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SUBJECT: Model 171.454/456/473 All Model Years

Instrument Cluster SCN Coding for Component Replacement or Dealer Installed Accessories:

- A. Introduction
- **B.** Process Overview
- C. Determine Vehicle Data for SCN Coding
- D. Generate SCN Codes
 - I. Print Out Method
 - II. CD-Burn Method
- E. Perform SCN Coding
 - I. Print Out Method
 - II. CD-Burn Method

A. Introduction

As of DAS release 05/05, SCN Coding is required on Model 171 in order to replace the instrument cluster or to install certain accessories at the Dealer (i.e. Navigation, CTEL). This bulletin provides instructions on performing the SCN Coding for the instrument cluster. It is designed for ease of use and is similar to the SCN Coding instructions of other control units.

Because of the length of the Coding String, this bulletin also includes instructions on transferring the SCN Code to the vehicle via a new method. This new method involves burning the SCN Code onto a CD-R, and then inserting the CD-R into your STAR Diagnosis System (SDS). The SCN Code would then be transferred into the vehicle automatically. However, you will still be able to enter the SCN Code manually via the keyboard should you choose to.

i NOTE: For installation or use of the Online SCN Coding Application, obtaining User ID and password for Online SCN Coding Application, or troubleshooting questions on the Online SCN Coding Application, please refer to S-B-07.61/38f

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B. Process Overview

The SCN Coding Process specified in this Service Bulletin is divided into three parts:

• Determining Vehicle Data for SCN Coding-

In order to obtain an SCN Code you must have the full VIN of the vehicle as well as the correct part number, and the Check Digit [1] for the component that you wish to obtain an SCN Code for. Information can be obtained by STAR Diagnosis using the 'Determine Vehicle Data for SCN Coding' screen.

• Generate SCN Code for Dealer Fit Accessories Using SA Codes-

This procedure can only be performed after a User ID and Password have been obtained and the Online SCN Coding Application has been downloaded. Using the information from the previous step, and the SA Code for the specific accessory, the Online SCN Coding Application will generate the SCN Codes. At this point, you have the option of printing out the codes, or burning them onto a CD.

i NOTE: For installation or use of the Online SCN Coding Application, obtaining User ID and password for Online SCN Coding Application, or troubleshooting questions on the Online SCN Coding Application, please refer to S-B-07.61/38f

• Perform SCN Coding via Print Out Method or CD-Burn Method-

This procedure will allow you to input the SCN Codes received into the vehicle.

- **Print Out Method-** In this process, you receive a print out of the SCN Codes, and you manually enter them into the SDS.
- **CD-Burn Method-** In this process, you burn the SCN Codes onto a CD, and after inserting the CD into the SDS, the SCN Codes are automatically transferred.

Once the SCN Coding process is complete, you will be able to release the vehicle.

C. Determine Vehicle Data for SCN Coding

- 1. Follow menu path: Control Units / Information and Communication / IC - Instrument Cluster / Control Unit Adaptations / SCN Coding
- Select 'Offline (FDOK, Fax, Office),' Press 'F3' (Figure 1)





 Select 'Determine vehicle data for SCN Coding,' Press 'F3' (Figure 2)

4. Confirm VIN. Press 'F3' (Figure 3)





107/2005 (2005-06-16 - - - × 171.454 Vehicle Control unit IC Step 1: Determine vehicle data for offline SCN coding from the vehicle. WDBWK54F26F087372 Vehicle ident no. Enter VIN as a 17-digit code. For example: WDB2200631A123456 USA, Canada: WDBNA63J0SA123456 NOTES - Coding of this control unit is effected with CD 'SCN-Repair-CD'. - The CD can be produced at the workshop using the application 'SDflash Online'.For this you require a PC with CD burner and an Intranet or Internet connection. (http://starnetwork-edc.daimlerchrysler.com/flashen/starterapplet.html) If the application 'SDflash Online' is not installed or if no CD burner is available, the CD can alternatively be ordered from the Global-Logistic-Center (GLC) in Germersheim. Check VIN and confirm with button F3. t 1 F1 F3

Figure 3

5. Print out vehicle data for SCN Coding by pressing 'F11' (Figure 4)

Strat Long Sciences				Dattery voltage 12.1 V 📓 👱		
/ehicle	171.454		Control unit IC			
Step 1: E	Determine v	ehicle data for offlir	e SCN coding from the	vehicle.		
Vehicle ide	ent no.		WDBWK	54F26F087372		
Category		Contraction of the second	PKW			
Part numb	er som som	and the second	1714420	1714420221		
IMPORTA	NT NOTE: The	check digit [1] must be er	tered correctly in the coding d	ata determination.		
Check digi	it [1]		53-10-EC	-CE		
Next steps			Contract of the Long	Barrow Martin		
Preparatio - Print vehi - After tran the CD.	n of the CD label cle data by press smitting the requ	ed 'SCN-Repair-CD' in the sing button F11 and reques est, press the button "Start	workshop t coding data via application 'SDfla burning program" in application 'S	sh Online'. Oflash Online' to burn		
- If the app	lication 'SDflash	Online' is not installed or if gistic-Center (GLC) in Gen	no CD burner is available, the CD mersheim.	can alternatively be		
ordered fro - Press bu	tton F4 to comple	ete and print the CD order f	orm, if desired	S. Ballenner and		
If the CD Is	abeled 'SCN-Rep	ate and print the CD order f	orm, if desired ding data can also be transferred t	o the control unit via		
If the CD I	abeled 'SCN-Rep item 'Perform o	ate and print the CD order f	orm, if desired ding data can also be transferred t	o the control unit via		

6. Generate and retrieve SCN Code. Refer to section 'D' in this document for instructions on generating SCN Codes.

i NOTE: For installation or use of the Online SCN Coding Application, obtaining User ID and password for Online SCN Coding, or troubleshooting questions on the Online SCN Coding Application, please refer to S-B-07.61/38f

D. Generate SCN Codes

1. Click on 'Coding' button on the top of the window (Figure 5).

STAR NETWORK							
DAIMLERCHRYSLER	Over	view Coding					
6 2 75	r Ve	hicles					
		FI	Programming status	Coding/parameterization status	Changed on $\overline{\nabla}$	Processed by	
	0	K WDB 220070 1A 410662		SCN and coding string available		TESTER4	
	0	K WDB 171456 1F 004460		SCN and coding string available		TESTER4	
	0	K WDB 168033 1J 585343		Vehicle data available		TESTER4	
							_

Figure 5

- 2. Enter data into required fields (Figure 6).
 - (A) Enter VIN into 'FIN/VIN' window.
 - (B) Enter PKW in the 'Category' box.
 - (C) Click on 'Other control unit.'
 - (D) Enter SA Codes in the 'Plus SA codes' window **ONLY IF** you are installing a Dealer installed accessory.
 - (E) Click on the button 'F2 Enter Control Unit Data.'

i Note:

-For ALL model years, the SA Code needs to be entered and coded only once when the accessory is installed for the first time.

-For model year 2005 only, add the SA Code if you are performing an Instrument Cluster replacement.

-Starting with Model Year 2006, do not attempt to add a SA Code if you are only performing an Instrument Cluster replacement.

The SA Codes for each Dealer installed accessory is as follows:

- SA Code for Navigation: 530
- SA Code for CTEL: 386

I Note: Refer to Instructions P-I-82.70/416 & P-I-82.85/431 for Dealer accessory installation procedure.

STAR NETWORK	
DAIMLERCHRYSLER	Overview Coding A
6 A R	Vehicle data
16 8/	FINVIN 4JGBB86EX6A000283 Category PKW
	Plus SA codes Minus SA codes
	C Engine control unit C Transmission control unit C 🗪 Other control unit
Applications	
S <u>D</u> flash	
Tools	
Star Setup	
	F2 Enter control unit data

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Figure 6

(F) Enter the Part Number/MBobject Number of the control unit (Figure 7). (G) Enter the Check Digit [1] (Figure 7).

| i | Note: Check Digit [1] must be entered in capital letters and do not include any dashes (-).

3. Generate SCN Coding Information. (H) Click 'F3 Query' button (Figure 7).

STAR NETWORK			
DAIMLERCHRYSLER	Overview Coding		
16 31	EINMIN 4JGBB86EX6A000283		Category PKW
	Plus SA codes		Minus SA codes
	Other control unit		
	Part number 2514420221	Status + instructions	
		Information:	
	F	Next steps: Enter the code in the s	pecial equipment block if special equipment has been installed in
Applications			
S <u>D</u> flash		Coding string:	4
Tools		SCN:	Check digit 2:
Star Setup		Ģ	
	Check digit 1	H	
	F2 Enter control unit data	iuery	
	F10 New vehicle	F6 Select burning software	F7 Start burning program F11 Print
			10.BT20_006
Menu Help	Logout Code control units.		

Figure 7

| i |

Note: If you see the following message (Figure 7a) pop-up after pressing the 'F3 Query' button(Step 3), this means that the SA Code that you have entered has already been reflected in the vehicle record. Because the SA Code is already in the vehicle record, it cannot be entered in again. Please delete the SA Code that was entered (Figure 6, Arrow D) and Click the 'F3 Query' button again to generate the SCN Code. The SCN Code will be generated and it will reflect the Dealer Fit Accessory that has been installed into the vehicle.



- 4. Display SCN Coding Information. (Figure 8)
 - (I) Click the 'OK' button.
 - (J) SCN Coding Information will then be displayed.

D. Generate SCN Codes (Continued) I. Print Out Method

(K) If you are SCN coding via **Print Out Method**, click on 'F11 Print' to print the information, and continue onto section 'E'.

D. Generate SCN Codes (Continued) II. CD-Burn Method

(L) If you are SCN coding via **CD-Burn Method**, insert the CD into the CD Burner, then click on 'F7 Start burning program'. Your designated burning program will start. Proceed to step 5.

1 Note: If you are starting the CD burning process for the first time on the computer, **DO NOT** click on 'F7 Start burning program'. Please have your IT personnel set up the burning software configuration.

I Note for IT: Burning Software Configuration: Select 'F6 Select burning software'. Then a window will open asking for you to select the preferred burning software. Search through the drive until you select the program(Ex. Nero.exe or Roxie.exe) of your choice. Click on 'Save'. The technician may now continue with step 4(L). To change the preferred burning software at anytime, repeat this procedure.

STAR NETWORK			_ D ×
DAIMLERCHRYSLER	Overview Coding		
V.Selation	r Vehicle data		
100000000000000000000000000000000000000	FINMIN 4JGBB86EX6A000283		Category PKW
	Plus SA codes	M	nus SA codes
	Other control unit		
	Part number 2514420221	r Status + instructions	
	Control unit software		
		Information:SCN and coding string available	8/11
	Information	X	r
			follow DAS instruction and press F7 to open burning prog
	i	SCN generation and coding string formation successfully completed	
Applications			
S <u>D</u> flash		OK	4 01 F4 02 8A 00 14 64 18 48 A 3B 36 05 46 BE 51 01 04 00 30 3B 37
		OC 4E 10 68 14 50	00 6E 00 4E 00 2E 00 00 04 14 34
		SCN: 2514420221 15 0007	Check digit 2: 10 03 74 C2
TOOIS			12
Star Setup	۱ () () () () () () () () () (
	Check digit 1 60 B0 3F F6		L K
	F2 Enter control unit data F3 Query		
	E10 Nowyobielo	EE Colort huming cothurn	E7 Start huming program E11 Brint
	- FTO New Venicle	ro select gunning soliware	10 BT20 006
Menu Help	Logout	Carateria Carateria	

Figure 8

5. Burning the SCN Coding information.

(M) Look for the files in the following directory of your computer (Figure 9). C:\userdata\csd\writefil\create\flashfil\Pkw\XXX.XXX\VIN Number

i Note: The XXX.XXX is the 4th through 9th characters of the VIN. Example: For Vin 4JG**BB86EX**6A00283, the directory will be: C:\userdata\csd\writefil\create\flashfil\Pkw**BB8.6EX**\4JGBB86EX6A00283\

(N) Only burn the two files located in the specified VIN directory (Figure 9).(O) After the CD is burned, return to the SDS with the CD, and continue with section 'E'.



Frequently Asked Questions about the CD Burning Method

What CD's can be used?

You are able to use a CD-Recordable (CD-R) Compact Disc.

What should my computer have?

Your computer should already be available to operate the Online SCN Coding Application as per S-B-07.61/38f. Your computer should also have a CD-R/CD-RW drive with a CD burning application (Ex. Nero or Roxio).

I burned the CD and went back to the SDS machine, but it does not recognize the CD. Now what?

What probably happened was either the CD was defective or the CD was not burned properly. Discard the defective CD and try burning the CD again after generating the SCN Codes.

Can I reuse the CD for another vehicle?

No. The CD is for one vehicle only. Once the SCN Coding is performed on the specified vehicle, the CD should be destroyed and disposed of.

E. Perform SCN Coding

1. Select 'Perform Offline SCN Coding', Press 'F3' (Figure 10).



- Figure 10
- A. If you are SCN Coding via Print Out Method, press 'F4' (Figure 11) and continue to sub-category *'I*' of this section (page 10).

B. If you are SCN coding via CD-Burn Method, insert the CD in the SDS, then press 'F3' (Figure 11) and continue on to sub-category '*II*' of this section (page 11).

07/2005 (2005-06	6-16)	VN - WDBWk64F26F067372 Battery voltage 12 1 V 🔮 🔔 🗗
/ehicle	171.454	Control unit IC
Step 2: F	Performance of S	SCN coding ('SCN-Repair-CD')
Vehicle ide	ent no.	WDBWK54F26F087372
Enter VIN a For examp WDB2200 USA, Cana	as a 17-digit code. ble: 1631A123456 ada: WDBNA63J0SA12	23456
NOTES	o balloches to list, con	
- CD 'SCN-	-Repair-CD' must be av	/ailable for this vehicle.
- Insert CD	labeled 'SCN-Repair-	CD' into the STAR DIAGNOSIS device.
- This contr	rol unit must not have b	een replaced or programmed since the CD was ordered.
- The CD n	must be discarded after	use otherwise incorrect coding of the control unit may occur.
Is the curre	ent CD 'SCN-Repair-CI	D' for this vehicle available?
Alternative	ly, the coding data can	be entered manually via button F4.
	t 🗸	
	F1 F3	F4



E. Perform SCN Coding (Continued) I. Print Out Method

 Input SCN Code, Coding string, and Check digit [2] manually, then Press 'F3' (Figure 12)

I NOTE: Please be sure to input all of the characters of the SCN Code that you have retrieved including any sets of zeros (00). In some cases you will not have enough characters to fill all of the empty fields; in this case you must leave these fields empty.

Enter VIN : - WDB220 - USA, Car	as a 17-digit code. For exa 0631A123456, WDC2200 ada: WDBNA63J0SA123	mple: 631A123456 456
Vehicle ide	ent no.	WDBWK54F26F087372
Part numbe	ər	1714420221
First four c	ligits of coding string:	· · · · · · · · · · · · · · · · · · ·
SCN		000000000 - 00 - 0000
Check digi	t [2]	00 - 00 - 00

2. The SCN Coding process is now complete when this documentation page appears (Figure 13). Press 'F11' to get a printout for your records.

I NOTE: The SCN Coding process is complete at this stage and the vehicle can be released.

Documen	tation for repair order Se	CN			
The SCN c	oding sequence has been com	pleted successfully.			
Print log w	ith function key F11 via menu it	em 'Printout of test step'.			
Date		2005-05-18 15:04 (03:04 pm)			
Model desig	gnation	PKW 171.456			
Vehicle ide	nt no. VIN	WDBWK56F45F062565			
DAS data v	ersion	05/2005 (2005-04-14)			
Diagnosis r	nultiplexer serial number	031320			
Control unit		Instrument cluster			
Part numbe	r an sharan an a	1714420121			
Diagnosis v	version	0A03			
SCN		1714420121-15-0009			
Coding string		01-92-F0-09-01-04-00-0C-38-62-0A-1E-12-8E-00-00- 01-04-00-30-88-50-0D-00-0A-60-09-80-06-60-04-2- 00-0D-00-00-04-7E-09-C4-13-88-1D-4C-27-10-01-04- 00-08-38-36-51-48-5C-12-01-04-00-1-38-34-28-64- 32-01-04-00-C8-00-88-00-80-05-01-07-01-04-01-68-3			

Figure 13

E. Perform SCN Coding (Continued) II. CD-Burn Method

 If the CD is being read properly, you will see the following screen (Figure 14). Continue to carry out Coding by pressing 'F3'. Proceed to step 3.

 If the CD is **NOT** being read properly, you will see the following screen (Figure 15). Ensure that the CD is in the SDS, and press 'F3' to retry the procedure (Figure 15).

i NOTE: If the CD-Burn method is not successful, you are alternatively able to press 'F4' to return to the main screen and follow the steps on performing the SCN Coding via print out method.

 The SCN Coding process is now complete when this documentation page appears (Figure 16). Press 'F11' to get a printout for your records. Remove the CD from the SDS.

i NOTE: After use, the CD must be destroyed. Do not attempt to use the same CD for another vehicle.

I NOTE: The SCN Coding process is complete at this stage and the vehicle can be released.

fille	171.454	Control unit Instrument cluster
arrying ou	t the SCN coding with CD 'S	CN-Repair-CD'
The following	coding data have been found:	
Vehicle ident r	· WDBWK56F45F062565	
Part number	1714420121	
SCN	1714420121-15-0009	







Docume	ntation for repair order S	CN		
The SCN	coding sequence has been com	pleted successfully.		
Print log v	with function key F11 via menu i	em 'Printout of test step'.		
Date		2005-05-18 15:04 (03:04 pm)		
Model des	ignation	PKW 171.456		
Vehicle ide	ent no. VIN	WDBWK56F45F062565		
DAS data version		05/2005 (2005-04-14)		
Diagnosis	sis multiplexer serial number 031320			
Control unit		Instrument cluster		
Part numb	er	1714420121		
Diagnosis	version	0A03		
SCN		1714420121-15-0009		
Coding string		01-92-F0-09-01-04-00-0C-3B-62-0A-1E-12-BE-00-00- 01-04-00-30.38-55-00-D0-0A-8E-00-96-00-66-00-04- 00-0D-00-04-7E-09-C4-13-88-1D-4C-27-10-01-04- 00-08-38-05-14-8C-12-01-04-00-1C-3B-34-28-64- 32-01-40-00-C8-00-88-00-88-00-56-10-F0-10-40-01-F8-3		

Figure 16

I NOTE: The following allowable labor operations should be used when submitting a warranty claim for this repair.

In Case of Warranty

Operation: Instrument cluster – complete (after test), Repl. (54-6023)

Damage Code	Operation Number	Time (hrs.)	Model Indicator (s)
**Use applicable damage	54-6023	0.7 hrs.	X1, X2, X3
code **			

I NOTE: Operation Code 54-6023 includes manual version SCN Coding. The addition in time will be viewable in the next Time Guide update.