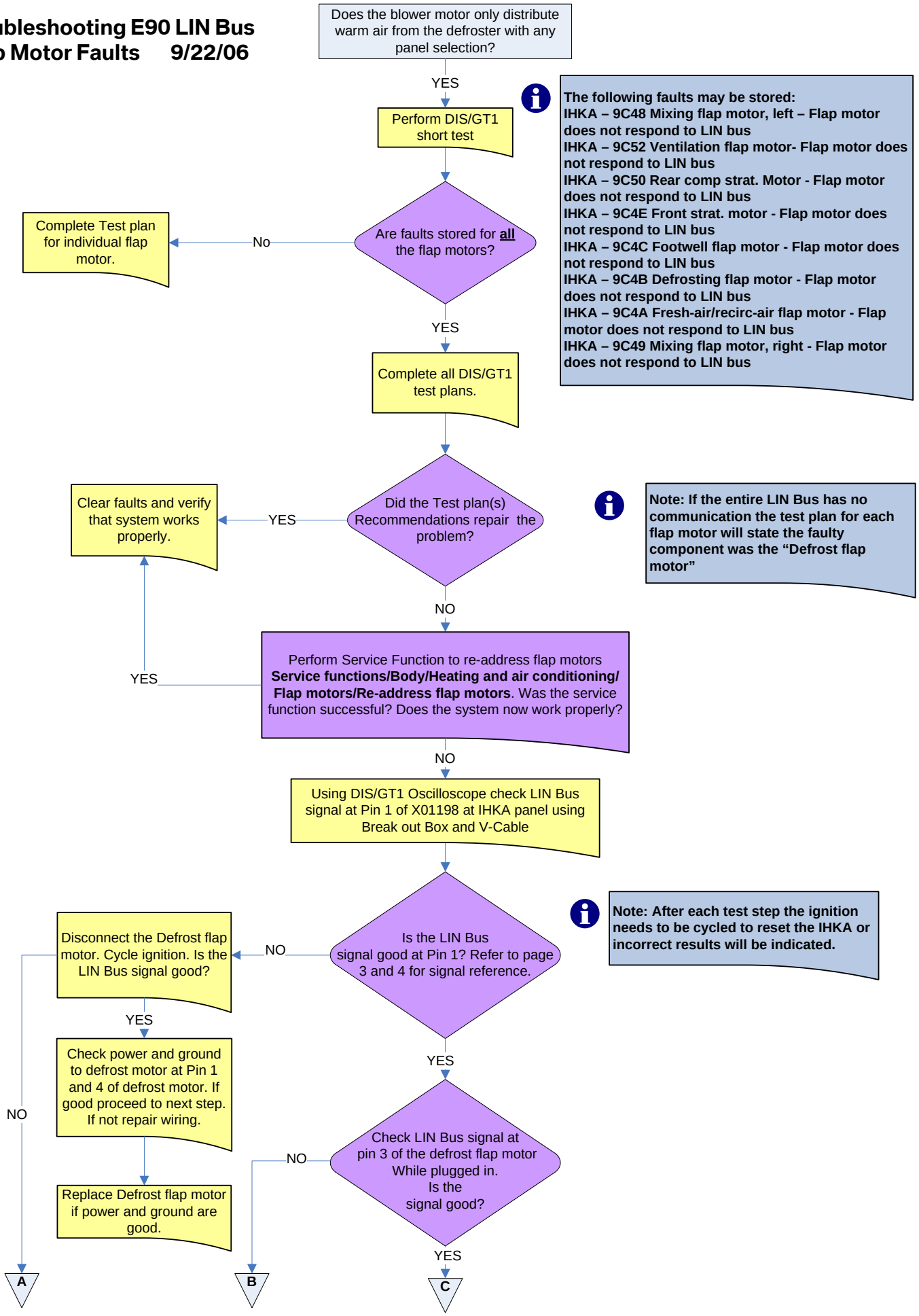
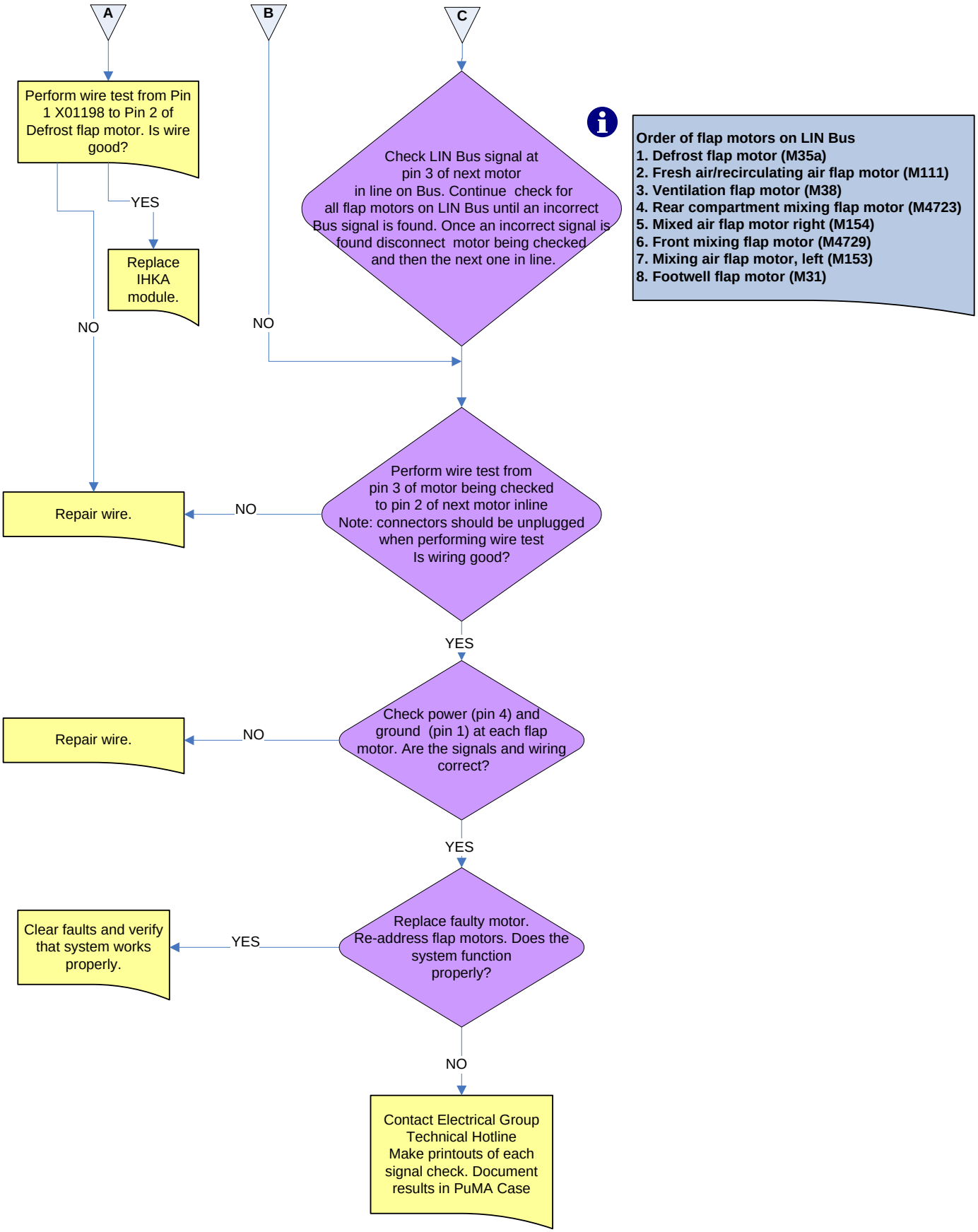
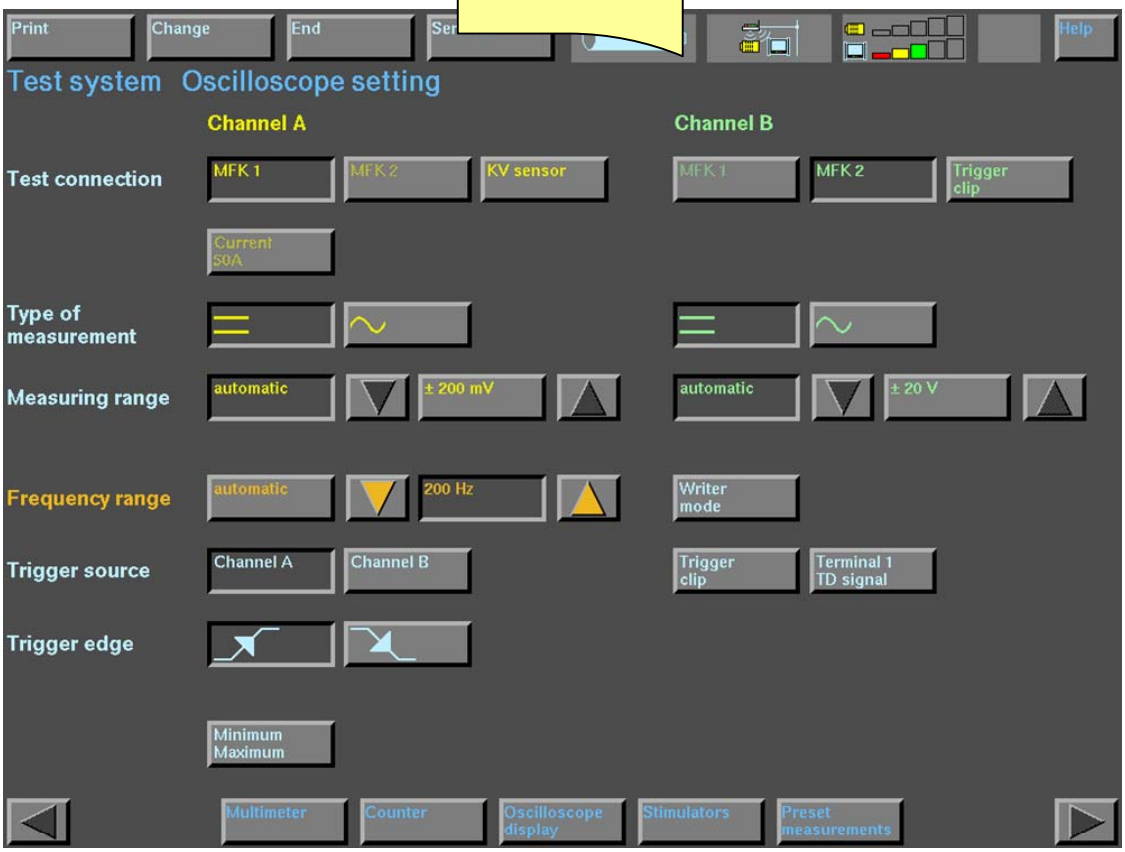
Troubleshooting E90 LIN Bus Flap Motor Faults 9/22/06

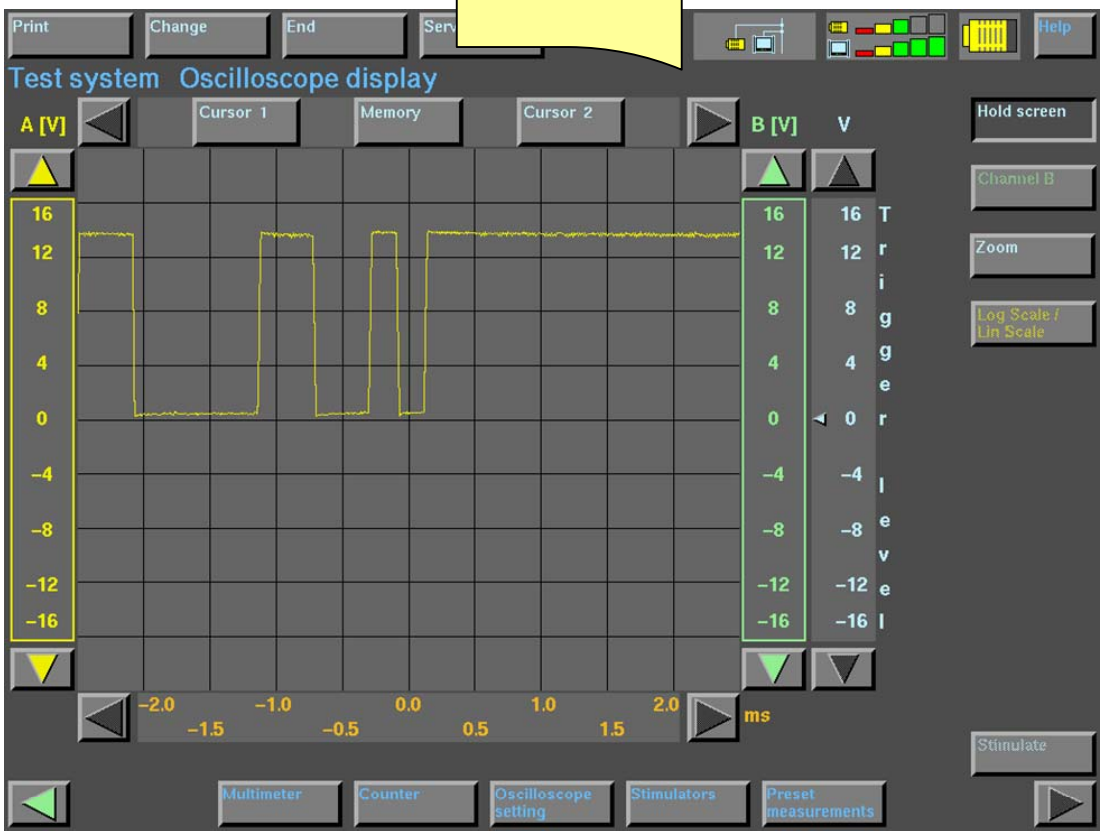



A
B
C
Perform wire test from Pin 1 X01198 to Pin 2 of Defrost flap motor. Is wire good?
YES
Replace IHKA module.
NO
Repair wire.
NO
Check LIN Bus signal at pin 3 of next motor in line on Bus. Continue check for all flap motors on LIN Bus until an incorrect Bus signal is found. Once an incorrect signal is found disconnect motor being checked and then the next one in line.
NO
Order of flap motors on LIN Bus
1. Defrost flap motor (M35a)
2. Fresh air/recirculating air flap motor (M111)
3. Ventilation flap motor (M38)
4. Rear compartment mixing flap motor (M4723)
5. Mixed air flap motor right (M154)
6. Front mixing flap motor (M4729)
7. Mixing air flap motor, left (M153)
8. Footwell flap motor (M31)
Perform wire test from pin 3 of motor being checked to pin 2 of next motor inline Note: connectors should be unplugged when performing wire test Is wiring good?
NO
YES
Repair wire.
NO
Check power (pin 4) and ground (pin 1) at each flap motor. Are the signals and wiring correct?
YES
Clear faults and verify that system works properly.
YES
Replace faulty motor. Re-address flap motors. Does the system function properly?
NO
Contact Electrical Group Technical Hotline Make printouts of each signal check. Document results in PuMA Case

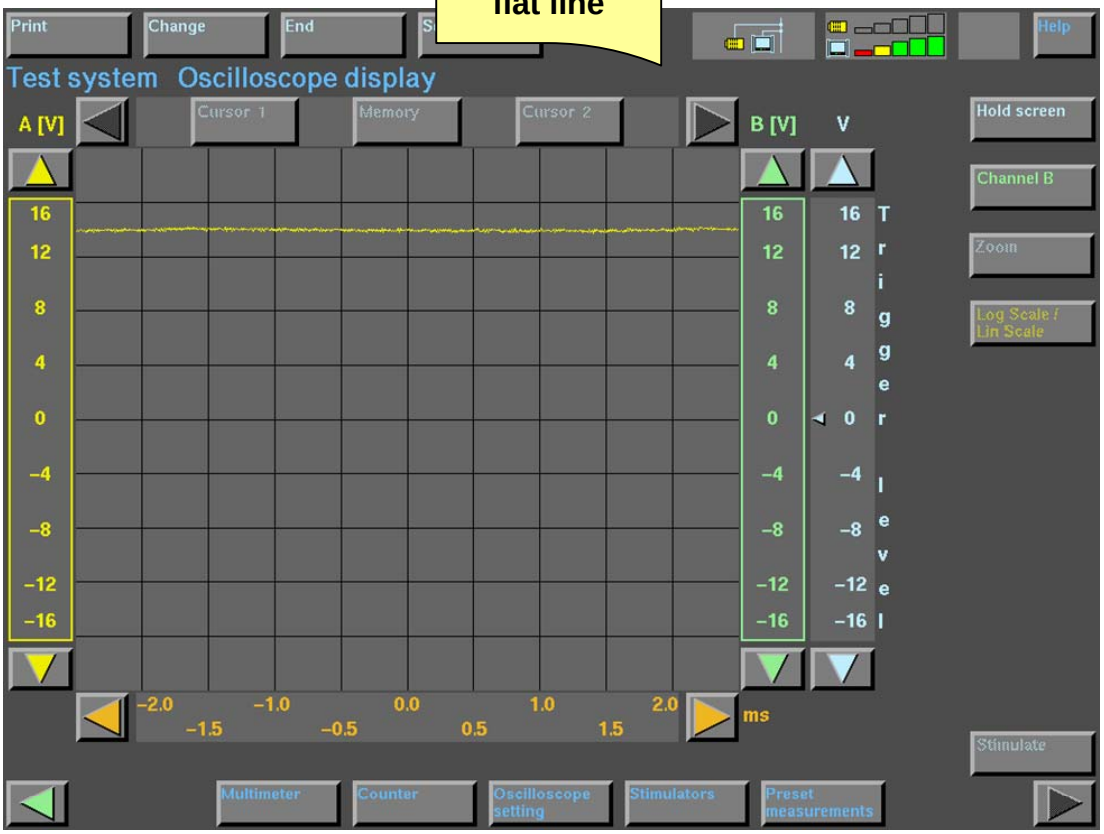
Oscilloscope Setting



Good Operating LIN Bus



Incorrect LIN Bus signal, voltage high flat line



Incorrect LIN Bus signal voltage low flat line