FB385 Engine (12496769 Base) Long Block Specifications

Specifications Part Number 12486592

This FB385 long block specification sheet should be used in conjunction with the FB385 short block specification sheet, GM part number 19172279.

Thank you for choosing GM Performance Parts as your high performance source. GM Performance Parts is committed to providing proven, innovative performance technology that is truly.... more than just power. GM Performance Parts are engineered, developed and tested to exceed your expectations for fit and function. Please refer to our catalog for the GM Performance Parts Authorized Center nearest you or visit our website at www.gmperformanceparts.com.

This publication provides general information on components and procedures which may be useful when installing or servicing a FB385 engine. Please read this entire publication before starting work. Also, please verify that all of the components listed in the Package Contents section below were shipped in the kit.

The information below is divided into the following sections: package contents, component information, FB385 engine specifications, additional parts that you may need to purchase, torque specifications, and a service parts list.

The FB385 engine incorporates modern technology in a package that can be installed in applications where 265-400ci small block Chevrolet V-8's were originally used. This complete engine is assembled using brand new, premium quality components. Due to the wide variety of vehicles in which a FB385 engine can be installed, some procedures and recommendations may not apply to specific applications.

The FB385 engine is manufactured on current production tooling; consequently you may encounter dissimilarities between the FB385 engine assembly and previous versions of the small block V-8. In general, items such as motor mounts, accessory drives, exhaust manifolds, etc. can be transferred to a FB385 when it is installed in a vehicle originally equipped with a small block V-8 engine. However, as noted in the following sections, there may be minor differences between a FB385 engine and an older small block V-8 engine. These differences may require modifications or additional components not included with the FB385 engine. When installing a FB385 engine in a vehicle not originally equipped with a small block V-8, it may be necessary to adapt or fabricate various components for the cooling, fuel, electrical, and exhaust systems.

It is not the intent of these specifications to replace the comprehensive and detailed service practices explained in the GM service manuals.

For information about warranty coverage, please contact your local GM Performance Parts dealer.

Observe all safety precautions and warnings in the service manuals when installing a FB385 engine in any vehicle. Wear eye protection and appropriate protective clothing. When working under or around the vehicle support it securely with jackstands. Use only the proper tools. Exercise extreme caution when working with flammable, corrosive, and hazardous liquids and materials. Some procedures require special equipment and skills. If you do not have the appropriate training, expertise, and tools to perform any part of this conversion safely, this work should be done by a professional.

DATE	REVISION	AUTH
02MY07	Initial Release - Rusty Sampsel	

The information contained in this publication is presented without any warranty. All the risk for its use is entirely assumed by the user. Specific component design, mechanical procedures, and the qualifications of individual readers are beyond the control of the publisher, and therefore the publisher disclaims all liability incurred in connection with the use of the information provided in this publication.

Legal and Emissions Information

This publication is intended to provide information about the FB385 engine and related components. This manual also describes procedures and modifications that may be useful during the installation of a FB385 engine. It is not intended to replace the comprehensive service manuals and parts catalogs which cover General Motors engines and components. Rather, it is designed to provide supplemental information in areas of interest to "do-it-yourself" enthusiasts and mechanics.

This publication pertains to engines and vehicles which are used off the public highways except where specifically noted otherwise. Federal law restricts the removal of any part of a federally required emission control system on motor vehicles. Further, many states have enacted laws which prohibit tampering with or modifying any required emission or noise control system. Vehicles which are not operated on public highways are generally exempt from most regulations, as are some special interest and pre-emission vehicles. The reader is strongly urged to check all applicable local and state laws.

Many of the parts described or listed in this manual are merchandised for off-highway application only, and are tagged with the "Special Parts Notice" reproduced here:

Special Parts Notice

This part has been specifically designed for Off-Highway application only. Since the installation of this part may either impair your vehicle's emission control performance or be uncertified under current Motor Vehicle Safety Standards, it should not be installed in a vehicle used on any street or highway. Additionally, any such application could adversely affect the warranty coverage of such an on-street or highway vehicle.

Package contents:

Item	Description	Quantity	GM Part Number
1	Engine Assembly	1	12496769
2	Short Block Instructions	1	19172279
3	Long Block Instructions	1	12486592

FB385 Engine Torque Specifications:

Camshaft retainer bolt/screw ..... 106 in.-lbs. / 12 N·m

Camshaft sprocket bolt/screw ..... 18 ft.-lbs. / 25 N·m

Connecting rod nut ..... .006" bolt stretch preferred 20 ft.-lbs. + additional 55º
..... (45 ft.-lbs. if no angle gauge is available)/ 27 N·m +
..... additional 55º (61 N·m if no angle gauge is available)

Crankshaft balancer bolt/screw ..... 63 ft.-lbs. / 85 N·m

Crankshaft balancer pulley ..... 35 ft.-lbs. / 47 N·m

Crankshaft bearing cap bolt/screw and stud ..... Inner: 70 ft.-lbs. Outer: 65 ft.-lbs. /
..... Inner: 95 N·m Outer: 88 N·m

Crankshaft rear oil seal housing nut/bolt/screw ..... 11 ft.-lbs. / 15 N·m

Cylinder head bolt /screw ..... 65 ft.-lbs. / 88 N·m

Distributor bolt/screw ..... 25 ft.-lbs. / 34 N·m

Drain plug ..... 15 ft.-lbs. / 20 N·m

Engine block oil gallery plug ..... 15 ft.-lbs. / 20 N·m

Engine front cover bolt screw ..... 97 in.-lbs. / 11 N·m

Flywheel bolt/screw ..... 65-70 ft.-lbs. / 88-95 N·m

Intake manifold bolt/screw and stud

- Final pass ..... 11 ft.-lbs. / 15 N·m

Oil filter adapter bolt/screw ..... 18 ft.-lbs. / 24 N·m

Oil level indicator tube bolt/screw ..... 106 in.-lbs. / 12 N·m

Oil pan assembly

- Corner nut/bolt/screw ..... 15 ft.-lbs. / 20 N·m
- Side rail bolt/screw ..... 97 in.-lbs. / 11 N·m

Oil baffle nut ..... 30 ft.-lbs. / 40 N·m

Oil pan drain plug ..... 15 ft.-lbs. / 20 N·m

Oil pump bolt/screw to rear crankshaft bearing cap ..... 66 ft.-lbs. / 90 N·m

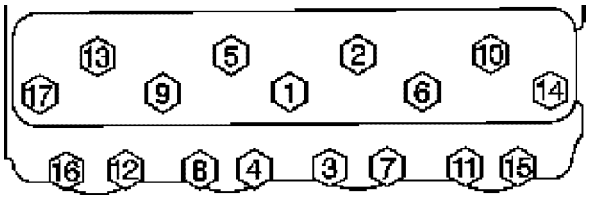
Oil pump cover bolt/screw ..... 80 in.-lbs. / 9 N·m

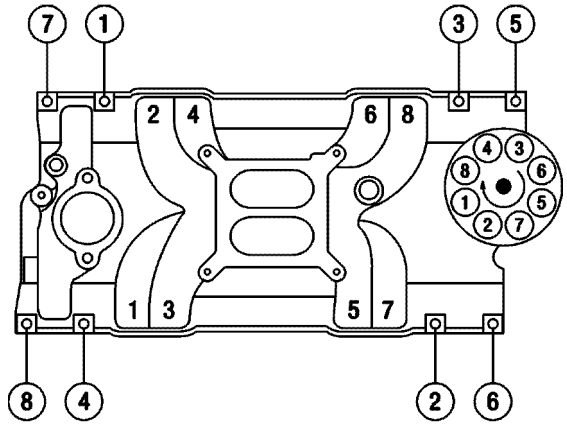
Spark plug ..... 15 ft.-lbs. / 20 N·m (tapered seat)

Starter motor bolt/screw ..... 35 ft.-lbs. / 48 N·m

Valve lifter guide retainer bolt/screw ..... 18 ft.-lbs. / 24 N·m

Water pump bolt/screw ..... 30 ft.-lbs. / 40 N·m





FIRING ORDER : **1-8-4-3-6-5-7-2**

Component Information:

Cylinder Heads:
The FB385 engine has “Fast Burn” CNC- machined aluminum performance cylinder heads. These cylinder heads have a 23-degree valve angle, no heat riser ports, 62cc combustion chambers, and utilize angle spark plugs. The intake ports are 210cc and the roof is raised .240”. The D-shaped exhaust ports are 78cc and raised .200”. These heads have 2.00" intake valves and 1.55" exhaust valves with screw-in 3/8" studs. The water passages are the same as the original 1955 small block Chevy design. These cylinder heads have dual pattern intake manifold mounting for both Vortec and early model manifolds. They also have dual pattern valve cover mounting for both center bolt and perimeter bolt pattern valve covers.

Intake Manifold:
This FB385 engine comes with a GM Performance Parts dual plane intake manifold part number 12366573 designed for use with raised intake ports and 1996 and newer Vortec style intake bolt pattern. This intake manifold was designed to use a standard flange Holley carburetor. This intake manifold does not have provisions for an exhaust gas recirculation (EGR) valve or a hot air choke.

Water Pump:
The FB385 engine comes with a long style cast iron water pump Part number 88894341, the water pump includes gaskets. The cooling system has a 180° F thermostat.

Ignition System:
The HEI (High Energy Ignition) distributor Part number 93440806 included with the FB385 engine is a self-contained ignition system that includes a magnetic pickup, a module, a coil, a rotor, and a cap. The HEI’s large diameter cap minimizes arcing and cross-firing between adjacent spark plug terminals. The cap’s male terminals provide a reliable, positive connection for the spark plug leads. However, the HEI’s large diameter cap may interfere with other underhood components in vehicles not originally equipped with HEI ignition systems. Check for adequate clearance before installation. The HEI distributor supplied with the FB385 has a hardened (melonized) drive gear that is compatible with a steel camshaft. Use of a non-hardened distributor gear will result in excessive wear.

The HEI system requires a 12 volt power supply for proper operation. The HEI ignition system should be connected directly to the battery with 10 or 12 gauge wire through a high quality ignition switch. If you are installing an HEI ignition in an early-model vehicle originally equipped with a point-type ignition, be sure to remove or bypass the resistor in the wiring harness to ensure the HEI receives 12 volts continuously. Use distributor connector package Part number 12167658, which includes connectors and wires for the HEI’s tachometer and 12 volt terminals.

Set spark timing at 32º before top dead center (BTDC) at 4000 RPM with the vacuum advance line to the distributor disconnected and plugged. This setting will produce 32º of total advance at wide open throttle (WOT). The HEI vacuum advance canister should remain disconnected. This engine is designed to operate using only the internal centrifugal advance to achieve the correct timing curve.

Caution
This engine assembly needs to be filled with oil and primed. You should add the specified oil (see start-up instructions) to your new engine. Check the engine oil level on the dipstick and add accordingly.

Start-up and Break-in Procedures

1. After installing the engine, ensure the crankcase has been filled with 10w30 motor oil (non-synthetic) to the recommended oil fill level on the dipstick. Also check and fill as required any other necessary fluids such as coolant, power steering fluid, etc.
2. The engine should be primed with oil prior to starting. Follow the instructions enclosed with the tool. To prime the engine, first remove the distributor to allow access to the oil pump drive shaft. Note the position of the distributor before removal. Install the oil priming tool, GM part number 12368084. Using a 1/2" dill motor, rotate the engine oil priming tool clockwise for three minutes. While you are priming the engine, have someone else rotate the crankshaft clockwise to supply oil throughout the engine and to all the bearing surfaces before the engine is initially started. This is the sure way to get oil to the bearings before you start the engine for the first time. Also, prime the engine if it sits for extended periods of time. Reinstall the distributor in the same orientation as it was removed.

   After the engine has been installed in the vehicle, recheck the oil level and add oil as required. It is also good practice to always recheck the ignition timing after removal and reinstallation of the distributor. See step 4 or engine specifications for the proper timing information.
3. Safety first. If the vehicle is on the ground, be sure the emergency brake is set, the wheels are chocked and the car cannot fall into gear. Verify everything is installed properly and nothing was missed.
4. Set initial spark timing at 10º before top dead center (BTDC) at 650 rpm with the vacuum advance line to the distributor disconnected and plugged. This setting will produce 32º of total advance at wide-open throttle (WOT). The HEI vacuum advance canister should remain disconnected. This engine is designed to operate using only the internal centrifugal advance to achieve the correct timing curve. Rotate the distributor counterclockwise to advance the timing. Rotate the distributor clockwise to retard the timing.
5. When possible, you should always allow the engine to warm up prior to driving. It is a good practice to allow the oil sump and water temperature to reach 180°F before towing heavy loads or performing hard acceleration runs.
6. Once the engine is warm, set the total advance timing to 32° at 4000 RPM.
7. The engine should be driven at varying loads and conditions for the first 30 miles or one hour without wide open throttle (WOT) or sustained high RPM accelerations.
8. Run five or six medium throttle (50%) accelerations to about 4000 RPM and back to idle (0% throttle) in gear.
9. Run two or three hard throttle (WOT 100%) accelerations to about 4000 RPM and back to idle (0% throttle) in gear.
10. Change the oil and filter. Replace with 10w30 motor oil (non synthetic) and a PF25 AC Delco oil filter. Inspect the oil and the oil filter for any foreign particles to ensure that the engine is functioning properly.
11. Drive the next 500 miles under normal conditions or 12 to 15 engine hours. Do not run the engine at its maximum rated engine speed. Also, do not expose the engine to extended periods of high load.
12. Change the oil and filter. Again, inspect the oil and oil filter for any foreign particles to ensure that the engine is functioning properly.
13. Do not use synthetic oil for break-in. It would be suitable to use synthetic motor oil after the second recommended oil change and mileage accumulation. In colder regions, a lower viscosity oil may be required for better flow characteristics.

FB385 Engine Specifications:

Displacement: ..... 350 cubic inches
Bore x Stroke: ..... 4.00 inch x 3.48 inch
Compression 9.6:1
Block: ..... Cast iron, four-bolt intermediate mains
Cylinder Head: ..... Cast aluminum, 23º valve angle
Valve Diameter (Intake/Exhaust): ..... 2.00”/1.55”
Chamber Volume: 62cc
Crankshaft: ..... 1053 Forged steel, 1 piece rear seal
Connecting Rods: ..... Forged, powdered metal, 3/8” bolts
Pistons: ..... Cast aluminum
Rings: ..... Moly coated cast iron
Camshaft: ..... Hydraulic roller tappet
Lift: ..... .474” intake, .510” exhaust
Duration: ..... 208° intake, 221° exhaust @.050” tappet lift
Centerline: ..... 108° ATDC intake, 116° BTDC exhaust
Rocker Arm Ratio: 1.5:1
Timing Chain: ..... 8 mm single roller design
Oil Pan: 4-quart
Oil Pressure (Normal): ..... 40 psi @ 2000 RPM
Recommended Oil: ..... 10w30 synthetic motor oil (after break in)
Oil Filter: ..... AC Delco part # PF25
..... Premium AC Delco part # UPF25
Valve Lash: ..... 1/8 turn down from zero lash
Fuel: ..... Premium unleaded - 92 (R+M/2)
Maximum Engine Speed: ..... 5800 RPM
Spark Plugs: ..... AC Delco part # MR43LTS
Spark Plug Gap ..... .040”
Spark Timing: ..... 32° maximum @ 4000 RPM
Firing Order: 1-8-4-3-6-5-7-2

Information may vary with application. All specifications listed are based on the latest production information available at the time of printing.

Additional parts that may be needed:

Flywheel / Flexplate:
Like all small block V-8 engines produced since 1986, the FB385 engine has a 3.00" diameter flywheel flange bolt pattern. Small block V-8 engines produced from 1958 through 1985 had a 3.58" diameter flywheel flange bolt pattern. This change in bolt circle diameter was made to accommodate a leak-resistant one-piece rear main seal. Due to revisions in the crankshaft design, a FB385 engine must have a counterweighted flywheel (or flexplate) for proper balance. The FB385 engine includes a flexplate part number 14088765. Additional flywheels and flexplates are available from the chart below.

FB385 Engine - Manual Transmission Flywheels

Part #	Outside Dia.	Clutch Dia.	Starter Ring Gear Teeth	Notes
14088648	14"	11.0,11.58"	168	For one-piece crank seal
14088646	12 3/4"	10.4,11.0"	153	Lightweight nodular iron flywheel, weighs approximately 15 lbs.; for one-piece crank seal
14088650	12 3/4"	10.4"	153	Standard weight flywheel; for one-piece crank seal

FB385 Engine - Automatic Transmission Flexplates

Part #	Outside Dia.	Conv Bolt Pat.	Starter Ring Gear Teeth	Notes
14088765	12 3/4"	10.75"	153	For one-piece crank seal
12554824	14"	11.50"	168	Heavy-duty flexplate with increased thickness for one-piece crank seal
14088761	14"	10.75,11.50"	168	For one-piece crank seal

Pilot Bearing:
You must install a pilot bearing in the rear of the crankshaft if the engine will be used with a manual transmission. The pilot bearing aligns the transmission input shaft with the crankshaft centerline. A worn or misaligned pilot bearing can cause shifting problems and rapid clutch wear. A roller pilot bearing Part number 14061685 is recommended for this engine. This heavy-duty bearing adds an extra margin of reliability to a high performance drivetrain.

Starter:
The FB385 does not include a starter. The starter must be matched to flywheel (or flexplate) diameter when installing a FB385 engine. Small diameter flywheels are 12 3/4" in diameter, and have starter ring gears with 153 teeth. Large diameter flywheels are 14" in diameter, and have 168 teeth on the starter ring gear. This difference in flywheel diameters requires two different starter housings. Starter noses used with 14" diameter flywheels have two offset bolt holes; starters used with 12 3/4" diameter flywheels have bolt holes that are straight across from each other.

Note: Chevrolet starter motors use special shouldered mounting bolts, which register the starter on the block.

The following starters and hardware can be used with the FB385 engine:

10496870	Heavy-duty, remanufactured starter for 12 3/4" diameter flywheel/flexplate
1876552	Heavy-duty starter for 14" diameter flywheel/flexplate
14097278	Bolt, starter mounting, long, for heavy-duty starter
14097279	Bolt, starter mounting, short, for heavy-duty starter
10455709	Remanufactured permanent magnet gear reduction (PMGR) starter for 12 3/4" diameter flywheel/ flexplate (10 lb.)
12606096	Permanent magnet gear reduction (PMGR) starter for 14" diameter flywheel/flexplate (10 lb.)
14037733	Bolt, starter mounting, inner for 12 3/4" PMGR starter
12338064	Bolt, starter mounting, outer for 12 3/4" PMGR starter; also for 14" PMGR starter (2 required)

Oil Pan / Filter / Adapter / Dipstick:

The FB385 engine includes an oil pan Part number 12557558 the same pan as the production ZZ4. This is a four quart, right-hand dipstick oil pan and gasket.

The FB385 engine assembly includes an oil filter adapter and oil filter element (AC # PF 25). A premium oil filter (AC # UPF25) is available for your FB385 engine. This has a 100% wire backed synthetic media with 6 micron filtration. An offset oil filter adapter may be installed to provide additional clearance for headers, clutch linkage, and suspension components. This offset oil filter adapter uses a small diameter spin-on filter element.

12556204	Offset oil filter adapter
88893990	Gasket and seal, oil filter adapter
11610405	Washer, oil filter adapter (2 required)
14092398	Bolt, oil filter adapter (2 required)
AC PF52	Filter to fit adapter, spin-on

The oil dipstick for the FB385 engine is on the right-hand (passenger) side of the block. A dipstick for the left-hand (driver) side of the block is available. Check for clearance when replacing the dipstick of an early-model block with a left-hand dipstick. The recommended oil dipstick and oil dipstick tube are Part number 12551144 and Part number 12551154 respectively. This oil dipstick tube bolts to the engine block below the deck surface, and can be used with header-type exhaust systems.

Carburetor / Air Cleaner:

A 750 cfm Holley four-barrel carburetor with either mechanical or vacuum operated secondaries and electric choke is recommended for the FB385 engine. GM Performance Parts has a 750 cfm Holley four-barrel carburetor Part number 12485506 with vacuum secondaries available.

A foam or paper element, low restriction air cleaner should be used to protect the engine from excessive wear and diffuse the air entering the carburetor. The fuel mixture distribution can be upset if no diffuser is used, causing poor power and misfiring at high engine speeds. Always check for adequate hood clearance when installing a new air cleaner. GM Performance Parts has two chrome 14" air cleaner assemblies for single 4 barrel engines. 12342071 is the Classic design and 123420280 is the high performance design.

Fuel Pump:
The FB385 engine does not include a fuel pump. However, it does have a mechanical fuel pump boss with a block off plate installed. The fuel system must be capable of supplying adequate fuel volume at a minimum of 6 psi pressure when the engine is operating at wide open throttle (WOT). A high volume in-line electric fuel pump is available from GM Performance Parts Part number 25115899. This heavy duty pump flows 72 gallons per hour at 6-8 psi outlet pressure.

Headers:
A FB385 engine can be equipped with a header exhaust system for maximum performance in applications where a nonproduction exhaust system is legal. For street performance and limited competition applications, the recommended header configuration is 1 3/4" diameter primary pipes, 32 to 36 inches long, with 3" diameter collectors. Use 2 1/2" diameter tailpipes with a balance tube ("H" pipe) and low restriction mufflers.

Accessory Drive Brackets:
Two Accessory Drive Kits are available from GM Performance Parts to fit the FB385 engine. P/N 12497698 is used for vehicles with air conditioning and P/N 12497697 is used for vehicles without air conditioning. Please see your GM Performance Parts dealer or visit us on the web at www.gmperformanceparts.com.

Spark Plugs / Spark Plug Wires:
The FB385 engine comes with spark plugs Part number 5614210 (AC # MR43LTS). When installing the engine in a vehicle originally equipped with a small block V-8 with HEI ignition, standard replacement spark plug wires can be used. High performance 8mm diameter wire sets with the Chevrolet Bow Tie logo or with the GM Performance Parts logo are available from GM Performance Parts for custom installations. The GM Performance Parts logo wire sets are available as Part number 12361056 (135° spark plug boots) and Part number 12361057 (90° spark plug boots). The Chevrolet logo wire sets are Part number 12361050 (135° spark plug boots) and 12361051 (90° spark plug boots). The 135° spark plug boot sets are recommended for routing the spark plug wires over the valve covers, 90° spark plug boot sets are recommended for routing the spark plug wires under the exhaust headers.

Rocker Covers:
The FB385 engine comes equipped with black stamped steel, center hold-down bolt rocker covers. A wide variety of valve cover choices are available at your GM Performance Parts dealer or visit us on the web at www.gmperformanceparts.com. Pre-1987 flange mount rocker covers can be installed on the FB385 engine using adapter Part number 24502540. This adapter is machined from billet aluminum, and uses an O-ring seal between the adapter and cylinder head rocker cover rail.

FB385 Service Parts List:

Part #	Quantity	Name
12561723	1	Engine, Partial
12531215	4	Bearing, Cr/Shf Upr/Lwr
12528826	1	Bearing, Cr/Shf Upr/Lwr Thrust (.001)
12453172	2	BEARING, Cm/Shf #3 And #4
12453170	1	Bearing, Cm/Shf #1
12453171	2	BEARING, Cm/Shf #2 And #5
12561388	10	Bolt/Screw, Cr/Shf Brg C
3877669	6	Bolt/Screw, Cr/Shf Brg C
12556307	1	Crankshaft
12523924	16	Bearing, Conn Rod Std
12523925	AR	Bearing, Conn Rod .001
12554314	1	Seal Asm, Cr/Shf Rr Oil
106751	2	Key, Cr/Shf Balr
10108688	8	Rod Asm, Conn
461372	16	Bolt/Screw, Conn Rod
3866766	16	Nut, Conn Rod
10159436	8	Piston With Pin (Std)
10159437	AR	Piston With Pin (.005" O.S)
10159438	AR	Piston With Pin (.030" O.S)
12528817	8	Ring Kit, Pstn (Std)
12528818	AR	Ring Kit, Pstn (.005" O.S)
12528819	AR	Ring Kit, Pstn (.030" O.S)
12464298	2	Head Asm, Cyl W/Vlvs
10212809	16	Shim-Vlv Spr
12551483	16	Spring-Vlv
10212810	16	Seal, Vlv Stem Oil
10212808	16	Cap-Vlv Spr
24503856	32	Key, Vlv Stem
12555331	8	Valve-Int
12551313	8	Valve-Exh
12552126	16	Stud-Vlv Rkr Arm Ball
12557236	2	Gasket-Cyl Hd
10168525	14	Bolt/Screw-Cyl Hd (Long)
10168526	4	Bolt/Screw-Cyl Hd (Med)
10168527	16	Bolt/Screw-Cyl Hd (Short)
12366573	1	Manifold Pkg, Int (Vortec)
89017465	1	Gasket-Int Manif
88960604	1	Balancer Asm-Cr/Shf
3815933	1	Bolt, Balancer
14001829	1	Washer-Cr/Shf Pul Hub
14088765	1	Flywheel Asm

Part #	Quantity	Name
14088764	6	Bolt/Screw-Flywhl
12528916	1	Pan Asm-Oil
12557558	OP	Pan, Oil
10108676	1	Gasket-Oil Pan
10202599	OP	Gasket Asm-Oil Pan
12553058	1	Reinforcement-Oil Pan
12553059	1	Reinforcement-Oil Pan
1359887	4	Nut-Hex Flg
93442037	1	Pump Asm-Oil
14024240	1	Spring, Oil Press Rlf Vl
12550042	1	Screen Asm-O/Pmp
3998287	1	Shaft, O/Pmp Drv
12551144	1	Indicator Asm-Oil Lvl
12551154	1	Tube Asm-Oil Lvl Ind
12561389	3	Stud-Cr/Shf Brg Cap
12554816	1	Deflector-Cr/Shf Oil
12562818	1	Cover Asm-Eng Frt
88894341	1	Pump Asm-Wat
12603957	2	Gasket-W/Pmp
10202456	1	Thermostat Asm-Eng Cool
10108470	1	Outlet-Wat
10105135	1	Gasket-Wtr Otlt
10185071	1	Camshaft Asm
12552129	1	Sprocket-Cm/Shf
14088784	1	Sprocket-Cr/Shf
9424877	3	Bolt-Hex
14088783	1	Chain-Cm/Shf Timing
10241740	16	Rod Asm-Vlv Push
17120735	16	Lifter, Vlv
12550002	8	Guide-Vlv Lftr
24501365	3	Bolt/Screw-Flywheel
10089648	16	Arm Kit, Vlv Rkr (W/Ball)
12555269	1	Cover Asm-Vlv Rkr Arm
12555272	1	Cover Asm-Vlv Rkr Arm
10046089	2	Gasket-Vlv Rkr Arm Cvr
93440806	1	Distributor Asm
10108445	1	Gasket-Ign Distr
5614210	1	Sparkplug Asm(Mr43lts)