

CarbonFire DISMOUNTED EOD OPS PAK III[®]

PATENTED & PATENTS PENDING



CARBONFIRE 10 DISMOUNTED EOD-OPS-PAK III INSTRUCTIONS

**(Also for use with the TACTICAL DISMOUNT PAK
and with all ROBOT ADAPTER SYSTEMS)**

Concept Development Corporation works closely with some of the top Bomb Techs and Bomb Squad Commanders in the country to insure that our products meet your most stringent requirements.

The new CarbonFire10 Dismounted EOD-OPS-PAK III is the result of this well coordinated process.

The CarbonFire10 Dismounted EOD-OPS-PAK III contains everything a bomb tech requires to make the shot. All you need to add is shock tube!

The Titanium and Carbon Fiber Barrel is 3 to 4 times stronger and 5 times lighter than steel. It has been proof tested by the U.S. Military and will handle all PAN type ammunition.

The barrel is covered by a 10 Year Warranty.

Removable End Cap to attach the
6" Barrel Extension.

Be sure the end cap remains
attached tightly, during normal use.



Clean & Lubricate with Silicone Grease All
Threads when Removing & Replacing
Extension Barrel or Cap

Shown With 6" Extension Barrel.

Use **ONLY** for water shots or
with Aquaforce Brass Slugs

**TIGHTEN BARREL ONLY UNTIL IT
STOPS DO NOT OVERTIGHTEN**



PAK FEATURES:

Molle straps for extra accessories



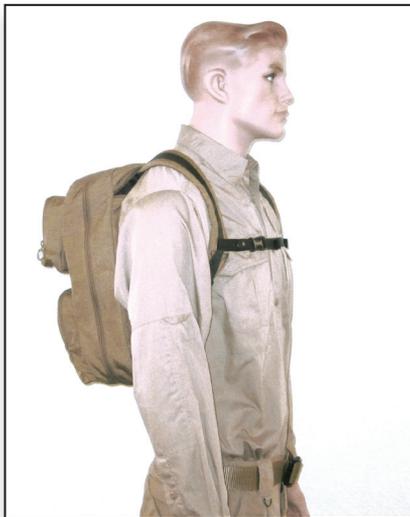
Rear compartment for Parachute/Pouch, Shock Tube, Tactical Tripod & Mount.



Example of Proper Tactical Dismount Setup With Parachute



Example of Proper Storage



Includes our **Tactical Dismount Pak II** to carry the minimum equipment required for a predetermined threat. Can be carried alone, or stored inside main PAK.

THREE ORGANIZED COMPARTMENTS FOR FAST & EASY ACCESS



1

2



3



AMMO POUCH 4



AQUAJET & AQUASLUG UPGRADE KIT

PAK CONTENTS



1



2



3

EOD-XP AMMO POUCH

AMMO
SELECTION
CARDS



4

CARBONFIRE 10 SETUP PROCEDURE

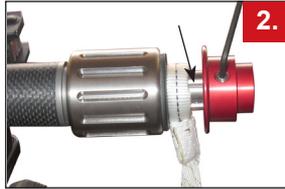


PARACHUTE ATTACHMENT PROCEDURE

IT IS IMPORTANT TO FOLLOW THIS PROCEDURE WHEN INSTALLING THE PARACHUTE



1.
Screw Breech onto barrel securely. Slide on black washer, then slide on the Parachute.



2.
Align Set Screw with groove and tighten lightly so that the chute retainer will slide in groove.



3.
Push retainer tightly against the loop and torque down the Set Screw securely. Screw will indent into the Breech Plug, slightly.



4.
Locate Breech Protector Locking Pin on opposite side of Set Screw.



5.
Route Shock Tube through Breech Protector and into Shock Tube Connector, tightly.



6.
Align Protector with Pin and push on as shown.



7.
Rotate the Protector to secure it in place.



8.
Connect Lanyard to Parachute as shown.



Unscrew Barrel from Breech to Reload for Subsequent Shots



POSITION THE BARREL, AS SHOWN, WITHIN THE MOUNT TO INSURE THAT THE PARACHUTE CORD CLEARS THE TRIPOD AND MOUNT DURING EJECTION.

NOTE: INSERT BARREL INTO MOUNT, FIRMLY, TO INSURE PROPER ALIGNMENT WITH LASER SIGHTS. INSERTING IT TIGHTLY WILL NOT EFFECT THE EJECTION PROCESS

FOLDING PARACHUTE FOR WINDPROOF POUCH

1. Fold parachute as shown below.



1. Layout Flat



2. Fold A & B to Center



3. Fold Top Over Even with Bottom



4. Fold in Each End



5. Fold Again

2. Insert parachute into pouch and check to insure that it will eject, easily.

3. Position pouch as shown and make sure shroud lines are clear of tripod.



Place rock or other object on tab to secure in high wind

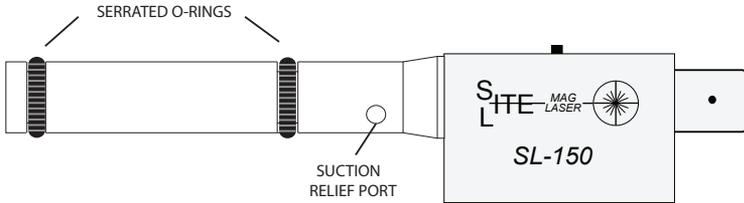


Grommet for Tent Stake

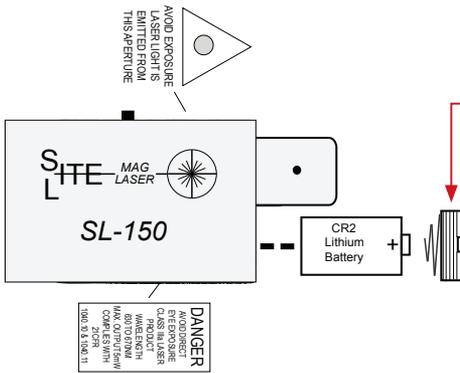


Tab is weighted with steel shot accessible thru Velcro closure

LASER INSTRUCTIONS



IMPORTANT! LUBRICATE O-RINGS WITH VASELINE OR SILICONE GREASE BEFORE INSERTING INTO MUZZLE.
(Do Not Use Oil!)



IMPORTANT!

NOTE: THE BATTERY CAP THREADS & HOUSING MAY DEVELOP AN INVISIBLE OXIDATION OVER TIME, THEREFORE, THE THREADS MAY NEED TO BE SANDED (VERY LIGHTLY) TO REMOVE THE ALUMINUM OXIDATION. IT IS RECOMMENDED TO USE STEEL WOOL OR A PENCIL ERASER TO REMOVE THE OXIDATION. THIS WILL INSURE A GOOD ELECTRICAL PATH. CHECK THIS, FIRST, IF THE LASER DOES NOT TURN ON PROPERLY.



Green Laser Sights require one CR-2 Lithium Battery. Install with positive terminal toward cap, as shown. Do Not Overtighten Cap.

LASER SAFETY PRECAUTIONS

The SL-150 CF10 Laser Sight uses a Class IIIa laser with a 532 +/- 10NM wavelength and a maximum output of 5.0mW. It is safe to use in normal operation as described in these instructions. The SL-150 has warning labels in compliance with applicable regulations, as shown.

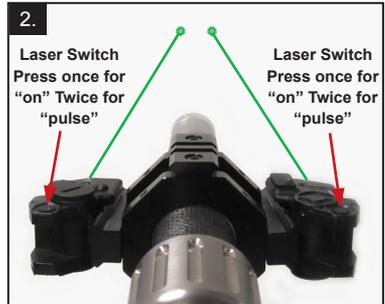
AVOID DIRECT EYE EXPOSURE. DO NOT LOOK DIRECTLY INTO THE LASER.

LASER ALIGNMENT PROCEDURE

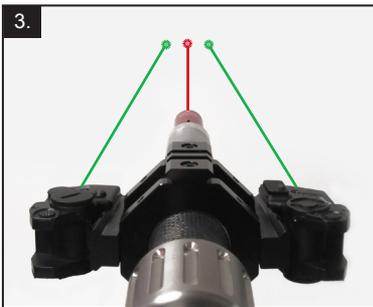
(Lasers have been Pre-Boresighted and may only require minor adjustments)



Lube O-Rings with SuperLube and insert SL-150, as shown.



Place muzzle 18" from wall & switch on both Laser Sights.



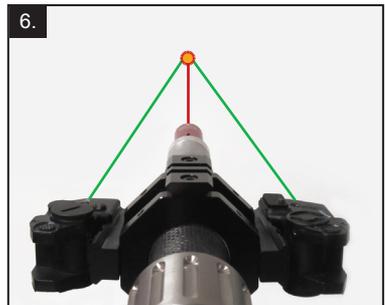
Turn on SL-150 Red Laser Boresighter.



Use the horizontal set screw to adjust the laser, left or right.



Use the vertical set screw to adjust the laser, up or down.

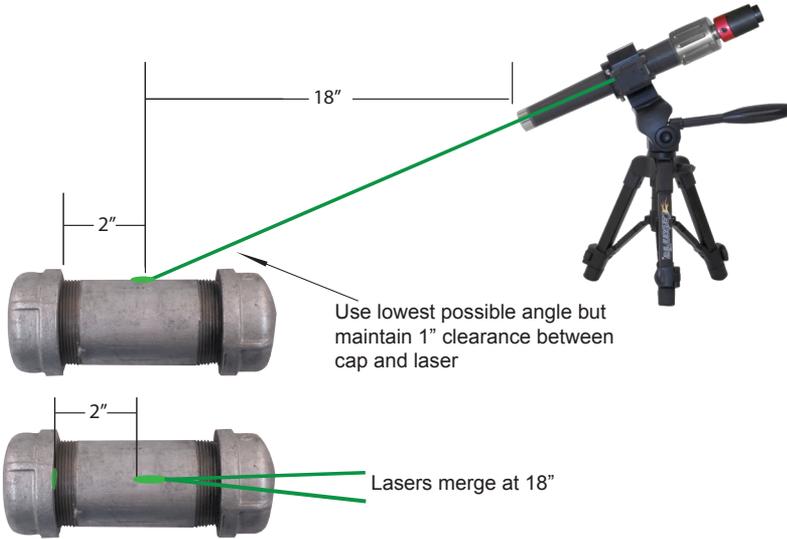


Adjust Green Laser Sights to merge with Red Laser dot. Remember to remove SL-150 Boresighter before making the shot.

NOTE: IT IS IMPORTANT TO PUSH BARREL INTO MOUNT, VERY FIRMLY, DURING ALIGNMENT AND ALWAYS WHEN MAKING A SHOT

TARGET ACQUISITION

(STEEL PIPE BOMB)



Laser will appear as a short line with some reflected light on the cap

LASER RANGING

With Extension

AIM POINT	RANGE
	12"
	18"
	24"
	36"

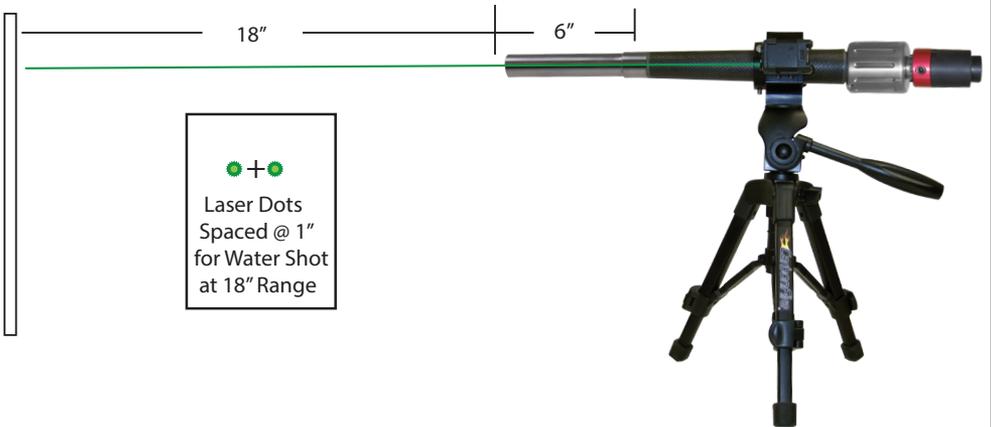
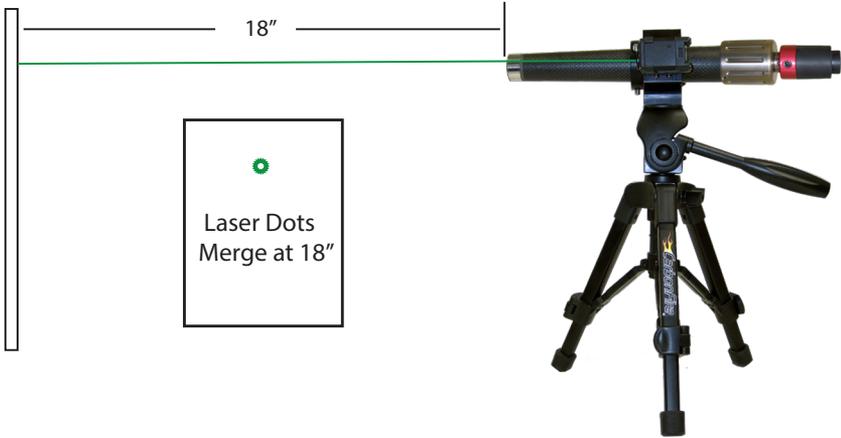
Laser Dot Spread at Range = #
Target Aiming Point = +

Without Extension

RANGE	AIM POINT
12"	
18"	
24"	
36"	

Laser Dot Spread at Range = #
Target Aiming Point = +

TARGET ACQUISITION



The Water Shot Barrel Extension adds 6" to the overall barrel length and extends the laser distance to 24" from the muzzle. The laser dots will be 1" apart at that distance but the center of the dots (as shown above) will always indicate the shot placement, at any distance.

OPTIONAL MOUNTS

CLAMP MOUNT



The Clamp Mount provides for many additional mounting options.

When using this mount, insure that there is adequate space for the barrel to eject and that the parachute has a clear path to deploy.



BASEPLATE MOUNT SETUP

USE BASE PLATE MOUNT SETUP FOR MAKING LOW SHOTS



Base Plate Assembly



If possible, aim muzzle downward or level for parachute deployment



Barrel positioning for lowest possible shots

(USE THIS METHOD ONLY IF NO OTHER OPTIONS ARE AVAILABLE)



Place the black skid plate, as shown, to protect the breech and to deflect the barrel to aid in parachute deployment.

CAUTION: Adjust the position of the skid plate and barrel angle so that the muzzle clears the barrel mount before contacting the skid plate. You can verify this by inserting the barrel and removing it, at the ejection angle.

STAKE MOUNT SETUP (FOR CONFINED OUTDOOR AREAS)



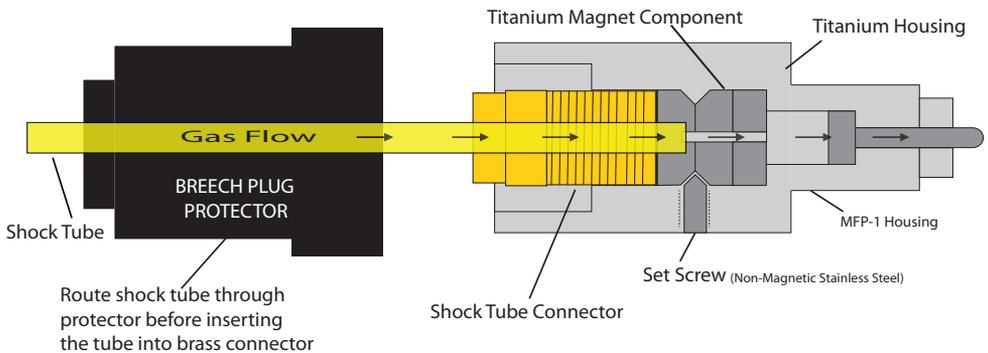
1. Place Thread Protector Cap on Stake.
2. Use a hammer or a rock, etc to drive in the stake.
3. Remove Thread Protector Cap and attach the Angle Ball Mount
4. Attach the Barrel Mount and tighten Securely.



Patent Pending

The MAG-FIRE concept was designed to improve the firing pin function in disrupters. The system eliminates the spring, simplifying the process while enhancing performance. Eliminating the spring reduces the possibility of binding and helps prevent the build up of powder residue.

The Titanium Magnet Component routes the shock tube gases through the assembly, breaking the magnetic field, and forcing the firing pin to contact the primer. The magnet pulls back the pin to the firing position after the firing sequence.

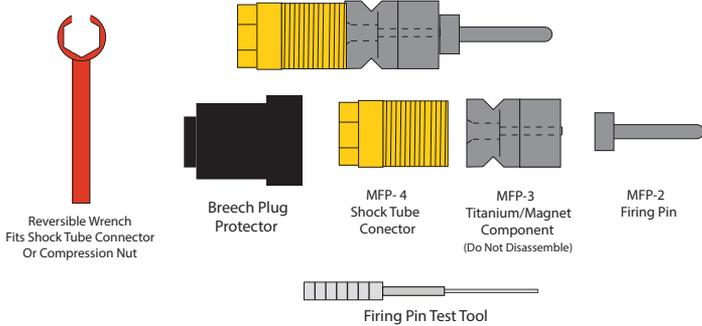


In general, pan ammunition uses a standard shotgun shell which is loaded in excess of the recommended standard shotgun loads. The excessive pressure created will blow a hole through the primer and contaminate and jam or damage the firing pin in any type breach. A protective brass seal is typically used to cover the primer to help prevent this. The seal is typically glued over the primer.

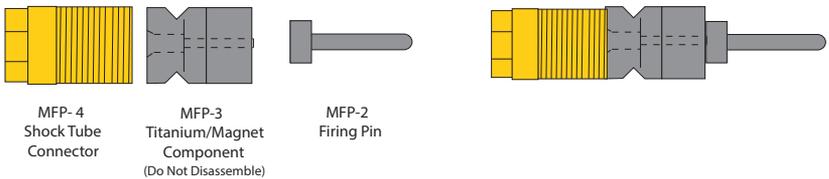
(DO NOT REMOVE THIS SHIELD WHEN USING STANDARD PAN AMMUNITION)

NOTE: EOD-XP Ammunition uses a proprietary powder & magnum rifle primer which prevents primer blow out.

PARTS BREAKDOWN:



Removing the firing assembly for cleaning or replacement:



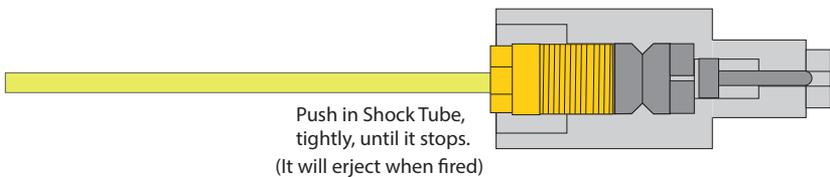
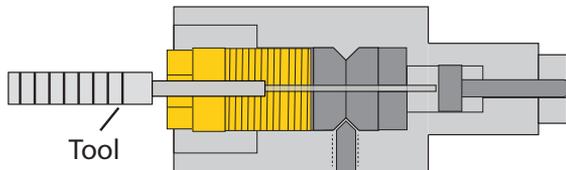
When using ***Standard Pan Ammunition**, it is recommended to clean the breech every 5 shots.
When using EOD XP ammunition, it is recommended to clean the breech after 25 shots.

***Standard Pan Ammunition requires the breech to be backed off.
This may cause excessive breech contamination.**

1. Remove the shock tube adapter.
2. Loosen the set screw
3. Remove the MPF-4, MPF-3 and the firing pin by slightly tapping the rear part of the housing on a bench.
4. Clean parts and dry with a cloth before assembling the unit.

REPLACING THE ASSEMBLY:

1. Assemble MPF-4, MPF-3 and firing pin as shown.
2. Insert the assembly into the breech plug and hold it in position with a small diameter screw driver or other tool while tightening the set screw.
3. Replace the shock tube connector.

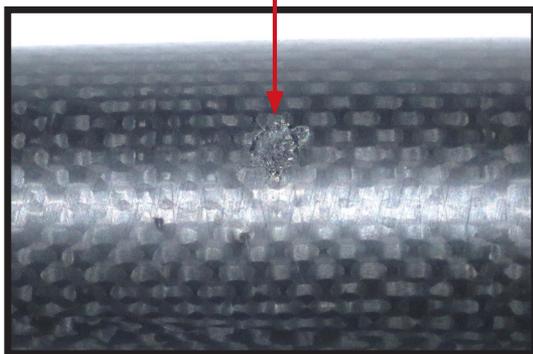
**Test Function:**

Insert Firing Pin Test Tool (provided) and push on Firing Pin to ensure smooth operation.

BARREL REPAIR INSTRUCTIONS

If the Carbon Fire 10 barrel is mishandled or damaged by accident, be sure to inspect it thoroughly. If only the surface of the barrel appears to be chipped, follow the instructions below for repair.

DAMAGED AREA



To repair a surface chip on the CarbonFire10 barrel, use a small amount of JB Weld epoxy putty to fill it in. Smooth out the area and let harden. Then sand lightly with a very fine grain sand paper to finish it. Do not sand into the carbon fiber.

CarbonFire Barrels have been Proof Tested to Withstand all PAN Disrupter Ammunition and Include a 10 Year Warranty!

BREECH MAINTENANCE

We recommend periodic lubrication of the breech threads with a light spray of Dry Moly Lubricant.



A Breech lock-up is unlikely but may occur if the Breech threads are not clean.

In case of a Breech lock-up, that cannot be removed by hand, tap Breech onto a hard smooth surface.



WATER SHOTS USING WITH EOD-XP AMMO



EOD-XP
BLANK

EOD-XP Blanks are waterproof and do not require the use of any type chamber plug for water shots.

DO NOT BACK OFF BREECH

Fill barrel with water and insert the standard red plug, with relief hole, into the muzzle.

Lubricate O-ring with silicone grease, insert into chamber and tighten securely.

- EOD-XP Ammo applies the full amount of energy directly to the water increasing the effectiveness of water shots by up to 80% over the previous method.

USE	BLANK	PROJECTILE	AVG. VELOCITY	RANGE
WATER / OTHER	LOW-VELOCITY	N/A	800 FPS	12"
WATER / OTHER	MED-VELOCITY	N/A	1370 FPS	12"
WATER / OTHER	HIGH-VELOCITY	N/A	1450 FPS	12"
WATER / OTHER	ULTRA-VELOCITY	N/A	1660 FPS	12"

**Range is 12" for use with CarbonFire10 with extension.
(Use a range of 6" without the extension)**

EOD-XP AMMUNITION

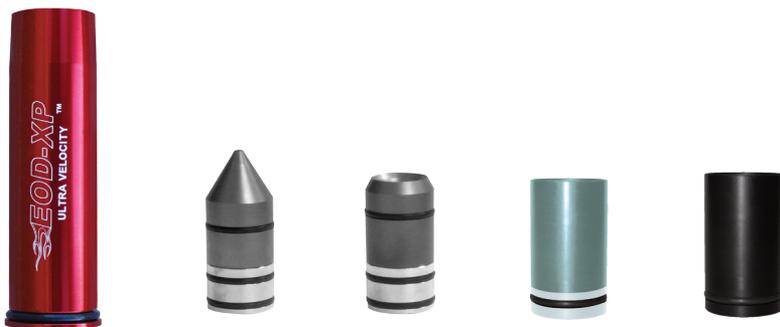
We strongly recommend the use of EOD-XP Ammunition in the CarbonFire10 or any PAN to avoid the inherent issues of Primer Blowout and Breech Contamination associated with other ammunition.

The shorter barrel of the CarbonFire10 reduces velocity and requires the use of the next higher velocity ammo than you would normally use in a standard 24" PAN.

Example: If you use a medium velocity round in a 24" PAN you would use a high velocity round in the CarbonFire10. If using ammo other than EOD-XP, make sure the primer disc cover is installed, as applicable, to prevent primer blowout.



Patented & Patents Pending



AquaForce®

The New AquaForce Jet & Slug systems were designed to be used in combination with the CarbonFire 10 allowing Bomb Techs to render safe just about any IED. These systems significantly reduce the possibility of ignition and collateral damage while improving the retention of evidence.

AquaJet®



PJ - 100 Nozzle



DJ - 200 Nozzle



CarbonFire shown with AquaJet nozzle installed

The New AquaJet system uses a concentrated jet stream of water to defeat the following:

- Hand Grenades
- Pressure Cookers
- Ammo Cans
- Venting LP Gas Tanks
- Vehicle Doors
- Windshields

NOTE: REFER TO THE AMMO SELECTION CARDS FOR SPECIFIC AQUAJET AIMING INSTRUCTIONS AND PROPER USE!



3 - Ring Brass Slug



4 - Ring Brass Slug

LUBE BRASS SLUG O-RINGS BEFORE LOADING

The New AquaSlug uses a non-sparking brass slug pushed by a column of water to defeat the following:

- Internal Threaded Pipe Bombs
- Standard Pipe Bombs
- Hand Grenades

NOTE: REFER TO THE AMMO SELECTION CARDS FOR SPECIFIC AQUASLUG AIMING INSTRUCTIONS AND PROPER USE!

CARBONFIRE10 ROBOT ADAPTER SYSTEM (SUPPLEMENTAL INSTRUCTIONS)

**USE THE SAME DUAL LASER ALIGNMENT AND SIGHTING PROCEDURES
WHEN USING THE CARBONFIRE10 ON ANY ROBOT**

(REFER BACK TO PAGES 8, 10, & 11 FOR THE PROPER ALIGNMENT &
TARGET ACQUISITION PROCEDURES)



PARACHUTE INSTALLATION INSTRUCTIONS

1. Fold parachute as shown below:



Fold sides in



Fold in half



Fold down



Fold down again,
and then fold over



Fold cord
as shown

2. Roll parachute, and place into holding tube

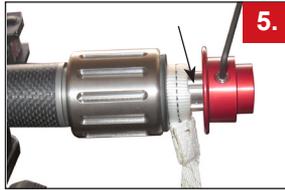
Position knot in groove as shown



3. Align the cutout in the cap with the groove and slide into place as shown:



Screw Breech onto barrel securely. Slide on black washer, then slide on the Parachute.



Align Set Screw with groove and tighten lightly so that the chute retainer will slide in groove.



Push retainer tightly against the loop and torque down the Set Screw securely. Screw will indent into the Breech Plug, slightly.



Locate Breech Protector Locking Pin on opposite side of Set Screw.



Route Shock Tube through Breech Protector and into Shock Tube Connector, tightly.



Align Protector with Pin and push on as shown.



Rotate the Protector to secure it in place.



Connect Lanyard to Parachute as shown.

IT IS IMPORTANT TO FOLLOW THIS PROCEDURE WHEN INSTALLING THE PARACHUTE.

CarbonFire DISMOUNTED EOD OPS PAK III[®]



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