

SIM 61 01 24 2024-02-01 CLICK AND DRIVE ACCESSORY AFFECTS ELECTRONIC POWER STEERING (EPS) FUNCTIONALITY

THIS REPAIR IS MOBILE FRIENDLY

MODEL

E-Series Model Description		Production Date
F54	MINI Clubman	
F55	MINI Hardtop 4 Door	from SOP 2013
F56	MINI Hardtop 2 Door	
F57	MINI Convertible	
F60	MINI Countryman	

SITUATION

Customers with a genuine MINI "Click and Drive System" (C&D) accessory installed may complain of steering system check control messages (CCM) and reduced steering functionality.

The concern starts after a software update to 4.28.1.x (21-03-500) or greater, and the issue can be duplicated after placing a device on the MINI (C&D) Click and Drive accessory.

One or more of the following CCM may be stored:

- Steering effort increased
- Driving Stabilization failed
- Speed control failed
- · Collision warning failed
- Pedestrian warning failed

Possible customer scenarios:

- Before driving: If the customer wants to charge a smartphone via the USB connection on the MINI C&D and plugs it in before driving, the CCM messages mentioned above occur as soon as the ignition (KL15) is switched on
- While driving: If the customer plugs in their mobile phone while the engine is running, nothing happens at first. Only when the vehicle activates the automatic start/stop (vehicle stops at the traffic lights and engine stops), then the above mentioned CCM messages occur.

A temporary solution for the customer to avoid a broken-down vehicle: Unplug the smartphone, turn off the engine AND ignition, wait a moment and then start the engine again. The steering assist should work again, and the customer can drive to a workshop.

Note: When installing the MINI Click and Drive accessory always use the most up-to-date installation instructions, found in the Electronic Parts Catalog (EPC).

CAUSE

Changes in the vehicle software have increased the electrical demands of the 15N_1 circuit. A preinstalled MINI C&D accessory may cause drops in voltage and module resets making components erratic.

CORRECTION

If the MINI C&D connection (+) A1* is installed at the BDC connector A258*3B pin 20, the MINI C&D (+) A1* connection must be moved to the front power distribution box.

Note: Replacing the vehicle's electric steering gear assembly will not correct this issue.

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PROCEDURE

Refer to Attachment

PARTS INFORMATION

To determine the part number that applies to the specific vehicle being repaired, enter the VIN/chassis number into either ETK or AIR, this will consider the specific equipment and/or options that are fitted to the vehicle.

Part Number	Description	Quantity
61 13 6 917 401	(J) Fuse MINI, yellow-brown (5A)	1
61 13 9 232 673	(I) Socket contact MCP 2.8 (0.2 - 0.35 mm ²)	1
Or		
61 13 5 A7D 687	(I) Socket contact MCP 2.8 (0.2 - 0.35 mm ²)	1
Or		
66 21 5 A77 F90	(K) SZ power distributor box (Set)	Sublet for the used item

CLAIM INFORMATION

Covered under the terms of the MINI New Passenger Car Limited Warranty as described below.

Repair Code: 7260001400 Other accessories Occasional malfunct

Obtain the flat rate unit (FRU) allowances for the following that applies.

Labor Operation	Description	
00 00 006	Carrying out vehicle test (Main work)	As applicable
Or:		
00 00 556	Carrying out vehicle test (Plusposition)	As applicable
And:		
61 21 528	Supporting voltage of the vehicle electrical system / recharging vehicle battery	As applicable
And, as needed:		
61 00 006*	61 00 006* Carrying out vehicle diagnosis, ABL (Work time) (Including further diagnosis as outlined in the Procedure)	
Or:		
00 58 500*	Diagnosis Worktime Flat Rate	2 FRU
And:		
61 14 535	Removing and installing/replacing front positive battery cable power distribution (Plusposition)	As applicable
And:		
61 99 000	Work time to move the MINI C&D (+) A1* connection to the front power distribution box.	3 FRU

If you are using a Main labor code for another repair, use the Plus code labor operation 00 00 556 instead of 00 00 006, or exclude them (including 61 21 528) when the Vehicle Test is included in another repair.

Work time labor operation codes 61 00 006, 00 58 500, and 61 99 000 are not considered Main labor operations.

Sublet – Bulk Material (RO and Claim Comments Required)

Sublet Code 4	See the sublet reimbursement calculations below	Reimbursement for the repair-related bulk materials (Do not use the MINI part numbers for claim submission)
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61 01 24_CLICK AND DRIVE ACCESSORY AFFECTS ELECTRONIC POWER STEERING (EPS) FUNCTIONALITY

Sublet reimbursement calculation for claiming the applicable repair-related bulk materials (MINI part number) is at the dealer net price amount for the proportional quantities used plus your dealer's handling.

Enter this material cost in sublet and itemize the amount on the repair order and in claim comment section.

BMW Group's AIR Application Resource for Flat Rate Labor Operation Codes

To obtain the corresponding flat rate unit (FRU) allowance information from the BMW Group AIR application resource, start by entering the Chassis Number (the last seven (7) characters of the VIN, select the applicable Model if two or more vehicle choices show), or enter the full VIN (17 characters), click on the "Search" button. Next, click on the "Flat Rate Units" button and enter the flat rate labor operation code in the field to the right, click "Search" to display the Flat Rate Unit Group detail choices.

Other Repairs

If other eligible and covered work is performed because of performing the ISTA diagnostics and related test plans, claim this work with the applicable Repair Code listed in AIR together with the corresponding labor operation codes and their flat rate unit (FRU) allowance(s), including the diagnosis* that applies.

(*) Based on which one applies to your dealer, please refer to **SI M01 01 20 or M01 04 20** for the applicable procedure for documenting, claiming, and explaining, on the RO and in the claim comments, your diagnosis work time (WT), job/repair work time (WT), and the vehicle repairs your dealer performed, unless otherwise required by State law.

FEEDBACK REGARDING THIS BULLETIN

Technical Feedback	To submit feedback for the technical topic of this bulletin: Submit your feedback in the rating box at the top of this bulletin		
Warranty Feedback	To submit feedback for the CLAIMS section of this bulletin: Submit an IDS ticket to the Warranty Department, or use the chat available in the Warranty Documentation Portal		
Parts Feedback	To submit feedback for the PARTS section of this bulletin: Submit an IDS ticket to the Parts Department		

Supporting Materials

picture_as_pdf M610124 Attachment Click and Drive Installation Instruction 2451654 1_2024.pdf picture_as_pdf M610124.pdf 2/13/24, 5:24 AM

ORIGINAL MINI PARTS AND ACCESSORIES. INSTALLATION INSTRUCTIONS.



MINI Click & Drive System Retrofit.

MINI Clubman (F54) MINI 5-door (F55) MINI 3-door (F56) MINI Convertible (F57) MINI Countryman (F60)

Retrofit kit number

65 90 2 448 753MINI Click & Drive System base rack65 90 2 471 026MINI Click & Drive System base rack66 21 5 A77 F90SZ power distributor

Installation time

The installation time is **approx. 0.75 hours**. This may vary depending on the condition of the vehicle and its equipment.

Important information

If the EPS control in the instrument cluster is lit, terminal 15 must be connected using the SZ power distributor.

These installation instructions are primarily designed for use within the MINI dealership organisation and by authorised MINI service companies.

In any event the target group for these installation instructions is specialist personnel trained on MINI cars with the appropriate specialist knowledge.

All work must be completed using the latest MINI repair manuals, wiring diagrams, servicing manuals and work instructions, in a rational order, using the prescribed tools (special tools) and observing current health and safety regulations.

If you experience installation or function problems, restrict troubleshooting to approx. 0.5 hours for mechanical work and 1.0 hours for electrical work.

To avoid unnecessary extra work and/or costs, please send an inquiry to the technical parts support team.

Quote the following information:

- Chassis number,
- Retrofit kit part number,
- A detailed description of the problem,
- any work already carried out.

Please do not archive the printout of these installation instructions. The current version can be found in the EPC.

Pictograms

Denotes instructions that draw your attention to dangers.

Denotes instructions that draw your attention to special features.

• Denotes the end of the instruction or other text.

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Installation information

Ensure that the cables and/or lines are not kinked or damaged as you install them in the car. Costs arising from this will not be reimbursed by BMW AG.

Additional cables/wires that are installed must be secured with cable ties. If the specified PIN chambers are occupied, bridges, double crimps, or twin-lead terminals must be used.

All pictures show LHD (left-hand drive) cars; proceed accordingly on RHD (right-hand drive) cars.

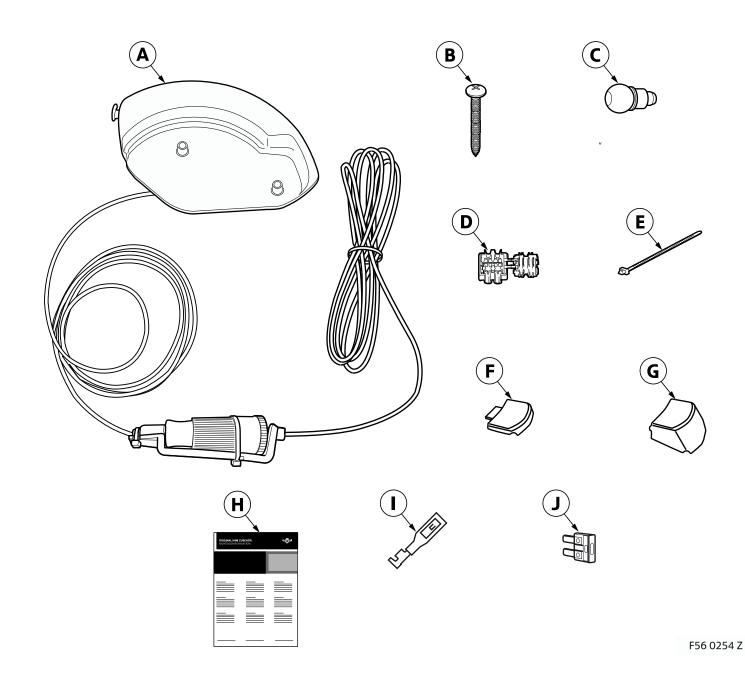
Ordering instructions

The following parts are not supplied in the retrofit kit and must be ordered separately (see EPC for part number and details):

- Socket contact MCP 2.8 x 0.8 I
- MINI 5A fuse J

Section	Page
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1. Parts list for retrofit kit

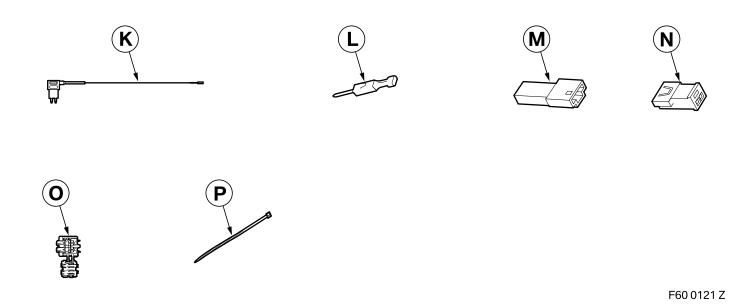


Legend

- A Holder
- B Screw (2 x)
- C Ball holder
- **D** Miniature connector (2 x)
- **E** Cable ties (5 x)
- F End-stop damper (F54, F55, F56 and F57 cars only)
- **G** End-stop damper (for F60 cars only)
- **H** Installation information (give to the customer)
- Socket contact MCP 2.8 x 0.8 (not supplied with the retrofit kit)
- J MINI 5A fuse (not included in the retrofit kit)

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2. SZ power distributor parts list

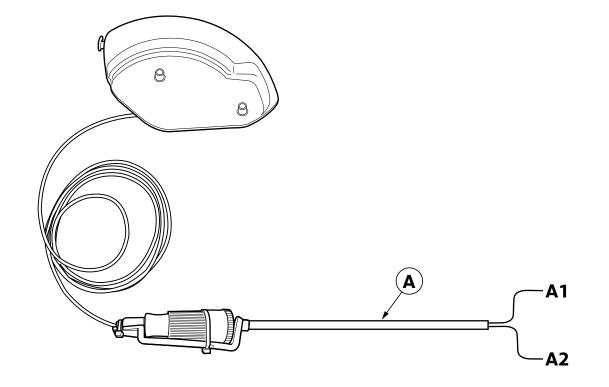


- K SZ power distributor, RED cable
- L Pin contact, 0.5 -1.0 mm² (2 x)
- M SW 2-pin plug housing
- N SW 2-pin socket housing
- **O** 2-way miniature connector (2 x)
- P Cable ties (2 x)

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3. Preparatory work

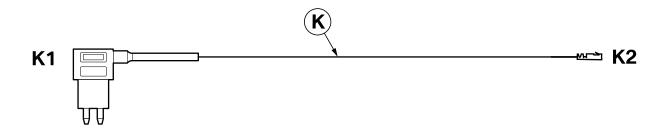
	ISTA/AIR No.
Disconnect the negative battery cable	61 20 900
Release and disconnect various plug connections	61 13
Cut, strip and crimp cables	61 11
Open the plug housing and remove the contacts from various connection systems	61 13
Instructions for handling wiring harnesses and cables	61 00
Instructions for handling the documents: Repair manual, technical data, tightening torques	00 11
The following components must be removed first of all	
Instrument panel	62 11 280
Steering column trim lower section	32 31 020
Left and right side centre console trim	51 45
Bottom left dashboard trim	51 45 180
(Interior) door sill cover strip, passenger side	51 47 000
Footwell side trim on the A-pillar, passenger side	51 43 075
Glove box	51 16 866
Release the power distributor	61 14



F56 0028 Z

Item	Designation	Signal	Cable colour/ cross-section	Connection location in the car	Abbreviation/ slot
А	Cradle				
A1	Open cable	Terminal 15		With miniature connector D or socket contact I to power distributor Z7	Z7*3B PIN 22
A2	Open cable	Terminal 31		With miniature connector D to the cable from plug BDC	A258*3B PIN 24

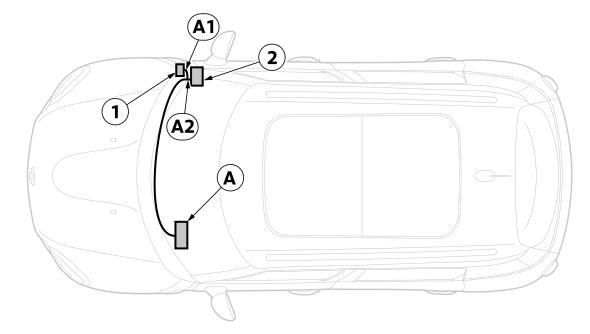
5. SZ power distributor retrofit wiring harness connection diagram



F60 0122 Z

Position	Designation	Signal	Cable colour/ cross-section	Connection location in the car	Abbreviation/ slot
	SZ power distributor retrofit wiring harness				
K1	SZ power distributor	Termi- nal 30B		To power distributor Z7	F79
K2	Socket contact	Termi- nal 30B	RT 0.35 mm²	To SW 2-way socket housing N	PIN 1

Installation and cabling diagram for LHD (left-hand drive) cars 6.



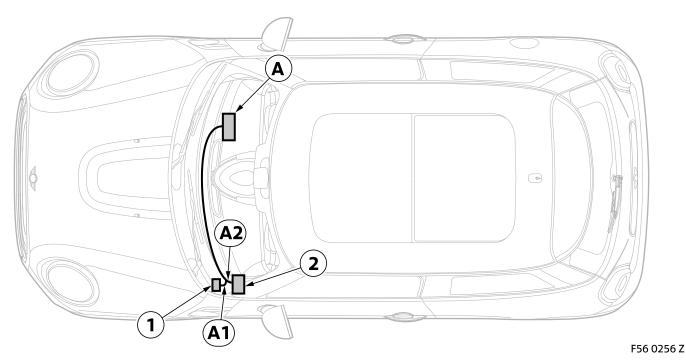
- Power supply cable from cradle A **A1**
- Holder power supply cable **A** A2
- 1
- Front power distributor **Z7** plug **Z7*3B** Body Domain Controller (BDC) **A258**, plug **A258*3B**, 54-pin SW socket housing 2

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F56 0255 Z

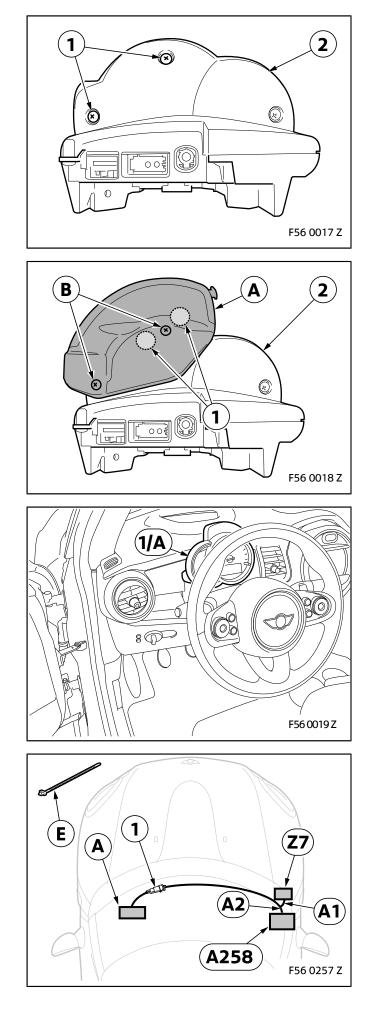
Installation and cabling diagram for RHD (right-hand drive) cars 7.



- Α Cradle
- Power supply cable from cradle A **A**1
- Holder power supply cable **A** A2
- 1
- Front power distributor **Z7** plug **Z7*3B** Body Domain Controller (BDC) **A258**, plug **A258*3B**, 54-pin SW socket housing 2

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8. Installing the Click & Drive System

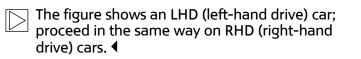


Undo screws (1) on the instrument cluster (2) (no longer required).

Remove the protective backing film (1) from cradle **A**.

Screw cradle **A** using screws **B** onto the instrument cluster (2).

Install the instrument cluster (1) with holder A.



Route branches **A1-A2** of holder **A** underneath the dashboard to the location of power distributor **Z7** and BDC **A258** on the A-pillar on the passenger side.

Secure plug connection (1) to a suitable point using cable ties **E**.

Ζ7

77

D

Z7*3B

2222222

666

A1)

F56 0252 Z

jagggg

If PIN 22 is occupied, use a miniature connector **D** ◀

Cut the retrofit cable to the required length.

Connect branch **A1**, SW cable, with crimped socket contact **I** to PIN 22 of plug **Z7*3B**.

Insert fuse J into slot F57 in power distributor Z7.

SZ power distributor

Disconnect branch **A1**, SW cable, from PIN 22 of plug **Z7*3B**.

Remove socket contact I using conventional workshop equipment.

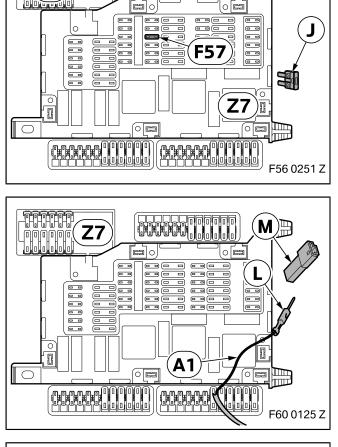
Connect branch **A1**, SW cable, to PIN 1 of the SW 2pin plug housing **M** using the crimped pin contact **L**.

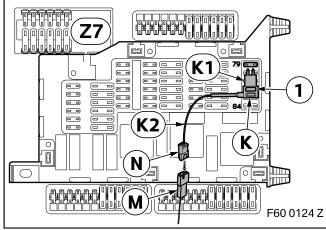
Remove the existing fuse from slot **F79** of power distributor **Z7** and insert it into slot (1) in SZ power distributor **K**.

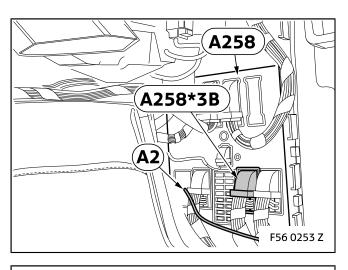
Connect branch **K1** on SZ power distributor **K** as shown to slot **F79** on power distributor **Z7**.

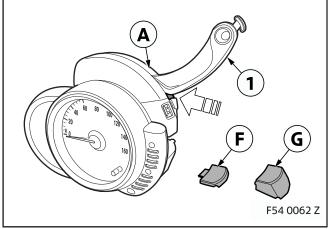
Connect branch **K2** to PIN 1 of SW 2-pin socket housing **N**.

Connect SW 2-pin socket housing **N** to SW 2-pin plug housing **M**.









All cars

Cut the retrofit cable to the required length.

Strip branch **A2** and connect it using miniature connector **D** as follows to the cable in plug **A258*3B** on the BDC **A258**:

Branch A2, BR cable, to BR/SW cable from PIN 24.

F54, F55, F56 and F57 cars only

Insert end-stop damper **F** between holder **A** and swivel arm (1).

For F60 cars only

Insert end-stop damper **G** between holder **A** and swivel arm (1).

9. Concluding work and coding

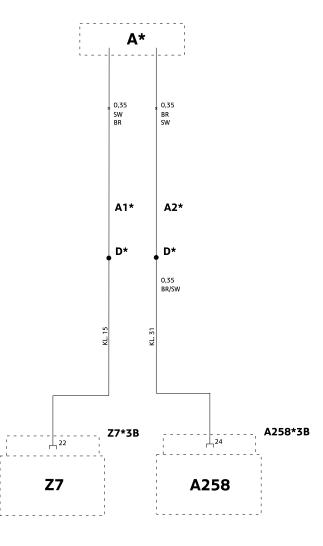
The retrofit system does not require programming / coding.

- Connect the battery
- Carry out a function test

If the EPS control in the instrument cluster is lit, terminal 15 must be connected using the SZ power distributor.

- Re-assemble the car in a logical manner
- Give all parts, which have not been installed, and the installation information to the customer

10. Wiring diagram



F56 0258 Z

Legend

- A* Cradle
- D* Miniature connector
- A1* Open cable SW or BR
- A2* Open cable BR or SW
- A258 Body Domain Controller BDC on A-pillar passenger side
- A258*3B SW 54-pin socket casing on BDC
- **Z7** Power distributor
- **Z7*3B** SW 12-pin socket housing

Depending on the version, cable colours SW (black) and BR (brown) may be reversed on branches A1* and A2*. Refer to the sticker and information on the wiring harness relating to +12V and earth.

All the designations marked with an asterisk (*) apply only to these installation instructions or this wiring diagram.

Cable colours

BL	Blue	GR	Grey	RT	Red
BO	Bordeaux (Burgundy)	L-GN	Light green	SW	Black
BR	Brown	NT	Natural	TR	Transparent
GE	Yellow	OR	Orange	VI	Violet
GN	Green	RO	Pink	WS	White