

The best way to check the pressures on a manifold is to use your tractor or power unit in the field. There is not a base-line pressure reading, as every tractor output will be different depending on HP, max PSI, load, GPM, etc. The pressures within the manifold are dependent on the tractor output.

You will need to test 2 scrapers that are the same model, since plumbing length, hose size, coupler diameters, etc. all affect the final PSI that enters the manifold. So, you need one perfectly functioning machine as a 'control' to collect readings from and compare against the problematic machine/manifold.

Review the diagram of the manifold in **Figure 1A** below. Know the difference between the Sequence Valve Cartridge (SCGA), the Counterbalance Valve Cartridge (CBGB), GB Test Port (Sequence), and GA Test Port (Counterbalance).

Start by testing the properly functioning scraper FIRST to collect base line readings:

Step 1: COMPLETELY REMOVE PRESSURE FROM THE MACHINE. NEVER REMOVE LINES OR FITTINGS FROM EQUIPMENT THAT IS UNDER PRESSURE -- SERIOUS INJURY **WILL** RESULT IF YOU LOOSEN PRESSURIZED HYDRAULICS ON THE MACHINE. PRESSURE IS REMOVED AT THE FEED LINE COUPLERS WITH THE PROPER TOOLS.

Step 2: Double-check that hydraulic lines have had pressure removed! After that, we recommend removing the feed line at the manifold (hydraulic hose connected to ITEM A [90-degree JIC elbow] on **Figure 1A**), so there is no built-up pressure in the block.

Step 3: Remove BOTH of the -6 SAE Port Plugs (requires 1/4" Hex) on the front and back of the manifold.

Step 4: Replace BOTH -6 SAE Plugs with 5000PSI minimum -6 SAE threaded pressure gages. Reinstall feed line into the manifold ITEM A.

Step 5: Once gages are in place and feed line reconnected into manifold elbow fitting, hook up the scraper to the tractor and pressurize the scraper. Begin to cycle the machine under NO LOAD. While cycling the machine, another person must document maximum/consistent working pressure during each functional operation (Apron Open, Pushoff Forward, Pushoff Extended, Pushoff Retracting, Apron Dropping, etc.). Keep track of any spikes in pressure during the cycling.

Note: from factory settings, the pressure will reach around 1,300PSI on the GA gage port before the sequence valve shift.

Step 6: Cycle the machine 2 more times and document the pressures. This is the completion of the test.

Step 7: REMOVE PRESSURE FROM THE MACHINE, remove feed line from manifold, remove pressure gages. Reinstall -6 SAE plugs and reinstall feed line to manifold.

Step 8: Repeat the same operation for the problematic scraper.

REPORT ALL RESULTS DIRECTLY TO ASHLAND INDUSTRIES.

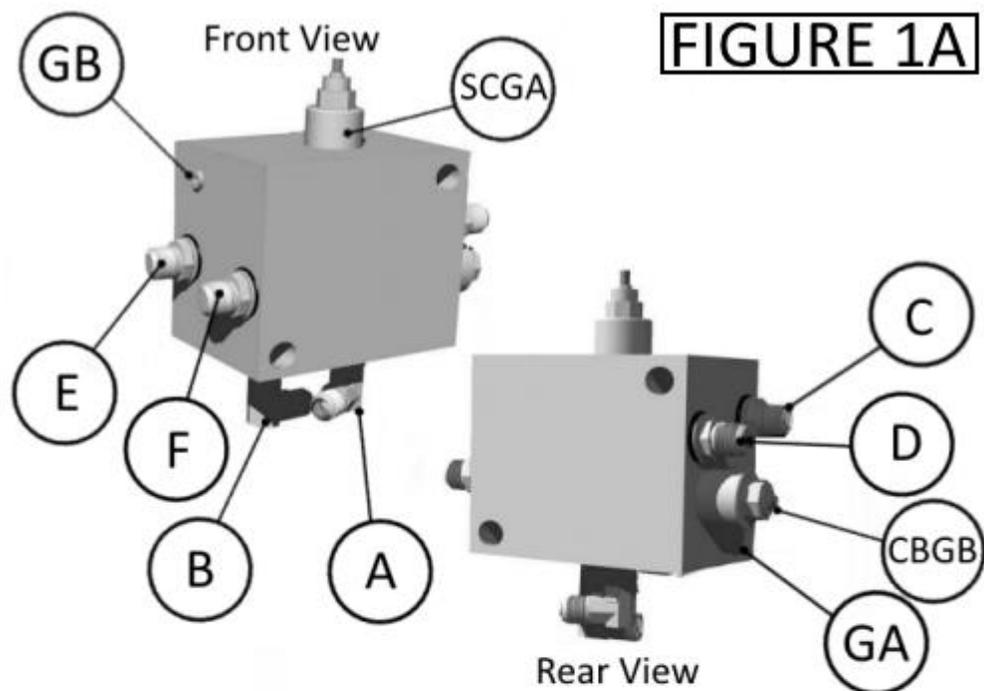


FIGURE 1A

The lettering for the port locations are stamped on the block

Item	Description
A	Supply Line
B	Pushoff Cylinder Rod End to Right Side Apron Cylinder Base End - Supply
C	Pushoff Cylinder, Base End
D	Apron Cylinder, Right Side, Rod End
E	Apron Cylinder, Left Side, Base End
F	Apron Cylinder, Left Side, Rod End
CBGB	Counterbalance Valve, adjustment
SCGA	Sequence Valve, adjustment
GA	Pressure Test Port
GB	Pressure Test Port