HALE PRODUCTS INC. **A Unit of IDEX Corporation**

August 9, 2006

TO: HALE MIDSHIP & LIGHT TRUCK CUSTOMERS

SUBJECT: NFPA Pump/Engine Combination List (Hale P/N 029-0020-52-0)

The engines on this list along with the pump gearbox ratio listed provides sufficient power for NFPA 1901 Pump Performance Ratings. Check with the engine manufacturer for their approval of the application. Refer to instruction sheet F-74, for proper interpretation of this list.

All recommendations are based on a 1:1 transmission gear lock-up ratio. Some transmissions lock-up in gear ratios other than 1:1, in which case this pump/engine combination list is not applicable.

Please check the ratios on this list against any pump orders that have not been shipped or pumps in your possession. If a particular model engine was scheduled to be used for an order and a different model was received, a new pump ratio may be required. If a change is necessary, notify Hale to make the revision.

Additional copies of this list are available upon request.

The latest version of this list is maintained on our website at **www.haleproducts.com**

HALE PRODUCTS, INC.
700 Spring Mill Avenue
Conshohocken, PA 19428
Attn: Communications Department

Please send _____ copies of the current NFPA Pump/Engine Combination List to:

NAME: _____

COMPANY: _____

ADDRESS: _____

CITY, STATE, ZIP: _____

NOTE: Information contained in this material is subject to change without notice.

700 Spring Mill Avenue, Conshohocken, PA 19428
TEL: (610) 825-6300; FAX: (610) 825-6440; www.haleproducts.com

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3/23/01

HALE MIDSHIP AND FRONT MOUNT FIRE PUMPS
NFPA RATED PUMP/ENGINE COMBINATION
INSTRUCTION SHEET

1. This list shows pump and engine combinations based on stresses imposed on the pump and gearbox during pump operation. Engines also impose stress on the pump drive shaft during road operation. This stress is the maximum engine torque multiplied by the truck transmission highest forward gear ratio (first) and torque converter ratio, where applicable. This maximum torque load must be checked against the pump drive shaft limit according to the instructions on Form F-72. If a diesel engine is used, it may be necessary to install a dampening device between the engine and pump to absorb and suppress the torsional vibration inherent in some four-cycle diesel engines. All pumping operations impose a torque load on the engine output shaft and related equipment, which drives the pump. This is especially critical in front mount pump applications where the engine manufacturer has a lower torque limit on the front end of the crankshaft. After establishing maximum torque loads, submit the data to the engine and drive line manufacturers for their recommendation and approval of the application.

2. Front Mount Pump applications are best accomplished on chassis supplied by the manufacturer with a front engine PTO drive package. If the chassis you are considering is not available with this option, there is a possibility the engine is not designed for front drive applications, there is insufficient space to run a drive line to a pump or the torque requirements of the front mount pump exceeds the front crankshaft torque limits. Another consideration with Front Mount Pumps is the engine idle speed - the lower the speed, the longer the life of the clutch - up to 700 RPM is considered a normal idle speed. Contact Hale's Engineering Department and engine manufacturer for additional information on application.

3. The pump/engine combinations shown give adequate performance within allowable NFPA 1901 engine speeds at normal operating conditions based on the truck transmission being in direct drive (1:1 ratio). In most cases, other ratios can also be used. Due to the various models offered by each engine manufacturer, specifications such as rated horsepower, speed and torque for each engine must match this list in order to accurately check the pump ratio. In the case of low speed engines, it may be possible to obtain a rating not listed by using an overdrive gear position on the truck transmission, if overdrive is available. Information for engines not listed is available from Hale's Engineering Department upon request.

4. For elevations over 2000 feet, drafting requirements greater than a 10 foot lift, more than 20 feet of suction hose, or other special conditions, contact Hale's Engineering Department.

5. The Qpak, Qflo, Qmax, DSD, MG, 8FGR, CSD and HFM series are single stage pumps. The Qtwo is a two-stage pump.

6. The use of the HP or 2HP high-pressure Pump option on midship pumps will impose an additional horsepower load. This load is present even when the Booster Pump is not discharging water. Before approving a pump-engine-booster combination, contact Hale's Engineering Department for a horsepower check at the NFPA 1901 rating spots.

7. All applications are based on summer diesel fuel sources. Some fuels are adjusted for winter weather or high altitude usage and may reduce engine performance by ten percent.

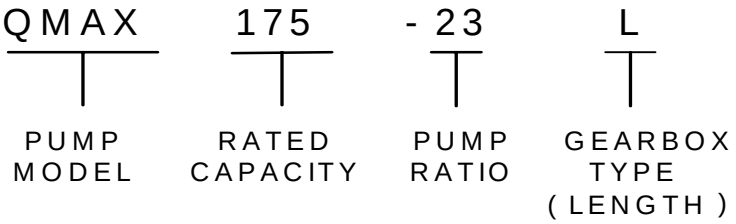
8. Pump winterization/heating jackets on the CSD and HFM front mount pump models is designed to operate at the normal engine cooling system temperature range of 180^{O}/190^{O}F. If the engine chassis/pump combination typically exceeds 190^{O}F, the winterization/heating jacket should be made inoperable. The jacket should only be used when the CSD or HFM front mount pump is required to operate in extremely cold temperatures.

9. The Hale Pump/Engine Combination List is based on the latest horsepower-RPM curve as furnished by the engine manufacturer at the time of publication. To create a realistic net horsepower curve, Hale deducts additional horsepower to help cover most standard accessory items and other power consuming loads. A partial example would be; Power steering pump, fan engaged, alternator charging, air compressor (loaded), air cleaner, air temperature and barometer. NFPA 1901 requires all lights and air conditioner(s) to be operating during the pump test. Any added load on the engine may require a pump ratio recalculation to insure sufficient horsepower for testing. Please contact Hale's Engineering Department for assistance.

10. Midship pump applications require a true neutral position and no movement of the truck to ensure safe shifting from pump-to-road or road-to-pump. Pre-load or rotation when the transmission is in the neutral position, truck drifting or truck rolling during shifting can cause damage to the pump.

11. The CBP, AP, MG and PSD Power Take-Off driven series pumps are able to be NFPA rated. Please contact Hale's Engineering Department to evaluate your pumping application.

12. The following information is provided to assist in developing a Hale Fire Pump model number. To obtain the proper pump for customer applications the Hale pump model number is comprised of four elements



The Hale pump model number illustrated above was determined by the use of the tables located in this list. A sample table is shown below with the pump model determination logic highlighted.

ENGINE	MANUFACTURER			SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE
	MODEL NUMBER			S1234	S1234	S1234	S1234	S1235	S1235	S1235	S1235	S1235
	DISPLACEMENT			629	629	629	629	728	728	728	728	728
	RATED HP			305	305	335	350	410	410	425	425	455
	GOVERNED SPEED			2100	2100	2100	2100	2100	2100	2100	2100	2100
	PEAK TORQUE			1050	1150	1250	1350	1450	1550	1450	1550	1550
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**											
	QPAK50	500	L	23	23	23	23	23	23	23	23	23
	QPAK50	500	X	25	25	25	25	25	25	25	25	25
	QPAK75	750	L	23	23	23	23	23	23	23	23	23
	QPAK75	750	X	25	25	25	25	25	25	25	25	25
	QPAK100	1000	L	23	23	23	23	23	23	23	23	23
	QPAK100	1000	X	25	25	25	25	25	25	25	25	25
	QFLO75	750	L	23	23	23	23	23	23	23	23	23
	QFLO75	750	X	28	28	28	28	28	28	28	28	28
	QFLO100	1000	L	23	23	23	23	23	23	23	23	23
	QFLO100	1000	X	28	28	28	28	28	28	28	28	28
	QFLO125	1250	L	23	23	23	23	23	23	23	23	23
	QFLO125	1250	X	28	28	28	28	28	28	28	28	28
	QMAX100	1000	S or L	23	23	23	23	23	23	23	23	23
	QMAX100	1000	X	25	25	25	25	25	25	25	25	25
	QMAX125	1250	S or L	23	23	23	23	23	23	23	23	23
	QMAX125	1250	X	25	25	25	25	25	25	25	25	25
	QMAX150	1500	S or L	23	23	23	23	23	23	23	23	23
	QMAX150	1500	X	25	25	25	25	25	25	25	25	25
	QMAX175	1750	S or L	23	23	23	23	23	23	23	23	23
	QMAX175	1750	X	25	25	25	25	25	25	25	25	25
	QMAX200	2000	S or L	21	23	23	23	23	23	23	23	23
	QMAX200	2000	X		23	25	25	25	25	25	25	25
	QMAX225	2250	S or L					23	23	23	23	23
	QMAX225	2250	X					25	25	25	25	25
	DSD75	750	L	23	23	23	23	23	23	23	23	23
	DSD75	750	X	28	28	28	28	28	28	28	28	28
	DSD100	1000	L	23	23	23	23	23	23	23	23	23
	DSD100	1000	X	28	28	28	28	28	28	28	28	28
	DSD125	1250	L	23	23	23	23	23	23	23	23	23
	DSD125	1250	X	28	28	28	28	28	28	28	28	28
	DSD150	1500	L	23	23	23	23	23	23	23	23	23
	DSD150	1500	X	28	28	28	28	28	28	28	28	28
	MG50	500		30	30	30	30	30	30	30	30	30
	MG75	750		30	30	30	30	30	30	30	30	30
	MG100	1000		30	30	30	30	30	30	30	30	30
	TWO STAGE											
	QTWO100	1000	S or L	23	23	23	23	23	23	23	23	23
	QTWO100	1000	X	23	23	23	23	23	23	23	23	23
	QTWO125	1250	S or L	23	23	23	23	23	23	23	23	23
	QTWO125	1250	X	23	23	23	23	23	23	23	23	23
	QTWO150	1500	S or L	23	23	23	23	23	23	23	23	23
	QTWO150	1500	X	23	23	23	23	23	23	23	23	23

13. The Pump/Engine Recommendation list has taken into account that some OEMs are setting the low idle higher than they have in the past. While not a significant issue for the single stage pumps the increased low idle speed causes a significant increase in pump discharge pressure of the Qtwo pump when operated in series (pressure) mode. The ratios selected for the Qtwo pumps are based on an idle setting of 800 RPM. This numerically lower ratio allows the pump to operate at lower pressure at idle but may limit the maximum pressure attainable due to engine speed limits. Additionally higher flow rated Qtwo pumps may not be available with the lower ratio. A supplemental Qtwo pump

recommendation list is available which lists ratios suitable for idle setting of 800 RPM compared to idle setting of 600 RPM for higher ratings and pressures if required by the customer.

MAXIMUM ALLOWABLE PUMP PRESSURE, ENGINE HORSEPOWER AND TORQUE LIMITS FOR HALE CENTRIFUGAL PUMPS

PUMP SERIES	MAXIMUM ALLOWABLE PRESSURE (PSI)			ENGINE LIMITS	
	HYDRODYNAMIC		HYDROSTATIC	GEARS MAX. GROSS HORSEPOWER FOR PUMPING	SHAFTS TORQUE CONSTANT FOR ROAD OPERATION (FT-LBS)
Qtwo	VOLUME 300	PRESSURE 600	600	450*	16000
Qmax, Qflo, Qpak	600		600		
8FGR	400		500		
DSD	400		600		
MG	400		500	325**	16000-SPLIT SHAFT PTO DRIVE**
CSD, HFM	400		600	425***	***
2CBP, 2HP	1000		1000	SEE POWER TAKE-OFF SELECTION DATA INSTRUCTION SHEET I-91 AND PUMP PERFORMANCE CURVES FOR LIMITS	
CBP, AP	400		500		
PSD	400		600		
QSMG (Bronze)	500		500	450*	16000
QG (Bronze)	VOLUME 300	PRESSURE 500	500		

WARNING: The horsepower limits for pumping do not take into consideration the torque on the pump drive shaft during road operation. This torque is imposed by the engine and multiplied by the truck transmission gear ratios. On automatic transmissions, both the transmission and torque converter ratios multiply the torque. Check for the maximum torque on the pump drive shaft by using the following formula.

* See current Pump-Engine Combination list for pump model number.

** Qpak & MG power take-off driven pumps require the PTO to have a torque rating of 500 lb.ft. Contact the PTO manufacturer for their continuous duty derating and approval of application. If additional information is required, contact Hale's Engineering Department.

*** On CSD and HFM series pumps, the pumping torque requirements might exceed the engine crankshaft limits. Contact the engine manufacturer for their approval of the pumping application.

See instruction sheet of the current pump-engine combination list (Form F-74) for additional information.

Failure to follow the procedures listed on this sheet may result in serious personal injury and/or damage to equipment.

$$\left(\begin{array}{c}\text{MAXIMUM ALLOWABLE GROSS}\\ \text{ENGINE TORQUE (FT - LBS)}\end{array}\right) = \frac{\text{TORQUE CONSTANT (FROM TABLE)}}{\left(\begin{array}{c}\text{HIGHEST FORWARD TRUCK TRANSMISSION RATIO}\\ \text{(FIRST GEAR)}\end{array}\right) \text{X} \left(\begin{array}{c}\text{TORQUE CONVERTER RATIO}\\ \text{(IF APPLICABLE)}\end{array}\right)}$$

EXAMPLES:

A) Qtwo, Qpak, Qmax, Qflo, DSD, 8FGR or MG pump driven by a manual transmission with a 7.71 first gear ratio

$$\frac{16000}{7.71} = 2{,}075 \text{ POUND FEET MAXIMUM ALLOWABLE GROSS ENGINE TORQUE}$$

B) Qtwo, Qpak, Qmax, Qflo, DSD, 8FGR or MG pump driven by an automatic transmission with a 3.69 first gear ratio and 2.21 torque converter ratio.

$$\frac{16000}{3.69\text{X}2.21} = 1{,}962 \text{ POUND FEET MAXIMUM ALLOWABLE GROSS ENGINE TORQUE}$$

MIDSHIP MOUNTED PUMPS

	MANUFACTURER			CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR
ENGINE	MODEL NUMBER			C7	C7	C7	C7	C7
	DISPLACEMENT			441	441	441	441	441
	RATED HP			275	275	300	300	330
	GOVERNED SPEED			2400	2400	2400	2400	2400
	PEAK TORQUE			800	860	800	860	860
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L	23	23	23	23	23
	QPAK50	500	X	23	23	23	23	23
	QPAK75	750	L	23	23	23	23	23
	QPAK75	750	X	23	23	23	23	23
	QPAK100	1000	L	23	23	23	23	23
	QPAK100	1000	X	23	23	23	23	23
	QFLO75	750	L	21	21	21	21	21
	QFLO75	750	X	21	21	21	21	21
	QFLO100	1000	L	21	21	21	21	21
	QFLO100	1000	X	21	21	21	21	21
	QFLO125	1250	L	21	21	21	21	21
	QFLO125	1250	X	21	21	21	21	21
	QMAX100	1000	S or L	21	21	21	21	21
	QMAX100	1000	X	21	21	21	21	21
	QMAX125	1250	S or L	21	21	21	21	21
	QMAX125	1250	X	21	21	21	21	21
	QMAX150	1500	S or L				21	19
	QMAX150	1500	X				21	19
	QMAX175	1750	S or L					
	QMAX175	1750	X					
	QMAX200	2000	S or L					
	QMAX200	2000	X					
	QMAX225	2250	S or L					
	QMAX225	2250	X					
	DSD75	750	L	23	23	23	23	23
	DSD75	750	X	23	23	23	23	23
	DSD100	1000	L	23	23	23	23	23
	DSD100	1000	X	23	23	23	23	23
	DSD125	1250	L	23	23	23	23	23
	DSD125	1250	X	23	23	23	23	23
	DSD150	1500	L				21	21
	DSD150	1500	X					19
	SMM/SMD	1250	X					19
	SMM/SMD	1500	X					
	MG50	500		26	26	26	26	26
	MG75	750		26	26	26	26	26
	MG100	1000		26	26	26	26	26
	TWO STAGE							
	QTWO100	1000	S or L	17	19	19	19	19
	QTWO100	1000	X	19	19	19	19	19
	QTWO125	1250	S or L	17	19	19	19	19
	QTWO125	1250	X	19	19	19	19	19
	QTWO150	1500	S or L					19
	QTWO150	1500	X					19
	QTWO175	1750	S or L					
	QTWO175	1750	X					
	QTWO200	2000	S or L					
	QTWO200	2000	X					

MIDSHIP MOUNTED PUMPS

	MANUFACTURER			CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR
ENGINE	MODEL NUMBER			C9	C9	C9	C9	C11
	DISPLACEMENT			537	537	537	537	677
	RATED HP			335	350	370	400	335
	GOVERNED SPEED			2100	2100	2100	2100	2100
	PEAK TORQUE			1050	1100	1100	1100	1250
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L	23	23	23	23	23
	QPAK50	500	X	23	23	23	23	23
	QPAK75	750	L	23	23	23	23	23
	QPAK75	750	X	23	23	23	23	23
	QPAK100	1000	L	23	23	23	23	23
	QPAK100	1000	X	23	23	23	23	23
	QFLO75	750	L	23	23	23	23	23
	QFLO75	750	X	23	23	23	23	23
	QFLO100	1000	L	23	23	23	23	23
	QFLO100	1000	X	23	23	23	23	23
	QFLO125	1250	L	23	23	23	23	23
	QFLO125	1250	X	23	23	23	23	23
	QMAX100	1000	S or L	21	21	21	21	23
	QMAX100	1000	X	21	21	21	21	23
	QMAX125	1250	S or L	21	21	21	21	23
	QMAX125	1250	X	21	21	21	21	23
	QMAX150	1500	S or L	21	21	21	21	23
	QMAX150	1500	X	21	21	21	21	23
	QMAX175	1750	S or L	21	21	21	21	23
	QMAX175	1750	X	21	21	21	21	23
	QMAX200	2000	S or L	21	21	21	21	23
	QMAX200	2000	X	21	21	21	21	23
	QMAX225	2250	S or L					
	QMAX225	2250	X					
	DSD75	750	L	23	23	23	23	23
	DSD75	750	X	23	23	23	23	23
	DSD100	1000	L	23	23	23	23	23
	DSD100	1000	X	23	23	23	23	23
	DSD125	1250	L	23	23	23	23	23
	DSD125	1250	X	23	23	23	23	23
	DSD150	1500	L	23	23	23	23	23
	DSD150	1500	X	23	23	23	23	23
	SMM/SMD	1250	X	19	19	21	21	23
	SMM/SMD	1500	X	19	19	21	21	23
	MG50	500		30	30	30	30	30
	MG75	750		30	30	30	30	30
	MG100	1000		30	30	30	30	30
	TWO STAGE							
	QTWO100	1000	S or L	19	19	19	19	21
	QTWO100	1000	X	19	19	19	19	21
	QTWO125	1250	S or L	19	19	19	19	21
	QTWO125	1250	X	19	19	19	19	21
	QTWO150	1500	S or L	19	19	19	19	21
	QTWO150	1500	X	19	19	19	19	21
	QTWO175	1750	S or L	19	19	19	19	21
	QTWO175	1750	X	19	19	19	19	21
	QTWO200	2000	S or L					21
	QTWO200	2000	X					21

MIDSHIP MOUNTED PUMPS

ENGINE	MANUFACTURER			CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR
	MODEL NUMBER			C11	C11	C11	C11	C13
	DISPLACEMENT			677	677	677	677	763
	RATED HP			350	350	370	370	410
	GOVERNED SPEED			2100	2100	2100	2100	2100
	PEAK TORQUE			1350	1450	1350	1450	1550
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L	23	23	23	23	23
	QPAK50	500	X	23	23	23	23	23
	QPAK75	750	L	23	23	23	23	23
	QPAK75	750	X	23	23	23	23	23
	QPAK100	1000	L	23	23	23	23	23
	QPAK100	1000	X	23	23	23	23	23
	QFLO75	750	L	23	23	23	23	23
	QFLO75	750	X	23	23	23	23	23
	QFLO100	1000	L	23	23	23	23	23
	QFLO100	1000	X	23	23	23	23	23
	QFLO125	1250	L	23	23	23	23	23
	QFLO125	1250	X	23	23	23	23	23
	QMAX100	1000	S or L	23	23	23	23	23
	QMAX100	1000	X	23	23	23	23	23
	QMAX125	1250	S or L	23	23	23	23	23
	QMAX125	1250	X	23	23	23	23	23
	QMAX150	1500	S or L	23	23	23	23	23
	QMAX150	1500	X	23	23	23	23	23
	QMAX175	1750	S or L	23	23	23	23	23
	QMAX175	1750	X	23	23	23	23	23
	QMAX200	2000	S or L	23	23	23	23	23
	QMAX200	2000	X	23	23	23	23	23
	QMAX225	2250	S or L			23	23	23
	QMAX225	2250	X			23	23	23
	DSD75	750	L	23	23	23	23	23
	DSD75	750	X	23	23	23	23	23
	DSD100	1000	L	23	23	23	23	23
	DSD100	1000	X	23	23	23	23	23
	DSD125	1250	L	23	23	23	23	23
	DSD125	1250	X	23	23	23	23	23
	DSD150	1500	L	23	23	23	23	23
	DSD150	1500	X	23	23	23	23	23
	SMM/SMD	1250	X	23	23	23	23	23
	SMM/SMD	1500	X	23	23	23	23	23
	MG50	500		30	30	30	30	30
	MG75	750		30	30	30	30	30
	MG100	1000		30	30	30	30	30
	TWO STAGE							
	QTWO100	1000	S or L	21	21	21	21	21
	QTWO100	1000	X	21	21	21	21	21
	QTWO125	1250	S or L	21	21	21	21	21
	QTWO125	1250	X	21	21	21	21	21
	QTWO150	1500	S or L	21	21	21	21	21
	QTWO150	1500	X	21	21	21	21	21
	QTWO175	1750	S or L	21	21	21	21	21
	QTWO175	1750	X	21	21	21	21	21
	QTWO200	2000	S or L	21	21	21	21	21
	QTWO200	2000	X	21	21	21	21	21

MIDSHIP MOUNTED PUMPS

ENGINE	MANUFACTURER			CATERPILLAR	CATERPILLAR	CATERPILLAR	CUMMINS	CUMMINS
	MODEL NUMBER			C13	C13	C13	ISB 275	ISB 300
	DISPLACEMENT			763	763	763	359	359
	RATED HP			430	470	525	275	300
	GOVERNED SPEED			2100	2100	2100	2600	2600
	PEAK TORQUE			1650	1650	1650	660	660
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L	23	23	23	21	21
	QPAK50	500	X	23	23	23	21	21
	QPAK75	750	L	23	23	23	21	21
	QPAK75	750	X	23	23	23	21	21
	QPAK100	1000	L	23	23	23	21	21
	QPAK100	1000	X	23	23	23	21	21
	QFLO75	750	L	23	23	23	21	21
	QFLO75	750	X	23	23	23	21	21
	QFLO100	1000	L	23	23	23	21	21
	QFLO100	1000	X	23	23	23	21	21
	QFLO125	1250	L	23	23	23	21	19
	QFLO125	1250	X	23	23	23	21	19
	QMAX100	1000	S or L	23	23	23	19	19
	QMAX100	1000	X	23	23	23	19	19
	QMAX125	1250	S or L	23	23	23	19	19
	QMAX125	1250	X	23	23	23	19	19
	QMAX150	1500	S or L	23	23	23		
	QMAX150	1500	X	23	23	23		
	QMAX175	1750	S or L	23	23	23		
	QMAX175	1750	X	23	23	23		
	QMAX200	2000	S or L	23	23	23		
	QMAX200	2000	X	23	23	23		
	QMAX225	2250	S or L	23	23	23		
	QMAX225	2250	X	23	23	23		
	DSD75	750	L	23	23	23	23	23
	DSD75	750	X	23	23	23	23	23
	DSD100	1000	L	23	23	23	23	23
	DSD100	1000	X	23	23	23	23	23
	DSD125	1250	L	23	23	23	21	21
	DSD125	1250	X	23	23	23	21	21
	DSD150	1500	L	23	23	23		
	DSD150	1500	X	23	23	23		
	SMM/SMD	1250	X	23	23	23		
	SMM/SMD	1500	X	23	23	23		
	MG50	500		30	30	30	26	26
	MG75	750		30	30	30	26	26
	MG100	1000		30	30	30	26	26
	TWO STAGE							
	QTWO100	1000	S or L	21	21	21	17	17
	QTWO100	1000	X	21	21	21		
	QTWO125	1250	S or L	21	21	21	17	17
	QTWO125	1250	X	21	21	21		
	QTWO150	1500	S or L	21	21	21		
	QTWO150	1500	X	21	21	21		
	QTWO175	1750	S or L	21	21	21		
	QTWO175	1750	X	21	21	21		
	QTWO200	2000	S or L	21	21	21		
	QTWO200	2000	X	21	21	21		

MIDSHIP MOUNTED PUMPS

ENGINE								
	MANUFACTURER			CUMMINS	CUMMINS	CUMMINS	CUMMINS	CUMMINS
	MODEL NUMBER			ISC 260	ISC 285	ISC 300	ISC 315	ISC 330
	DISPLACEMENT			506	506	506	506	506
	RATED HP			260	285	300	315	330
	GOVERNED SPEED			2200	2200	2200	2200	2200
	PEAK TORQUE			800	800	860	950	950
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L	23	23	23	23	23
	QPAK50	500	X	23	23	23	23	28
	QPAK75	750	L	23	23	23	23	23
	QPAK75	750	X	23	23	23	23	28
	QPAK100	1000	L	23	23	23	23	23
	QPAK100	1000	X	23	23	23	23	28
	QFLO75	750	L	23	23	23	23	23
	QFLO75	750	X	23	23	23	23	28
	QFLO100	1000	L	23	23	23	23	23
	QFLO100	1000	X	23	23	23	23	28
	QFLO125	1250	L	23	23	23	23	23
	QFLO125	1250	X	23	23	23	23	28
	QMAX100	1000	S or L	23	23	23	23	23
	QMAX100	1000	X	23	23	23	23	28
	QMAX125	1250	S or L	23	23	23	23	23
	QMAX125	1250	X	23	23	23	23	28
	QMAX150	1500	S or L			21	23	23
	QMAX150	1500	X			21	23	23
	QMAX175	1750	S or L				23	23
	QMAX175	1750	X				21	21
	QMAX200	2000	S or L					
	QMAX200	2000	X					
	QMAX225	2250	S or L					
	QMAX225	2250	X					
	DSD75	750	L	23	23	23	23	23
	DSD75	750	X	23	23	23	23	23
	DSD100	1000	L	23	23	23	23	23
	DSD100	1000	X	23	23	23	23	23
	DSD125	1250	L	23	23	23	23	23
	DSD125	1250	X	23	23	23	23	23
	DSD150	1500	L			23	23	23
	DSD150	1500	X			23	23	23
	SMM/SMD	1250	X			21	21	19
	SMM/SMD	1500	X					19
	MG50	500		30	30	30	30	30
	MG75	750		30	30	30	30	30
	MG100	1000		30	30	30	30	30
	TWO STAGE							
	QTWO100	1000	S or L	19	19	21	23	23
	QTWO100	1000	X	19	19	23	23	23
	QTWO125	1250	S or L	19	19	21	23	23
	QTWO125	1250	X	19	19	21	23	23
	QTWO150	1500	S or L			19	23	23
	QTWO150	1500	X			21	23	23
	QTWO175	1750	S or L				21	21
	QTWO175	1750	X				21	21
	QTWO200	2000	S or L					
	QTWO200	2000	X					

MIDSHIP MOUNTED PUMPS

ENGINE	MANUFACTURER			CUMMINS	CUMMINS	CUMMINS	CUMMINS	CUMMINS
	MODEL NUMBER			ISL 330	ISL 350	ISL 350	ISL 370	ISL 400
	DISPLACEMENT			537	537	537	537	537
	RATED HP			330	350	350	370	400
	GOVERNED SPEED			2200	2200	2200	2200	2200
	PEAK TORQUE			1150	1050	1250	1200	1200
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L	23	23	23	23	23
	QPAK50	500	X	28	28	28	23	23
	QPAK75	750	L	23	23	23	23	23
	QPAK75	750	X	28	28	28	23	23
	QPAK100	1000	L	23	23	23	23	23
	QPAK100	1000	X	28	28	28	23	23
	QFLO75	750	L	23	23	23	23	23
	QFLO75	750	X	28	28	28	23	23
	QFLO100	1000	L	23	23	23	23	23
	QFLO100	1000	X	28	28	28	23	23
	QFLO125	1250	L	23	23	23	23	23
	QFLO125	1250	X	28	28	28	23	23
	QMAX100	1000	S or L	23	23	23	23	23
	QMAX100	1000	X	25	28	23	23	23
	QMAX125	1250	S or L	23	23	23	23	23
	QMAX125	1250	X	26	28	23	23	23
	QMAX150	1500	S or L	23	23	23	23	23
	QMAX150	1500	X	26	28	23	23	23
	QMAX175	1750	S or L	23	23	23	23	23
	QMAX175	1750	X	26	23	23	23	23
	QMAX200	2000	S or L	23	21	21	23	23
	QMAX200	2000	X	23	21	23	23	23
	QMAX225	2250	S or L					
	QMAX225	2250	X					
	DSD75	750	L	23	23	23	23	23
	DSD75	750	X	23	23	23	23	23
	DSD100	1000	L	23	23	23	23	23
	DSD100	1000	X	23	23	23	23	23
	DSD125	1250	L	23	23	23	23	23
	DSD125	1250	X	23	23	23	23	23
	DSD150	1500	L	23	23	23	23	23
	DSD150	1500	X	23	23	23	23	23
	SMM/SMD	1250	X	23	23	23	23	23
	SMM/SMD	1500	X	23	21	23	23	23
	MG50	500		30	30	30	30	30
	MG75	750		30	30	30	30	30
	MG100	1000		30	30	30	30	30
	TWO STAGE							
	QTWO100	1000	S or L	23	23	21	21	23
	QTWO100	1000	X	23	23	21	21	23
	QTWO125	1250	S or L	23	23	23	21	23
	QTWO125	1250	X	23	23	23	21	23
	QTWO150	1500	S or L	23	23	23	21	23
	QTWO150	1500	X	23	23	23	21	23
	QTWO175	1750	S or L	23	23	23	21	23
	QTWO175	1750	X	23	23	23	21	23
	QTWO200	2000	S or L	23	21	23	21	23
	QTWO200	2000	X	23	19	23	21	23

MIDSHIP MOUNTED PUMPS

ENGINE								
	MANUFACTURER			**CUMMINS**	**CUMMINS**	**CUMMINS**	**CUMMINS**	**CUMMINS**
	MODEL NUMBER			ISL 425	ISM 340EV	ISM 365	ISM 380	ISM 385
	DISPLACEMENT			543	661	661	661	661
	RATED HP			425	340	365	380	385
	GOVERNED SPEED			2200	2100	2100	2100	2100
	PEAK TORQUE			1200	1350	1350	1200	1350
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L	23	23	23	23	23
	QPAK50	500	X	23	23	23	23	23
	QPAK75	750	L	23	23	23	23	23
	QPAK75	750	X	23	23	23	23	23
	QPAK100	1000	L	23	23	23	23	23
	QPAK100	1000	X	23	23	23	23	23
	QFLO75	750	L	23	23	23	23	23
	QFLO75	750	X	23	23	23	23	23
	QFLO100	1000	L	23	23	23	23	23
	QFLO100	1000	X	23	23	23	23	23
	QFLO125	1250	L	23	23	23	23	23
	QFLO125	1250	X	23	23	23	23	23
	QMAX100	1000	S or L	23	23	23	23	23
	QMAX100	1000	X	23	23	23	23	23
	QMAX125	1250	S or L	23	23	23	23	23
	QMAX125	1250	X	23	23	23	23	23
	QMAX150	1500	S or L	23	23	23	23	23
	QMAX150	1500	X	23	23	23	23	23
	QMAX175	1750	S or L	23	23	23	23	23
	QMAX175	1750	X	23	23	23	23	23
	QMAX200	2000	S or L	23	23	23	23	23
	QMAX200	2000	X	23	23	23	23	23
	QMAX225	2250	S or L				21	23
	QMAX225	2250	X				21	23
	DSD75	750	L	23	23	23	23	23
	DSD75	750	X	23	23	23	23	23
	DSD100	1000	L	23	23	23	23	23
	DSD100	1000	X	23	23	23	23	23
	DSD125	1250	L	23	23	23	23	23
	DSD125	1250	X	23	23	23	23	23
	DSD150	1500	L	23	23	23	23	23
	DSD150	1500	X	23	23	23	23	23
	SMM/SMD	1250	X	23	23	23	23	23
	SMM/SMD	1500	X	23	23	23	23	23
	MG50	500		30	30	30	30	30
	MG75	750		30	30	30	30	30
	MG100	1000		30	30	30	30	30
	TWO STAGE							
	QTWO100	1000	S or L	23	23	23	23	23
	QTWO100	1000	X	23	23	23	23	23
	QTWO125	1250	S or L	23	23	23	23	23
	QTWO125	1250	X	23	23	23	23	23
	QTWO150	1500	S or L	23	23	23	23	23
	QTWO150	1500	X	23	23	23	23	23
	QTWO175	1750	S or L	23	23	23	23	23
	QTWO175	1750	X	23	23	23	23	23
	QTWO200	2000	S or L	23	23	23	23	23
	QTWO200	2000	X	23	23	23	23	23

MIDSHIP MOUNTED PUMPS

ENGINE	MANUFACTURER			CUMMINS	CUMMINS	CUMMINS	CUMMINS	CUMMINS
	MODEL NUMBER			ISM 385	ISM 400	ISM 400	ISM 430	ISM 435
	DISPLACEMENT			661	661	661	661	661
	RATED HP			385	400	400	430	435
	GOVERNED SPEED			2100	2100	2100	2100	2100
	PEAK TORQUE			1450	1450	1550	1450	1550
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L	23	23	23	23	23
	QPAK50	500	X	23	23	23	23	23
	QPAK75	750	L	23	23	23	23	23
	QPAK75	750	X	23	23	23	23	23
	QPAK100	1000	L	23	23	23	23	23
	QPAK100	1000	X	23	23	23	23	23
	QFLO75	750	L	23	23	23	23	23
	QFLO75	750	X	23	23	23	23	23
	QFLO100	1000	L	23	23	23	23	23
	QFLO100	1000	X	23	23	23	23	23
	QFLO125	1250	L	23	23	23	23	23
	QFLO125	1250	X	23	23	23	23	23
	QMAX100	1000	S or L	23	23	23	23	23
	QMAX100	1000	X	23	23	23	23	23
	QMAX125	1250	S or L	23	23	23	23	23
	QMAX125	1250	X	23	23	23	23	23
	QMAX150	1500	S or L	23	23	23	23	23
	QMAX150	1500	X	23	23	23	23	23
	QMAX175	1750	S or L	23	23	23	23	23
	QMAX175	1750	X	23	23	23	23	23
	QMAX200	2000	S or L	23	23	23	23	23
	QMAX200	2000	X	23	23	23	23	23
	QMAX225	2250	S or L	23	23	23	23	23
	QMAX225	2250	X	23	23	23	23	23
	DSD75	750	L	23	23	23	23	23
	DSD75	750	X	23	23	23	23	23
	DSD100	1000	L	23	23	23	23	23
	DSD100	1000	X	23	23	23	23	23
	DSD125	1250	L	23	23	23	23	23
	DSD125	1250	X	23	23	23	23	23
	DSD150	1500	L	23	23	23	23	23
	DSD150	1500	X	23	23	23	23	23
	SMM/SMD	1250	X	23	23	23	23	23
	SMM/SMD	1500	X	23	23	23	23	23
	MG50	500		30	30	30	30	30
	MG75	750		30	30	30	30	30
	MG100	1000		30	30	30	30	30
	TWO STAGE							
	QTWO100	1000	S or L	23	23	23	23	23
	QTWO100	1000	X	23	23	23	23	23
	QTWO125	1250	S or L	23	23	23	23	23
	QTWO125	1250	X	23	23	23	23	23
	QTWO150	1500	S or L	23	23	23	23	23
	QTWO150	1500	X	23	23	23	23	23
	QTWO175	1750	S or L	23	23	23	23	23
	QTWO175	1750	X	23	23	23	23	23
	QTWO200	2000	S or L	23	23	23	23	23
	QTWO200	2000	X	23	23	23	23	23

MIDSHIP MOUNTED PUMPS

ENGINE								
	MANUFACTURER			**CUMMINS**	**CUMMINS**	**CUMMINS**	**CUMMINS**	**CUMMINS**
	MODEL NUMBER			ISM 450	ISM 450	ISM 475	ISM 500	ISM 500
	DISPLACEMENT			661	661	661	661	661
	RATED HP			450	450	475	500	500
	GOVERNED SPEED			2100	2100	2100	2100	2100
	PEAK TORQUE			1450	1550	1550	1450	1550
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L	23	23	23	23	23
	QPAK50	500	X	23	23	23	23	23
	QPAK75	750	L	23	23	23	23	23
	QPAK75	750	X	23	23	23	23	23
	QPAK100	1000	L	23	23	23	23	23
	QPAK100	1000	X	23	23	23	23	23
	QFLO75	750	L	23	23	23	23	23
	QFLO75	750	X	23	23	23	23	23
	QFLO100	1000	L	23	23	23	23	23
	QFLO100	1000	X	23	23	23	23	23
	QFLO125	1250	L	23	23	23	23	23
	QFLO125	1250	X	23	23	23	23	23
	QMAX100	1000	S or L	23	23	23	23	23
	QMAX100	1000	X	23	23	23	23	23
	QMAX125	1250	S or L	23	23	23	23	23
	QMAX125	1250	X	23	23	23	23	23
	QMAX150	1500	S or L	23	23	23	23	23
	QMAX150	1500	X	23	23	23	23	23
	QMAX175	1750	S or L	23	23	23	23	23
	QMAX175	1750	X	23	23	23	23	23
	QMAX200	2000	S or L	23	23	23	23	23
	QMAX200	2000	X	23	23	23	23	23
	QMAX225	2250	S or L	23	23	23	23	23
	QMAX225	2250	X	23	23	23	23	23
	DSD75	750	L	23	23	23	23	23
	DSD75	750	X	23	23	23	23	23
	DSD100	1000	L	23	23	23	23	23
	DSD100	1000	X	23	23	23	23	23
	DSD125	1250	L	23	23	23	23	23
	DSD125	1250	X	23	23	23	23	23
	DSD150	1500	L	23	23	23	23	23
	DSD150	1500	X	23	23	23	23	23
	SMM/SMD	1250	X	23	23	23	23	23
	SMM/SMD	1500	X	23	23	23	23	23
	MG50	500		30	30	30	30	30
	MG75	750		30	30	30	30	30
	MG100	1000		30	30	30	30	30
	TWO STAGE							
	QTWO100	1000	S or L	23	23	23	23	23
	QTWO100	1000	X	23	23	23	23	23
	QTWO125	1250	S or L	23	23	23	23	23
	QTWO125	1250	X	23	23	23	23	23
	QTWO150	1500	S or L	23	23	23	23	23
	QTWO150	1500	X	23	23	23	23	23
	QTWO175	1750	S or L	23	23	23	23	23
	QTWO175	1750	X	23	23	23	23	23
	QTWO200	2000	S or L	23	23	23	23	23
	QTWO200	2000	X	23	23	23	23	23

MIDSHIP MOUNTED PUMPS

ENGINE								
	MANUFACTURER			CUMMINS	MACK	MACK	MACK	MACK
	MODEL NUMBER			ISX 525	AC 310/330	AC 330/350	AC 350	AC 355/380
	DISPLACEMENT			912	728	728	728	728
	RATED HP			525	330	350	350	380
	GOVERNED SPEED			2000	1800	1800	1800	1800
	PEAK TORQUE			1650	1360	1460	1360	1560
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L					
	QPAK50	500	X	25	28	28	28	28
	QPAK75	750	L					
	QPAK75	750	X	25	28	28	28	28
	QPAK100	1000	L					
	QPAK100	1000	X	25	28	28	28	28
	QFLO75	750	L	23				
	QFLO75	750	X	23	28	28	28	28
	QFLO100	1000	L	23				
	QFLO100	1000	X	23	28	28	28	28
	QFLO125	1250	L	23				
	QFLO125	1250	X	23	28	28	28	28
	QMAX100	1000	S or L	23				
	QMAX100	1000	X	23	28	28	25	28
	QMAX125	1250	S or L	23				
	QMAX125	1250	X	23	28	28	25	28
	QMAX150	1500	S or L	23				
	QMAX150	1500	X	23	28	28	25	28
	QMAX175	1750	S or L	23				
	QMAX175	1750	X	23	28	28	25	28
	QMAX200	2000	S or L	23				
	QMAX200	2000	X	23	25	28	25	28
	QMAX225	2250	S or L	23				
	QMAX225	2250	X	23				28
	DSD75	750	L					
	DSD75	750	X	28	28	28	28	28
	DSD100	1000	L					
	DSD100	1000	X	28	28	28	28	28
	DSD125	1250	L					
	DSD125	1250	X	28	28	28	28	28
	DSD150	1500	L					
	DSD150	1500	X	28	28	28	28	28
	SMM/SMD	1250	X	23	23	23	23	23
	SMM/SMD	1500	X	23	23	23	23	23
	MG50	500		30				
	MG75	750		30				
	MG100	1000		30				
	TWO STAGE							
	QTWO100	1000	S or L	23	23	23	23	23
	QTWO100	1000	X	23	25	25	23	25
	QTWO125	1250	S or L	23	23	23	23	23
	QTWO125	1250	X	23	25	25	23	25
	QTWO150	1500	S or L	23	23	23	23	23
	QTWO150	1500	X	23	25	25	23	25
	QTWO175	1750	S or L	23	23	23	23	23
	QTWO175	1750	X	23	25	25	23	25
	QTWO200	2000	S or L	23		23	23	23
	QTWO200	2000	X	23		25	23	25

MIDSHIP MOUNTED PUMPS

ENGINE								
	MANUFACTURER			**MACK**	**MACK**	**MACK**	**MACK**	**MACK**
	MODEL NUMBER			AC 380/410	AC 427	AC 460P	AI 300A	AI 350
	DISPLACEMENT			728	728	728	728	728
	RATED HP			410	427	487	325	350
	GOVERNED SPEED			1800	1800	1850	1950	1950
	PEAK TORQUE			1660	1560	1660	1200	1260
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L					
	QPAK50	500	X	28	28	28	25	25
	QPAK75	750	L					
	QPAK75	750	X	28	28	28	25	25
	QPAK100	1000	L					
	QPAK100	1000	X	28	28	28	25	23
	QFLO75	750	L					23
	QFLO75	750	X	28	28	28	25	23
	QFLO100	1000	L					23
	QFLO100	1000	X	28	28	28	25	23
	QFLO125	1250	L					23
	QFLO125	1250	X	28	28	28	25	23
	QMAX100	1000	S or L				23	23
	QMAX100	1000	X	28	25	25	23	23
	QMAX125	1250	S or L				23	23
	QMAX125	1250	X	28	25	25	23	23
	QMAX150	1500	S or L				23	23
	QMAX150	1500	X	28	25	25	23	23
	QMAX175	1750	S or L				23	23
	QMAX175	1750	X	28	25	25	23	23
	QMAX200	2000	S or L				23	23
	QMAX200	2000	X	28	25	25	23	23
	QMAX225	2250	S or L					
	QMAX225	2250	X	28	25	25		
	DSD75	750	L					
	DSD75	750	X	28	28	28	25	25
	DSD100	1000	L					
	DSD100	1000	X	28	28	28	25	25
	DSD125	1250	L					
	DSD125	1250	X	28	28	28	25	25
	DSD150	1500	L					
	DSD150	1500	X	28	28	28	25	25
	SMM/SMD	1250	X	23	23	23	23	23
	SMM/SMD	1500	X	23	23	23	23	23
	MG50	500					30	30
	MG75	750					30	30
	MG100	1000					30	30
	TWO STAGE							
	QTWO100	1000	S or L	23	23	23	21	21
	QTWO100	1000	X	25	23	23	21	21
	QTWO125	1250	S or L	23	23	23	21	23
	QTWO125	1250	X	25	23	23	21	21
	QTWO150	1500	S or L	23	23	23	21	23
	QTWO150	1500	X	25	23	23	21	21
	QTWO175	1750	S or L	23	23	23	21	23
	QTWO175	1750	X	25	23	23	21	21
	QTWO200	2000	S or L	23	23	23		23
	QTWO200	2000	X	25	23	23		

MIDSHIP MOUNTED PUMPS

ENGINE								
	MANUFACTURER			**MACK**	**MACK**	**MACK**	**MACK**	**MACK**
	MODEL NUMBER			AI 400	AI 427	AI 460	AMI 300	AMI 335
	DISPLACEMENT			728	728	728	728	728
	RATED HP			400	427	460	325	365
	GOVERNED SPEED			1950	1950	1950	2100	2100
	PEAK TORQUE			1360	1460	1560	1200	1340
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L				23	23
	QPAK50	500	X	25	25	25	23	23
	QPAK75	750	L				23	23
	QPAK75	750	X	25	25	25	23	23
	QPAK100	1000	L				23	23
	QPAK100	1000	X	23	23	23	23	23
	QFLO75	750	L	23	23	23	23	23
	QFLO75	750	X	23	23	23	23	23
	QFLO100	1000	L	23	23	23	23	23
	QFLO100	1000	X	23	23	23	23	23
	QFLO125	1250	L	23	23	23	23	23
	QFLO125	1250	X	23	23	23	23	23
	QMAX100	1000	S or L	23	23	23	23	23
	QMAX100	1000	X	23	23	23	23	23
	QMAX125	1250	S or L	23	23	23	23	23
	QMAX125	1250	X	23	23	23	23	23
	QMAX150	1500	S or L	23	23	23	23	23
	QMAX150	1500	X	23	23	23	23	23
	QMAX175	1750	S or L	23	23	23	23	23
	QMAX175	1750	X	23	23	23	23	23
	QMAX200	2000	S or L	23	23	23	23	23
	QMAX200	2000	X	23	23	23	23	23
	QMAX225	2250	S or L	23	23	23		
	QMAX225	2250	X	23	23	23		
	DSD75	750	L				23	23
	DSD75	750	X	25	25	25	25	25
	DSD100	1000	L				23	23
	DSD100	1000	X	25	25	25	25	25
	DSD125	1250	L				23	23
	DSD125	1250	X	25	25	25	25	25
	DSD150	1500	L				23	23
	DSD150	1500	X	25	25	25	25	25
	SMM/SMD	1250	X	23	23	23	23	23
	SMM/SMD	1500	X	23	23	23	23	23
	MG50	500		30	30	30	30	30
	MG75	750		30	30	30	30	30
	MG100	1000		30	30	30	30	30
	TWO STAGE							
	QTWO100	1000	S or L	21	21	21	21	21
	QTWO100	1000	X	21	21	21	21	21
	QTWO125	1250	S or L	23	23	23	23	23
	QTWO125	1250	X	21	21	21	21	21
	QTWO150	1500	S or L	23	23	23	23	23
	QTWO150	1500	X	21	21	21	21	21
	QTWO175	1750	S or L	23	23	23	23	23
	QTWO175	1750	X	21	21	21	21	21
	QTWO200	2000	S or L	23	23	23		23
	QTWO200	2000	X					21

MIDSHIP MOUNTED PUMPS

ENGINE								
	MANUFACTURER			MACK	MERCEDES	MERCEDES	MERCEDES	MERCEDES
	MODEL NUMBER			AMI 370	MBE 4000	MBE 4000	MBE 4000	MBE 4000
	DISPLACEMENT			728	781	781	781	781
	RATED HP			405	350	370	370	410
	GOVERNED SPEED			2100	2000	2000	2000	2000
	PEAK TORQUE			1480	1350	1450	1350	1450
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L	23				
	QPAK50	500	X	23	25	25	25	25
	QPAK75	750	L	23				
	QPAK75	750	X	23	25	25	25	25
	QPAK100	1000	L	23				
	QPAK100	1000	X	23	25	25	25	25
	QFLO75	750	L	23				
	QFLO75	750	X	23	25	25	25	25
	QFLO100	1000	L	23				
	QFLO100	1000	X	23	25	25	25	25
	QFLO125	1250	L	23				
	QFLO125	1250	X	23	25	25	25	25
	QMAX100	1000	S or L	23	23	23	23	23
	QMAX100	1000	X	23	23	23	23	23
	QMAX125	1250	S or L	23	23	23	23	23
	QMAX125	1250	X	23	23	23	23	23
	QMAX150	1500	S or L	23	23	23	23	23
	QMAX150	1500	X	23	23	23	23	23
	QMAX175	1750	S or L	23	23	23	23	23
	QMAX175	1750	X	23	23	23	23	23
	QMAX200	2000	S or L	23	23	23	23	23
	QMAX200	2000	X	23	23	23	23	23
	QMAX225	2250	S or L	23		23	23	23
	QMAX225	2250	X	23				23
	DSD75	750	L	23				
	DSD75	750	X	25	28	28	28	28
	DSD100	1000	L	23				
	DSD100	1000	X	25	28	28	28	28
	DSD125	1250	L	23				
	DSD125	1250	X	25	28	28	28	28
	DSD150	1500	L	23				
	DSD150	1500	X	25	28	28	28	28
	SMM/SMD	1250	X	23	23	23	23	23
	SMM/SMD	1500	X	23	23	23	23	23
	MG50	500		30	30	30	30	30
	MG75	750		30	30	30	30	30
	MG100	1000		30	30	30	30	30
	TWO STAGE							
	QTWO100	1000	S or L	21	23	23	23	23
	QTWO100	1000	X	21	25	25	25	25
	QTWO125	1250	S or L	23	23	23	23	23
	QTWO125	1250	X	21	25	25	25	25
	QTWO150	1500	S or L	23	23	23	23	23
	QTWO150	1500	X	21	25	25	25	25
	QTWO175	1750	S or L	23	23	23	23	23
	QTWO175	1750	X	21	25	25	25	25
	QTWO200	2000	S or L	23	23	23	23	23
	QTWO200	2000	X	21	25	25	25	25

MIDSHIP MOUNTED PUMPS

ENGINE	MANUFACTURER			MERCEDES	MERCEDES	MERCEDES	MERCEDES	MERCEDES
	MODEL NUMBER			MBE 4000	MBE 4000	MBE 4000	MBE 904	MBE 906
	DISPLACEMENT			781	781	781	259	388
	RATED HP			410	435	450	170	190
	GOVERNED SPEED			2000	2000	2000	2500	2500
	PEAK TORQUE			1550	1550	1550	420	520
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L				21	23
	QPAK50	500	X	25	25	25	21	23
	QPAK75	750	L					23
	QPAK75	750	X	25	25	25		23
	QPAK100	1000	L					
	QPAK100	1000	X	25	25	25		
	QFLO75	750	L					
	QFLO75	750	X	25	25	25		
	QFLO100	1000	L					
	QFLO100	1000	X	25	25	25		
	QFLO125	1250	L					
	QFLO125	1250	X	25	25	25		
	QMAX100	1000	S or L	23	23	23		
	QMAX100	1000	X	23	23	23		
	QMAX125	1250	S or L	23	23	23		
	QMAX125	1250	X	23	23	23		
	QMAX150	1500	S or L	23	23	23		
	QMAX150	1500	X	23	23	23		
	QMAX175	1750	S or L	23	23	23		
	QMAX175	1750	X	23	23	23		
	QMAX200	2000	S or L	23	23	23		
	QMAX200	2000	X	23	23	23		
	QMAX225	2250	S or L	23	23	23		
	QMAX225	2250	X	23	23	23		
	DSD75	750	L					21
	DSD75	750	X	28	28	28		21
	DSD100	1000	L					
	DSD100	1000	X	28	28	28		
	DSD125	1250	L					
	DSD125	1250	X	28	28	28		
	DSD150	1500	L					
	DSD150	1500	X	28	28	28		
	SMM/SMD	1250	X	23	23	23		
	SMM/SMD	1500	X	23	23	23		
	MG50	500		30	30	30	26	26
	MG75	750		30	30	30		26
	MG100	1000		30	30	30		
	TWO STAGE							
	QTWO100	1000	S or L	23	23	23		
	QTWO100	1000	X	25	25	25		
	QTWO125	1250	S or L	23	23	23		
	QTWO125	1250	X	25	25	25		
	QTWO150	1500	S or L	23	23	23		
	QTWO150	1500	X	25	25	25		
	QTWO175	1750	S or L	23	23	23		
	QTWO175	1750	X	25	25	25		
	QTWO200	2000	S or L	23	23	23		
	QTWO200	2000	X	25	25	25		

MIDSHIP MOUNTED PUMPS

	MANUFACTURER			MERCEDES	MERCEDES	MERCEDES	MERCEDES	MERCEDES
ENGINE	MODEL NUMBER			MBE 906	MBE 906	MBE 906	MBE 906	MBE 906
	DISPLACEMENT			388	388	388	388	388
	RATED HP			210	210	230	250	260
	GOVERNED SPEED			2500	2500	2500	2500	2500
	PEAK TORQUE			520	605	660	660	700
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L	21	23	23	23	23
	QPAK50	500	X	21	23	23	23	23
	QPAK75	750	L	21	23	23	23	23
	QPAK75	750	X	21	23	23	23	23
	QPAK100	1000	L	21	23	23	23	23
	QPAK100	1000	X	19	23	23	23	23
	QFLO75	750	L			23	23	23
	QFLO75	750	X			23	23	23
	QFLO100	1000	L			23	23	23
	QFLO100	1000	X			23	23	23
	QFLO125	1250	L				21	21
	QFLO125	1250	X				21	21
	QMAX100	1000	S or L			19	21	21
	QMAX100	1000	X			19	21	21
	QMAX125	1250	S or L				19	19
	QMAX125	1250	X				19	19
	QMAX150	1500	S or L					
	QMAX150	1500	X					
	QMAX175	1750	S or L					
	QMAX175	1750	X					
	QMAX200	2000	S or L					
	QMAX200	2000	X					
	QMAX225	2250	S or L					
	QMAX225	2250	X					
	DSD75	750	L	23	23	23	23	23
	DSD75	750	X	23	23	23	23	23
	DSD100	1000	L		23	23	23	23
	DSD100	1000	X		23	23	23	23
	DSD125	1250	L				21	23
	DSD125	1250	X			21	21	23
	DSD150	1500	L					
	DSD150	1500	X					
	SMM/SMD	1250	X					
	SMM/SMD	1500	X					
	MG50	500		26	30	30	30	30
	MG75	750		26	30	30	30	30
	MG100	1000			26	30	30	30
	TWO STAGE							
	QTWO100	1000	S or L			17	19	19
	QTWO100	1000	X				19	19
	QTWO125	1250	S or L				17	17
	QTWO125	1250	X					
	QTWO150	1500	S or L					
	QTWO150	1500	X					
	QTWO175	1750	S or L					
	QTWO175	1750	X					
	QTWO200	2000	S or L					
	QTWO200	2000	X					

MIDSHIP MOUNTED PUMPS

ENGINE	MANUFACTURER			MERCEDES	MERCEDES	MERCEDES	MERCEDES	MERCEDES
	MODEL NUMBER			MBE 924	MBE 926	MBE 926	MBE 926	MBE 926
	DISPLACEMENT			296	439	439	439	439
	RATED HP			190	250	280	300	330
	GOVERNED SPEED			2500	2500	2500	2500	2500
	PEAK TORQUE			520	800	800	1000	860
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L	23	23	23	23	23
	QPAK50	500	X	23	23	23	23	23
	QPAK75	750	L	23	23	23	23	23
	QPAK75	750	X	23	23	23	23	23
	QPAK100	1000	L		23	23	23	23
	QPAK100	1000	X		23	23	23	23
	QFLO75	750	L		23	23	23	23
	QFLO75	750	X		23	23	23	23
	QFLO100	1000	L		23	23	23	23
	QFLO100	1000	X		23	23	23	23
	QFLO125	1250	L		23	23	23	23
	QFLO125	1250	X		23	23	23	23
	QMAX100	1000	S or L		23	23	23	23
	QMAX100	1000	X		23	23	23	23
	QMAX125	1250	S or L		23	23	23	23
	QMAX125	1250	X		23	23	23	23
	QMAX150	1500	S or L			19	23	21
	QMAX150	1500	X			19	23	21
	QMAX175	1750	S or L				23	19
	QMAX175	1750	X				23	
	QMAX200	2000	S or L					
	QMAX200	2000	X					
	QMAX225	2250	S or L					
	QMAX225	2250	X					
	DSD75	750	L	21	23	23	23	23
	DSD75	750	X	21	23	23	23	23
	DSD100	1000	L		23	23	23	23
	DSD100	1000	X		23	23	23	23
	DSD125	1250	L		23	23	23	23
	DSD125	1250	X		23	23	23	23
	DSD150	1500	L				23	21
	DSD150	1500	X				23	21
	SMM/SMD	1250	X				21	19
	SMM/SMD	1500	X				19	
	MG50	500		30	30	30	30	30
	MG75	750		26	30	30	30	30
	MG100	1000			30	30	30	30
	TWO STAGE							
	QTWO100	1000	S or L		21	21	21	21
	QTWO100	1000	X		21	21	21	21
	QTWO125	1250	S or L		21	21	21	21
	QTWO125	1250	X		21	21	21	21
	QTWO150	1500	S or L			17	21	21
	QTWO150	1500	X				21	21
	QTWO175	1750	S or L				21	21
	QTWO175	1750	X				21	
	QTWO200	2000	S or L					
	QTWO200	2000	X					

MIDSHIP MOUNTED PUMPS

	MANUFACTURER			DETROIT	DETROIT	DETROIT	DETROIT	DETROIT
ENGINE	MODEL NUMBER			SERIES 60	SERIES 60	SERIES 60	SERIES 60	SERIES 60
	DISPLACEMENT			778	778	778	778	778
	RATED HP			380	390	425	435	445
	GOVERNED SPEED			2100	2100	2100	2100	2100
	PEAK TORQUE			1350	1350	1450	1450	1450
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L	23	23	23	23	23
	QPAK50	500	X	23	23	23	23	23
	QPAK75	750	L	23	23	23	23	23
	QPAK75	750	X	23	23	23	23	23
	QPAK100	1000	L	23	23	23	23	23
	QPAK100	1000	X	23	23	23	23	23
	QFLO75	750	L	23	23	23	23	23
	QFLO75	750	X	23	23	23	23	23
	QFLO100	1000	L	23	23	23	23	23
	QFLO100	1000	X	23	23	23	23	23
	QFLO125	1250	L	23	23	23	23	23
	QFLO125	1250	X	23	23	23	23	23
	QMAX100	1000	S or L	23	23	23	23	23
	QMAX100	1000	X	23	23	23	23	23
	QMAX125	1250	S or L	23	23	23	23	23
	QMAX125	1250	X	23	23	23	23	23
	QMAX150	1500	S or L	23	23	23	23	23
	QMAX150	1500	X	23	23	23	23	23
	QMAX175	1750	S or L	23	23	23	23	23
	QMAX175	1750	X	23	23	23	23	23
	QMAX200	2000	S or L	23	23	23	23	23
	QMAX200	2000	X	23	23	23	23	23
	QMAX225	2250	S or L	23	23	23	23	23
	QMAX225	2250	X	23	23	23	23	23
	DSD75	750	L	23	23	23	23	23
	DSD75	750	X	23	23	23	23	23
	DSD100	1000	L	23	23	23	23	23
	DSD100	1000	X	23	23	23	23	23
	DSD125	1250	L	23	23	23	23	23
	DSD125	1250	X	23	23	23	23	23
	DSD150	1500	L	23	23	23	23	23
	DSD150	1500	X	23	23	23	23	23
	SMM/SMD	1250	X	23	23	23	23	23
	SMM/SMD	1500	X	23	23	23	23	23
	MG50	500		30	30	30	30	30
	MG75	750		30	30	30	30	30
	MG100	1000		30	30	30	30	30
	TWO STAGE							
	QTWO100	1000	S or L	23	23	23	23	23
	QTWO100	1000	X	23	23	23	23	23
	QTWO125	1250	S or L	23	23	23	23	23
	QTWO125	1250	X	23	23	23	23	23
	QTWO150	1500	S or L	23	23	23	23	23
	QTWO150	1500	X	23	23	23	23	23
	QTWO175	1750	S or L	23	23	23	23	23
	QTWO175	1750	X	23	23	23	23	23
	QTWO200	2000	S or L	23	23	23	23	23
	QTWO200	2000	X	23	23	23	23	23

MIDSHIP MOUNTED PUMPS

ENGINE								
	MANUFACTURER			**DETROIT**	**DETROIT**	**DETROIT**	**DETROIT**	**DETROIT**
	MODEL NUMBER			SERIES 60	SERIES 60	SERIES 60	SERIES 60	SERIES 60
	DISPLACEMENT			778	778	778	858	858
	RATED HP			445	450	455	455	490
	GOVERNED SPEED			2100	2100	2100	2100	2100
	PEAK TORQUE			1550	1550	1550	1550	1550
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L	23	23	23	23	23
	QPAK50	500	X	23	23	23	23	23
	QPAK75	750	L	23	23	23	23	23
	QPAK75	750	X	23	23	23	23	23
	QPAK100	1000	L	23	23	23	23	23
	QPAK100	1000	X	23	23	23	23	23
	QFLO75	750	L	23	23	23	23	23
	QFLO75	750	X	23	23	23	23	23
	QFLO100	1000	L	23	23	23	23	23
	QFLO100	1000	X	23	23	23	23	23
	QFLO125	1250	L	23	23	23	23	23
	QFLO125	1250	X	23	23	23	23	23
	QMAX100	1000	S or L	23	23	23	23	23
	QMAX100	1000	X	23	23	23	23	23
	QMAX125	1250	S or L	23	23	23	23	23
	QMAX125	1250	X	23	23	23	23	23
	QMAX150	1500	S or L	23	23	23	23	23
	QMAX150	1500	X	23	23	23	23	23
	QMAX175	1750	S or L	23	23	23	23	23
	QMAX175	1750	X	23	23	23	23	23
	QMAX200	2000	S or L	23	23	23	23	23
	QMAX200	2000	X	23	23	23	23	23
	QMAX225	2250	S or L	23	23	23	23	23
	QMAX225	2250	X	23	23	23	23	23
	DSD75	750	L	23	23	23	23	23
	DSD75	750	X	23	23	23	23	23
	DSD100	1000	L	23	23	23	23	23
	DSD100	1000	X	23	23	23	23	23
	DSD125	1250	L	23	23	23	23	23
	DSD125	1250	X	23	23	23	23	23
	DSD150	1500	L	23	23	23	23	23
	DSD150	1500	X	23	23	23	23	23
	SMM/SMD	1250	X	23	23	23	23	23
	SMM/SMD	1500	X	23	23	23	23	23
	MG50	500		30	30	30	30	30
	MG75	750		30	30	30	30	30
	MG100	1000		30	30	30	30	30
	TWO STAGE							
	QTWO100	1000	S or L	23	23	23	23	23
	QTWO100	1000	X	23	23	23	23	23
	QTWO125	1250	S or L	23	23	23	23	23
	QTWO125	1250	X	23	23	23	23	23
	QTWO150	1500	S or L	23	23	23	23	23
	QTWO150	1500	X	23	23	23	23	23
	QTWO175	1750	S or L	23	23	23	23	23
	QTWO175	1750	X	23	23	23	23	23
	QTWO200	2000	S or L	23	23	23	23	23
	QTWO200	2000	X	23	23	23	23	23

MIDSHIP MOUNTED PUMPS

ENGINE								
	MANUFACTURER			DETROIT	DETROIT	DETROIT	DETROIT	NAVISTAR
	MODEL NUMBER			SERIES 60	SERIES 60	SERIES 60	SERIES 60	DT466
	DISPLACEMENT			858	858	858	858	465
	RATED HP			515	470	490	515	210
	GOVERNED SPEED			2100	2100	2100	2100	2600
	PEAK TORQUE			1550	1650	1650	1650	520
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L	23	23	23	23	23
	QPAK50	500	X	23	23	23	23	23
	QPAK75	750	L	23	23	23	23	23
	QPAK75	750	X	23	23	23	23	23
	QPAK100	1000	L	23	23	23	23	21
	QPAK100	1000	X	23	23	23	23	21
	QFLO75	750	L	23	23	23	23	
	QFLO75	750	X	23	23	23	23	
	QFLO100	1000	L	23	23	23	23	
	QFLO100	1000	X	23	23	23	23	
	QFLO125	1250	L	23	23	23	23	
	QFLO125	1250	X	23	23	23	23	
	QMAX100	1000	S or L	23	23	23	23	
	QMAX100	1000	X	23	23	23	23	
	QMAX125	1250	S or L	23	23	23	23	
	QMAX125	1250	X	23	23	23	23	
	QMAX150	1500	S or L	23	23	23	23	
	QMAX150	1500	X	23	23	23	23	
	QMAX175	1750	S or L	23	23	23	23	
	QMAX175	1750	X	23	23	23	23	
	QMAX200	2000	S or L	23	23	23	23	
	QMAX200	2000	X	23	23	23	23	
	QMAX225	2250	S or L	23	23	23	23	
	QMAX225	2250	X	23	23	23	23	
	DSD75	750	L	23	23	23	23	21
	DSD75	750	X	23	23	23	23	21
	DSD100	1000	L	23	23	23	23	
	DSD100	1000	X	23	23	23	23	
	DSD125	1250	L	23	23	23	23	
	DSD125	1250	X	23	23	23	23	
	DSD150	1500	L	23	23	23	23	
	DSD150	1500	X	23	23	23	23	
	SMM/SMD	1250	X	23	23	23	23	
	SMM/SMD	1500	X	23	23	23	23	
	MG50	500		30	30	30	30	26
	MG75	750		30	30	30	30	26
	MG100	1000		30	30	30	30	
	TWO STAGE							
	QTWO100	1000	S or L	23	23	23	23	
	QTWO100	1000	X	23	23	23	23	
	QTWO125	1250	S or L	23	23	23	23	
	QTWO125	1250	X	23	23	23	23	
	QTWO150	1500	S or L	23	23	23	23	
	QTWO150	1500	X	23	23	23	23	
	QTWO175	1750	S or L	23	23	23	23	
	QTWO175	1750	X	23	23	23	23	
	QTWO200	2000	S or L	23	23	23	23	
	QTWO200	2000	X	23	23	23	23	

MIDSHIP MOUNTED PUMPS

	MANUFACTURER			NAVISTAR	NAVISTAR	NAVISTAR	NAVISTAR	NAVISTAR
ENGINE	MODEL NUMBER			DT466	DT466	DT466	DT466	DT466
	DISPLACEMENT			465	465	465	465	465
	RATED HP			220	225	225	245	245
	GOVERNED SPEED			2600	2600	2400	2600	2600
	PEAK TORQUE			540	560	620	620	660
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L	23	23	23	23	23
	QPAK50	500	X	23	23	23	23	23
	QPAK75	750	L	23	23	23	23	23
	QPAK75	750	X	23	23	23	23	23
	QPAK100	1000	L	21	21	23	23	23
	QPAK100	1000	X	21	21	23	23	23
	QFLO75	750	L	21	21	21	23	23
	QFLO75	750	X	19	21	21	23	23
	QFLO100	1000	L		19	21	21	23
	QFLO100	1000	X		19	21	21	23
	QFLO125	1250	L				19	
	QFLO125	1250	X				19	
	QMAX100	1000	S or L			19	19	21
	QMAX100	1000	X			19	19	21
	QMAX125	1250	S or L					19
	QMAX125	1250	X					19
	QMAX150	1500	S or L					
	QMAX150	1500	X					
	QMAX175	1750	S or L					
	QMAX175	1750	X					
	QMAX200	2000	S or L					
	QMAX200	2000	X					
	QMAX225	2250	S or L					
	QMAX225	2250	X					
	DSD75	750	L	21	23	23	23	23
	DSD75	750	X	21	23	23	23	23
	DSD100	1000	L	21	21	23	23	23
	DSD100	1000	X	19	21	23	23	23
	DSD125	1250	L				21	21
	DSD125	1250	X				21	21
	DSD150	1500	L					
	DSD150	1500	X					
	SMM/SMD	1250	X					
	SMM/SMD	1500	X					
	MG50	500		30	30	30	30	30
	MG75	750		30	30	30	30	30
	MG100	1000				30	30	30
	TWO STAGE							
	QTWO100	1000	S or L		17	19	19	19
	QTWO100	1000	X					19
	QTWO125	1250	S or L					17
	QTWO125	1250	X					
	QTWO150	1500	S or L					
	QTWO150	1500	X					
	QTWO175	1750	S or L					
	QTWO175	1750	X					
	QTWO200	2000	S or L					
	QTWO200	2000	X					

MIDSHIP MOUNTED PUMPS

	MANUFACTURER			NAVISTAR	NAVISTAR	NAVISTAR	NAVISTAR	NAVISTAR
ENGINE	MODEL NUMBER			DT466	DT466	DT466	DT466	DT570
	DISPLACEMENT			465	465	465	465	570
	RATED HP			255	260	285	300	285
	GOVERNED SPEED			2600	2400	2400	2400	2200
	PEAK TORQUE			660	800	800	860	800
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L	23	23	23	23	23
	QPAK50	500	X	23	23	23	23	23
	QPAK75	750	L	23	23	23	23	23
	QPAK75	750	X	23	23	23	23	23
	QPAK100	1000	L	23	23	23	23	23
	QPAK100	1000	X	23	23	23	23	23
	QFLO75	750	L	23	23	23	23	23
	QFLO75	750	X	23	23	23	23	23
	QFLO100	1000	L	23	23	23	23	23
	QFLO100	1000	X	23	23	23	23	23
	QFLO125	1250	L		23	23	23	23
	QFLO125	1250	X		23	23	23	23
	QMAX100	1000	S or L	21	21	21	21	23
	QMAX100	1000	X	21	21	21	21	23
	QMAX125	1250	S or L	19	21	21	21	23
	QMAX125	1250	X	19	21	21	21	23
	QMAX150	1500	S or L			19	21	
	QMAX150	1500	X			19	21	
	QMAX175	1750	S or L				19	
	QMAX175	1750	X				19	
	QMAX200	2000	S or L					
	QMAX200	2000	X					
	QMAX225	2250	S or L					
	QMAX225	2250	X					
	DSD75	750	L	23	23	23	23	23
	DSD75	750	X	23	23	23	23	23
	DSD100	1000	L	23	23	23	23	23
	DSD100	1000	X	23	23	23	23	23
	DSD125	1250	L	21	23	23	23	23
	DSD125	1250	X	21	23	23	23	23
	DSD150	1500	L				21	
	DSD150	1500	X				21	
	SMM/SMD	1250	X				19	
	SMM/SMD	1500	X					
	MG50	500		30	30	30	30	30
	MG75	750		30	30	30	30	30
	MG100	1000		30	30	30	30	30
	TWO STAGE							
	QTWO100	1000	S or L	19	21	19	19	21
	QTWO100	1000	X	19	19	19	19	21
	QTWO125	1250	S or L	17	19	19	19	21
	QTWO125	1250	X		19	19	19	21
	QTWO150	1500	S or L			19	19	19
	QTWO150	1500	X			19	19	19
	QTWO175	1750	S or L					
	QTWO175	1750	X					
	QTWO200	2000	S or L					
	QTWO200	2000	X					

MIDSHIP MOUNTED PUMPS

	MANUFACTURER			NAVISTAR	NAVISTAR	NAVISTAR	NAVISTAR	NAVISTAR
ENGINE	MODEL NUMBER			DT570	DT570	DT570	DT570	DT570
	DISPLACEMENT			570	570	570	570	570
	RATED HP			295	310	310	330	330
	GOVERNED SPEED			2200	2200	2200	2200	2100
	PEAK TORQUE			950	950	1050	950	1150
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L	23	23	23	23	23
	QPAK50	500	X	23	23	23	23	23
	QPAK75	750	L	23	23	23	23	23
	QPAK75	750	X	23	23	23	23	23
	QPAK100	1000	L	23	23	23	23	23
	QPAK100	1000	X	23	23	23	23	23
	QFLO75	750	L	23	23	23	23	23
	QFLO75	750	X	23	23	23	23	23
	QFLO100	1000	L	23	23	23	23	23
	QFLO100	1000	X	23	23	23	23	23
	QFLO125	1250	L	23	23	23	23	23
	QFLO125	1250	X	23	23	23	23	23
	QMAX100	1000	S or L	23	23	23	23	23
	QMAX100	1000	X	23	23	23	23	23
	QMAX125	1250	S or L	23	23	23	23	23
	QMAX125	1250	X	23	23	23	23	23
	QMAX150	1500	S or L	23	23	23	23	23
	QMAX150	1500	X	23	23	23	23	23
	QMAX175	1750	S or L	21	21	23	21	23
	QMAX175	1750	X	21	21	23	21	23
	QMAX200	2000	S or L					23
	QMAX200	2000	X					23
	QMAX225	2250	S or L					
	QMAX225	2250	X					
	DSD75	750	L	23	23	23	23	23
	DSD75	750	X	23	23	23	23	23
	DSD100	1000	L	23	23	23	23	23
	DSD100	1000	X	23	23	23	23	23
	DSD125	1250	L	23	23	23	23	23
	DSD125	1250	X	23	23	23	23	23
	DSD150	1500	L	23	23	23	23	23
	DSD150	1500	X	23	23	23	23	23
	SMM/SMD	1250	X	21	21	21	21	23
	SMM/SMD	1500	X					23
	MG50	500		30	30	30	30	30
	MG75	750		30	30	30	30	30
	MG100	1000		30	30	30	30	30
	TWO STAGE							
	QTWO100	1000	S or L	23	23	23	23	23
	QTWO100	1000	X	23	23	23	23	23
	QTWO125	1250	S or L	23	23	23	23	23
	QTWO125	1250	X	23	23	23	23	23
	QTWO150	1500	S or L	23	23	23	23	23
	QTWO150	1500	X	23	23	23	23	23
	QTWO175	1750	S or L			23		23
	QTWO175	1750	X			23		23
	QTWO200	2000	S or L					
	QTWO200	2000	X					

MIDSHIP MOUNTED PUMPS

	MANUFACTURER			NAVISTAR	NAVISTAR	NAVISTAR	NAVISTAR	NAVISTAR
ENGINE	MODEL NUMBER			DT570	VT365	VT365	VT365	VT365
	DISPLACEMENT			570	364	364	364	364
	RATED HP			340	175	200	215	230
	GOVERNED SPEED			2100	2800	2800	2800	2800
	PEAK TORQUE			1150	460	520	540	540
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L	23	21	23	23	23
	QPAK50	500	X	23	21	23	23	23
	QPAK75	750	L	23	21	23	23	23
	QPAK75	750	X	23	21	23	23	23
	QPAK100	1000	L	23			21	21
	QPAK100	1000	X	23			21	21
	QFLO75	750	L	23				19
	QFLO75	750	X	23				19
	QFLO100	1000	L	23				19
	QFLO100	1000	X	23				19
	QFLO125	1250	L	23				
	QFLO125	1250	X	23				
	QMAX100	1000	S or L	23				
	QMAX100	1000	X	23				
	QMAX125	1250	S or L	23				
	QMAX125	1250	X	23				
	QMAX150	1500	S or L	23				
	QMAX150	1500	X	23				
	QMAX175	1750	S or L	23				
	QMAX175	1750	X	23				
	QMAX200	2000	S or L	23				
	QMAX200	2000	X	23				
	QMAX225	2250	S or L					
	QMAX225	2250	X					
	DSD75	750	L	23		21	21	21
	DSD75	750	X	23		21	21	21
	DSD100	1000	L	23				19
	DSD100	1000	X	23				19
	DSD125	1250	L	23				
	DSD125	1250	X	23				
	DSD150	1500	L	23				
	DSD150	1500	X	23				
	SMM/SMD	1250	X	23				
	SMM/SMD	1500	X	23				
	MG50	500		30	26	26	30	30
	MG75	750		30	21	26	30	30
	MG100	1000		30				
	TWO STAGE							
	QTWO100	1000	S or L	23				
	QTWO100	1000	X	23				
	QTWO125	1250	S or L	23				
	QTWO125	1250	X	23				
	QTWO150	1500	S or L	23				
	QTWO150	1500	X	23				
	QTWO175	1750	S or L	23				
	QTWO175	1750	X	23				
	QTWO200	2000	S or L	23				
	QTWO200	2000	X	23				

MIDSHIP MOUNTED PUMPS

ENGINE								
	MANUFACTURER			**NAVISTAR**	**VOLVO**	**VOLVO**	**VOLVO**	**VOLVO**
	MODEL NUMBER			VT365	*D12D 365*	*D12D 395*	*D12D 425*	*D12D 435*
	DISPLACEMENT			365	740	740	740	740
	RATED HP			230	365	395	425	435
	GOVERNED SPEED			2800	2100	2100	2100	2100
	PEAK TORQUE			620	1350	1450	1450	1550
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**							
	QPAK50	500	L	21	23	23	23	23
	QPAK50	500	X	21	23	23	23	23
	QPAK75	750	L	21	23	23	23	23
	QPAK75	750	X	21	23	23	23	23
	QPAK100	1000	L	21	23	23	23	23
	QPAK100	1000	X	21	23	23	23	23
	QFLO75	750	L	21	23	23	23	23
	QFLO75	750	X	21	23	23	23	23
	QFLO100	1000	L	21	23	23	23	23
	QFLO100	1000	X	21	23	23	23	23
	QFLO125	1250	L		23	23	23	23
	QFLO125	1250	X		23	23	23	23
	QMAX100	1000	S or L	19	23	23	23	23
	QMAX100	1000	X	19	23	23	23	23
	QMAX125	1250	S or L		23	23	23	23
	QMAX125	1250	X		23	23	23	23
	QMAX150	1500	S or L		23	23	23	23
	QMAX150	1500	X		23	23	23	23
	QMAX175	1750	S or L		23	23	23	23
	QMAX175	1750	X		23	23	23	23
	QMAX200	2000	S or L		23	23	23	23
	QMAX200	2000	X		23	23	23	23
	QMAX225	2250	S or L			23	23	23
	QMAX225	2250	X			23	23	23
	DSD75	750	L	23	23	23	23	23
	DSD75	750	X	23	23	23	23	23
	DSD100	1000	L	23	23	23	23	23
	DSD100	1000	X	23	23	23	23	23
	DSD125	1250	L		23	23	23	23
	DSD125	1250	X		23	23	23	23
	DSD150	1500	L		23	23	23	23
	DSD150	1500	X		23	23	23	23
	SMM/SMD	1250	X					
	SMM/SMD	1500	X					
	MG50	500		26	30	30	30	30
	MG75	750		26	30	30	30	30
	MG100	1000		26	30	30	30	30
	TWO STAGE							
	QTWO100	1000	S or L	19	21	21	21	21
	QTWO100	1000	X		21	21	21	21
	QTWO125	1250	S or L		21	21	21	21
	QTWO125	1250	X		21	21	21	21
	QTWO150	1500	S or L		21	21	21	21
	QTWO150	1500	X		21	21	21	21
	QTWO175	1750	S or L		21	21	21	21
	QTWO175	1750	X		21	21	21	21
	QTWO200	2000	S or L					
	QTWO200	2000	X					

MIDSHIP MOUNTED PUMPS

ENGINE	MANUFACTURER			VOLVO
	MODEL NUMBER			*D12D 465*
	DISPLACEMENT			740
	RATED HP			465
	GOVERNED SPEED			2100
	PEAK TORQUE			1650
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX (S = SHORT, L = LONG, X = EXTRA LONG)	**SINGLE STAGE**			
	QPAK50	500	L	23
	QPAK50	500	X	23
	QPAK75	750	L	23
	QPAK75	750	X	23
	QPAK100	1000	L	23
	QPAK100	1000	X	23
	QFLO75	750	L	23
	QFLO75	750	X	23
	QFLO100	1000	L	23
	QFLO100	1000	X	23
	QFLO125	1250	L	23
	QFLO125	1250	X	23
	QMAX100	1000	S or L	23
	QMAX100	1000	X	23
	QMAX125	1250	S or L	23
	QMAX125	1250	X	23
	QMAX150	1500	S or L	23
	QMAX150	1500	X	23
	QMAX175	1750	S or L	23
	QMAX175	1750	X	23
	QMAX200	2000	S or L	23
	QMAX200	2000	X	23
	QMAX225	2250	S or L	23
	QMAX225	2250	X	23
	DSD75	750	L	23
	DSD75	750	X	23
	DSD100	1000	L	23
	DSD100	1000	X	23
	DSD125	1250	L	23
	DSD125	1250	X	23
	DSD150	1500	L	23
	DSD150	1500	X	23
	SMM/SMD	1250	X	
	SMM/SMD	1500	X	
	MG50	500		30
	MG75	750		30
	MG100	1000		30
	TWO STAGE			
	QTWO100	1000	S or L	21
	QTWO100	1000	X	21
	QTWO125	1250	S or L	21
	QTWO125	1250	X	21
	QTWO150	1500	S or L	21
	QTWO150	1500	X	21
	QTWO175	1750	S or L	21
	QTWO175	1750	X	21
	QTWO200	2000	S or L	
	QTWO200	2000	X	

8FG SERIES PUMPS

ENGINE	MANUFACTURER			CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR
	MODEL NUMBER			C7	C7	C7	C7	C7	C9
	DISPLACEMENT			441	441	441	441	441	537
	RATED HP			275	275	300	300	330	335
	GOVERNED SPEED			2400	2400	2400	2400	2400	2100
	PEAK TORQUE			800	860	800	860	860	1050
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX	8FG	1500	L or R						19
	8FG	1500	X						
	8FG	1750	L or R						
	8FG	1750	X						
	8FG	2000	L or R						
	8FG	2000	X						
	8FG	2250	L or R						
	8FG	2250	X						
	8FG	2500	L or R						
	8FG	2500	X						
	8FG	2750	L or R						
	8FG	2750	X						
	8FG	3000	L or R						
	8FG	3000	X						

ENGINE	MANUFACTURER			CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR
	MODEL NUMBER			C9	C9	C9	C11	C11	C11
	DISPLACEMENT			537	537	537	677	677	677
	RATED HP			350	370	400	335	350	350
	GOVERNED SPEED			2100	2100	2100	2100	2100	2100
	PEAK TORQUE			1100	1100	1100	1250	1350	1450
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX	8FG	1500	L or R	17	17	17	19	19	19
	8FG	1500	X				19	19	19
	8FG	1750	L or R			17			
	8FG	1750	X						
	8FG	2000	L or R						
	8FG	2000	X						
	8FG	2250	L or R						
	8FG	2250	X						
	8FG	2500	L or R						
	8FG	2500	X						
	8FG	2750	L or R						
	8FG	2750	X						
	8FG	3000	L or R						
	8FG	3000	X						

ENGINE	MANUFACTURER			CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR
	MODEL NUMBER			C11	C11	C13	C13	C13	C13
	DISPLACEMENT			677	677	763	763	763	763
	RATED HP			370	370	410	430	470	525
	GOVERNED SPEED			2100	2100	2100	2100	2100	2100
	PEAK TORQUE			1350	1450	1550	1650	1650	1650
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX	8FG	1500	L or R	19	19	19	19	19	19
	8FG	1500	X	19	19	19	19	19	19
	8FG	1750	L or R	19	19	19	19	19	19
	8FG	1750	X	19	19	19	19	19	19
	8FG	2000	L or R	19	19	19	19	19	19
	8FG	2000	X	19	19	19	19	19	19
	8FG	2250	L or R			19	19	19	19
	8FG	2250	X			19	19	19	19
	8FG	2500	L or R			19	19	19	19
	8FG	2500	X			19	19	19	19
	8FG	2750	L or R				19	19	19
	8FG	2750	X				19	19	19
	8FG	3000	L or R						17
	8FG	3000	X						

8FG SERIES PUMPS

ENGINE			MANUFACTURER	CUMMINS	CUMMINS	CUMMINS	CUMMINS	CUMMINS	CUMMINS
			MODEL NUMBER	ISB 275	ISB 300	ISC 260	ISC 285	ISC 300	ISC 315
			DISPLACEMENT	359	359	506	506	506	506
			RATED HP	275	300	260	285	300	315
			GOVERNED SPEED	2600	2600	2200	2200	2200	2200
			PEAK TORQUE	660	660	800	800	860	950
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX	8FG	1500	L or R						
	8FG	1500	X						
	8FG	1750	L or R						
	8FG	1750	X						
	8FG	2000	L or R						
	8FG	2000	X						
	8FG	2250	L or R						
	8FG	2250	X						
	8FG	2500	L or R						
	8FG	2500	X						
	8FG	2750	L or R						
	8FG	2750	X						
	8FG	3000	L or R						
	8FG	3000	X						

ENGINE			MANUFACTURER	CUMMINS	CUMMINS	CUMMINS	CUMMINS	CUMMINS	CUMMINS
			MODEL NUMBER	ISC 330	ISL 330	ISL 350	ISL 350	ISL 370	ISL 400
			DISPLACEMENT	506	537	537	537	537	537
			RATED HP	330	330	350	350	370	400
			GOVERNED SPEED	2200	2200	2200	2200	2200	2200
			PEAK TORQUE	950	1150	1050	1250	1200	1200
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX	8FG	1500	L or R		19	17	17	17	17
	8FG	1500	X		19		19	19	19
	8FG	1750	L or R						17
	8FG	1750	X						
	8FG	2000	L or R						17
	8FG	2000	X						
	8FG	2250	L or R						
	8FG	2250	X						
	8FG	2500	L or R						
	8FG	2500	X						
	8FG	2750	L or R						
	8FG	2750	X						
	8FG	3000	L or R						
	8FG	3000	X						

ENGINE			MANUFACTURER	CUMMINS	CUMMINS	CUMMINS	CUMMINS	CUMMINS	CUMMINS
			MODEL NUMBER	ISL 425	ISM 340EV	ISM 365EV	ISM 380EV	ISM 385EV	ISM 385
			DISPLACEMENT	537	661	661	661	661	661
			RATED HP	425	340	365	380	385	385
			GOVERNED SPEED	2200	2100	2100	2100	2100	2100
			PEAK TORQUE	1200	1350	1350	1200	1350	1450
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX	8FG	1500	L or R	17	19	19	19	19	19
	8FG	1500	X	19	19	19	19	19	19
	8FG	1750	L or R	17				19	19
	8FG	1750	X					19	19
	8FG	2000	L or R	17				19	19
	8FG	2000	X					19	19
	8FG	2250	L or R						
	8FG	2250	X						
	8FG	2500	L or R						
	8FG	2500	X						
	8FG	2750	L or R						
	8FG	2750	X						
	8FG	3000	L or R						
	8FG	3000	X						

8FG SERIES PUMPS

ENGINE			MANUFACTURER	CUMMINS	CUMMINS	CUMMINS	CUMMINS	CUMMINS	CUMMINS
			MODEL NUMBER	ISM 400EV	ISM 400	ISM 430	ISM 435	ISM 450	ISM 450
			DISPLACEMENT	661	661	661	661	661	661
			RATED HP	400	400	430	435	450	450
			GOVERNED SPEED	2100	2100	2100	2100	2100	2100
			PEAK TORQUE	1450	1450	1450	1550	1450	1550
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX	8FG	1500	L or R	19	19	19	19	19	19
	8FG	1500	X	19	19	19	19	19	19
	8FG	1750	L or R	19	19	19	19	19	19
	8FG	1750	X	19	19	19	19	19	19
	8FG	2000	L or R	19	19	19	19	19	19
	8FG	2000	X	19	19	19	19	19	19
	8FG	2250	L or R	19	19	19	19	19	19
	8FG	2250	X	19	19	19	19	19	19
	8FG	2500	L or R			19	19	19	19
	8FG	2500	X			19	19	19	19
	8FG	2750	L or R						
	8FG	2750	X						
	8FG	3000	L or R						
	8FG	3000	X						

ENGINE			MANUFACTURER	CUMMINS	CUMMINS	CUMMINS	CUMMINS	DETROIT	DETROIT
			MODEL NUMBER	ISM 475	ISM 500EV	ISM 500	ISX 525	SERIES 60	SERIES 60
			DISPLACEMENT	661	661	661	912	778	778
			RATED HP	475	500	500	525	380	390
			GOVERNED SPEED	2100	2100	2100	2000	2225	2225
			PEAK TORQUE	1550	1450	1550	1650	1350	1350
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX	8FG	1500	L or R	17	17	17	19	19	19
	8FG	1500	X	19	19	19	19	19	19
	8FG	1750	L or R	17	17	17	19		19
	8FG	1750	X	19	19	19	19	19	19
	8FG	2000	L or R	17	17	17	19		19
	8FG	2000	X	19	19	19	19		19
	8FG	2250	L or R	17	17	17	19		
	8FG	2250	X	19	19	19	19		
	8FG	2500	L or R	17	17	17	19		
	8FG	2500	X	19	19	19	19		
	8FG	2750	L or R	17	17	17	19		
	8FG	2750	X				19		
	8FG	3000	L or R				19		
	8FG	3000	X				19		

ENGINE			MANUFACTURER	DETROIT	DETROIT	DETROIT	DETROIT	DETROIT	DETROIT
			MODEL NUMBER	SERIES 60	SERIES 60	SERIES 60	SERIES 60	SERIES 60	SERIES 60
			DISPLACEMENT	778	778	778	778	778	778
			RATED HP	425	435	445	445	450	455
			GOVERNED SPEED	2225	2225	2225	2225	2225	2225
			PEAK TORQUE	1450	1450	1450	1550	1550	1550
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX	8FG	1500	L or R	19	19	19	19	19	19
	8FG	1500	X	19	19	19	19	19	19
	8FG	1750	L or R	19	19	19	19	19	19
	8FG	1750	X	19	19	19	19	19	19
	8FG	2000	L or R	19	19	19	19	19	19
	8FG	2000	X	19	19	19	19	19	19
	8FG	2250	L or R	19	19	19	19	19	19
	8FG	2250	X	19	19	19	19	19	19
	8FG	2500	L or R			19	21	21	19
	8FG	2500	X		19	19	19	19	19
	8FG	2750	L or R						19
	8FG	2750	X				19	19	19
	8FG	3000	L or R						
	8FG	3000	X						

8FG SERIES PUMPS

ENGINE			MANUFACTURER	DETROIT	DETROIT	DETROIT	DETROIT	DETROIT	DETROIT
			MODEL NUMBER	SERIES 60	SERIES 60	SERIES 60	SERIES 60	SERIES 60	SERIES 60
			DISPLACEMENT	858	858	858	858	858	858
			RATED HP	455	470	490	490	515	515
			GOVERNED SPEED	2225	2225	2225	2225	2225	2225
			PEAK TORQUE	1550	1650	1550	1650	1550	1650
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX	8FG	1500	L or R	19	19	17	19	17	17
	8FG	1500	X	19	19	19	19	19	19
	8FG	1750	L or R	19	19	17	19	17	17
	8FG	1750	X	19	19	19	19	19	19
	8FG	2000	L or R	19	19	17	19	17	17
	8FG	2000	X	19	19	19	19	19	19
	8FG	2250	L or R	19	19	17	19	17	17
	8FG	2250	X	19	19	19	19	19	19
	8FG	2500	L or R	19	19	17	19	17	17
	8FG	2500	X	19	19	19	19	19	19
	8FG	2750	L or R	19	19	17	19	17	17
	8FG	2750	X	19	19	19	19	19	19
	8FG	3000	L or R					17	17
	8FG	3000	X						

ENGINE			MANUFACTURER	MACK	MACK	MACK	MACK	MACK	MACK
			MODEL NUMBER	AC 310/330	AC 330/350	AC 350	AC 355/380	AC 380/410	AC 427
			DISPLACEMENT	728	728	728	728	728	728
			RATED HP	330	350	350	380	410	427
			GOVERNED SPEED	1800	1800	1800	1800	1800	1800
			PEAK TORQUE	1360	1460	1360	1560	1660	1560
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX	8FG	1500	L or R			21	21	21	21
	8FG	1500	X		21	21	19	19	19
	8FG	1750	L or R					21	21
	8FG	1750	X					19	19
	8FG	2000	L or R					21	21
	8FG	2000	X					19	19
	8FG	2250	L or R						21
	8FG	2250	X						19
	8FG	2500	L or R						21
	8FG	2500	X						19
	8FG	2750	L or R						
	8FG	2750	X						
	8FG	3000	L or R						
	8FG	3000	X						

ENGINE			MANUFACTURER	MACK	MACK	MACK	MACK	MACK	MACK
			MODEL NUMBER	AC 460P	AI 300A	AI 350	AI 400	AI 427	AI 460
			DISPLACEMENT	728	728	728	728	728	728
			RATED HP	460	325	350	400	427	460
			GOVERNED SPEED	1850	1950	1950	1950	1950	1950
			PEAK TORQUE	1660	1200	1260	1360	1460	1560
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX	8FG	1500	L or R	21		19	19	19	19
	8FG	1500	X	19		19	19	19	19
	8FG	1750	L or R	21			19	19	19
	8FG	1750	X	19			19	19	19
	8FG	2000	L or R	21			19	19	19
	8FG	2000	X	19			19	19	19
	8FG	2250	L or R	21			19	19	19
	8FG	2250	X	19			19	19	19
	8FG	2500	L or R	21				19	19
	8FG	2500	X	19				19	19
	8FG	2750	L or R	21					19
	8FG	2750	X	19					19
	8FG	3000	L or R						
	8FG	3000	X						

8FG SERIES PUMPS

ENGINE			MANUFACTURER	MACK	MACK	MACK	MERCEDES	MERCEDES	MERCEDES
			MODEL NUMBER	AMI 300	AMI 335	AMI 370	MBE 904	MBE 906	MBE 906
			DISPLACEMENT	728	728	728	259	388	388
			RATED HP	325	365	405	170	190	210
			GOVERNED SPEED	2100	2100	2100	2500	2500	2500
			PEAK TORQUE	1200	1340	1480	420	520	520
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX	8FG	1500	L or R		19	19			
	8FG	1500	X		19	19			
	8FG	1750	L or R			19			
	8FG	1750	X			19			
	8FG	2000	L or R			19			
	8FG	2000	X			19			
	8FG	2250	L or R			19			
	8FG	2250	X			19			
	8FG	2500	L or R						
	8FG	2500	X						
	8FG	2750	L or R						
	8FG	2750	X						
	8FG	3000	L or R						
	8FG	3000	X						

ENGINE			MANUFACTURER	MERCEDES	MERCEDES	MERCEDES	MERCEDES	MERCEDES	MERCEDES
			MODEL NUMBER	MBE 906	MBE 906	MBE 906	MBE 906	MBE 924	MBE 926
			DISPLACEMENT	388	388	388	388	296	439
			RATED HP	210	230	250	260	190	250
			GOVERNED SPEED	2500	2500	2500	2500	2500	2500
			PEAK TORQUE	605	660	660	700	520	800
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX	8FG	1500	L or R						
	8FG	1500	X						
	8FG	1750	L or R						
	8FG	1750	X						
	8FG	2000	L or R						
	8FG	2000	X						
	8FG	2250	L or R						
	8FG	2250	X						
	8FG	2500	L or R						
	8FG	2500	X						
	8FG	2750	L or R						
	8FG	2750	X						
	8FG	3000	L or R						
	8FG	3000	X						

ENGINE			MANUFACTURER	MERCEDES	MERCEDES	MERCEDES	MERCEDES	MERCEDES	MERCEDES
			MODEL NUMBER	MBE 926	MBE 926	MBE 926	MBE 4000	MBE 4000	MBE 4000
			DISPLACEMENT	439	439	439	781	781	781
			RATED HP	280	300	330	350	370	370
			GOVERNED SPEED	2500	2500	2500	2000	2000	2000
			PEAK TORQUE	800	1000	860	1350	1450	1350
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX	8FG	1500	L or R				19	19	19
	8FG	1500	X				19	19	19
	8FG	1750	L or R						
	8FG	1750	X						
	8FG	2000	L or R						
	8FG	2000	X						
	8FG	2250	L or R						
	8FG	2250	X						
	8FG	2500	L or R						
	8FG	2500	X						
	8FG	2750	L or R						
	8FG	2750	X						
	8FG	3000	L or R						
	8FG	3000	X						

8FG SERIES PUMPS

ENGINE			MANUFACTURER	MERCEDES	MERCEDES	MERCEDES	MERCEDES	NAVISTAR	NAVISTAR
			MODEL NUMBER	MBE 4000	MBE 4000	MBE 4000	MBE 4000	1313 466	1313 466
			DISPLACEMENT	781	781	781	781	465	465
			RATED HP	410	410	435	450	210	220
			GOVERNED SPEED	2000	2000	2000	2000	2600	2600
			PEAK TORQUE	1450	1550	1550	1550	520	540
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX	8FG	1500	L or R	19	19	19	19		
	8FG	1500	X	19	19	19	19		
	8FG	1750	L or R	19	19	19	19		
	8FG	1750	X	19	19	19	19		
	8FG	2000	L or R	19	19	19	19		
	8FG	2000	X	19	19	19	19		
	8FG	2250	L or R	19	19	19	19		
	8FG	2250	X	19	19	19	19		
	8FG	2500	L or R			19	19		
	8FG	2500	X			19	19		
	8FG	2750	L or R				19		
	8FG	2750	X						
	8FG	3000	L or R						
	8FG	3000	X						

ENGINE			MANUFACTURER	NAVISTAR	NAVISTAR	NAVISTAR	NAVISTAR	NAVISTAR	NAVISTAR
			MODEL NUMBER	1313 466	1313 466	1313 466	1313 466	1313 466	1313 466
			DISPLACEMENT	465	465	465	465	465	465
			RATED HP	225	225	245	245	255	260
			GOVERNED SPEED	2600	2600	2600	2600	2600	2400
			PEAK TORQUE	560	620	620	660	660	800
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX	8FG	1500	L or R						
	8FG	1500	X						
	8FG	1750	L or R						
	8FG	1750	X						
	8FG	2000	L or R						
	8FG	2000	X						
	8FG	2250	L or R						
	8FG	2250	X						
	8FG	2500	L or R						
	8FG	2500	X						
	8FG	2750	L or R						
	8FG	2750	X						
	8FG	3000	L or R						
	8FG	3000	X						

ENGINE			MANUFACTURER	NAVISTAR	NAVISTAR	NAVISTAR	NAVISTAR	NAVISTAR	NAVISTAR
			MODEL NUMBER	1313 466	1313 466	1313 570	1313 570	1313 570	1313 570
			DISPLACEMENT	465	465	570	570	570	570
			RATED HP	285	300	285	295	310	310
			GOVERNED SPEED	2400	2400	2200	2200	2200	2200
			PEAK TORQUE	800	860	800	950	950	1050
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX	8FG	1500	L or R						
	8FG	1500	X						
	8FG	1750	L or R						
	8FG	1750	X						
	8FG	2000	L or R						
	8FG	2000	X						
	8FG	2250	L or R						
	8FG	2250	X						
	8FG	2500	L or R						
	8FG	2500	X						
	8FG	2750	L or R						
	8FG	2750	X						
	8FG	3000	L or R						
	8FG	3000	X						

8FG SERIES PUMPS

ENGINE	MANUFACTURER			NAVISTAR	NAVISTAR	NAVISTAR	NAVISTAR	NAVISTAR	NAVISTAR
	MODEL NUMBER			1313 570	1313 570	1313 570	VT365	VT365	VT365
	DISPLACEMENT			570	570	570	364	364	364
	RATED HP			330	330	340	175	500	215
	GOVERNED SPEED			2200	2100	2100	2800	2800	2800
	PEAK TORQUE			950	1150	1150	460	520	240
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX	8FG	1500	L or R			19			
	8FG	1500	X			19			
	8FG	1750	L or R						
	8FG	1750	X						
	8FG	2000	L or R						
	8FG	2000	X						
	8FG	2250	L or R						
	8FG	2250	X						
	8FG	2500	L or R						
	8FG	2500	X						
	8FG	2750	L or R						
	8FG	2750	X						
	8FG	3000	L or R						
	8FG	3000	X						

ENGINE	MANUFACTURER			NAVISTAR	NAVISTAR				
	MODEL NUMBER			VT365	VT365				
	DISPLACEMENT			364	365				
	RATED HP			230	230				
	GOVERNED SPEED			2800	2800				
	PEAK TORQUE			540	620				
PUMP MODEL, RATED FLOW (GPM) AND GEARBOX	8FG	1500	L or R						
	8FG	1500	X						
	8FG	1750	L or R						
	8FG	1750	X						
	8FG	2000	L or R						
	8FG	2000	X						
	8FG	2250	L or R						
	8FG	2250	X						
	8FG	2500	L or R						
	8FG	2500	X						
	8FG	2750	L or R						
	8FG	2750	X						
	8FG	3000	L or R						
	8FG	3000	X						

CSD/HFM SERIES PUMPS

	MANUFACTURER		CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR
ENGINE	MODEL NUMBER		C7	C7	C7	C7	C7
	DISPLACEMENT		441	441	441	441	441
	RATED HP		275	275	300	300	330
	GOVERNED SPEED		2400	2400	2400	2400	2400
	PEAK TORQUE		800	860	800	860	860
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750	21	23	23	23	23
	CSD/HFM100	1000	21	23	23	23	23
	CSD/HFM125	1250	21	23	23	23	23
	CSD/HFM150	1500	21	21	21	21	21

	MANUFACTURER		CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR
ENGINE	MODEL NUMBER		C9	C9	C9	C9	C11
	DISPLACEMENT		537	537	537	537	677
	RATED HP		335	350	370	400	335
	GOVERNED SPEED		2100	2100	2100	2100	2100
	PEAK TORQUE		1050	1100	1100	1100	1250
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750	23	23	23	23	23
	CSD/HFM100	1000	23	23	23	23	23
	CSD/HFM125	1250	23	23	23	23	23
	CSD/HFM150	1500	23	23	23	23	23

	MANUFACTURER		CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR	CATERPILLAR
ENGINE	MODEL NUMBER		C11	C11	C11	C11	C13
	DISPLACEMENT		677	677	677	677	763
	RATED HP		350	350	370	370	410
	GOVERNED SPEED		2100	2100	2100	2100	2100
	PEAK TORQUE		1350	1450	1350	1450	1550
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750	23	23	23	23	23
	CSD/HFM100	1000	23	23	23	23	23
	CSD/HFM125	1250	23	23	23	23	23
	CSD/HFM150	1500	23	23	23	23	23

	MANUFACTURER		CATERPILLAR	CATERPILLAR	CATERPILLAR	CUMMINS	CUMMINS
ENGINE	MODEL NUMBER		C13	C13	C13	ISC 260	ISC 285
	DISPLACEMENT		763	763	763	506	506
	RATED HP		430	470	525	260	285
	GOVERNED SPEED		2100	2100	2100	2200	2200
	PEAK TORQUE		1650	1650	1650	800	800
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750	23	23	23	23	23
	CSD/HFM100	1000	23	23	23	23	23
	CSD/HFM125	1250	23	23	23	23	23
	CSD/HFM150	1500	23	23	23		21

	MANUFACTURER		CUMMINS	CUMMINS	CUMMINS	CUMMINS	CUMMINS
ENGINE	MODEL NUMBER		ISC 300	ISC 315	ISC 330	ISL 330	ISL 350
	DISPLACEMENT		506	506	506	537	537
	RATED HP		300	315	330	330	350
	GOVERNED SPEED		2200	2200	2200	2200	2200
	PEAK TORQUE		860	950	950	1150	1050
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750	23	23	23	23	23
	CSD/HFM100	1000	23	23	23	23	23
	CSD/HFM125	1250	23	23	23	23	23
	CSD/HFM150	1500	21	23	23	23	23

CSD/HFM SERIES PUMPS

ENGINE	MANUFACTURER		CUMMINS	CUMMINS	CUMMINS	CUMMINS	CUMMINS
	MODEL NUMBER		ISL 350	ISL 370	ISL 400	ISM 340EV	ISM 365EV
	DISPLACEMENT		537	537	537	661	661
	RATED HP		350	370	400	340	365
	GOVERNED SPEED		2200	2200	2200	2100	2100
	PEAK TORQUE		1250	1200	1200	1350	1350
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750	23	23	23	23	23
	CSD/HFM100	1000	23	23	23	23	23
	CSD/HFM125	1250	23	23	23	23	23
	CSD/HFM150	1500	23	23	23	23	23

ENGINE	MANUFACTURER		CUMMINS	CUMMINS	CUMMINS	CUMMINS	CUMMINS
	MODEL NUMBER		ISM 380EV	ISM 385EV	ISM 385	ISM 400EV	ISM 400
	DISPLACEMENT		661	661	661	661	661
	RATED HP		380	385	385	400	400
	GOVERNED SPEED		2100	2100	2100	2100	2100
	PEAK TORQUE		1200	1350	1450	1450	1450
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750	23	23	23	23	23
	CSD/HFM100	1000	23	23	23	23	23
	CSD/HFM125	1250	23	23	23	23	23
	CSD/HFM150	1500	23	23	23	23	23

ENGINE	MANUFACTURER		CUMMINS	CUMMINS	CUMMINS	CUMMINS	CUMMINS
	MODEL NUMBER		ISM 430	ISM 435	ISM 450	ISM 450	ISM 475
	DISPLACEMENT		661	661	661	661	661
	RATED HP		430	435	450	450	475
	GOVERNED SPEED		2100	2100	2100	2100	2100
	PEAK TORQUE		1450	1450	1450	1550	1550
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750	23	23	23	23	23
	CSD/HFM100	1000	23	23	23	23	23
	CSD/HFM125	1250	23	23	23	23	23
	CSD/HFM150	1500	23	23	23	23	23

ENGINE	MANUFACTURER		CUMMINS	CUMMINS	CUMMINS	CUMMINS	CUMMINS
	MODEL NUMBER		ISM 500EV	ISM 500	ISX 525	ISB 275	ISB 300
	DISPLACEMENT		661	661	912	359	359
	RATED HP		500	500	525	275	300
	GOVERNED SPEED		2100	2100	2000	2600	2600
	PEAK TORQUE		1450	1550	1650	660	660
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750	23	23	23	21	21
	CSD/HFM100	1000	23	23	23	21	21
	CSD/HFM125	1250	23	23	23	21	21
	CSD/HFM150	1500	23	23	23	18	18

ENGINE	MANUFACTURER		MACK	MACK	MACK	MACK	MACK
	MODEL NUMBER		AC 310/330	AC 330/350	AC 350	AC 355/380	AC 380/410
	DISPLACEMENT		728	728	728	728	728
	RATED HP		330	350	350	380	410
	GOVERNED SPEED		1800	1800	1800	1800	1800
	PEAK TORQUE		1360	1460	1360	1560	1660
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750					
	CSD/HFM100	1000					
	CSD/HFM125	1250					
	CSD/HFM150	1500					

CSD/HFM SERIES PUMPS

ENGINE	MANUFACTURER		MACK	MACK	MACK	MACK	MACK
	MODEL NUMBER		AC 427	AC 460P	AI 300A	AI 350	AI 400
	DISPLACEMENT		728	728	728	728	728
	RATED HP		427	460	325	350	400
	GOVERNED SPEED		1800	1850	1950	1950	1950
	PEAK TORQUE		1560	1660	1200	1260	1360
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750					
	CSD/HFM100	1000					
	CSD/HFM125	1250					
	CSD/HFM150	1500					

ENGINE	MANUFACTURER		MACK	MACK	MACK	MACK	MACK
	MODEL NUMBER		AI 427	AI 460	AMI 300	AMI 335	AMI 370
	DISPLACEMENT		728	728	728	728	728
	RATED HP		427	460	325	365	405
	GOVERNED SPEED		1950	1950	2100	2100	2100
	PEAK TORQUE		1460	1560	1200	1340	1480
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750			23	23	23
	CSD/HFM100	1000			23	23	23
	CSD/HFM125	1250			23	23	23
	CSD/HFM150	1500			23	23	23

ENGINE	MANUFACTURER		MERCEDES	MERCEDES	MERCEDES	MERCEDES	MERCEDES
	MODEL NUMBER		MBE 4000	MBE 4000	MBE 4000	MBE 4000	MBE 4000
	DISPLACEMENT		781	781	781	781	781
	RATED HP		350	370	370	410	410
	GOVERNED SPEED		2000	2000	2000	2000	2000
	PEAK TORQUE		1350	1450	1350	1450	1550
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750	23	23	23	23	23
	CSD/HFM100	1000	23	23	23	23	23
	CSD/HFM125	1250	23	23	23	23	23
	CSD/HFM150	1500	23	23	23	23	23

ENGINE	MANUFACTURER		MERCEDES	MERCEDES	MERCEDES	MERCEDES	MERCEDES
	MODEL NUMBER		MBE 4000	MBE 4000	MBE 904	MBE 906	MBE 906
	DISPLACEMENT		781	781	259	388	388
	RATED HP		435	450	170	190	210
	GOVERNED SPEED		2000	2000	2500	2500	2500
	PEAK TORQUE		1550	1550	420	520	520
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750	23	23	21	21	21
	CSD/HFM100	1000	23	23		21	21
	CSD/HFM125	1250	23	23			
	CSD/HFM150	1500	23	23			

ENGINE	MANUFACTURER		MERCEDES	MERCEDES	MERCEDES	MERCEDES	MERCEDES
	MODEL NUMBER		MBE 906	MBE 906	MBE 906	MBE 906	MBE 924
	DISPLACEMENT		388	388	388	388	296
	RATED HP		210	230	250	260	190
	GOVERNED SPEED		2500	2500	2500	2500	2500
	PEAK TORQUE		605	660	660	700	520
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750	21	21	21	21	21
	CSD/HFM100	1000	21	21	21	21	
	CSD/HFM125	1250		21	21	21	
	CSD/HFM150	1500					

CSD/HFM SERIES PUMPS

ENGINE	MANUFACTURER		MERCEDES	MERCEDES	MERCEDES	MERCEDES	DETROIT
	MODEL NUMBER		MBE 926	MBE 926	MBE 926	MBE 926	SERIES 60
	DISPLACEMENT		439	439	439	439	778
	RATED HP		250	280	300	330	380
	GOVERNED SPEED		2500	2500	2500	2500	2225
	PEAK TORQUE		800	800	1000	860	1350
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750	23	21	23	23	23
	CSD/HFM100	1000	23	21	23	23	23
	CSD/HFM125	1250	23	21	21	23	23
	CSD/HFM150	1500		18	18	23	23

ENGINE	MANUFACTURER		DETROIT	DETROIT	DETROIT	DETROIT	DETROIT
	MODEL NUMBER		SERIES 60	SERIES 60	SERIES 60	SERIES 60	SERIES 60
	DISPLACEMENT		778	778	778	778	778
	RATED HP		390	425	435	445	445
	GOVERNED SPEED		2225	2225	2225	2225	2225
	PEAK TORQUE		1350	1450	1450	1450	1550
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750	23	23	23	23	23
	CSD/HFM100	1000	23	23	23	23	23
	CSD/HFM125	1250	23	23	23	23	23
	CSD/HFM150	1500	23	23	23	23	23

ENGINE	MANUFACTURER		DETROIT	DETROIT	DETROIT	DETROIT	DETROIT
	MODEL NUMBER		SERIES 60	SERIES 60	SERIES 60	SERIES 60	SERIES 60
	DISPLACEMENT		778	778	858	858	858
	RATED HP		450	455	455	490	515
	GOVERNED SPEED		2225	2225	2225	2225	2225
	PEAK TORQUE		1550	1550	1550	1550	1550
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750	23	23	23	23	23
	CSD/HFM100	1000	23	23	23	23	23
	CSD/HFM125	1250	23	23	23	23	23
	CSD/HFM150	1500	23	23	23	23	23

ENGINE	MANUFACTURER		DETROIT	DETROIT	DETROIT	NAVISTAR	NAVISTAR
	MODEL NUMBER		SERIES 60	SERIES 60	SERIES 60	DT466	DT466
	DISPLACEMENT		858	858	858	465	465
	RATED HP		470	490	515	210	220
	GOVERNED SPEED		2225	2225	2225	2600	2600
	PEAK TORQUE		1650	1650	1650	520	540
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750	23	23	23	21	21
	CSD/HFM100	1000	23	23	23	18	18
	CSD/HFM125	1250	23	23	23		
	CSD/HFM150	1500	23	23	23		

ENGINE	MANUFACTURER		NAVISTAR	NAVISTAR	NAVISTAR	NAVISTAR	NAVISTAR
	MODEL NUMBER		DT466	DT466	DT466	DT466	DT466
	DISPLACEMENT		465	465	465	465	465
	RATED HP		225	225	245	245	255
	GOVERNED SPEED		2600	2600	2600	2600	2600
	PEAK TORQUE		560	620	620	660	660
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750	21	21	21	21	21
	CSD/HFM100	1000	18	21	21	21	21
	CSD/HFM125	1250		21	21	21	21
	CSD/HFM150	1500					

CSD/HFM SERIES PUMPS

ENGINE	**MANUFACTURER**		**NAVISTAR**	**NAVISTAR**	**NAVISTAR**	**NAVISTAR**	**NAVISTAR**
	MODEL NUMBER		DT466	DT466	DT466	DT570	DT570
	DISPLACEMENT		465	465	465	570	570
	RATED HP		260	285	300	285	295
	GOVERNED SPEED		2400	2400	2400	2200	2200
	PEAK TORQUE		800	800	860	800	950
PUMP MODEL, RATED FLOW (GPM)	CSD/HFM75	750	23	23	23	23	23
	CSD/HFM100	1000	23	23	23	23	23
	CSD/HFM125	1250	23	23	23	23	23
	CSD/HFM150	1500		21	21	21	23