

Model 21-40P - Programming Instruction Manual
INDEX

<i>Description</i>	<i>Page</i>
Programmable Features	2, 3
Monitor Temperature Trends	4 to 6
Operator Control Panel	7

OPERATING INSTRUCTIONS for PROGRAMMABLE FEATURES

REFERENCE *Operator Instruction Manual*, pages 5 and 6

ALWAYS READ STEP 1 FIRST

Contact Cimco for Programming Code and Programming Template

1. **ACCESS CODE** is required for all programmable features.
 1. Transformer manufacturer maintains control of "CODE". Cimco supplies standard code. Customer may request unique code.
 2. Instructions for each programmable feature are described in Items 2, 3, 4, 5, or 6 on this page.
 3. Access will be turned on with the following steps.
 1. Press and hold button 10 until programmable selections are completed.
 2. Enter seven digit access code.
 3. A "beep" will indicate acceptance of "code".
 4. Continue to hold button 10 until changes are complete.
 1. Steps 2, 3, 4, 5, and 6 can be executed as single actions or
 2. Steps 2, 3, 4, 5, and 6 software selections can be completed with one ACCESS CODE input.
 5. Repeat ACCESS CODE procedures if Button 10 is released before all software selections are completed.
2. Change "**ON SET-POINTS**"
 1. Press and release button 11 to select set-point requiring change.
 2. Press button 6 once to increase "TEMPERATURE ON" one increment.
 3. Press button 7 once to decrease "TEMPERATURE ON" one increment.
3. Change "**DEAD-BAND**"
 1. **DEAD-BAND** is defined as the difference between set-point on and set-point off.
 2. Press and release button 11 to select dead-band requiring change.
 3. Press button 6 once to increase "**DEAD-BAND**" one increment.
 4. Press button 7 once to decrease "**DEAD-BAND**" one increment.
4. Turn **FAN EXERCISER** on
 1. Repeat ACCESS CODE procedures if Button 10 has been released.
 2. Press and release button 9 then
 3. Press and release button 1.
 4. Release button 10 to turn fan exerciser on.
 5. Clock starts in AUTO ON running mode.
 6. FANS OFF MODE status during fan exerciser "on-time";
 1. Clock continues to run during FANS OFF mode.
 2. Fan power is turned off during FANS OFF mode.

(continued on next page)

OPERATING INSTRUCTIONS for PROGRAMMABLE FEATURES

(continued)

REFERENCE *Operator Instruction Manual*, pages 5 and 6

ALWAYS READ STEP 1 FIRST

Contact Cimco for Programming Access Code and Programming Template

5. Select **FAN EXERCISER "on-time"**
(CONTACT CIMCO FOR PROGRAMMING TEMPLATE FOR LOCATIONS OF BUTTONS 3, 4, and 5)
 1. **ENTER ACCESS CODE**
 2. Select "on-time" with one of the following choices.
 1. Press and release button 3 for two hours or
 2. Press and release button 4 for one hour or
 3. Press and release button 5 for one minute or
 4. Press and release button 6 to add one minute or
 5. Press and release button 7 to subtract one minute.
 3. Release button 10 and the "on-time" is selected.

6. Turn **FAN EXERCISER off**
 1. **ENTER ACCESS CODE**
 2. Press and hold button 10 then
 3. Press and release button 9 then
 4. Press and release button 2.
 5. Release button 10 to turn fan exerciser off.
 6. **ACCESS CODE IS TURNED OFF when button 10 is released.**

7. See *Programming Instructions*, pages 5 and 6, for RELAY ON elapsed time monitoring instructions.

OPERATING INSTRUCTIONS for PROGRAMMABLE FEATURES

REFERENCE *Operator Instruction Manual*, pages 5 and 6

ALWAYS READ STEP 1 FIRST

Contact Cimco for Programming Access Code and Programming Template

TABLE 2

1. Operating status LED's indicate which set-point is available for change.
 1. For "on" set-points LED's do not blink.
 2. For "dead-band" LED's blink.
2. Fans on set-point changes in five degree increments.
3. All set-points and dead-bands except fans on change in one degree increments.
4. Dead-band limits are fixed to help prevent mistakes.
 1. Fan relay dead-band maximum is 50 C.
 2. Fan relay dead-band minimum is 10 C.
 3. All other dead-band maximums are 10 C.
 4. All other dead-band minimums are 3 C.
 5. Other dead-band limits are available if specified by customer at the time of order.
5. Fan exerciser
 1. Minimum on time is one minute.
 2. Maximum on time is two hours.
 3. Off time is one week only.
6. Set-point monitoring "on" times are in 100's of hours.

OPERATING INSTRUCTIONS for MONITORING TEMPERATURE TRENDS

REFERENCE *Operator Instruction Manual*, pages 5 and 6
and *Programming Instructions*, page 2 - 4

ALWAYS READ STEP 1 FIRST

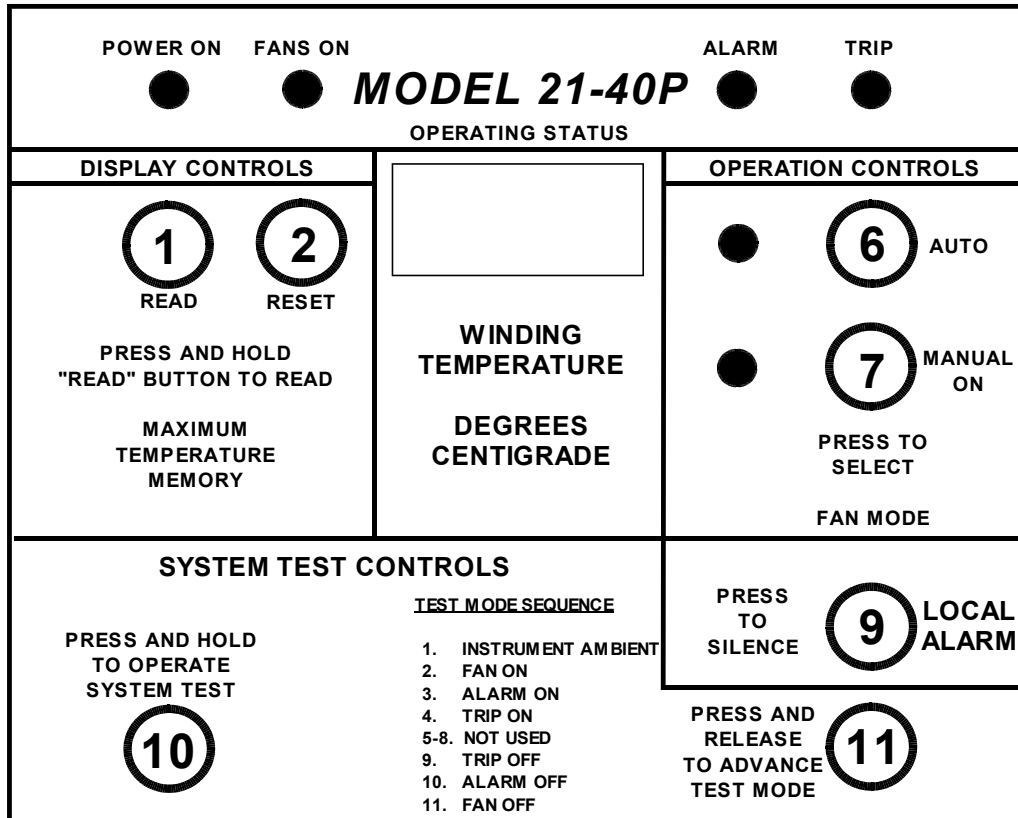
Contact Cimco for Programming Access Code and Programming Template

1. **ACCESS CODE** is required for all programmable features.
 1. Transformer manufacturer maintains control of "CODE".
 2. Access will be turned on with the following steps.
 1. Press and hold button 10 until desired operations are completed. Enter access code again if required.
 2. Enter seven digit access code.
 3. A "beep" will indicate acceptance of "code".
 4. Follow instructions in items 2, 3, or 4 on this page.
 3. Continue to hold button 10 until all changes are completed.
 1. Start Step 2 and continue through Steps 3 and 4 or
 2. Perform Step 1 or Step 2 or Step 3
2. **Monitor** fans on elapsed time
 1. To **read**
 1. Press and release button 3.
 2. Display will indicate elapsed time in hundreds of hours.
 3. Press and release button 3 then continue to Step 3. 1. 2.
 2. To **erase or reset time** to zero
 1. Press and release button 3 then
 2. Press and release button 2.
 3. Display will indicate three zeroes.
3. **Monitor** alarm-on elapsed time
 1. To **read**
 1. Press and release button 4.
 2. Display will indicate elapsed time in hundreds of hours.
 3. Press and release button 4 then continue to Step 4. 1. 2.
 2. To **erase or reset time** to zero
 1. Press and hold button 10 then
 2. Press and release button 4 then
 3. Press and release button 2.
 3. Display will indicate three zeroes.
4. **Monitor** trip-on elapsed time
 1. To **read**
 1. Press and release button 5.
 2. Display will indicate elapsed time in hundreds of hours
 2. To **erase or reset time** to zero
 1. Press and hold button 5 then
 2. Press and release button 2 then
 3. Display will indicate three zeroes.
5. **ACCESS CODE IS TURNED OFF** when button 10 is released.

SPECIAL NOTES FOR TEMPERATURE TREND DATA

1. Schedule fan motor maintenance.
2. Monitor fans on time.
3. Monitor alarm on time.
4. Monitor trip on time.
5. Data for estimating consumed life of transformer insulation.
6. Time is displayed in 100's of hours.
 1. Accuracy is plus 0 and minus 1 hour.
 2. Maximum reading is 25,000 hours.
 3. Automatic reset to zero after 25,000 hours.

FIGURE 1



OPERATOR CONTROL PANEL

TABLE 1	
STEP MODE	
1.	INSTRUMENT AMBIENT
2.	FANS ON
3.	ALARM ON
4.	TRIP ON
5 - 8.	NOT USED
9.	TRIP OFF
10.	ALARM OFF
11.	FAN OFF

