```
same_range_sep_eqv  THM

⊢  EquivRel on A→B, same_range_sep(A; B)  by Auto
|
1. A : Type
2. B : Type
⊢  EquivRel on A→B, same_range_sep(A; B)
| by BackThru: equivrel_characterization
|    THEN
|    GenUnivCD
|    THEN
|    OnAllClauses Try⁰ReduceSOAps THEN OnAllClauses Try⁰Reduce
|
|\
| 3. u : A→B
| ⊢  ∀j:B. (∃i:A. u(i) = j) ⟺ (∃i:A. u(i) = j)  by Auto
|
|\
| 3. u : A→B
| 4. v : A→B
| 5. ∀j:B. (∃i:A. u(i) = j) ⟺ (∃i:A. v(i) = j)
| ⊢  ∀j:B. (∃i:A. v(i) = j) ⟺ (∃i:A. u(i) = j)  by Rewrite by Hyp:-1
|
.\
. 3. u : A→B
. 4. v : A→B
. 5. ∀j:B. (∃i:A. u(i) = j) ⟺ (∃i:A. v(i) = j)
. 6. z : A→B
. 7. ∀j:B. (∃i:A. v(i) = j) ⟺ (∃i:A. z(i) = j)
. ⊢  ∀j:B. (∃i:A. u(i) = j) ⟺ (∃i:A. z(i) = j)  by Rewrite by Hyp:-1
END
```