

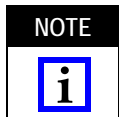
REMOVAL KIT NUMBER	WILL REMOVE	PRODUCT PART NUMBERS
2161742-1	4 X 6 and 4 X 8 Headers	2169832-1 and 2169833-1
2161744-1	6 X 6 and 6 X 8 Headers	2169830-1 and 2169831-1
2161756-1	8 X 6 and 8 X 8 Headers	2149968-1 and 2169829-1

Figure 1

1. INTRODUCTION

Removal Kits 2161742-1, 2161744-1, and 2161756-1 are designed to remove STRADA Whisper Headers from printed circuit (pc) boards. Refer to Figure 1.

Read and understand these instructions before using the removal tools.



Dimensions on this 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. DESCRIPTION

Each kit consists of two swage subassemblies, one clamp subassembly, one pusher block, one removal knob, and two separation screws. The swage subassemblies consists of a swage block, a wedge block, and two swage screws. The clamp subassembly consists of two side clamp blocks and two clamp screws.

The swage subassemblies grip the header by swaging the tops of the header c-pins. The clamp subassembly grips the sides of the header to allow the swage subassembly to provide the swaging action. As a user tightens the removal knob on the pusher block, the swage subassembly is pulled away from the pc board. The separation screws allow a user to remove the header from the swage block after removal from the pc board.

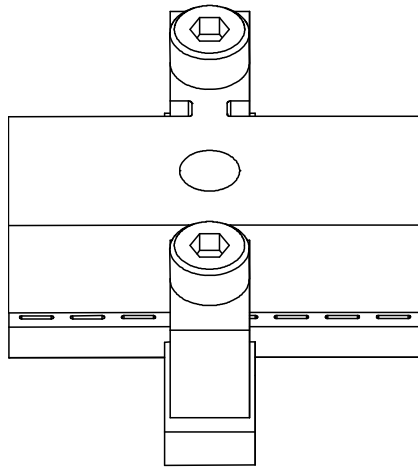
3. OPERATION

3.1. Tool Preparation (Figure 2)

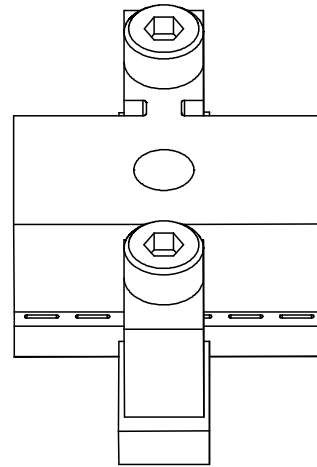
To prepare the removal tool, first determine the dimensions of the header (number of rows and columns).

To prepare the tool:

1. Select the kit part number to be used based on the header number or size.
2. Select the proper swage subassembly for the receptacle part number or size.



Wide Swage Subassembly



Narrow Swage Subassembly

HEADER PART NUMBER	HEADER SIZE	REMOVAL TOOL KIT	SWAGE SUBASSEMBLY
2169832-1	4 X 6	2161742-1	Narrow
2169833-1	4 X 8	2161742-1	Wide
2169830-1	6 X 6	2161744-1	Narrow
2169831-1	6 X 8	2161744-1	Wide
2149968-1	8 X 6	2161756-1	Narrow
2169829-1	8 X 8	2161756-1	Wide

Figure 2

3.2. Removal Procedure

CAUTION



Be certain the removal tool does not contact any pc board components except the header to be removed during use.

1. Remove or straighten any header components that may interfere with the swage block.
2. Loosen the swage screws to separate the swage block and the wedge block.
3. Place the swage block onto the header to be removed. Orient the swage block as shown in Figure 3.

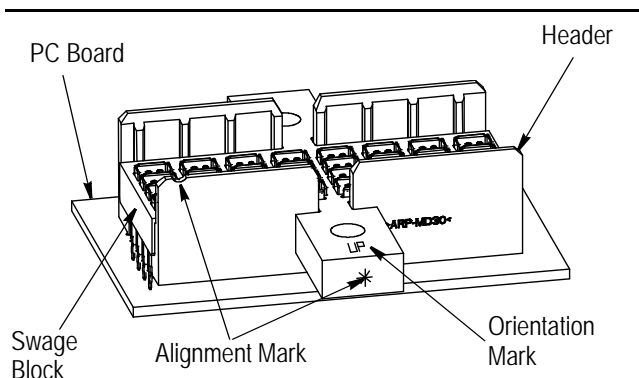


Figure 3

4. Place the wedge block onto the swage block and insert the swage screws into the wedge block. Do not tighten the swage screws. Orient the wedge block as shown in Figure 4.

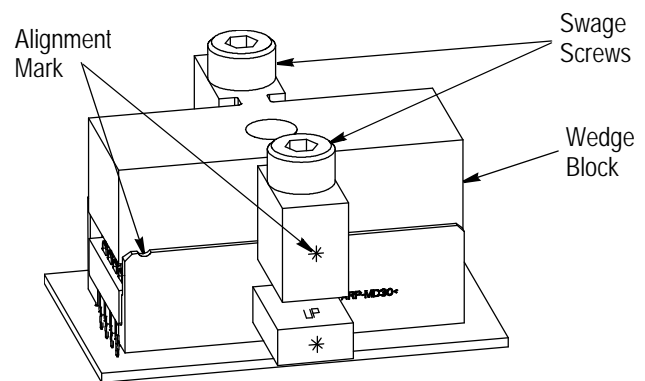


Figure 4

5. Loosen the clamp screws on the clamp subassembly and place the clamp subassembly over the swage subassembly.
6. Make sure the swage block is fully inserted into the header and tighten the clamp screws. The recommended torque for the clamp screws is 2 N-m [18 in.-lbs]. See Figure 5.

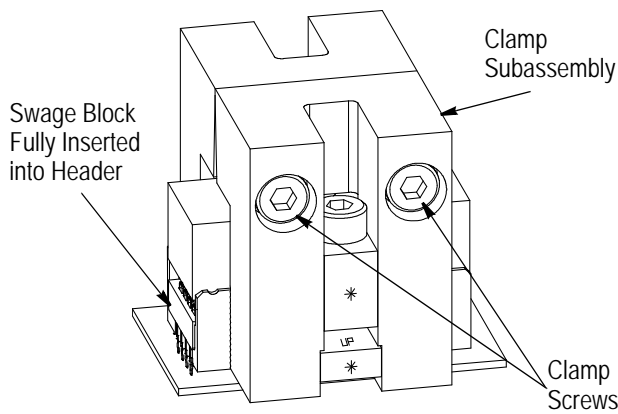


Figure 5

7. Tighten the swage screws. Tighten the screws at the same rate. Do not tighten one more than half of a turn before tightening the other by the same amount. The recommended torque for the swage screws is 2 N-m [18 in.-lbs].
8. Loosen the clamp screws and remove the clamp subassembly. Do not loosen the swage screws.
9. Place the pusher block over the swage subassembly and place the removal knob in the pusher block as shown in Figure 6.

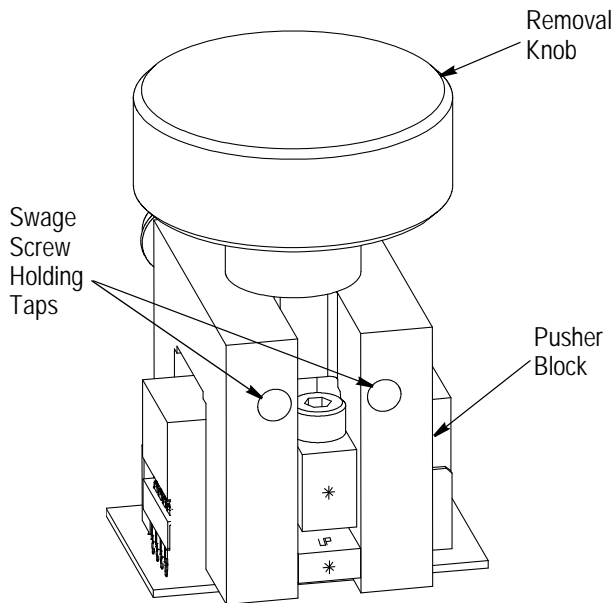


Figure 6

10. Tighten the removal knob to remove the header from the pc board.



The tool and header can spin after removal due to the twisting action of the removal knob. This spin could cause damage to the pc board. Hold the tool firmly during removal.



The pins on the bottom of the header can be very sharp. Exercise caution when handling a removed header.

11. Remove any remaining components from the pc board.
12. Loosen the removal knob and remove the removal knob and pusher block from the swage subassembly.
13. Loosen the swage screws to remove the wedge block from the swage block. The swage screws can be stored in the swage screw holding taps on the pusher block. See Figure 6.
14. Separate the header from the swage block. If the header is not easily removed from the swage block, see Paragraph 3.3, Separation Procedure.

3.3. Separation Procedure

The swaging action may cause the header to become stuck on the swage block. To remove the header from the swage block, perform the following procedure:

1. Remove the separation screws and washers from the pusher block.
2. Place the pusher block over the swage block and header.
3. Make sure the washers are on the separation screws and thread the screws into the swage block as shown in Figure 7.
4. Tighten the separation screws. Tighten the screws at the same rate. Do not tighten one more than half of a turn before tightening the other by the same amount.
5. When the header is removed from the swage block, loosen the separation screws and place them into the pusher block as shown in Figure 1.

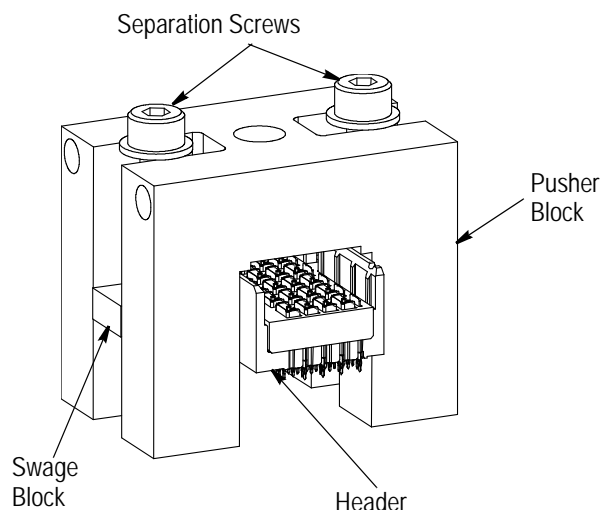


Figure 7

4. MAINTENANCE AND INSPECTION

TE Connectivity recommends that the tool be inspected immediately upon its arrival to ensure that it has not been damaged during shipment.

4.1. Daily Maintenance

It is recommended that each operator be made aware of, and responsible for, the following steps of daily maintenance:

- Remove dust, moisture, and other contaminants with a clean, soft brush, or lint-free cloth. **DO NOT** use objects that could damage the tool or any of its components.
- When the tool is not in use, store it 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 personnel responsible for the tool. The inspection frequency should be based on the amount of use, working conditions, operator training and skill, and established company standards.

5. REPLACEMENT AND REPAIR

Order tools through your local TE Connectivity 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

6. REVISION SUMMARY

- Corrected product name in title and Section 1, INTRODUCTION