



Photo Courtesy of Department of Defense



BH112PA-77 Series JETCAL^{®1} Performance Analyzer

The BH112PA-77 provides unique troubleshooting capability of uninstalled engines (in the test cell) and on-wing Trimming/Functional Check for General Electric J85 series turbojet afterburning engines.

The BH112PA-77 is a Turbine Engine Data Acquisition System that:

- Replaces Howell's BH112JB-77 JETCAL[®] Analyzer and GE P/N 21C3954 Fuel System Test Set
- Provides fault monitoring
- Offers extensive diagnostic capabilities
- Presents detailed graphs for in-depth analysis of fuel schedules
- Automates Technical Manual procedures



US Air Force T-38:

BH112PA-77-3
NSN 4920-01-497-2965
H338P-43 Test Cell Run Kit
NSN 4920-01-557-8109

US Navy F-5:

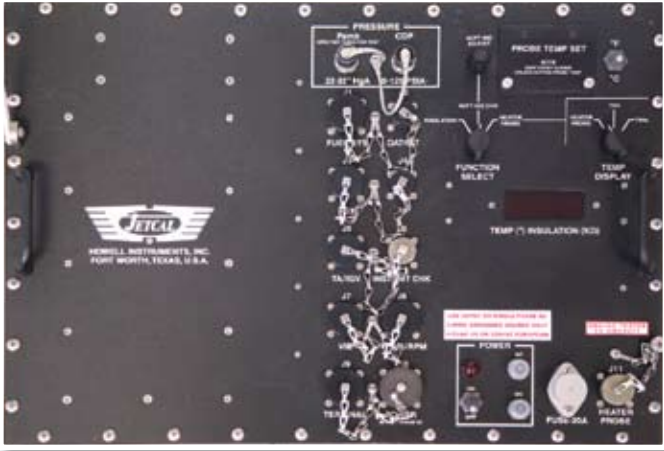
BH112PA-77
NSN 4920-01-558-0927
H338P-45 Test Cell Run Kit
NSN 4920-01-550-6958



¹ JETCAL[®] is a registered trademark of Howell Instruments, Inc.

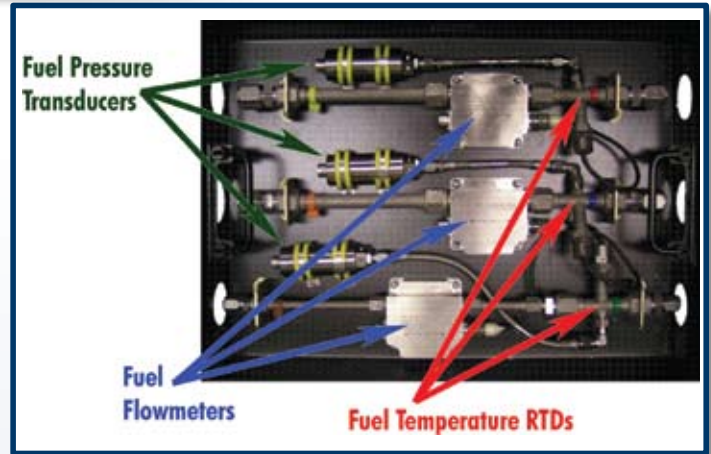
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PORTABLE ENGINE TEST SETS & TRIMMERS



Diagnose Fuel System Components

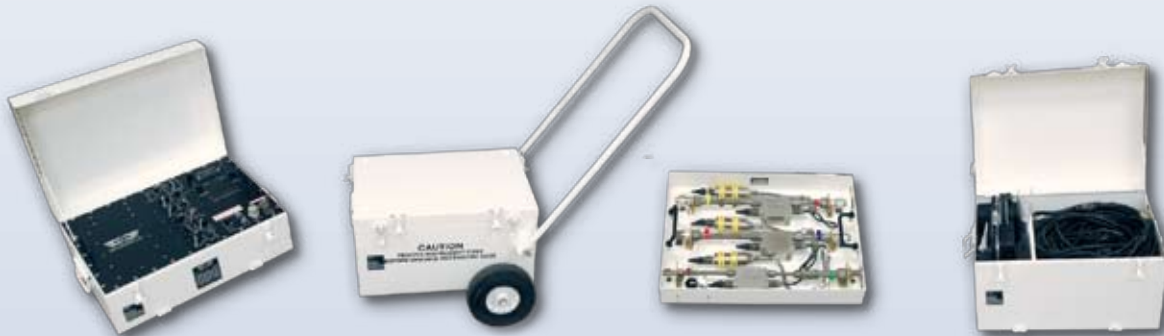
- Main Fuel Control (MFC) Accel/Decel Schedule
- Afterburner Fuel Control (ABC) Pilot and Main Spraybar Fuel Schedules
- Inlet Guide Vane (IGV) Schedule



Automated Data Recording

Parameters Recorded at Ten Records per Second:

- Engine Temperature, Speed, and Nozzle Position
- Fuel Flow, Fuel Pressure, and Fuel Temperature for the Main Fuel Control
- Afterburner Pilot Circuit, and Afterburner Main Spraybars



Test Capability	On-Wing	Test Cell
Initialization	X	X
Engine Starts	X	X
Idle Speed Check	X	X
Variable Exhaust Nozzle Cruise Area Check	X	
Anti-Ice Valve Check	X	X
Cabin Conditioning Shutoff Valve Check	X	
Overspeed Governor Check	X	X
T5 Tag Temperature Trimming	X	
Variable Geometry Check		X

Test Capability	On-Wing	Test Cell
Crossbleed Start Valve Check	X	
Military Fuel Flow Trimming		X
A/C Generator Check	X	
Min/Max Afterburner Check	X	X
Acceleration Check	X	X
Hot Throttle Rigging Check	X	
Normal Shutdown Check	X	X
Main Fuel Pump (MFP) Outflow Check		X
Overspeed Governor Bypass Test		X
Record Data	X	X



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