# RK32036 and RK32037 **Vacuum Restriction Indicators**

Installation and Service Instructions

Instruction Part Number 12933 Rev A

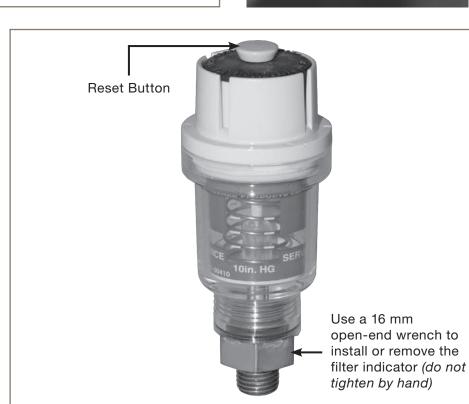
Vacuum restriction indicators monitor filter condition as the filter slowly becomes clogged with contaminants. As the filter gets dirty, restriction increases and less fuel is delivered to the engine causing the engine to lose power and eventually stall. By installing a vacumm indicator in your fuel system, visual monitoring of filter condition is possible at a glance, increasing

CAUTION! Do not use this restriction indicator in gasoline applications.

efficiency, eliminating guess work, and lengthening filter changeout

fuel system troubleshooting

intervals.



#### Contact Information

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Specifications	RK32036	RK32037
Accuracy	± 10%	± 10%
Calibrations	10 inHg (34 kPa) at red zone	10 inHg (34 kPa) at red zone
Material	Chemical Resistant Nylon	Chemical Resistant Nylon
Length	2.5 in. (6.4 cm)	2.5 in. (6.4 cm)
Diameter	1.3 in. (3.3 cm)	1.3 in. (3.3 cm)
Port Thread	3/8" SAE	1/8" NPT
Operating Temp	-40° to +250°F (-40° to +121°C)	



#### Installation Instructions

Installation of the vacuum indicator could vary greatly on different applications. The following is a list of recommendations for proper installation.

- Install the indicator on the outlet side of the fuel filter.
  This could be threaded directly into a vent plug port or in an unused outlet port on the filter mounting head.
- An adapter fitting that goes between the vacuum indicator and the outlet filter port may be required (customer supplied) depending on your port size.
- The vacuum indicator can be installed in any orientation.
- Stay away from heat sources and/or anything that could rub against the indicator.
- Use a 16 mm open-end wrench to install or remove the filter indicator (do not tighten by hand).
- Thread sealant is recommended on the RK32037 with the 1/8" NPT threads. Do not use thread **tapes** as loose particles could work their way into the fuel system. The RK32036 with 3/8" SAE threads requires a coat of motor oil on the o-ring before installation.



This is an example of a Racor 490R1210 fuel filter assembly with a restriction indicator installed in the vent port on the mounting head.

## Service Instructions

- As the filter gets dirty, a yellow plunger will move towards the red service area on the indicator.
- To reset the indicator, simply press the button on the top.
- The actual reading at which you should change your filter will depend on many factors as fuel systems vary so greatly. As a rule,

many pumps have trouble delivering fuel to the engine when restriction reaches 7 to 10 inches of mercury (inHg). Some falter earlier, some later.

To find the maximum restriction level for your application, install a new filter and the indicator. Run the filter until you begin to have performance problems and note the indicator reading at that point. Service the filter and reset the indicator. From that point on, you can watch the indicator to see how much filter life remains.

- Note the restriction level on the gauge when you service your filter for the first time after the indicator installation. This will give you a good idea of when future servicing will be needed.
- To reset the indicator, press the yellow button on the top. The yellow plunger inside should completely disappear from view.
- Always carry extra replacement elements as one tankful of excessive dirty fuel can clog a filter.

### Additional Vacuum Gauge Available From Racor

Vacuum gauges monitor filter condition and as the filter slowly becomes clogged with contaminates, the restriction (resistance to flow) increases. The fuel pump still tries to draw fuel (suction) but because of this restriction, less fuel is delivered to the engine and instead more air is pulled from it (fuel degassing). These results can cause the engine to lose power and eventually stall.

At the first indication of decreased performance, note the dial reading or apply the 'red line' decal provided with most kits. This will assist in knowing when to change the filter at the next interval.







**7232-4 Fitting** 1/8" NPTM by 1/4" (#4) hose barb



**7234-4 Fitting** 1/4" swivel by 1/4" (#4) hose barb

Specifications	RK 11233	1606B
Description	Silicone dampened, 0-30 inHg. Instrument panel installation.	Includes RK11233 gauge and two fittings (shown above).
Threads	1/4" NPT back bracket mount.	1/4" NPT back bracket mount.
Dimensions	2.0" W x 1.9" D	2.0" W x 1.9" D
Dial	2 in.	2 in.
Weight	0.4 lb (0.2 kg)	0.4 lb (0.2 kg)

Special Notes: For severe vibration applications, mount the gauge on a stable, remote location and connect to the source using flexible tubing. After September 1999, Racor converted many liquid-filled gauges to new silicone dampened movement. This new (dry) technology provides a vibration resistant design that never leaks fluid or requires adjustments due to temperature or altitude variations.

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