

TOOLS AND MAINTENANCE

ECT Probes
love
ECT Tools

On the following pages, we offer a variety of tools to insert or extract probes and receptacles. These tools are made from durable steel and materials to insure a long lifetime.

In addition you will find an Instructions and recommended maintenance procedures for our products.

PROBE HANDLING INSTRUCTIONS

Special care should be used when handling some small diameter probes such as the POGO-72. Their long length makes them more susceptible to bending than their 100 mil counterparts. It is recommended that the plunger not be deflected unless it is in its mating receptacle, which should be installed in a probe plate. If deflection is required prior to insertion into the mating receptacle, please follow these guidelines to reduce the possibility of damage.

- Hold the top of the probe barrel firmly between the forefinger and thumb of one hand.
- Using the forefinger of the opposite hand (or a wooden dowel if it is a point-ed tip), deflect the plunger the required distance.



Correct



Incorrect

BOARD MARKER TOOLS

Part No.	Description	Used on
RIT-BMP	Receptacle insertion tool	BMR-1
EXT-BMP	BMP insertion/extraction tool	BMP-1/BMP-3



POGO® MAINTENANCE

Generally, Pogo cleaning is not recommended. However, in some cases the spring probe performance in relationship to electrical conductivity can be improved if the spring probe tips are cleaned of any contaminants. Contaminants can form an insulation barrier on the probe tip, thus reducing contact integrity.

One of the more widely used methods for cleaning spring contact probes involves the use of brushes to clean the probe heads without probe removal from the test fixture. This technique allows for more frequent maintenance resulting in improved fixture reliability. After brushing contaminants free from the probes, the fixture should be vacuumed to insure no remaining particles create future problems.

Another cleaning method involves removal of probes from the test fixture, bundling them together, and submerging only the probe tips in a shallow pan of safe solution such as alcohol or citric cleaner for five minutes. After soaking, the probe tips can be scrubbed with a soft bristle brush to remove any residue, then rinsed and dried. The probes can then be installed back into the test fixture. This method should be attempted only as a last resort, as cleaning fluids and solvents can wash contaminants into the probes as well as the fixture.

Maintenance Tools

Part No. ECT	Part No. OB	Description	Dimensions
MPB-01	MB-1	Brass bristle brush	4.25 x 2.50 (108 x 64)
MPB-02	MB-2	4 row brass brush	3.25 x 1.125 (83 x 29)
MPB-03	MB-3	Nylon brush	6.25 (159)



GENERAL PURPOSE-REPLACEABLE INSERTION TOOLS

Made from the highest quality stainless steel, these durable, corrosion-resistant tools are guaranteed to provide years of service. They are engineered to minimum size for easy control and to fit comfortably in your hand for ease of use.

For receptacle installation, choose the RIT or ART tool that matches the receptacle and follow the Insertion Instructions. The press ring keeps the receptacle in place, so no glue is required. The spring probe can then be inserted into the receptacle to complete the installation.

The height of the probe can be changed by mounting the receptacle at different heights. For more information on receptacles, refer to the technical section of this catalog.



1. Insert receptacle into the drill hole.



2. Insert tip of RIT tool into the top of the receptacle and, with slight hand pressure, seat the receptacle into the drill hole until resistance is met.



3. Tap the top of the tool with a small plastic hammer until the receptacle is seated at the proper height. The press ring keeps the receptacle in place.

Receptacle Insertion Tools

Part No. ECT	Part No. OB	Mounting Height	Used on ECT	Used on OB
ARIT-1	ARIT40	Flush to .220 (5.59)	SPR-1/LTR-1	SR40/LR40
ARIT-1M	ARIT40M	Flush to .220 (5.59)	SPR-1/LTR-1	SR40/LR40
ARIT-25	ARIT54	Flush to .220 (5.59)	SPR-2/-25/-64	SR54/SR541
ARIT-25M	ARIT54M	Flush to .220 (5.59)	SPR-2/-25/-64	SR54/SR541
ART-62		Flush to .285 (7.24)	HPR-62	
ART-72	AT31	Flush to .220 (5.59)	HPR-72	HPR-72
RIT-0-0	T261-0	Flush	SPR-0	SR261
RIT-1-0		Flush	SPR-1/LTR-1	
RIT-3-0	T80-0	Flush	SPR-3	SR80
RIT-3-220		.220 (5.59)	SPR-3	
RIT-30-0	T20-0	Flush	HPR-30	SR20
RIT-4-0	T93-0	Flush	SPR-4	SR93
RIT-40-0	T27-0	Flush	HPR-40	SR27
RIT-5-0	T125-0	Flush	SPR-5	SR125
RIT-64-005	MRT54-005	.005 (0.13)	SPR-64	MR54
RIT-74-005	MRT-554-005	.005 (0.13)	SPR-74	MR554
RIT-80-0		Flush	STT-80	

CRIMP PLIER

ECT crimping pliers make receptacle crimping fast and easy. The standard ratchet-action jaws are individually fitted and inspected to ensure quick insertion and removal of the receptacle.

The tool features an internal high-tension coil spring for fatigue-free operation and a lifetime of dependable service. Vinyl cushion grips ensure a firm grip with minimum applied pressure. Instructions are provided.

The 900 series crimp plier requires a corresponding crimp locator (DCL) in order to function properly. Example: To order a plier to crimp a SPR-1W, specify a 900 plier and a DCL-1 crimp locator. If you already have the 900 plier, order only the DCL for the specific receptacle series you require.

Part No. ECT	Part No. OB
900	Model #900



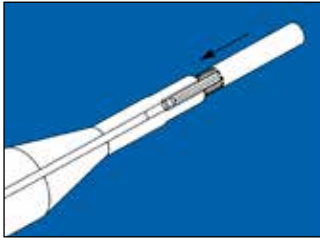
Interchangeable Crimp Plier Locators

Part No. ECT	Part No. OB	Receptacle ECT	Receptacle OB
DCL-0	CL261	SPR-0	SR261
DCL-1	CL40	SPR-1	SR40
DCL-2	CL541	SPR-2	SR541
DCL-3	CL80	SPR-3	SR80
DCL-20		MEP-20	
DCL-25	CL54	SPR-25	SR54
DCL-30	CL20	HPR-30	SR20
DCL-40	CL27	HPR-40	SR27
DCL-62		HPR-62	
DCL-72	CL31	HPR-72	HPR-72

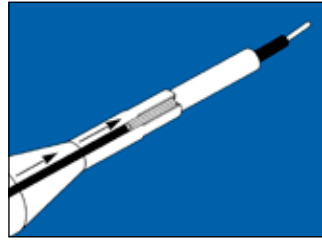


Dimensions in inches (millimeters). Specifications subject to change without notice. Stocking Disclaimer: Stocking levels for part numbers listed in this catalog are subject to change. Availability is based on current levels of usage and demand.

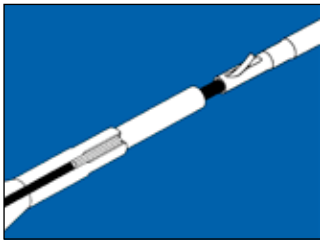
FASTITE® Insertion Instructions



1. Insert insulator, knurled end first into tip of FIT tool



2. Insert prestripped wire into notch on FIT tool and slide until it protrudes approximately 1/8 inch from insulator.



3. Hold wire firmly against tool with forefinger. Insert protruding wire into termination end of W-4 receptacle. Release grasp on wire and push insulator onto end of receptacle, completing termination.



4. Complete termination.

Probe/FASTITE® Insertion Tools

Part No. ECT	Part No. OB	Description	Used on ECT	Used on OB
PIT-0	PIT-261	Probe insertion tool	SPA-0/HPA-0/HPA-50	IP261
PIT-20		Probe insertion tool	MEP-20	
PIE-25	PIE-54	Probe insertion/ extraction tool	All 100mil probes	All 100mil probes
FIT-1	FIT-1	FASTITE® insertion tool	HPR-72W-4/SPR-0W-4 HPR-40T	SR28-4, SR31-4



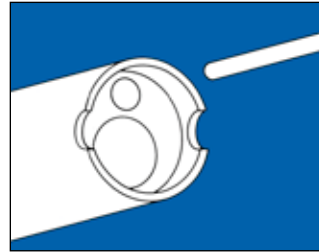
FIT-1



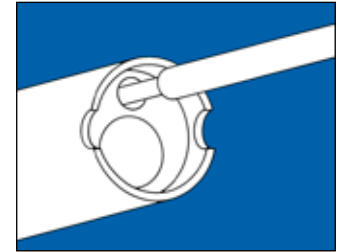
PIE-25

WIRE WRAPPING TIPS

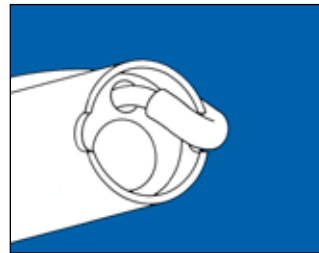
A wire-wrapped termination is made by coiling the wire around the sharp corners of a .025 (0.64) square receptacle post. By bending the wire around the sharp corner, the oxide layer of both surfaces is broken, revealing an oxide-free surface. This provides clean metal-to-metal contact between the wire and the post. The minimum number of turns is based on wire gauge and the type of wrap. A standard wrap coils only the bare wire around the post. A modified wrap coils the wire and a portion of the insulation. The modified wrap increases the ability to withstand vibration.



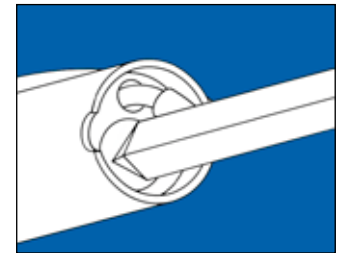
1. Pre-stripped wire, bit and sleeve



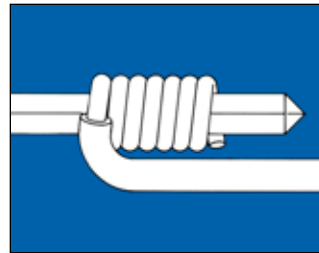
2. Insert wire.



3. Secure wire.



4. Insert terminal, actuate wrapping gun.



5. Completed termination.

Wire turns per MIL-STD-1130B

(on \square .025 (0.64) WireWrap Post)

Wire Size	Diameter	Minimum Number of Turns	
		Class A (Modified)	Class B (Standard)
30	.010 (0.25)	7 stripped turns plus 1/2 insulated	7 stripped turns
28	.0126 (0.32)	7 stripped turns plus 1/2 insulated	7 stripped turns
26	.0159 (0.40)	6 stripped turns plus 1/2 Insulated	6 stripped turns
24	.0201 (0.51)	5 stripped turns plus 1/2 insulated	5 stripped turns