```
depthfirst_wf  THM

⊢  For any graph
|  ∀the_obj:GraphObject(the_graph). depthfirst(the_obj) ∈ Traversal
| by Unfold ‘depthfirst‘ 0
|
1. the_graph : Graph
2. the_obj : GraphObject(the_graph)
⊢  the_obj.vacc((λs,i. dfs(the_obj;s;i)),nil) ∈ traversal(the_graph)
  by Inst
     Thm* For any graph
          ∀t:GraphObject(the_graph), T:Type. t.vacc ∈ (T→V→T)→T→T
     {gro_vacc_wf}
     [the_graph;the_obj;traversal(the_graph)]
END
```