

TR-5-400-QC

Mechanical Fixture System

Compact fixture press system for assemblies up to 11.75" x 8.5" (298 mm x 216 mm)



Suitable for prototype to volume production

- Up to 400 Test Points
- Easy to use single-action lever mechanism
- Requires no external power, vacuum or compressed air sources to operate
- Low-Cost Replaceable Fixture Kits
- Top and Bottom Probing of SMT and through-hole
- Compatible with TestJet™ Technology
- Easy-to-Change Fixtures



KIT-600-QC Fixture Kit

The CheckSum Model TR-5-400-QC Mechanical Bed-of-Nails Fixture System is designed for test fixturing of assemblies with probe areas of up to 11.75" by 8.50" with up to 400 test points. The Fixture System consists of a reusable Fixture Press that is used in conjunction with low-cost, easily interchanged Fixture Kits.

To operate the fixture, the operator places the unit under-test (UUT) onto the guide pins in the fixture. The operator then turns the lever-arm to actuate the probes. Turning the lever-arm closes the lid and compresses the probes through a linear mechanical-advantage mechanism. When the operator rotates the lever-arm, the top plate moves forward and down to engage the UUT. The lever-arm can be moved to the right or left side of the system depending on operator preference.

The TR-5-400-QC Fixture System is shared by all of your UUTs. Since the TR-5-400-QC has linear travel, it can accommodate probing on both top and bottom with either standard probes or TestJet Technology* probes.

For each individual UUT, a low-cost KIT600-QC is customized by drilling and wiring. Installing Fixture Kits in the Fixture Press is done very quickly. This process is simplified because there are no cables to change and no tools are required, the top and bottom simply snap into place. A bottom pan protects the wiring and pins in the removable Fixture Kits. Using the storage handles, the top pressure plate can be attached to the probe plate when the fixture is not in use.

The TR-5-400-FP front-panel keypad provides an operator input keypad and four LEDs that can indicate Power, Fail, Busy, and Pass. This connects to the CheckSum system module using the rear-panel DB25F connector.

Up to three 200-point Receiver blocks with wiring to backpanel connectors. Signals are transferred from the fixture kit to the fixture press back-panel connectors by low-cost 200-point wiring blocks (FIX-200P-WB) in each fixture kit and 200-point receiver blocks (FIX-200P-RBPM) mounted in the fixture press. Four standard 50-pin back-panel connectors are included as part of each FIX-200P-RBPM receiver block

TR-5-400-QC Specifications

Weight (Press)	Approx. 35 lbs. (shipping wt. 45 lbs.)
Weight (Kit)	Approx. 10 lbs. (shipping wt. 15 lbs.)
Overall Size	20"W x 24"D x 13"H
Usable Size	11.75"W x 8.50"D (probe area)
Inside Depth	2.44" (inside bottom pan)
UUT Height	1.525" (probe plate to top pressure plate)
Probe Plate	0.375" G-10 (FR-4)
Top Plate	0.50" Polycarbonate
Linear Travel	0.50" (Vertical)
Probe Count	Up to 400 std. force probes
Interface Signals	Up to 600
Back-Panel Connectors	50-pin header - 25x2, 0.1" on-center pins Keypad connector - DB25F Ground input - banana jack

Ordering Information

Model	Description
TR-5-400-QC	Mechanical Fixture Press
FIX-200P-RBPM	200 Point Receiver Block/Cable*
KIT600-QC	Fixture Kit
FIX-200P-WB	200 Point Wiring Block for KIT600-QC
MA-ROD	Pressure Rod (1.150")
MA-ROD-T	Tapered Pressure Rod (1.150")

*At least one 200-point receiver block (FIX-200P-RBPM) must be ordered with the TR-5-400-QC.



TR-5-400-QC Front Panel



TR-5-400-QC Rear Panel



TR-5-400-QC Ready for Testing

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† MultiWriter Technology is protected under U.S. Patent No. 7,802,021.

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