HVAC GUIDE™
GUIDED PROBE TESTER

Professional-grade instruments for field service

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USB Cable Included
Upload test data to a PC.

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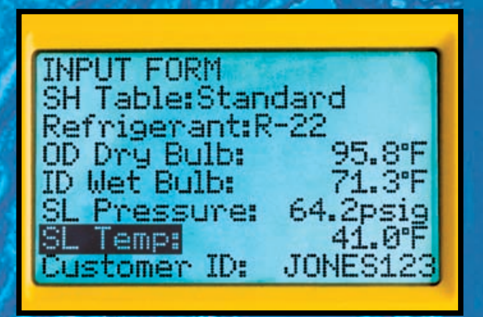
Model: HG2

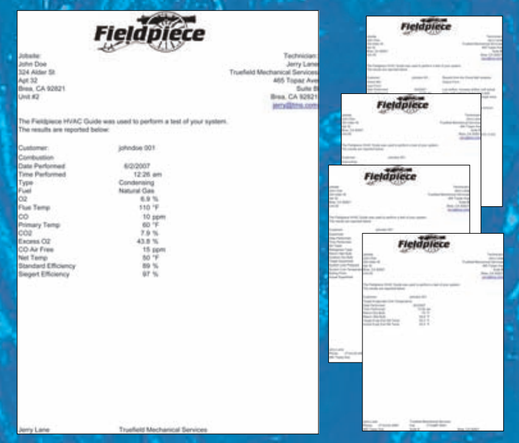
8 72641 00204 6



```
INPUT FORM
SH Table:Standard
Refrigerant:R-22
OD Dry Bulb:      95.8°F
ID Wet Bulb:      71.3°F
SL Pressure:  64.2psig
SL Temp:          41.0°F
Customer ID:  JONES123
```

Dot Matrix Display with Backlight

USB Cable
Connect to USB port on your PC and upload test data.



Fieldpiece

Jobsite:
John Doe
324 Alder St
Apt 32
Brea, CA 92821
Unit #2

Technician:
Jerry Lane
Truefield Mechanical Services
465 Topaz Ave
Suite B
Brea, CA 92821
jerry@tms.com

The Fieldpiece HVAC Guide was used to perform a test of your system.
The results are reported below:

Customer:	johndoe 001
Combustion	
Date Performed	6/2/2007
Time Performed	12:26 am
Type	Condensing
Fuel	Natural Gas
O2	6.9 %
Flue Temp	110 °F
CO	10 ppm
Primary Temp	60 °F
CO2	7.9 %
Excess O2	43.8 %
CO Air Free	15 ppm
Net Temp	50 °F
Standard Efficiency	89 %
Siegert Efficiency	97 %

Jerry Lane Truefield Mechanical Services

Professional Reports
Generate work orders with time-stamped diagnostics and Customer IDs that can be edited in spreadsheet software.

An Expert in Your Hip Pocket

Complete the INPUT FORM by performing the required tests, press OUTPUT to see the results and recommendations.

Model HG1 users can purchase a software upgrade to convert it to a model HG2 with the CheckMe! function.

Benefits

Improved HVAC technician performance
- Reduce call backs.
- Faster testing.
- Easier analysis.
- Higher quality job.
- Perform wider range of tests with less backup technical support.

Features
- Easy to use INPUT/OUTPUT FORMS to collect and analyze data.
- Automatically enter data using Fieldpiece accessory heads.
- Manual input using non-Fieldpiece test equipment.
- Sophisticated air conditioning analysis program based on data from 100,000 field tests (HG2 only).
- Download test data to a PC.
- Reload tests when returning to the same customer.
- Test data can be delivered to the customer as a work order.


HVAC Guide™ Tester


ATH4 Dual-Temp Head


ANC5 Soft Case


ATWB1 Wet Bulb and ATA1 Dry Bulb K-type Thermocouples

USB Cable and PC Software for Upload/Download

Specifications

Range	500mVDC, 5VDC(auto)
Accuracy	0.5% ± 2
Input Protection	Max 30VDC/24VAC
Battery	1.5V AA x 6 (installed)
Battery Life	500 hrs typical alkaline
Test Memory	Up to 200 saved tests

Which Accessory Heads?

		HEAD					T/C			
TEST	MEASUREMENT	ATH4	ASX14	AOX2	ACM3*	ADMN2	ATWB1	ATA1	ATC1	ATBF1
Target Evaporator Exit Temp	Return Dry Bulb	🟠						🟠		
	Return Wet Bulb	🟠					🟠			
	Supply Dry Bulb	🟠						🟠		
Superheat	OD Dry Bulb	🟠						🟠		
	ID Wet Bulb	🟠					🟠			
	SL Pressure		●							
	SL Temp		●						🔵	
Subcooling	LL Pressure		●							
	LL Temp		●						🔵	
Combustion	O2			●						
	Flue Temp			●						🔵
	CO				●					
	Primary Temp		●							🔵
Check Me! (model HG2)	Return Dry Bulb	🟠						🟠		
	Return Wet Bulb	🟠					🟠			
	Supply Dry Bulb	🟠						🟠		
	Sup Plen Press					●				
	Ret Plen Press					●				
	SL Pressure		●							
	SL Temp		●						🔵	
	LL Pressure		●							
	LL Temp		●						🔵	
	Condenser Air Enter Temp	🟠						🟠		

* With optional aspirator pump, model AOXP2 (included with the AOX2 head).
🔵 Thermocouple is included with recommended head.
🟠 Included with the HVAC Guide™ tester.
● Recommended accessory head.

This chart shows the accessory head and thermocouple recommended for each measurement.

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instruments for field service
www.fieldpiece.com

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Optional Pipe Clamp Thermocouples and Accessory Heads
Minimize your time on the job by using the HVAC Guide™ tester with ATC series pipe clamps and accessory heads (model ATH4 is included).


ADMN2 Dual-port Manometer


AOX2 Combustion Check


ASX14 Superheat and Subcooling


ACM3 Carbon Monoxide

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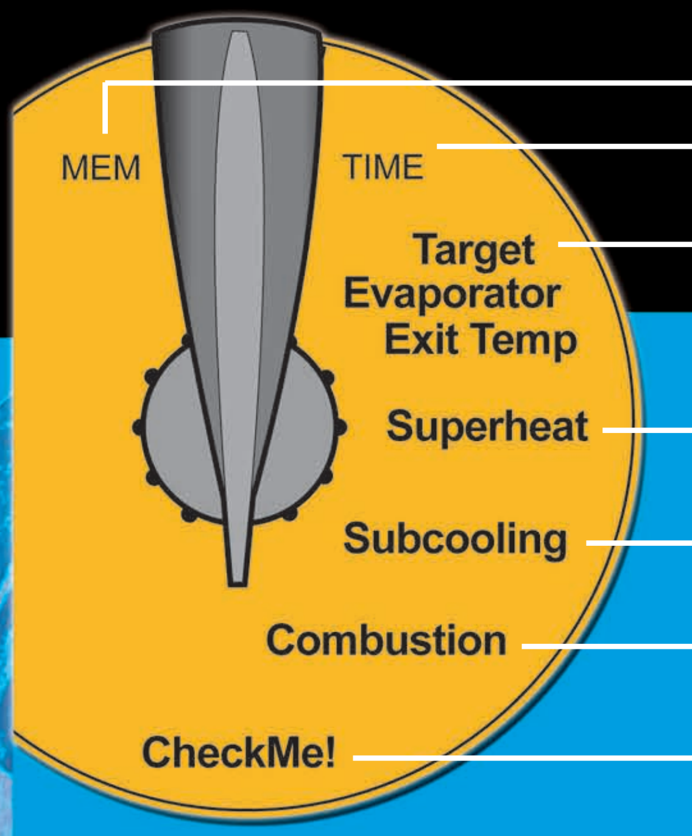
HVAC GUIDE™
GUIDED PROBE TESTER

More effective HVAC installation and maintenance.

- ✓ **Reduce call-backs.**
- ✓ **Easier.**
- ✓ **Faster.**
- ✓ **Better.**
- ✓ **Less reliance on off-site technical assistance.**

ALSO INCLUDES
ATH4 Dual-temp Head
ATWB1 Thermocouple
ATA1 Thermocouple
ANC5 Case
USB Cable
PC Software



Upload data to PC via USB.
Delete test data or customer files.

Set real-time clock.

Determine actual and target evaporator exit temperature by taking three temperature measurements.

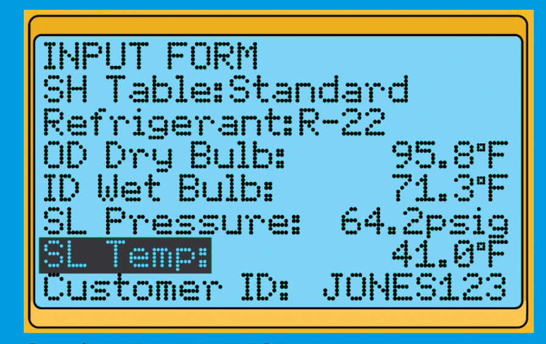
Determine target and actual superheat from indoor wet bulb, outdoor dry bulb, suction line temperature, and suction line pressure.

Determine actual subcooling from liquid line temperature and pressure and compare to target subcooling.

Combustion analysis from flue temperature, $\%O_2$, CO PPM, and primary temperature.

Most advanced real-world method for troubleshooting A/C systems (model HG2).

Fill in the INPUT FORM



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INPUT FORM
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OD Dry Bulb:      95.8°F
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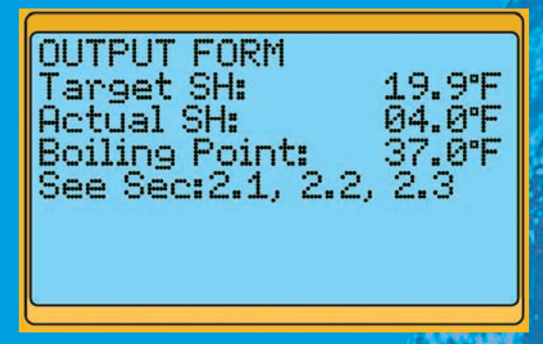
SL Pressure:  64.2psig
SL Temp:          41.0°F
Customer ID:  JONES123
```

Superheat Test INPUT FORM

The INPUT FORM guides you through each test. Each line of the INPUT FORM is a piece of data needed to fully perform the selected test. Track your jobs with Customer IDs.

Three ways to enter data.
1. **Automatically from accessory head:**
   a. **Attach appropriate head.**
   b. **Select appropriate line to edit.**
   c. **Press ENTER to start measuring.**
   d. **Press ENTER again to lock value.**
2. **Drop down menu.**
3. **Manually with arrow keys when using equipment you already own.**

Read the OUTPUT FORM



```
OUTPUT FORM
Target SH:        19.9°F
Actual SH:        04.0°F
Boiling Point:    37.0°F
See Sec:2.1, 2.2, 2.3
```

Superheat Test OUTPUT FORM

To display the OUTPUT FORM, fill in the INPUT FORM and press the OUTPUT button. If the data entered on the INPUT FORM is out of range or physically impossible an error message is displayed. The OUTPUT FORM will display the results of the test.

"See Sec:" shows the section in the manual with more information about the selected test.

The CheckMe! (model HG2) OUTPUT FORM shows what the problem is and what to do about it, ranked in order of likelihood. If you haven't taken all the necessary measurements, the first line will tell you what you need to do for a complete diagnosis.