**PowerGrip® SB® Clamp**

Stop cold water leaks with a unique, easy-to-install device that replaces conventional hose clamps in vehicle cooling system applications.

Gates PowerGrip® SB® Clamp is made from a heat shrinkable thermoplastic material that provides a dynamic seal.

No need for maintenance! Unlike conventional clamps, these clamps never need retightening. Additionally, they are completely resistant to all automotive fluids.

PowerGrip® SB® Clamps are available for hoses from 1/4" through 3-1/8" I.D. For best performance, be sure to select the recommended band size to the closest fit.

The special cardboard brace prevents the clamp from shrinking when exposed to heat.

Do not remove the brace until you are ready to install the clamp.

**Installation Instructions**

1. Be sure vehicle engine is turned off and has cooled down.
2. Drain coolant.
3. Remove old hose(s).
4. Clean metal stems with wire brush.
5. Remove clamp from brace by squeezing band to collapse, then fold in half and remove it from cardboard.

   **NOTE:** You may have to use pliers for smaller size clamps.

6. Place clamps over each end of new hose.
7. Position hose over fittings.

8. Slide clamp over top of fitting bead. If the clamp does not go over the bead, use the next larger size clamp.

   **Clamp placement cannot extend past the peak of the head on the stem fitting.**

   **IMPORTANT:** Avoid letting the clamp cover any of the hose that’s unsupported by the fitting.

9. Apply heat as follows:
   a. Use standard heat gun with setting on “High”.
   b. Do not use open flame to apply heat.
   c. Follow heat gun manufacturer’s safety procedures.
   d. Do not apply heat to one spot too long.
   e. Move gun continuously.
   f. Move heat gun continuously around as much of the clamp’s surface as possible – 1/3 of the surface minimum.

   **CAUTION:** Although Gates PowerGrip® SB® Clamps are very durable, too much heat can melt them.

   Continue heating until shrinking is complete. Using a 1000 watt heat gun, the clamp will shrink and make a proper seal in 60 seconds or less.

   **Clamp surface will appear “glossy” when heated enough/properly. Remove heat source.**

10. Check connections to be sure a good seal was made by trying to turn the hose. Hose and clamp should not turn when using a reasonable torque. **(Silicone hose may continue to rotate. This is normal and does NOT compromise the seal)**

11. Replace coolant.

12. Start engine and check for leaks. If leaks appear, apply more heat to clamp. **Note:** Clamps have the ability to tighten as the engine reaches operating temperature.

**Removing Gates PowerGrip® SB® Clamps**

Remove clamps with the specially designed heavy-duty SB Clamp Removal Tool or, melt the band with a soldering iron. Use of any other cutting device could damage the hose.