

IME 676. Aircraft Manufacturing and Assembly

HW 5

Follow instructions below. Both cases have the same value.

Fastening

HW Part 1: review these videos and make a two-page summary detailing important steps to install bolts with proper torque. Explain the use of correction factors when torque wrench adaptors are used to reach tight spaces. How is torque distributed in the bolt? Why measure and control torque if bolt tension is really the important parameter when securing bolts?

- <https://www.youtube.com/watch?v=WP7fGDCKRl>
- <https://www.youtube.com/watch?v=kTwpA2yJ81o>
- <https://www.youtube.com/watch?v=fN9b3ByRh7A>

HW Part 2: review this video and make a two-page summary detailing important riveting steps to install flush, countersunk rivets; and important rivet dimensions. Include key snapshots from the video to illustrate your summary.

- <https://www.youtube.com/watch?v=IDbTUt3OG9s&t=162s>