











435 So. Pacific Street • San Marcos, CA 92078 • (760) 744-0700 • Fax: (760) 744-1943 • E-mail: rfp@rfparts.com

## **SERVICE REPORT FORM**

Date: Tu	ube Brand/Make: Tub		Гуре:	_ Serial #:		
RMA#:	#: Purchased From:			Date Purchased:		
Check Type of Service:	☐ Broadcast	☐ Communication:	s 🛚 Navigation	☐ Amateur (Call Sign:	)	
	☐ Industrial	☐ Oscillator	□ Amplifier	□ CB		
	☐ Plasma	☐ Sputter	■ Welding	☐ Other		
Type of Equipment:						
Equipment Manufacture	er:			Model#:		
Check Modulation Mod	e: 🗆 AM 🗆	IFM □ SSB	□RTTY □	SSTV TV		
Rated Power Output of	Equipment:					
Operating Conditions:						
Total Hours of Fila	ament Operation: _		Total	l Plate Hours:		
Frequ	ency or Channel: _					
	Plate Voltage: _		Volts F	Plate Current:	MA	
Screen Voltage:			Volts Sc	reen Current:	MA	
Grid Bias Voltage:			Volts	Grid Current:	MA	
F	ilament Voltage: _		Volts			
Driving Power:			Watts F	Power Output:	Watts	
	SWR:_					
Was plate voltage on a	t time of failure?	☐ Yes ☐ No				
Was equipment being a	adjusted at time of	failure? 🛚 Yes 🗀	No What v	vas power level at time of failure?		
What are the symptoms	s of failure?					
Describe what happene	ed at time of failure	:	<del></del>			
			<del></del>			
					<del> </del>	
PLEASE	ATTACH O	RIGINAL PUR	CHASE INV	DICE TO THIS REPORT.		
Name (please print)			Signatu	Signature		
Address:			Telepho	ne:		
City:			Fax:		<del></del>	
State:		7in·	Email:			

## **OPERATING INSTRUCTIONS**

Keep this sheet with tube until installed in equipment.

## Read the following Instructions and take all necessary precautions.

#### **OPERATING INSTRUCTIONS**

This information is provided to help you establish safe operating conditions for both you and your power tube.

Do not operate this tube except in accordance with information included in the individual TUBE DATA SHEET, these precautions, and any additional information provided by the tube manufacturer and/or competent safety authorities.

# WARNING – HEALTH HAZARDS CAN EXIST WITH POWER TUBES

Operating and/or handling any electron power tube, whether small or large, may involve one or more of the following hazards:

- a. HIGH VOLTAGE-Normal operating voltages can be deadly.
- b. GLASS EXPLOSION-Many electron tubes have glass envelopes. Breaking the glass can cause scattering of glass particles. Handle glass tubes carefully.
- reach temperatures of several hundred degrees and may cause serious burns.
- MERCURY–Mercury requires special handling to avoid possible health and ecological effects.

To minimize the risk of damage or personal injury, this information must be passed on by you to any employees, technicians, or other personals who may come in contact with your power tube.

### **HIGH VOLTAGE**

Operating voltages for power tubes range from several hundred volts to more than 5,000 volts. Since these voltages can be deadly, equipment must be designed so that no one can come in contact with high voltages. All equipment must include safety enclosures for high-voltage circuits and terminals, with door interlock switches to open the primary circuits of the power supply. In addition, provisions must be made to discharge high-voltage condensers whenever access doors are opened. Never bypass or "cheat" interlock switches to allow operation with access doors open. REMEMBER—HIGH VOLTAGE CAN KILL.

### **GLASS EXPLOSION**

When handling glass tubes, remember that glass is a relatively fragile material, and accidental breakage can result at any time. Breakage will result in flying glass fragments; the larger the tube envelope, the greater the potential hazard. When handling such tubes, safety glasses (or even better, a face shield), heavy clothing and leather gloves should be worn for protection.

#### **HOT SURFACES**

Portions of the tube may reach high temperatures. Hot surfaces may remain hot for an extended time after the tube is shut off. Therefore, to prevent serious personal injury from burns, avoid any bodily contact with these surfaces both during and immediately after tube operation.

#### **MERCURY**

Power tubes containing mercury must be disposed of carefully to avoid possible harmful health and ecological effects. Care must be taken to avoid skin contact, ingestion, or inhalation of vapor. Exposure to mercury may cause serious personal injury including damage to the nervous system.

#### SERVICE REPORT INSTRUCTIONS

In returning an electron tube for test and inspection, the customer gives permission to manufacturer to break the ceramic bulb and to dissect the tube, in case such procedure is considered necessary, for a complete examination to determine whether failure was caused by a manufacturing defect. Moreover, the customer agrees that, in the event such procedure is necessary, he will not hold manufacturer liable for the return of any tube so dissected.

# THE RETURN SHIPMENT MUST BE MADE BY THE CARRIER THAT DELIVERED THE TUBE

Unusual care should be observed in packing tubes involved in adjustment claims, as proper attention cannot be given to a claim unless the tube is delivered to us in the exact condition existing at the time of failure. The tube should be first be packed in a box slightly larger than the tube. This package should be floated in an outer shipping container sufficiently large to allow a minimum of four to six inches of styrofoam, bubble wrap, or foam rubber on all sides of the inner package. The outer container should be labeled with notations such as "Glass", "Fragile", "Handle With Care", etc. A new unused corregated box (of 200 lb. minimum rating) is required for UPS insurance to be valid.

## TRANSPORTATION DAMAGE

All transmitting tubes should be given a thorough visual inspection and should be tested for continuity and short circuits immediately upon delivery. If found to be in normal condition, they should then be tested under load in the equipment in which they are to be used.

MECHANICAL DEFECTS SUCH AS LOOSE, SHORTED OR OPEN ELEMENTS, OPEN FILAMENTS, CRACKED OR BROKEN GLASS, ETC., ARE INDICATIVE OF MISHANDLING IN TRANSPORTATION. If such a condition is found, a damage claim should be filed immediately with the local agent of the transportation company, and the tube and its shipping container should be held in exactly the condition received pending instructions from the transportation company.

#### PACKAGING AND SHIPPING INSTRUCTIONS

Large transmitting tubes returned for inspection should be packed carefully in the original container and shipped via prepaid express to our Service Department.