

## 5.0 - Mechanical Adjustments:

### XIII. Rod End Adjustments

Rod ends thread into the ends of the actuator barrel and require a 1/8" roll pin to lock them into position once they are properly set. Their sizes vary according to the requirements of the seating system, but typically our rod ends range between 1.75" and 3.25" (at 1/4" intervals). Longer rod end sizes are available if required. The size of the rod end is currently stamped into the side face of the rod end for easy reference (older rod ends have the size stamped into the top face of the rod-end). **Note:** Certain systems may also have limitations to the rod end sizes they can handle. Size may be restricted due to actuator clearances, potential pinch points, and power base limitations.

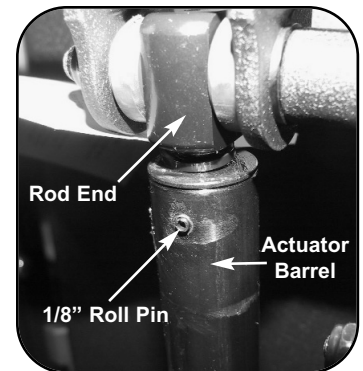


In order to adjust or replace a rod end, the existing roll pin in the actuator must first be removed (using a 1/8" pin punch). Once the pin is removed, a new rod end can be inserted, or the existing rod end can be adjusted by turning the actuator barrel clockwise or counter-clockwise around its threads. Once final adjustments are completed, the actuator must be re-pinned.

#### Pinning the Actuator

**Important!** All tilt and recline actuators must be pinned before being operated. This will prevent the actuator barrel from unwinding and disengaging from the rod-end. Every Motion Concepts tilt and recline actuator should either be factory pinned, or supplied with a pin for installation by a trained technician.

For safety, the rod-end threads must extend at least 0.50" into the actuator barrel. If the desired initial angle adjustment does not allow for at least 0.50" of thread, contact Motion Concepts and request a longer rod-end. Once the rod-end is in the correct position, the hole in the actuator barrel can be used as a locator to drill a 1/8" hole through the rod-end. The roll pin (1/8" diameter x 1 1/8" long) must be hammered completely through the hole so that it protrudes 1/16" on both sides.



**Note:** Any adjustment to the initial angle will require a new hole to be drilled through the rod-end. NEVER use a rod end with more than two holes drilled into it (including the hole being pinned). Make sure that any secondary hole is drilled at a sufficiently different orientation on the rod-end so as to provide proper and complete pinning, and not compromise the strength of the rod-end.

