

Haldex

**Product
Training
Workbook**

L20022 Rev. 12/03



Truck/Tractor/Bus

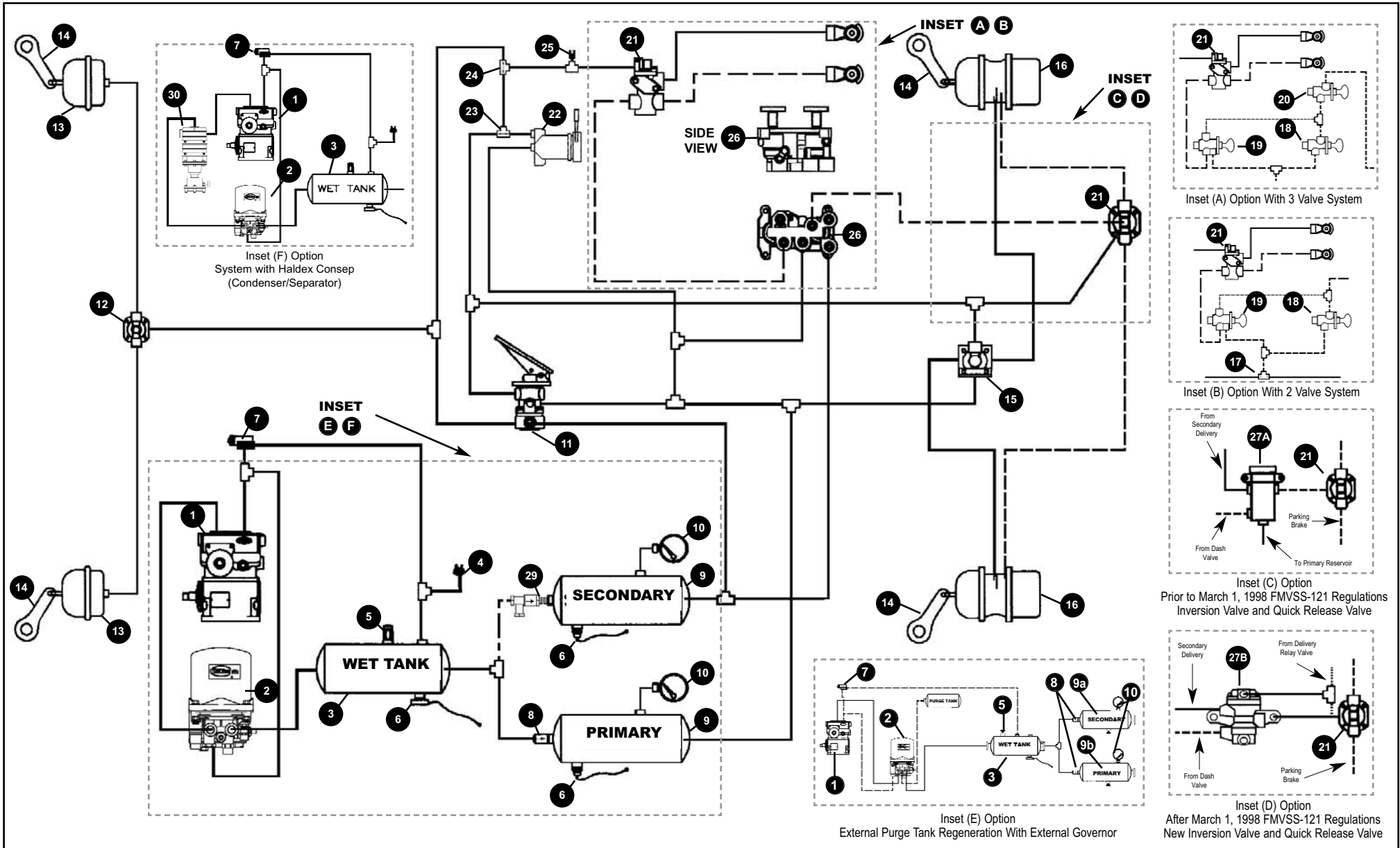
Full Component Breakdown

Easy to Follow System Schematic

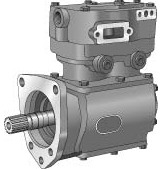



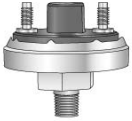
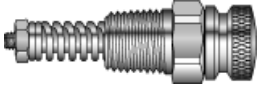
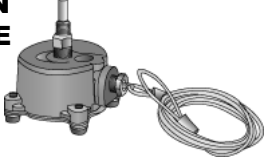
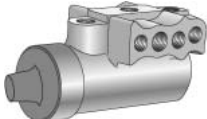
INTRODUCTION

The purpose of an air brake system on heavy duty vehicles is to convert air pressure to mechanical energy to activate the foundation brakes. The **FMVSS-121** brake law dictates how this is to be done for over-the-road vehicles. The purpose of this workbook is to help you construct a complete air brake system by using smaller systems. The systems covered in this workbook include:

AIR SUPPLY, SECONDARY SERVICE, PRIMARY SERVICE, PARKING, ANTI-COMPOUNDING, EMERGENCY, TRAILER SUPPLY and TRAILER CONTROL.




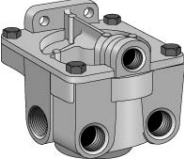


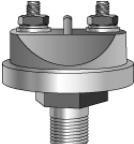
AIR SUPPLY SYSTEM

- 1 COMPRESSOR** 
- 2 AIR DRYER** 
- 3 WET (SUPPLY) TANK** 
- 30 CONSEP (Condensor/Separator)** 
- 4 LP SWITCH** 
- 5 PRESSURE RELIEF VALVE** 
- 6 AUTOMATIC DRAIN VALVE** 
- 7 GOVERNOR** 



SECONDARY SERVICE SYSTEM

- 6 MANUAL DRAIN VALVE** 
- 8 ONE-WAY CHECK VALVE** 
- 9a SECONDARY TANK**
- 29 REGENERATION VALVE** 
- 10 AIR GAUGE** 
- 11 DUAL FOOT CONTROL VALVE** 
- 12 QUICK RELEASE VALVE** 
- 13 FRONT SERVICE CHAMBER** 
- 14 AUTOMATIC BRAKE ADJUSTER** 

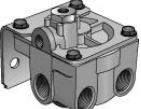
PRIMARY SERVICE SYSTEM

- 6 MANUAL DRAIN VALVE**
- 8 ONE-WAY CHECK VALVE**
- 9b PRIMARY TANK**
- 10 AIR GAUGE**
- 11 DUAL FOOT CONTROL VALVE**
- 14 AUTOMATIC BRAKE ADJUSTER** 
- 15 SERVICE RELAY VALVE** 
- 16 SPRING BRAKE** 
- 23 TWO-WAY CHECK VALVE** 
- 24 TWO-WAY CHECK VALVE**
- 25 STOP LIGHT SWITCH** 

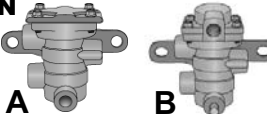
PARKING SYSTEM

- 16 SPRING BRAKE**
- 17 TWO-WAY CHECK VALVE** 
- 18 SYSTEM DASH VALVE (YELLOW)**
- 19 TRAILER DASH VALVE (RED)**
- 20 TRACTOR DASH VALVE (BLUE)**
- 26 MANIFOLD DASH VALVE** 

ANTI-COMPOUNDING SYSTEM

- 21 QUICK RELEASE WITH TWO-WAY CHECK OR** 
- 28 SPRING BRAKE RELAY VALVE WITH TWO-WAY CHECK** 

EMERGENCY SYSTEM

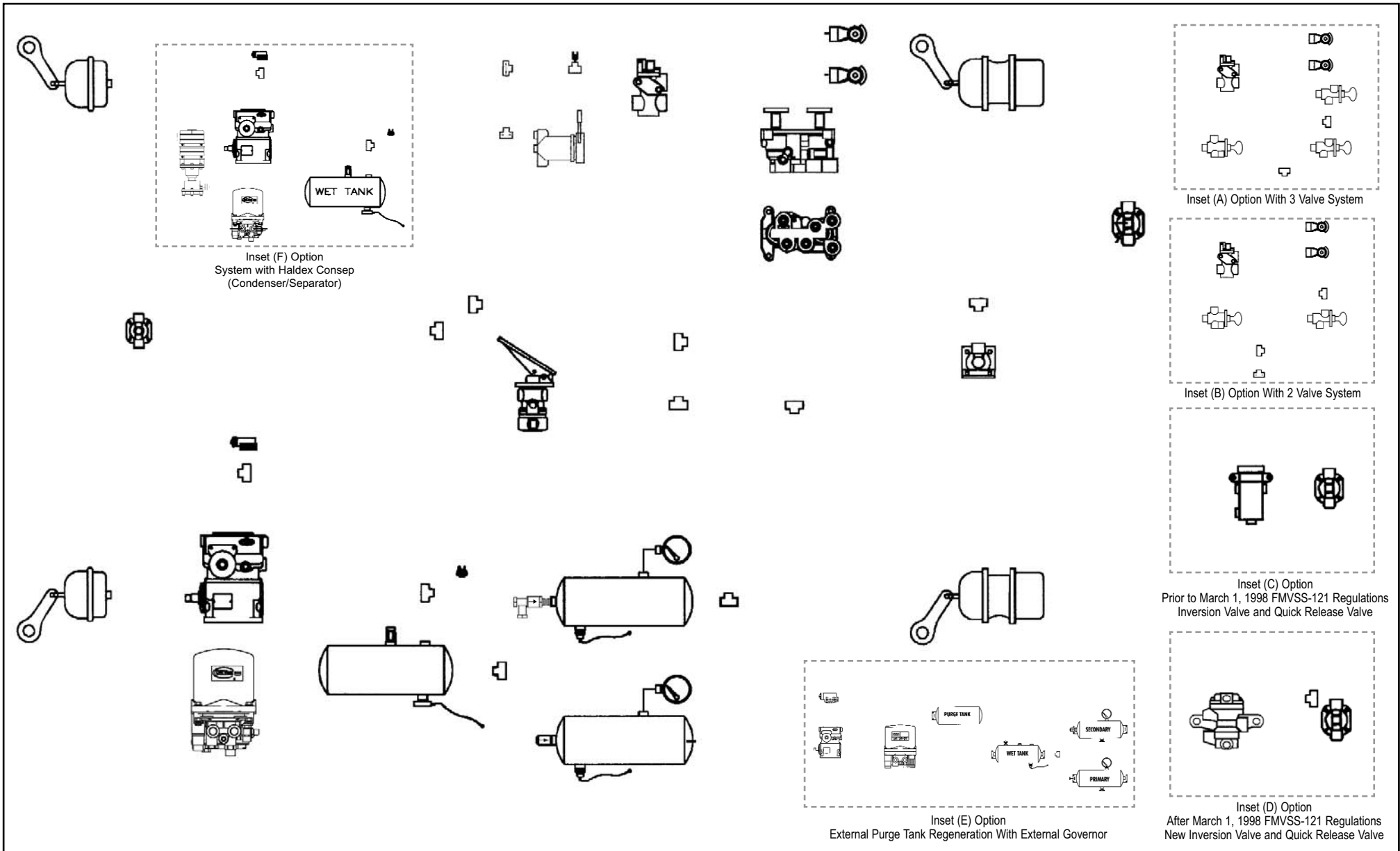
- 27 INVERSION VALVE** 

TRAILER SUPPLY SYSTEM

- 19 TRAILER DASH VALVE**
- 21 TRACTOR PROTECTION VALVE**
- 23 24 TWO-WAY CHECK VALVE** 

TRAILER CONTROL SYSTEM

- 22 HAND CONTROL VALVE** 
- 23 24 TWO-WAY CHECK VALVE**



L20022 US 3/07 10M ART (Last Rev. 12/03)
4/09 Address Block Updated Web Only

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