

### Standard Capacity UDM Solids Dispenser Double Position Installation Guide June 2002 TM-MSDBL1-000B PD 4204

For use when configuring a *Standard Capacity* UDM solids dispensing position to be a double dispensing position

**Document History** 

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## 1. Installing the UDM Double Dispensing Position Upgrade Kit

## **1.1 Description**

This kit is used to modify a Unit Dose Module Solids Dispenser shelf to allow it to dispense medications wider than allowed with the standard position. The purpose of the kit is to combine adjacent positions and have them operate as a single unit. The kit may support capacities of 10, 15, or 20 items per helix. Refer to Table 1 for a list of the kit's contents.

#### NOTE

Please refer to hospital service procedures and guidelines as stated in the Service and Installation Guide.

Kit Number 19-040022		0022		
-000A	-000B	-000C	DESCRIPTION	
1			20 Capacity Helix, Right Hand	
1			20 Capacity Helix, Left Hand (yellow)	
	1		15 Capacity Helix, Right Hand	
	1		15 Capacity Helix, Left Hand (yellow)	
		1	10 Capacity Helix, Right Hand	
		1	10 Capacity Helix, Left Hand (yellow)	
2	2	2	Connector Jumper	
2	2	2	Helix Guide	
1	1	1	Double Position Permanent Divider	
1	1	1	Retainer Clamp Bracket	
1	1	1	#6 x .25 Self Tapping Screw	

Table 1 Contents of the Double Dispense Position Upgrade Kit

## 1.2 Tools Required

The following tools are needed to perform this upgrade.

- 1. #2 Phillips Head Screwdriver
- 2. #1 Phillips Head Screwdriver (used only to reposition the motor and the index switch to the large 1.4" OD helix position)
- 3. Needle nose pliers

### **1.3 Reference Documentation**

The reference documentation associated with this kit is listed in Table 2.

#### Table 2 Reference Documentation

Description	Part No.	
Installation Guide	TM-MEDINS-000A	
Service Guide	TM-MEDSVC-000A	

#### **1.3.1 Configuration Evaluation**

This kit allows two adjacent solids dispense positions to be combined into a single dispense unit. Use Table 3 to determine the appropriate setup.

Configuration Style	Med Width (in)	Med Width (mm)
SHDP Style 1	1.5"-1.8"	38mm-46mm
SHDP Style 2	1.8"-2.5"	46mm-63mm
DHDP	2.3"-3.0"	58mm-76mm

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#### 1.3.2 Description of Shelf Indicator Points

The Solids Dispenser Shelf is labeled with indicator points that show the mounting location of the single and double permanent shelf dividers. Figure 1 defines these points.

#### 1.3.3 Combining Adjacent Oral Dispensing Positions

Figure 2 shows the parts that you should be familiar with when upgrading a single dispensing position.

It is necessary to remove an adjacent Permanent Divider when combining positions. The drive motors of the two combined positions do not need to be unmounted unless they are mounted in the low or 1.0" helix diameter position. *All combined positions use the 1.4" OD helix.* Refer to the **Service and Installation Guides** to reposition the drive motors and index switches.

#### NOTE

In the following text, the two adjacent dispense positions are referenced as left and right as observed from the top and front of the shelf.

Proceed as follows to combine two adjacent positions:

- 1. Remove the Helix Retainer from the left Permanent Divider that divides the two positions. The retainer is usually tight and, therefore, will require some force to remove.
- 2. Remove the Length Guides from the two positions. This is accomplished by grasping the top rear tab, and then lifting this end straight up. The front of the guide is hooked into the front slot.

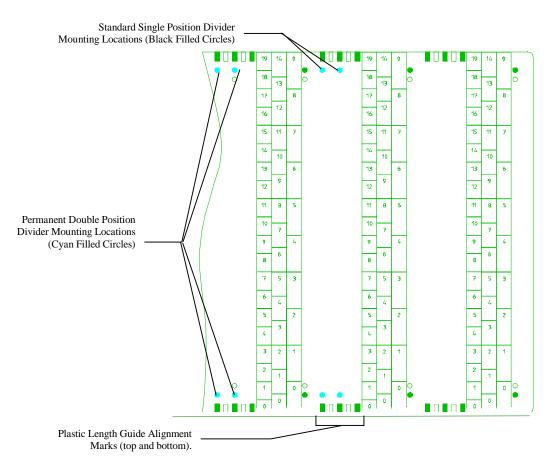


Figure 1 Solids Dispenser Shelf Indicator Points

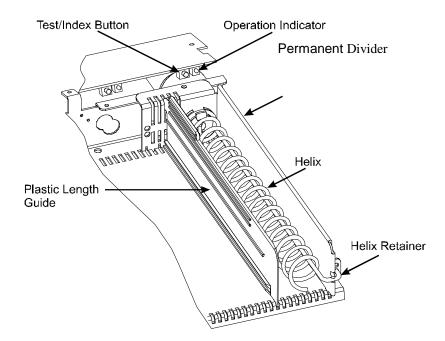


Figure 2 Factory Installed Standard Solids Dispensing Position

- 3. Remove the existing Helix from the left and right dispensing position drive motors.
- 4. Remove the Permanent Divider from between the two positions. The Helix Retainer was previously removed in Step 1. The divider is secured in place by a phillips head screw at the rear of the position. The front of the divider is hooked into a front slot of the shelf base.
- 5. Remove the Helix Retainer from the left position Permanent Divider.
- 6. Remove the left Permanent Divider. This divider will be replaced by a kit supplied Double Position Permanent Divider in the separate configuration setup procedure below.
- 7. Make sure that both motors are mounted in the high position.
- Reverse the direction of rotation of the left position drive motor by connecting its cable to the reverse motor polarity socket on the controller CCA. The controller CCA provides forward and reverse drive sockets for each drive motor. CCA socket J1 is used for the forward direction, and J2 is used for reverse.

#### NOTE

The left side drive motor is always configured for counterclockwise rotation with a left hand wound helix. This forces the med packages against the left permanent divider rather than the less sturdy plastic length guide. The left position motor is used to drive the meds since it is nearer to the center of the double positions.

#### **Configuration Setup For SHDP Style 1**

Follow these steps to set up a Single Helix, Double Position configuration to support meds that are no wider than 1.8 inches:

1. Install the kit provided Double Position Permanent Divider by using the left mounting hole in the divider (see Figure 3). Align the divider with the two cyan colored dots to the right.

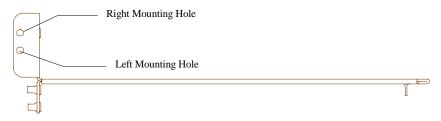


Figure 3 Permanent Divider Mounting Holes

- 2. Replace the left Helix (just removed) with a left hand wound Helix as provided with the kit. This part is color coded yellow.
- 3. Install the Helix Retainers.

- 4. Install the helix and divider jumpers onto the controller CCA above the right dispense position motor and above the previously removed Permanent Divider.
- 5. Install the Length Guide to the right of the Helix, setting it to the appropriate med width, by hooking the front into the base and then snapping in the back tab.
- 6. Use the CCA test buttons to manually test the position so that the index point is established. Adjust the Length Guide as necessary.

#### **Configuration Setup For SHDP Style 2**

Follow these steps to set up a Single Helix, Double Position configuration to support meds that are between 1.8 and 2.5 inches wide:

1. Attach the Retainer Clamp Bracket to the Double Position Permanent Divider using the #6 x .25 Self Tapping Screw. Note: the alignment post on the divider will go through the Clamp Bracket (see Figure 4).

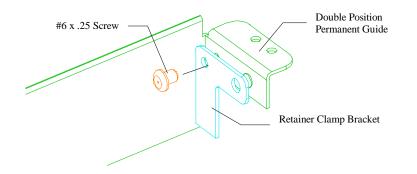


Figure 4 Attaching a Retainer Clamp Bracket to the Double Position Permanent Divider

- 2. Position the two Helix Guides as shown in Figure 5. Loosen the Permanent Divider on the right and slip the Helix Guide under it. The right Helix Guide will align with a slot in the Permanent Divider.
- 3. Install the Guide/Clamp Bracket using the right mounting hole in the divider (see Figure 4). Align the divider with the two cyan colored dots to the left. This bracket assembly will hold down the left Helix Guide.
- 4. Insert the Helix Retainer for the dispense position to the left of the double dispense position.
- 5. Replace the left dispense position helix with a left hand wound Helix as provided with the kit. This part is color coded yellow.
- 6. Install the helix and divider jumpers onto the controller CCA above the right dispense position motor and above the previously removed right Permanent Divider.

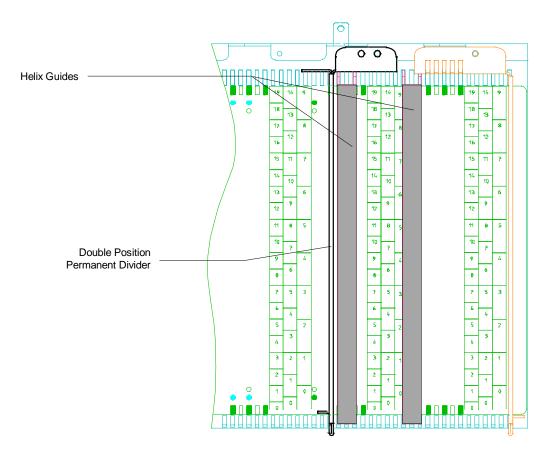


Figure 5 Positioning the Helix Guides

- 7. Install the Length Guide to the right of the Helix, setting it to the appropriate med width, by hooking the front into the base and then snapping in the back tab.
- 8. Use the CCA test buttons to manually test the position so that the index point is established. Adjust the Length Guide as necessary.

#### **Configuration Setup For DHDP**

Follow these steps to set up a Double Helix, Double Position configuration to support meds that are between 2.3 and 3.0 inches wide:

- 1. Install the kit provided Double Position Permanent Divider using the left mounting hole in the divider (see Figure 5). Align the divider with the two cyan colored dots to the right.
- 2. Replace the left dispense position helix with a left hand wound Helix as provided with the kit. This part is color coded yellow.
- 3. Replace the right dispense position helix with the right hand wound Helix as provided with the kit.
- 4. Install one Connector Jumper above the previously removed Permanent Divider. This jumper installation will indicate to the system that both motors must be driven simultaneously.
- 5. Insert all Helix Retainers.
- 6. Use the CCA test buttons to manually test the position so that the index point is established. Adjust the Length Guide as necessary.