

# **ASSEMBLY INSTRUCTIONS**

**SHORT WAVE** 

SR-4000 | SR-4000-IR | SR-6000 | SR-6000-IR





SR-4000

SR-6000-IR

# **ASSEMBLING YOUR NEW SYSTEM**

Unpack Your System: Check for visible damage and notify freight carrier if any exists. Carefully remove all packing, bubble pack, and cardboard boxes on the bottom of the pallet. USE EXTREME CARE IN UNWRAPPING THE PRE-INSTALLED IRIDIUM ELEMENTS. Tungsten halogen elements are fragile! GENTLY and SLOWLY pull the foam out from around the element, making sure that you do not torque the elements.

**Assemble Mast and Install on Base:** The control box / arm is pre-assembled and wired ready to insert into the vertical posts of the main stand assembly. The brackets are designed to accept the arm assembly and hold it in place while you secure the arm.

**First Use:** Refer to operating instructions before using the curing system.

# **ELEMENT REPLACEMENT INSTRUCTIONS**

Step 1: Check U/L label on heater for proper voltage.

**Step 2:** Remove end and center plate covers.

**Step 3:** Remove the grill guards by gently pulling down, then out on the center post section. Then, lift the bottom center position post of the guard until it comes out of its positioning hole. Slide the guard either left or right until the end comes out of its holes; then, slide out the other end.

**Step 4:** Remove the old element from its support, undo the wire nut connectors, and safely dispose of the old element(s). CAUTION: these elements are filled with inert gasses. When broken, they shatter into small, sharp pieces of glass.

**Step 5:** To install the new element(s), carefully unwrap the element. Be careful not to touch the glass part. Place it in the built-in holder in the cassette and reverse Steps 2 through 4. IMPORTANT NOTE: If you should touch the elements with your fingers, it will be necessary to clean them with denatured alcohol and cotton swabs. Oil from your fingers will cause a focused hot spot on the element and burn them out very rapidly. This type of premature failure is not covered under the systems warranty.

## **ELEMENT REPLACEMENT**

SR-4000/SR-6000 E-SR-2000 (ORDER NO. 17-1210)

# BASIC OPERATING INSTRUCTIONS

**Setup:** Plug unit into appropriate power source.

**To Adjust Systems Operational Height:** Support the control panel handle and extension arms, then loosen the slide lock knob on the mast slide assembly. With one foot on stand base, lift or lower the entire assembly as needed. Normal operating position for most jobs is 1/2 way up the mast. Be sure to adequately re-tighten the slide lock knob after you have repositioned the slider to prevent system control assembly from moving.

**Swiveling/Tilting Heater:** Heater cassette assembly can be swiveled 270° around the extension arm. This makes a narrow foot print so the unit can work in tight locations. The heater head can also tilt down 90° by loosening the locking knob and moving the head down to the desired location.

**Using the Extension Arm:** To raise or lower the extension arms, simply lift off depress into the desired position. Friction holding the extension arm in place can be adjusted

by tightening or loosening the four ¼" Nylock nuts in each "corner" of the extension arm.

Adjusting Heater Cassette: Each heater cassette can be individually adjusted to "clam shell" heat around corners or for door jambs. When heaters are rotated outward, the unit heats a larger area and requires a little more time to cure. When heaters are swiveled in, the cure time and area is reduced. Consider using at a lower temperature when heaters are swiveled in to prevent vehicle damage.

Heater Positioning: Position system so that the heater's cassettes are from 18" to 36" away from the panel. IMPORTANT NOTE: NEVER POSITION HEATERS CLOSER THAN 18" FROM TARGET AREA. You should start out with the systems heater cassettes positioned out at 36" away from the surface until you get a feeling for the power of the system and how to use the controls. Then you can move in closer as required.

## SYSTEM MAINTENANCE

With proper maintenance, your new Infratech system should give you years of reliable, productive service.

- 1. Every 4-6 months, unplug the system and remove end reflectors from heaters and re-check connection of lead wires to the elements.
- 2. Oil from your hands damages elements. If you touch the elements, clean them with denatured alcohol and clean cotton swabs (make sure the elements are cool first).
- 3. The reflectors on the heaters should be kept free of dust or over spray. Use a damp cloth or, if necessary, some fine steel wool or a Scotch-Brite® pad to clean residue.
- 4. Blow off IR sensor and dust with a cotton swab weekly. Do not over spray sensor.

CURING TIME							
PAINT TYPE	DISTANCE FROM SURFACE (NON-IR)	DISTANCE FROM SURFACE (IR)	HEATED AREA	POWER INTESTITY SETTING (NON-IR)	DIGITAL TEMP. SETTING (IR)	CURING TIME (NON-IR)	CURING TIME (IR)
Water Based Primer	30"	24"	4' x 4'	100%	180°	6-8 min.	4-8 min.
Water Based Primer	36"	36"	5' x 6'	100%	140°	6-10 min.	6-10 min.
Solvent Based Primer	30"	24"	4' x 4'	100%	180°	6-8 min.	5-7 min.
Solvent Based Primer	36"	36"	5' x 6'	100%	140°	7-10 min.	7-10 min.
Lacquer	36"	36"	5' x 6'	100%	140°	6-10 min.	6-10 min.
High Solids Clear Topcoat	30"	24"	4' x 4'	100%	180°	11-15 min.	10-14 min.
High Solids Clear Topcoat	36"	36"	5' x 6'	100%	140°	12-16 min.	12-16 min.
Urethane Clear Coat	36"	36"	5' x 6'	100%	140°	6-12 min.	6-12 min.
Polyurethane Clear Coat	36"	36"	5' x 6'	100%	140°	6-12 min.	6-12 min.
Acrylic Enamel	36"	36"	4' x 6'	100%	140°	6-10 min.	6-10 min.

## WORKING WITH INFRARED & PAINT

Every coating system, applicator and shop have many variables (type of material, thickness applied, type of reducer, air temperature, and ambient moisture content) that come into play when applying and curing coating systems. All these variables must taken into consideration when setting curing time settings and power intensity settings. The following is our recommendation to establish the correct setting for you shop:

- 1. Mix paint for the current weather conditions in your area as recommended by manufacturer.
- 2. Start with an intensity setting of 75% power (default setting).
- 3. Set cure time according to product being cured (refer to curing time chart).
- 4. If the job is not cured, add more time at the same intensity to complete the job.
- 5. For the next job using the same materials, increase intensity 5% (or 10% max.) and use the same recommended time.
- 6. At the first sign of solvent pop, back the intensity down 5% and use that setting down 5%.
- 7. Increase time settings until desired cure is achieved.

EXTREME CARE must be taken when using non-IR control systems. Technicians not familiar with the power of these systems are highly encouraged to use the maximum distance or lower power settings on all applications to assist in avoiding damage to the vehicle being repaired until they gain experience in the use of these systems.

#### **WARNINGS:**

- · NEVER block front of heater
- · DO NOT operate within 25' of flammable materials
- DANGER: Do not use within 10' when spraying operations are in progress
- · NEVER service heater without disconnecting from power
- · Source of possible shock
- · Use only with grounded power source
- Only use grounded extension cords that are rated for the amp load of these units

# DIGITAL CONTROL SYSTEM SETUP



## **CONTROL BOX FUNCTIONS**

SR-4000/SR-6000 PROGRAM-MABLE DIGITAL CONTROL

CONTROL SYSTEM FACTORY PRESETS:

Flash Time: 3 Min.
Cure Time: 30 Min.
Intensity: 75%

## **Modifying Control Settings**

With system plugged in to power and "Ready" light on but prior to starting system you can change the factory pre-sets.

**To Change Flash Time:** Press program button until flash time LED flashes, use arrow up or down buttons to increase or decrease time displayed. When light stops flashing, new time is locked into memory.

**To Change Cure Time:** Press program button until cure time LED flashes then use exact same procedure as described above to adjust cure time.

**To Change Intensity Setting:** Press program button until intensity LED flashes; use arrow up or down buttons to

increase or decrease percent of power output displayed. When light stops flashing, new setting is locked into memory. Changes made prior to starting the system will be locked into memory until you change settings using the above procedures.

**Changes During Operation:** With system operating, you can change any setting by using the above instructions. However, any changes made when the system is operating will not be held in memory after the current operating cycle.



### **CONTROL BOX FUNCTIONS**

SR-4000-IR/SR-6000-IR PROGRAMMABLE DIGITAL TEMPERATURE CONTROL

IR CONTROL SYSTEM/AUTO-TEMP CONTROL FACTORY PRESETS:

Flash Time: 3 Min.
Cure Time: 30 Min.
Temperature: 130° F

## **Modifying Control Settings**

With system plugged in to power and "Ready" light on but prior to starting system you can change the factory pre-sets.

**To Change Flash Time:** Press program button until flash time LED flashes, use arrow up or down buttons to increase or decrease time displayed. When light stops flashing, new time is locked into memory.

**To Change Cure Time:** Press program button until cure time LED flashes then use exact same procedure as described above to adjust cure time.

**To Change Temperature Setting:** Press program button until cure temperature led flashes, use arrow up or down buttons to increase or decrease temp displayed. When light

stops flashing, new setting is locked into memory. Changes made prior to starting the system will be locked into memory until you change settings using the above procedures.

**Changes During Operation:** With system operating, you can change any setting by using the above instructions. However, any changes made when the system is operating will not be held in memory after the current operating cycle.

**Change Temperature Calibration:** The infrared sensor controller is factory calibrated to +/- 3° F. If you wish to re-calibrate the control, press the program button until the calibrate LED flashes. Use the arrow up/down buttons to change the setting to match your measuring instrument.

SPECIFICATIONS									
PART NUMBER	MODEL	LENGTH	WATTS	VOLTS	AMP5	SHIPPING WEIGHT (LBS)			
17-1240	SR-4000	35"	4,000	240 - 1 PH	16.7	170			
17-1245	SR-4000-IR	35"	4,000	240 - 1 PH	16.7	170			
17-1360	SR-6000	35"	6,000	240 - 1 PH	25	190			
17-1365	SR-6000-IR	35"	6,000	240 - 1 PH	25	190			

