



Operator's Manual

Our energy working for you.™



**for Engine Series QSB5G3
with PowerCommand® 1.1 Control**

C80 D2R

FOREWORD

The purpose of this manual is to provide basic, Operator-level, information relevant to an engine when used as part of a stand-by generator set assembly. Should you require further, more detailed, information regarding the engine, please contact your authorised distributor.

This manual should be read in conjunction with the relevant PowerCommand Manual supplied with the generator set documentation pack. It contains additional, generator set specific, information and should form part of the documentation package supplied with the generator set.

The information contained within this manual is based on information available at the time of going to print. In line with Cummins Power Generation Limited policy of continuous development and improvement, information may change at any time without notice. The Operators should therefore ensure that before commencing any work, they have the latest information available.

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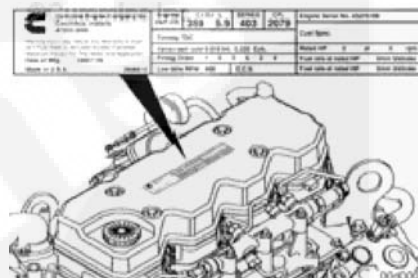
SECTION 1 – ENGINE DATA

1. Engine Data


1.1 Engine Identification Plate

Each engine is provided with a Data Plate as shown below. This provides information unique to the engine.

The engine data plate shows specific information about your engine. The Engine Serial Number (ESN) (1) and Control Parts List (CPL) (3) provide information for ordering parts and service needs.



Note: The engine data plate must not be changed unless approved by Cummins Engine Company Inc.

MANUFACTURED BY CUMMINS INC. <small>Assembled in the USA</small> 	Engine No.	Ref. No.	MODEL	Fuel Rate at Adv. HP	Min ³ Stroke		CPL
	Idle Speed (rpm)	Advertised HP	at rpm	Family	FEL	EPA	CARB
Date of Mfg:	Firing Order	Timing - T.D.C.	ELECTRONIC	Catalyst No.	ROx-MSBC		
WARNING: Injury may result and warranty is voided if fuel rate, rpm or altitudes exceed published maximum values for this model and application.	Valve lash cold	int.	Exh.	C I D / L /	E. C. S.	PM	
	IMPORTANT ENGINE INFORMATION: This engine is exempt from the prohibitions of section 203 (a) (1) (3) & (4) of the Clean Air Act as amended. See Exemption Label information for Exemption No. And Effective Date.						

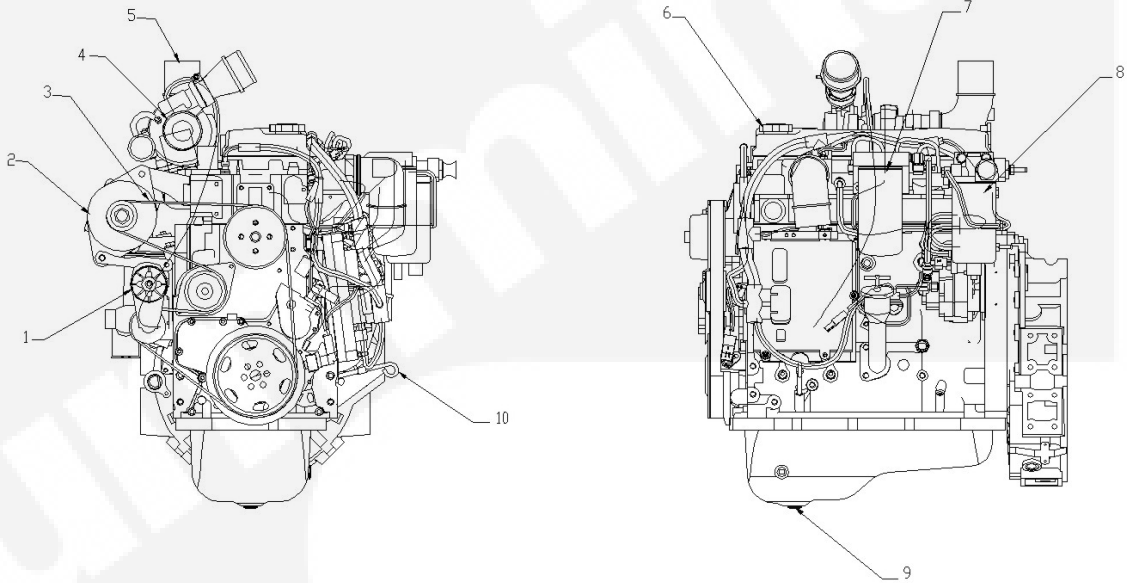
KEY

- | | |
|-------------------------------|----------------------------------|
| 1. Engine Serial Number (ESN) | 4. Valve Lash (Overhead) Lashing |
| 2. Engine Model Number | 5. Horse Power and rpm Rating |
| 3. Control Parts List (CPL) | |

1.2 Engine Diagrams

The following illustrations show the locations of the major external engine components, filters, and other service and maintenance points of a typical QSB5 engine. Some external components will be at different locations for different engine models.

1.2.1 Engine Views



KEY

- | | | | |
|----|----------------|----|----------------|
| 1. | Belt Tensioner | 6. | Oil Filler Cap |
| 2. | Alternator | 7. | Oil Filter |
| 3. | Fan Belt | 8. | Fuel Filter |
| 4. | Turbo Inlet | 9. | Oil Drain Plug |
| 5. | Exhaust | | |

1.3 Acoustic Information (1500 rpm)

Model	C80 D2R
Engine	QSB5G3
Enclosed Set Acoustic Data – LWA (Based on using a standard Cummins' canopy, and set operating with doors closed) ^{1, 2}	96
^{1.} Doors closed figures are measured using 2000/14/EC guaranteed sound power levels ^{2.} Based on 75% load For Noise Spectrum Figures refer also to Health and Safety Manual (0908-0110-00) Inline with the CPGK policy of continuous improvement these figures are subject to change.	

1.4 Acoustic Information (1800rpm)

Model	C80 D2R
Engine	QSB5G3
Enclosed Set Acoustic Data – LWA (Based on using a standard Cummins' canopy, and set operating with doors closed) ^{1, 2}	97
^{1.} Doors closed figures are measured using 2000/14/EC guaranteed sound power levels ^{2.} Based on 75% load For Noise Spectrum Figures refer also to Health and Safety Manual (0908-0110-00) Inline with the CPGK policy of continuous improvement these figures are subject to change.	

1.5 Engine Performance Data

QSB5			Fuel Consumption
Engine Performance Data at 1500 RPM			Standby (L/Hr)
QSB5G3			25
Engine Performance Data at 1800 RPM			
QSB5G3			29
Inline with the CPGK policy of continuous improvement these figures are subject to change.			

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SECTION 2 – GENERATOR SET INFORMATION (POWERCOMMAND® 1.1 CONTROL)

2. Generator Set Information (PowerCommand® 1.1 Control)

2.1 Scope

The information contained within this section is generic only.

For installation specific drawings refer to drawings supplied with the generator set documentation package.

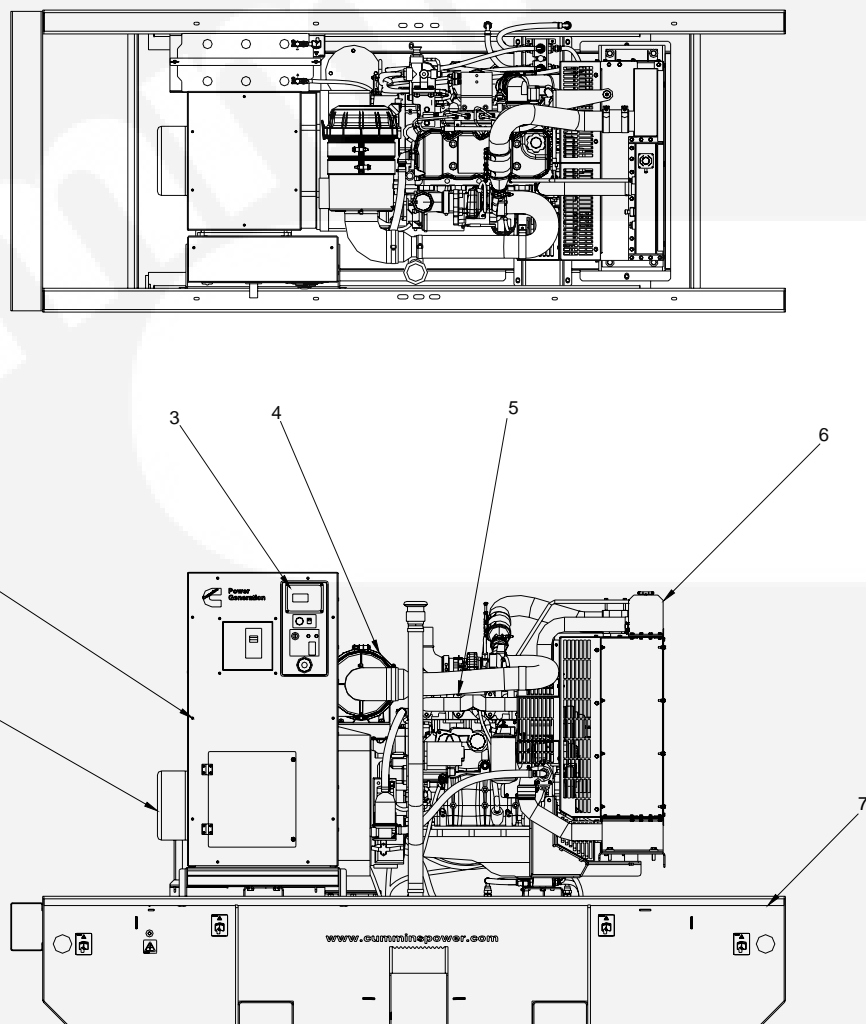


Figure 1 Typical QSB5 Generator Set

KEY

- | | | | |
|----|-----------------|----|-----------|
| 1. | Alternator | 5. | Engine |
| 2. | Control Housing | 6. | Radiator |
| 3. | PC1.1 Control | 7. | Bed Frame |
| 4. | Air Cleaner | | |

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