

DISASSEMBLY AND ASSEMBLY PROCEDURES

for
Servicing the

Awl Segment,
Needle Segment,
Thread Hook,
and
Threadlock Lever

for all

LANDIS MODEL 12 CURVED NEEDLE STITCHERS

[Note: Some procedures are not applicable to models older than the Landis 12K.]

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TABLE OF CONTENTS

	<u>Page No.</u>
Feed Cam Lever Removal	3
Awl Segment Assembly Removal	5
Awl Segment Assembly Installation	6
Removing Needle Segment Assembly	7
Installing Needle Segment Assembly	8
Thread Hook Removal	10
Threadlock Lever Removal	12

K26-1 Feed Cam Lever Removal

1. Remove K30-311, feed and guide handle retaining plate screw along with retaining plate K30-11A.
2. Turn handwheel until the set screw hole in #4 cam K23-4 is facing toward front of the machine.
3. Loosen feed cam lever pivot stud set screw three complete turns. K26-301A.
4. Grasp top of feed cam lever pivot stud with left hand while pushing upward on bottom of stud with a screwdriver. K26-201A.
5. While pulling up on stud a slight back and forth movement of feed and guide handle helps relieve any bind on stud.

Note: If head of stud does not clear cam track, a slight movement of handwheel may be required at this time.

6. Turn handwheel until the position of set screw hole in cam (as mentioned in Step #2 above) is at 12 o'clock, looking from right side of machine.
7. Pull outward on feed cam lever K26-1 while moving feed and guide handle as in step #5. above.

8. Lift feed cam lever straight up off feed adjusting lever slide block (K26-3A) once cam roll (K26-101) clears cam track in step #7.

REVERSE ABOVE PROCEDURES FOR ASSEMBLY

K26-10 Awl Segment Assembly Removal

1. Perform all steps for feed cam lever removal.
2. Remove awl segment stud retaining screw binding screw. (K26-310C)
3. Remove awl segment stud retaining screw (K26-310B).
4. Swing shoe guide (30-1) out of the way.
5. Loosen awl segment stud set screw 3 complete turns. (K26-306C)
6. Move feed slide (K26-1) as far to the right as possible.
7. Turn handwheel until awl is in the extreme downward position or remove stitchplate.
8. Remove awl segment stud (K26-210A) by pushing or tapping on pin punch. Note: make sure awl segment does not fall when stud is removed.

Awl Segment Assembly Installation

1. Turn handwheel until awl cam lever (K26-9) is at bottom of stroke.
2. Insert awl segment pivot stud into awl segment with flat on the stud toward front of machine.
3. Place the first tooth (opposite the awl clamp end) of the awl segment between the first and second full tooth at the top of awl cam lever.
4. Slide feed slide (K26-6) to the left until awl segment stud is fully engaged.
5. Tighten awl segment stud set screw lightly (K26-306C) making sure it seats on flat of stud.
6. Install awl segment stud retaining screw and tighten slowly until no side movement of awl segment can be felt but backlash of gear teeth should be unrestricted.
7. Tighten the awl segment stud set screw firmly. (K26-301A)
8. Install the awl segment stud retaining screw binding screw (K26-310C) once the conditions in step #6. are confirmed.

K24-2

Removing Needle Segment Assembly

1. Perform all steps for feed cam lever andawl segment removal, respectively.
2. Remove needle segment stud washer retaining screw (K24-302) with washer (K24-102).
3. Turn handwheel until needle is in extreme upward position.
4. Loosen needle segment stud set screw (K24-302A old style square head or K24-302B allen socket new style) 3 complete turns. Note: shuttle K25-4 has to be removed for access on all older models.
5. Remove the needle segment stud (K24-202) by tapping it to the right with hammer and pin punch. Needle segment and stud can be removed with fingers when stud is free enough.

K24-2

Installing Needle Segment Assembly

1. Turn handwheel until needle cam lever is at bottom of stroke (K24-1).
2. Slide the needle guide (K24-7A) out to the end of needle.
3. Place the first tooth (needle clamp end) of the needle segment between the first and second full tooth of the needle cam lever counting from the top.
4. Install the needle segment stud K24-202 making sure the beveled end of stud matches the beveled surface of K22-1N head.
5. Lightly tighten the needle segment stud set screw (K24-302A square head or K24-302B allen socket) making sure it seats on the flat of stud.
6. Place the needle segment stud washer K24-102 onto its retaining screw (K24-102) and screw it into the needle segment stud finger tight.
7. Tighten this screw until the needle segment sideplay and backlash are adjusted as in step #6. of Awl Segment Installation.
8. Tighten needle segment stud set screw firmly (K24-302A or K24-302B).

9. The retaining screw (K24-302) can now be tightened slightly to prevent it from vibrating loose during machine operation.

K-29-6 Thread Hook Removal

1. Perform all steps for Feed Cam Lever, Awl Segment Assembly, and Needle Segment Assembly removal.
2. Turn handwheel until needle cam lever (K24-1) is at bottom of stroke.
3. Turn the thread hook race cap retaining screw (top) until the threads are completely disengaged but screw does not have to be removed from hole.
4. Loosen the bottom screw of the thread hook race cap and let cap rotate down clear of thread hook.
5. Slide thread hook to the right into the notched tooth of the needle cam lever and lift free of machine. Note: If your stitcher does not have a notched tooth at top of needle lever, skip step #5. and continue onto Steps #6 - 10.
6. Remove cam cover studs (K23-209) and cam cover (K23-9).
7. Remove the right handwheel (K23-5D).
8. Remove the left cam lever shaft set collar (K23-101A).
9. Loosen both cam lever shaft set screws (K23-301B) 3 complete turns.

K-13-6 Thread Hook Removal

10. While sliding the cam lever shaft to the right insert a piece of broom handle (or something equivalent in size) to hold the shuttle driver cam lever in position. Slide the cam lever shaft to the right until it is clear of the needle cam lever. Now the needle cam lever can be positioned without interfering with thread hook removal.

REVERSE ABOVE PROCEDURES FOR THREAD HOOK INSTALLATION.

K28-11 Threadlock Lever Removal

1. Turn handwheel until the take-up lever (K28-3) is at its lowest point.
2. Remove upper take-up cam lever connection stud nut (K28-302).
3. Remove upper take-up cam lever connecting stud (K28-202).
4. Loosen the rear threadlock rocker shaft swivel connection nut (K28-308) approximately 6 turns.
5. Remove (2) threadlock and tension release lever nuts (K28-317).
6. Remove threadlock and tension release lever washer (K28-117).
7. Remove (2) take-up lever fulcrum bracket screws (K28-304 long with spacer and K28-304A short).
8. Remove take-up lever fulcrum bracket (K28-4) by pulling out on bracket disengaging with the ends of:
 - a. threadlock rocker shaft (K28-10B), first;
 - b. threadlock and tension release lever K28-117, second;
 - c. take-up lever (K28-3), third.

8. (Cont.)

Note: on reassembly, the ends of above parts must be started into their respective holes in reverse order with K28-117 being the most difficult.

9. Remove take-up lever (K28-3).
10. Remove threadlock roll retaining washer screw (K28-311A) with washer (K28-111A).
11. The threadlock lever (K28-11) and the thread lock roll (K28-111) can now be removed simultaneously.

REVERSE ABOVE PROCEDURES FOR ASSEMBLY AND ADJUSTMENT ACCORDING TO LANDIS 12K INSTRUCTION AND PARTS CATALOGUE.