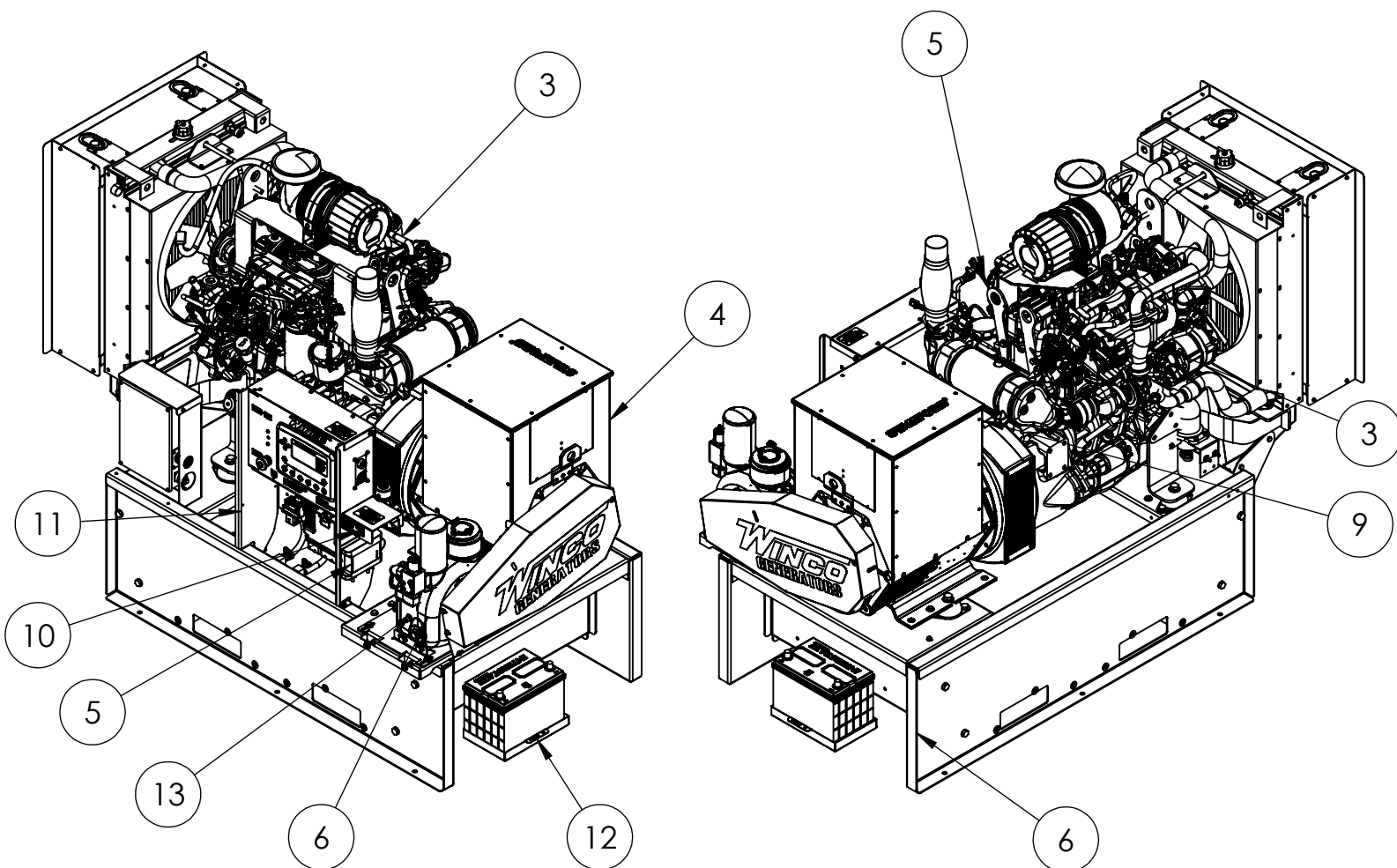


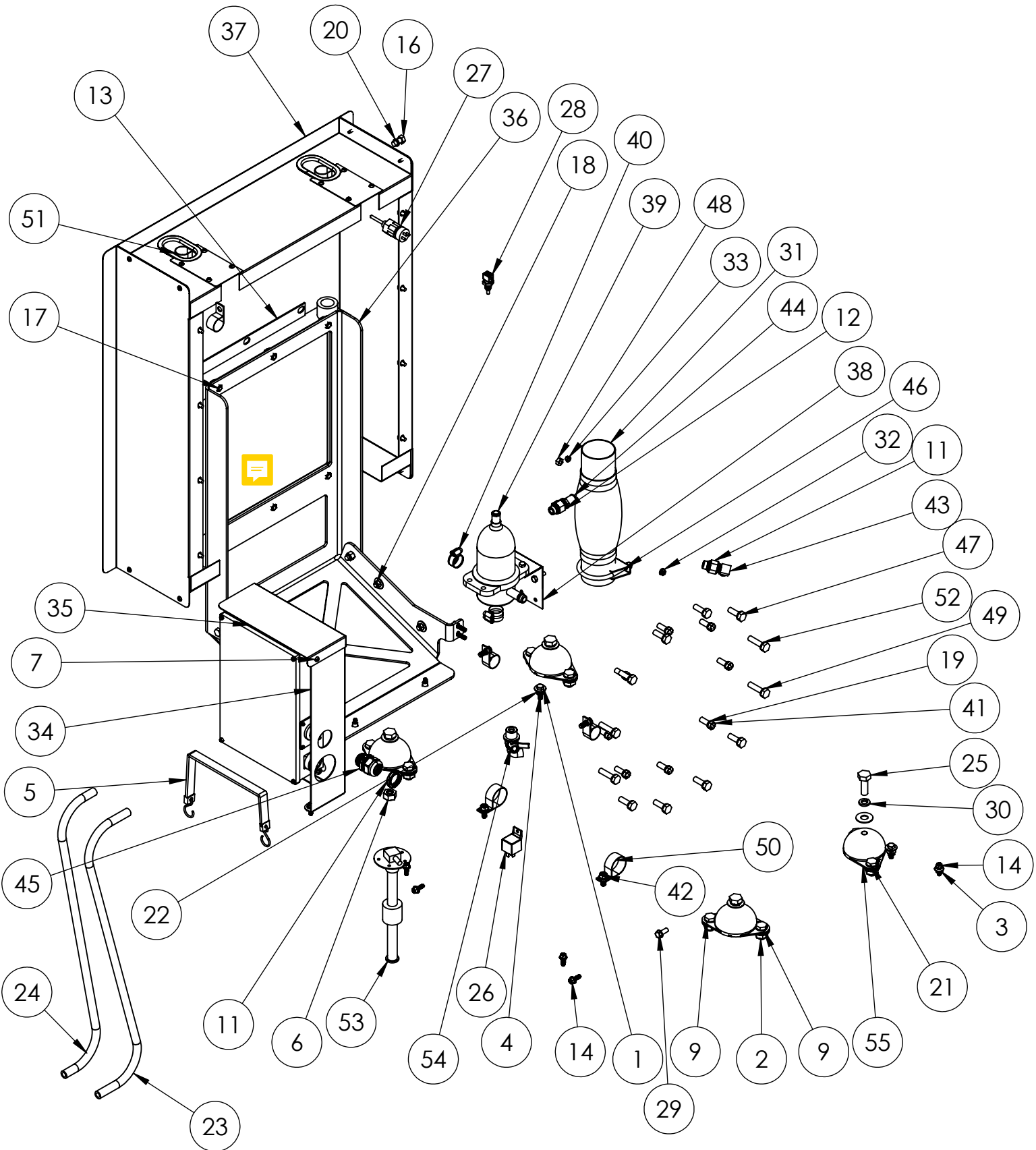
**WINCO Service**  
Phone: 507-357-6831  
Email: [service@wincogen.com](mailto:service@wincogen.com)  
[www.wincogen.com](http://www.wincogen.com)

# GENERAL ASSEMBLY



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	16200-021	MAINTENANCE KIT	1
2	16200-521	DECAL-MAINTENANCE KIT	1
3	350001-92	ENGINE FPT F5C F34	1
4	351930-111	UCI224C NDE-PTO 311 WDG UL1004	1
5	352020-26	BATTERY CHARGER KIT, 12V	1
6	352108-000	NK31 AIR END	1
7	411050-001	ENGINE ECU HARNESS FPT F5C	1
8	801044-000	BASE ASSEMBLY, NO FUEL TANK	1
9	802050-001	GENERATOR FRONT PANEL ASSY	1
10	803044-000	COMPRESSOR CONTROL	1
11	803050-000	CONTROL TOWER ASSY	1
12	805050-001	BATTERY TRAY	1
13	806044-101	COMPRESSOR COMPONENTS	1
14	80765-010	BATTERY 12V 650CCA GROUP 24	1
15	811044-001	ENGINE HARNESS WINCO SIDE F5C	1

# HARDWARE

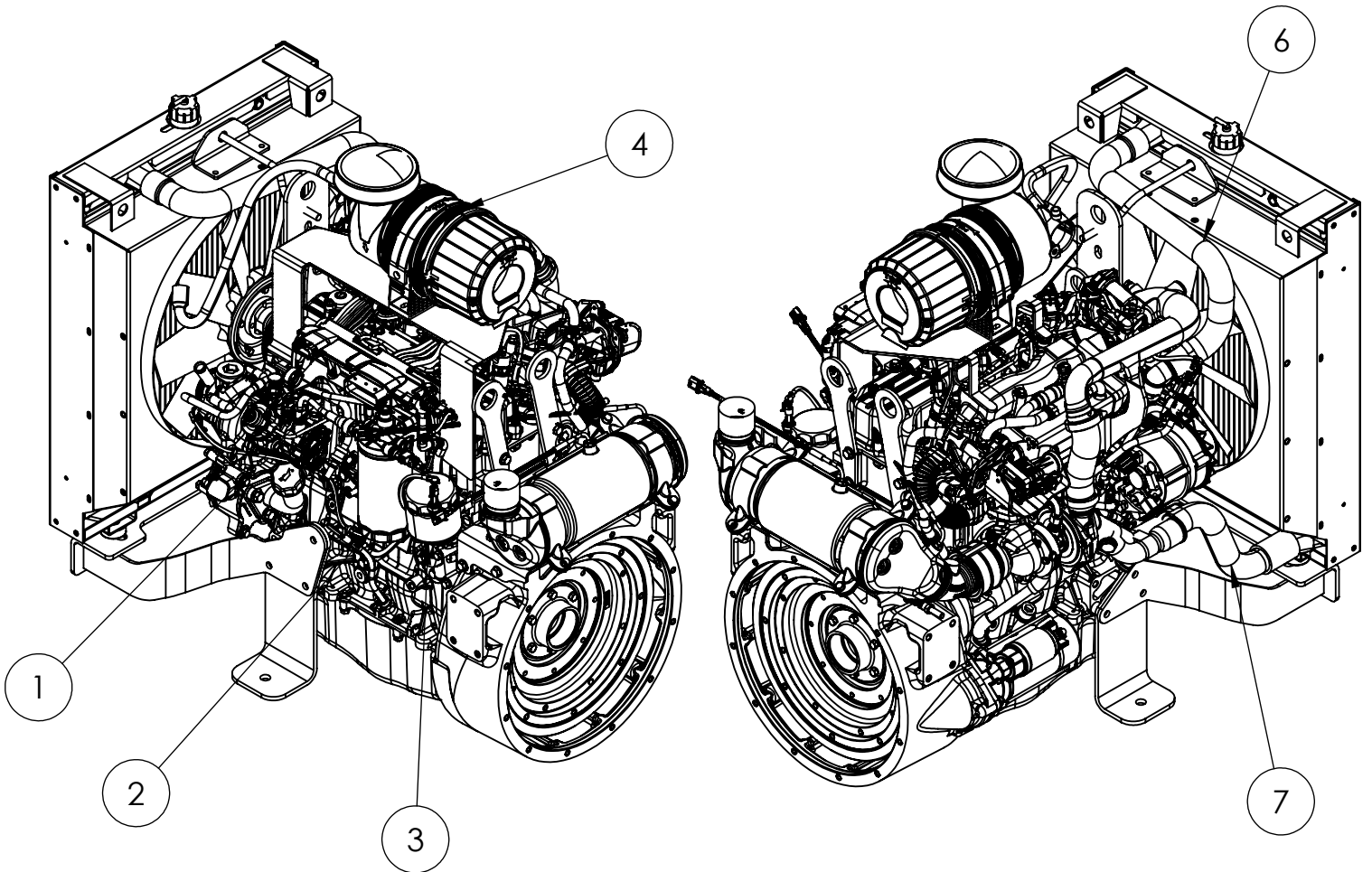


# HARDWARE BOM

ITEM NO.	PartNo	DESCRIPTION	QTY.
1	1116-000	.3125-18X1 HHB	2
2	16248-001	.5-13 FLANGE NUT	8
3	16248-000	.25-20 FLANGE NUT	1
4	16249-000	.3125-18 FLANGE	8
5	16329-001	RUBBER STRAP, BATTERY HOLD DOWN	1
6	1744-000	NUT HEX 1/2-13	4
7	21698-001	TORX PAN HEAD SCREW #10	1
8	21867-001	FLAT WASHER .51 X .88 X .05	8
9	21867-000	FLAT WASHER	4
10	22627-000	3/4 NPT CONDUIT NUT	1
11	300349-6	ADAPTER M16X1.5(M) X 3/8-18NPT (F)	1
12	300349-9	ADAPTER M18X1.5(M) X 3/8-18NPT (F)	1
13	350253-2	.375-24X1 HHB BLACK	8
14	352108-001	NK31 AIR/OIL COOLER	1
15	352120-2	1/4-20 X .75 FHCS	8
16	352120-3	1/4-20 X 1 FHCS	6
17	352121-1	FHCS 5/16-18X 3/4 GRADE 5	4
18	464-000	.375-16X.75 HHB	2
19	467-000	.3125-18X.75 HHB	10
20	47136-000	HEX NUT .3125-18 NYLOK	4
21	481-001	LOCKWASHER 3/8 SPLIT BLACK	8
22	481-000	LOCK 3/8 SPLIT	2
23	48178-000	HHCS 1/2-13 X 1	8
24	526-000	5/16 FLAT WASHER	12
25	55505-007	HOSE 3/8" ID 30" LONG	1
26	55505-014	HOSE 3/8" ID 37" LONG	1
27	57580-000	HHCS 1/2-13 X 1.5 GR5	4
28	59944-016	RELAY 12VDC 30AMP SPDT	1

ITEM NO.	PartNo	DESCRIPTION	QTY.
29	6-117	LOW COOLANT SENSOR	1
30	6-133	AIR TEMP SENSOR	1
31	62173-001	SELF TAP.SC. 5/16-18X.75	1
32	636-000	LOCKWASHER 1/2 SPLIT	4
33	64743-002	2.5" X 8 FLEX	1
34	64841-001	M6-1.0 FLANGE NUT ZINC	1
35	64841-000	NUT HEX M5-0.8 FLANGE LOCK ZINC	1
36	803050-004	BLACK BOX MOUNT	1
37	803050-005	BLACK BOX COVER	1
38	806044-018	OIL COOLER MOUNT	1
39	806044-023	DUCTING ASSEMBLY	1
40	806050-003	BLOCK HEATER BRACKET	1
41	80781-018	BLOCK HEATER WITH THERMOSTAT ASSY	1
42	81018-005	HOSE CLAMP 1.0625-.500	4
43	92382-000	HOSE FIT.ELBOW .375NPT X .625 HOSE	1
44	92388-000	HOSE FIT .375NPT X .625 HOSE	1
45	93073-031	CORD GRIP .75 NPT	1
46	93489-002	MUFFLER CLAMP 2.5"	1
47	94442-003	NUT HEX M8-1.25 ZINC	1
48	96003-030	M10-1.5X30MMM	8
49	96003-040	HHCS M10-1.5X 40MM BLACK	4
50	97391-010	TUBE CLAMP 1.5	2
51	97391-013	TUBE CLAMP/CUSH.WIRE 1-1/16	5
52	97436-010	M10 LOCKWASHER	12
53	98433-002	FUEL LEVEL SENDING UNIT KIT 9.5" 240-33 OHM	1
54	98906-018	OIL DRAIN VALVE M22 X 5/8 90HB	1
55	98956-001	SHOCKMOUNT 40 DURO (GREEN DOT)	4

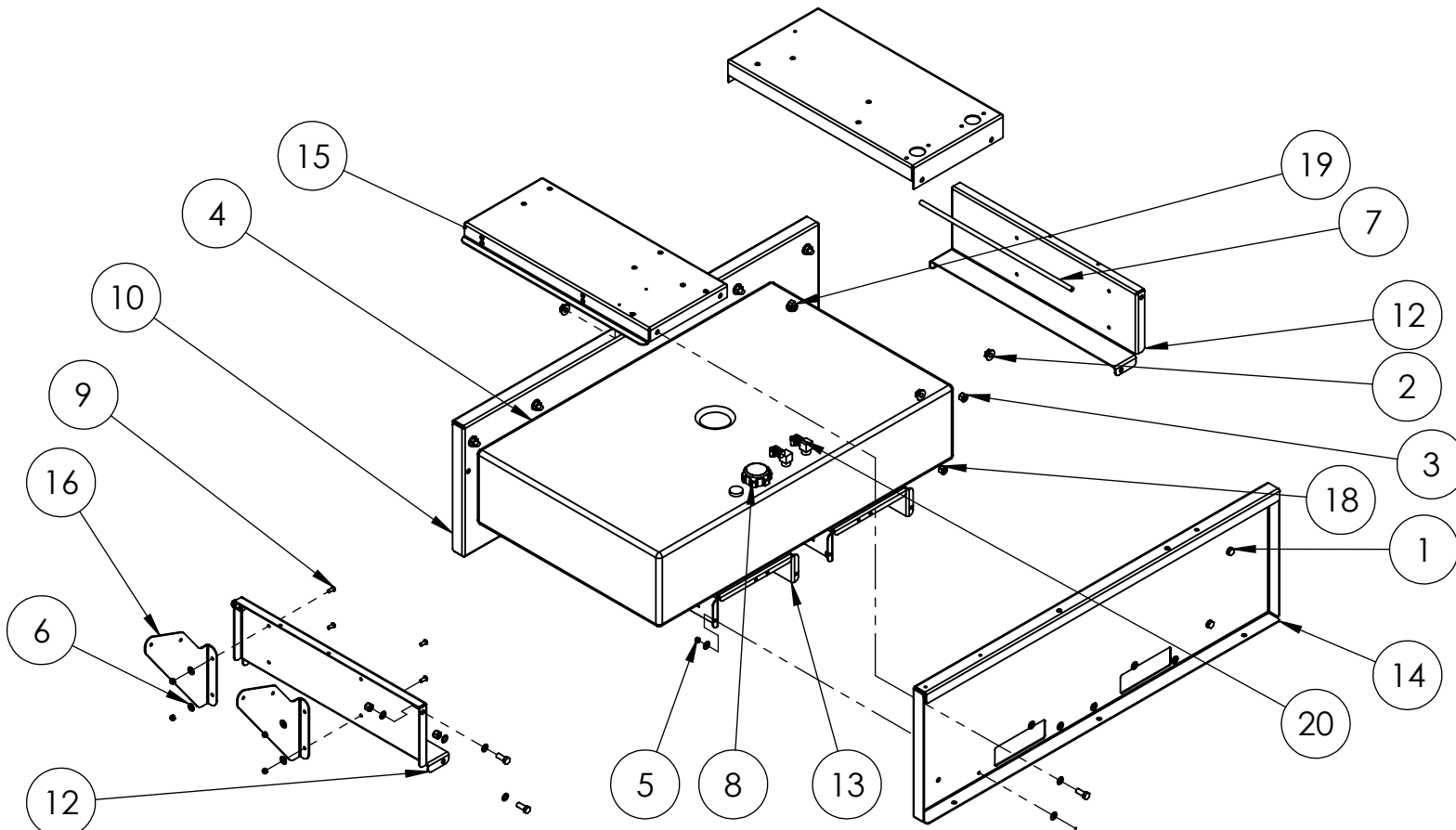
# ENGINE PACKAGE



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6-117	LOW COOLANT LEVEL SENSOR	1
2	6-139	FUEL FILTER	1
3	6-138	OIL FILTER	1
4	6-137	AIR FILTER	1
5	6-140	WATER SEPARATOR	1
6	6-148	TOP COOLANT PIPE	1
7	6-149	BOTTOM COOLANT PIPE	1

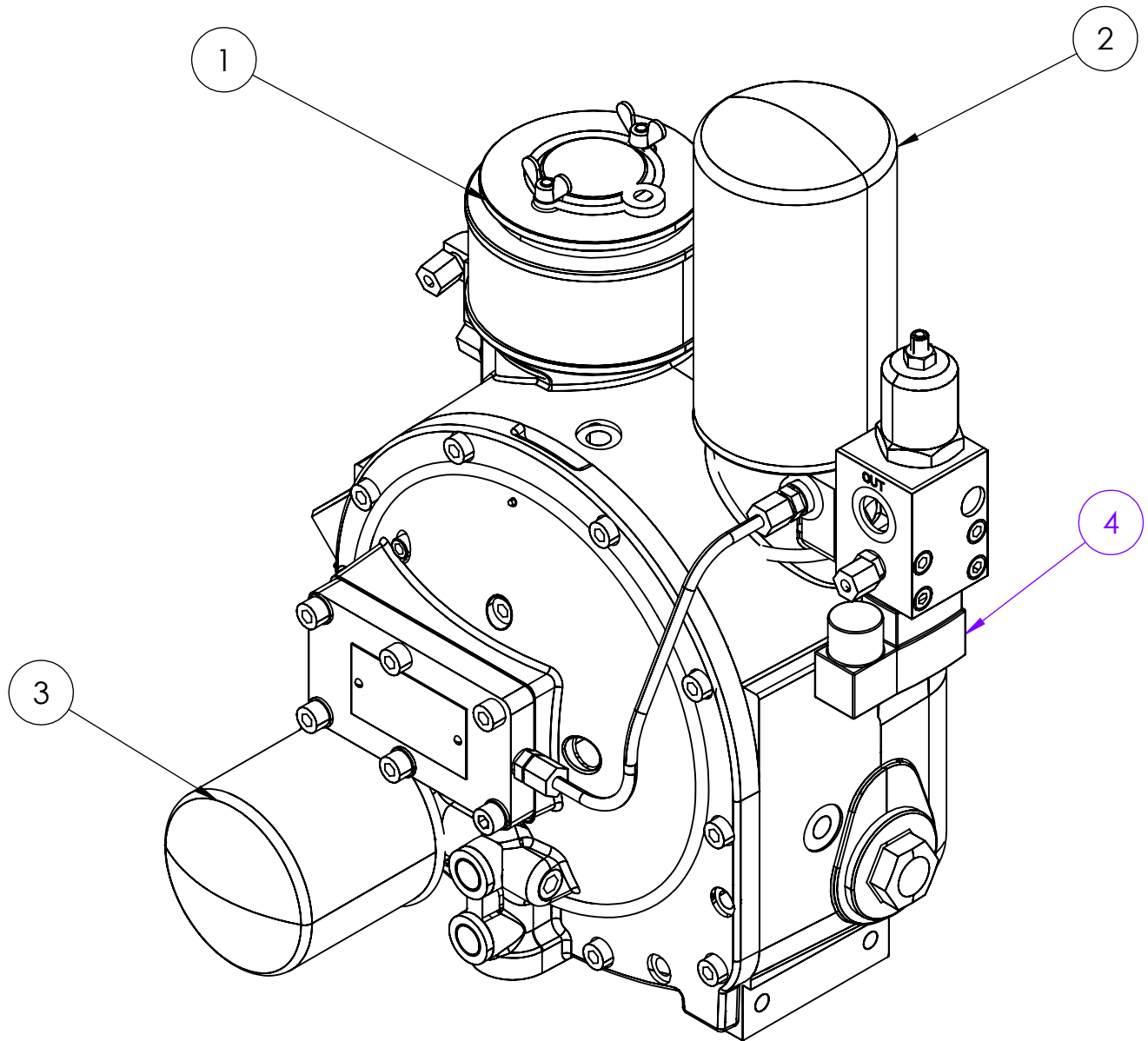
\*350001-92 - FPT F5C 3.4L I4 ENGINE PACKAGE\*

# BASE AND FUEL TANK ASSEMBLY



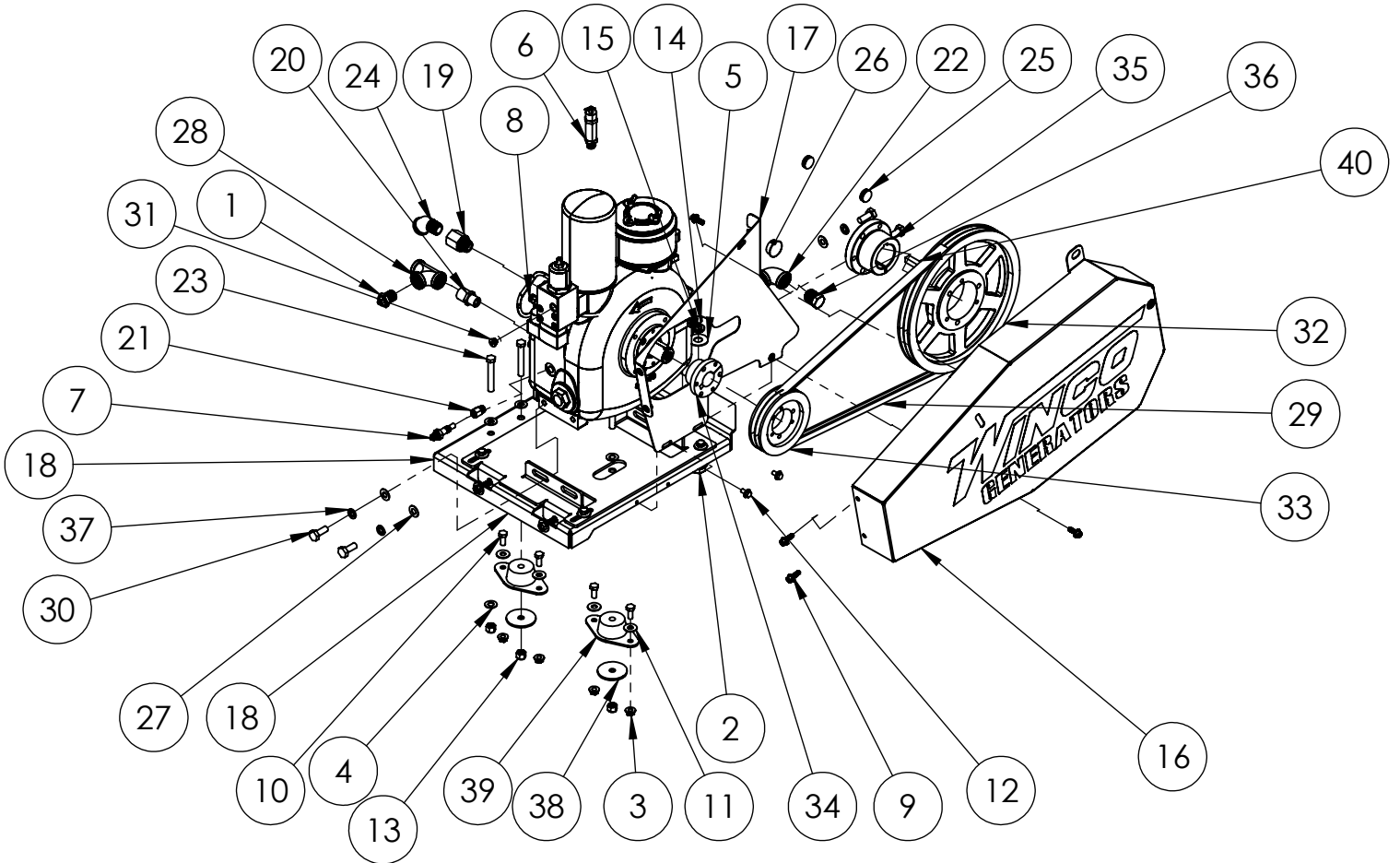
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	1516-000	.5-13X1.25 HHB	16
2	16248-001*	.5-13 FLANGE NUT	8
3	21867-000	FLAT WASHER .51 X .88 X .05	24
4	350041-118	FUEL TANK	1
5	47136-000	HEX NUT .3125-18 NYLOK	16
6	526-000	5/16 FLAT WASHER	28
7	55505-003	HOSE 3/8 ID X 24" LONG	1
8	62398-000	FUEL CAP AND GAUGE, TWO WAY VENT, 10IN, DIESEL	1
9	64858-102	5/16-18 X 0.75 BHSCS	4
10	801044-002	RIGHT SIDE RAIL, BOTTOM FORK	1
11	801044-025	GENERATOR CROSSMEMBER	1
12	801044-006	BASE FRAME END CAP, BOTTOM FORK	2
13	801044-015	FUEL TANK SUPPORT	2
14	801044-021	LEFT SIDE RAIL	1
15	801044-023	ENGINE CROSSMEMBER	1
16	806044-028	COOLER BRACE	2
17	81018-006	HOSE CLAMP 7/8 TO 3/8 X 1/2 WIDE	2
18	92242-000	NUT HEX .500-13 NYLOCK	8
19	93564-000	PIPE PLUG 3/4 SQUARE HEAD	1
20	94319-008	HOSE FIT. .500-14NPT X .375 HOSE BARB	2

# AIR COMPRESSOR



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	11-100	AIR FILTER	1
2	11-101	OIL FILTER	1
3	11-102	SEPARATOR FILTER	1
4	11-106	DC SOLENOID	1

# COMPRESSOR ASSEMBLY

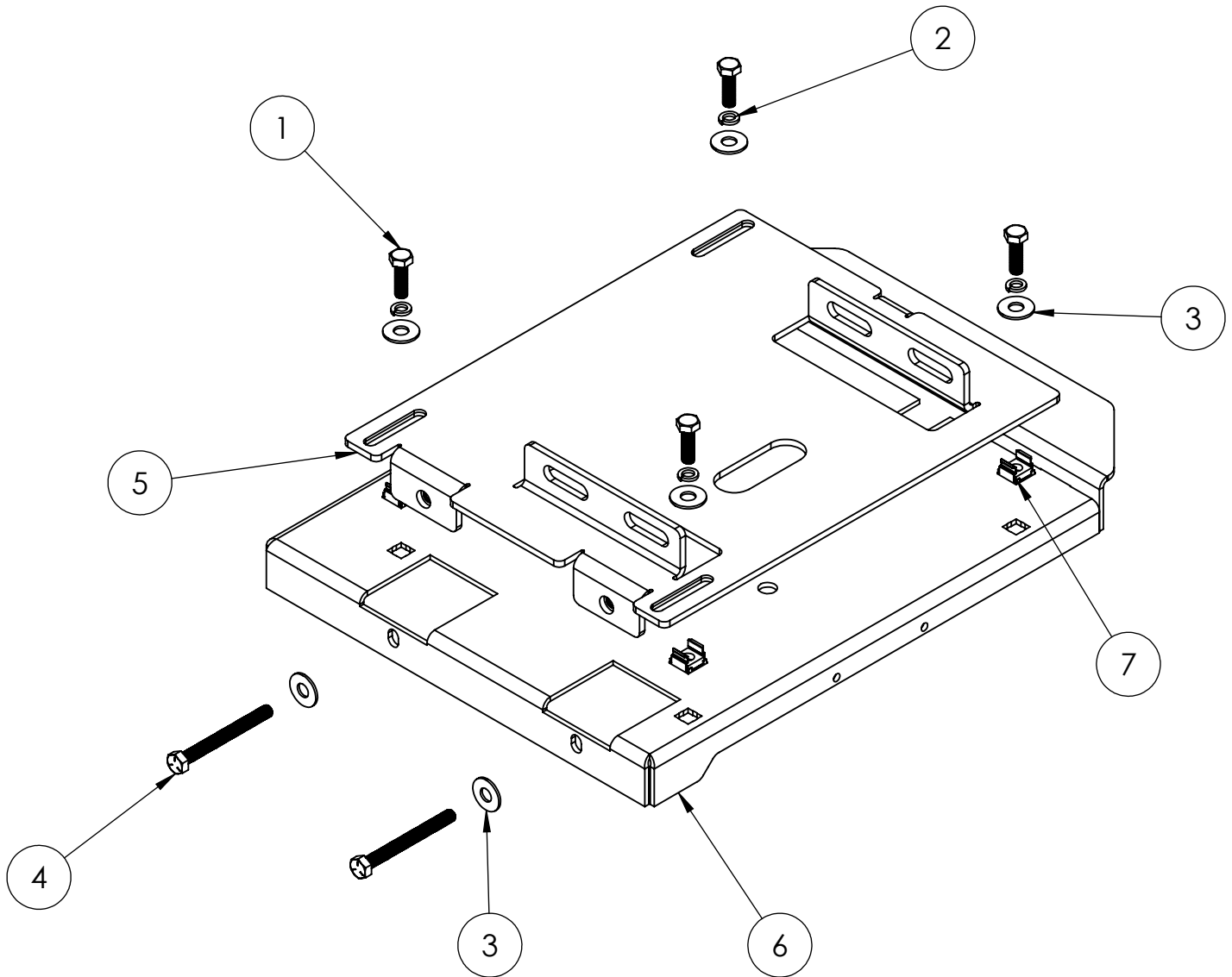


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	15808-004	HIGH TEMPERATURE SWITCH	1
2	16248-001*	.5-13 FLANGE NUT	1
3	16249-000	.3125-18 FLANGE	4
4	20604-000	3/8 WASHER	4
5	21867-000	FLAT WASHER	1
6	352108-002	PRESSURE RELIEF VALVE 200 PSI	1
7	352108-014	OIL TEMP SENSOR	1
8	352108-016	FITTING PUSH TO CONNECT 1/4 TUBE 1/8 NPT STRAIGHT	1
9	352120-2	1/4-20 X .75 FHCS	4
10	467-000	.3125-18X.75 HHB	4
11	526-000	5/16 FLAT WASHER	4
12	55440-000	.25-20X.5 SELF TAP	2
13	56864-000*	NUT HEX 3/8-16 NYLOK	3
14	57580-000	HHCS 1/2-13 X 1.5 GR5	1
15	636-000	LOCKWASHER 1/2 SPLIT	1
16	806044-014	BELT GAURD	1
17	806044-025	INSIDE BELT GAURD	1
18	806044-026	COMPRESSOR MOUNT ASSEMBLY	1
19	80952-004	.5 MALE BSPP X .5 NPT FEMALE ADAPTER	1
20	80952-005	HEX REDU.ADAPTER. 3/8" BSPP MALE X 1/2" NPT MALE	2

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
21	80952-000	ADAPTER BSPT1/4 MALE X 1/8 NPT FEMALE	1
22	81074-000	ELBOW-PIPE .500 NPT 90	1
23	91658-007	3/8-16X2.5	3
24	92584-003	ELBOW STREET 1/2 NPT 45D	1
25	93402-001	HOLE PLUG .8125" DIA.	2
26	93402-003	HOLE PLUG 1.00IN DIA	1
27	93548-000	FLAT WSH METRIC M10 X 21MM	4
28	94055-000	PIPE TEE 1/2X1/2X1/2NPT	1
29	95638-004	2-3VX580 V BELT	1
30	96003-025	M10-1.5X25MM	4
31	96040-004	1/8 BSPP	1
32	96935-003	2 3V 1060 SK V BELT PULLEY	1
33	96935-004	2 3V 475 SH V BELT PULLEY	1
34	96935-006	SH X 28MM QD BUSHING	1
35	96935-007	SX X 1.75" QD BUSHING	1
36	97269-000	PIPE PLUG 1/2NPT HEX HEAD	1
37	97436-010	M10 LOCKWASHER	4
38	98806-000	WASHER .406 X 2	2
39	98807-000	SHOCKMOUNT 40 DURO	2
40	S205686	3/8 X 3/8 X 1-3/8 KEY	1

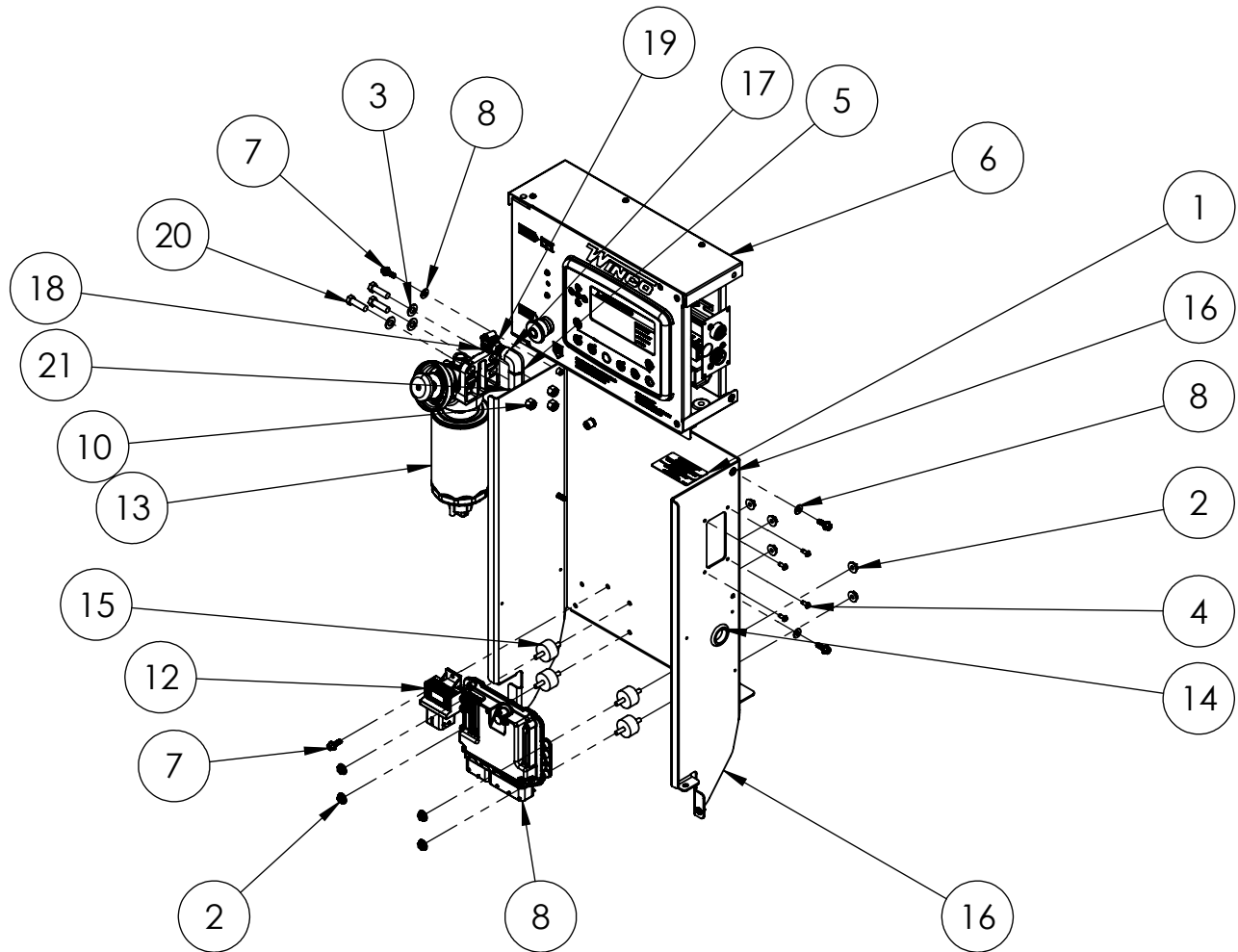


# COMPRESSOR MOUNT ASSY.



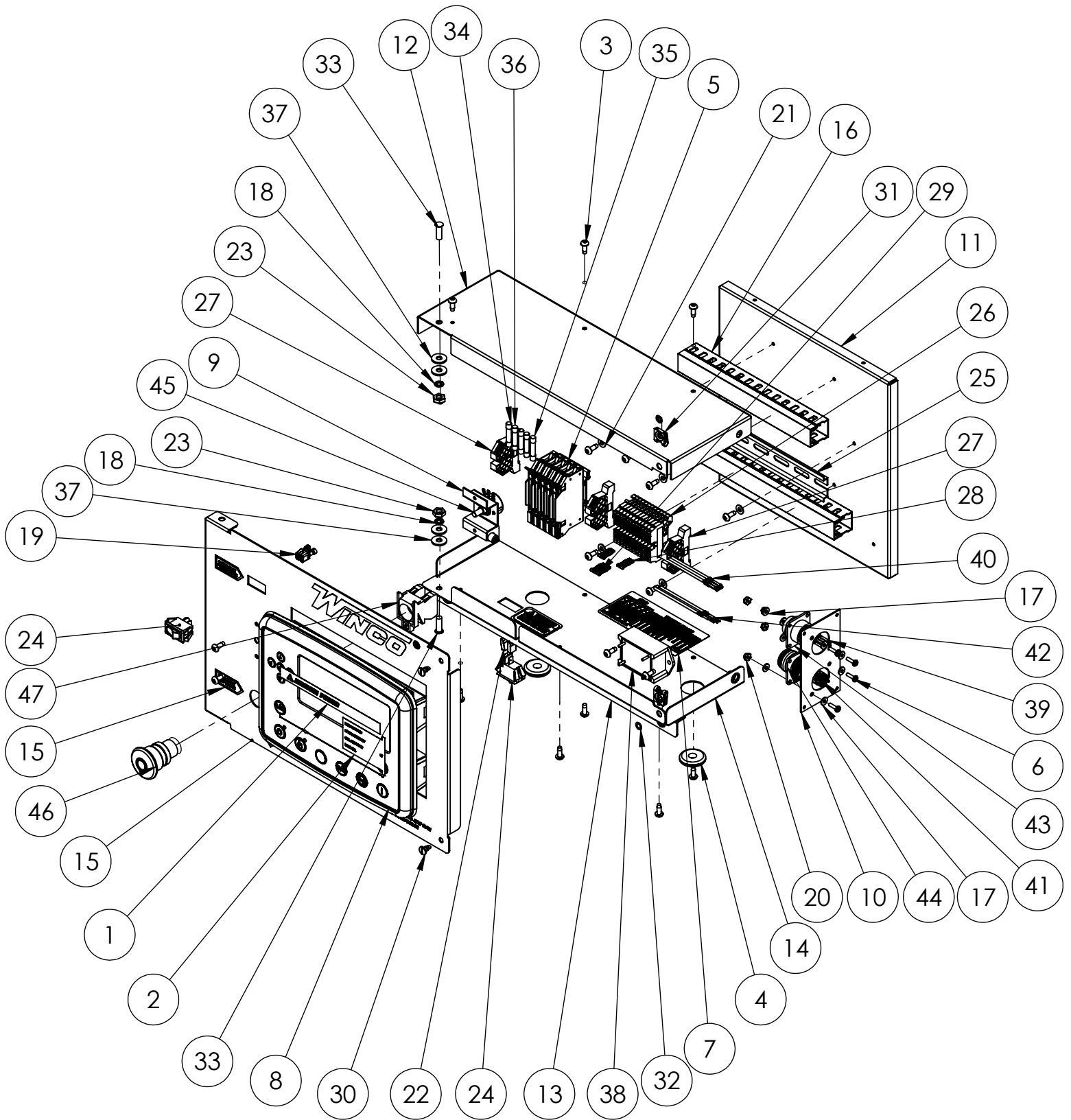
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	1116-000	.3125-18X1 HHB	4
2	480-000	LOCK .3125 SPLIT	4
3	526-000	5/16 FLAT WASHER	6
4	57523-001	HHCS 5/16-18X3 GR5 FULL THREAD	2
5	806044-015	COMPRESSOR MOUNTING PLATE	1
6	806044-026	AIR COMPRESSOR/ GEN MOUNT PLATE WELDMENT	1
7	92419-001	5/16 - 18 12GA TINNERMAN NUT	4

# CONTROL TOWER ASSEMBLY



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	16200-521	MAINTENANCE KIT DECAL	1
2	16248-000	.25-20 FLANGE NUT	9
3	20604-000	3/8 WASHER	3
4	21698-001	TORX PAN HEAD SCREW #10	4
5	300349-1	OIL DRAIN ADAPTER	2
6	351891-51	ECU ENGINE CONTROLLER	1
7	352120-2	1/4-20 X .75 FHCS	5
8	512-000	.25 WASHER	4
9	55505-003	HOSE 3/8 ID X 24" LONG	1
10	56864-000*	NUT HEX 3/8-16 NYLOK	3
11	6-114	ENGINE CONTROL UNIT	1
12	6-115	GLOW PLUG CONTROLLER	1
13	6-116	FUEL PRE FILTER	1
14	62486-000	GROMMET 1 X 1.375	1
15	71605-003	SHOCKMOUNT, BLACK, 30-35 DURO	4
16	803050-001	DE CONROL PEDISTAL	1
17	81018	ELBOW-STREET 3/8NPT 90DEG BRASS	2
18	81018-006	HOSE CLAMP 7/8 TO 3/8 X 1/2 WIDE	6
19	94319-007	HOSE FIT. .375-18NPT X .375 HOSE BARB	2
20	96000-003	HHCS 3/8-16 X 1.25 BLACK	3
21	96187-001	OIL DRAIN GASKET M14 ID	2

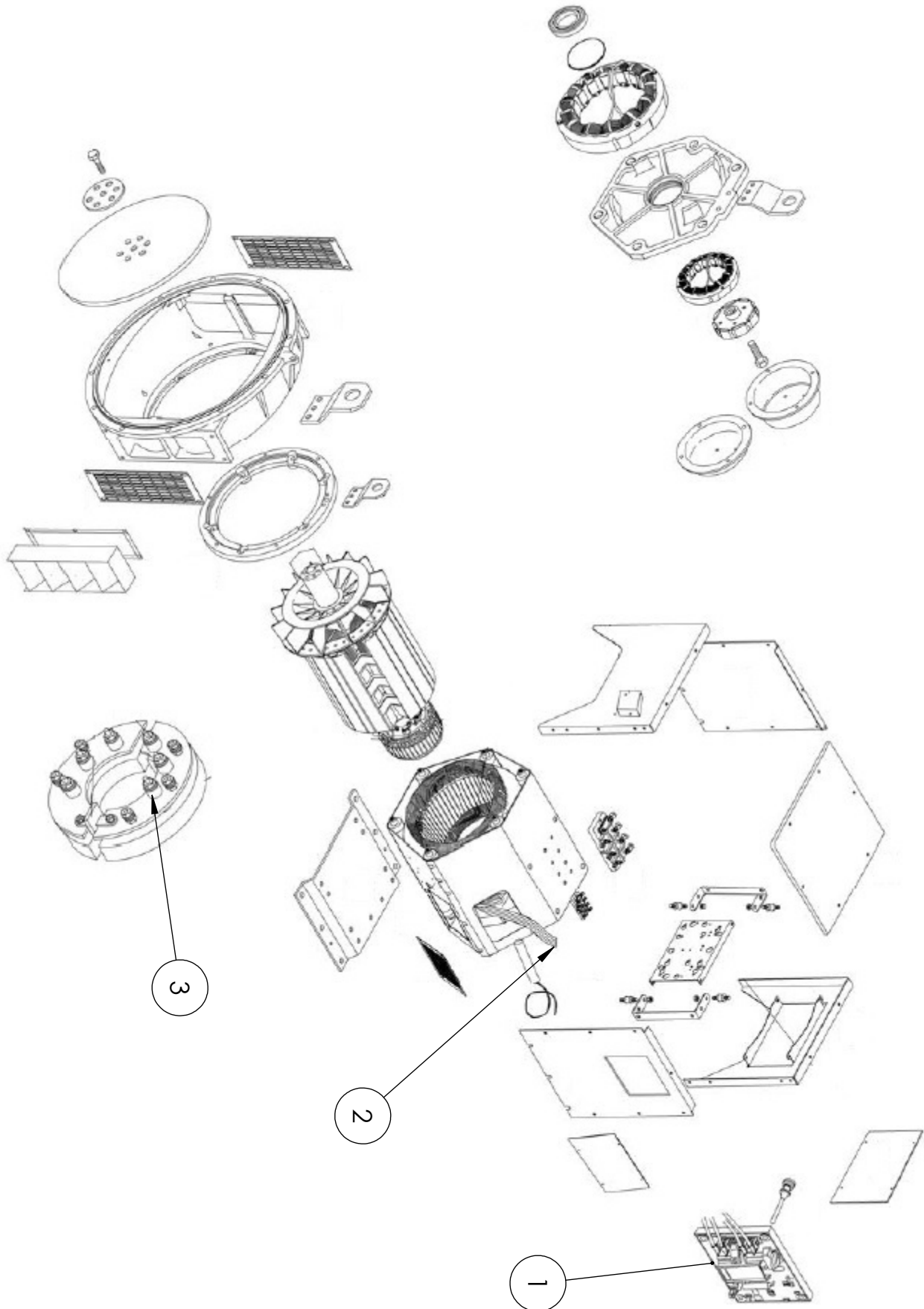
# DSE 7310 MKII ENGINE CONTROL ASSEMBLY



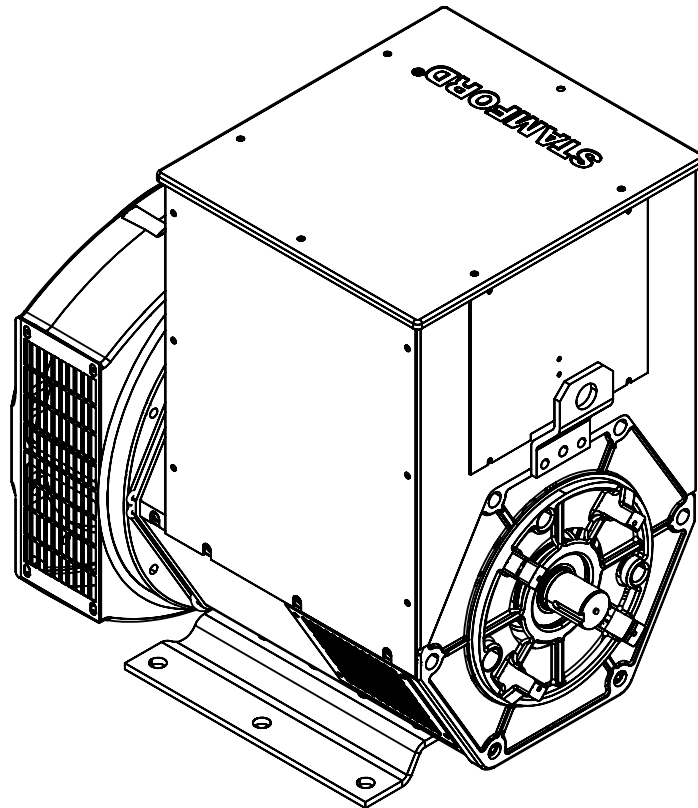
# DSE 7310 MKII ENGINE CONTROL ASSEMBLY CONT.

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

# GENERATOR EXPLODED VIEW



# GENERATOR SPECS & PARTS LIST

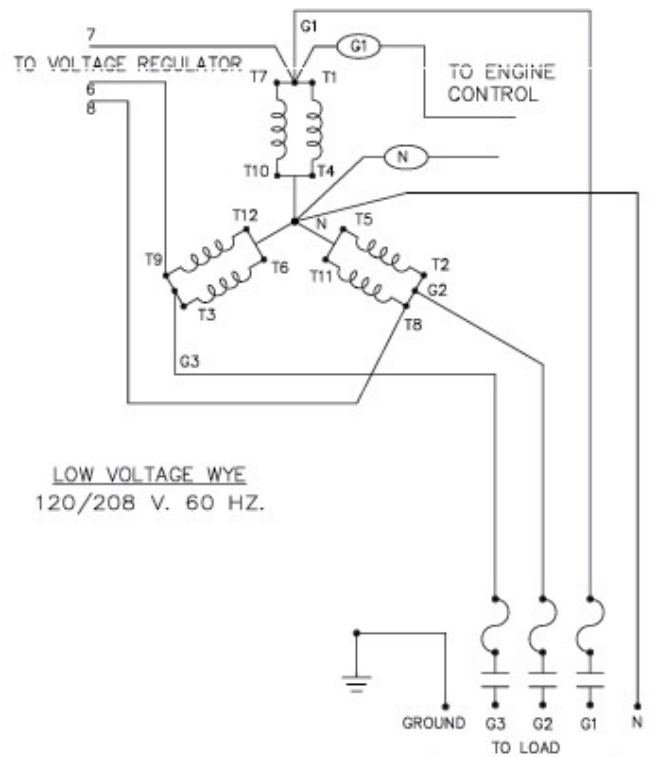
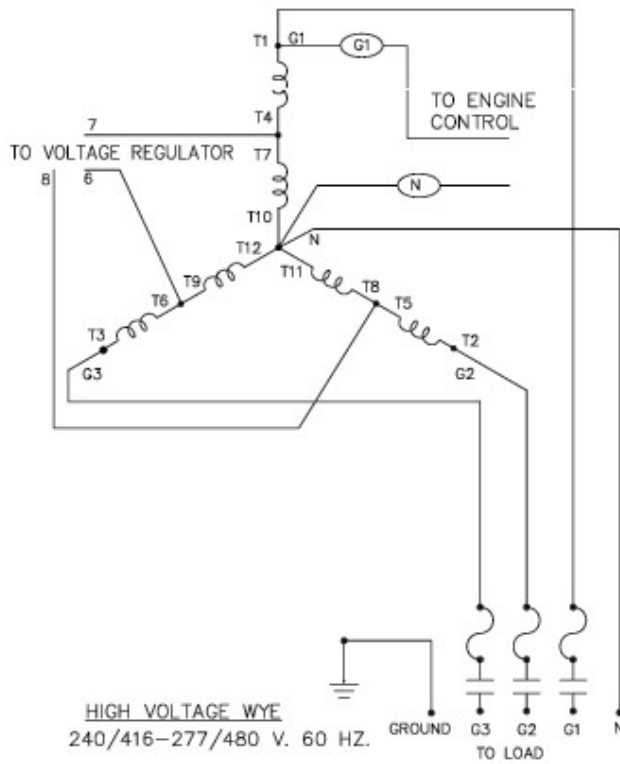


EXPECTED RESISTANCE (Ω) @ 22C	
MODEL	UCI224C 311
STATOR WINDING (PER PHASE SERIES CONNECTED)	0.181
ROTOR WINDING	0.59
EXCITER STATOR	21
EXCITER ROTOR (PER PHASE)	0.071
POSITIVE SEQUENCE (R1)	0.10
NEGATIVE SEQUENCE (R2)	0.14
ZERO SEQUENCE (R0)	0.10

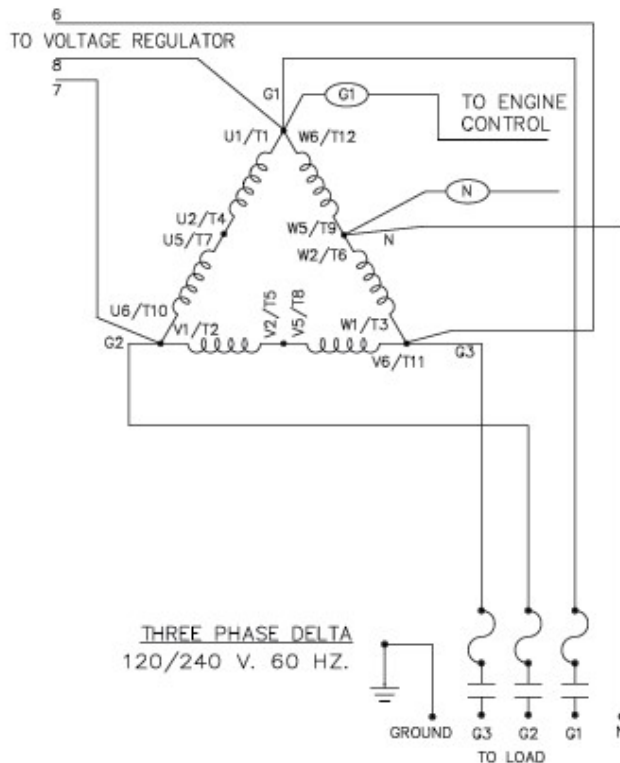
ITEM	DESCRIPTION	DE50F4
-	COMPLETE GENERATOR END	351930-111
-	STAMFORD MODEL	UCI224C
-	WINDING	311
24	AVR SX460-UL	350818-7
For additional parts support, contact WINCO service		

# GENERATOR WIRING

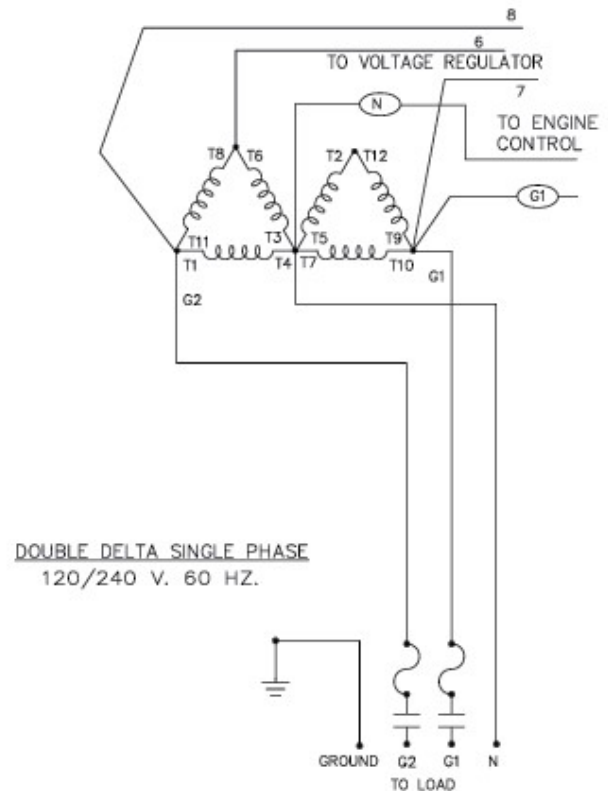
## THREE PHASE AC WIRE HIGH AND LOW WYE



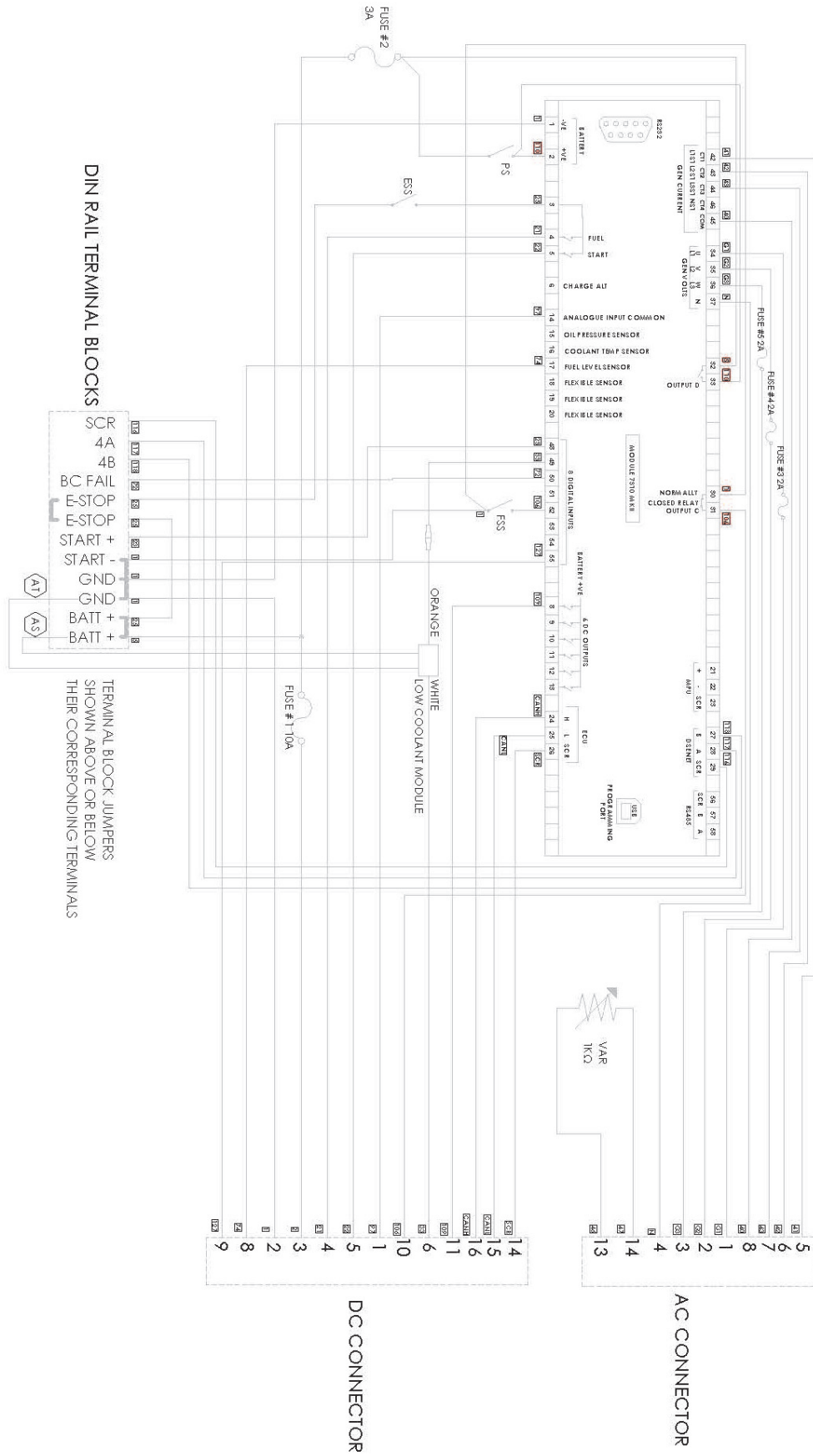
## THREE PHASE AC WIRING- DELTA



## SINGLE PHASE 311 WINDING



# CONTROLLER SCHEMATIC





# ENGINE HARNESS

