ARTISTIC TOUCH

SCHOOL of EMBROIDERY

"TRANSCRIPT"

for

EDUCATIONAL VIDEO NUMBER ONE

INSTRUCTIONS FOR LEARNING

TO OPERATE

"CHAIN STITCH" or "BONNAZ"

EMBROIDERY MACHINE'S

This is a four hour video tape that is designed to give you all of the information you will need to learn to operate "Chain stitch" or "Bonnaz" embroidery machine's. You will learn every thing you would learn if you attended classes for a week at Artistic Touch School of Embroidery.

For best results, view the entire video while reading the transcript. You will find many things in the transcript that I didn't have time for in the video.

You will also find that there are a few bloopers in the video! They have been corrected in the transcript. Please understand . . . this is a "low budget" tape. Every effort has been made to get things as clear as possible, but I make no claim at being an expert film maker! Since the original filming extended to almost six hours, I had to do quite a bit of editing, but nothing that was important has been omitted from the tape.

After you have viewed the video the first time, then place your T.V. in front of your machine, along with your remote control, and take each step one at a time. Don't go on to the next step until you can do each step perfectly, and you thoroughly understand what you are doing. DON'T TRY TO RUSH . . . TAKE YOUR TIME AND LEARN IT RIGHT BEFORE YOU MOVE ON. You will learn to write your name in no time at all, but learning the other things will not be as easy. If you have learned to do everything on this video in less than three months . . . you are doing great! I don't believe you have ever heard me say it would be easy! It will take time, but I think you will find it is worth the effort!

I sincerely want you to learn how to operate the machine, if you need any additional help, please feel free to call me. You have all of the instructions on the video and I'm as close as your phone! So, good luck! I have faith in you!

After you have learned to operate the Bonnaz machine, my way, I think you will feel that you have gotten what you paid for, and then some!

Artistic Touch School of Embroidery
9908 S. Broadway,
St. Louis, Mo. 63125
Phone:1 (800) 421-1991 Missouri:1 (312) 631-8600

"V I D E O O N E T R A N S C R I P T"

This is a COMPLETE TRANSCRIPT, of everything that is done on Artistic Touch, Video Tape Number one.

Teacher/narrator: Ruth E. Franklin
Camera Work by: Clay Gardner
Student Assistant:Leah

The Video you are about to view, is designed to teach you, EXACTLY, the same things you would learn about "chain stitch" or "bonnaz" embroidery, if you came to St. Louis, and spent a week in actual, hands-on training, at Artistic Touch School of Embroidery.

I have known how to operate the "bonnaz" machines for forty-plus years. I've forgotten what it is like to be a beginner.

I've taught many people how to operate the machines. I know setting down at the machine for the first time can be a frightening experience! Of course, I can show you how to do it, but . . . since watching a professional do things, it makes it look like there is nothing to it, are YOU GOING TO BE ABLE TO DO IT?

I think you will like my solution to this problem . . . Leah, has not had any more experience than you have. She has read the transcript & the "FREE INFORMATION KIT." You may also read these informational items, prior to viewing the Video. I have not allowed Leah to set down at the machine. She has seen me write her name on the machine, and that is all.

We are going to introduce you to Leah now, and I will ask her some questions.

Leah will be learning, right along with you as you learn! I will tell her what to do, and she will do it, the same as you do. She will have the same problems you have, and she will ask the same questions you would want to ask. Don't forget, it will be harder on Leah . . . she will be on camera while she is learning.

It is not required that you should be an art student. You don't need a lot of art training. All you really need is to be able to look at something and know if it looks good or bad.

The Video will be done in three shootings. This will give you & Leah time to practice what you have learned. I will let you know when we make each break.

If you do this the way I instruct you to do, you will both be able to operate the machine when we get to the end of the tape.

The most time consuming part of learning to operate this machine, is the time you must spend practicing. That, you can do at home on your own machine.

My name is Ruth Franklin. I hope you will feel like I've taken you by the hand and led you through these lessons, STEP by STEP!

When you contacted me for information about my Books & Video Tapes, you were sent a "FREE INFORMATION KIT." I hope you have taken the time to read it.

I will not go into things like the history of the machine and how to sell your work and who to sell it to . . . that is covered in the information kit. If you did not receive one let me know and one will be sent right out.

The first thing I will do on the Video, is have you, and Leah, check that the machine is in proper working condition.. You could be trying to learn on a machine with a broken needle . . . the looper could be out of alignment, or . . . there could even be a part missing! All you would know is THE MACHINE DON'T WORK! But, you wouldn't know why. Unless the machine is working right, you will not be able to learn right.

Along with this transcript, on the following page, you will find a chart showing some parts to the machine. I will have you & Leah, remove these parts from the machine. These parts must be removed regularly, for cleaning & oiling.

On page 4, you will find a diagram of the machine. Learn the names of parts shown on the diagram. I will refer to these parts often. In addition, you should know that the PAINTED part of your machine is called the CASTING. Some machines are black, some blue, some grey & some green. The bottom part of the casting is called the BASE. The top part of the casting is called the ARM. The WHEEL is on the right end of the ARM and the ARM HEAD is at the left end of the ARM. The ARM "HEAD" is the polished metal part that all of the parts on the "FACE" are connected to. Each part on the FACE has it's own name, and the most prominent part of the "FACE" is the "NOSE." The ARM HEAD has four sides. The FRONT, the BACK, the FRONT SIDE and the BACK SIDE.

Next, we will clean and oil the machine, make sure everything is working right, and put it back together.

Then comes what I consider to be the most important part of your training. You will be shown how to make all of the necessary adjustments on the machine.

Knowing how to make these adjustments, will mean the difference between your learning to be a really good operator, able to do TOP QUALITY WORK, or just being a mediocre operator that can only write names and do simple designs.

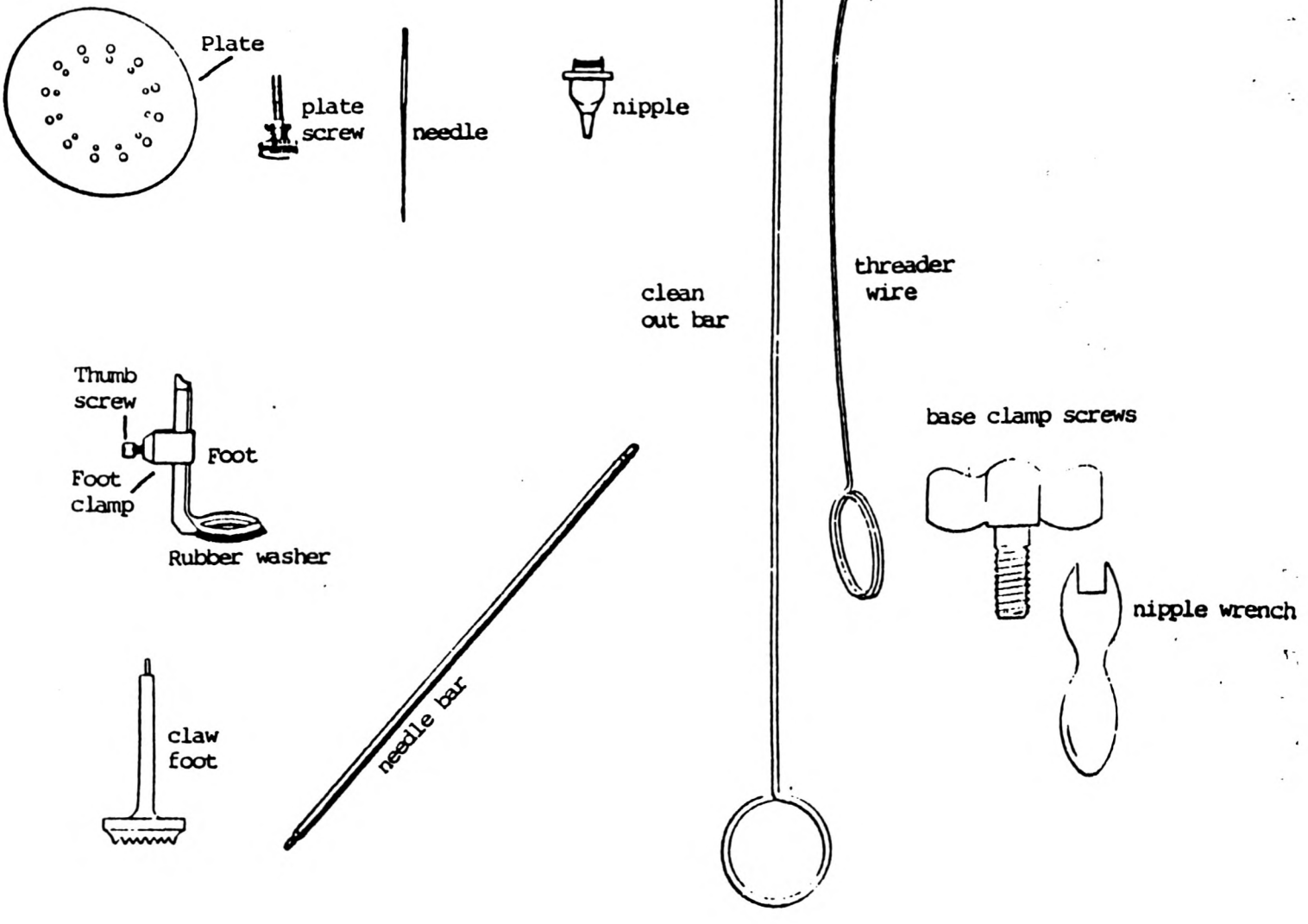
If you don't learn to make these adjustments, you will have problems with the machine picking the material, dropping stitches, puckering and many other things. You will also have problems following the designs and making square corners on your block lettering. If you DO learn to make all of the adjustments, you will be able to solve any problem that may come up.

Don't think you can skip over this part & just call a 'mechanic when the machine needs adjusting! Mechanics that know anything about these machines are few & far between! Even if you do find one, he still won't be able to do the "FINE ADJUSTMENTS." You have to adjust the machine to YOU in order to do good work. There are operators who have been in the business for many years, that have NEVER learned to do some of these adjustments . . . believe me, you can see it in the work that they do.

O P E R A T O R R E M O V A B L E P A R T S

Make an attempt to learn the names of these parts, it is necessary for the operator to remove them from the machine on a regular basis for cleaning and oiling.

PART NAME	SINGER NUMBER	CORNELY NUMBER
Claw foot	8071-B-B	604
Presser foot	8071-A	605
Rubber shoe	8073-A	Shoe
Foot clamp	8072	10025
Thumb screw	8025	10026
Needle plate	8106	1707
Plate screw	8107	56
Needle bar	8026-A	10030
Needle's	8027 (135X1) size 1-12	253 S
Nipple	8056 sizes 1-12	27 A
Nipple wrench	8155	Wrench
Base clamp screws	8157	95
Clean-out bar	8167	C. Rod
Threader wire	8156-A	1305



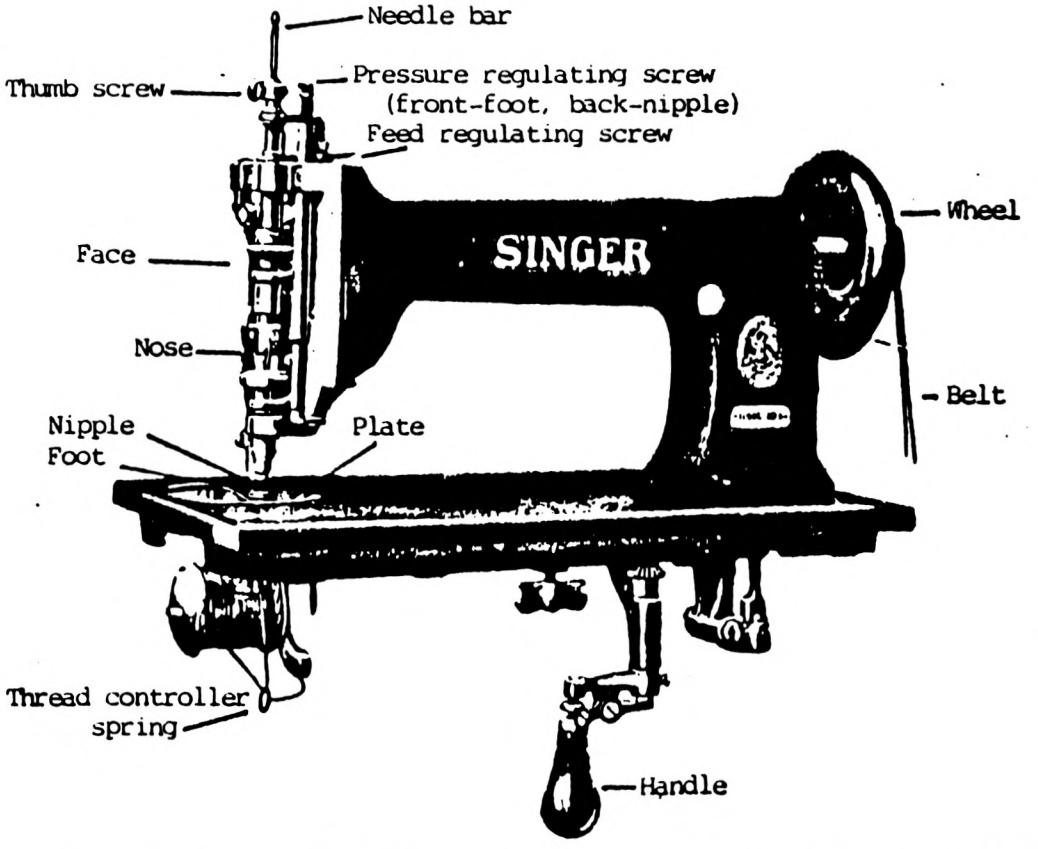
MACHINE DIAGRAM

The machine shown below is the Singer 114 W 103, depending on where & when your machine was manufactured, the letter in the model number can be "W", "K" or "E". The model 104 is the same except it is designed for heavy fabrics.

Basically, all of the machines are about the same no mater what company made them. The parts are called by the same names.

Older machines do not have the foot & nipple pressure regulating springs as shown on this model. Instead they have scissor loop springs.

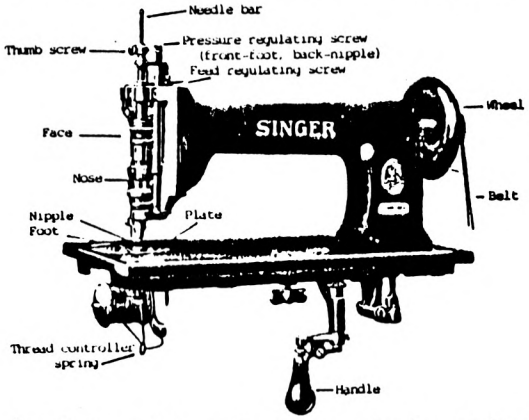
Compare the picture below with your machine and learn the names of the parts shown. You will need to know them in order to learn to operate the machine.



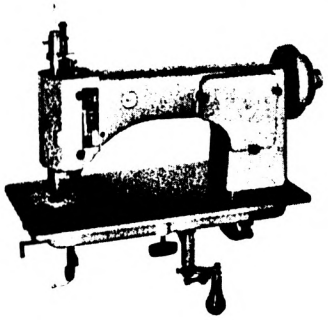
NOTE: The entire column of parts on the front of the machine is called the "FACE."

M A C H I N E D I A G R A M ' S

The machine shown on the left is the Singer 114 W 103. Chain stitch.



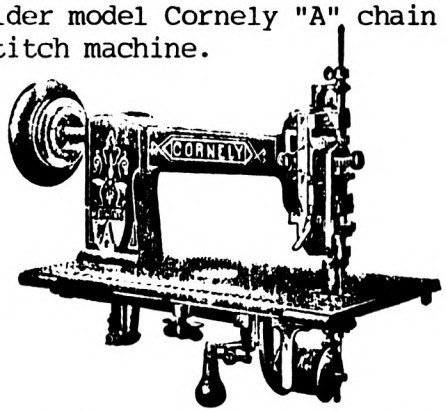
The machine shown on the right is the Cornely "A" chain stitch.



Basically, all of the chain stitch machines are about the same, no matter what Company made them. The parts are called by the same names.

Compare these three pictures to your machine. Learn the names of the parts shown.

The machine shown below is an older model Cornely "A" chain stitch machine.



These older machines do not have the foot & nipple pressure regulating springs. Instead they have the "scissor loop springs" as shown, on the front and back of the arm head.

I promise you, in this Video, I'll teach you much more than just how to write your name . . . I'll teach you to be an "EMBROIDERY ARTIST."

I've made a special effort to be sure all of the information I give you is "ACCURATE INFORMATION."

I don't want you calling me to tell me your machine was damaged because I forgot to tell you something.

I also, don't want to leave you stranded, because I started showing you something and then went on to something else without finishing.

I,m sure you will notice on this narration, it sounds like I am reading. That's because I am! I'm reading the script so I will get everything right.

THERE'S SOMETHING S P E C I A L ABOUT THIS VIDEO!

Just before we do each STEP on the Video, A NUMBER WILL APPEAR ON THE SCREEN. That number will correspond with the number for that STEP in this transcript. If you want to review any STEP, you can fast-forward or re-wind until the number appears.

As I told you before, the Video will be done in three phases in order to give you and Leah time to practice what you have learned.

In the first section, in addition to all of the things I have already told you about, I will show you how to align yourself with the machine when you set down. You are an extension of the machine, so this is very important.

Next, I will have you & Leah, place two pieces of typing paper under the foot, put the foot down and start getting used to operating the treadle and the handle.

I will explain what the machine is supposed to do and how it does it.

I will explain the relationship between the "nose" and the "handle," and how they work.

From time to time, Leah and Clay will ask me questions. I think you will find this beneficial, since they will be asking the same questions you would ask if you were here. If they miss anything you would like to ask, write it down and call me.

Leah will practice trying to stay on the paper, you should do the same. Maybe she will try to write her name . . . we shall see!

Enough talk! . . . Let's start learning something!

STEPS IN SECTION NUMBER ONE

INDEX

The STEP number (on the left) will correspond with the number that appears on the Video just before that STEP is performed.

STEP NUMBER		TRANSCRIPT PAGE
1.	Making sure the machine is working right.	7
2.	Removing the needle bar.	7
3.	Removing & replacing the needle.	7
4.	How to straighten the needle.	7
5.	How to remove the nipple & choose the size.	8
6.	Cleaning the nipple.	8
7.	Removing the foot & clamp.	8
8.	Replacing the rubber shoe on the foot.	8
9.	Removing the needle plate.	8
10.	How to clean the looper.	9
11.	Cleaning the needle shaft.	9
12.	Oiling the machine.	9
13.	Checking the looper setting.	10
14.	Checking to see if the looper is set for chenille.	10
15.	How to manually change the looper setting.	11
	Looper setting for Singer 114 K 104 machines.	11
	PUTTING THE MACHINE BACK TOGETHER	
16.	Replacing the needle plate.	12
17.	Replacing the foot.	12
18.	Replacing the rubber shoe while the foot is on the machine.	12
19.	Replacing the nipple.	12
20.	Replacing the needle bar & needle into the machine.	12
21.	Choosing the hole in the needle plate.	13
	FINE TUNING YOUR MACHINE	
22.	Adjusting the nose.	14
23.	Adjusting the nipple.	15
24.	Adjusting the foot.	16
	Special note about older machines.	17
	Special note about "STOP MOTION."	17
25.	Adjusting the length of the stitch.	17
26.	Threading the machine.(from the cone to the looper)	18
	Information about the tension assembly.	18
27.	Adjusting the height of the needle & the thread tension.	19
	Sample of small practice stitch.	20
	Sample of stitch used for general work.	20
28.	Aligning yourself with the machine.	20
29.	Starting to practice. Trying to stay on the paper.	20
30.	The relationship between the handle & the nose.	21

END OF THE FIRST OF THREE SECTIONS.

V I D E O L E S S O N ' S T R A N S C R I P T

These lesson's involve removing & replacing parts on the machine and making adjustments. You will need tools in order to do this. 1 small screw driver, 1 larger screw driver. 1 pair of needle nose pliers, 1 pair of regular pliers. A foot knife, a clean-out rod, a nipple wrench, 20 weight non-detergent motor oil. You also need with your machine, number 5 (110 metric) long-point needles, 1 number 6 nipple, 1 presser foot, 1 claw foot and a new rubber shoe.(for the foot)

STEP # 1.

To start with, we are going to make sure your "bonnaz" machine is in proper working condition. We are going to remove some parts from the machine . . . don't get shook-up, I will show you how to put them back! Use the machine diagram on page 4 to see where the parts are located on your machine.

STEP # 2. REMOVING THE NEEDLE BAR.

Use a pair of pliers to just loosen the thumb screw holding the needle bar in place. Hold the needle bar with your left hand & pull it straight up & out of the needle shaft. The needle is in the end of the needle bar. Take a good look at the needle. Compare it to one of your new needles. Check to see if the hook is broken or bent.

STEP # 3. REMOVING & REPLACING THE NEEDLE.

If you find the hook IS bent or broken, it must be replaced. For general work when you are using Robinson-Anton 20/2 or Suisse "C" mercerized thread, or 600 denier rayon, you should be using a number 5 (110 metric) needle. Look on the shank of the needle to see what size it is.

To remove the needle, hold the needle bar in your left hand and use the pliers to un-screw the needle.

Even though the needle bar has threaded holes in both ends, be sure to replace the needle in the same end it came out of . . . most needle bars are slightly bent from tightening the thumb screw against them. If you turn the needle bar around, this may cause the needle to rub against the nipple and break the thread or even the needle.

Be sure you get the needle tight into the needle bar. Roll the needle bar on the machine table . . . if the needle is making an arch as it rolls, you will have to straighten it.

STEP # 4. HOW TO STRAIGHTEN THE NEEDLE.

Roll the needle bar until the arch is facing up. Hold the needle bar in this position and move it to the edge of the table. Use your finger to bend the needle down slightly. Re-check it & keep doing this until the arch is no longer there & the needle is perfectly straight coming out of the needle bar. When you are done, put the needle bar aside.

STEP # 5. HOW TO REMOVE THE NIPPLE & CHOOSE THE SIZE.

You should have a small wrench with your machine, it is called the nipple wrench. Use it to remove the nipple, located at the bottom of the column of parts, called the "FACE."

When the nipple has been removed, you will find the size marked on the side. You should always use the next larger size nipple than the needle you are using. Some manufacturer instruction books tell you to use the SAME size. You will find you will have fewer problems if you use 1 size larger nipple.

STEP # 6. CLEANING THE NIPPLE.

While you have the nipple in your hand, use a straight pin to remove the lint & dirt that has collected in it. Don't use your needle to do this, you can damage the hook. When you are done, put the nipple aside.

STEP # 7. REMOVING THE FOOT & CLAMP.

Raise the foot lifting lever at the back side of the arm head. Use the pliers to loosen the thumb screw on the clamp holding the foot onto the machine. Slide the clamp down & remove the foot.(in the Video, I told Leah to turn the screw the wrong way. To loosen a screw, turn it counter-clockwise. To tighten it, turn it clock wise.)

STEP # 8. REPLACING THE RUBBER SHOE ON THE PRESSER FOOT.

You should have two "feet" with your machine. One is the "claw foot" that we will learn about later, the other is called the "presser foot" or "rubber foot."

The claw foot is used for doing chenille, working on terry-cloth & bulky materials & quilting. The presser foot is used for almost all other work. You can use the claw foot when doing lettering and other things, but you will not get as nice an effect and it may be harder to get accuracy on smooth materials. We will be using the presser foot for this part of the lessons.

Remove the rubber shoe from the foot with your fingers. See if you can replace it by just using your fingers . . . if you can, it needs to be replaced with a new rubber shoe.

Hold the foot upside down in your left hand. Lay the new shoe on the foot and hold it with your thumb. Run the hook of the "foot knife" around the inside edge of the foot, inside the shoe, until it stretches onto the foot.

Later on I will show you how to do this with the foot still on the machine. Set the foot & clamp aside for now.

STEP # 9. REMOVING THE NEEDLE PLATE.

Reach under the machine with your left hand. Directly below the needle plate, you will feel a large, round, thumb screw. It is about one-half inch in diameter. (Leah turns the machine back on the hinges so you can see better on the Video.)

Un-do the screw & push it up against the needle plate, this will make the plate raise so you can remove it from the machine. Set the needle plate & screw aside.

ALL OF THE PARTS HAVE BEEN REMOVED, THAT NEED TO BE REMOVED FOR REGULAR MAINTENANCE.

STEP # 10. HOW TO CLEAN THE LOOPER.

First, put the foot lifting lever at the back side of the machine down. If the machine is threaded, pull the thread out of the looper from beneath the machine.

Take a paper towel in your left hand and hold it under the machine where you removed the plate screw.

With your right hand, squirt some oil into the looper.

Turn the power switch to the machine on. (generally located under the front of the table on the far right side.)

Press your right foot down on the treadle and watch the dirt & debris work it's way to the top of the looper with the machine running.

Stop & wipe away the mess that has come out. Look at what has come out the bottom of the looper onto the paper towel you are holding there!

Keep repeating this process for several minutes. Keep adding fresh oil until all you get on both towels is fresh, clean oil.

When you are done, don't forget to turn off the power to the machine.

STEP #11. CLEANING THE NEEDLE SHAFT.

Place a fresh paper towel over the area where the looper is.

Place the clean-out rod into the hole at the top of the machine where you removed the needle bar.

Turn the clean-out rod as you push it up and down in the needle shaft.

You will see the dirt, lint & debris that falls out of the needle shaft onto the paper towel.

When you are done, place ONE drop of oil into the needle shaft.

EVERYTHING WE HAVE DONE UP TO NOW, SHOULD BE DONE ON A WEEKLY BASIS, IF YOU ARE USING THE MACHINE EIGHT HOURS A DAY. With less usage, you can clean less often, with more usage, you will need to clean it more often. Some of you will have machines that have not been cleaned for years . . . you will wonder how the machine could have possibly worked. You will be amazed at how good it will work now ! ! !

STEP # 12. OILING THE MACHINE.

Get into the habit of oiling the machine when you clean it. Place one drop of oil into each of the oil holes that are marked on your machine.

Remove the belt from the wheel. Turn the handle to the back and turn the machine back on the hinges.

Place one drop of oil into each of the oil holes under the machine. If there is no oil hole, the part does not need oil.

If you have a motor that requires oil, put several drops into the oil cap on each end of the motor.

Many operators saturate the machine with oil & grease . . . this is not necessary! Give the machine a good cleaning once a year * put a light coating of grease or Vaseline on the gears and your machine will work fine.

Put the machine back down into the table. Place one drop of oil on each spot on the "face" of the machine, where a part moves up & down.

To repeat some information on the machine diagram . . . from this point on you will need to remember, the painted part of your machine is called the CASTING. The Bottom part of the casting is called the BASE. The top part of the casting is called the ARM. The WHEEL is on the right end of the arm. The shiny metal part on the left end of the arm is called the ARM HEAD. The column of parts on the front of the arm head is called the FACE. The part right in the center of the face is called the NOSE.

The ARM HEAD has six sides, the front, the back, the back-side, the front side, and the top and bottom.

After you have oiled the parts on the FRONT (face) of the ARM HEAD, oil the parts on the BACK of the arm head. Turn the handle & wipe away all of the excess from all of the parts.

Remove the large screw from the side ARM COVER, and remove the SIDE ARM COVER. Put one drop of oil into each oil hole inside. Replace the side arm cover and screw.

NOTE: The ARM HEAD also has a TOP & BOTTOM. Later on I will tell you to look for parts on the front, back, front-side, back-side and top & bottom of the ARM HEAD.

STEP # 13. CHECKING THE LOOPER SETTING.

Now that the machine is cleaned & oiled, lets check to see if the looper is set correctly. With your right hand, turn the wheel (drive pulley) away from you while watching the bottom of the nipple carrier. When the nipple carrier has risen to the highest point, turn the handle so it and the "nose" are facing toward you.

The notch in the looper, should be aimed at 1:00 o'clock. This is the setting for doing chain stitch embroidery. If it is not there, first, check it again as directed above.

STEP # 14. CHECKING TO SEE IF THE MACHINE IS SET FOR CHENILLE.

If, when you checked the looper, it was set with the eye at 6:00 O'clock this is no problem. The machine is set for doing chenille. Go on to the next step.

Reach under the machine with your left hand. Pull the looper operating gear to the left. Hold the handle with your right hand, so it don't move. Turn the gear with your left hand until it drops into the notch at the other end of the slot in the gear. The machine should now be at the setting for doing chain stitch embroidery. (1:00 o'clock) Get used to doing this without turning the machine back on the hinges, but this first time . . . if you must see, turn the machine back.

STEP # 15. HOW TO MANUALLY CHANGE THE LOOPER SETTING.

THE FOLLOWING INSTRUCTIONS APPLY TO ALL BONNAZ MACHINES, no matter how old, what company they were made by, or what model they are. The only exception is the Singer 114 K 104 machine and the Cornely 121. I will give you instructions for setting these after the general instructions for the others.

Turn the machine back on the hinges. Turn the handle until you can see the small screw in the looper operating gear. Just barely loosen the screw.

On the old machines, the screw is very prominate, on the others, it is in one end of the slot type opening. This type gear was designed to make it easy to change from chain stitch to chenille. With the slot in the gear facing up, the screw should be in the front notch for chain stitch, the back notch for chenille.

IF YOU COMPLETELY REMOVE THE SMALL SCREW, it is hard to replace it. Put the spring & collar back in place, then push the collar in with your thumb and hold it tight while you replace the screw.

To take up where we left off, turn the machine back down into the table. Turn the handle so the nose is aimed toward you.

Turn the wheel back away from you while watching the nipple carrier raise to the highest point.

With your left hand, carefully turn the gear until the eye of the looper is set at 1:00 o'clock. BE SURE TO KEEP THE END OF THE GEAR FLUSH WITH THE END OF THE SHAFT. Carefully turn the handle to the back & turn the machine back on the hinges. (later, learn to do this without turning the machine up.)

Very carefully turn the handle so you can see the set screw. Tighten the set screw as tight as you can get it.

Put the machine back down into the table. Check to see if the setting is correct. Turn the handle toward you. ON MACHINES WITH THE CHANGEABLE GEAR ONLY, pull the gear to the left & turn it until it drops into the other notch. The eye should be at 6:00 o'clock. (the chenille setting.) If it is, you did the job right! Change it back to chain stitch and you can put the belt back on the wheel now.

SPECIAL NOTE. We will go into doing chenille later on, but, in order to complete setting the machine for chenille, you also must turn the needle around so the opening is aimed away from the nose instead of toward it. Don't change it just yet.

Singer 114 K 104 machines: The chain stitch setting is 11:00 o'clock.

Cornely 121 machines: Even though this is a bonnaz machine, it don't have a looper . . . it has a bobbin and makes a lock stitch.

THE LOOPER SETTING SHOULD BE CHECKED EVERY TIME YOU CLEAN THE MACHINE . . . ANYTIME YOU BREAK A NEEDLE, THE LOOPER CAN BE THROWN OUT OF ALIGNMENT.

WE ARE READY TO PUT THE MACHINE BACK TOGETHER.

STEP # 16. REPLACING THE NEEDLE PLATE.

Put the needle plate back into the machine. Don't worry about the needle hole just yet.

Replace the large thumb screw into the needle plate, but don't tighten it all the way yet.

STEP # 17. REPLACING THE FOOT.

First put the foot lifting lever on the back side of the arm head up. When you put the foot back on the machine, be sure to put the clamp as high as it will go and be sure the foot is also as high as it will go before you tighten the thumb screw. If the clamp is not placed as high as it will go, eventually, this can cause the nose wires to wear out. The machine will start making a short stitch in one direction & a long stitch in the other.

Be sure to tighten the thumb screw, slightly, with pliers. If you don't, it will work loose while you are working. This can cause the needle & nipple to tear holes in whatever you are working on. Don't over tighten it.

STEP # 18. REPLACING THE RUBBER SHOE WHILE THE FOOT IS ON THE MACHINE.

With your finger, push down on the shoe. The shoe will fall off. This happens from time to time when you are putting material under the foot. It can be replaced without removing the foot.

Hold the edge of the shoe in place with your index finger on your left hand.

Put the hook of the foot knife, down between the foot & the shoe from the top. Start at the back & stretch the shoe onto the foot.

Some operators GLUE the shoe to the foot. This is not necessary! If you are working on bulky material and the bulk knocks the shoe off, either the shoe is worn out or perhaps you should change to the claw foot.

STEP # 19. REPLACING THE NIPPLE.

Put the nipple back into the nipple carrier with your fingers. Be sure to get it all the way in, then tighten it with the nipple wrench.

STEP # 20. REPLACING THE NEEDLE BAR & NEEDLE.

Turn the handle so it & the nose are aimed toward you. Make sure the opening in the hook is also aimed toward you.

Lower the needle bar into the needle shaft until you can just see the hook below the nipple. We will have to re-adjust the height of the needle later on. When we do, the thumb screw MUST BE TIGHTENED SLIGHTLY WITH PLIERS. Be careful not to over tighten the screw & strip the threads or break it.

STEP # 21. CHOOSING THE HOLE IN THE NEEDLE PLATE.

There are 12 sizes of needles, 12 sizes of nipples, and 12 needle holes in the needle plate. The size of the needle & the plate hole is determined by the thread you are using.

THREAD	NEEDLE	NIPPLE	PLATE HOLE
20/2 mercerized.	#5 (110 metric)	# 6	# 5
Suisse "C" mercerized.	#5	# 6	# 5
600 denier rayon.	#5	# 6	# 5
Wool yarn	#5	# 6	# 5
Orlon yarn	#6 (120 metric)	# 7 or 8	# 6 or 7
0000 mercerized.	#2 (80 metric)	# 3	# 2
00/2 rayon	#3 (90 metric)	# 4	# 3
DMC cotton mercerized.	#4 (100 metric)	# 5	# 4
Metallic thread	#4	# 5	# 4

When using thinner thread, use the smaller sizes. When using heavier thread, use larger sizes. When doing chenille with orlon yarn, you may need to use a larger plate hole & nipple.

We are going to use the #5 needle and the #6 nipple for these lessons, so we will use the # 5 needle plate hole.

Use the hook knife in one of the THREADER HOLES to move the right hole under the needle. (Start with the smallest hole and count forward.) Be sure the hole is directly below the needle.

Turn the wheel until the needle is just entering the hole. Turn the handle all the way around several times, SLOWLY! See that the needle has clearance all the way around. You can move the plate just a fraction with the foot knife to re-align it.

When you are sure the needle will not hit against the plate at any point, hold the plate firmly with your right hand and re-tighten the large plate screw. You don't need pliers on this.

There are exceptions to all rules: If the plate is old & chewed up, you may have to use whatever hole is in good condition. Don't use a hole so big that the nipple can fit into it. This will cut the material. One too small will break the thread and even the needle.

The main cause for breaking needles is too large or too small a nipple, too large or too small plate hole. Too small needle for the thread you are using.

F I N E T U N I N G Y O U R M A C H I N E

After you have learned to operate the machine, you will find that the way your machine is adjusted, won't work perfectly for all materials. The hardest thing to do on a bonnaz machine is making square corners on block lettering. Once you have control of the machine, if you can not get the machine to make square corners, IT IS PROBABLY THE MACHINE ! ! !

Other mechanics will tell you IT IS THE OPERATOR . . . that is because they don't know how to operate the machine, so they do adjustments by guess-work.

If the machine is adjusted properly, you should not have any problem making square corners and staying on the stamping lines.

STEP # 22. ADJUSTING THE NOSE.

On the back of the "feed lever bracket," (the part that holds the nose) you will find a set screw. Loosen the screw slightly.

With your left hand, raise & lower the bracket as high as it will go, then as low as it will go. You will find it will move a total span of about one-fourth inch.

If the bracket will not move . . . some mechanic who did not know what he was doing, has taken the machine apart & tightened the tiny screw behind the nose too tightly. The screw I am talking about is on the front of the feed lever bracket in the space just behind the nose. Not the set screw I had you loosen on the back of the feed lever bracket.

This tiny screw is only supposed to keep the bracket from going above or below the groove in the needle shaft.

DO NOT ATTEMPT TO GET AT THIS TINY SCREW WITHOUT INSTRUCTIONS. COMPLETE INSTRUCTIONS FOR DOING THIS ARE IN VIDEO NUMBER FIVE. THE MECHANICS TAPE.

After you have figured out where the top of the groove is, and where the bottom of the groove is, place the bracket half-way between the two. Re-tighten the set screw.

This is the setting for the feed lever bracket & nose when doing average work, shirts, towels, jackets etc. When using a backing material.

When working on heavier material, you may need to raise the nose. When working on very thin material without backing . . . you will need to lower the nose or the needle will pick the material. If your machine stands one stitch straight up when you make a fast turn right back on the same line, the nose is generally set too high.

Improper balance between this setting & the nipple setting is the number one reason for bonnaz machines picking the material when working on nylon jackets.

STEP # 23. ADJUSTING THE NIPPLE.

Remove the "nipple carrier pressure regulating thumb screw," on the FRONT, TOP of the arm head. Be careful . . . it has a spring under it that will jump out at you.

REMEMBER, we are setting all of the adjustments on the machine, for doing average work. You may need to re-adjust them later for your particular situation.

Screw the "nut" or collar, on the thumb screw, so it is positioned half-way on the threads.

Put the thumb screw back into the machine. You will have to push down to get it started. Screw the thumb screw down to the nut. Tighten the nut with pliers.

With your right hand, turn the wheel away from you while watching the nipple raise to the highest point.

On the BACK SIDE of the arm head. you will find two holes. Inside the holes are set screws.

Insert a small screw driver into the hole in the center of the BACK SIDE of the arm head. (the lower one) Slightly loosen the set screw.

Just to the right of the set screw, on the BACK of the arm head, you will find the "nipple carrier bell crank." It is held onto the machine with a hinge stud that looks like a large screw. You can look through the opening behind the arm head to see it.

Place a larger screw driver into the slot on the hinge stud. Turn it as you watch the nipple raise. Don't worry about turning it too far, it will only raise so far, then it will lower again.Get acquainted with the full stroke of this adjustment. Watch the nipple.

When you have the nipple half-way between the highest and the lowest stroke, re-tighten the set screw. Be sure to get it tight.

If you are working on heavier material, or on chenille, you may have to set the nipple higher. For thinner materials, you may need to set it lower.

IF YOUR MACHINE DON'T WORK AS I TELL YOU IT WILL after you have adjusted the nose, nipple & foot, you may have worn-out springs under the thumb screws on the pressure regulating adjustments. Replace them with new springs.

This is the adjustment that will make a really great operator out of you! Learn it well! If this adjustment is done right, you can make square corners & follow the stamping lines with ease after you have learned to operate the machine.

FOR SAFETY, CHECK THE SETTING. Place two pieces of typing paper under the nipple. Put the foot down. Turn the wheel by hand to make several stitches. If the nipple makes a mark on the paper (other than the needle mark) you will need to raise the nipple. If it is set too low, the nipple can cut holes in the material. If it is too high, the needle will snag the material & it will have to be lowered.

After you have the nipple set correctly, you can put more pressure on the nipple by screwing the "nipple carrier thumb screw" in more. If you need less pressure, screw the thumb screw out.

BE SURE TO TIGHTEN THE "NUT" with pliers. It will work loose while you are sewing and fly to the ceiling.

STEP # 24. ADJUSTING THE FOOT.

Remove the "presser foot slide bar thumb screw" at the BACK TOP of the arm head. This also has a spring under it, but it won't jump out at you.

Place the nut on the screw, so it is half-way on the threads. Replace the thumb screw back into the machine. Screw it down to the nut. Tighten the nut with pliers.

On the FRONT SIDE of the arm head, you will find another hole. Inside the hole is another thumb screw. Loosen the set screw slightly.

Just to the right of the set screw on the BACK of the arm head, you will find the "feed bell crank." It is held onto the machine with another hinge stud. Place a larger screw driver into the slot and turn it as you watch the foot raise & lower. Get acquainted with the full stroke on this one the same as you did on the nipple hinge stud.

Set the hinge stud so it is half-way between the highest & lowest stroke. Re-tighten the set screw.

To check the setting, place a single piece of paper under the foot. You should just barely be able to pull the paper away when the foot is at the lowest stroke.

For heavier materials, you may need to raise the foot, thinner materials, you may need to lower it.

You may need to keep working at re-adjusting the foot & nipple until you are able to get perfectly square corners.

You can get more pressure by screwing the "presser foot thumb screw in more. Less pressure by screwing it out.

NOW, DON'T FORGET . . . the major adjustment for the NIPPLE is on the BACK of the arm head and the pressure regulator on the FRONT.

AND . . . the major adjustment for the FOOT, is on the FRONT of the arm head, and the pressure regulator on the BACK.

SPECIAL NOTE: about older machines.

Some of the older machines do not have these adjustments. If your machine does not have the holes for the set screws on the front & back sides of the arm head, you have one of these older machines. The hinge studs are screws instead of studs. These machines can be "MODERNIZED." Get in touch with me to find out how if you have one of these older machines.

The REALLY OLD MACHINES, don't have ANY of these adjustments at all . . . They have "scissor loop springs," exposed on the arm head of the machine. They can be adjusted . . . let me know what kind of machine you have & I will tell you how to do it.

SPECIAL NOTE ABOUT "STOP MOTION."

If you have a machine that will not sew by your just pressing on the foot treadle, the machine probably has a "stop motion" on the machine.

Try PULLING DOWN ON THE HANDLE, then PRESS ON THE FOOT TREADLE. If the machine will sew now, unless you remove it or disengage it, YOU WILL HAVE TO PULL DOWN ON THE HANDLE AS YOU PRESS ON THE TREADLE to make the machine sew. When you release the handle, the machine will stop sewing, even when you are still pressing on the treadle. Some operators like it, I feel if the machine is adjusted properly, you can make square corners without it.

If you would like to disengage it . . . remove the SIDE ARM HEAD COVER from the machine. Inside, you will see loop spring and just above it, a rocker held in with a large screw. Remove the spring and the rocker, the "STOP MOTION" is disengaged. Now the machine will sew when you just press on the treadle.

STEP # 25. ADJUSTING THE LENGTH OF THE STITCH.

On the FRONT TOP of the arm head, you will find a screw with a lever attached to it. Loosen the lever by *pushing it away from you.

Place two pieces of typing paper under the foot, put the foot lever down, and sew a few inches toward you. (The machine will sew in whatever direction you aim the "NOSE.")

Turn the screw in until you have only about three or four threads showing above the lever. This will be a very short stitch, but . . . it will make it easier for you to control the machine while learning.

Tighten the lever, then force it a bit tighter with the handle of the screw driver.

* I told Leah to pull the lever toward her. This was wrong. You push it away.

NOTE: Don't try sewing just yet, the machine must be threaded & the needle has to be adjusted. Remember we do not have the thumb screw on the needle bar tightened. If you try sewing, you could damage the machine.

STEP # 26. THREADING THE MACHINE. (from the cone of thread to the looper.)

Some of you have machines with the tension assemble attached to the machine. On the machine we are using for the demonstration, the tension is on the table behind where the tension would be. This is because we work with spools of thread as well as cones. The tension on this machine is set up with a rod for the spools. If you are going to do any work with the DMC spools, you will need to set your machine up in this manner. (This is a special note that is not on the Video.)

INSTRUCTIONS. Turn the handle while looking into the hole just in front of the needle hole. Watch for the eye of the looper to come into view. You are going to put the THREADER WIRE into the hole. When you do, BE SURE THE EYE OF THE LOOPER IS AWAY FROM THE HOLE ! ! ! If you force the wire into the eye of the looper, YOU MAY NOT GET IT BACK! That would mean you would have to figure out how to get it out of there and in doing so, YOU COULD DAMAGE THE LOOPER.

Set the cone of thread on the floor under the machine just to the *left of where you will set. This will make it easy to get at the cones when changing colors.

Place one eye-hook directly above the cone of thread under the table. Run the thread through it.

Place the second eye-hook directly behind the first, at the back of the under-side of the table. Run the thread through it also.

Place the third eye-hook on the back-underside of the table, directly behind where the tension disk are. I mean this eye hook is to be to the back edge of the table, not close to the tension.

ALTERNATE PLACEMENT: The first two eye-hooks, can be placed at the far left corners under the table.

If your tension assembly has a "tension regulating plate." (Leah is pointing to this when I tell her to look for the regulating lever) Move the regulating lever located at the right side of the tension assembly all the way to the front so it won't have any pressure against the tension disk. If the pressure is against the disk, this will cause an uneven tension on the thread. When you are working with spools, remove the tension assembly & replace it with the rod for the spool. Then you will use the lever at the right to adjust the tension.

From the third eye-hook, run the thread through the hole in the regulating plate, over the top then between the tension disk.

From the tension disk, pull the thread into the lower part of the oval on the "thread controller spring." It will just slip in when you pull it up beside the oval.

MAKE SURE THE EYE OF THE LOOPER IS OUT OF THE WAY. Place the threader wire into the hole in front of the needle hole. Push it down as far as it will go.

* I said right on the Video, I should have said left.

With your left hand, hook the thread onto the hook on the end of the threader wire. Hold the thread with your left hand and pull the threader wire up to the top of the machine with your right hand.

Break the thread so it is only about 8 to 10 inches long coming out of the threader hole.

This part is not really necessary on the newer machines, but . . . on the really old machines, you will not be able to finish threading the machine UNLESS YOU, lift the foot, pass the threader wire under the foot from the back to the front so the thread is not coming up into the circle of the foot. The old machines have a SLOT to the front of the threader hole. The thread MUST be in the slot to finish threading.

Hold a slight tension on the thread with your left hand. Turn the handle around CLOCKWISE, one complete turn, ending with the handle aimed to the back. (You can always tell where the handle is aimed & what direction the machine will sew, by looking at the "nose."

While keeping the tension on the thread, turn the wheel away from you until the needle goes down into the looper and picks up just one stitch. (If it don't pick up the stitch, do this step again.)

Lift the foot. With your right hand, pass the threader wire under the foot from the back to the front. This will pull the thread off the needle so there is only one thread coming up from the hole in the plate. THE MACHINE IS THREADED.

STEP # 27..ADJUSTING THE HEIGHT OF THE NEEDLE & THE THREAD TENSION.

Use your left hand, pull steadily on the thread. You should feel a slight tension on the thread. If it feels too loose, reach under the machine with your left hand to the "tension thumb nut." It's on the end of the tension. Turn the nut to the front until you can feel the tension tighten. If the tension is too tight, turn the nut to the back.

Place two pieces of typing paper under the needle and put the foot down. Turn the power to the machine on. Sew about 3 or 4 inches toward you. If the needle height is set right . . . the chain the machine is making should be about the size of the zeros in this percentage sign.%

If the needle is pulling too much thread to the top of the paper, lower the needle slightly. If they are still too large, tighten the tension.

If the chain is too small or cutting the paper, loosen the tension and raise the needle. When you have it set right . . . tighten the thumb screw holding the needle with the pliers just slightly.

You should have a very small, short stitch on the machine. I have done an example below for you to compare your stitch to. You will find while you are learning, it will be easier for you to get control of the machine while using this small stitch.

SMALL STITCH EXAMPLE.



Later on. after you have gotten to where you are able to control the machine, gradually increase the length of the stitch until it is the size of the sample shown below. This is the size you will use for general work, like writing names and doing block & script lettering.

AVERAGE STITCH EXAMPLE.



STEP # 28. ALIGNING YOURSELF WITH THE MACHINE.

YOU ARE AN EXTENSION OF THE MACHINE. You must be sitting so your right arm is in a straight line from your elbow to the handle. If your chair is too high, saw the legs off so you do not have to bend over to see what you are doing. You should be perfectly comfortable sitting at the machine.

STEP # 29. STARTING TO PRACTICE. TRYING TO STAY ON THE PAPER.

Place two pieces of typing paper under the foot. Put the foot down, turn the power on, keep your left hand out of the way.

Put your right hand on the handle and your right foot on the treadle. Press down on the treadle slightly. Watch the nose to see what direction the machine is sewing. Try to adjust your foot to a steady speed and just try to stay on the paper. Turn the handle every time you start to go off the paper. DON'T USE YOUR LEFT HAND TO TURN THE PAPER!

Keep just trying to get control of the treadle & just manage to stay on the paper for the first half hour or so. If you break the thread, stop & re-thread the machine. You may even break the needle. Don't get upset, just replace it. When the paper is filled up, just slide another 2 pieces in beside it and start practicing on the new paper.

I had failed to have Leah tighten the needle bar thumb screw. The screw loosened and Leah thought the needle was broken, it had dropped down. Be sure you have your thumb screw holding the needle bar tightened slightly with pliers.

While practicing for just a very few minutes, Leah almost wrote her name, but . . . the big surprise came after we stopped shooting and Clay the camera man sat down at the machine and within very few minutes, he wrote his name also!

During all of the years I have been teaching people to operate the Bonnaz machines, I have found very few people who could not learn to write their name within the first hour! NOT BY ANY MEANS DOES THIS MEAN THEY ARE READY TO CONTINUE ON ALONE! It takes at least two to three months of daily practice, either alone or supervised, before a student has complete control of the machine. When I was working for "Nudie's Rodeo Tailors" in Hollywood, one of the western movie stars sat down at my machine one day and learned to write his name in less than five ... tes! His name was "Ron Reagan!"

STEP # 30. THE RELATIONSHIP BETWEEN THE HANDLE AND THE NOSE.

The "NOSE" is located at about the center of the column of parts on the "FACE" on the arm head. You should remember from when we made the adjustments. If you don't remember, look at the machine diagram.

Remember when we checked the looper and many other times, I told you to turn the handle and the "nose" toward you. I'm sure you finally figured out that when you turned the handle toward you, the nose automatically turned toward you. In order for you to know what direction the machine is going to sew, all you need to do is glance at the nose.

Just follow your "nose." It will lead you where ever you want to go!

END OF THE FIRST OF THREE SECTIONS.

This is the end of the first section. Sleep on what you have learned, practice, review this first section several times and we will continue with the second section tomorrow night. I think you are going to find out you have learned a lot more that you think you did. I have a feeling, you and Leah will both be able to write your name when we start with the second section.

S T E P S I N S E C T I O N N U M B E R T W O

I N D E X

The STEP number (on the left) will correspond with the number that appears on the video just before that STEP is performed.

STEP NUMBER		TRANSCRIPT PAGE
31.	How to break off the thread.	23
32.	Doing practice designs.	25
33.	Repetitive Designs.	26
34.	Learning the "Free-Hand" lower case ALPHABET.	27
35.	Learning the "Free-Hand" upper case ALPHABET.	28
36.	Trimming your work.	29
37.	Increasing the height and length of the stitch.	29
38.	How to do Scrolling, or fill-in.	31

END OF THE SECOND OF THREE SECTIONS

S E C O N D S E C T I O N

This will be the second section of this video tape. Our student, Leah, has reviewed the first section, she has practiced on the machine for about three hours.

She is able to write her name and now, she wants to start trying to do some other things. Lets find out if she has any questions, she probably wants to ask the same things you want to ask. Leah, do you have any questions?

Leah: Yes, why can't I use my left hand?

Ruth: I told you not to use your left hand, because you would be fighting with the machine. Now that you have had some practice, you can start using the left hand in unison with the right. The left hand is used mostly just to keep the material straight and to keep the material from bunching up, but if you don't learn to use both together, you will never be a really good operator. Both hands actually guide the machine in order to do good work.

Your next question would be, how do you break off? That is what people generally want to know after they have practiced for a while. They realize they can't just go from one shirt to the other the way I showed you to do on the paper. So lets go on to step # 31.

SPECIAL NOTE. The next half hour or so will be very repetitive and very boring, but there is a very good reason behind what I am doing. As I have said before, when you watch a professional do something, it makes it look like there is nothing to it! In case anyone thinks learning the bonnaz machine is easy . . . I want to change your mind right now. It takes time and practice. You will do things many times WRONG before you do it one time RIGHT. I am going to let you watch Leah struggle to learn to break off the thread, some of you will pick it up right away, others will take even longer than Leah did.

As you have seen, Leah learned to write her name in almost no time at all, but . . . there is a lot more to being an "Embroidery Artist" than just being able to write your name. I can teach anyone to do that in less that an hour, but not by any stretch of the imagination is that person able to go on to do other work without additional training.

O.K. Let's have Leah write her name. And . . . she does it!

STEP # 31. HOW TO BREAK OFF THE THREAD. (2 ways shown.)

When you are done writing a name or letter or whatever, you must break off from there before going on to the next name or letter.

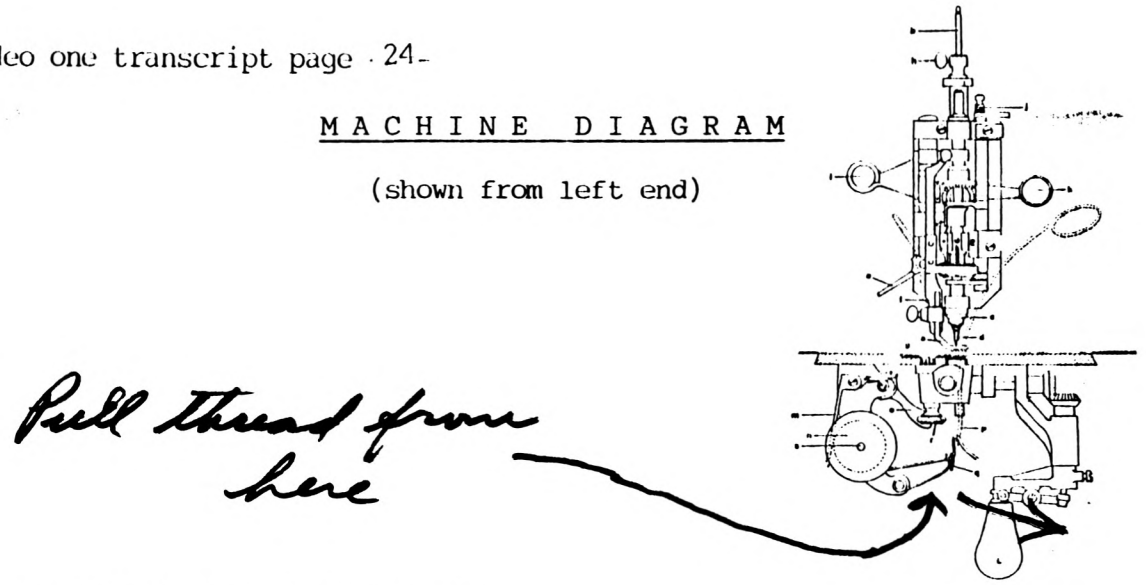
Try to always stop with the nose & handle aimed to the back. By doing this, you are less apt to drop the stitch off the hook of the needle before you break the thread.

Turn the wheel by hand, so the nipple is up and the foot is down.

With your LEFT hand, raise the foot lifting lever. At the same time, with your RIGHT hand, reach under the machine and pull the thread toward you from between the "thread controller spring" and the looper. (see diagram on the following page.)

MACHINE DIAGRAM

(shown from left end)



Break-off instructions continued.
Pull the thread toward you (about two inches.) At the same time, with your left hand, pull the paper, or material toward you also to take up the slack.

When you have taken up the slack, put the first finger on your left hand on the spot where the thread is coming out of the paper. Pull on the paper so the thread is pulling against the needle . . . pull tight!

With your right hand, *PULL the wheel back about one-quarter turn. When you do this, the needle tries to pull the thread up into the nipple . . . you are holding it back from doing this, so . . . the thread breaks.

Keep practicing this over & over, you must learn to do it fast, so it will become automatic to you. It becomes easier each time you do it.

ANOTHER WAY TO BREAK-OFF.

Stop with the handle aimed to the back as before. Raise the foot. Use the hook on the foot knife to reach in under the foot and hook into the loop of the thread between the paper and the needle. Pull the stitch out and cut the thread with the knife.

A THIRD WAY OF BREAKING OFF.

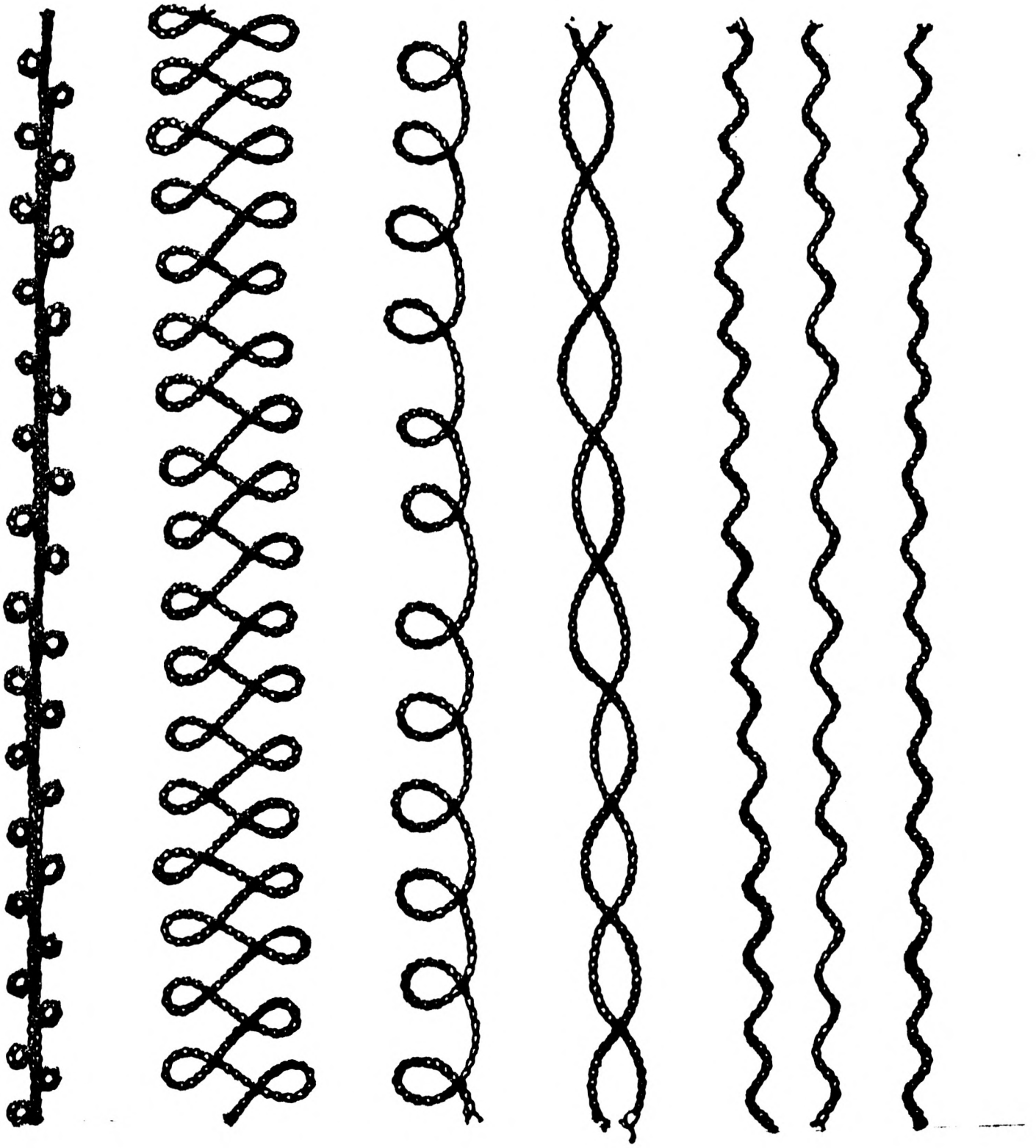
This method is used mostly by what I call "SLOPERATORS!," it is used when speed is of the essence and quality is dispensed with. I will tell you my reasons for saying this when we get to the section on trimming.

How to do it: Your tension must be set so the machine will not become un-threaded when you do this. Stop with the needle up into the nipple and the nipple is just slightly above the paper. Turn the handle , quickly, one complete turn. At the same time, pull the paper quickly to the left with your left hand. The thread will be locked down, it will be cut to about one-fourth inch long and when you start up again, the thread on the back of the material will only be about one-half inch long. This method works great when you are working on in-expensive articles like names on caps etc. I don't approve of this method for other work, but everything has it purpose. In the embroidery business, "time is money!" so . . . rather than counting minutes, learn to make your minutes count! This method could mean the difference between your making money on a large order of simple designs & loosing your shirt.

* You always "PUSH" the wheel for other things, this is the only time you "PULL" the wheel.

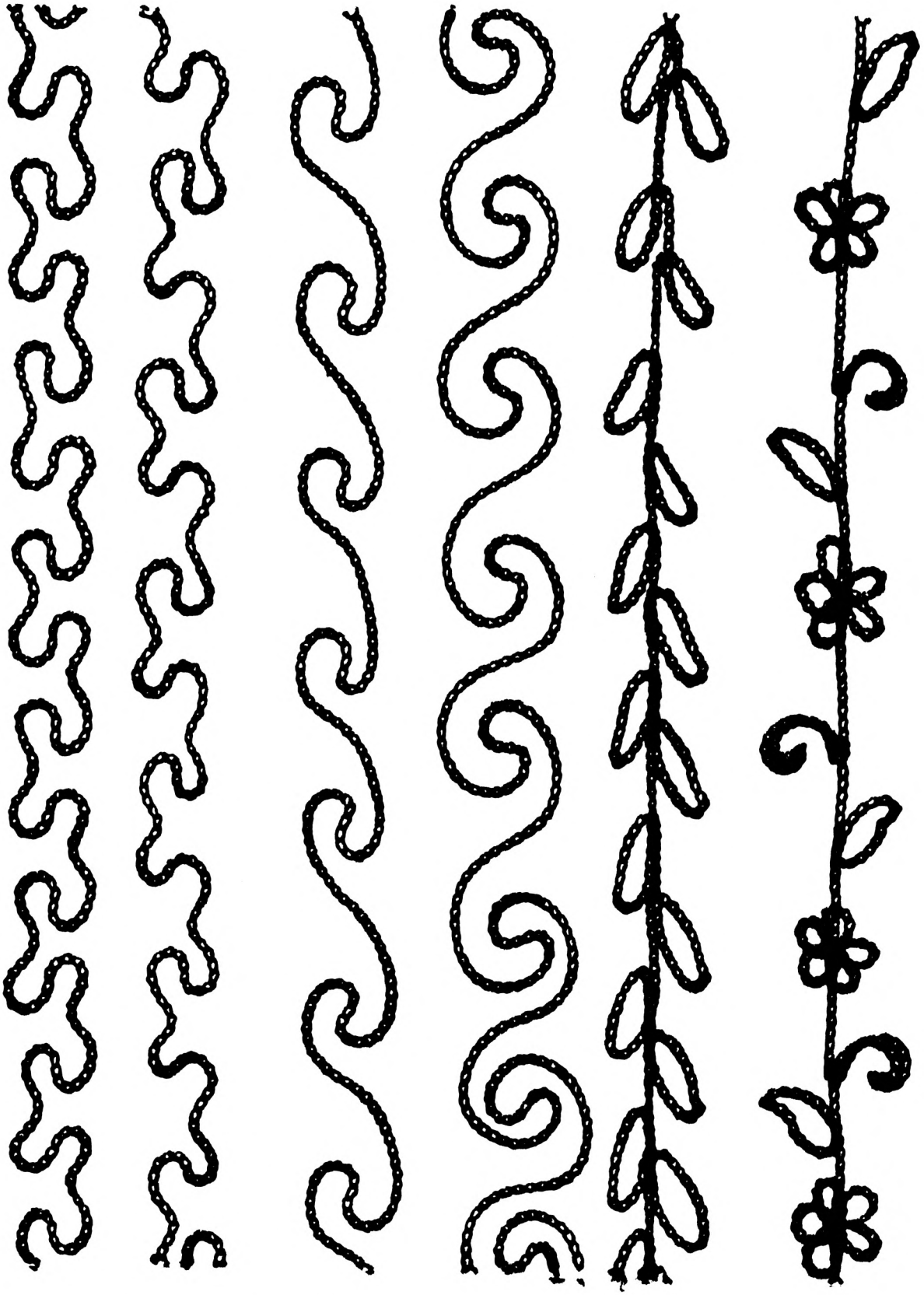
STEP # 32. DOING PRACTICE DESIGNS.

On this page I have shown several simple designs for you to use while practicing. This first page is the easy ones. After you have done them so many times that you can do them perfectly, proceed on to the next page. Don't draw them on the paper and try to follow the lines . . . do them "FREE HAND."



STEP # 33. REPETITIVE DESIGNS.

Practice doing the designs on this page "FREE-HAND" also.Keep doing them until you can do them easily without hardly even thinking about what you are doing. This practice gets you to where you are at ease with the machine.



STEP # 34. LEARNING the "FREE-HAND" lower case ALPHABET.

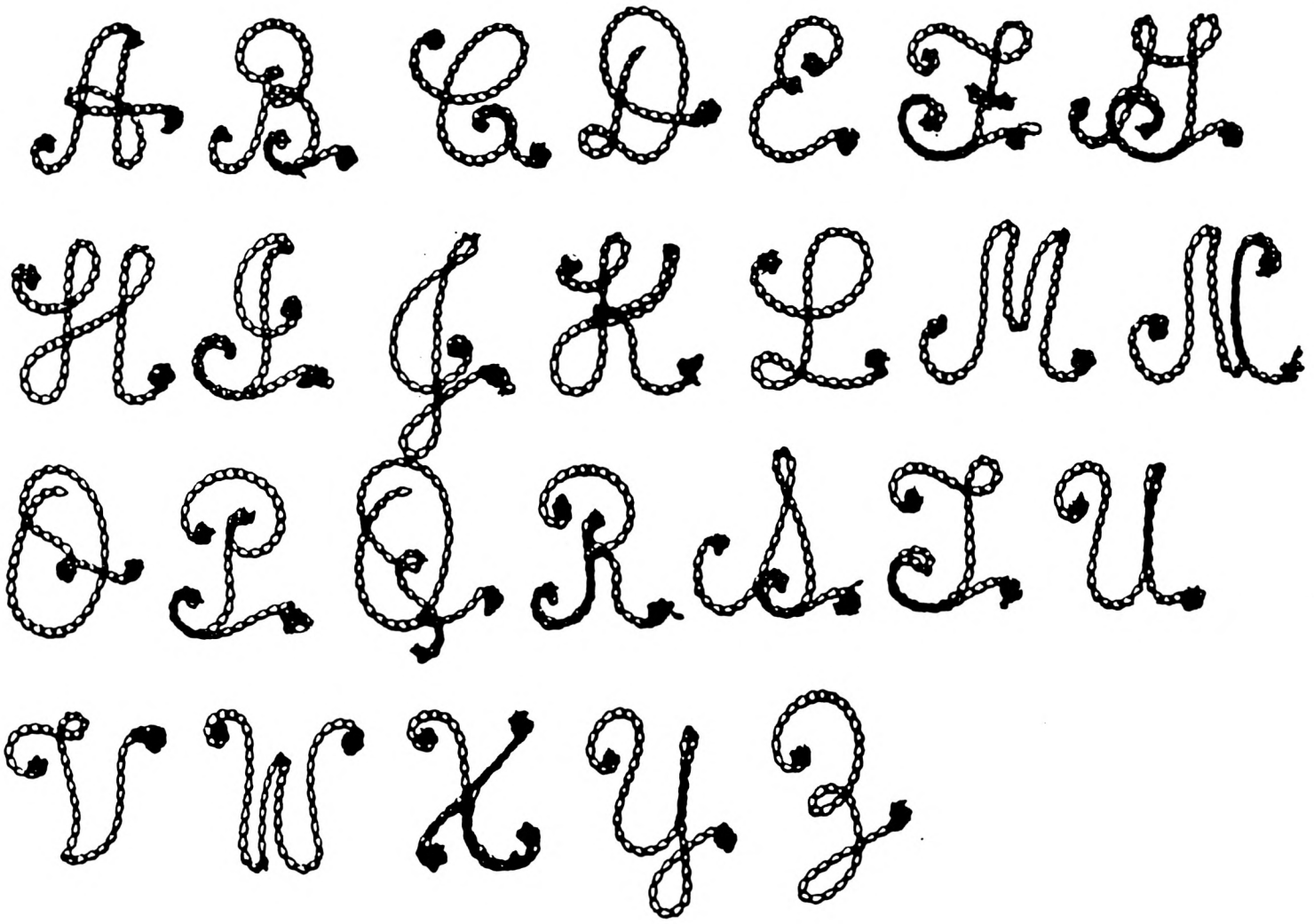
The designs on the preceding pages are designed so you will acquire hand, foot & eye coordination. Now you are ready to go back to first grade and learn the alphabet! Why can't you just use your normal hand writing? If it looks like your penmanship teacher taught you, it will be fine . . . but, most people don't have a really good legible hand writing. When doing names. you will find they look much better if the script is up & down rather than slanted. The Capitol letters should be larger and fancier, yet clear & discernible. The name should look nice and should be so it can be read at a glance.

Practice the formation of the lower case letters below. If you can make them look even better, that is great. The open letters like a-e-o-c- should be nicely rounded. The stroke letters like t-y-p-d-f-g-h-j-k-l-b should all have the up & down stroke going the same as the other stroke letters in the name. Nothing looks worse than a name like "Ralph" when the stroke on the l-p & h are all going in different directions.All of the letters should be of equal size & proportioned evenly. The space between your letters is just as important as the letters themselves.



STEP # 35. LEARNING the "FREE-HAND" upper case ALPHABET.

The upper case alphabet shown below was designed to have a pleasing look, yet . . . the fact that these letters are going to be done on the "bonnaz" machine, has been taken into consideration. The letters are designed so you can go from the upper case letter to the lower case without breaking off. In addition, you can see that each letter starts with a small circle. If you get into the habit of doing this, it adds a bit of "finesse" to your work and it also serves a purpose. If you start and end each name with a dot, the embroidery is less apt to rip out during washing. Even when I do what I call "double names" where I write the name then go back over it, I still add the starting and ending dots for just the "finesse."



While viewing the upper case alphabet, the sound fades when I am doing the "X, Y and Z" don't worry about it, nothing important was said.

STEP # 36. TRIMMING YOUR WORK.

In the section on learning to break off, I told you the "THIRD WAY" was the "SLOPERATOR'S" way. This is because the thread is just locked down and cut from the top of the material. When you are working on cheap mass production items, this is O.K. but, when you are doing work for individuals, "where they can get at you," you are asking for trouble!

Some other operators even break off the first way, then lock the stitch by hand . . . then cut the thread from the top! They are asking for trouble also. When these garments are washed . . . eventually, the names or letters will start un-raveling, and you have a very unhappy customer.

To avoid this problem, first trim all of the threads from the back of the work, close to the material. Remove all of the backing material that you can. Contrary to popular opinion, those large pieces will not wash out when the garment is washed.

Now you have only the thread on the front of the material to contend with. Use a small tool that you can purchase at the dime store called a "knit-picker" or "snag fixer." I call them "pull-through needles." They have a small latch hook on the end.

First pull the thread tight so it is locked down. Then push the pull-through needle through the material from the back, right next to the thread. Place the thread into the latch hook, and pull it through to the back. don't cut it any shorter than one inch. When the garment is washed, the loose ends of the thread will un-wind and form into a ball. This will prevent the embroidery from ripping out. The only way it is apt to come out is if your customer decides to do some additional trimming themselves before washing the garment.

You can make this operation even easier by first melting the plastic handle off the end of the needle. This will leave just the metal part. Then file the end down to a fine point. With this needle, you can work from the top of the material. Simply lock the thread down, put the point of the needle in next to the thread, place the thread in the latch hook and pull it through.

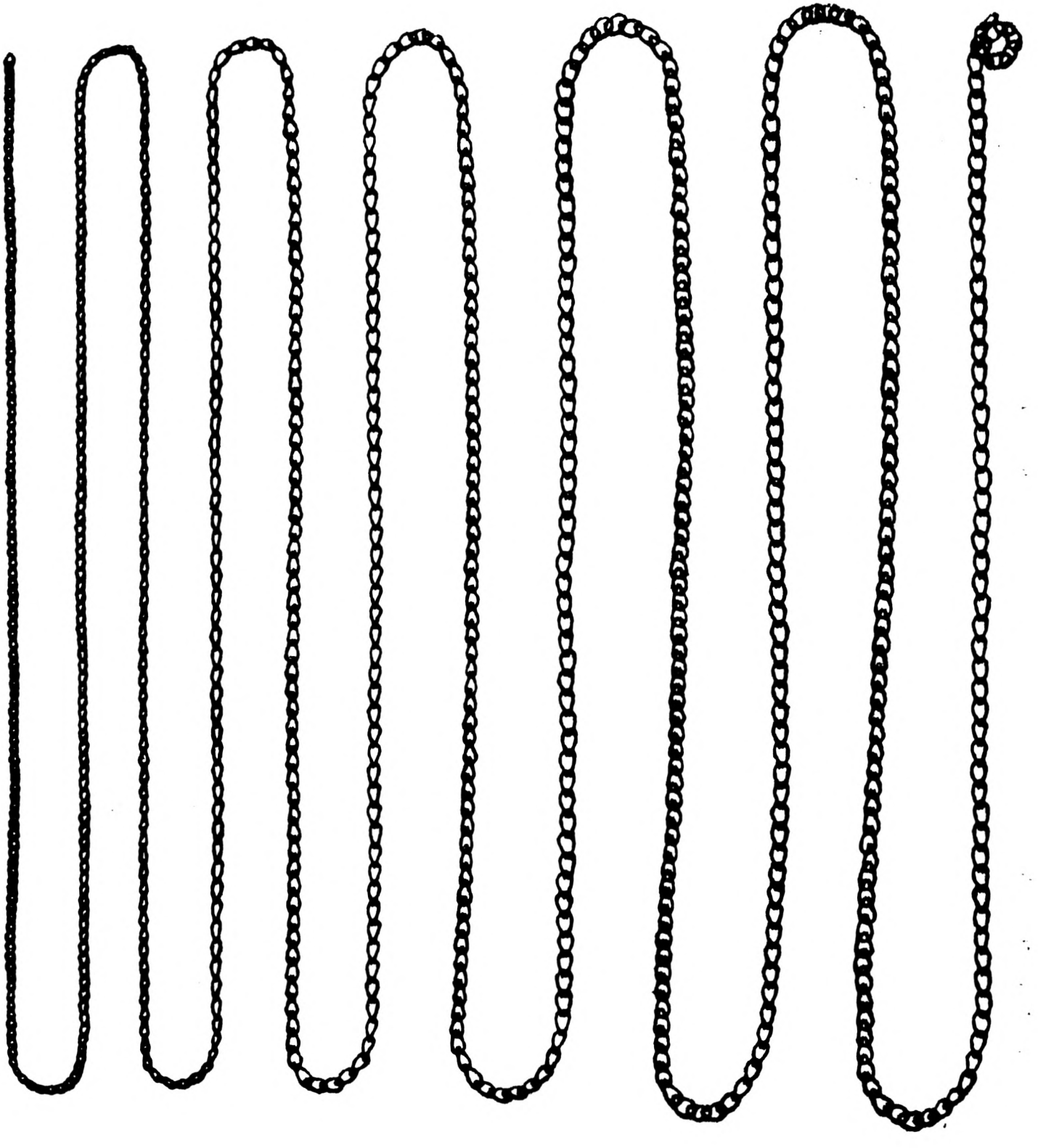
STEP # 37. INCREASING THE HEIGHT & LENGTH OF THE STITCH.

You have had enough practice with the very small stitch. Next, lets learn what the full range of the stitch on the machine is.

Any time you increase the stitch size, three things should be done. 1. The needle should be raised slightly. 2. The length should be increased accordingly. 3. The tension should be loosened.

On the following page, I will start with the small stitch you are using for practice and increase the stitch every two inches or so, until the machine is producing the largest stitch it is capable of. I will be using the same thread while doing this. Of course, when you use a very large stitch, you should also use heavier thread.

EXAMPLE OF FULL CAPABILITY OF STITCH SIZE from smallest to largest.



After you have seen what the machine can do, decrease the stitch size, (all three ways) down to the average stitch shown on page 20 of this transcript.

STEP # 38. HOW TO DO SCROLLING, or fill-in.

When you start doing larger lettering, it is first outlined then filled in with small circles. These small circles are called "scrolling."

Doing scrolling becomes almost automatic once you have learned how to do it. Start practicing by making small circles one right after the other, and each one over-lapping the other to make a solid fill. In order to go in any particular direction while doing this, you make a slight hesitation as you place each circle next to the other. After you have practiced doing this for some time, you will get to where you don't even think about what you are doing. The machine just seems to go in the direction you want it to go.

If you have to consciously, think about the direction . . . you are not doing it right. Practice some more. You will also find if you go faster and keep a steady speed it will be much easier.

Don't try to go too fast that you don't fill in solid. One of my mentors, Bob Champe, walked past my machine one day and said, " your scroll work looks like a twelve story hotel, with all of the light's on!" I was so insulted, I could have killed him, but . . . I also think that was about the last time I even tried to sacrifice quality for quantity! From my mentors I learned that "Quality doesn't cost . . . it pays!" Doing things the right way also eliminates the insults from your mentors, co-workers and customers.

After you have gotten used to going in different directions while doing your scrolling practice, and you have the circles laying one after the other. Start first doing an outlined area then fill it in.

When you have done this for a while. Stop and remove the paper you have been practicing on from the machine. Now, fold the paper along the edge of some of the outlined scrolling you have been working on. Fold it just between the outline and the scrolling.

You will usually see an open space right in that area. No matter how hard you try, this will always happen. When the garment is washed, this will show up even more prominately.

You can do like some operators and just ignore it. But, the best solution to the problem is . . . after you have finished doing the scrolling on your lettering, go back and re-outline the letter just to the inside of the original outline. This will lock the open space to the other outline and your work will look much neater.

This is the end of the second section. Leah needs to practice what she has learned tonight, and I am sure you do too. Tomorrow, we are going to learn about making patterns, stamping, and doing lettering & designs. Plus I am going to show you all kinds of samples of what you will be able to do once you have learned to operate the machine. We will also learn a little bit about doing chenille work.

So . . . practice what you have learned and we will see you again tomorrow night!

STEPS IN SECTION NUMBER THREE

INDEX

The STEP number (on the left) will correspond with the number that appears on the Video just before that STEP is performed.

STEP NUMBER		TRANSCRIPT PAGE
39.	Tracing a script lettering design from the lettering book.	33
40.	Perforating the pattern with the pounce wheel.	33
41.	Mixing the stamping paste.	33
42.	Stamping the design.	33
43.	Tracing a monogram design from the monogram book.	34
44.	The automatic perforating machine.	34
45.	Stamping the pattern made on the automatic perforator	34
46.	Changing the thread color.	34
47.	Embroidering and filling in a script name.	35
48.	Embroidering a monogram design.	35
49.	Magic stamping paste.	35
50-51	Doing Free-hand vermicelli designs.	36
52-53	Changing the machine to chenille and filling in lettering.	36

END OF TRANSCRIPT

STEP # 39. TRACING A SCRIPT LETTERING DESIGN FROM THE LETTERING BOOK.

The name "Betty" is traced using the lettering book, since this pattern will be perforated by using the pounce wheel, and it is to be stamped onto the material with stamping paste, specially treated pattern paper is used that will withstand the mineral spirits used in the stamping paste. This paper can be purchased from Troy or screen printing supply companies. When doing your tracing, be sure to follow the design accurately. Draw lines on the paper so you will get the letters straight across the bottom. If your art work is not done properly, the embroidery will not look good either. Learn to be particular. Do it right from start to finish, if it is worth doing at all, it is worth doing right!

If you are just doing a one-of-a-kind design, it can be drawn directly onto the garment, drawn onto thin tracing paper or onto tearlon backing material. Lay the design on top of the material and do the embroidery, then tear away the paper or tearlon. When you have more than one of the same thing you will have to make a perforated pattern.

STEP # 40. PERFORATING THE PATTERN WITH THE POUNCE WHEEL.

A pounce wheel is a small tool that can be purchased at any art store, that will punch holes in the pattern as you follow the design so you can transfer the design to the material below. The wheel swivels as you move it so it will go around curves. It takes practice to learn to use the pounce wheel, just the same as it takes practice to learn to operate the machine. When you perforate the pattern, use a piece of white scrim felt under the pattern for the pounce wheel to have a soft cushion as it punches the holes. After you have all of the design perforated, turn the pattern over and sand off the holes. This will make the pattern so it will stamp evenly on the material.

STEP # 41. MIXING THE STAMPING PASTE.

Stamping paste is available in pans, in red, white, blue and light blue. It is also available in what is called "magic or black-light paste." Almost any cleaning fluid or solvent can be used to mix it into a paste, I prefer to use mineral spirits because of the high flash point. (temperature where it will catch fire) Pour some of the fluid onto the pan and use the dauber to mix it into a paste.

STEP # 42. STAMPING THE DESIGN.

Lay the pattern onto the garment EXACTLY where you want the design to be. Hold the pattern firmly with your left hand while you rub over the design with the dauber. Just rub in one direction. Don't let the pattern move while you lift a corner to see if it has stamped good onto the material. If it hasn't, go over it again. If you let the pattern move while you are stamping the pattern, you will get a shadow effect that is not good. Be careful! When you are done, clean the pattern off on both sides. They can be used over and over again.

STEP # 43. TRACING A MONOGRAM DESIGN FROM THE MONOGRAM BOOK.

A three letter monogram design is traced from the monogram book. For this monogram, all three letters are the same size. If I wanted a larger letter in the center, I would first draw the center letter then enlarge it on the copy machine, then I would add the smaller letters on the sides. This design is drawn on just regular paper because we are going to use the "automatic perforating machine" to perforate it.

STEP # 44. THE AUTOMATIC PERFORATING MACHINE.

Many years ago, I needed a small copy machine. I found one advertised in a local newspaper very reasonable. I went to see it, and the copies it made were those old kind with the thin paper that look terrible, but, the man said "it also will make stencils for using on a duplicating machine!" To an embroidery artist, stencil, means perforated pattern! I said, show me! He took a stencil from a package and a page of typing, he ran it through the machine. It came out the other end with the typed page perforated into the stencil. A little light dawned in my head! I thought if it will make a stencil from that typed page, why not a stencil for lettering! I purchased the machine, brought it home and it worked! I think that was about the best investment I ever made.It has saved me many hours of work.

The machine is The Secretary Copy Machine made by 3-M. It uses a "thermal stencil," it works by the carbon in the drawing causing the light to melt the wax on the stencil. It makes excellent perforated patterns that will last for up to ten uses before the mineral spirits starts melting the wax. You can pick them up used, for around $50.00. They can also be purchased new from $150.00 up. Be sure it is a "THERMOGRAPHIC COPIER."

STEP # 45. STAMPING THE PATTERN MADE ON THE AUTOMATIC PERFORATOR.

Remove the top sheet that is just used to absorb the wax. Separate the stencil from the original design carefully. Lay the stencil in place where you want the design and stamp it the same as you would with a paper perforated pattern. Be a bit more careful, because they are not as strong as paper. If your stencil starts getting holes in it, be sure the area where you are stamping it don't have anything under it that is causing the holes. If necessary, you may need to make more than one stencil to stamp several garments. Throw the stencil away when you are done.

STEP # 46. CHANGING THE THREAD COLOR.

When changing from one color thread to another, simply break the thread at the cone you are using and tie the thread from the new color onto the thread still in the machine. Pull the thread from where it is coming out of the needle plate until the new color comes up. Don't waste your time trying to re-thread the machine from the cone up . . . the thread you waste cost very little. Your time is worth more!

STEP # 47. EMBROIDERING & FILLING IN A SCRIPT NAME.

There are several ways of doing this, for more expensive work, I always outline the lettering twice, one on top of the other. Then I do the fill in, or scrolling then I re-outline it a final time just between the scrolling and the original outline. On less expensive work,I just do the single outline, fill it in then do the final outline. The final outline keeps the scrolling from separating from the outline when the garment is washed.

When doing work that is to have a different color outline, put the outline on first. after you have put a double outline on, just go down into the body of the letter and drop the stitch and move onto the next letter. When you do the second color, outline it again just to the inside of the first color then do your fill in, and re-outline the second color. This will keep the outline color from raveling out and looking sloppy.

When doing script lettering, try to make the thick & thin lines uniform. Go through and outline across the bottom then back across the top. When you do the fill in, go up to the top of a stroke and scroll down. Don't go over your scrolling with a chain stitch line, it looks bad. Be sure to follow the pattern as closely as possible, and if the top of letters is SQUARED OFF, don't just round them off. Don't teach yourself to be a "SLOPerator!"

STEP # 48. EMBROIDERING A MONOGRAM DESIGN.

When doing monograms, if there is a larger center letter with the side letters entwined,always put the center letter strokes over the side letter strokes so it is the most prominent. When you do "SHADING" on monograms, it always goes to the right and to the bottom. (see samples.)

Always remember when doing monogramming or lettering, the open space in the letters is just as important as the letter itself. Stand back and look at your work to make sure it has a pleasing look to it!

When doing monograms on terry cloth, don't use a large stitch. The thread will shrink and pucker the monogram. Use a short, fat stitch so there is plenty of thread. This will prevent the thread shrinkage from causing any problem.

STEP # 49. MAGIC STAMPING PASTE.

Magic stamping paste should always be used when you work on terry cloth. If you try to stamp with regular red or blue paste, the loops move and make it impossible to cover the stamping. Before blacklights and magic stamping paste, we used to monogram towels by stamping the design onto newsprint then laying it on top of the towel and embroidering over it. The paper was removed after we were done. This way can drive you nuts! The paper moves and tears up as you are working.

You have to work in simi-darkness to use the magic stamping paste and blacklight, but it makes it so much easier, if I had to work in a cave to use it I would! Remember, when you stamp something with magic stamping paste, you can not see it until it is under the blacklight, so be careful that you don't get it stamped too thick!

STEP # 50 & 51. DOING FREE-HAND VERMICELLI DESIGNS.

There are many free-hand vermicelli designs used in dress embroidery and in quilting, my sister, Linda, and my niece, Judy, will show you all of them in Video #6. I only show the two most popular on this video. Regular & turkish.

The trick to doing a nice vermicelli is to keep it looking completely random, yet uniform. This takes practice, but you will be a much better operator if you learn how to do it. Just start practicing . . . you will gradually work up a rhythm. Doing vermicelli is how I check a machine as a mechanic, to see if the machine is adjusted right! If the machine is making short stitches in one direction and long in another, you can not do uniform vermicelli. I can tell more about a machine by sitting down and doing one minute of vermicelli than I could by checking every part.

STEP # 52 & 53. CHANGING THE MACHINE TO CHENILLE & FILLING IN LETTERING.

You have already been taught how to change the machine to chenille, this is a refresher course. Hold the handle with your right hand, with your left hand, pull the looper operating gear to the left and turn it until it drops into the notch at the other end of the slot in the gear. ALSO, turn the needle around so the opening is facing to the back. The machine is now ready to do chenille.

On the example, I am doing rayon chenille. You should be able to see each individual loop standing straight up. Since this is red on black, I embroidered the letters in chain stitch first, especially since this is also for a motorcycle club, there is the possibility of the chenille getting ripped out on a letter. If this happens, the letter will still be there and I won't have a motorcycle club mad at me! Anytime you do chenille, you should either DOUBLE OUTLINE the letter or fill it in with chain stitch before the chenille is put it.

When you use mercerized thread, the chenille should look like a plush terry cloth towel. When you do wool or orlon chenille, the chenille should look like a bunch of little worms!

The best way for new operators to learn to operate the bonnaz machine is by doing fill in on large chenille letters. This gives them time to learn to control the machine while they are still producing work.

NOTE: In this part about chenille, on the video, I call the looper operating gear "The Driver." I hate it when I do things like that, the mechanic who taught me to work on the machines, made up his own names as he went along. I try as much as possible to always call parts by the correct name.

Now that you are well on your way to becoming an "EMBROIDERY ARTIST," I want to show you some samples of what you will be able to do when you have learned.

I hope you realize I am not showing you the samples just so you can see what nice work I do . . . I am showing them so you can see different applications of work done on the bonnaz machine. Every sample is different and made different ways. Please read the transcript as you watch the video so you can see what I am trying to show you. Each sample is explained in the transcript below.

Poodle Design

On this one, the body was screen printed onto the skirt, then the chenille, the ribbon and the chain stitch detail was added. It was screen printed so they could be produced fast. By doing this,we eliminated having to stamp the design and the flat embroidery for the body. When you are doing something by the thousands, you MUST figure every possible way to cut down the cost of production, but please notice, even though this was a mass produced item . . .the quality is still there and the design has the elegant look that is representative of the "POODLE!"

Class letters & monograms in chenille.

You are shown several large class letters, monograms & a megaphone. These are used mostly by high school students. Notice the tight, yet plush chenille stitch, the square corners and the spacing on the interlocked D & C and on the script R & C. On the script Stroh's, notice how neatly the tail is proportioned under the lettering. Be sure to keep the tail so it tapers from the last letter to the widest part going in a gradual taper. If you do script lettering with a tail and it has a letter like a "f", "g", "j", "p", "q", or "y" that goes down into the tail, DO NOT LEAVE OPEN SPACE AROUND THE TAIL OF THE LETTER IN THE TAIL. If you do this, it looks terrible! I have drawn some examples of the word Hollywood below to show you what I mean.



Barbara Mandrell.

This is a three color design using both the chain stitch & satin stitch machine. The darker pink is put on first with the chain stitch machine. The capitol letters are shaded to the right and the lower case is filled in. Then the capitol letters are done in a lighter pink on the satin stitch machine. Finally, the entire design is outlined in white with the satin stitch machine including the separations between the colors on the capitol letters. We also did this same design with both pinks done in rayon chenille and outlined with the white satin stitch. If you try this, send me a stamped, self addressed envelope and I will send you the design. (This one or any others you see that you would like to have.) On a design like this, always do all of the flat work first then do the chenille.

Brentwood & Blust's.

Both of these samples are done in old english lettering with chenille. When you do old english, first do the letter in chain stitch. When you put the chenille on, just do the heavy parts of the letter, leave the thin lines just in chain stitch.

Oakridge Boys.

This was one of the hardest designs I have ever done . . . it looks simple, but trying to keep those letters all joined together, the top and bottom straight and the part at the bottom round, is not easy! Remember, embroidery is supposed to be viewed from a distance of eight to twenty feet, stand back and look at your work after it is done to see if it looks right!

Dancing girls.

Instead of using scrolling on the dresses, I used straight lines, this gave a better effect. When you do arms & legs, do the scrolling from the hands or feet working up. This will give a look of roundness and contouring.

Mushroom.

Notice how the lines in the detail on the underside of the mushroom makes it look like a mushroom is supposed to look.

Flower pot.

This design was done on hundreds of denim skirts. The pot and the flowers are applique. The pieces are cut out of material that has had hot press on backing applied to it. Then they are pressed in place and sewn on with the chain stitch machine. I used a zig zag design around the flower pot, then circles around the flowers, this gives a simple design a very elegant look.

Flowers & apple.

These designs were cut out of material, the design was already on the material. Then, I followed the design to enhance it with the embroidery. This is done a lot in quilting, especially for upholstery work.

Girl swinging golf club & birdie.

This design is also a partial applique. The skirt & blouse are material then the rest of the design is embroidered. These went on ladies golf skirts. The little "Birdie," went on the blouse that went with the skirt. The body of the bird is also an applique.

The Stingray automobile.

Doing cars and motorcycles is difficult, don't even try to put in all of the detail you would get in a picture, just put in the most important lines and try to get it to look as close to the real thing as you can. If you get good at doing things like this, you will have more work than you know what to do with!

Straw hat.

There is no way you can stamp a design onto a straw hat, so . . . draw or stamp the design onto "Tearlon," then lay it where you want it on the hat and embroidery it. When you are done, remove the Tearlon from around the design. It works best if you use the cording or braid machine for working on straw hats, but if you use the chain stitch machine, use a larger needle & nipple and heavier thread.

Bruce Barne's antique toy's.

The script lettering has shading applied to the right side, the body of the car is done in gold metallic thread using vermicelli for the fill instead of filling it solid with scrolling. I added rhinestones for headlights to give an even more elegant look.

Aquaventure's

Notice how the detail in the mermaid's tail gives the look of fish scales? Doing little things like this means a lot to your customers. don't ever think they won't notice!

The ship picture.

This can be another entire business for an embroidery operator. Making pictures and wall hanging's like this. People will pay good prices for something as different as this.

Motorcycle club colors.

Almost always, bikers want the three piece "set of color's." This consist of the top & bottom rocker and the logo in the center. Do a good job for these guys and they will send you all kinds of work.

Peacock.

When doing a multi color design like this, I start with the color at the far end of the feather. After I finish puting in each color, I sew down into the area where the next color will go. I just drop the stitch without breaking off and move to the next feather. This locks the ending down when I go over it with the next color. If you try to break off for each part of each color, you will have too much trimming to do. This design went on the back of a Country & Western shirt so I put rhinestones in the feathers to give it even more flash!

Drapery design.

When doing a lengthily design like this, where the design is repeated, just make your pattern repeat two or three times, then stamp it in small sections. I remember an artist at one of the factories I worked at a long time ago making a pattern for the valance for draperies that was well over 25 feet long . . . she could have just about killed me when I cut off the first three feet of her pattern and pitched the rest in the trash can. Sorry, I don't work with 25 foot long patterns, then or now! On this particular design, you follow the design first with just plain chain stitch, (I used variegated thread) then follow it back with putting the circles on for the "finesse!"

The calico cat skirt.

This is an applique design that also went on denim skirts. The applique is pressed into place then I used the zig zag design around the cats body to sew it on. The ball of yarn the cat is playing with IS YARN sewn on with the braid machine! By using more than one machine on something you can come up with very interesting effects. By the way, on the "fifty's poodle skirts" done by Artistic Touch, we used heavy gold thread and a large chain stitch for the poodle's leash!

The cabbage patch doll.

This is an entirely different type of work done on the bonnaz machine. It is called "Trapunto" For regular trapunto, a piece of material is placed behind the design then it is embroidered around the outline with chain stitch. Then thread is blown in between the two pieces of material to give a raised, puffed effect. The cabbage patch is actually a reverse trapunto applique. Her face, arms & legs are sewn on then the excess material is cut away. Then the trapunto thread is blown in. Her skirt & blouse are then sewn on and her hair is yarn braided and sewn on last.

I included the monogram designs because that can be a very big part of your business, take a good look at the beauty of the chain stitch monograms on the towels. I have found over the years, people prefer chain stitch for household items. If you want to learn more about monogramming, you should get my book number 2, which also includes special tips about chain stitch monogramming, book number 7 that has all of the monogram designs and video number 2 that also has some instructions for chain stitch monograms.

Now that we have come to the end of this video, I am well aware that it is quite long, but . . . anything worth doing, takes time.

Between the video and the transcript, you have all of the information you will need to become a really great "Embroidery Artist!"

You have learned everything you would have learned if you came to St. Louis to attend my school for a week, but, in addition, you have a lasting record of everything you learned so you can go back and review it anytime you want.

It will take a lot of practice before you are able to start working on customers garments. You will have a lot of frustrating moments, and there will be a lot of times you will feel like giving up, when this happens just pick up the phone and call me, I'll get you back on the right path again.

After you have learned to operate the bonnaz machine, you will want to learn more about chenille, and the other bonnaz machines. Look at the free information kit, you will find there are other books and video's you may want to order.

Charles Troy, from Troy Thread Co. asked me if I didn't think after I did this video, the book on chain stitch embroidery would become obsolete? No, not in any way! They are two entirely different things and they compliment each other! The tape shows you things the book couldn't. And, the book has other things in it that we just didn't have time for on the video.

Keep practicing, and keep in touch! Let me know when the work you do is going to appear in the movies or on T.V. I want to be sure to watch!