

## Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E9751/1 CE: NO

RATED OUTPUT	KVA	40	RATING CLASSIFICATION	PRP	
	KW	32			
	PHASE	3			
	VOLTS	415		PERFORMANCE CLASS	G1
	AMPS	56			
	HZ	50			
	RPM	1500			
GOVERNOR TYPE			COOLING METHOD		
			WATERCOOLED		

ENGINE MAKE	PERKINS	BUILD NUMBER	DK514.35
ENGINE MODEL	1403A-33TG1	SERIAL NUMBER	02430380
ALTERNATOR MAKE	STAMFORD		
ALTERNATOR MODEL	P1443	SERIAL NUMBER	0268438/013
CONTROL PANEL(S)	AUTO START	SERIAL NUMBER(S)	
SWITCHGEAR		SERIAL NUMBER(S)	

LOAD TEST RESULTS (AT UNITY POWER FACTOR)								
TYPE	LOAD %	HZ	VOLTS	AMPS	KW	ENGINE TEMP DEG C	OIL TEMP DEG C	OIL PRESS BAR
load acceptance	80	50.6	415	40	28.8	—	—	4.8
standby/ prime+10%	110%	50	415	4.8	35.2	84	—	3.8

GENERATING SET ENCLOSURE MECHANICAL PROTECTION IP

AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M) —

(UNITS WITH ACOUSTIC CANOPIES ONLY & MEASURED UNDER TEST BAY CONDITIONS AT 75% LOAD IN ACCORDANCE WITH ISO8528-10)

AMBIENT TEST CONDITIONS		FUEL/OIL USED	
ALTITUDE (M)	Sea Level	FUEL SPEC	BS2869A2
BAROMETRIC PRESSURE (kpa)	1008	DENSITY	0.84 kg/l
TEMPERATURE (Deg c)	15	CALORIFIC VALUE	42.5 MJ/kg
HUMIDITY (%)	82	LUB OIL SPEC	Multigrade

WIRING DIAGRAMS:	
ENGINE	06-130700
CONTROL PANEL(S)	10-170800

TESTED BY  
*Lo Zammelli*

DATE  
26/08/2010

**Generating Set Functional Test Report**  
In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E9751/2 CE: NO

RATED OUTPUT	KVA	<u>40</u>	RATING CLASSIFICATION	<u>PRP</u>	
	KW	<u>32</u>			
	PHASE	<u>3</u>			
	VOLTS	<u>415</u>		PERFORMANCE CLASS	<u>61</u>
	AMPS	<u>56</u>		(AS DEFINED BY ISO 8528-1)	
	HZ	<u>50</u>			
	RPM	<u>1500</u>			
GOVERNOR TYPE			COOLING METHOD	<u>WATERCOOLED</u>	

ENGINE MAKE	<u>PERKINS</u>	BUILD NUMBER	<u>DK51435</u>
ENGINE MODEL	<u>1103A-33TG1</u>	SERIAL NUMBER	<u>U242833U</u>
ALTERNATOR MAKE	<u>STAMFORD</u>		
ALTERNATOR MODEL	<u>P1445</u>	SERIAL NUMBER	<u>0268438/004</u>
CONTROL PANEL(S)	<u>AUTO START</u>	SERIAL NUMBER(S)	
SWITCHGEAR		SERIAL NUMBER(S)	

LOAD TEST RESULTS (AT UNITY POWER FACTOR)								
LOAD TYPE	LOAD %	HZ	VOLTS	AMPS	KW	ENGINE TEMP DEG C	OIL TEMP DEG C	OIL PRESS BAR
load acceptance	<u>90</u>	<u>50.3</u>	<u>415</u>	<u>40</u>	<u>28.8</u>	<u>—</u>	<u>—</u>	<u>5.0</u>
standby/ prime+10%	<u>110%</u>	<u>50</u>	<u>415</u>	<u>48</u>	<u>35.2</u>	<u>83</u>	<u>—</u>	<u>4.2</u>

GENERATING SET ENCLOSURE MECHANICAL PROTECTION IP

AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M) —

(UNITS WITH ACOUSTIC CANOPIES ONLY & MEASURED UNDER TEST BAY CONDITIONS AT 75% LOAD IN ACCORDANCE WITH ISO8528-10)

AMBIENT TEST CONDITIONS		FUEL/OIL USED	
ALTITUDE (M)	<u>Sea Level</u>	FUEL SPEC	<u>BS2869A2</u>
BAROMETRIC PRESSURE (kpa)		DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)		CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)		LUB OIL SPEC	<u>Multigrade</u>

WIRING DIAGRAMS:			
ENGINE	<u>06-130700</u>	CONTROL PANEL(S)	<u>10-170800</u>

TESTED BY  
L. Tammy

DATE  
26/08/2010

## Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E8751/3 CE: NO

RATED OUTPUT	KVA	40	RATING CLASSIFICATION	DRP
	KW	32		
	PHASE	3		
	VOLTS	415		
	AMPS	56		
	HZ	50		
	RPM	1500		
GOVERNOR TYPE			PERFORMANCE CLASS	6.1
			(AS DEFINED BY ISO 8528-1)	
			COOLING METHOD	WATERCOOLED

ENGINE MAKE	PERKINS	BUILD NUMBER	DK 51435
ENGINE MODEL	1403A - 33TG1	SERIAL NUMBER	U243044U
ALTERNATOR MAKE	STAMFORD	SERIAL NUMBER	0263438/005
ALTERNATOR MODEL	P1443	SERIAL NUMBER(S)	
CONTROL PANEL(S)	AUTO - START	SERIAL NUMBER(S)	
SWITCHGEAR		SERIAL NUMBER(S)	

LOAD TEST RESULTS (AT UNITY POWER FACTOR)								
LOAD TYPE	LOAD %	HZ	VOLTS	AMPS	KW	ENGINE TEMP	OIL TEMP	OIL PRESS
						DEG C	DEG C	BAR
load acceptance	90	50,5	415	40	28,8	—	—	4,8
standby/ prime+10%	110%	50	415	48	35,2	84	—	3,8

GENERATING SET ENCLOSURE MECHANICAL PROTECTION IP

AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M) —

(UNITS WITH ACOUSTIC CANOPIES ONLY & MEASURED UNDER TEST BAY CONDITIONS AT 75% LOAD IN ACCORDANCE WITH ISO8528-10)

AMBIENT TEST CONDITIONS			FUEL/OIL USED	
ALTITUDE (M)	Sea Level	FUEL SPEC	BS2869A2	
BAROMETRIC PRESSURE (kpa)	1003	DENSITY	0.84 kg/l	
TEMPERATURE (Deg c)	16	CALORIFIC VALUE	42.5 MJ/kg	
HUMIDITY (%)	77	LUB OIL SPEC	Multigrade	

WIRING DIAGRAMS:		
ENGINE	06-130700	CONTROL PANEL(S)
		10-170800

TESTED BY  
*L. Janssen*

DATE  
26/08/2010

## Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E875114 CE: NO

RATED OUTPUT	KVA	40	RATING CLASSIFICATION	PRP	
	KW	32			
	PHASE	3			
	VOLTS	415		PERFORMANCE CLASS	61
	AMPS	56			
	HZ	50			
RPM	1500				
GOVERNOR TYPE			COOLING METHOD		
			WATERCOOLED		

ENGINE MAKE	PERKINS	BUILD NUMBER	DK51435
ENGINE MODEL	1103A-33T6-1	SERIAL NUMBER	U242929U
ALTERNATOR MAKE	STAMFORD	SERIAL NUMBER	0267427/016
ALTERNATOR MODEL	P1445	SERIAL NUMBER(S)	
CONTROL PANEL(S)	AUTO-START	SERIAL NUMBER(S)	
SWITCHGEAR		SERIAL NUMBER(S)	

### LOAD TEST RESULTS (AT UNITY POWER FACTOR)

LOAD TYPE	LOAD %	HZ	VOLTS	AMPS	KW	ENGINE TEMP DEG C	OIL TEMP DEG C	OIL PRESS BAR
load acceptance	30	50.5	415	40	28.8	—	—	4.9
standby/prime+10%	110%	50	415	48	35.2	83	—	4.2

GENERATING SET ENCLOSURE MECHANICAL PROTECTION IP

AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M) —

(UNITS WITH ACOUSTIC CANOPIES ONLY & MEASURED UNDER TEST BAY CONDITIONS AT 75% LOAD IN ACCORDANCE WITH ISO8528-10)

AMBIENT TEST CONDITIONS		FUEL/OIL USED	
ALTITUDE (M)	Sea Level	FUEL SPEC	BS2869A2
BAROMETRIC PRESSURE (kpa)	1009	DENSITY	0.84 kg/l
TEMPERATURE (Deg c)	16	CALORIFIC VALUE	42.5 MJ/kg
HUMIDITY (%)	77	LUB OIL SPEC	Multigrade

### WIRING DIAGRAMS:

ENGINE	06-130700	CONTROL PANEL(S)	10-170800
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TESTED BY

*L. J. Tacumalli*

DATE

26/08/2010

**Generating Set Functional Test Report**  
In accordance with ISO 8528 - 6 2005

PLANT NUMBER: ES75-115 CE: NO

RATED OUTPUT	KVA	<u>40</u>	RATING CLASSIFICATION	<u>DRP</u>		
	KW	<u>32</u>				
	PHASE	<u>3</u>				
	VOLTS	<u>415</u>			PERFORMANCE CLASS	<u>6-1</u>
	AMPS	<u>56</u>			(AS DEFINED BY ISO 8528-1)	
	HZ	<u>50</u>				
	RPM	<u>1500</u>				
GOVERNOR TYPE			COOLING METHOD	<u>WATERCOOLED</u>		

ENGINE MAKE	<u>PERKINS</u>	BUILD NUMBER	<u>DK51435</u>
ENGINE MODEL	<u>1103A-33TG1</u>	SERIAL NUMBER	<u>U243028U</u>
ALTERNATOR MAKE	<u>STAMFORD</u>		
ALTERNATOR MODEL	<u>D1443</u>	SERIAL NUMBER	<u>02694381006</u>
CONTROL PANEL(S)	<u>AUTO-START</u>	SERIAL NUMBER(S)	
SWITCHGEAR		SERIAL NUMBER(S)	

**LOAD TEST RESULTS (AT UNITY POWER FACTOR)**

LOAD TYPE	LOAD %	HZ	VOLTS	AMPS	KW	ENGINE TEMP DEG C	OIL TEMP DEG C	OIL PRESS BAR
load acceptance	<u>90</u>	<u>50.3</u>	<u>415</u>	<u>40</u>	<u>28.8</u>	<u>—</u>	<u>—</u>	<u>5.0</u>
standby/prime+10%	<u>110%</u>	<u>50</u>	<u>415</u>	<u>48</u>	<u>35.2</u>	<u>84</u>	<u>—</u>	<u>4.3</u>

GENERATING SET ENCLOSURE MECHANICAL PROTECTION IP  
 AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M) —  
 (UNITS WITH ACOUSTIC CANOPIES ONLY & MEASURED UNDER TEST BAY CONDITIONS AT 75% LOAD IN ACCORDANCE WITH ISO8528-10)

AMBIENT TEST CONDITIONS		FUEL/OIL USED	
ALTITUDE (M)	<u>Sea Level</u>	FUEL SPEC	<u>BS2869A2</u>
BAROMETRIC PRESSURE (kpa)	<u>100.8</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>16</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>78</u>	LUB OIL SPEC	<u>Multigrade</u>

**WIRING DIAGRAMS:**

ENGINE	<u>06-130700</u>	CONTROL PANEL(S)	<u>10-170800</u>
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TESTED BY L. Zammit

DATE 26/08/2010

**Generating Set Functional Test Report**  
In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E975 1/6 CE: NO

RATED OUTPUT	KVA	<u>40</u>	RATING CLASSIFICATION	<u>PRD</u>	
	KW	<u>32</u>			
	PHASE	<u>3</u>			
	VOLTS	<u>415</u>		PERFORMANCE CLASS	<u>G1</u>
	AMPS	<u>56</u>		(AS DEFINED BY ISO 8528-1)	
	HZ	<u>50</u>			
	RPM	<u>1500</u>			
GOVERNOR TYPE			COOLING METHOD	<u>WATERCOOLED</u>	

ENGINE MAKE	<u>PERKINS</u>	BUILD NUMBER	<u>DK 51435</u>
ENGINE MODEL	<u>1103A-33TG-1</u>	SERIAL NUMBER	<u>02430280</u>
ALTERNATOR MAKE	<u>STAMFORD</u>		
ALTERNATOR MODEL	<u>P1445</u>	SERIAL NUMBER	<u>0269438/015</u>
CONTROL PANEL(S)	<u>AUTO-START</u>	SERIAL NUMBER(S)	
SWITCHGEAR		SERIAL NUMBER(S)	

**LOAD TEST RESULTS (AT UNITY POWER FACTOR)**

LOAD TYPE	LOAD %	HZ	VOLTS	AMPS	KW	ENGINE TEMP DEG C	OIL TEMP DEG C	OIL PRESS BAR
load acceptance	<u>90</u>	<u>50,5</u>	<u>415</u>	<u>40</u>	<u>28,8</u>	<u>—</u>	<u>—</u>	<u>4,8</u>
standby/ prime+10%	<u>110%</u>	<u>50</u>	<u>415</u>	<u>48</u>	<u>35,2</u>	<u>84</u>	<u>—</u>	<u>4,2</u>

GENERATING SET ENCLOSURE MECHANICAL PROTECTION IP

AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M) —

(UNITS WITH ACOUSTIC CANOPIES ONLY & MEASURED UNDER TEST BAY CONDITIONS AT 75% LOAD IN ACCORDANCE WITH ISO8528-10)

AMBIENT TEST CONDITIONS		FUEL/OIL USED	
ALTITUDE (M)	<u>Sea Level</u>	FUEL SPEC	<u>BS2869A2</u>
BAROMETRIC PRESSURE (kpa)	<u>1008</u>	DENSITY	<u>0.84 kg/l</u>
TEMPERATURE (Deg c)	<u>16</u>	CALORIFIC VALUE	<u>42.5 MJ/kg</u>
HUMIDITY (%)	<u>80</u>	LUB OIL SPEC	<u>Multigrade</u>

**WIRING DIAGRAMS:**

ENGINE	<u>06-130700</u>	CONTROL PANEL(S)	<u>10-170800</u>
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TESTED BY L. Zumbado

DATE 26/08/2010

## Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E9751/7 CE: NO

RATED OUTPUT	KVA	40	RATING CLASSIFICATION	D20	
	KW	32			
	PHASE	3			
	VOLTS	415		PERFORMANCE CLASS	G1
	AMPS	56			(AS DEFINED BY ISO 8528-1)
	HZ	50			
	RPM	1500			
GOVERNOR TYPE			COOLING METHOD	WATERCOOLED	

ENGINE MAKE	PERKINS	BUILD NUMBER	DK 51435
ENGINE MODEL	1103A-33TG1	SERIAL NUMBER	U2430370
ALTERNATOR MAKE	STAMFORD	SERIAL NUMBER	0268137/007
ALTERNATOR MODEL	D 144 S	SERIAL NUMBER(S)	
CONTROL PANEL(S)	AUTO START	SERIAL NUMBER(S)	
SWITCHGEAR		SERIAL NUMBER(S)	

### LOAD TEST RESULTS (AT UNITY POWER FACTOR)

LOAD TYPE	LOAD %	HZ	VOLTS	AMPS	KW	ENGINE TEMP DEG C	OIL TEMP DEG C	OIL PRESS BAR
load acceptance	90	50,6	415	40	28,8	—	—	5,0
standby/ prime+10%	110%	50	415	49	35,2	84	—	4,4

GENERATING SET ENCLOSURE MECHANICAL PROTECTION

IP

AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M)

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(UNITS WITH ACOUSTIC CANOPIES ONLY & MEASURED UNDER TEST BAY CONDITIONS AT 75% LOAD IN ACCORDANCE WITH ISO8528-10)

AMBIENT TEST CONDITIONS		FUEL/OIL USED	
ALTITUDE (M)	Sea Level	FUEL SPEC	BS2869A2
BAROMETRIC PRESSURE (kpa)	1009	DENSITY	0.84 kg/l
TEMPERATURE (Deg c)	14	CALORIFIC VALUE	42.5 MJ/kg
HUMIDITY (%)	77	LUB OIL SPEC	Multigrade

### WIRING DIAGRAMS:

ENGINE	06-130700	CONTROL PANEL(S)	10-170800
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TESTED BY

L. Zaunli

DATE

27/08/2010

## Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: ES751/8 CE: NO

RATED OUTPUT	KVA	40	RATING CLASSIFICATION	PRD
	KW	32		
	PHASE	3		
	VOLTS	415	PERFORMANCE CLASS	6-1
	AMPS	56		
	HZ	50		
	RPM	1500		
GOVERNOR TYPE			COOLING METHOD	WATERCOOLED

ENGINE MAKE	PERKINS	BUILD NUMBER	DK51435
ENGINE MODEL	1103A-33TG-1	SERIAL NUMBER	1243035U
ALTERNATOR MAKE	STAMFORD	SERIAL NUMBER	0267427/017
ALTERNATOR MODEL	D 1443	SERIAL NUMBER(S)	
CONTROL PANEL(S)	AUTO-START	SERIAL NUMBER(S)	
SWITCHGEAR		SERIAL NUMBER(S)	

LOAD TEST RESULTS (AT UNITY POWER FACTOR)								
LOAD TYPE	LOAD %	HZ	VOLTS	AMPS	KW	ENGINE TEMP DEG C	OIL TEMP DEG C	OIL PRESS BAR
load acceptance	90	50.6	415	40	288	—	—	4.9
standby/ prime+10%	110%	50	415	48	352	84	—	4.2

GENERATING SET ENCLOSURE MECHANICAL PROTECTION IP

AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M) —

(UNITS WITH ACOUSTIC CANOPIES ONLY & MEASURED UNDER TEST BAY CONDITIONS AT 75% LOAD IN ACCORDANCE WITH ISO8528-10)

AMBIENT TEST CONDITIONS		FUEL/OIL USED	
ALTITUDE (M)	Sea Level	FUEL SPEC	BS2869A2
BAROMETRIC PRESSURE (kpa)	1010	DENSITY	0.84 kg/l
TEMPERATURE (Deg c)	15	CALORIFIC VALUE	42.5 MJ/kg
HUMIDITY (%)	72	LUB OIL SPEC	Multigrade

WIRING DIAGRAMS:			
ENGINE	06-130700	CONTROL PANEL(S)	10-170800

TESTED BY *L. Zammit*

DATE *27/08/2010*

## Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E9751/9 CE: NO

RATED OUTPUT	KVA	40	RATING CLASSIFICATION	PRP	
	KW	32			
	PHASE	3			
	VOLTS	415		PERFORMANCE CLASS	61
	AMPS	56			
	HZ	50			
	RPM	1500			
GOVERNOR TYPE			COOLING METHOD		
			WATERCOOLED		

ENGINE MAKE	PERKINS	BUILD NUMBER	DK51435
ENGINE MODEL	1103A-33T6-1	SERIAL NUMBER	112428261
ALTERNATOR MAKE	STAMFORD	SERIAL NUMBER	0268438/014
ALTERNATOR MODEL	P-1443		
CONTROL PANEL(S)	AUTO-START	SERIAL NUMBER(S)	
SWITCHGEAR		SERIAL NUMBER(S)	

LOAD TEST RESULTS (AT UNITY POWER FACTOR)								
LOAD TYPE	LOAD %	HZ	VOLTS	AMPS	KW	ENGINE TEMP DEG C	OIL TEMP DEG C	OIL PRESS BAR
load acceptance	90	50,5	415	40	28,8	—	—	4,8
standby/prime+10%	110%	50	415	48	35,2	84	—	3,8

GENERATING SET ENCLOSURE MECHANICAL PROTECTION IP

AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M) —

(UNITS WITH ACOUSTIC CANOPIES ONLY & MEASURED UNDER TEST BAY CONDITIONS AT 75% LOAD IN ACCORDANCE WITH ISO8528-10)

AMBIENT TEST CONDITIONS		FUEL/OIL USED	
ALTITUDE (M)	Sea Level	FUEL SPEC	BS2869A2
BAROMETRIC PRESSURE (kpa)	1010	DENSITY	0.84 kg/l
TEMPERATURE (Deg c)	15	CALORIFIC VALUE	42.5 MJ/kg
HUMIDITY (%)	70	LUB OIL SPEC	Multigrade

WIRING DIAGRAMS:	
ENGINE <span style="border: 1px solid black; padding: 2px;">06-130700</span>	CONTROL PANEL(S) <span style="border: 1px solid black; padding: 2px;">10-170800</span>

TESTED BY L. J. ... DATE 27/08/2010

## Generating Set Functional Test Report

In accordance with ISO 8528 - 6 2005

PLANT NUMBER: E8751/10 CE: NO

RATED OUTPUT	KVA	40	RATING CLASSIFICATION	PRP	
	KW	32			
	PHASE	3			
	VOLTS	415		PERFORMANCE CLASS	61
	AMPS	56			
	HZ	50			
	RPM	1500			
GOVERNOR TYPE			COOLING METHOD WATERCOOLED		

ENGINE MAKE	PERKINS	BUILD NUMBER	DK51435
ENGINE MODEL	1403A - 33TG1	SERIAL NUMBER	U243030U
ALTERNATOR MAKE	STAMFORD		
ALTERNATOR MODEL	D 1443	SERIAL NUMBER	0267427/018
CONTROL PANEL(S)	AUTO-START	SERIAL NUMBER(S)	
SWITCHGEAR		SERIAL NUMBER(S)	

### LOAD TEST RESULTS (AT UNITY POWER FACTOR)

TYPE	LOAD %	HZ	VOLTS	AMPS	KW	ENGINE TEMP DEG C	OIL TEMP DEG C	OIL PRESS BAR
load acceptance	90	59.6	415	40	28.8	—	—	4.8
standby/ prime+10%	110%	50	415	49	35.2	84	—	3.6

GENERATING SET ENCLOSURE MECHANICAL PROTECTION

IP

AVERAGE SOUND PRESSURE LEVEL (DBA AT 1 M)

(UNITS WITH ACOUSTIC CANOPIES ONLY & MEASURED UNDER TEST BAY CONDITIONS AT 75% LOAD IN ACCORDANCE WITH ISO8528-10)

AMBIENT TEST CONDITIONS		FUEL/OIL USED	
ALTITUDE (M)	Sea Level	FUEL SPEC	BS2869A2
BAROMETRIC PRESSURE (kpa)	1010	DENSITY	0.84 kg/l
TEMPERATURE (Deg c)	16	CALORIFIC VALUE	42.5 MJ/kg
HUMIDITY (%)	72	LUB OIL SPEC	Multigrade

### WIRING DIAGRAMS:

ENGINE	06-130700	CONTROL PANEL(S)	10-170800
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TESTED BY

L. Zammit

DATE

27/08/2010