

Technical Information

35.2009

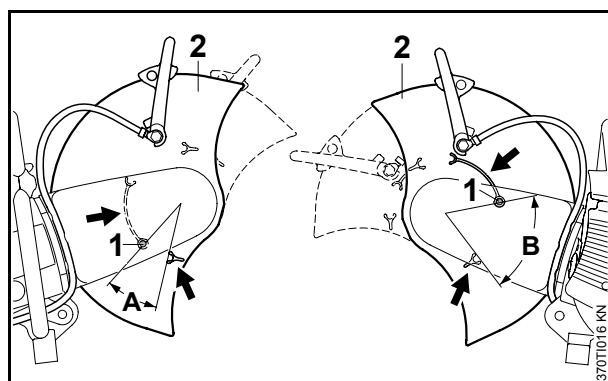
Cut-off machine STIHL Cutquik® TS 410, 420 – Series 4238

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1. Guard with defined adjustment range

1.1 Adjustment range

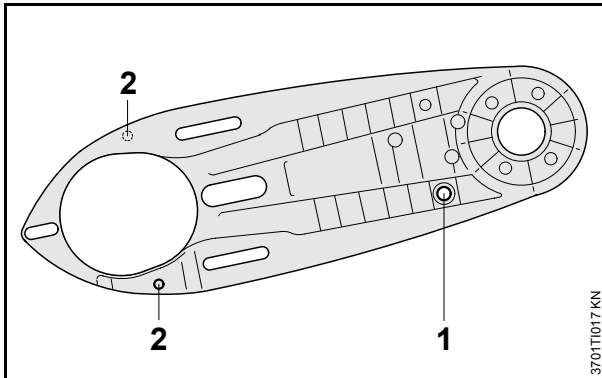


Left: Adjustment range **(A)**,
Guard mounted on the inboard side

Right: Adjustment range **(B)**,
Guard mounted on the outboard side

In STIHL Cutquik® TS 410, 420 cut-off machines, the adjustment range **(A and B respectively)** of the guard will be determined by the stop pin **(1)** installed into the cast arm and by the lugs (arrows) molded onto the guard **(2)**.

1.2 Cast arm



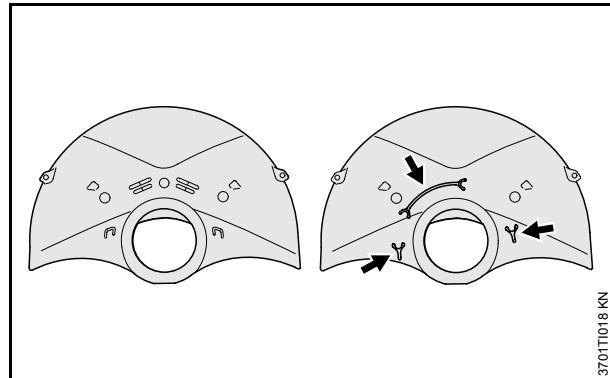
The previous versions of the cast arm 4238 701 0201 (TS 410) and cast arm 4238 701 0200 (TS 420) are being replaced by the new versions of the cast arm 4238 701 0203 (TS 410) and cast arm 4238 701 0202 (TS 420).

The new versions differ by a threaded hole (1) for installing in the stop pin (see [1.4](#)) and additional holes (2) for fastening the limit stop (see [1.5](#)).

Spare parts

The previous versions of cast arm 4238 701 0201 (TS 410) and cast arm 4238 701 0200 (TS 420) without a threaded hole and without additional holes are no longer available. The new versions of cast arm 4238 701 0203 (TS 410) and cast arm 4238 701 0202 (TS 420) can also be used for older machines.

1.3 Guard



Left: Previous versions of the guard
Right: New versions of the guard

The previous versions of the guard dia. 300 mm (12") (4238 700 8102) and the guard dia. 350 mm (14") (4224 700 8102) are being replaced by the new versions of the guard dia. 300 mm (12") (4238 700 8105) and the guard dia. 350 mm (14") (4224 700 8108).

The new versions differ from the previous versions by casted lugs (arrows), together with the stop pins (see [1.4](#)) installed into the cast arm (see [1.2](#)) to determine the adjustment range (see [1.1](#)) of the guard.

Spare parts

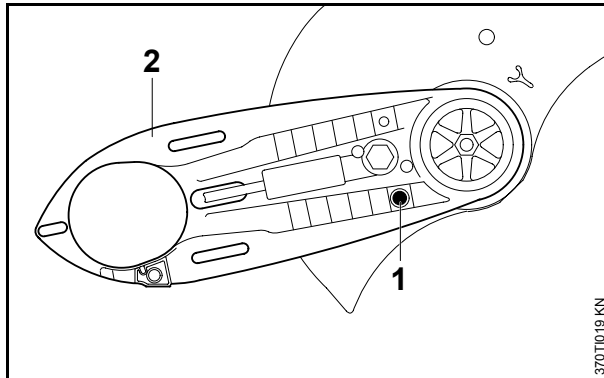
The previous versions of the guard dia. 300 mm (12") (4238 700 8102) and the guard dia. 350 mm (14") (4224 700 8102) remain available for older machines.

Service notes

The previous versions of the guard dia. 300 mm (12") (4238 700 8102) and the guard dia. 350 mm (14") (4224 700 8102) may only be installed in machines with the previous guards.

The new versions of the guard dia. 300 mm (12") (4238 700 8105) and the guard dia. 350 mm (14") (4224 700 8108) may only be installed in machines with the new guards.

1.4 Stop pin

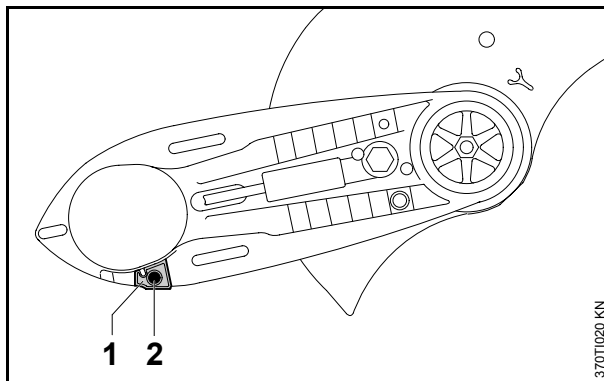


With the introduction of the new guards (see [1.3](#)), the stop pin (1) 4224 691 0100 and the limit stop (see [1.5](#)) are introduced. The stop pin (1) installed into the cast arm (2), together with the lugs molded onto the guard (see [1.3](#)) determine the adjustment range (see [1.1](#)).

Tightening torques

Stop pin / cast arm 5 Nm

1.5 Limit stop

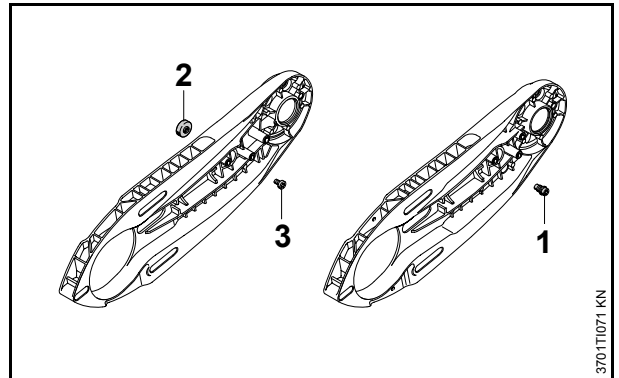


With the introduction of the new guards (see [1.3](#)), the limit stop (1) 4238 691 0200 and the stop pin (see [1.4](#)) are introduced. The limit stop (1) is fastened to the cast arm with the pan head self-tapping screw IS-P4x16 (2) (9074 478 3025).

Tightening torques

Limit stop / cast arm 1.8 Nm

1.6 Rubber buffer



Left: Previous versions of the cast arm, rubber buffer and screw
 Right: New versions of the cast arm with guard and the stop pin

The stop pin (1, see [1.4](#)) and lugs cast onto the guard (see [1.3](#)) determine the adjustment range (see [1.1](#)), the rubber buffer (2) 4224 790 9300 and the screw IS-M5x6-10.9 (3) (9022 341 0910) have been eliminated.

Spare parts

The previous versions of the rubber buffer 4224 790 9300 and the screw IS-M5x6-10.9 (9022 341 0910) remain available for machines with the previous guards.

1.7 Reconfiguring the "cast arm with guard" – from guard on the inboard side to guard on the outboard side

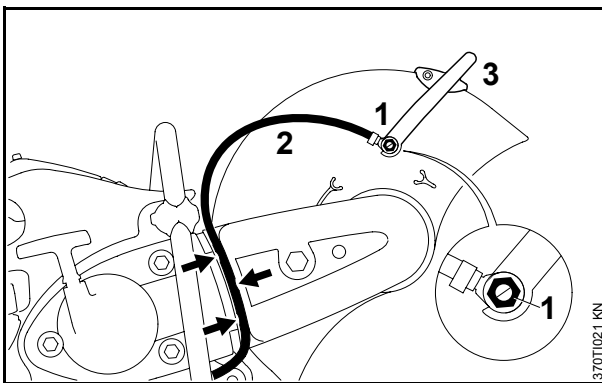
The "cast arm with guard" is mounted on the inboard side by the manufacturer.

The "cast arm with guard" can also be mounted on the outboard side depending on requirements.

Assembly on the inboard side is recommended for better balance.

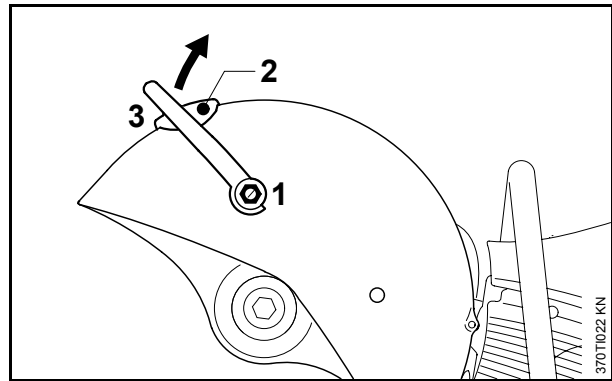
- Remove the abrasive wheel

Remove water attachment



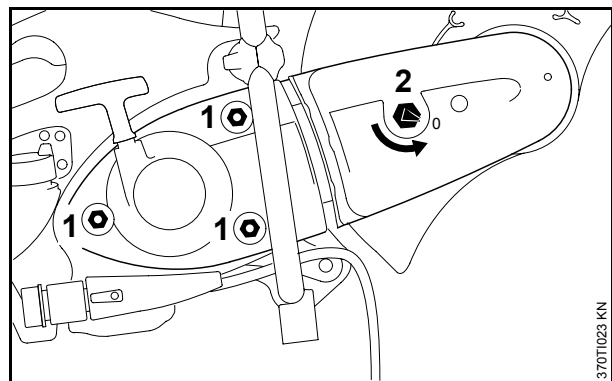
- Loosen the banjo bolt (1) with the combination wrench – in the process, remove the square nut from the guide on the inside of the guard
- Remove the water hose (2) with connector from the adjusting lever (3)
- Remove the water hose (2) from the guide (arrows) in the V-belt guard

Remove the adjusting lever



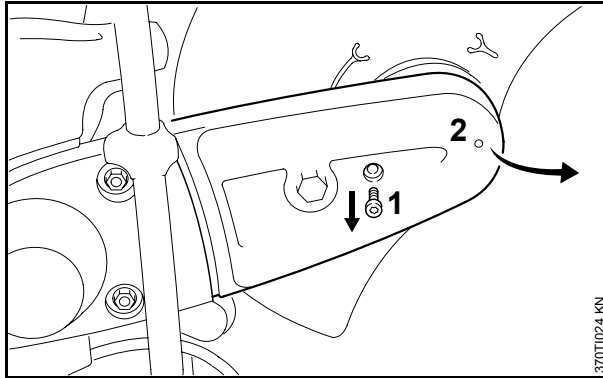
- Loosen the banjo bolt (1) with the combination wrench and remove it together with the seal – in the process, remove the square nut from the guide on the inside of the guard
- Remove bolt (2)
- Turn the adjusting lever (3) upwards and remove


Slacken the V-belt

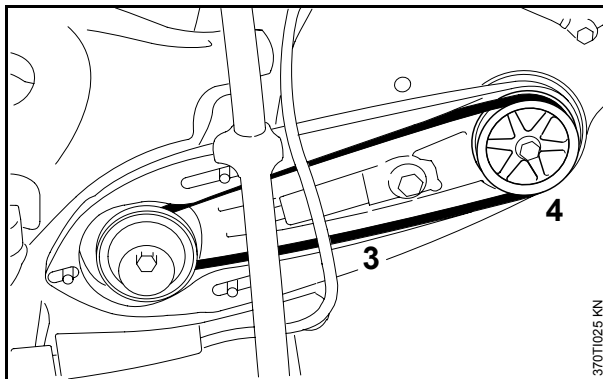


- Loosen the nuts (1) – do not remove them
- Turn the tensioning nut (2) counterclockwise with the combination wrench – approx. 1/4 turn, max. to stop = 0

Remove the V-belt guard

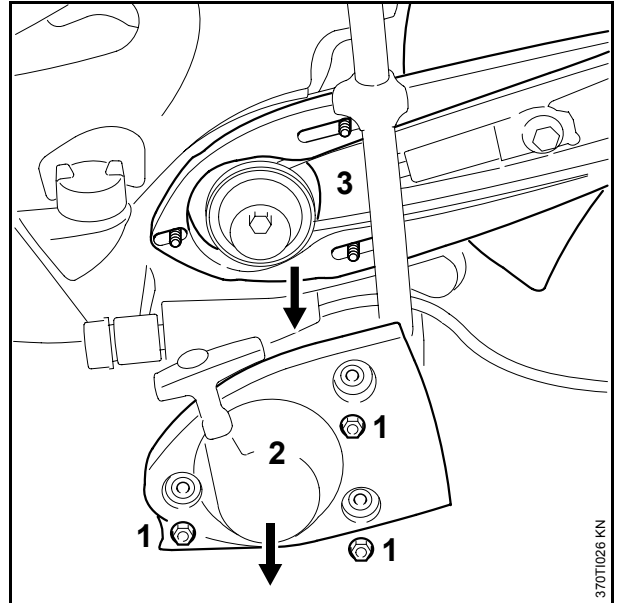


- Loosen screw (1) – in machines with the new belt guard (see  2), the screw is secured on the belt guard to prevent loss
- Raise the V-belt guard (2) slightly and pull off towards front



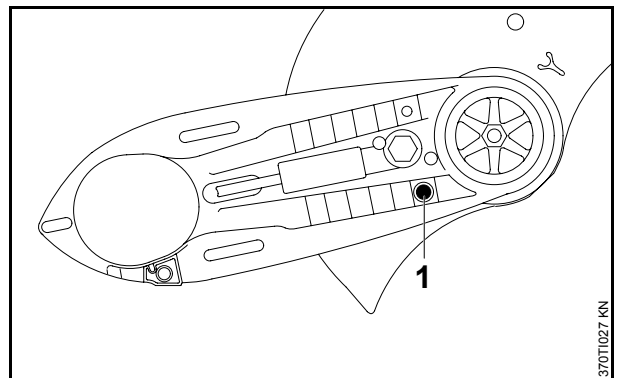
- Remove the V-belt (3) from the front pulley (4)

Remove the "cast arm with guard"

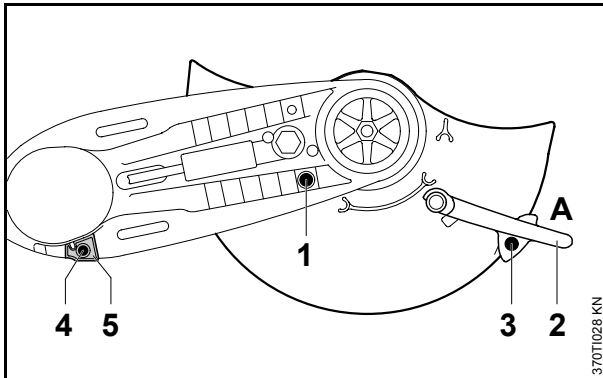


- Remove the nuts (1)
- Remove the "starter cover with rewind starter" (2)
- Remove the "cast arm with guard" (3) from the studs

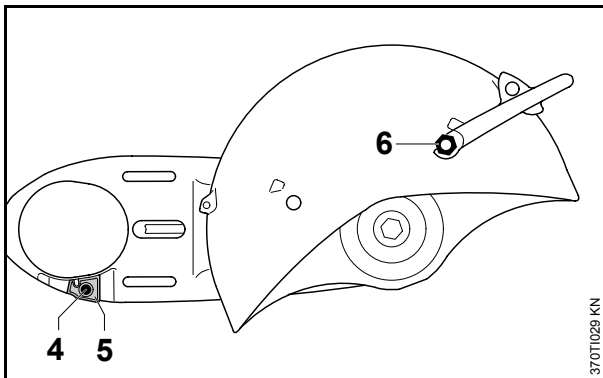
Preparing the "cast arm with guard" for outboard mounting



- Remove stop pin (1)

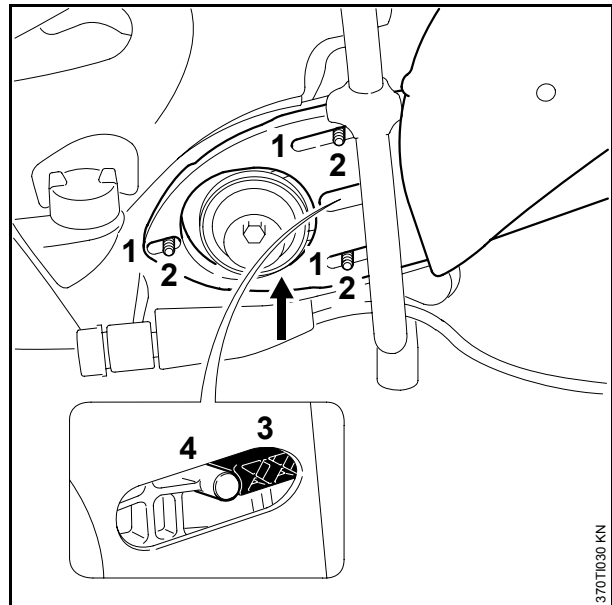


- Turn the guard so that it is in the position shown (see picture)
- Install and tighten the stop pin (1)
- Move the adjusting lever (2) to position (A)
- Install the bolt (3) and tighten
- Loosen the bolt (4) of the limit stop (5)
- Remove the limit stop (5)

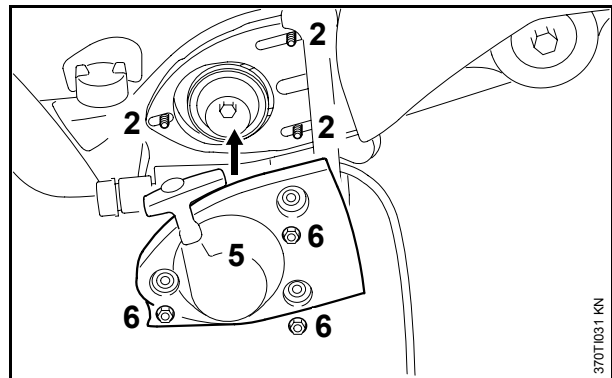


- Turn the "cast arm with guard" so that the guard is on the outboard side
- Insert limit stop (5) – align the hole in the limit stop with the hole in the cast arm
- Install the screw (4) and tighten
- Insert the square nut into the guide of the guard and hold in place
- Install the shorter banjo bolt (6) and washer at the adjusting lever and tighten with the combination wrench

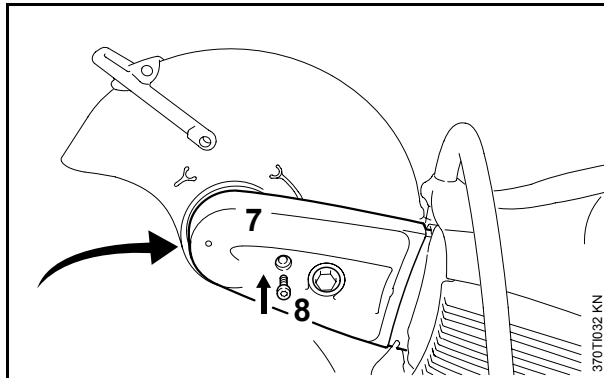
Mount "cast arm with guard" – guard on the outboard side




- Position the oblong holes (1) in the "cast arm and guard" onto the studs (2), install the ribbed V-belt over the front pulley
- Check that the belt adjustment moves easily
- The belt tensioner (3) must nest against the lug (4)

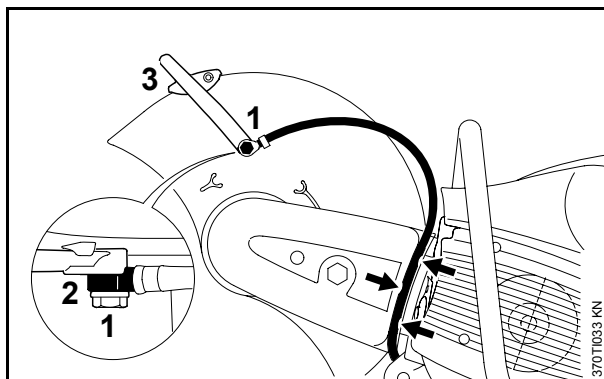


- Fit the "starter cover with rewind starter" (5) over the studs (2)
- Tighten the nuts (6) by hand



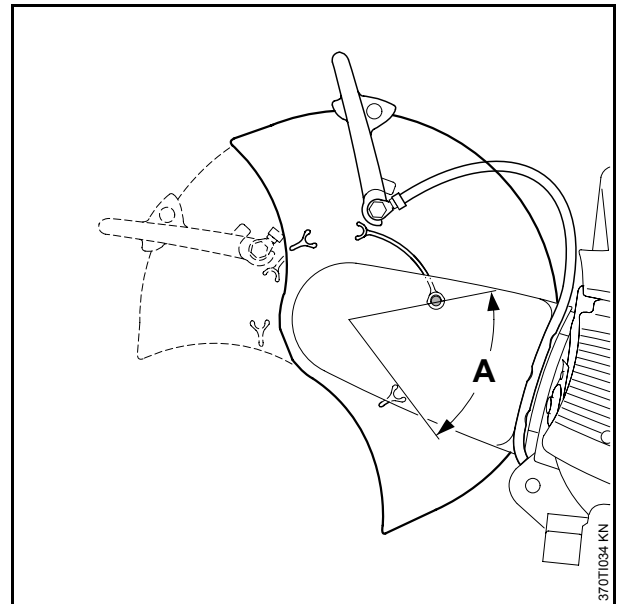
- Push the V-belt guard (7) into place
- Install and tighten screw (8) – in machines with the new belt guard (see  2), the screw is secured on the belt guard to prevent loss

Connect water connection



- Insert the longer banjo bolt (1) through the connector (2) of the water attachment – observe the position of the connector
- Insert the square nut into the guide of the guard and hold in place
- Install the support with the longer banjo bolt onto the adjusting lever (3) – install the banjo bolt and tighten with the combination wrench
- Insert the water hose into the guide in the V-belt guard (arrow) from the shut-off cock towards the guard – avoid tight radiuses
- Tension the ribbed V-belt

Check the adjustment range of the guard

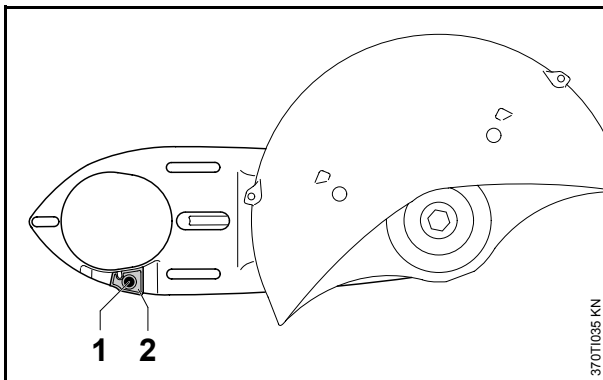


- Rotate the guard forwards and backwards as far as possible – adjustment range (A) must be limited by the stop pin

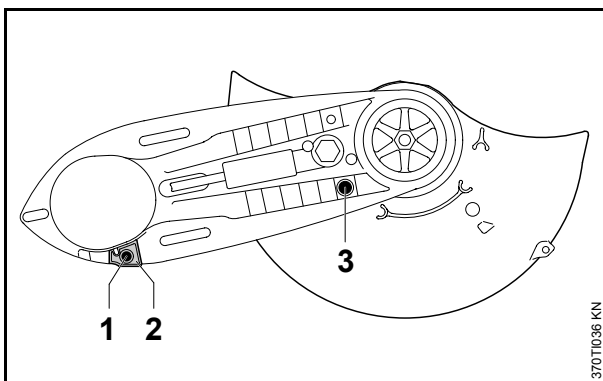
1.8 Reconfiguring the "cast arm with guard" – from guard on the outboard side to guard on the inboard side

- Remove the abrasive wheel
- Remove water attachment
- Remove the adjusting lever
- Slacken the V-belt
- Remove the V-belt guard
- Remove the V-belt
- Remove the "cast arm with guard"

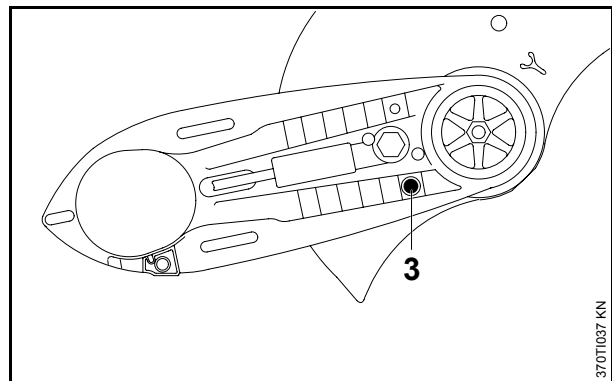
Preparing the "cast arm with guard" for inboard mounting



- Loosen the bolt (1) of the limit stop (2)
- Remove the limit stop (2)

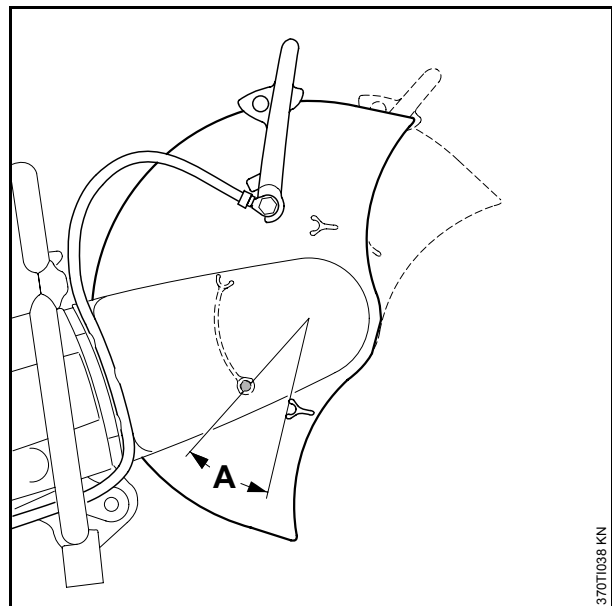


- Turn the "cast arm with guard" so that the guard is on the inboard side
- Insert limit stop (2) – align the hole in the limit stop with the hole in the cast arm
- Install the screw (1) and tighten
- Remove stop pin (3)



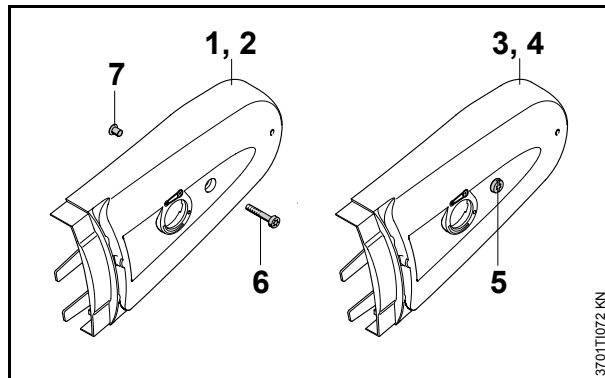
- Turn the guard so that it is in the position shown (see picture)
- Install and tighten the stop pin (3)
- Install the adjusting lever
- Mount "cast arm with guard" – guard on the inboard side
- Install the V-belt
- Install the V-belt guard
- Connect water connection
- Tension the ribbed V-belt

Check the adjustment range of the guard



Rotate the guard forwards and backwards as far as possible – adjustment range (A) must be limited by the stop pin

2. Belt guard, screw



Left: Previous versions of the belt guard and the screw

Right: New versions of the belt guard and the screw

The previous versions of the belt guard (1) 4238 700 8101 (TS 410) and the belt guard (2) 4238 700 8100 (TS 420) are being replaced by the new versions of the belt guard (3) 4238 700 8107 (TS 410) and the belt guard (4) 4238 700 8109 (TS 420).

The new versions of the belt guard (3, 4) are fastened to the cast arm with the new screw IS-M5x21 (5) (9022 319 1027). In the versions of the belt guard (3, 4), the new screw IS-M5x21 (5) (9022 319 1027) is secured against loss. The previous versions of the spline screw IS-M5x30x22-10.9 (6) (9022 341 1070) and the hollow rivet DIN7339-7.5x1x6.8 (7) (9443 825 7130) are no longer needed.

Tightening torques

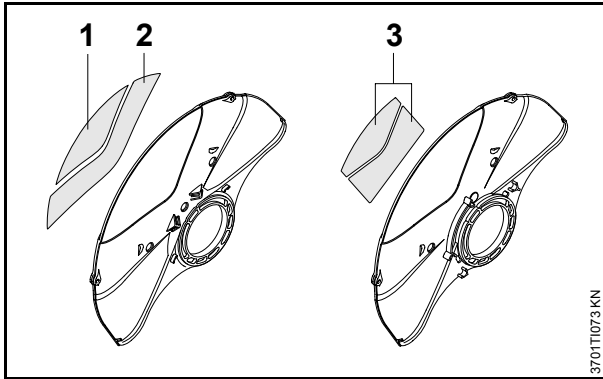
| | |
|-----------------------|------|
| Belt guard / cast arm | 6 Nm |
|-----------------------|------|

Spare parts

The previous versions of the belt guard 4238 700 8101 (TS 410) and the belt guard 4238 700 8100 (TS 420) are no longer available. The new versions of belt guard 4238 700 8107 (TS 410) and belt guard 4238 700 8109 (TS 420) can also be used for older machines. The previous versions of spline screw IS-M5x30x22-10.9 (9022 341 1070) and hollow rivet DIN7339-7.5x1x6.8 (9443 825 7130) remain available for older machines.

3. Set of instruction labels

3.1 Set of instruction labels 0000 960 0100 (only for TS 410)



Left: Previous versions of the instruction labels

Right: New versions of the instruction labels

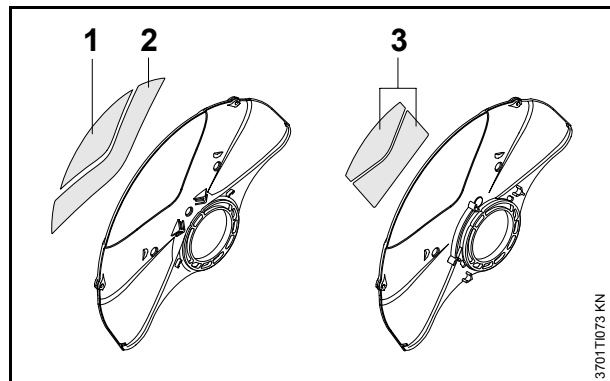
TS 410 only, the previous versions of instruction label (1) 0000 967 3521 and instruction label (2) 0000 967 3511 are being replaced by the new "set of instruction labels" (3) 0000 960 0100.

Spare parts/service notes

The previous versions of instruction label (1) 0000 967 3521 and instruction label (2) 0000 967 3511 are no longer available. The new "set of instruction labels" (3) 0000 960 0100 can also be used with older STIHL Cutquik® TS 410 cut-off machines.

Always attach both instruction labels in the new "set of instruction labels" (3) 0000 960 0100.

3.2 Set of instruction labels 0000 960 0101 (only for TS 420)



Left: Previous versions of the instruction labels

Right: New versions of the instruction labels

TS 420 only, the previous versions of instruction label (1) 0000 967 3521 and instruction label (2) 0000 967 3520 are being replaced by the new "set of instruction labels" (3) 0000 960 0101.

Spare parts/service notes

The previous versions of instruction label (1) 0000 967 3521 and instruction label (2) 0000 967 3520 are no longer available. The new "set of instruction labels" (3) 0000 960 0101 can also be used with older STIHL Cutquik® TS 420 cut-off machines.

Always attach both instruction labels in the new "set of instruction labels" (3) 0000 960 0101.

4. Summary

| Item | Part Name | Previous | New | Rem. |
|------|---|---------------|---------------|----------|
| 1 | Cast arm (TS 410) | 4238 701 0201 | 4238 701 0203 | 1) 2) |
| 2 | Cast arm (TS 420) | 4238 701 0200 | 4238 701 0202 | 1) 2) |
| 3 | Guard dia. 300 mm (12") (TS 410) | 4238 700 8102 | 4238 700 8105 | 3) 4) |
| 4 | Guard dia. 350 mm (14") (TS 420) | 4224 700 8102 | 4224 700 8108 | 3) 4) |
| 5 | Stop pin | --- | 4224 691 0100 | |
| 6 | Limit stop | --- | 4238 691 0200 | |
| 7 | Pan head self-tapping screw IS-P4x16 | --- | 9074 478 3025 | |
| 8 | Rubber buffer | 4224 790 9300 | --- | 3) |
| 9 | Spline screw IS-M5x6-10.9 | 9022 341 0910 | --- | 3) |
| 10 | Belt guard (TS 410); including Item 14 | 4238 700 8101 | --- | 1) |
| 11 | Belt guard (TS 410); including Item 16 | --- | 4238 700 8107 | 2) |
| 12 | Belt guard (TS 420); including Item 14 | 4238 700 8100 | --- | 1) |
| 13 | Belt guard (TS 420); including Item 16 | --- | 4238 700 8109 | 2) |
| 14 | Hollow rivet DIN7339-7.5x1x6.8 | 9443 825 7130 | --- | 3) |
| 15 | Spline screw IS-M5x30x22-10.9 | 9022 341 1070 | --- | 3) |
| 16 | Screw IS-M5x21 | --- | 9022 319 1027 | |
| 17 | Instruction label (TS 410) | 0000 967 3511 | --- | 1) 4) 5) |
| 18 | Set of instruction labels (TS 410) | --- | 0000 960 0100 | 2) 4) |
| 19 | Instruction label (TS 420) | 0000 967 3520 | --- | 1) 4) 6) |
| 20 | Set of instruction labels (TS 420) | --- | 0000 960 0101 | 2) 4) |
| 21 | Instruction label (TS 410, TS 420) | 0000 967 3521 | --- | 1) 4) 7) |

Modification to be introduced : continuously

Remarks

- 1) Previous version of part no longer available from factory
- 2) New version of part can also be used for older machines
- 3) Previous version of part remains available for older machines
- 4) See "Service notes"
- 5) Previous version of part is replaced by Item 18
- 6) Previous version of part is replaced by Item 20
- 7) Previous version of part is replaced by Item 18 in the TS 410 and by Item 20 in the TS 420