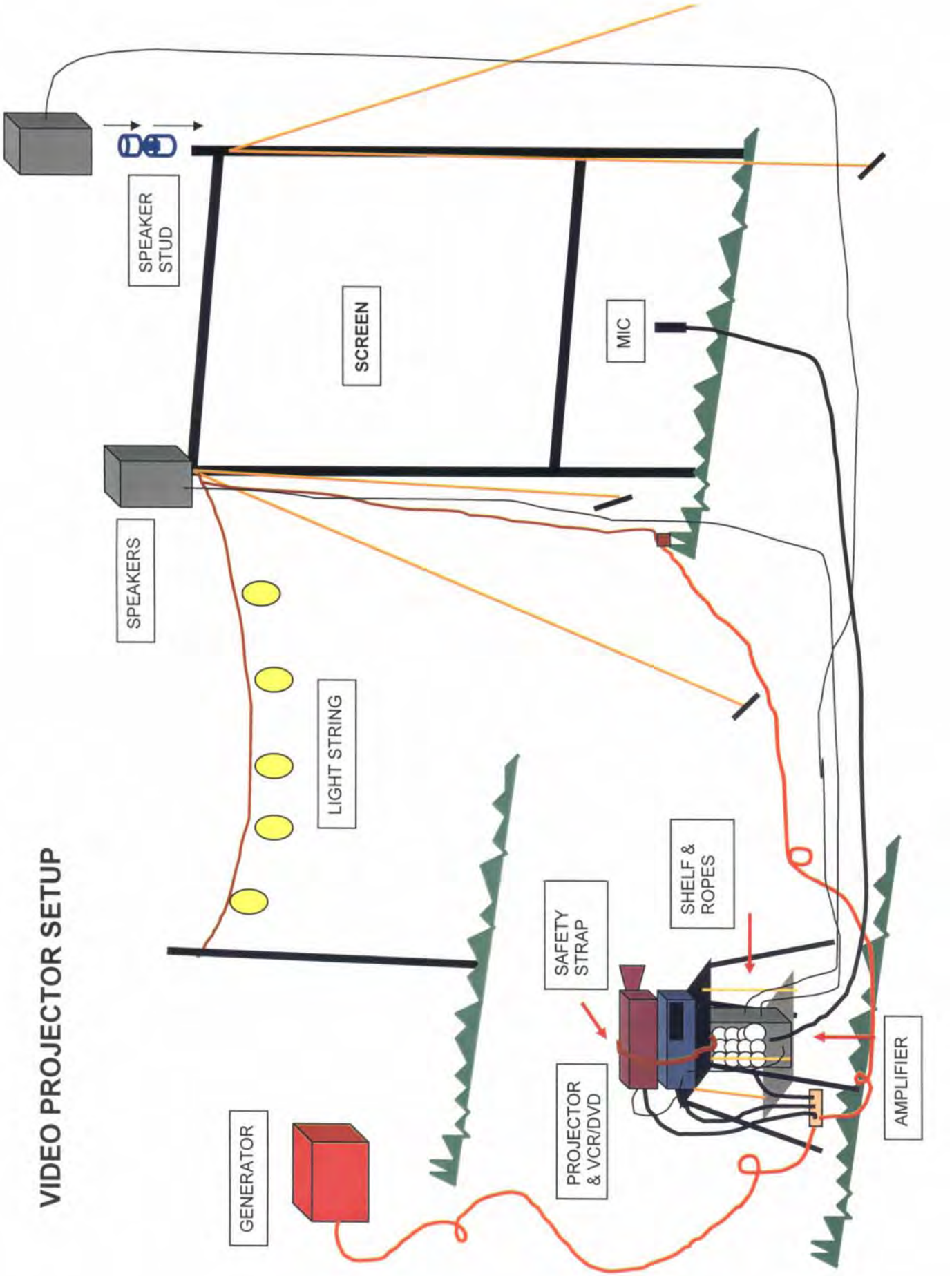
JESUS Film HARVEST PARTNERS

SET UP AND MAINTENANCE



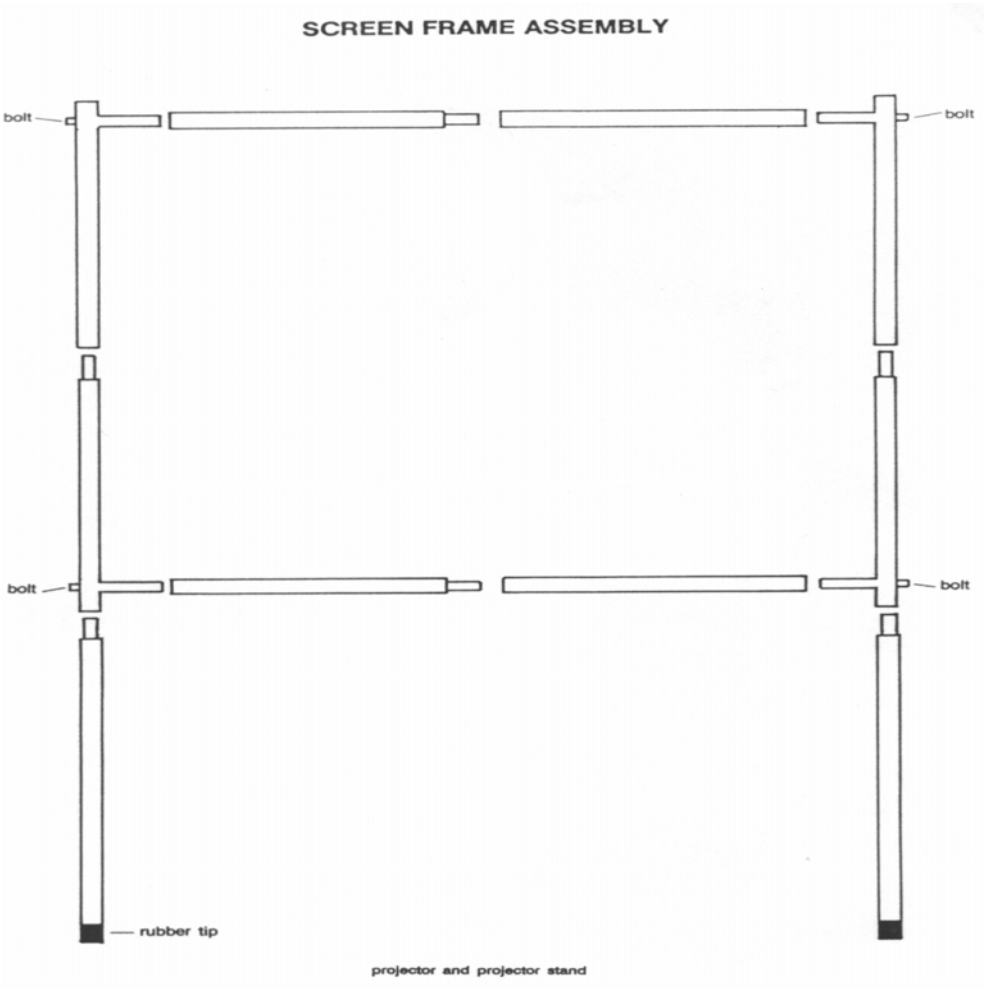
HOW TO SET UP THE SCREEN FRAME
(Frame: 12' high, 8' across, screen: 6' high, 8' across)

A. Select an open and flat area large enough for the number of people you expect to attend the outdoor film showing.

B. Lay the screen frame poles out where you want the frame to stand for the showing. The two poles with the black rubber ends are the bottom of the frame that will stand on the ground. Lay the two rubber ends where you want the frame to stand. Lay the rest of the poles out on the ground **(SEE DIAGRAM 1)** with the top of the frame pointed away from where the projection stand will be. But DO NOT connect the poles at this time.

(Suggestion: it is helpful to use colored electrical tape to color-code the screen framework. This makes it easier and faster to set up.)

DIAGRAM 1



C. Connect only the two top horizontal poles **(SEE FIGURE 1).**

D. Thread the top of the screen surface with the pocket hem through the top horizontal poles **(SEE FIGURE 2).** Use care to not get the screen surface dirty; if a rag sheet is available put it on the ground under the sheet.

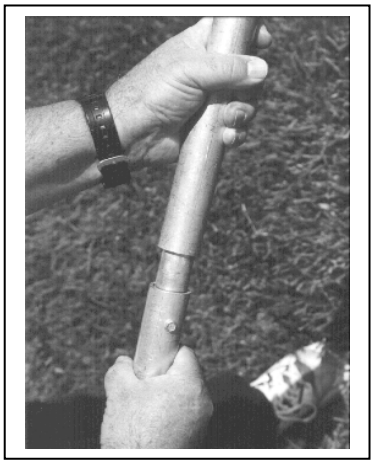


FIGURE 1

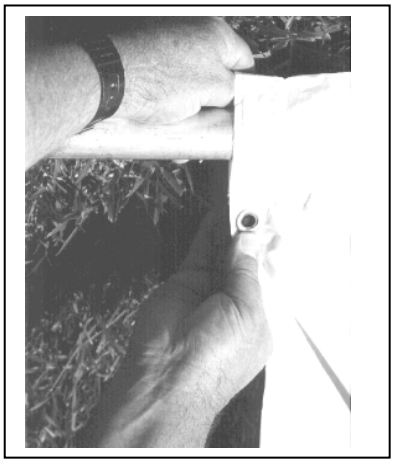


FIGURE 2

E. Finish assembling the rest of the frame poles by connecting the pole ends as shown in **DIAGRAM 1**.

F. Secure the screen to the frame by attaching the Velcro straps firmly to each other. Two people can work across the frame from each other in order to straighten the screen fabric evenly. Fasten the Velcro strips around the poles so that the screen is tight and firmly connected to the frame **(SEE FIGURE 3**).

G. Attach the string of lights to the top of the screen frame. Tie a noose in the cord near the first light bulb closest to the electrical plug end and slide onto the top of one of the vertical poles **(SEE FIGURE 4).** (You will secure the other end of the light cord after you erect the screen frame.)

H. Cut the 80 ft rope into 2 lengths, 40 ft each. Tie a noose in the middle of each 40 ft rope and slide on the top of the left and right vertical poles **(SEE FIGURE 4**).

FIGURE 3

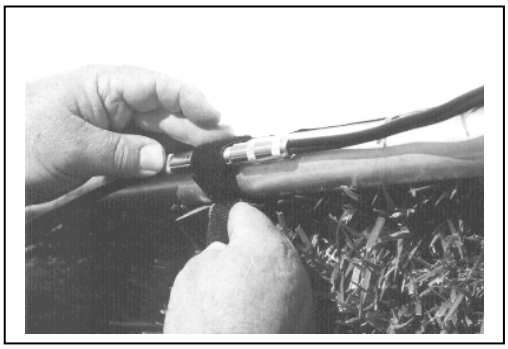
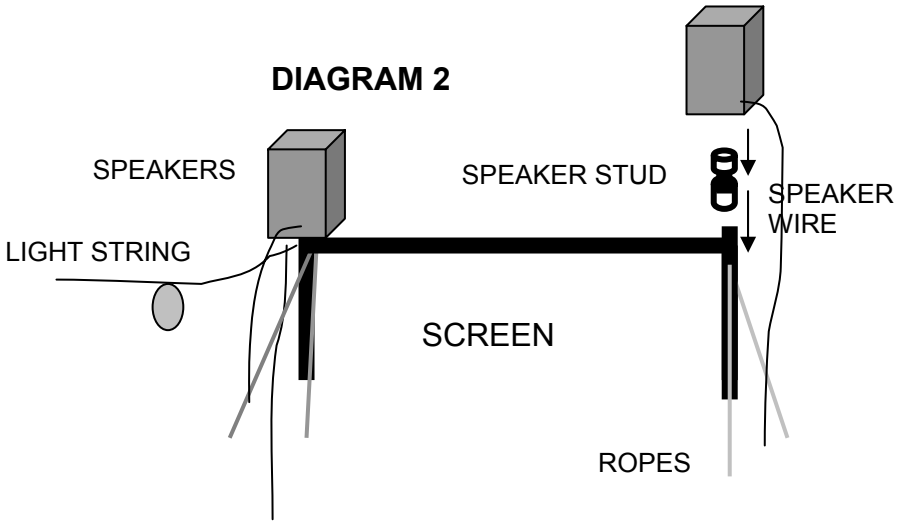


FIGURE 4

I.

Slide the speaker stud on top of the frame poles. Set the speakers on top of the speaker stud. Connect the speaker wire to each speaker in the jack on the front right corner of the speaker **(SEE DIAGRAM 2)**. (Later you will connect the other end of the speaker wire to the Fender amp.)

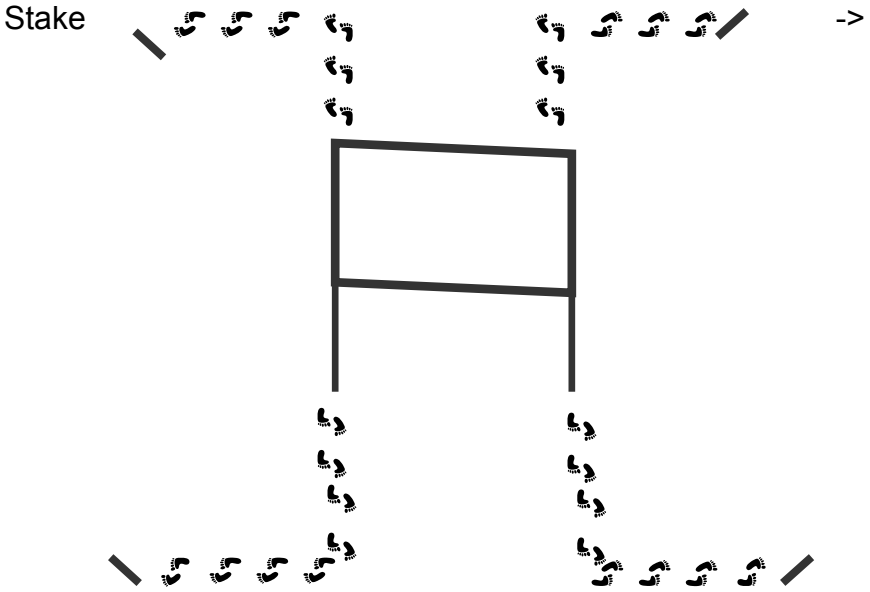
DIAGRAM 2



J. Erect the screen frame. There are several steps to this.

J1. Stand at the top right corner of the screen frame with your back to the frame and take three large steps beyond the screen. Then take three large steps to the side away from the frame. Drive a metal stake into the ground at that point. The stake should lean at a 45-degree angle away from the screen frame. **(SEE DIAGRAM 3)** Tie a loose end of the rope to the metal stake. Repeat this procedure for the left side of the frame.

DIAGRAM 3



J2. Stand at the bottom of the right vertical pole (with the rubber end) with your back to the screen and take four large steps straight ahead. Then take four large steps away from the frame. Drive a metal stake into the ground at that point. The stake should lean at a 45-degree angle away

from the frame. Repeat this same procedure for the left vertical pole of the frame. **(SEE DIAGRAM 3)** DO NOT tie the other end of the rope to the stake yet.

J3. Four film team workers are now ready to lift the frame upright. Two workers should stand at the bottom of the frame with one of his feet on the rubber end to steady the frame as it is raised. The two other workers should stand on each side of the frame helping to guide the frame and the speakers as they lift into the air **(SEE FIGURE 5 and 6**).

FIGURE 5

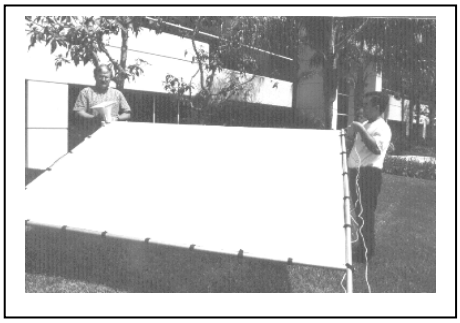


FIGURE 6

J4. The first two workers will then hold on to the loose rope and pull the rope toward themselves at the same time causing the frame to stand upright (**FIGURE 8**).

J5. Once the screen is upright, tie the end of each rope to the stake behind it (**FIGURE 7**).

J6. The metal stakes and the ropes will probably need to be adjusted to tighten the rope and steady the screen. Confirm that all ropes are tight and securely tied to the stakes (**FIGURE 7**).

FIGURE 7

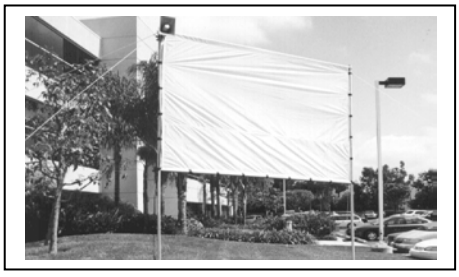


FIGURE 8

HOW TO SET UP THE VIDEO EQUIPMENT

K. The equipment we have provided will be compatible with local power supply. The equipment is auto adjusting multisystem for 110v-220v. The exception to this is the Fender sound system. <u>The voltage must be manually switched on the amp.</u>

L. The video projector has approximately a 6 meter (20 foot) throw distance. So set up the projector stand approximately 6 meters (20 feet) from the screen and then adjust the distance as necessary after turning on the projector and plugging in the speaker cords.

M. Put together the projector stand.

M1. The projector stand legs have rubber ends on the one end and a screw on the other end. Screw the ends into the metal stand (**SEE FIGURE 9**).

M2. The legs can be extended by pulling on them and then tightened by turning the black adjustment nut **(SEE FIGURE 10**). You can adjust the length of each leg to level the stand on uneven ground.

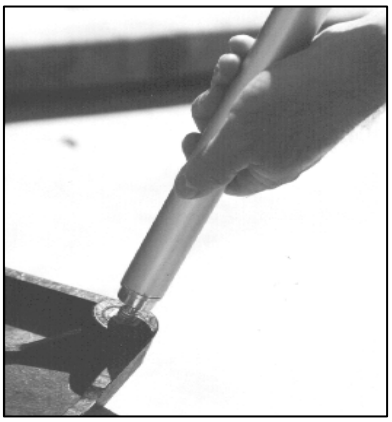


FIGURE 9

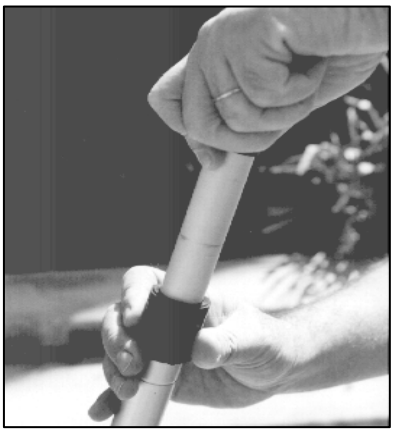


FIGURE 10

N. Put the stand with the longest side parallel to the screen. Place the Fender amp on the hanging shelf under the projector stand. The rope is 3.5 meters (12 feet) long; this includes some "extra" length so the shelf can be adjusted if necessary by untying the knots (**SEE FIGURE 11)**.

FIGURE 11

O. **SEE FIGURE 12** Put the video projector on the front of the stand facing the screen. Put the DVD player on the stand behind the video projector with the front facing to the right. Use the two safety straps to secure the video projector and

DVD player on top of the stand.

FIGURE 12

FIGURE 13

P. Connect the two speaker plugs into the two (100 amp) outlets at the rear of the Fender unit **(SEE FIGURE 13)**.

Q. IF YOU HAVE A 110V GENERATOR: Plug the power strip into the female end of the 30.5-meter (100-foot) extension cord. Plug the male end of the 30.5-meter (100-foot) extension cord into the generator and set the generator about 30.5 meters (100 feet) behind the projector stand. Follow the Generator's operating instructions provided in the owner's manual. Check to see if the generator has enough oil before starting.

   IF YOU HAVE A 230V GENERATOR: Plug the female end of the 30.5-meter (100-foot) extension cord into the male plug of the 3-outlet block. Put the European (double round pin) adapter on the male end of the 30.5-meter (100-foot) extension cord and plug the adapter into the generator and set the generator about 30.5 meters (100 feet) behind the projector stand.

R. Plug the male end of the 15-meter (50-foot) extension cord light string into the Power strip/outlet block. Tie the other end of the light string to a fixed object (tree or fence post) so that the string is elevated above the heads of the crowd. Plug the end of the light string into the female end of the 15-meter (50-foot) extension cord.

S. Plug the video projector, the DVD player, and the Fender amp into the power strip. <u>The voltage must be manually switched on the Fender amp.</u>

T. The microphone, with its protective bag and cord are in the compartment on the Fender amp unit. Plug the microphone into the Fender microphone outlet in Mic/Line One. The speaker should stand in front of the screen facing the audience when addressing them.

U. Use the two phono to phono cords and the Y adapter to connect the DVD player to the video projector and the DVD player to the Fender amp: take one cord and plug one phono end into the video projector yellow "Video" jack. Plug the other

end of that cord into the yellow “video out” on the DVD player. Take the other cord and plug one phono end into the “audio out” on the DVD player (if your DVD player has two "audio out" jacks, it doesn't matter which one you use). On the other end of that cord connect the phono jack end of the Y adapter. Then take the 2 phono plugs on the Y adapter and plug them into the two jacks in the blue “stereo” channel on the Fender amp. Then be sure the amp switch above the “stereo” channel is flipped to “stereo.” Use the 4th row of dials down from the top for volume and to modify the sound **(SEE FIGURE 14).**

FIGURE 14

V. Remove the cap on the video projector and turn it on. Be sure the input is switched to “video.” Follow the operating instructions provided in the owner's manual for both the projector and the DVD player.

W. Turn the DVD player and the Fender amp on. Put a DVD (either PAL or NTSC format) in the DVD player and push “play.” Use the dials on the Fender amp to test that you have sound. Be sure you are getting video out of the projector.

Note: there is an extra 3- prong to 2-prong adapter included in the equipment which is not required for set up as described here, but may be needed depending on power supply on location.

MAINTENANCE AND REPAIR OF THE EQUIPMENT

I. INTRODUCTION

Maintenance of projectors and other equipment must be given a high priority. If the equipment is not working or the film is damaged, people will not be able to see the film. The following information will show how to clean, maintain and repair the film and equipment in order to minimize the possibility of interrupted or cancelled showings. Therefore, we recommend that each team designate one person to be responsible for spare parts, inventory, repairs and equipment maintenance. All persons assigned to maintenance should be thoroughly trained in every detail of this equipment and should regularly review its content.

II. VIDEO PROJECTOR MAINTENANCE

Maintenance should be a routine part of your film ministry schedule. Perhaps you know of someone in your church or district that is gifted mechanically or electrically who could handle more difficult repairs.

A. Follow all instructions and guidelines in the "Operator's Manual" that came with the projector.

B. **Have a qualified service technician** perform major servicing using the **Eiki Service Manual**. Special tools are required.

C. Cleaning the Projector

1. **Keep projectors clean.**
2. Clean the lens with a soft cloth and, if necessary, use water or lens cleaner. **Do not use alcohol to clean the lens.**

III. VIDEO PROJECTOR TROUBLE SHOOTING AND REPAIRS

A. When the power light only is on and not the lamp indicator light, then follow the instructions to replace the lamp. **NEVER TOUCH THE PROJECTOR LAMP WITH YOUR FINGERS.** Use a handkerchief to replace the projection and exciter lamps. The oil from your fingers on new lamps will cause them to burn out.

B. After locating the problem, use the **Trouble Shooting** section in the projector **Owner's Instruction Manual** to determine its cause.

C. Be very careful not to disturb the video projector while the lamp is hot. Allow the fan to run until it stops. Then you can unplug the projector and pack it away. **Handle gently.**

IV. SCREEN MAINTENANCE

A. The metal frame and stakes should be stored in the orange carry bag. The ropes and cords should be stored in the red carry bag. **The screen surface should be stored in the equipment case.**

B. When the plastic screen surface gets dirty, it may be stretched out on a grassy or paved area and cleaned with a soft brush and soapy water. Rinse with fresh water and let dry before folding for storage. At the same time clean the metal frame, ropes and stakes.

V. COILING ELECTRIC CABLES

Coiling the wire in a circle causes it to be twisted making it difficult to unwind without tangling. This happens when wire is coiled around the hand and elbow. Every wrap puts one more twist in the wire. Eventually, breaks develop in the wire or its insulation. **This is especially true of the microphone cable.**

To eliminate tangling and twisting, coil it in a figure eight. Begin by stretching the wire on the ground and untwisting it. It can then be coiled into a figure eight by using the hand and elbow and crossing over the forearm on each wrap as shown in the diagram. If this is too difficult, you can drive two stakes in the ground and coil the wire in a figure eight pattern around the stakes. Spacing of the stakes depends on the size coil you want. Take two shoelaces or heavy cord and tie around each end of the figure eight. When you are ready to use it, the wire will uncoil without tangling (**SEE FIGURE 15**).

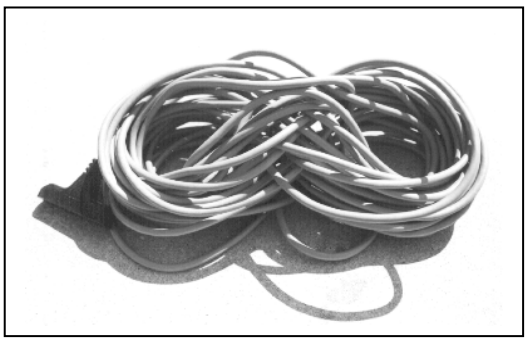


FIGURE 15

You might also use a piece of board, 16 x 32 cm, with wide notches cut in either end. Wrap the cord around the board.

The red bag included is intended to carry the extension cords, light string, rope, power strip, etc.

VI. GENERATOR MAINTENANCE

A. Before using the generator, carefully read the operating instructions. Keep the operating instructions for periodic review and reference.

B. Check oil before each showing. Be sure the generator is on level ground.

C. After the first 20 hours of use of a new generator (approximately seven film showings), break-in oil should be drained and refilled with oil as recommended in the generator instructions.

D. Oil should be changed after every 200 hours of use or after approximately 75 showings.

E. Spark plugs can be cleaned with a wire brush and the spark gap adjusted when needed.

F. The speed adjustment should never be touched except to adjust voltage. Check voltage periodically with a voltmeter. Too much voltage can burn.

G. The air intake should be cleaned regularly and especially in dusty, windy conditions. Sponge filters can be washed in soapy water and dried. Saturate in a light oil and squeeze out excess before replacing. **NEVER OPERATE THE GENERATOR WITHOUT A FILTER.**

H. <u>High Elevation Generator modification procedure</u>

High elevations can definitely be a problem. Most gasoline engines that run well at 3000 to 5000 ft do not operate very well at 12000 ft.

If your YAMAHA 1000iS model is not running well when above 5000 feet, you need to consider using a kit to change the specifications for operation at higher elevations. This kit contains a replacement fuel jet orifice and a hotter spark plug. Your Yamaha generator should operate normally at high elevations if you install this kit.

1. Please remove the carburetor bowl by removing the one bolt on the under side. Inside remove the orifice piece. A straight blade screwdriver should fit in the slot of this piece. Place the standard orifice (jet) in a safe place and screw in the new high altitude orifice (jet) into the same opening. Close the bowl and replace the bolt.
2. Remove the spark plug and replace with the new hotter type spark plug provided. Keep the old spark plug.
3. If you return the generator to altitudes under 5000 feet, you will need to re-install the old orifice and spark plug to keep the engine from overheating.

GENERATOR MAINTENANCE SCHEDULE

Perform the following maintenance according to the time period indicated by the ✔ .

No.	Item	Remarks	Before each showing	20 hours	50 hours	100 hours	300 hours
1.	Spark Plug	Check condition. Adjust gap and clean. Replace if necessary.			✔		
2.	Valve clearance	Check and adjust when engine is cold.					✔
3.	Crankcase breather system	Check breather hose for cracks or damage. Replace if necessary.					✔
4.	Idle speed	Check and adjust engine idle speed.					✔
5.	Exhaust System	Check for leakage. Retighten or replace gasket if necessary.	✔				
		Check muffler screen and spark arrestor. Clean/replace if necessary.					✔
6.	Engine Oil	Check oil level	✔				
		Replace		✔		✔	
7.	Air Filter	Clean. Replace if necessary.			✔		
8.	Fuel Filter	Clean fuel tank filter. Replace if necessary.				✔	
9.	Fuel Line	Check fuel hose for cracks or damage. Replace if necessary.	✔				
10.	Choke knob	Check choke operation.	✔				
11.	Cooling System	Check for fan damage.					✔
12.	Starting System	Check recoil starter operation.	✔				
13.	Generation	Check if the pilot light comes on.	✔				
14.	Fittings/Fasteners	Check all fittings and fasteners. Correct if necessary.				✔	