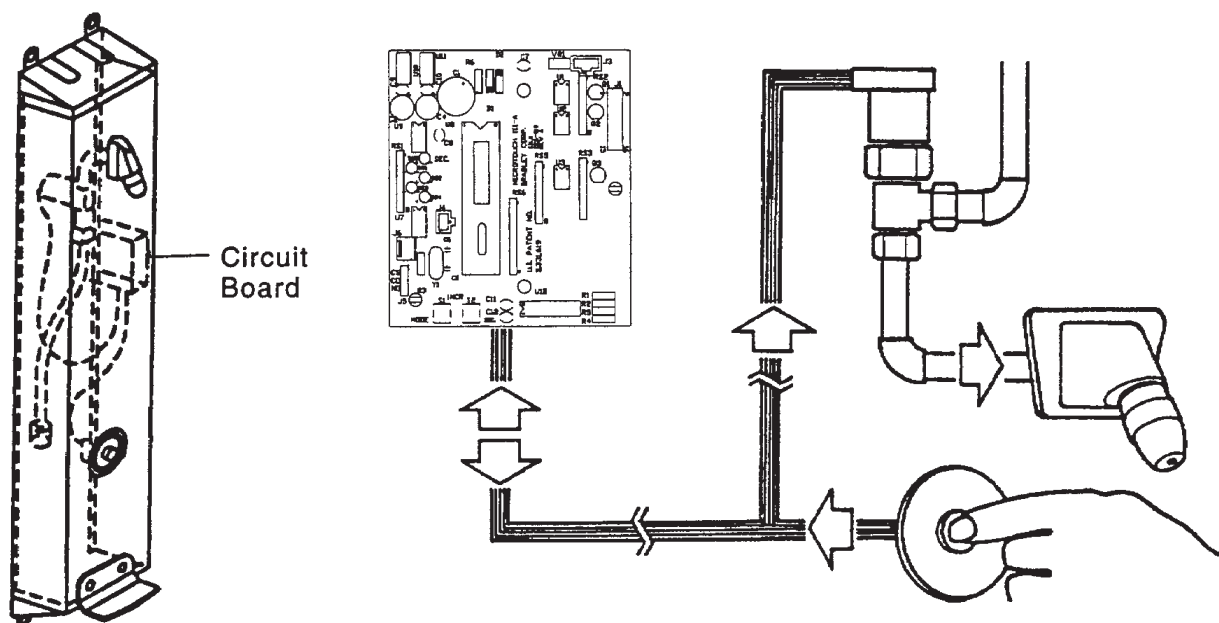## Micro-Touch™

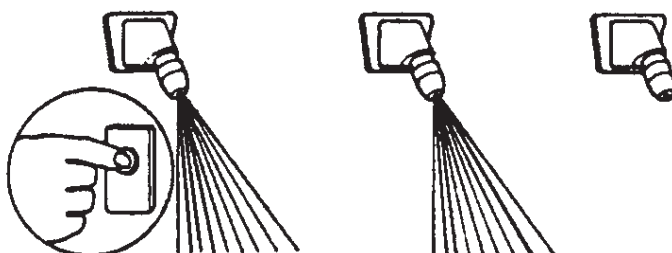### How Micro-Touch TM III Works
See Below

1. Pushbutton sends electrical impluse (millivolts) to circuit board.

2. Circuit board controls metering style and timing sent to solenoid.

3. Solenoid receives signals from circuit board and open/closes water path way to outlet.

Circuit Board

Metering Mode Options

Meter Only: One press of the activation button activates the cycle and the fixture will complete its present cycle even if the button is pressed and subsequent times during the cycle.
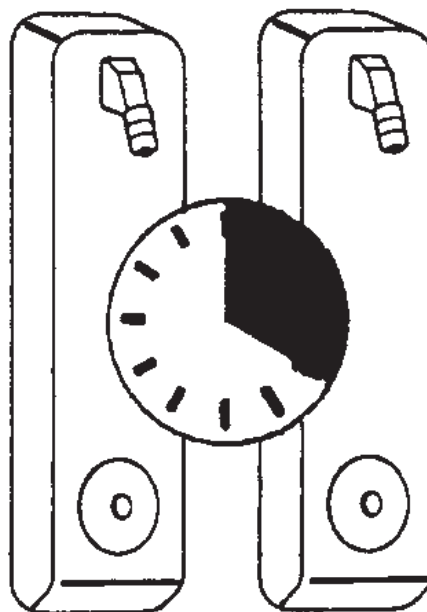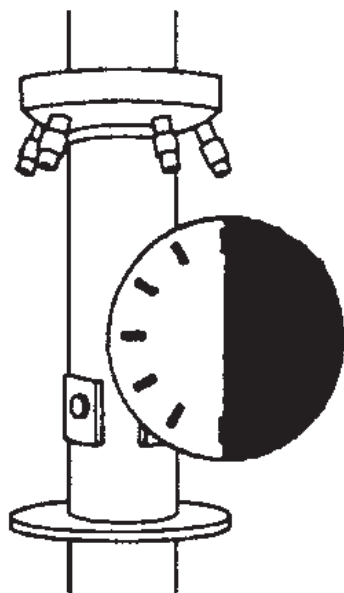
Typical Application: Standard operation for most applications and fixtures.

Micro-Touch™

Comby Mode: Allows the flexibility of setting the timing functions of two stations (solenoids) independently of the other four.

Typical Application: Separate timing of two shower stations from timing of four others. Delay

Time: After a cycle is complete, a delay period can be set to prevent the initiation of a second cycle for a preset length of time.

Typical Application: For use in public areas where building owner does not want user to immediately restart timing cycle. Typical uses include physical education facilities and swimming pool areas.
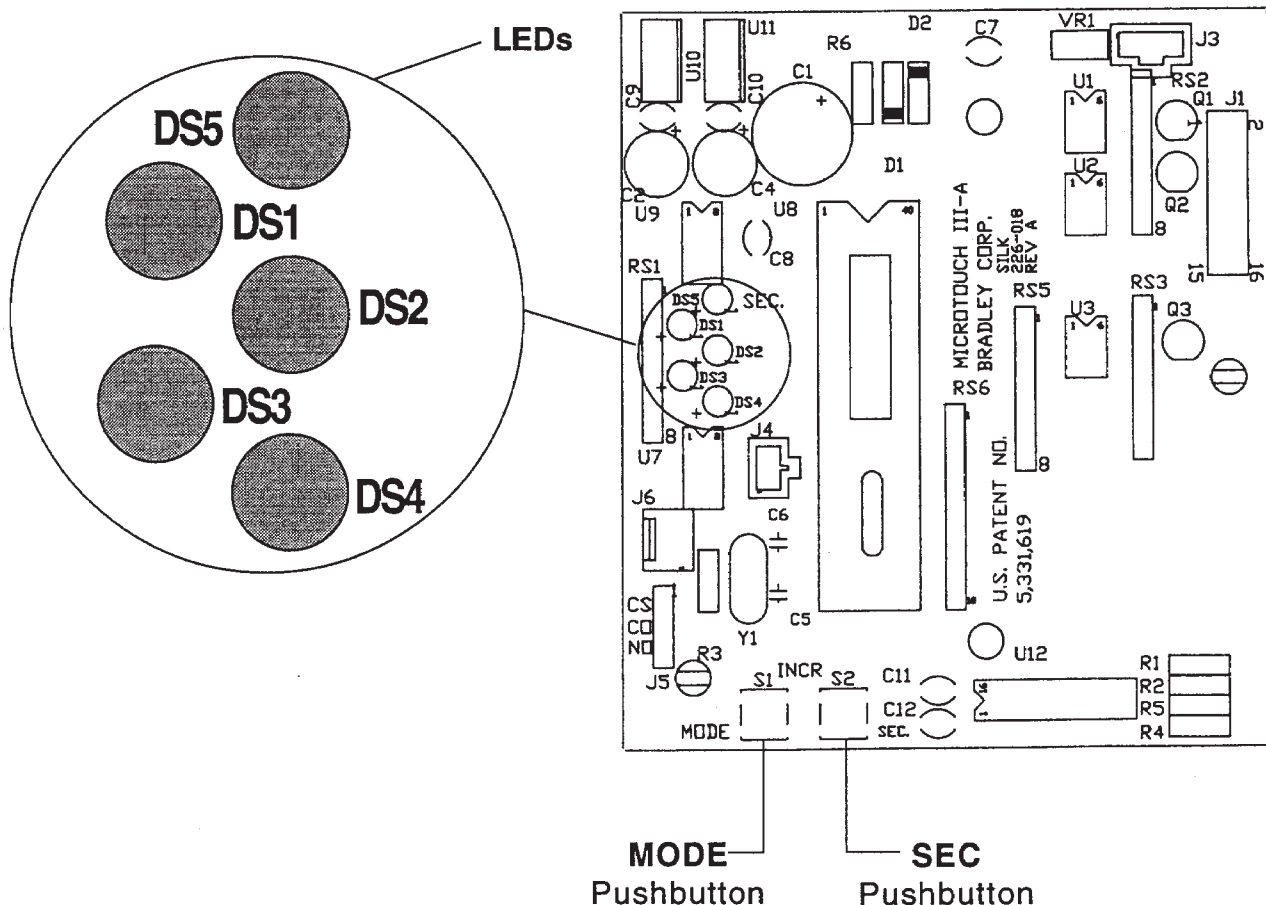
Circuit Board Pushbuttons and LEDs

Pushbuttons

There are two pushbuttons on the circuit board—one labeled **MODE**, and one labeled **SEC**. The MODE button is used to program the metering mode, and the **SEC** button is used to program the cycle time for the mode in increments of 1 second. Also, the **MODE** and **SEC** buttons can be used together to program the cycle time in increments of 15 seconds (see **Program the Circuit Board** on following pages).

LEDs

• There are five LEDs on the circuit board—they are labeled **DS1, DS2, DS3, DS4,** and **DS5** .

• LED **DS5**: When the **MODE** pushbutton is pressed, LED **DS5** flashes repeatedly until the **MODE** pushbutton is released. The number of times you allow LED **DS5** to flash determines the metering mode programmed (see **Program the Circuit Board**).

When the **SEC** pushbutton is pressed, LED **DS5** flashes repeatedly until the SEC pushbutton is released. When programming the cycle time for a metering mode, each flash of LED **DS5** equals 1 second of cycle time.

• LEDs **DS1, DS2, DS3,** and **DS4**: Different combinations of these LEDs light, and remain lit, once you have programmed a metering mode using the **MODE** pushbutton. The combination of lit LEDs indicates the metering mode you have programmed (see **Program the Circuit Board**).

Program the Circuit Board
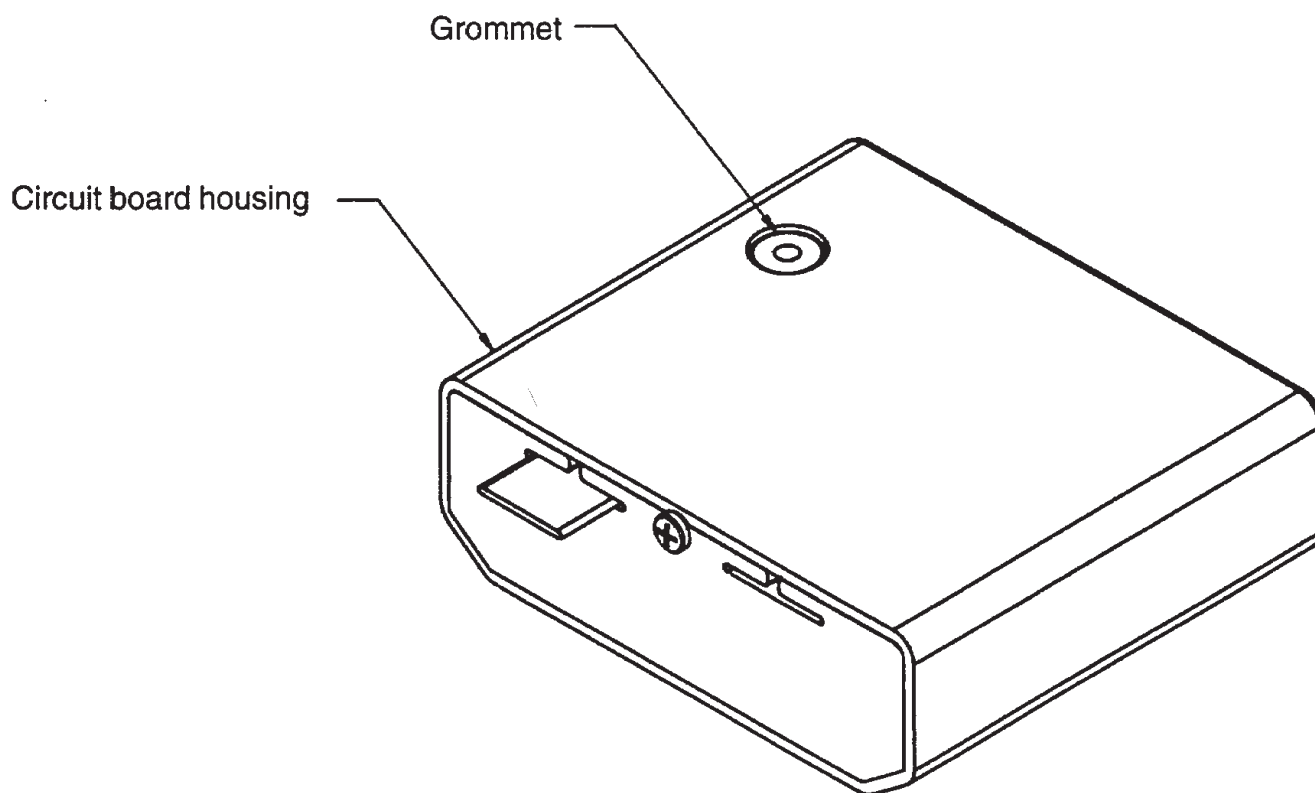
Factory preset cycle timing

The fixture cycle timing and metering option is preset at the factory. The preset for showers is the Meter Only mode with a cycle time of 20 seconds. This option also includes a built-in delay from the completion of the metered cycle of one second until the pushbutton can again be activated. If you want to change the mode and/or cycle time, see the procedures for the desired mode on the following pages.

Pressing the MODE and SEC pushbuttons

⚠️ **IMPORTANT: Sharp-tipped tools can puncture the waterproof seal that covers the pushbuttons. Use only tools with blunt tips to press the MODE and SEC pushbuttons.**

The **MODE** and **SEC** pushbuttons are accessed through a grommet on top of the circuit board housing. To press a button, insert a blunt-tipped tool (i.e.: small screwdriver) through the hole in the grommet.

Grommet

Circuit board housing

Program the Circuit Board

Program Meter Only mode
Program mode:

1. Press **MODE** until LED **DS5** flashes one time.

      Result: *LED **DS2** should be lit to indicate that the circuit board is programmed for the Meter Only mode.*

Program cycle time (if different than factory-set time):

1. Press **MODE** until LED **DS5** flashes four times.

      *Result: LED **DS2** and **DS3** should be lit to indicate that you are ready to enter the cycle time.*

2. Enter the cycle time in 1-second or 15-second increments.

• **1-second increments**: Press **SEC** until the number of times that LED **DS5** flashes equals the number of seconds for the desired cycle time.

• **15-second increments**: Remove the circuit board from its housing (see following pages for instructions). Press **SEC** and **MODE** at the same time—each flash of LED **DS5** equals 15 seconds of cycle time. Release **SEC** and **MODE** when the desired time has been entered.

      Result: *Only LED **DS2** should be lit to indicate that the circuit board is programmed for the Meter Only mode.*

Program Double Touch mode
Program mode:

1. Press **MODE** until LED **DS5** flashes two times.

      Result: *LED **DS1** should be lit to indicate that the circuit board is programmed for the Double Touch mode.*

Program cycle time (if different than factory-set time):
1. Press **MODE** until LED **DS5** flashes four times.

*Result: LED **DS1** and **DS3** should be lit to indicate that you are ready to enter the cycle time.*

2. Enter the cycle time in 1-second or 15-second increments.

• **1-second increments**: Press **SEC** until the number of times that LED **DS5** flashes equals the number of seconds for the desired cycle time.

• **15-second increments:** Remove the circuit board from its housing (see following pages for instructions). Press **SEC** and **MODE** at the same time—each flash of LED **DS5** equals 15 seconds of cycle time. Release **SEC** and **MODE** when the desired time has been entered.

      Result: *Only LED **DS1** should be lit to indicate that the circuit board is programmed for the Double Touch mode.*

Program Comby mode
Program mode:

1. Press **MODE** until LED **DS5** flashes three times.

      Result: *LED **DS1** and **DS2** should be lit to indicate that the circuit board is programmed for the Comby mode.*

Program cycle time (if different than factory-set time):

1. To assign lavatory (long) time, press **MODE** until LED **DS5** flashes four times.

      Result: *LED **DS1, DS2,** and **DS3** should be lit to indicate that you are ready to enter the lavatory (long) cycle time.*

Program the Circuit Board Continued...

2. Enter the lavatory (long) cycle time in 1-second or 15-second increments.

• **1-second increments**: Press **SEC** until the number of times that LED **DS5** flashes equals the number of seconds for the desired cycle time.

• **15-second increments:** Remove the circuit board from its housing (see following pages for instructions) press **SEC** and **MODE** at the same time—each flash of LED **DS5** equals 15 seconds of cycle time. Release **SEC** and **MODE** when the desired time has been entered.

       *Result: LEDs **DS1** and **DS2** should be lit to indicate that the circuit board is programmed for the Comby mode.*

3. To assign flush (short) cycle time, press **MODE** until LED **DS5** flashes five times.

       *Result: LED **DS1**, **DS2**, and **DS4** should be lit to indicate that you are ready to enter the lavatory (long) cycle time.*

4. Enter the flush (short) cycle time in 1-second or 15-second increments.

• **1-second increments**: Press **SEC** until the number of times that LED **DS5** flashes equals the number of seconds for the desired cycle time.

• **15-second increments:** Remove the circuit board from its housing (see following pages for instructions) press **SEC** and **MODE** at the same time—each flash of LED **DS5** equals 15 seconds of cycle time. Release **SEC** and **MODE** when the desired time has been entered.

       *Result: LEDs **DS1** and **DS2** should be lit to indicate that the circuit board is programmed for the Comby mode.*

Program Delay Time

1. Press **MODE** until LED **DS5** flashes six times.

       Result: No new LEDs are lit, and you are ready to enter the Delay Time.

2. Enter the flush (short) cycle time in 1-second or 15-second increments.

• **1-second increments**: Press SEC until the number of times that LED **DS5** flashes equals the number of seconds for the desired Delay Time.

• **15-second increments**: Remove the circuit board from its housing (see next page for instructions) press **SEC** and **MODE** at the same time—each flash of LED **DS5** equals 15 seconds of cycle time. Release **SEC** and **MODE** when the desired time has been entered.

       Result: The Delay Time has been programmed

Bradley

Operation and Service Guide: Showers
P.O. Box 309 • Menomonee Falls, WI 53052-0309
1.800.BRADLEY • Fax: 262.251.5817 • bradleycorp.com

Program the Circuit Board Continued

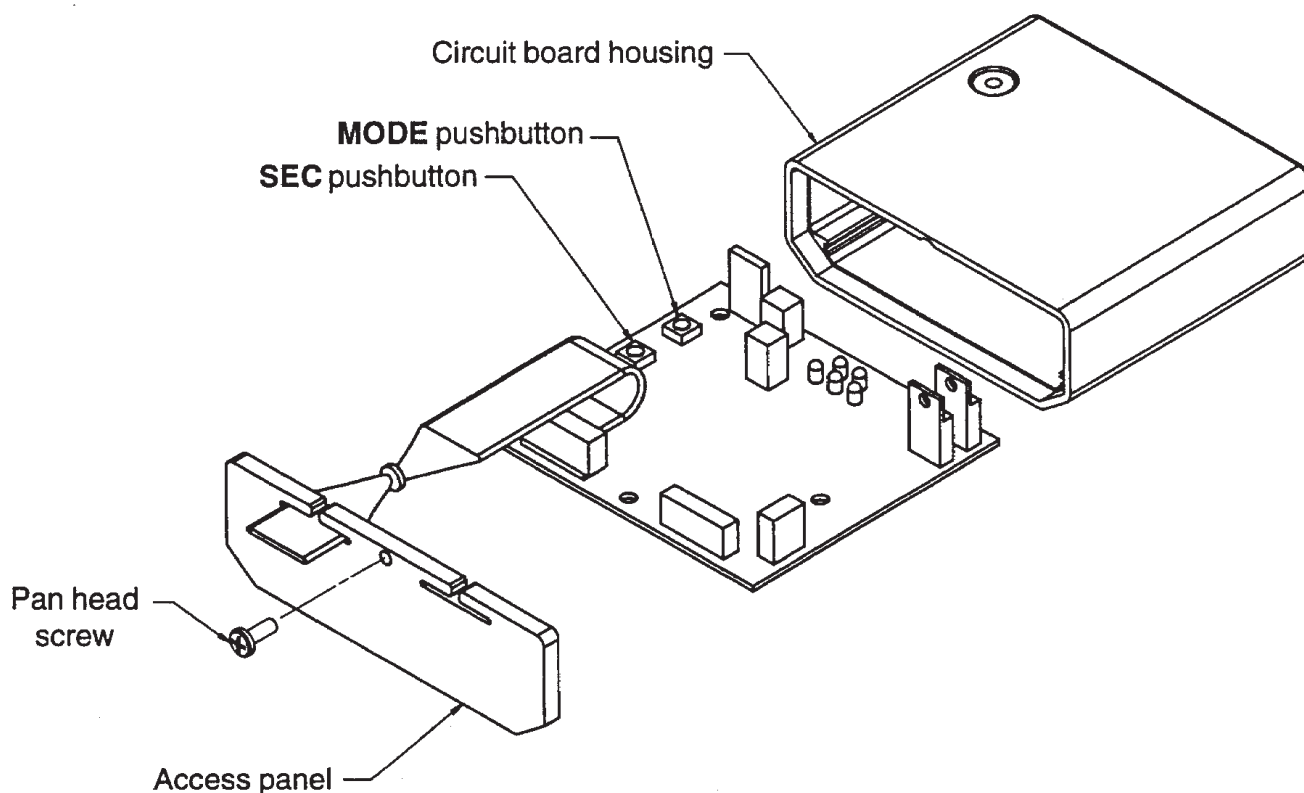### *Remove circuit board from housing*

NOTE: Follow the procedure below only when you want to access the SEC and MODE pushbuttons to program cycle times in increments of 15 seconds.

1. Remove the pan head screw that secures the access panel to the housing (see Figure below).

⚠️ **IMPORTANT:** Do not allow the circuit board to come in contact with metal surfaces. Since power is still being supplied to the circuit board, contact with metal surfaces can cause the board to short-circuit.

2. Pull the circuit board from the housing to access the MODE and SEC pushbuttons.

Circuit board housing

MODE pushbutton

SEC pushbutton

Pan head screw

Access panel

Circuit Board Pushbuttons and LEDs Continued

Bradlink™ Option Description

Bradley offers a unique communications link as standard equipment. The Bradlink™ feature (when specified) will allow all fixtures utilizing the Micro-Touch™ system to transfer timing information from one circuit board to another. With two conductor, 22 AWG, twisted pair wire, multiple fixtures can be "Bradlinked" together. For example, if a facility has a room with 10 fixtures, a maintenance person can go to any one of the fixtures, set the metering time, and the entire room would be automatically reset to the "new" information. There is no need to time each valve or fixture individually.

1. All showers set to the same time.

2. Maintenance person changes timing on one shower.

3. The shower automatically communicates the new time to all other showers connected by Bradlink™.

4. All showers now set to the new time.

Contact your Bradley Representative for further information.