

# COSTUME REFERENCE LIBRARY

## Sky Trooper



Model TK-6647, Photo by **Tarisa Matsumoto-Maxfield**



**Description:** Sky Trooper

**Prefix:** TK

**Detachment:** [First Imperial Stormtrooper Detachment](#)

**Context:** The Sky Troopers appear in the Disney Star Tours II 3-D attraction ride.

The Sky Troopers are a highly trained unit with specially designed armor, with distinctive gray unit markings. Their armor is very light weight, but can withstand high altitudes and the pressure from G-forces. They are equipped and trained with Z-7I Jetpacks. The Z-7I Jetpacks were especially designed with a more stable gyro, a larger fuel tank and higher thrusting power for the Imperial Forces, by Mitrinomon Transports. The Z-7I Jetpack, makes the Sky Trooper units extremely fast and maneuverable, enabling them to get behind enemy lines quickly, and to set up ambushes, when ground troops and large vehicles are unable to do so. Wielding the BlasTech DC-15A and DC-15S, the Sky Trooper units are well known for their marksmanship. They are also trained in the use of hit-and-run attacks and often provide Stormtrooper units with air cover during pitched battles. With the combination of the Jetpack and their marksmanship, the

Sky Trooper units are a very formidable weapon for the Empire.

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:

- A unit stripe in a medium gray shall be present on the cap of the helmet. The unit stripe starts between the eyes and above the brow and flares out to cover the outer edges of both back traps. (trapezoidal indentations) and ends at the ridge of the cap where the back meets and extends below the bottom of each trap.
- Variant to the cap unit stripe: You may have a thin silverish white stripe running through the center of the medium gray unit stripe, from the front to the back of the cap.
- The two side traps (trapezoidal indentations) are kept white.
- Variant to side traps: You may have a small black horizontal stripe inside of the side traps.
- Lens may be flat or bubble, smoke or green in color, sufficiently dark enough to obscure the costumers eyes.
- Below the brow, and in between the ears and eyes, a gray trapezoid with a black outline shall be present. These maybe a decal or hand painted or decal that replicates hand painted.
- Frown is painted black and overlaps the teeth area, with the front of the teeth being highlighted in medium gray. Eight teeth on the frown are cut out.
- The chin area shall be painted gray.
- Vocoder (vertically ribbed chin detail) is painted black.

- Chin shall have two hose ports, one on each side of the vocoder, where the ribbed black hoses connect.
- Tube Stripes, there are two variations that you may have:
  - ◆ Variant 1. A solid medium gray stripe, running the length of the tube, with the ends slanting toward the ear. These may be a decal or hand painted, or a decal that replicates hand painted.
  - ◆ Variant 2. Straight stripes, black in color, with medium gray in between the black stripes, numbering between 9 and 16 and slanting toward the ear. These may be a decal, or hand painted, or decals that replicate hand painted.
- The ?ear? bars may have three or four bumps, shall be gray or painted gray, with a black outline. Painting the bumps with rank stripes (highlighted) in black is optional.
- Tears (area beneath the corner of the eye lenses) are gray with a black outline and have vertical black lines inside the gray area. These maybe a decal or hand painted or decal that replicates hand painted.
- Mesh maybe 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 shall have no visible screws.
- The ends of the frown shall be rounded, not tapered to points (not like ANH).
- Ear bars shall four bumps only, not three.

For level three certification (if applicable):

- Lenses shall be bubble green only.
- Ear bars shall have only one or two bumps painted in black (rank stripes).
- Neck trim shall be of an s-type profile rather than a u-type profile.



Hoses

For 501st approval:

- The hoses shall be ribbed, black in color, with a 1.25?/ 3.2 cm diameter and be 18? to 21?/ 45.7 cm to 53.3 cm in length. They shall connect from the helmet hose ports to the chestbox side ports.



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/designs.



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 shall not have a flat end at the ends of them. They shall be ribbed 100%.

For level three certification (if applicable):

- These shall be affixed in the front (no snaps, rivets or brads shall be visible).
- These shall be affixed in the back (no snaps, rivets or brads shall be visible).



Shoulder Armor

For 501st approval:

- The shoulders are considered effectively symmetrical.
  - ◆ They may be worn interchangeably on the left and right shoulders.
- A unit stripe, medium gray in color, running through the center and flaring out at the top, shall be present.

For level two certification (if applicable):

- Shoulders are rounded at the corners.
- No shoulder straps across the biceps.

For level three certification (if applicable):

- Shoulders have foam padding inside.
- Shoulders are slightly pinched and are worn slightly higher, compared to ANH/ESB.

Upper Arm Armor

For 501st approval:



- Biceps are fully closed.
- A unit stripe, medium gray in color, located on the outside of the biceps, shall be present..

For level two certification (if applicable):

- Biceps use the overlap construction method.
  - ◆ Using the butt joint and cover strip method is inaccurate.



Forearm Armor  
For 501st approval:

- Forearms are fully closed.
- A unit stripe, medium gray in color, shall be present on the raised design area that has indentation.
- A unit stripe, medium gray in color, shall be present on the cover strip/overlapping areas.

For level two certification (if applicable):

- No return edge on the inside of the front of the forearm is allowed.
- Forearms use the overlap construction method.
  - ◆ Using the butt joint and cover strip method is inaccurate.



Gloves  
For 501st approval:

- Black in color, made of either rubber, nomex, leather, or leather-like material, with no visible straps or logos/designs. The fingers are enclosed, non-textured.

For level two certification (if applicable):

- Gloves shall be rubber or rubber like chemical gloves in black.



Hand Plates  
For 501st approval:

- Hand plates shall be medium gray in color.
- There are two variances of the hand plates. You may choose from one of the variances, but may not mix the variances:
  - Variant 1. Clamshell or snowtrooper-style hand plates.
  - Variant 2. 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.



Chest Armor  
For 501st approval:

- Chest plate overlaps the abdominal plate.
- A unit stripe, medium gray in color, shall be present on the chest plate. It will start at the bottom of the center of the chest plate and flare out closer to the neck.
- A white flexible U shaped gasket or molded lip shall be present around all edges.

For level two certification (if applicable):

- Fabric or elastic strip connecting chest to back shall be either black or not present.



#### Chestbox

For 501st approval:

- Main body of chest box shall be white.
- Rectangular box with a rounded bottom, approximately 7" high, 7.25" wide, 2.5" deep, or 17.8 cm high, 18.4 cm wide, 6.4 cm deep.
- The top edges of the Chestbox are angled at approximately 45 Degrees.
- Two round medium gray buttons are present on the left side of the top of the chest box.
- The front of the chest box has five 1" square x 1/8" thick detail pieces, or 2.5 cm square x 0.3 cm thick detail pieces.
- The configuration of the detail pieces from center to right is:
  - white - center lower
  - gray - top, black lower
  - red - top, red - lower
- There are three rocker switches (one black, two red) on the left side. The configuration from center to left is: black, red, red.
- There shall be two small, round, white buttons on the bottom of the black and outer red rocker switches.
- At the lower part of each side of the chestbox, there shall be a black gear-like greeblie.
- From the center to the left side of the tube, there shall be 9 medium gray vertical stripes.
- On the bottom left side of the tube, just below the medium gray vertical stripes, there is a small angled protrusion, approximately 0.75" high x 2" wide, or 1.9 cm high x 5.1 cm wide.



#### Back Armor

For 501st approval:

- A white flexible U shaped gasket or molded lip is present around all edges.
- Back armor contains a "O II" design.

For level two certification (if applicable):

- Back armor shall have minimal to no overlap of the kidney armor.



#### Mitrinomon Z-71 Jetpack

For 501st approval:

Based on the Mitrinomon Z-6 Jetpack, but the anti-vehicle homing missile/magnetic grappling hook was removed in the Z-71 and a modified, larger fuel tank was added.

- It is allowable to use the Merr-Sonn Munitions JT-12 Jetpack for the 501st requirements.
  - ◆ Note: Shall have the 9mm warhead removed and the modified, larger fuel tank added.
  - ◆ The JT-12 Jetpack has the bottom thrusters removed and replaced with the correct side thrusters.
- Note: The Z-6 is the model that Boba and Jango Fett use.
  - ◆ The JT-12 Jetpack is the model that Mandalorians Death Watch and Jango Fett also use.
- The body of the Jetpack is white.

- A wide vertical strip, medium gray in color, is located on the center back of the Jetpack.
- Two, wide, black vertical stripes are located on either side of the medium gray center stripe.
- The two large indents, just above the vertical black strips on the fuel tank, are a medium gray.
- Black horizontal stripes are present on each side of the Jetpack.
  - ◆ There are two variances to the black horizontal side stripes and it may be one of these two variances.
    - ◇ Either 9 or 11 stripes per side.
    - ◇ Each side shall have an equal number of stripes.

For level two certification (if applicable):

- Jetpack thrusters shall actually work and jetpack shall be able to actually hover for at least 30 seconds.



Abdomen Armor  
For 501st approval:

- A white flexible U shaped gasket or molded lip shall be present around all edges.
- 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):

- There shall be no visible split rivet/brad on the cod/crotch and no visible rivets or brads on the left or right side of the ab plate, unlike ANH/ESB.



Kidney and Posterior Armor  
For 501st approval:

- A white flexible U shaped gasket or molded lip shall be present around all edges.
- A separate kidney/butt plate is not allowed - the kidney and butt plate shall be combined/fused to a single plate/one piece.
- The crotch tab of the butt plate area may or may not have visible snaps.

For level two certification (if applicable):

- The edges of the hip area are rounded/curved (not like the straight lines found on the ANH/ESB posterior armor).

For level three certification (if applicable):

- There shall be no visible side rivets on the kidney plate, unlike ANH/ESB suits.
- There shall be no visible snaps, rivets or brads on the lower center tab of the posterior armor.



Belt  
For 501st approval:

- Belt face is made of plastic (TK ammo belt).
- Belt proper is tightly woven nylon/cordura like/style material or material with a tightly woven nylon/cordura like/style covering. Size 2.25" (57mm) to 2.5" (64mm) wide. The color is to be white to

off-white.

- The drop boxes 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):

- There shall be no square buttons covering the belt rivets (there shall be two rivets, one on each side of the ammo belt).
- Corners of ammo belt shall be cut at right angles, not 45 degrees as in ANH/ESB.
- Drop boxes are closed in the back.



Thermal Detonator  
For 501st approval:

- (A.K.A. O2 canister) attaches to the center back of the belt.
- This is an all gray cylinder without silver stickers or silver paint.
- The cylinder is between 2" (50mm) and 2.68" (68mm) in diameter with white end caps on each end.
- The white control panel pad faces upwards, with controls/round washer style detail closest to the right end cap.
- The total length is approximately 7.50" (190.5mm).
- The thermal detonator is attached via metal or metallic-appearing clips approximately 3/4" (19mm) wide.

For level two certification (if applicable):

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

For level three certification (if applicable):

- The thermal detonator control panel has correct ROTJ details, not ANH/ESB.



Thigh Armor  
For 501st approval:

- Thigh armor shall be closed in the back.
- A unit stripe, medium gray in color, running vertically and center of the front and rear of both thighs shall be present.
- The ammo belt shall be installed on the bottom of the right thigh.

For level two certification (if applicable):

- The thigh ammo belt shall be connected by brads/split rivets only - standard rivets are not acceptable.
- The bottom corners of the thigh ammo belt shall be rounded off.
- Thighs use the overlap construction method.
  - ◆ Using the butt joint and cover strip method is inaccurate.

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

- A unit stripe, medium gray in color, shall be present on the front of both greaves. The stripe is centered, running vertically, and flaring out as it gets closer to the knees.
- Trapezoidal knee plate (sniper knee plate) shall be medium gray in color, with the small ridge style pattern at the bottom of the sniper knee plate, left white.

For level two certification (if applicable):

- Lower legs are constructed using the overlap construction method.
  - ◆ Using the butt joint and cover strip method is inaccurate.



Boots

For 501st approval:

- Boots are above ankle height and made of white leather or leather-like material.
- Boots, including the heel and sole, are medium gray in color.
- 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):

- Boots shall be lightly scuffed.
- There shall be no seam on the front of the boot.

## Optional Accessories

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



DC-15A Blaster Rifle

For 501st approval:

Manufactured by BlasTech Industries, the DC-15A is a tibanna gas, cartridge powered weapon. Hyper-ionized blue plasma bolts are more than capable of penetrating armored units. Exceptionally effective against both droids and contemporary targets.

- Realistic Clone Style DC-15A Blaster Rifle.
- Blaster rifle is scratch built out of plastic, wood, metal or cast in resin.
- Blaster has realistic Episode II or Episode III details:
  - ◆ Flip up sight in down position.
  - ◆ (10) radiator fins evenly spaced along the length of barrel.
  - ◆ Power setting adjuster detail lever.
  - ◆ Sniper Scope attached under rifle in storage position.
  - ◆ Charge magazine clip on left side.
  - ◆ Igniter detail knobs.
- Total length is approximately 55 inches (139.7 cm).
- Because of the scale, the Hasbro version is not allowed.

For level two certification (if applicable):

- Charge magazine detail on clip is metal to gun metal grey in color.
- Detail bolts and screws are metal to gun metal grey in color.
- Igniter has some copper coloring.
- Power setting adjuster detail lever is metal or gun metal grey.
- Sniper scope is metal or gun metal grey.
- Blaster is weathered.

For level three certification (if applicable):

- Functioning Blue LED is installed in barrel.



DC-15S Blaster  
For 501st approval:

Manufactured by BlasTech Industries the DC-15S is smaller in scale than the DC-15A blaster rifle. Although it has a shorter range than that of the "A" model, it is easier to handle with a higher rate of fire. It features a folding stock for braced firing.

- Realistic Clone Style DC-15S Blaster.
- Blaster may be scratch built out of plastic, wood, metal or cast in resin.
- Blaster has realistic Episode II or Episode III details:
  - ◆ Wire frame sight.
  - ◆ Folding stock.
  - ◆ (12) radiator fins evenly spaced along the length of barrel.
  - ◆ Igniter detail knobs.
  - ◆ Charge magazine clip on right side.
- Total length is approximately 26" (66 cm).
- Because of the scale, the Hasbro version is incorrect.

For level two certification (if applicable):

- Charge magazine detail on clip is metal to gun metal grey in color.
- Detail bolts and screws are metal to gun metal grey in color.
- Igniter knobs have some copper coloring.
- Blaster is weathered.

For level three certification (if applicable):

- Functioning Blue LED is installed in barrel.

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- [This CRL is available as a PDF at www.501st.com/databank/Costuming:TK\\_skytrooper](http://www.501st.com/databank/Costuming:TK_skytrooper)

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