Compressor Nameplates
A nameplate is attached to all compressors. It displays the model, piece number and serial number. A nameplate with a black background denotes a new original equipment compressor, whereas a nameplate with a red background designates that the compressor is a Bendix remanufactured/replacement unit. When making reference to a particular compressor, use the pc. no. stamped on the nameplate.

Air Compressor Discharge hose fitting
Part No. 142110
Designed for use with stainless steel braided discharge hose. All brass bodies with brass sleeves and steel nuts. 5/8" OD.
Hose Part No. 919-10

Air Compressor Discharge Hose Assembly
Part No. 142552
Length = 52 inches
Hose I.D. = 1/2 inch
Hose O.D. = 5/8 inch
Part No. 142572 (72 inches)
BENDIX COMPRESSORS AND PARTS

WHY A BENDIX REMANUFACTURED COMPRESSOR?
• All components are inspected and then replaced or remanufactured to the highest Bendix OEM manufacturing and product specifications, long the industry standard.
• All Bendix remanufactured compressors meet or exceed OE manufacturing functional, end-of-line test specifications.
• Bendix discards and replaces all wear components – o-rings, gaskets, piston rings, bearing inserts, sleeve bearings, unloader springs, seals, studs, lock washers, pipe fittings, inlet and discharge valves, inlet and discharge springs, wrist pin plugs and safety valves – with new components in all remanufactured compressors.
• During the remanufacturing process, genuine Bendix compressors are upgraded with the latest manufacturing methods, technologies and product enhancements, often making our remanufactured product better than the original.
• These upgrades are done even if the replaced compressor did not have the enhancement when new.

Look for our Governors on page 8!

Tu-Flo® 550 for Detroit Diesel
Series 60 non-EGR
(69 tooth gear w/21 tooth spline)
Part No. 5004188X

Tu-Flo® 550 for Detroit Diesel
Series 60 non-EGR
(21 tooth spline)
Part No. 107622X

Tu-Flo® 750 for Detroit Diesel
Series 60 non-EGR & Series 50
(69 tooth gear w/21 tooth spline)
Part No. 5004187X

Tu-Flo® 750 for Detroit Diesel
Series 60 non-EGR & Series 50
(21 tooth spline)
Part No. 107623X

Tu-Flo® 550 for International I-6
pre-2004 DT466, HT530
Part No. 5004613X

Tu-Flo® 750 for International I-6
pre-2004, HT530
Part No. 5004614X

Tu-Flo® 550 for Mack Extended
(Pre-1997)(*Head contoured for special clearance application.)
Part No. *108866X
Part No. 5002865X

Tu-Flo® 550 for Mack Extended
(Pre-1997)(*Head contoured for special clearance application.)
Part No. *108869X
Part No. 5002868X

Tu-Flo® 750 for Mack Extended
(Pre-1997)(*Head contoured for special clearance application.)
Part No. *108866X
Part No. 5002865X

Tu-Flo® 750 for Mack Extended
(Pre-1997)(*Head contoured for special clearance application.)
Part No. *108869X
Part No. 5002868X

Unloader Kit
Kit contains parts to install 3 piece unloader plungers in Tu-Flo compressors.
Part No. 279615N

Air Strainer
For TF-400, 500, 501, 600, and 700 Bendix compressors
Part No. 278500N
Contents:
(Air Filter=Part No. PA1704)

ST-4™ Safety Valve
Part No. 131081
250 psi.

(1) 279905 Mounting Baffle
(1) 243009 Filter Element (PA1704)

(1) 279903 Cover

(1) 243430 Gasket
(2) 237648 Lock Washer
(2) 243411 Cap Screw
**REMANUFACTURED HALDEX COMPRESSORS**

**Head Assembly**
Rotate to match your inlet/outlet port needs; extra gasket included!

**Unloader Assembly**
Thru-the-head servicing. Quick and easy way to restore to original performance!

**Connecting Rod and Bearings**
Robust design provides extended service life and eliminates connecting rod failures!

**Cylinder Block**
Water cooled to provide maximum life and performance.

**Piston & Ring Assembly**
Perfect balance of function and service life. Minimizes oil passing and life ending early failures due to piston and cylinder wear.

**Main Bearing**
Ball bearings ensure trouble-free life and smooth operation.

---

**Part No. 3558052X**
Cubic Feet Per Minute: 13.2  
Model: QE296C Quiet Economy Single Cylinder  
Air Inlet: Left  
Air Outlet: Front  
Spline: 11 Tooth  
Application/Notes: Cummins C Engine. Iron Head/Cover. Intake Valve Retainer. Thru-Drive for power steering pump. Flange Mount, Engine Drive, Water Cooled, Threaded Discharge Type.

**Part No. 3018543X**
Cubic Feet Per Minute: 13.2  
Model: SS296 Super Single Cylinder  
Air Inlet: Left  
Air Outlet: Rear  
Unloader Port Type: Left/Direct  
Application/Notes: For L/K/N engines. Flange Mount, Engine Drive, Water Cooled.

**Part No. 3558072X**
Cubic Feet Per Minute: 13.2  
Model: QE296 Quiet Economy Single Cylinder  
Air Inlet: Left  
Air Outlet: Rear  
Spline: 11 Tooth  

---

**Part No. EL13020X**
Rotatable Head, Belt Drive, End Cap, Oil Feed Base, Oil Drain, Water Cooled  
Top/Flange Discharge Type  
Overall Height: 11.42 in.  
Overall Width: 4.79 in.  
Overall Length: 8.93 in.  
External Shaft Length: 2.14 in.  
Head Rotation: Right  
Block Rotation: Right  
Notes: High Capacity Replacement EL16020X  
Haldex Haldex Repair Kits  
RN26A EL1300 Unloader Kit  
RN26GW EL 13 00 Gasket Kit  
SN144 Installation Kit

**Part No. EL16040X**
Head Rotatable, Double Flange Mount, Gear Drive Flange Oil Feed, Side Option on Service Units, Flange or Base Oil Drain  
Top/Flange Discharge Type, Turbochargeable, Water Cooled  
Overall Height: 12.57 in.  
Overall Width: 5.68 in.  
Overall Length: 9.09 in.  
External Shaft Length .54 in.  
Head Rotation: Right  
Block Rotation: Right  
Notes: High Capacity  
Application: Cummins In-Line Engines  
Haldex Haldex Repair Kits  
RNT26A EL1600 Unloader Kit  
RN26GX EL 1600 Gasket Kit  
SN144B Installation Kit

**Part No. EL16111X**
Flange Mount, Gear Drive, Cranshaft End, Oil Feed Flange, Oil Drain, Water Cooled  
Top/Threaded Discharge Type  
Overall Height: 12.19 in.  
Overall Width: 5.43 in.  
Overall Length: 11.58 in.  
External Shaft Length :16 in.  
Head Rotation: Left  
Block Rotation: Left  
Notes: High Capacity  
Haldex Haldex Repair Kits  
RNT26A EL1600 Unloader Kit  
RN266GZ EL 1600 Gasket Kit  
SN144J Installation Kit

**AIR CLEANER / FILTER**
Part No. KN19040 (Air Filter=Part No. PA2256)  
Provides greater atmospheric air intake capacity. May be remote mounted by using kits SN3711AC/SN3711AD and cut to length 3/4" ID hose with fittings and clamps. -Includes 100696E element. Mt. Centers=2.75", Height=4.44" Dia.=4.30"

---

**COMPRESSOR MANIFOLD KIT (INTAKE)**
For 1/2" Pipe. Mounting Centers: 2.75"  
Part No. SN3711AA

**COMPRESSOR MANIFOLD KIT (INTAKE)**
For 3/4" Hose. Mounting Centers: 2.75"  
Part No. SN3711AD
The primary duty of the air dryer is to eliminate the moisture and dirt that would cause damage to valves and other system components. The air dryer removes these pollutants, providing dry air, free of contaminants that can cause premature failure of the air and brake system.

### Bendix AD-9® Air Dryer 12 Volt

<table>
<thead>
<tr>
<th>Description</th>
<th>PART NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete New Unit</td>
<td>065225</td>
</tr>
<tr>
<td>Complete REMAN Unit</td>
<td>109685X</td>
</tr>
<tr>
<td>AD-9 DROP In</td>
<td>065647</td>
</tr>
</tbody>
</table>

#### END COVER INFORMATION

<table>
<thead>
<tr>
<th>New Unit: (Special Order)</th>
<th>065231</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply Port:</td>
<td>1/2&quot; P. T.</td>
</tr>
<tr>
<td>Delivery Port:</td>
<td>1/2&quot; P. T.</td>
</tr>
<tr>
<td>Control Port:</td>
<td>1/4&quot; P. T.</td>
</tr>
<tr>
<td>Check Valve Ass’y - 1/2&quot;</td>
<td>107800N</td>
</tr>
<tr>
<td>Purge Valve &amp; Heater Ass’y (REMAN)</td>
<td>5004341X</td>
</tr>
<tr>
<td>Reman Desiccant Cartridge</td>
<td>107794X</td>
</tr>
<tr>
<td>Purge Valve Ass’y - Maint. Kit</td>
<td>5005037</td>
</tr>
<tr>
<td>Bracket Kit</td>
<td>107695</td>
</tr>
</tbody>
</table>

### Bendix AD-IS® Air Dryer

#### Spin on Cartridge, DRM™ model

<table>
<thead>
<tr>
<th>Description</th>
<th>PART NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Unit</td>
<td>800383</td>
</tr>
</tbody>
</table>

### Bendix AD-IS® Air Dryer

#### Spin on Cartridge

| New Unit                     | 801266   |
| REMAN Unit                   | 5010696X |

#### KITS AND SERVICE PARTS

- Desiccant Cartridge Kit: 5008414
- Governor and Check Valve Kit: 5004049
- Heater and Thermostat kit (12v): 109495
- Purge Valve Maintenance kit: 5003547
- Purge Valve replacement kit: K022105
- Wiring Harness and Splice kit: 109871N

(Can not sub other governors)
# Bendix AD-9™ Air Dryer

**Note:** Old and new purge valve assemblies are interchangeable in all AD-9 air dryers.

---

**AD-9 Air Dryer Parts Kit List**

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
<th>New Purge Valve w/ heater</th>
<th>Reman Purge Valve w/ heater</th>
<th>New Purge DLU Valve w/ heater</th>
<th>Desiccant Cartridge Kit</th>
<th>Heater-Valve &amp; Thermostat Kit</th>
<th>Check Valve Kit</th>
<th>Mounting Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Purge Valve Shoulder Bolt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Exhast Diaphragm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Purge Valve</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1/4&quot; Tapping Screw</td>
<td>X-3</td>
<td>X-3</td>
<td>X-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Purge Washer</td>
<td>X-3</td>
<td>X-3</td>
<td>X-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Purge Valve Housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>48 Self Tapping Screw</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Sealing Ring</td>
<td>X-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Heater &amp; Thermostat Screw</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Wire Harness Connector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>108669N</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Spring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Purge Piston</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>O-Ring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>D-Ring</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>O-Ring</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>O-Ring</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Check Valve Assy.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Check Valve O-Ring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>3/8&quot; x 2 1/8&quot; End Cover Cap Screw</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>3/8&quot; Special Washer</td>
<td>X-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>3/8&quot; x 2 3/8&quot; Bracket Cap Screw</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X-2</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Lower Mounting Bracket</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Safety Valve</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>End Cover</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Lock Nut</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X-2</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>O-Ring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X-2</td>
</tr>
<tr>
<td>28</td>
<td>O-Ring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Desiccant Cartridge Assy.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Upper Mounting Bolt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>5/16&quot; x 4 1/2&quot; Upper Bolt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Upper Bolt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>5/16&quot; Nut</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>5/16&quot; Lock Washer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Exhaust Cover (See Note 2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>112390</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Complete Purge Valve Assy.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**General:** All kits and replacement parts and assemblies can be used in any version of the AD-9 unless otherwise noted.

**Note 1:** These heater and thermostat kits are for use in the new replacement purge valve assemblies and can not be installed in the old configuration purge valve assembly.

**Note 2:** The service AD-9 Air Dryers listed are not supplied with an extended exhaust cover, however the extended exhaust cover Pc No. 112390 can be installed on any new purge valve assemblies to allow the connection of a hose to direct expelled contaminants, away from the vehicle. This exhaust cover is available as a separate Item.
BENDIX AIR DRYERS

BENDIX REPAIR KITS for AD-2 AIR DRYER

- Thermostat Kit (102657N)
  Includes Thermostat, gasket, and "O" ring.

- Purge Valve Replacement Kit (287053N)
  Includes purge valve, diaphragm, boot, and "O" rings.

- Desiccant cartridge (101900X)
  End cover assy. -12v.
  End cover assy. -24v.

AD-2 - Desiccant type Reman. 12 volt, 1/2" port.
Part No. 286934RX

BENDIX REPAIR KITS for AD-4 AIR DRYER

- Desiccant Cartridge Kit (104358X)
  Part No. 286934RX

- Purge Valve Replacement Kit (103818)
  Purge valve and exhaust diaphragm.

- End Cover Kit (103980N)
  "O" ring and piston spring.

AD-4 - Desiccant type 12 volt, Reman.
60 watt heater
1/2"x1/2"x1/4" ports.
Part No. 065041X

AD-SP Air Dryer System Purge

<table>
<thead>
<tr>
<th>Service Part No.</th>
<th>Reman. Part No.</th>
<th>Heater &amp; Thermostat Volts-Watts (See Note 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>800887 109991X</td>
<td>12V - 980W</td>
<td></td>
</tr>
<tr>
<td>065594 109992X</td>
<td>24V - 90W</td>
<td></td>
</tr>
</tbody>
</table>

Note: 12 & 24 volt AD-SP air dryers are identified by connector color: White = 12V, Gray = 24V.

AD-SP Air Dryer Kits

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>5008414</td>
<td>Cartridge Kit</td>
</tr>
<tr>
<td>5005624</td>
<td>Del Check Valve Kit</td>
</tr>
<tr>
<td>109995</td>
<td>Purge Valve Kit</td>
</tr>
</tbody>
</table>

AD-IP Air Dryer Integral Purge

<table>
<thead>
<tr>
<th>Service Part No.</th>
<th>Reman. Part No.</th>
<th>Heater &amp; Thermostat Volts-Watts (See Note 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>065612 109477X</td>
<td>12V - 90W</td>
<td></td>
</tr>
<tr>
<td>065613 109478X</td>
<td>24V - 90W</td>
<td></td>
</tr>
</tbody>
</table>

Note: All replacement air dryers include 109871 (wire harness and splice kit) and 5001247 (mounting bracket kit). Note - 12 & 24 volt air dryers are identified by connector color: White = 12V, Gray = 24V.
HALDEX AIR DRYERS & REPLACEMENT PARTS

• **DRYest™ System Purge Dryer**
  Part No. DA35100 new outright
  Uses MTC dessicant cartridge for superior drying (Part No. 47178964), compact size, built in heater.

• **PURest™ Air Dryer**
  Part No. DA34100 Outright
  • Multi-Treatment Cartridge employs 5 stages of cleaning to ensure a dry air system.
  (Part No. DQ6050)
  • Universal Mounting bracket makes change overs easy.
  • Built in heater prevents freezing and damage to the dryer.

• **Pure Air Plus™ “Like-Nu”**
  Part No. DA33100X Exchange.
  With spin on dessicant cartridge. Coalescing filter for exceptional oil and contaminant removal. 12V. DA33110X = 24V.
  Desiccant Kit; Part No. DQ6026
  Includes desiccant cartridge & coalescing filter.

• **Part No. M109689X** Exchange.
  Reman air dryer from Haldex with soft seat.

MERITOR AIR DRYERS & REPLACEMENT PARTS

Part No. R955205 (S4324130010)
12V/100 Watt heater, with integral turbo cut-off valve, and mounting bracket.
Integral regeneration valve eliminates need for purge tank.

Part No. R950011
Air Dryer Cartridge System Saver Series

Part No. R950014
Purge Valve Kit B
Includes, O-Ring, Washer, Piston O-Ring, Piston Seat, Piston, Shims, Compression Spring, O-Ring, Valve head, and Retainer Ring.

Part No. R950015
Heater Service Kit
Includes, 2 mounting screws, wiring connector, O-ring, Wire, heater, thermostat, plastic retainer & retainer screw.

Part No. R955207
Holset Drop-In series.

SKF AIR DRYERS & REPLACEMENT PARTS

Part No. CR620502
12V/75 Watt heater.
This model includes an internal valve system that provides full turbo boost protection and an internal feedback feature required for the Cummins/Holset QE and E-Type compressors.

Desiccant Cartridge Kit
For Turbo-2000 & HD-2000 Air Dryers
Part No. CRT224

REPLACEMENT KITS:
Part No. CR223 - Regeneration Valve Kit:
Includes spindle, spring and o-ring
Part No. CR228
Turbo Valve Kit
Part No. CR235
Purge Valve Kit: Purge Valve, O-rings, screen.
Part No. CR223 - Check Valve Kit
FLEETCRAFT AIR DRYER AND PARTS

Fleetcraft Air Dryer
With integral turbo cut-off valve, no need for purge tank. Includes mounting bracket.
Part No. FC955205

Air Dryer Cartridge
Part No. FC950011

Fleetcraft Desiccant Cartridge Kit
For Turbo-2000 & HD-2000 Air Dryer
Part No. FCT224

ISOLATION VALVE - ALCOHOL EVAPORATOR - GOVERNORS

ISOLATION VALVE
(Turbo Cut-Off Valve)
Used with air dryers not equipped with this feature. Allows use of air dryer on turbo charged engines without affecting engine performance. Installs directly (1/2"-14 NPTF) to air line inlet port of air dryer.
Part No. KN23500

Port A: To air dryer inlet port
Port B: To pipe plug
Port C: To compressor discharge
Port D: To governor unloader
Height: 3.18”

ALCOHOL EVAPORATOR
An automatic vaporizing device for keeping air lines and air reservoir free of ice. Bracket Mount.
• Easy to install
• Pressure protected
• Holds 40 oz. of methyl alcohol.
• 1/2” NPTF Ports
Part No. A72420

FLEETCRAFT GOVERNOR
Features ball check design with filtered ports. Can be mounted at a remote location or directly to compressor. Preset to open at 120 PSI, close at 100 PSI. Can be Adjusted. Includes 4 pipe plugs, mounting gasket and instructions. New, outright.
Part No. FC18530

Bendix D-2 Governor
Remanufactured. No Core. For mounting to the compressor or mounted remotely. Pressure range 100 - 120 PSI. 5” overall height. 1/8” NPT ports.
Sold outright.
Part No. OR275491X
Part No. OR284358X (105-125 PSI, waterproof cover)
Part No. 275491N (NEW)

Haldex Piston-Type Governor
Operates in conjunction with the compressor unloading mechanism. Automatically controls the air pressure in the air supply system between the desired predetermined maximum and minimum pressures. Direct compressor or remote mount. 1/8-27 NPT ports.
Part No. KN18530 (NEW)

PRESSURE RELIEF (SAFETY) VALVES

PRESSURE RELIEF VALVE
Brass body and stainless steel spring. Factory set at 150 PSI. 1/4”NPTF
Part No. 1031200

ST-3 SAFETY VALVE
75PSI
Pressure setting, 1/4” port.
Part No. 285850

SAFETY VALVE Kit ST-4
The ST-4 Safety Valve is installed in the extra compressor discharge port, if available, or the discharge line to prevent compressor damage in the event of discharge line blockage. Because of this, a standard safety valve may not be used. 250 psi.
Part No. 131081
1/2-14 NPT
Part No. 801116
7/8-14. UNF-2A

SAFETY VALVE
Protects against excessive pressure in air system. Installs in the supply reservoir. Factory set at 150 PSI. Can be adjusted. Automatically closes after excess pressure is released to atmosphere. 1/4” PT.

(A) Part No. 205105N
(B) Part No. 284142N
(B) Part No. 285849N (175 psi)
PRESSURE PROTECTION VALVES

PRESSURE PROTECTION VALVE
Used to protect air brake system from accessory failure. Nonadjustable. 1/4" NPTF inlet port, 1/4" NPTF outlet port.

<table>
<thead>
<tr>
<th>Operating PSI</th>
<th>Part No.</th>
<th>Open</th>
<th>Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>KN31000</td>
<td></td>
<td>65</td>
<td>45</td>
</tr>
<tr>
<td>KN31010</td>
<td></td>
<td>95</td>
<td>75</td>
</tr>
</tbody>
</table>

PRESSURE PROTECTION VALVE with one way check valve
Used to protect air brake system from accessory failure. Nonadjustable. 3/8" NPTF inlet port, 1/2" NPTF outlet port.

<table>
<thead>
<tr>
<th>Operating PSI</th>
<th>Part No.</th>
<th>Opening Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>KN31170</td>
<td></td>
<td>50 PSI</td>
</tr>
<tr>
<td>KN31171</td>
<td></td>
<td>75 PSI</td>
</tr>
</tbody>
</table>

Tractor Protection Valve
TP-3DC
Part No. 065706

PRESSURE PROTECTION VALVE
Part Number 90554107
Pressure Protection Valve
Protects the air brake system in the event of a leak or failure within the air suspension system. A replaceable filter minimizes contaminants and other debris from entering other air system accessories.

All Ports: 1/4" NPT
Closing Pressure: 70 PSIG
Opening Pressure: 75 PSIG minimum

PRESSURE PROTECTION VALVE
TYPE PR-4
Closes at a preset pressure. Factory set at 85 PSI. Many different applications. Can be used to protect one reservoir system from another if a reservoir system failure occurs. Nonadjustable. 1/4" PT supply and delivery ports.
Part No. 286500N

PRESSURE PROTECTION VALVE
TYPE PR-2
Closes at a preset pressure. Factory set at 65 PSI. Can be used to protect one reservoir system from another if a reservoir system failure occurs. 1/4" PT supply and delivery ports.
Part No. 277147N
Part No. 277227N (75 psi)

PRESSURE CONTROL VALVE
Pressure setting from 0 psi to reservoir pressure. 1/4" NPTF inlet and outlet. 1/4" NPTF exhaust
Part No. 5400

PRESSURE PROTECTION VALVE
3/8" NPTF Inlet, 3/8" NPTF Outlet
2" height
Operating PSI

<table>
<thead>
<tr>
<th>Operating PSI</th>
<th>Part No.</th>
<th>Open</th>
<th>Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>KN31170</td>
<td>110257</td>
<td>75</td>
<td>70</td>
</tr>
<tr>
<td>KN31171</td>
<td>110258</td>
<td>95</td>
<td>90</td>
</tr>
</tbody>
</table>

TP-5™ TRACTOR PROTECTION VALVE
Part No. 288605N
OR288605X

PRESSURE PROTECTION VALVE
3/8" NPTF Inlet and Outlet
2-9/16" tall Normal closing

<table>
<thead>
<tr>
<th>Operating PSI</th>
<th>Part No.</th>
<th>Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>140270</td>
<td></td>
<td>3/8&quot; - 60 psi</td>
</tr>
<tr>
<td>140280</td>
<td></td>
<td>3/8&quot; - 70 psi</td>
</tr>
<tr>
<td>140380</td>
<td></td>
<td>1/4&quot; - 70 psi</td>
</tr>
</tbody>
</table>
### CHECK VALVES

#### SINGLE CHECK VALVE
**SC-2 Steel Seat**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>800372</td>
<td>1/4&quot; PT</td>
<td>1/2&quot; PT</td>
<td>2.92&quot;</td>
</tr>
<tr>
<td>800373</td>
<td>1/8&quot; PT</td>
<td>1/8&quot; PT</td>
<td>2 7/16</td>
</tr>
</tbody>
</table>

The 800372 single check valve is also available in Fleetcraft: Part No. FC800372

#### SINGLE CHECK VALVE
**SC-1 Steel Seat**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>800375</td>
<td>1/4&quot; PT</td>
<td>1/4&quot; PT</td>
<td>2 7/16</td>
</tr>
</tbody>
</table>

#### DOUBLE CHECK VALVE
**DC-4**

*SC-2 Steel Seat*

<table>
<thead>
<tr>
<th>Part No. A B C D E</th>
</tr>
</thead>
<tbody>
<tr>
<td>278595N 1/4&quot; PT 1/2&quot; PT 1/4&quot; 2.75&quot; 1/4&quot;</td>
</tr>
<tr>
<td>278597N 1/4&quot; PT 3/8&quot; PT 1/4&quot; 2.75&quot; 1/4&quot;</td>
</tr>
<tr>
<td>278598N 3/8&quot; PT 3/8&quot; PT 1/4&quot; 2.75&quot; 3/8&quot;</td>
</tr>
</tbody>
</table>

**DC-4 DOUBLE CHECK VALVE with STOP LIGHT SWITCH**
Part No. 286452N
Ports 3/8"

#### SINGLE CHECK VALVE
**SC-1 Rubber Seat**

<table>
<thead>
<tr>
<th>Part No. A B C</th>
</tr>
</thead>
<tbody>
<tr>
<td>10200-3/8 3/8&quot; PT 3/8&quot; PT 213/16&quot;</td>
</tr>
<tr>
<td>10200-1/2 1/2&quot; PT 1/2&quot; PT 213/16&quot;</td>
</tr>
</tbody>
</table>

**TWO WAY CHECK VALVE**
(Diaphragm Type)
Mount in any position
Use in place of ball or shuttle types
Used when two inputs must become one input.

- Inlet B: 3/8" NPTF
- Inlet D: 3/8" NPTF
- Outlet C: 3/8"

Part No. KN25060

#### TR-3™ INVERSION VALVES

**NOTE:** With common control & supply pressure inlet opens at “A” P.S.I. descending pressure and exhaust opens at “B” P.S.I. ascending pressure.

<table>
<thead>
<tr>
<th>Part No. A B C</th>
</tr>
</thead>
<tbody>
<tr>
<td>280758N 1/8&quot; P.T. control</td>
</tr>
<tr>
<td>281459N 3/8&quot; P.T. delivery</td>
</tr>
<tr>
<td>101450N 2-7/8&quot; tall</td>
</tr>
</tbody>
</table>

Part No. 280758N A= 45 psi, B= 60 psi
Part No. 281459N A= 25 psi, B= 40 psi
Part No. 101450N A= 25 psi, B= 40 psi

101450N is a special-duty bus application.
QUICK RELEASE VALVES

Aluminum Die Cast Body
Supply/Delivery
Differential 0 PSI

TRAMEC

QUICK RELEASE VALVES -
Used wherever a quick release function is required in the air brake system. Aids in meeting FMVSS 121 timing requirements.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Supp Del</th>
<th>Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1032005</td>
<td>3/8&quot; 3/8&quot;</td>
<td>1/2&quot; 3/8&quot;</td>
</tr>
<tr>
<td>1032011</td>
<td>1/2&quot; 3/8&quot;</td>
<td></td>
</tr>
</tbody>
</table>

Supply/Delivery Differential 0 PSI

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Cracking Pressure</th>
<th>Port Size (NPTF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000D1/2</td>
<td>0-1PSI</td>
<td>1/2&quot; 3/8&quot; 3/8&quot;</td>
</tr>
<tr>
<td>2000D3/8</td>
<td>0-1PSI</td>
<td>3/8&quot; 1/4&quot; 1/4&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inlet Port</th>
<th>Delivery Ports</th>
<th>Differential PSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>KN32050</td>
<td>1/2&quot; 3/8&quot;</td>
<td>6</td>
</tr>
<tr>
<td>KN32060</td>
<td>3/8&quot; 3/8&quot;</td>
<td>6</td>
</tr>
</tbody>
</table>

QRN - Lightweight, nonmetallic. Mounting holes 11/32" diameter on 1 1/2" centers.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Delivery</th>
<th>Supply</th>
<th>Supp/Delivery Differential Del. (PSI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>802745</td>
<td>3/8&quot; PT</td>
<td>1/2&quot; PT</td>
<td>1 Max.</td>
</tr>
<tr>
<td>802743</td>
<td>3/8&quot; PT</td>
<td>3/8&quot; PT</td>
<td>1 Max.</td>
</tr>
<tr>
<td>802741</td>
<td>3/8&quot; PT</td>
<td>3/8&quot; PT</td>
<td>5-8</td>
</tr>
</tbody>
</table>

QR-1C - With Double Check Valve
A dual function valve.
Serves the spring brake chambers as a QR valve; the double check valve prevents a service and emergency brake application from occurring at the same time.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Supply</th>
<th>Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>289182N</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>289714N</td>
<td>1/4&quot;</td>
<td>3/8&quot;</td>
</tr>
</tbody>
</table>

QR-1
Part No. 229859N
Supply Ports: 3/8"
Delivery Ports: 3/8"
Mounting holes on 1 1/2" centers.
Crack Pressure: 0 psi.

Also available as Outright Reman. (OR229859X, OR229860X)-No Core.

LQ-2™ - Limiting and Quick Release Valve
Part No. 229505N
A dual function valve.
Mounting holes on 1 1/2" centers.
Crack Pressure: 0 psi.
Has CPT exhaust port.
Supply Port: 3/8"
Delivery Ports (2): 3/8"
Control Port: 1/4

QR-1
Part No. 229860N
Supply Ports: 1/2"
Delivery Ports: 3/8"
Mounting holes on 1 1/2" centers.
Crack Pressure: 0 psi.

QR-1
Part No. 288251N
Supply Ports: 3/8"
Delivery Ports: 3/8"
Mounting holes on 1 1/2" centers.
Crack Pressure: 0 psi.
Has 3/8" exhaust port.

QR-L
Part No. 800333
Supply Ports: 1/2"
Delivery Ports: 1/2"
Direct mount, in-line quick release valve.
**CONTROL VALVES**

**MV-3 CONTROL MODULE**
An integrated control assembly for control panel mounting in tractor. It provides all the federal legal requirements for trailer air supply and parking brake control and permits the tractor parking brakes to be applied while air is supplied to the trailer. Six 1/4" ports.
Nonmetallic. Designed to supersede the MV-2 valve. Different mounting separates styles.

- **Part No. 800257** - Fig. 1, .27 Push in fittings.
- **Part No. 800516** - Fig. 1, .27
- **Part No. 800517** - Fig. 2
- **Part No. 800518** - Fig. 1, 1/8" Aux. Port.
- **Part No. 800519** - Fig. 1, 1/8" Exh. Port.
- **Part No. 800521** - Fig. 3, 1/4-20.
- **Part No. 800523** - Fig. 1, #10-24
- **Part No. 800573** - Fig. 1, 1/4-20.
- **Part No. 800622** - Push in fittings.

**MV-3 MODULE MAINTENANCE KITS**

<table>
<thead>
<tr>
<th>MAINTENANCE KIT PART NO. 107216 CONSISTING OF:</th>
<th>SHUTTLE KIT PART NO. 107217</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KEY</strong></td>
<td><strong>KEY</strong></td>
</tr>
<tr>
<td>No.</td>
<td>QTY</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

**MV-2 CONTROL MODULE**
An integrated control assembly for control panel mounting in tractor. It provides all the federal legal requirements for trailer air supply and parking brake control and permits the tractor parking brakes to be applied while air is supplied to the trailer. Six 1/4" ports.
Nonmetallic. **Part No. 101437N**

**PP-DC Control Valve**
- **Part No. 065661**
  - Mounting Hole 1/4"-20 THD.
  - Port Type Push to connect w/ 3/8" O.D. tubing

**PP-DC Control Valve Maintenance Kit**
**Part No. 5006939**

**MANIFOLD DASH VALVE**
Engineering Grade Composite (EGC) - One Piece Housing. Ports have molded identification. Completely serviceable. 2 Spools. All ports 1/4" NPTF. Red and Yellow knobs included.
**Part No. KN20615**
**Part No. KN20607 (3/8" ports)**

**MV-2 SPOOL INSERTS**
The MV-2 control module is serviced by replacement of the complete spool inserts.

**Spool Assembly**
- **Part No. 101569**
- **Part No. 101570**

**CHECK VALVE**
Surface Material
- Plastic - “Old Style”
- Aluminum “New Style”
**PUSH PULL VALVES**

**PUSH PULL CONTROL VALVE**
PP-5 (w/pilot air release)
A pressure sensitive on-off control commonly used with vehicle torque converter system, engine speed control, and some parking brake systems. Automatic release pressure 40 PSI. 1/4" supply, 1/4" delivery and exhaust, all NPTF.

**Part No.** 281946N

**PUSH PULL CONTROL VALVE PP-1**
A pressure sensitive on-off control usually used to control parking and emergency brakes. 1/8" supply, 1/4" delivery and exhaust, all NPTF.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Automatic Release Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>276566N</td>
<td>20 PSI</td>
</tr>
<tr>
<td>276567N</td>
<td>40 PSI</td>
</tr>
<tr>
<td>287417X</td>
<td>30 PSI</td>
</tr>
<tr>
<td>239357N</td>
<td>7/8 hex nut</td>
</tr>
</tbody>
</table>

**HAND CONTROL VALVE**
Pull-push with Automatic Shut-Off. Shut-off 30±5 PSI. 1/4" outlet and inlet, 1/8" exh.
Includes knob/nameplate.
**Part No.** 99600B

**PUSH-PULL STYLE VALVE**
Controls parking /emergency brakes. Pop pressure: 35±10 PSI. 1/8" mounting hole required. Knob included. Made of Engineering Grade Composite. All ports 1/8" NPTF.

**Part No.** KN20021

**PUSH-PULL STYLE VALVE**

**Part No.** KN20025

**PUSH-PULL STYLE VALVE**
Panel mount. Made of EGC plastic. All ports 1/4" NPTF.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Pop Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>KN20031</td>
<td>25-35 PSI</td>
</tr>
<tr>
<td>KN20033</td>
<td>7-17 PSI</td>
</tr>
</tbody>
</table>

**KNOWS FOR PUSH-PULL VALVES**

- **Pin type.** RCCC red. Pin included. **Part No.** KN20900
- **Pin type.** RCCC yellow. Pin included. **Part No.** KN20901
- **Pin type.** RCCC blue. Pin included. **Part No.** KN20902
- **Pin type.** RCCC yellow. Pin included. **Part No.** KN20903
- **Red Pin type.** **Part No.** 298817N
- **Yellow Pin type.** **Part No.** 298817N

All knobs made of Engineering Grade Composite. Threaded knobs have 1/4-20 threads.
LEVER STYLE VALVES / TRAILER BRAKE CONTROL VALVES

DOUBLE FLIPPER STYLE VALVES
Panel mount, directional air control valve. May be used for control of push-pull air cylinders or various other air operated devices.
Supply ports 1/4" NPTF
Delivery Ports (2) 1/8" NPTF

FLIPPER STYLE VALVE
Panel mount.
On-off nonautomatic two position valve.
Made of Engineering Grade Composite.
All Ports 1/8".
Holding Type: Part No. KN20001

TW-3 LEVER TYPE CONTROL VALVE
Used in parking and emergency brake systems.
1/4" supply and delivery ports.
Part No. OR283040X

TW-1 CONTROL VALVE
Two position steel valve with chrome handle.
All ports 1/8" NPTF.
Dial plate not included.
Part No. 229635N
(also as Outright Reman-no core)

TRAILER BRAKE CONTROL VALVES

TRAILER BRAKE CONTROL VALVE
In column mount.
Made of Engineering Grade Composite.
Handle applies 50° maximum. Handle and knob not supplied. All 1/8" ports.
Holding Type: Part No. KN20541

TW-4 CONTROL VALVE
1/8" Ports
Part No. 276635N

Part No. 110376
Used with part no. 110257.
Used on trailer turnable axles, converter dollies and trailers exempt from spring brakes.
3/8" NPT ports.

TRAILER EMERGENCY VALVE / SV-1 SYNCHRONIZING VALVES

TEV Valve
Provides Spring Brake Priority
Retains the ability of the driver to repeatedly apply and release the Parking/Emergency Brakes even with a damaged tank.
Part No. 51301

SV-1 SYNCHRONIZING VALVE
A pneumatic control valve. Controls air from remote air supply other than control air supply. All threads NPTF.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>A PSI</th>
<th>B PSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>278825N</td>
<td>42</td>
<td>28</td>
</tr>
<tr>
<td>282472N</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>283700N</td>
<td>62</td>
<td>50</td>
</tr>
</tbody>
</table>
SR-5 TRAILER SPRING BRAKE VALVE
Die-cast aluminum, reservoir mounted valve that controls up to four spring brake actuators during parking or emergency applications. All threads NPTF.
Anti-Compounding:
Part No. OR109615X
Part No. 065437
Part No. OR109615X

MULTIFUNCTION RT-4 SPRING BRAKE VALVES
Meets all FMVSS-121 trailer requirements for spring brake control and other regulations.

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>TRAILER SUPPLY</th>
<th>TRAILER RESERVOIR</th>
<th>RESERVOIR</th>
<th>PPV CLOSING</th>
</tr>
</thead>
<tbody>
<tr>
<td>KN26010</td>
<td>3/8&quot; X</td>
<td>3/8&quot;</td>
<td>1 1/2&quot;</td>
<td>3/8&quot; (4) 1/2&quot; NPTF</td>
</tr>
<tr>
<td>KN26020</td>
<td>X</td>
<td>3/8&quot;</td>
<td>1 1/2&quot;</td>
<td>3/8&quot; (4) 1/2&quot; NPTF</td>
</tr>
</tbody>
</table>

SPRING BRAKE VALVE CONTROL VALVES
Protected Reservoir System
Four delivery ports. Cover ports in line of reservoirs.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Port (A)</th>
<th>Port (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>110171</td>
<td>3/8&quot; NPTF</td>
<td>3/8&quot; NPTF</td>
</tr>
<tr>
<td>110191</td>
<td>3/8&quot; NPTF</td>
<td>3/8&quot; NPTF</td>
</tr>
</tbody>
</table>

SPRING BRAKE EXHAUST VALVE
Part No. 3800
Tee mounted pressure and quick release valve. on spring brake applications. Prevents unwanted application of spring brakes due to drop in supply pressure.
1/4" NPT ports. 1 1/4" NPT pressure. Form 7800 Tee Mounted Same application as 3800.

SR-1™ SPRING BRAKE VALVE
Part No. OR286364X
1/4" PT ports.
55 psi reservoir trip pressure.
Part No. 288063N (30 psi)

SR-2™ TRAILER SPRING BRAKE VALVE
Part No. 103061N
1/4" PT Service/Supply ports.
3/4" male PT reservoir. 3/8" delivery (4)

SR-4™ TRAILER SPRING BRAKE VALVE
Part No. 101622X
1/4" PT Supply/Service ports.
1/2" female PT reservoir. 3/8" delivery (4)

SPRING BRAKE CONTROL VALVE
Service Reservoir Priority System
Complies with all changes to FMVSS121. Designed for use with a single reservoir on a typical single or tandem axle trailer application.
Part No. 110700

Note: All of these can be used with (2) 1400 cu. in. reservoirs on tandem axle trailers.
Plug kit for 110500 and 110700
Part No. 110515
Repair kit for 110500
Part No. 110501
Part No. 110800 Has relay feature, fills from the tank
RELAY VALVES - BENDIX

R-12™ RELAY VALVE
Piston operated, with 4 delivery ports for service or parking brakes.
Crack pressure: 4 PSI unless noted.

(A) Part No. 065104
  3/8” Vertical Delivery Ports
  1/2” Supply Ports
  1/4” Service Port

Part No. 102626N
  1/2” Vertical Delivery Ports
  1/2” Supply Ports
  1/4” Service Port

(B) Part No. 103009N
  1/2” Horizontal Delivery Ports
  1/2” Supply Ports
  1/4” Service Port

Part No. 065125
  1/2” Horizontal Delivery Ports
  1/2” Supply Ports
  1/4” Service Port

Crack pressure: 5.5 PSI

Part No. 065206
R-12™ Relay Valve
Vert. (2) & Horizontal Delivery Ports
  3/8” Delivery Ports
  1/2” Supply Ports
  1/4” Service Port

R-14 RELAY VALVE
Anti-compounding feature permits control of spring brakes as well as service brakes.
Has 4 delivery ports.
Crack Pressure: 4 PSI

Part No. 103010N
Part No. 104574
(with 1/2” supply, & bracket)

(B) Part No. 103009N
1/2” Horizontal Delivery Ports
3/4” Supply Ports
1/4” Service Port
Part No. 065125
1/2” Horizontal Delivery Ports
1/2” Supply Ports
1/4” Service Port

R-12DC™ RELAY VALVE
with double check valve
4 delivery ports NPT.
2 Horizontal and 2 Delivery.
Crack pressure: 4 PSI.

Part No. 800481
  3/8” Vertical Delivery Ports (2)
  1/2” Supply Ports (2)
  1/4” Horizontal Delivery Ports (2)

RE-6™ RELAY EMERGENCY VALVE
4 delivery ports (2) A.P.T., (2) P.T.
Part No. 281865N

AR-1™ Antilock Relay Valve
Part No. 800297
The AR-1™ antilock relay valve is a specialized brake relay valve. It is essentially an R-14™ relay valve with a special cover that permits direct attachment of an antilock controller. Like the R-14™, the AR-1™ incorporates a quick release valve adjacent to the service port which provides for rapid exhaust of control air pressure.

BP-R1™ Bobtail Brake Proportioning Relay Valve
• Maintenance Kit 106392
• Universal Mounting Bracket
296010 furnished with valve
• Outright Reman - no core.

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>SERVICE</th>
<th>SUPPLY</th>
<th>DELIVERY</th>
<th>AUX RES.</th>
<th>CONTROL</th>
<th>CRACK PRESSURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR65145X</td>
<td>1/4&quot;</td>
<td>1/2&quot;</td>
<td>3/8&quot;</td>
<td>(1)</td>
<td>1/8&quot;</td>
<td>4</td>
</tr>
<tr>
<td>OR65146X</td>
<td>1/4&quot;</td>
<td>1/2&quot;</td>
<td>3/8&quot;</td>
<td>(1)</td>
<td>1/8&quot;</td>
<td>5.5</td>
</tr>
</tbody>
</table>
Bendix Coreless® Valves - Outright Reman Program.
The Coreless® valves program gives you virtually 100% coverage of the Bendix remanufactured valve line. Forget about carrying remanufactured valves with core obligation as part of your regular inventory. With expanded product coverage, it has never been easier to make the jump to Coreless. (Available in other valves as well besides Relay Valves!)

R-14 RELAY VALVE
Anti-compounding feature permits control of spring brakes as well as service brakes. Has 4 delivery ports.
Crack Pressure: 4 PSI
Horizontal Delivery Ports
Part No. OR103010X
Vertical Delivery Ports
Supply is 1/2"
Part No. OR103028X

R-12™ RELAY VALVE
Piston operated, with 4 delivery ports for service or parking brakes.
Crack pressure: 4 PSI unless noted.
(A) Part No. OR102626X
  1/2” Vertical Delivery Ports
  1/2” Supply Ports
  1/4” Service Port
(B) Part No. OR103009X
  1/2” Horizontal Delivery Ports
  3/4” Supply Ports
  1/4” Service Port

R-6™ RELAY VALVE
4 delivery ports 3/8” Supply ports 3/8”
Part No. OR279180X

R-6™ RELAY VALVE
270 degrees port service angle
4 delivery ports 3/8”
Supply ports 3/8”
4 Hole mounting flange
Part No. OR283940X

R-8™ RELAY VALVE
90 degrees port service angle
1/4” P.T. Service Port
1/8” P.T. Balance Port
Includes exhaust cover
Part No. OR286370X

R-8P™ RELAY VALVE
2 Supply ports 3/4”
3/8” P.T. Service Port
2 1/2” P.T. Delivery Ports (1 1/4”)
Part No. OR287114X

R-12P™ PILOT RELAY VALVE
4 delivery ports 3/8”
2 Supply ports 1/2”
Control Port 1/4”
Part No. OR109264X

RE-6™ RELAY EMERGENCY VALVE
4 delivery ports (2) A.P.T., (2) P.T.
Part No. OR281865X

RE-6™ RELAY EMERGENCY VALVE
4 delivery ports (2) A.P.T., (2) P.T.
A.P.T. delivery is 1/4" vs OR281865X
Part No. OR281860X

BP-R1™ Bobtail Brake Proportioning Relay Valve
•Maintenance Kit 106392
•Universal Mounting Bracket
296010 furnished with valve
•Outright Reman - no core.

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>SERVICE</th>
<th>SUPPLY</th>
<th>DELIVERY</th>
<th>AUX RES.</th>
<th>CONTROL</th>
<th>CRACK PRESSURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR65145X</td>
<td>1/4”</td>
<td>1/2”</td>
<td>3/8”</td>
<td>(1)</td>
<td>1/8”</td>
<td>4</td>
</tr>
<tr>
<td>OR65146X</td>
<td>1/4”</td>
<td>1/2”</td>
<td>3/8”</td>
<td>(1)</td>
<td>1/8”</td>
<td>5.5</td>
</tr>
</tbody>
</table>

The Coreless® valves program gives you virtually 100% coverage of the Bendix remanufactured valve line. Forget about carrying remanufactured valves with core obligation as part of your regular inventory. With expanded product coverage, it has never been easier to make the jump to Coreless. (Available in other valves as well besides Relay Valves!)
**RELAY VALVES - SEALCO**

### 2 PORT SERVICE RELAY
Used primarily for single axle trailer service brakes, or axle by axle trailer brake designs. 
Nipple mounted.
Crack Pressure 4 PSI.
Control Port: ⅜” NPTF
Reservoir Port: ⅜” NPTF
Delivery Ports: ⅜” NPTF
Part No. 110410

### 2 PORT SERVICE RELAY VALVE
**LOV-2**
Control Port: ⅜” NPTF
Reservoir Port: ⅜” NPTF
Delivery Ports (2): ⅜” NPTF
Cracking Pressure 1.5 PSI
Part No. 110360

### 2 PORT DELIVERY
Used primarily for tandem axle trailer service brakes, or axle by axle trailer brake designs. 
Nipple mounted.
Crack Pressure 4 PSI.
Control Port: ⅜” NPTF
Reservoir Port: ⅜” NPTF
Delivery Ports: ⅜” NPTF
Part No. 110197

### 4 PORT DELIVERY
Crack Pressure 4.5 PSI.
Comes with "ratio feature."
Aux. Supply Port: ⅜” NPT
Control Port: ⅜” NPT
Reservoir Port: ⅜” NPT
Delivery Ports (4): ⅜” NPT
Part No. 110197

### RELAY EMERGENCY VALVE
4 Delivery Ports
The Original "Quick Fix"
Nipple mounted.
Crack Pressure 1.5 PSI.
Control Port: ¼” NPTF
Reservoir Port: ½” NPTF
Emerg.-Supply Port: ⅜” NPTF
Delivery Ports (4): ⅜” NPTF
Part No. A1000S
Replacement Cartridge
Part No. 1000-5A

### CHARGING RELAY 4 DELIVERY PORTS EMERGENCY VALVE
Control Port: ⅜” NPTF
Emerg.-Supply Port: ⅜” NPTF
Reservoir Port: ⅜” NPTF
Delivery Ports (4): ⅜” NPTF
Cracking Pressure 4.5 PSI
Part No. 110470

### CHARGING EMERGENCY 4 PORT RELAY VALVE
Crack Pressure 4.5 PSI.
Comes with "ratio feature."
Supply Port: ⅜” NPT
Control Port: ⅜” NPT
Reservoir Port: ⅜” NPT
Delivery Ports: ⅜” NPT (4)
Cracking Pressure 4.5 PSI
Part No. 110360

### NON-CHARGING RELAY EMERGENCY VALVE
Commonly used on converter dollies, turntable axles, and air lift axles with service brake chambers.
Serv-Control Port (2): ⅜” NPTF
Emerg.-Supply Port: ⅜” NPTF
Reservoir Port: ⅜” NPTF
Supply-Out Port: ⅜” NPTF
Delivery Ports (4): ⅜” NPTF
Cracking Pressure 4.5 PSI
Part NO. 110338X

### CHARGING EMERGENCY 4 PORT RELAY VALVE
Crack Pressure 4.5 PSI.
Comes with "ratio feature."
Supply Port: ⅜” NPT
Control Port: ⅜” NPT
Reservoir Port: ⅜” NPT
Delivery Ports: ⅜” NPT (4)
Cracking Pressure 4.5 PSI
Part No. 110205

### CONTROL LINE RELAY EMERGENCY VALVE for Non-ABS Applications.
Commonly used on converter dollies, and turntable axles on pull, transfer and B-train type trailers.
Control Port: ⅜” NPT
Reservoir Port: ½” NPT
Dolly Port: ⅜” NPT
Delivery Ports (4): ⅜” NPT
Nominal Crack Pressure 0.0 PSI
Part No. 110570
includes bracket as shown.

### HEAVY DUTY MOUNTING NIPPLES
Straight nipple
⅜” NPT, 1⅞” long
Part No. 6002S

Reducing Nipple
⅜” to ⅜”, 1⅞” long
Part No. 6003

### NON-CHARGING RELAY EMERGENCY VALVE
Commonly used on converter dollies, turntable axles, and air lift axles with service brake chambers.
Serv-Control Port (2): ⅜” NPTF
Emerg.-Supply Port: ⅜” NPTF
Reservoir Port: ⅜” NPTF
Supply-Out Port: ⅜” NPTF
Delivery Ports (4): ⅜” NPTF
Cracking Pressure 4.5 PSI
Part NO. 110338X

### CONTROL LINE RELAY EMERGENCY VALVE for Non-ABS Applications.
Commonly used on converter dollies, and turntable axles on pull, transfer and B-train type trailers.
Control Port: ⅜” NPT
Reservoir Port: ½” NPT
Dolly Port: ⅜” NPT
Delivery Ports (4): ⅜” NPT
Nominal Crack Pressure 0.0 PSI
Part No. 110570
includes bracket as shown.
EMERGENCY RELAY VALVE
4 port. Suitable for pre-121 trailers, converter dollies, or exempt trailers. Crack pressure 3.0 PSI

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>SERVICE INLET</th>
<th>EMERG. INLET</th>
<th>DELIVERY</th>
<th>AUX RES.</th>
<th>RES.</th>
</tr>
</thead>
<tbody>
<tr>
<td>KN30200*</td>
<td>3/8&quot;</td>
<td>3/8&quot;</td>
<td>3/8&quot;</td>
<td>(1)</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>KN30300</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>(1)</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>KN30400</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>3/8&quot;</td>
<td>(1)</td>
<td>3/4&quot;</td>
</tr>
</tbody>
</table>

(1)=Plugged
* = non-charging

RELAY VALVES(RG2)
2 Delivery Ports. Compact size. A fast, low cracking pressure straight relay for tractor-trailer-truck applications. Crack pressures 5.6 +/- 1.0 PSI. Cover may be rotated without affecting warranty.

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>RESERVOIR</th>
<th>DELIVERY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>KN28500</td>
<td>3/8&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>KN28510</td>
<td>3/8&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>KN28520</td>
<td>1/2&quot;</td>
<td>1/2&quot;</td>
</tr>
</tbody>
</table>

RELAY VALVE
2 & 4 Horizontal Delivery Ports.
A multipurpose, low differential, high capacity, straight relay. Meets FMVSS-121 timing requirements. Cover can be rotated without affecting performance or warranty.
3/8" delivery ports.
1/2" reservoir ports
3/8" control port
2 Delivery Ports 4.6 PSI crack pressure
Part No. KN28060
4 Delivery Ports
7 PSI Crack Pressure
Part No. KN28080

Remanufactured Relay Valve - Two Port - Single Control Line
Used to apply and release service brakes on tractor or trailer.
Part No. KN28131X
Part No. KN28140X
Supply (2): 1/2"
Delivery (2): 1/2"
Control (1): 1/4"
Crack Pressure: 4.0± 1 PSI

Remanufactured Fast Air and Balancing (FAB) Relay Valve
Speedup or fast air relay.
Used on converter dollies and long wheel base towing trailers to speed the tractor control signal to the rear trailer(s) service brakes. Cover may be rotated without affecting performance or warranty.
Two mounting holes: .34 diameter on .50" centers.
Part No. KN28300X
Supply (2): 1/2"
Delivery (2): 1/2"
Control (1): 3/8"
Crack Pressure: 0 PSI

RG5 - 2 Delivery Port Relay Valve
Used on 2 tank, 3 valve trailer systems and tractor applications. Compact size.
Made of durable (EGC) Engineering Grade Composite.
All ports are molded-in identification.
Interchangeable with competitive valves.
Corrosion and rust proof.
Crack Pressure: 6.0 PSI
Part No. KN28550
Supply A: 1/2" x 3/8" nipple installed at factory
Supply B: Plugged
Delivery C: 3/8"
Delivery D: 3/8"
Control Port: 1/4"
FULL-FUNCTION (FF2 / FF3) TRAILER VALVES

FF2 FULL FUNCTION TRAILER VALVE
Replaces 2 and 3 valve multifunction trailer air brake systems by providing:
- Trailer spring brake control.
- Pressure protection with one-way check.
- Trailer service relay.
- Fully complies with FMVSS-121 trailer regulations, for spring brake control and other requirements

Single valve for tandem axle:
- 1 or 2 reservoir systems
- Protects supply to 70 PSI; no dragging spring brakes with 70 PSI or higher supply line.
- 3 second spring brake apply
- Service brake functions
- Anti-compounding

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CRACK PRESSURE</th>
<th>RESERVOIR</th>
<th>CONTROL</th>
<th>SUPPLY</th>
<th>SPRING BRAKE</th>
<th>SERVICE BRAKE</th>
</tr>
</thead>
<tbody>
<tr>
<td>KN28601</td>
<td>3 PSI</td>
<td>1/2&quot;</td>
<td>1/4&quot;</td>
<td>3/8&quot;</td>
<td>3/8&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>KN28602*</td>
<td>5 PSI</td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td>3/8&quot;</td>
<td>3/8&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>KN28603*</td>
<td>5 PSI</td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td>3/8&quot;</td>
<td>3/8&quot;</td>
<td>3/8&quot;</td>
</tr>
</tbody>
</table>

*SPECIAL ORDER

Heavy steel walled pipe nipple included with each valve, conforming to NFPA/T3.8.3 R2-1977 standard.

Single valve system - easy to install, maintain and troubleshoot. Built-in pressure protection and anti-compounding functions: FMVSS-121 compliant, eliminates broken foundation components caused by compounding of spring brake. Space age engineering grade composites: resists corrosion, lighter and more durable than aluminum. Built-in service and spring brake quick release. Heavy wall mounting nipple is treated to resist corrosion and withstand severe duty applications. Service brake priority ensures air tank pressure is sufficient to stop vehicle when spring brakes are first released. Can be used with single or twin air tanks.
### SHUT OFF VALVES / DRAIN VALVES

#### SHUT OFF VALVE
Ball type valve with 1/2" NPTF both ends. Working pressure 150 PSI.
Part No. 12116

#### DRAIN VALVES WITH CABLE
Use on wet or dry tanks. 1/4" NPTF. Brass body with stainless spring. Nylon coated stainless cable.
- **4'** Cable
  - Part No. FC12104
- **5'** Cable
  - Part No. FC12105

#### DRAIN VALVES WITH CABLE
Use on wet or dry tanks. 1/4" NPTF. Nylon coated stainless cable.
- **3'** cable Part No. 12103
- **4'** cable Part No. 12104
- **5'** cable Part No. 12105

#### EXTERNAL SEAT DRAIN COCK
- **NPTF** Part No.
  - 1/8" DC604-2
  - 1/4" DC604-4
  - 3/8" DC604-6
  - 1/2" DC604-8

#### DRAIN COCK
- **NPTF** Part No.
  - 1/8" DC601-4
  - 3/8" DC601-6
  - 1/2" DC601-8

#### DRAIN COCK
- **NPTF** Part No.
  - 1/8" DC603-2
  - 1/4" DC603-4
  - 3/8" DC603-6

#### DRAIN VALVES, AUTOMATIC
Mounted to side; or bottom of wet tank. Functions when pressure varies in air tank. Only one moving part. Cable looped on both ends. 5 Foot cable. 1/4" NPTF Threads

Non-Heated: Part No. KN24000
Heated: Part No. OR281923X

#### DV-2™ AUTOMATIC RESERVOIR DRAIN VALVES
The DV-2 automatic reservoirs drain valve is a completely automatic draining device. It is installed directly into the end or bottom drain port of the reservoir and does not require any additional control lines. It operates automatically from ascending and descending reservoir pressures.

Non-Heated: Part No. OR281923X
Heated: Part No. OR284412X

#### TRUCK VALVES

### GROUND PLUG SHUT OFF COCK
Female Pipe To Male Pipe

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Female Pipe Thread</th>
<th>Male Pipe Thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>V402P-2-2</td>
<td>1/8&quot;</td>
<td>1/8&quot;</td>
</tr>
<tr>
<td>V402P-4-4</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>V402P-6-6</td>
<td>3/8&quot;</td>
<td>3/8&quot;</td>
</tr>
</tbody>
</table>

### TRUCK VALVE Hose To Male Pipe

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Hose I.D.</th>
<th>Pipe Thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>SV404P-6-6</td>
<td>3/8&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>SV404P-10-6</td>
<td>5/8&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>SV404P-10-8</td>
<td>5/8&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>SV404P-12-6</td>
<td>3/4&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>SV404P-12-8</td>
<td>3/4&quot;</td>
<td>1/2&quot;</td>
</tr>
</tbody>
</table>

### TRUCK VALVE Flare To Male Pipe

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Hose I.D.</th>
<th>Pipe Thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>V409F-8-6</td>
<td>1/2&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>V409F-8-8</td>
<td>1/2&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>V409F-10-8</td>
<td>5/8&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>V409F-12-8</td>
<td>3/4&quot;</td>
<td>3/8&quot;</td>
</tr>
</tbody>
</table>
Valves

New outright, one year warranty.

Part No. FC28500
Relay Valve
Straight relay.
3/8" delivery,
3/8" reservoir.
Crack pressure 6 psi.

Part No. FC065104
Relay Valve
3/8" vertical delivery ports (4)
1/2" supply. 1/4" service port.
Crack pressure 4 psi.

Part No. FC102626
Relay Valve
1/2" vertical delivery ports (4)
1/2" supply. 1/4" service port.
Crack pressure 4 psi.

Part No. FC065437
Spring Brake Control Valve
Mounted on the reservoir, controls up to 4 spring brakes.
3/8" delivery (4)
1/4" service and supply.
3/8" reservoir B.

Part No. FC26020
Spring Brake Control Valve
Trailer Supply 3/8"
3/8" delivery (4)
1/2" reservoir A. 3/8" reservoir B.
Closing pressure 70 psi.

Part No. FC103081
Spring Brake Control Modulating Valve
3/8" delivery (2)
1/4" balance. 1/4" control.
Controls spring brake pressure to 0-95 psi.

Part No. FC286171
Dual Brake Valve
All ports 3/8".

Valves

New outright, one year warranty.

Part No. FC28510
Relay Valve
Straight relay.
3/8" delivery,
1/2" reservoir.
Crack pressure 6 psi.

Part No. FC103009
Relay Valve
1/2" horizontal delivery ports (4)
3/4" supply. 1/4" service port.
Crack pressure 5.5 psi.

Part No. FC103010
Relay Valve
1/2" horizontal delivery ports (2)
3/4" supply(2). 1/4" service port.
Crack pressure 4 psi.

Part No. FC103028
Relay Valve
1/2" vertical delivery ports (4)
1/2" supply. 1/4" service port.
Crack pressure 4 psi.

Part No. FC281865
Relay Emergency Valve
delivery ports (4)-2APT, 2PT
3/4" and 3/8" supply. 1/4" service

Part No. FC229635
Lever Control Valve
All ports 1/8"

Part No. FC276566
Push Pull Valve-20 psi
1/8" supply, 1/4" delivery and exhaust.

Quick Release Valves - Crack pressure 0 psi
Part No. FC229859
3/8" del, 3/8" supply.

Part No. FC298239
Push Pull Valve-40 psi
1/4" delivery 1/8" control and supply. Auto pressure release.

Part No. FC29860
3/8" del, 1/2" supply.

Part No. FC289714
Quick release double check valve 3/8" del. 1/4" supply
VELVAC AIR VALVES

Four-Way Push/Pull Valves
Part No. 320121 - Two Position Valve
Part No. 320122 - Three Position, Holding Type Valve

Four-Way Electronic Solenoid Valve
Part No. 320131
- Features newly designed orifice area increasing airflow
- Manual override switch for manual operation
- (3) 9/32" dia. valve body mounting holes, (5) 1/4"-18 FPT ports
- Exhaust cone filters included (030084 = 1/8" & 030092 = 1/4")

Four-Way Rotary Handle Valve
Part No. 320123
Includes solid one-piece knob and TWO faceplates
(Raise/Lower & Open/Close) (3) 1/4"-18 FPT ports

VELVAC AIR CYLINDERS

- Stainless steel cylinder shaft provides excellent corrosion resistance and extended cycle life.
- Lightweight, corrosion resistant, aluminum cylinder tube with die cast aluminum end caps.
- Rear Clevis cast as integral part of the cover for improved durability and mounting integrity.
- Double acting, Emralon-coated piston cup assures smooth, long lasting operation even in cold weather conditions.
- Front end cap assembly includes pressure seal, dirt seal and oil impregnated bronze bushing.
- Cylinder tube is imprinted with part number and date code for quick identification.
- ALL cylinders are factory pressure and leak tested prior to shipping.

Part No. 100122
Air Cylinder - 2-1/2" I.D. x 4" Stroke. Cylinder Type: Push / Pull; Retracted Length: 9.37"

Part No. 100123
Air Cylinder - 2-1/2" I.D. x 6" Stroke. Cylinder Type: Push / Pull; Retracted Length: 11.37"

Part No. 100124
Air Cylinder - 2-1/2" I.D. x 8" Stroke. Cylinder Type: Push / Pull; Retracted Length: 13.37"

Part No. 100131
Air Cylinder - 3-1/2" I.D. x 6" Stroke. Cylinder Type: Push / Pull; Retracted Length: 13.60"

Part No. 100136
Air Cylinder - 3-1/2" I.D. x 8" Stroke. Cylinder Type: Push / Pull; Retracted Length: 18.35"

Part No. 100137
Air Cylinder - 3-1/2" I.D. x 8" Stroke. Cylinder Type: Push / Pull; Retracted Length: 15.60"
End of Line Testing without TOOLBOX™ Software

1. Apply 12 volts DC power to the ABS.
2. The ECU/single modulator valve assembly should click two times.
3. If the indicator lamp comes on for three seconds and goes out: This indicates a correct installation. The end of line test is complete. If the ABS indicator lamp comes on and stays on, check the sensor installation:
   A. Remove the power from the ABS and raise the sensed wheels so they may be rotated.
   B. Repeat Step 1 and Step 2.
   C. Rotate each sensed wheel — one at a time — at a rate of 1/2 revolution per second. This rate equals a wheel speed of approximately 4 mph (7 kph). The ABS indicator lamp should now go out and stay out indicating a correct installation. The end of line test is complete.
4. If the ABS lamp does not go out, there is a sensor gap problem or hardware fault. Adjust the sensor and, if necessary, perform a fault code check.

Sensor Gap Adjustment

Push the sensor into its holder until it contacts the tooth wheel. At installation, there must be no gap between the sensor and the tooth wheel. Measure the AC voltage output. The value should be 0.2 volt AC when the wheel is rotated at a rate of 1/2 revolution per second. Perform any necessary repairs. Repeat the sensor installation check. If the trailer lamp still does not go out, a system fault exists. Perform a fault code check.

Fault Code Check

Use constant power activation to perform the following fault code check.
1. Apply constant power to the ECU/single modulator valve assembly for more than one, but less than five seconds.
2. Remove the power.
3. Reapply the power.
4. Check the trailer ABS indicator lamp on the side of the trailer. The fault code will be displayed three times.
5. Find the fault on the chart and perform the necessary repairs.
6. After performing the necessary repairs, repeat the end of line test to verify correct sensor installation.

Blink Code Chart (Most common codes - for more info see Meritor Wabco TP-0173 chart)

<table>
<thead>
<tr>
<th>Blink Code</th>
<th>Problem Area</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Sensor YE1 (curbside sensor)</td>
<td>Check sensor installation. Perform necessary repairs.</td>
</tr>
<tr>
<td>6</td>
<td>Sensor YE2 (roadside sensor)</td>
<td>Check sensor installation. Perform necessary repairs.</td>
</tr>
<tr>
<td>7</td>
<td>ECU/single modulator valve assembly</td>
<td>Verify correct installation. If code continues, contact Meritor WABCO for assistance.</td>
</tr>
<tr>
<td>14</td>
<td>Power Supply</td>
<td>Verify correct electrical installation. Check power supply. Perform necessary repairs.</td>
</tr>
<tr>
<td>15</td>
<td>ECU Failure</td>
<td>Verify correct installation. If code continues, contact Meritor WABCO for assistance.</td>
</tr>
<tr>
<td>16</td>
<td>SAE J1708 Failure</td>
<td>Internal failure, contact Meritor WABCO.</td>
</tr>
<tr>
<td>17</td>
<td>SAE J2497 Failure</td>
<td>Internal failure, contact Meritor WABCO.</td>
</tr>
<tr>
<td>18</td>
<td>Generic I/O Failure</td>
<td>Verify correct electrical installation. Check power supply. Perform necessary repairs.</td>
</tr>
</tbody>
</table>
2S/1M schematic (showing air)

SPRING BRAKE CONTROL VALVE
Spring Brake Priority System
Complies with all changes to FMVSS121. Designed for use with a single reservoir on a typical single or tandem axle trailer application. Part No. 110500

- Spring Brake control valve, R955322 - Wabco ECU valve, 6003 - 3/4" to 1/2" pipe nipple, 6006 - 3/4" pipe nipple, N9508-AA air tank, 1010447 - spring brake chamber, 1011451 - red emergency gladhand, 1011452 blue service gladhand.
COMPONENTS LISTING: Typical Set Up Guide:

No. 1 = 110500 - Spring Brake control valve,
No. 2 = S4005001010 - Wabco ECU valve,
No. 4 = 6003 - 3/4" to 1/2" pipe nipple,
No. 5 = 6006 - 3/4" pipe nipple,
No. 6 = N9508-AA air tank,
No. 7 = 1010447 - spring brake chamber,
No. 8 = 1011451 - red emergency gladhand,
No. 8 = 1011452 blue service gladhand.
ABS - 4S/2M MERITOR WABCO COMPONENT KITS

We have developed these kits for MANUFACTURERS ONLY - OEM ONLY. These kits are not available to aftermarket distributors. Those kits are on the following pages. THANK YOU!

SPRING BRAKE CONTROL VALVE
Spring Brake Priority System
Complies with all changes to FMVSS121.
Designed for use with a single reservoir on a typical single or tandem axle trailer application.
Part No. 110500

4 Sensor/2 Modulator Valve
(4S/2M) Configuration Shown
Suggested Electrical Diagram
Tandem Suspension,
Four Wheels Sensed

KIT PART NO. 1544223

REPLACEMENT PARTS LIST

<table>
<thead>
<tr>
<th>Qty</th>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>S4005001030</td>
<td>ECU</td>
</tr>
<tr>
<td>1</td>
<td>S4493260300</td>
<td>10' Power Cable</td>
</tr>
<tr>
<td>2</td>
<td>S4497130300</td>
<td>10' Sensor Ext cable</td>
</tr>
<tr>
<td>2</td>
<td>S4497130180</td>
<td>6' Sensor Ext cable</td>
</tr>
<tr>
<td>1</td>
<td>---</td>
<td>ABS Label For Lamp</td>
</tr>
<tr>
<td>1</td>
<td>---</td>
<td>Installation Guide</td>
</tr>
<tr>
<td>1</td>
<td>---</td>
<td>End of Line Test</td>
</tr>
</tbody>
</table>

MERITOR WABCO

Enhanced Easy-Stop™

ABS Power Extension Cable - 48 ft.
ISO connector one end, blunt cut on the other, with a connector wire to the ABS warning lamp.
Part No. PECW-48

4S/2M schematic (showing air)

110500 - Spring Brake control valve,
S4005001030 - Wabco ECU valve,
6003 - 3/4" x 1/2" hex nipple
6006 - 3/4" pipe nipple,
1010329 - air tank,
1010447 - spring brake chamber,
1011451 - red emer. gladhand,
1011452 - blue svc. gladhand.

A/C = Anti-Compounding
- - - Service Brake
- - - Spring Brake
- - - Supply Line (Red)
- - - Control Line (Blue)
**MERITOR WABCO ABS ENHANCED EASYSTOP™ CONVERSION KITS**

Meritor WABCO has created a series of retrofit kits to replace the previous Easy-Stop platform, to the current production Enhanced Easy-Stop platform.

Easy Stop was installed on production built trailers between March 1997 and February 2001.

Enhanced Easy-Stop incorporated current technology to address regulatory PLC requirements and has been installed from March 2001 to present.

To determine the proper kit, find the existing Easy-Stop ECU/Valve part number that needs to be replaced.

Then determine if you will pull the diagnostics from the **tractor** (power adapter equipped kits) or from the **trailer** (power adapter with diagnostic adapter equipped kits).

**Converting Meritor WABCO Easy Stop to Enhanced Easy-Stop™ Trailer ABS ECU/VALVE**

<table>
<thead>
<tr>
<th>Easy Stop ECU/Valve#</th>
<th>Description</th>
<th>Enhanced Easy Stop Power Adapter Retrofit Kit</th>
<th>Enhanced Easy Stop Power/Diagnostic Adapter Retrofit Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>472 500 021 0</td>
<td>2S/1M for Trailers</td>
<td>R955344</td>
<td>R955345</td>
</tr>
<tr>
<td>472 500 011 0</td>
<td>2S/1M for Dollies</td>
<td>R955322</td>
<td>R955323</td>
</tr>
<tr>
<td>472 500 012 0*</td>
<td>2S/1M, 2S/2M, 4S/2M</td>
<td>R955320</td>
<td>R955321</td>
</tr>
<tr>
<td>472 500 013 0</td>
<td>4S/3M</td>
<td>R955346</td>
<td>R955347</td>
</tr>
</tbody>
</table>

- If a 472 500 012 0 ECU/Valve was used in an Easy Stop 2S/1M application, order a R955344 or R955345 kit. Kits contain an Enhanced Easy-Stop ECU/Valve and either a power cable adapter or power/diagnostic cable adapter.

**Part No. R955344**  
(from the tractor)  
For Trailer Applications Only  
(NO Dolly) 2S/1M  
Replaces Meritor  
Part Number 4725000210  
w/S8946073120 cable

**Part No. R955322**  
(from the tractor)  
For Dollies Only 2S/1M  
Replaces Meritor  
Part Number 4725000110  
w/S8946073120 cable

**Part No. R955320**  
(from the tractor)  
2S/1M, 2S/2M, 4S/2M  
Replaces Meritor  
Part Number 4725000120  
w/S8946073120 cable

**Part No. R955345**  
(from the trailer)  
For Trailer Applications Only  
(NO Dolly) 2S/1M  
Replaces Meritor  
Part Number 4725000210  
w/S8946073130 cable

**Part No. R955323**  
(from the trailer)  
For Dollies Only 2S/1M  
Replaces Meritor  
Part Number 4725000110  
w/S8946073130 cable

**Part No. R955321**  
(from the trailer)  
2S/1M, 2S/2M, 4S/2M  
Replaces Meritor  
Part Number 4725000120  
w/S8946073130 cable
MERITOR WABCO ENHANCED EASYSTOP™ COMPONENTS

Part No. S4005001010
ECU Valve Assembly
2S/1M Basic for trailer
(after the 3/1/01 date)

Part No. S4461082010
ECU Only

Part No. S4005001020
ECU Valve Assembly
2S/2M Basic for trailer
(after the 3/1/01 date)

Part No. S4721950330
Relay Valve with boyonet
connector. Valve replacement
for S4005001010.
(after the 3/1/01 date)

Part No. S4005001030
ECU Valve Assembly
4S/2M Basic for trailer
(after the 3/1/01 date)

Part No. S4008506010
ECU Only

Part No. S4008500530
Modulator Valve, 1/2" ports.
Kostal Connector, 12 V

Part No. S4008500540
Modulator Valve, 1/2" ports.
Bayonet Connector, 12 V

Part No. S4493260100
ABS Power Cable
4 conductor, 3.3 feet.
for standard harness connector

Part No. S4493260050 - 1.65 feet.
Part No. S4493260300 - 10 feet. (shown)
Part No. S4493260470 - 15.4 feet.

Part No. S8946073120
Adapter cable. Connects Easystop
power cable to enhanced Easystop
ECU/Valve assembly.

Part No. S8946073130
Adapter cable with diagnostic cable.
Connects Easystop power cable to enhanced
Easystop ECU/Valve assembly.

Part No. S8946062752
ABS connector relay
2S/1M Basic.

Easy Stop
Power Cables
Part No. S8946049440
Power cable, 4 conductor, 3', std connector
Part No. S8946049450
Power cable, 4 conductor, 13', std connector
Part No. S8946060380
Power cable, 4 conductor, 14', std connector
Part No. S8946060500
Power cable, 4 conductor, 20', std connector

Part No. S4493641500
13.1' / 9.8' Power "Y" Cable
Part No. S4493641530
20' / 10' Power "Y" Cable3

NOTE: Sensors and Sensor Extensions are Universal to Both Systems
MBS ABS KIT - FLEETCRAFT

Wabash National announced that it has discontinued its proprietary ABS products for all production trailers, and we have the complete replacement retrofit kits available for slider suspensions.

Part Number 1532014
2S/1M ABS Kit: INCLUDES:
PLC Select Valve/ECU Assembly - 6 port
Power Cord Extension
2 Sensor Clips
Heavy Duty Hex Nipple
Installation Instructions
PLC Service Manual

The 1532014 kit has no sensors so that the existing sensors can be used if the existing sensor numbers are 10800126 (Wabash number), or S4410328080 (Meritor number.)

MBS ABS KITS - MERITOR

Wabash National announced that it has discontinued its proprietary ABS products for all production trailers, and we have the complete replacement retrofit kits available for slider suspensions.

Part Number R955382
2S/1M ABS Kit: INCLUDES:
ECU Valve Assembly.
Power cable 14 ft with iso plug,
sensor extension cables (2) 6 ft w/ plug,
sensor springs (2), installation instructions.

The R955382 kit has no sensors so that the existing sensors can be used if the existing sensor numbers are 10800126 (Wabash number), or S4410328080 (Meritor number.)

Also available - R955383 for 4S/2M.

KITS ARE BOXED / 1 BOX PER TRAILER.

Part Number R955374
2S/1M ABS Kit: INCLUDES:
ECU Valve Assembly.
Sensors (2) 1 ft,
power cable 14 ft w/iso plug,
sensor extension cables (2) 6 ft w/ plug,
sensor springs (2), installation instructions.

The R955374 includes sensors if the existing sensors are not Meritor, or all new sensors are needed.

Also available - R955375 for 4S/2M.
MISCELLANEOUS MERITOR WABCO ABS COMPONENTS

Sensor Placement
When more than one wheel is controlled by a single valve, sensors should be mounted at the axle which tends to lock first. For spring suspensions this is usually the forward axle. For air suspensions this is usually the rear most axle.

Right Angle (90°) Sensor Kits
Includes sensor, bushing clip, friction lube, and instructions.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Cable lead in Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>R955335</td>
<td>1.0</td>
</tr>
<tr>
<td>R955336</td>
<td>3.0</td>
</tr>
<tr>
<td>R955341</td>
<td>5.8</td>
</tr>
<tr>
<td>R955342</td>
<td>6.6</td>
</tr>
</tbody>
</table>

ABS Diagnostic (Pre-PLC)
Cable with Tool
Part No. SA13237L1130

ABS Relay Valve
Second modulator valve for use on 2S/2M and 4S/2M Systems
Part No. R955378

ABS Relay Valve
with bayonet connector. Valve replacement for S4005001010
Part No. S4721950330

ABS Modulator Valve
Controls air pressure to the brake chambers during an ABS stop.
Part No. S4008500530
12 volt, kostal style connector. (screw-on)

Part No. S4008500540
12 volt, bayonet style connector.

Common ABS Components

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1810000</td>
<td>Bendix/Haldex 1' Sensor</td>
</tr>
<tr>
<td>1810001</td>
<td>Friction Bushing / Clip</td>
</tr>
<tr>
<td>1810002</td>
<td>Meritor Wabco 1' Sensor</td>
</tr>
<tr>
<td>1810003</td>
<td>Meritor Wabco 3' Sensor</td>
</tr>
<tr>
<td>S8997605104</td>
<td>Stainless steel friction busing clip</td>
</tr>
</tbody>
</table>

Sensor Extension Cables

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Cable Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>S4497130180</td>
<td>6 feet</td>
</tr>
<tr>
<td>S4497130300</td>
<td>10 feet</td>
</tr>
<tr>
<td>S4497130500</td>
<td>16 feet</td>
</tr>
</tbody>
</table>

ABS Power Cable
4 Cond., 49 feet, w/blunt cut end.
Part No. S4493151500

POWER CABLES

Part No. Description ( EZ STOP)
S8946049440 ABS Power Cable, 3 feet, with industry standard plug.
S8946049450 ABS Power Cable, 13 feet, with industry standard plug.
S8946060380 ABS Power Cable, 14 feet, with industry standard plug.
S8946060500 ABS Power Cable, 20 feet, with industry standard plug.
### ABS ELECTRIC CONFIGURATION - 2S/1M - HALDEX PLC - FULL FUNCTION

**Kit Part No. AQ961404**

<table>
<thead>
<tr>
<th>PARTS LIST Consisting of:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty</td>
<td>Part No.</td>
</tr>
<tr>
<td>-----</td>
<td>----------</td>
</tr>
<tr>
<td>1</td>
<td>AL919310</td>
</tr>
<tr>
<td>1</td>
<td>AL430624</td>
</tr>
<tr>
<td>2</td>
<td>AL919804</td>
</tr>
<tr>
<td>1</td>
<td>AL919901</td>
</tr>
<tr>
<td>1 box</td>
<td>-</td>
</tr>
</tbody>
</table>

- PLC Select ECU Design
- FFABS Relay Valve
- 3/4" nipple, spring brake priority.
- For Van Trailers
- Complies with the March 2001 PLC4 Trucks industry.
- Kit includes detailed instructions for installation and maintenance.

**Kit Part No. AQ960802**

<table>
<thead>
<tr>
<th>PARTS LIST Consisting of:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty</td>
<td>Part No.</td>
</tr>
<tr>
<td>-----</td>
<td>----------</td>
</tr>
<tr>
<td>1</td>
<td>AL919310</td>
</tr>
<tr>
<td>1</td>
<td>AL430624</td>
</tr>
<tr>
<td>2</td>
<td>AL919804</td>
</tr>
<tr>
<td>1</td>
<td>AL918602</td>
</tr>
<tr>
<td>1 box</td>
<td>-</td>
</tr>
</tbody>
</table>

- PLC Select ECU Design
- FFABS Valve Type
- Reservoir Mount
- Control Port (1) 3/8"-18
- Emergency Supply Port (1) 3/8"-18
- Complies with the March 2001 PLC4 Trucks industry.
- Kit includes detailed instructions for installation and maintenance.

**ABS AIR CONFIGURATION - UNIVERSAL PLC 2S/1M REPLACEMENT KIT**

AQ960510 Universal PLC Select ABS Kit will replace all competitive brands and generations of trailer 2S/1M (2 Sensor - One Modulator Valve) ABS systems. These are any systems that utilize a single ABS valve, two sensors, and a separate spring brake control valve. Some additional components unique to the vehicle being upgraded should be expected. **Do not** use this kit to replace the Haldex FFABS ABS System as this is a single valve per vehicle and spring brake control is integral to the FFABS valve.

**Kit Part No. AQ960510**

<table>
<thead>
<tr>
<th>PARTS LIST Consisting of:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty</td>
<td>Description</td>
</tr>
<tr>
<td>-----</td>
<td>--------------</td>
</tr>
<tr>
<td>1</td>
<td>PLC Select Valve ECU Assy. 6 Port</td>
</tr>
<tr>
<td>1</td>
<td>19 Foot Power Cord Ext.</td>
</tr>
<tr>
<td>2</td>
<td>6.6 foot Sensor Extensions</td>
</tr>
<tr>
<td>1</td>
<td>Installation Instructions L31203</td>
</tr>
<tr>
<td>1</td>
<td>PLC Service Manual L30030</td>
</tr>
</tbody>
</table>

ECU Part No. AL919310
FF ABS Valve Part No. AL430624
Power Cord Part No. AL918602
Sensor Cable extension Part No. AL919804
ABS PLC SELECT UPGRADE KIT - 2S / 1M

Wheel-speed Sensor and Trailer Power connects directly to ECU - no intermediate cables required.

Single fastener design assures easy serviceability.

Potted ECU Enclosure provides excellent protection from the environment.

Part No. AQ964110
KIT CONTAINS:
1M Power Cord Extension
0.5M Sensor Extensions
PLC Select ECU & Bracket.

ABS ELECTRICAL CONFIGURATION - 4S/2M - FULL FUNCTION

ECU Valve
PLC Select
Part No. AL919338
• Meets FMVSS121 requirements including March 2001 In-Cab Malfunction Lamp.
• Embraces “Power Line Carrier” multiplexing technology.
• Standard Electronic Odometer.
• Select Low-High software is standard.
• Sensor and Power Connectors plug directly into the ECU.
• Potted ECU Enclosure
• New Mounting Bracket with single fastener design.
• Standard on-board diagnostic capability
• Compatible with both PLC InfoCenter and PLC PC.

Kit Part No. AQ963011

<table>
<thead>
<tr>
<th>PARTS LIST Consisting of:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty</td>
<td>Part No.</td>
</tr>
<tr>
<td>1</td>
<td>AL919311</td>
</tr>
<tr>
<td>1</td>
<td>AL430624</td>
</tr>
<tr>
<td>2</td>
<td>AL919802</td>
</tr>
<tr>
<td>2</td>
<td>AL919804</td>
</tr>
<tr>
<td>1</td>
<td>AL919901</td>
</tr>
<tr>
<td>1</td>
<td>AL364040</td>
</tr>
<tr>
<td>1</td>
<td>AL40906</td>
</tr>
<tr>
<td>1 box</td>
<td></td>
</tr>
</tbody>
</table>
HALDEX ABS COMPONENTS

ABS Modular Valve less ECU
Part No. AL364040
Single axle application

Number of Ports: 2
Mounting Port Size: 1/2 inch
Delivery Port Size: 3/8 inch
Mount: Reservoir
Application: 24mm 12 volt Solenoid

ABS Modular Valve less ECU
Part No. AL364041
Multi-axle application

Number of Ports: 6
Mounting Port Size: 1/2 inch
Delivery Port Size: 3/8 inch
Mount: Reservoir
Application: 24mm 12 volt Solenoid

ABS Power Cable
ECU end includes industry standard 5-pin female connector.
7-way end is stripped wires.
For production Mar. '01-present.
Part No. Length
AL918603 38 feet
ABS lamp lead is 25 feet.
AL918604 52.5 feet
ABS lamp lead is 26.2 feet.
AL918606 15 feet
ABS lamp lead is 4 feet.

FFABS Valve
Part No. Description
AL430611 4 port, 1/2" nipple, 12 volt, 3/8" ports

FFABS Valve
Part No. Description
AL430614 4 port, 3/4" nipple, 12 volt, 3/8" ports

Electronic Control Unit (ECU)
Part No. AL919302
No longer available.
Use AQ964110 upgrade kit MOD 1 - SLH-A5-19 Pin
- OEM part no. is located on top.
- Post mandate ECU's include bail latch.

Pin Housing Dimensions:
3-1/2 inch Height x 5-3/8 inch Wide
Application/Notes: Pre-March '01

Power cord repair kit
5 way terminal kit for power cords.
Part No. Description
AQ15473

Right Angle (90°) Sensor Kit
Includes sensor, bushing clip.
Part No. Cable lead
AL10271914 1.6 feet
Bendix® TABS-6 (Standard)
Trailer Antilock Braking System
Few connections, small and light, fast and reliable, for all applications.
Part No. 801855
2S/1M trailer ABS module.
Communicates over PLC.
Has a 4 port relay.

MC-12 Trailer ABS Modules - Replacement Kit
Part No. 802902
The MC-12 trailer ABS modules are no longer available. TABS-6 kits are available for service.
19.5 foot cable, 5-pin ABS pigtail and sensors.

A-18 Trailer ABS Modules - Replacement Kit
Part No. K019711
The A-18 trailer ABS modules are no longer available. TABS-6 kits are available for service.

ABS Diagnostic Tools
Part No. Description
801869 RDU - Remote Diagnostic Unit
801872 RDU adapter - 6 pin to 9 pin adapter cable
802229 RDU adapter - 9 pin to 9 pin adapter cable
802435 RDU plus 6 pin to 9 pin adapter cable
802436 RDU plus 9 pin to 9 pin adapter cable
802162 TRDU - Trailer Remote Diagnostic Unit
802165 TRDU adapter - 7 pin connector for TRDU

Bendix Pressure Modulator Valves
Part No. System
801481 12 volt, M-32QR™
801666 12 volt, M-32™

BS-24™ Wheel Speed Sensors
Part No. Description
801546 90°, 60", w/Deutsch connector.
801552 Straight, 75" w/D704 connector.
801534 Clamping Sleeve
The WS-24™ is compatible with all previous Bendix sensors if used with this clamping sleeve.

Power Cord
MC-30™ cable assembly
Part No. 801697