

```

find_SG( $\langle P, T, F, M_0, N, s_0, \lambda_T \rangle$ )
   $M = M_0$ ;  $s = s_0$ ;  $S = \{M\}$ ;  $\lambda_S(M) = s$ ;
   $T_e = \{t \in T \mid M \subseteq \bullet t\}$ ; done = false;
  while ( $\neg$  done)
     $t = \text{select}(T_e)$ ;
    if ( $T_e - \{t\} \neq \emptyset$ ) then push( $M, s, T_e - \{t\}$ );
    if ( $(M - \bullet t) \cap t \bullet \neq \emptyset$ ) then return("Not safe.");
     $M' = (M - \bullet t) \cup t \bullet$ ;  $s' = s$ ;
    if ( $\lambda_T(t) = u+$ ) then  $s'(u) = 1$ ;
    else if ( $\lambda_T(t) = u-$ ) then  $s'(u) = 0$ ;
    if ( $M' \notin S$ ) then
       $S = S \cup \{M'\}$ ;  $\lambda_S(M') = s'$   $\delta = \delta \cup \{(M, t, M')\}$ ;
       $M = M'$ ;  $s = s'$ ;  $T_e = \{t \in T \mid M \subseteq \bullet t\}$ ;
    else
      if ( $\lambda_S(M') \neq s'$ ) then return("Inconsistent.");
      if (stack is not empty) then ( $M, s, T_e$ ) = pop();
      else done = true;
  return( $\langle S, \delta, \lambda_S \rangle$ );

```