INSTRUCTIONS FOR USE AND INFORMATION FOR THE ASSEMBLER

X-RAY TUBE HOUSING ASSEMBLIES

Products: X-Ray Tube Housing Assembly

Models: Alta750 X-Ray Tube Housing Assembly

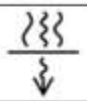
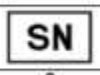
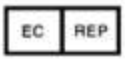
Manufacturer: Richardson Electronics - Healthcare
40W267 Keslinger Road
LaFox, Illinois 60147
USA

Authorized Representative in the European Community:

Richardson Electronics GmbH
Raiffeisenstrasse 5
Donaueschingen
78116
Germany

Originally written in English.

Graphic symbols associated with the product:

Protective Earth; Protective Ground	
Large Focal Spot	
Small Focal Spot	
Radiation Filter	
Consult Instructions for Use	
Caution	
Caution, Hot Surface	
Catalogue Number	
Date of Manufacture	
Manufacturer	
Serial Number	
Temperature Limit	
Atmospheric Pressure Limit	
Humidity Limitation	
Authorized Representative in the European Community	

Intended use: Richardson Healthcare X-Ray Tube Housing Assemblies are designed to emit ionizing radiation and are intended to be used as a component of a CT system which is used for diagnostic and interventional X-Ray applications on a stationary system.

X-Ray Tube Housing Assemblies are components of Computed Tomography systems. These systems must only be operated by qualified personnel including Radiologists and Radiological Technicians.

Consult the equipment manufacturer's instructions regarding proper installation, calibration and service of X-Ray Tube Housing assemblies. Service and maintenance must be provided by a qualified service provider. X-Ray Tube Housing assemblies and related cooling units (heat exchangers) do not contain field serviceable parts. In the event the product is not working properly it should be removed by qualified service personnel and returned to the manufacturer.

Upon receipt of product inspect for damage or breakage. If any damage occurred during transport report to the carrier and file a written report.

Retain the shipping container for use to return product.

Installation of High Voltage Cables:
Refer to installation procedures provided by equipment manufacturer or High Voltage Cable manufacturer.

Storage and Handling:
Temperature for Transport and Storage: Typically -20^{0}C to 75^{0}C. (Consult product specific Tech Data Sheet)

Temperature for Operation: Typically 5^{0}C to 40^{0}C. (Consult product specific Tech Data Sheet)

Safety

Proper use of X-Ray Tube assemblies is the responsibility of the equipment manufacturer, assembler and user. It is important to ensure that the assembly is properly earth grounded and system earth leakage currents comply with appropriate end product safety standards and local requirements.

WARNING: To avoid the risk of electrical shock, this equipment must only be connected to a supply with protective earth.

X-Ray Tube Housing assemblies are provided with Temperature and/or Pressure switches. Consult product specific Tech Data Sheet for details and connection information.

All personnel working with X-Ray Tube Housing assemblies must protect themselves against exposure to radiation. Refer to the system model manual for radiation protection instructions and information related to safety.

Only operate the unit in accordance with the Technical Data Sheet or System Operation Manual.

WARNING: X-Ray Tube housing Assemblies are not Field serviceable. No modifications to the assembly is allowed. In the event the product is not functioning properly, it should be returned to Richardson.

Potential Hazards associated with X-Ray Tube housing Assemblies

High Voltage Shock: Assemblies may operate up to 150,000 volts. When access to High voltage cables or cable receptacles is required, primary circuits must be disabled and any residual charge or capacitor charge must be discharged.

Radiation Exposure: When energized, x-ray radiation is produced which can be harmful to human tissue.

Beryllium: Some X-ray Tubes contain beryllium. In the unlikely event the protective case is compromised and beryllium fragments are expelled dispose in accordance with local regulatory requirements.

Heat: The assembly contains fluids used for their dielectric and cooling properties. Overheating of the assembly may result in rupture and escaping fluids which could result in serious burns.

The unit may operate at elevated temperatures. Do not contact the outer surface of the assembly unless it is cool.

Weight: The unit is heavy. (Consult Product Tech Data for unit specific weight)

Disposal: Take back, proper disposal and recovery of Medical Devices takes place in accordance with European WEEE directive and the requirements of national legislation.

The X-Ray Tube contains beryllium and a cooling fluid. The X-Ray Tube Housing assembly contains lead for radiation shielding and mineral oil. The X-Ray Tube and X-Ray Tube Housing assembly must not be disposed with domestic or industrial waste; they must be disposed in accordance with local regulation.

The X-Ray Tube and X-Ray Tube Housing assembly may be returned to Richardson Healthcare for proper disposal.

Richardson Healthcare strives to be environmentally conscious. Select materials and components are recycled. Controls are in place to assure that all products meet specifications and safety requirements.

Maintenance: All maintenance should be performed by qualified maintenance personnel. Periodically inspect the X-Ray Tube assembly to ensure there are no loose or altered parts. Remove the high voltage cable assembly and clean the receptacle and terminals. If carbon tracks are visible, replace the high voltage cable and clean the high voltage socket. Re-dress with proper insulating material.

Recommended maintenance schedule:

30 days after installation

Every 6 months

Additional Information for the Assembler

X-Ray Tube Housing assemblies should only be installed and maintained by qualified service providers.

Metal center section X-Ray Tube may have a spark gap between the center section of the tube and the housing assembly. For proper monitoring of tube current, refer to the Product Technical Data for proper electrical connections.

End grounded metal X-Ray Tubes may have the center section at earth potential or electrically isolated to provide a method to monitor tube current. Refer to the Product Technical Data for proper electrical connections.

X-Ray Tube assemblies are provided with thermal or pressure switches. These switches must be connected to an interlock circuit to provide a visual or audible warning and/or prevent exposure to avoid overheat conditions.

Compatibility

The Richardson Alta 750 X-Ray Tube Housing Assembly is compatible with the following CT Gantries:

TSX-101A/2	AQUILION SINGLE
TSX-101A/4	AQUILION MULTI
TSX-101A/5	AQUILION 8
TSX-101A/B	AQUILION 8
TSX-101A/B	AQUILION 8FX
TSX-101A/6	AQUILION 16
TSX-101A/8	AQUILION 16FX
TSX-101A/D	AQUILION 32
TSX-101A/E	AQUILION 64
TSX-101A/7	AQUILION SUPER 4
TSX-101A/9	AQUILION SUPER 4FX
TSX-101A/F, L	AQUILION 8 PC BASED
TSX-101A/G, M	AQUILION 16 PC BASED
TSX-201A/1	AQUILION LB (LARGE BORE)
TSX-101A/I	AQUILION 32 (SPELLMAN)
TSX-101A/H	AQUILION 64 (SPELLMAN)
TSX-101A/N	AQUILION CX
TSX-101A/Q, S, T	AQUILION CXL
TSX-101A/R	AQUILION RXL
TSX-302A/1, 2	
AQUILION PRIME (FIRST GENERATION)	

Collimators (Optic Assembly)

PX79-24880-1	PX77-82660-3	PX-23731-1		
PX79-13250-2	PX79-13250-1	PX79-13250-2B	PX79-13250-2C	PX79-23731-2
PX77-97920-1	PX79-23731-3			
PX79-44770-1	PX79-23731-4			
PX79-26150-1				
PX79-38200-1				
PX79-21140-2	PX21140-1			
PX79-23731-1	PX77-97920-1			
PX79-21140-2A	PX79-23732-1			