**Chapter 10, Problem 93.**

Fig. 10.135 shows a *Colpitts oscillator*. Show that the oscillation frequency is

$$f_o = 1/[2\pi\sqrt{(LC_T)}]$$

where $C_T = (C_1C_2)/(C_1 + C_2)$. Assume $R_i >> X_{C2}$.

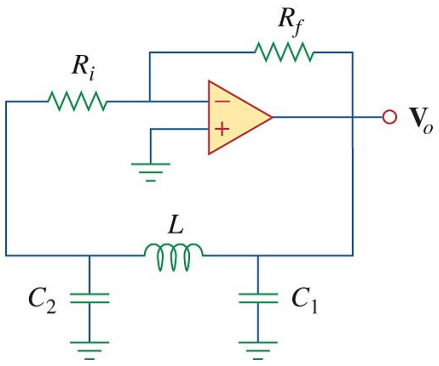


Figure 10.135
For Prob. 10.93.