1: $G \wedge F$ premise

. . .

2: $F \wedge G$

3: | E assumption

4: | $F \wedge G$ hyp 2

5: $E \rightarrow F \wedge G$ $\rightarrow$ intro 3-4

6: $(F \wedge G) \wedge (E \rightarrow F \wedge G)$ $\wedge$ intro 2,5