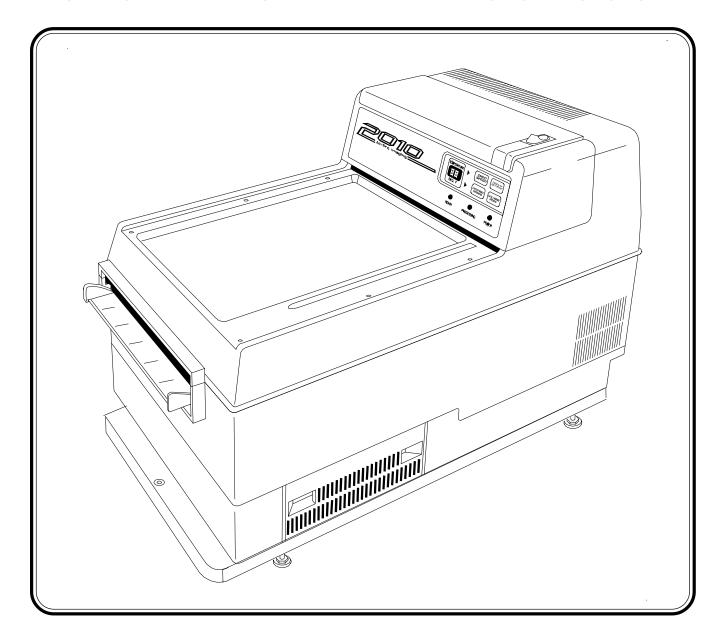


AUTOMATIC FILM PROCESSOR



MANUAL



TABLE OF CONTENTS

OPERATIONS	
Key Parts Identification	4
Operator Controls	6
Daily Operation	7
Maintenance	8
SERVICE	
Installation and Assembly	12
Specifications	15
Plumbing Connections - Option 1	16
Plumbing Connections - Option 2	17
Trouble Shooting	18
SYSTEM SCHEMATIC	25
MAJOR ASSEMBLIES AND PARTS	26
Cover Assembly	27
Base Assembly - Top View	28
Base Assembly - Bottom View	30
Roller Transport Parts	32
Drive Block Assembly	34
OPTIONAL ACCESSORIES	35
ALL-PRO 2010	
With Water Recirculator PN 45002W	36

ABOUT THE ALL-PRO 2010™

EXCELLENCE IN PROCESSOR PERFORMANCE

Your All-Pro 2010 X-ray Film Processor is designed and manufactured in the U.S.A. by All-Pro Imaging. Every processor bearing the All-Pro name meets our high standards for manufacturing and performance excellence. From design through production, you are assured of quality images for every patient, every time.

OVERVIEW

The All-Pro 2010 automatic film processor is designed to make the development of high quality X-rays as easy and dependable as possible. The STANDARD CYCLE processes screen-type films in 2 1/2 minutes. The EXTENDED CYCLE processes direct exposure films in 4 1/4 minutes. To process film, simply select the CYCLE and insert a film into the film inlet. The processing cycle automatically starts. When processing is complete, the film exits into the film receptacle tray on the top of the processor, and the All-Pro 2010 automatically enters the standby mode. To initiate processing again, just insert a film into the film inlet. Whichever processing cycle is chosen, your All-Pro 2010 consistently delivers archival quality films.

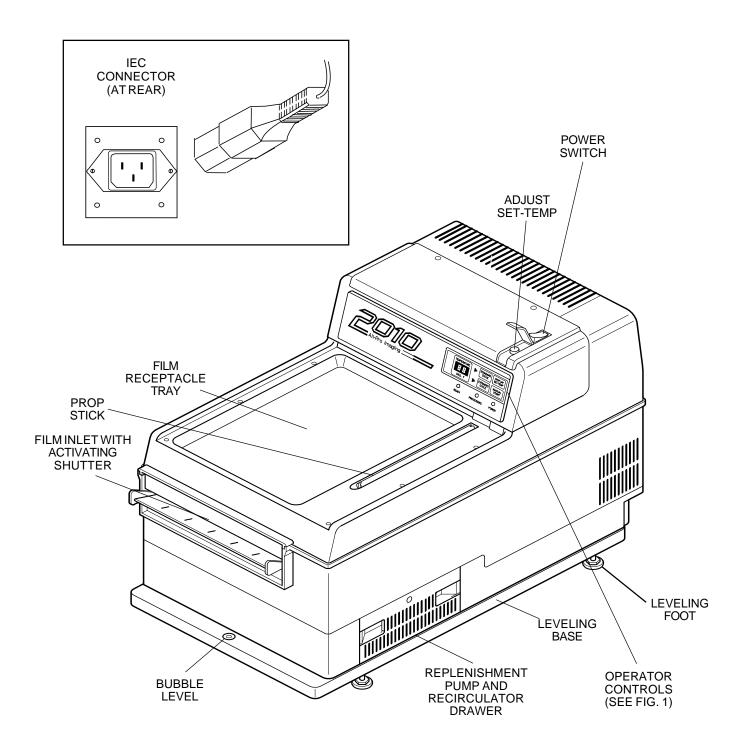
Attention to design detail enhances the performance of the All-Pro 2010. The microprocessor takes the guesswork out of film processing. It triggers an initial, predetermined amount of chemistry to counteract oxidation and replenishes fresh chemistry in proportion to monitored film load. The microprocessor controls and maintains chemistry temperature and controls processing time.

The All-Pro 2010 is also designed with the environment in mind - the microprocessor puts the processor in standby when films aren't being processed to save water and electricity. With separate water and chemistry drain lines, chemistry is easily captured for disposal in accordance with local codes. For locations where local codes require, or the user opts for water conservation, All-Pro offers an All-Pro 2010 Model #45009 with built-in water recirculation.

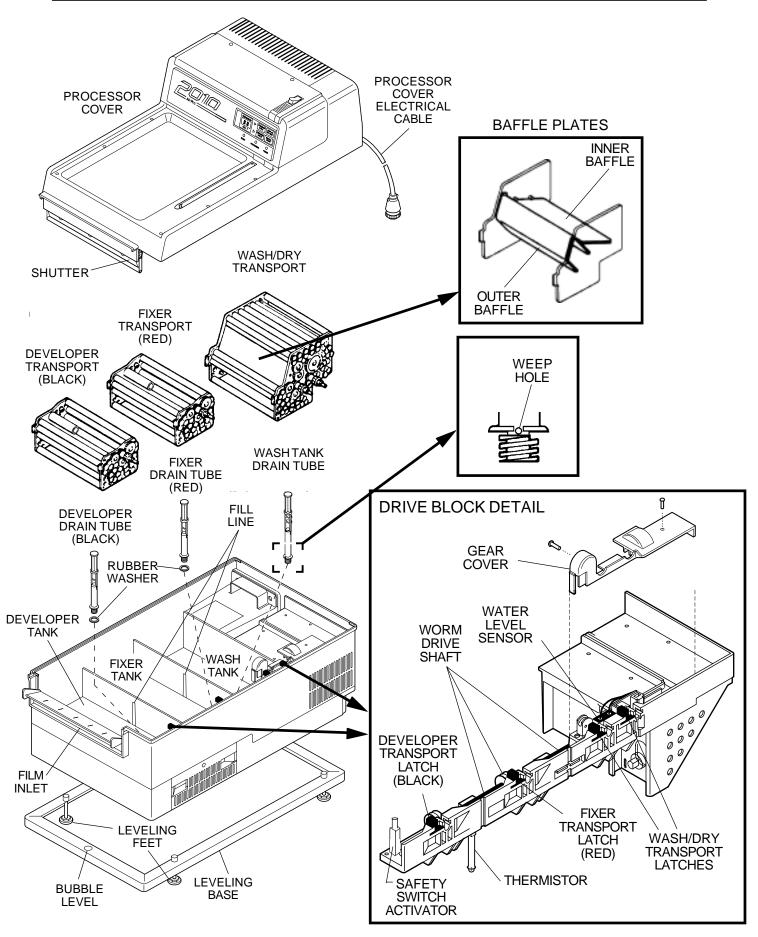
The modular component design makes the All-Pro 2010 easy to maintain and service. To make sure you get top performance from your new processor, please review and follow the installation, assembly, operation, and maintenance procedures described in this MANUAL.

By following a regular maintenance schedule, the All-Pro 2010 will provide years of dependable, reliable service. Congratulations. You made the right choice!

EXTERNAL KEY PARTS IDENTIFICATION



INTERNAL KEY PARTS IDENTIFICATION



Before processing films, we recommend familiarizing yourself with the operator controls (**Fig. 1**):

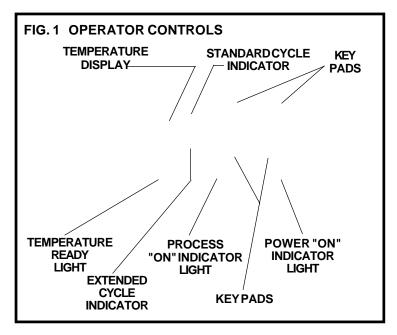
INDICATOR LIGHTS

POWER

Illuminates when the POWER switch (located on top) is in the ON position.

READY

Illuminates when chemistry has reached set point operating temperature factory pre-set at 88°F, 31°C. When READY illuminates, chemistry is at the proper temperature to process films.



PROCESSING

Illuminates when a film has been inserted and is being transported through a process cycle. PROCESSING flashes regularly when the film is being fed and for 5 seconds after the shutter closes. When processing films, wait until PROCESSING stops flashing and beeping stops before inserting the next film, to prevent films from overlapping. PROCESSING remains ON while a processing cycle is running. When the processor is in a stand-by mode, ready to accept films for processing, PROCESSING will not be illuminated. When the MANUAL START mode is selected, the PROCESSING light flashes short-long.

KEY PADS

STANDARD CYCLE

To process screen film. The arrow indicator to the left of the keypad illuminates when selected. Film is processed in 2½ minutes.

EXTENDED CYCLE

To process direct exposure film. The arrow indicator to the left of the keypad illuminates when selected. Film is processed in 4 1/4 minutes.

DISPLAY SET-TEMP

The selected chemistry set point temperature flashes on the TEMPERATURE display when the keypad is pressed and held. Otherwise, the TEMPERATURE display indicates actual chemistry temperature. If the keypad is pressed and the display does not change value, the set point and actual chemistry temperatures are the same and READY is illuminated. If this is not the case, see TROUBLESHOOTING or contact with your dealer. The SET-TEMP is factory pre-set at 88° F (31° C).

MANUAL START

Use this keypad only during cleaning procedures. MANUAL START activates an extended 10 minute process cycle. Processing indicator light flashes (short-long) when in this mode.

BEFORE PROCESSING FILM

CAUTION: Developer and Fixer tanks must contain chemistry before processing film.

1. CHECK FLUID LEVELS IN THE CHEMISTRY REPLENISHMENT BOTTLES.

n Replace or refill bottles when there is 1" or less of chemistry in the bottom of the bottles. Do not use the 1" of chemistry left in the bottles.

2. TURN ON WATER SUPPLY.

3. TURN ON POWER SWITCH

- n Automatically, approximately 4 1/2 oz. (135 ml) of chemistry is pumped into the Developer and Fixer tanks to compensate for oxidation.
- n POWER, TEMPERATURE display, and the selected CYCLE lights illuminate.
- n READY light illuminates when chemistry reaches SET-TEMP (factory set at 88°F/31°C) in approximately 20 40 minutes, depending on initial chemistry temperature.

4. READY TO PROCESS

n When the READY light is on, All-Pro 2010 is at the factory SET-TEMP of 88°F (31°C) and ready to process film.

5. INSERT CLEANING FILM

- n Insert a cleaning film after the READY light illuminates.
- n The cleaning film picks up condensate and/or dried chemistry deposits from the rollers.
- n After the cleaning film exits, the processor returns to stand-by automatically.

PROCESSING FILM

1. SELECT PROCESS CYCLE

- n Choose STANDARD CYCLE for 2½ min. film processing. Press STANDARD CYCLE when the processor is in the stand-by mode (PROCESSING light is not illuminated).
- n Choose EXTENDED CYCLE for 4 1/4 min. processing. Press EXTENDED CYCLE when the processor is in the stand-by mode (when PROCESSING light is not illuminated).

2. INSERT FILM

- n Processing starts automatically when a film is inserted; after the last film exits, the processor automatically returns to standby.
- n Feed large films straight. Be sure to wait until the PROCESSING light stops flashing and the beeping stops before inserting the next film. Wait at least 15 seconds before turning on the lights or opening darkroom door.

3. AT THE END OF THE DAY

- n Turn off the power switch.
- n Turn off the water supply valve.

MAINTENANCE

Cleaning your All-Pro 2010 on a weekly, monthly, and quarterly basis is critical in maintaining quality processor performance. We recommend the maintenance procedure outlined below using Spray 2000 and Formula 2000 cleansers especially formulated for the All-Pro 2010. This suggested maintenance schedule may have to be modified if your processor requires more frequent cleaning.

WEEKLY...Clean roller transports

Caution: Before you remove the cover, the roller transports, or disconnect electrical plugs, turn power switch OFF.

1. REMOVE DEVELOPER AND FIXER ROLLER TRANSPORTS

- n Lift cover and hold open with prop stick.
- n Slide open the latches.
- n Lift the roller transports straight up, and move them straight to the side to avoid dripping chemistry into adjacent tanks. Place the roller transports in a large sink.

NOTE: Dripping just a few drops of Fixer into the Developer tank will contaminate the Developer and result in poor film quality.

2. CLEAN ROLLER TRANSPORTS (Do not soak overnight)

- n Use separate sponges for each transport and warm running water to clean rollers and gears. Be sure to rotate gears while cleaning rollers.
- n Use Spray 2000 for additional cleaning and clean as above.
- n Rinse each roller transport thoroughly.

NOTE: When cleaning the gears, a soft brush can be used to loosen and remove stubborn deposits. Do not use soap, detergents, or abrasive cleaners. Be sure to use a separate sponge for each transport.

3. REINSTALL ROLLER TRANSPORTS

- n Be sure that developer and fixer are at proper levels (to fill line). If they are not, top off with chemistry to the fill line.
- n Slowly lower each transport into its tank. Match color-coded latches to color-coded transport end plates.
- n Do not splash Fixer into Developer tank when installing Fixer transport.
- n Close all the latches.
- n Remove the prop stick and close the cover.

4. PROCESS A CLEANING FILM

- n Turn ON the power.
- n Always process a new cleaning film (after the READY light illuminates) after cleaning the roller transports.

MONTHLY...Change Chemistry

If the bottom of the Developer tank is coated with black residue and/or the white gears on the side of the Developer roller transport are stained grey or black, the Developer has been contaminated. The Developer tank and transport must be cleaned with Formula 2000 (see Quarterly cleaning). See TROUBLE SHOOTING for causes and solutions.

Caution: Do not turn ON the power when the Developer and Fixer tanks are empty.

Turn power switch OFF before removing the cover, the roller transports, or disconnecting electrical cables.

1. REMOVE AND CLEAN DEVELOPER AND FIXER ROLLER TRANSPORTS

- n Turn power switch off. Lift cover and hold open with prop stick.
- n Slide open the latches (two).
- n Lift the Developer and Fixer roller transports out; clean as in the WEEKLY procedure.

2. DRAIN AND CLEAN TANKS

- n Unscrew and remove the Developer drain tube and completely drain the tank. Replace the drain tube, fill with water and repeat this process two or more times. Replace the drain tube and fill the tank with warm water to the fill line.
- n Unscrew and remove the Fixer drain tube and drain the tank. Replace the drain tube, fill with water and repeat this process two or more times. Replace the drain tube and fill the tank with warm water to the fill line.
- n Remove the prop stick, close the cover and turn the power ON.
- n Press MANUAL START.
- n When the cycle ends, drain the tanks.

3. REFILL WITH CHEMISTRY

- n Turn power switch OFF. Lift cover and hold open with prop stick.
- n Fill Fixer tank with chemistry to the fill line. POUR SLOWLY! Do not splash or splatter. If Fixer is splashed into Developer tank, wipe up completely with clean moistened towel or sponge.
- n Fill Developer tank with developer chemistry to the fill line. POUR SLOWLY, taking care not to splash the chemistry.

4. REINSTALL ROLLER TRANSPORTS

- n Slowly lower each transport into its tank. Match color-coded transport end plates to color-coded latches.
- n Do not splash Fixer into Developer tank when installing Fixer transport.
- n Close all the latches (two).
- n Remove the prop stick and close the cover.

5. PROCESS A CLEANING FILM

- n Turn the power ON.
- n Always process a new cleaning film (after READY light illuminates), after cleaning the roller transports.

MAINTENANCE

QUARTERLY ... Clean with Formula 2000

Clean your All-Pro 2010 processor with Formula 2000 Tank and Transport Cleanser every three months or whenever a black residue is evident on roller transports and/or tanks. Formula 2000 (Part Number 43945) is available from your dealer.

Caution: Before you remove the cover, the roller transports, or disconnect electrical plugs, turn power switch OFF. Turn water supply OFF.

USE FORMULA 2000 IN A WELL VENTILATED AREA

1. REMOVE AND RINSE DEVELOPER AND FIXER ROLLER TRANSPORTS

- n Unplug the processor cover electrical cable from the processor base. Remove cover and set aside.
- n Slide open the latches (four)
- n Lift the Developer, Fixer, and Wash/Dry roller transports out; clean as in the WEEKLY procedure.
- n Remove the baffles from the Wash/Dry transport during cleaning. Be sure to reinstall exactly as you removed them.

2. PREPARE PROCESSOR FOR CLEANING WITH FORMULA 2000

- n Drain the Developer and Wash tanks. Refill with water and drain again. Replace the drain tubes. Replace the Wash/Dry Roller Transport if the Wash tank requires no further cleaning.
- n If the Wash tank is excessively dirty, cleaning with Formula 2000 is recommended (see below). When cleaning the Wash tank with Formula 2000, it is necessary to cover the drain tube weep hole with the special washer (supplied with the All-Pro 2010) to prevent the tank from draining (see Internal Key Parts Identification). *Remember to remove this washer after cleaning.*
- n Drain the Fixer tank. Refill with water and drain again. Replace the drain tube and fill the tank with water.
- Pour Formula 2000 Component 1 (large bottle) into the empty Developer tank. Fill the tank with cold water to the fill line. Sprinkle Formula 2000 Component 2 evenly across the Developer tank. The effervescent action of Formula 2000 begins as soon as Component 2 is added. Some odor and vapor will be evident.
- n If the wash tank is to be cleaned with Formula 2000, follow the same procedure.
- n To clean the gears and end plates of the roller transport, dip each end of the transport into the cleaning solution, then carefully reinstall in the appropriate tank. Repeat for each transport being cleaned. **Never use Formula 2000 in the Fixer tank.**
- ${\tt n}\,$ Replace all roller transports; replace the cover, reconnect the cover electrical electrical cable and the power cord.

4. RUN PROCESSOR

- n Turn ON the power switch.
- n Press MANUAL START. Let the processor run with the roller transports in place until the process cycle shuts off (10 min.). For deeper cleaning, press MANUAL START again.
- n Occasionally lift the cover to wipe the rollers and drive gears above the solution level with a sponge while the processor is running to loosen any deposits remaining above the solution level. Use a separate sponge for each tank. Close the cover so that the rollers can resume rotating in the cleaning solution.

5. CLEAN THE ROLLER TRANSPORTS

- n When the cycle finishes, turn OFF the power switch and remove the processor cover.
- n Remove the roller transports and place them in a large sink. Clean with a sponge under warm water. Rotate the gears and rollers while cleaning.
- n Rinse thoroughly to remove all traces of Formula 2000 to avoid contaminating the fresh chemistry!

6. PRELIMINARY RINSE (flushing Formula 2000)

- n Make sure the power switch is OFF.
- n Remove the drain tubes and drain all three tanks. **Dispose of the cleaning solution in accordance with local codes.** Replace the drain tubes.
- n Fill all three tanks with water, turn on the power, push MANUAL START. Run the processor for two minutes, turn power OFF, then drain.

Caution: Do not turn on the power when the Developer and Fixer tanks are empty.

7. FINAL RINSE

- n Fill the Developer and Fixer tanks with water.
- n Turn ON the processor water supply. **Be sure to remove the washer covering the weep hole in the Wash tank drain tube if you cleaned the Wash tank and installed this washer.** Turn on the power switch for two minutes, then turn off the power switch. The replenisher pumps will run and purge the lines.
- n Drain, then refill the Developer and Fixer tanks with water and drain again.
- n Refill the tanks with chemistry, reinstall the roller transports and process a new cleaning film (See MONTHLY MAINTENANCE)

NOTE: Opening the cover during the processing cycle or during a cleaning cycle opens the safety switch and stops only the drive motor. The rollers and drive gears stop rotating. This is a safety feature of the ALL-PRO 2010.

INSTALLATION AND ASSEMBLY

1. UNPACK CONTENTS AND MOUNT THE WALL CHART NEAR THE PROCESSOR

2. MOUNT PROCESSOR ON LEVELING BASE

- n Thread the 4 leveling feet into the leveling base. Place the leveling base on the counter with the bubble level facing front. Adjust the leveling until the bubble is centered and the base is stable.
- n Place the processor base on the leveling base. The posts on top of the leveling base insert into the holes in the bottom of the processor. Make sure the bubble is centered.

3. CONNECT TO PLUMBING

(See Plumbing Connections-Options 1 & 2)

- n Match color-coded drain hoses to corresponding color-coded label on barbed fittings. Mount the hose end onto the barbed fitting by rotating the hose clockwise while pushing. Push the hose flush up against the barbed fitting, leaving no space. If removal of the hose is necessary, rotate clockwise while pulling the hose. No clamps are required as the hose is self-clamping.
- n Chemistry bottles must be placed below the processor or under the counter. **Do not locate replenisher bottles above the processor.**
- n If routing the drain lines, replenishment lines and water inlet hose through the countertop, drill a 2½" diameter hole through the countertop (See Plumbing Connection illustrations). For routing replenishment lines through counter, unscrew the retaining nut under cap to remove the cap assembly. Cut replenishment lines to appropriate length. Reassemble cap after routing lines and hoses through the hole.
- n Connect the flexible water inlet hose to the fitting at the rear of the All-Pro 2010. Connect the other end to a shut-off valve on the main plumbing.
- n Turn on the water supply. Check all plumbing connections for leaks.
- n Install the drain hoses in the drain using one of the following options:

IMPORTANT: Dispose of Developer, Fixer, and wash water in accordance with local codes. See Plumbing Connections.

OPTION 1: Route water (white) drain hose to a vertical 1½" PVC standpipe. Route Developer (black) and Fixer (red) drain hoses to chemistry

recovery containers under the counter.

OPTION 2: Route all three drain hoses into a vertical 1½" PVC standpipe.

NOTE: Hoses must always slope downward to drain pipe or recovery containers with out any "U's" or upward bends in the hose.

NOTE: Hoses routed into drain pipe must be cut so that the ends are at a min. 6" above the standing water in the P-trap at the bottom of the pipe.

NOTE: Hoses routed into chemistry recovery containers must be cut so that the ends are 2" above the highest expected solution level in the recovery container.

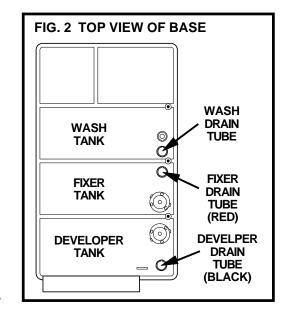
4. INSTALL ROLLER TRANSPORTS

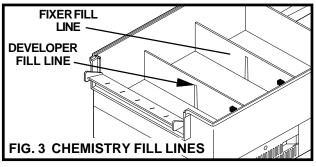
NOTE: DO NOT TURN ON POWER WHEN DEVELOPER AND FIXER TANKS ARE EMPTY!

n Rinse tanks and roller transports with warm water. DO NOT USE SOAP, DETERGENTS, OR CLEANSERS.

INSTALLATION AND ASSEMBLY

- n Screw black drain tube with rubber washer in front Developer tank; red drain tube with rubber washer in the middle Fixer tank; wash drain tube without rubber washer in rear Wash tank. (Fig. 2)
- n Fill the Developer and Fixer Tanks with water to the fill line (**Fig. 3**).
- n Grasp Wash/Dry roller transport with end plates on both sides and install in the rear of Wash tank with the baffle facing forward.
- n Grasp the Fixer roller transport with red end plates by the built-in handle and install in the middle Fixer tank.
- n Grasp the Developer roller transport with black end Plates by the built-in handle and install in the Developer tank.
- n Lock in each roller transport by sliding the color coded latches (four) on the Drive Block toward the rear of the processor (see - Drive Block Detail; Internal Key Parts).
- n Put the cover on the processor base. Route the electrical cable attached to the cover to the back of the processor between the cover and the base. Align the slotted electrical cable connector with the keyed receptacle in the base and push into place, then fasten by rotating the lock ring.
- n Plug one end of line cord into the IEC connector (rear of the processor), plug the other end to a grounded dedicated 115V wall outlet.





TEST PROCESSOR BEFORE OPERATING

NOTE: Opening the cover during the processing cycle or during a cleaning cycle opens the safety switch and stops only the drive motor. The rollers and drive gears stop rotating. This is a safety feature of the ALL-PRO 2010.

1. TEST PROCESSOR WITH WATER

- n Turn ON the power switch (on top of cover). TEMPERATURE display and the selected CYCLE arrow illuminates; the replenisher pumps run.
- n Push DISPLAY SET-TEMP and hold. 88°F (31°C) appears. This temperature is factory set. Consult TROUBLESHOOTING, Developer/Fixer Temperature Control Problems, if this setting needs to be changed.
- n Within 15-35 min. (depending on initial water temperature) the READY light illuminates, indicating that the water has reached 88°F (31°C).
 - **NOTE:** During warm-up, temperature display will not register temperatures below 50°F.
- n Push MANUAL START. The Wash tank fills with water, transport rollers and chemistry agitators turn, dryer heater activates.

NOTE: Replenishment pumps will stop operating if MANUAL START is activated during initial replenishment.

INSTALLATION AND ASSEMBLY

- n Check all hoses and hose fittings for leaks.
- n Turn OFF the power switch, remove the cover and the roller transports.
- n Unscrew the drain tubes, one at a time. Each tank should drain within 90 seconds, or the drain hoses are incorrectly installed (See Trouble Shooting and Plumbing Connections).

THE DAYLIGHT LOADER OR THE QUICKLOADER MAY BE INSTALLED NOW. INSTRUCTIONS ARE PROVIDED WITH EACH UNIT.

2. TEST PROCESSOR WITH CHEMISTRY

- ${\tt n}$ Disconnect the power plug and the cover electrical cable. Remove the cover and the transports.
- n Draintanks.
- n Reinstall the drain tubes in the tanks.
- n Fill the Fixer tank with chemistry to the top of the fill line. POUR SLOWLY! Do not splash or splatter. If fixer splashes into the Developer tank, wipe up completely with a clean moistened towel or sponge.
- n Fill the Developer tank with chemistry to the fill line. POUR SLOWLY!
- n Install the Wash/Dry roller transport in the Wash tank and close the latches.
- n SLOWLY lower the Fixer transport into the Fixer tank and close the latch. Do not splash Fixer into the Developer tank.
- n SLOWLY lower the Developer transport into the Developer tank and close the latch.
- n Insert replenishment tubes into replenishment containers.
- n Reconnect the power plug, reinstall the processor cover and connect the cover electrical cable. Turn the power ON.
- n After the READY light illuminates, run a new cleaning film at STANDARD or EXTENDED CYCLE (normally STANDARD).

3. TEST PROCESSED FILM QUALITY

- n Insert an **unexposed** film and process at STANDARD or EXTENDED CYCLE (normally STANDARD). **The processed film should be completely clear if the film was handled under proper darkroom conditions or with the lights OFF.**
- n Briefly expose a film to room light and then process at STANDARD OR EXTENDED CYCLE

SPECIFICATIONS

ELECTRICAL 115 VAC, 60 Hz, 10 amps. Use a 15 AMP, 3 prong, grounded outlet. A

separate dedicated 15 AMP line is recommended.

WATER FLOW 1/2 gallon per minute water flow (while processing film).

WATER PRESSURE 80 PSI maximum/ 30 PSI minimum. Water source must have a manual

shut-off near processor.

WATER CONNECTION Valved 3/4" male garden hose fitting near rear of processor. 6' hose with

standard female garden hose fittings provided.

WATER BACKFLOW PREVENTION

A vacuum breaker is not normally required because the processor has a 1" air gap between water supply inlet and the maximum possible water

level height.

WATER TEMP 55°F (13°C) to 85°F (29.5°C).

DRAIN 1 1/2" vertical PVC standpipe, open at top. DO NOT DRAIN INTO

COPPER OR BRASS. The top of the standpipe must be 6" below the

bottom of the countertop.

DIMENSIONS 18" (H) x 15" (W) x25"(D) with leveling base.

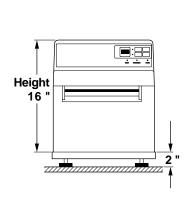
WEIGHT 90 lbs. with water and chemistry (75 lbs empty)

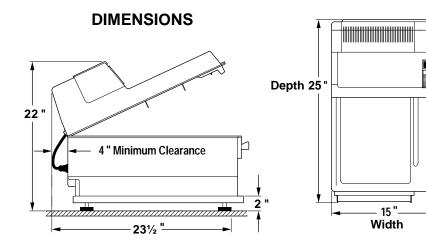
VENTILATION Room air temperature must be below 85°F (29.5°C) during processing.

Because heat is generated during processing, adequate ventilation is required to maintain darkroom temperature. 8-12 volume room air changes

FLUID REPLENISHMENT CHART

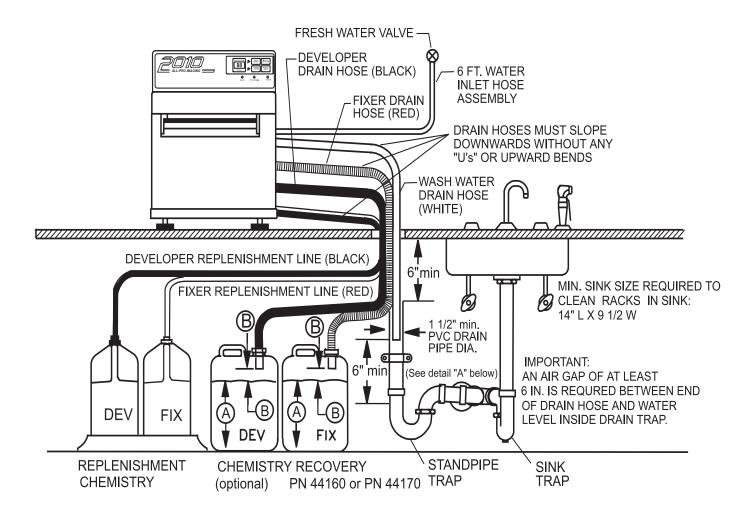
INITIAL POWER ON	4.5 oz. in 95 sec.
EVERY 25" LINEAR FILM	3.5 oz. in 75 sec.





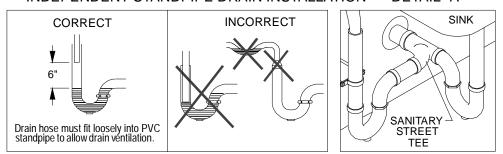
PLUMBING CONNECTIONS - OPTION 1

Chemistry recovery and wash water sewer disposal connection (if permitted by local code*).



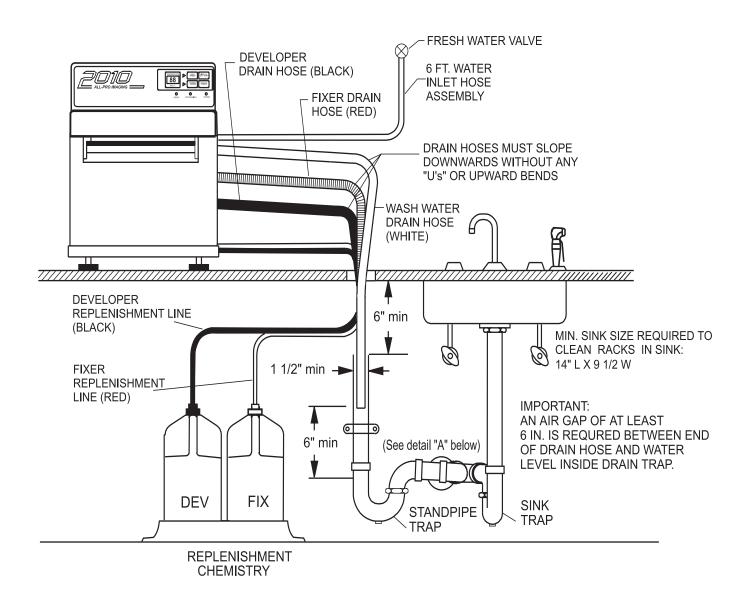
- (A) THE MAXIMUM DISCHARGED FLUID LEVEL
- B 2" MINIMUM

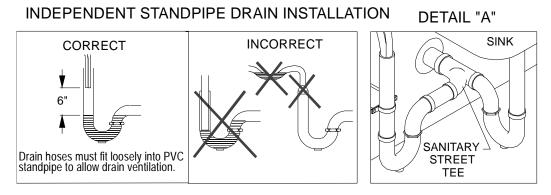
INDEPENDENT STANDPIPE DRAIN INSTALLATION DETAIL "A"



*If local codes do not permit wash water disposal, see ALL-PRO 2010 with water recirculation PN 45002W in this manual.

Chemistry and wash water sewer disposal connection (if permitted by local code*).





*If local codes do not permit sewer disposals, see Plumbing Connections- Option 1 or ALL-PRO 2010 with water recirculation PN 45002W in this manual.

PROBLEM	CAUSE	SOLUTION
Processor totally inactive. No lights when power switch is turned on.	 A Line cord is not plugged into wall outlet or IEC connector at the back of the processor. B. Cover electrical cable is not connected to base receptacle. C. No power supplied to Processor, 115V outlet. D. Possible blown fuse. 	A. Make sure the power switch is OFF. Plug line cord into outlet. Check line cord connection at IEC connector. B. Plug cover electrical cable into base receptacle. C. If still no power try a different outlet. If the processor still does not work, call your authorized ALL-PRO dealer for service/parts. D. Locate fuse next to power cord in back of machine. Replace with 10 Amp fuse if necessary.
Processor won't start when film is inserted.	A. Shutter assembly at film inlet may be dirty. B. Cover assembly is not engaging interlock switch. C. Shutter may be bent or jammed if film is fed into the processor, or if cover assembly has been mishandled.	 A. If shutter doesn't move up/down freely, clean shutter with a moist sponge and dry. B. Make sure cover is seated correctly on base. C. Review Daily Operation, Processing Film. If processor still does not work, call your authorized ALL-PRO dealer for service/parts.
Processor doesn't stop after films exit; processor using excessive amounts of chemistry.	A. Shutter assembly at film inlet may be dirty, bent, or jammed.	A. Shutter must move up freely as film enters the processor and must fall down freely once film is past shutter and inside processor. If it doesn't do this, clean the shutter with a moist sponge and dry. B. To repair or replace a bent or jammed shutter, call your authorized ALL-PRO dealer for service/parts.
4. Processor stops before film exits.	A A processing cycle may be accidentally interrupted if a large motor, like a compressor, vacuum pump, or refrigerator, is on the same circuit as the processor. When the large motor starts, voltage falls too far causing the processor to interrupt the processing cycle and return to stand-by. B. Voltage from the power company is momentarilyinterrupted then restored. The same problem described above will occur. C. Rack assembly may not be square or may have a broken gear. D. Programmed process time incorrect.	 A. Relocate processor to another circuit to a dedicated circuit to resolve this problem. B. Relocate processor to another circuit or to a dedicated circuit. C. Place assembly on a level surface. It should rest flat on all four corners. If it does not, loosen (do not remove) screws on end plates. Hold assembly firmly down on surface while retighten ing screws on end plates. If a gear is broken, call your authorized ALL-PRO dealer for service/parts. D. Measure the Electronics Module programmed process time: With the unit in STANDARD CYCLE, hold the shutter open for 5 seconds and then release. The Processor should run for 3:06 after the shutter closes. With the unit in EXTENDED CYCLE, hold the shutter open for 5 sec. and then release. The Processor should run for 4:55 after the shutter closes. If not , cal your authorized ALL-PRO dealer for service/parts. E. Feed in film straight and be sure to straighten bent films before inserting.

PROBLEM	CAUSE	SOLUTION
5. Fan motor runs, but only blows cold air.	A. Defective air heater.	A Call your authorized ALL-PRO dealer for service/parts.
6. Replenishment pumps do not run.	A Defective replenishment pump motor.	A. Remove screw then slide out the replenishment pump and agitator motor drawer: Turn power switch OFF, wait 5 seconds, then turn power switch ON to initiate a replenishment cycle. Pump should run approximately 90 seconds. if pumps do not run, call your autho rized ALL-PRO dealer for service/parts.
Replenishment pumps run but do not pull chemistry out of bottles.	A. Solution levels in bottle are below 1".B. Loose tubing connections or crimped tubing.	A. Check that pick-up tubing inside the bottle reaches down into the chemistry. When 1" or less of chemistry is left in the bottle, the tubing may not reach far enough down into the solution. Replace with fresh bottles of chemistry. Do not use left over chemistry. B. Check for and correct any loose tubing apparations or princed tubing.
	C. Caps on replenishment bottles are too tight.	connections or crimped tubing. If chemistry is still not replenishing, call your authorized ALL-PRO dealer for service/parts. C. Loosen caps.
Replenisher pumps run but do not empty developer and Fixer bottles evenly.	A Solution levels in bottle are below 1". B. Loose tubing connections or crimped tubing.	A Check that pick-up tubing inside the bottle reaches into chemistry left in the bottle. When 1" or less of chemistry is left in the bottle, the tubing may not reach far enough down into the solution. Replace with fresh bottles of chemistry. B. Check for and correct any loose tubing connections or crimped tubing. If chemistry is still not replenishing, call your authorized ALL-PRO dealer for service/parts.
Chemistry agitators in tanks are not operating.	A. Dirty or defective magnet. KEYED BEARING SHAFT BASE	A Locate chemistry agitators in the bottom of Developer and Fixer tanks. 1. Remove thumb screw, plastic cap, magnet, washer, and ceramic post. 2. Clean all items with SPRAY 2000 and warm water and rinse thoroughly. Reassemble 3. If agitators still do not spin, call your authorized ALL-PRO Dealer for service/parts.
	B. Circulator drawer is not completely closed. C. Defective circulator motor.	B. Close circulator drawer. C. Call your authorized ALL-PRO dealer for service/parts.

PROBLEM	CAUSE SOLUTION
10.Developer / fixer is too hot or too cold. A. SET-TEMP is not set to (Factory pre-set temper) B. Wash water is hotter than 55°F. C. Air temperature in the hotter than 85°F.	With power switch ON, push and hold DISPLAY SET-TEMP to display the temperature that the processor is set to. If 88° F is not flashing, adjust the set point temperature: 1. Lift the lid in front of the power switch and locate the SET-TEMP screw. 2. Press the DISPLAY SET-TEMP keypad and hold while turning the SET-TEMP screw with a flat blade screwdriver. 3. Rotate the SET-TEMP screw until the DISPLAY reads the desired SET-TEMP value (e.g. 88° F). 4. Slowly rotate the SET-TEMP screw clockwise until the DISPLAY just reads 1° F above the desired SET-TEMP value (e.g. 89° F). Note the screw's position. 5. Slowly rotate the SET-TEMP screw counterclockwise until the DISPLAY just reads 1°F below the desired SET-TEMP value (e.g. 87°F). Note the screw's position. 6. Rotate the SET-TEMP screw clockwise to just above halfway between positions #4 (89°F) and #5 (87°F) so that DISPLAY SET-TEMP again reads the desired SET-TEMP (e.g. 88°F). 7. If necessary, repeat this process to be certain that the setting is just about midway between #4 and #5. 8. If temperature cannot be adjusted, or does not remain at adjusted temperature, call your authorized ALL-PRO dealer for service/parts.

SOLUTION

Wash water does not turn on during a process cycle.	A Main water supply is not turned on.	A Check that the main water supply is turned ON.
process cycle.	B. Inlet screen on Water Solenoid may be clogged.	 B. Locate the water inlet hose that connects to the solenoid at the rear of the processor. Turn OFF the water. 1. Disconnect the garden hose fitting. 2. If there is a screen between the hose and the solenoid, remove it and clean. 3. The solenoid fitting also has an inlet
		screen. Clean with a small brush. 4. Reattach the water inlet hose.Turn ON the water. 5. If water still does not turn on, call your authorized ALL-PRO dealer for service/parts.
	C. A blocked or incorrectly installed wash water hose.	C. When drain tube is removed from a wash tank, water should drain in 90 seconds or faster. If wash tank takes longer than 90 seconds to drain, check drain hose. It must slope down, with-out u's or upward bends, to an open 1½" standpipe cut hose to length. If wash water still does not turn on call your authorized ALL-PRO dealer for service/parts.
	D. Water level sensor wet.	D. Remove screws securing molded gear cover to expose top of water level sensor. Dry top and bottom of water level sensor with paper towel.
	E. Defective solenoid or water re-recirculation pump.	E. Call your authorized ALL-PRO dealer for service/parts.
 Wash water does not turn off at the end of a process cycle. 	A. Water solenoid assembly or electronics Module or water re-recirculation pump/PCB may need replacing.	A. Call your authorized ALL-PRO dealer for service/parts.
13. Wash water intermittently turns on/off.	A Improperly installed drain hose.	A. When drain tube is removed from a full wash tank during Process Cycle, water should drain in 90 seconds or less. If wash tank takes longer than 90 seconds to drain, check drain hose. It must slope down, without u's or upward bends, to an open 1½" standpipe. Cut hose to length. If problem continues call your authorized ALL-PRO dealer for service/parts.
	B. Water splashes during filling, or fills too fast.	B. Check water supply pressure. If above 80 psi, install regulator.

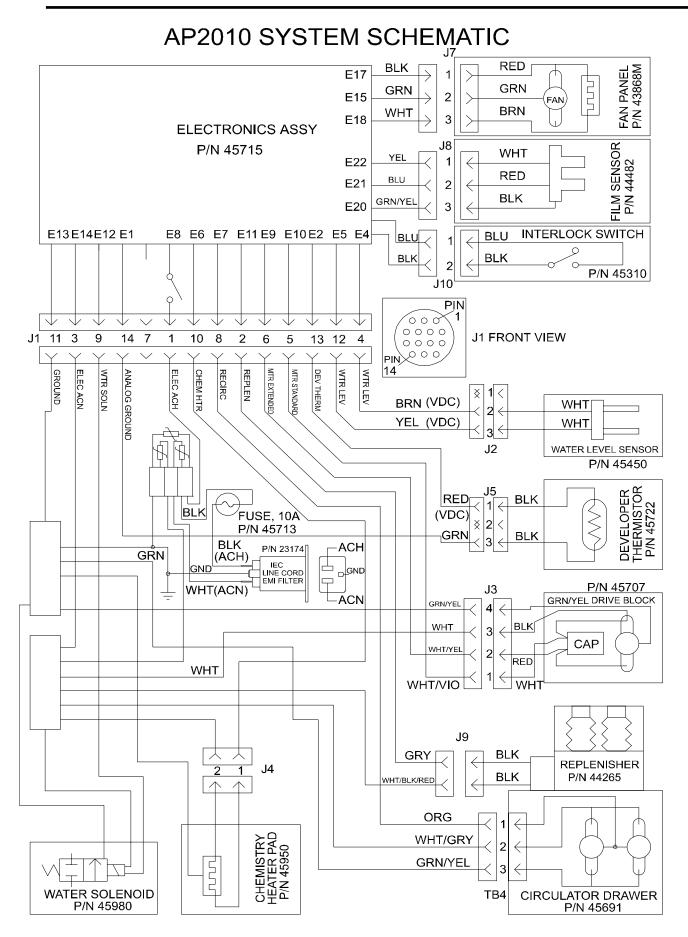
CAUSE

PROBLEM

PROBLEM	CAUSE	SOLUTION
14. Wash water does not fill wash tank within 2 minutes.	A. Dirty inlet screen. B. Slow fill rate. C. Low water pressure.	A Locate the water inlet hose that connects to the solenoid at the rear of the processor. Turn OFF the water. 1. Disconnect the garden hose fitting. 2. If there is a screen between the hose and the solenoid, remove it and clean. 3. The solenoid fitting also has an inlet screen. Clean with a small brush. 4. Reattach the water inlet hose. Turn ON the water. B. Check fill rate, which should be ½ gallon per minute. Follow "A" above. C. Check that incoming water pressure is 30 psi, minimum. If wash water is still not filling tank within 2 minutes, call your authorized ALL-PRO dealer for service/parts.
15. Knocking / thumping noises during processing cycle.	A Baffles in Wash/Dry transport are installed incorrectly. WASH/DRY RACK OUTER BAFFLE OUTER BAFFLE	A See illustration, inner baffle is installed first, processing cycle.
	B. Chemistry agitator magnets in Developer or tank are dirty or there's no chemistry in the tank(s). C. Rack assembly is not fully seated; latches are not closed; broken gears; damaged worms. D. Thumping sounds come from the front top of of the processor. The shutter guard may be bent inward slightly and is rubbing on the inlet rollers of the Developer rack.	B. Clean magnets (see #9); fill tank with fresh chemistry. C. Reseat rack(s); close latches. Check gears, check worms on shaft. If damaged or broken call your authorized ALL-PRO dealer for service/parrts. D. Lift the processor lid. If the sound is eliminated, reposition the shutter guard by loosening the screws securing it to the lid. Adjust position, retighten the screws.
Caked white stains on exit rollers of transport and entry rollers of Wash/Dry transport.	A. Baffles are either not installed at all or are incorrectly in Wash/Dry rack.	A. Check installation. See #15 for correct baffle installation.
Heavy silver deposits and/or gray stains on white gears of Developer transport.	A Developer is contaminated.	A Clean processor and rack, see Maintenance.
Heavy silver deposits on Fixer transport rollers.	A. Spray 2000 not thoroughly rinsed off rollers. B. Fixer is exhausted. Chemistry type being used is not suitable. Replenishment bottles were accidentally allowed to run empty.	A Clean and rinse racks thoroughly. B. Change chemistry in tanks. Monitor replenishment bottles. Replace when level is below 1". Use chemistry suitable for roller transport type processors and film type being used.

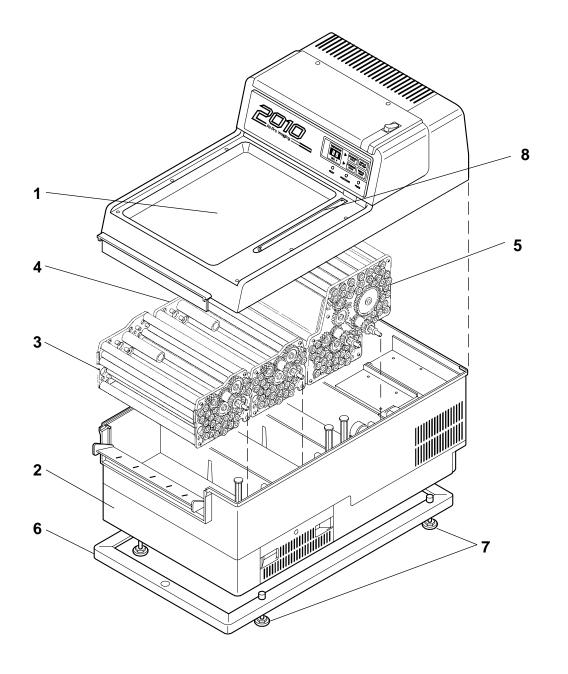
PROBLEM	CAUSE	SOLUTION
18. Heavy silver deposits on Fixer transport rollers. (cont'd)	C. Chemistry has not been replenished as needed for film loads.	C. Check replenishment: 1. Mark the fluid level on the outside of the Fixer and Developer bottles. 2. Turn the processor OFF. Turn the processor ON and listen for replenishment motors. Observe the fluid levels in the chemistry bottles. 3. Check that they drop by an equal amount, approximately 1/4". 4. If chemistry does not drop at all or does not drop by an equal amount, call your authorized ALL-PRO dealer for service/parts.
 Heavy white deposits found throughout entire Wash/Dry rack. 	A. Films were processed with the manual fresh water supply inlet valve to the processor turned OFF.	A. Turn water on, clean transport with SPRAY 2000.
	B. No wash water.	B. Solenoid is not working. Call your authorized ALL-PRO dealer for service/parts.
	C. Wash water flow is too low.	C. Incoming water pressure is below 30 PSI, call your plumber for service.
	D. Dirty inlet screen.	D. Clean screens, see #14
20. Films are too light.	A. Films are underexposed. B. Chemistry may be outdated, under-replenished or contaminated.	A. Check film manufacturer's exposure guidelines. Check calibration of X-ray machines. Check that the film/screen combination is correct per film/screen manufacturer's specifications. Use film recommended for automatic processing. B. Check chemistry manufacturer for expiration dates. Check Chemistry Replenishment table in
	C. Chemistry agitator is not turning in Developer	Specifications to determine correct rate. See #6,7,8. To diagnose contaminated chemistry see #33. C. See # 8 - 9.
	tank.	
	D. Developer / Fixer temperature is below 88°F.	D. Check SET-TEMP should be 88°F. Check actual developer bath temperature with an accurate thermometer. See #10.
	E. Films are processed before READY light illuminates.	E. Wait for READY light.
	F. Developer tank level may be low.	F. Check that drain tube washer is in good condition and that drain tube is firmly seated. To replace damaged drain tubes. call your authorized ALL-PRO dealer for service/parts.

PROBLEM	CAUSE	SOLUTION
21. Films are not clearing. Silver, green, brown color on films.	A Films were processed before READY light illuminated.	A Wait until READY illuminates.
	B. Fixer temperature is too low. C. Chemistry may be outdated, under-replenished, or contaminated.	B. See #10 C. Check chemistry manufacturer for expiration dates. Check Chemistry Replenishment table in Specifications to determine correct rate. See #6, 7, 8. To diagnose contaminated
	D. Fixer tank level may be low.	chemistry see # 33. D. Check that drain tube washer is in good condition and that drain tube is firmly seated. If drain tube is damaged, call your authorized Air Techniques dealer to replace.
	E. Wash water temperature may be too cold (below 55°F).	E. See #10.
	 F. Films were processed with wash water supply turned OFF. 	F. Turn water supply ON.
	G. Wash tank is not filling within 2 minutes. H. Fixer agitator magnet is not turning. I. Incorrect process time for film type	G. See #14 H. See #10 I. Check manufacturer's recommended process time.
22. Emulsion is peeling off film.	 A. Chemistry may be outdated, under-replenished, or contaminated. B. Wash water temperature is too hot (above 100°F) 	A. Check chemistry manufacturer for expiration dates. Use film recommended for automatic processing. Check Chemistry Replenishment table, p.7 to determine correct rate. See #6, 7, 8. To diagnose contaminated chemistry see #33. B. SEE #10
23. Films are wet or tacky.	A. Chemistry may be outdated, under-replenished, or contaminated. B. Room not properly vented. C. Baffles are either not installed at all or are installed incorrectly in the Wash/Dry rack.	A. Check chemistry manufacturer for expiration dates. Check Chemistry Replenishment table at end of Trouble Shooting to determine correct rate. See #6, 7, 8. To diagnose contaminated chemistry see #33. B. Room air temperature must not exceed 80°F during processing. C. Check installation. See #15, for correct baffle installation.
	D. Dryer heater or fan may not be working.	D. Call your authorized ALL-PRO dealer for service/parts.
	E. Wash tank not filling.	E. See #11, 13, 14.
24. Chemistry is outdated.	A. Chemistry has a limited useful shelf life when stored properly.	A Consult manufacturer for information on any suspected case of chemistry.
25.Chemistry is exhausted or under replenished.	A. Failure to change developer and fixer at recommended intervals.	A Change chemistry monthly. Consult chemistry manufacturer's guidelines.
	B. Replenishment bottles are empty. C. Replenisher pumps not working.	B. Replace bottles when level 1" or less. C. Call your authorized ALL-PRO dealer for service/parts.
26. Developer chemistry is contaminated if one or more of these symptoms are present. • Ammonia smell • Dark or black developer • Black deposits on bottom of Developer tank • Gray stains on Developer rack gears • Black streaks or smudges on films • Poor film clarity • Poor film density (blacks are only dark gray)	A. Fixer was dripped or splashed into Developer tank.	A. Perform a Quarterly cleaning.

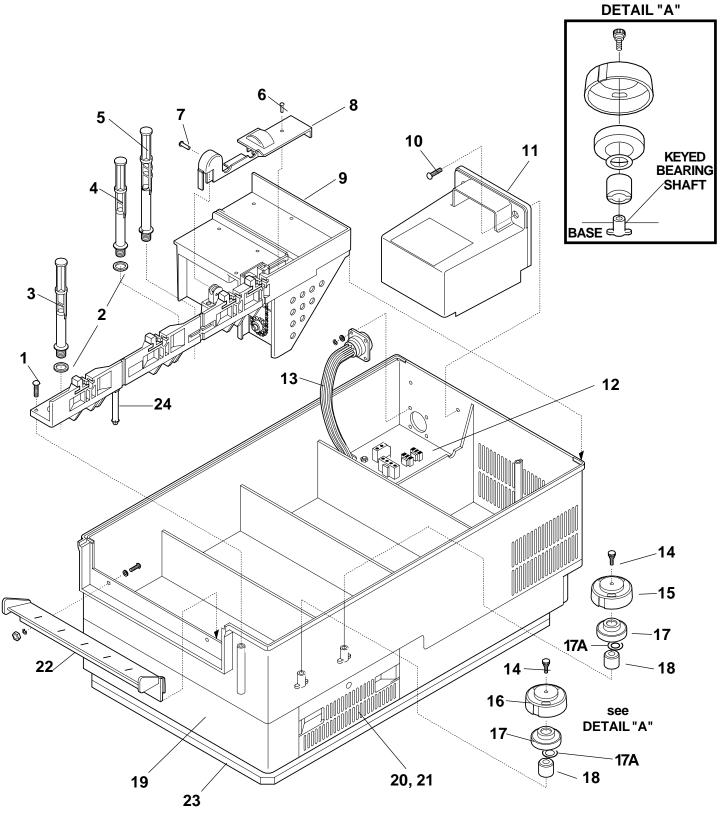


MAJOR ASSEMBLIES AND PARTS

DESCRIPTION	PART NUMBER
Cover Assembly	45705
Base Assembly	45707
Developer Transport	43840M
Fixer Transport .	43845M
Wash/Dry Transport	43850M
Leveling Base Assembly	45100
Leveling Feet	43106
Prop Stick	43115
	Cover Assembly Base Assembly Developer Transport Fixer Transport Wash/Dry Transport Leveling Base Assembly Leveling Feet

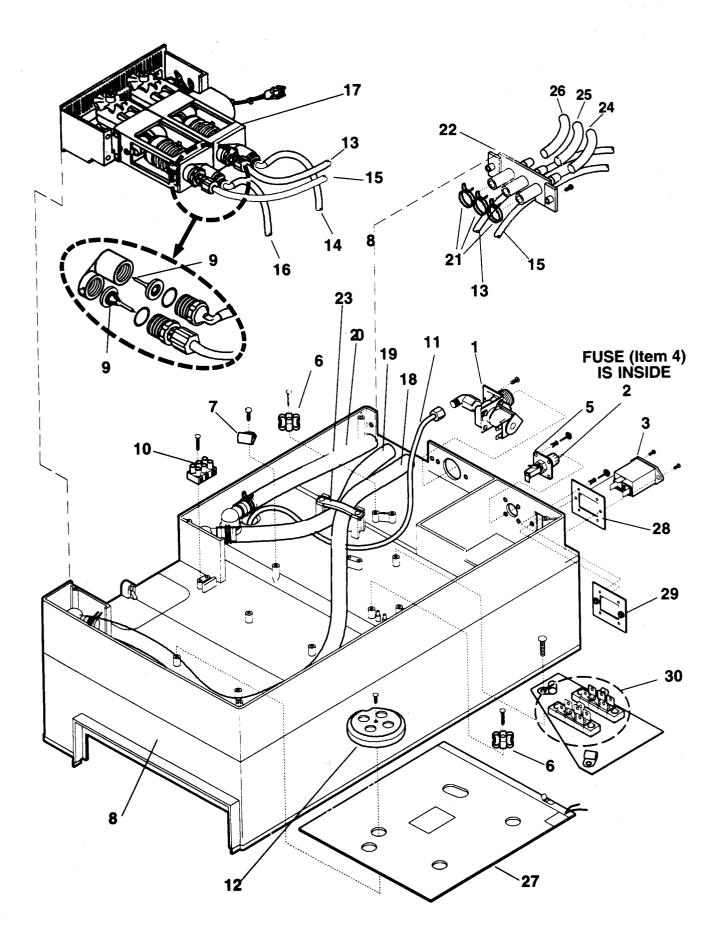


<u>ITEM</u>	DESCRIPTION	PART NUMBER
1 2 3 4 5 6 7 8 9 10 11	Electronics Module Dryer Heater Assembly Dryer Fan Air Heater Assembly Molded Cover Cover Insert w/ Light Seal Shutter Assembly Film Sensor Assembly Shutter Guard Hinge Block Interlock Switch Assembly	45715 43868M 43530 43605 45360 45350 43584 44482 43659 43587 45310
6		DETAIL "B"
5	DETAIL NAME	DETAIL "C"
	DETAIL "A"	DETAIL C
7 See Details A + C	FILM SENSOR 9	CROSS SECTION VIEW 9



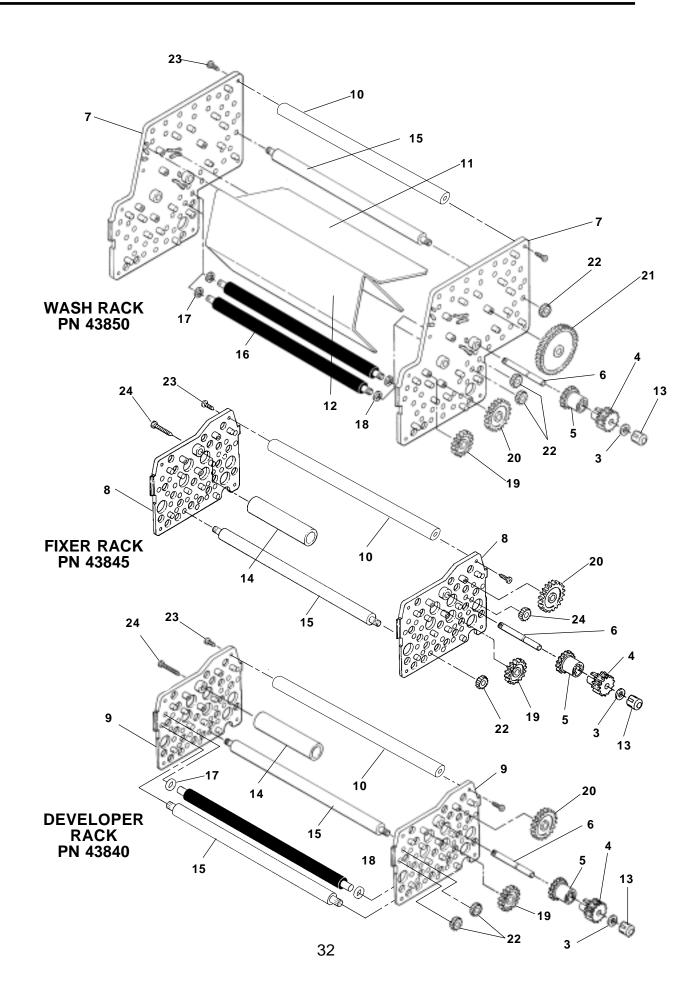
BASE ASSEMBLY - TOP VIEW

<u>ITEM</u>	<u>DESCRIPTION</u> <u>PA</u>	RT NUMBER
1	Screw - Drive Block Mount	30569
2	Drain Tube Washer	43271
3	Drain Tube Assembly - Black (includes item 2)	43286
4	Drain Tube Assembly - Red (includes item 2)	43287
5	Drain Tube - Wash	43270
6	Screw - Gear Cover	30568
7	Screw - Gear Cover	30539
8	Gear Cover, Molded	43258
9	Drive Block Assembly	45704
10	Screw, Electrical Cover	30562
11	Electrical Compartment Cover	43259
12	Component Connector Plate	45445
13	Base Wiring Harness, Complete	45440
14	Thumb Screw, Circulator Cover	30552
15	Fixer Circulator Cover - Red	43385
16	Developer Circulator Cover - Black	43384
17	Circulator Magnet	43233
17A	Teflon Washer	41286
18	Bearing, Ceramic	43232
19	Base, Sub - Assembly	45201
20	Circulator Drawer Assembly	45262
21	Circulator Drawer Replacement Kit	45691
22	Film Feeder, Modified	45567
23	Bottom Plate Assembly	43885
24	Temperature Sensor Assembly (see Drive Block/Assembly	y) 45722
N/A	Water Level Sensor (see Drive Block/Component Detail)	45450
N/A	Wash Tank Drain Tube Plug Kit	43189
	(used during cleaning)	



BASE ASSEMBLY - BOTTOM VIEW

<u>ITEM</u>	DESCRIPTION	PART NUMBER
1	Solenoid Assembly	45980
2	Fuse Holder	90219
3	Line Cord IEC Connector w. EMI Filter	23174
4	Fuse, Delayed Action, 10 Amp	45713
5	Mounting Panel, Fuse	45258
6	Replenisher Tubing Clamp	44039
7	Cable Clamp	41771
8	Base Sub-Assembly	45201
9	Poppet Valve Kit (includes 2 valves & 2 O-Rings	49793
10	Receptacle, 3-Pin Connector Plug	43437
11	Water Inlet Tube Assembly	45221
12	Heater Pad Hold Down	43859
13	Replenisher Fixer Inlet Tubing (Red)	44043
14	Replenisher Fixer Outlet Tubing (Red)	44041
15	Replenisher Developer Inlet Tubing (Black)	44044
16	Replenisher Developer Outlet Tubing (Black)	44042
17	Replenisher Assembly	44265
18	Tubing, Developer Drain	44209
19	Tubing, Fixer Drain	44210
20	Tubing, Water Drain	44211
21	Clamp, Tank Drain	49963
22	Drain Manifold, Molded	44206
23	Drain Hose Strap	43357
N/A	Bottom Plate (not illustrated)	43885
N/A	Screw, Bottom Plate (not illustrated)	30550
24	Drain Hose, Developer (Black)	44361
25	Drain Hose, Fixer (Red)	44362
26	Drain Hose, Water (White)	44363
27	Silicone Heater Pad Assembly	44758M
28	Exterior IEC Mounting Plate	45436P
29	Interior IEC Mounting Plate	45437
30	Terminal Block Mounting Plate	45439



ROLLER TRANSPORT PARTS

<u>ITEM</u>	DESCRIPTION	PART NUMBER
3	Spacer Washer	43524
4	Drive Gear (14 Tooth) 3/16" Thick	43513
5	Shaft Gear	43509
6	Axle Shaft	43508
7	End Plate, Modified	43512
8	End Plate, Red	43507
9	End Plate, Black	43502
10	Space Bar	43847
11	Baffle Plate, Flat	43852
12	Baffle Plate, "U" Shaped	43851
13	Spacer Retainer	43517
14	Handle	43516
15	Roller, Plastic	43842
16	Roller, Rubber	43843
17	Washer, White	41284
18	Washer, Black	41821
19	Gear (28 Tooth)	43503
20	Gear (36 Tooth)	43504
21	Gear (60 Tooth)	43520
22	Idler Gear (14 Tooth)	43514
23	Screw	30567
24	Screw	30595

DRIVE BLOCK ASSEMBLY

DRIVE DECORAGGENIDET					
<u>ITEM</u>	DESCRIPTION	PART NUMBER			
1 2 3 4 5 5 6 7 8 9 10 11 12 13 14 15 16	Bearing, Shaft Drive Shaft Clamp - Black Drive Shaft Clamp - Red Main Drive Shaft Drive Gear Sprocket (12 tooth) Drive Gear Sprocket (16 tooth) Water Level Sensor Capacitor, Drive Motor Snap Ring Drive Motor Assembly Drive Motor Mounting Plate Molded Drive Block Rack Latch Drive Chain Rack Latch - Black Rack Latch - Red Thermistor	43244 43223 43246 43242 43243 43243-1 45450 44713 41127 45726 43253 43253 43256 43247 43254 43255 45722			
2	3 16 15 13 10 5A				

OPTIONAL ACCESSORIES

FORMULA 2000 CLEANSER

Twin pack (2 bottles)

PN 43945

SPRAY 2000 PN 43965

Each kit contains: 1 liter bottle; 1 sprayer attachment; 4 cleaning webs (a non-abrasive scrubbing pad made for cleaning roller roller transports).

CHEMISTRY RECOVERY CONTAINERS

For capture and recovery of Developer and Fixer; one labeled Fixer, one labeled Developer.

5 gallons, 2 each
2.5 gallons, 2 each
PN 44160
PN 44170

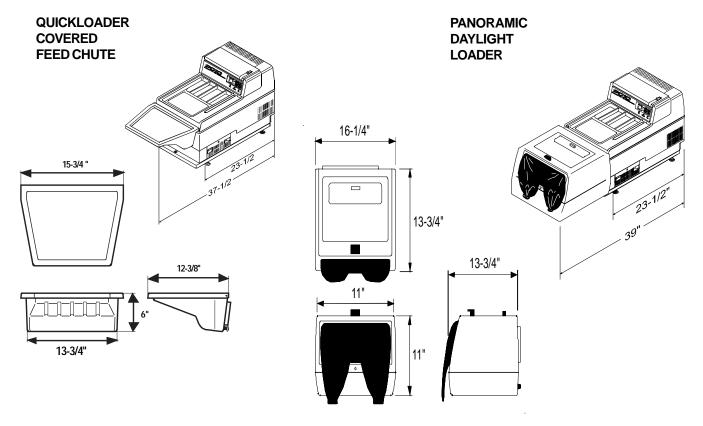
QUICKLOADER COVERED FEED CHUTE

PN 45785

The QuickLoader eliminates waiting until the last film is fully inside the processor before leaving the darkroom. The QuickLoader mounts onto the front of the All-Pro 2010. To load, the operator just lifts the lid, feeds a film into the chute, closes the lid, and leaves the darkroom without fear of exposing the film. Dimensions: 12 3/8" H x 15 3/4" W x 6" D Weight: 3 lbs.

DAYLIGHT LOADER PN 45125

The Daylight Loader, mounted to the front of the All-Pro 2010, allows 8 x 10 films to be processed without a darkroom. The cassette is placed into the loader via an access door located on top of the loader. The operator's hands are inserted into the loader through the light-tight cuffs. The operator removes the exposed film from the cassette and inserts it into the shutter to initiate processing. When the film has fully entered the processor, the hands can be removed and the door lifted to remove the empty cassette before inserting a new one. Dimensions: $16 \, 1/4$ " (W) x $13 \, 3/4$ " (D) x $10 \, 3/4$ " (H) Weight: 20 lbs.



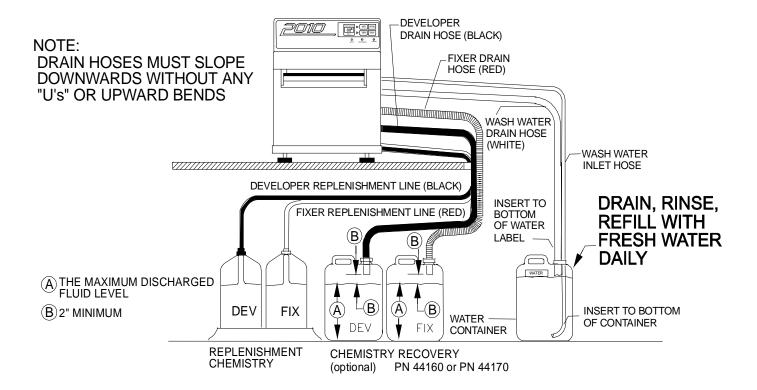
WITH WATER RECIRCULATION PN 45002W

Install the All-Pro 2010 with Water Recirculation System when there is no nearby water, when the user opts for water conservation, or when local codes require the capture and recovery of waste water.

Model #45002W is fitted with an internal water recirculation pump, which replaces the solenoid valve on the regular model, and comes with a $2\frac{1}{2}$ gallon water container. The internal pump recirculates water at about the same rate as water is circulated in the regular version of the 45002W, ensuring the processing of quality films.

PLUMBING CONNECTIONS

- 1. Fill the container with fresh water to the bottom of the WATER label.
- 2. Cut the wash water drain hose so that when it is inserted into the water container it reaches to the bottom of the WATER label. Insert the hose into the container.
- 3. Insert the wash water inlet hose all the way to the bottom of the water container. See the illustration below for the correct installation.



WITH WATER RECIRCULATION PN 45002W

OPERATION AND MAINTENANCE

Follow the same Daily Operation procedure detailed on pages 8 & 9 and the same Weekly, Monthly, and Quarterly Maintenance. In addition **change, the wash water daily.**Follow these steps:

AT THE END OF THE DAY:

- n Turn OFF the POWER switch.
- n Lift the processor cover and remove the wash tank drain tube. Completely drain the Wash tank water into the water container. Replace the wash tank drain tube.
- n Remove the wash water inlet hose and the wash water drain hose from the container. Dispose of the used wash water in accordance with local codes, and thoroughly rinse the container with clean water.
- n Fill with 2½ gallons of fresh water (to the bottom of the WATER label).
- n Insert the wash water inlet hose until it reaches the bottom of the container. Insert the (white) wash water drain hose until it reaches the bottom of the WATER label.

AT THE BEGINNING OF THE DAY:

n Check that the wash water container is properly filled and connected.

NOTES

NOTES



A division of **Air Techniques, Inc.**

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