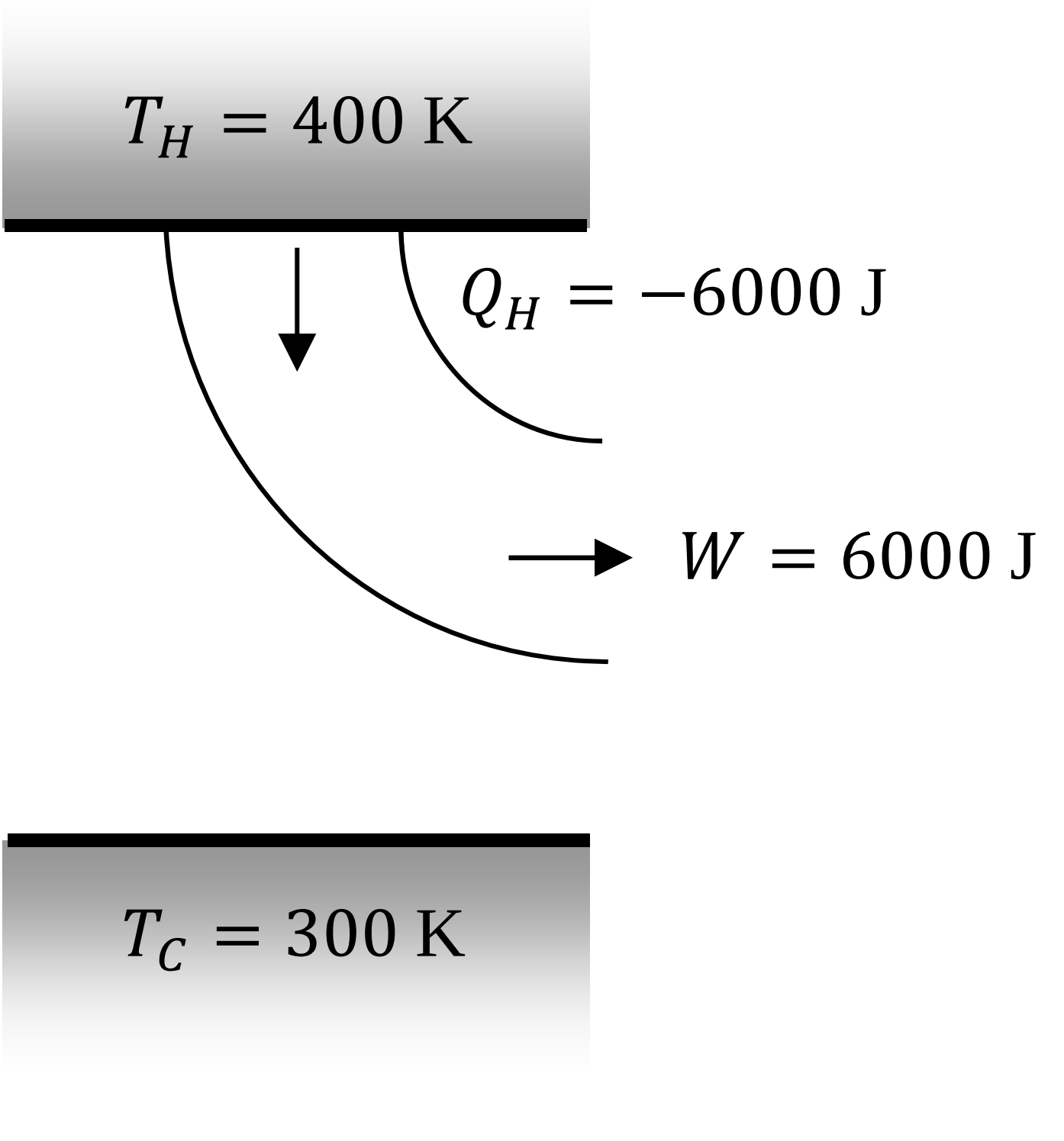
$T_H = 400\ \mathrm{K}$
$Q_H = -6000\ \mathrm{J}$
$W = 6000\ \mathrm{J}$
$T_C = 300\ \mathrm{K}$