12   Union and Short Record Definitions

1.   **scheme**
       VEHICLE1 =
        class
         type
          Vehicle = Car | Lorry,
          Car :: curr_value : **Nat** age : Year,
          Lorry :: curr_value : **Nat** age : Year tonnage : **Nat**,
          Year

         value
          incr_age : Vehicle → Vehicle
          incr_age(v) ≡
           case v **of**
            mk_Car(cv, a) → mk_Car(cv, add_one(a)),
            mk_Lorry(cv, a, t) → mk_Lorry(cv, add_one(a), t)
           end,

          add_one : Year → Year
        end

2.   **scheme**
       VEHICLE2 =
        class
         type
          Vehicle ==
           Vehicle_from_Car(Vehicle_to_Car : Car) | Vehicle_from_Lorry(Vehicle_to_Lorry : Lorry),
          Car == mk_Car(curr_value : **Nat**, age : Year),
          Lorry == mk_Lorry(curr_value : **Nat**, age : Year, tonnage : **Nat**),
          Year

         value
          incr_age : Vehicle → Vehicle
          incr_age(v) ≡
           case v **of**
            Vehicle_from_Car(mk_Car(cv, a)) → Vehicle_from_Car(mk_Car(cv, add_one(a))),
            Vehicle_from_Lorry(mk_Lorry(cv, a, t)) →
              Vehicle_from_Lorry(mk_Lorry(cv, add_one(a), t))
           end,

          add_one : Year → Year
        end