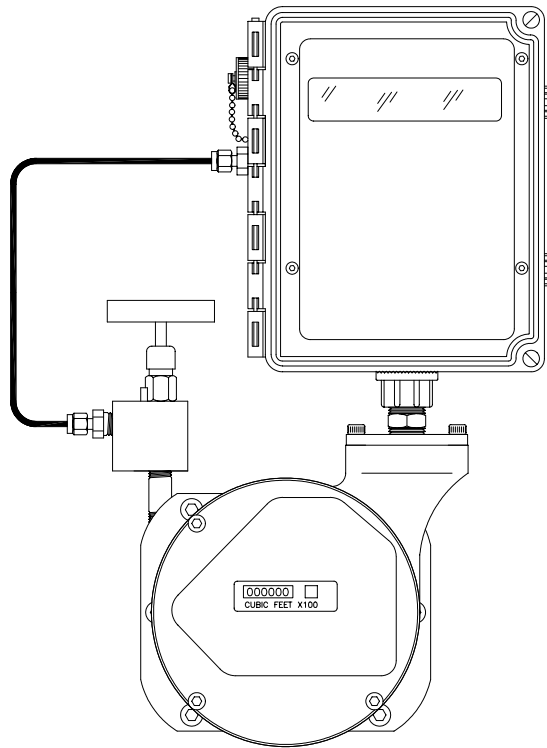


# Electronic Corrector Mounting Kit for American Meter Rotary Meters.



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## Section One: Introduction

It is the intent of this manual to provide guidance to the user for both mechanical and electrical assembly of the Rotary Meter / Electronic Corrector mount kit. Following these steps in the proper sequence will accelerate the assembly process, permitting the user to bring the equipment 'on-line' with minimal delay.

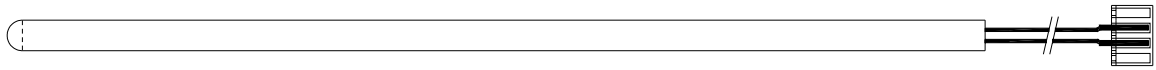
This retrofit kit is compatible with either the Metrotek AE-6000 or MTEK-6000 electronic correctors, for attachment to the American Meter RPM line of rotary meters.

## Section Two: Mounting Kit Parts List

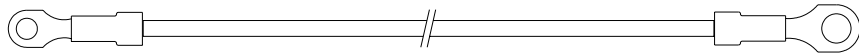
A number of electrical and mechanical components are required for the conversion process. Figures 1 & 2 illustrate all of the parts normally provided with each kit, while the table below provides Metrotek part number references in the event that a replacement component should ever be required.

Description	Part Number	Quantity
Thermal Probe Assembly	1015-0196B-002	1
Grounding Wire	1002-0323-001	1
Index Pulser Cable	1002-0324-001	1
Rotary Meter Mounting Column	1008-0014-001	1
Hole Plugs, 0.25" Diameter	5325-0063	4
Valve and Tubing Kit	2019-0009B-001	1
Owners Manual Document	MAN-900359	1
Complete Mounting Kit Assembly	1014-0048-001	--

Table-1.



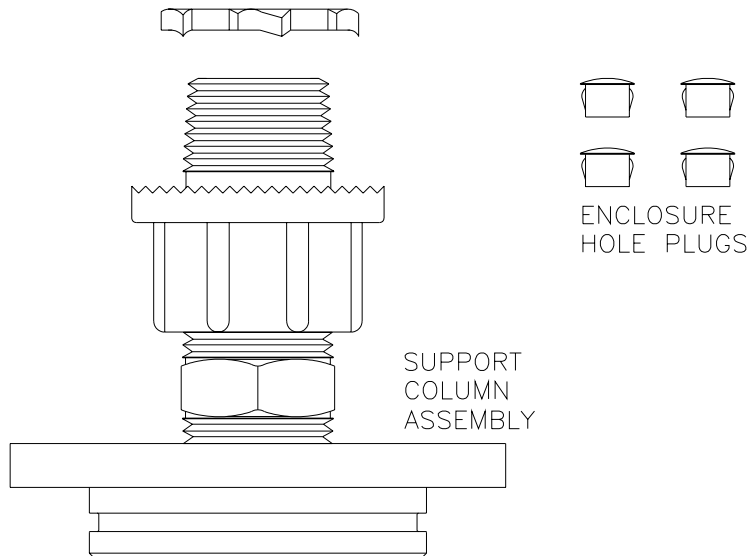
THERMAL PROBE



GROUNDING WIRE



INDEX PULSER CABLE



ENCLOSURE  
HOLE PLUGS

SUPPORT  
COLUMN  
ASSEMBLY

Figure-1.  
Illustration of supplied  
components. (1 of 2)

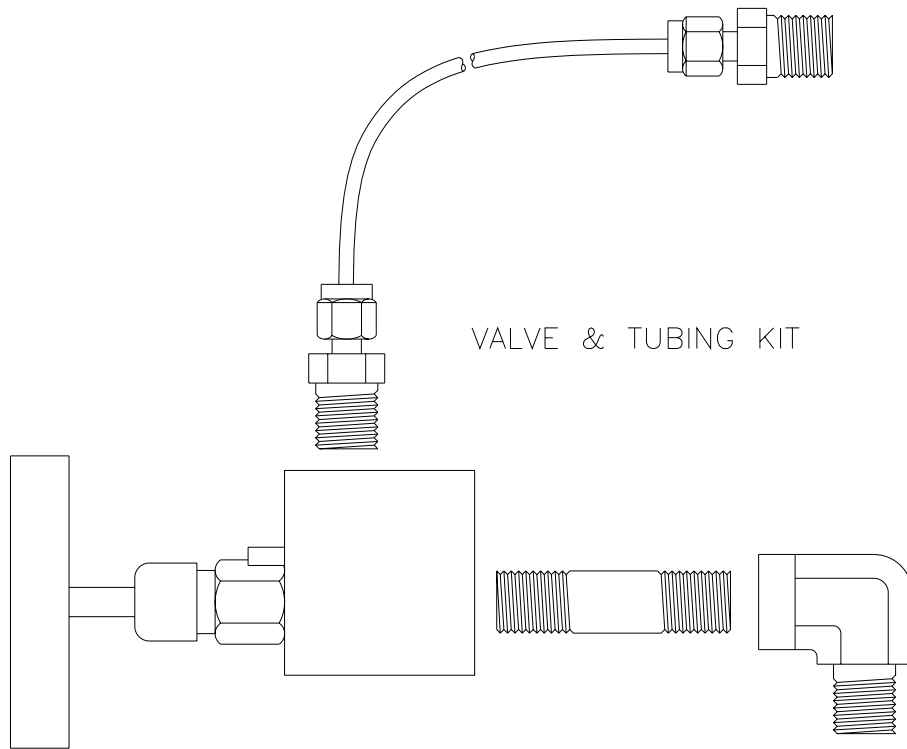


Figure-2.  
Illustration of supplied  
components. (2 of 2)

### Section Three: Thermal Probe Installation

Removal of the rotary meter register cover is necessary in order to gain access to the thermal well (reference Figure-3). Installation of the thermal probe is not difficult, although two points should be kept in mind; a) Thermal conductive grease is recommended at the probe tip end to provide for a rapid response time to temperature changes; b) Only moderate torque should be applied to the lock-down screw to avoid crushing the wire exit end of the probe.

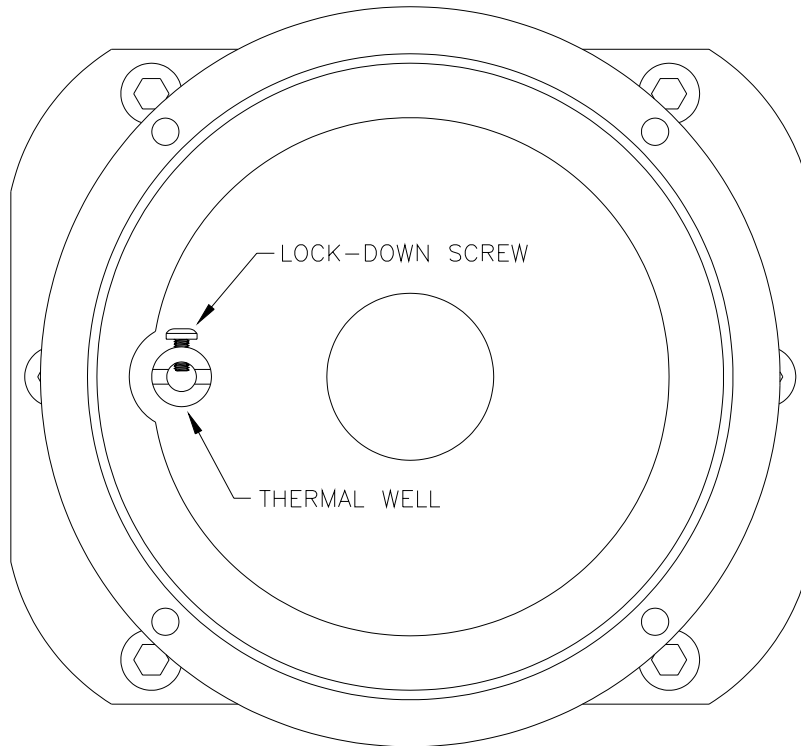


Figure-3.  
Rotary meter with register cover removed.

## Section Four: Support Column Mounting & Wire Routing

Mounting of the support column onto the rotary meter index cover should be performed at this stage. The index pulser cable and the grounding wire are to be connected to the points illustrated in Figure 4. Care should be taken to ensure that the wiring does not interfere or rub against the gear mechanism of the index counter. The thermal probe wiring is also to be routed through the support column, and the register cover reassembled back onto the rotary meter base.

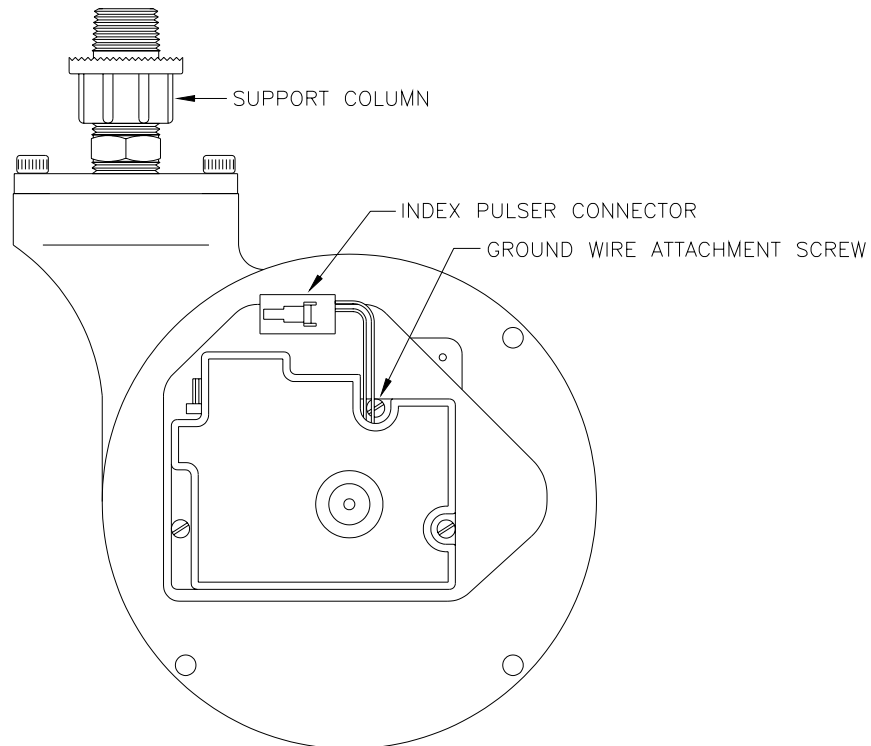


Figure-4.  
Inside view of rotary meter cover.

## Section Five: Mounting of the Electronic Corrector

If not already done so, the four 0.25" diameter enclosure holes illustrated in Figure-5 should be sealed with plastic plug inserts. Assembly of the valve kit, corrector, and rotary meter is rather straightforward as illustrated in Figure-6. Pliers will be necessary to torque down the locknut onto the mounting column threads.

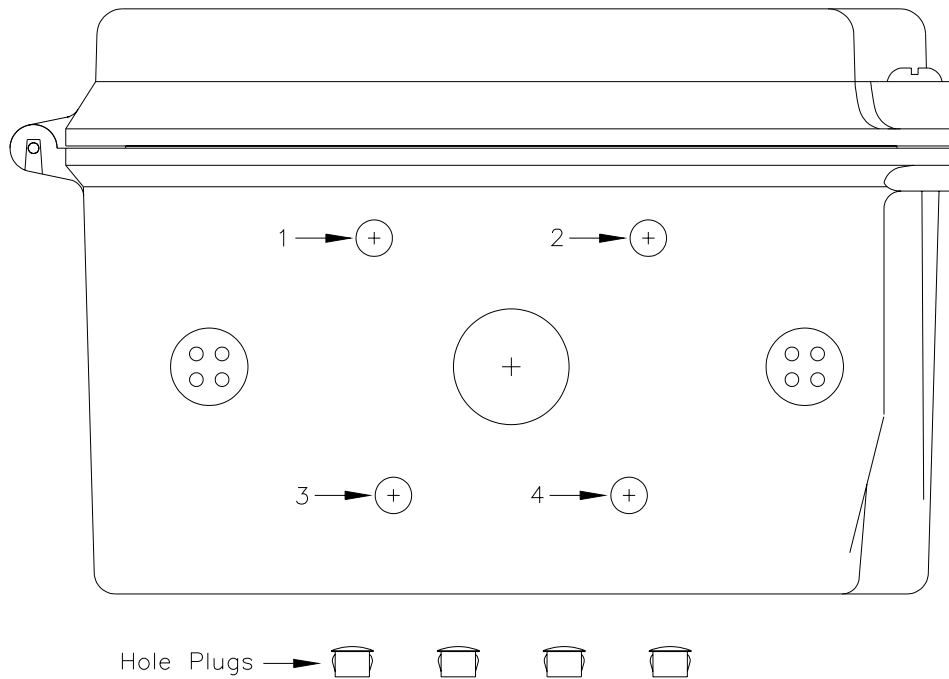


Figure-5.  
Base of electronic corrector,  
hole plug locations.

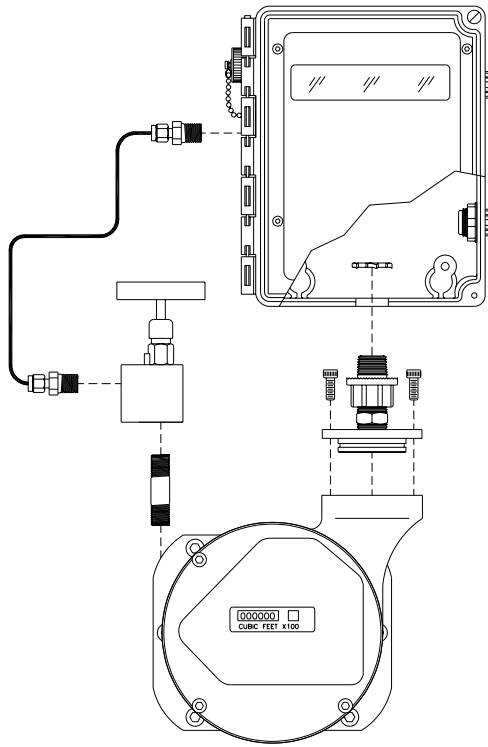


Figure-6.  
Exploded diagram,  
mechanical components.

## Section Six: Electrical Connections to the Corrector

Depending on the electronic corrector model being utilized, the wiring connection attachment points will differ.

### AE-6000 Electronic Corrector:

- Remove the bottom left processor circuit board mounting screw and secure the green ground wire at this position.
- Ensure that JP2 is set for “YES” to enable the external RTD probe sense circuit.
- Connect the RTD sensor cable to the J5 connector.
- Connect the pulser cable to the J2 connector.

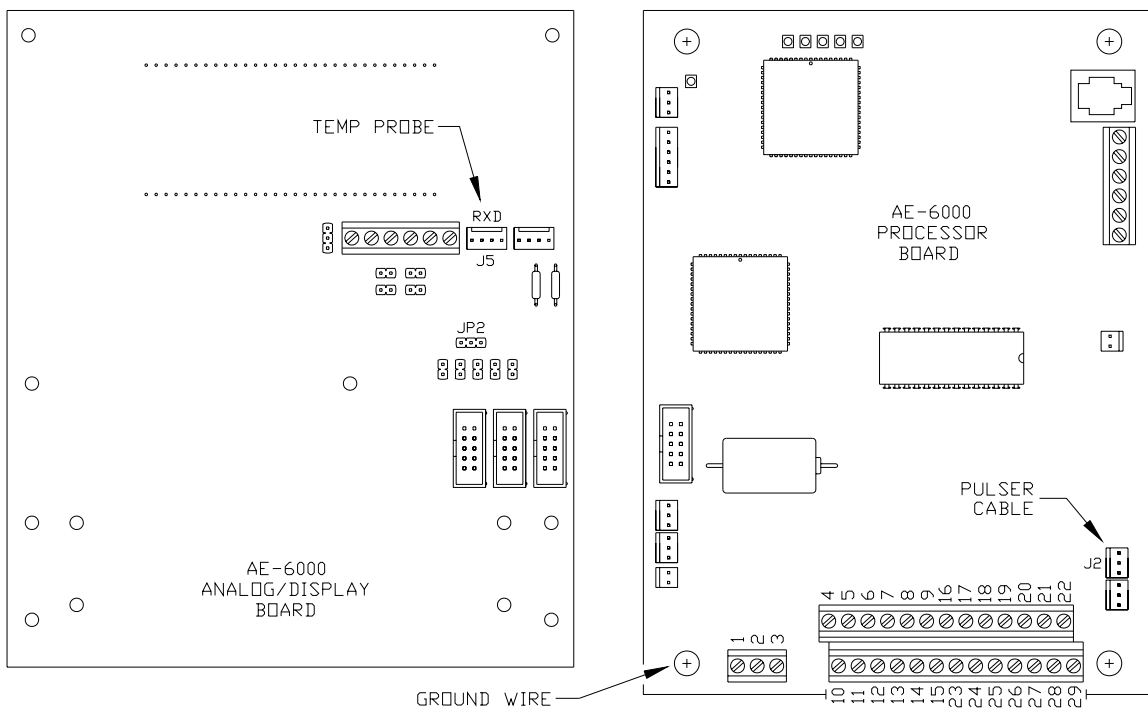


Figure-7.  
AE-6000 Board Profile.

**MTEK-6000 Electronic Corrector:**

- Secure the green grounding wire onto the metal mounting flange of the pressure transducer (reference Figure-8).
- Attach the RTD sensor cable to the J11 connector. (reference Figure-9)
- Verify that jumper JP14 is set to position A+B to enable external probe sensing.
- Connect the pulser cable to the J8 connector (reference Figure-9).

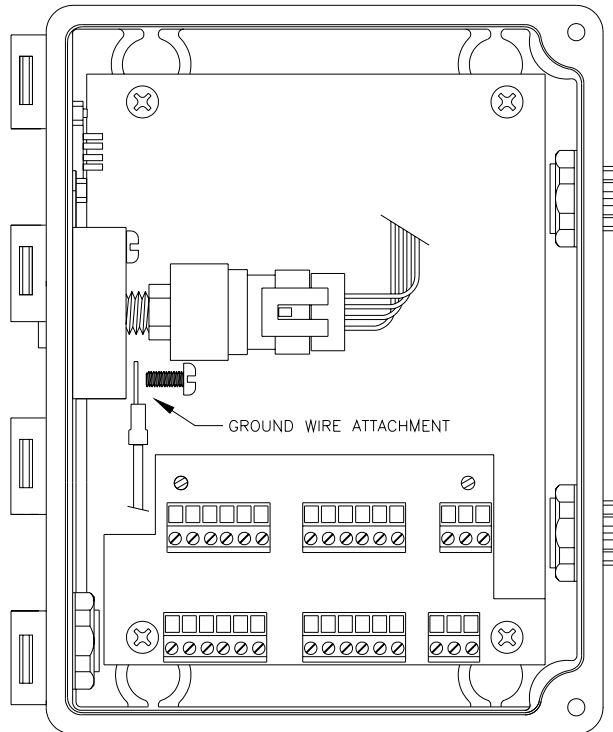


Figure-8.  
Ground Wire Connection.

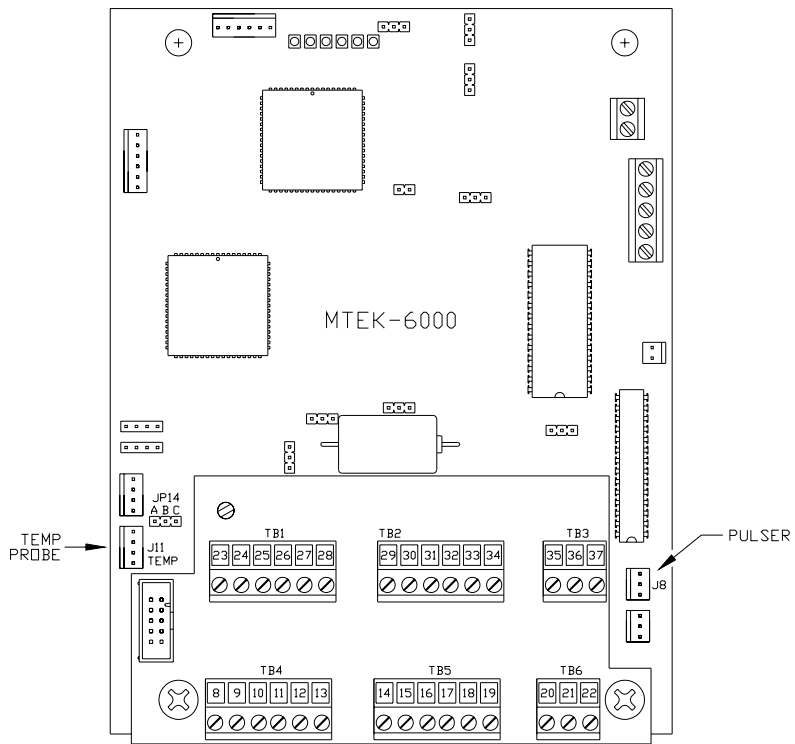


Figure-9.  
MTEK-6000 Board Profile.

## Section Seven: Final Checkout Procedure

Before leaving the field site, some integrity testing will be necessary to ensure that the system as a whole is now operational. It is readily apparent that the checklist will include index pulse counting, temperature sensing, and pressure measurement. The steps below are detailed using address codes that are entered using the external keypad / display unit. Typically this is done by pressing the 'CONF' key, 'JUMP' key, address value, and 'ENT'.

### Index Pulse Counting:

- Enter address '051108' for the uncorrected volume display value, and verify that it tracks at the same rate as the mechanical index. The value can be changed to exactly match the mechanical index by pressing the 'EDIT' key. If counts do not register correctly, verify that the corrector is configured to accept Form-A pulse count inputs, and also verify that the index count multiplier value is proper.

### Temperature Sensing:

- Enter address '020304' (or press F4 key) to observe the flow temperature, and verify that the value is reasonable. If not, double-check that JP2 (AE6000) or JP14 (MTEK6000) have been correctly configured to enable sensing of an external temperature probe.

### Pressure Verification:

- Enter address '030302' (or press F3 key) to verify that the pressure readings are reasonable for the field site location. If not, pressure sense line leaks are the most probable cause.

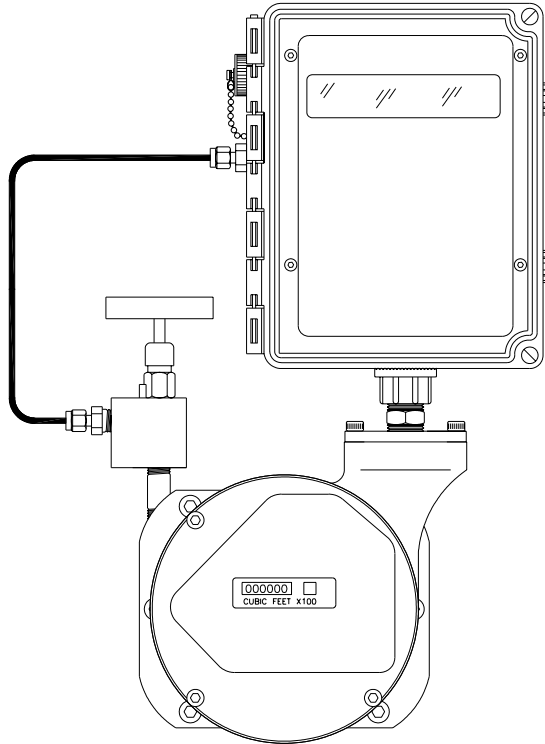


Figure-9.  
Fully assembled unit.

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