Motorola BIONIC with JellyBean to GSM (ATT MVNO). Rev

1.1

Bob Phone 6-7-2014(based on SNOOP79 Razr method on Howard Forums, with specifics from CELLZEALOT for the GSM hack. All combine here as a way to remind ME what to do next time I need to flash one...)

Once software set up and know what you are doing, it takes about 30 minutes to complete this. 8 minutes to flash phone in step 1.

20 minutes for the other changes and reboots.

Install latest moto drivers install latest RDS lite download motorola JB sfb file RadioComm 11.11.11 Razr Blade Root Mirror (I use the VM machine way to root. See below for files.) XDA thread on Bionic - GSM (point where Jelly Bean starts being discussed) Cellzolt's BUILD.PROP (this MUST have its properties set to rw-r- - r- - See below)

<u>1-Flash stock latest JellyBean Bionic firmware/rom</u> <u>cdma targa 9.8.10-72-VZW-22 and rooting</u>

-Pull old SIM and leave no SIM in phone at this point.

Boot into Recovery by holding volume up and down while you phone turns on (yes phone is supposed to be off) scroll down to choose recovery then press volume UP to select it.



once on recovery wipe all data / factory reset and cache. *To get from ANDROID ON HIS BACK to this table of options, press and hold VOL- and tap VOL+. Then use VOL- to scroll down.* (Vol +/- scroll here, power button is enter)



once done choose "reboot system now" and immediately hold volume UP and DOWN to bring up bootloader menu again.

Now choose "AP Fastboot"





d? Fastinot Flash Hule (5) M.77 eMC Info: Size 166 To return to normal mole - first press power key to power down Device is LOCKED. Status Cole: 0

Battery (K (K to Program Connect USB Bata Cable

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| RSD Lite v6.1.5 Multi-Hash / Mul nfig Help | ti-Flex Tool |
|--|--|
| Filename: E:\cdma_targa_9.8.20-7 evice Properties | 2_VZW-22_cfc.xml\cdma_targa_9.8.20-72_VZW-22_cfc.x Start Show Device Close |
| | Name Date modified Tj e cdma_targa_9.8.20-72_VZW-22_cfc.xml 9/11/2013 11:18 AM XI |
| Model Port No. Port T 1 2 3 | ess Result |
| 4 5 6 | File name: cdma_targa_9.8.20-72_VZW-22_cfc.xml Open Files of type: All Files (*xml;*.shx;*.sbf;*.hs;*.hsx;*.zip;*.bzir_ Cancel |
| 7 8 9 10 | C Open as read-only |
| 11 12 13 | |
| 14 | |

On PC, pen RSD lite, click on the doted button and browse the XML from the extracted JB SFB file.

Click "Start" to flash. This will take a few minutes this is loading new stock JB OS on your phone. Note this screen shot is from a RAZR flash, but other than names of files and phones, process is the same.

| File | ename: Z:\Desktop\cdma_spy | der_9.8.20-72 | 2_VZW-16_11 | | 8.20-72_VZ StartShart | iow Device Llose | |
|---|----------------------------|--|-------------|--|--|------------------|----|
| Device Properties IMEL/ESN/MEID: N / A Technology: N / A Software Version: N / A Flex Version: N / A Boot Version: N / A DRM Version: N / A | | | | File Properties Filename: cdma_spyder_9.8.20-72_VZW-16_1ff.xml Creation Date: 02/02/2013 05:39:00 File size: 1812 Sofware Version: 9.8.20-72_VZW-16 For Phone Model: SPYDER | | | |
| | | | | | | | |
| | Model | Port No. | Port Type | IMEL/ESN/MEID | Status | Progress | T |
| 1 | Fastboot CDMA, SPYDER S | 1 | USB | N/A | 5/16 reboot-bootloader | >> | 17 |
| - | | | | L'AND PORT | | | |
| | | 2 | | | | | |
| | | 2 | | | | | |
| | | 2 3 4 | | | | | |
| | | 2 3 4 5 | | | | | |
| | | 2 3 4 5 | | | | | |
| | | 2 3 4 5 6 7 | | | | | |
| | | 2 3 4 5 6 7 8 | | | | | |
| | | 2 3 4 5 6 7 8 | | | | | |
| | | 2 3 4 5 6 7 8 9 | | | | | |
| | | 2 3 4 5 6 7 8 9 10 11 | | | | | |
| | | 2 3 4 5 6 7 8 9 10 11 | | | | | |
| | | 2 3 4 5 6 7 8 9 10 11 12 12 | | | | | |

If get ERROR in state 5/22 FAILED, may have to modify xlm batch that tells RDS what to do as shown below Note, must unpack the downloaded .zip to get to the .xml file. Open in a text editor NOT Internet Explorer to save edit.

"Okay never mind! I found the answer! I have a bionic working flawlessly on JB now.. Other than losing root.. :-(. I found the answer on a RAZR forum but can't find it but here is the same answer from Xda.

- 1. open the file : cdma_targa_9.8.2O-72_VZW-22_cfc.xml
- 2. remove the lines : <step operation="oem" var="fb_mode_set" />

AND <step operation="oem" var="fb_mode_clear" />

ALSO when phone reboots, be ready and, hold VOL- and

VOL+ and use down button to get back into AP FAST BOOT. If DON'T RSD will never say PASSED on Progress but probably still ok.

On the next normal reboot, you will see the android with his chest being updated. Perfectly normal.

First boot takes 8 minutes!

Then: (Note, these are a little closer to center than you may think, had the best luck with 3-4 being pressed just along Emergency Call button)



Over and over again, 1,2,3,4 1,2,3,4 eventually you will get it!!!!! (3,4 are right next to emergency call box)

Once everything is done and phone booted up to launcher skip activation screen by taping the corners <u>and finish the setup wizard</u>. Do NOT enter gmail account, say NONE as we are going to factory reset the phone one more time next.

0. Go to SETTINGS, STORAGE and be sure the internal SD card is formatted and mounted and has 8meg available. Have had 2 problems with not mounted once and wrong format other time. First time, Did a FACTORY RESET(settings->privacy->Factory Data reset, with FORMAT INTERAL STOREAGE checked from within phone. --→Second time, just clicked on FORMAT INTERNAL STORAGE from drop down notification bar. This must be done to format internal SD card or you will have no space for pictures etc. (Still had to Factory reset)

-See Android with heart again and this reboot takes another 6 minutes.

After Reboot, continue with 4 corners bypass above and *enter GOOGLE ID, ect and set up to get on Wi-Fi* as need to download a BUILD.PROP program below (Or side load If don't want to put google ID in (like giving phone to a new person)

ROOTING using a VM on Win7 x86

1a-Enable USB debugging mode

Root phone using razr blade (folow on screen instructions)

See next page to root a JB Bionic on .22Everything you need to root the Bionic on JellyBean .22 is here and it is automatic. The process will walk you through connecting to the Samba file share, connecting the phone in USB debugging mode, and OF COURSE, it will run the process to root the phone. Kind of paint to set up, but makes re-rooting EASY as just run the VM again and the built in scripts root it for you.

Here are the steps from: http://forum.xda-developers.com/showthread.php?t=2256439

1) Install Sun VirtualBox on your Windows PC. http://download.virtualbox.org/virtu...-84980-Win.exe

Note: We've had one report that this file also works with VMWare Workstation and VMWare Player. (Bob Note: NOPE did not....) If you don't want to install VirtualBox feel free try the file with VMWare.(Bob Note: NOPE)

2) Download the VirtualBox .ova file containing the Linux VM from one of the following links: <u>http://www.knite.net/Bionic/Root_Bio...20130501-4.ova</u>

http://www.mediafire.com/?a2i6forosp77xrd

https://dl.dropboxusercontent.com/s/...7IdDetSvw&dl=1

3) Import the .ova file into VirtualBox. (Click "File" then "Import Appliance".)

4) Start the imported VM in VirtualBox (Click the big "Start" Button. It has a green arrow icon.)

5) Follow the instructions on the Linux console on the PC. *Will be following on-screen instructs to:*

- 1. setting up a REMOTE STORAGE under FILES from regular APP drawer.
- 2. Then need USB debugging ON
- *3. MTP as the USB type.* NOTES:
- a. First be sure VM networking is set on the right adapter in laptop and has an IP. Will know as VM will pop error when run machine if there is a network problem.)
- b. On Bionic, under APPS-> find FILES. Setup new <u>remote file</u>.
- c. Bionic setting to enter via bionic keyboard are show on PC when running VM (IP address of PC, mygroup ,share, guest,BIONIC) Follow instructions on PC.
- d. Do what PC says about DEV MODE and change connection to MTP.
- e. Follow PC instructions, Remember to press VOL+ key as rebooting. Should get a couple vibrates on phone.)

Once rooted install "BuildProp Editor" from GooglePlay *Can use* **Root Checker** program from the Play Store to see if you have root.

2,. Radio Comm (enable ATT/TMobile Bands)

Evit

Note: on Win 7 x64, RadioComm 11.11.11 wants to REPAIR driver each time it is started. Let it... Then it says Motorola Driver Card Mismatch. Ignore.

- 1. First Selection when install is :set MA: Common first time program runs.
- 2. 1. Ensure USB is connected as PC Tools mode MTP (not Mass Storage)

| 2 | In Radiocomm go to Upper Left Drop down: MA->CDMA1X->QSC60x5 | | | | | | | | |
|------|--|--|------|--------|----------|---|--|--|--|
| c Ra | c RadioComm v11.11.11 Common (MDM 6x00) | | | | | | | | |
| Main | Main Settings Features Common Applications Driver Details Help | | | | | | | | |
| | MA 🔹 🕨 | | 3G | ▶ nnel | Set CDMA | 1 | | | |
| | Evit | | 3GSM | | Set GSM | | | | |

| Band | CDMA1X → Common → A GSM ✓ M | Set WCDMA |
|------------|--|--|
| Set | Get Get | IMSI MEID |
| FTM CDM | A FTM Common 1 FTM Commo CDMA_WVFRM Misc CDMA 1 DWD OSS 1 PST USB Driver: | DIN 2 FTM Common 3 FTM GSN |
| RadioCon | nm v11.11.11 Common (MDM 6x00) | |
| Main Setti | ngs Features Common Applicatio | ns Driver Details Help |
| FTM | RS232 RS232 Settings | ▶ Set CDMA ▶ Set GSM |
| | USB | GNPO USB Driver |
| Band | USB Settings (GNPO Driver Only) | PST USB Driver Keep Histor |
| | TCPIP | M-Link USB Driver |
| | TCPIP Settings | IMSI MEID PESN |
| FTM | Test Command Timeout | FTM Common 3 FTM GSM FTM C |
| SET_ C | FSAC 'Clear All Files' Timeout | ET_PDM Tx_SWEEP_CAL Tx_AGCTRK_LOMoto Cmd |

3. After it comes up, switch to FTM Common1 tab on left middle and wait for the phone to enumerate purple(??) (A. in screen shot below)

| Main Settings Features Common Applications Driver Details Help | |
|---|---------------|
| Mode Channel | |
| FTM Set CDMA | KC |
| Set GSM | |
| | |
| Band | |
| Clear Status Save to The RESTART | By PDO |
| Set Get Swyerson INCL SN Fick Organization Cart Get Track ID | |
| | |
| FTM CDMA TM Common 1 FTM Common 2 FTM Common 3 FTM GSM FTM GSM BER FTM WCDMA FTM WCDMA BER FTM 10 1 1 | Setup Buttons |
| History Common A WAccess | New Script |
| Raw Data Data Data Data Likite | Blank |
| To Radio: 1876. NV_PS_IPV6_IID_I | Blank |
| Free Badio | Blank |
| 1879. NV_BCC_HDR_IM_FALL_I | Blank |
| Send Data 1880, NV_BCO_HDR_IM_RISE_1 1881, NV_VCO_TMPI | Blank |
| PM_CHARGE PM_CHARGE_SWITCH 1882, NV_VCO_DEFAULT_I | Blank |
| Fast Charge ON OFF | Blank |
| Charge OFF ON Options below apply to a WRITE only! | Blank |
| PM_CHARGE_CONFIGCET_ADC_VAI | Blank |
| IMAXSEL_FC ADC Channel Get Quick Access Buttons | Blank |
| NV FTM MODE | Blank |
| VMAXSEL , | Blank |
| Smart Battery Data | Blank |
| Fyeque Get Data LDO_CONTROL Salert LDO | Blank |
| | Blank |
| CPM TDICKIE CHADGE | Blank |
| MAXSEL TR (No File Selected) Execute C Off Execute | Blank |
| Execute Prover With Land | Blank |
| Drowse vyrne i Execute | Blank |
| | Blank |
| Wead Port SelectFort Phinaski Doccoordococoordoccoordoccoordoccoordoccoordoccoordoccoordoccoord | Blank |
| C Configure Execute 0: 0 00 0000 000000000000000000000000 | Blank |
| C Binary | Blank |
| C Hex Hex Data Port Data O000000000000000000000000000000000000 | Blank |
| | |
| | |
| | |

4. On the Middle right side in the NVAccess, scroll to NV item 1877 NV_RF_BC_CONFIG_I (B.)

| RadioComm v11.11.11 Common (MDM 6x00) | | | | | | |
|---|---|---|----------------------|--|--|--|
| Main Settings Features Common Application | s Driver Details Help | | | | | |
| FTM Channel | Set CDMA Sending Set GSM 55070000 Set GSM 000000000 Set WCDMA 000000000 | INRead' command with data | R _C | | | |
| Set Get Get | © Single | C Keep History Clear Status Save to File ESN FLEX Version Get Track ID | Radio Comm By PDO | | | |
| FTM CDMA FTM Common 1 FTM Comm | on 2 FTM Common 3 FTM | I GSM FTM GSM BER FTM WCDMA FTM WCDMA BER FTM 10 | Setup Buttons | | | |
| Misc or Common commande | | NVAccess | New Script | | | |
| Raw Data | Read Write | 1877, NV_RF_BC_CONFIG_I | Blank | | | |
| To Radio: | | Data: (Hex) | Blank | | | |
| Error Dadie | | 8703E804000002000000000000000000000000000000 | Blank | | | |
| From Radio: | | B. , | Blank | | | |
| Send Data | | For locations with more than one value, enter Hex values with no delimiters. | Blank | | | |
| PM_CHARGE PM_CHARGE_SWITCH | - | | Blank | | | |
| Fast Charge ON OFF | | | Blank | | | |
| Charge OFF ON | | Options below apply to a WRITE only! | Blank | | | |
| | | Send Offline Digital command first? | Blank | | | |
| IMAXSEL EC | - 1 | Quisk Assocs Buttage | Blank | | | |
| ADC Channel: | Get | NV FTM MODE | Blank | | | |
| • | • | | Didin | | | |

5. READ the value from the device (A.) Must get results in GREEN, not Red. Red means phone not connected right.

6. In the DATA field, Delete 16 of the 07000000.... And Replace the first 8 bytes (16 digits) with: 8703E80400000200 (B.)

7. WRITE the data to the device and power cycle. (C.)

8. Radio Comm seems to hang on quit on Win7 x64. CNT-AIT-DEL, Task manager to kill it... This will enable GSM/UMTS bands. Will ride through factory resets. Only need to re-do if FLASH phone with RSD.

2A. Load cellzellot's BUILD.PROP

- 1. Load esfile explorer for play store.
- 2. Enable ROOT EXPLORER in esFile explorer. If this doesn't work, you don't have Root.
- 3. Existing BUILD.PROP is in /system
- 4. MAKE A COPY
- 5. Copy the new one over the old BUILD.PROP in /system
- YOU MUST SET THE PERMISSIONS ON THE BUILD.PROP to rw-r—r-- using esfile explorer or the phone will boot loop/lock and you have to start over with a flash stock rom again.

2B. Rename files to avoid SIM FROM UNKNOW SOURCE problems.

 In /system/app need to rename 4 files. Stk.apk and Stk.odex and VzwPhoneService.apk and VzwPhoneService.odex to anything else. I did this, but still see that SIM warning once on reboot.

3- Factory reset again to avoid Unfortunately the process com.android.phone has stopped

over and over

1. Turn off, hold 3 finger-reset to get to recovery option. Choose Recovery.

- 2. Once android on back, Hold Vol-, Press Vol+ to get menu.
- 3. Choose Factory Reset(clear data/cache) using VOI- to scroll
- 4. Once done. Pull battery

5. Insert ACTIVATED SIM (I had problems because bought a new SIM and put it in, SIM must be activated with carrier.

6. Power up. May get 1 android.phone FC, dismiss it. And SIM is FROM UNKNOW SOURCE will appear 1 time after each reboot. Ignore.

Note: BUILD.PROP with leave the phone is WCDMA, not GSM(autoPRL). This worked fine for me.

4- Enter APN for MMS and Data

I used H2O, a ATT MVNO, and had no data or MMS. The instructions for each provider are a little different, as I think ATT and TMobile MAY work right out of the box. H2O had specific instructions for Android phones:

H2O WIKI for adding Android APN

Under Networks, APN, this is the NEW one I had to Enter.

- Name: H2O
- APN: att.mvno
- Proxy: 66.209.11.33
- Port: 80
- Username: blank
- Password: blank
- Server: blank
- MMSC: <u>http://mmsc.cingular.com</u>
- MMS Proxy: 66.209.11.33
- MMS Port: 80
- MCC:310
- MNC:410
- APN Type: default, supl, mms

5- Cell signal seems weak.

- 1. Verizon coverage and maybe CDMA in general, seems to go farther than GSM in remote locations.
- 2. Read the Bionic antennas are not optimized at all for GSM, so as a GSM phone, signal is weak. Nothing can do about that,

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