

# t16\_waybel18

(TMchgTjfAYNvZyezvT4sNQeYZU3nj6DgjNE)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v2\_pre\_topc : \iota \Rightarrow o$  be given. Let  $l1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $u1\_pre\_topc : \iota \Rightarrow \iota$  be given. Let  $v2\_waybel18 : \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v5\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v2\_pre\_topc X0) \wedge (l1\_pre\_topc \\
& X0))) \Rightarrow (\forall X1. ((\neg v2\_struct\_0 X1) \wedge ((v2\_pre\_topc X1) \wedge (l1\_pre\_topc \\
& X1))) \Rightarrow (\forall X2. ((\neg v2\_struct\_0 X2) \wedge ((v2\_pre\_topc X2) \wedge (l1\_pre\_topc \\
& X2)))) \Rightarrow (((u1\_struct\_0 X1 = u1\_struct\_0 X2) \wedge (r1\_tarski (u1\_pre\_topc \\
& X2) (u1\_pre\_topc X1))) \Rightarrow (\forall X3. ((v1\_funct\_1 X3) \wedge ((v1\_funct\_2 \\
& X3 (u1\_struct\_0 X0) (u1\_struct\_0 X1)) \wedge ((v5\_pre\_topc X3 X0 X1) \wedge \\
& (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 \\
& X1)))))) \Rightarrow ((v1\_funct\_1 X3) \wedge ((v1\_funct\_2 X3 (u1\_struct\_0 X0) \\
& (u1\_struct\_0 X2)) \wedge ((v5\_pre\_topc X3 X0 X2) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 \\
& (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X2))))))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0. (l1\_pre\_topc X0) \Rightarrow ((v2\_waybel18 X0) \Leftrightarrow (\forall X1. ( \\
& (\neg v2\_struct\_0 X1) \wedge ((v2\_pre\_topc X1) \wedge (l1\_pre\_topc X1)))) \Rightarrow (\forall X2. \\
& ((v1\_funct\_1 X2) \wedge ((v1\_funct\_2 X2 (u1\_struct\_0 X1) (u1\_struct\_0 \\
& X0)) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 \\
& X1) (u1\_struct\_0 X0)))))) \Rightarrow ((v5\_pre\_topc X2 X1 X0) \Rightarrow (\forall X3. \\
& ((\neg v2\_struct\_0 X3) \wedge ((v2\_pre\_topc X3) \wedge (l1\_pre\_topc X3)))) \Rightarrow (\neg \\
& (m1\_pre\_topc X1 X3) \wedge (\forall X4. ((v1\_funct\_1 X4) \wedge ((v1\_funct\_2 \\
& X4 (u1\_struct\_0 X3) (u1\_struct\_0 X0)) \wedge (m1\_subset\_1 X4 (k1\_zfmisc\_1 \\
& (k2\_zfmisc\_1 (u1\_struct\_0 X3) (u1\_struct\_0 X0)))))) \Rightarrow (\neg (v5\_pre\_topc \\
& X4 X3 X0) \wedge (k2\_partfun1 (u1\_struct\_0 X3) (u1\_struct\_0 X0) X4 (u1\_struct\_0 \\
& X1) = X2))))))
\end{aligned} \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(X0 = X1) \Leftrightarrow ((r1\_tarSKI X0 X1) \wedge (r1\_tarSKI X1 X0)) \quad (3)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_pre\_topc X0) \wedge (l1\_pre\_topc \\ & X0))) \Rightarrow (\forall X1.((\neg v2\_struct\_0 X1) \wedge ((v2\_pre\_topc X1) \wedge (l1\_pre\_topc \\ & X1)))) \Rightarrow (((u1\_struct\_0 X0 = u1\_struct\_0 X1) \wedge ((u1\_pre\_topc X0 = u1\_pre\_topc \\ & X1) \wedge (v2\_waybel18 X0))) \Rightarrow (v2\_waybel18 X1)) \end{aligned}$$