

Component Procedures: Combination Switch

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Component Procedures: Combination Switch

Parts and Labor (itype_189)

Parts

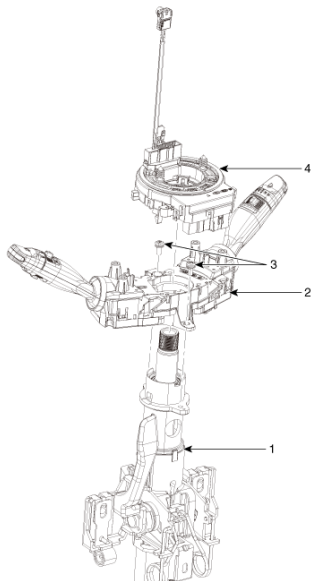
Qualifier	Part #	Name	Price	Note
Switches > Multifunction Swi?	93400F2502	With Auto Lights	378.55	Includes Headlamp/ Wiper A?
Switches > Multifunction Swi?	93400F2002	Without Auto Lights	378.55	Includes Headlamp/ Wiper A?

Labor

Operation	Qualifier Path	Skill	Std Hrs	Wty Hrs
Remove & Replace	Switches > Multifunction Switch, R&R	2	0.5	0.0

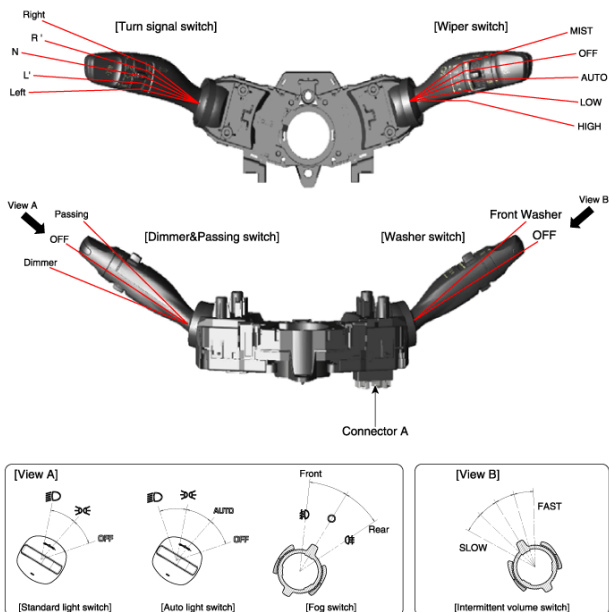
Multifunction Switch - Components and Components Location (Article 44730)

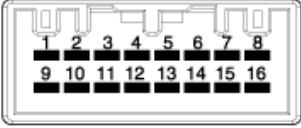
- Component



* Assembly sequence :
 ① → ② → ③ → ④ → Wiring connector

1. Steering column 2. Multifunction switch 3. Screw 4. Clock spring



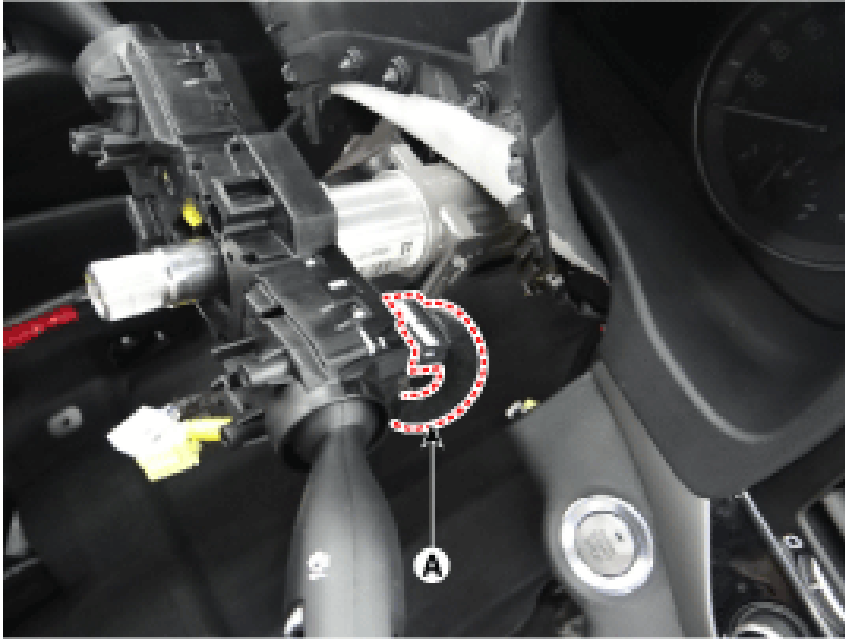
Connector A	No	Description	Remark
	1	Front wiper switch signal	Mist/Off/Int(Auto)/Low/High
	2	Front wiper low backup signal	Wiper low backup
	3	-	-
	4	-	-
	5	-	-
	6	Front washer switch	Washer motor
	7	Wiper intermittent volume switch	Int volume (Fast ~ Low)
	8	IGN2	Battery (+)
	9	GND	Multifunction switch ground
	10	Foglamp switch	Front foglamp
	11	GND	BCM ground
	12	Turnsignal switch	Turn (LH) / Turn (RH)
	13	Dimmer & Passing switch	Dimmer / Passing
	14	Light switch	Off / Auto / Tail / Low
	15	Headlamp low backup signal	Headlamp low backup
	16	-	-

Multifunction Switch - Repair Procedures (Article 44731)

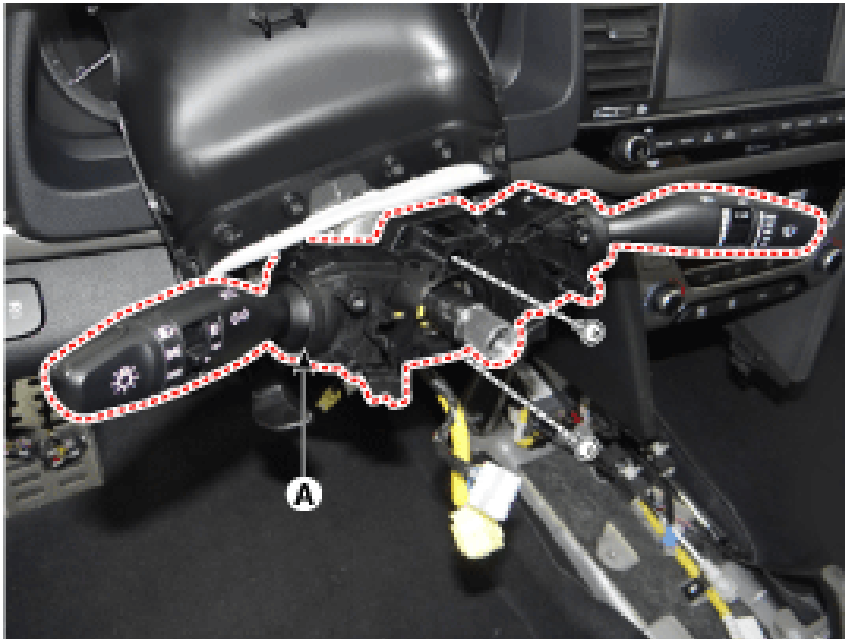
- Removal
- Disconnect the negative (-) battery terminal.
- Remove the steering wheel. (Refer to Steering System - "Steering Wheel")
- Remove the steering column upper and lower shrouds after loosening the screws. (Refer to Body - "Steering Column Shroud Panel")
- Remove the clock spring. (Refer to Restraint - "Driver Airbag (DAB) Module and Clock Spring")



- Disconnect the multifunction switch connector (A).



- Remove the multifunction switch assembly (A) after loosening the screws.



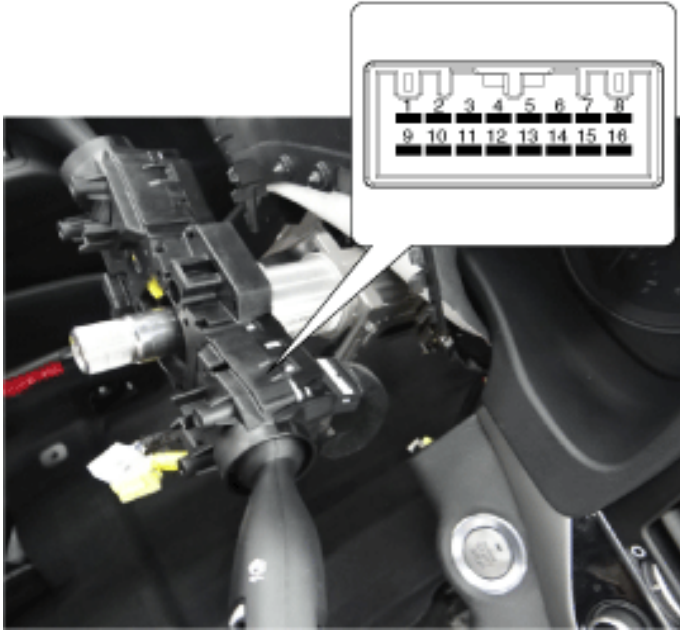
- Installation

- Install the multifunction switch.
- Install the clock spring.
- Install the steering column upper and lower shrouds.
- Install the steering wheel.
- Connect the negative (-) battery terminal.

- Inspection

Multifunction Switch Inspection

- Check for continuity between the terminals in each switch position according to the table. Switch position Switch terminal Resistance (Ω , $\pm 3.5\%$) Wiper switch MIST 1-9 330 OFF ∞ Intermittent (AUTO) 800 LOW 1800 HIGH 5700 Wiper intermittent volume Volume 1 7-9 330 Volume 2 690 Volume 3 1310 Volume 4 2610 Volume 5 7310 Fog lamp switch OFF 9-10 ∞ Front foglamp 910 Rear foglamp 2910 Turnsignal switch OFF 9-12 ∞ Left 910 Right 2910 Dimmer & Passing switch OFF 9-13 ∞ Passing 910 Dimmer 2910 Light switch OFF 9-14 ∞ AUTO / DRL 680 Tail lamp 1680 Low beam 5580



Switch position Switch terminal Resistance (Ω , $\pm 3.5\%$)

Wiper switch MIST 1-9 330

OFF ∞

Intermittent (AUTO) 800

LOW 1800

HIGH 5700

Wiper intermittent volume Volume 1 7-9 330

Volume 2 690

Volume 3 1310

Volume 4 2610

Volume 5 7310

Fog lamp switch OFF 9-10 ∞

Front foglamp 910

Rear foglamp 2910

Turnsignal switch OFF 9-12 ∞

Left 910

Right 2910

Dimmer & Passing switch OFF 9-13 ∞

Passing 910

Dimmer 2910

Light switch OFF 9-14 ∞

AUTO / DRL 680

Tail lamp 1680

Low beam 5580

Inspection (With GDS)

- The body electrocal system can be quickly diagnosed failed parts with vehicle diagnostic system (GDS). The diagnostic system (GDS) provides the following information. Self diagnosis : Checking the failure code (DTC) and display Current data : Checking the system input/output data state Actuation test : Checking the system operation condition Additional function : Other controlling such as he system option and zero point adjustment
- Self diagnosis : Checking the failure code (DTC) and display
- Current data : Checking the system input/output data state
- Actuation test : Checking the system operation condition
- Additional function : Other controlling such as he system option and zero point adjustment
- Select the "Car model" and the system to be checked in order to check the vehicle with the tester.
- Select the "Body Control Module (BCM)" to check the multi function switch .
- Select the "Current data" menu to search the current state of the input/output data. The input/output data for the sensors corresponding to the multi function switch can be checked.

Current Data 23/100		
Search		
Selective Display	Full List	Graph
Items List	Reset Min.Max	Record
Stop	Grouping	VSS
Sensor Name	Value	Unit
<input type="checkbox"/> PAS Switch/RPAS OFF Switch	OFF	-
<input type="checkbox"/> RPAS OFF Indicator(Optional)	OFF	-
<input type="checkbox"/> PAS Indicator/RPAS OFF Indicator	OFF	-
<input type="checkbox"/> Washer Switch	OFF	-
<input type="checkbox"/> INT Switch	OFF	-
<input type="checkbox"/> Mist Switch	OFF	-
<input type="checkbox"/> Wiper Stop Position Switch	ON	-
<input type="checkbox"/> Wiper Low Relay	OFF	-
<input type="checkbox"/> Wiper High Relay	OFF	-
<input type="checkbox"/> Head Lamp Washer Relay	OFF	-
<input type="checkbox"/> Room Lamp Output	OFF	-
<input type="checkbox"/> Foot Lamp Output	OFF	-
<input type="checkbox"/> Tail Lamp Switch	OFF	-
<input type="checkbox"/> Auto Light Switch (Option)	OFF	-
<input type="checkbox"/> Head Lamp Switch	OFF	-
<input type="checkbox"/> Head Lamp High Switch	OFF	-
<input type="checkbox"/> Front Fog Switch (Option)	OFF	-
<input type="checkbox"/> Rear Fog Switch (Option)	OFF	-
<input type="checkbox"/> Tail AV	OFF	-
<input type="checkbox"/> Auto Light Power (Option)	ON	-
<input type="checkbox"/> Rear Fog Relay (Option)	OFF	-
<input type="checkbox"/> Puddle Lamp Output	OFF	-
<input type="checkbox"/> External Trunk Release Switch	CLOSE	-

Multifunction Switch - Specifications (Article 44726)

- Specifications

Items Specifications

Rated voltage DC 12V

Operating temperature range -40 to +176°F (-40°C to +80°C)

Rated load Washer Washer : 6A (Motor load)

Multifunction Switch - Specifications (Article 44729)

- Specifications

Items Specifications

Rated voltage DC 12V

Operating temperature range -40 to +176°F (-40°C to +80°C)

Rated load Washer Washer : 6A (Motor load)