

REF 2500 D-DPL Series

## General Description

This Pulse Lavage has an easy disposal BUILT-IN Battery Pack, which avoids bulky cables and motion limitation. Integrated LED light source provides deep cavity visual assistance.

It is fully disposable single use, minimizing potential contamination, designed for use in orthopaedic surgical procedures, trauma and general wound care.

## Orthopaedic Bone Bed Preparation

Pulse lavage is an important equipment used to prepare bone bed before orthopaedic cementing during arthroplasty. It has been proven to increase cement penetration into the cancellous bone, potentially improving fixation strength leading to longer survival of implants, thus reducing revision rates.

## Wound Care

With the adequate steady pressurized, pulsed solution it can achieve a mechanical debridement for wounds, removing dirt, infectious microorganisms, wound exudates, necrotic tissue and debris. Thereby assisting visual examination and optimizing wound healing by stimulating granulation tissue formation.



Standard package includes:

- 1 Hand piece
- 1 Small cone tip (ST01Z) - Optional
- 1 Coaxial canal tip (CT02Z) - Optional



Read carefully the operating instruction before use. Failure to follow may cause damage or injuries.

## Indications

- Orthopaedics pre-cementing bone bed preparation
- Emergency Department wound cleaning
- Outpatient Clinic wound examination
- Surgical intraoperative wound debridement
- Hospital Wards wound care.

## Warnings

Failure to follow may cause injuries to person.

- Wear protective equipment, such as fluid-proof gown, gloves, mask or face shield, hair cover to avoid infectious splash backs.
- Use a drape or towel to cover all patient lines, ports, and wounds that aren't being treated.
- When applied on tendons and bones, should take precautions depending on tissue condition and the judgement of professional personnel.
- Follow standard practices to minimize potential contamination.
- Sterile only if package is unopened and undamaged.
- Single use only! DO NOT Re-sterilize!
- DO NOT operate damaged or malfunctioning instrument.

## Contraindications

- Should not be performed over exposed nerves.
- Should not be performed in the presence of active, profuse bleeding (precautionary measures for patients on anticoagulation medication)
- Improper technique may harm wound bed.
- Patients with sensory impairment are unable to provide accurate feedback needed to guide the clinician if improper technique is used.

## Caution

Failure to follow may cause damage to product.

- DO NOT use this product in any other manner other than the purpose or the operation method described in this instruction manual.
- DO NOT submerge instrument in liquid.
- DO NOT drop or hit the instrument.
- Store in a cool dry place.
- No modification of this equipment is allowed
- DO NOT mix with used or other types of batteries
- Some national laws restricts this device to sale by or on the order of a physician.

## Instructions for Use

1. Peel open the package and remove all the items in a sterile way.
2. Retract Locking Ring by pressing up (A).
3. Attach the required tip to the handpiece and push on until the connection is secured (B).  
(When using the Intramedullary Tip ensure the **white cap** is removed before use)
4. Lock the required tip in place by depressing the Locking Ring.  
(Retract the Locking Ring for tip removal (A))
5. Attach the irrigation tube to the irrigation solution (D)
6. Attach the suction tube to the suction system (F).
7. Remove the protector from the Toggle Trigger (C).  
High speed: depress the upper half.  
Low speed: depress the lower half.  
Stop the flow: return to the original position.

### NOTE:

- Start with high speed flow for the first time use.
- Both irrigation and suction tubes has clamps to prevent leakage of fluids.

## Turn ON/OFF L.E.D

Press the power button (G) to turn ON the light and press again to turn it OFF if needed.



### In Case of Tip Obstruction: (Optional)

Insert the cleaning rod (HA 250) from the end of the tip and push until releasing the obstruction.



## Battery Removal

1. Rotate to remove battery cap (E) and pull out the Battery Pack.
2. Disconnect the small connection by pulling.



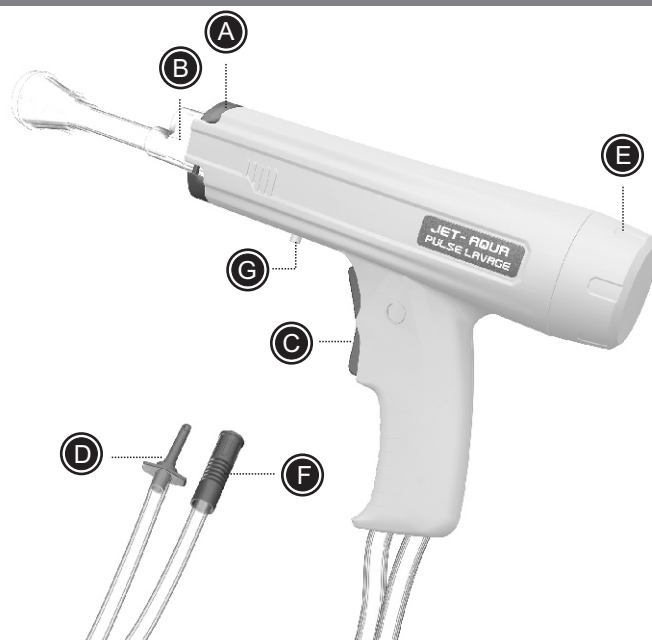
## Disposal

- Make sure to remove the battery pack in case of disposal.
- Do not use this product in any other manner other than the purpose or the operation method described in this instruction manual.



The separate collection symbol (crossed-out wheeled bin) is applied to the batteries that are enclosed with this product in accordance with the EU Battery Directive (2006/66/EC).

- The EU Battery Directive (2006/66/EC) is applied only in the European Union. If you wish to discard used batteries in other region please comply with its regional regulation.
- For the correct method of disposal, please contact your local municipality, waste disposal services.



DO NOT dispose battery in fire  
DO NOT recharge

## Transportation and Storage

- Temperature: -10°C ~ +40°C
- Humidity: <75%RH

## Shelf Life

Please check package label

## Specifications

- Adjustable spray speed: High or Low
- Pressure: <15 PSI
- Pulse rate: 1500~1700 cycle/min
- High speed flow rate: 1100~1400ml/min (30mm cone tip)
- High speed flow rate: 1000~1300ml/min (coaxial tip)
- Low speed flow rate 700ml/min
- Tube Length 3 meters
- DC 10.5V / AA x 7 cells Alkaline Battery

(Data may vary according to type of power source, type of tip, distance and length of operation)

## Labeling Symbols



Consult operators manual



Warning / Caution



Do not use if pack is opened or damaged



Do not reuse



Keep dry



Storage temperature range



Sterilized by ethylene oxide / Do not re-sterilise



Dispose in accordance with the EU Battery Directive



Recycle alkaline battery



Catalog Number



Batch Code



Serial number



Complies with EU directives



Manufacturer



Authorized Representative in the European Community

## Optional Accessories

### General Description

Different shapes of tip for different purposes.  
Sterilized single use accessories.

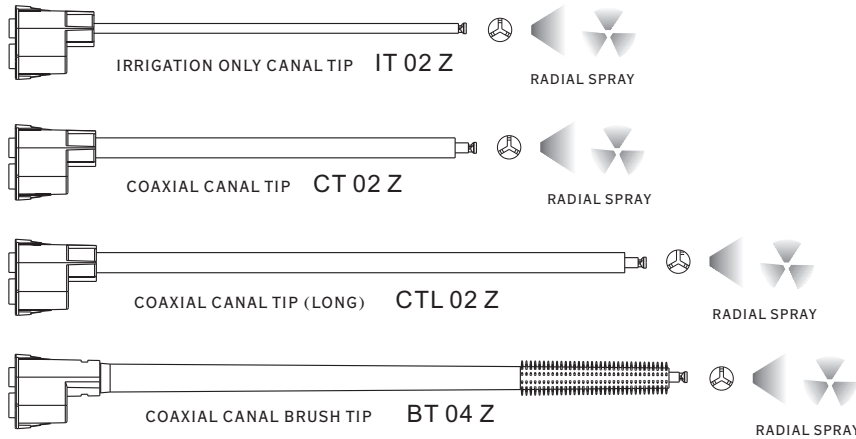
#### ⚠ Warnings

- Sterile only if package is unopened and undamaged.
- Single use only! DO NOT Re-sterilize!

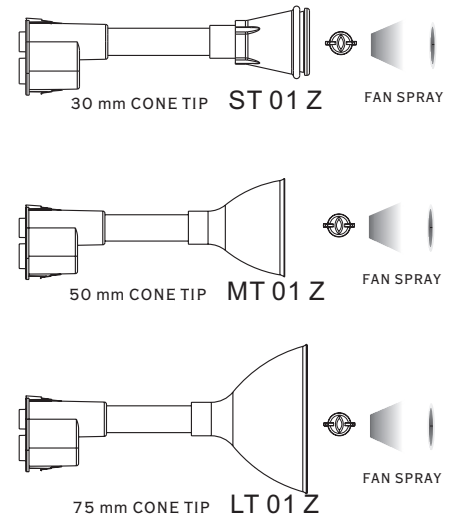
#### ⚠ Caution

- DO NOT use this product in any other manner other than the purpose or the operation method described in this instruction manual.
- DO NOT drop or hit the instrument.

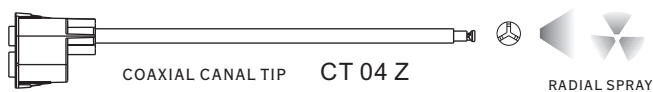
### Femoral canal bone-bed preparation



### Bone-bed preparation & Wound debridement



### Humeral canal bone-bed preparation



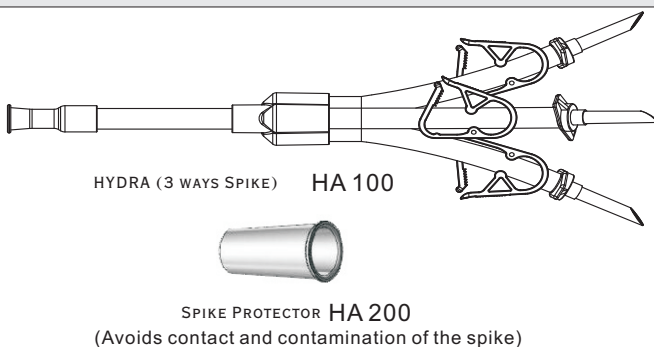
### Obstructed Tips Cleaning



### Tunneling wound irrigation



### Multiple saline bags connector



### Shelf Life

Please check package label

### Disposal

Dispose of safely in accordance with all current national and international waste disposal directives.

### Labeling Symbols

- Consult operators manual
- Warning / Caution
- Catalog Number
- Batch Code
- Use by
- Sterilized by ethylene oxide  
Do not re-sterilise
- Do not Reuse
- Do not use if pack is opened or damaged
- Keep dry
- Storage temperature range
- Manufacturer
- Authorized Representative in the European Community