



$$\sum M_B = (20.5625 * 500\#) + (4.02209 * 850\#) - (F_A * \cos 14.2712^\circ) * (7.43054') - ((F_A * \sin 14.2712^\circ) * (0.573800')) = 0$$

$$13700.0\# - ((F_A * \cos 14.2712^\circ) * (7.43054')) - ((F_A * \sin 14.2712^\circ) * (0.573800')) = 0$$

$$13700.0\# - (F_A * 7.20123) - (F_A * 0.141449) = 0$$

$$13700.0\# = F_A * 7.20123 + F_A * 0.141449$$

$$13700.0\# = F_A * 7.34268 = 0$$

$$\frac{13700.0\#}{7.34268} = \frac{F_A * 7.34268}{7.34268}$$

$$1865.80\# = F_A$$

$$F_{Ax} = 1865.80 * \cos 14.2712^\circ$$

$$F_{Ay} = 1865.80 * \sin 14.2712^\circ$$

$$\sum \vec{F}_x = -850\# - (1865.80\# * \cos 14.2712^\circ) + F_{Bx} = 0$$

$$-2659.23\# + \frac{F_{Bx}}{-F_{Bx} - F_{Bx}} = 0$$

$$2658.22\# = F_{Bx}$$

$$\sum \vec{F}_y = -500\# + (1865.80\# * \sin 14.2712^\circ) - F_{By} = 0$$

$$-40.0581 - F_{By} = 0$$

$$+F_{By} + F_{By}$$

$$40.0581\# = F_{By}$$