



AIR DRYER APPLICATION GUIDELINE

The following Application Guideline is a point system that is calculated based on **Vehicle Configuration** and **Vocation Options**. Fill in points accordingly — on each line — and refer to **Page 2** for dryer selections. If a particular entry is not valid for an application, then enter **ZERO** (0) on that line. Refer to **Page 3** for example applications.

VEHICLE CONFIGURATION

POINTS

- 1. Vehicle is equipped with bulk offloading or central tire inflation. See Note 1
- 2. For every axle (tractor and trailer – including lifts): **Add 1.0 point** _____
- 3. For each non-steerable lift axle (additional points): **Add 1.0 point** _____
- 4. For each steerable lift axle (additional points): **Add 0.5 point** _____
- 5. Tractor and/or trailer is equipped with air suspension. **Add 0.5 point** _____

VOCATION OPTIONS (CHOOSE THE ONE THAT BEST FITS)

- 6. Vehicle is used as a city transit bus. See Note 2
- 7. Vehicle is used for pickup & delivery. { a) Non-fuel hauler: **Add 0.5 point**
b) Fuel hauler: **Add 1.0 point** _____
- 8. Vehicle is used for residential refuse. **Add 4.5 points** _____
- 9. Vehicle is used for rural or commercial refuse. **Add 1.0 point** _____
- 10. Vehicle is used as a dump truck or concrete mixer. **Add 1.0 point** _____
- 11. Vehicle is used for logging or construction. **Add 1.0 point** _____
- 12. Vehicle is used for line haul. — a) Single trailer **No Points:**
b) Pulling three (3) to five (5) axles on any trailer/dolly combination: **Subtract 1.5 points:**
c) Pulling six (6) or more axles on any trailer/dolly combination: **Subtract 2.5 points:** _____

Add lines 1-12 and use this value on **Page 2**

¹Vehicles equipped with either bulk offloading or central tire inflation are required to use two air dryers with a Bendix® EverFlow® controller assembly. No points need to be calculated. Refer to **Page 2** for proper dryer selection.

²Requires an Extended Purge version of the dryer (AD-9® EP, AD-9si™ EP, AD-IP® EP, AD-IS® EP). No points need to be calculated. Refer to **Page 2** for proper dryer selection.



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Application		Increasing Performance				Bendix® Air Dryers		
		Point Total	AD-SP®	AD-IP®, AD-9®, AD-9si™, AD-IS®, AD-RP™	AD-9® EP, AD-9si™ EP, AD-IP® EP, AD-IS® EP, AD-RP™ EP ⁷	Tandem Installed Dryers ⁴	Bendix® EverFlow® Assembly ⁵	
	Highway Travel Coach / RV	N/R		✓				
	City Transit Bus	N/R			✓			
	Air/Hydraulic	N/R	✓ ³	✓				
	School Bus City / Rural Route	N/R	✓ ³	✓				
	Fire Truck	2-6		✓				
		6.5-9			✓			
	Pick-up & Delivery	2-6	✓ ³	✓				
	Fuel Hauler (Non-Bulk)	6.5-9			✓			
	Offloading)	9.5-13				✓	✓	
	Line Haul	2-6	✓ ³	✓				
		6.5-9			✓			
	Rural and Commercial Refuse / Yard and Terminal Jockey	2-4		✓	✓			
	Residential Refuse (with and without Work Brake)	6.5-9			✓			
	Dump Truck / Concrete Mixer	2-6		✓				
		6.5-9			✓			
	Off-Highway / Construction / Loggers	2-6		✓				
		6.5-9			✓			
		9.5-13					✓	✓
	Bulk Offloading	N/R					✓	
	Central Tire Inflation	N/R					✓	
Reservoir Drainage Frequency			Check Monthly			Monthly / 4000 Miles		

Bendix® AD-9®/ AD-9si™ / AD-IP® / AD-IS® / AD-RP™ Air Dryers ⁶	Point Totals																
	2	3	4	5	6	6.5	7	8	9	9.5	10	11	12	13	14	15	16 or above
Standard Purge																	
Extended Purge																	
Tandem Installed Dryers																	
Bendix® EverFlow® Assembly																	

The application chart is for reference only. If your vehicle does not fall into these guidelines, contact Bendix Engineering or TechTeam at 1-800-AIR-BRAKE.

N/R – No Points Required – Application is not dependent on point totals.

³When selecting a Bendix® AD-SP® air dryer, note this dryer is intended for servicing low-demand air systems. For example, Line Haul applications are limited to single tandem axle trailers.

⁴Tandem dryers must be matched models (i.e. two Bendix® AD-IS® or two Bendix® AD-9® air dryers, etc.). Both dryers must be extended purge versions.

⁵There is no required compressor charge time or purge time. The operation is controlled through the Bendix® EverFlow® air dryer module.

⁶The Bendix® AD-9si™ air dryer is not available in tandem or EverFlow configurations.

⁷Consult Bendix Tech Team at 1-800-AIR-BRAKE (1-800-247-2725).

AIR DRYER APPLICATION GUIDELINE USAGE EXAMPLES

Example #1: Typical Line Haul Application

Vehicle Configuration

1. Not Applicable
2. Total number of all axles = **3 points**
3. Total number of non-steerable lift axles = **0 points**
4. Total number of steerable lift axles = **0 points**
5. Tractor is equipped with air suspension = **0.5 points**

A typical single axle, line haul vehicle:

- Air suspension.
- Three (3) axles total.

Vocation Options

- 6, 7, 8, 9, 10, 11 Not Applicable = **0 points**
12. Standard line-haul hauling single trailer = **0 points**

Total [3 + 0.5 = 3.5 points]

Selection choices include: Bendix® AD-SP®, AD-9®, AD-9si™, AD-IP®, AD-IS® or AD-RP™ air dryers.

Example #2: Line Haul Pulling Single Axle Double

Vehicle Configuration

1. Not Applicable
2. Total number of all axles = **5 points**
3. Total number of non-steerable lift axles = **0 points**
4. Total number of steerable lift axles = **0 points**
5. Tractor equipped with air suspension = **0.5 points**

A 4x2 line haul vehicle pulling:

- (2) single axle trailers
- (1) single axle dolly
- Tractor air suspension
- Five (5) axles total

Vocation Options

- 6, 7, 8, 9, 10, 11 Not Applicable = **0 points**
12. Vehicle is used for line haul (3-5 axles) = **-1.5 points**

Total [5 + 0.5 – 1.5 = 4 points]

Selection choices include Bendix AD-9, AD-9si, AD-IP, AD-IS or AD-RP air dryers.

NOTE: A Bendix AD-SP air dryer is not acceptable in this application.



Recommended Service Intervals for Bendix® Air Dryers

Air Usage	Typical Vehicle Vocation	Axles	Reservoir Drain Interval (whichever comes first)			Standard Desiccant Cartridge Replacement	PuraGuard® Oil Coalescing Desiccant Cartridge Replacement for Bendix® Air Dryers				
			Hours	Mileage	Time		AD-9®	AD-9si™	AD-IP®	AD-IS®	AD-RP™
Standard	Line haul, city delivery	5 or less	900	25,000	3 months	Every 3 years	Every 3 years				
Medium	Double trailer trains, light transit, light off-highway	8 or less	450	12,000	2 months	Every 2 years	Every 2 years				
High	Multiple trailer trains, city transit, heavy duty off-road	11 or less	300	6,000	1 month	Every year	Every year				

⁸Drain reservoirs and change the desiccant cartridge more frequently if more than just traces of moisture are found in any of the reservoirs.

The Bendix® PuraGuard® oil coalescing air dryer cartridge has an identical appearance to the standard air dryer cartridge, but contains oil coalescing media at the inlet of the desiccant bed. This coalescing media provides a much higher level of oil removal compared to the standard air dryer cartridge. The PuraGuard oil coalescing cartridge has all of the same functions as the standard cartridge and is used in applications where lower oil concentration levels are required.

IMPORTANT! When servicing, note that standard air dryer cartridges may be serviced with PuraGuard oil coalescing cartridges, however, PuraGuard oil coalescing air dryers or cartridges **MUST** only be serviced with like replacements.

For Bendix PuraGuard oil coalescing air dryer only: Preventive Maintenance is as easy as 1-2-3

Adhering to a preventive maintenance schedule is crucial to keeping a vehicle's air system clean and ensuring superior performance of all components that utilize system air— such as brakes, emissions equipment and automated manual transmissions. Depending on vocation, Bendix recommends a 1-, 2- or 3-year air dryer cartridge replacement on vehicles equipped with a Bendix® compressor.

For severe service application—such as residential refuse trucks or school buses—the air dryer cartridge should be replaced every year or 100,000 miles; for pick-up and delivery operations, or for double- and triple-trailer line haul trucks, every two years or 200,000 miles is the recommendation. Line-haul operations using a single trailer should swap the filter out every three (3) years or 300,000 miles. The recommended intervals for trucks equipped with non-Bendix® compressors are 6 months (50,000 miles), one year (100,000 miles) and two years (200,000 miles), respectively.

More frequent intervals may be required depending on a vehicle's age, its compressor condition, use of a non-Bendix compressor, the operating environment, the vehicle's vocation, and its usage. In conjunction with these guidelines, fleets can determine the functionality of their filters by checking for moisture in the air brake system monthly. If moisture is present, the air dryer cartridge may require replacement. Reference the Bendix Service Data Sheet of the specific air dryer for additional information. (Recommended intervals for trucks equipped with non-Bendix compressors are 6 months (50,000 miles), one year (100,000 miles) and two years (200,000 miles), respectively.)

