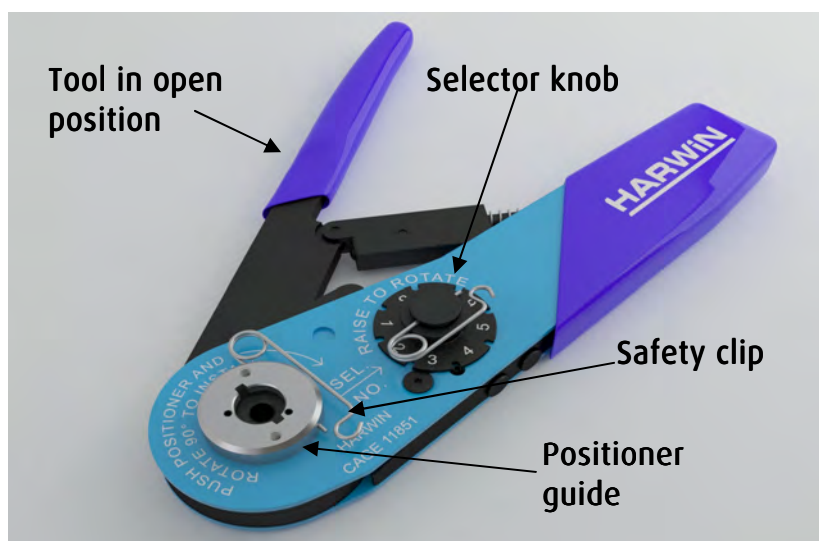


## HAND CRIMP TOOL M22520/2-01



**This Hand Crimp Tool has been designed for use with the following Crimp Contacts:**

**Datamate Signal Crimp Sockets (when used with Positioner T5747):**

- M80-01100XX ..... Large bore Female crimp contact for 22 AWG wire  
(used in all L-Tek, J-Tek and Mix-Tek female crimp connectors).
- M80-01300XX ..... Small bore Female crimp contact for 24-28 AWG wire  
(used in all L-Tek, J-Tek and Mix-Tek female crimp connectors).
- M80-01900XX ..... Extra small bore female crimp for 28-32 AWG wire  
(used in all L-Tek, J-Tek and Mix-Tek female crimp connectors).
- M80-04000XX ..... Large bore Male crimp contact for 22 AWG wire  
(used in L-Tek male crimp connectors).
- M80-04100XX ..... Small bore Male crimp contact for 24-28 AWG wire  
(used in L-Tek male crimp connectors).
- M83-01100XX ..... Large bore Female crimp contact for 22 AWG wire  
(used in all L-Tek, J-Tek and Mix-Tek female crimp connectors).
- M83-01300XX ..... Small bore Female crimp contact for 24-28 AWG wire  
(used in all L-Tek, J-Tek and Mix-Tek female crimp connectors).

**Datamate Signal Crimp Pins can also be crimped (when used with Positioner Z80-193):**

- M80-19400XX ..... Large bore Male crimp contact for 22 AWG wire  
(used in J-Tek and Mix-Tek male crimp connectors).
- M80-19500XX ..... Small bore Male crimp contact for 24-28 AWG wire  
(used in J-Tek and Mix-Tek male crimp connectors).

**Datamate and M300 Power Crimp Contacts can also be crimped (when used with Positioner Z80-058):**

- M80-05500XX ..... Power Female crimp contact for 18-20 AWG  
(used in M80-716 and M80-719 series).
- M300-0010045 ..... Power Female crimp contact for 18-20 AWG
- M300-0020045 ..... Power Female crimp contact for 22 AWG
- M300-1010045 ..... Power Male crimp contact for 18-20 AWG
- M300-1020045 ..... Power Male crimp contact for 22 AWG

## Crimp Contacts Continued:

K series Power Crimp Sockets can also be crimped (when used with Positioner ZK3609-00):

K3606-46 ..... Power Male crimp contact for 18 AWG.

K3607-46 ..... Power Female crimp contact for 18 AWG.

## GENERAL INFORMATION

The Hand crimp tool M22520/2-01 consists of a basic hand tool, which should be used with a positioner.

The contact is correctly crimped when the tool is free to open at the fully closed position, i.e., when the ratchet releases. The tool cannot be opened without completing the cycle.

## TOOL PREPARATION

1. Check that the tool is in the open position. Remove the safety clip from the positioner guide (do not discard).
2. Insert the Positioner into the positioner guide and turn it 90° in the direction shown on the tool, until the bayonet pins lock.
3. Install the safety clip back into the positioner guide (optional).
4. Check Table 1 for the correct crimp tool setting of the wire size you wish to crimp.
5. Remove the safety clip from the selector knob (do not discard).
6. Lift and turn the selector knob until the correct crimp tool setting is lined up with the "Sel. No." arrow. Lower the selector knob, ensuring the locating peg lines up with a notch.
7. Install the safety clip back into the selector knob.

## CRIMPING PROCEDURE

1. Ensure that the wire to be crimped is within the specified range of sizes for the contact and the crimp tool. Failure to use the specified wire size will result in poor quality crimps and possible tool damage.

Table 1

Contact	Crimp Type	Wire Gauge (AWG)	Stranding (mm)	Crimp Tool Setting	Minimum pull-off force
M80-01100XX M83-01100XX M80-04000XX M80-19400XX	Datamate Large Bore	22	19/0.15	6	50N
M80-01300XX M83-01300XX M80-04100XX M80-19500XX	Datamate Small Bore	24	7/0.2	6	44N
		26	7/0.15	6	25N
		28	7/0.12	6	12.5N
M80-01900XX	Datamate Extra small bore	28	7/0.12	5	12.5N
		30	1/0.25	4	7N
		32	7/0.08	4	4N
M80-05500XX	Datamate Power Crimp	20	19/0.2	8	85N
		18	19/0.26	8	140N
M300-0010045 M300-1010045	M300 series Large Bore	20	19/0.2	8	80
		18	19/0.25	8	140
M300-0020045 M300-1020045	M300 Series Small Bore	22	19/0.15	8	50
K36XX-46	K Series Power Crimp	18	Variable	8	142N

2. Cut the end of the cable to be terminated so that there is a clean cut end (Figure A). Strip the cable to the correct length (Figure B) using a PTFE Wire stripper, preferably with adjustable rotating cutter. This should result in all the strands lying together neatly. If the lay of the strands is disturbed, it may be re-imposed with a slight twist.

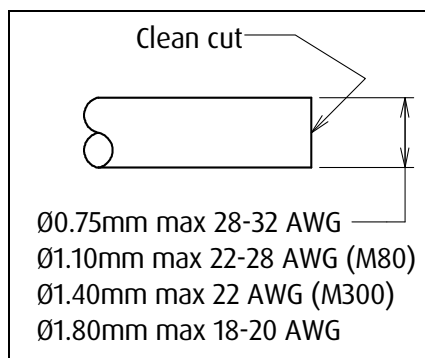


Figure A

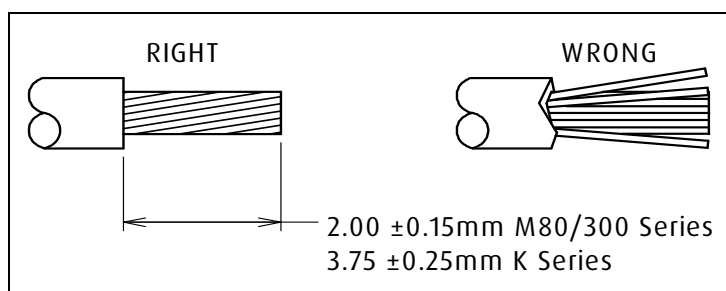


Figure B

3. Position the crimp contact fully into the positioner, with the crimp barrel uppermost.

4. Load the terminated end of the cable into the crimp barrel of the contact. Ensure the wire is fully inserted, with all strands in place (see Figure C).

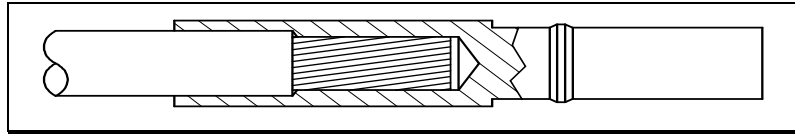


Figure C

5. Squeeze the handles of the crimp tool fully together, until ratchet releases. The handle will return to the open position. Remove the crimped contact and wire. Check that there is no exposed or stray wire, and that the insulation is fully within the end of the crimp barrel.  
*Note: The cross hole on the crimp barrel, although not an inspection hole (it is designed to assist with plating processes) may give approximate guidance to the location of the conductor. After crimping the contact, the indent may overlap this hole.*
6. Crimp joints should be checked for:
  - a) Correct combination of cable, tool setting and crimp termination.
  - b) Correctness of form and location of crimp.
  - c) Freedom of fracture, rough edges and flash.
  - d) Adequate insertion of all conductor strands in the crimp barrel.
  - e) Absence of damage to the conductor or the insulation.

## CONTACT ASSEMBLY TO HOUSING PROCEDURE

M80 Series parts are assembled using Assembly Tool Z80-280 and Instruction Sheet IS-25.

M300 Series parts are assembled using Assembly Tool Z300-902 and Instruction Sheet IS-40.

K Series parts are assembled using the Assembly Tool ZK3610-00 and Instruction Sheet IS-22.

## CARE OF TOOL

There is virtually no maintenance required for the M22520/2-01 tool. However, it is good practice to keep the indenter tips free of residual colour band deposits and other debris. A small wire brush may be used for this purpose.

We strongly recommend that you:

1. **DO NOT** immerse tools in any cleaning solution.
2. **DO NOT** spray oil into tool to lubricate.
3. **DO NOT** attempt to disassemble tool or make repairs.

This is a precision crimp tool and should be handled as such.