

Driveshaft Housing
 Caleb A. Sylvester, Christopher J. Cannell
 Material: 6061 Aluminum
 Primary dimensions in millimeters, secondary
 dimensions in inches.
 Break all edges, approximately 0.127mm[0.005"]R.
 NOTE the fits between this housing and other
 components.

FIT - This drive shaft housing fits into the large hole in the end of the tail piece. Both the ODs of this piece - the main length of the housinging (19.65mm) and the lip of the housing (3.18mm) - need to maintain an INTERFERENCE FIT tolerance with the inside of the hole in the tail. The fit between this housing and the tail piece MUST BE WATER-TIGHT. See tail.dwg for a better idea of placement.

NOTE - The bearings that stabilize the driveshaft are mounted in the ends of the driveshaft housing. The specific bearing is a McMaster-Carr product:

McMaster-Carr.com
 Catalog page 1010, Miniature Precision
 Stainless Steel Ball Bearing - ABEC-5
 Part Number 57155K36: 0.25" ID, 0.375" OD,
 0.125" width.

FIT - The bearings will be mounted in the ends of the housing, so the (nominal) 9.52 mm ID at each end of the housing should maintain a LIGHT PRESS FIT with the OD of the bearings in order for the bearings to remain in place during the vehicle's operation. See driveshaft_assembly_2d.dwg for more detail on placement and fit.

