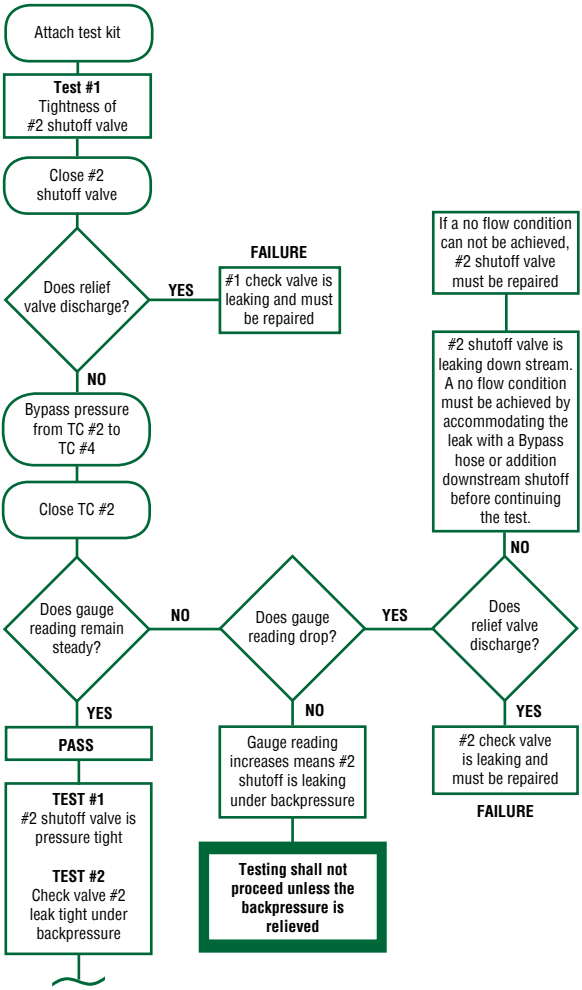
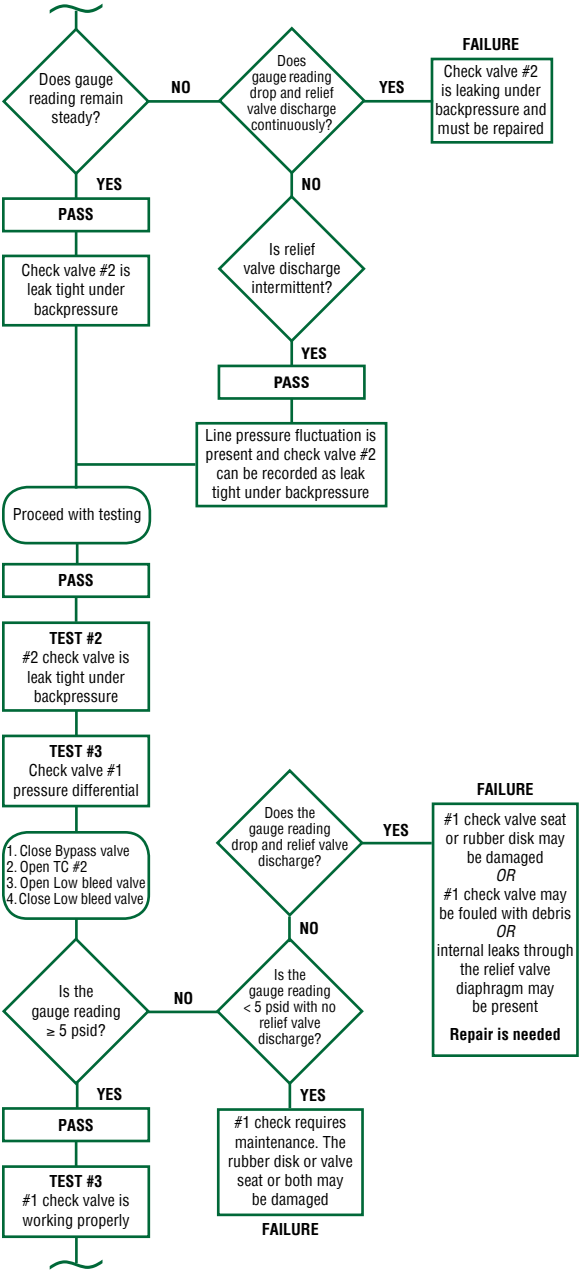
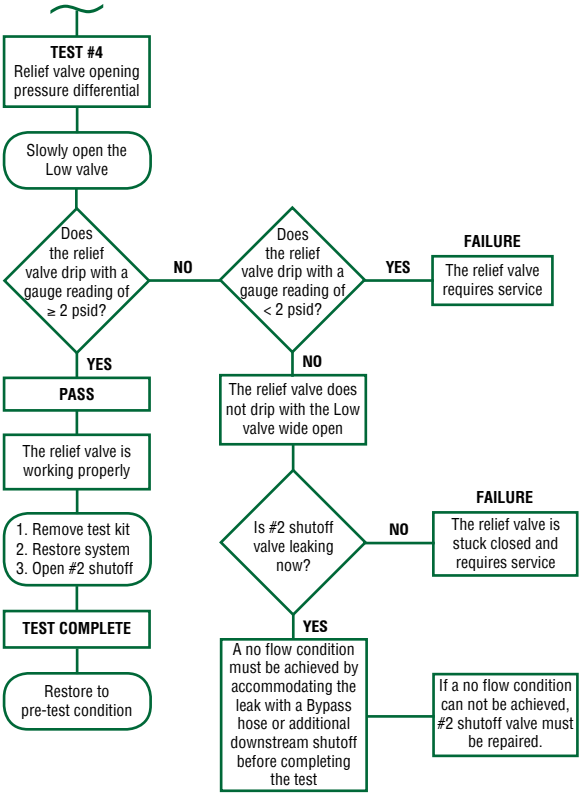
Trouble-Shooting Flow Chart for ASSE 1013 (RP) Assemblies




Does gauge reading remain steady?
NO
Does gauge reading drop and relief valve discharge continuously?
YES
FAILURE
Check valve #2 is leaking under backpressure and must be repaired
YES
PASS
Check valve #2 is leak tight under backpressure
NO
Is relief valve discharge intermittent?
YES
PASS
Line pressure fluctuation is present and check valve #2 can be recorded as leak tight under backpressure
Proceed with testing
PASS
TEST #2
#2 check valve is leak tight under backpressure
TEST #3
Check valve #1 pressure differential
1. Close Bypass valve
2. Open TC #2
3. Open Low bleed valve
4. Close Low bleed valve
Does the gauge reading drop and relief valve discharge?
YES
FAILURE
#1 check valve seat or rubber disk may be damaged
OR
#1 check valve may be fouled with debris
OR
internal leaks through the relief valve diaphragm may be present
Repair is needed
NO
Is the gauge reading ≥ 5 psid?
NO
Is the gauge reading < 5 psid with no relief valve discharge?
YES
PASS
TEST #3
#1 check valve is working properly
YES
#1 check requires maintenance. The rubber disk or valve seat or both may be damaged
FAILURE


TEST #4
Relief valve opening pressure differential
Slowly open the Low valve
Does the relief valve drip with a gauge reading of ≥ 2 psid?
NO
Does the relief valve drip with a gauge reading of < 2 psid?
YES
FAILURE
The relief valve requires service
YES
PASS
The relief valve is working properly
1. Remove test kit
2. Restore system
3. Open #2 shutoff
TEST COMPLETE
Restore to pre-test condition
NO
The relief valve does not drip with the Low valve wide open
Is #2 shutoff valve leaking now?
NO
FAILURE
The relief valve is stuck closed and requires service
YES
A no flow condition must be achieved by accommodating the leak with a Bypass hose or additional downstream shutoff before completing the test
If a no flow condition can not be achieved, #2 shutoff valve must be repaired.