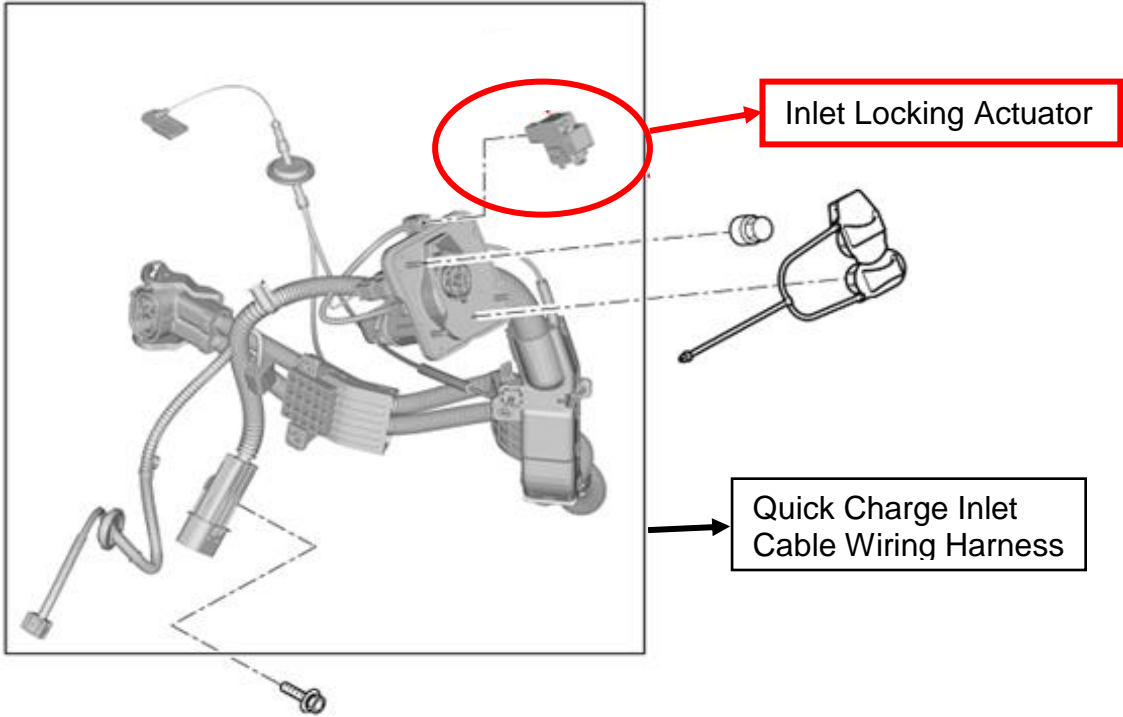
 HYUNDAI Technical Service Bulletin	GROUP BODY ELECTRICAL	NUMBER 18-BE-018
	DATE NOVEMBER, 2018	MODEL(S) IONIQ ELECTRIC (AE EV) IONIQ PLUG-IN HYBRID (AE PHEV)
SUBJECT: CHARGING INLET LOCKING ACTUATOR PART INFORMATION AND REPLACEMENT PROCEDURE		

Description: Some Ioniq EV (AE EV) and Ioniq Plug-in Hybrid (AE PHEV) vehicles may experience a charging connector lock/unlock actuator malfunction, which may cause:

- The charging connector to not remain locked when the charger is inserted into the charging port.
- The charging connector to be unable removed from the vehicle charging port.

This bulletin provides part replacement instruction and information on the availability of the inlet locking actuator as a separate part. If the vehicle exhibits one of the condition described above, it is recommended to replace the inlet locking actuator only, not the entire quick charge inlet cable wiring assembly.



Applicable Vehicles:
All 2017 - 2019 Ioniq Electric (AE EV)
All 2018 - 2019 Ioniq Plug-in Hybrid (AE PHEV)

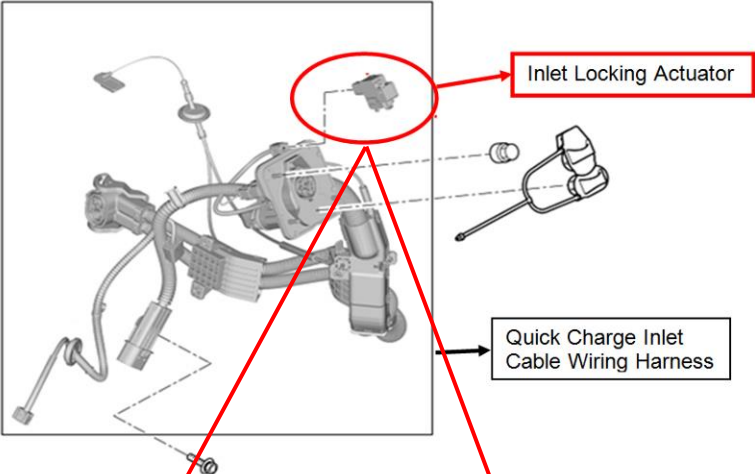

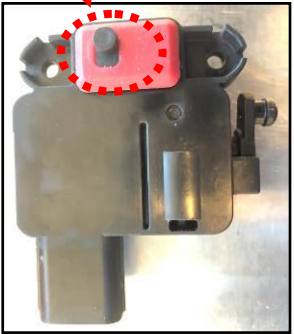
SUBJECT:

CHARGING INLET LOCKING ACTUATOR PART INFORMATION AND REPLACEMENT PROCEDURE

Warranty Information:

MODEL	OP. CODE	OPERATION	OP. TIME	CAUSAL PART	NATURE	CAUSE
Ioniq Electric (AE EV) Ioniq Plug-in Hybrid (AE PHEV)	91999R00	Inlet Locking Actuator Replacement	Please see WEBLTS for current LTS time.	For Causal P/N: Refer to the Parts Information for the inlet locking actuator P/N per applicable model.	114	ZZ3

Parts Information:

PART NAME	PART NUMBER		PART IMAGE
	IONIQ ELECTRIC (AE EV)	IONIQ PLUG-IN HYBRID (AE PHEV)	
Inlet Locking Actuator	91999G7310	91999G7110	  <p>91999G7310</p>  <p>91999G7110</p> <p>NOTE: The main differences between the two parts is the length of the tab.</p>

Service Procedure:

- Ioniq Electric (AE EV) Inlet Locking Actuator Replacement (pages 3-8)
- Ioniq Plug-in Hybrid (AE PHEV) Inlet Locking Actuator Replacement (pages 9-14)

IONIQ ELECTRIC (AE EV) INLET LOCKING ACTUATOR REPLACEMENT

! WARNING

Be sure to read and follow the “General Safety Information and Caution” notice before doing any work related with the high voltage system. Failure to follow the safety guidelines may result in serious electrical injuries.

1. Align the vehicle onto the lift. Do not lift the vehicle up.



2. If applicable, record the customer’s radio preset stations for AM/FM/XM.

3. Open charger door by pressing the release buttons on the dash.

Open tailgate by pressing the release buttons on the tailgate.



4. Pull hood release to open the hood to access the auxiliary battery.

5. Disconnect the negative (-) cable on the auxiliary 12 V battery.

**Negative battery terminal tightening torque:
3.0~4.4 lb-ft (4.0~6.0 Nm, 0.4~0.6 kgf.m)**



6. Remove the trunk covers.

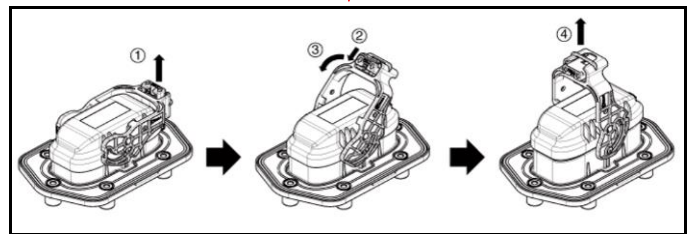
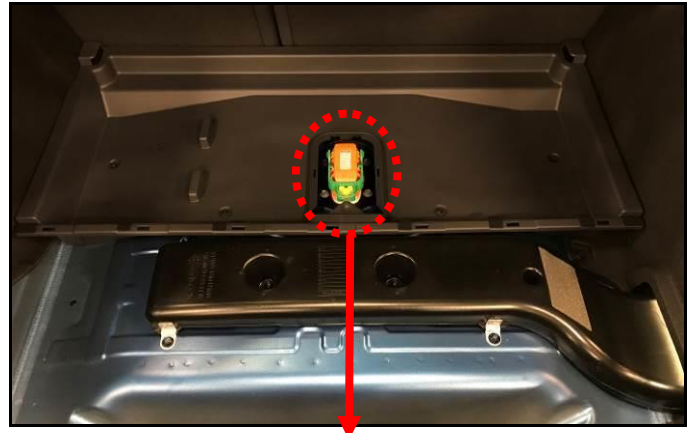
Remove the safety plug cover by using a Phillips screwdriver to remove the clip located in the picture to the right.



7. Wear insulated protective gloves and disconnect the high voltage safety plug by following the illustration steps shown to the right.

⚠ CAUTION

Per the EV “General Safety Information and Caution Notice”, wear insulated safety gloves when working on high voltage components that have an orange connector and cable color.



NOTE: Step 2 is pushing the yellow tab inward and then lift.

Ensure the insulated safety gloves are not expired by checking the stamped date on the gloves.

To order a new set of insulated safety gloves, contact Bosch at 1-866-539-4248. Refer to the table on the right for the part number information.

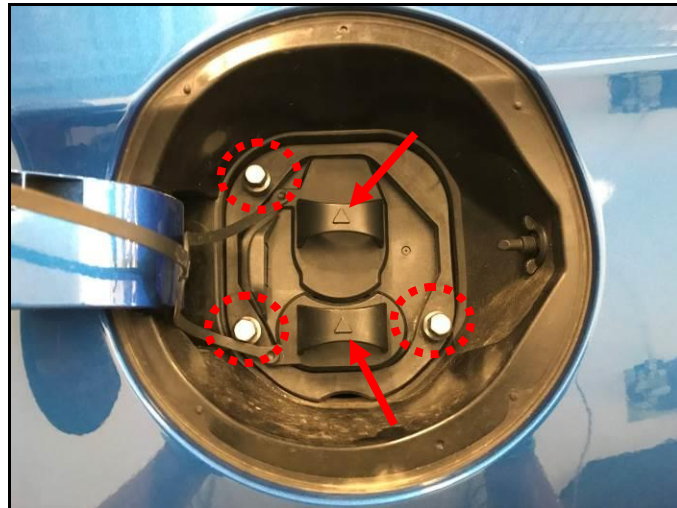
Refer to <https://www.grainger.com/content/qt-electrical-safety-gloves-inspection-262> for electrical safety gloves inspection information.

Bosch Part Number	Description	Image
J-48755-11H (Medium)	Insulated Leather Safety Gloves	
J-48755-12H (Large)	Insulated Leather Safety Gloves	

8. Wait 5 minutes to allow the high voltage battery capacitor to fully discharge.
9. Remove the three 10mm nuts holding the charger port and pull the charger port plugs.

**Quick charging port mounting bolt
tightening torque:**

8.0~10.1 lb-ft (10.8~13.7 Nm, 1.1~1.4 kgf.m)



10. Lift the vehicle to comfortable working height.



11. Remove the rear driver's side wheel by removing the 5 lug nuts.

Lug nut tightening torque:

**79.6~94.0 lb-ft (107.9~127.5 Nm, 11.0~13.0
kgf.m)**



12. Remove the wheel well liner by removing the three types of fasteners located in the picture to the right.



13. Remove a 10mm bolt and a 10mm nut to loosen the charging wiring harnesses.

**Quick charging port bracket mounting
nut/bolt tightening torque:
7.2~8.7 lb-ft (9.8~11.8 Nm, 1.0~1.2 kgf.m)**



Loosen the harnesses by pulling them out of the body mounting screws.



14. Carefully pull the charging port away from the fender and wiggle downward to release the charging port.



15. Disconnect the connector from the inlet locking actuator.



16. Use a T15 Torx screwdriver to remove the two screws holding the inlet locking actuator.

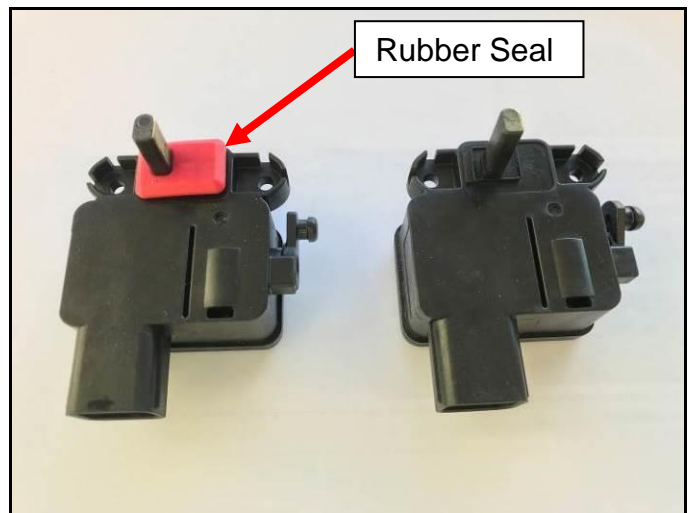


17. Detach the cable from the inlet locking actuator arm.



18. Remove the red rubber seal from the old part and place it onto the new part.

Replace the inlet locking actuator with the new part.



19. Reinstall all removed parts in reverse order.
20. Confirm if the charging port locks/unlocks and if the charging function is operating by checking the vehicle's charging status.



IONIQ PLUG-IN HYBRID (AE PHEV) INLET LOCKING ACTUATOR REPLACEMENT

! WARNING

Be sure to read and follow the “General Safety Information and Caution” notice before doing any work related with the high voltage system. Failure to follow the safety guidelines may result in serious electrical injuries.

1. Align the vehicle onto the lift. Do not lift the vehicle up.



2. If applicable, record the customer's radio preset stations for AM/FM/XM.
3. Open tailgate by pressing the release buttons on the tailgate.



4. Remove the battery cover on the rear passenger side trunk.

Disconnect the negative (-) cable on the auxiliary 12 V battery.

**Negative battery terminal tightening torque:
3.0~4.4 lb-ft (4.0~6.0 Nm, 0.4~0.6 kgf.m)**



- Remove the trunk cover.

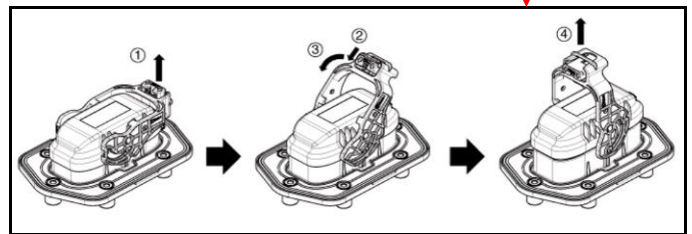
Remove the safety plug cover by using a small flathead screwdriver.



- Wear insulated protective gloves and disconnect the high voltage safety plug by following the illustration steps shown to the right.

CAUTION

Per the EV “General Safety Information and Caution Notice”, wear insulated safety gloves when working on high voltage components that have an orange connector and cable color.



NOTE: Step 2 is pushing the yellow tab inward and then lift.

Ensure the insulated safety gloves are not expired by checking the stamped date on the gloves.

To order a new set of insulated safety gloves, contact Bosch at 1-866-539-4248. Refer to the table on the right for the part number information.

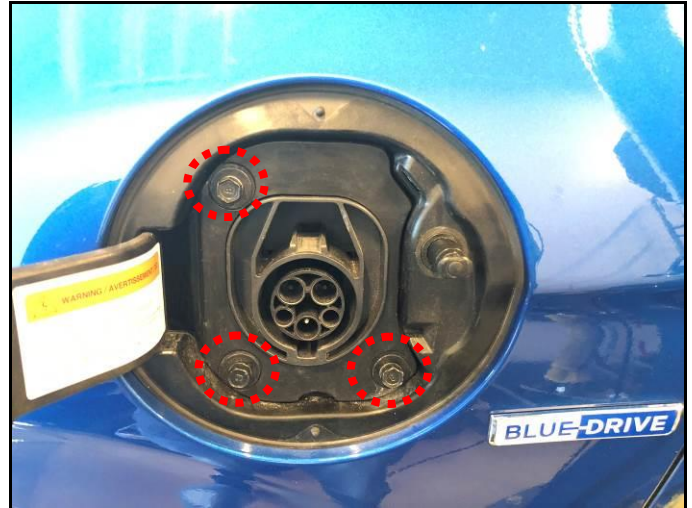
Refer to <https://www.grainger.com/content/qt-electrical-safety-gloves-inspection-262> for electrical safety gloves inspection information.

Bosch Part Number	Description	Image
J-48755-11H (Medium)	Insulated Leather Safety Gloves	
J-48755-12H (Large)	Insulated Leather Safety Gloves	

7. Wait 5 minutes to allow the high voltage battery capacitor to fully discharge.
8. Open the charging lid and remove the three 10mm nuts holding the charger port.

**Quick charging port mounting bolt
tightening torque:**

8.0~10.1 lb-ft (10.8~13.7 Nm, 1.1~1.4 kgf.m)



9. Remove the charging lid by using a small flathead screwdriver to unlock the tab as shown in the picture to the right.

NOTICE

The purpose of removing the charging lid is to prevent possible scratches between the contact of the lid and the body panel.



10. Lift the vehicle to comfortable working height.



11. Remove the front driver side wheel by removing the 5 lug nuts.

Lug nut tightening torque:

79.6~94.0 lb-ft (107.9~127.5 Nm, 11.0~13.0 kgf.m)



12. Remove the wheel well liner by removing the three types of fasteners located in the picture to the right.



13. Carefully unlock the charging assembly by unlocking the two lock tabs from behind the front driver side fender, using a flathead screwdriver and push outward.



14. Detach the cable from the inlet locking actuator arm.



15. Use a T15 Torx screwdriver to remove the two screws holding the inlet locking actuator.

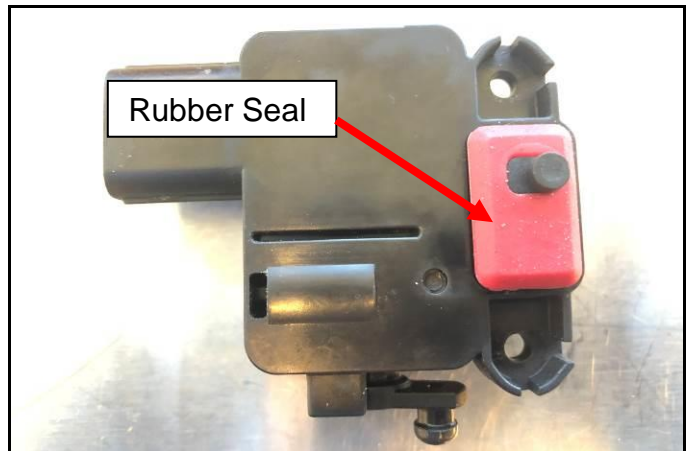


16. Disconnect the connector from the inlet locking actuator.



17. Remove the red rubber seal from the old part and place it onto the new part.

Replace the inlet locking actuator with the new part.



18. Reinstall all removed parts in reverse order.
19. Confirm if the charging port locks/unlocks and if the charging function is operating by checking the vehicle's charging status.