❖ GARNET
INSTRUMENTS LTD.

SEELEVEL SPECIAL™
Gauge For Trucks

MODEL 808P2 OWNERS MANUAL

REVISION 2

IMPORTANT OPERATOR INFORMATION

DATE INSTALLED:_____

UNIT NUMBER:_____

COMPARTMENT:_____

DISPLAY CALIBRATION UNITS (e.g. inches, gallons):_____

MINIMUM TANK READOUT:_____

MAXIMUM TANK READOUT:_____

ALARM POINT (IF APPLICABLE):_____

SPILLSTOP EMPTY POINT (IF APPLICABLE):_____

SPILLSTOP HORN POINT (IF APPLICABLE):_____

SPILLSTOP SHUTDOWN POINT (IF APPLICABLE):_____

AUTOMATIC ALARM: WARNING LEVEL:_____

EMPTY LEVEL:_____

PRINTED IN CANADA

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CHAPTER 1
OVERVIEW

Congratulations on purchasing the Garnet Instruments Model 808P2 SeeLeveL Special™ Gauge for Trucks. The SeeLeveL represents the state of the art in liquid level measurement equipment for transport applications. The SeeLeveL is designed for reliable, accurate level measurement of sour or sweet crude oil, chemicals, acids, water, condensate, gasoline, or diesel fuel. The liquid level is determined by sensing the position of a magnetic float using a series of reed switches arranged in a vertical sensing bar. This technology has no moving parts except for the float, and can operate over a range of product temperatures from -40 C to +90 C (-40 F to +194 F).

The SeeLeveL has been designed to withstand the vibration and shock encountered in mobile applications. The components are weatherproof, and the sender bar in the tank can withstand steaming temperatures. The 808P2 operates entirely on internal batteries, with 12 volt truck power only being used to operate the back light (external alarms will require truck power).

The SeeLeveL can display in any units, such as inches of level, gallons, barrels, or cubic metres of volume. It has one alarm point which can be used to operate horns, isolation valves, or a Garnet MultiRack driver. It also has an additional automatic, self resetting alarm output to operate a high level warning horn or light, and can operate the Garnet SpillStop to shut down loading of the truck in an overfill situation.

The 916 Total Programmer is used to program the SeeLeveL to read the desired calibration units, and to set the alarm points. It is designed to be easily operated by people unfamiliar with electronics or computers.

CHAPTER 2
NEW FEATURES OF THE 808P2 COMPARED TO THE 808PA

The 808P2 has some enhancements over the 808PA series. It uses new technology in the display to provide a number of new features:

1) The calibration memory has been changed to a flash memory device which is much more secure and does not require power to maintain the memory contents. This should result in a much more reliable operation, with less chance of a lost or corrupted calibration.
2) The display can be programmed with a magnet for 8 or 11 bit operation, to work with bars in either 1/3, 1/4, or 1/6 inch mode. If a sender bar ends up in the wrong mode, then the display will show bad light and the number of bits received. The previous displays would not accept bars in 11 bit (1/6 inch) mode. The mode is stored in the display in the same secure memory as the calibration.
3) The display has improved diagnostics:
   a) If the wrong number of bits are received, then the display shows “bL:xx” where xx is the number of bits actually received.
   b) By connecting together two end pins on the right hand side of the programming plug (looking at the back of the display), the display will show a basic inch calibration, which aids in troubleshooting to determine if the sender bar or display calibration is at fault.
   c) If there is a fault during programming or if the memory is not functioning correctly, the display shows “Err”.
   d) If the memory does not have a valid value for the number of received bits (either 8 or 11) then the display shows “Prob”.
   e) If the display has no fibre connected and is exposed to strong light the display will show “Sun” indicating that sunlight is affecting the display. If a flickering light gets into the display opto then the display may show either “Sun” or “bL:xx” depending on the exact nature of the light getting in.
4) The optical receiver has been improved so it cannot be overloaded with too much light from the sender bar.
5) The display backlight has been changed for improved brightness and evenness of illumination. The color has been changed to green to make it easier to see.
6) The fibre optic connector is field replaceable, so if it is broken or fails, the display can be quickly returned to service.
7) The entire display has been miniaturized to fit into the lid of the enclosure. This greatly eases installation and servicing, since the gauge can be removed without having to unbolt the base of the enclosure. To remove the display, simply pop the lid off, undo the fibre, and disconnect the wires.
8) The display has a new alarm output. The purple wire is an automatic, self resetting alarm output for overfill warning. A switch must be wired from the white wire to ground, and a horn or warning light is connected to the purple wire. When the product level rises to the warning point, the warning device will turn on. Pressing the switch momentarily will turn the warning off. When the tank is emptied, the warning is reset to that the next time the tank is filled the warning will turn on again. This way the operator cannot forget to re-arm the warning system.
9) The display has the ability to drive a remote transmitter for applications which require the transfer of the data from the gauge to another piece of equipment.

CHAPTER 3
GAUGE DESCRIPTION

The SeeLeveL gauge consists of a sender bar, a donut shaped float, a fibre optic interconnect cable, and a display. The sender bar is mounted vertically in the tank with the float sliding up and down around it in accordance with the fluid level. The sender bar sends the fluid level information via fibre optic cable to the display, which displays the level in appropriate units and operates the alarms, Spill Stop transmitter, and remote data transmitter.

The float contains magnets which activate reed switches inside the stainless steel sender bar to indicate the level of the fluid. The activated switches are detected by the microprocessor at the top of the bar. The microprocessor operates from a long life lithium battery giving about 10 years of life. The level information is relayed through the fibre optic cable to the display, the fibre being used to maintain electrical isolation between the sender bar and the display, allowing operation in flammable liquids.

The display converts the level information to volume according to the calibration programmed into it with the 916 Total Programmer. The calibration can be in inches or volumetric units such as cubic metres or barrels. The tank level is shown on a backlit LCD (Liquid Crystal Display) giving good visibility in all lighting conditions. The display circuitry and LCD operate from a lithium battery giving nominally 8-10 years of life. The LCD back light is powered by 12 volt truck power. The entire display is enclosed in a Valox Betts box with a clear cover, which is durable enough to withstand indirect road spray.

The display contains four alarms which are programmed using the 916 Programmer. They can be set to turn on or off at any point in the tank. Alarm 4 is available as an output transistor which completes a circuit to ground and can handle 1 amp of DC current at 24 volts.

WARNING: The use of alarm points is entirely at the owner's risk due to the nature of connecting external horns or lights, the reliability of external horns or lights, and the requirement for external switches to disarm them.

Alarm 4 also has an extra transistor output on the purple wire. With this purple wire connected to a warning horn, and the white wire connected to a momentary switch to ground, alarm 4 functions as a self resetting high level warning alarm. Alarm 4 is programmed as the warning point, and alarm 3 is programmed near the tank empty point. When the product level rises in the tank and hits the warning point, the horn will sound. Momentarily pressing the switch will silence the horn. When the tank is unloaded below the empty point, the alarm is reset so that it will sound again when the tank is filled to the warning point. This way the operator cannot forget to turn on the horn. The horn will sound at the warning point even if the switch is pressed prior to the product level hitting the warning point.

The display has a Spill Stop transmitter for direct connection to a Garnet 815 SpillStop or 815U SpillStop Ultra controller. The transmitter operates in accordance with the programmed alarm points 1, 2, and 3. This provides the user with automated horn warnings and automated control of PTO loading to prevent product spills due to inadvertent overfilling of the tank.

Installation of the gauge consists of cutting a hole in the top of the tank and welding in a 1 inch coupler, and welding an anchor assembly to the bottom of the tank. The sender bar is cut to length, the end is sealed, and it is inserted from the top of the tank and fastened at the top with a compression fitting. The display is mounted at a convenient point on the truck, and Synflex air brake hose is connected from the sender head to the display to house the fibre optic cable. The

cable is connected at each end, and the gauge is programmed. Snapping on the covers for the head and display completes the installation. The bar can be removed later for service by disconnecting the fibre, unscrewing the compression fitting, and pulling it out.

CHAPTER 4
UNIQUE FEATURES

The SeeLeveL gauge has been designed for maximum ease of installation and servicing, and for best operational features. The anchor at the bottom of the tank provides a shock mount for the float, and holds the float in place while the bar is removed so no tank entry is required for sender bar replacement. If the new sender bar is cut to the same length as the old, no re-calibration is required.

The float is molded from polyethylene for high chemical resistance, good esthetic appearance, and high durability due to the "give" in the plastic. The light weight of the polyethylene allows the float size to be minimized while allowing it to float on the lowest density products.

The sender bar has no moving parts and is completely filled with potting material to enhance reliability. The use of a digital rather than analog sensing technique lowers power consumption to permit battery operation, and ensures high accuracy with no drift or degradation. To accommodate different tank sizes, the bar is simply cut to length with a hacksaw, and the cut end sealed with a cap to prevent moisture or product contamination. This way only one size needs to be stocked, and a perfect fit is ensured. The sender head is very low in profile to satisfy rollover requirements; the maximum height is less than 5 inches above the top of the tank so that it will not protrude above the spillway. The bar is programmed for 1/3” or 1/6” resolution by holding an ordinary magnet (included with the operators manual) under the head for a specific period of time, this can be done in the field if necessary. The resolution information is stored in three separate memories for security, but if for some reason this information is lost, the sender bar automatically defaults to 1/3”.

The single fibre optic cable connecting the sender head to the display can be disconnected at both ends. There is approximately 10 times as much light as is required for operation available for the fibre, so no special fibre end preparation is required. The fibre ensures that even with faulty wiring into the display, no explosion hazard can exist.

The 808P2 display enclosure used is waterproof and the internal circuitry is also protected against moisture by an internal panel and a coating on the circuit board. By being battery operated and not requiring truck power to operate (other than the LCD backlight), installation is simplified and reliability enhanced. The small size of the display box also makes it easy to find an appropriate mounting location. The backlit LCD display ensures that the gauge display is always visible, regardless of ambient lighting conditions.

The use of an on-site programmer eliminates downtime waiting for factory calibration parts, and allows easy reprogramming should the need arise. The entire display, including decimal point, is completely programmable to whatever units are desired. In addition to numbers, the letters F, U, L, and E can be programmed to provide displays such as FULL, E, etc. The alarm can be programmed to turn either on or off to save terminals and wiring, and uses a transistor rather than a relay to increase current capability, eliminate sparking, and eliminate gauge battery power drain.

CHAPTER 5
SENDER BAR LIMITS OF RESISTIVITY

The temperature of the product being transported should be limited to approximately +90 C (+194 F). Damage to the float and sender bar can occur if this value is exceeded.

The tube used in the manufacturing of the sender bar is seamless 316 stainless steel. **It should be noted that certain corrosive products, as well as high concentrations of acid products, may attack the stainless steel and cause perforations to develop. It is the operator's responsibility to determine the products compatibility with the sender bar.**

WARNING: Perforation of the sender bar or heat damage is not warrantable.

The Loctite products used to secure the end cap can be attacked by certain chemicals as well. For reference, the next page is a chemical resistance chart from Loctite showing product compatibility with various chemicals.

CHAPTER 6
SENDER BAR PROGRAMMING

The 808P2 sender bar is identified by an “X” in the serial number, for example 810X-9999. It can be programmed for either 1/3” 8 bit operation or 1/6” 11 bit operation. The reason that the bar sends more bits for 1/6” operation is that there are twice as many points to send. The 808P2 display must be programmed to match the mode of the bar, so if the bar is in 1/3” mode the display must be in 1/3” mode, and if the bar is in 1/6” mode the display must be in 1/6” mode. If the modes do not match, the display will show bL: 8 or bL:11.

CAUTION: If the bar is being used with a display other than an 808P2, contact your dealer or Garnet Instruments before attempting to operate the bar in 1/6” mode with the different display.

For security, the bar holds its mode information in three different memory locations and continually takes the best two out of three as being the correct mode. If any one location is corrupted it is automatically repaired. If the bar ever loses its mode information completely, it will default to 1/3” operation.

The bars are always shipped in 1/3” mode, so they only need to be programmed if the 1/6” mode is desired. If a bar is in 1/6” mode it can be programmed back to 1/3” mode. A bar can be reprogrammed any number of times. The bar mode is programmed by holding a magnet underneath the head for a specific period of time. The magnet can either be one you you have, or a float can be used – slide it right up against the head (this can only be done before the compression fitting is on). The magnet is in the correct position when the opto appears to flicker continuously instead of flashing.

To program a bar to 1/6” mode, hold the magnet under the head for 12 seconds. The LED should appear to flicker continually during this time. Remove the magnet after the 12 seconds, the LED will respond with 6 long flashes (1 second on, 1 second off, 1 second on, etc.). After the 6 long flashes, the bar will resume normal operation. If desired, the bar can be plugged into the 916 **OPTICAL INPUT**, the # BITS should show 11. Note that the timing window is from 9 to 15 seconds, so you don’t have to be exact.

To program a bar to 1/3” mode, hold the magnet under the head for 6 seconds. The LED should appear to flicker continually during this time. Remove the magnet after the 6 seconds, the LED will respond with 3 long flashes (1 second on, 1 second off, 1 second on, etc.). After the 3 long flashes, the bar will resume normal operation. If desired, the bar can be plugged into the 916 **OPTICAL INPUT**, the # BITS should show 8. Note that the timing window is from 3 to 9 seconds, so you don’t have to be exact.

If the magnet is held in position for less than 3 seconds or more than 15 seconds, the bar mode will not change. The bar can be programmed to either mode regardless of the mode it is currently in, so if in doubt about the mode feel free to reprogram.

CHAPTER 7
TROUBLESHOOTING GUIDE

There are only 4 serviceable components in the gauge: the float, the sender bar, the interconnecting fibre optic cable, and the display.

If the float is sunk, the display will read the bottom tank reading all the time. If the float is partially sunk, the reading may rise and then fall as the tank is filled. If the float has lost its magnets, the reading on the display will stay the same as the fluid level changes, or the reading may appear to stick at one value then suddenly jump to a much different value.

If the fibre is damaged or the sender bar is dead, the display will read "no L" on the display. If the light level is poor due to a damaged or excessively bent fibre, or if the fibre is not fully inserted, or if the display is not programmed for the same resolution as the sender, the display will show “bL:xx”, where xx is the number of bits being received. If the fibre optic cable is disconnected from the display, a flashing red light should be visible from the end of the fibre.

If the display reads erratically, check for water inside the head or display, and for a poor end cap seal. If no problem can be seen, the display will require factory servicing.

To test a sender bar:

1. Make sure the sender is flashing about once a second from the optical connector. If it is not, the sender is dead and must be replaced.
2. If the sender is flashing, plug a piece of fibre into the sender optical connector and the other end of the fibre into the **OPTICAL INPUT** on the 916 programmer. The top left display shows the number of bits the bar is sending and the optical power. If the optical power is poor (less than 70), then check the fibre, if it is good and fully inserted then the bar output is defective and the bar must be replaced. Ensure that the number of bits is correct (1/3” is 8 bits and 1/6” is 11 bits). If necessary reprogram the bar with a magnet (see the bar programming section) to put it into the correct mode. If the number of bits is not 8 or 11 then the bar is defective and must be replaced.
3. Press and hold for one second the appropriate mode button on the programmer to match the mode of the bar (**810PS 1/3”** or **810PS 1/6”**). Now press and hold for one second the **BAR TEST** button to put the programmer into the bar test mode. The inch display will now show what the bar is putting out. Slowly run a float up the bar while watching the inch display to verify bar operation. If the bar does not operate correctly then it must be replaced. Note that it is faster to test the bar in 1/3” resolution, if it works for 1/3” it will work for 1/6”. To return the programmer to normal operation press the **Power On & Reset** button.
4. If a programmer is not available, a quick test can be made of the bar by jumping the two top pins on the programming plug in the display. This converts the display into reading raw inches only, the calibration is ignored. Run the float up and down on the bar to see if the inches change in a consistent manner. The bar should read around 80 to 85 inches when the float is near the top. The bottom reading will vary depending on the length of the bar.

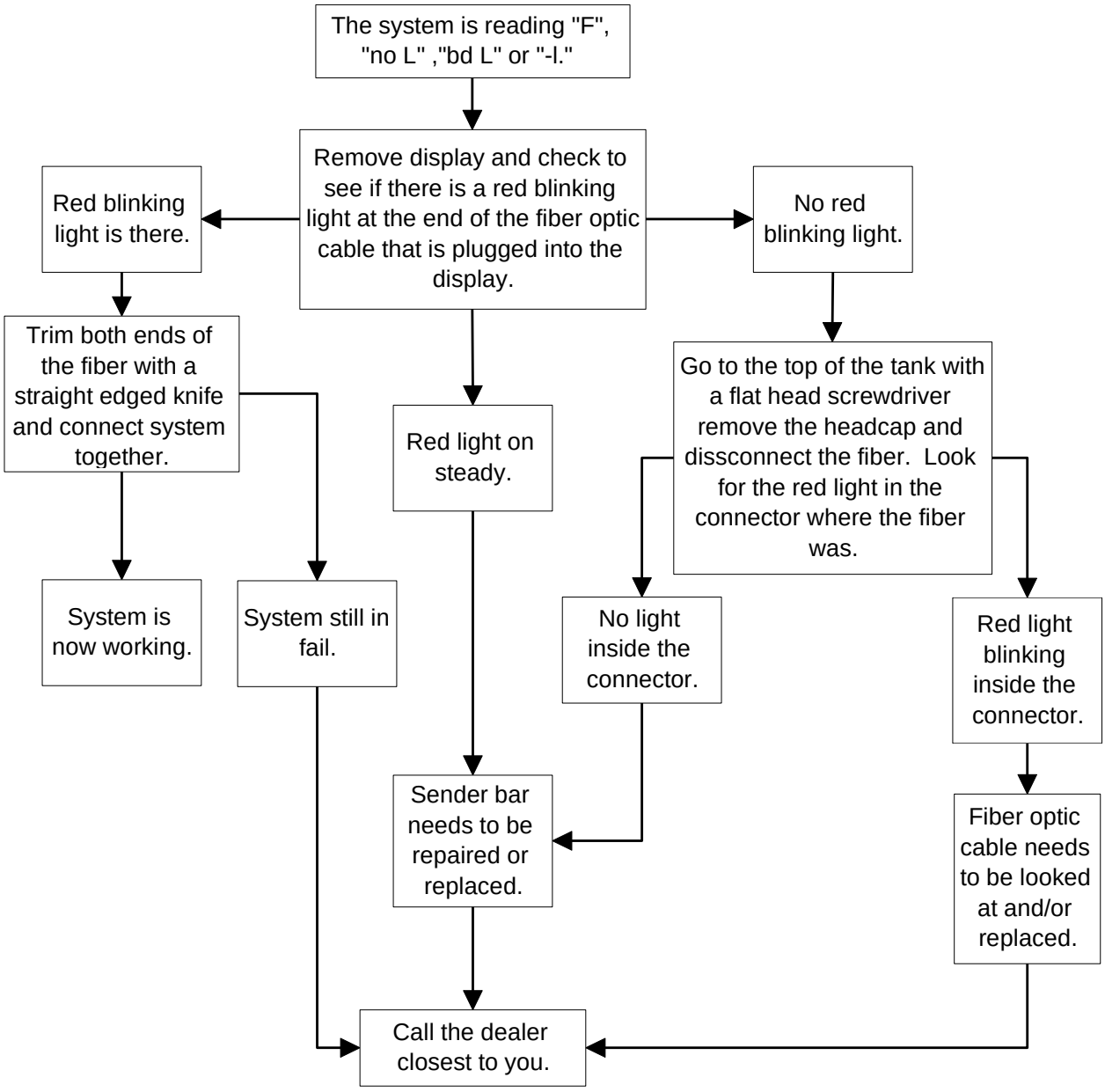
Note: If the programmer or display is being used to test a bar outside in bright sunlight, the sunlight may penetrate right through the black **OPTICAL INPUT** housing and overwhelm the optical input. If this happens the programmer will appear to not respond to pressing the **BAR** or **BAR TEST** button. It will be necessary to shade the connector with your hand to ensure proper operation.

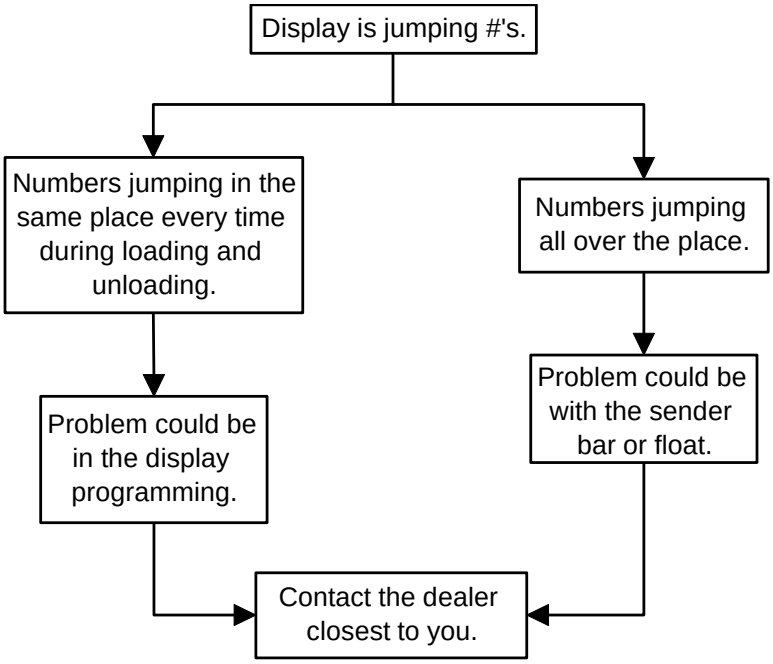
To test a display:

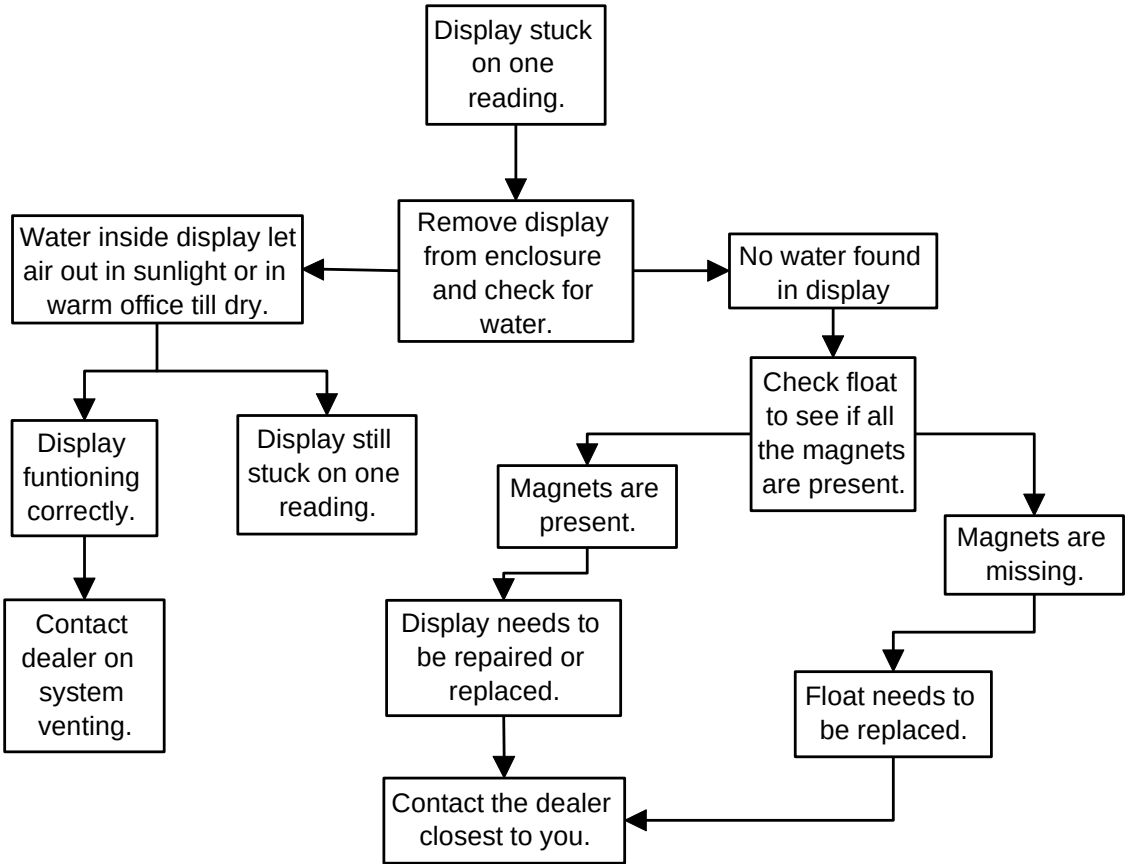
1. The display should show “no L” with no fibre connected. Note that if the optical connector on the display is exposed to ambient light the display may read “bd L” or “Sun”. If neither of these is the case then the display is defective and must be replaced. Note that it is possible for the display to “hang up” and freeze its display if it is exposed to excessive static shock or strong radio signals. If this is the case it should automatically reset itself within a few seconds.
2. Press the appropriate mode button to match what the display should be. Plug a piece of fibre from the **OPTICAL OUTPUT** of the 916 programmer to the optical connector on the display. If the display shows “no L” then it is defective and must be replaced (make sure the end of the fibre going into the display is flashing!). If the display shows “bd L” then it may be in the wrong mode. Press the appropriate mode button on the 916 while the fibre is connected to the display to reprogram the display mode. The display should flash “P1-3” or “P1-6” and then show some programmed value. If it does not respond then it is defective and must be replaced.
3. If the display shows some strange reading when the fibre is plugged in, it may need reprogramming. Copy the existing programming into an unused memory on the 916 (just in case) and then program the display in inches or a known good program. The display should show “prog” within a couple of seconds of plugging in the 916 plug, if not it is defective. After the 916 plug is removed the display should match the reading on the 916 calibration display, if it does not then the display is defective.
4. If only the alarms do not work then copy the calibration into the 916 to check if the points are programmed. If they are then connect a fibre from the 916 **OPTICAL OUTPUT** to the display optical connector. Connect the positive terminal of an ohm meter to the alarm wire, and the negative terminal of the ohm meter to the ground (green) wire. Use the inch up/down buttons on the 916 to run the display up to test the alarms. If the purple wire is being tested then make sure that both A3 and A4 are correctly programmed and run the display from below A3 to make sure that previous bypassing is cleared.

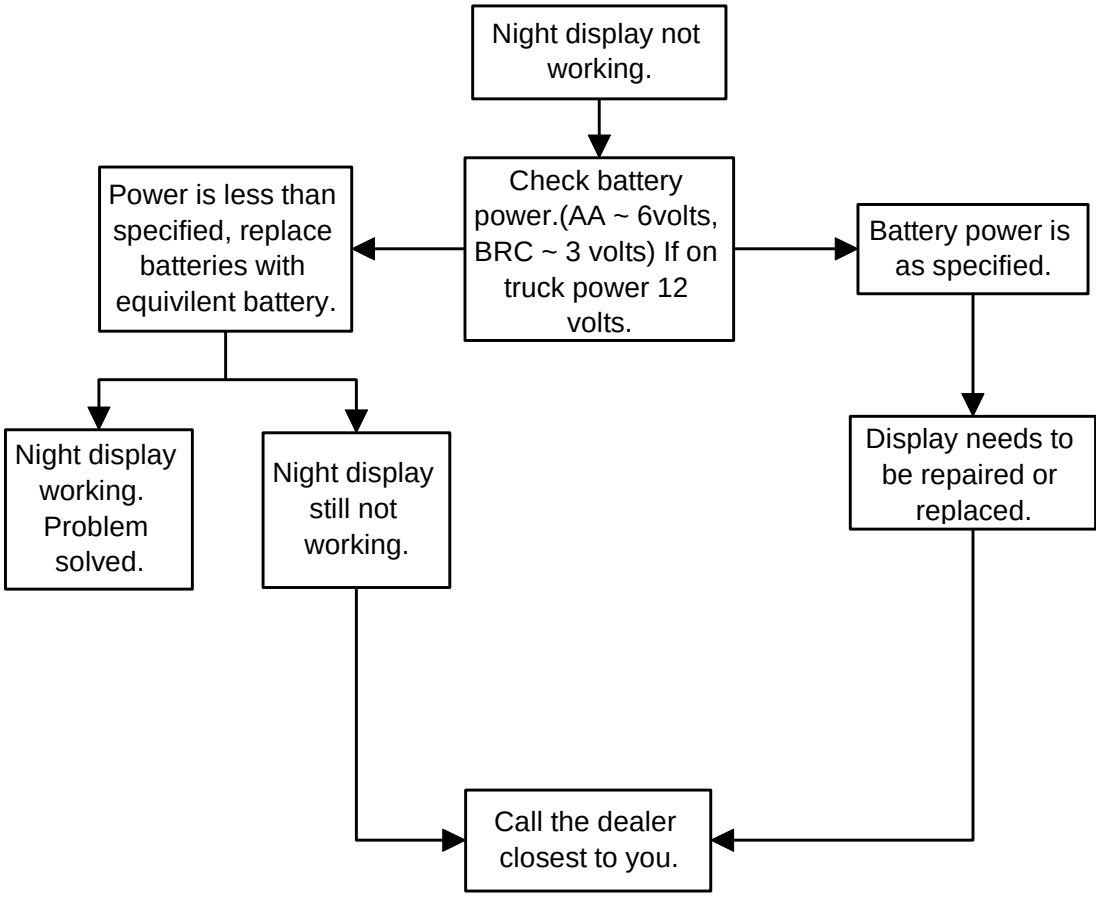
Troubleshooting Flowchart for SeeLevel Gauges

There are four parts to every system,
1) Float
2) Sender Bar
3) Fiber
4) Display




Display is jumping #'s.
Numbers jumping in the same place every time during loading and unloading.
Numbers jumping all over the place.
Problem could be in the display programming.
Problem could be with the sender bar or float.
Contact the dealer closest to you.


Display stuck on one reading.
Remove display from enclosure and check for water.
Water inside display let air out in sunlight or in warm office till dry.
No water found in display
Display funtioning correctly.
Display still stuck on one reading.
Check float to see if all the magnets are present.
Magnets are present.
Magnets are missing.
Contact dealer on system venting.
Display needs to be repaired or replaced.
Float needs to be replaced.
Contact the dealer closest to you.


Night display not working.
Check battery power.(AA ~ 6volts, BRC ~ 3 volts) If on truck power 12 volts.
Power is less than specified, replace batteries with equivilent battery.
Battery power is as specified.
Night display working. Problem solved.
Night display still not working.
Display needs to be repaired or replaced.
Call the dealer closest to you.

CHAPTER 8
SERVICE AND WARRANTY INFORMATION

The warranty will apply only if the warranty card shipped with the equipment has been returned to Garnet Instruments Ltd.

Garnet Instruments Ltd. warrants equipment manufactured by Garnet to be free from defects in material and workmanship under normal use and service for a period of one year from the date of sale from Garnet or an Authorized Dealer. The warranty period will start from the date of purchase or installation as indicated on the warranty card. Under these warranties, Garnet shall be responsible only for actual loss or damage suffered and then only to the extent of Garnet's invoiced price of the product. Garnet shall not be liable in any case for labor charges for indirect, special, or consequential damages. Garnet shall not be liable in any case for the removal and/or reinstallation of defective Garnet equipment. These warranties shall not apply to any defects or other damages to any Garnet equipment that has been altered or tampered with by anyone other than Garnet factory representatives. In all cases, Garnet will warrant only Garnet products which are being used for applications acceptable to Garnet and within the technical specifications of the particular product. In addition, Garnet will warrant only those products which have been installed and maintained according to Garnet factory specifications.

LIMITATION ON WARRANTIES

These warranties are the only warranties, expressed or implied, upon which products are sold by Garnet and Garnet makes no warranty of merchantability or fitness for any particular purpose in respect to the products sold. Garnet products or parts thereof assumed to be defective by the purchaser within the stipulated warranty period should be returned to the seller, local distributor, or directly to Garnet for evaluation and service. Whenever direct factory evaluation, service or replacement is necessary, the customer must first, by either letter or phone, obtain a Returned Material Authorization (RMA) from Garnet Instruments directly. No material may be returned to Garnet without an RMA number assigned to it or without proper factory authorization. Any returns must be returned freight prepaid to: Garnet Instruments Ltd, 288 Kaska Road, Sherwood Park, Alberta, T8A 4G7. Returned warranted items will be repaired or replaced at the discretion of Garnet Instruments. Any Garnet items under the Garnet Warranty Policy that are deemed irreparable by Garnet Instruments will be replaced at no charge or a credit will be issued for that item subject to the customer's request.

If you do have a warranty claim or if the equipment needs to be serviced, contact the installation dealer. If you do need to contact Garnet, we can be reached as follows:

Garnet Instruments Ltd.
288 Kaska Road
Sherwood Park, Alberta
Canada T8A 4G7
E-mail: tstalker@garnetinstruments.com

CHAPTER 9
DEALER LISTS

Canadian Dealer/Distributor List

Dealers

ADVANCE ENGINEERED PRODUCTS LTD.
10498-17 Street
Edmonton AB T6P 1V8 Ph (780) 467-8891

ADVANCE ENGINEERED PRODUCTS LTD.
5502-56 Avenue S.E. 1-800-332-8385
Calgary AB T2C 4M6 Ph (403) 720-4888

ADVANCE ENGINEERED PRODUCTS LTD.
5218-62 Street
Lloydminster AB T9V 2E4 Ph (780) 875-4952

ADVANCE ENGINEERED PRODUCTS LTD.
144 Henderson Dr.
Regina SK S4N 5P7 Ph (306) 721-5678

ADVANCE ENGINEERED PRODUCTS LTD.
2335 Schuyler Street
Saskatoon SK S7M 5V1 Ph (306) 933-2445

AV BRAKE (formerly McCOY BRO'S SOUTH)
4005-9TH Ave North 1-800-265-4387
Lethbridge AB T1H 6H6 Ph (403) 327-2299

BRADVIN TRAILER SALES LTD.
10939-96 Ave.
Grande Prairie AB T8V 3J4 Ph (780) 539-6260

COLUMBIA REMTEC
12343A-104 Avenue
Surrey BC V3V 3H2 Ph (604) 930-3551

EDMONTON TRAILER SALES
16830-111 Avenue
Edmonton AB T5M 2S6 Ph (780) 413-6030

GBM TRAILER SERVICE LTD.
8516-40 Street S.E.
Calgary AB T2P 2G6 Ph (403) 279-9717

GOLDEC INT'L EQUIPMENT INC.(Hamm's Tanks)
6760-65 Avenue 1-800-661-1665
Red Deer AB T4P 1A5 Ph (403) 343-6607

HOTROD MACHINING INC.
Box 253
High Level AB T0H 1Z0 Ph (780) 926-4944

H & S MECHANICAL
Box 156
Carlyle SK S0C 0R0 Ph (306) 453-2213

INNOVATIVE HYDRAULICS
5202-62 Street
Lloydminster AB T9V 2E4 Ph (780) 875-4385

JASPER TANK
#200, 53016 Hwy 60
Spruce Grove AB T7X 3G7 Ph (780) 962-1333

PARTCO
West Road Industrial Park
SUNDRE AB T0M 1X0 Ph (403) 638-3414

PROTANK LTD.
400-410 Pinebush Road 1-800-205-6871
Cambridge ON N1R 8E6 Ph (519) 624-5150

QUICKSILVER MANUFACTURING LTD. (Nocorode Tanks)
1 Main Street
Strome AB T0B 2H0 Ph (780) 672-8180

REMTEC
933 Boul Simard
Chambly QC J3L 4B7 Ph (450) 658-6671

ROCKY RAPIDS
Box 61
Drayton Valley AB T0E 1Z0 Ph (780) 542-0787

TRU-KARE TANK AND METER SERVICE LTD.
RR1 Site 2 Box 2
Lacombe AB T0C 1S0 Ph (403) 782-1811

Distributors

FABMASTER
4313-76 Avenue
Edmonton AB T6B 2H7 Ph (780) 461-8111

American Dealer List

ADVANCED TANK SYSTEMS
301 Enterprise Lane
Colmar PA 18915 Ph (215) 822-1336

BEALL TRAILERS OF COLORADO INC.
4850 East 74th Avenue
Commerce City CO 80022 Ph (303) 289-3149

BEALL TRAILERS OF MONTANA INC.
1430 Highway 87 East
Billings MT 59103 Ph (406) 252-7163

BEALL TRAILERS OF NORTH DAKOTA INC.
537 – 27th Avenue East
Dickinson ND 58601 Ph (701) 225-4441

BEALL TRAILERS OF OREGON INC.
9200 N Ramsey Blvd
Portland OR 97203 Ph (503) 286-8823

BLUE STREAK WELDING
PO Box 275
Slanesville WV 25444 Ph (304) 822-8876

BRENNER TANK
PO Box 670
Fond Du Lac WI Ph (920) 922-4530

BULLZEYE TANK SERVICE
1041 Conrad Sauer
Houston TX 77043 Ph (713) 465-0447

C-CAM
9938 Chemical Road
Pasadena TX 77507 Ph (281) 474-1101

ENERGY FABRICATION INC.
3750 Kermit Hwy.
Odessa TX 79764 Ph (915) 362-0591

FLEETPRIDE POWER EQUIPMENT
7749 Interstate 37 1-888-884-9385
Corpus Christi TX 78409 Ph (361) 289-5151

HEIL TRAILER
1121 Cantrell Sansom Road 1-800-621-2563
Fort Worth TX 76131 Ph (817) 232-0900

HY-TEC INC.
51 Industrial Circle
Lancaster PA 17601 Ph (717) 656-4329

KERSTEN TRAILER SALES
8999 East 96 Avenue
Henderson CO Ph (303) 287-2891

MacCLASKEY OILFIELD SERVICES
5900 W Carlsbad Highway
Hobbs NM 88241 Ph (505) 393-1016

RAMPMASTER
140 Stewart Huston Drive 1-800-344-4018
Coatesville PA 19320 Ph (610) 857-1900

RUSH SALES COMPANY
2700 E. I-20 PO Box 2488
Odessa TX 79760 Ph (915) 337-2397

SEMI SERVICE INC.
1082 South 300 West
Salt Lake City UT 84115 Ph (801) 521-0360

SOONER GREAT DANE
5204 I-40 West
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