

Manual Wire Wrapping Tools User's Guide

G200/R3278 (Lexan™)

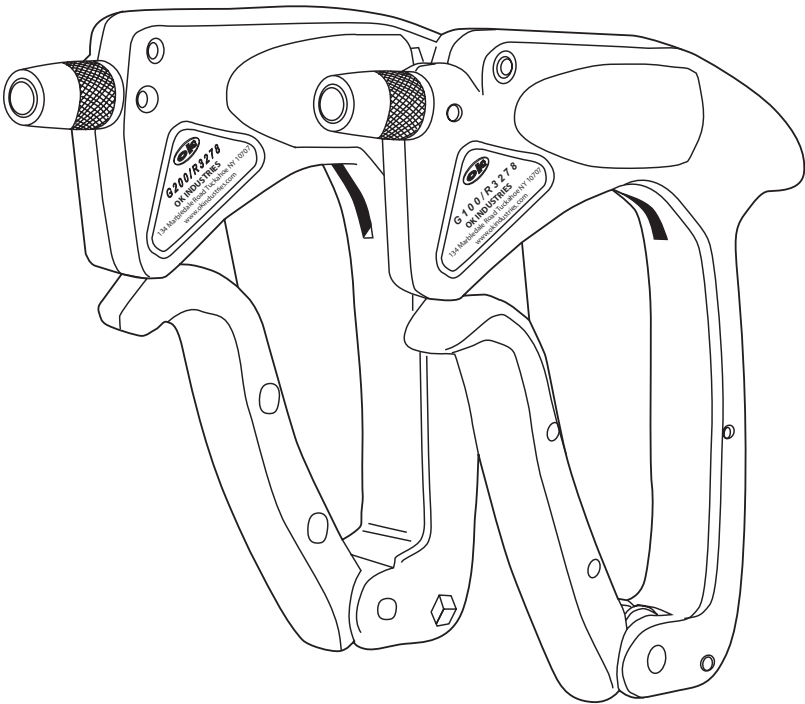
G100/R3278 (Aluminum)

G100/R3278FL (with Flashlight)

G100/R3278INS

(Aluminum insulated version)

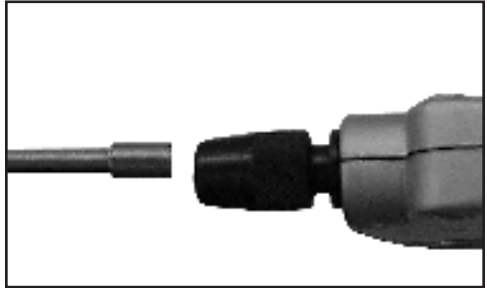
G100/R3394CT (Unwrap)



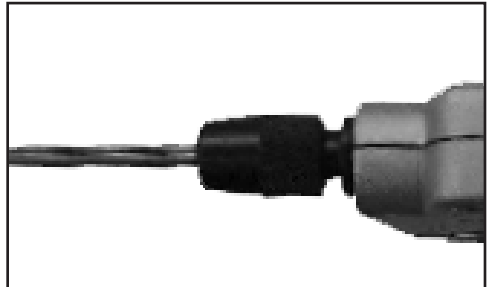
BIT AND SLEEVE INSTALLATION:

1. Remove the tool from the box.
2. Install a Bit and Sleeve. Follow installation instructions below. **(Bits and Sleeves are sold separately. See page 5 for bit and sleeve selection).**

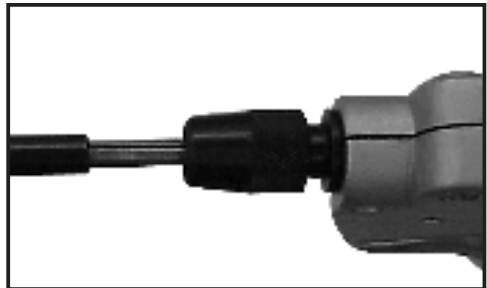
- Loosen nose piece (nut).
- Insert the bit into the nose piece



- Rotate until the bit is seated on the driver.



- Place sleeve over the bit and slide the sleeve into the nose piece. Rotate the sleeve as you are sliding the sleeve into the nose piece until the sleeve has engaged with the collet pin, the sleeve will then slide further into the nose piece. The sleeve is now seated.



- While squeezing the trigger, tighten the nose piece. This will insure proper orientation of the bit and sleeve and will minimize drag on the trigger.

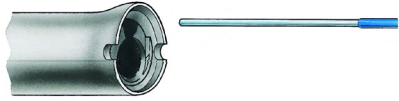


- The tool is now ready for use. To make a wire wrapped connection follow the instructions and helpful hints on page 4.

How to make A Wire Wrapped Connection:

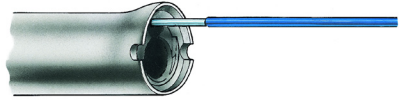
Step 1:

Select the Proper Bit and Sleeve for the Wire Being used



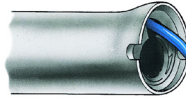
Step 2:

Insert the wire into the Wire Slot



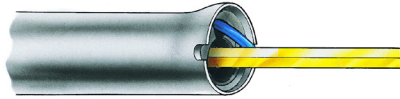
Step 3:

Anchor the Wire



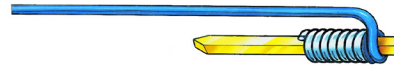
Step 4:

Insert the terminal



Step 5:

Finished connection



Some Hints on Making Wrapped Connections

Overwrap



Easy Does It!

Do not press too hard. Let the OK tools do the work. Excessive pressure can lead to overwrapping. Backforce "BF" to prevent overwrapping is available on most power tools and is recommended for use with 26 through 30 AWG wire.

Open Wrap



Spiral Wrap



Stay With It!

Just keep the OK tool on the terminal until the wrap is complete. Early removal can result in spiral and open wraps.

Insufficient Turns



Feed Wire Correctly!

It's easy to feed wire into the slot in the OK bit correctly. Be sure the stripped end of the wire is "pushed-in" all the way.

Pigtails



Use the Correct Bit and Sleeve!

Wire wrapping is a precision technique and the wrong bit and sleeve just cannot do the job. Improper selection can cause problems ranging from "Pigtails" to loose wraps.

Wrapping Bits and Sleeves Chart (AWG) Inches

Wire Gauge AWG	Regular		Bit Part No.	Sleeve Part No.	Maximum Insulation Diameter Inches	Minimum Terminal Diagonal Inches	Maximum Terminal Diagonal Inches	Terminal Hole Depth Inches	Effective Radius Inches	Terminal Hole Diameter Inches
	Modified									
18	●		KB18	P194LN	—	0.06	0.073	1.000	0.15	0.075
20		●	WB20M	P194LN	0.059	0.042	0.073	1.000	0.15	0.075
20-22	●		KB2075	P2224	—	0.042	0.073	1.000	0.123	0.075
22	●		KB22	P2224	—	0.054	0.073	0.75	0.117	0.075
22		●	WB2275M	P2224	0.052	0.049	0.074	1.000	0.132	0.075
22-24	●		KB224LH	P2224	—	0.061	0.085	1.000	0.117	0.086
22-24	●		KB224-1	P2224	—	0.054	0.073	1.000	0.111	0.075
22-24	●		KB224	P2224	—	0.054	0.073	0.807	0.111	0.075
22-24		●	WB224M	P2224	0.05	0.049	0.074	1.25	0.121	0.075
24		●	WB24DH	P2224	0.046	0.054	0.073	1.75	0.117	0.075
24	●		KB24	P2224	—	0.055	0.074	0.75	0.1	0.075
24		●	*WB24SM	P3032LN	0.044	0.024	0.043	0.75	0.098	0.044
24-26		●	WB2426M	P2224	0.046	0.054	0.073	0.75	0.118	0.075
26	●		KB26	P2426	—	0.058	0.073	1.000	0.10	0.075
26		●	*WB26SM	P26LN	0.031	0.023	0.038	0.75	0.075	0.04
26		●	WB26M	P2224	0.046	0.054	0.073	1.000	0.118	0.075
26		●	*WB2644M	P3032LN	0.046	0.024	0.043	0.75	0.098	0.044
26		●	WB2669M	P2426	0.041	0.053	0.068	1.000	0.109	0.069
28		●	WB2870M	P2426	0.034	0.053	0.068	1.000	0.103	0.07
28		●	*WB28SHM	P3032	0.03	0.031	0.035	0.75	0.066	0.036
30		●	*SB30MSH-B	P3032	0.027	0.031	0.035	0.75	0.064	0.036
30		●	*SB30MMK	P3032	0.023	0.031	0.035	0.75	0.064	0.036
30-32		●	*WB3032M	P3032	0.027	0.034	0.038	0.75	0.064	0.04
30-32		●	†WB3032MIL	P3032	0.027	0.034	0.038	0.75	0.064	0.04
30-32	●		KB3032	P3032	—	0.034	0.038	0.75	0.064	0.04

*These tools are recommended for .025" square terminals on .100"

† Provides 2.5 turns of insulation centers

Extended Length (5") Bits and Sleeves Chart

Wire Gauge AWG	mm.	Regular		Bit Part No.	Sleeve Part No.	Maximum Insulation Diameter Inches	Minimum Terminal Diagonal Inches	Maximum Terminal Diagonal Inches	Terminal Hole Depth Inches	Effective Radius Inches	Terminal Hole Diameter Inches
		Modified									
22	0.65	●		KB22-5	P2224-5	—	0.054	0.073	0.75	0.117	0.075
24	0.50	●		KB24-5	P2426-5	—	0.055	0.074	0.75	0.100	0.075
26	0.40	●		KB26-5	P2426-5	—	0.058	0.073	0.75	0.100	0.075

Insulated Sleeves (1000V dielectric strength)

WIRE SIZE	PART NO.
22-24 AWG	P2224INS (or P2224-5INS for 5" version)
24-26 AWG	P2426INS (or P2426-5INS for 5" version)

Maintenance Procedure: Manual Wire Wrapping Tools

Periodic Maintenance:

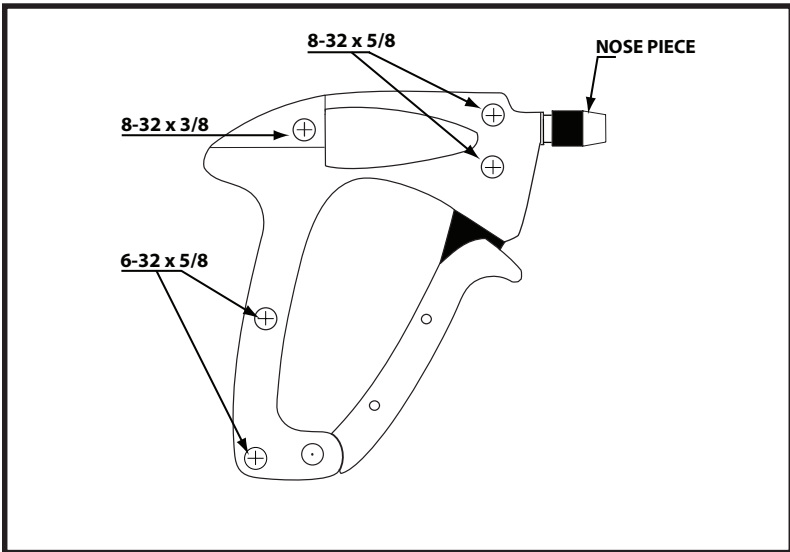
The only required maintenance is periodic greasing of the gear assembly. The interval is dependent on use. For reference we suggest every 50,000 wraps or every 6 months which ever comes first.

Tools Required:

1. Philips Head Screwdriver.
2. Synthetic Grease (Such as: Chemplex 940 from NFO Technologies).

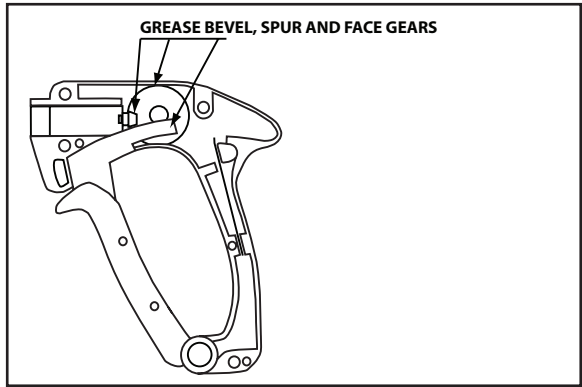
Disassembly:

1. Using a Philips head screwdriver, remove the 5 screws that hold the housing together. Note the type and location of the screws.



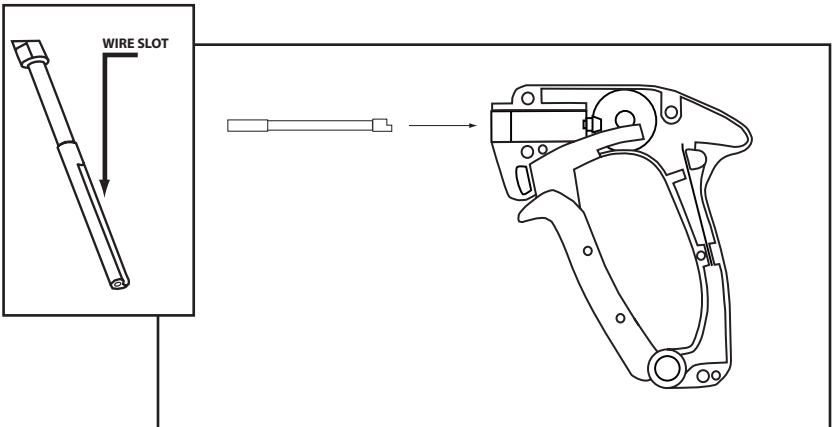
2. Turn the gun over and lay it down on a flat surface so the nose piece is facing left. Separate the housings and remove the collet and nose piece. Note: Use a flat head screwdriver to separate the housings.

3. Apply grease to the bevel, spur and face gear.



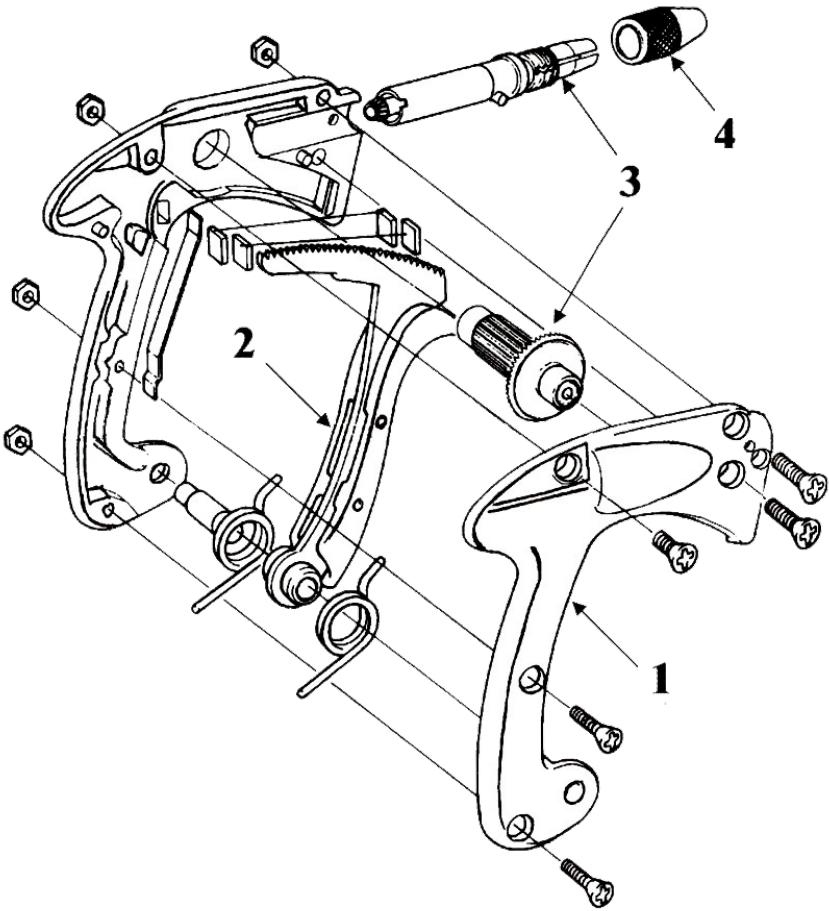
Reassembly:

1. Prior to closing the unit the bit index must be checked.
2. Load a bit into the barrel assembly.



3. The wire slot on the bit should be in the 12 O'clock position. If the wire slot is not in the 12 O'clock position then proceed to step 4. If the wire slot is in the 12 O'clock position then proceed to step 5.
4. Lift the barrel assembly from the gun assembly and rotate the bit until the wire slot is in the 12 O'clock position. Reinstall the barrel assembly into the gun housing. Insure the barrel-locating pin is seated into its locating hole in the housing and that the bit is still in the 12 O'clock position.
5. Reinstall top housing and Install the bottom 6-32x5/8 screw. Install collet and nose piece, insuring that the collet-locating pin is seated in the locating hole in the housing. Install remaining screws.

Spare Parts



Item	Gun Type	Part#	Description
1	G100/R3278	21612	Frame Pair
	G200/R3278	10441	Frame Pair
	G100/R3278INS	21424	Frame Pair
2	G100/R3278	11589	Trigger Asm.
	G200/R3278	10938	Trigger Asm.
	G100/R3278INS	21333	Trigger Asm.
3	All Gun Types	21671	Gear-Barrel Asm. Kit
4	All Gun Types	10344	Collet Nut