

1	$\vdash \top$	A1	✓	✓	
2	$\vdash [\neg p] p \leftrightarrow (\neg p \rightarrow p)$	A11	✓	✓	
3	$\vdash [\neg p] p \rightarrow (\neg p \rightarrow p)$	EE	✓	✓	2
4	$\vdash ([\neg p] p \rightarrow (\neg p \rightarrow p)) \rightarrow ([\neg p] p \rightarrow p)$	A1	✓	✓	
5	$\vdash [\neg p] p \rightarrow p$	R1	✓	✓	3, 4
6	$\vdash \neg p \rightarrow \neg[\neg p] p$	CP	✓	✓	5
7	$\vdash [\neg p] \neg p \leftrightarrow (\neg p \rightarrow \neg[\neg p] p)$	A12	✓	✓	
8	$\vdash (\neg p \rightarrow \neg[\neg p] p) \rightarrow [\neg p] \neg p$	EE'	✓	✓	7
9	$\vdash [\neg p] \neg p$	R1	✓	✓	6, 8
10	$\vdash [\neg p] \neg p \rightarrow (\top \rightarrow [\neg p] \neg p)$	A1	✓	✓	
11	$\vdash \top \rightarrow [\neg p] \neg p$	R1	✓	✓	9, 10
12	$\vdash \top$	A1	✓	✓	
13	$\vdash K2 \top$	R2	✓	✓	12
14	$\vdash \top$	A1	✓	✓	
15	$\vdash K1 \top$	R2	✓	✓	14
16	$\vdash K1 \top \rightarrow (K2 \top \rightarrow (K1 \top \wedge K2 \top))$	A1	✓	✓	

17	$\vdash K2 \top \rightarrow (K1 \top \wedge K2 \top)$	R1	✓	15, 16
18	$\vdash K1 \top \wedge K2 \top$	R1	✓	13, 17
19	$\vdash (K1 \top \wedge K2 \top) \rightarrow ((\top \wedge \neg p) \rightarrow (K1 \top \wedge K2 \top))$	A1	✓	
20	$\vdash (\top \wedge \neg p) \rightarrow (K1 \top \wedge K2 \top)$	R1	✓	18, 19
21	$\vdash E\top \leftrightarrow (K1 \top \wedge K2 \top)$	A6	✓	
22	$\vdash (K1 \top \wedge K2 \top) \rightarrow E\top$	EE'	✓	21
23	$\vdash (\top \wedge \neg p) \rightarrow E\top$	HS	✓	20, 22
24	$\vdash \top \rightarrow [\neg p] C\neg p$	R5	✓	11, 23
25	$\vdash [\neg p] C\neg p$	R1	✓	1, 24

System PAC ▾ Agents 2

Goal
[!p]C!p ✓

Syntax Overview ▾