



Occupant Model Checklist

Toyota Yaris

Dec 2013

Checklist for Running the Toyota Yaris Occupant Model

1. Determine the firing time using the “7-30” rule.
 - a. Double integrate the crash pulse to get the displacement time history.
 - b. Identify the time corresponding to 7 inches of displacement.
 - c. Subtract 30 ms from that time to get the firing time.
2. Change the value of the following variables under CONTROL_ANALYSIS.TIME.
 - a. Set DAB_TTF to the firing time.
 - b. Set Anchoragebuckleframe_TTF to the firing time.
 - c. Set ttf_retrpret to 0.0015 seconds less than the firing time.
3. Change the INITIAL_JOINT_VEL for Motion_jnt (under the DS3_Interiors system) to correspond to the desired initial velocity.
4. Change the crash pulse using the following functions, which are called in MOTION_JOINT_ACC for Motion_jnt (under the DS3_Interiors system).
 - a. For full frontal
 - i. /DS3_Interiors/vehicle_acc
 - b. For offset or centerline pole
 - i. /DS3_Interiors/vehicleX_acc
 - ii. /DS3_Interiors/vehicleY_acc
 - iii. /DS3_Interiors/vehicleZ_acc
5. If PSM is enabled in the model, update the PSM file under /DS3_Interiors/Toeboard_fem/MOTION.STRUCT_DISP