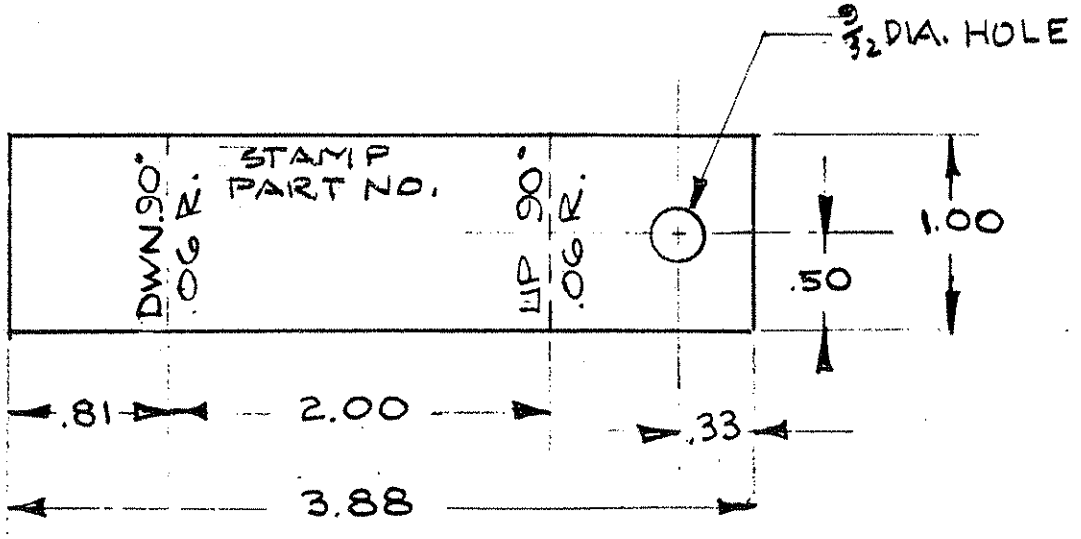
23-9054

PRINT ISSUED		TITLE	PART NO.
		BRACKET, CLAMPING	23-9054
LAST CHG. LTR.	A		SHEET OF

CHG	BY	DATE	WAS

CHG	BY	DATE	WAS
A	PRJ	12-9-68	B Size Drawing

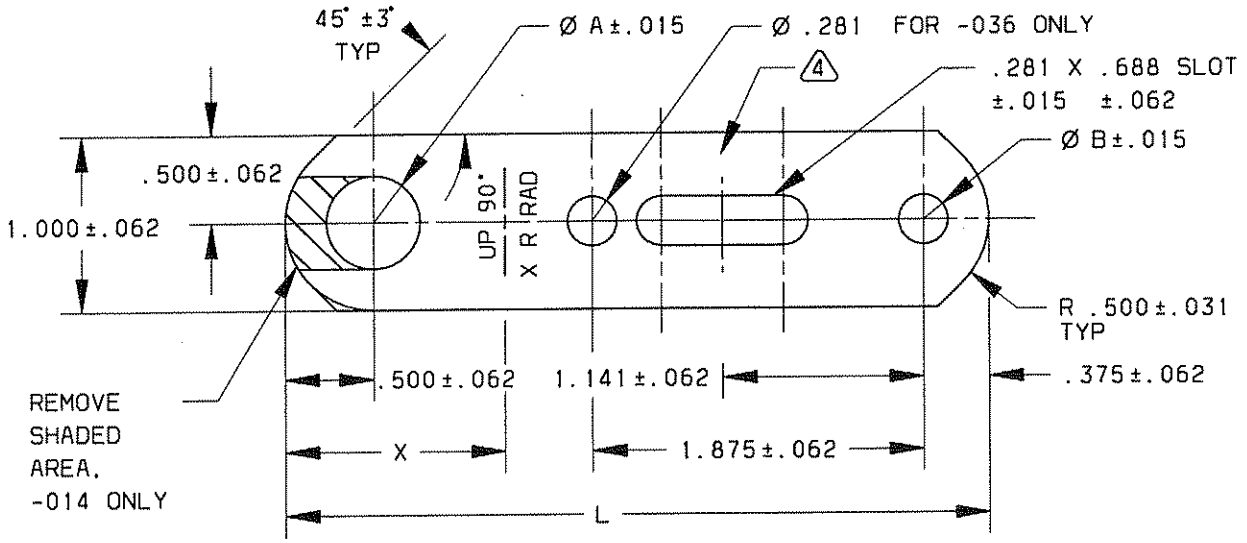


① .063 Thick Aluminum 5052-H32

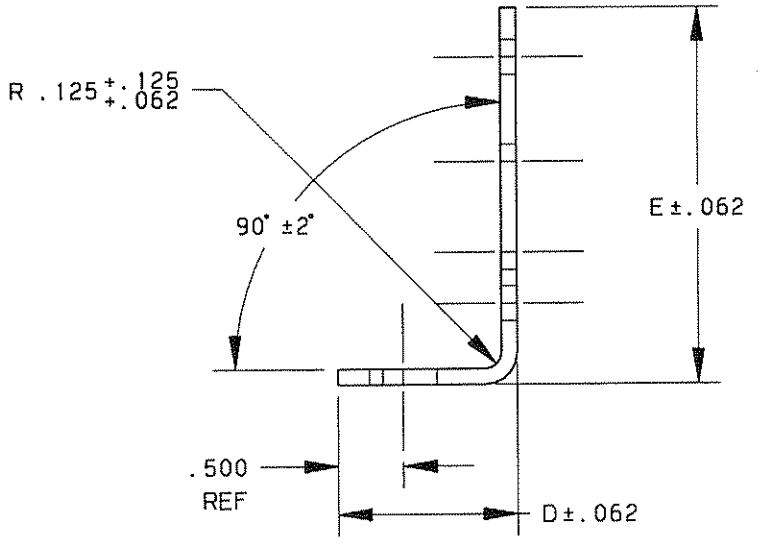
COMPLIED	PRJ	DATE DRAWN		MATERIAL	NEXT ASSY. NO.
APPROVED	K.J.A	12-9-68		①	VEHICLE

Portland 12-16-68 FREIGHTLINER CORPORATION Oregon 97208

DRAWN	LFB	TITLE BRACKET, ANGLE	DRAWING NUMBER 23-09130	
APPRV	DAJ			
DATE	11/04/99	FREIGHTLINER CORPORATION PORTLAND, OREGON	SHEET 1 OF 6	CHG. LTR. BF
CATIA ORIGINAL				



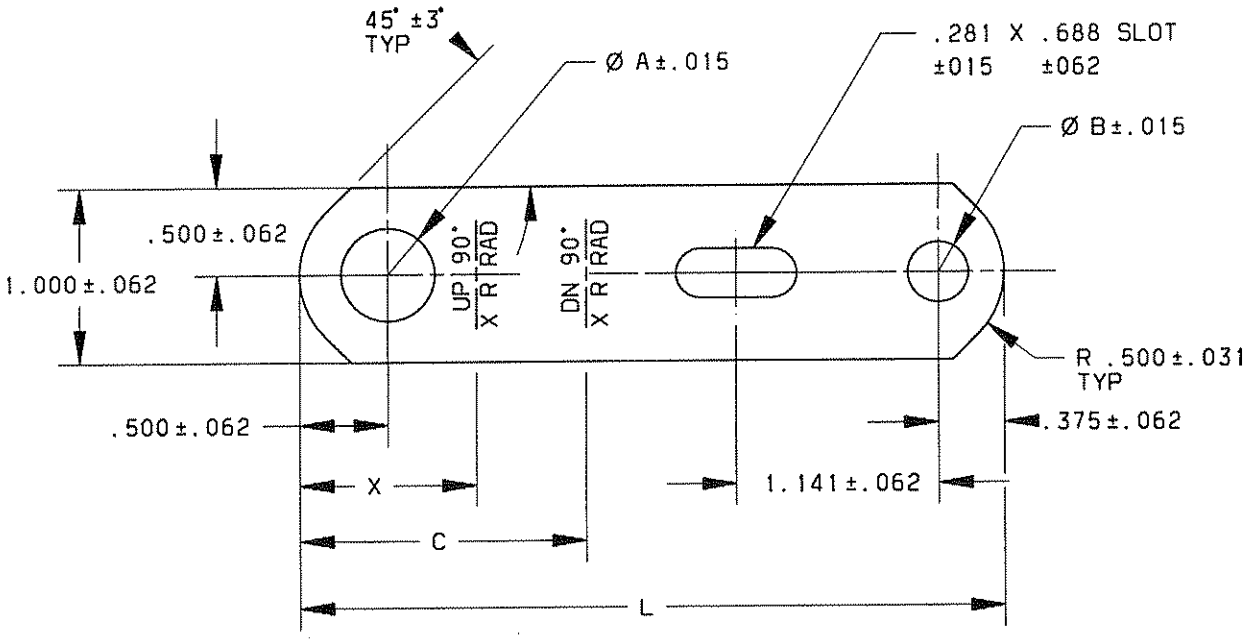
3 FLAT PATTERN



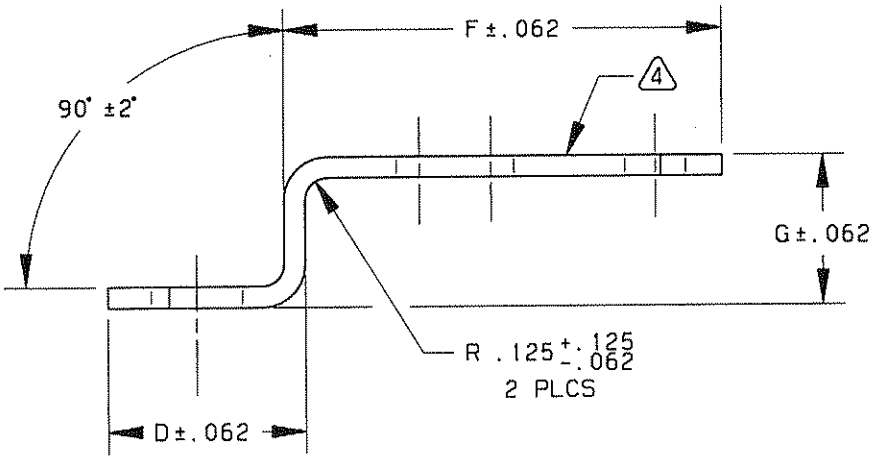
FORMED VIEW

CHG	JOB NO	DATE	BY	REVISION
BF	P10358-01	11/04/99	LFB	REVISED AND REDRAWN IN CATIA. ADDED -039 & -040.

DRAWN	LFB	TITLE BRACKET, ANGLE	DRAWING NUMBER 23-09130
APPRV	DAJ		
DATE	11/04/99	FREIGHTLINER CORPORATION PORTLAND, OREGON	SHEET 2 OF 6 / CHG. LTR. BF
CATIA ORIGINAL			



3 FLAT PATTERN



FORMED VIEW

CHG	JOB NO	DATE	BY	REVISION
BF	P10358-01	11/04/99	LFB	REVISED AND REDRAWN IN CATIA. ADDED -039 & -040.

DRAWN	LFB	TITLE	DRAWING NUMBER
APPRV	DAJ	BRACKET, ANGLE	23-09130
DATE	11/04/99	FREIGHTLINER CORPORATION PORTLAND, OREGON	SHEET 3 OF 6 / CHG. LTR. BF
CATIA ORIGINAL			

X (3) DIM	A DIM	B DIM	C (3) DIM	L (3) LENGTH	D	E	F	G	FREIGHTLINER PART NUMBER
1.250	.531	.281	----	4.000	1.365	2.865	----	----	23-09130-000 (5)
3.000	.531	.281	----	4.000	3.115	1.115	----	----	23-09130-001 (5)
1.250	.281	.281	----	4.000	1.365	2.865	----	----	23-09130-002 (6)
----	.531	.281	----	4.000	----	----	----	----	23-09130-003
3.000	.656	.281	----	4.000	3.115	1.115	----	----	23-09130-004 (7)
1.000	.281	.281	1.620	4.000	1.115	----	2.495	.850	23-09130-005 (6)
----	.218	.218	----	4.000	----	----	----	----	23-09130-006
1.380	.656	.281	----	4.000	1.495	2.735	----	----	23-09130-007 (7)
----	.281	.281	----	4.000	----	----	----	----	23-09130-008
1.250	.281	.281	3.141	4.000	1.365	----	.974	2.121	23-09130-009 (6)
----	.656	.281	----	4.000	----	----	----	----	23-09130-010
----	.531	.281	----	4.000	----	----	----	----	23-09130-011 (10) (5)
6.000	.531	.281	----	7.000	6.115	1.115	----	----	23-09130-012 (4) (8)
1.000	.531	.281	1.625	4.000	1.115	----	2.495	.850	23-09130-013 (5)
----	.531	.281	----	4.000	----	----	----	----	23-09130-014 (5)
----	.344	.281	----	4.000	----	----	----	----	23-09130-015 (6)
1.000	.375	.281	1.625	4.000	1.115	----	2.495	.850	23-09130-016 (9)
1.250	.344	.344	----	4.000	1.365	2.865	----	----	23-09130-017
7.500	.531	.281	----	8.500	7.615	1.115	----	----	23-09130-018 (8)
1.000	.433	.281	----	3.000	1.115	2.115	----	----	23-09130-019 (8)
1.250	.344	.281	----	7.000	1.365	5.865	----	----	23-09130-020 (8)
1.000	.531	.281	1.907	4.275	1.115	----	2.495	1.125	23-09130-021
3.000	.433	.281	----	4.000	3.115	1.115	----	----	23-09130-022
1.000	.531	.281	1.269	3.650	1.115	----	2.495	.500	23-09130-023 (5)
----	.531	.281	----	6.453	----	----	----	----	23-09130-024 (10) (8)

CHG	JOB NO	DATE	BY	REVISION
BF	P10358-01	11/04/99	LFB	REVISED AND REDRAWN IN CATIA. ADDED -039 & -040.

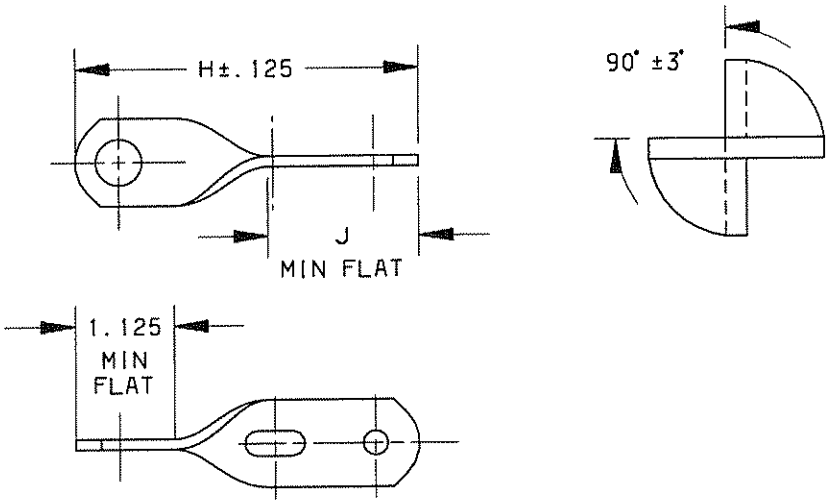
DRAWN	LFB	TITLE	DRAWING NUMBER	
APPRV	DAJ	BRACKET, ANGLE	23-09130	
DATE	11/04/99	FREIGHTLINER CORPORATION PORTLAND, OREGON	SHEET 4 OF 6	CHG. LTR. BF
CATIA ORIGINAL				

X (3) DIM	A DIM	B DIM	C (3) DIM	L (3) LENGTH	D	E	F	G	FREIGHTLINER PART NUMBER
1.250	.531	.281	----	4.807	1.365	3.672	----	----	23-09130-025
2.915	.344	.344	6.058	8.848	3.030	----	2.905	3.373	23-09130-026
2.000	----	----	----	5.807	2.115	3.922	----	----	23-09130-027
2.915	.563	.344	6.058	8.848	3.030	----	2.905	3.373	23-09130-028
2.915	.563	.344	----	9.000	3.030	6.200	----	----	23-09130-029
1.000	.531	.344	1.625	4.000	1.115	----	2.495	.850	23-09130-030
0.795	.344	.344	2.565	5.750	0.910	----	3.300	2.000	23-09130-031
----	.656	.281	----	4.000	----	----	----	----	23-09130-032 (10) (11)
1.250	.344	.281	----	7.000	1.365	5.865	----	----	23-09130-033
1.000	.433	.281	----	4.885	1.115	4.000	----	----	23-09130-034
----	.281	.281	----	6.453	----	----	----	----	23-09130-035 (8) (10)
1.250	.531	.281	----	4.000	1.365	2.865	----	----	23-09130-036 (12)
1.250	.656	.281	----	6.453	1.365	2.865	----	----	23-09130-037 (13)
1.456	.531	.281	3.166	5.325	1.570	----	2.275	1.940	23-09130-038
1.322	.312	.750	----	4.394	1.437	3.187	----	----	23-09130-039
2.815	.531	.281	----	4.027	2.815	1.460	----	----	23-09130-040 (8)

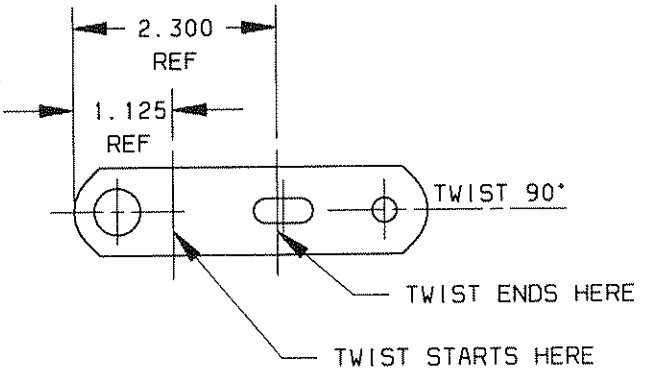
CHG	JOB NO	DATE	BY	REVISION
BF	P10358-01	11/04/99	LFB	REVISED AND REDRAWN IN CATIA. ADDED -039 & -040.

DRAWN	LFB	TITLE	DRAWING NUMBER	
APPRV	DAJ	BRACKET, ANGLE	23-09130	
DATE	11/04/99	FREIGHTLINER CORPORATION PORTLAND, OREGON	SHEET 5 OF 6	CHG. LTR. BF
CATIA ORIGINAL				

-011, -024, -032 AND -035 FORMED VIEWS.



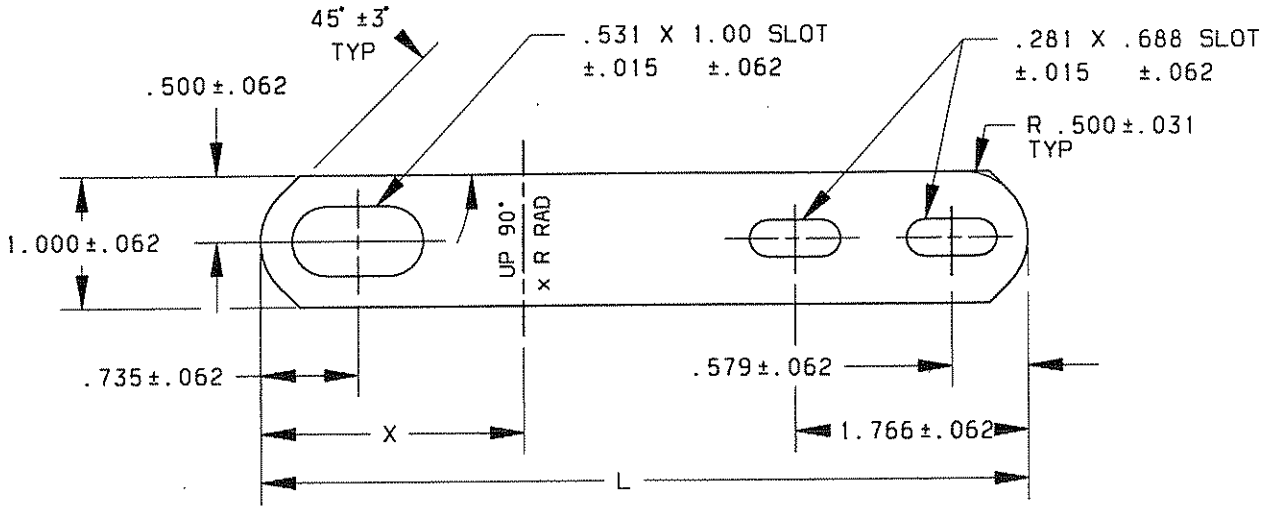
BRACKET	H	J
23-09130-011	3.922	1.712
23-09130-024, -035	6.375	4.165
23-09130-032	3.922	1.712



-011 (5), -024, -032 AND -035 FLAT PATTERN
SCALE: 1/2

CHG	JOB NO	DATE	BY	REVISION
BF	P10358-01	11/04/99	LFB	REVISED AND REDRAWN IN CATIA. ADDED -039 & -040.

DRAWN	LFB	TITLE	DRAWING NUMBER	
APPRV	DAJ	BRACKET, ANGLE	23-09130	
DATE	11/04/99	FREIGHTLINER CORPORATION PORTLAND, OREGON	SHEET 6 OF 6	CHG. LTR. BF
CATIA ORIGINAL				



(3) -027 FLAT PATTERN
SCALE: 3/4

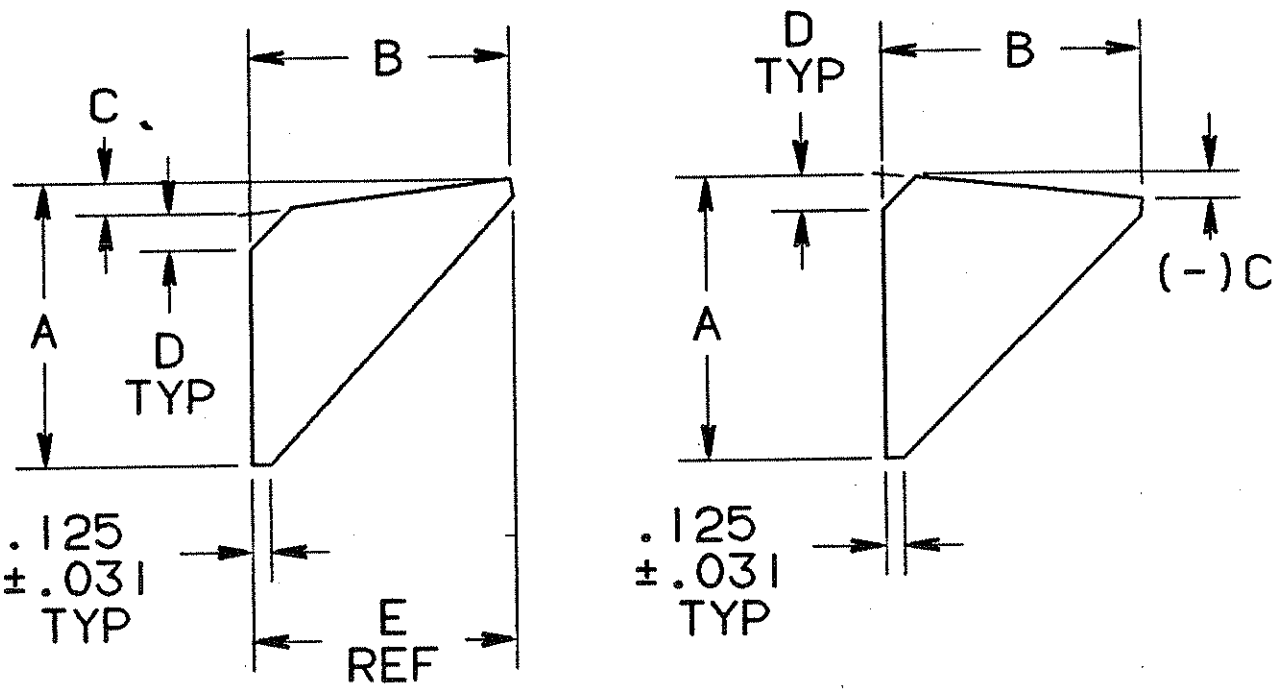
ENGINEERING NOTES

1. MATERIAL 11 GA (.120) MILD STEEL PER 48-00005-711.
   ALTERNATE MATERIAL: 48-00005-011, 48-00703-003.
2. ZINC OR CADMIUM PLATE (REF 49-00005-101 OR 49-00012-110).

(3) DIMENSIONS ARE FOR REFERENCE ONLY (SEE SHEETS 1,2 & 6).
(4) STAMP PN & CHANGE LTR PER FREIGHTLINER SPEC. 49-00051.
(5) MADE FROM 23-09130-003 (AS OPTION).
(6) MADE FROM 23-09130-008 (AS OPTION).
(7) MADE FROM 23-09130-010 (AS OPTION).
(8) DELETE SLOT.
(9) SIMILAR TO -005.
(10) TWIST AS SHOWN ON SHEET 5.
(11) MADE FROM 23-09130-010 (AS OPTION).
(12) MADE FROM 23-09130-000 (AS OPTION).
(13) MADE FROM 23-09130-024 (AS OPTION).

CHG	JOB NO	DATE	BY	REVISION
BF	P10358-01	11/04/99	LFB	REVISED AND REDRAWN IN CATIA. ADDED -039 & -040.

ORIGINAL JOB NO.	TITLE	PART NO.
230873 V	GUSSET, WELDMENT .125 THK ALUMINUM	23-11636
LAST CHG LTR: B		SHEET 1 OF 1



A ±.062	B ±.062	C ±.031	D ±.031	E REF	PART NUMBER
2.500	6.000	0.000	.250	2.500	23-11636-000
5.500	2.250	2.250	.000	2.338	23-11636-001

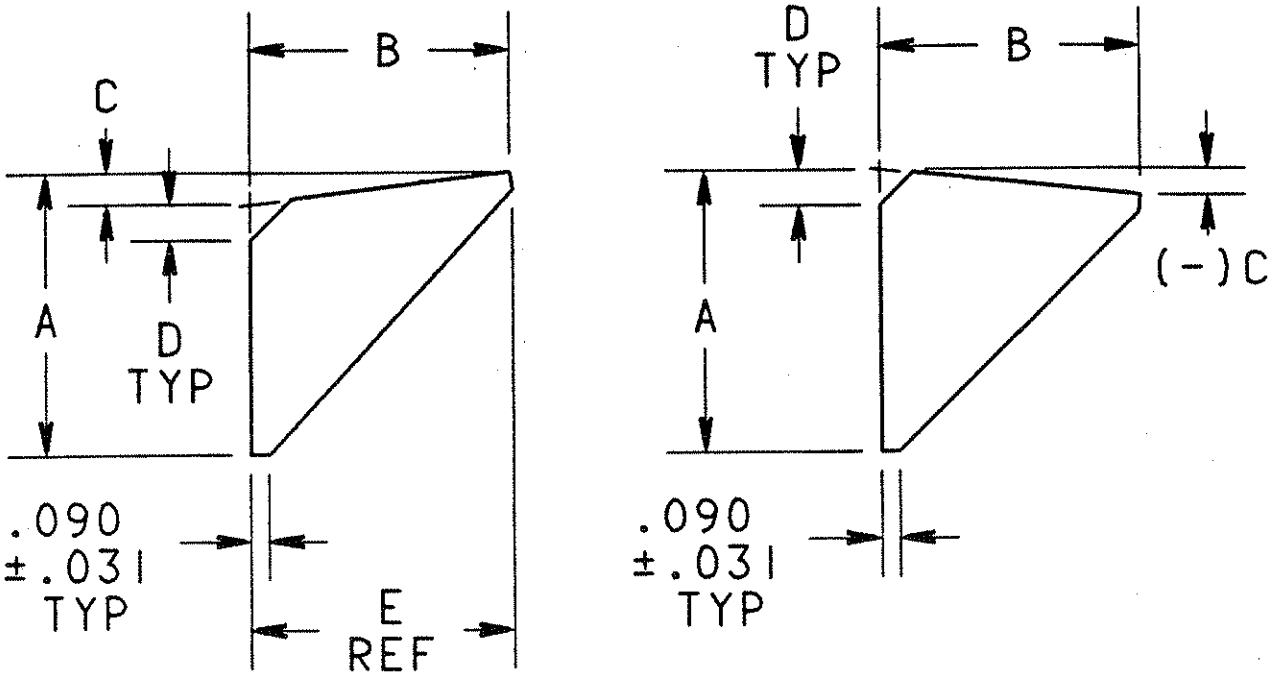
LTR	JOB NO.	BY	DATE	CHANGE INFORMATION
A	230873V	TCA	10-15-84	SWITCHED A & B DIMS
B	271955H	AJG	05-15-85	ADDED -001

COMPILED	TCA	DATE DRAWN	CADAM ORIGINAL	MATERIAL	MASTER NUMBER	
APPROVED	NER	07-23-84		48-00129-026	03380	000D1

PORTLAND FREIGHTLINER CORPORATION OREGON 97208

AC-826

ORIGINAL JOB NO.	TITLE	PART NO.
238050 H	GUSSET, WELDMENT (A) .190 THK ALUMINUM	23-11637
LAST CHG LTR: A		SHEET 1 OF 1



A ±.062	B ±.062	C ±.031	D ±.031	E REF	PART NUMBER
1.500	6.000	0.000	.250	6.000	23-11637-000
3.250	3.250	0.000	.500	3.250	23-11637-001

LTR	JOB NO.	BY	DATE	CHANGE INFORMATION
A	251069P	TCA	10-23-84	.090 TO .190; ADD -001

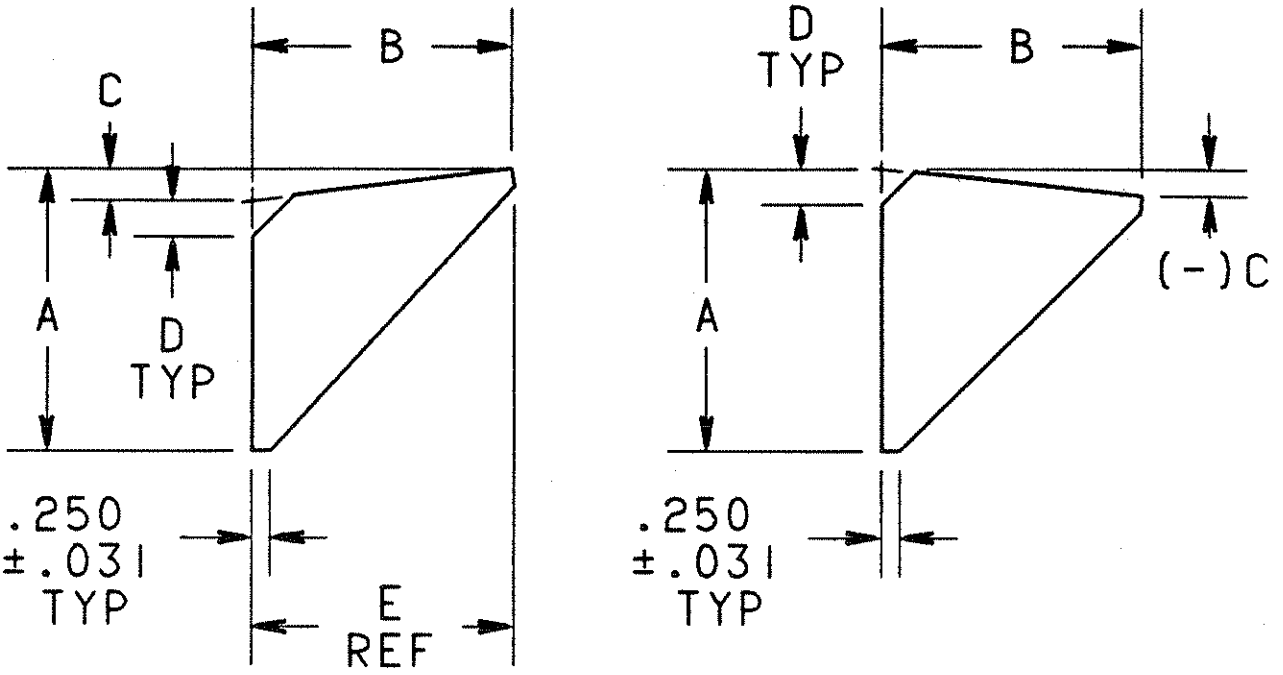
LTR	JOB NO.	BY	DATE	CHANGE INFORMATION

COMPILED	TCA	DATE DRAWN	CADAM ORIGINAL	MATERIAL	MASTER NUMBER	
APPROVED	NER	02-09-84		48-00129-030	03380	000D1

PORTLAND FREIGHTLINER CORPORATION OREGON 97208

AC-826

ORIGINAL JOB NO.	TITLE	PART NO.
238085 H	GUSSET, WELDMENT .250 THK ALUMINUM	23-11638
LAST CHG LTR: A		SHEET 1 OF 1



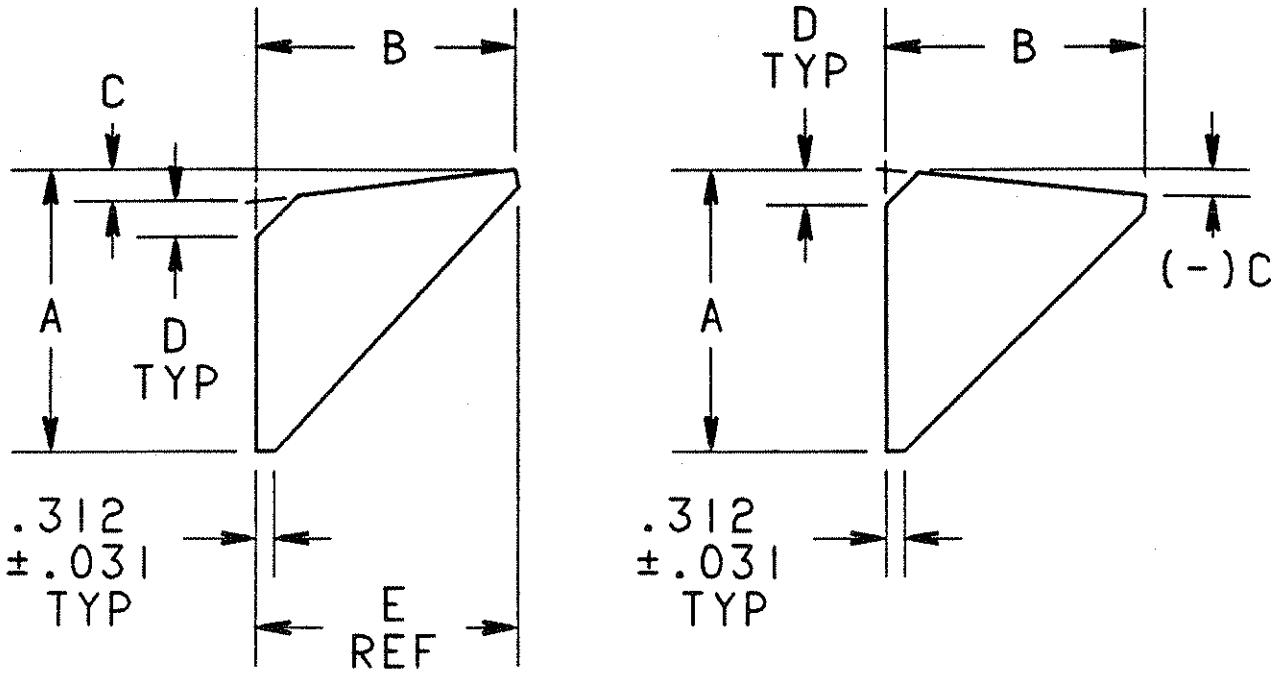
A ±.062	B ±.062	C ±.031	D ±.031	E REF	PART NUMBER
1.500	6.000	0.000	.250	6.000	23-11638-000

COMPILED	TCA	DATE DRAWN	CADAM ORIGINAL	MATERIAL	MASTER NUMBER	
APPROVED	NER	02-09-84		48-00179-025	03380	000D1

LTR	JOB NO.	BY	DATE	CHANGE INFORMATION

LTR	JOB NO.	BY	DATE	CHANGE INFORMATION
A	238085H	TCA	10-23-84	48-129-25 TO 48-179-25

ORIGINAL JOB NO.	TITLE	PART NO.
238050 H	GUSSET, WELDMENT .312 THK ALUMINUM	23-11639
LAST CHG LTR: A		SHEET 1 OF 1



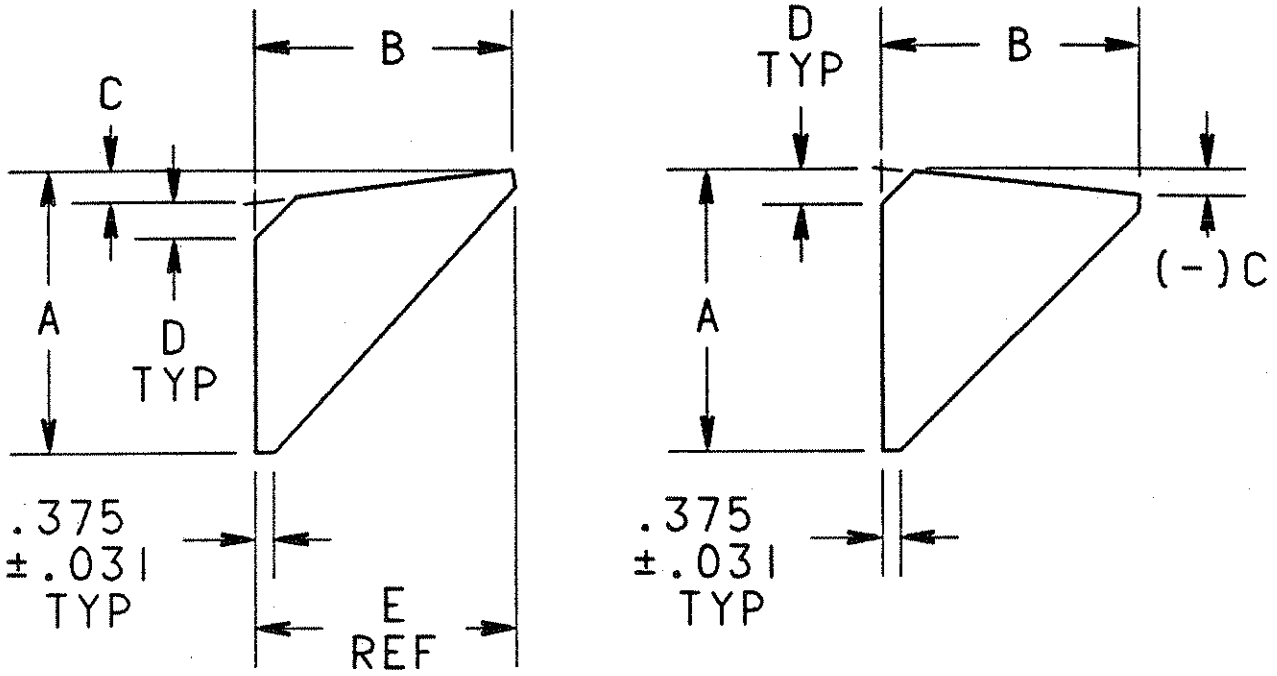
A ±.062	B ±.062	C ±.031	D ±.031	E REF	PART NUMBER
1.500	6.000	0.000	.250	6.000	23-11639-000

CHANGE INFORMATION	DATE	BY	JOB NO.	TR

CHANGE INFORMATION	DATE	BY	JOB NO.	TR
48-129-31 TO 48-179-31	10-23-84	TCA	238050H	A

COMPILED	TCA	DATE DRAWN	CADAM ORIGINAL	MATERIAL	MASTER NUMBER	
APPROVED	NER	02-09-84		48-00179-031	03380	000D1

ORIGINAL JOB NO.	TITLE	PART NO.
238050 H	GUSSET, WELDMENT .375 THK ALUMINUM	23-11640
LAST CHG LTR: A		SHEET 1 OF 1



A ±.062	B ±.062	C ±.031	D ±.031	E REF	PART NUMBER
1.500	6.000	0.000	.250	6.000	23-11640-000

COMPILED	TCA	DATE DRAWN	CADAM ORIGINAL	MATERIAL	MASTER NUMBER	
APPROVED	NER	02-09-84		48-00179-038	03380	000D1

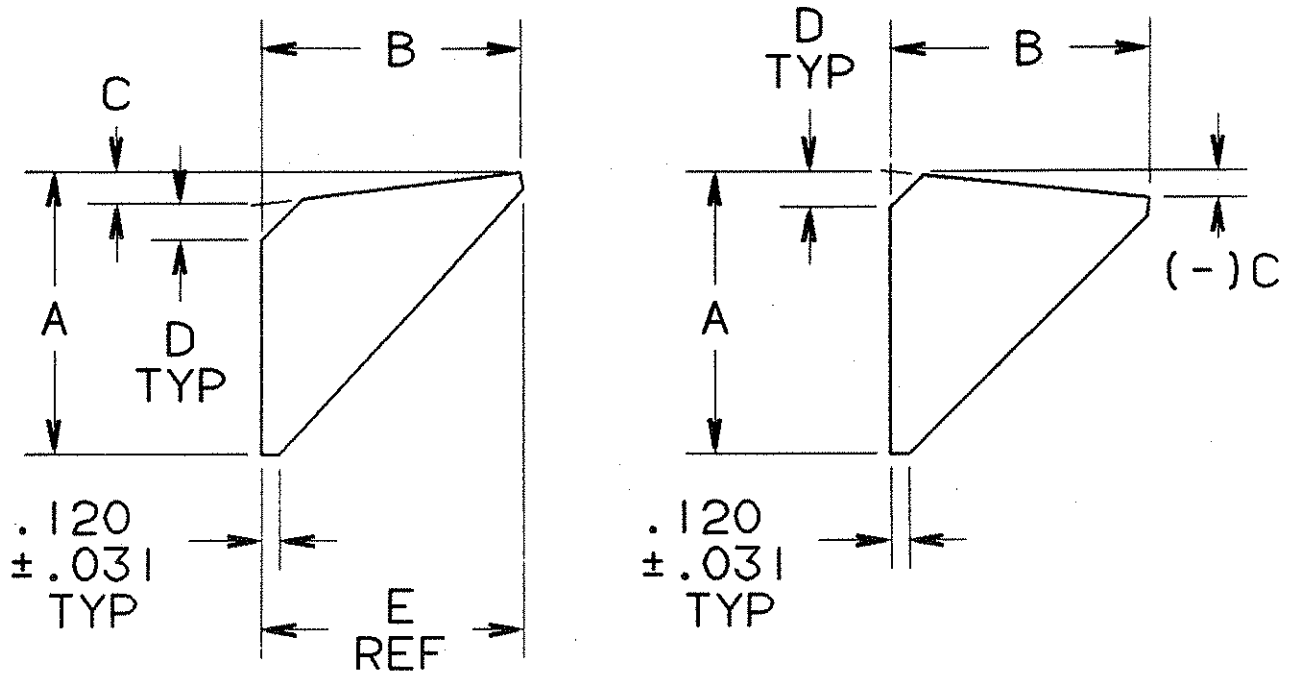
LTR	JOB NO.	BY	DATE	CHANGE INFORMATION
A	238050H	TCA	10-23-84	48-129-38 TO 48-179-38

PORTLAND FREIGHTLINER CORPORATION OREGON 97208

AC-826

23-11641

ORIGINAL JOB NO.	TITLE	PART NO.
238050 H	GUSSET, WELDMENT 11 GA (.1196 THK) STEEL	23-11641
LAST CHG LTR: A		SHEET 1 OF 1



A ±.062	B ±.062	C ±.031	D ±.031	E REF	PART NUMBER
1.500	6.000	0.000	.250	6.000	23-11641-000
1.500	4.000	0.000	.500	4.000	23-11641-001

LTR	JOB NO.	BY	DATE	CHANGE INFORMATION
A	188156P	GDR	04-15-86	ADDED -001

LTR	JOB NO.	BY	DATE	CHANGE INFORMATION

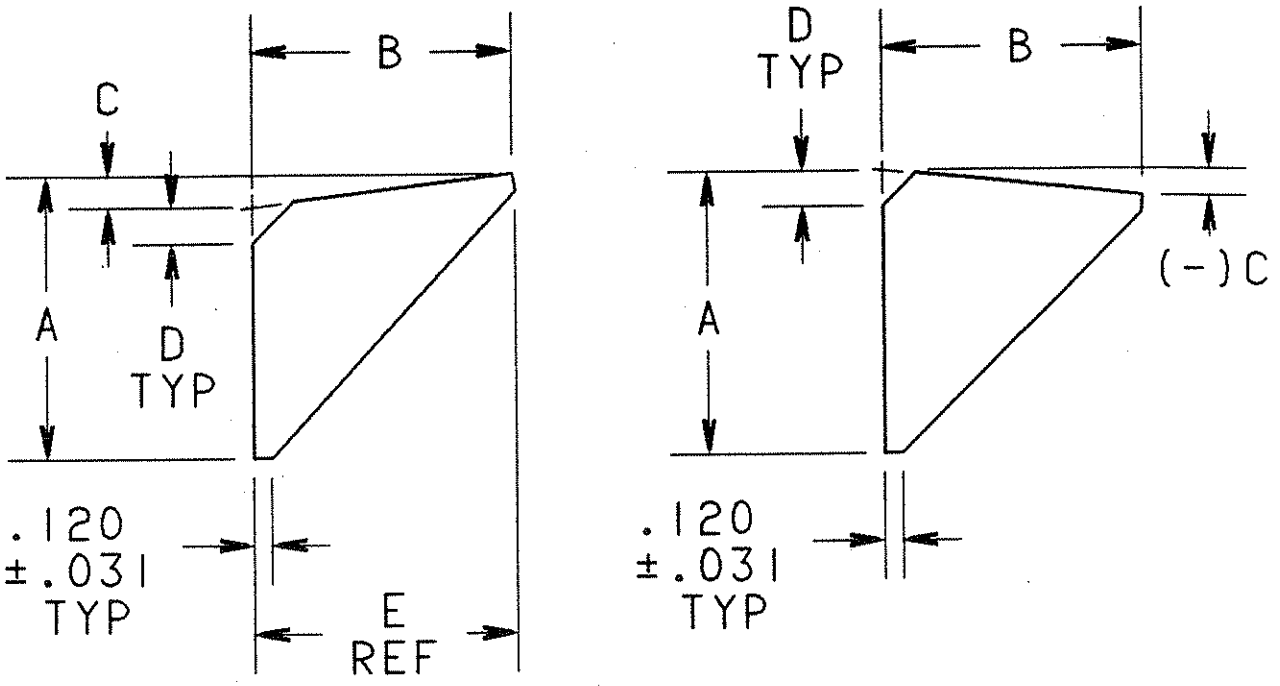
COMPILED	TCA	DATE DRAWN	CADAM ORIGINAL	MATERIAL	MASTER NUMBER	
APPROVED	NER	02-09-84		48-00005-011	03380	00001

PORTLAND FREIGHTLINER CORPORATION OREGON 97208

EAC-826

23-11641

ORIGINAL JOB NO.	TITLE	PART NO.
238050 H	GUSSET, WELDMENT 11 GA (.1196 THK) STEEL	23-11641
LAST CHG LTR –		SHEET 1 OF 1



A ±.062	B ±.062	C ±.031	D ±.031	E REF	PART NUMBER
1.500	6.000	0.000	.250	6.000	23-11641-000

CHANGE INFORMATION	DATE	BY	JOB NO.	LTR

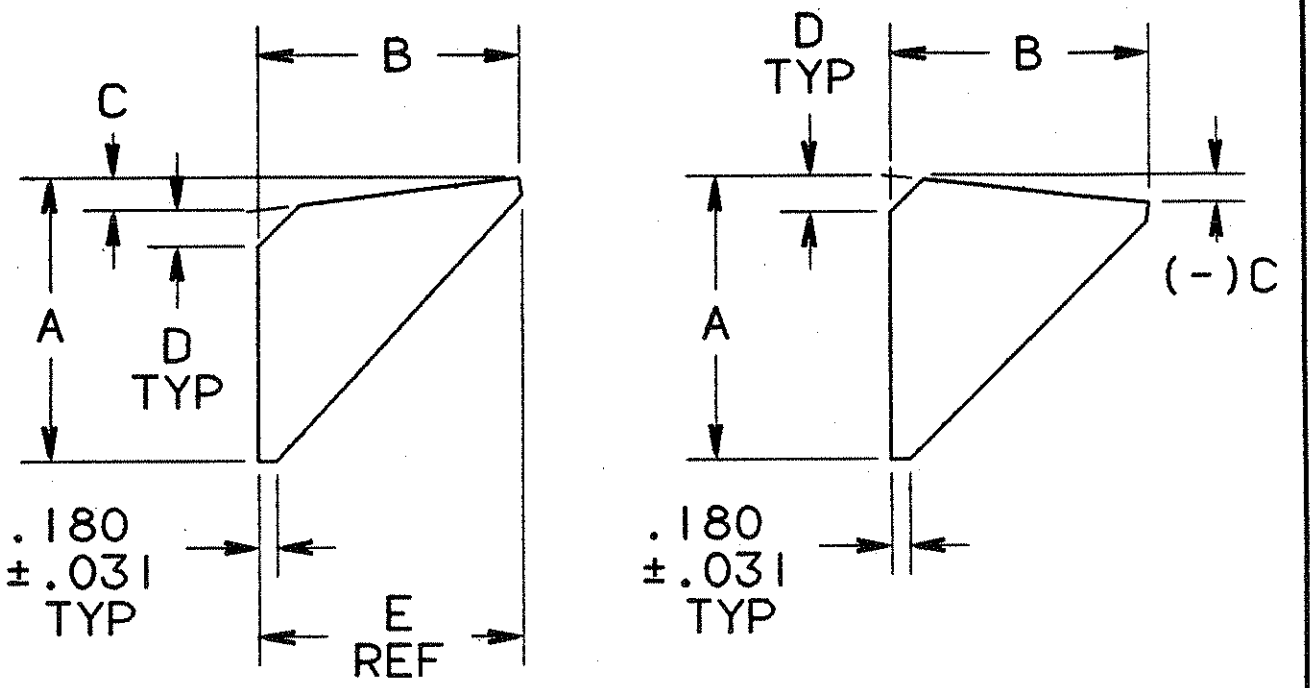
CHANGE INFORMATION	DATE	BY	JOB NO.	LTR

COMPILED	TCA	DATE DRAWN	CADAM ORIGINAL	MATERIAL	MASTER NUMBER	
APPROVED	NER	02-09-84		48-00005-011	03380	000D1

PORTLAND FREIGHTLINER CORPORATION OREGON 97208

EAC-826

ORIGINAL JOB NO.	TITLE	PART NO.
238050 H	GUSSET, WELDMENT 7 GA (.1793 THK) STEEL	23-11642
LAST CHG LTR: N		SHEET 1 OF 1



A ±.062	B ±.062	C ±.031	D ±.031	E REF	PART NUMBER
1.500	6.000	0.000	.250	6.000	23-11642-000
2.750	6.000	0.000	.250	6.000	23-11642-001
2.250	6.000	0.000	.250	6.000	23-11642-002
1.750	5.250	-0.512	.375	5.233	23-11642-003
3.250	4.000	0.000	.250	4.000	23-11642-004
3.000	8.000	0.000	.250	8.000	23-11642-005
3.500	13.000	0.000	.500	13.000	23-11642-006
5.500	2.250	2.250	.000	2.377	23-11642-007
4.000	6.500	0.000	1.000	6.500	23-11642-008
3.500	5.250	0.000	1.500	5.250	23-11642-009
1.750	9.000	0.000	.500	9.000	23-11642-010
2.500	2.500	0.000	.500	2.500	23-11642-011
2.500	4.000	0.000	.500	4.000	23-11642-012
2.375	5.750	0.000	.500	5.750	23-11642-013

LTR	JOB NO.	BY	DATE	CHANGE INFORMATION
K	286721H	CN	03-31-86	ADDED -010
L	287613P	DMM	05-29-86	ADDED -011
M	284396V	TCA	08-19-86	ADDED -012
N	285432V	TT	12-08-86	ADDED -013

LTR	JOB NO.	BY	DATE	CHANGE INFORMATION
F	271955H	AJG	05-15-85	ADDED -007
G	277328P	TCA	09-27-85	ADD -8;48-5-7 TO 48-701-407
H	277328P	AJG	10-11-85	FROM 7.000 TO 6.500 (-008)
J	EAR21130	TCA	12-11-85	ADDED -009

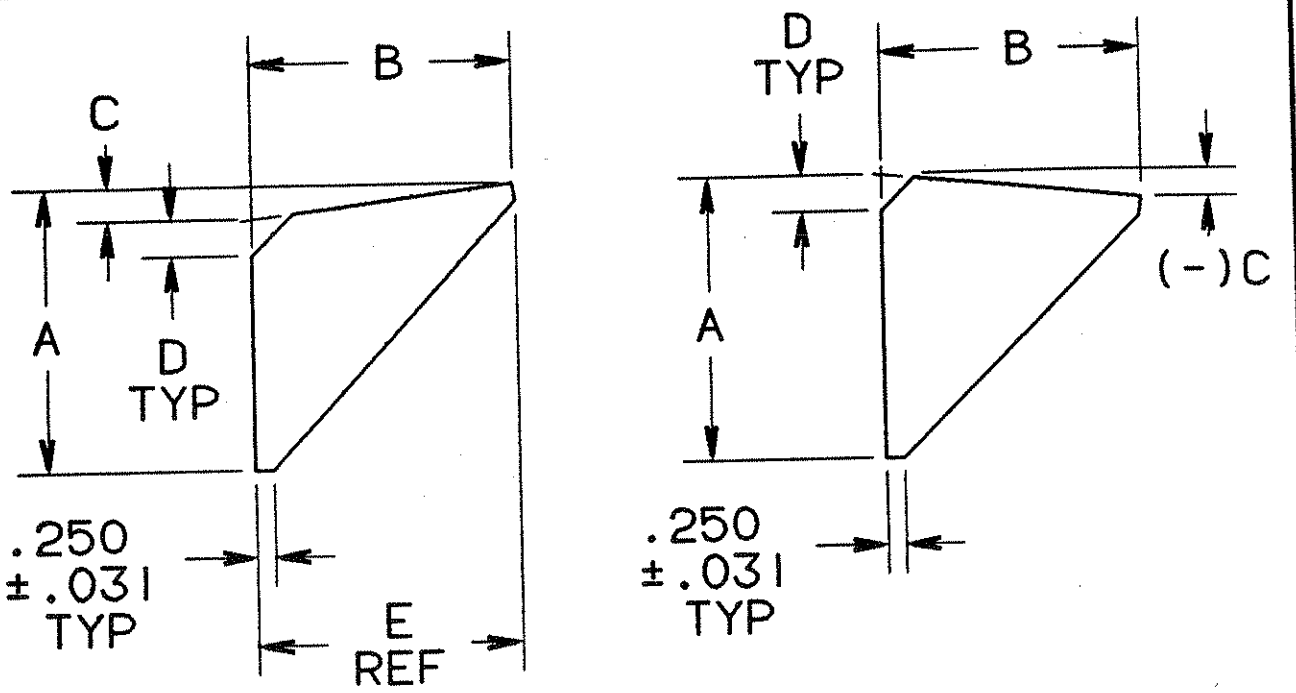
COMPILED	TCA	DATE DRAWN	CADAM ORIGINAL	MATERIAL	MASTER NUMBER	
APPROVED	NER	02-09-84		48-00701-407	03380	00001

PORTLAND FREIGHTLINER CORPORATION OREGON 97208

M/F

AC-826

ORIGINAL JOB NO.	TITLE	PART NO.
234665 V	GUSSET, WELDMENT .250 THK STEEL	23-11643
LAST CHG LTR: R		SHEET 1 OF 1



A ±.062	B ±.062	C ±.031	D ±.031	E REF	PART NUMBER
1.750	4.000	0.000	.562	4.000	23-11643-000
4.500	5.000	0.000	.625	5.000	23-11643-001
1.625	1.875	0.000	.375	1.875	23-11643-002
4.625	10.750	0.000	.500	10.750	23-11643-003
3.500	4.750	0.000	.500	4.750	23-11643-004
2.000	3.000	0.000	.375	3.000	23-11643-005
2.500	8.000	0.000	.375	8.000	23-11643-006
2.500	4.000	0.000	.500	4.000	23-11643-007
4.500	7.375	0.000	1.000	7.375	23-11643-008
2.250	2.750	0.000	.625	2.750	23-11643-009
1.500	4.000	0.000	.250	4.000	23-11643-010
3.875	8.000	1.375	.500	8.042	23-11643-011
1.500	2.500	0.000	.375	2.500	23-11643-012
2.750	4.500	0.000	.750	4.500	23-11643-013
1.500	6.000	0.000	.250	6.000	23-11643-014
7.250	7.375	0.000	1.000	7.375	23-11643-015
5.000	8.000	0.000	.500	8.000	23-11643-016
1.500	1.500	0.000	.375	1.500	23-11643-017
3.500	4.250	0.000	.750	4.250	23-11643-018
3.000	3.000	0.000	.500	3.000	23-11643-019

CHANGE INFORMATION			
LTR	JOB NO.	BY	DATE
K	264572P	TCA	04-04-85
L	261157V	TCA	09-20-85
M	283906V	DAC	04-10-86
N	287613P	AJG	05-15-86

CHANGE INFORMATION			
LTR	JOB NO.	BY	DATE
P	284645V	FLF	10-01-86
R	268246P	RE	12-09-86
H	256225P	TCA	09-26-84
J	265148H	TCA	02-12-85

ADDED -013
ADDED -014
ADDED -015
ADDED -016
ADDED -017
ADDED -018 & -019
ADDED -011
ADDED -012

COMPILED	TCA	DATE DRAWN	CADAM ORIGINAL	MATERIAL	MASTER NUMBER	
APPROVED	NER	02-09-84		48-00004-004	03380	000D1

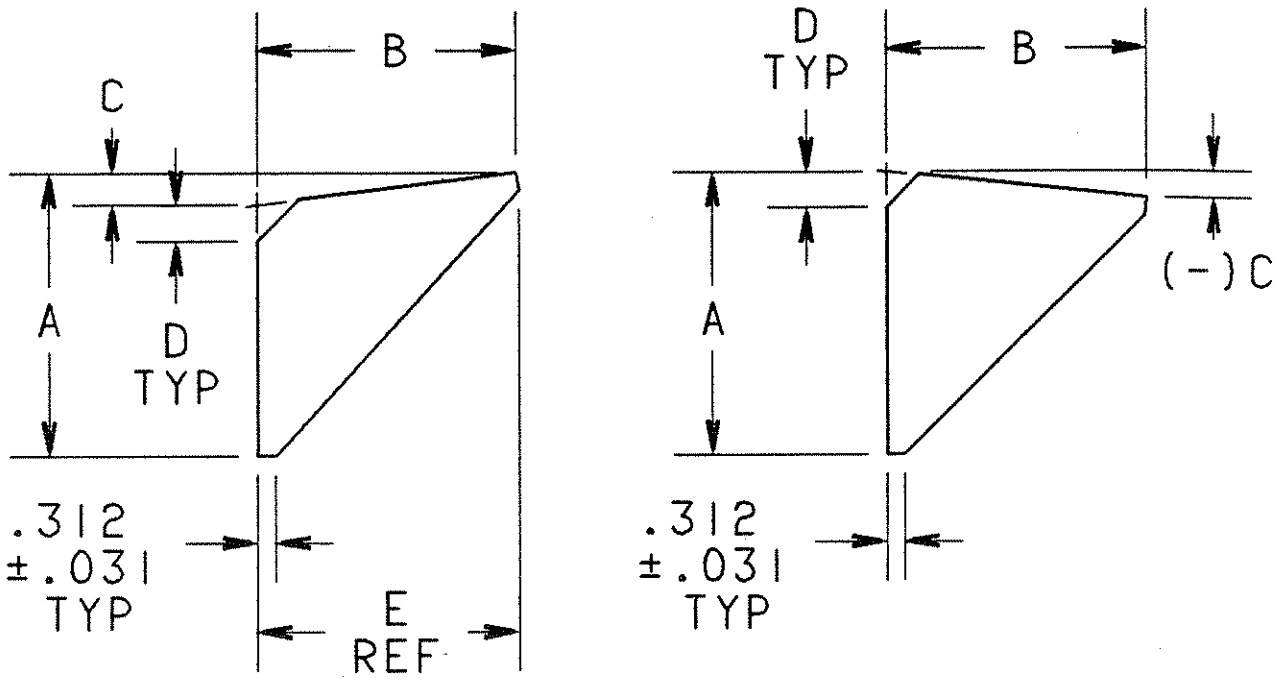
PORTLAND FREIGHTLINER CORPORATION OREGON 97203

M/F

EAC-826

23-11644

ORIGINAL JOB NO.	TITLE	PART NO.
238050 H	GUSSET, WELDMENT .312 THK STEEL	23-11644
LAST CHG LTR: -		SHEET 1 OF 1



A ±.062	B ±.062	C ±.031	D ±.031	E REF	PART NUMBER
1.500	6.000	0.000	.250	6.000	23-11644-000

CHANGE INFORMATION	LTR	JOB NO.	BY	DATE

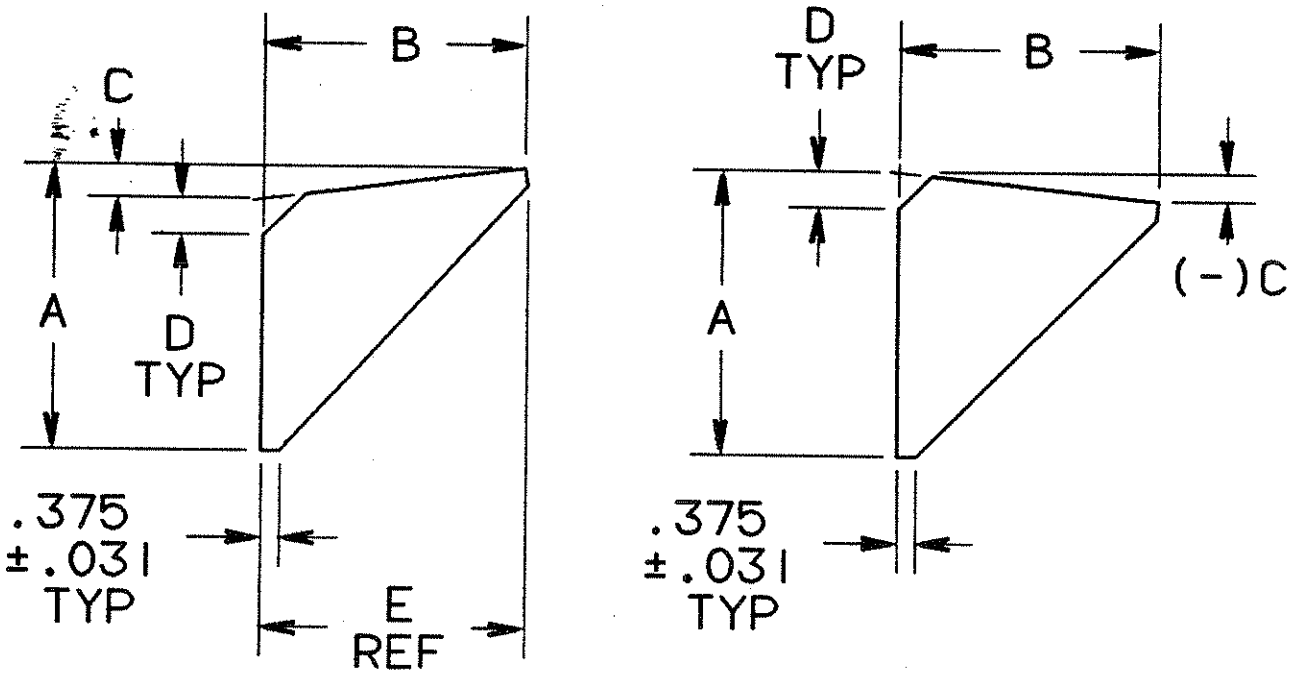
CHANGE INFORMATION	LTR	JOB NO.	BY	DATE

COMPILED	TCA	DATE DRAWN	CADAM ORIGINAL	MATERIAL	MASTER NUMBER	
APPROVED	NER	02-09-84		48-00004-005	03380	000D1

PORTLAND FREIGHTLINER CORPORATION OREGON 97208

EAC-826

ORIGINAL JOB NO.	TITLE	PART NO.
240216V	GUSSET, WELDMENT .375 THK STEEL	23-11645
LAST CHG LTR: E		SHEET 1 OF 1



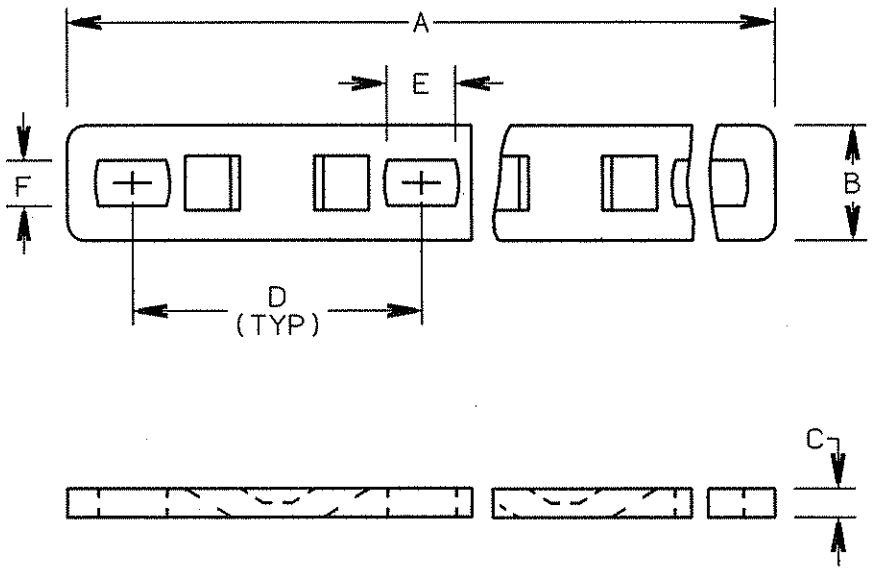
A ±.062	B ±.062	C ±.031	D ±.031	E REF	PART NUMBER
2.375	2.375	0.000	1.000	2.375	23-11645-000
2.750	2.750	0.000	.375	2.750	23-11645-001
3.500	4.500	0.000	.500	4.500	23-11645-002
2.250	2.250	0.000	1.000	2.250	23-11645-003
1.375	3.000	0.000	.375	3.000	23-11645-004
1.750	2.500	0.000	.750	2.500	23-11645-005
2.000	2.000	0.000	.750	2.000	23-11645-006

LTR	JOB NO.	BY	DATE	CHANGE INFORMATION
E	9707 D	PW	12-01-86	ADDED -006

LTR	JOB NO.	BY	DATE	CHANGE INFORMATION
A	268307P	TCA	03-01-85	ADDED -001
B	0086 D	DAC	10-02-85	ADDED -002, -003
C	290555P	DMR	04-28-86	ADDED -004
D	290999H	LCU	05-27-86	ADDED -005

COMPILED	TCA	DATE DRAWN	CADAM ORIGINAL	MATERIAL	MASTER NUMBER	
APPROVED	NER	07-20-84		48-00004-006	03380	000D1

DRAWN	ERK	TITLE	ITEM NUMBER
APPRV	DJM	TIE PLATES MULTIPLES	23-12122
DATE	10/09/92	FREIGHTLINER CORPORATION PORTLAND, OREGON	SHEET 1 OF 1



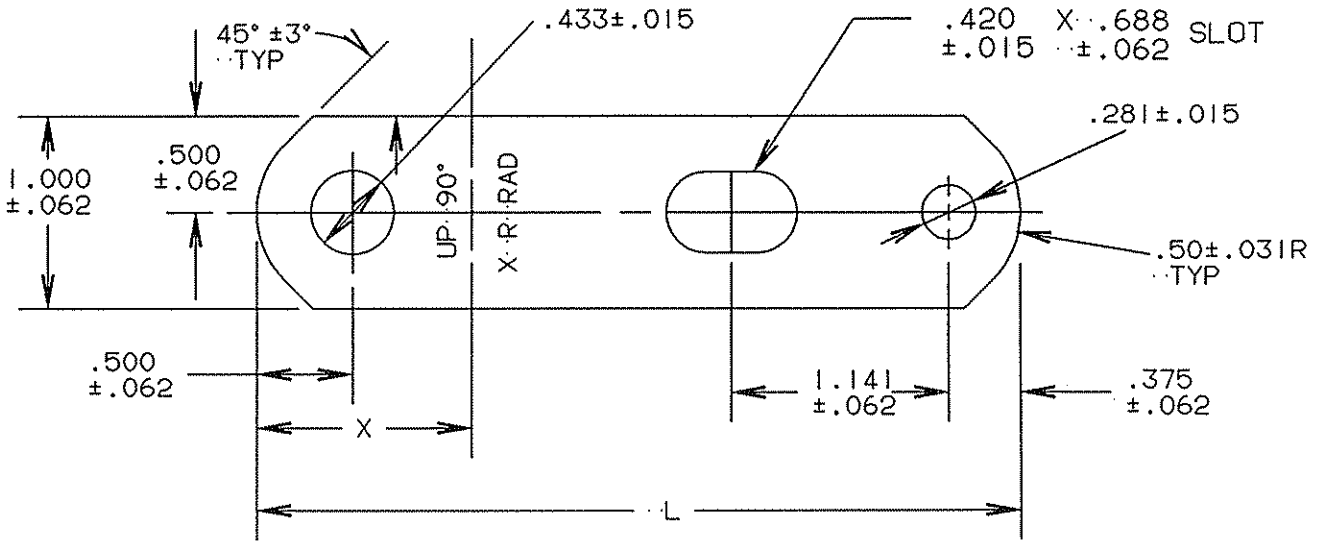
NO. OF BDLS.	DIMENSIONS MM (INCHES)								FREIGHTLINER PART NUMBER
	A	B	C	D	E	F	MFG	PART #	
3	108.0 (4.25)	12.7 (.50)	3.2 (.125)	31.8 (1.25)	7.6 (.30)	5.1 (.200)	PANDUIT	MTP3S-E10-C	23-12122-001
4	139.7 (5.50)	12.7 (.50)	3.2 (.125)	31.8 (1.25)	7.6 (.30)	5.1 (.200)		MTP4S-E10-C	23-12122-002

SPECIFICATIONS:

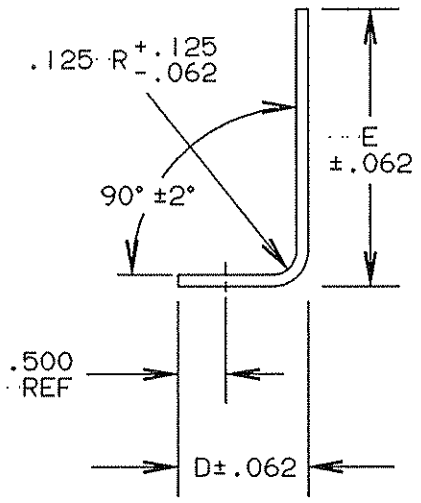
1. MATERIAL -------- NYLON
2. COLOR ---------- NATURAL OR BLACK.
3. DIMENSIONS SHOWN ARE REFERENCE ONLY.
4. EQUIVALENT ACCEPTABLE WITH ENGINEERING APPROVAL.

CHG	JOB/RLSE NO	DATE	BY	REVISION
-	PN0431-04	10/09/92	ERK	DOCUMENTED

DRAWN	ASR	TITLE	ITEM NUMBER
APPRV	TKC	BRACKET, ANGLE	23-12305
DATE	01/24/96	FREIGHTLINER CORPORATION PORTLAND, OREGON	SHEET 1 OF 3



FLAT PATTERN



FORMED VIEWS

CHG	JOB/RLSE NO	DATE	BY	REVISION
-	786499-05	01/24/96	ASR	INITIAL RELEASE

DRAWN	ASR	TITLE	ITEM NUMBER
APPRV	TKC	BRACKET ANGLE	23-12305
DATE	01/24/96	FREIGHTLINER CORPORATION PORTLAND, OREGON	SHEET 2 OF 3

FREIGHTLINER PART NUMBER	G	F	E	D	L LENGTH	C DIM	B DIA	A DIA	X DIM
23-123055-000	-----	-----	3.115	1.115	4.000	-----	.281	.433	1.121

CHG	JOB/RLSE NO	DATE	BY	REVISION
-	786499-05	01/24/96	ASR	INITIAL RELEASE

DRAWN	ASR	TITLE	ITEM NUMBER
APPRV	TKC	BRACKET, ANGLE	23-12305
DATE	01/24/96	FREIGHTLINER CORPORATION PORTLAND, OREGON	SHEET 3 OF 3

ENGINEERING NOTES:

1. MATERIAL: 11 GA (.120) MILD STEEL PER 48-00005-711.
   ALTERNATE MATERIAL: 48-00005-011, 48-00703-003.
2. ZINC OR CADMIUM PLATE (REF 49-00005-101 OR
   OR 49-00012-110)

CHG	JOB/RLSE NO	DATE	BY	REVISION
-	786499-05	01/24/96	ASR	INITIAL RELEASE