t144_group_2 (TMdaaAJEuUXZqwckUGyWvcR-WEkwurVs7cSS)

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Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v15\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v2\_group\_1 : \iota \Rightarrow o$ be given. Let $v3\_group\_1 : \iota \Rightarrow o$ be given. Let $l3\_algstr\_0 : \iota \Rightarrow o$ be given. Let $m1\_group\_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k16\_group\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $g3\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u2\_algstr\_0 : \iota \Rightarrow \iota$ be given. Let $k8\_group\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k15\_group\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v2\_group\_1\ X0) \wedge ((v3\_group\_1\ X0) \wedge (l3\_algstr\_0\ X0)))) \Rightarrow (\forall X1.(m1\_group\_2\ X1\ X0) \Rightarrow ((r1\_tarski\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1)) \Rightarrow (g3\_algstr\_0\ (u1\_struct\_0\ X1)\ (u2\_algstr\_0\ X1) = g3\_algstr\_0\ (u1\_struct\_0\ X0)\ (u2\_algstr\_0\ X0)))) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v2\_group\_1\ X0) \wedge ((v3\_group\_1\ X0) \wedge (l3\_algstr\_0\ X0)))) \Rightarrow (\forall X1.(m1\_group\_2\ X1\ X0) \Rightarrow ((k8\_group\_2\ X0\ X1 \in k15\_group\_2\ X0\ X1) \wedge (k8\_group\_2\ X0\ X1 \in k16\_group\_2\ X0\ X1))) \tag{2}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v2\_group\_1\ X0) \wedge (l3\_algstr\_0\ X0))) \Rightarrow (\forall X1.(m1\_group\_2\ X1\ X0) \Rightarrow ((\neg v2\_struct\_0\ X1) \wedge ((v2\_group\_1\ X1) \wedge (l3\_algstr\_0\ X1)))) \tag{3}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v2\_group\_1\ X0) \wedge ((v3\_group\_1\ X0) \wedge (l3\_algstr\_0\ X0)))) \Rightarrow (\forall X1.(m1\_group\_2\ X1\ X0) \Rightarrow (k8\_group\_2\ X0\ X1 = u1\_struct\_0\ X1)) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1\_tarski\ X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (X2 = X0)) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(X0 = X1) \Leftrightarrow ((r1\_tarski\ X0\ X1) \wedge (r1\_tarski\ X1\ X0)) \tag{6}$$

Assume the following.

$$\forall X0.(l3\_algstr\_0\ X0) \Rightarrow ((v15\_algstr\_0\ X0) \Rightarrow (X0 = g3\_algstr\_0\ (u1\_struct\_0\ X0)\ (u2\_algstr\_0\ X0))) \tag{7}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v15\_algstr\_0\ X0) \wedge ((v2\_group\_1\ X0) \wedge ((v3\_group\_1\ X0) \wedge (l3\_algstr\_0\ X0))))) \Rightarrow (\forall X1.((v15\_algstr\_0\ X1) \wedge (m1\_group\_2\ X1\ X0)) \Rightarrow ((k16\_group\_2\ X0\ X1 = k1\_tarski\ (u1\_struct\_0\ X0)) \Rightarrow (X1 = X0)))$$