

Instructions for Knitting
Children's
Fancy Sport Hose
With Turn-Down Cuff



Made on
**THE GEARHART
80 NEEDLE CYLINDER**
With Ribbing Attachment



Using Size No. 3-16
Best Quality
Worsted Yarn

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Destroy Previous Instructions

Issued By
GEARHART KNITTING MACHINE CO.
Clearfield, Penna.

**DIRECTIONS AS GIVEN BELOW APPLY TO A SIZE 8 HOSE.
FOR MEASUREMENTS OF OTHER SIZES
SEE CHART ON PAGE 4.**

To knit this new style children's hemmed or double, fancy roll top hose it is necessary to use all cylinder needles (80) and half of the Ribber needles (20) which will give a very elastic hose of the desirable four-and-one ribbed effect.

Only one adjustment of your Machine is necessary which you must first make as follows:

The Cylinder Pin Clip is furnished to you, with instructions for its use printed on the envelope containing it. Snap this Clip over the end of the Cylinder Pin inside of the Cylinder.

It will change the position of the Ribber Dial, when the Dial lug rests against it, so that the Ribber Dial Needles will operate between the Cylinder Needles when the machine is in action; thus avoiding a possibility of the Dial Needles striking the Cylinder Needles, when operated with all Cylinder Needles in use.

When other garments are made on the Machine with every other Cylinder Needle removed, the Cylinder Pin Clip should be removed.

CAUTION—These Cuff Instructions must be followed EXACTLY.

1. With all needles in the Cylinder, set up the machine in the usual way making the set-up loops as tight as possible to start knitting, that is, about $\frac{1}{4}$ inch between the needles and Set-up Hooks. Using the 3-16 **Body** yarn, set the Machine **Cam** for a **Standard Tension**—*As tight a stitch as possible to make, with all weights hung on the Set-up and without any additional weight applied by the left hand.*



Setting up

First Part of Top

2. Knit exactly **18 rounds** of plain stitches using the **Body** yarn. Do not put the Ribbing Attachment on yet.

First Dotted Color Stripe

3. To get the first dotted stripe of color (making 20 dots) use the **Pick-Up Hook** and lift every second **Pair** of Cylinder needles up out of use, starting in front of the **Carrier** and going clear around the Cylinder. This will leave 40 needles, or 20 **Pair**, around the 80 Cylinder which will be knitting. Before turning the Crank, however, break off the **Body** yarn at the carrier and lead the end of the **Colored** yarn up through the **Yarn Guide** and **Yarn Guide Holes** and down through the **Carrier Holes** to the knitting, splicing this new yarn instead of tying to the **Body** yarn. Start the **Crank** slowly being sure that 1 inch of the end of the **Colored** yarn starts in the knitting with the last 1 inch of the end of the **Body** yarn to form this splice. Make all colored yarn splices in the center of the front of the Cylinder.

Knit **3 complete rounds**, holding down firmly on the knitting under the cylinder with the left hand in addition to the weights.

Body Yarn Between Stripes

4. With the hand push all these 40 needles down into use again but be careful to push them down only far enough that the shanks of the needles will just go under the point of the Machine **Cam** as you start knitting again. Before starting to knit splice on the **Body** yarn the same as you spliced the **Colored** yarn and knit just **5 rounds** of plain.

Solid Color Stripe

5. Splice on the **Colored** yarn again and knit exactly **10 rounds**, but do not lift any needles out of use this time as this should be a solid color section.

6. Again splice on the **Body** yarn and knit **5 rounds** of plain as before.

Second Dotted Color Stripe

7. Splice on the **Colored** Yarn, lifting every second **Pair** of needles up out of use as you did first and knit exactly **3 complete rounds**. Push these needles down again as before. Be careful that the latches of the needles when pushed down into use again are not closed when you start knitting.

Front half of Roll Top Completed

8. Splice on the **Body** yarn again and knit **9 rounds**. This makes a total of 53 rounds, containing two small 3-round dotted color stripes and one 10-round solid color stripe, and body yarn to make not less than $4\frac{1}{4}$ inches.

Reverse Side of Roll Top

9. Continue knitting **53 additional rounds** more with the **Body** yarn which will form the double knitting for the back of the hemmed or turn-over top.

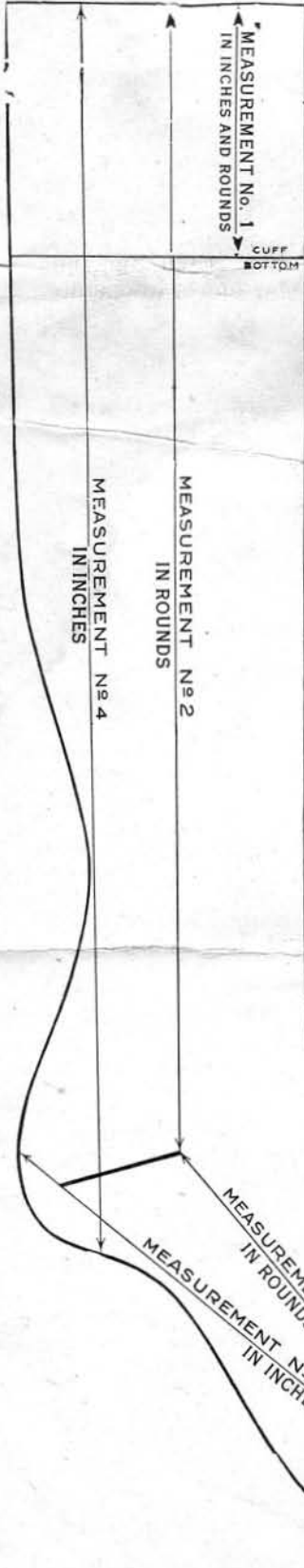
- Doubling and Hemming the Cuff*
10. Take the Set-up off the knitting under the Cylinder. Pull the 106 rounds of knitting you have just completed, up through the Cylinder as you would turn a stocking inside out and carefully hook the original Set-up loops on the end of this strip of knitting over the Cylinder needles one at a time, being careful to put the same loop over each needle that was put around and knit on the needle when set-up. Knit exactly **3 rounds**, *securely* holding down on the double knitting with the left hand under the Cylinder.
- Starting the Rib*
11. Carefully place the Ribbing Attachment on the Machine with the Dial **Lug** resting snugly against and to the right of the Cylinder **Pin** as usual. Place the Ribber Needles **in every other Dial Groove** (20 in the 80 Ribber), starting in the Dial **Groove** which comes opposite the **Second** Needle back of one of the **Red** marks dividing the Cylinder. *To avoid a large hole appearing in the gore of the heel, never allow a Ribber Needle to operate in the Groove of the Dial coming opposite or above one of the Red marks on the Cylinder.*
As each Dial Needle is placed in the Ribber Dial the Dial Needle Hook must be inserted through the loop which is around its adjoining Cylinder needle, but don't lift the stitch off of the Cylinder Needle. By doing this you will have a Cylinder needle and a Dial needle through the same stitch, and thus prevent little holes appearing in the hose where the Ribber starts to operate.
- The Leg*
12. Usually when the Ribbing Attachment is placed in operation the Tension can be tightened but for this type of hosiery the Tension should not be changed until you start the ankle. Always make note of the position of the **Cam** and **Indicator** so that every hose that you make of the same size will exactly match and pair up.
Knit **105 rounds** for the first part of the leg to the ankle.
- The Ankle*
13. The ankle should be knit as tight as possible, gradually tightening the stitch by **unscrewing the Cam Nut** $\frac{1}{4}$ turn at a time for 4 times, as follows: knit **10 rounds** after each of the first three $\frac{1}{4}$ turns, and **20 rounds** after the fourth $\frac{1}{4}$ turn. This makes 50 more rounds of knitting and it will be necessary in knitting through these 50 rounds to hold down snugly with the left hand in addition to the weights. This now makes a total of 155 rounds.
- Finishing Ankle*
14. Transfer the Ribber Dial stitches in front of the Machine to their adjoining Cylinder needles and knit **10 rounds** more to finish the ankle. After these last 10 rounds are made, transfer the remaining Ribber Needles at the back of the Ribber Dial to their adjoining Cylinder Needles and remove the Ribbing Attachment from the Machine. This gives you a total of 165 rounds for the leg from the point where the Ribbing Attachment was put on to the start of the heel.
- Heel, Foot and Toe*
15. Knit the Heel as usual, lowering **Cam** one full turn of the **Cam Nut**. Hook **Yarn Guide Take-up Spring** on the yarn, etc. After the heel is made as instructed for all hosiery, unhook the **Take-Up Spring**, tighten the Tension again $\frac{1}{2}$, or better still, $\frac{3}{4}$ of a turn and knit about **51 rounds** for size No. 8 foot, to conform to the measurements. Knit the toe and close as usual.
- Pressing*
16. **Press only the toe—Inspect your work.**
It will not be required that you press the entire hose. *Please do not do so.* Simply press the toe out flat after closing—doing this very carefully. Do not shape the cuff (or roll top), simply turn it down over the leg from the hemmed top connection.
- Measuring*
17. Always measure your work. The finished hose must conform to the measurements as given in the chart on page 4. You should not make these measurements as soon as the hose is completed, because during the process of knitting, the yarn and hose have been stretched, but you should allow the hose to go back to its natural shape and then make your measurements. This size 8 hose must measure from the hemmed top connection to the bottom of the heel (Measurement No. 4) exactly $15\frac{1}{2}$ inches. From the hemmed top connection to the bottom of the cuff (Measurement No. 1) must be exactly $4\frac{1}{4}$ inches. The foot from the tip of the toe to the back of the heel (Measurement No. 5) must be just 8 inches. If the hose is smaller than these measurements it is because you are knitting with the tension too tight, and you should start the next hose with the tension $\frac{1}{4}$ turn looser. If it is too large, start the next one $\frac{1}{4}$ turn tighter. Record then on paper the correct tension to follow in this knitting.

MEASUREMENTS AND SIZES

The diagram and chart below will show you the five measurements which govern the sizes of Children's Sport Hose. Measurements No. 1, No. 2 and No. 3 are **knitting measurements** or the **number of rounds** necessary to secure the **checking** or **inch measurements** which are No. 1, No. 4 and No. 5, and these three measurements must be **exactly** as shown.

WHERE HEMMED TOP IS JOINED TOGETHER

You will see that Measurement No. 1 is both a **knitting** and **checking** measurement, and therefore it will be necessary for you to set your machine at a Standard Tension which will produce the **exact inch measurement** by using the **exact** number of rounds in the **knitting measurement** for the hemmed or Roll Top. With a little practice this will be easy for you to accomplish.



Hose Sizes and Measure No. 5	Measure No. 1	Number of Rounds Necessary to Make Measurement No. 1	Measure No. 4	Measure No. 5 In Inches EXACTLY As Follows	With About the Following Number of Rounds for Measure No. 3		
7½ 8 AND 8½	MUST BE EXACTLY 4¾ INCHES	Body Yarn 18	MUST BE EXACTLY 15½ INCHES	7½	45		
		Color Dot 3					
		Body 5					
		Solid Color 10					
9 9½ 10 AND 10½	MUST BE EXACTLY 4¾ INCHES	Body Yarn 21	MUST BE EXACTLY 16½ INCHES	9	63		
		Color Dot 3					
		Body 5					
		Solid Color 10					
		Body 5	Note— To secure this requires about 165 Rounds in Measure No. 2	8	51		
		Color Dot 3					
		Body 9					
		Total for Front Half 53					
		Body Yarn To Make Back Half } 53	8½	57			
		Total Rounds 106					
		Body Yarn 21			Note— To secure this requires about 177 Rounds in Measure No. 2	10	75
		Color Dot 3					
		Body 5					
		Solid Color 10					
		Body 5	10½	81			
		Color Dot 3					
		Body 11					
		Total for Front Half 58					
		Body Yarn To Make Back Half } 58					
		Total Rounds 116					

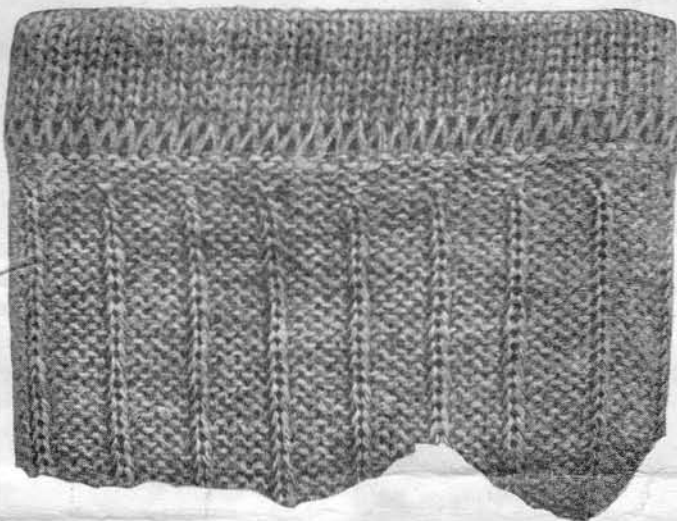
NOTE—Measurement No. 1 as a **KNITTING MEASUREMENT** includes all of the rounds of Knitting necessary to make both the front and back of the Hemmed Top.

Measurement No. 1 as a **CHECKING** or **INCH MEASUREMENT** is just one-half of the **KNITTING MEASUREMENT**, or the length of the front half from the joining of the Hemmed Top to the Cuff Bottom.

THIS IS A PICTURE OF THE ROLL TOP AND ILLUSTRATES THE COLORED FLOSS KNITTING



HEMMED TOP



This is a picture of the *inside* of a Sport Hose and illustrates the correct way to make this hemmed top connection.

In setting up the machine you are told in Paragraph 1 to make $\frac{1}{4}$ inch loops between the set-up hooks and the needles. This picture shows clearly why so tight a loop is necessary. After you have made the correct number of rounds of knitting for either the small or larger sizes, as directed on the chart, the Set-up is removed, and this strip of knitting is pulled up through the center of the cylinder, and these $\frac{1}{4}$ inch set-up loops are hooked over the cylinder needles one at a time. You now have two stitches on each cylinder needle, the regular cylinder stitch and the set-up loop. At this time you must hold down with the left hand inserted up inside the cylinder and securely grasping knitting and complete the three rounds of knitting, securely holding it down.

If the hemmed top is made as described above, the finished hose will present a neat and handsome appearance.

SHIPPING INSTRUCTIONS FOR SENDING KNITTING TO THE COMPANY

Knitting must be packed very securely by the sender and tied up with good twine.

The packing record, supplied, should show the pairs of hose contained in the shipment together with the worker's number, which has been supplied by the Company, with the contract.

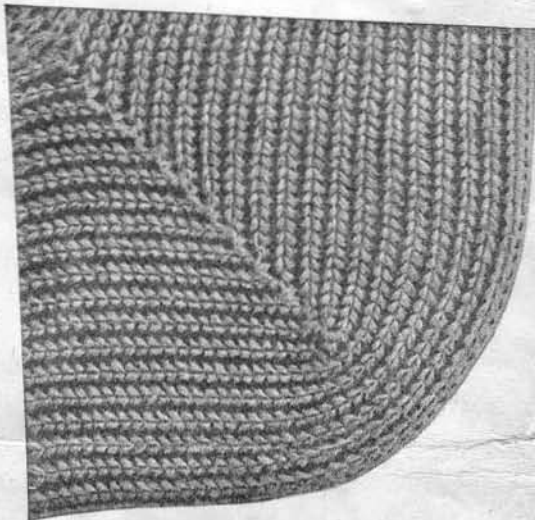
The full name and address and the worker number should be plainly printed on the outside of the package and the package should be addressed very clearly to the Gearhart Knitting Machine Company.

The same box can be used in returning knitted goods to the Company that the Company used in sending the yarn to the knitter. If the knitting does not completely fill the box, some crumpled up paper should be stuffed in the box to fill up the empty space.

The knitting should be tied up securely in half-dozen pair lots, with each hose folded the same, either two or three folds.

The Company always wants to receive the knitting in the very best condition, and this advice should be very carefully complied with.

Heel



CORRECT WAY TO TURN HEEL AND TOE

If correctly done, this will be found the simplest and best method. Heels and toes of all hosiery should be turned this way.

First Half

The first half of the heel and toe is made exactly the same as you no doubt have always been doing; that is, by lifting out of action the last needle knitted upon at the end of each course of knitting, starting with the needle on the right hand side of the Machine in front of the red dividing marks on cylinder, and continue lifting the needles on alternate sides, one at a time, until the proper number of needles have been lifted to make a nice turn for the finished heel and toe. (16 needles will be left in action in the 80 needle cylinder.)

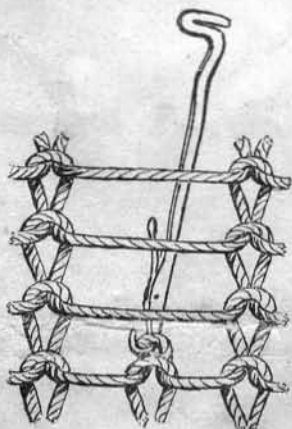
Second Half

When you have completed the first half the Yarn Carrier will be at the back of the Machine, on the *right hand side*, and the next course of knitting will be made by turning the crank backwards, with the Yarn Carrier passing across the front of the machine from right towards left. The first needle to be pushed down into action is the first needle to the right of the remaining needles that were in action, and will be the *first needle knitted upon*. In pushing down into action the needles that were lifted out to form the first half of the heel or toe, *do not push them all the way down*, but just far enough to allow the latch to lie over the loose yarn in front of it and coming from the last needle knitted upon to the Yarn Carrier hole.

When you now reverse, or turn the crank backward, the yarn, as it comes from the Carrier hole, will lap up over the latch as the Carrier passes this needle, and, as the crank is turned further, this needle will then make its stitch easily, which gives the proper appearance in the completed heel, as pictured above.

Continue to push down the needles, one at a time, alternately on either side of the Machine, turning the crank backward and forward until there is one needle remaining on either side of the Machine just in front of the red dividing marks on the cylinder. With the Carrier resting in front of the Machine, all of the needles back of the red dividing marks, together with these two just in front of the red marks are pushed down into action, and the crank turned forward to knit the foot, or in knitting the toe, to make the additional rounds before taking the work from the machine. In pushing needles back into action, never push them clear down as their latches are likely to snap shut and dropped stitches occur.

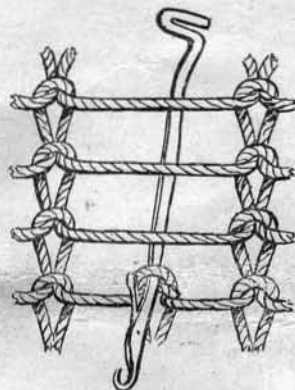
Picking Up a Dropped Cylinder Stitch While Knitting is on the Machine



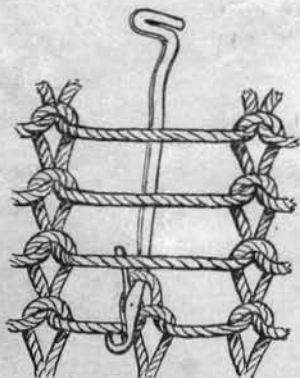
PICTURE 1

Place **Cylinder Needle** down between the knitting and the **cylinder** under all of the dropped stitches. Insert the hook of the needle through the loop of the last stitch which is completely formed. (See **Picture 1.**)

Push **needle** down until the hooked **loop** slides back and drops off the **needle latch** to the position shown in **Picture 2.**



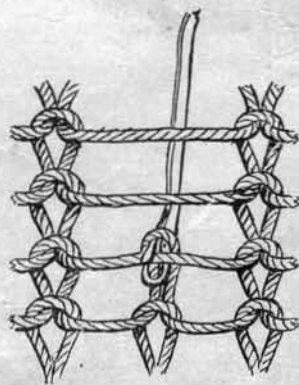
PICTURE 2



PICTURE 3

Turn **needle** on its side and pull back up guiding the **needle** so the latch goes under the cross-thread above as illustrated in **Picture 3.**

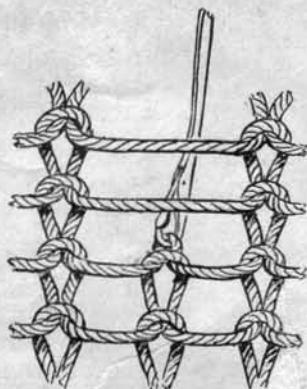
Turn **needle** upright, keeping the **latch** under the one cross-thread. **PULL UPWARDS.** This action will cause the **latch** to force the cross-thread into the **hook** of the **needle**. The old loop will then slide down over and off the **needle** to form a new stitch as **Pictures 4 and 5** illustrate.



PICTURE 4

Push the **needle** down again so the newly formed stitch slides back over and off the **needle latch** as shown in **Picture 2.** Repeat these actions until all the cross-threads have been picked up, then place this last loop up over the **cylinder needle** which dropped it.

Dropped ribber needle stitches discovered after the ribber has been removed from the machine can not be picked up in the same manner as cylinder needle stitches. Instead of placing the needle under the cross-threads, it is placed inside the knitting with the hook catching the last loop. Then proceed to pick up the cross-threads and form stitches with the needle hook and latch, pushing the needle down through the knitting each time.



PICTURE 5