1 Exam Prep

Understanding and Servicing Alarm Systems

Tabs and Highlights

These 1 Exam Prep Tabs and Highlights are based on Understanding and Servicing Alarm Systems.

Each 1 Exam Prep Tabs sheet has five rows of tabs. Start with the first tab at the first row at the top of the page; proceed down that row placing the tabs at the locations listed below. Place each tab in your book setting it down one notch until you get to the bottom of a page. Then start back at the top again.

2nd Edition Page#	2nd Edition Sect	3rd Edition Pqe#	3rd Edition Sect	Tab Description
vii		vii		Contents
3	1.2	3	1.2	Diagrams /Symbols
7	1.4	7	1.4	OHM's law
11	1.5	9	1.5	Electrical Measurements
13	1.5.3	13	1.5.3	Measuring Resistance
17	1.6	17	1.6	Power
19	2.0	19	2.0	Test Equipment
21	2.4	21	2.3.1	Simple Continuity Testers
27	2.6	23	2.4	Meters
33	2.8	29	2.6	Foil Zapper
45	3.1	53	3.1	Equipment Troubles
53	4.0	63	4.0	Protective Loops
55	4.1	65	4.1	Open Loops/Symbols
57	4.2	67	4.2	Single Closed Loop
61	Fig.4-15	75	Fig.4-15	Open/Closed Loop
65	4.4	77	4.4	Double Closed Loop
83	Fig. 4-40	*107	Table 4-40	Break-Cross Loop

2nd Edition Page#	Sect	3rd Edition Pqe#	Sect	Tab Description
91	5.1	97	5.1	Trouble Shooting Steps
95	6.0	103	6.0	Trouble shooting Procedures
129	7.0	139	7.0	Controls
135	7.5	143	7.4	Bell Time-Out Feature
137	7.8	147	7.7	Entry-Exit Delay Feature
141	8.0	151	8.0	Silent Alarms
143	8.4	153	8.4	McCulloh Transmitters
155	9.1	161	9.1	Batteries/Power Supplies
157	9.1.1	163	9.1.1	Battery Testing
163	9.3	169	9.3	Fire Alarm System Batteries
167	10.0	173	10.0	Intrusion Detection System
175	10.3	181	10.3	Ultrasonic Motion Detectors
179	10.4	183	10.4	Microwave Motion Detectors
193	11.0	191	11.0	Alarm Service Person
197	12.0	195	12.0	Work Hazards
209	Glossary	207	Glossary	Glossary
241	Index	249	Index	Index

Note: Be Aware - *Means of Out of Order

Highlights for Understanding and Servicing Alarm Systems

2nd Edition Page#	2nd Edition Sect	3rd Edition Pqe#	3rd Edition Sect	Suggested Hi-Lighting
4	1.2	4	1.2	Diagrams & Symbols: Be familiar with Figure 1-1 common symbols
7	1.4	7	1.40	OHM's Law: E-IR
11	1.5	11	1.5	Electrical Measurements: V-O-M-Volt-OHM- Milliamp meter measures volts, amps and OHMs.
14-15	1.53	14-15	1.5.3	Measuring Resistance: An Ohmmeter is a meter with a built-in battery and a built-in current-limiting resistor. Note: Figure 1-11.
17	1.6	17	1.6	Power: Power, which is expressed in watts. P=E x I
19	2.1	19	2.1	The Eye: The eye is free and always with us, but is seldom thought of as a test instrument because we cannot see electricity.
21	2.4	21	2.3.1	Simple Continuity: A simple continuity tester is just a battery in series with some sort of indicating device such as a bulb ... Note figure 6-11 & 6-12
28	2.6	23	2.4.1	Meters: Because of its versatility, sensitivity, and accuracy, the meter will be with test instrument most used by the alarm troubleshooters.
33	2.8	29	2.6	Foil Zapper: A capacitating discharger tester, which I call a "zapper" is best used across foil and will give excellent result.
45	3.1	53	3.1	Equipment Troubles: There are a number ... such as a control panel, photoelectric beam, etc ...
53	4.0	63	4.0	Before doing any trouble shooting, we must know the types of protective loops
53	4.1	65	4.1	Open Loop: An open loop is the simplest used . . .
57	4.1	65	4.1	Be familiar with symbols. Note figure 4-2 thru Figure 4-6) Pgs. 65-67
59	4.2	68	4.2	Single closed loop: Note: figure 4-11. Pg 70
62-63	4.15	74-75	4.3	Open and closed loop: Note: Figure 4-15. A, B, C, and D.
66	4.4	79	4.4	Double Closed Loop: Note: Figure 4-20 A & B
83	4.8	*109	6.2	Break-Cross Loop: Note: Figure 6-3 A,B,C & D

2nd Edition Page#	Sect	3rd Edition Pqe#	Sect	Suggested Hi-Lighting
91	5.1	97	5.1	The seven basic steps in troubleshooting & be familiar with Table 5-1 (List of possible causes - Table 5-1).
98	6.0	103	6.0	Be familiar with Table 6-1: Testing the control or transmitter
117	6.4	NONE		Simple Continuity: A simple continuity tester is just a battery in series with some sort of indicating device such as a bulb ...
130-131	7.1	140	7.1	Simple Control: Note: Figure: 7-1 A, B, C, & D (Operation of Simple Control)
135	7.5	144	7.4	Bell Time Out Feature: There are four modes of time-out operation: Note 1-4
138	7.8	14	77.7	Entry-Exit Delay Feature: With entry-exit delays, it's possible to locate the on-off switch insider the protected premises
141	8.0	151	8.0	Silent Alarms: The most of often used transmission path for silent alarm is telephone lines
143	8.4	153	8.4	McCulloh Transmitters: The McCulloh transmitters has been used for many years. It's like an alarm party line
155	9.1	161	9.1	Batteries: Today most alarm equipment operates from low.voltage, energy limiting transformers ... article 725 NEC
157	9.1.1	163	9.1.1	Battery Testing: Note: Figure 9-1
162-163	9.2	169	9.2	Power Supplies: 22 gauge wire is usually adequate
163	9.3	169	9.3	Fire Alarm System Batteries: These typically have a capacity of 30 ampere-hours or more... often 24 volts
167-169	10.1	173-174	10.1	Photoelectric Beams: Photo beams ... subdivided as follows: (IR), Steady, LED, etc... Note: Figure 10-1, A, B, and C page 169
176	10.3	182	10.3	Ultrasonic Motion Detectors: An ultrasonic motion ... is too high for most people to hear, but dogs & other animals ...
179	10.4	182	10.4	Microwave Motion Detectors: Microwave Motion Detectors are somewhat similar to Ultrasonic motion ...
193	11.0	191	11.0	Alarm service person: twenty steps on an alarm service persons day-today activity.

2nd Edition Page#	Sect	3rd Edition Pqe#	Sect	Suggested Hi-Lighting
197-202	12.0	195-201	12.0	Work Hazards: Falls, ladders, ceilings, cuts, electric shock, etc... also be familiar with Table 12-1 (Typical contents of 24 unit size first Aid)
209	Glossary	207	Glossary	Glossary: Active detector, capacitance detector, E-O-L and Homes, Edwin...

*NOTE: Be Aware - Out of Numerical Order