

JIMMY JIB TRIANGLE OPERATING MANUAL

MANUFACTURER

Stanton Video Services Inc. 2223 East Rose Garden Loop Phoenix, Arizona 85204 Tel. (602) 493 9505

CONTENTS:

- 1. Jimmy Jib Triangle Standard
- 2. Giant Extension
- 3. Super Extension
- 4. Super Plus Extension
- 5. Extreme Extension
- 6. 12 metre Extension
- 7. 3-wheel dolly
- 8. 4-wheel dolly
- 9. Aluminium crane track
- **10. Track Wheels**
- 11. Dutch Roll Head
- 12. Maintenance & Modifications

JIMMY JIB TRIANGLE STANDARD

Maximum Camera Wt. 60 lbs (27.2 KG)

If you are missing any of the following items, please contact Stanton Video immediately. tel: 602 493-9505

- 1. Front Tube
- 2. Center Tube
- 3. Rear Tube
- 4. Tapered Plugs (7)
- 5. Pulley Cable
- 6. Weight Bar
- 7. Bipod
- 8. Head Assembly
- 9. Camera Knob
- 10. Focus & Iris Servos

- 11. Control & Battery Boxes
- 12. Pan & Tilt Motors
- 13. Control Box Cable
- 14. Transformer
- 15. Joystick
- 16. Follow Focus
- 17. Zoom Focus Handle
- 18. Control Cable
- 8 4 (1)0 5 **©** 2 0000 7 6 9 3 00 00 0 0 11 10 (13) (12) ō No. 0000000000000 112 ÷. 0 16 15 [14] (18) [17

July 97

JIB ASSEMBLY

NEVER USE THE TRIPOD ON A SMOOTH SURFACE WITHOUT THE DOLLY. DOING SO WILL PUT SIDE STRESS ON THE LEGS & CASTINGS, POSSIBLY CAUSING A TRIPOD FAILURE.

- 1. Remove the Center Tube Section and mount it to your Tripod. Level the Tripod using the level on the Pedestal Mount. Make sure the **Tripod Legs** and **Safety Clamps** are tight.
- 2. Align a Tripod Leg with the Jib Tubes as you are assembling the Jib. This will prevent the jib from tipping during the assembly process.
- 3. Attach the Rear Tube Section and secure it with the Tapered Plugs.
- 4. Insert the Front Tube Section into the Center Section and tighten the Tapered Plugs.



NOTE:

TAPERED PLUG CONNECTIONS

Make sure the Plug is mated properly with the Hole in the Tube before tightening. The plug must be snugged securely but not over tightened.



PULLEY CABLE

A steel wire rope cable (Pulley Cable) runs between the Pedestal and Front Assembly. This cable keeps the camera head level no matter what position the Jib arm is in. This is a good time to inspect the cable for <u>breaks</u> and <u>frays</u>. If any are found, the cable must be replaced.

- 1. Remove the Safety Ring and Pin from the Toggle Jaw.
- 2. Attach the Toggle Jaws to the wire rope and turnbuckle eyes. Make sure you insert the Safety Ring into the Pin.



3. The Pulley Cable must be properly aligned with the Cable Spools.



MOUNTING THE HEAD

- 1. Install the Bipod at the front of the Jib by inserting the Bipod Pin into the notched hole. Rotating the Bipod 180 degrees will prevent it from fall out if the Jib is lifted up.
- 2. Remove the Locking Handle from the Expansion Joint and insert the Joint into the Head Support Tube.
- 3. Re-install the handle through the slot in the Support Tube and tighten.



- 4. After the Head is securely attached to the front of the Jib, **add some counter weight (25lb)** to the weight bar.
- 5. Level the Head Support Tube using the Turnbuckle. This may have to be redone after the camera is mounted.
- Note: Lifting up on the head will relieve tension on the turnbuckle and make it easier to adjust.



- 6. The Head can be leveled Side-Ways by loosening the Locking Handle and rotating the head to a vertical position.
- 7. Remove the Camera Platform Handle and fold down the Platform. Insert the Platform Handle and tighten.



MOUNTING AND BALANCING THE CAMERA

- NOTE: Note: Always align a Tripod Leg with the Jib Tubes as you are assembling the jib. This will prevent the Jib from tipping during the assembly process. Before mounting the camera, add at least 25lbs of counter weight. During the mounting procedure, you must keep your hands on the camera at all times.
- 1. Loosen the Swing Arm Knob and slide the Camera Platform to its lowest position and retighten. Mount the camera and secure in place with the Camera Knob.
- 2. Configure your camera completely with battery, quick plate, focus system etc. Mount the camera to the camera platform with the Camera Knob.

3. Slide the camera forward or backward in the platform slot until the camera stays level. Tighten the Camera Knob.

NOTE:

You cannot leave the camera in this low position. If you do the camera will act like a pendulum and always try to swing to this low position.

Camera too far back. CORRECT

- 4. Loosen Swing Arm Knob. Slide the Swing Arm and Camera up in 1/2 in. increments. The tendency of the camera to pendulum back to center will become less as the Swing Arm moves up.
- 5. When you reach the vertical balance point you will be able to rotate the camera to any position and it will remain in that position.
- 6. If you move the camera too high on the Swing Arm, it will try to rotate upside down.



JIB BALANCING

- 1. Make sure all securing knobs for the camera, Camera Platform, Jib mount and Tripod Legs are tight.
- 2. Use standard barbell weights (1 in. hole size). Olympic style weights are not recommended because the center hole is too large, causing the weights to be suspended below the Jib centerline.
- Start by loading 25 lb. plates on the weight bar, <u>stacking them equally on both sides of the Rear Tube</u> <u>Section.</u> Switch to lighter weights as the Jib becomes more balanced. When you get to within about 5 lbs. of the balance point, you may wish to fine tune the Jib with the optional sliding Ballast Bag.

When using the Ballast Bag, make sure the bag sits on top of the tube, not slung underneath. Bottom mounting will cause the Jib to return, on its own, to a level position.



OVER SLINGING THE HEAD

The Head can be mounted in the upright or over slung position. The camera will be more stable however, if the Head is under slung. Also keep in mind that it is possible to tip the Head and camera over, as only the weight of the Head and camera holds the head level. Under normal operation, tipping the Head over is virtually impossible. However, if the Jib is armed down against an obstacle and the operator continues to push hard enough, tipping is possible.



BREAKDOWN

- 1. The main thing to remember when taking down the Jib is to <u>Always remove the counter weight first.</u> If the camera is removed first you will have created a catapult, which if released, will topple the Jib over and ruin your day.
- Make certain you align the Jib arm with a Tripod Leg before removing the counter weight. Failure to do this
 may cause the Jib to tip over. Leaving about 25lbs of counter weight on the Jib will help alleviate this
 possibility.

7

MAINTENANCE

- 1. Inspect the Pulley Cable, upon each set up, for any damage or wear and replace if necessary.
- 2. All threaded parts that are frequently unscrewed should be lubricated; this is especially true of any aluminum threads. Motorcycle chain lube works well for this.

PAN & TILT MOTORS

- 1. The camera should be mounted and balanced before engaging the motors.
- 2. The Pan and Tilt Motors are mounted to the Head through the use of a pin and a pinch type motor mount bracket. The pins are attached with a spacer block and screws.
- 3. Engage the motors by rotating them into the 4 in. gear and tightening the pinch clamp.



PAN & TILT SLIP CLUTCH

NOTE: The most common mistake made by first time Jib users is the improper balancing of the camera. If the camera is out of balance, the strain on the Tilt Motor will cause the motor clutches to slip. This is a safety feature. The Clutches prevent damage to the gear motor when inverting or moving the Head manually with the motors engaged.

The clutch friction should be high enough to allow the motors to pan or tilt the camera (with the joystick) but still have enough slippage to allow the Head to be moved manually. If the clutches are slipping (during normal joystick operation) and you are sure you have balanced the camera properly, it may be necessary to increase clutch tension. The clutch adjustment screw is locked with a set screw which prevents the screw from turning when the gear slips. To increase friction, turn the screw clockwise in small increments. If the clutches are to tight, and the Head is over rotated, damage to the head cable can result.



It has been found that the use of the small 22 tooth pinion on the <u>Tilt Axis</u> has improved the "feel" and movement of this Axis. This is especially true when using heavier film cameras. This small pinion is available as accessory.

FOCUS & IRIS MOUNT

The Focus/Iris assembly consists of two servos with gear wheels attached. This assembly mounts to the screw hole utilized by the lens manufacturer to mount their cable drive focus systems. As you tighten the Lens Mount Knob to mount the assembly, you must <u>be careful</u> that the screw does not bottom out <u>inside</u> the lens. If you continue to force the screw you may do internal damage to your lens.



Occasionally the curvature of this mount is greater than the lens curvature. This means that there will be contact only at the center of the mount instead of along the entire curve. This can cause the Focus/Iris assembly to twist

on the lens. To correct this problem, adjust the set screw in the Lens Mount. Back out this set screw only far enough to just touch the lens.



IRIS SERVO

- 1. The lens auto iris switch should be in the off position.
- 2. Slide the Iris Servo onto the Lens Mount Shaft and plug the servo into the proper (blue) connector. Turn the unit on.
- 3. Rotate the Lens Iris clockwise (iris closed) until you hit the lens stop. Rotate the Iris Servo gear (using the Iris Knob on the control box) counter clockwise until you hit the servo stop. This will synchronize the Lens and Servo stops.
- 4. Engage the Iris Servo with the lens by rotating the Iris Servo on the Lens Mount Shaft. Lenses with extenders may require the Iris Servo to be reversed in its mount.



FOCUS SERVO

- 1. Slide the Focus Servo onto the Lens Mount Shaft and plug it into the proper (red) connector.
- 2. Rotate the Servo on the Shaft until the Lens Focus Gear ring and servo Gear engage.
- 3. The Focus Servo Bracket is spring loaded. Compress this spring slightly when you engage the gears.



If you have a Canon Lens, the Master Gear will directly engage the lens. If you have another lens it will be necessary to add an extra gear. Slip the extra gear over the hub of the Master Gear and secure with the 4-40 screw.



The Focus Servo can be mounted to a 15mm matte box rod by removing the Focus Block and replacing it with a 15mm Film Clamp. This is an accessory available from Stanton Video.

Focus Rotation: Focus rotation is set at the factory at about 90⁰. This will usually be more than enough for most video lenses. If you need to increase focus rotation refer to the last page under PC Board Adjustments. You should call Stanton Video before making this adjustment.

FOLLOW FOCUS SYSTEM

11

- 1. **Zoom:** The zoom is controlled in the usual way with a rocker on top of the Handle.
- 2. Zoom Rate: You can slow down the maximum speed of the zoom with this control.
- 3. **Rate Switch**: This switch enables or disables the zoom rate control. This allows you to set your rate then switch to the normal maximum zoom speed.
- 4. **Set Point Switch**: This switches focus control from the Focus Knob on the bottom of the Handle, to the Follow Focus Box. This allows you to rack focus between two focus set points.
- 5. **Focus Rate**: Is used when switching between focus set points. This pot controls the elapsed time to perform the focus.



NOTE: If the Follow Focus Box is not connected, make sure the Set Point Switch is set to allow focus control from the pot in the Handle.

- 1. Attach the Control Box to the left side of the Pedestal (use the bottom hole) and secure with the provided Star Knob.
- Attach the Battery Pack to the bottom of the Control Box. When the side latches engage, you will hear a snap if they have locked into position.





ELECTRICAL CABLE ROUTING

THE UNIT SHOULD BE TURNED OFF BEFORE MAKING ANY CONNECTIONS

HEAD CABLE & CONTROL BOX CABLE

- 1. Run the Control Box Cable along the top of the jib tube and fasten it in place with the velcro straps. The 24 pin Amp connector attaches to the Control Box and the 37 pin attaches to the Head Cable.
- 2. Connect the Focus Motor (red) and the Iris Motor (blue) using the 4 pin Switchcraft connectors.
- 3. Connect the Tilt Motor (blue) and Pan Motor (red) using the phono plugs.
- 4. Form a <u>slack loop</u> between the Head and the Jib arm. It may be necessary to slide the Head Cable along the jib tube in order to form the proper size loop.

CONTROL CABLE page 1

- 1. Slide the weight bar into the Rear Boom Section. Attach the Joystick and Zoom/Focus Handle to the weight bar.
- 2. Plug the 16 pin Amp connector of the Control Cable into the Control Box and route it down the Rear Tube section toward the weight bar.
- 3. Connect one end of the Control Cable (blue) to the Joystick and the other end (red) to the Zoom/Focus Handle.

NOTE: Cabling to the head can be routed through the holes provided in the Jib Center Section and the Front Tube Section. The cable will have to be routed while assembling the Jib.



ELECTRONIC CONTROLS

- 1. **Ramp**: An adjustable acceleration ramp that cushions the start and stop of the Pan and Tilt motion. The amount of cushion is increased by rotating the "Ramp" knob clockwise.
- 2. Center: Sets the Pan or Tilt output voltage to zero. This is set at the factory and under normal circumstances does not require operator adjustment. If you observe the head moving without deflecting the Joystick, it will be necessary to adjust Centering.
 - a. Disengage the motors from 4 in. gears.
 - b. Adjust the RAMP to minimum and the SPEED to maximum.
 - c. Position the Head so that you can observe the motor pinion.
 - d. Adjust the Centering control until the gear stops moving.
- 3. **Speed**: Controls the maximum speed for Pan and Tilt. This makes the Joystick less sensitive and is most useful for slow accurate moves.
- 4. Iris: Controls the iris.
- 5. VCR: Starts and stops the VCR providing your lens connector allows for this. Make sure the VCR switch on your lens is in the off position. Since most newer cameras require a momentary contact, this is the type of switch that we have provided. If your recorder requires a maintained switch, you will have to start and stop the recorder at the camera.



- 6. Lens: By pushing this switch you change to Canon or Fujinon. If your lens does not work properly, this switch is probably in the wrong position.
- 7. **Polarity**: This switch enables you to change direction of the Joystick to whatever "feels" most comfortable to you. When you undersling the Head, it will be necessary to change Pan direction.



Make sure the Control Box is turned off.

- 1. To test the condition of charge, push the Battery Test Button and the Bar Graph will light up. The Bar Graph is more of a Low Battery indicator than a charge indicator. The best way to assure you have a full charge is to leave the charger on for at least 8 hrs.
- 2. Connect the Battery Cable between the Control Box and the Battery Pack.
- MAKE SURE ALL CABLES ARE CONNECTED and turn on the Control Box power switch. The power light will come on.



AC OPERATION

- 1. Connect the AC Transformer to the AC power source.
- Plug the Transformer's XLR connector into the back of the Battery Box; the AC power light should come on.
- 3. The batteries are now charging and if the Battery Pack is connected to the Control Box, the entire system is running on AC.
- <u>Circuit Breaker</u>: The circuit breaker protects the batteries and must be in the on position in order for the batteries to charge. Remember you will not be able to **charge your batteries** unless the **Circuit Breaker is on** (up position).

The normal position of the breaker is "on", however, there is one condition where you will want to turn the breaker off. This occurs when there is a **Short** or **Dead Cell** in the battery which will cause the Transformer voltage to be reduced to the point where the Head will begin to operate erratically. If you turn the Breaker off, the batteries will then be separated from the rest of the circuit and the Head will be operating on **AC Only**. **Remember, this is for backup emergency AC operation only.** For continuous AC operation, you must purchase the AC power supply.

NOTE: The Battery Pack uses GELL CELLS not Ni-Cads. Gell Cells can be charged indefinitely but must not be totally discharged or left on the shelf in an uncharged state for long periods of time.

QUIET DRIVE LUBRICATION

The following instructions describe the proper lubrication of the QUIET DRIVE gear motor. To prevent belt slippage the belt must be coated with some type of belt dressing. The critical point that must be remembered is that you must not get grease onto the belt and you must not put so much grease into the gearbox that it gets thrown on the belt.

- **BELT DRESSING** We have found that JP1 chain lube (blue) works the best as a belt dressing. This substance becomes very tacky without gluing the belt to the pulleys as some of the regular belt dressings tend to do.
- 1. Remove the Motor, the Pulley and the belt from the gearbox. If the belt has been slipping thoroughly clean the pulleys and belt with alcohol.
- Coat the Belt and the grooves of the Pulleys with the dressing. Set these parts aside to dry for about 30 min.



- 3 Mount the motor to the gearbox with the two 4-40 Philips screws and slide two washers onto the Pulley Pin.
- 4. Add grease to the Pulley Pin and slip on the Pulley. Run the Belt between the two pulleys.



- 6. Place grease into the hole in the rear of the Shaft and grease the teeth of the Gear. Push the Shaft onto the Shaft Pin. It will be necessary to push until the Shaft seats against the back of the gearbox.
- 7. Place a washer onto the Pulley Pin and grease the end of the Pin. Grease the Shaft and close the gearbox.



NOTE: The lubricant used should be a non melting high temperature type of grease. The Belt is an O-ring that is 2" OD with a 1/16" cross section.

CHARGING VOLTAGE ADJUSTMENT

- 1. The unit must be fully charged before making any adjustments.
- 2. Turn charger on and check voltage across pins 1,2 & 3 at the 4 pin AMP connector on the Battery Box.
- 3. Turn the Adjustment Pots to attain 14 Volts between pin 1 & 2 and 14 volts between 2 & 3.



4. After you have adjusted the two pots, measure the voltage between pin 1 & 3. It should be about 28 volts.

(Call Stanton Video!)

Focus Rotation Angle

- 1. The Angle Pots allow you to increase focus rotation. The factory setting is minimum (about 90 deg.).
- 2. To increase the Focus Rotation Angle turn the Angle Pot counter-clockwise.
- 3. Maximum is about 250 deg. If you over adjust the pot, the focus motor will continuously rotate in one direction.



+5 Volt Adjustment

- 1. Connect a voltmeter from gnd to -5 V and measure the voltage. This measurement will usually be about -4.97 volts.
- 2. Connect the voltmeter from gnd. to +5 V.
- 3. Rotate the +5 Volt adjust. until the meter reads the same as the -5 V measurement. The goal is to make both the +V and -V read the same.

Negative Offset

- 1. Turn the Speed pot all the way down (counter clockwise).
- 2. Turn the Ramp pot all the way down (counter clockwise).
- 3. Connect Pin #1 of the Op-Amp to gnd. with a jumper cable.
- 4. Connect a voltmeter from Pan/Tilt Motor Voltage to gnd.
- 5. Rotate Neg. Offset Adjust. until the meter reads as close to Zero voltage as possible.

Maximum Voltage

- 1. Connect the voltmeter from gnd. to Motor Voltage.
- 2. Power unit from AC (connect to battery pack and turn on charger).
- 3. Deflect the Joystick (maximum deflection) of the axis being adjusted.
- 4. Rotate Max. Voltage pot until meter reads minimum voltage. Now rotate pot in the opposite direction and stop when the motor voltage ceases to increase







- NOTE: 1. When using the Dolly Wheels to move the Giant, or Super Giant, always use two people.
 - 2. Never use the Tripod on a smooth surface without the Dolly. Doing so will over stress the leg castings and possibly cause a Tripod failure.
 - 3. The Giant puts a great deal of weight on the Tripod. Make sure that all securing knobs are good and **TIGHT**, including the tripod legs and **Tripod Safety Collars**.

If you are missing any of the following items, contact Stanton Video immediately. Tel: 602-224-6162

- 1. Extension Tubes (2)
- 2. Tapered Plugs (7)
- 3. Giant Strut
- 4. Strut Knob and Rod with Plastic Washer
- 5. Eye Bolts & Pinch Nuts
- 6. Shackles (2)
- 7. Strut Cable
- 8. Pulley Cable

Maximum camera weight without strut cable: 25lbs (12kg)



GIANT ASSEMBLY

- 1. Insert the Giant Extension Tubes between the Center Section and the Front Section.
- 2. Make sure all Tapered Plugs, Tripod Knobs and all assembly hardware are Tight.



STRUT & STRUT CABLE

- 1. Install the Strut to the Jib by inserting the Strut into the 3-Hole pattern forward of the Pedestal.
- 2. Insert the Front Eye Bolt into the hole provided and screw on the Eye Bolt Pinch Nut (finger tight only). Now tighten the socket head screw in the Pinch Nut.



4

- 3. Run the Strut Cable over the top of the Strut, insert the Eye Bolt into the Rear Section and secure with the Pinch Nut. This is facilitated by lifting the Rear Section with one hand as you insert the Eye Bolt.
- 4. Attach the Pulley Cable.
- 5. Mount the Camera and balance the Jib before adjusting the Cable tension. Adjust the Strut Cable tension until the Jib is straight. This is done by rotating the Strut Tube.

Note: Do not be alarmed if the cables seem a bit short when you first install them. They are set up on the "tight side" intentionally to compensate for cable stretch.



SUPER EXTENSION

July 97

If you are missing any of the following items contact Stanton Video immediately. TN 602 224 6162

- Super Extension Tubes 1.
- 2. **Rear Extension Tube**
- Tapered Plugs (7) 3.
- Cable Guides (2) 4.
- Side Strut & Wing Nuts 5.

- 6. Side Cables
- 7. Cable Stabilizer & Mounting Knob
- Control Bar & Mounting Knob 8.
- 9. Strut Cable



SUPER ASSEMBLY

Note: Always align a tripod leg with the jib tubes as you are assembling the jib. This will prevent the jib from tipping during the assembly process. Before mounting the camera, add at least 25lbs of counter weight

- Insert the Giant Extensions into the Jib Center Section. 1.
- 2. Add the Super Giant Extensions to the Giant Extensions.
- Now add the Front Section and attach the Pulley Cable. 3.
- Make sure all the Tapered Plugs are snug. 4.
- Insert the Rear Extension Tube into the Center Section and then add the Rear Section. 5.



1. Install the Giant Strut just forward of the Pedestal as outlined in the Giant instructions. The Side strut can then be installed on the Side Strut Mounting Screws. For video cameras, side struts are probably not necessary.



- 2. Install the Strut Cable using the Eye Bolts and Shackels. Attach the Carabiners to the Shackles at this time.
- 3. Install the Eye Bolt into the Front Section first, then run the cable over the top of the Strut.
- 4. With the Strut Cable over the top of the Strut insert the Eye Bolt into the Rear Section and secure with the Pinch Nut. This is facilitated by lifting the rear section with one hand as you insert the Eye Bolt.
- Note: Do not be alarmed if the cables seem a bit short when you first install them. They are set up on the "tight side" intentionally to compensate for cable stretch.



MOUNTING THE CONTROL BAR

The Control Bar is mounted in the same 3-Hole pattern as the Strut. This three 3-Hole pattern is placed in the Rear Jib Tubes for this purpose. The Button head screws are used in place of the socket head screws to locate the Mounting Pad. The button head wedges firmly into the two mounting holes and firmly locks the Control Bar in place. The Mounting Pad will not sit completely flat on the Jib Tube.



CABLE STABILIZER

At the Super length, the unsupported span of the Pulley Cable becomes too great and it is necessary to add the Cable Stabilizer. The Stabilizer is attached to the Jib by using the 5/8" holes in the extensions and is placed approximately half way between the Pedestal and Head.



If you are missing any of the following items contact Stanton Video immediately. TN 602 224 6162

- 1. Photo-detector
- 2. Amplifier Box
- 3. Battery Cable



INSTRUCTIONS

1. Gaffer tape the Photo-detector over the camera tally light. Make sure that you use enough tape to prevent light from leaking into the detector.



- 2. Connect the detector to the 4 pin Auxiliary.
- 3. The Battery Cable has a power tap to allow the Amplifier to be run off the battery pack. Connect the Battery Cable in the usual manner and then plug the Amplifier Box to the Battery Cable.
- 4. Attach the Amplifier Box to the side of the control box with Velcro.
- 5. Adjust the sensitivity (threshold at which the light will come on) by the pot adjustment on the Amplifier Box





Super Plus Extension

8 metres reach

6 extension sections 2 tail sections Double top strut cable Side struts optional 3 or 4 wheel dolly If you are missing any of the following items contact Stanton Video immediately. TN 602493 9505

- 1. Extension Tubes.
- 2. Tapered Plugs (6)
- 3. Side Cables (2)
- 4. Pulley Cable
- 5. Strut Cable
- 6. Eye Bolt & Pinch Nut
- 7. Turnbuckle (1)

MAXIMUM CAMERA WT 50 lbs, 22.7 kg

NEVER USE THE TRIPOD ON A SMOOTH SURFACE WITHOUT THE DOLLY. DOING SO WILL PUT SIDE STRESS ON THE LEGS & CASTINGS, POSSIBLY CAUSING A TRIPOD FAILURE.



Note: Always Align a Tripod Leg with the Jib Tubes as you are assembling the Jib. This will prevent the jib from tipping during the assembly process.

- 1. Insert the Giant, Super and Super Plus Extensions into the Jib Center Section.
- 2. Now add the Front Section and attach the Pulley Cable
- 3. Insert the Rear Extension Tube into the Center Section and then add the Rear Section



The primary difference between the Super and the Super Plus is the addition of the **Intermediate Cable**. If this cable is not installed properly it is possible to **over tension** and cause it to support too much weight.

The Strut is installed just forward the pedestal as per the Super instructions. The Side Struts are always used on the Super Plus.

The Super Plus Kit does not include the shackles, eyebolts for front and back main cable or the carabineers for the side struts. Use the hardware included in the Giant and Super kit.

To install the Side Cables easily, place your back against the jib for more leverage and then push out on the cable to place them in the Cable Guide.

Make sure the Cable Clamp is in front and touching the Cable Guide.

Note: Do not be alarmed if the cables seem a bit short when you first install them. They are set up on the "tight side" intentionally to compensate for cable stretch.





.



Extreme Extension

10 metres reach

8 extension sections 3 tail sections Double top strut cable Single side struts 4 wheel dolly recommended
If you are missing any of the following items contact Stanton Video immediately. TN 602493 9505



July 97

JIB ASSEMBLY

MAXIMUM CAMERA WT 50 lbs, 22.7 kg

NEVER USE THE TRIPOD ON A SMOOTH SURFACE WITHOUT THE DOLLY. DOING SO WILL PUT SIDE STRESS ON THE LEGS & CASTINGS, POSSIBLY CAUSING A TRIPOD FAILURE.

1. Insert the Giant, Super and Super Plus Extensions into the Jib Center Section.

Note: Make sure the Extension with the 3 hole pattern is the 5th tube from the Center Section

- 3. Now add the Front Section and attach the Pulley Cable
- 3. Insert Two Rear Extension Tubes into the Center Section and then add the Rear Section

STRUT CABLE

- Note: The Extreme Kit does not include the turnbuckle for the intermediate cable, shackles, carabineers or eyebolts. Use the hardware included in the Giant and Super Plus Kit.
- 1. The Extreme Strut is installed just forward the pedestal. The Side strut can then be attached to the Side Strut Mounting Screws using the Wing Nuts. The Side Struts are always used on the Extreme.



- 2. Attach the #1 and #2 cables to the front of the Jib, and run them over the top of the Giant Strut.
- 3. Attach the Eye Bolt into the Rear Section. This is facilitated by lifting the rear section with one hand as you insert the Eye Bolt.



SIDE STRUTS

- 1. Install the Side Struts as shown in the diagram below.
- Note: To install the Side Cables easily, place your back against the jib for more leverage and then push out on the cable to place them in the Cable Guide. Do not be alarmed if the cables seem a bit short when you first install them. They are set up on the "tight side" intentionally to compensate for cable stretch.
- 2. Make sure the front strut is attached to the fifth extension; the same extension as the strut cable.



CABLE STABILIZER

At this length of Jib it is necessary to add a second Cable Stabilizer. The stabilizer is attached to the Jib by using the 5/8" holes in the extensions and are placed approximately 1/3 from the front and 1/3 from the pedestal.



SWINGING MONITOR PLATFORM

Because of the length of the Rear Section it is necessary to move the monitor from the Pedestal to a location on the rear tubes. This is accomplished with the Swinging Monitor Platform.





12m (40ft) Extension

13 metres reach

11 extension sections3 tail sectionsDouble top strut cableDouble side struts4 wheel dolly

If you are missing any of the following items contact Stanton Video immediately. TN 602493 9505

ABSOLUTE MAXIMUM CAMERA WT 25 lbs - 11.3 kg

ALWAYS use the 12 Meter Jib with the large 4 WHEEL DOLLY. This increases the platform base and stability required for a jib this size.

- 1. Extensions (3)
- 2. Front Section
- 3. Tapered Plugs (10)
- 4. Side Cables (2)
- 5. Pulley Cable
- 6. Wide Cable Guides (2)

- 7. Eye Bolts (3)
- 8. Shackles (3)
- 9. Turn Buckle
- 10. Strut Cable
- 11. Cable Stabilizer
- 12. Flat Head Screws (2)



1

If the 12 Meter is to be used with a dolly then it must be installed on the **4 Wheel Dolly**. The 3 Wheel Dolly is not a large enough platform for a jib of this size.

All extensions to the 12 Meter Jib have been lightened with a series of holes. These four lightened tubes must always be used in the last four sections of the 12 Meter Jib.

1. Remove the Front Assembly from the front tube and transfer it to the new lightened front tube.



2 Assemble the extreme jib and support it with a hard case. As you add the 12 Meter additions leave the hard case in its position.



- 3. Add all the 12 Meter sections. Do not move the hard case forward as you add sections as the jib will begin to droop placing strain on the bottom connection.
- 4. Install the top Strut cables leaving slack in the intermediate cable. Wait until counter weight is added before adjusting the cables. Do not add counter weight at this time.
- 5. Connect the Side Strut Cables. The side cables now contain two cables per side and are attached using a cable eye instead of Caribiner.



Pinch Nut

Because two cables pass through them, the rear Cable Guides must be replaced with Wide Cable Guides



4

6. Before adjusting the cables you must counter weight the jib with at least 200 lbs.

STRUT CABLE ADJUSTMENT

The top cable adjustment is explained in the Super, Super Plus and Extreme manuals. The main thing to remember is to adjust the long cables with the Cable Guides, then the intermediate cables with the turnbuckles.



CABLE STABILIZERS

An additional Cable Stabilizer should be used on the 12 Meter Jib for a total of three stabilizers.



5

THE STANTON DOLLY FRAME

Assembly:

- 1. Remove the swivel bolt and rotate the Swing Tube into the 90 deg. position. Align the swivel bolt hole in the tube section with the holes in the Tube Plate. Replace the bolt and tighten with the wing nut.
- 2. Attach Wheels (see attached pages).
- 2. Position the tripod legs so that the spike ends are facing down. Insert the spike into the tripod mounting hole.
- NOTE: It is helpful to keep all the tripod leg adjustments (including the center adjustment) in a snug position; Tight enough to hold, but loose enough to slide without further adjustment.
- 3. Place the Cable Strap over the heel of the tripod and tighten wing nuts hand tight. Additional cable length can be gained by using the cable set screw.
- 4. With all the legs secured by the cable straps, adjust the height and level of the tripod. With the tripod leg and center adjustments loose you should be able to quickly position the tripod by pulling up or down on the tripod head.
- 5. The Foot Rail can now be added if the dolly is to be ridden. If you have trouble aligning the holes, loosen the Swivel Bolt.



If you are missing any of the following items, please contact Stanton Video immediately. TN 602 224 6162

- 1. 8" Wheels (6)
- 2. Axle (3)
- 3. Axle Bolt (3)
- 4. Lock Nuts (3)
- 5. Pinch Collars (6)
- 6. Wheel Fork (2)
- 7. Stearable Fork (1)
- 8. Fork Handle (1)
- 9. Brake Handle (3)
- 10. Black Delrin Washer (3)

- 11. Pulleys (3)
- 12. Pulley Cable (1)
- 13. Button Head Screws (6)
- 14. Swivel Bolt (3)
- 15. Pinch Nuts (3)
- 16. Rubber Washer (3)
- 17. Washer (3)
- 18. Cable Guard Sets (3)
- 19. Delrin Bushing (2)





WHEEL ASSEMBLY

1. Slide the Pinch Collars onto the Axle.



- Adjust the Collars so that when the wheels are installed the wheel hub will stick out slightly beyond the axle (about 1/64 in.). This will take the "slop" out of the bearings when the Axle Bolt is tightened.
- 3. Make sure the Collars are tight, and slide on the Wheels. Also, the **Wheel Webs must be faced inward** otherwise they will interfere with the brake.



4. Insert the Wheels and Axle between the Forks and secure with the Axle Bolt.



- 5. Press the Delrin Bushing into the Fork (this bushing may already be installed). The bushing should be flush with the bottom surface.
- 6. Mount the Pulley using the Delrin Bushing as a guide and fasten in place with the Button Head Screws. The screws should be centered in the Pulley Slots.



- Install Fork to Dolly Tube using the Swivel Bolt. The Stearable Fork can be put can be placed in any of the three wheel locations.
- 8. Tighten the Pinch Nut against the Rubber Washer. This washer locks the Swivel Bolt to the Dolly Tube and prevents the bolt from turning when the wheels are "crabbed".
- 9. Tighten the Pinch Nut Screw. This screw **Must Be Tightened**, otherwise the Swivel Bolt may unscrew when the wheels are turned.



- 1. Align the Dolly Wheels.
- 2. String the Pulley Cable as shown in the drawing.
- 3. Tighten the Turnbuckle. This will probably cause the wheels to become misaligned.
- 4. By loosening the Button Head Screws the wheels can now be realigned.



CABLE GUARDS

- 1. The Cable Guards should be installed before the Jib is installed onto the Dolly
- 2. Attach each Cable Guard set by fastening the two halves together with the screw and nut provided.
- 3. Loosen the axle bolt and slide the guards onto the bolt.
- 4. Adjust the Cable Guards high enough to miss any cracks or uneven areas in the floor. Make sure the are guards are low enough to catch the smallest cable.
- **WARNING** -- Improper adjustment of the Cable Guards could result in either missing a cable or running a guard into an uneven floor tile or some other imperfection in the dolly runway. This could result is upsetting the entire Jib Arm.





If you want to maneuver the Dolly by steering with the leading wheel it will be necessary to lock the two back wheels. This is accomplished by inserting two screws into the pulley which locks the pulley to the cross tube.





4 wheel dolly

2 or 4 wheel steering

Four Wheel Dolly

You should have received the following:

- * Wheel Assembly (4)
- * Cable Guards (4)
- * Stabilizers
- * Dolly Frame
- * Cross Brace
- * Wheel Cables (2)
- * Pinch Collars (4
- * Plastic washers (8)
- ' Push Bar
- * Soft Top
- * Pulley Lock Screws (8)
- * Alignment Screws (4)



Two Wheel Steering Set Up

Unfold the dolly frame making sure the tripod locator holes are facing up and the frame is square.



- 4 Attach the Cross Brace to the frame at the Cheek Bolt location and secure with the Wing Nuts
- Note: The frame must be square or the holes in the Brace will not line up with the holdes in the frame.



2. Insert Frame Rails between the Cheek Plates, aliening the bolt holes...insert the Cheek Plate Bolts.



5. Select the wheel assemblies (there are

two) that have the Alignment Screws. Loosen the Lock Screws and rotate the pulley all the way counter clockwise until the screw hits the end of the slot...tighten the lock screws. In the two wheel steering mode, these wheels

will not rotate.



 Assemble the two halves of the Cross Brace and secure with the T-knob.



6 Fit the first wheel to the frame as shown below, making sure a plastic washer is between the pulley and the bottom of the frame. Secure on top with a plastic washer and pinch collar - Install the second wheel in the opposite corner the same way.



- 7. Algin the pulleys on the other two wheel assemblies so the lock screws are in the center of the slot. Attach the wheels to the frame and secure them with a pinch collar. *Make sure there is a plastic washer between the pulley and bottom of the frame and also between the pinch collar and the top of the frame*
- 8. Pivot the steerable wheels so that they are aligned and will roll in the same direction.
- 9. Run the cable around the two pullies on the steerable wheels and tighten the turnbuckle. The cable should cross in the center



 With the lock screws loose, rotate the wheels into perfect alignment and then tighten the lock screws.





11. Attach the push bar to one of the steerable wheels as shown below





Four Wheel Steering

Since all the wheels steer in the four wheel steering mode, all the wheels need to be setup as in figure 7. Figure 8 also applies except again, there are no fixed wheels.

Cable setup for two wheel steering



Cable setup for 4 wheel steering



Attaching the tripod to dolly

- 1 Remove the button head screw
- 2 Slide out tripod foot
- 3. Slide Strap Ring on to inner leg with buckle facing out. The fit is tight so it may require a bit of force
- 4. Slide the foot back in and reattach the screw



6 Cinch the strap up as shown and secure the excess





7. Attach the soft top as shown below. Make sure the end with only two straps goes to the frame rail that has the spike hole in the center.



Odds And Ends

- Install the tripod on the frame as shown with the Spike going into the Spike Hole.
- Note: Move the straps to the side of the ring before you cinch up the strap. If you position the strap up over the back of the heel, the strap can loosen up.



8. Cinch the strap down and secure it to the velcrow strap underneith.









Note: When using standard width curved track, the track wheel at the slotted hole must go to the inside of the curve. If it is put to the outside of the curve, the dolly might derail

Important

- * Always secure the dolly brakes before operating the jib
- * Always deploy the dolly stabilizers before operating the jib
- * Never push the dolly from the top of the tripod
- * Always move the dolly with the pull/push bar



Aluminium Crane track

Assembly:

1

- 1. Unfold the track from its stored position as illustrated.
- 2. Back out the Coupler Set Screws far enough so that the Coupler is loose in the track tube.
- 3. Slide the track sections together and tighten <u>both set screws</u>. Pull the track together as you tighten the set screws so that there is a minimum gap at the joint.
- 4. ALWAYS SAND BAG BOTH ENDS OF THE TRACK. It is very easy to concentrate so much on the shot that you roll the dolly off the track, with possible bodily harm or equipment damage as a result. Also make sure an observer is present to monitor the dolly's position, as ramming the sand bags may cause the dolly to derail.
- 5. If you are changing wheels, you must pull the jib off the tripod before trying to make the switch. The weight of the jib makes changing wheels clumsy and dangerous without first removing the jib.



If you are missing any of the following items, please contact Stanton Video immediately. TN 602493 9505

- 1 Track Wheel (3)
- 2. Plastic Washer (3)
- 3. Spring Clip (3)
- 4. Push Bar



Assembly:

- 1. Insert the Track Wheel Stud up through the Wheel Stud Hole in the dolly frame. Make sure the plastic washer is between the frame and the track wheel. No washer goes on top.
- 2. Secure the Track Wheel to the Dolly with a Spring Clip. Repeat the procedure for the remaining Track Wheels.
- 3. Attach the push bar to the dolly by removing the Spring Clip from the Track Stud and slipping the grommet end of the bar over the stud. Reconnect the Spring Clip.

4. Place the dolly on the track. If you are using 24 inch. wide track, move the wheel on the Swing Tube to the slotted position.

5. When using curved track make sure the Swing Tube points to the inside of the curve. If it points to the outside the dolly may derail.



ALWAYS SAND BAG BOTH ENDS OF THE TRACK. It is very easy to concentrate so much on the shot that you roll the dolly off the track, with possible bodily harm or equipment damage as a result. Also make sure an observer is present to monitor the dolly's position, as ramming the sand bags may cause the dolly to derail.

If you are changing wheels, you must pull the jib off the tripod before trying to make the switch. The weight of the jib makes changing wheels clumsy and dangerous without first removing the jib.



Maintenance & Modifications

Focus motor maintenance

Jittering problems in the focus motor can be caused by lack of grease in the gearbox. The grease helps dampen the backlash in the gear train and without it, the motor will hunt (jitter) for position. Even though we grease each motor when we assemble them, it seems that over time the grease will migrate out away from the gears and eventually require a little more grease to be put in.

You will need a grease gun that has a small tip and you will want to use an automotive, high temp type of grease. Stay away form the very heavy wheel bearing type greases. The hole you put the grease in, turns out to be one of the screw holes that mounts the motor to the focus bracket. Only one hole will work as the others are blocked. You don't really want to fill the gear box up all the way but rather just enough to see a little grease come out where the gear head mates to the motor. If you have any questions, give us a call.

Jim





Improving Circuit Ground or... how to get rid of the focus jitters!

This simple modification (model 3 and 4 electronics will help prevent any jittering or oscillation associated with of the focus motor. It will also allows the focus travel (angle of rotation) pot to be turned all the way up so you can utilize the motors full rotation.



model 4B

Jimmy Jib Triangle

Tally light detector circuit (modified June 2004)





Modifications to control box and multi-way plug June 2004

Additional pins in 24 way connector at control box

- 5 Second return video screen
- 10 Second return video inner
- 13 Tally detector -ve
- 14 Tally detector + ve



DANGER CAMERA CRANE IN OPERATION MAY MOVE WITHOUT WARNING PLEASE USE EXTREME CAUTION

ASK JIB OPERATOR FOR GUIDANCE



DANGER CANERA CRANE DO NOT MOVE THIS EQUIPMENT

PLEASE ASK A QUALIFIED PERSON TO DO IT

PLEASE USE EXTREME CAUTION

ON NO ACCOUNT ATTEMPT TO REMOVE THE CAMERA OR ANY PART OF IT

