

## Installation of Instruments on ROOTS® Meters

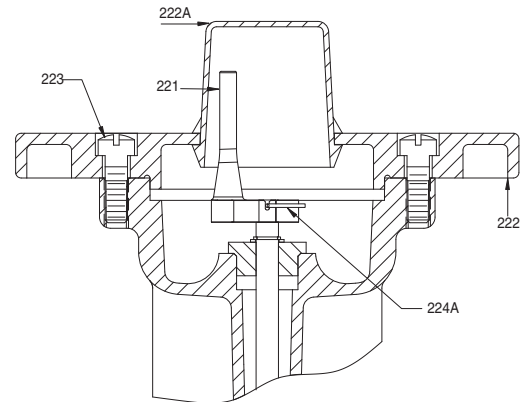
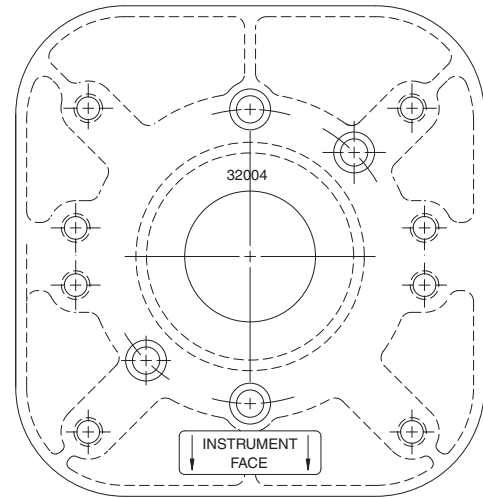
The following procedures describe how to properly install an electronic corrector, mechanical corrector, AMR device or other instrumentation to a ROOTS® Meter with mechanical output drive:

UNIVERSAL INSTRUMENT DRIVE ADAPTER PLATE ASSEMBLY, Item 220, Part Number 047269-090, contains the following components:

- Item 221, Drive Dog (Non-Metallic) with Pin Asm., P/N 056936-000
- Item 224, Shear Pin (24-gauge), P/N 05803-000 (4 extra's in bag)
- Item 222, Universal Instrument Adapter Plate, P/N 031972-000
- Item 223, Cap Screw (2), 1/4-20 x 3/4
- Item 222A, Plastic Cap Plug

All ROOTS® Meters and Repair Assemblies or Conversion Kits for meters with an Instrument Drive is installed by the factory. Should the need arise to install the ID Adapter Plate Assembly, please adhere to the following assembly procedures:

1. Position drive dog (Item 221) to the ID drive shaft (Item 6). Align slot of drive dog with hole of the drive shaft.
2. Insert shear pin (Item 224) through the slot in the drive dog and the hole of the drive shaft.
3. Bend the shear pin horizontal to the flat portion of the drive dog, 180 degrees opposite the other bend in the pin (like a "Z").
4. Position the adapter plate (Item 222) on the top of the meter instrument drive Support Assembly with the **front** facing the embossed arrows & "**INSTRUMENT FACE.**" The adapter plate may be rotated to any desired position at 90-degree intervals so that the adapter plate's two mounting holes align with two of the four tapped holes in meter support arm - assuming instrument clears meter and piping. Installation of the adapter plate at a 45-degree angle is not recommended. If installed in this position, seal the two unused mounting holes in the plate.
5. Insert and turn the two mounting screws (Item 223) until reaching a tight engagement with the plate.



Item No.	Qty Reqd.	Part	Item Name
221	1	A056936-000	Drive Dog with Pin
222	1	B031972-000	Mounting Plate
223	1	A010104-003	Scr. Mach. Fil. Hd. 1/4-20 3/4
222A	1	A052698-000	Cap Plug
224A	5	A056803-000	Pin, Shear

6. Install the **front** of the instrument in alignment with the **front** of the adapter plate\*. Screws for securing the instrument to plate are provided with the instrumentation.

7. Connect Pressure and/or Temperature Systems in accordance with manufacturer's instructions.

\* **Special Note:** Some AMR devices and other instrumentation have different mounting recommendations by their manufacturer. Compare instructions and install for best fit and proper engagement without binding.

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