Problem 17.96 Modified

A 45 gram bullet is fired with a horizontal velocity of 400 m/s into a 9 kg panel of side b = 0.2 m. Knowing that h = 200 mm and that the panel is initially at rest, determine:
  (a) the velocity of the center of the panel immediately after the bullet becomes imbedded,
  (b) the impulsive reaction at A, assuming that the bullet becomes imbedded in 2 ms.
  (c) the reaction at A after the plate has swung through an angle of 90 degrees