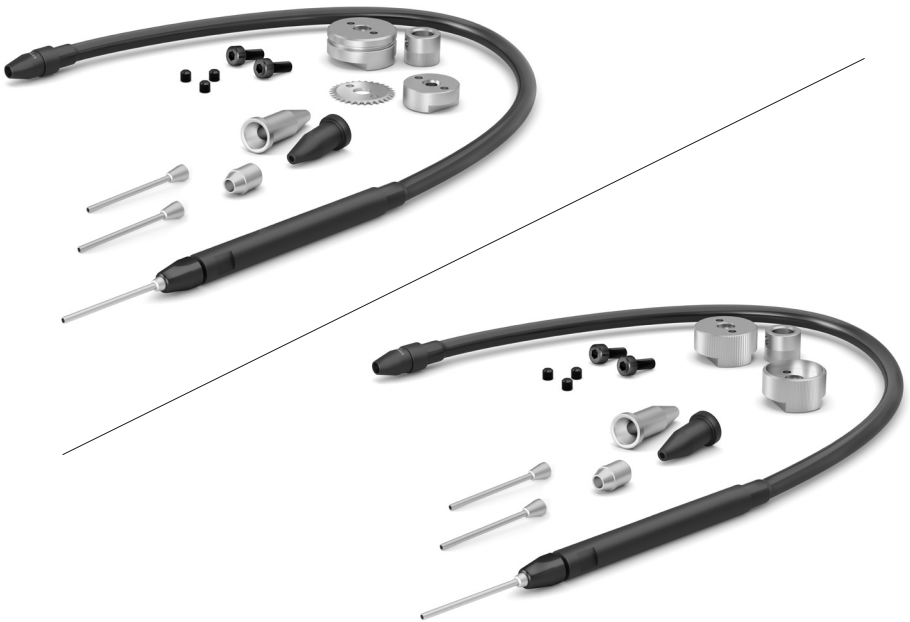


# JBC

[www.jbctools.com](http://www.jbctools.com)

## INSTRUCTION MANUAL



### GSFR

Guide Kit for Robot with/without  
Solder Wire Perforation

This manual corresponds to the following references:

**GSFR[XX]V[LL]-B With Solder Wire Perforation**

<u>Ref.</u>	<u>Wire Diameter Ø</u>	<u>Tube Length</u>
<b>GSFR08V03-B</b>	0.8 mm / 0.032 in	0.3 m / 11.81 in
<b>GSFR08V05-B</b>	"	0.5 m / 19.69 in
<b>GSFR08V06-B</b>	"	0.6 m / 23.62 in
<b>GSFR08V07-B</b>	"	0.7m / 27.56 in
<b>GSFR08V10-B</b>	"	1.0 m / 39.37 in
<b>GSFR08V15-B</b>	"	1.5 m / 59.06 in
<b>GSFR10V03-B</b>	1.0 mm / 0.040 in	0.3 m / 11.81 in
<b>GSFR10V05-B</b>	"	0.5 m / 19.69 in
<b>GSFR10V06-B</b>	"	0.6 m / 23.62 in
<b>GSFR10V07-B</b>	"	0.7m / 27.56 in
<b>GSFR10V10-B</b>	"	1.0 m / 39.37 in
<b>GSFR10V15-B</b>	"	1.5 m / 59.05 in
<b>GSFR12V03-B</b>	1.2 mm / 0.047 in	0.3 m / 11.81 in
<b>GSFR12V05-B</b>	"	0.5 m / 19.69 in
<b>GSFR12V07-B</b>	"	0.7m / 27.56 in
<b>GSFR12V10-B</b>	"	1.0 m / 39.37 in
<b>GSFR15V03-B</b>	1.5 mm / 0.059 in	0.3 m / 11.81 in
<b>GSFR15V04-B</b>	"	0.4 m / 15.75 in
<b>GSFR15V05-B</b>	"	0.5 m / 19.69 in
<b>GSFR15V07-B</b>	"	0.7m / 27.56 in
<b>GSFR15V10-B</b>	"	1.0 m / 39.37 in
<b>GSFR15V15-B</b>	"	1.5 m / 59.05 in
<b>GSFR16V03-B</b>	1.6 mm / 0.063 in	0.3 m / 11.81 in
<b>GSFR16V04-B</b>	"	0.4 m / 15.75 in
<b>GSFR16V05-B</b>	"	0.5 m / 19.69 in
<b>GSFR16V15-B</b>	"	1.5 m / 59.05 in

This manual corresponds to the following references:

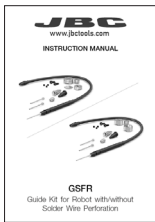
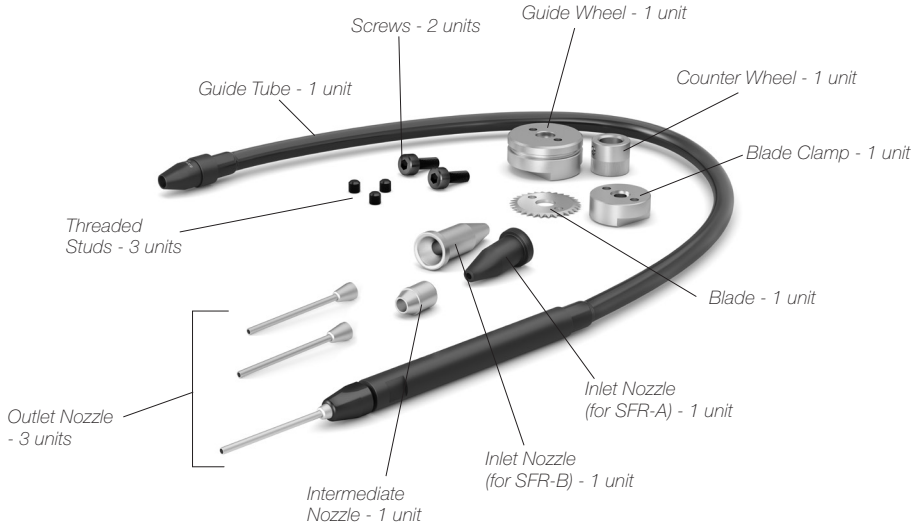
**GSFR[XX]D[LL]-B Without Solder Wire Perforation**

<u>Ref.</u>	<u>Wire Diameter Ø</u>	<u>Tube Length</u>
<b>GSFR05D03-B</b>	Ø0.46 - 0.56 mm / Ø0.018 - 0.022 in	0.3 m / 11.81 in
<b>GSFR05D05-B</b>	“	0.5 m / 19.68 in
<b>GSFR05D07-B</b>	“	0.7 m / 27.92 in
<b>GSFR05D10-B</b>	“	1.0 m / 39.37 in
<b>GSFR06D03-B</b>	Ø0.60 - 0.64 mm / Ø0.023 - 0.025 in	0.3 m / 11.81 in
<b>GSFR07D03-B</b>	Ø0.70 - 0.78 mm / Ø0.028 - 0.031 in	0.3 m / 11.81 in
<b>GSFR07D07-B</b>	“	0.7 m / 27.92 in
<b>GSFR08D03-B</b>	Ø0.80 - 0.82 mm / Ø0.032 - 0.033 in	0.3 m / 11.81 in
<b>GSFR08D05-B</b>	“	0.5 m / 19.68 in
<b>GSFR08D06-B</b>	“	0.6 m / 23.62 in
<b>GSFR08D07-B</b>	“	0.7 m / 27.92 in
<b>GSFR08D10-B</b>	“	1.0 m / 39.37 in
<b>GSFR10D03-B</b>	Ø0.90 - 1.10 mm / Ø0.036 - 0.044 in	0.3 m / 11.81 in
<b>GSFR10D06-B</b>	“	0.6 m / 23.62 in
<b>GSFR10D07-B</b>	“	0.7 m / 27.92 in
<b>GSFR10D10-B</b>	“	1.0 m / 39.37 in
<b>GSFR12D03-B</b>	Ø1.14 - 1.27 mm / Ø0.045 - 0.051 in	0.3 m / 11.81 in
<b>GSFR12D05-B</b>	“	0.5 m / 19.68 in
<b>GSFR12D10-B</b>	“	1.0 m / 39.37 in
<b>GSFR15D03-B</b>	Ø1.50 - 1.57 mm / Ø0.060 - 0.063 in	0.3 m / 11.81 in
<b>GSFR15D04-B</b>	“	0.4 m / 15.75 in
<b>GSFR15D05-B</b>	“	0.5 m / 19.68 in
<b>GSFR15D10-B</b>	“	1.0 m / 39.37 in
<b>GSFR15D15-B</b>	“	1.5 m / 59.05 in
<b>GSFR16D03-B</b>	Ø1.60 - 1.63 mm / Ø0.063 - 0.065 in	0.3 m / 11.81 in
<b>GSFR16D04-B</b>	“	0.4 m / 15.75 in
<b>GSFR16D05-B</b>	“	0.5 m / 19.68 in
<b>GSFR16D07-B</b>	“	0.7 m / 27.92 in
<b>GSFR16D15-B</b>	“	1.5 m / 59.05 in

# Packing List

## Guide Kit for Robot with Solder Wire Perforation

The following items are included (*more information at page 11*).

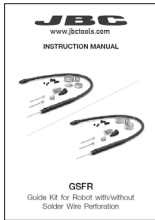
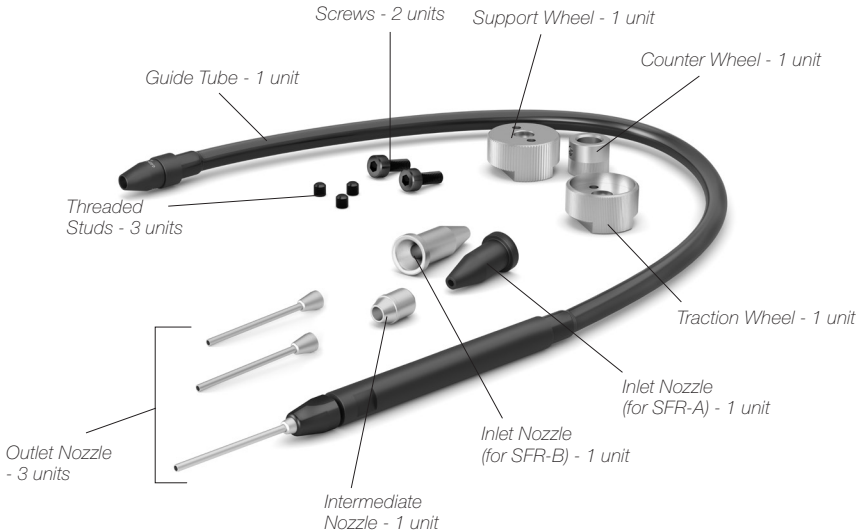


**Manual** ..... 1 unit  
 Ref. 0030637

# Packing List

## Guide Kit for Robot without Solder Wire Perforation

The following items are included (*more information at page 12*).

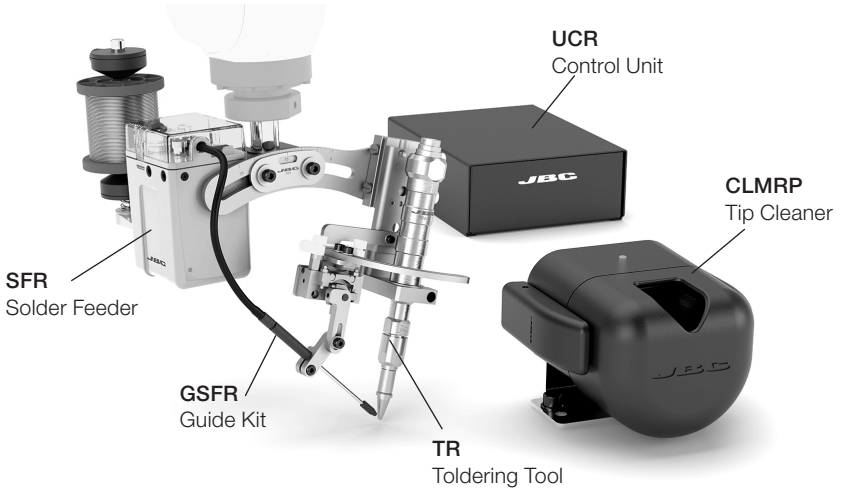


**Manual** ..... 1 unit  
Ref. 0030637

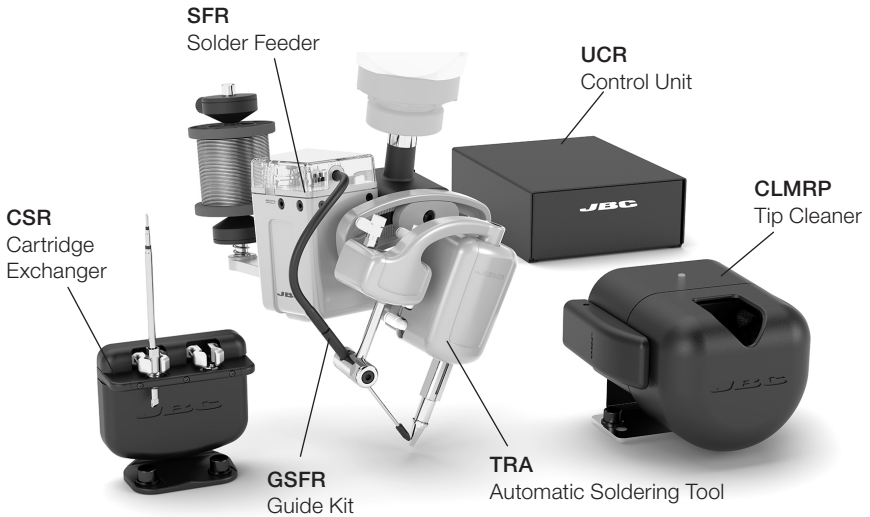
# Features

The Guide Kit GSFR is designed to be used with the Solder Feeder SFR in automatic soldering processes.

## Work Place Examples with TR Soldering Tool



## Work Place Examples with TRA Automatic Soldering Tool and CSR Cartridge Exchanger



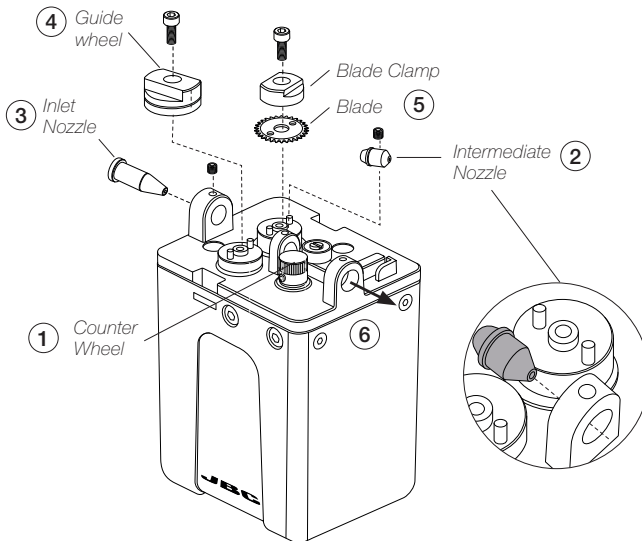
## Assembly: GSFR Wheels to SFR

For this operation, disconnect the device, and take off the cover by pressing the tabs.

Use the allen key and the spanner provided with SFR for the following steps. First disassemble the guide tube (6), the Support and Traction wheels or the Guide Wheel, Blade and Blade Clamp (4)+(5). Then, disassemble the nozzles (2)+(3). Disassemble the Counter Wheel (1) if needed\*.

### Assembly with Solder Wire Perforation

1. Assemble the counter wheel (1) if needed\*.
2. Insert the intermediate nozzle (2) until its collar rests against the housing and tighten the screw.
3. Assemble the inlet nozzle (3) and tighten the screw.
4. Assemble the guide wheel (4) and tighten the screw. **Attention:** Always use the correct wheel set for each wire thickness.
5. Assemble the blade first, then mount the blade clamp (5) onto the same axis and tighten the screw. **Caution:** handle the blade carefully to avoid injury.

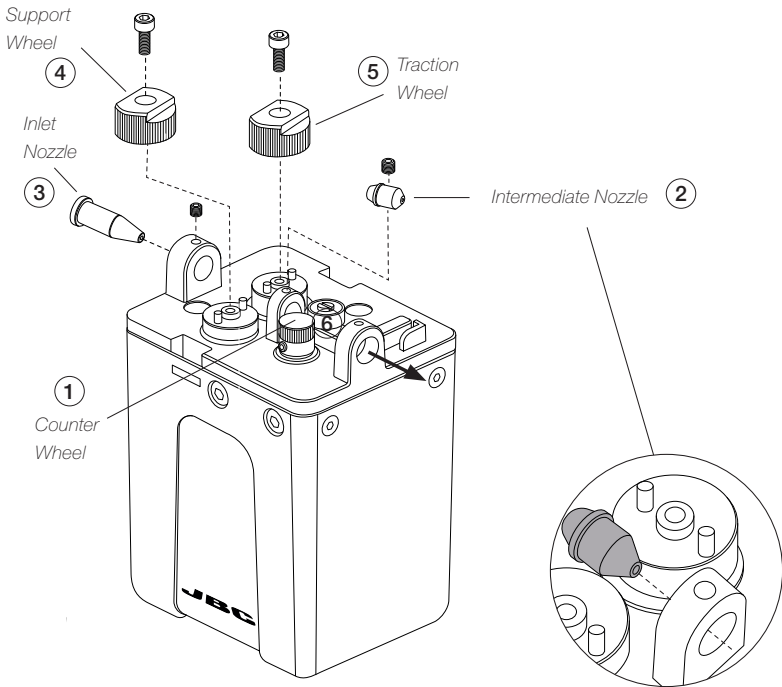


\* SFR comes with a counter wheel already assembled.

Only change the counter wheel if you want to work with a wire diameter that is outside the working range of the counter wheel already assembled to the SFR.

## Assembly without Solder Wire Perforation

1. Assemble the counter wheel (1) if needed\*.
2. Insert the intermediate nozzle (2) until its collar rests against the housing and tighten the screw.
3. Assemble the inlet nozzle (3) and tighten the screw.
4. Assemble the support wheel (4) and tighten the screw. **Attention:** Always use the correct wheel set for each wire thickness.
5. Assemble the traction wheel (5) onto the axis and tighten the screw.



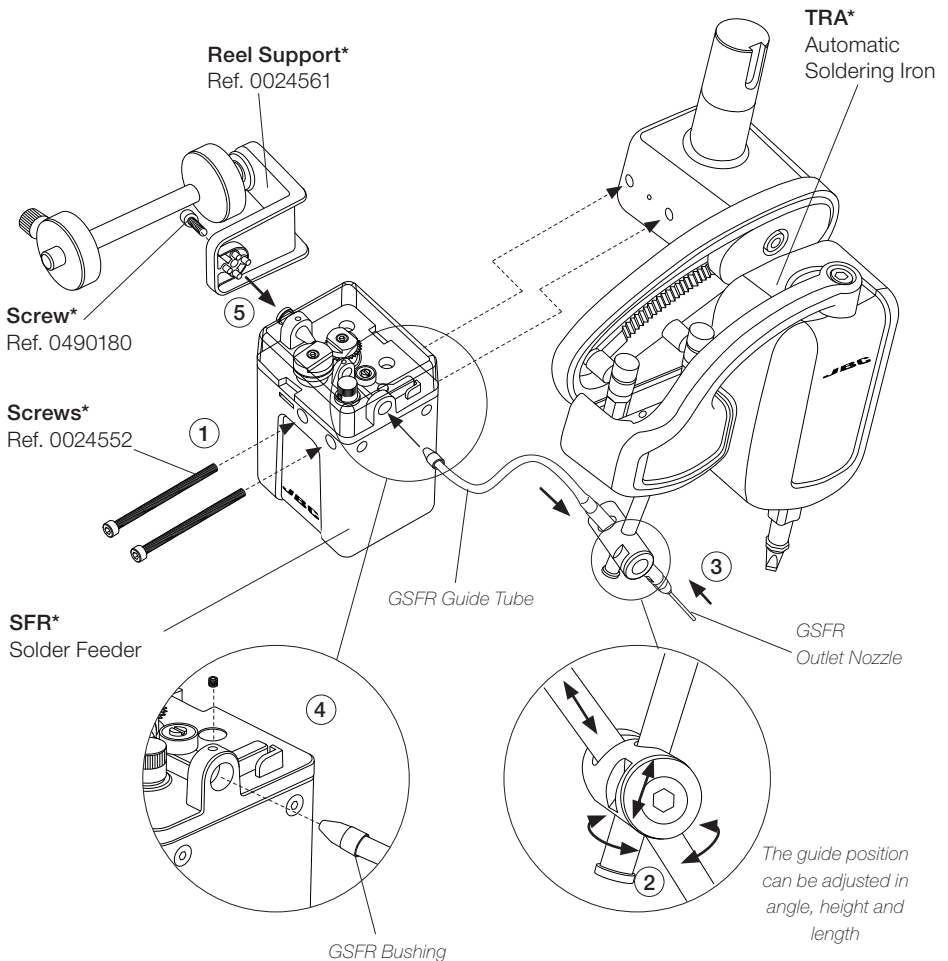
\* SFR comes with a counter wheel already assembled.

Only change the counter wheel if you want to work with a wire diameter that is outside the working range of the counter wheel already assembled to the SFR.



## Assembly: GSFR Tube to SFR\* and TRA\*

1. Assemble SFR to TRA with the screws.
2. Assemble GSFR Guide Tube to TRA and tighten the screw.
3. Assemble the Outlet Nozzle onto the Dispensing Tube.
4. Assemble GSFR Bushing into SFR hole and tighten the screw.
5. Finally attach the Reel Support to SFR with its screw.



\*Not included, sold separately

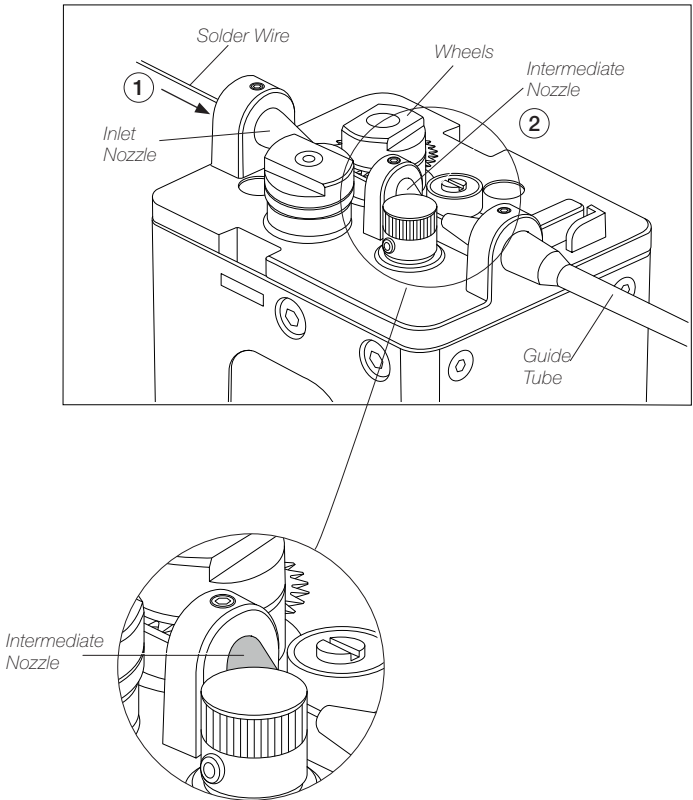
# Solder Wire Loading

GSFR must be assembled previously.

1. Feed the Solder Wire into the Inlet Nozzle until it reaches the wheels.
2. Make sure the wire passes through the Intermediate Nozzle and enters into the Guide Tube.

**Important:** Set the wire thickness parameter before starting to dispense the wire. To set W-THI command see the Communication Protocol for SFR unit at [www.jbctools.com/jbcsoftware.html](http://www.jbctools.com/jbcsoftware.html).

Wire feeding is controlled by an external controller (Robot/PLC/Computer). To start wire loading process use W-SLD command. See the Communication Protocol for SFR unit at [www.jbctools.com/jbcsoftware.html](http://www.jbctools.com/jbcsoftware.html)



## Maintenance

- Before carrying out maintenance, always unplug the tool and the device.
- Use a damp cloth to clean the tool. Alcohol can only be used to clean the metal parts.
- Periodically check that the metal parts of the mechanism are clean.
- Keep Dispensing Nozzle Tip clean to avoid solder feeding obstruction.
- Periodically check all cables and tube connections.
- Replace any defective or damaged parts. Use original JBC spare parts only.
- Repairs should only be performed by a JBC authorized technical service.

## Safety



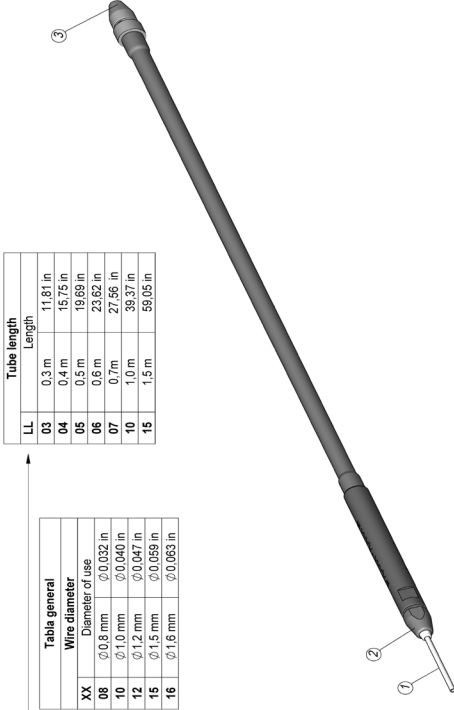
**It is imperative to follow safety guidelines to prevent electric shock, injury, fire or explosion.**

- Do not use the device for any other purpose.
- Be sure that the power supply is disconnected before changing any spare part.
- Avoid flux coming into contact with skin or eyes to prevent irritation.
- Be careful of fumes produced while soldering.
- Keep your workplace clean and tidy. Wear appropriate protective glasses and gloves while handling components to avoid personal injury.
- Utmost care must be taken with liquid tin waste which can cause burns.

# Exploded View

WITH SOLDER WIRE PERFORATION

## GSFR XX V LL-B



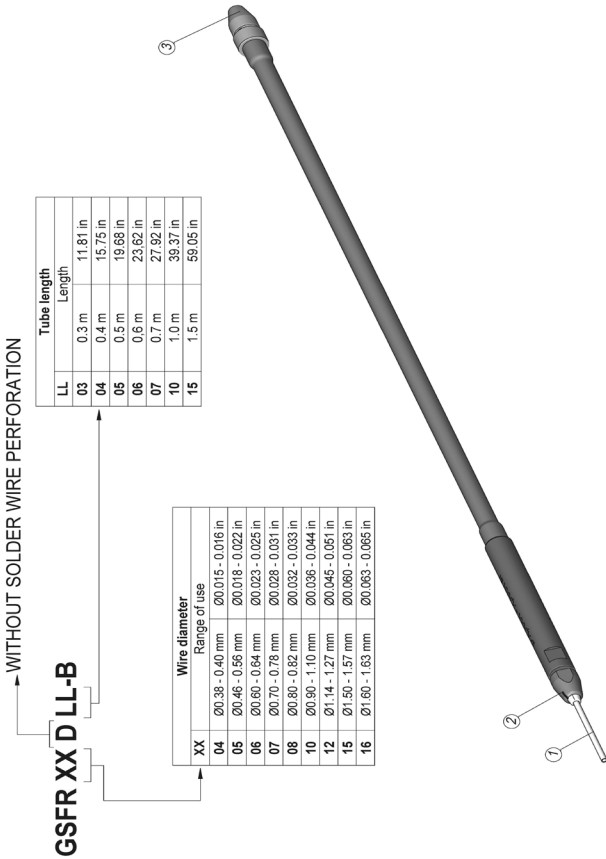
Tube length	
LL	Length
03	0.3 m 11.81 in
04	0.4 m 15.75 in
05	0.5 m 19.69 in
06	0.6 m 23.62 in
07	0.7 m 27.56 in
10	1.0 m 39.37 in
15	1.5 m 59.05 in

Table general	
XX	Wire diameter
06	Ø 0.8 mm Ø 0.032 in
10	Ø 1.0 mm Ø 0.040 in
12	Ø 1.2 mm Ø 0.047 in
15	Ø 1.5 mm Ø 0.059 in
16	Ø 1.6 mm Ø 0.063 in

Guide kit Ref.	Guide tube Ref.
GSFR08/003-B	0029648
GSFR08/005-B	0029649
GSFR08/006-B	0029650
GSFR08/007-B	0029651
GSFR08/010-B	0029652
GSFR08/015-B	0029653
GSFR10/003-B	0029681
GSFR10/005-B	0029682
GSFR10/006-B	0029654
GSFR10/007-B	0029655
GSFR10/010-B	0029656
GSFR10/015-B	0030926
GSFR12/003-B	0029657
GSFR12/005-B	0030647
GSFR12/007-B	0031537
GSFR12/010-B	0029658
GSFR15/003-B	0029659
GSFR15/004-B	0029660
GSFR15/005-B	0029661
GSFR15/007-B	0031538
GSFR16/010-B	0029662
GSFR16/015-B	0029663
GSFR16/003-B	0029664
GSFR16/004-B	0029665
GSFR16/005-B	0031468
GSFR16/015-B	0029666

Tube length	Wires Ø	Guide wheel Ref.	Blade Ref.	Blade clamp Ref.	Inlet nozzle Ref. (for SFR-A)	Inlet nozzle Ref. (for SFR-B)	Interm. nozzle Ref.	Inlet nozzle Ref. (for SFR-B)	Counter wheel Ref.	Screws Ref.	Threaded stud Ref.	Needle	Metal cap	Input tube guide
GSFR08/LL-B		0021696			0023740	0030561	0020637		0026689	0026695	0026696	0029943	0029948	0029950
GSFR10/LL-B		0021699			0023741	0030562	0030638		0026689	0026695	0026696	0029944	0029948	0029950
GSFR12/LL-B		0021738	0021555	0018638	0023736	0030563	0030639		0026689	0026695	0026696	0029945	0029948	0029951
GSFR15/LL-B		0019896			0023855	0030564	0030640		0026689	0026695	0026696	0029946	0029948	0029951
GSFR16/LL-B		0025922				0030565	0030641		0026689	0026695	0026696	0029947	0029948	0029951

## Exploded View



LL	Tube length
03	0.3 m
04	0.4 m
05	0.5 m
06	0.6 m
07	0.7 m
10	1.0 m
15	1.5 m

XX	Wire diameter
04	Ø0.38 - 0.40 mm Ø0.015 - 0.016 in
05	Ø0.46 - 0.56 mm Ø0.018 - 0.022 in
06	Ø0.60 - 0.64 mm Ø0.023 - 0.025 in
07	Ø0.70 - 0.78 mm Ø0.028 - 0.031 in
08	Ø0.80 - 0.82 mm Ø0.032 - 0.033 in
10	Ø0.90 - 1.10 mm Ø0.036 - 0.044 in
12	Ø1.14 - 1.27 mm Ø0.045 - 0.051 in
15	Ø1.50 - 1.57 mm Ø0.060 - 0.063 in
16	Ø1.60 - 1.63 mm Ø0.063 - 0.065 in

Guide kit Ref.	Guide tube Ref.
GSFR060303-B	0229687
GSFR060304-B	0331533
GSFR060305-B	0322362
GSFR060307-B	0229668
GSFR060310-B	0229669
GSFR060303-B	0229670
GSFR070303-B	0229671
GSFR070307-B	031776
GSFR070315-B	033648
GSFR080303-B	0229648
GSFR080305-B	0229649
GSFR080306-B	0229650
GSFR080307-B	0229651
GSFR080310-B	0229652
GSFR080303-B	0229653
GSFR080306-B	0229654
GSFR080307-B	0229655
GSFR080310-B	0229656
GSFR100307-B	0229657
GSFR120303-B	030647
GSFR120310-B	0229658
GSFR160303-B	0229659
GSFR160304-B	0229660
GSFR160305-B	0229661
GSFR160310-B	0229662
GSFR160315-B	0229663
GSFR160303-B	0229664
GSFR160304-B	0229665
GSFR160305-B	031468
GSFR160307-B	031548
GSFR160315-B	0229666

Traction wheel Ref.	Support wheel Ref.	Inlet nozzle Ref. (for SPR-A)	Interm. nozzle Ref.	Inlet nozzle Ref. (for SPR-B)	Counter-wheel Ref.	Screws Ref.	Threaded stud Ref.	Needle	Metal cap	Input tube guide
0019479	0020345	0023740	0030558	0030535	0026693	0026695	0026696	0029940	0029948	0029949
	0019519		0030559	0030534				0029941		
	0019480		0030560	0030536				0029942		
			0030561	0030537				0029943		
0019481	0023741	0030562	0030538	0026694	0026694	0029944	0029945	0029946	0029950	
		0023736	0030539							0029945
GSFR160315-B	0023855	0030564	0030565	0030540	0026694	0030540	0030541	0029947	0029947	0029951
			0030565	0030541						

## Notes

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# Specifications

## GSFR

### Guide Kit for Robot with/without Solder Wire Perforation

Ref.: **GSFR[XX]V[LL]-B** With Solder Wire Perforation *(detailed Ref. see page 2)*

Ref.: **GSFR[XX]D[LL]-B** Without Solder Wire Perforation *(detailed Ref. see page 3)*

- |                                      |                                  |
|--------------------------------------|----------------------------------|
| - Total Net Weight:                  | 42 g / 0.093 lb                  |
| - Total Package Dimensions / Weight: | 245 x 185 x 45 mm / 117 g        |
| (L x W x H)                          | 9.65 x 7.28 x 1.77 in / 0.258 lb |

Complies with CE standards.  
ESD safe.

# JBC

## Warranty

JBC's 2 year warranty covers this equipment against all manufacturing defects, including the replacement of defective parts and labour.

Warranty does not cover product wear or misuse.

In order for the warranty to be valid, equipment must be returned, postage paid, to the dealer where it was purchased.



This product should not be thrown in the garbage.

In accordance with the European directive 2012/19/EU, electronic equipment at the end of its life must be collected and returned to an authorized recycling facility.



[www.jbctools.com](http://www.jbctools.com)

0030637-170424