```
hmap2_wd  THM

⊢  ∀'a,'b,'c:S.
   and
   (all(λf:'a → 'b → 'c. equal(map2(f,nil,nil),nil))
   ,all
    (λf:'a
     → 'b
     → 'c. all
           (λh1:'a. all
                    (λt1:hlist
                     ('a
                      ). all
                         (λh2:'b. all
                                  (λt2:hlist
                                   ('b). equal
                                         (map2
                                          (f
                                          ,cons(h1,t1)
                                          ,cons(h2,t2))
                                         ,cons
                                          (f(h1,h2)
                                          ,map2(f,t1,t2)))))))))
  by HN THEN StrongAuto THEN Try (Complete (Unfold `label` 0))
END
```