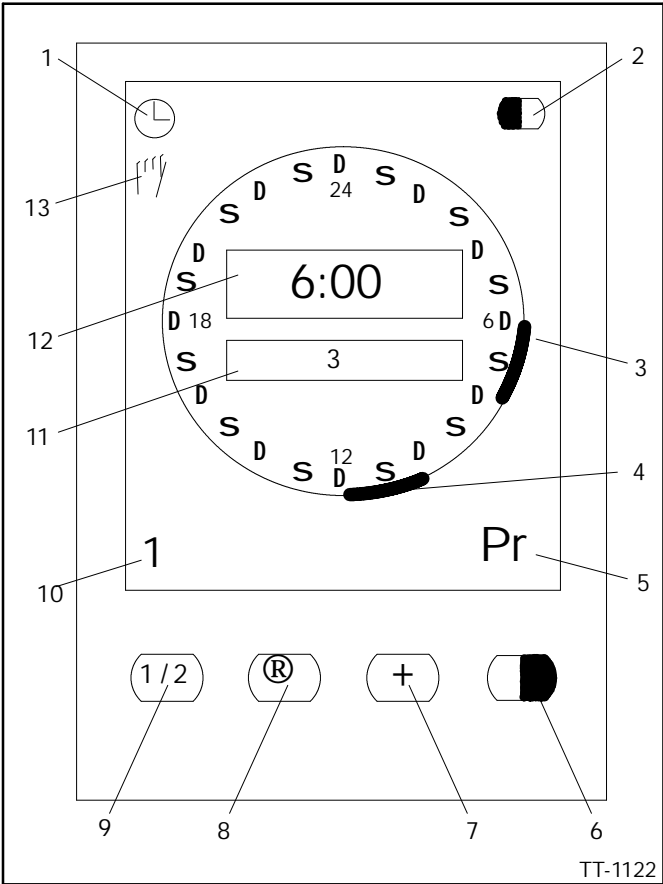


SERVICE BULLETIN

Original Issue Date: 11/96  
Model: **ATS**  
Market: **Industrial**  
Subject: **Exercise Timer Programming and Operation**

This service bulletin explains how to program and operate the ATS exercise timer, a digital weekly time switch with segmented program display. Set up to four different start/shutdown programs per day. The timer digitally displays the time of day and weekday number. The timer has a minimum switching time of one minute and approximately 20 hours of program memory reserve power.



1. Blinking clock symbol = set time of day  
Constant clock symbol = time switch running  
2. State of output contact, half shaded = on, no shading = off  
3. Segment display of first program, 1 segment = 15 min.  
4. Segment display of second program, 4 programs per day max  
5. Symbol of program input or interrogation  
6. Set button stores the programs to memory. Also used to override program  
7. Plus button increments time for programming  
8. Arrow button changes from day to hour:minute. Copy start and shutdown times from one day to the next  
9. Week button alternates between week one and week two  
10. Displays week one or week two  
11. Actual day of the week or program day  
12. Real time, set start time or set shutdown time  
13. Hand symbol- blinking = continuous manual override  
constant = manual override

Figure 1. Exercise Timer

Routing	Service Manager	Sales Manager	Parts Manager	Technician No. 1	Technician No. 2	Technician No. 3	Return This to
Initial Here							

# Operation

## Resetting the Clock

1. Lift bottom flap of timer front cover to open.
2. Simultaneously press and hold the ARROW (®), PLUS (+), and SET (■) buttons for 10 seconds.
3. Continue to depress the ARROW (®) button and simultaneously release the PLUS (+) and SET (■) buttons.
4. Release the ARROW (®) button when all segments of the LCD display appear. See Figure 1.

## Initial Setup (Date and Time)

Use the following procedure to set the current date and time.

1. Press the ARROW (®) button once. The clock symbol and the program day flash.
2. Press and release the PLUS (+) button until the current day of the week displays. Monday is day 1, Sunday is day 7.
3. Press the ARROW (®) button once when the current day displays.
4. To increase the hour, press and release the PLUS (+) button. Press the ARROW (®) button once to enter the hour. Timer runs from 1 to 24 hours, not am/pm.
5. To set the minute, press and release the PLUS (+) button to increase the display until the correct minute displays. Hold the PLUS (+) button to increase the minutes by 5.
6. To enter the minute press the ARROW (®) button once. After the minute has been entered PR (program) flashes on the exerciser's display, and the number 1 in the display's lower left corner indicates the week.

## Programming the Plant Exercise and Shutdown Times

7. To advance to the desired exercise day, press and release the ARROW (®) button. If the exercise day is in week 2, proceed to step 7a.
  - a. Press and release the ARROW (®) button to advance to day 7.
  - b. Press the ARROW (®) button once.
  - c. Press the WEEK (1/2) button once. The number 2 in the display's lower left corner indicates the week.
  - d. Press and release the ARROW (®) button four times to advance to the desired exercise day.
8. Press or hold the PLUS (+) button to set the exercise start time.
9. Press the SET (■) button to save the exercise start time.
10. To set the exercise shutdown time, press or hold the PLUS (+) button. Bar segments fill the display to identify the start time.
11. To save the exercise shutdown time, press the SET (■) button.
12. To advance to the next exercise day, press the ARROW (®) key.
13. The timer copies the start and shutdown time from the previous day to the following day. To clear the setting if the exercise start and shutdown times are different or do not apply to the current day, press the PLUS (+) and SET (■) buttons simultaneously.
14. To continue filling the desired schedule for succeeding days as described in steps 8-11, press the ARROW (®) key.
15. When day 7 of week 1 or week 2 displays, the timer is ready to run the program. Press the ARROW (®) button once.
16. The program is complete and ready to run when the clock icon is in the upper left corner of the exerciser's display.

## Resetting the Time

1. Perform Initial Setup steps 1 to 5.
2. Press and release the ARROW (®) button eight times until the clock icon appears.

## Reviewing the Program

Continue to press and release the ARROW (®) button to review the programmed start and shutdown times.

## Modifying an Existing Program

Use one of the following procedures to reprogram a previously entered program.

1. Reprogramming Procedure 1.
  - a. Press the WEEK (1/2) button to choose week 1 or week 2.
  - b. Press the ARROW (®) key four times.
  - c. Perform the procedure listed under Programming the Plant Exercise and Shutdown Times.
  - d. Cancel the entered program for every day by pressing the PLUS (+) and SET (■) buttons simultaneously.
  - e. Enter the new program for every day.
2. Reprogramming Procedure 2.
  - a. Reset the clock as described under Resetting the Clock.
  - b. Perform the steps listed under Initial Setup.

## Manual Override

Use the following procedure to manually override the exercise timer.

1. For manual override, press the SET (■) button and release once. Relay contacts change state.
2. To end manual override, press and release the SET (■) button again and relay contacts change state. If manual override is not ended, the timer automatically continues with the program at the next preset on or off time.

## Continuous Manual Operation

Use the following steps for continuous manual operation.

1. Press the SET (■) button for two seconds until the hand icon (⌚) flashes.

If the display set symbol (■) is on, the segmented display shows. If the display set symbol (□) is off, the segmented display does not show.
2. Press the SET (■) button once if the display set symbol is off.

## Ending Continuous Manual Operation

Press the SET (■) button for two seconds until the clock icon appears in the display.