

# Data Reporter

309867F



## Important Safety Instructions

Read all warnings and instructions in this manual.  
Save these instructions.

## Part No. 246085

Records actual temperature, temperature setpoint, actual pressure, pressure setpoint, cycles, and diagnostic code data from Reactor™ proportioner.  
Downloads data to PC with Microsoft® Windows 98 or later.

## Part No. 248848

Data Reporting Kit without interface module.



PROVEN QUALITY. LEADING TECHNOLOGY.



# Install Hardware

For 246085 only. For Kit 248848 continue on step 12.

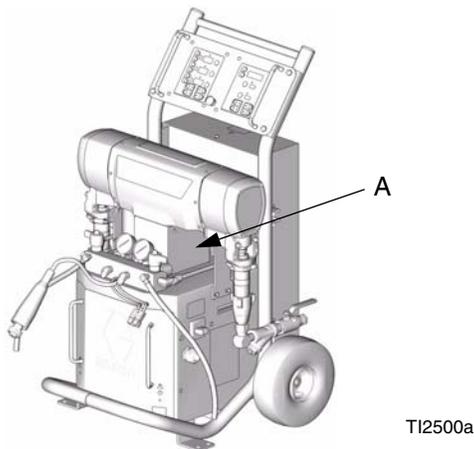
1. Turn Reactor main power OFF . Disconnect power supply.

**⚠ WARNING**

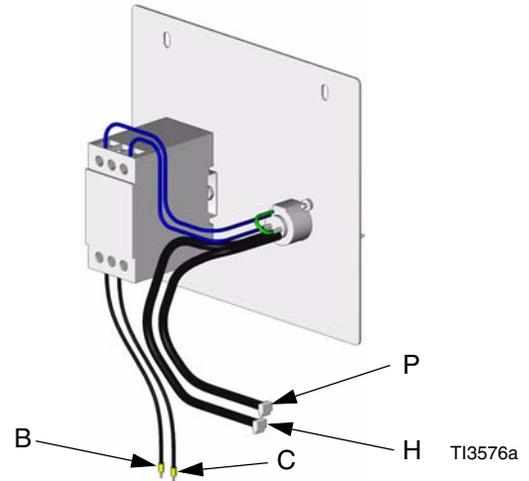


Read warnings in Reactor repair manual. Wait 5 min for stored voltage to discharge (E-30 and E-XP2 models only).

2. Remove side plate (A). The plate is on the right side of the Electric Reactor (shown) and on the left side of the Hydraulic Reactor.

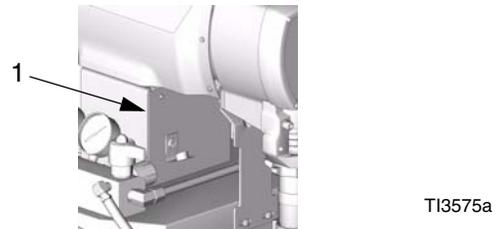


3. Thread wires (B, C) and cables (H, P) of interface module (1) through boot in top of cabinet.

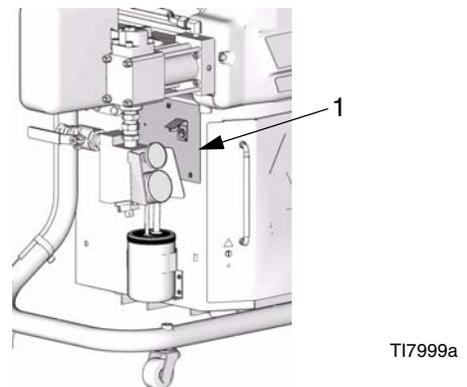


4. Attach interface module (1).

### Electric Reactor



### Hydraulic Reactor

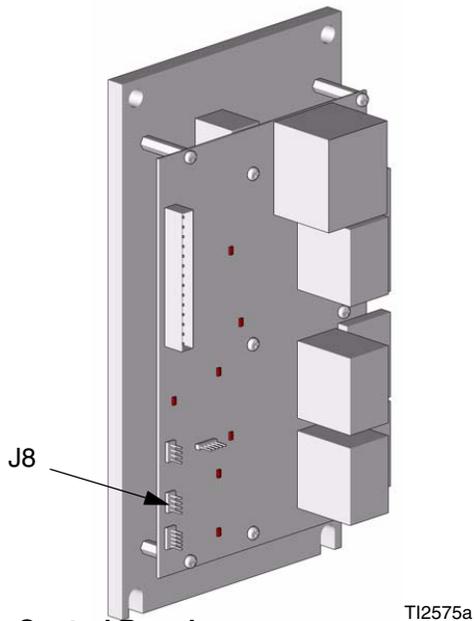


5. Open Reactor cabinet.

**CAUTION**

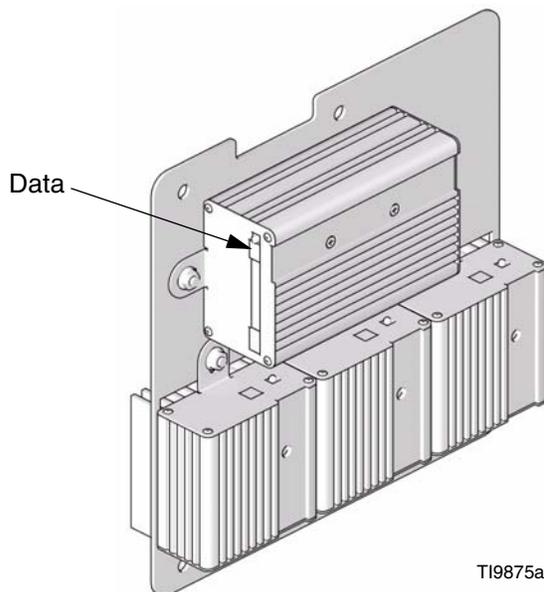
Before handling boards, put on a static conductive wrist strap to protect against static discharge which can damage boards. Follow instructions provided with wrist strap.

6. Put on static conductive wrist strap.
7. Connect HEAT cable to J8 on temperature control board or, if required, to temperature control module data connector.



**Temperature Control Board**

TI2575a

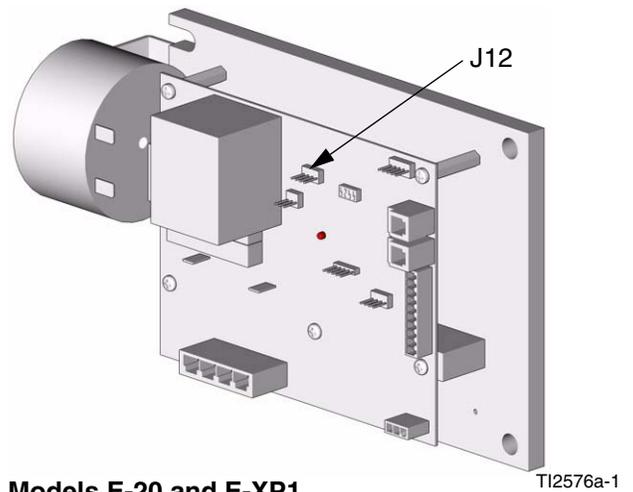


**Temperature Control Module**

TI9875a

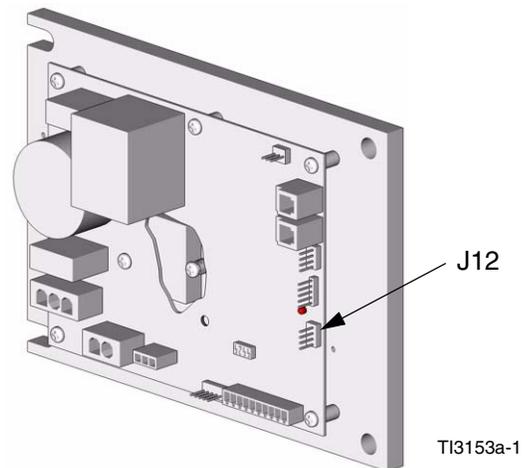
8. Connect PUMP cable to J12 on motor control board.

**Models E-30 and E-XP2**

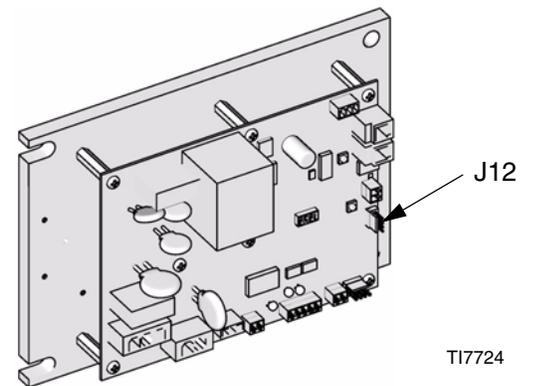


**Models E-20 and E-XP1**

TI2576a-1

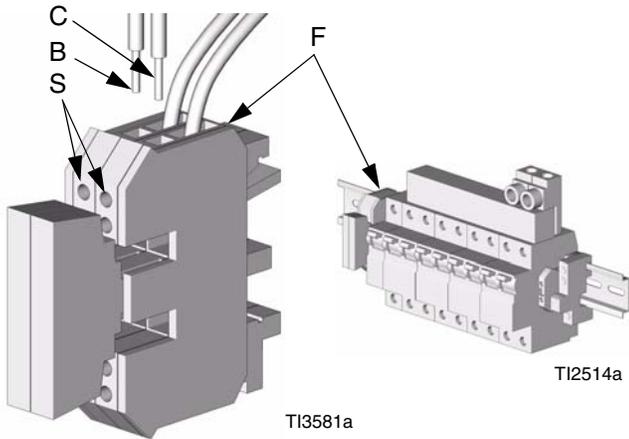


**Models H-25 and H-XP2**



TI7724

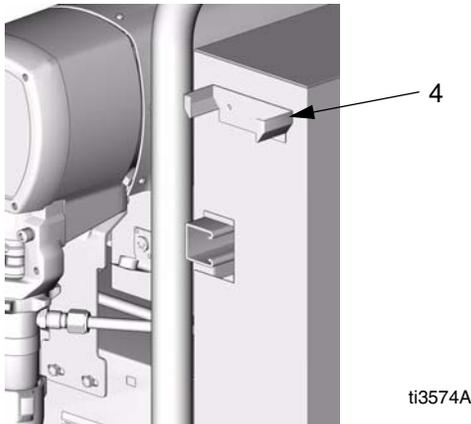
9. Insert wires (B, C) in top front terminals of fuse block (F) at circuit breaker module. Tighten screws (S).



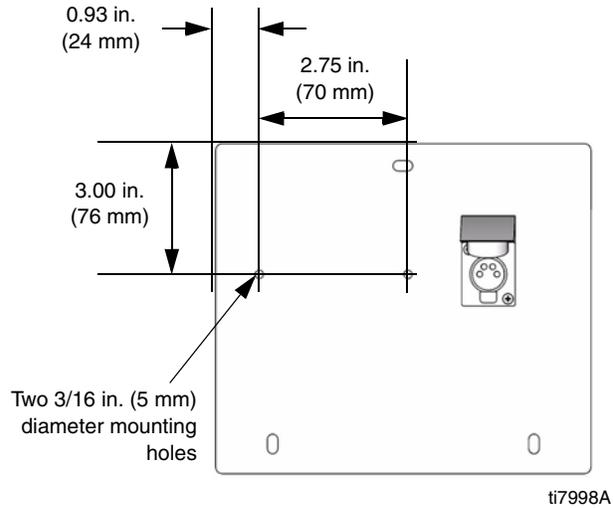
10. Close Reactor cabinet.

11. Drill holes as follows:

- a. *For Electric Reactor*, drill holes using bracket (4) as template. Apply sealant (4c) to screw threads. Mount with screws (4a) and nuts (4b).

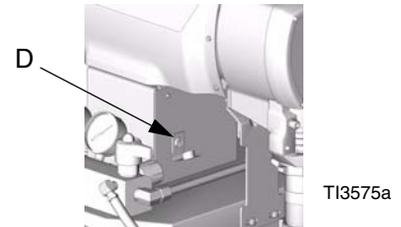


- b. *For Hydraulic Reactor*, drill two holes exactly as shown below. Be careful not to damage components inside cabinet when drilling holes. Apply sealant (4c) to screw threads. Mount bracket (4) with screws (4a) and nuts (4b).

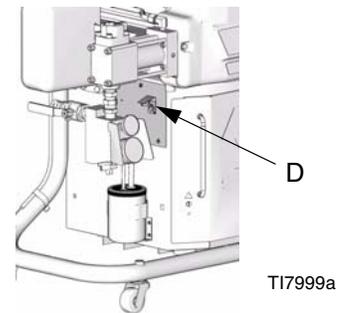


12. Connect Reporter cable to interface plug (D).

**Electric Reactor**



**Hydraulic Reactor**



13. Reconnect power supply. Turn Reactor main power

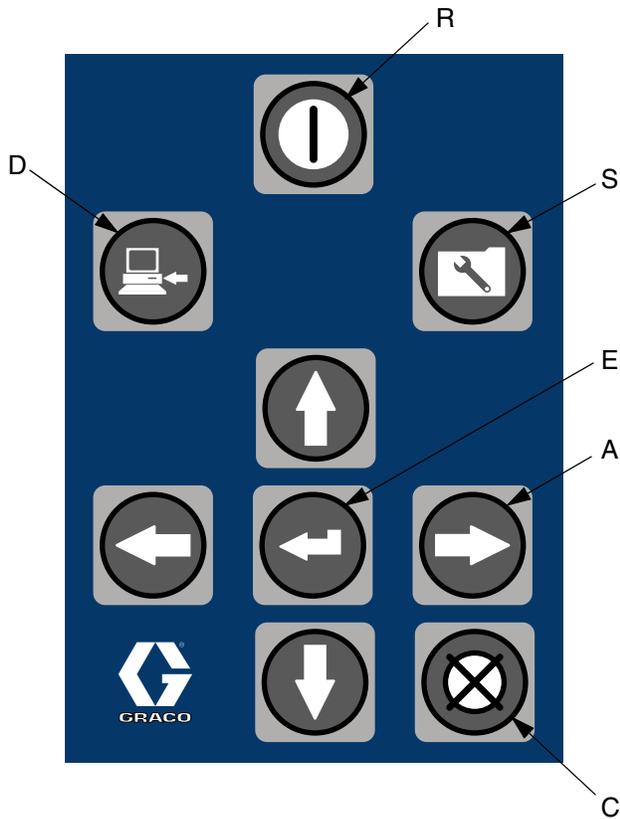


Main screen will appear on Reporter, see page 5.



Reporter is now ready to record data from Reactor, see page 5. To download data, first **Install Software**, page 7.

# Keypad



**Key:**

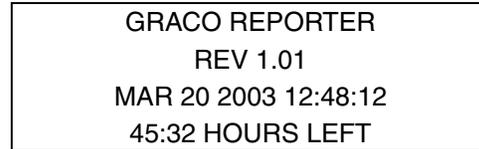
- R Record key
- S Setup key
- E Enter key
- A Arrow keys (up, down, left, right)
- C Cancel key
- D Download key

# Screens

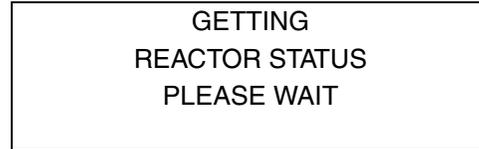
Reporter displays data received from Reactor. It is not a remote control for Reactor.

## Main Screen

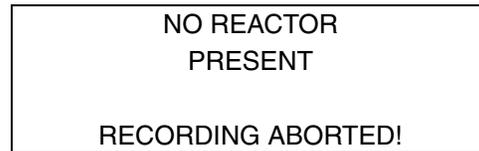
Main screen appears when powered up.



Press . Following message will appear momentarily, followed by Record screen.



If following message appears with audible alarm, Reporter is not properly connected to Reactor. Check connection.



## Record Screen

Displays A, B, and hose temperatures, A and B pressures, cycles, and remaining recording time. Display reflects selections made on Setup screens, page 6.

	A	B	HOSE
°F	160	160	160
PSI	1200	1200	
CYCLES		0	45:32

If hose zone is in current control mode, display will show hose current, for example 14A.

Press or to stop recording.

## Setup Screens

Display must be at main screen, page 5. Press  to

enter Setup. Press  or  to move through

Setup menu. Press  to select.

```

SETUP
┌ RECORDING PERIOD
├ CHANGE UNITS
└ DATE/TIME CHANGE
  
```

```

SETUP
┌ DELETE RECORDS
  
```

Press  or  to exit Setup.

### Recording Period

Reporter updates records at set intervals. At default of 10 sec, Reporter has 52:11 hours of recording time. Changing to 30 sec increases recording time to 156:33 hours; 1 min increases to 313:06 hours.

```

SETUP
┌ RECORDING PERIOD
├ CHANGE UNITS
└ DATE/TIME CHANGE
  
```

Press .

```

SELECT RECORD PERIOD
┌ 10 SECONDS
├ 30 SECONDS
└ 1 MINUTE
  
```

Press  or  to move through menu. Press

 to select.

## Change Units

```

SETUP
┌ RECORDING PERIOD
├ CHANGE UNITS
└ DATE/TIME CHANGE
  
```

Press .

```

CHANGE UNITS
┌ TEMP          * °F   °C
├ PRESSURE     * PSI  BAR
  
```

Press  or  to move through menu. Press

 or  to move \* between units. Press  to select.

### Date/Time Change

```

SETUP
┌ RECORDING PERIOD
├ CHANGE UNITS
└ DATE/TIME CHANGE
  
```

Press .

```

DATE:  MAR 20 2003
TIME:  12:48:12
  
```

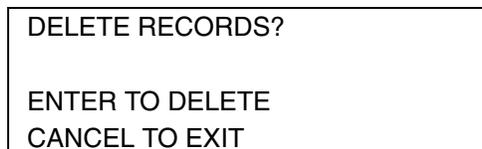
Press  or  to change values. Press  or

 to move cursor. Press  to select.

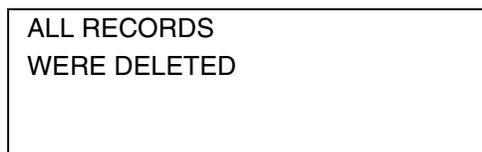
## Delete Records



Press  .



Press  to delete. Press  to exit.



## Install Software

 The Reactor Downloading program operates on PCs with Microsoft® Windows 98 or later.

1. Close all programs and applications.
2. Insert software CD (6) in CD ROM drive. If install starts automatically, go to step 6. If install does not start automatically, go to step 3.
3. From file menu in program manager or file manager, choose Run.
4. Type: **d:\setup.exe** (use letter corresponding to your CD ROM drive).
5. Press ENTER.
6. Follow instructions on screen. Software will load Reactor Downloading program to Start menu and will place icon on desktop.

 On some PCs a Restart may be necessary after program is loaded.

# Downloading

## Hardware Connections

1. See drawing on page 14. Connect cable (7) to converter (2) and to appropriate serial port on PC.

 If PC uses a USB port, connect a USB to RS-232 serial adapter between the PC and cable (7).

2. Remove Reporter cable from Reactor interface module (1) and insert in converter (2).
3. Connect power supply (8) to converter (2). Plug power supply into outlet.

## Run Program

### Main Window

Locate Menu Bar (M) and Tool Bar (T), for reference. See FIG. 1.

Start Reactor Downloading program on PC. Check that status indicator (L) at upper right of main window is green; also see Status Bar (S).

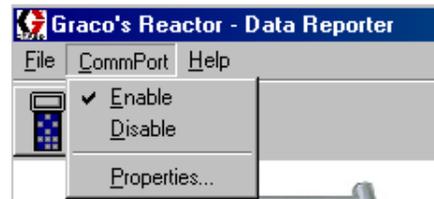
 Clicking status indicator (L) turns CommPort Enable on and off, provided Reporter is properly connected to PC.

 If indicator is red and following message appears, connection is broken.

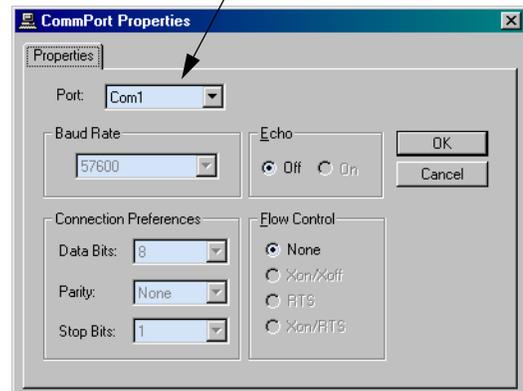


Check that:

- CommPort is enabled



- correct CommPort is selected (CommPort Properties window)



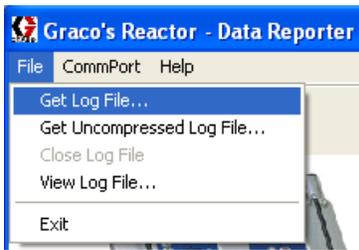
- cable (7) is connected properly, see left
- Reporter is displaying main screen, page 5.



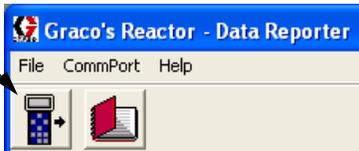
FIG. 1. Main Window

## Get Log File

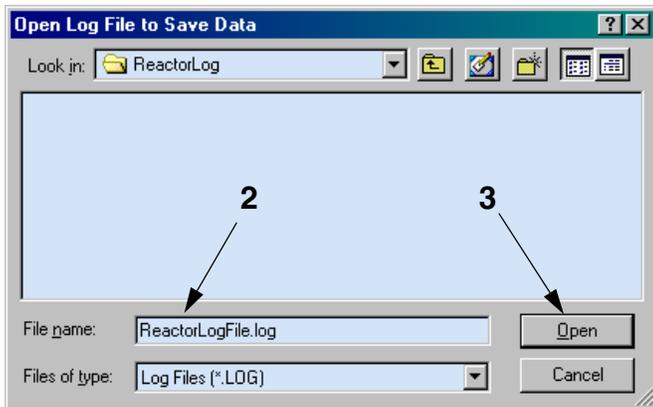
1. Access by File>Get Log File on menu bar, or left button on tool bar.



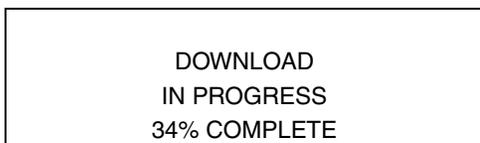
OR



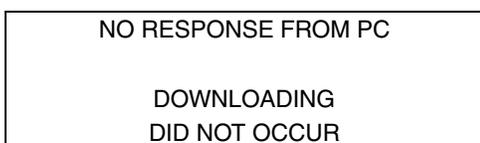
2. Application will prompt you to open a log file. Enter a file name. Do not use spaces in the file name.
3. Click Open.



4. Data will download to log file. Download screen will display. Downloading an entire set of records will take about 3 minutes.



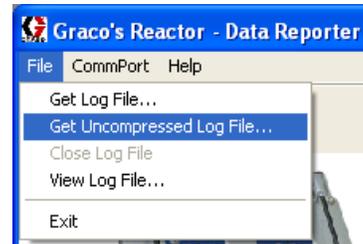
If following message appears with audible alarm, Reporter is not properly connected to PC. Check connection.



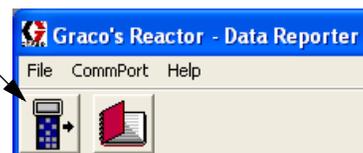
## Get Uncompressed Log File

For non-English Microsoft Windows XP operating systems, "Get Uncompressed Log File" should be used if the "Get Log File" command fails. The uncompressed option takes about five times longer than the compressed mode.

1. Access by File>Get Uncompressed Log File on menu bar, or left button on tool bar.



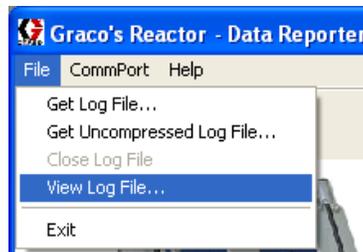
OR



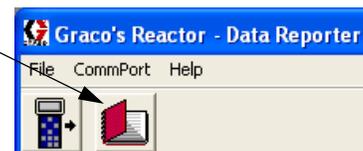
2. Continue to follow Get Log File procedure at left. Downloading an entire set of records will take about 15 minutes.

## View Log File

1. Access by File>View Log File on menu bar, or right button on tool bar.



OR



2. File can be opened as a text file in Notepad or Wordpad, or in a spreadsheet program such as Microsoft Excel, page 11.

## Exit

Exits program.

# Open File in Excel

1. Start Excel.
2. Change file type to All Files (\*.\*). See FIG. 2.

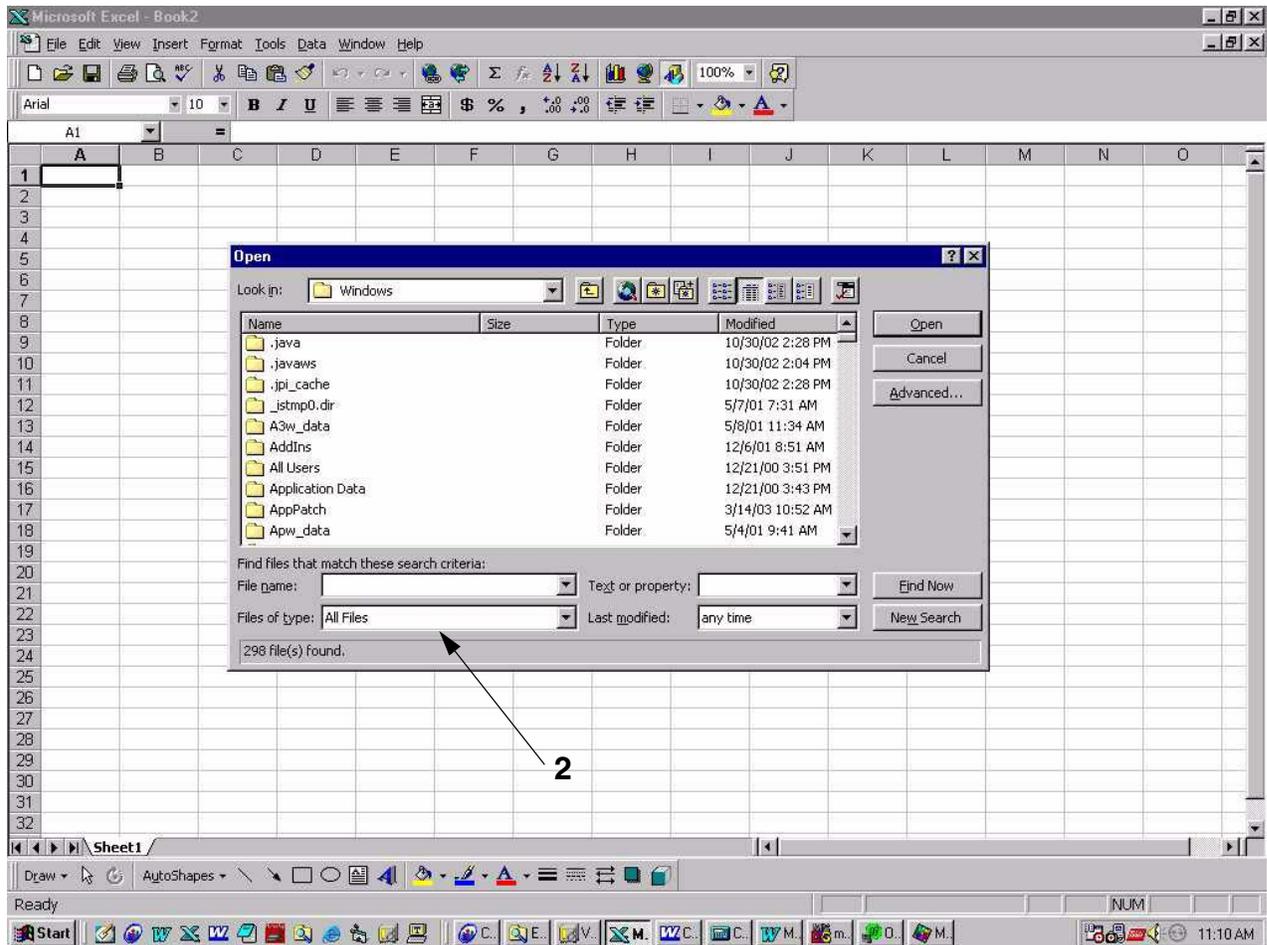


FIG. 2. Excel Window

3. Locate saved ReactorLogFile.log. See FIG. 3.

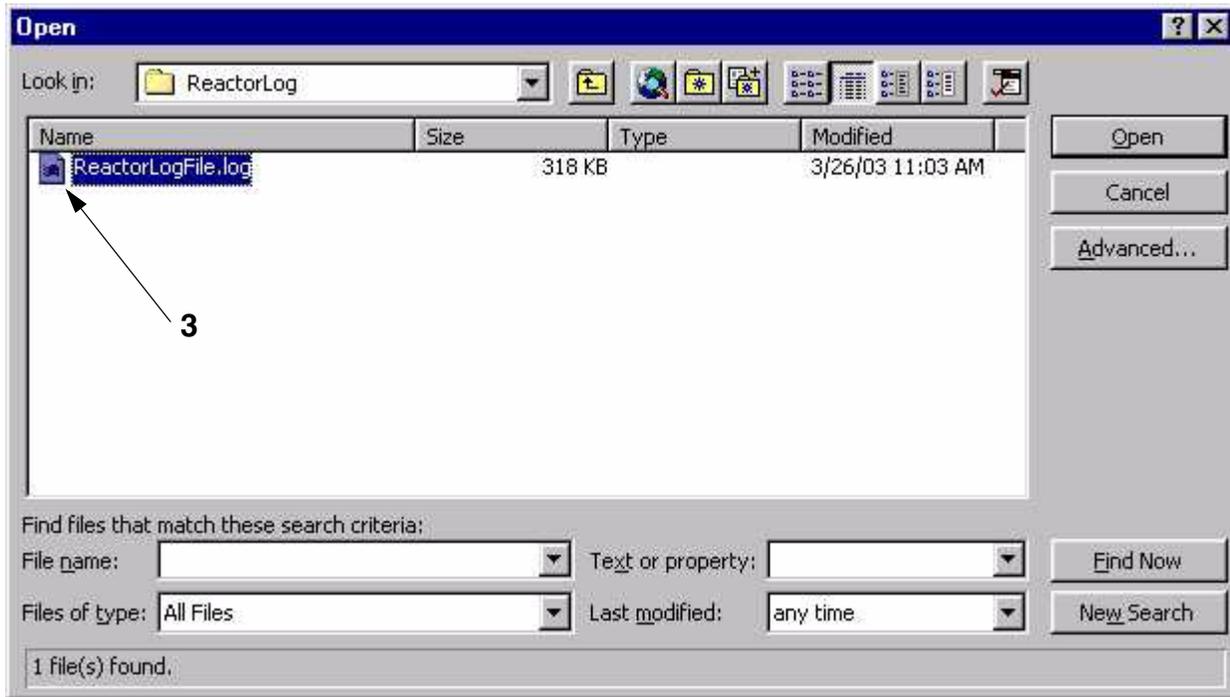


FIG. 3. Reactor Log File Window

4. Check that file is delimited. See FIG. 4.

5. Click Finish. See FIG. 4.



FIG. 4. Check that File is Delimited

- Data is imported into formatted Excel document.  
See FIG. 5.

The screenshot shows a Microsoft Excel window titled "Microsoft Excel - ReactorLogFile.log". The spreadsheet contains the following text:

1 Graco, Inc.  
 2 Plural Component Proportioner Reactor E-XP1  
 3 Status Report as of 4/26/2003 13:00:00  
 4  
 5 Pump control  
 6 Software version: 1.05.01  
 7 Life cycles (thousands): 37  
 8 Power on clock (hours): 6  
 9 At pressure clock (hours): 6  
 10 Motor running at pressure clock (hours): 6  
 11  
 12 Volume of material per cycle (both materials)  
 13 Model E-20 and E-XP1: .0104 gallons (.0395 liters)  
 14 Model E-30: .0272 gallons (.1034 liters)  
 15 Model E-XP2: .0203 gallons (.0771 liters)  
 16  
 17 Heater control  
 18 Software version: 1.06.02  
 19 Power on time (hours): 37  
 20 Zone A power on (hours): 2  
 21 Zone B power on (hours): 3  
 22 Zone hose power on (hours): 4  
 23 Power up cycles: 7  
 24  
 25 Temperature units - Fahrenheit  
 26 Pressure units - PSI  
 27  
 28 Date and T Temp A Temp B Temp/Curr Pressure A Pressure E Cycles Set Temp Set Temp Set Temp/ Set Press Error A Error B Error Hose Pump Error  
 29 ##### 161 161 159 1000 1000 0 160 160 160 1000 0 0 0 0  
 30 ##### 162 158 158 1000 1000 4 160 160 160 1000 0 0 0 0  
 31 ##### 159 160 160 1000 1000 8 160 160 160 1000 0 0 0 0  
 32 ##### 158 161 159 1000 1000 12 160 160 160 1000 0 0 0 0

The table data is as follows:

Date and T	Temp A	Temp B	Temp/Curr	Pressure A	Pressure E	Cycles	Set Temp	Set Temp	Set Temp/	Set Press	Error A	Error B	Error Hose	Pump Error
#####	161	161	159	1000	1000	0	160	160	160	1000	0	0	0	0
#####	162	158	158	1000	1000	4	160	160	160	1000	0	0	0	0
#####	159	160	160	1000	1000	8	160	160	160	1000	0	0	0	0
#####	158	161	159	1000	1000	12	160	160	160	1000	0	0	0	0

FIG. 5. Sample Formatted Excel Document

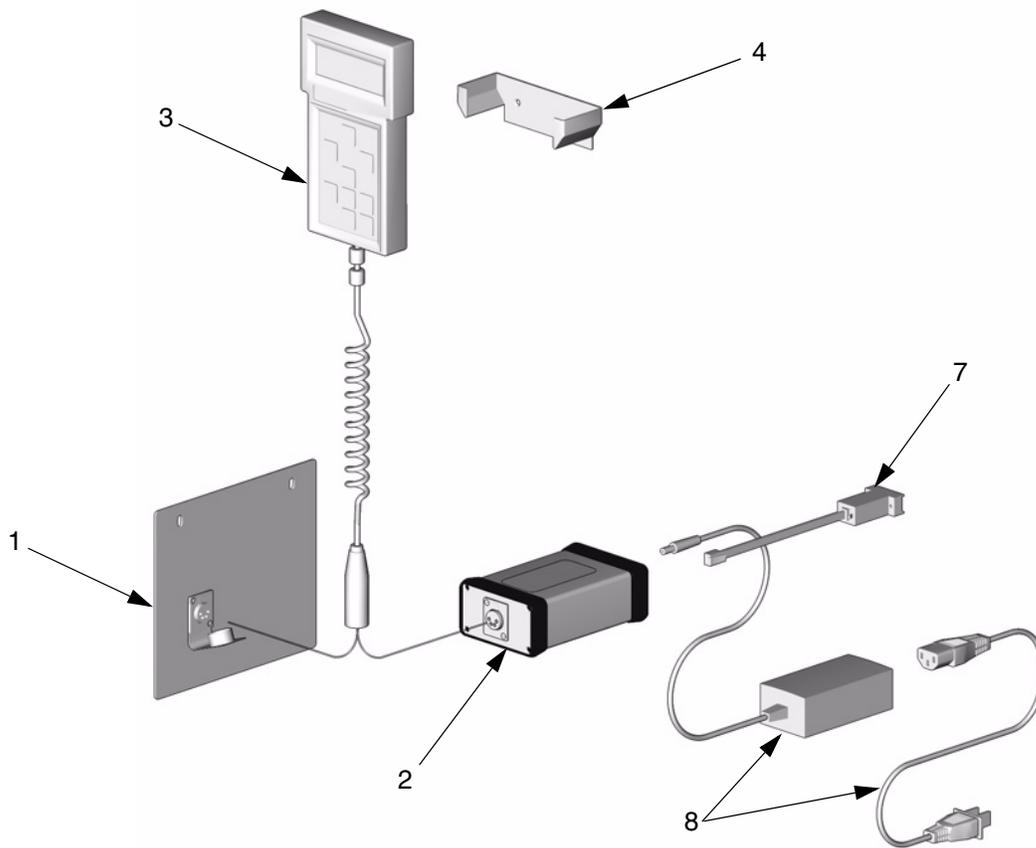


A series of 20 horizontal lines spanning the width of the page, providing a template for writing.

# Parts

## Models 246085 and 248848

Ref. No.	Part No.	Description	Qty	Ref. No.	Part No.	Description	Qty
1	246122	MODULE, interface (model 246085 only)	1	4a	103312	. SCREW, machine; 8-32 x 3/8 in. (10 mm)	2
2	246597	CONVERTER, RS-232 to RS-485	1	4b	100284	. NUT, hex; 8-32	2
3	246771	REPORTER; includes 3a	1	4c	113500	. ADHESIVE; 0.5 cc	1
3a	118347	. COVER; not shown	1	6	15C491	SOFTWARE, CD ROM; not shown	1
4	246772	BRACKET; includes 4a-4c	1	7	117827	CABLE, 9 pin D-SUB to RJ11	1
				8	117829	POWER SUPPLY, 12V	1



T13573a

# Graco Standard Warranty

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized Graco distributor to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

**THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.**

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

**GRACO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY GRACO.** These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

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## Graco Information

**TO PLACE AN ORDER**, contact your Graco distributor, or call this number to identify the distributor closest to you:

**1-800-328-0211 Toll Free**

**612-623-6921**

**612-378-3505 Fax**

*All written and visual data contained in this document reflects the latest product information available at the time of publication.  
Graco reserves the right to make changes at any time without notice.*

This manual contains English. MM 309867

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**International Offices:** Belgium, China, Japan, Korea

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