

# COSTUME REFERENCE LIBRARY

## Stormtrooper, Heavy Weapons Trooper



Model TK 2918, Photo by **Dan Brown**



**Description:** Stormtrooper, Heavy Weapons Trooper (HWT)

**Prefix:** TK

**Detachment:** **First Imperial Stormtrooper Detachment**

**Context:** Star Wars Battlefront

Heavy Weapons Troopers ( A.K.A. Shock Troopers) are an elite unit of the Imperial Stormtrooper Corps, specializing in the use of various non-standard weapons and equipment. Their armor is extra heavy plated compared to the standard Stormtrooper armor. Some, equipped with rocket launchers, act as anti-vehicle units on the battlefield. They are trained to hit hard targets and to guard strategic locations. The Heavy Weapons Troopers operate as splinter units, backing up standard garrisons and fulfilling unique roles on the battlefield.

The 501st approval requirements are listed in black.

FISD Defines two additional, optional levels of costuming excellence. In the page below, requirements for Level 2 "Expert Infantryman" are listed in **blue**. Requirements for Level 3 "Centurion" are listed in **red**.

- Those armor pieces without blue and/ or red text are by default considered the highest level.
- Please visit the FISD web site for a full description of these standards.

**For 501st membership only the requirements in black need to be met.**

### Special Notes:

- Visit the [Frequently asked questions page](#) for information on the Rubies Supreme Stormtrooper costume.
  - Blasters are not required for legion membership per our [weapons policy](#).
  - The armor parts shall be made from one of these types of materials or like materials: White fiberglass, ABS (Acrylonitrile Butadiene Styrene), HIPS (High Impact Polystyrene), or Polyvinyl chloride (PVC).
  - FX armor may not be used for Level 3 approval.
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This Visual Guide has been reviewed by the detachment staff and the LMO team and is certified for use as a minimum approval guideline for GMLs. GMLs are free to approve this costume type.

- Any uncertainties or questionable aspects of the submitted costume should be brought to the appropriate DL/GML peer review section of the legion forum.

## Required Costume Components

The following costume components are present and appear as described below.



Helmet  
For 501st approval:

- Traps (trapezoids on dome of helmet) and tears (area beneath the corners of eye lenses) are gray.
- Rear traps and tears have vertical black lines.
- Lenses are flat material, green in color, sufficiently dark enough to obscure the costumer's eyes.
- The "ear" bars have three or four bumps and should be gray or painted gray, with a black outline. Painting the bumps with rank stripes (highlighted) in black is optional.
- Frown is painted gray and does not leave the teeth area. Eight total teeth on the frown are cut out.
- Tube stripes are medium blue, numbering between 9 and 16 per side with the curve bends extending backwards.
- Vocoder (vertically ribbed chin detail) is painted black.
- Aerators/Hovi mix tips (cylinders on either side of the vocoder) are black or painted black.
- Tears, traps, and tube stripes may be hand painted, decals, or decals that replicate hand painted.
- Mesh may be used behind the frown to obscure the face of the wearer.
- Note: The helmet is accurate in detail and proportion to official references.
  - ◆ Many commercially available helmets or those considered disproportionate in size or shape are ineligible.

[For level two certification \(if applicable\):](#)

- Ears should have three screws used per side, one above and below the ear bar and one at the base of the helmet.
- Ear bars should have four bumps only, not three.
- Traps/tears and tube stripes shall have the correct ANH TK details.
- Correct 'Hovi mic' aerator tips.
- Helmet and details/paint should be lightly scuffed, (battle worn), but not weathered like a Sandtrooper (TD).

For level three certification (if applicable):

- Ear bars shall have only one bump painted in black (rank stripes).
- Neck trim shall be of an s-type profile rather than a u-type profile.
- Tears/traps shall be hand painted or use decals that emulate hand painted (with correct ANH TK details).



Neck Seal

For 501st approval:

- Black with horizontal ribs, fitted to the wearer, and extending from the base of the neck to the top of the Adam's apple.



Under Suit

For 501st approval:

- Black non-textured material, either one-piece or two-piece construction with no visible zippers or logos.



Pauldron

For 501st approval:

- A black, orange, or white neck ornament made of leather or a leather-like material, worn over the right shoulder.

For level two certification (if applicable):

- Pauldron shall be of the padded "puffy" variety.
- Older style flat and off color pauldrons are incorrect.

For level three certification (if applicable):

- Pauldron color is orange.



Shoulder Straps

For 501st approval:

- These shall be securely mounted in front and may free float in back. They may be affixed with rivets, Velcro, or adhesive.

For level two certification (if applicable):

- No visible rivets are allowed.
- Shoulder straps should be lightly scuffed,(battle worn), but not weathered like a Sandtrooper (TD).

For level three certification (if applicable):

- These shall be glued in front.



Shoulder Armor  
For 501st approval:

- One on each shoulder. The shoulder bells are considered effectively symmetrical; they may worn interchangeably on the left and right shoulders and should have a black elastic strap that wraps around the inside of the bicep.

For level two certification (if applicable):

- Shoulder bells should be lightly scuffed,(battle worn), but not weathered like a Sandtrooper (TD).



Upper Arm Armor  
For 501st approval:

- Biceps are fully closed.

For level two certification (if applicable):

- Biceps should be lightly scuffed,(battle worn), but not weathered like a Sandtrooper (TD).

For level three certification (if applicable):

- Biceps must be constructed using the butt joint and cover strip method. Overlap construction is not allowed.



Forearm Armor  
For 501st approval:

- Forearms are fully closed

For level two certification (if applicable):

- Forearms should be lightly scuffed,(battle worn), but not weathered like a Sandtrooper (TD).

For level three certification (if applicable):

- No return edge on the inside of the front of the forearm is allowed.
- Forearms must be constructed using the butt joint and cover strip method. Overlap construction is not allowed.



Hand Plates  
For 501st approval:

- Roughly pentagonal in shape, the hand plates are mounted securely over the back of the glove. As an alternative to plastic, these may be made out of latex or latex-like material.

For level two certification (if applicable):

- Hand plates should be lightly scuffed,(battle worn), but not weathered like a Sandtrooper (TD).

For level three certification (if applicable):

- Hand guards shall be latex or latex-like, painted white, affixed to rubber gloves in lieu of plastic hand guards.



Gloves

For 501st approval:

- Black gloves, made of either rubber, nomex, leather, or leather-like material.
- Gloves have no visible straps, logos or designs.
- Fingers are enclosed and non-textured.

For level two certification (if applicable):

- Black rubber or rubber-like chemical gloves.



Chest Armor

For 501st approval:

- Chest plate overlaps the abdominal plate.

For level two certification (if applicable):

- Chest plate should be lightly scuffed,(battle worn), but not weathered like a Sandtrooper (TD).

For level three certification (if applicable):

- Chest and back shall be connected with a white fabric or preferably elastic strap at the shoulders.
- AM chest plate must be replaced with a more screen accurate version.



Ammo Pouches

For 501st approval:

- German MP-40 style ammo pouches.
- Pouches are black in color and made of canvas, leather or leather-like material.
- There are a minimum of two pouches:
  - ◆ One pouch on the left shoulder and one on the right hip.
- Option:
  - ◆ A third pouch worn on the opposite hip.



Back Armor

For 501st approval:

- Back plate contains a "O II" design.

For level two certification (if applicable):

- The Back plate should be lightly scuffed,(battle worn), but not weathered like a Sandtrooper (TD).

For level three certification (if applicable):

- Back plate shall have no, or minimal overlap of the kidney plate.
- AM back plate must be replaced with a more screen accurate version.



Backpack  
For 501st approval:

- Backpack is styled after and closely matches the backpack seen in the Battlefront series.

For level two certification (if applicable):

- Backpack is lightly scuffed and battle worn, but not heavily weathered or dirty.



Abdomen Armor  
For 501st approval:

- The Ab plate has a button area that matches the color pattern shown (3 blue + 6 gray); buttons are approximately 7/16" (11mm) in diameter.

For level two certification (if applicable):

- Any gap between the ab and kidney plate shall be no more than 1/2" (12.5mm) wide. Any shims used to achieve this effect should be of a similar material and color as the ab and kidney plate. Shims shall fit flush and seams are allowed.
- Ab plate and details/paint should be lightly scuffed, (battle worn), but not weathered like a Sandtrooper (TD).

For level three certification (if applicable):

- Ideally there should be no gap between the ab and kidney plates, just a single visible seam line.
- Rivets on the left side of the ab plate: a total of three fasteners, the heads should be rounded or domed, solid, approximately 5/16" (8mm) diameter and equally spaced out along the depth of the armor and about 10mm from the edge. They may be painted white, or not. Paperclip brads are not considered to have a domed head. Note: For the original TK armor the type of rivets used were bifurcated rivets or split rivets.
- A single male snap on the top right corner of the ab plate shall be present.
- A single split rivet or brad shall be present on the crotch tab of the ab plate. It does not need to be functional.
- Ab plate buttons must be integrated and painted directly on the plate, no separate buttons are allowed.



Kidney Armor  
For 501st approval:

- A separate kidney plate is present, split from the posterior armor.

For level two certification (if applicable):

For level three certification (if applicable):

- Squared cut-out sections at the lower left and right corners of the Kidney Armor.
  - ◆ The cut out is roughly 22 mm tall from the bottom and 22 mm in from the side.
- Three rivets, approximately 5/16"(8mm) diameter, are present on the left side of the kidney plate.
  - ◆ Note: The original rivets used for the TK armor were bifurcated rivets or split rivets.
- Rivets are equally spaced along the depth of the armor and about 10mm from the edge.
- The heads are rounded or domed.
  - ◆ Note: Paperclip brads are not considered to have a domed head.
- Rivets are painted white.



Posterior Armor  
For 501st approval:

- A separate rear armor piece is split from the Kidney Armor

For level two certification (if applicable):

- Posterior Armor is lightly scuffed (battle worn), but not heavily weathered like a Sandtrooper (TD).

For level three certification (if applicable):

- Two male snaps are present on the lower center tab of the Posterior Armor.
  - ◆ Snaps do not need to be functional.



Belt  
For 501st approval:

- Belt face is made of plastic (TK ammo belt).
- The soft belt proper is made of canvas, or material with a canvas covering. Size must be 2.75" (70 mm) to 3.25" (83 mm) wide and not wider than the plastic portion of the belt. The color is be white to off-white.
- It is allowable to have drop boxes for the 501st requirements. If the drop boxes are used, they should dangle from the sides of the front plastic belt (ammo belt) via white straps and are aligned under the plastic tabs of the ammo belt.

For level two certification (if applicable):

- Drop boxes are not allowed.
- Should be lightly aged, (battle worn), but not weathered like a Sandtrooper (TD).
- There shall be three square buttons, one centered in the middle and one on each end of the plastic ammo belt.
- Belt face (TK ammo belt) should be lightly scuffed, (battle worn), but not weathered like a Sandtrooper (TD).

For level three certification (if applicable):

- The corners of the plastic ammo belt shall be trimmed at a 45 degree angle.



### Thermal Detonator For 501st approval:

- The Thermal Detonator (a.k.a. O2 canister) attaches to the back of the belt.
- Detonator consists of a grey cylinder, between 2"(50mm) and 2.5" (64mm) in diameter, with white end caps on each end.
- Detonator includes a white control panel pad, with controls closest to the right end cap.
  - ◆ Note: The Thermal Detonator is omitted from this costume when a pack is worn.

### For level two certification (if applicable):

- Thermal detonator belt clips are positioned with little to no gap between the clips and the end caps.



### Thigh Armor For 501st approval:

- Thigh armor shall be closed in the back.
- The small ammo belt is installed on the bottom of the right thigh.

### For level two certification (if applicable):

- The thigh should be lightly scuffed, (battle worn), but not weathered like a Sandtrooper (TD).

### For level three certification (if applicable):

- Thigh ammo belt must be attached to thigh with a solid head rivet or fastener in the upper corner and fastened to the lower thigh ridge. Standard pop rivets are not allowed
- The bottom corners of the thigh ammo belt shall be rounded off.
- Thighs must be constructed using the butt joint and cover strip method. Overlap construction is not allowed.



### Lower Leg Armor For 501st approval:

- Greaves close in the back.
- The trapezoid knee plate (sniper knee plate) is affixed to the left greave and may have two visible brads or rivets securing it to the greave.
- The AM greaves (shins) shall be on the proper legs, with a new cover strip. The cover strip edge shall be facing the inside of the leg.
  - ◆ Note: There is a manufacturer defect with the AM greaves (shins) that may cause you to wear the them improperly. Please see the Tutorial titled : "AM armor shins: the proper way to assemble and wear", on the whitearmor.net

### For level two certification (if applicable):

- The greaves should be lightly scuffed, (battle worn), but not weathered like a Sandtrooper (TD).
- Sniper knee plate must be aligned with the ridges on the shin.
- Sniper knee plate must not have visible rivets or fasteners attaching it to the shin.

### For level three certification (if applicable):



- Lower legs must be constructed using the butt joint and cover strip method. Overlap construction is not allowed.



#### Boots

For 501st approval:

- Boots are above ankle height and made of white leather or leather-like material.
- Small U-shaped elastic sections on both sides of the ankle.
- Flat sole with a short heel.
- No buckles or laces.
- Jodhpur/ Chelsea-type boots or an equivalent style is acceptable.
  - ◆ Elvis or Mariachi boots are not allowed.

For level two certification (if applicable):

- There is no seam present on the front of the boot.
- Boots are lightly scuffed.

## Optional Accessories

Items below are optional costume accessories. These items are not required for approval, but if present appear as described below.



#### Macrobinoculars

For 501st approval:

- Styled after the ones used by the Sandtrooper in the Special Edition scenes of ANH.



#### Minimag PTL Missile Launcher

For 501st approval:

- Based on the missile launcher as seen in the Star Wars Battlefront video game series.

For level two certification (if applicable):

- Missile launcher closely matches the video game reference (Battlefront series), including scope on the left side, stock, and pistol grip.



#### DLT-19 Heavy Blaster Rifle

For 501st approval:

Manufactured by BlasTech Industries, the DLT-19 heavy blaster rifle is much more powerful with a much greater range than the E-11 blaster. Because of its powerful, long range capabilities, this rifle is commonly used on Imperial controlled planets with large, clear, open areas.

- Based on a real or replica MG-34 machine gun.

For level two certification (if applicable):

- A DLT-19 is an MG-34 with T-tracks on the barrel, ejection port cover added, and a small disk on left side.



RT-97C Heavy Blaster Rifle  
For 501st approval:

Manufactured by BlasTech Industries, the RT-97C features a long barrel to increase the firing range of the energy beam projectile. Three scopes increase accuracy and versatility. The first scope is an energy scanner capable of detecting life forms. The second scope is a rangefinder that automatically adjusts the targeting components. The third scope uses infrared heat imaging technology.

- Based on a real or replica MG-15 machine gun.

For level two certification (if applicable):

- Correct style scopes.
- Silver metal hose is present on the right hand side of barrel between the trigger and "saddle barrel".



T-21 Light Repeating Blaster Rifle  
For 501st approval:

Manufactured by BlasTech Industries.

- Based on a real or replica Lewis Mark I machine gun. For this prop the magazine disk and bipod of the original gun are left off.

For level two certification (if applicable):

- A ribbed length of tubing shall be installed over the front of the gun barrel.
- A canvas, leather, or nylon sling shall be attached.
- Sight shall be present on top where ribbing meets base.



E-11 Blaster  
For 501st approval:

Manufactured by BlasTech Industries, the E-11 is standard-issue for many Imperial troops. Light, compact yet powerful, the E-11 blaster is always in high demand throughout the galaxy.

- Based on a real or replica Sterling sub-machine gun, scratch-built, or a modified commercial toy Stormtrooper blaster.

For level two certification (if applicable):

- Folding stock.
  - ◆ Stock does not need to function.
- A real or replica ammo counter - based off of a Hengstler counter - should be present.
- D-ring mounted on the rear.
- Correct style scope.
- Two power cylinders on the magazine.
- Scratch-built, resin cast, Hyperfirm rubber cast blasters should have a total of 6 t-racks on blaster (leaving the lowest row on the Hengstler side un-covered).

- If using the Hasbro E11 toy blaster, it is modified to have the correct number of T-tracks (6 total), with a lower row of open vent holes on the magazine housing side.
  - ◆ This is accomplished by covering the pre-existing rows of holes with T-tracks, then grinding off the lower integrated T-track on the magazine housing side, and drilling a new row of holes in its place.



SE-14R Blaster  
For 501st approval:

- The SE-14R blaster as seen the video game. It should have a correct scope if carried in lieu of the E-11.

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