

CATERPILLAR SR4

5ZA / SEBP2265

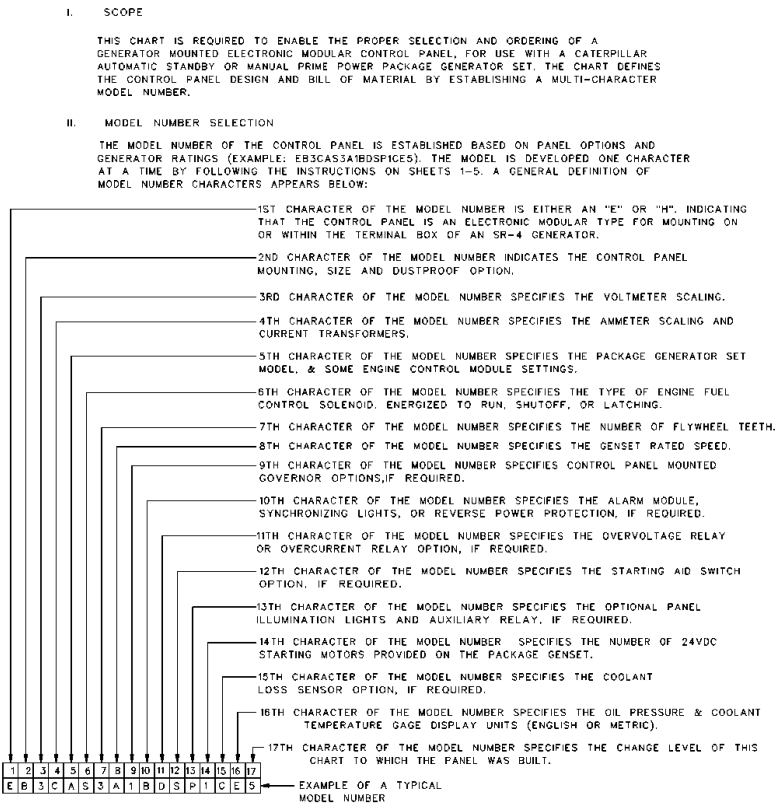
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103-1582 CHART-CONTROL PANEL

1031582 CHART-CONTROL PANEL-PART 1 OF 9

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Parts list rows are not synced on this VPS for SEBP2265/SEBP22650001 yet.					

103-1582 CHART-CONTROL PANEL

1031582 CHART-CONTROL PANEL-PART 2 OF 9

Drawing 1 of 1

III. DESCRIPTION OF EQUIPMENT SPECIFIED BY MODEL NUMBER

1 — AN "E" AS THE FIRST CHARACTER OF THE MODEL NUMBER SPECIFIES THAT THE CONTROL PANEL IS AN ELECTRONIC MODULAR TYPE. AN "H" INDICATES THAT IT IS BUILT & TESTED TO MEET CANADIAN STANDARD ASSOC. (CSA) APPROVAL.

	PANEL TYPE	VOLTAGE ADJUST RHEOSTAT
E	STANDARD PANEL	129-0308
H	CSA APPROVED PANEL TESTED PER 3L-0369 INCLUDES 103-6332 FILM	7C-4471

2 — THE SECOND CHARACTER OF THE MODEL NUMBER SPECIFIES THE CONTROL PANEL MOUNTING, SIZE AND DUSTPROOF OPTION. THE CONTROL PANEL SIZE IS DETERMINED BY THE GENERATOR FRAME SIZE. SEE TABLE 1 AND FIGURE 1. DUSTPROOF OPTION SATISFIES NEMA 12 AND IP44.

EB3CASA1BDSPICE5

	PANEL MTD AND TYPE	GENERATOR FRAME SIZE	PANEL DIMENSIONS			VANDAL DOOR AS.	DUSTPROOF KIT
			A	B	C		
A	STANDARD TOP MTD	360	603.2	323.8	323.8	REQUIRED	_____
B	STANDARD TOP MTD	440/580 680/800	698.5	323.8	323.8	REQUIRED	_____
C	TOP MTD DUSTPROOF	360	603.2	323.8	323.8	REQUIRED	103-8975
D	TOP MTD DUSTPROOF	440/580 680/800	698.5	323.8	323.8	REQUIRED	103-8975

FIGURE 1

3 — THE THIRD CHARACTER OF THE MODEL NUMBER SPECIFIES THE GENERATOR AC OPERATING VOLTAGE & THE RESULTING AC METERING MODULE VOLTMETER SCALING SELECTION.

MODEL EB3CASA1BDSPICE5

	GENERATOR VOLTAGE(S) (LINE TO LINE)	VOLTMETER SCALING SELECTION	
		PROGRAMMING	JUMPER
2	0-150 VAC L-L	150	NO
3	151-600 VAC L-L	600	YES

REF: REPUBLIC ELECTRIC AND DEVELOPMENT CO

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103-1582 CHART-CONTROL PANEL

1031582 CHART-CONTROL PANEL-PART 3 OF 9

Drawing 1 of 1

4 — THE FOURTH CHARACTER OF THE MODEL NUMBER SPECIFIES THE AMMETER SCALING SELECTION AND CURRENT TRANSFORMER. (GENERATOR POWER RATING MUST BE LESS THAN OR EQUAL TO VALUES GIVEN IN TABLE BELOW.)

MODEL EB3CASA1BDSP1CE5

GENERATOR EKW OUTPUT TABLE CALCULATED FROM RATED OUTPUT VOLTAGE AT 0.80 POWER FACTOR WITH 15% MARGIN. (GENERATOR POWER RATING MUST BE LESS THAN OR EQUAL TO VALUES GIVEN IN TABLE BELOW.)

GENERATOR EKW RATING AT-VOLTAGES (L-L, RMS)											
	200 VAC	208 VAC	220 VAC	240 VAC	300 VAC	380 VAC	400 VAC	415 VAC	440 VAC	480 VAC	600 VAC
C	20EKW	25EKW	25EKW	25EKW	35EKW	45EKW	45EKW	50EKW	50EKW	55EKW	70EKW
D	35	35	35	40	50	65	70	75	75	85	105
E	45	50	50	55	70	90	95	100	105	115	140
F	70	75	75	85	105	135	140	150	155	170	215
G	95	100	105	115	140	180	190	200	210	230	285
H	140	150	155	170	215	270	285	300	315	345	430
J	190	200	210	230	295	365	385	400	420	460	575
K	240	250	265	285	360	455	480	500	530	575	720
L	285	300	315	345	430	545	575	600	635	690	865
M	360	375	395	430	540	685	720	750	795	865	1080
N	480	500	530	575	720	915	960	1000	1060	1155	1445
P	600	625	660	720	900	1145	1205	1250	1325	1445	1805
R	720	750	795	865	1080	1370	1445	1500	1590	1735	2165
S	960	1000	1060	1155	1445	1830	1925	2005	2120	2310	2890

AMMETER (TRANSFORMER RATED)				CURRENT TRANSFORMERS			
				ROUND		SQUARE	
QTY	SCALE	PROGRAM SETTING	QTY	RATIO	PART NO	RATIO	PART NO
C	1 0- 100 AMPS	100	3	100:5	5N-5429	—	—
D	1 0- 150 AMPS	150	3	150:5	4W-8102	—	—
E	1 0- 200 AMPS	200	3	200:5	5N-5430	—	—
F	1 0- 300 AMPS	300	3	300:5	5N-5431	—	—
G	1 0- 400 AMPS	400	3	400:5	5N-5432	—	—
H	1 0- 600 AMPS	600	3	600:5	5N-5433	600:5	61-1952
J	1 0- 800 AMPS	800	3	800:5	5N-5434	800:5	7E-1112
K	1 0-1000 AMPS	1000	3	1000:5	7W-8839	1000:5	7E-1113
L	1 0-1200 AMPS	1200	3	1200:5	7W-8838	1200:5	7E-1114
M	1 0-1500 AMPS	1500	3	1500:5	7W-8837	1500:5	7E-1115
N	1 0-2000 AMPS	2000	3	2000:5	7W-8836	2000:5	7E-1116
P	1 0-2500 AMPS	2500	3	2500:5	7W-8835	2500:5	7E-1117
R	1 0-3000 AMPS	3000	3	3000:5	7W-6598	3000:5	7E-1118
S	1 0-4000 AMPS	4000	3	4000:5	7W-7805	4000:5	7E-1119

NOTE:SQUARE CURRENT TRANSFORMERS TO BE SUPPLIED IF 5TH CHARACTER OF CONTROL PANEL MODEL NUMBER IS M THROUGH W (3408, 3412 AND 3500 PACKAGE GENERATOR SETS). ROUND CURRENT TRANSFORMERS TO BE SUPPLIED WITH ALL OTHER ENGINE SALES MODELS.

Ref.	Part number	Description	Qty	Code	Group page
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103-1582 CHART-CONTROL PANEL

1031582 CHART-CONTROL PANEL-PART 4 OF 9

Drawing 1 of 1

5 — THE FIFTH CHARACTER OF THE MODEL NUMBER SPECIFIES THE PACKAGE GENERATOR SET ON WHICH THE PANEL WILL BE INSTALLED & SOME ENGINE CONTROL MODULE SETTINGS.

MODEL EB3CAs3A1BDSPICE5

PACKAGE GENERATOR SET	CHARACTER	ENGINE CONTROL MODULE SETTINGS					
		FAULT SHUTDOWN SETTINGS		OIL STEP SPEED	CRANK TERMINATION SPEED		
		OIL PRESSURE	COOLANT TEMP			OVER- SPEED	
		HI RPM KPA(PSI)	LOW RPM KPA(PSI)	°C(°F)			
3114 PRIME	A	206(30)	68(10)	107(225)	SAME AS 3208	SAME AS 3208	400 RPM
3116 PRIME	B						
3208 STANDBY	C	206(30)	68(10)	113(235)			
3208 PRIME	D			107(225)			
3304 STANDBY	E			113(235)	REF 3L-0332	REF 3L-0332	
3304 PRIME	F	82(12)	68(10)	107(225)			
3306 STANDBY	G			113(235)			
3306 PRIME	H			107(225)			
3406 STANDBY	J						
3406 PRIME	K						
3408 STANDBY	M						
3408 PRIME	N	206(30)	68(10)	107(225)			
3412 STANDBY	O						
3412 PRIME	P						
3508 STANDBY	R						
3508 PRIME	S						
3512 STANDBY	T	206(30)	68(10)	107(225)			
3512 PRIME	U						
3516 STANDBY	V						
3516 PRIME	W						

6 — THE SIXTH CHARACTER OF THE MODEL NUMBER SPECIFIES THE TYPE OF THE ENGINE FUEL CONTROL SOLENOID.

MODEL EB3CAs3A1BDSPICE5

	FUEL CONTROL SOLENOID TYPE	PROGRAM ENGINE CONTROL MODULE FOR:	SHUT-OFF GP
R	ENERGIZED TO RUN	ENERGIZED TO RUN	111-7760
S	ENERGIZED TO SHUTOFF	ENERGIZED TO SHUTOFF	111-7761

NOTE: IF CONTROL PANEL MODEL NUMBER 5TH CHARACTER IS "M" THROUGH "P", 7E-8396 AUXILIARY FUEL CONTROL RELAY GROUP IS INCLUDED.

Ref.	Part number	Description	Qty	Code	Group page
Parts list rows are not synced on this VPS for SEBP2265/SEBP22650004 yet.					

103-1582 CHART-CONTROL PANEL

1031582 CHART-CONTROL PANEL-PART 5 OF 9

Drawing 1 of 1

7 — THE SEVENTH CHARACTER OF THE MODEL NUMBER SPECIFIES THE NUMBER OF TEETH ON THE FLYWHEEL OF THE GENSET THAT THE CONTROL PANEL WILL BE INSTALLED ON. IT IS IMPORTANT THAT THE CORRECT NUMBER OF TEETH BE PROGRAMED INTO THE ENGINE CONTROL MODULE TO ASSURE PROPER OPERATION.

MODEL EB3CASP3A1BDSPICE5

	NUMBER OF FLYWHEEL TEETH	PACKAGE GANERATOR SET	GENERATOR FRAME SIZE
1	183	3516,3512,3508	ALL
2	136	3412,3408	ALL
3	136	3406(# 0 FLYWHEEL HOUSING)	582
4	113	3406(# 1 FLYWHEEL HOUSING)	ALL
5	156	3306,3304	ALL
6	134	3208 ,3114,3116	ALL

REFER TO CHART 3L-0332 TO ASSIST IN DETERMINING NUMBER OF FLYWHEEL TEETH.

8 — THE EIGHTH CHARACTER OF THE MODEL NUMBER SPECIFIES THE RATED SPEED AT WHICH THE GENERATOR SET WILL OPERATE.

MODEL EB3CASP3A1BDSPICE5

	RATED SPEED (RPM)
A	1000
B	1200
C	1500
D	1800

9 — THE NINTH CHARACTER OF THE MODEL NUMBER SPECIFIES CONTROL PANEL MOUNTED GOVERNOR OPTIONS, IF REQUIRED.

MODEL EB3CASP3A1BDSPICE5

	GOVERNOR OPTION	GOVERNOR TYPE	GOV SW	GOVERNOR GP- ELECTRONIC	GOVERNOR FUSE PART #	QTY
X	NONE, OR SHIPPED LOOSE CUSTOMER INSTALLED 2301A GOVERNOR	CAT HYDRA-MECH, 2301A LOAD SHARING	—	—	NOT REQUIRED	—
1	GOVERNOR SWITCH GP	CAT HYDRA-MECH PSG,3161	7N-8008	—	NOT REQUIRED	—
4	1724/8290 GOVERNOR (F/U/W 3114 AND 3116 ENGINES)	ELECTRONIC SPEED SENSING	—	7E-1233	3K-8782	1
5	1724/8290 GOVERNOR	ELECTRONIC SPEED SENSING	—	7E-1232	3K-8782	1
6	2301A GOVERNOR	2301A SPEED SENSING	—	4P-2788	7T-0037	1

NOTE : ABOVE CHARACTERS 2, 3, & 6 ARE NOT COMPATIBLE WITH THE CONTROL PANEL MODEL NUMBER 10TH CHARACTER D, E, F OR G (SYNC. LIGHT). ABOVE CHARACTERS 4 AND 5 ARE NOT COMPATIBLE WITH THE CONTROL PANEL MODEL NUMBER 10TH CHARACTER D, E, F, OR G (SYNC. LIGHT) UNLESS PROVIDED WITH OPTIONAL 7E-2583 LOAD SHARE MODULE (NOT INSTALLED).

Ref.	Part number	Description	Qty	Code	Group page
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103-1582 CHART-CONTROL PANEL

1031582 CHART-CONTROL PANE-PART 6 OF 9

Drawing 1 of 1

10—THE TENTH CHARACTER OF THE MODEL NUMBER SPECIFIES EITHER THE ALARM MODULES, SYNCHRONIZING LIGHT MODULE,SYNCHRONIZING LIGHT MODULE WITH GENERATOR REVERSE POWER PROTECTION OPTION, IF REQUIRED.

MODEL EB3CASA1BDSPICES

MODULE TYPE	PART NO.			
	MODULE OR CONTROL GP	REVERSE POWER RELAY	FILMS	COVER PLATE
X NOT REQUIRED	NOT REQUIRED	NOT REQUIRED	NOT REQ'D	7C-1008
A ALARM (NFPA99)	9Y-2907	NOT REQUIRED	NOT REQ'D	NOT REQUIRED
B ALARM (NFPA 110)	9Y-2906	NOT REQUIRED	NOT REQ'D	NOT REQUIRED
C ALARM (SINGLE UNIT PRIME POWER)	7E-1234	NOT REQUIRED	NOT REQ'D	NOT REQUIRED
D SYNC. LIGHTS (0-480V L-L)	106-5171	NOT REQUIRED	NOT REQ'D	NOT REQUIRED
E SYNC. LIGHTS (600V L-L)	106-5169	NOT REQUIRED	NOT REQ'D	NOT REQUIRED
F SYNC. LIGHTS (0-480V L-L) WITH REVERSE POWER	106-5171	5N-5510	7C-4062	NOT REQUIRED
G SYNC. LIGHTS (600V L-L) WITH REVERSE POWER	106-5169	7C-4378	7C-4062	NOT REQUIRED

NOTE :ABOVE CHARACTERS D, E, F, & G ARE INCOMPATIBLE WITH THE CONTROL PANEL MODEL NUMBER 9TH CHARACTERS 2, 3, AND 8 (2301 GOVERNORS). REVERSE POWER RELAY SHALL BE SET AT APPROX. 15% OF GENERATOR RATING.
ABOVE CHARACTERS D, E, F, AND G ARE INCOMPATIBLE WITH THE CONTROL PANEL MODEL NUMBER 9TH CHARACTERS 4 AND 5 UNLESS PROVIDED WITH OPTIONAL 7E-2583 LOAD SHARE MODULE (NOT INSTALLED).

11—THE ELEVENTH CHARACTER OF THE MODEL NUMBER SPECIFIES THE PANEL MOUNTED GENERATOR OVERVOLTAGE OR OVERCURRENT RELAY, IF REQUIRED.

MODEL EB3CASA1BXSPICES

RELAY TYPE	RELAY P/N
X NOT REQUIRED	—
1 208 V OVERVOLTAGE THREE PHASE	123-4944
2 240 V OVERVOLTAGE THREE PHASE	123-4945
3 416 V OVERVOLTAGE THREE PHASE	123-4946
4 480 V OVERVOLTAGE THREE PHASE	123-4947
5 600 V OVERVOLTAGE THREE PHASE	126-0558
6 3 PHASE OVERCURRENT RELAY	112-7959

NOTE: ABOVE CHARACTERS #1, #2, #3, #4, #5 AND #6 ARE NOT COMPATIBLE WITH F AND G OF THE TENTH CHARACTER.
OVERVOLTAGE AND OVERCURRENT RELAY PICK-UP SETTINGS SHALL BE SET AT ITS MAXIMUM VALUE.

Ref.	Part number	Description	Qty	Code	Group page
Parts list rows are not synced on this VPS for SEBP2265/SEBP22650006 yet.					

103-1582 CHART-CONTROL PANEL

1031582 CHART-CONTROL PANEL-PART 7 OF 9

Drawing 1 of 1

12—THE TWELFTH CHARACTER OF THE MODEL NUMBER SPECIFIES THE STARTING AID SWITCH OPTION, IF REQUIRED.

MODEL EB3CAS3A1BDSPICE5

	QTY	STARTING AID SWITCH	METER PANEL FILM
X	0	NOT REQUIRED	103-1837
S	1	9D-3721 MANUAL	103-1837
A	1	8C-9812 AUTOMATIC	103-1838

NOTE: ABOVE CHARACTER "A" PERMITS INJECTION OF ETHER INTO ENGINE AFTER CRANK TERMINATION IF JACKET WATER TEMPERATURE IS LESS THAN 70°F (52°C)

13—THE THIRTEENTH CHARACTER OF THE MODEL NUMBER SPECIFIES THE PANEL ILLUMINATION LIGHT GROUP AND AUXILIARY RELAY OPTIONS, IF REQUIRED.

MODEL EB3CAS3A1BDSPICE5

	QTY	LAMP HOUSING AS	LAMP	SWITCH	PLUG BUTTON	RELAY	SOCKET
X	0	NOT REQUIRED	NOT REQUIRED	NOT REQUIRED	NOT REQUIRED	—	—
	2	NOT REQUIRED	NOT REQUIRED	NOT REQUIRED	5P-4835	—	—
P	2	7G-9730	7N-5876	—	NOT REQUIRED	—	—
	1	—	—	8D-2676	NOT REQUIRED	3N-5714	4W-8787

14—THE FOURTEENTH CHARACTER OF THE MODEL NUMBER SPECIFIES THE NUMBER OF 24VDC STARTING MOTORS PROVIDED ON THE PACKAGE GENERATOR SET, TO BE CONTROLLED BY THE PANEL.

MODEL EB3CAS3A1BDSPICE5

		QTY	STARTER MOTOR MAGNETIC SWITCH(S)	CIRCUIT BREAKER PART #	
				3114 & 3116 PRIME GENSETS (REF.MODEL # CHARACTER 5)	ALL OTHER GENSETS
1	SINGLE STARTING MOTOR	1	9X-8124	9H-1958	1N-9770
2	DUAL STARTING MOTORS	2	9X-8124	—	—
		1	—	—	9H-1958

15—THE FIFTEENTH CHARACTER OF THE MODEL NUMBER SPECIFIES THE COOLANT LOSS SENSOR OPTION, IF REQUIRED.

MODEL EB3CAS3A1BDSPICE5

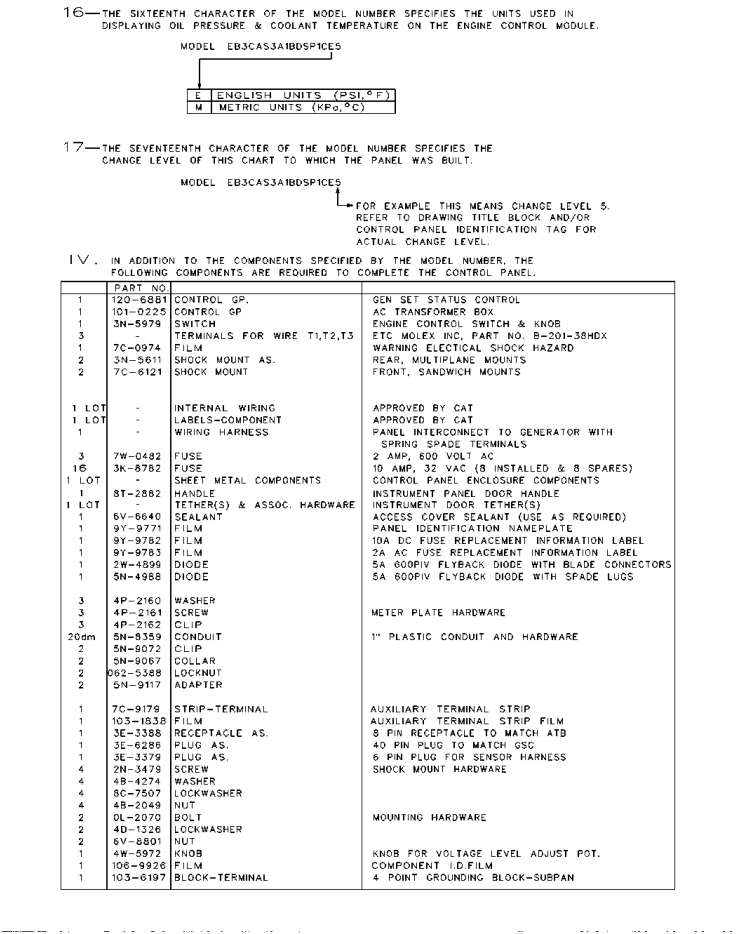
	HARNESS CONNECTOR
X	NOT REQUIRED
C	3E-3367

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103-1582 CHART-CONTROL PANEL

1031582 CHART-CONTROL PANEL-PART 8 OF 9

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103-1582 CHART-CONTROL PANEL

1031582 CHART-CONTROL PANEL-PART 9 OF 9

Drawing 1 of 1

- GENERAL REQUIREMENTS
1.

ALL CONTROL PANELS SHALL CONTAIN THE APPROPRIATE SPACE,WIRING,HOLES,ETC. TO SUPPORT THE FIELD INSTALLATION OF ANY OPTION LISTED ON THIS CHART. REFER TO DIMENSIONAL DRAWINGS 102-8774 OR 102-6300 FOR GENERAL ENCLOSURE DIMENSIONS.
2.

THE COMPLETED CONTROL PANEL SHALL BE FINISHED PAINTED CATERPILLAR YELLOW,IE2139,WITH THE INSTRUMENT DOOR PAINTED FLAT BLACK.
3.

A SUPPLIER NAMEPLATE WILL BE ATTACHED INSIDE THE PANEL. 103-1582 AND THE CONTROL PANEL MODEL NUMBER SHALL BE STAMPED ON THIS NAMEPLATE, ALONG WITH THE DATE CODE.
4.

A COMPLETE SET OF CAT DRAWINGS INCLUDING OUTLINE DRAWING, WIRING DIAGRAMS, SCHEMATIC DIAGRAMS,INTERCONNECT DIAGRAM SHALL BE PACKED WITH EACH CONTROL PANEL.
5.

STANDARD HARDWARE FASTENERS USED FOR SHEETMETAL TO SHEETMETAL SECUREMENT SHALL BE TORQUED TO THE VALUES GIVEN BELOW. IN ADDITION TYPE B LOCTITE SEALANT, AS SPECIFIED BY IE2200, SHALL BE USED EXCEPT ON INSTRUMENT PANEL DOOR FASTENERS.

SCREW SIZE (INCH)	STANDARD HARDWARE			
	NEWTON-METERS		FOOT-LBS	
	MIN	MAX	MIN	MAX
4-40	0.37	0.53	0.3	0.4
6-32	0.69	0.98	0.5	0.7
8-32	1.41	2.01	1.0	1.5
10-32	2.35	3.36	1.7	2.5
1/4-20	5.70	8.14	4.2	6.0
5/16-18	10.44	14.91	7.7	11.0
3/8-16	18.03	25.76	13.3	19.0
7/16-14	28.48	40.68	21.3	30.0
1/2-13	42.71	61.02	31.5	45.0
9/16-12	62.65	89.50	46.2	66.0
5/8-11	85.28	126.11	66.1	93.0
3/4-10	142.38	203.40	105.0	150.0
7/8-9	191.74	273.91	141.4	202.0

- CATERPILLAR REFERENCE DRAWINGS
- 103-1584 CHANGE 05 INSTRUCTIONS

Ref.	Part number	Description	Qty	Code	Group page
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