Fabrication Guide

Hybrid System using Becker Lever Lock Knee Joint:

1. Fabricate the KAFO as usual except for the lateral thigh chafe or strap which should be mounted on the plastic shell rather than the bar (Figure A).

2. On the lateral upright approximately 1/2" to 3/4" from the proximal edge of bar, drill a hole through the center of the bar with a #29 drill bit. Thread the hole with an 8-32 tap.

3. Insert the 8-32 x 1/2" socket head cap screw into the knob mount so that the head of the screw is recessed into the mount. Firmly install the unit into the 8-32 hole from Step 2 (Figure B).

4. For proper operation of the medial joint, a cable housing is necessary to route the cable from the release knob to the joint. Starting approximately 2" below the knob mount, mark a line downward on the plastic shell curving across the posterior and then distally toward the joint (Figure C). Maintain as wide an arc as possible. Secure the cable housing along this path using at least 2 nylon cable straps.

5. Remove the locking pawl from each knee joint. Locate the drill guide dimple on the bottom of the pawl and drill completely through using a 1/8" drill bit. De-burr and reassemble the knee joints.

6. Position release knob on mount. Insert cable end through the posterior opening of the pawl and out of the proximal hole. Pull cable through until swaged end is inside pawl. Insert cable end of the lateral joint through the hole in the anterior side of the release knob. Feed the medial cable through the cable housing into the posterior side of the release knob.

7. To adjust cable length and tension, raise the release knob approximately 3/4" and pull the knob away from the bar. The release knob is in the locked open position. The mount should lock into a recessed area within the knob. Pull the lateral cable above the knob so that the pawl is raised as far proximal as possible. Tighten the 8-32 set screw on the anterior side of the knob to secure the cable. Adjust the medial cable in the same manner. To unlock the knob, press in on it while pulling upward. Test the operation of the unit several times, making any necessary adjustments before cutting off the excess cable. Install end cap into pawls by tapping lightly with a hammer.

For Fillauer Knee Joints, eliminate Step #5.

For OTS Knee Joints, Step #5 is as follows: Remove plastic tip from pawl. Install receiver barrel onto pawl with set screw oriented perpendicular to uprights (Note: receivers are components of OTS’ nylon bail kit).