

400 ft. Magazine and Take-up Motor



Instructions for Use

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Preliminary remarks

This magazine is primarily designed for 400 ft. 16 mm single or double perforated film on plastic cores (darkroom loads) but by removing the core adapters it will also accept 200 ft. film on daylight loading spools and a corresponding 200 ft. take-up spool.

The magazine is of the single compartment displacement type in order to make it as light and compact as possible. By using the Arri shoulder pod, the Arriflex 16 can still be hand held with the magazine attached.

There is no need to connect belts, adjust friction, or worry about clutches with the Arriflex 16 magazine. An auxiliary take-up motor attaches to the magazine, and when the complete unit is placed on the camera, it is automatically connected to its electrical system and is controlled by the camera switch. Only one auxiliary take-up motor is needed for each camera, irrespective of the number of magazines acquired.

Because of the extra power requirements of the magazine take-up motor, it is important too keep the battery as near "full charge" as possible. If there will be comparatively long periods of battery drain, it is advisable to use two 6—8 Volt batteries wired in parallel, like the batteries as supplied for the Arriflex 35. See battery instruction sheets.

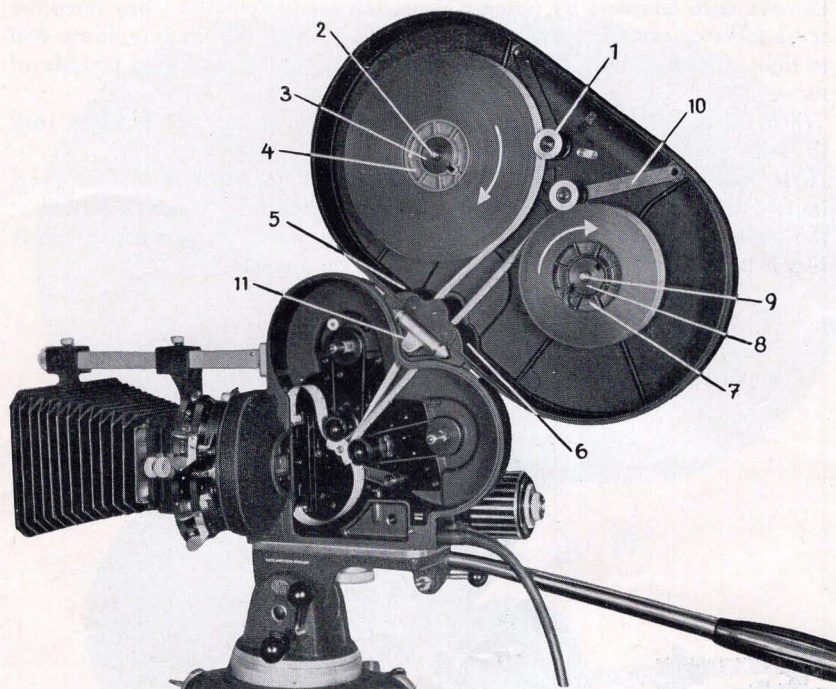
The Arriflex 16 is designed for the right eye viewing. Still it is possible to use the left eye also by turning the rubber eyecup around. With magazine attached, however, this is not possible. It should prove no problem, even to those people who prefer sighting with the left eye, as it is not difficult for most of them to get used to right eye viewing by keeping the left eye closed, if necessary covered with an eyepatch. However, there is also a special roof prism intermediate piece available, to extend the proper eyepiece away from camera body and leaving clearance for left eye viewing and/or making possible even to change the insight direction. Please ask for complete details of that roof prism device, if needed.

HOW TO LOAD MAGAZINE

a) With 400 ft. darkroom loads:

Open magazine cover by turning lock bar from "C" to "O". Lift off cover. Place film on left spindle with loose end to right and center film roll between flanges of friction guide roller. Push loose end through left-hand magazine throat past light trap rollers to outside, around "nose", and back through right-hand throat into magazine again. First turn take-up core so that its slit is directed like this / and not like this \. Attach film end into this slit and wind up enough film by hand until it is secure, or attach film with a little scotch tape.

Close cover by first putting its lower edge against magazine body in a wide angle, making sure that the two lugs on the cover line up and properly engage the mating slot in magazine housing. When properly done, the cover will readily close. Turn lock to "C".



- 1 & 10 = friction guide rollers
- 2 = delivery film spindle
- 3 = delivery core adapter
- 4 = delivery film core
- 5 = left-hand magazine throat
- 6 = right-hand magazine throat
- 7 = take-up film core
- 8 = take-up core adapter
- 9 = take-up film spindle
- 11 = lock lip on magazine "nose"

The film footage indicator is subtractive. It is connected to the delivery spool and shows the approximate amount of unexposed film. The camera film counter can be utilized for accurate control.

Because the 400 ft. film roll has to be loaded in a darkroom or a changing bag, it is desirable to practice loading a few times in daylight with dummy film.

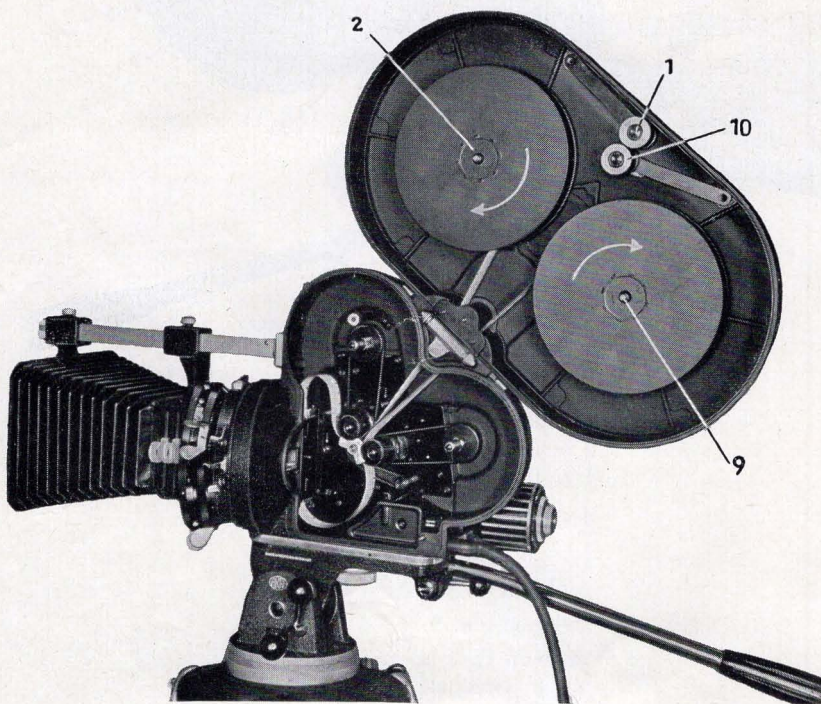


b) With 200 ft. dayload spools:

Remove core adapters by pushing down centers of spindles. (They have the same locks as camera spindles). Place delivery spool on left side, loose film to right, thread as before, take up film on empty spool, and wind up several turns.

When using 200 ft. spools the friction roller guides are not needed. Lock them both to their respective catches.

Now of course the film indicator on outside of magazine cannot be used. Instead the film counter on camera is utilized **It should be remembered that the counter provides for 10 feet between "100" and "0", and hence 200 ft. film is used up when counter shows 90 on second round.**



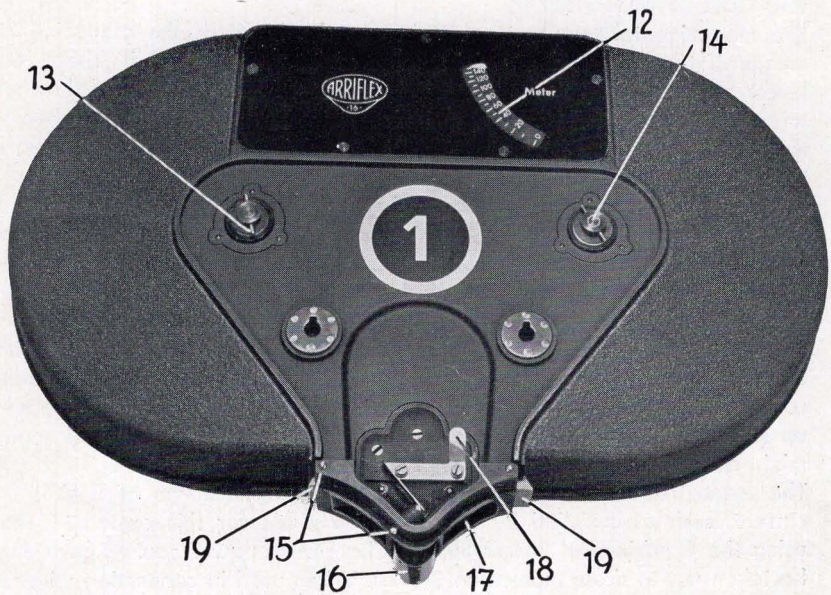
1 = friction guide roller, to be locked out before 10

2 = delivery film spindle, core adapter removed

9 = take-up film spindle, core adapter removed

10 = friction guide roller, to be locked out after 1

(To lock 10, swing roller guide first across catch, press in and lead back)



- 12 = film footage indicator
- 13 = take-up film spindle gear
- 14 = delivery film spindle
- 15 = silver contact pins
- 16 = loop of film
- 17 = magazine "nose"
- 18 = contact spring
- 19 = locking slide („lip“)

It is also important to note that each roll or spool of film contains about 10 feet more than stated, to serve as leader and trailer during processing. This extra footage permits trying out camera with camera cover open to make sure that film is taken up properly.

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For identification purposes, space is provided on the cover of each magazine for two round plastic discs, one of which carries a number (1, 2, 3, etc.) and the other one is blank and can be written on in pencil. These discs are glued on and can be added and removed at will. When ordering new magazines, please state which number you wish it to have.



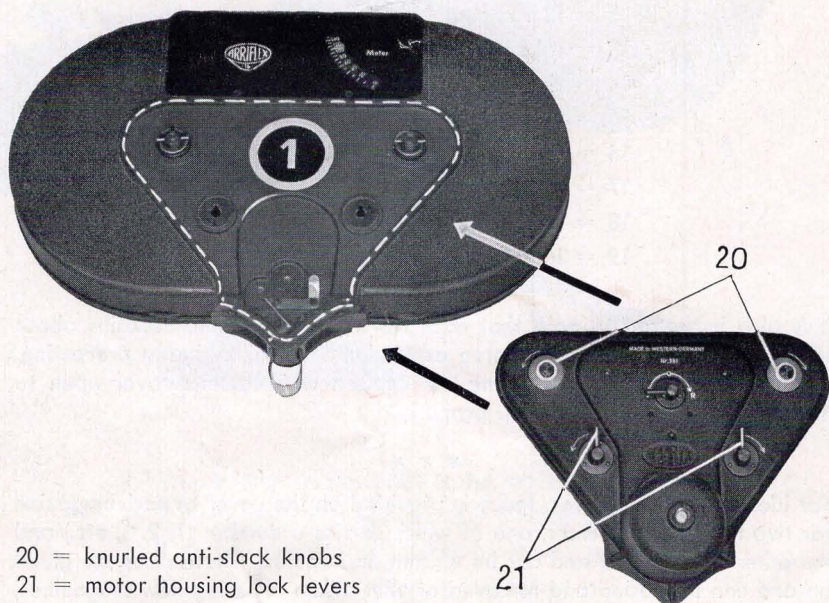
THE TAKE-UP MOTOR

The magazine take-up motor attaches to the body of the magazine by means of two lock levers and becomes an integral part of it. These lock levers are located to the left and right of the motor drum. When they are turned towards top, they are unlocked. In this position motor is attached to magazine wall. Then locks are turned outward and downward as far as they will go.

In the center of motor housing is another lever with which motor can be set on "F" for normal forward filming, and "R" for reverse filming. **It is imperative that the lever position corresponds with the same settings on the camera motor, as otherwise film will be torn.**

The interior of the triangular motor housing contains gears which connect to the take-up and delivery spindle. The knurled discs on the motor housing connect to these spindles and have an important function: **Before starting camera, each must be turned in the direction of its arrow in order to take up film slack in camera and magazine.** If this is neglected, take-up motor might accumulate too much momentum and tend to tear film.

The magazine motor must only be used with a maximum of 8 Volt DC current, such as supplied by Arri batteries made for this camera. (When using the Combination Power Supply Charger as power source, care must be taken not to draw more than 8 Volt). When used in connection with the Arriflex Synchronous Motor, the take up motor is supplied with 8 Volt DC



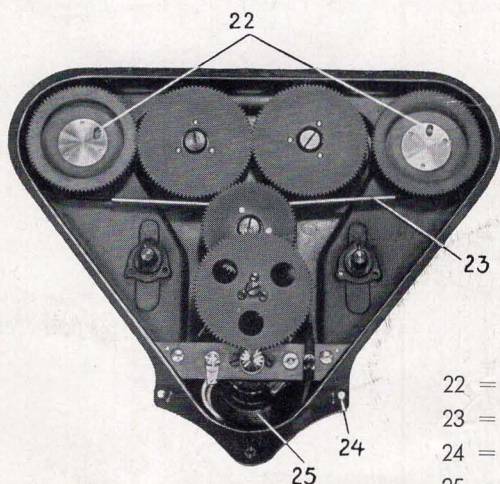
current from the rectifier incorporated into the Power Supply of the Synchronous Motor. For details see instructions for Synchronous Motor.

ATTACHING MAGAZINE and MOTOR ASSEMBLY TO ARRIFLEX 16

Remove cover and magazine plug from camera. Set camera and magazine motors to "F". Snap lock lip on side of magazine "nose" upward. Pull out a loop of film from delivery side of the magazine, (CAREFUL! Don't pull off film from take-up side, it might come loose) and insert loop into camera. Now seat magazine first against back dovetailed support, then bring down front until it falls into place and lock by pressing "lip" down only as far as it will go. **Do not use excessive force as the "lip" is not supposed to lock flush against wall.** Use hand pressure only.

Then thread film through sprocket drum and film gate in the conventional manner. Turn knurled spindle knobs in direction of arrows and take up all slack. Run a few feet of film with camera cover off, and convince yourself that film is taken up properly. Then close cover and set camera film counter to "0".

Remember, every time you stop camera, you must again take up film slack by turning knobs.



- 22 = engaging pieces
- 23 = braking arrangement
- 24 = silver contact pin
- 25 = take-up motor

Note: In case it is found that the magazine is not taking up, the most likely cause is that current is not being delivered to the magazine take-up motor. Should that be the case, detach the take-up motor, while magazine remains on camera, and check the spring-contact on both the motor assembly and the magazine housing. If necessary, bend both contacts for 1 to 2 millimeters so that they bear against each other firmly. Also check contact on camera body and clean, if needed.

Subject to Alteration