

#### Automotive & Powersports THE FACTS ABOUT YOUR INTAKE & AIR

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

Part Number: 75-5050, 75-5050D Description: Performance Intake Kit & Filter Vehicle Applications: 2009-2010 Ford F-150, Raptor 5.4L **Test Date:** 05/17/17 **Test Report #:** 1, 2, 3, 4, 6, 7, 8, 9

#### **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 36.84% 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 over state airflow.

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

	· · · · · · · · · · · · · · · · · · ·
Description	% S&B Flowed Better than Stock (tested @ 381 cfm)
S&B Intake w/ Cleanable Filter (Secondary Inlet - Open)	36.84%
S&B Intake w/ Cleanable Filter (Secondary Inlet - Closed)	11.00%
S&B Intake w/ Dry Filter (Secondary Inlet - Open)	34.29%
S&B Intake w/ Dry Filter (Secondary Inlet - Closed)	7.66%

#### **TEST CONDITIONS**

Barometric Pressure	28.98
Airflow Setpoint	381 cfm
Relative Humidity	50
Temperature	70.2F
Type of Dust	ISO Coarse
Batch #	13240C
Dust Feed Rate (grams/minute)	10.79

## 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.

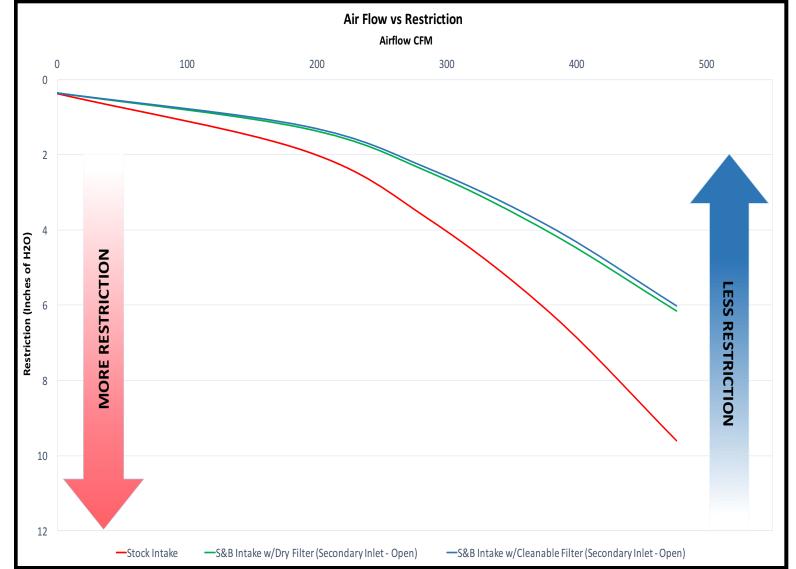
Description	Efficiency Rate (tested @ 381 cfm)	
Stock	99.69%	
S&B Intake w/ Cleanable Filter	99.28%	
S&B Intake w/ Dry Filter	99.56%	

#### 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.



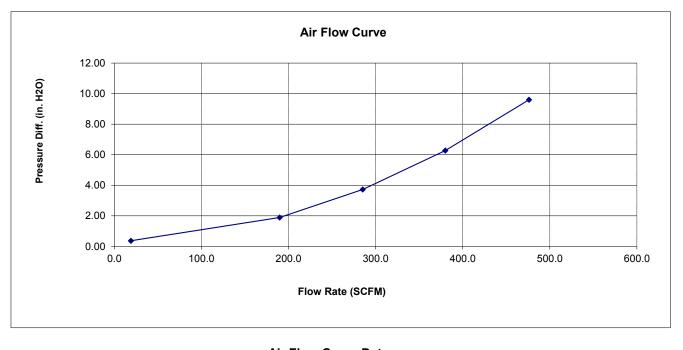


Test #: 455 Sample #: 1 Filter #: FA-1883 Housing #: Date Code: Operator: SD Report Date: 5/17/2017 Filter Mfg.: Housing Mfg.:



Test Description: STOCK INTAKE AND FILTER, NO SENSORS, FILTER# FA-1883

Test Conditions			
Barometric Pressure: Air Flow Type: Number of Pleats:	28.8833 in. Hg SCFM	Relative Humidity: Temperature: Pleat Depth:	49 % 68 deg. F in.
Number of Pleats: Flow Direction:		Pleat Depth:	in.



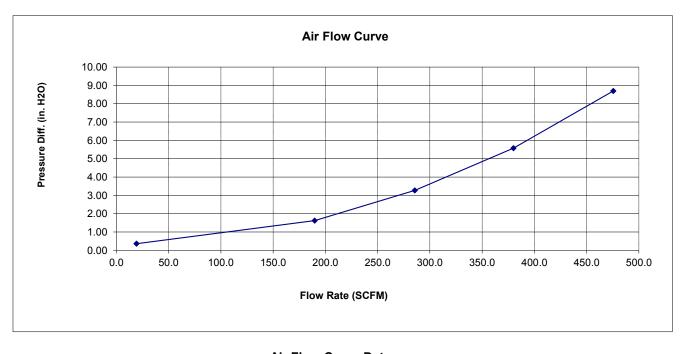
Air Flow Curve Data				
Flow Rate Differential Pressur				
19	0.37			
190	1.89			
285	3.72			
380	6.27			
476	9.60			

Operator: SD Report Date: 5/17/2017 Filter Mfg.: Housing Mfg.:



Test Description: 75-5050 PRODUCTION KIT, NO SENSOR, PLUG INSTALLED, KF-1035

Test Conditions				
Barometric Pressure: Air Flow Type: Number of Pleats: Flow Direction:	SCFM	Relative Humidity: Temperature: Pleat Depth:	49 % 69 deg. F in.	



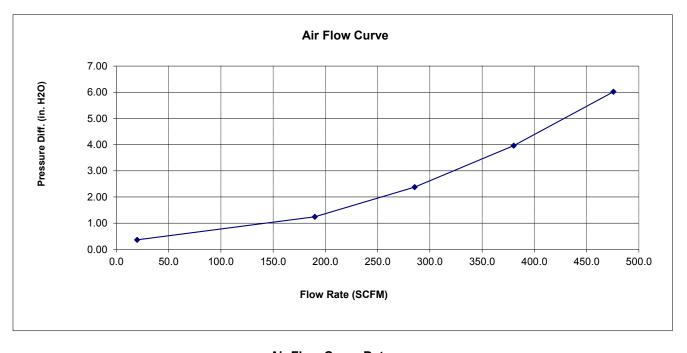
Air Flow Curve Data				
Flow Rate Differential Pressur				
19	0.36			
190	1.63			
286	3.27			
380	5.58			
476	8.70			

Operator: SD Report Date: 5/17/2017 Filter Mfg.: Housing Mfg.:



Test Description: 75-5050 PRODUCTION KIT, NO SENSOR, PLUG REMOVED, KF-1035

Test Conditions				



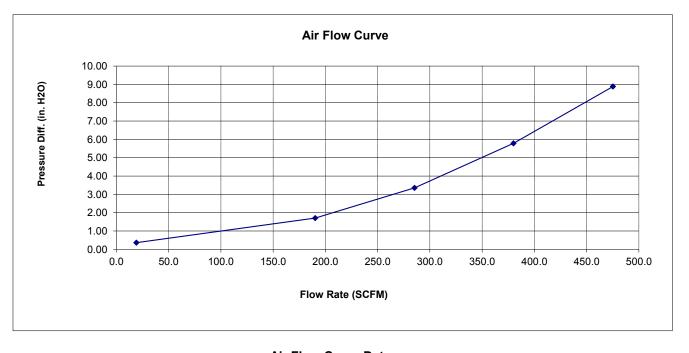
Air Flow Curve Data				
Flow Rate Differential Pressur				
20	0.36			
190	1.24			
285	2.38			
380	3.96			
476	6.02			

Operator: SD Report Date: 5/17/2017 Filter Mfg.: Housing Mfg.:



Test Description: 75-5050 PRODUCTION KIT, NO SENSOR, PLUG INSTALLED, KF-1035D

Test Conditions				
Barometric Pressure:	28.81397 in. Hg	Relative Humidity:	48 %	
Air Flow Type:	SCFM	Temperature:	69 deg. F	
Number of Pleats: Flow Direction:		Pleat Depth:	in.	



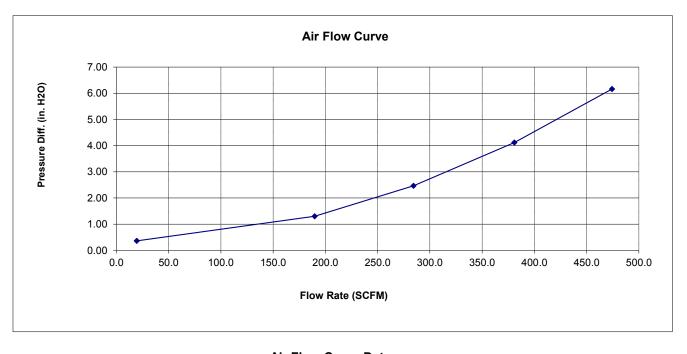
Air Flow Curve Data			
Flow Rate	Differential Pressure		
19	0.36		
190	1.70		
285	3.35		
380	5.79		
475	8.88		

Operator: SD Report Date: 5/17/2017 Filter Mfg.: Housing Mfg.:



Test Description: 75-5050 PRODUCTION KIT, NO SENSOR, PLUG REMOVED, KF-1035D

Test Conditions			
0711 in. Hg CFM	Relative Humidity: Temperature: Pleat Depth:	48 % 69 deg. F in.	
	0711 in. Hg	0711 in. Hg Relative Humidity: CFM Temperature:	



Air Flow Curve Data				
Flow Rate	Differential Pressure			
20	0.36			
190	1.30			
284	2.47			
381	4.12			
474	6.16			

#### Air Filter Full Life Efficiency Test Report

Test #: 455 Sample #: 2 Filter #: FA-1883 Housing #: Date Code: Operator: SD Report Date: 5/17/2017 Filter Mfg.: Housing Mfg.:

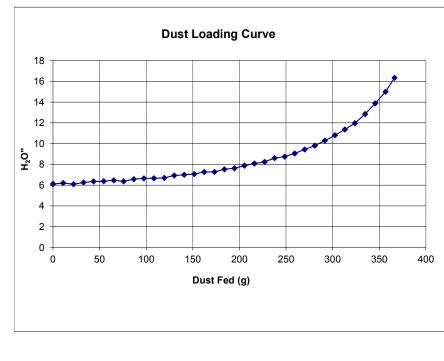


Test Description: STOCK INTAKE AND FILTER, NO SENSOR, FILTER# FA-1883

		Tes	t Condition	S			
Barometric Pressure:	28.874 in. Hg			Relative	Humidity:	49	%
Air Flow Setpoint:	381 SCFM			Ту	pe of Dust:	A4 COARSE	
Test Procedure:					Batch #:	13240C	
Air Flow Type:	SCFM			Ter	mperature:	68	deg. F
Test Endpoint:	10 in. H2O			Initial	Add Rate:	NaN	g/min
Number of Pleats:			А	ccumulative	Add Rate:	10.79	g/min
Flow Direction:				PI	leat Depth:		in.
Initial Delta P	6.22 in. H2O	Accumulative Capacity: 366.20 g Test Time: 33.92 n			•		
		Initial	Initial Accumulative				
			Blanket		Blanket		
	Start			4674.30	154.53		
	End			5040.50			
	Gain			366.20	1.14		
	Efficiency			99.69%			

Standard Restriction

Pressure Differential



Dust Loading Curve Data					
Dust Fed (g)	Pressure ("H2O)				
0	6.102				
10.836	6.209				
21.957	6.096				
32.789	6.256				
43.547	6.358				
54.453	6.387				
65.211	6.467				
75.895	6.364				
86.635	6.58				
97.512	6.655				
108.25	6.663				
119.334	6.697				
130.009	6.94				
140.808	7				
151.539	7.07				
162.201	7.271				
173.218	7.284				
183.871	7.524				
194.642	7.633				
205.292	7.88				
216.024	8.085				
226.944	8.239				
237.687	8.61				
248.591	8.753				

#### Air Filter Full Life Efficiency Test Report

Operator: SD Report Date: 5/17/2017 Filter Mfg.: Housing Mfg.:

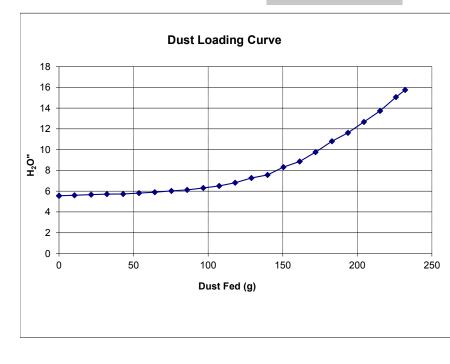


Test Description: 75-5050 PRODUCTION KIT, NO SENSOR, PLUG INSTALLED, KF-1035D

		Tes	t Condition	s			
Barometric Pressure:	28.805 in. Hg			Relative	Humidity:	48	%
Air Flow Setpoint:	381 SCFM			Ту	be of Dust:	A4 COARSE	
Test Procedure:					Batch #:	13240C	
Air Flow Type:	SCFM			Ter	nperature:	68	deg. F
Test Endpoint:	10 in. H2O			Initial	Add Rate:	NaN	g/min
Number of Pleats:			Α	ccumulative	Add Rate:	10.79	g/min
Flow Direction:				PI	eat Depth:		in.
Initial Delta P	5.74 in. H2O	Test Results Accumulative Capacity: 230.30 g					
		Test Time:				21.55	min
		Initial Accumulative					
			Blanket		Blanket		
	Start			5398.70	157.84		
	End			5629.00			
	Gain			230.30	1.01		
	Efficiency			99.56%			

Standard Restriction

C Pressure Differential



Dust Loading Curve Data					
Dust Fed (g)	Pressure ("H2O)				
0	5.561				
10.394	5.606				
21.544	5.667				
32.106	5.711				
43.026	5.731				
53.645	5.821				
64.261	5.896				
75.38	6.021				
85.966	6.118				
96.772	6.31				
107.36	6.509				
118.143	6.817				
129.039	7.272				
139.805	7.566				
150.495	8.314				
161.37	8.855				
172.012	9.761				
182.975	10.804				
193.707	11.624				
204.448	12.673				
215.227	13.727				
225.898	15.061				
232.114	15.751				

#### Air Filter Full Life Efficiency Test Report

 Test #:
 455

 Sample #:
 9

 Filter #:
 KF-1035

 Housing #:
 75-5050

 Date Code:

Operator: SD Report Date: 5/17/2017 Filter Mfg.: Housing Mfg.:

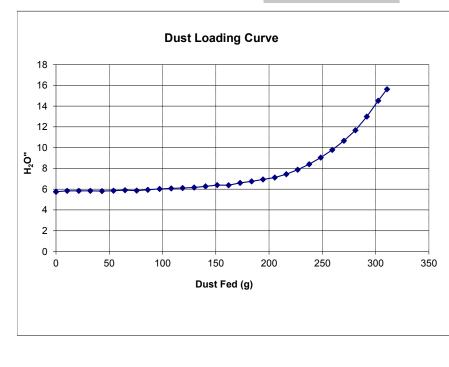


Test Description: 75-5050 PRODUCTION KIT, NO SENSOR, PLUG INSTALLED, KF-1035

		Tes	t Condition	IS			
Barometric Pressure:	28.777 in. Hg			Relative	Humidity:	49	%
Air Flow Setpoint:	381 SCFM			Тур	be of Dust:	A4 COARSE	
Test Procedure:					Batch #:	13240C	
Air Flow Type:	SCFM			Ter	nperature:	68	deg. F
Test Endpoint:	10 in. H2O			Initial	Add Rate:		g/min
Number of Pleats:			4	ccumulative	Add Rate:	10.79	g/min
Flow Direction:				PI	eat Depth:		in.
Initial Delta P	5.89 in. H2O	Test Results Accumulative Capacity: Test Time:			309.10 28.83	•	
		Initial Accumulative					
			Blanket		Blanket		
	Start			5432.50	143.93		
	End			5741.60			
	Gain			309.10	2.25		
	Efficiency			99.28%			

Standard Restriction

Pressure Differential



Dust Loading Curve Data				
Dust Fed (g)	Pressure ("H2O)			
0	5.753			
10.441	5.838			
21.48	5.842			
32.232	5.836			
43.189	5.811			
53.99	5.851			
64.838	5.906			
75.709	5.863			
86.207	5.939			
97.211	6.028			
108.138	6.076			
118.871	6.113			
129.699	6.155			
140.384	6.267			
151.292	6.396			
161.98	6.38			
172.853	6.604			
183.632	6.748			
194.316	6.942			
205.359	7.125			
216.159	7.437			
226.841	7.873			
237.65	8.402			
248.447	9.047			





















