

# Stainless Steel Deluxe Sender (SN33)

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- 1) Cut a 1-7/8" diameter hole through the top of the fuel tank directly over the deepest part of the tank. If the tank already has a smaller opening, either enlarge the existing opening to 1-7/8" or file notches on the edge of the opening to allow the rheostat housing to be slid into the fuel tank.
- 2) It is recommended that this opening be located over the deepest part of the tank if possible. The opening should also be located on a flat, level area so as to avoid tank baffles or other obstructions inside the fuel tank.
- 3) For best results, the opening should be as close to the centerline of the car as possible. This will keep excessive fuel movement (sloshing) side-to-side from seriously affecting the gauge reading.
- 4) Measure the tank depth down through the opening. On a sheet of paper draw two lines the same distance apart as the vertical depth measurements you just determined. One line will represent the top of your tank and the other is the bottom at the point where the sender will be installed.
- 5) Draw a third line (dashed) about 1.00" inch above the line you drew for the bottom of the tank. This dashed line will be the empty reading and will allow a minimum fuel reserve of one inch.
- 6) Draw a mark halfway between the top line and the dash (reserve line). This mark will be the center point between full (top line) and empty (at the reserve level) and allow the gauge to read correctly. The rheostat pivot point will be located at this center line.
- 7) Place the stainless tube and mounting flange assembly on top of your line drawing. Align the edge of the mounting flange over the top (full) line. Notice that the lower end of the pick-up tube will probably extend past (below) the bottom line (bottom of tank).
- 8) Locate the centerline on the drawing and mark the pick-up tube at this location.
- 9) With a felt-tip pen, mark the pick-up tube 1/4" above the tank bottom line. This is the point at which the tube must be cut to insure the tube will not bottom out on the tank floor. Use a hacksaw designed for cutting stainless steel and cut the tube at an ANGLE. If the cut is correct, the angled cut in the tube will be between the dashed reserve line and the tank bottom line. Mounting flange should be in alignment with the top line.
- 10) Slide the cork gasket up the stainless steel tube and align corresponding holes.
- 11) The pivot arm/float arm will swing 90° to the top (full) and 90° to the bottom (empty). Keep the pick-up tube/sender movement aligned over the drawing and carefully move the pivot arm to its full position.
- 12) Align the float arm through the pivot arm until the float just reaches the top line (full) on the drawing. Use a felt-tip pen to mark the float arm where it crosses the hole in the pivot arm.
- 13) Remove the float arm and bend carefully at this mark to a 90° angle. Bend in the same direction as the 90° bend holding the float. Cut excess float arm so there is 3/16" "hook" after the 90° bend.
- 14) Insert the 3/16" hook through the hole in the pivot-arm and press the float arm into position. Swing the float top to bottom one last time to double-check your measurements. Float should just touch the dotted line at the same time the pivot arm bottoms out in the opening on the side of the rheostat housing.
- 15) Your fuel sender is now set properly for your tank depth and will allow a reserve fuel supply when empty is indicated on the gauge.
- 16) Firmly crimp the edges of the pivot arm around the float arm for a secure and permanent attachment.
- 17) Loosen the two stainless pan-head screws on the rheostat housing and carefully slide the rheostat housing down the tube to the end.

- 18) Lower the pivot arm (with float arm and tank float attached) so as to point into the tank opening. Insert tank-float and float arm through the opening until the rheostat housing/pick-up tube assembly is just starting to enter through the tank opening. Make sure float and float arm are clear of all fuel tank baffles and any other obstructions in the tank.
- 19) The cork gasket and sender mounting flange can now be aligned over the tank opening and fastened securely with the five insulated leak-proof screws provided.
- 20) Connect a ground wire to one of the five sender mounting screws for proper gauge operation.

