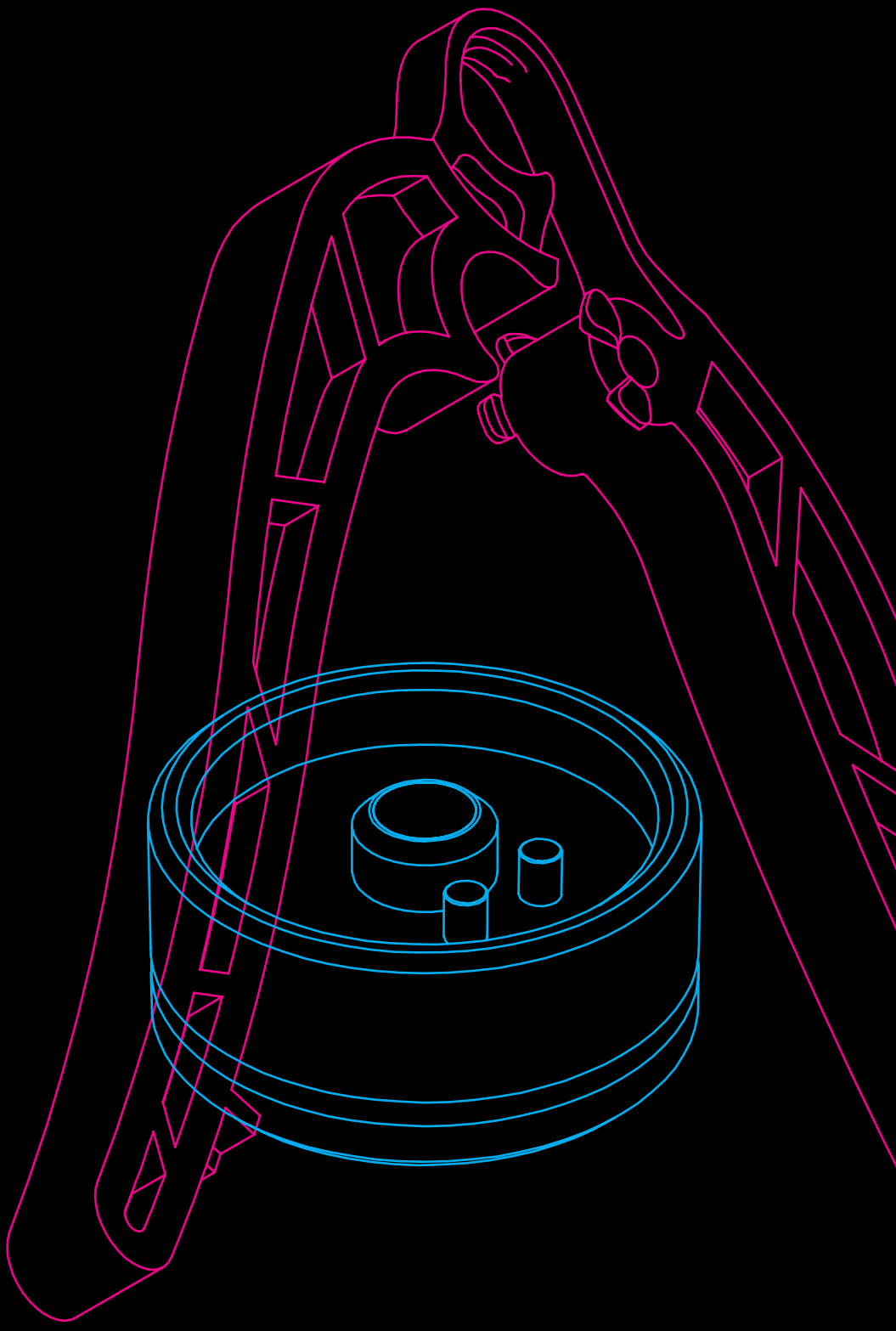
FIDLOCK®

Tools



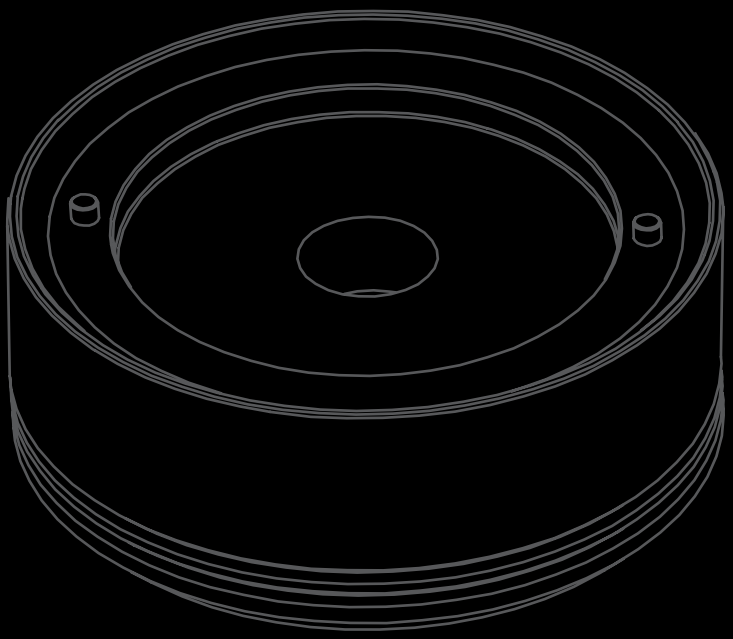
Tools

Fidlock fasteners are individually configurable and can therefore be optimally adjusted to suit the respective application and the desired design. According to the configuration of the fastener, Fidlock offers the appropriate tools to ensure it can be fitted easily. The Quickfinder clearly shows which tools can be used for fitting the different fasteners and fastener parts, and takes the user directly to the correct tool/catalog page with a single click.

		TOOL1	**TOOL2**	**TOOL3**	**TOOL4**	**TOOL5**	**TOOL6**
MINI TURN *thread*	male	Page 6		Page 7			
	female		Page 6	Page 7			
MINI TURN *rivet*	male						
	female						

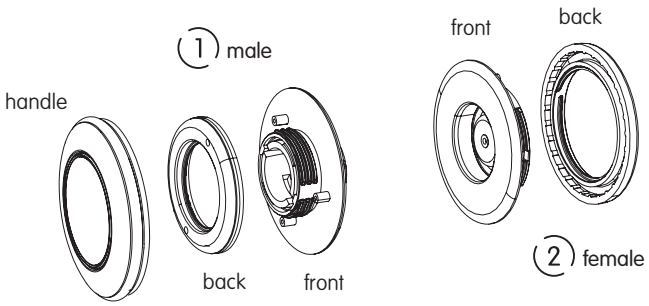
		TOOL1	TOOL2	TOOL3	TOOL4	TOOL5	TOOL6
SNAP male S screw low	front				Page 14		
	back			Page 20		Page 14	
SNAP male S screw high	front				Page 14		
	back			Page 20		Page 14	
SNAP female S screw low	front						Page 15
	back			Page 20			
SNAP female S screw high	front						Page 15
	back			Page 20			
SNAP female S screw cap	front						Page 16
	back			Page 20			
SNAP male M screw low	front			Page 20			
	back			Page 20			
SNAP male M screw high	front			Page 20			
	back			Page 20			
SNAP female M screw	front						
	back	Page 6		Page 7			
SNAP male L screw low	front						
	back			Page 20			
SNAP male L screw high	front						
	back			Page 20			
SNAP male L screw cap	front						
	back			Page 20			
SNAP male S rope	front						
	back				Page 14		

Tools



Tools for MINI TURN fasteners

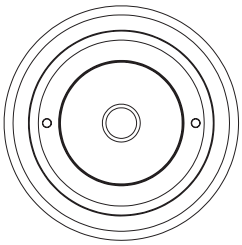
MINI TURN fasteners are the ideal solution for most fastener concepts and applications. The fastener parts are fitted using sturdy tools. The fasteners consist of a male upper part (1) plus a handle and a female lower part (2), each comprising a front and back section. Product designers can choose between two different processing methods: the MINI TURN thread (screw connection) or the MINI TURN rivet (heat rivet) for high stresses and strains.



	Part	Tool	
***MINI TURN** thread*	back (male)	TOOL1	Page 6
	back (female)	TOOL2	Page 6
	back (male / female)	TOOL3	Page 7
***MINI TURN** rivet*	front / back		Page 11

Tools

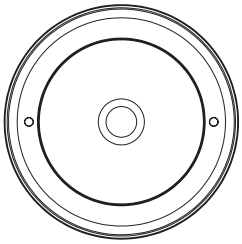
TOOL 1



Technical data/ Details			
Material	Aluminium	Diameter	52.00 mm
Number of rings	1		
Used for			
male	MINI TURN thread		

Tool with two pins for screwing the fastener's threaded ring on by hand. An industrial drive can be connected to the thread on the back section for the purposes of machine processing.

TOOL 2



Technical data/ Details			
Material	Aluminium	Diameter	52.00 mm
Number of rings	2		
Used for			
female	MINI TURN thread		

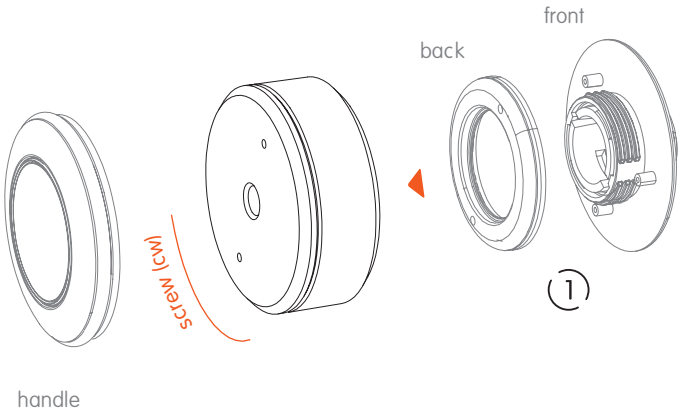
Tool with two pins for screwing the fastener's threaded ring on by hand. An industrial drive can be connected to the thread on the back section for the purposes of machine processing.

Note: As an alternative to TOOL1 and TOOL2, TOOL3 can be used.

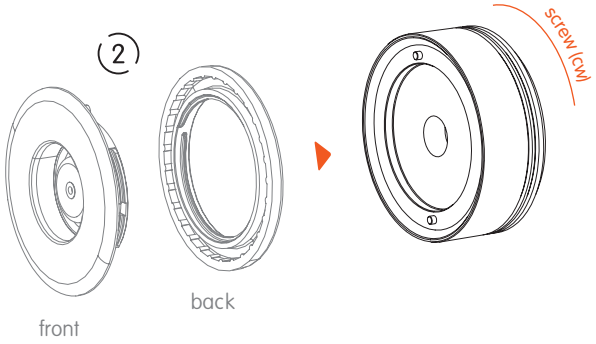
Fitting

The MINI TURN thread is fitted in two simple work steps using TOOL1 and TOOL2. First the male upper fastener part (1), consisting of a back and front section, is screwed on in a clockwise direction using TOOL1. The same work step is then carried out for the female lower fasten er part (2) using TOOL2. Finally, the handle is clipped onto the male part and aligned.

male

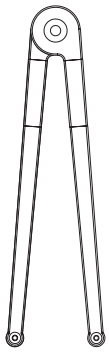


female



TOOL 3

Technical data/ Details	
Material	Burnished steel
Used for	
male	MINI TURN thread
female	MINI TURN thread



The adjustable face spanner is used for manually fitting both the male upper fastener parts and the female lower fastener parts of the MINI TURN thread. It is also perfect for fitting many SNAP fasteners.

Note: As an alternative to TOOL3, a combination of TOOL1 and TOOL2 can be used. We recommend using TOOL1 and TOOL2 for fitting the BIG TURN series. For fitting the MINI TURN series and samples for salespeople, we recommend using TOOL3.

Fitting

The MINI TURN thread can be fitted easily using a single tool (TOOL3). For the male upper fastener part (1), the back and front sections are placed onto TOOL3 (face spanner) and screwed into one another in a clockwise direction. The same work step is then carried out for the female lower fastener part (2). Finally, the handle is simply clipped onto the male part and aligned.

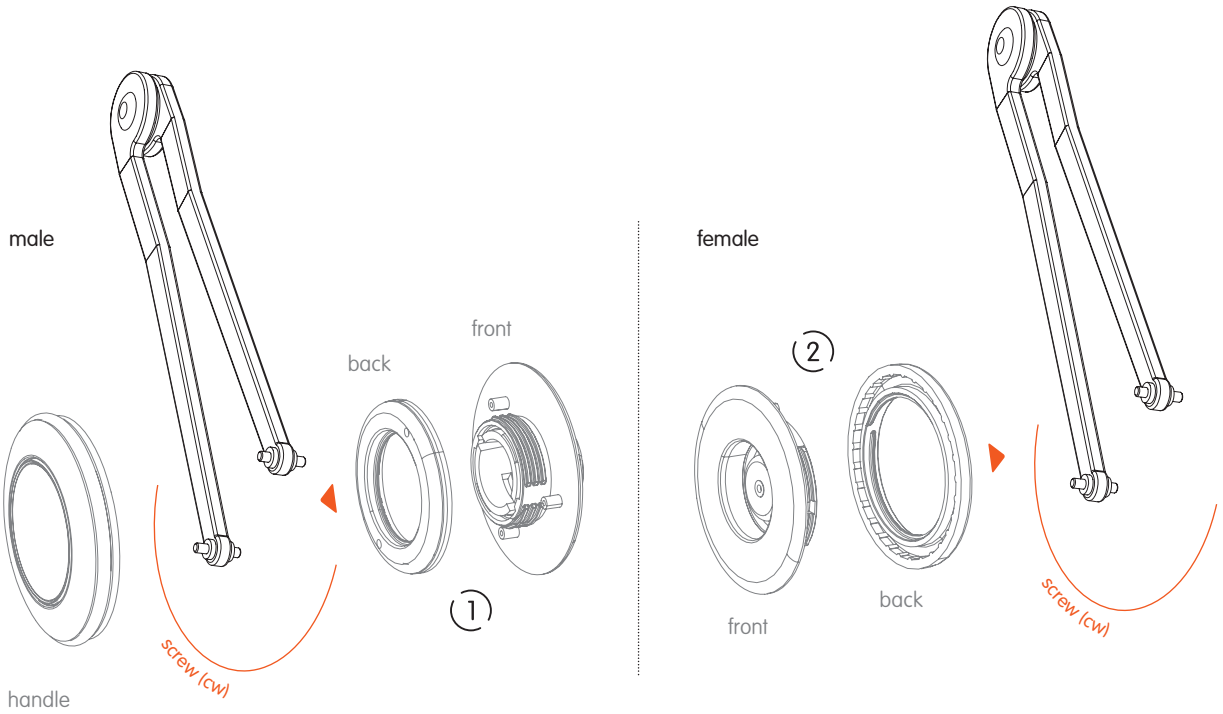


Diagram of an example fastener

TOOL 22

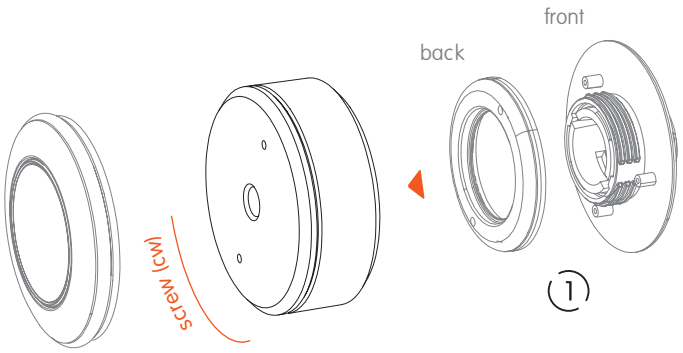
Technical data/ Details			
Material	PA66-GF	Diameter	54.00 mm
Used for			
male	MINI TURN thread		

This TOOL is a comination of TOOL 1 and TOOL 2, meaning you need only one TOOL to assembly a Mini Turn Thread fastener. To make assembly easier, it is best to purchase two TOOLS.

Fitting

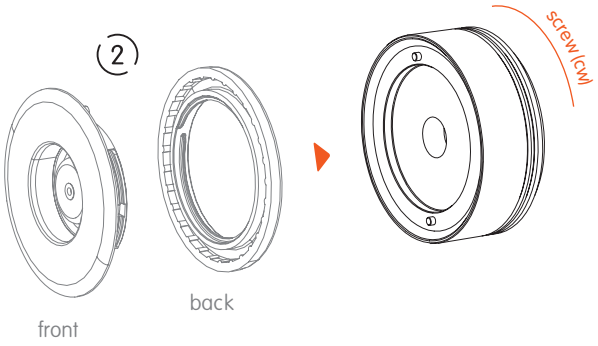
The MINI TURN thread is fitted in two simple steps using the same TOOL, TOOL 22. First the male upper fastener part (1), consisting of a back and fron section, is screw on in a clockwise direction. The same work step and TOOL is then used to fit the female lower fastener part (2). Finally the handle is clipped onto the male part and aligned. This TOOL ist not suitable for mass production, these are convient TOOLS to assemble samples.

male



handle

female



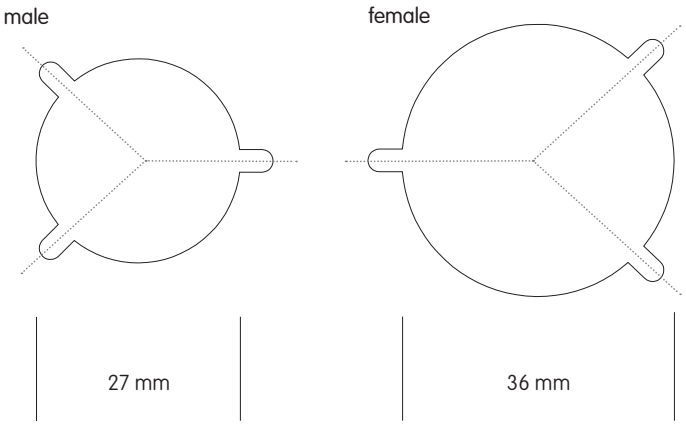
Fitting

Tools required

For fitting the fastener you will need scissors, cutters, punch pliers, a fiber-tip pen, and TOOL3 (face spanner).

Fitting the pattern/punching template (1:1)

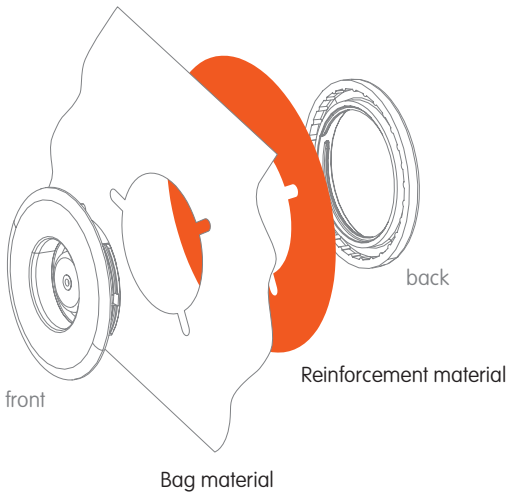
Please download the pattern and punching template at the following link:
download.fidlock.com/Template_MINI_TURN_thread.zip
Print off the pattern and then cut it out.



Material and material reinforcement

Note: The MINI TURN requires a material thickness of min. 1.5 to 2.5 mm.

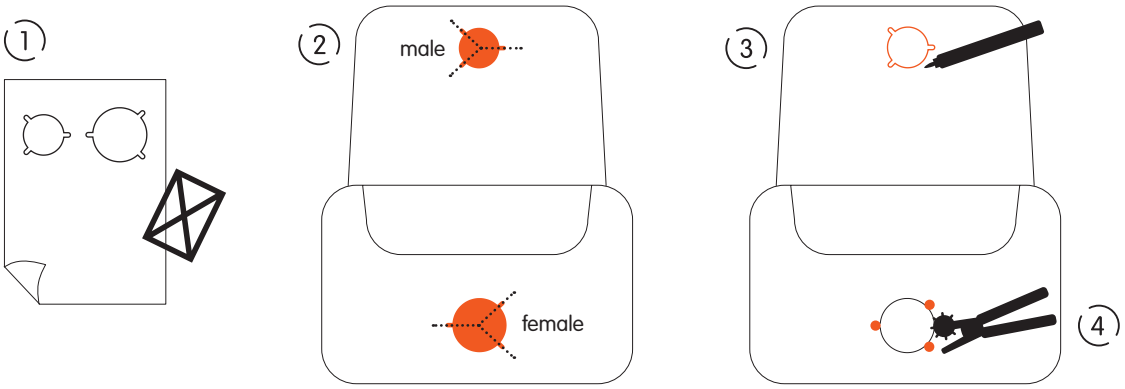
If the bag material used is too floppy or too thin, cut out additional patterns for the female lower part and male upper part, e.g. out of card, leather, or polypropylene, and place these between the fastener parts as reinforcement. The thickness of these reinforcement materials should be 1 to 1.5 mm.



Positioning and aligning exactly

Cut out the patterns (1) and place the male pattern on the flap of the bag and the female pattern on the body of the bag. ***Note:*** It is essential to ensure the exact alignment of the lugs (2), so that the male and female closing mechanism works in the end!

Then use the fiber-tip pen to mark the position on the material (fabric) (3) and cut or punch the holes in the material (4).

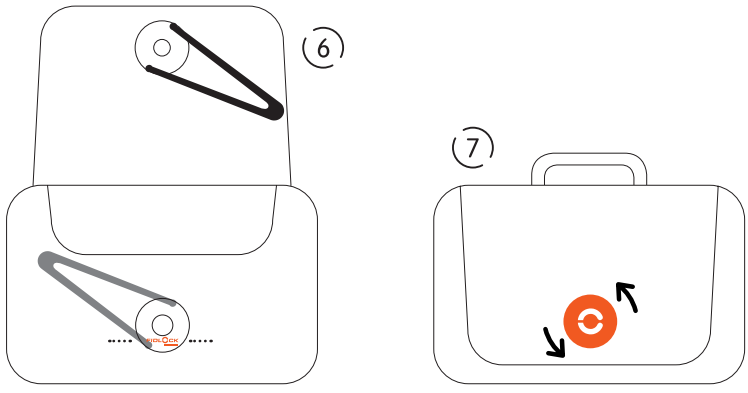


Fitting correctly

Fit the female lower fastener part (5) using TOOL3 (face spanner). Then screw the back and front sections on in opposite directions and tighten by hand (see page 6/7 for details). ***Note:*** The "Fidlock patented" logo will be correctly and horizontally aligned if the position of the lugs (2) was correctly punched.

Fit the male upper fastener part (6) using TOOL3 (face spanner). Fit the back and front sections against each other and tighten by hand.

Note: It is essential to ensure the exact alignment of the handle. To do so, turn the handle to the correct position (sticker/ logo) and then click into place (7).



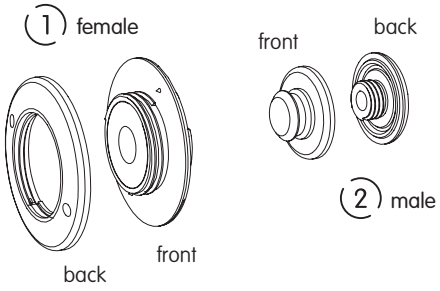
Enlarged view

Note: With the MINI TURN rivet, which is designed for high stresses and strains, both the upper and lower fastener parts require a special device to fit the heat rivets that are integrated in the product. The fastener is therefore optimized for semi-automated fitting in large production lots. The fitting machine is available on request from Fidlock – simply contact our Service team directly by sending an e-mail to info@fidlock.com or calling +49 (0) 511 / 96159310.

Tools

Tools for SNAP fasteners

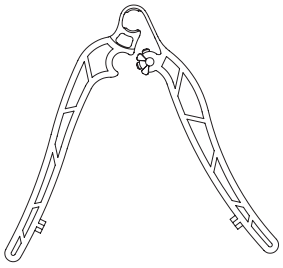
SNAP fasteners are the flexible solution for many fastener concepts and attachment solutions. The fastener parts are fitted using robust tools that are each used for both the upper part (1) and the lower part (2). The fasteners consist of a female upper part and a male lower part, each comprising a front and back section.



SNAP	Part	Tool	
SNAP male S screw low	front	TOOL4	Page 14
	back	TOOL5	Page 14
SNAP male S screw high	front	TOOL4	Page 14
	back	TOOL5	Page 14
SNAP female S screw low	front	TOOL6	Page 15
	back	TOOL7	Page 15
SNAP female S screw high	front	TOOL6	Page 15
	back	TOOL7	Page 15
SNAP female S screw cap	front	TOOL6	Page 16
	back	TOOL8	Page 16
SNAP male M screw low	front	TOOL9	Page 17
	back	TOOL7	Page 17
SNAP male M screw high	front	TOOL9	Page 17
	back	TOOL7	Page 17
SNAP female M screw	front		
	back	TOOL1	Page 6
SNAP male L screw low	front	TOOL10	Page 18
	back	TOOL7	Page 18
SNAP male L screw high	front	TOOL10	Page 18
	back	TOOL7	Page 18
SNAP male L screw cap	front	TOOL10	Page 19
	back	TOOL8	Page 19
SNAP female L screw	front		
	back	TOOL2	Page 6

Tools

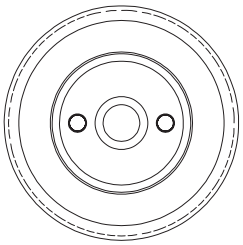
TOOL 4



Technical data/Details	
Material	Nylon
Used for	
front	SNAP male S screw low, SNAP male S screw high

Plastic pliers for holding the SNAP male front section.

TOOL 5



Technical data/Details			
Material	Aluminium	Diameter	32.00 mm
Number of rings	1		
Used for			
back	SNAP male S screw low, SNAP male S screw high		

Tool with two pins for screwing the fastener's threaded ring on by hand. An industrial drive can be connected to the thread on the back section for the purposes of machine processing.

Fitting

SNAP fasteners are fitted in two simple work steps using both TOOL4 and TOOL5. The front section of the male part (1) is inserted into TOOL4 (pliers). The back section is then screwed on in a clockwise direction using TOOL5.

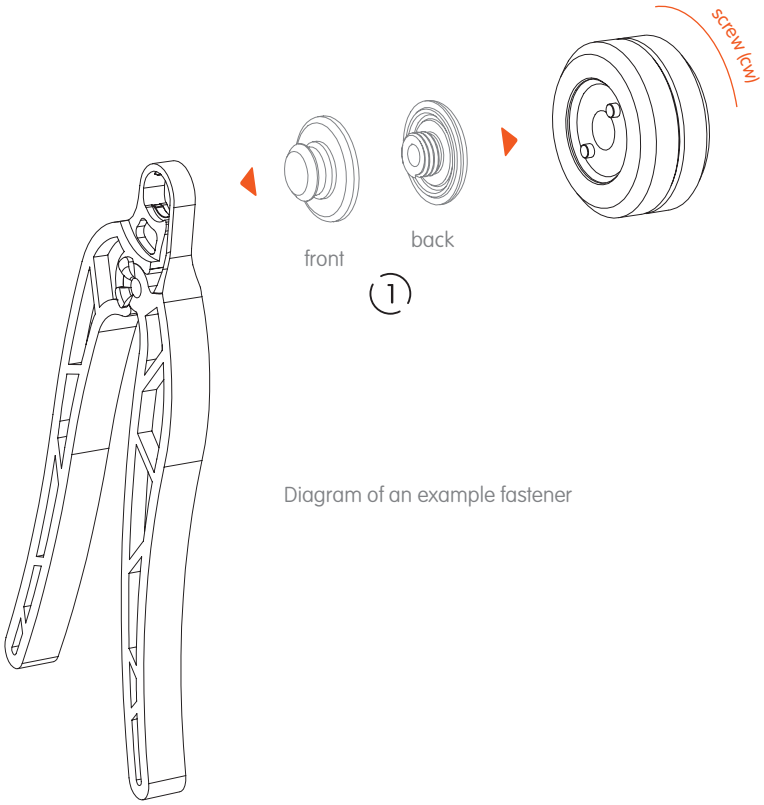
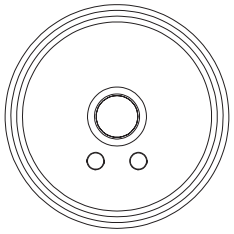


Diagram of an example fastener

TOOL 6

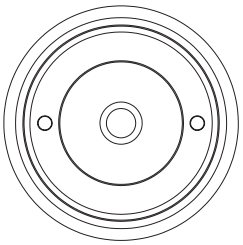
Technical data / Details			
Material	Aluminium	Diameter	52.00 mm
Number of rings	1		
Used for			
front	SNAP female S screw low, SNAP female S screw high, SNAP female S screw cap		



Laser-sintered tool for holding the SNAP female screw. Parts can be screwed manually or using a 3/8" square spanner (ratchet).

TOOL 7

Technical data / Details			
Material	Aluminium	Diameter	40.00 mm
Number of rings	2		
Used for			
back	SNAP female S screw low, SNAP female S screw high, SNAP male M screw low, SNAP male M screw high, SNAP male L screw low, SNAP male L screw high		



Tool with two pins for screwing the fastener's threaded ring on by hand. An industrial drive can be connected to the thread on the back section for the purposes of machine processing.

Fitting

TOOL6 and TOOL7 are suitable for fitting many SNAP fasteners and can be used for both male and female parts. The back section is inserted into TOOL7, then screwed onto the front section in a clockwise direction using TOOL6.

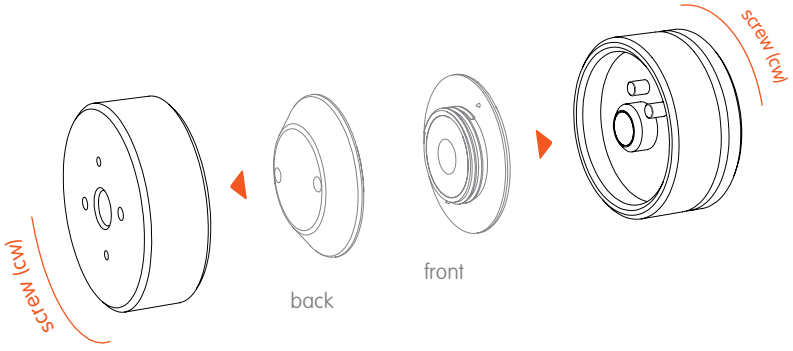
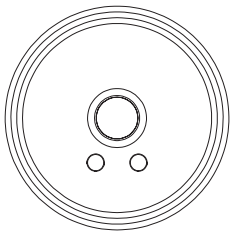


Diagram of an example fastener

Tools

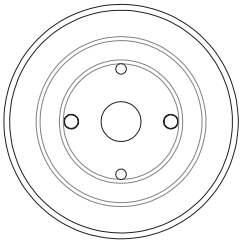
TOOL 6



Technical data / Details			
Material	Aluminium	Diameter	52.00 mm
Number of rings	1		
Used for			
front	SNAP female S screw low, SNAP female S screw high, SNAP female S screw cap		

Laser-sintered tool for holding the SNAP female screw. Parts can be screwed manually or using a 3/8" square spanner (ratchet).

TOOL 8



Technical data / Details			
Material	Aluminium	Diameter	40.00 mm
Number of rings	no ring		
Used for			
back	SNAP female S screw cap, SNAP male L screw cap		

Tool with two pins for screwing the fastener's threaded ring on by hand. An industrial drive can be connected to the thread on the back section for the purposes of machine processing.

Fitting

TOOL6 and TOOL8 used together enable SNAP fasteners to be fitted effortlessly and can be used for both male and female parts. For this, the back section is inserted into TOOL8, then screwed onto the front section and TOOL6 in a clockwise direction.

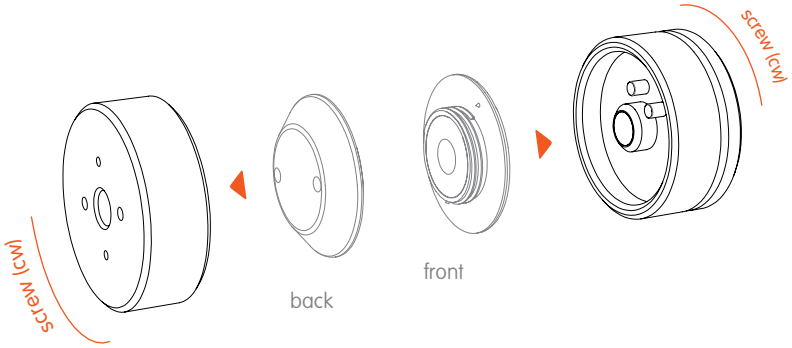
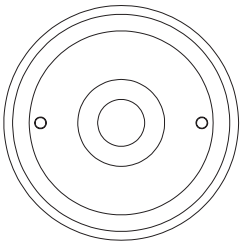


Diagram of an example fastener

TOOL 9

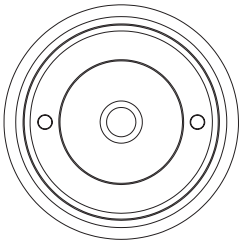
Technical data / Details	
Material	Nylon
Used for	
front	SNAP male M screw low, SNAP male M screw high



Tool with two pins for screwing the fastener's threaded ring on by hand. An industrial drive can be connected to the thread on the back section for the purposes of machine processing.

TOOL 7

Technical data / Details			
Material	Aluminium	Diameter	40.00 mm
Number of rings	2		
Used for			
back	SNAP female S screw low, SNAP female S screw high, SNAP male M screw low, SNAP male M screw high, SNAP male L screw low, SNAP male L screw high		



Tool with two pins for screwing the fastener's threaded ring on by hand. An industrial drive can be connected to the thread on the back section for the purposes of machine processing.

Fitting

TOOL9 and TOOL7 allow easy fitting of many SNAP fasteners and can be used for both male and female parts. In each case, the front section is inserted into TOOL9, then screwed onto the back section and TOOL7 in a clockwise direction.

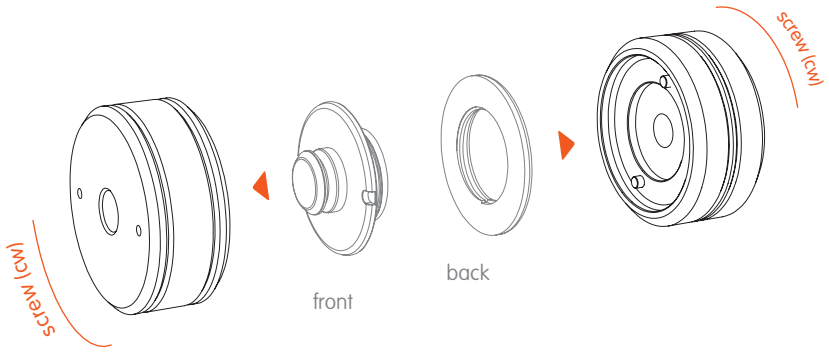
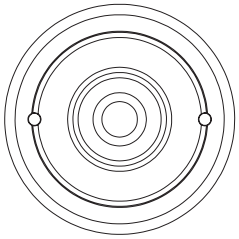


Diagram of an example fastener

Tools

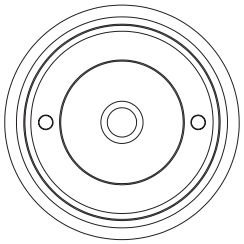
TOOL 10



Technical data / Details			
Material	Aluminium	Diameter	44.00 mm
Number of rings	3		
Used for			
front	SNAP male L screw low, SNAP male L screw high, SNAP male L screw cap		

Tool with two pins for screwing the male part (upper fastener part) on by hand.
An industrial drive can be connected to the thread on the back section.

TOOL 7



Technical data / Details			
Material	Aluminium	Diameter	40.00 mm
Number of rings	2		
Used for			
back	SNAP female S screw low, SNAP female S screw high, SNAP male M screw low, SNAP male M screw high, SNAP male L screw low, SNAP male L screw high		

Tool with two pins for screwing the fastener's threaded ring on by hand. An industrial drive can be connected to the thread on the back section for the purposes of machine processing.

Fitting

TOOL10 and TOOL7 enable easy fitting of many SNAP fasteners and can be used for both male and female parts. In each case, the front section is inserted into TOOL10, then screwed onto the back section and TOOL7 in a clockwise direction.

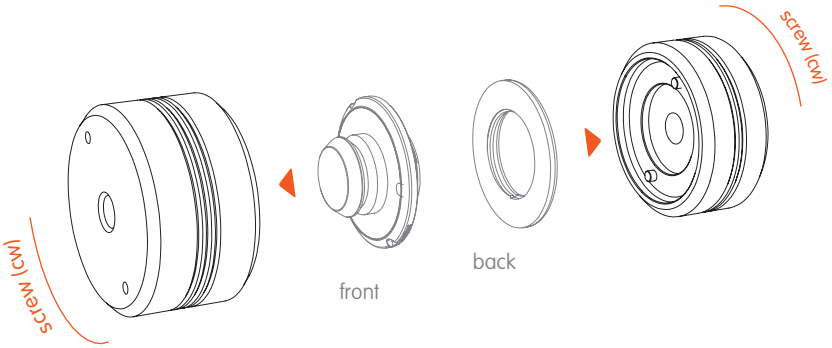


Diagram of an example fastener

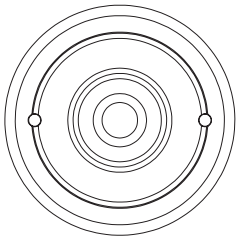
TOOL 10

Technical data / Details

Material	Aluminium	Diameter	44.00 mm
Number of rings	3		

Used for

front	SNAP male L screw low, SNAP male L screw high, SNAP male L screw cap



Tool with two pins for screwing the male part (upper fastener part) on by hand.
An industrial drive can be connected to the thread on the back section.

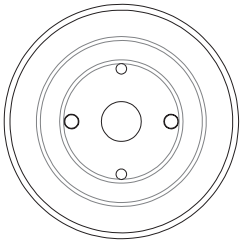
TOOL 8

Technical data / Details

Material	Aluminium	Diameter	40.00 mm
Number of rings	no ring		

Used for

back	SNAP female S screw cap, SNAP male L screw cap



Tool with two pins for screwing the fastener's threaded ring on by hand. An industrial drive can be connected to the thread on the back section for the purposes of machine processing.

Fitting

TOOL10 and TOOL8 allow easy fitting of many SNAP fasteners and can be used for both male and female parts. In each case, the front section is inserted into TOOL10, then screwed onto the back section and TOOL8 in a clockwise direction.

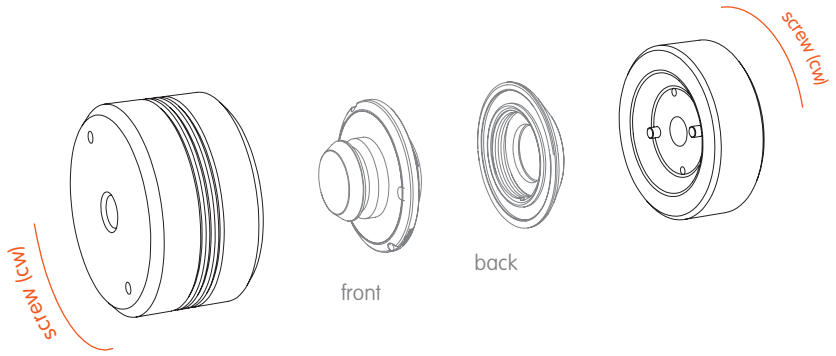
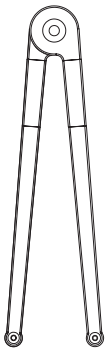


Diagram of an example fastener

TOOL 3



Technical data / Details	
Material	Burnished steel
Used for	
back	SNAP male S screw low, SNAP male S screw high, SNAP female S screw low, SNAP female S screw high, SNAP female S screw cap, SNAP male M screw low, SNAP male M screw high, SNAP male L screw low, SNAP male L screw high, SNAP male L screw cap

The adjustable face spanner is used for manually fitting both the male upper fastener parts and the female lower fastener parts of SNAP fasteners. It is also perfect for fitting MINI TURN fasteners.

Fitting

TOOL3 allows easy fitting of SNAP fasteners using a single tool and can be used for both male and female parts. For this, the back section is inserted into TOOL3, then screwed onto the front section and the appropriate counterpart in a clockwise direction.

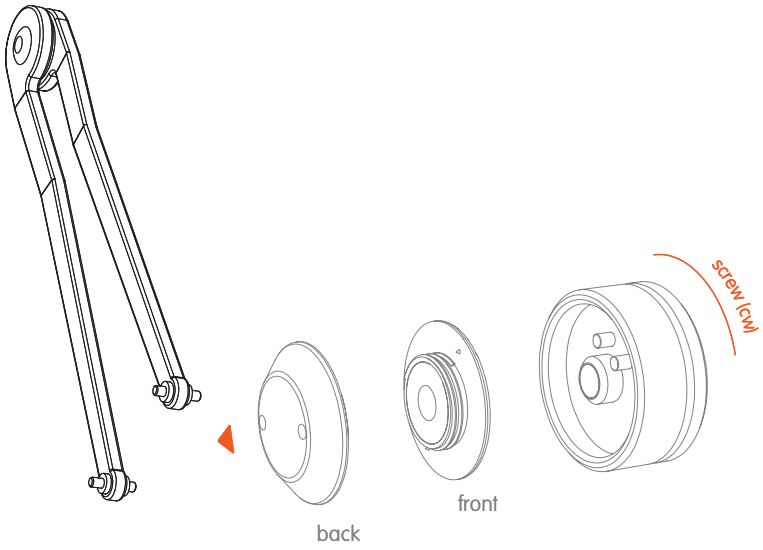


Diagram of an example fastener

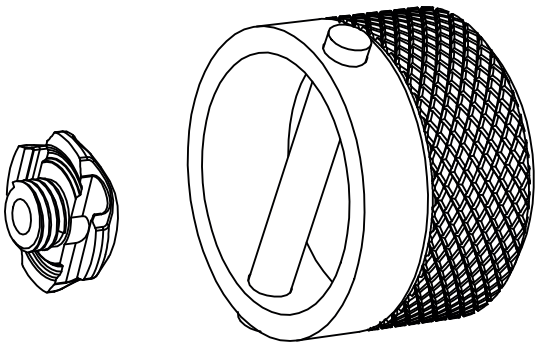
Tool 23

Technical data / Details	
Material	PA66-GF
Used for	
back	SNAP male S screw low back, SNAP male S screw high back, SNAP female S screw low front, SNAP female S screw low back, SNAP female S screw screw high front, SNAP female S screw high back, SNAP male M screw low/ high back, SNAP male L screw low back

Fitting

Tool 23 is a combination of TOOL 5, TOOL 6 and TOOL 7. This TOOL can be used for all the SNAP male and female S fasteners as well as the male M and L fasteners. It is ideal when using the male and female SNAP fasteners that you purchase two of these TOOLS for easier assembly. Simply place the female/male part of the fastener into the TOOL and twist clockwise to tighten.
Tip: By holding the other part of the fastener with a piece or leather or non slipperly fabric to assembly goes faster and is easier on your hands. This TOOL is not suitable for mass production. It is a convinient TOOL for assembling samples.

Tool 18



Technical Data	
Material	Aluminium
Used for	
back	SNAP male S rope

Fitting

TOOL 18 can be used to tighten and/or properly attached the upper part of the SNAP male S rope to its counter part. Simply place the upper part of the SNAP male S rope onto the TOOL and turn clockwise to tighten.

Disclaimer

The manufacturer of the end products in which FIDLOCK fasteners are used bears responsibility for thoroughly testing that the FIDLOCK products are suitable for the intended application. FIDLOCK assumes no responsibility for damage caused by misuse, modification, repair and adequacy specifi- cations or specified ultimate loads. All ultimate load specifications in sales catalogues are voluntary, non-binding specifications and cannot replace the test conducted by the end product manufacturer in which the manufacturer tests the adequacy of the FIDLOCK products for the intended application.

Patents

The Fidlock product families BIG TURN, MINI TURN, SNAP, SNAP BUCKLE, SNAP HELMET BUCKLE, SNAP FLAT BUCKLE, SNAP PUSH, SNAP PULL, SLIDER make use of technology as described in patent application of patent family WO002008006357 (EP000002040572, US020100283269, RU000002415623, AU002007272165, CN000101657120, CN000101646362, KR102009033469, CA000002681141).
The product families MINI TURN und BIG TURN are protected by patent DE 102004015873 and further patents and patent applications which belong to this patent family. Furthermore all products are covered by additional patent applications in numerous countries.
The product family HOOK makes use of technology as described in patent application PCT/EP 2013/060762.