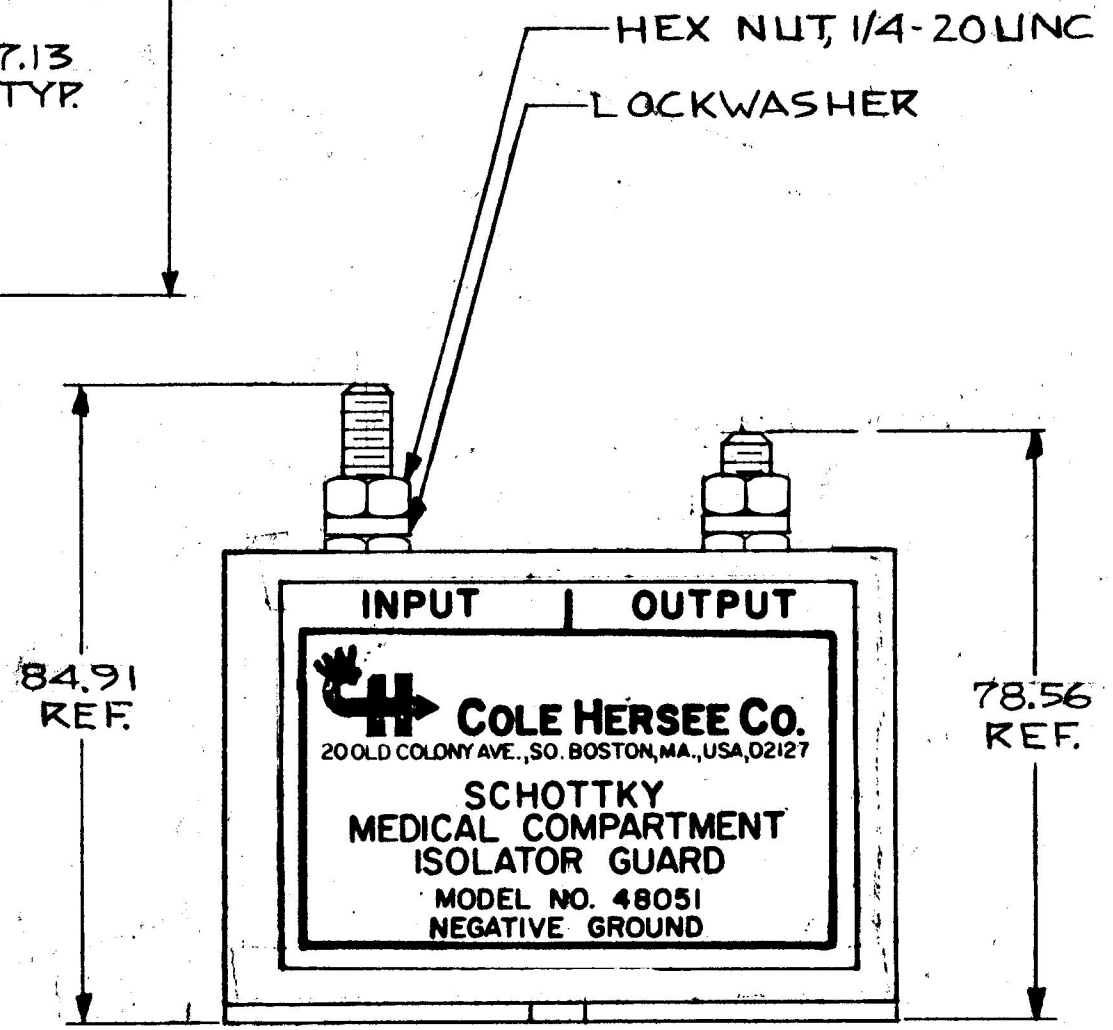
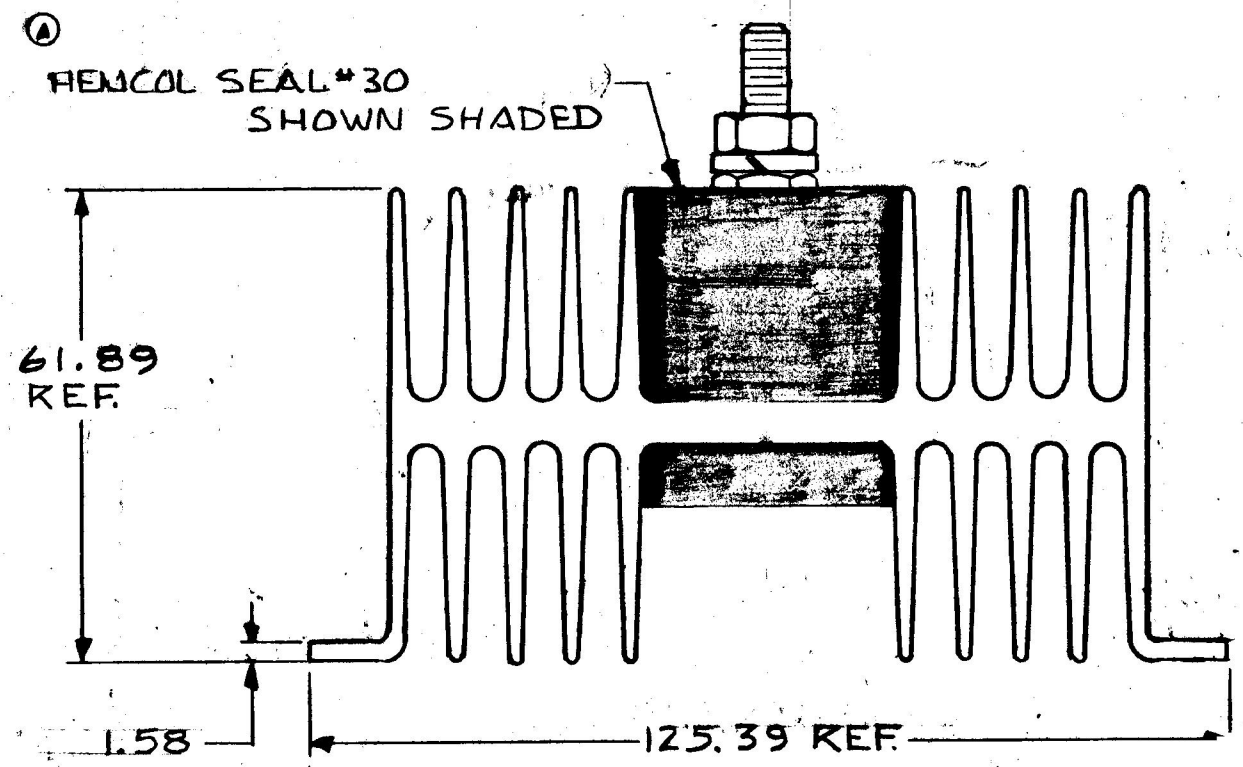
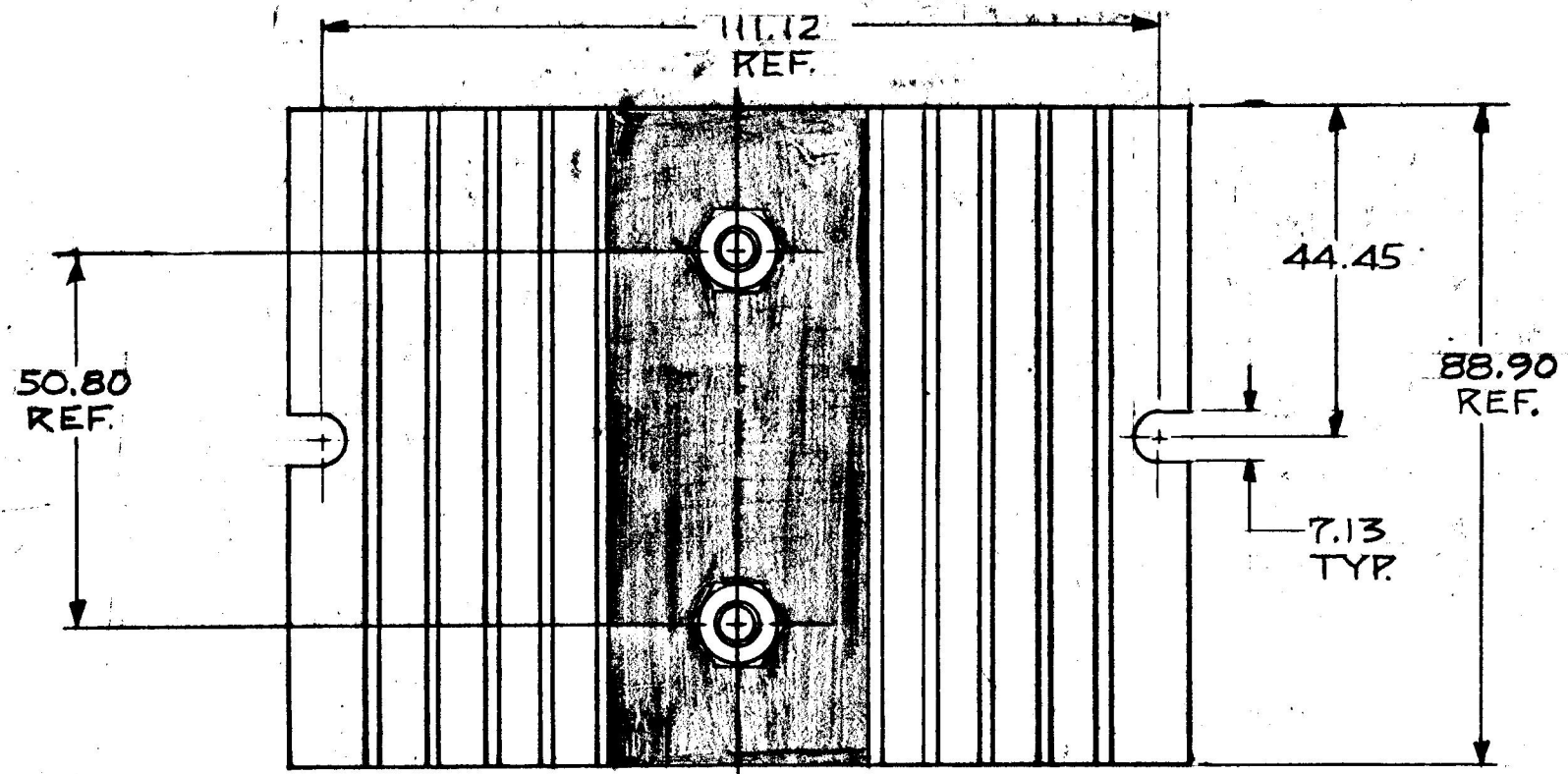


MM	IN
7.13	.281
17.92	.312
44.45	1.750
50.80	2.000
61.89	2.437
78.56	3.093
84.91	3.343
88.90	3.500
125.39	4.937
1.58	.062
111.12	4.375



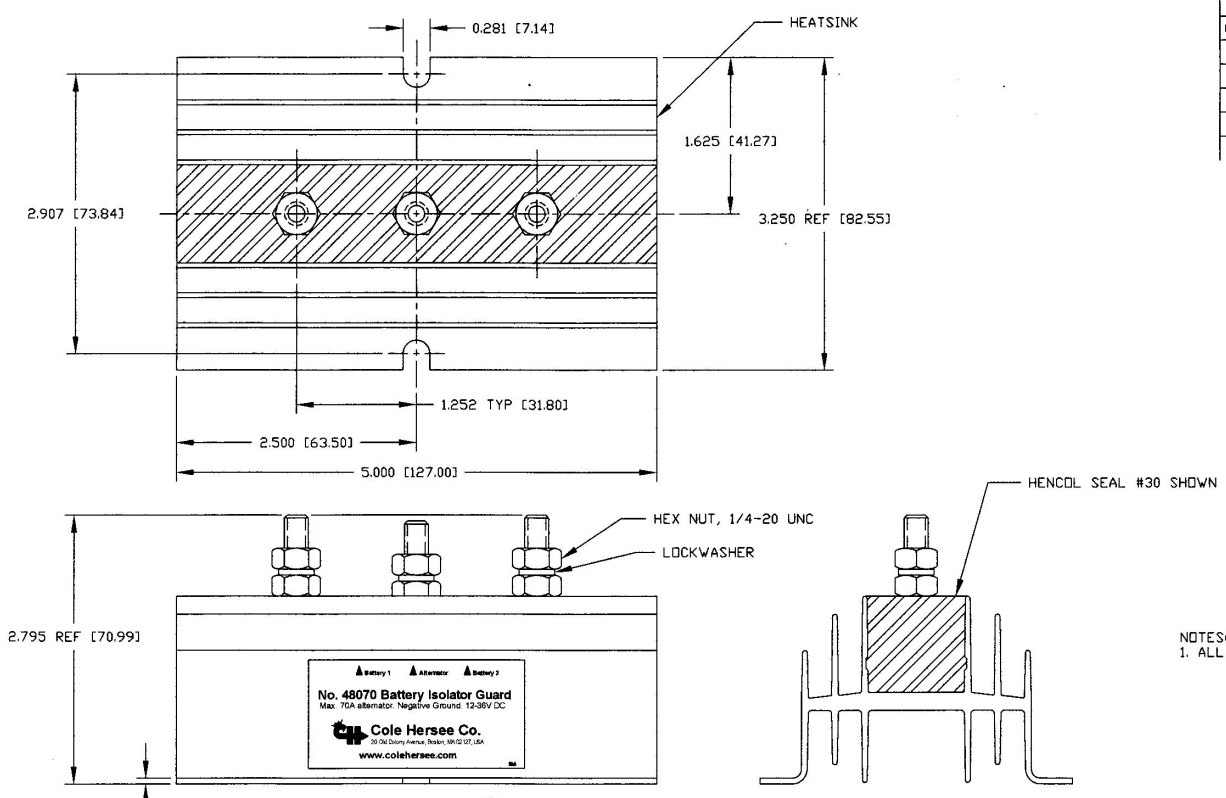
NOTE
F. ALL STEEL PARTS PLATED

DO NOT SCALE

LET.	WAS	DATE	BY	LET.	WAS	DATE	BY	MATERIAL	DRAWN	CHECKED	APPR'D.	SCALE	DATE DRAWN
									DPS	RJA		1:1	7-27-81
				B	ECN 25623	8/17/94	IF	FINISH	Cole Hersee Co. 20 OLD COLONY AVENUE, SOUTH BOSTON, MA, U.S.A. 02127				DATE BLUEPRINT
				A	REVISED NOTE	4/30/84	ups	TOLERANCES					SCHOTTKY ISOLATOR GUARD 75 AMPS
					LSM	3/21/82	MF	DECIMAL ±.010 METRIC ±.25					

METRIC

COLE-HERSEE CO.
EX 1938Z



Revision Control Record

Rev.	Description of Change	ECN No.	Date
B	NEW LABEL	01273	5/16/01
C	BATTERY 2 WAS BATTERY 1	03626	11/18/03

NOTES:
1. ALL STEEL PARTS PLATED

0.060 [1.52]

Legend:

- UNLESS OTHERWISE SPECIFICALLY NOTED, THE FOLLOWING ARE DEFAULT DIMENSIONS:
 - 2-Place Decimal Dimensions = .001"
 - 3-Place Decimal Dimensions = .0005"
 - Angular Dimensions = ±1.0 Deg.
 - Radius = Refer to applicable English Dimensional Tolerance
 - NOTE: All dimensions are ASME-Compliant.
- Dimensional Units: All dimensions are expressed in inches unless otherwise specified.
- DATE: In an Attachment - Non-Tennesson Subjects Dimensional System for identification purposes only.

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DO NOT SCALE: Dimensional variation may occur during printing/ reproduction.

Basic Characteristics:

- Critical Characteristics, relating to Safety and/or Regulatory Compliance
- Significant Characteristics relating to Process Control (SPC)
- Key Characteristics relating to Form - Fit - Function as defined by Cole Hersee Company and/or the Customer.

Think that the identification of any Characteristics as being "Special" does not alter the requirement that ALL specified dimensions & tolerances must be met.

Engineering: N/A

Scale: 1:1

Drawn By: DPS

Date: 1/27/83

Responsible Engineer: N/A

Page: Pg. 1 of 1

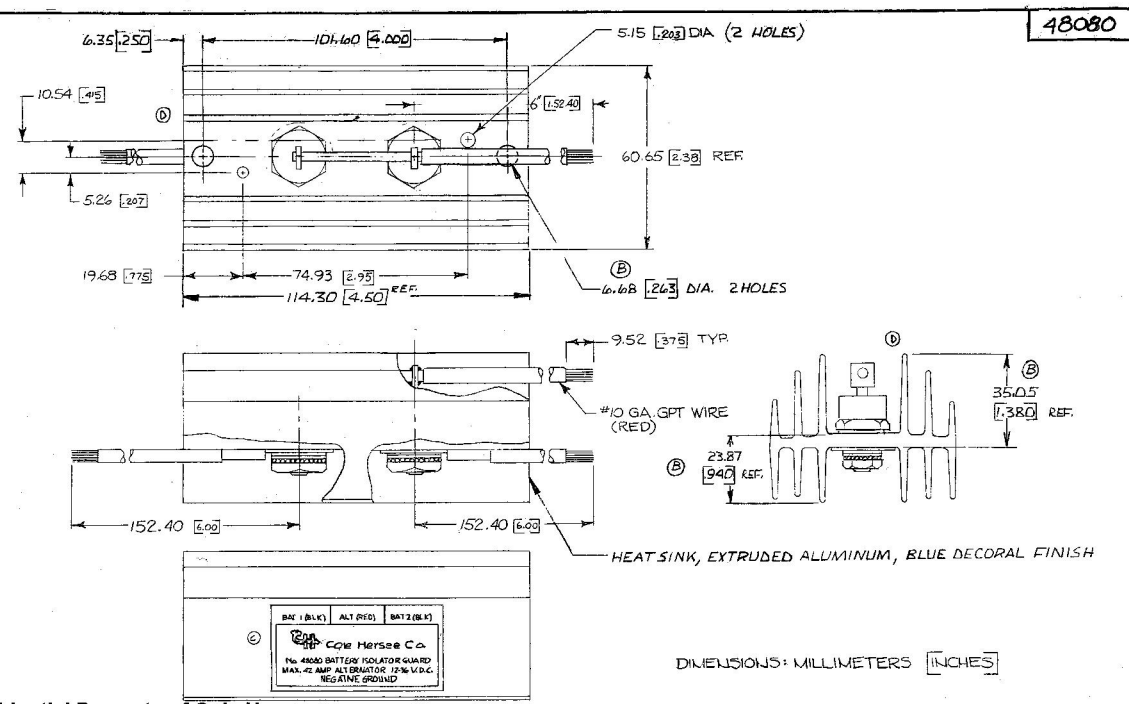
Cole Hersee Co.
30 Old Colony Ave., South Boston, MA, 02127
Phone 617-569-2100 Web www.colehersee.com

Description: 70 AMP BATTERY ISOLATOR GUARD

Drawing / Part No.: 48070

Current Rev.: C

EX-17312



Confidential Property of Cole Hersee

42 AMP @ 12-36 VDC

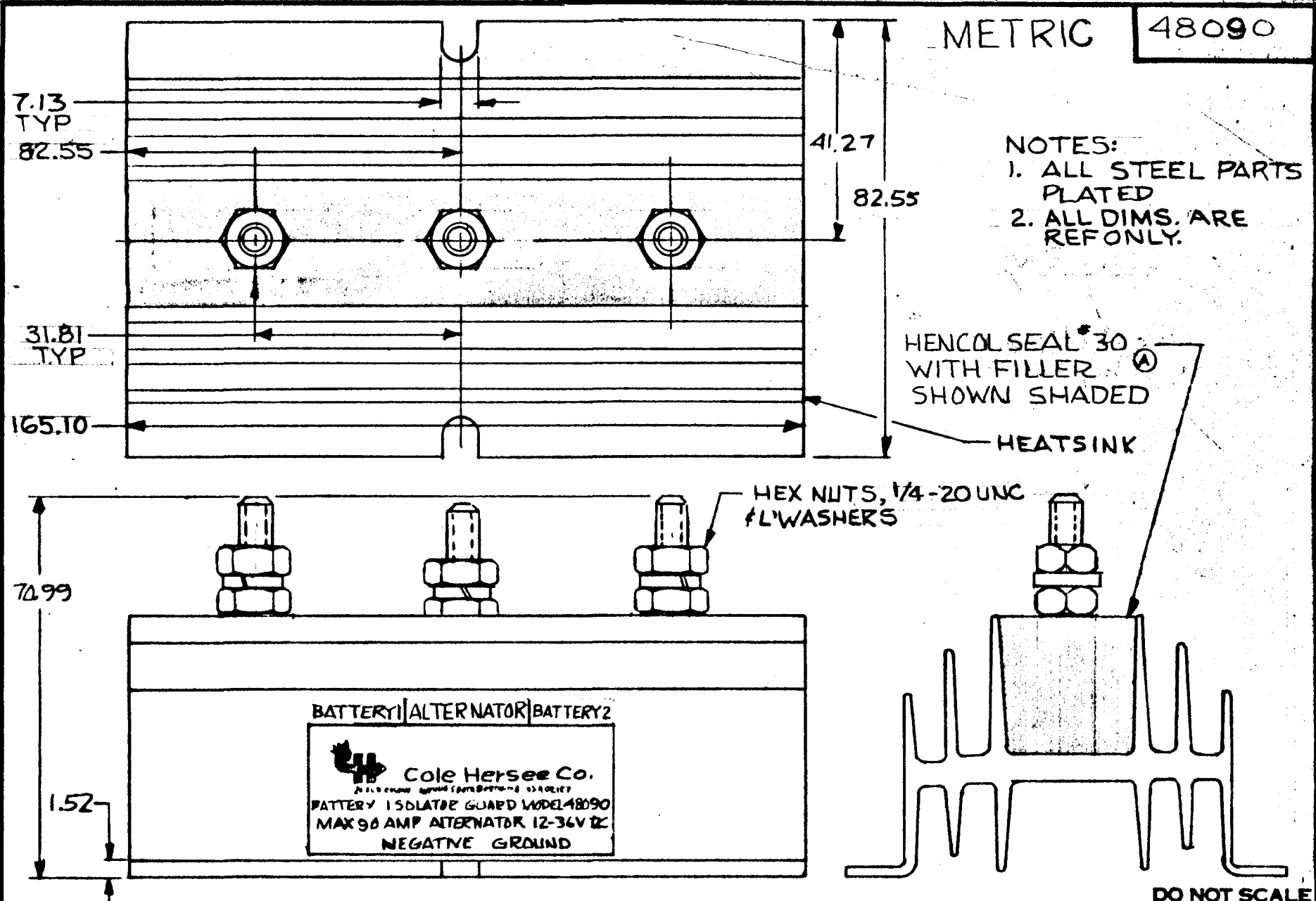
LET	WAS	DATE	BY	LET	WAS	DATE	BY	MATERIAL	QTY	REMARKS	SCALE

DATE ORDER: 9-19-75
DATE RELEASED:
DATE MANUFACTURED:
DATE OF THIS DRAWING: 9-19-75
DATE OF LAST REVISION:
DATE OF THIS DRAWING: 9-19-75
DATE OF LAST REVISION:
DATE OF THIS DRAWING: 9-19-75
DATE OF LAST REVISION:
DATE OF THIS DRAWING: 9-19-75
DATE OF LAST REVISION:

48080

MM	IN
1.52	.060
7.13	.281
31.81	1.252
41.27	1.625
82.55	3.250
70.99	2.795
82.55	3.250
165.10	6.500

EX 20328

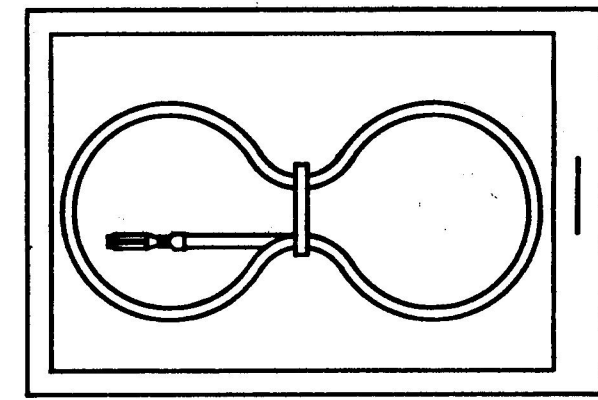
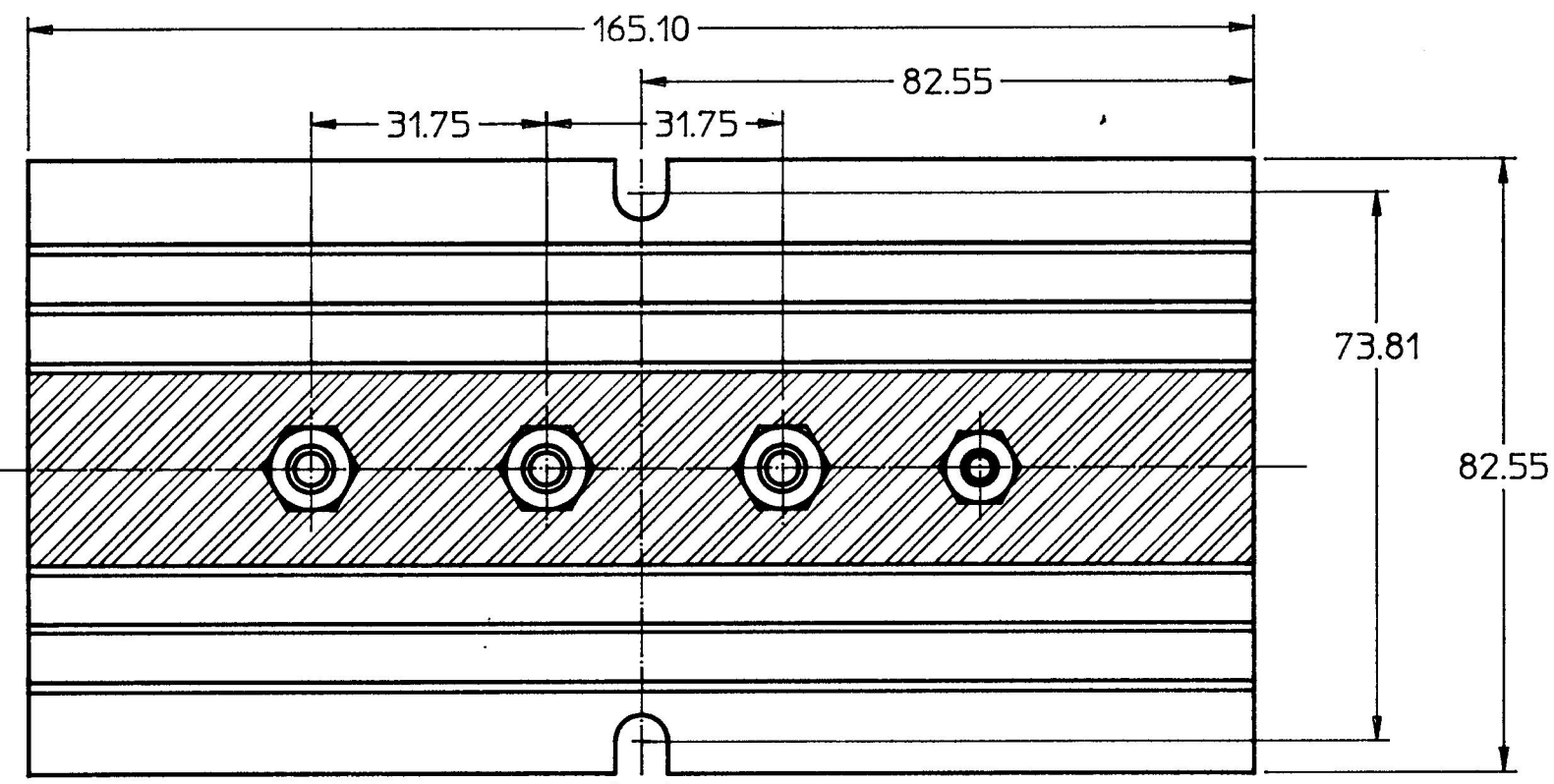


LET.	WAS	DATE	BY	LET.	WAS	DATE	BY	MATERIAL	DRAWN	CHECKED	APPR'D	SCALE	DATE DRAWN
									DP	RF	B	1:1	9/13/83
								FINISH	CH Cole Hersee Co. <small>20 OLD COLONY AVENUE SOUTH BOSTON MA U.S.A. 02117</small>				DATE BLUEPRINT
								TOLERANCES					90 AMP BATTERY ISOLATOR GUARD
				A	REV. NOTE	4/27/84	DP	DECIMAL ±					
					ISSUED	3/9/84	RF	METRIC ±					

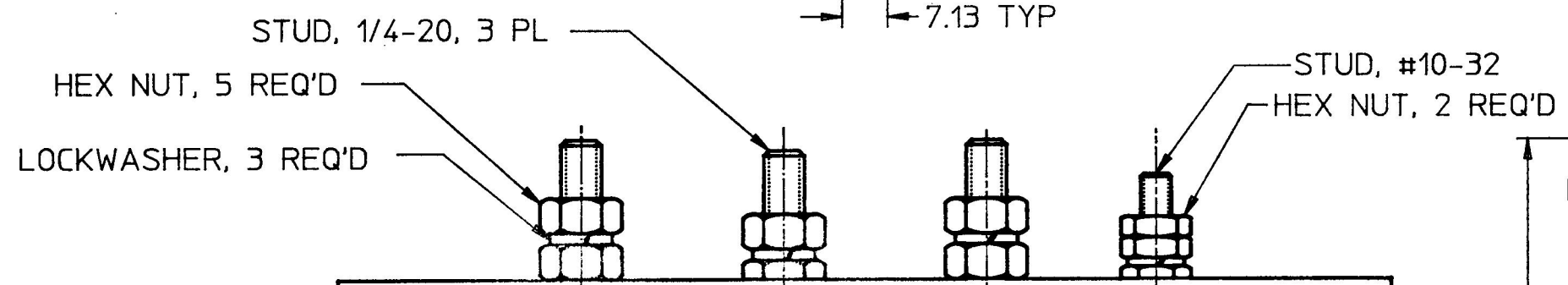
CH-188(4-78)

48092

MM	IN
1.52	0.060
7.13	0.281
31.75	1.250
72.14	2.840
73.81	2.906
82.55	3.250
165.10	6.500
1828.80	72.000
1 mm ²	16 ga

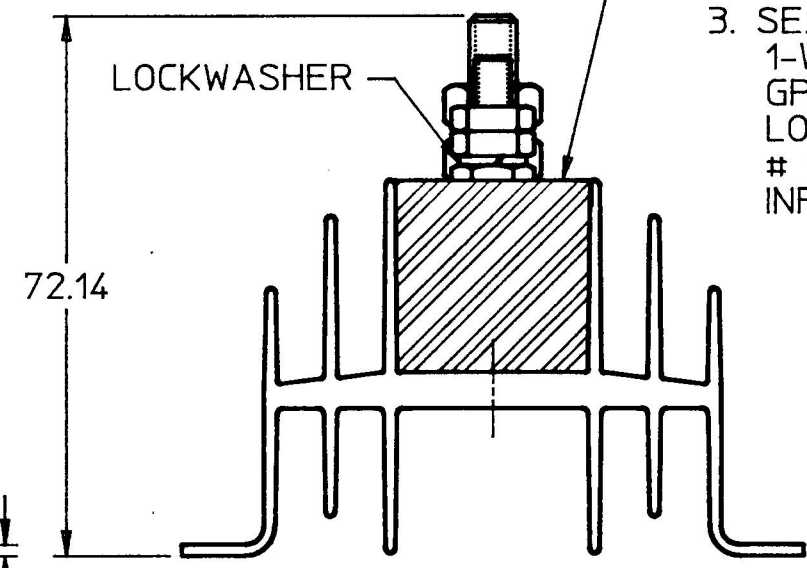
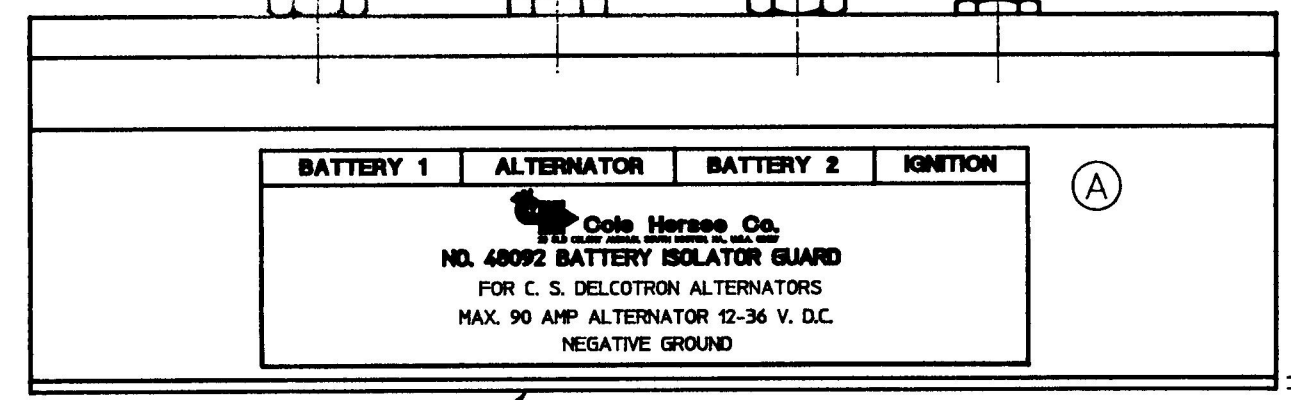


BAGGED PARTS
SCALE 1:2
NOTE 3
SHIPPED LOOSE



HENCOL SEAL #30
SHOWN HATCHED

NOTES:
1. ALL STEEL PARTS PLATED
2. ALL DIM'S REF. ONLY
3. SEALED POLY BAG WITH,
1-WIRE LEAD, 1.0mm²,
GPT, YELLOW, 1828.80
LONG WITH PACKARD TERM.
12015824 ATTACHED AND
INFORMATION SHEET.



HEATSINK, BLUE

1.52

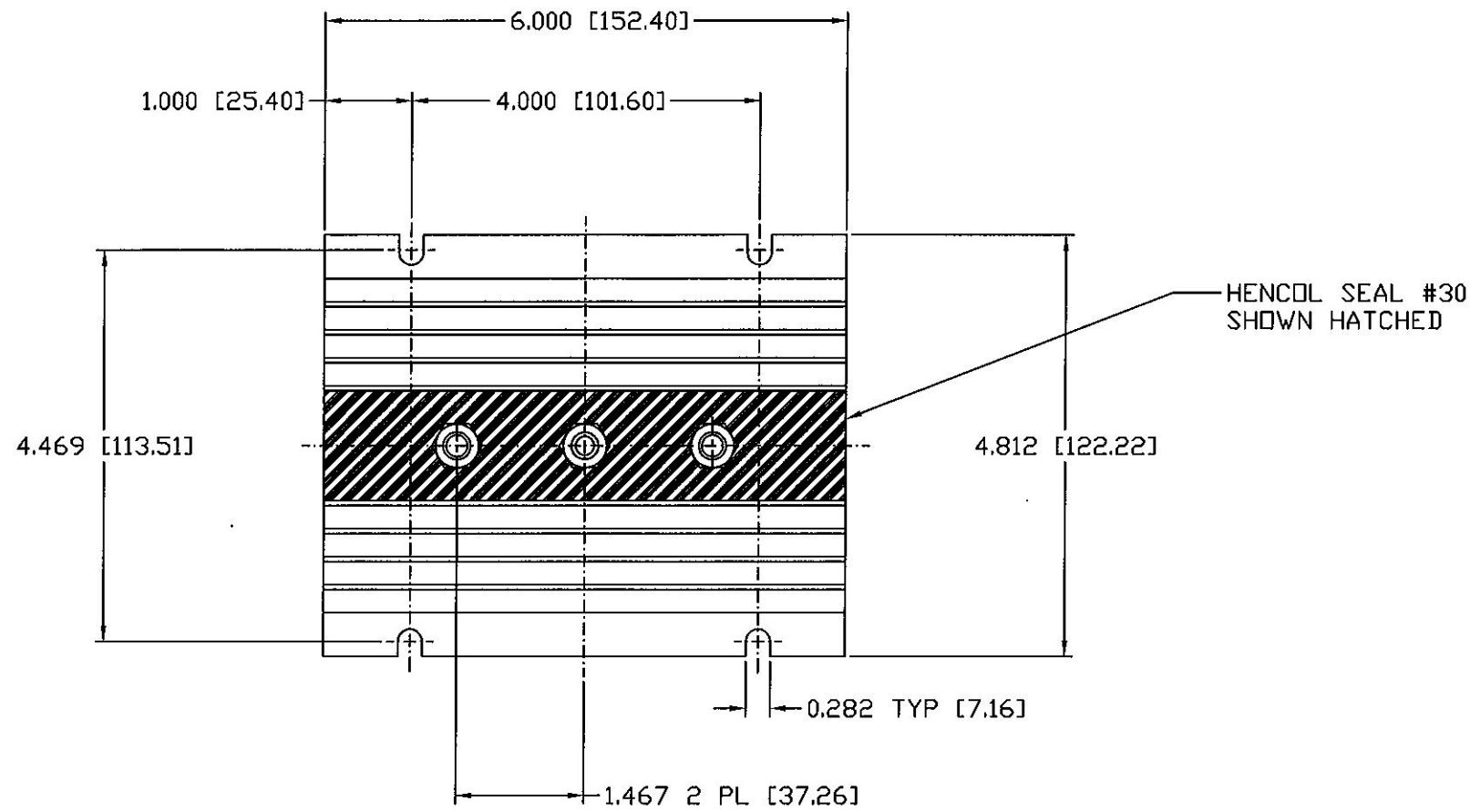
DO NOT SCALE
CAD GENERATED

METRIC

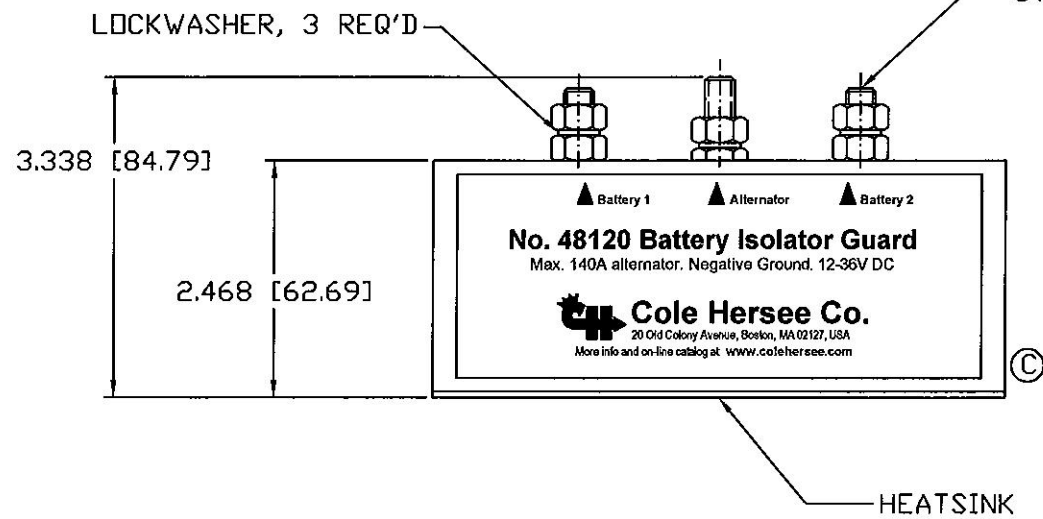
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								FINISH	DPS			1:1		9/30/88
				A	ECN 24012	7/27/89	JP	TOLERANCES DECIMAL ± ANGLE ±					DATE BLUEPRINTED	
					ISSUED			BATTERY ISOLATOR GUARD FOR C S DELTRON ALTERATOR				48092		

Revision Control Record

Rev.	Description of Change	ECN No.	Date
C	NEW LABEL	01274	05/15/01
D	CHANGED 120 TO 140 AMP	10236	06/02/10

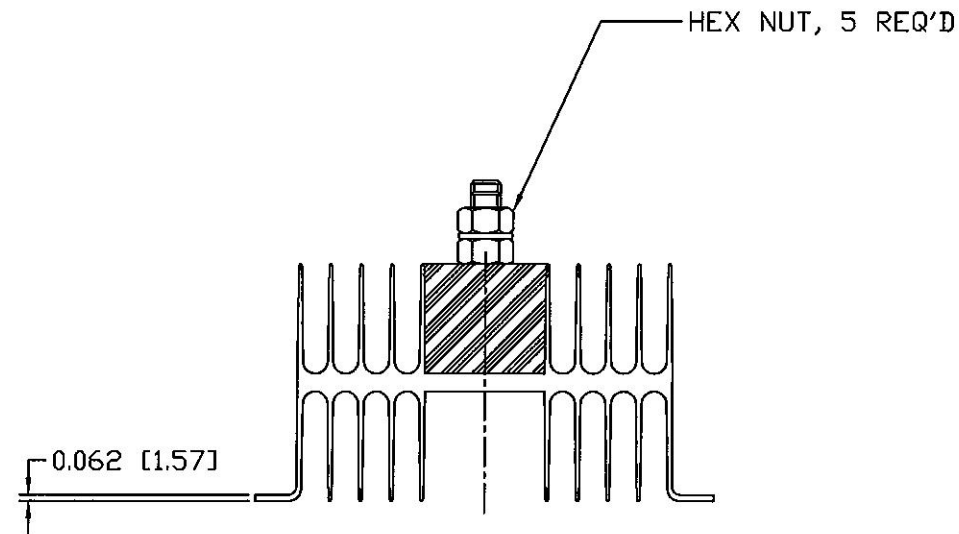


HENCOL SEAL #30
SHOWN HATCHED



STUD, 5/16-18, 3 PL

LOCKWASHER, 3 REQ'D



HEX NUT, 5 REQ'D

NOTES:
1. ALL STEEL PARTS PLATED
2. ALL DIMENSIONS REFERENCE ONLY

Tolerances Unless otherwise specifically noted, the following are default tolerances:
 • 2-place Decimal Dimensions +/- .02"
 • 3-place Decimal Dimensions +/- .005"
 • Angular Dimensions +/- 1.0 Deg.
 • Metric: Refer to equivalent English Dimension Tolerance
 >>> NOTE: All tolerances are Non-Cumulative. <<<

Dimensional Units All dimensions are expressed in inches except those shown in brackets (xxx) are expressed in millimeters

"REF." or an Asterisk (*) = Non-Toleranced Reference Dimension, shown for clarification purposes only.

Used On or Ref.: Scale: **1:2**

PROPRIETARY INFORMATION This Engineering Drawing, and the information contained herein, is proprietary to Cole Hersee Company and may not be disclosed, re-produced, or in any other way transferred or communicated to any other party without the express written consent of an authorized representative of Cole Hersee Company.

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DO NOT SCALE - Dimensional variation may occur during printing / reproduction.

Drawn By: **DPS** Date Drawn: **1/28/83**

Key for Special Characteristics:

⊠ Critical Characteristic, relating to Safety and/or Regulatory Compliance

X Significant Characteristic relating to Process Control (SPC)

Ⓢ Control Dimension relating to Form - Fit - Function as defined by Cole Hersee Company and/or the Customer

(Note that the identification of any Characteristics as being "Special" does not alter the requirement that ALL specified dimensions & tolerances must be met.)

Responsible Engineer: **N/A** Pg. 1 of 1

Cole Hersee Co.
 20 Old Colony Ave., South Boston, MA, 02127
 Phn: 617-268-2100 Web: www.colehersee.com

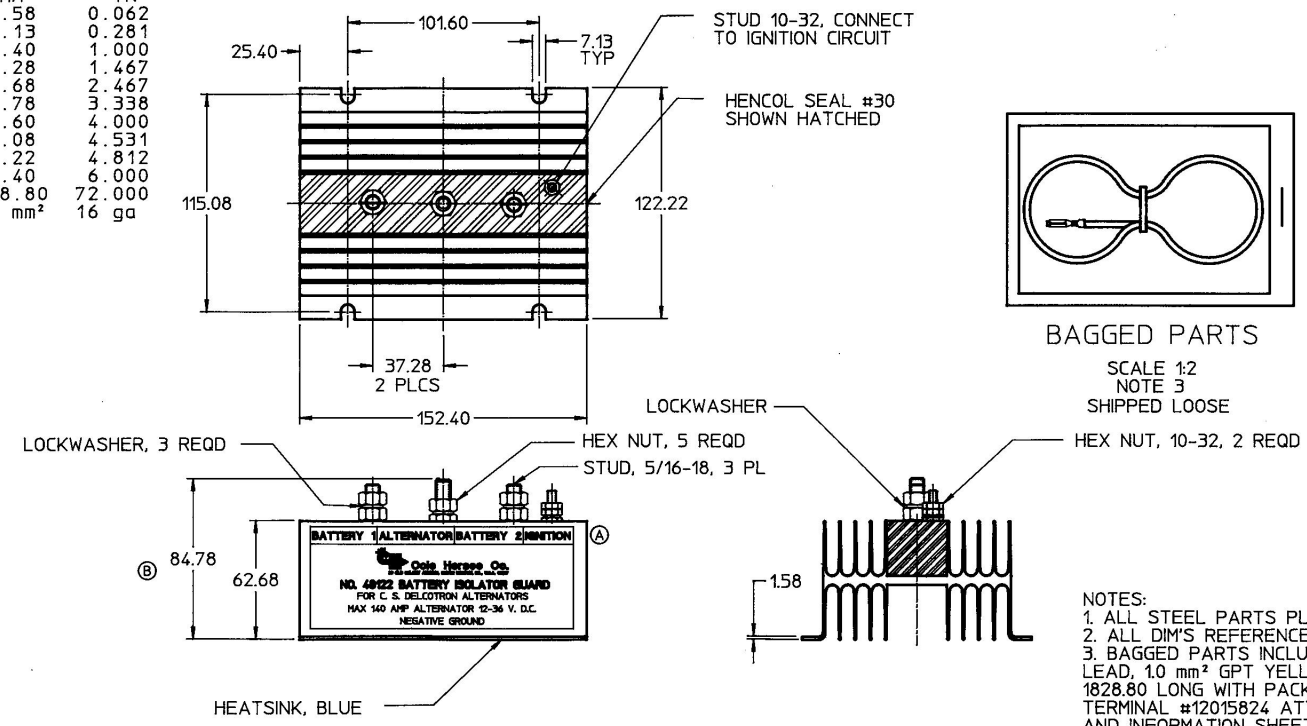
Description: **140 AMP BATTERY ISOLATOR GUARD**

Drawing / Part No.: **48120**

Current Rev.: **D**

48122

MM	IN
1.58	0.062
7.13	0.281
25.40	1.000
37.28	1.467
62.68	2.467
84.78	3.338
101.60	4.000
115.08	4.531
122.22	4.812
152.40	6.000
1828.80	72.000
1.0 mm ²	16 ga



NOTES:
 1. ALL STEEL PARTS PLATED
 2. ALL DIM'S REFERENCE ONLY
 3. BAGGED PARTS INCLUDE 1-WIRE LEAD, 1.0 mm² GPT YELLOW, 1828.80 LONG WITH PACKARD TERMINAL #12015824 ATTACHED AND INFORMATION SHEET.

DO NOT SCALE

Confidential Property of Cole Hersee

METRIC

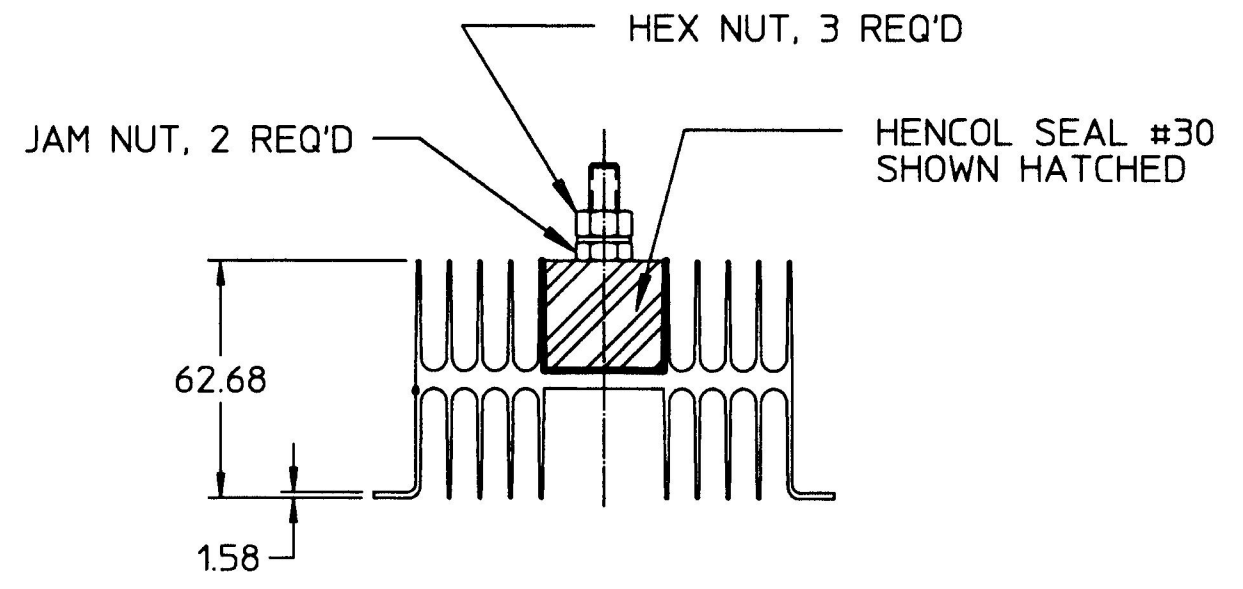
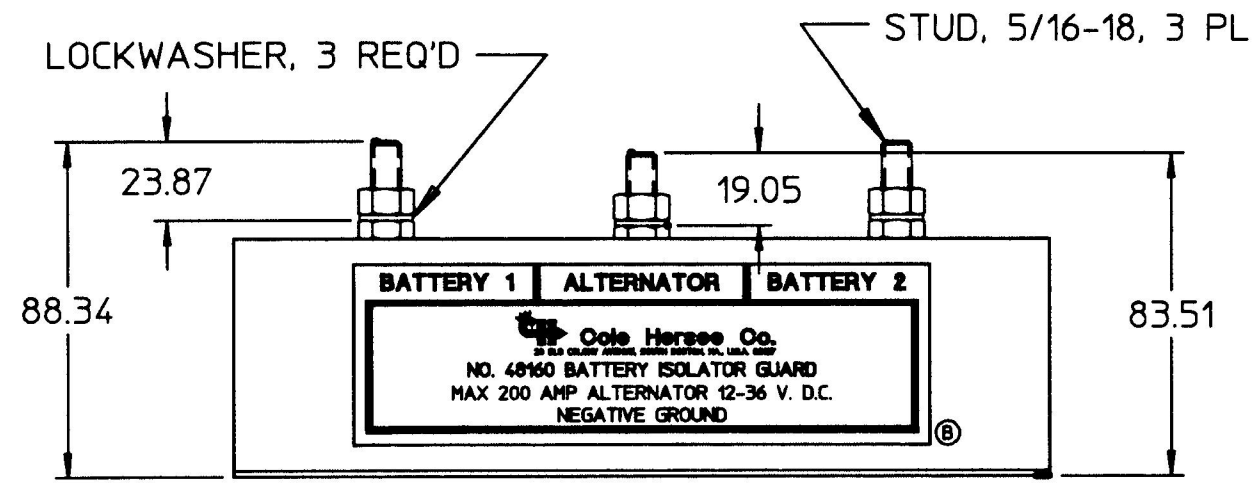
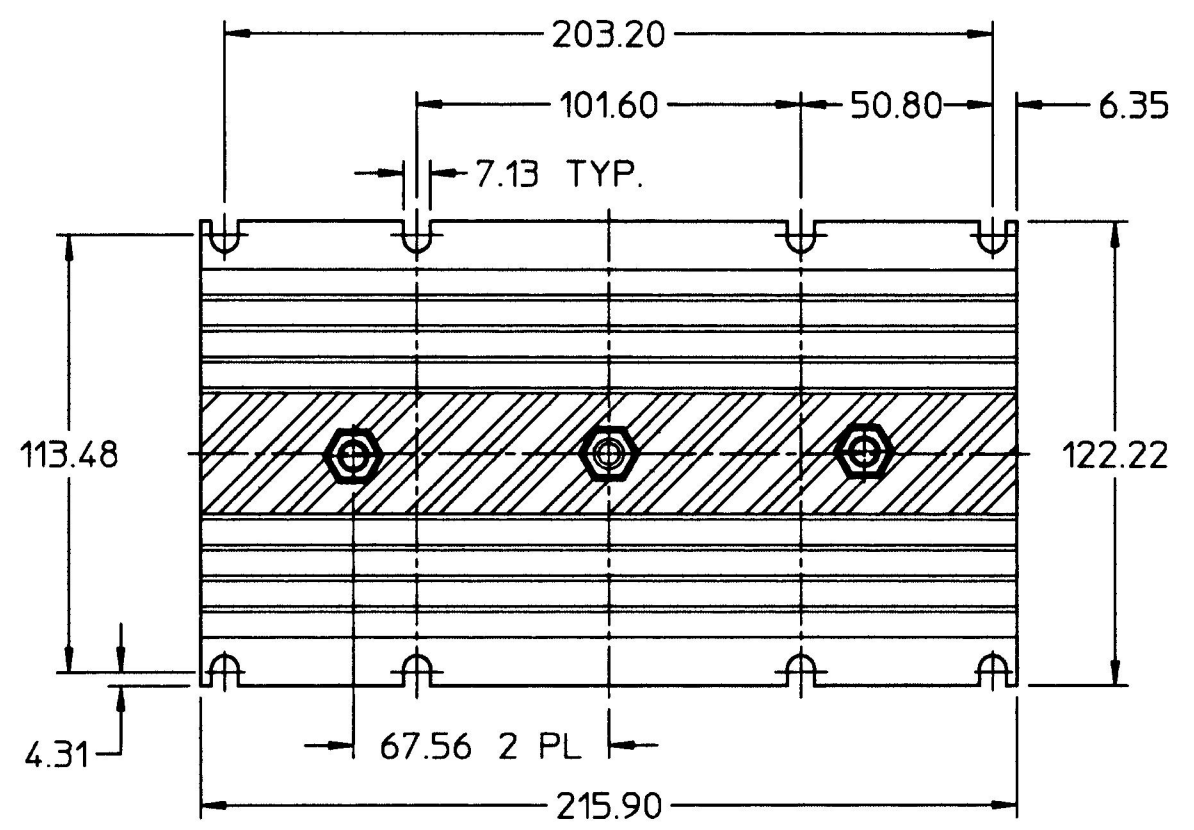
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									DPS			1:2			10/5/88
				B	87.48	12/29/93	BL	FINISH							DATE BLUEPRINTED
				A	EN 2402	7/22/89	JP	TOLERANCES DECIMAL # ANGLE 2							
					ISSUED	2/2/89	AF								

Cole Hersee Co.
 20 OLD COLONY AVENUE, BOSTON, MA, U.S.A. 02127

BATTERY ISOLATOR GUARD FOR C S DELTRON ALTERNATOR


48122

MM	IN
1.58	0.062
4.31	0.170
6.35	0.250
7.13	0.281
19.05	0.750
23.87	0.940
50.80	2.000
62.68	2.467
67.56	2.660
83.51	3.288
88.34	3.478
101.60	4.000
113.48	4.468
122.22	4.812
203.20	8.000
215.90	8.500



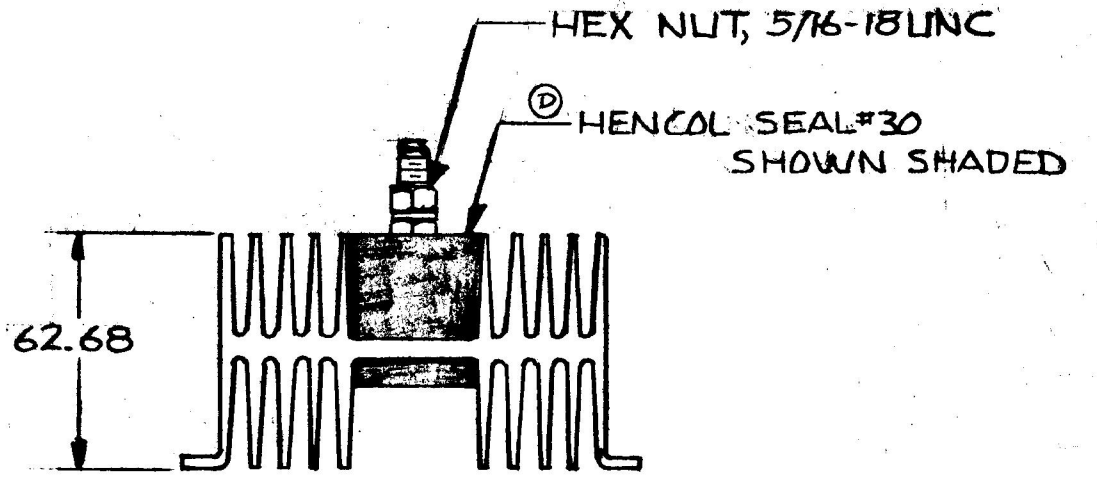
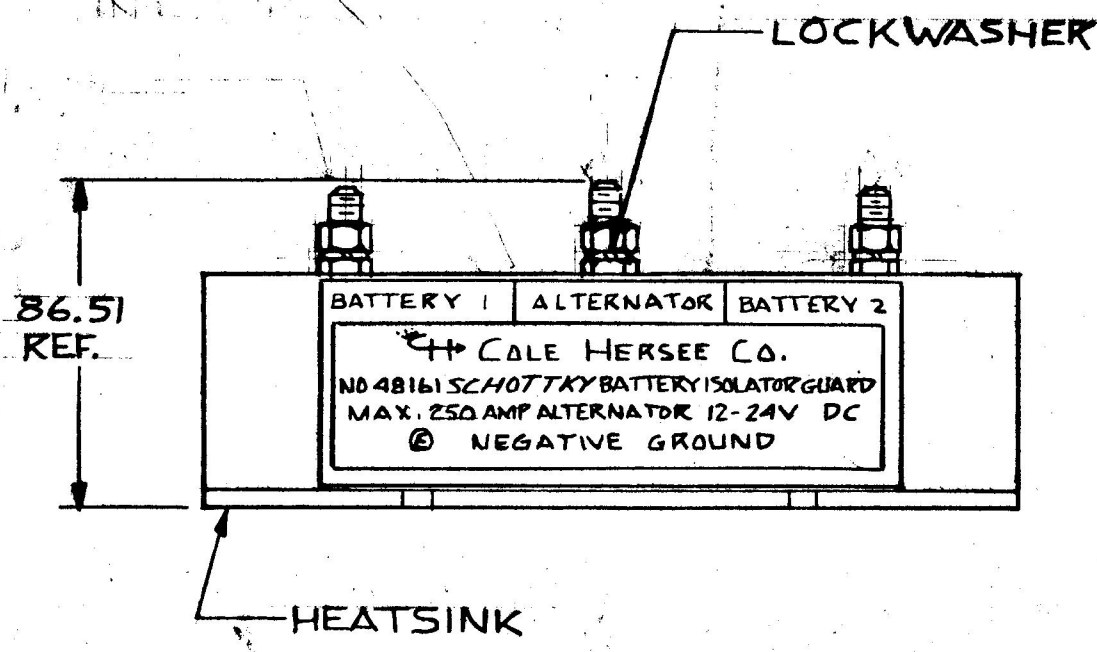
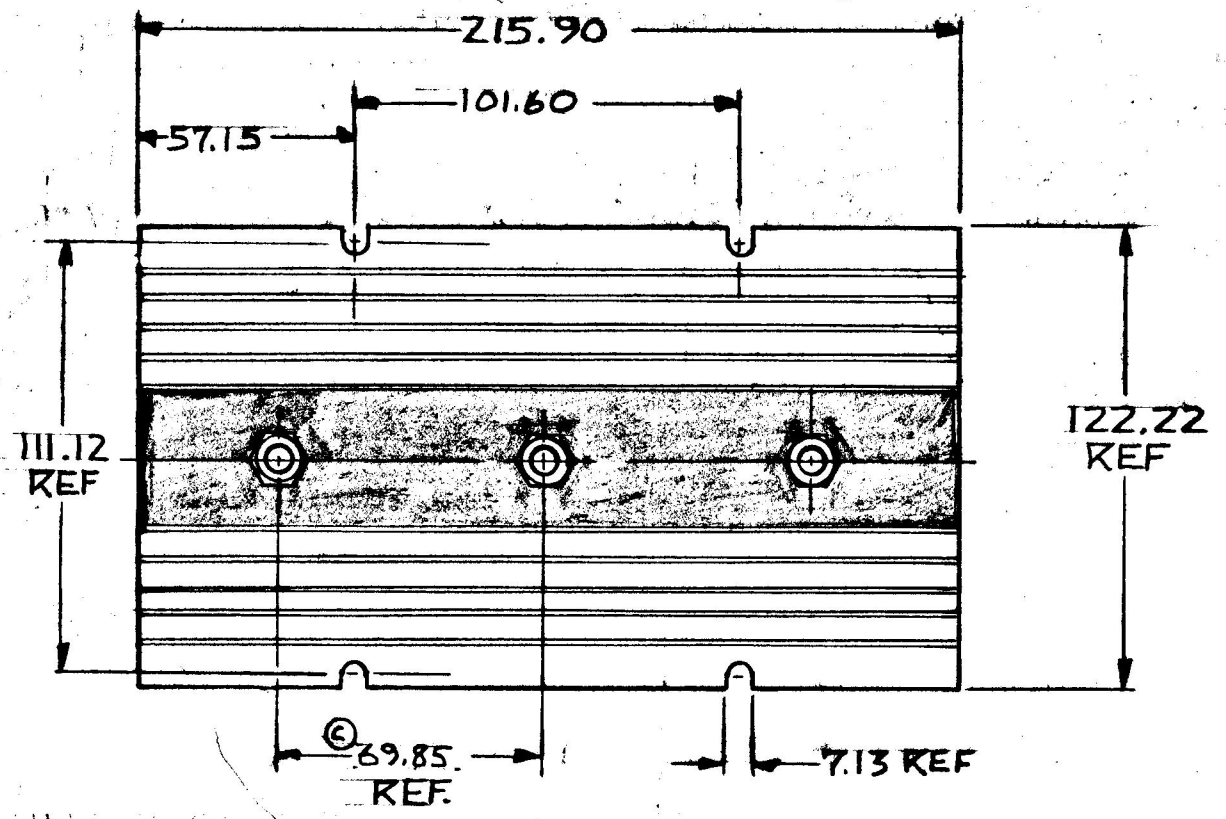
- NOTES:
 1. ALL STEEL PARTS PLATED
 2. ALL DIM'S REF. ONLY

DO NOT SCALE

LET.	WAS	DATE	BY	LET.	WAS	DATE	BY	MATERIAL	DRAWN	CHK	APVD	SCALE	DATE DRAWN
								N/A	LIZ	KE	N/A	1:2	3/10/89
								FINISH	 Cole Hersee Co. 20 OLD COLONY AVENUE, BOSTON, MA., U.S.A., 02127				DATE BLUEPRINTED
				B	ECN #00155	02/02/00	MA	N/A					(A)
				A	ECN 24503 48160-01	8/10/90	RO	TOLERANCES DECIMAL ± N/A ANGLE ± N/A	BATTERY ISOLATOR GUARD FOR C S DELTRON ALTERNATOR				48160
					ISSUED	3/31/89	AF						

MM 17
7.13 281
57.12 2.25
62.68 2.468
86.51 3.406
101.60 4.000
122.22 4.817
215.90 8.500
69.85 2.750
111.42 4.375

COLE-HERSEE CO.
EX19679



NOTE:
ALL STEEL PARTS PLATED

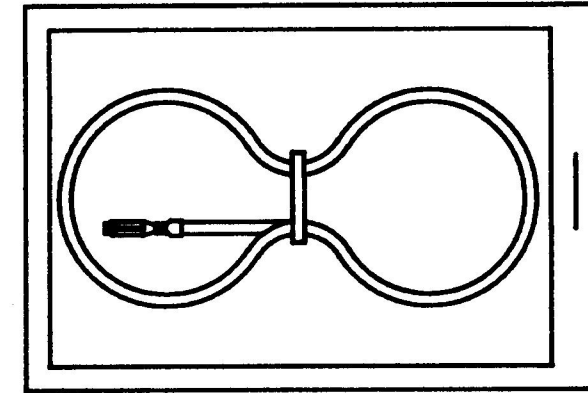
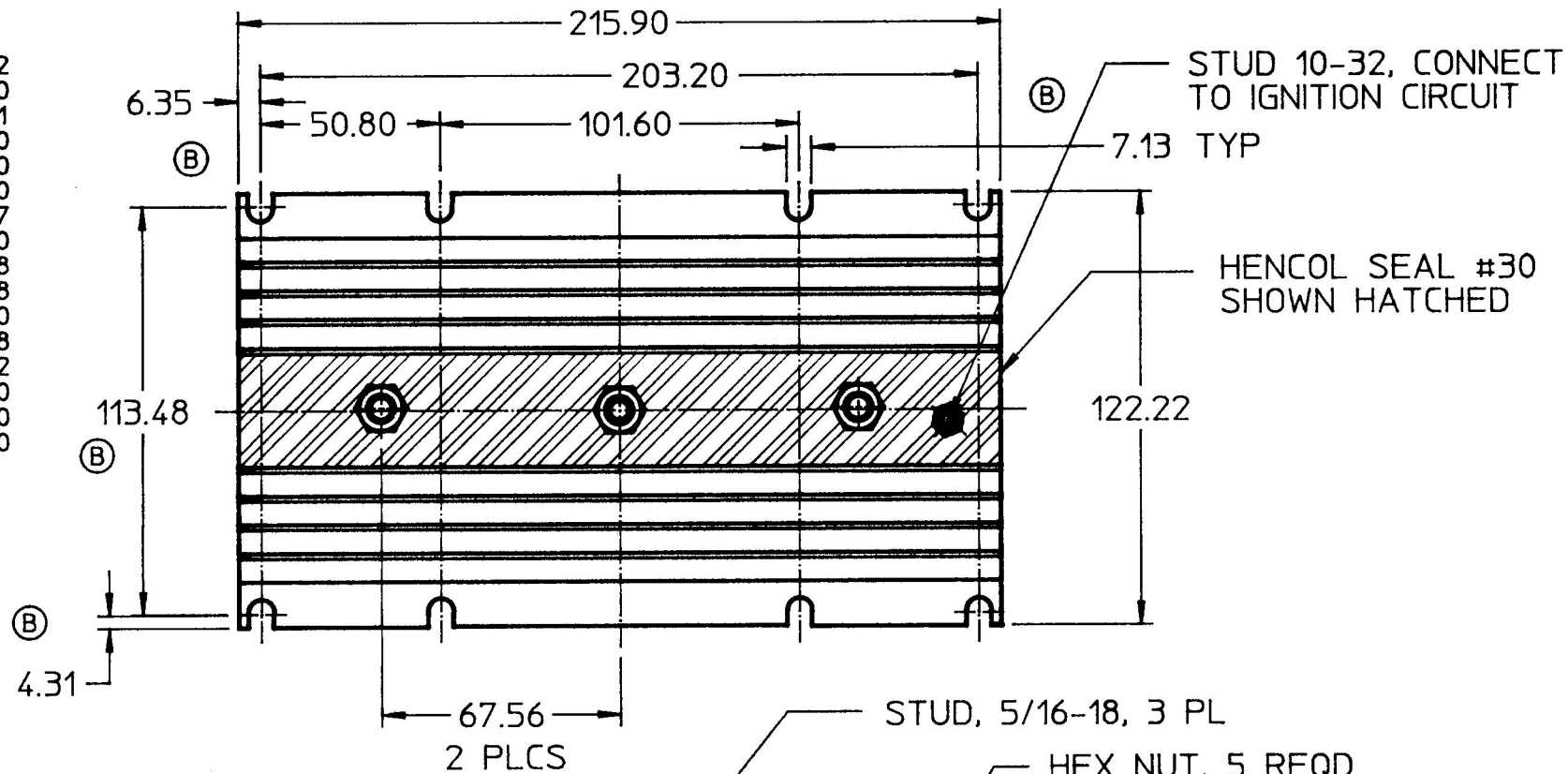
METRIC

DO NOT SCALE

LET.	WAS	DATE	BY	LET.	WAS	DATE	BY	MATERIAL	DRAWN	CHECKED	APPR'D.	SCALE	DATE DRAWN
				E	ECN 23982	3-31-89	JK		PS	RA		1/2:1	8-21-81
				D	REVISED NOTE	1/30/84	PS	FINISH					DATE BLUEPRINT
				C	34.92	9-22-82	PS						
					ISSUED	3/7/82	RJA	TOLERANCES					
				B	REVISED REDRAWN	3-3-82	PS	DECIMAL ±.010 METRIC ±.25					
										 160 AMP SCHOTTKY BATTERY ISOLATOR GUARD		48161	

48162

MM	IN
1.58	0.062
4.31	0.170
7.13	0.281
19.05	0.750
23.87	0.940
50.80	2.000
62.68	2.467
67.56	2.660
83.51	3.288
88.34	3.478
101.60	4.000
113.48	4.468
122.22	4.812
203.20	8.000
215.90	8.500
1828.80	72.000
1.0 mm ²	16 ga



BAGGED PARTS

SCALE 1:2
NOTE 3
(SHIPPED LOOSE)

NOTES:
1. ALL STEEL PARTS PLATED
2. ALL DIM'S REFERENCE ONLY
3. BAGGED PARTS INCLUDE 1-WIRE LEAD, 1.0 mm² GPT YELLOW, 1828.80 LONG WITH PACKARD TERMINAL #12015824 ATTACHED AND INFORMATION SHEET.

DO NOT SCALE
CAD GENERATED

METRIC

LET.	WAS	DATE	BY	LET.	WAS	DATE	BY	MATERIAL	DRAWN	CHK	APVD	SCALE	EX22440	DATE DRAWN
									DPS	JK		1:2		10/5/88
				B	ECN 24800	3/20/91	RO	FINISH						DATE BLUEPRINTED
				A	ECN 24012	7/27/89	JP	TOLERANCES DECIMAL ± ANGLE ±						
					ISSUED									

Cole Hersee Co.
18 OLD COLONY AVENUE SOUTH BOSTON MA, U.S.A. 02117
**BATTERY ISOLATOR GUARD
FOR C S DELTRON ALTERNATOR**

48162

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[DRAGON](#) [LCD MULTI CHARGER](#) [MINI-CHARGER](#) [5V 2.1A](#) [PB320](#) [PB50](#) [PB550 + 4XAA 2700MAH](#) [VC4](#) [POCKET-CHARGER +](#)
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[2XAAA](#) [CL14.4VDC-0.4A](#) [CL14.4VDC-0.7A](#) [CL14.4VDC-1.2A](#) [CL7.2VDC-0.4A](#)