This instruction manual applies to machines from the following serial numbers onwards:

# 2731762
This instruction manual applies to all versions and subclasses listed under "Specifications".

Reprinting, copying or translation of PFAFF instruction manuals, whether in whole or in part, is not permitted without our prior permission and not without written indication of the source.

PFAFF Industrie Maschinen AG
Postfach 3020
D-67653 Kaiserslautern
Königstr. 154
D-67655 Kaiserslautern
## Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Safety ......................................................</td>
</tr>
<tr>
<td>1.01</td>
<td>Directives ..............................................</td>
</tr>
<tr>
<td>1.02</td>
<td>General notes on safety .............................</td>
</tr>
<tr>
<td>1.03</td>
<td>Safety symbols ..........................................</td>
</tr>
<tr>
<td>1.04</td>
<td>Important points for the user ......................</td>
</tr>
<tr>
<td>1.05</td>
<td>Operating and specialist personnel ...............</td>
</tr>
<tr>
<td>1.05.01</td>
<td>Operating personnel ....................................</td>
</tr>
<tr>
<td>1.05.02</td>
<td>Specialist personnel ....................................</td>
</tr>
<tr>
<td>1.06</td>
<td>Danger .....................................................</td>
</tr>
<tr>
<td>2</td>
<td>Proper use ...............................................</td>
</tr>
<tr>
<td>3</td>
<td>Specifications ...........................................</td>
</tr>
<tr>
<td>4</td>
<td>Disposal of the machine ..............................</td>
</tr>
<tr>
<td>5</td>
<td>Transport, packaging and storage ..................</td>
</tr>
<tr>
<td>5.01</td>
<td>Transport to the customer ...........................</td>
</tr>
<tr>
<td>5.02</td>
<td>Transport within the customer’s premises ........</td>
</tr>
<tr>
<td>5.03</td>
<td>Disposal of the packaging ...........................</td>
</tr>
<tr>
<td>5.04</td>
<td>Storage ....................................................</td>
</tr>
<tr>
<td>6</td>
<td>Explanation of the symbols ..........................</td>
</tr>
<tr>
<td>7</td>
<td>Controls ...................................................</td>
</tr>
<tr>
<td>7.01</td>
<td>Adjusting the stitch length ........................</td>
</tr>
<tr>
<td>7.02</td>
<td>Adjusting the top feed stroke on the PFAFF 5625-657/01</td>
</tr>
<tr>
<td>7.03</td>
<td>Adjusting the top feed stroke on the PFAFF 5625-657/02</td>
</tr>
<tr>
<td>7.04</td>
<td>Lifting the presser foot .............................</td>
</tr>
<tr>
<td>7.05</td>
<td>Key for fixing the presser foot ....................</td>
</tr>
<tr>
<td>8</td>
<td>Installation and commissioning ....................</td>
</tr>
<tr>
<td>8.01</td>
<td>Installation ...............................................</td>
</tr>
<tr>
<td>8.02</td>
<td>Commissioning ............................................</td>
</tr>
<tr>
<td>9</td>
<td>Setting up ..................................................</td>
</tr>
<tr>
<td>9.01</td>
<td>Inserting the needle ....................................</td>
</tr>
<tr>
<td>9.02</td>
<td>Threading the machine / adjusting the thread tension</td>
</tr>
<tr>
<td>10</td>
<td>Care and Maintenance ..................................</td>
</tr>
<tr>
<td>10.01</td>
<td>Cleaning the looper compartment ..................</td>
</tr>
<tr>
<td>10.02</td>
<td>Checking the oil level / filling in oil ............</td>
</tr>
<tr>
<td>10.03</td>
<td>Checking the oil level in the oil tank for the needle head parts / filling in oil</td>
</tr>
</tbody>
</table>
11 Adjustment ................................................................................................................ 11 - 1
11.01 Notes on adjustment................................................................................................... 11 - 1
11.02 Tools, gauges and other accessories .......................................................................... 11 - 1
11.03 Abbreviations .............................................................................................................. 11 - 1
11.04 Adjusting the basic machine ....................................................................................... 11 - 1
11.04.01 Needle height (preliminary adjustment) ................................................................. 11 - 2
11.04.02 Driving eccentric of the looper (Pre-adjust) ............................................................. 11 - 3
11.04.03 Feed lifting eccentric ................................................................................................ 11 - 4
11.04.04 Driving eccentric of the spreader ............................................................................ 11 - 5
11.04.05 Feed driving eccentric and drive to needle bar frame ............................................. 11 - 6
11.04.06 Positioning the feed dog ............................................................................................ 11 - 7
11.04.07 Feed dog height ....................................................................................................... 11 - 8
11.04.08 Position of the needle to the needle hole ................................................................. 11 - 9
11.04.09 Position of the looper crosswise to the sewing direction ........................................ 11 - 10
11.04.10 Position of the looper in the direction of sewing / re-adjusting the looper eccentric ... 11 - 11
11.04.11 Readjusting the needle height .................................................................................. 11 - 12
11.04.12 Position of the spreader in the direction of sewing ................................................ 11 - 13
11.04.13 Position of the spreader crosswise to the direction of sewing ............................... 11 - 14
11.04.14 Needle guard and thread loop support ................................................................... 11 - 15
11.04.15 Balancing weight .................................................................................................... 11 - 16
11.04.16 Feed difference ....................................................................................................... 11 - 17
11.04.17 Top feed stroke on the PFAFF 5625-657/01 ........................................................... 11 - 18
11.04.18 Top feed stroke on the PFAFF 5625-657/02 ......................................................... 11 - 19
11.04.19 Limiting the top feed stroke .................................................................................... 11 - 20
11.04.20 Lifting motion of the top feed dog .......................................................................... 11 - 21
11.04.21 Clearance between the presser foot and the needle plate ...................................... 11 - 22
11.04.22 Presser foot-to-needle plate clearance on the PFAFF 5625-657/02 ......................... 11 - 23
11.04.23 Needle thread tension release (only on the PFAFF 5625-657/01) ......................... 11 - 24
11.04.24 Needle thread regulator and take-up lever guard .................................................. 11 - 25
11.04.25 Looper thread regulator ......................................................................................... 11 - 26
11.04.26 Limiting the stitch length ....................................................................................... 11 - 27
1 Safety

1.01 Regulations

This machine is constructed in accordance with the European regulations indicated in the conformity and manufacturer’s declarations.

In addition to this instruction manual, please also observe all generally accepted, statutory and other legal requirements, including those of the user’s country, and the applicable pollution control regulations!

The valid regulations of the regional social insurance society for occupational accidents or other supervisory authorities are to be strictly adhered to!

1.02 General notes on safety

● The machine must only be operated by adequately trained operators and only when the instruction manual has been fully read and understood!

● All notices on safety and the instruction manual of the motor manufacturer are to be read before the machine is put into operation!

● All notes on the machine concerning danger and safety must be observed!

● The machine must be used for the purpose for which it is intended and must not be operated without its safety devices; all regulations relevant to safety must be adhered to.

● When part sets are changed (e.g. needle, presser foot, needle plate, feed dog or bob-bin), during threading, when the workplace is left unattended and during maintenance work, the machine must be disconnected from the power supply by turning off the on/off switch or removing the plug from the mains!

● Daily maintenance work must only be carried out by appropriately trained persons!

● Repairs and special maintenance work must only be carried out by qualified technical staff or persons with appropriate training!

● During maintenance or repairs on the pneumatic system the machine must be disconnected from the compressed air supply! The only exception to this is when adjustments or function checks are carried out by appropriately trained technical staff!

● Work on the electrical equipment must only be carried out by technical staff who are qualified to do so!

● Work on parts or equipment connected to the power supply is not permitted! The only exceptions to this are specified in regulations EN 50110.

● Conversion or modification of the machine must only be carried out under observation of all relevant safety regulations!
Safety

- Only spare parts which have been approved by us are to be used for repairs! We draw special attention to the fact that spare parts and accessories not supplied by us have not been subjected to testing nor approval by us. Fitting and/or use of any such parts may cause negative changes to the design characteristics of the machine. We shall not accept any liability for damage caused by the use of non-original parts.

1.03 Safety symbols

- Danger!
  Special points to observe.

- Danger of injury to operating or technical staff!

Caution
Do not operate without finger guard and safety devices. Before threading, changing bobbin and needle, cleaning etc. switch off main switch.

1.04 Important notes for the user

- This instruction manual belongs to the equipment of the machine and must be available to the operating staff at all times.
  This instruction manual must be read before the machine is operated for the first time.

- Both operating and technical staff must be instructed on the safety devices of the machine and on safe working methods.

- It is the duty of the user to operate the machine in perfect running order only.

- The user must ensure that none of the safety devices are removed nor put out of working order.

- The user must ensure that only authorized persons operate and work on the machine.

For further information please refer to your PFAFF agency.
1.05 Notes for operating and technical staff

1.05.01 Operating staff

Operating staff are the persons responsible for setting up, operating and cleaning the machine and for removing any disturbances in the sewing area.

The operating staff are obliged to observe the following points, and must:

- always observe the notes on safety in this instruction manual!
- avoid using any working methods which adversely effect the safety of the machine!
- avoid wearing loose-fitting clothing or jewelry such as necklaces or rings!
- also ensure that only authorized persons are allowed near the danger area of the machine!
- immediately report to the user any changes to the machine that may affect its safety!

1.05.02 Technical staff

Technical staff are persons who have been trained in electrical engineering, electronics, pneumatics and mechanical engineering. They are responsible for lubricating, servicing, repairing and adjusting the machine.

The technical staff are obliged to observe the following points, and must:

- always observe the notes on safety in this instruction manual!
- switch off the on/off switch before carrying out adjustment and repair work and ensure it cannot be switched on again unintentionally!
- never work on parts or equipment still connected to the power supply! Exceptions to this are only permissible according to regulations EN 50110;
- disconnected the machine from the compressed air supply when carrying out maintenance or repair work on pneumatic equipment! Exceptions to this are only permissible for function checks;
- replace all safety covers after carrying out maintenance or repair work!
Safety

1.06 Danger warnings

⚠️ A working area of 1 m must be kept free both in front of and behind the machine, so that easy access is possible at all times.

⚠️ Never put your hands in the sewing area during sewing!
Danger of injury by the needle!

⚠️ While setting or adjusting the machine do not leave any objects on the table nor in the needle plate area! Objects may be trapped or slung out of the machine!

Fig. 1 - 01

⚠️ Do not operate the machine without take-up lever guard 1!
Danger of injury from the movement of the take-up lever!

⚠️ Do not operate the machine without a belt guard!
Danger of injury by running drive belts!

⚠️ Do not operate the machine without finger guard 2!
Danger of injury by the needle!
2 Proper use

The PFAFF 563-657/01 is a single-needle, lockstitch special sewing machine with unison feed and pneumatically adjustable lift stroke.

The PFAFF 5625-657/02 is a single-needle, lockstitch special sewing machine with unison feed and mechanically adjustable lift stroke.

Any use of these machines which is not approved by the manufacturer shall be considered as improper use! The manufacturer shall not be liable for any damage arising out of improper use! Proper use shall also be considered to include compliance with the operation, adjustment, service and repair measures specified by the manufacturer!
Specifications

3 Specifications

Stitch type: ................................................................. 401 (chainstitch)
Version: ........................................................................ C N8,5
Needle size: ........................................................... 150 - 180
Needle system: .................................................. 5640-59R

Max. thread size: .......................................................... 11/3
(Synthetic or comparable sizes of other thread types)

Effective balance wheel Ø: .............................................. 80mm

Presser foot clearance: .................................................. 11 mm
Clearance width: ......................................................... 255 mm
Clearance height: .......................................................... 112 mm
Max. stitch length: ...................................................... 8,5 mm

Noise data:
Emission sound level at the workplace .................... (see equipment service manual)
Air consumption per switch cycle: ...................................... 0.146 Nl
Net weight machine head: ........................................... approx. 56 kg
Gross weight: ........................................................... approx. 64 kg

▲ Subject to alterations in design, weight and dimensions

Maximum sewing speed
The maximum sewing speed depends on the material to be sewn, and thus on the top feed stroke.

<table>
<thead>
<tr>
<th>Top feed in mm</th>
<th>Max. speed in s.p.m.</th>
<th>Top feed in mm</th>
<th>Max. speed in s.p.m.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mm</td>
<td>4000</td>
<td>5 mm</td>
<td>2200</td>
</tr>
<tr>
<td>2 mm</td>
<td>3600</td>
<td>6 mm</td>
<td>2000</td>
</tr>
<tr>
<td>3 mm</td>
<td>3000</td>
<td>7 mm</td>
<td>1800</td>
</tr>
<tr>
<td>4 mm</td>
<td>3000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chaining off speed
To minimize noises when chaining off, we recommend to reduce the possible maximum speed.

3.01 Possible work aids

Sub-class –906/07 ................................................... pneumatic foot lift and tension release
4 Disposal of Machine

- Proper disposal of the machine is the responsibility of the customer.
- The materials used for the machine are steel, aluminium, brass and various plastic materials. The electrical equipment comprises plastic materials and copper.
- The machine is to be disposed of according to the locally valid pollution control regulations; if necessary, a specialist is to be commissioned.

⚠ Care must be taken that parts soiled with lubricants are disposed of separately according to the locally valid pollution control regulations!
5 Transport, packaging and storage

5.01 Transportation to customer's premises

All machines are delivered completely packed.

5.02 Transport within the customer’s premises

The manufacturer bears no liability for transport within the customer’s premises or to the individual locations of use.
Always ensure that the machine is only transported upright.

5.03 Disposal of the packaging

The packaging of these machines consists of paper, cardboard and VCE fiber. The proper disposal of the packaging is the responsibility of the customer.

5.04 Storage

The machine can be stored for up to 6 months if not in use. During this time it should be protected from dust and moisture.
For longer storage the individual parts of the machine, especially the moving parts, should be protected against corrosion, e.g. by a film of oil.
6  Explanation of the symbols

In this Instruction Manual, tasks to be carried out and important information are drawn to your attention by symbols. The symbols have the following meanings:

- **Note, information**

- **Cleaning, care**

- **Lubrication**

- **Servicing, repairing, adjustment, maintenance (only to be carried out by specialist personnel)**
7 Controls

7.01 Adjusting the stitch length

- After pressing key 1, the required stitch length can be set by turning adjustment wheel 2.

7.02 Adjusting the top feed stroke on the PFAFF 5625-657/01

- The top feed stroke can be set by turning adjustment wheel 1.

The maximum top feed stroke is limited by the manufacturer. The limit can be changed by qualified personnel, see Chapter 11.04.17 Top feed stroke.
7.03 Adjusting the top feed stroke on the PFAFF 5625-657/02

Maschine ausschalten!
Verletzungsgefahr durch unbeabsichtigtes Anlaufen der Maschine!

- Open cover on the rear side of the machine, loosen nut 1 and adjust lever 2 accordingly.

Fig. 7 - 03

7.04 Lifting the presser foot

- The presser foot can be lifted by operating lever 1.

On machines with pneumatically-operated foot lift (sub-class –906/07) the presser foot can be lifted as described in the system service manual.

Fig. 7 - 04
7.05 Key for fixing the presser foot

- The presser foot can be fixed by raising it, then pressing key 1 and lowering the presser foot.
- To release it raise the presser foot.

Further control elements are described in the system service manual.
Installation and commissioning

The machine must only be installed and commissioned by qualified personnel!
It is imperative that all relevant safety regulations are observed!

8.01 Installation

- Suitable connections for electricity must be available at the machine's location.
- Make sure that a level and firm surface as well as sufficient lighting are guaranteed at the machine's location.
- Connect the ground cable from the sewing head, motor, main switch and additional units to the frame, see the system service manual.

8.02 Commissioning

- The machine, in particular the electric cables and pneumatic connection tubes must be checked for damage.
- Clean the machine thoroughly and then, with the machine in its assembly position, fill in oil, see Chapter 10 Care and Maintenance.
- When the machine is running, the balance wheel must turn towards the operator. If this is not the case, have the machine converted by specialized staff.
Setting up

9 Setting up

All regulations and instructions in this service manual must be observed.
Special attention must be paid to all safety regulations!

All setting up work is only to be carried out by appropriately trained personnel.
For all setting up work the machines must be disconnected from the mains by
operating the main switch or by pulling out the plug.

9.01 Inserting the needle

Switch off the machine!
Danger of injury if the machine is started accidentally!

Only use needles from the system intended for the machine, see Chapter 3 Specifications.

● Raise the needle bar to its highest position and loosen screw 1.
● Insert needle 2 as far as possible into the needle bar (the long needle groove must be facing right).
● Tighten screw 1.

Fig. 9 - 01
9.02 Threading the machine / adjusting the thread tensions

Switch off the machine!
Danger of injury if the machine is started accidentally!

- Thread the needle thread as shown in Fig. 9-02.
- Adjust the needle thread tension by turning milled screw 1.
- Open the top and side cover of the looper compartment.
- Thread the looper thread as shown in Fig. 9-02.
- Insert the thread on the looper 2 with a pair of tweezers.
- Adjust the looper thread tension by turning milled screw 3.
Care and Maintenance

10 Care and Maintenance

<table>
<thead>
<tr>
<th>Task</th>
<th>Frequency</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean the looper compartment</td>
<td>Daily, several times</td>
<td></td>
</tr>
<tr>
<td>Clean the entire machine</td>
<td>Once a week</td>
<td></td>
</tr>
<tr>
<td>Check the gear oil level</td>
<td>Daily</td>
<td></td>
</tr>
<tr>
<td>Check the oil level in the oil tank</td>
<td>Daily</td>
<td></td>
</tr>
</tbody>
</table>

The maintenance intervals apply to an average machine running time for a single shift. Shorter maintenance intervals are advisable for longer running times.

10.01 Cleaning the looper compartment

Switch off the machine.

Danger of injury if the machine is started accidentally!

- Clean the complete looper and looper compartment daily, several times if in continuous use.
Switch off the machine.
Danger of injury if the machine is started accidentally!

Before each use, open the side cover and check the oil level. The oil level must always be visible in inspection glass 1 (air bubble must be visible, or the oil level is too high).

- If necessary remove screw 2 and fill in oil until an air bubble is visible.
- Tighten screw 2 again.

Only use oil with a mean viscosity of 22.0 mm²/s at 40°C and a density of 0.865 g/cm³ at 15°C.

We recommend PFAFF sewing machine oil, part number 280-1-120 144.
Switch off the machine.
Danger of injury if the machine is started accidentally!

Always check the oil level before starting the machine.
The oil level must always be visible in sight glass 1.

- Whenever necessary raise cap 2 and fill in oil.
- Before starting the machine open valve 3.

Only use oil with a mean viscosity of 22.0 mm²/s at 40°C and a density of 0.865 g/cm³ at 15°C.

We recommend PFAFF sewing machine oil, part number 280-1-120 144.

During long stop periods close valve 3.
**11 Adjustment**

The illustrations in this chapter show a **PFAFF 5625-657/01** with sub-class **-906/07** (pneumatic presser foot lift) as a work aid. Machines without this subclass, as well as the **PFAFF 5625-657/02**, differ slightly in some aspects from the illustrations shown.

**11.01 Notes on adjustment**

All following adjustments are based on a fully assembled machine and may only be carried out by expert staff trained for this purpose.

Machine covers, which have to be removed and replaced to carry out checks and adjustments, are not mentioned in the text.

The order of the following chapters corresponds to the most logical work sequence for machines which have to be completely adjusted. If only specific individual work steps are carried out, both the preceding and following chapters must be observed.

Screws and nuts indicated in brackets ( ) are fastenings for machine parts, which must be loosened before adjustment and tightened again afterwards.

**11.02 Tools, gauges and other accessories**

- 1 set of screwdrivers with blade widths from 2 to 10 mm
- 1 set of wrenches with jaw widths from 6 to 22 mm
- 1 set of Allan keys from 1.5 to 6 mm
- 1 gauge for top feed stroke 5.0 mm (part no. 61-111 633-60)
- 1 metal ruler (part no. 08-880 218-00)
- 1 adjustment pin (part no. 61-111 643-55)
- Needles, system 5640-59R

**11.03 Abbreviations**

t.d.c. = top dead centre
b.d.c. = bottom dead centre
11.04 Adjusting the basic machine

11.04.01 Needle height (preliminary adjustment)

**Requirement**

When the needle bar is positioned at t.d.c., there should be a distance of approx. **11 mm** between the needle point and the needle plate.

● Without twisting it, adjust the needle bar 1 (screw 2) in accordance with the requirement.
11.04.02 Driving eccentric of the looper (Pre-adjust)

**Requirement**
When the needle bar is positioned at b.d.c., the round side of adjustment pin 1 (part no. 61-111 643-55) should lock into groove 5.

- Insert adjustment pin 1 in hole 2.
- Turn eccentric 3 (screws 4) in accordance with the requirement.
- Remove adjustment pin 1.
Adjustment

11.04.03 Feed lifting eccentric

**Requirement**
When the needle bar is positioned at b.d.c., slot 3 should be vertically above shaft 4.

- Turn eccentric 1 (screws 2) in accordance with the requirement.
11.04.04 Driving eccentric of the spreader

**Requirement**
1. When the needle bar is positioned at b.d.c., slot 5 of eccentric 1 should be vertically above shaft 3.
2. Spreader holder 4 should move a distance of 6 mm.

- Turn eccentric 1 (screws 2) in accordance with requirement 1 or adjust it in accordance with requirement 2.
Adjustment

11.04.05 Feed driving eccentric and drive to needle bar frame

Requirement
When the needle bar is positioned at b.d.c.
1. Slot 7 of eccentric 1 should be vertically above shaft 5 and
2. Crank 3 should be positioned vertical to shaft 6.

● Turn eccentric 1 (screws 2) in accordance with requirement 1.
● Turn crank 3 (screw 4) in accordance with requirement 2.
11.04.06 Positioning the feed dog

Requirement
When the maximum stitch length is set, the feed dog 4 should move laterally and lengthwise in the centre of the needle plate cut-out.

- Align device 1 (screws 2 and 3) in accordance with the requirement.
Adjustment

11.04.07 Feed dog height

**Requirement**
When the needle bar is positioned at b.d.c. and with the maximum stitch length set, the front teeth of the feed dog 4 should be **1.1 mm** above the needle plate.

![Diagram](image)

- Loosen screw 1.
- Adjust screw 2 (nut 3) in accordance with the **requirement**.
- Tighten screw 1.
11.04.08 Position of the needle to the needle hole

**Requirement**

1. Crosswise to the sewing direction, the needle should penetrate in the centre of the needle hole.

2. When the needle bar is positioned at b.d.c., there should be a distance of 0.8 mm between the needle and the front edge of the needle hole.

- Align the needle bar frame (screws 1, 2 and 3) in accordance with requirement 1.
- Adjust the needle bar (screw 3) in accordance with requirement 2.
Adjustment

Position of the looper crosswise to the sewing direction

Requirement
When its point is positioned in the centre of the needle, looper 1
1. Should be parallel to the needle plate cut-out and
2. There should be a distance of 0.1 mm between the looper point and the needle.

Fig. 11 - 09

- Position the looper point to the centre of the needle by turning the balance wheel.
- Align looper 1 (screws 2) in accordance with requirement 1.
- Adjust holder 3 (screw 4) in accordance with requirement 2.
11.04.10 Position of the looper in the direction of sewing/re-adjusting the looper eccentric

**Requirement**
When the needle bar is positioned 6.0 mm after b.d.c. and the stitch length is set at 8.5 mm, the looper point should be centred to the needle.

![Fig. 11-10](image)

- Set the stitch length at 8.5 mm by piercing paper. The scale on the stitch length control button is not identical with the actual stitch length.
- By turning the balance wheel in the sewing direction, position the needle bar at 6.0 mm after b.d.c.
- In this position fit the screw clamp to the needle bar, so that the upwards motion of the needle bar is blocked.
- Adjust bracket 1 (screw 2) in accordance with the requirement.

**Checking the looper drive eccentric**
- Turn the balance wheel in the opposite direction of sewing until the screw clamp has contact again.
- Measure the distance between the looper point and the edge of the needle – the distance should be 5 mm.
- If there is any variance, turn the balance wheel in the sewing direction until the screw clamp has contact again and carry out the following adjustment:
- If the value measured is more than 5 mm, turn eccentric 3 (screw 4), so that the looper moves half of the difference measured to the left.
- If the value measured is less than 5 mm, turn eccentric 3 (screw 4), so that the looper moves half of the difference measured to the right.
- After the correction on eccentric 3 has been carried out, return to the setting described in the requirement.

Keep the stitch length setting for the next adjustment.
11.04.11 Readjusting the needle height

**Requirement**
When the stitch length is set at 8.5 mm and the looper point approaching from the rear is in alignment with the front side of the needle, the bottom edge of the looper should be 1.0 - 1.2 mm above the eye of the needle.

- Adjust needle bar 1 (screw 2) in accordance with the requirement.
- Check the position of the looper in the direction of sewing, see Chapter 11.04.10 Position of the looper in the direction of sewing.
11.04.12 Position of the spreader in the direction of sewing

**Requirement**
With the **needle bar at b.d.c.** and the maximum stitch length setting, the distance between the spreader point 3 and the needle should be **4 mm**.

- Adjust holder 1 (screw 2) in accordance with the **requirement**.
11.04.13 Position of the spreader crosswise to the direction of sewing

**Requirement**

1. The point of spreader 1 should have a side distance of 0.1 mm to the looper.
2. The point of spreader 1 should be 0.1 mm above the back of the looper.

- Position the looper eye next to the point of spreader 1 by turning the balance wheel.
- Adjust holder 2 (screws 3) in accordance with requirement 1.
- Turn the balance wheel until the point of spreader 1 is positioned above the back of the looper.
- Adjust holder 2 (screw 4) in accordance with requirement 2.
11.04.14 Needle guard and thread loop support

**Requirement**
When the looper point approaching from the rear is positioned at the centre of the needle
1. Guard 1 should be touching the needle lightly and its lower edge should be positioned 0.5 mm above the needle tip.
2. The top edge of the thread loop support 3 should be level with the bottom edge of the looper.
3. There should be a distance of 0.1 mm between thread loop support 3 and the needle.

- Align guard 1 (screw 2) in accordance with requirement 1.
- Align thread loop support 3 (screws 4) in accordance with requirement 2 and 3.
Adjustment

11.04.15 Balancing weight

Requirement
When the needle bar is positioned at t.d.c., the greatest eccentricity of the balancing weight 1 should be at the bottom.

- Adjust balancing weight 1 (screw 2) in accordance with the requirement.
11.04.16 Feed difference

Requirement
With the maximum stitch length set, when the balance wheel is turned, the needle and bottom feed dog should carry out the same feed strokes.

- Adjust connecting rod 1 (nut 2) in accordance with the requirement.
  Connecting rod towards " + " = greater needle feed stroke or
  Towards " - " = smaller needle feed stroke.
**Adjustment**

11.04.17  Top feed stroke on the PFAFF 5625-657/01

**Requirement**

1. When adjustment wheel 1 is set at position “5”, the top feed dog 10 and presser foot 11 should both rise 5.0 mm.
2. The standard stroke should be limited to 5 mm.

- Remove the bottom feed dog and the needle and set the adjustment wheel 1 at “0”.
- Unscrew the needle plate, place the metal ruler over the opening of the needle plate cut-out so that both presser feet can touch the metal ruler.
- Screw in stop screw 2 as far as possible.
- For the pre-adjustment set crank 3 (screw 4) so that crank 5 does not move when the balance wheel is turned.
- Set adjustment wheel 1 at “5”.
- For the re-adjustment twist ball stud 6 (counter nut 7) in accordance with requirement 1.
- Adjust crank 8 (screw 9) so that the top feed dog 10 and presser foot 11 both rise the same distance from the needle plate.
- Check requirement 1 and , if necessary, adjust ball stud 6 (nut 7).
- Adjust stop screw 2 in accordance with requirement 2.
Top feed stroke on the PFAFF 5625-657/02

**Requirement**
With the maximum feed stroke set, top feed dog 5 and presser foot 6 should each rise 5.00 mm.

- Remove the bottom feed dog and the needle.
- Unscrew the needle plate, place the metal gauge over the opening of the needle plate cutout so that both sewing feet can be lowered onto the metal gauge.
- Push up lever 1 (nut 2) as far as possible.
- Adjust crank 3 (screw 4) so that the top feed dog 5 and presser foot 6 rise the same distance above the needle plate.
- Adjust lever 1 (nut 2) in accordance with the requirement.
11.04.19 Limiting the top feed stroke

**Requirement**
1. The maximum stroke of the top feed is set according to customer specifications (standard setting: 5 mm)
2. The minimum stroke should be at least 3 mm.

- Adjust screw 1 in accordance with requirement 1.
- Adjust screw 2 (nut 3) in accordance with requirement 2.
Lifting motion of the top feed dog

**Requirement**
When the stroke is set at 3 mm, the top feed dog 3 should just have reached the needle plate when the needle, when approaching from above, is at the height of the needle plate.

- Adjust eccentric 1 (screws 2) in accordance with the requirement.
Adjustment

11.04.21 Clearance between the presser foot and the needle plate

**Requirement**
When presser foot 1 is raised, there should be a clearance of approx. **11 mm** between presser foot 1 and the needle plate.

- Raise presser foot 1 with cylinder 2.
- Adjust plunger 3 (nut 4) in accordance with the requirement.
Presser foot-to-needle plate clearance on the PFAFF 5625-657/02

### Requirement
When presser foot 7 is raised
1. The hand lever 4 should be parallel to the needle thread tension unit 5,
2. The tip of crank 8 and bar 9 should be aligned and
3. There should be a clearance of approx. 11 mm between presser foot 7 and the needle plate.

**Fig. 11 - 22**

- Loosen screws 1, 2, and 3.
- Turn the hand lever 4 in accordance with requirement 1.
- In this position, move stop 6 to touch the case and tighten screws 2.
- Raise presser foot 7 with the hand lever.
- Turn crank 8 and bar 9 in accordance with requirement 2 and tighten screws 3.
- Turn linkage rod 10 (nubs 11) in accordance with requirement 3.
- Adjust the needle thread tension release unit (Chapter 11.04.23).
## Adjustment

**11.04.23** Needle thread tension release (only on the PFAFF 5625-657/01)

<table>
<thead>
<tr>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>When the presser foot is raised, tension disks 3 should be apart.</td>
</tr>
</tbody>
</table>

- Raise the presser foot with the hand lever.
- Turn adjustment ring 1 (screws 2) in accordance with the requirement.
11.04.24 Needle thread regulator and take-up lever guard

**Requirement**
1. When the needle bar is at b.d.c., there should be a clearance of 1 mm between thread take-up lever 8 and take-up lever guard 1.
2. The thread take-up lever 8 should be centred to the take-up lever guard 1 as seen from the side.
3. The screws in the elongated holes of the thread regulator 4 and thread guides 6 should be positioned in the centre.

Fig. 11 - 24

- Adjust take-up lever guard 1 (screws 2) in accordance with requirements 1 and 2.
- Adjust the thread regulator 4 (screws 5) and thread guide 6 (screws 7) in accordance with requirement 3.
11.04.25 Looper thread regulator

**Requirement**

1. When the maximum stitch length is set, thread puller 1, at the top of its stroke, should have a clearance of **28 mm** to the top edge of the bedplate.
2. The eyes of thread puller 3 should be in alignment with the eyes of thread puller 1.

---

**Fig. 11 - 25**

- Adjust the thread puller 1 (screws 2) in accordance with **requirement 1**.
- Adjust the thread puller 3 (screw 4) in accordance with **requirement 2**.

The adjustment of thread puller 3 is dependent on the sewing conditions. If necessary, with the appropriate adjustment more or less thread can be pulled.
11.04.26 Limiting the stitch length

**Requirement**
For the required maximum stitch length, stop lug 1 should be touching stop 3.

- Adjust stop lug 1 (screws 2) in accordance with the requirement.