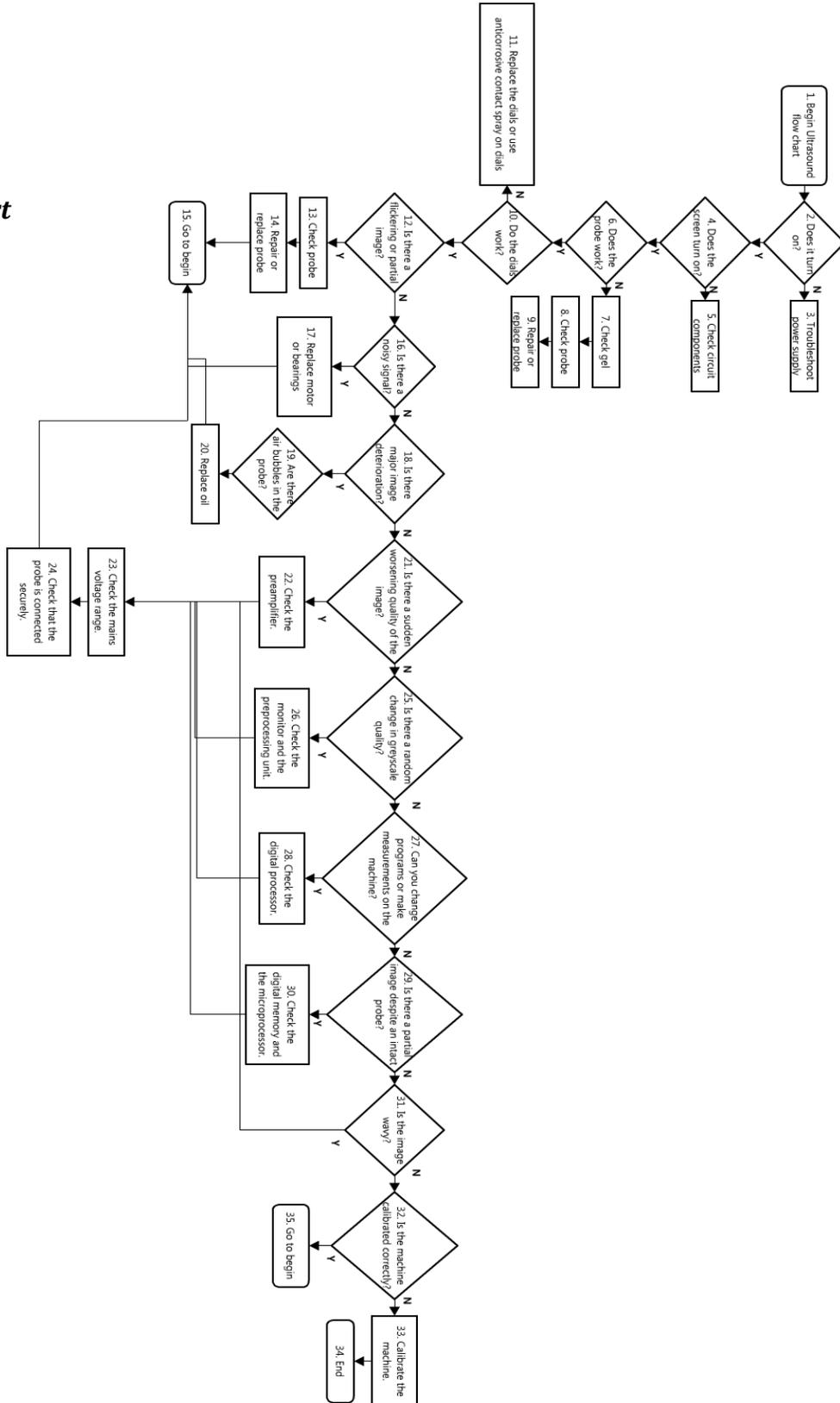


# Ultrasound Repair and Troubleshooting



Flowchart

**Description**

1. Begin Ultrasound Flow Chart	Begin Ultrasound Flow Chart
2. Does it turn on?	Does it turn on?
3. Troubleshoot Power Supply	See power supply flowchart
4. Does the screen turn on?	Does the screen turn on?
5. Check circuit components	Troubleshoot the circuit (see troubleshooting guide)
6. Does the probe work?	Does the machine show an image?
7. Check gel.	Is there enough of the proper gel.
8. Check probe.	Ensure that the probe is properly connected and undamaged.
9. Repair or replace probe.	Solder the broken connections or replace the probe.
10. Do the dials work?	Do the dials properly control the machine?
11. Replace dials or use anticorrosive contact spray on dials.	Replace or use anticorrosive contact spray on dials.
12. Is there a flickery or partial image	Does the image on the screen have missing sections? Does the screen flicker?
13. Check probe.	Gently pull on the cable at different points to see when the image flickers. This is where the cable is broken.  For composite probes wave a pencil across the transducer. If not seen, this is where the transducer is not

	connected.
14. Repair or replace probe.	Solder the broken connections or replace the probe.
15. Go to begin.	Go to begin.
16. Is there a noisy signal?	Is there distortion in the produced image?
17. Replace motor or bearings	Replace the motor or bearings if they are broken or damaged.
18. Is there major image deterioration?	Is the image severely deteriorated?
19. Are there air bubbles in the probe?	Does the oil in the probe have air bubbles in it?
20. Replace oil.	Replace oil.
21. Is there a sudden worsening quality of the image?	Does the image have sudden changes in quality?
22. Check the preamplifier.	Check the preamplifier.
23. Check the mains voltage range.	Check the outlet voltage range.
24. Check that the probe is connected securely.	Check that the probe is connected securely.
25. Is there a random change in greyscale quality?	Is there a random change in greyscale quality?
26. Check the monitor and the preprocessing unit.	Check the monitor and the preprocessing unit.
27. Can you change programs or make measurements on the machine?	Can you change programs or make measurements on the machine?

28. Check the digital processor.	Check the digital processor.
29. Is there a partial image despite an intact probe?	Is there a partial image despite an intact probe?
30. Check the digital memory and the microprocessor.	Check the digital memory and the microprocessor.
31. Is the image wavy?	Is the image wavy?
32. Is the machine calibrated correctly?	Is the machine calibrated correctly?
33. Go to begin.	Got to begin.
34. Calibrate the machine.	Calibrate the machine.
35. End	End