Field campaign

Topic	New Flying Spur Hybrid - Engine control module update - Generic scan tool communication error (SC 22/34)
Market area	United States E05 Bentley USA and rest America (6E05)
Brand	Bentley
Transaction No.	2068364/1
Campaign number	EC59
Note	
Type	
US code	

Vehicle data

New Flying Spur Hybrid

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
ZG23GB	2022	E		*	*	*
ZG23GB	2023	E		*	*	*
ZG25GB	2023	E		*	*	*

Chas is numbers

Manufacturer	Filler	Type	Filler	MY	Factory	From	To	Prod from	Prod to
SCB	*	*	*	N	C	096164	098565		
SCB	*	*	*	N	C	001009	004622		
SCB	*	*	*	P	C	004721	005545		

Documents

Document name
master.xml
sc2234vinlist.pdf

Notes

Technical background

A software update to the Engine Control Module is required

The update allows communication with generic scan tools used for vehicle inspection and maintenance (I/M) programs

Remedy

Carry out the instructions within the Work section to completion

Customer notification

Ensure the instructions are conducted at the nearest opportunity

Make a note of the required action on the workshop order before it is signed by the customer

If it is omitted to perform the work required during a workshop visit, the customer should be notified

You should also pass on this information to your new and used car sales departments to allow affected vehicles to be checked and repaired immediately

Warranty accounting

instructions Warranty type   710

or 790 Damage service number EC59

Damage code   00 66

Time to conduct the software update and readiness code procedure

Labour Operation Code   01 51 00 00

Time   As per ODIS log (Must not exceed 50 TU)

Time to conduct static/dynamic drive cycles and Road test

Labour Operation Code   01 21 00 00

Time   50 TU

.

NOTE: In the event that the readiness code test was not successful at the first attempt and a road test was required in conjunction with a second attempt at completing the readiness code test please ensure a current ODIS log is included with all applicable warranty claim submissions

Genuine parts

Not applicable

Parts supply

Not applicable

Parts despatch control

Not applicable

Repair instructions

Technical background

A software update to the Engine Control Module is required

The update allows communication with generic scan tools used for vehicle inspection and maintenance (I/M) programs

Check

If the vehicle is not already listed as repaired within the "Repair history" (in Elsa Pro) refer to the Identification section

Should neither be evident ("Repair history" or applicable paint marks) carry out the required work in accordance with these instructions

Genuine parts

Not applicable

Work

- Hybrid vehicles use a High voltage system and MUST only be worked on by suitably qualified personnel

- *Please ensure all guidelines within the repair manual are strictly followed before and whilst conducting any work on vehicles with a High voltage system*

- The closed-circuit voltage of the vehicle must be at least 12.5 volts during the update. Connect a suitable battery charger to the vehicle. For further information refer to the Repair manual

- During the update switch off all unnecessary consumers (ventilation, seat heater, interior illumination etc)

- Because of the highest transmission stability you MUST use the diagnosis interface VAS 6154 (WiFi diagnostic tool) ONLY in USB operation or the cable-connected VAS 5055 for the reprogramming (updating) of control units. If these units are not available, the diagnosis interface VAS 5054 (A) can also be used in USB mode

- Do Not under any circumstances use a Bluetooth connection to conduct the reprogramming (updating) of any control units

IMPORTANT: Please ensure ODIS version 2.30.5 or later is installed before commencing with the below steps

NOTE: The screenshots shown within this procedure are for reference purposes only the format may vary although the actual instructions are the same regardless of format

1) Select and run Guided fault finding

- Referring to Figure 1 - Within the Special functions tab select SVM - Code input (A) then select Perform test (B)
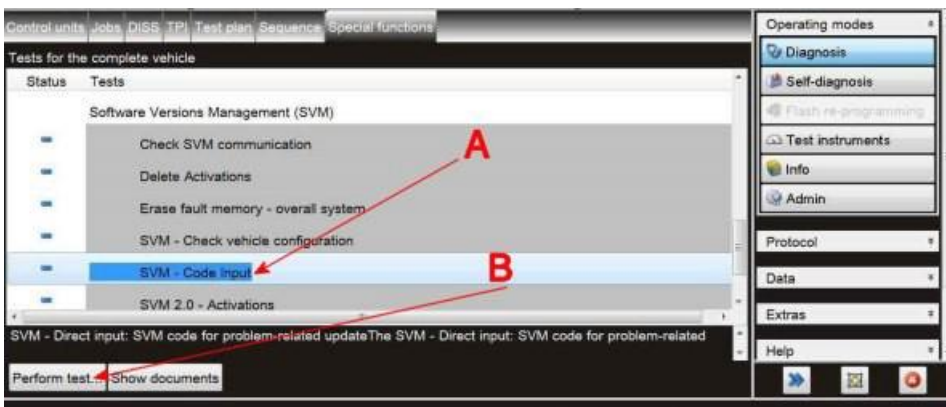
Figure 1

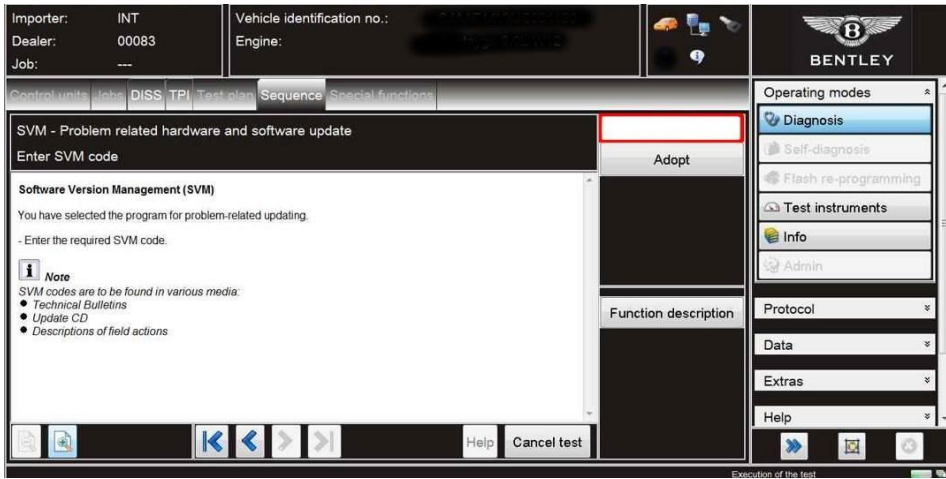2) On the next screen enter SVM code 371PHEVSCAN01 (Figure 2)

Figure 2

3) On the following screen, confirm SVM code 371PHEVSCAN01 is correct

- All control modules will now be interrogated

- The update will then be suggested

4) Carry out all on screen prompts until completion

■

To wake up the system after the update is completed a bus silence is required, carry out the following steps in the order stated below:

- Switch off the ignition

- Remove the diagnostic interface from the OBD port

- Switch off and remove the battery charger from the vehicle

- Close the bonnet, boot and all doors

- Lock the vehicle

- Wait 5 minutes to allow the vehicle to go into bus silence

- When 5 minutes has elapsed, unlock the vehicle and open the driver's door

- Switch on the ignition

5) Check and confirm that no DTC's are stored or there are no engine operation issues evident prior to starting the procedure from Step 6 - Save an online log to confirm that no DTC's were evident at this stage of the procedure

VERY IMPORTANT: The operative conducting this procedure must be aware of the following whilst the vehicle is undergoing this

procedure during the current workshop visit

• Do not attempt to erase any DTC's from the engine control module/s and transmission control module

• VERY IMPORTANT: Do not conduct a readiness test other than when instructed within this procedure

• Do not disconnect the battery whilst the CAN BUS is awake

• Failure to comply with any of the above will erase the previously set engine adaptions, therefore the complete process will require repeating

CAUTION: Ensure that any outstanding issues are resolved before commencing

IMPORTANT: Ensure that before the next part of the procedure is conducted (engine DTC adaptions clear) the engine must be at operating temperature (>90C)

6) Carry out the engine adaptions clear routine as follows:

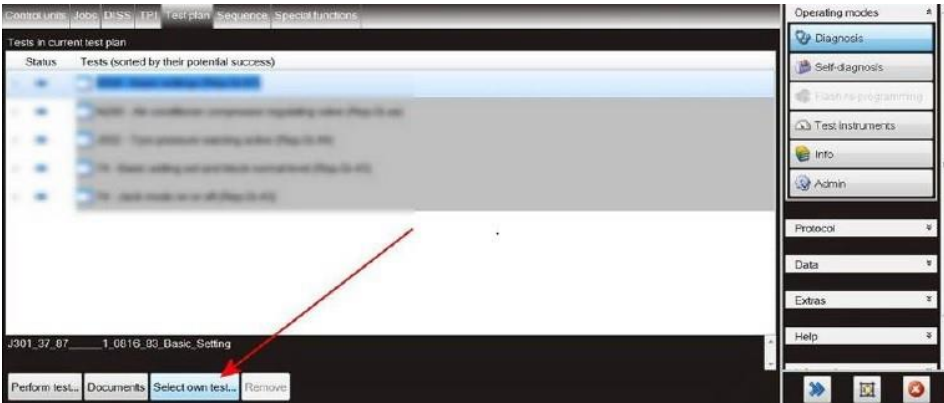• Referring to Figure 3 - Navigate to Test plan - Select own test

Figure 3

- Referring to Figure 4
- Select - Powertrain (Point A)
- Select - Engine (Point B)
- Select - 01 - Self-Diagnostic capable system (Point C)

Figure 4

- Referring to Figure 5
- Select - 01 – Engine control unit – J623 (Point A)
- Select - 01 – Subsystems, marginal conditions (Point B)
- Select - Clear engine adaption (Point C)
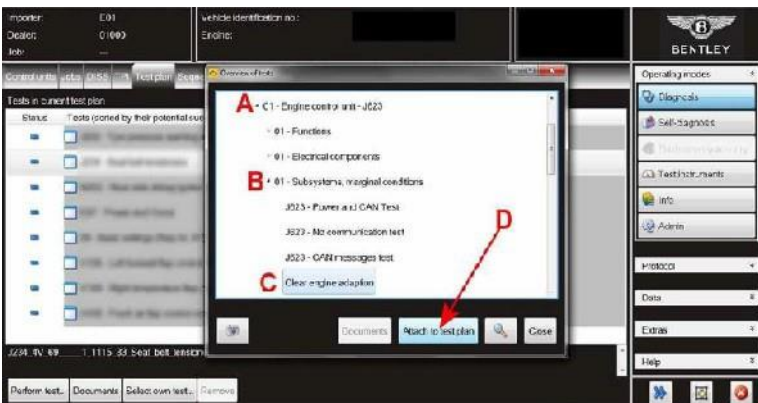- Select - Attach to test plan (Point D), then complete the test

Figure 5

7) Conduct the Readiness code procedure within *01 – Guided functions* as follows:

- Referring to Figure 6 – Select *Readiness code* (Point A)
- Select Execute (Point B)

⚠ ENSURE NEUTRAL IS SELECTED DURING THE TEST WHEN INSTRUCTED AS DIRECTED BY ODIS
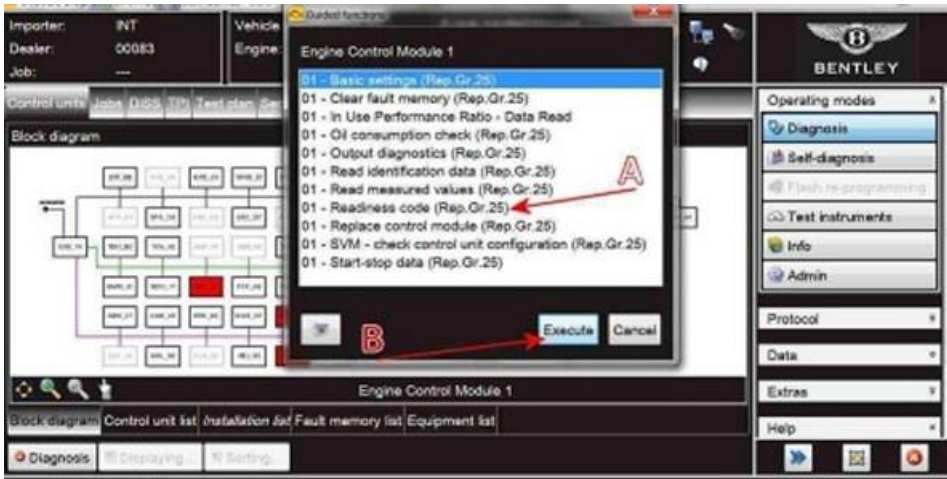
Figure 6

- Carry out the Readiness code test until complete as shown in Figure 7
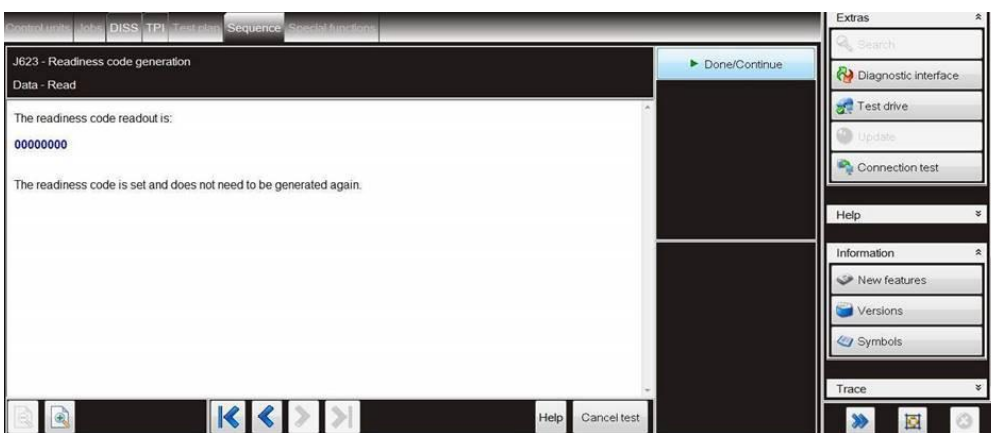

Figure 7

- Should the readiness code bytes be 00000000 NO FURTHER ACTION IS REQUIRED – proceed to step 8. Should ANY of the bytes be 1 - The operative MUST conduct a road test

- On return repeat the Readiness code test again. Once complete you must then recheck and confirm the readiness code is 00000000 – Once complete proceed to step 8

8) Idle torque adaptions - These must be done while the vehicle is stationary

VERY IMPORTANT: Ensure the Park brake is applied, the operative should also apply the footbrake for the duration of the torque adaptions procedure process

• Select Neutral and ensure A/C, A/C MAX and recirculation are switched ON. Allow the engine to idle for 30 seconds

• Select Drive and ensure A/C, A/C MAX and recirculation are still switched ON. Allow the engine to idle for 30 seconds

• Select Drive and ensure A/C, A/C MAX and recirculation are now switched OFF. Allow the engine to idle for 30 seconds

• Select Neutral and ensure A/C, A/C MAX and recirculation are now switched OFF. Allow the engine to idle for 30 seconds

Repeat the above steps a further 3 times, (4 times total)

9) Clear the vehicle of any DTC's generated as a result of performing the previous steps

Should any applicable DTC's still be evident these must be resolved before continuing the next part of this TPI

10) Find a suitable road to carry out the following drive cycle NOTE: The diagnostic machine will be required whilst conducting the road test

IMPORTANT: The operative MUST ensure the battery within the diagnostic machine is suitably charged before proceeding

IMPORTANT: The engine MUST be at operating temperature

CAUTION: Should any engine operating issues be evident during the road test, the operative should submit a Technical DISS query and await feedback before conducting any further work

• Select M for manual gears, confirm this on the DIP

• In 3rd gear raise the vehicle speed to 34mph/55kph (approximately 2400rpm) and maintain that speed for 60 seconds avoiding any acceleration/deceleration, if the cycle is interrupted please repeat until successful. Cruise control can be used if required

• Once the drive cycle is complete turn the engine off and on again

• Repeat the above drive cycle 3 times, ensure the engine off/on is carried out after each cycle

IMPORTANT: Record the time/mileage of each of the drive cycles and extended road test

11) Carry out a road test to confirm smooth operation of the Engine and Transmission

VERY IMPORTANT: After conducting this procedure the Retailer must be aware of the following:

• Do not attempt to erase any DTC's from the engine control module/s and transmission control module

• Do not conduct any further readiness code tests

• Do not disconnect the battery whilst the CAN BUS is awake

• Failure to comply with any of the above will erase the previously set engine adaptions, therefore the complete process will require repeating

12) On completion place a green paint completion mark on the brake fluid reservoir - Refer to the Identification section

Identification
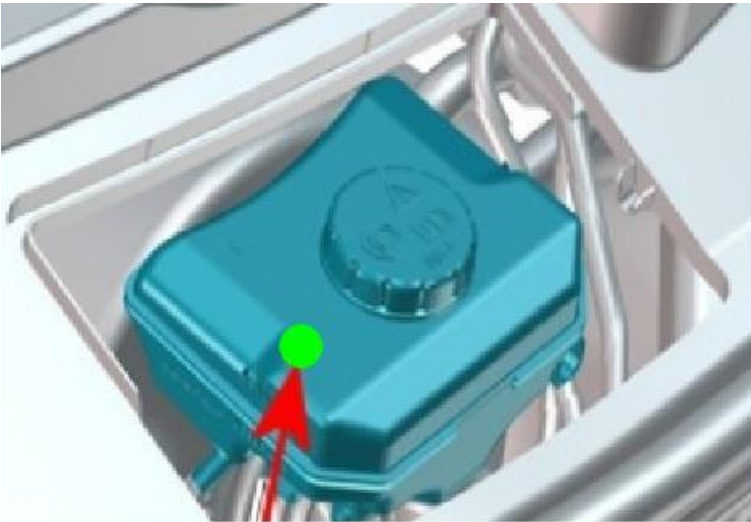
. Repair instructions . Notes

SCBBR6ZGXNC096164	SCBBR6ZG1NC096943	SCBBR6ZG9NC098522	SCBBR6ZG0NC002440	SCBBR6ZG7NC004203
SCBBR6ZG5NC096167	SCBBR6ZG7NC096977	SCBBR6ZG1NC098532	SCBBR6ZGXNC002459	SCBBR6ZG3NC004229
SCBBR6ZG0NC096173	SCBBR6ZG6NC097005	SCBBR6ZG0NC098540	SCBBR6ZGXNC002669	SCBBR6ZG2NC004237
SCBBR6ZG8NC096177	SCBBR6ZG1NC097008	SCBBR6ZG8NC098558	SCBBR6ZG9NC002677	SCBBR6ZG6NC004239
SCBBR6ZG5NC096248	SCBBR6ZG6NC097084	SCBBR6ZG5NC098565	SCBBR6ZG0NC002700	SCBBR6ZG7NC004251
SCBBR6ZG3NC096250	SCBBR6ZG4NC097097	SCBBR6ZG7NC001009	SCBBR6ZGXNC002767	SCBBR6ZG4NC004255
SCBBR6ZGXNC096259	SCBBR6ZG8NC097118	SCBBR6ZG4NC001095	SCBBR6ZG2NC002777	SCBBR6ZG3NC004277
SCBBR6ZG8NC096289	SCBBR6ZGXNC097184	SCBBR6ZG3NC001153	SCBBR6ZGXNC002798	SCBBR6ZG0NC004298
SCBBR6ZG1NC096294	SCBBR6ZG6NC097294	SCBBR6ZG1NC001202	SCBBR6ZG1NC002835	SCBBR6ZG6NC004340
SCBBR6ZG5NC096315	SCBBR6ZGXNC097315	SCBBR6ZG9NC001237	SCBBR6ZG0NC002972	SCBBR6ZG9NC004364
SCBBR6ZG1NC096358	SCBBR6ZG0NC097355	SCBBR6ZG0NC001272	SCBBR6ZG8NC003240	SCBBR6ZGXNC004387
SCBBR6ZG9NC096382	SCBBR6ZG0NC097386	SCBBR6ZG4NC001274	SCBBR6ZGXNC003269	SCBBR6ZG6NC004399
SCBBR6ZG6NC096386	SCBBR6ZG8NC097667	SCBBR6ZG4NC001288	SCBBR6ZG0NC003314	SCBBR6ZG5NC004457
SCBBR6ZG8NC096390	SCBBR6ZG8NC097670	SCBBR6ZG5NC001302	SCBBR6ZG8NC003335	SCBBR6ZG1NC004469
SCBBR6ZG5NC096394	SCBBR6ZG5NC097674	SCBBR6ZG4NC001307	SCBBR6ZG2NC003394	SCBBR6ZG8NC004484
SCBBR6ZG2NC096398	SCBBR6ZG0NC097680	SCBBR6ZGXNC001313	SCBBR6ZG4NC003428	SCBBR6ZG9NC004493
SCBBR6ZG6NC096436	SCBBR6ZG5NC097691	SCBBR6ZG7NC001317	SCBBR6ZG6NC003446	SCBBR6ZG0NC004530
SCBBR6ZG2NC096448	SCBBR6ZG0NC097694	SCBBR6ZG1NC001331	SCBBR6ZG2NC003458	SCBBR6ZG2NC004609
SCBBR6ZG8NC096521	SCBBR6ZG9NC097709	SCBBR6ZG4NC001341	SCBBR6ZG8NC003464	SCBBR6ZG5NC004622
SCBBR6ZG5NC096539	SCBBR6ZG8NC097720	SCBBR6ZG4NC001369	SCBBR6ZG7NC003469	SCBBR6ZG3PC004721
SCBBR6ZG0NC096562	SCBBR6ZG7NC097742	SCBBR6ZG7NC001382	SCBBR6ZGXNC003501	SCBBR6ZG8PC004746
SCBBR6ZG8NC096566	SCBBR6ZG6NC097750	SCBBR6ZG7NC001401	SCBBR6ZG2NC003511	SCBBR6ZG3PC004752
SCBBR6ZGXNC096603	SCBBR6ZGXNC097766	SCBBR6ZG5NC001493	SCBBR6ZG1NC003564	SCBBR6ZG0PC004787
SCBBR6ZG3NC096619	SCBBR6ZG3NC097866	SCBBR6ZGXNC001537	SCBBR6ZG2NC003606	SCBBR6ZG4PC004811
SCBBR6ZG0NC096626	SCBBR6ZG8NC097930	SCBBR6ZG1NC001619	SCBBR6ZG1NC003614	SCBBR6ZG8PC004827
SCBBR6ZG3NC096636	SCBBR6ZG2NC097938	SCBBR6ZG3NC001671	SCBBR6ZG2NC003668	SCBBR6ZG3PC004850
SCBBR6ZG7NC096638	SCBBR6ZG4NC097942	SCBBR6ZG1NC001684	SCBBR6ZG8NC003674	SCBBR6ZG5PC004879
SCBBR6ZG8NC096650	SCBBR6ZG1NC097946	SCBBR6ZG0NC001689	SCBBR6ZG2NC003704	SCBBR6ZG5PC004882
SCBBR6ZG5NC096654	SCBBR6ZG3NC097950	SCBBR6ZG1NC001703	SCBBR6ZG5NC003714	SCBBR6ZGXPC004893
SCBBR6ZG0NC096710	SCBBR6ZG6NC097974	SCBBR6ZG0NC001711	SCBBR6ZGXNC003725	SCBBR6ZG3PC004895
SCBBR6ZG9NC096737	SCBBR6ZG5NC097982	SCBBR6ZG7NC001754	SCBBR6ZG1NC003788	SCBBR6ZG9PC004917
SCBBR6ZG3NC096748	SCBBR6ZG3NC098029	SCBBR6ZG1NC001765	SCBBR6ZG8NC003819	SCBBR6ZG5PC004977
SCBBR6ZG1NC096750	SCBBR6ZG0NC098036	SCBBR6ZG6NC001776	SCBBR6ZG0NC003829	SCBBR6ZGXPC005204
SCBBR6ZGXNC096763	SCBBR6ZG4NC098041	SCBBR6ZG7NC001785	SCBBR6ZG3NC003842	SCBBR6ZG2PC005262
SCBBR6ZG2NC096787	SCBBR6ZG6NC098137	SCBBR6ZGXNC001800	SCBBR6ZG0NC003877	SCBBR6ZG6PC005278
SCBBR6ZG4NC096791	SCBBR6ZG2NC098183	SCBBR6ZG9NC001853	SCBBR6ZG9NC003893	SCBBR6ZG0PC005339
SCBBR6ZG3NC096796	SCBBR6ZG3NC098273	SCBBR6ZG1NC001877	SCBBR6ZG4NC003901	SCBBR6ZG1PC005351
SCBBR6ZG1NC096800	SCBBR6ZG6NC098347	SCBBR6ZGXNC002042	SCBBR6ZG9NC003988	SCBBR6ZG8PC005458
SCBBR6ZG7NC096803	SCBBR6ZG8NC098432	SCBBR6ZG2NC002066	SCBBR6ZG0NC003992	SCBBR6ZG6PC005491
SCBBR6ZG6NC096811	SCBBR6ZG3NC098452	SCBBR6ZG5NC002157	SCBBR6ZG5NC004054	SCBBR6ZG7PC005497
SCBBR6ZG9NC096821	SCBBR6ZG2NC098460	SCBBR6ZG8NC002167	SCBBR6ZG6NC004063	SCBBR6ZG5PC005515
SCBBR6ZG1NC096828	SCBBR6ZG5NC098467	SCBBR6ZGXNC002185	SCBBR6ZG6NC004080	SCBBR6ZG5PC005529
SCBBR6ZG4NC096838	SCBBR6ZG9NC098469	SCBBR6ZG0NC002230	SCBBR6ZG1NC004083	SCBBR6ZG3PC005545
SCBBR6ZG0NC096867	SCBBR6ZG7NC098471	SCBBR6ZG9NC002274	SCBBR6ZG0NC004107	
SCBBR6ZG0NC096898	SCBBR6ZG4NC098475	SCBBR6ZG0NC002339	SCBBR6ZG5NC004118	
SCBBR6ZGXNC096939	SCBBR6ZG6NC098493	SCBBR6ZG4NC002411	SCBBR6ZG2NC004190	