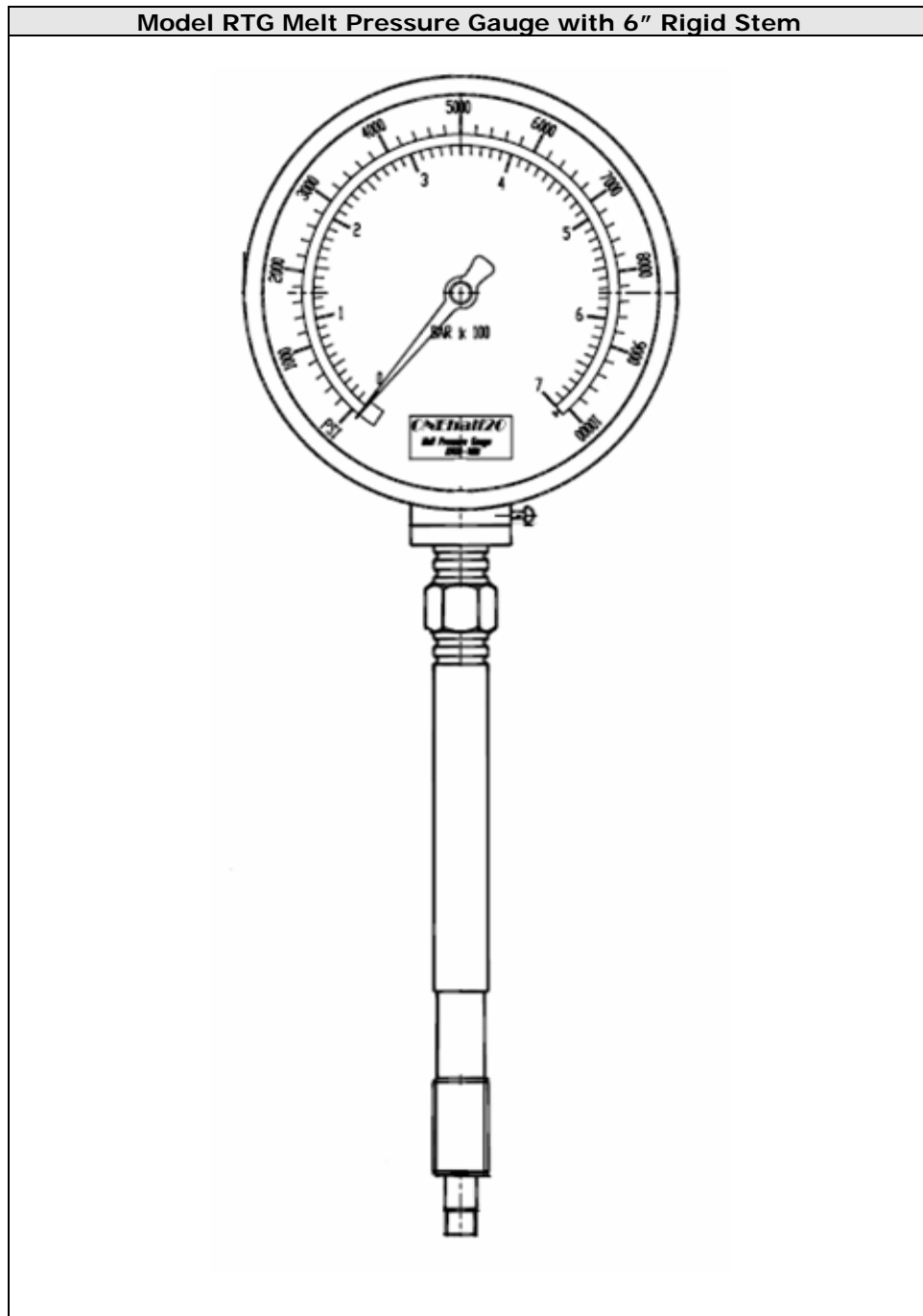


**Melt Pressure Gauges Models RTG & CTG  
Installation & Operating Manual Version 1.00**





### Before Proceeding

Check to insure that the model number of the ONEhalf20 Melt Pressure Gauge is suitable for your application. ONEhalf20 Melt Pressure Gauges are available in two (2) unique designs. The RTG style is a rigid stem only version of the Melt Pressure Gauge, or the CTG style which also has a rigid stem but additionally incorporates 30" of flexible capillary. The next designation is a numeric number indicating the rigid stem length in inches. This is then followed by the pressure range designation i.e. (-10M = 0-10,000 psi, -5M = 0-5,000 psi).

### Introduction

Your ONEhalf20 Melt Pressure Gauge will provide years of trouble free service if proper care is taken during handling, installation and use. Also included with your Melt Pressure Gauge is a Transducer Care Guide. Please refer to this data sheet for additional information.

### Operating Principle

ONEhalf20 Melt Pressure Gauges are totally mechanical devices, requiring no power, that are used to make pressure measurements of molten polymers up to 750 degrees F (400C).

### Installation

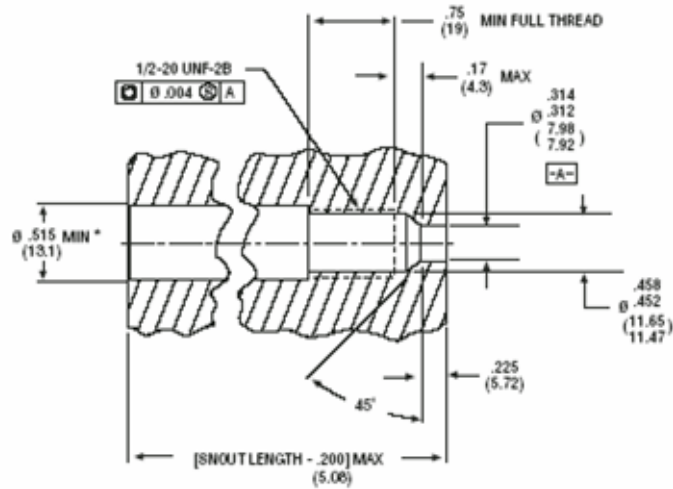
Do not remove protective cap covering the Gauge threads until ready to install. Prior to initial installation, verify correct machining of the 1/2-20UNF mounting hole. Detailed mounting hole information is available at [www.onehalf20.com](http://www.onehalf20.com) (under the technical section). When reinstalling make sure that the mounting hole is clear of material. A ONEhalf20 Cleaning Tool Kit, (CLEANKIT-1/2-20), should be used. To prevent galling, lightly coat the Gauge threads with a high temperature anti-seize material. An adequate seal, in a properly machined and maintained mounting well, is obtained with 100 in-lbs (8.3 ft-lbs) mounting torque. Maximum recommended torque Torque is 500 in-lbs (41.6 ft-lbs).

[www.onehalf20.com](http://www.onehalf20.com)

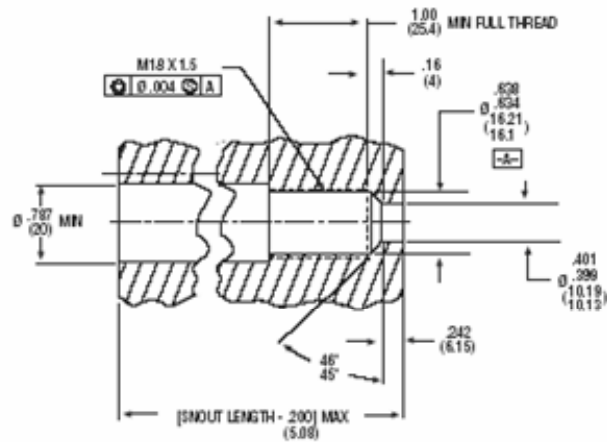
Tel: (416) 781-1881

Fax: (416) 781-0940

**Mounting Hole (1/2-20 UNF-2B)**



**Mounting Hole (M18 X1.5)**



**Start Up**

Bring system to operating temperature, with no pressure, and adjust the ZERO screw located on the side of the Gauge dial. Next, rotate the Gauge Dial to allow for easy viewing of pressure readings. Allow sufficient "soak time" to assure that any material at the Gauge tip is molten before extruder drive is started.

**Removal**

The Melt Pressure Gauge should only be removed when polymer is hot and liquid. Wipe tip with a soft cloth immediately. The melt pressure gauge must be removed before using an abrasive material or wire brush to clean the extruder barrel. Clean mounting hole completely before reinstalling the gauge by using the ONEhalf20 Cleaning Tool Kit, (CLEANKIT-1/2-20).



### Thermocouple Option

The CTG Style ONEhalf20 Melt Pressure Gauge might also incorporate a thermocouple in the rigid stem (designation –TCJ or -TCK). The standard (-TCJ), Type J (iron-constantan) T/C junction is located just behind the flush diaphragm at the tip of the Gauge. This senses the temperature at that point. The thermocouple assembly can be replaced by loosening the #4-40 cup point set screw on the side of hex assembly and pulling the T/C probe, carefully, straight out, without twisting.

Replacement assemblies are available. When installing the thermocouple probe assembly, align the slot with the pressure capillary tube and press into snout until top of probe shoulders flush against snout. Lock in place with set-screw.

### Gauge Repair

Questions concerning warranty, repair cost, delivery, and requests for an RMA# should be directed to the ONEhalf20 Service Department, (416)-781-1881 or by email: [service@onehalf20.com](mailto:service@onehalf20.com). Please call for a return authorization number (RMA#) before returning any product. Damaged Melt Pressure Gauges should be returned to:

**ONEhalf20 Inc.**  
**Attn: Service Department**  
**RMA# \_\_\_\_\_**  
**352 Bedford Park Avenue**  
**Toronto, Ontario M5M 1J8**  
**Canada**

[www.onehalf20.com](http://www.onehalf20.com)

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