

## **The *ErgoReJoy*<sup>™</sup> Tips Before Initial Assessment**

A full assessment of the armrest and midline locations should take approximately 20 minutes once the evaluator has become familiar with the *ErgoReJoy* assessment and positioning system. No tools are required to position and lock the joystick and *JoyPad*<sup>™</sup> ergonomic wrist support in place. The basic joystick positioning assessment requires comparing the client's driving abilities and postural positioning while operating the power wheelchair (PWC) in two joystick locations: the standard armrest-mounted position, and midline. A third (intermediate) location in between the armrest and the central location is optional, and recommended if the client's biometrics prevent midline operation, or if the armrest location was preferred. Note: Confirm PWC seat is the proper width for the client's body. If too wide, fill the gap between the client's body and armrest with a pillow at the same height as the armrest.

Seating and positioning products often affect PWC joystick or alternative drive control positioning. In addition, positioning the joystick or other controls in a central location with forearm and wrist support has been clinically validated to compliment PWC seating products. As a result, it is recommended that the seating and positioning assessment be performed prior to the drive control positioning assessment.

It is recommended, when possible, to engage the client in the assessment. For example, as the 8" extension arm is added to the *ErgoReJoy* platform for midline joystick positioning, the evaluator could ask the client to hold the joystick, or to place their hand on the joystick while its optimal position is being ascertained. Client feedback regarding joystick and *JoyPad*<sup>™</sup> positioning comfort is crucial to the evaluator's ability to make adjustments and ensure a successful joystick positioning assessment.

Note: Prior to beginning the assessment, the joystick should be assembled to the *ErgoReJoy* platform, with the receiver sockets and socket brackets attached to the underside of the PWC's armrests. Initial assembly of the joystick positioning system takes approximately 30 to 45 minutes, provided that the underside of the PWC's armrests have slots allocated for component installation. Detailed assembly instructions are provided (including procedures for PWC armrests in the absence of slots) with each assessment kit, and are also included with this protocol.

**IMPORTANT:** Always turn off power to the joystick control after each test drive or before adjusting the position of either the joystick or the *JoyPad*<sup>™</sup> ergonomic wrist support to avoid accidental engagement of the joystick control.

When positioning the *ErgoReJoy* joystick platform and *JoyPad*<sup>™</sup> ergonomic wrist support, multiple components of the Active Controls universal positioning system will require adjustment. Familiarization with making the following adjustments will facilitate the assessment:

- Removing the *ErgoReJoy* joystick, platform and positioning arm from its receiver socket (refer to figure A): To become familiar with removing the joystick assembly from the PWC, the evaluator can practice moving the modular system from the right

side of the PWC to the left side. It's so simple, that it only requires approximately 10 seconds. There are no brackets to remove, or electrical connections to unplug, reroute and reconnect. (One tip for familiarizing the client with the modular connection, is to ask about hand preference BEFORE installing the *ErgoReJoy* joystick assembly in the receiver socket. If possible, try to involve the client in process of inserting the assembly into the receiver socket to orient them to the simple process of installation.)

- The joystick's proximity to the user in the armrest location can be adjusted by moving the socket bracket medially or laterally using the quick release adjustment handles under the armrest (refer to figure B).
- After the joystick's baseline armrest assessment, the socket height must be raised for central assessments. Loosen the adjustment handle behind the socket, and raise the socket to the top of the slot of the socket bracket (refer to figure E). Tighten the adjustment handle firmly to eliminate any socket movement.

**Note: for large adults, it may be necessary to lower the socket height 1"-2" and add the 3" extension arm positioned upward at a 45° angle to clear the thigh. Then, use the double ball adaptor to attach the 8" arm to the 3" arm. To attain a midline location in pediatric clients with narrow PWC's, move the 8" arm from the ball on the side of the joystick platform to the one under the joystick platform.**

- By loosening the adjustment knobs of the extension arms, the lateral position, angle, and pitch of the joystick control can be adjusted for each client. When installing the extension arms, keep the adjustment knobs on the outside away from the client for ease of evaluator adjustment (refer to figure F).
- The 3", 5" and 8" extension arms will be used in three different joystick locations; the armrest (3"), at midline (8"), and if needed, in the intermediate (5") location. The 3" arm installs on the 1.5" ball under the joystick platform located in its center. The 5" and 8" arms install on either the left or right ball on the side of the joystick platform and the ball attached to the top of mini-mast (refer to figure B).
- In the central joystick locations, the *JoyPad*<sup>™</sup> gel wrist support should be positioned using the small 3" extension arm and 1" balls (refer to figure G) to rest supportively under the user's wrist, with the wrist aligned with the forearm in a neutral position (approximately 0° of extension/flexion and radial/ulnar deviation) (Refer to figure H). One of the important goals of the *ErgoReJoy* universal positioning assessment system is to facilitate the assessing of the client's ideal joystick location. The evaluator is encouraged to provide every PWC client with the opportunity to drive at midline during an evaluation, not just those who have difficulty driving in the armrest location.

Custom positioning of the joystick optimizes the operational performance, long-term comfort, and safety of the PWC user, while increasing confidence and improving satisfaction with their seating system. While not every client will qualify for third-party reimbursement of a midline mounting accessory (despite its preventative benefits in pressure distribution and musculoskeletal alignment), most clients will benefit from central positioning of the joystick control, and may opt to pay out-of-pocket for it.

Items required to perform the assessment:

- The *ErgoReJoy* Custom Assessment and Positioning Case with all adjustable components.
- The *ErgoReJoy* driving assessment forms filled out with the client's first name, any pre-existing musculoskeletal conditions, PWC make and model used during the assessment, and date of the assessment. (Extra Driving Assessment forms may be downloaded at [forms@activecontrols.com](mailto:forms@activecontrols.com))
- Unobstructed test-driving area, including a path through a standard-sized doorway.
- The *ErgoReJoy* platform with preinstalled joystick from the PWC.
- Video camera, tablet, or smartphone (required to record user's test-drive in both the standard and preferred locations as supporting evidence for a Letter of Medical Necessity-sample LMN's are included in the Protocol).
- Camera, tablet or smartphone (required to photograph the user's trunk and upper extremity postures in the assessed locations).
- **We highly recommend the evaluator perform a complete *ErgoReJoy* joystick positioning assessment with a colleague prior to assessing the the first client.**