

[kits]



Index

Page Number

Introduction	1
1. Service Kits	
Features & Benefits	2
List of all Service Kits with BOM's (Bills of Materials)	3 - 11
2. Water Heater Kits	
Features & Benefits	12
List of all Water Heater Kits with BOM's	13 - 22
3. Electronic Governor Kits	
Features & Benefits	23
List of ISOCHRONOUS Electronic Governor Kits with BOM's	24 - 25
List of DROOP Electronic Governor Kits with BOM's	26 - 27
Features & Benefits of LCS50	28
List of LCS50 Electronic Governor Kits with BOM's	29
4. X100 Upgrade Kits	
Features & Benefits	30
List of all X100 Upgrade Kits with BOM's	31
5. Battery Charger Kits	
Features & Benefits	32
List of all Battery Charger Kits with BOM's	33 - 34
6. Permanent Magnetic Generator (PMG) Kits	
Features & Benefits	35
List of all PMG Kits with BOM's	35
7. Glow Plugs Kits	
List of all Kits with BOM's	36



Introduction

As part of FG Wilson's commitment to improving our product and services, we have expanded our range of kits currently available to purchase.

This publication will outline the features and benefits of all available kits including:-

- ▶ **Service Kits**
- ▶ **Electronic Governor Kits**
- ▶ **Battery Charger Kits**
- ▶ **Water Heater Kits**
- ▶ **X100 Upgrade Kits**
- ▶ **Permanent Magnetic Generator Kits**

A complete Bill of Materials (BOM's) is also available with each kit for your easy reference.

Ordering

Only Service Kits may be ordered as an option when the generating set is purchased. Through Gensets On Line the kits can be ordered in the "customer wishes" field. All kits (including Service Kits) can be ordered as an aftersales option through our Parts Distribution Centre (PDC) by fax, e-mail or e-GO. Prices and part numbers are available on Impact 4.0.1, e-GO or from PDC.

"Find" Function

Please note as this document is in PDF format the "Find" function in Adobe Acrobat Reader can be used to find your engine build number etc. Just follow the simple steps below to operate:-

- ▶ Choose Edit > Find (box shown below will appear)
- ▶ Enter the build number (or other required text) in the "Find What" box and click OK
- ▶ Acrobat will search the document starting from the current page and display the first occurrence of the text you are searching for
- ▶ To find the next occurrence choose Edit > Find again





Service Kits

1

Each Service Kit option comprises the recommended parts to carry out all minor services and the first major service as recommended in the maintenance schedule in the Users Handbook. (Part numbers for specific User Handbooks can be obtained on Impact and ordered through e-GO).

Service Kits are only offered for engine serial numbers listed.

Features

Each Service Kit comprises oil, fuel and air filters as well as a rocker cover gasket. The Service Kits will have the correct quantity of parts to carry out servicing at the specified service intervals as suggested in the manufacturers engine manual.

Benefits

The benefits of using our Kits are as follows:-

- ▶ One box for ease and convenience
- ▶ Allows you to ship ready packaged kits with the generating set direct to your end user
- ▶ Parts are readily available when needed
- ▶ Using genuine parts specifically designed for the engine ensures a quality service
- ▶ Over-stocking of some parts is reduced
- ▶ Reduced dealer/customer administration costs and time
- ▶ Better value. Benefit from significant savings on the sum of the piece parts
- ▶ Allows you to purchase filters for engine types where you have low populations in your territory



For Example

The manual suggests that the oil and fuel filters need to be replaced at 250 hour intervals, and the air filter needs to be replaced and tappet clearances checked at 1000 hours. The kit will comprise of 4 oil filters, 4 fuel filters, 1 air filter and 1 rocker cover gasket. This will cover servicing up to 1000 hours.

The range of kits has been expanded to cover the following engines:

- ▶ 400, 2306, 2806, 3012, 4006, 4008, 4012 and 4016 Series Perkins engines
- ▶ Z482, D722, D905 and D1105 Kubota engines

Ordering

Service Kits may be ordered as an option when the generating set is purchased, through Gensets On Line these kits can be ordered in the "customer wishes" field, or as an aftersales option through our Parts Distribution Centre (PDC) by fax, e-mail or e-GO. Prices are available on Impact, e-GO or from PDC.



Service Kits 1

Kit Part No.	Engine	Build No.	Serial No.	Kit Contents	Qty/Kit	Qty/Eng
SKK-482	Z482 Kubota			Air Filter Element	2	1
				Oil Filter Canister	4	1
				Fuel Filter Element	2	1
				Fuel Pre-Filter	1	1
				Fuel/Water Separator	1	1
				Fan Belt	1	1
				Rocker Cover Gasket	1	1
SKK-722	D722 Kubota			Air Filter Element	2	1
				Oil Filter Canister	4	1
				Fuel Filter Element	2	1
				Fuel Pre-Filter	1	1
				Fuel/Water Separator	1	1
				Fan Belt	1	1
				Rocker Cover Gasket	1	1
SKK-905	D905 Kubota			Air Filter Element	2	1
				Oil Filter Canister	4	1
				Fuel Filter Element	2	1
				Fuel Pre-Filter	1	1
				Fuel/Water Separator	1	1
				Fan Belt	1	1
				Rocker Cover Gasket	1	1
SKK-1105	D1105 Kubota			Air Filter Element	2	1
				Oil Filter Canister	4	1
				Fuel Filter Element	2	1
				Fuel Pre-Filter	1	1
				Fuel/Water Separator	1	1
				Fan Belt	1	1
				Rocker Cover Gasket	1	1
SKP-403	403C-15	HL51102U	up to162432L	Air Filter Element	2	1
		HL51103U	up to162432L	Oil Filter Canister	2	1
				Fuel Filter Element	2	1
				Fuel Pre-Filter	2	1
				Fan Belt	1	1
				Rocker Cover Gasket	1	1
SKP-403B	403C-15	HL51104U	521648L onwards	Air Filter Element	2	1
		HL51102U	162433L to 519052L	Oil Filter Canister	2	1
		HL51103U	162433L to 519052L	Fuel Filter Element	2	1
				Fuel Pre-Filter	2	1
				Fan Belt	1	1
		Rocker Cover Gasket	1	1		



Service Kits 1

Kit Part No.	Engine	Build No.	Serial No.	Kit Contents	Qty/Kit	Qty/Eng	
SKP-403C	403C-15	HL51104U	162433L to 521647L	Air Filter Element	2	1	
		HL51102U	519053L onwards	Oil Filter Canister	2	1	
		HL51103U	519053L onwards	Fuel Filter Element	2	1	
				Fan Belt	1	1	
				Rocker Cover Gasket	1	1	
SKP-403D	403C-15	HL51104U	Up to and including 162432L	Air Filter Element	2	1	
				Oil Filter Canister	2	1	
				Fuel Filter Element	2	1	
				Fan Belt	1	1	
				Rocker Cover Gasket	1	1	
SKP-404	404C-22	HP51101U	up to and including 978284K	Air Filter Element	2	1	
		HP51108U	up to and including 978284K	Fuel Filter Element	2	1	
				Oil Filter Canister	2	1	
				Fan Belt	1	1	
				Rocker Cover Gasket	1	1	
SKP-404B	404C-22	HP51099U	900000L to 911154L	Air Filter Element	2	1	
		HP51099U	993595L to 999999L	Fuel Filter Element	2	1	
		HP51099U	911155M onwards	Oil Filter Canister	2	1	
		HP51100U	900000L to 911154L	Fan Belt	1	1	
		HP51100U	993595L to 999999L	Rocker Cover Gasket	1	1	
		HP51100U	911155M onwards				
		HP51106U	900000L to 911154L				
		HP51106U	993595L to 999999L				
		HP51106U	911155M onwards				
		HP51107U	900000L to 911154L				
		HP51107U	993595L to 999999L				
		HP51107U	911155M onwards				
		HP51145U	900000L to 911154L				
		HP51145U	993595L to 999999L				
		HP51145U	911155M onwards				
		HP51146U	900000L to 911154L				
		HP51146U	993595L to 999999L				
		HP51146U	911155M onwards				
		HP51144U	90000L to 911154L				
		HP51144U	993595L to 999999L				
		HP51144U	911155M onwards				
		HP51101U	900000L to 900946L				
		HP51101U	978284k to 985865K				
		HP51101U	985866L to 999999L				
		HP51108U	900000L to 900946L				
		HP51108U	978284K to 985865K				
		HP51108U	985866L to 999999L				



Service Kits

1

Kit Part No.	Engine	Build No.	Serial No.	Kit Contents	Qty/Kit	Qty/Eng	
SKP-404C	404C-22	HP51099U	978285K to 985865K	Air Filter Element	2	1	
		HP51099U	985866L to 993594L	Fuel Filter Element	2	1	
		HP51100U	978285K to 985865K	Pre-Filter	2	1	
		HP51100U	985866L to 993594L	Oil Filter Canister	2	1	
		HP51106U	978285K to 985865K	Fan Belt	1	1	
		HP51106U	985866L to 993594L	Gasket	1	1	
		HP51107U	978285K to 985865K				
		HP51107U	985866L to 993594L				
		HP51145U	978285K to 985865K				
		HP51145U	985866L to 993594L				
		HP51146U	978285K to 985865K				
		HP51146U	985866L to 993594L				
		HP51144U	978285K to 985865K				
		HP51144U	985866L to 993594L				
		HP51101U	900946L to 911154L				
		HP51101U	911155M onwards				
		HP51108U	900946L to 911154L				
HP51108U	911155M onwards						
SKP-404D	404C-22	HP51099U	up to & including 978284K	Air Filter Element	2	1	
		HP51100U	up to & including 978284K	Fuel Filter Element	2	1	
		HP51106U	up to & including 978284K	Pre-Filter	2	1	
		HP51107U	up to & including 978284K	Oil Filter Canister	2	1	
		HP51145U	up to & including 978284K	Fan Belt	1	1	
		HP51146U	up to & including 978284K	Rocker Cover Gasket	1	1	
		HP51144U	up to & including 978284K				
SKP-31524	3.1524	CM33513		Oil Filter Canister	4	1	
		CM50330		Fuel Filter Element	4	1	
				Air Filter Element	1	1	
				Rocker Cover Gasket	2	1	
SKP-4236	T4.236 4.236	LD50317		Oil Filter Canister	4	1	
		LD50720		Fuel Filter Element	2	1	
		LJ50418		Air Filter Element	1	1	
				Rocker Cover Gasket	1	1	
SKP-10440	1004-4OT	AK50724		Oil Filter Canister	2	1	
		AK50712		Fuel Primary	2	1	
				Fuel Secondary	2	1	
				Air Filter Element	1	1	
				Rocker Cover Gasket	1	1	



Service Kits 1

Kit Part No.	Engine	Build No.	Kit Contents	Qty/Kit	Qty/Eng	
SKP-1041	1004-4	AA50497	Oil Filter Canister	5	1	
		AA50721	Fuel Primary	4	1	
		AA50843	Fuel Secondary	4	1	
		AA51258	Air Filter	1	1	
		AB50498	Rocker Cover Gasket	2	1	
SKP-1042	1004-4	AG50797	Oil Filter Canister	5	1	
		AG50844	Fuel Primary	4	1	
		AG50845	Air Filter Element	1	1	
		AG51038	Rocker Cover Gasket	2	1	
		AG51041				
SKP-1061	1006-6T	YB504958	Oil Filter Canister	5	1	
		YB50496	Fuel Primary	4	1	
			Fuel Secondary	4	1	
			Air Filter Element	1	1	
			Rocker Cover Gasket	2	1	
SKP-1062	1006-6T	YB50604	Oil Filter Canister	5	1	
		YB50853	Fuel Primary	4	1	
		YB50855	Fuel Secondary	4	1	
		YB51044	Air Filter Element	1	1	
		YB51048	Rocker Cover Gasket	2	1	
SKP-1064	1006-6TA	YD51131	Oil Filter Canister	5	1	
		1006TAG	Fuel Primary	4	1	
		1006TAG1	Fuel Secondary	4	1	
		YD50863	Air Filter Element	1	1	
		YD50861	Rocker Cover Gasket	2	1	
		YD50733				
		YD50701				
SKP-1103A	1103A-33G1	DJ51295	Air Filter Element	2	1	
			Fuel Filter Element	2	1	
			Oil Filter Element	2	1	
			Rocker Cover Joint	2	1	
			Fan Belt	2	1	
SKP-1103AT	1103A-33TG1&2	DK51307	Air Filter Element	2	1	
			Fuel Filter Element	2	1	
			Oil Filter Element	2	1	
			Rocker Cover Joint	2	1	
			Fan Belt	2	1	



Service Kits 1

Kit Part No.	Engine	Build No.	Kit Contents	Qty/Kit	Qty/Eng	
SKP-1104A	1104A-44TG2	RS51294	Air Filter Element	2	1	
			Fuel Filter Element	2	1	
			Oil Filter Element	2	1	
			Rocker Cover Joint	2	1	
			Fan Belt	2	1	
SKN-1306	1306 -9T	WH1298	Oil Filter Canister	2	1	
		WH3888	Fuel Filter Element	1	1	
		WJI296	Water Filter	2	1	
		WJI297	Air Filter Element	1	1	
		WJI466				
		WJI467				
		WJI468				
		WJ3512				
		WJ3889				
		WJ3890				
		WM4308				
		WR4411				
		WR4487				
		WR4490				
		WR4625				
WS4418						
WS4486						
SKS-2306	2306-E14TAG1	FGA061016	Air Filter Element	2	1	
		FGA061007	Fuel Filter Primary	2	1	
		FGB061018	Fuel Filter Secondary	2	1	
		FGB061011	Oil Filter Element	1	1	
		FGD061017	Fan Belt	1	1	
		FGD061012	Rocker Cover Gasket	1	1	
SKS-2806	2806-E16TAG1	HGA060802	Oil Filter Element	2	1	
		HGA061006	Fuel Primary	2	1	
		HGA061012	Fuel Secondary	2	1	
		HGB060801	Air Filter Element	1	1	
		HGB060803				
		HGB061007				
		HGB061013				
		SXG060132				
		SXG060133				
		SXG060134				
		SXG060135				
		SXG060136				
		SXG060137				
SXG060141						
SXG060142						



Service Kits 1

Kit Part No.	Engine	Build No.	Kit Contents	Qty/Kit	Qty/Eng
SKS-3012	3012TAG2A	S6A28293	Oil Filter Canister	12	3
	3012TG	S6A28399	Fuel Filter Element	8	2
	S6D28294		Air Filter Element	8	2
	SGC120021		Rocker Cover Gasket	12	4
	SGC120229				
	SGD120022				
	SGD120083				
	SGD120209				
	SGD120230				
	SGD120232				
	SGD120246				
	SGD120248				
	SGF120020				
	SGF120118				
	SGF120228				
SGF120233					
SKP-4006	4006-TAG1A	DGD062011-U4802K	Oil Filter Canister	3	3
	4006-TAG2A	DGA062002-U0517L	Fuel Filter Element	1	1
	4006-TAG3A	DGB062005-U0552L	Air Filter Element	2	2
			Rocker Cover Gasket	12	6
			Fanbelt	4	4



Service Kits



Kit Part No.	Engine	Kit Contents	Qty/Kit	Qty/Eng
SKS-4008	4008TAG	Oil Filter Canister	24	3
	4008TAG1	Fuel Filter Element	4	1
	4008TAG2	Air Filter Element	4	2
	4008TAG3	Rocker Cover Gasket	24	8

The following engine builds are covered by SKS-4008 -

DGA080069	DGA080206	DGA062002	DGA080010
DGA080308	DGA080366	DGA080259	DGA080268
DGA080883	DGA081162	DGA080507	DGA080701
DGB062005	DGB080011	DGA081452	DGA082025
DGB080207	DGB080367	DGB080034	DGB080087
DGB080616	DGB080658	DGB080399	DGB080502
DGB080757	DGB080916	DGB080702	DGB080707
DGB081797	DGB082010	DGB081080	DGB081092
DGB082230	DGD062005	DGB082031	DGB082052
DGL080368	DGL080675	DGL080172	DGL080302
		DGL080816	

SKS-4012	4012TAG2	Oil Filter Canister	24	6
	4012TWG2	Fuel Primary	4	1
	4012TAG	Air Filter Element	8	2
	4012TWG	Rocker Cover Gasket	36	12

The following engine builds are covered by SKS-4012 -

DGA120951	DGA121198	DGA120154	DGA120552
DGA122023-U0716K	DGB120014	DGA121433	DGA121540
DGB120199	DGB120257	DGB120118	DGB120155
DGB120390	DGB120477	DGB120270	DGB120287
DGB120563	DGB120635	DGB120495	DGB120533
DGB120850	DGB120943	DGB120708	DGB120793
DGB121378	DGB121421	DGB120950	DGB121072
DGB12200	DGB122023	DGB121488	DGB121796
DGK120015	DGK120196	DGB122031	DGB122036
DGK120391	DGK120462	DGK120201	DGK120271
DGK120687	DGK120717	DGK120496	DGK120519
DGK121565	DGK121632	DGK120818	DGK121376
DGK122023-U0875H	DGK122025-U0153J	DGK122001-U0225J	DGK122007
DGL120012	DGL120323	DGK122029-U0325J	DGK122034-U2298K
DGL121343	DGM120388	DGL120629	DGL120867
DGR120244		DGR120000	DGR120119



Service Kits

1

Kit Part No.	Engine	Kit Contents	Qty/Kit	Qty/Eng
SKP-4016	4016-TAG2	Oil Filter Canister	24	8
	4016-TAG	Fuel Filter Element	8	4
	4016-TWG2	Air Filter Element	8	2
		Rocker Cover Gasket	48	16

The following engine builds are covered by SKP-4016 -

DGA160694	DGA160907	DGA160235	DGA160621
DGA162008-U0242J	DGA162008-U0297J	DGA161607	DGA162008-U0022J
DGA162008-U0453H	DGA162008-U0535K	DGA162008-U0319J	DGA162008-U0327J
DGA162008-U0797L	DGA162008-U0821H	DGA162008-U0651K	DGA162008-U0689K
DGA162008-U1203J	DGA162008-U1570L	DGA162008-U0889K	DGA162008-U0900L
DGA162008-U1839K	DGA162008-U2797K	DGA162008-U1637L	DGA162008-U1825L
DGA162008-U3967K	DGA162008-U4322K	DGA162008-U2952K	DGA162008-U3033K
DGB160080	DGB160224	DGA162008-U4647K	DGB160017
DGB16036	DGB160381	DGB160255	DGB160273
DGB160515	DGB160540	DGB160471	DGB160511
DGB161010	DGB161485	DGB160705	DGB160881
DGB161641	DGB162011-U0015K	DGB161522	DGB161544
DGB162011-U0085K	DGB162011-U0143K	DGB162011-U0051K	DGB162011-U0071K
DGB162011-U0238J	DGB162011-U0250J	DGB162011-U0201K	DGB162011-U0221J
DGB162011-U0389L	DGB162011-U0454J	DGB162011-U0261K	DGB162011-U0378K
DGB162011-U1076J	DGB162011-U1489L	DGB162011-U0923J	DGB162011-U1028J
DGB162011-U4649K	DGK160018	DGB162011-U3449K	DGB162011-U3937K
DGK160522	DGK160630	DGK160189	DGK160222
DGK162002-U0429K	DGK162002-U0763J	DGK160865	DGK162002-U0277J
DGK162002-U2659K	DGK162002-U2847K	DGK162002-U1482K	DGK162002-U1795K
DGL160229	DGL160249	DGL160016,	DGL160179
DGL160478	DGL160614	DGL160289	DGL160317
DGL161498	DGL161519	DGL160695	DGL160785
DGL162007-U0728J	DGL162007-U0733J	DGL162007-U0007J	DGL162007-U0612K
		DGL162007-U1131K	



Service Kits 1

Kit Part No	Engine	Build No.	Kit Contents	Qty/Kit	Qty/Eng
SKP-1103A	1103A-33G1	DJ51295	Air Filter Element	2	1
			Fuel Filter Element	2	1
			Oil Filter Element	2	1
			Rocker Cover Joint	2	1
			Fan Belt	2	1
SKP-1103AT	1103A-33TG1&2	DK51307	Air Filter Element	2	1
			Fuel Filter Element	2	1
			Oil Filter Element	2	1
			Rocker Cover Joint	2	1
			Fan Belt	2	1
SKP-1104A	1104A-44TG2	RS51294	Air Filter Element	2	1
			Fuel Filter Element	2	1
			Oil Filter Element	2	1
			Rocker Cover Joint	2	1
			Fan Belt	2	1

Water Heater Kits **2**

Each kit option comprises the recommended parts to retrofit a water heater to the generating set.

Features

The heater itself is powered either by a 110-120 or 208-240 volt AC auxiliary supply protected by a safeguard breaker inside the main control panel.

A thermostatic controller is included to regulate the output temperature to within safe limits.

When the generating set is not running the heater is automatically connected to the AC supply through a power relay mounted in the control panel.

Upon receiving a start signal the AC supply is automatically disconnected by the power relay and automatically reconnected when the start signal is removed and the engine has stopped. (Not applicable to 1000 Series Panels or Access 1000 Panels).

Benefits

Water Heater Kits are appropriate when the generating set is to be sited in a low ambient environment. The heater maintains the engine coolant at a temperature (typically 100°F) which facilitates rapid starting and load acceptance.

Ordering

Water Heater Kits can be ordered as an aftersales option through our Parts Distribution Centre (PDC) by fax, e-mail or e-GO. Prices and part numbers are available on Impact 4.0.1, e-GO or from PDC.





Water Heater Kits **2**

Kit Part No.	Engine Model	Kit Contents	Qty/Kit
WH-LPW/LPA (240V)	All Listers	Hose	2
		Conduit	1
		Cable	1
		Screw Metric	4
		Nut Metric	8
		Washer	9
		Gland	1
		Cap	1
		Adaptor	4
		Bush	1
		Tee	1
		Clip	6
		Heater	1
		Contactator	1
		Terminal Crimp	2
		Boot Post	2
		Carrier	1
		Insulator	1
		Fuse Link	1
		Bar	1
Mounting Bracket	1		
Bracket	1		
WH-LPW/LPAL (120V)	All Listers	Hose	2
		Conduit	1
		Cable	1
		Screw Metric	4
		Nut Metric	8
		Washer	9
		Gland	1
		Cap	1
		Adaptor	4
		Bush	1
		Tee	1
		Clip	6
		Heater	1
		Contactator	1
		Terminal Crimp	2
		Boot Post	2
		Carrier	1
		Insulator	1
		Fuse Link	1
		Bar	1
Mounting Bracket	1		
Bracket	1		



Water Heater Kits **2**

Kit Part No.	Engine Model	Kit Contents	Qty/Kit
WH-P31524 (240V)	3.1524	Hose	1
		Conduit	1
		Screw Metric	2
		Nut Metric	2
		Washer	6
		Gland	1
		Sleeve	1
		Cable Tie	6
		Adaptor	4
		Fitting	3
		Nipple	1
		Plug	1
		Clip	4
		Heater	1
		Contactactor	1
		Terminal Crimp	4
		Terminal	5
		Carrier	1
Insulator	1		
Fuse Link	1		
Bar & Mounting Bracket	1		
WH-P31524L (120V)	3.1524	Hose	1
		Conduit	1
		Screw Metric	2
		Nut Metric	2
		Washer	6
		Gland	1
		Sleeve	1
		Cable Tie	6
		Adaptor	4
		Fitting	3
		Nipple	1
		Plug	1
		Clip	4
		Heater	1
		Contactactor	1
		Terminal Crimp	4
		Terminal	5
		Carrier	1
Insulator	1		
Fuse Link	1		
Bar & Mounting Bracket	1		



Water Heater Kits **2**

Kit Part No.	Engine Model	Kit Contents	Qty/Kit
WH-P1004 (240V)	1004G	Hose	2
	1004TG2	Conduit	1
		Screw UNC	2
		Screw Metric	2
		Nut UNC	2
		Nut Metric	2
		Washer	8
		Gland	1
		Sleeve	1
		Cable Tie	8
		Adaptor	1
		Fitting	1
		Adaptor	1
		Clip	4
		Heater	1
		Contactors	1
		Terminal	2
		Carrier	1
		Insulator	1
		Fuse Link	1
	Bar	1	
	Bracket	2	
WH-P1004L (120V)	1004G	Hose	2
	1004TG2	Conduit	1
		Screw UNC	2
		Screw Metric	2
		Nut UNC	2
		Nut Metric	2
		Washer	8
		Gland	1
		Sleeve	1
		Cable Tie	8
		Adaptor	1
		Fitting	1
		Adaptor	1
		Clip	4
		Heater	1
		Contactors	1
		Terminal	2
		Carrier	1
		Insulator	1
		Fuse Link	1
	Bar	1	
	Bracket	2	



Water Heater Kits **2**

Kit Part No.	Engine Model	Kit Contents	Qty/Kit
WH-P1006 (240V)	1006TG1A	Hose	2
	1006TG2A	Cable	3
		Screw Metric	2
		Nut UNC	2
		Nut Metric	2
		Washer	8
		Gland	2
		Tee	1
		Reducer	1
		Cable Tie	8
		Adaptor	2
		Fitting	1
		Clip	4
		Heater	1
		Contactors	1
		Terminal Crimp	4
		Terminal	2
		Carrier	1
		Insulator	1
		Fuse Link	1
	Bar	1	
	Bracket	2	
WH-P1006L (120V)	1006TG1A	Hose	2
	1006TG2A	Cable	3
		Screw Metric	2
		Nut UNC	2
		Nut Metric	2
		Washer	8
		Gland	2
		Tee	1
		Reducer	1
		Cable Tie	8
		Adaptor	2
		Fitting	1
		Clip	4
		Heater	1
		Contactors	1
		Terminal Crimp	4
		Terminal	2
		Carrier	1
		Insulator	1
		Fuse Link	1
	Bar	1	
	Bracket	2	



Water Heater Kits **2**

Kit Part No.	Engine Model	Kit Contents	Qty/Kit
WH-P1103 (240V)	1103A	Adaptor Pipe	1
		Fitting Hosetail	2
		Nipple	1
		Valve Ball	2
		Bracket	1
		Locknut	2
		Bolt Hex Head	2
		Clamp Hose	2
		Washer Hard	2
		Washer	2
		Hose 5/8" (730 mm)	2
		Heater Jacket Water 1000W 240V	1
		Cable Tie	12
WH-P1103L (120V)	1103A	Adaptor Pipe	1
		Fitting Hosetail	2
		Nipple	1
		Valve Ball	2
		Bracket	1
		Locknut	2
		Bolt Hex Head	2
		Clamp Hose	2
		Washer Hard	2
		Washer	2
		Hose 5/8" (730 mm)	2
		Heater Jacket Water 1000W 120V	1
		Cable Tie	12
WH-P1104 (240V)	1104A	Heater Jacket Water	1
		Adaptor Pipe	1
		Fitting Hosetail	2
		Nipple	1
		Valve-Ball	2
		Bracket	1
		Locknut M6X1	2
		Bolt Hex Head M6X1	2
		Clamp Hose	4
		Washer Hard	2
		Washer	2
Hose (1420 mm)	1		



Water Heater Kits **2**

Kit Part No.	Engine Model	Kit Contents	Qty/Kit
WH-P1104L (120V)	1104A	Heater Jacket Water	1
		Adaptor Pipe	1
		Fitting Hosetail	2
		Nipple	1
		Valve Ball	2
		Bracket	1
		Locknut M6X1	2
		Bolt Hex Head M6X1	2
		Clamp Hose	4
		Washer Hard	2
		Washer	2
		Hose (1420 mm)	1
		WH-N1300 (240V)	1306 - E87TA215
1306 - E87TA300	Conduit		2
1306 - E87TA330	Cable		6
	Screw Metric		4
	Nut Metric		4
	Washer		8
	Adaptor		2
	Fitting		2
	Bush		1
	Clip		4
	Heater		1
	Contactora		1
	Terminal		2
	Terminal Crimp		2
	Carrier		1
	Insulator	1	
	Fuse Link	1	
	Bar	1	
	Bracket	1	



Water Heater Kits **2**

Kit Part No.	Engine Model	Kit Contents	Qty/Kit
WH-N1300L (120V)	1306 - E87TA215	Hose	2
	1306 - E87TA330	Conduit	2
	1306 - E87TA300	Cable	6
		Screw Metric	4
		Nut Metric	4
		Washer	8
		Adaptor	2
		Fitting	2
		Bush	1
		Clip	4
		Heater	1
		Contactor	1
		Terminal	2
		Terminal Crimp	2
		Carrier	1
	Insulator	1	
	Fuse Link	1	
	Bar	1	
	Bracket	1	
WH-S3012 (1.5kw)	3012TAG2A	Conduit	9
	3012TAG3A	Cable	33
	3012TG	Screw Metric	16
	3012TWG2	Nut Metric	16
	3012TAG2B	Washer	32
		Gland	6
		Tee	2
		Pad	8
		Cable Tie	72
		Adaptor	8
		Hose Assy	4
		Heater	2
		Contactor	1
		Terminal Crimp	24
		Carrier	2
	Insulator	2	
	Fuse Link	2	
	Bar	2	
	Bracket	4	



Water Heater Kits **2**

Kit Part No.	Engine Model	Kit Contents	Qty/Kit
WH-ST4008 (2.5kw)	4008TAG1	Conduit	3
	4008TAG2	Cable	12
	4008TAG3	Screw Metric	6
	4008TAG	Nut Metric	6
		Washer	12
		Gland	2
		Tee	1
		Sleeve	1
		Reducer	1
		Cable Tie	15
		Adaptor	3
		Elbow	2
		Nipple	4
		Heater	1
		Valve	2
		Contactator	1
		Terminal Crimp	2
	Terminal	2	
	Carrier	2	
	Insulator	2	
	Fuse Link	2	
	Bar	2	
	Bracket	2	
	Hose Assy	1	



Water Heater Kits **2**

Kit Part No.	Engine Model	Kit Contents	Qty/Kit
WH-ST4012 (2.5kw)	4012TWG2	Conduit	9
	4012TAG2	Cable	4
		Screw Metric	12
		Nut Metric	12
		Washer	28
		Gland	1
		Cable Tie	15
		Adaptor	6
		Elbow	2
		Nipple	8
		Heater	2
		Valve	4
		Contactor	1
		Terminal Crimp	4
		Terminal	4
		Carrier	2
		Insulator	2
	Fuse Link	2	
	Bar & Tee	2	
	Bracket	4	
	Hose Assy	4	
WH-S23-2800 (2.5kw)	2306C - E14TAG1A	Heater	1
	2306C - E14TAG2	Adaptor	1
	2306C - E14TAG3	Socket	1
	2806C - E16TAG1	Nipple	1
	2806C - E16TAG2	Adaptor	4
		Washer	16
		Nut metric	8
		Screw Metric	8
		Hose Assy	4
		Bracket	4
		Contactor	1
		Relay	1
		Terminal	7
		Carrier	3
		Fuse Link	3
	Fuse	1	
	Insulator Busbar	1	
	Cable Tie	24	
	Loom	2	



Water Heater Kits **2**

Kit Part No.	Engine Model	Kit Contents	Qty/Kit
WH-ST4006	4006	4KW Jacket Water Heater Bracket	1
		4KW 240V Jacket Water Heater	1
		Washer	8
		Set Screw	4
		Nut Nyloc	4
		Adaptor	1
		Adaptor	1
		Hose Assembly	1
		Hose Assembly	1
		Adaptor	2
		Ball Valve	2
		Reducer	1
		Nipple 3/4" BSPT	1
		Adaptor	1
		Cable Tie	16
		Wiring Loom – 4006 WH	1

Electronic Governor Kits 3

Each kit option comprises the recommended parts to retrofit an electronic governor to the generating set.

Features

Each Woodward Electronically Powered Governor (EPG) system includes three basic parts:-

- A Magnetic Pick-Up (MPU) which senses engine speed from an engine driven gear (fitted as standard).
- A Speed Control which receives the speed signal from the MPU which compares it to a reference signal and generates a control signal that is then sent to the actuator.
- An Actuator receives the signal from the Speed Control and positions its output shaft according to this signal. The output shaft is linked to the fuel control system.



Benefits

The standard mechanical governor regulates the steady state generating set speed within 0.8% with a speed droop from no load to full load of 4%.

Fitting an electronically governed actuator improves the steady state speed to within 0.25% to provide isochronous frequency regulation typically required when supplying electronic or other non-linear loads.

Ordering

Electronic Governor Kits can be ordered as an aftersales option through our Parts Distribution Centre (PDC) by fax, e-mail or e-GO. Prices and part numbers are available on Impact 4.0.1, e-GO or from PDC.



Electronic Governor Kits (Isochronous) **3**

Kit Part No.	Engine Model	Kit Contents	Qty/Kit
GE1-P31524	3.1524	Rod End	2
		Actuator	1
		Lever Arm	1
		Controller	1
		Rod Link	1
		Conduit	1
		Cable	1
		Screw UNC	4
		Screw Metric	11
		Nut Metric	13
		Washer	34
		Gland	2
		Tee	3
		Cap	1
		Vibration Mount	4
		Terminal Crimp	13
		Loom	1
		Cover	1
		Panel Body	1
		Mounting Bracket	1
GE1-P4-6TG	1004G	Screw Metric	4
	1004TG2	Nut Metric	14
	1006TG1A	Washer	44
	1006TG2A	Pad	4
		Cable Tie	30
		Vibration Mount	4
		Loom	1
		Threaded Rod	3
		Mounting Bracket	2



Electronic Governor Kits **3** (Isochronous)

Kit Part No.	Engine Model	Kit Contents	Qty/Kit
GE1-P6TAG	1006TAG	Rod End	2
		Actuator	1
		Lever Arm	1
		Controller	1
		Governor	1
		Screw UNC	6
		Screw Metric	7
		Bolt Metric	1
		Nut Metric	17
		Washer	42
		Pad	3
		Cable Tie	27
		Vibration Mount	4
		Loom	1
		Threaded Rod	1
		Mounting Bracket	1
GE1-S3012	3012TAG2A	Rod End	1
	3012TAG3A	Actuator	1
	3012TG	Lever Arm	1
	3012TWG2	Controller	1
	3012TAG2B	Rod End	1
		Rod Link	1
		Conduit	1
		Cable	1
		Screw UNC	4
		Screw Metric	11
		Nut Metric	13
		Washer	34
		Gland	2
		Tee	3
		Cap	1
		Vibration Mount	4
Terminal Crimp		13	
Loom		1	
Cover		1	
Panel Body	1		
Mounting Bracket	1		



Electronic Governor Kits **3** (Droop)

Kit Part No.	Engine Model	Kit Contents	Qty/Kit
GE3-P31524	3.1524	Rod End	2
		Actuator	1
		Lever Arm	1
		Controller	1
		Screw UNC	8
		Screw Metric	3
		Nut Metric	14
		Washer	44
		Pad	3
		Cable Tie	30
		Vibration Mount	4
		Loom	1
		Threaded Rod	1
		Mounting Bracket	1
GE3-P4-6TG	1004G	Rod End	2
	1004TG2	Actuator	1
	1006TG1A	Lever Arm	1
	1006TG2A	Controller	1
		Screw UNC	8
		Screw Metric	11
		Nut Metric	2
		Washer	44
		Pad	4
		Cable Tie	30
		Vibration Mount	4
		Loom	1
		Threaded Rod	1
		Mounting Bracket	2



Electronic Governor Kits **3** (Droop)

Kit Part No.	Engine Model	Kit Contents	Qty/Kit
GE3-S3012	3012TAG2A	Rod End	1
	3012TAG3A	Actuator	1
	3012TG	Lever Arm	1
	3012TWG2	Controller	1
	3012TAG2B	Rod End	1
		Rod Link	1
		Conduit	1
		Cable	1
		Screw UNC	4
		Screw Metric	11
		Nut Metric	13
		Washer	34
		Gland	2
		Tee	3
		Cap	1
		Vibration Mount	4
		Terminal Crimp	13
		Loom	1
		Cover	1
		Panel Body	1
	Mounting Bracket	1	

Electronic Governor Kits (LCS50 / L Series) 3

Standard Features

- The LCS50 is a combined actuator and control module suitable for use on engines fitted with a Delphi fuel pump.
- It is a compact design, which can be easily installed on-site.
- While a standard mechanical governor regulates the steady state generating speed to within +/- 0.8% with a speed droop from no load to full load of 4%, fitting an electronically governed actuator improves the steady state speed to within +/- 0.25%.

Optional Features

- 50/60 Hz selection
- Raise/lower speed capability
- External bias (synchronising)



Note: This LCS50 governor can only be fitted to engines fitted with a Delphi fuel pump.

Benefits

This is an electronically governed actuator that provides isochronous frequency regulation typically required when supplying electronic or other non-linear loads.

Ordering

Electronic Governor Kits can be ordered as an aftersales option through our Parts Distribution Centre (PDC) by fax, e-mail or e-GO. Prices and part numbers are available on Impact 4.0.1, e-GO or from PDC.



Electronic Governor Kits **3** (LCS50 / L Series)

Kit Part No.	Engine Model	Kit Contents	Qty/Kit
GE5-P31524	3.1524	O Ring	1
		Screw	4
		Screw Metric	1
		Washer	3
		Governor	1
		Guard	1
		Nut	2
		Loom	1
GE5-P1004/6	1004G	O Ring	1
	1004TG2	Screw	4
	1006TG1A	Screw Metric	1
	1006TG2A	Washer	1
	1006TAG	Governor	1
		Loom	1
GE5-P1100A (With PowerWizard Panel)	1103 /1104	Actuator	1
		Loom (With PowerWizard Panel)	1
		Magnetic Pick-up	1
		O Ring	1
		Screw	4
		Cable Ties	20
		Retrofit Instruction Manual	1
		GE5-P1100B (Without PowerWizard Panel)	1103 /1104
Loom (Without PowerWizard Panel)	1		
Magnetic Pick-up	1		
O Ring	1		
Screw	4		
Cable Ties	20		



Upgrade Kits 4

X100 AMF Kits

Benefits

The X100 is an AMF Function Upgrade enabling the 2001 Series Control System to be used in automatic standby generating set systems where the customer provides the load transfer contactors – with or without a mains monitoring relay – or where a TX / STX Load Transfer Panel is used. This effectively creates a 2101 Control System.



Features

An automatically controlled static CVC battery trickle charger is included to maintain the generating set battery in a fully charged condition.

Ordering

Upgrade Kits can be ordered as an aftersales option through our Parts Distribution Centre (PDC) by fax, e-mail or e-GO. Prices and part numbers are available on Impact 4.0.1, e-GO or from PDC.



Upgrade Kits 4

Kit Part No.	Type	Kit Contents	Qty/Kit
X100200124V	24V	Terminal	14
		Carrier	3
		Fuse Link	3
		PCA	1
		Rail 400mm Long	1
		Battery Charger	1
		Fuse	1
		Insulator Busbar	1
		PCB	1
		Switch	4
		Facing	1
		Label	1
		Screw	2
		Screw Metric	5
		Loom	1
X100200112V	12V	Terminal	14
		Carrier	3
		Fuse Link	3
		PCA	1
		Rail 400mm Long	1
		Battery Charger	1
		Fuse	1
		Insulator Busbar	1
		PCA	1
		Switch	4
		Facing	1
		Label	1
		Screw	2
		Screw Metric	5
		Loom	1

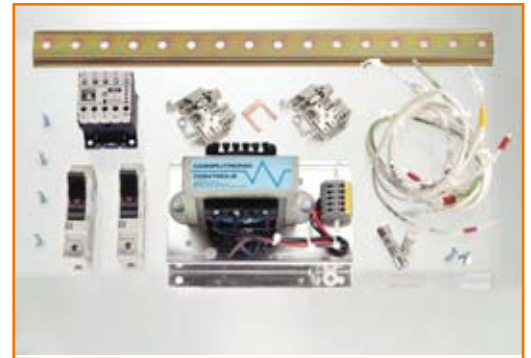
Battery Charger Kits 5

Benefits

These battery charger options provide a trickle charge to the generating set battery(ies) to help maintain an optimum charged condition for starting. These kits are suitable for the 2001 Control Panel only.

Features

An important feature of the chargers is the controlled rate of charging, which prevents over-charging and thereby maximises battery life. The battery chargers are powered by an AC auxiliary supply protected by a safeguard breaker inside the main control panel. When the generating set is not running the battery charger is automatically connected to the AC supply through a power relay mounted in the control panel. Upon receiving a start signal the AC supply is automatically disconnected by the power relay and automatically reconnected when the start signal is removed. Compact tamper proof design.



Pre-set voltage and current limits. Service LED's to indicate mains, charging and charged status. Housed within generating set control panel.

Ordering

Battery Charger Kits can be ordered as an aftersales option through our Parts Distribution Centre (PDC) by fax, e-mail or e-GO. Prices and part numbers are available on Impact 4.0.1, e-GO or from PDC.



Battery Charger Kits 5

Kit Part No.	Type	Kit Contents	Qty/Kit
PBC5-24VDC	24V	Battery Charger	1
		Screw Metric	6
		Carrier	2
		Fuse Link	2
		Terminal	1
		Bar	1
		Insulator Busbar	1
		Rail 400mm Long	1
		Loom	1
		Contactore	1
PCB5-12VDC	12V	Battery Charger	1
		Screw Metric	4
		Carrier	2
		Fuse Link	2
		Terminal	2
		Bar	1
		Insulator Busbar	1
		Rail 400mm Long	1
		Screw Metric	2
		Loom	1
Contactore	1		
BCK-PW1112	PowerWizard Battery Charger 12VDC/110VAC	Battery Charger	1
		Relay	1
		Fuse	2
		Fuse Link	2
		Relay Base	1
		Terminal	3
		Copper Link	1
		Washer	4
		Screw	4
		Plain Washer	4
Harness	1		
Busbar	1		



Battery Charger Kits 5

Kit Part No.	Type	Kit Contents	Qty/Kit
BCK-PW1124	PowerWizard Battery	Battery Charger	1
	Charger 24 VDC/110V AC	Relay	1
		Fuse	2
		Fuse Link	2
		Relay Base	1
		Terminal	3
		Copper Link	1
		Washer	4
		Screw	4
		Plain Washer	4
		Harness	1
		Busbar	1
	BCK-PW2412	PowerWizard Battery	Battery Charger
Charger 12 VDC/240V AC		Relay	1
		Fuse	2
		Fuse Link	2
		Relay Base	1
		Terminal	3
		Copper Link	1
		Washer	4
		Screw	4
		Plain Washer	4
		Harness	1
		Busbar	1
BCK-PW2424		PowerWizard Battery	Battery Charger
	Charger 24 VDC/240V AC	Relay	1
		Fuse	2
		Fuse Link	2
		Relay Base	1
		Terminal	3
		Copper Link	1
		Washer	4
		Screw	4
		Plain Washer	4
		Harness	1
		Busbar	1



Permanent Magnetic Generator (PMG) Kits 6

Features & Benefits

The PMG provides to the AVR constant power which is independent of the main stator load. The result is the alternator has a good response to impact load, and increased immunity to voltage distortion. Permanent Magnetic Kits can be ordered through e-GO or PDC.

Kit Part No.	Type	Alternator	Kit Contents	Qty/Kit
954-054 (Kit does not include AVR)	PMG 1	2000/3000 Series	Housing	1
			Adaption Shaft	1
			Rotor Magnets	1
			Stator	1
			Fixing Screw	2
			Tie Rod	1
			Washer & Nut	1
			End Plate	1
954-141	PMG 2	5000/6000 Series	Housing	1
			Adaption Shaft	1
			Rotor Magnets	1
			Stator	1
			Fixing Screw	2
			Tie Rod	1
			Washer & Nut	1
			End Plate	1
594-201	PMG 3	7000 Series	Housing	1
			Adaption Shaft	1
			Rotor Magnets	1
			Stator	1
			Fixing Screw	2
			Tie Rod	1
			Washer & Nut	1
			End Plate	1
594-232	PMG 4	8000/9000 Series	Housing	1
			Adaption Shaft	1
			Rotor Magnets	1
			Stator	1
			Tie Rod	1
			Washer & Nut	1
			Spacer for Screen	1



Glow Plug Kits 7

With effect from 7th November 2005, all FG Wilson generating sets powered by 1100A engines have been fitted with glow plugs as standard so that customers in cold climates can benefit from a -15°C start. This delivers potential benefits to our customers in cold climate regions, allowing the engines to start unaided down to -15°C (subject to use of suitable lubrication oil). Generating sets powered by the 1100A engine are capable of starting in temperatures as low as -10°C without the use of glow plugs (-7°C on P27P1 – P33E1 models).

Customers who have already received generating sets without glow plugs fitted to their engine, who wish to take advantage of the 1100A series' lower temperature starting capabilities, can order a glow plug retrofit kit through our Parts Distribution Centre.

The operation of glow plugs on sets fitted with 1001 and 2001 Series Control Panels will be via the key switch or thermostart pushbutton on the control panel fascia, in the same manner as always. These switches have either been disabled or removed on sets supplied to date that did not have glow plugs fitted to the engines.

Sets fitted with PowerWizard panels have an in-built timer to allow operation of the glow plug to take place before engaging the starter motor on the engine. This timer will be set to zero on all units in the factory allowing customers in tropical climates who do not require the glow plugs to start their genset immediately via either the control panel or when operating in Auto mode. Customers who wish to take advantage of the cold start capability provided by the glow plug will be required to set the start delay timer to 6 seconds via the PowerWizard Control Panel menu.

Kit Part No.	Type	Kit Contents	Qty/Kit
GPK-1103A	1103A	Glow Plug	3
		Busbar	1
		Bracket	1
		Bolt	1
		Nut	1
		Washer	1
		Lockwash	1
		Relay	1
GPK-1104A	1104A	Glow Plug	4
		Busbar	1
		Bracket	1
		Bolt	1
		Nut	1
		Washer	1
		Lockwash	1
		Relay	1



FG Wilson has manufacturing facilities in the following locations:

Northern Ireland • Brazil • China • India • USA

With headquarters in Northern Ireland, FG Wilson operates through a Global Dealer Network. To contact your local Sales Office please visit the FG Wilson website at

www.FGWilson.com