



INSTALLATION, OPERATION & MAINTENANCE DATA SHEET For QUANTUM® ENCLOSURES (EXB-N34 Junction Boxes)

For use in Class I, Groups B, C, & D, Type 3 & 4, Class II, Groups E, F & G and Class III Hazardous Locations, as defined by the Canadian Electrical Code and the National Electric Code.

Installation Instructions

This junction box must be installed by trained, qualified and competent personnel. Installation must comply with local, state and national regulations, as well as safety practices for this type of equipment.

WARNING: Electrical power **must** be **OFF** during installation. **Disconnect** primary power source and **lock out**.

The mounting location must be flat and provide proper clearance, rigidity and strength to support the enclosure and all contained devices. (Refer to Figures 1 & 2)

Larger enclosures are equipped with factory installed hinges. Enclosures should be mounted with hinges on the left. **Do not** mount the enclosure with hinges on the **top** or **bottom** side. (See Figure 3)

Securely fasten the enclosure to the mounting location, using 1/2" diameter steel mounting bolts and washers, or washer head bolts. Install sealing fittings and conduit using an approved electrical conducting type lubricant on the threads. The conduit thread connections must be tapered pipe thread conforming to ANSI/ASME B1.20.1. A minimum of five (5) full threads engagement is required for all conduit connections. Conduit sealing fittings, approved for the specific hazardous location where the enclosure is used, must be installed within 18" of the enclosure. All unused conduit openings must be plugged using a close-up plug approved for the specific hazardous location where the enclosure is used. Plugs must be tightly installed with a minimum engagement of five (5) full threads.

IMPORTANT: Install only U.L. listed and CSA certified auxiliary control devices for hazardous locations (Long and Extra-Long styles only). Refer to individual operator installation sheet for installation details. The minimum wall thickness of counter-bore (where required) and operator spacing are to be determined from the dimensional chart on Pages 2 & 3.

NOTE: If installing a breather and/or drain, make certain they are suitable for the specific hazardous location where they are to be used. Also, provide a protective device to shield the breather and drain during hose-down operations.

Inspect and clean the machined flange (flam path) surfaces of both the cover and box. Surfaces must be smooth, free of nicks, scratches, dirt or any foreign particle build up that would prevent a proper seal. Surface must seat fully against each other to provide a proper explosion-proof joint. Clean surfaces by wiping with a clean, lint-free cloth.

Apply a light coat of Killark "LUBG" lubricant to flange surfaces and close the cover. Install and tighten all cover bolts to 30 ft. lbs. Make certain that no cover bolts are omitted. Use only those bolts supplied with the enclosure. Check the bolted joint with a 0.0015" thick feeler gauge. The gauge **must not enter** the joint more than 1/8" at any point.

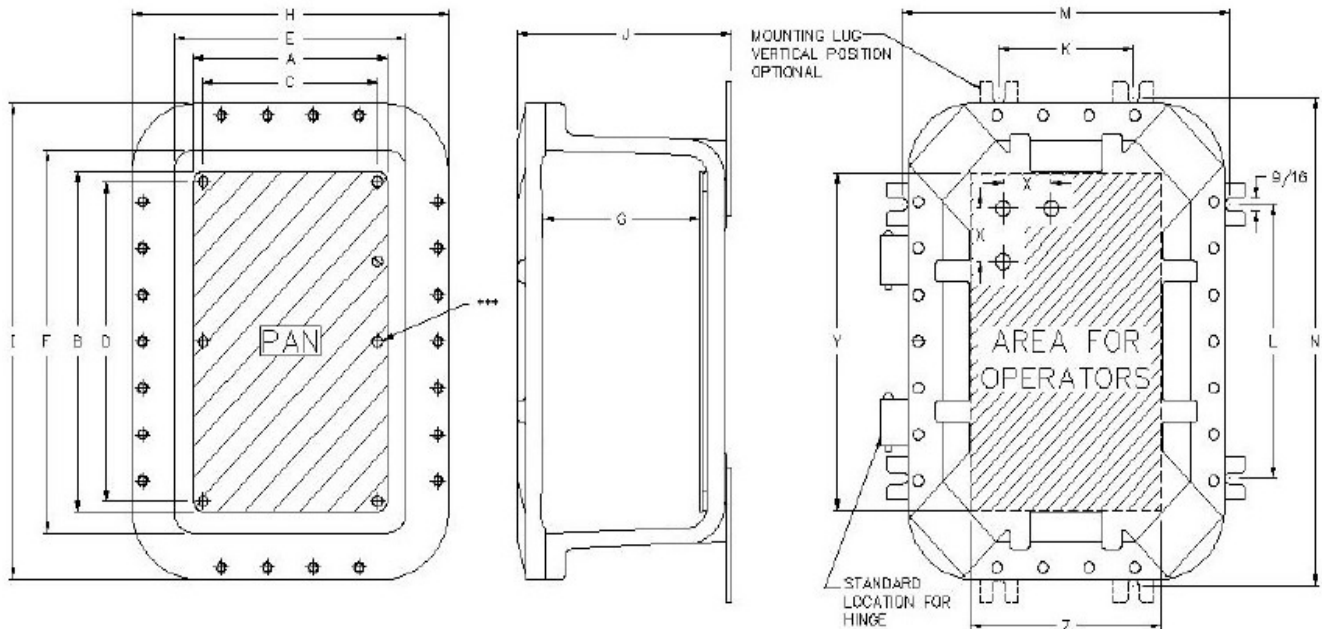
NOTE: Missing bolts or an improper joint can result in an explosion, creating a potential for physical injury or property damage.

ENCLOSURE CAT. NUMBER	INTERNAL DIMENSIONS							EXTERNAL DIMENSIONS				MOUNTING DIMENSIONS				
	PAN				Internal Volume			H	I	J	K	L	M	N	O	
	A	B	C	D	E*	F*	G									
EXB-684 N34	5	7	3	5	5.75	7.75	4.25	10.25	12.25	6.12	N/A	6	7.88	N/A	.19	
EXB-664 N34	5	5	3	3	5.73	5.73	4.31	10.32	10.32	6.09	N/A	4.00	7.88	N/A	0.19	
EXB-6124 N34	5	11	3	9	5.75	11.75	4.44	10.69	16.69	7.00	3.82	7.82	7.88	7.82	.19	
EXB-886 N34	7	7	5	5	7.59	7.59	6.06	12.32	12.32	8.09	N/A	6.00	9.88	N/A	0.19	
EXB-8104 N34	7	9	5	7	7.73	9.73	4.06	12.32	14.32	6.32	N/A	8.00	9.88	N/A	0.19	
EXB-8106 N34	7	9	5	7	7.59	9.59	6.06	12.32	14.32	8.32	N/A	8.00	9.88	N/A	0.19	
EXB-8126 N34	7	11	5	9	8	12	6.38	13.25	17.25	8.70	3.82	7.82	10.38	14.38	0.19	
EXB-8128 N34	7	11	5	9	8	12	8.38	13.25	17.25	10.70	3.82	7.82	10.38	14.38	0.19	
EXB-10106 N34	9	9	7	7	10	10	6.20	15.25	15.25	8.90	4.94	4.94	12.94	12.94	0.25	
EXB-10108 N34	9	9	7	7	10	10	8.20	15.25	15.25	10.90	4.94	4.94	12.94	12.94	0.25	
EXB-10146 N34	9	13	7	11	10	14	6.20	15.25	19.25	8.90	4.94	8.94	12.94	16.94	0.25	
EXB-10148 N34	9	13	7	11	10	14	8.20	15.25	19.25	10.90	4.94	8.94	12.94	16.94	0.25	
EXB-12126 N34	10.5	10.5	9	9	11.5	11.5	6.00	16.38	16.38	8.69	6.94	6.94	14.94	14.94	0.25	
EXB-12128 N34	10.5	10.5	9	9	11.37	11.37	8.00	16.38	16.38	10.69	6.94	6.94	14.94	14.94	0.25	
EXB-12186 N34	10	16	9	15	11.5	17.5	6.00	16.38	22.38	9.06	6.94	12.88	14.94	20.88	0.25	
EXB-12188 N34	10	16	9	15	11.37	17.37	8.00	16.38	22.38	11.06	6.94	12.88	14.94	20.88	0.25	
EXB-12246 N34	10.3	22.3	9	21	11.5	23.5	6.00	16.38	28.38	9.32	6.94	18.88	14.94	26.88	0.25	
EXB-12248 N34	10.3	22.3	9	21	11.37	23.37	8.00	16.38	28.38	11.32	6.94	18.88	14.94	26.88	0.25	
EXB-122412 N34	10.3	22.3	9	21	11.37	23.37	12.16	16.38	28.38	15.18	6.94	18.88	14.94	26.88	0.25	
EXB-12368 N34	11	35	9	33	12	36	8.12	17.25	41.25	11.40	7.00	31.00	15.00	39.00	0.25	
EXB-123610 N34	11	35	9	33	12	36	10.12	17.25	41.25	13.40	7.00	31.00	15.00	39.00	0.25	
EXB-14146 N34	13	13	11	11	14	14	6.20	19.25	19.25	9.40	9.00	9.00	17.00	17.00	0.25	
EXB-14148 N34	13	13	11	11	14	14	8.20	19.25	19.25	11.40	9.00	9.00	17.00	17.00	0.25	
EXB-16166 N34	14	14	13	13	15.5	15.5	6.00	20.38	20.38	9.19	10.94	10.94	18.94	18.94	0.25	
EXB-16168 N34	14	14	13	13	15.37	15.37	8.00	20.38	20.38	11.19	10.94	10.94	18.94	18.94	0.25	
EXB-16248 N34	15	23	13	21	16	24	8.12	21.25	29.25	12.00	11.38	19.38	19.38	27.38	0.25	
EXB-162410 N34	15	23	13	21	16	24	10.12	21.25	29.25	14.00	11.38	19.38	19.38	27.38	0.25	
EXB-18186 N34	17	17	15	15	18	18	6.12	23.25	23.25	10.00	13.38	13.38	21.38	21.38	0.25	
EXB-18188 N34	17	17	15	15	18	18	8.12	23.25	23.25	12.00	13.38	13.38	21.38	21.38	0.25	
EXB-18248 N34	16.4	22.1	15	21	17.37	23.37	8.00	22.38	28.38	11.75	13.00	19.00	21.00	27.00	0.25	
EXB-182410 N34	16.4	22.1	15	21	17.23	23.23	10.00	22.38	28.38	13.75	13.00	19.00	21.00	27.00	0.25	
EXB-18308 N34	16	29	15	28	17.88	30.88	8.13	22.63	35.63	12.44	13.25	26.50	21.25	34.5	0.25	
EXB-18368 N34	16	34	15	33	17.37	35.37	8.00	22.38	40.38	12.38	13.25	31.50	21.25	39.50	0.25	
EXB-183610 N34	16	34	15	33	17.23	35.23	10.00	22.38	40.38	14.38	13.25	31.50	21.25	39.50	0.25	
EXB-203611 N34	18.8	34.8	16.8	32.8	20.14	36.14	11.13	26.44	42.44	15.56	15.75	31.75	23.75	39.75	0.25	
EXB-24248 N34	22.3	22.3	21	21	23.37	23.37	8.06	28.38	28.38	12.19	19.50	19.50	27.50	27.50	0.25	
EXB-242410 N34	22.3	22.3	21	21	23.23	23.23	10.06	28.38	28.38	14.19	19.50	19.50	27.50	27.50	0.25	
EXB-24308 N34	23	29	21	27	24	30	8.06	29.25	35.25	12.40	19.56	25.56	27.56	33.56	0.25	
EXB-24368 N34	23	35	21	33	24	36	8.12	29.25	41.25	12.40	19.56	31.56	27.56	39.56	0.25	
EXB-243610 N34	23	35	21	33	24	36	10.12	29.25	41.25	14.40	19.56	31.56	27.56	39.56	0.25	

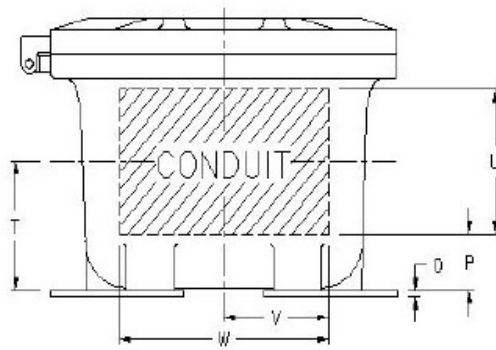
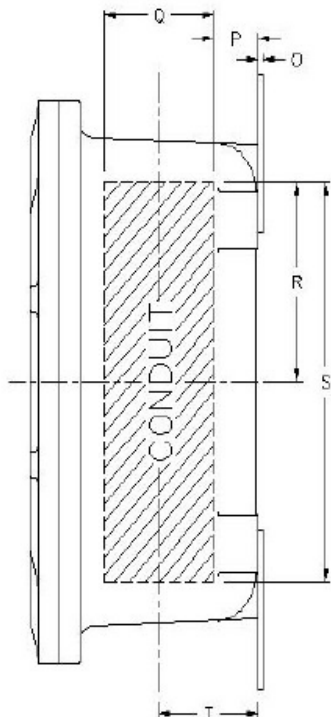
* Dimensions at bottom of box

** Spotface 1/16" deep

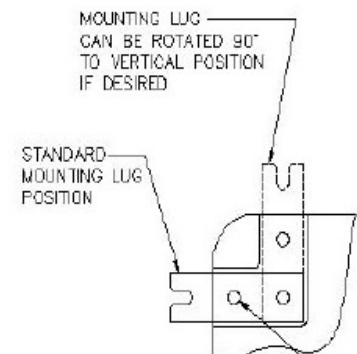
*** Center pan holes on EXB-1236, EXB-1824, EXB-1836, EXB-2036, EXB-2436



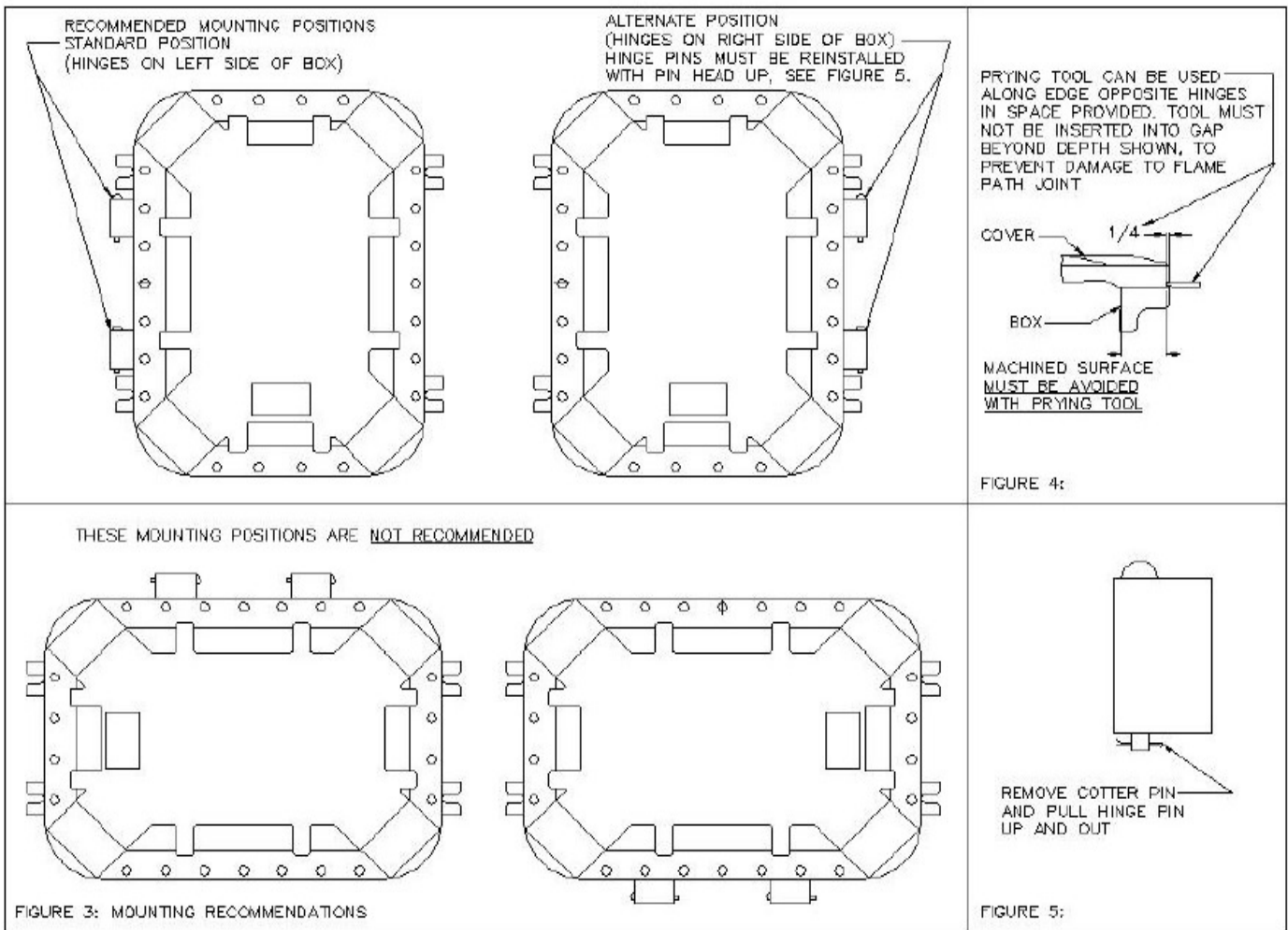
CONDUIT AREA								OPERATOR AREA AND SPECS			Min. Thk. at C-bore	Max. Dia. of C-bore	Max. # of Oper.	Encl. Wgt. (lbs)	ENCLOSURE CAT. NUMBER
P	Q	R	S	T	U	V	W	X	Y	Z					
1.18	2.81	3.44	6.88	2.75	2.81	2.44	4.88	2.5	7	5	**	2.5	6	20	EXB-684 N34
1.18	2.81	2.44	4.88	2.75	2.81	2.44	4.88	2.5	5	5	**	2.5	4	18	EXB-664 N34
1.18	2.81	5.00	10.00	2.75	2.81	2.44	4.88	2.5	11	5	.81	2.5	8	32	EXB-6124 N34
1.18	4.81	3.44	6.88	3.75	4.81	3.44	6.88	2.5	7	7	**	2.5	9	30	EXB-886 N34
1.18	2.81	4.44	8.88	2.75	2.81	3.44	6.88	2.5	9	7	**	2.5	12	34	EXB-8104 N34
1.18	4.18	4.44	8.88	3.45	4.81	3.44	6.88	2.5	9	7	**	2.5	12	38	EXB-8106 N34
1.78	3.75	5	10	3.66	3.75	3	6	2.5	11	7	0.81	2.5	12	47	EXB-8126 N34
1.78	5.75	5	10	4.66	5.75	3	6	2.5	11	7	0.81	2.5	12	67	EXB-8128 N34
1.91	3.75	4	8	3.79	3.75	4	8	2.5	9	9	1.06	2.5	9	66	EXB-10106 N34
1.91	5.75	4	8	4.79	5.75	4	8	2.5	9	9	1.06	2.5	9	72	EXB-10108 N34
1.91	3.75	6	12	3.79	3.75	4	8	2.5	13	9	1.06	2.5	15	82	EXB-10146 N34
1.91	5.75	6	12	4.79	5.75	4	8	2.5	13	9	1.06	2.5	15	89	EXB-10148 N34
1.88	3.81	4.94	9.88	4.00	3.81	4.94	9.88	2.5	10	10	**	2.5	16	75	EXB-12126 N34
1.88	5.81	4.94	9.88	5.00	5.81	4.94	9.88	2.5	10	10	**	2.5	16	83	EXB-12128 N34
2.06	3.13	7.94	15.88	3.88	3.75	4.94	9.88	2.5	16	10	**	2.5	28	110	EXB-12186 N34
2.06	5.13	7.94	15.88	4.88	5.75	4.94	9.88	2.5	16	10	**	2.5	28	120	EXB-12188 N34
2.13	3.13	10.94	21.88	3.94	3.81	4.94	9.88	2.5	22.25	10.25	**	2.5	36	145	EXB-12246 N34
2.13	5.13	10.94	21.88	4.94	5.81	4.94	9.88	2.5	22.25	10.25	**	2.5	36	160	EXB-12248 N34
2.13	9.28	10.94	21.88	7.12	9.28	4.94	9.88	2.5	22.25	10.25	**	2.5	36	225	EXB-122412 N34
2.09	5.75	17	34	4.97	5.75	10	20	2.5	35	11	1.38	2.5	56	231	EXB-12368 N34
2.09	7.75	17	34	5.97	7.75	5	10	2.5	35	11	1.38	2.5	56	245	EXB-123610 N34
2.09	3.75	6	12	3.97	3.75	6	12	2.5	13	13	1.38	2.5	25	121	EXB-14146 N34
2.09	5.75	6	12	4.97	5.75	12	24	2.5	13	13	1.38	2.5	25	136	EXB-14148 N34
2.06	3.75	6.94	13.88	4.18	3.75	6.94	13.9	2.5	14	14	**	2.5	36	127	EXB-16166 N34
2.06	5.75	6.94	13.88	5.18	5.75	6.94	13.9	2.5	14	14	**	2.5	36	138	EXB-16168 N34
2.34	5.75	11	22	5.22	5.75	7	14	2.5	22	14	1.69	2.5	40	251	EXB-16248 N34
2.34	7.75	11	22	6.22	7.75	7	14	2.5	22	14	1.69	2.5	40	266	EXB-162410 N34
2.34	3.75	8	16	4.22	3.75	8	16	2.5	16	16	1.69	2.5	36	206	EXB-18186 N34
2.34	5.75	8	16	5.22	5.75	8	16	2.5	16	16	1.69	2.5	36	220	EXB-18188 N34
2.32	4.88	10.94	21.88	5.00	5.56	7.94	15.9	2.5	22	16	**	2.5	63	240	EXB-18248 N34
2.32	6.88	10.94	21.88	6.00	8.56	7.94	15.9	2.5	22	16	**	2.5	63	260	EXB-182410 N34
3.32	5.54	14.5	29	6.09	6.20	7.94	15.9	2.5	29	16	**	2.5	.91	330	EXB-18308 N34
2.50	4.88	16.94	33.88	5.18	6.06	7.94	15.9	2.5	34	16	**	2.5	78	380	EXB-18368 N34
2.50	6.88	16.94	33.88	6.18	8.06	7.94	15.9	2.5	34	16	**	2.5	78	405	EXB-183610 N34
2.47	8.44	16.72	33.97	6.88	8.47	8.72	17.5	2.5	34.88	18.88	**	2.5	91	540	EXB-203611 N34
2.88	5.50	10.88	21.88	5.88	5.50	10.94	21.9	2.5	22	22	**	2.5	81	330	EXB-24248 N34
2.88	7.50	10.88	21.88	6.88	7.50	10.94	21.9	2.5	22	22	**	2.5	81	350	EXB-242410 N34
2.47	5.75	14	28	5.35	5.75	11	22	3.0	28	22	1.94	2.5	63	422	EXB-24308 N34
2.47	5.75	17	34	5.35	5.75	11	22	3.0	34	22	1.94	2.5	77	506	EXB-24368 N34
2.47	7.75	17	34	6.35	7.75	11	22	3.0	34	22	1.94	2.5	77	531	EXB-243610 N34



NOTE:
EXB SERIES 664,886,8104 & 8106
ENCLOSURES HAVE HORIZONTAL
MOUNTING LUG POSITION ONLY



3/8"-16 X 3/4" HEX SOCKET FLAT HEAD
STEEL SCREW (2 SCREWS PER LUG)
TIGHTEN USING 3/16" HEX KEY WRENCH
TO 25 FT./LBS



MAINTENANCE INSTRUCTIONS

After installation, this junction box should be inspected at regular intervals. A visual inspection should ascertain that all cover bolts are installed and still tight; that all conduit connections are intact and free of corrosion, and that the enclosure mounting bolts are tight and in good condition.

If the enclosure must be opened for servicing, to check or replace internal devices and apparatus, the following procedures should be followed.

WARNING: Before servicing the enclosure, be certain the electrical power is OFF. Disconnect the enclosure from primary power source and lock out.

Remove all cover bolts. Clean and inspect. Replace any corroded, bent or otherwise damaged bolts with new, factory authorized bolts obtained from an authorized Killark distributor.

Open enclosure. Do not use hammer, screwdriver, or any prying tool to open cover, except as shown in Figure 4.

Inspect cover hinges. If hinges are damaged or do not function properly, contact a factory authorized service representative for hinge replacement and installation.

Inspect machined flange (flame path) surfaces. Surfaces must be smooth, free of nicks, scratches, dirt or any foreign particle build-up that would prevent a proper seal. Should surface be damaged contact factory. Never attempt to rework surfaces by sanding, grinding, ect. Surfaces must seat fully against each other to provide proper explosion-proof joint.

Inspect water exclusion gasket. If gasket is damaged, **do not** attempt field replacement or repair.

Contact a factory authorized representative for a replacement cover. When removing gasketed cover for replacement, **do not** detach hinge body from cover. (NOTE: Optional hinges on 664, 886, 8104, & 8106 enclosures **must** be removed from cover).

Remove cover and hinge body from enclosure by removing the hinge pins. (see Figure 5) The damaged gasket can be removed from the cover and the cover without gasket can be safely used in Class I & II hazardous (classified) locations, however the enclosure may **not** be raintight or hosedown tight.

Clean flange surface by wiping with a clean, lint-free cloth. Apply a light coating of Killark "LUBG" lubricant to flange surfaces and close cover. Install and tighten **all** cover bolts to 30 ft. lbs. Make certain no cover bolts are omitted. Use **only** factory authorized bolts. Check the flame joint with a .0015" feeler gauge. The gauge must not enter the flame joint more than 1/8" at any point. Missing bolts or an improper flame joint can result in an explosion, creating a potential for physical injury and property damage.

Technical information, advice and recommendations contained in these documents is based on information that Killark believes to be reliable. All the information and advice contained in the documents is intended only for use by persons having been trained and possessing the requisite skill and know-how and to be used by such person only at their own discretion and risk. The nature of these instructions is informative only and does not cover all of the details, variations or combinations in which this equipment may be used, its storage, delivery, installation, check out, safe operation, and maintenance. Since conditions of use of the product are outside of the care, custody and control of Killark, the purchaser should determine the suitability of the product for his intended use, and assumes all risk and liability whatsoever in connection therewith.