

Engine Horsepower & Exhaust Flow Guide

Engine Data

The data shown in this section is a collection of information gathered by Donaldson from various sources and should be used for estimating.

For exact information, consult your engine manufacturer.

Allis Chalmers
Case
Caterpillar
Continental Motors
Cummins
Detroit Diesel
Deutz
Ford
Hatz Diesel
Hino
Isuzu
Iveco
John Deere
Kohler
Kubota
Lister
Lombardini
Mack
Mercedes-Benz
Mitsubishi
MTU of North America
Navistar
Nissan
Perkins
Renault
Same
Teledyne
Volkswagon
Volvo
Waukesha
White Eng
Yanmar

Engine Exhaust Flow Rate Calculation

Exhaust flow rate may be calculated using the following formula. Exhaust temperature and intake airflow rate must be determined to calculate the exhaust flow rate. Exhaust temperature and manufacturers maximum backpressure may be approximated using the chart below.

$$\left(\frac{\text{Exhaust Temp. (°F)} + 460}{540} \right) \times \text{Intake Airflow (CFM)} = \text{Exhaust Flow}$$

Engine Type	Engine Temperature	Maximum Backpressure
Diesel 2-Cycle Naturally Aspirated	= 900°F	4" Hg
Diesel 2-Cycle Turbo	= 750°F	3" Hg
Diesel 4-Cycle Naturally Aspirated	= 1000°F	3" Hg
Diesel 4-Cycle Turbo	= 900°F	3" Hg
Gasoline (all types)	= 1200°F	4" Hg

Note: If you are spec'ing a dual muffler system divide engine's exhaust flow (CFM) by two

Engine Airflow Calculations

CFM intake rate is available from the engine manufacturer. If CFM specifications are not available, use the volumetric efficiency calculation. A simple calculation for cfm is to multiple the horsepower of your engine by 2.5.

4-Cycle Engine Airflow Calculation

$$\left(\frac{\text{Engine Size (CID)} \times \text{RPM}}{3456} \right) \times \text{Volumetric Efficiency} = \text{Intake Airflow (CFM)}$$

2-Cycle Engine Airflow Calculation

$$\left(\frac{\text{Engine Size (CID)} \times \text{RPM}}{1728} \right) \times \text{Volumetric Efficiency} = \text{Intake Airflow (CFM)}$$

Volumetric Efficiency

Engine volumetric efficiency ratings are best obtained from your engine manufacturer. Engines operating with electronic controls could have volumetric efficiency ratings of more than 2.0. Airflow on these engines should be verified by the engine manufacturer.

4 Cycle GAS Engine	Naturally Aspirated	=	.70 - .80
2 and 4 Cycle DIESEL Engine	Naturally Aspirated	=	.90
	Turbo*	=	1.50 - 3.00*

* If VE rating is not available, Donaldson recommends using the highest value to insure proper airflow.

Engine Model	RPM	HP	-- Exhaust --	
			Intake Temp. (°F)	Flow (CFM)
ALLIS CHALMERS				
10000.....	2200	145	265	
11000.....	2200	220	560	
16000.....	2100	250	420	
17000 MKII ...	2100	300	780	
2000.....	2100	59	97	
21000 MKII ...	2100	375	875	
213.....	3600	32	75	
2200.....	2100	55	97	
25000 MKII ...	2100	450	1050	
2800.....	2600	85	200	
2900.....	2600	135	340	
320.....	3600	53	114	
3400.....	2400	125	240	
3500.....	2400	175	380	
3700.....	2400	200	400	
426.....	3600	72	150	
433I.....	2400	100	247	
433T.....	2400	90	242	
6000.....	2200	104	218	
61000.....	2100	800	2300	
6138I.....	2100	450	1060	
6138LT.....	2100	325	790	
6138T.....	2100	375	875	
649I.....	2600	155	430	
649T.....	2600	135	390	
65000.....	2100	900	2400	
670I.....	2400	200	490	
670T.....	2400	175	460	
685I.....	2200	266	680	
685T.....	2200	220	555	
7000.....	2200	160	300	
D175.....	2200	52	85	
D262.....	2200	78	128	
D344.....	1800	88	143	

CASE				
301BD.....	2200	94	153	1000..... 414
336BD.....	2200	104	171	1000..... 462
336BDT.....	2200	126	267	850..... 648
451BD.....	2200	142	360	1000..... 973
451BDT.....	2200	181	380	900..... 957
504BD.....	2200	155	275	950..... 718
504BDT.....	2200	221	440	900..... 1108
504BDTI.....	2200	256	600	950..... 1567
A267D.....	2000	73	123	1000..... 333
A284.....	2000	136	1000..... 368	
A377.....	1800	139	1000..... 376	
A451D.....	2000	145	200	1000..... 541
G188.....	2000	49	82	1000..... 222
G188D.....	2250	62	138	1000..... 373

CATERPILLAR				
1160.....	2800	225	410	1050..... 1146
1673T.....	2200	250	600	950..... 1567
1674TA.....	2200	270	690	900..... 1738
1693TA.....	2100	1080	900..... 2720	
3116.....	2600	200	618	856..... 1511
2600.....	250	713	867..... 1755	
2450.....	275	685	929..... 1773	
2600.....	300	745	984..... 2006	

Engine Model	RPM	HP	-- Exhaust --	
			Intake Temp. (°F)	Flow (CFM)
CATERPILLAR CONTINUED				
3126B.....	2200	175	1239	660..... 2640
2300.....	190	1355	716..... 3017	
2200.....	210	1327	741..... 3031	
2200.....	230	593	808..... 1471	
2200.....	250	635	821..... 1595	
2200.....	275	649	867..... 1683	
2200.....	300	660	916..... 1778	
2400.....	330	709	931..... 1937	
3140.....	2800	410	1000..... 1109	
3145.....	2800	410	1050..... 1146	
3150.....	2800	410	1000..... 1109	
3160.....	2800	410	1080..... 1169	
3176.....	1800	275	692	676..... 1458
1800.....	300	738	693..... 1579	
1800.....	350	802	760..... 1819	
1800.....	365	805	808..... 1900	
3204NA.....	2400	66	193	980..... 515
3208ATAC.....	up to 300	950		
3208N.....	2200	165	325	1076..... 930
3208NA.....	2800	210	410	1000..... 1109
3208T.....	2800	250	646	900..... 1627
2200.....	215	591	855..... 1443	
3208T-DIATAAC				
2600.....	275	752	854..... 1837	
2800.....	300	871	874..... 2162	
3208T-DIT.....	2600	250	649	976..... 1740
3304B.....	up to 165	950		
3304NA.....	2200	102	206	1050..... 576
3304T.....	2200	165	264	900..... 665
3306.....	1900	300	745	1019..... 2059
3306B.....	1800	285	745	825..... 1781
1800.....	300	777	843..... 1887	
3306NA.....	2200	150	325	950..... 849
3306T.....	2200	250	600	900..... 1511
.....	up to 300	850		
3306TA.....	2200	270	624	950..... 1629
3406.....	1900	425	1109	880..... 2758
3406B.....	1800	300	930	655..... 1917
.....	1800	330	986	705..... 2125
.....	1800	350	1016	739..... 2255
.....	1800	400	1052	753..... 2364
.....	1800	425	1077	806..... 2532
.....	1900	460	1108	847..... 2694
3406E.....	1800	355	967	762..... 2301
1800.....	375	1023	899..... 2717	
1800.....	435	1066	901..... 2872	
1800.....	455	1083	919..... 2925	
1800.....	475	1105	937..... 3017	
1800.....	500	1119	954..... 3098	
1800.....	575	1164	959..... 3236	
1800.....	600	1164	959..... 3236	
3406T.....	2100	339	910	900..... 2292
3406TA.....	2100	375	1000	900..... 2519
3408T.....	2100	425	980	900..... 2468
3408TA.....	2100	475	1220	900..... 3073
3412T.....	2100	650	1719	870..... 4234
3412TA.....	2100	750	2426	900..... 6420
3508.....	1800	1000	2490	900..... 6271
3512.....	1800	1500	3695	900..... 9306
3516.....	1800	2000	4830	900..... 12164
3606.....	1000	2475	5850	850..... 14192
3608.....	1000	3330	7235	800..... 16882
3612.....	1000	4950	11700	800..... 27300
3616.....	1000	6655	14470	800..... 33763

Engine Model	RPM	HP	-- Exhaust --	
			Intake Temp. (°F)	Flow (CFM)
CATERPILLAR CONTINUED				
5.4-6.....	2000	437	1041	950..... 2718
5.4-8.....	1900	614	1477	950..... 3857
5.4V12.....	1900	896	1936	900..... 4876
5.75-6.....	1330	317	780	950..... 2037
6.25-6.....	1375	440	1111	950..... 2901
C-10.....	1800	305	755	821..... 1888
1800.....	335	766	918..... 2078	
1800.....	350	752	892..... 1997	
1800.....	370	766	918..... 2078	
C-12.....	1800	335	805	876..... 2110
1800.....	355	815	859..... 2121	
1800.....	380	826	898..... 2202	
1800.....	395	833	924..... 2265	
1800.....	410	836	937..... 2287	
1800.....	425	815	922..... 2220	
1800.....	430	826	948..... 2276	
1800.....	455	819	953..... 2269	
C-15.....	1800	355	963	762..... 2294
1800.....	375	1023	899..... 2714	
1800.....	435	1066	902..... 2830	
1800.....	455	1083	919..... 2925	
1800.....	475	1105	937..... 3017	
1800.....	500	1119	954..... 3098	
C-16.....	1800	575	1154	941..... 3165
1800.....	600	1164	959..... 3236	
D330NA.....	2200	100	227	1050..... 635
D330T.....	2200	165	418	950..... 1091
D333NA.....	2200	150	349	1000..... 944
D333T.....	2200	250	613	900..... 1544
D334TA.....	2200	280	689	950..... 1799
D336TA.....	2200	350	895	950..... 2337
D342NA.....	1300	200	418	1050..... 1169
D342T.....	1300	300	887	950..... 2316
D343T.....	2000	315	786	950..... 2052
D343TA.....	2000	425	996	900..... 2508
D346TA.....	2000	565	1350	900..... 3400
D348TA.....	2000	850	2048	900..... 5158
D349TA.....	2000	1130	2827	900..... 7120
D353TA.....	1300	490	1091	900..... 2748
D379TA.....	1300	650	1501	900..... 3780
D398TA.....	1300	975	2323	900..... 5851
D399T.....	1300	1300	3009	900..... 7578

CONTINENTAL MOTORS				
E201.....	2400	104	1100..... 300	
F124.....	2400	65	1100..... 188	
F135.....	2000	40	58	1100..... 168
F140.....	2400	84	1100..... 243	
F162.....	2400	60	84	1100..... 243
F186.....	2400	101	1100..... 292	
F209.....	2400	109	1100..... 315	
F226.....	2400	115	1100..... 332	
F227.....	2400	78	116	1100..... 335
F244.....	2400	126	1100..... 364	
F245.....	2400	88	127	1100..... 367
G134.....	2000	58	1100..... 168	
G157.....	2000	68	1100..... 196	
H227.....	2000	96	1100..... 277	
H243.....	2000	104	1100..... 300	
H260.....	2000	112	1100..... 324	
J382.....	2000	160	1100..... 462	
L478.....	2400	162	265	1100..... 766
M271.....	2400	141	1100..... 407	
M290.....	2400	151	1100..... 436	

Engine Model	RPM	HP	-- Exhaust --	
			Intake Temp. (°F)	Flow (CFM)
CONTINENTAL MOTORS CONTINUED				
M330	2400		172	1100 497
M363	2400	122	201	1100 581
N56	2200		27	1100 78
N62	2400		31	1100 90
R513	2400		267	1100 771
R572	2400		298	1100 861
R602	2400	191	313	1100 904
S749	2200		358	1100 1034
S802	2200		392	1100 1132
S820	2400	250	455	1100 1314
T&B371	2400		193	1100 558
T&B427	2400	133	241	1100 696
U501	2400		260	1100 751
V603	2800		313	1100 904
Y112	2400	37	58	1100 168
Y69	2400		37	1100 107
Y91	2400	27	91	1100 263

CUMMINS				
3B2.9	2500	56	115	1000 311
4B3.9	2500	76	150	1050 419
4BT	2500	105	289	890 750
4BT	2500	120	336	970 922
4BT3.9	2500	100	253	1000 684
4BT3.9-G1	1800	86	147	850 357
4BT3.9-G2	1800	102	157	850 381
4BTA3.9	2500	120	298	900 751
6B5.9	2500	116	226	1000 611
6BT	2500	190	590	780 1290
	2500	230	535	1031 1531
	2300	230	520	910 1380
6BT5.9	2500	152	381	900 960
6BT5.9-G1	1800	135	224	900 564
6BT5.9-G2	1800	166	285	900 718
6BTA5.9	2500	180	449	900 1131
6C8.3	2500		316	1000 854
6CT	2300	250	570	930 1740
	2200	300	742	1000 2140
	2000	275	590	985 1665
6CT8.3	2500		555	900 1398
6CTA8.3	2500	250	632	900 1592
C-160	2500	153	300	900 756
C-180	2500	173	350	900 881
C-190	2500	190	495	900 1247
FLEET 270	1600	270	710	900 1788
FLEET 300	1600	300	765	900 1927
	1600	300	710	900 1788
Formula 240	1800	240	630	900 1587
	1800	240	618	900 1556
Formula 270	1800	270	720	900 1813
Formula 300	1800	300	761	900 1917
	1800	300	745	900 1876
	1800	300	744	900 1874
Formula 315	1800	315	735	900 1851
Formula 350	1800	350	821	900 2068
	1800	350	800	900 2015
	1800	350	857	900 2158
Formula 400	1900	400	1060	900 2670
	1900	400	930	950 2428
	1900	400	986	900 2483
Formula 450	1900	450	1110	950 2898

Engine Model	RPM	HP	-- Exhaust --	
			Intake Temp. (°F)	Flow (CFM)
CUMMINS CONTINUED				
Formula L10-240				
	1900	240	522	900 1315
	1900	240	580	900 1461
	1900	240	585	900 1473
Formula L10-270				
	1900	270	556	900 1400
	1900	270	618	900 1556
	1900	270	606	900 1526
Formula L10-300				
	1900	300	609	900 1534
GNH-220-IP	1800	177	250	900 630
GNH-250-IP	1800	204	265	900 667
GV-12-525-IP	1800	408	580	900 1461
ISB	2500	185	578	698 1257
	2600	190	526	801 1250
	2500	205	508	831 1246
	2600	210	526	857 1313
	2500	225	510	892 1311
	2500	240	610	812 1456
	2500	245	610	812 1456
	2600	260	622	886 1592
	2500	275	620	956 1673
ISC	2400	225	708	706 1417
	2400	240	721	746 1485
	2400	260	743	765 1578
	2200	285	682	833 1531
	2200	300	688	860 1578
	2200	315	682	919 1686
	2200	330	693	927 1758
	2200	350	706	966 1841
ISL	2100	310	689	891 1682
	2100	330	708	933 1740
ISM	2100	280	777	670 1523
	1800	310	734	721 1528
	1800	330	773	742 1610
	2100	350	888	720 1778
	2100	370	918	737 1853
	2100	400	918	737 1853
	2100	425	855	969 2171
	2100	450	974	789 2030
	2100	500	940	965 2341
ISX	1800	400	1063	655 2036
	1800	450	1129	696 2218
	2000	475	1126	842 2504
	2000	500	1125	905 2633
	2000	600	1227	975 3202
KT-1150-C	2100	450	1130	900 2846
KT-2300-C	2100	900	2400	880 5956
KT-450	2100	450	1130	850 2741
KTA-1150-C	2100	600	1400	900 3526
	2100	525	1410	880 3499
KTA-2300-C	2100	1200	2900	900 7304
	2100	1050	2700	900 6800
KTA-3067-C	2100	1600	3760	900 9470
	2100	1350	3455	900 8701
KTA-525	2100	525	1425	850 3457
KTA-525-FORM				
	1900	525	1200	850 2911
KTA-600	2100	600	1400	850 3396
KTTA-19-C			650	900
KTTA-38-C			1350	900
KTTA-50-C			2000	900

Engine Model	RPM	HP	-- Exhaust --	
			Intake Temp. (°F)	Flow (CFM)
CUMMINS CONTINUED				
L10	1700	260	615	745 1300
	1700	280	640	760 1407
	1600	310	638	825 1470
	2100	270	670	900 1687
	2100	300	659	900 1660
M11	1600	280	615	817 1476
	1600	310	670	813 1390
	1600	350	760	822 1554
	1600	370	770	828 1641
	1600	400	840	832 1801
N-855-C	2100	220	460	850 1116
	2100	235	460	850 1116
N-927	1950	240	465	880 1154
	2100	260	495	880 1228
	2100	240	495	880 1228
N14	1800	330	1014	657 1997
	1800	400	1126	723 2354
	2100	350	1212	606 2254
	2100	370	1283	651 2474
	2100	460	1329	737 2737
	2100	500	1380	802 2984
	2100	525	1380	802 2984
	2100	410	1164	670 2614
	2100	435	1302	714 2639
	2100	550	1380	802 2984
	2100	525	1380	802 2984
NH-220	2100	212	470	900 1184
NH-230	2100	220	460	900 1159
NH-230S	1800	186	460	900 1159
NH-250-M	2100	240	460	950 1201
	1800	190	395	1050 1105
	1800	200	395	900 995
	2100	210	460	900 1159
NHC-250	2100	240	460	900 1159
	2300	240	710	900 1788
NHC-250-D	2100	240	460	900 1159
NHD-230	2100	220	495	900 1247
NHF-240	2300	230	505	900 1272
NHF-265	2300	255	505	900 1272
NHH-250	2100	240	460	900 1159
NHHTC-335	2100	335	850	850 2062
NHTF-295	2300	295	710	900 1788
NT-335-M	1800	235	625	950 1632
	1800	265	650	900 1637
	2100	285	775	950 2024
	2100	335	800	950 2089
NT-380-M	2300	380	950	950 2481
	2000	253	700	1000 1893
	2000	300	750	900 1889
	2300	320	900	980 2400
NT-855-C	2100	310	895	880 2221
	2100	280	860	850 2086
	2100	250	825	850 2001
	2100	335	920	900 2317
	2100	335	900	900 2267
	2100	280	820	900 2065
	2100	250	680	880 1687
	2100	310	835	900 2103
NTA-370	1950	335	810	850 1965
	2100	370	950	850 2305
NTA-400	2100	400	1000	850 2426
NTA-420	2300	420	1080	900 2720

Engine Model	RPM	HP	Intake CFM	-- Exhaust --	
				Temp. (°F)	Flow (CFM)
CUMMINS CONTINUED					
NTA-855-C	2100	400	1000	880	2481
	2100	360	960	880	2382
	2100	360	980	900	2468
	2100	400	1050	900	2644
NTC-270-CT	2100	240	740	850	1795
	2100	225	760	900	1914
	2100	270	825	900	2078
NTC-290	2100	270	665	950	1736
	2100	290	685	900	1725
	1950	255	580	920	1482
NTC-300	2100	300	936	900	2357
NTC-335	2100	280	780	880	1936
	2100	300	805	880	1998
	2100	335	850	900	2141
	2100	320	830	900	2090
NTC-350	2100	350	885	900	2229
	2100	335	865	880	2146
	2100	320	845	880	2097
	1950	310	760	850	1844
	2100	350	986	900	2483
	2100	350	930	900	2342
NTC-400	2100	400	1165	950	3042
	2100	400	1030	900	2594
NTCC-300	2100	300	868	900	2186
NTCC-350	2100	350	1000	900	2519
NTCC-400	2100	400	1090	900	2745
NTF-295	2300	295	710	850	1722
NTF-365	2300	365	960	920	2453
P.TORQ 240	2100	240	618	900	1556
P.TORQ 270	2100	240	735	900	1851
	2100	270	840	900	2116
P.TORQ 315	2100	315	890	950	2324
P.TORQ L10-240					
	2100	240	645	900	1624
	2100	240	577	900	1453
	2100	240	647	900	1629
P.TORQ L10-270					
	2100	270	630	900	1587
Signature	2000	500	1072	959	2638
	2000	565	1117	986	2777
	2000	600	1164	1013	2936
SUPER 250	2100	240	495	900	1247
V-12-500-M	2100	480	840	900	2116
	1800	370	720	950	1880
	1800	400	720	900	1813
	2100	425	840	950	2193
V-378-C	3000	145	277	900	698
V-504-C	3000	195	357	900	899
V-504-M	3300	202	425	950	1110
	2500	158	322	900	811
	3300	197	386	900	972
V-555	3300	216	470	880	1166
V-555-C	3000	215	430	850	1043
V-555-E	3300	202	470	900	1184
V-903	2600	307	610	900	1536
	2600	255	610	900	1536
	2600	269	610	900	1536
	2600	288	610	880	1514
V-903-C	2600	295	610	880	1514
	2600	265	610	850	1480
V-903-M	2600	307	610	950	1593
	2300	250	545	900	1373
	2500	302	585	900	1473
V-9035	2200	250	520	880	1290

Engine Model	RPM	HP	Intake CFM	-- Exhaust --	
				Temp. (°F)	Flow (CFM)
CUMMINS CONTINUED					
V5-120-635-M					
	1800	435	1060	900	2670
V5-120-635-M					
	2100	540	1380	900	3476
V6-155	3300	149	318	950	830
V8-185-E	3300	178	425	950	1110
V8-210	3300	202	425	950	1110
V8-300	3000	288	580	970	1536
V8-300-M	3000	288	585	950	1528
	2600	220	505	900	1272
	2800	260	545	950	1423
VT-12-635-M					
	2100	635	1460	950	3812
	1800	490	1100	900	2770
VT-12-700-M					
	2100	700	1600	980	4267
	1800	480	1130	900	2846
	1800	545	1190	900	2997
	2100	595	1500	950	3917
VT-12-800-M					
	2100	800	1820	950	4752
	1800	550	1325	900	3337
	1800	620	1400	900	3526
	2100	680	1700	950	4439
VT-1710-C	2100	635	1700	900	4281
VT-555	3000	220	625	900	1574
VT-555-C	3000	230	585	850	1419
VT-903	2600	307	850	900	2141
		350	1050	900	2644
	2600	320	930	900	2342
VT-903-C	2600	350	920	900	2317
	2600	320	905	900	2279
VT8-370-M	3000	370	930	950	2428
	2600	270	760	900	1914
	2800	320	865	950	2259
VTA-1710-C	2100	700	1880	950	4909
	2100	800	2100	980	5600
VTR-28-C				900	
DETROIT DIESEL					
12V-149	1900	800	2800	850	6793
12V-149T	1900	1000	3600	850	8733
12V-149TI	1900	1200	4300	850	10431
12V-71	1800	350	1128	850	2736
	2300	471	1430	850	3469
	2100	456	1309	850	3176
12V-71T	2100	525	1800	850	4367
	1800		1650	850	4003
16V-149	1900	1060	3600	850	8733
16V-149T	1900	1325	4800	850	11644
16V-149TI	1900	1600	5500	850	13343
16V-71	2100	608	1748	850	4241
	1800	466	1506	850	3653
16V-71T	1800		2240	850	5434
	2100	700	2300	850	5580
16V-92	1800	600	1960	850	4755
	2100	720	2300	850	5580
16V-92T	2100	860	3200	850	7763
	1800		2600	850	6307
2-53	1800	2300	130	850	315
	1200		91	850	221
	200		142	850	344
2-71	200	65	223	850	541
	1800	48	200	850	485
	1200		131	850	318

Engine Model	RPM	HP	Intake CFM	-- Exhaust --	
				Temp. (°F)	Flow (CFM)
DETROIT DIESEL CONTINUED					
3-53/2-VAL	2200	75	242	850	587
	1800	59	202	850	490
	2200		253	850	614
	2800	98	319	850	774
3-53T	2500	125	500	850	1213
	2500	125	500	850	1213
3-71	1800	82	319	850	774
	2100	109	375	850	910
	1200		207	850	502
4-35T	2500	170	596	850	1446
4-53/2-VAL	2200	103	340	850	825
	1000		282	850	684
	2200		356	850	864
	2800	136	450	850	1092
4-53T	2500	170	596	850	1446
	1200		275	850	667
	2300	159	550	850	1334
	1800	117	425	850	1031
	2100	152	500	850	1213
6-71	2300	236	825	850	2001
	1800	175	637	850	1545
	2100	228	750	850	1819
	1200		413	850	1002
6-71T	2100	275	1045	850	2535
6-71TT	1950	230	930	850	2256
6-V-71	2300	236	715	850	1735
	1800	175	564	850	1368
	2100	228	655	850	1589
6V-53	2200		534	850	1295
	2800	210	675	850	1638
	2600		627	850	1521
6V-53T	2500	230	855	850	2074
6V-92	1800	225	730	850	1771
	2100	270	860	850	2086
6V-92T	1800		1000	850	2426
	2100	322	1200	850	2911
6V-92TA	2100	335	1225	850	2972
6V-92TT	1950		1030	850	2499
6V-92TTA	1950	270	1050	850	2547
8.2LN	3000	165	376	850	912
8.2LT	3000	205	553	850	1342
8V-53	2200		693	850	1681
	2500		786	850	1907
8V-71	1800	233	753	850	1827
	2300	314	954	850	2314
	2100	304	874	850	2120
8V-71T	2100	350	1200	850	2911
	1800		1100	850	2669
8V-71TA	2100	370	1240	850	3008
8V-71TT	1950		1240	850	3008
8V-71TTA	1950	305	1055	850	2559
8V-92	1800	300	980	850	2377
	2100	360	1150	850	2790
8V-92T	2100	430	1600	850	3881
	1800		1300	850	3154
8V-92TA	2100	435	1434	850	3479
8V-92TT	1950		1300	850	3154
8V-92TTA	1950	365	1250	850	3032
Series 40E (7.6 LTA)					
	2300	175	675	670	1450
	2600	190	705	710	1575
	2600	210	740	765	1730
	2600	230	700	885	1810
	2400	195	715	720	1610
	2400	250	700	885	1810</

Engine Model	RPM	HP	-- Exhaust --	
			Intake Temp. (°F)	Flow (CFM)

DETROIT DIESEL CONTINUED

Series 40E (8.7 LTA)				
2200	250	685	850	1725
2200	275	705	955	1890
2200	300	710	965	1930
2200	320	715	985	1995
Series 50 (8.5 Ltr)				
2100	250	760	625	1575
2100	275	790	680	1720
2100	300	820	715	1845
2100	320	815	730	1861
2100	350	815	850	2055
Series 60 (12.7 Ltr)				
2100	330	1050	610	2157
2100	350	1090	645	2310
2100	370	1010	725	2300
2100	400	1050	780	2500
2100	430	1080	820	2652
2100	470	1170	825	2877
2100	500	1170	825	2877
Series 60 (14 Ltr)				
2100	550	1231	986	3402
2100	575	1271	867	3221

DEUTZ

BF12L 714	2300	390	695	850	1686
BF6L 913	2800	175	396	850	961
F10L 413	2650	310	595	850	1443
F10L 714	2300	275	577	850	1400
F12L 413	2650	370	714	850	1732
F12L 714	2300	330	695	850	1686
F1L 208	3600	9	70	850	170
F1L 210	3000	16	96	850	233
F1L 411D	3000	16	98	850	238
F2L 411D	3000	32	133	850	323
F2L 411W	3000	30	133	850	323
F2L 912	2500	36	150	850	364
F2L 912W	2500	34	150	850	364
F3L 912	2800	60	176	850	427
F3L 912W	2500	50	158	850	383
F4L 912	2800	80	202	850	490
F4L 912W	2500	67	180	850	437
F5L 912	2800	100	210	850	509
F5L 912W	2500	84	187	850	454
F6L 413	2650	185	357	850	866
F6L 714	2300	165	347	850	842
F6L 912	2800	120	252	850	611
F6L 912W	2500	101	224	850	543
F8L 413	2650	250	476	850	1155
F8L 714	2300	220	463	850	1123

FORD

00	2400	59	101	900	254
172DF	2400	59	101	900	254
175DF	2500	52	108	900	272
183D	2200	52	99	900	249
192DF	2400	65	113	900	285
201DF	2250	66	111	900	280
220	2400	69	130	900	327
233D	2100	68	120	900	302
242D	2230	76	133	900	335
242DF	2500	79	149	900	375
254DF	2500	80	157	900	395
256DF	2500	89	157	900	395
3320DF	2500	111	203	900	511

Engine Model	RPM	HP	-- Exhaust --	
			Intake Temp. (°F)	Flow (CFM)

FORD CONTINUED

362DF	2500	121	223	900	562
363DFT	2400	150	214	900	539
380DF	2500	120	233	900	587
401DF	2500	132	246	900	620
401DFT	2500	167	246	900	620
67GF	3600	32	60	900	151
98GF	3600	45	87	900	219
X	2250	60	122	900	307
Y	2250	96	183	900	461

HATZ DIESEL

2L30	3000	30	68	1100	196
2L40	3000	37	82	1100	237
2M40	3000	40	85	1100	246
3L30	3000	45	101	1100	292
3L40	3000	55	123	1100	355
3M40	3000	60	130	1100	376
4L30	3000	60	135	1100	390
4L40	3000	74	164	1100	474
4M40	3000	80	170	1100	491
E573	3000	3	14	1100	40
E673	3000	5	16	1100	46
E75	3000	7	18	1100	52
E780	3000	10	25	1100	72
E786	3000	14	30	1100	87
E79	3000	8	20	1100	58
E88	2600	10	28	1100	81
E89	2600	12	30	1100	87
E950	3000	17	36	1100	104
Z788	3000	23	55	1100	159

HINO

Z790	3000	30	61	1100	176
DK10	2000	132	325	900	819
DK10T	1800	160	425	900	1070
DM100	2400	62	165	900	416
EB300	2000	132	315	900	793
EC100	2600	76	208	900	524
EF550	2200	230	572	900	1441
EF750	2200	245	589	900	1483
EF750T	2200	272	850	900	2141
EH100	2600	93	244	900	615
EH500	2800	114	277	900	698
EH700	2800	118	290	900	730
EK100	2200	196	467	900	1176
EL100	2600	132	327	900	824
EL100T	2400	145	440	900	1108
EM100	2400	148	362	900	912
ER100	2200	160	407	900	1025
EV700	2200	298	700	900	1763

ISUZU

QD100	3200	87	185	900	466
QD130	2800	115	230	900	579
QD145	3200	129	280	900	705
QD145T	2500	139	305	900	768
QD200	2200	194	410	900	1033
QD200T	2000	218	515	900	1297
QD27	2800	26	50	900	126
QD40	2800	40	80	900	201
QD60	3800	55	140	900	353
QD85	3000	68	162	900	408
QD90	2800	75	150	900	378
QT15	3600	14	55	900	139

Engine Model	RPM	HP	-- Exhaust --	
			Intake Temp. (°F)	Flow (CFM)

ISUZU CONTINUED

QT23	3600	22	75	900	189
QT35	3000	32	96	900	242

IVECO

803 i 3L-NA	2500	51	120	1100	347
804 i 4L-NA	2500	68	155	1100	448
805 i 5L-NA	2500	84	74	1100	214
806 i 6L-NA	2500	102	235	1100	679
806 i tc 6L-TC	2500	131	340	900	856
8210 i 6L-NA	2000	205	440	1100	1271
8280 i V8-NA	2200	287	600	1100	1733
8281 SRi V8-TCA	2200	424	900	900	2267
8281 Si V8-TC	2000	331	790	900	1990
8361 Si 7L-TC	2400	157	450	900	1133
8361 i 6L-NA	2500	139	322	1100	930

JOHN DEERE

3164D	2500	52	100	900	252
3179D	2500	58	100	900	252
3179T	2500	79	178	900	448
4219D	2500	70	135	900	340
4239A	2500	117	277	900	698
4239D	2500	80	148	900	373
4239T	2500	109	258	900	650
4276D	2500	82	160	900	403
4276T	2200	98	266	900	670
6076A	2200	240	568	900	1431
6076H	2200	250	647	900	1629
6076T	2200	190	505	900	1272
6329D	2500	104	200	900	504
6359A	2500	176	470	900	1184
6359D	2500	121	228	900	574
6359T	2500	163	370	900	932
6414D	2200	118	228	900	574
6414T	2200	146	360	900	907
6466A	2100	233	579	900	1458
6466D	2200	138	258	900	650
6466T	2200	185	484	900	1219
6619A	2100	301	680	900	1713
8955A	2100	456	1130	900	2846
8955T	2100	356	978	900	2463

KOHLER

K161	3600	7	14	1150	42
K181	3600	8	16	1150	48
K241	3600	10	20	1150	60
K301	3600	12	24	1150	72
K321	3600	14	26	1150	78
K341	3600	16	30	1150	89
K582	3600	23	48	1150	143
K91	3600	4	7	1150	21
KT17	3600	17	35	1150	104
KT19	3600	19	39	1150	116

Engine Model	RPM	Intake HP	Intake CFM	-- Exhaust --	
				Temp. (°F)	Flow (CFM)
KUBOTA					
D1402-B	2800	31	62	900	156
D3200-B	2400	66	123	900	310
D600-B	3600	16	35	900	88
D850-BW	3000	20	41	900	103
DH850-B	3600	23	49	900	123
S2800-B	2600	58	116	900	292
V1100-B	3000	26	55	900	139
V1702-B	2800	40	77	900	194
V1902-B	2800	42	83	900	209
V4300-B	2400	88	164	900	413
VH1100-B	3600	31	66	900	166
Z400-B	3600	11	23	900	58
Z600-BW	3200	14	29	900	73
ZB400-B	3200	10	21	900	53
ZB600C-1-B	3200	14	29	900	73
ZH600-B	3600	16	33	900	83

Engine Model	RPM	Intake HP	Intake CFM	-- Exhaust --	
				Temp. (°F)	Flow (CFM)
LISTER					
HL3	2500	125	250	900	315
HL4	2500	167	334	900	421
HL6	2500	250	500	900	630
HLT6	2100	300	600	900	756
HR2	2200	73	146	900	184
HR3	2200	110	220	900	277
HRW2	2200	31	62	900	186
HRW3	2200	47	94	900	277
HRW4	2200	62	124	900	368
HRW6	2200	93	186	900	554
HRWS6	2000	102	204	900	504
LT1	3600	8	16	900	60
LV1	3600	9	18	900	71
LV2	3600	18	35	900	139
ST1	3000	10	20	900	78
TL2	3000	27	54	900	186
TL3	3000	40	80	900	280
TS2	3000	22	44	900	154
TS3	3000	33	66	900	229

Engine Model	RPM	Intake HP	Intake CFM	-- Exhaust --	
				Temp. (°F)	Flow (CFM)
LOMBARDINI					
10LD 400-2	3000	16	34	1000	92
10LD 400-2/B1	3600	18	36	1000	111
11LD 535-3	3000	33	66	1000	200
11LD 625-3	3000	38	76	1000	227
3LD 450	3000	10	20	1000	54
3LD 510	3000	11	22	1000	59
3LD 510/L	2200	8	16	1000	46
4LD 640	3000	14	28	1000	76
4LD 640/L	2200	10	20	1000	59
4LD 705	2600	15	30	1000	73
4LD 820	2600	18	36	1000	87
4LD 820/L	2200	14	28	1000	73
5LD 675-2	3000	29	58	1000	157
5LD 675-3	3000	44	88	1000	235
5LD 825-2	2600	34	68	1000	170
5LD 825-2/L	2200	27	54	1000	143
5LD 825-3	2600	52	104	1000	254
5LD 825-3/L	2200	40	80	1000	216
5LD 825-4	2600	67	134	1000	338
5LD 825-4/L	2200	54	108	1000	287
5LD 930-3	2600	54	108	1000	284
5LD 930-4	2600	72	144	1000	379
6LD 260	3600	5	10	1000	41

Engine Model	RPM	Intake HP	Intake CFM	-- Exhaust --	
				Temp. (°F)	Flow (CFM)
LOMBARDINI CONTINUED					
6LD 260/C	1800	5	10	1000	38
6LD 325	3600	7	14	1000	46
6LD 325/C	1800	7	14	1000	46
6LD 360	3600	8	16	1000	51
6LD 360 V	3600	8	16	1000	51
6LD 400	3600	8	16	1000	57
7LD 665	3000	15	30	1000	78
7LD 665/F	3000	15	30	1000	78
7LD 740/L	3000	16	32	1000	87
8LD 600-2	3000	26	52	1000	141
8LD 665-2	3000	29	58	1000	157
8LD 665-2/L	2200	22	44	1000	119
8LD 740-2	2600	29	58	1000	141
9LD 561-2	3000	26	52	1000	130
9LD 561-2/L	2200	18	36	1000	100

Engine Model	RPM	Intake HP	Intake CFM	-- Exhaust --	
				Temp. (°F)	Flow (CFM)
MACK					
E6	NA	350	NA	750	1950
E7	NA	300	NA	728	1561
	NA	350	NA	742	1679
	NA	400	NA	791	1934
	NA	427	NA	795	2136
	NA	460	NA	814	2315
	NA	310/330	NA	728	1550
	NA	330/355	NA	735	1653
	NA	355/380	NA	736	1767
E9	NA	500	NA	740	3050
EN291	2800	178	356	900	448
EN331	2800	206	412	900	519
EN402	2800	246	492	900	620
EN438	2600	247	494	900	622
EN540	2400	280	560	900	705
EN707C	2100	306	612	900	771
END465	2600	325	650	900	819
END475	2400	280	560	900	705
END5673C	2100	250	500	900	1511
END5864	2300	270	540	900	2141
END673E	2100	180	360	900	1007
END707	2100	200	400	900	1033
END864BC	2450	540	1080	900	1360
ENDT475	2400	460	920	900	1159
ENDT673	2100	225	450	900	1511
ENDT675	2100	237	474	900	1574
ENDT676	2100	800	1600	900	2015
ENDT864A	2300	860	1720	900	2166
ENDT865	2600	325	650	900	2418
ENDT866	2400	275	550	900	2644
ENDTF673	2300	665	1330	900	1675
ENDTF673C	2200	625	1250	900	1574

Engine Model	RPM	Intake HP	Intake CFM	-- Exhaust --	
				Temp. (°F)	Flow (CFM)
MERCEDES-BENZ					
OM314	2800	85	170	900	428
OM346	2800	427	854	900	1075
OM352	2800	130	260	900	655
OM352A	2800	168	336	900	846
OM355	2000	200	400	900	824
OM360	2500	190	380	900	776
OM401	2500	195	390	900	856
OM402	2500	260	520	900	856
OM403	2500	325	650	900	1166
OM404	2500	430	860	900	1859
OM407	2200	240	480	900	1209
OM407A	2200	280	560	900	1410
OM407h	2200	240	480	900	1209

Engine Model	RPM	Intake HP	Intake CFM	-- Exhaust --	
				Temp. (°F)	Flow (CFM)
MERCEDES-BENZ CONTINUED					
OM407hA	2200	280	560	900	1410
OM421	2300	216	432	900	1088
OM422	2300	280	560	900	1410
OM422A	2300	330	660	900	1662
OM422LA	2300	375	750	900	1889
OM423	2300	355	710	900	1788
OM423LA	2100	470	940	900	2367
OM424	2300	420	840	900	2116
OM424A	2300	530	1060	900	2670
OM424LA	2300	615	1230	900	3098
OM616	3600	67	134	900	337
OM617	3600	82	164	900	413
OM636	3500	40	80	900	239

Engine Model	RPM	Intake HP	Intake CFM	-- Exhaust --	
				Temp. (°F)	Flow (CFM)
MITSUBISHI					
S12A-PT	1800	660	1320	900	4080
S12A-PTA	1800	850	1700	900	5239
S12A-PTK	1800	900	1800	900	5516
S12N-PT	1800	1000	2000	900	6145
S12N-PTA	1800	1130	2260	900	6926
S12N-PTK	1800	1230	2460	900	7556
S12U-PTA	1200	3100	6200	900	19921
S12U-PTK	1200	3300	6600	900	21156
S16N-PT	1800	1320	2640	900	8084
S16N-PTA	1800	1500	3000	900	9243
S16N-PTK	1800	1620	3240	900	9973
S6A-PT	1800	330	660	900	2040
S6A-PTA	1800	425	850	900	2569
S6A-PTK	1800	450	900	900	2770
S6B-PT	1800	260	520	900	1612
S6B-PTA	1800	320	640	900	1964
S6B-PTK	1800	360	720	900	2216
S6N-PT	1800	500	1000	900	3123
S6N-PTA	1800	565	1130	900	3476
S6N-PTK	1800	615	1230	900	3727
S6U-PTA	1200	1550	3100	900	9973
S6U-PTK	1200	1650	3300	900	10578
S8N-PT	1800	660	1320	900	4080
S8N-PTA	1800	750	1500	900	4634
S8N-PTK	1800	810	1620	900	4987

Engine Model	RPM	Intake HP	Intake CFM	-- Exhaust --	
				Temp. (°F)	Flow (CFM)
MTU OF NORTH AMERICA					
12V-396-TB-83	1845	1560	3120	900	3338
12V-396-TB-93	1845	1200	2400	900	3862
12V-396-TC-82	1745	1300	2600	900	2472
8V-396-TB-83	1845	1050	2100	900	2075
8V-396-TB-93	1845	1800	3600	900	2508
8V-396-TC-82	1745	870	1740	900	1588

Engine Model	RPM	Intake HP	Intake CFM	-- Exhaust --	
				Temp. (°F)	Flow (CFM)
NAVISTAR					
4-196	3800	86	172	1150	483
6.9 L	3000	170	340	1000	892
7.3 LT (T444)	2600	190	380	753	1359
7.3 L	3000	175	350	1000	944
9.0 L (DV550)	2800	185	370	1050	1146
C-200	2500	74	148	1150	325
C-221	2600	90	180	1150	370
C-263	2800	109	218	1150	477

Engine Model	RPM	HP	Intake CFM	-- Exhaust --	
				Temp. (°F)	Flow (CFM)

NAVISTAR CONTINUED

C-301	2800	118	183	1150	546
C-345	3000	160	224	1150	668
C-392	3000	180	255	1150	760
C-549	3200	232	381	1150	1136
C135B	2400	46	70	1150	209
C153	2400	53	80	1150	239
C175	2500	63	95	1150	283
D155	2500	48	95	900	239
D179	2400	59	99	900	249
D188	2400	62	104	900	262
D206	2500	56	119	900	300
D236	2400	65	131	900	330
D239	2500	80	138	900	348
D268	2500	85	165	900	416
D282	2400	95	156	900	393
D310	2300	101	165	900	416
D312	3000	117	216	900	544
D360	3000	136	250	900	630
D370	2200	105	188	900	473
D407	2600	127	245	900	617
D414	3000	157	287	900	723
D466	3000	165	323	900	813
D550B	3000	200	382	900	962
D554	2300	150	294	900	740
D691	1600	150	256	900	645
DT239	2500	110	225	900	567
DT358	2400	130	340	900	856
DT360	2700	190	588	850	1426
DT361	2600	146	341	900	859
DT402	2400	165	380	900	957
DT407	2500	160	368	900	927
DT414	3000	220	449	900	1131
DT420	2600	225	403	900	1015
DT466	2400	195	664	737	1520
DT466	2400	210	650	765	1530
DT466	2400	230	677	855	1710
DT466	2400	250	650	845	1640
DT466	2400	275	650	984	1820
DT573	2600	300	539	900	1357
DT573B	2600	260	525	900	1322
DT817	2100	385	975	900	2456
DT817B	2100	320	975	900	2456
DT817C	2200	420	975	900	2456
DVT800	2600	310	752	900	1894
MV-404	3600	188	315	1150	939
MV-446	3600	235	348	1150	1038
UC60	2500	17	33	1150	98
UR-450	2400	158	234	1150	698
UV-401	2800	165	243	1150	725
V-304	4400	180	298	1150	888
V-345	3800	172	284	1150	847
V-345	3800	168	284	1150	847
V-392	3600	236	306	1150	912
V-537	3200	208	372	1150	1109
VS-478	3400	224	352	1150	1049
VS-549	3200	243	381	1150	1136

NISSAN

A-12	4800	58	74	900	186
A-15	4800	78	95	900	239
ED-33	3200	83	168	900	423
FD-33T	3200	105	235	900	592
FD-6	2700	131	243	900	612
FD-6T	2700	148	340	900	856

Engine Model	RPM	HP	Intake CFM	-- Exhaust --	
				Temp. (°F)	Flow (CFM)

NISSAN CONTINUED

H-20	3100	55	82	900	207
H-30	2600	66	102	900	257
J-15	2800	32	55	900	139
LD-20	2600	38	80	900	201
LD-28	2600	53	115	900	290
ND-6	2400	130	260	900	655
P-40	2300	80	120	900	302
PD-6	2200	173	360	900	907
PD-6T	2200	227	505	900	1272
PE-6	2200	200	408	900	1028
PE-6T	2200	250	570	900	1436
RD10	2400	330	682	900	1718
RD10T	2400	415	1000	900	2519
RD10TA	2300	485	1200	900	3022
RD8	2400	265	545	900	1373
RD8T	2400	320	763	900	1922
SD-16	3200	36	85	900	214
SD-22	3200	51	110	900	277
SD-25	3200	60	126	900	317
SD-33	3200	79	165	900	416
SD-33T	3200	92	230	900	579

PERKINS

3.1522	2500	44	95	900	239
4-107	4000	57	99	900	249
4-108	4000	60	100	900	252
4-154	3600	80	128	900	322
4-203	2600	63	122	900	307
4-236	2800	80	153	900	385
4-248	2500	85	144	900	363
4-270	2000	62	125	900	315
4-300	2200	90	152	900	383
4-302	2300	76	161	900	405
4-318	2000	75	147	900	370
4-99	4000	55	92	900	232
4.108	4000	49	102	900	257
4.165	3600	70	135	900	340
4.2032	2250	58	117	900	295
4.236	2800	82	157	900	395
4.248	2500	84	152	900	383
4.318	2000	75	140	900	353
6-305	2600	89	184	900	463
6-354	2800	120	230	900	579
6-372	2500	121	215	900	541
6.247	3600	101	205	900	516
6.3544	2800	200	238	900	599
6.3724	2500	227	227	900	572
D3-152	2500	52	88	900	222
D3.152	2500	49	3	900	8
D4.203	2500	3	3	900	8
T6-354	2400	150	307	900	773
T6-354-3	2500	140	320	900	806
T6.3544	2600	370	370	900	932
TV8.640	2600	685	685	900	1725
V8-510	2800	185	331	900	834
V8-540	2500	166	312	900	786
V8-605	2500	200	350	900	881
V8.540	2600	370	370	900	932
V8.640	2600	411	411	900	1035

RENAULT

18TS/GTS	5750	92	230	1150	686
20 TL/GTL	5500	98	200	1150	596
20 TX	5500	112	230	1150	686

Engine Model	RPM	HP	Intake CFM	-- Exhaust --	
				Temp. (°F)	Flow (CFM)

RENAULT CONTINUED

20 TX	5000	112	230	1150	686
4 GTL	4000	33	70	1150	209
4L/TL	4250	20	40	1150	119
9 TD/GTD	4800			900	
FUEGO TURBO D	4250	85	211	900	531
TRAFIC	4750	46	90	1150	268
TRAFIC	5000	46	90	1150	268
TRAFIC PROP	4000	56	140	900	353

SAME

1052 LP	2500	39	83		71
1053 P	2500	64	124		106
1054 P	2500	85	165		141
1054 PT	2300	90	152		129
1055 P	2500	105	206		175
1056 P	2500	126	248		211
1056 PS	2300	148	228		194
1056 PT	2300	160	228		194
916.3A	3000	61	131		112
916.4A	3000	81	175		149

TELEDYNE

ACN	3600	6	13		11
AENL	3600	9	20		17
AGND	3200	12	26		22
BKN	3600	7	16		14
EY18-3W	3600	5	10		9
EY21W	3800	17	33		28
EY25W	3600	6	15		13
EY27W	3600	8	16		14
EY44W	3600	10	22		19
NH4D	2800	30	75		64
R08	5000	27	60		51
R11	4200	34	73		62
R14	4200	48	105		89
R17	5000	83	180		153
R22	5500	101	220		187
RD16	4800	54	135		115
RD21	4200	62	155		132
S-12D	3600	12	31		26
S-14D	3600	14	30		26
S-8D	3600	8	18		15
TJD	3600	18	48		41
TM13	3000	33	70		60
TM13	3000	12	45		38
TM20	3000	52	100		85
TM20	3000	44	90		77
TM27	3000	69	125		106
TM27	3000	59	120		102
TMD13	3000	29	72		61
TMD20	3000	44	110		94
TMD27	3000	121	300		256
TRA-12D	3600	12	25		21
V-465D	3000	66	133		113
V460D	3000	65	65		55
VE4	2400	48	48		41
VF4	2400	56	56		48
VG4D	2400	37	75		64
VH4	2800	61	61		52
VH4D	2800	30	65		55
VR4D	2200	37	122		104
W2-1230	3600	25	55		47

Engine Model	RPM	HP	-- Exhaust --	
			Intake Temp. (°F)	Flow (CFM)

TELEDYNE CONTINUED

W2-1235	3600	30	68	58
W2-880	3600	20	44	37
W4-1770	3000	35	72	61
WD1-340	3000	7	18	15
WD1-350	3000	8	20	17
WD1-430	3000	10	24	20
WD1-450	3400	10	26	22
WD1-660	3000	15	38	32
WD1-670	3000	16	40	34
WD1-750	3000	17	43	37
WD2-1000	3000	21	52	44
WD2-860	3000	19	48	41
WI-145	4000	4	8	7
WI-145V	3600	4	8	7
WI-185	3600	5	10	9
WI-185V	3600	5	10	9
WI-340	3600	9	20	17
WI-390	3600	11	22	19
WI-588	3600	16	34	29

VOLKSWAGON

026.2	2200	70	140	1150	417
068.5	4000	48	90	900	227
068.A	4000	60	120	900	302
075.1	4000	75	145	900	365
126A	2000	45	90	1150	268

VOLVO

D45BPP	2300	75	195	900	491
TD100G	2000	223	460	900	1159
TD100GPP	2000	223	460	900	1159
TD120HP	2000	286	575	900	1448
TD121G	2000	284	575	900	1448
TD45B	2200	90	235	900	592
TD61A	2500	154	330	900	831
TD61AP	2500	165	350	900	881
TD61AW	2500	162	350	900	881
TD71A	2200	189	360	900	907
TD71AP	2200	192	360	900	907
TD71AW	2400	190	360	900	907
TID100KPP	2000	249	515	900	1297
TID121KP	2000	343	695	900	1750
TID121LP	1800	401	800	900	2015
TID71A	2200	216	380	900	957
TID71AP	2200	209	400	900	1007

Engine Model	RPM	HP	-- Exhaust --	
			Intake Temp. (°F)	Flow (CFM)

WAUKESHA

190DLC	2800	84	128	109
197DLC	2800	91	208	177
197DLCS	2800	131	320	273
D317D	2400	118	285	243
D317DS	2400	142	340	290
F1197D	1800	258	620	528
F1197DS	1800	400	960	818
F1197DSI	2400	462	1100	937
F1905DS	1200	397	860	733
F1905DSI	2200	514	1015	865
F2896D	1200	415	804	685
F2896DS	1200	695	1032	879
F2896DSI	1200	877	1305	1112
F475D	2400	182	440	375
F475DS	2400	216	520	443
F674D	2200	226	540	460
F674DS	2200	229	550	469
H1077D	2400	346	630	537
H1077DS	2400	522	1080	920
H1077DSI	2400	557	1190	1014
H866DS	2300	384	920	784
L1616D	2400	520	940	801
L1616DS	2400	785	1680	1431
L1616DSI	2400	836	1850	1576
L5100D	1200	830	1420	1210
L5100DS	1200	1232	2170	1849
L5100DSI	1200	1375	2560	2181
L5790D	1200	905	1710	1457
L5790DS	1200	1235	2600	2215
L5790DSI	1200	1754	3080	2624
LRDCS	1200	695	1032	879
NKDC	1200	297	566	482
NKDCS	1200	390	860	733
P2154D	2200	592	1420	1210
P2154DS	2200	1017	2450	2087
P2154DSI	2200	1077	2600	2215
VLRD	1200	905	1710	1457
VLRDS	1200	1235	2600	2215
VRD232	2200	68	160	136
VRD283	2200	76	180	153
VRD310	2400	106	255	217
WAKD	1800	258	530	451
WAKDS	1800	400	810	690

Engine Model	RPM	HP	-- Exhaust --	
			Intake Temp. (°F)	Flow (CFM)

WHITE ENG

D-2000	2600	70	120	102
D-2300	2400	137	117	117
D-2300T	2400	211	180	180
D-3000	2800	110	193	164
D-3000T	2600	130	280	239
D-3300T	1800	175	149	149
D-3400	2400	210	179	179
D-3400T	2400	333	284	284
D-4800	2400	260	221	221
D-4800T	2400	400	341	341
D-4800TA	2400	400	341	341
D-4800TAH	1800	431	367	367
G-1600	2400	102	87	87
G-2000	2800	84	120	102
G-2300	2400	130	111	111
G-3000	2800	130	181	154
G-3400	2400	210	179	179

YANMAR

12LAAL-DT	1800	1060	2772	900	6981
3T95LE	2800	51	114	900	287
4HAL	1800	110	260	900	655
4T95LE	2800	68	150	900	378
4T95LTE	2800	85	208	900	524
6HAL	1800	165	390	900	982
6HAL-DT	1800	330	837	900	2108
6HAL-HT	1800	264	692	900	1743
6HAL-T	1800	209	512	900	1289
6LAAL-DT	1800	530	1370	900	3450
6T95LE	2800	102	233	900	587
6T95LTE	2800	128	314	900	791
8LAAL-DT	1800	705	1800	900	4533