



# URS500 SOLVENT RECYCLER

**PROVIDES A "GREENER" OPERATION WITH LOWER OPERATING COSTS.**



The URS500 effectively recycles used solvent. The clean, distilled solvent can be used over and over. Typical solvents are paint thinner, gun wash solvent, acetone and MEK. With a URS500, unnecessary solvent purchases are eliminated; purchases drop by 90 % and waste disposal costs drop by 90 %. Profitability improves.

### EASY TO USE:

- 1) Pour 5 gallons of dirty solvent into the bag in the distillation tank.
- 2) Press start; the heater vaporizes the solvent.
- 3) Clean solvent cools as it flows through the condenser to the clean solvent pail for reuse. Residue remains in the heat resistant liner bag in the tank for disposal.

### PERFORMANCE:

Capacity:	20 L
Speed:	4-6 hrs
Power Supply:	115-120 V, 1500 W heater
Display:	LEDs indicate heating and cooling phase
Microprocessor :	Controls work flow. Self diagnostics.
Dimensions:	43 cm w x 43 cm d x 107 cm h; 59 kg



Dirty Solvent    Clean, Recycled Solvent



*PROVIDES CLEAN SOLVENT EVERY DAY*



# URS500 SOLVENT RECYCLER



## FEATURES

- Distillation by vapourization and condensation
- Automatic shut off
- Direct heating - low maintenance with no heating oil to dispose of
- Polished stainless steel, corrosive resistance cabinet for years of dependable service
- Complete with 3 disposable tank liner bags (LB900C-10) and 1 lid gasket (770-2150N)
- Sealed electric element with heavy duty insulation
- One year warranty.

## SAFETY FEATURES

- Control System: A microprocessor continuously monitors and controls the work flow. Self diagnostics.
- Safety: Certified to UL Standard 2208 and CSA Standard 22.2 No. 30 and 88. For use in non hazardous and hazardous locations Class 1 Division 1; Group D.



## SAMPLE COST SAVINGS FOR AN ALL-SOLVENT-USE SHOP

### Cost For Off-Site Disposal

Waste solvent per month	40 GAL
Waste Solvent per yr.	480 GAL
Solvent Replacement Cost (\$10.00 /GAL)	\$4,800
Solvent Disposal Cost (\$5.00 / GAL)	\$2,400
Total (A)	\$7,200

### Cost for On-Site Recycling

Top up with virgin solvent
Disposable bags
Disposal of solid waste
Total (B)
Savings (A-B)

*The costs drop by \$ 6,220 for a shop that uses 40 GAL per month.*



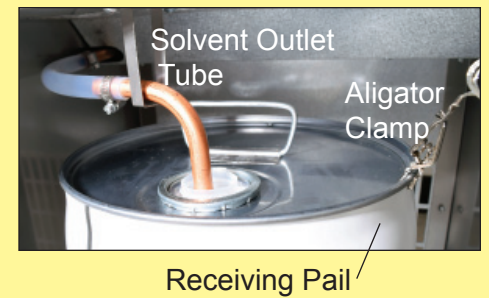
CORPORATION



# URS500 / 600 SERIES SOLVENT RECYCLER STANDARD OPERATING PROCEDURES

## 1) Position Solvent Receiving Pail

Position the receiving pail so the Solvent Outlet Tube (curved) is well into the opening of the pail. The pail must be 5 US Gal (20 L) and approved for containing solvent. If the pail is metal, connect the alligator clamp of the ground wire to the rim of the pail. If you have a model with the Solvent Transfer System (EP2 Models) make sure: the Solvent Outlet Tube is inserted into the opening of the pail, the cap is tight and if the pail is metal, the alligator clamp is attached to the rim of the pail.

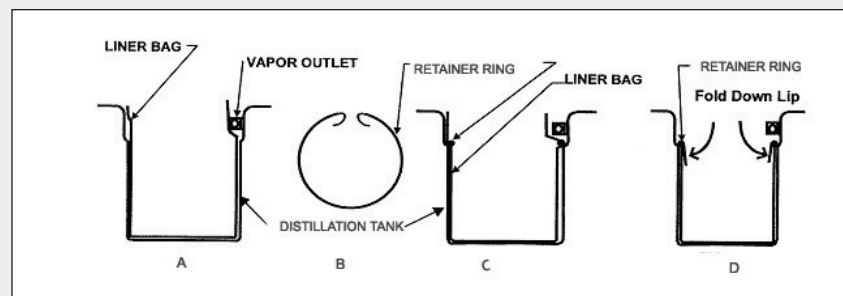


## 2) Install New Liner Bag

- Install a Liner Bag, PN LB900C-10, so that the bottom of the Bag sits flat on the bottom of the Distillation Tank as shown in drawing (A) below.
- With thumb and index finger, squeeze the Retaining Ring and insert it into inside of the Liner Bag as in B and C below. Let it go and make sure it fits securely in the groove. Fold the flap of the liner bag over the retaining ring.

### Caution:

Ensure that the bag material does not 1) block the Vapor Outlet Port or 2) get between the lid and tank.



Installing New Liner Bag



- Fill the distillation tank** with used solvent to 2" below the Retaining Ring. Over filling can cause a blockage in the condenser passage way and leaking under the Lid Gasket. **Close the lid and cover.** To change the temperature set point see the instruction in the manual or on the cover of the solvent recycler.

## 4) Start Recycling

Press "START" button. Distillation starts, "HEAT" and "FAN" lights come on. Heat light flashes. If you want to stop recycling press "STOP". Do not pull the plug in the presence of solvent.

**DANGER: DO NOT OPEN THE COVER AND LID  
UNTIL THE HEAT AND FAN LIGHTS ARE OFF.**



Key Pad

## 5) Recycling

Recycling is complete when "HEAT" and "FAN" lights are off.

## 6) Transfer Clean Solvent

- Remove the receiving pail containing the clean recycled solvent; install a clean empty pail.
- For models with the Solvent Transfer System: turn the Transfer Timer knob clockwise fully to transfer the clean recycled solvent from the Receiving Pail to a destination container.

## 7) Remove Debris:

- Wearing gloves and goggles, remove the Retaining Ring.
- Slowly pull the Liner Bag containing the debris out of the distillation tank in a way that the Liner Bag does not break. Dispose of the debris as a hazardous material unless local regulations state otherwise. Do not leave old waste in the distillation tank and later top up with new solvent to recycle.  
NOTE: If the bag sticks to the bottom of the tank, turn the recycler on for 5 minutes to loosen the bag from the bottom of the tank, then lift the bag out while the tank is warm.  
Do not reuse a liner bag. Use a new liner bag after each recycling for effective removal of waste.

## 8) Clean Distillation Tank

Remove any remaining debris from the Distillation Tank. If necessary add virgin solvent or ethylene glycol (anti freeze) and clean with plastic or wooden tools. Wipe and dry the tank with a cloth. Do not clean with abrasive or metal tools that can damage the tank. Dirt and debris left in the tank can prevent full heat from reaching the solvent during recycling.  
**Note:** There will be about 1/8 Gal (500 ml) of solvent remaining in the Distillation Tank after recycling due to condensation. This solvent, if left in the tank, can cause corrosion.



## 9) Clean Lid Sealing Surface:

Use a cloth. Clean and dry 1) the lid and Lid Gasket and 2) the lid sealing surface which is the top of the tank where the Lid Gasket sits. See photo on right. This cleaning extends the life of the Lid Gasket and prevents leakage. Avoid rotating the lid during cleaning.





# URS500 / URS600 SERIES SOLVENT RECYCLER STANDARD MAINTENANCE AND SAFETY PROCEDURES

## BEFORE EACH USE:

- Inspect the Lid Gasket for cuts and hardened sections. With each recycling, **check for solvent leaks under the Lid Gasket**. A damaged Lid Gasket leads to poor sealing and vapor leakage which is **dangerous** and wasteful. Replace a damaged lid gasket, 770-2150N, per the Maintenance Procedures below. Replace the gasket at least once every 6 months.
- Ensure the top surface of the tank, before closing the lid, is clean and free from paint and contaminated solvent. Ensure the tank is also clean and free from damage.

## EVERY 3 MONTHS:

### Inspection:

- Confirm that the solvent recycler is connected to building power using an **explosion proof plug and receptacle** (or an explosion proof hard connection). An explosion proof connection is mandatory for safe operation and mandatory to maintain product certification to UL2208 and CSA22.2. The explosion proof receptacle is shown at the bottom of this page.
- Confirm that the receiving pail is 5 gallons (20L) and approved to contain solvent. Connect the ground wire to the pail if the pail is metal.
- Treat the area around the solvent recycler (16 inches at the back of the solvent recycler, 10 feet at each side and front) to be a Class 1, Division 2 Explosion Proof Area. Keep this Area clear; free from debris, other hot surfaces, hazards and free from all sources of ignition such as non explosion proof receptacles. Ensure that this Area is well ventilated to dissipate any solvent vapor that arises from the operation of the solvent recycler.

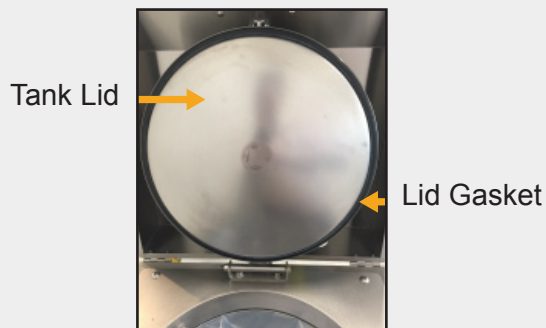
### Cleaning:

- Clean 1) the Condenser and 2) the Vapor Outlet Port per the Maintenance Procedures below.

## MAINTENANCE PROCEDURES

### Replacing The Lid Gasket

1. Open the safety cover and the tank lid.



2. Remove the damaged Lid Gasket using a flat screwdriver.
3. Clean the edge of the lid where the Lid Gasket was located with a scuff / abrasive material (non-woven), so that all contamination is removed before the new Lid Gasket is installed. Wet the gasket with soapy water then press a section of the lid gasket into the groove with your fingers. Gradually work your way around the ring. It is important that the ring is flat with no deformations. This can be checked by the horizontal seam on the ring, which must be straight along its entire length. Do not use tools or sharp objects to install the new Lid Gasket as they may damage the gasket.
4. In order to verify the proper functioning of the lid gasket, recycle 10 litres of clean water.

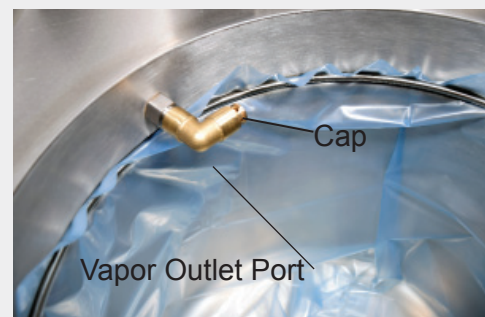
### Cleaning the Condenser

1. Use a vacuum cleaner to clean the Air Inlet Grill and Air Outlet Grill with a brush attachment. This cleaning will remove dust from the Condenser Fins to allow effective cooling of the condenser.



### Cleaning the Vapor Outlet Port

1. Remove the Cap of the Vapor Outlet Port using a small flat screw driver and clean with a metal pin. If necessary, use a small drill or allow the Cap to soak in thinner before cleaning. It is important that all openings in the Cap are free from debris to prevent blockage.



Distillation Tank

2. Unscrew the brass Vapor Outlet Port from the nut on the tank wall by hand or with a water pliers and clean. Do not remove the stainless steel nut from the tank wall.
3. Place a cloth over the Vapor Outlet Port. With a blow gun, blow air through the Solvent Outlet Tube located inside the door, above the receiving pail. Material in the condenser, if any, will exit from the Vapor Outlet Port into the tank.
4. Re-install the Cap and the Vapor Outlet Port. Recycle 5 gallons of clean solvent to flush the Vapor Outlet Port and condenser.



Explosion Proof Receptacle

As this equipment uses solvent, an explosion proof connection is mandatory for safe operation and mandatory to maintain the product certification to UL 2208 and CSA 22.2.