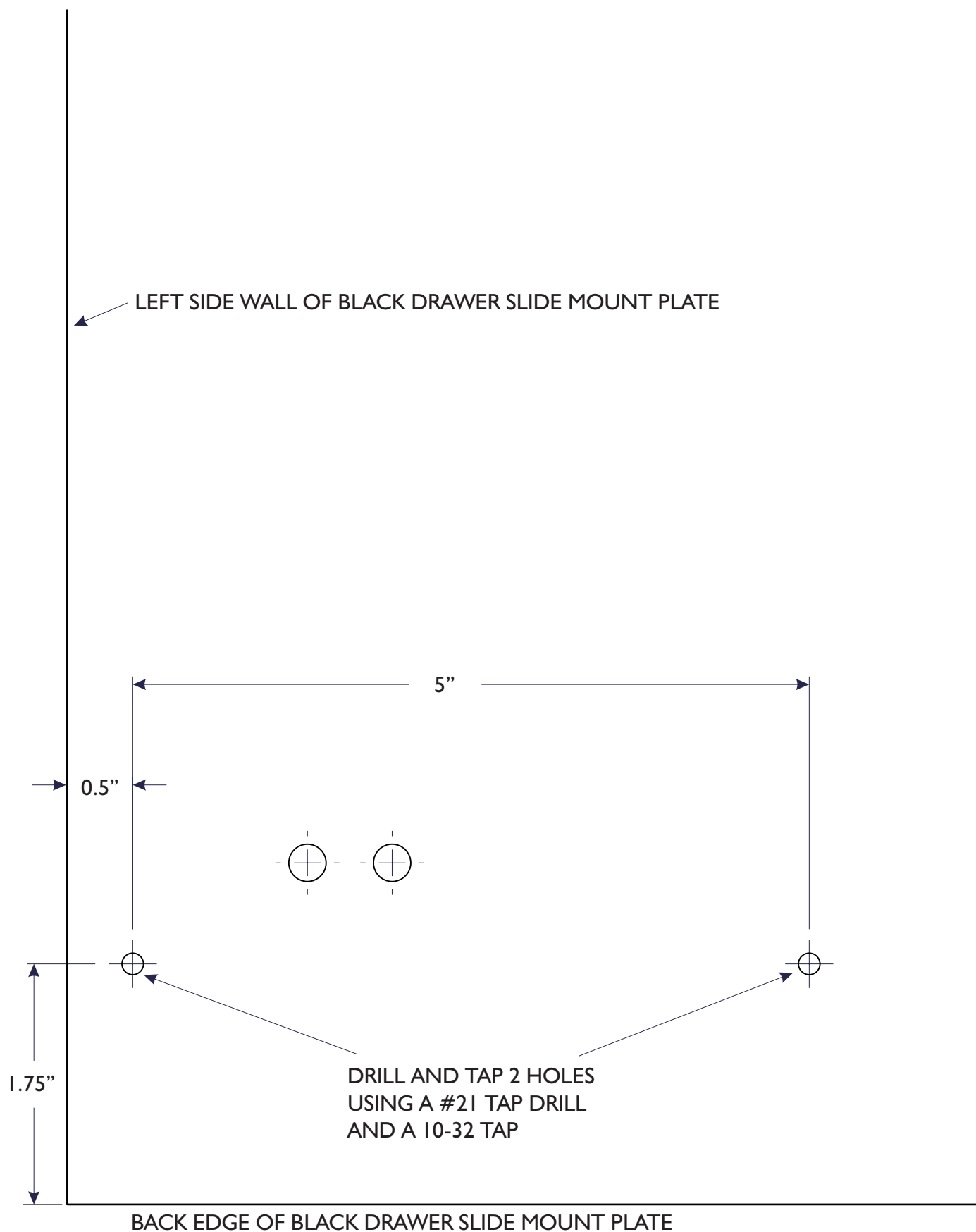
#### 4 HOLE TERMINAL DIAGRAM



- 4** Slide the unit drawer back into place and replace the screw to secure the unit drawer closed.
- 5** Place the included power supply in the sub-base of the cabinet and route the power cable to the motor control box. Insert the connector of the power cable into the corresponding female connector on the motor control box.

# UNDER COUNTER DELIVERY TEMPLATE

UNDERSIDE OF DRAWER SLIDE MOUNT





# 12 O'CLOCK MOBILE DELIVERY TEMPLATE

## UNDERSIDE OF COUNTERTOP

Tape this template to the underside of the countertop on the left hand side of the unit drawer for a right-handed application.

