```
action_auto  THM

⊢  ∀Auto:Automata(Alph;St), l:Alph*.
|  (<St,λl,s. δAuto(s,l)>:l←InitialState(Auto)) = (Result(Auto)l)
| by RepD
|
1. Alph : Type
2. St : Type
3. Auto : Automata(Alph;St)
4. l : Alph*
⊢  (<St,λl,s. δAuto(s,l)>:l←InitialState(Auto)) = (Result(Auto)l)
| by (ListInd 4 THEN RecUnfold `maction` 0)
|    THEN
|    (RecUnfold `compute_list` 0)
|    THEN
|    (Reduce 0)
|
|\
| ⊢  InitialState(Auto) = InitialState(Auto)  by Auto
|
.\
. 5. u : Alph
. 6. v : Alph*
. 7. (<St,λl,s. δAuto(s,l)>:v←InitialState(Auto)) = (Result(Auto)v)
. ⊢  δAuto((<St,λl,s. δAuto(s,l)>:v←InitialState(Auto)),u)
.    =
.    δAuto((Result(Auto)v),u)  by RWH (HypC 7) 0
END
```