```
length_reverse  THM

⊢  ∀l:T*. ||rev(l)|| = ||l|| ∈ ℤ  by UnivCD
|
1. T : Type
2. l : T*
⊢  ||rev(l)|| = ||l||  by ListInd 2
|
|\
| ⊢  ||rev(nil)|| = ||nil||
|   by RecUnfold ‘reverse‘ 0 THEN RecUnfold ‘length‘ 0 THEN Reduce 0
|
.\
. 3. u : T
. 4. v : T*
. 5. ||rev(v)|| = ||v||
. ⊢  ||rev(u.v)|| = ||u.v||  by RecUnfold ‘reverse‘ 0 THEN Reduce 0
. |
. ⊢  ||rev(v) @ [u]|| = ||v||+1
. | by RWH
. |    (LemmaC
. |     Thm* ∀as,bs:T*. ||as @ bs|| = ||as||+||bs||
. |     {length_append})
. |    0
. |
. ⊢  ||rev(v)||+||[u]|| = ||v||+1  by Reduce 0
END
```