

SECTION 3: JESUS FILM TRAINING MANUAL

Topic 5: Equipment Manual & Care and Repair

A. EQUIPMENT MANUAL

Read this manual immediately and also familiarise yourself with the Equipment Care and Repair Manual. Then, sometime before your first show, set up all your equipment and examine it carefully in order to become familiar with it (i.e. where everything is plugged in, position of fuses, meanings of words, etc.)

Do not change the equipment set-up or wiring for any reason unless you have base leadership's permission, and do not lose your manuals.

The equipment is excellent, so treat with respect. If something is not working, it is probably not the equipment's fault. (Know what I mean-?)

Equipment:

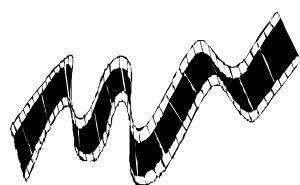
GENERATOR ⚡ Always check the oil and gas before operating and make sure there is enough gas on hand for the film show as well as for counselling afterwards. (See page 73)

PROJECTOR ⚡ Keep as clean and dry as possible. (See page 74)

⚡ Do not leave the projector light on when film is not running through the projector.

⚡ While replacing light bulbs, do not touch the bulb with your fingers (especially the projector bulb, since it will reduce its life expectancy). These bulbs are very expensive, so use extreme caution!

FILM ⚡ Do not touch the pictures. Hold only by the edges. (See page 75)



⚡ Handle carefully! Do not let it spill off reel when moving between the projector and the film container.

⚡ Keep it clean. When rewinding the film, always use the "Film Cleaning Cloth" to clean the film. (Lint-less cloth: eg. handkerchief)

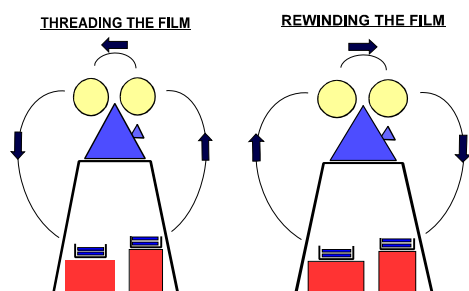
SPEAKERS ⚡ Make sure there is a knot around any splicer, to keep them from pulling apart.

- Set speakers securely in place and above the heads of the crowd — Never on the ground. From box to poles and vice-versa.

- MICROPHONE**
- Take good care of the microphone and the microphone cord - bending, knotting, or pulling hard will break the wires.
 - **Never blow in a microphone.**
 - Don't let it lay around.

- THREADING THE FILM**
- Sprocket holes should be at the side closest to the person doing the threading.

- REWINDING THE FILM**
- **Rewind the film on site** so it can be ready for the next showing.
 - If you are using a Slot / Channel load projector **ALWAYS** rewind through the slot/channel as this gives a tight roll of the film on the reel and greatly lessens damage due to the rubbing of the film against itself during travel.
 - ALWAYS fasten the end of the film down with masking tape, to hold the film tightly in place.



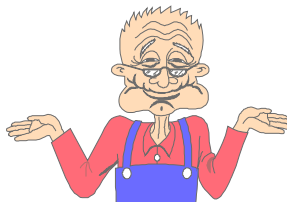

- Don't get confused when rewinding. Make sure the shown film is rewind on the correct reel.
- Always rewind from the take-up/full reel to the bottom of the empty reel.

NOTE: Always have a plastic sheet / umbrella ready to protect the projector against rain.

!! This equipment is very expensive. You are responsible to take care of your set of equipment. At film shows the team leader must designate one person to be with the equipment all evening (i.e. no counselling). The equipment cannot be left unattended during the day or night unless it is securely locked up or you are sleeping with it.

B. PROBLEM SOLVING

IF	THEN TRY
Generator is not working	<ul style="list-style-type: none"> ◆ Check petrol ◆ Check fuse
There is no power at the projector	<ul style="list-style-type: none"> ◆ Check all connections between generator & projector ◆ Check the 'main fuse' on projector. ◆ Press reset button on projector.

The projector lamp will not light	<ul style="list-style-type: none"> ◆ Is there power to the projector ? (See above) ◆ Is the main projector control switch turned all the way on? ◆ Is the projector lamp properly seated on socket? ◆ Check the projector lamp filament.
There is no sound from the speakers	<ul style="list-style-type: none"> ◆ Check all connections between projector & speakers. ◆ Does the 'exciter lamp' on projector come on when the volume is turned up on the projector? ◆ Check the amplifier fuse on projector. ◆ Check the hidden fuse at the back of projector
You need to replace a fuse	<ul style="list-style-type: none"> ◆ Make sure you replace the old fuse with one of the same type (check the numbers of the fuse). ◆ If you do not have the correct fuse on hand do not try to improvise. You could damage the equipment.
Sound quality is poor 	<ul style="list-style-type: none"> ◆ Check that the optical sound track on the film is not dirty or scratched. ◆ Clean the sound optics and lens. ◆ Turn down bass. ◆ Correct speaker: <ul style="list-style-type: none"> — Horn ➡ outdoor. — Box ➡ indoor.
Image quality is poor	<ul style="list-style-type: none"> ◆ Check that the film is not dirty or scratched. ◆ Clean the projection lens.
Split frame on picture	<ul style="list-style-type: none"> ◆ Adjust "Frame Control" knob located by 'focus control' knob.
Image won't focus properly	<ul style="list-style-type: none"> ◆ The loop restorer may be operating continuously. Turn the main control switch to off, pause briefly and then turn it on again. ◆ Check the film for damaged sprocket perforations.
<u>The film is backwards, upside down</u> 	<ul style="list-style-type: none"> ◆ <u>Make sure the film has been rewound.</u> ◆ <u>If the film is still backwards, rewind the film as follows:</u> You need two empty reels to solve this problem: <ul style="list-style-type: none"> — Step 1: Rewind to empty reel nr. 1 — Step 2: Rewind a second time to empty reel nr. 2 — Step 3: Rewind to original reel
No sound from microphone	<ul style="list-style-type: none"> ◆ Check if microphone is turned on. ◆ Check volume control on projector. ◆ Check all connections between mic and projector. ◆ Check if projector has power.
Everything is falling apart	<ul style="list-style-type: none"> ◆ Pray!
All is well	<ul style="list-style-type: none"> ◆ Give thanks!

C. SAMPLE EQUIPMENT POLICY

1. Equipment and films will be assigned to the Team Leader; however, the team as a whole will be held responsible for all losses, breakages and repairs.
2. The equipment and films **must not be loaned or used by anyone else** unless authorised by the appropriate authority who supervises the Team Leader.
3. If equipment is used by fellow ministry staff, the person to whom the equipment is assigned is responsible to see that the user really knows how to use the equipment properly. The person to whom it is assigned remains personally responsible for the equipment and films under all circumstances.
4. The team may use the equipment in conjunction with other Christian ministries such as missions, churches, youth groups, etc. **but your team members alone must operate the equipment.**
5. **Every piece of equipment, including all the wires, cords, fittings remain the property of the JESUS-film ministry**, and must be returned by the holder of the equipment to the ministry if and when the team is disbanded, or the equipment is being transferred to another team or area.
 - In settlement, the team may be required to repair or replace any items missing, broken or in need of repair.
 - Don't change existing fittings on wires — property of Campus Crusade for Christ.
 - Make your own adaptors to suit your circumstances.
6. Film and equipment can be repaired and replaced by Campus Crusade for Christ, Midrand. Charges are made according to the number of metres being replaced or repaired. If long portions of the film are damaged beyond repair, that section of the film will need to be ordered, and the costs for repairs or replacement will be charged to the team.

D. OPERATIONAL POLICY

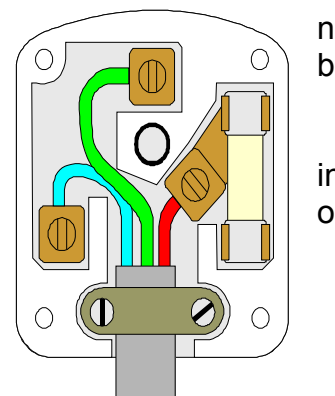
1. It is not at all unreasonable to plan for and expect that churches, missions, groups, youth, etc who sponsor JESUS-film showings, will meet the operational expenses. In fact, it is strongly suggested that they do so.

A standard fee could be set for film rental. The costs for petrol and oil for the generator are added to this cost. Additional costs include literature used, replacement of expensive projector bulbs, repairs and various supplies.

Certainly the sponsoring group should share in travel costs, accommodation and meals, as they are able.

This is a very reasonable request and will enable the team to continue to minister.

2. If the team is working in an area where there are few or no Christians or churches, the operational expenses must be financed from other sources.
3. These financial matters must be discussed and finalised in each country so that there is a unified policy being observed by all who have copies of the JESUS-film.



E. EQUIPMENT CARE AND REPAIR

1. Train Your Film Team

An ideal team should consist of a minimum of four people who hold responsible positions and duties. See lecture: (S3, T7, Page 85)

- a. **The equipment man.** He will be responsible for all equipment, films, projectors, screens, etc. He can supervise others, but he will remain responsible.
- b. **The team leader.** He is the one who manages the team, is involved in public relations, and is responsible for all team ministry.
- c. **etc.**

ALL TEAM MEMBERS MUST BE PROFICIENT IN THE USE, CARE AND REPAIR OF THE EQUIPMENT SO THAT THE MINISTRY CAN CONTINUE !!



2. Practical Instructions

- a. **Electrical extension cords and connections**
 1. Tie the cords to prevent damage and connections
 2. How to repair electrical cords

- Without solder
 - With solder
3. Fitting cords to plugs to keep polarity
 - Blue ➡ Neutral ➡ left connection.
 - Brown ➡ Life ➡ right connection.
 - Green ➡ Earth ➡ big connection.
 4. Cleaning and coiling the cord for proper care and use, and to prevent tangling and breaking.
 5. Placement of microphone, light, speaker cords during indoor and outdoor meeting.
 6. Tie and tape cord. Keep power cord away from mic and speaker cords.

b. Generator

1. Check the oil level before every usage.
2. Carry spare oil and petrol, with appropriate funnel.
3. If there is a special plug which fits the generator, clamp this to the machine, with a connection so that any standard extension cord could be used.
4. Be sure to have a supply of proper fuses.
5. Maintain proper speed.
 - Too slow — the speech is slow and dragging, the volume is low and lacks power, the picture is dim.
 - Too fast — the speech is too fast, and the picture is very bright.

BOTH OF THESE CONDITIONS WILL BURN OUT PROJECTORS AND EQUIPMENT. ESPECIALLY IF THE SPEED IS TOO SLOW.

6. Clean the air filter weekly.
7. Drain and replace the oil monthly.
8. Placement of the generator at a showing.
9. Heavy duty power cord from the generator to the multiplug at the projector.

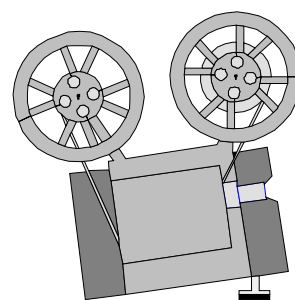
c. Setting up equipment

1. Place the screen at the most strategic place.
 - At the corner of a room, especially for overhead projectors.
 - Front of the room.

- Above the heads of the people.
 - Arrange for single or double-sided viewing.
 - Be aware of any light from other sources which may shine on the projector side of the screen.
 - If there is such a light, it should be on the back of the screen with the projector facing it.
2. Pace off the correct number of steps from the screen to the projector:
 - With a 2 metre screen, about 9 or 10 steps
 - With an outdoor screen, about 12 or 14 steps.
 3. Place, elevate and focus the light from the projector on the screen before putting the film on.
 4. Test the room or area for acoustic qualities, and the best placement of the speakers.
 - NEVER put speakers on the floor.
 - Usually put a chair on a table, and the speaker on the chair above the heads of the people.
 - Aim the speakers at the audience as you aim a gun.
 - “Sandwich the people” between speakers so that the speakers are in front of and behind the audience. In this way you will not need to drive the amplifier system, and the people will hear easily and enjoyably.
 5. Thread the film and test it, focus. Then reset the film at the beep so that it is ready to begin.
 6. Secure and plan a work area for the projectionist. He should have a chair.
 7. Arrange for the use of the microphone either in front of the audience, or at the projector.
 8. Set up flood lights, etc. Arrange area for counselling.

d. The Projector

1. How it works:
 - a. The parts of the film:
 - The frame
 - The sound track
 - The sprocket holes
 - b. The placement of the feed reel on the projector. The film comes off the top, clockwise, to the right.
 - c. The movement of the film as it stops and starts at the aperture. Twenty four (24) frames per second.
 - d. Shutter closes off the light between every frame, 24 times per second.
 - e. The functions of the top and bottom loops.
 - f. The pressure plate.
 - g. The claw.
 - h. The lense and sound optics: Again twenty four (24) frames between



sight and sound.

- i. The gate
- j. The framer
- k. Testing exciter sound circuit.

2. Cleaning and servicing the projector:

a. The gate area is CRUCIAL.



- b. The use of alcohol.
- c. Match sticks, and cotton buds.
- d. Pressure plate.
- e. Fixed plate and the tension side.
- f. Exciter photo electric cell.
- g. Lenses.
- h. Sprockets and rollers.
- i. Brushing away dust.

3. Replacing bulbs and fuses:

- a. Projection
- b. Exciter
- c. Fuses

4. Using and threading the projector

- a. Always thread on the leader
- b. Slot load
- c. Auto load
- d. Manual load

5. Rewinding the film (use silicon cloth). Page 69.

e. Film Care and Repair

1. Inspection, during show. Spots, scratches, lines, holes.

2. Splicing equipment and tape

3. Replacing sprocket holes

4. Cleaning:

- Silicon cloth
- Film cleaner. The film must be dry before it winds up on the reel.

5. Never allow the film to be in direct sunlight.

6. Water, dust and oil are bitter enemies of film.

7. Clean the film after 2 or 3 showings.

8. Use film cleaner (wax) after every 10 showings.



In dusty conditions use film cleaner after every 3 showings.

f. Packing after use

1. Put each piece of equipment in its own place so nothing is forgotten or lost.
Hint: The person who set it up, must also take it off and put it back in the correct case.
2. Clean cords as you put away the equipment.
3. Keep all projector parts with the projector.
4. Keep each piece of equipment in its own carton or case.
 5. All available team members assist in packing. The counselling is being done by those you have been trained.
 6. Be alert: The public may want to help themselves to your equipment and bits and pieces.
 7. Some **eager** friends and Christians will want to HELP you pack up. You must learn how to handle this situation so that you do not offend them, and so that you do not lose your valuable equipment.
You may be in a place where replacement would be impossible and your film ministry would cease.

