

A Indications for Use

The Instrumentation Industries, Inc. Negative Inspiratory Force (NIF) Meters are devices used to measure and monitor patient inspiratory effort. During use the NIF Meter is attached to the patient airway at a point that provides optimal readings of patient respiratory effort.

B Contraindications

None known.

C Directions for Use

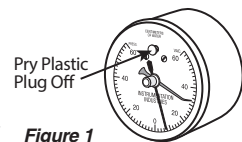
1. Verify that the **Black Needle** is set to zero. Re-zero if necessary. (see section D below)
2. Set **Red Pointer** to zero by adjusting **Center Knob**.
3. Attach the **NIF Meter** to the appropriate adapter(s). (see Figures 7 and 8 in panel G for instructions)
4. Connect the attached adapter to endotracheal tube, tracheostomy tube, mouthpiece, or mask. (see Figure 4 or 5, in panel E or Figure 6 in panel F for instructions)
5. To check inspiratory pressure, occlude the **Vent** by placing a fingertip over it. Remove fingertip when patient effort is completed.
6. The patient's maximum inspiratory force will have been captured by the **Red Pointer**.
7. Reset **Red Pointer** to zero.

Note: Do not exceed the maximum pressure as shown on the gauge. For example, if the gauge's maximum pressure is 30 cm H₂O and the incoming pressure is 60 cm H₂O, the maximum pressure has been exceeded. This may destroy the internal workings of the gauge.

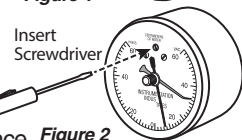
D How to "Re-Zero" a NIF Meter

If the **Needle** has moved away from zero, it can be re-zeroed.

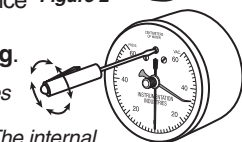
1. Carefully pry out **Plastic Plug** from the crystal. (Figure 1)



2. Insert a **Screwdriver Blade** into the set screw located at the 12:00 position. (Figure 2)



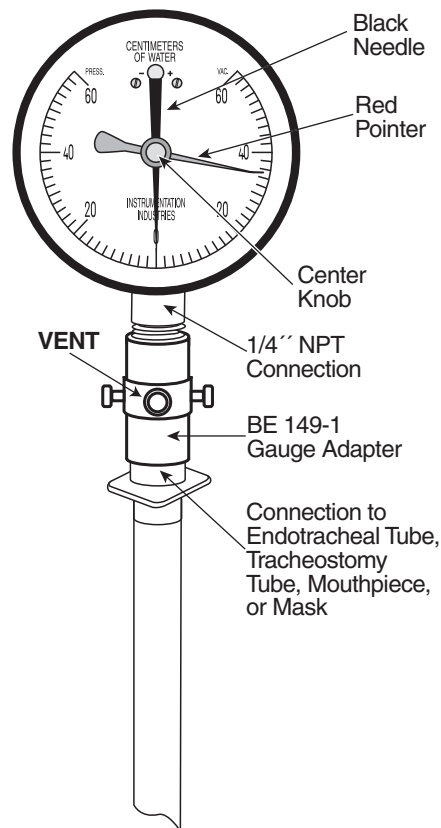
3. Turn the **Screw** in the direction that allows the **Needle** to move the shortest distance back to zero. (Figure 3)



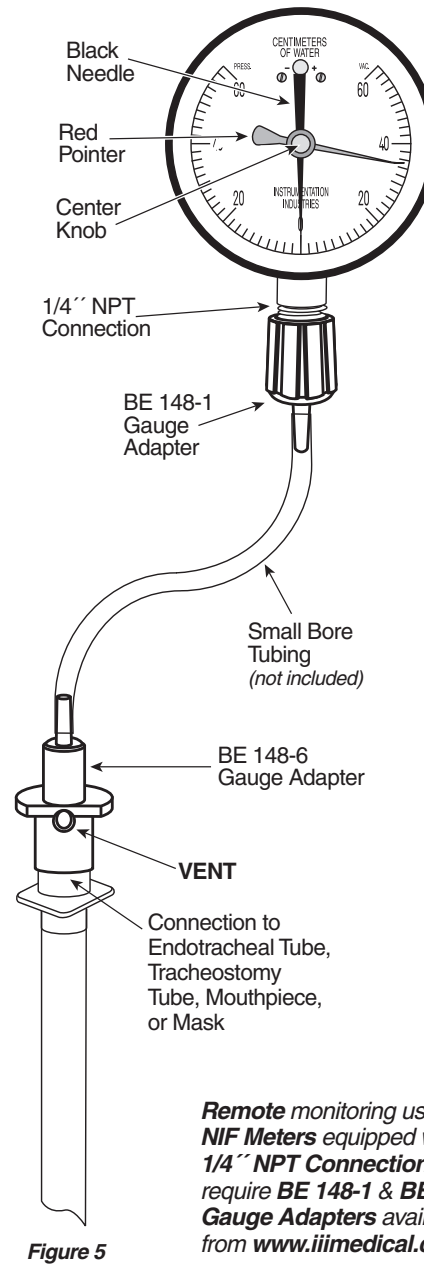
Note: Under no circumstances should you attempt to move the **Needle** more than 180°. The internal workings of the gauge may be destroyed.

E Directions for: NS 30-TRR — NS 60-TBR — NS 60-TRR — NS 120-TRR

Direct Inspiratory Monitoring



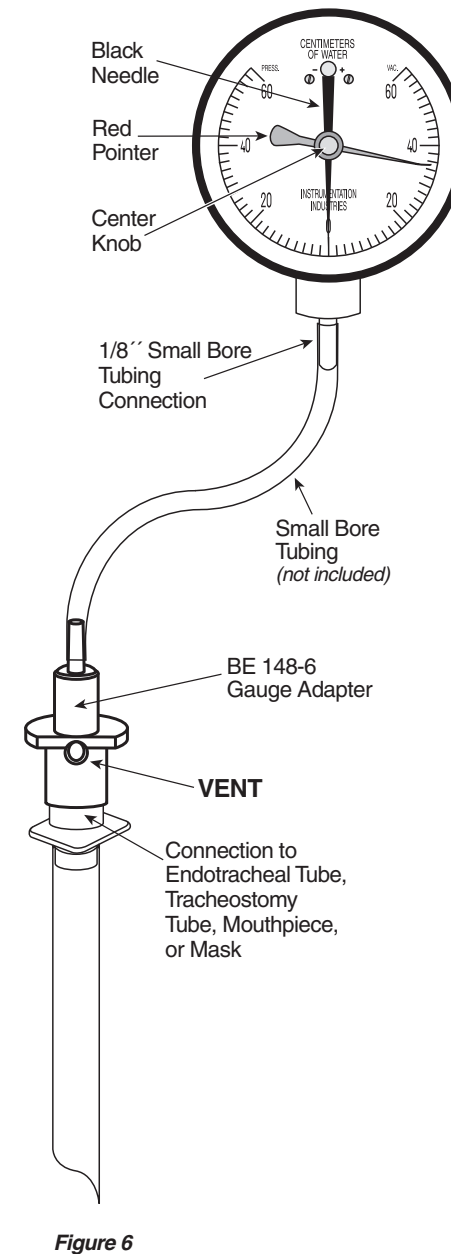
Remote Inspiratory Monitoring



Remote monitoring using NIF Meters equipped with 1/4'' NPT Connections require BE 148-1 & BE 148-6 Gauge Adapters available from www.iiimedical.com

F Directions for: NS 30-PBR — NS 60-PBR

Remote Inspiratory Monitoring



G 1/4" NPT Gauge Installation Directions

Handle the gauge with care. Dropping or jarring the gauge will damage it.

1. Prior to installation, at least two layers of teflon tape **MUST** be applied to threads. (Figure 7)
2. **HAND TIGHTEN** gauge into position.
3. Place a wrench on the square fitting next to the gauge case to finish tightening. (Figure 8)

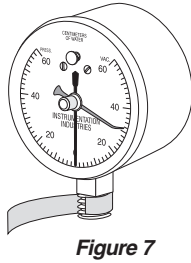


Figure 7

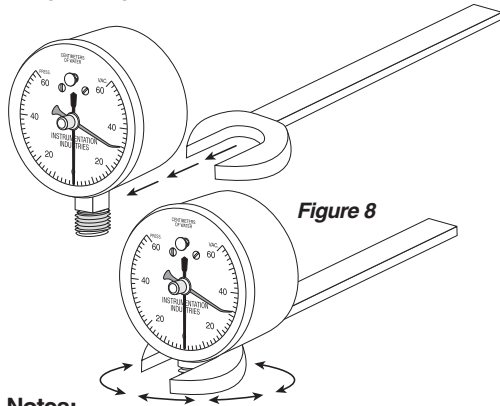


Figure 8

Notes:

- **ALWAYS** use a wrench to tighten a NIF Meter with a 1/4" NPT fitting into position.
- **NEVER** apply force on the gauge case to tighten into position.
- **DO NOT** overtighten fitting into **Plastic Adapters!**

H Cleaning and Sterilization Recommendations









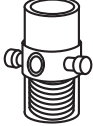
Gauge Cleaning

1. **DO NOT** immerse gauge in any liquid.
2. **Gauge Case Cleaning**
Wipe exterior of the gauge case with bactericidal or virucidal wipe.
3. **Gauge Crystal Cleaning**
DO NOT use alcohol or a solution containing phenols on crystal. Gently wipe crystal with bactericidal or virucidal wipe.

Gauge Adapter Cleaning and/or Sterilization

Visit iiimedical.com for suggested cleaning and/or sterilization methods for these products.

I Product Specifications

		
NS 30-PBR 30cm H ₂ O NIF Meter	NS 30-TRR 30cm H ₂ O NIF Meter	NS 60-PBR 60cm H ₂ O NIF Meter
Bottom 1/8" small bore tubing connection	Rear 1/4" NPT connection	Bottom 1/8" small bore tubing connection
Marks: Reads ± 30cm H ₂ O in 1 cm markings	Marks: Reads ± 30cm H ₂ O in 1 cm markings	Marks: Reads ± 60cm H ₂ O in 2 cm markings
Includes: BE 148-6 Gauge Adapter	Includes: BE 149-1 Gauge Adapter	Includes: BE 148-6 Gauge Adapter
Packaged: Individually	Packaged: Individually	Packaged: Individually
		
NS 60-TBR 60cm H ₂ O NIF Meter	NS 60-TRR 60cm H ₂ O NIF Meter	NS 120-TRR 120cm H ₂ O NIF Meter
Bottom 1/4" NPT connection	Rear 1/4" NPT connection	Rear 1/4" NPT connection
Marks: Reads ± 60cm H ₂ O in 2 cm markings	Marks: Reads ± 60cm H ₂ O in 2 cm markings	Marks: Reads ± 120cm H ₂ O in 4 cm markings
Includes: BE 149-1 Gauge Adapter	Includes: BE 149-1 Gauge Adapter	Includes: BE 149-1 Gauge Adapter
Packaged: Individually	Packaged: Individually	Packaged: Individually
		
BE 148-1 Gauge Adapter	BE 148-6 Gauge Adapter	BE 149-1 Gauge Adapter
Changes 1/4" NPT connection to 1/8" tubing connection	1/8" tubing connection x 15mm I.D./22mm O.D. for remote inspiratory measuring	Female 1/4" NPT connection x 15mm I.D./22mm O.D. for remote inspiratory measuring
Material: Polycarbonate	Material: Polycarbonate	Material: Polycarbonate
Packaged: Individually	Packaged: Individually	Packaged: Individually
Available: NS-RC - Crystal w/Recording Needle. Replacement for all NS Series NIF Meters.		



NIF Meters

Installation & Usage Directions

NS 30-PBR
NS 30-TRR
NS 60-PBR
NS 60-TBR
NS 60-TRR
NS 120-TRR



EXPLANATION OF SYMBOLS

	Federal law restricts this device to sale by or on the order of a physician.		Non-Sterile
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Manufactured for:

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Fax: 1-412-854-5668

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Reusable



— Not made with Natural Rubber Latex

— Not made with Di(2-ethylhexyl) phthalate (DEHP)