

FILLING AND BLEEDING THE SYSTEM

Filling the System

- 1 Verify that all sender arms are free to traverse their complete arc.
- 2 Verify that all bleeder valves on the throttle and clutch slaves are closed, and linkages disconnected.

NOTICE

See section on "System Fluid" for fluid specifications on page 17.

- 3 Remove fill port plug from the reservoir and fill the reservoir within one inch of the top of the sight tube with HA5455 water glycol fluid. Replace fill port plug.
- 4 Pressurize reservoir to 100 +/-10 psi through the air filler valve in the top of the reservoir.
- 5 The system will now begin to fill with fluid. As the system fills the fluid level in the reservoir will become lower. When the fluid level is between 1 to 2 inches from the bottom of the sight glass release the pressure and refill the tank, as in Step 4.
- 6 Repressurize the system and repeat this procedure of filling the reservoir as required until no fluid drop is noted. At this point, the system is filled and must now be bled.
- 7 Check entire system for leaks and correct as required.

Bleeding the System at Slave

NOTICE

Verify that linkage is disconnected, and sender's handles are free to move. While bleeding, move the slave arm and verify that the piston has bottomed.

- 1 Fill the reservoir as required.
- 2 Using the bleeder tube provided and a clean, empty container, insert the bleeder tube in the bleeder valve at one side of a slave. Open the bleeder valve about one turn and bleed system until no air bubbles are evident in the flowing fluid. When the fluid is clear, close the bleeder valve. During the bleed operation maintain the system pressure above 60 psi, and the fluid level in the sight gauge above the two-inch mark. Should the fluid level drop below two inches close the bleeder valve and release the pressure from the system. Refill the reservoir with the fluid that has been bled off, repressurize the system and continue bleeding. Bleed long enough that no air or foam remains in this branch of the system. Draw at least a full reservoir of fluid through each side of each circuit.

NOTICE

Since there are two positions at each slave to be bled and four slaves, the reservoir must be filled at least 8 times during the bleed operation. The fluid which has been bled off should be used to refill the reservoir.

NOTICE

The bleeding procedure is much easier for two people to perform than one. (one keeping reservoir filled and under pressure, while the other one bleeds the system.)

- 3 Tighten bleeder valve after the bleed operation.
- 4 Bleed the second port of the slave as described in Steps 1, 2, and 3.
- 5 Repeat steps 1 through 4 with a second person at the sender moving the handles back and forth slowly five to ten times
- 6 Continue performing the preceding five steps for each remaining slave.

Bleeding the System at Senders

After bleeding system at each slave bleeder valve, each sender must now be bled. A small amount of air will be trapped at the high point in each sender head.

- 1 Refill reservoir if required (fill tank at this time to between 1/2 and 2/3 full), and leave about 100 psi on the pressure gauge.

NOTICE

Place a rag over the bleeder hole on the sender, to prevent fluid from spilling on the console.

- 2 Very slowly open the bleeder plug using a 3/16" allen wrench. See Figure 10 for location of bleeder screw.

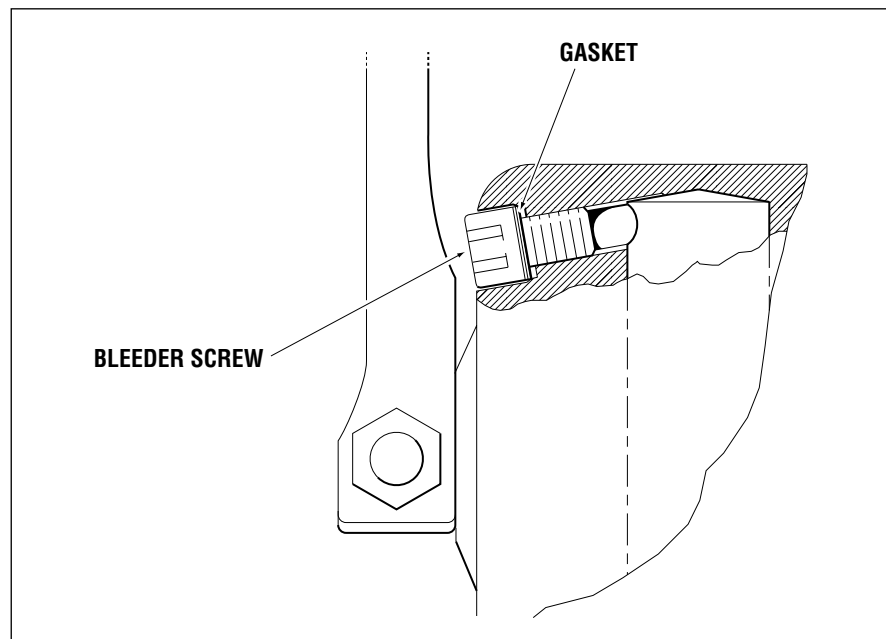


Figure 20. Bleeder Screw.

- 3 Allow the fluid to bleed out until the fluid is clear without air bubbles.
- 4 Tighten the bleeder screw after bleeding.
- 5 Repeat Steps 1 to 4 above, for each sender.
- 6 The reservoir level should be between 1/2 and 2/3 full. If the level is below this, the reservoir should be filled to this level. Verify that pressurize in the reservoir is between 80 and 85 psi.