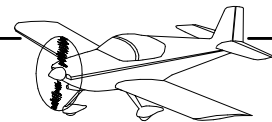


REVISION DESCRIPTION:

RV-10 11-03 REV 2: In Figure 1, E-Drill Bushing interior diameter changed to .120.

In Step 2, "Match-Drill #30" was "Match-Drill #17".



Step 1: Locate the steel E-Drill Bushing provided in the kit and shown in Figure 1 below. The drill bushing will be used to protect the hinge bearing from the drill bit when match-drilling the elevator horns to the inboard elevator hinge point. It may be necessary to reduce the diameter of the tube to get it to fit inside the bearing. Mount the tube in a drill press then hold a file to it until the diameter measures 1/4 [6.4 mm].

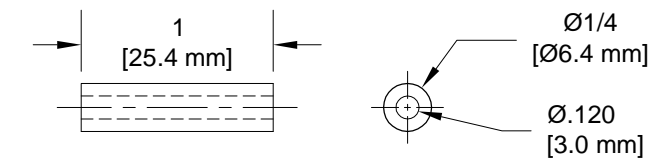


FIGURE 1: E-DRILL BUSHING

Step 2: Insert the E-Drill Bushing into the VA-146 Elevator Center Bearing as shown in Figure 2. Match-Drill #30 the WD-605-L-1 Left Elevator Horn using the E-Drill Bushing as a drill guide.

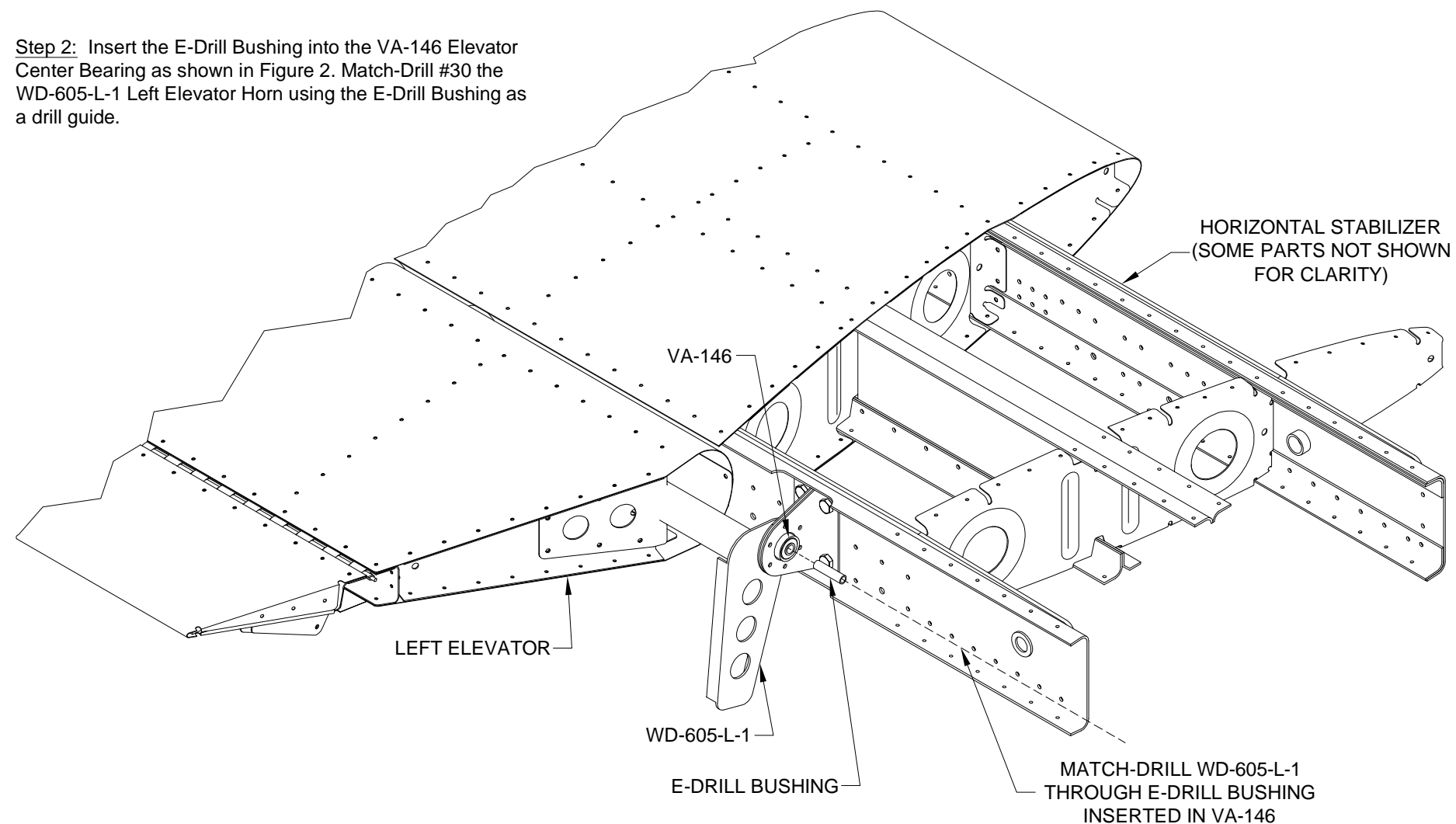


FIGURE 2: MATCH-DRILL ELEVATOR HORN

Step 3: Remove the left elevator from the horizontal stabilizer. Final-Drill the hole in the WD-605-L-1 Elevator Horn to 1/4 inch and deburr the hole.

Step 4: Repeat Page 11-2, Steps 3 and 4 and Steps 1 through 3 for the right elevator.

Step 5: Install both right and left elevators to the horizontal stabilizer. See Page 11-2, Figure 3 for hardware call-out. Secure both elevators in the "trail" position by placing strips of duct tape over the gap between the elevator counterbalance arm and the horizontal stabilizer.

Step 6: With both elevators in the "trail" position there will most likely be a mismatch in position between the bottom end of the WD-605-L-1 Elevator Horn and the bottom end of the WD-605-R-1 Elevator Horn. Identify which of the two elevator horns is the most aft.

Step 7: In the most aft WD-605-1 Elevator horn, locate and drill a 3/16 inch hole as shown in Figure 3.

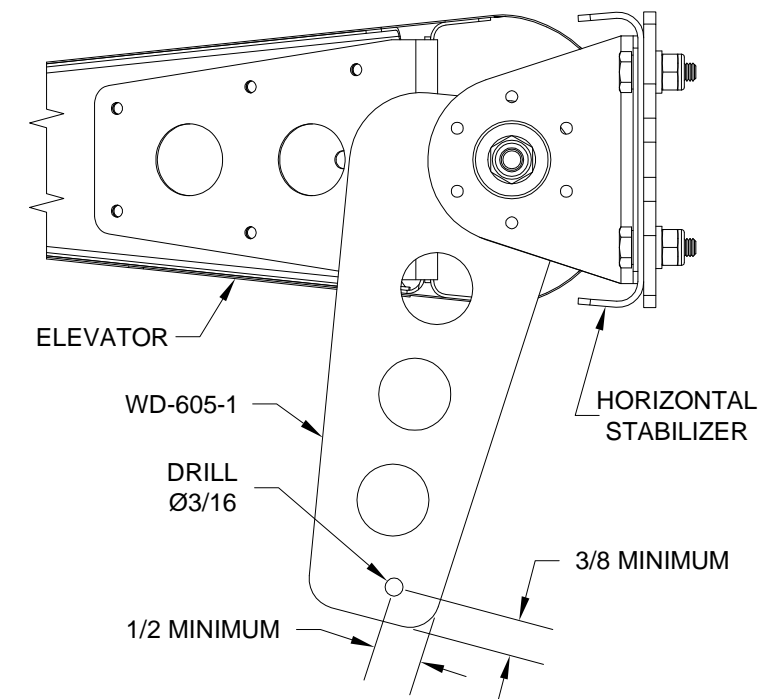


FIGURE 3: ELEVATOR PUSHROD BOLT HOLE

Step 8: Measure the spanwise distance between the WD-605-L-1 and WD-605-R-1 Elevator Horns.

Step 9: Make or find or otherwise acquire a block of wood/plastic/metal that is the same thickness or up to 1/32 inch less than the distance measured in Step 8. The block should be 3/4 to 1 1/4 inch wide and 2 to 3 inches long. This Drill Guide Block will be used to keep the bit perpendicular when drilling from one elevator horn to the other. A stack up of blocks is acceptable if a single block the correct thickness is not available. Use a drill press to drill a 3/16 inch diameter hole in the block(s) 1/2 inch from one end. The hole must be perpendicular to the drill guide block.

Step 10: Insert a 3/16 bolt through the hole drilled per Step 7 in the WD-605-1 Elevator Horn. Place the Drill Guide Block against the elevator horn with the bolt passing through the hole drilled per Step 9. Clamp both elevator horns together with the drill guide block between them then double-check that both elevators are aligned in trail.

Step 11: Remove the 3/16 bolt from the WD-605-1 Elevator Horn and Drill Guide Block. Match-Drill #12 a hole in the elevator horn using the elevator horn and drill guide block to aid alignment. Drill the hole as straight and as square as humanly possible.

Step 12: Remove the clamp and Drill Guide Block from the WD-605-1 Elevator Horns and then remove the elevators from the horizontal stabilizer. Reinstall the elevator attach hardware finger tight in the horizontal stabilizer hinge brackets so that it won't get lost. Deburr the holes in the elevator horns and set the elevators safely aside.