

U.S. BLIND STITCH MACHINE CORP.

EXPRESS STREET & SKYLINE DRIVE PLAINVIEW N.Y. 11803 TELEPHONE: 516-433-4350 CABLE ADDRESS:"BLINSTIT PLAINVIEW NEW YORK"

1099 SERIES

COVERING THE FOLLOWING STANDARD SUB CLASSES:

1099-CS-1-HH	1099-T
B1099-CS-1-HH	1099-T-1
F1099-CS-1-HH	1099-WB
S1099-CS-1-HH	1099-WB-1
1099-PB	W-1

MAINTENANCE & PARTS CATALOG

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Stitch Machine Lon



III – MAINTENANCE INSTRUCTIONS

FOR 1118, 1099 & 1108 SERIES

INTRODUCTION

A. Replacing the Looper

B. Replacing the Needle Guide

C. Replacing the Shoe

D. Replacing the Feeder

MAINTENANCE INSTRUCTIONS

INTRODUCTION

All U.S. BLIND STITCH machines are designed for long life and trouble-free performance. When installed and lubricated in accordance with the INSTALLATION AND OPERATING INSTRUC-TIONS, only the minimum maintenance normally associated with industrial sewing machines will be required. These maintenance requirements will generally be confined to the four locations described below, at which wear may be expected after extended use. When such wear does occur, the worn part may be readily replaced by following the appropriate instructions. For ease of installation, and to insure satisfactory service, it is essential that only genuine U.S. BLIND STITCH parts and needles are used. They are the <u>only</u> parts designed specifically for the machine, with the builtin long life and excellent wearing characteristics typical of the U. S. BLIND STITCH machine.

A. REPLACING THE LOOPER

- 1. Should it become necessary to replace the looper (item "B" in Figure 6), loosen the looper clamp screw (item "A" in Figure 6) and remove the old looper. Because of the precise fit of the looper in the looper rod it may be necessary to exert a moderate amount of force to pull the looper out. Insert the new looper into the end of the rod as far as it will go before bottoming on the looper shoulder.
- 2. Any time a looper is moved or changed, recheck the looper timing and reset if necessary. Proper looper timing is absolutely essential for correct stitch formation. As described in detail below, a properly timed looper will pass over the needle in the correct position to pick up the loop, and also clear the chain-off pin, feeder, looper slot, and needle. The first check point for timing the looper is at the position where the looper picks the thread loop off the needle during the needle return stroke. Referring to Figure 7, (Point "C"), the long prong of the looper should pass over and just clear the scarf of the needle, approximately 3/32" (2.4mm) behind the end of the needle eye. At the same time, the short prong of the looper should pass over the needle with about 1/64" (.406mm) clearance, and must be so set that it also clears the chain-off pin (item "D" in Figure 7).

- 3. To adjust the looper so that the timing checks out as noted in paragraph 2, it may be rotated within its clamp by a limited amount. This adjustment should be made with the looper clamp screw (item "A" in Figure 6) loosened, and the looper bottomed against its shoulder. Do not move the looper in or out, and do not attempt to force the looper to turn beyond the limited amount of travel available.
- 4. If the adjustment described in paragraph 3 is insufficient to provide the correct timing, it will be necessary to turn the looper rod (item "E" in Figure 6) itself. This may be accomplished by loosening with looper rod clamp screw (item "C" in Figure 6). The rod is then free to turn in the looper rod fork (item "D" in Figure 6). It will normally be necessary to make only a very small adjustment in order to get the looper into the correct rotational position for proper timing. If, for any reason, the rod has been removed or the basic setting of the looper rod has been disturbed by a large amount, it may be reset by noting that the distance from the center of the looper rod fork pin (item "F" in Figure 6) to the rear face of the looper rod ball (item "G" in Figure 6) is normally 4 & 3/32 inches (104mm) (refer to Figure 6). If the rod is set to this dimension then only minor adjustment will be required to bring the looper into the correct timing position. Note that this dimension is merely a guide to assist in setting a rod and variations may be expected from machine to machine.
- 5. If, after completing the above adjustments, it is found that the looper is either too low or too high, it will be necessary to adjust the eccentric stud. First loosen the two set screws (item "A" in Figure 7). Place a wide blade screwdriver in the slot of the eccentric stud (item "B" in Figure 7) and, using a slight turning motion, raise or lower the looper as required. Once the proper height is established, check to see whether the looper must be moved to the left or to the right prior to retight-ening the eccentric block set screws. If such a movement is required, it may be obtained by lightly tapping the eccentric block in the correct direction with the handle of a screwdriver.

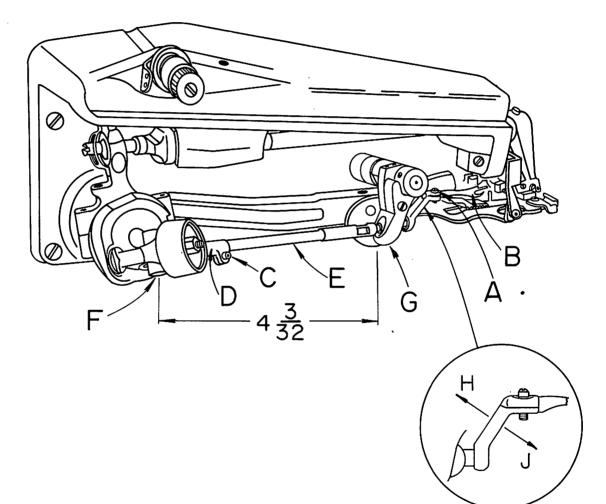


FIGURE 6

- 6. Once the looper is timed with respect to the needle as outlined in paragraphs 2 thru 5 above, slowly turn the handwheel in a direction away from the operator, until the looper approaches the edge of the looper slot. (Point "C" in Figure 8) in the presserfoot. At this point make sure the small prong of the looper clears this edge. If it does not clear, adjust the eccentric block as outlined in paragraph 5 until the interference is eliminated.
- 6A. If timing of looper still proves difficult, its possible that looper sweep required adjustment. If looper is too close to chain off pin and also, too close to needle guide on opposite position, the looper sweep is too short.

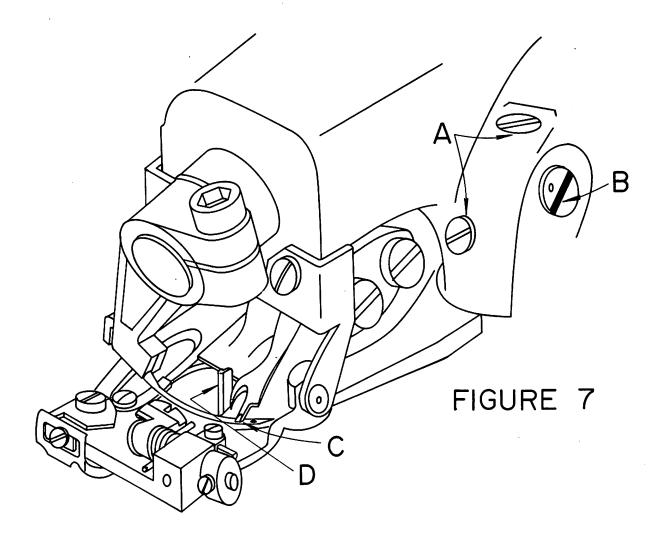
If looper on pick up stroke, is too far to right of chain off pin and too close to needle rest at left of presserfoot, the looper sweep is too wide.

For adjustment, refer to insert illustration (Figure 6). To widen looper sweep, flex or bend looper crank in direction of arrow "H".

To shorten looper sweep, flex or bend looper crank in direction of arrow "J".

Both adjustments should be gradual and sweep checked frequently.

7. Continue turning the handwheel away from the operator until the point of the needle starts to enter the area in between the looper prongs. (Refer to Point "D" in Figure 8). If the needle strikes the crotch of the looper, the looper has generally been set too far forward. Check to see if the looper has been inserted into the clamp as far as it will go. It should be inserted until the shoulder on the looper is stopped on the clamp. If this check is satisfactory, recheck the distance from the center of the looper rod fork pin to the rear face of the looper rod ball. Refer to paragraph 4 and reset if necessary. If neither of the above two measures corrects the problem, it is possible that the needle lever may be set too low and required adjustment.



- 8. Once clearance is established between the needle and the looper crotch, continue turning the handwheel away from the operator until the needle passes between the looper prongs, clearing both the long and the short prong. If difficulty is experienced at this point, it may be necessary to modify some of the previous adjustments to the eccentric block or the looper rod length. If this is done, recheck the previous points to insure that a position is established which will satisfy all of the clearance conditions.
- 9. After all the necessary adjustments have been made, tighten all set screws and the lock nut and recheck all the adjustment points. Referring to Figure 9, the looper should now clear the chain-off pin ("D"), feeder ("E"), looper slot ("F"), needle, and pass over the needle in the correct position to pick up the loop.

B. REPLACING THE NEEDLE GUIDE

1. After considerable service, it may be expected that the wearing action of the needle will cause a sharp edged groove to form on the needle guide (item "G" in Figure 9).

This condition can cause thread breakage and uneven penetration. When this happens the guide should be replaced. The needle guide was specifically designed as a readily replaceable wear plate to prevent damage to the presserfoot from the action of the needle.

2. Loosen the needle guide attaching screw (item "A" in Figure 9) and remove the worn needle guide. Clear out any lint or dirt that may have accumulated under the old guide and insert the new guide. Insure that the new guide is seated flush with the top and side of the presserfoot and then retighten the attaching screw. Slowly turn the handwheel in the direction away from the operator and check to insure that the new guide fits properly under the needle and that no interference has been introduced between the guide and the looper.

C. REPLACING THE SHOE

- 1. The shoe, (item "E" in Figure 8), also known as a cloth retainer, normally will not required replacement. However, in the event of wear due to the particular fabrics being used, or if the shoe or spring suffers any damage, they may be readily replaced.
- 2. The first step is to remove the complete front guide assembly by unscrewing the front guide holder attaching screw (item "A" in Figure 8). Next loosen the shoe pin and the shoe eccentric barrel lock screws, (item "B" Figure 8), and slide out the shoe pin (item "F"), shoe and retaining spring (item "G"). Before removing these components it is advisable to note the manner in which the spring is assembled so that it may be reinstalled in the same way.

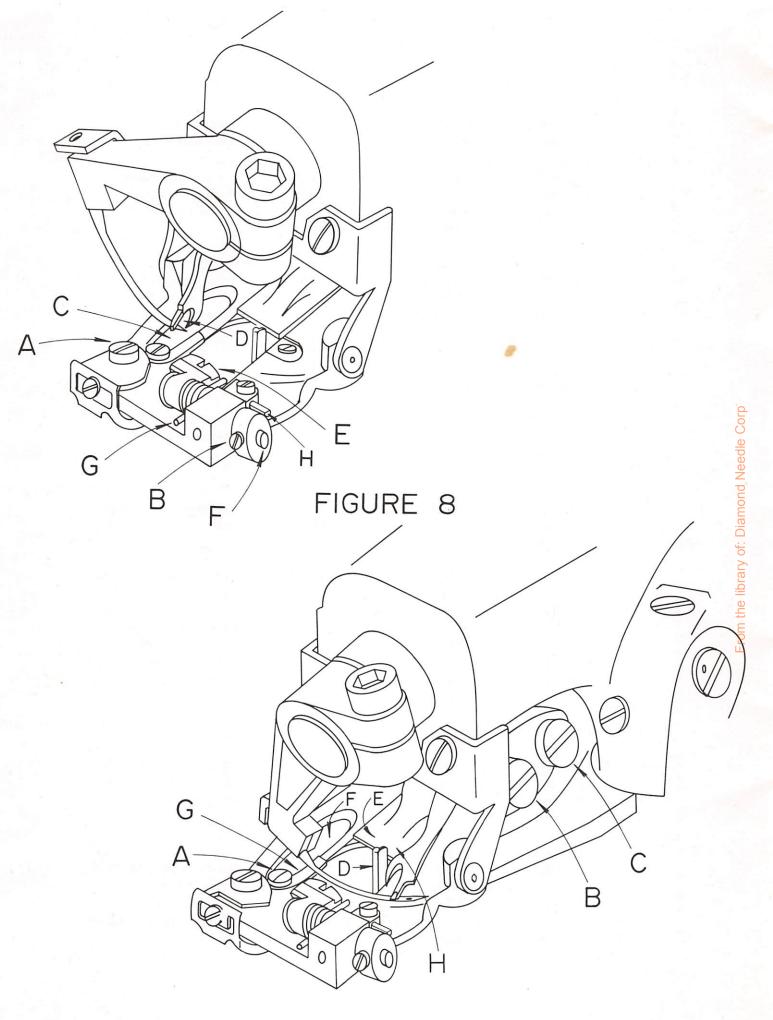


FIGURE 9

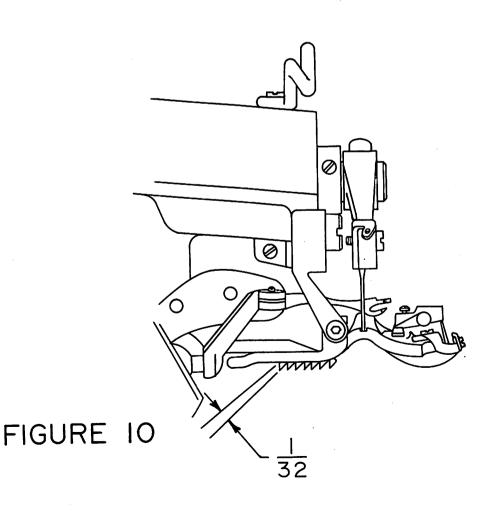
- 3. When replacing an old shoe, make sure that the replacement shoe properly fits the pin without binding and without excessive looseness. In the event that the pin has worn and does not fit the new shoe properly, it should be replaced at the same time as the shoe-pin. After replacing the shoe, shoe pin spring into shoe eccentric barrel, retighten screws (item "B" Figure 8), and check to insure that the center of the shoe is lined up with the center of the rib. Also insure that the shoe clears both sides of the opening of the presserfoot.
- 4. In and out position of shoe should now be checked. For light fabrics, shoe should be as close to needle as possible. For heavy fabrics with seam, shoe should be set back as far as possible from needle. To move shoe in and out turn eccentric barrel (item "I" Figure 8). After the correct location is established, be sure to tighten screws, (item "B" Figure 8).
- 4A. An additional shoe adjustment is also possible. The height of the shoe can now be controlled, (item "H" in Figure 8). This is a tapered pin and position can be adjusted so that the shoe, whenever required, can be controlled as far as elevation is concerned. By moving the tapered pin in or out the shoe can be kept from pressing down on some fabrics which require little, if any shoe pressure. By having this control, it sometimes will aid in penetration of difficult fabrics. The normal position of the shoe, when set properly on most fabrics, is that the shoe will show movement on the penetration cycle on one ply of fabric.

5. REPLACING THE CHAIN OFF PIN

- 1. After considerable service, it may become necessary to replace the chain off pin, (Item "D" in Figure 7).
- 2. Remove the chain off pin attaching screw and remove the chain off pin, clean out any lint or dirt that may have accumulated. Attach the new chain off pin, using the screw previously removed. Insure that the chain off pin is against the side and forward edge of the slot in the presserfoot, and then tighten the screw.

D. REPLACING THE FEEDER

- 1. In the event that the machine develops difficulty by failing to properly feed the work, a worn feeder is frequently found to be the cause. After considerable service, especially with certain hard fabrics, the feeder teeth have a tendency to become dull, and the feeder should be replaced. In order to remove the old feeder, remove the front feeder attaching screw (item "B" in Figure 9) and loosen the rear feeder attaching screw (item "C" in Figure 9). The old feeder may then be slid out of place. Insert the new feeder under the rear screw and replace the front screw.
- 2. Before tightening the attaching screws check to see that the feeder is set to the proper depth. Referring to Figure 10 this should be approximately 1/32" (.795mm) below and parallel to the bottom of the presserfoot for all light and medium weight fabrics. For heavy fabrics, the setting should be approximately 1/16" (1.59mm) below and parallel to the bottom of the presserfoot. These dimensions are intended as guides and may be modified as required by the specific fabrics. Once the proper depth is established, rotate the handwheel slowly in a direction away from the operator and check to insure that the feeder clears the looper (see Figure 9, Point "H") and also clears both sides of the feeder slot in the presserfoot. Firmly tighten feeder attaching screws (Figure 9, Items "B" & "C") before resuming sewing.



1099 SERIES PARTS CATALOGUE COVERING THE FOLLOWING STANDARD SUB-CLASSES

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1099-CS-1-HH	1099PBW-1
B1099-CS-1-HH	1099-T
F1099-CS-1-HH	1099-T-1
S1099-CS-1-HH	1099-WB
	1099-WB-1

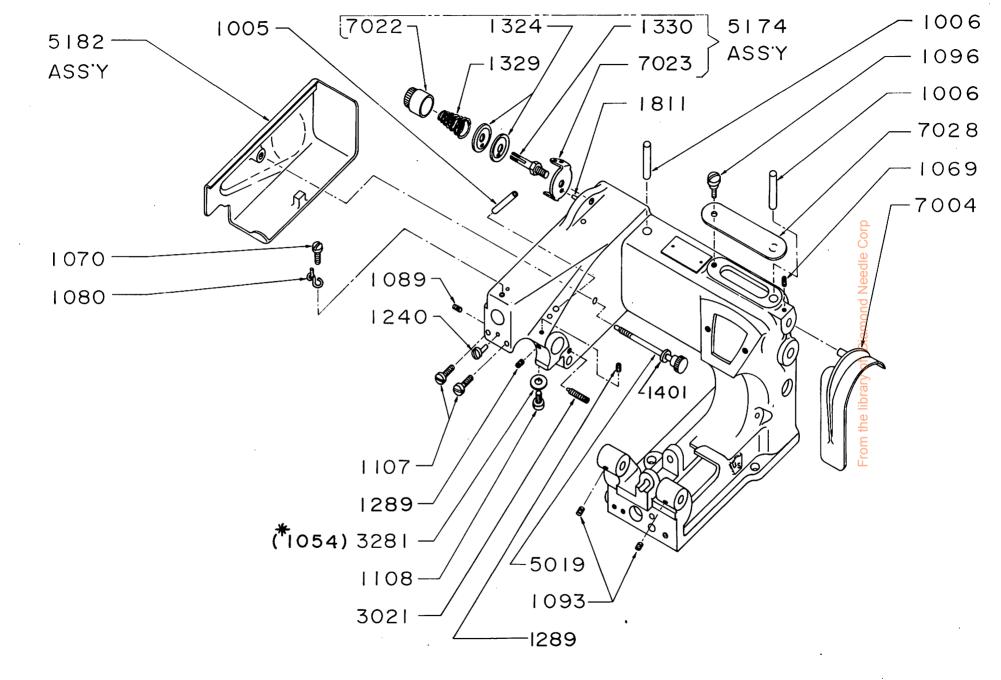
MAIN FRAME GROUP

		-	0
			de Corr
5182 1401 5019 7004	Side Cover Assembly Washer, Clamp Screw Screw, Side Cover Guard, Belt	1005 1006 1093 1289	Tube, Oil Wick, Oil Screw, Set Screw, Set Pin, Presserfoot
1069 5174	Screw, Guard Thread Tension Regulating Ass'y.	1240 1089	Pin, Presserfoot
2114	Consists of:	7028 1096	Plate, Top Cover
	7023 Thread Guide 1324 Disc. Thread Tension	1107	Screw, Bridge Mtg. 👱
	1330 Post, Thread Tension 1329 Spring, Tension 7022 Nut, Tension	3281 1108 1080	Washer, Clamp Screw
3021	1811 Pin, Spring Screw, Feed Lever Plate	1070 1054*	Screw, Thread Guide Washer

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*Models 1099-T, 1099-WB and 1099-WB-1 Do not have washer 1054

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MAIN FRAME GROUP

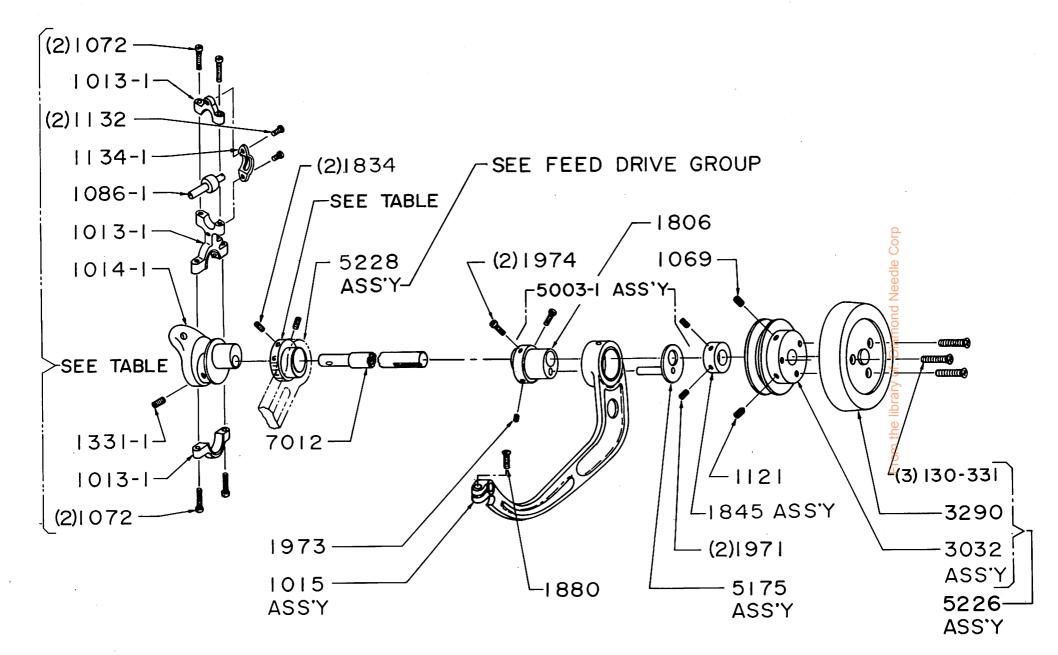
MAIN SHAFT GROUP

Main Shaft 7012 1845 Collar Ass'y. 5003-1* Rib Connection Lever & Eccentric Ass'y. 1971 Screw 1974 Screw Eccentric 5226** Handwheel Ass'y. Screw For Stud 3290 Handwheel 1973 1880 Screw, Clamp 3291 Screw 3032 Pulley Ass'y. See Needle Connection Ass'y. Table* 1121 Screw 1072 1069 Screw Screw 1134-1 Guard See Stitch Collar Ass'y., 1132 Regular Screw Table 1131-1 Screw 1834 Set Screw 🖒 **Diamond Needle** *Sold as an Assembly Only **The Following Optional Handwheel Ass'y. Are Available of: 5188-1 Handwheel With Position Hub From the library 5240 Handwheel Double Pulley Ass'y. 5253 Handwheel, Double Pulley and Positioner Hub Ass'y.

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Table

Model	Needle Connection Ass'y.	Stitch Collar Ass'y.
1099-CS-1-HH	5004-1	5232
B1099-CS-1-HH	5004-1	5232
F1099-CS-1-HH	5004-1	5232
S1099-CS-1-нн	5004-1	5232
1099PBW-1	5004-1	5232
1099T	5004-1	5231
1099T-1	5004-1	5232
1099-WB	50 41-1	5231
1099-WB-1	5004-1	5231



MAIN SHAFT GROUP

FEED DRIVE GROUP

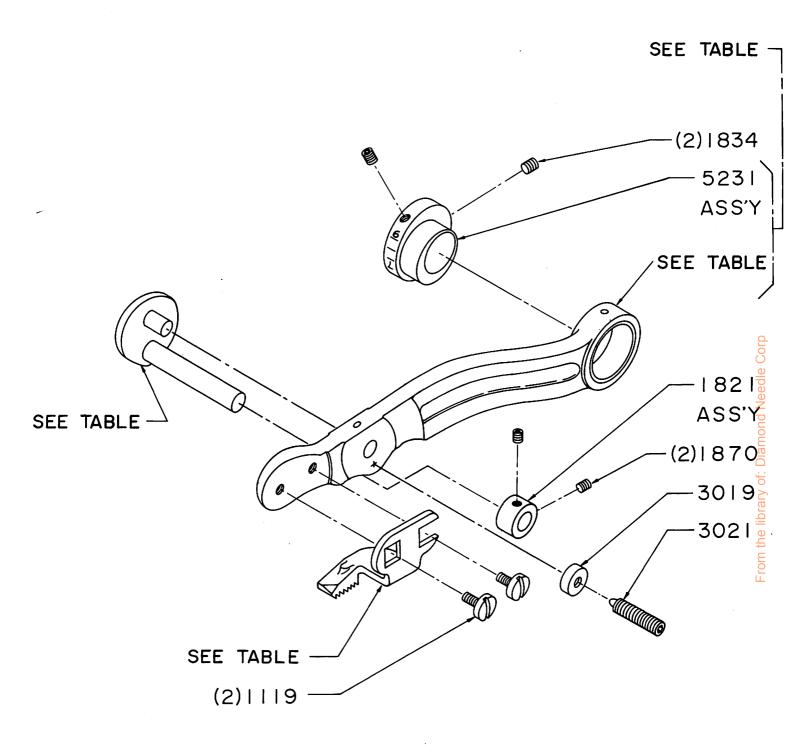
See Table	Feed Lever & Stitch Collar Ass'y. (Sold as Ass'y. only)
See Table	Feed Rocker Ass'y.
3019	Feed Lever Plate
3021	Screw - Lever Plate
1821	Thrust Collar Ass'y. 1870 Set Screw
See	Feeder
Table	1119 Feeder Screw

*Types of Feeders Available

Armoloyd	2125
Carbide	2119

Table

Model	Feed Rocker Ass'y.	Feed Lever Stitch Collar Ass'y.	Feed Lever Ass'y.	Stitch Collar Ass'y.	Feeder
1099-CS-1-HH B1099-CS-1-HH F1099-CS-1-HH S1099-CS-1-HH 1099PBW-1 1099T 1099-T-1 1099-WB 1099-WB	5023 5023 5023 5016 5016 5023 5016 5016	5211 5211 5211 5211 5208 5208 5209 5208 5208	5229 5229 5229 5229 5228 5228 5228 5228	5232 5232 5232 5232 5232 5231 5231 5231	2106 2106 2106 2106 2100 2100* 2100 2100* 2100*



FEED DRIVE GROUP

NEEDLE DRIVE GROUP

 5082
 Needle Lever Ass'y.
 5135

 1076
 Screw
 1095

 3050
 Screw
 1095

 1137
 Clamp
 1243

 1136
 Lever
 Lever

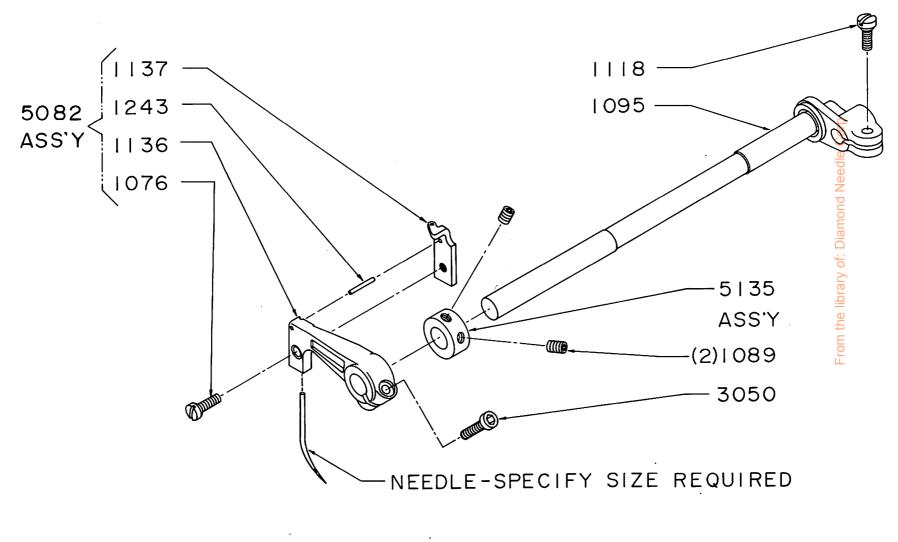
5135 Collar Ass'y. 1089 Screw 1095 Shaft 1118 Screw

NEEDLE SIZES AVAILABLE

Use Genuine U.S.B.S. Needles For Best Results

Short Needles	Long Needles - System 251					
0	Regular Point	Ball Point	Spear Point			
1	Sizes	Sizes	Sizes			
1 1/2	00	10	10			
2	10	15	15			
2 1/2	15	20	20			
3	20	25	25			
3 1/2	25		30			
4	30	`	35			
4 1/2	35		65			
5 1/2	40					
	55					

From the library of: Diamond Needle Corp

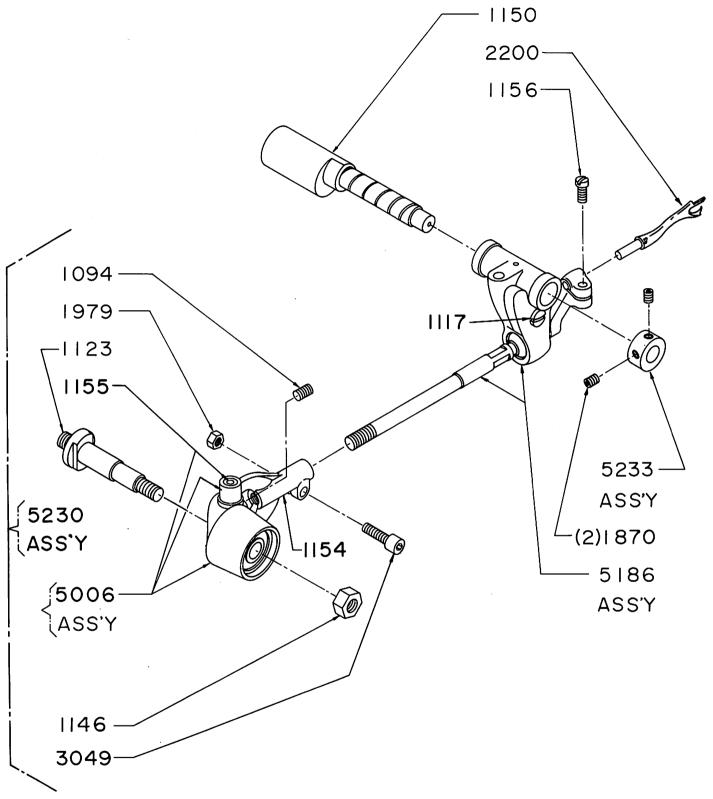


NEEDLE DRIVE GROUP

LOOPER DRIVE GROUP

Part No.	Description
2200*	Looper
1150	Stud, Looper Adjustment
5233	Collar Ass'y.
	1870 Set Screw
5230	Looper Rod Fork, Sleeve & Stud Ass'y.
	Consists of:
	1154 Fork
	1155 Pin
	3049 Screw
	1979 Nut
	1123 Stud
	1146 Nut
	5006 Looper Rod Sleeve Ass'y.
	(Not sold separately)
	1094 Screw
5213	Looper Rod & Fork Ass'y.
	Consists of:
	5185 Looper Rod & Ball Ass'y.
	1154 Fork
	3049 Screw
	1979 Nut
5186	Looper Rod & Carrier Ass'y.
	Consists of:
	5017 Looper Rod Carrier Ass'y.
	1117 Screw
	5185 Looper Rod & Ball Ass'y.
5206	Looper Rod, Fork & Carrier Ass'y.
	Consists of:
	5186 Ass'y.
	1154 Fork
	3049 Screw
	1979 Nut

*2201 Looper Used with S1099-CS-1-HH



LOOPER DRIVE GROUP

From the library of: Diamond Needle Corp

FEED FRAME I GROUP

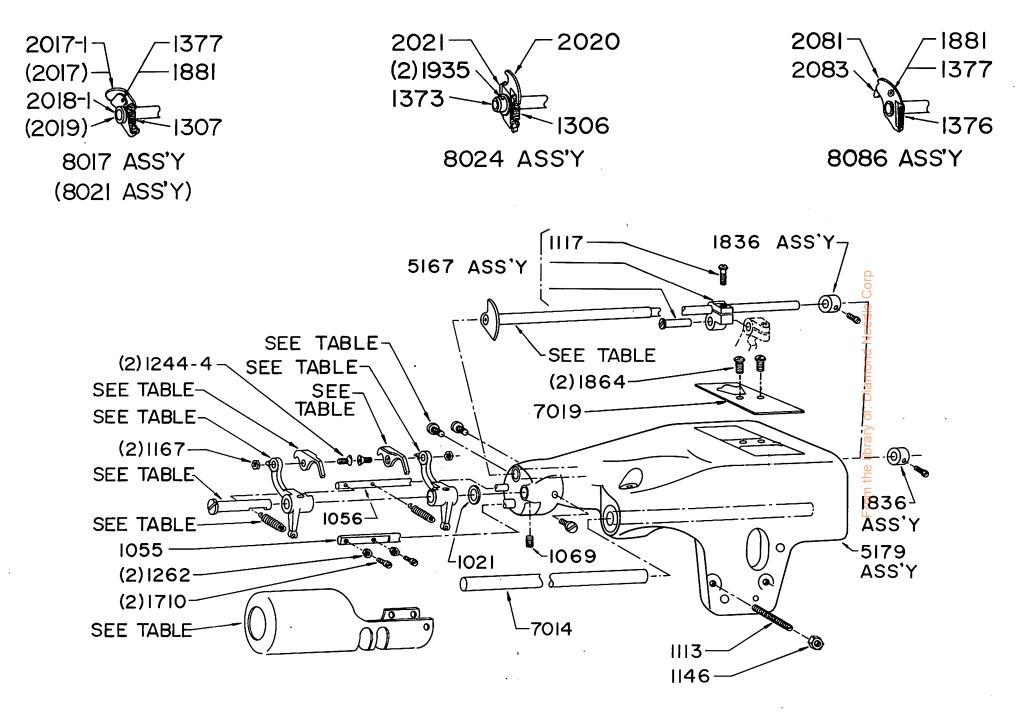
5179	Feed Frame Ass'y.	See Table	BKT, L.H. Platten
1836	Collar Ass'y.	See Table	BKT, R.H. Platten
	1079 Set Screw	See Table	Stud
5167	Rib Shaft Crank Ass'y.	1069	Set Screw
	1117 Screw	1021	Spacer: - 1021 - 1 = .010";
7018	Plate, Window 🥂		-2 = .015", etc.
1864	Screw, Plate	See Table	Spring
1056	Post, Spring	***1710	Screw, Limit
***1262	Nut	1055	Post
See Table	Platten, L.H.	See Table	Platten, R.H.
1244-4	Screw, Platten	1113	Screw, Frame
1146	Nut	1105	Screw
1029	Nut	See Table	Cylinder
See Table	Screw, Cylinder	7014	Shaft, Rocker
1167	Nut, Platten Lock		O all
			die solo
	TABLE		ee
			2 7

TABLE

Model	Rib Shaft Ass'y.	Platten Left			Platten Bkt Right	Spring	Stud	Cylinder	Cylinder Screw
1099-CS-1-HH	8067-1	2400	2401	2473	2474	3062	1379	7025	1966
B1099-CS-1-НН		Roller* 7140	2435	2473-1	2474	3065	1379-1	7025	1966
*F1099-CS-1-HH	8096	2436	2437	2482-1	2481-1	1172	1379-1		<u></u>
			P	in 3013	Pin 3013	3 4 Req'	d.		E E
*S1099-CS-1-HH	8096	2422	2423	2482-1	2481-1	1172	1379	7025	196 <mark>6</mark>
			P	in 3013	Pin 3013	3 4 Req'	d.		
1099-PBW-1	8086**	2400	2401	2473	2474	3062	1379	7025	1966
1099-T	8024**	2400	2401	2473	2474	3062	1379		
1099-T-1	8024**	2400	2401	2473	2474	3062	1379	7025	1966
1099-WB	8017**	2400	2401	2466	2465	3062	1379		
1099-WB-1	8021**	2400	2401	2466	2465	3062	1379		
**R	ib Shaft		Rib	Rib					
	Ass'y.	Rib	Pawl	Hub	Collar	Spring	Screw	Nut	
	8086	2081	2083			1376	1377	1881	
	8024	2020		2021	1373	1306	1935		
	8017	2017-1		2018-1		1307	1377	1881	
	8021	2017		2019		1307	1377	1881	

*1995 Roller Screw

***In place of 1710 & 1262 use part nos. 1132(2), 1114(2), 1168(2) and 7150

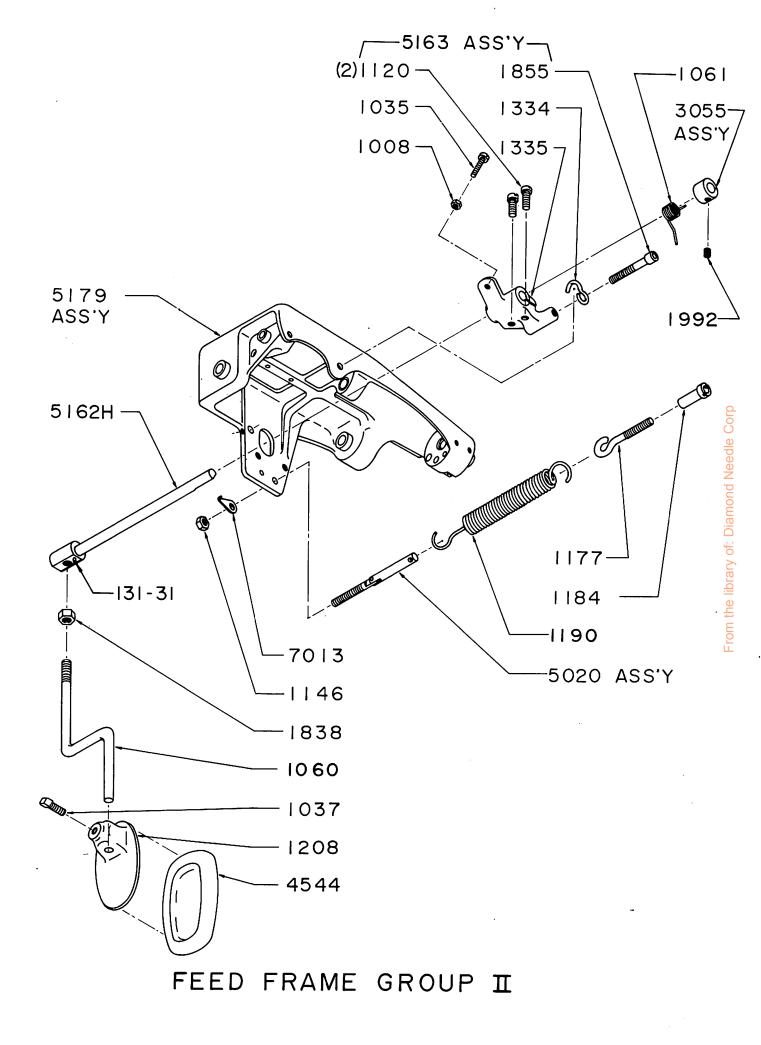


FEED FRAME GROUP I

5020	Spring Link Ass'y.
	1176 Pin
1146	Nut, Ret'ng.
1177	Screw, Link
1184	Nut, Spring
*1190	Main Spring
5163	Lift Arm Ass'y.
	1335 Lift Arm
	1855 Screw
	1334 Hook
	1120 Screw
	1035 Screw
	1008 Nut
3055	Collar Ass'y.
	1992 Set Screw
1061	Spring
5235	
5235	Knee Pedal Ass'y.
	1208 Knee Pedal
	1037 Screw
7013	Key
1060	Vertical Offset Rod
1838	Nut
4544	Pad, Pedal
	Horizontal Rod, Knee Press
131-31	PIN

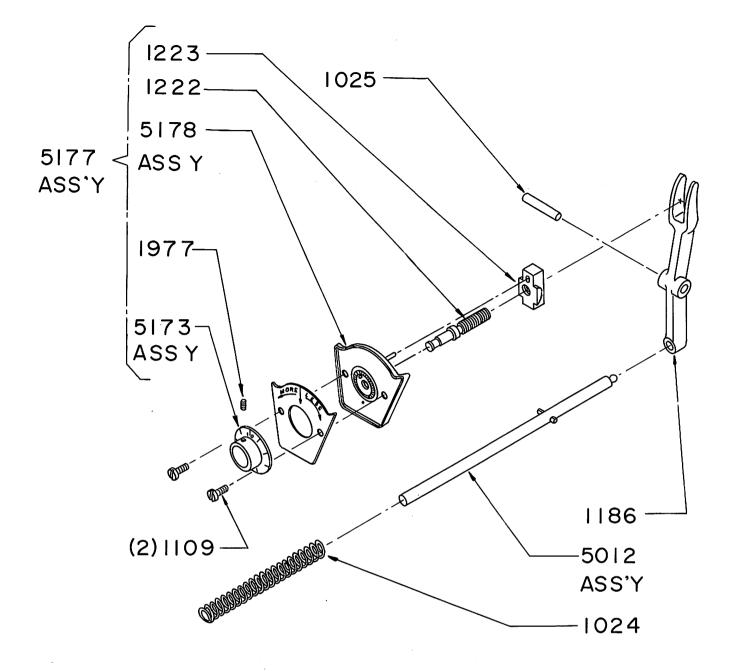
*Subclasses F1099-CS-1-HH and S1099-CS-1-HH use Spring 1660

See last page for diagram of lifter for subclasses B1099-CS-1-HH, F1099-CS-1-HH and S1099-CS-1-HH.

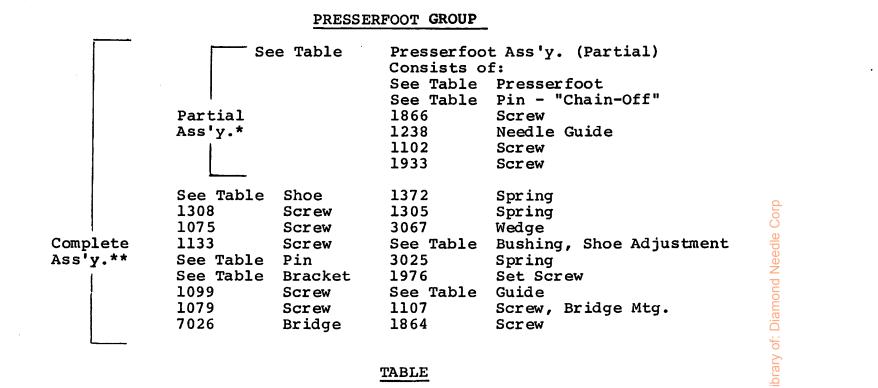


REGULATING GROUP

Regulating Fork Push Rod Ass'y. 1186 5012 1023 1024 Pin Spring 1025 Pin Regulator Ass'y. - Complete 1109 Screw, Regulator 5177 Dial & Ratchet Ass'y. Dial Plate Ass'y. 5173 5178 1223 Shoe Screw 1222 1977 Screw

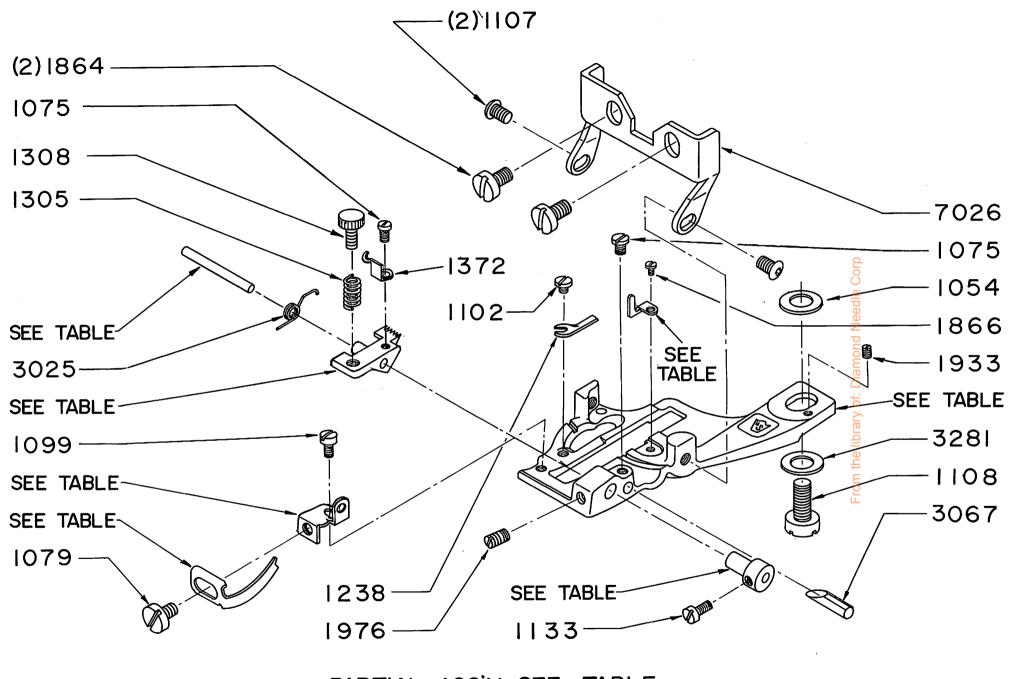


REGULATING GROUP



TABLE

Model	Shoe	Shoe Ass'y.	Anchor	Shoe Pin	Bushing	Guide	Chain-Off Pin	Presserfoot	Partial $\stackrel{0}{=}$ C Ass'y.* \in A	
		<u></u>			Dubititity	Julac				
1099-С5-1-НН	2540	5215	3024-1	3294	7210	2606	1831	2373	8503 🖵	8603
В1099-СS-1- НН	2541	5216	3024-1	3294	7210	2606	1831	2373	8503	8616
F1099-CS-1-HH	2540	5215	3024-1	3294	7210	2606	1831	2373	8503	8603
S1099-CS-1-HH	2541	5216	3024-1	3294	7210	2606	1831	2373	8503	8616
1099-PBW-1	2521-1	L 5078-1	3024-1	3294	7210	2606	1831	2359	8509	8618
1099-T	2511	5074-1	Fitted 1418-B	3294	7210		2900	2358	8508	8619
1099-T-1	2521	5078	3024-1	3294	7210	2606	2900	2359	8509	8620
1099-WB	2510	5064	Bracket 1242	1237	3068-1	2606	2900	2352	8502	8621
1099-WB-1	2517	5077	3024	3294	3068-1	2606	2900	2350	8500	8617



PARTIAL ASS'Y SEE TABLE COMPLETE ASS'Y SEE TABLE PRESSERFOOT GROUP

FRONT PLATE GROUP

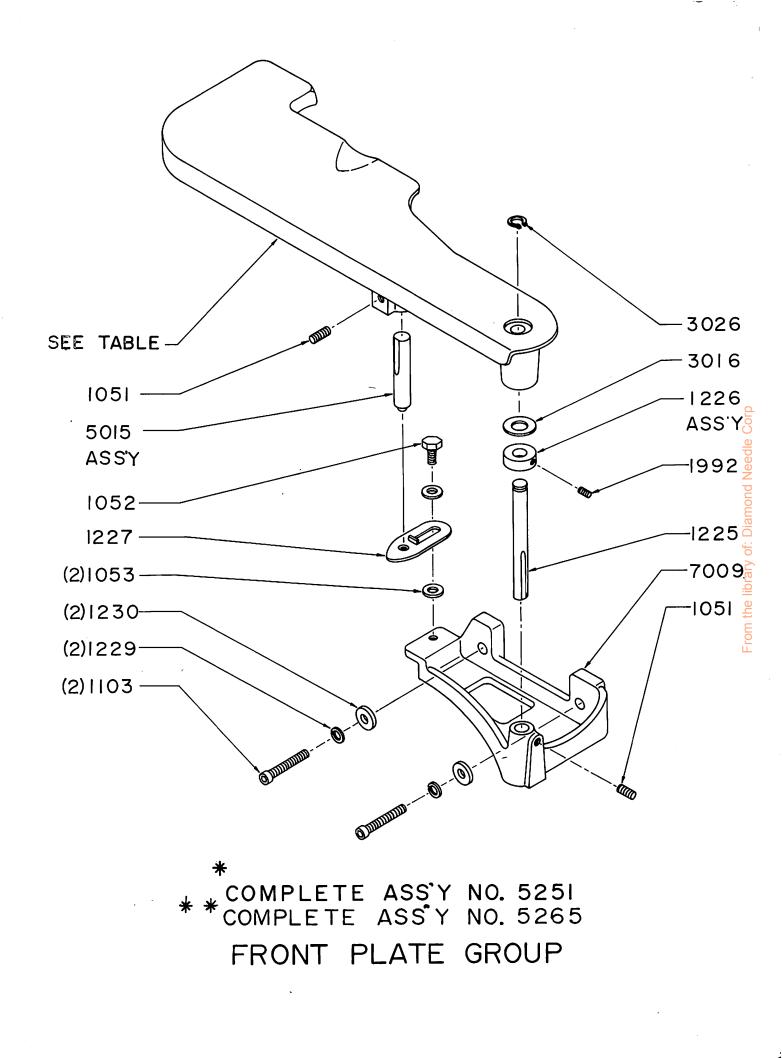
See Table	Swing Plate	1225	Pivot Pin
1051	Screw	3026	Retaining Ring
5015	Stop Pin Ass'y.	7009***	Support Bracket
1227	Stop Plate	1103	Screw
1052	Screw	1230	Washer, Flat
1053	Washer	1229	Washer, Lock
1051	Set Screw	1226	Collar Ass'y.
3016	Spring Washer		1992 Set Screw

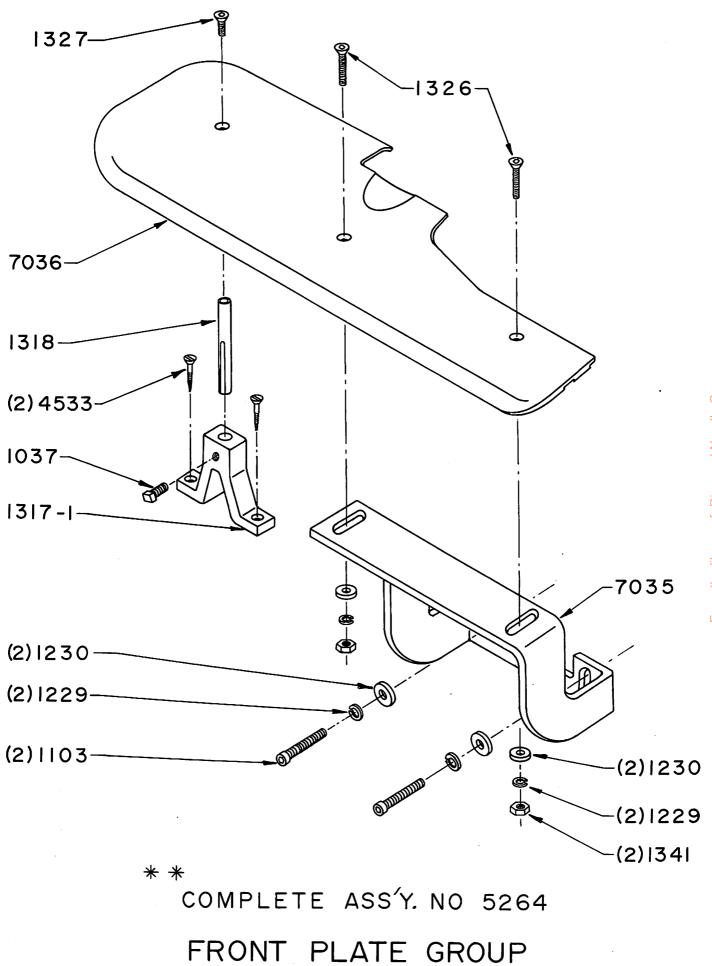
TABLE

		Swing		Stationary	
Model	Swing Plate	Plate Ass'y.	Stationary Plate	Plate Ass'y.	
1099CS-1-HH	7006	*5251			
***B1099-CS-1-HH	7006	*5251			
F1099-CS-1-HH			7036	5264	
S1099-CS-1-HH					
1099-PBW-1					
1099-T	7037	**5265			
1099-T-1	7006	*5251			
1099-WB	7037	**5265			
1099-WB-1	7037	**5265			

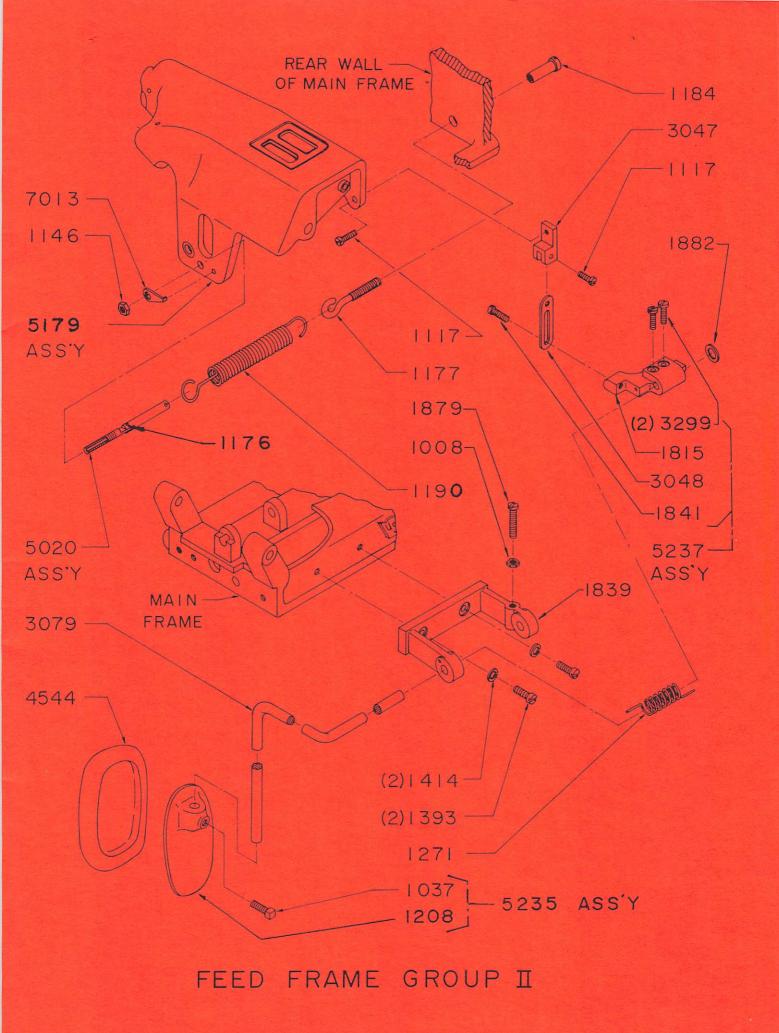
***Board under machine 7200 Support Bracket 7060

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From the library of: Diamond Needle Corp



A Machine is Only as Good as its NEEDLE!

Don't Take Chances-Avoid Trouble

Top-quality sewing demands top-quality machines equipped with top-quality needles to achieve perfect results.

Peak efficiency in today's high-speed sewing of synthetic and wash and wear fabrics is accomplished only with needles of superior quality and performance.

Imitations or substitutes are a costly compromise. Pennies saved on inferior needles only prove to be expensive dollars in the long run.

U. S. Blind Stitch needles are made in the United States to U. S. specifications of the finest materials and workmanship available.

The quality of U. S. Needles is, in fact, a matter of world-wide recognition and cannot be duplicated. The confidence of our customers in U. S. needles is the knowledge that quality is and always has been foremost in our products.

For durability and freedom from breakage, U. S. Needles are unequalled. Their uniform construction, carefully controlled finish and curvature assure efficient, economical stitching.

BE SURE TO USE ONLY GENUINE U. S. NEEDLES *Look for this Label* on all parts The same precision construction and working perfection exists in all U. S. Machine Parts.

BE SURE TO GET U. S. - ACCEPT NO SUBSTITUTE