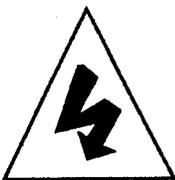


# MOTOR DRIVE WIRING AND SETTING LIMITS



**1.** Remove the strain relief from the actuator motor head and string the motor and sensor wires through it and the motor cover. Wire your two motor wires to terminals 1 and 2. Wire your two sensor wires to terminals 4 and 5. (See Fig. 11 and 12.)

**2.** It is now necessary to check for proper wiring. The east-west commands from the receiver should correlate with the drive ring movement for your site. If the drive ring is moving in the wrong direction or not at all, switch the two motor wires. (See Fig. 11 and 12.)

**NOTE:** The east and west limits are preset near the mechanical limitations of the antenna which is very close to both horizons. If these settings are improper (due to an obstacle that would interfere

with the antenna at one or both horizons), proceed with steps 3 & 4. Otherwise, turn to the next page.

**3.** Note the factory preset position (at the first limit switch) in the actuator motor head. Using the actuator motor head, move the drive ring to approximately where your first antenna limit (the east limits in the northern hemisphere and west limits in the southern hemisphere) needs to be. Disconnect the actuator motor head from the CD Sipco gearbox by loosening the two  $\frac{5}{16}$ " x  $\frac{5}{8}$ " bolts. Run the actuator motor head back to the factory preset limit. Reattach the actuator motor head to the CD Sipco gearbox by tightening (without overtightening) the two  $\frac{5}{16}$ " x  $\frac{5}{8}$ " bolts. (See Fig. 13)

**4.** Now move the drive ring to where the other antenna limits are to be (the west limits in the northern hemisphere and east limits in the southern hemisphere). Loosen the Phillips-head screw that holds the sensor rod in the actuator motor head. Move the sensor rod until it depresses the second limit switch. Tighten the screw back onto the sensor rod just enough to keep the sensor rod from moving. (See Fig. 13)

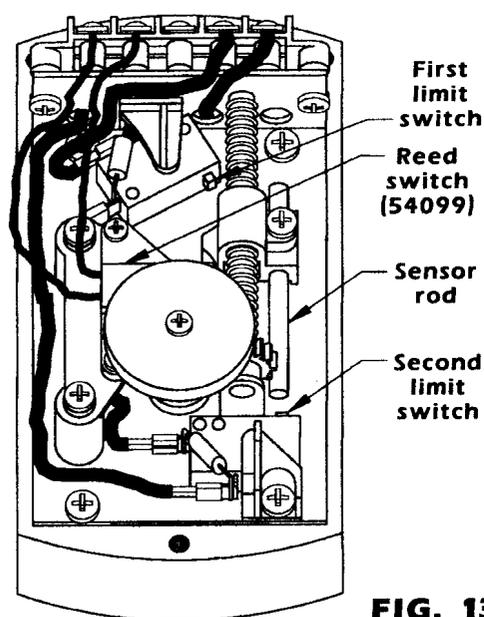
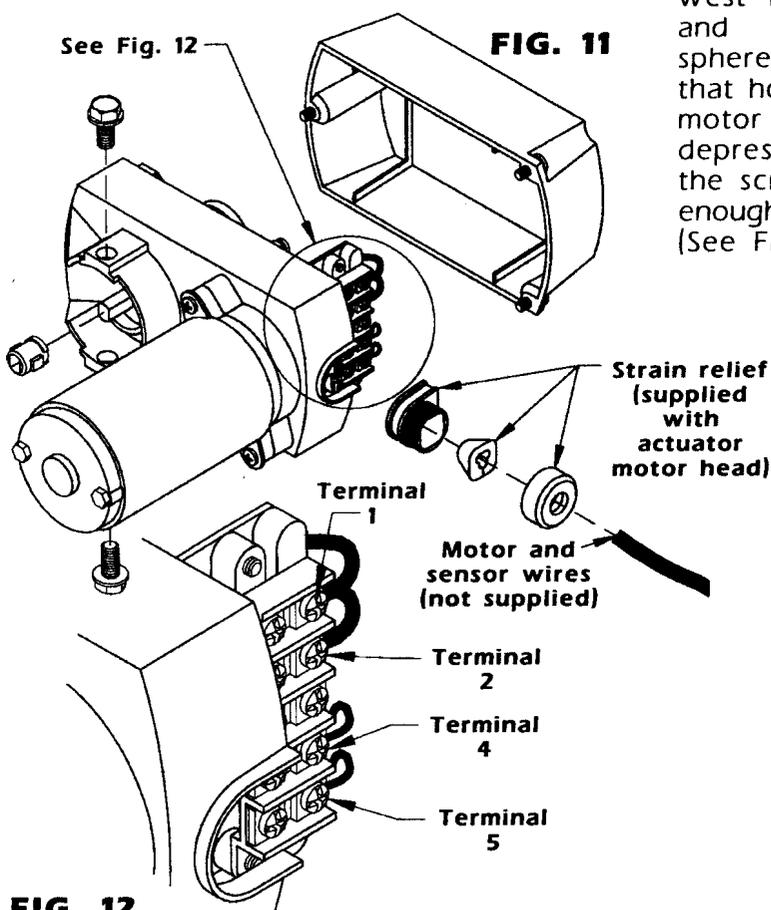


FIG. 12

FIG. 13

# MOTOR COVER INSTALLATION AND FINAL CHAIN ADJUSTMENT



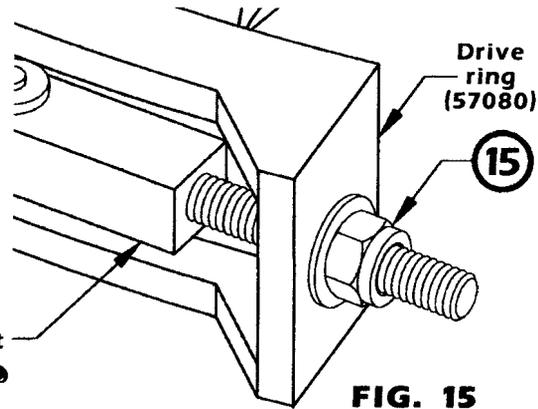
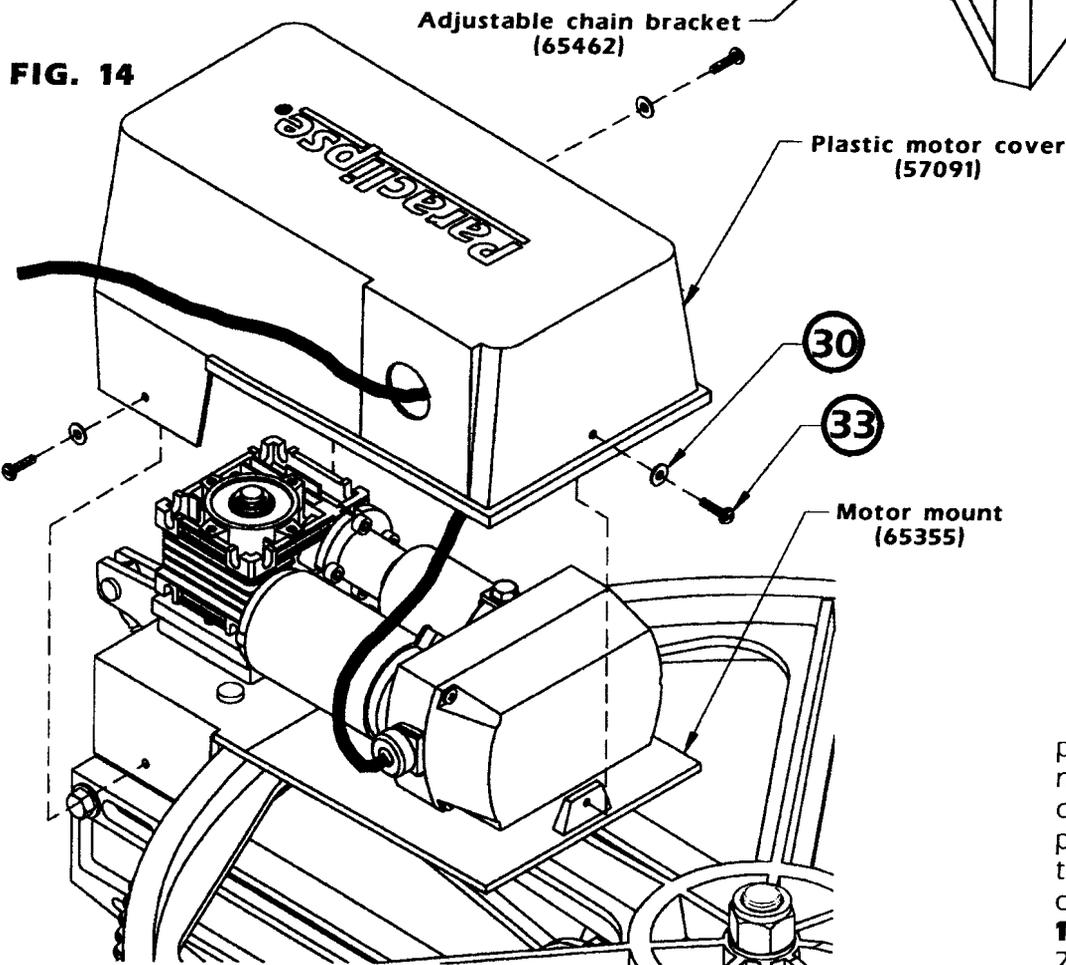
**After the motor has been correctly wired and the motor limits have been set, it is necessary to correctly tension the chain and check the operation of the motor limits. Failure to do so may result in serious motor or antenna damage.**

**1.** Reattach the actuator motor head cover by tightening down on the three Phillips-head screws. Attach the plastic motor cover to the motor mount using three #10 x  $\frac{3}{4}$ " self-tapping screws and three #10 flatwashers. Don't overtighten. (See Fig. 14)

**2.** Use the motor to rotate the drive ring back and forth to each limit twice.

Be certain that both limit settings are satisfactory. Check the tension of the chain at each limit. If necessary, retorque the  $\frac{5}{16}$ " nut on the adjustable chain bracket to 7 ft./lbs. (9.5 Nm). (See Fig. 15)

**3.** After the chain has been adjusted, grease it liberally with good quality marine wheel-bearing grease (not supplied).



For a complete listing of nuts, bolts, and other hardware, please see identification table on page 25 for **12 CD** and page 26 for **14 1/2 CD**.