

NICCA B·C Flash Unit

Model III
INSTRUCTIONS



Nicca

NICCA B·C Flash Model III

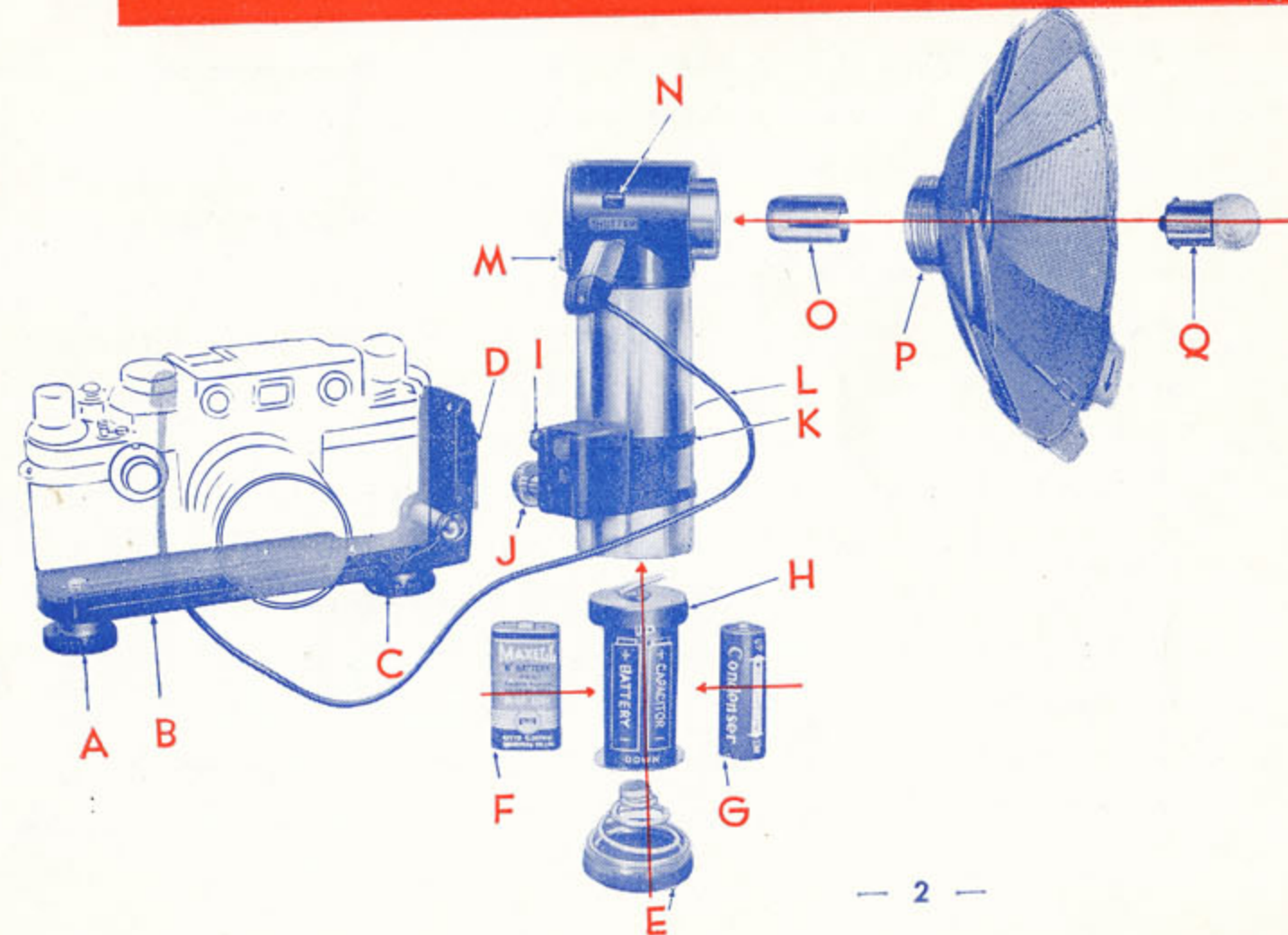
The Nicca B·C Flash Model III is an all-purpose flash gun. Although it was designed primarily for use with the Nicca camera, it can also be utilized, with equally good result, with all other Leica or Contax-type cameras, and folding cameras equipped with lens shutter.

Moreover, with the aid of a special bracket, this flash unit can be mounted on any type of reflex camera.

◇ Despite the fact that the Nicca B·C Flash Unit Model III is extremely easy to operate, it is desired that the instructions contained in this booklet be read thoroughly so that no difficulty would be encountered in the course of operation.

- A. Fastening knob
- B. Mounting bracket
- C. Mounting bracket stabilizing screw
- D. Bracket fixture
- E. End cap
- F. Battery
- G. Capacitor (Condenser)
- H. B·C power pack
- I. Safety catch
- J. Fastening thumbscrew
- K. Adjustable clamp
- L. Barrel
- M. Test lamp
- N. Shutter outlet for camera connector cord
- O. Adapter for bayonet-base flash bulb
- P. Reflector
- Q. Test bulb

Parts of NICCA B·C Flash Unit Model III



Characteristic Features of NICCA Flash Unit

The "automatic charging" flash unit is a revolutionary device—another of a series of contributions which the Japanese technicians have made to the development in the field of photography. This flash unit embodies the following features:

1. The electric current from the battery passes through the filament of the flash bulb, and automatically charges the capacitor. In case the bulb is defective, the current will not reach the capacitor; therefore, the test lamp will not glow even if it is pressed. In this way, the battery, capacitor, and flash bulb can be tested without the least difficulty. No expensive flash bulb testor is required.
2. Because the filament burns out when the flash bulb is used, the flow of electric current to the capacitor is cut off automatically. Therefore, this flash unit has no charging switch found on other makes of B·C type flash units.
3. By inserting a test bulb into the socket of the flash unit, the synchronizer circuit can be tested.
4. Because the Nicca B·C Flash Unit Model III is equipped with an extension socket for series circuit, it ensures accurate synchronization for multi-flash photography.

How to Install the Battery

1. The Nicca Flash Unit utilizes a 22.5V battery (hearing aid battery, Type 015).
With the aid of this battery and a capacitor (condenser), this flash unit ensures accurate synchronization for both single-and multi-flash exposures.
2. Install the battery and capacitor (condenser) in the B·C power pack by closely following the instructions. Be sure to place the end of the battery in the correct positions. (See Fig. 1)

Fig. 2



3. After the battery and capacitor have been properly installed, insert the B·C power pack with the right end up into the barrel of the flash unit, and then close the end cap. (See Fig. 2)

How to Mount the Reflector

1. With the reflector folded, place the lug (a) on the reverse side of the reflector into the cavity (b) located on the head of the flash gun. Then turn the ring of the reflector until it is securely mounted on the flash gun. (See Fig. 3)
2. Turn the blade of the reflector in the direction of the arrow. When the first and last blades are properly hooked, an ideal spherical reflector is formed. (See Fig. 4)

Fig. 3

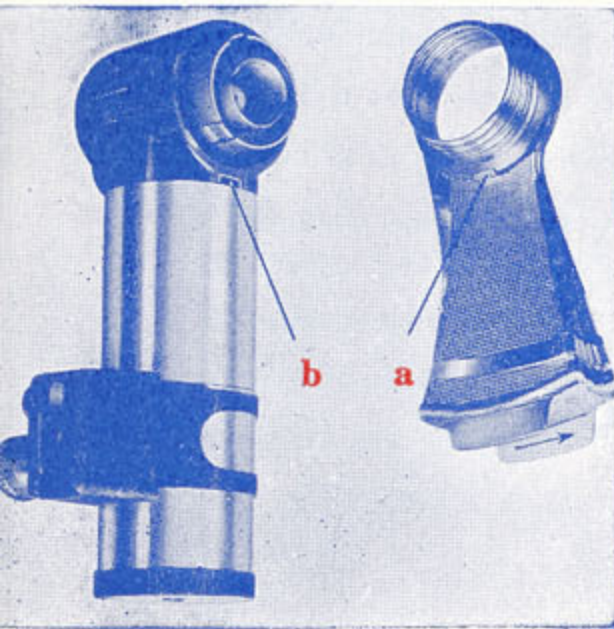
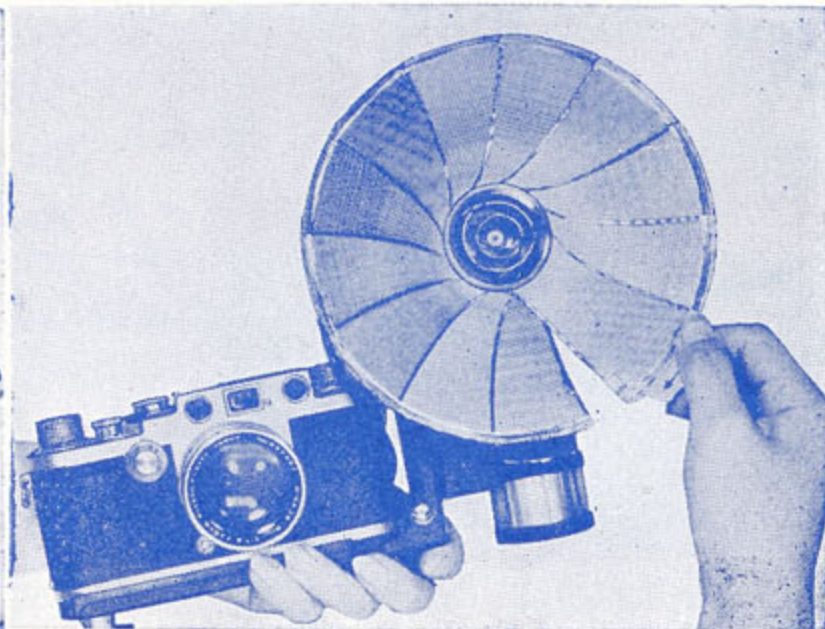


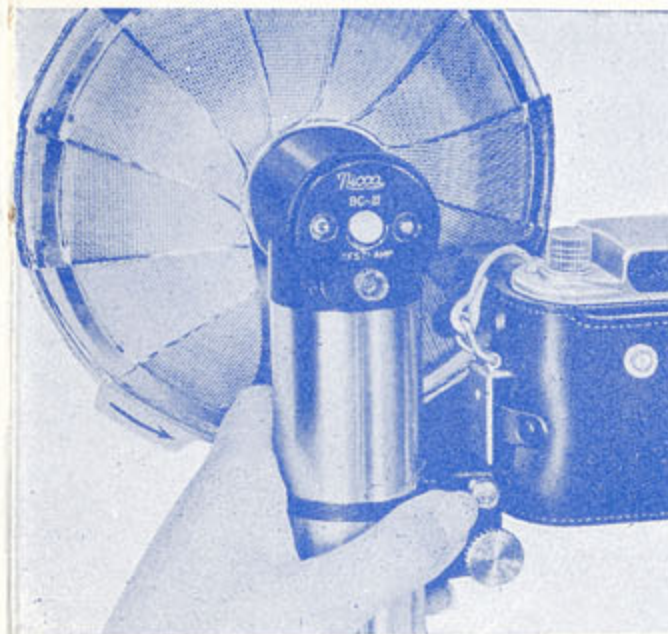
Fig. 4



How to Mount the Flash Gun on the Camera

1. When mounting the flash gun on the Nicca camera encased in an ever-ready case equipped with a bracket, press the safety catch (I) firmly, and insert the flash unit from the bottom of the case. Push it all the way upward, and tighten the fastening thumbscrew (J). (See Fig. 5)
2. When using a collapsible bracket, unfold the bracket, and tighten the mounting bracket stabilizing screw (C) so that the side section of the bracket is fixed at a right angle with the base. Then, place the camera on the bracket, insert the mounting thumbscrew (A) into the tripod mount

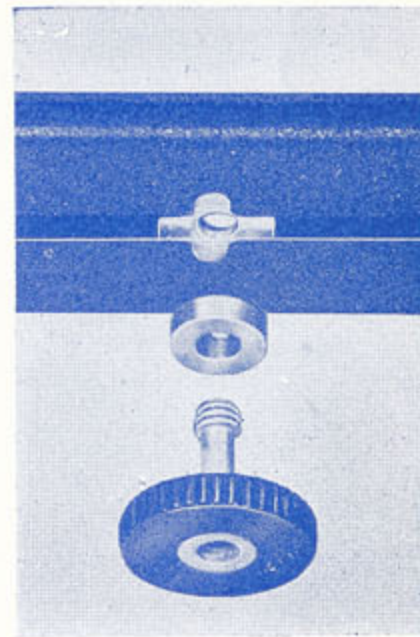
Fig. 5



of the camera, and tighten it securely. After this is done, mount the flash gun on the bracket by following the instruction given in the preceding paragraph.

3. In case the fastening knob (A) is too short and does not reach the tripod mount of the camera, remove the ring on the axle of the screw. (See Fig. 6)

Fig. 6



Test Prior to Making Exposure

First of all, insert the smaller plug of the connector cord into the synchronizer terminal of the camera, and the larger plug into the socket marked "Shutter" located on the head of the flash unit. Be sure that the red marks coincide. (See Fig. 7)

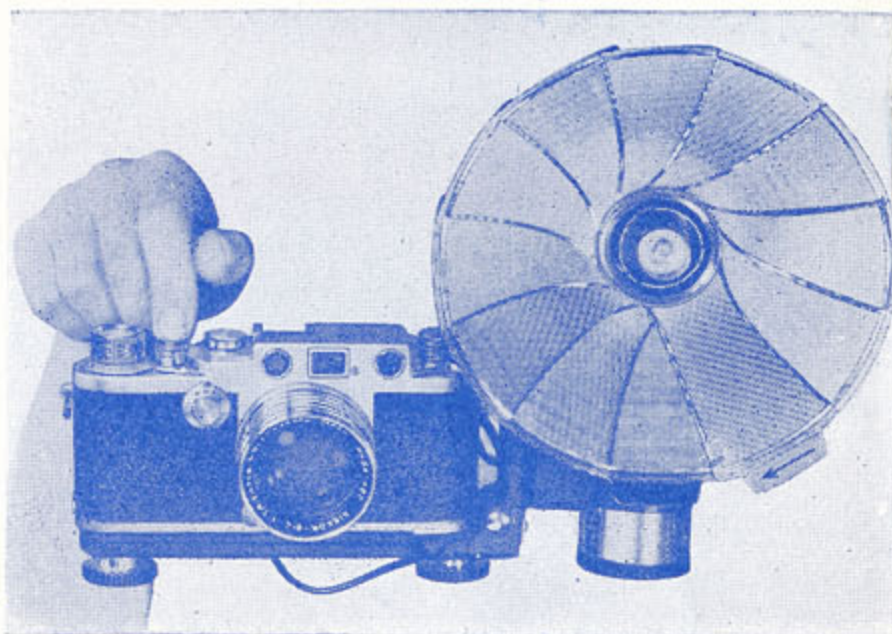
Testing of synchronizer circuit

Press the shutter release four or five seconds after inserting the test bulb into the socket of the flash gun. If the test bulb glows, the synchronizer circuit is in order. Make this test once prior to loading the film into the camera. (See Fig. 8)

Fig. 7



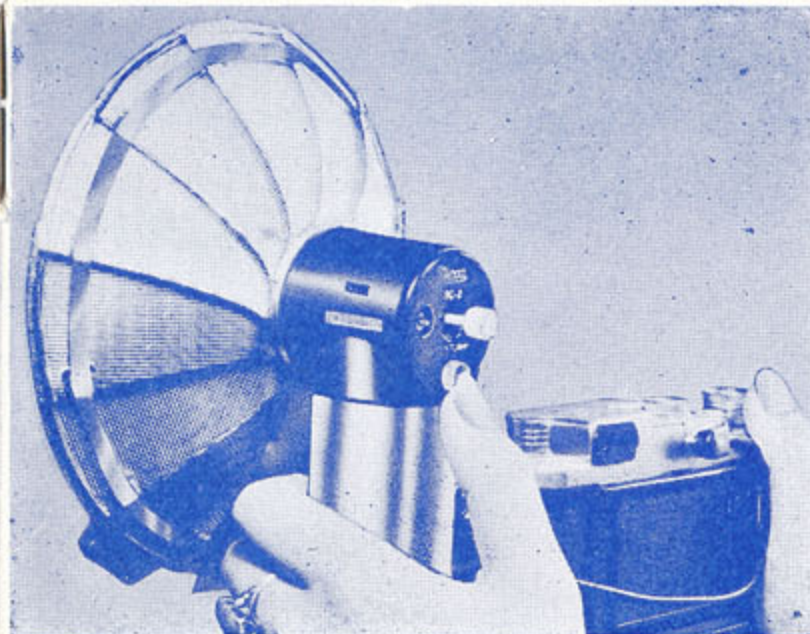
Fig. 8



How to Test Flash Bulb

1. Press the test lamp (M) situated on the back of the flash gun for four or five seconds after inserting the flash bulb into the socket. If the test lamp glows for an instance, it means that the flash bulb, capacitor, and battery are sound. (See Fig. 9)
2. If the test lamp does not glow, it may mean that the test lamp has burned out, or the battery has been exhausted. Therefore, it is advisable to test the test lamp and battery first.

Fig. 9



3. A burned out test lamp will not have any adverse effect on firing of the flash bulb itself. Therefore, a flash exposure can be made even if the test lamp is burned out.
4. In case a large-size bulb with a screw-base is to be used, remove the adapter (O) shown in Fig. 1 by turning it in a left motion.

Non-Synchronized Flash Exposure

Fig. 10 flash button

1. Non-synchronized flash exposure can be made by pressing the flash button (arrow mark in Fig. 10).
2. After making a flash exposure, press the ejector, and the used flash bulb will be automatically ejected. (See Fig. 11)
3. In case the flash unit is to be left unused for some length of time, it is advisable to remove the battery. In this way, the life of the battery can be prolonged.
4. **When the battery is left in the flash gun, be sure to remove the flash bulb or test bulb from the socket.**

Fig. 11

Other Precautions

1. In case the position of the bracket fixture is to be changed, loosen the screw (S), shift the position of the adjustable clamp, and tighten the screw securely. (See Fig. 12)
2. When making exposures at high shutter speeds ranging from 1/50 to 1/1000 sec., do not use flash bulbs for lens shutter, such as G. E. No. 5. For such high speed exposures, always use flash bulbs for focal plane shutter.
3. In case the test bulb burns out, always ask for 6-8V 150mA bayonet-base bulb.
4. An additional midget test lamp comes with the flash unit. In case it becomes necessary to change the test lamp, remove the test lamp button by turning it in a left motion while pulling. Then, shake the flash gun slightly and the midget lamp will fall out. (See Fig. 13)

Fig. 12

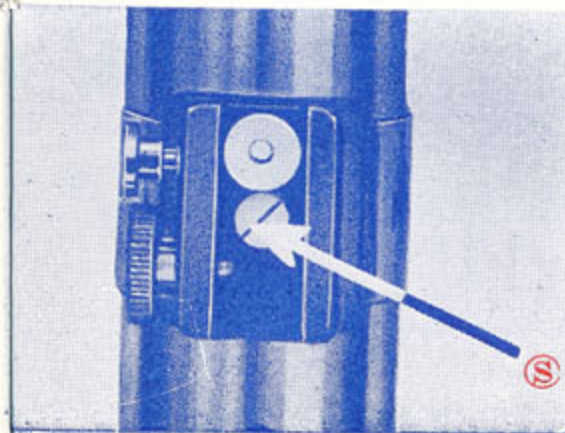
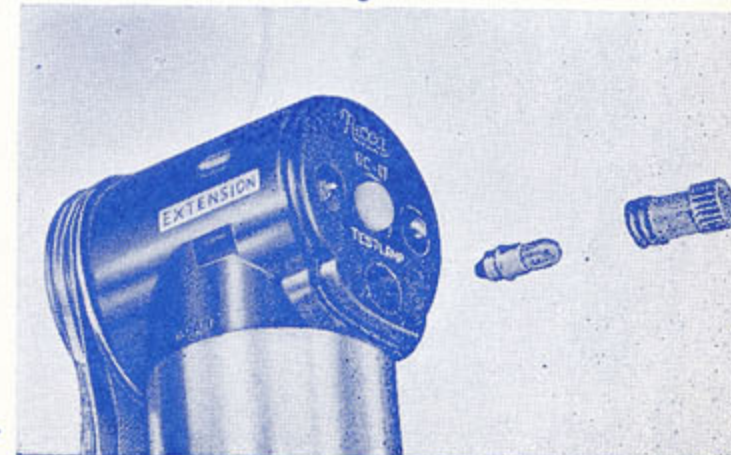


Fig. 13



Types of Extension

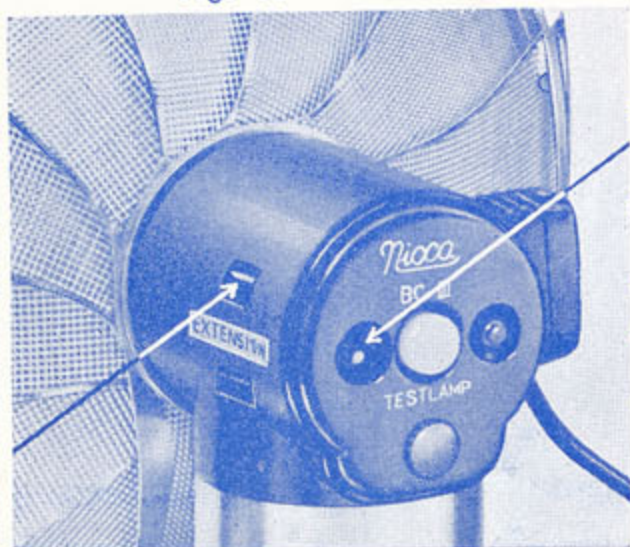
The Nicca Flash Unit assures simple and accurate multi-flash exposures.

There are two types of extension circuit, namely, parallel circuit and series circuit.

A. Parallel Circuit

As an example, the parallel arrangement of three extension sockets are as shown in Fig. 15. In this case, a slight difference in the time of firing of the flash bulb is caused by the resistance offered by bulbs A, B, and C, and the system of wiring. Consequently, this circuit cannot ensure accurate synchronization at such high speeds as $1/500$ sec. or over. Nevertheless, this system can be used with no visible ill-effect in case one or two extension sockets are to be utilized.

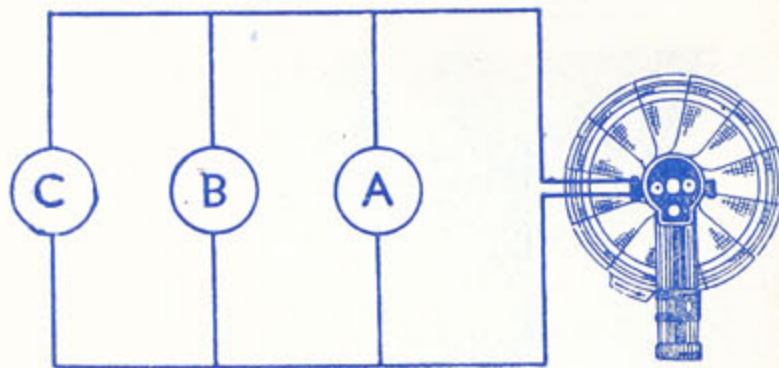
Fig. 14



Socket for Parallel Circuit

Socket for Series Circuit

Fig. 15



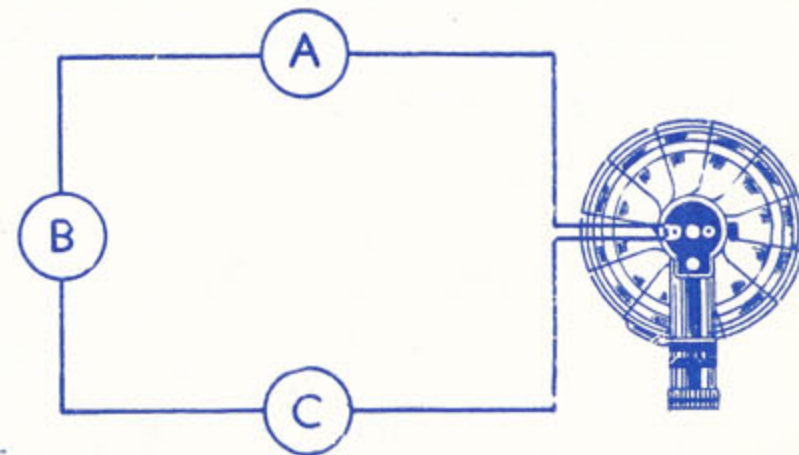
B. Series Circuit

An example of the series circuit is shown in Fig. 16. This system has the following advantages :

1. Accurate synchronization can be secured.
2. Through the use of the test lamp, the extension circuit, and all flash bulbs can be tested very easily
3. An extension cord of a maximum length of 80 feet, and a total of 5 flash bulbs can be used. In short, a larger number of flash bulbs can be fired with this circuit than with the parallel circuit. In case a more powerful condenser is used, about ten flash bulbs can be fired simultaneously.

Either one of the aforementioned circuits can be used, but, in case three or more flash bulbs are to be fired, and in case a high speed exposure is to be made, it is advisable to use a series circuit.

Fig. 16



Testing of Sidelights

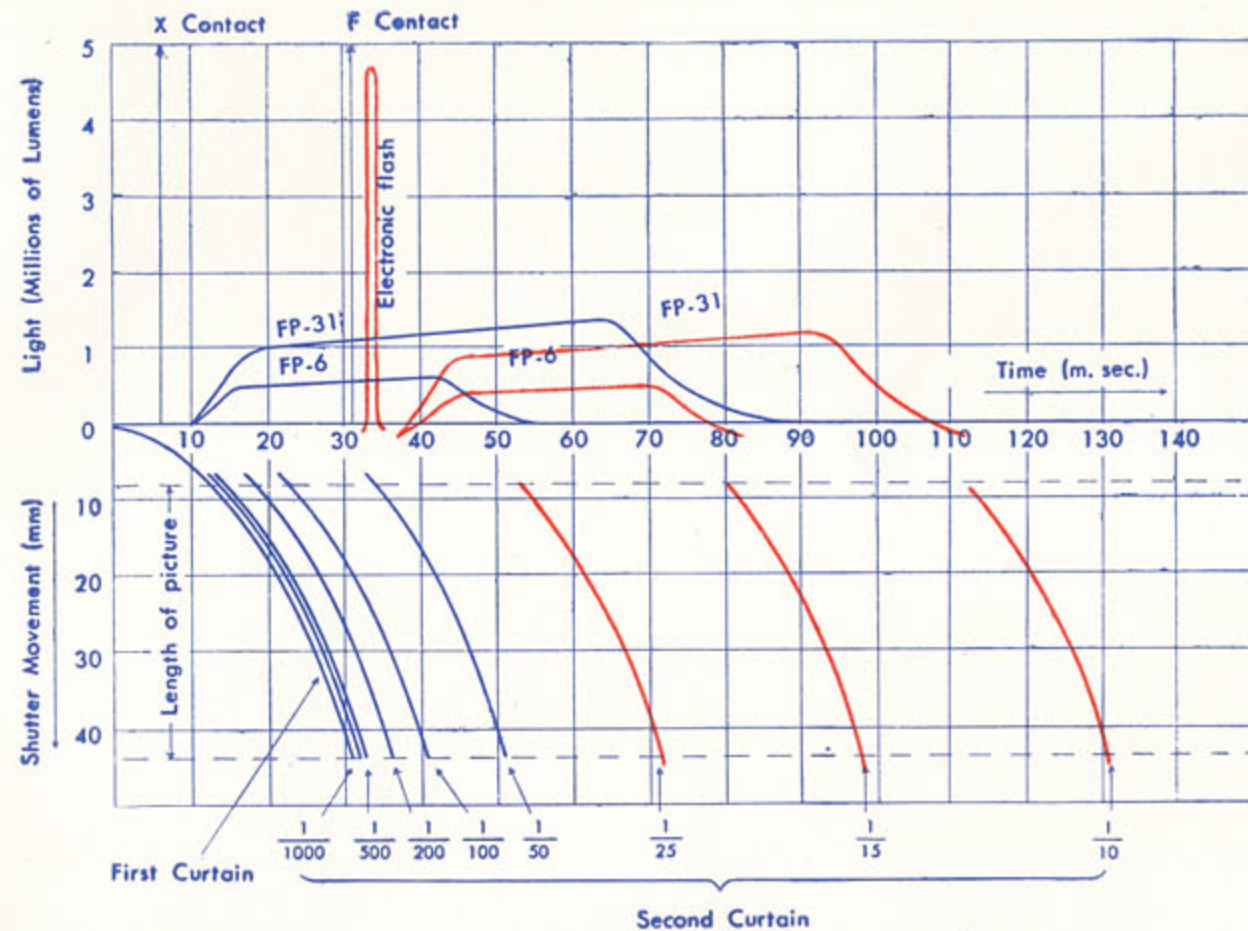
A. Testing of Parallel Circuit

Insert test bulbs in the sockets of the flash gun and sidelights, and press flash button (See Fig. 10) of the flash gun. If the test bulbs glow, it will mean that the extension circuit is in order.

B. Testing of Series Circuit

Testing of both flash bulbs and circuit can be conducted simultaneously by pressing the test lamp (M) located on the back of the flash gun after installing the flash bulbs into the socket of the sidelights. When a larger number of sidelights are used, the light of the test lamp becomes very dim, but, so long as it glows even slightly, the flash bulbs can be fired simultaneously.

Synchronization of NICCA Camera



NICCA CAMERA CO., LTD.