4.4.

$v_2 = 540\,km/h = 150\,m/s$

$v_0 = 0\,m/s$

$v = 340\,m/s$

$f' = 20\,kHz = 20000\,Hz$

$f = ?$

$f' = f \cdot \frac{v \pm v_0}{v \pm v_2}$

$f' = f \cdot \frac{v}{v - v_2} \quad / \cdot (v - v_2)$

$f' \cdot (v - v_2) = f \cdot v \quad / : v$

$f = \frac{f' \cdot (v - v_2)}{v}$

$f = 20000\,Hz \cdot \frac{340\,m/s - 150\,m/s}{340\,m/s} =$

$= 20\,000\,Hz \cdot \frac{190\,m/s}{340\,m/s} = 20000\,Hz \cdot 0{,}5588$

$= 11176\,Hz \approx 11200\,Hz.$