



**SANYO Commercial Solutions**

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## Technical Service Bulletin

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- Category:** Procedure Only - No Specific Fault
- Topic:** Method to force compressor to Minimum, Intermediate and Maximum speed for "testing" purposes only.
- Applicable Product:** All Sanyo "72 Series R-410a Air Conditioners and Heat Pumps of 26,000 to 42,000 BTU Capacities"

The following procedure can be used to "force" a compressor to run at its minimum, intermediate or maximum speed. This function should be used only as a reference test to verify that a system is changing speeds or generally functioning properly. It should not be used as a primary method to conduct refrigerant charging based upon operating pressures and temperatures. Refrigerant charging is best served using the "weighted" method.

To force a compressor to minimum, intermediate or maximum speeds follow these steps:

1. Install system including power wiring, refrigerant piping and indoor unit remote controller.
2. Connect a second "wired remote/RCS-TM80BG" to the outdoor Printed Circuit Board on the blue colored connector marked as "CN018 and RC" (shown on upper right side of Figure 1).



Figure 1

3. Turn the power supply on to the indoor and outdoor units.
4. Press and hold the “Automatic Address Setting Button” on the outdoor board (one second or longer) until LED1 and LED2 begin to blink alternately. This button is shown in the lower right side of Figure 1.
5. Wait until both LED1 and LED2 turn off. This indicates that automatic addressing of the indoor and outdoor units has been accomplished.
6. Using the wired remote connected to the outdoor unit simultaneously press the “**wrench**”, “**set**” and “**cancel**” buttons as shown in Figure 2 for approximately 4 seconds. The display on the remote will change to “setting codes”.



Press simultaneously  
Figure 2

7. Using the “**Temperature Up and Down**” buttons (   ) on the outdoor unit remote controller scroll until you reach **Item Code 4E** (See Figure 3). The normal setting is “0”.

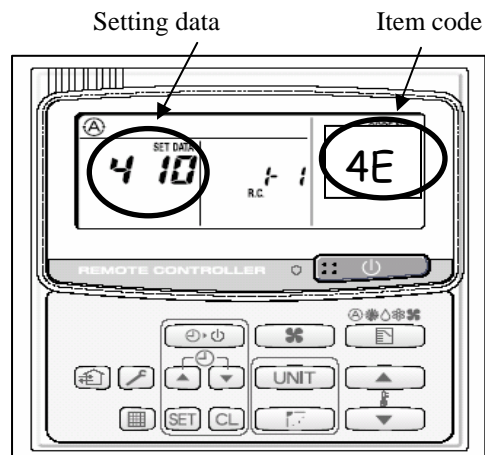




Figure 3

8. Next, using the “**Timer Up and Down**” buttons (   ) on the outdoor unit remote controller scroll up or down to select the number 0, 1, 2, 3, 4 or 5 to achieve the compressor speed as shown in Figure 4 to force the compressor to the desired speed.

Item code	Setting data					
	0	1	2	3	4	5
<b>4E</b>	0	1	2	3	4	5
<b>4F</b>	0	1	2	3	4	5
Desired Compressor Speed	Normal Speed for Final Installation	Speed for “Rated” Capacity	<b>Intermediate Compressor Speed</b>	<b>Maximum Compressor Speed</b>	<b>Minimum Compressor Speed</b>	Nominal (Max speed for cooling only)

Figure 4

9. Press the “SET” button on the outdoor remote controller to send the new **4E** settings to the outdoor PCB. You will notice the word “Setting” in the upper left corner of the remote controller display.
10. Repeat steps 7, 8 and 9 above to program the same “Setting Data” code for Item code **4F**. Note, if the setting data code for 4E was “3”, the setting code for 4F should also be “3”, and so on.
11. Press the “SET” button on the outdoor remote controller to send the new 4F settings to the outdoor PCB.
12. Exit the setting mode by pressing the “Wrench” button on the remote controller.
13. Use the remote controller of the indoor unit to turn the unit on or off and to select the heating or cooling mode.
14. If operating in the cooling mode you must set the “desired temperature” to the minimum temperature setting using the indoor unit remote controller. If operating in the heating mode you must set the “desired temperature” to the maximum temperature setting using the indoor unit remote controller.
15. Using the indoor unit remote controller set the fan speed to the HIGH position.
16. Adjust and Set the indoor unit flap/vane to the position as shown in Figure 5 and Figure 6.

Type of indoor unit	Flap angle	
	Cooling	Heating
4-way Air discharge type	F 3	F 5
Ceiling-mounted type	F 2	F 2
Wall-mounted type	( F 2 ) ※1	( F 2 ) ※1
Concealed duct type	No flap※2	No flap※2

Figure 5

FLAP/VANE ANGLE SHOWN ON REMOTE CONTROLLER

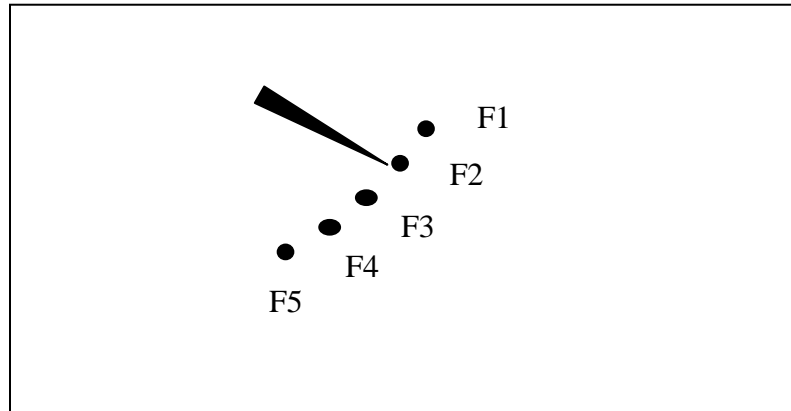


Figure 6

17. To force the compressor to a different speed repeat items 6 through 9 above.

**18. Be certain to reset the SETTING DATA back to 0 (for item codes 4E and 4F) and return the unit to normal operation once you finish.**

For additional details please access our technical literature using our website at [www.sanyohvac.com](http://www.sanyohvac.com) or contact our technical service department at 800-851-1235.