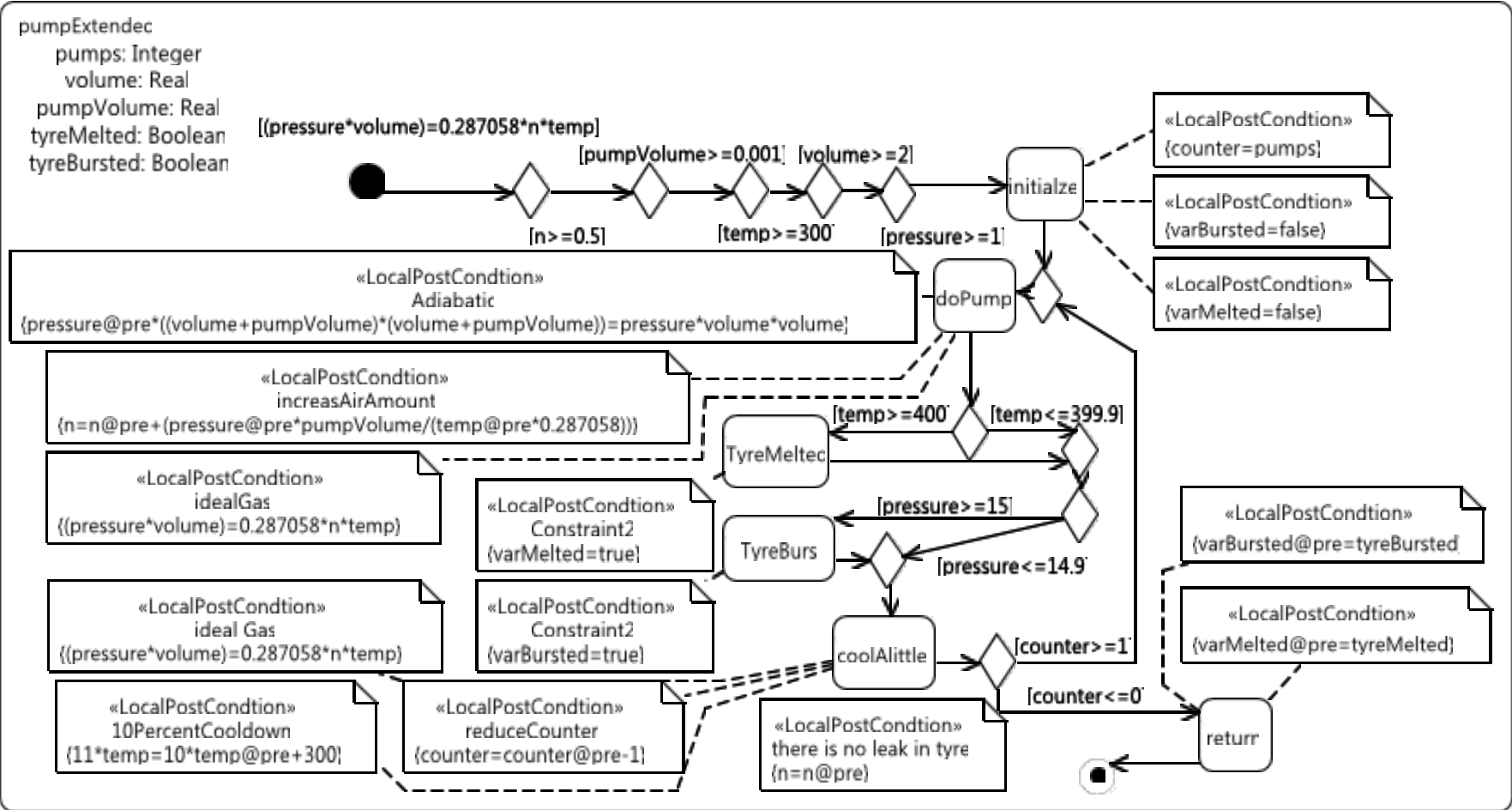
pumpExtendec
pumps: Integer
volume: Real
pumpVolume: Real
tyreMelted: Boolean
tyreBursted: Boolean
[(pressure*volume)=0.287058*n*temp]
[pumpVolume>=0.001]
[volume>=2]
[n>=0.5]
[temp>=300]
[pressure>=1]
initialze
«LocalPostCondtion»
{counter=pumps}
«LocalPostCondtion»
{varBursted=false}
«LocalPostCondtion»
{varMelted=false}
«LocalPostCondtion»
Adiabatic
{pressure@pre*((volume+pumpVolume)*(volume+pumpVolume))=pressure*volume*volume}
doPump
«LocalPostCondtion»
increasAirAmount
{n=n@pre+(pressure@pre*pumpVolume/(temp@pre*0.287058))}
[temp>=400]
[temp<=399.9]
TyreMeltec
«LocalPostCondtion»
idealGas
{(pressure*volume)=0.287058*n*temp}
«LocalPostCondtion»
Constraint2
{varMelted=true}
[pressure>=15]
TyreBurs
[pressure<=14.9]
«LocalPostCondtion»
{varBursted@pre=tyreBursted
«LocalPostCondtion»
ideal Gas
{(pressure*volume)=0.287058*n*temp}
«LocalPostCondtion»
Constraint2
{varBursted=true}
coolAlittle
[counter>=1]
«LocalPostCondtion»
{varMelted@pre=tyreMelted}
[counter<=0]
«LocalPostCondtion»
10PercentCooldown
{11*temp=10*temp@pre+300}
«LocalPostCondtion»
reduceCounter
{counter=counter@pre-1}
«LocalPostCondtion»
there is no leak in tyre
{n=n@pre}
returr