

RAVEN PROCESS CONTROL INSTRUMENTS

SLUDGE INTERFACE DETECTOR SID-20200

Manufactured in USA by Raven

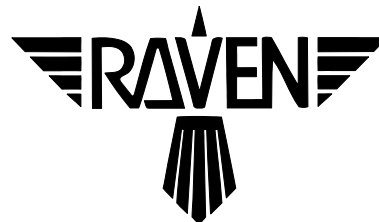


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RAVEN PROCESS CONTROL INSTRUMENTS
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TOOL DESCRIPTION

The Raven SID-20200 Sludge Interface Detector (SID) is a portable instrument designed to detect sediment density change and measure sediment interface level. Precision electronics and the latest technology enable accurate and repeatable measurements.

TOOL FAMILIARITY (Figure A)

- Roller Counter – measures sediment level in inches or centimeters
- **Horn** – sounds when solids are encountered.
- **Horn switch** – waterproof toggle switch disables horn.
- **Sensor Sensitivity Adjustment** – adjusts sensor probe sensitivity.
- **Battery low indicator** - lamp flashes when batteries are low.
- **Power button – On / Off.**
- **Handle** – tabs provided for wall mount and hands-free operation.
- **Cable storage rack** – stores up to 50 feet (15.24m) of signal cable.
- **Probe mount hook** – eliminates probe cable strain during transport and storage.
- **Sensor probe** – emits harmless infrared light beam.



Figure A

BATTERY CONNECTION

1. Remove faceplate screws and separate from case.
2. Attach battery connector to battery cradle.
3. Secure faceplate to the case with screws. Snug tight. Do not over-tighten.
4. Switch-on the POWER and HORN. Place your finger between sensor probe gap. Red density light illuminates and the horn sounds. The horn can be switched-off without affecting the operation of the unit.

SEDIMENT INTERFACE DETECTION

1. Set Sensitivity to LOW.
2. Lower and rest sensor probe on tank bottom.
3. If red light illuminates, go to step 5.
4. If red light does not illuminate, set Sensitivity to medium (MED). If red light does not illuminate, set Sensitivity to high (HIGH). If red light still does not illuminate, check to see if there are any settled solids in the tank.
5. Press ZERO on faceplate, place taught cable on roller and slowly elevate sensor probe from tank bottom until the red light goes out. Note probe travel on display. This is the amount of sediment at tank bottom.
6. The sensor probe is now at the tank sediment interface. This is the Baseline sensitivity for this tank.



SENSITIVITY ADJUSTMENTS

The Sensitivity Knob is used to compensate for varying types of sediment density.

SENSITIVITY

Lowest Sensitivity is LOW

Highest Sensitivity is HIGH

METER REACTION

Meter reacts to larger particles

Meter reacts to smaller particles

TOOL CARE

Loosely coil sensor probe around cable stowage bracket and utilize probe mount hook for storage to prolong life of the signal cable assembly.

MAINTENANCE

- Replace all 3 batteries as a group with new AAA alkaline batteries of the same type and brand.
- Switch power switch-off when not in use to conserve batteries.
- Store for long periods with the batteries removed.
- Store in cool dry place and out of direct sunlight.
- Clean sensor probe IR lens with mild detergent .

TROUBLESHOOTING

NO POWER – remove faceplate and verify connections between battery cradle and printed circuit board.

NO POWER – replace all three AAA batteries with new of same brand.

ALL LAMP SEGMENTS ILLUMINATED with no blockage of sensor probe gap indicates failure of signal cable. Likely failure point is near sensor probe. Bend signal cable near sensor probe. If lamps extinguish or flicker while bending signal cable, the cable has broken conductors and must be replaced. See next section for part number. Sensor Probe and Signal Cable is simple to replace.

REPLACEMENT PARTS

NAME	PART #	UNIT of MEASURE
Sensor Probe and Signal Cable	RP-20203-n	Feet (n = feet)

WARRANTY

Meter has a one (1) year warranty from the date of purchase. **Sensor Probe** and **Signal Cable** have a six (6) month warranty from the date of purchase. If a part should fail during this period of time, Raven will replace the part at no charge. Raven reserves the right to request proof of purchase and to examine the failed part at the expense of purchaser to return the failed part to Raven.

