FIX IT

A CONSTRUCTION SET FOR THE MIND
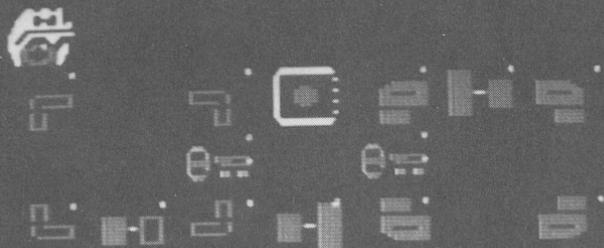
Title screen graphics created with Penguin Software's Complete Graphics System II by Mark Pelczarski and David Lubar.

Music developed with Studio 64 by EnTech Software, P.O. Box 185, Sun Valley, CA 91353.

This disk contains a high-speed operating system called Diversi-DOS™, which is licensed for use with this program only. To legally use Diversi-DOS with other programs, you may send $30.00 directly to: DSR, Inc., 5848 Crampton Ct., Rockford, IL 61111. You will receive a Diversi-DOS utility disk with documentation.

Fix It!
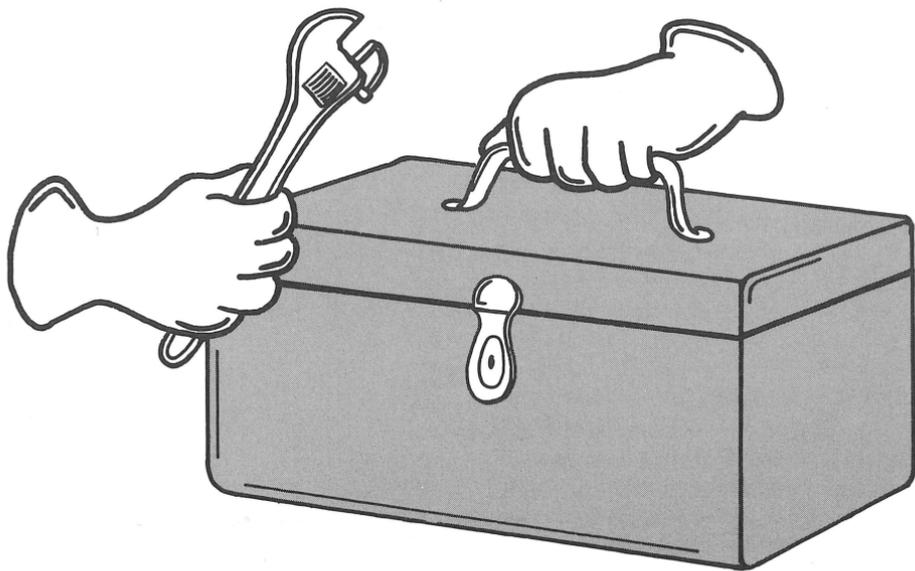
YOUR FIX IT! GUIDE

Fix It! Facts
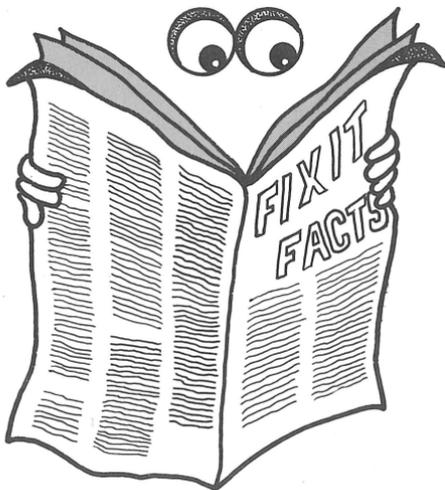
Do challenges intrigue you? FIX IT! calls on your ingenuity — and patient effort — to solve perplexing kinetic puzzles and transform them into working machines.

A kit is a disassembled machine. A machine is an assembled kit that works. FIX IT! contains two hundred different, progressively harder kits that need to be assembled.

Each FIX IT! kit contains a variety of parts with different characteristics that produce the most amusing and satisfying results when assembled correctly.

Watch the demonstration and start fixing the early kits — 1 thru 45. You'll soon learn what each part does.

You'll be ready to master kits 46-200 and to even make your own machines to baffle your friends.

FIX IT! is the perfect computer program for people who enjoy brain teasers. You'll become a master builder — the only tool you'll need is your mind.

Checking Your Computer
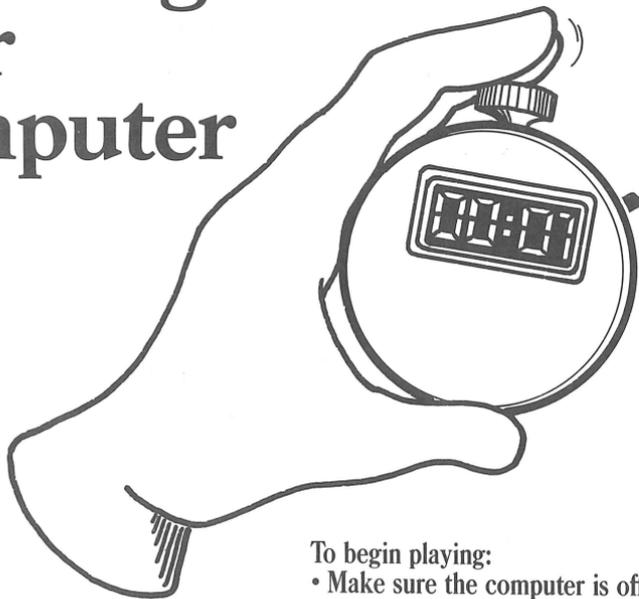
Apple® players, here's what you'll need to start:
• an Apple® II+, Apple® IIe or Apple® IIc
• an Apple® disk drive
• a monitor (color monitor recommended)
• a joystick (optional)
• a mouse (optional)
For joystick or mouse control, connect it to the computer before you begin.

To begin playing:
• Make sure the computer is off and the monitor is on.
• Open the disk drive door.
• Insert the FIX IT! program diskette into the drive.
• Close the drive door.
• Turn on the computer and the program loads.*

Note: Keep the CAPS LOCK key depressed.

* The first time you load this program, the Owner's Frame appears instructing you to type your name and press RETURN. Be sure to type your name accurately. This is the only time your name can be entered.

After the program loads, press D to see a demonstration of how the program works. Press RETURN to skip the demo. You can select your playing option — keyboard, joystick or mouse — and press RETURN. Remember, even if you play with a joystick or mouse, you can use the keyboard too.

Commodore® players, here's what you'll need to start:
• a Commodore® 64
• a Commodore® disk drive
• a monitor (color monitor recommended)
• a joystick (optional)
For joystick control, connect the joystick to Port 2 before you begin.

To begin playing:
• Make sure your computer is off and your monitor and disk drive are turned on.
• After these devices have been turned on, turn on your computer.
• Wait until the disk drive lights have stopped flashing and the monitor

screen presents a READY message and a blinking cursor.
• Open the drive door.
• Insert the FIX IT! program diskette into the drive.
• Close the drive door.
• Type LOAD"RH",8,1 and press RETURN.
• The program loads the Owner's Frame.*

* The first time you load this program, the Owner's Frame appears instructing you to type your name and press RETURN. Be sure to type your name accurately. This is the only time your name can be entered.

After the program loads, press D to see a demonstration of how the program works. Press RETURN to skip the demo.

Quick Fix It! Steps
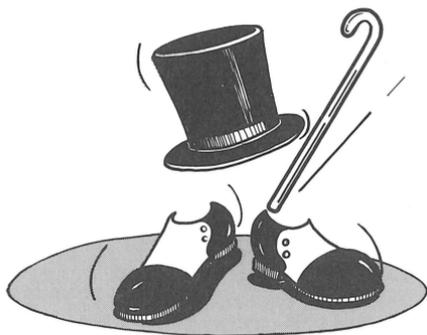
We suggest that you look through the manual to set up the computer and check the many options and features of the game. A list of parts in your tool kit appears on pages 10-13 and explains what each part is and what it does.

But for quick starters, here are the basic moves to get you fixing:

1. Pick up the part you need by moving the arrow to the spare parts bank at the bottom of the screen. Apple® players, use arrow keys, A and Z keys, joystick or mouse. Commodore® players, use the A and Z keys for moving up and down. Use the up/down CRSR key to move left and the right/left CRSR key to move right.

2. Grab part with SPACE BAR or joystick/mouse button.

3. Move part to desired place. To turn a part, press T.* Then press the SPACE BAR or joystick/mouse button to drop the part in place.

4. When all parts are in place, release bolt. Press RETURN once. Or move arrow to wrench and press SPACE BAR, the mouse button or the joystick button twice.

5. Apple® players can end or change your activity by pressing ESC to see your choices. Press the f1 function key if you are a Commodore® player. This will take you to the Main Menu, discussed on pages 16 and 17.

*If you need to turn a part, you can also use the mouse or joystick, see page 14 for more details on fixing machines.

STATUS AREA

MACHINE AREA

SPARE PARTS BANK
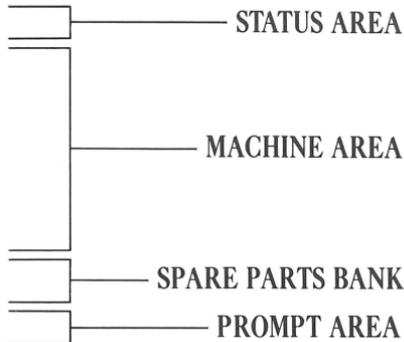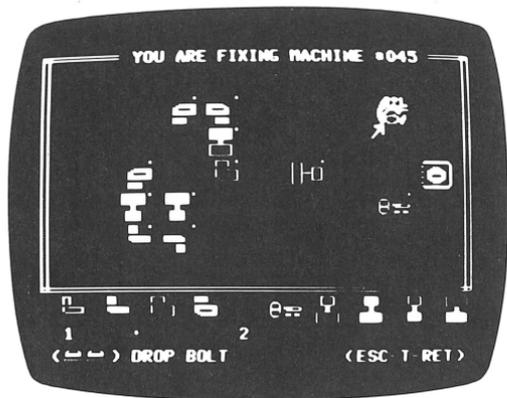
PROMPT AREA

STATUS AREA
tells you what you are doing to a machine.
MACHINE AREA
is where machines are fixed, etc..
SPARE PARTS BANK
shows complete set of parts, but you
can use only the parts that are numbered
to fix the kit.
PROMPT AREA
shows the options available to you at
each step. Looking at these will help
you know what you can do. You may
press a key or a push-button to pick
your option.
PUSH-BUTTONS
are on the joystick and mouse. If you're
using the keyboard, use the SPACE

BAR as the push-button.

⌨ means press push-button once.

⌨⌨ means press push-button twice.

Lost? Check the status and prompt
areas. They'll tell you where you are
and what you can do.
Especially note your options while
you're testing a kit.
(⌨) PAUSE (⌨⌨) CANCEL (S-F)
Press S to turn the sound on and off.
Press F to slow down or speed up
the bolt.
Press button to pause or cancel the
action while testing.

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The Game: Here's Your Goal

To fix a kit, the bolt must be released from the wrench and travel to the box. You'll see a target bolt inside the box. To enter the open side of the box, the moving bolt must match the properties of the target bolt. Bolts may be small and hollow, large and hollow, small and solid, or large and solid.

Your Tool Kit
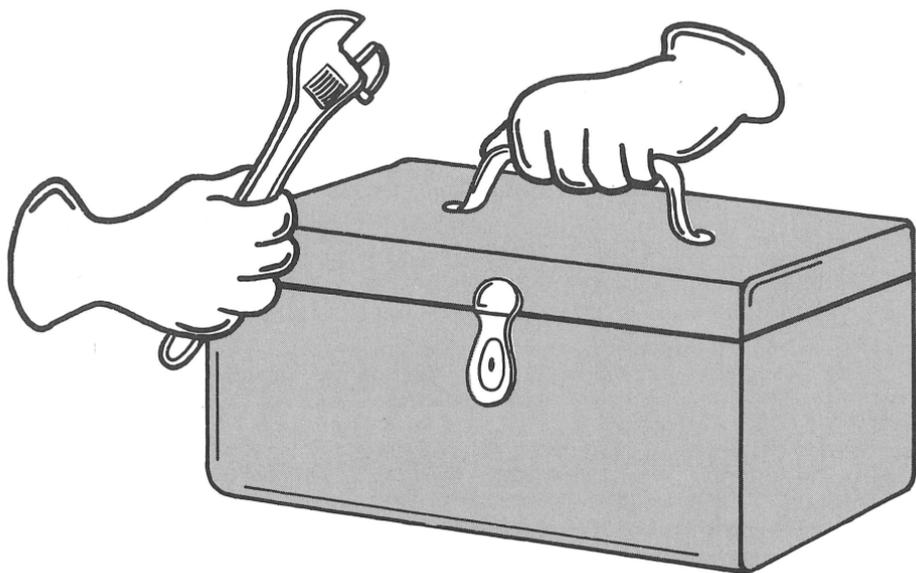
The parts you need to fix a kit are presented at the bottom of the screen.

ELBOWS

Elbows change the direction of the motion of a bolt, but the elbow only changes the direction of a bolt it matches.

A small hollow elbow will change the direction of a small hollow bolt, but a large bolt or a solid bolt will pass by a small hollow elbow. The direction of the moving bolt will NOT change.

changes the direction of small, hollow bolts.

changes the direction of small, solid bolts.

changes the direction of large, hollow bolts.

changes the direction of large, solid bolts.

CONVERTERS

Converters change the property of a bolt. To change a bolt from small to large or hollow to solid, for example, you need to use a converter.

A converter is made up of two ends. Each end is different. A bolt needs to enter the converter through the end that matches its properties (solid, hollow, large, small) to be converted to the property represented by the other end of the converter. Again, if the bolt does not match the converter, it passes by unchanged.

converts hollow bolts from large to small or from small to large.

converts solid bolts from large to small or from small to large.

converts small bolts from hollow to solid or from solid to hollow.

converts large bolts from hollow to solid or from solid to hollow.

BOUNCER

The bouncer makes any bolt rebound in the opposite direction.

THE KEY

The key opens a locked box. If any keys are in the machine area, the box will be locked. The bolt must pass through ALL the keys to unlock the box.

MODIFIED PARTS

The first 100 kits contain only regular parts. Kits 101 to 200 contain Modified Parts. These parts change their properties AFTER being touched by the bolt during its progress through the kit. The properties of the part and bolt DO NOT have to match for the change to take place.

Every time ANY bolt touches a modified part, the modification will take place.

Converters and Elbows may be modified in one of four ways:

CONTENT

These parts are marked with a small *C* in the spare parts bank. A content modification changes the properties of a part. For example, a small *hollow* elbow becomes a small *solid* elbow after the bolt passes by or through it.

SIZE

These parts are marked with a small *S* in the spare parts bank. A size modification changes the size of a part. For example, a *small* hollow elbow becomes a *large* hollow elbow after the bolt passes it.

TURN

Parts with a turn modification are marked with a small *T*. After the bolt passes the part, the part will move clockwise a quarter turn.

LOCATION

Parts with a location modification are marked with a small *L*. A location modification moves the part to the position that the bolt occupied immediately before it came in contact with the modified part. And if this places the part on top of another, the other part is no longer in the machine.

Watch those Small Letters!

Each modified part in the spare parts bank is marked by a small letter. Any similar part in the machine area is also modified but lacks the small *C*, etc. So check the parts bank to see if any part in question is modified.

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Fixing A Kit

Parts needed to fix a kit are found on the bottom of the playing screen. Parts available for use in a particular kit are numbered.

For example, this shows you have 3 hollow elbows to use in this kit.

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REMEMBER: your goal is to get the bolt in the wrench to travel to the open end of the box. The target bolt inside the box tells you the form and size of the bold needed to enter the box.

To Select a Part

1. Move the screen arrow to the part, using the arrow keys, A and Z keys, the joystick or the mouse if you're an Apple® player. Commodore® players use the A and Z keys to move the arrow up and down. Use the up/down CRSR key to move left and the right/left CRSR key to move right.
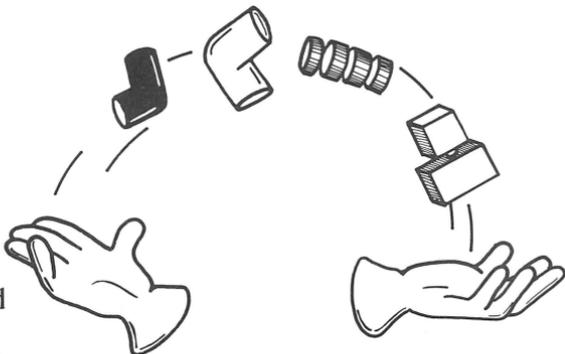
2. When the arrow is at the part you want, press the SPACE BAR or the button on the mouse or joystick to grab the part.

3. Move the part to where it is needed to fix the kit. Set it into position by pressing the SPACE BAR or the button on the joystick or mouse once.

This symbol on the screen represents the SPACE BAR or the button on the joystick or mouse.

Press the SPACE BAR or button once.

Press the SPACE BAR or button twice.

Locked Parts

When a kit loads, a few parts appear on the screen. These original parts are locked. A white dot appears by each one. This lets you know that these parts

cannot be grabbed or moved around.

The Prompt Area

Check the prompt area at the bottom of the screen, to see your options. If you forget what to do next, the prompt area will help you remember.

Select the Wrong Part?

If you select a part that is not needed, return it to its place at the bottom of the screen. Grab the part, move it to its place, and drop it. Your inventory of available parts will be updated.

Need to Turn a Part?

If you've got the part in a good spot, but you need to turn it, press *T*. Press *T* again to turn it some more.

If you are using the joystick or mouse, you may also turn the part without using the keyboard.

1. Move the screen arrow to a part of the screen that is clear.

2. Press the button to activate the turn command.

3. Return the screen arrow to the part to be turned.

4. Press the button once for each quarter turn you want the part to make.

5. Return the screen arrow to an unoccupied position, press the button,

and the turn command is deactivated.

The SPACE BAR, arrow keys and the *T* key may also be used when you are using the mouse or the joystick.

Think You've Got It?

You may want to test your kit as you work. You can release the bolt and see how far it travels. Then you can get an idea of what still needs to be done. When you feel you've put all the right parts in the right places, release the bolt and watch it go!

You release the bolt by:

1. pressing RETURN or

2. moving the screen arrow to the wrench and pressing the SPACE BAR, the mouse button or the joystick button twice.

Did the bolt make it to the box or just part way? Look at the prompt area to see what you can do next.

Always check your options

Especially note your options in the prompt area while you're testing a kit. (🖳) PAUSE (🖳🖳) CANCEL (S-F)
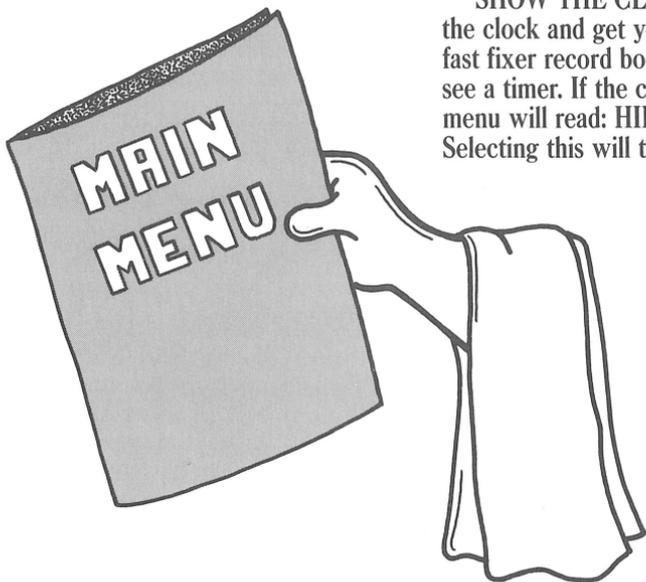
Press S to turn the sound on and off.

Press F to slow down or speed up the bolt.

Press button to pause or cancel the action while testing.

The Main Menu:

Know Your Options

Want to try Kit #14 or #126 next? Or would you like to play against the clock? Or maybe design your own machine? You can do all of this with the help of the Main Menu.

Press ESC or the f1 function key when a kit is presented and you will see the Main Menu. Here are all the options available to you in FIX IT!:

LEAVE MAIN MENU — This will return you to your previous position in the program.

LOAD A SPECIFIC KIT — lets you select by number the kit that you want to solve.

If you change your mind about loading a kit, simply press the RETURN key or enter 0.

SHOW THE CLOCK — Want to beat the clock and get your name in the fast fixer record book? Select this to see a timer. If the clock is running, the menu will read: HIDE THE CLOCK. Selecting this will turn off the clock.

DESIGN YOUR OWN MACHINE —
This gives you the chance to use your
creativity and cunning to design
your own kits.

SAVE YOUR KIT — After designing
a kit, you may save it for future play
through this option. You can save as
many as 100 kits.

REPLACE KIT — If you design a kit
that surpasses one of your previous
efforts, you can replace it using this
option. You may only replace kits that
you have designed and saved.

It's important to THINK AHEAD
if you want to use this option. Load
the kit you want to replace before you
start designing your new kit.

LOAD THE "KIT IN PROGRESS"
— Not enough time to finish a kit? Save
it by using the option below and then
you can load the unfinished kit later.

SAVE THE "KIT IN PROGRESS"
— Stumped by a kit? Save it for later.
Note: Kits in Progress, when loaded, do
not show their kit number, nor do they
allow you to enter the competition mode.

END THIS SESSION — Use this
option to exit the program.

If a menu item is marked with an
X it is not available for selection at
that time. For example, if you have not
designed a kit, then the SAVE YOUR
KIT option won't operate.

Design Your Own Machine

Want to put your creativity to use? Select DESIGN YOUR OWN MACHINE from the Main Menu. Depending on your degree of cunning, you can choose to use regular or modified parts.

Using Modified Parts

You can select the modification that you want for each part. But only one modification can be chosen for any type of part.

Content, Location, Turn, Size

To modify a part, move the screen arrow to the part and press the initial letter of the modification you want to use: C, L, T, S. To turn off the modification, press the letter again.

Modify as many parts as you want. Then press *F* for Finished. Now all the parts you can use — the modified ones you chose and the remaining regular ones — are displayed in the spare parts bank.
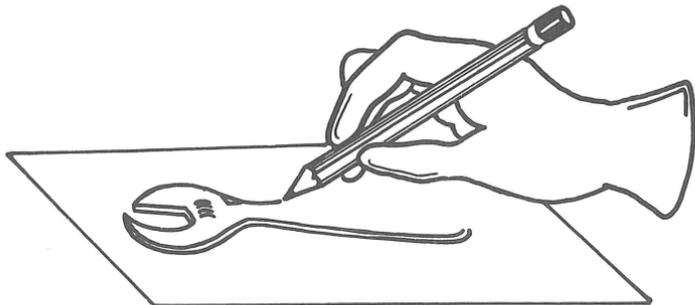
Start Designing

Once the part set is selected, you can start to design your own machine. Notice, the target box is totally closed and there is no bolt inside it. In the design mode, any bolt can enter from any direction.

Designing a machine uses the same techniques used in fixing a kit. While designing, though, you may move the wrench and the target box to any location on the screen.

Testing Your Design

After you create a design that looks as if it would challenge Houdini, test your machine to see if it indeed does work. Press the SPACE BAR, joystick or mouse button twice or use RETURN to release the bolt. If the bolt successfully reaches the target box, you will be given two options:

CONTINUE DESIGN—select this option if you have concocted more ways to outwit an opponent.

PREPARE KIT—Select this option if you are ready to transform your working machine into a challenging kit.

Preparing a Kit

To make your kit challenging for another player, you need to put away or hide some of the parts you used.

You decide which pieces stay on the screen and which belong in the spare parts bank.

1. Move the screen arrow to the parts you want to remove and press *P*.

2. If you get carried away and want to begin again on your kit preparation, pressing *R* will restore your machine to its original form.

3. When you have put away the parts you want, press *F* to signal that you are finished.

4. Press ESC or the f1 function key to get the Main Menu if your want to save your kit. Select SAVE or REPLACE KIT.

Special Features
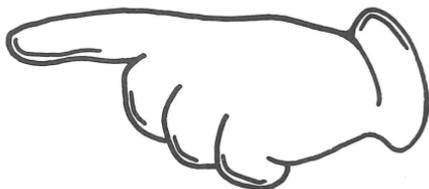
ESC — Use the ESC key at any time during the program to reach the Main Menu if you are playing on an Apple® computer.

f1 — Use the f1 function key at any time during the program to reach the Main Menu if you are playing on a Commodore® computer.

SOUND — You can play FIX IT! with or without sound. Press *S* while a machine or kit is being tested to turn off the sound. Press *S* again to return the sound.

INSTANT REPLAY — Press *R* after the kit has been solved to see the replay of a successfully completed kit.

TESTING OPTIONS — After releasing the bolt to test a machine, you may:

• Pause the movement of the bolt by pressing the SPACE BAR or the joystick or mouse button once.

• Cancel the test by pressing the SPACE BAR or the joystick or mouse button twice.

• Control the speed of the bolt. The

bolt has two speed options. If the bolt is moving rapidly and you want to savor your solution of a tricky kit, press *F* to slow the progress of the bolt through your kit. Press *F* again to speed up the bolt on its appointed rounds.

• f8 — If you are a Commodore® player, you can change the cursor control to the standard Commodore® cursor keys by pressing the f8 function key at the Main Menu. Press f8 again to return to the cursor control described on page 14.

CORRECT A TYPING ERROR —

• Use the left ARROW key to clear letters if you are playing on an Apple® computer.

• Use the DEL key to clear letters if you are playing on a Commodore® computer.

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