## Changing sweep angle & park position on 4R series motors





The first step is to take note of the current setting of the motor.

On this case, the motor is set to park RIGHT, and sweep 110 degrees.

This information will be useful once inside the gearbox, and making adjustments.



Using a Phillips head screwdriver, remove the (4) screws holding the gearbox cover in place.



Set the gearbox cover, gasket, and (4) screws aside.

The first step is to remove the linkage.

It is held in place with a C-clip.



Push the C-clip off the crank pin. This is best accomplished with a small flat head screwdriver.

Set the C-Clip aside.

Lift the linkage straight up. There is very little tolerance in both the connection to the crank pin, as well as the connection to the sweep angle plate, so the linkage must be lifted straight up--not at an angle.

The linkage can be lifted out with fingers. No tools should be necessary to pry it off.







The plate shown here has options for 40, 53, 65, 85, 100, 110, and 120 degrees

Some WEXCO motors have sweep angle plates that have options for 40, 50, 60, 70, 80, 90, 100, and 110 degrees.



Remember that before any adjustments were made to this motor, it had been set to park RIGHT, and sweep at 110 degrees. The pin on the linkage was thus located here (as shown by the yellow circle).



Using a Phillips head screwdriver, carefully remove the two screws that hold the sweep angle plate in place.

NOTE: these screws are easily stripped, and are often torqued quite high at the factory, so take care not to strip them.

Lift the sweep angle plate up, revealing the white gear underneath.

This is the step where it is important to remember the original settings of the motor.

The motor was originally set to RIGHT park, and the linkage pin was positioned over the channel as shown. Although not labeled on the gear, THAT is the channel that effects RIGHT hand park, while the other channel is for LEFT hand park.





Reinstall the sweep angle plate, and spin it into position, so that the hole designating the desired angle is directly OVER the channel that determines the desired park position.

As shown by the yellow circle, the 85 degree hole is now positioned over the channel that effects RIGHT hand park.

The plate is positioned in an acceptable position, when the sweep angle mounting plate holes are located over the tapped holes, as shown.



Reinstall the two screws holding the sweep angle plate in place.



Side view of the linkage shown. The pin that goes into the sweep angle plate is indicated by the yellow arrow. The hole that the crank pin goes into is indicated by the blue arrow.

All the pins and holes have very little tolerance (so as to provide excellent sweep angle control).

This linkage must be reinstalled by having the pins go STRAIGHT into their respective holes, not at any angle.



View of the linkage repositioned.



Position the C-clip on the linkage, and prepare to press it back onto the crank pin.

C-clip shown correctly pressed back onto the crank pin.

A distinctive click should be heard as the C-clip is reseated correctly.





Re-install the gasket, and gearbox cover, by reinstalling the four screws with a Phillips head screwdriver.

Relabel the motor to show the new park position and sweep angle