

# Model TR-5-600-QC Mechanical Fixture System

## Product Features

- Up to 600 Test Points
- Low-Cost Replaceable Fixture Kits
- No Vacuum or Air Source Needed
- Top and Bottom Probing of SMT and through-hole
- Compatible with Agilent TestJet technology
- Easy-to-Change Fixtures



*Model TR-5-600-QC with UUT in Place*

The CheckSum Model TR-5-600-QC Mechanical Fixture System is designed for test fixturing of assemblies with up to 600 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 and closes the lid. The operator then turns a lever-arm to actuate the probes. Turning the lever-arm compresses the probes through a linear mechanical-advantage mechanism on the top of the Fixture Press. A protective inter-lock prevents the lid latch from being released until the lever-arm is returned to the non-actuated position.

The CheckSum Model TR-5-600-QC Fixture can accommodate UUTs with probe areas of up to 11.75" x 8.50" and with up to 600 test points. The TR-5-600-QC Fixture Press is shared by all of your UUTs. For each individual UUT, a low-cost KIT600-QC is customized by drilling and wiring. Since the TR-5-600-QC has 0.5" of linear travel, it can accommodate probing on both top and bottom

with either standard probes or Agilent TestJet technology probes.

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.



*Model TR-5-600-QC Quick Interchange of Fixtures*

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.

## Configuration

The basic Model TR-5-600-QC Fixture Press is configured for testing up to 200 test points. It can be expanded up to 600 test points by adding two FIX-200P-RB Receiver Block/Cable options (200-points each). The 50-pin ribbon cables from CheckSum test electronics are connected directly to the back of the TR-5-600-QC.

**FIXTURE  
SYSTEMS**

# Model TR-5-600-QC Mechanical Fixture System

The Model KIT600-QC Fixture Kit includes:

- Probe-plate with bottom pan
- 2 shipping/storage handles
- Clear polycarbonate top plate
- 10 MA-ROD pressure rods

## Customizing Your Fixture

Customizing the fixture for your UUT can be done by CheckSum, a local fixture contractor or in-house if the necessary drilling and wiring equipment is available.

If you are doing your own custom fixturing, you will need to add:

- UUT guide pins
- Spring probes and receptacles
- Internal wiring
- FIX-200P-WB Wiring Block (200-Points)
- Additional pressure rods as needed (one is used for each 10-25 test points)

Mechanical bed-of-nails fixtures require less expertise to customize than vacuum fixtures since vacuum gasketing is not required. In most cases, users with the facilities to do precise drilling can customize their own mechanical fixtures.

Customizing entails installation of guide pins, drilling for spring probe receptacles, wire wrapping inside the fixture from the bottom of the spring probe receptacles to the back panel targets, and installation of pressure rods in the top plate.

Contact the CheckSum fixture group for more information and competitive custom fixturing and test programing quotes.

## TR-5-600-QC Specifications

Weight (Press)	~30 lbs. (shipping wt. ~35 lbs.)
Weight (Kit)	~10 lbs. (shipping wt. ~15 lbs.)
Overall Size	20"W x 14"D x 11"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"
Probe Count	Up to 600



Model KIT600-QC Fixture Kit



Model TR-5-600-QC Ready for Testing

## Ordering Information

Model	Description
TR-5-600-QC	Mechanical Fixture Press (with 200 Point Interface Block/Wiring)
FIX-200P-RB	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")