$$A \underset{k_{-1}}{\overset{k_1}{\rightleftharpoons}} X \underset{k_{-2}}{\overset{k_2}{\rightleftharpoons}} Z$$

Applying steady state approximation:

$$\frac{d[X]}{dt} = k_1[A] - (k_{-1} + k_2)[X] + k_{-2}[Z] = 0$$

$$[X] = \frac{k_1[A] + k_{-2}[Z]}{k_{-1} + k_2}$$

The net rate of consumption of A is

$$-\frac{d[A]}{dt} = k_1[A] - k_{-1}[X]$$

$$= k_1[A] - k_{-1}\frac{k_1[A] + k_{-2}[Z]}{k_{-1} + k_2}$$

$$= \frac{(k_{-1} + k_2)k_1[A] - k_{-1}k_1[A] - k_{-1}k_{-2}[Z]}{(k_{-1} + k_2)}$$

$$= \frac{k_1k_1[A] + k_2k_1[A] - k_{-1}k_1[A] - k_{-1}k_{-2}[Z]}{(k_{-1} + k_2)}$$

$$= \frac{k_1k_2[A]}{(k_{-1} + k_2)} - \frac{k_{-1}k_{-2}}{k_{-1} + k_2}[Z]$$

In the previous derivation, the encircled term has sign problem.