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**SAE J1141 JUL87**

## **Air Cleaner Elements**

SAE Information Report  
Revised July 1987

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400 Commonwealth Drive, Warrendale, PA 15096

## HIGHWAY VEHICLE REPORT

SAE J1141

Issued June 1977  
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Supersedes J1141

### Ø AIR CLEANER ELEMENTS

Over the past several years many differently sized dry-type air cleaner elements have been manufactured to service the numerous makes and models of United States domestic passenger cars and light trucks. This has led to inventory and stock control inefficiencies that affect the motoring public, the automobile manufacturers, and the air cleaner producers. Currently, there are hundreds of different air cleaner elements required to service these vehicles.

The SAE Air Cleaner Test Code Subcommittee, recognizing the need for standardization of air cleaners has compiled a list of the 25 most used round type and the most used panel type elements. Automotive engineers responsible for the design of engine air induction systems on new applications are encouraged to select a dry-type air cleaner element from these lists. It is expected that by adhering to this recommendation that the currently most popular elements will be chosen for new applications to eliminate further proliferation.

A periodic review will be made by the Air Cleaner Test Code Subcommittee to revise this listing, based on changes in sales volume rating for these and other models used on United States domestic production vehicles.

Underhood space limitations, available air cleaner housings and engine induction air requirements dictate the choice of the proper element to the automotive engineer. After these general parameters are established refer to one of the tables.

1. **SELECTION PROCEDURE:** The air cleaner elements have been arranged in order of descending sales volume popularity in the following listings. The table includes the information on nominal height, inside diameter and outside diameter for the round elements and the nominal length, width, and height for the panel elements. The exact dimensions, tolerances, seal configurations, general construction and filtration characteristics information on these elements may be obtained from the air cleaner manufacturers.

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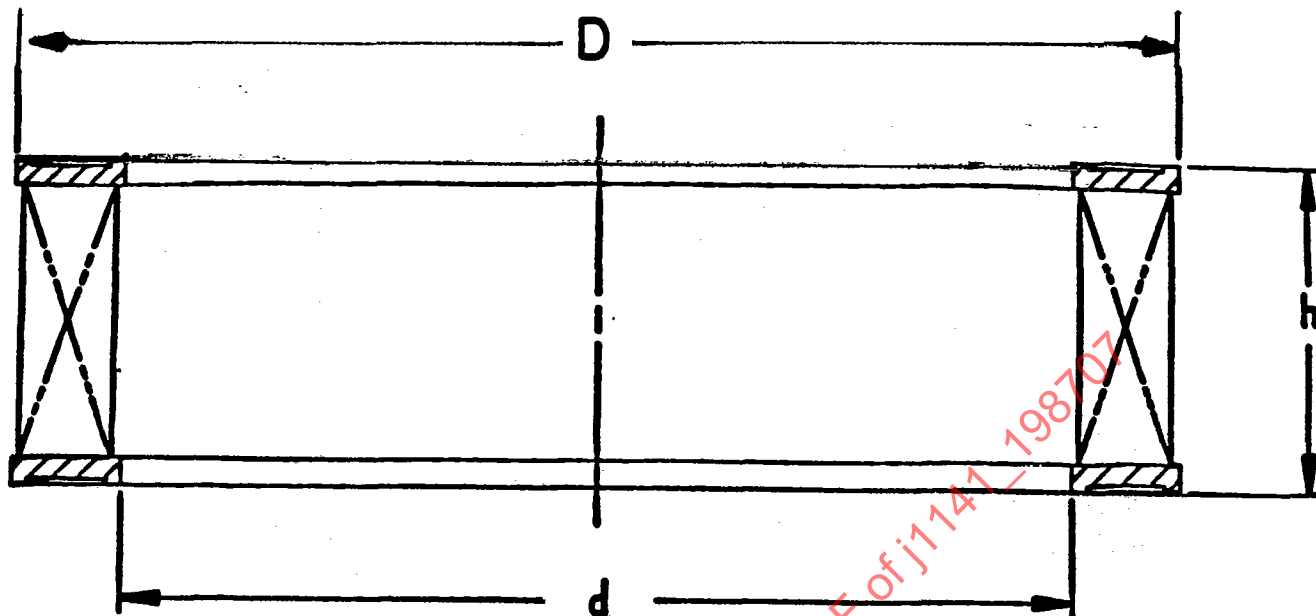
## 1. (Continued):

- (1) By referring to either listing, choose an appropriate size element for the application.
- (2) If more than one element appears to fulfill the requirements, then choose the most popular.
- (3) Get all necessary information and assistance to complete the necessary design details by contacting the air cleaner element manufacturers.

NOTE: The higher popularity ratings are based on physical dimensions and should take precedence only after it has been determined that the construction, materials, and functional characteristics satisfy the performance requirements.

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## AIR CLEANER ELEMENTS - ROUND TYPE

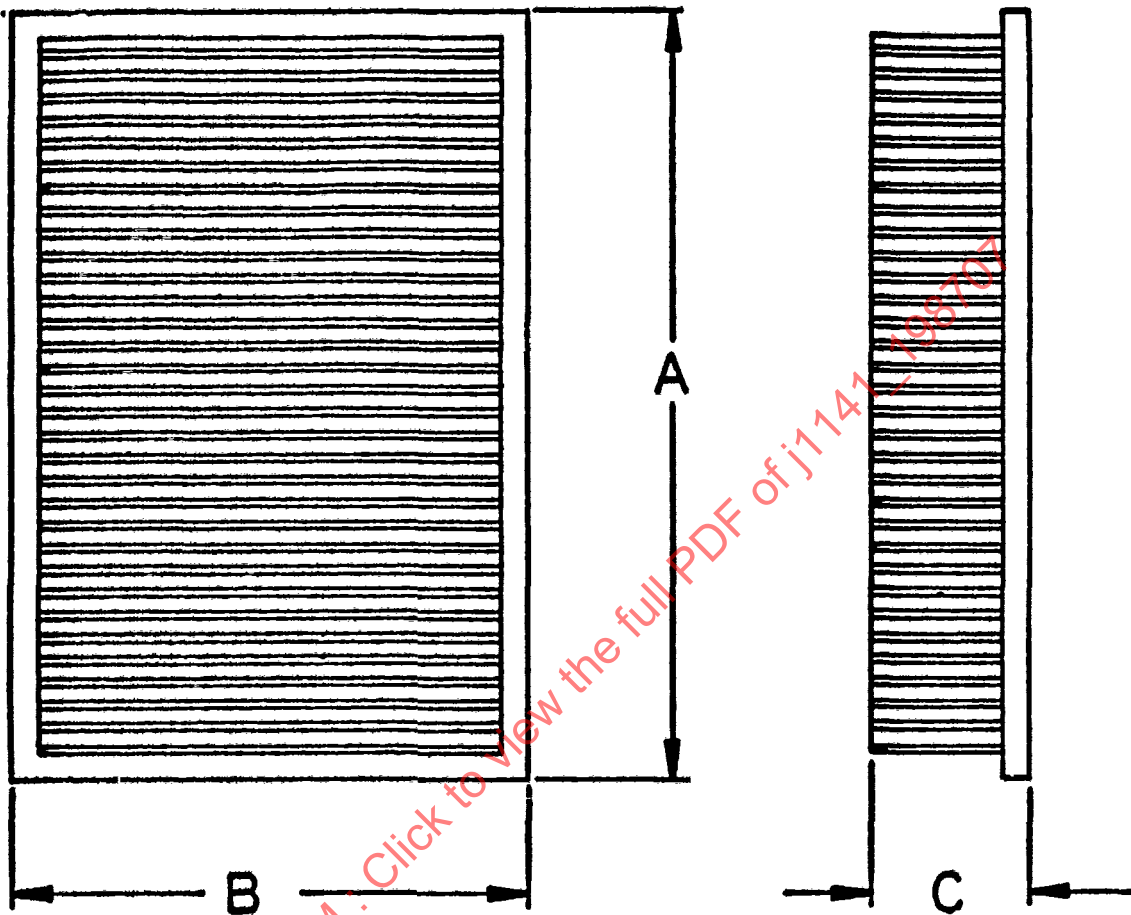


Volume Popularity Rating	Height-h		Inside Dia-d		Outside Dia-D	
	mm	in	mm	in	mm	in
1	88.0	3.46	249.0	9.82	306.0	12.04
2	66.5	2.62	230.0	9.04	286.0	11.26
3	70.0	2.75	191.5	7.54	248.0(T)	9.76(T)
					262.0(B)	10.30(B)
4	62.5	2.46	249.0	9.82	306.0	12.04
5	90.0	3.53	208.0	8.20	247.0	9.74
6	77.0	3.04	295.0	11.62	351.5	13.84
7	49.0	1.92	208.0	8.20	247.0	9.74
8	55.0	2.17	227.0	8.95	266.5	10.49
9	58.5	2.30	219.0	8.62	258.0	10.16
10	71.0	2.78	282.5	11.12	339.0	13.34
11	54.0	2.12	244.0	9.62	283.5	11.16
12	57.5	2.26	202.0	7.96	241.0	9.50
13	77.0	3.04	164.5	6.48	204.0	8.02
14	102.0	4.03	295.0	11.61	351.5	13.84
15	69.5	2.74	280.5	11.04	319.5	12.58
16	82.0	3.22	168.5	6.63	207.5	8.17
17	72.0	2.82	208.0	8.20	247.0	9.47
18	139.0	5.46	249.0	9.82	306.0	12.04
19	49.0	1.92	226.5	8.92	266.0	10.46
		(OVAL)	146.0	5.75	185.0	7.28
20	54.0	2.12	231.0	9.09	270.0	10.63
		(OVAL)	194.0	7.64	233.0	9.17
21	60.5	2.38	202.0	7.94	262.0	10.31
22	63.0	2.49	176.0	6.93	216.0	8.50
23	63.5	2.50	287.5	11.32	326.0	12.85
24	66.0	2.62	275.0	10.84	314.5	12.38
25	44.5	1.75	229.0	9.02	292.0	11.51

(T) - TOP

(B) - BOTTOM

## AIR CLEANER ELEMENTS - PANEL TYPE



Volume Popularity Rating	Length-A		Width-B		Height-C	
	mm	in	mm	in	mm	in
1	205.0	8.07	133.5	5.25	41.0	1.62
2	334.0	13.15	133.5	5.25	41.0	1.62
3	273.0	10.75	133.5	5.25	41.0	1.62
4	271.0	10.65	159.0	6.27	36.0	1.42
5	212.0	8.36	201.0	7.90	57.0	2.27