```
lremove_wf  THM

⊢  ∀St:Type, l:St*, s:St, eq:(St→St→𝔹). (l \ s) ∈ St*  by RepD
|
1. St : Type
2. l : St*
3. s : St
4. eq : St→St→𝔹
⊢  (l \ s) ∈ St*
| by ListInd 2 THEN RecUnfold ‘lremove‘ 0 THEN Reduce 0
|
|\
| ⊢  nil ∈ St*  by Auto
|
.\
. 5. u : St
. 6. v : St*
. 7. (v \ s) ∈ St*
. ⊢  if eq(s,u)→ v \ s else u.(v \ s) fi ∈ St*  by SplitOnConclITE
END
```