

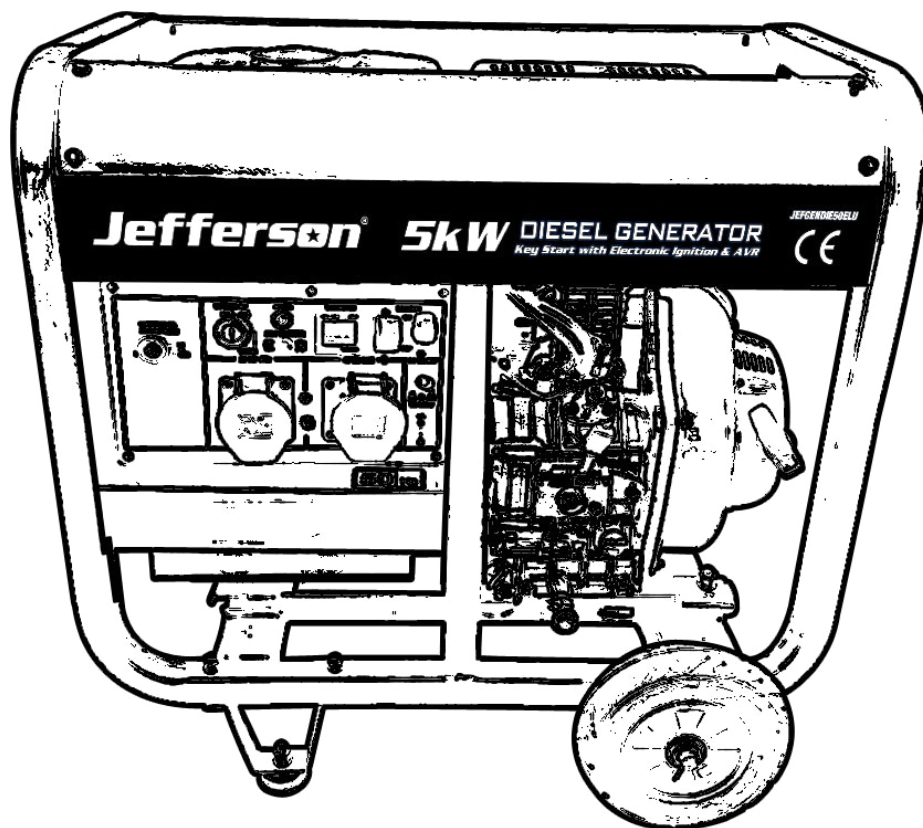
Jefferson®

PROFESSIONAL TOOLS & EQUIPMENT

5.0kW DIESEL GENERATOR

With AVR & Electric Start

JFEGENDIE50ELK

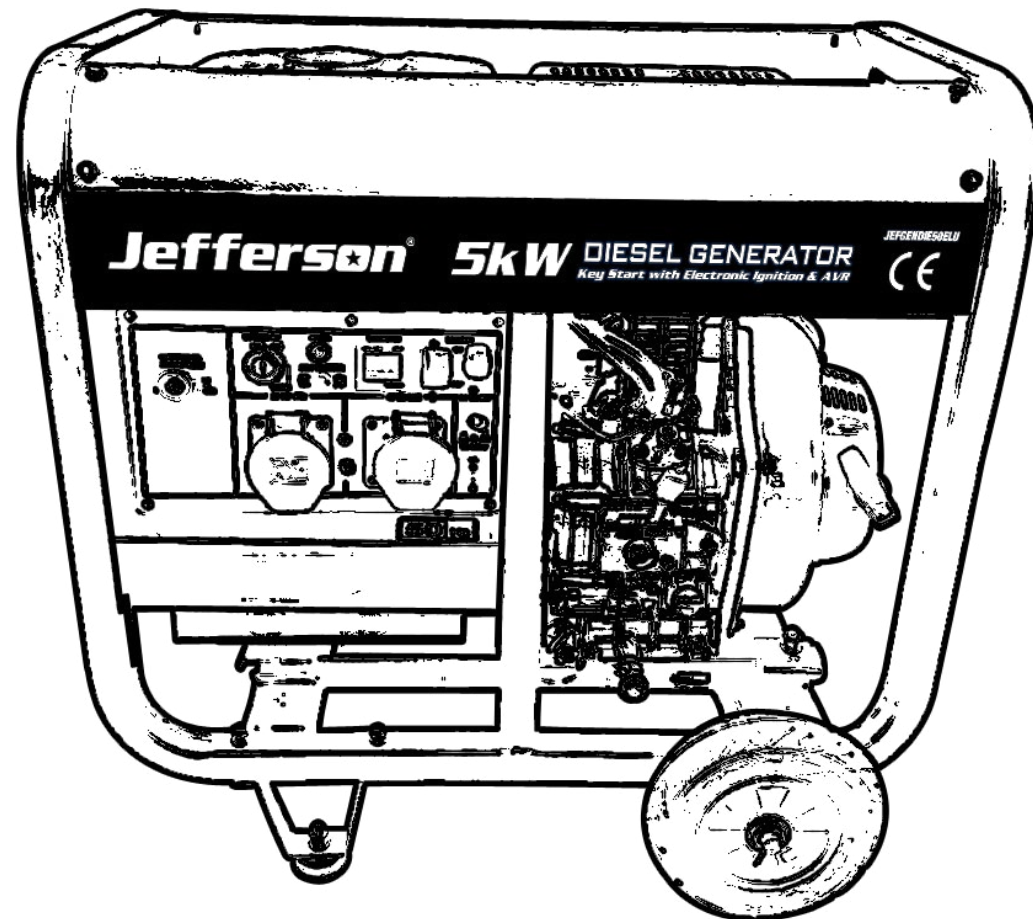


User Manual

www.jeffersonstools.com

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2. Safety Information

- The exhaust gas is poisonous, never use a generator indoors or in an attached garage. Always run your generator outdoors in a well-ventilated area. Keep the generator at least 1 meter (3 feet) away from buildings and other equipment during operation.
- Place generator on level ground to operate.
- The load must be kept within rating stated on generator rating plate, overloading will damage the unit or shorten its life.
Note: Recommended Min Load is 50% to prevent carbon build-up on the engine.
- Running the engine at excessive speeds is dangerous and will damage the engine.
- Do not tamper with parts, which may increase or decrease the governed speed.
- When using extension cords, please make sure they are grounded with sufficient wire gauge for the application. Heavy-duty outdoor rated cords will handle household appliance loads.
- The exhaust system gets hot enough to ignite some materials. Do not operate the engine near combustible materials.
- Do not store fuel indoors or try to refuel a generator while it is still running. Clean up any spilled fuel before restarting the engine.
- The muffler becomes very hot during operation and remains hot for a while after stopping the engine. Be careful not to touch the muffler while it is hot. Let the engine cool before storing the generator indoors.
- Unit must meet operating speed before electrical loads are connected.
- Turn off all equipment powered by the generator before shutting down your generator.
- To prevent electric shock or fire, never use the machine in rain or snow or connect the generator to a live circuit.
- Do not connect the generator to another power supply outlet.
- Protection against electrical shock depends on circuit breakers specifically matched to the generating set. If the circuit breakers require replacement they must be replaced with a circuit breaker having identical ratings and performance characteristics.
- Ensure the generator does not have any damaged hoses, loose or missing clamps, damaged tank or cap before use. All defects should be corrected before use.
- To prevent surging that may possibly damage equipment, do not allow the engine to run out of fuel when electrical loads are applied.
- Before transporting the generator ensure that all the fuel is drained to prevent leakage.
- Keep children and pets away from the generator at all times.
- The installation and major repair of the generator should only be carried out by trained and fully qualified engineers.
- Ensure appropriate ear protection is worn when working in close proximity to the generator.



WARNING:

- Do not cover the unit when in use.
- The unit should be earthed using 4mm diameter grounding wire.
- Do not use the generator in wet or damp conditions.
- Store the generator in well-ventilated area with an empty fuel tank.

3. Checking Generator Prior to Use

- Check the fuel level and top up with **diesel fuel** if necessary. Do not overfill the fuel tank (there should be no fuel in the filler neck).
- After refuelling make sure the tank cap is closed properly and securely. Be careful not to spill fuel when refuelling and **clean up any spilled or excess fuel**. Spilled fuel or fuel vapour can ignite when the engine is started.
- Do not fill above the fuel filter top.
- Check the engine oil level and top up if necessary as shown in **Fig.1**.

4. Starting the Generator

Note: To make it easier to start the generator in cold temperatures remove the oil plug and add 2cc of engine oil before starting.

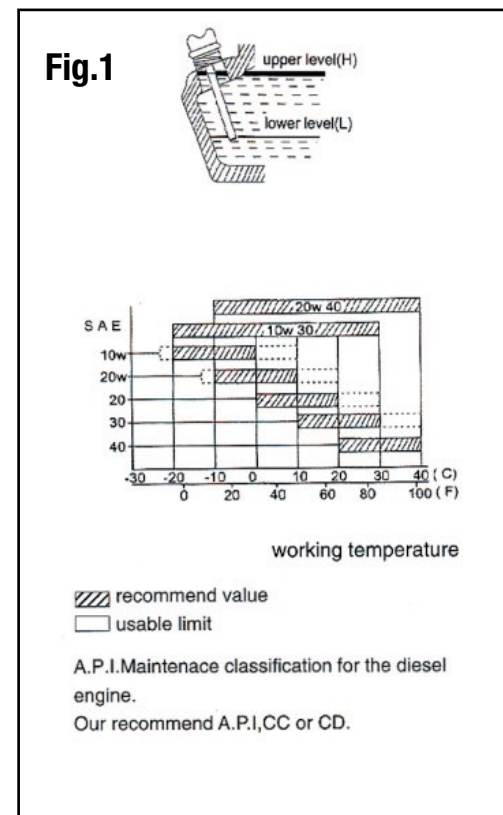
1. Warm up the engine without the load for about 3 minutes.
2. Open the Fuel Cock.

Recoil Start

3. Put the starting switch into the "Run" position.
4. Hold the starting/recoil handle loosely and pull the cord out until you feel resistance - then return it slowly.
5. Push the decompression lever down and then release it.
6. Hold the starting/recoil handle firmly - then pull the cord hard and fast as far as it will go. Use two hands if necessary. Repeat the process until the engine starts.

Electric Start

1. Turn the ignition key to the "Start" position.



WARNING:

- Make sure there is no air in the fuel pipe when using the unit for the first time, starting the unit or refuelling an empty tank. You can drain away air by loosening the connection between the injection pump and pipeline then drain the air until the fuel comes out.
- Do not loosen or adjust either the engine speed limit bolt or fuel injection limit bolt. These have been set to their optimum settings before leaving the factory.
- Never pull out the start handle when diesel engine is running. This is dangerous and can damage the engine.

5. Connecting Consumers to the Generator

1. Connect the machine you want to use to the AC socket. **Note:** Do not exceed the specified load limit of the specified maximum AC output.
2. Do not connect the generator to the household network as this may result in damage to the generator itself or to other electrical appliances in your home.

6. Stopping the Generator

1. Before stopping the generator, allow it to run for approximately 3 minutes with no consumers so that it can "cool down".
2. Turn off the circuit breaker.
3. Turn the key/ignition switch to the "OFF" position.
4. Turn the fuel cock lever to the "CLOSED" position.

7. Transporting and Storage

- When transporting the generator, ensure the starting switch is set to the "OFF" position and that the fuel valve is set to the "CLOSED3" position.
- Keep the generator level to prevent fuel spillage. Fuel vapour or spilled fuel may ignite. Touching a hot engine can cause serious burns or fires.
- Let the engine cool before transporting or storing the generator.
- Make sure not to drop or strike the generator when transporting. Do not place heavy objects on top of the generator during transit, storage or operation.

8. Maintenance

The chart below indicates the maintenance checks you should make on your generator parts and the frequency that these checks should generally be carried out. **Note:** You can contact your nearest Jefferson dealer for help and advice and a full list of replacement parts.

Check	Frequency				
	Daily	24 Hours Usage	100 Hours Usage	300 Hours Usage	1000 Hours Usage
Check and refill fuel	○				
Check and refill lube oil	○				
Check for oil leakage	○				
Check and tighten each engine part	○			● Tighten headbolts	
Change lube oil		○ 1st time	○ 2nd time and thereafter		
Clean oil filter			○ Clean	○ Replace	
Replace air cleaner element	Service more frequently when used in dusty areas			○ Replace	
Clean fuel filter				○	● Replace
Check fuel injection nozzle				● Clean	
Check fuel pipe				● Replace if necessary	
Adjust valve clearance for intake and exhaust valves		● (1st time)		●	
Check the battery electrolyte levels	Monthly				
Key:	○ Indicates simple/quick check ● Indicates special tools and skills required				

Notes:

- **Changing engine oil:** Remove the oil filler cap and drain plug. Drain the used oil while the engine is still warm.
- **Changing the air cleaner element:** Do not wash the air cleaner element with detergent. Never start the engine without the element, or with a defective element.
- **Cleaning and replacing the fuel filter:** (1) Drain the fuel oil from the fuel tank; (2) Loosen the small screws of the fuel cock and pull out the filter from the fuel tank. Wash the filter thoroughly with diesel.

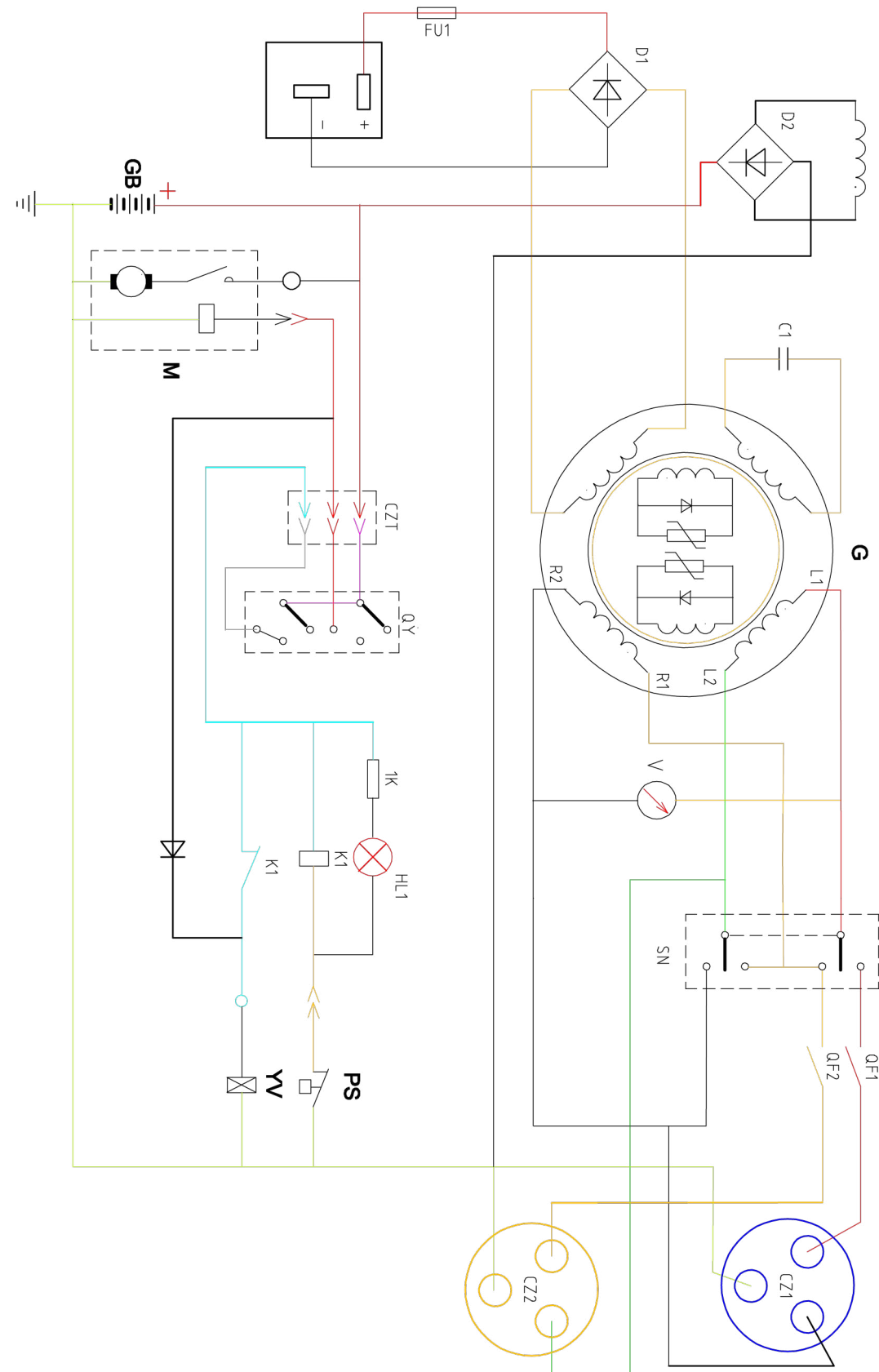
9. Troubleshooting

Symptom	Possible Cause	Action
Engine won't start	Not enough fuel oil	Add fuel - see section "4. Checking Generator Prior to Use"
	Fuel nozzle cannot inject fuel or there is not enough fuel	Repair the fuel injector
	The speed control lever is not in the "Run" position	Move the lever to the "Run" position
	Lubricant oil level is too low	Check that the oil level is topped up and sits between the upper and lower level markers
	Not enough speed or force used on the starter/recoil handle	See section "5. Starting the Generator"
Generator fault	The fuel nozzle is blocked or dirty	Clean the fuel nozzle
	Circuit breaker is not closed	Turn the circuit breaker to the "On" position
	Poor or faulty socket connection	Adjust the socket feet
	The rated generator speed cannot be obtained	Adjust to rated speed
	Carbon brush is faulty or worn	Replace the carbon brush
	AVR is depreciated	Replace the AVR

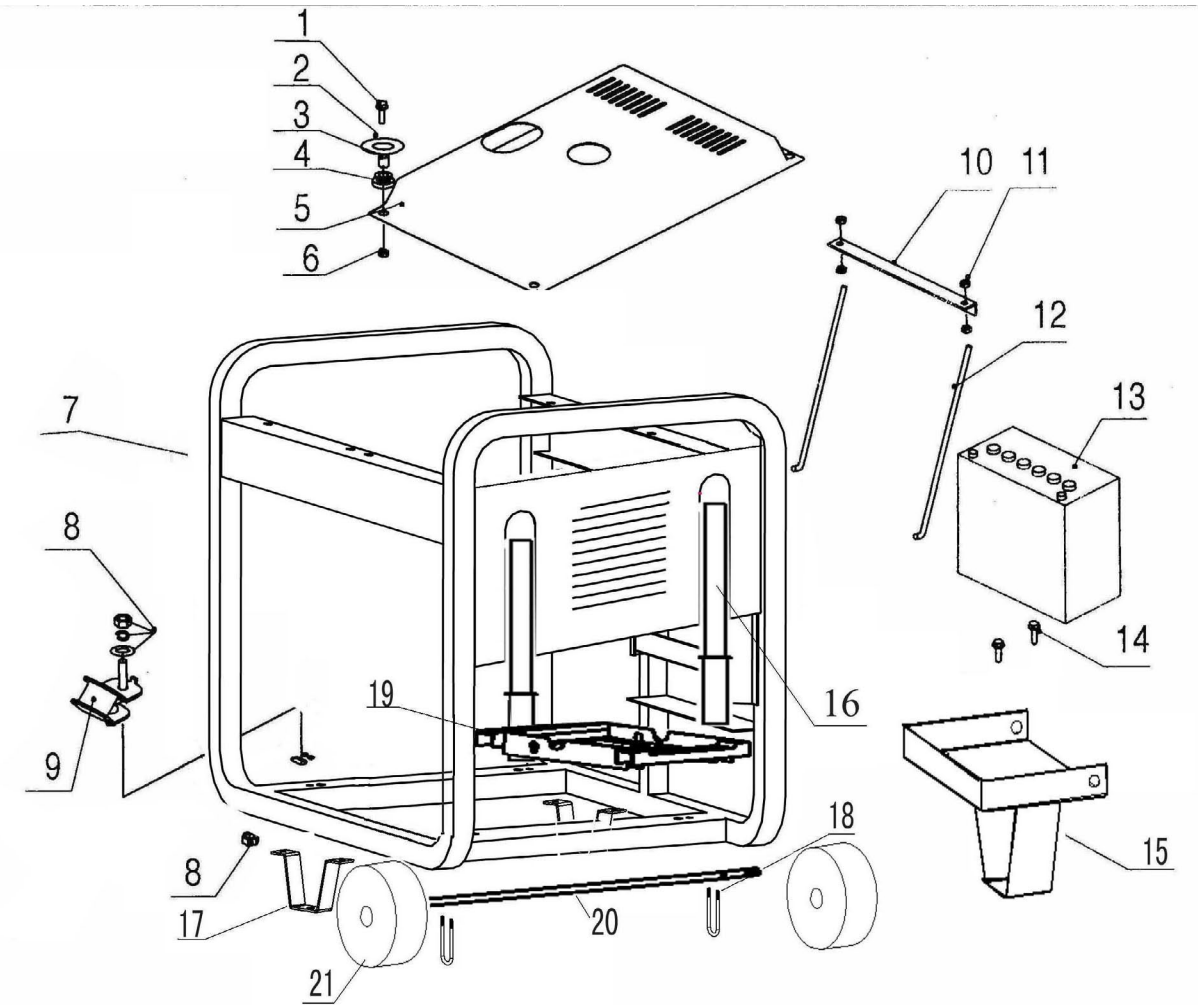
10. Technical Specification

Jefferson [®] JEFGENDIE50ELK	
5kW DIESEL GENERATOR	
Frequency:	50Hz
Rated Output:	4.5kW
Max Output:	5.0kW
AC Output:	1 x 230V 32A / 1 x 110V 32A
DC Output:	12V / 8.3A
Engine Model:	MacGen 10.0HP / 3000rpm
Engine Type:	Diesel • Air-Cooled • 4 Stroke • Single Cylinder
Starting System:	Key Start With Battery • Recoil Start
Guaranteed Noise Level:	96 dB Lwa
Fuel Tank:	12.5L
Displacement Capacity:	418cc
Lubrication Oil Volume:	1.65L
Low Oil Shutdown:	Yes
www.jeffersontools.com 	

11. Circuit / Wiring Diagram

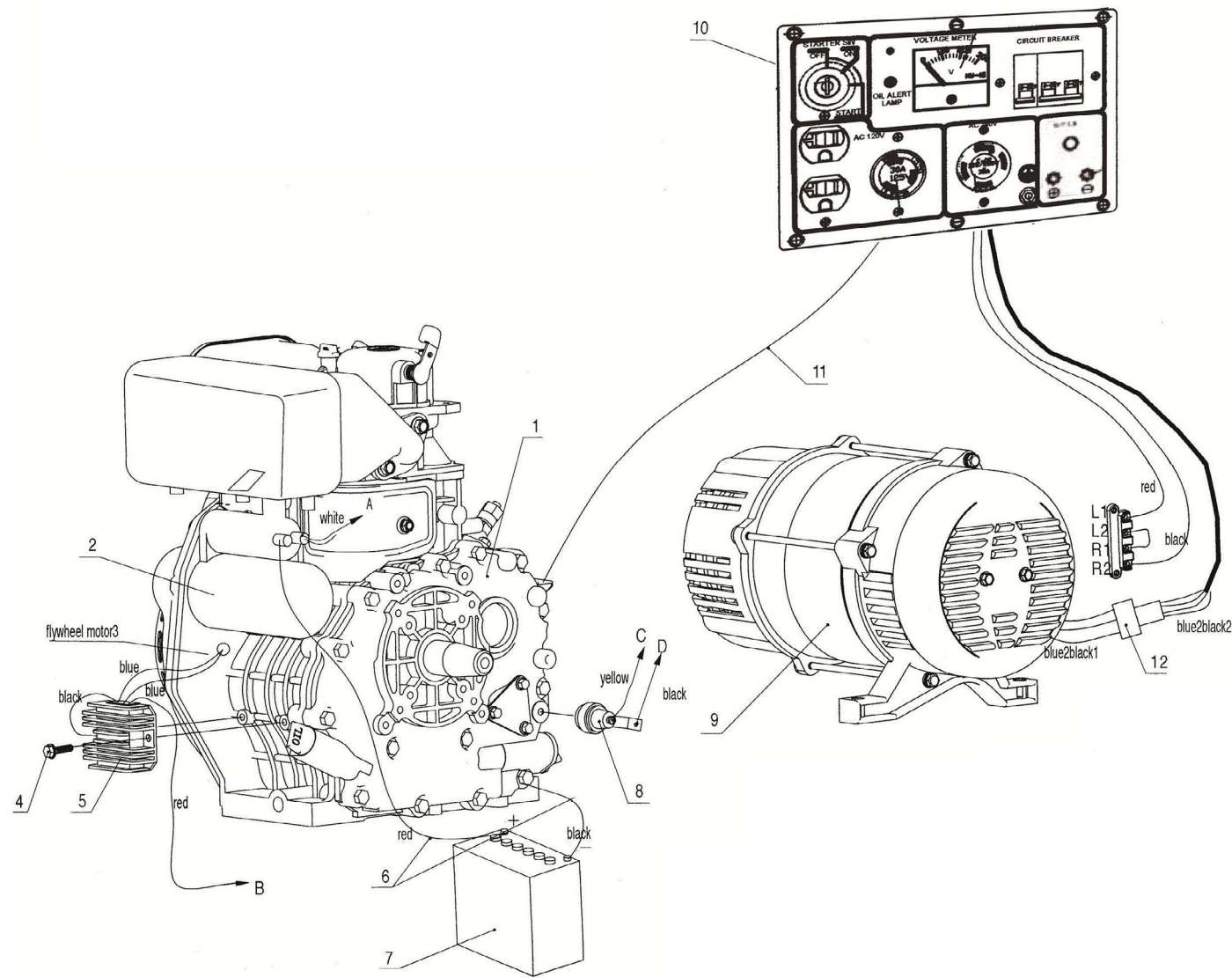


12. Parts & Assembly (A)



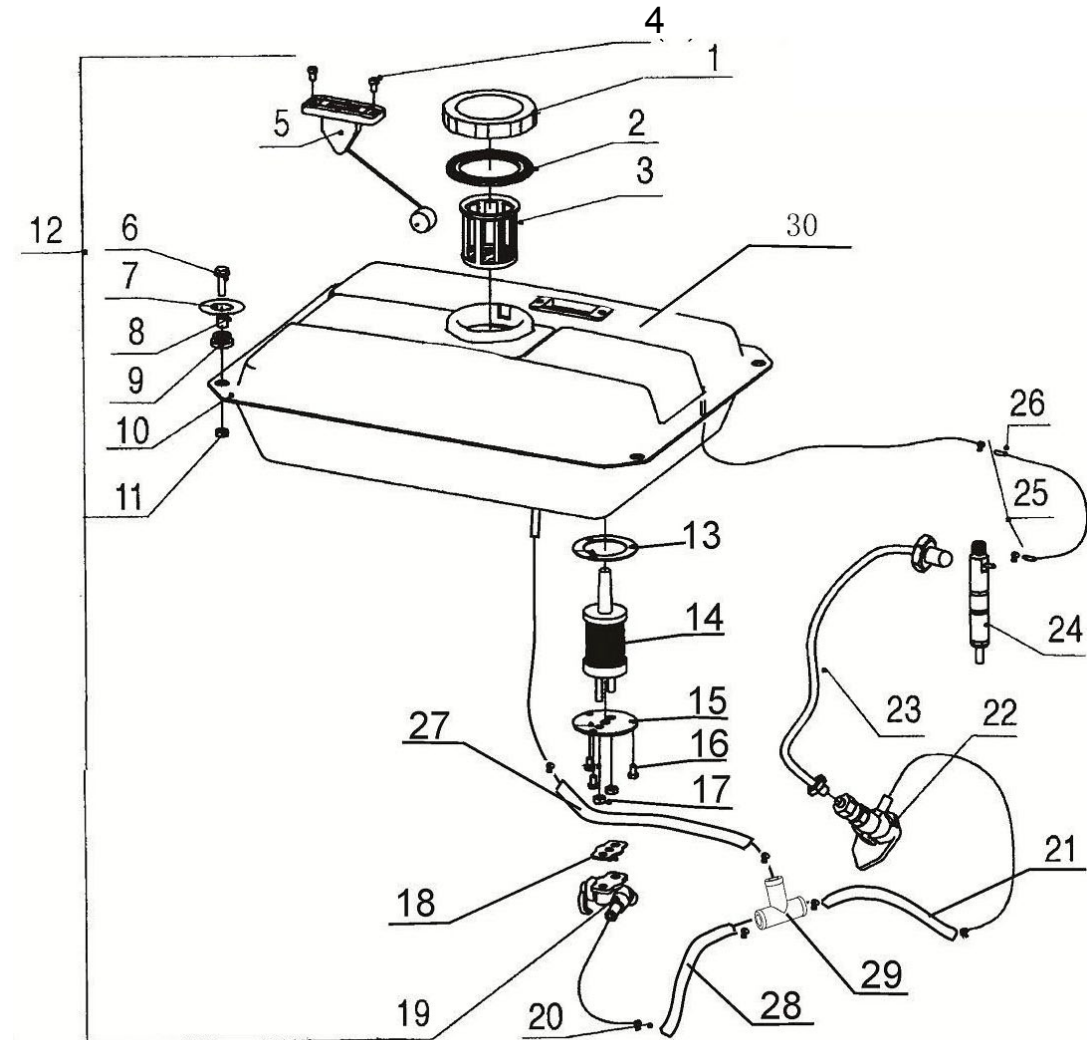
1. Bolt M6 X 25	x4	11. Nut M6	x4
2. Large Flat Washer Ø6	x4	12. Battery Bolt (Hook Shape)	x2
3. Shock Absorption Sheath	x4	13. Battery	x1
4. Shock Absorption Washer	x4	14. Bolt M6 x 8	x4
5. Decorative Cover	x1	15. Battery Base Plate	x1
6. Nut M6	x4	16. Handle	x2
7. Frame	x1	17. Support Foot	x2
8. Nut M10	x8	18. Hose Clamp	x2
9. Shock Absorption Mat	x4	19. Bracket	x1
10. Battery Pressing Plate	x1	20. Wheel Axle	x1
		21. Wheel	x2

12. Parts & Assembly (B)



1. Diesel Engine	x1	10. Control Panel Assembly	x1
2. Starter Motor	x1	11. Throttle Pulling Wire	x1
3. Flywheel Generator	x1	12. Connector Assembly	x1
4. Spring Washer	x1		
5. Battery Charging Rectifier	x1		
6. Battery Wire (Red)	x1		
Battery Wire (Black)	x1		
7. Battery	x1		
8. Low Oil Shutdown	x1		
9. Single Phase Synchronous Generator	x1		
	x1		

12. Parts & Assembly (C)



1. Fuel Cap	x1	16. Cross Screw M5 x 8	x3
2. Seal Ring	x1	17. Nut M6	x2
3. Filtering Cup	x1	18. Gasket (Diesel Oil Filter)	x1
4. Screw M5 x 10	x2	19. Oil Drain Cock Parts (clockwise)	x1
5. Fuel Level Indication Buoy	x1	20. Fuel Inlet Pipe Clip	x2
6. Bolt M6 x 25	x4	21. Fuel Inlet Pipe	x1
7. Large Flat Washer	x4	22. High Pressure Fuel Pump (counter-clockwise)	x1
8. Big Fuel Tank Lining	x4	23. High Pressure Fuel Pipe Parts	x1
9. Shock Absorbtion Gasket for Fuel Tank	x4	24. Fuel Injector	x1
10. Fuel Tank Parts	x1	25. Fuel Leak-off Pipe Clip	x2
11. Nut M6	x4	26. Fuel Leak-off Pipe	x1
12. Fuel Tank Assembly	x1	27. Return Pipe	x1
13. Pressing Plate Gasket (Diesel Oil Filter)	x1	28. Fuel Inlet Pipe	x1
14. Fuel Tank Filtering Core	x1	29. T-Connector	x1
15. Pressing Plate (Diesel Oil Filter)	x1	30. Fuel Tank	x1

EC Declaration of Conformity

We, Jefferson Professional Tools & Equipment, as the authorised European Community representative of the manufacturer, declare that the following equipment conforms to the requirements of the following Directives:

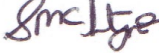
2000/14/EC (as amended)	Noise Emission in the Environment by Equipment for Use Outdoors
2004/108/EC (as amended)	Electromagnetic Compatibility
2006/42/EC (as amended)	Machinery Directive

Equipment Category: Power Generator (Item 45)
Product Name/Model: JFEGENDIE50ELSK 5kw Silent Diesel / JFEGENDIE50ELK 5kw Diesel
Rated Power: 4.5kW

The conformity assessment procedure followed was in accordance with Annex VI of the Outdoor Noise Directive

Notified Body: AVT Technology (1067)
Measured Sound Power Level: 95dB
Guaranteed Sound Power Level: 96dB

A copy of this certificate has been submitted to the European Commission and to the EU Member State, United Kingdom

Signed by: Stephen McIntyre 
Position in the company: Operations Director
Date: 09 July 2014
This technical document is held by: Jimmy Hemphill
Technical file holder's address as shown below

Name and address of manufacturer or authorised representative:

Jefferson Tools, Herons Way, Chester Business Park, Chester, United Kingdom, CH4 9QR
Telephone: +44 (0)1244 646 048 **Fax:** +44 (0)1244 241 191 **Email:** enquiries@jeffersonstools.com
www.jeffersonstools.com

Limited Warranty Statement

Jefferson Professional Tools & Equipment, or hereafter "Jefferson" warrants its customers that its products will be free of defects in workmanship or material.

Jefferson shall, upon suitable notification, correct any defects, by repair or replacement, of any parts or components of this product that are determined by Jefferson to be faulty or defective.

This warranty is void if the equipment has been subjected to improper installation, storage, alteration, abnormal operations, improper care, unauthorised service or repair.

Warranty Period

Jefferson will assume both the parts and labour expense of correcting defects during the stated warranty periods below.

All warranty periods start from the date of purchase from an authorised Jefferson dealer. If proof of purchase is unavailable from the end user, then the date of purchase will be deemed to be 3 months after the initial sale to the distributor.

1 Year

- All Jefferson Petrol & Diesel Generators

90 Days

- All replacement parts purchased outside of the warranty period

Important: All parts used in the repair or replacement of warranty covered equipment will be subject to a minimum of 90 days cover or the remaining duration of the warranty period from the original date of purchase.

Warranty Registration / Activation

You can register and activate your warranty by visiting the Jefferson Tools website using the following address: www.jeffersonstools.com/warranty and completing the online form.

Online warranty registration is recommended as it eliminates the need to provide proof of purchase should a warranty claim be necessary.

Warranty Repair

Should Jefferson confirm the existence of any defect covered by this warranty the defect will be corrected by repair or replacement at an authorized Jefferson dealer or repair centre.

Packaging & Freight Costs

The customer is responsible for the packaging of the equipment and making it ready for collection. Jefferson will arrange collection and transportation of any equipment returned under warranty. Upon inspection of the equipment,

if no defect can be found or the equipment is not covered under the terms of the Jefferson warranty, the customer will be liable for any labour and return transportation costs incurred.

These costs will be agreed with the customer before the equipment is returned.

Warranty Limitations

Jefferson will not accept responsibility or liability for repairs made by unauthorised technicians or engineers. Jefferson's liability under this warranty will not exceed the cost of correcting the defect of the Jefferson products.

Jefferson will not be liable for incidental or consequential damages (such as loss of business or hire of substitute equipment etc.) caused by the defect or the time involved to correct the defect. This written warranty is the only express warranty provided by Jefferson with respect to its products.

Any warranties of merchantability are limited to the duration of this limited warranty for the equipment involved.

Jefferson is not responsible for cable wear due to flexing and abrasion. The end user is responsible for routine inspection of cables for possible wear and to correct any issues prior to cable failure.

Claiming Warranty Coverage

The end user must contact Jefferson Professional Tools & Equipment (Tel: +44 (0) 1244 646 048) or their nearest authorised Jefferson dealer where final determination of the warranty coverage can be ascertained.

Step 1 - Reporting the Defect

Online Method:

- Visit our website www.jeffersonstools.com/warranty and complete the Warranty Returns form. You can complete the form online and submit it to us directly or download the form to print out and return by post.

Telephone Method:

Contact your Jefferson dealer or sales representative with the following information:

- Model number
- Serial number (usually located on the specification plate)
- Date of purchase

A Warranty Returns form will be sent to you for completion and return by post or fax, together with details of your nearest authorised Jefferson repair centre. On receipt of this form Jefferson will arrange to collect the equipment from you at the earliest convenience.

Step 2 - Returning the Equipment

It is the customer's responsibility to ensure that the equipment is appropriately and securely packaged for collection. Please ensure that you include a copy of your proof of purchase. Please note that Jefferson cannot assume any responsibility for any damage incurred to equipment during transit. Any claims against a third party courier will be dealt with under the terms & conditions of their road haulage association directives.

Step 3 - Assessment and Repair

On receipt, the equipment will be assessed by an authorised Jefferson engineer and it will be determined if the equipment is defective and in need of repair and any repairs needed are covered by the warranty policy. In order to qualify for warranty cover all equipment presented must have been used, serviced and maintained as instructed in the user manual.

Where repair is not covered by the warranty a quotation for repair, labour costs and return delivery will be sent to the customer (normally within 7 working days).

Note: *If the repair quotation is not accepted Jefferson Professional Tools & Equipment will invoice 1 hour labour time at £30 per hour plus return carriage costs (plus VAT).*

In cases where no fault can be found with the equipment, or, if incorrect operation of the equipment is identified as the cause of the problem, a minimum of 1 hour labour at £30 per hour plus carriage costs will be required before the equipment will be despatched back to the customer.

Any equipment repaired or replaced under warranty will normally be ready for shipment back to the customer within 7 working days upon receipt of the equipment at an authorised Jefferson Repair centre (subject to part availability). Where parts are not immediately available Jefferson will contact you with a revised date for completion of the repair.

General Warranty Enquiries

For any further information relating to Jefferson warranty cover please call **+44 (0) 1244 646 048** or send your enquiry via email to warranty@jeffersonstools.com.

Disclaimer:

The information in this document is to the best of our knowledge true and accurate, but all recommendations or suggestions are made without guarantee. Since the conditions of use are beyond their control, Jefferson Tools® disclaim any liability for loss or damage suffered from the use of this data or suggestions. Furthermore, no liability is accepted if use of any product in accordance with this data or suggestions infringes any patent. Jefferson Tools® reserve the right to change product specifications and warranty statements without further notification. All images are for illustration purposes only.

IMPORTANT! SAFETY FIRST!

Before attempting to use this product please read all the safety precautions and operating instructions outlined in this manual to reduce the risk of fire, electric shock and personal injury.



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