```
disjoint2_wf  THM

⊢  ∀T:Type, eq:{T≡₂}, L,M:T List. disjoint₂(eq;L;M) ∈ 𝔹  by UnivCD
|
1. T : Type
2. eq : {T≡₂}
3. L : T List
4. M : T List
⊢  disjoint₂(eq;L;M) ∈ 𝔹  by EquivT 2
|
3. eq ∈ T→T→𝔹
4. L : T List
5. M : T List
⊢  disjoint₂(eq;L;M) ∈ 𝔹
| by ListInd 4 THEN Rewrite (HigherC disjoint2_unrollC) 0
|
|\
| ⊢  true₂ ∈ 𝔹  by Auto
|
.\
. 6. u : T
. 7. v : T List
. 8. disjoint₂(eq;v;M) ∈ 𝔹
. ⊢  if u(∈eq) M→ false₂ else disjoint₂(eq;v;M) fi ∈ 𝔹
.   by IfThenElseCases 0
END
```