

My Home

TIPS FOR OPERATING YOUR HOME

Tom Feiza
Mr. Fix-It

Published by
Mr. Fix-It Press
P.O. Box 510724
4620 S. Raven Lane
New Berlin, WI 53151
Phone: (262) 786-7878
Fax: (262) 786-7877
E-mail: Tom@misterfix-it.com
www.howtooperateyourhome.com
or www.htoyh.com

© 2007 by Mr. Fix-It Press

All rights reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted in any form by any means – electronic, digital, mechanical, photocopy, recording, or any other – without permission in writing from the author.

NOTICE:

This book is available at special discounts for bulk purchases, sales promotions, premiums, fund-raising, or educational use. For details, contact the publisher.

First edition, 2007

ISBN-13: 978-0-9674759-8-1

ISBN-10: 0-9674759-8-8

Printed in the United States of America

BE SAFE!

The information in this book has been carefully assembled to ensure that it is as accurate as possible. However, the book provides general information only, and it is sold with the understanding that the publisher and author are not rendering legal or professional services.

This book does not provide product-specific information, and you should consult the manufacturer of the product or equipment for specific information. Operation and maintenance information is provided for general understanding only.

When attempting a home repair project, always consult professionals and follow label directions. Companies that manufacture equipment and home repair products are the ultimate authorities. Follow their instructions.

Many home repair, operation, and maintenance projects involve a certain degree of risk and should be approached with care. You should only attempt repairs if you have read and understood the instructions for the product, equipment, or tool that you are using. If questions or problems arise, consult a professional or the manufacturer.

Due to the variability of local conditions, construction materials, and personal skills, neither the author nor the publisher assumes responsibility for any injuries suffered or for damages or other losses that may result from the information presented.

ACKNOWLEDGEMENTS

Special thanks go to all the people who listen to my radio show, watch my television appearances, attend my seminars, use my home inspection service, and read my newspaper column. Your questions, answers, and tips made this book possible. Many manufacturers have provided me with excellent technical information, and I value their help.

My editor, Leah Carson, took my rough copy and made the information much more useful and user-friendly. Lynn Eckstein designed my Mr. Fix-It logo years ago. Tom Feiza III created the cover and the wonderful interior layout.

Lindsay Mefford (Feiza) created the artwork for this revised edition from our originals and my rough sketches.

Most importantly, I owe a lot to my wife, Gayle, and our kids, Lindsay and Tom. They helped me keep things in proper perspective by dragging me out of the office for vacations and family time.

Please enjoy my book and have a great fix-it day!
Tom Feiza – “Mr. Fix-It”

Author Tom Feiza, a.k.a. Mr. Fix-It
Editor Leah Carson, Excellent Words (luv2cre8@wi.rr.com)
Artwork Lindsay Mefford, Tom Feiza
Layout/Cover Art Tom Feiza III (tomfeiza@gmail.com)

TABLE OF CONTENTS

CHAPTER 1 – STRUCTURE, FRAMING	1	CHAPTER 5 – FIREPLACE, CHIMNEY	20
Foundation	1	Masonry Chimney	20
Pier, Pile Foundations	1	Masonry Fireplace Parts	20
Slab Foundations	2	Masonry Chimney Parts	21
Protecting Foundations	2	Metal Chimneys	21
Protecting Full-Depth Foundations	3	Metal Prefabricated Fireplace	22
Foundation Surface Drainage	3	Direct Vent Fireplace	22
Wood Framing	4		
Wall Framing, Studs	4	CHAPTER 6 – HEATING	23
Floor Support Systems	5	Warm Air Furnace	23
Roof Framing	5	Forced Air Heating Systems	23
Stucco	6	Forced Air Distribution Systems	24
Brick Home	6	Heat Pump Systems	24
		Filtering for Forced Air Heating	25
CHAPTER 2 – INSULATION & VENTILATION	7	Air Filter Types	25
Insulation Basics	7	Air Filters – Higher Efficiency	26
Air Movement – Heat Loss	7	Hydronic Heating System	26
Typical Insulation	8	Steam Heating Systems	27
Ventilation – Types	8	Fuel Oil Heating Systems	27
Attic Ventilation	9	Ductwork – Dampers	28
Bathroom Ventilation	9	High and Low Returns – Cold Climates	28
Kitchen Ventilation	10	Thermostat – Heating and Cooling	29
Heat Recovery Ventilator	10	Digital Thermostat	29
		Humidifier System and Controls	30
CHAPTER 3 – DOORS, WINDOWS	11	Heat System Disconnects	30
Exterior Doors	11		
Interior Doors	11	CHAPTER 7 – AIR CONDITIONING	31
Door Adjustments	12	Air Conditioning	31
Overhead Garage Doors	12	Air Conditioning – Fan Unit Locations	31
Garage Door Operator	13	Evaporative Cooler – Swamp Cooler	32
Windows	13	Cooling – Heat Pump	32
Window Parts	14	Air Conditioning Leaks	33
Window Glass or Glazing	14	Refrigeration Cycle	33
		Air Conditioning Condenser Maintenance	34
CHAPTER 4 – ROOF	15	Evaporative Cooler Details	34
Roof Types	15		
Roofs – General Terms	15	CHAPTER 8 – ENERGY	35
Asphalt Shingle Roof	16	Natural Gas	35
Roof Materials	16	Natural Gas Distribution, Valves	35
Tile, Slate	17	Fuel Oil	36
Roof Venting – Attic Venting	17	Propane	36
Flat, Low-Slope Roofs	18	Electrical	37
Roof Gutters and Drainage	18	Gas Shut-Off	37
Roof Plumbing Vents	19		
Bituminous Membranes	19		

CHAPTER 9 – PLUMBING38

Water Supply – Municipal, Cold Climate38
 Water Supply – Municipal, Warm Climate38
 Water Supply – Private Well39
 Water Distribution with Basement – Cold Climate . . .39
 Water Distribution with Slab –Warm Climate40
 Water Distribution with Crawl Space40
 Drainage, Waste and Vent System41
 Septic System41
 Water Heater – Gas42
 Water Heater – Electric42
 Water Softener43
 Water Backflow Prevention43
 Typical Toilet44
 Shut-Off Valves – Appliances44
 Garbage Disposal45
 Hose Faucets45
 Pounding Pipes46
 Sanitary and Storm Sewers46
 Sanitary Pumps47
 Plugged Drains47

CHAPTER 10 – ELECTRICITY48

Electrical – Overhead Feed48
 Electrical – Underground Feed48
 Electrical Main Panel49
 Electrical Main Panel – Warm, Dry Climate49
 Ground Fault Circuit Interrupters (GFCI)50
 Polarity50
 Outlets, Cords and Plugs51
 Circuit Breaker Resets51

CHAPTER 11 – SAFETY52

Carbon Monoxide52
 Fire Safety52
 Lead, Asbestos, Radon, Mold53
 Electrical53

CHAPTER 12 – SERVICE REQUIREMENTS54

Service Requirements by the Calendar54
 Daily and Weekly54
 Monthly55
 Spring55
 Summer56
 Fall57
 Winter58
 Periodic Maintenance and Service as Needed58

ORDERING INFORMATION59