

SCDC Pay-Out Control Installation Instructions #4495

To install the SCDC Pay-Out Control onto a DMC Control Plate:

1. Remove the two screws securing the DMC Sensor Mask and Spacers and remove from the arm.
2. Disconnect the wiring harness plug from the control.
3. Remove the three nuts securing the DMC Control To the control plate and Remove the control.

NOTE: One of the three nuts secures the Arm Spring Retainer. Do not remove the retainer.

4. Install the SCDC Control and plug the wiring harness into the control. Mount the control with the three PPH 4-40 X 1/4" screws provided (see Fig.1). Make sure the spring retainer is secured by one screw.

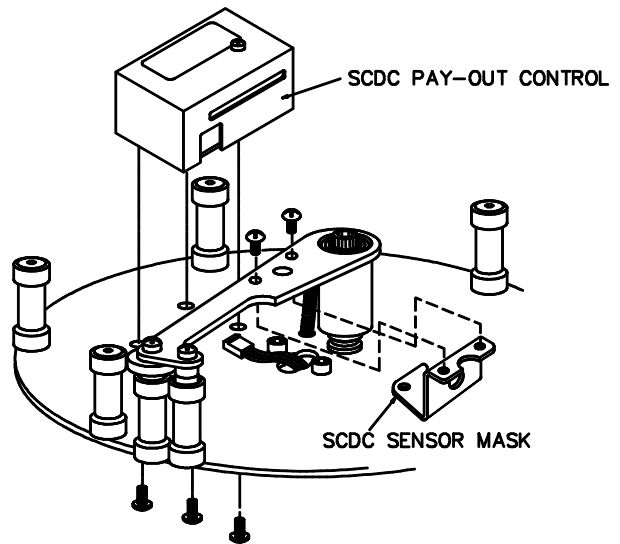


Figure 1

5. Carefully install the SCDC Sensor Mask in the slot of the SCDC Pay-Out Control. Secure the mask to the arm using the PTH 8-32 x 3/8" screws provided. Make sure the mask is flush with the bottom side of the arm before installing screws to avoid damaging the threads. Do not over tighten the screws (see Fig. 1).

NOTE: Once the SCDC Sensor Mask has been installed on the DMC arm, the SCDC Control can be changed without removing the Sensor Mask. Refer to the SCDC installation instructions below.

NOTE: The DMC and SCDC Control Plate Assemblies are interchangeable and can be intermixed on the same platter system.

NOTE: After installing the SCDC Pay-Out Control onto a DMC Control Plate the calibration instructions are no longer valid. Refer to the instructions on pages 2-4 to service the SCDC Pay-Out Control. Keep these instructions with the original DMC manual for future reference.

To install the SCDC Pay-Out Control onto a SCDC Control Plate:

1. Remove the three screws securing the SCDC Pay-Out Control and unplug the wiring harness. Rotate the arm clockwise and slide the control away from the arm as the arm is rotated back to the counterclockwise position.

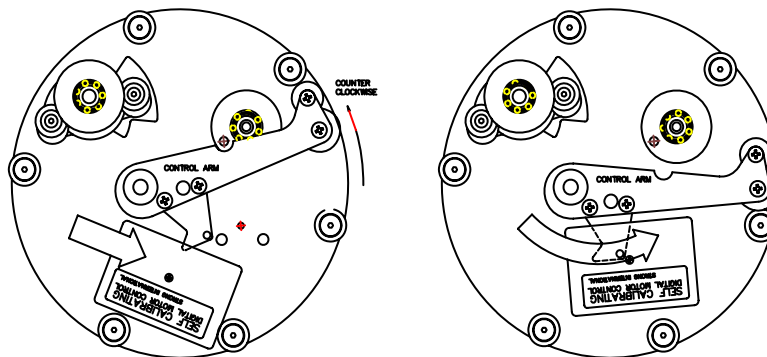


Figure 2

NOTE: One of the three screws secures the Arm Spring Retainer. Do not remove the retainer.

2. Install the new SCDC Pay-Out Control in the reverse order (see Fig. 2). Connect the wiring harness to the control. Mount the control on the plate using the screws provided. Make sure the spring retainer is secured by one screw.
3. Install the control plate and check for proper operation.

SCDC UNIT TEST SERVICE PORT

The Pay-Out SCDC control features a service port next to the LED that permits connecting a computer with the appropriate cable and software to perform pixel tests, read logged error data, upgrade SCDC software, read or change EEprom data and read real time values. The software and cable are available through your service department.

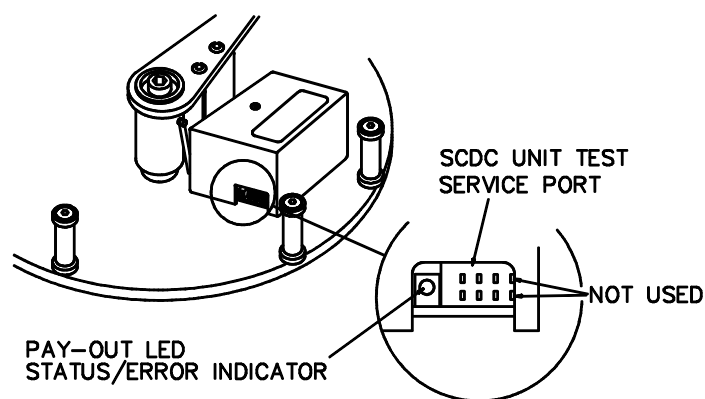


Figure 3

NOTE: The Pay-Out control may have one of two types of service ports. When connecting the computer cable to a control with a serial port (as shown above) only 6 of the pins in the port are used. Do not use the 2 pins shown in Figure 3. The cable simply plugs into a control using a USB port.

SCDC LED ERROR INDICATION

The LED is located in the service port opening (Figure 3). At power-up the red LED will blink a number of times equivalent to the version number of the software installed on the control.

1. Continuous fast blinking indicates proper operation.

The same LED is used to indicate errors. If an error occurs, it will appear on the error log screen with a check mark in the box of the current error. It will also be added to the logged error count, which is a permanent record. The current error field is cleared when the control is powered down. Error indication is as follows:

2. One blink every two seconds indicates that the motor or the feed castor diode is shorted. This error will log as a MOTOR SHORT on the logged error screen. See Feed Castor Diode Checking on page 7 of PIB 4493. Also unplug the suspect drive motor to isolate.

NOTE: If the motor or feed castor diode is defective, you should get the same error indication from the Rewind control when the suspect feed castor is lifted.

If the error is indicated a second time on a Pay-Out Control, plug the control into another arm. If the problem exists on only one arm, the problem is an open feed castor diode. The diode needs to be replaced. See Feed Castor Diode Checking on page 7 of PIB 4493.

Note: If the motor or feed castor diode is defective, you should get the same error indication from the Pay-Out or Rewind control used on that arm.

3. Two blinks every two seconds indicate an open Feed Castor Diode. This error will log as a LOSS OF MOTOR DIODE on the logged error screen. If you get this error, turn the power off and on again.

If the error is indicated a second time, plug the control plate into another arm. If the problem exists on only one arm, the problem is an open feed castor diode. The diode needs to be replaced. See Feed Castor Diode Checking in Operation Manual PIB 4493 page 7.

NOTE: If the feed castor diode is defective, you should get the same error indication from the Pay-Out or Rewind control used on that arm.

4. Three blinks every two seconds indicate one of four possible optical errors. This error will log as OPTICAL ERROR 1-4 on the logged error screen. Optical error 1 and 2 indicate that the optical chip is either defective or improperly installed.

This error detection was put into place primarily as a factory test to ensure that the optical chip has been properly installed and is not likely to occur in the field. However, if it does occur, review Service Bulletin #6802 before proceeding with any other corrections.

Optical error 3 and 4 indicate that the Pay-Out sensor mask is damaged or missing. If the mask is installed correctly, a few pixels at the end of the row of pixels on the optical chip will be covered and a few pixels on the opposite end will never be covered. The operating system reads which end is covered and determines from that whether the card is installed as a Pay-Out or Rewind control.

Optical error 3 occurs when both ends of the pixels are seeing light all of the time. Verify that the Pay-Out sensor mask is installed correctly and undamaged.

Optical error 4 occurs when both ends of the pixels are not seeing light. Check the LED light level. See SCDC LED Failure Test on page 17 of PIB 4493. If the LED has reached its fail point, an optical error 4 will be logged. This refers to the LED used to stimulate the optical chip, not the red indicator LED. Verify that the Pay-Out sensor mask is installed correctly and undamaged. This error can also occur if there is an obstruction between the LED and optical chip. Remove the LED board and remove any dust or lint that may be covering the optical chip.

Optical error 3 and 4 may also occur as result of an internal defect on the control. Replace the suspect Pay-out control with a working control from another SCDC control plate or power supply. If the problem exists after changing the control, the mask is defective. If the problem disappears after changing the control, the original control is defective and needs to be replaced.

5. **Four blinks every two seconds** indicate a bad check sum on flash or EEprom memory. If you get this error, turn the power off and on again. If the error is indicated a second time, check the error log. If this error logs as BAD FLASH CHECKSUM, use the software upgrade function to install new software. If it logs as BAD EEPROM CHECKSUM, use the EEprom Function and reload defaults. If this fails to correct the problem, the control is defective and needs to be replaced.