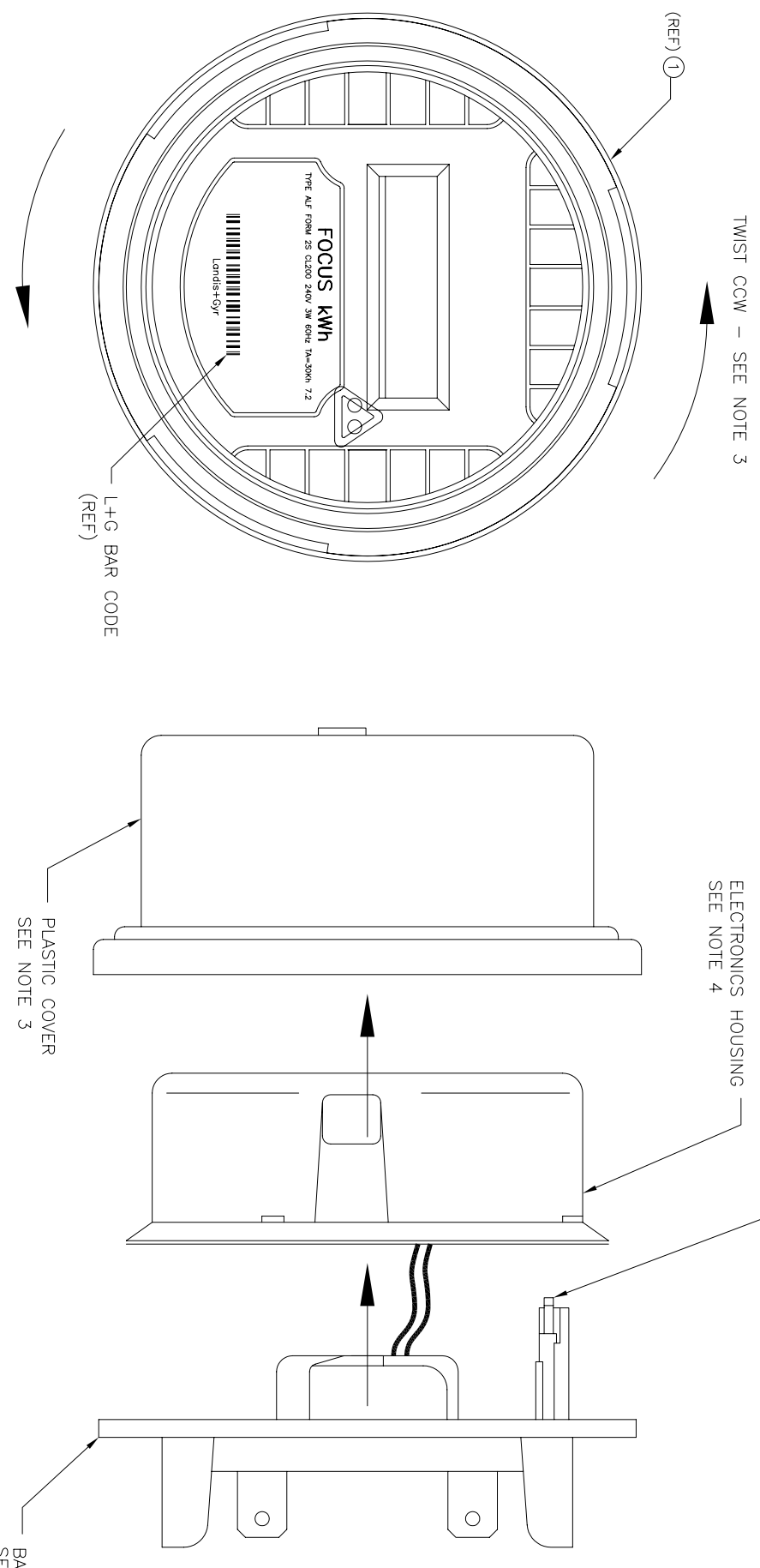


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B00	RELEASED PER ECN070050	12/18/07	
B01	REVISED PER ECN080019	02/29/08	
C00	REVISED PER ECN080029	05/21/08	
D00	REVISED PER ECN080022	05/22/08	
D01	REVISED PER ECN080032	07/07/08	
D02	REVISED PER ECN080040	12/05/08	

- NOTES: UNLESS OTHERWISE SPECIFIED
- 1) THIS IS A STATIC SENSITIVE ASSEMBLY – USE STATIC ELIMINATING MEASURES DURING ASSEMBLY AND HANDLING.
 - 2) MANUFACTURE TO IPC 610A CLASS 2 WORKMANSHIP STANDARDS.

FOCUS METER ASSEMBLY MODIFICATION INSTRUCTIONS

- 3) TO REMOVE THE SEE-THRU PLASTIC COVER, TWIST OFF CCW AND PLACE OFF TO THE SIDE. REMOVE THE LOCKING TAB THAT COMES WITH THE UNIT BEFORE TWISTING.
 - 4) TO REMOVE THE ELECTRONICS HOUSING FROM THE BASEPLATE, SET METER ON A SOLID SURFACE & PLACE HANDS AROUND THE BOTTOM OF THE GRAY HOUSING WHERE IT MEETS WITH THE BASEPLATE. WITH THUMBS IN THE 6 O'CLOCK POSITION, WHILE TOUCHING BOTH THE HOUSING AND BASEPLATE, SQUEEZE FIRMLY WITH THUMBS USING CONSIDERABLE FORCE. TO FLEX THE HOUSING AND RELEASE THE BOTTOM TWO FASTENERS LOCATED AT THE 4 O'CLOCK & 8 O'CLOCK POSITIONS. IT MAY BE NECESSARY TO ALTERNATE PRESSURE BY THUMBS UNTIL BOTH FASTENERS ARE RELEASED. ONCE RELEASED, PUSH GENTLY TOWARD THE 12 O'CLOCK POSITION TO RELEASE THE TOP TWO FASTENERS. THE HOUSING CAN BE LIFTED OFF AND THEN THE INPUT CONNECTOR CAN BE UNPLUGGED FROM THE PCB. EXTRA CARE SHOULD BE GIVEN TO LIFT THE HOUSING STRAIGHT OFF OF THE BASEPLATE TO AVOID DAMAGING THE SPRING CONTACTS LOCATED ON THE BASE ASSEMBLY. THE SPRING CONTACTS SHOULD BE VISUALLY INSPECTED TO ENSURE SYMMETRY NOW AND BEFORE THE HOUSING IS RE-INSTALLED (SEE NOTE 14)
- WARNING:** THE PHYSICAL ATTACHMENT BETWEEN THE BASEPLATE AND THE ELECTRONICS IN THE HOUSING MUST BE MAINTAINED. THE METER IS CALIBRATED TO PROVIDE ACCURATE READINGS ONLY FOR THE BASE PLATE IT WAS ORIGINALLY MATED WITH. IF THE INPUT CONNECTOR IS UNPLUGGED, IT MUST BE RECONNECTED UPON COMPLETING THE UGM INSTALLATION INTO THE HOUSING (SEE VIEW B-B).
- 5) ONCE THE HOUSING IS SEPARATED FROM THE BASEPLATE, LAY THE UNIT FLAT ON A BENCH AND PLACE THE HOUSING ASSY TO THE LEFT HAND SIDE OF THE BASEPLATE ASSY. SEE SHEET 2 FOR A DETAILED VIEW.
- INSTRUCTIONS CONTINUED ON SHEET 2
- FOR PRODUCT STRUCTURE SEE 890-0001-003**



FOCUS METER FRONT VIEW

TWIST CCW - SEE NOTE 3

ELECTRONICS HOUSING
SEE NOTE 4

SPRING CONTACTS
SEE NOTE 4

PLASTIC COVER
SEE NOTE 3

BASEPLATE ASSY
SEE NOTE 4

DWG file: 895-0001-003-1_D02

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES OR IN [MILLIMETERS]

TOLERANCES	DECIMALS	ANGLES
	X ± .03	± 1/2°
	.XX ± .01	
	.XXX ± .005	

APPROVALS	DATE
DRAWN BY: M/FL	05/22/08
CHECKED BY:	
APPROVED BY:	
APPROVED BY:	

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Arkion Systems			
TITLE			
ASSY & MODIFICATION DWG			
SmartMeter-H (W/O WATER INT)			
FORM 2S - PLASTIC COVER			
SIZE	PART NO.	REV.	
D	895-0001-003	D02	
SCALE 1:1	DO NOT SCALE DRAWING	SHEET 1 OF 3	

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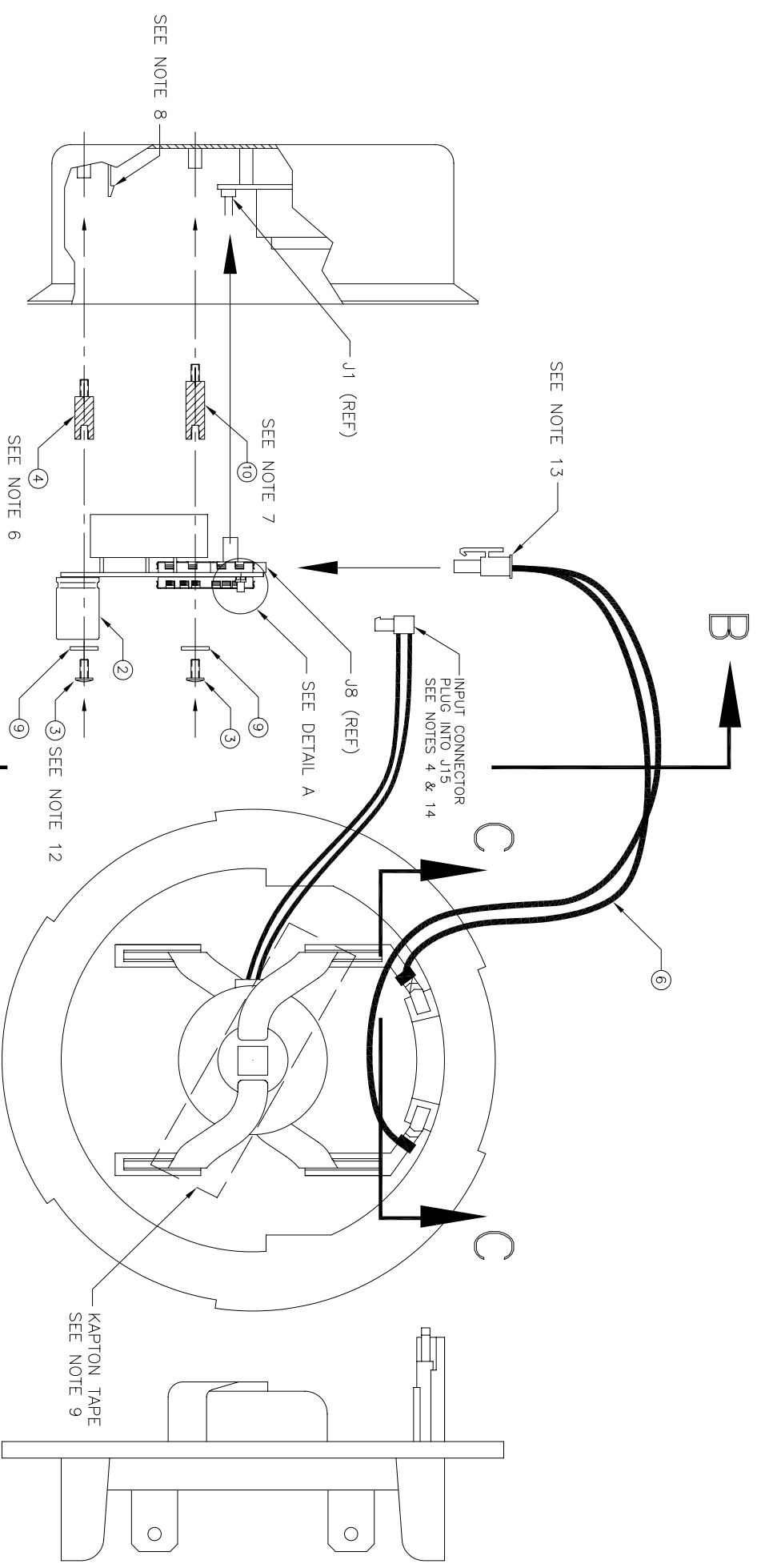
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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	SEE SHEET 1 FOR REVISIONS		

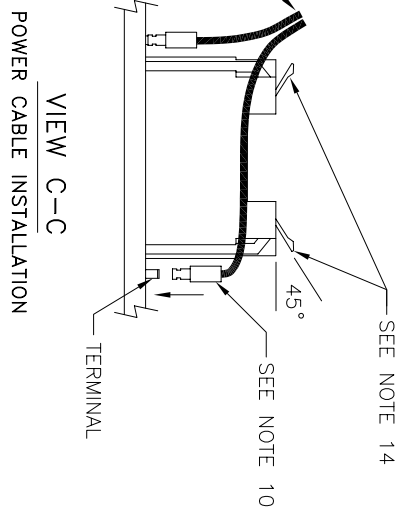
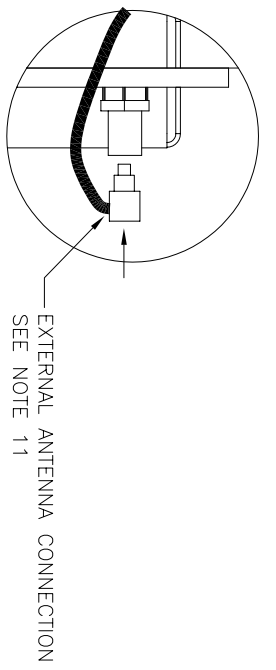
FOCUS METER ASSEMBLY MODIFICATION INSTRUCTIONS – CONT FOM SHT 1

- 6) ADD STANDOFF (ITEM4) TO THE HOUSING IN THE LOCATION SHOWN. SEE VIEW B-B FOR CORRECT LOCATION.
- 7) ADD STANDOFF (ITEM10) TO THE HOUSING IN THE LOCATION SHOWN. SEE VIEW B-B FOR CORRECT LOCATION.
- 8) SNAP OFF THE RIGHT SIDE MOUNTING CLIP LOCATED IN HOUSING. THIS WILL INTERFERE WITH THE UGM-H MODULE IF NOT DONE (SEE VIEW B-B FOR CORRECT LOCATION).
- 9) APPLY 2 PIECES OF KAPTON TAPE (AR) ACROSS THE EXPOSED LINE TERMINALS TO PREVENT SHORTING. EACH PIECE SHOULD BE APPROX 4 INCHES IN LENGTH.
- 10) PLUG ONE SIDE OF THE UGM-H POWER CABLE ASSY (ITEM6) INTO THE 2 TERMINALS OF THE BASEPLATE ASSY AS SHOWN (THE ORIENTATION DOES NOT MATTER).
- 11) TAKE THE EXTERNAL ANTENNA (ITEM7) AND RUN THE WIRE THROUGH THE CUT-OUT OPENING IN THE HOUSING. REMOVE THE ADHESIVE BACKING AND SECURE THE ANTENNA TO THE HOUSING AT THE APPROXIMATE DIMENSION INDICATED – THE BOTTOM OF THE ANTENNA SHOULD BE HORIZONTAL TO TO THE FLANGE ON THE HOUSING (SEE SHT 3). ONCE SECURE, PLUG THE ANTENNA CO-AX INTO CONNECTOR (J4) ON THE UGM-H MODULE. THE FOLLOWING INSTRUCTIONS MUST BE MAINTAINED FOR THIS INSTALLATION:
 - APPLICATION ONLY AT 70° F +/- 10°.
 - CLEAN SURFACE WITH ISOPROPYL ALCOHOL PRIOR TO STICKING ANT.
 - THE ADHESIVE LINER SHOULD ONLY BE REMOVED IMMEDIATELY PRIOR TO THE APPLICATION AND CARE SHOULD BE USED TO ENSURE NO DIRT IS PICKED UP.
- 12) CAREFULLY PLUG THE UGM-H MODULE (ITEM2) INTO THE METER BY INSERTING J1 OF THE MODULE (LOCATED ON THE BACK SIDE) INTO J1 OF THE L&G INTERNAL PWA (LOCATED ON THE TOP SIDE). MOVE THE EXT ANTENNA WIRE SO THAT IT DOESN'T INTERFERE WITH ANY COMPS IN THAT AREA. ONCE SECURE, ADD THE SCREWS (ITEM3) AND WASHERS (ITEM9) – 2 PLS AND TIGHTEN THE MODULE DOWN IN PLACE (SEE VIEW B-B ON SHT3 FOR DETAIL).
- 13) PLUG THE 3-POS POWER CONNECTOR OF THE CABLE ASSY (ITEM 6) INTO J8 OF THE UGM-H MODULE ASSY (ITEM2).
- 14) BEFORE INSTALLING THE MODIFIED HOUSING ASSY BACK ONTO THE BASEPLATE ASSY, MOVE ANY WIRES SO THAT THEY DO NOT INTERFERE WITH THE INSTALLATION – SPECIFICALLY THAT THE POWER CABLE ASSY (ITEM 6) IS NOT PINCHING AGAINST THE SPRING CONTACTS. VISUALLY INSPECT THE SPRING CONTACTS TO ENSURE SYMMETRY (THEY SHOULD ALL BE AT APPROX 45° ANGLES) SEE VIEW C-C FOR DETAIL. RE-INSTALL THE INPUT CABLE INTO CONNECTOR J15 ON THE L&G INTERNAL PWA AS SPECIFIED (SEE VIEW B-B FOR CONN LOCATIONS).

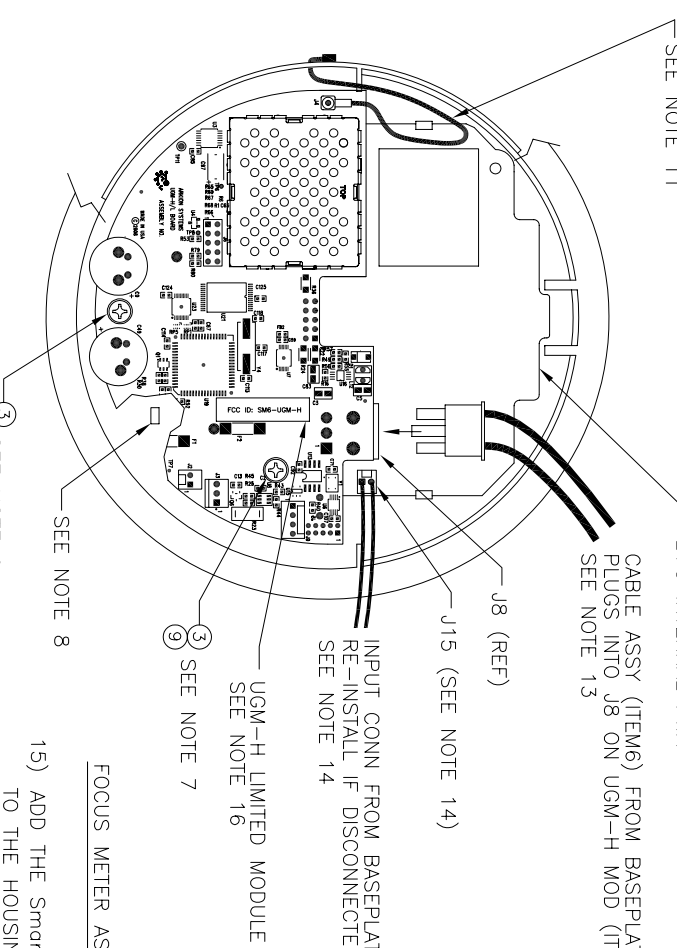
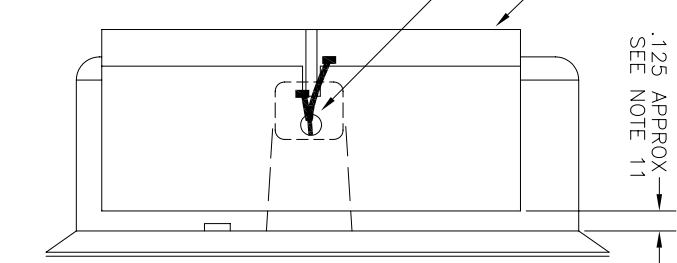
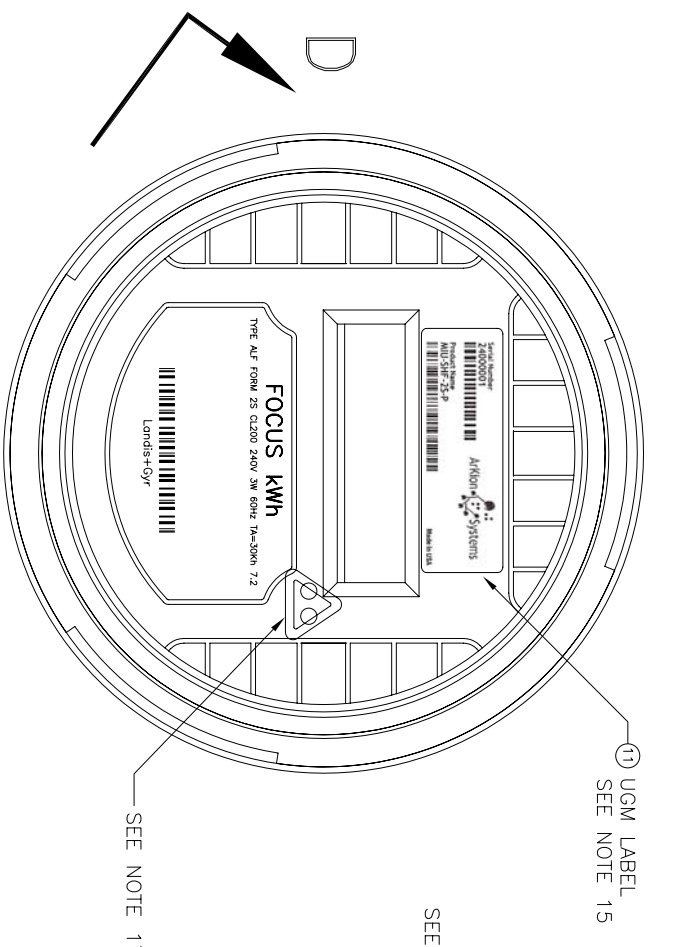
INSTRUCTIONS CONTINUED ON SHEET 3



SIDE VIEW – HOUSING
(ROTATED 90° FOR CLARITY)



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	SEE SHEET 1 FOR REVISIONS		



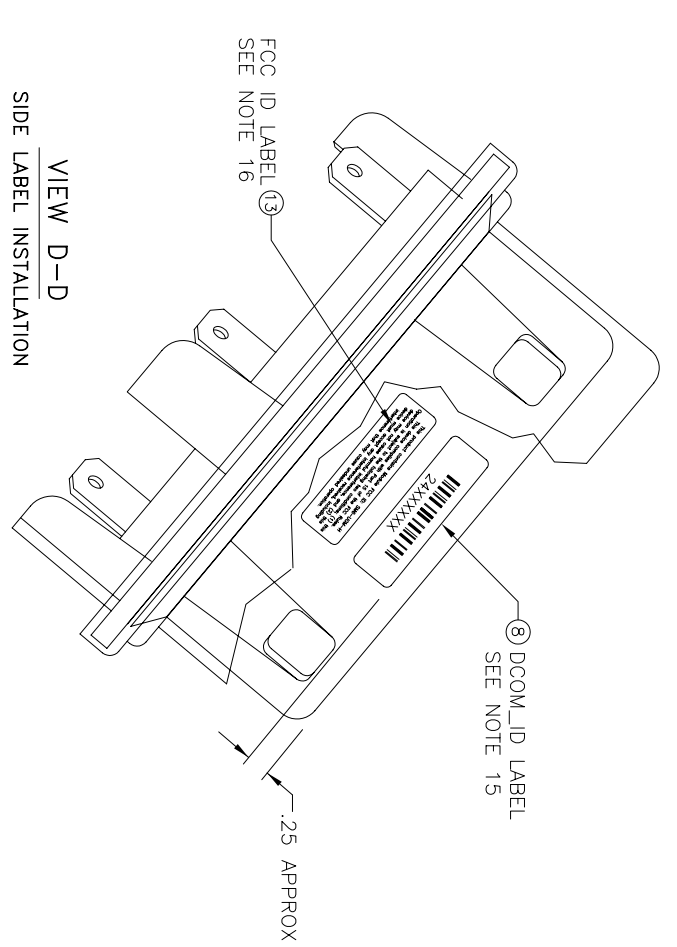
VIEW B-B (ASSEMBLED UNIT)

FOCUS METER ASSEMBLY MODIFICATION INSTRUCTIONS - CONT FROM SHT 2

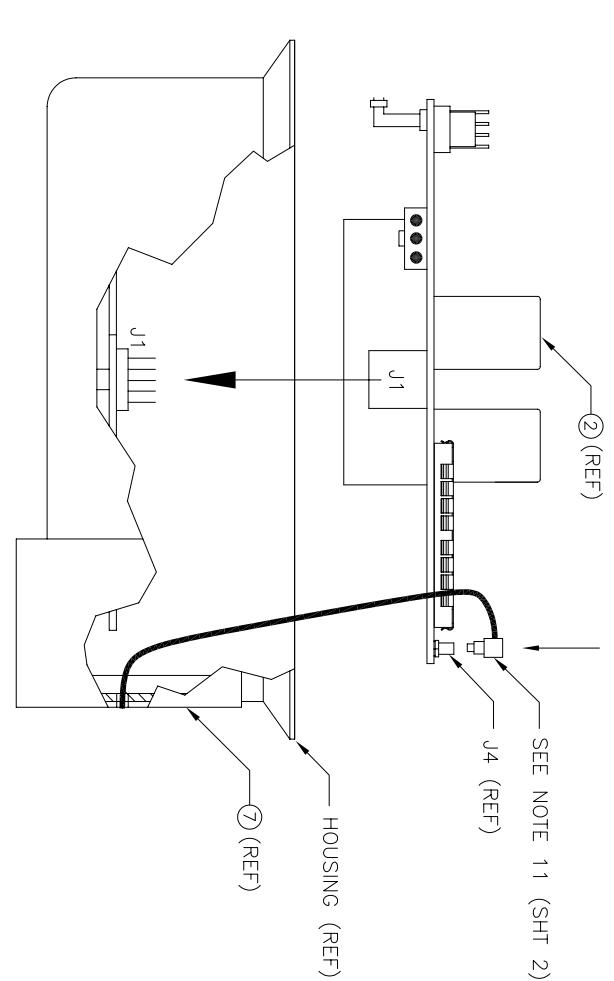
- 15) ADD THE SmartMeter PRODUCT BAR CODE/SERIAL NUMBER LABEL (ITEM11) TO THE HOUSING IN THE APPROX POSITION SHOWN. IT MUST BE VISIBLE FROM THE TOP OF THE UNIT AND CENTERED ABOVE THE LCD AS SHOWN. THE LOCATION OF THE SN/DCOM_ID LABEL (ITEM8) ON THE SIDE OF THE UNIT IS MORE CRITICAL (TEST FIXTURE REQ) AND SHOULD BE CENTERED BETWEEN THE CUT-OUTS IN THE HOUSING AT THE APPROX DIMENSION SHOWN IN VIEW B-B (SHT 3). THESE 2 LABELS WILL CONTAIN A DUPLICATE SERIAL NUMBER AND DCOM_ID. THE FIRST 2 NUMBERS INDICATE TO THE TESTER WHAT TO PROGRAM INTO THE UNIT AND THESE NUMBERS WILL CONTINUE TO BE SUPPLIED BY ARKION SYSTEMS UNTIL FURTHER NOTICE:
- 24XXXXXX / INDICATES MIU-HIGH VERSION
 - 22XXXXXX / INDICATES MIU-LOW VERSION

- 16) APPLY THE SmartMeter FCC LABEL (ITEM13) WITH THE FCC ID INFO UNDER THE DCOM_ID LABEL (ITEM8) IN THE APPROX AREA SHOWN. THIS LABEL SHOULD REFERENCE THE FCC ID NUMBER ON THE MODULE LABEL.
- 17) RE-INSTALL THE SEE-THRU PLASTIC COVER BY TWISTING CW INTO IT'S LOCKED POSITION. LINE UP TRIANGLE ON THE COVER TO BE DIRECTLY OVER THE LED'S OF THE UNIT. THE UNIT IS NOW FULLY ASSEMBLED READY FOR TEST.

MODIFIED MIU-HF FOCUS METER UNIT



VIEW D-D
SIDE LABEL INSTALLATION



EXTERNAL ANTENNA CONNECTION DETAIL

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DWG file: 895-0001-003-3_D02

SIZE	PART NO.	REV.
D	895-0001-003 D02	

SCALE: NONE DO NOT SCALE DRAWING SHEET 3 OF 3