

Series II ODYR/SLX-23-1 NITROUS PRESSURE GAUGE rev. A SEN-23-1 SENSOR

Wiring:

ODYR-23-1

PWR - connect to 12 volt power. (An accessory circuit will work for this.)

DIM - connect to the tail light circuit.

SND - connect to the SEN-23-1 white wire.

Gauge case - connect to a main ground location

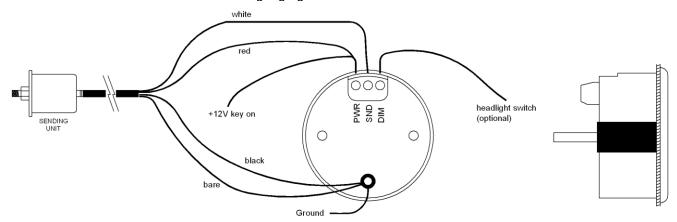
SEN-23-1

RED - connect to accessory power BLACK - connect to gauge ground

WHITE - connect to the gauge SND terminal

GREEN - not used

Bare shield - connect to gauge ground



Mounting:

The Series II gauge requires a round hole 2-1/16" in diameter. It should be inserted into the opening from the front and the U-clamp will be installed from the back. Tighten the two nuts on the U-clamp so that the gauge is secure. Gauge depth to the back of the case is 1". Gauge depth including the mounting studs is 1-7/8".

Factory settings:

Lo warning point: 600 psi Hi warning point: 1200 psi

- The pressure gauge will operate and read correctly between the pressure range of 0psi 2000psi.
- The gauge has a user adjustable low and high warning level. This can be set to indicate when the pressure is too low or too high.

These senders have a 1/8" NPT fittings. The sender location threads should be cleaned before installation.

The sender must be Dakota Digital part SEN-23-1a. Sending units from other manufacturers will cause incorrect readings. If a sender is not connected properly, the display will show "EEE". If the SND terminal is shorted to ground, the display will show "---".

Setting the warning limits, gauge setup, and update speed:

The SND terminal is used to enter and change the warning settings. You will need a wire connected to the SND terminal that can be momentarily powered while you watch the gauge. The headlights should be off or the DIM terminal unhooked so that it does not interfere with the setup.

Make sure that the sender is not connected while this is done.

- 1. To enter the set mode, turn the key on with the SND wire not touching anything. The gauge will display "SEt".
- 2. Power the SND wire. The gauge will display "HI".
- 3. Release the SND wire. The gauge will display the current high warning pressure.
- 4. Each time you momentarily power the SND wire the number will change.
- 5. When the desired high warning value is displayed, keep the SND wire powered for about 2 seconds. The gauge will display "LO".
- 6. Release the SND wire. The gauge will display the current low warning pressure.
- 7. Each time you momentarily power the SND wire the number will change.
- 8. When the desired high warning value is displayed, keep the SND wire powered for about 2 seconds. The gauge will display "SPd".
- 9. Release the SND wire. The gauge will display the current update speed. ("SLO" for slow or "FSt" for fast)
- 10. Each time you momentarily power the SND wire the setting will change.
- 11. When the desired update speed is displayed, keep the SND wire powered for about 2 seconds. The gauge will display "--".
- 12. Turn the key off.

Troubleshooting guide:

Problem	Possible cause	Solution
Gauge will not light up	PWR terminal does not have power.	Connect to a location that has power.
	GND terminal does not have a good ground.	Connect to a different ground location.
	Gauge is damaged.	Return gauge for service. (see instructions)
Gauge lights up, but does	Loose connection on SND terminal.	Reconnect wire.
not read correctly.	Poor ground connection.	Move ground to different location
•	Gauge is sender setup is incorrect.	See "Setting sender setup" in the manual.
	Voltage or wiring problem in the	Check wiring harness for loose or damaged wires.
	vehicle wiring harness.	
Gauge lights up, but displays <u>"Er0"</u> .	Gauge is damaged.	Gauge must be returned for service. (see instructions)
Gauge lights up, but displays	SND terminal is shorted to ground.	Check wire for damaged insulation. Replace if necessary.
" " .	Sender is damaged.	Replace sender.
	Sender is not connected to gauge.	Connect SND terminal on gauge to sender terminal.
	Wire between gauge and sender is broken.	Test and replace wire.
	Sender is damaged.	Replace sender.
	Gauge is damaged.	Return gauge for service. (see instructions)
Gauge lights up, but displays "Er3"	Gauge is not calibrated correctly.	Gauge must be recalibrated. (contact factory).
Gauge lights up, but displays "Er5".	Gauge warning points need to be reset.	See "Setting the warning limits" in the manual.
Gauge flashes constantly.	Warning limits are not set properly.	Reset warning limits.
	Pressure is too low or too high.	Check engine.
Gauge will not dim.	DIM terminal is not connected correctly.	
Gauge remains dim at all	DIM terminal is getting power all	Connect DIM wire to location that only has power when the headlights
times.	of the time.	are on.
	Battery is very low.	Recharge or replace vehicle battery.
	Gauge is damaged.	Return gauge for service. (see instructions)

Technical specifications:

Minimum operating voltage - 7 VDC

Maximum operating voltage - 17 VDC

(operating at or near maximum voltage for an extended time can damage unit)

Pressure

Minimum pressure reading - 0 psi

Maximum pressure reading - 200 (2000psi)
Gauge Resolution - 10 – 20 psi
Warning Range Lo - 600 – 900 psi
Warning Range Hi - 900 – 1200 psi

Typical gauge accuracy - ±50 psi (gauge and sensor combined)

Typical current draw (@ 13.8V) - 0.1 A

SERVICE AND REPAIR

DAKOTA DIGITAL offers complete service and repair of its product line. In addition, technical consultation is available to help you work through any questions or problems you may be having installing one of our products. Please read through the Troubleshooting Guide. There, you will find the solution to most problems.

Should you ever need to send the unit back for repairs, please call our technical support line, (605) 332-6513, to request a Return Merchandise Authorization number. Package the product in a good quality box along with plenty of packing material. Ship the product by UPS or insured Parcel Post. Be sure to include the RMA number on the package, and include a complete description of the problem with RMA number, your full name and address (street address preferred), and a telephone number where you can be reached during the day. Any returns for warranty work must include a copy of the dated sales receipt from your place of purchase. Send no money. We will bill you after repair.

Dakota Digital 24 Month Warranty

DAKOTA DIGITAL warrants to the ORIGINAL PURCHASER of this product that should it, under normal use and condition, be proven defective in material or workmanship within 24 MONTHS FROM THE DATE OF PURCHASE, such defect(s) will be repaired or replaced at Dakota Digital's option.

This warranty does not cover nor extend to damage to the vehicle's systems, and does not cover removal or reinstallation of the product. This Warranty does not apply to any product or part thereof which in the opinion of the Company has been damaged through alteration, improper installation, mishandling, misuse, neglect, or accident.

This Warranty is in lieu of all other expressed warranties or liabilities. Any implied warranties, including any implied warranty of merchantability, shall be limited to the duration of this written warranty. Any action for breach of any warranty hereunder, including any implied warranty of merchantability, must be brought within a period of 24 months from date of original purchase. No person or representative is authorized to assume, for Dakota Digital, any liability other than expressed herein in connection with the sale of this product.

▲WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov



4510 W. 61st St. North Sioux Falls, SD 57107 www.dakotadigital.com

Phone (605) 332-6513 Fax (605) 339-4106

dakotasupport@dakotadigital.com Copyright 2011 - Dakota Digital, Inc.