

### AMP-HDI\* CONNECTOR JACKSCREW HARDWARE KITS, GUIDE PINS, AND GUIDE PIN KITS



REDUCED FOR PACKAGING

4-40 UNC 2A THREAD ROLL PIN*		<u>D</u>	TURNABLE FEMALE JACKSCREW	ROLL PIN*		4-40 UNC:2A THREAD KNOBT		
FIXED MALE JACKSCREW KIT			TURNABLE FEMALE JACKSCREW KIT	FIXED FEMALE JACKSCREW KIT		TURNABLE MALE JACKSCREW KIT		
• TWO OP	TIONS: ON	E LONGE	R THAN THE OTHER	THREE OPTIO WITH SCREWI THAN SECON	DRIVER SLO	DT, AND THE	WDRIVER	
KIT NO.	TYPE	STYLE	USED IN RECEPTACLE CONN PART NO.	MATING PIN PART N		PART NO.	TYPE	STYLE
532804-5	Fixed	Male	532428 532825 (Two-Row)	532429 533090 532446 532430	53 <b>306</b> 0 53 <b>3091</b>			
532804-1	Fixed	Male	532431 533268   (Three-Row) 532918 533514   (Three-Row) 532838 533425   (Three-Row) 532434 532903   (Four-Row) 532920 533443   (Four-Row) 532840 533449   (Four-Row) 532840 533449	532435 533254 532448 532436 532921 533446 533083 532933 532837 533404 532944 532841	533093 533296 533513 533426 533512 532818 533270 533445 533447 533056 533448	532804-2 532804-3 532804-4	Turna <b>ble</b>	Femal
532805-5	Fixed	Female	532428 532825 (Two-Row)	532429 533090 532448 532430	533091			
532805-1	Fixed	Female	532431 533268 (Three-Row) 532918 533514 (Three-Row) 532838 533425 (Three-Row) 532434 532903 (Four-Row) 532920 533443 (Four-Row) 532840 533449 (Four-Row)	532432 533092 532447 532432 532919 533432 532934 53293 532836 53351 533094 532836 532435 533255 532448 532431 532921 533444 533083 532932 532844 532842 532844 53284 53285 53285 53285 53285 53285 53285 53285 53285 53285 532	533093   533296   533513   533512   533512   532818   533270   533445   533447   533058	532805-2 532805-3 532805-4	Turnable	Male

# 1. INTRODUCTION

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> > This instruction sheet (IS) covers the selection and assembly of AMP-HDI Connector Jackscrew Hardware Kits, Guide Pins, and Guide Pin Kits. The jackscrew hardware kits are listed by part number in Figure 1; the guide pins and guide pin kits are listed by part number in Figure 6.

Read these instructions thoroughly before starting to assemble the parts.

NOTE: All dimensions shown on this instruction sheet are in inches.

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#### 2. JACKSCREW HARDWARE KITS

The jackscrew kits consist of a variety of hardware that is designed for positive and quick mating and unmating of printed circuit (pc) board-mounted connectors. Two types of jackscrews are availablefixed and turnable. Each type is supplied in two styles-male and female. Fixed male and fixed female jackscrew kits are used with receptacle connectors only. Turnable male and turnable female jackscrew kits are used only with pin connectors. See Figure 1. The fixed male jackscrew kits (532804-1 and 532804-5) each consist of a fixed male jackscrew and a roll pin. One kit is supplied with a short roll pin and is designed for the two-row connectors. The other kit is available with a longer roll pin and is designed for three- and four-row connectors. Once installed, the fixed hardware remains stationary in the receptacle connector keying hole and does not rotate.

Hardware that is compatible with the fixed male jackscrew kits includes three options of turnable female jackscrew kits (532804-2, 532804-3, and 532804-4). Each option consists of a turnable female jackscrew and one of three knobs. One is a short knob without a screwdriver slot; another includes a short knob with a screwdriver slot; and the last is a longer knob with a screwdriver slot. Once installed, turnable hardware freely rotates in the pin connector keying hole.

Fixed female jackscrew kits and turnable male jackscrew kits are also supplied. The fixed female jackscrew kits (532805-1 and 532805-5) are compatible with turnable male jackscrew kits 532805-2. 532805-3, and 532805-4. See Figure 1.

# 3. JACKSCREW HARDWARE PROCEDURE

The use of different styles of jackscrews can prevent connectors from mismating. Figures 2 and 3 illustrate how different styles of jackscrew hardware—male and female—can be installed on both the pin and receptacle connectors. Note that two of the same style can be used in the same connector.

NOTE I

Opposite-style jackscrews must be used in mating connectors (male jackscrews to female jackscrews).

The steps which follow are recommended to assemble jackscrew hardware kits:

1. Select two of the *fixed* jackscrew kits from Figure 1; the kits selected will be assembled on each end of the receptacle connector.

2. Assemble each kit by first inserting the jackscrew tip into the front—or mating face of the receptacle connector as shown in Figure 2, making certain that the chamfered hole in the shank is visible. If using three- or fourrow connectors, the chamfered hole will be visible from the sides. If using two-row connectors, the hole will be visible from the top.

3. Using needle-nose pliers, install the roll pin into the shank of the jackscrew tip. See Figure 2.

**NOTE** Fixed jackscrew kits should be assembled to the receptacle connector PRIOR to mounting the connector onto the printed circuit board.

4. Select two *turnable* jackscrew kits from Figure 1 for each pin connector. Once





Fig. 3

instailed, these jackscrew kits will mate with those assembled on the receptacle connector.

5. Assemble each turnable kit by first inserting the jackscrew tip into the top of the pinconnector as shown in Figure 3.

 Next, position the shank of the female ackscrew tip over the knob as shown in Figure 4, it is recommended that a plate with a 265-inl-drameter hole be used to nest the knob.



1.18 18.14

during the jackscrew assembly. Seat the jackscrew into the knob by using an arbor tool (Figure 4).

7. To assemble a turnable male jackscrew to a knob, first screw a turnable female jackscrew onto the male jackscrew. Use the same plate mentioned in Step 6 to nest the knob. Next, the up the components as shown in Figure 5 and seat the jackscrew into the knob by using an arbor tool.



### JACKSCREW; GUIDEPIN KITS FOR AMP-HDI CONNECTORS



3. When assured that the jackscrew hardware has been properly installed, mate the two connector assemblies, making sure that the matching hardware is compatible with the hardware installed on the mating counterpart.

### 4. GUIDE PINS AND GUIDE PIN KITS

Guide pins are designed to facilitate the mating of large-size AMP-HDI pin and receptacle connectors. By using the guide pins, connectors with misalignment of as much as .080 in. In diameter can be mated successfully. Guide pins can be purchased separately or in kits. A kit consists of one guide pin, one nut, and one washer.

Part numbers of pins and kits are listed in Figure 6.

# 5. GUIDE PIN ASSEMBLY PROCEDURE

Guide pins are assembled to AMP-HDI pin connectors after the connectors have been secured to the pc board. See Figure 7. Selection of the correct pin or guide pin kit will depend on the pc board thickness. Refer to Figure 6.

