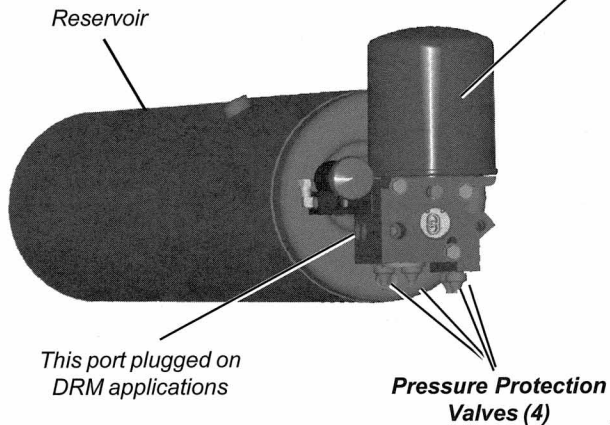
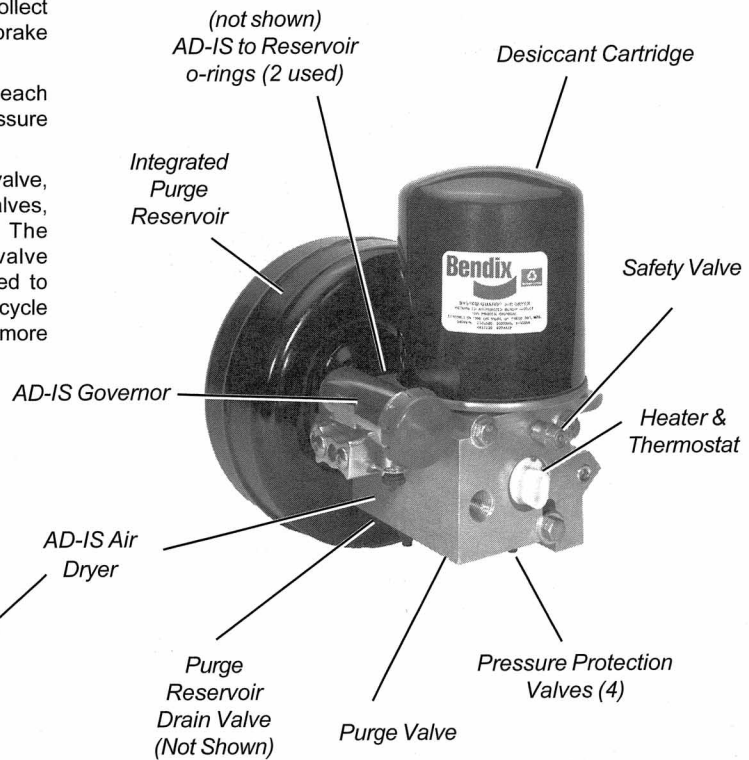


The AD-IS Air Dryer uses a "spin on" desiccant cartridge to collect and remove air system contaminants before they enter the brake system.

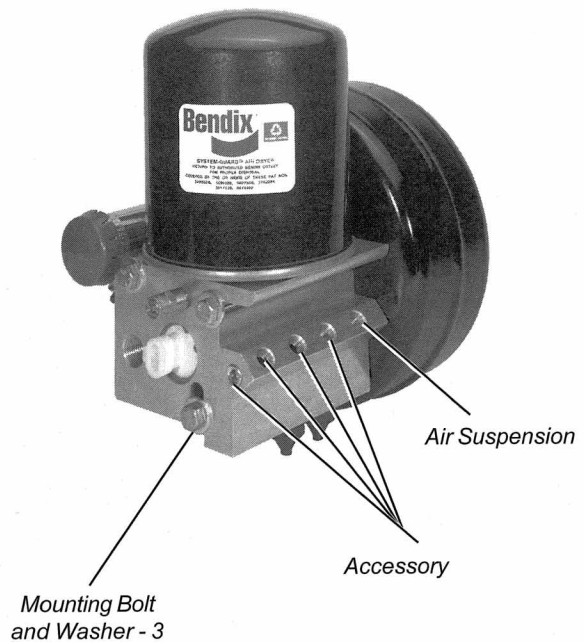
The function of the pressure protection valves is to protect each reservoir from a pressure loss in the other reservoir or a pressure loss in an air accessory.

The base assembly contains a check valve assembly, safety valve, heater and thermostat assembly, four pressure protection valves, threaded air connections and the purge valve assembly. The removable purge valve assembly incorporates the purge valve mechanism and a turbocharger cutoff feature that is designed to prevent loss of engine "turbo" boost pressure during the purge cycle of the AD-IS air dryer. See Service Data Sheet SD-08-2418 for more information.



The function of the **Dryer Reservoir Module (DRM)** is to provide heavy vehicles with an integrated vehicle air dryer, secondary reservoir, purge reservoir, governor and a number of the charging valve components in a module. The **DRM** includes an **Integrated Solution Air Dryer**, the **AD-IS**, a reservoir (including a separate purge reservoir section) a governor and four pressure protection valves. See Service Data Sheet SD-98-9808 for more information.

Weight	62 lbs (Air Dryer assembly 14.2 lbs.) approx.
(Air Dryer) VMRS	13-010-033
Device Code	9808



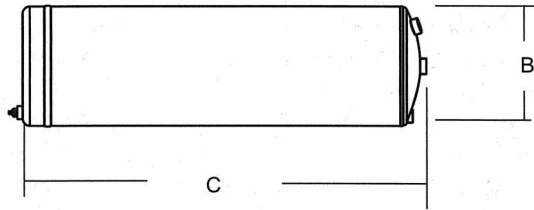


Figure 1

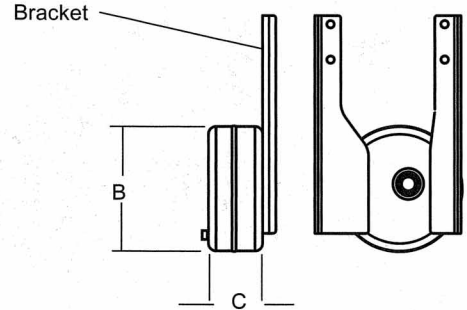


Figure 2

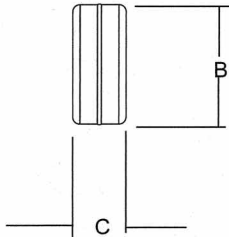


Figure 3

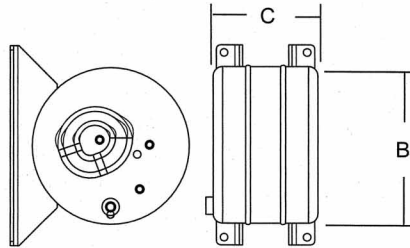


Figure 4

Service and Remanufactured AD-IS Air Dryers do not include DRM Reservoirs or Purge Volume Reservoirs.

**Dryer Reservoir Modules**

DRM O.E. Pc. No.	AD-IS O.E. Pc. No.	AD-IS Service Pc. No.	AD-IS Reman. Pc. No.	Reservoir Service Pc. No.	'A' Port* Plug	Primary Port	Secondary Port	Suspension Port	Accessory Ports (Qty.)
5003227	5003424	800383	5004050X	5005313	without	1/4" NPT	Integral	1/4" NPT	1/4" NPT (4)
NA	5003424	800383	5004050X	5009107	without	1/4" NPT	Integral	1/4" NPT	1/4" NPT (4)
5007593	5008184	800838	5008332X	5007588	without	3/8" PTC	Integral	1/4" PTC	1/4" NPT (4)
5009232	5009482	801045	5009233X	5008939	without	1/4" NPT	Integral	1/4" NPT	1/4" NPT (4)

**AD-IS Air Dryer with Purge Volume**

AD-IS O.E. Pc. No.	AD-IS Service Pc. No.	AD-IS Reman. Pc. No.	Purge Vol. Service Pc. No.	'A' Port* Plug	Primary Port	Secondary Port	Suspension Port	Accessory Ports (Qty.)	Purge Volume
5005921	800959	5008871X	5008781	without	1/2" PTC	1/2" PTC	1/4" NPT	1/4" NPT (4)	Standard
5010134	801147	5010133X	5008574	with	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT (4)	Standard
5010212	801164	5010211X	5008574	with	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT (4)	Standard
5010694	801266	5010696X	5008574	with	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT (3)	Standard
5010135	801147	5010133X	5009028	with	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT (4)	EP
5010695	801266	5010696X	5009028	with	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT (3)	EP
5008296	801145	5010104X	5009028	with	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT (4)	EP
5008779	801264	5010684X	5010563	with	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT (4)	DLU-EP
5010213	801164	5010211X	5009028	with	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT (4)	EP

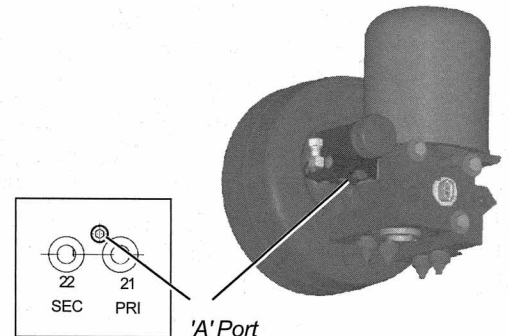
Purge Volume EP = Extended Purge DLU = Discharge Line Unloader

**Reservoirs**

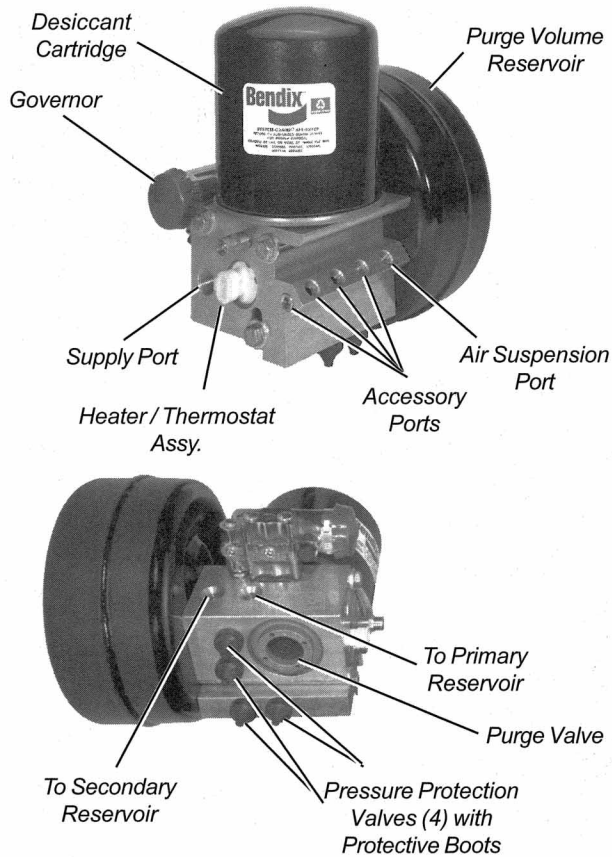
Service Pc. No.	'B' Dia. Inches	'C' Length Inches	Compartment Number	Comments	Figure
5005313	9	53.5	2	Steel	1
5009107	9	55.5	2	Aluminum	1
5007588	9	26	3	Steel	1
5008939	9	29.8	2	Steel	1

**Purge Volume**

Service Pc. No.	'B' Dia. Inches	'C' Length Inches	Compartment Number	Mounting Bracket	Figure
5008781	9	3.9	1	Included	2
5009028	9	6	1	4 Hole SAE Mtg.	3
5008574	9	3.9	1	4 Hole SAE Mtg.	3
5010563	9	6	1	Included	4



**\*AD-IS Dryers with a plugged port 'A' can not be interchanged with those that do not have a port in this location.**



**KITS AND SERVICE PARTS**

AD-IS to Reservoir o-rings (2 used) .....	5002816
Delivery Check Valve Replacement Kit .....	5004052
Desiccant Cartridge Replacement .....	5008414
Governor Adapter .....	5003698
Governor Check Valve Kit .....	5004049
Governor Gasket .....	5007834
Heater & Thermostat Replacement (12 volt) .....	109495
Heater & Thermostat Replacement (24 volt) .....	109496
Mounting Bolt Kit .....	5009233
Protective Boots (for pressure protection valves) .....	5005163
Purge Valve Maintenance Kit .....	5003547
Safety Valve .....	800350
Service Purge Valve Kit .....	800404
Service Purge Valve Kit - DLU .....	5009650
Splash Shield Kit (includes bracket and cover) .....	5006698
Splash Shield Cover .....	5005266
Wire Retainer (optional for cover) .....	5009653

**NOTE:** There are no kits available for the pressure protection valves. These are not serviceable items - see warning below.

**WARNING:**

**Do not attempt to adjust or service the Pressure Protection valves. Incorrect pressure protection valve settings can result in automatic application of vehicle spring brakes without prior warning.**

**GOVERNOR AND DELIVERY CHECK VALVE REPLACEMENT**

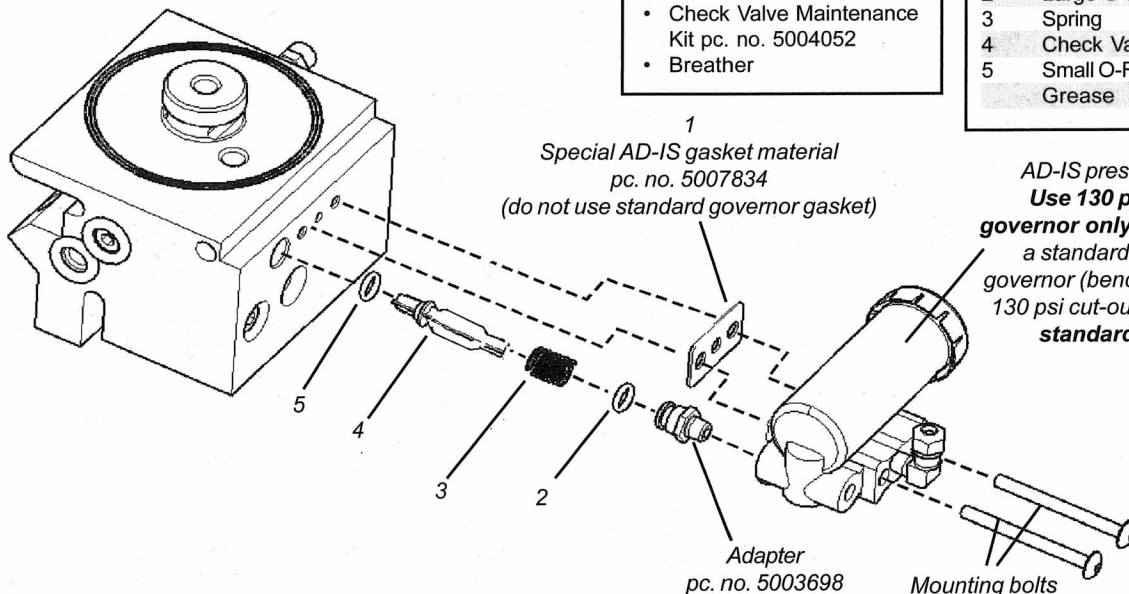
Governor and Delivery Check Valve Rep. Kit .....	5004049
Delivery Check Valve Replacement Kit .....	5004052

**GOVERNOR / DELIVERY CHECK VALVE REPLACEMENT KIT 5004049**

- Governor (AD-IS preset)
- Check Valve Maintenance Kit pc. no. 5004052
- Breather

**DELIVERY CHECK VALVE MAINTENANCE KIT 5004052**

Key	Description
1	Governor Gasket
2	Large O-Ring
3	Spring
4	Check Valve Body
5	Small O-Ring
	Grease



1  
Special AD-IS gasket material  
pc. no. 5007834  
(do not use standard governor gasket)

AD-IS preset governor  
**Use 130 psi cut-out governor only.** If replaced by a standard adjustable governor (bench calibrated to 130 psi cut-out), **do not use standard gasket.**

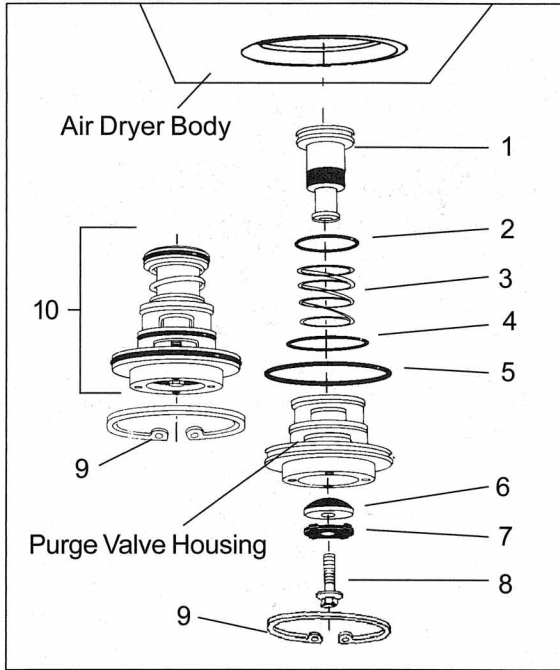
Adapter  
pc. no. 5003698

Mounting bolts

# MAINTENANCE KITS: PURGE VALVE REPAIR/REPLACEMENT

AD-IS

CATALOG  
**08-A-27**



- Service Purge Valve ..... 800404
- Service Purge Valve - DLU ..... 5009650
- Purge Valve Maintenance Kit ..... 5003547

### SERVICE PURGE VALVE 800404 & 5009650(DLU)

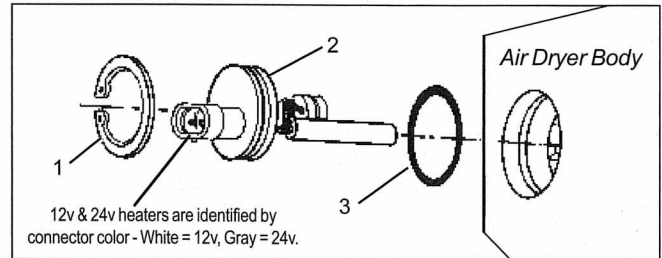
Key	Description
2	Quad-Ring
4	O-Ring
5	O-Ring
9	Retaining Ring
10	Purge Vlv. Cartridge Assy. Barium Grease

### PURGE VALVE MAINT. KIT 5003547

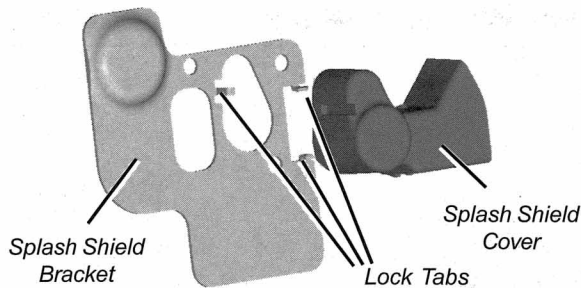
Key	Description
1	Purge Valve Piston
2	Quad-Ring
3	Piston Return Spring
4	O-Ring
5	O-Ring
6	Purge Valve
7	Exhaust Guide
8	Shoulder Bolt
9	Retaining Ring
	Assembly Tool
	Barium Grease

- Heater & Thermostat Replacement Kit (12 volt) ..... 109495
- Heater & Thermostat Replacement Kit (24 volt) ..... 109496

Key	Description
1	Retaining Ring
2	Heater & Thermostat Assembly
3	O-Ring
	Dielectric Lubricant
	Silicone Lubricant



### AD-IS Splash Shield Bracket and Cover



- AD-IS Splash Shield Kit (includes bracket and cover) ..... 5006698
- AD-IS Splash Shield Cover ..... 5005266
- Wire Retainer for Cover (optional, not shown) ..... 5009653

### WARNING:

**Do not attempt to adjust or service the Pressure Protection valves. Incorrect pressure protection valve settings can result in automatic application of vehicle spring brakes without prior warning.**

Mounting Bolt Kit Piece No. **5009233** Consists of the following:

Item	Qty.
3/8" Mounting Bolts	3
3/8" Washer	3