

Z6Ms True Volume Transesophageal Transducer Care Guide

Product Training



- Summarize Storage, Transport, and Accident Prevention
- Demonstrate Conductivity and Leakage Testing
- Illustrate Proper Cleaning of the Z6Ms True Volume TEE Transducer
- Locate List of Approved Cleaners on the Siemens Website

TEE Transducer Care and Handling

Before use:

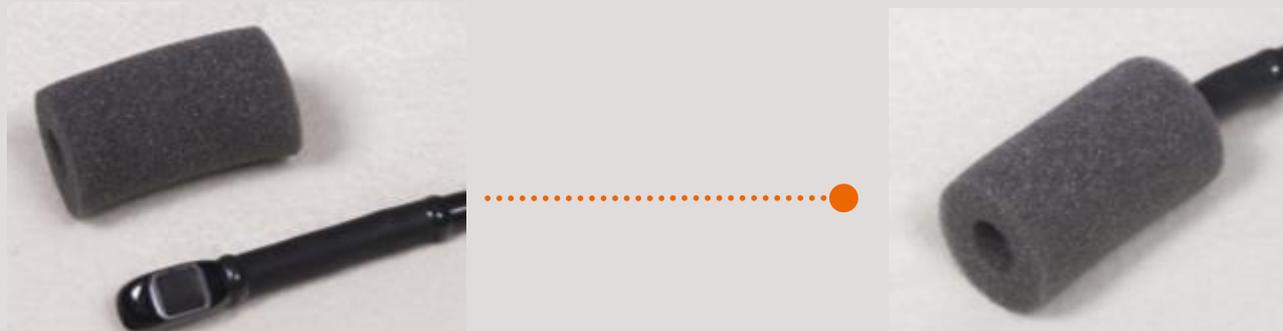
- Inspect the transducer for cracks and cuts
- Perform Conductivity and Leakage Testing in the following order:
 - Conductivity test
 - Leakage test
- If Conductivity fails, do not perform the leakage test
- If leakage test fails, take out of circulation and call Service Representative
- Always use a proper bite guard



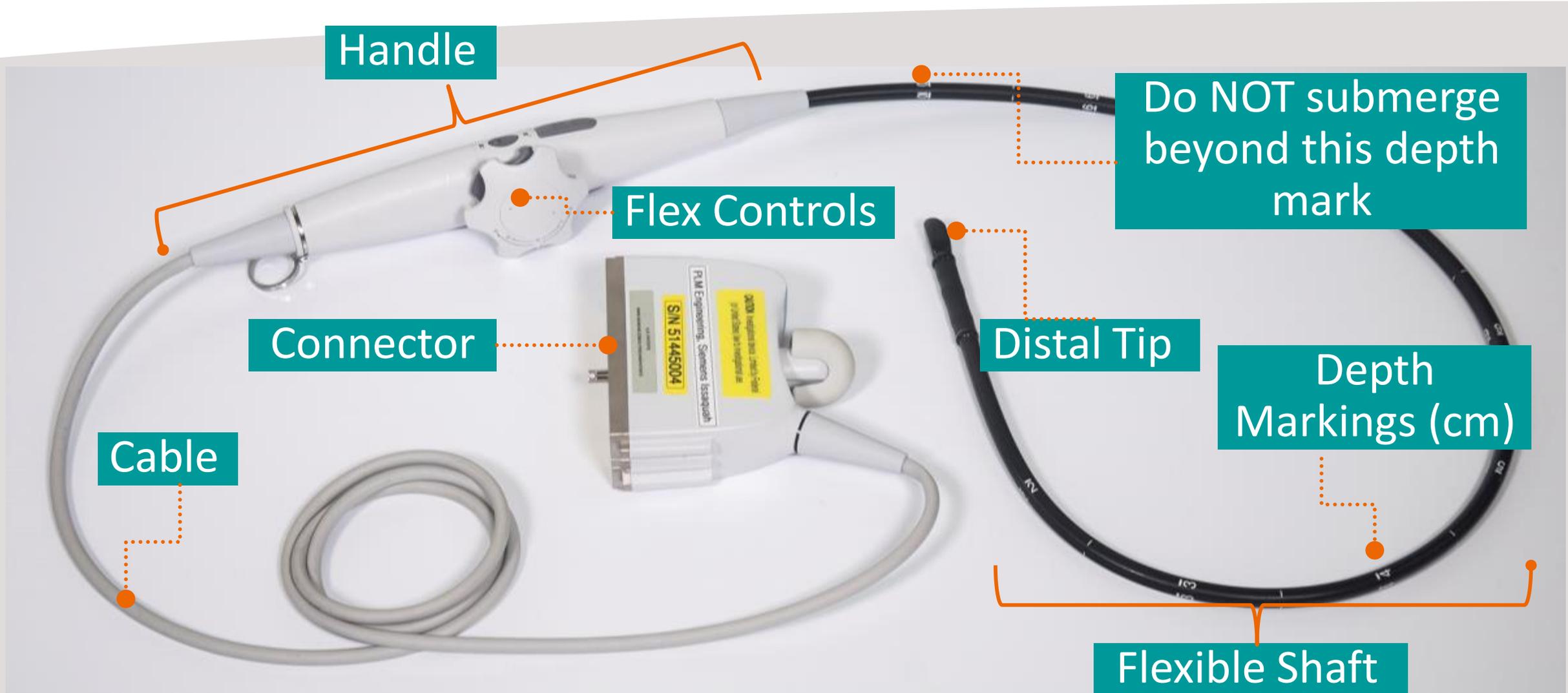
Bite Guard

TEE Transducer Storage

- Do **NOT** store the transducer while wet
- Do **NOT** store in extreme temperatures or direct sunlight
- Use a Siemens Approved disposable tip protector
- Store in **clean, dry** and **protected** environment
- Transducer should **NOT** be stored in transducer holders on the system



TEE Transducer Parts



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Conductivity and Leakage Testing

Dale 800B Tester

- Once solution conductivity is confirmed, perform the leakage test
- The leakage test demonstrates whether there is any leakage of electrical current demonstrated in the conductive solution
- Passing the Leakage Current Test assures that the leakage current was within acceptable limits
- When to perform Conductivity and Leakage Testing
 - Prior to each use, once high level disinfection has been performed
 - If TEE transducer has not been used for an extended period
 - If TEE transducer has been damaged, dropped, or struck

Conductivity and Leakage Testing

Dale 800B Tester Parts



Adapter for TEE
Transducer and Cable



Electrode Rod
and Cable

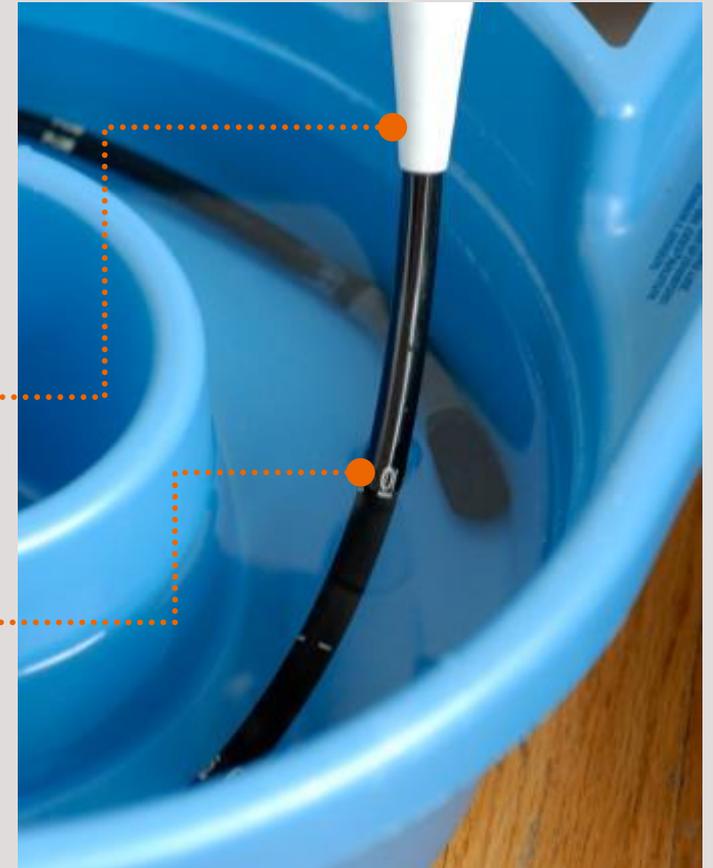


The Dale
800B Tester

Conductivity and Leakage Testing

Step 1: Assemble Dale 800B Tester

- Fill tub with disinfectant or normal saline solution
- Immerse the TEE transducer into the tub
 - Do **NOT** submerge the handle or system connector in the disinfecting solution
 - Do **NOT** go beyond the 100 cm depth marker of the guide tube



Conductivity and Leakage Testing

Step 2: Assemble Dale 800B Tester

- Place the electrode rods into the solution
- Insert to a depth of at least one inch (25mm)



Conductivity and Leakage Testing

Step 3: Assemble Dale 800B Tester

- Plug the transducer connector into the TEE transducer adapter



Conductivity and Leakage Testing

Step 4: Assemble Dale 800B Tester

- Plug the TEE transducer adapter and the electrode cable into the tester
- The connections are interchangeable



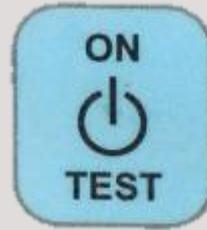
Conductivity and Leakage Testing Final Set-up Display for Dale 800B Tester



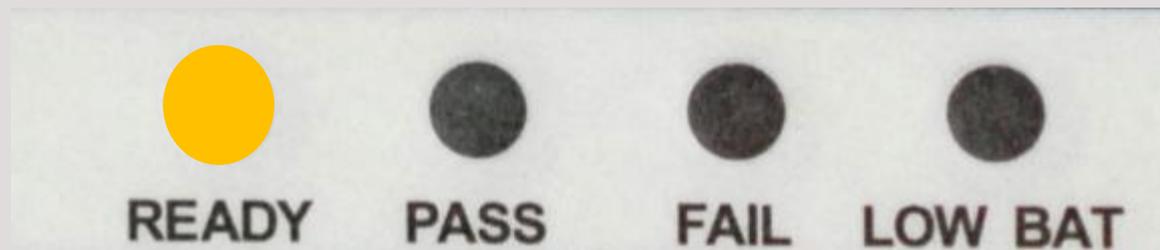
Conductivity and Leakage Testing

Step 5: Ready System

- Press ON / TEST button



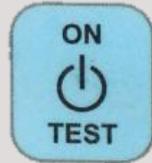
- Wait for the READY light



Conductivity and Leakage Testing

Step 6: Test Conductivity

- Select Conductivity - toggle down
- Press ON / TEST button
- Wait for the PASS light



- If Conductivity fails, do not perform Leakage Test and call service representative



Conductivity and Leakage Testing

Step 7: Test Leakage Current

- Select Leakage – toggle up
- Press ON / TEST 
- Wait for the PASS or FAIL light



- If Leakage Test fails, take out of circulation and call service representative



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TEE Transducer Disinfection Procedure

Step 1: Disconnect the Transducer



Transducer Ports



Unlocked



Locked

TEE Transducer Disinfection Procedure

Step 2: Pre-clean Prior to Disinfection

- Carefully remove any protective covers and dispose of accordingly
- Keep the transducer in the unlocked position for cleaning and storage
- Always use the Flex Controls to move the tip
- The distal tip is very sensitive to pressure, bumps, scrapes, and jarring; care must be taken no to damage the tip while cleaning



TEE Transducer Disinfection Procedure

Step 2: Pre-clean Prior to Disinfection

- Use only approved pre-cleaners and disinfectants
- Gently use a pre-cleaner to remove mucous or bioburden prior to disinfection
- Avoid excessive bending of the flexible shaft



TEE Transducer Disinfection Procedure

Step 3: High Level Disinfection Procedure

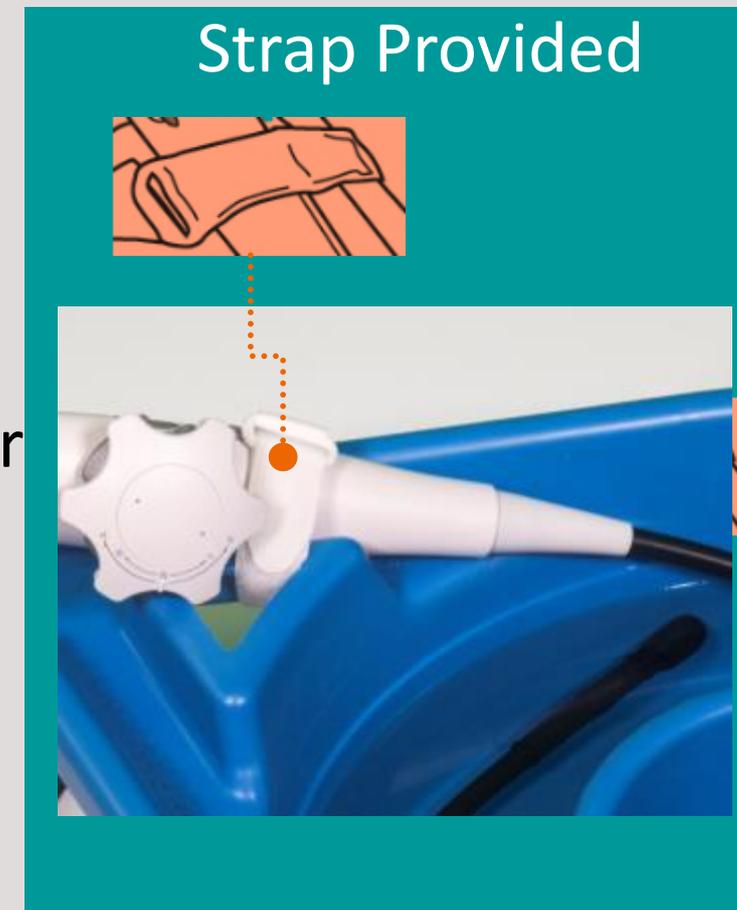
- Fill the tub with disinfectant or normal saline solution
- Immerse the TEE transducer into the tub
- Do **NOT** submerge the handle or system connector in the disinfecting solution
- Do **NOT** go beyond the 100 cm depth marker of the guide tube



TEE Transducer Disinfection Procedure

Step 3: High Level Disinfection Procedure

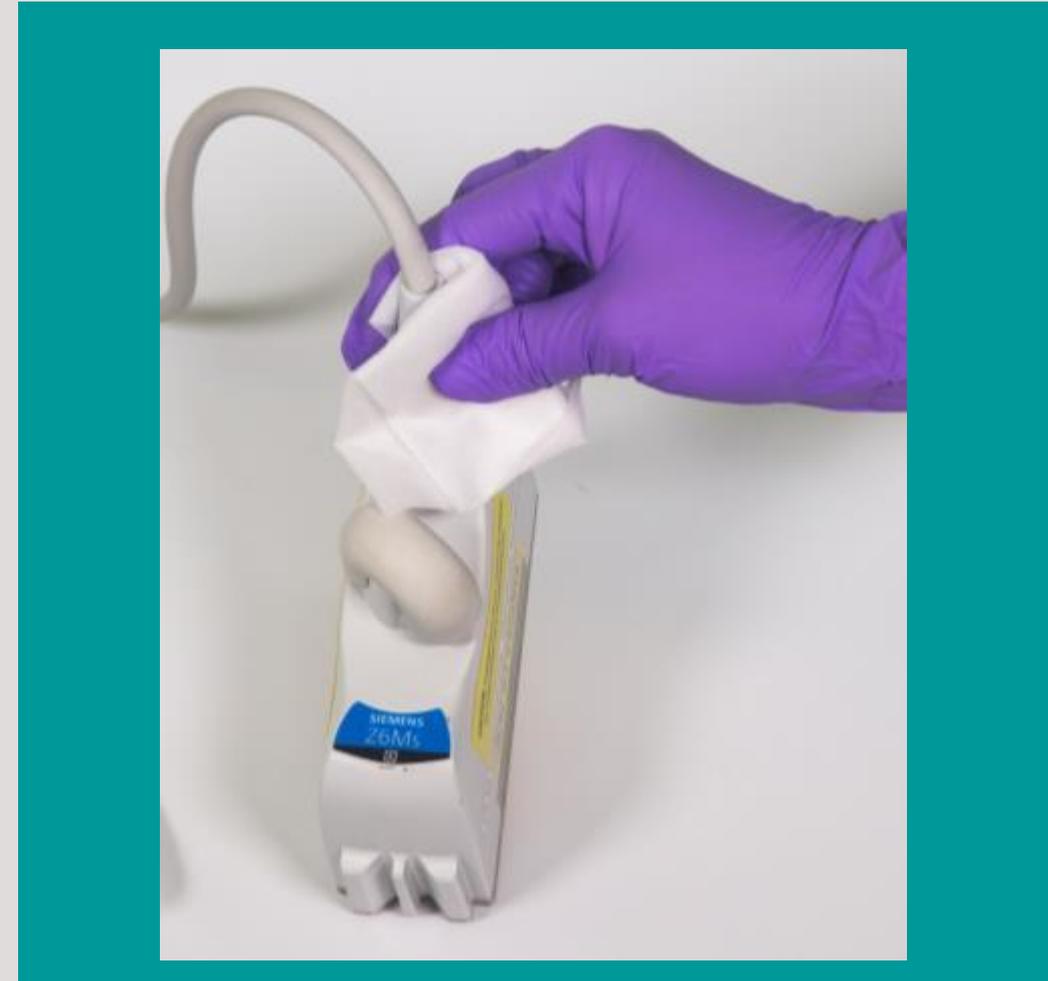
- Secure the handle so it cannot fall into the bath
- Follow manufacturer's instruction for high-level disinfectant use
- Do **NOT** soak the transducer in the solution longer than manufacturer's guidelines



TEE Transducer Disinfection Procedure

Step 4: Clean the Transducer Control Housing and Cable

- Gently use a cloth or pad moistened with 70% isopropyl alcohol or approved cleaner
- Carefully dry the transducer handle and cable with:
 - Gauze pads or a soft cloth or air dry for 30 minutes



TEE Transducer Storage and Transport

- Store in a clean, dry, protected environment
- Always use the carrying case for safe and easy transport of the disinfected transducer from one site to another

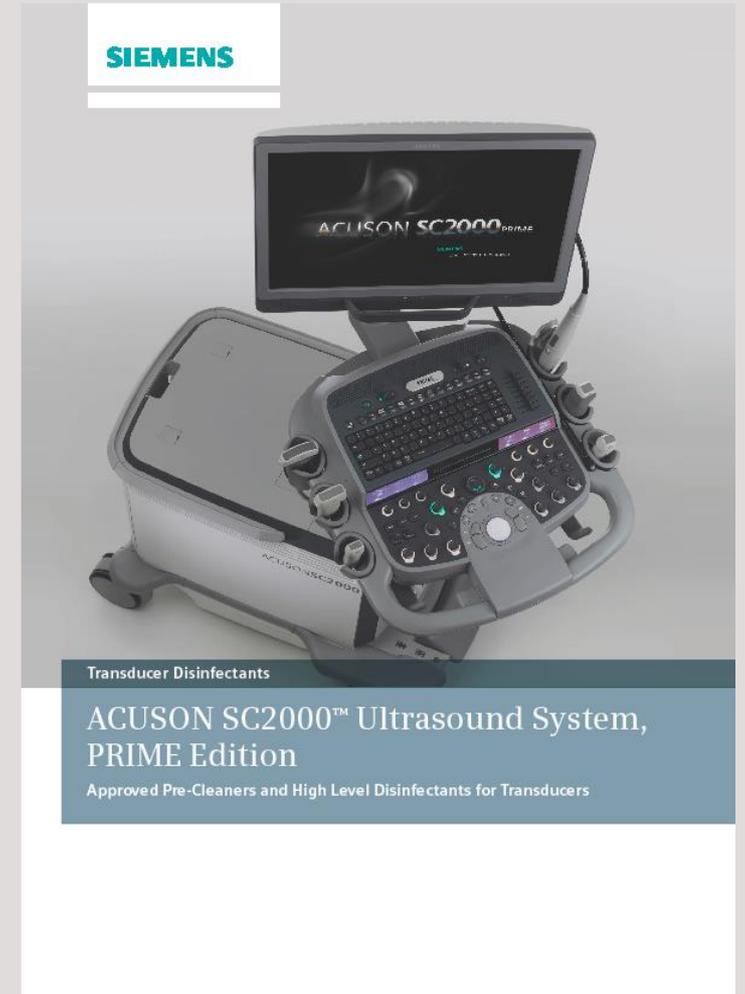


- Summarize Storage, Transport, and Accident Prevention
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- Find a complete list of Siemens approved transducer disinfectant guides at :

[Transducer Disinfectant Guides](#)

- [Transducer Disinfectant Guides](#)
- User Manual
- Ask your local Siemens Healthineers representative for an approved list
- Call the local Customer Care Center





Questions

Knowledge Check



Knowledge Check

1. Multiple Choice:

Where can you find information on approved cleaners and disinfectants for the ACUSON Z6Ms transducer?

- A. Customer Care Center
- B. Siemens website for transducer disinfectant guides
- C. User Manual
- D. Local Siemens Healthineers Representative
- E. All of the above



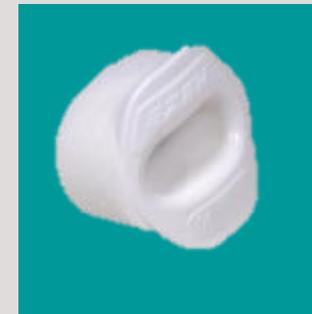
Correct answer is E

2. True or False: The TEE transducer can be cleaned in a steamer.

FALSE

3. True or False : Operator does not need to use a bite guard if the patient does not have any teeth.

FALSE



Knowledge Check

4. Fill in the blank:

What tests must be performed prior to each use of the TEE transducer?

Conductivity Test

Leakage Test



5. Fill in the blank:

What type of tip protector should be used?

Siemens Approved



Knowledge Check

6. Multiple choice:

What does the **Dale 800B Tester** test for?

- A. Probe temperature
- B. Solution conductivity
- C. Leakage current test
- D. Both B and C

D- Both B and C



Knowledge Check

7. True or False: Store in a clean, dry, protected environment

TRUE—and Always use the carrying case for safe and easy transport of the disinfected transducer from one site to another



8. Multiple choice:

If the Leakage Test fails, what is the next step?

- A. Use anyway, since it worked last time
- B. Dispose of transducer
- C. Test again and if fails, **DO NOT USE** and call Service Representative
- D. All of the above

C. Test again and if Fails, call Service

DO NOT USE!!



9. Multiple choice:

In conductivity and leakage testing, the electrode rods must be placed into the solution at a minimum depth of _____?

- A. ½ inch (12.5mm)
- B. 1 inch (25mm)
- C. ¾ inch (19mm)
- D. Electrode rods do not need to be in the solution

B. 1 inch (25mm)

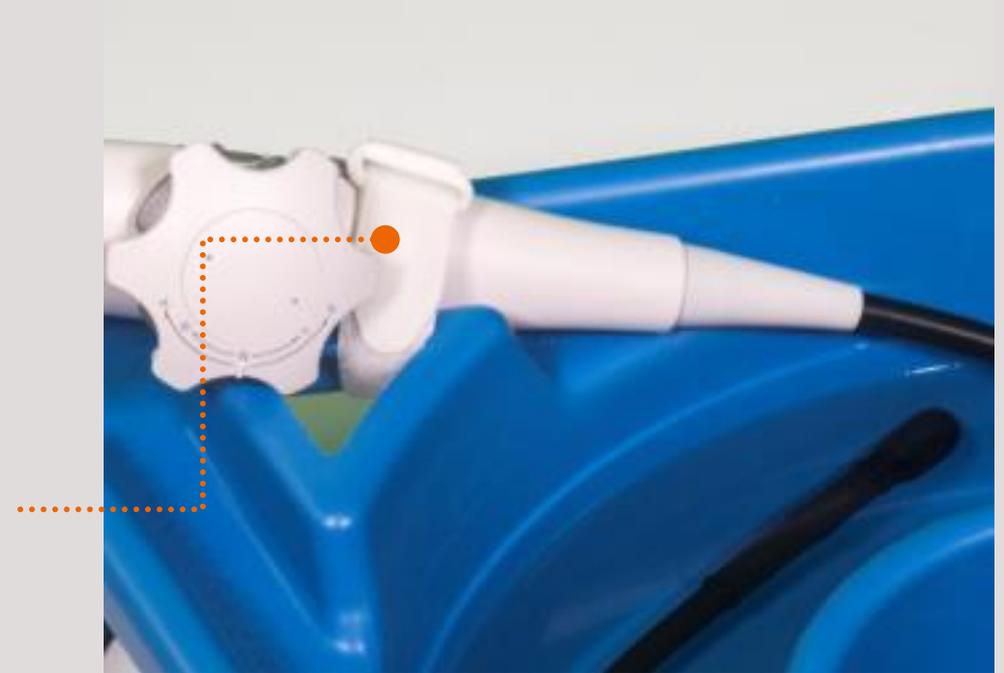


Knowledge Check

10. True or False

The Handle of the TEE transducer can be submerged into the disinfectant solution?

FALSE –Do not allow the Handle to enter the liquid. Be sure to use the strap to secure the housing to the tub.



Thank You