



# THE FACTS ABOUT YOUR INTAKE & AIR FILTER

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

**Part Number:** 75-5140

**Test Date:** 2020.07.22

**Description:** Restriction, C&E

**Test Report #:** 806

**Vehicle Applications:** 2020 Ford F-250, F350, 6.7L Diesel

## 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 39.05% Better than Stock.**

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 Stock (tested @ 580 cfm)
S&B Intake w/ Cleanable Filter (Secondary Inlet - Open)	39.05%
S&B Intake w/ Cleanable Filter (Secondary Inlet - Closed)	34.91%
S&B Intake w/ Dry Filter (Secondary Inlet - Open)	37.47%
S&B Intake w/ Dry Filter (Secondary Inlet - Closed)	33.21%

Test Conditions	
Barometric Pressure	28.7 inHg
Airflow Setpoint	580 CFM
Relative Humidity	52%
Temperature	69 F
Type of Dust	A4 Coarse
Batch #	14057C
Dust Feed Rate (grams/minute)	16.42

**FACT: S&B Protects Your Engine**

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

Description	Efficiency Rate (Tested @ 580 cfm)
Stock	99.21%
S&B Intake w/ Cleanable Filter	99.42%
S&B Intake w/ Dry Filter	99.54%

**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

# Air Filter Restriction Test Report

Test #: 806  
Sample #: -02R  
Filter #: KF-1050  
Housing #:  
Date Code: 2020.07.21

JM  
7/23/2020



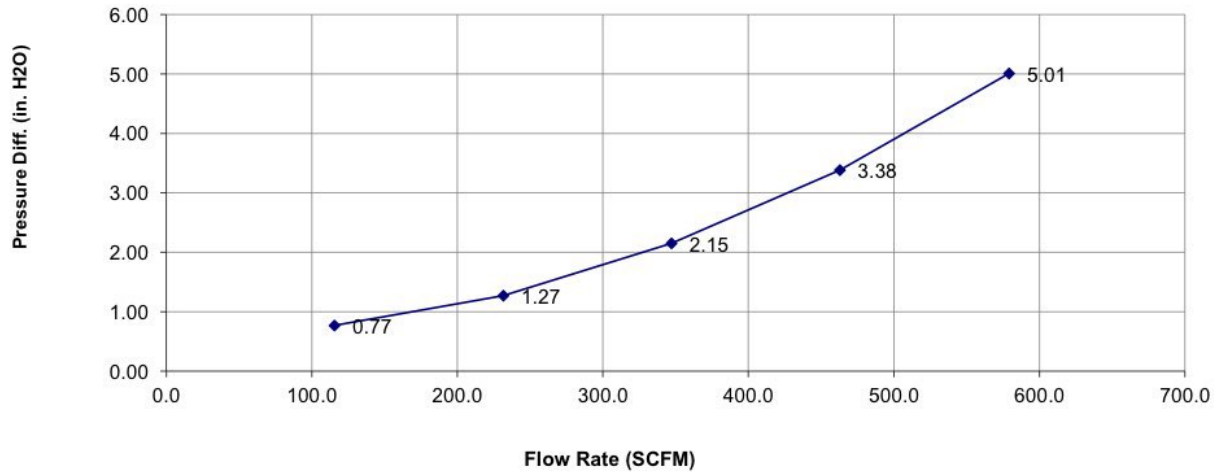
Test Description: 75-5140 with KF-1050, without Box Plug, without MAF Sensor

## Test Conditions

Barometric Pressure: 28.69513 in. Hg  
Air Flow Type: SCFM  
Number of Pleats:  
Flow Direction:

Relative Humidity: 55 %  
Temperature: 70 deg. F  
Pleat Depth: in.

## Air Flow Curve



## Air Flow Curve Data

<u>Flow Rate</u>	<u>Differential Pressure</u>
116	0.77
232	1.27
347	2.15
463	3.38
579	5.01

# Air Filter Restriction Test Report

Test #: 806  
Sample #: -01R  
Filter #: KF-1050  
Housing #:  
Date Code: 2020.07.21

JM  
7/23/2020



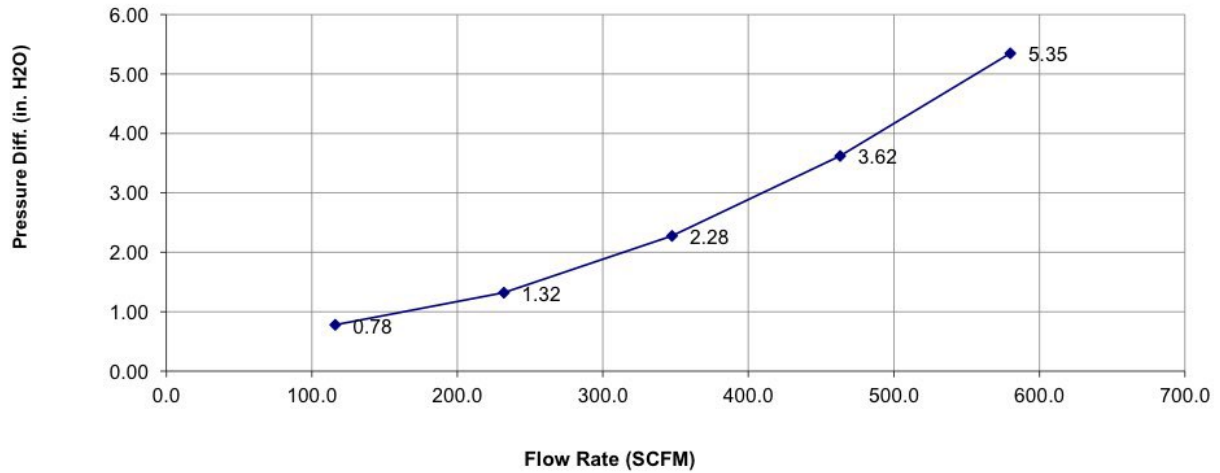
Test Description: 75-5140 with KF-1050, with Box Plug, without MAF Sensor.

## Test Conditions

Barometric Pressure: 28.70413 in. Hg  
Air Flow Type: SCFM  
Number of Pleats:  
Flow Direction:

Relative Humidity: 55 %  
Temperature: 70 deg. F  
Pleat Depth: in.

## Air Flow Curve



## Air Flow Curve Data

<u>Flow Rate</u>	<u>Differential Pressure</u>
116	0.78
232	1.32
348	2.28
463	3.62
580	5.35



# Air Filter Restriction Test Report

Test #: 806  
Sample #: -04R  
Filter #: KF-1050D  
Housing #:  
Date Code: 2020.07.21

JM  
7/23/2020



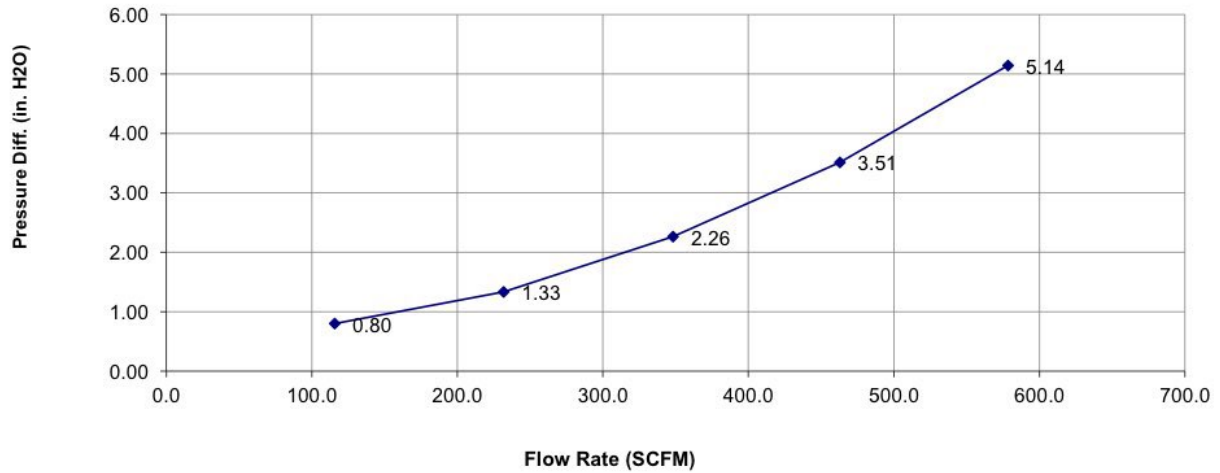
Test Description: 75-5140, with KF-1050D, without Box Plug, without MAF Sensor

## Test Conditions

Barometric Pressure: 28.68174 in. Hg  
Air Flow Type: SCFM  
Number of Pleats:  
Flow Direction:

Relative Humidity: 54 %  
Temperature: 70 deg. F  
Pleat Depth: in.

## Air Flow Curve



## Air Flow Curve Data

<u>Flow Rate</u>	<u>Differential Pressure</u>
116	0.80
232	1.33
348	2.26
463	3.51
579	5.14

# Air Filter Restriction Test Report

Test #: 806  
Sample #: -03R  
Filter #: KF-1050D  
Housing #:  
Date Code: 2020.07.21

JM  
7/23/2020



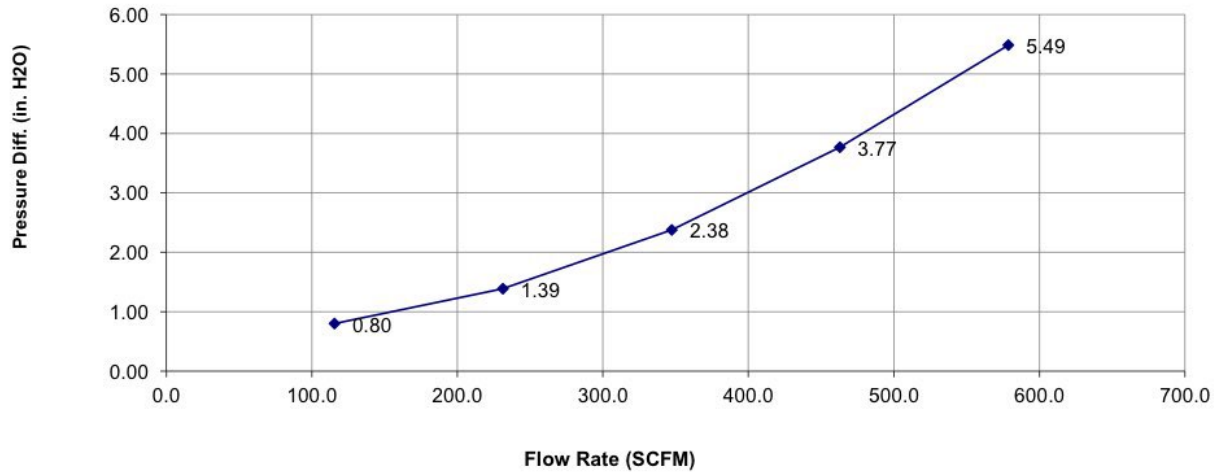
Test Description: 75-5140, with KF-1050D, with Box Plug, without MAF Sensor

## Test Conditions

Barometric Pressure: 28.68532 in. Hg  
Air Flow Type: SCFM  
Number of Pleats:  
Flow Direction:

Relative Humidity: 54 %  
Temperature: 70 deg. F  
Pleat Depth: in.

## Air Flow Curve



## Air Flow Curve Data

<u>Flow Rate</u>	<u>Differential Pressure</u>
116	0.80
231	1.39
347	2.38
463	3.77
579	5.49



# Air Filter Restriction Test Report

Test #: 803  
Sample #: 1  
Filter #: STOCK  
Housing #: STOCK  
Date Code: 43938

BL  
4/17/2020  
FORD  
FORD



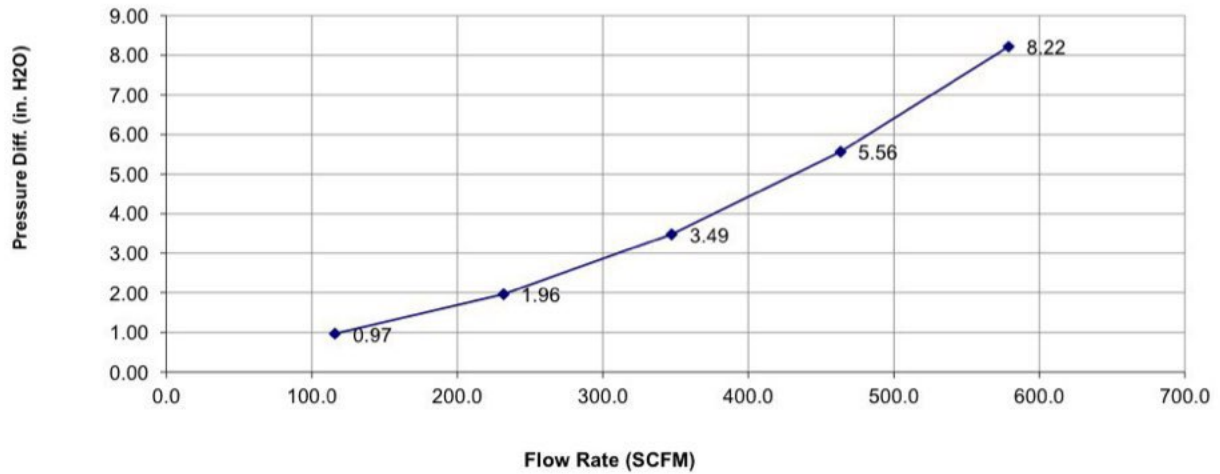
Test Description: 2020 FORD POWERSTROKE STOCK INTAKE

### Test Conditions

Barometric Pressure: 28.83342 in. Hg  
Air Flow Type: SCFM  
Number of Pleats:  
Flow Direction:

Relative Humidity: 35 %  
Temperature: 72 deg. F  
Pleat Depth: in.

### Air Flow Curve



### Air Flow Curve Data

<u>Flow Rate</u>	<u>Differential Pressure</u>
116	0.97
232	1.96
347	3.49
463	5.56
579	8.22



# Air Filter Full Life Efficiency Test Report

**Test #:** 803  
**Sample #:** 2  
**Filter #:** STOCK  
**Housing #:** STOCK  
**Date Code:** 43938

**Operator:** BL  
**Report Date:** 4/17/2020  
**Filter Mfg.:** FORD  
**Housing Mfg.:** FORD



**Test Description:** 2020 FORD POWERSTROKE STOCK INTAKE

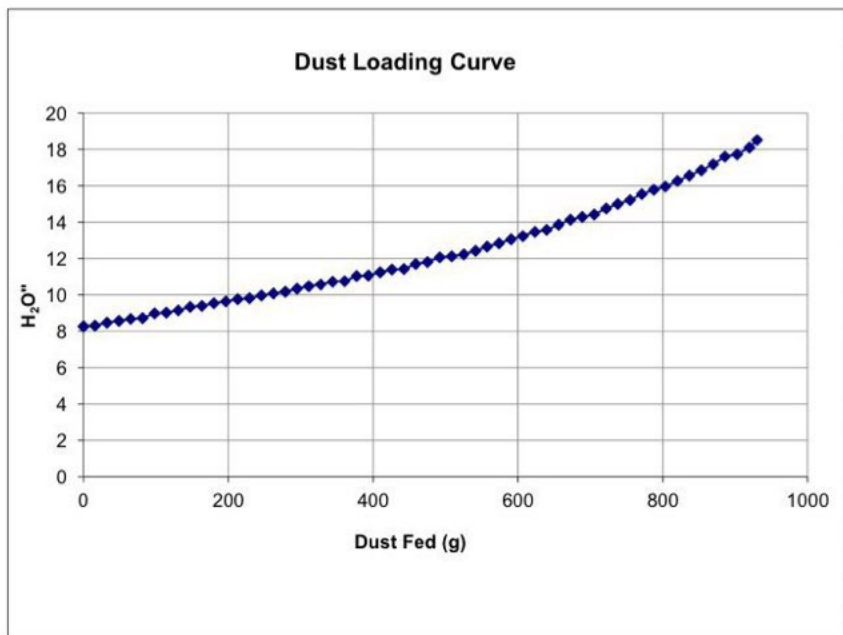
Test Conditions			
<b>Barometric Pressure:</b>	28.823 in. Hg	<b>Relative Humidity:</b>	44 %
<b>Air Flow Setpoint:</b>	0 SCFM	<b>Type of Dust:</b>	
<b>Test Procedure:</b>	FICIENCY	<b>Batch #:</b>	
<b>Air Flow Type:</b>	SCFM	<b>Temperature:</b>	66 deg. F
<b>Test Endpoint:</b>	10 in. H2O	<b>Initial Add Rate:</b>	NaN g/min
<b>Number of Pleats:</b>		<b>Accumulative Add Rate:</b>	0 g/min
<b>Flow Direction:</b>		<b>Pleat Depth:</b>	in.

Test Results			
<b>Initial Delta P</b>	8.16 in. H2O	<b>Accumulative Capacity:</b>	884.40 g
		<b>Test Time:</b>	56.69 min

	Initial		Accumulative	
		Blanket		Blanket
Start			4010.50	589.02
End			4894.90	596.07
Gain			884.40	7.05
Efficiency			99.21%	

- Standard Restriction
- Pressure Differential



Dust Loading Curve Data	
Dust Fed (g)	Pressure ("H2O)
0	8.267
15.94	8.317
32.468	8.475
48.835	8.576
65.115	8.684
81.679	8.716
98.027	8.976
114.255	9.019
130.591	9.144
147.053	9.338
163.54	9.397
180.041	9.54
196.4	9.64
212.969	9.762
229.066	9.817
245.48	9.969
262.109	10.076
278.485	10.175
294.756	10.343
311.036	10.469
327.481	10.572
344.087	10.727
360.371	10.753
377.106	11.03