

CAR[G]+

feature -- queries

model: G

year: INTEGER

odometer: INTEGER

feature -- { **NONE** }

make (a_model: G; a_year: INTEGER; a_miles: **like** odometer)

-- Initialize a new car with `a_model`, `a_year`, and an odometer read `a_miles`.

ensure

proper_initialization:

$\text{model} \sim \text{a_model} \wedge \text{year} = \text{a_year} \wedge \text{odometer} = \text{a_miles}$

invariant

valid_car_year: $\text{year} \geq 1900$

valid_mileage: $\text{odometer} \geq 0$