

# FreeMotion Fitness **Technician Certification Test**

FREEMOTION FITNESS

Print or open this test in Excel.

Place an "X" in the box next to each correct answer. Send or forward your test to your coordinator.

Service Company:

Technician:

Date:

**Treadmills/Incline Trainers** 

# 1. What are the input voltage requirements for treadmills and incline trainers located in the USA?

- A. 240-volt dedicated 10 amp circuit with shared AC neutral.
- Β. 120-volt non-dedicated 20 amp circuit with shared AC neutral.
- C. 120-volt dedicated 20 amp circuit with non-shared AC neutral.
- D. 240-volt non-dedicated 20 amp circuit with non-shared AC neutral.

# 2. What type of wall receptical is required for Treads and incline trainers units in the United States and Canada?



- Standard 120-volt two plug outlet. Standard 220-volt single plug outlet. Β.
- C. Standard 120-volt surge protected wall outlet.
- D. NEMA 5-20R wall receptical.

# 3. Which two buttons are pressed simultaneously for 3 seconds to enter and exit maintenace mode on Treadmills?

- Stop and speed increase. Α.
- Clear and Enter. Β.
- C. Stop and Display
- D. Quick Start and Clear.

# 4. Which Option screens are Contained in treadmill maintenance Mode?



- Speed,Incline,LED,Lube reminder,Language,Belt Replacement,Error Codes,Calibration,over-rides.
- Β. Total Time, Language, and Timeout.
- C. Total Time, Distance, Language, Safety Key, and timeout.
- D. Hours, Distance, Max program time, Language, Timeout, Custom Program, Sleep Timeout, Safety Key, TV.

# 5. Which 3 buttons are pressed to enter calibration mode on treadmills?

- Start, Speed increase and Stop. Α.
  - В Clear, Enter- and Enter+.
  - C. Stop, Quick Start and Clear. D.
    - Clear, Speed increase and Incline increase.

# 6. Motor debug is screen 4 of calibration and should be off. What error code will be displayed if motor debug is switched on?

- 0001H or 2006H Δ
- EEEEE R 22
- C.
- D. Δ

7. To which parameters should you advance, for the last three error codes that the motor controller has experienced?

- Α. P021, P022, P023.
- в P014, P015, P016.
- P045, P046, P047. C.
- P073, P074, P075. П

# 8. What does a motor contoller error code of 22 indicate?

- Α. Low voltage (Run State)
- Β. Encoder Feedback Error.
- C. Overload
- D. Overvoltage.

#### 9. What is the most likely cause of a motor controller error code 22?

A. Loss of speed sensor signal.



- C. Unit has experienced a spike in electricity.
- D. The motor controller fan has stopped and the controller has overheated.

#### 10.You may be directed to set parameter defaults following a motor controller error code. How is this done?



- By pressing the reset button on the motor controller.
- B. By powering down the unit for 3 minutes and re-powing.
- C. Enter Calibration. Move to last screen. Press & hold Clear and right Stop button. Press speed 12 button.
- D. Enter treadmill maintenance mode. Press and hold stop and clear for 30 seconds.

### 11. On Domestic units for the Unites Staes and Canada, what voltage does the drive motor operate on?

Α.	120 VDC
В.	240 VDC
C.	120 VAC
D.	240 VAC

#### 12. On Domestic units for the United States and Canada, what voltage does the Incline motor operate on?

A.	120 VDC
В.	240 VDC
C.	120 VAC
D.	240 VAC

#### 13. True or false: The safety key can be disabled in the maintenance mode of the console.



14. When checking the resistance of the drive motor windings, how much resistance should register between wires?

- A. 20 ohmsB. Infinate ohms
  - 0 ohms
  - 1.65 ohms

## 15. What is the purpose of the CSAFE board?



C.

D.

- To shut down the unit if the user falls.
- Keep propritary information from being downloaded.
- C. Allows communication between treadmill upper control board and external devices.
- D. Keeps the user from entering fraudulent information about weight.

### 16. What is the average life expectancy of the walking belt on commercial units?

- A. 5,000 -10,000 miles
- B. 10,000-15,000 miles
- C. 20,000-30,000 miles
- D. 40,000-50,000 miles

## 17. What is the average life expectancy for the walking board surface if properly maintained?

- A. 10,000-15,000 miles
- B. 20,000-25,000 miles
  - C. 30,000-35,000 miles
  - D. 40,000-50,000 miles

18. True or false: The walking board can be flipped over when the surface begins to wear out. (Dual Sided)



19. True or false: An anti-static wrist strap must be worn when handling or replaceing console componants.



20. Utilizing the Service Bulletin (Flash) for treadmill knocking noise. What can be replaced to eliminate this condition?

- A. Drive belt. B. Walking belt
  - C. Walking board.
  - D. Front roller bushings.

TRUE

FALSE

21. In the tech manuals and other info section on the web, for the NordicTrack 9600 incline trainer lift motor installation What set of buttons are pressed to rotate the right side motor down until it stops?

- A. Start button and Clear.
- В.
  - B. Right side stop button and Clear.C. the quick incline (-) button and (0) button.
  - D. The quick incline (-) button and (-5) button.

#### 22. What does the error "Controller Comm Error" during power up indicate? ( located in tech manuals and other info section)

A. The treadmill console cannot communicate with the controller. (Check upright cable)



- . The treadmill controller is cold and must warm up.
- C. Power to the treadmill is weak and not sufficient to power the controller.
- D. The pulse sensors are not registering.

#### 23. Older Nordic track units require lubrication (CTK models). What type of lubrication must be used?

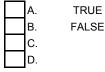
A.	Silicone
В.	Wax
C.	WD-40
П	Icon ner

. Icon performant Lube (In original Icon tube)

## 24. FMTK and FMTL models have a maintenance free walking belt. What type of lubrication can be used?

- A. Silicone B. None
  - C. WD-40
  - D. 10W30 motor oil

25. True or false: The walking belts on commecial units are directional and must be installed with the arrow pointing in the direction of the belt movement.



#### **Bikes and Ellipticals**

#### 26. What two buttons are pressed to enter calibration on FreeMotion ellipticals?

- A. Clear and Enter.
- B. Enter and Resistance up.
- C. Quick Start and Enter.
- D. (+) and (-) next to enter.

#### 27. What button is pressed to advance levels in elliptical calibration?

- A. Quick Start.
- B. Enter.
- C. Clear.
- D. Manual.

## 28. Which screen in elliptical calibration will display battery voltage? (multiplied by 1000)

- A. screen 1 B. screen 2 C. screen 3

  - D. screen 4

#### 29. What battery voltage should be displayed in calibration mode on ellipticals?

- A. 6.5V to 7.5V
- B. 11V to 12V
- C. 9V to 12V
- D. 8.5V to 10.5V

#### 30. What two buttons are pressed to enter Maintenance Mode on Ellipticals?

# A. Enter and Quick Start.

- B. Clear and Enter.
- C. Clear and Quick Start.
- D. (+) and (-) next to enter.

#### 31. Which button is pressed to advance levels in Maintenance mode on Ellipticals?

- A. Clear B. Quick Start C. Enter
  - D. Manua
  - D. Manual

#### 32. If a bike is running off batteries, what is the minimum RPM required for start up?

- A. 50RPM B. 100RPM C. 10RPM
  - D. 25RPM

#### 33. What two buttons are pressed to enter calibration mode on FreeMotion bikes?

- A. Enter and Quick Start.
- B. Clear and Enter.
- C. Clear and Quick Start.
- D. (+) and (-) next to enter.

#### 34. What bullton is pressed to advance screens in calibraton mode on bikes?

- Clear А
- Β. Quick Start
- C. Enter
- D. Manual

# 35. On Bikes and ellipticals that have a TV. How do you enter configuration mode?

- - Press Channel (+) and Volume (+) Α. Press Channel (-) and Volume (-)
  - Β.

TRUE

FALSE

- C. Press TV Only button and Volume (+)
- D. Press TV Only button and Volume (-)

## 36. True or False: On most models of FreeMotion Bikes, a small hole is located in the flywheel to aid in belt installation.



**General Information** 

37. True or false: Motor oil is recommended as a lubricant on the guide rods of freeMotion weight equipment.



38. What should your digital multimeter display when set to resistance and leads are not touching anything?



39. In 2002, the commercial division of Icon Health and Fitness's name was changed to FreeMotion Fitness. What was the Name of the Original company aquired by Icon Health and Fitness?

Α.	Diversified Products.
В.	Diamondplated Fitne
~	

- dplated Fitness.
- Ground Zero Design. C.
- D. Musclebound Fitness.

40. What is the recommended procedure for cleansing the console of our fitness products?

- Α. Spray cleanser on the touchpad and wipe away excess.
- It is not recommeded to clean the console. В.
- C. Dampen cloth and wipe surface.
- D. Spray with alchohol and let dry.