```
ma-single-pre1_wf  THM

⊢  ∀a:Id, T,A:Type, x:Id, P:(A→T→Prop).
|  ma-single-pre1(x;A;a;T;x,v.P(x,v)) ∈ MsgA
| by Auto THEN Unfold ‘ma-single-pre1‘ 0 THEN Analyze
|    THEN
|    Try (Complete Auto)
|    THEN
|    Analyze
|    THEN
|    Try (Complete Auto)
|    THEN
|    GenConcl (s(x) = z)
|    THEN
|    Try (Complete Auto)
|
.....wf .....
1. Id
2. T : Type
3. A : Type
4. x : Id
5. A→T→Prop
6. s : State(x : A)
⊢  s(x) ∈ A
| by Repeat
|    (Unfolds [‘ma-state‘;‘fpf-cap‘;‘fpf-single‘;‘fpf-dom‘;‘fpf-ap‘]
|     -1
|     THEN
|     Reduce -1)
|    THEN
|    DoSubsume
|
.....subtype_rel .....
1. Id
2. T : Type
3. A : Type
4. x : Id
5. A→T→Prop
6. x@0:Id→if eqof(IdDeq)(x,x@0) ∨2 false2→ A else Top fi
⊢  if eqof(IdDeq)(x,x) ∨2 false2→ A else Top fi ⊆r A
  by ((RWO
       Thm* ∀d:EqDecider(A), i:A. (eqof(d)(i,i)) ∼ true2
       {eqof_eq_btrue}
       0)
      THEN
      (Reduce 0))
     THEN
     Analyze 0
END
```