Pull - Pull

Control Cable Set

- KEVLAR® Aramid Fiber has a breaking strength over 100 lbs and will not stretch
- KEVLAR® is nonmetallic, lighter than steel and fuel proof. It will not cause RFI.
- KEVLAR® Pull-Pull is easy to set up and adjust.

Instructions

1. Lay out control cable routing. Ideally, the cables should be straight from bellcrank or servo to control horn. The red tubes can be used as guides if a gentle curve is needed (use the aluminum rivets in the ends of the tubes for bearing surfaces). For sharp bends use additional bellcranks. Drill clearance holes as needed. For larger models, 4-40 clevises (#526), nuts (#490) and eyebolts (#549) are available.

2. Install one side. Run a crimp tube onto the cable. Make a loop with the cable around an eyebolt or through a bellcrank hole. Run the end through the crimp tube and crimp with pliers or hammer. Many modelers add a drop of glue for security. It is acceptable to omit the crimp tube and use a knot as long as it is glued. Aramid cable loses strength if bent too sharp (the inner fibers carry all the load) so try to radius at all connections. Attach cable to servo end and route to control horn. Attach an eyebolt as before. Attach a nut and clevis and adjust so that the bellcrank or servo arm is parallel to the control horn/hinge axis. Connect the clevis to the control horn.

3. Install other side. Attach an end as before and connect to servo end. Route cable to control horn end and attach the last termination. Adjust clevis so that line is nearly taut and attach.

4. Adjust. This is important! Tighten lines until taut. The cable will not stretch so no additional tension is needed. Kevlar® can be twisted without affecting strength (in fact, it helps with air resistance) so to change line length simply loosen locknut, turn eyebolt and retighten nut. It is very important that line lengths be the same (so that bellcrank/servo arm and control horns are parallel) to prevent binding.

5. Secure adjustment. Tighten locknuts or use CA or Loctite® to keep line from loosening. Aramid fiber has a slightly lower coefficient of expansion than wood, so at very low temperatures the model may contract more than the lines and a little tightening may be needed

Both cable ends must be in line with hinge axis

Use Eyebolt and Clevis, or straight loop for termination

Servo or Bellcrank

Line lengths must be the same to prevent binding

Control Surface

Gold-N-Clevis

Alternate termination: glue or tie cable to clevis

Retaining Clips must be installed