



FUSION SPLICER SERVICE

Error & Troubleshooting Guide

Common fusion splicer error messages across Fujikura, Sumitomo, INNO, Fitel and others, with what each one means and how to fix it.

The wording on screen changes between brands, but the underlying causes and the fixes are consistent. Most splicer trouble comes down to three things, in this order: a dirty V-groove, worn electrodes, or a bad cleave. Work through those first. The tables below cover the messages we get asked about most. If a fix here does not clear it, the unit likely needs bench service, and that is what we do.

Arc & Electrode Errors

Message / Symptom	What it means	What to do
Strong Arc / Weak Arc Power	The arc is too strong or weak for an AUTO splice mode to adjust. Usually drifted calibration or worn electrodes.	Run an Arc Calibration with standard G.652 single-mode fiber and re-splice. If it does not resolve, replace the electrodes.
Too Left / Too Right Arc	The arc field is not centered between the electrodes. Caused by damaged electrodes or excessive glass buildup.	Replace the electrodes using the Replace Electrodes function, then run a fresh arc calibration.
Not Adequate (after Fusing Power Calibration)	The arc could not be fully calibrated in one cycle.	Run arc calibration again, repeating until you see Good for both Power and Position.
Fluttering / unstable arc, sizzling noise, bubbles	Classic worn-electrode symptoms. Electrodes are typically due around 1,000 to 6,000 arcs depending on model.	Replace and condition the electrodes, then recalibrate the arc. Verify with test splices.
Fiber Separated / Fiber burn-back	Fibers burn back instead of fusing. Often from calibrating with the wrong fiber, making standard arc power too strong.	Perform arc calibration only with standard G.652 SMF. Re-run and confirm before splicing.

Alignment & Fiber Detection Errors

Message / Symptom	What it means	What to do
Left / Right Fiber Not Found	Fiber set too far back, debris in the V-groove, or dirty objective lenses. Worst case, a camera or optical fault.	Reseat the fiber at the bottom of the V-groove. Clean the groove and lenses with 99% IPA. If it persists, it needs bench service.
Alignment Error (L / R / LR) / high fiber offset	Dust in the V-groove or on the fiber, contaminated clamps, or glass buildup causing axis offset.	Deep-clean V-grooves, clamps, and bare-fiber pads. Reseat fiber. Enable E-ACAS clamp adjustment where available. On some units, worn V-grooves need replacing.
Large Cleave Angle / Cleave Shape NG	Bad cleave feeding the splicer a poor end face, or dirty objective lenses giving a false reading.	Clean the cleaver and rotate to a fresh blade position, re-prepare the fiber. Wipe the objective lenses if a clean cleave does not clear it.
Large Gap / Large Gap Offset	The gap between fibers cannot be set or inspected. Usually dirty lenses or misalignment.	Clean both objective lenses with separate swabs. Reseat the fiber. Re-run the splice.
Right / Left fiber core dirty (pre-splice warning)	The splicer detected contamination on the fiber before splicing (common on INNO units).	Re-clean and re-cleave the fiber. Correct preparation, then proceed.

Splice Quality Problems

Message / Symptom	What it means	What to do
High splice loss / high estimated loss (>0.1 dB)	Drifted arc calibration, worn electrodes, dirty V-groove, bad cleave, or motor wear.	Recalibrate arc, service electrodes, clean grooves, check the cleaver. Verify against a known reference.
Bubbles in the splice	Contamination or a bad cleave, sometimes insufficient pre-fuse time.	Clean fiber and components, verify cleave quality, recalibrate arc, re-splice.
Splice too fat	Too much arc energy or excess fiber overlap, so molten glass accumulates at the joint.	Reduce overlap and recalibrate arc power. Re-check alignment.
Splice too thin	Weak arc power or too little overlap.	Recalibrate arc power and adjust overlap. Confirm with test splices.
Fibers breaking on the proof test	Weak fusion, or contamination on V-grooves and bare-fiber pads. A worn cleaver or stripper also leaves fiber prone to snapping.	Re-run the arc test and recalibrate. Deep-clean grooves and pads. Check the cleaver and stripper.

Power, Display & Mechanical Faults

Message / Symptom	What it means	What to do
Will not power on / no boot	Failed battery or charge circuit, power-supply fault, or a main-board issue.	Verify the power cord and that the supply LED lights. Check the battery is charged. If it still will not boot, it needs board-level service.
Boots then freezes / stuck on a screen	If motherboard info shows then locks up, likely firmware or a board fault. If nothing shows, suspect the main board.	Note whether boot info appears. Firmware re-flash or board repair is a bench job, but usually fixable. Do not scrap over a no-boot.
Screen blank, cracked, or unresponsive	Damaged LCD or touch panel, loose ribbon, or a display-driver fault.	LCD and touch-panel replacement, ribbon reseating, and a full functional check.
Heater / oven not shrinking sleeves	Failed heater element, broken wiring, or a heater-control fault.	Heater element and wiring service, then heater calibration to correct shrink temperature and time.
Motor error (X / Y / Z / focus)	Debris or dried lubricant in the motor track, worn gears, lost home position, or a driver-board fault.	Clean and re-lubricate the track, re-home, replace worn gears or belts, repair the driver board.

The three-step check that solves most problems

1. Clean first. Deep-clean the V-grooves, clamps, and objective lenses with 99% isopropyl alcohol and lint-free swabs. Dust here causes more alignment errors and high loss than anything else.
2. Check the cleaver. A worn or dirty cleaver throws a high cleave angle, and the splicer fuses that bad cut into a bad splice. Rotate to a fresh blade position or replace the blade.
3. Service the electrodes and recalibrate. If cleaning and a good cleave do not fix it, replace and condition the electrodes, then run an arc calibration until it reads Good.

Still not fixed? Aumictech Labs repairs and calibrates fusion splicers across every major brand, current and discontinued. Free evaluation, flat-rate quote before any work, and a test-splice certificate on every unit. Send the model and the exact message on screen to sales@aumictech.com and we will tell you what it takes before you ship.

This guide is general reference. Always consult your splicer's instruction manual for model-specific procedures. Electrode life and menu names vary by model.