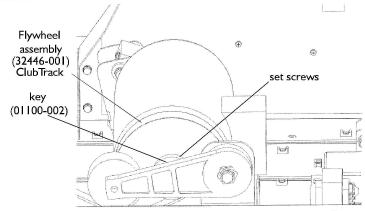
- 5. Remove the four hex nuts that hold the motor mount on the headframe.
- 6. Pull the motor assembly off the headframe.
- 7. Using a 13mm open end wrench, remove the nuts and washers securing the motor. Note the arrangement of the isolator mounts.
- 8. Loosen the two set screws on the flywheel/drive pulley and remove. Use a gear puller to pull the flywheel off the motor shaft.



- 9. Reinstall the flywheel onto the motor shaft and loosely tighten the setscrews.
- 10. Replace the motor by following Steps 4 through 8 in reverse order. Use Loctite 242 adhesive on the motor mount studs before installing new motor mounting nuts.



Tighten the motor mounting nuts until the lock washer flattens, then turn the nut $\frac{1}{2}$ turn. Do not overtighten the nut.

The new motor and flywheel assembly must be aligned with the front roller drive pulley. Use a straight-edged ruler placed on the outside of the front roller drive pulley to align the outside face of the motor drive pulley to within 0.020 inch (½mm). Tighten the set screws.

- 11. Replace the poly-V belt as previously described.
- 12. Replace the hood assembly as previously described.

Field Functional Test

To verify that the treadmill is operating properly, perform Field Test No. 3. See Appendix D, Field Functional Tests for specific instructions.

Replacing the Grade Actuator

 Place a clean sheet of cardboard or a clean rag on the treadmill deck before starting this procedure. Do not elevate the treadmill.

- 1. Block the treadmill headframe securely with wooden blocks to ensure that the treadmill will not drop when you remove the grade actuator.
- 2. Turn off the power and remove the hood as described.
- 3. Disconnect the grade actuator connector from the VSD board (P10).
- 4. Remove the two 8mm hex bolts securing the grade arm bearings to the block at the end of the screw on the grade actuator. Be careful, as the grade arm will swing free when these bolts are removed.
- 5. Remove the shoulder bushings from the grade arm and set aside, noting the location of flats for preventing rotation.
- 6. Remove the 3/8 locknut and bolt from the grade actuator mounting at the headframe end and remove the actuator. Withdraw the cylindrical bushing from the bearing in the end of the actuator.
- 7. Spin the block containing the actuator nut off the end of the screw. Using a Phillips screwdriver, remove the M4 screws, lock washers, and flat washers securing the grade nut.
- 8. Replace the grade actuator, following steps 2 through 7 in reverse order. When re-installing the bronze bearings, be sure to clean all mating surfaces and lubricate bearings with automotive wheel bearing grease prior to installation. Prior to installing the grade arm bearings as described in step 4, perform the procedure described below to calibrate the grade system. Apply a small amount of grease to the screw after installation.

