



DETROIT DIESEL SERIES 60 ENGINE OWNERS MANUAL

CONTACT FITZGERALD GLIDER KITS

1225 Livingston Hwy Byrdstown, TN 38549

Monday-Friday, 8am-5pm (CST)

Toll Free: (888) 649-1053

Sales: (931) 864-4885

Warranty: (931) 864-4886

FAX: (931) 864-4895

www.fitzgeraldgliderkits.com

ENGINE MODEL AND SERIAL NUMBER DESIGNATION

The engine serial number and model number are stamped on the cylinder block in the following location (as viewed from the flywheel end):

Left side just below the intake manifold and above the cast-in Detroit Diesel logo.



Location of Engine Serial and Model Numbers

DDEC II

Detroit Diesel Series 60 engines equipped with DDEC II electronic control systems are identified by a "U" in the sixth position of the model number. Example: 6067GU60.

Detroit Diesel Electronic Controlled Series 60 engines can be equipped with a variety of options designed to warn the operator of an engine malfunction. The options can range from "Check Engine" and "Stop Engine" panel lights to automatic reduction in engine power followed by automatic engine shutdown. The power-down/shutdown option may be activated by low coolant level, low oil pressure, or high engine oil or coolant temperature.

DDEC III/IV

Detroit Diesel Series 60 engines equipped with DDEC III or DDEC IV electronic control systems are identified by a "K" in the sixth position of the model number. Example: 6067GK60.

Detroit Diesel Electronic Controlled Series 60 engines can be equipped with a variety of options designed to warn the operator of an engine malfunction. The options can range from "Check Engine" and "Stop Engine" panel lights to automatic reduction in engine power followed by automatic engine shutdown. The power-down/shutdown option may be activated by low coolant level, low oil pressure, or high engine oil or coolant temperature.



Typical Shut-Down Override Switch and Engine Lights

NOTICE:

If the warning lights stay on, or if they do not come on momentarily after turning on the ignition, consult with a DDEC technician. Operating the engine under these circumstances may result in engine damage.

The Series 60 DDEC engine is equipped with an electronically controlled fuel injection system. There are no control racks or mechanical linkage to adjust. This system not only helps to improve fuel economy and vehicle performance, but also helps to reduce cold starting time and increase initial idle speed for fast engine warm-up and virtual elimination of cold smoke.

The DDEC engine has no mechanical governor. Engine horsepower, torque, idle, and engine speed are contained in the internal electronics. Therefore, there are no mechanical governor spring adjustments for idle and high speed control.

There is no need for a throttle delay either, since emission control is performed through the Electronic Control Module (ECM).

The Electronic Foot Pedal Assembly (EFPA), eliminates the need for any throttle linkage.

The DDEC engine has the ability to perform diagnostics for self-checks and continuous monitoring of other system components. Depending on the application, DDEC can also monitor oil temperature, coolant temperature, oil pressure, fuel pressure, coolant level, and remote sensors (if used). This diagnostic system is connected to the "Check Engine" light (CEL) and the "Stop Engine" light (SEL) to provide a visual warning of a system malfunction.

DDEC III/IV ENGINE PROTECTION

Since many vehicles are equipped with the DDEC engine protection system, the "Stop Engine" malfunction is recorded in the Electronic Control Module. With the 30 second shutdown option, the engine will begin a 30 second stepped power down sequence until it shuts down completely.

To allow for the possibility of the "Stop Engine" automatic shutdown function being activated while the vehicle is operating in a critical situation, an override is provided.

In such a situation the operator may elect to "override" the automatic stop engine sequence by pressing the "Stop Engine Override" switch, located on the instrument panel, until a safe stop can be made. The operator only needs to press the override switch every 15 to 20 seconds to prevent the engine shutdown from occurring.

An important thing to remember is that it takes 30 seconds from the time the automatic shutdown sequence begins until engine shutdown. Therefore the operator must press the override switch just prior to engine shutdown and continue to do so until the vehicle can be brought to a safe stop. The immediate speed reduction option will bring engine RPM back to a predetermined speed, but will not shut down the engine.

The engine should not be restarted after it has been shut down by the engine protection system unless the problem has been located and corrected.

The conditions that will cause the "Stop Engine" light to come on are:

- Loss of coolant
- High oil temperature
- Low oil pressure
- Auxiliary shutdown

It is important to point out that whenever the CEL or the SEL comes on, the DDEC computer will determine where the problem is, and will then store this information in its memory.

If the malfunction is intermittent, the lights will come on and go off as the computer senses the changing engine condition.

A special diagnostics tool (Diagnostics Data Reader, or "DDR") is available that can be plugged into the engine computer memory to extract information related to the cause of the problem. Once the malfunction has been corrected, the DDEC system will return the engine to normal operation.

The DDR can distinguish between codes now active and those stored in the historic code memory.

The malfunction code recorded in the computer memory will remain until it is erased by a technician.

The malfunction code can also be obtained by the operator. A "Diagnostic Request" switch may be provided which, when pressed, will cause the CEL to flash a code number. It will, for example, flash twice ... pause ... flash five times ... pause. In other words a code 25.

Code 25 will continue to flash and repeat as long as the check engine switch is held in the "On" position with the ignition on.

EMERGENCY JUMP STARTING

The DDEC II electronic control system operates on 12 volt DC. If a DDEC II engine with an electronic starting motor requires emergency jump starting, do not exceed 16 volts DC.

DDEC III and DDEC IV electronic control systems operate on 12 or 24 volts DC. If a DDEC III or DDEC IV engine with an electronic starting motor requires emergency jump starting do not exceed 32 volts DC.

NOTICE:

Jump starting with voltages greater than those indicated or reversing battery polarity may damage the ECM (Electronic Control Module).

DDEC II Diagnostic Codes

Diagnostic Connector



CEL Examples

TO READ CODES: Use diagnostic data reader or short pin A to pin M. The latter method will flash codes at the CEL.

Error

Code # Description 42

- Synchronous Ref Sensor
- 43 Low Coolant Level
- 44 **Engine Over Temperature**
- 45 Low Oil Pressure
- 46 Low Battery Voltage
- 47 Hi Fuel Pressure
- 48 Lo Fuel Pressure
- 51 **EEPROM Error**
- 52 ECM - A/D Fail
- 53 **EEPROM Memory Failure**
- 54 Vehicle Speed Sensor
- 55 Proprietary Comm. Link
- 56 ECM - A/D Fail
- Cruise Ctl/Press Gov Ctl Switch 58
- 61-68 Inj Response Time Long
- 71-78 Ini Response Time Short
- 84 Crankcase Pressure Hi
- 85 **Engine Overspeed**
- 86 Press Gov Ctl - Hi Volt
- 87 Press Gov Ctl - Lo Volt



DDEC III/IV	Diagnostic	Codes
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Flash		Flash	
Code	DDEC III/IV Description	Code	DDEC III/IV Description
11	VSG Sensor Input Voltage Low	44	Oil or Coolant or Intake Air, Temp. High
12	VSG Sensor Input Voltage High	45	Oil Pressure Low
13	Coolant Level Sensor Input Voltage Low	46	ECM Battery Voltage Low
14	Oil or Coolant Temp. Sensor Input	47	Fuel, Air Inlet, or Turbo Boost
	Voltage High		Pressure High
15	Oil or Coolant Temp. Sensor Input	48	Fuel or Air Inlet Pressure Low
	Voltage Low	52	ECM A/D Conversion Fail
16	Coolant Level Sensor Input	53	ECM Non Volatile Memory Fault
	Voltage High	54	Vehicle Speed Sensor Fault
17	Throttle Valve Position Sensor Input	55	J1939 Data Link Fault
	Voltage High	56	J1587 Data Link Fault
18	Throttle Valve Position Sensor Input	57	J1922 Data Link Fault
	Voltage Low	61	Injector Response Time Long
21	TPS Input Voltage High	62	Aux. Output Short To Battery (+) or
22	TPS Input Voltage Low		Open Circuit, or Mech. Fault
23	Fuel Temp. Sensor Input Voltage High	63	PWM Drive Short to Battery (+) or
24	Fuel Temp. Sensor Input Voltage Low		Open Circuit
25	No Active Codes	64	Turbo Speed Sensor Input Fault
26	Aux. Engine Shutdown #1 or #2,	65	Throttle Valve Position Input Fault
	Input Active	66	Engine Knock Sensor Input Fault
27	Air Inlet or Intake Air, Temp. Sensor	67	Air Inlet Pressure Sensor Input
	Input Voltage High		Voltage Fault
28	Air Inlet or Intake Air, Temp. Sensor	68	TPS Idle Validation Switch Open Circuit
	Input Voltage Low		or Short to Ground
31	Aux. High Side Output Open Circuit or	71	Injector Response Time Short
	Short to Ground	72	Vehicle Overspeed
32	CEL or SEL Short to Battery (+) or	73	Gas Valve Position Input Fault or
	Open Circuit	_	ESS Fault
33	Turbo Boost Sensor Input Voltage High	74	Optimized Idle® Safety Loop Short
34	Turbo Boost Sensor Input Voltage Low		to Ground
35	Oil Pressure Sensor Input Voltage High	75	ECM Battery Voltage High
36	Oil Pressure Sensor Input Voltage Low	76	Engine Overspeed with Engine Brake
37	Fuel Pressure Sensor Input	77	Fuel Temperature High
	Voltage High	85	Engine Overspeed
38	Fuel Pressure Sensor Input Voltage Low	86	External Pump Pressure Sensor Input
41	Too Many SRS (Missing TRS)		Voltage High
42	Too Few SRS (Missing SRS)	87	External Pump Pressure Sensor Input
43	Coolant Level Low		Voltage Low

TO READ CODES: Use the diagnostic data reader or depress and hold the diagnostic request switch with the ignition on, engine at idle or not running. Press and hold the switch. Active codes will be flashed on the "Stop Engine" light (SEL) followed by the inactive codes being flashed on the "Check Engine" Light (CEL). The cycle will repeat until the operator releases the diagnostic request switch.

S-60 ENGINE DRIVING TIPS

ACCELERATING THE VEHICLE

Engine response versus pedal movement may feel different from the mechanical governed engine you were driving. The electronic foot pedal assembly was designed to communicate "percentage" foot pedal travel to the engine's electronic control module. The engine will respond accordingly to the driver's demand.

Another throttle or governor characteristic you may need some time to get used to the DDEC limiting speed governor. This allows the driver to command total engine response between idle and rated speed, such as accelerating at half throttle—an advantage when driving under slippery conditions.

If you do require wide open throttle engine response, either accelerating or just plain pulling hard, the throttle will have to be held to the floor. To obtain 100% fueling at any speed, the foot pedal will have to be maintained at the fully depressed position.

CRUISE CONTROL

For added driver convenience and comfort, DDEC III also features a cruise control option which works just like the system in your car. It can be operated in any gear above 1100 RPM or road speed faster than 20 MPH, up to the rated engine speed. It can be programmed to hold your road speed at or below the maximum vehicle speed. The switch to energize cruise control is usually mounted on the instrument panel. Turn the switch to the on position to energize the system. When you reach road speed, press the set switch to activate cruise control. The cruise light will come on. To increase road speed in one MPH increments, press the resume/accel switch. To reduce speed, press and hold the set/coast switch until the lower speed is reached. Cruise control is deactivated by slightly depressing the service brake, clutch pedal, or trailer brake. Also, the on/off switch deactivates cruise control. Cruise control will maintain speed even on upgrades, unless power requirements demand a downshift. And, of course, cruise control doesn't limit your speed on downgrades. Most likely, the cruise control will feel stronger than driving with the foot pedal because of the instantaneous and wide open throttle response. That is why cruise control is not suggested during slippery conditions.

Use cruise control after downshifting on a hill to pull the hill. Hitting the resume switch (not the set switch) will keep the truck accelerating in the lower gears up to rated engine speed.

Cruise control will disengage below 1100 RPM or 20 MPH road speed. If you want to pull the engine below 1100 RPM when using cruise control, remember to hold the throttle pedal to the floor to keep the engine pulling at wide open throttle. Realistically, the engine will pull to about 1050 RPM. Remember: the electronic data programmed into the ECM will not allow you to hurt or overfuel the engine at low or lug speeds. There is enough oil pressure to withstand hard pulls at low engine speeds.

S-60 ENGINE DRIVING TIPS

JAKE BRAKES

If your engine is equipped with both cruise control and Jake Brake® retarders, the Jakes can operate automatically while you are in cruise control. If the cruise control/ engine brake function is turned on in the ECM programming, the Jakes will come on "low" when your set road speed increases a few MPH or KPH above your set cruise speed. If your speed continues to increase, the ECM will increase the Jakes' braking power progressively. When the vehicle returns to the set cruise speed, the Jakes will "turn off" until the next time you need them. For safety reasons, don't use cruise control when it's not possible to keep the vehicle at constant speed due to winding roads, heavy traffic, slippery roads, or when descending grades that call for Jake Brake® assistance.

SHIFTING

Depending on your transmission model, the gear split may vary from 500 to 300 RPM. The electronic governor provides almost no overrun capability, and if the transmission is downshifted too early, you will experience a temporary loss of pulling power until the engine speed falls below rated speed. This is true even on steep grades with heavy loads. When using an 18, 15 or 13 speed transmission, you will need to downshift at an RPM that allows "less than rated" RPM before throttle application in the next gear down. You may want to limit engine speed to 1900 RPM in all gears. The Series 60 provides constant horsepower from 1800 RPM through 2100 RPM, but fuel economy is not as efficient above 1800 RPM and may cause premature engine issues and/or failures.

If you decide to drive at lower RPM's for improved fuel economy, don't let different engine noises throw you off guard. The Series 60 sounds quiet at 1400 RPM, almost as if it had quit pulling. Don't believe it! if you had a boost gauge to look at while driving, you would notice the turbocharger maintaining steady intake manifold pressure, even as RPM's fall. Depending on the air intake arrangement, you may also experience a "chuffing" sound as the engine starts to pull hard at the lower RPM's. This is caused by the velocity changes of the airflow within the air intake plumbing. Electronic engines can actually deliver more fuel at lower engine speeds than rated speed.

IDLE REQUIREMENTS

If you have to idle your engine for any reason, it is suggested that RPM's be set at 900 to 1000 RPM. Try to minimize idle times as much as possible for the first 10,000 miles on the engine. Lower idle RPM's will cause oil slubber, and can inhibit the cylinder rings' ability to seat properly.

IDLE SHUTDOWN

The DDEC engine may also have an optional idle shutdown system. The purpose of this system is to conserve fuel by eliminating excessive idling and to allow for a turbocharger cool down period. To activate the shutdown, the transmission must be in neutral with the vehicle parking brakes set and with the engine in idle or fast idle mode. The cruise control system may also be programmed to permit fast idle using the cruise control switches. With the engine at normal idle, the transmission in neutral, and the service brake on, turn on the cruise control "on/off" switch. and use the "Resume" switch. The engine RPM should increase to a predefined RPM. The RPM can be raised or lowered from this point using the "set" and "resume" switches.

FITZGERALD WARRANTY STATEMENT

Fitzgerald Glider Kits is not responsible for the cost of maintenance or repairs due to lack of performance of required maintenance services or the failure to use **Fuel**, **Oil**, **Lubricants**, **and coolants** meeting Detroit Diesel recommended specifications. Performance of said required maintenance and use of proper fuel, oil, lubricants and coolants are the responsibility of the owner.

ITEM DA	AILY										
1—Lubricating Oil				Ι							
2–Fuel Tank				Ι							
3-Fuel Lines and Flexit	ole Hoses			Ι		ЛА		FER			
4—Cooling System				Ι	■ `	VIA			NAI	1C	
5—Turbocharger				Ι	-						
ITEM 7,500 MILE	(12,000KM) IN	TERV	AL		4		SE	ERVI	CE		
6—Battery				Ι	-	REC	OMI	MEN	DAT	IONS	5
8–Drive Belts				Ι	-						-
9—Air Compressor				Ι	4						
-Initial Breakin Oil and Filters			R	-	ON-	HIGH	IWA	Y TR	UCK		
ITEM 15,000 MIL	.E (24,000KM)	INTER	VAL		-						
1—Lubricating Oil				R	-						
7—Tachometer Drive				I		DES:	I–Ins	bect. S	Service	e. Corr	ect
10—Air Cleaner				I			or Rei	place a	as Neo	essar	v.
11-Lubricating Oil Filter	r			R	-		R_Re	nlace			<i>J</i> .
12–Fuel Filters					-		11 110	piaco			
13–Coolant/Inhibitor Le	ever			I							
ITEM	MONTHS	6	12	18	24	30	36	42	48	54	60
	MILES/ KM (1000)	15/24	30/48	45/72	60/96	75/120	90/144	105/168	120/192	135/216	150/240
1—Lubricating Oil		R	R	R	R	R	R	R	R	R	R
2–Fuel Tank			I		I		I		Ι		Ι
4–Cooling System				Ι				Ι			
7—Tachometer Drive		I	I	I	I	I	I	I	I	I	I
8–Drive Belts		I	I	I	I	I	I	I	R	I	Ι
9—Air Compressor		I	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	
11—Lubricating Oil Filte	r	R	R	R	R	R	R	R	R	R	R
12–Fuel Filters		R	R	R	R	R	R	R	R	R	R
13–Coolant Pump/Inhi	bitor Level		<u> </u>					I	I	I	I
14–Cranking Motor		Follow Manufacturer's Recommendations									
15—Air System								I			I
16—Exhaust System				1				I	1	I	1
17—Engine (Steam Clea	in)								-		Ŧ
18–Radiator & A/A Cha	arge Cooler								I		1
19–0il Pressure											
20—Battery Charging Al	ternator						1		I		1
21-Engine & Iransmiss					1 T	<u> </u>			1 7		
22-Crankcase Pressur	e								1 T		
23-Fan Hub	1-								I		
24—Inermostats & Sea	15								1 T		
25—Crankcase Breathe	ſ				т				1		\vdash
20—Engine Tune-up											
33–Vibration Damper											

LUBRICANT SELECTION IN NORTH AMERICA

The selection of the proper lubricating oil is important to achieve the long and trouble-free service which Detroit Diesel engines are designed to provide. The proper lubricating oil for all Detroit Diesel engines is selected based on SAE viscosity grade and API (American Petroleum Institute) service designation. Only oils licensed to display the American Petroleum Institute (API) symbol shown should be used.

SAE Viscosity Grade: 15W-40 API Classification: CH-4–CJ-4 HT/HS Viscosity: 3.7 cP minimum

API Lubricant Service Mark

OIL DRAIN INTERVALS

During use, engine lubricating oil undergoes deterioration from combustion byproducts and contamination by the engine. In addition, certain components in a lubricant additive package are designed to deplete with use. For these reasons, regardless of the oil formulation, regular oil drain intervals are required.

Fitzgerald Glider Kits recommends first initial oil change at 5,000 to 7,000 miles to remove breakin metals and rebuild contaminates. Oil should be changed every 15,000 miles thereafter.

LUBRICANT REQUIREMENTS

Lubricants meeting these criteria have provided maximum engine life when used in conjunction with specified oil drain and filter maintenance schedules.



The preferred lubricating oil is Shell Rotella SAE 15W-40 (CJ-4).

(P/N 23512703)

SYNTHETIC OIL

Synthetic oils may be used in Detroit Diesel engines, provided they are approved by a Power Guard Oil Specification. The use of synthetic oil does not necessarily ensure the extension of the recommended oil drain interval beyond its limits.

LUBRICATING OIL CHECKS

Check the oil level daily with the engine stopped. If the engine has just been stopped and is warm, wait approximately 20 minutes to allow the oil to drain back to the oil pan before checking. Add the proper grade of oil to maintain the correct level on the dipstick.



Check Oil Level Daily

All diesel engines are designed to use some oil, so the periodic addition of oil is normal. See "Engine Oil Consumption Guidelines" to determine the degree of oil usage.

ENGINE OIL CONSUMPTION GUIDELINES

NOTICE:

Do not overfill. Oil may be blown out through the crankcase breather if the crankcase is overfilled

COOLANT



Shell Rotella ELC Engine Coolant is the preferred ethylene glycol coolant. If other commercial brands of ethylene glycol are used, they must be equivalent to the Shell Rotella ELC.



Conventional Coolant (commonly green)

Test at every service using Pencool or Power Cool test strips. Any additive supplements should be Power Cool or Pencool.

Fully Formulated (commonly red or purple)

Test at every service. Repeat steps mentioned above.

Extended Life Coolant (commonly red or pink)

Check freeze point at every service. Requires an enhancer at 325,000 miles. Refer to decal on coolant reservoir.

SUPPLEMENTAL COOLANT ADDITIVE (SCA) TEST PROCEDURES

Pencool 3-Way Coolant Test Strips should be used to measure nitrite and glycol concentrations. Cavitation/corrosion protection is indicated on the strip by the level of nitrite concentration. Freeze/boilover protection is determined by glycol concentration. Use the test strips as follows:

1. Dip the strip into coolant for one second. Remove and shake briskly to eliminate excess fluid.

2. Immediately compare end pad(% Glycol) to the color chart on the container.

3. Sixty seconds (one minute) after dipping, compare the nitrite pad to the color chart.

4. Color change of additive indicator (middle pad) indicates presence of inhibitor that is not approved by Detroit Diesel.

For best results make the tests while the coolant is between $50^{\circ}F-120^{\circ}F$ ($10.^{\circ}C-60^{\circ}C$).

Wait at least 60, but no longer than 75, seconds before reading the nitrite level. Promptly replace and tighten the test strip container cap after each use. Discard unused strips if they have turned light pink or tan.

A factory analysis program is available through authorized Detroit Diesel service outlets. To verify coolant acceptability, submit a sample for coolant analysis every three (3) years, 300,000 miles, (480,000 km), or 6,000 operating hours, whichever comes first.

If any other coolant additive is used, follow that particular manufacterers guidlines.

NEED RELEASE COOLANT FILTERS

Spin-on coolant filters are available for Detroit Diesel engines. Membranes in the filters release SCAs before the coolant approaches a corrosive condition, protecting the engine from corrosion. The elements release the SCA charge as needed, as opposed to the maintenance SCA elements, which instantaneously release the SCA charge. These elements should be replaced after 1 year, 120,000 miles, (192,000 km), or 2,000 operating hours, whichever comes first.

FUEL PROCESSORS

Many vehicles are now equipped with optional fuel processors, such as Detroit Diesel's Fuel Pro 382. This single filter system replaces traditional primary and secondary filters. By reducing the number of filters and extending the change interval, filter expense can be reduced by up to 75%.



DIESEL FUEL

The quality of fuel used in the Detroit Diesel engine is a very important factor in obtaining satisfactory engine performance, long engine life and long injector life. Biodiesel fuels can decrease the life of fuel filters and degrade their water coalescing ability. Failures attributed to the use of fuels which do not meet industry standards are not the fault of Fitzgerald Glider Kits, and will not be covered by Fitzgerald Glider Kits warranty.

Fitzgerald Glider Kits recommends using a 7 to 10 micron filter. Using a 7 micron filter will increase filter change frequency, but will provide better protection for the injectors

Here is how the Fuel Pro 382 works:



1. When new, the fuel level in the 382 filter will be very low. The filter is causing minimal restriction. as the filter used in Model 382, dirt collects on the filter from the bottom up. Fuel rises on the filter indicating remaining filter life.

2. Fuel level remains low. As dirt is trapped on the filter, the fuel rises over the dirt and flows through clean filter media to keep flow restriction low.

3. Restriction remains consistently low. Even though the fuel level is now over more than half of the element, the fuel is still flowing through clean new media.

4. The filter element is now covered by fuel, and it is using all of the media's surface area. Restriction is just starting to rise and the element should be changed at the next scheduled maintenance interval.

NOTE: If your vehicle is not equipped with a Fuel Pro, retrofit kits are available from DDC outlets.

AFTERMARKET FILTRATION SYSTEMS

Aftermarket Fuel supplemental filtration systems may be used, provided they do not replace the factory installed system, reduce fuel volumes, pressures, or flow rates delivered to the engine.

ADDITIONAL MAINTENANCE ITEMS:

Transmission: 50wt synthetic oil drain/flush at 500,000 miles

Differential: 75w90 synthetic oil drain/flush at 500,000 miles

Power Steering filter change interval: Once a year.

Service Eaton "Easy Pedal" clutches based on manufacturers recommendations.

*Freightliner Cascadia's use "solo" clutches. Follow manufacturers recommendations.

If your suspension does not have grease fittings, it is a sealed, maintenance free system. Contact manufacturers for recommendations.

Fitzgerald Glider Kits does not align front ends or balance tires. This will be the owners responsibility.

Fitzgerald Glider Kits reserves the right to ship parts to customers or repair shop. Certain parts are specific to our engines and not readily available at most shops. Any parts shipped that require special paint colors will delay shipping.

PARTS LIST FOR OUR 6067GK60 MODEL ENGINES ONLY

Detroit Fuel Filter	23538657
Luber Finer Oil Filter	LFP2160
Borg Warner Turbo	171702
Water Pump	R23522707
Injectors	R23555915
Cam Sensor	8929387
Crank Sensor	8929388
Oil Pressure Sensor	23532797
7 Micron Filter	23521528
10 Micron Filter	23533816

Other engine model componants will vary. (6067WK60, 6067BK60).

OVERHEAD SETTINGS

As previously stated, Fitzgerald Glider kits recommends that the overhead be run at 60,000 miles to ensure peak performance out of your 12.7 litre Detroit Diesel engine. Our overhead settings are as follows:

Intake:	8
Exhaust:	26
Jake:	26
Injector:	80.3mm

FITZGERALD GLIDER KITS WARRANTY INFORMATION

As a customer of Fitzgerald Glider Kits, we would like to take a moment to explain and make you familiar with our warranty process. We will break this down in 5 steps.

Step 1. Contact

We may be contacted at 866-597-3836 or 931-864-4886, Monday through Friday from 8:00am to 5:00pm CST. After hours we may be reached at 931-337-5794, Monday through Friday from 5:00pm to 8:00pm CST, and Saturday from 8:00 to 12:00pm CST.

Step 2. Repair facility

When a problem does arise with your Glider, please contact this warranty department first. This will allow our involvement and guidance from the beginning, which will make for a more pleasant experience for us all during this process. Fitzgerald Glider Kits warranty department would like to remind you, that while every effort will be made by our staff to see that your truck is repaired correctly and in a timely manner, we are not a breakdown service. Upon receiving your call, we will assess the issue, and guide you towards a facility to make the necessary repair. Due to certain parts specific warranty policies, (such as; OEM, Eaton, Bendix, Etc.), some repairs must be made at the facilities that can file warranties through these companies. Otherwise, the warranty for repairs will not be available, and will result in out-of-pocket expenses. Our department will guide you in this process and make you aware of their locations.

Step 3. Repairs

After you have contacted us and now have your truck at a repair shop, it is time for the repair. The shop will notice a distinctive decal on your engine valve cover. It says "STOP! Do Not Perform Repairs On This Vehicle Until Making Contact With Our Warranty Department." It also includes our phone number, displayed for contact. You may instruct the shop before hand of this, and expedite this process somewhat if you choose. Not following this procedure may jeopardize your warranty availability and increase your out-of-pocket expense. We will give the shop permission to now diagnose your problem, and in turn give us an estimate for parts and labor of the repair. After we receive this estimate, we will review it and make sure labor times are within Motor Manual SRT Guidelines. We will also evaluate the parts required to determine if the parts are something that can be purchased there, or if they need to be shipped from our facility. Our department staff will stay in close contact with the repair shop throughout the repair process, and will give you, the customer, updates as often as you request.

Step 4. Billing

After the repair is completed, Fitzgerald Glider Kits will pay the final invoice for all agreed upon warranty items from the estimate.

Step 5. Completion

Now that the repair has been completed and the invoice is paid, you can get your truck back into service, which is WHY you made the purchase in the first place. This will be the process that you will use any time there is a warranty issue. Please feel free to call our warranty department with any questions you may have about your truck warranty. We are here to help you make your experience with our warranty as pleasant as possible, and to keep your truck in service and remain profitable.

NOTE: Custom painted engine parts will require and extra day of shipping due to painting.

YOUR FITZGERALD GLIDER KIT WITH DETROIT SERIES 60 ENGINE

When your Fitzgerald Glider Kit leaves our factory floor it is filled with the following fluids:

Shell Rotella SAE 15W-40 (CJ-4) motor oil

Peak windshield washer fluid

Shell Spirax S6 GME 50wt. synthetic transmission oil

Syngard 75w90wt. synthetic differential oil

Antifreeze: Shell Rotella ELC 50/50 Antifreeze

DETROIT DIESEL SERIES 60 ENGINE