



M106 (SOD-Vr) Screening Obscuration Device-Visual Restricted Terrain Tactical Small Unit Training Packet



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SFC James Scates
TRADOC Hand Grenade Proponent
316 CAV Calvary BDE
A TRP 3-16 CAV
706-626-6509
Email: james.r.scates.mil@mail.mil

Mr. John Ryan
Senior Close Combat Munitions Analyst
MCoE, CDID
Soldier Division, Lethality Branch
706-545-7194 or DSN: 835-7194
Email: john.j.ryan74.ctr@mail.mil



M106 (SOD-Vr)

Screening Obscuration Device-Visual Restricted Terrain



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Description

- The M106 SOD-Vr is an exploding/bursting type hand grenades that produces ~35 seconds of near-instantaneous obscuration smoke; to break the enemy line of sight, quick obscuration of the individual Soldier or tactical small unit, casualty evacuation from the battle field, or used in conjunction with the M83 TA smoke hand grenade for long lasting > 90-105 seconds of screening obscuration smoke. The M106 SOD-Vr is the sixth hand grenade the Soldier will carry and employ during training and combat operations.
- The grenade has a fiberboard body with Mylar coating, it is light green in color with black markings and warnings, it has an orange exploding symbol on the back side of the grenade, and a single brown band $\frac{3}{4}$ down the body of the grenade to indicate a low order explosive capability.
- The grenade is fitted with the M201A2 MOD 3 fuze, with a fuze delay of 1.0 to 2.3 seconds, it has a unique (double tooth) safety lever, single circular pull ring with safety pin seated in a confidence clip, the safety pin far side is spread at 45 degrees.
- The grenade can be employed 40 meters by the average Soldier, and is employed using the Standing throwing position, by high arc or low rolling employment method.



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Tactical Small Unit/Hand Grenade Range Detail

M106 SOD-Vr Training



M106 (SOD-Vr)

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1. Refer to TC 3-23.30 Grenades and Pyrotechnic Signals before conducting any type of hand grenade training.

- Refer to TC 3-23.30 for safety and warning information for the following hand grenades:
 - M67 Fragmentation Hand Grenade w/wo confidence clip
 - M106 Screening Obscuration Device-Visual Restricted Terrain (SOD-Vr)
 - M83 TA Smoke Hand Grenade (White) (Screening Obscuration Smoke)
 - M18 Smoke Hand Grenade (Green, Yellow, Red, Violet) (Signal Smoke)
 - M14 TH3 Incendiary Hand Grenade (Start fires and Destroy Equipment)

- Hand grenade training basic skills:
 - Hand Grenade Identification (What type of grenade do I need?)
 - Proper right or left hand grip
 - Proper disengagement of the pull ring from the confidence clip (If present)
 - Proper arming procedure
 - Employment techniques



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1. Review Hand Grenade Training posted on Warrior University:
https://www.warrioruniversity.army.mil/landing?p_p_id=58&p_p_lifecycle=0&58_redirect=%2f
2. Leaders will conduct Risk Assessment and evaluate training before employment live/tactical munition. **Warning: The M106 SOD-Vr is a bursting type hand grenade, and differs from the M18/M83 burning type hand grenade.**
3. When possible, train using the M69 training practice hand grenade with M228 training practice fuze w/wo confidence clip. The M69 with M228 weighs the same as the M67 fragmentation hand grenade. Employing the M69 training grenade body without a M228 fuze does not allow the Soldier to properly grip, arming or employ.
4. Drills are trained using the Talk-through, Walk-through, Run-through method of instruction. Leaders will check on training; to ensure Soldiers comprehend, the action, condition, and standards or performance step(s) required to complete an action.



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5. The M106 SOD-Vr Interactive Multimedia Instruction (IMI) is available for download on Warrior University. The IMI is set up for individual testing, but can be conducted at unit level.

- Completion of the M106 SOD-Vr IMI training and test should be noted and maintained in the Soldiers training packet for 12 months.
- M106 SOD-Vr Warrior University link listed below.
- See Draft Memorandum for Record to record unit training, on slide 40



M106 SOD-Vr Hand Grenade Interactive Multimedia Instruction



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M106 SOD-Vr Interactive Multimedia Instruction (WU) LINK

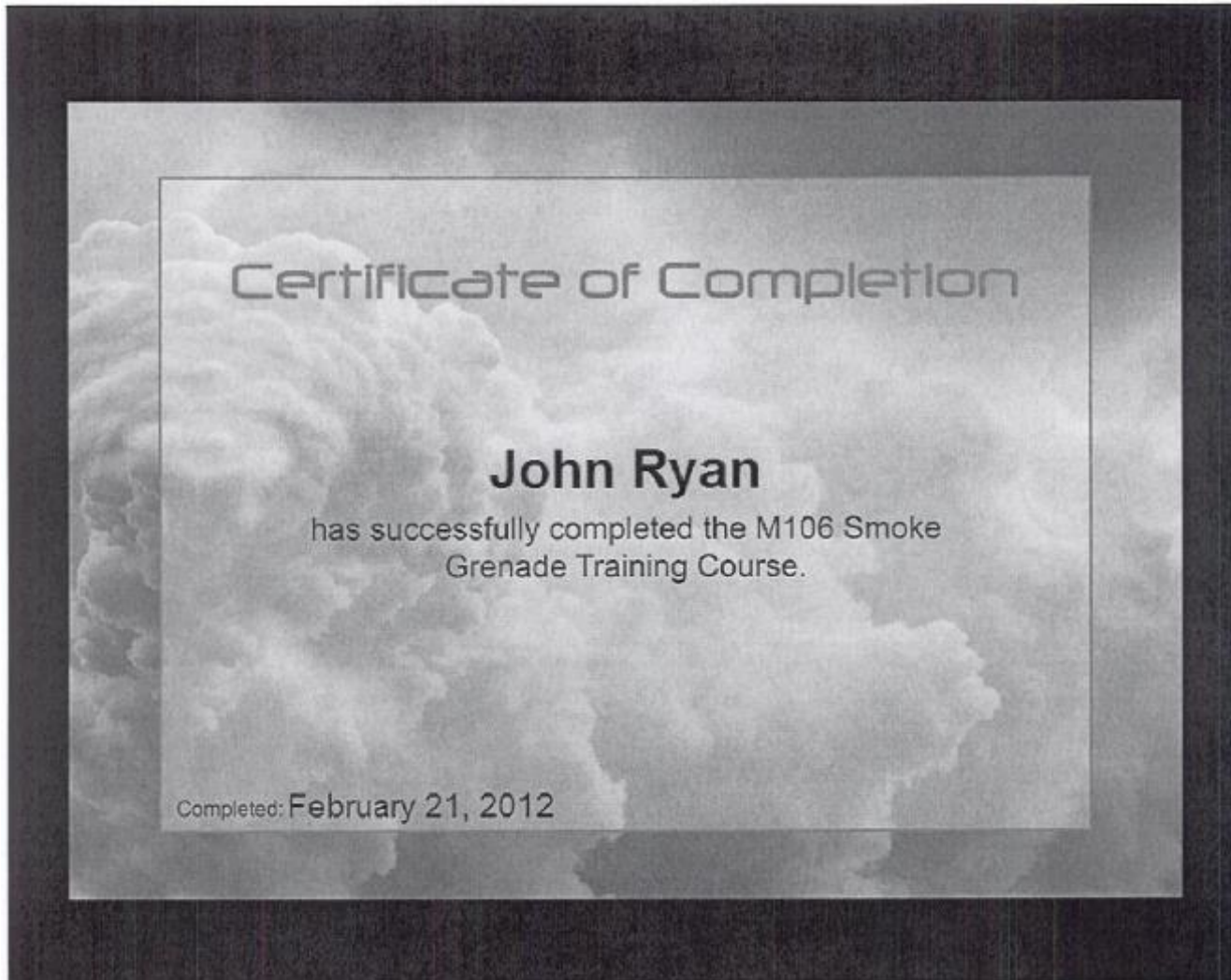
https://www.warrioruniversity.army.mil/landing?p_p_id=58&p_p_lifecycle=0&_58_redirect=%2f



M106 SOD-Vr Hand Grenade IMI Certificate of Completion



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M106 SOD-Vr Hand Grenade Training Risk Assessment



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HIGH = H

- United States Army Training and Doctrine Command (TRADOC) M106 SOD-Vr Hand Grenade Cadre Training and Certification Train the Trainer Course Development.
- United States Army Forces Command (FORSCOM) M106 SOD-Vr Hand Grenade Training Tactical Small Unit Leaders Training.

MEDIUM = M

- TRADOC Hand Grenade Cadre Training and Certification Home Station Training.
- FORSCOM (Small Unit) M106 SOD-Vr hand grenade training.

LOW = L

- Training with INERT M106 SOD-Vr hand grenade.



M106 SOD-Vr Hand Grenade Training Safety Considerations



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- All personnel conducting and or observing the M106 SOD-Vr hand grenade demonstration are required to wear the following equipment: Personal Protective Equipment (PPE): Body Armor (OTV, IOTV, Plate Carrier), Combat Helmet, Ballistic Goggles, Gloves, Hearing Protection, and the Army Combat Uniform with sleeves rolled down.
- The M106 SOD-Vr hand grenade will be separated from the M18, M83 and M14 grenades and will be maintained in its M2A1 ammunition can until ready for inspection and employment/demonstration.
- **Read and follow all instruction on the M106 SOD-Vr GTA Card inside M2A1 ammo can, before removal, arming and employment of grenade.**
- Check and clear designated employment/demonstration area for debris before arming and employ grenade.
- Do not disengage the pull ring from the confidence clip until ready to employ the M106 SOD-Vr hand grenade. Do not reset Confidence clip once disengaged.
- Do Not Attempt to “**COOK OFF**” or “**MILK**” the M106 SOD-Vr hand grenade or any other canister or hexagon shape hand grenades (M18, M8, M83, M14, M7A3 and M84).



Hand Grenade Training

Definition of Terms



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- **WARNING: Soldiers/Throwers Will NOT attempt to “MILK” or “COOK OFF” Hand Grenades (M18 SMK, M83 SMK, M14 INC, M7A3 ABC, M106 SOD-Vr., etc.) with a fuze delay time less than 4.0 seconds.**
- **COOK OFF**: The intentional arming (removal of safety clip (if present), disengagement of pull ring from confidence clip (if present), removal of pull ring/pin assembly) and releasing of pressure on the safety lever (1/8th inch or 1/4th pounds of pressure) and counting one thousand one, one thousand two before employing grenade to achieve a desired affect, i.e. to prevent the enemy from reacting to a hand grenade with a fuze delay greater than 4.0 seconds.
- **MILKING**: The unintentional releasing of pressure on the safe lever (1/8th inch or 1/4th pounds of pressure) causing the striker to rotate on its axes, striking the primer, starting the burn of the pyrotechnic delayed fuze leading to detonation. Detonation times can vary between 0.3-5.5 seconds based on the type of hand grenade and fuze being employed.
- **DUD**: A dud is defined as a fuze failure, or function for any reason after initial striker contact with primer.



M106 SOD-Vr Hand Grenade Leaders Evaluation



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- Refer to TC 3-23.30 for hand grenade training guidance, and safety and warning information.
 - Prepare to conduct hand grenade training:
 - Hand grenade identification
 - ID grenades by type and purpose.
 - Safe handling and inspection of hand grenades
 - Refer to STP 21-1 Task: 071-COM-4401: Perform Safety Checks on Hand grenades, and 071-COM-4407 Employ Hand Grenades.
 - Proper stowage of hand grenade in designated and designed pouch
 - The MOLLE Fragmentation Pouch fits the M67 Fragmentation Hand Grenade, The Flash-Bang pouch fits the M84 FB, canister shape hand grenade can be stowed in the M4 double magazine or other pouches.
 - Proper right and left hand grip
 - Refer to TC 3-23.30 for proper right and left hand grip.



M106 SOD-Vr Hand Grenade Leaders Evaluation



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- Refer to TC 3-23.30 for hand grenade training guidance, and safety and warning information.
 - Disengagement of the pull ring from the confidence clip (If present)
 - Refer to TC 3-23.30 for confidence clip disengagement procedures.
 - Proper arming procedure
 - Refer to TC 3-23.30 for arming procedure sequence.
 - Proper employment technique
 - Refer to TC 3-23.30 for throwing position (Prone to Standing, Standing, Prone to Kneeling, Kneeling, Alternate Prone).
 - Hand Grenade Qualification Course, or Modified Training Lane.
 - Refer to TC 3-23.30 and DA PAM 350-38 STRAC for training requirements.



M106 SOD-Vr Hand Grenade Environmental Considerations



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- It is the responsibility of all Soldiers and DA Civilians to protect the environment from damage. Based on its commitment to environmental protection the Army will conduct its operations in ways that minimize the environmental impact. The Army will comply with all environmental laws and regulations. This includes Federal, State, Local and Host Nation Laws, some of which are outlined in TC 3-34.489, The Soldier and the Environment (8 May 01), Appendix B.
- There are no unique environmental considerations for this period of instruction.



M106 SOD-Vr Hand Grenade Terminal Learning Objective (TLO)



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ACTION: Conduct Cadre Training and Certification on the M106 SOD-Vr Hand Grenade.

CONDITION: In a classroom and/or field environment, given this PowerPoint presentation, access to the Interactive Multimedia Instruction (IMI) presentation and one each M106 SOD-Vr (INERT) hand grenade with confidence clip for every 6 Soldiers that will conduct hand grenade training.

STANDARD: Inspect, Stow, Arm and Employ the M106 SOD-Vr without causing damage to the Hand Grenade, Fuze, Confidence Clip, Pull ring/pin assembly or causing personal injury or damage to unit equipment.



M106 SOD-Vr Hand Grenade Enabling Learning Objective (ELO)



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ACTION: Inspect the M106 SOD-Vr Hand Grenade Outer Create, M2A1 Ammunition Can with M106 SOD-Vr GTA Cadre, and M106 SOD-Vr Hand Grenade in its packaged configuration.

CONDITION: In a classroom and/or field environment, given this PowerPoint presentation and a requirement to inspect the M106 SOD-Vr outer packaging create, M2A1 ammunition can and the M106 SOD-Vr hand grenade in its packaged configuration for defects.

STANDARD: Inspect the M106 SOD-Vr outer packaging create, M2A1 ammunition can and M106 SOD-Vr hand grenade for defects; report and turn in outer packaging create with contents, M2A1 ammunition can with contents or hand grenades that have defects that can not be corrected.



M106 SOD-Vr Hand Grenade M2A1 Ammunition Can Outer Packaging Inspection

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1. Inspect the M106 SOD-Vr Outer Packaging Create for defects.

- Inspect wooden wire bound box for damage (I.e. Broken planks, chemical or powder leakage or stain, or improper markings)
- If there is no indication of damage, continue with inspection, if there is damage turn-in to issuing authority.
- Confirm proper item nomenclature, National Stock Number, proper issue quantity, and that anti-pilferage seal is present.
- Comply with all items Hazard, Safety and Warning markings.
- Properly store over pack until ready to issue, in accordance with ammunition classification markings.





M106 SOD-Vr Hand Grenade M2A1 Ammunition Can Inspection



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1. Inspect the M2A1 Ammo can for defects: **Outer Can**

- Check can for dents, broken lid hinge or if can is bulged.
- Check for anti tamper seal.
- Check can lid hinge for damage to the point the can cannot be open.
- Check for Nomenclature and National Stock Number.
- Check for proper shipping name (DODIC).
- Check for safety and hazard warning label.





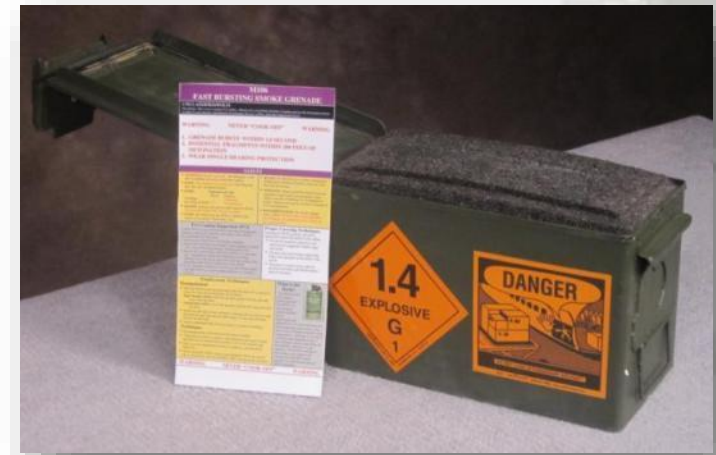
M106 SOD-Vr Hand Grenade M2A1 Ammunition Can Inspection



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1. Inspect the M2A1 Ammo can for defects: **Inner Can and Grenade:**

- Open M2A1 can lid.
- Check for and remove GTA Card:
- GTA Card Present.
- GTA Card is legible.
- Contact your ammunition OIC /NCOIC if GTA Card is missing or non-legible.
- Read and follow all Inspection, PCI and PCC instructions.





M106 SOD-Vr Hand Grenade M2A1 Ammunition Can Inspection



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1. Remove Styrofoam protective cover.

- Check for quantity of 6 ea M106 SOD-VR per can.
- Conduct a visual inspection of the top of each grenade.

- Ensure all pull rings are set in the confidence clip.
- Check to ensure safety levers are present and SL ears are seated.
- Inspect foil top for damage.
- Check for upside down grenades, If grenade is found: **DO Not Remove.**



STOP INSPECTION and RETURN CAN WITH GRENADE TO ISSUING POINT.





M106 SOD-Vr Hand Grenade Safety Checks



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4. Remove and Inspect M106 SOD-Vr Hand Grenade:

- Remove one grenade at a time from M2A1 ammo can.
- **DO NOT PULL THE GRENADE BY ITS FUZE HEAD or PULL RING.**
- Remove grenade by securing the fuze head with the index finger and thumb and pull straight up from its stored position.
- Inspect the grenade to ensure the pull ring is set in the confidence clip, and the pull pin is fully seated in the fuze.
- Inspect grenade body for damage.
- Inspect foil top and bottom end caps for damage.





M106 SOD-Vr Hand Grenade Safety Checks



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- Fuze: Check fuze to ensure it is seated, not loose and there is no gap between the fuze, gasket, and grenade body.
- Single Circular Pull Ring with Safety Pin Assembly: Check pull ring/pin for cracks, broken safety pin legs, and that the pin is fully seated through the fuze, and that the pull pin running end has a 45 degree spread. **Note:** If the pull pin running end is spread to 180 degrees, DO NOT attempt to reshape or reform.
- Confidence Clip: Check to ensure the confidence clip is present and pull ring is seated, if pull ring is not seated in confidence clip DO NOT reseal pull ring.
- Safety lever and hinge ears: Check to ensure the safety lever is present and not damaged, check the safety lever hinge ears to ensure they are pointed upward.
- Foil Top and Bottom: Check for tears, holes, bulges or leakage of (white powder/filler material).
- Check Body: Check body for tears, holes, bulges or leakage of (White powder/filler material).
- Nomenclature and Markings: Check to ensure the nomenclature and marking are legible and brown band is present.

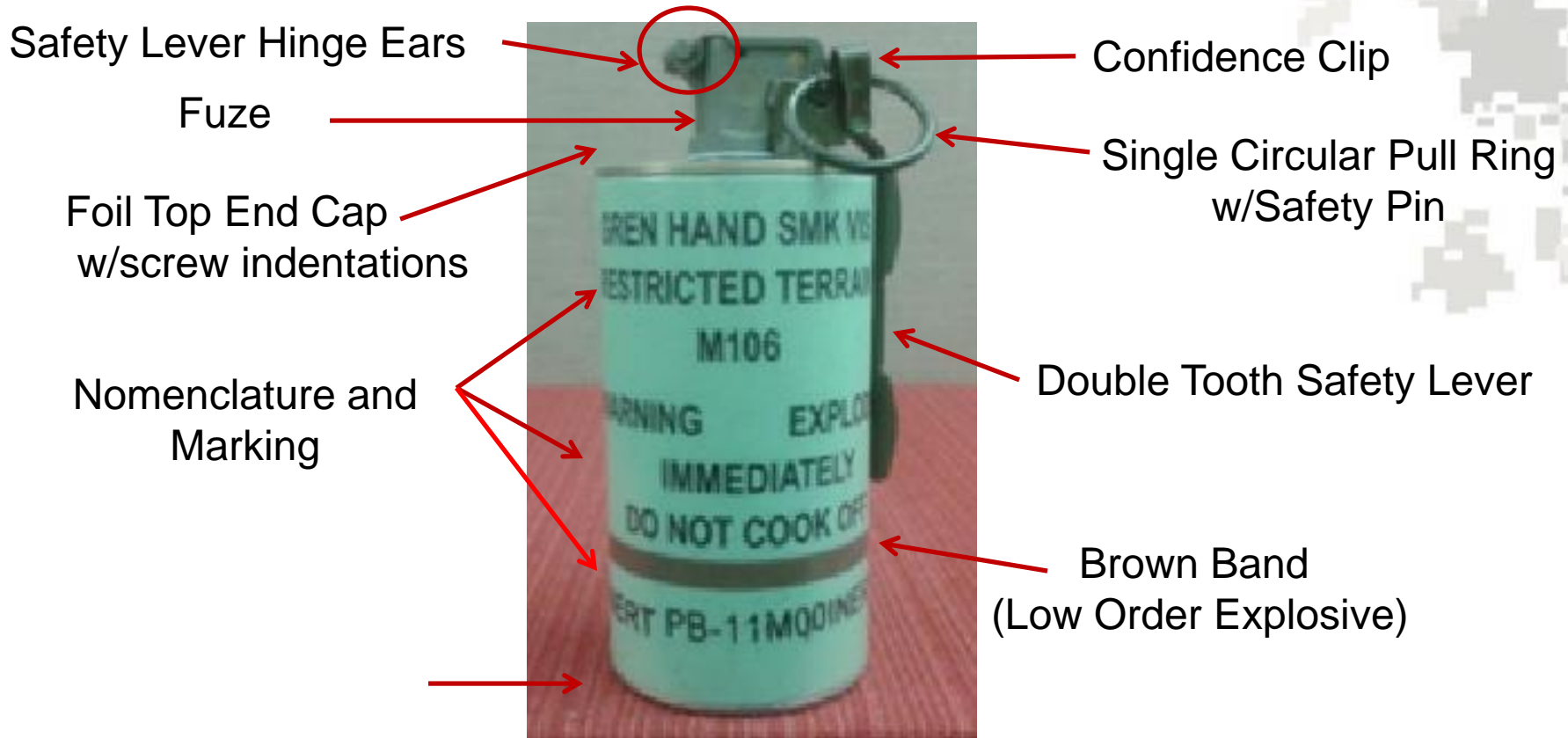


M106 SOD-Vr Hand Grenade Safety Checks



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M106 SOD-Vr hand grenade items to be checked (Front View)





M106 SOD-Vr Hand Grenade Safety Checks

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M106 SOD-Vr hand grenade items to be checked (Back View)

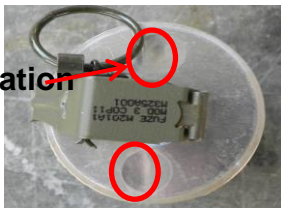
Trail end of pull pin
with 45 degree spread



Brown Band
(Low Order Explosive)

Markings, Warnings and Labels

Four Screw Indentation



Foil Top End Cap
W/screw indentation

Four bolt Indentation



Foil Bottom End Cap
w/screw indentation



M106 SOD-Vr Hand Grenade Safety Checks



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M106 SOD-Vr hand grenade items to be checked (Close Up View)



Confidence Clip



Single Circular Pull Ring



Pull Pin 45 Degree Spread



Safety Lever Hinge Ears
Front View



Safety Lever Hinge Ears
in the up position
Side View



Double Tooth Safety
Lever
(AKA: Spoon)



M106 SOD-Vr Hand Grenade Enabling Learning Objective (ELO)



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ACTION: Identify Markings, Warnings, Label and Components on the M106 SOD-Vr hand grenade.

CONDITION: In a classroom and/or field environment, given this PowerPoint presentation and a requirement to identify all markings, labels, and components on the M106 SOD-Vr hand grenade (INERT).

STANDARD: Identify the 4 major identification points of the M106 SOD-Vr. (see slide 27, Highlighted areas are the 4 identification points.)

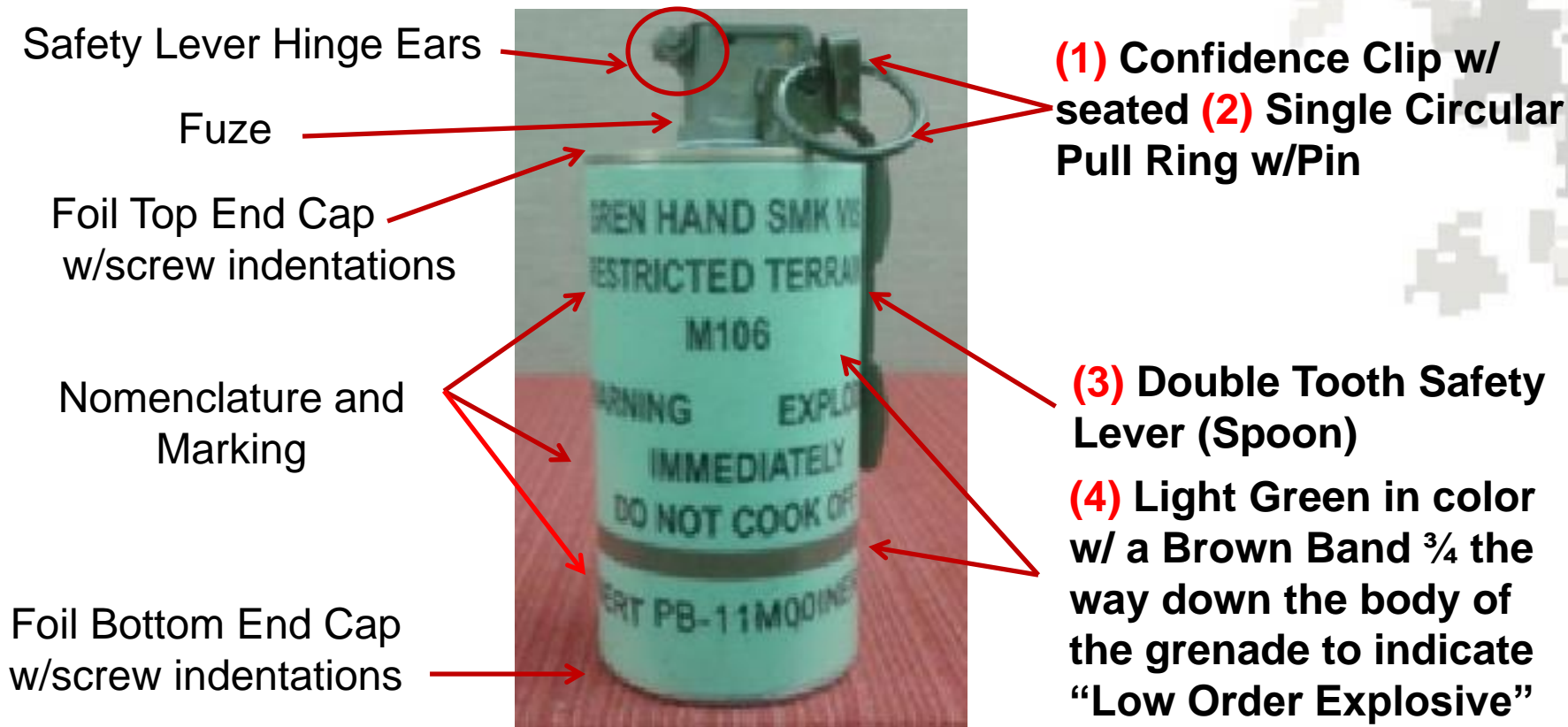


M106 SOD-Vr Hand Grenade

Markings, Warnings, Label and Components

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Markings, Labels and Components of the M106 SOD-Vr (Front View)





M106 SOD-Vr Hand Grenade

Markings, Warnings, Label and Components

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Markings, Warnings, Label and Components of the M106 SOD-Vr (Back View)

Trail end of pull pin
with 45 degree spread



Markings, Warnings and Labels

Brown Band
(Low Order Explosive)



M106 SOD-Vr Hand Grenade Top and Bottom View



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Foil Top
w/four screw
Indentation



M2A1 Ammo
Can Stowed
Position

Foil Bottom
w/ Indentation





M106 SOD-Vr Hand Grenade Enabling Learning Objective (ELO)



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ACTION: Stow the M106 SOD-Vr hand grenade in a designated pouch.

CONDITION: In a classroom and/or field environment, given this PowerPoint presentation and a requirement to stow the M106 SOD-Vr (INERT) hand grenade in a designated pouch.

STANDARD: Correctly stow the M106 SOD-Vr hand grenade without causing damage to the grenade or pouch.



M106 SOD-Vr Hand Grenade Stowage Procedures



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Stow the M106 SOD-Vr hand grenade:

- Modified M4 double magazine pouch attached to body armor.
- Open modified M4 double magazine pouch.
- Place M106 SOD-Vr into the pouch with the pull ring/pin assembly facing the back panel of the pouch and the safety lever (Spoon) against the left panel of the pouch.
- Fully seat the M106 SOD-Vr in to the pouch, ensuring the bottom of the grenade is touching the bottom of the pouch.
- Check the positioning of the grenade ensuring that the pull ring/pin is against the back panel and the safety lever is against the left panel.
- Close the top cover of the pouch, securing the push the dot fastener or buckle quick release.
- Check grenade frequently to ensure that the grenade is in the correct position.



M106 SOD-Vr Hand Grenade Stowage Procedures



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M4 Double Magazine
Pouch Closed



M4 Double Magazine
Pouch Open



M106 SOD-Vr Hand
Grenade Positioned for
Stowage



M106 SOD-Vr Hand Grenade Stowage Procedures



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M106 SOD-Vr Hand Grenade in Stowed Position



M106 SOD-Vr Hand Grenade Position Stowed with pouch close and secured.



M106 SOD-Vr Hand Grenade Enabling Learning Objective (ELO)



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ACTION: Employment of the M106 SOD-Vr hand grenade.

CONDITION: On a authorized training area or designated hand grenade training range, wearing all required PPE and safety equipment, arm and employ the M106 SOD-Vr hand grenade.

STANDARD: Correctly Grip, Disengage Confidence Clip, Arm and Employ the M106 SOD-Vr without causing personal injury or damage to unit equipment.



M106 SOD-Vr Hand Grenade Employment and Demonstration



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Employ the M106 SOD-Vr hand grenade.

1. Secure M106 SOD-Vr hand grenade using the proper right or left hand grip.

- **Right Hand Grip:** Secure grenade in the right hand with fuze skyward, place safety lever between 1st and 2nd joint of the thumb of the throwing hand, wrap remaining fingers around grenade.
- **Left Hand Grip:** Secure grenade in the left hand with fuze downward, place safety lever between 1st and 2nd joint of the thumb of the throwing hand, wrap remaining fingers around grenade.



M106 SOD-Vr Hand Grenade Employment and Demonstration



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Employ the M106 SOD-Vr hand grenade. (Right Hand)

2. Disengage Pull Ring from Confidence Clip and Arm Grenade:

- Right Hand Grip: Bring the grenade into the working area (Chin to Chest/Name tape level), making knuckle to knuckle contact.
- With palm of the non-throwing hand facing skyward, Insert the index or middle finger of the non-throwing hand into the pull ring.
- Maintain a firm proper grip on the grenade.
- Twist the pull ring towards the body $\frac{1}{4}$ - $\frac{1}{2}$ turn (Clockwise) until separate of the pull ring from the confidence clip.
- Pull the pull pin straight out of the grenade.
- Employ grenade using the overhand arc or underhand roll.
- Seek cover immediately after employment.



Right Hand Grip:
Rotate pull ring clockwise
(Towards) the body) to
disengage Confidence
Clip



M106 SOD-Vr Hand Grenade Employment and Demonstration



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Employ the M106 SOD-Vr hand grenade. (Left Hand)

2. Disengage Pull Ring from Confidence Clip and Arm Grenade:

- Left Hand Grip: Bring the grenade into the working area (Chin to Chest/Name tape level), making knuckle to knuckle contact.
- With palm of the non-throwing hand facing downward, Insert the index or middle finger of the non-throwing hand into the pull ring.
- Maintain a firm proper grip.
- Twist the pull ring away from the body $\frac{1}{4}$ - $\frac{1}{2}$ turn (Clockwise), until separate of the pull ring from the confidence clip.
- Pull the pull pin straight out of the grenade.
- Employ grenade using the overhand arc or underhand roll.
- Seek cover immediately after employment.



Left Hand Grip:
Rotate pull ring
clockwise (away from
the body) to disengage
Confidence Clip



M106 SOD-Vr Hand Grenade TRAINING MEMORANDUM (DRAFT)



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OFFICES SYMBOL	Date:
MEMORANDUM FOR RECORD	
SUBJECT: M106 SOD-Vr Hand Grenade Familiarization, Safety and Employment Training	
1. Reference:	
2. M016 SOD-VR Familiarization, Safety and Employments training has been conducted on the areas list below:	
a. Completed IMI Training and Testing and received a certification of completion.	
b. Soldiers have reviewed the M106 SOD-Vr Graphic Training Aid (GTA) card.	
c. Identification and inspection of the outer packaging material of the M106 SOD-Vr	
d. Identification and inspection of the inner packaging material of the M106 SOD-Vr	
e. Identification and inspection of the M106 SOD-Vr.	
f. Stowage of the M106 SOD-Vr in a modified MOLLE Pouch.	
g. Confidence Clip training completed.	
h. Arming and employment of the M106 SOD-Vr.	
3. The following Soldier/Soldiers completed and met training and qualification requirements to inspect, carry, stow and employ the M106 SOD-Vr. Name/Rank/SSN: _____	
4. The following unit representative conducted M106 SOD-Vr training.	
a. Name/Rank _____	
b. Duty Position: _____	
5. A copy of this memorandum will be submitted to CO and BN Training NCOIC and maintained for a period of one year.	
6. A copy of this training memorandum will accompany all ammunition requests for the M106 SOD-Vr.	
7. POC for this action:	
Unit Commander Signature Block CPT, INF Commanding	

REQUIREMENT

Memorandum for Record: M106 SOD-Vr hand grenade training