```
delete_fenum_value_comp1  THM

⊢  Inj(ℕ(m+1); ℕ(k+1); f)
|  ⇒
|  (∀i:ℕm. f(i) = k ⇒ (Replace value k by f(m) in f)(i) = f(m) ∈ℕk)
| by Auto
|
1. m : ℕ
2. k : ℕ
3. f : ℕ(m+1)→ℕ(k+1)
4. Inj(ℕ(m+1); ℕ(k+1); f)
5. i : ℕm
6. f(i) = k
⊢  (Replace value k by f(m) in f)(i) = f(m) ∈ ℕk
| by Compute
|      ⌈(Replace value k by f(m) in f)(i)⌉
|      *⇒
|      if f(i)=₂k→ f(m) else f(i) fi
|    THEN
|    SplitITE Concl
|
.....truecase .....
⊢  f(m) = f(m) ∈ ℕk  by ¬f(m) = k ∈ ℤ  Asserted
|
.....assertion .....
⊢  ¬f(m) = k  by SimilarTo: ¬m = i ∈ ℤ
|
7. f(m) = k
⊢  m = i  by BackThru: Inj(ℕ(m+1); ℕ(k+1); f)
END
```