

# turbo® Precleaners Recommendations for Heavy Equipment

## Used in Construction, Mining, Logging, Municipal and Industrial Applications

In order to accurately determine the proper turbo® Precleaner to use with any specific make or model of a diesel or gasoline engine, you must first calculate the C.F.M. (cubic feet per minute of air) requirement of that engine. In making this calculation, it is important to note that any change in the R.P.M. (revolutions per minute) or the addition of a turbocharger can alter the C.F.M. rating of the engine.

### Formula

$$\text{Air (CFM)} = \frac{\text{R.P.M.} \times \text{C.I.D.} \times \text{Vol. Eff.}}{3456}$$

To convert Metric Displacements to C.I.D. for use in the formula above, use the following conversion factor:

$$\text{Displacement in Liters} \times 61.02 = \text{C.I.D.}$$

### Volumetric Efficiency

Diesel Engines – normally aspirated	= .85
turbocharged (intercooled / aftercooled)	= 1.85

C.F.M. – Cubic Feet per Minute

R.P.M. – Revolutions per Minute

C.I.D. – Cubic Inch Displacement

Vol. Eff.- Volumetric Efficiency



turbo® II Precleaner				
Model #	Airflow range		Inlet size base	
	CFM	m3/min	Inches	mm
24	100-250	2.8-7.1	3" or 4"	76 or 102
35	250-350	7.1-9.9	4.5"	114
46	300-700	8.5-19.8	4.5", 5", 6", 7"	114, 127, 152, 178
68	700-1100	19.8-31.1	5", 6", 7", 8"	127, 152, 178, 203

All turbo® II models are available with a raincap or with a bull-nose • Material: Metal with powdercoat finish

turbo® III Precleaner				
Model #	Airflow range		Inlet size base	
	CFM	m3/min	Inches	mm
15	15-85	0.4-2.4	2"	51
50	50-250	1.4-7.1	3" or 4"	76 or 102
200	200-500	5.6-14.2	4.5" or 5"	114 or 127
500	500-1100	14.2-31.1	6", 7", 8"	152, 178, 203

All turbo® III are available with raincap • Material: Polymer, 25% glass filled



turbo® PowerRam Precleaner				
Model	Airflow range		Inlet size base	
	CFM	m3/min	Inches	mm
L	500-1500	14.2-42.5	6", 7", 8"	152, 178, 203



## Model Specifications



1. The *turbo*® Precleaners have specially designed blades that cause the incoming air to spin.
2. As air spins, centrifugal force spins dust, dirt, insects, rain and snow from clean air.
3. Contaminants are blown out special discharge ports by a high-velocity air powered rotor.
4. Only the purified air goes to the air filter.



<i>turbo</i> ® II Precleaner						
Model	O.D.		Height		Weight	
	Inches	mm	Inches	mm	LBS	kg
24	8	203	11	279	5	2.3
35	9.25	235	12.25	311	6.5	2.9
46	12.25	311	15.5	394	11	4.9
68	14.5	368	17.5	444	16	7.3
<i>turbo</i> ® III Precleaner						
Model	O.D.		Height		Weight	
	Inches	mm	Inches	mm	LBS	kg
15	5.27	134	5.13	130	0.5	0.23
50	7.5	190	8	203	1.5	0.68
200	9.34	237	11.6	295	4.4	1.97
500	13.8	350	14.1	358	7.5	3.4
<i>turbo</i> ® PowerRam Precleaner						
Model	O.D.		Height		Weight	
	Inches	mm	Inches	mm	LBS	kg
L	13.5 x 14.5	343 x 359	13.25	321	9	4.1

**turbo**®  
PRECLEANER

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