One of the unique features of the Bennett Trim Tab system is the use of concealed, through the transom hydraulic fittings. However, there are cases of complete inaccessibility inside the transom, making the use of the standard Bennett actuator difficult. For such instances, the external line upper hinge is available. This special upper hinge solves the inaccessibility problem by allowing the hydraulic line to enter the transom where there is no obstruction. The hydraulic tubing connects directly to the back side of the upper hinge of the actuator and is fed through the transom above the waterline. A “clamshell” cover is included with each upper hinge to cover the tubing where it enters the hole in the transom.

**INSTRUCTIONS FOR REPLACING STANDARD UPPER HINGE WITH EXTERNAL LINE UPPER HINGE**

**STEP 1** - SNAP WHITE PLASTIC CLIP ON THE PISTON SHAFT PROTRUDING FROM THE BOTTOM OF THE CYLINDER.

**STEP 2** - GRAB BODY OF CYLINDER WITH BOTH HANDS AND UNSCREW THE STANDARD UPPER HINGE CAP FROM ACTUATOR.

**STEP 3** - SCREW ON NEW EXTERNAL LINE UPPER HINGE AND HAND TIGHTEN. REMOVE THE WHITE CLIP.

**STEP 4** - FOLLOW THE INSTALLATION INSTRUCTIONS FOR ACTUATOR PLACEMENT AND INSTALLATION BUT DO NOT DRILL THE ½” HOLE FOR THE PIPE NIPPLE.

**STEP 5** - ABOVE THE WATERLINE, AT A POINT WHERE IT IS CONVENIENT FOR THE TUBING TO ENTER, DRILL A 9/32 INCH HOLE AT AN ANGLE (AS SHOWN BELOW), UP AND INTO THE INSIDE OF THE TRANSOM.
STEP 6 - INSERT THE TAPED END OF A PRECUT LENGTH OF HYDRAULIC TUBING (REMEMBER TO MAKE BOTH STARBOARD AND PORT TUBING LENGTHS EQUAL AND REMOVE THE TAPE BEFORE CONNECTING TO THE H.P.U.). CONNECT THE TUBING TO THE ELBOW ON THE ACTUATOR USING THE PROVIDED NUT AND FERRULE. TIGHTEN NUT WITH \( \frac{1}{2} \)" WRENCH ONE FULL TURN PAST FINGER TIGHT, NO MORE.

STEP 7 - INSTALL THE PROVIDED CLAMSHELL TO COVER THE HOLE AND PROTECT THE TUBING AT THE ENTRY POINT. SOME SEALANT CAN BE APPLIED AROUND THE TUBING WHERE IT ENTERS THE TRANSOM.

DIRECTIONS FOR REPLACING A DAMAGED EXTERNAL LINE UPPER HINGE

STEP 1 - WITH THE TRIM TABS IN FULL UP POSITION, DETACH THE TUBING FROM THE BRASS ELBOW. (SOME FLUID WILL DRIP OUT).

STEP 2 - SNAP WHITE PLASTIC CLIP ON THE PISTON SHAFT PROTRUDING FROM THE BOTTOM OF THE CYLINDER.

STEP 3 - GRAB BODY OF CYLINDER WITH BOTH HANDS AND UNSCREW COUNTER CLOCKWISE FROM THE ACTUATOR CAP (A SMALL AMOUNT OF FLUID WILL SPILL).

STEP 4 - SCREW NEW CAP ONTO CYLINDER. TIGHTEN CAP HAND TIGHT. REMOVE WHITE PLASTIC CLIP.

STEP 5 - DETACH THE OLD CAP FROM THE TRANSOM AND DISCARD.

STEP 6 - RE-ATTACH THE ACTUATOR TO THE TRANSOM AND RE-CONNECT THE TUBING BY TIGHTENING THE NUT AND FERRULE UNTIL IT IS SNUG.

STEP 7 - TEST THE ACTUATOR BEFORE LAUNCHING THE BOAT.