Camera Assistant Tools & Equipment
The following shows many of the basic items that an Assistant Cameraman should have in their “kit” or “ditty bag.” This is by no means a complete listing of tools you will need. Every job is going to be a bit different and you may need certain items that are not shown. One of the best places to get tools for your ditty bag is Filmtools in Burbank, CA. Check their web site at [www.filmtools.com](http://www.filmtools.com).
Carts, Accessory Bags & Front Box

Magliner – Used to transport camera equipment and accessories.
Rubbermaid Cart – Used to transport camera equipment and accessories.
Canvas Tote Bag – Used to carry various camera accessories and supplies.
AC Ditty Bag— Cloth or canvas bag with various compartments, used to carry AC tools and accessories.
**Front Box** – may be mounted on the gear head or fluid head for storage of key tools and accessories used regularly by the First Assistant Cameraman.
AC Pouch & Belt—Used by the assistant cameraman to keep tools and supplies close at hand.
Electronic Accessories

On-board Video Monitor—Used by the 1st AC for critical focus or to view the framing of the shot.
Portable GPS – To be used when traveling to unfamiliar locations.
**Assorted Tools & General Accessories**

**Metal Tape Measure** – used for measuring certain distances when the cloth/fiberglass tape measure will not work. Do not use when checking focus distances to actors.
Cloth/Fiberglass Tape Measure – used primarily for measuring distances to actors for following focus.
Precision Screwdrivers – to be used for making repairs/adjustments to camera equipment.
Assorted Screwdrivers (Slotted & Phillips) – to be used for making repairs/adjustments to camera equipment.
4-in-1 Screwdriver (Top) & Stubby Screwdriver (Bottom) – to be used for making repairs/adjustments to camera equipment or for mounting camera equipment to various adapter plates or surfaces.
T-Handle Stubby Screwdriver – to be used for attaching cameras or mounting plates to head quick release plates.
Assorted Hex Keys (Allen Wrenches) – to be used for making repairs/adjustments to camera equipment.
Assorted Pliers and Cutters— to be used for making repairs/adjustments to camera equipment.
Vise Grips & Crescent Wrench— to be used for making repairs/adjustments to camera equipment.
Leatherman (Multipurpose Tool)– to be used for making repairs/adjustments to camera equipment.
Swiss Army Knife— to be used for making repairs/adjustments to camera equipment.
Razor Knife – to be used for cutting gels, tape or other items.
Scissors— to be used for cutting gels, tape or other items.
**Dental Mirror** – for checking sync of shutter when adjusting shutter angle for certain shots or for checking interior of camera body for loose film chips.
Clamp-on Jar Opener—can be used as a simple zoom control or follow focus if you don’t have those accessories, and can also be used to remove tight screw-on filters.
Large Flashlight – used when filming in dark locations and also for checking the gate on the camera.
Small Flashlight with Pouch – used when filming in dark locations and also for checking the gate on the camera.
Lighted Magnifiers – used for checking the gate on the film camera.
Pocket Level, Bubble Level & Hot-Shoe Level – to check that camera equipment is level before shooting.
Inclinometer – used to measure the angle of tilt on the Fluid Head or Gear Head. This measurement is often taken in case you may need to duplicate the shot later in production.
3/8-16 & 1/4-20 Bolts – for attaching camera to non-standard mounting platforms.
1-in. and 2-in. brush - for keeping exterior of camera and other equipment clean.
Electrical Tester – for checking the continuity of power in an AC electrical outlet.
Electrical Adapters & Power Strip – for charging batteries and powering any electrical device.
Voltmeter or Multimeter – used for checking batteries, bulbs, fuses, switches, cables, etc.
Specialized Film Tools & Accessories

Large Sync Slate – to be used to identify specific information at the beginning of the shot
Small & Medium Sync Slates – to be used to identify specific information at the beginning of the shot
Insert Slates – to be used to identify specific information at the beginning of the shot. Used when not recording sound.
Tabletop Slate— to be used to identify specific information at the beginning of the shot. Especially useful when shooting tabletop commercials.
Large & Small Clapper Sticks – for slating multiple camera shots.
Changing Tent – for loading/unloading of film when a darkroom is not available.
French Flag with Arm – for keeping stray light from striking the front of the lens or filters in the matte box.
Focus Whips & Speed Crank – extensions for the follow-focus mechanism in order to give you more control when pulling focus.
Cardellini Clamp – for attaching on-board monitors, on-board lights, or other objects to camera or other device.
Noga or Ultralight Arm— for attaching on-board monitors, on-board lights, or other objects to camera or other device.
Terrycloth Wrist Bands – to be used in place of foam or chamois eyepiece covers (they are washable so they can be used over and over).
Color Charts & Gray Scales – used as a reference to adjust the colors from shot to shot. Usually shot at the beginning of roll for reference in postproduction.
Focus Chart – used as a for checking the focus of lenses during camera prep or on the set.
Framing Chart – used as a reference for framing each shot. Usually shot at the beginning of roll for reference in postproduction.
Camera Oil & Liquid Silicone – The oil is used to keep the camera movement or mechanism lubricated. The silicone is used to keep the pull down claw lubricated.
Depth of Field Calculators – for checking depth of field on critical shots.
Shot Bag T-Marks – used to mark actors outside or on surfaces where tape won’t stick.
Golf Tees—used to mark actors outside or on surfaces where tape won’t stick. They are especially useful on grassy areas because they are almost invisible to the camera.
Space Blankets – used for covering the camera or other equipment to protect it.
Engraved Filter Tags – for labeling the matte box to indicate what filters are currently in place.
Blower Bulb Syringe – for removing dust and dirt off lens elements and filters.
Spring Clamps (Grip Clamps) – for securing space blanket, camera covers or other objects.
Bungee Cords – for securing camera and other equipment during transport.
Panavision Motor Cover Tool - used to remove the motor cover from the Panavision 35mm camera. The motor cover should only be removed if you need to change the circuit boards.
Panavision Iris Rod Wrench - used to loosen or tighten the locks on Panavision Iris Rod Brackets.
Ground Glass Puller (Hirschman Forceps) – for removing ground glass from film cameras.
Pelican Case Opener (Peli-ease) – used to open the latches on Pelican brand equipment cases.
Film Measuring Tool – used to measure the length of a Short End or Dummy Roll of film.
Loupe – used to examine film for scratches, especially when performing the camera prep.
Eye & Hearing Protection – to protect your eyes from objects or substances being projected toward the camera and to protect your ears from gunshots, explosions or other loud sounds on the set.
Video Connectors & Cables – for connecting the video tap on the camera to the video monitor.
Fingerless Gloves – to protect hands when carrying camera or other equipment (fingerless allows the assistant to be able to follow focus or thread camera without removing the gloves).
Stop Watch – to check the timing on the length of a scene or shot. It is most often used by the Script Supervisor but sometimes the Assistant Cameraman may need to use one.
Various Cinematography Books or Camera Instruction Manuals - to be used as a reference
Special Arri Tools – These are some of the tools you will need when making any minor repairs or adjustments on the Arriflex 16 SR2, 16 SR3, 416, 235, 435, 535, Arricam or Alexa cameras.