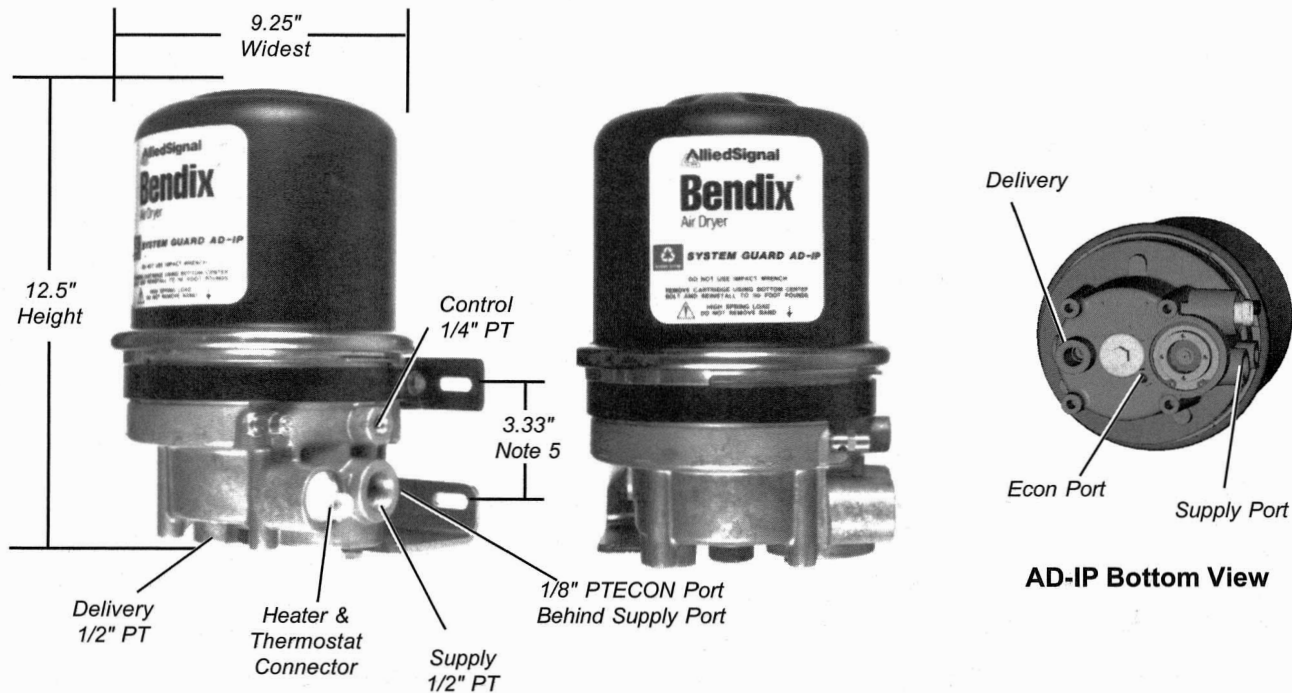


The function of the AD-IP Integral Purge Air Dryer is to collect and remove air system contaminants in solid, liquid and vapor form before they enter the brake system. It provides clean, dry air to the components of the brake system which increases the life of the system and reduces maintenance costs.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

In addition to the standard AD-IP, the AD-IP DI (Drop In) is also offered. It is a specialized version designed especially for air systems that use either the Holset (Cummins) Type E or QE air compressor. These Holset compressors utilize a unique unloading system that requires

that air pressure remain in the discharge line during the entire unloaded cycle of the compressor. To accomplish this, Holset compressors rely on air "feedback" or back pressure from the supply reservoir. When an air dryer is installed the direct "feedback" from the supply reservoir is interrupted and an alternate source for "feedback" pressure must be provided. A standard AD-IP air dryer can be installed however a separate "feedback" line with a single check must be installed. The AD-IP Drop In model incorporates the feedback line and single check as an integral part of the dryer and eliminates the need for these components.

Weight 28.75 lbs.  
VMRS 13-010-033  
Device Code 2414



**AD-IP Bottom View**

Service Pc. No.	Reman. Pc. No.	Mounting Bracket Kit	Econ Port	Heater & Thermo. Volts-Watt	Notes
65612	109477	5001247	---	12v - 90w	
65613	109478	5001247	---	24v - 90w	
65693	109503	---	---	12v - 90w	
800089	5000985	5001247	1/8" PT	12v - 90w	
800249	5002660	---	---	12v - 90w	
800576	5005556	5001247	---	12v - 90w	Ext. Purge
800577	5005567	---	1/8" PT	12v - 90w	Ext. Purge
800618	5006234	5001247	---	24v - 90w	Ext. Purge
800857	109478	5001247	---	24v - 90w	Includes Silencer

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

Note - Center to center of slots in both brackets 3.33 inches

**AD-IP Piece Number Changeover**

AD-IP Pc. No.	AD-IP . Service Pc.No.	AD-IP Pc. No.	AD-IP . Service Pc.No.	AD-IP Pc. No.	AD-IP . Service Pc.No.	AD-IP Pc. No.	AD-IP . Service Pc.No.
65612	65612	109479	NA	800857	800857	5003294	65613
65613	65613	109480	NA	801124	801124	5003976	65612
65614	NA	109500	65693	5000154	65612	5005268	800551
65615	NA	109503	65693	5000155	65612	5005270	65612
65693	65693	131030	NA	5000156	65612	5005387	65613
65709	NA	131038	65612	5000213	65612	5005697	65612
109465	65612	131066	65612	5000214	65612	5005702	65613
109466	65613	131080	65612	5000351	800089	5006591	65612
109467	NA	800020	NA	5000794	65612	5006634	65612
109468	NA	800021	65612	5000985	800089	5006848	65612
109469	65612	800089	800089	5001509	800089	5006879	65612
109470	65613	800249	800249	5001740	65612	5007252	65613
109471	NA	800551	65612	5001743	65693	5007270	65612
109472	NA	800576	800576	5002660	800249	5009413	65613
109477	65612	800577	800577	5002663	800249	5009817	65612
109478	65613	800618	800618	5002900	65612		

**MAINTENANCE KITS**

**MOUNTING BRACKET KIT  
5001247**

Item	Description	Qty.
1	5/16" Clamp Ring Bolt	1
2	Washer	1
3	5/16" Nut	1
4	Clamp Ring	1
5	Saddle Bracket	1
7	3/8" Cap Screw	2
8	3/8" Washer	2
9	Lower Mounting Bracket	1

**CARTRIDGE BOLT KIT  
109498**

Item	Description	Qty.
10	Cartridge Bolt	1
12	O-Ring	1
13	O-Ring	1

**DESICCANT CARTRIDGE KIT  
65624 (Service New Cartridge)  
109493 (Remanufactured Cartridge)**

Item	Description	Qty.
11	Desiccant Cartridge	1
11A	O-Ring	1
11B	O-Ring	1
12	O-Ring	1
13	O-Ring	1

**PURGE VALVE MAINT. KIT  
5003547**

Item	Description	Qty.
14	Retaining Ring	1
16	Shoulder Bolt	1
17,18	Purge Valve Complete	1
20	Purge Valve Piston	1
21	Quad-Ring	1
22	Piston Return Spring	1
23	O-Ring	1
24	O-Ring	1
19	Piston Guide	1
	Purge Valve Assembly Tool	1

**EXTENDED PURGE KIT\*  
5005309**

Item	Description	Qty.
33	Reservoir 3.5" x 10"	1
34	Makeup Line	1
35	Mounting Clamps	2
36	1/2" Lock Washers	4
37	1/2" Nuts	4
38	Plate	2
39	Straight Fitting	1
40	90° Fitting	1
	3/4" Pipe Plug	2

\*For extended purge air dryers only.

**HEATER & THERMO. KIT  
109495 (12 V.)  
109496 (24 V.)**

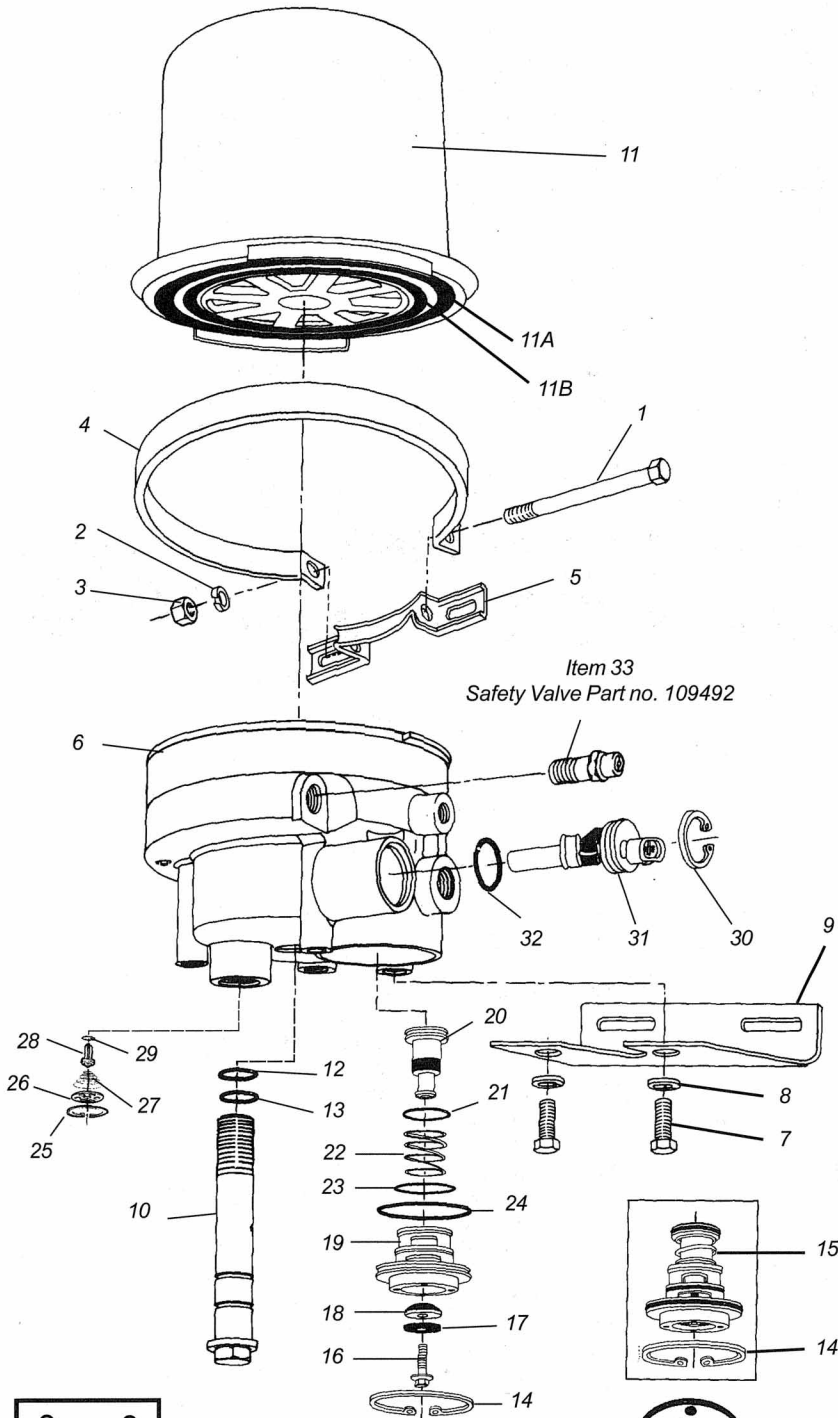
Item	Description	Qty.
30	Retaining Ring	1
31	Heater & Thermo Assly	1
32	O-Ring	1

**SERVICE PURGE VALVE KIT  
800404**

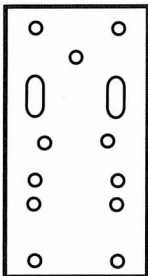
Item	Description	Qty.
14	Retaining Ring	1
15	Purge Valve Assembly	1
21	Quad-Ring	1
23	O-Ring	1
24	O-Ring	1

**DELIVERY CHECK VLV. KIT  
109494**

Item	Description	Qty.
25	Retaining Ring	1
26	Perforated Plate	1
27	Check Valve Spring	1
28	Check Valve	1
29	O-Ring	1



Item 33  
Safety Valve Part no. 109492



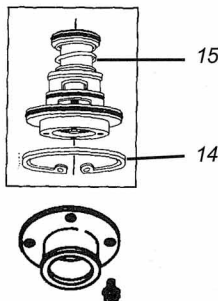
**UNIVERSAL MOUNTING PLATE**

Pc. No. 113209

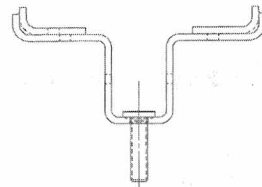
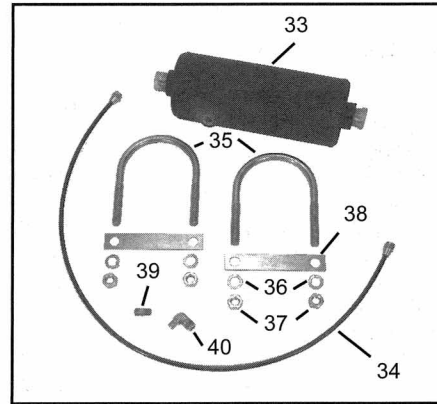
(Can be used to mount any air dryer to vehicle)

**Parts Not Available in Kits or Individually**

- Key 6 End Cover
- Key 19 Purge Valve Body



**Exhaust Cover 112609**  
(available as a separate item)



Bracket Pc. No. 109983 used on AD-IP Pc. Nos. 109500, 5001743 and 5001744

# MAINTENANCE KITS

AD-IP

CATALOG  
**08-A-17**

## WIRE HARNESS AND SPLICE KIT 109871

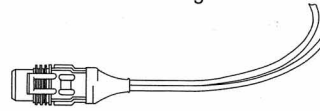
Qty.	Description
1	Wire Harness Assembly
2	Un-insulated Butt Splice Connector
1	1/4" Eyelet w/Heat Shrink Insulator
1	3/8" Eyelet w/Heat Shrink Insulator
2	2" Length Adhesive Lined Heat Shrink Tubing



Adhesive Lined Heat Shrink Tubing



Eyelet w/Heat Shrink Insulator



Wire Harness Assembly



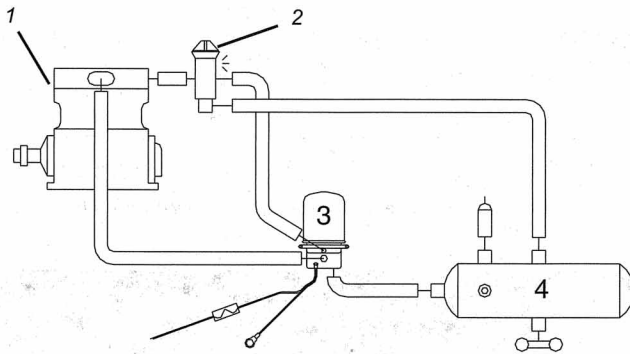
Un-insulated Butt Splice Connector

## SYSTEM APPLICATION & INSTALLATION INFORMATION

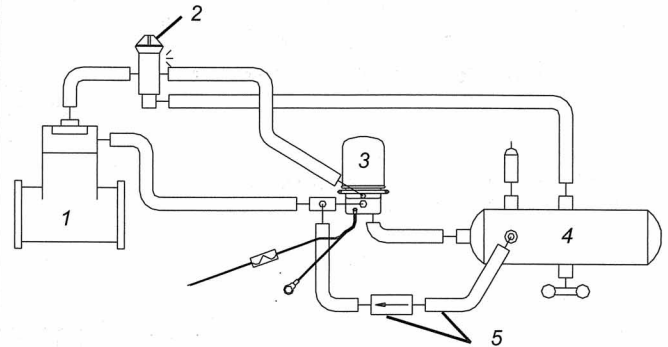
The AD-IP Air Dryer can be used in all the charging systems displayed below with the exception of the European style, Discharge Line Unloader system. Use the AD-9 Air Dryer shown on catalog page 08-A-31 for the discharge line unloader systems. Refer to Product bulletin Pro-08-12 for additional information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

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

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

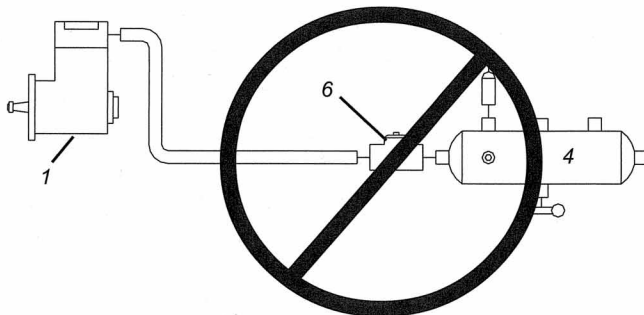


**Typical standard AD-IP Air Dryer Installation  
Holset E & QE Single Cylinder Compressor**



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

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



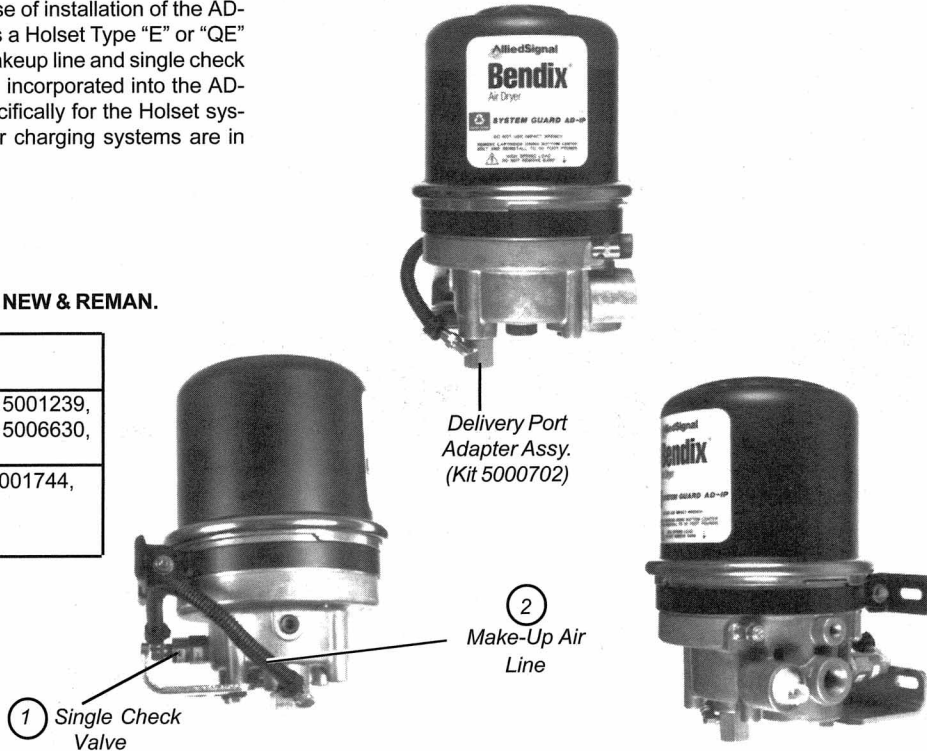
Key	Description
1	Compressor
2	Governor
3	AD-IP Air Dryer
4	Supply Res.
5	Single Check & Feed Back Line (Holset only)
6	Discharge Line Unloader Valve

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

Weight 27.5 lbs.  
 VMRS 13-010-033  
 Device Code 2415

**AD-IP O.E. PART NUMBER TO SERVICE NEW & REMAN.**

Service Pc. No.	Reman Pc. No.	O.E.M. Pc. No.
800067	5000709	5000708, 5000830, 5001239, 5001626, 5001736, 5006630, 5003975
800168	5001751	800248, 5001113, 5001744, 5002659, 5002662



ECON CHECK VALVE KIT 109499 consists of the following:

Item	Qty	Description
1	1	Single Check Valve
2	1	1/4" Tubing Assembly

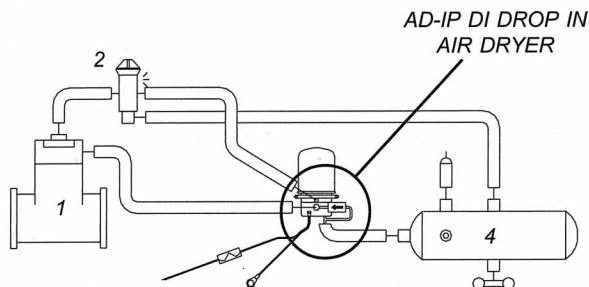
Service Pc. No.	Reman. Pc. No.	Supply Port	Delivery Port	Heater & Thermo. Volts-Watt	Comments
800067	5000709	" PT	" PT	12v - 90w	Notes 1, 2
800168	5001751	" PT	" PT	12v - 90w	Notes 2, 3

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  
 Note 3 - Includes Econ Check Valve Kit and NO mounting kit

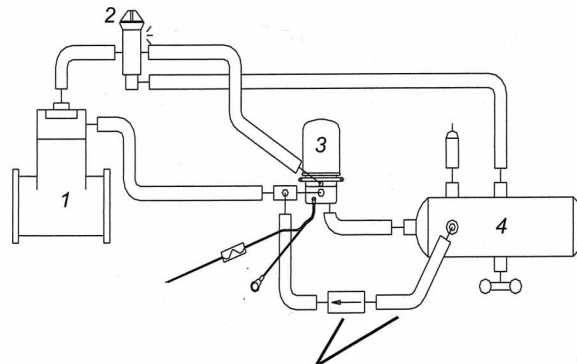
**AD-IP DROP IN SYSTEM APPLICATION & INSTALLATION INFORMATION**

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

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



**Holset Charging System w/Standard AD-IP Air Dryer**



*This Make Up line and single check valve INCORPORATED IN AD-IP DI*

Key	Description
1	Compressor
2	Governor
3	AD-IP Drop In Air Dryer
4	Supply Res.