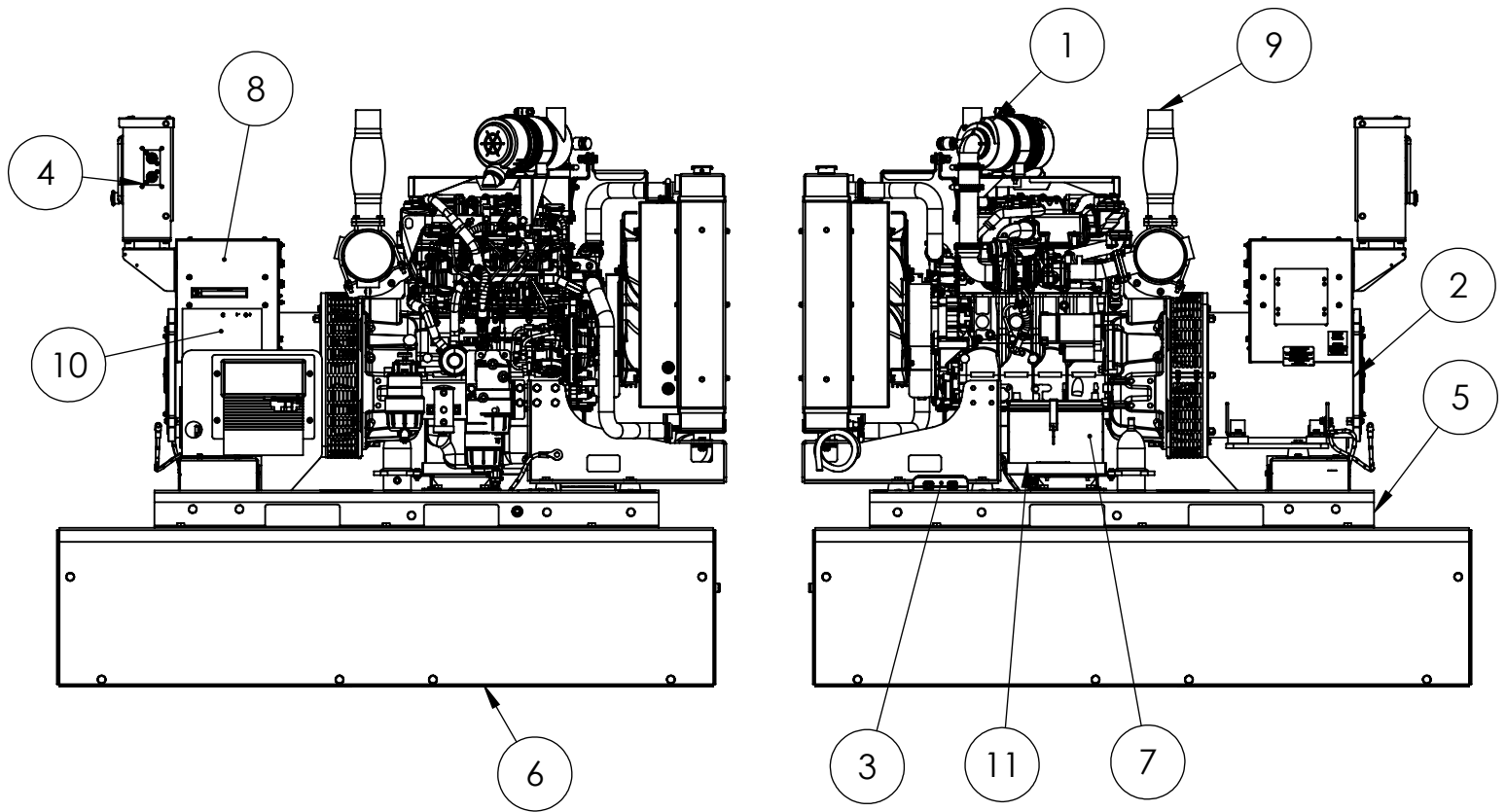


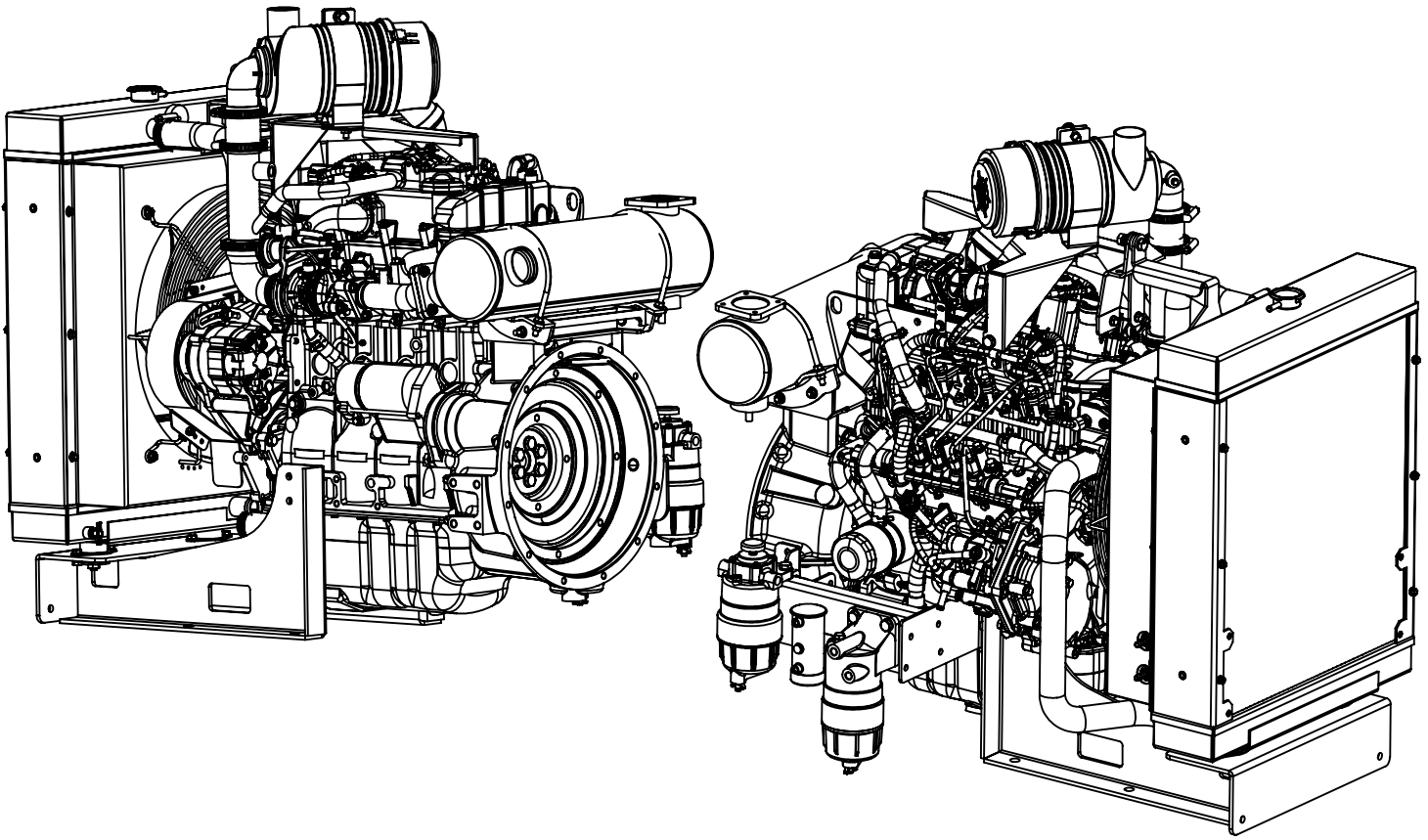
**WINCO Service**  
Phone: 507-357-6831  
Email: [service@wincogen.com](mailto:service@wincogen.com)  
[www.wincogen.com](http://www.wincogen.com)

# General Assembly



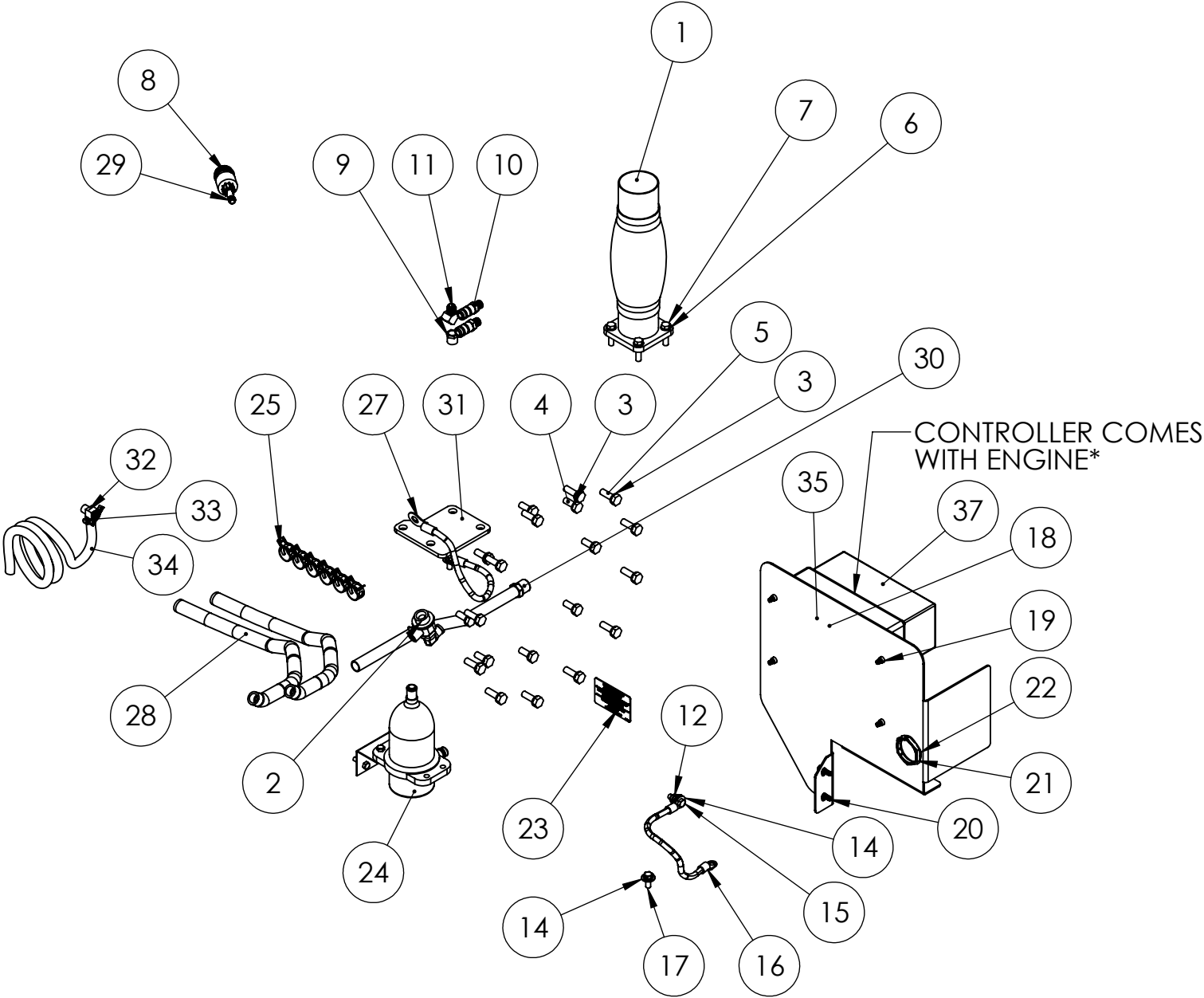
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	350001-104	ENGINE, ISUZU, TIER IV, MODEL 4LE2TAGV05	1
2	350023-6	GEN END, S1L2-J1, SAE#4/10", WDG#711, 12 LEAD	1
3	352020-26	BATTERY CHARGER KIT, 12V, 1.5 AMP	1
4	1000-0541	CONTROLLER MOUNT ASSEMBLY	1
5	1000-0933	DE23 BASE ASSEMBLY	1
6	1000-0554	DE FUEL TANK ASSEMBLY	1
7	80765-010	BATTERY 12V 650CCA GROUP 24	1
8	1000-0567	DE30 TERMINAL BOX ASSEMBLY	1
9	1000-0950	HARDWARE KIT DE23 MKII	1
10	1000-0951	DECAL AND NAMEPLATE INSTALLATION DE23, DE40	1
11	805050-003	BATTERY TRAY KIT FOR DE25, DE30	1
12	811023-001	DE23, DSE DISPLAY TO ECU WIRING HARNESS	1

# Engine



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	7-106	AIR FILTER	1
2	7-100	OIL FILTER	1
3	7-112	SEDIMENT BOWL FUEL FILTER	1
4	7-113	SEDIMENT BOWL FUEL FILTER	1
<b>ALL ITEMS LISTED IN THE ABOVE TABLE ARE INCLUDED WITH A 16200-023 MAINTENANCE KIT PURCHASE</b>			
5	7-121	STARTER MOTOR	1
6	7-122	ALTERNATOR	1
7	7-115	FAN BELT	1
8	7-114	UPPER AND LOWER RADIATOR HOSE KIT	1
Contact Winco service for full engine parts support.			

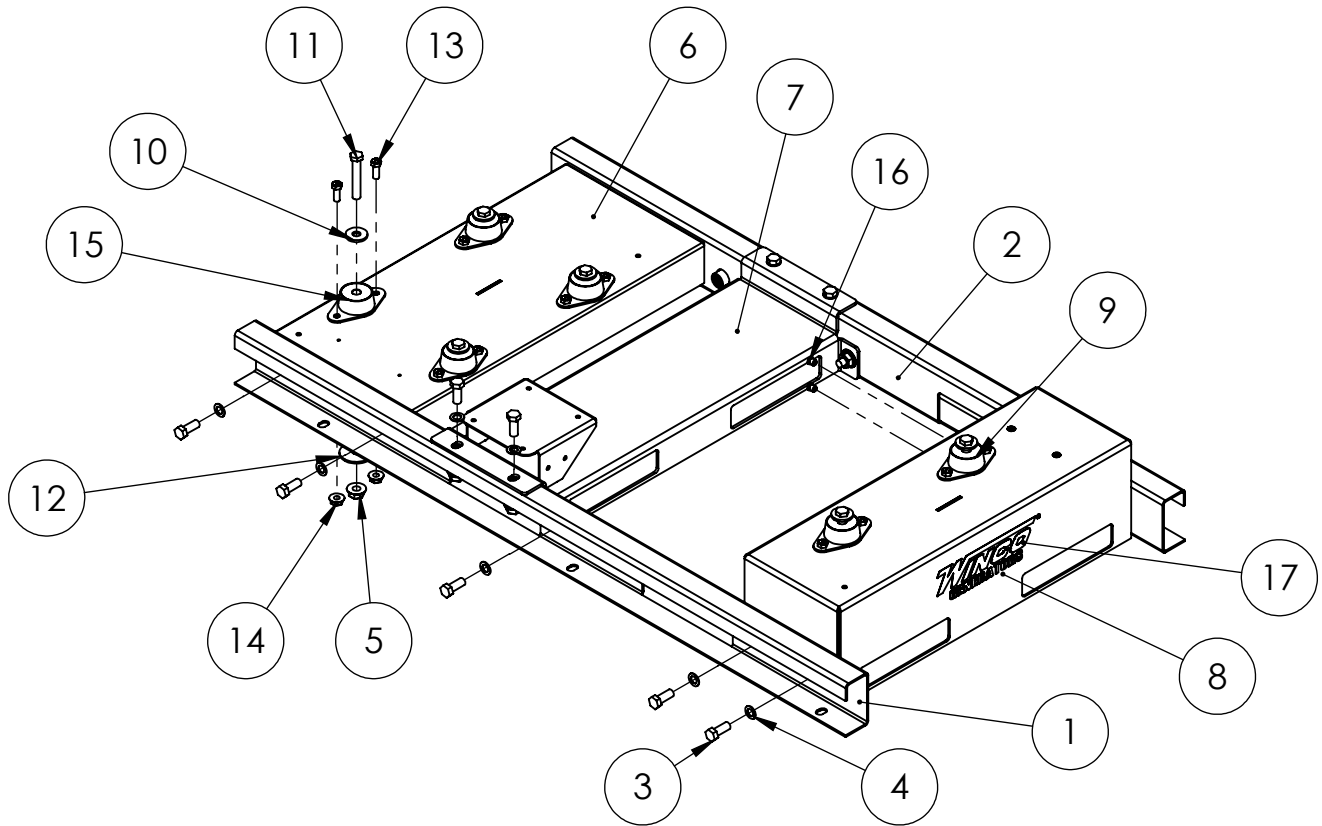
# Hardware Kit



## Hardware Kit continued

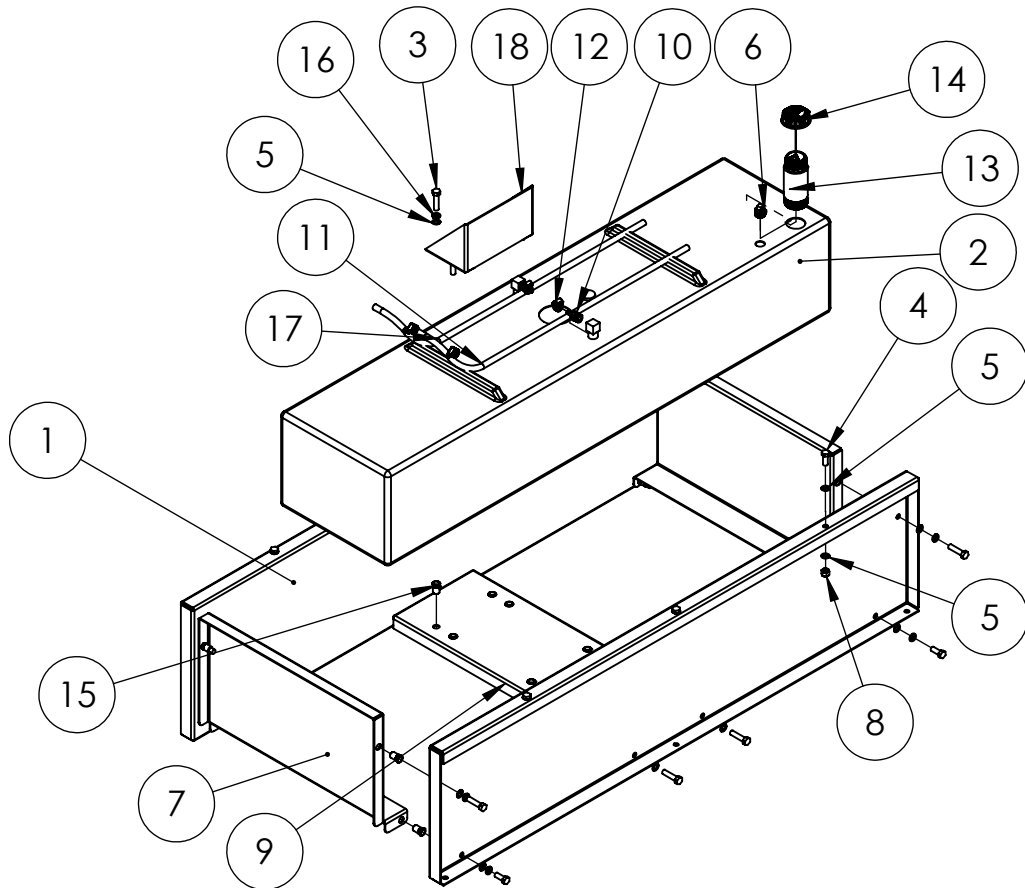
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	801025-013	EXHAUST, 2.5IN FLEX WITH FLANGE	1
2	98906-021	OIL DRAIN VALVE M24-2.0 X5/8" 90	1
3	97436-010	M10 LOCKWASHER	20
4	96003-020	M10-1.5X20MM	8
5	96003-030	M10-1.5X30MMM	12
6	65005-001	5/16 WASHER SS	4
7	64908-001	HHCS M8-1.25X35MM 8.8GR ZINC	4
8	16043-002	VIRGIS AIR RESTRICTION INDICATOR	1
9	56348-000	FITTING, REDUCER, 3/8 X 1/4	1
10	350341	HOSE FITTING 1/4 NPT (M) X 5/8 HOSE BARB	2
11	92587-000	ELBOW 1/4NPT 45 DEGREE	1
12	16249-000	.3125-18 FLANGE	1
13	20039-000	LOCKWASHER 1/2 EXTERNAL TOOTH	1
14	526-000	5/16 FLAT WASHER	3
15	1116-000	HHCS .3125-18X1	1
16	93542-018	LEAD WIRE ASSY	1
17	62173-001	SELF TAP.SC. 5/16-18X.75	2
18	1000-0949	ISUZU ECU MOUNT MKII	1
19	352125-1	1/4-20 RIVET NUT 22 GA-10GA	4
20	352120-2	1/4-20 X .75 FHCS	8
21	300527-7	DEUTSCH HDP20 1.875 JAM NUT	1
22	300527-6	DEUTSCH HDP20 LOCK WASHER	1
23	16200-523	MAINTENANCE KIT DECAL	1
24	80781-018	BLOCK HEATER WITH THERMOSTAT ASSY	1
25	81019-000	HOSE CLAMP CONSTANT TENSION 24MM, 5/8 HOSE	6
26	93689-001	HOSE 0.625IN ID RUBBER, 16 IN	1
27	93542-013	LEAD WIRE ASSY	1
28	93689-001	HOSE 43"	2
29	92386-002	PIPE NIPPLE 1/8 NPT X 1.5"	1
30	92388-001	HOSE FIT 1/2 NPT X 5/8 HOSE	1
31	2000-0007	FUEL SEPARATOR RELOCATION PLATE	1
32	93824-003	PETCOCK VALVE 1/4 NPT 90 HOSE BARB	1
33	81018-009	HOSE CLAMP .625-.250	1
34	55505-014	55505-014 for 8235224-174	1
35	2000-0015	RELAY RELOCATION BRACKET ASM (DE23, DE40)	1
36	2000-0044	SHIP LOOSE FOAM KIT FOR FIELD INSTALLATION	1
37	ISUZU ECU MODEL	ISUZU ECU	1

# Base Frame Assembly



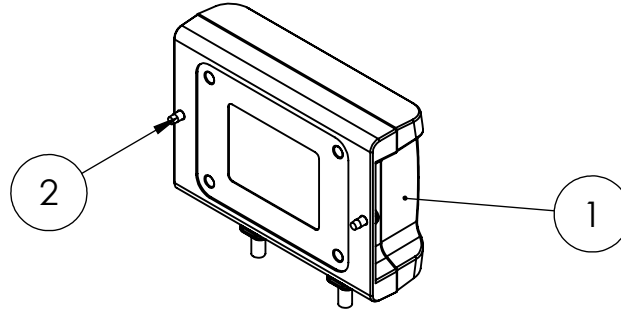
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	1000-0934	DE23 LEFT SIDE BASE RAIL	1
2	1000-0936	DE23 RIGHT SIDE BASE RAIL WELDMENT	1
3	1516-000	.5-13X1.25 HHB	14
4	21867-001	FLAT WASHER .51 X .88 X .05	14
5	16248-001	.5-13 FLANGE NUT	20
6	1000-0944	DE23 ENGINE CROSSMEMBER WELDMENT	1
7	1000-0941	DE23 FORWARD FORK POCKET WELDMENT	1
8	1000-0939	DE23 GEN CROSSMEMBER WELDMENT	1
9	98807-005	SHOCKMOUNT BLUE/GOLD	2
10	21867-002	WASHER .5 X 1.375 X .146	6
11	57580-007	HHCS .5-13 X 3	6
12	98806-002	WASHER SNUBBING 2.13 X .532 X .134THK	6
13	91658-001	HHCS 3/8-16X1	12
14	16250-000	.375-16 FLANGE NUT	12
15	98807-003	SHOCKMOUNT RED/GOLD	4
16	352125-1	1/4-20 RIVET NUT 22 GA-10GA	4
17	64214-047	WINCO LOGO	1

# Base and Fuel Tank Assembly



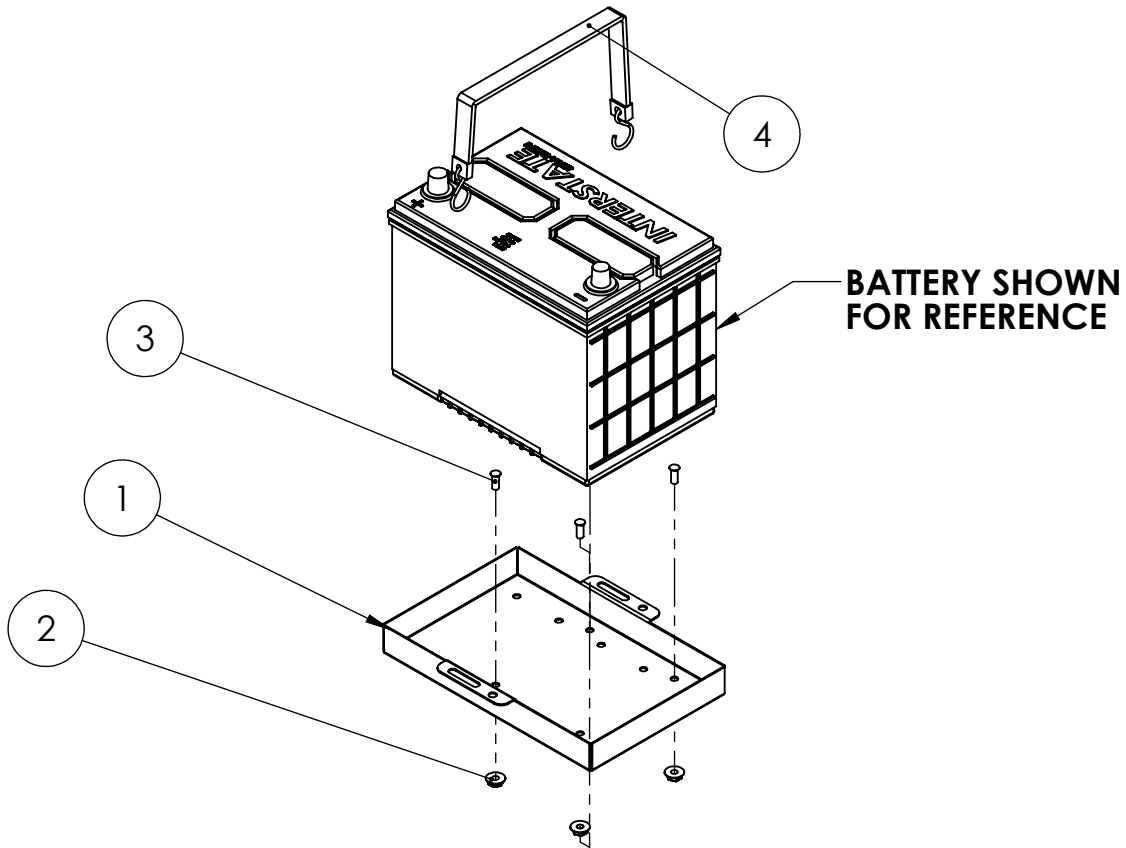
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	1000-0549	DE FUEL TANK SIDE RAIL	2
2	350041-142	FUEL TANK, 47 USEABLE GALLON, PLASTIC FUEL TANK WITH DIP TUBES	1
3	57580-000	.5-13X2.0 HHB	14
4	1516-000	.5-13X1.25 HHB	9
5	21867-001	FLAT WASHER .51 X .88 X .05	30
6	93564-000	PIPE PLUG 3/4 SQUARE HEAD	1
7	1000-0548	DE FUEL TANK END CAP	2
8	92242-000	NUT HEX .500-13 NYLOCK	7
9	1000-0550	DE CENTER FUEL TANK CROSSMEMBER	1
10	94319-008	HOSE FIT. .500-14NPT X .375 HOSE BARB	2
11	55505-028	HOSE 3/8 ID X 55" LONG	1
12	81018-006	HOSE CLAMP 7/8 TO 3/8 X 1/2 WIDE	4
13	15482-010	FUEL NECK ADAPTER 2.25" FILL	1
14	15482-011	FUEL CAP, 2.25 INCH, 2-WAY VENTED, TETHERED, DIESEL ONLY, GREEN, 8IN TETHER	1
15	352125-3	RIVET NUT 0.5-13, .063 - .200 (SHEET METAL HOLES SIZE .6875)	20
16	636-000	LOCKWASHER 1/2 SPLIT	16
17	55505-024	HOSE 3/8 ID X 50" LONG	1
18	1000-0551	DE CENTER FUEL TANK STOP	1

# Battery Chargers



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	72036-022	BATTERY CHARGER, 12VDC, 1.5AMP, GUEST 2701A	1
2	21698-001	TORX PAN HEAD SCREW #10	2

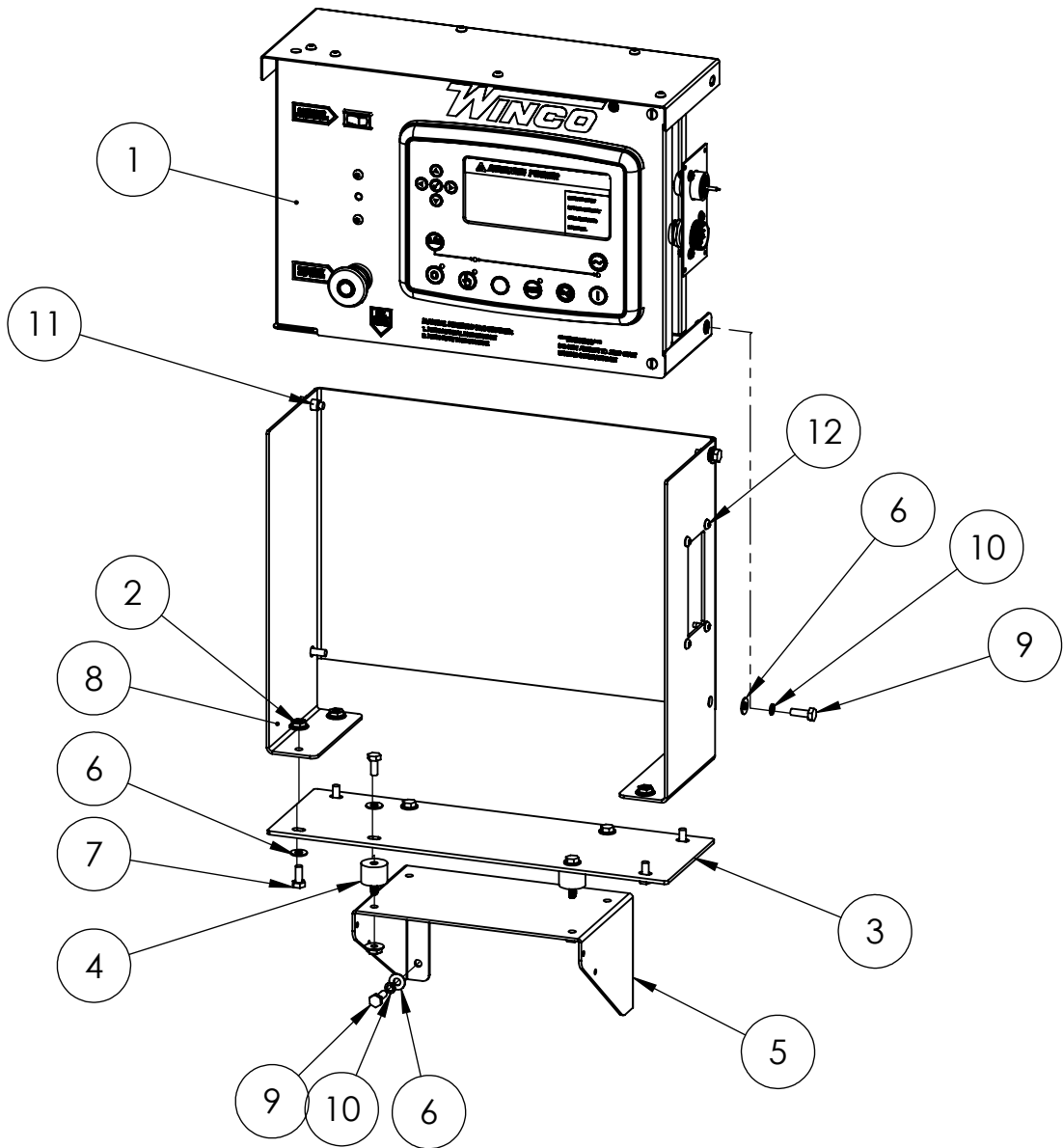
# Battery Kit



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	805050-001	BATTERY TRAY	1
2	16248-000	.25-20 FLANGE NUT	4
3	94980-001	THREAD STUD .25-20X.625	4
4	16329-001	RUBBER STRAP, BATTERY HOLD DOWN	1
5	53220-039	BATTERY CABLE ASSY	1
6	53220-040	BATTERY CABLE NEG 18 INCH	1

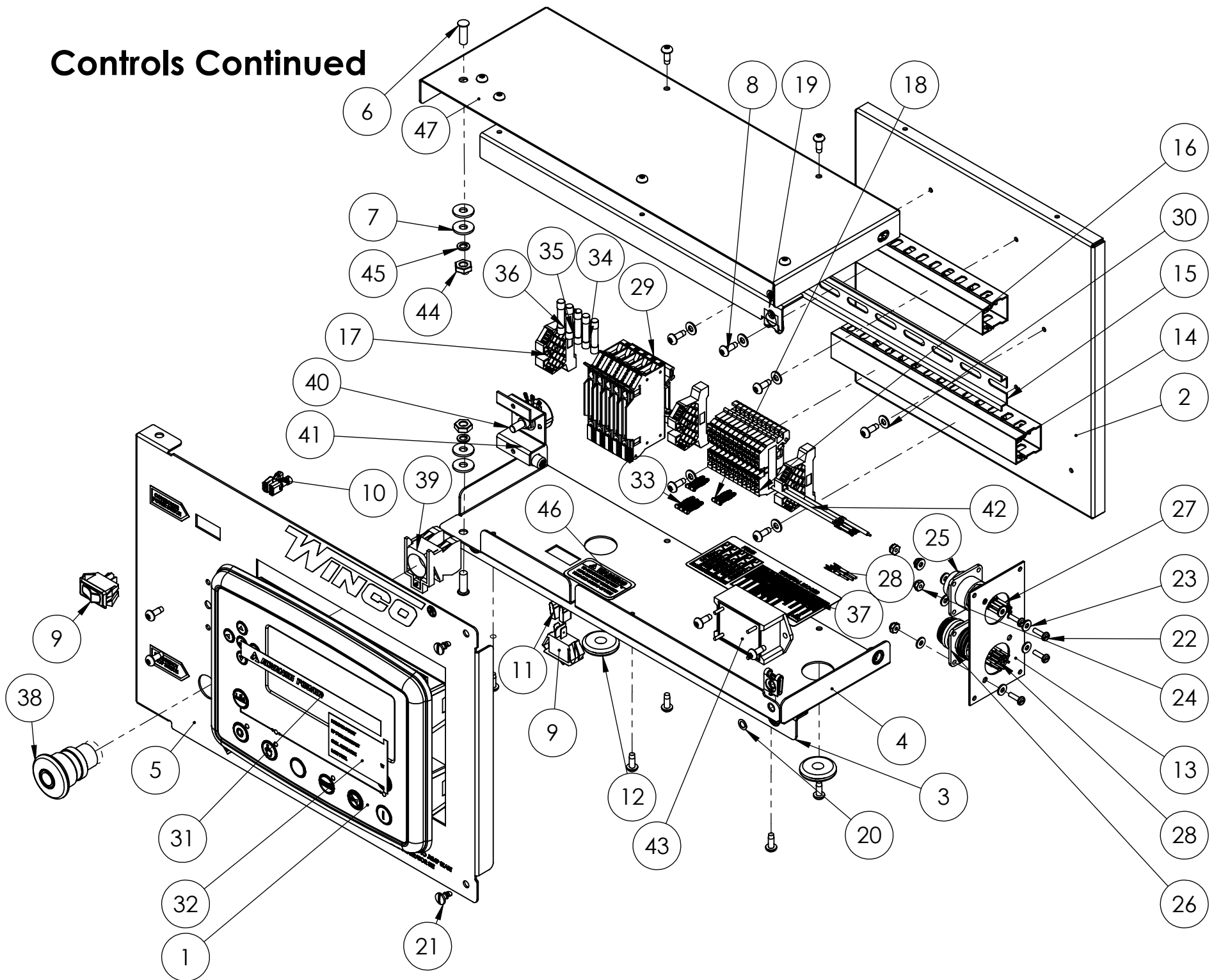


# Controls



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	351891-51	ECU ENGINE CONTROLLER	1
2	16248-000	.25-20 FLANGE NUT	8
3	1000-0542	CONTROLLER VIBE MOUNT	1
4	64062-002	SHOCKMOUNT .25 50 DURO	4
5	1000-0561	CONTROLLER SIDE PEDESTAL	1
6	512-000	.25 WASHER	16
7	476-000	.25-20X.625 HHB	8
8	1000-0568	CONTROLLER BOX MOUNT	1
9	466-000	.25-20X.75 HHB	8
10	479-000	LOCK WASHER, .25" SPLIT	8
11	352125-1	1/4-20 RIVET NUT 22 GA-10GA	2
12	21698-001	TORX PAN HEAD SCREW #10	4

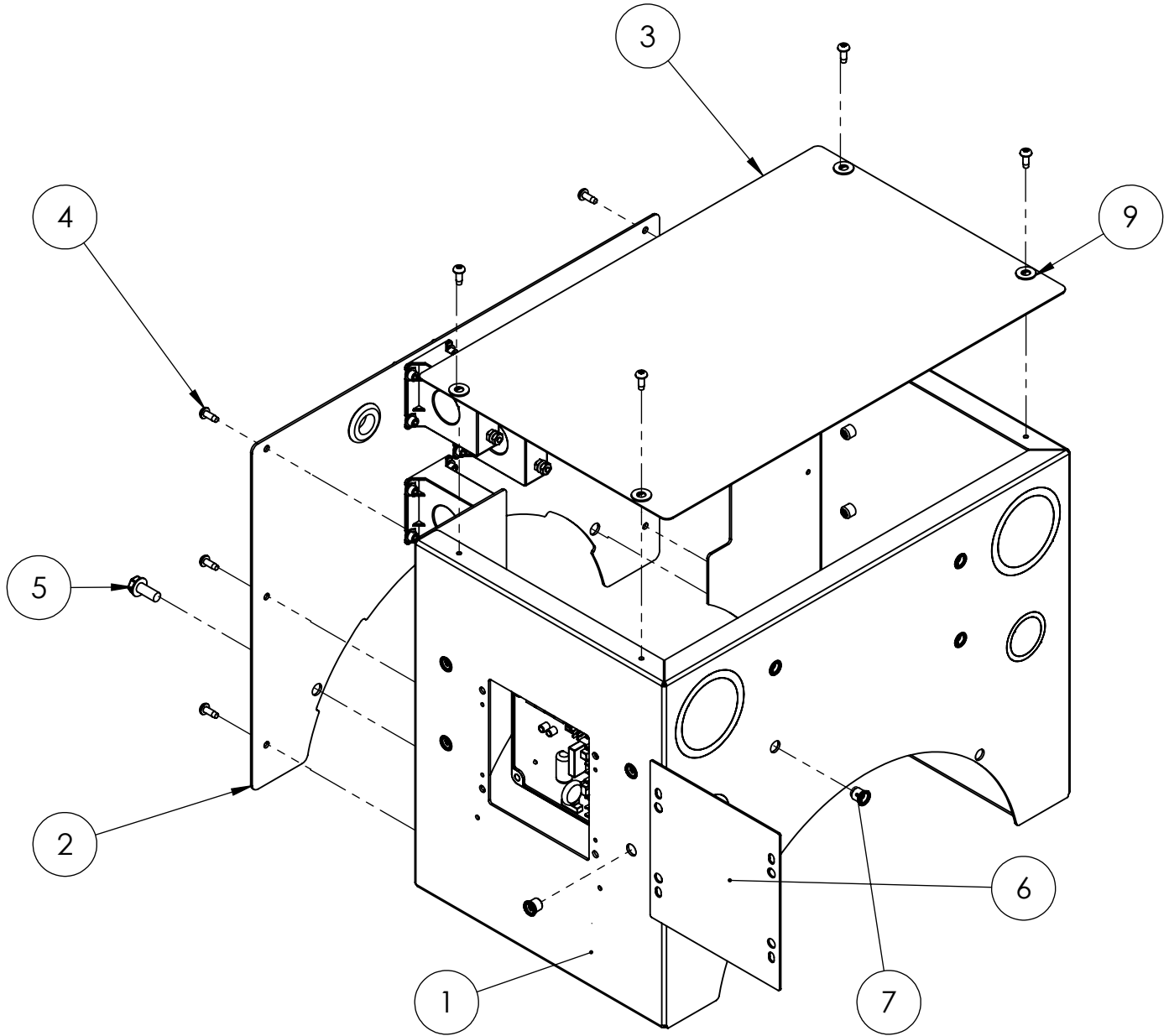
# Controls Continued



## Controls Continued

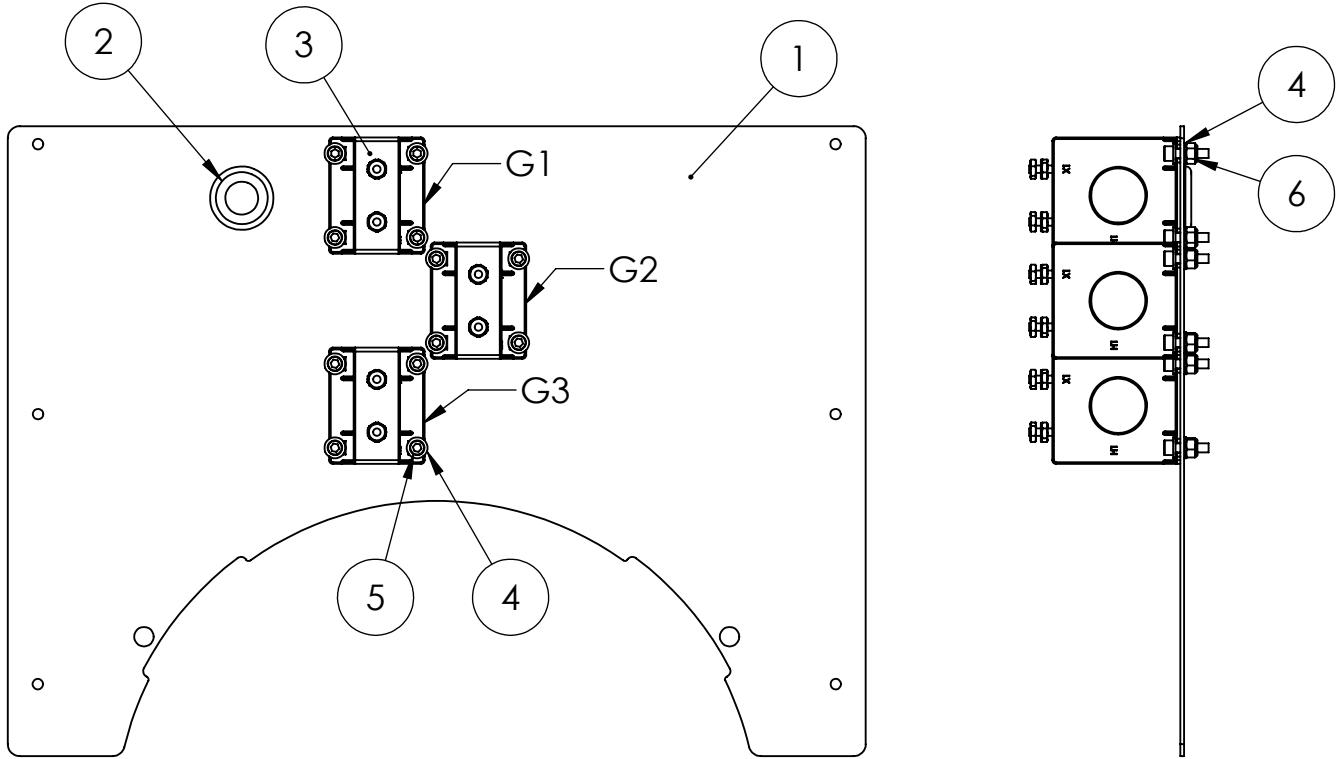
ITEM NO.	PART NUMBER	DESCRIPTION	
1	351112-29	DEEP SEA ELECTRONICS 7310 MKII	1
2	351900-42	DIN RAIL MOUNTING PLATE	1
3	351900-44	COVER SUPPORT BRACKET	1
4	351900-45	DSE8610 CONTROL BOX BOTTOM	1
5	351900-47	DSE 7310 MKII FRONT PANEL	1
6	94980-003	THREAD STUD .25-20 X .750	2
7	96286-001	1/4" NYLON WASHER	4
8	21698-001	TORX PAN HEAD SCREW #10	21
9	64089-000	SPST, ROCKER SWITCH	2
10	48602-003	TERMINAL FEMALE 16-14 AWG .250 TAB	2
11	61898-000	TERMINAL FLAG 16/14AWG .250	2
12	23917-002	GROMMET, .375ID X 1	2
13	351900-51	PLUG MOUNTING PLATE	1
14	352017-001	WIRE DUCT, 8.5IN	2
15	64551-005	DIN RAIL 9.5"	1
16	80623-009	TERMINAL BLOCK, DIN MOUNTED, SPRING CAGE	12
17	80623-010	END BLOCK, DIN MOUNTED	3
18	80623-011	2-POLE TERMINAL BLOCK JUMPER	2
19	91683-000	1/4 TURN CLIP NUT	2
20	91684-000	RETAINER RING 1/4 TURN SPLIT RING	2
21	91682-001	STUD 1/4 TURN SLOTTED	2
22	24988-000	SCREW 6-32 X 1/2 BIND	4
23	425-000	#6 FLATWASHER	8
24	51802-000	NUT HEX #6-32 NYLOCK	4
25	96925-002	14 PIN CONNECTOR	1
26	96925-006	16 PIN CONNECTOR	1
27	96923-001	TERMINAL, SOCKET, 18-16AWG	10
28	96924-001	TERMINAL, PIN, 18-16AWG	16
29	2489-003	DIN RAIL FUSE HOLDER 1-1/4 X 1/4IN	5
30	598-000	#10 WASHER	6
31	16600-005	DSE MKII ADVANCE POWER LOGO INSERT	1
32	16601-007	DSE 8610 MKII LIGHT LEGEND CARD INSERT	1
33	80623-012	3-POLE TERMINAL BLOCK JUMPER	1
34	95064-008	FUSE AGC 2 AMP	3
35	95064-000	FUSE AGC 3 AMP	1
36	95064-006	FUSE AGC 10 AMP	1
37	351095-16	DECAL, FUSES AND TERMINAL BLOCKS	1
38	99783-001	SWITCH, PUSH-PULL	1
39	99783-002	SWITCH CONTACT	1
40	97517-001	RHEOSTAT	1
41	351900-36	RHEOSTAT MOUNTING BRACKET	1
42	96923-101	PLUG TERMINAL	4
43	96333-001	LOW COOLANT MODULE	1
44	638-000	HEX NUT, .25IN	2
45	479-000	LOCK WASHER, .25" SPLIT	2
46	63941-004	DECAL FUSE WARNING (ENGLISH)	1
47	351900-52	DSE CONTROL BOX TOP	1
48	351900-53	DSE PANEL STOP	1
49	11067-000	18 GA WIRE	1

# Terminal Box Assembly



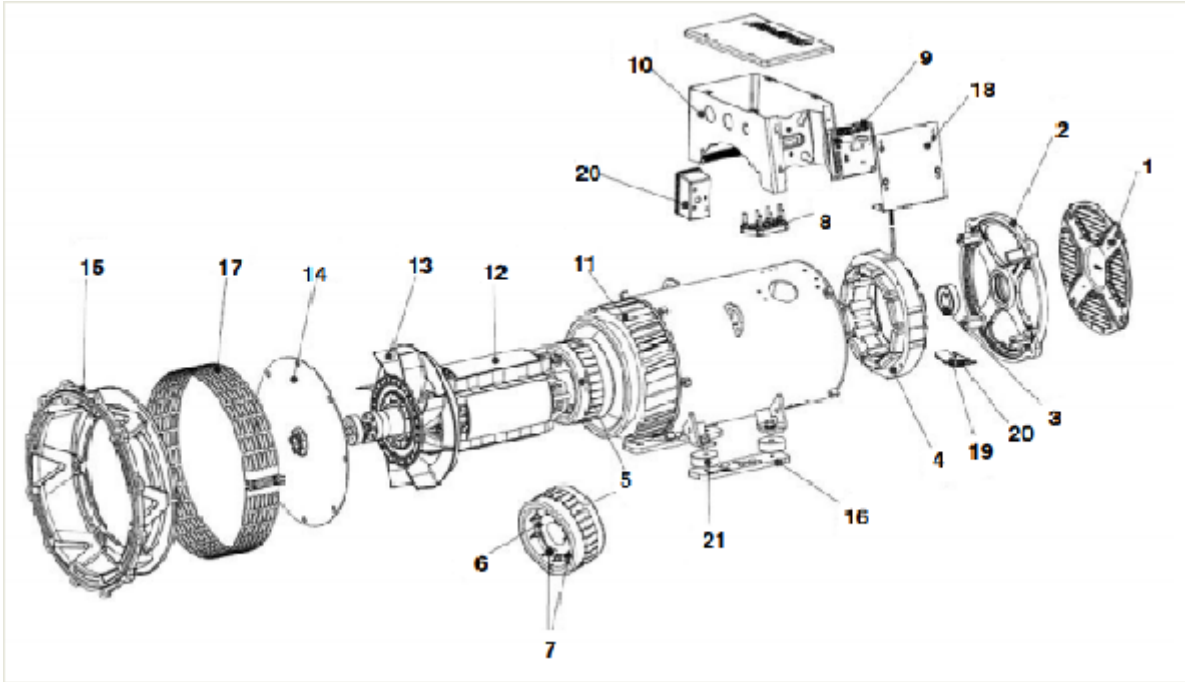
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	1000-0566	DE30 TERMINAL BOX	1
2	801025-009	TERMINAL BOX CT PANEL ASSEMBLY	1
3	1000-0237	DE40 TERMINAL BOX COVER	1
4	21698-001	TORX PAN HEAD SCREW #10	10
5	62173-001	SELF TAP.SC. 5/16-18X.75	2
6	1000-0304	DE40 AVR COVER	1
7	352125-1	1/4-20 RIVET NUT 22 GA-10GA	12
8	93542-018	LEAD WIRE ASSY	1
9	512-000	.25 WASHER	4

# Terminal Box CT Panel Assembly



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	801025-009	TERMINAL BOX CT PANEL	1
2	23917-000	GROMMET .6875ID X 1	1
3	80126-003	CT 150:5 PANEL MOUNT	3
4	598-000	#10 WASHER	24
5	64872-000	SOC.HCS 10-24 X 3/4 BLK	12
6	5315-000	NUT HEX 10-24 NYLON	12
7	99347-029	AC HARNESS FOR DE SERES GENERATORS	1

# GENERATOR



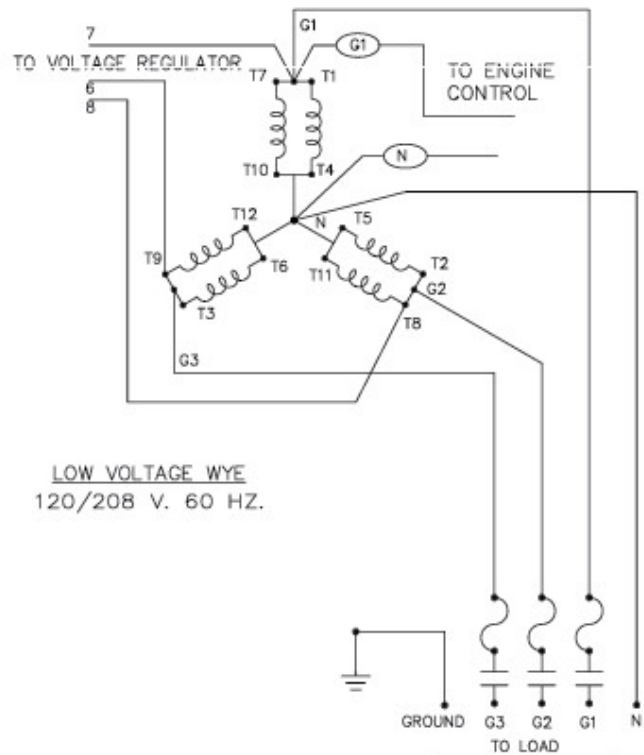
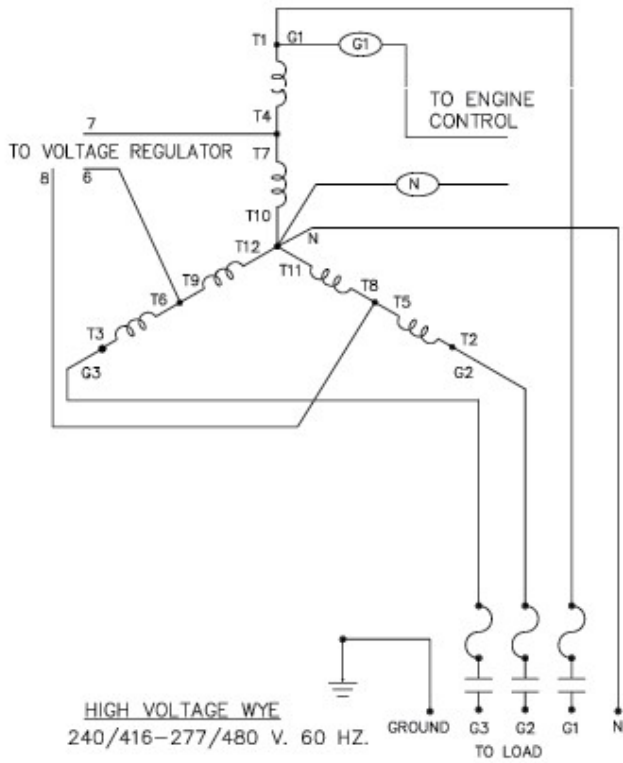
EXPECTED RESISTANCE ( $\Omega$ ) @ 22C	
MODEL	S1L2-J1 711
STATOR WINDING (PER PHASE SERIES CONNECTED)	0.203
ROTOR WINDING	0.925
EXCITER STATOR	16.44
EXCITER ROTOR (PER PHASE)	0.207
POSITIVE SEQUENCE (R1)	0.254
NEGATIVE SEQUENCE (R2)	0.292
ZERO SEQUENCE (R0)	0.254
AUX. WINDING	4.24

ITEM	DESCRIPTION	DE23
-	COMPLETE GENERATOR END	350023-6
-	STAMFORD MODEL	S1L2-J1
-	WINDING	711
24	AVR AS540	8-101
--	RECTIFIER SERVICE KIT	8-818

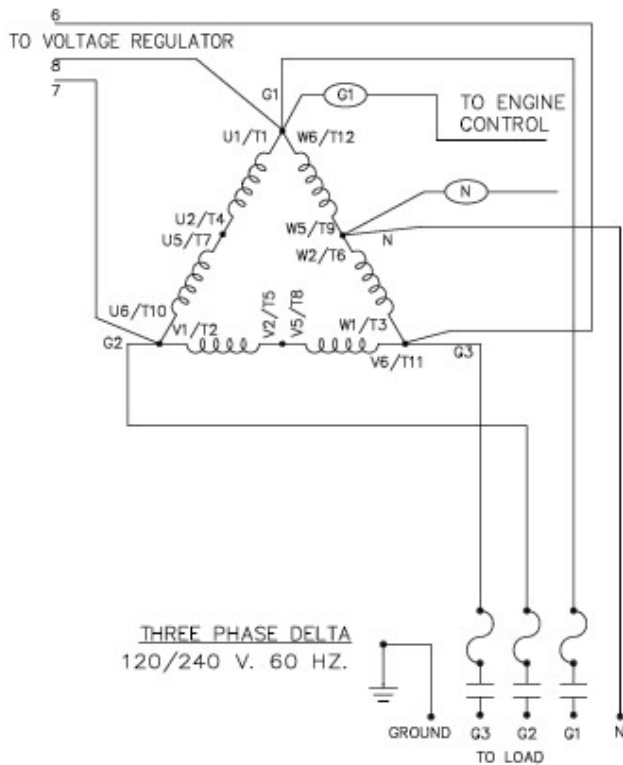
For additional parts support, contact WINCO service

# Generator Connections

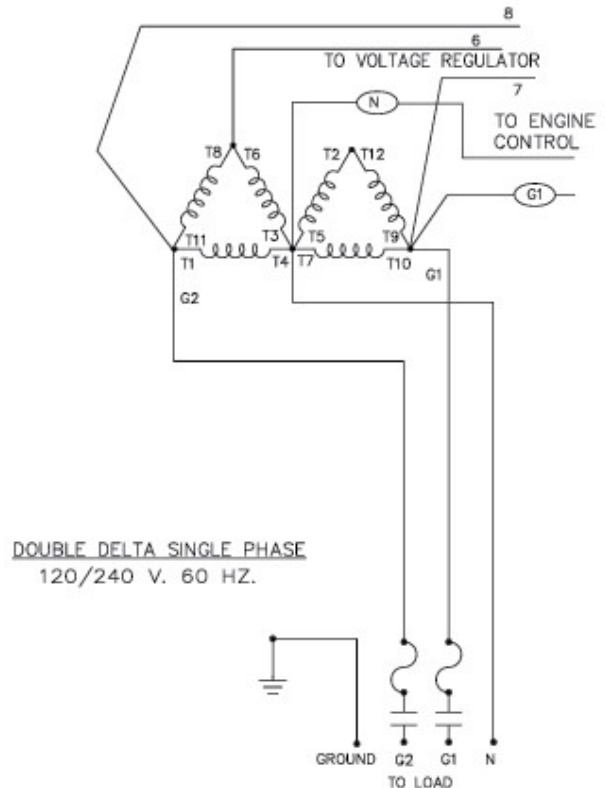
## THREE PHASE AC WIRE HIGH AND LOW WYE



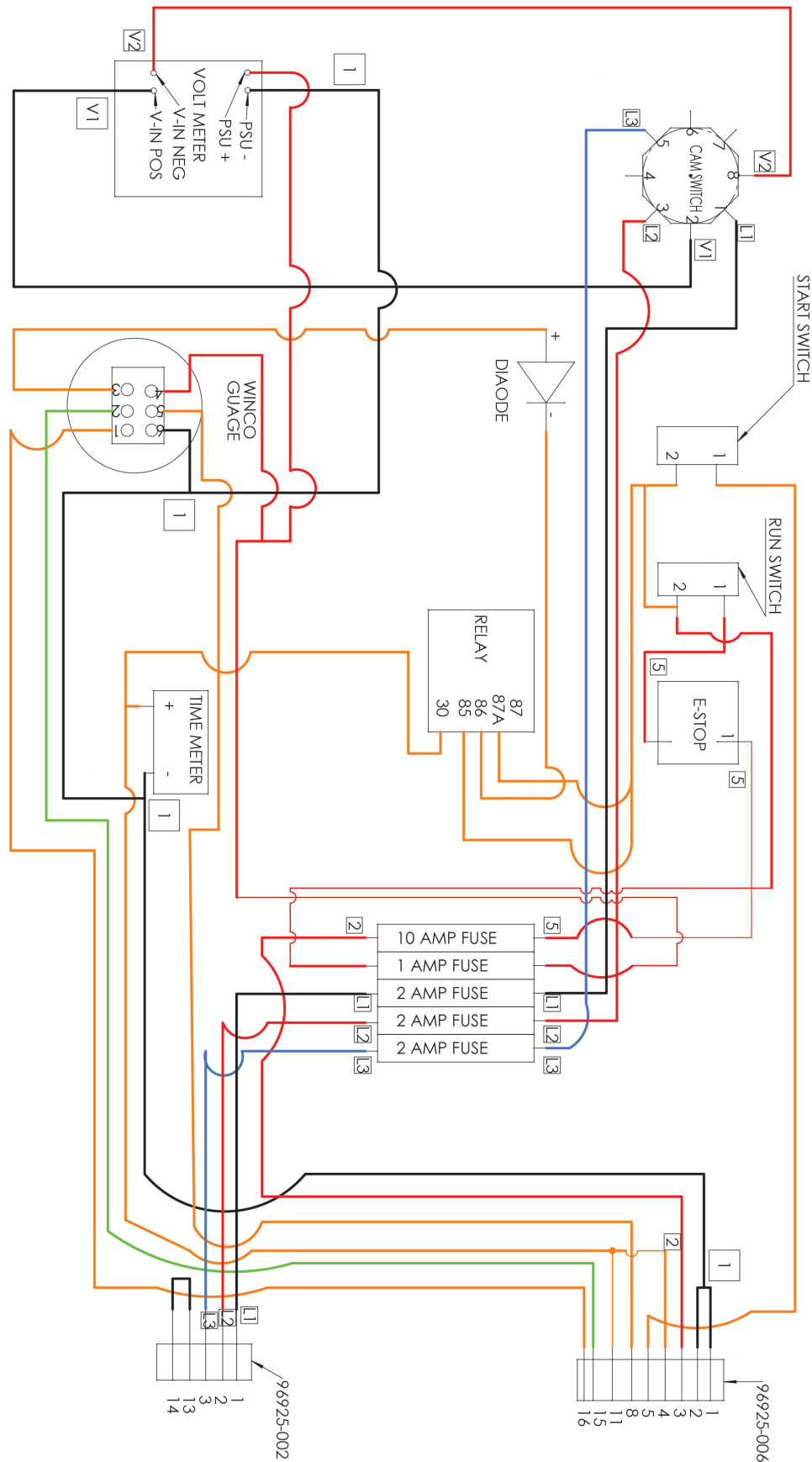
## THREE PHASE AC WIRING- DELTA



## SINGLE PHASE 311 WINDING

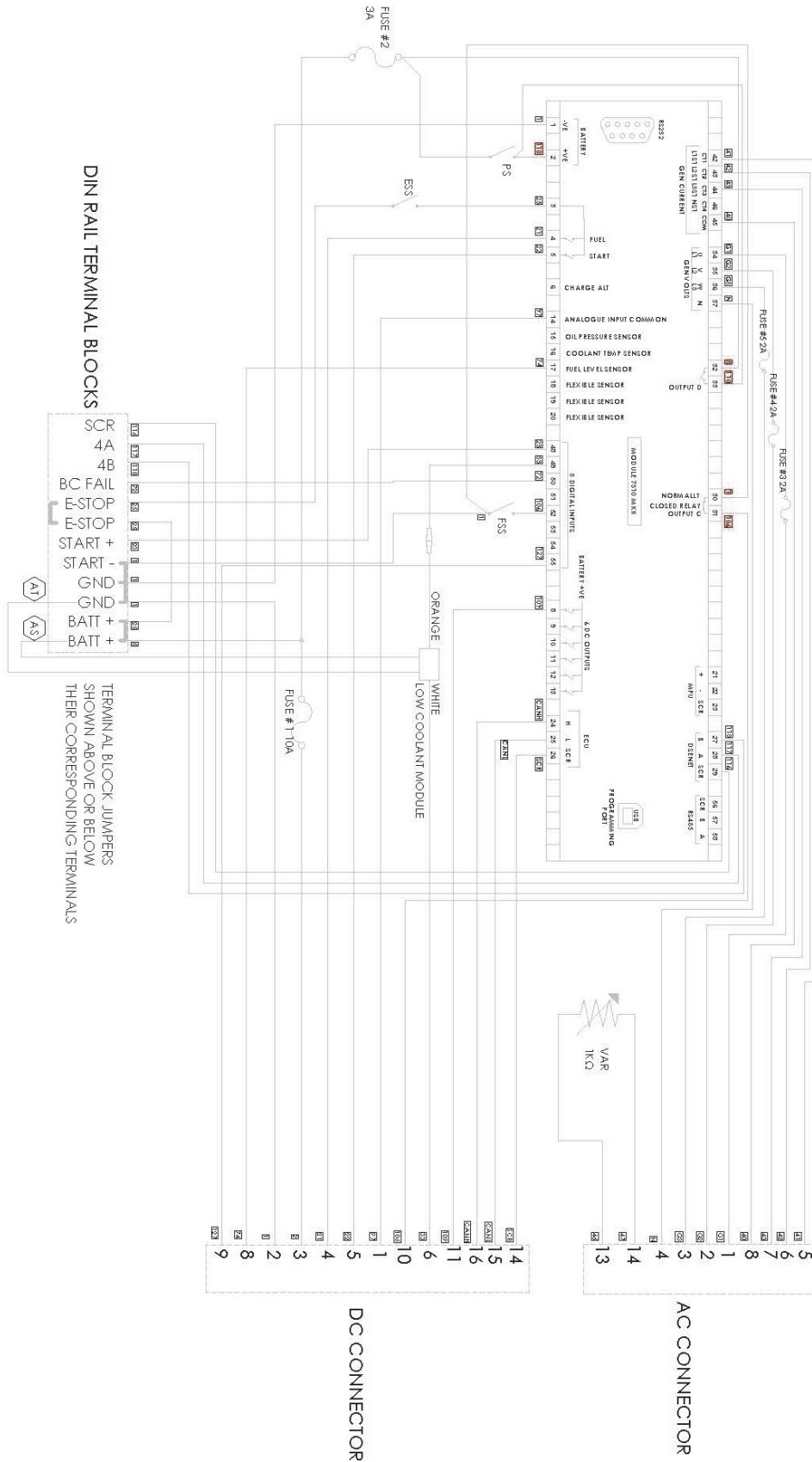


# Manual Generator Control Schematic





# DSE7310 Generator Control Schematic

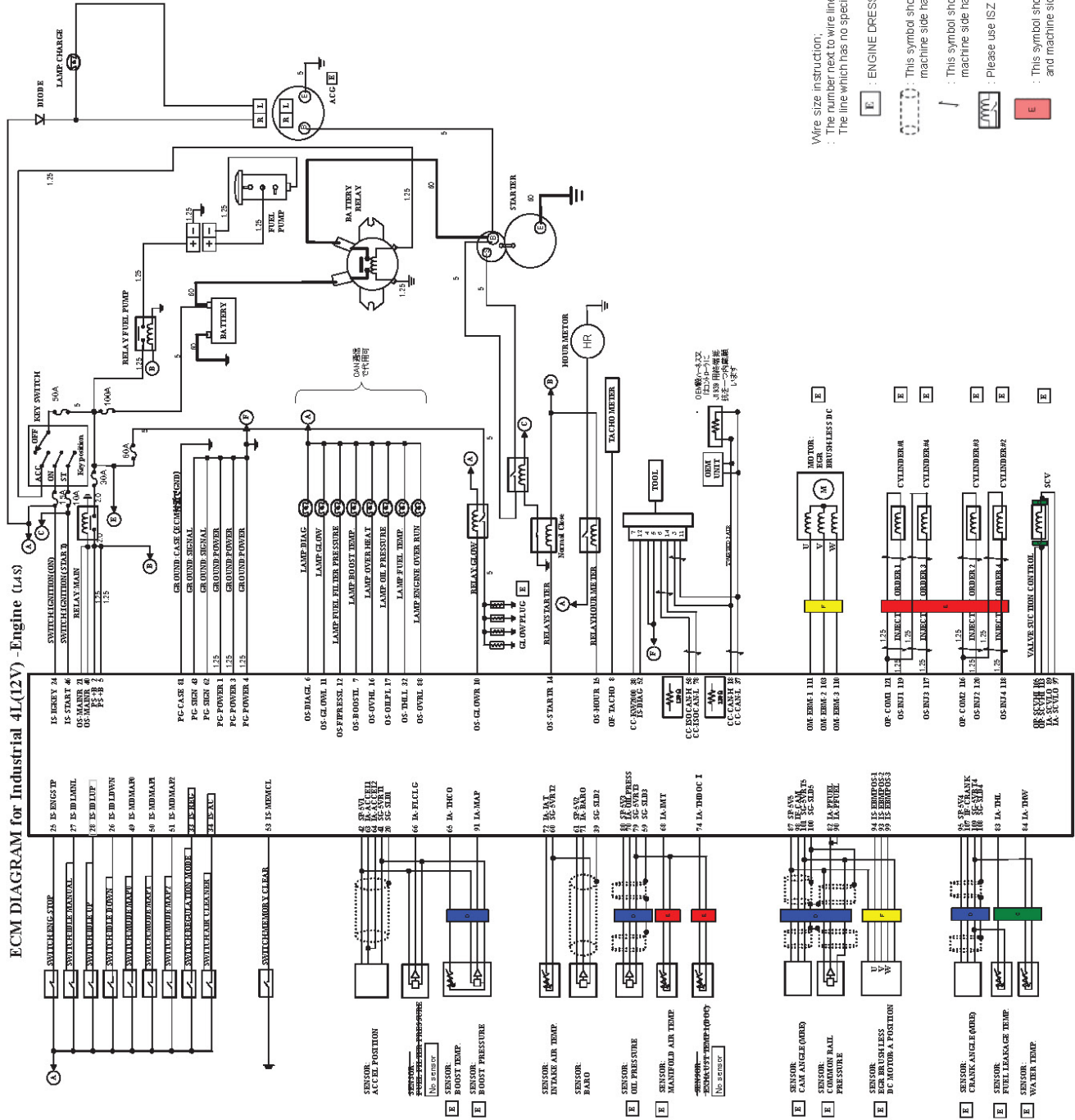


# ECM Wiring Schematic

Apr.21/2014 rev.3

ECM DIAGRAM for Industrial 4L(12V)-Engine (L4S)

5.4 ECM 5ワイヤシステム  
ECM Diagram



Wire size instruction;  
 : The number next to wire line; ISZ recommended electric wire size.  
 The line which has no special instruction; 0.75sq is ISZ recommended size.

**E** : ENGINE DRESS PARTS

: This symbol shows shield wire. Please use twist wire for machine side harness too.

: This symbol shows twist wire. Please use twist wire for machine side harness too.  
 Please use ISZ recommended relay.

: This symbol shows the point that connects with engine harness and machine side harness.

: This symbol shows the point that connects with engine harness and machine side harness.