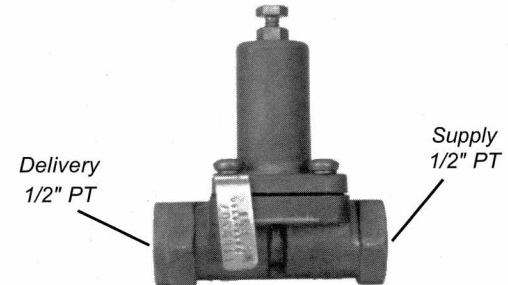
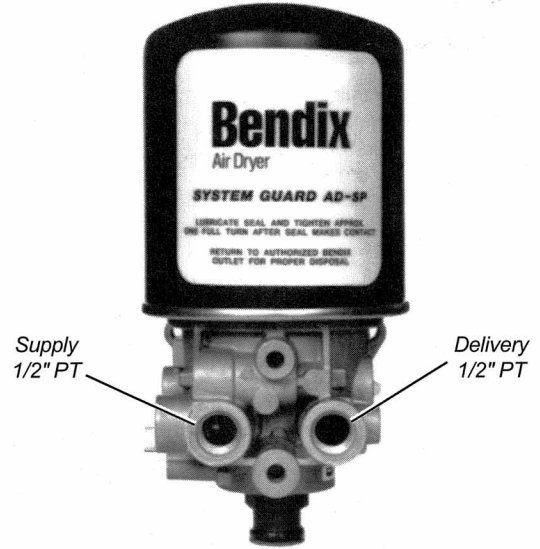
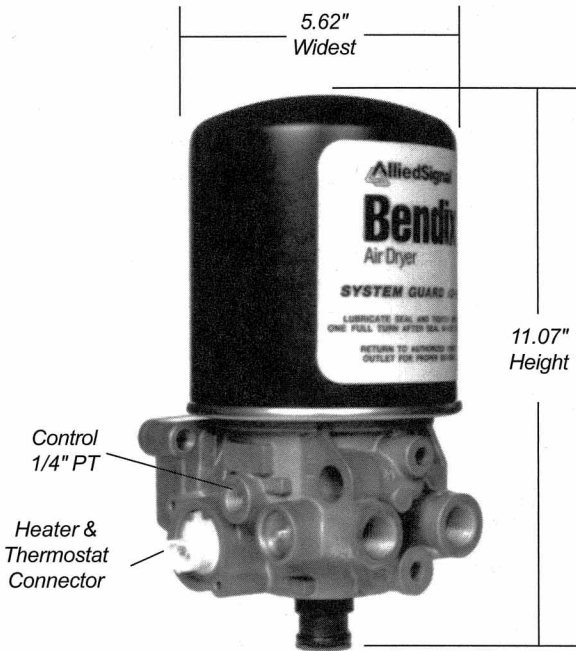


The function of the AD-SP System Purge Air Dryer is to collect and remove air system contaminants in solid, liquid and vapor form before they enter the brake system. It provides clean, dry air to the components of the brake system which increases the life of the system and reduces maintenance costs. Daily manual draining of the reservoirs is eliminated.

The system purge designation is used because the AD-SP uses a small portion of system air pressure from the supply and front axle service reservoirs to perform the purge or regeneration function. An SC-PR Single Check Protection valve is always used in conjunction with the AD-SP to protect the service system.

Weight 26 lbs.  
VMRS 13-010-033  
Device Code 2415



Service Pc. No.	Reman Pc. No.	Heater & Thermostat Volts-Watts (See Note 2)
800887	109991	12v - 90w
800972	109992	24v - 90w

I.D. Tag Pc. No.	O.E. Pc. No.	Service Pc. No.	Reman. Pc. No.
1189307	5000105	065677	5000148

Note 1 - All replacement air dryers include 109871, wire harness and splice kit  
Note 2 - 12 & 24 volt AD-SP air dryers are identified by connector color - White = 12v, Gray = 24v

**Maintenance Kit Information**  
See Pages 08-A-14 & 15

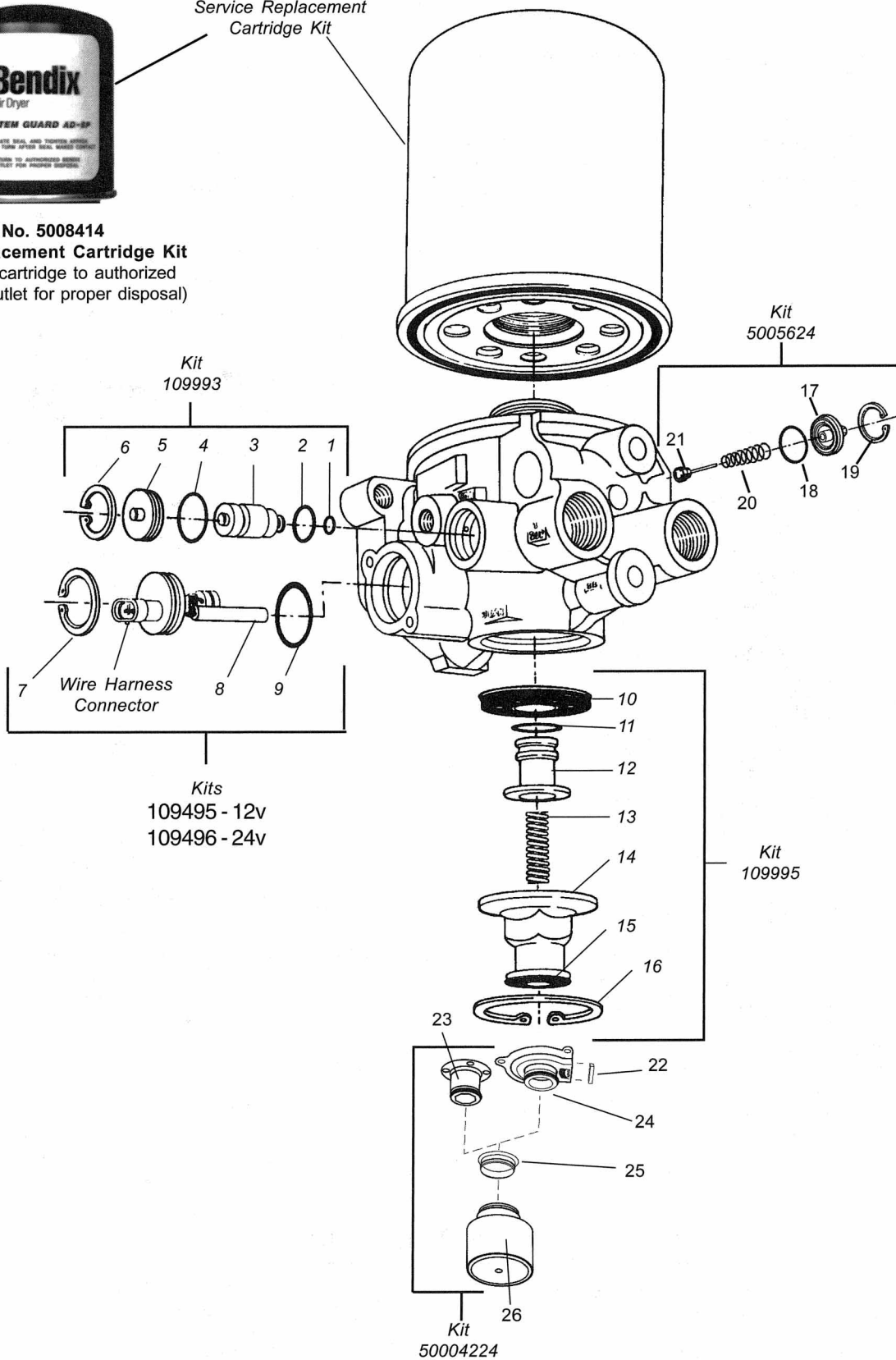
### AD-SP Retro-Fit Kits

Qty.	12v AD-SP Retro-Fit Kit 131031 Description	Qty.	24v AD-SP Retro-Fit Kit 131032 Description
1	12v Air Dryer	1	24v Air Dryer
1	Harness & Splicer Kit	1	Harness & Splicer Kit
1	SC-PR Single Check Protection Valve	1	SC-PR Single Check Protection Valve
1	1/2" Pipe Nipple	1	1/2" Pipe Nipple



Service Replacement Cartridge Kit

**Part No. 5008414**  
**Service Replacement Cartridge Kit**  
 (Return used cartridge to authorized Bendix Parts outlet for proper disposal)



### WIRE HARNESS AND SPLICE KIT 109871

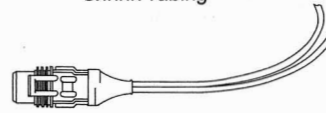
Qty.	Description
1	Wire Harness Assy.
2	Un-insulated Butt Splice Connector
1	1/4" Eyelet w/Heat Shrink Insulator
1	3/8" Eyelet w/Heat Shrink Insulator
2	2" Length Adhesive Lined Heat Shrink Tubing



Adhesive Lined Heat Shrink Tubing



Eyelet w/Heat Shrink Insulator



Wire Harness Assembly



Un-insulated Butt Splice Connector

AD-SP Air Dryer Maintenance Kits						
Key	Description	Turbo Cutoff Kit 109993	Heater & Thermostat 109495(12v) 109496(24v)	Purge Valve Kit 109995	Deluxe Check Valve Kit 5005624	Silencer Kit 5004224
1	O-Ring	1				
2	O-Ring	1				
3	Turbo Cutoff Piston	1				
4	O-Ring	1				
5	Cover	1				
6	Retaining Ring	1				
7	Retaining Ring		1			
8	Heater & Thermostat		1			
9	O-Ring		1			
10	Purge Valve			1		
11	O-Ring			1		
12	Purge Piston			1		
13	Purge Piston Spring			1		
14	Exhaust Cover			1		
15	Exhaust Diaphragm			1		
16	Retaining Ring			1		
17	Check Valve Cover				1	
18	O-Ring				1	
19	Retaining Ring				1	
20	Spring				1	
21	Valve				1	
22	Gasket					1
23	Exhaust Cover					1
24	Exhaust Cover					1
25	Adapter					1
26	Silencer					1
27	Screws (not shown)					4

### AD-SP Service Piece Number Changeover

AD-SP Pc. No.	AD-SP Service Pc.No.	AD-SP Pc. No.	AD-SP Service Pc.No.	AD-SP Pc. No.	AD-SP Service Pc.No.	AD-SP Pc. No.	AD-SP Service Pc.No.
65691	800887	800887	800887	5000447	800973	5002231	800972
65694	800972	800972	800972	5000448	800974	5002747	800887
109772	800887	800973	800973	5000587	800887	5002748	800973
109775	800972	800974	800974	5001170	800887	5006639	800887
109872	800887	801105	801105	5001171	800972	5006700	800887
109873	800972	801115	801105	5001172	800973	5008081	800887
109991	800887	5000104	800887	5001173	800974	5009111	800972
109992	800972	5000145	800887	5001483	800973		
800042	800973	5000445	800973	5001484	800974		
800043	800974	5000446	800974	5002230	800887		

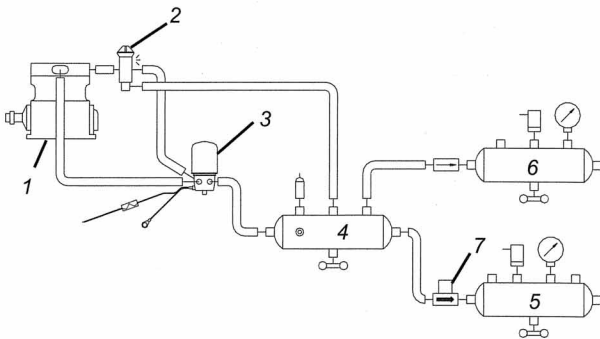
The AD-SP Air Dryer can be used in all the charging systems displayed below with the exception of the European style, Discharge Line Unloader system. Use the AD-9 Air Dryer shown on catalog page 08-A-31 for the discharge line unloader systems. Refer to Product bulletin Pro-08-12 for additional information on this subject.

Use the following component key for the charging system schematics below;

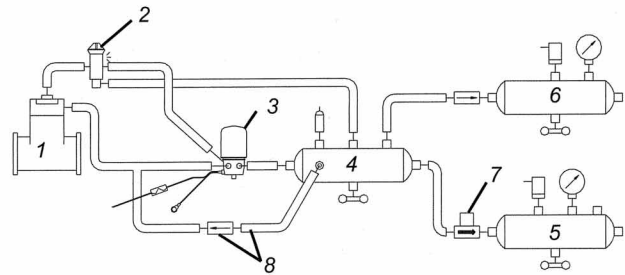
Key	Description
1	Compressor
2	Governor
3	AD-SP Air Dryer
4	Supply Res.
5	Front Service Reservoir

Key	Description
6	Rear Service Reservoir
7	SC-PR Valve
8	Single Check Vlv. & Feed Line (Holset Only)
9	Discharge Line Unloader Valve

**Typical AD-SP Air Dryer Installation  
Single & Two Cylinder Compressor (Except Holset E & QE)**

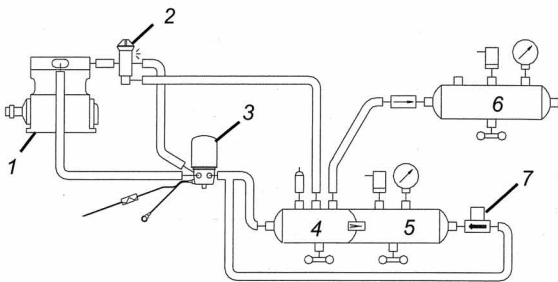


**Typical standard AD-SP Air Dryer Installation  
Holset E & QE Single Cylinder Compressor**

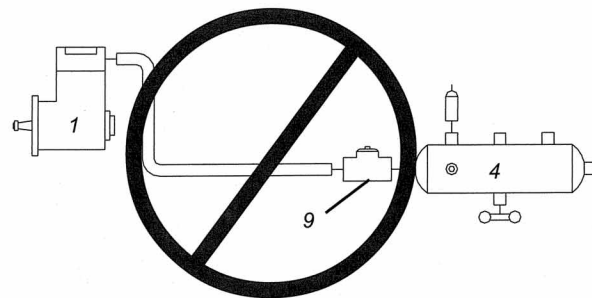


**For Systems Using the Holset Type E & QE compressor,  
Use the AD-IP DI Drop In Air Dryer.**

**Typical AD-SP Air Dryer Installation  
Single & Two Cylinder Compressor (Except Holset E & QE)  
w/Two Compartment Reservoir**



**Typical Discharge Line Unloader Charging System  
USE AD-9 INSTEAD OF AD-SP  
(See Catalog Page 08-A-31)**



# AD-SP DI DROP IN AIR DRYER

AD-SP

CATALOG  
**08-A-13**

The purpose of the AD-SP DI is to permit ease of installation of the AD-SP air dryer in a charging system that utilizes a Holset Type "E" or "QE" compressor. With the AD-SP DI in use the makeup line and single check valve, required in the Holset installation are incorporated into the AD-SP DI. The AD-SP DI air dryer is meant specifically for the Holset system. Utilize the standard AD-SP when other charging systems are in use.

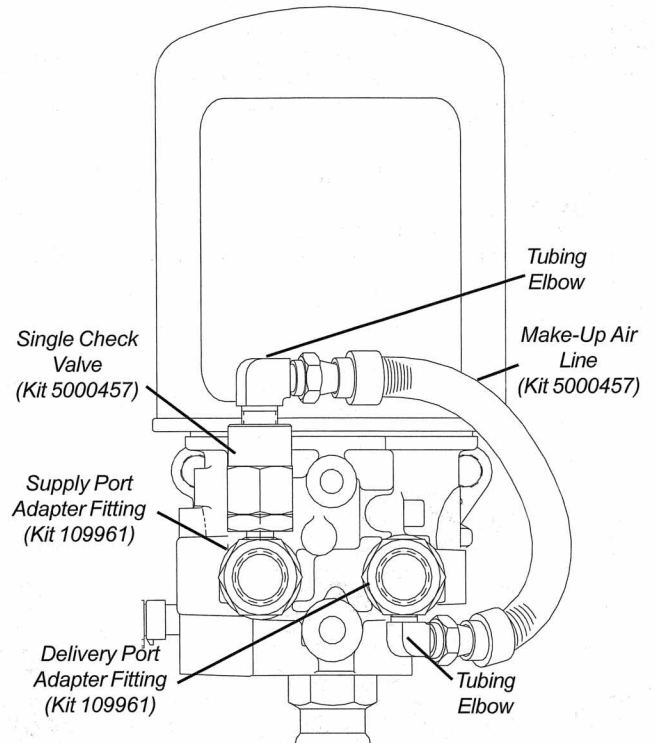
Like the standard AD-SP air dryer an SC-PR Single Check Protection valve is always used in conjunction with the AD-SP DI to protect the service system.

Weight 26 lbs.  
VMRS 13-010-033  
Device Code 2415

Service Pc. No.	Heater & Thermo. Volts-Watt (See Note 2)	Comments (See Note 1)
800973	12v - 90w	AD-SP Service New Replacement
800974	24v - 90w	AD-SP Service New Replacement

Note 1 - All replacement air dryers include 109871 (wire harness and splice kit) and 5001247 (mounting bracket kit).

Note 2 - 12 & 24 volt air dryers are identified by connector color - White = 12v, Gray = 24v



### MAKE-UP AIR LINE KIT 5000457

Qty	Description
1	Single Check Valve
1	1/4" Tubing Assembly
1	1/4" Tubing x 1/8" PT Elbow

### ADAPTER KIT 109961

Qty	Description
1	Adapter
1	1/4" Tubing x 1/8" PT Elbow

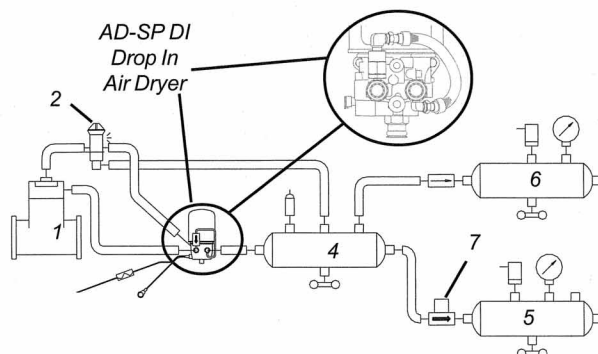
## DROP IN SYSTEM APPLICATION & INSTALLATION INFORMATION

The AD-IP DI (Drop In) Air Dryer is meant for use in charging systems that use the Holset Type E or QE compressor.

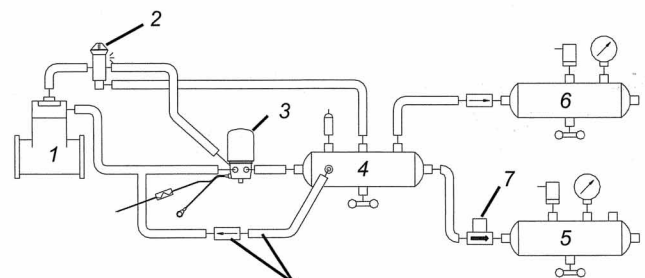
Use the following component key for the charging system schematics below;

Key	Description	Key	Description
1	Compressor	5	Front Service Reservoir
2	Governor	6	Rear Service Reservoir
3	AD-SP Air Dryer	7	SC-PR Valve
4	Supply Res.		

**Holset Charging System w/AD-SP DI (Drop In) Air Dryer**



**Typical standard AD-SP Air Dryer Installation Holset E & QE Single Cylinder Compressor**



Makeup Line & Single Check INCORPORATED IN AD-SP DI