

# INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS FOR FAIRCHILD MODEL MPLT-70 MINI-PANEL LOADING STATION

## GENERAL INFORMATION

The Model MPLT-70 Mini-Panel Loading Station furnishes a means of monitoring and manually or automatically controlling supply pressure. It offers a dual gage option for four output ranges.

### Specifications Model MPLT-70

Normal supply pressure ..... 150 psig  
[10 BAR] (1000 kPa)

Maximum supply pressure ..... 250 psig  
[17 BAR] (1700 kPa) supply

Ambient Temperature limit ..... -40°F to +160°F  
(-40°C to +71°C)

Flow capacity 100 psig [7 BAR]  
(700 kPa) supply 30 psig  
[2 BAR] (200 kPa) set ..... 2.5 SCFM (4.25 m<sup>3</sup>/HR)

Supply pressure effect for 5 psig  
[.35 BAR] (35 kPa) change in  
supply pressure ..... 0.05 psig [.003 BAR]  
(.35 kPa) max (dead end service)

Repeatability ..... 0.06 psig [.004 BAR] (.42 kPa)

## PRINCIPLES OF OPERATION

The Model MPLT-70 mini-panel loading station incorporates the Model 70B pressure regulator with a transfer function (Figure 1) which allows switching to an automatic controller. For operating principles, see the Installation, Operating and Maintenance instructions for the Model 70B.

Pressure gages contain a standard Bourdon tube for measuring pressure.

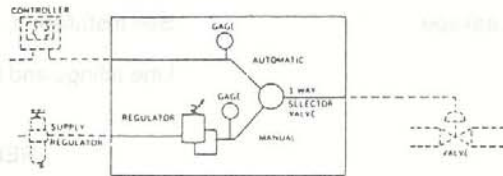


Figure 1

## INSTALLATION

Inlet and outlet connections are barbed fittings for 1/8" ID tubing. Figure 2 supplies outline dimensions for installation.

Clean all lines to the panel loading station to remove dirt and scale before installation is made. Apply minimum amount of pipe compound to male threads of air line (if applicable). Start with third thread back and work away from end of line to avoid possibility of getting

compound into the meter or regulator. Inlet and outlet connections to the regulator are labeled and should be tightened securely. Avoid undersized fitting that will limit flow through the regulator and cause pressure drop downstream.

The use of a filter to remove dirt and entrained liquid in the air line ahead of the regulator is recommended for best performance.

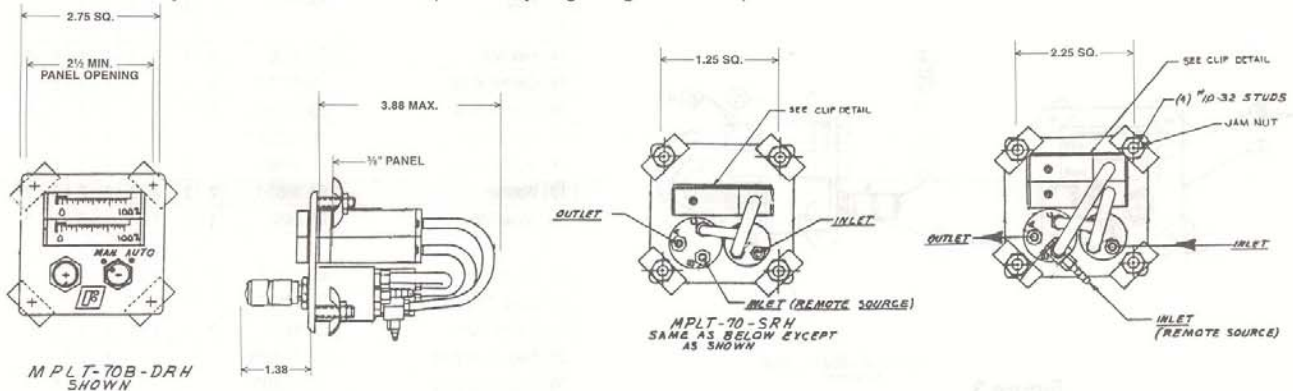


Figure 2

## ADJUSTMENTS

No field adjustments are necessary.

## OPERATION

Panel loading stations as shipped, have regulators set at approximately 1/2 PSI. To increase setpoint pressure, the knob is turned in a clockwise direction. For decreased output pressure, the screw is turned counter-clockwise.

## MAINTENANCE

For maintenance instructions, see the Installation, Operating and Maintenance instructions for the Model 70B regulator.

## TROUBLE SHOOTING

Problem	Check
Gage reading inaccurate	Gage pointer
Gage inoperative	Wear on pinion and sector hair spring.
Leakage	See Installation, Operating and Maintenance instructions for regulator. Line fittings and line.

## REPAIR PARTS LIST

NO.	NAME	NUMBER	S.R.V.	D.R.V.	S.R.H.	D.R.H.	S.P.V.	D.P.V.	S.P.H.	D.P.H.
1	Panel Assembly (Silkscreen)	EC-14255-1			1				1	
2	Panel Assembly (Silkscreen)	EC-14255-2				1				
3	Adapter	EA-12424		1		1		1	1	1
4	Mounting Kit	EA-18986-1	1	1	1	1	1	1	1	1
5	Gauge 0-15 psig	GS-1022PV					1	2		
6	Gauge 0-15 psig	GS-1022PH							1	2
7	Gauge 0-100%	GS-1022RV	1	2						
8	Gauge 0-100%	GS-1022RH				1	2			
9	Hose Fitting	EB-9488	3	2	3	2	3	2	3	2
10	1/8 I.D. Tubing	EA-9458-25	2	3	2	3	2	3	2	3
11	Adapter Fitting	EA-9712		1		1		1		1
12	Plug	EA-9711		1		1		1		1
13										
14	Hex Nut	EB-8890	1	1	1	1	1	1	1	1
15	Control Knob	EB-9471-2	1	1	1	1	1	1	1	1
16	Control Knob	EA-9472-1	1	1	1	1	1	1	1	1
17	Name Plate	EB-18273-2	1	1	1	1	1	1	1	1
18	3-Way Valve	EC-9385-2	1	1	1	1	1	1	1	1
19	Washer	EA-3662-1	2	2	2	2	2	2	2	2
20	Hose Fitting	EB-9453	1	3	1	3	1	3	1	3
21										
22	Spring Clip	EB-16151	1	1	1	1	1	1	1	1
23	Spec. Model 70B	EA-10079	1	1	1	1	1	1	1	1
24	Range Screw	EA-9417	1	1	1	1	1	1	1	1
25	Gage 0-30 psig	GS-1032PV					1	2		
26	Gage 0-30 psig	GS-1032PH							1	2
29	Gage 0-80 psig						1	2		
30	Gage 0-80 psig								1	2
33	Panel Assembly (Silkscreen)	EC-14255-3	1				1			
34	Panel Assembly (Silkscreen)	EC-14255-4		1				1		

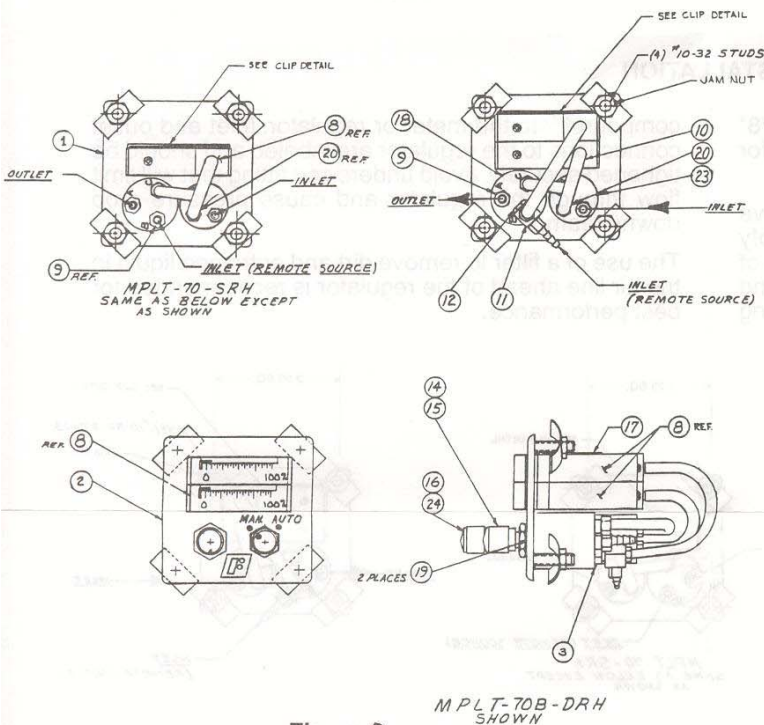


Figure 3

MPLT-70B-DRH  
SHOWN

ISO 9002  
Certified

**FAIRCHILD**  
INDUSTRIAL PRODUCTS COMPANY

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FM NO. 25571

IS-40MPLT70  
Litho in USA  
Rev. B 10-98