## **BREAK-FREE BOR-CAP SYSTEMS**

#### FOR CLEANING & PRESERVING LARGE CALIBER WEAPONS

The BOR-CAP Systems provide the most modern and effective method of cleaning and preserving weapons and weapon systems.

The Bor-Cap Systems provide the following key advantages:

- Reduced Time: Clean and preserve in one day.
- Reduced Manpower: Less people needed to punch the bore.
- Reduced Logistics: Order, inventory and supply only one kit.
- Reduced Cost: Save in materials, time, manpower and logistics.
- Convenience:

Everything needed to clean and preserve the weapon supplied in one kit.

• Improved Efficiency:

Used as directed, the Bor-Cap systems provide the most effective way to thoroughly clean and preserve a weapon.

• Combat Readiness:

The weapon is always ready to fire; no need to clean immediately before firing.

Read the following Cleaning and Preserving Instructions carefully.

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#### IMPORTANT INFORMATION

## WHEN USING BREAK-FREE CLP AND THE BOR-CAP KITS, ALWAYS FOLLOW THESE IMPORTANT PRACTICES.

1. SHAKE THE BOTTLE OF BREAK-FREE CLP BEFORE EACH USE.

BREAK-FREE CLP contains a number of different ingredients, some of which will settle out at the bottom of the bottle. The bottle must be well shaken before use in order to ensure that all the ingredients are put back into suspension. IF THE BOTTLE IS NOT SHAKEN, THE LUBRICATING AND PRESERVING PROPERTIES OF BREAK-FREE CLP WILL BE REDUCED.

2. DO NOT APPLY ANY OTHER OIL OR PRESERVATIVE ON TOP OF BREAK-FREE CLP.

BREAK-FREE CLP is a cleaner, a lubricant and a preservative. It is not necessary to use any other oil or preservative to protect the parts of the weapon to which BREAK-FREE CLP has been applied – other than the long term preserving oil BREAK-FREE SMX which may be used if the weapon is to be placed in long term storage after cleaning. Indeed, applying any oil or preservative other than BREAK-FREE SMX on top of BREAK-FREE CLP may cause some chemical reaction which could CAUSE CORROSION AND DAMAGE THE WEAPON.

3. AFTER CLEANING AND PRESERVING THE BORE, CHAMBER AND BREECH, LEAVE THE BREECH OPEN AND THE MUZZLE UNCAPPED FOR AT LEAST TWO HOURS TO ENSURE ALL SOLVENTS HAVE EVAPORATED.

BREAK-FREE CLP contains a small amount of a blend of solvents that helps the product flow easily when it is being applied. These solvents evaporate very quickly, but always leave the muzzle uncapped and the breech open for at least two hours after applying BREAK-FREE CLP to ensure that all solvents have evaporated. If solvents are trapped together with air inside a sealed bore, the solvents can react with the moisture in the air to form acids, which can CAUSE CORROSION WITHIN THE BORE.

4. WASH THE BORE BRUSH AND CHAMBER BRUSH AFTER CLEANING AND PRESERVING.

After cleaning and preserving the bore and chamber, wash the dirt and oil from the bristles of the brushes with a high-pressure hose. Shake the brushes well to remove all surplus water and leave to dry. By cleaning the brushes regularly, you will avoid spreading old oil and dirt throughout the bore and chamber, and the life of the brushes will be extended.

5. THERE IS NO NEED TO DRY PUNCH THE BORE BEFORE FIRING.

## **STEP 1: TO CLEAN THE BORE**

#### DAY OF FIRING

- 1. Allow weapon to cool. The weapon can be cleaned after firing when it has cooled sufficiently to allow you to place your hand on the outside of the tube.
- 2. Inspect the Breech and Bore. Clear all obstructions.
- 3. You will need the following items from this BOR-CAP kit:

1 each pre-measured unit of BREAK-FREE CLP 1 each BOR-CAP Nylon Bristle Bore Brush Assembly

NOTE: Always shake the pre-measured unit of BREAK-FREE CLP before each use. When applying BREAK-FREE CLP to the Bore Brush, ensure the entire circumference of the brush is soaked.

- 4. Attach the Bore Brush to the rammer staff.
- 5. Wet punch the Bore as follows:
  - a. Pour ¼ of the pre-measured unit onto the brush and wet punch the Bore once forward along its entire length and once back.
  - b. Pour second ¼ of the pre-measured unit onto the brush and wet punch the bore with a back-and-forth scrubbing action along its entire length and back.
  - c. Pour third ¼ of the pre-measured unit onto the brush and wet punch the Bore with a back-and-forth scrubbing action along its entire length and back.
  - d. Pour final ¼ of the pre-measured unit onto the brush and wet punch the Bore once forward along its entire length and once back.
- 6. The weapon should be left for several hours or overnight to allow the BREAK-FREE CLP to break loose the firing residue, etc.

## **STEP 2: TO CLEAN THE BORE**

#### AFTER SEVERAL HOURS OR OVERNIGHT

1. You will need the following items from this BOR-CAP Kit:

1 each pre-measured unit of BREAK-FREE CLP1 each BOR-CAP Nylon Bristle Bore Brush Assembly3 - 4 each BOR-CAP Bore Cleaning Sleeves

- 2. Attach the Bore Brush to the rammer staff.
- 3. Wet punch the Bore as follows:
  - a. Pour ¼ of the pre-measured unit onto the brush and wet punch the Bore once forward along its entire length and once back.
  - b. Pour second ¼ of the pre-measured unit onto the brush and wet punch the Bore once forward along its entire length and once back.
- 4. Dry punch the Bore as follows:
  - a. Tie a clean Bore Cleaning Sleeve around the brush and dry punch the Bore once forward along its entire length and once back. Remove and dispose of the sleeve.
  - b. Tie a clean Bore Cleaning Sleeve around the brush and dry punch the Bore once forward along its entire length and once back. Remove and dispose of the sleeve.
  - c. If necessary, use additional Bore Cleaning Sleeves to dry punch the Bore.

NOTE: If the Bore has not been previously cleaned with BREAK-FREE CLP and there is a heavy build-up of carbon or coppering or severe heat-checking, then it may be necessary to use additional cleaning cycles until the Bore has been conditioned with BREAK-FREE CLP.

## **STEP 3: TO PRESERVE THE BORE**

#### AFTER THE BORE HAS BEEN CLEANED

- 1. Wet Punch the Bore to apply a preserving coat of BREAK-FREE CLP as follows:
  - a. Tie a clean Bore Cleaning Sleeve around the brush. Pour the third ¼ of the premeasured unit onto the sleeve and wet punch the Bore once forward along its entire length and once back.
  - b. Pour the final ¼ of the pre-measure unit onto the sleeve and wet punch the Bore once forward along its entire length and once back. Remove and dispose of the sleeve.
- 2. The Bore has now been cleaned and preserved. Leave the Breech open and the Muzzle uncapped for at least two hours in order to allow any remaining solvents to evaporate.
- 3. There is no need to dry punch the Bore before firing

## NOTE:

IF THE WEAPON IS TO BE STORED FOR LONGER THAN 6 MONTHS WE RECOMMEND THAT BREAK-FREE SMX LONG TERM PRESERVING OIL IS SUBSTITUTED FOR BREAK-FREE CLP IN THE ABOVE INSTRUCTIONS TO PRESERVE THE BORE.

**SEE INSTRUCTIONS:** 

TO PRESERVE THE BORE FOR LONG TERM STORAGE

<u>WARNING:</u> DO NOT APPLY ANY OIL OR PRESERVATIVE ON TOP OF BREAK-FREE CLP OTHER THAN BREAK-FREE SMX

## TO PRESERVE THE BORE FOR LONG TERM STORAGE

#### IF THE WEAPON IS TO BE STORED FOR LONGER THAN SIX MONTHS

- 1. After the weapon has been cleaned, leave for at least two hours to allow all solvents to evaporate.
- 2. You will need the following items:

Liter bottle or 5 liter Bottle of BREAK-FREE SMX 1 x each BREAK-FREE Nylon Bristle Bore Brush Assembly 1 x each BOR-CAP Bore Cleaning Sleeve

- 3. Attach the Bore Brush to the rammer staff.
- 4. Wet Punch the Bore to apply a long term preserving coat of BREAK-FREE SMX as follows:
  - a. Tie a clean Bore Cleaning Sleeve around the Brush. Pour BREAK-FREE SMX onto the sleeve ensuring the entire circumference is saturated. Wet punch the Bore once forward along its entire length and once back.
  - b. Pour BREAK-FREE SMX onto the sleeve ensuring the entire circumference is saturated. Wet punch the Bore once forward along its entire length and back. Remove and dispose of sleeve.
- 5. The Bore has now been preserved for long term storage. There is no need to dry punch the Bore before firing.

<u>WARNING:</u> DO NOT APPLY ANY OTHER OIL OR PRESERVATIVE ON TOP OF BREAK-FREE SMX

#### STEP 4: TO CLEAN AND PRESERVE THE CHAMBER

You will need the following items:

1 each liter or pint bottle of BREAK-FREE CLP with Trigger Sprayer 1 each BOR-CAP Nylon Bristle Chamber Brush (available as Optional

Equipment)

1 each BOR-CAP Chamber Cleaning Sleeves (available as Optional Equipment)

NOTE: Always shake the bottle of BREAK-FREE CLP before use. Adjust the nozzle on the trigger sprayer to fan spray position.

#### **STAGE 1: DAY OF FIRING**

- 1. Spray Chamber area with BREAK-FREE CLP, ensuring all surfaces are wet.
- 2. Scrub Chamber area with Chamber Brush.
- 3. Leave for several hours or overnight. Then proceed to Stage Two.

#### STAGE 2: AFTER SEVERAL HOURS OR OVERNIGHT

- 1. Spray the Chamber area with BREAK-FREE CLP.
- 2. Scrub the Chamber area with the Chamber Brush.
- 3. Wipe the Chamber area with a Chamber Sleeve fixed to the Chamber Brush.
- 4. Spray the Chamber area with BREAK-FREE CLP; use a General Purpose cloth or a Chamber Sleeve tied around the Chamber Brush and wipe to leave an even coat.

NOTE: Wash dirt and oil from the nylon bristles of the Chamber Brush using a high-pressure hose, steam or equivalent.

WARNING: DO NOT USE ANY OIL OR PRESERVATIVE OTHER THAN BREAK-FREE SMX ON TOP OF BREAK-FREE CLP

# STEP 5: TO CLEAN AND PRESERVE THE BREECH AND PERIPHERAL EQUIPMENT

You will need the following items from this BOR-CAP Kit:

1 each liter or pint bottle of BREAK-FREE CLP with Trigger Sprayer
1 each BOR-CAP Primer Vent Brush (where applicable)
1 each BOR-CAP Primer Seat Brush (where applicable)
1 each BOR-CAP Bore Evacuator Brush (where applicable)
BOR-CAP General Purpose Cloths

NOTE: Always shake the bottle of BREAK-FREE CLP before use. Adjust the nozzle on the trigger sprayer to fan spray position.

## STAGE 1. Day of Firing

- 1. Use the spray bottle of BREAK-FREE CLP to thoroughly wet the Breech and Breech Mechanism components. Allow to soak for several minutes and then wipe clean using a General Purpose Cloth. Reapply a light coat of BREAK-FREE CLP.
- 2. Where applicable, spray BREAK-FREE CLP into the Primer Vent and Primer Vent Seat and scrub with the BOR-CAP Primer Vent Brush and Primer Seat Brush.
- 3. Where applicable, use the spray bottle of BREAK-FREE CLP to thoroughly wet the Evacuator Bore and Valves. Leave on for several hours or overnight.
- 4. Use the spray bottle of BREAK-FREE CLP to thoroughly wet the Evacuator Bore and Valves. Leave on for several hours or overnight.
- 5. Use the spray bottle of BREAK-FREE CLP to thoroughly wet the Muzzle Brake. Leave on for several hours or overnight.

## STAGE 2. After Several Hours or Overnight

- 1. Scrub the Bore Evacuator Valves with the Bore Evacuator Brush. Wipe the Bore Evacuator clean with a General Purpose Cloth and reapply a light coat of BREAK-FREE CLP.
- 2. Wipe the Muzzle Brake clean with a General Purpose Cloth and reapply a light coat of BREAK-FREE CLP.
- 3. Spray BREAK-FREE CLP onto all exposed metal surfaces. Use a General Purpose Cloth to wipe to an even coat.

AFTER CLEANING AND PRESERVING, LEAVE THE BREECH OPEN AND THE MUZZLE UNCAPPED FOR AT LEAST TWO HOURS TO ALLOW ALL SOLVENTS TO EVAPORATE.