

# **F-SERIES TRACKER TROUBLESHOOTING**

## **TRACKER SITS LEVEL, LEANS TO ONE SIDE, OR DOES NOT MOVE:**

1. Manually move tracker through its entire range of motion. Check for any mechanical interference and correct if necessary. If your Tracker™ does not come with sealed bearings, you must grease the bearings regularly at least twice a year (See warranty).
2. Check shadow plates for proper installation. The tracker will not work without them.
3. Be sure the Track Rack™ is pointing south (in the Northern Hemisphere) and the copper transfer tube is mounted on the south end of the frame, and is not crimped in any way.
4. Check for any wiring which may stop the Track Rack™ from turning freely. Check wiring and junction boxes for equal balancing on the east and west sides.
5. A shock absorber may be sticking. On a calm sunny day remove shocks at the Truss Tubes. If it tracks without the shocks, call **ZOMEWORKS**. The shock absorbers may be defective. (Shocks are warranted for 2 years).
6. The Track Rack™ moves when sunlight warms one canister which then forces liquid into the other canister. You may simulate the sunlight's effect by warming the lower canister with a hair dryer or carefully with a hand torch (Alternately, you may also cool the upper canister with wet towels or a cold water spray). Within 10 minutes, the Tracker should begin to rotate towards the cooler canister. If the Track Rack™ does not move, and you have checked the assembly for movement, the Tracker may have lost its charge. Call your dealer or your **ZOMEWORKS** representative.

## **TRACKER IS SLOW TO WAKE UP:**

1. Check that Track Rack™ is getting full early morning sun shining underneath the tracker. The wake up fin must see the sun.
2. Check modules and electrical junction boxes for equal balancing on the east and west sides.
3. Check bearings for lubrication so the tracker moves freely.  
**NOTE:** If the Track Rack™ is installed in a corrosive climate, check the axle and bearings frequently for rust or corrosion; if you do not have sealed bearings you will need to grease yours 2 - 3 times per year. Coating the axle and bearings with grease will help prevent corrosion.
4. The shock absorbers may be sticking when collapsed or extended. Remove the shock bolt at the truss tube and check the shock motion for "stick". If the tracker "wakes up" without the shocks, the shocks are likely defective. Contact your dealer or **ZOMEWORKS** for replacement. Do not leave the tracker defenseless with out shocks; a strong wind could damage it. Tie it down.

## **TRACKER DOES NOT HIT THE BUMPER STOPS:**

1. The tracker is very effective even if it doesn't track to the bumper limits. The bumper stops are set for approximately 90° of rotation.
2. To increase the rotation, raise the counterweight. But remember; raising the counterweight will make the tracker less stable in the wind. For optimum performance you must balance rotation against stability. If the tracker rotates further to one side than the other, the tracker may be out of balance, refer to **Step 10, Page 14** of the instructions and rebalance the rack.

## **IMPORTANT NOTES TO REMEMBER:**

1. The Track Rack™ must be assembled according to the instructions.
2. The Track Rack™ should move smoothly through the entire range of motion, with the only drag supplied by the shock absorbers. If friction or interference is noted, check assembly against the instructions and make required corrections.
3. The photovoltaic modules should be centered and mounted evenly as per the instructions. The canisters on each side of a Track Rack™ should not be “shaded” by the photovoltaic modules.  
You must maintain at least a 2” minimum clearance, check assembly instructions.
4. Counterweight must be properly adjusted per instructions.
5. The Track Rack™ must be in a location that maintains a clear line-of-site to the sun throughout the day, and during different seasons. Remember that the sun’s position in the sky changes from season to season.
6. To maintain optimum sun exposure you may want to adjust your Track Rack™ for the winter & summer seasons. Use the seasonal adjustment arm. This will vary with your location’s latitude.
7. A shadow from structures, trees or other objects that may miss the Tracker in the summer may fall across it in the winter, preventing its operation.

## **MAINTENANCE:**

1. The maintenance required is lubrication of greaseable bearings (Sealed bearings not included) twice a year.
2. Paint touch up will be necessary to prevent rusting.
3. If the Track Rack™ is installed in a corrosive climate, check the axle and bearings frequently for rust or corrosion; you may need to grease the bearings 3 to 4 times per year and keep the axle coated with grease.
4. Check that the shock bolts and shock arm bracket bolts are tight two times per year. A tracker is defenseless against the wind without functioning shock absorbers.