

Resident Evil 2 Save Game Hacking Guide

by Pesthauch666

Updated to v1.1 on Oct 5, 2006

This walkthrough was originally written for Resident Evil 2 (1998) on the PSX, but the walkthrough is still applicable to the N64 version of the game.

```
//                                                                    \\
|| R e s i d e n t   E v i l   2   -   S a v e   G a m e   H a c k i n g ||
||                                                                    ||
|| Version 1.1 - Oct/05/2006                                         ||
\\                                                                    //
\_____/\
```

This Guide only covers save file hacking of the PSone version of Resident Evil 2.

Yes, you could cheat with as simple GameShark or ActionReplay too, but if you don't have any cheating device (or to make the cheat lasting longer) it is possible to alter the save file instead. A device to send the save file to a computer (and back to the memory card again) is required of course.

I've already written a small program to make manipulation easier but since it was written in ARexx scripting language (which is available on Amiga only) you have to use a Hex Editor instead (this guide also was entirely written on a good old Amiga 1200 with CygnusEd).

If you stumble across some typing errors or some sentences in bad english, keep in mind that english is not my native language (german that is). And so there will be some errors of course.

Requirements:

~~~~~

The game and a PSone or PStwo (or PS3 ?) to play it ;-).

You'll need a Resident Evil 2 Games Save as single game file (suffix .psx; the filesize should be 8246 Bytes). A saved full memory card (.gme or .mcd) won't do it. Any good software you could use should support saving a single game file. Hey, I've even used my good old Amiga 1200 with the DexDrive Hardware using a special Amiga software (MCControl - you'll find it on Aminet; or download it from here: <http://mccontrol.online.fr>) to find out how to manipulate the save file. But the software shipped with the DexDrive hardware should do it too if you are using a lesser OS like Window\$. There was a much better program for Windoze available but I can't remember it's name. Just "google" around and you should find it.

To manipulate the game file you need a simple hex editor which should be available for any OS. I've been using the pretty old V2.0 of FileX which is available on Aminet too.

How to manipulate:

~~~~~

I've provided some memory addresses of which functionality I found out. There are many more of course but I've only found out these. If you found some more

interesting memory addresses just mail them to pesthauch666@web.de. Please use "RE2" as subject because I have to filter all other mails automatic as spam. I will add the memory addresses you found out to this FAQ. And of course you will take the credit for your work.

But keep in mind that some manipulations can crash the game, like using one of Clairs guns with Leon. Some funny things can happen too if you're trying to rush through the game with cheated (key)items while bypassing important story plots. And of course it would be wise to use only a backup of your game save. By the way cheating to provide better guns, more ammo or health items only works with a regular (Claire or Chris) save. The 4th Survivor Scenarios (Hunk or even Tofu) can't be manipulated at all. The starting items of Hunk and Tofu seem to be "hardwired" inside the game.

All memory addresses and values are hexadecimal since this is the common form. All Hex-Editors view the memory addresses and values in hexadecimal form. Values mostly are displayed with their ASCII equivalent also.

Addresses

000 - Country version of the game
possible country strings

Values:

BASLUS-0042100	USA
BISLPS-0122200	Japan
BESLES-0097200	European
BESLES-0097400	German
BESLES-0097300	France

Comment:

Every PSone game has a unique product number. If you experienced any problems with gamesaves you downloaded from GameFAQs these product numbers could be responsible. Since even the different language versions of the games have different product numbers you can't use a US gamesave with the european PAL version of the game. You can simply change these values to the product number of your game to make the save work. With Resident Evil 2 (Part 1 and 3 as well) it works fine. But some other games (i.e. Spyro or MediEvil) use a checksum to secure the integrity of the game save. You can manipulate these game saves too if you figure out how the checksum is calculated (which is not an easy task). Programs like MCControl make things a lot easier because such programs have a little database of product numbers and so can make changing the numbers within the program easier. Even some checksum algorithms for specific games (AzureDreams, MediEvil, Spyro 1+2) are implemented.

452 - Side Pack (on/off)

Values:

0 - Small Inventory [8 Slots]	-> Side Pack not equipped
1 - Big Inventory [10 Slots]	-> Side Pack is equipped

Comment:

Within the game you can find a "Side Pack" with which you can expand the maximum of items you can carry around in your inventory.

5CE-5F2 - Inventory Area (Max. 10 Slots with 4 Byte each Slot)

- +0 : Object Nr. - Values: 00 - 63
- +1 : Amount - Values: 00 - FF (FF = Infinite)
- +2 : Icon Size/Slot use
 - Values:
 - 0 - Small Icon (1 Slot)
 - 1 - Big Icon (2 Slots - first part of icon)
 - 2 - Big Icon (2 Slots - second part of icon)
- +3 : ??? (unused ?)

Comment:

Every slot is stored with these 4 bytes within the game save. Which means that the first slot ranges from 5CE to 5D1. The second slot starts at 5D2 and ends at 5D5 and so on.

- The first byte holds the object number which is placed at this slot. All Object numbers are described later in this document.
- The second byte shows the amount of the object. Keep in mind that the amount is only useful for some items like the guns and ammunition. Items like the knife or the key items have an amount of one. An Amount of FF for a weapons, ammunition and the small key means infinite ammunition/keys. Only the small key can have an higher amount then only one, since there are several desks to unlock with it. All other keys/plugs/handles/jewels etc. can only used once.
- The third byte holds the information what size the object has. Most items occupy only one slot while others (like the "big" guns) occupy two slots. All small objects have the value 0 (see object description). For the big weapons the first half of the icon graphic is displayed when using value 1 while value 2 toggles the display of the second half of the icon. Since these both graphics parts have to be displayed side by side, the big icons only can start on a par slot number (Slot numbers 1,3,5,7 or 9). Then you have to place the same item/amount/icon values inside the next 4 slot-bytes - but the value for the icon size has to be set to 02 now. But if you don't care about messed up icon graphics you can just ignore that or only use the first icon part to make these big weapons (like the rocket launcher) more handy.
- I don't know if the fourth byte has any use since it seems to be always set to zero.

- 5F6 - Status Slot
 - 5F6 : Object Nr.
 - 5F7 : Amount
 - 5F8 : Icon Size/Slot use
 - 5F9 : ???

Comment:

This single slot holds items which are only useful for some particular events. As far as I know only the lighter, lock pick and the G-Virus (object numbers 2F, 30 and 52) are useful here.

This slot is organized exactly as the inventory and the chest. But since only some special objects should be placed here the icon size isn't important.

5FA-6F6 Chest Area (64 Slots)

- +0 : Object Nr.
- +1 : Amount
- +2 : Icon Size/Slot use
 - (even 2 slot objects occupy only one chest slot)
- +3 : ???

Comment:

This rather big area holds the contents of the "magic" chest. And it is organized exactly like the the inventory area. But with one difference.
 - Since even bigger weapons occupy only one chest slot the value for the icon size has no use at all. But these value was set in all saves I checked to 00. And because these big guns fit in one slot you don't have to place the same item beneath with a value of 02 like it had to be in the inventory area.

Object-List:

Obj. Nr.	Object Description	Maximum Amount	Big Icon/ Two Slots Wide
---	-----	-----	-----
00:	"Empty"	0	
01:	"Knife"	1	
02:	"Hand Gun - H&K VP70"	ff	
03:	"Hand Gun - Browning HP"	ff	
04:	"Hand Gun - H&K VP70SF (Rapid Fire)"	ff	
05:	"Magnum - Desert Eagle 50A.E."	ff	
06:	"Magnum - Desert Eagle 50A.E. (Longer)"	ff	
07:	"Shotgun - Remington M1100-P"	ff	
08:	"Shotgun - Remington M1100-P (Longer)"	ff	
09:	"Grenade Launcher M79 (with normal Rounds)"	ff	
0a:	"Grenade Launcher M79 (with Flame Rounds)"	ff	
0b:	"Grenade Launcher M79 (with Acid Rounds)"	ff	
0c:	"Bowgun"	ff	
0d:	"Colt S.A.A."	ff	
0e:	"Spark Shot"	ff	Yes
0f:	"Sub Machine Gun"	ff	Yes
10:	"Flamethrower"	ff	Yes
11:	"Rocket Launcher"	ff	Yes
12:	"Gatling Gun"	ff	Yes
13:	"Machine Gun"	ff	Yes
14:	"Handgun Bullets - 9mm Parabellum"	ff	
15:	"Shotgun Shells"	ff	
16:	"Magnum Bullets"	ff	
17:	"Fuel (for the Flamethrower)"	ff	
18:	"Grenade Rounds"	ff	
19:	"Flame Rounds"	ff	
1a:	"Acid Rounds"	ff	
1b:	"Machine Gun Bullets"	ff	
1c:	"Spark Shot Bullets"	ff	
1d:	"Bow Gun Bolts"	ff	
1e:	"Ink Ribbon"	ff	
1f:	"Small Key"	ff	
20:	"Hand Gun Parts"	1	
21:	"Magnum Parts"	1	
22:	"Shotgun Parts"	1	
23:	"First Aid Spray"	1	
24:	"Chemical FR-W09 (Grenade to Flame Rounds)"	1	
25:	"Chemical AC-W24 (Grenade to Acid Rounds)"	1	
26:	"Green Herb"	1	
27:	"Red Herb"	1	
28:	"Blue Herb"	1	
29:	"Mixed Herb (Green)"	1	
2a:	"Mixed Herb (Red & Green)"	1	
2b:	"Mixed Herb (Blue & Green)"	1	

2c:	"Mixed Herb (3x Green ?)"	1
2d:	"Mixed Herb (2x Green & 1x Blue ?)"	1
2e:	"Mixed Herb (2x Green & 2x Red ?)"	1
2f:	"Lighter"	1
30:	"Lock Pick"	1
31:	"Photo - Sherry & Parents"	1
32:	"Valve Handle"	1
33:	"Red Jewel"	1
34:	"Red Card Key"	1
35:	"Blue Card Key"	1
36:	"Serpent Stone"	1
37:	"Jaguar Stone"	1
38:	"Left Part of Blue Stone (Jaguar Stone)"	1
39:	"Right Part of Blue Stone (Jaguar Stone)"	1
3a:	"Eagle Stone"	1
3b:	"Bishop Plug"	1
3c:	"Rook Plug"	1
3d:	"Knight Plug"	1
3e:	"King Plug"	1
3f:	"Weapon Box Key"	1
40:	"Detonator"	1
41:	"Plastic Bomb"	1
42:	"Bomb & Detonator"	1
43:	"Square Crank"	1
44:	"Film A"	1
45:	"Film B"	1
46:	"Film C"	1
47:	"Unicorn Medal"	1
48:	"Eagle Medal"	1
49:	"Wolf Medal"	1
4a:	"Golden Cogwheel"	1
4b:	"Manhole Opener"	1
4c:	"Main Fuse"	1
4d:	"Fuse Case"	1
4e:	"Vaccine"	1
4f:	"Vaccine Cartridge"	1
50:	"Film D (Rebecca)"	1
51:	"Base Vaccine"	1
52:	"G-Virus"	1
53:	"Special Key !!! (Special Outfit Locker Key)"	1
54:	"Joint S Plug"	1
55:	"Joint N Plug"	1
56:	"Cord"	1
57:	"Photo (Ada & John)"	1
58:	"Cabin Key"	1
59:	"Precinct Key (Spade)"	1
5a:	"Precinct Key (Diamond)"	1
5b:	"Precinct Key (Heart)"	1
5c:	"Precinct Key (Club)"	1
5d:	"Control Panel Key R"	1
5e:	"Control Panel Key H"	1
5f:	"Power Room Key"	1
60:	"MO Disk"	1
61:	"Lab Card Key"	1
62:	"Master Key"	1
63:	"Platform Key"	1

Examples:

~~~~~

Here you find some examples how the relating memory addresses could look like inside the Hex-Editor.

Inventory:

-----

```

Hand Gun__ 10 Shots          30 Rockets          always 1
H&K VP70 \ |                | Big      |          Slot 5          for key items
          | | Small         | Icon    |          is empty   G-Virus |
          | | Icon          | Part 1 |          |                \ | Small
          | | |            Slot 2  | |    |          |                | | Icon
000005CE: 020A0000 01010000 111E0100 111E0200 00000000 63010000 52010000 ...
          Slot 1  | | |      \      /      |      Slot 5  | | |      Slot 7  ...
                  | | Small \      /      Big          | | Small
                  | | Icon  \      /      Icon          / | Icon
Knife__ / |                Rocket  Part 2  Plat-  |
          always Launcher          form always
          1 for \_____ /      Key 1 for
          knife      \ /          key items
                  The Rocket Launcher
                  occupies 2 Slots

```

The same items stored inside the "magic" chest would look like this:

-----

```

inside the chest area the ____ for the rocket launcher in the chest
item size isn't important \      / area, inside that slot now the
anymore but should set to 00 | | vaccine was placed
                             | |
000005FA: 020A0000 01010000 111E0000 4E010000 00000000 63010000 52010000 ...
          Slot 1  Slot 2  Slot 3  Slot 4  Slot 5  Slot 6  Slot 7  ...

```

Save Type:

-----

```

Address      Values in hexadecimal form          ASCII-Display
-----      -----
00000000: 4245534C 54532D30 30393734 30300000 ... : BESLES-0097400
                                     |
                                     Gamesave is from the german
                                     version of Resident Evil 2

```

Revision History:

~~~~~

Sep/10/2006

First version of this guide

Oct/05/2006

- fixed an memory address error in the chest area section
- small changes within the object list

Copyright:

~~~~~

Copyright Markus Surm 2006

This may be not be reproduced under any circumstances except for personal, private use. It may not be placed on any web site or otherwise distributed publicly without advance written permission. Use of this guide on any other web site or as a part of any public display is strictly prohibited, and a violation of copyright.

This document is copyright Pesthauch666 and hosted by VGM with permission.