FireRed and LeafGreen ACE

Mail Glitch & Arbitrary Code Execution Setup Guide

-SYSTEM REQUIREMENTS-

Systems:
GameBoy Advance/SP, Nintendo DS Phat/Lite, Nintendo 3DS (CFW via open_agb_firm)

Emulator:
Tested Working on mGBA 0.10.2 or later (Must enable GBA BIOS, use Google)

WARNING: Not guaranteed to work on Analogue Pocket, Emulation Handhelds or GB Operator. iPhone/Android Emulators will also likely crash or experience issues. Some Reproduction copies of the games will work, but it varies based on quality of the Reproduction cartridges.

 Game Version:
Works on English 1.0/1.1, French, German, Spanish, and Italian copies

This setup will not work on Japanese FRLG.
The Mail Glitch functions differently in those games.

-MAIL GLITCH SETUP-

Required Pokemon/Moves/Items:
 a. Pokemon with the move KNOCK OFF (CH'DING the Trade Farfetch'd Learns at Lv 21)
 b. Pokemon with the move RECYCLE (MIMIEN the Trade Mr. Mime Learns at Lv 33)
 c. A consumable Berry (SITRUS BERRY works best, because it triggers at 50% HP)
 d. RETRO MAIL, purchasable at CELADON CITY DEPT STORE for $50. (Buy A LOT)

Performing the Glitch:

1. Prepare Pokemon Party for a Double Battle, in this order.

Lead Pokemon: Any Pokemon holding consumable Berry
2nd Pokemon: Pokemon who knows KNOCK OFF

3rd Pokemon: Pokemon who knows RECYCLE, Holding RETRO MAIL
Pokemon 4-6: Irrelevant, just don't give them RETRO MAIL

SAVE the game HERE, before the next step.

2. Enter a Double Battle with any Trainer. (VS Seeker Rematches are OK!)

NOTE: If using the MIMIEN Route for 0x0351, you will gain EVs from this Double Battle
if MIMIEN gains any EXP. In this case, the Double Battle against RAPIDASH &
NINETALES
on ROUTE 16 is preferred. They only give SPEED and SPDEF EVs, which won't affect
MIMIEN's corruption into 0x0351.

3. Make your Lead Pokemon consume the held Berry. Take as many turns as needed.

4. Turn after Berry is consumed, Switch lead Pokemon with RECYCLE Pokemon
Have KNOCK OFF Pokemon target the incoming RECYCLE Pokemon with KNOCK OFF.

5. If successful, the game should say "[_] knocked off [_]'s RETRO MAIL"

6. Next turn, the Pokemon who was knocked off, uses RECYCLE.
If successful, the game should say "[_] found one [_] BERRY!"

7. At this point, the glitch is complete and you can finish the Double Battle.

NOTE: It's OK if your Pokemon consumes the recycled BERRY during the battle.
After the battle, as long as it's not still holding RETRO MAIL, the glitch was successful.

USING the MAIL GLITCH:

1. For safety, empty BOX 3 SLOT 1 in the PC.
Pokemon Data will be corrupted in this spot, if you write a Mail message on your 6th
POKEMON.

2. Fill your PARTY with 6 Pokemon, and give 5 of them RETRO MAIL.
You will be prompted to enter a message. Any message is fine. POKEMON -> ABRA is
the fastest to enter.

3. Give RETRO MAIL to your 6th Pokemon, you should see a message entry screen
with ??? in every word slot. This is 100% confirmation of glitch success.

4. DO NOT enter any words in the ??? slots yet.
You can either press START to confirm, or B to back out of the message screen.
Your 6th Pokemon should appear to NOT have held Mail.

5. You can duplicate items, by making your 6th Pokemon hold them.
Give them RETRO MAIL, and then press START to confirm on the ??? screen.
1x RETRO MAIL will be consumed, you'll receive a copy of the Held Item.
Your Pokemon should still be holding the original Item.
Can be repeated until you run out of RETRO MAIL.

6. You can safely remove RETRO MAIL from all your other Pokemon.
This WILL NOT permanently deactivate the glitch.
You can access the glitched ??? Mail Slot by giving RETRO MAIL
to a full party again.

NOTE: The in-game trade JYNX is holding FAB MAIL, this does seem to interfere
with the glitch in some cases. Avoid trading Pokemon holding MAIL to preserve the Mail
Glitch setup.

-Pre E4 HOCK 2.O Route for 0x0351-

PROS:
Simple setup that requires only two Mail Message entries.
Same steps on all versions and languages (except Japanese.)
A funny name.

CONS:
Requires two battles for EV Training

Requirements
1. MAIL GLITCH SETUP has been completed.

2. Purchased or Cloned at least 8x HP UPs.
These can be bought for $9800 at CELADON DEPT STORE.

Performing the Glitch:
This method will work for both FireRed and LeafGreen, on all EU languages, and only requires entering two rounds of Mail Glitch messages.

Make sure BOX 3 SLOT 1 is empty, then give RETRO MAIL to your 6th Pokemon, you should see a message entry screen with ??? in every word slot.

Enter the following messages in the exact order shown below, for your language.
Do not enter a word into the first ??? slot.

English:
??? | HIGHS
I CHOOSE YOU | WANDERING

French:
??? | HAUTEUR
CE SERA TOI | NOMADE

Italian:
??? | SUL SERIO
FATTI AVANTI | CRUDELE

German:
??? | HÖHEN
DU BIST DRAN | LATSCH

Spanish:
(?) | INFANTIL
TE ELIJO | RIDÍCULO

After confirming the message, a glitch species should appear in BOX 3 SLOT 1.
It should have the following characteristics:

Level 4
Female
Species name is one of the following depending on your language:
English: HOCK
French: TONNE
Italian: CK
German: HOCK
Spanish: ENO

If it has these characteristics, then you have obtained species 0x200.

Move 0x200 from BOX 3 SLOT 1 into your party then give it the 8x HP UPs.

0x200 is safe to use in battle and switch out to gain Effort Values. You don't even need to worry about gaining too much experience.

Use 0x200 in battle against the following POKEMON to gain the correct Effort Values. Make sure it only gains EXP from these two battles, and no other POKEMON.

1x HP EV (CATERPIE in VIRIDIAN FOREST)
1x ATTACK EV (DODUO on ROUTE 16 / MANKEY on ROUTE 22)

After completing these two battles, place 0x200 back into BOX 3 SLOT 1 then give RETRO MAIL to your 6th Pokemon, you should see a message entry screen with the same words entered earlier.

To complete the corruption into 0x0351 the position of the 2nd and 4th words must be swapped. You do not need to re-enter/modify the 1st and 3rd word slots.

English:
??? | WANDERING
I CHOOSE YOU | HIGHS

French:
??? | NOMADE
CE SERA TOI | HAUTEUR

Italian:
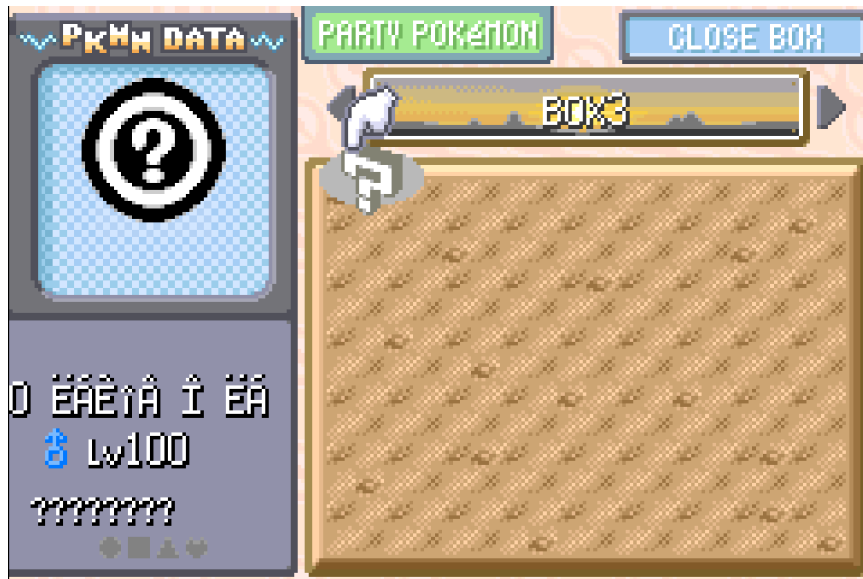??? | CRUDELE
FATTI AVANTI | SUL SERIO

German:
??? | LATSCH
DU BIST DRAN | HÖHEN

Spanish:
(?) | RIDÍCULO
TE ELIJO | INFANTIL

Press START and select YES to confirm the Mail Message entry, then open the PC and navigate to BOX 3 SLOT 1, you should see a POKEMON that looks like this.

The name might vary slightly between FireRed/LeafGreen in other languages, but it should be very similar to this.

You've successfully created ACE Species 0x0351!

-Post E4 Empty Slot Route for 0x0351-

PROS:
Simple setup that requires no EV Training or complex Data Swapping.
Same steps on all versions and languages (except Japanese.)

CONS:
Must have defeated the Elite 4 on the save file.

Requirements
1. MAIL GLITCH SETUP has been completed.

2. For this method you must have completed the Elite 4, to unlock the MOVE1 and MOVE2 categories in the Mail Message entry.

3. SEEN POKEDEX entry for MAGIKARP
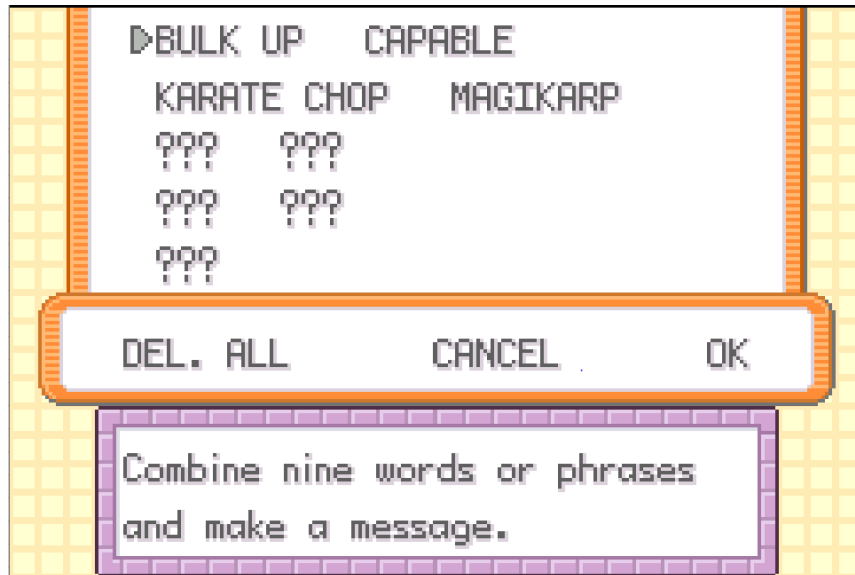
Performing the Glitch:

This method will work for both FireRed and LeafGreen, on all EU languages, and only requires entering a single Mail Glitch message.

Make sure BOX 3 SLOT 1 is empty, then give RETRO MAIL to your 6th Pokemon, you should see a message entry screen with ??? in every word slot.
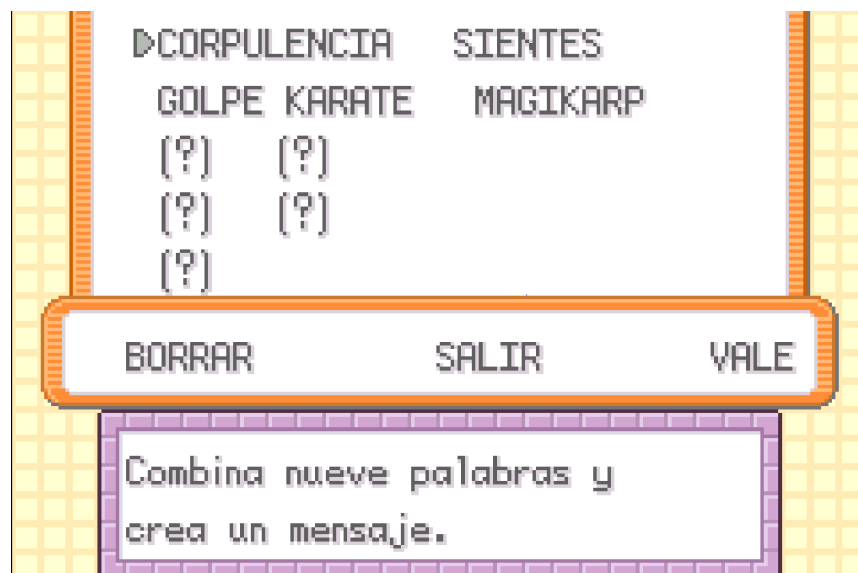
Enter the following messages in the exact order shown below, for your language.

NOTE: For MAGIKARP you MUST use the POKEMON category, not A-Z Mode, not POKEMON2.

ENGLISH:

SPANISH:
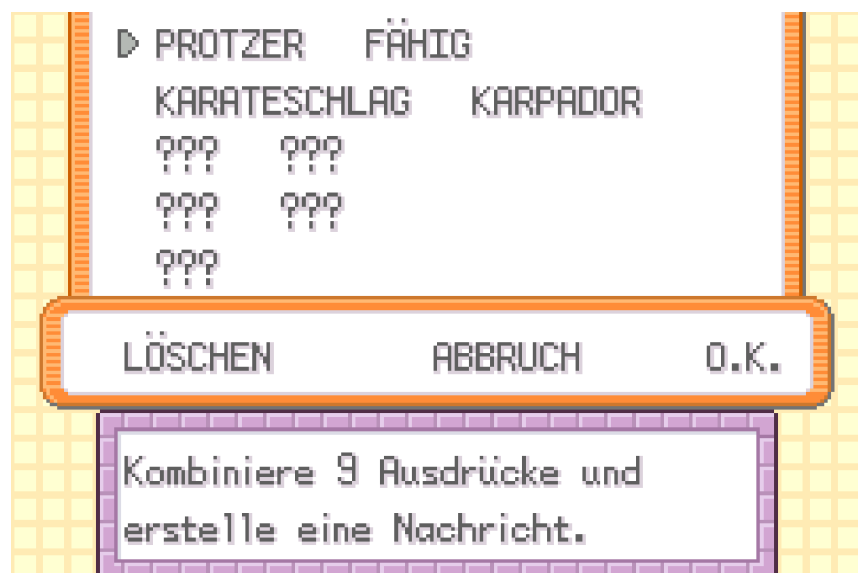
```
▷CORPULENCIA   SIENTES
  GOLPE KARATE   MAGIKARP
  (?)    (?)
  (?)    (?)
  (?)
```

```
BORRAR        SALIR       VALE
```

```
Combina nueve palabras y
crea un mensaje.
```

GERMAN:

```
▷ PROTZER   FÄHIG
  KARATESCHLAG   KARPADOR
  ???    ???
  ???    ???
  ???
```

```
LÖSCHEN        ABBRUCH      O.K.
```

```
Kombiniere 9 Ausdrücke und
erstelle eine Nachricht.
```

FRENCH:

```
▷ GONFLETTE   CAPABLE
  POING-KARATE   MAGICARPE
  ???   ???
  ???   ???
  ???

TOUT EF.       ANNULER      OK

Avec neuf (groupes de) mots,
créez un message.
```

ITALIAN:

```
▷GRANFISICO   USATE
 COLPOKARATE   MAGIKARP
 ???   ???
 ???   ???
 ???

CANCELLA       ESCI         OK

Con nove espressioni,
crea un messaggio.
```
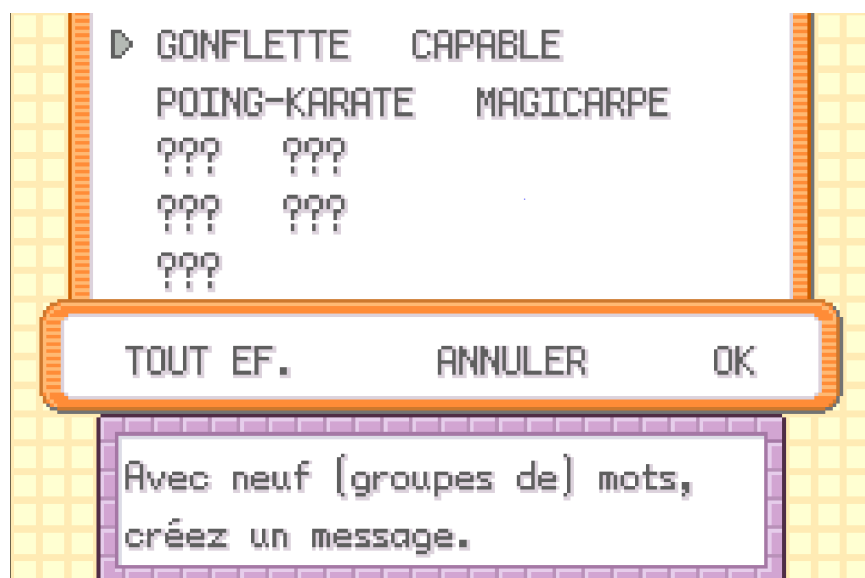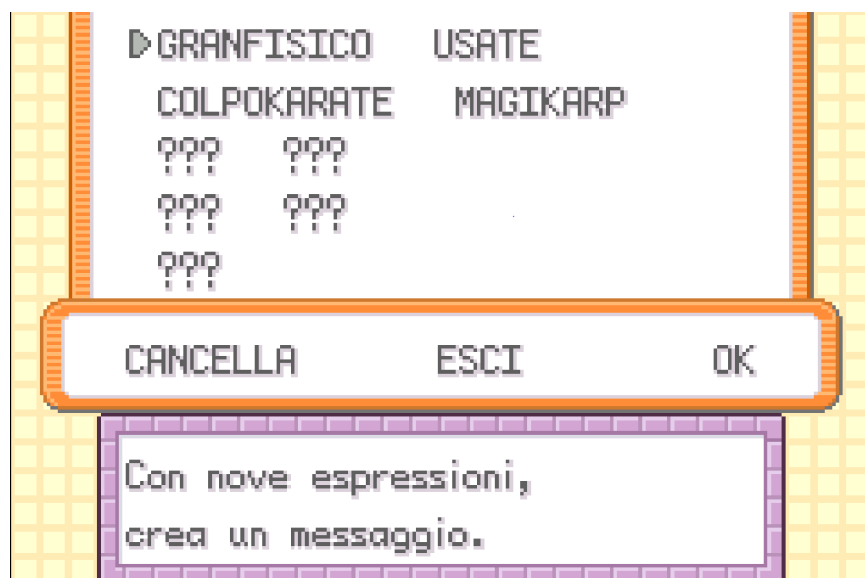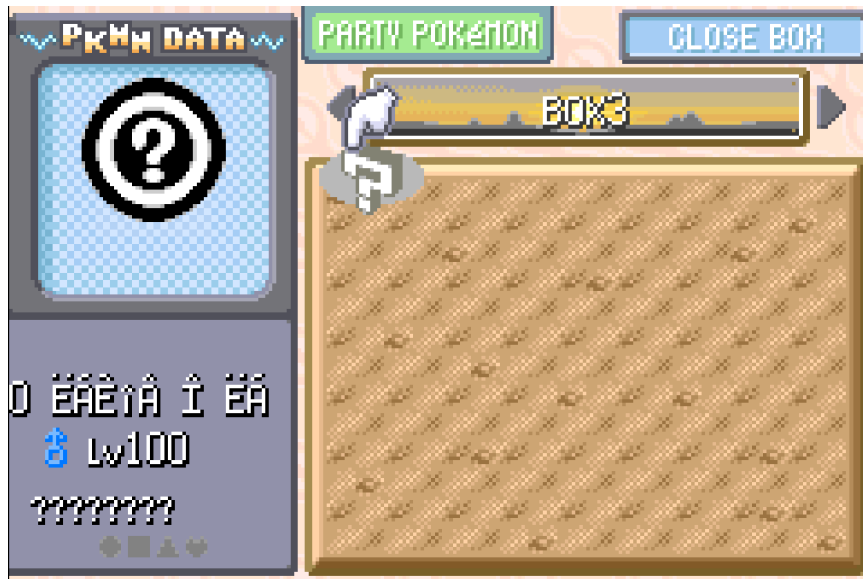
Press START and select YES to confirm the Mail Message entry, then open the PC and navigate to BOX 3 SLOT 1, you should see a POKEMON that looks like this.

The name might vary slightly between FireRed/LeafGreen in other languages, but it should be very similar to this.

You've successfully created ACE Species 0x0351!

-MIMIEN Route for 0x0351-

PROS:
Can be done as early as CELADON CITY.
Requires only a single Mail Message entry.
Same steps on all versions and languages (except Japanese.)

CONS:
Requires careful EV Training of MIMIEN, which cannot be undone.

Requirements
1. MAIL GLITCH SETUP has been completed.

2. MIMIEN (the trade MR. MIME) with fewer than:
81 EVs in HP
3 EVs in ATTACK
32 EVs in SPEED

MIMIEN is also the earliest available user of RECYCLE, which is required for the Mail Glitch.
MR. MIME learns RECYCLE at Level 33, but gaining EXP also causes EV gains.

There are two approaches to MIMIEN:

A. Raise ABRA to Level 33 before trading for MIMIEN. (RECOMMENDED)

    Trade Pokemon will always have 0 EVs and be the same level as your POKEMON,
    with the default moveset for that level.
    ABRA learns no level up moves, but TM29 PSYCHIC is a good option. (SAFFRON
    CITY)
    Remember to SKIP EVOLUTION from Level 16 onward.

B. Carefully track POKEMON battled with MIMIEN while levelling. (ADVANCED)

    Every POKEMON fought will [give EVs to a specific stat](#), if MIMIEN gained EXP.
    This includes EXP SHARE and SWITCH training.

MIMIEN must have exactly 81 HP EVs, 3 ATK EVs, AND less than 32 SPEED EVs
in order to successfully create 0x0351. (DEF/SPATK/SPDEF EV values don't matter)
REMEMBER! EVs CANNOT BE RESET IN FIRE RED AND LEAF GREEN.

Assuming a starting point of MIMIEN with 0 EVs, you can quickly achieve the correct
EVs for 0x0351 with the following steps:
1. Battle 3 DODUO on ROUTE 16 to gain +3 ATK EVs. (WEST OF CELADON CITY)
2. Battle 1 CATERPIE in VIRIDIAN FOREST to gain +1 HP EV.
3. Give MIMIEN 8x HP UP vitamins to gain +80 HP EVs.
    a. Buy one HP UP, and use MAIL GLITCH to duplicate it 8 times.

Once MIMIEN has exactly 81 HP EVs and 3 ATK EVs, place him in BOX 3 SLOT 1.

Use the Mail Glitch to access the glitched slot, and enter the following:

ENGLISH:	SPANISH:	FRENCH:
??? WANDERING	??? RIDÍCULO	??? NOMADE
??? ???	??? ???	??? ???
GERMAN:	ITALIAN:	JAPANESE:
??? LATSCH	??? CRUDELE	IMPOSSIBLE
??? ???	??? ???	

Press START and select YES to confirm the Mail Message entry, then open the PC and navigate to BOX 3 SLOT 1, you should see a POKEMON that looks like this.

The name might vary slightly between FireRed/LeafGreen in other languages, but it should be mostly identical to this.

You've successfully created ACE Species 0x0351!

-NINO/NINA Route for 0x0351-

PROS:
Can be done as early as FUSCHIA CITY. (For Move Deleter access)
Avoids needing specific EVs on MIMIEN (Earliest RECYCLE user for the Mail Glitch.)
Works on all versions and languages (except Japanese.)

CONS:
EV Training & multiple Mail Message Data Swaps make crashes/errors more likely.
Requires specific SEEN POKEDEX entries.
Different setup for FireRed vs. LeafGreen

Requirements
1. MAIL GLITCH SETUP has been completed.

2. Trade NIDORINO/NIDORINA from Route 11 Building, 2nd Floor (East of VERMILLION)
        These Pokemon must be totally untrained, or freshly traded.

You cannot use the NIDORAN-M/NIDORAN-F from Route 5.

3. SEEN POKEDEX entries for:
EEVEE (Bill's PC at CERULEAN CAPE)
HITMONCHAN (Fighting Dojo in SAFFRON CITY)
MAGIKARP (Salesman in MT. MOON Pokemon Center)
RHYHORN (GIOVANNI in ROCKET HIDEOUT)

This section will be different for Fire Red & Leaf Green.
DO NOT SAVE AGAIN UNTIL 1st ACE CODE IS SAFELY EXECUTED, as EVs CANNOT BE RESET.

FIRE RED	LEAF GREEN
STEP 1: Take NINA to the Move Deleter in Fuschia City. Delete all moves but POISON STING.	STEP 1: Take NINO to the Move Deleter in Fuschia City. Delete all moves but POISON STING.
Place NINA in Box 3 Slot 1, use the Mail Glitch to access the glitched slot, and enter the following:	Place NINO in Box 3 Slot 1, use the Mail Glitch to access the glitched slot, and enter the following:
??? HITMONCHAN ??? EEVEE	??? HITMONCHAN ??? EEVEE
Use the POKEMON category, not A-Z Mode, not POKEMON2.	Use the POKEMON category, not A-Z Mode, not POKEMON2.
STEP 2: NINA should become a Level 0 WIGGLYTUFF.	STEP 2: NINO should become a Level 0 WIGGLYTUFF. Go to CELADON CITY DEPT STORE Buy a POKEDOLL for $1000. Give NINO the POKEDOLL.
DO NOT OPEN IT'S SUMMARY, DO NOT USE A MOVE IN BATTLE. YOUR GAME WILL CRASH.	This has Index Number #80 and will become PETAL DANCE after the next swap.
Place it in the DAYCARE south of CERULEAN CITY.	
Take 2 steps, remove from DAYCARE.	Enter the next Glitch Mail message:
It will be Level 1 all its glitch moves are overwritten.	??? EEVEE ??? HITMONCHAN
Place NINA the WIGGLYTUFF into Box 3 Slot 1.	STEP 3: NINO should become a NIDORINO again, but now should have PETAL DANCE as its Second Move. Swap this to the 1st Move Slot.
Use the Mail Glitch to access the glitched slot, and enter the following:	
??? MAGIKARP	

??? RHYHORN

STEP 3: NINA should become a PARASECT.
We've shuffled around GROWTH, ATTACKS, and EVs.

WIGGLYTUFF's 1st Move was SING.
Which is now PARASECT. (Both Index #47)

What used to be NIDORINA is now 30 HP EVs.
(Both Index #30)

Take out this PARASECT and give it:
5x HP UP (+50 HP EVs)

Use PARASECT to battle:
1x CATERPIE (+1 HP EVs)
3x DODUO (+3 ATK EVs)

Bringing NINA to 81 HP / 3 ATK which is 0x0351 in Hex.

STEP 4: Place NINA the PARASECT into Box 3 Slot 1.

Enter the final Glitch Mail Message:

??? EEVEE
??? HITMONCHAN

NINA should become 0x0351, which will have a name like: "/EAEiA I EA"

This will become 80 HP EVs after the next swap.
(Both Index #80)

Enter the next mail message:

??? MAGIKARP
??? RHYHORN

STEP 4: NINO will still be a NIDORINO, but its ATTACKS, MISC, and EVs have all shuffled.

DO NOT OPEN IT'S SUMMARY, DO NOT USE A MOVE IN BATTLE. YOUR GAME WILL CRASH.

Use Switch Training to battle:
1x CATERPIE (+1 HP EVs)
3x DODUO (+3 ATK EVs)

Bringing NINO to 81 HP / 3 ATK which is 0x0351 in Hex.

STEP 5: Place NINO in Box 3 Slot 1.

Enter the final Glitch Mail Message:

??? HITMONCHAN
??? EEVEE

NINO should become 0x0351 which will have a name like: "0 EAEiA I EA"

-Empty Slot 0x1453 Route for 0x0351-

PROS:
Can be done as early as CELADON CITY. (To perform Mail Glitch)
Avoids needing specific EVs on MIMIEN (Earliest RECYCLE user for the Mail Glitch.)
Doesn't require any other Trade POKEMON or POKEDEX entries

CONS:
Only works on ENGLISH FireRed and LeafGreen 1.0/1.1

Requirements
1. MAIL GLITCH SETUP has been completed.

2. PC BOXES must be completely empty from BOX 1 SLOT 19 thru BOX 14 SLOT 30
NOTE: There is an optional bootstrap to eliminate this requirement, which will be covered below.

Creating 0x1453 from Empty Slot
Make sure BOX 3 SLOT 1 is empty, then give RETRO MAIL to your 6th Pokemon, you should see a message entry screen with ??? in every word slot.

First click the DEL. ALL option in the menu to set all message slots from ??? to -------

Enter the following message in the exact order shown below.

------- CHLOROPHYLL
OFF BADLY

Press START and then click YES to confirm MAIL Message entry.

Go to the PC and enter MOVE ITEMS mode.

There should now be a Glitch POKEMON in BOX 3 SLOT 1.

Hover the Glitch POKEMON and TAKE the ?????? Item and put it in your BAG.
NOTE: The ?????? Item can be safely TOSSED later w/o negative effects.

Exit the PC, give RETRO MAIL to your 6th Pokemon and re-enter the message entry screen.

Enter the following message in the exact order shown below.

UNDERSTAND CHLOROPHYLL
TAKE THAT RARE

Press START and then click YES to confirm MAIL message entry.

The Glitch POKEMON in BOX 3 SLOT 1 will have become 0x1453, which can be used to activate Arbitrary Code Execution. It should have the name: [/   x;   Ï]

Using MOVE POKEMON mode in the PC, and press SELECT to change the Hand to YELLOW.

Grab 0x1453 in BOX 3 SLOT 1 and MOVE it to BOX 1 SLOT 18.

0x1453 can cause a blue pop-up with the message "Save Completed. OK!" when interacted with in the PC BOX. However, this does not have any negative effects.

0x1453 ACE isn't ideal for general use because it requires all BOX spaces after BOX 1 SLOT 19 to be empty, but it can be used to generate 0x0351 and then RELEASED after.

Optional 0x1453 BOX Skip Bootstrap
If there are too many POKEMON on the save file to feasibly RELEASE everything after BOX 1 SLOT 19 then you can use the MAIL Glitch to create a second glitch Pokemon that bypasses this requirement.

Give RETRO MAIL to your 6th Pokemon, and the MAIL message entry screen should be set to all ??? once again.

Enter the following message in the exact order shown below.

LEFT OPPONENT
LEFT IDOL

Press START and then click YES to confirm MAIL message entry.

Using MOVE POKEMON mode in the PC, and press SELECT to change the Hand to YELLOW.

Grab the new Bootstrap Glitch POKEMON in BOX 3 SLOT 1 and MOVE it to BOX 1 SLOT 21.

Also make sure to have at least one normal POKEMON in the beginning of BOX 1.

This should allow 0x1453 to safely execute ACE without emptying BOX 2 thru 12.

Using 0x1453 ACE to Create 0x0351
Enter the following BOX names, which will create 0x0351 in Box 10 Slot 19

INCLUDE ALL BLANK SPACES!

```
Box   1: 4 C U n n R ... o
Box   2: P R o B F w m _
Box   3: _ _ W U 0 o _ _
Box   4: _ V H ? n _ _ _
Box   5: / F Q m D F Q m
Box   6: _ _ _ _ _ ... _
Box   7: _ _ _ _ _ ... _ _
Box   8: _ _ _ _ ... _ _ _
Box   9: _ _ _ ... _ _ _ _
Box 10: _ _ _ _ _ ... o a
Box 11: ... o _ _ _ _ _ _
```

Using MOVE POKEMON mode in the PC, press SELECT to change the Hand to YELLOW.

Grab 0x1453 in BOX 1 SLOT 18 and then hover over a normal POKEMON, press A to SWAP once, and then A to SWAP again.

The "Save Completed. OK!" blue screen should appear and then disappear.

If the game crashes, then either the code has a typo OR the other BOX spaces weren't correctly cleared of POKEMON data.

Navigate to BOX 10, there should now be a Glitch POKEMON in SLOT 19, that looks like this:

You've successfully created ACE Species 0x0351!

0x1453 can now be safely RELEASED, as well as the BOX Skip Bootstrap, if it was needed.

-FIRST ACE CODE EXECUTION-

1. Completely Empty BOX 13 and BOX 14. They MUST BE EMPTY for ACE to EXECUTE, aside from the first row of BOX 13.

2. Using MOVE POKEMON mode in the PC, and press SELECT to change the Hand to YELLOW.

3. Select the Glitch Pokemon 0x0351 in BOX 3 SLOT 1 and MOVE it to BOX 13 SLOT 1.

4. Place another random Pokemon into BOX 13 SLOT 2.

5. Enter the following BOX Names. INCLUDE ALL BLANK SPACES!

```
Box 1: z ♀ l o k … Q n CHARACTER 3 is LOWERCASE L not No. 1
Box 2: ♀ Q n n U U n _
Box 3: _ _ y ' ? q _ _
Box 4: A A A A A A A A
Box 5: A A A A A A A A
Box 6: A A A A A A A A
Box 7: A A A A A A A A
Box 8: A A A A A A A A
Box 9: A A A A A A A A
Box10: A A A A A A A A
Box11: A A A A A A A A
Box12: A A A A A A A A
Box13: A A A A A A A A
Box14: _ F o _ _ _ _ _
```

6. Use YELLOW Hand to pick up your Pokemon in BOX 13 SLOT 2.

7. Hover over Glitch Pokemon 0x0351, and then Press A to SWAP.

8. If the game doesn't crash, Place 0x0351 in BOX 13 SLOT 2.

If the game DOES crash, then there's either a typo in the BOX names
OR invisible Pokemon Data in Box 13/14 from releasing/transferring.

Drop Pokemon into all these spaces, and move them away to fully clear it.
Invisible Bad Eggs can also appear in Box 13.
Group Selecting with the YELLOW hand will delete them.

9. BOX 14 should now be named [_ F o ì _ _ _ _]

10. You have successfully set up FRLG Grab ACE, and the Box 14 Exit Bootstrap.

YOU MAY NOW SAVE THE GAME, CONGRATULATIONS!

Find ACE Codes to use @ https://e-sh4rk.github.io/CodeGenerator/index_frlg.html

Only codes marked (move ACE) will NOT work with this setup.

Codes with [exit = "GrabACEExit"] can be used without modification
OR changed to [exit = "Bootstrapped"] to avoid changing the names of BOX 10 & 11.

Any code marked as (Bootstrapped) will work automatically, until you rename BOX 14.

If so, you must run the above code again to restore BOX 14 name: [_ F o ì _ _ _ _]