

PAGE 1 OF 2
DATE: 7-10-1997
REVISION:A
W.O. NO: 62141
CUSTOMER: EMHART
LOCATION:

INFRARAIL SPECIAL NUMBER R706

PURPOSE AND DESCRIPTION:

CUSTOMER REQUIRES A SPECIAL FOREHEARTH TEMPERATURE MEASUREMENT SYSTEM CONSISTING OF 3 INFRARAIL SENSORS SPECIAL R614. THE SYSTEM IS PROVIDED EITHER WITH OR WITHOUT A POWER SUPPLY. **SYSTEMS WITHOUT POWER SUPPLIES** WILL BE REFERED TO SPECIAL HARDWARE P.N. **3SNP-R706** AND CONSIST OF THE ITEMS BELOW:

- 1 16" X 12" X 8" ENCLOSURE
- 3 INFRARAIL PROCESSOR MODULES SPECIAL R614
- 3 SENSING HEADS MOUNTED THROUGH THE HOUSING (SPECIAL R614).
- 4 AIR FLOW METERS, 3 OF WHICH CONTROL THE FLOW TO THE SENSORS, AND THE FOURTH TO CONTROL AIR TO THE ENCLOSURE.
- 3 AIR PURGE OUTLETS. BULKHEAD TYPE.
- 1 INTERNAL BLEED VALVE.
- 1 FUSED TERMINAL STRIP FOR 24VDC POWER
- 3 R/S TYPE THERMOCOUPLE PANEL MOUNT JACKS (STANDARD TYPE).
- 1 3/4" CONDUIT HUB FOR DC SIGNALS.

SPECIAL SYSTEMS WITH POWER SUPPLIES WILL BE REFERED TO SPECIAL HARDWARE P.N. **3S-R706** AND CONSIST OF THE ITEMS LISTED ABOVE, PLUS THE FOLLOWING ITEMS:

- 1 TERMINAL STRIP FOR AC POWER
- 1 LINE FILTER/SPIKE SUPPRESSOR ASSEMBLY
- 1 CIRCUIT BREAKER
- 2 3/4" CONDUIT HUBS, 1 FOR DC SIGNALS, 1 FOR AC LINE INPUT.

IN ADDITION, EACH SYSTEM IS TO BE PROVIDED WITH THE FOLLOWING EXTERNAL COMPONENTS:

- 3 25 FOOT FIBER OPTICS FROM SENSORS SPECIAL R614.
- 3 REIMAGING LENS ASSEMBLIES OPTICAL RESOLUTION D/30 FROM SPECIAL R614.
- 3 AAQ-1 AIR PURGES
- 3 STAINLESS STEEL SIGHT TUBE AND MOUNTING FLANGES
- 3 30 FOOT LENGTH COPPER TUBING LENGTHS.
- 1 60 FOOT LENGTH COPPER TUBE.

NOTE: THIS SPECIAL IS COMBINED WITH SPECIAL R614 .

GENERALITY OF APPLICATION AND RESTRICTIONS:

UNRESTRICTED: SUITABLE FOR USE WITH ALL STANDARD OPTIONS.

WRITTEN BY:  _____

APPROVED BY:  _____ DATE: 7-10-97

INFRARAIL SPECIAL NUMBER R706

REVISION:A
DATE: 7-10-1997

PRODUCTION INSTRUCTIONS:

AFTER FINAL CALIBRATION, DELIVER THE SPECIAL R614 SENSORS AND ELECTRONICS TO ENGINEERING FOR INSTALLATION INTO THE SPECIAL ENCLOSURE.

CALIBRATION INSTRUCTIONS:

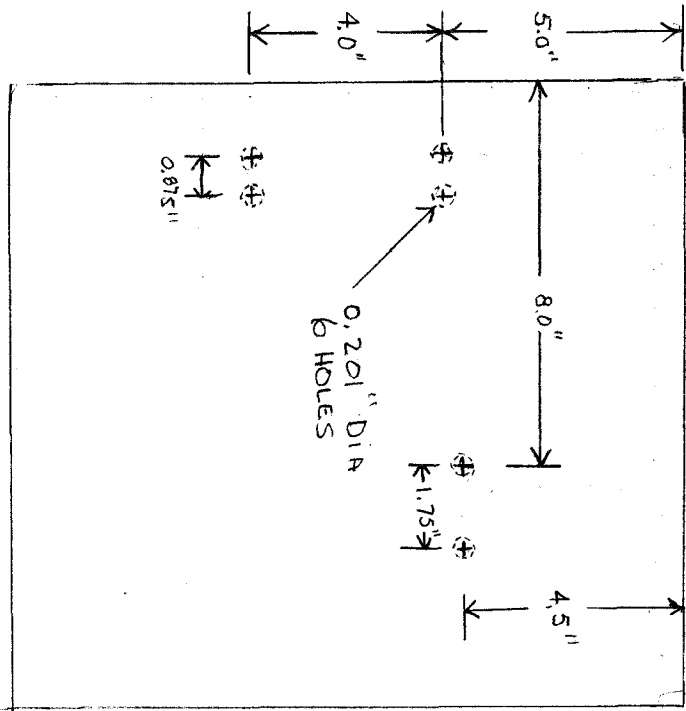
CALIBRATE AS PER STANDARD.

MANUAL INSTRUCTIONS:

GENERIC INFRARAIL SERIES MANUAL.

213-0992

AIR REGULATION PANEL



13.15"

13.88"

2 2/5

3 1/2

Section 1 — GENERAL INFORMATION

1.5 SPECIAL MODIFICATIONS

The customer has requested that Ircon, Inc. develop a special Glass Forehearth Temperature Measurement System comprised of an air regulation module and temperature sensor module(s). Depending on system requirements, the air regulation module PN ARM-R708 is capable of delivering air for 1 to 4 sensor module enclosures. The sensor module enclosures consist of 2 or 3 sensors with or without power supplies. Part Numbers for the different module enclosures are as follows:

2S - R706	2 sensor module with a power supply
2SNP - R706	2 sensor module without power supply
3S - R706	3 sensor module with a power supply
3SNP - R706	3 sensor module without power supply

The sensor modules feature Ircon Infrarail Models DNFFE-99F temperature measurement systems calibrated for 4 - 20 mA DC linear output over a temperature range of 1800 - 2500°F and an optical resolution of D/30. Fiber Optics are connected to each of the sensors located inside the enclosure. Air flow from the Air Regulation Module is directed into the sensor module enclosure, through the Flow Meters, located on the outside of the front door of the enclosure. Air then is directed toward the air purge located at the mounting bracket. Depending on the power option selected, terminal blocks for DC and/or AC power are provided. Also provided are 3 R Type standard thermocouple jacks located on the front door.

INSTALLATION INSTRUCTIONS

All module enclosures have been assembled with sensors and electronics. The Infrarail Processor Modules have been wired for a multiple loop configuration. Refer to Section 3 of this manual for more information.

POWER CONNECTIONS

For modules provided without a power supply, connect DC power to terminals marked +24V and 24 COM . Refer to Section 3.4 of this manual for power supply and load requirements. Connect the Recorder, the Controller, etc... in a series loop to the DC terminal blocks labeled + and - under labels 1, 2, and/or 3. Terminal Block 1 connects to the processor module for the sensor labeled SEN-1 on the side of the enclosure. Terminal block 2 connects to the processor module for SEN-2, and/or terminal block 3 connects to the processor module for SEN-3.

For modules with power supplies, connect AC supply to terminal blocks for AC connections. Connect sensor output as previously described.

FIBER OPTIC CABLE ASSEMBLY

Connect the fiber optic cable assemblies to the type F sensors as shown in Section 2F of this manual. *NOTE:* Each sensor , fiber optic cable, and reimaging lens assembly are calibrated as individual systems. Match Serial numbers to each sensor , fiber optic cable, and reimaging lens assembly. Mixing optical components and/or lens assemblies will result in calibration errors.

AIR SUPPLY CONNECTIONS

The Air Regulation Module PN. ARM - 708 supplies air to each sensor module enclosure and air purge located at the mounting bracket. The Air Regulation Module includes the following:

- ½ in. bulkhead union fitting for air input
- Air Filter/Regulator
- Air Manifold
- ¾ in. bulkhead unions for air out to the sensor modules

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- ½ in. bulkhead union fitting for air input
- Air Filter/Regulator
- Air Manifold
- ¾ in. bulkhead unions for air out to the sensor modules

Purchase Order

Joe Luker
APPROVED

001506/773-835-6882

ORDER NUMBER 8332907	PAGE 01	DATE 12/20/97	QUANTITY NORMAL	UNIT PRICE 167.25/L
ORDERED FROM FOX TOOL 1955 N. MILWAUKEE AVENUE CHICAGO IL 60647		SUPPLIER TRICON, INC. 7300 N. NATCHEZ CHICAGO IL 60647		

BUYER IRON DEFCE	TERMS NET 45	ACKNOWLEDGE YES	SHIPPING PT	DEST PPD
----------------------------	------------------------	---------------------------	-----------------------	--------------------

LINE NO	QTY ORDERED	BLANKET TYPE	UNIT	CURR. PRICE	DESCRIPTION	ORDER NUMBER	DATE	EXT.
01					FLANGE COMPLETE REAR PRINT. REV			

NOT FOR RESALE **FOR RESALE**

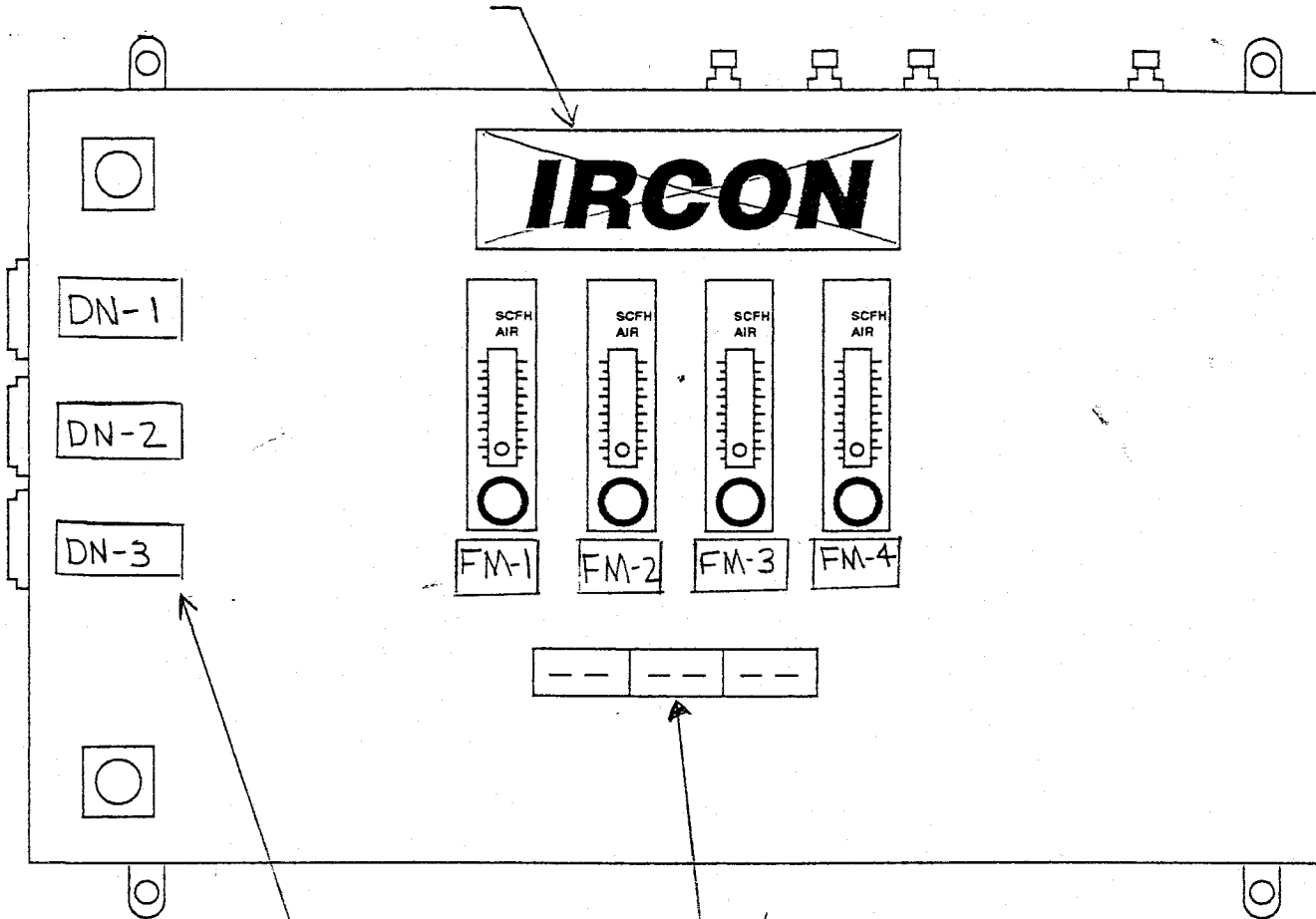
PURCHASE ORDER NUMBER AND IRON PART NUMBERS (IF STATED) MUST APPEAR ON ALL ACKNOWLEDGMENTS, PACKING SLIPS AND INVOICES.

THIS ORDER MUST BE ACKNOWLEDGED WITHIN 7 DAYS.

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

INTERNAL USE ORDERED BY *[Signature]* CUSTOMER

IRCON WILL
APPLY LABEL



ADD LABELS (QTY 7)
LABELS MUST WITH STAND
80°C AMBIENT

R/S TYPE T/C JACKS
(PANEL)

* FLOW METERS FM-1, FM-2, FM-3 ADJUST FLOW TO SENSORS
FLOW METER FM-4 ADJUSTS FLOW TO BOX

BOX IS TO HAVE AREA FOR EXHAUST AIR

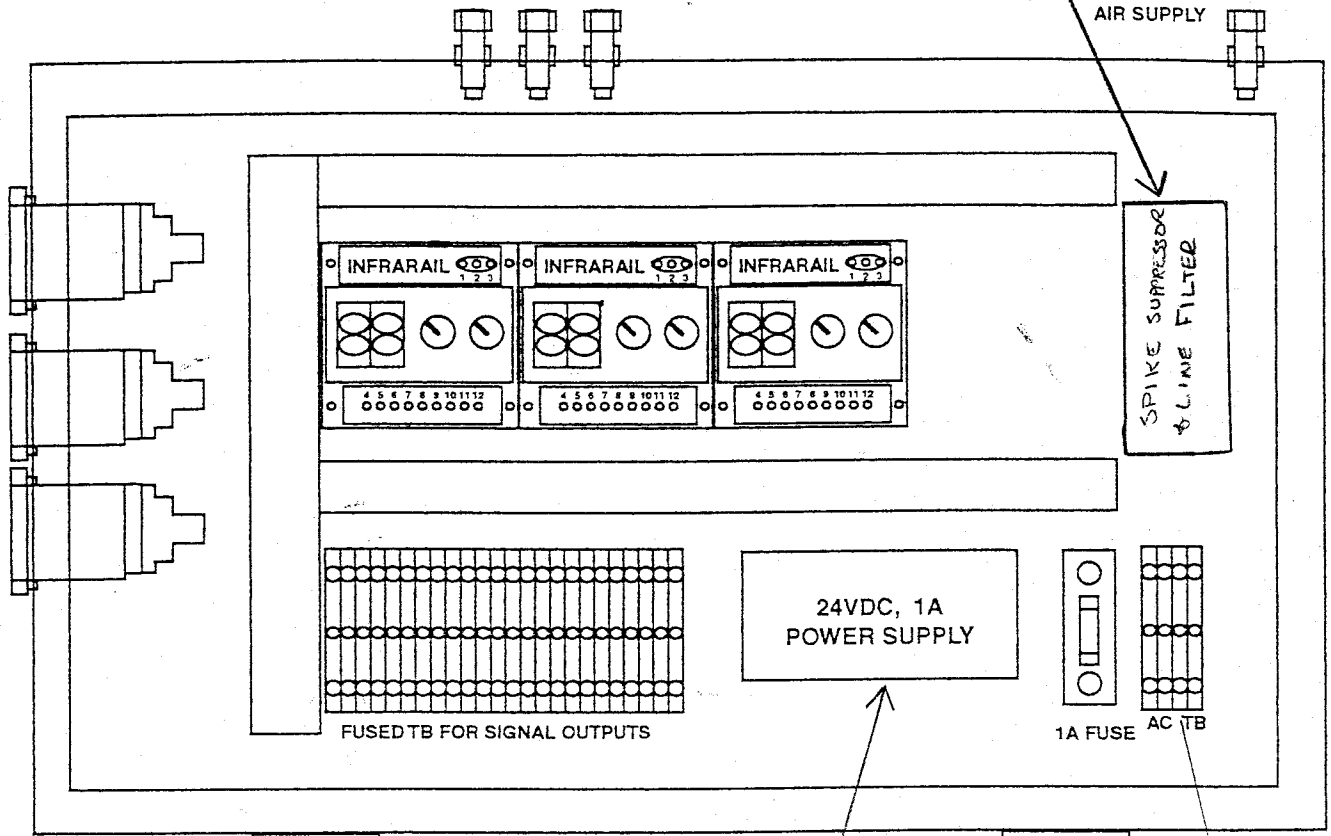
BOX TO BE COLORED TAN (RITTAL #RAL-7032)

SUPPRESSOR supplied
By IRCOW

(3) BULKHEAD FITTINGS FOR
1/4" COPPER HEADINGS

1/4" BULKHEAD FITTING
FOR CUSTOMERS REGULATED
AIR SUPPLY

(3) DETECTOR
ASSEMBLY
MOUNTING
WELL AND
HOUSING

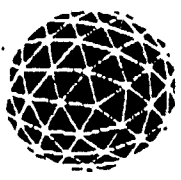


3/4" CONDUIT HUB
FOR SIGNAL OUTPUTS

3/4" CONDUIT HUB
FOR AC LINE IN

PROVIDE AREA
FOR CUSTOMER SUPPLIED
POWER SUPPLY

220VAC



SYNERGY SYSTEMS

INC.

SENSORS TO SYSTEMS

PROPOSAL

INQUIRY NUMBER
Fax-Lakner
DATE
Wednesday, October 09, 1996
TERMS
Net 30 Days
PRICES QUOTED ARE FOR
Shipping Point
DELIVERY
4 - 6 Weeks ARO
REFERENCE NUMBER
TM-100996-01.

TO: Joe Lakner
 Ircon, Inc.
 7300 North Natchez
 Niles, IL 60714

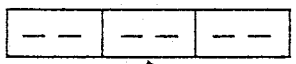
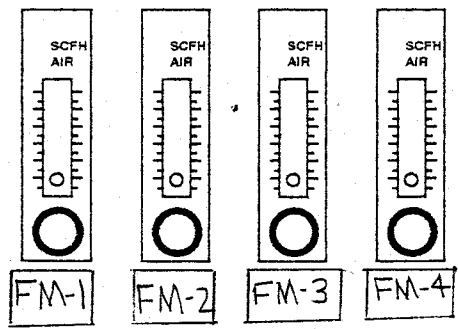
We are pleased to offer the following Proposal:

QUANTITY	DESCRIPTION	PRICE	AMOUNT
	Ircon Infrarail Custom Assemblies		
	<u>3 Zone System</u>		
1	16"H X 12"W X 8"D Nema 12K Enclosure Containing the Following:		
	(3) DNFFF-99F Infrarail (includes processor, sensor and cable)-Supplied by Ircon.		
	(1) — 24V, 1A DC Power Supply-Supplied by Ircon.		
	(2) 3/4" Conduit Hubs.		
	(lot) <i>220/AC</i> Terminal Blocks and Fused Terminals for Incoming AC Power and 4-20ma Output Signals.		
	(1) Incoming AC Line Fuse.		
	(4) Purge Rotameters. → <i>ADD \$316</i>		
	(3) 1/4" Bulkhead Fittings for Air Purge.		
	(1) 1/4" Bulkhead Fitting for Air Inlet.		
	(1) In-Line Filter.		
	(1) Exhaust Muffler for Air Leaving Enclosure.		
	(3) 50' Rolls of 1/4" Copper Tubing.		
	(1) Manifold for Air Purge Distribution.		
	(1) → <i>NOTE</i> Type STC and Termination. <i>(R/S) TYPE</i>		
	(lot) Misc. Hardware and Labor to Assemble.		
	Total		\$ 1130.00
			+ 316.00
			1,446

THE ABOVE PRICES SHALL REMAIN IN EFFECT FOR 30 DAYS FROM DATE OF QUOTATION UNLESS OTHERWISE NOTED ABOVE. CANCELLATION OF ORDERS ONCE PLACED AND ACCEPTED BY US CAN BE MADE ONLY WITH OUR CONSENT. DELIVERY DATES PROMISED ARE SUBJECT TO DELAYS BEYOND OUR CONTROL.

IRCON WILL
APPLY LABEL

IRCON



DN-1
DN-2
DN-3

R/S TYPE T/C JACKS
(PANEL)

ADD LABELS (QTY 7)
LABELS MUST WITH STAND
80°C AMBIENT

* FLOW METERS FM-1, FM-2, FM-3 ADJUST FLOW TO SENSORS
FLOW METER FM-4 ADJUSTS FLOW TO BOX

BOX IS TO HAVE AREA FOR EXHAUST AIR

BOX TO BE COLORED TAN (RITTAL #RAL-7032)

3 SENSOR BOX
FOR EMHART GLASS

COLOR PAINT	
RITTAI	RAL-7032
	TAN

1) BOX will House 3 DUFFIE-9TF SENSORS AND THE ELECTRONIC modules

2) FUSED TERMINAL BLOCKS FOR 4-20mA outputs

3) TERMINAL BLOCKS FOR AC INPUT, * 1 A Fuse,

4) AC LINE FILTER

5) QTY 2 3/4" conduit hubs For signal outputs

6) QTY 4 1/4" Bulkhead fittings For air

Purchase Order



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

Phone 847-967-5151
Fax 847-647-0070



Joe Palmer

002439/630 820 5151

P/O NUMBER	PAGE	P/O DATE	ORDERTYPE	CHANGE/CANCEL
83162-00	01	06/11/97	NORMAL	ORIGINAL 06/12/97

ORDERED FROM

SYNERGY SYSTEMS
600 NORTH COMMONS DRIVE
SUITE 110
AURORA, IL 60504

SHIP TO

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

BUYER	TERMS	ACKNOWLEDGE	CONFIRM	FOB	SHIP VIA	COL/PPD
RON DEFOE, P/MGR.	NET 45	YES	YES	SHIPPING PT.	BEST WAY	PPD

LINE NO.	QTY. ORDERED	U/M	OUR ITEM NUMBER DESCRIPTION/COMMENTS	YOUR ITEM NUMBER	PRICE/UNIT REQUESTED DATE	EXTENDED PRICE	CHANGE CANCEL
01	2	EA	ENCLOSURES 16"H X 12"W X 8"D TO HOUSE INFRIRIAL PROCESSORS AND ITEMS PER Q# TM-1000996-01 *****NOTE: SKETCHES ALSO ENCLOSED*****		1,445.000 07/16/97	2,892.00	329
02	1	EA	PANEL 15"H X 7" W PER GTM100099601 ENGINEERING AND DRAWINGS = \$400.00		400.000 07/16/97	400.00	329

ILLINOIS PERMIT #2415-9425

TOTAL
EXTENDED PRICE

3,292.00

NOT FOR RESALE

COMMENTS

CONF TO TIM 6-11

FOR RESALE
PURCHASE ORDER NUMBER AND IRCON PART NUMBER, (IF STATED)
MUST APPEAR ON ALL ACKNOWLEDGMENTS, PACKING 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.

INTERNAL USE

ORDERED BY

Part No. 020192 Rev H 10/96

CUSTOMER

SPIKE SUPPRESSOR ASSEMBLY:

QTY			OUR COST
1.	P.C. BOARD	50219-3	6.67 \$6.67
1.	VARISTOR	53163-2	.52
1.	TERMINAL STRIP	54490-2	.65
2.	STANDOFF	41110-2	.18
4.	CONNECTOR (e-stock)	34T205000	.02

CABLE ASSEMBLY

OUR COST

CABLE	56005-2	.13/FOOT (APPROX. 2 FT)
CONNECTOR	57588-2	22.26
CONNECTOR	57599-2	10.17
LABEL	47720-2	.40

LINE FILTER — 55107-2 — 10²⁴

MB-5 stainless steel
 ≈ 1/8" thick
 \$2⁰⁰/each

S.S. MOUNTING BRACKET

FOR REIMAGING LENS

~~COVER SHIELD~~

P.N. ~~44671-2~~
~~44671-2~~
~~\$52~~

MB-2 stainless steel
 quick release
 AIR/PURGE
 ≈ 1/2" thick
 \$38⁰⁰

~~44671-2~~
~~\$52~~

Section 1 — GENERAL INFORMATION

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Purchase Order



ATTN: ~~FO~~ JOE LAKE

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

Phone 847-967-5151
Fax 847-647-0070



001606/773-235-5283

P/O NUMBER	PAGE	P/O DATE	ORDER TYPE	CHANGE/CANCEL
83211-00	01	06/19/97	NORMAL	ORIGINAL 06/19/97

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

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

BUYER	TERMS	ACKNOWLEDGE	CONFIRM	FOB	SHIP VIA	COL/PPD
IRON DEFCE. P/MGR.	NET 45	YES	YES	SHIPPING PT.	BEST WAY	

LINE NO.	QTY ORDERED	BLANKET TYPE	U/M	OUR ITEM NUMBER DESCRIPTION/COMMENTS	YOUR ITEM NUMBER	PRICE/UNIT REQUESTED DATE	EXTENDED PRICE	CHANGE CANCEL
01	6		EA	EX-4305 SIGHT TUBE/FLANGE COMPLETE PER PRINT, REV. A		297.000 07/10/97	1,782.00	329

ILLINOIS PERMIT #2415-9425

TOTAL EXTENDED PRICE 1,782.00

FOR RESALE

COMMENTS

CONF TO TED 6-19/FAX

FOR RESALE
PURCHASE ORDER NUMBER AND IRCON PART NUMBER, (IF STATED)
MUST APPEAR ON ALL ACKNOWLEDGMENTS, PACKING 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.

INTERNAL USE

ORDERED BY

R. DeF...

CUSTOMER

Part No. 020192 Rev H 10/96

FOX TOOL CO., INC.

1685 N. Milwaukee Avenue
Chicago, Illinois 60647
Phone: (773) 235-5283
Fax #: (773) 235-5075

=====QUOTE ACKNOWLEDGEMENT=====

QUOTE DATE	REQUEST FOR QUOTE ID	CUST. ID	QUOTE ID	TERMS
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06/16/97	QUOTE	100001	000911	
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TO: IRCON, INC.
7300 N. NATCHEZ AVENUE
NILES IL 60714
ATTENTION: J. LAKNER
847-967-5151
FREIGHT: 847-647-0070

DATE DUE: 07/07/97 SALESMAN: ESTIMATOR: 01

PART NUMBER	REV	QUANTITY	UNIT PRICE
EX 305	A	6	297.00
SIGHT TUBE/FLANGE		10	271.00
		15	257.00

DELIVERY 7-7-97 NO LATER

Section 1 — GENERAL INFORMATION



CAUTION

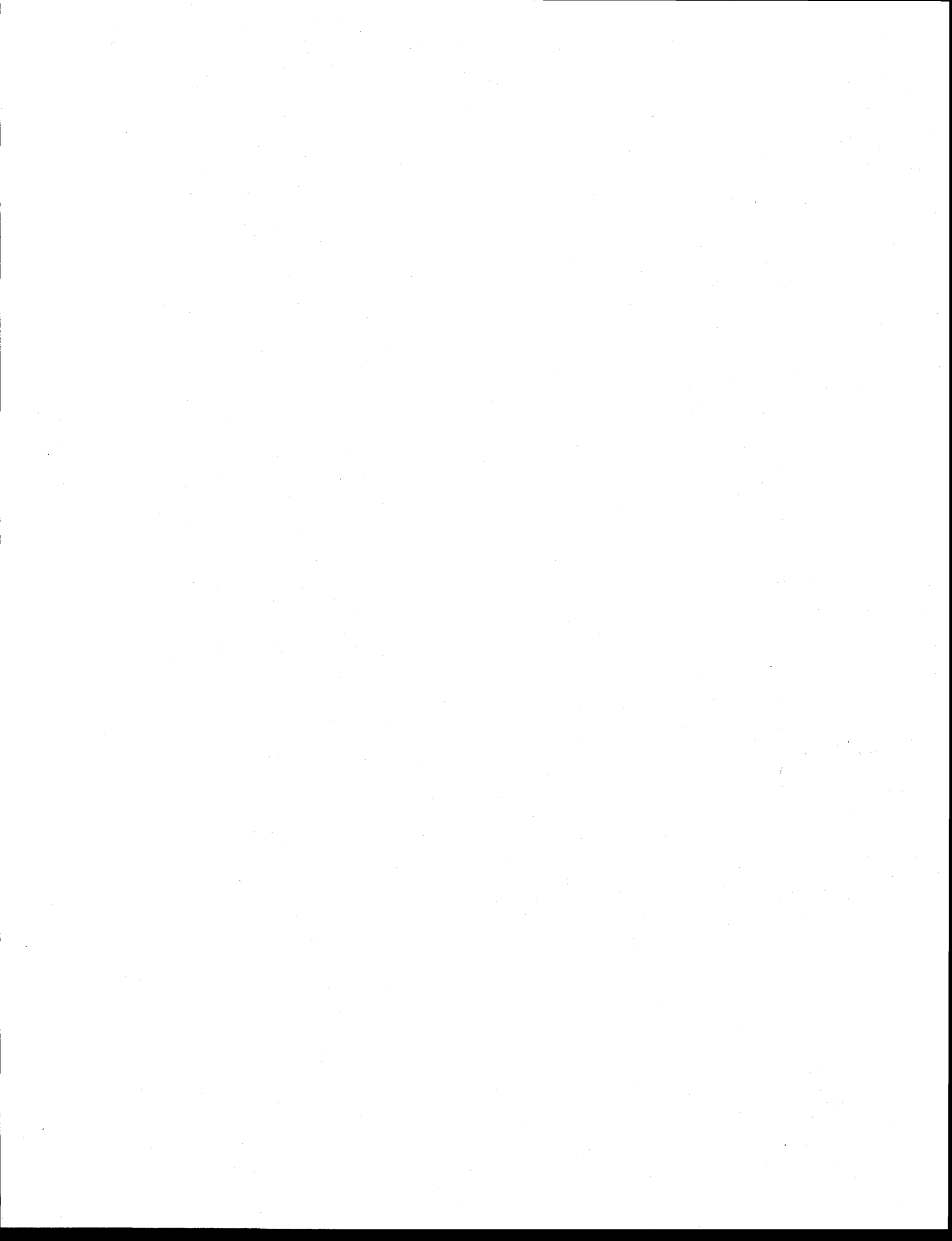


To avoid damage to the sensors and the electronics, Periodic maintenance of the Air Filter/Regulator is required.

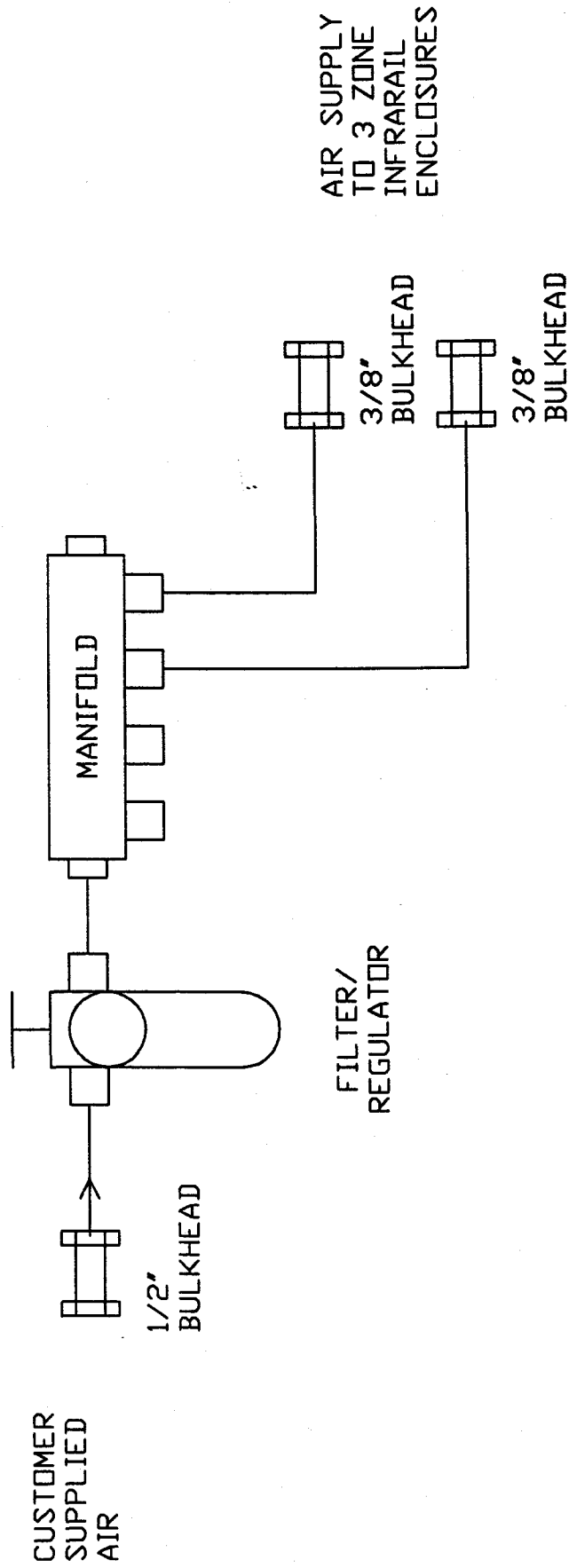
Connection from the the Air Regulation Module to each sensor module enclosure is through the $\frac{3}{8}$ in. bulkhead union. Air flow into each enclosure is controlled by the Air Flow Meter labeled FM-4. Air flow into the enclosure is adjustable from 0 - 12 scfm. Air flow into each air purge at the mounting bracket is controlled by flow meters FM-1, FM-2, and/or FM-3. Air flow affecting sensor SEN - 1 is controlled by flow meter FM-1 and is output to the Air Purge through a $\frac{1}{4}$ in. bulkhead union labeled AP-1. Air flow affecting sensor SEN - 2 is controlled by flow meter FM-2 and is output to the Air Purge through a $\frac{1}{4}$ in. bulkhead union labeled AP-2. Air flow affecting sensor SEN - 3 is controlled by flow meter FM-3 and is output to the Air Purge through a $\frac{1}{4}$ in. bulkhead union labeled AP-3. Flow rates from 0 - 1 scfm are attainable through these meters. A flow rate of 1 scfm is recommended.

NOTE: Ircon, Inc. is the sole owner in all respects of any product or software modification or design herein specified.

Details of this modification are retained in IRCON Engineering Files as InfraRail Special No. R706.

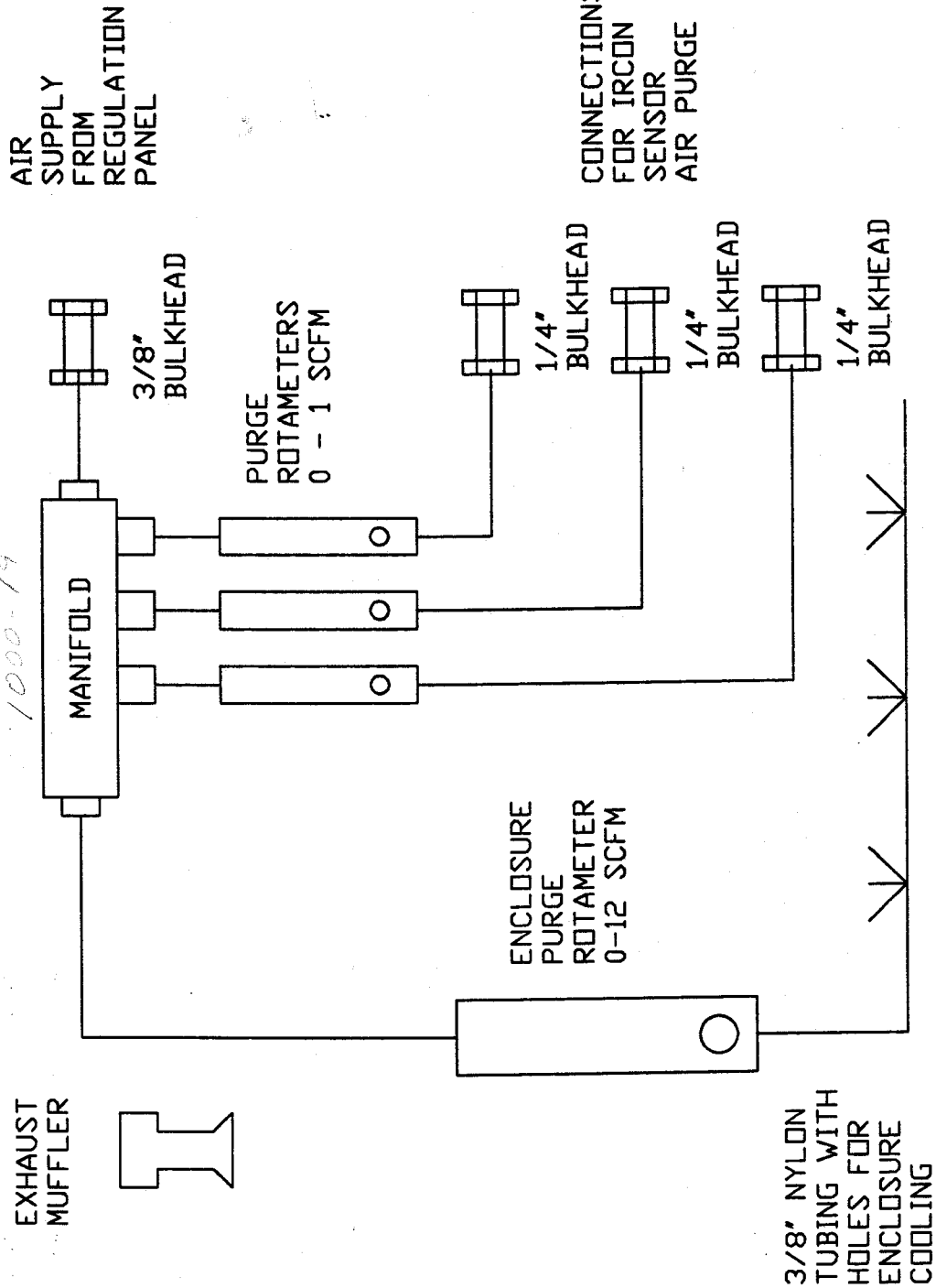


REGULATION PANEL

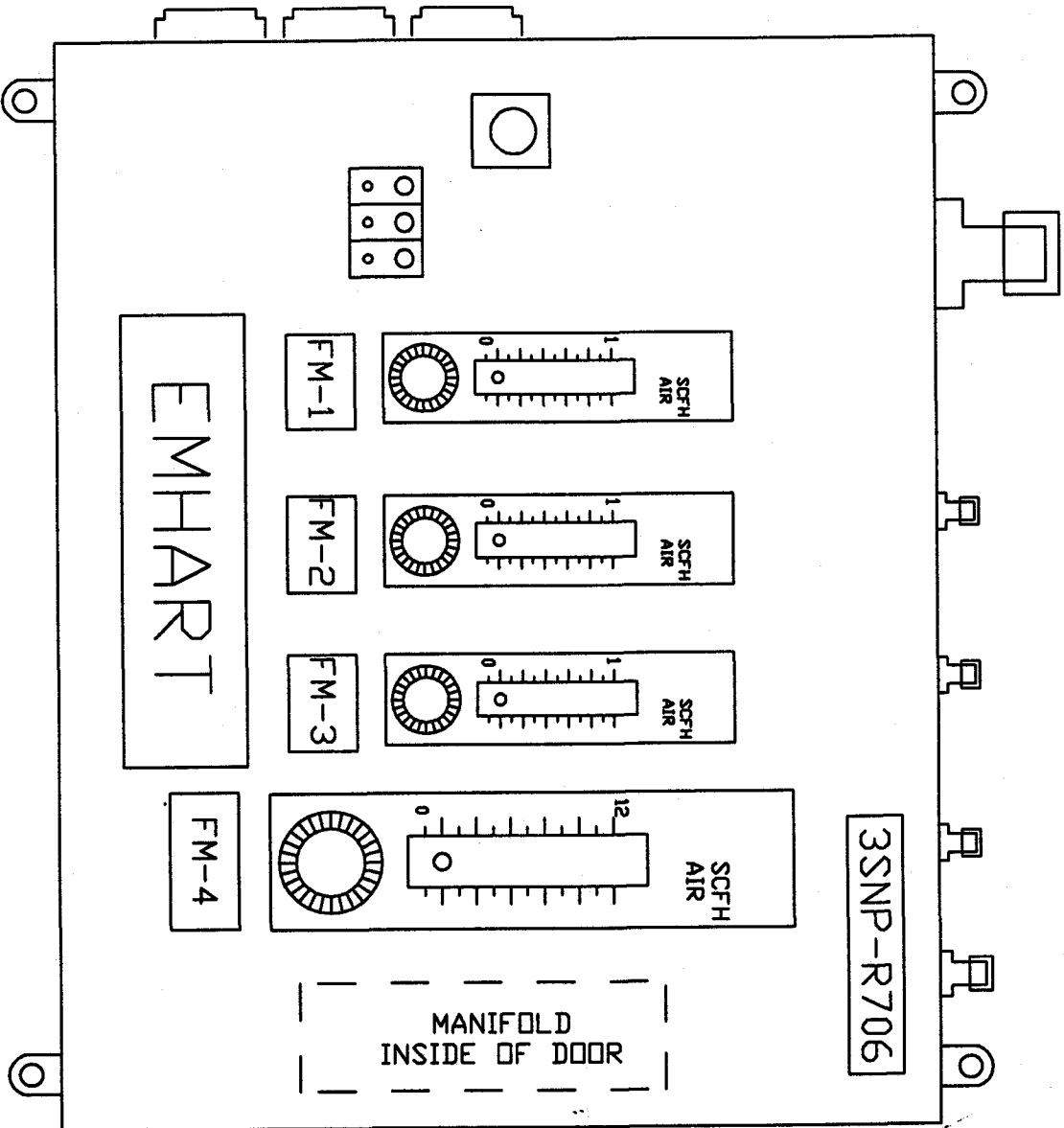


DRAWING TITLE		1/2" BULKHEAD ADDED		7/24/97
IRCON REGULATION PANEL AIR SUPPLY		T. M.		
PROJECT		DATE	BY	CHKD
IRCON 3 ZONE SYSTEM PNEUMATICS		7/10/97	T. M.	
CONTRACT NUMBER		4020		
ISSUES NUMBER		IRCREGP		

3 ZONE INFRARAIL ENCLOSURE

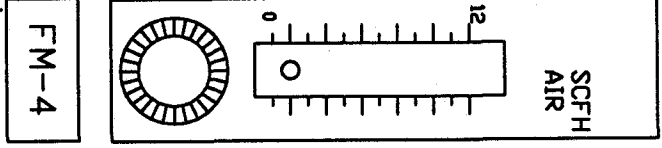
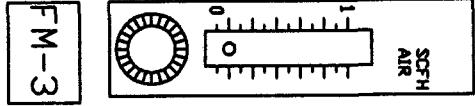
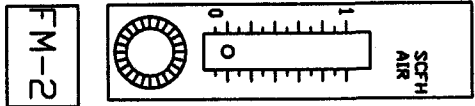
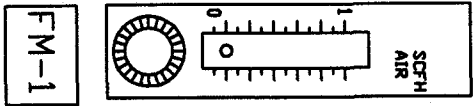


PROJECT	IRCON	4020
3 ZONE INFRARAIL PNEUMATIC DRAWING		
IRCON		
3 ZONE SYSTEM PNEUMATICS		
DATE		
BY		
CHECKED		
APPROVED		
SCALE		
SHEET NO.		
TOTAL SHEETS		
32/100		



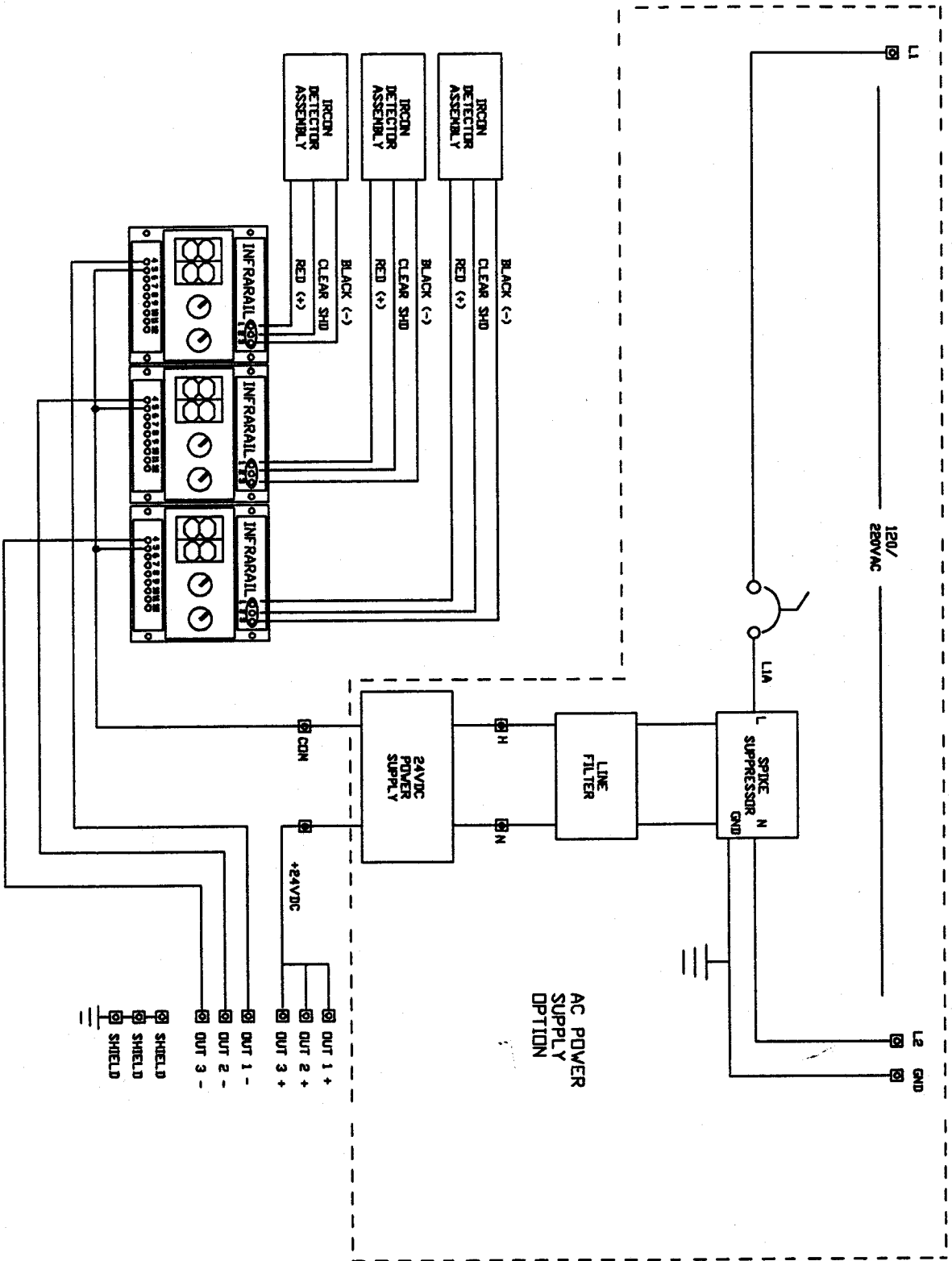
3SNP-R706

EMHART



MANIFOLD
INSIDE OF DOOR

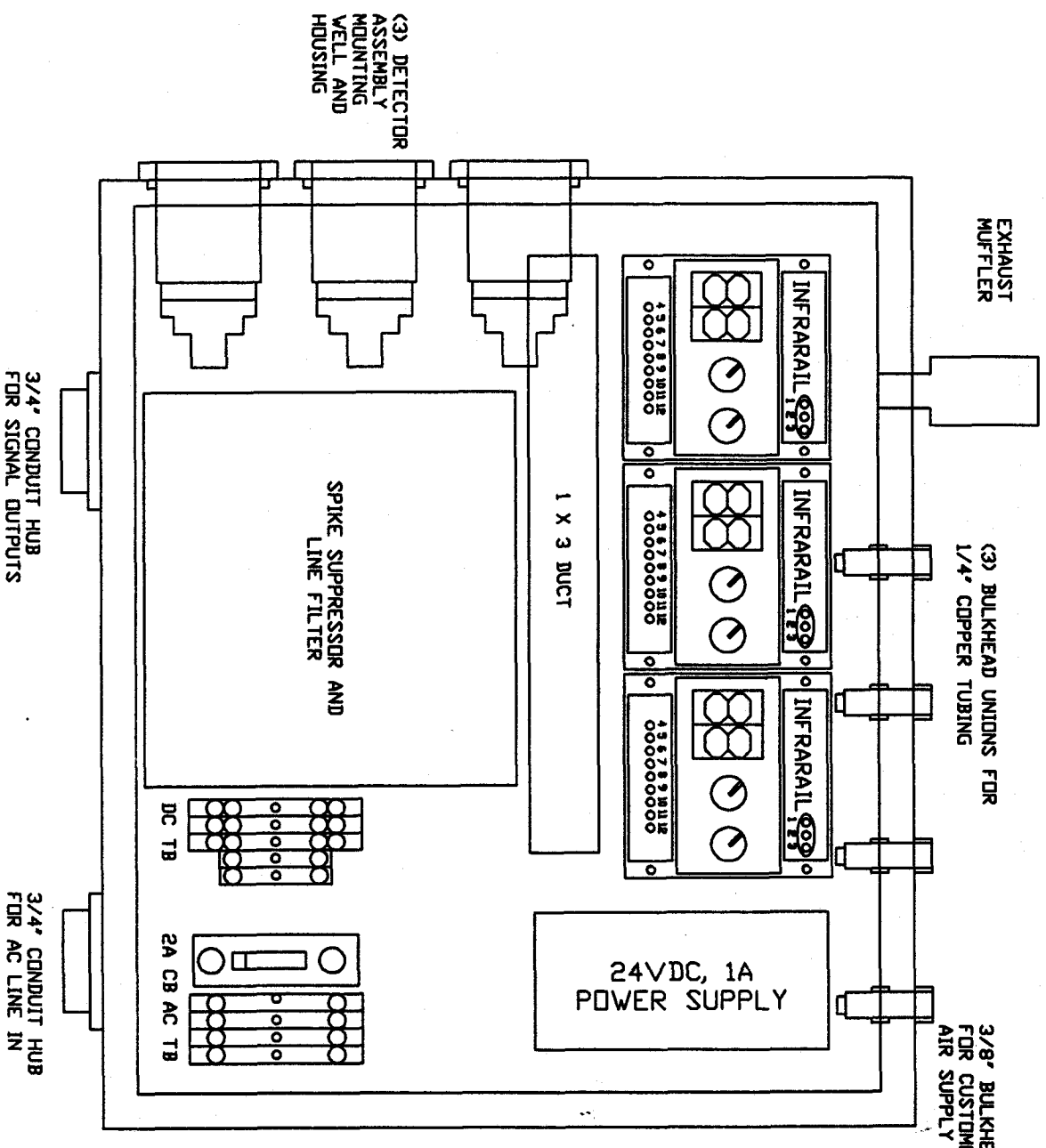
DRAWING TITLE IRCONI 3 ZONE DOOR LAYOUT		T. N. T. N.		REVISIONS DATE BY		APPROVED DATE BY	
PROJECT 3 ZONE IRCONI CUSTOM ENCLOSURE		DRAWING NUMBER 4020		SCALE 3/16" = 1'-0"		SHEET NUMBER 32/RC0	



AC POWER
SUPPLY
OPTION

ROOM TITLE	ROOM	I. R.	AREA'S AC POWER OPTION/REV#
3 ZONE INFRARED WARNING DETECTOR ROOM	3 ZONE INFRARED WARNING DETECTOR ROOM		
3 ZONE INFRARED CUSTOM ENCLOSURE ROOM	3 ZONE INFRARED CUSTOM ENCLOSURE ROOM		

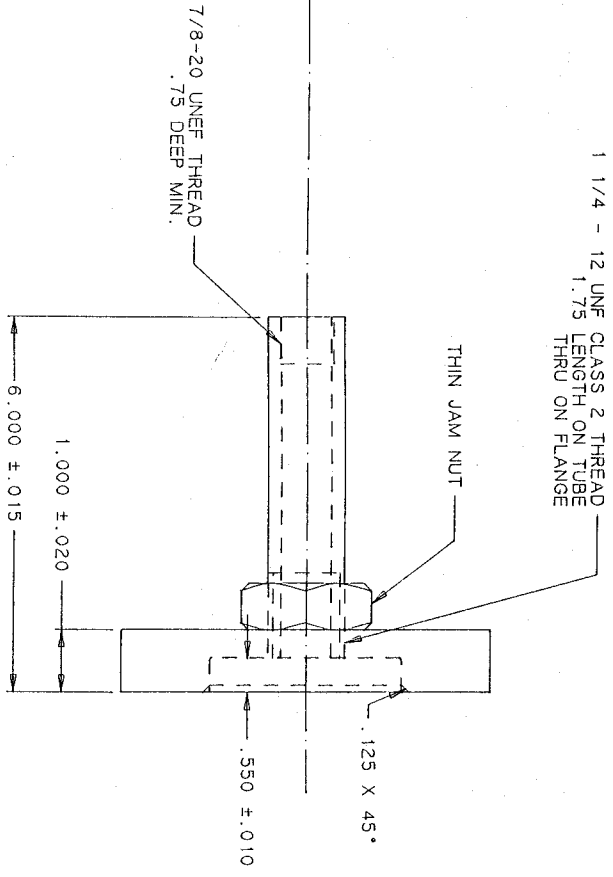
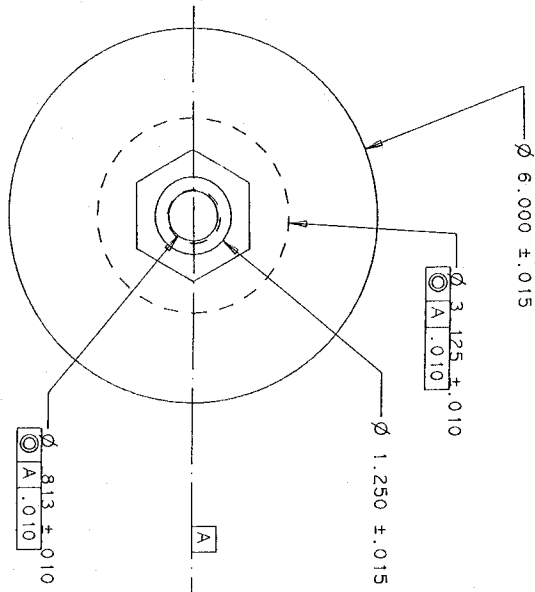
4020
328RCWD



3/4" CONDUIT HUB FOR SIGNAL OUTPUTS

3/4" CONDUIT HUB FOR AC LINE IN

ROOM	120/200VAC SUPPLY	4000	3ZONES
ROOM 3 ZONE FIREWORK SUPPLEMENT LAYOUT			
ROOM 3 ZONE SYSTEM LAYOUT			



ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED

MATERIAL	304 STAINLESS
DRAWN BY	gpg/g
DATE	9/9/96
APPROVED	
DATE	
SCALE	1/2"

DO NOT SCALE

TITLE
SIGHT TUBE/FLANGE



IRCON, INC.
7300 North Natchez Ave.
Niles, IL 60714

DRAWING NO.	EX-4305
REV.	A

DRAWING NO.	EX-4305	REV.	A
REVISION			
LTR.	DESCRIPTION	BY/DATE	
A	THREADED PARTS REMOVED WELD NOTE	6/13/97	
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SHEET # 1 OF 1			

DRAWING NO. REV.

EX-4305 A

REVISION

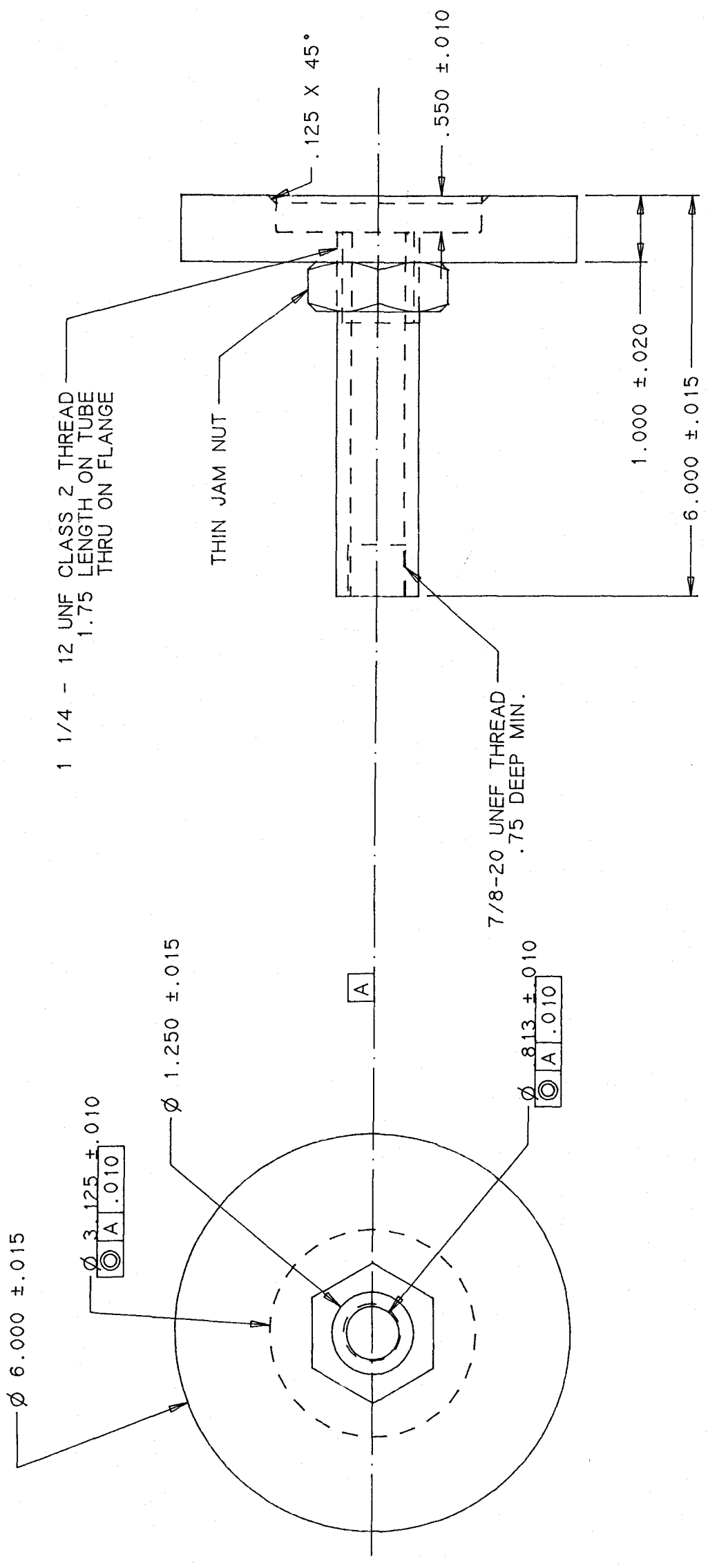
LTR. DESCRIPTION BY/DATE
A THREADED PARTS REMOVED WELD NOTE 6/13/97

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Niles, IL 60714

DRAWING NO. REV.
EX-4305 A



DO NOT SCALE

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MATERIAL 304 STAINLESS	DRAWN BY	DATE
	JPB	9/9/96
	APPROVED	DATE
	SCALE	1/2
TITLE		
SIGHT TUBE/FLANGE		

DRAWING NO. REV.

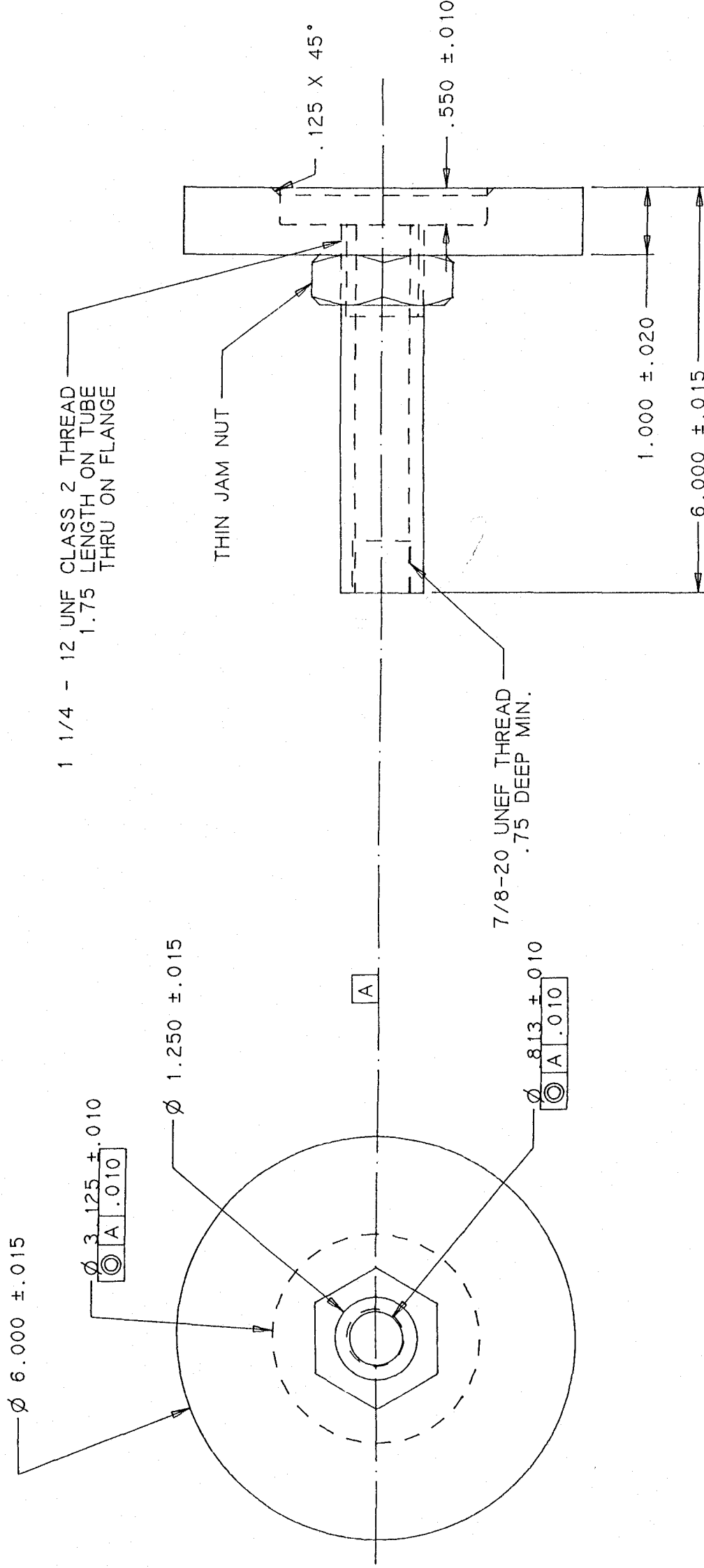
EX-4305 A

REVISION

LTR. A DESCRIPTION BY/DATE
THREADED PARTS,
REMOVED WELD NOTE 6/13/97

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SHEET # 1 OF 1



1 1/4 - 12 UNF CLASS 2 THREAD LENGTH ON TUBE THRU ON FLANGE

THIN JAM NUT

7/8-20 UNF THREAD .75 DEEP MIN.

DO NOT SCALE

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED

MATERIAL 304 STAINLESS

DRAWN BY JPB DATE 9/9/96

APPROVED DATE

SCALE 1/2



IRCON, INC.
7300 North Natchez Ave.
Niles, IL 60714

TITLE

SIGHT TUBE/FLANGE

DRAWING NO. REV.

EX-4305 A

DRAWING NO.
EX-4305

REV.
A

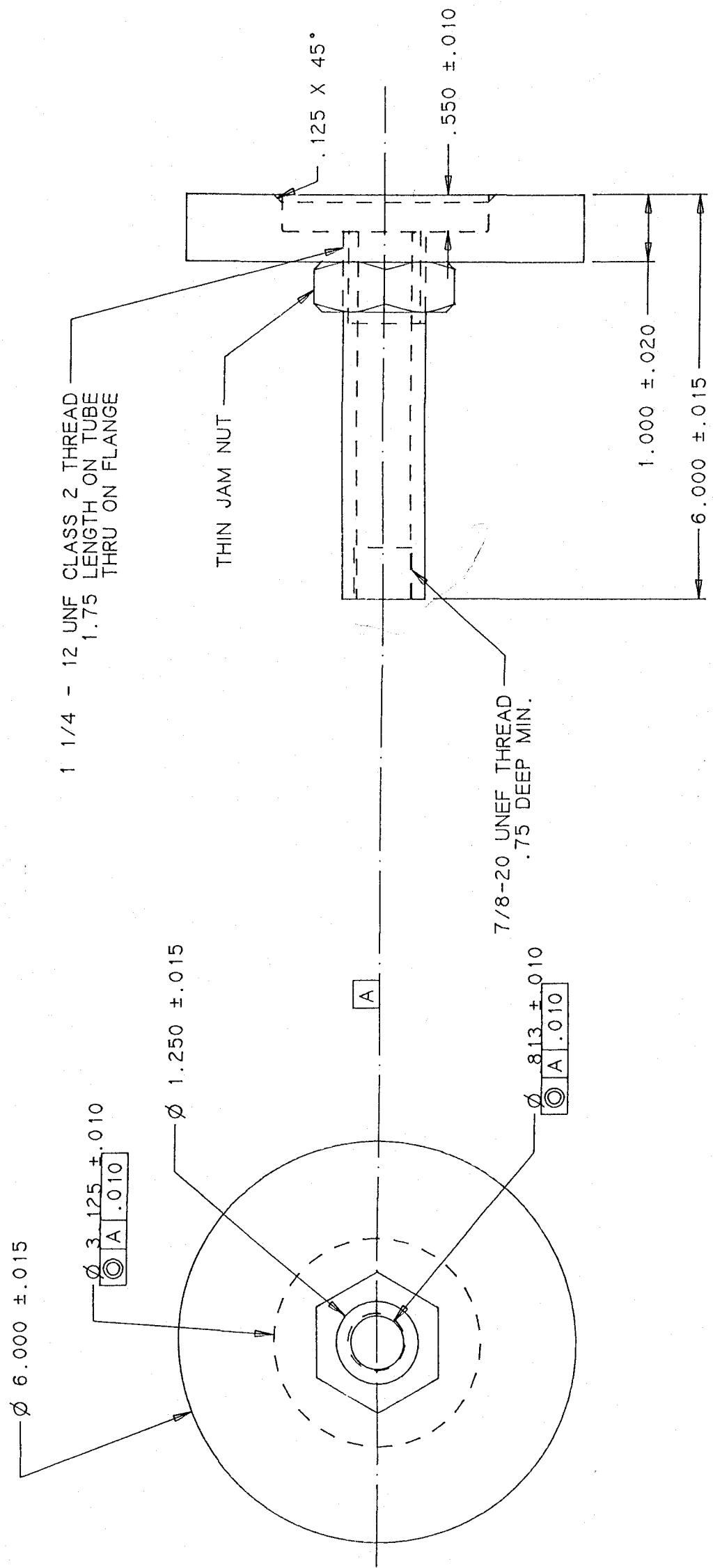
LTR. A

REVISION
DESCRIPTION

THREADED PARTS,
REMOVED WELD NOTE

BY/DATE
6/13/97

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MATERIAL 304 STAINLESS		DRAWN BY JPB	DATE 9/9/96
		APPROVED	DATE
		SCALE 1/2	

SHEET # 1 OF 1

IRCON, INC.
7300 North Natchez Ave.
Niles, IL 60714



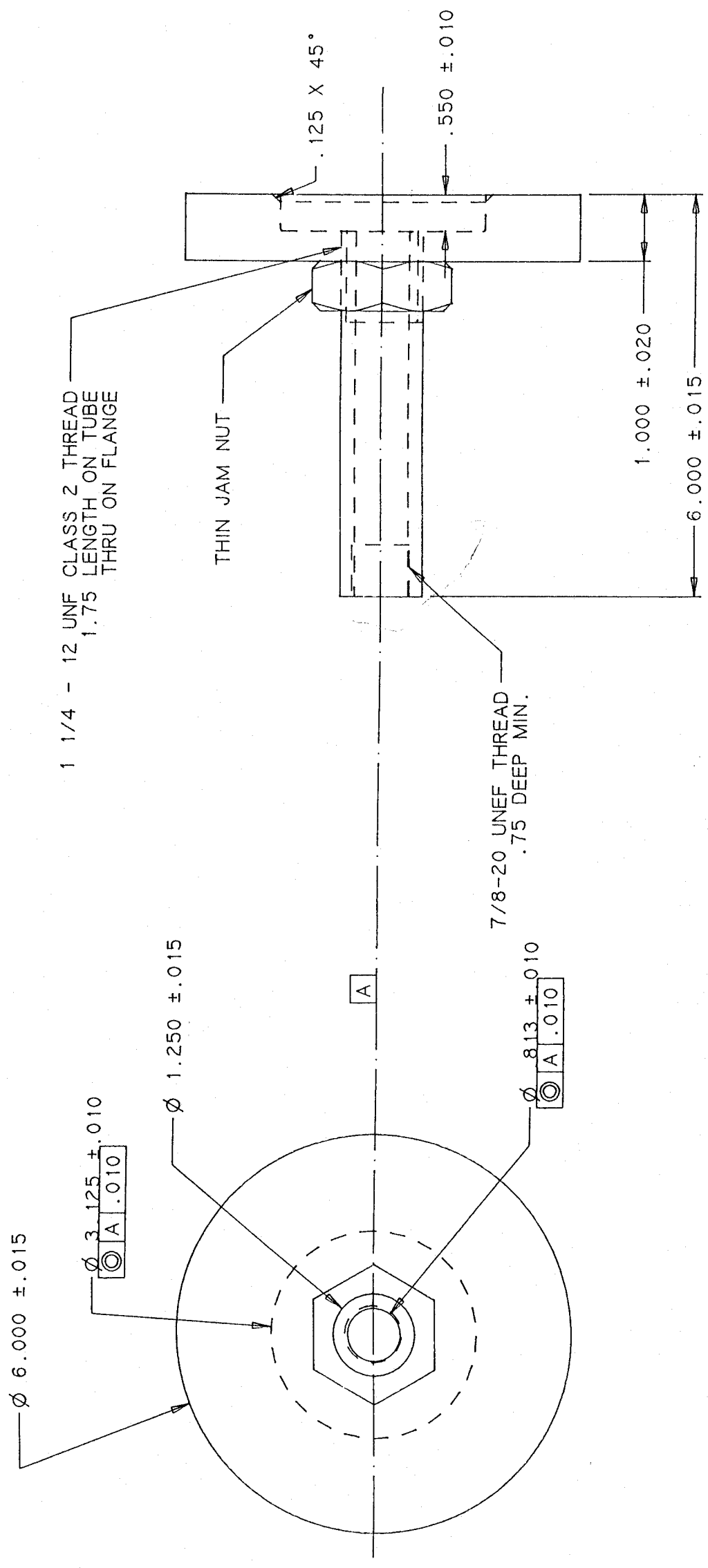
TITLE
SIGHT TUBE/FLANGE

DRAWING NO.
EX-4305

REV.
A

DRAWING NO.		REV.
EX-4305		A

REVISION		BY/DATE
LTR.	DESCRIPTION	
A	THREADED PARTS, REMOVED WELD NOTE	6/13/97



1 1/4 - 12 UNF CLASS 2 THREAD
1.75 LENGTH ON TUBE
THRU ON FLANGE

THIN JAM NUT

7/8-20 UNEF THREAD
.75 DEEP MIN.

1.000 ± 0.020

6.000 ± 0.015

.125 X 45°

.550 ± 0.010

DO NOT SCALE

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED

MATERIAL 304 STAINLESS		DRAWN BY gpb	DATE 9/9/96
TITLE SIGHT TUBE/FLANGE		APPROVED "	DATE
SCALE 1/2		DRAWING NO. EX-4305	
IRCON, INC. 7300 North Natchez Ave. Niles, IL 60714		REV. A	

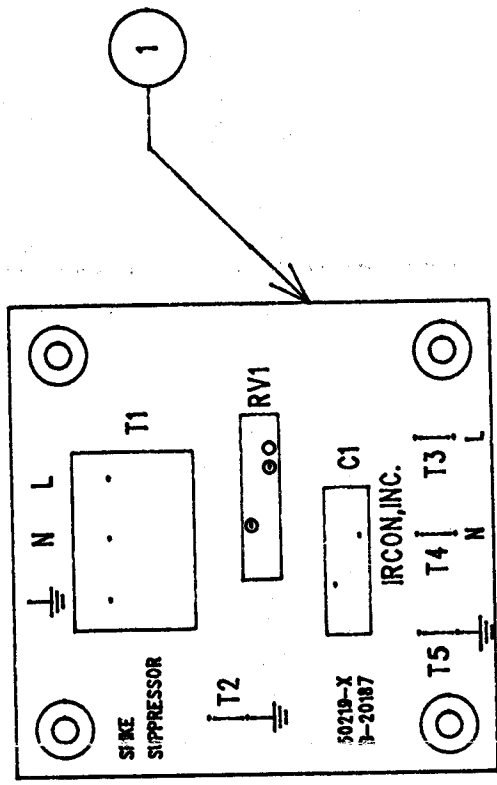
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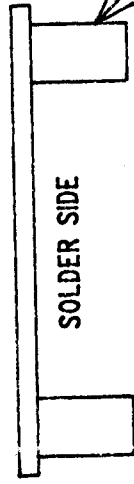
REFERENCE

ASSY # LSC206

SCHEMATIC # B-20187



COMPONENT SIDE



SOLDER SIDE

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DRAWING NO.		REV.
B11034		C
REVISION		
LTR.	DESCRIPTION	BY/DATE
A	RELEASED TO PRODUCTION	10/14/91 PJ SI 11/5/91 AH
B	ECO 2596 REMOVED C1 CAP. FROM B/M	2/28/92 VES
C	ECO 3447 ADD 1 HOLE TO RV1.	5/26/95 F A

DO NOT SCALE

SHEET # 1 OF 1

MATERIAL		DATE	
DRAWN BY JK		10/1/91	
APPROVED JG		DATE 11/4/91	
SCALE FULL		TITLE	
		PCB SPIKE SUPPRESSOR ASSEMBLY (LINE SCANNER)	



IRCON, INC.
7301 North Caldwell Ave.
Niles, IL 60714

DRAWING NO.		REV.
B11034		C

SUB-ASSEMBLY ID: 150200 PCB SPIKE SUPPRESSOR ASSY POWER SUPPLY (C-800000) LAST REV: 05/16/97 REV: B
ALL MODELS LAST ECO POSTING: 06/16/97

USE WITH DRAWING(S): B11934

LV SCH# COMPONENT NO QUANTITY UNIT SHOWN DESCRIPTION

01 0010	502123	1.00	EA	RVI	PCB SPIKE SUPPRESSOR SCANNER
01 0030	531632	1.00	EA	RVI	VARIABLE RESISTOR, 250VAC, 0.1W
01 0040	574902	1.00	EA	TI	TERM. STRIP 3 CKT FOR MOUNT VDE APPROVED: 8MM SPEC
01 0050	347205000	4.00	EA	12	TERM. TAB 205 PC MOUNT VERT. BRASS TIN PLI SPEC
				13	TERM. TAB 205 PC MOUNT VERT. BRASS TIN PLI SPEC
				14	TERM. TAB 205 PC MOUNT VERT. BRASS TIN PLI SPEC
				15	TERM. TAB 205 PC MOUNT VERT. BRASS TIN PLI SPEC

01 0060 NOTE 2.00

** NOTE: INSTALL THE FOLLOWING PARTS AFTER THE WAVE **

***** SOLDERING OPERATION *****

01 0070 ATTIVE 2.00 EA 2 STANDOFF #6-32 X 1/2 LONG PRETT FIT FIT SPEC

END OF REPORT

USE THIS FOR R706 (EMHART)
9-16-97 AD

TUE, MAR 18, 1997
10:51 AM
DC06B001

IRCON, INC
BILL OF MATERIAL REPORT

PAGE 0001
AMI
#J

FLAGS=NNNN, LEVELS=00

DRAWING ID: B11074

SPIKE SUPPRESSOR BRACKET ASSY (I/O BOX) LINE SCANNER

LAST REV: 01/23/92 REV:A
LAST ECO POSTING: / /

ALL MODELS

MISC COMMENT:

LV SEQ# COMPONENT NO QUANTITY UM SYM/ITEM DESCRIPTION

LV SEQ#	COMPONENT NO	QUANTITY	UM	SYM/ITEM	DESCRIPTION
01 0010	446702	1.00	EA	1	BRACKET PCB MOUNTING SURGE SUP C-DWG
01 0020	433032	1.00	EA	2	GROMMET 1/2ID X 7/8OD X 1/4THK BLACK VINYL SPEC
01 0030	330000008	2.00	EA	3	CABLE MOUNT BASE #6 SCREW HOLE PANDUIT #TM256-C SPEC
01 0040	20060803P	2.00	EA	4	SCREW #6-32 X 1/4 PH PHL ZINC PLATE
01 0050	B11075	1.00		5	PCB SPIKE SUPPRESSOR ASSY (LINE SCANNER)
01 0060	20062893P	4.00	EA	6	SCREW #6-32 X 7/8 PH PHL SEM STEEL BRIGHT ZINC, EXT TOOTH
01 0070	220600030	4.00	EA	7	WASHER #6 FLAT 3/8OD ZINC PLATED
01 0080	H-B11074-A	1.00			SPIKE SUPPRESSOR BRACKET - ASSY LABOR

END OF REPORT

DRAWING NO. B11074

REV. A

LTR. A

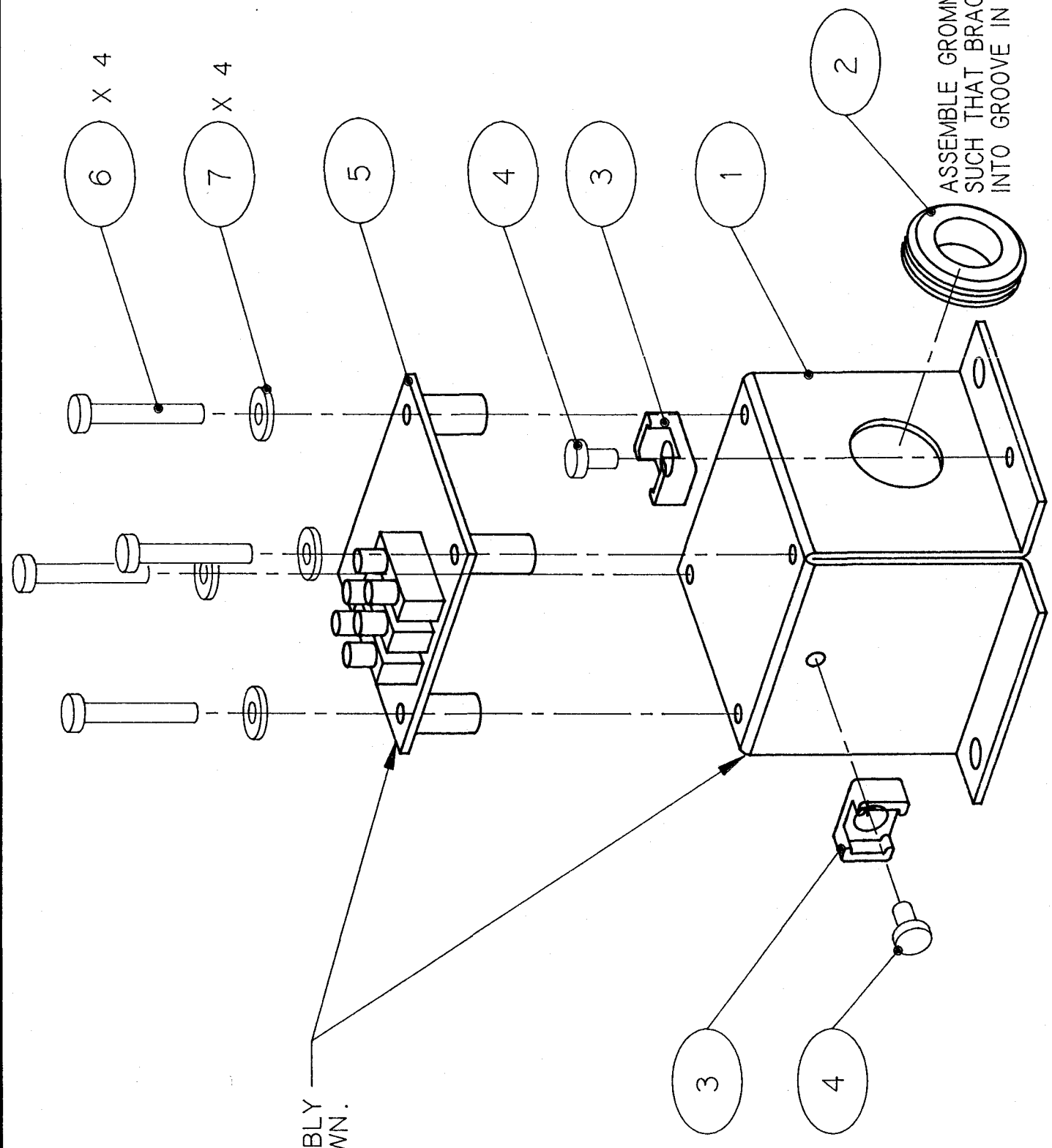
REVISION DESCRIPTION

RELEASED FOR PRODUCTION.

BY/DATE

VZ3/92
PP 7/92
JUN 7/11/92

ORIENT PCB ASSEMBLY TO BRACKET AS SHOWN.



ASSEMBLE GROMMET INTO HOLE SUCH THAT BRACKET FITS INTO GROOVE IN GROMMET.

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SHEET # 1 OF 1

DO NOT SCALE

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MATERIAL		DRAWN BY		DATE	
LINE SCANNER		PP		12/17/91	
SCALE		APPROVED		DATE	
		PPB		1/9/92	
SQUARE D COMPANY		INFRARED MEASUREMENT DIVISION			
NILES, ILLINOIS 60648		TITLE			
SPIKE SUPPRESSOR BRACKET ASSEMBLY I/O BOX		DRAWING NO. B11074			
MANUFACTURER OF PRODUCTS IRCON		REV. A			

