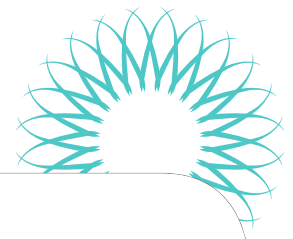




IMS TROUBLESHOOTING GUIDE



In order to determine your specific instrument and cassette needs, review these “Rules of Thumb.” They offer good insight into your decisions about cassettes and equipment.

Problem	Cause	Prevention
• Spotting	<ul style="list-style-type: none">• Insufficient rinsing after ultrasonic cleaning• Insufficient drying after ultrasonic cleaning• Not changing ultrasonic solution• Sterilizer has not been cleaned	<ul style="list-style-type: none">• Rinse thoroughly under steady stream of water for 30 seconds. Use distilled water if possible• Rinse with hot water• Optional: Dip cassettes in alcohol after rinsing• Solution should be changed at least once a day• Follow manufacturer's guidelines for maintenance and cleaning• Use only distilled water for reservoir
• Rust	<ul style="list-style-type: none">• Corrosion from carbon steel instruments spreads to stainless steel instruments• Abrasion can destroy the chromium/oxide surface• Sterilizer not clean	<ul style="list-style-type: none">• Separate stainless and carbon instruments• For carbon steel instruments: Dip in pre-sterilization solution as suggested by sterilizer manufacturer• Lubricate joints and lock area• Follow manufacturer's guidelines for maintenance and cleaning
• Pitting	<ul style="list-style-type: none">• Chemical attack on instruments• Chlorides (water leakage from water softener or additives containing chlorides)• Organic residues (blood, saliva, sweat)	<ul style="list-style-type: none">• Rinse and dry instruments thoroughly• Use approved cleaning and sterilization solutions only, never use household bleach or stain and tartar remover• Use demineralized or distilled water in final rinse.• Use approved cleaning and sterilization solutions only. Never use bleach, tartar or cement remover

Problem	Cause	Prevention
Staining (Resin cassettes)		
• Black/Purple	<ul style="list-style-type: none">• Amalgam left in carrier• Contact with ammonia	<ul style="list-style-type: none">• Thoroughly remove amalgam or other compounds from the instrument prior to processing• If carrier is plugged, sterilize separately and unplug while carrier• Use only proper and approved cleaning agents and rinse thoroughly
• Green	<ul style="list-style-type: none">• Chrome breakdown of instruments	<ul style="list-style-type: none">• Inspect instruments and replace those with cracked handles or peeled plating
• Yellow/Brown	<ul style="list-style-type: none">• Sterilizer has not been cleaned• Normal use discoloration	<ul style="list-style-type: none">• Change reservoir water once a week• Regularly clean chamber and filters according to manufacturer's instructions• Every 6 months soak resin cassettes (without instruments and not in the ultrasonic) in 2 cups bleach 30 minutes to 1 gallon of water for 5 to
• Brown/Blue	<ul style="list-style-type: none">• Sterilizer has not been cleaned	<ul style="list-style-type: none">• Regularly clean chamber and filters according to manufacturer's instructions
• Turning Matte Gray	<ul style="list-style-type: none">• Excessive lime in water• Cement remover has been in contact with instruments	<ul style="list-style-type: none">• Use demineralized or distilled water for softened water in cleaning stage• Wipe off cement removers prior to placing in an automatic washer
Cassette Issues		
• Broken Hinges	<ul style="list-style-type: none">• Overloading/improperly placed instruments• Improperly placed rails	<ul style="list-style-type: none">• Instruments should not protrude from cassette• Only light force is needed to close the cassette• Do not reposition resin cassette rails
• Wet Packs	<ul style="list-style-type: none">• Insufficient drying before or during sterilization• Improper loading of cassettes in sterilizer	<ul style="list-style-type: none">• Thoroughly dry cassette after cleaning, before wrapping• Crack open autoclave sterilizer door during dry cycle• Optional: After sterilization cycle, leave cassettes in warm sterilizer for 10 minutes• Do not overpack sterilizer• Keep cassettes slightly separated within the chamber• Always use sterilizer's cassette rack



REPROCESSING DO'S AND DON'TS

DO

- ...wear Hu-Friedy's Lilac Utility Gloves when handling contaminated cassettes and instruments.
- ...change the ultrasonic solution at least once a day or when visibly soiled. Dirty solution harbors particles that may inhibit efficient cleaning process.
- ...wipe off cement residue, glass ionomer and/or other heavy debris at chairside immediately after use.
- ...use Hu-Friedy's Enzymax products when cleaning Hu-Friedy cassettes and instruments for best results.
- ...sharpen instruments at chairside after sterilization and before a procedure. Hu-Friedy's sharpening stones can be processed along with instruments in the IMS cassette.
- ...autoclave utility gloves in separate sterilization pouches.

DON'T

- ...let instruments protrude from cassettes.
- ...place cassettes in temperatures above 350°F/177°C.
- ...overload the cassette. If there is resistance when closing cassette, stop. Remove excess items and repeat the closing process. Forcing cassette to close under stress may inhibit future performance.
- ...put stainless steel and carbon steel instruments in the same cassette.
- ...reposition the location of the rails in resin cassettes. Improper rail location may cause undue stress on the cassette and can damage it.
- ...use IMS Autoclave Wrap in dry heat sterilization.
- ...run ultrasonic unit or steam autoclave without water.