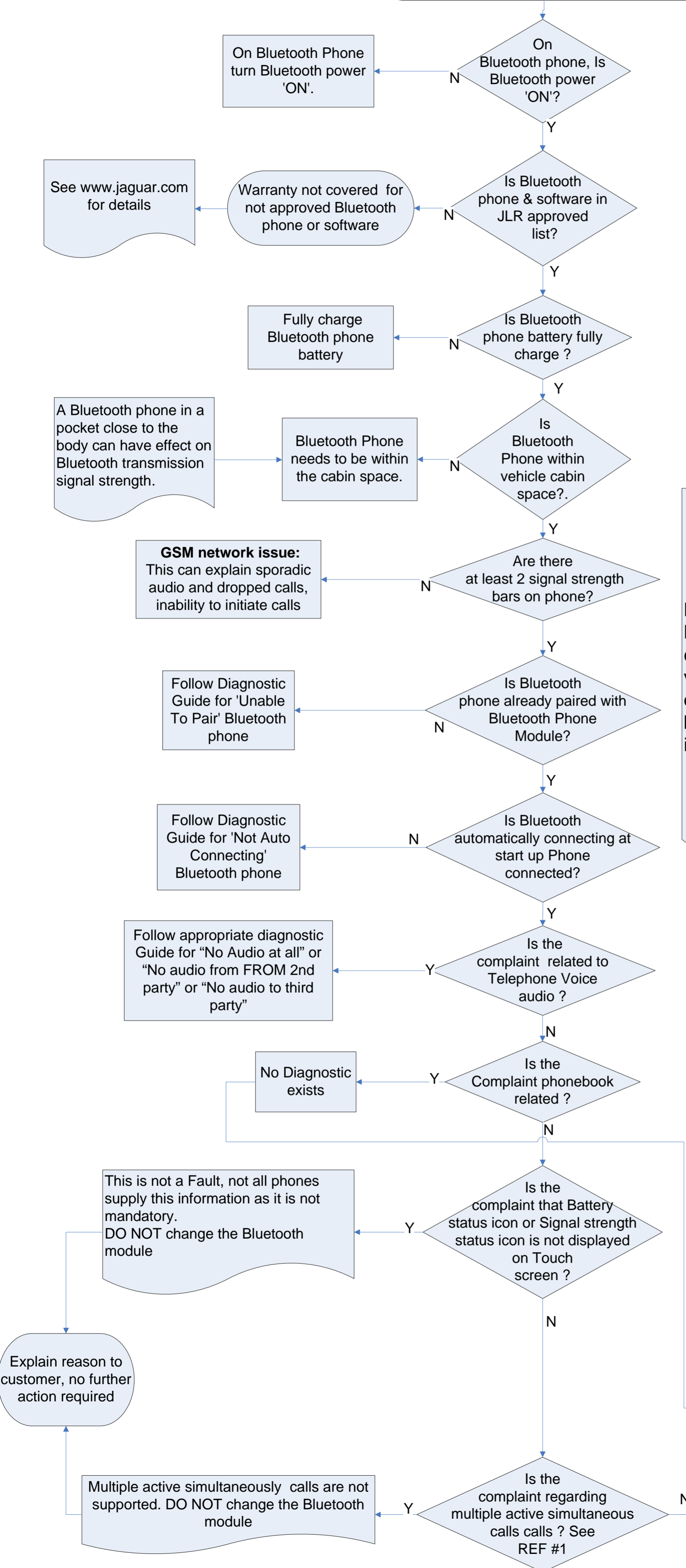# No Bluetooth XK (X150)

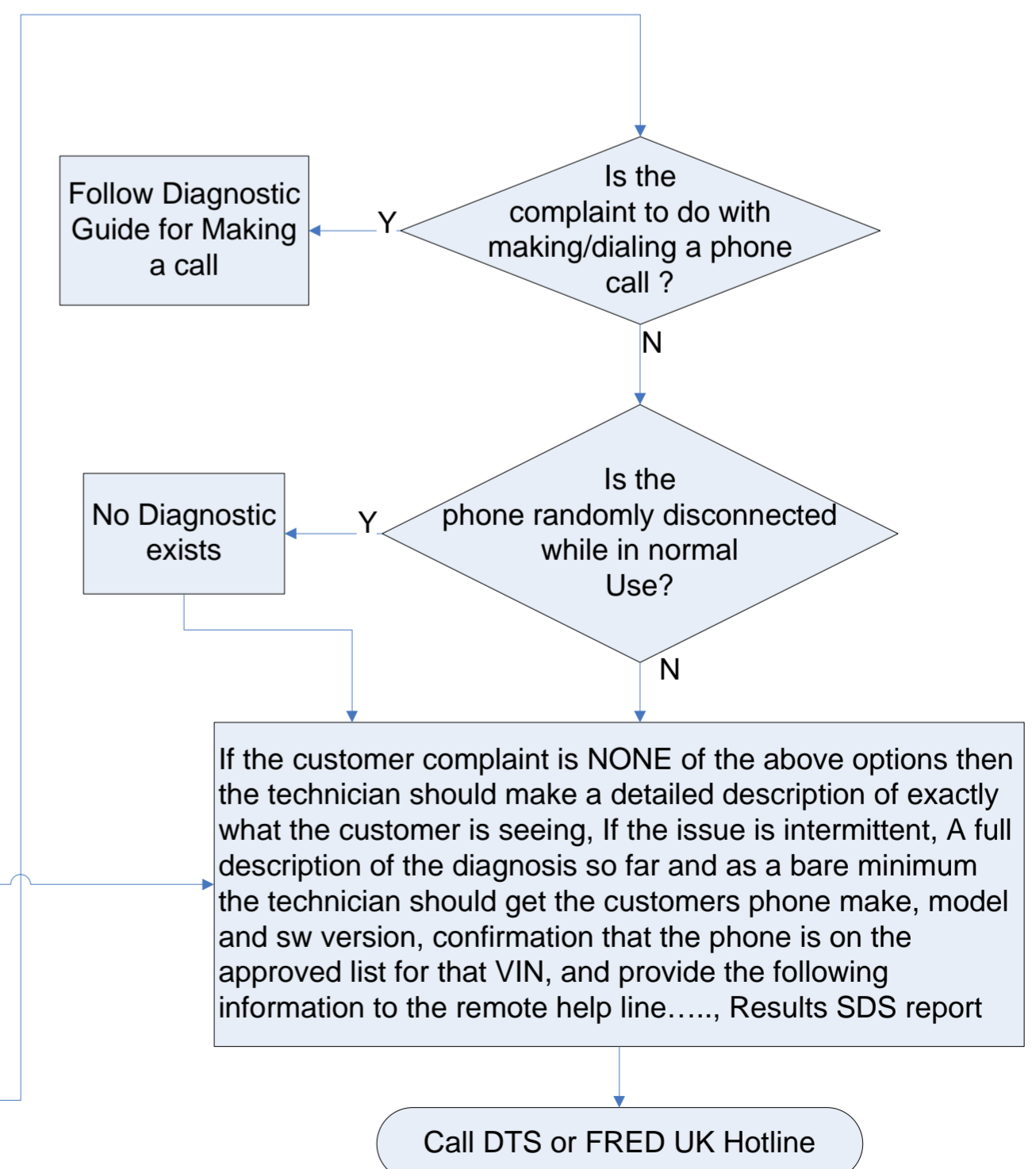**NO BLUETOOTH:**

No Bluetooth is not a fault and at best is a poor description to aid diagnosis of the problem. The aim of this chart is to remove the use of No Bluetooth completely. The technician should use this to try and select a best fit. If none of the below fit then an in depth description of the issue should be provided and not a 2 word summary.

REFERENCE NOTES:

REF #1:-
Multiple active simultaneous calls is defined as have 2 calls active at the same time in the Mobile phone, the vehicle phone system only supports 1 call active at any one time. This means it is not possible to answer, swap between or terminate calls individually using the vehicle interface.
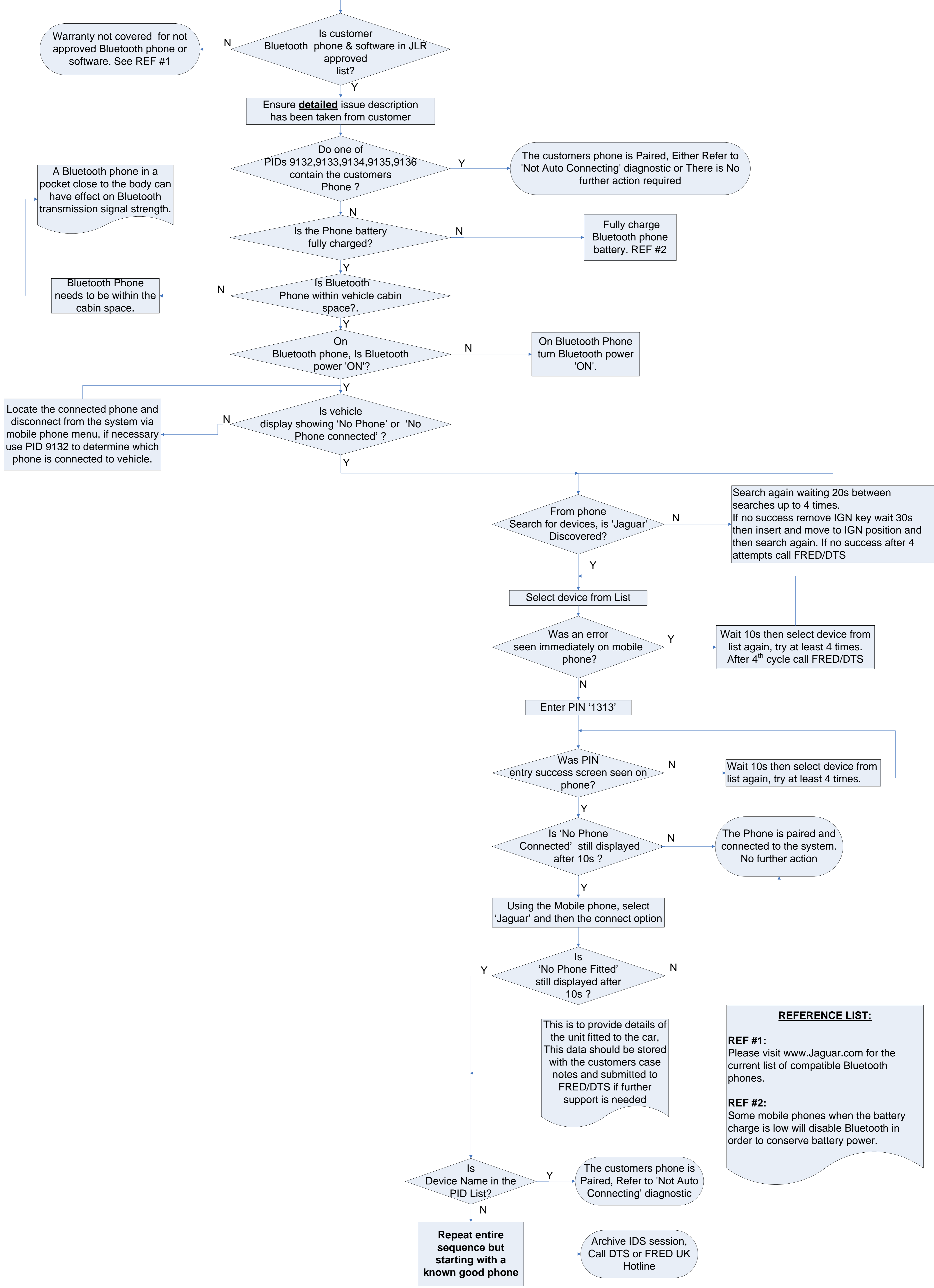

On Bluetooth phone, Is Bluetooth power 'ON'?
- N → On Bluetooth Phone turn Bluetooth power 'ON'.
- Y ↓

Is Bluetooth phone & software in JLR approved list?
- N → Warranty not covered for not approved Bluetooth phone or software → See www.jaguar.com for details
- Y ↓

Is Bluetooth phone battery fully charge ?
- N → Fully charge Bluetooth phone battery
- Y ↓

Is Bluetooth Phone within vehicle cabin space?.
- N → Bluetooth Phone needs to be within the cabin space. → A Bluetooth phone in a pocket close to the body can have effect on Bluetooth transmission signal strength.
- Y ↓

Are there at least 2 signal strength bars on phone?
- N → GSM network issue: This can explain sporadic audio and dropped calls, inability to initiate calls
- Y ↓

Is Bluetooth phone already paired with Bluetooth Phone Module?
- N → Follow Diagnostic Guide for 'Unable To Pair' Bluetooth phone
- Y ↓

Is Bluetooth automatically connecting at start up Phone connected?
- N → Follow Diagnostic Guide for 'Not Auto Connecting' Bluetooth phone
- Y ↓

Is the complaint related to Telephone Voice audio ?
- Y → Follow appropriate diagnostic Guide for "No Audio at all" or "No audio from FROM 2nd party" or "No audio to third party"
- N ↓

Is the Complaint phonebook related ?
- Y → No Diagnostic exists
- N ↓

Is the complaint that Battery status icon or Signal strength status icon is not displayed on Touch screen ?
- Y → This is not a Fault, not all phones supply this information as it is not mandatory. DO NOT change the Bluetooth module → Explain reason to customer, no further action required
- N ↓

Is the complaint regarding multiple active simultaneous calls calls ? See REF #1
- Y → Multiple active simultaneously calls are not supported. DO NOT change the Bluetooth module → Explain reason to customer, no further action required
- N →

Is the complaint to do with making/dialing a phone call ?
- Y → Follow Diagnostic Guide for Making a call
- N ↓

Is the phone randomly disconnected while in normal Use?
- Y → No Diagnostic exists
- N ↓

If the customer complaint is NONE of the above options then the technician should make a detailed description of exactly what the customer is seeing, If the issue is intermittent, A full description of the diagnosis so far and as a bare minimum the technician should get the customers phone make, model and sw version, confirmation that the phone is on the approved list for that VIN, and provide the following information to the remote help line….., Results SDS report

↓

Call DTS or FRED UK Hotline

PAIRING: Vehicle Model - XK (06MY onwards)

The process of Pairing allows the vehicle to recognise the customer's Mobile phone automatically when returning to the vehicle, this is achieved by is the exchanging of secure codes between the Vehicle and the Mobile phone. This diagnostic procedure will focus only on searching from the Mobile phone as it is faster and usually more successful. It is possible to search from the vehicle HMI and where the customer has searched using the phone, then attempt using the car HMI (Note before XK 09MY it is only possible to start a search for mobile devices from the Vehicle interface). The goal is to pair the phone to the car and if it is possible via one means but not the other this is NOT a fault.

The following steps will describe the normal procedure of pairing. Pairing is a 2 stage procedure comprising of a 1st stage '*DISCOVERY*' or searching for Bluetooth devices and 2nd stage '*PAIRING*'. ALWAYS CHECK THE APPROVED PHONE LIST FOR COMPATIBILITY BEFORE PROCEEDING

1. Ensure that the vehicle is powered up with IGN on (Engine does not have to be running). Ensure no other Land Rover FreeLander or Jaguar XK (**09MY** onwards only) or Jaguar XF with Bluetooth is powered up and in range of the phone being used.

2. Ensure that the vehicle is not connected to any other device by checking that the 'No Phone Connected' message is displayed on the touch screen / Radio while in phone mode.

3. Using the <u>mobile phone</u> search for '*devices*' or '*audio devices*' and discovered devices will appear in the '*DEVICE LIST*', If a device called ' Jaguar appears in the mobile phone's device list as unpaired then stage 1 of the procedure is complete.

4. Select the device '*Jaguar*' from the device list and accept the option to 'pair' / 'bond' with '*Jaguar*'. If there is a error message in a short space of time the device list will remain present, simply wait 10s and then repeat the selection of '*Jaguar*' for pairing / bonding. (If unsure refer to mobile phone handbook under pairing or bonding).

5. The user will be presented with a '*PIN*' entry screen enter '1313' for Jaguar models into the appropriate box and select the '*pair*' / '*bond*' button.

6. There should be a short delay and then a success prompt will be given to the user.

7. The Phone should under most circumstances connect to the car at this point. The Screen will change to the 'Phone IDLE' screen where keypad or Mobile phone name is available to the user in phone mode on the touch screen / radio HU.

8. This is not the case with all phones and some popular exceptions are noted below. However the connection of the phone to the vehicle after entering the PIN is the mobile phone's responsibility. If connection does not happen after *PIN* entry this is not a fault with the vehicle.

➢Nokia phones following *PIN* entry, when a device exists with an identical friendly name of '*Jaguar*' will prompt the user to edit the friendly name such that it is unique. This should be done promptly as there will be a time out which may or may not affect the successful storage of security key in the phone. This is not a fault with the vehicle.

➢Some phones after successfully exchanging security keys will prompt the user to add the device to the authorised or trusted list, failure to accept this can affect the success of the storage of the device on the phone side, this is not a fault of the vehicle.

➢Some Nokia phones (mainly Symbian OS based) will not automatically connect the phone to the car after pairing sequence above. This is not a fault of the phone or the vehicle and the user for the 1st time must manually select '*Jaguar*' from the list and select the option to connect to that *Jaguar*.

➢Some Sony Ericsson phones following pairing and accepting that '*Jaguar*' can be added to the trusted device list, have a delay before the connection is complete, during this time pressing any of the smart buttons can cause the phone to disconnect from the vehicle. This is not a fault of the vehicle or the phone.

9. When searching from the vehicle for the Phone the phone must be discoverable to other devices, this is a option in the Phone menu. It should be noted that some devices (e.g. Motorola) are only discoverable for a short period of time and so the user ensure as few Bluetooth devices are in range of the vehicle.

10. When searching from the car, the user should ensure that Laptops with Bluetooth fitted are not near the vehicle as this can effect the number of devices successfully discovered when initiating the search from the vehicle HMI.
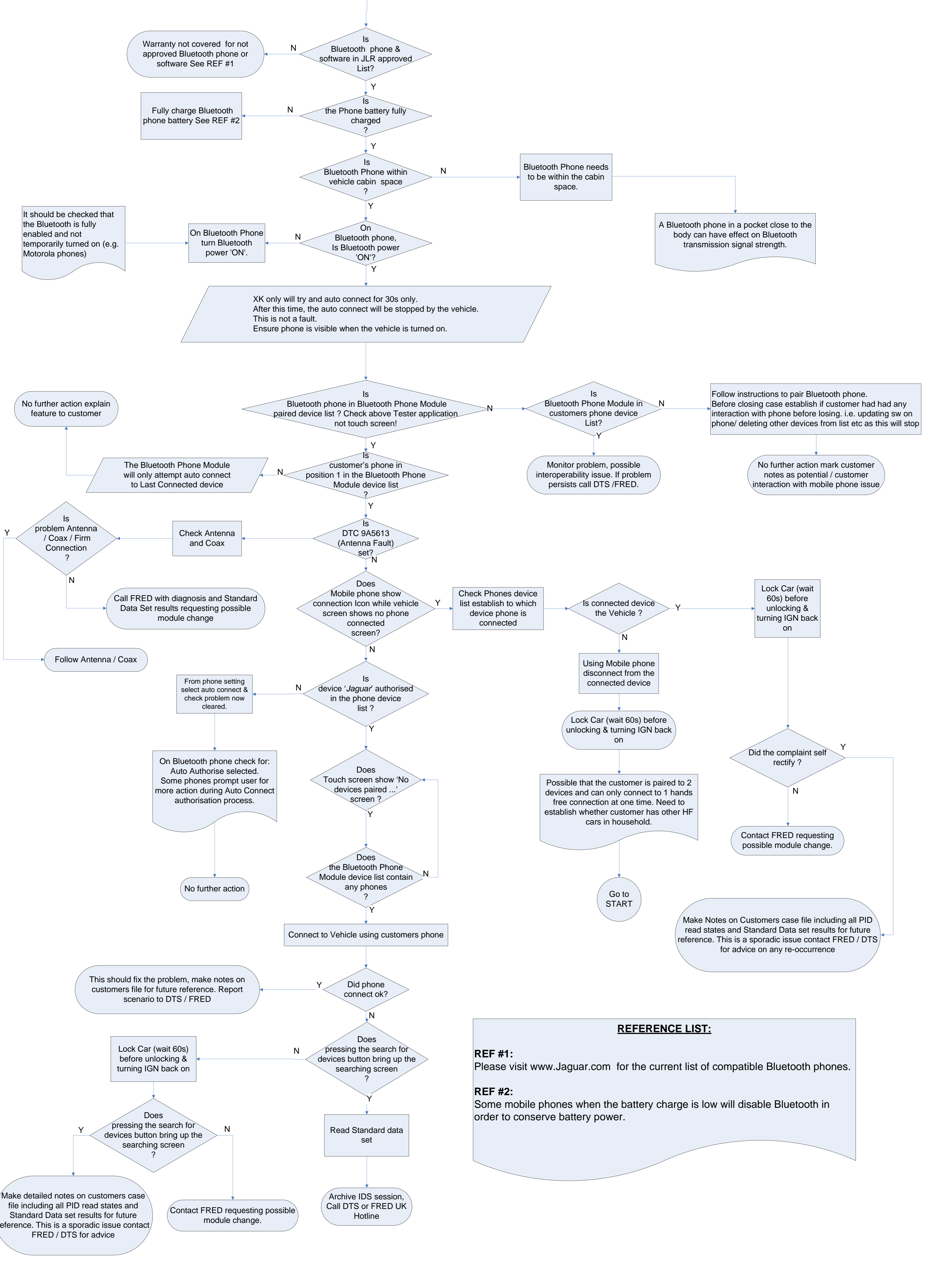
Unable to Pair – XK

Is customer Bluetooth phone & software in JLR approved list?

N → Warranty not covered for not approved Bluetooth phone or software. See REF #1

Y

Ensure **detailed** issue description has been taken from customer

Do one of PIDs 9132,9133,9134,9135,9136 contain the customers Phone ?

Y → The customers phone is Paired, Either Refer to 'Not Auto Connecting' diagnostic or There is No further action required

N

Is the Phone battery fully charged?

N → Fully charge Bluetooth phone battery. REF #2

Y

A Bluetooth phone in a pocket close to the body can have effect on Bluetooth transmission signal strength.

Is Bluetooth Phone within vehicle cabin space?.

N → Bluetooth Phone needs to be within the cabin space.

Y

On Bluetooth phone, Is Bluetooth power 'ON'?

N → On Bluetooth Phone turn Bluetooth power 'ON'.

Y

Locate the connected phone and disconnect from the system via mobile phone menu, if necessary use PID 9132 to determine which phone is connected to vehicle.

N ← Is vehicle display showing 'No Phone' or 'No Phone connected' ?

Y

From phone Search for devices, is 'Jaguar' Discovered?

N → Search again waiting 20s between searches up to 4 times.
If no success remove IGN key wait 30s then insert and move to IGN position and then search again. If no success after 4 attempts call FRED/DTS

Y

Select device from List

Was an error seen immediately on mobile phone?

Y → Wait 10s then select device from list again, try at least 4 times. After 4th cycle call FRED/DTS

N

Enter PIN '1313'

Was PIN entry success screen seen on phone?

N → Wait 10s then select device from list again, try at least 4 times.

Y

Is 'No Phone Connected' still displayed after 10s ?

N → The Phone is paired and connected to the system. No further action

Y

Using the Mobile phone, select 'Jaguar' and then the connect option

Is 'No Phone Fitted' still displayed after 10s ?

N →

Y

This is to provide details of the unit fitted to the car, This data should be stored with the customers case notes and submitted to FRED/DTS if further support is needed

Is Device Name in the PID List?

Y → The customers phone is Paired, Refer to 'Not Auto Connecting' diagnostic

N

Repeat entire sequence but starting with a known good phone

→ Archive IDS session, Call DTS or FRED UK Hotline

REFERENCE LIST:

REF #1:
Please visit www.Jaguar.com for the current list of compatible Bluetooth phones.

REF #2:
Some mobile phones when the battery charge is low will disable Bluetooth in order to conserve battery power.

Not Auto Connecting – XK 06MY onwards

Is Bluetooth phone & software in JLR approved List?
- N → Warranty not covered for not approved Bluetooth phone or software See REF #1
- Y ↓

Is the Phone battery fully charged?
- N → Fully charge Bluetooth phone battery See REF #2
- Y ↓

Is Bluetooth Phone within vehicle cabin space?
- N → Bluetooth Phone needs to be within the cabin space. → A Bluetooth phone in a pocket close to the body can have effect on Bluetooth transmission signal strength.
- Y ↓

On Bluetooth phone, Is Bluetooth power 'ON'?
- N → On Bluetooth Phone turn Bluetooth power 'ON'. → It should be checked that the Bluetooth is fully enabled and not temporarily turned on (e.g. Motorola phones)
- Y ↓

XK only will try and auto connect for 30s only.
After this time, the auto connect will be stopped by the vehicle.
This is not a fault.
Ensure phone is visible when the vehicle is turned on.

Is Bluetooth phone in Bluetooth Phone Module paired device list ? Check above Tester application not touch screen!
- N → **Is Bluetooth Phone Module in customers phone device List?**
  - N → Follow instructions to pair Bluetooth phone. Before closing case establish if customer had had any interaction with phone before losing. i.e. updating sw on phone/ deleting other devices from list etc as this will stop → No further action mark customer notes as potential / customer interaction with mobile phone issue
  - Y → Monitor problem, possible interoperability issue. If problem persists call DTS /FRED.
- Y ↓

Is customer's phone in position 1 in the Bluetooth Phone Module device list?
- N → The Bluetooth Phone Module will only attempt auto connect to Last Connected device → No further action explain feature to customer
- Y ↓

Is DTC 9A5613 (Antenna Fault) set?
- Y → Check Antenna and Coax → **Is problem Antenna / Coax / Firm Connection?**
  - Y → Follow Antenna / Coax
  - N → Call FRED with diagnosis and Standard Data Set results requesting possible module change
- (down) ↓

Does Mobile phone show connection Icon while vehicle screen shows no phone connected screen?
- Y → Check Phones device list establish to which device phone is connected → **Is connected device the Vehicle ?**
  - Y → Lock Car (wait 60s) before unlocking & turning IGN back on → **Did the complaint self rectify ?**
    - Y → Make Notes on Customers case file including all PID read states and Standard Data set results for future reference. This is a sporadic issue contact FRED / DTS for advice on any re-occurrence
    - N → Contact FRED requesting possible module change.
  - N → Using Mobile phone disconnect from the connected device → Lock Car (wait 60s) before unlocking & turning IGN back on → Possible that the customer is paired to 2 devices and can only connect to 1 hands free connection at one time. Need to establish whether customer has other HF cars in household. → Go to START
- N ↓

Is device 'Jaguar' authorised in the phone device list ?
- N → From phone setting select auto connect & check problem now cleared. → On Bluetooth phone check for: Auto Authorise selected. Some phones prompt user for more action during Auto Connect authorisation process. → No further action
- Y ↓

Does Touch screen show 'No devices paired ...' screen ?
- Y ↓
- (loop back)

Does the Bluetooth Phone Module device list contain any phones ?
- N → (up)
- Y ↓

Connect to Vehicle using customers phone

Did phone connect ok?
- Y → This should fix the problem, make notes on customers file for future reference. Report scenario to DTS / FRED
- N ↓

Does pressing the search for devices button bring up the searching screen ?
- N → Lock Car (wait 60s) before unlocking & turning IGN back on → **Does pressing the search for devices button bring up the searching screen ?**
  - Y → Make detailed notes on customers case file including all PID read states and Standard Data set results for future reference. This is a sporadic issue contact FRED / DTS for advice
  - N → Contact FRED requesting possible module change.
- Y ↓

Read Standard data set
↓
Archive IDS session, Call DTS or FRED UK Hotline

REFERENCE LIST:

REF #1:
Please visit www.Jaguar.com for the current list of compatible Bluetooth phones.

REF #2:
Some mobile phones when the battery charge is low will disable Bluetooth in order to conserve battery power.

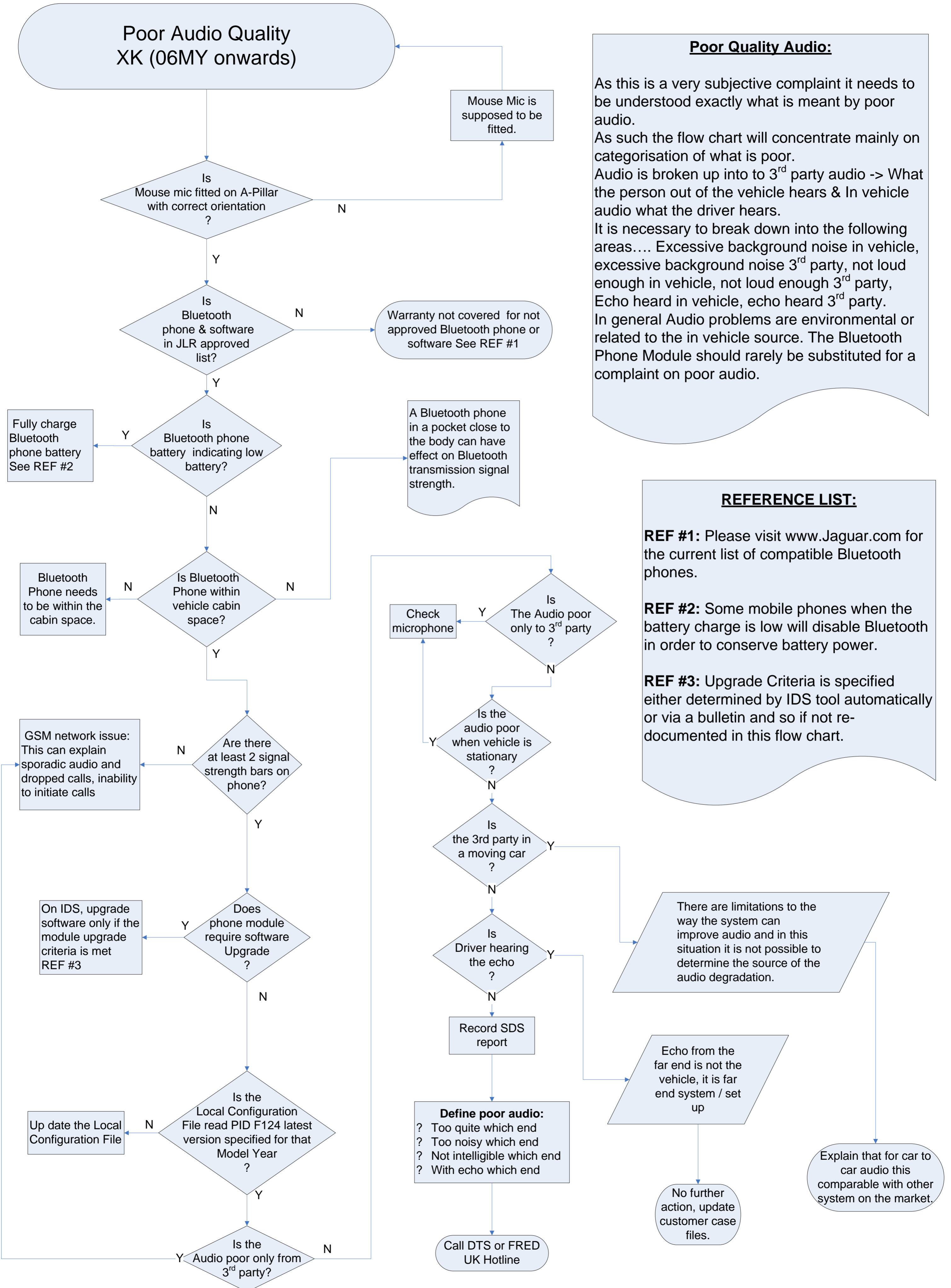# Auto CONNECT: **Vehicle Models XK (06MY onwards)**

Auto Connect is the process of the vehicle connecting to the last connected Mobile phone when the user returns to the vehicle after turning the vehicle on.

1. Turn on IGNITION.
2. The display will start up and the screen will move to the standard display start up home screen. For FreeLander 2 a Green light will illuminate in the Phone button.
3. The Vehicle will tell the Bluetooth Phone Module to start auto connect.
4. The Bluetooth Phone Module will start looking for the **last connected phone only**.
5. Upon locating the last connecting phone the Bluetooth unit will start a security exchange with the phone to ensure that the phone is still authorised to connect to the system.
6. The connection will start and the XK will have the standard icon on the bottom of the screen which indicates a phone is connected.
7. Pressing the phone mode button will show the vehicle PHONE Home screen on the vehicle display.

Things to look out for….
➢The vehicle friendly name in the device list is not authorised for connection without user action. This can be detected as shortly after the car is turned on when watching the Mobile phone screen a pop up will appear asking if the user wishes to allow the connection. This pop up usually times out after a while and so initially may be harder to detect. Refer to the Mobile phone user guide for details of the Mobile phone screen views.
➢The Mobile phone was never correctly paired with the vehicle. Refer to Unable to Pair diagnostics for determining if the phone is paired.
➢The Mobile phone was not the last connected phone to the vehicle, this can be overlooked if the user has multiple phones or the vehicle has multiple users.
➢The Mobile phone has for some reason not stored the Vehicle in its device list or the vehicle has been removed from the Mobile phone device list, either in error or by updating phone software.
➢Bluetooth is not enabled on the Mobile phone or was not fully enabled at the time Ignition was turned on (some phones allow enabling of Bluetooth and after a while or previous disconnect will turn off Bluetooth to save the battery)
➢The Mobile phone was in range and connected but then the link was lost.
➢The battery is low in the Mobile phone (some phone turn Bluetooth off when battery charge is low in order to conserve battery life).
➢The Mobile phone was not powered up at the time Ignition was turned on.
➢The Mobile phone is already connected with another Bluetooth device.

Poor Audio Quality
XK (06MY onwards)

Mouse Mic is supposed to be fitted.

Is Mouse mic fitted on A-Pillar with correct orientation ? — N →

Y ↓

Is Bluetooth phone & software in JLR approved list? — N → Warranty not covered for not approved Bluetooth phone or software See REF #1

Y ↓

Is Bluetooth phone battery indicating low battery? — Y → Fully charge Bluetooth phone battery See REF #2

A Bluetooth phone in a pocket close to the body can have effect on Bluetooth transmission signal strength.

N ↓

Is Bluetooth Phone within vehicle cabin space? — N → Bluetooth Phone needs to be within the cabin space.

— N →

Y ↓

Are there at least 2 signal strength bars on phone? — N → GSM network issue: This can explain sporadic audio and dropped calls, inability to initiate calls

Y ↓

Does phone module require software Upgrade ? — Y → On IDS, upgrade software only if the module upgrade criteria is met REF #3

N ↓

Is the Local Configuration File read PID F124 latest version specified for that Model Year ? — N → Up date the Local Configuration File

Y ↓

Is the Audio poor only from 3rd party? — Y → (left path) — N →

Is The Audio poor only to 3rd party ? — Y → Check microphone

N ↓

Is the audio poor when vehicle is stationary ? — Y → Check microphone

N ↓

Is the 3rd party in a moving car ? — Y → There are limitations to the way the system can improve audio and in this situation it is not possible to determine the source of the audio degradation.

N ↓

Is Driver hearing the echo ? — Y → (to limitations box)

N ↓

Record SDS report

↓

Define poor audio:
? Too quite which end
? Too noisy which end
? Not intelligible which end
? With echo which end

↓

Call DTS or FRED UK Hotline

Echo from the far end is not the vehicle, it is far end system / set up

↓

No further action, update customer case files.

Explain that for car to car audio this comparable with other system on the market.

Poor Quality Audio:

As this is a very subjective complaint it needs to be understood exactly what is meant by poor audio.
As such the flow chart will concentrate mainly on categorisation of what is poor.
Audio is broken up into to 3rd party audio -> What the person out of the vehicle hears & In vehicle audio what the driver hears.
It is necessary to break down into the following areas…. Excessive background noise in vehicle, excessive background noise 3rd party, not loud enough in vehicle, not loud enough 3rd party, Echo heard in vehicle, echo heard 3rd party.
In general Audio problems are environmental or related to the in vehicle source. The Bluetooth Phone Module should rarely be substituted for a complaint on poor audio.
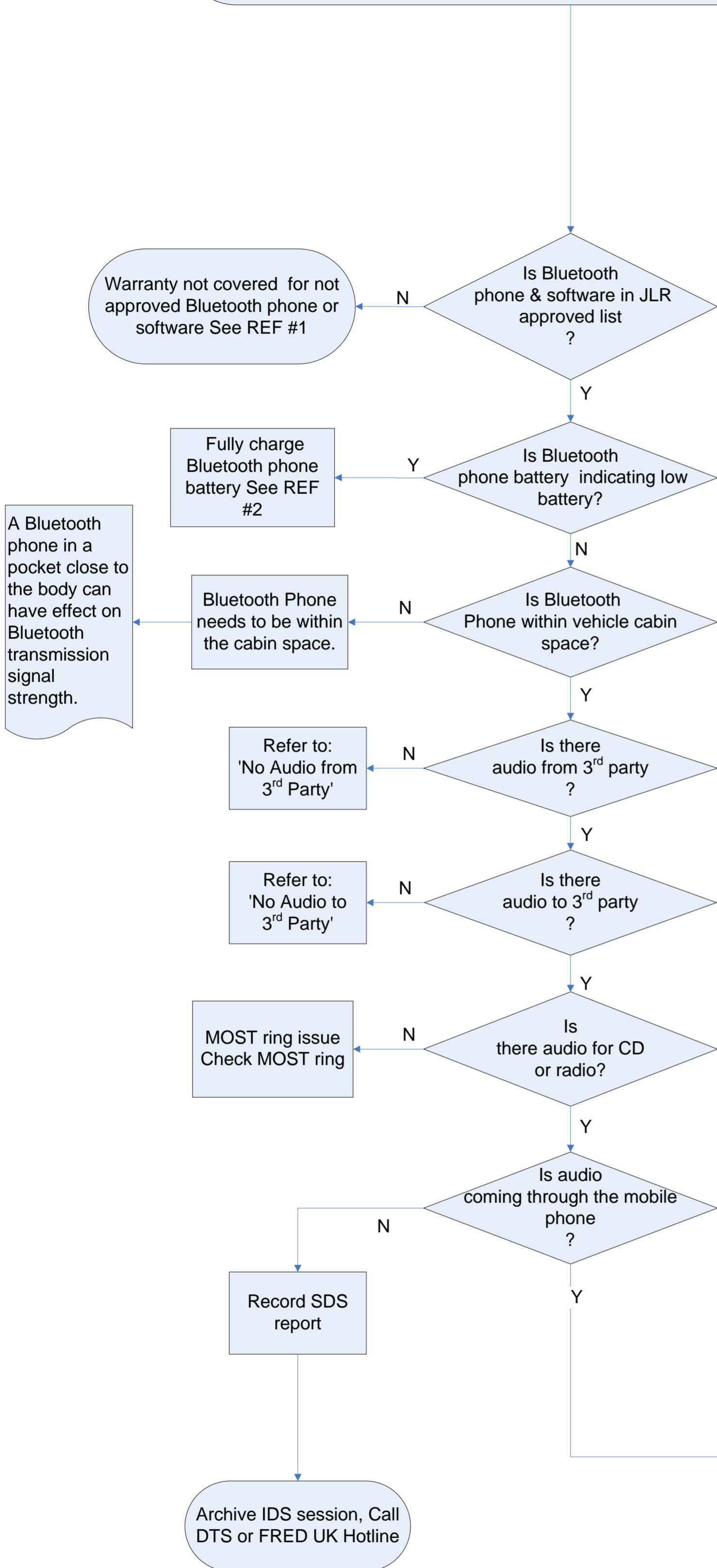

REFERENCE LIST:

REF #1: Please visit www.Jaguar.com for the current list of compatible Bluetooth phones.

REF #2: Some mobile phones when the battery charge is low will disable Bluetooth in order to conserve battery power.

REF #3: Upgrade Criteria is specified either determined by IDS tool automatically or via a bulletin and so if not re-documented in this flow chart.
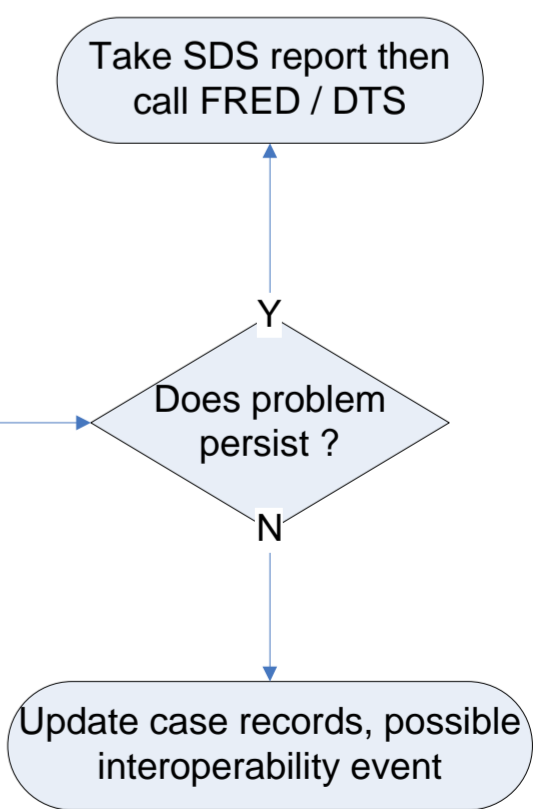
No Audio – XK (06MY onwards)

No Audio: ALL MODELS

This ONLY covers the scenario where there is no audio in any direction into or out of the vehicle.
The main checks here are that on making a call check that the car has not switched to the handset. This can be the case on some phones if the number is dialled using the Mobile phone instead of the vehicle HMI.

Is Bluetooth phone & software in JLR approved list ?

N → Warranty not covered for not approved Bluetooth phone or software See REF #1

Y ↓

Is Bluetooth phone battery indicating low battery?

Y → Fully charge Bluetooth phone battery See REF #2

N ↓

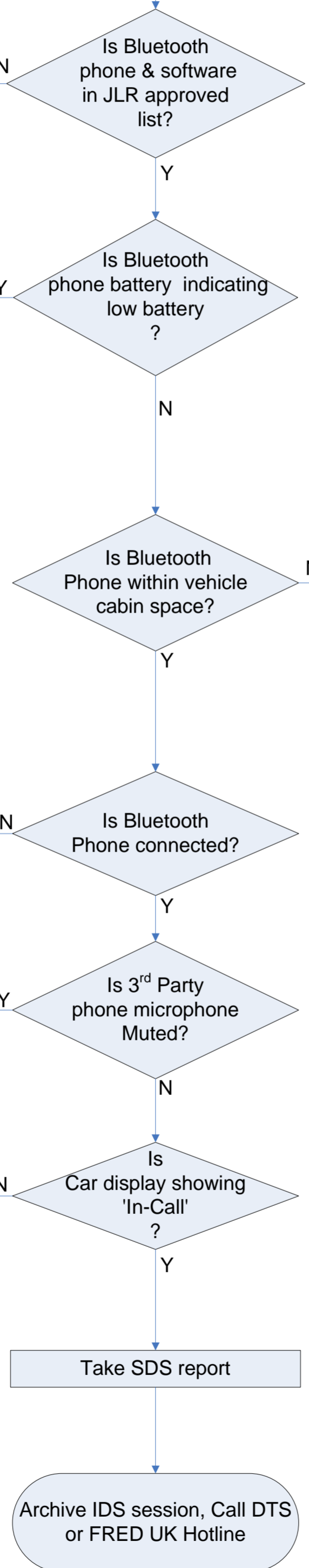**Is Bluetooth Phone within vehicle cabin space?**

N → Bluetooth Phone needs to be within the cabin space. → A Bluetooth phone in a pocket close to the body can have effect on Bluetooth transmission signal strength.

Y ↓

Is there audio from 3rd party ?

N → Refer to: 'No Audio from 3rd Party'

Y ↓

Is there audio to 3rd party ?

N → Refer to: 'No Audio to 3rd Party'

Y ↓

Is there audio for CD or radio?

N → MOST ring issue Check MOST ring

Y ↓

Is audio coming through the mobile phone ?

N → Record SDS report → Archive IDS session, Call DTS or FRED UK Hotline

Y ↓

Through HMI select Hands free from menu. If no joy, undock and re-dock phone from HMI →

Does problem persist ?

Y → Take SDS report then call FRED / DTS

N ↓

Update case records, possible interoperability event

REFERENCE LIST:

REF #1: Please visit www.Jaguar.com for the current list of compatible Bluetooth phones.

REF #2: Some mobile phones when the battery charge is low will disable Bluetooth in order to conserve battery power.

No Audio from 3ʳᵈ Party
XK (06MY onwards))

No Audio From 3rd Party: Covers ALL models

This only covers the case where the Driver cannot hear the 3ʳᵈ party, but the 3ʳᵈ party can hear the driver.

Warranty not covered for not approved Bluetooth phone or software ← **N** — Is Bluetooth phone & software in JLR approved list?

Y

Fully charge Bluetooth phone battery ← **Y** — Is Bluetooth phone battery indicating low battery ?

N

Is Bluetooth Phone within vehicle cabin space? — **N** → Bluetooth Phone needs to be within the cabin space. → A Bluetooth phone in a pocket close to the body can have effect on Bluetooth transmission signal strength.

Y

Connect Bluetooth phone using vehicle HMI ← **N** — Is Bluetooth Phone connected?

Y

Have 3ʳᵈ party phone mute turned 'OFF' ← **Y** — Is 3ʳᵈ Party phone microphone Muted?

N

Call has ended. ← **N** — Is Car display showing 'In-Call' ?

Y

Take SDS report

Archive IDS session, Call DTS or FRED UK Hotline

REFERENCE LIST:

REF #1:
Please visit www.Jaguar.com for the current list of compatible Bluetooth phones.

REF #2:
Some mobile phones when the battery charge is low will disable Bluetooth in order to conserve battery power.

No Audio to 3rd Party XK (06MY onwards))

Covers the scenario where the Driver can hear the 3rd party but the 3rd party cannot hear the driver at all. i.e. virtually silent at the far end.
This should not be confused with not being able to understand the driver which would be a poor audio scenario.

Is Bluetooth phone & software in JLR approved List ?
— N → Warranty not covered for not approved Bluetooth phone or software
— Y ↓

Is Bluetooth phone battery indicating low battery ?
— Y → Fully charge Bluetooth phone battery
— N ↓

Is Bluetooth Phone within vehicle cabin space?
— N → Bluetooth Phone needs to be within the cabin space. → A Bluetooth phone in a pocket close to the body can have effect on Bluetooth transmission signal strength.
— Y ↓

Is Bluetooth Phone connected ?
— N → Connect Bluetooth phone using vehicle HMI
— Y ↓

Is Audio Mute 'ON'? In vehicle REF #3?
— Y → Turn System Phone Audio Mute 'OFF' See REF #3
— N ↓

Is car display showing 'In-Call' ?
— N → Call has ended.
— Y ↓

Has IHU Logged a microphone DTC ?
— N → DTC 0x9D7901 indicates microphone electrical fault
— Y ↓

Take SDS report
↓
Archive IDS session, Call DTS or FRED UK Hotline

REFERENCE LIST:

REF #1:
Please visit www.Jaguar.com and for the current list of compatible Bluetooth phones.

REF #2:
Some mobile phones when the battery charge is low will disable Bluetooth in order to conserve battery power.

REF # 3:
Audio Mute is a feature of the car and it is possible to turn this on particularly on Range Rover, Range Rover Sport and Discovery 3, Check the vehicle screen menu and determine if call is on hold, if so take of hold. Consult vehicle Handbook for menu descriptions.