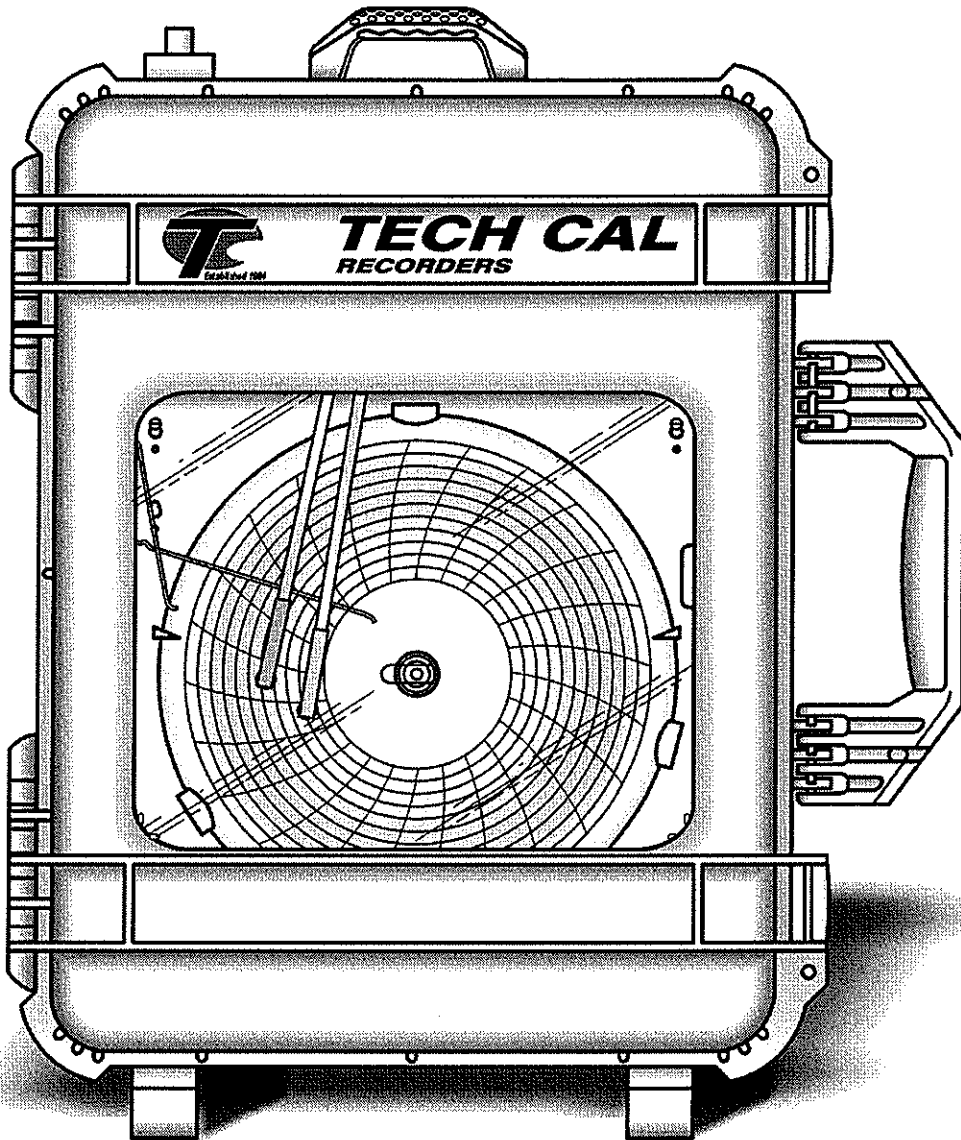


TECH CAL

RECORDERS



Owner's Manual

Operating Instructions

- 1) Thoroughly check instrument at the time of unpacking to inspect for any damage that may have occurred during shipment.
- 2) Mount the unit as level as possible.
- 3) Make sure the recorder is secure.
- 4) Select the desired rotation speed on the chart drive.
- 5) Install chart by unlocking the chart hub.
- 6) Raise the Pen Lifter.
- 7) Slide the chart paper between the pens and the chart plate securing it in the tabs.
- 8) Lock the Hub and lower the Pen Lifter.
- 9) Verify that the pen (s) are in contact with the chart paper and have sufficient ink.
- 10) Apply zero pressure and adjust the pen for chart zero.
- 11) Turn on the pressure to the unit.
- 12) Upon completion of test, turn off the Pressure.
- 13) Turn off the Chart Drive.
- 14) Lift pen (s) from Chart Paper.
- 15) Replace Pen covers to keep pens from drying out.

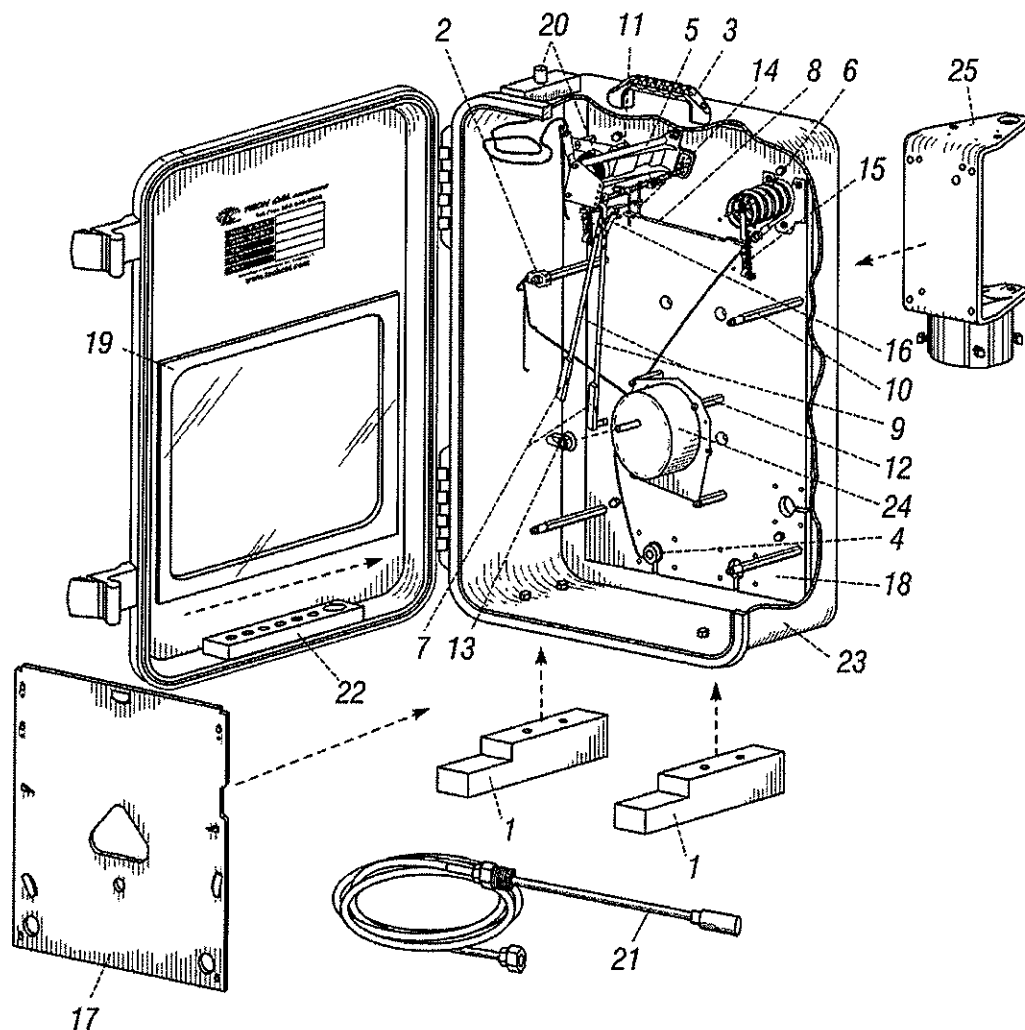
* If the recorder is suspected to be out of tolerance or not reading correctly please contact an authorized repair facility or the manufacture for repair and/or recalibration.

* Each Tech Cal Recorder is supplied with NIST Traceable Certifications. It is required that occasionally the recorder be recalibrated to ensure it accuracy.

General Specifications:

Case	Polyethylene Copolymer, Chemical Resistant, Light Weight & Durable Temperature Range: -10°F to 210°F
Window	Lexan, Polypropylene, Impact Resistant
Chart Drive	'C' Battery Operated, UL and cUL Listed For Hazardous Locations, Temperature Range: -40°F to 160°F
Chart Size	12-inch Diameter (American Meter Style)
Chart Rotation	60 Min, 96 Min., 12 HR, 1,2,7,8,14,16,31 & 32 Day
Number of Pens	1-3 (one for each element)
Pen Style	Disposable, Clip-On
Element Type	Pressure-Helical (bourdon), Stainless Steel Temperature-Helical (bourdon) Class V Mercury Filled
Range	Pressure 0 thru 30,000 PSI, Temperature 0 - 250 Deg. F
Accuracy	+/- .5% of Full Scale

Parts List



Item	Part #	Description
1	4P143	Foot
2	4P136	Pen Lifter Assembly
3	4P113	Soft Grip Top Handle
4	4P131	Case Connector, 1/4" NPTF
5	4P121	Pen Mount Assembly
6.1	4P101	500 PSI Static Pressure Element
6.2	4P102	1K PSI Static Pressure Element
6.3	4P103	2K PSI Static Pressure Element
6.4	4P104	3K PSI Static Pressure Element
6.5	4P105	5K PSI Static Pressure Element
6.6	4P106	10K PSI Static Pressure Element
6.7	4P107	15K PSI Static Pressure Element
6.8	4P108	20K PSI Static Pressure Element
6.9	4P109	25K PSI Static Pressure Element
6.10	4P110	30K PSI Static Pressure Element
7.1	4P140	1st From Chart, Blue
7.2	4P141	2nd From Chart, Red
7.3	4P142	3rd From Chart, Green
8	4P134	Link Assembly
9	4P127	Pen Arm, Long Slot
10	4P139	Riser, Chart Plate
11	4P137	Riser, Temp. System
12	4P138	Riser, Chart Drive

Item	Part #	Description
13	4P130	Hub, G190
14	4P126	Pen Shaft Arm Assembly, 90 Deg
15	4P135	Range Adjustment Arm
16.1	4P122	1st From Chart, Shaft Assembly
16.2	4P123	2nd From Chart, Shaft Assembly
16.3	4P124	3rd From Chart, Shaft Assembly
17	4P128	Chart Plate
18	4P120	Back Plate
19	4P144	Lexan Window
20	4P161	Ambient Temp. Sys., 0-150 Deg F
21.1	4P111	0-150 Deg F, Temp. Sys. /10' Armor Cap
21.2	4P112	0-200 Deg F, Temp. Sys. /10' Armor Cap
21.3	4P164	50-250 Deg F, Temp. Sys. /10' Armor Cap
22	4P163	Pen / Battery Holder
23.1	4P116	Black Case
23.2	4P117	Orange Case
23.3	4P118	Yellow Case
23.4	4P119	Silver Case
24	4P129	Chart Drive, Sonceboz 0820
25	4P158	Pipe Mount, 2" Slip-On
Not Shown	4P165	Spool, Temp. Cable
Not Shown	4P166	Panel Mount Brackets
Not Shown	4P167	Lower Connection Plate