

½ DIE SET PART NUMBER*	CONTACT PART NUMBER	CONTACT SIZE	WIRE GAGE RANGE (AWG)	RECOMMENDED INSULATION STRIP LENGTH
(TE #2217968-5)**	5962-203-0431 5960-203-0431	4	4***	10.92-12.50 [.430-.492]
DEUTSCH #0434-205-0400 (TE #2217968-3)	0460-204-0490 0462-203-04141	4	6***	
DEUTSCH #0434-205-0800 (TE #2217968-4)	0460-204-08141 0462-203-08141	8	8-10***	

•NOTE: Die part numbers listed are only ½ of the die set. When ordering a complete replacement die set, order quantity of 2. See Figure 12.
Not included with standard tool. *Wire sizes per J1128 and J1560 (DIN 72551-6).

Figure 1

1. INTRODUCTION

Hand crimping tool HDT-04-08 (TE #1606312-5) is used to crimp the contacts provided in the table in Figure 1.

i **NOTE**
Dimensions in this instruction sheet are in metric units [with U.S. customary units in brackets]. Figures and illustrations are for reference only and are not drawn to scale.

2. CRIMPING PROCEDURE

- Strip the insulation from the wire according to the dimensions provided in the table in Figure 1.
- Open the tool handles to open the jaws. Place the contact into the appropriate size die. Die 0434-205-0400 for size 4 contacts and die 0434-205-0800 for size 8 contacts. Die 2217968-5 for size 4 contact with #4 AWG wire, not included with standard tool. See Figure 2.



Figure 2

- Partially close the tool until the contact is held in place. See Figure 3.



Figure 3

4. Insert the stripped wire into the crimp barrel of the contact. See Figure 4.



Figure 4

5. Squeeze the handles of the tool until the handles stop and the tool makes one complete cycle. See Figure 5.



Figure 5

6. See Figure 6 and remove and inspect the crimped contact for:

- *No damaged wire strands*
- *No missing wire strands*
- *Wire inserted to the proper depth of the contact*



Figure 6

3. DIE REPLACEMENT

1. HDT-04-08 hand tool comes preassembled with die 0434-205-0400 for crimping size 4 solid contacts (#6 AWG) wire. Die 0434-205-0800, for size 8 solid contacts, is packaged separately with the tool. See Figure 7.



Figure 7

2. To replace the die on the crimper, loosen and remove nuts on the retaining bolts in the die assembly. Remove the lock washers, and slide the retaining bolts out from the rear of the crimper. See Figure 8.



Figure 8

3. Replace the dies by sliding them up and off of the crimper head. Line up retaining bolt holes on the crimper head, and insert the retaining bolts from the rear of the crimper. See Figure 9.



Figure 9

4. Replace the lock washers and tighten the nuts. See Figure 10.



Figure 10

4. MAINTENANCE AND INSPECTION

Hand crimping tools are inspected before shipment. The tool received should be inspected immediately upon arrival to ensure that the tool has not been damaged during shipment, and that it performs according to the criteria described in this sheet. If a tool is damaged upon arrival, retain the shipping container, file a claim with the carrier, and notify TE Connectivity immediately.

4.1. Daily Maintenance

1. Remove dust, moisture, and other contaminants from the tool with a clean brush or a soft, lint-free cloth. DO NOT use objects that could damage the tool.
2. Make sure that the proper hardware is in place and are secured with the proper nuts and washers.
3. Make certain that all pins, pivot points, and bearing surfaces are protected with a THIN coat of any good SAE 20 motor oil. DO NOT oil excessively.
4. When the tool is not in use, keep the handles closed to prevent objects from becoming lodged in the crimping areas and store the tool in a clean, dry area.

4.2. Periodic Inspection

Regular inspections should be performed by quality control personnel. A record of scheduled inspections should remain with the tool or be supplied to supervisory personnel responsible for the tool. Though recommendations call for at least one inspection per month, the inspection frequency should be based on the amount of use, working conditions, operator training and skill, and established company standards. These inspections should be performed in the following sequence:

A. Jaw Closure Inspection

1. This jaw closure adjustment requires a 2280710-1 adjusting block. If no adjusting block is available use a veneer caliper locked and set at .996 in.



NOTE

For a video of this procedure go to: <https://youtu.be/xYnISuLYRIw>

2. Remove the nuts, washers and bolts from the retainer assemblies (dies). Leave retainer assemblies (dies) in the tool.
3. Close handles completely (making sure the retainer assemblies are aligned) to position tool jaws for adjustment. Remove the retainer assemblies (dies) from the tool. Check the dimension with the adjusting block or veneer caliper as shown in Figure 11. If the jaws are set correctly no adjustment is required. Reinstall the retainer assembly (dies), bolts, washers and nuts. Cycle tool one time then gage tool indenters using dimensions in Figure 12. See "Gaging Crimping Chamber" below.

4. If the adjusting block cannot enter the jaws when positioned correctly or the dimension is below .996 in., go to STEP 1. If the adjusting block is loose when positioned correctly or above .996 in., go to STEP 2.

B. Step 1 Jaw Adjusting Block Too Tight or Under .996 in.

1. To perform this procedure the jaws must be set to over the .996 in. dimension or the adjusting block must be loose at the correct position as shown in Figure 11.
2. Loosen the handle adjustment screw ½ turn counterclockwise. Install retainer assembly (die set) and cycle the tool. The tip of the adjustment screw should now make contact with the opposing surface in the handle slot (no gap).
3. Remove the retainer assembly (die set). Position adjusting block or veneer caliper as shown in Figure 11. If jaws are over the .996 in. dimension or adjusting block is loose, go to Step 2.
4. If the jaws are still under the .996 in. dimension, adjusting block is tight, loosen the handle adjustment screw 1/8 turn counterclockwise. Install the retainer assembly (die set) and cycle the tool to eliminate the gap at the tip of the screw.
5. Repeat above procedure until the adjusting block is loose or jaws are above the .996 in. dimension then go to Step 2 below. 1/8 turn on the adjustment screw is approximately .001 in. at the gage.

C. Step 2 Jaw Adjusting Block is Loose or Over .996 in.

1. Turn handle adjustment screw clockwise 1/8 turn at a time checking the jaw gap with adjusting block or veneer caliper set at .996 in. 1/8 turn on the adjustment screw is approximately .001 in. at the adjusting block position in Figure 11. Turn handle adjustment screw until the adjusting block is tight or at .996 in.
2. Install retainer assembly (die), bolts, washer and nuts. Gage tool indenters according to the instructions below, “Gaging Crimping Chamber”. Use dimensions in Figure 12.

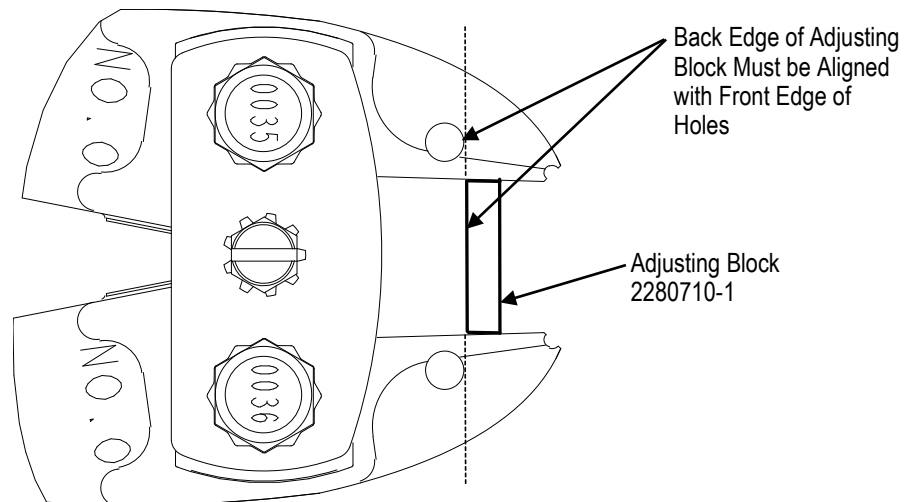


Figure 11

4.3. Gaging Crimping Chamber

This inspection requires the use of plug gages conforming to the dimensions listed in Figure 8. To gage the crimping chamber, proceed as follows:

1. Close the jaws by squeezing the tool handles together until the handles have bottomed, and then HOLD the handles in this position.

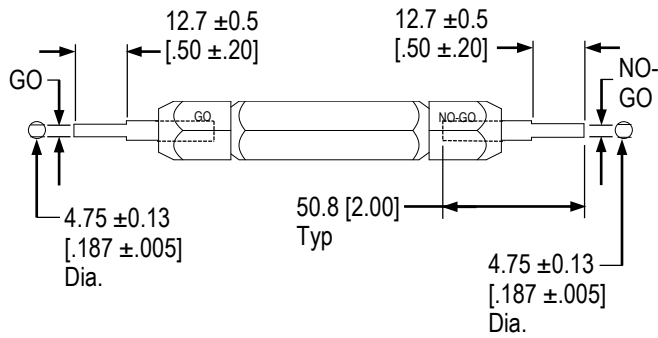
2. Align the GO element of the gage with the wire barrel crimp section of the crimping chamber. Refer to Figure 12. Push the element straight into the crimping chamber without using force. The GO element must pass completely through the crimping chamber.
3. Align the NO-GO element of the gage with the same crimp section, and try to insert the element. The NO-GO element may start entry, but it must not pass completely through the crimping chamber. Refer to Figure 12.

If the crimping chamber conforms to the gage inspection, the tool is considered dimensionally correct. If the crimping chamber does not conform to the inspection, the tool must be repaired. Refer to Section 6, REPLACEMENT AND REPAIR.

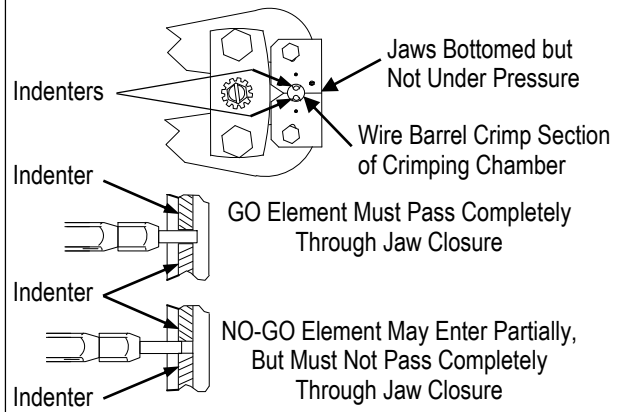
For additional information concerning the use of the plug gage, refer to Instruction Sheet [408-7424](#).

Hand Tool HDT-04-08 (TE #1606312-5)

Suggested Plug Gage Design – Wire Barrel Crimp Section



Inspection of Wire Barrel Crimp Section



½ DIE SET PART NUMBER	“GO” GAGE DIMENSIONS	“NO-GO” GAGE DIMENSIONS
0434-205-0400 (TE #2217968-3 & -5)	3.048-3.056 [.1200-.1203]	3.300-3.302 [.1299-.1300]
0434-205-0800 (TE #2217968-4)	2.108-2.116 [.0830-.0833]	2.360-2.362 [.0929-.0930]

Figure 12

5. REPLACEMENT AND REPAIR

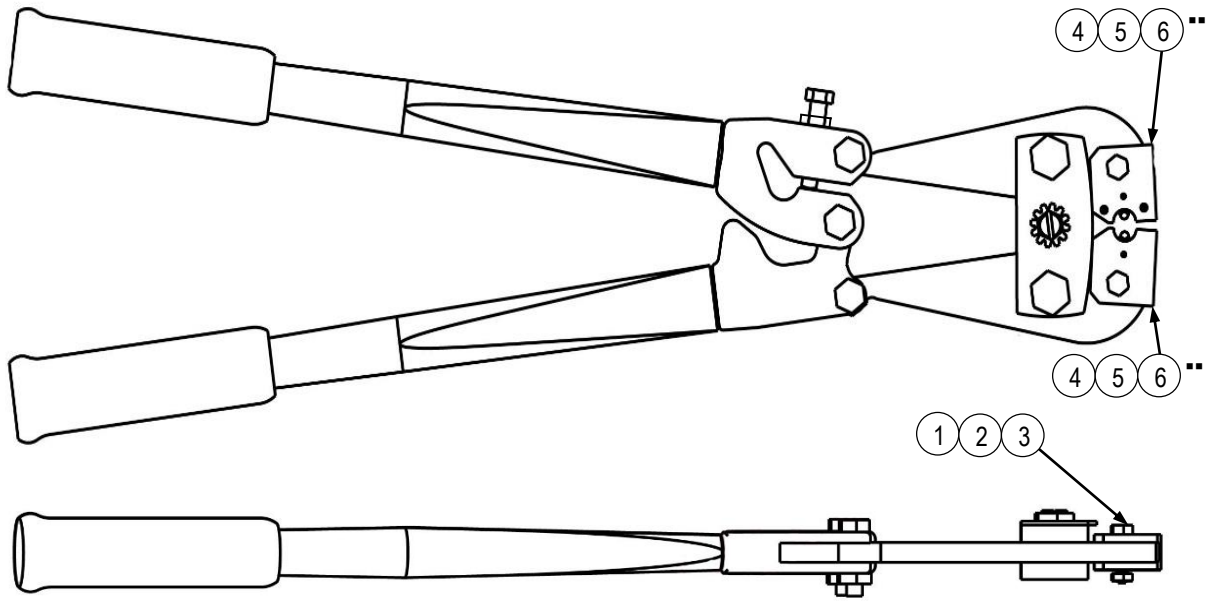
Customer-replaceable parts are listed in Figure 13. A complete inventory should be stocked and controlled to prevent lost time when replacement of parts is necessary. Parts other than those listed should be replaced by TE to ensure quality and reliability. Order replacement parts through your TE Representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 717-986-7605, or write to:

CUSTOMER SERVICE (038-035)
 TYCO ELECTRONICS CORPORATION
 PO BOX 3608
 HARRISBURG PA 17105-3608

For customer repair service, call 1-800-526-5136.

6. REVISION SUMMARY

- Updated document to corporate requirements
- Corrected contact part numbers in table in Figure 1.



ITEM NUMBER	PART NUMBER	DESCRIPTION	QTY PER TOOL ASSEMBLY
1	2217973-1	Bolt	2
2	21124-8	Nut	2
3	22873-3	Washer	2
4*	0434-205-0400 (TE #2217968-3)	Half Die 0434-205-0400	2
5*	0434-205-0800 (TE #2217968-4)	Half Die 0434-205-0800	2
6**	2217968-5	Half Die	0

•NOTE: Die part numbers listed are only ½ of the die set. When ordering a complete replacement die set, order quantity of 2. See Figure 1.

**Not included with standard tool.

Figure 13