



PAGE 1 OF 3  
DATE: 03-26-1996  
REVISION: A  
CUSTOMER: IRCON INC.  
LOCATION: NILES, IL

## INFRARAIL SPECIAL NUMBER R700

### PURPOSE AND DESCRIPTION:

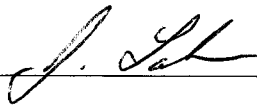
CUSTOMER REQUIRES A INFRARAIL SIGNAL CONDITIONER TO BE MATED WITH A SPECIAL SENSING HEAD SIMILAR TO SPECIAL E724. THE SENSING HEAD IS TO MEASURE A SPOT OF 0.1" AT A DISTANCE OF 4" WITH A TEMPERATURE RANGE OF 2000 TO 2500 DEGREES F.

MODEL: DN999-99F  
RANGE: 2000 - 2500 DEG. F  
OPTICAL RESOLUTION: 0.1" AT 4"


### GENERALITY OF APPLICATION AND RESTRICTIONS:

UNRESTRICTED: SUITABLE FOR USE WITH ALL STANDARD OPTIONS.

WRITTEN BY: \_\_\_\_\_



APPROVED BY: \_\_\_\_\_



DATE: \_\_\_\_\_

3-26-96

**INFRARAIL SPECIAL NUMBER R700**

REVISION: A  
DATE: 03-26-1996

**PRODUCTION INSTRUCTIONS:**

START WITH A MODEL DNE31-24F ELECTRONICS MODULE, AND INSTALL M1 MODULE  
AS PER BILL OF MATERIAL ON PAGE 3.  
DELIVER THE CABLE TO ENGINEERING FOR MODIFICATION. NO CONNECTOR IS REQUIRED  
FOR THIS SPECIAL.  
SECURE FROM ENGINEERING THE SPECIAL SENSING HEAD.

**CALIBRATION INSTRUCTIONS:**

ENGINEERING WILL PROVIDE ASSISTANCE WITH INITIAL CALIBRATION AND TESTING OF THIS  
UNIT. UPON COMPLETION DELIVER THE UNIT TO ENGINEERING FOR CE TESTING!!  
CALIBRATE AS PER STANDARD.

**MANUAL INSTRUCTIONS:**

GENERIC INFRARAIL SERIES MANUAL.

## INFRARAIL SPECIAL NUMBER R700

REVISION: A  
DATE: 03-26-1996

## M1 MODULE ASSEMBLY BILL OF MATERIAL

<u>SYMBOL</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>		
R1	104644011	RESISTOR	4.64M OHM	METAL FILM 1/4W 1%
R44	101872011	RESISTOR	18.7K OHM	METAL FILM 1/4W 1%
R54	102153011	RESISTOR	215K OHM	METAL FILM 1/4W 1%
R45	106341011	RESISTOR	6.34K OHM	METAL FILM 1/4W 1%
R55	103742011	RESISTOR	37.4K OHM	METAL FILM 1/4W 1%
R46	106491011	RESISTOR	6.49K OHM	METAL FILM 1/4W 1%
R56	104752011	RESISTOR	47.5K OHM	METAL FILM 1/4W 1%
R47	105761011	RESISTOR	5.76K OHM	METAL FILM 1/4W 1%
R57	105762011	RESISTOR	57.6K OHM	METAL FILM 1/4W 1%
R48	105111011	RESISTOR	5.11K OHM	METAL FILM 1/4W 1%
R58	107152011	RESISTOR	71.5K OHM	METAL FILM 1/4W 1%
R49	104531011	RESISTOR	4.53K OHM	METAL FILM 1/4W 1%
R59	108662011	RESISTOR	86.6K OHM	METAL FILM 1/4W 1%
R50	103831011	RESISTOR	3.83K OHM	METAL FILM 1/4W 1%
R60	101073011	RESISTOR	107K OHM	METAL FILM 1/4W 1%
R51	103241011	RESISTOR	3.24K OHM	METAL FILM 1/4W 1%
R61	101333011	RESISTOR	133K OHM	METAL FILM 1/4W 1%
R52	102741011	RESISTOR	2.74K OHM	METAL FILM 1/4W 1%
R53	101052011	RESISTOR	10.5K OHM	METAL FILM 1/4W 1%
R62	101653011	RESISTOR	165K OHM	METAL FILM 1/4W 1%

MODLINE PLUS SPECIAL NUMBER CONTINUED,

BILL OF MATERIAL

MODEL: 2-99F10

MODULE M1 REFERENCE: DWG.NO.C-10864

SYMBOL	PART NO.	DESCRIPTION			
R45	106341011	RESISTOR	6.34 Kohm	METAL FILM	1/4W 1%
R55	103742011	RESISTOR	37.4 Kohm	METAL FILM	1/4W 1%
R46	106491011	RESISTOR	6.49 Kohm	METAL FILM	1/4W 1%
R56	104752011	RESISTOR	47.5 Kohm	METAL FILM	1/4W 1%
R47	105761011	RESISTOR	5.76 Kohm	METAL FILM	1/4W 1%
R57	105762011	RESISTOR	57.6 Kohm	METAL FILM	1/4W 1%
R48	105111011	RESISTOR	5.11 Kohm	METAL FILM	1/4W 1%
R58	107152011	RESISTOR	71.5 Kohm	METAL FILM	1/4W 1%
R49	104531011	RESISTOR	4.53 Kohm	METAL FILM	1/4W 1%
R59	108662011	RESISTOR	86.6 Kohm	METAL FILM	1/4W 1%
R50	103831011	RESISTOR	3.83 Kohm	METAL FILM	1/4W 1%
R60	101073011	RESISTOR	107 Kohm	METAL FILM	1/4W 1%
R51	103241011	RESISTOR	3.24 Kohm	METAL FILM	1/4W 1%
R61	101333011	RESISTOR	133 Kohm	METAL FILM	1/4W 1%
R52	102741011	RESISTOR	2.74 Kohm	METAL FILM	1/4W 1%
R53	101052011	RESISTOR	10.5 Kohm	METAL FILM	1/4W 1%
R62	101653011	RESISTOR	165 Kohm	METAL FILM	1/4W 1%
R1	104644011	RESISTOR	4.64 Mohm	METAL FILM	1/4W 1%

MODULE M2 REFERENCE: DWG.NO.C-10865

SYMBOL	PART NO.	DESCRIPTION			
R44	101871011	RESISTOR	18.7 Kohm	METAL FILM	1/4W 1%
R54	102153011	RESISTOR	215 Kohm	METAL FILM	1/4W 1%
R25	101001011	RESISTOR	1.00 Kohm	METAL FILM	1/4W 1%
J2	100000990	JUMPER, DUMMY RESISTOR			
J1	100000990	JUMPER, DUMMY RESISTOR			
C07	52102-2	CAPACITOR	33pF	CERAMIC	
R36	104644011	RESISTOR	4.64 Mohm	METAL FILM	1/4W 1%
R38	103741011	RESISTOR	3.74 Kohm	METAL FILM	1/4W 1%
R39	104990011	RESISTOR	499 ohm	METAL FILM	1/4W 1%
R40	104220011	RESISTOR	422 ohm	METAL FILM	1/4W 1%

$I_{sc}^{2500^{\circ}F} = 0.696 \mu A$

$I_{sc}^{2000^{\circ}F} = 0.095 \mu A$

2500°F  
 2000°F

TEMPERATURE RANGE: 2000 TO 2500 DEGREES F  
SPECTRUM: 0.70 TO 1.00 MICRONS  
(current output is nonlinear with Planck)

TEMP. IN DEG. F	% SIGNAL	Iout in Uamps
2000.0	13.640	0.0949
2025.0	15.345	0.1068
2050.0	17.225	0.1199
2075.0	19.292	0.1343
2100.0	21.562	0.1501
2125.0	24.049	0.1674
2150.0	26.770	0.1863
2175.0	29.740	0.2070
2200.0	32.978	0.2295
2225.0	36.500	0.2540
2250.0	40.327	0.2807
2275.0	44.477	0.3096
2300.0	48.971	0.3408
2325.0	53.830	0.3747
2350.0	59.076	0.4112
2375.0	64.732	0.4505
2400.0	70.820	0.4929
2425.0	77.366	0.5385
2450.0	84.394	0.5874
2475.0	91.930	0.6398
2500.0	100.000	0.6960

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SOLD TO \_\_\_\_\_ CUSTOMER NO. 008239

IRCON INC.  
7300 N. NATCHEZ AVE.

NILES IL 60714

SHIPPING ADDRESS \_\_\_\_\_ TAX CODE NO TAX

DO NOT PACK. DELIVER TO  
VERN LAPPE

SCHEDULED SHIPPING WEEK \_\_\_\_\_ MONTH/DAY/YEAR 04/27/96  
ENDING

OUR ORDER NO. SA 009611/00 ORDER DATE 03/06/96  
MONTH/DAY/YEAR

YOUR ORDER NO. \_\_\_\_\_

TERMS X NET 30  
OTHER

F.O.B. X NILES, ILLINOIS

CODE 000 .00

VIA NONE PPD. COLL. X

SPECIAL SHIPPING INSTRUCTIONS \_\_\_\_\_

03/06/96 PAGE 1

LINE NO.	PART NO.	QTY.	DESCRIPTION	UNIT MEAS	DISCOUNT %	PRICE EACH U.S. DOLLAR	AMOUNT U.S. DOLLAR
01		1	INFRARAIL TEMPERATURE SYSTEM MODEL DN999-99C SERIAL NBR 001135	EA		.00	.00
			CABLE(S) 12 FEET EA ( 12 FEET EA INCLUDED IN ABOVE)				
			***** * SPECIAL Z999 *****				
			!!!!!!WARNING!!!!!! ** SPL # TO BE DETERMINED ** ** SEE ENGINEERING DEPT. **				
			GRAND TOTAL				.00

*Handwritten notes:*  
- See quote J.P. 3-26-96  
- Special lead for infrared  
- Box Worksheet  
- RWS  
- 3/12/96

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

Ship To: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

ORIGINAL

Part No. 020172 Rev C 12/95



# PURCHASE REQUISITION

Supplier

Date 3-27-96

FOX TOOL

P.O. # \_\_\_\_\_

Requisitioner J. LAKNER

Purpose/Reason INFRARED SPC

Attn \_\_\_\_\_

Date needed (3-12-96) OR SOONER

Phone \_\_\_\_\_

Route to J. LAKNER

**Material Safety Data Information:**  
 New chemical MSDS received on \_\_\_\_\_  for sample only  routine use  
 Previously purchased chemical: Active Index No. \_\_\_\_\_

Qty	U/M	Part No.	Rev. Level	Description	Price Ea	Total	Acct or W/O No.
10		EX-4279	A	FIELD STOP 0.019" I.D. 0.395 O.D. IRCON TO SUPPLY PART NUMBER <del>45119-4</del> TO MAKE EX 4279			9611

Confirming to \_\_\_\_\_

Approval (under \$100 - Authorized Requisitioner) J. Lakner  
 (\$100 - \$5000 - Department Manager) \_\_\_\_\_  
 (over \$5000 - General Manager) \_\_\_\_\_

Total \$ \_\_\_\_\_



# PURCHASE REQUISITION

Supplier

Date 3-27-96

FOX TOOL

P.O. # \_\_\_\_\_

Requisitioner J. LAKNER

Purpose/Reason INFRARED SPC

Attn \_\_\_\_\_

Date needed (3-12-96) OR SOONER

Phone \_\_\_\_\_

Route to J. LAKNER

**Material Safety Data Information:**  
 New chemical MSDS received on \_\_\_\_\_  for sample only  routine use  
 Previously purchased chemical: Active Index No. \_\_\_\_\_

Qty	U/M	Part No.	Rev. Level	Description	Price Ea	Total	Acct or W/O No.
10		EX-4279 A		FIELD STOP 0.014" I.D. 0.395 O.D. IRCON TO SUPPLY PART NUMBER <del>4</del> 45119-4 TO MAKE EX 4279			9611

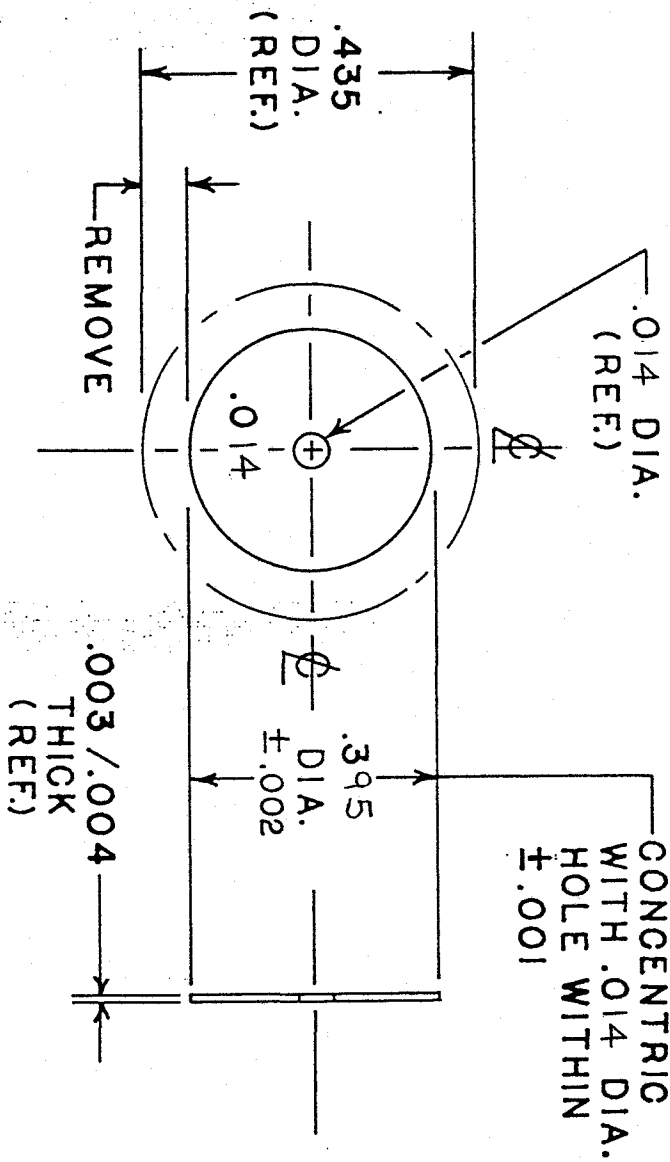
Confirming to \_\_\_\_\_

Approval (under \$100 - Authorized Requisitioner) J. Lakner

Total \$ \_\_\_\_\_

(\$100 - \$5000 - Department Manager) \_\_\_\_\_

(over \$5000 - General Manager) \_\_\_\_\_



- NOTES:**
1. MATERIAL: IRCON PART NO. 45119 -4  
(300 SERIES STAINLESS STEEL)
  2. FINISH: NONE

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT

TOLERANCES (UNLESS OTHERWISE SPECIFIED)

- 2 PL.C. DEC. = ±
- 3 PL.C. DEC. = ±
- ANGULAR = ±
- T.I.R. CONCENTRICITY = ±

DWG. NO.	EX-4279	REV.	A
REVISIONS			
A	ORIGINAL RELEASE	✓	3-21-96

USE ON	SPECIAL NO. R700
NEXT HIGHER ASS'Y	
USE ON	



IRCON, INC. ENGINEERING DEPT.  
SKOKIE, ILLINOIS, U.S.A.

TITLE  
DETECTOR FIELDSTOP  
(0.014 DIA. HOLE)

DRAWN BY	DATE
3-21-96	
APPROVED BY	
M.E.	E.E.
SCALE	

DRAWING NO.	REV.
EX-4279	A

WED, MAR 13, 1996

IRCON, INC.

1:42 PM

DC06B001

FLAGS=NYYY, LEVELS=00

BILL OF MATERIAL REPORT

DRAWING ID: B11147 DETECTOR ASSEMBLY  
(SPECIAL NO. E224)

ALL MODELS

USE WITH DRAWING(S): C11148

LV	SEQ#	COMPONENT NO	QUANTITY	UM	SYM/ITEM	DESCRIPTION
01	0010	501743	1.00	EA	1	PCB DETECTOR SILICON SPECIALS
01	0020	445172	3.00	EA	2	STANDOFF SWAGE 1/80D X 3/16LG
01	0030	410312	3.00	EA	3	SCREEN #00-80 X 3/19 PAN HEAD
01	0040	<del>43191-2</del> 43191-2	1.00	EA	PAD, 4	PLASTIC SPACER, <del>TRANS</del> TRANS
01	0050	590532	1.00	EA	—	5 DET. SILICON MOD+V/W/MAX/M1/M2 V
01	0060	454122 EX-4279	1.00	EA	—	6 DET. FIELD STOP .030 DIA .014 DIA
01	0070	640482	1.00	EA	—	7 FILTER BANDPASS 0.7-1.0U SPL
01	0080	950100002	1.00	AP	8	EPOXY HARDMAN #4005 GEN PURP

\*\*END OF REPORT\*\*

LAST REV: 09/25/95 REV: B  
LAST ECO POSTING: / /

ECO DATE	ECO NUMBER	ECO NEW QTY
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PAGE

**STOR T05**

ACTEC VTB5051J .15X.15" T0-5

SPECIAL(S) .150 SQ. A-DWG .028" THK

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**DRAWING (S) TOO LARGE  
TO SCAN.**

**TO VIEW THE ORIGINAL  
DESIGN,**

**A REQUEST TO VIEW  
PHYSICAL FILE  
IS YOUR NEXT OPTION.**



# Purchase Quotation Request



IRCON, INC.  
7301 N. Caldwell Ave.  
Niles, IL 60714 USA

Phone 708-967-5151  
Toll Free 800-323-7660  
Fax 708-647-0948

**ISO 9001**  
Quality System  
Certified

#7

This is not an order - and implies no obligation on our part.  
We reserve the right to accept or decline all or parts hereof.

G & Z INDUSTRIES INC.  
541 CHADDICK DRIVE  
WHEELING, IL. 60090-6053

Date: 3-15-95  
Lead Time: 8 Weeks ARO -EX-3502

Qty	Part Number	Rev Level	Description and Specifications	Unit Price	Total Price
10	EX-3502		ASSEMBLY OF ITEMS: 44731-2 REV(A)	\$123.32	\$1233.20
25				62.23	1555.75
50			<del>44728-2(C) EX-3499, REV. A - SENSING HEAD</del>	44.87	<u>2243.50</u>
100			<del>44730-2(B) EX-3496, REV. A - DETECTOR HOUSING</del>	35.56	3556.00
			<del>44729-2(A) EX-3445, ----- GIARE STOP</del>		
10	43224-2		DETECTOR SPACER	9.37	93.70
25				4.91	122.75
50				3.42	171.00
100			DELIVERY: 4 WKS ARO	3.01	301.00
10	EX-3500	A	FIELD STOP	18.45	184.50
25			(IRCON TO SUPPLY 45119-3)	8.92	223.00
50				5.75	287.50
100			DELIVERY: 4 WKS ARO	5.17	517.00

Drawings Attached      LENS EX-3498      QTY 50 = 9.76      Grand Total      6689.65  
 Comments:      4-5-95

Attention Bidders: Can you identify a better value through:

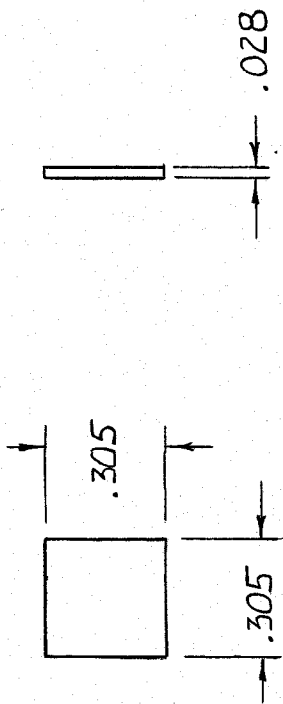
- Substitution
- Quantity change
- Different design
- Packaging change

Buyer RONALD DEFOE      Date 3/7/95  
 Signature [Signature]      3/7/95  
 Seller Signature [Signature]  
 Title PRESIDENT/G&Z INDUSTRIES, INC.      Date 3-15-95

REV.

DWG. NO.  
64046-2

REVISIONS



LONGWAVE CUTOFF:  $1.00 \pm .010 \mu$  @ 50% T  
 SHORTWAVE CUTOFF:  $0.7 \pm .015 \mu$  @ 50% T  
 TRANSMISSION  $\leq 0.1\%$  BETWEEN  $1.05 \mu$  &  $1.25 \mu$   
 CHIPS AND JIG MARKS:  $\leq .020$ " TOWARD CENTER  
 FINISH: 80-50  
 OPTICAL SYSTEM: F/3.6 AT NORMAL INCIDENCE

"L" ASSY

NEXT HIGHER ASS'Y

USED ON 1100, MOD + 2000

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT

TOLERANCES (UNLESS OTHERWISE SPECIFIED)

- 2 PLC. DEC. =  $\pm$
- 3 PLC. DEC. =  $\pm .005$
- ANGULAR =  $\pm$
- T.I.R. CONCENTRICITY =  $\pm$



IRCON, INC. ENGINEERING DEPT.  
 SKOKIE, ILLINOIS, U.S.A.

TITLE  
 FILTER, BANDPASS  
 0.7 - 1.0  $\mu$

DRAWING NO.

64046-2

REV.

FOR ASSEMBLY NO. LSE724

**BILL OF MATERIAL**  
SPECIAL NO. E724

SHEET \_\_\_\_\_ OF \_\_\_\_\_  
RELEASE DATE 5/05/95

ITEM IRCON PART NO. QTY. SYMBOL

DESCRIPTION

1	44731-2	1	_____	SENSING HEAD MECHANICAL ASSEMBLY
2	20081267D	1	_____	#8-32 X 3/8" CONE TIP NYLON HEX HEAD MACHINE SCREW
3	61103-2	1	_____	LENS, PLANO-CONVEX, 12.5mm
4	B-11147	1	_____	DETECTOR ASSEMBLY
5	47375-2	1	_____	LABEL



TITLE  
SENSING HEAD FINAL ASSEMBLY  
(SPECIAL NO. E724)

DRAWING NO. C-11148

# Purchase Quotation Request

*Plow*

IRCON, INC.  
7301 N. Caldwell Ave.  
Niles, IL 60714 USA

Phone 708-967-5151  
Toll Free 800-323 7660  
Fax 708-647-0948



This is not an order - and implies no obligation on our part.  
We reserve the right to accept or decline all or parts hereof.

8-2-95

G & Z INDUSTRIES  
541 CHADDICK DR.  
WHEELING, IL 60090

G&Z QUOTE #598+599,600,601

Date: 8-2-95

Load Time: 6-7 Weeks ARO

Qty	Part Number	Rev Level	Description and Specifications	Unit Price	Total Price
50	44728-2	C	SENSING HEAD	\$28.59	\$ 1429.50
50	44730-2	B	DETECTOR HOUSING	10.04	502.00
50	44729-2	A	GLARE STOP	5.76	288.00
50	44731-2	A	ASSEMBLY OF ITEMS 44728-2, 44729-2, 44730-2	10.73	536.50
50	44731-2	A	COMPLETE INCLUDING COMPONENTS	49.84	\$ 2756.00 2492.00
			NOTE: .069 DEPTH TO BE CHANGED TO .035 <i>INTERNAL THREDS</i>		
50	43224-2			3.01	171.00

Drawings Attached

Grand Total \_\_\_\_\_

Comments: NOTE: G & Z QUOTED ON 3/15/95, UNDER EX P/N'S 3502, 3499, 3496 AND 3445.

**Attention Bidder:** Can you suggest a better value through:

- Substitution
- Quantity change
- Different design
- Packaging change

Buyer RONALD DEFOE

Date 7/24/95

Signature \_\_\_\_\_

*R. DeFoe*

*7/24*

Seller Signature \_\_\_\_\_

Title PRESIDENT/G&Z INDUSTRIES, INC.

Date 8-2-95



INDUSTRIES, INC.

541 CHADDICK DRIVE ■ WHEELING, ILLINOIS 60090-6053  
PHONE: 708/215-2300 ■ FAX: 708/215-2579

FAX TRANSMITTAL SHEET

PLEASE DELIVER THE FOLLOWING PAGES TO:

NAME: JOE LAVENER

COMPANY: IRON

DEPT: ENGINEERING

FAX NUMBER: 708-647-0948

TOTAL NUMBER OF PAGES 2 INCLUDING THIS COVER SHEET.

DATE: 5/31/95

FROM: DAVID GILL

.....

IF YOU DO NOT RECEIVE ALL OF THE PAGES SPECIFIED, PLEASE CONTACT THE ABOVE AS SOON AS POSSIBLE. PHONE: (708) 215-2300 FAX: (708) 215-2579

.....

REFERENCE: DRAWING EX-3499

COMMENTS:

JOE,

PER OUR CONVERSATION, DRAWING  
INFO YOU REQUESTED. AS CALL  
WHEN YOU REC.

THANKS,

DAVE



3 wks  
4 wks

QUOTE FAXED 5/24

# PURCHASE REQUISITION

Supplier

Fox Tool

CC: 5/26  
Ami

Date 5-24-95

P.O. #

Requisitioner AMI DONADO

Purpose/Reason CALIBRATION BRACKET FOR SPECIAL E724

Attn

Phone

Date needed

Route to

### Material Safety Data Information:

New chemical MSDS received on \_\_\_\_\_

for sample only

routine use

Previously purchased chemical: Active Index No. \_\_\_\_\_

Qty	U/M	Part No.	Rev. Level	Description	Price Ea	Total	Acct or W/O No.	
4		EPPE1574		CLAMP-MOUNTING FOR EUREKA S.H. SPECIAL E724	9/00 EA		6920	
NOTE ONLY								
					9/00			
				Standard price				

Ami  
5/25/95

Confirming to \_\_\_\_\_

Approval (under \$100 - Authorized Requisitioner) [Signature]

Total \$ \_\_\_\_\_

(\$100 - \$5000 - Department Manager) \_\_\_\_\_

(over \$5000 - General Manager) \_\_\_\_\_

# G & Z

INDUSTRIES, INC.

541 CHADDICK DRIVE ■ WHEELING, ILLINOIS 60090-6053  
PHONE: 708/215-2300 ■ FAX: 708/215-2579

C E R T I F I C A T E   O F   C O M P L I A N C E

DATE: 6-9-95

IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714

7-10-95  
A.D.

PURCHASE ORDER NO: 76271-00

PART NUMBER: EX-3502 REV.A SENSING HEAD

QTY:

31 ✓

THIS IS TO CERTIFY THAT THE ITEMS, PARTS, SERVICES AND/OR MATERIALS SUPPLIED ON THE ABOVE PURCHASE ORDER PLACED WITH OUR COMPANY ARE IN FULL COMPLIANCE WITH THE DRAWINGS, SPECIFICATIONS, QUALITY PROVISIONS AND ANY OTHER PROVISION APPLICABLE TO THE INDIVIDUAL PURCHASE ORDER.

WE FURTHER CERTIFY THAT DOCUMENTATION APPLICABLE TO MATERIAL PHYSICAL AND CHEMICAL ANALYSIS, INSPECTION RECORDS AND SUB-CONTRACTOR SUPPLIED CERTIFICATIONS AS MAY BE REQUIRED ARE MAINTAINED IN OUR FILES AND ARE AVAILABLE UPON BUYER REQUEST.

COMPANY: G&Z INDUSTRIES, INC.

ADDRESS: 541 CHADDICK  
WHEELING, IL 60090

SIGNED: \_\_\_\_\_

  
JOHN E. GRACE  
PRESIDENT/G&Z INDUSTRIES, INC.

DWG. NO.

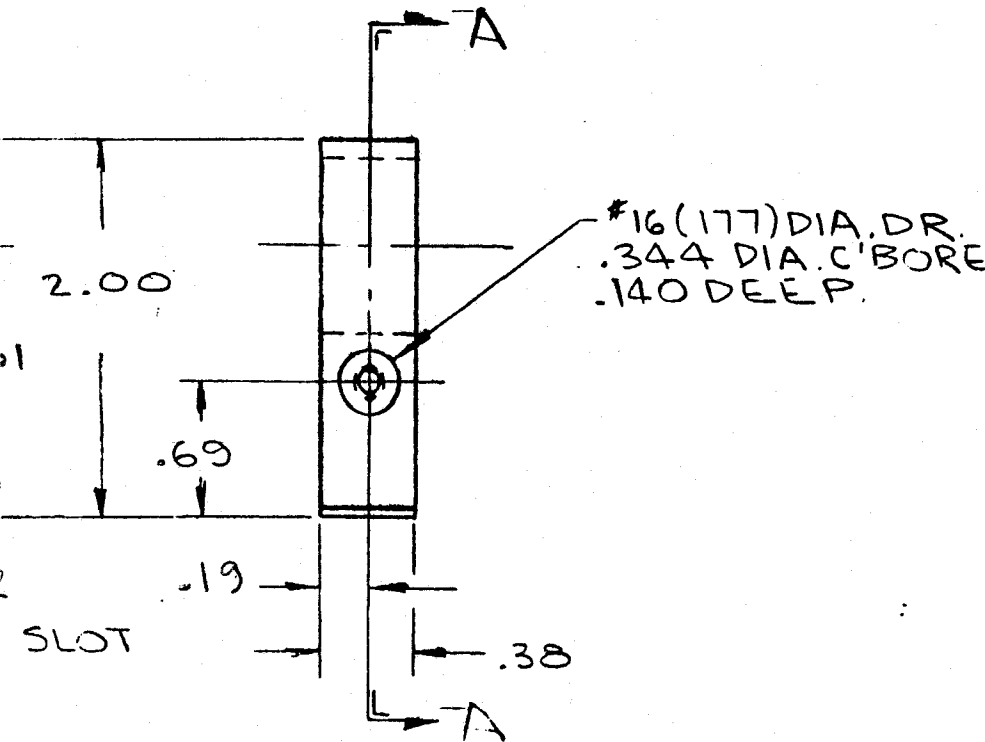
PE-1574

REV.

A

REVISIONS

A	ADDED .03 DIM. 5/20/88 JEF
B	RELEASED TO PRODUCTION 10/31/88 JEP 2/7
A	CHG 1.38 TO 1.31 5/26/95 JEF



#7 (.201) DIA. DR. .53 DP.  
1/4-20 TAP - .41 DP.

NOTICE !

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© 1988, IRCON, INC.

"L" ASS'Y

NEXT HIGHER ASS'Y

USED ON

SPECIAL E724

UNLESS OTHERWISE SPECIFIED

DO NOT SCALE PRINT

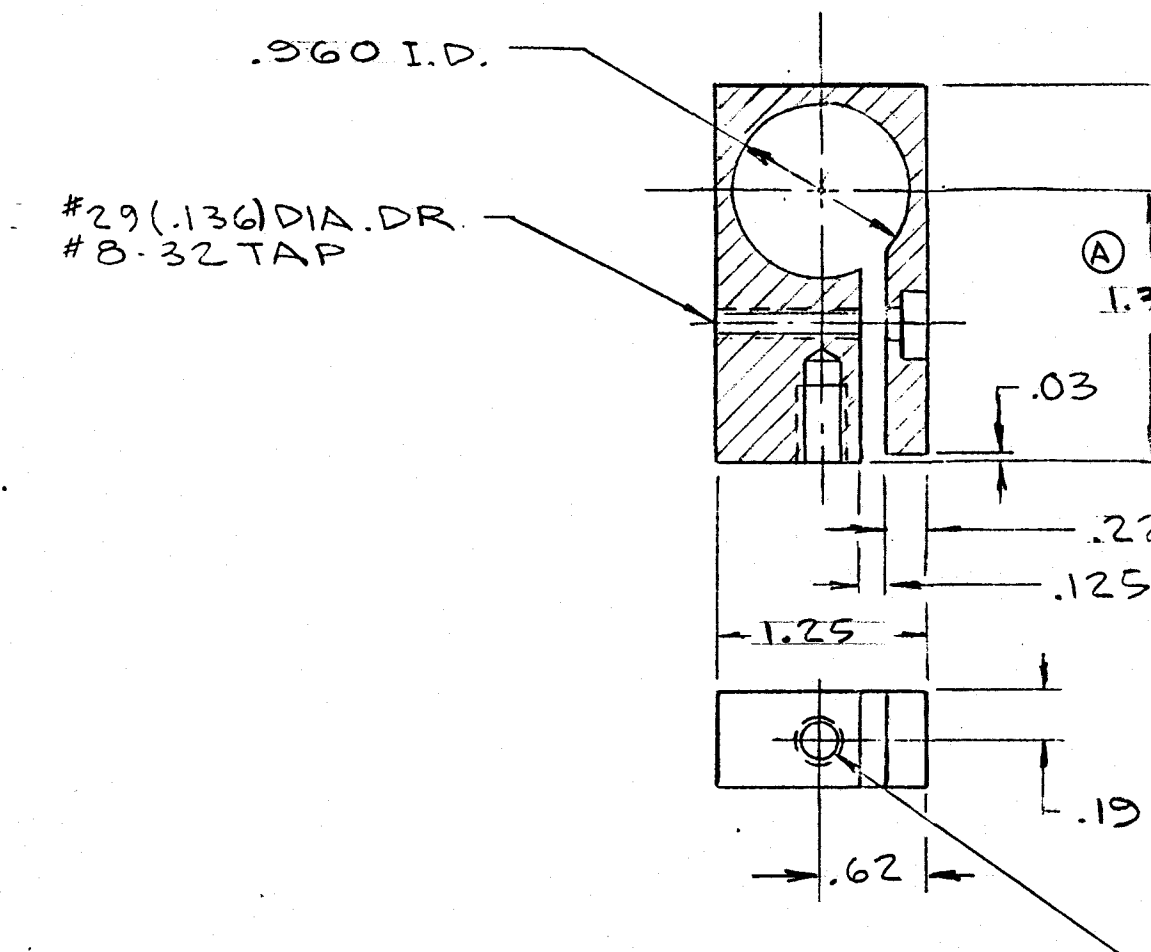
UNLESS OTHERWISE SPECIFIED)	DRAWN BY	DATE
	JEF	5/23/88
APPROVED BY		
M.E.	E.E.	A.D.
SCALE FULL		



IRCON, INC. ENGINEERING DEPT.  
SKOKIE, ILLINOIS, U.S.A.

TITLE  
CLAMP-MOUNTING FOR  
EUREKA S.H.  
SPECIAL E724

DRAWING NO.	REV.
PE-1574	A



NOTES :

1. MAT'L: ALUMINUM 2024-T4
2. FINISH: NONE
3. MUST BE FREE OF BURRS & SHARP EDGES.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED

TOLERANCES (UNLESS OTHERWISE SPECIFIED)

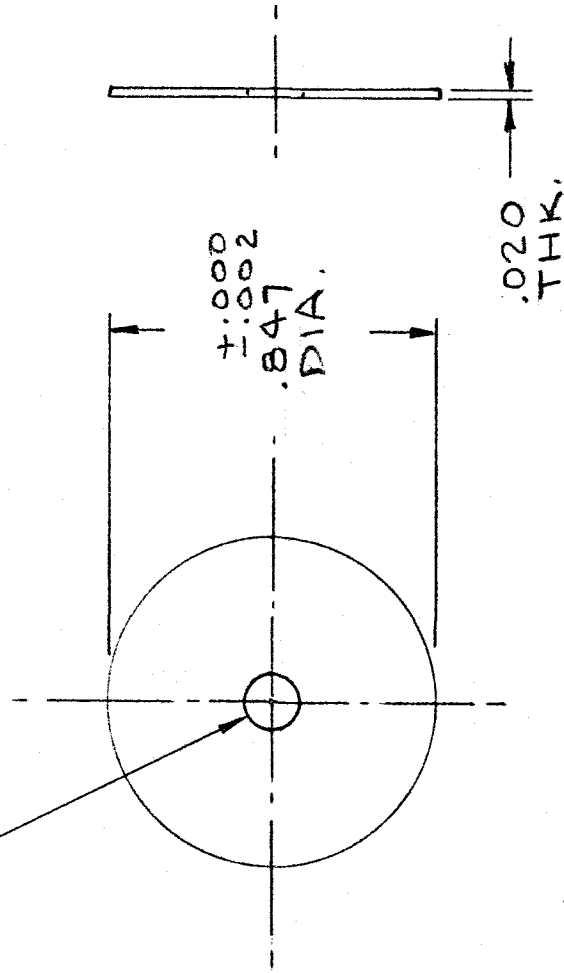
2 PLC. DEC.	= ± .01
3 PLC. DEC.	= ± .005
ANGULAR	= ± 1/2°
T.I.R. CONCENTRICITY	= ± .005



THIS PRINT SUPERSEDES ANY PRINT PRIOR TO

DWG. NO.

$\pm .004$   
 $\pm .000$   
.155 DIA. HOLE



MAT'L: ALUMINUM  
 MUST BE FREE OF BURRS.  
 FINISH: BLACK ANODIZE (TYPE II)  
 HOLE MUST BE CONCENTRIC  
 WITHIN  $\pm .002$ .

REVISIONS

A WAS DWG. EX-3445  
 SPECIAL RELEASE  
 5/4/95

NEXT HIGHER ASS'Y

NEXT LOWER ASS'Y

USED ON E-715 & E717 & E724

DO NOT SCALE PRINT

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED

TOLERANCES (UNLESS OTHERWISE SPECIFIED)

- $\pm .010$  ALL DIMENSIONS EXCEPT ROUND HOLES
- $\pm .002$  ALL ROUND HOLES AND ROUND PARTS
- $\pm \frac{1}{2}^\circ$  ALL ANGLES
- $\pm .010$  T.I.R. CONCENTRICITY
- ALL THREADS TO BE CLASS -2A EXTERNAL
- CLASS -2B INTERNAL



IRCON, INC.  
 7555 N. LINDER AVENUE SKOKIE, ILLINOIS 60077  
 (312) 967-5151

DRAWN BY JM

DATE 5/20/85

APPROVED BY

M.E. E.E.

SCALE 2/1

TITLE  
 GLARE STOP  
 (.155 DIA. HOLE)  
 (1.46  $\mu$ m EATON)

DRAWING NO.

44729-2

REV.

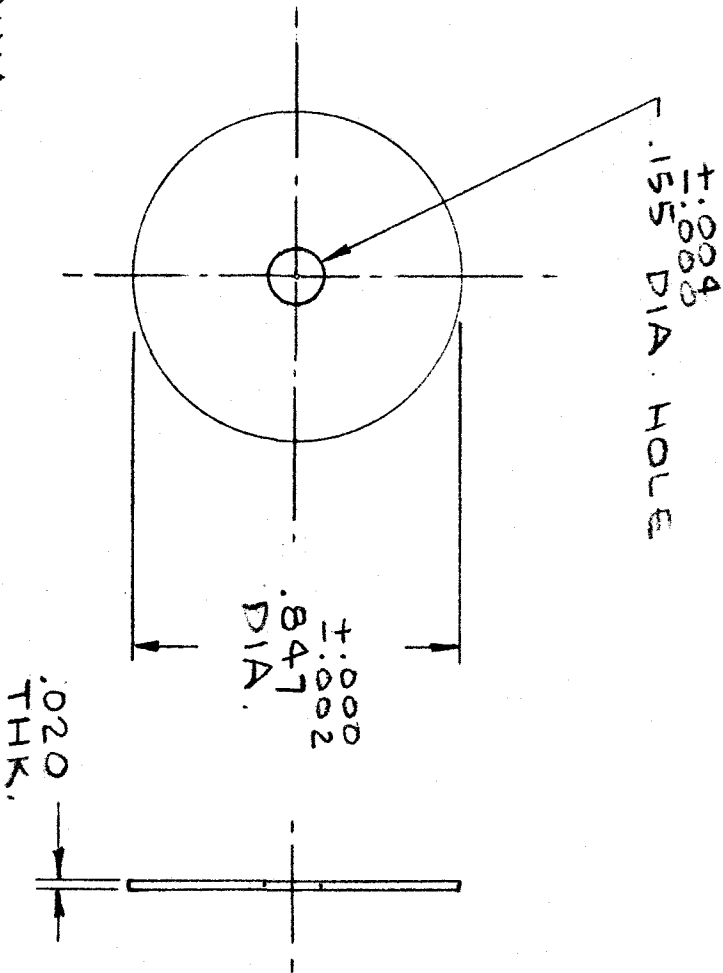
A

THIS PRINT SUPERSEDES ANY PRINT PRIOR TO

DWG. NO.

REVISIONS

A WAS DWG. EX-3445  
SPECIAL RELEASE  
5/4/95



MAT'L: ALUMINUM  
MUST BE FREE OF BURRS.  
FINISH: BLACK ANODIZE (TYPE II)  
HOLE MUST BE CONCENTRIC  
WITHIN ±.002.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED

DO NOT SCALE PRINT

TOLERANCES (UNLESS OTHERWISE SPECIFIED)

- ± .010 ALL DIMENSIONS EXCEPT ROUND HOLES
- ± .002 ALL ROUND HOLES AND ROUND PARTS
- ± ½° ALL ANGLES
- ± .010 T.I.R. CONCENTRICITY
- ALL THREADS TO BE CLASS -2A EXTERNAL  
CLASS -2B INTERNAL

DRAWN BY

JS

DATE

5/20/85

APPROVED BY

M.E.

E.E.

SCALE 2/1



IRCON, INC.  
7555 N. LINDER AVENUE SKOKIE, ILLINOIS 60077  
(312) 967-5151  
TELEX 72-4412

TITLE  
GLARE STOP  
(.155 DIA. HOLE)  
(1.46 μm EATON)

NEXT HIGHER ASS'Y

NEXT LOWER ASS'Y

USED ON E-715 & E717 & E724

DRAWING NO.

44729-2

REV.

A

**BILL OF MATERIAL**  
SPECIAL NO. E724

SHEET \_\_\_\_\_ OF \_\_\_\_\_  
RELEASE DATE 5/05/95

FOR ASSEMBLY NO. \_\_\_\_\_ LSE724

ITEM	IRCON PART NO.	QTY.	SYMBOL	DESCRIPTION
1	44731-2	1	_____	SENSING HEAD MECHANICAL ASSEMBLY
2	20081267D	1	_____	#8-32 X 3/8" CONE TIP NYLOK HEX HEAD MACHINE SCREW
3	61103-2	1	_____	LENS, PLANO-CONVEX, 12.5mm
4	B-11147	1	_____	DETECTOR ASSEMBLY
5	47375-2	1	_____	LABEL



TITLE  
SENSING HEAD FINAL ASSEMBLY  
(SPECIAL NO. E724)

DRAWING NO.  
C-11148

R  
B

**DRAWING (S) TOO LARGE  
TO SCAN.**

**TO VIEW THE ORIGINAL  
DESIGN,**

**A REQUEST TO VIEW  
PHYSICAL FILE  
IS YOUR NEXT OPTION.**

FOR ASSEMBLY NO. LSE724

**BILL OF MATERIAL**  
SPECIAL NO. E724

SHEET      OF       
RELEASE DATE 5/05/95

ITEM	IRCON PART NO.	QTY.	SYMBOL	DESCRIPTION
1	44731-2	1	—	SENSING HEAD MECHANICAL ASSEMBLY — 26
2	20081267D	1	—	#8-32 X 3/8" CONE TIP NYLOK HEX HEAD MACHINE SCREW
3	61103-2	1	—	LENS, PLANO-CONVEX, 12.5mm — 51
4	B-11147	1	—	DETECTOR ASSEMBLY
5	47375-2	1	—	LABEL — 164
	64048-2	1	—	FILTER, BAND PASS — 33
	45412-2	1	—	FIELD STOP .030" — 146
	44517-2	3	—	STANDOFF — 143
	43224-2	1	—	SPACER, DETECTOR — 65
	61103-2 <del>61103-2</del>	1	—	LENS, PLANO CONVEX - 51
	50174-3	1	—	P.S.B. — 94

↑  
↓

QUANTITIES  
IN STOCK  
AS OF  
3-10-99  
A.D.



TITLE  
SENSING HEAD FINAL ASSEMBLY  
(SPECIAL NO. E724)

DRAWING NO.  
C-11148  
B

2-2-94  
A.D.

# INVENTORY OF PARTS FOR SPECIAL E717 - E724

3-2-95  
A.D.

<u>P.N.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
	5-2-95 1	
EX-3502	S.H. HOUSING	1 - 3
C-STOCK	NYLOK HEX SCREW	86
EX-3498	LENS	19 - 8
59053-2	DETECTOR 121	47 - 173
47375-2	LABEL 680	723 - 680
50174-3	P.C.B. 81	117 - 106
44517-2	STANDOFF 47 WIP, 300 ORD	89 - 56
41031-2	BRASS SCREWS 32A	129 - 99
43224-2	PLASTIC SPACER 14 WIP, 50 ORD	4 - 17
EX-3500	FIELD STOP (.030")	8 - 6
64048-2	FILTER (E724 ONLY) 174	212 - 199

NOTE:

~~WE HAVE 2 COMPLETE E724 SENSORS BUILT  
AND CALIBRATED.~~

8-5-94 AD

ASSEMBLY NBR B11147 DESC DETECTOR ASSEMBLY

PART NUMBER	DESC	U/M	ASSEM QUANT	STD COST
501743-95	PCB DETECTOR SILICON SPECIALS	EA	1	1.34
150 - 445172-147	STANDOFF SWAGE 1/800 X 3/16LG	EA	3	1.89
250 - 410312-253	SCREW #00-90 X 3/16 PAN HEAD	EA	3	.69
50 - 432242-66	PLASTIC SPACER .219" LONG	EA	1	3.01
590532-43	DET. SILICON MOD+V/U/NAK/NI/NE	EA	1	11.61
454122-147	DET. FIELD STOP .030 DIA	EA	1	.72
640482-34	FILTER BANDPASS 0.7-1.0U SPL	EA	1	14.00
990100002	EPOXY HARDMAN #4005 GEN PURP	EA	1	.06
TOTAL			12	33.26

Stock AS OF 11-02-98  
 A.D.

PARTS COST  
 PARTS LABOR  
 ASSEM LABOR  
 TOTAL BOM

MATERIALS

(SPECIAL NO. EYR4)

STD  
LABOR

.00  
.00  
.00  
.00  
.00  
.00  
.00  
.00  
.00  
.00

37 86  
.00  
.00  
33 86

# Purchase Order



IRCON, INC.  
1001 W. 10TH ST.  
MILWAUKEE, WI 53233

Phone 708-957-5751  
Fax 708-947-0000



001606/312-235-5200

PO NUMBER	PAGE	PO DATE	ORDER TYPE	DATE
76073-00	01	03/22/95	NORMAL	03/22/95

ORDERED FROM  
**FOX TOOL CO**  
1665 N. MILWAUKEE AVENUE  
CHICAGO IL 60647

SHIP TO  
**IRCON, INC.**  
7300 N. WATCHEZ AVE  
MILWAUKEE, IL 53114

BUYER	SHIP TO	SHIP FROM	COMMENTS	FOR	DATE
ON BEHALF OF	IL 10 NET 30	YES	YES	SHIPPING FT.	PPD

LINE NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL PRICE	DATE
1	1	CONCRETE PER PRINT ASSEMBLY INCLUDES: 2000 REV & 2PCS 2000 REV & 2PCS 2000			04/21/95

ILLINOIS PERMIT 72415-1425

NOT FOR RESALE

FOR RESALE

PURCHASE ORDER NUMBER AND INVOICE NUMBER (IF STATED) MUST APPEAR ON ALL ACKNOWLEDGEMENTS, INVOICES, SLIPS AND INVOICES.

THIS ORDER MUST BE ACKNOWLEDGED WITHIN 7 DAYS.  
THIS ORDER ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE.

ORDERED BY R. Defer

CUSTOMER

# Purchase Quotation Request

cc: Joe 3/14



IRCON, INC.  
7301 N. Caldwell Ave.  
Niles, IL 60714 USA

Phone 708-967-5151  
Toll Free 800-323-7660  
Fax 708-647-0948



This is not an order - and implies no obligation on our part.  
We reserve the right to accept or decline all or parts hereof.

MPF  
502 MORSE  
UNIT B  
SCHAUMBURG, IL 60193

3/14/94 Wayne called.  
No Quote - does not  
have the equipment  
to make quote.

Date: \_\_\_\_\_  
Lead Time: \_\_\_\_\_ Weeks

Qty	Part Number	Rev Level	Description and Specifications	Unit Price	Total Price
10 25 50 100	EX-3502		ASSEMBLY OF ITEMS: EX-3499, REV. A - SENSING HEAD EX-3496, REV. A - DETECTOR HOUSING EX-3445, ----- - GIARE STOP		
10 25 50 100	43224-2		DETECTOR SPACER		
10 25 50 100	EX-3500	A	FIELD STOP (IRCON TO SUPPLY 45119-3)		

Drawings Attached

Grand Total \_\_\_\_\_

Comments:

Attention Bidder: Can you suggest a better value through:

- Substitution
- Quantity change
- Different design
- Packaging change

Buyer RONALD DEFOE Date 3/7/95

Signature R. Defoe 3/7/95

Seller Signature \_\_\_\_\_

Title \_\_\_\_\_ Date \_\_\_\_\_

# Purchase Quotation Request



IRCON, INC.  
7301 N. Caldwell Ave.  
Niles, IL 60714 USA

Phone 708-967-5151  
Toll Free 800-323-7660  
Fax 708-647-0948

**ISO 9001**  
Quality System  
Certified

#7

This is not an order - and implies no obligation on our part.  
We reserve the right to accept or decline all or parts hereof.

G & Z INDUSTRIES INC.  
541 CHADDICK DRIVE  
WHEELING, IL. 60090-6053

Date: 3-15-95

Lead Time: 8 Weeks ARO -EX-3502

Qty	Part Number	Rev Level	Description and Specifications	Unit Price	Total Price
10	EX-3502		ASSEMBLY OF ITEMS: EX-3499, REV. A - SENSING HEAD EX-3496, REV. A - DETECTOR HOUSING EX-3445, ----- - GLARE STOP	\$123.32	\$1233.20
25				62.23	1555.75
50				44.87	2243.50
100				35.56	3556.00
10	43224-2		DETECTOR SPACER  DELIVERY: 4 WKS ARO	9.37	93.70
25				4.91	122.75
50				3.42	171.00
100				3.01	301.00
10	EX-3500	A	FIELD STOP (IRCON TO SUPPLY 45119-3)  DELIVERY: 4 WKS ARO	18.45	184.50
25				8.92	223.00
50				5.75	287.50
100				5.17	517.00

Drawings Attached

LENS EX-3498 QTY 50 = 9.76  
7-5-95

Grand Total 6689.65

Comments:

Attention Bidder: Can you suggest a better value through?

Substitution

Quantity change

Different design

Packaging change

Buyer RONALD DEFOE Date 3/7/95

Signature *R. Defoe* 3/7/95

Seller Signature *[Signature]*

Title PRESIDENT/G&Z INDUSTRIES, INC. Date 3-15-95





# PURCHASE REQUISITION

Supplier

Date

4-4-95

687

P.O. #

Requisitioner

J. LAKNER

Purpose/Reason

SPECIAL E724

Attn

Date needed

4-28-95

Phone

Route to

STOCK

**Material Safety Data Information:**

New chemical MSDS received on \_\_\_\_\_

for sample only

routine use

Previously purchased chemical: Active Index No. \_\_\_\_\_

Qty	U/M	Part No.	Rev. Level	Description	Price Ea	Total	Acct or W/O No.
50		432242		DETECTOR SPACER	3.42	171.00	

Confirming to \_\_\_\_\_

Approval (under \$100 - Authorized Requisitioner)

*J. Lakner*

Total \$

171.00

(\$100 - \$5000 - Department Manager)

(over \$5000 - General Manager)



# PURCHASE REQUISITION

Supplier

C & Z

Date 4-9-95

P.O. # \_\_\_\_\_

Requisitioner J. LAKNER

Purpose/Reason SPECIAL E724

Attn \_\_\_\_\_

Phone \_\_\_\_\_

Date needed 4-28-95

Route to J. LAKNER

**Material Safety Data Information:**  
 New chemical MSDS received on \_\_\_\_\_  for sample only  routine use  
 Previously purchased chemical: Active Index No. \_\_\_\_\_ 35 5

Qty	UM	Part No.	Rev. Level	Description	Price Ea	Total	Acct or W/O No.
50		EX-3499	A	SENSING HEAD	—	—	
50		EX-3496	A	DETECTOR HOUSING	—	—	
50		EX-3455	—	GLARE STOP	—	—	
50		EX-3502		ASSEMBLY OF ITEMS, EX-3499, EX-3496, EX-3455	44.87	2243.50	

Confirming to \_\_\_\_\_

Approval (under \$100 - Authorized Requisitioner) \_\_\_\_\_

(\$100 - \$5000 - Department Manager) \_\_\_\_\_

(over \$5000 - General Manager) \_\_\_\_\_

Total \$ 2243.50

# Purchase Quotation Request



IRCON, INC.  
7301 N. Caldwell Ave.  
Niles, IL 60714 USA

Phone 708-967-5151  
Toll Free 800-323-7660  
Fax 708-647-0948

**ISO 9001**  
Quality System  
Certified

#7

This is not an order - and implies no obligation on our part.  
We reserve the right to accept or decline all or parts hereof.

G & Z INDUSTRIES INC.  
541 CHADDICK DRIVE  
WHEELING, IL. 60090-6053

Date: 3-15-95

Lead Time: 8 Weeks ARO -EX-3502

Qty	Part Number	Rev Level	Description and Specifications	Unit Price	Total Price
10	EX-3502		ASSEMBLY OF ITEMS:	\$123.32	\$1233.20
25			EX-3499, REV. A - SENSING HEAD	62.23	1555.75
50			EX-3496, REV. A - DETECTOR HOUSING	44.87	2243.50
100			EX-3445, ----- - GLARE STOP	35.56	3556.00
10	43224-2		DETECTOR SPACER	9.37	93.70
25				4.91	122.75
50			DELIVERY: 4 WKS ARO	3.42	171.00
100				3.01	301.00
10	EX-3500	A	FIELD STOP	18.45	184.50
25			(IRCON TO SUPPLY 45119-3)	8.92	223.00
50				5.75	287.50
100			DELIVERY: 4 WKS ARO	5.17	517.00

Drawings Attached

LENS EX-3498 QTY 50 = 9.76  
4-5-95

Grand Total 6689.65

Comments:

Attention, Bidder: Can you  
equally value through

Substitution

Quantity change

Different design

Packaging change

Buyer RONALD DEFOE Date 3/7/95

Signature [Signature] 3/7/95

Seller Signature [Signature]

Title PRESIDENT/G&Z INDUSTRIES, INC. Date 3-15-95

# PURCHASE REQUISITION



P.O.# \_\_\_\_\_

VENDOR: <u>GLOBE FASTENERS</u> <u>C/O ELECTRA SALES</u> <u>1224 FIELD COURT</u> <u>NAPERVILLE, IL 60540</u> TELEPHONE: (312) <u>369-8240</u> <input type="checkbox"/> CHECK IF ALTERNATE IS ACCEPTABLE	DATE: <u>5-16-85</u> REQUISITIONER: <u>R. VERNON</u> PURPOSE/REASON: <u>EATON PROJECT NO. 36933</u> DATE NEEDED: <u>6-24-85</u> SHIP VIA: <input type="checkbox"/> BEST WAY <input type="checkbox"/>
---	--

ATTN. TOM MCGUIRE

QTY.	UNITS	DESCRIPTION	Price Each \$	Price Total \$	Acct. or W.O. #
100		1/8" SWAGE STANDOFF X 3/16" LONG, 0-80 THREAD SIZE, SOLID BRASS WITH HOT TIN DIP FINISH GLOBE TYPE: RB-44-080-105-20		123/C	36933
CONFIRMING TO: <u>TOM MCGUIRE</u>			TOTAL	\$123.00	

APPROVAL \_\_\_\_\_ UNDER \$100.00

\_\_\_\_\_ \$100.00 - \$500.00

\_\_\_\_\_ OVER \$500.00

# Purchase Quotation Request



IRCON, INC.  
7301 N. Caldwell Ave.  
Niles, IL 60714 USA

Phone 708-967-5151  
Toll Free 800-323-7660  
Fax 708-647-0948



#7

This is not an order - and implies no obligation on our part.  
We reserve the right to accept or decline all or parts hereof.

G & Z INDUSTRIES INC.  
541 CHADDICK DRIVE  
WHEELING, IL. 60090-6053

Date: 3-15-95

Lead Time: 8 Weeks ARO -EX-3502

Qty	Part Number	Rev Level	Description and Specifications	Unit Price	Total Price
10	EX-3502		ASSEMBLY OF ITEMS:	\$123.32	\$1233.20
25			EX-3499, REV. A - SENSING HEAD	62.23	1555.75
50			EX-3496, REV. A - DETECTOR HOUSING	44.87	2243.50
100			EX-3445, ----- - GLARE STOP	35.56	3556.00
10	43224-2		DETECTOR SPACER	9.37	93.70
25				4.91	122.75
50			DELIVERY: 4 WKS ARO	3.42	171.00
100				3.01	301.00
10	EX-3500	A	FIELD STOP	18.45	184.50
25			(IRCON TO SUPPLY 45119-3)	8.92	223.00
50				5.75	287.50
100			DELIVERY: 4 WKS ARO	5.17	517.00

Drawings Attached

LENS EX-3498 QTY 50 = 9.76  
4-5-95

Grand Total 6689.65

Comments:

Attention Bidders: Can you  
fill in a box, value in \$/lb.

Substitution

Quantity change

Different design

Packaging change

Buyer RONALD DEFOE Date 3/7/95

Signature [Signature] 3/7/95

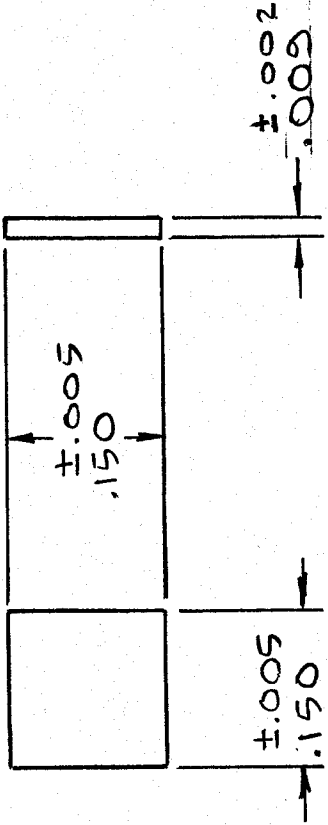
Seller Signature [Signature]

Title PRESIDENT/G&Z INDUSTRIES, INC. Date 3-15-95

DWG. NO. 64048-2 REV. A

REVISIONS

A RELEASE TO PRODUCTION 8-28-87 PJ



NOTES:  
 1. LONG WAVE CUTOFF: . . . . . 1.00 ± 0.10 MICRONS @ 50° T  
 2. SHORT WAVE CUTOFF: . . . . . 0.70 ± 0.15 MICRONS @ 50° T  
 3. CHIPS & JIG MARKS: . . . . . ≤ .020" TOWARD CENTER  
 4. FINISH: . . . . . 80-50  
 5. OPTICAL SYSTEM: . . . . . F/3.6 AT NORMAL INCIDENCE  
 6. NO CHANGES TO COATING DESIGN OR MATERIAL ALLOWED ON THIS PART.  
 7. PURCHASE PART FROM OCLI.

NOTICE !

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"L" ASS'Y

NEXT HIGHER ASS'Y

USED ON SPECIAL N° CT03P

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT



IRCON, INC. ENGINEERING DEPT.  
 SKOKIE, ILLINOIS, U.S.A.

DRAWN BY	DATE
VZP	5/22/89
APPROVED BY	
M.E. JIB	E.E. S.P.
SCALE	X

2 PLC. DEC. = ±  
 3 PLC. DEC. = ±  
 ANGULAR = ±  
 T.I.R. CONCENTRICITY = ±

TITLE  
 FILTER BANDPASS  
 0.7 - 1.0 μ (SH703)

DRAWING NO.

64048-2

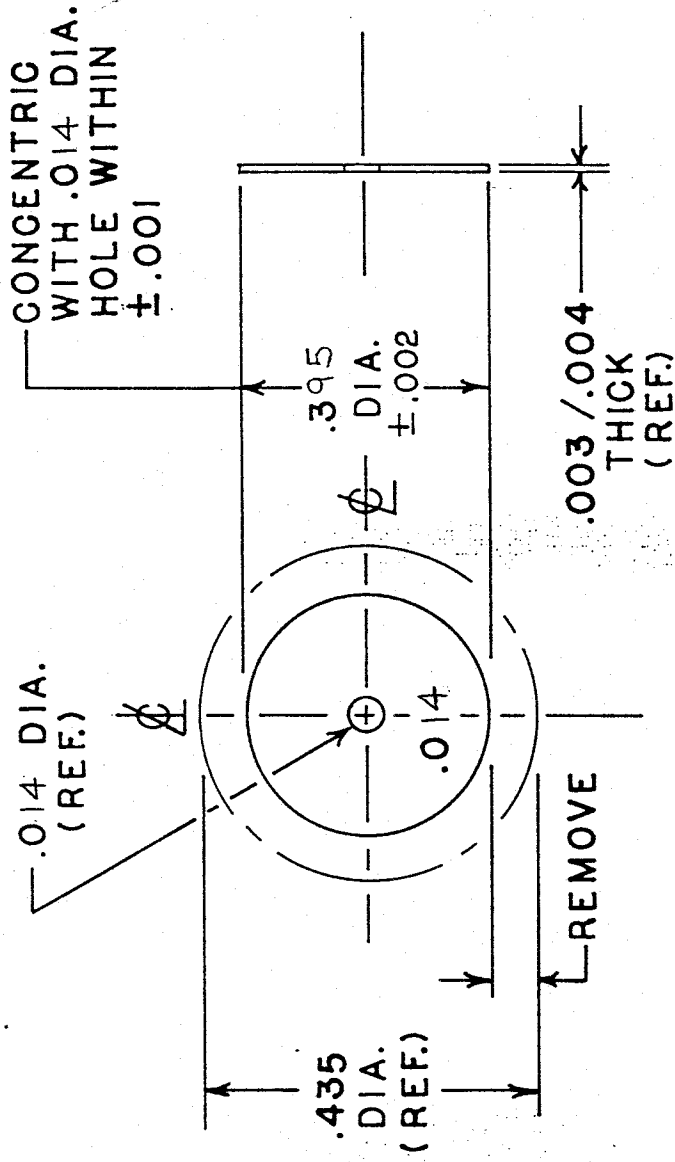
REV.

A

DWG. NO. EX-4279 REV. A

REVISIONS

A ORIGINAL RELEASE  
3-21-96



- NOTES:
1. MATERIAL: IRCON PART NO. 45119 - 4  
(300 SERIES STAINLESS STEEL)
  2. FINISH: NONE

"L" ASS'Y

NEXT HIGHER ASS'Y

USED ON SPECIAL NO. R700

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT



IRCON, INC. ENGINEERING DEPT.  
SKOKIE, ILLINOIS, U.S.A.

DRAWN BY	DATE
APPROVED BY	3-21-96
M.E.	E.E.
SCALE	

TOLERANCES (UNLESS OTHERWISE SPECIFIED)

- 2 PLC. DEC. = ±
- 3 PLC. DEC. = ±
- ANGULAR = ±
- T.I.R. CONCENTRICITY = ±

TITLE DETECTOR FIELDSTOP  
(0.014 DIA. HOLE)

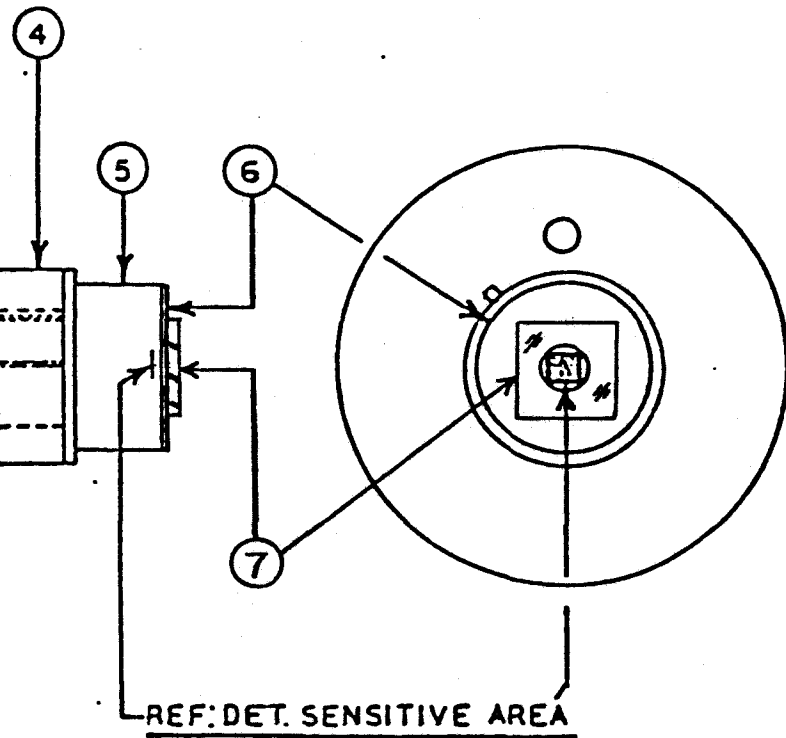
DRAWING NO.

EX-4279 REV. A

**DRAWING(S) TOO LARGE  
TO SCAN.**

**TO VIEW THE ORIGINAL  
DESIGN,**

**A REQUEST TO VIEW  
PHYSICAL FILE  
IS YOUR NEXT OPTION.**



ALIGN THE FIELDSTOP (ITEM 6) SO IT IS CENTERED OVER THE SENSITIVE AREA OF THE DETECTOR (ITEM 5) AND EPOXY IT IN PLACE.

ALIGN THE FILTER (ITEM 7) OVER THE OPENING OF THE FIELDSTOP (ITEM 6) AND EPOXY IT IN PLACE.

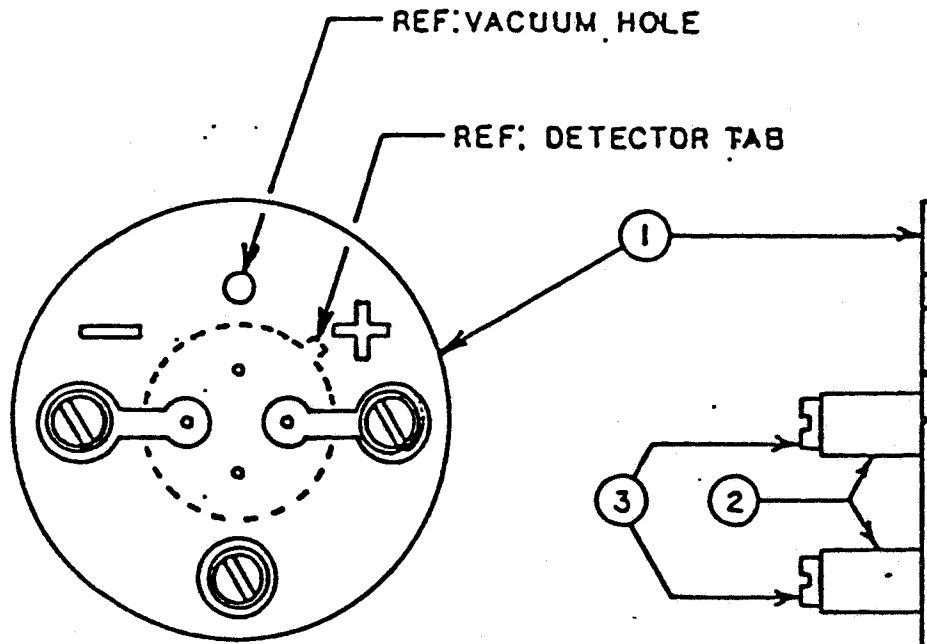
DRAWING NO.		REV.
B-11147		B
REVISION		
LTR.	DESCRIPTION	BY/DATE
A	SPECIAL RELEASE	5/5/95 J.J.
B	REVISED NOTE #3. DO NOT EPOXY ITEMS TOGETHER	9-25-95 J.L.
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DO NOT SCALE

SHEET #

BY	DATE		<b>SQUARE D COMPANY</b> INFRARED MEASUREMENT DIVISION NILES, ILLINOIS 60648	MANUFACTURER OF <b>IRCON</b> PRODUCTS
ED	DATE			
TITLE			DRAWING NO.	REV.
DETECTOR ASSEMBLY (SPECIAL NO. E724)			B-11147	B

R700



**NOTES:**

1. STAKE ITEM 2 TO ITEM 1 USING INTN'L EYELETS INC. ROLL SETTING TOOL NO. FR-90 OR EQUIVALENT.
2. SOLDER ITEM 2 TO THE FOIL OF ITEM 1.
3. SLEEVE THE DETECTOR WITH ITEM 4 THEN, INSERT THE LEADS INTO THE BOARD. SOLDER THE LEADS TO THE P.C. BOARD  
 TO P.C.B. DO NOT SOLDER LEADS

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED

MATERIAL	DRAWN
	J.
	APP'D

**BILL OF MATERIAL**

SHEET 2 OF 2  
 RELEASE DATE 7-29-87

FOR ASSEMBLY NO. \_\_\_\_\_

ITEM	IRCON PART NO.	QTY.	SYMBOL	DESCRIPTION
1	EX-3552	1	-----	SENSING HEAD MECHANICAL ASSEMBLY <sup>2</sup>
2	<del>C-STOCK</del>	1	-----	#8-32 X 3/8" LONG SOCKET SET SCREW, CONE POINT WITH NYLOCK PELLET
3	61059-2 61103-2	1	-----	LENS, 1.6" FOCAL LENGTH <sup>PLANO-CONVEX, 12.5 mm</sup>
4	EX-3456 64048-2-1	1	-----	FILTER, SQUARE BANDPASS (LAMBDAO = 1.46 MICRONS) <sup>0.7-1.0</sup>
5	EX-3444 EX-4279	1	-----	FIELD STOP, 0.090" DIAMETER <sup>0.014" ID, 0.395 O.D.</sup>
6	B-10849	1	-----	DETECTOR ASSEMBLY
7	20081267D 47375-2	1	-----	LABEL



TITLE  
 SENSING HEAD FINAL ASSEMBLY  
 ( SPECIAL NO. E715)

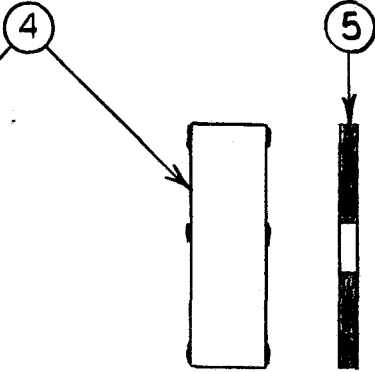
DRAWING NO.  
 B-10850

DWG. NO.

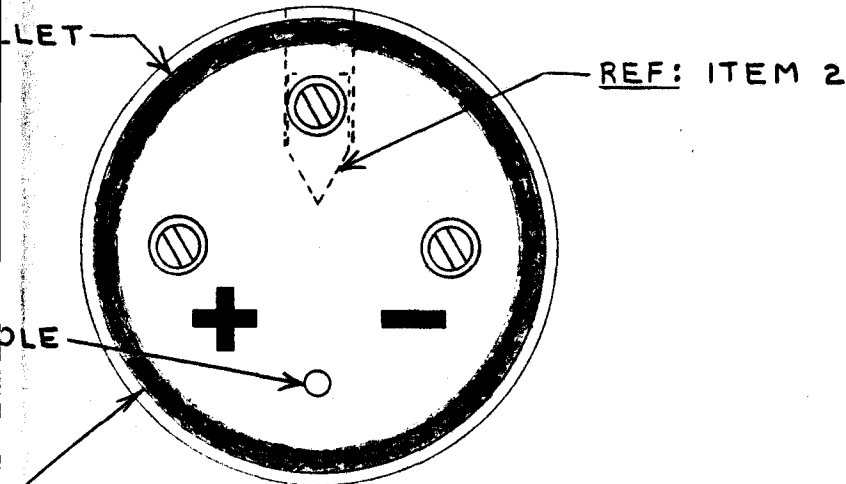
REV.

B-10850

REVISIONS



APPLY SMALL DROPS OF EPOXY TO BOTH SIDES OF ITEM 4 THEN INSTALL ITEM 4 AND ITEM 5 INTO ITEM 1



ALIGN ITEM 6 AS SHOWN ABOVE THEN INSTALL ITEM 6 INTO ITEM 1. SECURE ITEM 6 TO ITEM 1 WITH A FILLET OF EPOXY AS SHOWN.

"L" ASS'Y

NEXT HIGHER ASS'Y

USED ON

SPECIAL NO. E715

UNLESS OTHERWISE SPECIFIED

DO NOT SCALE PRINT

UNLESS OTHERWISE SPECIFIED)

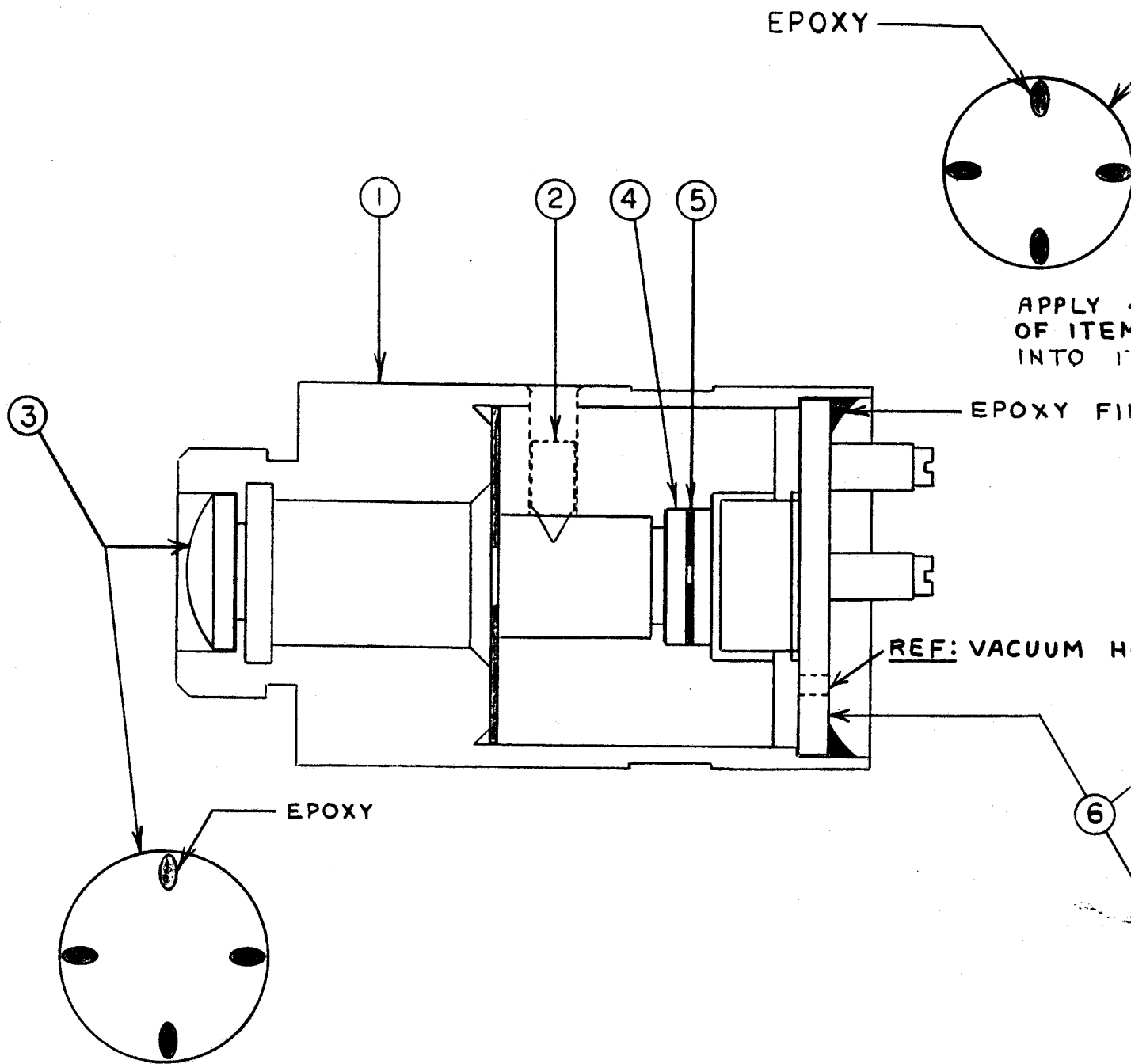
DRAWN BY	DATE
R.L.V.	7-29-87
APPROVED BY	
M.E.	E.E.
SCALE	



IRCON, INC. ENGINEERING DEPT.  
SKOKIE, ILLINOIS, U.S.A.

TITLE  
SENSING HEAD FINAL  
ASSEMBLY

DRAWING NO.	REV.
B-10850	



APPLY 4 SMALL DROPS OF EPOXY TO THE  
 FLAT SURFACE OF ITEM 3 THEN INSTALL  
 ITEM 3 INTO ITEM 1

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED  
 TOLERANCES (UNLESS OTHERWISE SPECIFIED)

- 2 PLC. DEC. =  $\pm$
- 3 PLC. DEC. =  $\pm$
- ANGULAR =  $\pm$
- T.I.R. CONCENTRICITY =  $\pm$

FOR ASSEMBLY NO. \_\_\_\_\_

BILL OF MATERIAL

SHEET 2 OF 2  
 RELEASE DATE 7-28-87

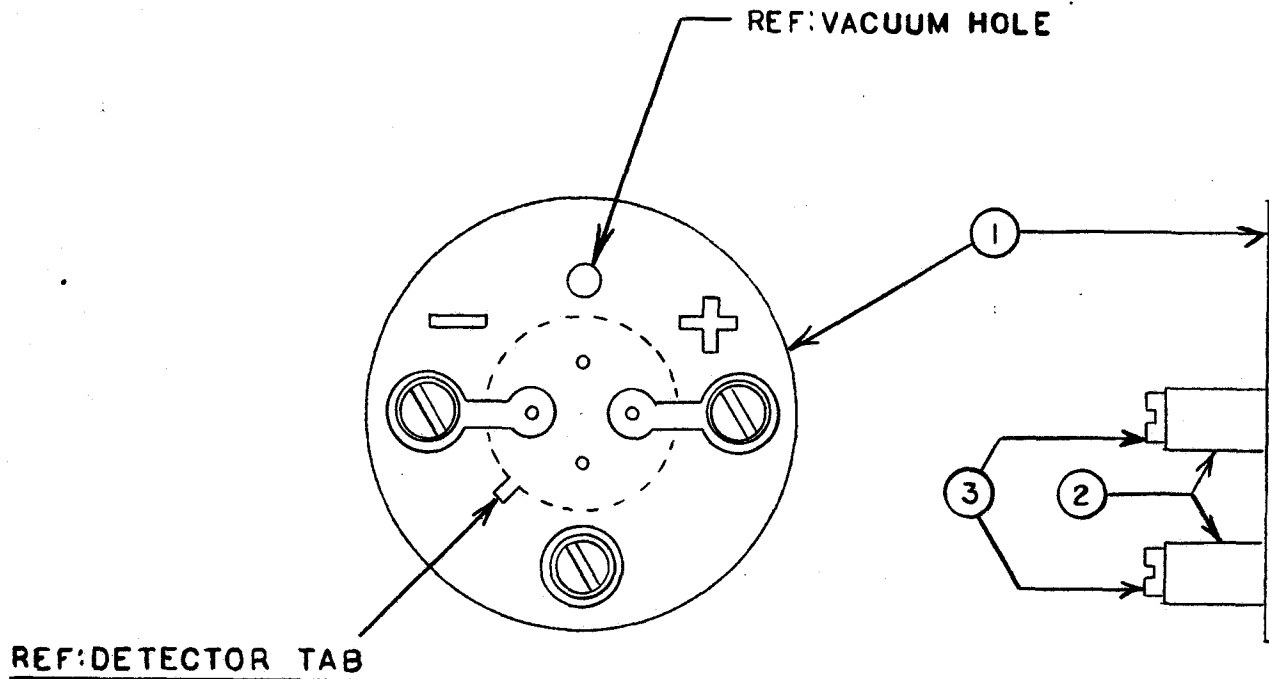
ITEM	IRCON PART NO.	QTY.	SYMBOL	DESCRIPTION
1	50174- <del>X3</del> ✓	1	-----	DETECTOR P.C. MOUNTING BOARD ✓
2	44517-2 ✓	3	-----	SWAGE THREADED STANDOFF, 0-80 THREAD, SILVER PLATED BRASS ✓
3	41031-2 ✓	3	-----	# 0-80 X 3/16" LONG PAN HEAD MACHINE SCREW, BRASS ✓
4	<del>59054-2</del> ✓ 59054-2 ✓	1	-----	DETECTOR, GERMANIUM, 2mm DIAMETER ✓
5	43191-2	1	---	PAD, TRANSISTOR, TO-5

~~59054-2 = Det Ge HAMAMATSU 2mm Dia TO-5~~  
~~59053-2 = Det. SIL. VACTEC UTB50515 .15X .15" TO-5~~



TITLE  
 DETECTOR ASSEMBLY  
 ( SPECIAL NO. E715)

DRAWING NO. B-10849



**NOTES:**

1. STAKE ITEM 2 TO ITEM 1
2. SOLDER ITEM 2 TO THE FOIL OF ITEM 1
3. INSTALL ITEM 4 TO THE P.C. BOARD (ITEM 1)  
THEN, SOLDER THE LEADS TO THE P.C. BOARD  
AND CUT THE LEADS FLUSH WITH THE BOARD  
NOTE: BE CAREFULL TO INSTALL ITEM 4 WITH  
THE TAB AS SHOWN
4. INSTALL ITEM 3 INTO ITEM 2

ALL DIMENSIONS ARE IN INCHES UN

TOLERANCES (UNLESS OTHERW

2 PLC. DEC. =  $\pm$

3 PLC. DEC. =  $\pm$

ANGULAR =  $\pm$

T.I.R. CONCENTRICITY =  $\pm$



DWG. NO.

61103-2

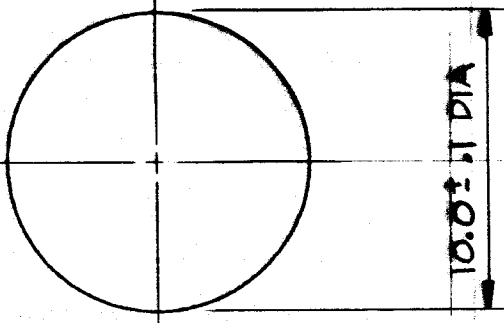
REV.

A

REVISIONS

A

SPECIAL RELEASE  
WAS DWG. EX-3498  
6/6/95 J.C.



"L" ASS'Y

NEXT HIGHER ASS'Y

USED ON

~~OTHERWISE SPECIFIED~~

DO NOT SCALE PRINT

SPECIFIED)	DRAWN BY	DATE
	1.1	10/11/85
	APPROVED BY	
	M.E.	<i>EE</i>
SCALE 4:1		



IRCON, INC. ENGINEERING DEPT.  
SKOKIE, ILLINOIS, U.S.A.

TITLE  
PLANO-CONVEX LENS  
R = 12.5 mm

DRAWING NO.

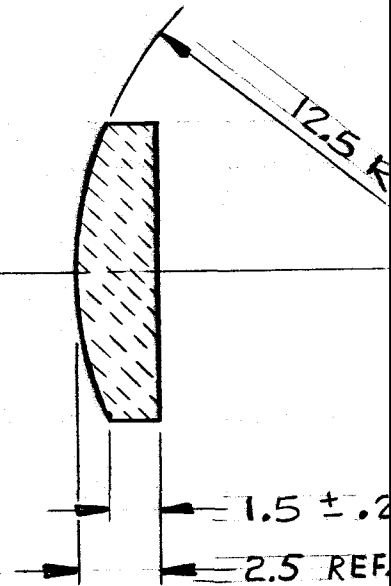
61103-2

REV.

A

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. LENS TYPE: PLANO-CONVEX.
3. MATERIAL: BK-7
4. SURFACE COSMETIC 80-50
5. D.I.E.T. (DIFFERENCE IN EDGE THICKNESS) : 0.1mm MAX
6. BEVEL OUTSIDE EDGES 45° R 0.2 (NOT SHOWN)



ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

TOLERANCES (UNLESS OTHERWISE SPECIFIED)

- 2 PLC. DEC. = ±
- 3 PLC. DEC. = ±
- ANGULAR = ±
- T.I.R. CONCENTRICITY = ±