



## A to Z Theatrical Supply and Service

800 East Meyer Boulevard

Kansas City, MO 64131

+1 (816) 523-1655

# Chitty Chitty Bang Bang User Manual

Thank you for considering A to Z Theatrical's *Chitty Chitty Bang Bang* Prop Car. We have compiled this user manual to make the process as easy as possible. For the safety of the cast, crew and prop, please read these instructions fully before using *Chitty Chitty Bang Bang*.

If you have any questions, please don't hesitate to contact us at (816) 523-1655 or via [chitty@atoztheatrical.com](mailto:chitty@atoztheatrical.com).



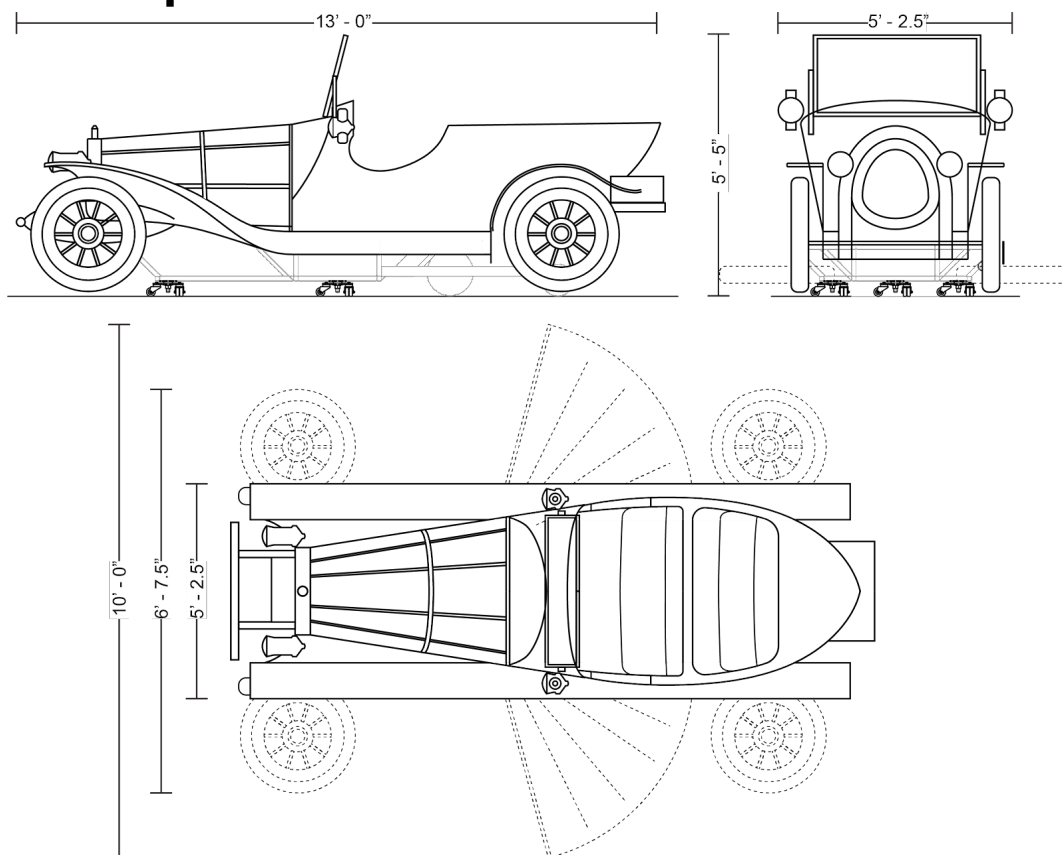


# Contents

|                                       |           |
|---------------------------------------|-----------|
| <b>Contents</b>                       | <b>2</b>  |
| <b>Physical Specifications</b>        | <b>3</b>  |
| <b>About The Prop</b>                 | <b>4</b>  |
| <b>The Features</b>                   | <b>5</b>  |
| The Dashboard                         | 5         |
| Effects Electrical Panel              | 6         |
| Hydraulic Effects                     | 7         |
| Wheels                                | 7         |
| Flying Mode                           | 8         |
| Driving Assembly                      | 9         |
| Wings                                 | 9         |
| <b>Pre-Show Checklist</b>             | <b>10</b> |
| <b>Post-Show Checklist</b>            | <b>11</b> |
| <b>Shipping Checklist</b>             | <b>12</b> |
| <b>Acknowledgements &amp; Contact</b> | <b>13</b> |



## Physical Specifications



**Width:** 5' 2½" (wheels in, wings closed)  
Can be reduced to 4' 0½" wide if side lights are removed.  
5' 11½" (Front wheels out)  
6' 7½" (Rear wheels out)  
10' 0" (wings open)

**Length:** 13' 0"

**Height:** 4' 2" (with windshield down)  
5' 5" (with windshield up)

**Weight:** 1,225 lbs.

**Distance between left to right casters:** 2' 10" on center of tri swivel casters

**Capacity:** 5 Performers (3 adults and 2 children) or ~ 800 lbs.



## About The Prop

The Prop is approximately a 3:4 scale (75% original size) version of the film prop, simplified from the film's design. The entirety of the vehicle is custom-built for stage use.

Every surface from the dashboard back is capable of supporting an adult's body weight. The rear fenders over the back wheels are steel and designed to support an actor crawling or stepping into the back seat.

We strongly recommend spreading weight evenly across the car when possible (e.g. don't have the whole cast on one running board for a photograph.)

**DO NOT** put weight or pushing force forward of the steering wheel. To save weight, the **HOOD**, **FRONT FENDERS**, and the **PICNIC BASKET** are all **NON-LOAD-BEARING STRUCTURES**. They should **NEVER** be subject to the weight of a performer, or used to lift or push the vehicle.

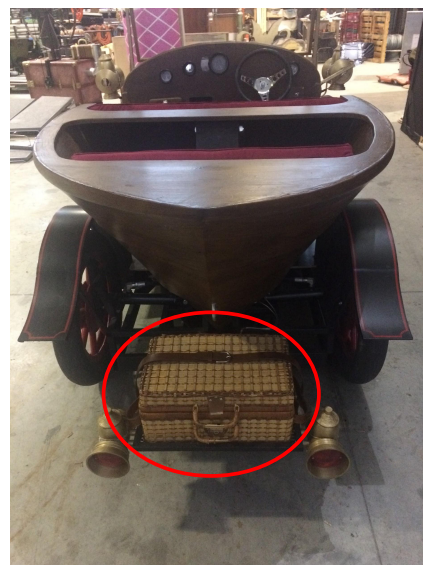


The **Crossbar located at the Front of the Prop** is the **Only load-bearing part forward of the dashboard**. It is intended to help lift the prop over bumps and as a tiedown point during shipping.

Special Attention needs to be given to The prop's **Front and Rear Lights** during shipping and movement. Their positions make them easy to damage inadvertently.

The **Basket** on the rear of the prop is removable for use during the show. The

**Basket and its platform** are **Not Load Supporting** and should not be used by performers to enter or exit the prop.

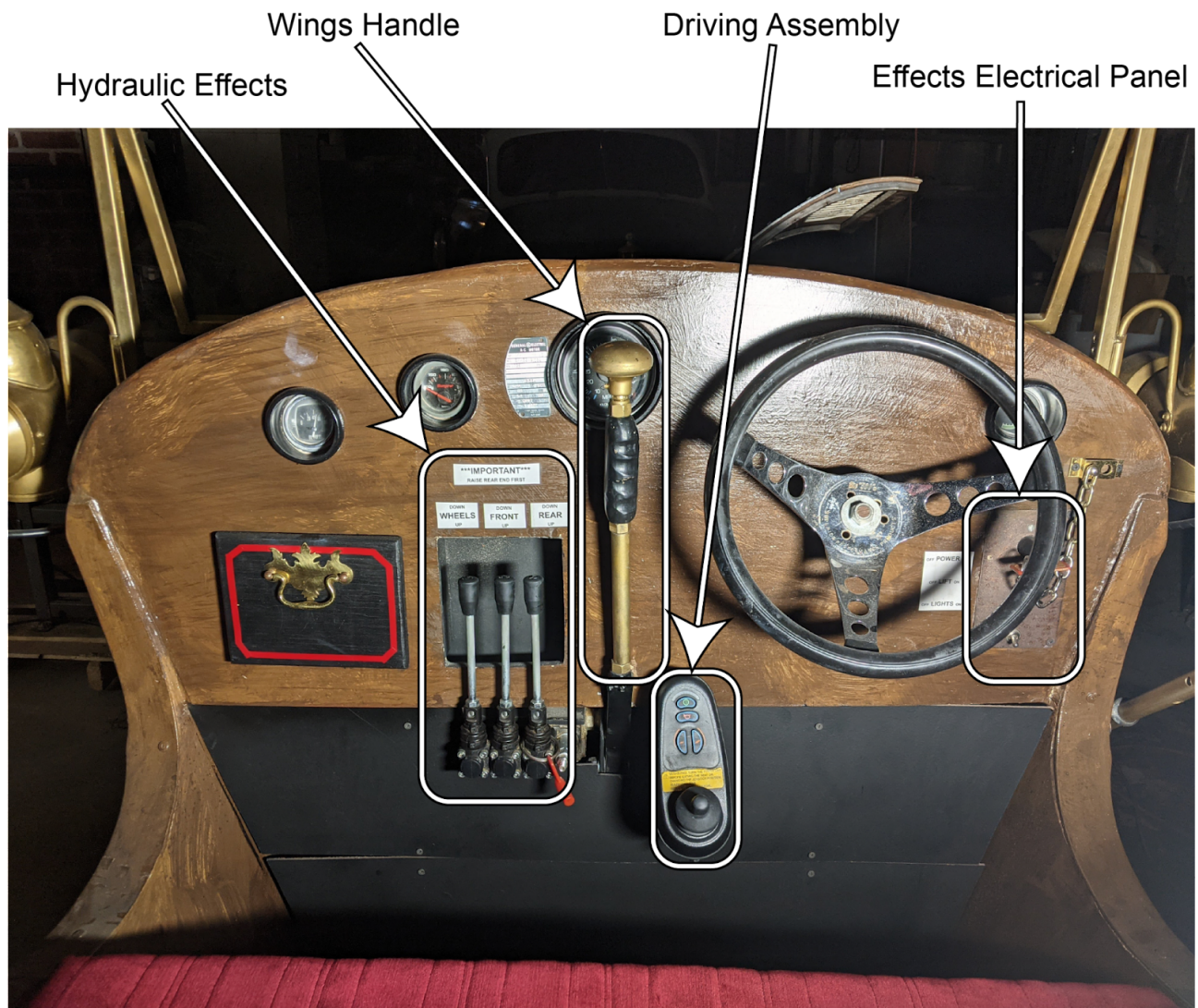




## The Features

Please make clear to the cast and crew that while Chitty has a number of exciting features, the car is a prop and not a toy. While the various “tricks” are built to be rugged and service generous use on stage, they should not be played with. Please treat Chitty with the same respect and care you would offer to a fellow member of the cast and crew.

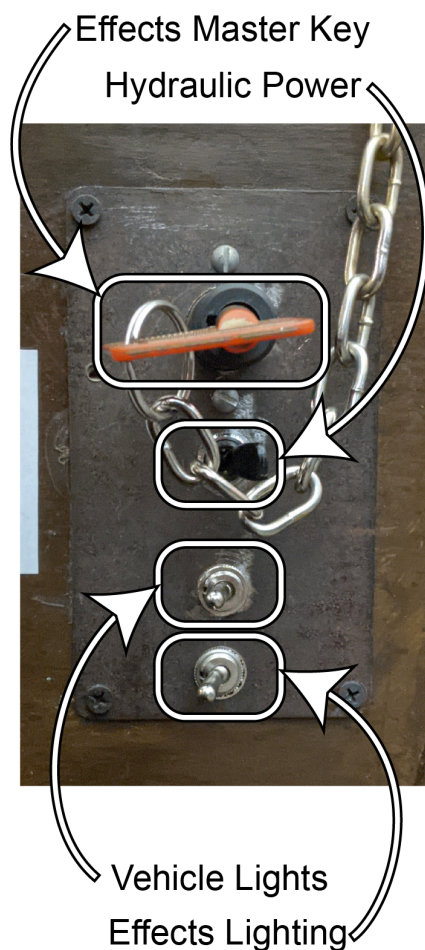
## The Dashboard



## Effects Electrical Panel

These switches control the electrical aspects of the props effects, and their operation will directly affect the performance and safety features of the prop.

- **Effects Master Key**
  - **Right: On - Left: Off - Removed: Safe**
  - The Master Key disconnects the main battery from all of the effects. With the key removed, the effects are in a fully disabled state. The key must be installed and turned on for any of the effects to function.
  - When the prop is unattended, the key should be removed and left hanging on its keeper chain.
- **Battery Meter**
  - When the master switch is turned on, this meter will show the current charge level of the effects battery
  - When the Hydraulic pump is running, the battery level will appear to drop rapidly. This is normal. The level will recover when the pump is turned off.
  - This lighted indicator can safely be covered with gaff tape during performances. It is intended for crew to use before and after a show to make sure the battery is charged.
- **Hydraulic Power**
  - **Left: Off - Right: On**
  - The Hydraulic switch runs the pump that provides the force to move the wheels and lift the car into a flying position. The motor should only be turned on when the effects are in use, as detailed in the hydraulic operation section
  - The Hydraulic motor is very power hungry. Leaving it running for a long period of time will drain the effects battery.
- **Vehicle Lights**
  - **Left: Off - Right: On**
  - Controls the Headlights, Taillights, and Running Lights of the Prop.
- **Effects Lighting**
  - **Left: Off - Right: On**
  - Controls the red underlighting below the Prop.





## Hydraulic Effects

**BE AWARE!** These levers will cause parts of the prop to move with considerable strength.

**NO ONE** should be around the exterior or sides of the prop while Hydraulic Effects are in use.

**ALL ACTORS MUST** be fully seated inside the car, briefed on what to expect, and aware of their surroundings while these effects are in use.

The props hydraulic effects are controlled by the three levers on the dashboard. Power to operate these effects is provided by the Hydraulic Power switch on the effect electrical panel.

Generally these effects are used by turning on the hydraulic power, operating the effect, then immediately turning off the hydraulic power. The exception to this rule is descending from a flying position, which is done solely by gravity with hydraulic power turned off.



## Wheels

### To pull wheels up

1. Turn **Hydraulic Power** switch **ON**
2. Push **Lever #1 Forward** away from you
3. You will hear the sound of hydraulic pump change when the wheels reach their raised position and the movement is complete.
4. Turn **Hydraulic Power** switch **OFF**

### To put wheels down

1. Turn **Hydraulic Power** switch **ON**
2. Pull the **Lever #1 Backward** towards you
3. You will hear the sound of hydraulic pump change when the wheels reach their lowered position and the movement is complete.
4. Turn **Hydraulic Power** switch **OFF**

## Flying Mode

Chitty can reach a maximum height of +30" on the back and +26" on the front. You do not need to raise the prop to the maximum height to achieve a convincing effect. Each production will decide for themselves how to use the system to create the desired effect that fits within their space and design intent. Mastering this effect requires practice, but is absolutely worth the effort.





Lever #2 controls the back of prop and Lever #3 controls the front. The Hydraulic motor is used to raise the car, and gravity is used to lower it.

### **To Raise the Prop into Flying position**

1. Turn **Hydraulic Power** switch **ON**
2. Alternate between pulling backward (towards you) on **Lever #2** and **Lever #3**
3. Pull each lever **one at a time** in short bursts, alternating between them to maintain a relatively level ascent.
  - a. **BE AWARE! Pulling both levers simultaneously will make the front of the car drop.**
4. Slowly raise the car to the desired flying height.
5. Once desired height is achieved, let go of Levers 2 & 3.
6. Turn **Hydraulic Power** switch **OFF**.

### **To Lower From Flying position**

1. **DO NOT** turn on the hydraulic power switch
  - a. **BE AWARE! Running the Hydraulic Pump while lowering the prop may cause a catastrophic failure of the Hydraulic Pump.**
2. Push **Lever #2** and **Lever #3** forward slowly to lower the prop to the ground.
3. Both levers may be operated at the same time going down, alternating between them will help keep the prop level as you descend.

If you have any questions about Flying Mode in Chitty, please don't hesitate to contact us at (816) 523-1655 or [chitty@atoztheatrical.com](mailto:chitty@atoztheatrical.com).

## **Driving Assembly**

All actors must be fully seated when the prop is in motion.  
**NEVER climb in or out of the car while it is moving.**

Drive only in open spaces. Driving practice should be done with a spotter, on a fully cleared stage or a large open area.

Press the Power Button to turn on the driving assembly. The Joystick controls speed and direction. The speed is set between 1 to 5 dots using the Speed Adjustment Buttons. **DO NOT go above 3 dots.**

Spotters are needed at all times when the prop is in motion. The spotters should be aware of the intended movement of the prop and be on the lookout for objects or people that might be in its path.





## Notes:

The Driving Assembly has its own batteries that are independent from the Effects Batteries. Both are charged by the extension cord connected to the charge port under the hood.

To charge the Driving Batteries, the XLR cable must be plugged into the back of the Driving Assembly. The prop cannot be driven while charging.

If the battery indicator lights continually scroll when the assembly is turned on, the charging XLR is still plugged in and you will not be able to drive. Unplug the charging XLR, Power the Assembly Off and back ON again to clear the error.

If the vehicle suddenly behaves in an unusual fashion, **Check the Casters!** Make sure that they have not become bound with any foreign material that the car might have rolled over, such as: screws, loose tape, tie-line, and ribbons. These items can cause a caster to roll poorly or lock up completely.

## Wings

To extend the wings, pull the wings handle backwards towards yourself.

The wings are a mechanical effect with no power assist. It takes quite a bit of effort on the lever to overcome the wing box doors and start the wings moving.

To retract the wings push the lever forward. If the wing fabric does not fold neatly back to the storage boxes, gently lift the door of the wing box and tuck the fabric in.







# Pre-Show Checklist

Please follow this checklist before each use of this prop.

|                               |   |
|-------------------------------|---|
| <b>Battery Charger</b>        |   |
|                               | Unplug extension cord from the charge port and close the hood flap                            |
| <b>Drive Assembly Checks</b>  |   |
|                               | Unplug the charging XLR plug from the driving assembly  |
|                               | Turn <b>ON</b> the Driving Assembly   |
|                               | Confirm Battery Level and Speed Settings are as expected                                      |
|                               | Turn <b>OFF</b> Driving assembly until needed   |
| <b>Hydraulics and Effects</b> |   |
|                               | Insert the Effects Master Key and Turn It <b>ON</b>   |
|                               | Confirm Battery Level is as expected  |
|                               | Turn <b>ON</b> Effects Lighting and Vehicle Lights  |
|                               | Confirm all lights are working properly   |
|                               | Turn <b>ON</b> Hydraulic Power  |
|                               | Confirm you can hear the Hydraulic pump running   |
|                               | Turn <b>OFF</b> Hydraulic Power   |
|                               | Turn <b>OFF</b> Vehicle Lights  |
|                               | Turn <b>OFF</b> Effects Lighting  |
| <b>Underneath the Prop</b>    |   |
|                               | Lift the lids of the wing boxes and check that the wings are neatly stowed and ready for use. |
|                               | Check and ensure none of the hoses are kinked or pinched                                      |
|                               | Confirm the casters are free from debris or foreign materials                                 |



# Post-Show Checklist

Please follow this checklist after each use of this prop.

| Hydraulics and Effects |  |
|------------------------|--|
|                        | Confirm Hydraulic Power Switch is OFF  |
|                        | Turn <b>OFF</b> Driving Assembly   |
|                        | Turn <b>ON</b> Effects Lighting and Vehicle Lights   |
|                        | Confirm all lights are working properly  |
|                        | Turn <b>OFF</b> Effects Lighting and Vehicle Lights  |
|                        | Turn <b>OFF</b> and <b>REMOVE</b> Effects Master Key, Leave it hanging on its keeper chain |
| The Wings              |  |
|                        | Open each wing box   |
|                        | Check that the velcro is still securely attached to the frame inside the wing box.         |
|                        | Check that the wings are neatly stowed and ready for next use                              |
| Underneath the Prop    |  |
|                        | Check and ensure none of the hoses are kinked or pinched                                   |
|                        | Confirm the casters are free from debris or foreign materials                              |
|                        | Check the exterior of the prop for wear, damage, dents or deformation in the body.         |
|                        | Photograph any damage immediately.   |
| Battery Charging       |  |
|                        | Plug the XLR plug into the underside of the driving assembly                               |
|                        | Open the Hood flap and plug an extension cord into the charging port.                      |
|                        | Set charge timer to 4 hours  |
|                        | Confirm you can hear the charger fan running   |



# Shipping Checklist

Please follow this checklist when preparing to ship the prop

|  |  |
|--|--|
| <b>Photograph all sides of the prop</b>  |  |
|  | Front, Back, Left, Right, Dashboard, Hood, Seats   |
| <b>Secure in Shipping Vehicle</b>        |  |
|  | Secure in place on the floor of the truck or trailer at a minimum for four points on the prop's steel subframe. Use either the tie down points built into the frame, or the strongpoints behind where the wheel pistons attach to the frame. |
| <b>Electrical Status</b>                 |  |
|  | Confirm all Effects Switches are OFF   |
|  | Turn OFF and REMOVE Effects Master Key, Leave it hanging on its keeper chain   |
|  | Make Sure the Driving Assembly is turned OFF and the charging XLR is unplugged.  |
| <b>Final Photographs</b>                 |  |
|  | The prop in the Truck/trailer  |
|  | Each of the 4 tiedown points   |
| <b>Send all Shipping photographs Too</b> | <a href="mailto:chitty@atoztheatrical.com">chitty@atoztheatrical.com</a>   |

**NOTE:** *It is an advisable practice to document the condition of the prop when you unpack it and when you send it back. If anything happens during shipping or if there is damage you believe to have already occurred before it was sent to you, we need to know as soon as possible so that you are not billed for damage while it is in your possession. Should anything become damaged during your run, let us know immediately and we can advise towards your best solution. DO NOT make repairs without speaking with the A to Z Theatrical Production Team.*



## **Acknowledgements & Contact**

The *Chitty Chitty Bang Bang Car* was designed and constructed by the A to Z Theatrical production team. If you have any questions, suggestions, or issues about the prop or this manual please contact us at (816) 523-1655. Reach us via email at [chitty@atoztheatrical.com](mailto:chitty@atoztheatrical.com). We're also available for your costuming, prop, and scenic needs at [www.atoztheatrical.com](http://www.atoztheatrical.com). Thank you for choosing A to Z Theatrical Supply & Service!