



## PNEUMATIC BRAKING SYSTEM Réf : SYS-FPTR



### Presentation :

The pneumatic braking system is constituted of 2 under bodies (truck and trailer) with the different components of the braking system (RENAULT PREMIUM Type).

It includes :

- The air dryer
- The protection valve
- The air tank (3 on the truck, 1 on the trailer)
- The pressure reduction valve for trailer
- The duplex service brake control valve
- The quick release valve
- The load sensing valve (1 on truck, 1 on trailer)
- The double relay governor valve
- The trailer control valve
- The single diaphragm chamber (front truck and trailer)
- The double spring diaphragm chamber (rear truck)
- The automatic coupling on trailer and connexion truck-trailer
- The air pressure reading in different locations on the circuit thanks to specific connexion
- The connections and pipes with quick and safe connexions



All those components are fixed on the board on which the truck and trailer top view is drawn to locate them easily.

### Pedagogic activities :

The student is going to acquire the following competences :

- Identify the different components as well as different inlets and outlets (supply, control, inlet and outlet pressure).
- Know each component location and purpose (located on a vehicle view).
- Build the piping according to the manufacturer drawings.
- Carry out pressure measures to allow :
  - Validation of the component working in its pneumatic environment.
  - Control the compliance with manufacturer data.



**This model complies with the requirements from BEP to BTS levels (French national Education).  
A technical and pedagogic documentation is supplied with the simulator on USB key.**

### Approached subjects:

- Pneumatic energy storage
- Pneumatic circuits safety and protection
- Pneumatic circuits modulation (brake valve, load sensing valve and trailer control valve)
- A pneumatic circuit checking with pressure gauges

### Characteristics :

| <u>Energy (bar) :</u> | <u>Dimensions (mm) :</u>                                      | <u>Weight (Kg) :</u> |
|-----------------------|---|----------------------|
| Air supply 7          | Truck L= 1400 P= 700 H= 1700<br>Trailer L= 700 P= 700 H= 1700 | 160+95               |

Tuyaux de connexion des composants : 30 de 0.5 m et 5 de 0.75 m  
two more tubes and two outlet pipes with pressure

### Options :

- Slip-cover

CAP

BAC PRO

BTS

SUP

**POIDS LOURDS - AGRICOLE**