

DELUXE STITCHER

C O M P A N Y I N C .

Head Serial Number : _____

Date Purchased : _____

Where Installed: _____

(make/model of machine)

DB75 & DB75V

OPERATION AND MAINTENANCE MANUAL

DB75HD231/2.....Stitcher Head....23 Wire

DB75HD251/2.....Stitcher Head.....25 Wire

DB75HD20241/2..Stitcher Head..20x24 Wire

DB75VHD231/2...Stitcher Head...23 Wire

DB75VHD251/2....Stitcher Head.....25 Wire

DB75VHD20241/2..Stitcher Head..20x24 Wire

Before using this Stitcher Head, all operators must study this manual and follow the safety warnings and instructions. Keep these instructions with the Stitcher Head for future reference. If you have any questions, contact your local DeLuxe Stitcher Representative or Distributor.

WARNING!

DB75/75V Heads

Machine operators and others in the work area should always wear safety glasses to prevent serious eye injury from fasteners and flying debris when loading, operating, or unloading the stitcher machine.

Do not operate this stitcher head without all stitcher machine guards in place. Do not modify the guards in any way. Always disconnect the power supply before removing any guards for servicing.

Never operate the machine with wire feeding through the head unless there is stock above the clinchers, otherwise serious damage may result.

Always turn power off when making adjustments. Always disconnect the power cord before any disassembly work.

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Introduction

The DeLuxe Stitcher Muller Replacement Heads, along with a complete line of fully interchangeable replacement parts are available for current Muller-Martini users. Anywhere the HK75 and HK75V are utilized the DeLuxe Stitcher DB75HD, and DB75VHD can be used.

The DB75HD has a stitching capacity from 2 sheets up to 5mm(.197") and will accommodate wire sizes from 20-28 gauge round as well as 21 x 25 and 20 x 24 flat. The perfect replacement head for Muller-Martini stitchers 221, 321 and others, the DB75HD is completely interchangeable.

The DB75VHD has a stitching capacity from 2 sheets up to 6mm(.236) and will accommodate wire sizes from 20-28 gauge round as well as 21 x 25 and 20 x 24 flat. This replacement head for Muller-Martini stitchers 221, 321 and the like, is also completely interchangeable.

Each of these heads weighs 7 lbs (3.2 kgs.) independently. The packaged shipping weight including the Wire Guide Spring, Clincher Plate assembly and user manuals is 10 lbs. (4.5 kgs.).

Always use a high quality Galvanized Wire so the plating does not peel. Excessive peeling will cause clogging and the premature wear of many components. Use the following chart as a guide for wire gauge usage.

2 sheets - 1/8" (3mm)	25 gauge
1/8" (3mm) - 3/16" (5mm)	23 or 24 gauge
3/16" (5mm) - 7/32" (6mm)	20 gauge round or 20x24 flat

Specifications

Weight

Shipping Weight 10 lbs (4.5 kg)

Stitcher Head

DB75HD 7 lbs (3.2 kg)

DB75VHD 7 lbs (3.2 kg)

Physical Dimensions

Height 8.5" (22 cm)

Width 3.5" (9 cm)

Depth 4.25" (11 cm)

Stitching Capacity

DB75HD Two Sheets to 13/64" (5 mm)*

DB75VHD Two Sheets to 1/4" (6 mm)*

Wire Types

. 20 through 28 round or
21 x 25 and 20 x 24 flat

Stitcher Machine Compatibility

. Minuteman

. Fox

. Bravo

. Presto

* Actual stitching thickness capacity depends on the type of stock being stitched and the capacity of the collator being used.

Installation

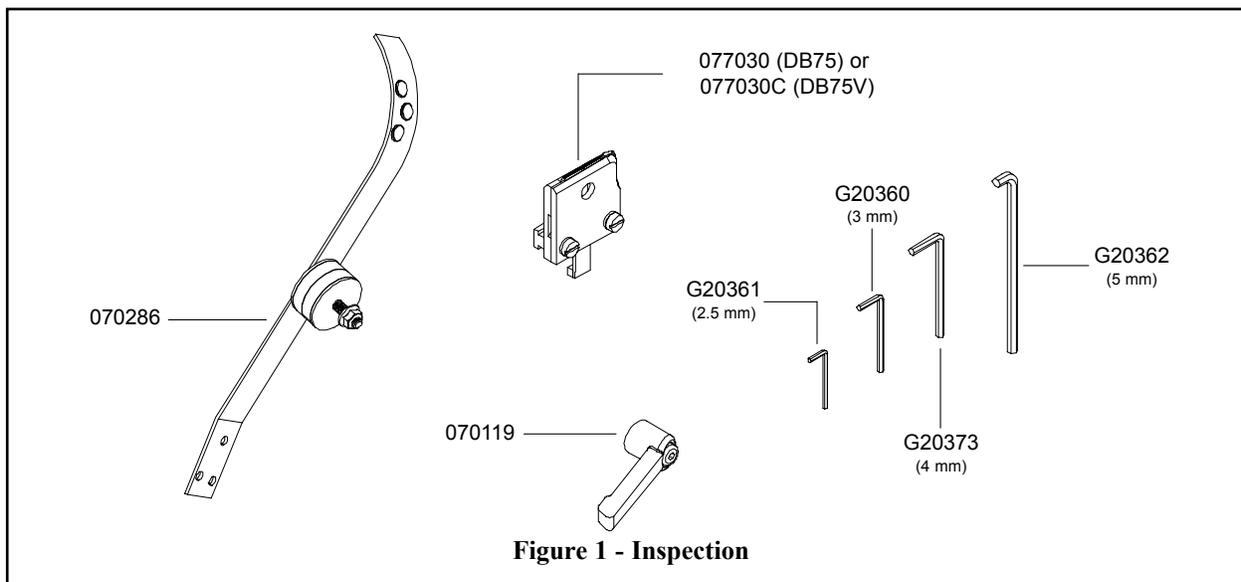
Pre-Inspection

Carefully inspect the condition of the shipping container before unpacking your replacement Head for Muller-Martini Stitchers. If the container is broken or damaged and there is evidence that the stitcher head may be damaged, immediately notify the carrier who delivered the head and the DeLuxe Stitcher Graphic Arts Representative from whom the Head was purchased.

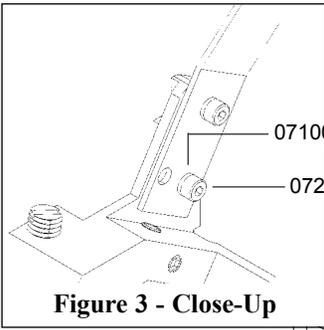
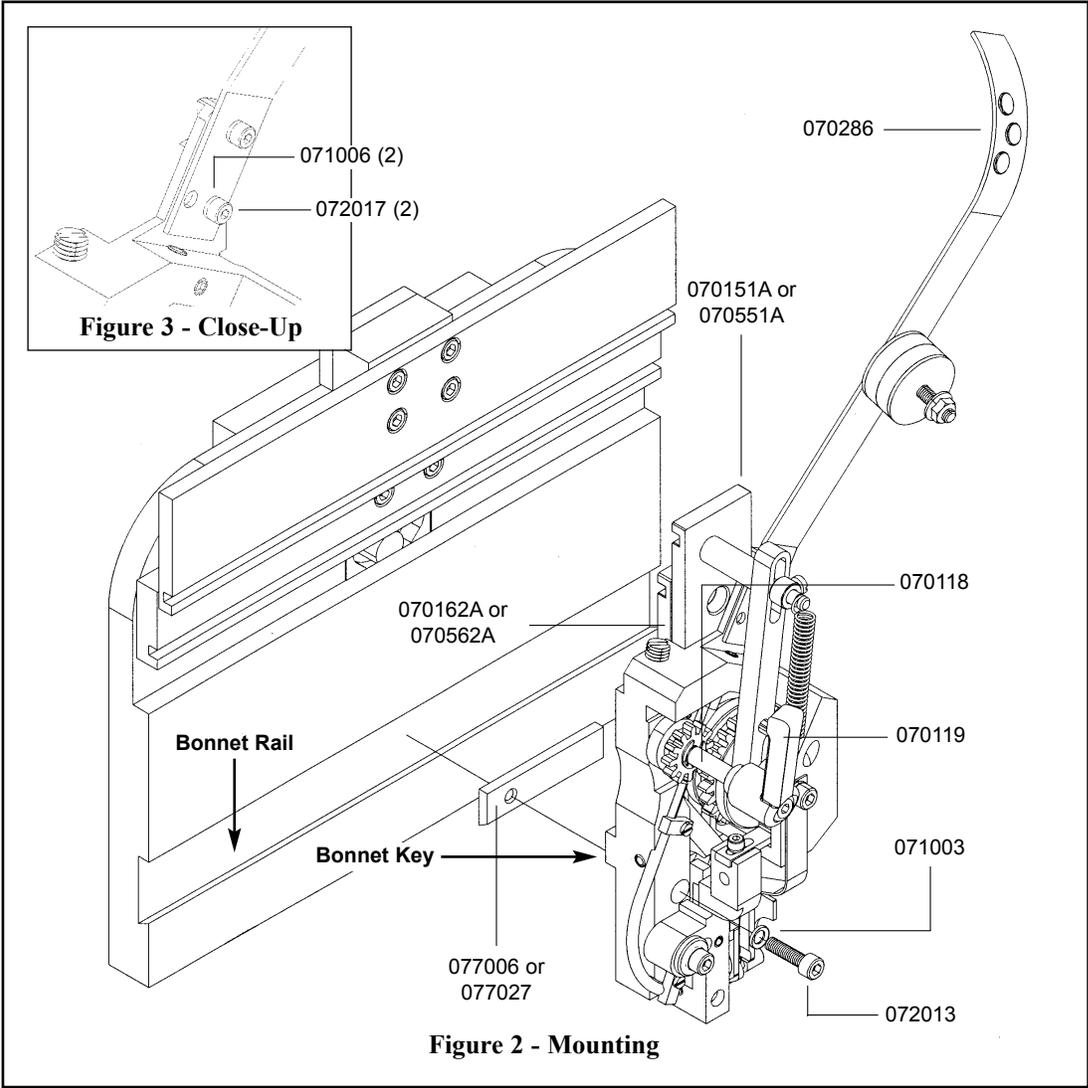
Inspection (Figure 1)

As you carefully unpack the replacement head, check to make sure all components were delivered and are in good working order. Use **Figure 1** in this manual for reference to the following pieces:

- Replacement Head for Muller Martini Stitchers: DB75HD or DB75VHD
- Wire Guide Spring (070286)
- Clincher Plate Assembly (077030 or 077030C)
- Feed Release Handle (070119)
- 2.5, 3, 4 and 5 mm Hex Key Wrenches (G20361, G20360, G20373 and G20362)
- Stitch samples

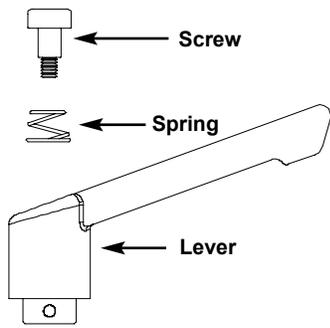


Mounting & Assembly (Figure 2)



CAUTION
Always disconnect the power before assembling or making adjustments to your stitcher machine.

Completely loosen the Screw (072013) which secures the Mounting Strap (077006 or 077027) to the back of the Replacement Head. Do not remove the Screw from the Bonnet, as it will make the mounting process easier. Use **Figure 2** for part number reference. Slide the Mounting Strap into the rail of your Muller-Martini Stitcher Machine. Line up the groove in the Bender Slide Assembly (070162A or 070562A) and the groove in the Driver Slide Assembly (070151A or 070551A) with the grooves in the rails of the Stitcher. Slide the head downward until the key in the Bonnet slips into the groove in the Bonnet Rail just above the Mounting Strap. Secure the Head to the Mounting Strap by tightening the Screw with the supplied 5 mm Wrench (G20362).



Secure the Feed Release Handle (070119) to the Replacement Head by slipping the Lever over the Feed Release Cam Assembly (070118) and securing it with the Screw included with the Lever, inserted through the Spring, supplied with your Head. Make sure the Lever is angled toward the outside of the Head when you the Screw is tightened.

Remove the two (2) Screws (072017) and the two (2) Lock Washers (071006) from the Replacement Head and line the holes in the Wire Guide Spring (070286) up with the holes in the Stitcher Head. Secure the Wire Guide Spring with these same Screws and Lock Washers.

Depending on the position of the Wire Spool in conjunction with the Stitcher Head, secure the Spring in a vertical position or on a slight angle. Refer to **Figure 3** for part number reference.

Secure and align the Clincher Plate Assembly (077030) to the Stitcher Machine by first loosening the two (2) Screws (072012) in the supplied Clincher Plate Assembly until the Clincher Mounting Bar (077016) is free. Slide the Mounting Bar into the rail of the Stitcher Machine and align the Clincher Slide (077014 or 077029C) in the corresponding rail on the Stitcher. Secure the Clincher Plate Assembly to the Mounting Bar by tightening the same two (2) Screws

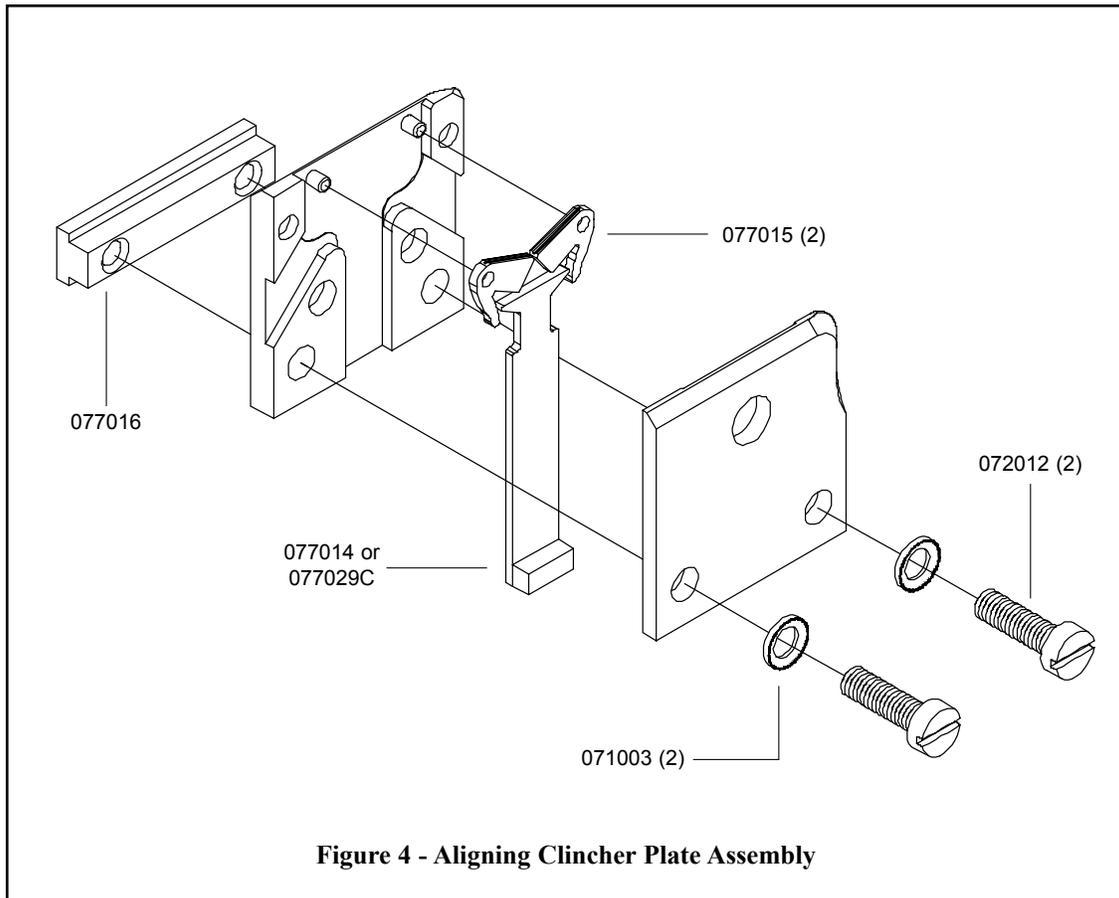


Figure 4 - Aligning Clincher Plate Assembly

previously loosened. Before completely tightening the Screws, align the Clincher Points (077015), within the Clincher Plate Assembly, directly under the Driver (070152-25, 070152-23 or 070152-20 and 070552-25, 070552-23 or 070552-20). Refer to **Figure 4** for part number reference.

Jog the Stitcher machine to make sure the Head has been properly mounted to the Stitcher machine. Once the Machine has been jogged through several cycles, it is safe to test the Head at full speed.

Operation

Wire Threading (Figure 5)

Before the Stitcher Machine is turned on, release the Wire Holder Assembly (070135A), secured by the Wire Holder Retaining Spring (070183 or 070583) by loosening the Screw (072004) on the front of the Head. Thread the wire from the Spool under the studs on the Wire Guide Spring (070286), between the Wire Oiler Felts (G20293) on the Spring and into the Wire Nozzle (070181). Turn the Adjustable Lever (070119) clockwise so that the Small Feed Gear (070112) is disengaged from the Large Feed Gear (070510A).

Continue to push wire through the Replacement Head until the end of the wire passes the Small and Large Feed Gears, enters the Wire Tube (070244) and begins to come out the bottom of the Wire Tube. Then using a small screw driver, wedge the wire up until it enters the Fixed Wire Cutter (070600C). Engage the Small and Large Feed Gears by turning the Adjustable Lever counter-clockwise.

Note: It will take two full cycles for the proper length staple to come out of the Head.

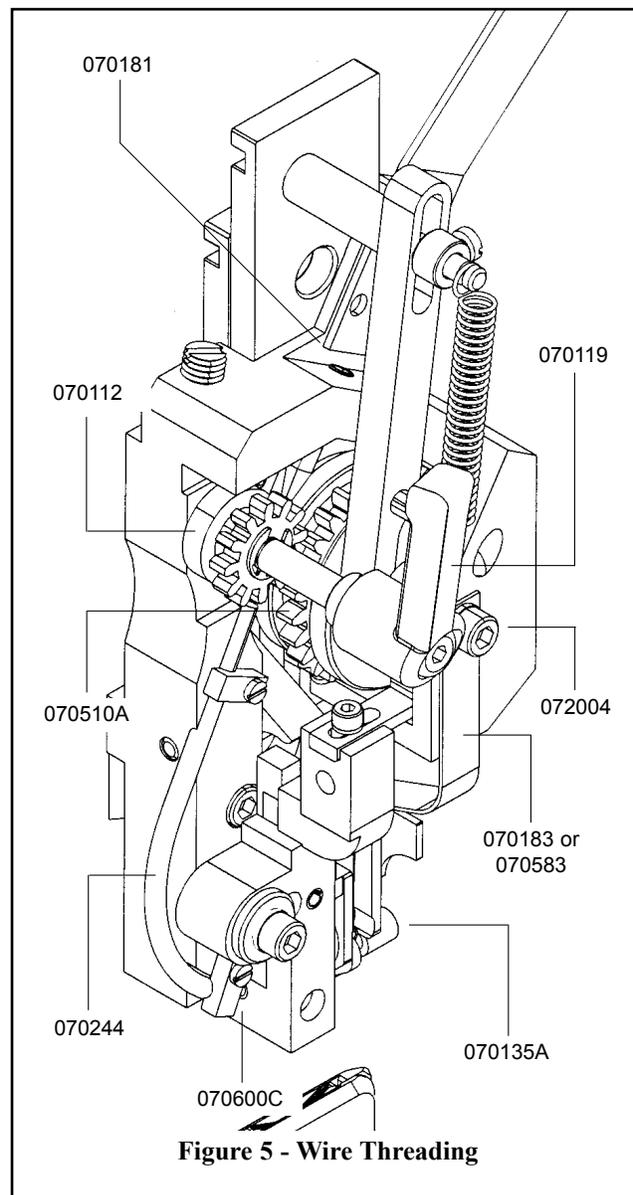


Figure 5 - Wire Threading

Wire Straightening (Figure 6)

Make sure the Wire Holder Assembly has been removed before tripping the Machine to avoid jams and the chipping of parts.

⚠ WARNING

Once the Replacement Head has been threaded, jog the Stitcher Machine under power and watch the feeding of the Wire out of the Cutter Box Assembly (070197A or 070597A) to the right of the Moving Cutter (070145C). Notice the direction the Wire is moving. For the Stitcher Head to work at its optimum capacity, the wire should be traveling in a straight horizontal direction when exiting the Head.

Top-to-Bottom Adjustment

Look to the right of the Cutter Box Assembly, as the Wire being fed through the Head. If the Wire is feeding in an upward or downward direction, the Wire Straightener Assembly (070206A) will have to be adjusted. Loosen the Screw (072002) securing the Wire Straightener Assembly to the Cutter Box, but do not remove it. If the wire is feeding in an upward direction, slide the Wire Straightener Assembly down slightly to compensate. Conversely, if the wire is feeding in a downward direction, slide the Assembly up slightly. Make sure

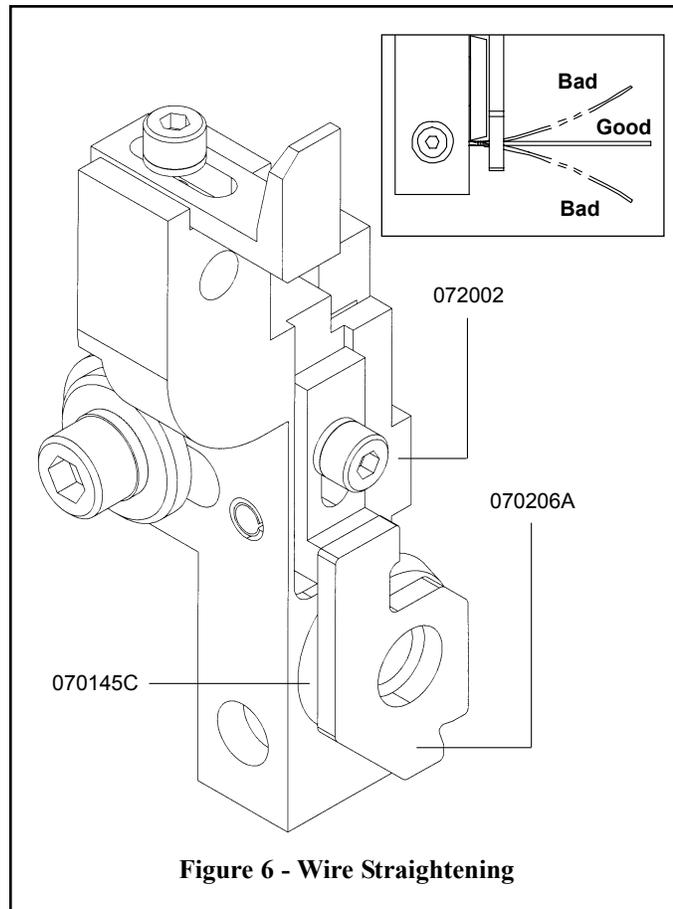


Figure 6 - Wire Straightening

to tighten the Screw after every adjustment to see accurate results. Allow enough Wire to be fed through the Head so that an accurate assessment can be made. Make sure the ends of each cut piece of Wire is free of burrs, which would negatively affect the driving and clinching of the formed Wire.

Front-to-Back Adjustment

Observe the Wire feeding through the Replacement Head, from the side and make sure that the Wire is traveling straight towards you. If it is not, the front-to-back alignment of the Wire has to be adjusted. This adjustment is a much finer adjustment than the Top-to-Bottom adjustment on a Muller Replacement Head, but if it is not correct it will negatively affect the resulting stitch. Loosen, but do not remove, the Screw securing the Wire Straightener Assembly to the Cutter Box. Move the Assembly forward to shift the feeding wire forward slightly. Move the Assembly back

slightly to shift the feeding wire backward slightly. Allow enough Wire to be fed through the Head to make an accurate assessment. Tighten the Screw (072002) when the correct Cutter Box Assembly (070197A) position is determined. Again, make sure the ends of each cut piece of Wire is free of burrs, which would negatively affect the driving and clinching of the formed Wire.

Adjusting the Length of the Right Leg (Figure 7)

Always disconnect the power before assembling or making adjustments to your stitcher machine.

CAUTION

Once the Replacement Head has been threaded and the wire straightness has been obtained, it is time to begin stitching. Replace the Wire Holder Assembly (070135A) and secure it to the Head with the Wire Holder Retaining Spring (070183 or 070583). Make sure to tighten the Screw (072004) at the top of the Spring afterwards.

Jog the Stitcher Machine once to load a piece of wire into the Wire Holder Assembly. Even though each Replacement Head has been tested at the factory, the wire draw adjusted and the legs equalized, the following are directions to make these adjustments if necessary.

Lengthening the Stitch's Right Leg

If after a few stitches, the length of the stitch's right leg is too short or too long compared to that of the left, you will need to make adjustments. It is difficult to adjust the length of the left leg alone, so adjustments are always made to the right leg. To compensate for the length of the left leg, adjust the stitch's right leg to match the left and then make adjustments for the overall length of the stitch or wire draw.

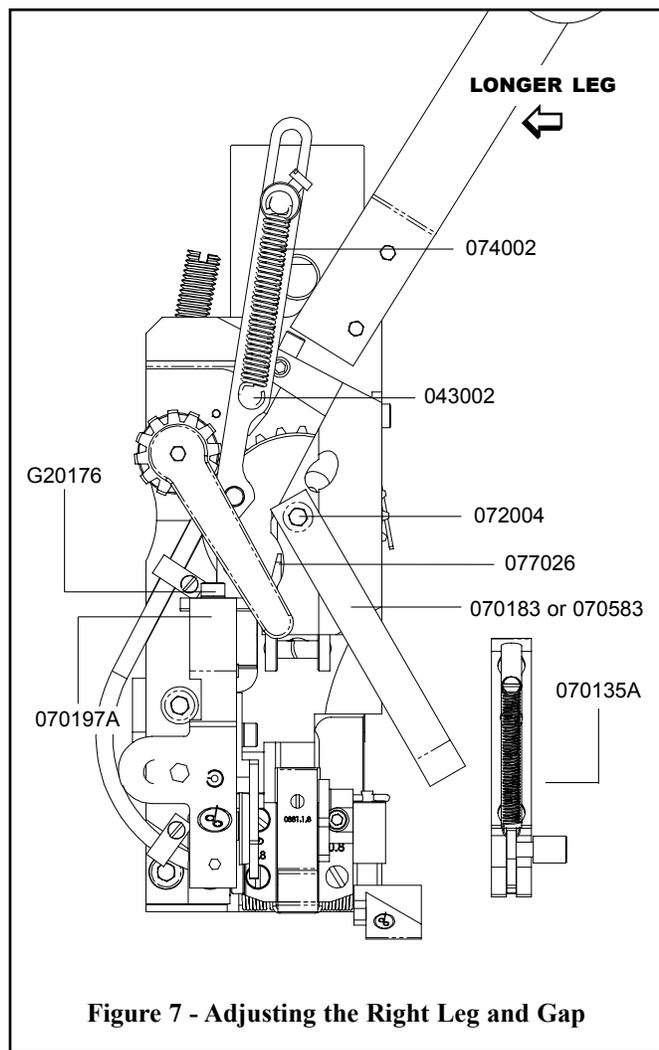
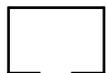


Figure 7 - Adjusting the Right Leg and Gap

Power off the Stitcher Machine and release the Extension Spring (074002) from the Feed Gear Operating Lever Pin (043002) on the Replacement Head. Loosen, but do not remove, the Screw (G20176) securing the Feed Gear Stop (077026) to the top of the Cutter Box Assembly. If the right leg of the stitch is too short, slide the Feed Gear Stop to the left slightly, to lengthen the right leg. Tighten the Screw (G20176) at this point. Replace the Extension Spring and power on the Stitcher Machine. Jog the Stitcher to observe the length of the stitch's right leg after the initial adjustment. Continue to make adjustments and re-test the Head until the length of the stitch's right leg is satisfactory.

Shortening the Stitch's Right Leg

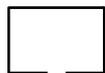
If the right leg of the stitch is too long, power off the Stitcher machine. Release the Extension Spring (074002) from the Feed Gear Operating Lever Pin (043002). Disengage the Small Feed Gear and the Large Feed Gear by turning the Feed Release Handle (070119). Push the Feed Gear Operating Lever (077001) down which will move the pin on the Feed Gear Pinion Assembly out of the way of the Feed Gear Stop (077026). Loosen, but do not remove the Screw (G20176) securing the Feed Gear Stop (077026) to the Cutter Box Assembly (070197A) and slide the Stop slightly to the right. Tighten the Screw at this point to secure this position. Replace the Extension Spring. Trip the Stitcher to observe the length of the stitch's right leg after the initial adjustment. Continue to make adjustments and re-test the Head until the length of the stitch's right leg is satisfactory. Tighten the Screw at this point.



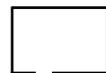
Good



Good



Good



Shorten Right Leg



Lengthen Right Leg

Always disconnect the power before assembling or making adjustments to your stitcher machine.

⚠ CAUTION

Adjusting the Wire Draw (Figure 8)

Increasing the Overall Length of the Stitch (Adjusting the Stitch Gap)

To change the overall length of the stitch, or more specifically to change the gap between the legs of the stitch, the position of the Cutter Box Assembly must be adjusted. To increase the overall length of the stitch's legs, first power off the Stitcher Machine. Release the Extension Spring from the Feed Gear Operating Lever Pin and loosen the Screw (072006) securing the Cutter Box to the Stitcher

Head. Slide the Cutter Box to the left and tighten the Screw in this position. Attach the Extension Spring and power on the Stitcher Machine. Trip the Stitcher to observe the overall length of the each stitch after the initial adjustment. Continue to make adjustments and re-test the Head until the overall length of Wire drawn is satisfactory.



Good



**Increase Gap
Move Cutter Box Right**



**Decrease Gap
Move Cutter Box Left**

Shortening the Overall Length

To decrease the overall length of the stitch’s legs or decrease the size of the gap first power off the Stitcher Machine. Release the Extension Spring (074002) from the Feed Gear Operating Lever Pin (043002). (See **Figure 7**). Disengage the Small Feed Gear and the Large Feed Gear by turning the Feed Release Handle (070119). Push the Feed Gear Operating Lever (077001) down which will move the pin on the Feed Gear Pinion Assembly out of the way of the Feed Gear Stop (077026). Loosen, but do not remove, the Screw (072006) securing the Cutter Box Assembly (070197A) to the Stitcher Head. (See **Figure 8**). Slide the Cutter Box to the right and tighten the Screw in this position. Complete the Stitcher’s cycle and re-attach the Extension Spring.

Power on and jog the Stitcher to observe the overall length of the each stitch after the initial adjustment. Continue to make adjustments and re-test the Head until the overall length of Wire drawn is satisfactory.

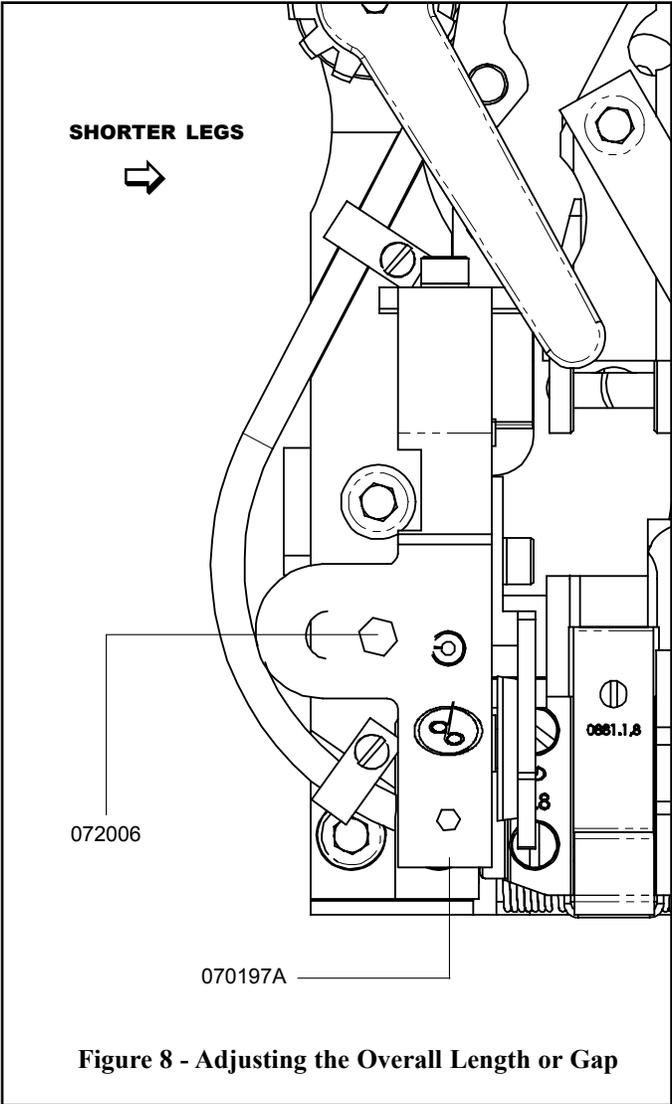


Figure 8 - Adjusting the Overall Length or Gap

Adjusting the Clincher Points (Figure 9)

If the clinch on the staple is not tight enough, the Clincher Points (077015) have to be raised. Conversely, if the clinch is too tight, the Clincher Points have to be lowered. This adjustment is made on the Stitcher Machine and so cannot be completely explained in this manual as each individual Machine is different.

The final position of the Clincher Points should be flush (or slightly above flush) with the Clincher Plates (077019 and 077018). The best way to see the position of the Clincher Points is to jog the Machine where the Muller Replacement Head is mounted. When the Driver (070152-23, 070152-25, 070152-20, 070552-20, 070552-25 or 070552-23) is at the lowest position of its stroke, the Clincher Points are at their highest position. Jog the Stitcher Machine until the Stitcher Head just past this point to reveal the Clincher Points' position. To be sure that the Points are at the best position possible, run a few test stitches and compare the clinched staples.

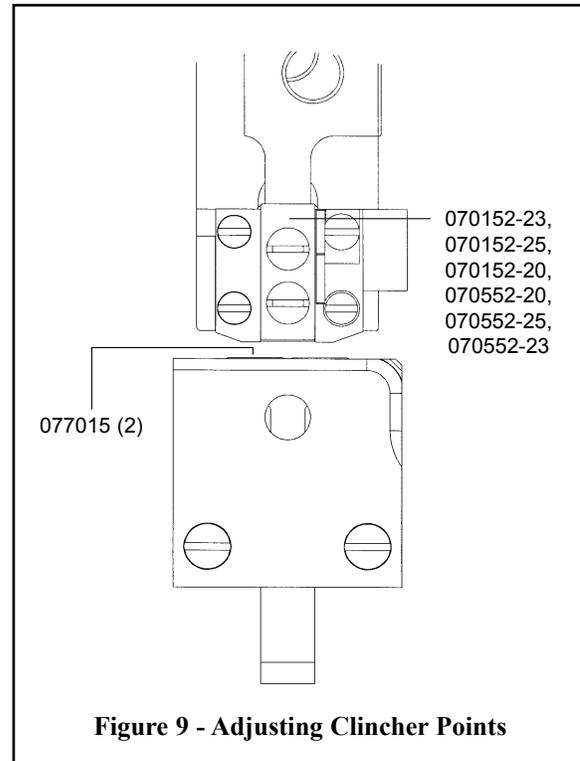


Figure 9 - Adjusting Clincher Points

Always disconnect the power before assembling or making adjustments to your stitcher machine.

CAUTION

Maintenance

Your DB75 and DB75V Stitcher Heads have been fully lubricated at the factory, but to insure continuous superior operation and a longer life of the heads, the operator should be sure that the heads are lubricated regularly and carefully maintained. The operator should periodically inspect all moving parts for signs of wear and when required, replace the worn parts. Some Drivers and the Wire Cutters are subject to high wear and so have been designed to be reversible to provide additional surfaces. If after continuous usage, the original driving or cutting surfaces of any of these parts show signs of wear, their position in the head can be changed, thereby providing a new surface and lengthen the life of the part. For a complete list of wear and replacement parts for your DB75 and DB75V style Stitcher Heads, refer to page 52 in the back of this manual.

Lubrication (Figure 10)

Use any standard S.A.E. #10 oil for lubricating the heads. Heads that are in constant operation should be lubricated daily. Heads that are operated periodically should be lubricated every five pound wire spool change or every month, whichever comes first. Usually, only a drop of oil is required at each lubrication point. Care must be taken that those parts of the head that contact the work to be stitched are free of oil. Lubricate regularly instead of excessively. Excessive oiling will result in work becoming spotted with oil. Use one drop of oil in the following lubrication points:

- at the top of the Bonnet (070000 or 070500) on either side of the Driver Slide (070551A or 070151A) and Bender Slide (070162A or 070562A).
- on the ledge of the Bender Slide Insert (077012).
- the oil hole in the front of the Bonnet (070000 or 070500) - this lubricates the Clutch Bearing located inside the Feed Gears
- in between the Wire Holder Retaining Spring (070183 or 070583) and the Wire Holder (070135A).
- on the Hook Pivot Pin (073009) in the Wire Holder Assembly (070135A).
- on the Cutter Operating Lever (070230) behind the Cutter Box Assembly (070197A or 070597A).
- on each of the Clincher Point Pivot Pins (077018-2) on the Clincher Back Plate (077018)

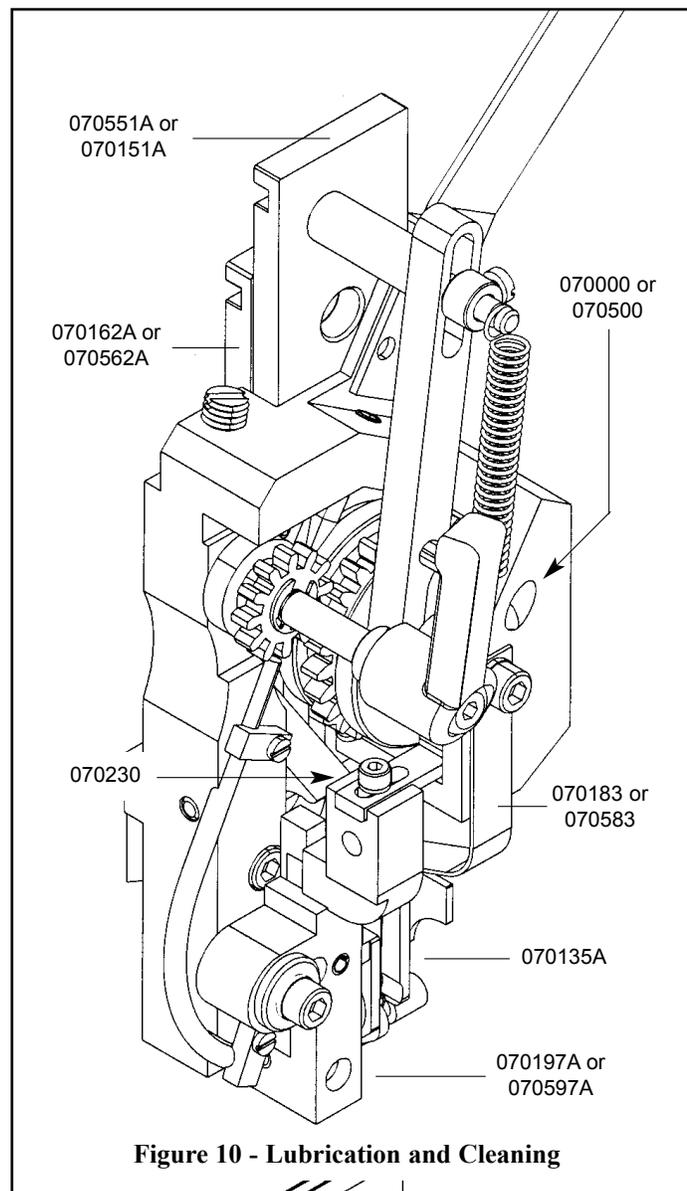


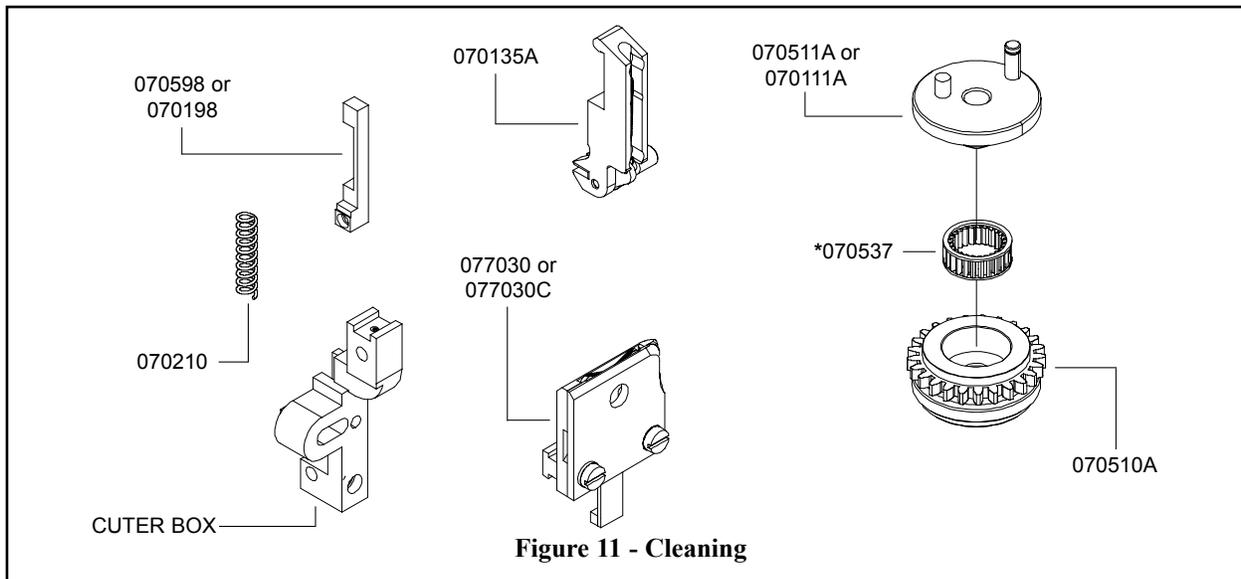
Figure 10 - Lubrication and Cleaning

Cleaning (Figure 11)

In addition to proper lubrication, routine cleaning is important for the maintenance of your DB75 and DB75V Heads. The entire Head should be torn down and rebuilt at least every three months and the following areas should be cleaned once every month:

- **Feed Gear Assembly:** remove the Extension Spring (074002), the Set Collar (077007) and the E-Ring (073001) to release the Feed Gear Operating Lever Assembly (077001). Slide the Driver Slide Assembly (070551A or 070151A) and the Bender Slide Assembly (070162A or 070562A) out the Back of the Bonnet and loosen the Friction Strip (070186). Remove the Feed Gear Assembly and wash in an oil-dissolving solvent, dry and relubricate with any standard S.A.E. #10 oil.
- **Wire Holder (070135A):** release the Wire Holder from the Retaining Spring and wash in an oil-dissolving solvent, dry and return the Holder to the Head. Grease the front surface of the Wire Holder and Hook Spring prior to installation.
- **Cutter Box Assembly:** loosen and remove the screw securing the Assembly to the Head, remove the Cutter Operating Slide (070598 or 070198) and Spring (070210) and wash all three pieces in an oil-dissolving solvent. Dry the pieces thoroughly, grease the Spring and re-assemble the Cutter Box Assembly.
- **Anywhere that dust, oil or pieces of wire and paper have built up** - for example: in the Clincher Plate and around the Clincher Points.

When rebuilding the DB75 and DB75V Heads, be careful to lubricate high friction areas with Red E-Lube Grease or other Lithium-based greases. Refer to the exploded drawings on **pages 28 - 47** for a detailed description of the areas that need to be greased and the amount of Grease to use.



* Do not apply grease to the Feed Clutch, rather use a S.A.E. #10 light weight oil for lubrication

Ordering Spare Parts

In time, you will need to replace some parts in your Muller Replacement Head. When this happens, first locate the needed part in one of the following diagrams. Then locate the DeLuxe Stitcher part number and contact your Graphic Arts Representative to order the part by the part number, description and quantity.

Always disconnect the power cord before any maintenance is done or adjustments are made to the Muller Replacement Head

CAUTION

Replacing Spare Parts

The following are some of the more common wear parts which will need to be removed and replaced in your DB75 or DB75V. Most replacements require the Stitcher Head to be removed from the Stitcher Machine and disassembled. These instructions will be given first, then a more specific description for replacing the individual wear parts will follow.

General Maintenance and Repair (Figure 12)

Cut the wire feeding to the Stitcher Head just below the Wire Spool. Disengage the Small Feed Gear (070112) from the Large Feed Gear (070510A) by turning the Feed Release Handle (070119). Pull the remaining wire upward through the Muller Replacement Head. Loosen and remove the

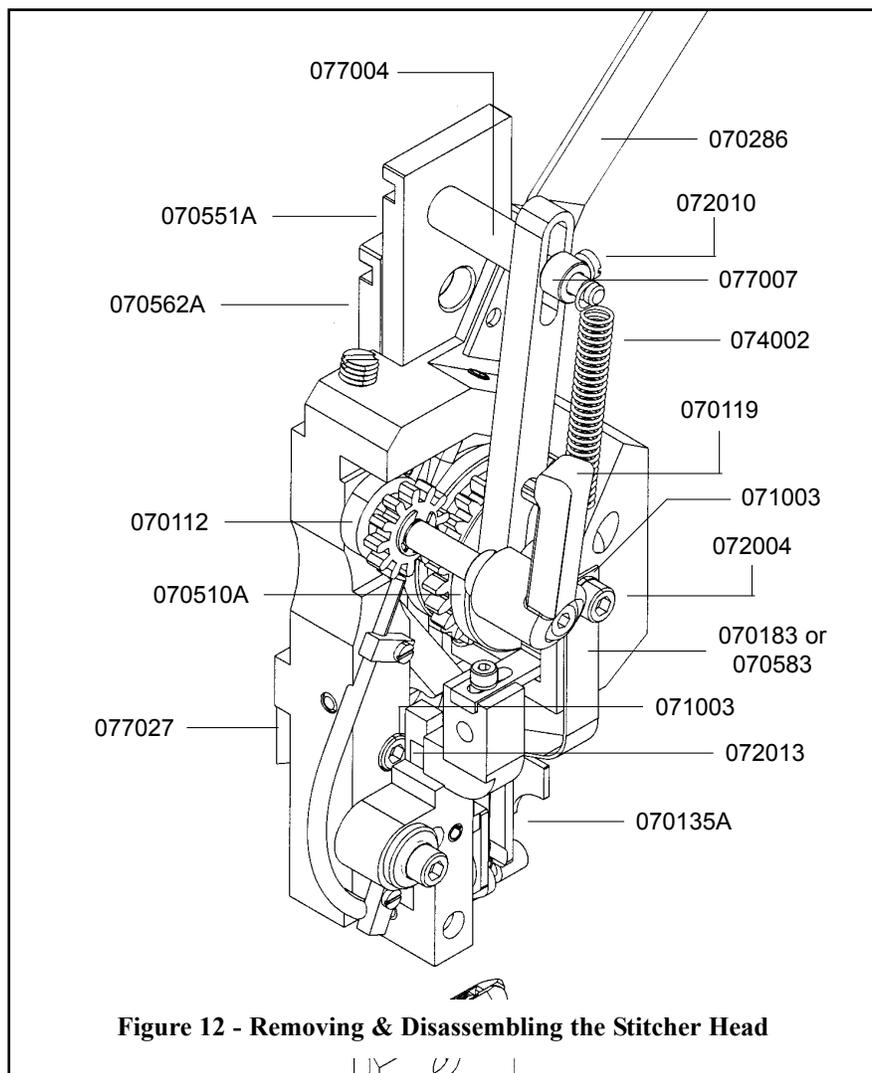


Figure 12 - Removing & Disassembling the Stitcher Head

Screw (072013) and Washer (071003) securing the Stitcher Head to the Mounting Strap (077027) and to the Stitcher Machine. Place the DB75 or DB75V on a clean, flat work area and remove the Wire Guide Spring (070286) by removing the two (2) Screws (072017) and two (2) Washers (071006) securing the Spring to the Head. Refer to **Figure 3** for part number reference.

Loosen and remove the Screw (072004) along with the Washer (071003), securing the Wire Holder Spring (070183 or 070583) to the Bonnet. Refer to **Figure 12** for part number reference. Remove the Spring from the Head and the Wire Holder Assembly (070135A) from under the Spring Assembly. Disengage the Spring (074002) from the Driver Slide Shaft (077004) and from the Feed Gear Operating Lever Pin (043002). Loosen the Screw (072010) securing the Set Collar (077007) and remove it from the Driver Slide Shaft as well. Once the E-Ring (073001) is removed from the Feed Gear Pinion Assembly (070511A or 070111A), the Feed Gear Operating Lever Assembly (077001) can be removed from the Stitcher Head. Refer to **Figure 13** for part number reference.

To remove the Cutter Box Assembly (070597A) from the DB75 or DB75V Head, loosen and remove the Screw (072006), the Ribbed Washer (071003) and the Plain Washer (071008) securing the Assembly to the Head. Similarly, loosen and remove the two (2) Screws (072005) and the two (2) Ribbed Lock Washers (071003) securing the Supporter Block (077021) to the Bonnet. **(DB75V only)** Remove the Driver Slide Assembly (070551A) and Bender Slide Assembly (070562A) from the Bonnet. And then slide the Driver Slide Assembly out from the Bender Slide Assembly. Refer to **Figure 12** for part number reference.

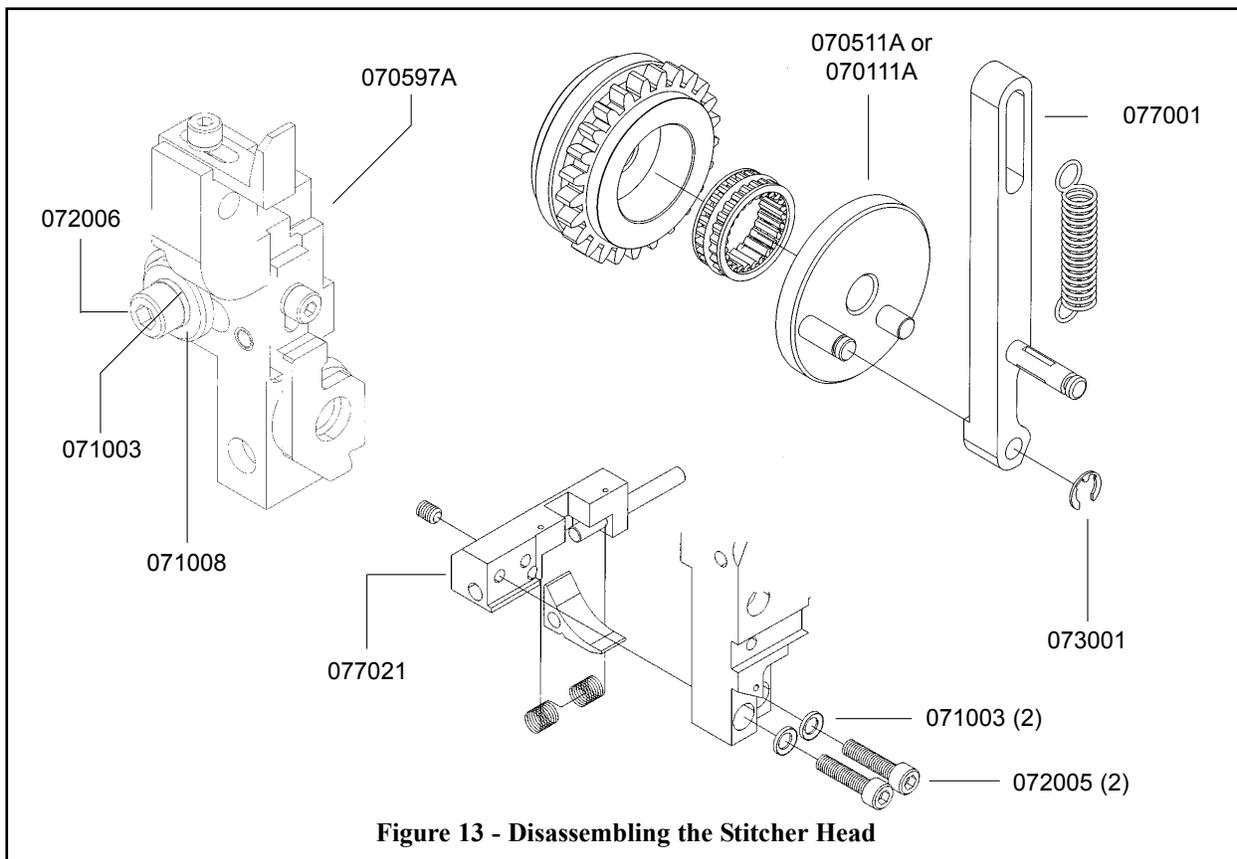


Figure 13 - Disassembling the Stitcher Head

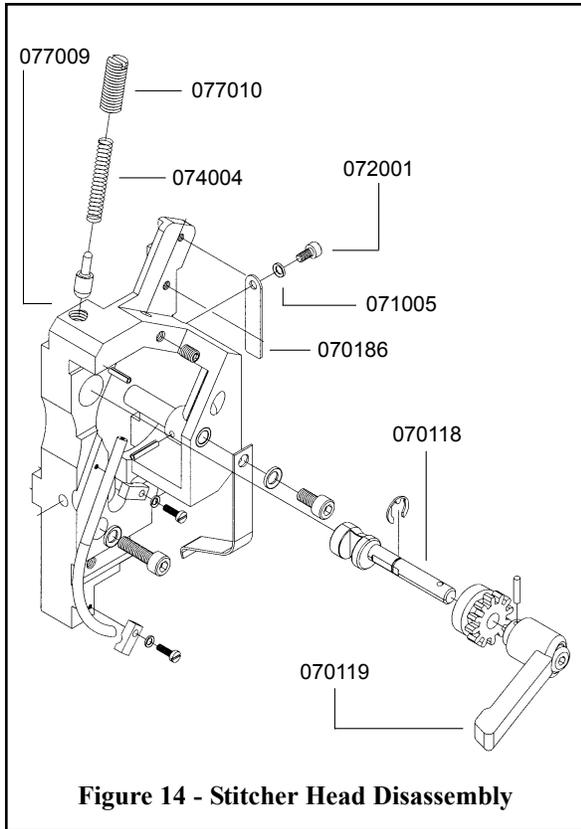


Figure 14 - Stitcher Head Disassembly

Loosen and remove the Screw (072001) and Ribbed Lock Washer (071005) securing the Friction Strip (070186) to the Bonnet and remove the Feed Gear Assembly (070510A, 070537 and 070511A or 070111A). Loosen and remove the Feed Cam Plunger Bushing (077010) and take with it the Compression Spring (074004) and Feed Cam Plunger (077009) to release the Feed Release Cam Assembly (070118) and Adjustable Lever (070119).

Removing and Replacing the Cutters (Figure 15)

If burrs appear on the ends of your cut wire or if the wire bends but does not cut, the Moving and or Fixed Cutter may need to be replaced. The position of the Moving Cutter (070145C) on the Cutter Operating Slide (070598 or 070198) can be rotated several times before the part has to be exchanged for new. Simply loosen the Moving Cutter Screw (072014) which has a **left-handed thread** and rotate the Moving Cutter until a fresh cutting edge is lined up with the Fixed Cutter (070600C). Tighten the Screw at this point to secure the position.

The Fixed Cutter can also be rotated when worn by loosening the Screw (G20229) and rotating the position of the Cutter within the Cutter Box (070597A). The Fixed Cutter has to be lined up again with the Moving Cutter before the Screw can be tightened. The Screw also should be treated with a Threadlocker before tightened down on a new or rotated Fixed Cutter. Insert the Cutter Operating Slide back into the Cutter Box and make sure there is free movement between the Cutter Box and the Cutter Operating Slide when both Cutters are as close as possible to each other. If there is free movement, tighten the Screw securing the Fixed Cutter. If the Cutter Operating Slide does not slide freely within the Cutter Box, move the Fixed Cutter back into the Cutter Box slightly until free movement is re-established and then tighten the Screw at this point.

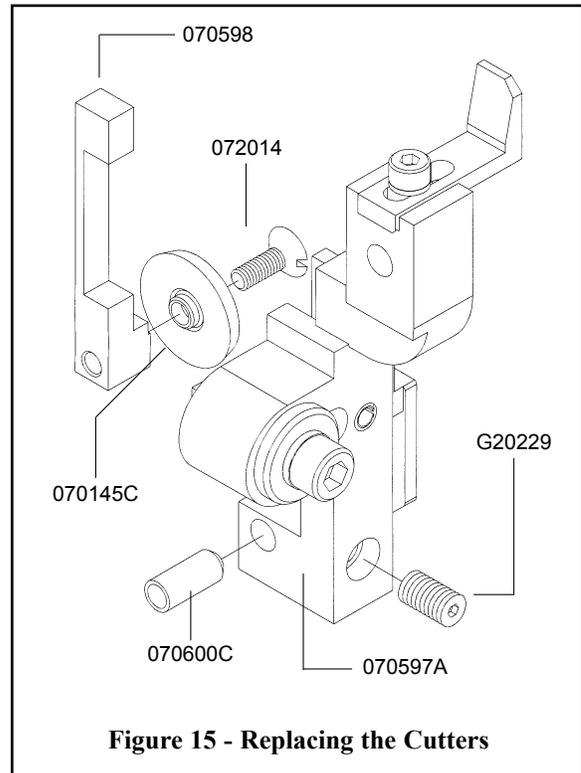


Figure 15 - Replacing the Cutters

Note: Too much gap between the Cutters will cause premature wear on both parts as well as severe burrs on the ends of each piece of cut wire.

Removing and Replacing the Cutter Operating Slide (Figure 16)

Once the Cutter Box Assembly has been removed from the Stitcher Head, the Cutter Operating Slide (070598 or 070198) can be replaced easily. Wire that is not cut, gets an incomplete cut or has large burrs on its ends may be the result of a worn Cutter Operating Slide. Remove the Operating Slide from the Cutter Box, being careful of the Cutter Box Spring (070210). If the Moving Cutter does not have to be replaced at this time, it will have to be removed from the Operating Slide. The Moving Cutter Screw (072014), securing the Cutter, has a **left-handed thread** and must be loosened clockwise. Replace the worn Cutter Operating Slide and secure the existing or new Cutter to the Slide with the Screw, turning counter-clockwise. Be sure to mount the Moving Cutter securely to the Operating Slide. A loose fit adversely affects the cut and drive of the wire. Roll the Cutter Box Spring in Red E-Lube Grease and insert it in the slot of the Cutter Box. Compress the Spring with the end of the Cutter Operating Slide as you insert it back into the Cutter Box. The assembly can be secured to the Head again with the Screw (072006), Ribbed Lock Washer (071003) and the plain Washer (071008).

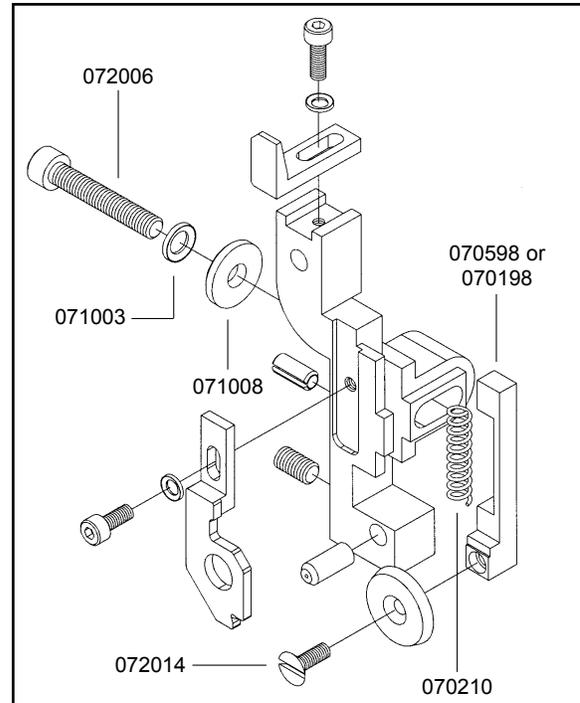


Figure 16 - Replacing the Cutter Operating Slide

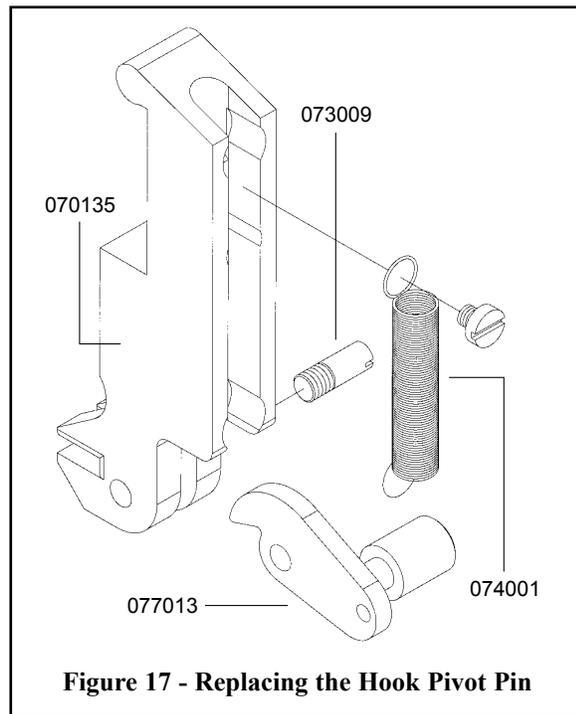


Figure 17 - Replacing the Hook Pivot Pin

Replacing the Hook Pivot Pin (Figure 17)

The Wire Holder Hook Assembly (077013) pivots on the Hook Pivot Pin (073009) with every stroke of the Stitcher Head. When the Pivot Pin is worn, wire may drop out of the Wire Holder Assembly (070135A) or the Hook may begin to block the entry of the wire as it is fed. Replacing the Hook Pivot Pin when worn will prevent this from happening. Release the Extension Spring (074001) from the Wire Holder Hook Assembly. Unscrew the worn Hook Pivot Pin, releasing the Hook Assembly and replace it with a new Pivot Pin. make sure the new Pin has a Nylon patch on its threads or treat it with a threadlocker. Re-attach the Extension Spring to the Wire Holder Hook Assembly and grease the outside of the Extension Spring with Red E-Lube Grease.

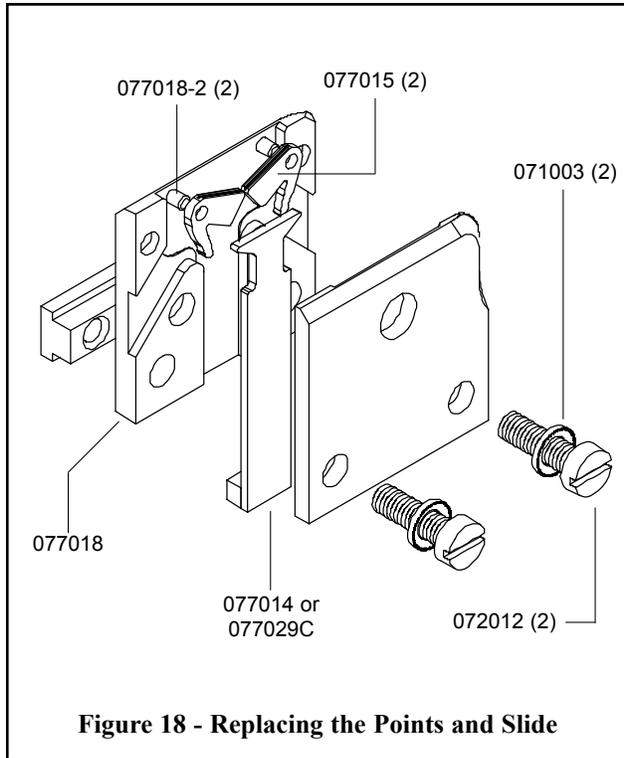


Figure 18 - Replacing the Points and Slide

The Wire Holder Assembly can now be replaced under the Wire Holder Spring.

Replacing the Clincher Points (Figure 18)

If the legs of the staple are not completely clinched even though the Clincher Points (077015) are properly adjusted or if the legs of the staple “wander” from stitch to stitch, the Clincher Points or Clincher Slide Assembly may need to be replaced. Loosen and remove the two (2) Screws (072012) and Ribbed Lock Washers (071003), securing the Clincher Front Plate (077019). Release the Clincher Slide Assembly (077014 or 077029C) which in turn unlocks the Clincher Points. Remove the worn Points from the Clincher Point Pivots (077018-2) and replace them. Insert the existing or new Clincher Slide Assembly within the Clincher Back Plate (077018), between the two Points. Secure the Clincher Front Plate to the rest of the assembly with the two Screws.

Replacing the Driver (Figure 19)

If the rib of the Driver (refer to **Figure 19** for part numbers) is worn or even chipped, the crown of the staples produced could be buckled or the corners may be sheared. To replace a worn or damaged Driver on a DB75 Head, loosen and remove the two (2) Screws (072018) securing the Driver to the Driver Slide Assembly (070151A). Secure the new Driver to the Driver Slide Assembly with the existing Screws after treating them with a threadlocker. The Driver has a small groove on one end to center the wire onto the driving surface. Make sure the grooved end is pointing downward before the Screws are tightened.

The Drivers on the DB75V Heads are reverseable so that when one edge is worn or damaged, the Driver can be reversed to extend the life of the part. Simply remove the Driver from the Driver retaining Screw (072015) and reverse its position. If both sides are worn or one of the ribs is severely broken, replace the old Driver with a new one.

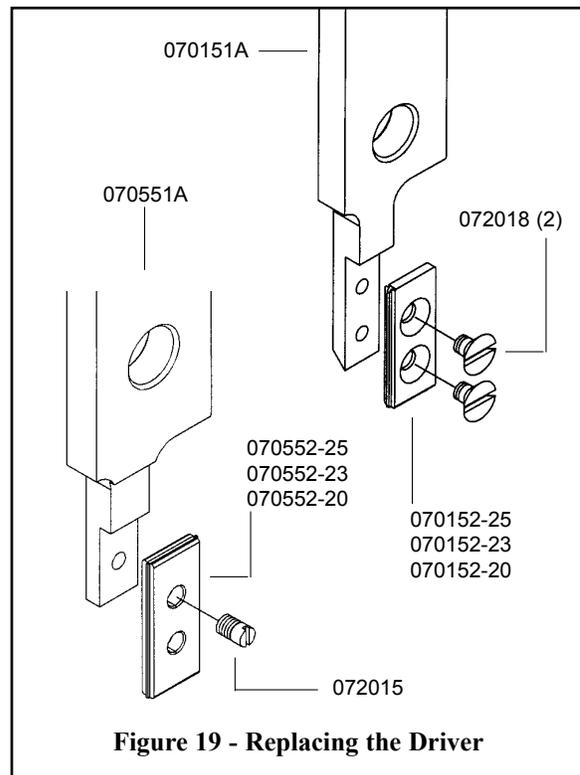
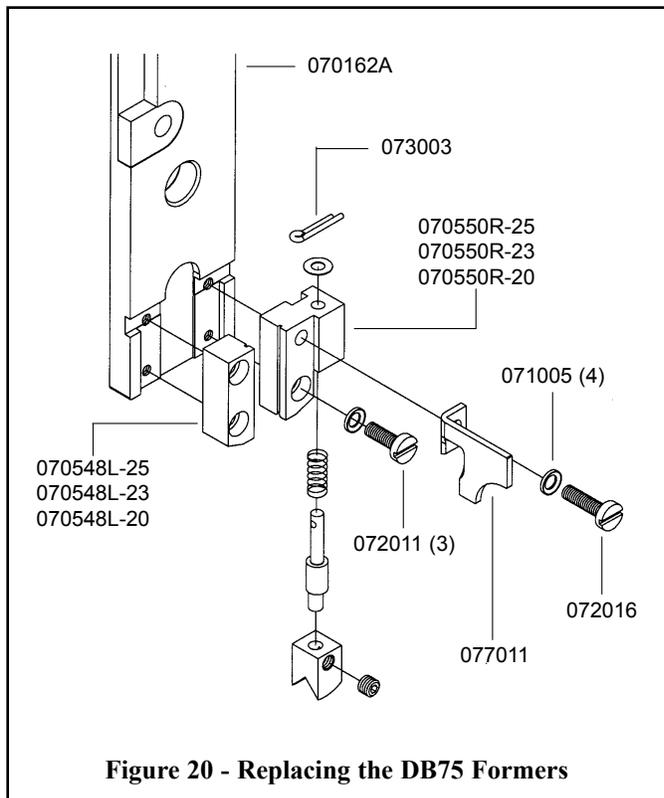


Figure 19 - Replacing the Driver

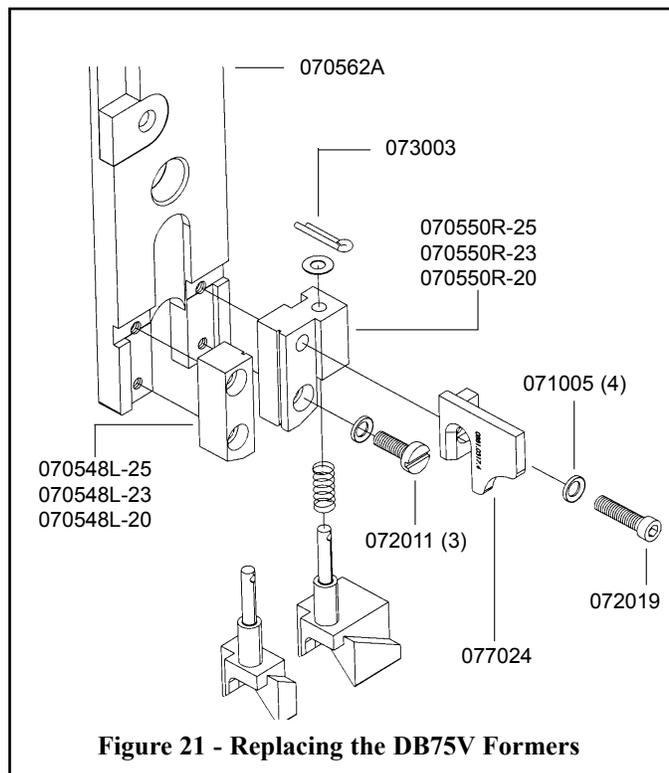


Replacing the Formers (Figures 20 & 21)

Over time, both the Right and Left-Hand Formers (refer to **Figures 20 & 21** for part numbers) will wear with use. When this occurs the wire passing through the Formers could become distorted and not drive properly. Once the Bender Slide Assembly (070162A or 070562A) has been removed from the Head, replacing worn Formers is a simple task.

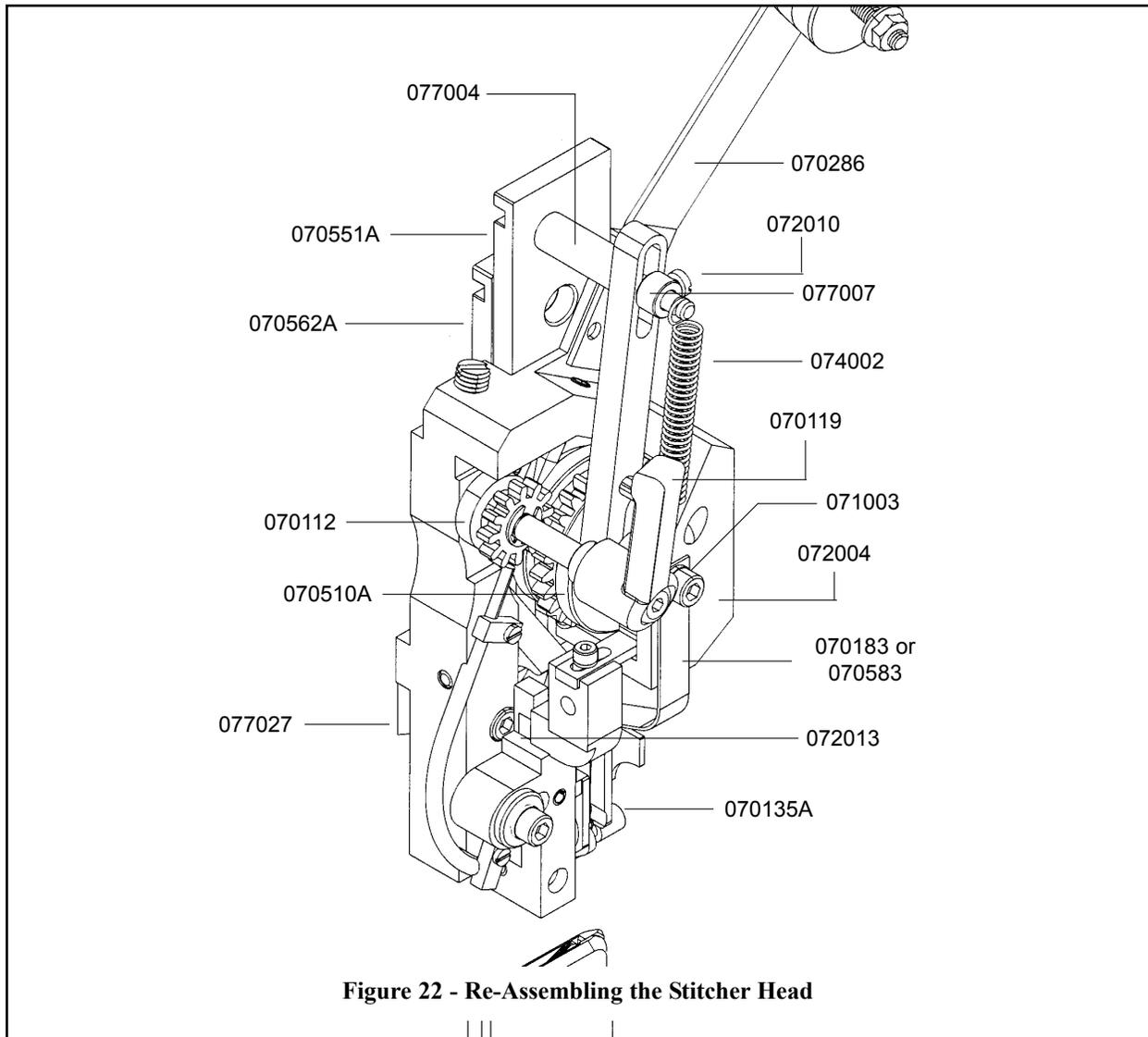
Loosen and remove the two (2) Screws (072011) as well as the two (2) Ribbed Lock Washers (071005) securing the Left-Hand Former to the Bender Slide Assembly. Loosen and remove the Screw (072011) and Ribbed Washer (071005) securing the bottom half of the Right-Hand Former and the Screw (072016 or 072019) and Ribbed Washer (071005) securing the Hook Guide (077011 or 077024) and top half of the Right-Hand

Former to Bender Slide Assembly. The Centering Guide (077003, 077022 or 077023), Centering Guide Post (077002), Centering Guide Spring (074003) and Shim Ring (071002) will have to be removed and transferred to the new Former before re-assembly can begin. Straighten the Cotter Pin (073003) and slip it out of the Centering Guide Post to release the Centering Guide Assembly. Insert the existing Centering Guide, the Post, and the Spring into the new Right-Hand Former. Top the Guide Post with a Shim Ring and secure the whole assembly with a new Cotter Pin. Next, exchange the old Left-Hand Former for the new one and replace it with the Screws and Washers removed previously. Make sure to treat the Screws with a threadlocker before inserting them into the Head. Similarly, secure the new Right-Hand Former using the old Screws and Washers. Be sure to replace the Hook Guide along with the Right-Hand Former and treat the Screws with a threadlocker.



Replacing the Hook Guides (Figures 20 & 21)

When continued use wears or damages either of the Wire Guides (077011 or 077024), they can be easily exchanged for new by removing the Screw (072019 or 072016) and Ribbed Lock Washer (071005) securing them. When the Wire Guide wears or breaks, the Wire Holder Hook Assembly in the Wire Holder is not activated with each stroke of the Head. If this occurs, no wire will be allowed into the Wire Holder to be formed or driven. be sure to use a threadlocker on the Screws when replacing the Hook Guides to the Right-Hand Formers.



Re-assembling the Stitcher Head (Figure 22)

After all cleaning and lubrication is complete and any spare parts that have been added are secure, the Muller Replacement Head is ready to be re-assembled. Refer to the exploded drawings on **pages 27 - 46** for a detailed description of the areas that need to be greased and the amount of Grease to use.

1. Slip the Feed Gear Assembly over the Feed Gear Shaft (070114). Make sure it is pressed flush against the cam of the Bonnet (070000). The taller of the two pins on the Feed Gear Pinion Assembly (070511A or 070111A) should be positioned to the left. (See **figure 1A**)

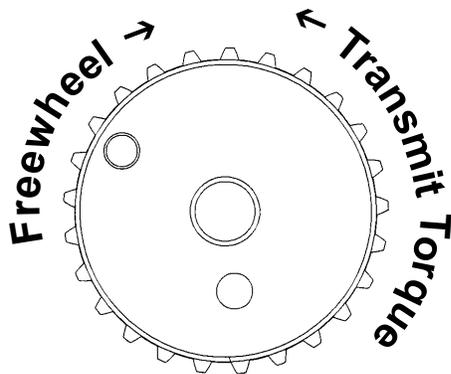


Figure 1A - Feed Gear Pinion Asy

2. Grease the front of the Driver Slide Assembly (070551A or 070151A) and slip it between the Formers on the Bender Slide Assembly (070151A or 070562A), after greasing the front of it. insert both parts into the slot on the back of the Bonnet (070000 or 070500). Make sure that the Driver Slide Assembly still moves freely in between the Bender Slide Assembly.

3. Secure the position of the Large Feed Gear (070510A) with a Friction Strip (070186), held in place with Screw (072001) through a Ribbed Lock Washer (071005).

4. Slip the Feed Gear Operating Lever Assembly (0881.0011.4) over the longer pin on the Feed Gear Pinion Assembly (070511A or 070111A) and over the Driver Slide Shaft (077004) which has been greased. Secure the Set Collar (077007) to the Shaft with a Screw (072010) and secure the Feed Gear Operating Lever Assembly to the Feed Gear Pinion Assembly with an E-Ring (073001). There should be a 0.04" (1mm) gap between the Set Collar and the Feed Gear Operating Lever.

5. Secure the Cutter Box (070197A or 070597A) to the Bonnet (070000 or 070500) with a Screw (072006) through one (1) Ribbed Lock Washer (071003) and one Washer (071008). The tip of the Feed Gear Stop (077026) should be between the long and short pins on the Feed Gear Pinion Assembly (070511A or 070111A).

6. Secure the Wire Holder Assembly (070135A) under the Wire Holder Retaining Spring (070183 or 070583) and tighten the Screw (072004).

7. Secure the Wire Guide Spring (070286) to the Bonnet (070000 or 070500) with two (2) Screws (072017) through two (2) Lock Washers (071006).

Note: Failure to use the Lock Washers or Screws other than the Screw (072017) may cause serious damage to the Stitcher Head.

Trouble Shooting (Figure 23)

The quality and quantity of work that can be produced with the Muller Replacement Head is dependent upon the operator making all adjustments as accurately as possible and carefully maintaining the head. The cause of staple imperfections usually can be traced to inaccurate settings or normal wear of moving parts. In the event of trouble of this nature occurring, the operator can, by referring to the following troubleshooting chart, quickly locate and remedy the cause or causes of the trouble.

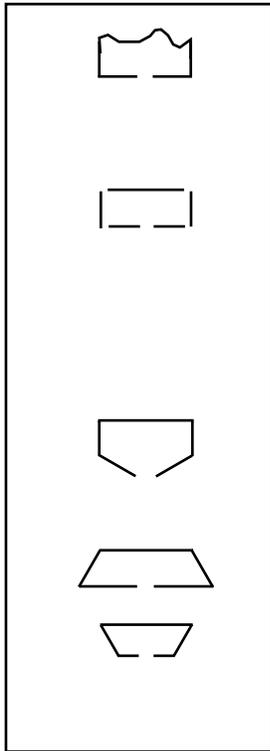
The following is a brief list of problems and solutions which should cover the majority of situations encountered when stitching with the DB75 and DB75V Stitching Heads.

Always disconnect the power cord before any maintenance is done or adjustments are made to the Muller Replacement Head

CAUTION

	PROBLEM: Right Leg Short SOLUTION: Move the Feed Gear Stop to the right, slightly. (See pages 12 - 13)
	PROBLEM: Right leg Long SOLUTION: Move the Feed Gear Stop to the left, slightly. (See pages 12 and 13)
	PROBLEM: Corner Buckled SOLUTION: Check the Driver for a chipped corner and rotate or replace it if needed. (See page 22) Use a heavier gauge wire.
	PROBLEM: Leg(s) Buckled SOLUTION: Check the Wire Cutters and Wire Cutter Operating Slide for wear and rotate or replace if needed. (See pages 20 and 21) Use a heavier gauge wire.

Figure 23 - Troubleshooting



PROBLEM: Crown Buckled

SOLUTION: Check Supporter Spring (070344) tension on the DB75V Head. If it is too loose replace it.

PROBLEM: Stitch in Pieces

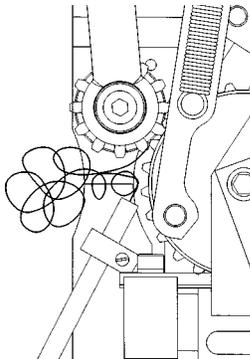
SOLUTION: Clean and lubricate the Head (See page 17) Check for hard or brittle wire and replace. Check the tension of the Wire Holder Spring and replace Spring if too loose. Look for wear in Wire Holder pivot point in Bonnet.

PROBLEM: Loose Clinch

SOLUTION: Raise the Clincher Points. (See page 15)

PROBLEM: Legs are Spread or Contracted

SOLUTION: Make sure the wire is feeding straight through the Head. (See pages 11 and 12) Check the Wire Cutters for wear and rotate or replace if needed. (See pages 20 and 21) Check the Formers for wear in the grooves and replace if needed.

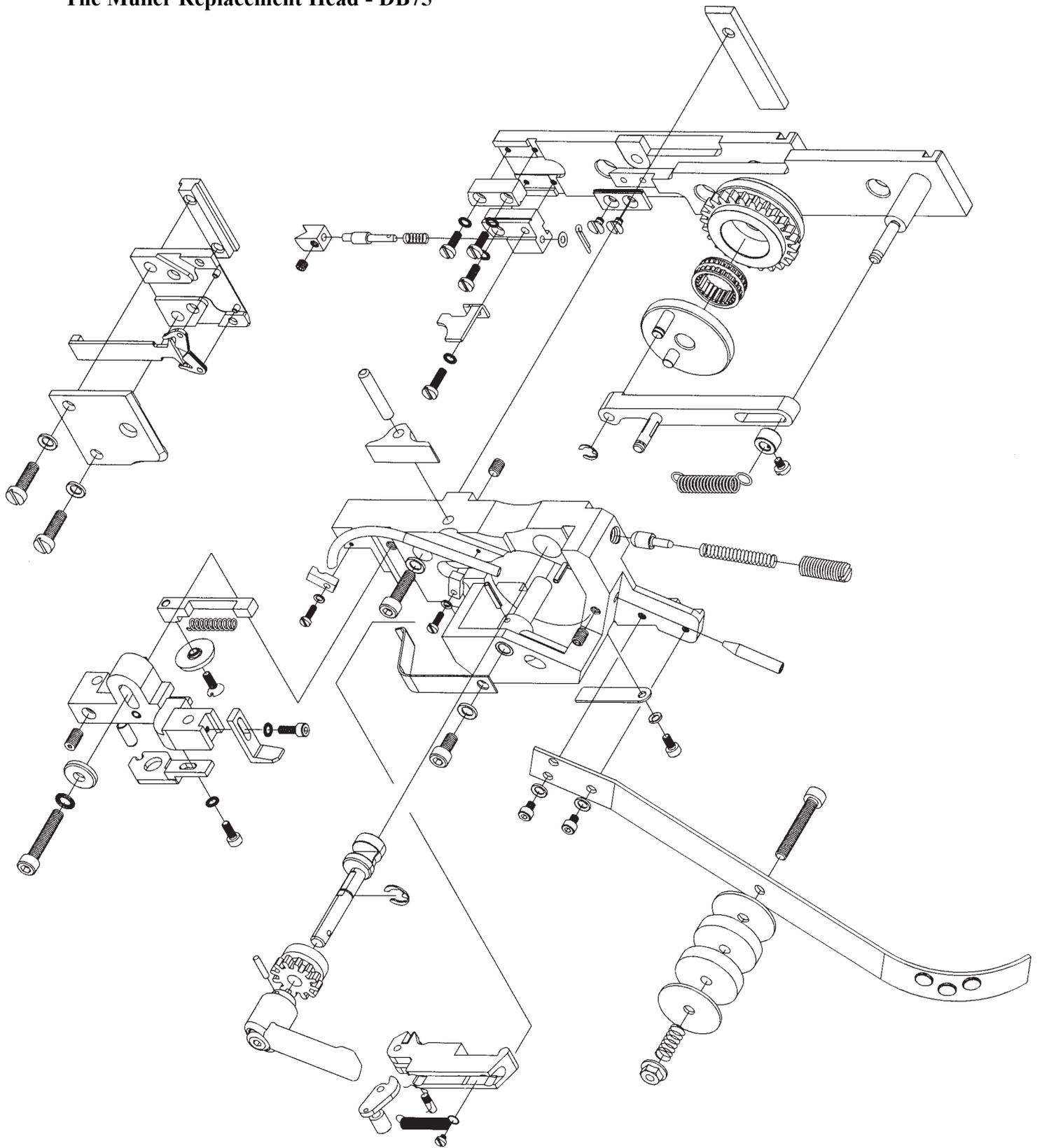


PROBLEM: Wire jam near Feed Gear

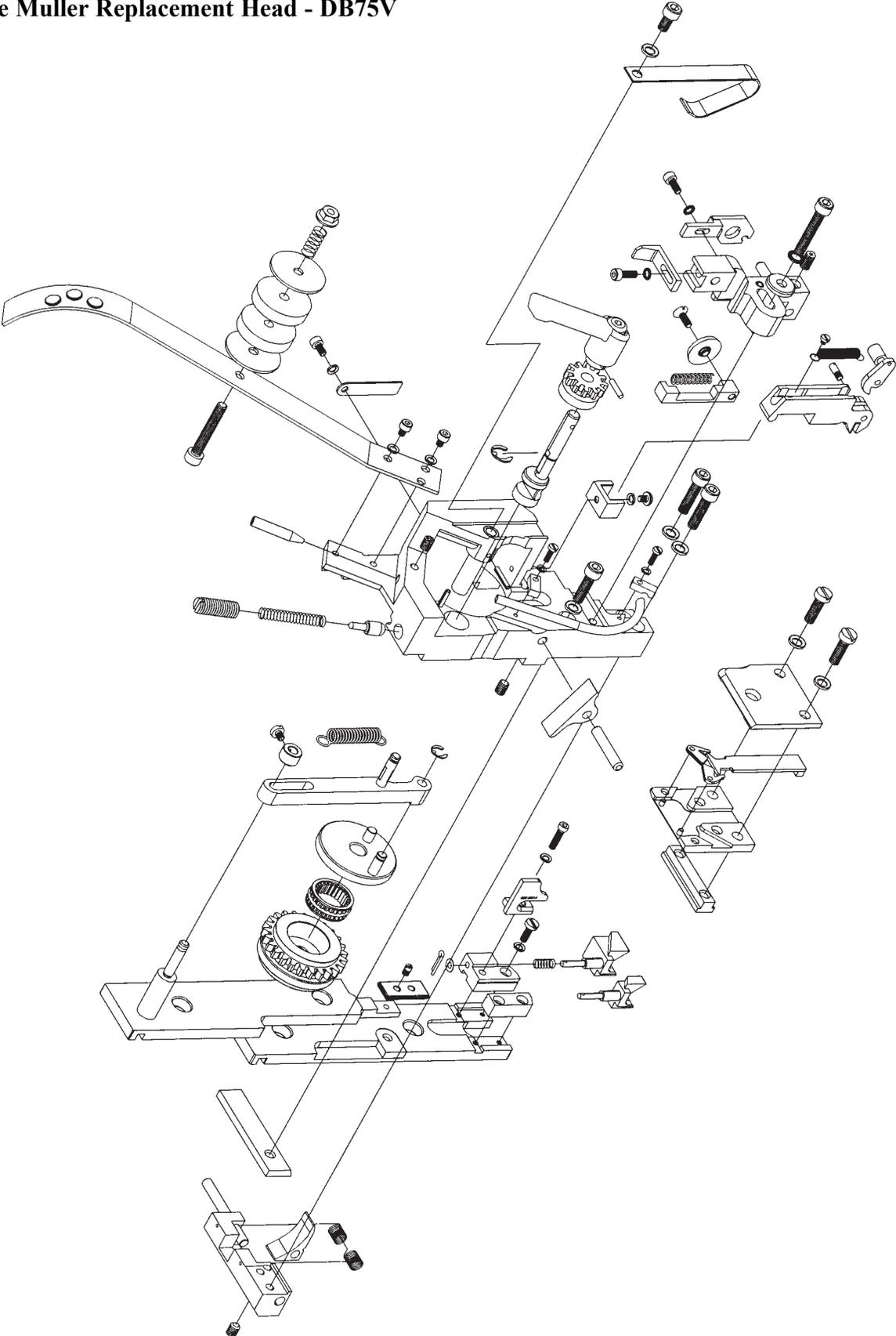
SOLUTION: Tighten Cutters. Check for the following worn parts and replace if necessary. Fixed Cutter, Moving Cutter, Cutter Operating Slide, Cutter Operating Lever, Bender Slide Insert, Wire Guide, Hook, Hook Pivot Pin and Feed Gear Friction Strip.

Figure 23 - Troubleshooting

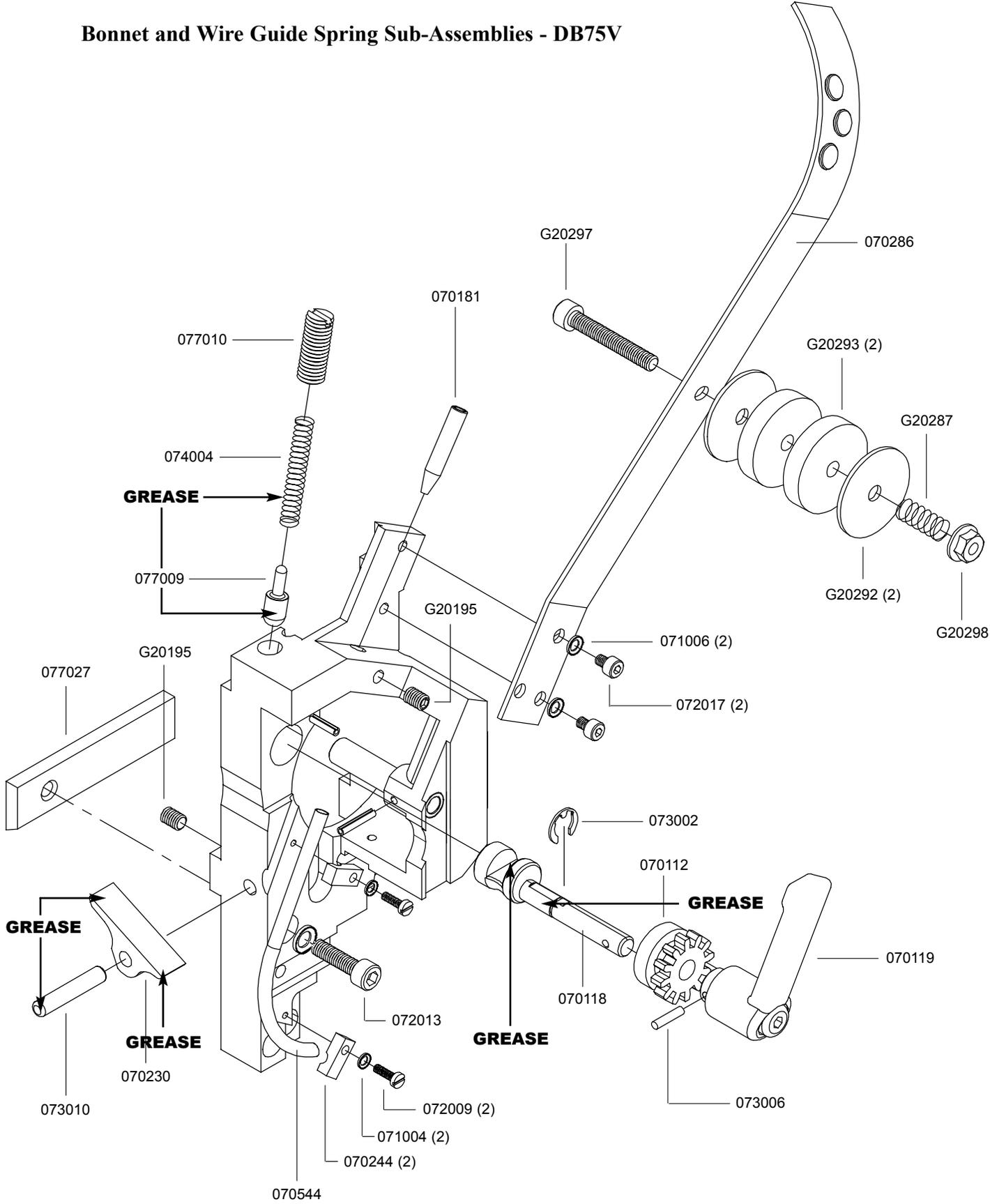
The Muller Replacement Head - DB75



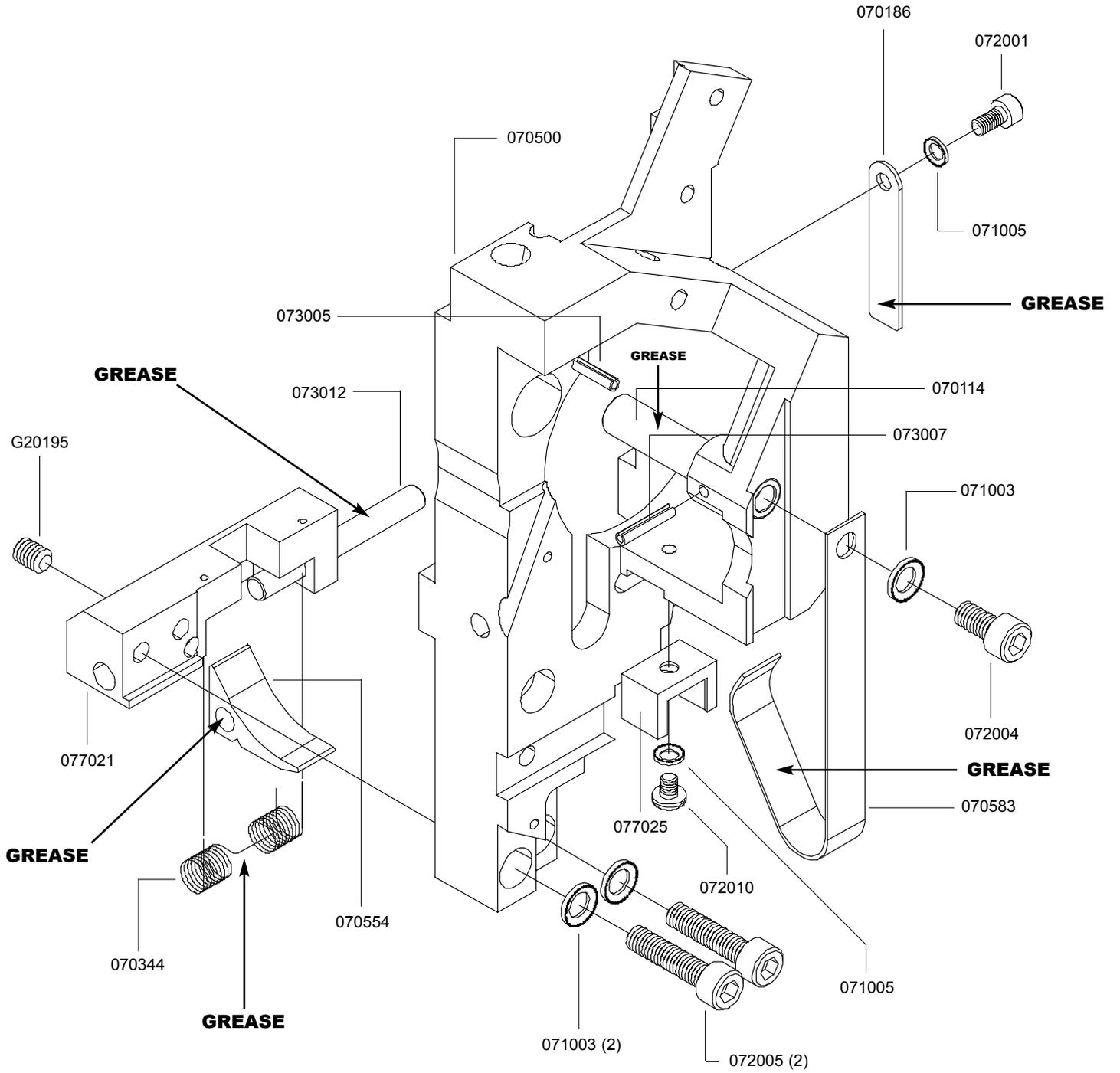
The Muller Replacement Head - DB75V



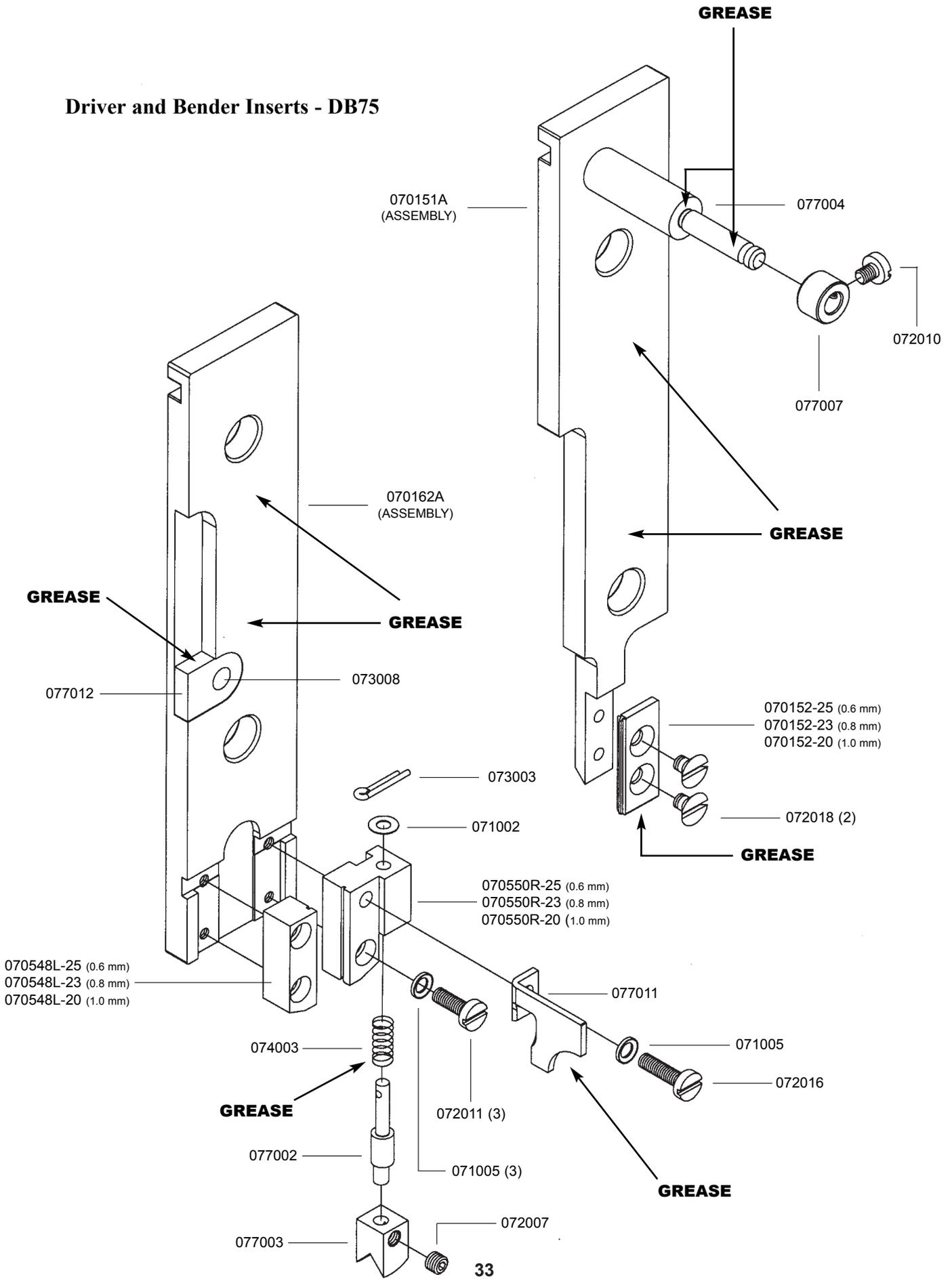
Bonnet and Wire Guide Spring Sub-Assemblies - DB75V



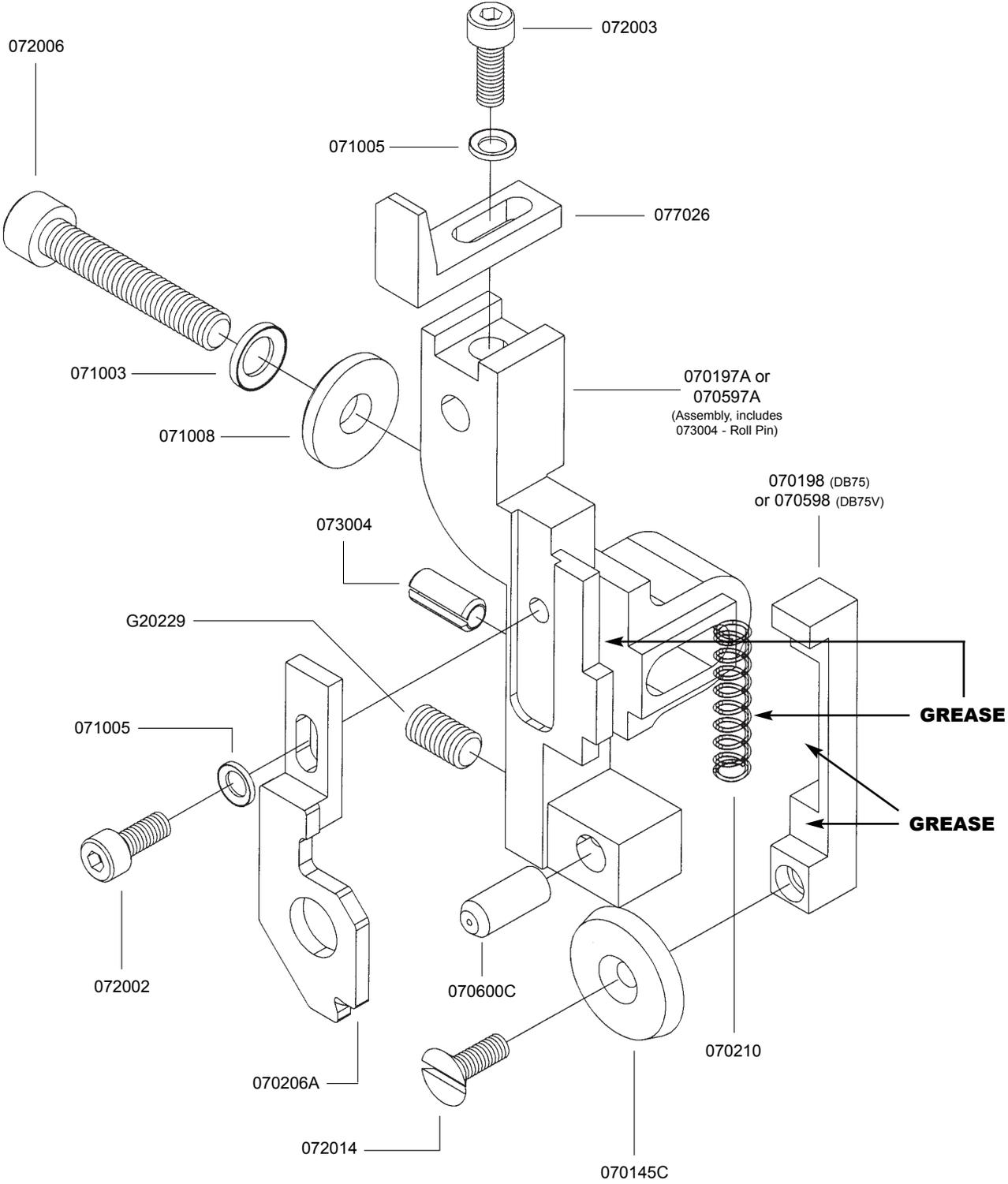
Bonnet and Supporter Sub-Assemblies - DB75V



Driver and Bender Inserts - DB75

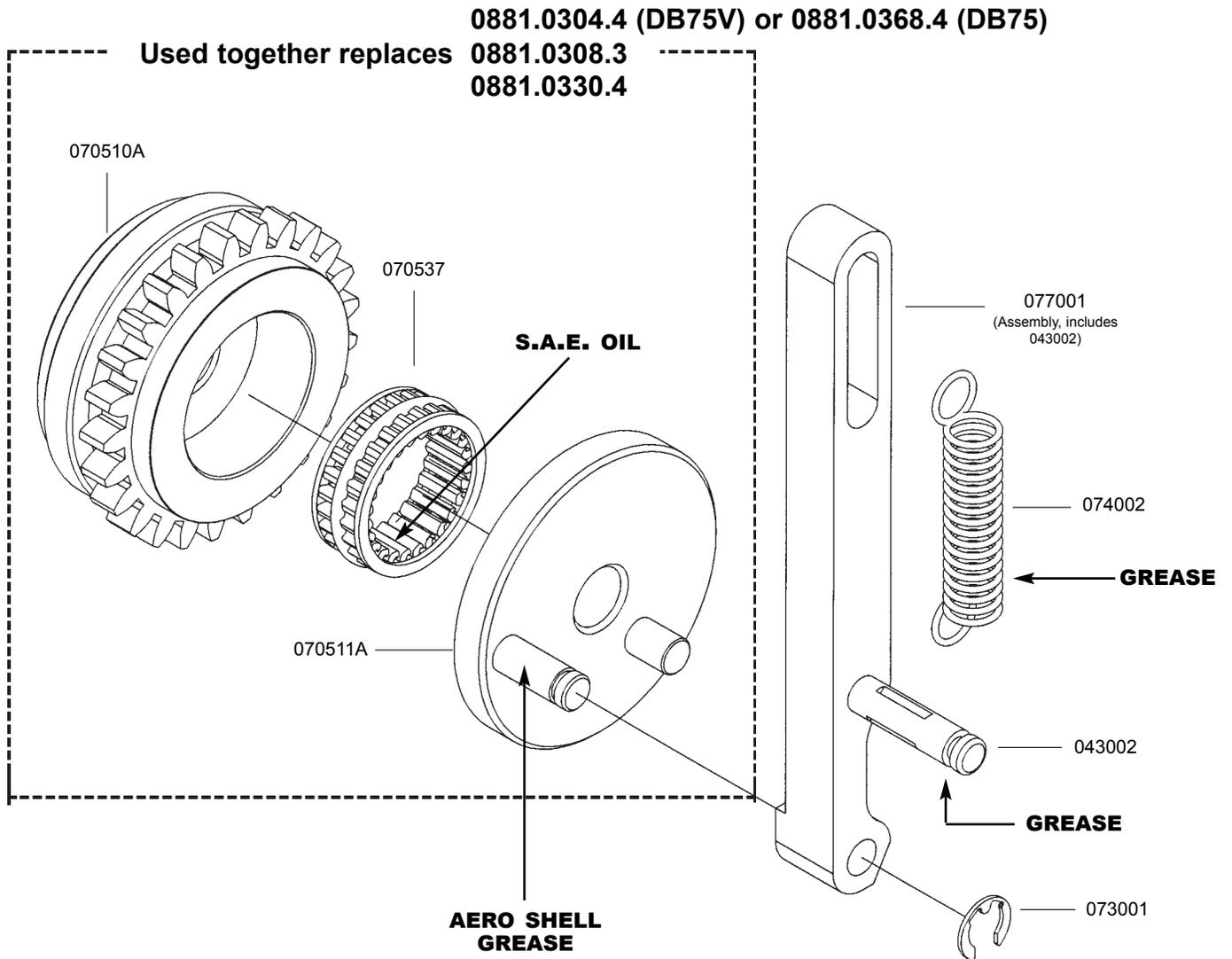


Cutter Box Assembly - DB75 & DB75V



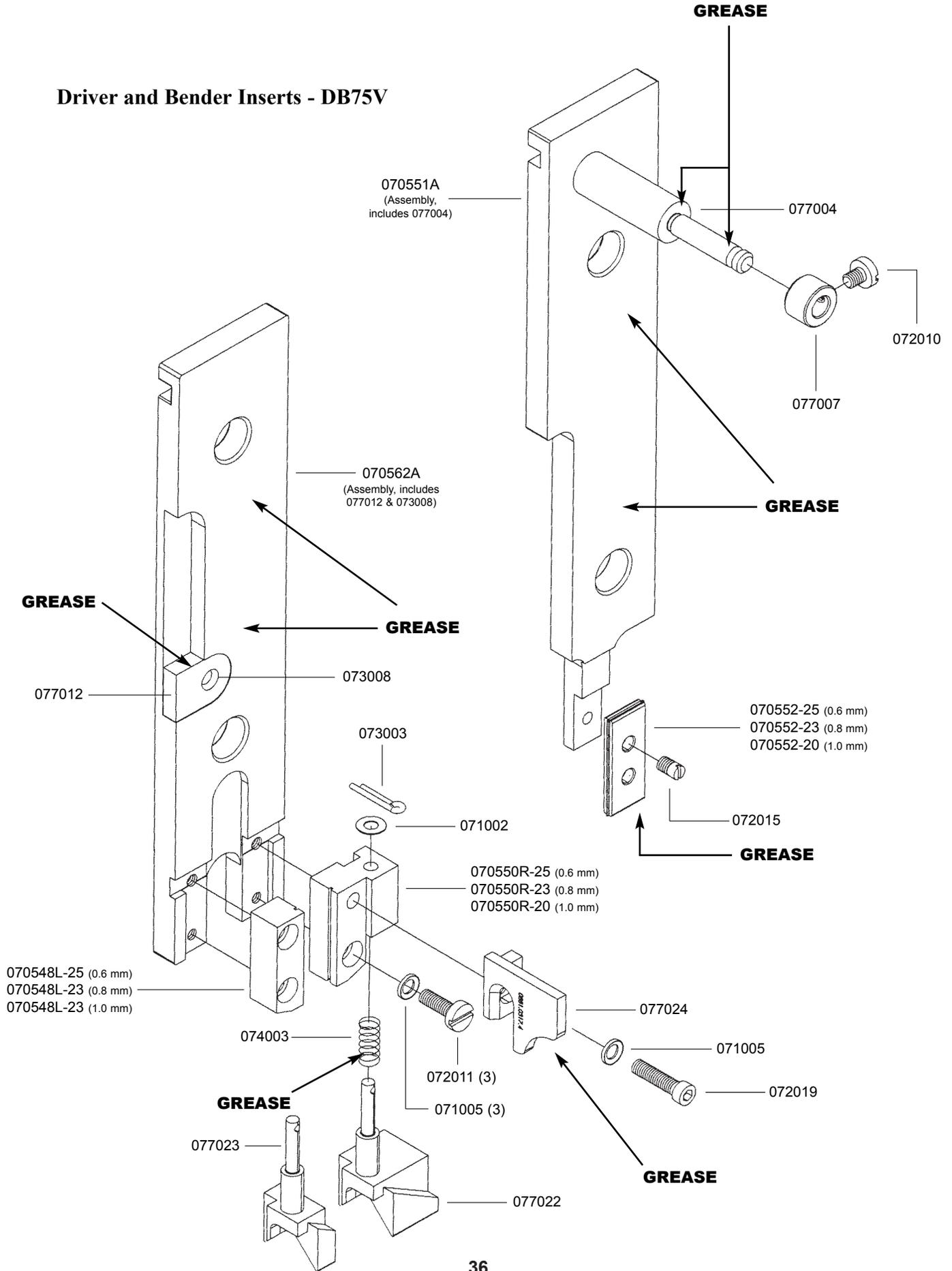
Feed Gear Assembly - DB75 & DB75V

Ask for part number MMKFG1 or MMKFG2

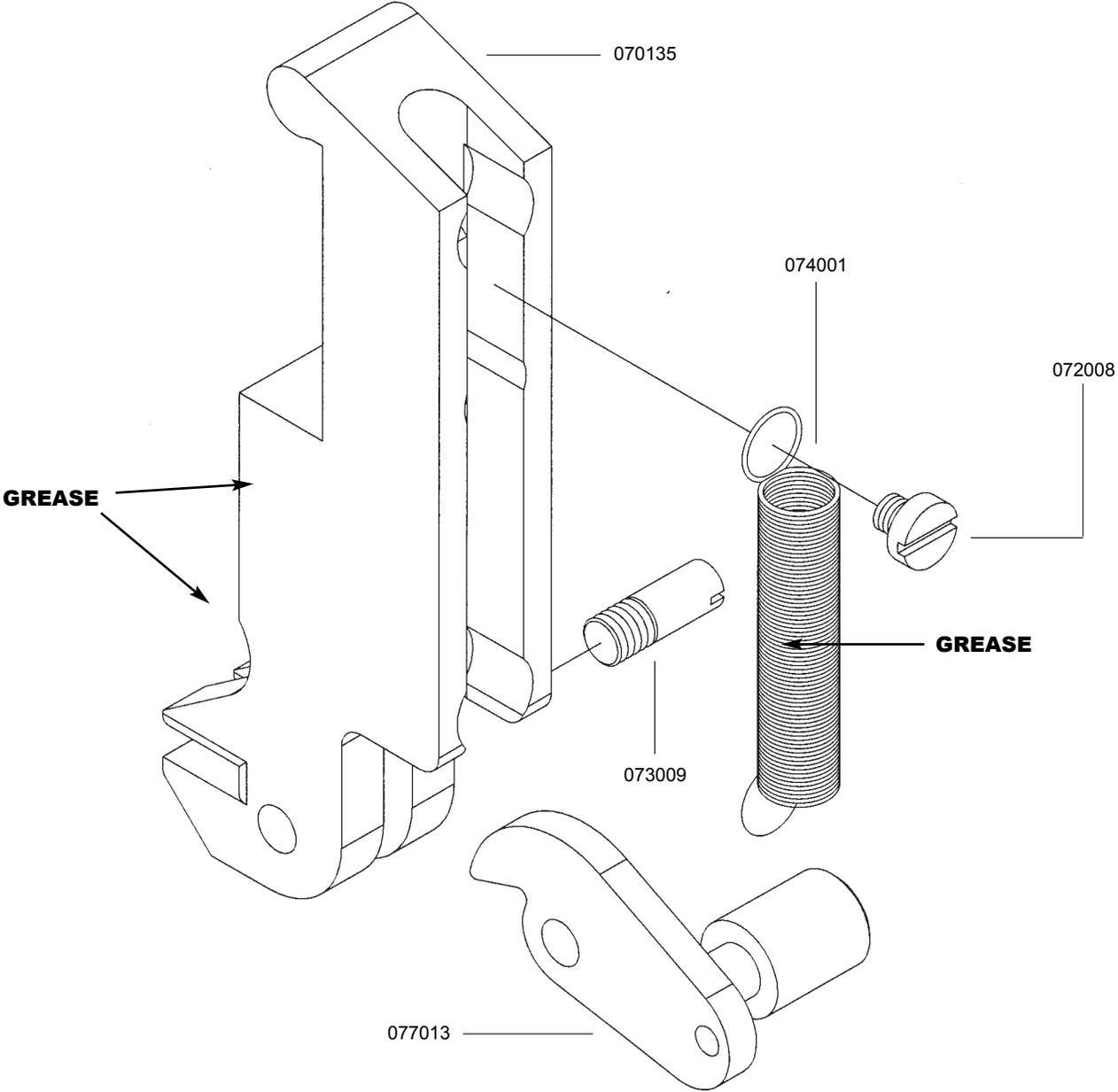


* Indicates parts that are not interchangeable with Muller-Martini parts.
All parts used together can be used interchangeably with the Muller-Martini Feed Gear.

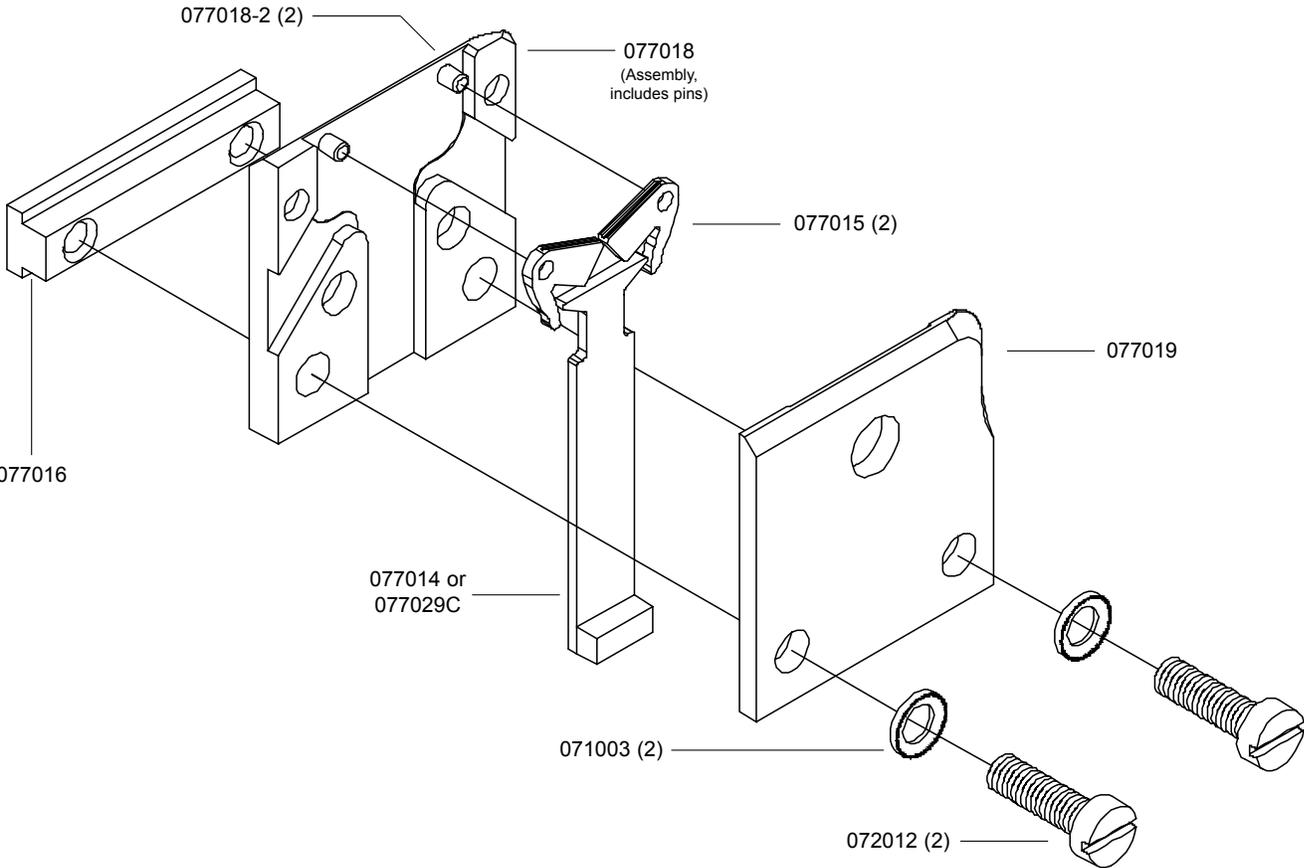
Driver and Bender Inserts - DB75V



Wire Holder Assembly - DB75 & DB75V



Clincher Plate Assembly - DB75 & DB75V



Part Number / Description Cross-Reference

043002	Grooved Pin	1	070548L-23	Former LH 22-24 Wire	1
070000	Bonnet	1	070548L-25	Former LH 25-28 Wire	1
070111A	Feed Gear Pinion Assembly	1	070550R-20	Former RH 20-24 Wire	1
070112	Feed Gear, Small	1	070550R-23	Former RH 22-24 Wire	1
070114	Feed Gear Shaft	1	070550R-25	Former RH 25-28 Wire	1
070118	Feed Release Cam Assembly	1	070551A	Driver Slide Assembly	1
070119	Feed Release Handle	1	070552-20	Driver 20-24 Wire	1
070135A	Wire Holder Assembly	1	070552-23	Driver 22-24 Wire	1
070144	Wire Tube	1	070552-25	Driver 25-28 Wire	1
070145C	Moving Cutter - Carbide	1	070554	Supporter	1
070151A	Driver Slide Assembly	1	070562A	Bender Slide Assembly	1
070152-20	Driver 20-24 Wire	1	070583	Wire Holder Retain Spring, DB75V	1
070152-23	Driver 22-24 Wire	1	070597A	Cutter Box Assembly	1
070152-25	Driver 25-28 Wire	1	070598	Cutter Operating Slide	1
070162A	Bender Slide Assembly	1	070600C	Fixed Cutter - Carbide	1
070181	Upper Wire Tube	1	071002	Shim Ring	1
070183	Wire Holder Retaining Spring	1	071003	Lock Washer Ribbed, 6mm	5
070186	Friction Strip	1	071004	Lock Washer, Ribbed	7
070197A	Cutter Box Assembly	1	071005	Lock Washer Ribbed, 4mm	2
070198	Cutter Operating Slide	1	071006	Lock Washer, Ribbed	2
070206A	Wire Straightener Assembly	1	071008	Washer	1
070210	Cutter Box Spring	1	072001	Screw M4x0.7x8	1
070230	Cutter Operating Lever	1	072002	Screw M4x0.7x10	1
070244	Wire Tube Clamp	2	072003	Screw M4x0.7x12	1
070286	Wire Guide Spring	1	072004	Screw M6x1.0x12	1
070344	Supporter Spring	1	072005	Screw	2
070500	Bonnet	1	072006	Screw M6x1.0x30	1
070510A	Feed Gear, Large	1	072007	Screw M5x0.8x4	1
070511A	Feed Gear Pinion Assembly	1	072009	Screw M3x.5x10	2
070537	Feed Gear Clutch	1	072010	Screw M4x0.7x5	1
070544	Lower Wire Tube	1	072011	Screw M4x.7x12	3
070548L-20	Former LH 20-24 Wire	1	072012	Screw M6x1.0x20	2

Part Number / Description Cross-Reference

072013	Screw M6x1.0x22	1	077022	Centering Guide, Wide	1
072014	Moving Cutter Screw	1	077024	Hook Guide, DB75V	1
072015	Driver Retaining Screw	1	077025	Wire Holder Guide	1
072016	Screw M4x0.7x18	1	077026	Feed Gear Stop	1
072017	Screw M5x0.8x5.5	2	077027	Mounting Strap, DB75V	1
072018	Screw M4x0.7x6	2	077029C	Clincher Slide - Carbide	1
072019	Allen Head Screw	1	077030	Complete Clincher Plate Asy	1
073001	E-Ring	1	077030C	Complete Clincher Plate Asy	1
073002	E-Ring	1	G20195	Screw M6x1x8	2
073003	Cotter Pin	2	G20229	Screw M6x1x12	1
073005	Spring Pin, M3x10	1	G20287	Wire Oiler Felt Spring	1
073006	Spring Pin, M3x12	1	G20292	Wire Oil Felt Washer	2
073007	Spring Pin	1	G20293	Wire Oiler Felt	2
073010	Dowel Pin	1	G20297	Screw M6x1x40	1
073012	Pin	1	G20298	Hex Nut M6x1	1
074002	Extension Spring	1	G20360	Hex Key Wrench 3.0mm	1
074003	Center Guide Spring	1	G20361	Hex Key Wrench 2.5mm	1
074004	Compression Spring	1	G20362	Clamp Wrench 5.0mm	1
077001	Feed Gear Operating Lever Asy	1	G20373	Hex Key Wrench 4.0mm	1
077002	Centering Guide Post	1	MMKFG1	Muller Feed Gear Kit	1
077003	Centering Guide	1	MMKFG2	Muller Feed Gear Kit	1
077006	Mounting Strap	1			
077007	Set Collar	1			
077009	Feed Cam Plunger	1			
077010	Feed Cam Plunger Bushing	1			
077011	Hook Guide, DB75	1			
077014	Clincher Slide Assembly	1			
077015	Clincher Point 1/2"	2			
077016	Clincher Mounting Bar	1			
077018	Clincher Back Plate	1			
077019	Clincher Front Plate	1			
077021	Supporter Block	1			

REGISTRATION

To better service your wire stitching needs, please take a moment to fill out and return this registration card.

CUSTOMER

Name : _____
(First) (Middle Initial) (Last)
Company : _____
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City : _____ State/Province : _____ Zip : _____
Country : _____
Phone : _____ Fax : _____ E-mail : _____

PRODUCT

Machine(s) Purchased : _____
Serial Number(s) : _____
With Head(s) : _____
(Type/Quantity Purchased)
Serial Number(s) : _____
Head(s) Purchased : _____
Serial Number(s) : _____

DEALER

Date Received : _____
Dealer Name : _____
Dealer Street Address : _____
City : _____ State/Province : _____ Zip : _____
Country : _____
Dealer Phone : _____

Other Bindery Products Used : _____

Would you like information sent to you about new products that would benefit your company? Yes No

Please take a moment to fill out the attached card and mail it to DeLuxe Stitcher Company, Inc.. In addition, duplicate the information for your records to assist when making further inquiries.

PRODUCT

Machine(s) Purchased : _____
Serial Number(s) : _____
With Head(s) : _____
(Type/Quantity Purchased)
Serial Number(s) : _____
Head(s) Purchased : _____
Serial Number(s) : _____

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Dealer Name : _____
Dealer Street Address : _____
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Common Replacement Parts for 1/2" Crown

Below is a list of the most common wear/replacement parts for the DB75 and 75V Stitcher Head. This guide should help you when ordering replacement parts. If the part you need is not listed below, please refer to the more detailed parts list on pages 47 - 48.

Description	Item Number
Moving Cutter - Carbide	070145C
Driver (DB75) - 25-28	070152-25 or 070552-25
Wire Holder Retaining Spring	070183
Cutter Operating Lever	070230
Fixed Cutter - Carbide	070600C
Moving Cutter Screw	072014
Screw, M4x0.7x6-Nylon	072018
Rivet	073008
Hook Pivot Pin, Nylon	073009
Wire Holder Spring	074001
Hook Guide	077011
Bender Slide Insert	077012
Clincher Slide Assembly	077014
Clincher Point 1/2"	077015
Clincher Point Pivot	077018-2

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STAMP
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**DELUXE STITCHER
COMPANY, INC.**
6635 West Irving Park Road
Chicago, Illinois 60634-2410 U.S.A.
Attn: Customer Service

LIMITED WARRANTY

DeLuxe Stitcher Company, Inc. warrants to the original retail purchaser that this product is free from defects in material and workmanship and agrees to repair or replace, at DeLuxe Stitcher's option, any defective product within 90 days from the date of purchase. This warranty is not transferable. It covers damage resulting only from defects in material or workmanship and does not cover conditions or malfunctions resulting from normal wear, neglect, abuse or accident.

This warranty is in lieu of all other express warranties. Any warranty of merchantability or fitness for a particular purpose is limited to the duration of this warranty. DeLuxe Stitcher shall not be liable for any incidental or consequential damages.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

To obtain warranty service you must return the product, at your expense, together with proof of purchase to an authorized DeLuxe Stitcher Company Graphic Arts Dealer.

Always use genuine DeLuxe Stitcher parts. When ordering parts, please identify the part number, the part name, the wire size and crown size of your Stitcher.

DeLuxe Stitcher Company, Inc.
6635 West Irving Park Road
Chicago, Illinois 60634-2410
Phone: 773-777-6500 800-634-0810
Fax: 773-777-0156 800-417-9251
E-mail: info@deluxestitcher.com
Web Site: <http://www.deluxestitcher.com>

DBS75HD1005