

RPBA Field Test Using the Mako MK5 5-Valve, per UF TREEO

Step	Procedure
1.	NOTIFY OWNER , identify, inspect, & observe assembly. If needed, installed appropriate fittings to test cocks
2.	OPEN TEST COCKS - Open and leave open Test Cock (TC) #4, then TC #3, TC #2, and finally TC #1 - Fully close TC #1, TC#2, TC #3, and TC #4
3.	ATTACH TEST KIT - Verify MK5 is turned on and captured values are cleared (Hold Down the Back Button) - Close all MK5 test kit valves and verify high, low, and bypass hoses are all appropriately connected to MK5 - Connect high side hose to TC #2 - Connect low side hose to TC #3
4.	BLEED AIR FROM HOSES - Slowly open TC #3 fully, then open low bleed valve (leave open) - Slowly open TC #2 fully, then open high bleed valve (leave open) - Close the high bleed valve and next the low bleed valve
5.	OBSERVE CHECK VALVE #1 - Close the outlet shutoff valve RECORD Check Valve #1 (CV #1) as either "closed tight" (relief valve closed) or "leaking" (relief valve opens)
6.	TEST RELIEF VALVE - Open high control valve approximately one turn - Open low side control valve slightly, <i>no more than ¼ turn</i> RECORD reading (Press the Capture Button) at discharge of water from the Relief Valve (Pass if ≥ 2.0 psi) - Close low side control valve
7.	TIGHTNESS OF CHECK VALVE #2 - Maintain MK5 high side control valve in open position - Bleed air from the bypass hose by opening the bypass control valve then close the bypass control valve - Attach the bypass hose from the MK5 to TC #4 and open TC #4 fully - Open low side bleed valve so the reading exceeds the apparent differential pressure across CV #1 - Slowly Close the low side bleed valve - Observe whether relief valve vent drips (If it drips, reopen the low bleed and close the low bleed) - If relief valve drips a second time, then Check Valve #2 (CV #2) has failed and must be repaired. Close bypass control valve only if CV #2 leaks RECORD the CV #2 as "closed tight" (relief valve closed) or "leaked" (relief valve opens)
8.	TEST CV #1 (Static differential pressure across CV #1 must be greater than the relief valve opening point AND at least 5.0 psid) - Open low side bleed valve so the reading exceeds the apparent differential pressure across CV #1 - Slowly Close the low side bleed valve RECORD psid reading (Press the Capture Button) across CV #1
9.	OUTLET SHUTOFF VALVE - Close TC #2 and check for leaks in outlet shutoff valve RECORD as "closed tight" or "leaking"
10.	LINE PRESSURE READING - Close TC #3 and TC#4 - Open TC #2 and open low bleed valve RECORD psid reading (Press the Capture button) for the line pressure
11.	TEST CHECK VALVE #2 - Close TC #2 and remove all hoses from the assembly - Attach the high side hose from the MK5 to TC#3 and the low side hose from the MK5 to TC#4 - Slowly open TC#4 and open the low bleed valve - Slowly open TC#3 and open the high bleed valve - Close the high bleed valve and next the low bleed valve RECORD psid reading (Press the Capture Button) across CV #2 (Pass if ≥ 1.0 psi)
12.	CONCLUSION - Close all test cocks, remove all test equipment and fittings - Slowly open #2 shutoff valve - Open the MK5's valves and drain water from hoses

