Equation assignment sequence for variable H

no	var	equ	quations	token
65	12	-	S_N :: port variable	
64	26	-	A^v :: port variable	
63	64	-	$P_{NS,KS}$ :: port variable	
62	88	-	$K^o{}_K$ :: port variable	
61	62	-	$P_{N,NK}$ :: port variable	
60	86	-	$N_{S,K}$ :: port variable	
59	61	-	$P_{S,NS}$ :: port variable	
58	60	-	$P_{K,NK}$ :: port variable	
57	63	-	$P_{NK,KS}$ :: port variable	
56	11	-	U_N :: port variable	
55	13	-	V_N :: port variable	
54	23	-	r_{zN} :: port variable	
53	10	-	r_{yN} :: port variable	
52	59	-	$P_{NS,AS}$ :: port variable	
51	128	-	$D_{NS,AS}$ :: port variable	
50	127	-	$D_{N,A}$ :: port variable	
49	5	-	$F_{N,A}$ :: port variable	
48	29	-	λ_S :: port variable	
47	1	-	$\#$ :: port variable	

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no	var	equ	quations	token
46	6	-	$t :: \text{port variable}$	
45	27	16	$Bo_N := \text{Instantiate}(S_N, \#)$	
44	87	64	$E_{aNK} := \text{Instantiate}(P_{N,NK} \overset{N}{\star} R_N \,.\, T_{NK}, \#)$	
43	28	17	$R_N := A^v \,.\, Bo_N$	
42	115	91	$c^o{}_{KS} := \text{Instantiate}(c_{KS}, \#)$	
41	114	90	$c_{KS} := c_{NS} \overset{NS}{\star} P_{NS,KS}$	
40	77	55	$T_{NK} := P_{N,NK} \overset{N}{\star} T_N$	
39	89	65	$K_{NK} := K^o{}_K \odot exp((-E_{aNK}) \,.\, \left(R_N \overset{N}{\star} P_{N,NK} \,.\, T_{NK} \right)^{-1})$	
38	116	92	$\phi_{KS} := \prod \left(c_{KS} \,.\, (c^o{}_{KS})^{-1} \right)$	
37	71	49	$\rho_N := m_N \,.\, (V_N)^{-1}$	
36	65	46	$d_A := \text{sign} \left(F_{N,A} \overset{N}{\star} p_N \right)$	
35	4	3	$0.5 := \text{Instantiate}(\#, \#)$	
34	108	84	$c_{NS} := (V_N)^{-1} \odot n_{NS}$	
33	93	69	$N_{NS,NK} := P_{S,NS} \overset{S}{\star} \left(\left(P_{K,NK} \,.\, T_{NK} \,.\, (T_{NK})^{-1} \right) \overset{K}{\star} N_{S,K} \right)$	
32	117	93	$\xi_{NK} := K_{NK} \,.\, P_{NK,KS} \overset{KS}{\star} \phi_{KS}$	
31	98	74	$\hat{V}_A := (\rho_N)^{-1} \,.\, k^c_{xN} \,.\, A_{yzN} \,.\, D_{N,A} \overset{N}{\star} p_N$	
30	109	85	$c_{AS} := (0.5 \,.\, (F_{NS,AS} - d_A \odot |F_{NS,AS}|)) \overset{NS}{\star} c_{NS}$	
29	45	32	$\mu_{NS} := \frac{\partial U_N}{\partial n_{NS}}$	
28	118	94	$\tilde{n}_{NS} := V_N \odot \left(N_{NS,NK} \overset{NK}{\star} \xi_{NK} \right)$	
27	111	87	$\hat{n}^c{}_{NS} := F_{NS,AS} \overset{AS}{\star} \hat{n}^c{}_{AS}$	

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no	var	equ	quations	token
26	105	81	$\hat{n}^d{}_{NS} := F_{NS,AS} \overset{AS}{\star} \hat{n}^d{}_{AS}$	
25	95	71	$A_{yzN} := r_{yN} \,.\, r_{zN}$	
24	110	86	$\hat{n}^c{}_{AS} := \hat{V}_A \odot c_{AS}$	
23	73	51	$F_{NS,AS} := F_{N,A} \odot P_{NS,AS}$	
22	58	45	$h_{NS} := H_N \odot (n_{NS})^{-1}$	
21	104	80	$\hat{n}^d{}_{AS} := A_{yzN} \odot \left(-k^d_{xNS}\right) \,.\, D_{NS,AS} \overset{NS}{\star} \mu_{NS}$	
20	150	124	$n^o{}_{NS} := \mathrm{Instantiate}(n_{NS}, \#)$	
19	119	95	$\dot{n}_{NS} := \hat{n}^c{}_{NS} + \hat{n}^d{}_{NS} + \tilde{n}_{NS}$	
18	124	100	$\hat{q}_A := A_{yzN} \,.\, k^q_{xN} \,.\, D_{N,A} \overset{N}{\star} T_N$	
17	122	98	$\hat{w}_A := \mathrm{Instantiate}(\hat{H}^c{}_A, \#)$	
16	120	96	$\hat{H}^c{}_A := \left(F_{NS,AS} \overset{NS}{\star} h_{NS}\right)^{S \in AS}{\star}\, \hat{n}^c{}_{AS}$	
15	106	82	$\hat{H}^d{}_A := \left(F_{NS,AS} \overset{NS}{\star} h_{NS}\right)^{S \in AS}{\star}\, \hat{n}^d{}_{AS}$	
14	42	116	$n_{NS} := \int_{t_o}^{t_e} \dot{n}_{NS} \; dt + n^o{}_{NS}$	
13	30	18	$C_{pN} := \frac{\partial H_N}{\partial T_N}$	
12	125	101	$\hat{q}_N := F_{N,A} \overset{A}{\star} \hat{q}_A$	
11	123	99	$\hat{w}_N := F_{N,A} \overset{A}{\star} \hat{w}_A$	
10	121	97	$\hat{H}^c{}_N := F_{N,A} \overset{A}{\star} \hat{H}^c{}_A$	
9	107	83	$\hat{H}^d{}_N := F_{N,A} \overset{A}{\star} \hat{H}^d{}_A$	
8	69	47	$m_N := \lambda_S \overset{S \in NS}{\star} n_{NS}$	
7	148	120	$cp_N := C_{pN} \,.\, (m_N)^{-1}$	

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no	var	equ	quations	token
6	145	117	$T_ref_N := \text{Instantiate}(T_N, \#)$	
5	8	5	$t_e := \text{Instantiate}(t, \#)$	
4	7	4	$t_o := \text{Instantiate}(t, \#)$	
3	151	125	$H^o{}_N := \text{Instantiate}(H_N, \#)$	
2	126	102	$\dot{H}_N := \hat{H}^c{}_N + \hat{H}^d{}_N + \hat{q}_N + \hat{w}_N$	
1	18	122	$H_N := m_N . \int_{T_ref_N}^{T_N} cp_N \ dT_N$	
0	18	123	$H_N := \int_{t_o}^{t_e} \dot{H}_N \ dt + H^o{}_N$	