



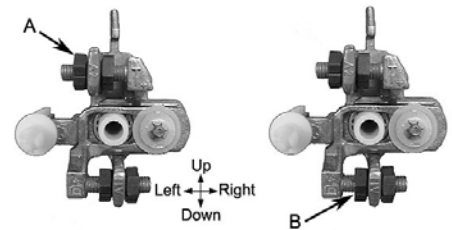
METRIS Meter Adjustment



Warning Follow your company's standard operating procedures regarding the use of personal protection equipment (PPE). Adhere to guidelines issued by your company in addition to those contained in this document when installing or repairing meters.

A METRIS meter adjustment is completed through the hand-hole cover. After removing the red security seal and 2 screws, remove the hand hole cover to access the meter tangent.

A non-temperature compensated tangent is pictured to the right. Whether the meter is temperature compensated or non-temperature compensated, the adjustment is the same. Use the Itron proving wrench (part number 012700) or a 5/16" ignition wrench to adjust the METRIS meter. After the adjustment is completed and the meter is in proof, ensure the O-ring is in the groove in the top casting and replace the hand hole cover.



Timing Adjustment

Rotate the tangent block to the position pictured to the right.

- Moving the wrench in a downward motion adjusts the timing nut (A) to the right increasing the open rate percent accuracy (downward +).
- Moving the wrench in an upward motion adjusts the timing nut (A) to the left decreasing the open rate percent accuracy (upward -).
- Rotating the timing nut one flat produces a 0.3% change in accuracy.

One flat of a nut equals one sixth of a full revolution. A normal wrench throw is half a flat (about 30 degrees of a rotation). If the wrench is rotated about its shaft 180 degrees between successive throws, two throws will turn the nut one flat.

Displacement Adjustment

- Moving the wrench in an upward motion adjusts the displacement nut (B) to the left increasing the open and check rate accuracy (upward +).
- Moving the wrench in a downward motion adjusts the displacement nut (B) to the right decreasing the open and check rate accuracy (downward -).
- Rotating the displacement nut one flat produces ~ a 0.5% change in accuracy.

Timing Adjustment:	Changes spread	1 nut flat ~ 0.3%
	Upward (-)	
	Downward (+)	
Displacement Adjustment:	Changes open & check	1 nut flat ~ 0.5%
	Upward (+)	
	Downward (-)	
Example:		
Target (% accuracy)	Open = 100.0%	Check = 100.0%
Reading (% accuracy)	Open = 100.4%	Check = 101.0%
Proper adjustment for timing nut = 2 flats down		
Proper adjustment for displacement screw = 2 flats down		

Method for Expressing Meter Performance

% Error (Err)
 % Accuracy (Acc)
 % Proof (Prf)

Example:

+0.5% Err = 99.5% Prf = 100.5% Acc = Fast
 0.0% Err = 100% Prf = 100% Acc
 -0.5% Err = 100.5% Prf = 99.5% Acc = Slow



Note Adjustment Rule: Bring open to check and check to spec.