SUNRISE MEDICAL
MOBILITY PRODUCTS DIVISION
2842 Business Park Ave
Fresno, California 93727-1328
(559) 292-2171- (800) 456-8168

INSTRUCTION SHEET
S525 COG RELEASE REPLACEMENT

⚠ PLEASE REVIEW BEFORE ASSEMBLING KIT TO THE CHAIR.

This instruction refers to the replacement of the S525 Cog release mechanism, kit PN#'s 922235. The KIT contains the parts as shown in figure 1(see table), decal PN#150827, and this insert.

The motor will need to be removed to perform the replacement of the cog release mechanism. As a result it is recommended that the battery housing be removed for unobstructed access to the motors and controller. Do not forget to unplug the battery housing from the right side of the frame before removing the housing.

Motor Removal:

Step 1.

Start by removing the four 5/16-24 cap screws (**222194**) that thread into the hub (**Figure 2, A**), holding the outer rear wheel, using a 1/4" Allen wrench. This exposes the two 5/16-18 hex bolts (**222235**) that hold the motor to the frame. **Figure 2** depicts the short base configuration using hole set (**B**). Long bases will have bolts using hole set (**C**).

Step 2.

Unplug each motor from the controller or integral harness. Remove the two 5/16-18 hex bolts holding the motor to the frame using a set of ½" wrenches and/or sockets.

Cog Replacement:

Step 1.

To remove existing parts from the motor, start by removing the guard (**Figure 1, Item 4**) with a 5mm Allen wrench. Do not discard these fasteners. They must be reused. Remove the roll pin (**Figure 1, Item 7**) using a small punch. Earlier production chairs use a 5/32 X 3/4" roll pin. Later production chairs use a 1/8 x 1in pin. A simple measuring device can be used to verify size (Or you may call customer service for the serial number differentiation). Remove the 1/4-20 nylock nut (**Figure 1, Item 6**) with a 7/16 wrench and a 5/32 Allen wrench and remove the lever and bearing.

Step 2.

To re-install the new cog mechanism, start by prepping the paddle shaft to receive the pinion gear. Using a small punch or screw driver slipped into the paddle shaft hole, rotate the paddle shaft 90 degrees (**Figure 3, corner insert**). With the paddle shaft hole 90 degrees to the motor, slide the spring over the paddle shaft, followed by the pinion gear. Place roll pin through pinion to secure.

Step 3.

Place the bearing (**Figure 1, Item 3**) in the handle (**Figure 1, Item 2**) and orient the handle as in figure 4. Two teeth will be left past the engagement on the handle. The Handle is in the Free wheel position at this point. Place the 1/4-20 counter sunk screw (**Figure 1, Item 1**)through back side (**Figure 4**). Install the nut and tighten to 3-ft-lbs min. The 1/4-20 screw uses a 5/32 Allen wrench. A 4mm Allen will also work.

Step 4.

Add the guard (**Figure 1, Item 4**)with the original M6 hardware. Tighten to 10 ft-lb min, using lock tight if available. Replace the wheel, and tighten all four cap screws to 20-25 ft-lb minimum. Repeat on opposite side as needed.

Freewheel Decal Replacement: (if Needed)

Place decal 2 in from the end of each frame member (**Figure 5**). Both Handles will need to be oriented upwards for the chair to drive.

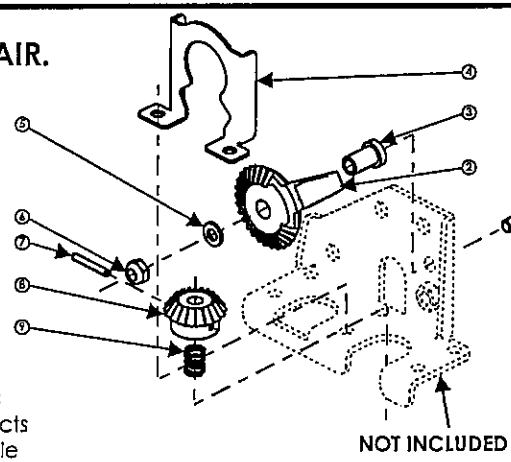

Figure 1. Kit Contents

ITEM NO.	QUANTITY	PN	DESCRIPTION
1	1	226126	1/4-20 X 1 1/4 FH C/S BLK
2	1	562633	HANDLE GEAR COG
3	1	342107	MOUNT, BEARING PLASTIC GEAR
4	1	540289	GUARD COG RELEASE
5	1	262100-QU	1/4 AN WASHER FLAT
6	1	201105	1/4-20 NYLOCK NUT THIN
7	1	562632	PINION GEAR COG
8	1		1/8 X 1 Roll PIN
9	1	321721	LEVER RETURN SPRING

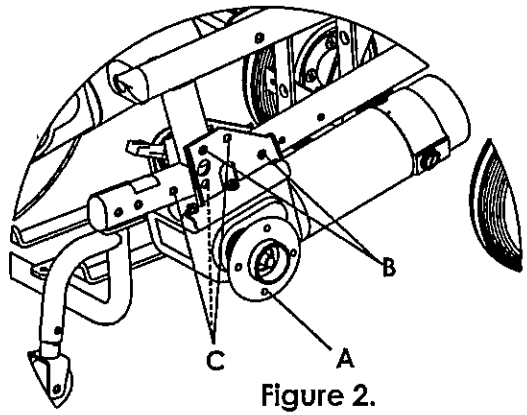

Figure 2.

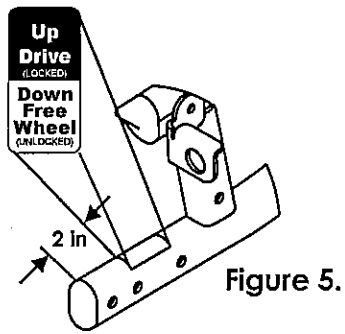

Figure 5.

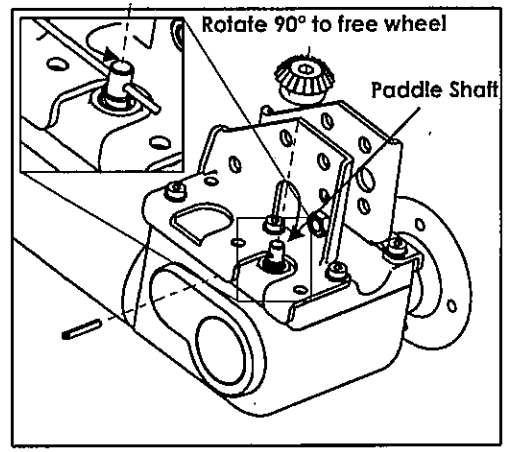

Figure 3. Position for Assembly

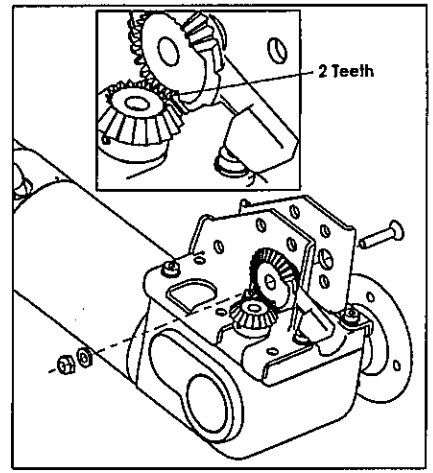

Figure 4. Lever Assembly