```
ma-ef-sub  THM

⊢  ∀M1,M2:MsgA.
   M1 ⊆ M2
   ⇒
   (∀k:Knd, x:Id, s:M2.state, v:M2.da(k), w:M2.ds(x).
    M2.ef(k,x,s,v,w) ⇒ M1.ef(k,x,s,v,w))
  by RepeatFor 8 (Analyze 0 THENA Complete Auto) THEN Unfold_MsgA -8
     THEN
     Unfold_MsgA -7
     THEN
     SplitAndHyps
     THEN
     Unfold `fpf-val` 0
     THEN
     Try (DoSubsume THEN Reduce 0)
     THEN
     AllHyps
     (λh.
      Unfold `fpf-sub` h THEN InstHyp [<k,x>] h THENA Complete Auto)
     THEN
     ExRepD
     THEN
     ThinTrivial
     THEN
     RevHypSubst -2 -1
     THEN
     Try (DoSubsume THEN Reduce 0)
     THEN
     RevHypSubst -1 0
     THEN
     Try (Fold `member` 0)
     THEN
     DoSubsume
     THEN
     BackThru
     Thm* ∀eq:EqDecider(X), f,g:x:X fp-> Type, x:X.
          g ⊆ f ⇒ (f(x)?T ⊆r g(x)?Top)
     {subtype_DASH_fpf_DASH_cap_DASH_top}
END
```