

Field Test Procedure for 3 Valve Test on an ASSE 1020 (PVB)

Flush Test Cocks (TC)

- Step #1: Install test adapters (if applicable)
- Step #2: Open TC #1 - close
- Step #3: Open TC #2 - close
- Step #4: Remove air-inlet canopy/hood

Attach Test Kit

- Step #1: Close high and low valves and open Bypass valve on test kit
- Step #2: Attach high hose to TC #1
- Step #3: Attach low hose to TC #2
- Step #4: Open TC #1
- Step #5: Open high valve - bleed air - close
- Step #6: Open TC #2
- Step #7: Open low valve - bleed air - close

Test #1 - Tightness of #2 Shutoff Valve

- Step #1: Close #2 shutoff valve
- Step #2: Close bypass valve
- Step #3: Open high valve
- Step #4: Open low valve (differential will read zero)
- Step #5: Close high valve
- Step #6: Close low valve
- Step #7: Close #1 shutoff valve

Test Results: If differential gauge reading does not rise above zero (0), record #2 shutoff valve as tight.

Test #2 - Tightness of the Check Valve

- Step #1: Open #1 shutoff valve
- Step #2: Open bypass valve
- Step #3: Open low valve, bleed, close low valve

Test Results: If there is a differential gauge reading of 1 psid or higher after reading stabilizes, record check valve as tight.

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ASSE 1020 (PVB)

Test #3 - Air-Inlet Opening

- Step #1: Close TC #1 and TC #2
- Step #2: Remove hoses from TC #1 and TC #2
- Step #3: Attach high hose to TC #2
- Step #4: Open TC #2
- Step #5: Open high valve - bleed air – close
- Step #6: Center differential gauge at TC #2
- Step #7: Close #1 shutoff
- Step #8: Open high valve and record differential gauge reading when the air-inlet opens

Test Results: Record gauge value. If air-inlet is visibly open when differential gauge reading is 1 psid or higher, record valve as passed.

Restore System

- Step #1: Close TC #2
- Step #2: Remove hose
- Step #3: Open all valves on test kit to drain water
- Step #4: Restore to pretest condition
- Step #5: Replace air-inlet canopy/hood

The tester shall provide copies of the test results to the owner and other appropriate parties as required.

NOTES:

Field Test Procedure for 5 Valve Test on an ASSE 1020 (PVB)

Flush Test Cocks (TC)

- Step #1: Install test adapters (if applicable)
- Step #2: Open TC #1 - close
- Step #3: Open TC #2 - close
- Step #4: Remove air-inlet canopy/hood

Attach Test Kit

- Step #1: Close high, low and bypass valves and High and low bleed valves on test kit
- Step #2: Attach high hose to TC #1
- Step #3: Attach low hose to TC #2
- Step #4: Open TC #1
- Step #5: Open high bleed valve - bleed air - close
- Step #6: Open TC #2
- Step #7: Open low bleed valve - bleed air - close

Test #1 - Tightness of #2 Shutoff Valve

- Step #1: Close #2 shutoff valve
- Step #2: Open high valve
- Step #3: Open low valve (differential will read zero)
- Step #4: Close high valve
- Step #5: Close low valve
- Step #6: Close #1 shutoff valve

Test Results: Record gauge value. If differential gauge reading does not rise above zero (0), record #2 shutoff as tight.

Test #2 - Tightness of Check Valve

- Step #1: Open #1 shutoff valve
- Step #2: Open low bleed valve - close low bleed valve

Test Results: If differential gauge reading holds steady at 1 psid or higher, record check valve as tight.

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Test #3 - Air-Inlet Opening

- Step #1: Close TC #1 and TC #2
- Step #2: Remove hoses from TC #1 and TC #2
- Step #3: Attach high hose to TC #2
- Step #4: Open TC #2
- Step #5: Open high bleed valve - bleed air - close
- Step #6: Center differential gauge at TC #2
- Step #7: Close #1 shutoff
- Step #8: Open high bleed valve and record differential gauge reading when the air-inlet opens

Test Results: Record gauge value. If air-inlet is visibly open when differential gauge reading is 1 psid or higher, record valve as passed.

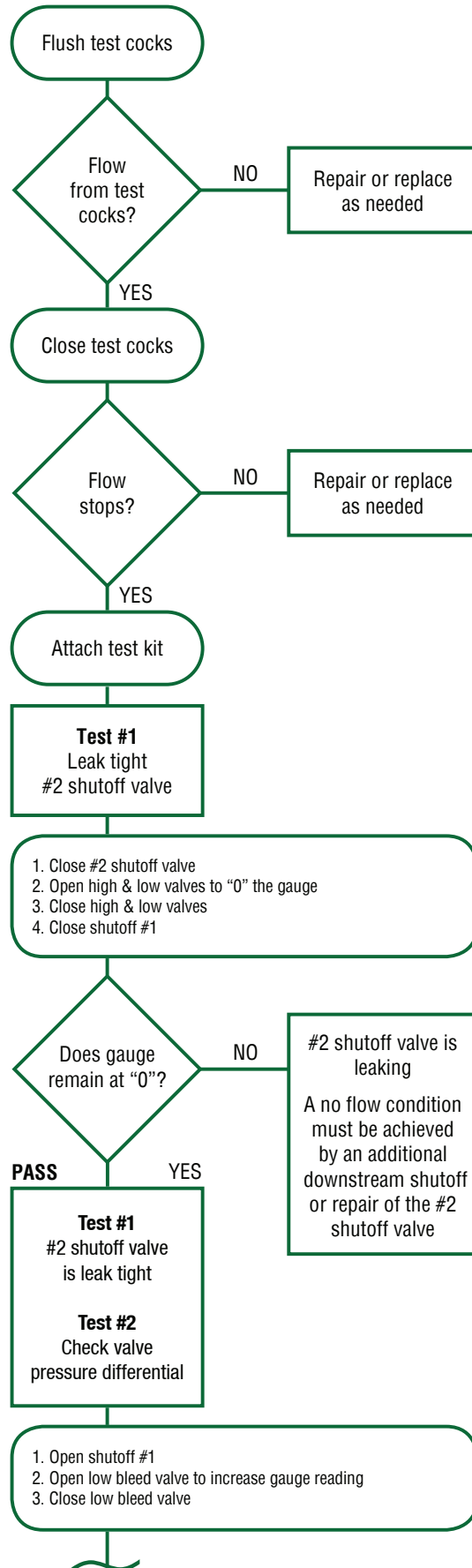
Restore System

- Step #1: Close TC #2
- Step #2: Remove hose
- Step #3: Open all valves on test kit to drain water
- Step #4: Restore to pretest condition
- Step #5: Reinstall air-inlet canopy/hood

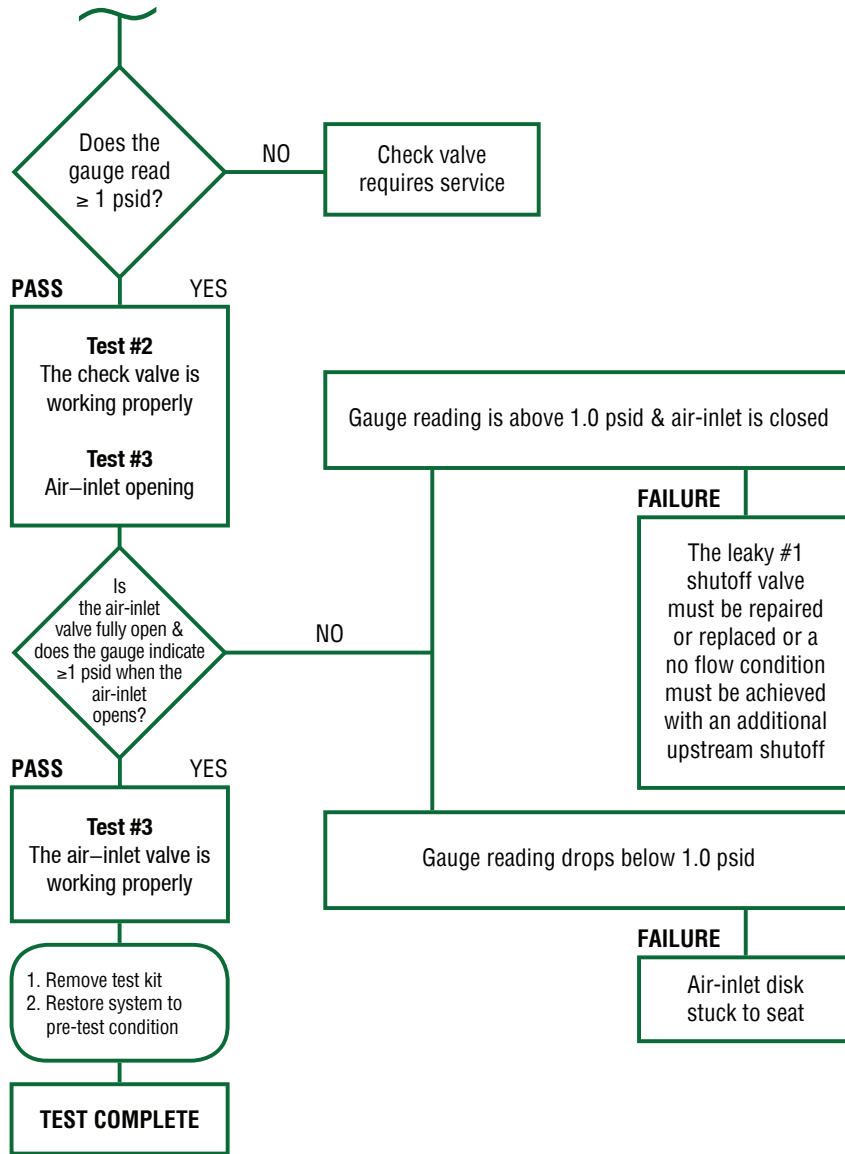
The tester shall provide copies of the test results to the owner and other appropriate parties as required.

NOTES:

Trouble-Shooting Flow Chart for ASSE 1020 (PVB) Assemblies



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Trouble-Shooting Guide for ASSE 1020 (PVB) Assemblies

Problem:

Air-inlet valve does not open as gauge drops to 0.0 psid

Air-inlet disc stuck to seat	Clean
Debris on sealing surface	Clean
Debris or scale on guide	Clean
Broken spring	Replace

Problem:

Air-inlet valve does not open and differential on gauge does not drop

Leaking #1 shutoff valve (Parallel Installation)	Clean or replace
Leaking #2 shutoff valve with backpressure	Clean or replace valve, and eliminate backpressure

Problem:

Air-inlet opens below 1.0 psid

Debris on air-inlet disc	Clean
Damaged air-inlet disc	Replace
Scaled or damaged seat	Clean or replace

Problem:

Check valve opens below 1.0 psid

Debris on air check disc	Clean
Damaged check disc	Replace
Scaled or damaged seat	Clean or replace

Problem:

Leakage through air-inlet (minor)

Poppet seal damaged	Replace
Poppet damaged	Replace
Debris on sealing surface	Clean

Problem:

Continuous discharge through air-inlet

Poppet improperly guided	Repair or replace
Poppet damaged	Replace
Seal damaged	Replace
Low inlet volume	Check line pressure

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Problem:

Continuous discharge through test cock #2

Leaking #1 shutoff valve Clean or replace

Problem:

Chattering under flow conditions

Worn or damaged
check valve guide Repair or replace