54. The free-body diagram is shown below. Newton's second law for the mass m for the x direction leads to

$$T_1 - T_2 - mg\sin\theta = ma$$

which gives the difference in the tension in the pull cable:

$$\begin{aligned} T_1 - T_2 &= m(g\sin\theta + a) \\ &= (2800)\,(9.8\sin 35^\circ + 0.81) \\ &= 1.8 \times 10^4 \text{ N} . \end{aligned}$$