



Automotive Data Solutions Inc.

INSTALL GUIDE

FLC-AL(DL)-HK13-EN

HK13

AVAILABLE FOR: FLCAN

Rev. Date: February 17, 2021

Doc. No.: ##74095##

PATENT NO. US 8,856,780 CA 2759622

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HYUNDAI

KIA

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INSTALL TYPE SELECTION

MAKE	MODEL	YEAR	INSTALL TYPE	FEATURES													
				DATA IMMOBILIZER BYPASS	ARM OEM ALARM	DISARM OEM ALARM	A/M ALARM CTRL FROM OEM REMOTES	TACHOMETER OUTPUT	DOOR LOCK	DOOR UNLOCK	TRUNK/HATCH RELEASE	DOOR STATUS OUTPUT	TRUNK STATUS OUTPUT	HOOD STATUS OUTPUT*	E-BRAKE OUTPUT	RAP SHUTDOWN CTRL	MUX PARKING LIGHT CTRL
HYUNDAI	Elantra STD key AT	21	9	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Palisade STD key AT	20-21	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Santa Fe STD key AT	19-20	1	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Santa Fe STD key AT	21	10	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Sonata STD key AT	20-21	7	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Venue STD key AT**	20-21	5	•			•	•	•	•	•	•	•	•	•	•	•
	Venue STD key MT**	20-21	8	•			•	•	•	•	•	•	•	•	•	•	•
KIA	Forte STD key AT	19-21	2	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Seltos STD key AT	21	6	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Soul STD key AT	20-21	3	•	•	•	•	•	•	•	•	•	•	•	•	•	•

*Available only if vehicle is equipped with factory hood switch.

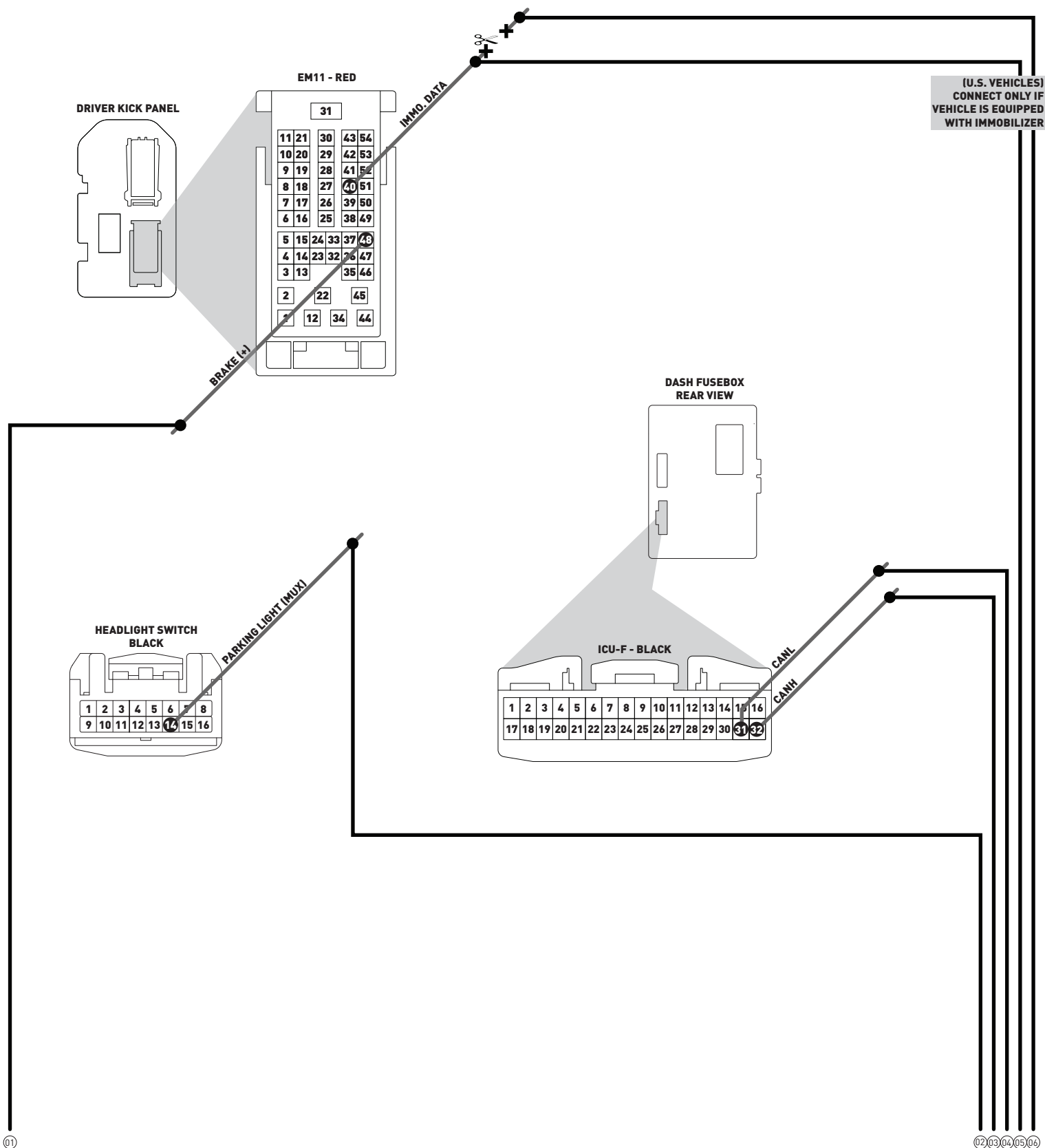
** This solution does not retain the OEM alarm or OEM horn honk confirmation. Use an alarm and remote starter system or install an aftermarket alarm system with horn connected.

TYPE 1 - WIRE CROSS REFERENCE CHART

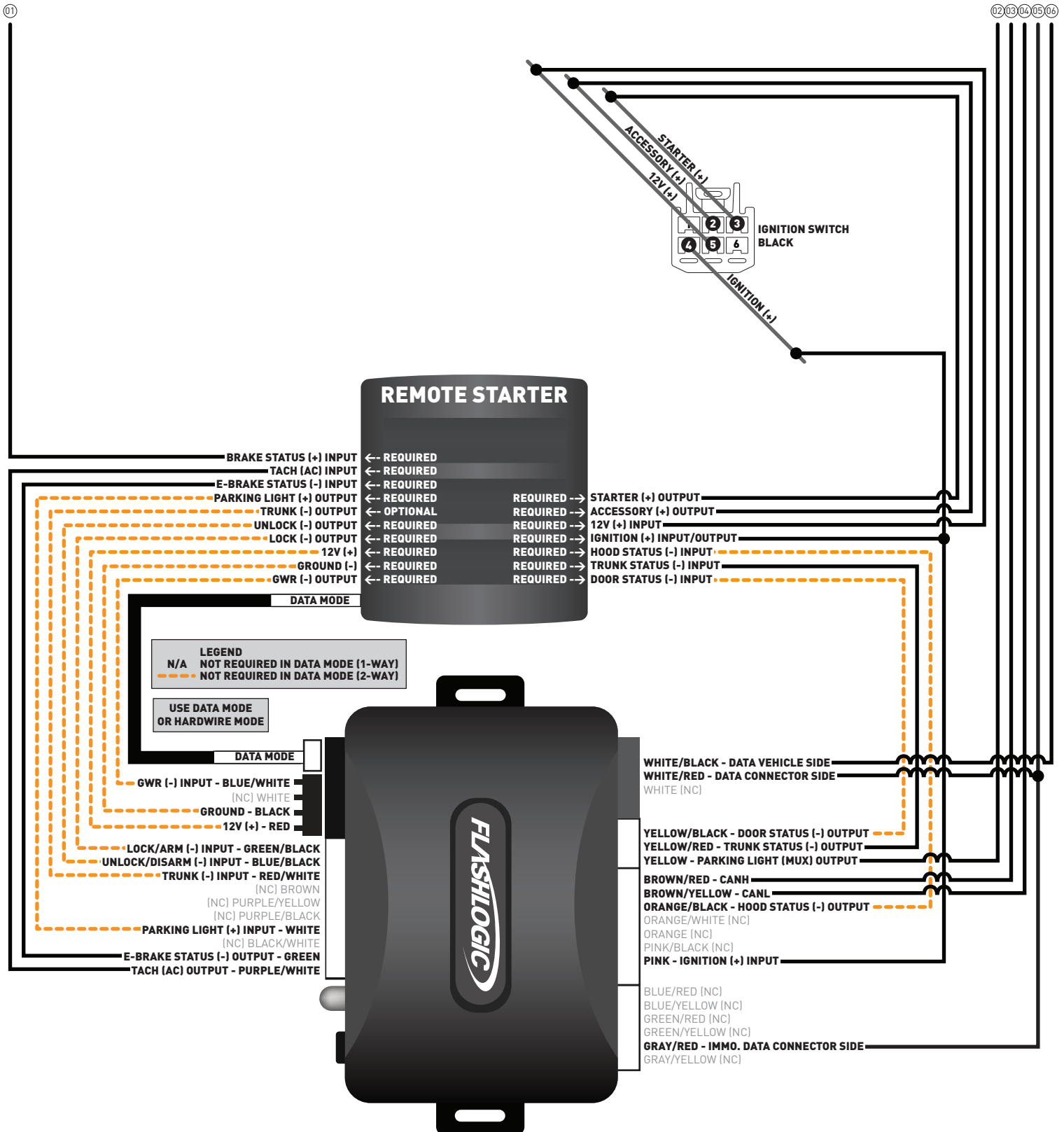
MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Santa Fe STD key AT	19-20	12V	~	Black	06 pin	05	White	(+)	Ignition switch	~
			Accessory	~	Black	06 pin	02	Blue	(+)	Ignition switch	~
			Starter	~	Black	06 pin	03	Black or Pink	(+)	Ignition switch	~
			Ignition	~	Black	06 pin	04	Green	(+)	Ignition switch	~
			Brake	EM11	Red	54 pin	48	Green/Black	(+)	Driver kick panel	~
			CanH	ICU-F	Black	32 pin	32	Red	(DATA)	Dash fusebox, rear view	~
			CanL	ICU-F	Black	32 pin	31	Blue	(DATA)	Dash fusebox, rear view	~
			Immo. Data*	EM11	Red	54 pin	40	White/Orange or Black	(DATA)	Driver kick panel	~
			Parking Light	~	Black	16 pin	14	Yellow	(MUX)	Parking light switch	~

*(USA) Data Immobilizer wire is only present if vehicle is equipped with an immobilizer.

TYPE 1 - WIRING DIAGRAM - 1 OF 2



TYPE 1 - WIRING DIAGRAM - 2 OF 2

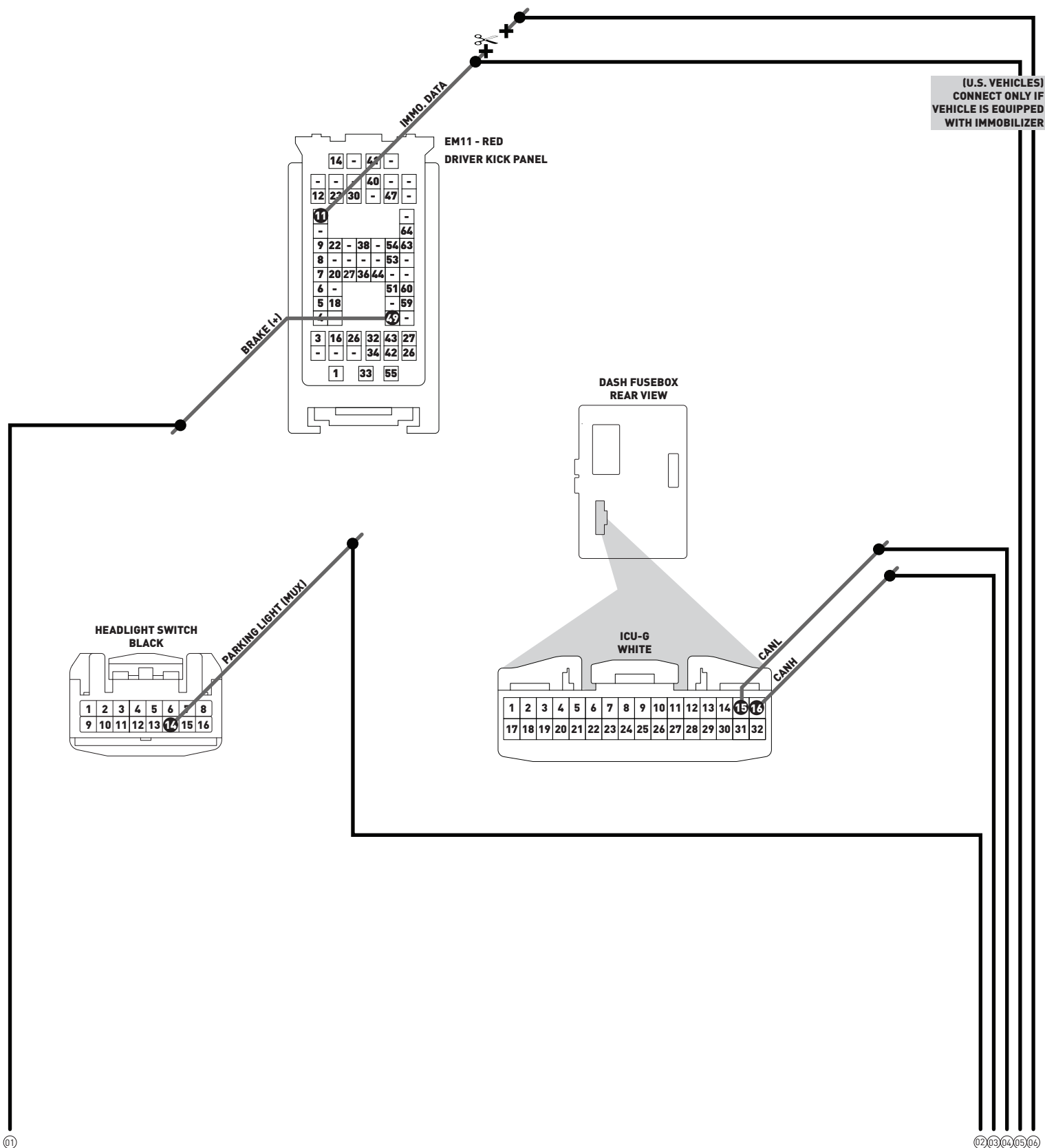


TYPE 2 - WIRE CROSS REFERENCE CHART

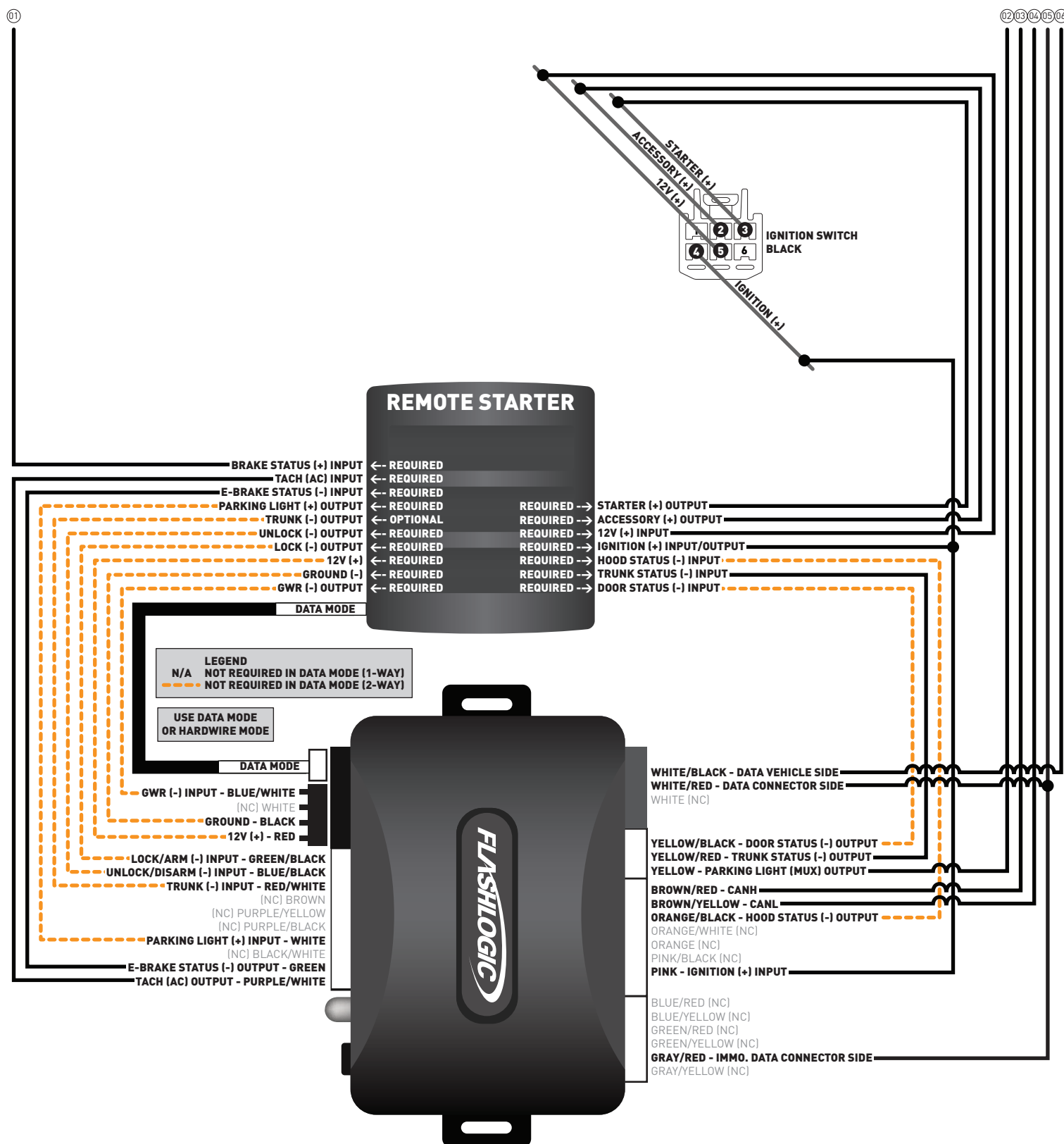
MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
KIA	Forte STD key AT	19-21	12V	~	Black	06 pin	05	Red	(+)	Ignition switch	~
			Accessory	~	Black	06 pin	02	Black	(+)	Ignition switch	~
			Starter	~	Black	06 pin	03	White	(+)	Ignition switch	~
			Ignition	~	Black	06 pin	04	Pink	(+)	Ignition switch	~
			Brake	EM11	Red	68 pin	49	Green	(+)	Driver kick panel	~
			CanH	ICU-G	White	32 pin	16	White	(DATA)	Dash fusebox, rear view	~
			CanL	ICU-G	White	32 pin	15	Brown	(DATA)	Dash fusebox, rear view	~
			Immo. Data*	EM11	Red	68 pin	11	Brown or Brown/ Orange	(DATA)	Driver kick panel	~
			Parking Light	~	Black	16 pin	14	Blue	(MUX)	Parking light switch	~

*(USA) Data Immobilizer wire is only present if vehicle is equipped with an immobilizer.

TYPE 2 - WIRING DIAGRAM - 1 OF 2



TYPE 2 - WIRING DIAGRAM - 2 OF 2

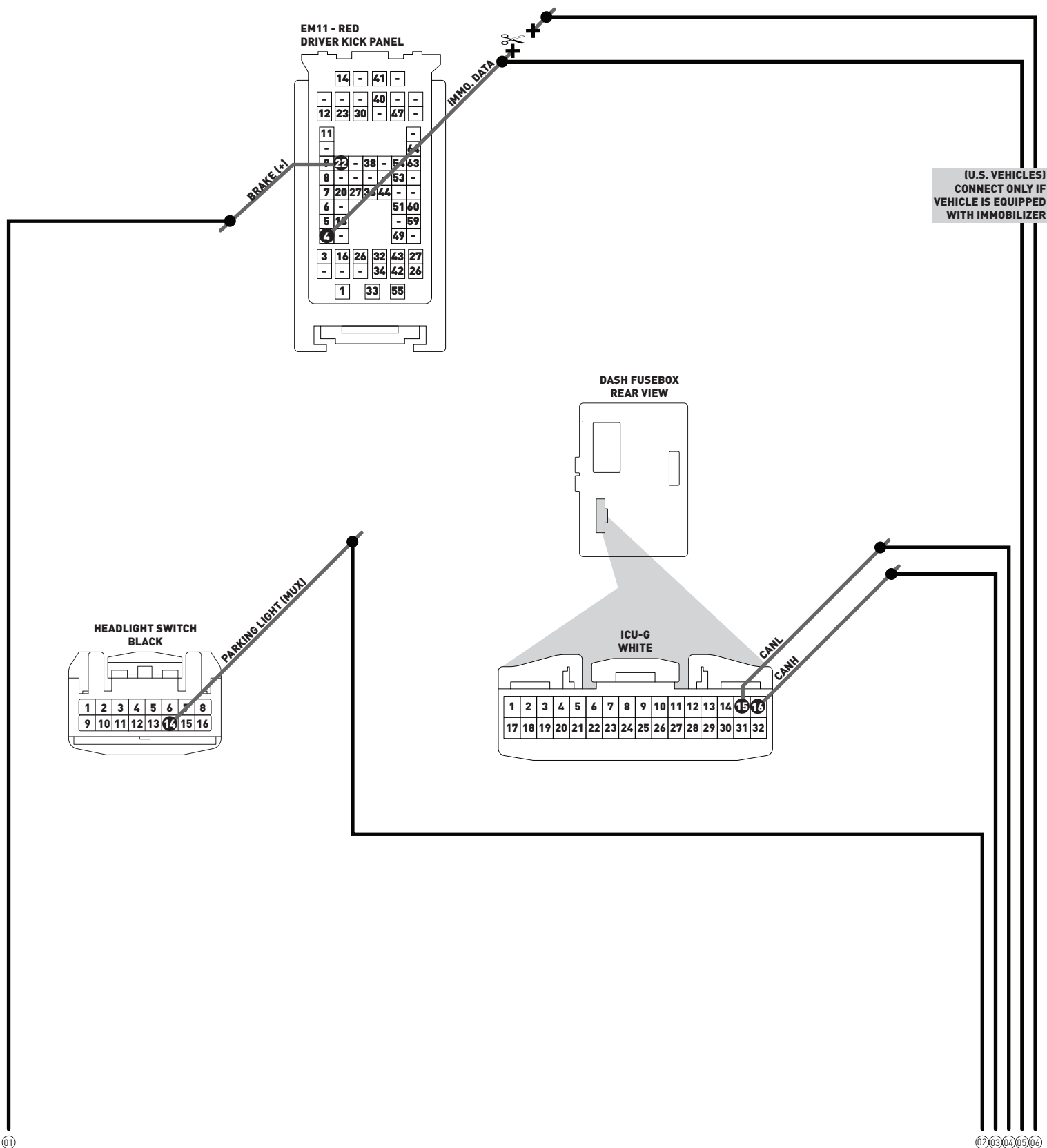


TYPE 3 - WIRE CROSS REFERENCE CHART

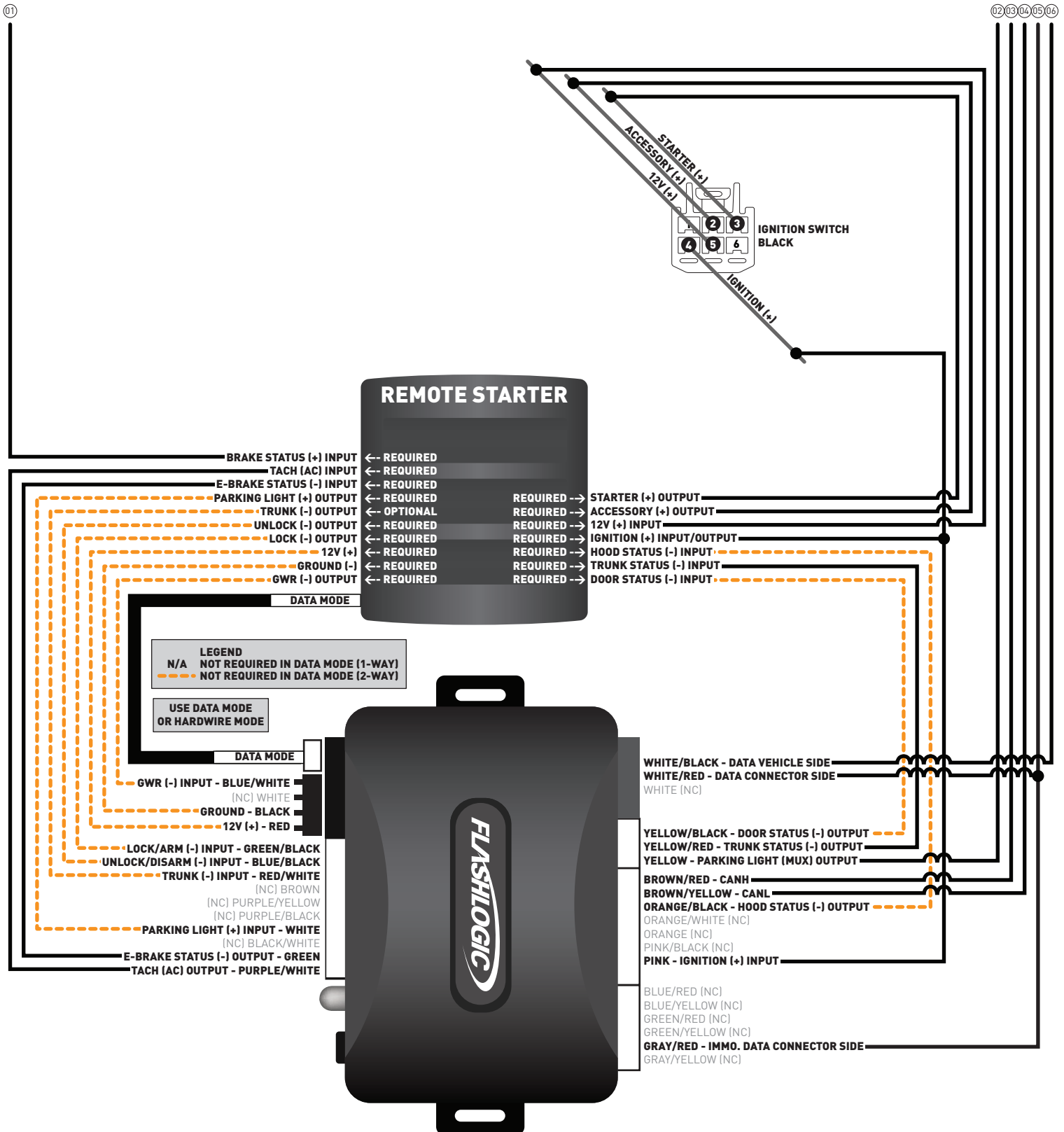
MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
KIA	Soul STD key AT	20-21	12V	~	Black	06 pin	05	Red	(+)	Ignition switch	~
			Accessory	~	Black	06 pin	02	Black	(+)	Ignition switch	~
			Starter	~	Black	06 pin	03	White	(+)	Ignition switch	~
			Ignition	~	Black	06 pin	04	Pink	(+)	Ignition switch	~
			Brake	EM11	Red	68 pin	22	Green/Black	(+)	Driver kick panel	~
			CanH	ICU-G	White	32 pin	16	Red	(DATA)	Dash fusebox, rear view	~
			CanL	ICU-G	White	32 pin	15	Blue	(DATA)	Dash fusebox, rear view	~
			Immo. Data*	EM11	Red	68 pin	04	Brown/Orange	(DATA)	Driver kick panel	~
			Parking Light	~	Black	16 pin	14	Blue	(MUX)	Parking light switch	~

*(USA) Data Immobilizer wire is only present if vehicle is equipped with an immobilizer.

TYPE 3 - WIRING DIAGRAM - 1 OF 2



TYPE 3 - WIRING DIAGRAM - 2 OF 2

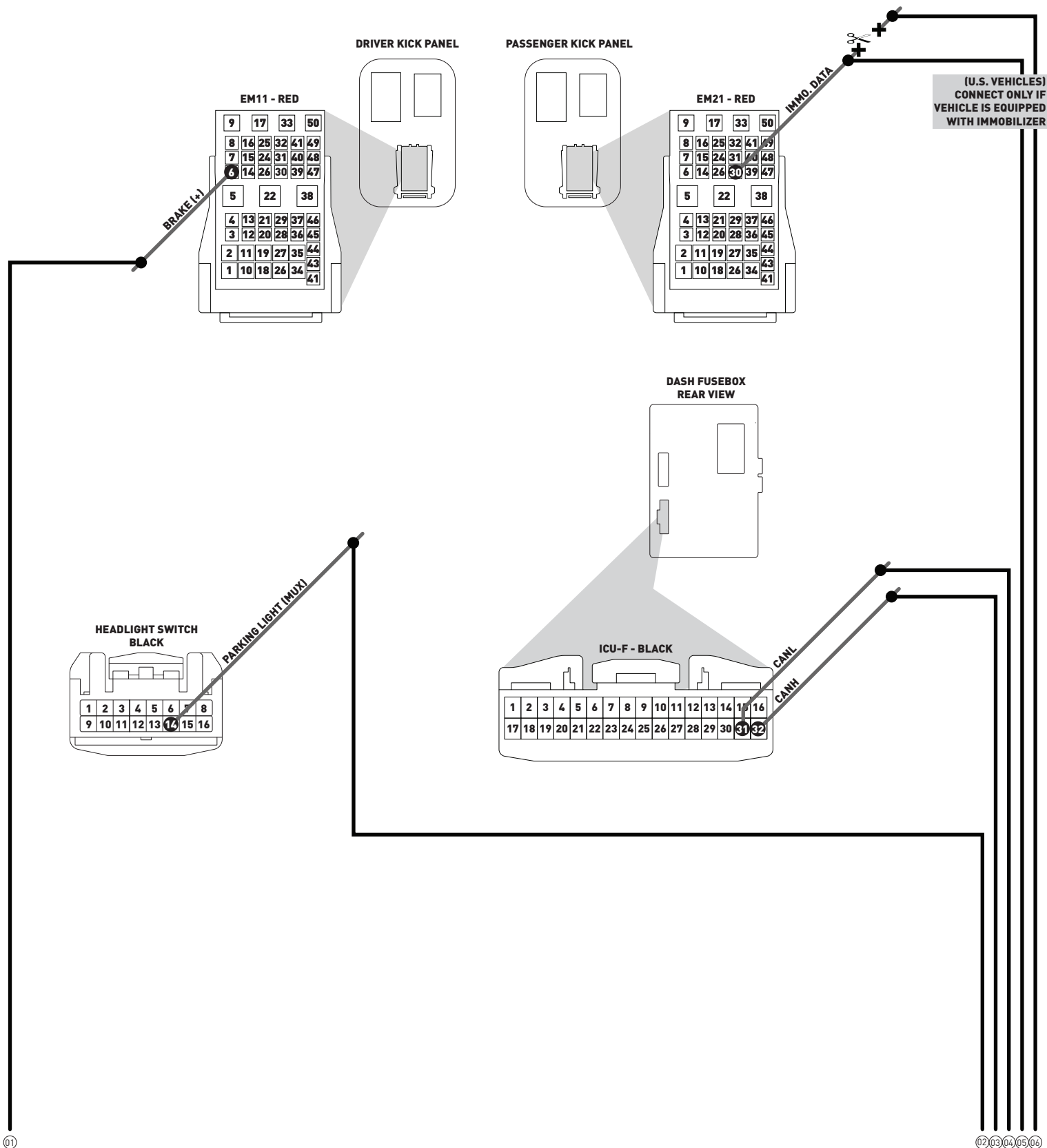


TYPE 4 - WIRE CROSS REFERENCE CHART

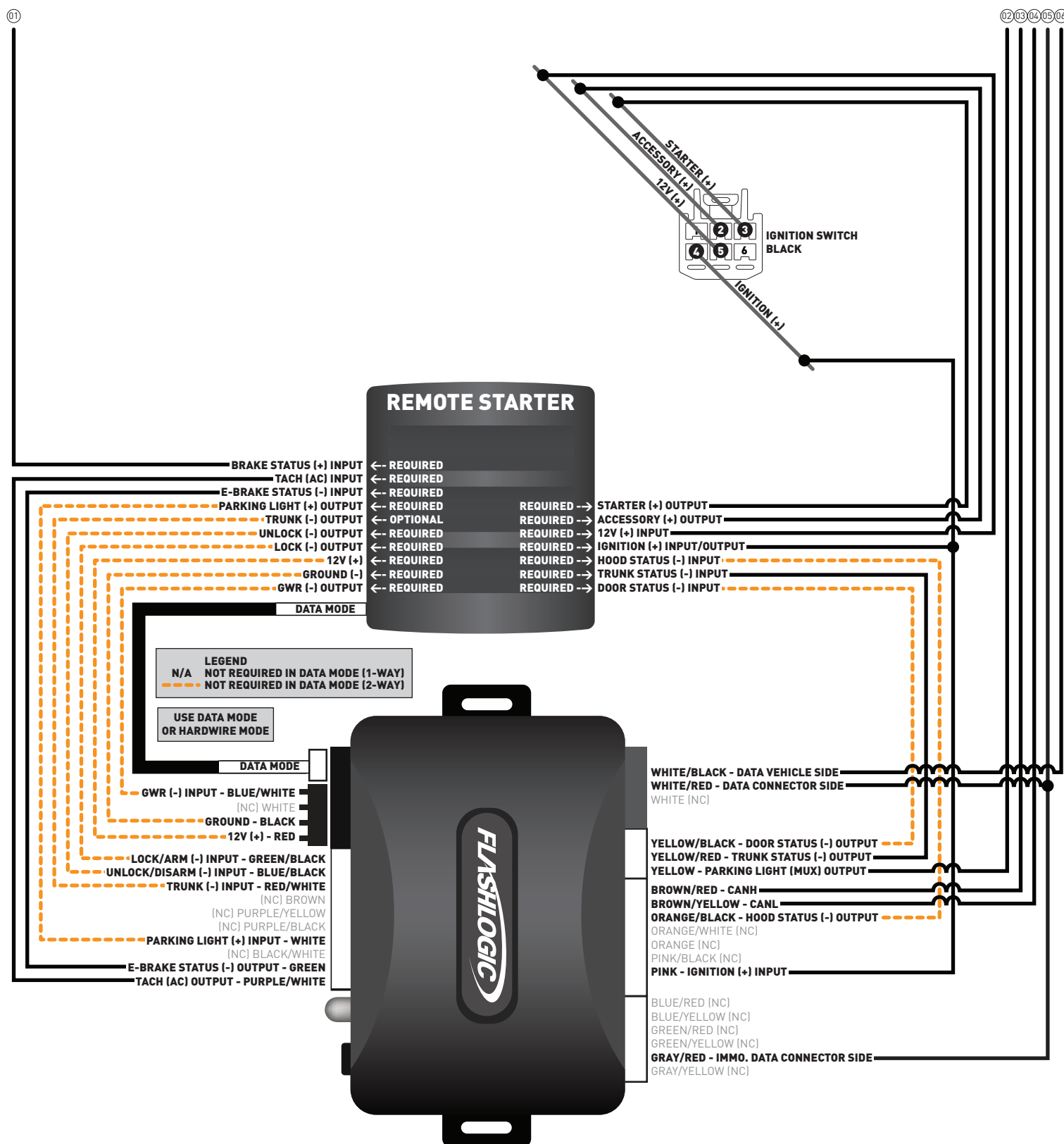
MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Palisade STD key AT	20-21	12V	~	Black	06 pin	05	White	(+)	Ignition switch	~
			Accessory	~	Black	06 pin	02	Blue	(+)	Ignition switch	~
			Starter	~	Black	06 pin	03	Black or Pink	(+)	Ignition switch	~
			Ignition	~	Black	06 pin	04	Green	(+)	Ignition switch	~
			Brake	EM11	Red	50 pin	06	Green/Black	(+)	Driver kick panel	~
			CanH	ICU-F	Black	32 pin	32	Red	(DATA)	Dash fusebox, rear view	~
			CanL	ICU-F	Black	32 pin	31	Blue	(DATA)	Dash fusebox, rear view	~
			Immo. Data*	EM21	Red	50 pin	30	White/Orange	(DATA)	Passenger kick panel	~
			Parking Light	~	Black	16 pin	14	Blue	(MUX)	Parking light switch	~

*[USA] Data Immobilizer wire is only present if vehicle is equipped with an immobilizer.

TYPE 4 - WIRING DIAGRAM - 1 OF 2



TYPE 4 - WIRING DIAGRAM - 2 OF 2

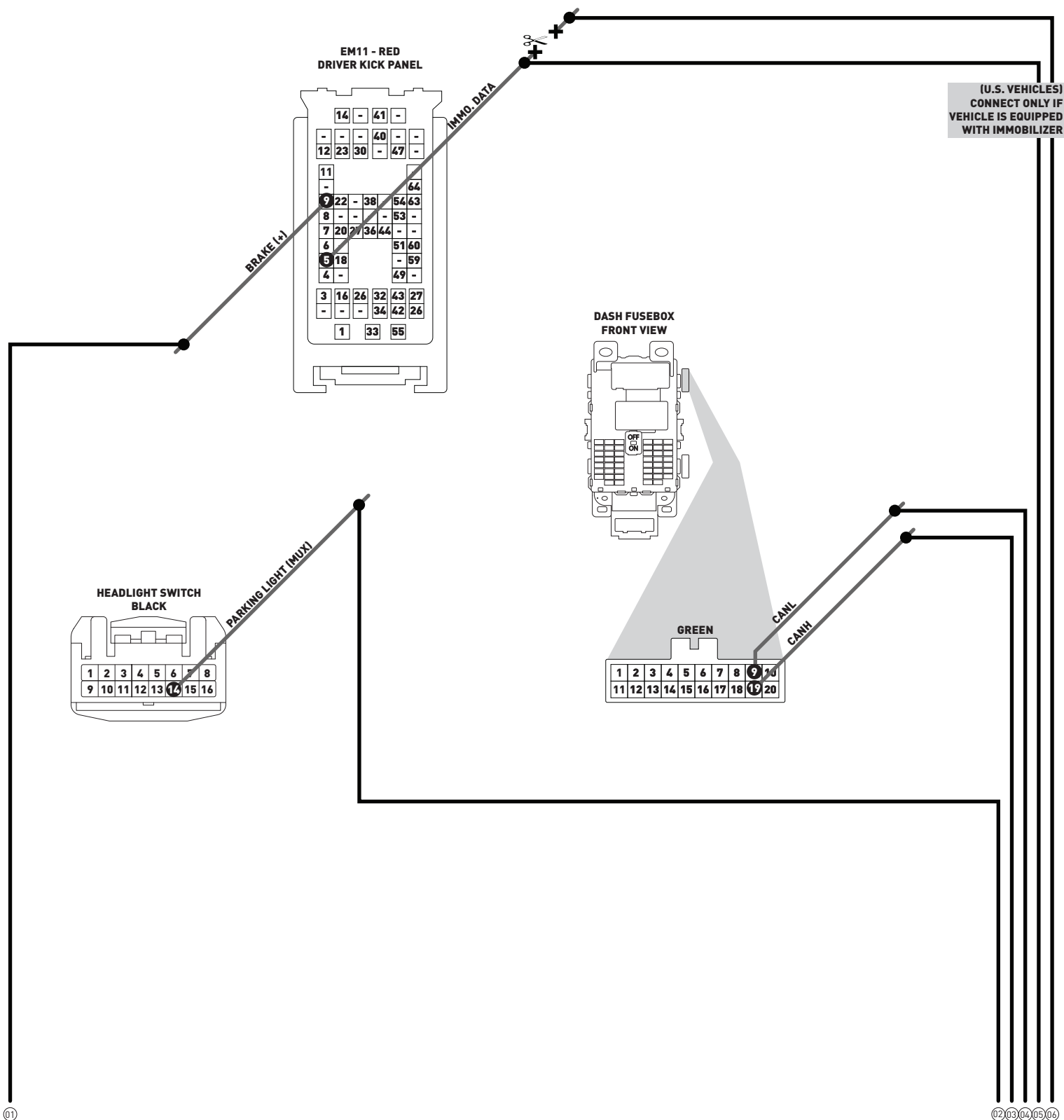


TYPE 5 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Venue STD key AT	20-21	12V	~	Black	06 pin	05	White	(+)	Ignition switch	~
			Accessory	~	Black	06 pin	02	Blue	(+)	Ignition switch	~
			Starter	~	Black	06 pin	03	Green	(+)	Ignition switch	~
			Ignition	~	Black	06 pin	04	Gray	(+)	Ignition switch	~
			Brake	EM11	Red	68 pin	09	Pink	(+)	Driver kick panel	~
			CanH	JM02	Green	20 pin	19	Red	(DATA)	Dash fusebox, rear view	~
			CanL	JM02	Green	20 pin	09	Blue	(DATA)	Dash fusebox, rear view	~
			Immo. Data*	EM11	Red	68 pin	05	Blue/Black	(DATA)	Driver kick panel	~
			Parking Light	~	Black	16 pin	14	Gray	(MUX)	Parking light switch	~
			Horn	EM11	Red	68 pin	11	Blue	(-)	Driver kick panel	~

*[USA] Data Immobilizer wire is only present if vehicle is equipped with an immobilizer.

TYPE 5 - WIRING DIAGRAM - 1 OF 2



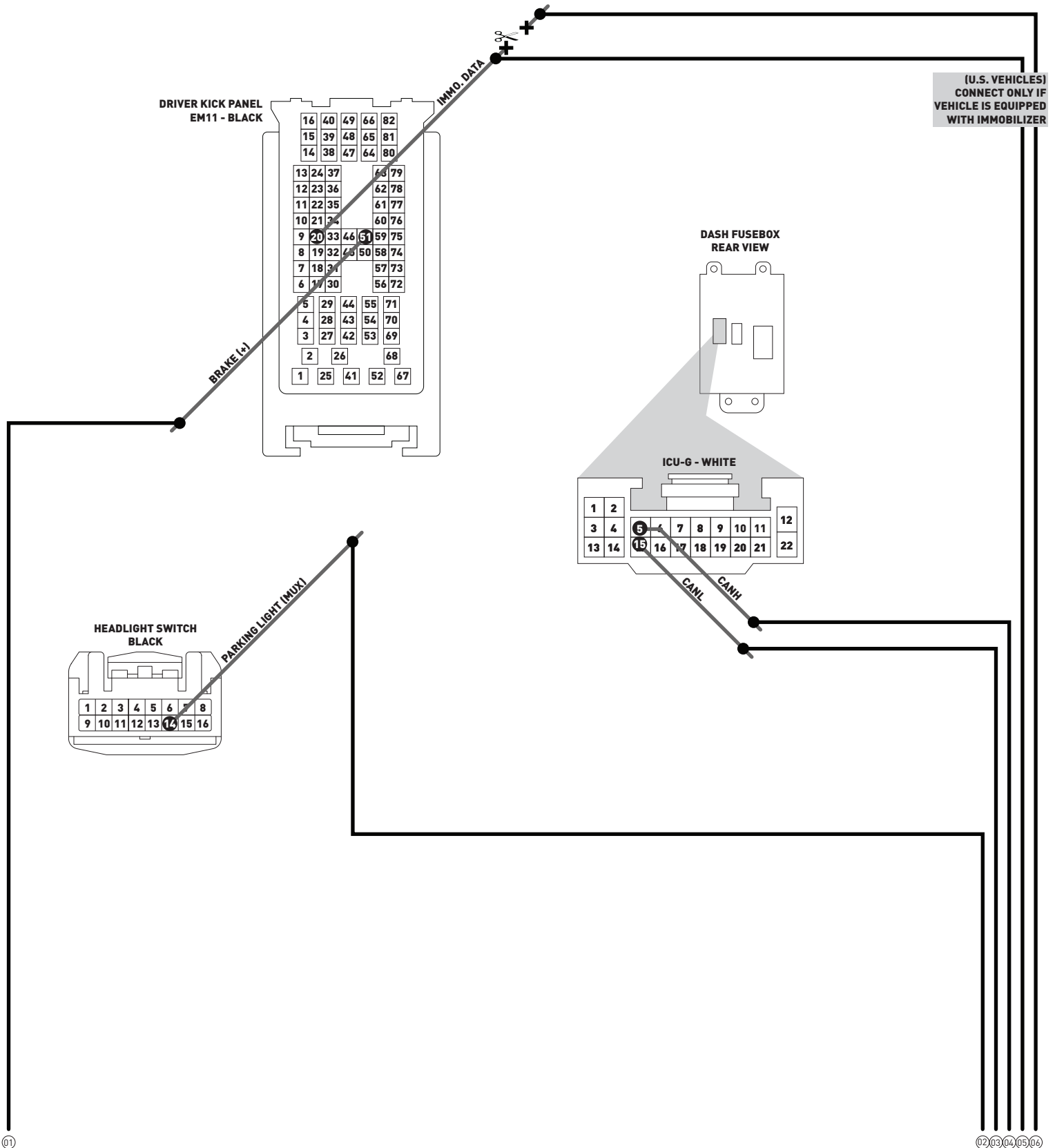
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TYPE 6 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
KIA	Seltos STD key AT	21	12V	~	Black	06 pin	05	Red	(+)	Ignition switch	~
			Accessory	~	Black	06 pin	02	Black	(+)	Ignition switch	~
			Starter	~	Black	06 pin	03	White	(+)	Ignition switch	~
			Ignition	~	Black	06 pin	04	Pink	(+)	Ignition switch	~
			CanH	ICU-G	White	22 pin	05	White	(DATA)	Dash fusebox, rear view	~
			CanL	ICU-G	White	22 pin	15	Black	(DATA)	Dash fusebox, rear view	~
			Immo. Data*	EM11	Black	82 pin	04	White/Orange	(DATA)	Driver kick panel	~
			Brake	EM11	Black	82 pin	51	Green or Green/Black	(+)	Driver kick panel	~
			Parking Light	~	Black	16 pin	14	Blue	(MUX)	Parking light switch	~

*[USA] Data Immobilizer wire is only present if vehicle is equipped with an immobilizer.

TYPE 6 - WIRING DIAGRAM - 1 OF 2



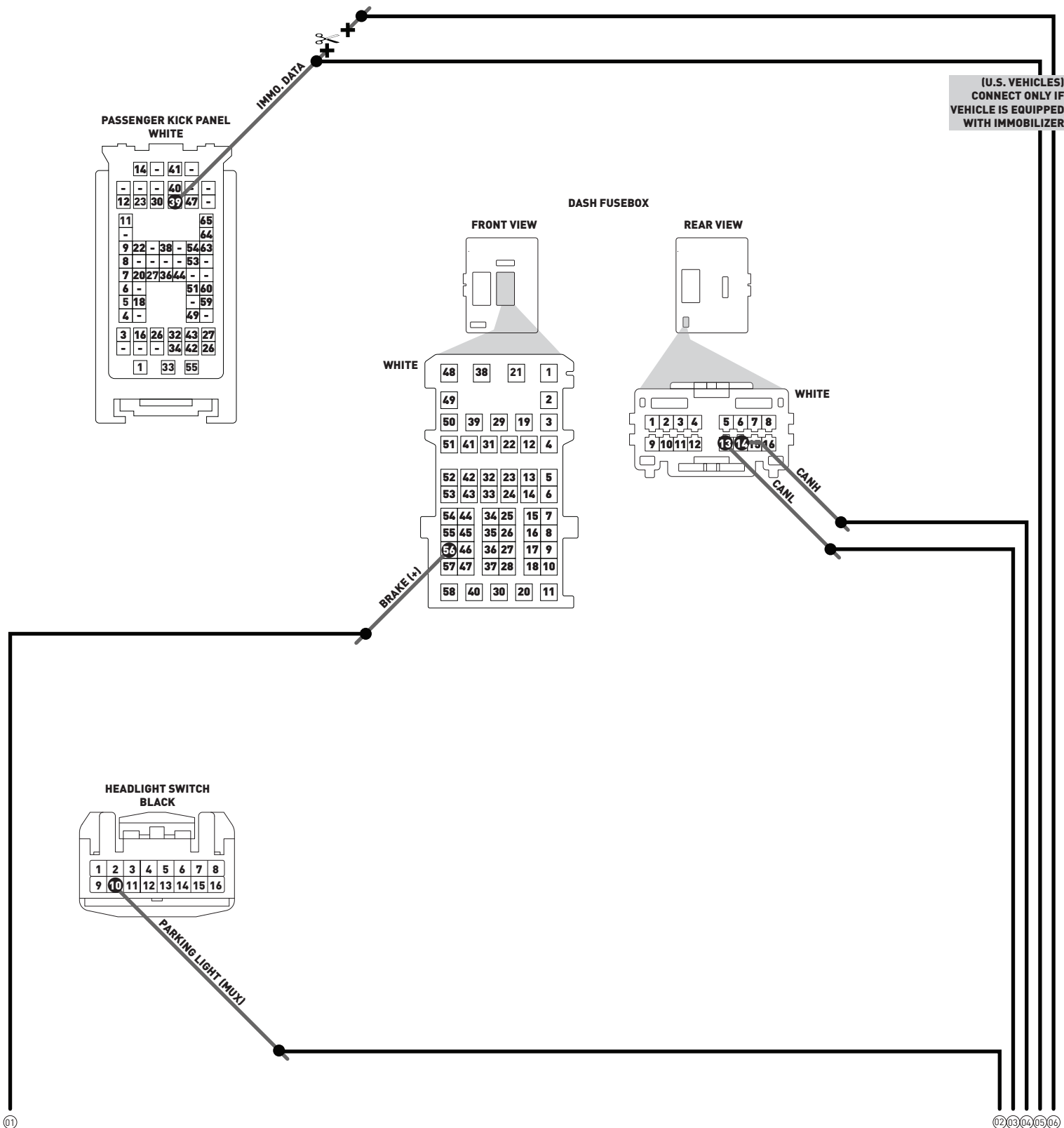
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TYPE 7 - WIRE CROSS REFERENCE CHART

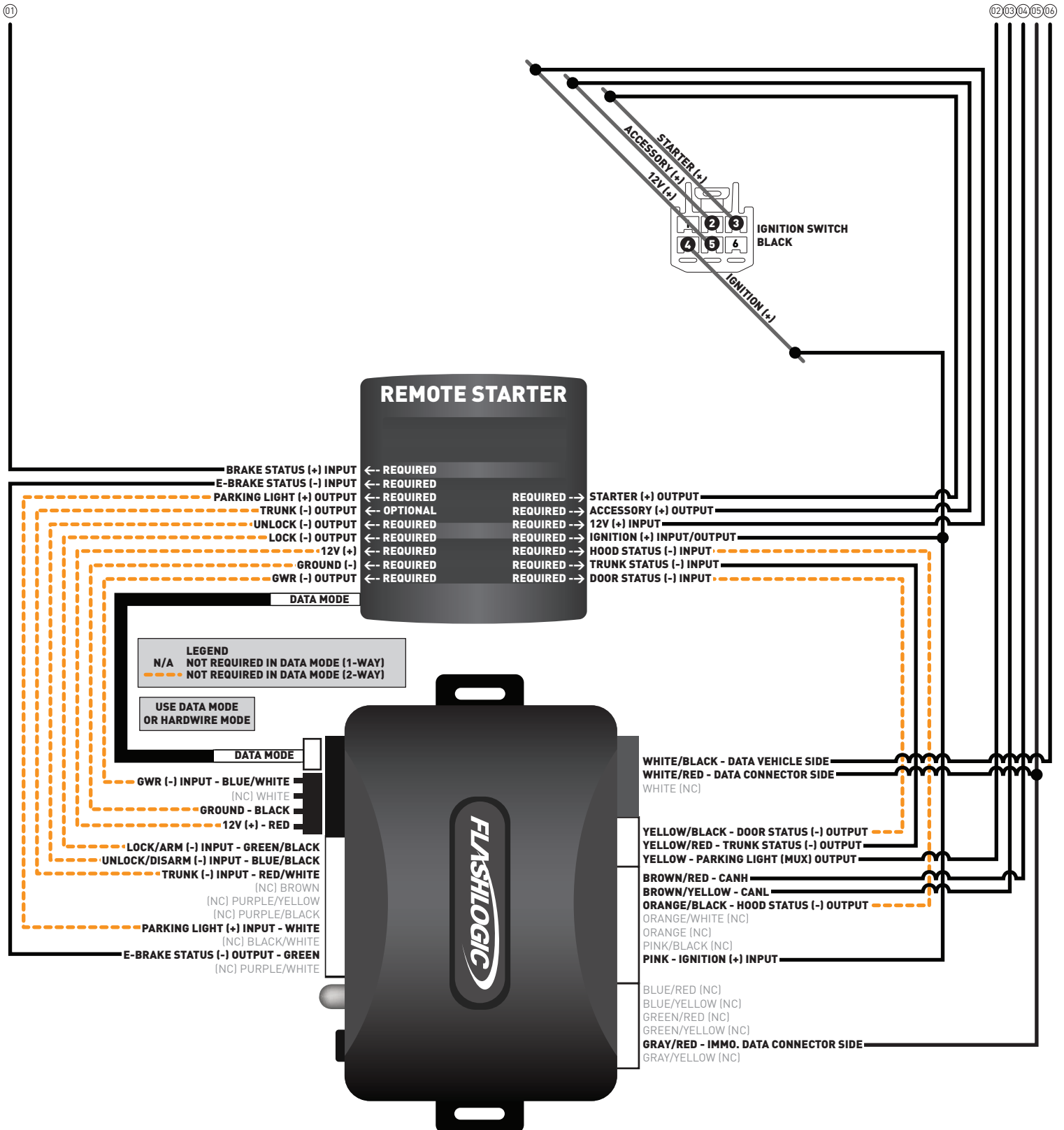
MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Sonata STD key AT	20-21	12V	~	Black	06 pin	05	Red	(+)	Ignition switch	~
			Accessory	~	Black	06 pin	02	Orange	(+)	Ignition switch	~
			Starter	~	Black	06 pin	03	Gray	(+)	Ignition switch	~
			Ignition	~	Black	06 pin	04	Pink	(+)	Ignition switch	~
			CanH	ICU-G	White	16 pin	14	Green	(DATA)	Dash fusebox, rear view	~
			CanL	ICU-G	White	16 pin	13	Orange	(DATA)	Dash fusebox, rear view	~
			Immo. Data*	EM21	White	68 pin	39	White	(DATA)	Passenger kick panel	~
			Brake	ICU-B	White	58 pin	56	Green or Green/Black	(+)	Dash fusebox, front view	~
			Parking Light	~	Black	16 pin	10	Pink	(MUX)	Parking light switch	~
			Tach	~	~	~	~	~	(AC)	Camshaft position sensor	~

*[USA] Data Immobilizer wire is only present if vehicle is equipped with an immobilizer.

TYPE 7 - WIRING DIAGRAM - 1 OF 2



TYPE 7 - WIRING DIAGRAM - 2 OF 2

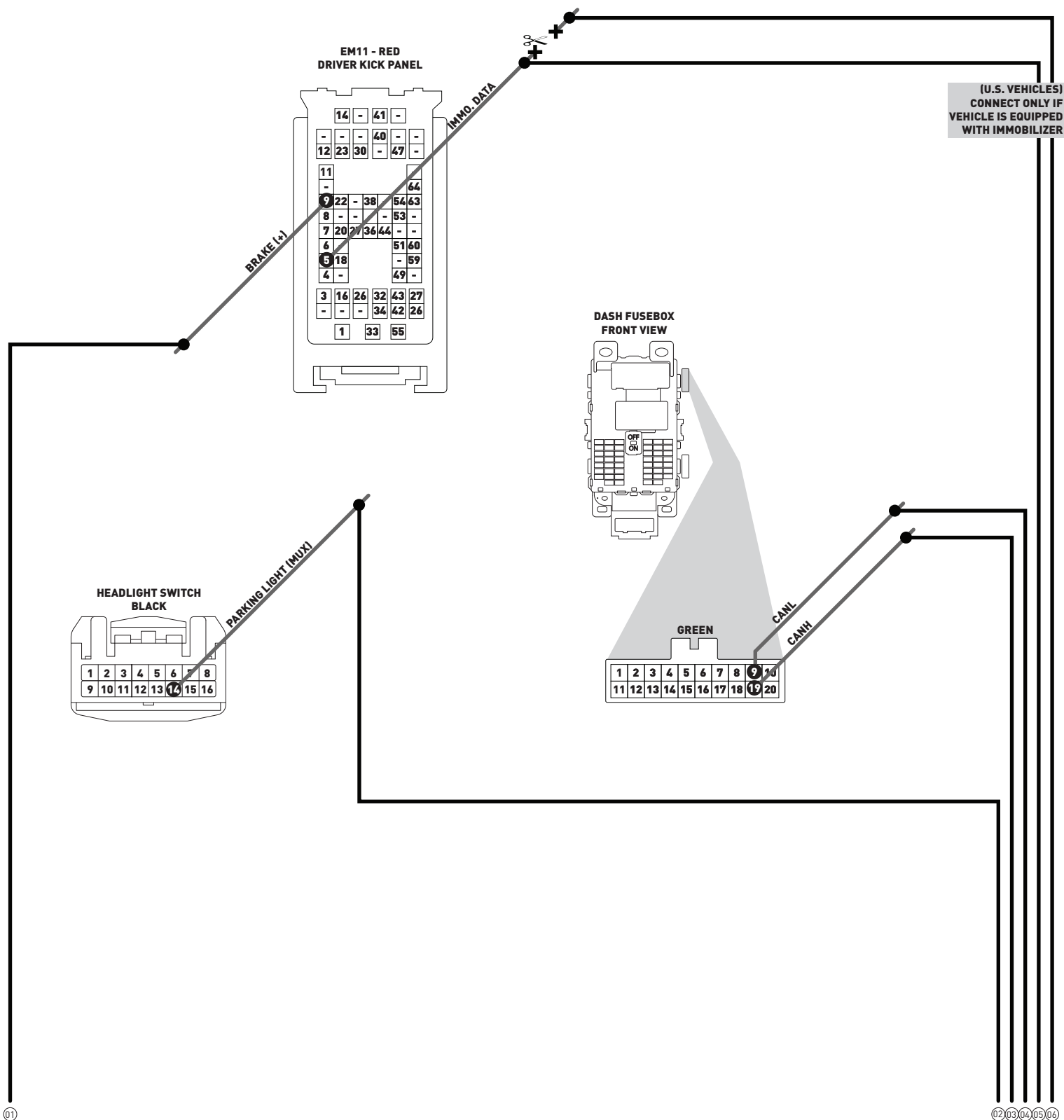


TYPE 8 - WIRE CROSS REFERENCE CHART

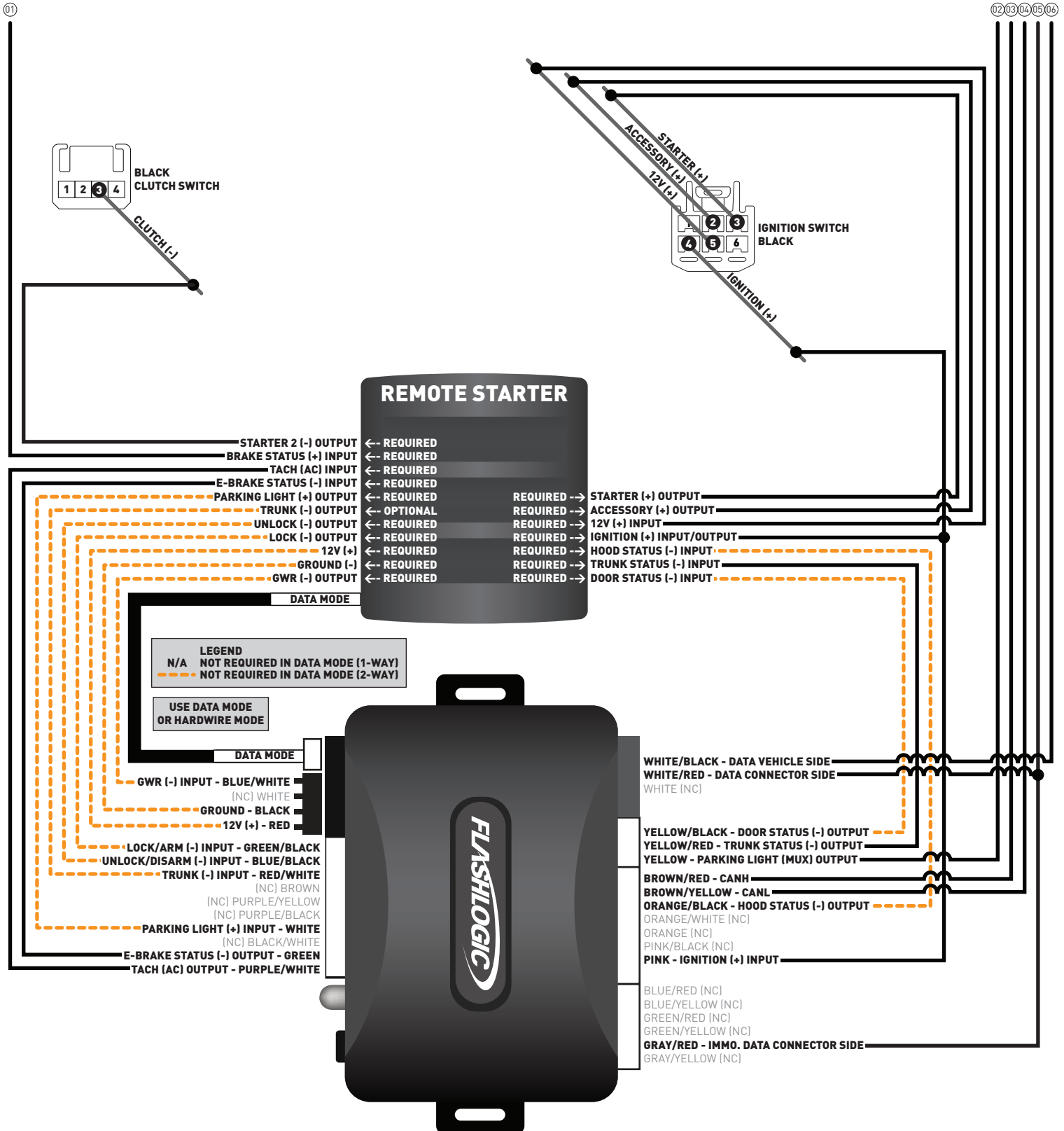
MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Venue STD key MT	20-21	12V	~	Black	06 pin	05	White	(+)	Ignition switch	~
			Accessory	~	Black	06 pin	02	Blue	(+)	Ignition switch	~
			Starter	~	Black	06 pin	03	Green	(+)	Ignition switch	~
			Ignition	~	Black	06 pin	04	Gray	(+)	Ignition switch	~
			Brake	EM11	Red	68 pin	09	Pink	(+)	Driver kick panel	~
			CanH	JM02	Green	20 pin	19	Red	(DATA)	Dash fusebox, rear view	~
			CanL	JM02	Green	20 pin	09	Blue	(DATA)	Dash fusebox, rear view	~
			Immo. Data*	EM11	Red	68 pin	05	Blue/Black	(DATA)	Driver kick panel	~
			Parking Light	~	Black	16 pin	14	Gray	(MUX)	Parking light switch	~
			Clutch	~	Black	04 pin	03	Pink/Black	(-)	Clutch switch	~
			Horn	EM11	Red	68 pin	11	Blue	(-)	Driver kick panel	~

*(USA) Data Immobilizer wire is only present if vehicle is equipped with an immobilizer.

TYPE 8 - WIRING DIAGRAM - 1 OF 2



TYPE 8 - WIRING DIAGRAM - 2 OF 2



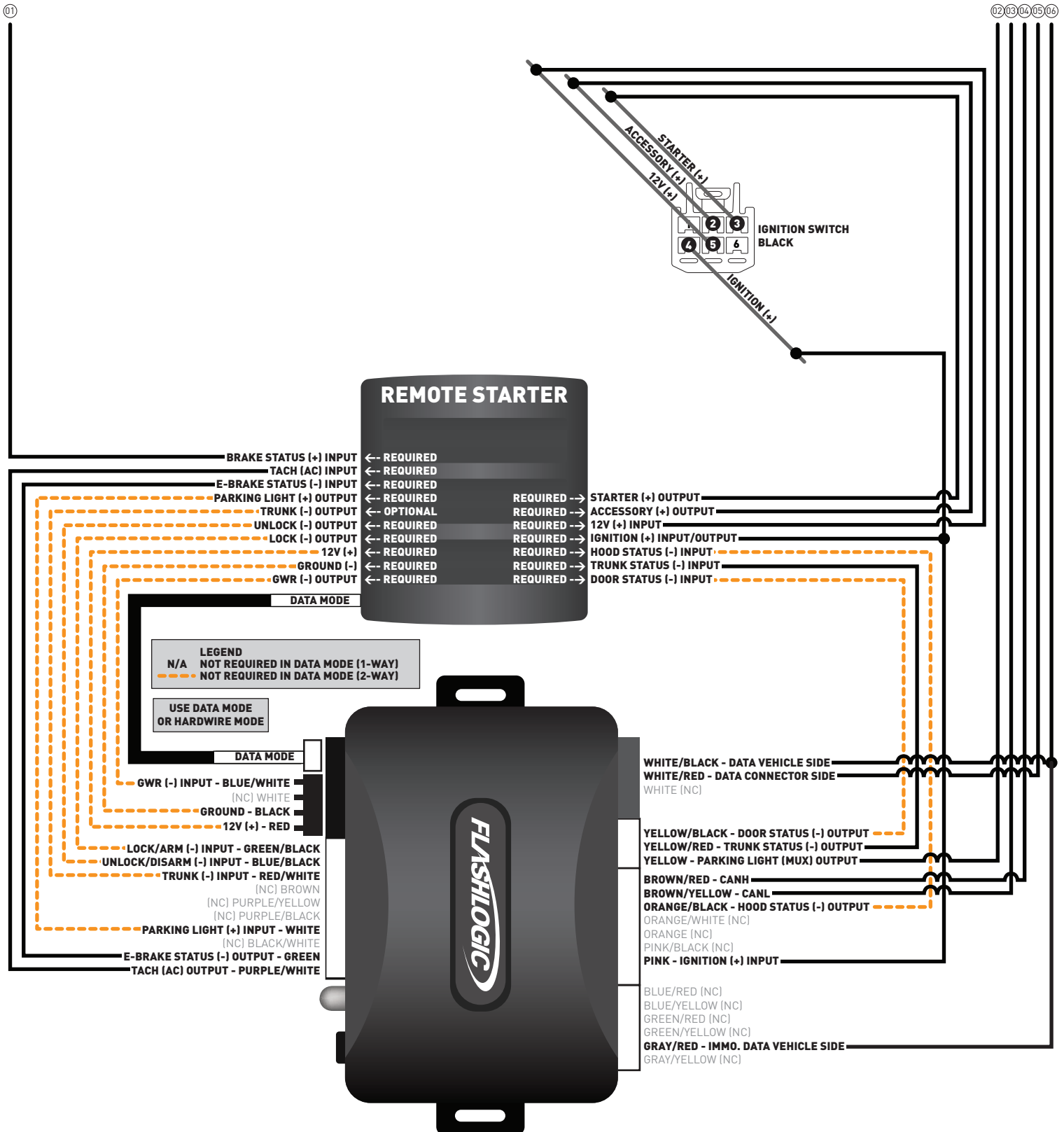
TYPE 9 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Elantra STD key AT	21	12V	~	Black	06 pin	05	Red	(+)	Ignition switch	~
			Accessory	~	Black	06 pin	02	Black	(+)	Ignition switch	~
			Starter	~	Black	06 pin	03	White	(+)	Ignition switch	~
			Ignition	~	Black	06 pin	04	Pink	(+)	Ignition switch	~
			CanH	ICU-E	White	40 pin	13	Green	(DATA)	Dash fusebox, rear view	~
			CanL	ICU-E	White	40 pin	12	Orange	(DATA)	Dash fusebox, rear view	~
			Immo. Data*	EM11	Blue	71 pin	23	Brown	(DATA)	Right of dash fusebox	~
			Brake	EM11	Blue	71 pin	40	Green	(+)	Right of dash fusebox	~
			Parking Light	~	White	16 pin	10	Blue	(MUX)	Parking light switch	~

*[USA] Data Immobilizer wire is only present if vehicle is equipped with an immobilizer.

02 03 04 05 06

TYPE 9 - WIRING DIAGRAM - 2 OF 2

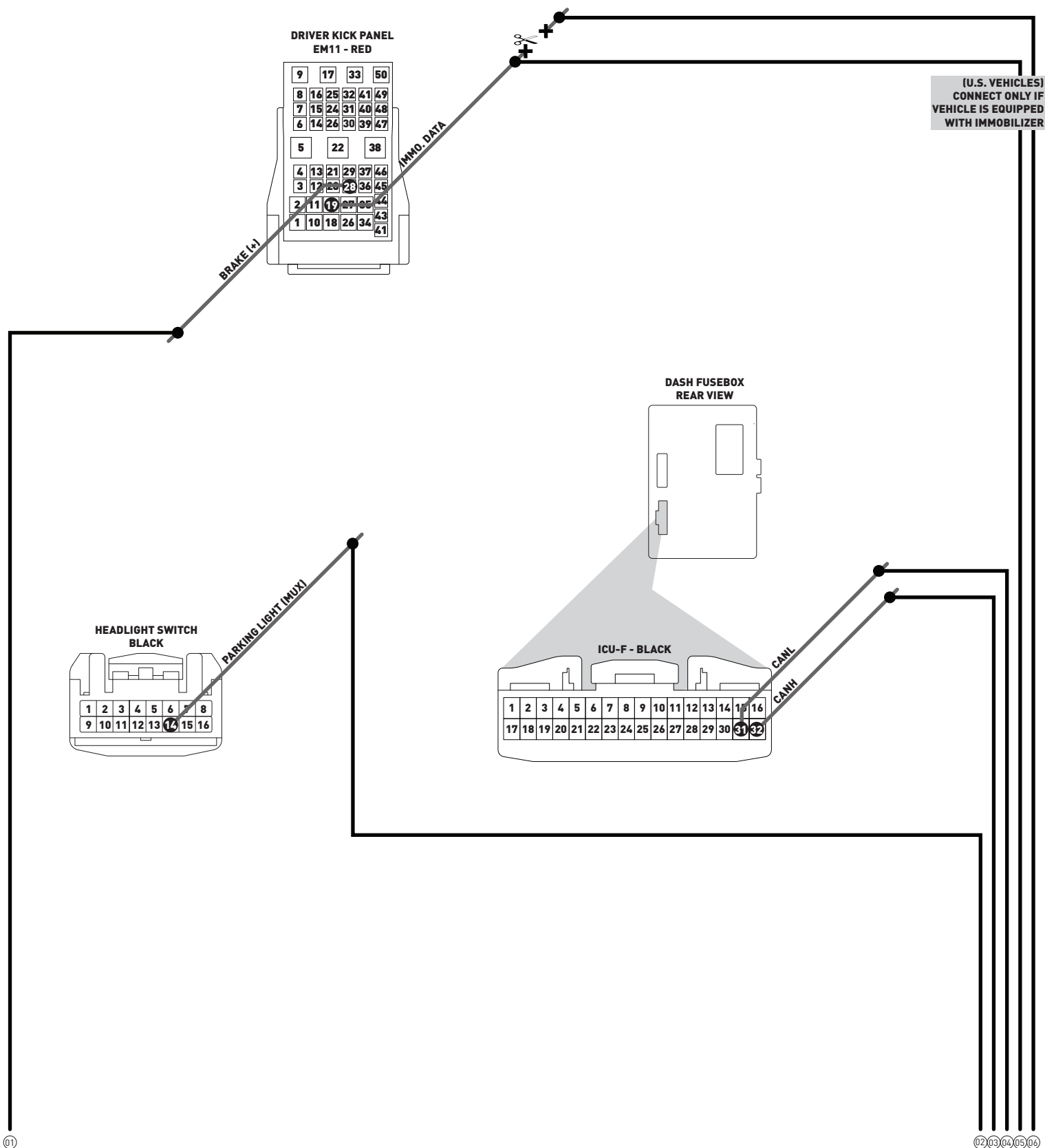


TYPE 10 - WIRE CROSS REFERENCE CHART

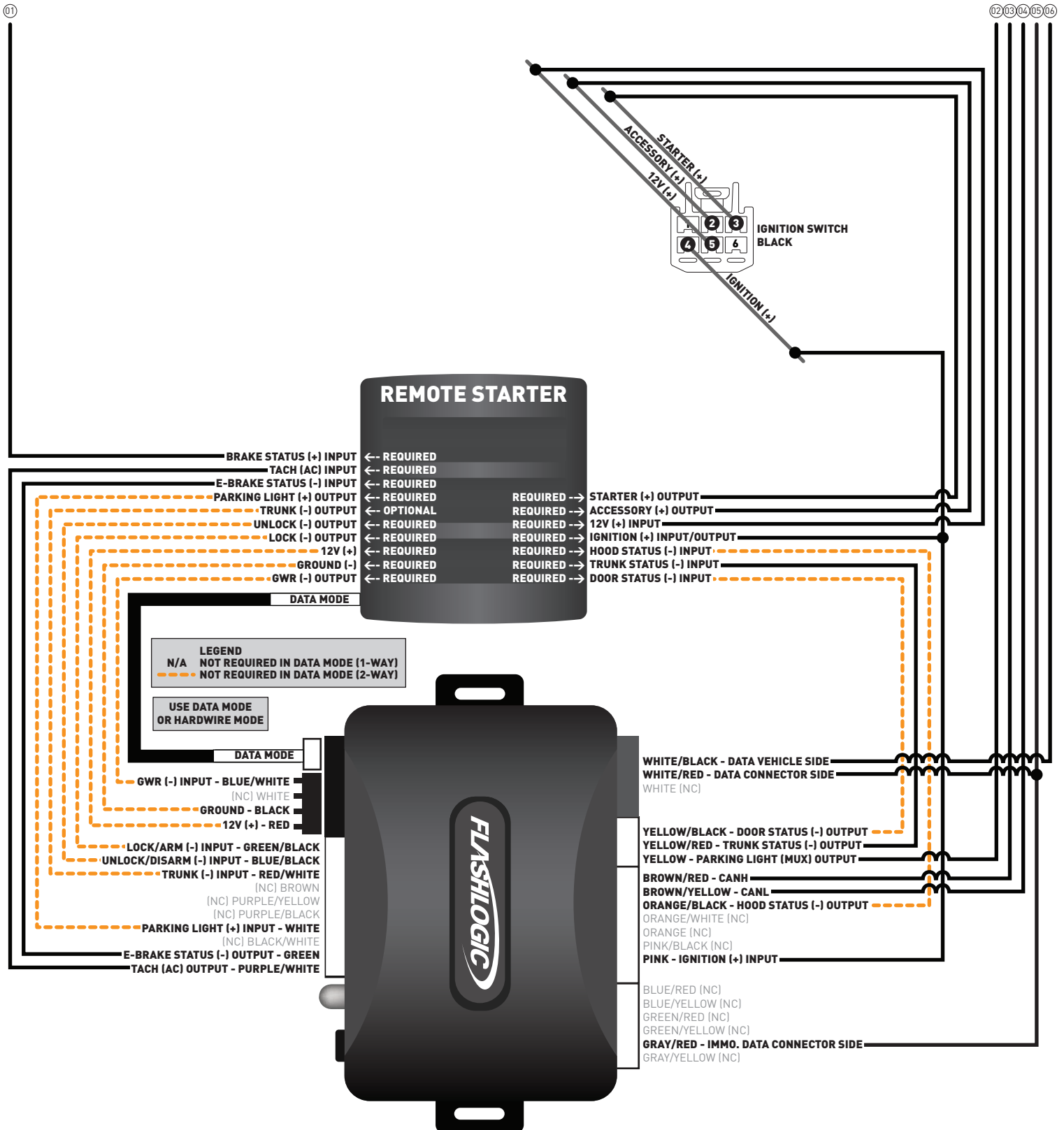
MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Santa Fe STD key AT	21	12V	~	Black	06 pin	05	White	(+)	Ignition switch	~
			Accessory	~	Black	06 pin	02	Blue	(+)	Ignition switch	~
			Starter	~	Black	06 pin	03	Black or Pink*	(+)	Ignition switch	~
			Ignition	~	Black	06 pin	04	Green	(+)	Ignition switch	~
			Brake	EM11	Red	50 pin	28	Green/Black	(+)	Driver kick panel	~
			CanH	ICU-F	Black	32 pin	32	Green or Blue	(DATA)	Dash fusebox, rear view	~
			CanL	ICU-F	Black	32 pin	31	Orange	(DATA)	Dash fusebox, rear view	~
			Immo. Data*	EM11	Red	50 pin	19	White/Orange	(DATA)	Driver kick panel	~
			Parking Light	~	Black	16 pin	14	Yellow	(MUX)	Parking light switch	~

*[USA] Data Immobilizer wire is only present if vehicle is equipped with an immobilizer. If the starter wire is pink, the vehicle is not equipped with an immobilizer.

TYPE 10 - WIRING DIAGRAM - 1 OF 2





TYPE 10 - WIRING DIAGRAM - 2 OF 2



INSTALLATION MODE SELECTION

- 1**  Press and release programming button to select installation mode.

 LED flashes [1X] once = DATA MODE
 LED flashes [2X] twice = STANDARD HARDWARE MODE

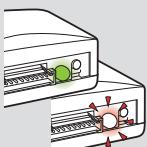
- 2**  Press and hold programming button until LED turns solid GREEN to register selection.

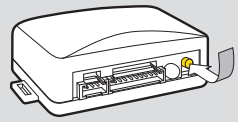


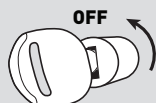
After registration, follow Factory Reset Procedure to change installation mode and restart this procedure.

MODULE PROGRAMMING PROCEDURE

- 1**  Turn key to ON position.

- 2**  Wait, if LED turns solid GREEN, proceed with step 4.
 If LED flashes RED three times [3x], proceed with step 3.

- 3**  The vehicle's immobilizer is NOT detected:
 For USDM vehicles without an immobilizer, press and release programming button and proceed with step 4.
 For CDM and USDM vehicles with an immobilizer, verify every wire connections and repeat the module programming procedure.

- 4**  Turn key to OFF position.

- 5** Module Programming Procedure completed.

IDENTIFY VEHICLE YEAR

1 Locate the Vehicle Identification Number (VIN), identify the 10th character then match it to its corresponding year.



A	1980	L	1990	Y	2000	A	2010	L	2020
B	1981	M	1991	1	2001	B	2011	M	2021
C	1982	N	1992	2	2002	C	2012	N	2022
D	1983	P	1993	3	2003	D	2013	P	2023
E	1984	R	1994	4	2004	E	2014	R	2024
F	1985	S	1995	5	2005	F	2015	S	2025
G	1986	T	1996	6	2006	G	2016	T	2026
H	1987	V	1997	7	2007	H	2017	V	2027
J	1988	W	1998	8	2008	J	2018	W	2028
K	1989	X	1999	9	2009	K	2019	X	2029

MODULE DIAGNOSTICS

LED STATUS	DIAGNOSTICS		
	DURING PROGRAMMING	DURING REMOTE START	WITH IGNITION OFF
Flashing RED	Missing/wrong information from firmware or vehicle	Incorrectly programmed	Incorrectly programmed or connected
Solid RED	Waiting for more vehicle information	Incorrectly programmed	Not programmed waiting for more vehicle information
Flashing GREEN	Additional steps required to complete programming	Correctly programmed and operational	False ground when running status from remote starter
Solid GREEN then OFF	Correctly programmed	Reset in progress	Reset in progress
OFF	No activity or already programmed	Invalid ground when running status from remote starter	At rest and ready for a remote start sequence

FACTORY RESET PROCEDURE

- DISCONNECT** all connectors from module **EXCEPT** the black 4-PIN standard or optional data connector.
- DISCONNECT** black 4-PIN standard or optional data connector.
- PRESS AND HOLD** programming button while connecting either 4-PIN standard or optional data connector.
- When LED flashes red, **RELEASE** programming button.

- LED will turn solid red for 2 seconds.
RESET COMPLETED.
 - RECONNECT** all connectors.
 - Repeat programming procedure.
- Failure to follow procedure may result with a DTC or a CHECK ENGINE error message.