

Automotive & Powersports

THE FACTS ABOUT YOUR INTAKE & AIR FILTER

ISO 5011 Tested to Make Sure You Maximize Airflow While Still Protecting Your Engine.

Part Number:	Test Date:
Description:	Test Report #:
Vehicle Applications:	

TECHNICAL BULLETIN

There is a lot of misinformation in the marketplace. S&B publishes specific test results for each of our intakes & filters as shown below, so you can make an informed decision. Remember, improving your airflow is only good if your engine is still protected. That's the S&B difference!

FACT: S&B Flows	Better than Stock.	WATCH OUT: Some con

In tests performed in our climate controlled laboratory according to the ISO5011 Test Standard, S&B's intake kit (and filter) had significantly lower restriction (better airflow) than the stock intake system. See the graph on the next page.

WATCH OUT: Some competitors overstate airflow.

If they state that their filter will flow, let's say 1000 cfm, without stating at what restriction level, they are trying to mislead you.

Description	% S&B Flowed Better than	Test Conditions
	Stock (tested @cfm)	Barometric Pressure
S&B Intake w/ Cleanable Filter (Secondary Inlet - Open)		Airflow Setpoint
S&B Intake w/ Cleanable Filter		Relative Humidity
(Secondary Inlet - Closed)		Temperature
S&B Intake w/ Dry Filter	Million V	Type of Dust
(Secondary Inlet - Open		Batch #
S&B Intake w/ Dry Filter (Secondary Inlet - Closed)		Dust Feed Rate (grams/minute)

FACT: S&B Protects Your Engine

S&B Tests at the highest rated CFM for your vehicle when determining the efficienty rate (amount of dust the filter stops), so that we can be sure that your engine will be protected

Description	Tested @cfm,
Stock	
S&B Intake w/ Cleanable Filter	
S&B Intake w/ Dry Filter	

WATCH OUT: Some Competitors Use the Same Efficiency Rates for Multiple Part Numbers

Many send one filter off to a lab to be tested at a low cfm and then publish this efficiency rate for all of their part numbers

RESET FORM

Test #: 917 5R JM 8/22/2023
Filter #: KF-1087 S&B
Housing #: 75-5160 S&B



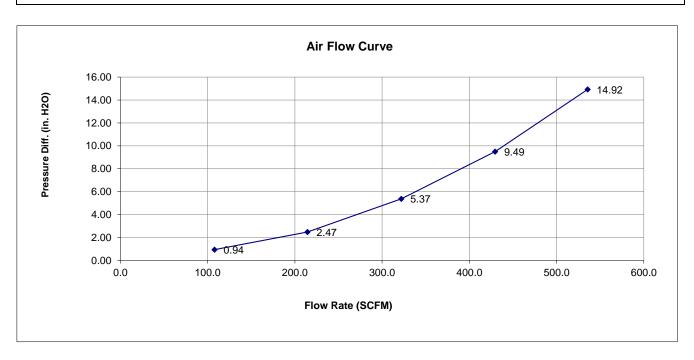
Date Code: 2023.08.16

Test Description: 75-5160 NO Box Plug, Proto Scoop, 85 PL, 96 grams, Restriction Test

Test Conditions

Barometric Pressure:28.70907 in. HgRelative Humidity:51 %Air Flow Type:SCFMTemperature:73 deg. FNumber of Pleats:85Pleat Depth:in.

Flow Direction:



Flow Rate	<u>Differential Pressure</u>
108	0.94
214	2.47
322	5.37
429	9.49
536	14.92

Test #: 917 6R JM 8/22/2023
Filter #: KF-1087 S&B
Housing #: 75-5160 S&b

db.



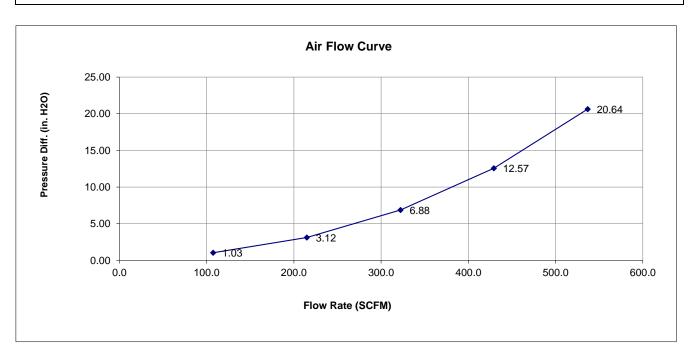
Test Description: 75-5160 with Box Plug, Proto Scoop, 85 PL, 96 grams, Restriction Test

Test Conditions

Barometric Pressure:28.70484 in. HgRelative Humidity:51 %Air Flow Type:SCFMTemperature:73 deg. FNumber of Pleats:85Pleat Depth:in.

Flow Direction:

Date Code: 2023.08.16



Flow Rate	<u>Differential Pressure</u>
107	1.03
215	3.12
322	6.88
429	12.57
537	20.64

Air Filter Full Life Efficiency Test Report

Test #: 917 7CE

Sample #: Filter #: KF-1087 Housing #: 75-5160 Date Code: 2023.08.16

Operator: JM Report Date: 8/22/2023 Filter Mfg.: S&B Housing Mfg.: S&B



Test Description: 75-5160 with Box Plug, KF-1087 85pl, 96g

Test Conditions

52 % **Barometric Pressure:** 28.699 in. Hg **Relative Humidity:** Type of Dust: 538 SCFM Air Flow Setpoint: A4 Coarse **Test Procedure:** CE Batch #: 14996C SCFM 73 deg. F Air Flow Type: Temperature: **Test Endpoint:** 10 in. H2O **Initial Add Rate:** NaN g/min **Number of Pleats:** 85 **Accumulative Add Rate:** 15.23 g/min Flow Direction:

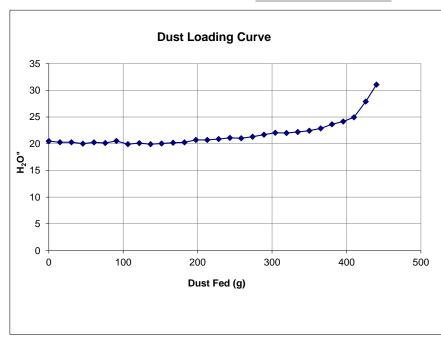
Pleat Depth: in.

Test Results

Initial Delta P 20.22 in. H2O **Accumulative Capacity:** 429.10 g **Test Time:** 28.97 min

	Initial	Accumulative)
		Kit	Blanket
Start		4128.00	584.48
End		4557.10	586.42
Gain		429.10	1.94
Efficiency		99.55%	

Standard Restriction Pressure Differential



Dust Loading Curve Data	
Dust Fed (g)	Pressure ("H2O)
0	20.454
14.894	20.266
30.387	20.271
45.693	20.008
60.665	20.257
75.774	20.132
90.883	20.518
106.248	19.905
121.605	20.106
136.65	19.901
151.588	20.034
167.04	20.182
182.266	20.258
197.614	20.695
212.851	20.703
228.152	20.868
243.317	21.084
258.529	21.021
273.841	21.299
289.098	21.683
304.189	22.043
319.424	21.999
334.553	22.185
349.965	22.429

Test #: 917 3R JM Sample #: 8/23/2023 Filter #: KF-1087D S&B S&B

Housing #: 75-5160 Date Code: 2023.08.16

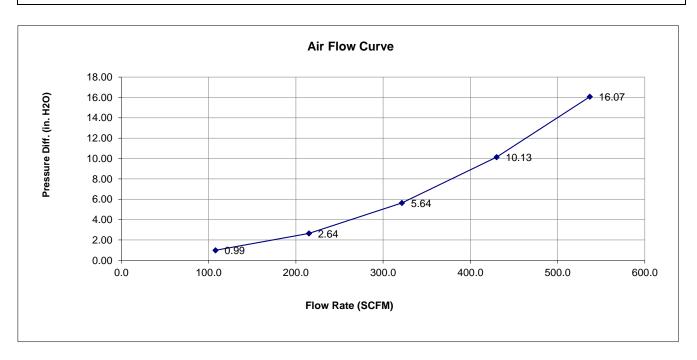


Test Description: 75-5160 NO Box Plug, KF-1087D 135pl, 15g Restriction Test

Test Conditions

Barometric Pressure: 28.71679 in. Hg **Relative Humidity:** 54 % Air Flow Type: Temperature: 74 deg. F SCFM **Number of Pleats:** 135 Pleat Depth: in.

Flow Direction:



Flow Rate	<u>Differential Pressure</u>
108	0.99
215	2.64
322	5.64
430	10.13
537	16.07

 Test #: 917 4R
 JM

 Sample #:
 8/23/2023

 Filter #: KF-1087D
 S&B

 Filter #: KF-1087D
 S&B

 Housing #: 75-5160
 S&B

 Date Code: 2023.08.16

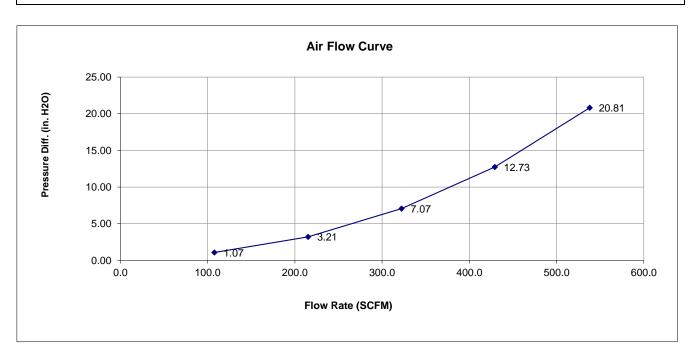


Test Description: 75-5160 with Box Plug, KF-1087D 135pl, 15g Restriction Test

Test Conditions

Barometric Pressure:28.71099 in. HgRelative Humidity:53 %Air Flow Type:SCFMTemperature:73 deg. FNumber of Pleats:135Pleat Depth:in.

Flow Direction:



Flow Rate	<u>Differential Pressure</u>
108	1.07
215	3.21
322	7.07
429	12.73
538	20.81

Air Filter Full Life Efficiency Test Report

Test #: 917 10CE Sample #: 10CE Filter #: KF-1087D Housing #: 75-5160 Date Code: 45156

Operator: EM Report Date: 8/22/2023 Filter Mfg.: S&B Housing Mfg.: S&B



Test Description: 75-5160 WITH BOX PLUG KF-1087D 135PL 15G

Test Conditions

Barometric Pressure: 28.765 in. Hg 538 SCFM Air Flow Setpoint: **Test Procedure:** CE SCFM Air Flow Type:

Test Endpoint: 10 in. H2O **Number of Pleats:** 135

Flow Direction:

Relative Humidity: 53 % Type of Dust: A4 COARSE Batch #: 14996C

Temperature: 75 deg. F **Initial Add Rate:** NaN g/min **Accumulative Add Rate:** 15.23 g/min

Pleat Depth: in.

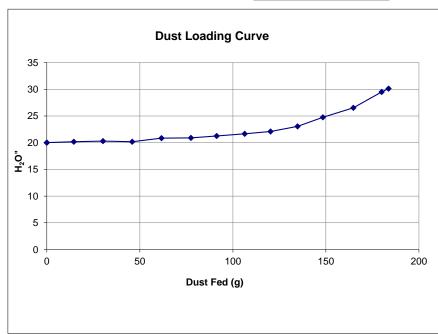
Test Results

Initial Delta P 20.07 in. H2O **Accumulative Capacity:**

180.30 g **Test Time:** 12.22 min

Initial Accumulative Blanket Kit 4004.20 591.82 Start 4184.50 End 592.30 180.30 0.48 Gain Efficiency 99.73%

> Standard Restriction Pressure Differential



Dust Loading Curve Data	
Dust Fed (g)	Pressure ("H2O)
0	20.012
14.498	20.178
30.187	20.295
45.865	20.164
61.63	20.857
77.452	20.893
91.266	21.242
106.341	21.658
120.222	22.094
134.733	23.055
148.372	24.751
164.759	26.534
179.967	29.499
183.681	30.125







 Test #: 917 1R
 EM

 Sample #: 1R
 8/22/2023

 Filter #: FORD BRONCO
 FORD

 Housing #: 2021 FORD BRONCO, 2.3L
 FORD



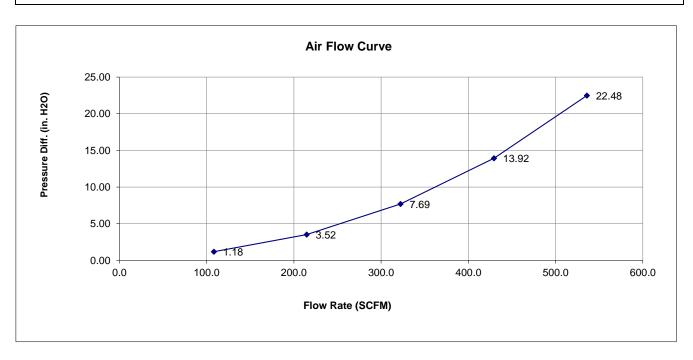
Date Code: 45154

Test Description: 2021 FORD BRONCO 2.3L, RESTRICTION TEST

Test Conditions

Barometric Pressure: 28.74469 in. Hg Relative Humidity: 53 %
Air Flow Type: SCFM Temperature: 73 deg. F
Number of Pleats: Pleat Depth: in.

Flow Direction:



Flow Rate	<u>Differential Pressure</u>
108	1.18
215	3.52
322	7.69
429	13.92
536	22.48

Air Filter Full Life Efficiency Test Report

Test #: 917 2CE

Sample #:

Filter #: Ford Bronco

Housing #: 2021 Ford Bronco 2.3L

Date Code: 2023.08.16

Test Description: 2021 Ford Bronco, 2.3L, CE Test

Operator: JM Report Date: 8/22/2023 Filter Mfg.: Ford Housing Mfg.: Ford



Test Conditions

Barometric Pressure: 28.728 in. Hg

538 SCFM Air Flow Setpoint: **Test Procedure:** CE Air Flow Type:

Test Endpoint:

Number of Pleats: Flow Direction:

SCFM 10 in. H2O

Relative Humidity: 52 % Type of Dust: A4 Coarse Batch #: 14996C Temperature: 73 deg. F **Initial Add Rate:** NaN g/min

Accumulative Add Rate: 15.23 g/min

Pleat Depth: in.

Test Results

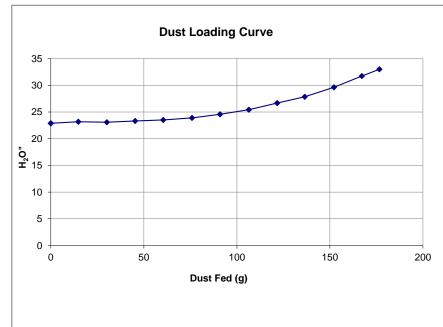
Initial Delta P 22.78 in. H2O **Accumulative Capacity:** 173.10 g **Test Time:** 11.64 min

Initial Accumulative Blanket Kit 3251.90 584.01

Start End 3425.00 584.43 173.10 0.42 Gain Efficiency 99.76%

Standard Restriction

Pressure Differential



Dust Loading Curve Data	
Pressure ("H2O)	
22.88	
23.169	
23.069	
23.321	
23.512	
23.887	
24.55	
25.421	
26.662	
27.853	
29.629	
31.738	
32.996	





