Wilwood Flexline Fitting Types

Most of Wilwood's calipers have a female 1/8-27 NPT fluid inlet. Male adapter fittings in either straight, 45, or 90 degree 1/8 NPT to -3 AN are used to connect the caliper to the -3 AN braided stainless steel flexline. The -3 flexline is then connected to the vehicle’s brake hardlines.

**PIPE THREAD FITTINGS**
NPT (National Pipe Thread) thread fittings have a tapered thread and form a seal by the interference of the male and female tapered threads. In order to ensure a leak free seal, PTFE pipe thread sealing tape MUST be used on the male threads.

**AN FITTINGS**
The seal on AN fittings is achieved between the 37º cone on the male fitting and the 37º single flare on the female fitting. No thread sealant is required as the seal is between the cone and the single flare and not at the threads.

**BANJO FITTINGS**
Banjo bolt fittings have a straight, non-tapered thread. The seal is formed by the use of two copper crush washers, one on each side of the banjo fitting.

**CHASSIS FITTINGS**
Chassis fittings adapt the braided stainless steel flexline to the flared fitting of the vehicle’s brake hardline.

**Procedures for Tightening and Sealing Fittings**

**PIPE THREAD FITTINGS**
Apply PTFE tape to pipe threads before attaching fitting to caliper. Start two threads from the end of the male fitting, wrap PTFE tape around the threads 2 times in a clockwise direction when viewed from the open end of the fitting. This will ensure the tape will not unravel when tightening. Hand tighten the fitting into the caliper, then using a wrench, tighten another 1.5 to 3 turns further. Check for leakage after pressure is applied to the system. **NOTE:** Consider the final orientation of 45º and 90º adapter fittings when tightening.

**AN FITTINGS**
Hand-tighten the female nut until it is snug so that the cone and flare inside have started to seat against each other. Then using a wrench, tighten enough to seal the joint being careful not to over tighten which may damage the nut. Always check for leakage after pressure is applied to the system.

**BANJO FITTINGS**
Place a copper washer on the banjo bolt, then feed the bolt through the banjo fitting. Place the second copper washer on the banjo bolt under the banjo fitting so that the washer seats between the banjo fitting and the caliper. Tighten the banjo bolt to 96-120 in-lbs (do not exceed 144 in-lbs). Torque to lighter specification and check for leakage, increasing torque only to stop leakage without exceeding maximum specification.

**CHASSIS FITTINGS**
Connect flexline to male AN side of chassis fitting. Feed chassis fitting through hole in vehicle’s chassis brake line bracket, then insert brake line retaining clip into slot of the chassis fitting so that it is wedged between the brake line bracket and the chassis fitting. Tap the clip in with a hammer to hold chassis fitting in place. Tighten vehicle’s existing hardline fitting to the female end of chassis fitting until snug. Two wrenches must be used to tighten connections, one to hold chassis fitting and one to tighten the lines. **NOTE:** To prevent damage to the hardline fitting, a proper flare nut wrench should be used.