



$$\sum M_B = (20.5625'' * 500\#) + (4.02209'' * 850\#) - (FA * \cos 58.8409^\circ) * (7.43054'') + ((FA * \sin 58.841^\circ) * (0.573800'')) = 0$$

$$13700.0''\# - ((FA * \cos 58.8409^\circ) * (7.43054'')) - ((FA * \sin 58.8409^\circ) * (0.573800'')) = 0$$

$$13700.0''\# - ((FA * \cos 58.8409^\circ) * (7.43054'')) - ((FA * \sin 58.8409^\circ) * (0.573800'')) = 0$$

$$13700.0''\# - (FA * 3.84468) - (FA * 0.491020) = 0$$

$$13700.0''\# - FA * 3.84468 - FA * 0.491020 = 0$$

$$13700.0''\# - FA * 4.33570 = 0$$

$$\frac{13700.0''\#}{4.33570} = \frac{-FA * 4.33570}{4.33570}$$

$$3159.81\# = FA$$

$$FA_x = 3159.81 * \cos 58.8409^\circ$$

$$FA_y = 3159.81 * \sin 58.8409^\circ$$

$$\sum F_x = -850\# - (3159.81\# * \cos 58.8409^\circ) + FB_x = 0$$

$$\frac{-2484.94\# + FB_x = 0}{-FB_x - FB_x}$$

$$2484.94\# = FB_x$$

$$\sum F_y = -500\# + (3159.81\# * \sin 58.8409^\circ) - FB_y = 0$$

$$\frac{2203.96 - FB_y = 0}{+FB_y + FB_y}$$

$$2203.96\# = FB_y$$