



THE FLIX SPLICING MANUAL

**Written by Lisa Baron
&
Edited by Peter Knight**



The contents of this manual are designed as a suggested method for using and working with Flix equipment and do not pretend to be the only method available. It is suggested that the manual is read and used as reference material. Many of the ideas and methods found in this manual relate to other equipment and similar setups of projector equipment and presentation. All copyright of third parties is acknowledged and remains their property.

This edition first published by Mad Cornish Projectionist™ publications in 2000.

Produced by

Mad Cornish Projectionist™

This manual is provided subject to the condition that it shall not, by way of trade or otherwise, be lent, resold, hired out or otherwise circulated without the publisher's prior consent in any form of binding or cover than that in which it is published and without similar condition being imposed on the subsequent purchaser.

An online version is available on the Mad Cornish Projectionist Productions web site at <http://www.madcornishprojectionist.co.uk/splicing>

Copyright © Mad Cornish Projectionist™ and Lisa Baron 2000

Mad Cornish Projectionist is a trademark for Peter Knight

1 Acknowledgements

I would like to acknowledge the help of Lisa Baron in providing the original written material for this manual. I would also like to thank Steve Barrance (The Mad Apprentice) for help with the splicing photographs.



2 Contents Page

1	ACKNOWLEDGEMENTS.....	2
2	CONTENTS PAGE.....	3
3	INTRODUCTION.....	4
4	INTRODUCTION TO SPLICING.....	4
4.1	THE BASICS OF FILM.....	4
5	SETTING UP.....	5
5.1	SWITCHING POWER ON.....	5
5.2	CONTENTS OF WHITE CUPBOARD.....	5
6	GENERAL POINTS ON SPLICING/DESPLICING.....	6
7	THE TOWER.....	6
7.1	INTRODUCTION.....	6
7.2	CONTROLS.....	6
7.3	QUICK CHECKLIST FOR THE TOWER.....	7
8	THE REELS.....	8
8.1	FILM REELS:.....	8
8.2	SPLICING REELS:.....	8
8.2.1	<i>Split Spool</i>	8
9	SPLICING & DESPLICING.....	9
10	OTHER DETAILS.....	14
10.1	LABELLING.....	14
10.2	CLEARING UP.....	14
11	HEALTH & SAFETY.....	15



3 Introduction

This manual was written by Lisa Baron, who was a committee member for FLIX between 1996 and 1999 and taught most of the other committee members how to splice. Peter Knight was a projectionist for FLIX between 1997 and 2000.

This manual is designed to help with the teaching of splicing amongst new members of the committee, a refresher guide for older members of committee and as a general reference guide.

The style of the manual is that there are instructions followed by a checklist in each section.

REMEMBER IF YOU EVER HAVE ANY PROBLEMS WHEN SPLICING OR DESPLICING ALWAYS LET THE PROJECTIONISTS OR THE REST OF COMMITTEE KNOW AS SOON AS POSSIBLE SO THE PROBLEM CAN BE SORTED OUT.

4 Introduction to splicing

4.1 *The Basics of Film*

Flix is fortunate enough to have a tower, which means that it is possible to show most films as one large reel instead of using several reels and having to swop them over. This means that when the film arrives (usually on about five - eight small reels of approximately 20 minutes each) they need to be joined together by splicing and placed on one very large spool. More details about this later on.



When the film has been shown and wound on to another large spool, it must be de-spliced and replaced on the small spools. Due to the film arriving on several reels it is possible that it may get mixed up and lead to the beginning of reel one being spliced to reel five, for example (this has happened). In order to avoid this; at the beginning and end of each small reel is what is known as a leader. At the beginning of film the leader is called a '*header*' and the end it is called a '*footer*'. On this should be written which reel it is and whether it is the beginning or end: -

Reel 2 Head

Reel 2 Tail

These leaders must be removed from the smaller reels and the last frame of reel two, for example, will then be spliced to the first frame of reel three, and so on. White stickers are placed on the edge of the film near the splice to allow it to be found when de-splicing. The leaders are placed back into the

cans in the correct sequence, so that they can be located easily when the film is being de-spliced, ready for sending back.



5 Setting Up

Before you can start to splice or desplice a film you need to prepare things and set up some of the equipment. Once in the POD make sure that the film is there, if not it will need to be moved from the film dump, currently the SOCSLOT.

5.1 SWITCHING POWER ON

The only piece of equipment which needs to be switched on when splicing or despling a film is the tower. To turn the tower on you need to find the fuse box which is located on the wall between the sound system and the projector (Vicky).

- ☛ Turn on the two red switches and the switch labelled tower, the other switches should be off unless someone else in the pod is using other pieces of equipment.

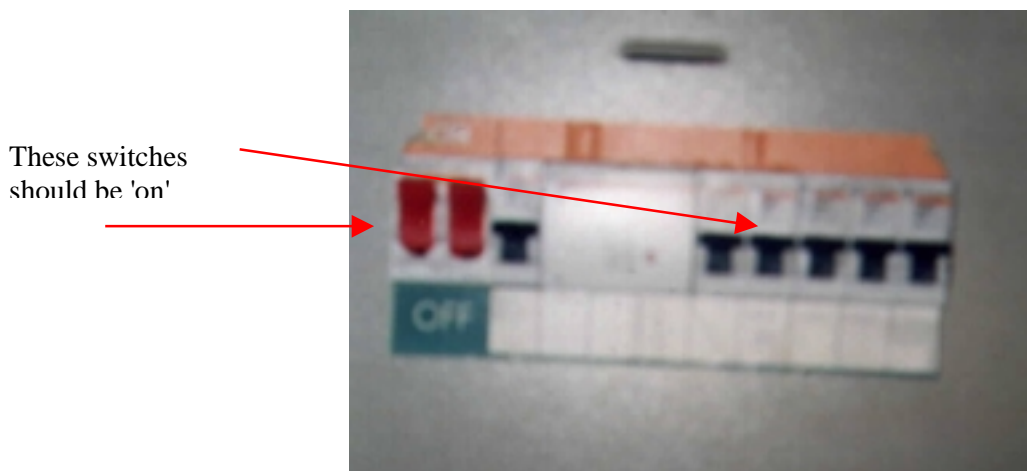


Figure 1 - A diagram of the switches in the fuse box.

5.2 Contents of White Cupboard

The following is a list of the items which will be needed during splicing or despling. All of these items can be found in the white cupboard:

- ☛ Safety goggles
- ☛ Gloves - these are heavy duty leather items
- ☛ Splicing Machine
- ☛ Splicing tape
- ☛ White Stickers
- ☛ Masking Tape
- ☛ Split Spool
- ☛ Centres for reels if necessary
- ☛ Elastic bands
- ☛ White gloves



6 General Points on Splicing/Desplicing

Before any splicing is done the following things need to be remembered:-

- ☛ **THE HEAD PROJECTIONIST CAN STOP PEOPLE FROM SPLICING AND ARRANGE TO HAVE THEM RE-TRAINED IF THEY DO NOT SPLICE FILMS PROPERLY.**
- ☛ **ANYBODY CAN RE-TRAIN IF THEY WISH TO DO SO.**
- ☛ **THE COMMITTEE SHALL SHARE THE SPLICING DUTY DURING EACH TERM, WITH EACH PERSON SPLICING ONE FILM PER TERM WHEREVER POSSIBLE.**
- ☛ **ANY PERSON WHO IS UNABLE TO SPLICE A FILM THEY HAVE SIGNED UP FOR SHOULD INFORM THE REST OF THE COMMITTEE AS SOON AS POSSIBLE SO SOMEONE ELSE CAN DO IT.**
- ☛ **THE POD SHOULD NOT BE USED FOR SPLICING/DESPLICNG A FILM DURING EVENTS RUN BY ENTS OR THE UNION.**

7 The Tower

7.1 Introduction



This section describes how the tower works, however, it will make more sense once you have been shown by a member of committee. It is important that you are comfortable about using this piece of equipment under supervision before attempting to operate it on your own. Not only could you damage the film and other equipment, but you could seriously harm yourself and others or even kill yourself.

It is not always easy to understand how the tower works and often takes a while to get use to.

REMEMBER GO AT YOUR OWN PACE BEFORE INCREASING THE SPEED.

7.2 Controls

There are three dials and three switches on the tower. This allows two films to be dealt with at the same time without one interfering with the other. It is therefore possible to show a film while splicing or desplicing another film.

The tower dials on the left-hand side control 'forward'. By setting the dials it is possible to make the film either run from the bottom reel to the top or vice versa. Which ever dial is set to the greater seed will



determine the direction. For instance if the top dial was set to 180 and the bottom to 60 the film would wind upwards. As a general rule the two dials are half the speed of the other.



The other dial on the right hand side is the 'rewind' dial. Depending on what the dial is set to will determine the direction the film goes in. The dial does the same job that both of the other 'forward' dials does. If the dial is set to the middle, around 140 then there should be equal tension on the film.

The switch which is situated in the middle of the two sets of dials controls which side of the tower is 'forward' and which is 'rewind' therefore if it is to the left then 'forward' is the left hand side and 'rewind' is the right.

The black switch immediately below this is the on/off switch for the 'forward' controls.

The silver switch on the right is the on/off switch for 'rewind'.

When you first start the film moving make sure that you hold the reel which the film is running off from. This is also the case when you need to stop or slow a film down when winding.

7.3 Quick Checklist For The Tower

- ☛ TO GAIN A BALANCED TENSION WHEN USING RUN THE REEL THE FILM IS LEAVING SHOULD BE ABOUT HALF THE SPEED OF THE REEL IT IS GOING ON TO E.G. FILM MOVING FROM THE TOP OF THE TOWER TO THE BOTTOM, CONTROL A AT 70 CONTROL B AT 140 FILM MOVING FROM THE BOTTOM OF THE TOWER TO THE TOP, CONTROL A 140 CONTROL B AT 70**
- ☛ ONLY GO AT A SPEED YOU ARE COMFORTABLE WITH, IT DOESN'T MATTER IF OTHERS GO AT 280**
- ☛ DO NOT START THE FILM AT THE HIGHEST SPEED ALWAYS BUILD UP SPEED GRADUALLY**
- ☛ USE THE CONTROLS TO SPEED UP AND SLOW DOWN THE REELS**
- ☛ DO NOT LIFT LARGE REELS OF FILM ONTO AND OFF THE TOWER ON YOUR OWN**

- ☛ RUN ALWAYS OPERATES ON THE SIDE THE CONTROL IS POINTING TOWARDS**
- ☛ REWIND ALWAYS OPERATES THE SIDE NOT BEING USED BY RUN**



8 The Reels

8.1 *Film reels:*

There are five large reels which are available to be used for splicing films onto. Whenever possible the newest reels, silver with circular holes in them, should be used. However if the film has more than seven reels to it then try to place it on a reel with a small centre. The small centred reels should be labelled.

• IF A FILM WILL NOT FIT ONTO ONE SMALL CENTRED REEL THEN USE TWO OF THE LARGE CENTRED REELS AND INFORM THE PROJECTIONISTS IMMEDIATELY.

8.2 *Splicing reels:*

8.2.1 Split Spool

When winding the film off the large spool on to hubs so that it can be fitted in to the cans in its separate parts a split spool must be used. A split spool is similar to the making up spool but it has two sides and a centre hub. The two sides and centre hub dismantle to allow removal of the film, which is placed in the can with its original centre hub.

- ☛ **ALWAYS USE A SPLIT SPOOL REEL TO SPLICE AND DESPLICE FILMS WITH**
- ☛ **WHENEVER POSSIBLE USE THE NEW SPLIT SPOOL REEL, SILVER WITH CIRCULAR HOLES IN**
- ☛ **ENSURE THE TWO HALVES OF THE SPLIT SPOOL ARE SECURELY FASTENED TOGETHER**
- ☛ **NEVER USE THE ADVERT REEL (ONLY HAS ONE SIDE TO IT AND IS WHITE)**



9 Splicing & Desplicing

In order to join the film a splice needs to be made. This is done using splicing tape and the splicing machine. When splicing a film the following things need to be observed and carried out:

1. Handle the film with care
2. Find the box with your film in it, they are clearly labelled

Technicolor				PRINT NO	REEL NO
35mm Domestic				ex001	1
				ASP Ratio	FOOTAGE
				SCOPE	1526
SOUND	NUMBER OF CARIS				
SDDS-SRD	6				
TITLE					

Figure 2 - An example of the label found on a film can.

3. Remove reel number 1 and place it on the split spool + then on the tower
4. Gently pull the header, if you see the BBFC certificate (see below) then this is the beginning of the film, wind the film back on to the reel, and then attach the end of it to the film reel using masking tape

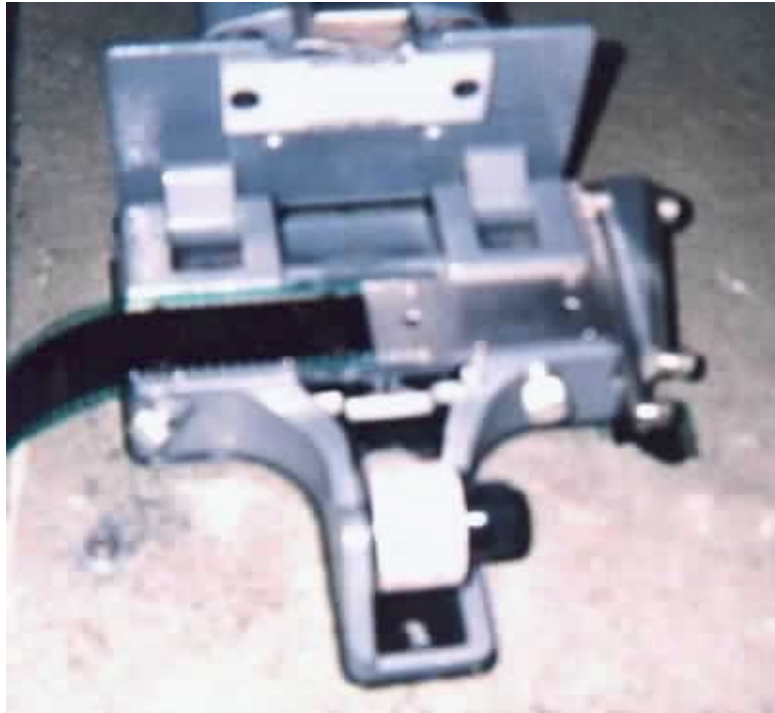


Figure 3 - An example film certificate.

5. If you see pictures from the film then wind the film back and replace it in it's can, repeat the above with the last numbered reel + you should see the credits, if so then attach this to the film reel



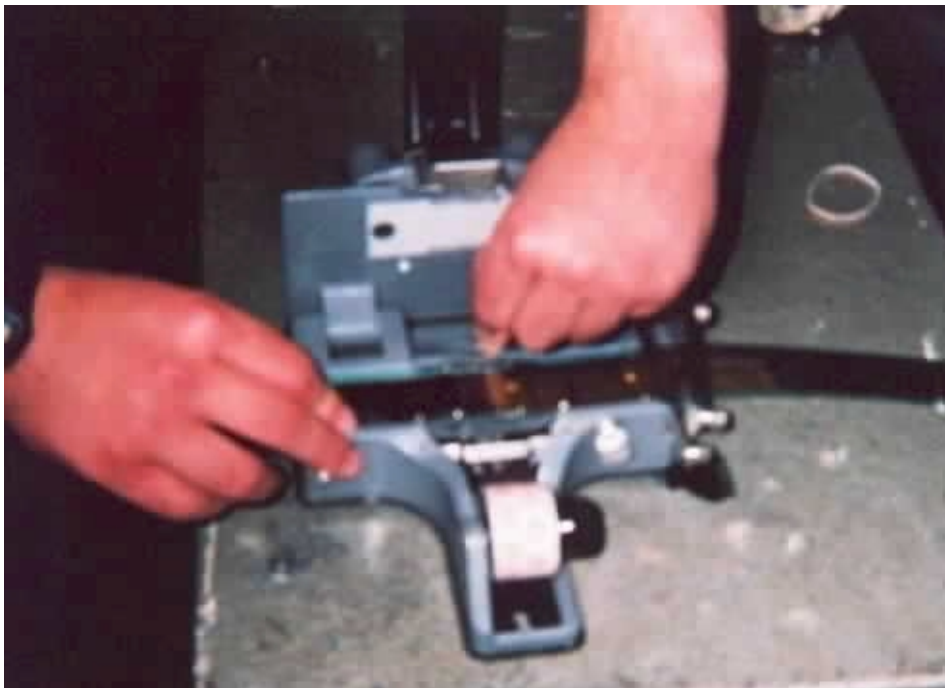
6. If starting with the first reel place the film reel at the bottom of the tower, if starting with the last reel then place the film reel at the top of tower
7. If you start with reel one then carry on splicing the reels in numerical order while if you start with the last reel then work backwards through the reels, so reel number one is the last to be spliced on
8. Always check that the headers and footers match the reel number + film that you are splicing
9. Always ensure that there is a **reference** film on each header and footer so that they can be put in the correct place if they get mixed up. A **reference** frame is a frame which is attached to the header or footer or each reel.
10. Always place headers and footers back in the right can
11. Once you have spliced the last reel on secure the film with a piece of masking tape or electrical tape.
12. Ensure there are four holes to each frame. This is important as otherwise the picture will jump 'out of rack' which means that the picture will look odd on screen.
13. Ensure there are no part frames at the join. Again this can cause the film to jump out of rack or even get the film caught in the projector.
14. The two pieces of film should overlap by no more than 1mm. This provides a clean splice, but if there is too much overlaps then the film and projector can get damaged.
15. There should not be a gap between the two pieces of film, which are being joined together. This makes a bad looking splice on screen and can cause the film to go out of rack.
16. Remove all previous pieces of splicing tape. If any splicing tape is left this can cause the film to jump in the projector and may cause problems to the running of the film.
17. Ensure the film is flat and secure when it is in the splicing machine.



18. Remove the headers from all the reels except the first one.

19. Remove the footers from all the reels except the last one

20. Pull splicing tape over the join and smooth down bottom to top or left to right



21. After remove your hands from inside the splicing machine close it and press firmly on the handle



22. Open the splicing machine, turn the film over and repeat the above process



23. Ensure the two pieces of film are the right way up

24. Ensure the sound loop meets - the purple track which runs down the edge of the film.

25. Ensure the film is not twisted

26. Place a thin piece of white sticker along the edge of the film on the same side as the sound loop, this is your splice mark.

27. Ensure the splice mark does not cover any of the holes on the film or the soundtrack

28. The two blades at the right hand of the splicing machine are for cutting the film, but only use the straight blade



29. Only removed damaged or partial frames from the splice point
30. Only use white stickers, pieces of for splicing marks
31. Only use masking tape to secure the film + label reels
32. If the splicing tape runs out whilst you are using it replacement are in the white cupboard

- ☛ **DO NOT USE SELLOTAPE OR ANYTHING ELSE TO SPLICE FILMS ONLY USE SPLICING TAPE**
- ☛ **IF YOU ARE UNSURE ABOUT ANYTHING OR DON'T KNOW WHAT TO DO THEN ASK**
- ☛ **DO NOT REMOVE FRAMES FROM ANY OTHER PART OF THE FILM UNLESS THE FILM IS DAMAGED + BREAKS WHILST YOU ARE SPLICING IF THIS HAPPENS INFORM THE FBP + THE DUTY PROJECTIONIST**



10 Other Details

10.1 LABELLING

It is always helpful to the projectionists if the film is labelled once it has been spliced. This just needs to be a piece of masking tape with the following information on it:

- ☛ The name of the film,
- ☛ Date,
- ☛ Your name,
- ☛ Whether the film is heads out (you started with reel one) or tails out (if you started with the last reel)

10.2 CLEARING UP

When you have finished splicing or desplicing a film the following clearing up needs to be done before you leave:

- ☛ Replace all the cans in the right film box
- ☛ Place box neatly along the back wall
- ☛ Replace everything in the white cupboard and lock it
- ☛ Ensure the tower controls are all at zero and/or turned off
- ☛ Turn off the power at the mains, if other people are using other equipment then only turn off the tower unless they ask for it to be left on
- ☛ Throw away any frames which had to be removed, unless you desperately want to keep them
- ☛ Ensure the pod is tidy
- ☛ Turn off the lights and lock the door, unless another people is still in there



11 Health & Safety

When splicing or despicng a film the following health and safety rules needs to be followed. Many of these items can be found in the Committee Code of Practice and the Risk Assessment.

- ☛ Whenever a film is being spliced there should be at least two people in the pod, including the person splicing or desplicing the film. - And George does not count as a second person when someone is splicing.
- ☛ It is recommended that there should be no more than four people in the pod when a film is being spliced.
- ☛ No one is to splice a film until they have been fully trained by an experienced member of the committee.
- ☛ The first film someone splices should be overseen by an experienced member of committee, but not necessarily the person who trained them.
- ☛ Long hair must be fasten in such a way that it cannot fall into a reel, or any other piece of equipment
- ☛ Baggy clothes must not be worn when splicing.
- ☛ Items of clothing, e.g. jumpers, must not be tied around your waist/shoulders etc when splicing. Hats must not be worn when splicing.
- ☛ When the reels on the tower are in motion the person who is splicing the film should wear a pair of goggles and gloves
- ☛ When starting/stopping the reels the gloves provided must be worn.
- ☛ Ensure all reels are securely on the tower and all nuts are screwed in place before using the tower.
- ☛ Do not use any equipment you have not been trained to use.
- ☛ Do not turn on the power to anything you are not going to be using, e.g. if you are only using the tower then there is no need to turn on the fumeo 16mm projector.
- ☛ Do not stop the reels with your bare hands, feet, other body parts – covered or bare, only use the controls and your hands if you are wearing the safety gloves provided.