

TEE Transducer Care

Philips Healthcare

www.philips.com/ultrasound



Philips Customer Helpdesk 0870 5329741



Objective: By the end of the training users will be familiar with Philips recommendations for TEE care, including handling, cleaning, storing, and disinfectant compatibility. This checklist is your opportunity to verify that your facility has received training and will act as a reference to you of training topics covered with relevant help function keywords **in bold**. *Note: User information provided with system is the primary and best source of information*

Overview

Topic	Notes
User Materials	TEE Cleaning Procedure PDF, Important information for TEE transducer care handout, S8-3t Quick Guide, Operating Notes, Getting Started, System Help Information components / Read this first
Transducer Care	For information on transducer general care, handling, cleaning, storing & disinfectant compatibility see System User manual & Philips Transducer Care website: www.healthcare.philips.com/main/products/ultrasound/transducers/transducer_care/index.wpd

TEE Transducer Care

Topic	Notes
Handling	Handle the transducer with care. Dropping or banging can cause serious damage
TOE Accessories	Use a tip guard on the transducer distal tip to protect the transducer's lens during transportation. Always use a bite guard during studies. A protective cover such as a disposable sheath should be used during studies TEE Accessories and Supplies
Storage & Transport	When not in use, store the transducer in a TEE storage rack. Use the carrying case to transport the transducer Storage for transport <i>Warning: Do not bend the shaft into a circle with a diameter less than 0.3m (1ft)</i>
Electrical Safety	Before use, inspect the transducer for damage. In the event of any sign of damage, immediately discontinue use. Checking the TEE Transducer Electrical Safety Check Device available from Civco Medical. Electrical

TEE Transducer Specifications and Minimum Patient Weight

Topic	Notes
Transducer parts	Identify transducer flexible shaft and distal tip, handle and steering mechanism, cable and connector
Spec & Safety	Transducer specifications: tip size, patient weight guidelines. Transducer descriptions See table below

TEE transducer specifications and minimum patient weight guidelines

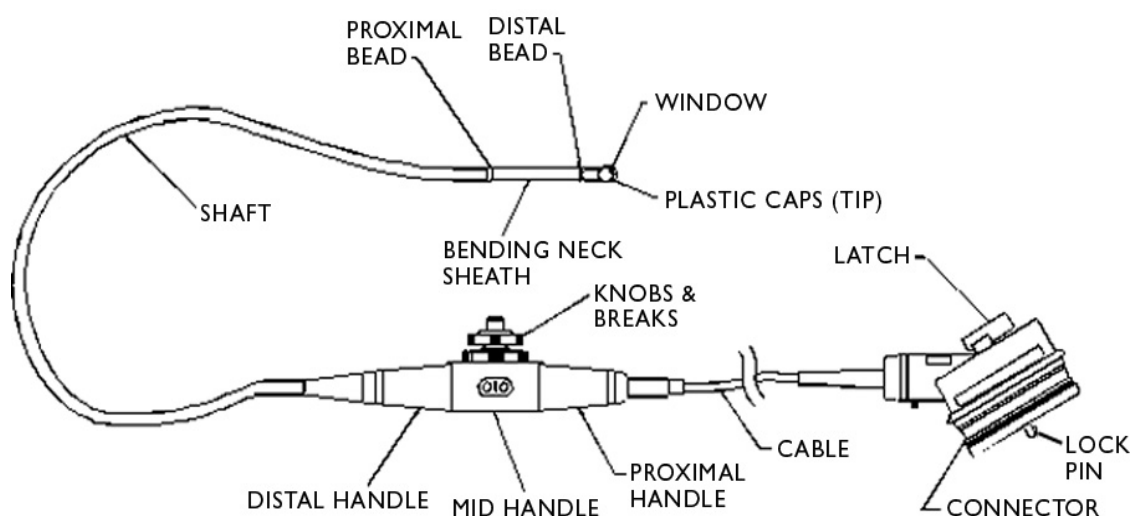
Probe	Mode	Model	CIVCO Tip Guard code	Min patient weight (kg)	Tip Length (mm)	Tip Width (mm)	Tip Height (mm)	Shaft Length (mm)	Shaft Width (mm)
X7-2t	3D	xMatrix	667-094	30	38	17	13.5	900	10
S7-2	2D	Omni III	610-945	25	35	14.9	12.5	900	10
S7-3t	2D	Mini Multi	610-1009	3.5	27	10.7	8.0	700	7.4
S8-3t	2D	Micro TEE	610-1111	2.5	18.5	7.5	5.5	700	5.2

Please refer to System User manual

TEE Transducer Cleaning and Disinfecting

Topic	Notes
Correct Cleaning Procedure & Disinfectants	<p>See Disinfectants and Gels in the 'Getting Started Manual' and User Manual. See User Materials 'Important information for TEE transducer car' & 'TEE Cleaning Procedure' Power Point. This information is to be used in conjunction with your institution's infection control procedure.</p> <p>Transducer care Always follow the recommendations of disinfectant manufacturer <i>Note: Prior to disinfection the instrument should be cleaned using an enzymatic cleaner or mild soapy solution to remove any visible contaminate and then each element of the instrument disinfected according to the guidelines</i></p> <p>Procedure for disinfecting the TEE transducer by immersion:</p> <ol style="list-style-type: none"> 1. Disconnect the transducer from the system 2. Use the following procedure to remove all organic matter and other residue: <ol style="list-style-type: none"> a) Soak gauze pads in mild, soapy water. Do not use iodine-based soaps. b) Wipe the distal tip and flexible shaft up to the control housing (steering mechanism) with the gauze pads. Use an enzymatic cleaner to assist in removing protein residuals c) Use water to rinse the distal tip and flexible shaft thoroughly. Avoid wetting transducer hub 3. Check the transducer for any residual organic material. Repeat Step 2 if necessary. 4. Disinfect the distal tip and flexible shaft by placing them in the appropriate disinfectant. <i>Warning: Do not soak the transducer for extended periods. The transducer steering mechanism is not sealed, if disinfectant or other fluid enters the steering mechanism, it will corrode the gears and electrical connections</i> 5. Remove the tip and shaft from the disinfectant and thoroughly rinse with water according to the instructions from the disinfectant manufacturer. <i>Note: some disinfectant manufacturers recommend rinsing by immersion in water</i> 6. Dry the distal tip and flexible shaft with a sterile cloth or pad, or allow to air dry 7. Lightly wipe only the steering mechanism and handle with a pad moistened with rubbing alcohol (70% isopropyl alcohol), or using T-Spray II as directed 8. Clean the cable using a mild soap solution, Quaternary Ammonium or Milton.. Do not use alcohol based products 9. Wipe the connector with bleach, alcohol or Quaternary Ammonium based products. Do not spray 10. Hang the transducer on a wall-mounted rack and allow to air dry to complete procedure
Cautions	<ul style="list-style-type: none"> ▪ Do not rinse or immerse the handle or steering mechanism ▪ Do not rinse or immerse the cable or connector ▪ The use of 70% isopropyl alcohol on transducers is restricted to the handle only. Do not use bleach or isopropyl alcohol-based products on the transducer or shaft ▪ Never sterilize the transducer with autoclave, ultraviolet, gamma radiation, gas, steam, or heat sterilization techniques. Severe damage will result ▪ Fewer agents are compatible with Mini and Micro TEE. See compatibility table ▪ Using non-recommended disinfectants, incorrect solution strength or immersing deeper or longer than recommended can damage or discolour the transducer

Basic TEE parts



Philips TEE Transducer Compatible Pre-Cleaners, Disinfectants & Accessories for the UK

	Product	Manufacturer/ supplier / contact details
Cleaners (Control Housing and Cable)	T-Spray II Quat.Ammonia	Pharmaceutical Innovations pharminnovations.com CIVCO Medical Solutions civco.com Mana-Tech Ltd (UK distributor) mana-tech.com
Pre-Cleaners and Cleaning agents (Transducer shaft and tip)	Autozyme	Puricore International Ltd puricore.com NHS Supply Chain supplychain.nhs.uk
	Bodedex	BODE Chemie bode-chemie.com H+R Healthcare Ltd (UK distributor) email: mike.hoskins@hrhealthcare.co.uk
	Cidezyme/Enzol <5%	CIVCO Medical Solutions civco.com Mana-Tech Ltd (UK distributor) mana-tech.com
	Neodisher Septo- Pre Clean	Dr Weigert drweigert.co.uk
	Gigazyme	Schülke & Mayr UK Ltd schuelke.com NHS Supply Chain supplychain.nhs.uk
Disinfectants (Transducer shaft and tip)	RelyOn Perasafe Powder ¹	Antec International relyon.dupont.com NHS Supply Chain supplychain.nhs.uk
	Peracetic acid OCS ¹	Olympic Chemical Systems olympicchemicalsystems.com
	Perastel ¹ (compatible with Puricore AER)	Tristel Solutions Ltd tristel.com
	Tristel Fuse for Instruments ¹ (used with Stella semi-automated decontamination device)	Tristel Solutions Ltd tristel.com
	Tristel Sporidical Wipes ¹	Tristel Solutions Ltd tristel.com
Accessories	Tip protectors, bite guards, transducer covers ² /sheaths, storage racks and holders etc	CIVCO Medical Solutions civco.com Mana-Tech Ltd (UK distributor) mana-tech.com
	² Micro TEE transducer S8-3t	Palmedic palmedic.eu
	Palmedic Probetection Cover Kit Product code 1280-02	Leonhard Lang (UK distributor) email: tony.abbott@leonhardlang.co.uk
	Storage cupboards	Neocare neocare.org.uk
	Endoscope Storage Cabinet	PuriCore International Ltd puricore.com
Automated Disinfectors (Transducer shaft and tip)	C-10 Probetester	Optima Scandinavia AB tee-probetester.com
	Test and Disinfection equipment for US probes	SMC Limited (Optima UK distributor) email: enquiries@smcni.com
	Automated Endoscope Reprocessor (AER)	PuriCore International Ltd puricore.com

Important Note: ¹Fewer agents are compatible with the Mini Multi S7-3t and Micro TEE S8-3t transducers. From the disinfectant group, only **RelyOn Perasafe, Tristel Solutions Ltd Tristel Fuse for Instruments** and **Tristel Sporidical Wipes** are compatible with these delicate transducers. ²Palmedic Probetection Cover Kit - Specifically designed Transducer cover kit for the Micro TEE S8-3t transducer

For more information please contact your local Ultrasound Representative or access the Transducer Care Website www.healthcare.philips.com/main/products/ultrasound/transducers/transducer_care/index.wpd

Caution - Philips advises customers to follow instructions in the Philips User Manual or Transducer Care website for disinfectant compatibility with Philips Ultrasound devices. The use of non-recommended disinfectants may damage your transducer. Avoidable transducer damage is not covered by warranty or service contract. The use of non-recommended disinfectant is done so at the customers own risk

TEE Transducer Training Checklist, Summary and Evaluation

Institution:	Contact Person:
Phone:	Customer email address:
Address:	System Serial / Configuration Number:

Date	Project number (applicable to installation training)	Trainer
Name	Email /contact details	Please send course info

This training was related to an installation? Yes / No (Please circle)
 If additional (non-installation) training please provide details:

After you have received your training please tick in the left column or mark N/A (not applicable)

<input type="checkbox"/>	Transoesophageal (TEE) Transducer Overview
<input type="checkbox"/>	TEE Transducer Care
<input type="checkbox"/>	TEE Transducer Specifications and Minimum Patient Weight Guidelines
<input type="checkbox"/>	TEE Transducer Cleaning and Disinfecting and Cautions
<input type="checkbox"/>	TEE Transducer Compatible Pre-Cleaners, Disinfectants, Accessories and Automated Disinfectors for the UK

The undersigned accepts that the topics detailed above have been covered during the training provided to the above key participants, who now feel competent to operate the equipment in its intended clinical applications according to the Operators Manuals and to provide training to other users. The checklist summary and evaluation form must be completed by customer and Philips representative and copies will be retained by both.

Authorised customer representative Signature / Title:

Comments: We trust that this training has been satisfactory. Please feel free to comment in the space provided below

Philips Healthcare would like to keep you informed about education courses they provide. Please indicate if you give permission for us to put your email address on a central e-mailing list by ticking the box next to your contact details