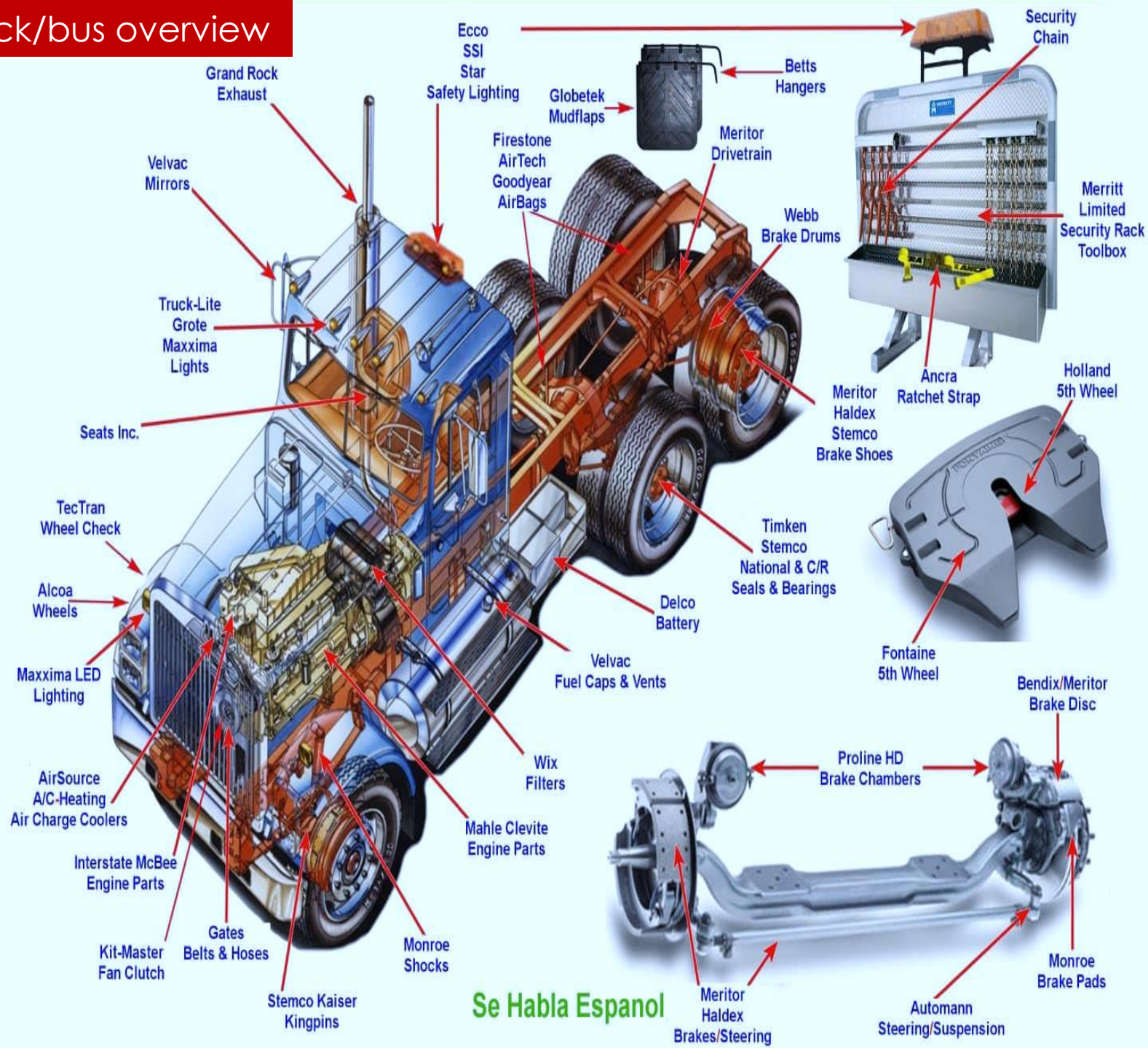


# MODULE 5: TRUCKS AND BUSES

Your Tour Guide for Today  
Tim Janello

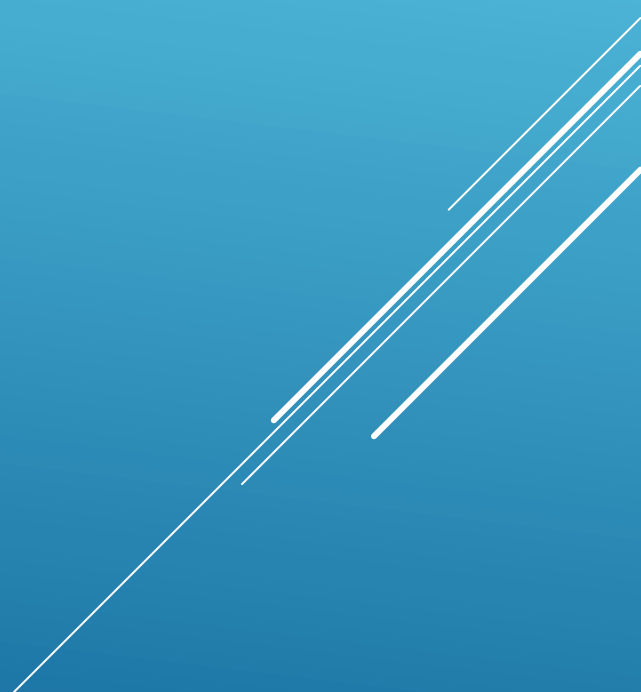
# Truck/bus overview

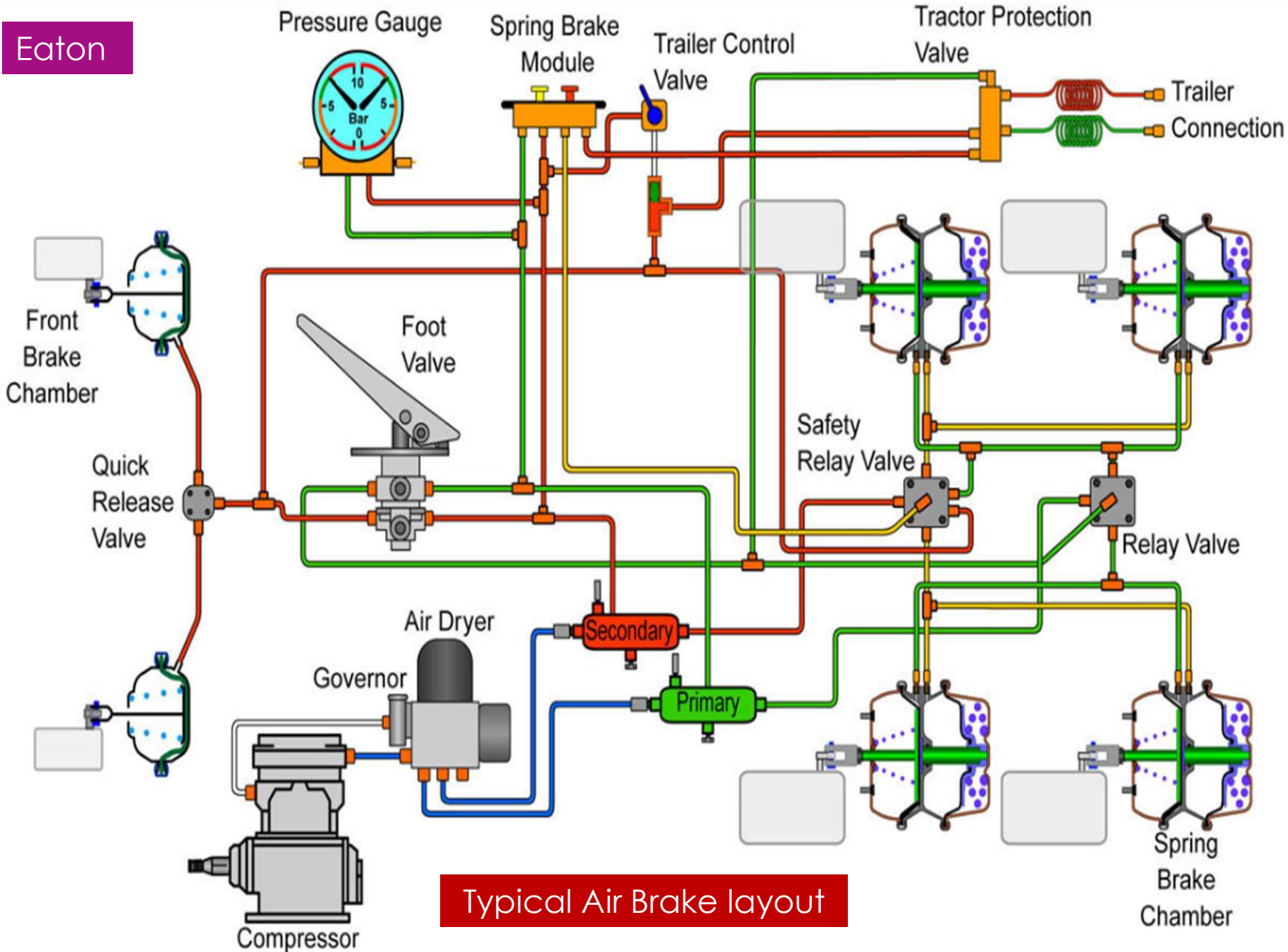


# MAJOR BRAKE AND DRIVELINE MANUFACTURES

Meritor

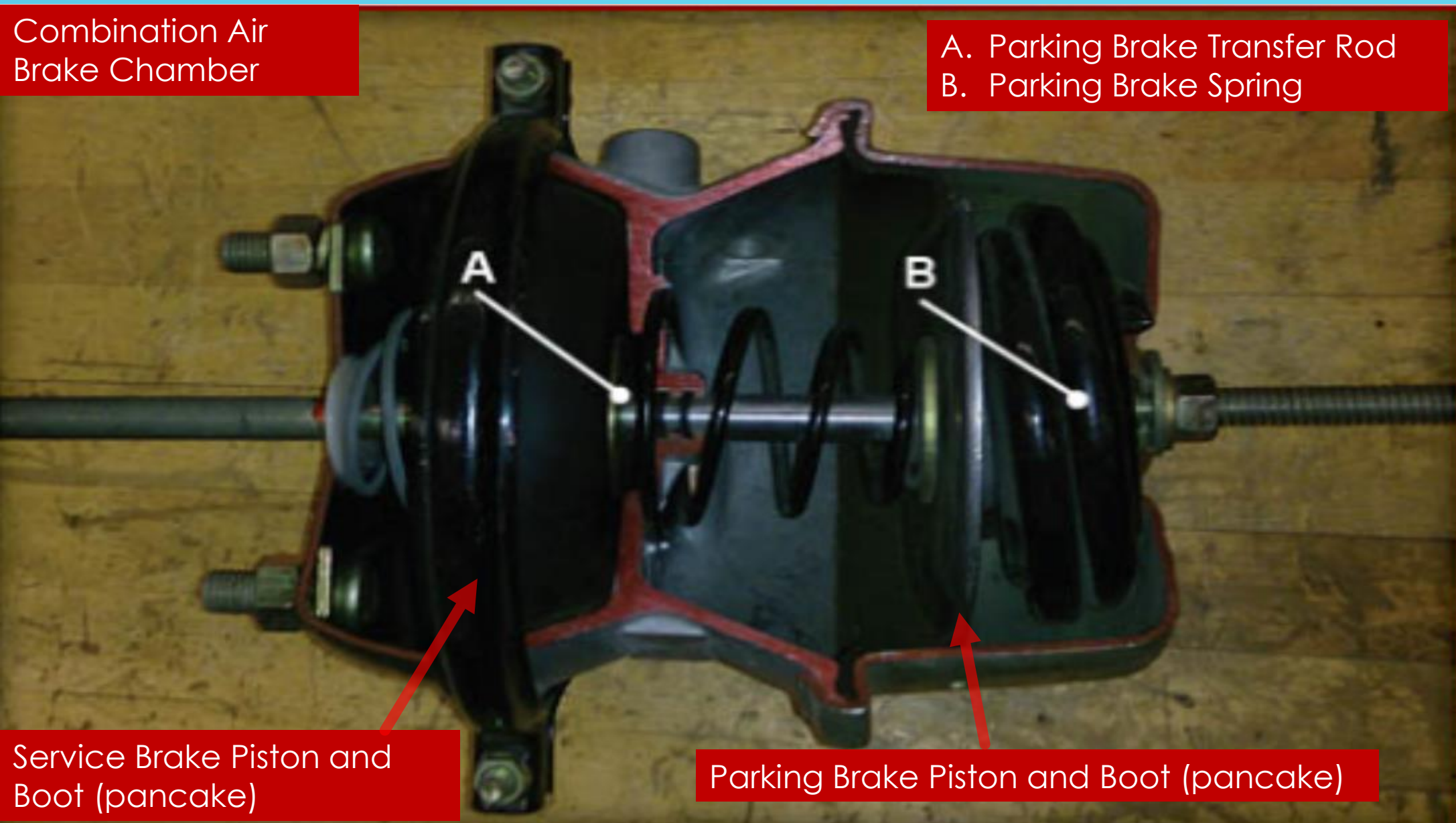
Bendix





Typical Air Brake layout





Combination Air  
Brake Chamber

A. Parking Brake Transfer Rod  
B. Parking Brake Spring

Service Brake Piston and  
Boot (pancake)

Parking Brake Piston and Boot (pancake)

- ▶ **Manual and Auto-shift**

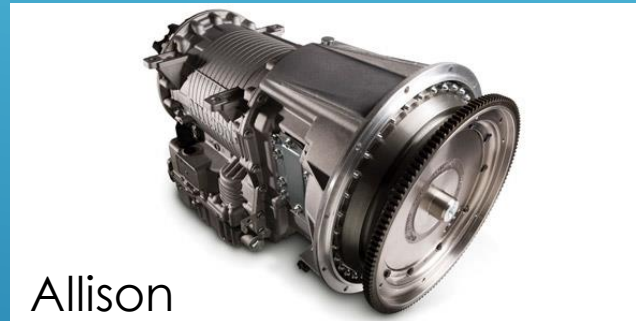
- ▶ Eaton (Cummins)
- ▶ Detroit Diesel
- ▶ Volvo
- ▶ Tremec

- ▶ **Fully Automatic**

- ▶ Allison
- ▶ Aisin

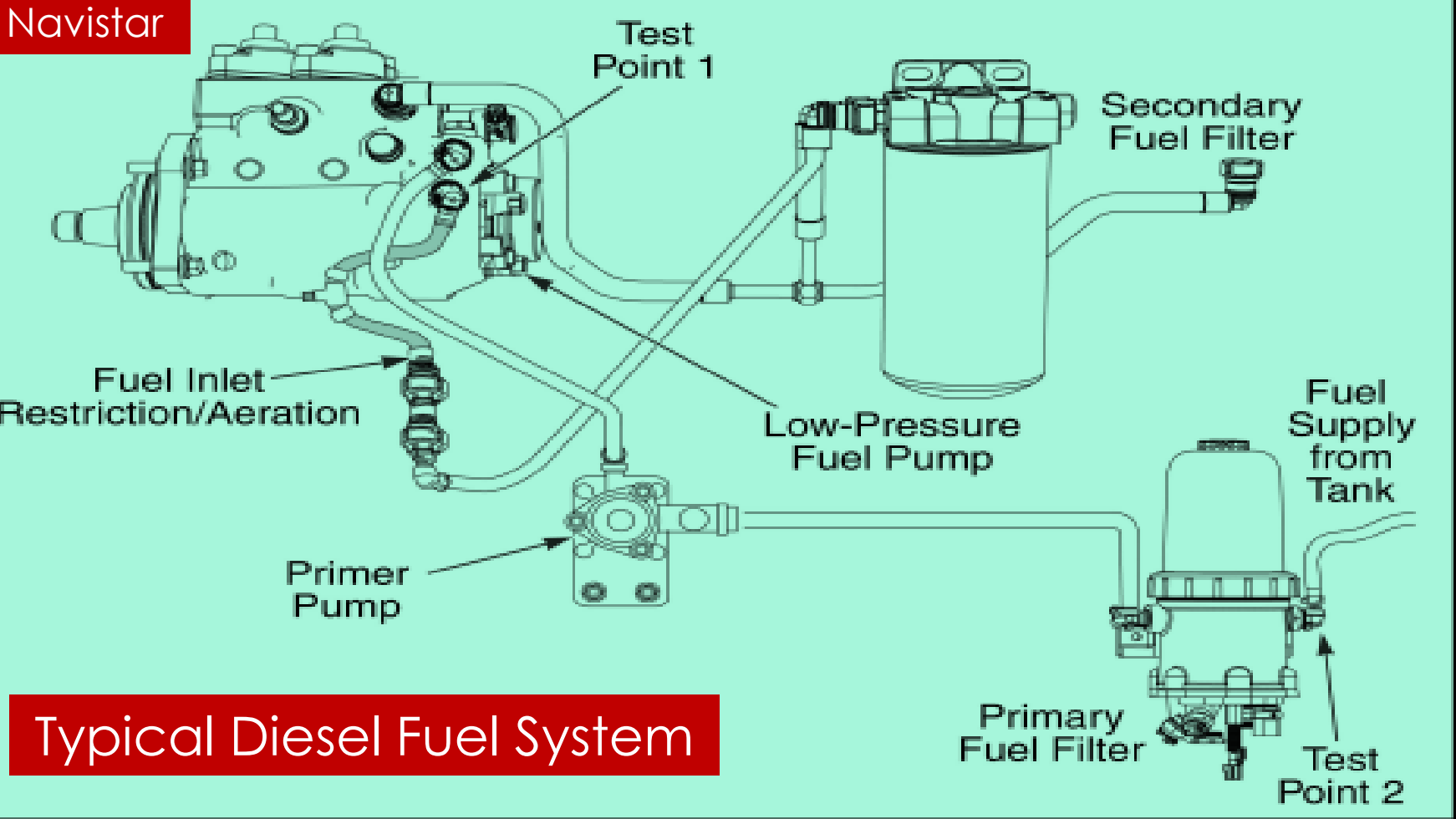


Eaton



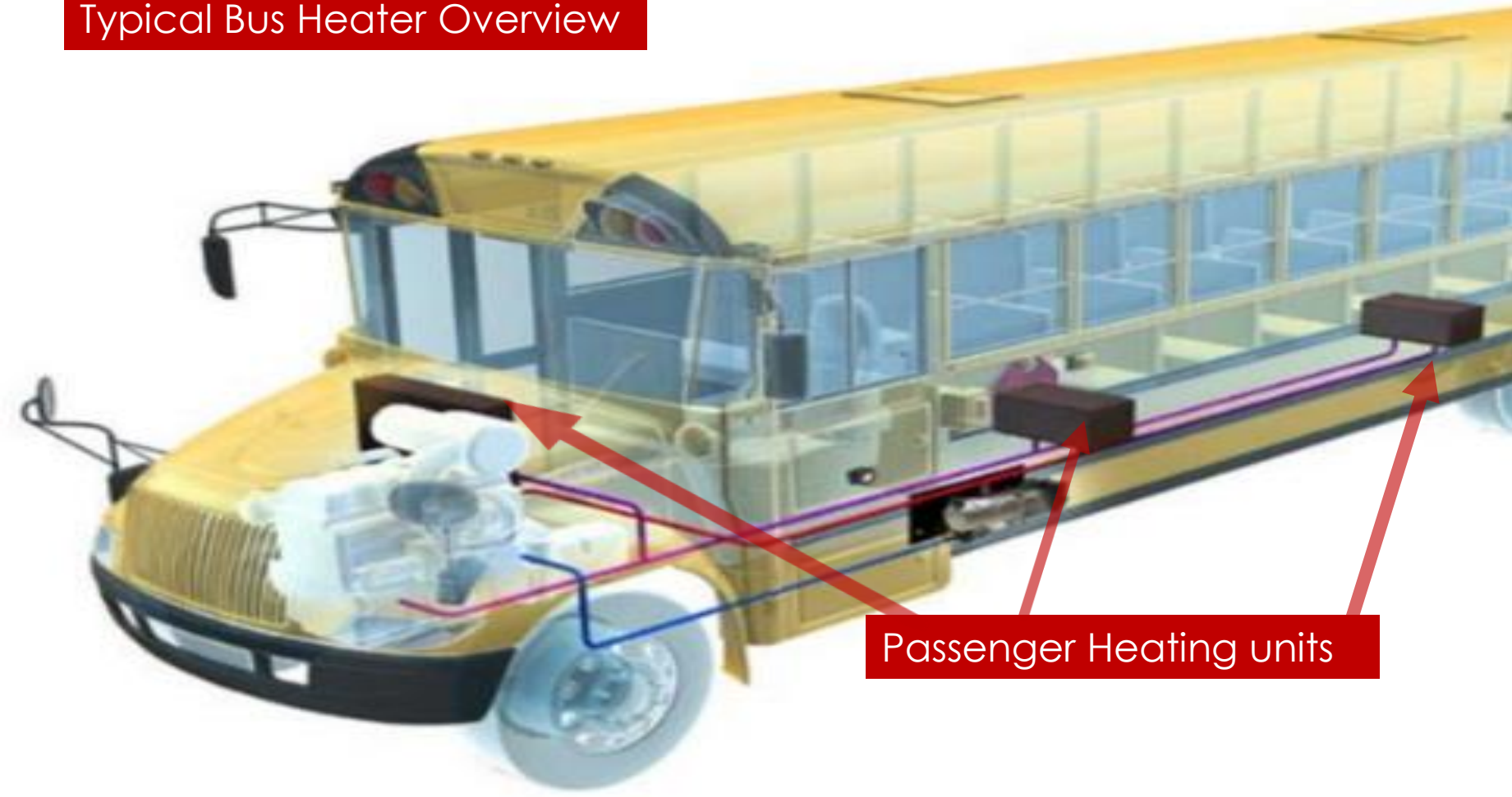
Allison

# TRANSMISSION MANUFACTURES

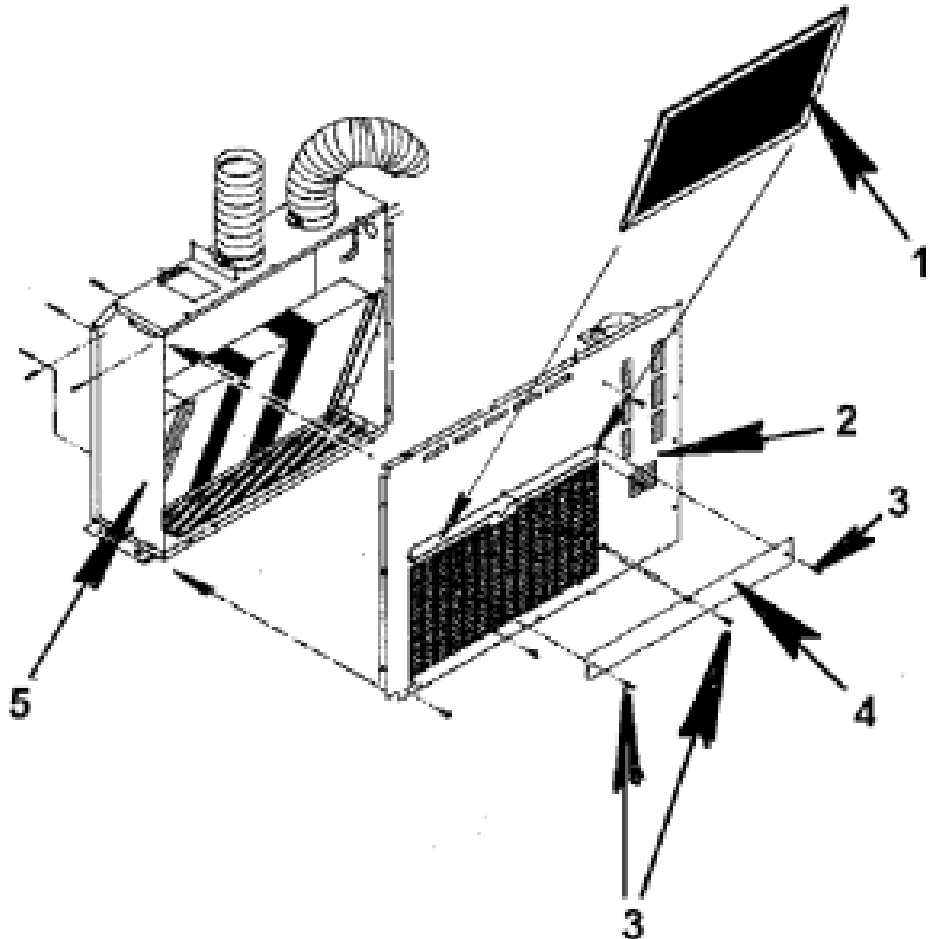


Typical Diesel Fuel System

## Typical Bus Heater Overview



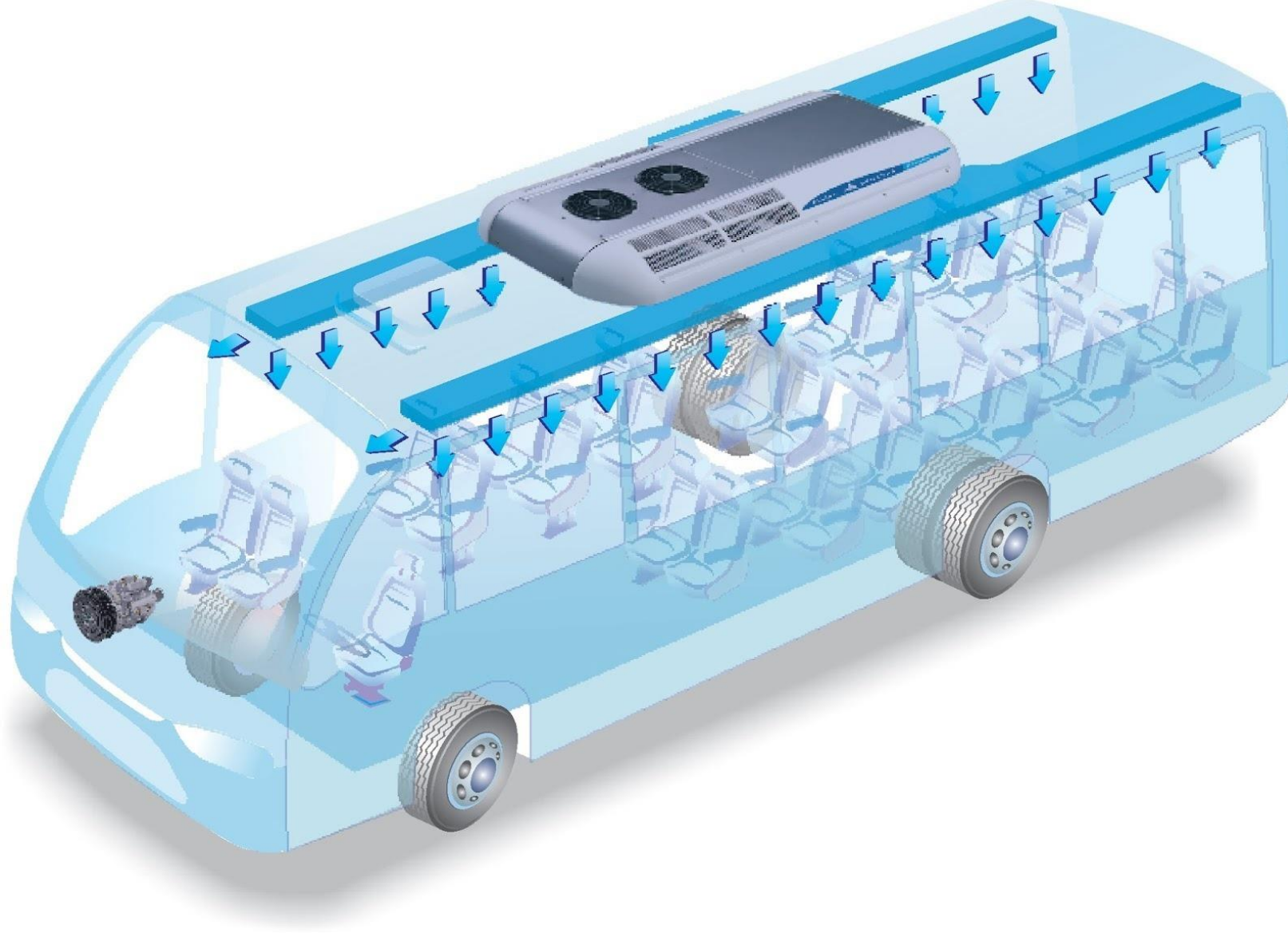




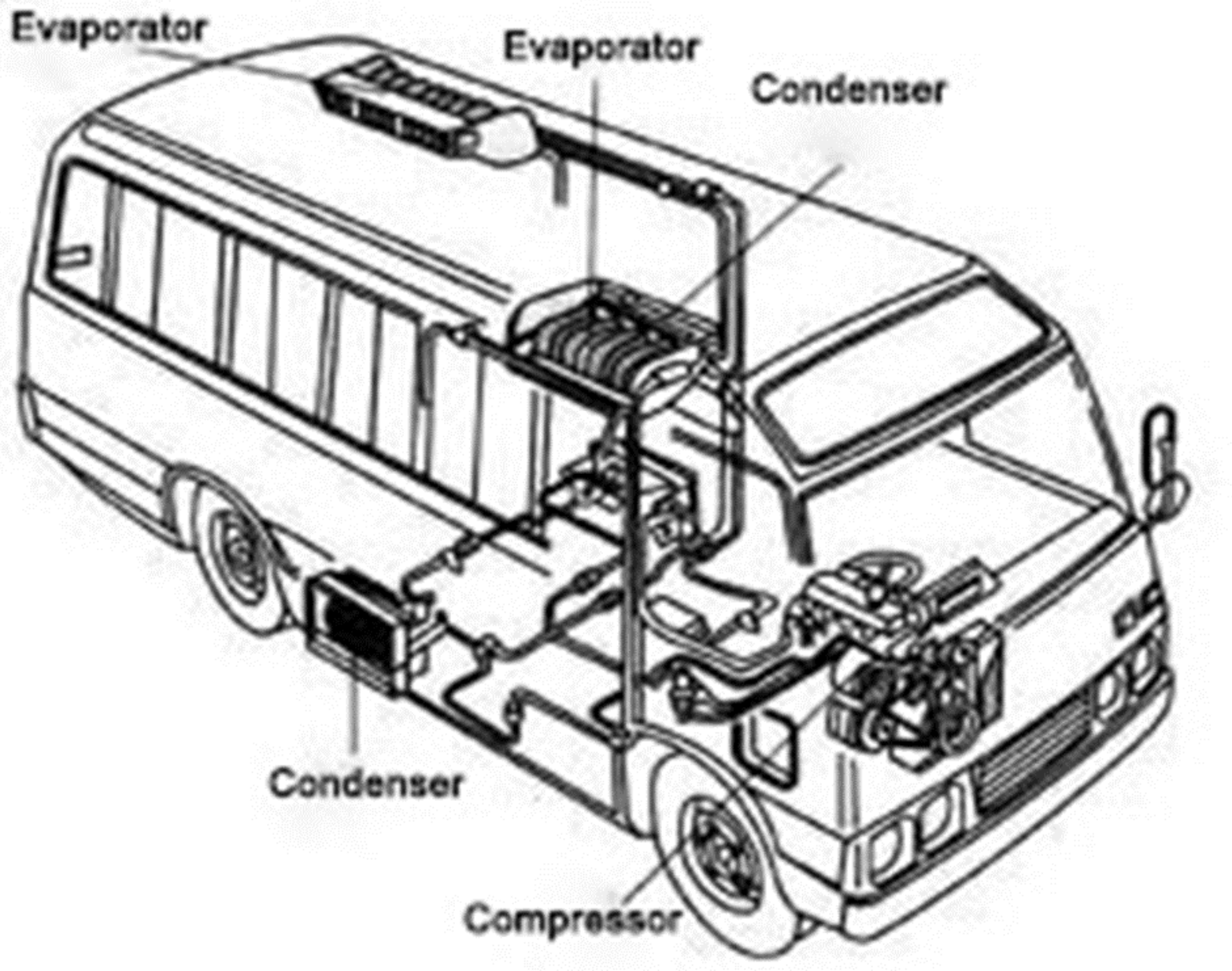
# TYPICAL BUS HEATERS

**Figure 217 Filter Remove**

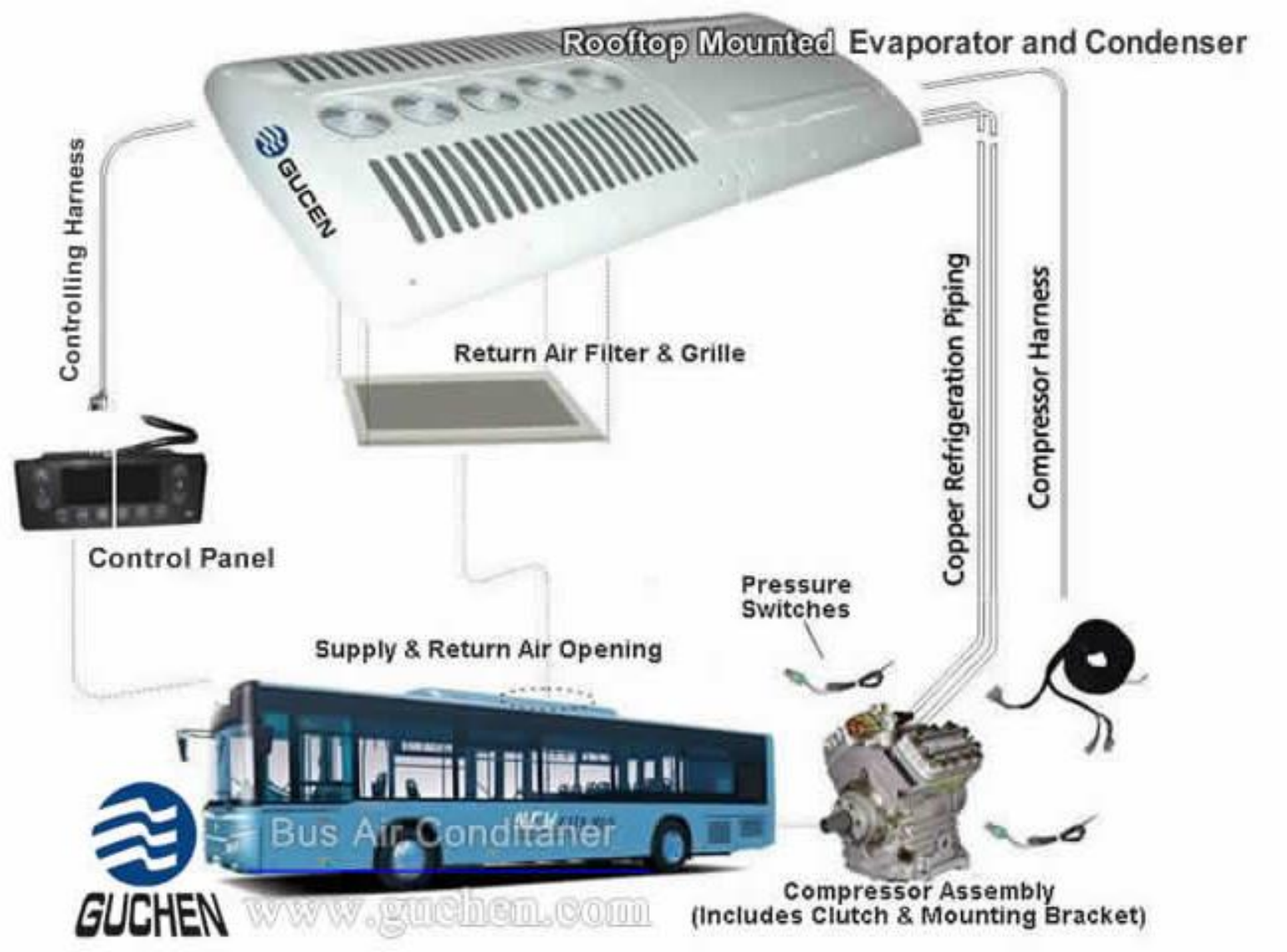
1. HEATER FILTER
2. HEATER FRONT COVER PLATE
3. FILTER ACCESS COVER MOUNTING SCREWS
4. FILTER ACCESS COVER
5. HEATER BODY ASSEMBLY



TYPICAL BUS OVERHEAD AC UNITS



## INTEGRATED AC SYSTEM OUTLINE



LARGE TRANSIT BUS AC SYSTEM LAYOUT



Cummins



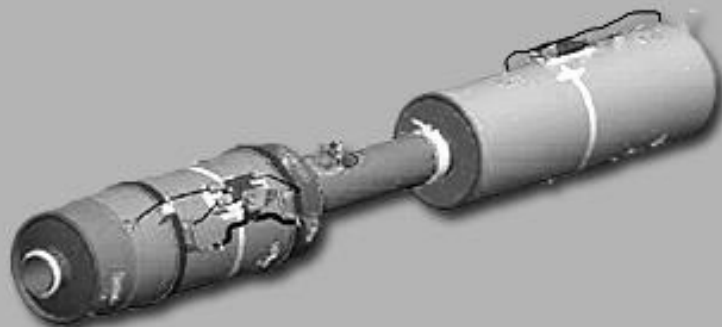
**Horizontal DPF - Horizontal SCR,  
"Switchback"**



**Horizontal DPF - Horizontal SCR,  
Frame Rail Mounted**



**Horizontal DPF - Horizontal SCR,  
Frame Rail Mounted**



**Horizontal DPF - Horizontal SCR, In Line**



**Horizontal DPF - Vertical SCR**

**DIESEL EXHAUST AFTER-TREATMENT SYSTEMS**

# NEXT GENERATION AFTER-TREATMENT

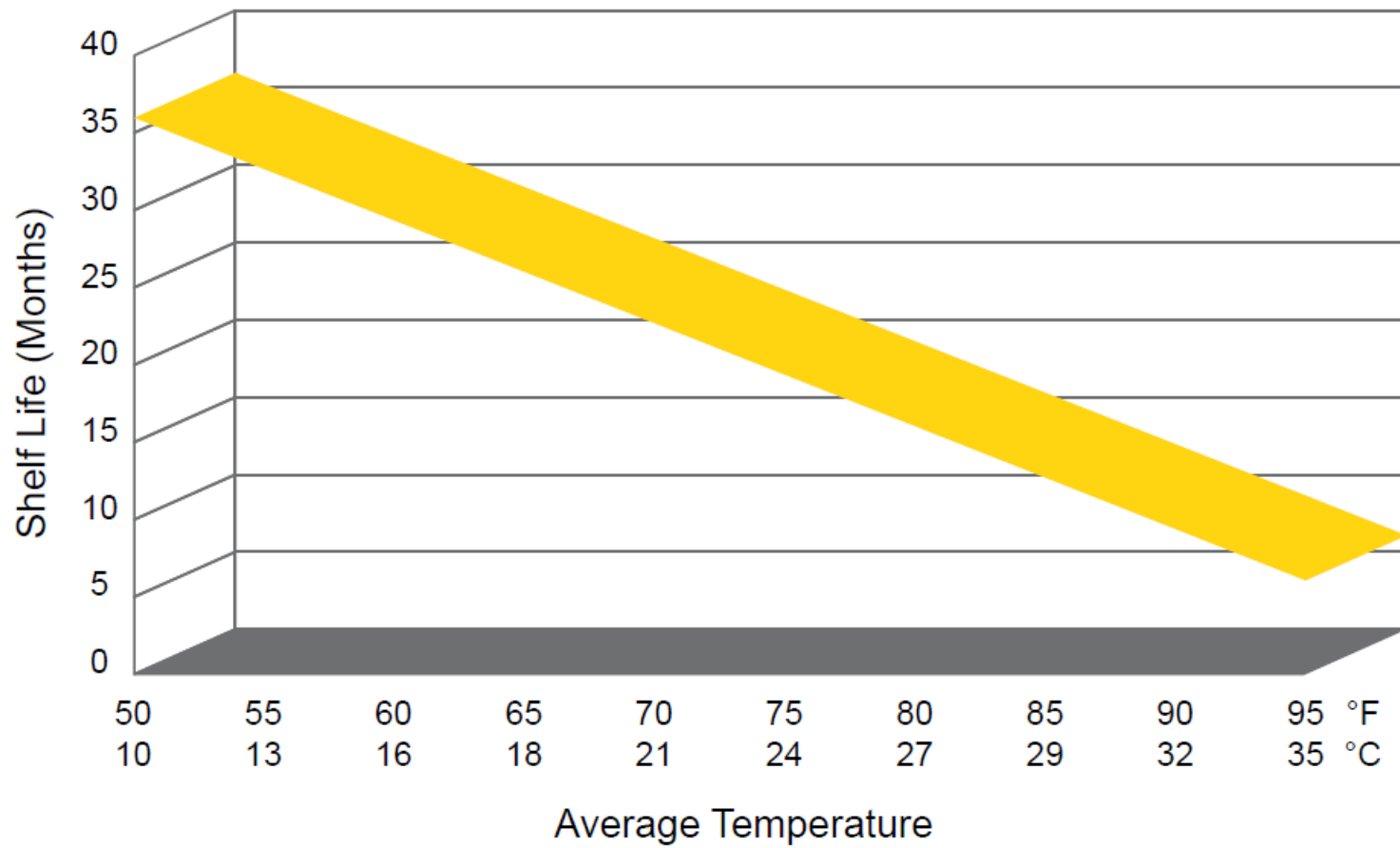
- ▶ Single Unit
- ▶ Combines = DOC, DPF, Decomp Tube, & SCR
- ▶ 40% less weight
- ▶ Improved Heat Retention & Regeneration for Low Cycle Driving





## DEF Quality Testing





DEF SHELF LIFE