



LIFTING SYSTEM TECHNICAL CERTIFICATION TRAINING

Field Engineering | 2010

LifeFitness
WHAT WE LIVE FOR

Course Objectives

- » Theory of operation
- » Incline/Decline ranges for treadmills
- » Review basic terms of the different components
- » Review folding consumer treadmill F3
- » Common issues

Commercial and Consumer Treadmills



F3



T3



T5.0



T5.5



T7.0



CLST & CST

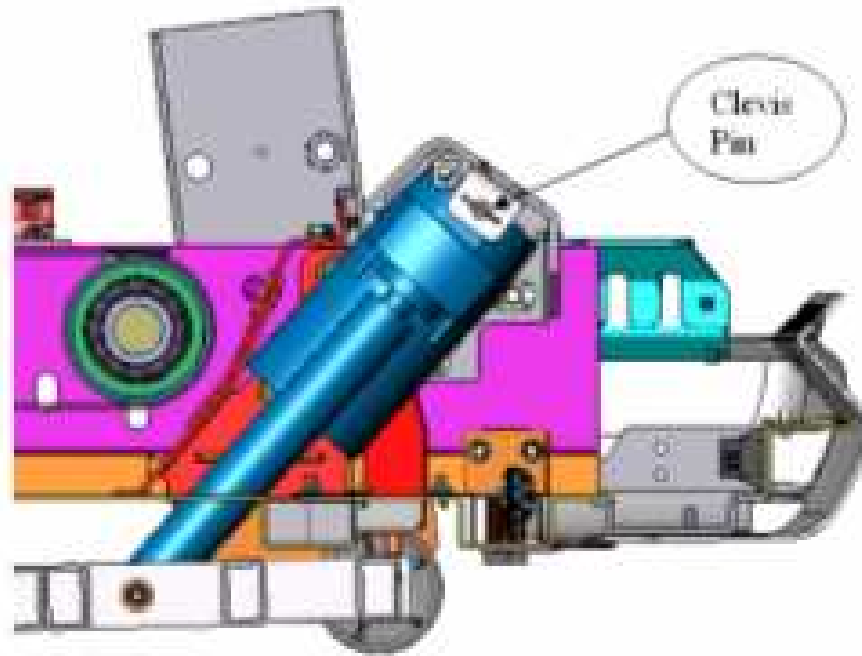


95T & PCST

Theory of Operation

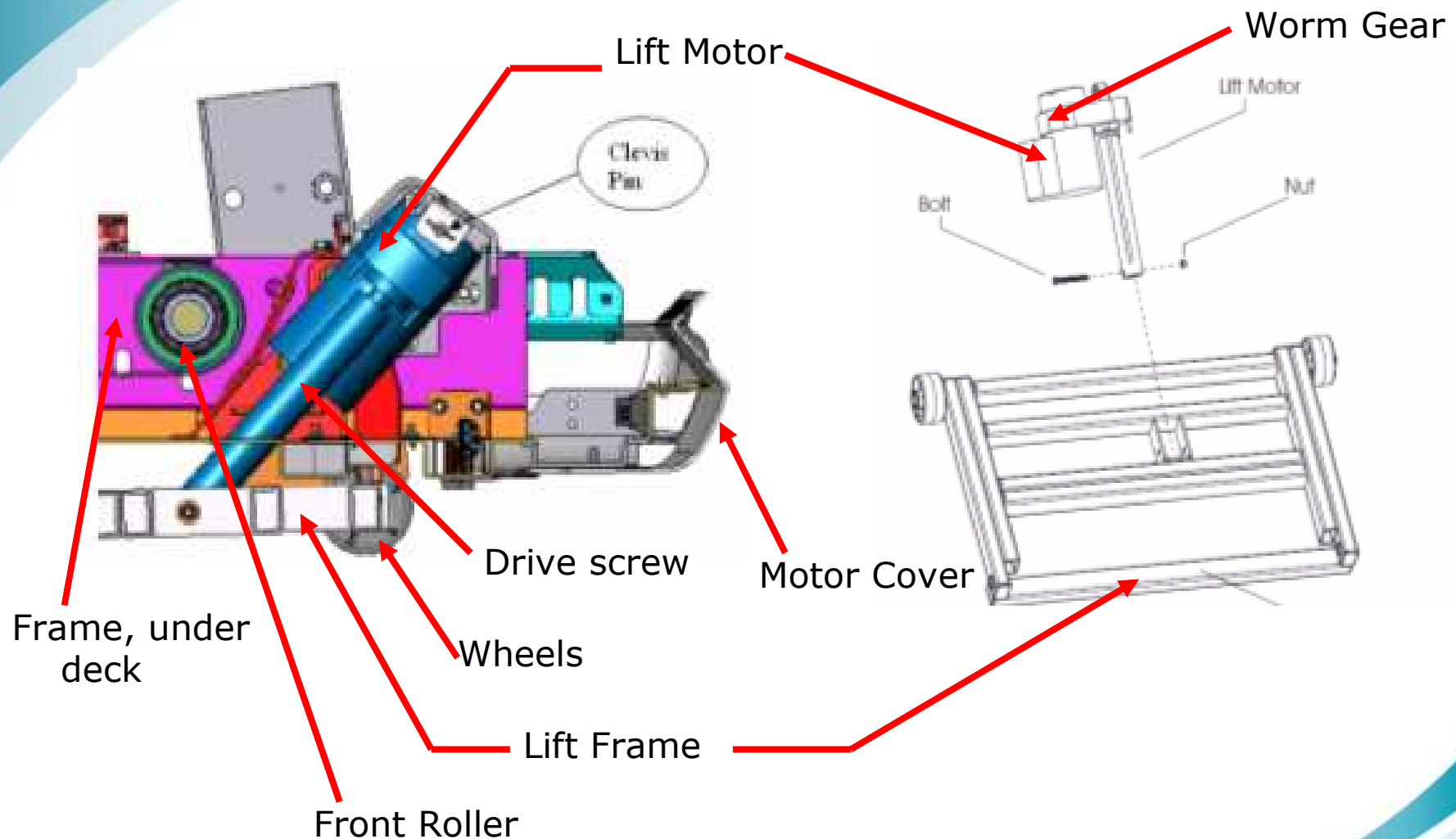
- » A lift motor/actuator is used to incline and/or decline the treadmill's walking surface.
- » One end of the lift motor is pivotally connected to the treadmill frame under the front motor shroud.
- » The other end of the motor; the drive screw, connects to a lift frame.
- » The lift frame contains two wheels assembled to it.
- » The lift frame is also pivotally mounted to the main treadmill frame somewhere under the deck.
- » As the lift motor drive screw extends, the lift frame rises and moves along the floor by the use of the two wheels.
- » This causes the treadmill to incline. Conversely, as the lift motor drive screw retracts, the treadmill declines.

Incline & Decline Ranges

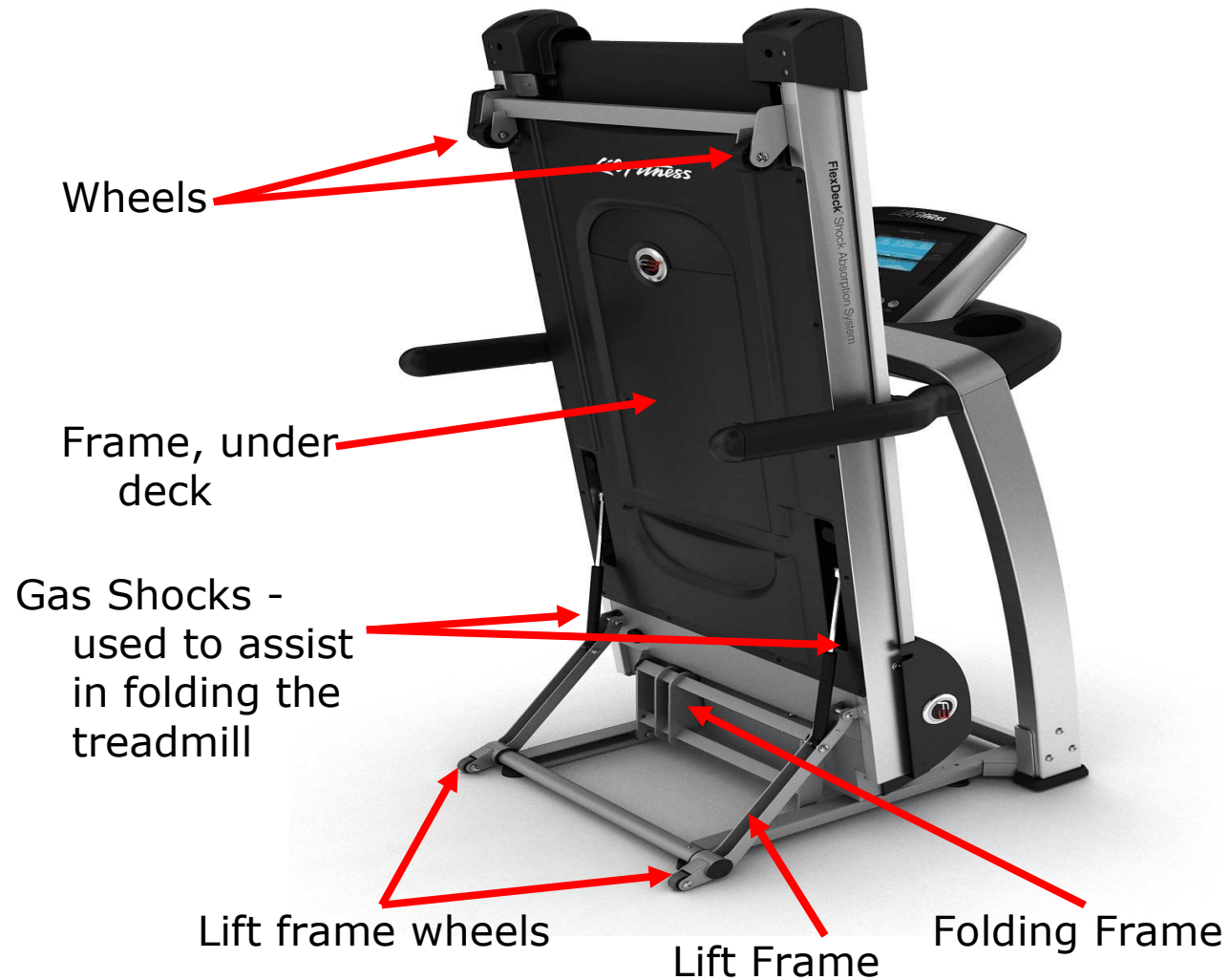


- » Incline ranges for commercial and high-end consumer treadmills: [0%->15%] or [0°->8.5°].
- » Incline ranges for consumer treadmills:
 - » [0%->12%] or [0°->6.8°].
- » Decline range: up to -3% or -1.7°.
 - ♦ This is currently offered on only on the 97T Classic Series Treadmill
 - ♦ Mainly used by military personnel

Components – Visual Representation



Folding System for F3 treadmill



Common Issues

F3 Treadmill – Unit Does Not incline

- » Issue:
 - ◆ Unit will not Incline
- » Probable cause:
 - ◆ Installer / Service technician has not calibrated the Motor Controller and Lift Motor of the unit at the time of installation or service
- » Solution:
 - ◆ Perform the calibration procedure



F3

Treadmill will not Incline

- » Issue:
 - ◆ Unit will not incline:
 - > The unit shows "Please wait" on the display
 - > Debris are visible on the lift screw threads
- » Probable cause:
 - ◆ Faulty Lift Motor/Actuator - crack in lift actuator nut/bushing
- » Solution:
 - ◆ Replace if necessary



Summary

- » Which Life Fitness manufactured treadmill has a decline option?
- » What is one probable solution if F3 treadmill does not incline?
- » Debris are visible on the lift screw thread of a lift actuator and the treadmill does not incline / decline. What is the likely solution?

Questions





THANK YOU!

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