

DRAFT FOR REVIEW — Not Doctor-approved for training. VERIFY items must be cleared before competency use.



IN-HOUSE LABORATORY

Cypress & Katy, TX

Document ID: SOP-LAB-010

Version 0.1 DRAFT | Target effective 09/10/2026

Pro 2 Printer Maintenance

Daily / weekly / monthly Pro 2 maintenance

Smile Avenue Family Dentistry — In-House Laboratory

SprintRay Pro 2 care (daily / weekly / monthly)

Document ID	SOP-LAB-010
Version	0.1 DRAFT FOR REVIEW
Effective (target)	09/10/2026
Owner	Lab Technician (process) / Doctor (clinical release)
Stack	Pro 2 (primary); resin handling per SOP-LAB-001
Status	DRAFT FOR REVIEW — do not train from this until Doctor sign-off

Related: SOP-LAB-001 (resin/IPA/PPE); product fabrication SOPs

1. Purpose

Keep the Smile Avenue SprintRay **Pro 2** clean, optically clear, and software-current so print quality stays consistent and failures are caught before cases are ruined.

2. Scope

In scope: Build platform care; resin tank inspect/clean/replace criteria; UV lid / hood habits; Optical Panel cleaning; resin handling on the printer; software updates; when to stop and escalate.

Out of scope: RayWare design; ProWash S / NanoCure (see 011 / 012); annual ProTection remote maintenance videos beyond routine lab care (**VERIFY** if practice is enrolled in ProTection / annual remote maintenance).

3. Who

Role	Responsibility
Lab Technician	Daily/weekly/monthly care; first-line troubleshooting; log tank liters / replacements (VERIFY log)
Trainer / Lead Lab Technician	Spot-check Optical Panel and tank condition; competency
Doctor	Authorize tank/platform/Optical Panel replacement spend; clinical remake decisions

4. Safety

- Follow SOP-LAB-001 PPE for all open-resin and IPA work.
- IPA $\geq 91\%$ on soft towels only — **never pour IPA into the resin tank** (can damage the film).
- Never put metal scrapers or the print-removal tool **into** the resin tank. Only resin, silicone wiper, gloved hand, and build platform belong in the tank.
- Do not touch the lens **beneath** the Optical Panel.
- Keep the red UV hood closed when not accessing the build area.
- Damaged build platform: **do not use** — can damage the tank and cause spills.

5. Materials

Item	Notes
IPA $\geq 91\%$	Soft non-abrasive cloth / soft shop towel
Glass cleaner	For Optical Panel second wipe (SprintRay Optical Panel guide)
Print removal tool / scraper	Platform only — never into tank
Silicone resin wiper	Tank agitation / leveling as needed
~200 μm mesh filter	When emptying tank back to bottle
Replacement resin tank	When worn (see replace criteria)
Flashlight / phone light	Low-angle tank inspection

Note on “filters”: SprintRay’s published Pro 2 maintenance set emphasizes **resin mesh filtration** when emptying tanks and a clear **Optical Panel / tank film** light path. An onboard **air filter** replacement cadence was **not found** in SprintRay Support articles reviewed for this draft — mark **VERIFY** if hardware has a user-serviceable air filter.

6. Steps by cadence

SprintRay documents **event-based** tank and optical cleaning (debris, failures, storage) more than fixed calendar intervals. Cadences below are **practice operating rhythm** aligned to official *how-to* steps. Items without an official calendar interval are marked **VERIFY**.

6.1 DAILY (or after each print session)

1. **PPE on** (SOP-LAB-001).
2. **After print — remove platform first** (reduces cleanup): unlock magnetic lock (knob), pull platform toward you; set on protected surface.
3. **Clean build platform:** scrape hardened residue; spray/wipe with IPA $\geq 91\%$ and soft cloth until no debris. Confirm clean, dry, undamaged surface before next lock-in.
4. **Resin tank cover:** If finished printing for the day, install the **resin tank lid/cover** to preserve resin (Quick Start / setup guidance).
5. **UV lid:** Use the ergonomic handle; wipe handle with IPA $\geq 91\%$ if contaminated. Keep hood closed when idle.
6. **Resin level:** Confirm between **min and max** before next job; top up only after shake per SOP-LAB-001.
7. **Quick tank look:** No cured chunks, no foreign objects, no tank cover left **on** during a print (never print with tank cover on).
8. **Spills:** Wipe immediately with IPA; do not leave resin on hood, cradle, or Optical Panel area.
9. **End of day:** Platform clean or staged clean; tank covered; hood closed; no open IPA towels left on printer.

6.2 WEEKLY (VERIFY exact weekday — suggested: same day each week)

Perform even if no obvious failure:

1. **Inspect resin tank film** (top and underside) with bright light at a low angle for haze, streaks, cured spots, dust.
2. **Clean resin tank** when residue, long idle resin, partial cures, or print issues appear — and at least weekly if the tank has been in active use (**VERIFY** if weekly is too frequent for low-volume weeks; SprintRay “when to clean” is condition-based):
 - Unlock tank (pull toward you) and lift from cradle.
 - Pour resin back to **same** bottle through **~200 μm** filter.
 - Gently peel cured chunks — **no sharp tools**.
 - Moisten soft towel with IPA $\geq 91\%$; gently wipe **inside**; avoid pressure on film edges; **do not pour IPA into tank**.
 - Wipe **underside** clear window thoroughly, including corners.
 - Re-inspect with low-angle light; reinstall only when clear and dry.
3. **Clean Optical Panel (top surface only):**
 - Inspect for fingerprints, dust, resin.
 - IPA 91% on soft cloth → gentle wipe.
 - Glass cleaner on a **separate** cloth → remove streaks.
 - Fully dry before printing.
 - Never touch internal lens; no abrasives; no excessive pressure.

4. **Exterior / lid handle:** Soft towel + IPA as needed; no solvents on unapproved surfaces.
5. **Software check:** Settings → Software → confirm Automatic Updates **On**; install available update if present (do not power off during install).

6.3 MONTHLY (VERIFY — no official “monthly” checklist published; align to practice calendar)

1. **Tank life review:** SprintRay rates tanks up to ~15 L under normal use and **recommends replacement after ~10 L** for best results. Log cumulative liters / replace date (**VERIFY** how Smile Avenue tracks liters — RayWare/tank UI vs manual log).
2. **Replace tank early** if any: hazy/scratched/rough film; wrinkles/stretch; loud peeling during print; horizontal lines/shift; poor platform adhesion; visible leaks/discoloration.
3. **Platform inspection:** Flatness, gouges, damaged coating — remove from service if damaged.
4. **Optical Panel health:** Persistent distortion after cleaning, deep scratches, or **printer notification** → plan replacement per SprintRay Optical Panel article (user-replaceable when prompted).
5. **Confirm one-tank-per-resin** labeling still matches inventory.
6. **Review open SprintRay Support tickets / recurring fail modes** with Lead Lab Technician.

6.4 Resin handling on the printer (every job)

1. Shake bottle 1 minute (SOP-LAB-001).
2. Assign correct material/shade to tank on touchscreen.
3. Platform locked (magnetic knob) before start.
4. Nothing on platform except the intended print.
5. After failure: clean tank and optical path before reprint (see Troubleshooting).

7. QC

Cadence	QC check
Daily	Platform clean/dry; tank covered when idle; hood closed; resin within min/max
Weekly	Tank film clear under low-angle light; Optical Panel streak-free; software current or update queued
Monthly	Tank liter/age reviewed; damaged tanks/platforms quarantined

8. Troubleshooting

Symptom	First actions
Nothing sticks / partial prints	Clean tank (filter resin, wipe film + underside); clean Optical Panel; confirm resin profile matches tank; retry small test
Contaminated optical path	Clean tank underside + Optical Panel per guides
Loud peel / lines / leaks	Inspect tank wear → replace tank
Platform damage	Stop using platform; escalate replacement
Software / UI oddities	Check network; run update; reboot only after jobs complete
Spill into cradle / panel area	PPE; IPA wipe; do not print until optical path verified clean

9. Escalate

Escalate to	When
Doctor	Case remakes, patient-delivery impact, capital replacement approval
SprintRay Support — 1-800-914-8004	Failures after tank + Optical Panel clean; Optical Panel replacement prompts; hardware errors; unclear tank/platform damage; software install failures

10. Sources

- SprintRay Support — Resin Tank Maintenance: https://support.sprinray.com/en_US/pro-maintenance/resin-tank-maintenance-
- SprintRay Support — Pro 2 Optical Panel: https://support.sprinray.com/en_US/pro-2-getting-started/pro-2-optical-panel
- SprintRay Support — Pro 2 How to Update Software: https://support.sprinray.com/en_US/pro-2-maintenance/pro-2-how-to-update-software
- SprintRay Support — Pro 2 Setup and First Print: https://support.sprinray.com/en_US/pro-2-getting-started/pro-2-setup-and-first-print
- SprintRay Pro 2 Quick Start (platform clean with IPA; tank cover; lid handle IPA) — vendor quick-start PDF referenced in public materials
- Failed-print optical-path guidance: SprintRay “What to do When a Print Fails” support articles (Pro 2: clean Optical Panel + tank film)

11. VERIFY list

1. Weekly cleaning weekday and owner initials log.
2. Whether monthly cadence should be calendar-fixed or “every 20 print days.”

3. How tank liters are tracked (UI vs spreadsheet).
 4. ProTection / annual remote maintenance enrollment and whether annual video checklist is mandatory on top of this SOP.
 5. User-serviceable **air filter** — confirm none, or add official interval if SprintRay documents one for this serial.
 6. Spare tank / platform / Optical Panel on-hand par levels.
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