

Automotive Data Solutions Inc.

INSTALL GUIDE

ADS-AL(DL)-HK3-EN

HK3

AVAILABLE FOR: ADS-AL CA

Rev. Date: September 02, 2016

Doc. No.: ##29903##

U.S. PATENT NO. 8,856,780

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HYUNDAI

KIA

NOTICE: The manufacturer will accept no responsibility for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. This guide has been written for properly trained technicians; a certain level of skill & knowledge is therefore assumed. Please review the Installation Guide carefully before beginning any work.

INSTALL TYPE SELECTION - 1 OF 2

MAKE	MODEL	YEAR	INSTALL TYPE	FEATURES																			
				DATA IMMOBILIZER BYPASS	SECURE TAKEOVER	ARM OEM ALARM	DISARM OEM ALARM	A/M ALARM CTRL FROM OEM REMOTES ³	A/M RS CTRL FROM OEM REMOTES ^{3&4}	POWER SLIDING DOOR (L)	POWER SLIDING DOOR (R)	POWER LIFTGATE ⁸	PRIORITY UNLOCK	DOOR LOCK	DOOR UNLOCK	TRUNK/HATCH RELEASE	DOOR STATUS OUTPUT	TRUNK STATUS OUTPUT	HOOD STATUS OUTPUT*	BRAKE PEDAL STATUS OUTPUT	TACHOMETER OUTPUT	E-BRAKE OUTPUT	RAP SHUTDOWN CTRL
HYUNDAI	Azera PTS AT	12-15	09	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•
	Elantra PTS AT	11-13	02	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•
	Elantra PTS AT/MT	14-16	18	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•
	Elantra Coupe PTS AT	13	02	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•
	Elantra Coupe PTS AT/MT	14	19	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•
	Elantra GT PTS AT/MT	13-16	10	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•
	Elantra PTS AT	17	35	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•
	Equus PTS AT	14-15	28	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•
	Genesis Sedan PTS AT ⁵	13	15	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•
	Genesis Sedan PTS AT	14	15	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•
	Genesis Sedan PTS AT ²	15	24	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•
	Santa Fe/Santa Fe Sport PTS AT	13-16	08	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•
	Santa Fe PTS AT	17	36	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•
	Santa Fe Sport PTS AT	17	37	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•
	Sonata PTS AT ⁶	15	23	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•
	Sonata Hybrid PTS AT ⁶	16	31	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•
	Sonata PTS AT ⁶	16	32	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•
	Tucson PTS AT	14-15	26	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•
	Tucson PTS AT	16	30	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•
	Veloster PTS AT	12-13	04	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•
Veloster PTS MT	12-13	05	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•	
Veloster PTS AT	14-15	20	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•	
Veloster PTS MT	14-15	21	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•	
Veloster PTS AT	16	20	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•	
Veloster PTS MT	16	21	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•	

¹WARNING: The takeover feature using the OEM remote is not available.

²The priority unlock feature is only available when the ignition is off.

³Available only for AL-64k, AL-128k & BLADE-AL 64k with compatible RS. Telematics Data Gateway not available on BLADE-AL 32k.

⁴This feature is disabled by default, it must be enabled during programming.

⁵Vehicles manufactured after November 2012 are covered by this solution. See the driver's door sticker for the manufacturing date.

⁶A/M ALARM CTRL and A/M RS CTRL FROM OEM REMOTES are not supported with idle mode.

⁷Idle mode is not available.

⁸The power liftgate feature is only available when ignition is off.

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

INSTALL TYPE SELECTION - 2 OF 2

MAKE	MODEL	YEAR	INSTALL TYPE	FEATURES																			
				DATA IMMOBILIZER BYPASS	SECURE TAKEOVER	ARM OEM ALARM	DISARM OEM ALARM	A/M ALARM CTRL FROM OEM REMOTES ³	A/M RS CTRL FROM OEM REMOTES ^{3&4}	POWER SLIDING DOOR (L)	POWER SLIDING DOOR (R)	POWER LIFTGATE ⁸	PRIORITY UNLOCK	DOOR LOCK	DOOR UNLOCK	TRUNK/HATCH RELEASE	DOOR STATUS OUTPUT	TRUNK STATUS OUTPUT	HOOD STATUS OUTPUT	BRAKE PEDAL STATUS OUTPUT	TACHOMETER OUTPUT	E-BRAKE OUTPUT	RAP SHUTDOWN CTRL
KIA	Cadenza PTS AT ²	14-16	13	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•
	Forte 5 PTS AT/MT	14-16	12	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•
	Forte Koup PTS AT/MT	14-16	12	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•
	Forte Sedan PTS AT	14-16	12	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•
	K900 PTS AT	15-16	38	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•
	Optima PTS AT	11-13	03	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•
	Optima PTS AT	14-15	16	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•
	Optima PTS AT	16	33	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•
	Optima Hybrid PTS AT	11-13	17	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•
	Optima Hybrid PTS AT	14-15	16	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•
	Rio PTS AT	12-16	06	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•
	Rio PTS MT	12-16	07	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•
	Rio 5 PTS AT	12-16	06	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•
	Rio 5 PTS MT	12-16	07	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•
	Rondo PTS AT ¹	14-16	14	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•
	Sedona PTS AT ⁶	15-16	25	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•
	Sorento PTS AT ¹	14-15	11	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•
	Sorento PTS AT ⁷	16-17	29	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•
	Soul PTS AT	14-16	22	•	•			•	•					•	•	•	•	•	•	•	•	•	•
	Sportage PTS AT	11-13	01	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•
Sportage PTS AT	14-16	27	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•	
Sportage PTS AT	17	34	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•	

¹WARNING: The takeover feature using the OEM remote is not available.

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³Available only for AL-64k, AL-128k & BLADE-AL 64k with compatible RS. Telematics Data Gateway not available on BLADE-AL 32k.

⁴This feature is disabled by default, it must be enabled during programming.

⁵Vehicles manufactured after November 2012 are covered by this solution. See the driver's door sticker for the manufacturing date.

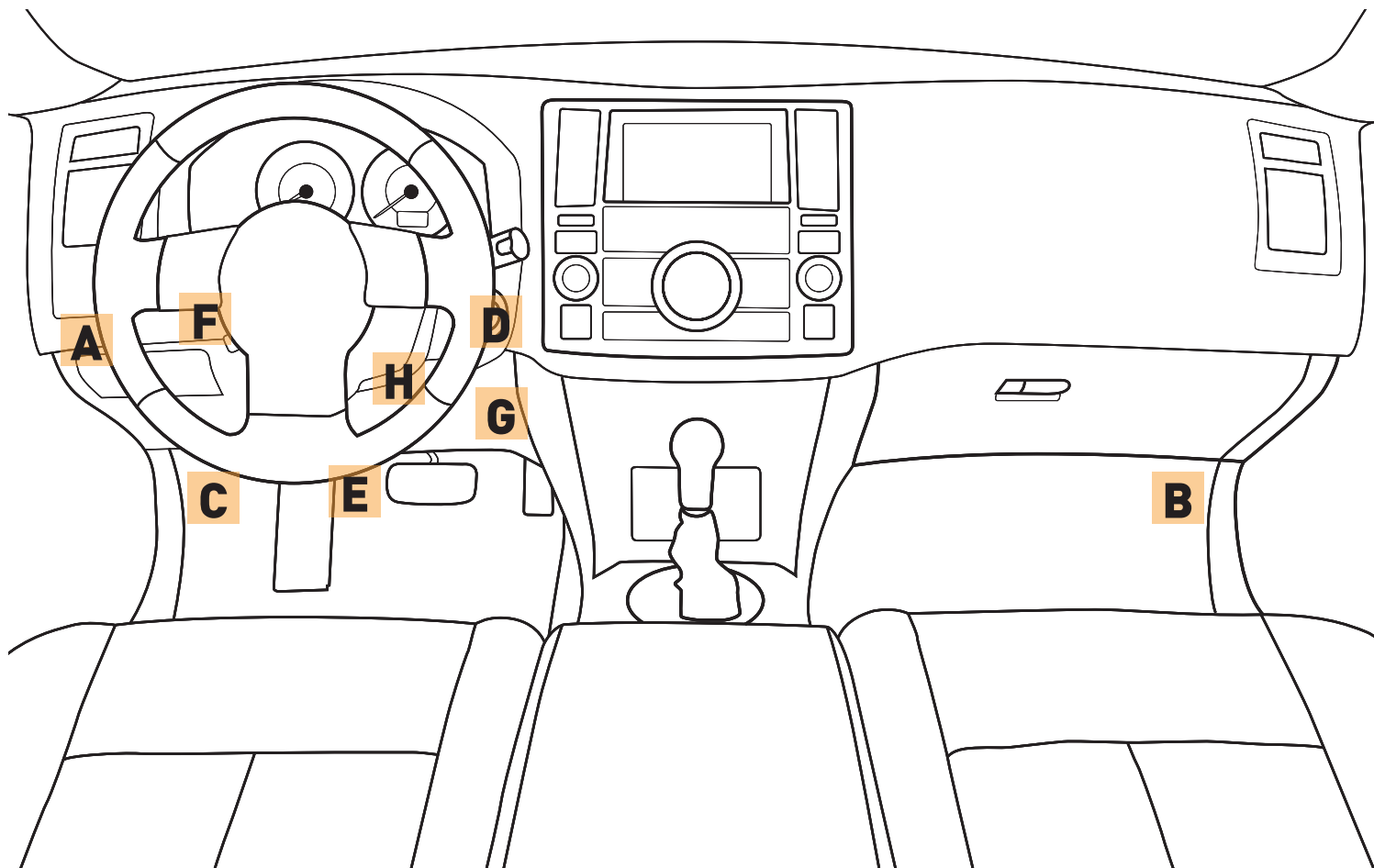
⁶A/M ALARM CTRL and A/M RS CTRL FROM OEM REMOTES are not supported with idle mode.

⁷Idle mode is not available.

⁸The power liftgate feature is only available when ignition is off.

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

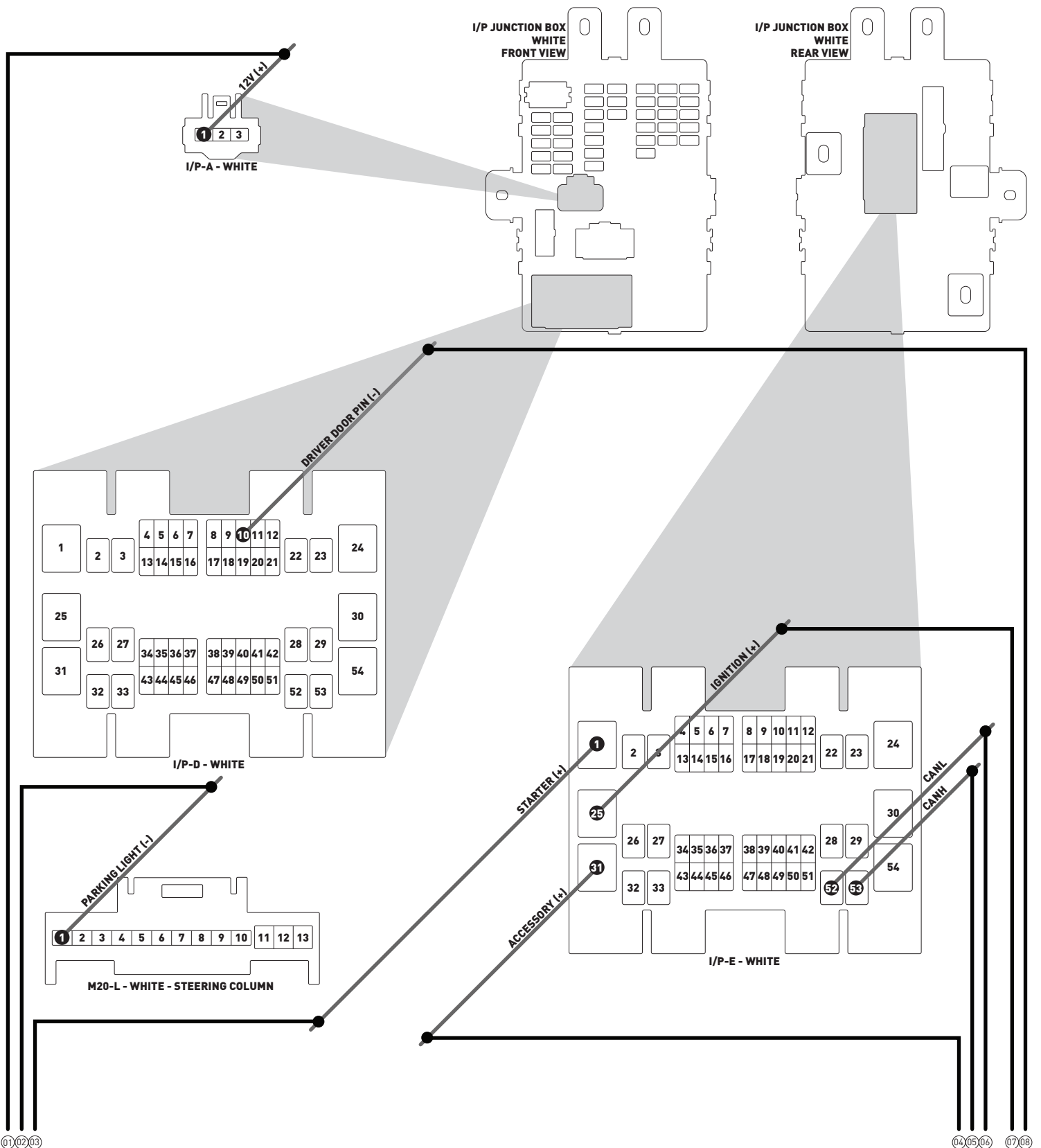
COMPONENT LOCATOR



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
KIA	Sportage PTS AT	11-13	12V	I/P-A	White	03 pin	01	Red	(+)	I/P front side, driver side dash	A
			Accessory	I/P-E	White	54 pin	31	Blue or White/Blue	(+)	I/P rear side, driver side dash	A
			Starter	I/P-E	White	54 pin	01	Red	(+)	I/P rear side, driver side dash	A
			Ignition	I/P-E	White	54 pin	25	Blue	(+)	I/P rear side, driver side dash	A
			CanH	I/P-E	White	54 pin	53	Blue	[DATA]	I/P rear side, driver side dash	A
			CanL	I/P-E	White	54 pin	52	Red	[DATA]	I/P rear side, driver side dash	A
			Driver Door Pin	I/P-D	White	54 pin	10	Green/Orange	(-)	I/P front side, driver side dash	A
			Parking Light	M20-L	White	13 pin	01	Blue	(+)	Steering Column	~
			Data	MC11	Yellow	24 pin	07	Blue	[DATA]	Passenger kick panel	B
			Tach	MC11	Yellow	24 pin	04	White	[AC]	Passenger kick panel	B
			PTS 1	M61	White	10 pin	01	White	(-)	Push button	D
			PTS 2	M61	White	10 pin	07	White/Black	(-)	Push button	D

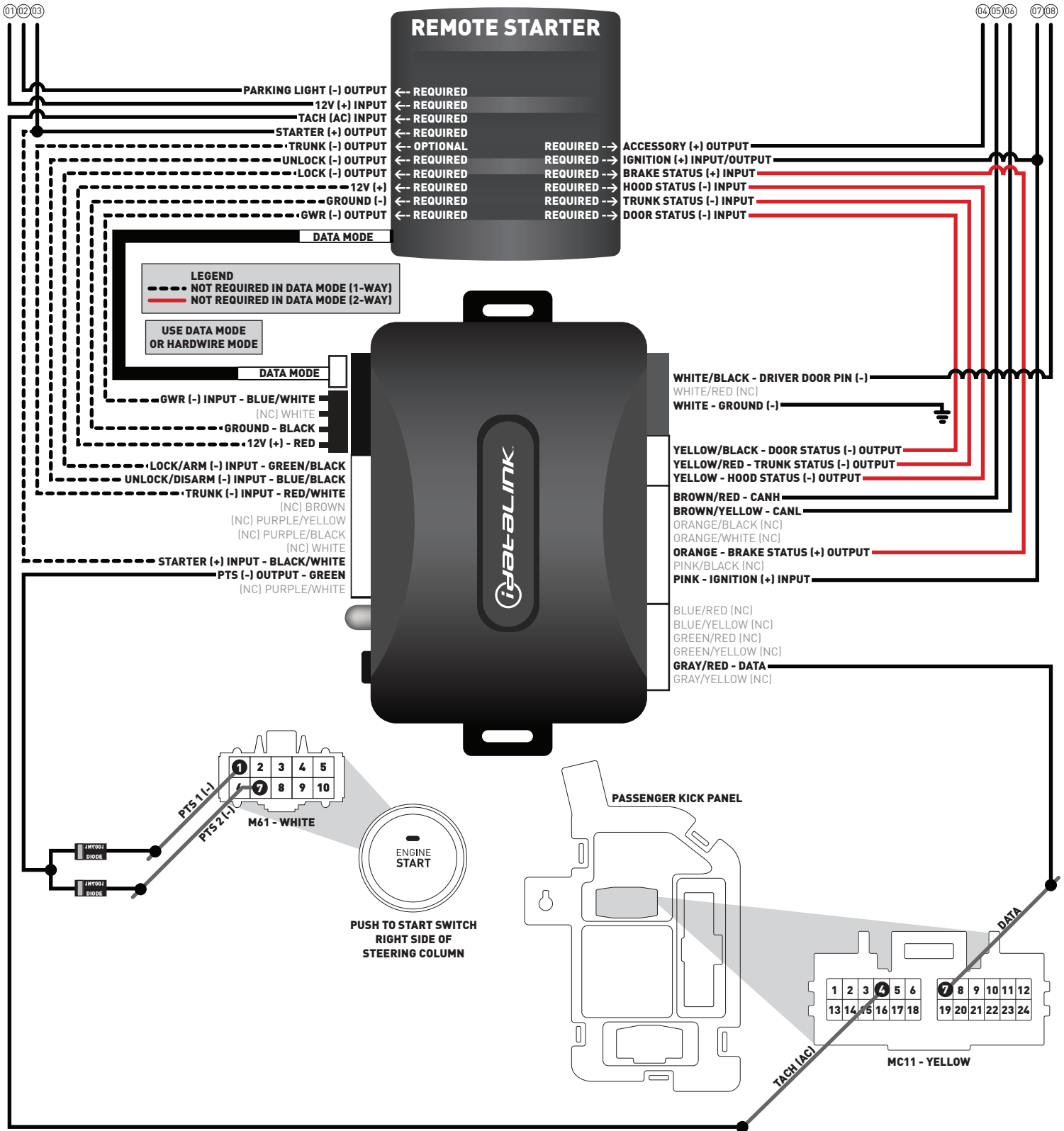
TYPE 1 - WIRING DIAGRAM - 1 OF 2



01 02 03

04 05 06 07 08

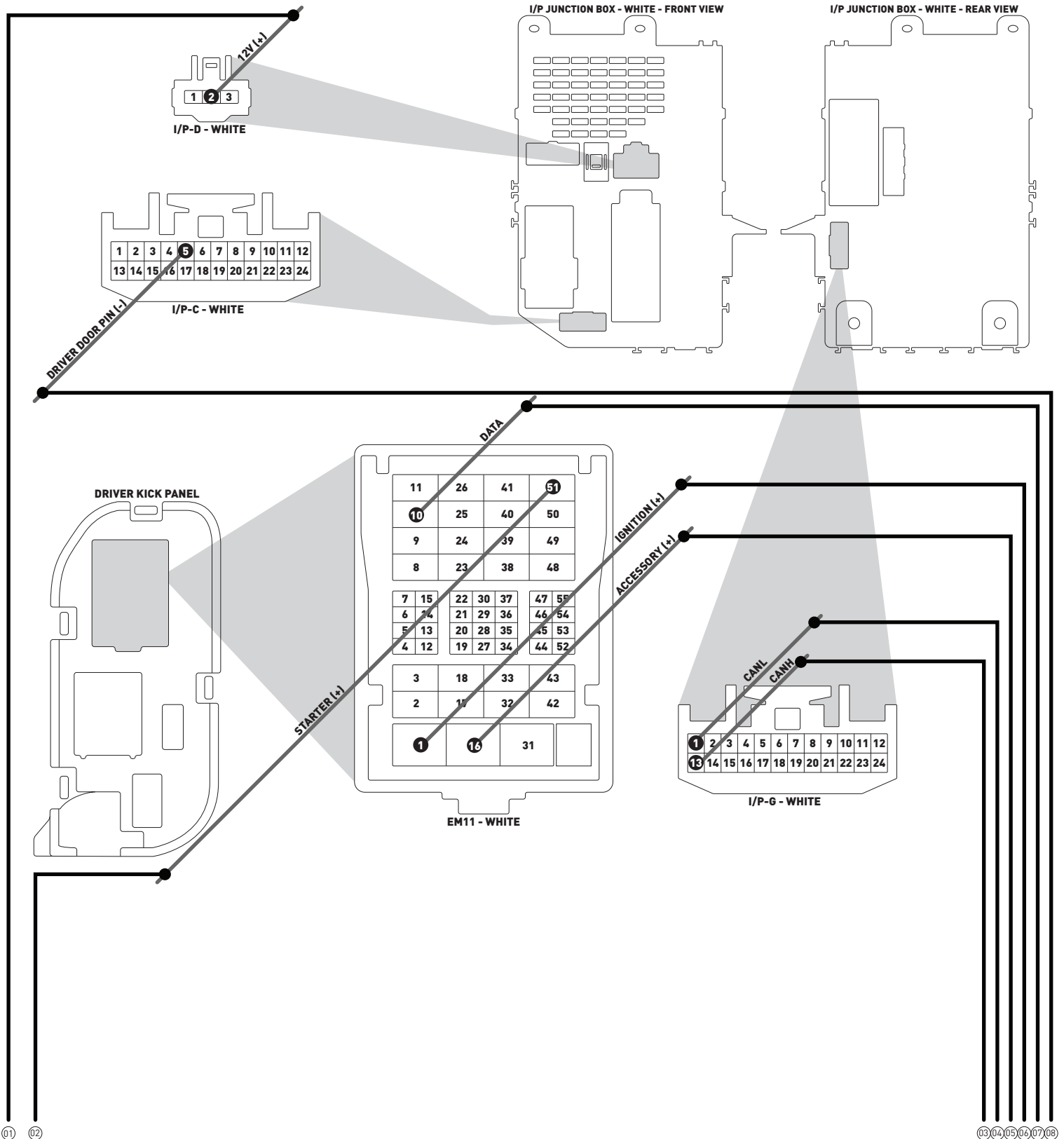
TYPE 1 - WIRING DIAGRAM - 2 OF 2



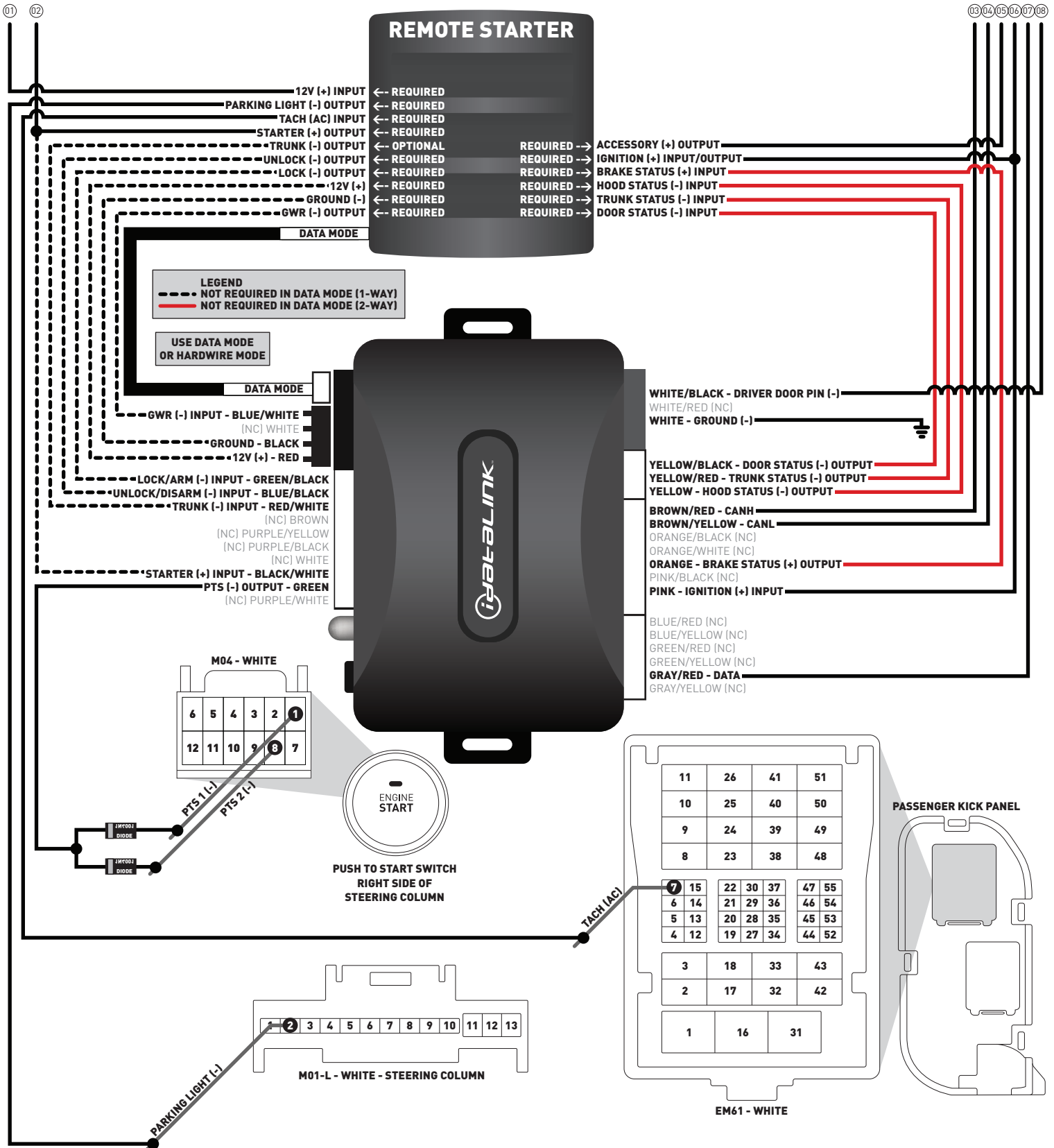
TYPE 2 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Elantra PTS AT	11-13	12V	I/P-D	White	03 pin	02	Red	(+)	I/P front side, driver side dash	A
			Tach	EM61	White	55 pin	07	Green	(AC)	Passenger kick panel	B
			Starter	EM11	White	55 pin	51	Gray	(+)	Driver kick panel	C
			Ignition	EM11	White	55 pin	01	Pink	(+)	Driver kick panel	C
			Accessory	EM11	White	55 pin	16	Orange	(+)	Driver kick panel	C
			CanH	I/P-G	White	24 pin	13	White/Orange	(DATA)	I/P rear side, driver side dash	A
			CanL	I/P-G	White	24 pin	01	Yellow/Orange	(DATA)	I/P rear side, driver side dash	A
			Parking Light	M01-L	White	13 pin	02	Pink	(-)	Steering Column	~
			Driver Door Pin	I/P-C	White	24 pin	05	Brown	(-)	I/P front side, driver side dash	A
			Data	EM11	White	55 pin	10	Brown/Orange	(DATA)	Driver kick panel	C
			PTS 1	M04	White	12 pin	01	Yellow/Black	(-)	Push button	D
			PTS 2	M04	White	12 pin	08	Yellow/Orange	(-)	Push button	D
	Elantra Coupe PTS AT	13	12V	I/P-D	White	03 pin	02	Red	(+)	I/P front side, driver side dash	A
			Tach	EM61	White	55 pin	07	Green	(AC)	Passenger kick panel	B
			Starter	EM11	White	55 pin	51	Gray	(+)	Driver kick panel	C
			Ignition	EM11	White	55 pin	01	Pink	(+)	Driver kick panel	C
			Accessory	EM11	White	55 pin	16	Orange	(+)	Driver kick panel	C
			CanH	I/P-G	White	24 pin	13	Brown	(DATA)	I/P rear side, driver side dash	A
			CanL	I/P-G	White	24 pin	01	White	(DATA)	I/P rear side, driver side dash	A
			Parking Light	M01-L	White	13 pin	02	Pink	(-)	Steering Column	~
			Driver Door Pin	I/P-C	White	24 pin	05	Brown	(-)	I/P front side, driver side dash	A
			Data	EM11	White	55 pin	10	Brown/Orange	(DATA)	Driver kick panel	C
			PTS 1	M04	White	12 pin	01	Yellow/Black	(-)	Push button	D
			PTS 2	M04	White	12 pin	08	Yellow/Orange	(-)	Push button	D

TYPE 2 - WIRING DIAGRAM - 1 OF 2



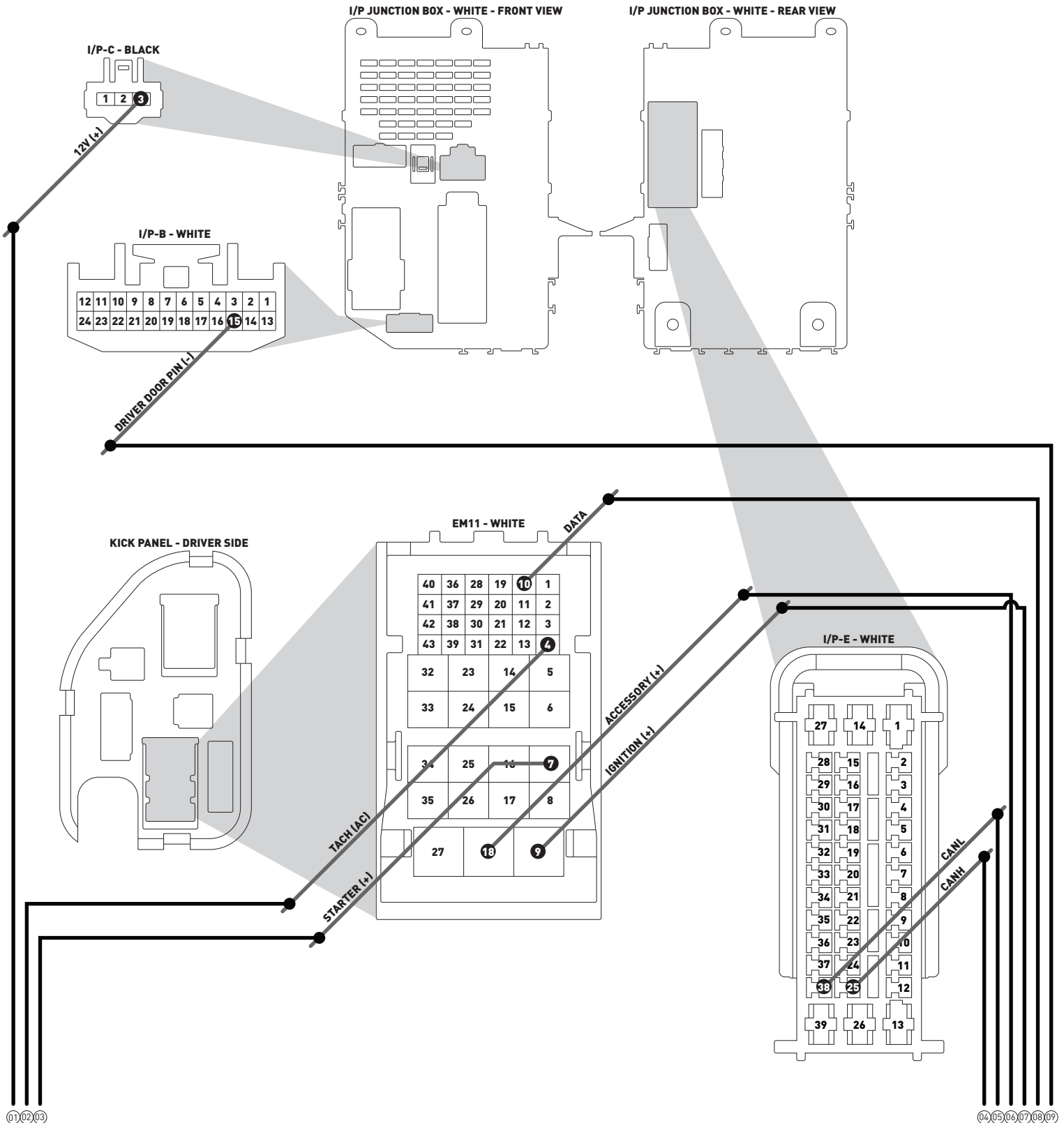
TYPE 2 - WIRING DIAGRAM - 2 OF 2



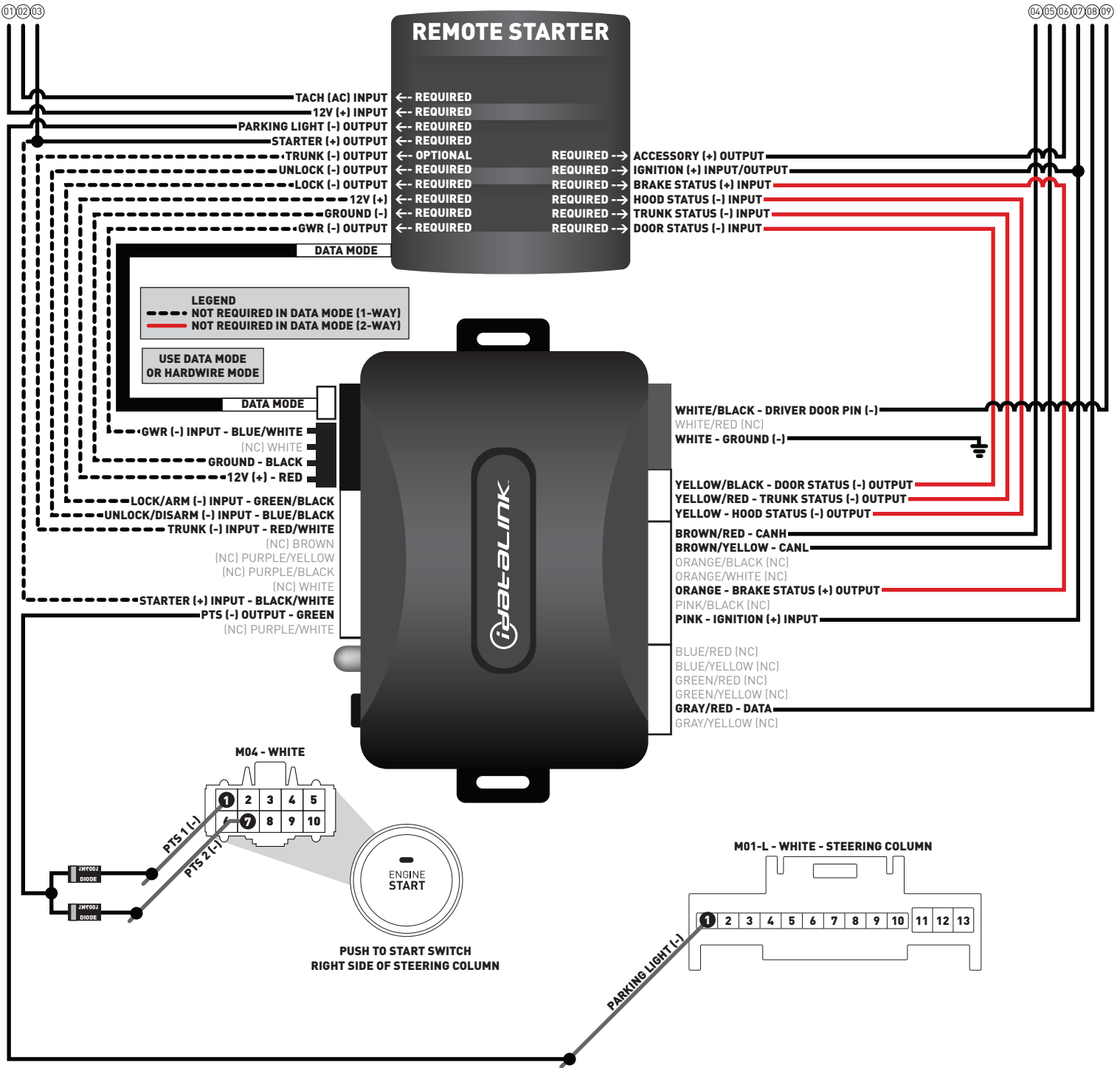
TYPE 3 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
KIA	Optima PTS AT	11-13	12V	I/P-C	Black	03 pin	03	Red	(+)	I/P front side, driver side dash	A
			Tach	EM11	White	43 pin	04	Gray	(AC)	Driver kick panel	C
			Starter	EM11	White	43 pin	07	Gray	(+)	Driver kick panel	C
			Ignition	EM11	White	43 pin	09	Pink	(+)	Driver kick panel	C
			Accessory	EM11	White	43 pin	18	Orange	(+)	Driver kick panel	C
			CanH	I/P-E	White	39 pin	25	White/Orange	[DATA]	I/P rear side, driver side dash	A
			CanL	I/P-E	White	39 pin	38	Yellow/Orange	[DATA]	I/P rear side, driver side dash	A
			Parking Light	M01-L	White	13 pin	01	Pink	(-)	Steering Column	~
			Driver Door Pin	I/P-B	White	24 pin	15	Brown	(-)	I/P front side, driver side dash	A
			Data	EM11	White	43 pin	10	Brown/Orange	[DATA]	Driver kick panel	C
			PTS 1	M04	White	10 pin	01	Yellow/Black	(-)	Push button	D
			PTS 2	M04	White	10 pin	07	Yellow/Orange	(-)	Push button	D

TYPE 3 - WIRING DIAGRAM - 1 OF 2



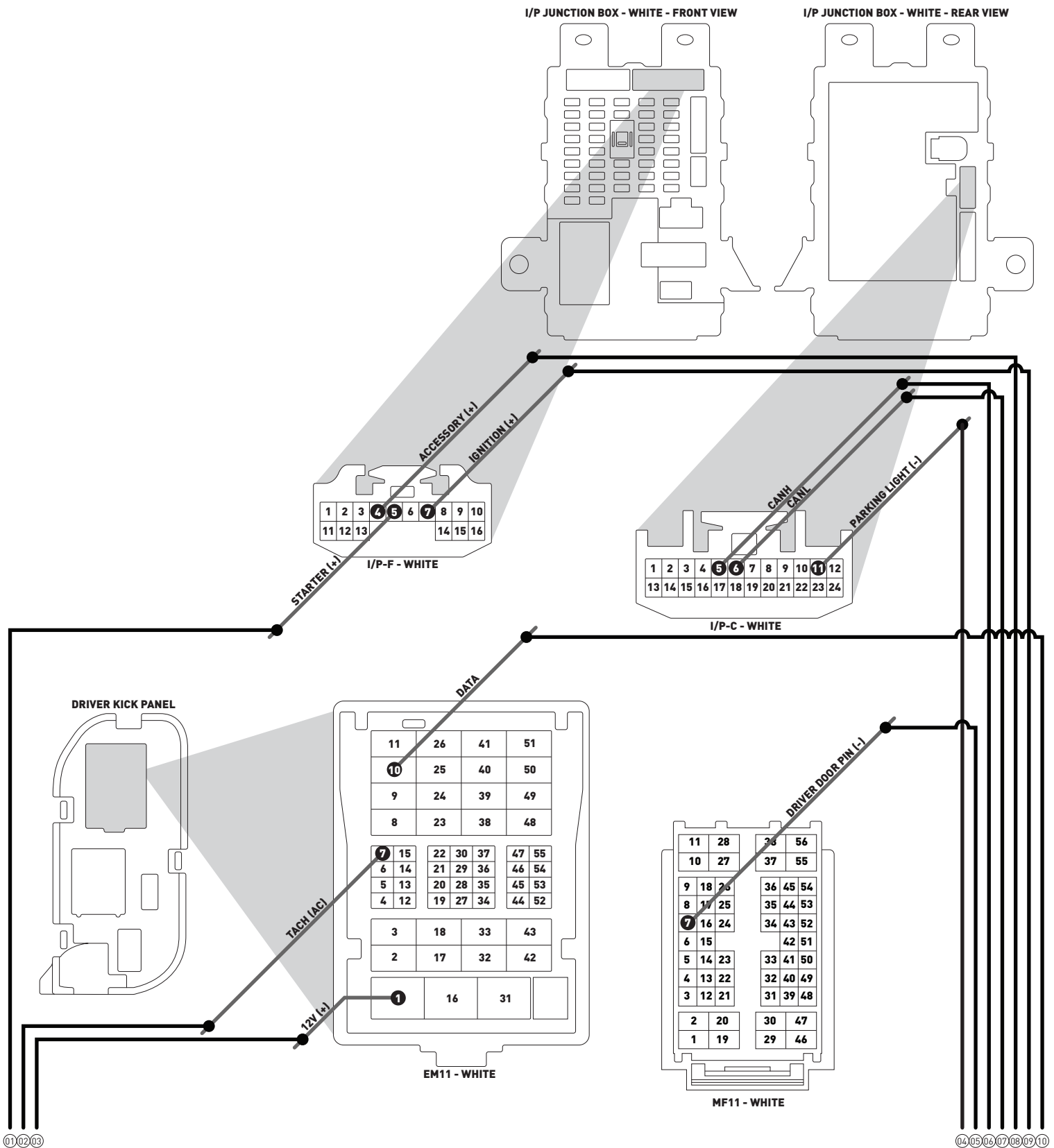
TYPE 3 - WIRING DIAGRAM - 2 OF 2



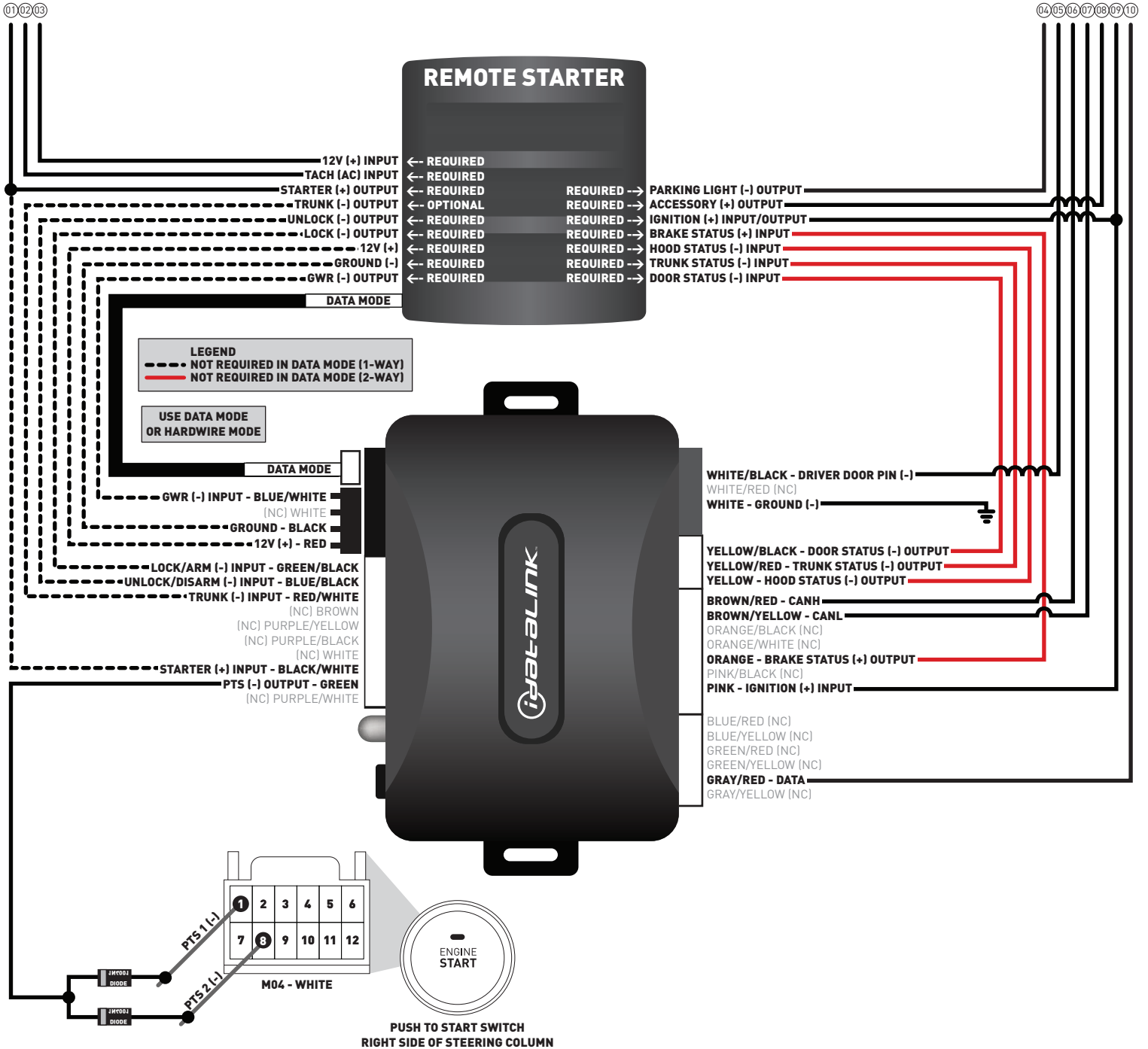
TYPE 4 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Veloster PTS AT	12-13	CanH	I/P-C	White	24 pin	05	White/Orange	(DATA)	I/P rear side, driver side dash	A
			CanL	I/P-C	White	24 pin	06	Yellow/Orange	(DATA)	I/P rear side, driver side dash	A
			Data	EM11	White	55 pin	10	Blue	(DATA)	Driver kick panel	C
			Parking Light	I/P-C	White	24 pin	11	Pink	(-)	Driver kick panel	C
			Driver Door Pin	MF11	White	56 pin	07	Brown	(-)	Driver kick panel	C
			Ignition	I/P-F	White	16 pin	07	Pink	(+)	I/P front side, driver side dash	A
			Accessory	I/P-F	White	16 pin	04	Red	(+)	I/P front side, driver side dash	A
			Starter	I/P-F	White	16 pin	05	Yellow	(+)	I/P front side, driver side dash	A
			Tach	EM11	White	55 pin	07	Orange	(AC)	Driver kick panel	C
			12V	EM11	White	55 pin	01	Red	(+)	Driver kick panel	C
			PTS 1	M04	White	12 pin	01	Yellow/Black	(-)	Push button	D
			PTS 2	M04	White	12 pin	08	Yellow/Orange	(-)	Push button	D

TYPE 4 - WIRING DIAGRAM - 1 OF 2



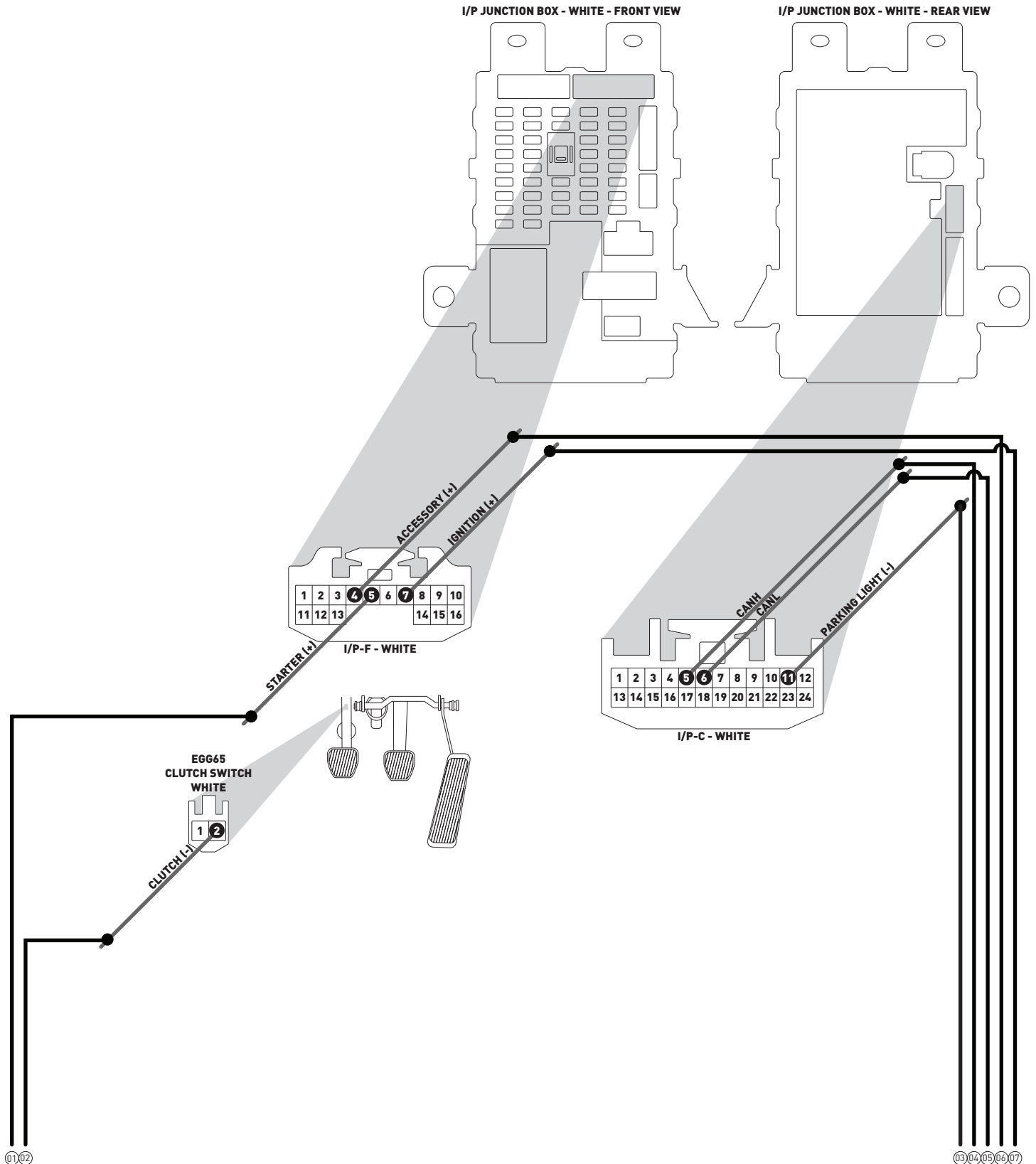
TYPE 4 - WIRING DIAGRAM - 2 OF 2



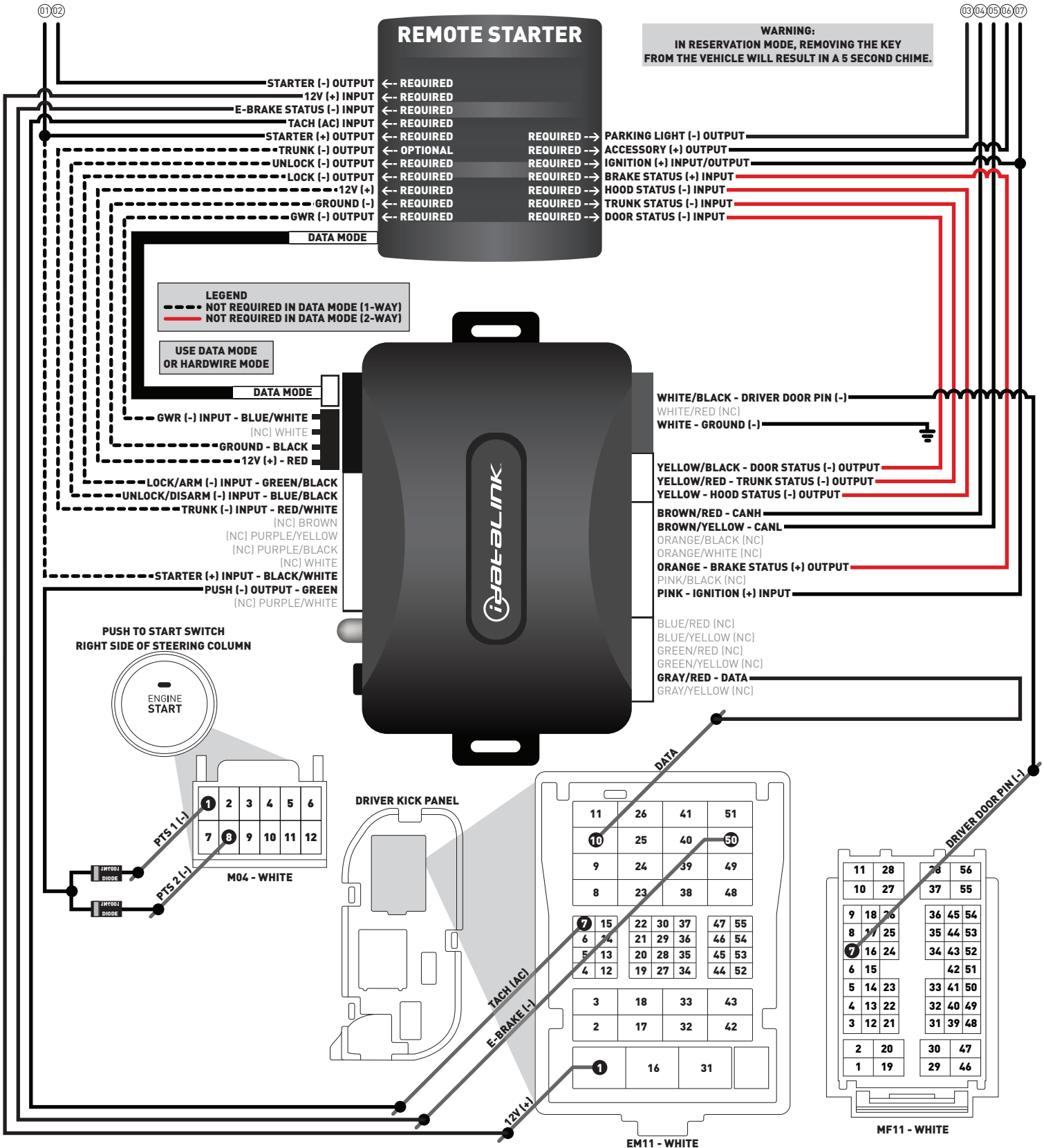
TYPE 5 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Veloster PTS MT	12-13	CanH	I/P-C	White	24 pin	05	White/Orange	(DATA)	I/P rear side, driver side dash	A
			CanL	I/P-C	White	24 pin	06	Yellow/Orange	(DATA)	I/P rear side, driver side dash	A
			Data	EM11	White	55 pin	10	Blue	(DATA)	Driver kick panel	C
			E-brake	EM11	White	55 pin	50	Blue	(-)	Driver kick panel	C
			Parking Light	I/P-C	White	24 pin	11	Pink	(-)	I/P rear side, driver side dash	A
			Driver Door Pin	MF11	White	56 pin	07	Brown	(-)	Driver kick panel	C
			Ignition	I/P-F	White	16 pin	07	Pink	(+)	I/P front side, driver side dash	A
			Accessory	I/P-F	White	16 pin	04	Red	(+)	I/P front side, driver side dash	A
			Starter	I/P-F	White	16 pin	05	Yellow	(+)	I/P front side, driver side dash	A
			Tach	EM11	White	55 pin	07	Orange	(AC)	Driver kick panel	C
			12V	EM11	White	55 pin	01	Red	(+)	Driver kick panel	C
			Clutch	EKG65	White	02 pin	02	Green	(-)	Clutch switch	E
			PTS 1	M04	White	12 pin	01	Yellow/Black	(-)	Push button	D
PTS 2	M04	White	12 pin	08	Yellow/Orange	(-)	Push button	D			

TYPE 5 - WIRING DIAGRAM - 1 OF 2



TYPE 5 - WIRING DIAGRAM - 2 OF 2

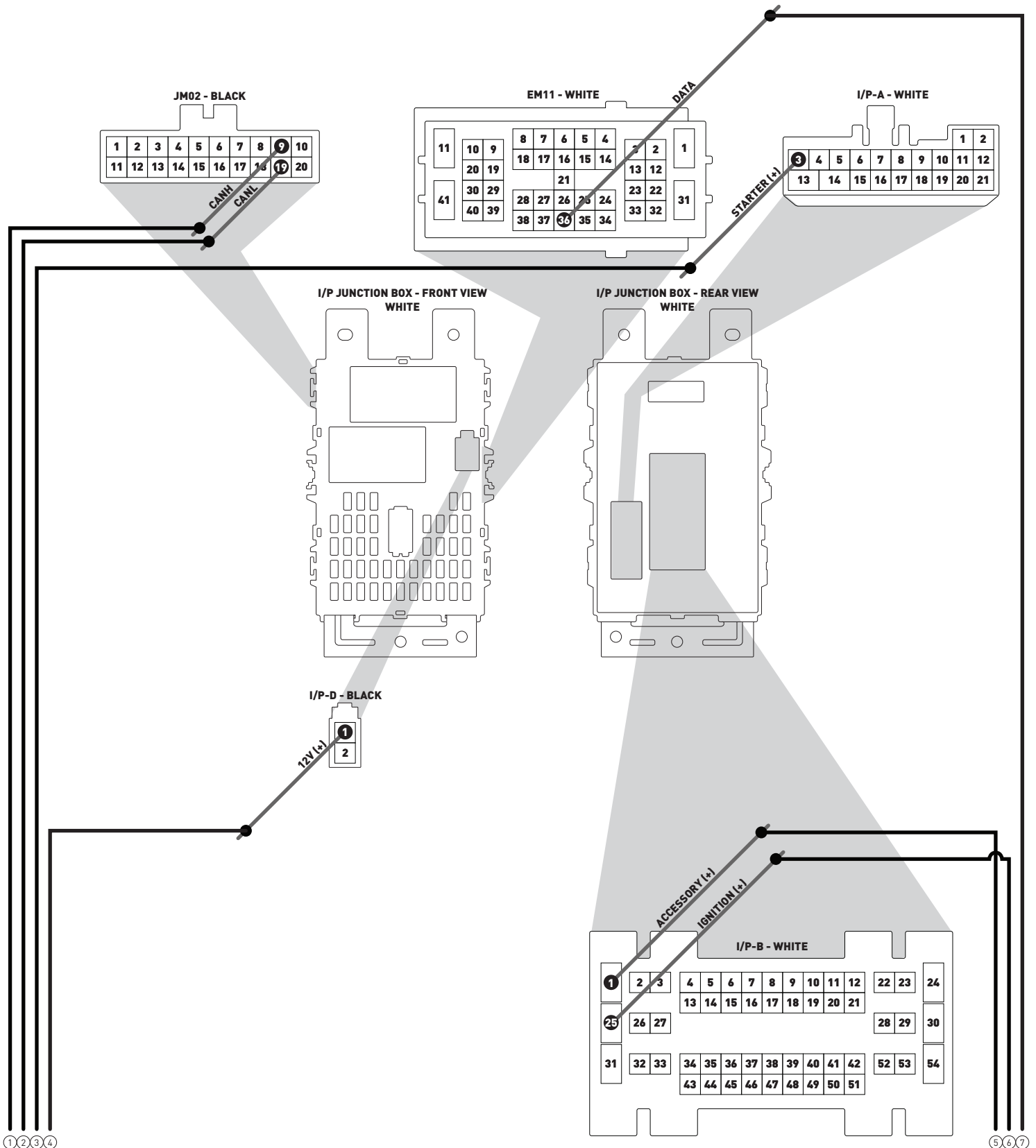


WARNING:
IN RESERVATION MODE, REMOVING THE KEY FROM THE VEHICLE WILL RESULT IN A 5 SECOND CHIME.

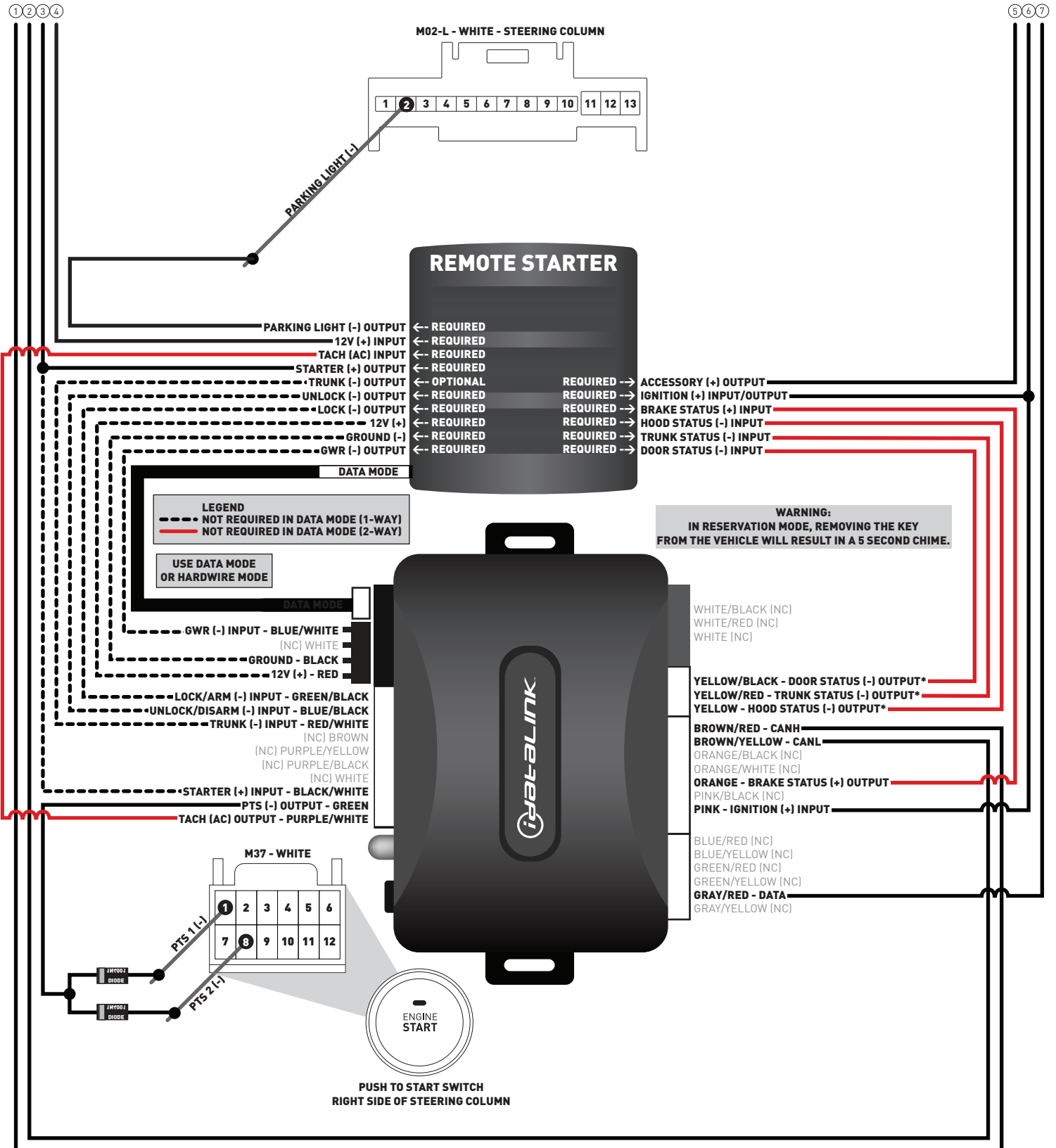
TYPE 6 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
KIA	Rio PTS AT	12-16	CanH	JM02	Black	20 pin	09	Brown	(DATA)	I/P driver side dash	A
			CanL	JM02	Black	20 pin	19	White	(DATA)	I/P driver side dash	A
			Data	EM11	White	41 pin	36	Blue/Black	(DATA)	I/P driver side dash	A
			Parking Light	M02-L	White	13 pin	02	Pink/Black	(-)	At light switch	~
			Accessory	I/P-B	White	54 pin	01	Red	(+)	I/P driver side dash	A
			Ignition	I/P-B	White	54 pin	25	Green	(+)	I/P driver side dash	A
			Starter	I/P-A	White	21 pin	03	White	(+)	I/P driver side dash	A
			12V	I/P-D	Black	02 pin	01	Red	(+)	I/P driver side dash	A
			PTS 1	M37	White	12 pin	01	Pink	(-)	Push button	D
			PTS 2	M37	White	12 pin	08	Gray/Black	(-)	Push button	D
	Rio 5 PTS AT	12-16	CanH	JM02	Black	20 pin	09	Brown	(DATA)	I/P driver side dash	A
			CanL	JM02	Black	20 pin	19	White	(DATA)	I/P driver side dash	A
			Data	EM11	White	41 pin	36	Blue/Black	(DATA)	I/P driver side dash	A
			Parking Light	M02-L	White	13 pin	02	Pink/Black	(-)	At light switch	~
			Accessory	I/P-B	White	54 pin	01	Red	(+)	I/P driver side dash	A
			Ignition	I/P-B	White	54 pin	25	Green	(+)	I/P driver side dash	A
			Starter	I/P-A	White	21 pin	03	White	(+)	I/P driver side dash	A
			12V	I/P-D	Black	02 pin	01	Red	(+)	I/P driver side dash	A
			PTS 1	M37	White	12 pin	01	Pink	(-)	Push button	D
			PTS 2	M37	White	12 pin	08	Gray/Black	(-)	Push button	D

TYPE 6 - WIRING DIAGRAM - 1 OF 2



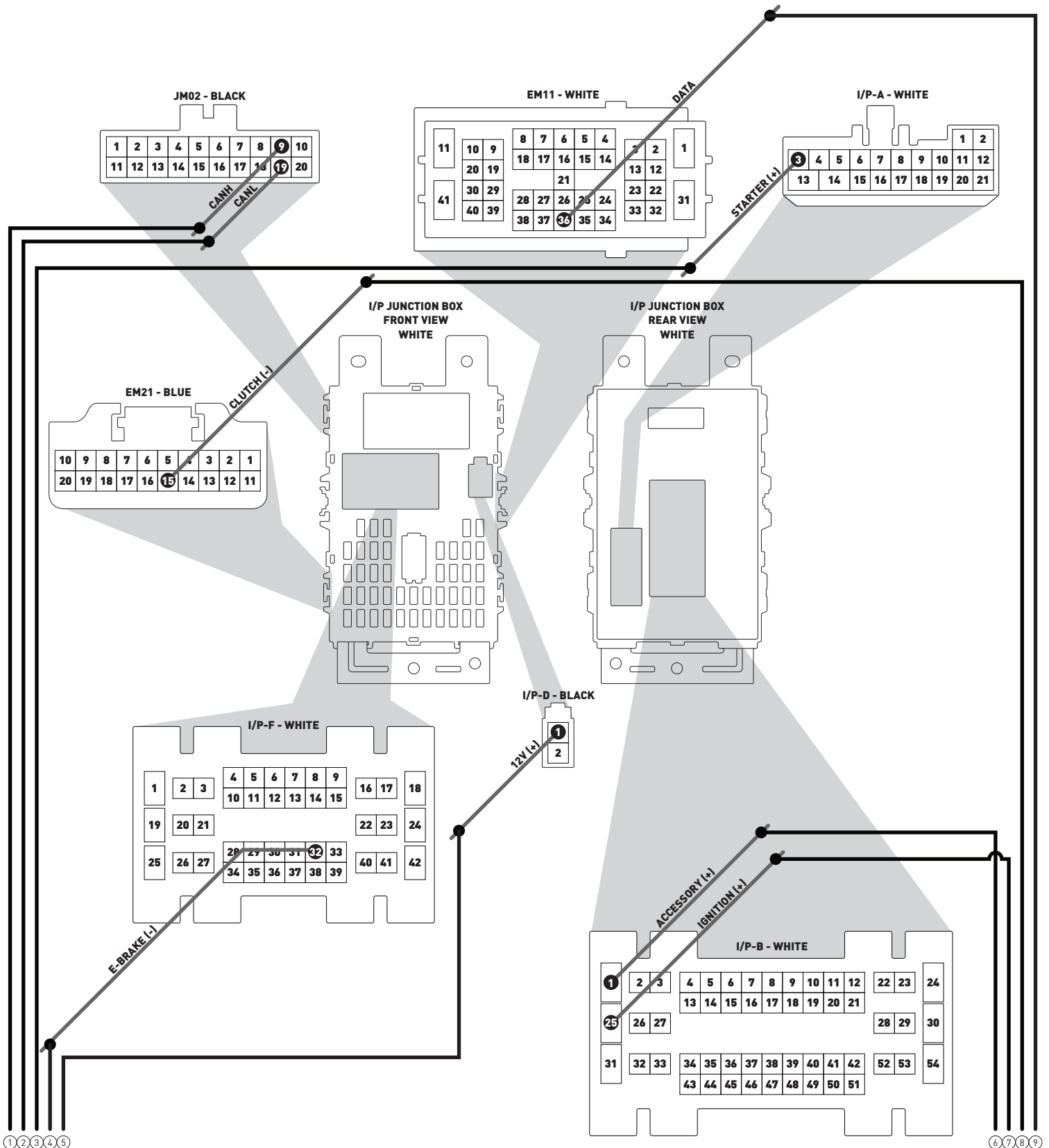
TYPE 6 - WIRING DIAGRAM - 2 OF 2



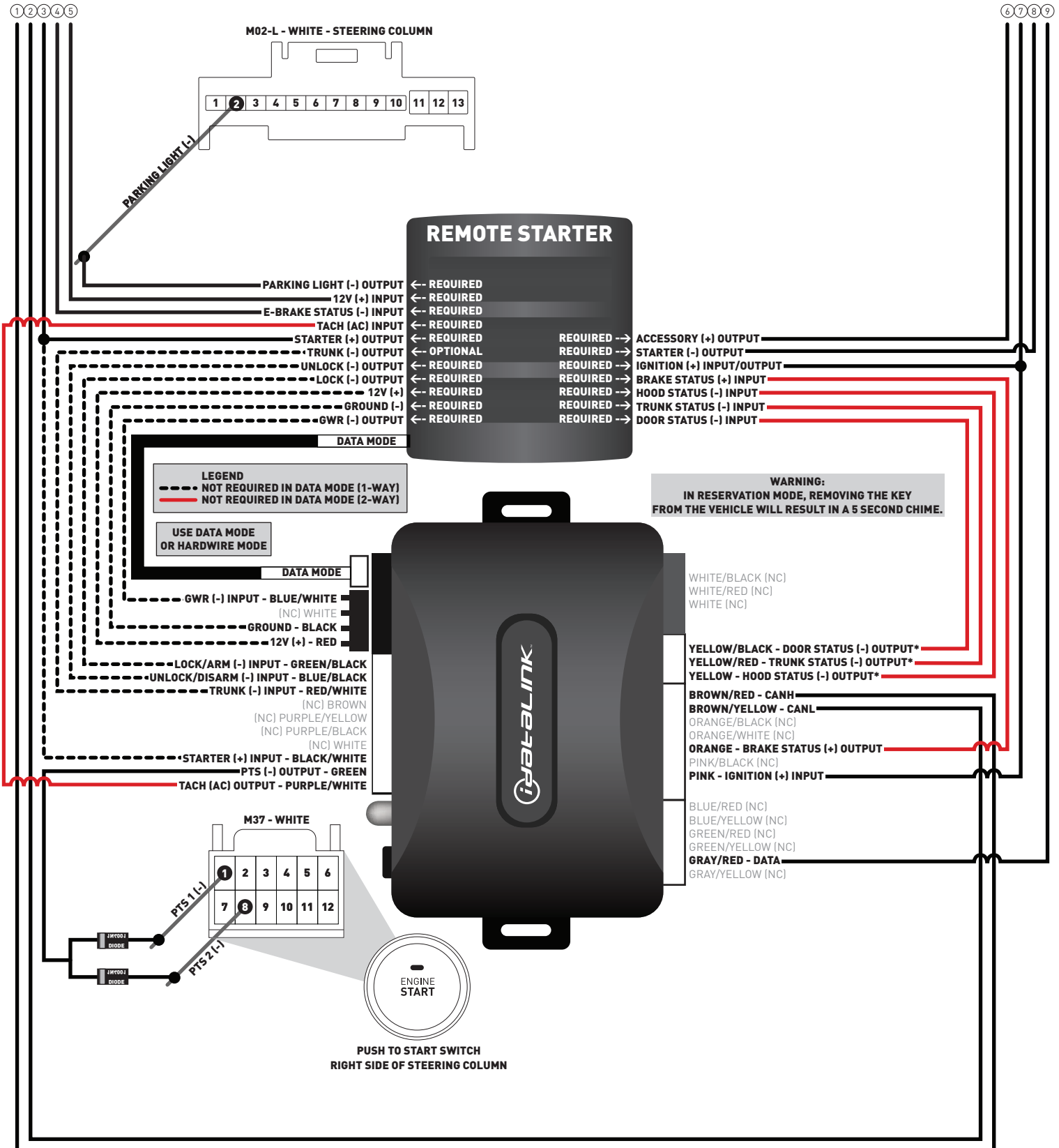
TYPE 7 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
KIA	Rio PTS MT	12-16	CanH	JM02	Black	20 pin	09	Brown	(DATA)	I/P driver side dash	A
			CanL	JM02	Black	20 pin	19	White	(DATA)	I/P driver side dash	A
			Data	EM11	White	41 pin	36	Blue/Black	(DATA)	I/P driver side dash	A
			E-brake	I/P-F	White	42 pin	32	Green	(-)	I/P driver side dash	A
			Parking Light	M02-L	White	13 pin	02	Pink/Black	(-)	At light switch	C
			Accessory	I/P-B	White	54 pin	01	Red	(+)	I/P driver side dash	A
			Ignition	I/P-B	White	54 pin	25	Green	(+)	I/P driver side dash	A
			Starter	I/P-A	White	21 pin	03	White	(+)	I/P driver side dash	A
			12V	I/P-D	Black	02 pin	01	Red	(+)	I/P driver side dash	A
			Clutch	EM21	Blue	20 pin	15	Pink	(-)	I/P driver side dash	A
			PTS 1	M37	White	12 pin	01	Pink	(-)	Push button	D
			PTS 2	M37	White	12 pin	08	Gray/Black	(-)	Push button	D
	Rio 5 PTS MT	12-16	CanH	JM02	Black	20 pin	09	Brown	(DATA)	I/P driver side dash	A
			CanL	JM02	Black	20 pin	19	White	(DATA)	I/P driver side dash	A
			Data	EM11	White	41 pin	36	Blue/Black	(DATA)	I/P driver side dash	A
			E-brake	I/P-F	White	42 pin	32	Green	(-)	I/P driver side dash	A
			Parking Light	M02-L	White	13 pin	02	Pink/Black	(-)	At light switch	C
			Accessory	I/P-B	White	54 pin	01	Red	(+)	I/P driver side dash	A
			Ignition	I/P-B	White	54 pin	25	Green	(+)	I/P driver side dash	A
			Starter	I/P-A	White	21 pin	03	White	(+)	I/P driver side dash	A
			12V	I/P-D	Black	02 pin	01	Red	(+)	I/P driver side dash	A
			Clutch	EM21	Blue	20 pin	15	Pink	(-)	I/P driver side dash	A
			PTS 1	M37	White	12 pin	01	Pink	(-)	Push button	D
			PTS 2	M37	White	12 pin	08	Gray/Black	(-)	Push button	D

TYPE 7 - WIRING DIAGRAM - 1 OF 2



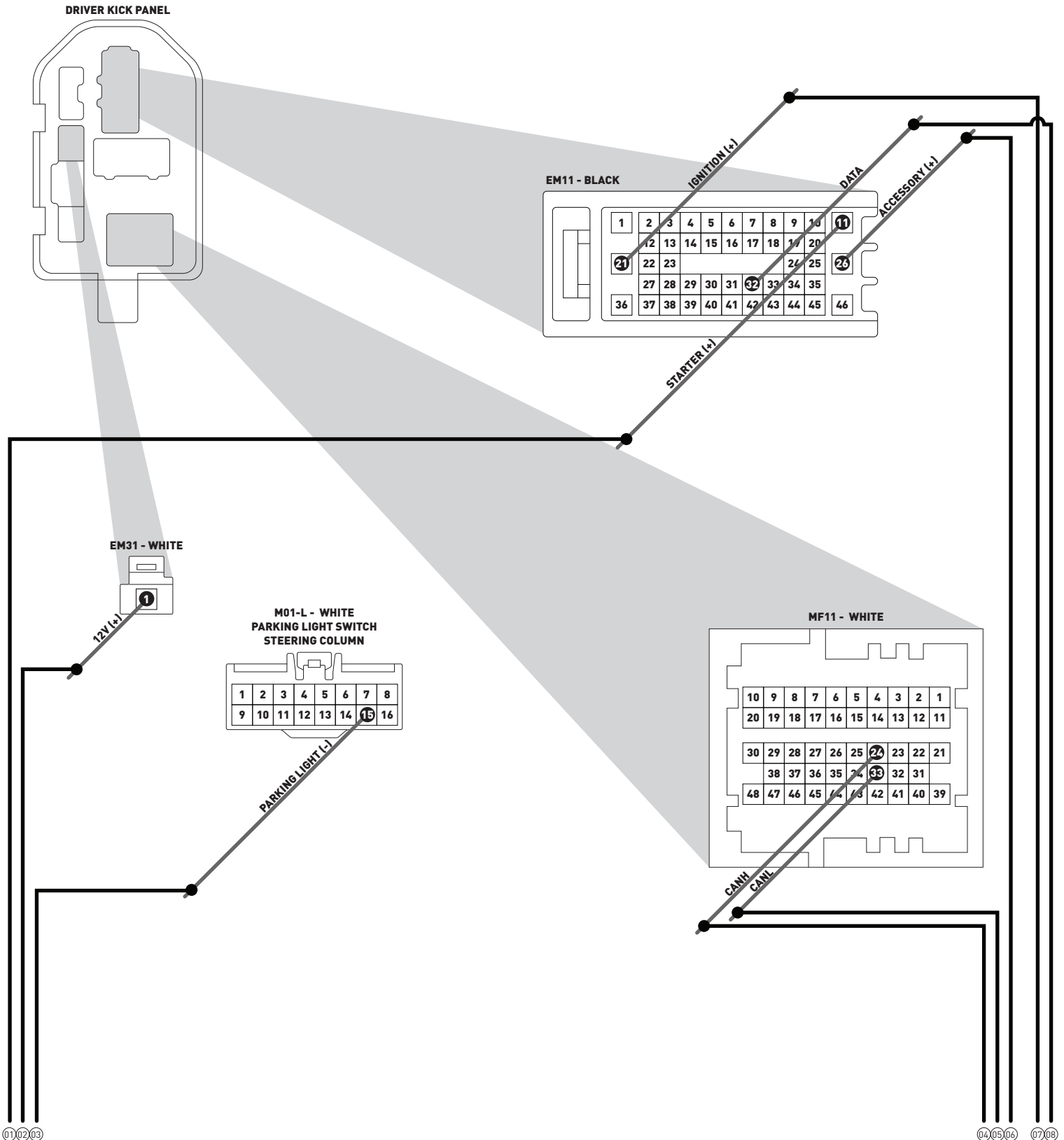
TYPE 7 - WIRING DIAGRAM - 2 OF 2



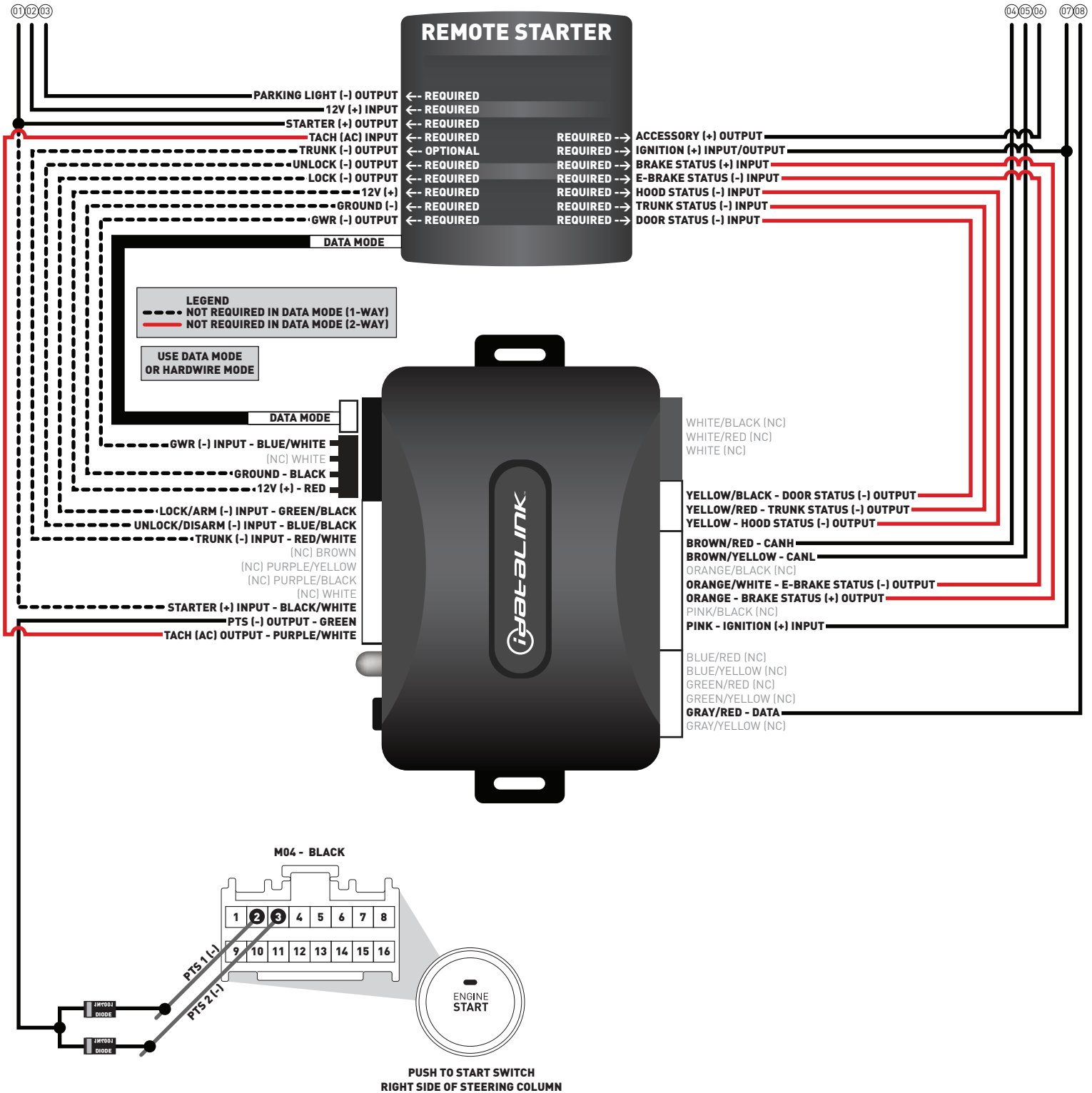
TYPE 8 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Santa Fe PTS AT	13-16	12V	EM31	~	01 pin	01	Red	(+)	Driver kick panel	C
			Ignition	EM11	Black	46 pin	21	Green	(+)	Driver kick panel	C
			Accessory	EM11	Black	46 pin	26	Blue	(+)	Driver kick panel	C
			Starter	EM11	Black	46 pin	11	Pink	(+)	Driver kick panel	C
			CanH	MF11	White	48 pin	24	Blue	(DATA)	Driver kick panel	C
			CanL	MF11	White	48 pin	33	Red	(DATA)	Driver kick panel	C
			Data	EM11	Black	46 pin	32	White/Orange	(DATA)	Driver kick panel	C
			Parking Light	M01-L	White	16 pin	15	Pink	(-)	Parking light switch, steering column	F
			PTS 1	M04	Black	16 pin	02	Yellow/Orange	(-)	Push button	D
			PTS 2	M04	Black	16 pin	03	Orange/Black	(-)	Push button	D

TYPE 8 - WIRING DIAGRAM - 1 OF 2



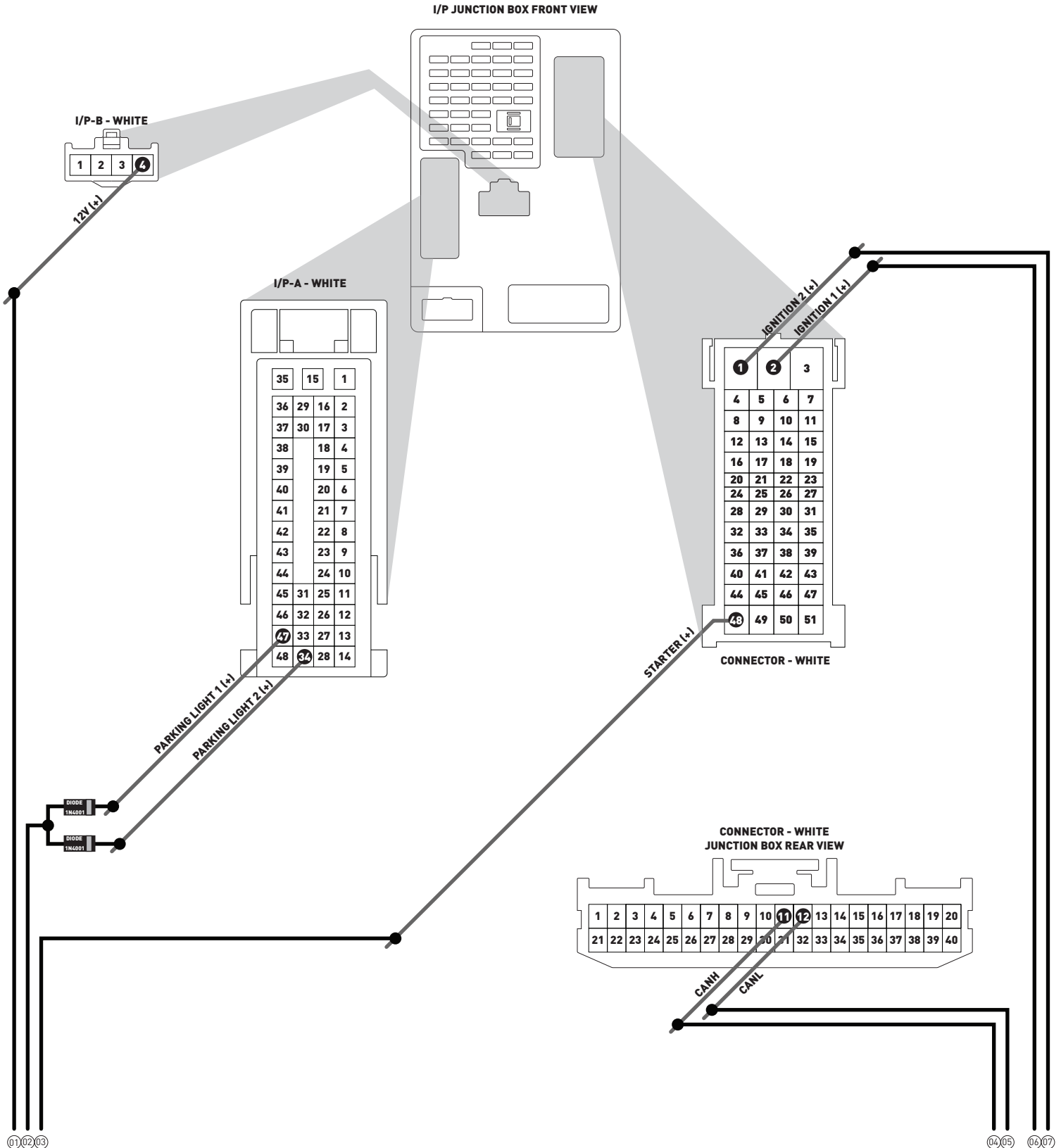
TYPE 8 - WIRING DIAGRAM - 2 OF 2



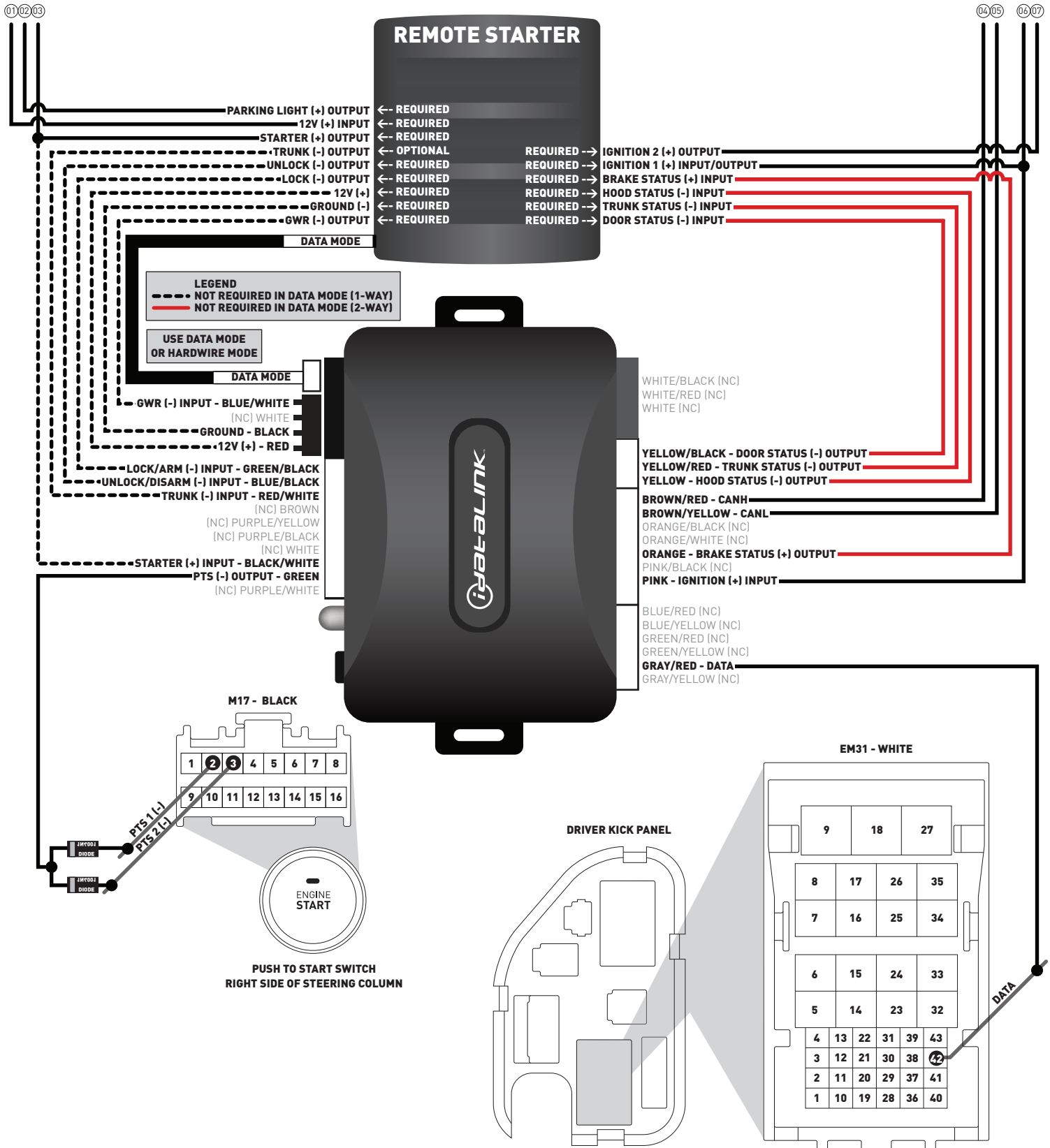
TYPE 9 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Azera PTS AT	12-15	12V	I/P-B	White	04 pin	04	Red	(+)	Junction box front view	A
			Starter	~	White	51 pin	48	Pink/Black	(+)	Junction box front view	A
			Ignition 1	~	White	51 pin	02	Red	(+)	Junction box front view	A
			Ignition 2	~	White	51 pin	01	Pink	(+)	Junction box front view	A
			CanH	~	White	40 pin	11	Green	[DATA]	Junction box rear view	A
			CanL	~	White	40 pin	12	Orange	[DATA]	Junction box rear view	A
			Parking Light 1	I/P-A	White	48 pin	47	Brown/Black	(+)	Junction box front view	A
			Parking Light 2	I/P-A	White	48 pin	34	Gray/Black	(+)	Junction box front view	A
			Data	EM31	White	43 pin	42	Green or White	[DATA]	Driver kick panel	C
			PTS 1	M17	Black	16 pin	02	Orange	(-)	PTS button	D
			PTS 2	M17	Black	16 pin	03	Blue	(-)	PTS button	D

TYPE 9 - WIRING DIAGRAM - 1 OF 2



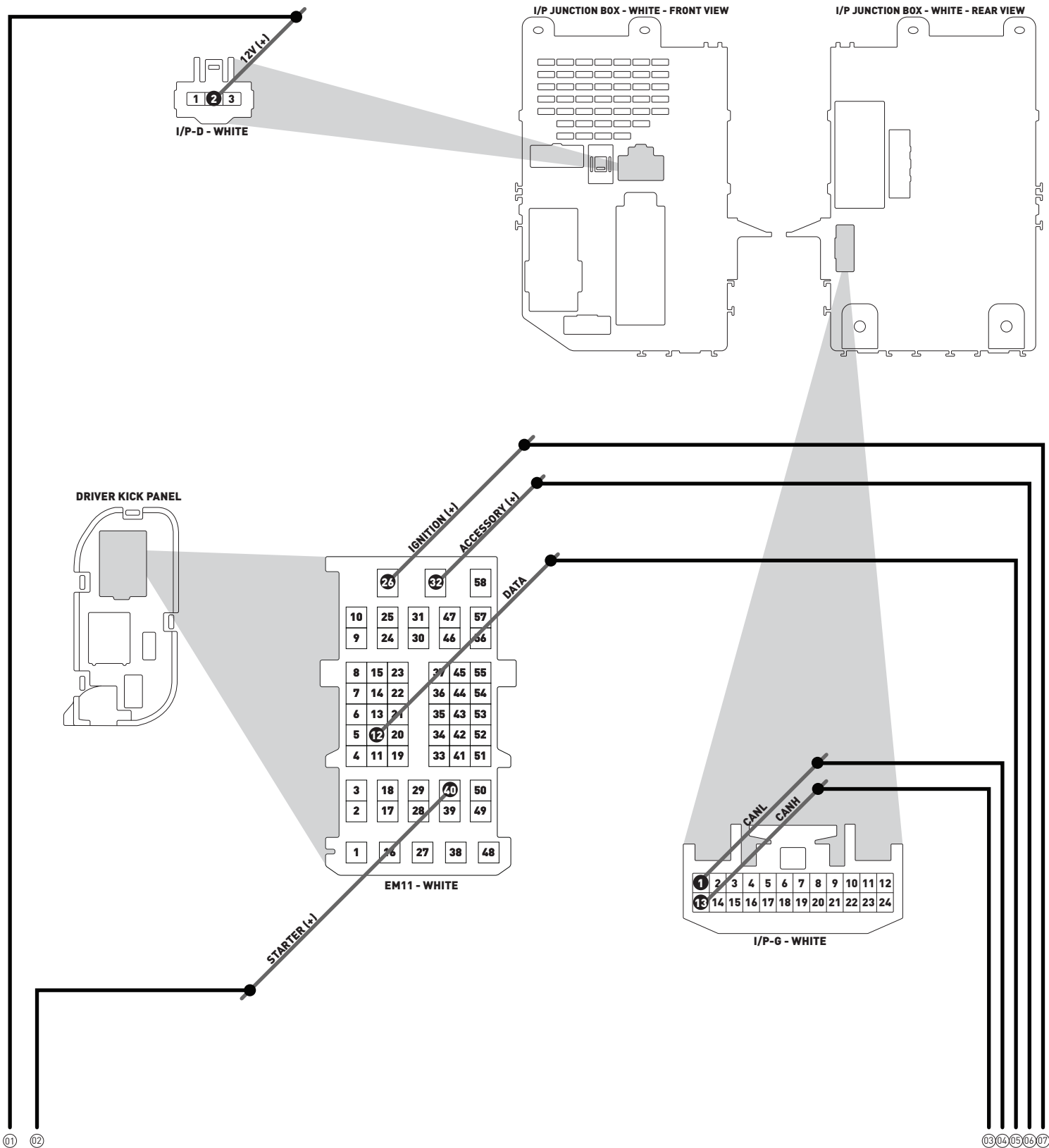
TYPE 9 - WIRING DIAGRAM - 2 OF 2



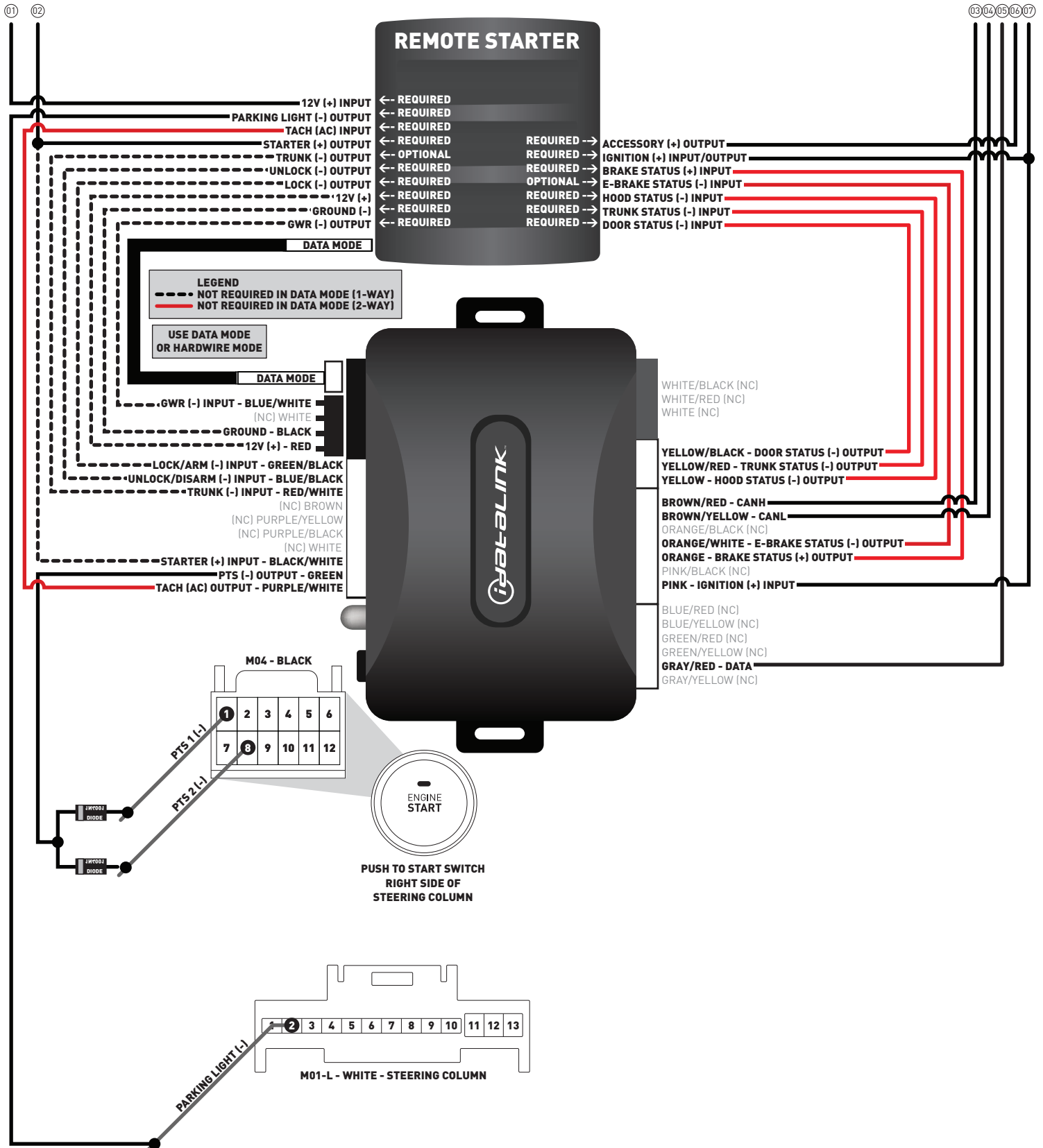
TYPE 10 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Elantra GT PTS AT/MT	13-16	12V	I/P-D	Black	03 pin	02	Red	(+)	I/P junction box front side	A
			Starter	EM11	White	58 pin	40	Orange	(+)	Driver kick panel	C
			Ignition	EM11	White	58 pin	26	White	(+)	Driver kick panel	C
			Accessory	EM11	White	58 pin	32	Orange	(+)	Driver Kick panel	C
			CanH	I/P-G	White	24 pin	13	Green	(DATA)	I/P junction box rear side	A
			CanL	I/P-G	White	24 pin	01	Orange	(DATA)	I/P junction box rear side	A
			Parking Light	M01-L	White	13 pin	02	Pink	(-)	Parking light switch	~
			Data	EM11	White	58 pin	12	Blue/Black	(DATA)	Driver kick panel	C
			PTS 1	M04	Black	12 pin	01	Yellow/Black	(-)	Push button	D
			PTS 2	M04	Black	12 pin	08	Yellow/Orange	(-)	Push button	D

TYPE 10 - WIRING DIAGRAM - 1 OF 2



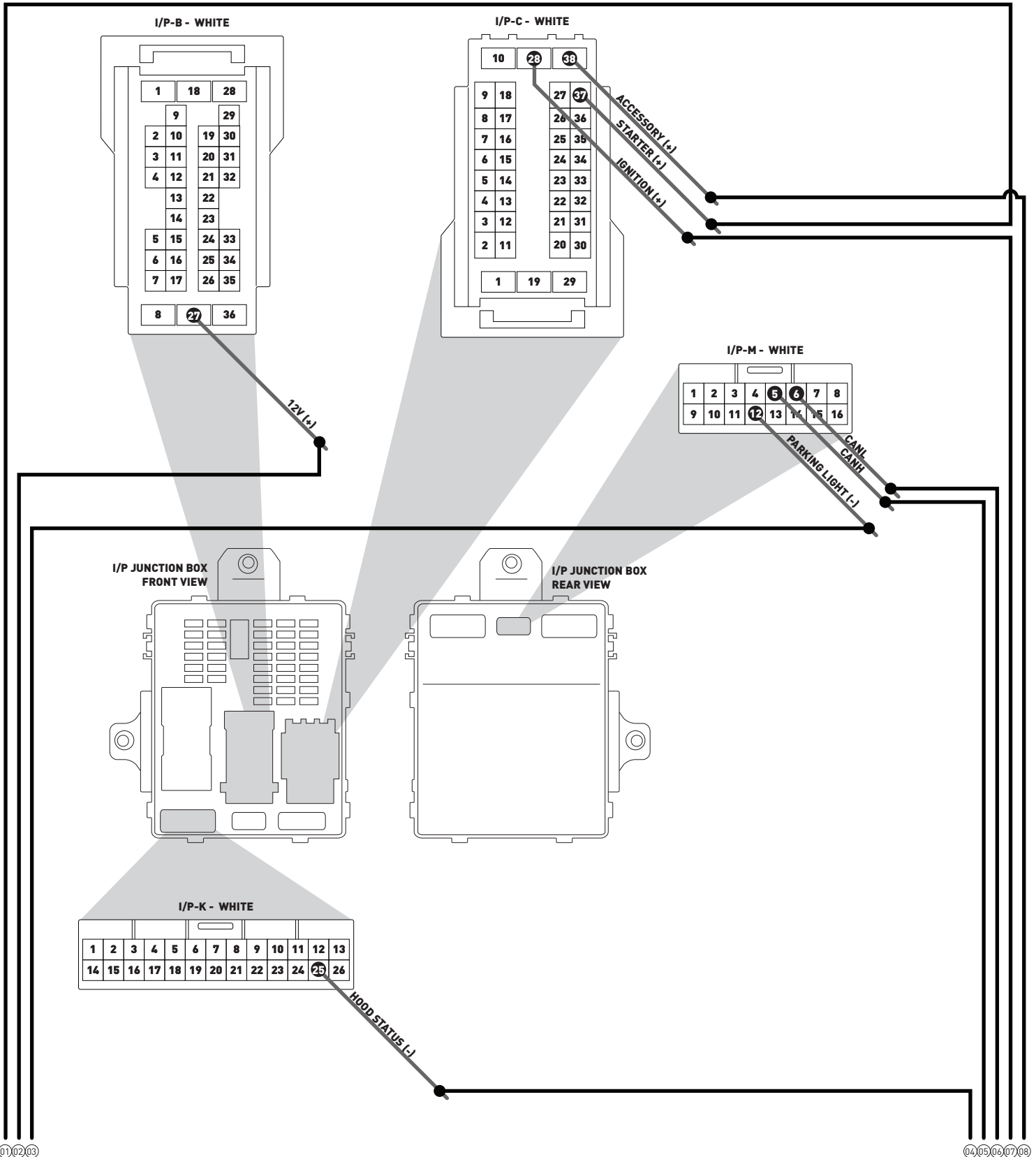
TYPE 10 - WIRING DIAGRAM - 2 OF 2



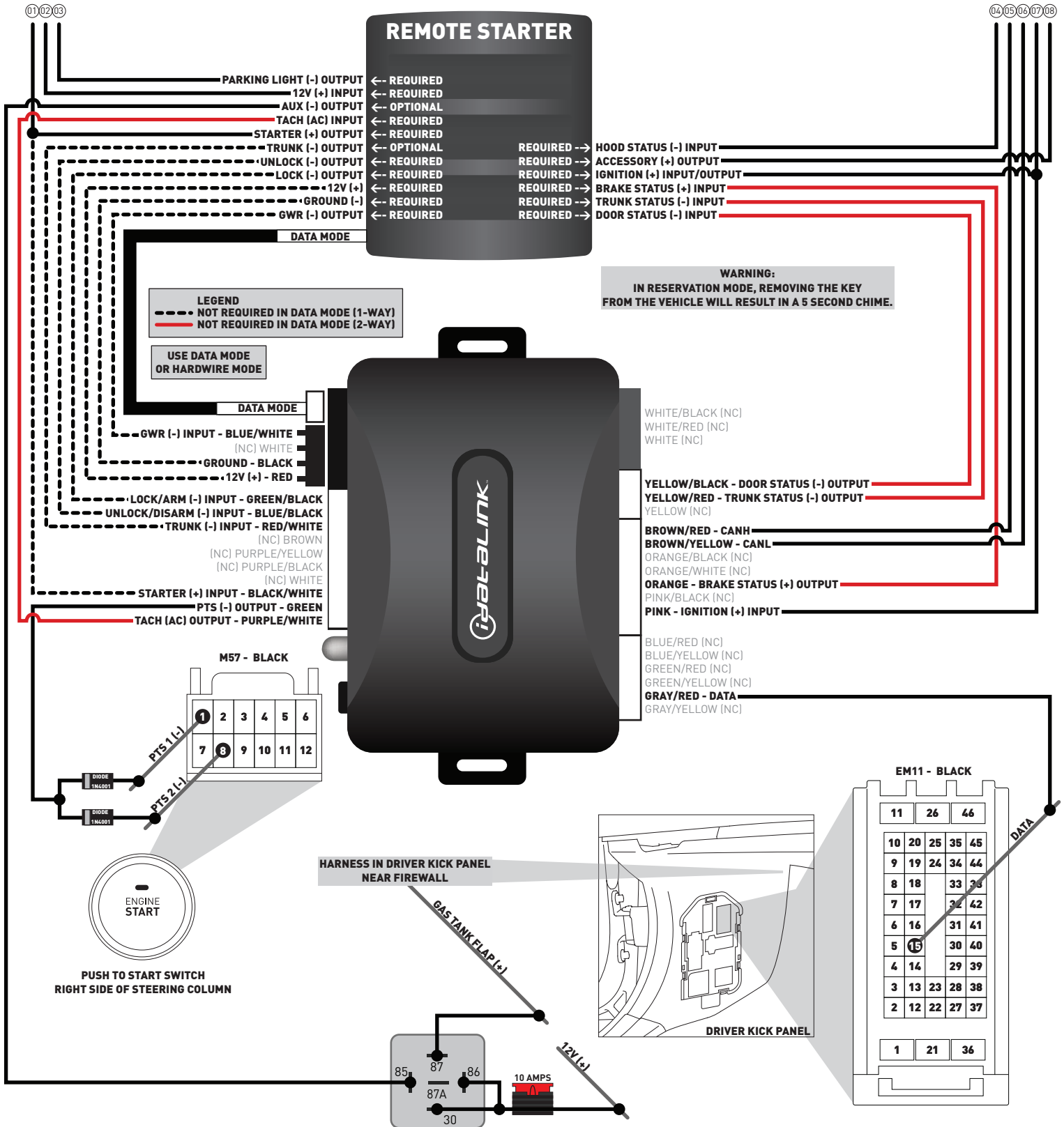
TYPE 11 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
KIA	Sorento PTS AT	14-15	CanH	I/P-M	White	16 pin	05	Black	(DATA)	I/P driver side dash	A
			CanL	I/P-M	White	16 pin	06	White	(DATA)	I/P driver side dash	A
			Data	EM11	Black	46 pin	15	Blue/Orange	(DATA)	Driver kick panel	C
			Parking Light	I/P-M	White	16 pin	12	Blue	(-)	I/P driver side dash	A
			Accessory	I/P-C	White	38 pin	38	White	(+)	I/P driver side dash	A
			Ignition	I/P-C	White	38 pin	28	Red	(+)	I/P driver side dash	A
			Starter	I/P-C	White	38 pin	37	Green	(+)	I/P driver side dash	A
			12V	I/P-B	White	36 pin	27	Red	(+)	I/P driver side dash	A
			PTS 1	M57	Black	12 pin	01	Brown/Black	(-)	Push button	D
			PTS 2	M57	Black	12 pin	08	Pink/Black	(-)	Push button	D
			Hood Switch	I/P-K	White	26 pin	25	Red/Black	(-)	I/P driver side dash	A
			Gas Tank Flap	~	~	~	~	Blue/Orange	(+)	Driver kick panel near firewall	C

TYPE 11 - WIRING DIAGRAM - 1 OF 2



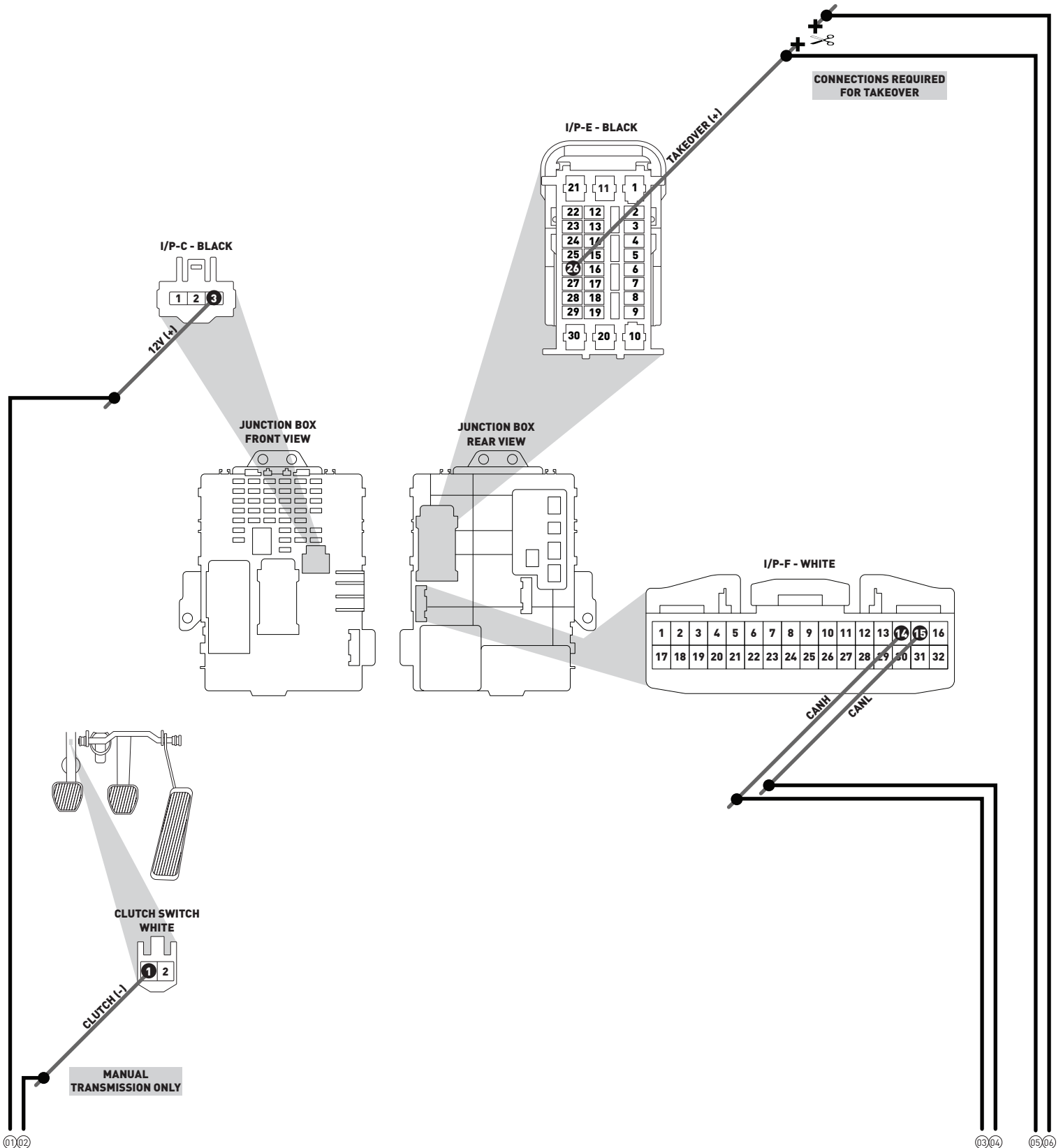
TYPE 11 - WIRING DIAGRAM - 2 OF 2



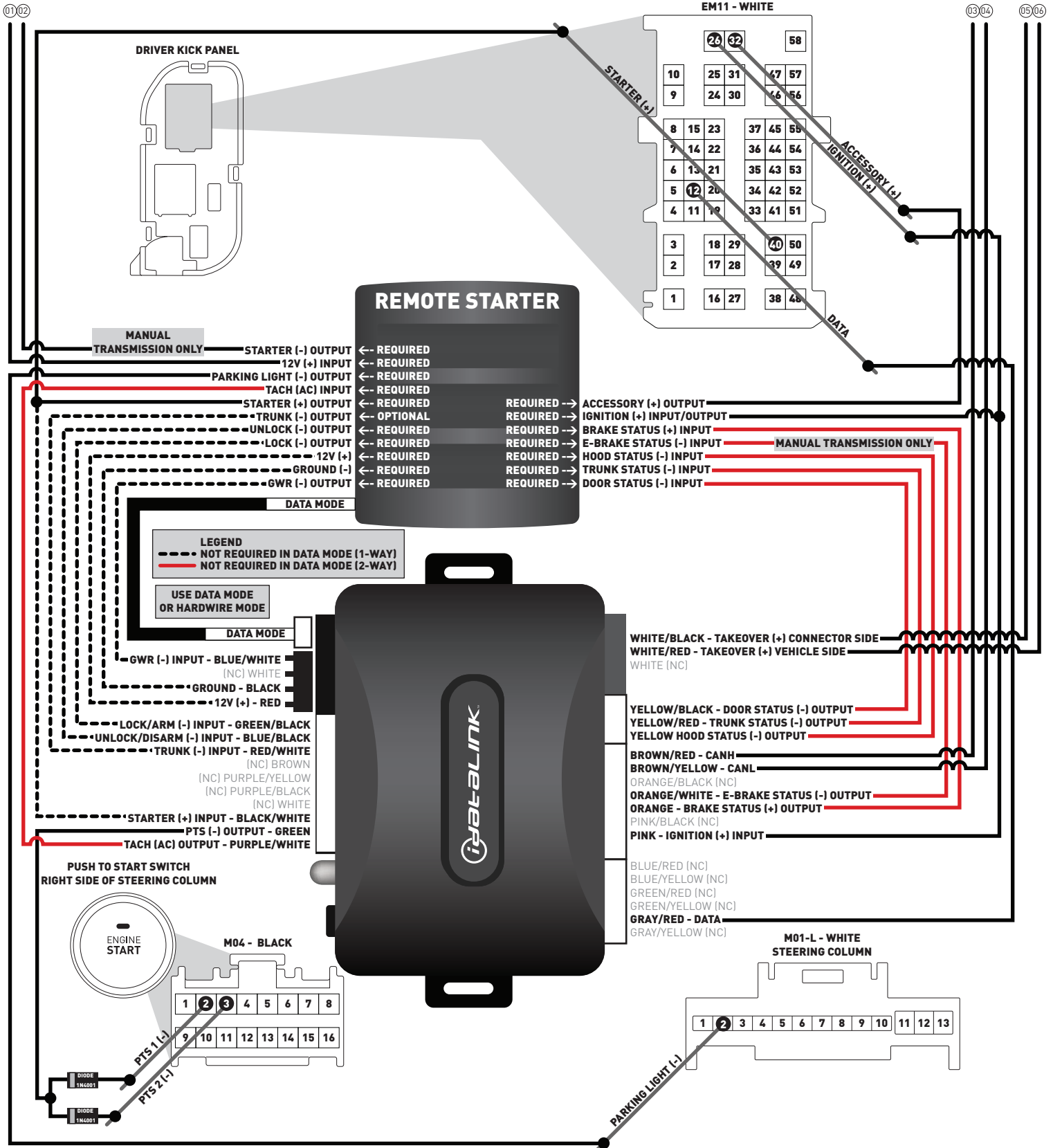
TYPE 12 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
KIA	Forte 5 PTS AT/MT	14-16	12V	I/P-C	Black	03 pin	03	Red	(+)	Junction box, front view	A
			Starter	EM11	White	58 pin	40	Orange	(+)	Driver kick panel	C
			Accessory	EM11	White	58 pin	32	Black	(+)	Driver kick panel	C
			Ignition	EM11	White	58 pin	26	Pink	(+)	Driver kick panel	C
			CanH	I/P-F	White	32 pin	14	Orange	[DATA]	Junction box, rear view	A
			CanL	I/P-F	White	32 pin	15	Green	[DATA]	Junction box, rear view	A
			Parking Light	M01-L	White	13 pin	02	Pink	(-)	Parking light switch	~
			Data	EM11	White	58 pin	12	Blue/Orange	[DATA]	Driver kick panel	C
			PTS 1	M04	Black	16 pin	02	Yellow/Black	(-)	PTS button	D
			PTS 2	M04	Black	16 pin	03	Yellow/Orange	(-)	PTS button	D
			Takeover	I/P-E	Black	30 pin	26	Pink/Black	(+)	Junction box, rear view	A
			Clutch	~	White	02 pin	01	Green	(-)	Clutch switch	A
	Forte Koup PTS AT/MT	14-16	12V	I/P-C	Black	03 pin	03	Red	(+)	Junction box, front view	A
			Starter	EM11	White	58 pin	40	Orange	(+)	Driver kick panel	C
			Accessory	EM11	White	58 pin	32	Black	(+)	Driver kick panel	C
			Ignition	EM11	White	58 pin	26	Pink	(+)	Driver kick panel	C
			CanH	I/P-F	White	32 pin	14	Orange	[DATA]	Junction box, rear view	A
			CanL	I/P-F	White	32 pin	15	Green	[DATA]	Junction box, rear view	A
			Parking Light	M01-L	White	13 pin	02	Pink	(-)	Parking light switch	~
			Data	EM11	White	58 pin	12	Blue/Orange	[DATA]	Driver kick panel	C
			PTS 1	M04	Black	16 pin	02	Yellow/Black	(-)	PTS button	D
			PTS 2	M04	Black	16 pin	03	Yellow/Orange	(-)	PTS button	D
			Takeover	I/P-E	Black	30 pin	26	Pink/Black	(+)	Junction box, rear view	A
			Clutch	~	White	02 pin	01	Green	(-)	Clutch switch	A
	Forte Sedan PTS AT	14-16	12V	I/P-C	Black	03 pin	03	Red	(+)	Junction box, front view	A
			Starter	EM11	White	58 pin	40	Orange	(+)	Driver kick panel	C
			Accessory	EM11	White	58 pin	32	Black	(+)	Driver kick panel	C
			Ignition	EM11	White	58 pin	26	Pink	(+)	Driver kick panel	C
			CanH	I/P-F	White	32 pin	14	Orange	[DATA]	Junction box, rear view	A
			CanL	I/P-F	White	32 pin	15	Green	[DATA]	Junction box, rear view	A
			Parking Light	M01-L	White	13 pin	02	Pink	(-)	Parking light switch	~
			Data	EM11	White	58 pin	12	Blue/Orange	[DATA]	Driver kick panel	C
			PTS 1	M04	Black	16 pin	02	Yellow/Black	(-)	PTS button	D
PTS 2			M04	Black	16 pin	03	Yellow/Orange	(-)	PTS button	D	
Takeover	I/P-E	Black	30 pin	26	Pink/Black	(+)	Junction box, rear view	A			

TYPE 12 - WIRING DIAGRAM - 1 OF 2



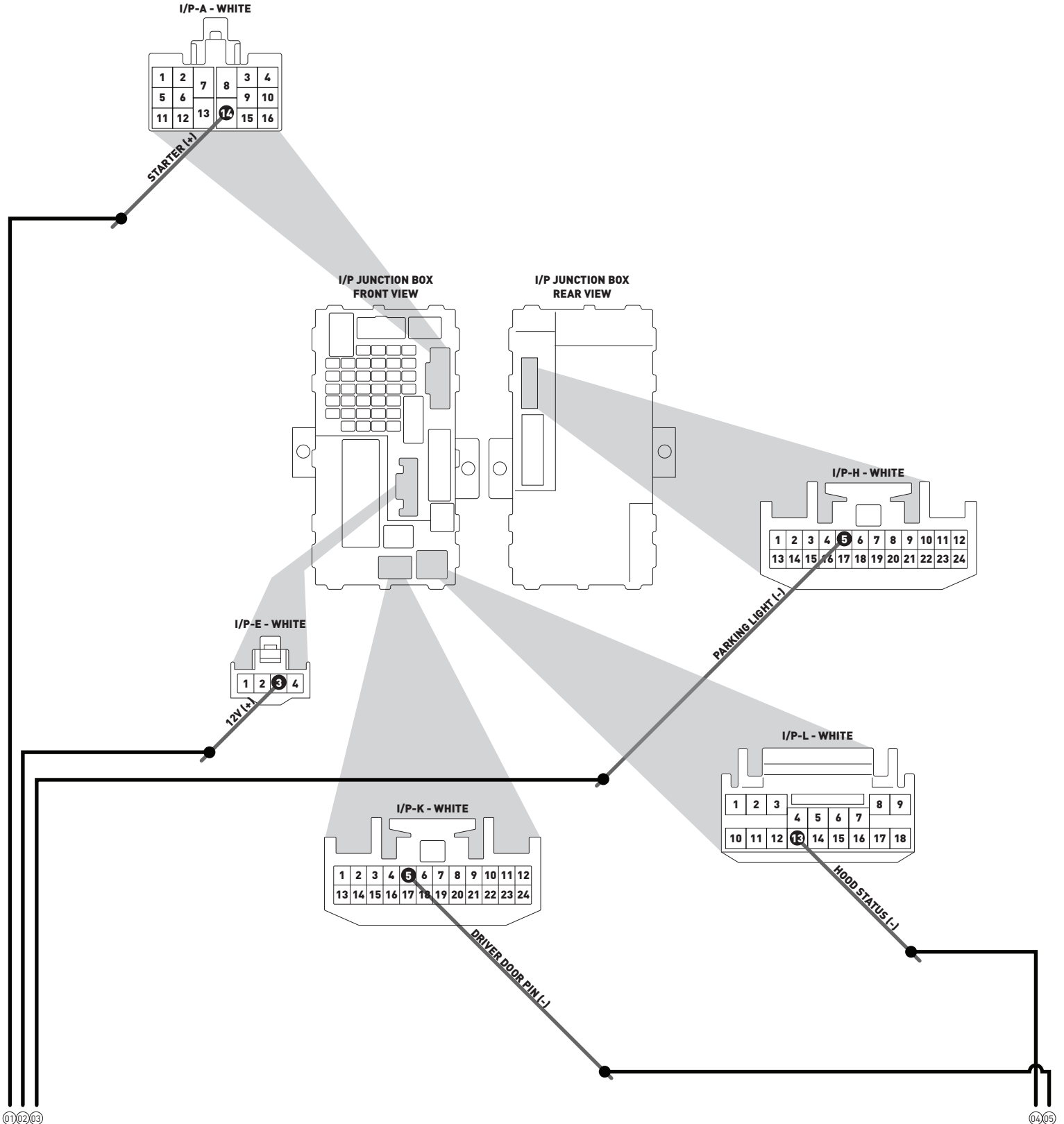
TYPE 12 - WIRING DIAGRAM - 2 OF 2



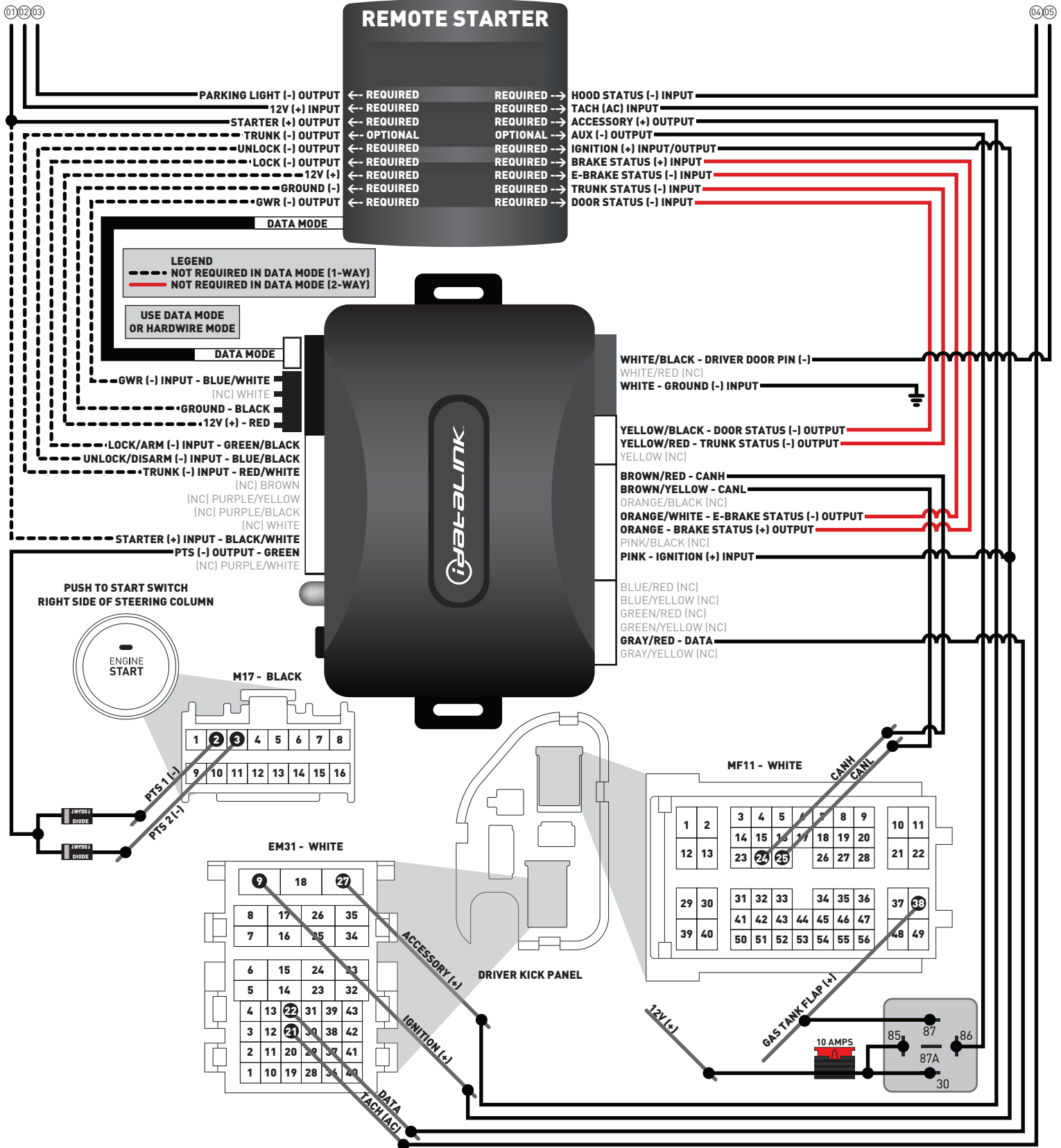
TYPE 13 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
KIA	Cadenza PTS AT	14-16	12V	I/P-E	White	04 pin	03	Blue	(+)	Junction fuse box	A
			Ignition	EM31	White	43 pin	09	Red	(+)	Driver kick panel	C
			Accessory	EM31	White	43 pin	27	Blue	(+)	Driver kick panel	C
			Starter	I/P-A	White	16 pin	14	Pink/Black	(+)	Junction fuse box	A
			Tach	EM31	White	43 pin	21	Brown	(AC)	Driver kick panel	C
			CanH	MF11	White	56 pin	24	Blue/Black	(DATA)	Driver kick panel	C
			CanL	MF11	White	56 pin	25	Green/Black	(DATA)	Driver kick panel	C
			Data	EM31	White	43 pin	22	Pink	(DATA)	Driver kick panel	C
			Parking Light	I/P-H	White	24 pin	05	White	(-)	Junction fuse box	A
			PTS 1	M17	Black	16 pin	02	Gray	(-)	Push button	D
			PTS 2	M17	Black	16 pin	03	White	(-)	Push button	D
			Driver Door Pin	I/P-K	White	24 pin	05	Blue	(-)	Junction fuse box	A
			Hood Switch	I/P-L	White	18 pin	13	Orange	(-)	Junction fuse box	A
Gas Tank Flap	MF11	White	56 pin	38	Green/Orange	(+)	Driver kick panel	C			

TYPE 13 - WIRING DIAGRAM - 1 OF 2



TYPE 13 - WIRING DIAGRAM - 2 OF 2



TYPE 14 - TECHNICAL NOTE

IMPORTANT

- I For this installation, the takeover feature is only available with the aftermarket remotes. The OEM remotes will NOT be functional during the remote start sequence. If they are used, the puddle lights and parking lights, may start flashing erratically until the vehicle's engine is shutdown. To avoid any erratic behavior, choose one of the two options listed below:

OPTION 1: With Takeover

- Perform all the connections to the "Keyless Interruption" wire as shown in the wiring diagram.
 - Do NOT enable the "Shutdown On Door Open" in the bypass advanced menu.
- The door handle request switch will NOT be functional during the remote start sequence.

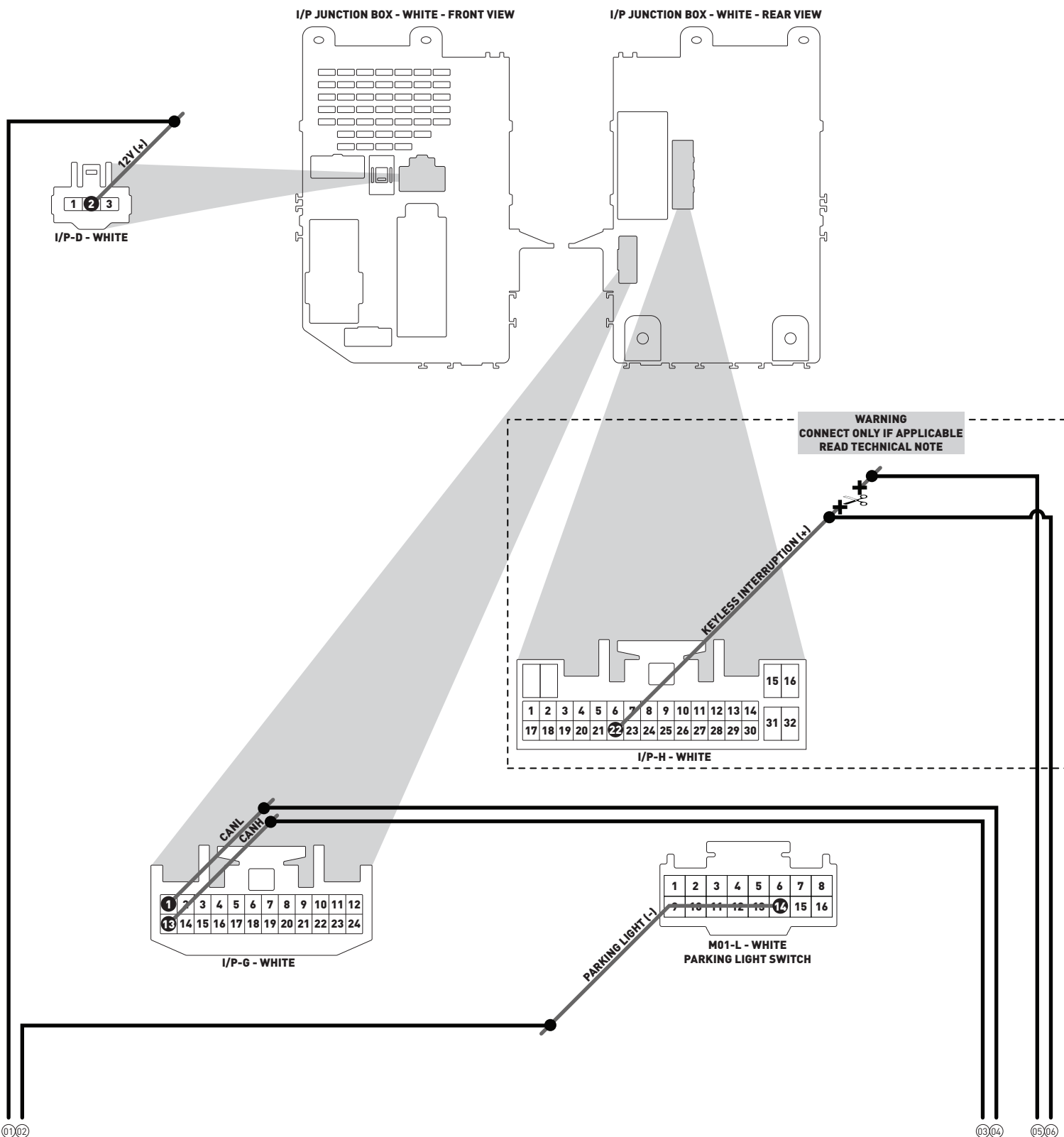
OPTION 2: Without Takeover

- Do NOT perform any of the connections to the "Keyless Interruption" wire.
 - Enable the "Shutdown On Door Open" in the bypass advanced menu.
- The door handle request switch will be functional during the remote start sequence.

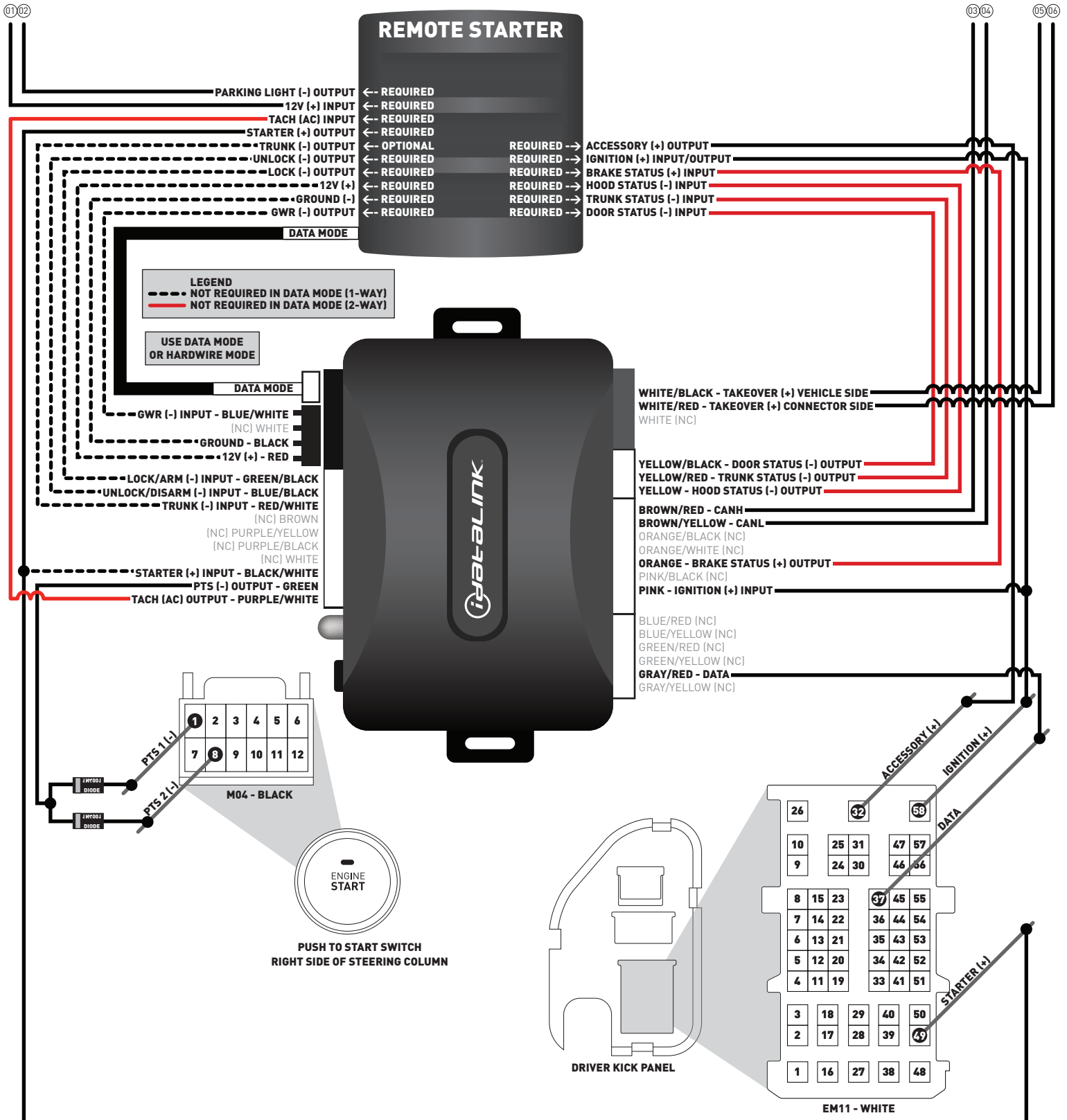
TYPE 14 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
KIA	Rondo PTS AT	14-16	12V	I/P-D	Black	03 pin	02	Red	(+)	Junction box	A
			Starter	EM11	White	58 pin	49	Green	(+)	Driver kick panel	C
			Accessory	EM11	White	58 pin	32	White	(+)	Driver kick panel	C
			Ignition	EM11	White	58 pin	58	Pink	(+)	Driver kick panel	C
			CanH	I/P-G	White	24 pin	13	Orange	[DATA]	Junction box	A
			CanL	I/P-G	White	24 pin	01	Blue	[DATA]	Junction box	A
			Parking Light	M01-L	White	16 pin	14	Pink	(-)	Parking light switch	~
			Data	EM11	White	58 pin	37	Blue/Orange	[DATA]	Driver kick panel	C
			PTS 1	M04	Black	12 pin	01	Yellow/Black	(-)	PTS button	D
			PTS 2	M04	Black	12 pin	08	Yellow/Orange	(-)	PTS button	D
Keyless Interruption	I/P-H	White	32 pin	22	Green	(+)	Junction box	A			

TYPE 14 - WIRING DIAGRAM - 1 OF 2



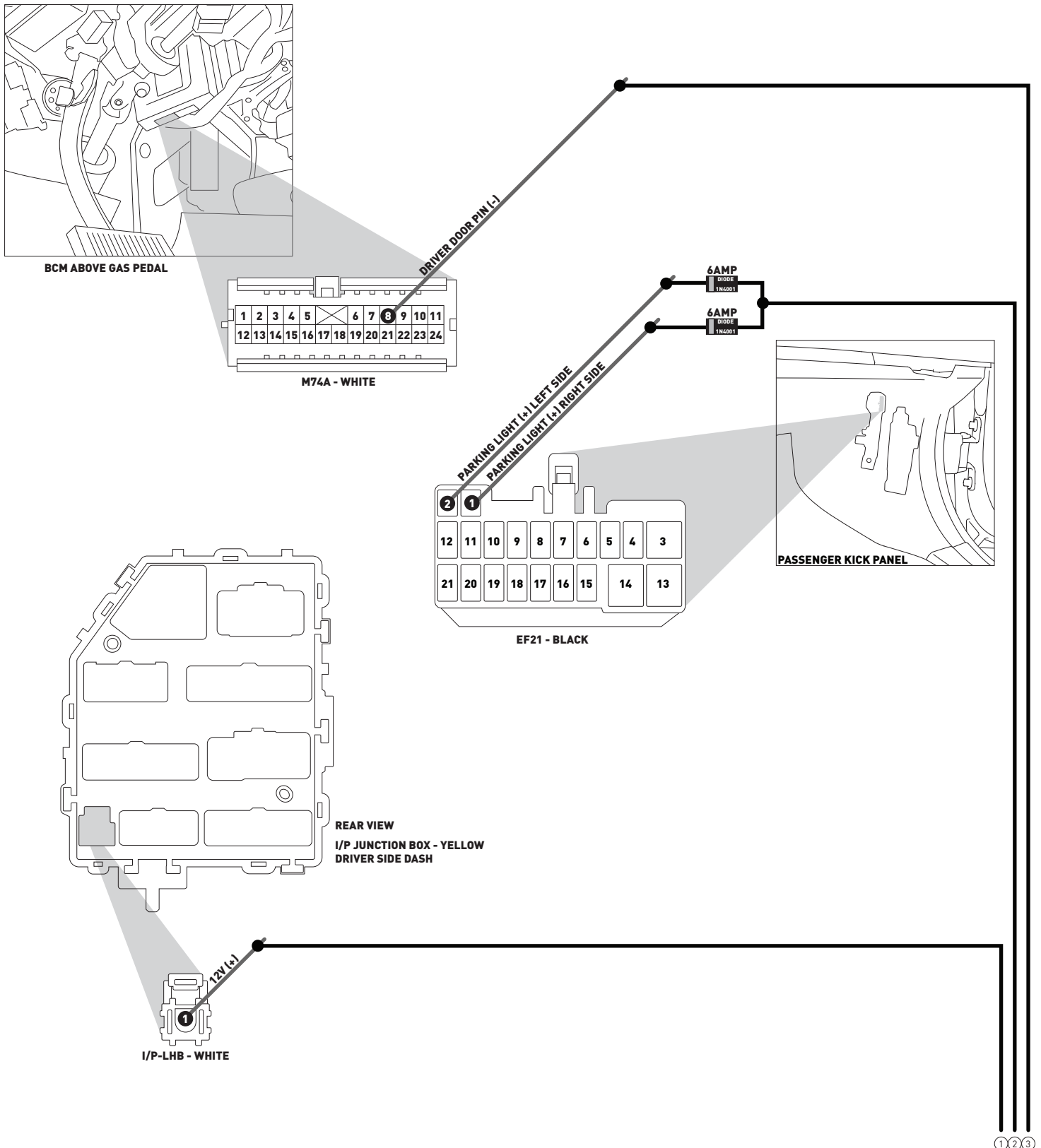
TYPE 14 - WIRING DIAGRAM - 2 OF 2



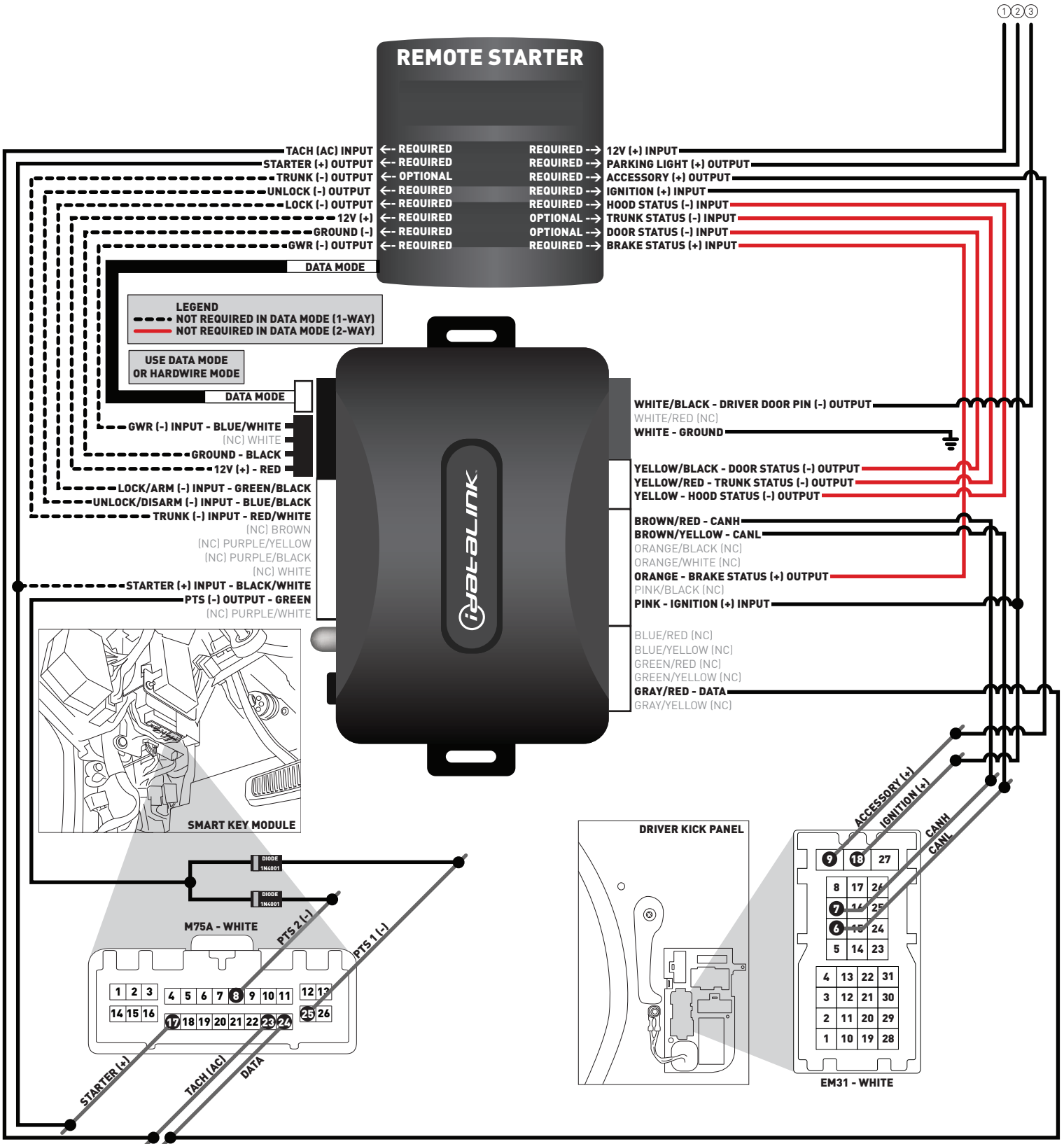
TYPE 15 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Genesis Sedan PTS AT	13-14	PTS 1	M75A	White	26 pin	25	Orange/Black	(-)	Smart Key module, above driver kick panel	A
			PTS 2	M75A	White	26 pin	08	White	(-)	Smart Key module, above driver kick panel	A
			Data	M75A	White	26 pin	24	Black/Orange	(DATA)	Smart Key module, above driver kick panel	A
			CanH	EM31	White	31 pin	07	Brown	(DATA)	Driver kick panel	C
			CanL	EM31	White	31 pin	06	White	(DATA)	Driver kick panel	C
			Ignition	EM31	White	31 pin	18	White	(+)	Driver kick panel	C
			Tach	M75A	White	26 pin	23	Yellow/Orange	(AC)	Smart Key module, above driver kick panel	A
			12V	I/P-LHB	White	01 pin	01	White	(+)	I/P junction box rear view, driver side dash	A
			Accessory	EM31	White	31 pin	09	Red	(+)	Driver kick panel	C
			Starter	M75A	White	26 pin	17	Yellow	(+)	Smart Key module, above driver kick panel	A
			Driver Door Pin	M74A	White	24 pin	08	Green	(-)	BCM, above gas pedal	G
			Parking Light (L)	EF21	Black	21 pin	02	Brown	(+)	Passenger kick panel	B
			Parking Light (R)	EF21	Black	21 pin	01	White	(+)	Passenger kick panel	B

TYPE 15 - WIRING DIAGRAM - 1 OF 2



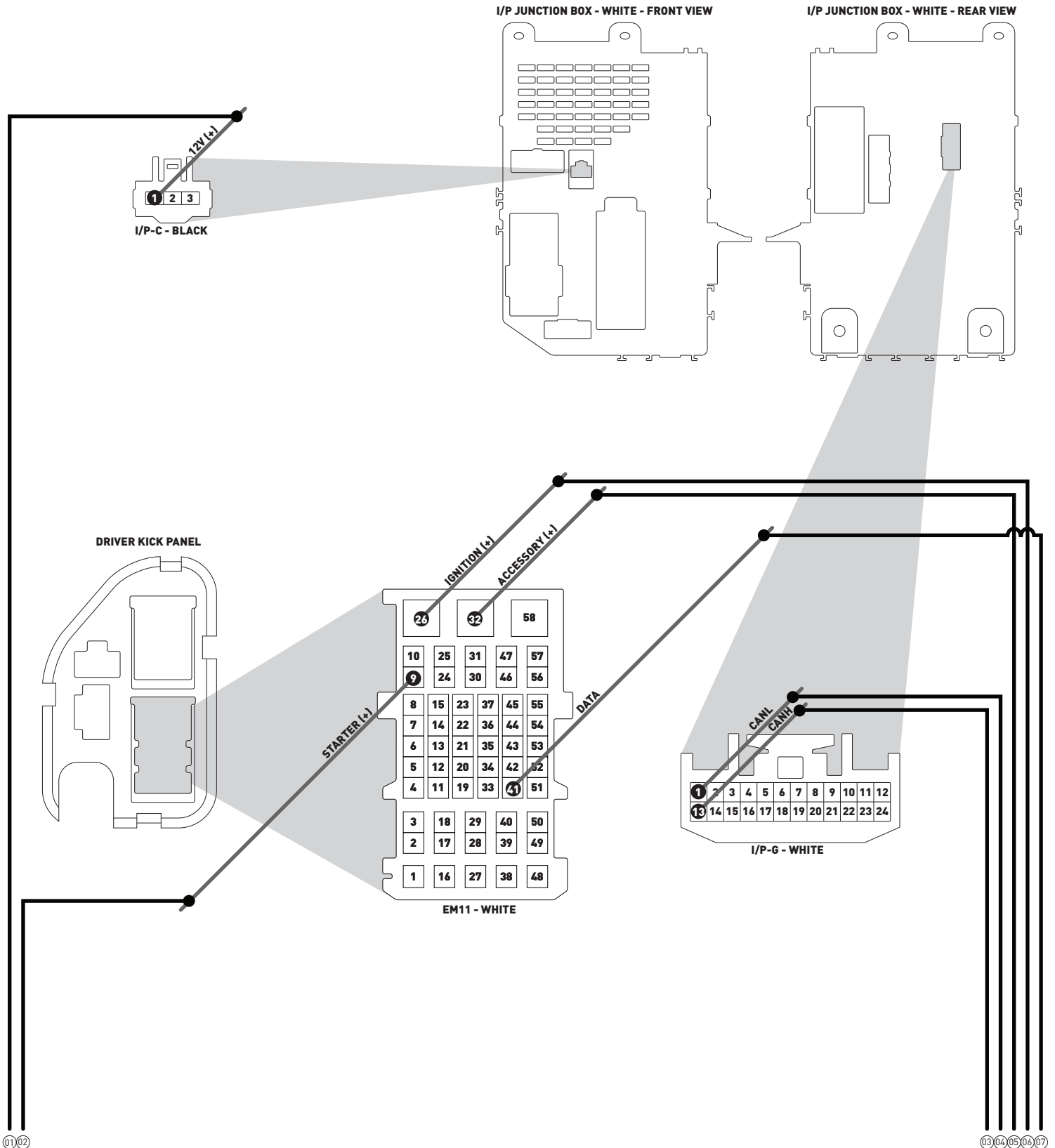
TYPE 15 - WIRING DIAGRAM - 2 OF 2



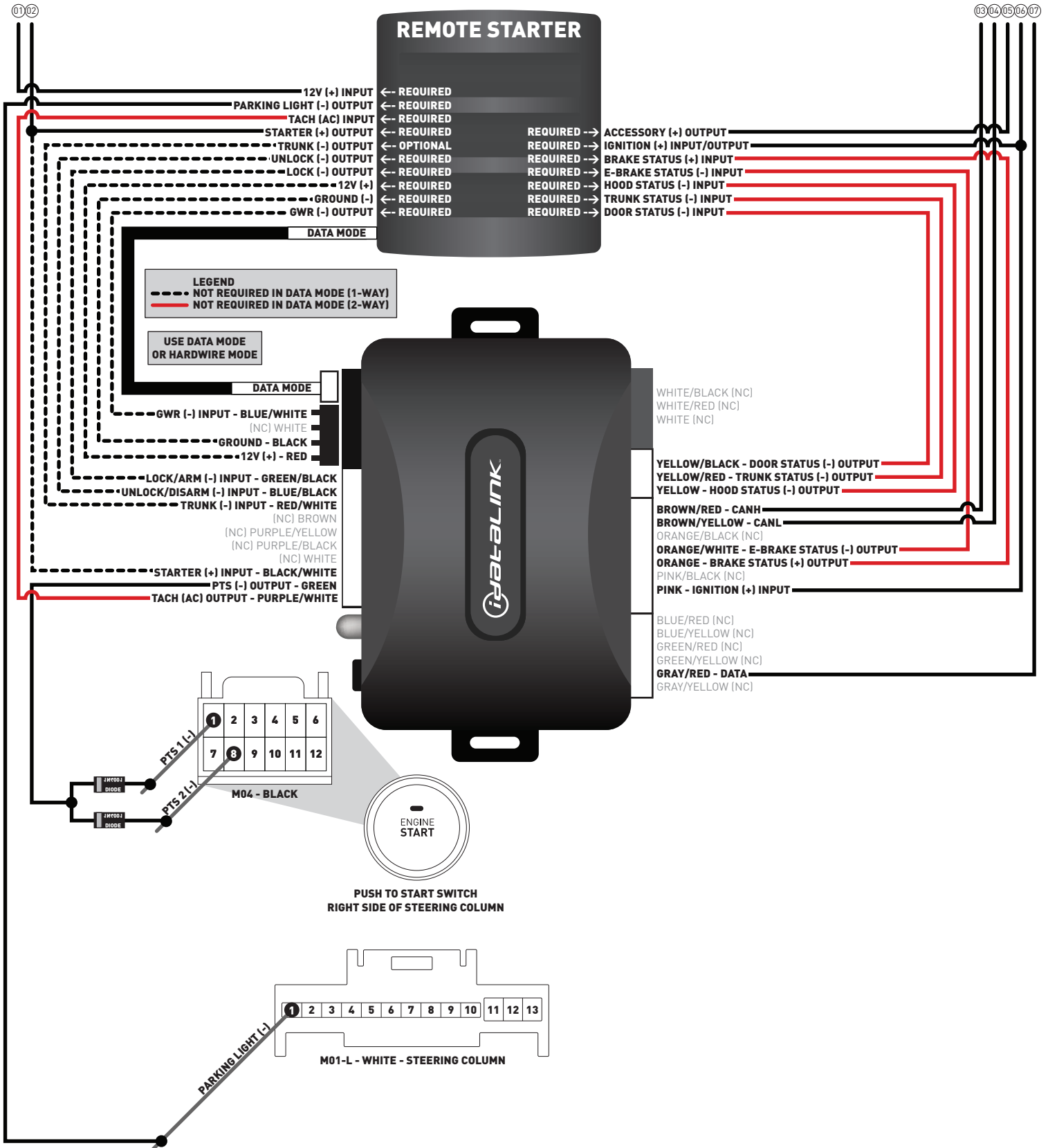
TYPE 16 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
KIA	Optima/ Optima Hybrid PTS AT	14-15	12V	I/P-C	Black	03 pin	01	Red	(+)	Junction box	A
			Starter	EM11	White	58 pin	09	Gray	(+)	Driver kick panel	C
			Accessory	EM11	White	58 pin	32	Orange	(+)	Driver kick panel	C
			Ignition	EM11	White	58 pin	26	Pink	(+)	Driver kick panel	C
			CanH	I/P-G	White	24 pin	13	White/Orange	[DATA]	Junction box	A
			CanL	I/P-G	White	24 pin	01	Yellow/Orange	[DATA]	Junction box	A
			Parking Light	M01-L	White	13 pin	01	Pink	(-)	Parking lights switch	~
			Data	EM11	White	58 pin	41	Brown/Orange or Blue	[DATA]	Driver kick panel	C
			PTS 1	M04	Black	12 pin	01	Yellow/Black	(-)	PTS button	D
PTS 2	M04	Black	12 pin	08	Yellow/Orange	(-)	PTS button	D			

TYPE 16 - WIRING DIAGRAM - 1 OF 2



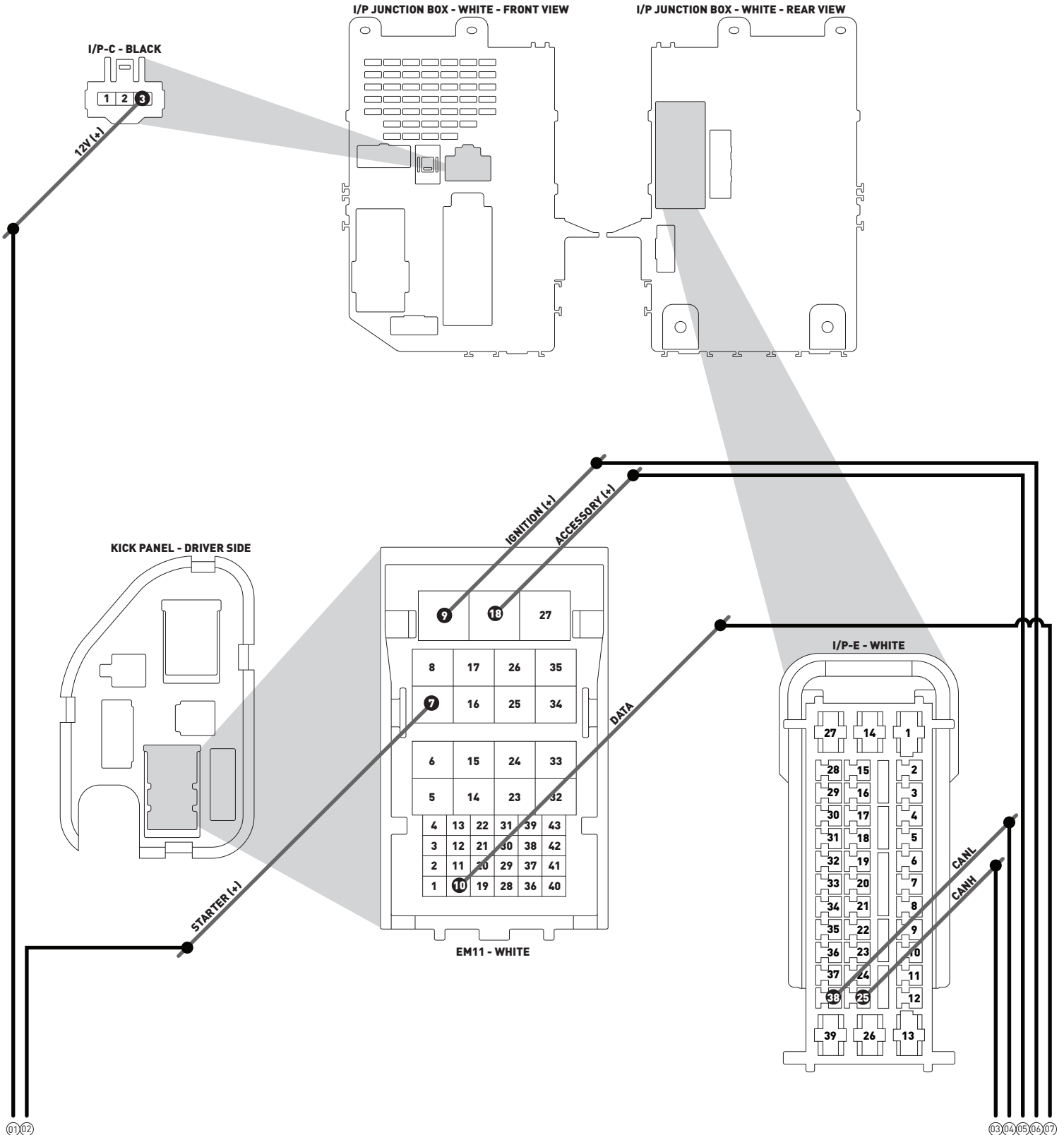
TYPE 16 - WIRING DIAGRAM - 2 OF 2



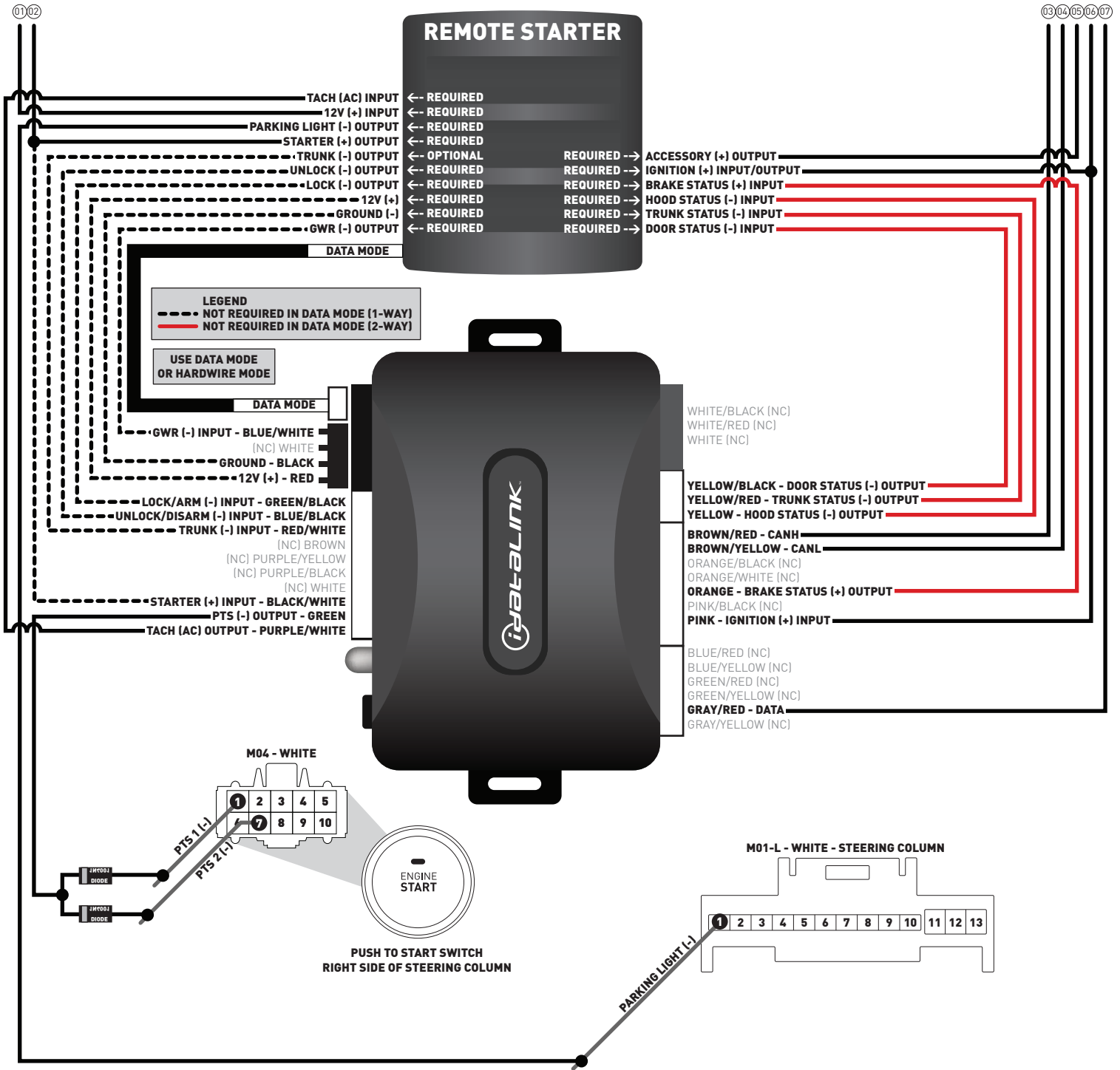
TYPE 17 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
KIA	Optima Hybrid PTS AT	11-13	12V	I/P-C	Black	03 pin	03	Red	(+)	I/P front side, driver side dash	A
			Starter	EM11	White	43 pin	07	Gray	(+)	Driver kick panel	C
			Ignition	EM11	White	43 pin	09	Pink	(+)	Driver kick panel	C
			Accessory	EM11	White	43 pin	18	Orange	(+)	Driver kick panel	C
			CanH	I/P-E	White	39 pin	25	White/Orange	[DATA]	I/P rear side, driver side dash	A
			CanL	I/P-E	White	39 pin	38	Yellow/Orange	[DATA]	I/P rear side, driver side dash	A
			Parking Light	M01-L	White	13 pin	01	Pink	(-)	Steering Column	~
			Data	EM11	White	43 pin	10	Brown/Orange	[DATA]	Driver kick panel	C
			PTS 1	M04	White	10 pin	01	Yellow/Black	(-)	Push button	D
PTS 2	M04	White	10 pin	07	Yellow/Orange	(-)	Push button	D			

TYPE 17 - WIRING DIAGRAM - 1 OF 2



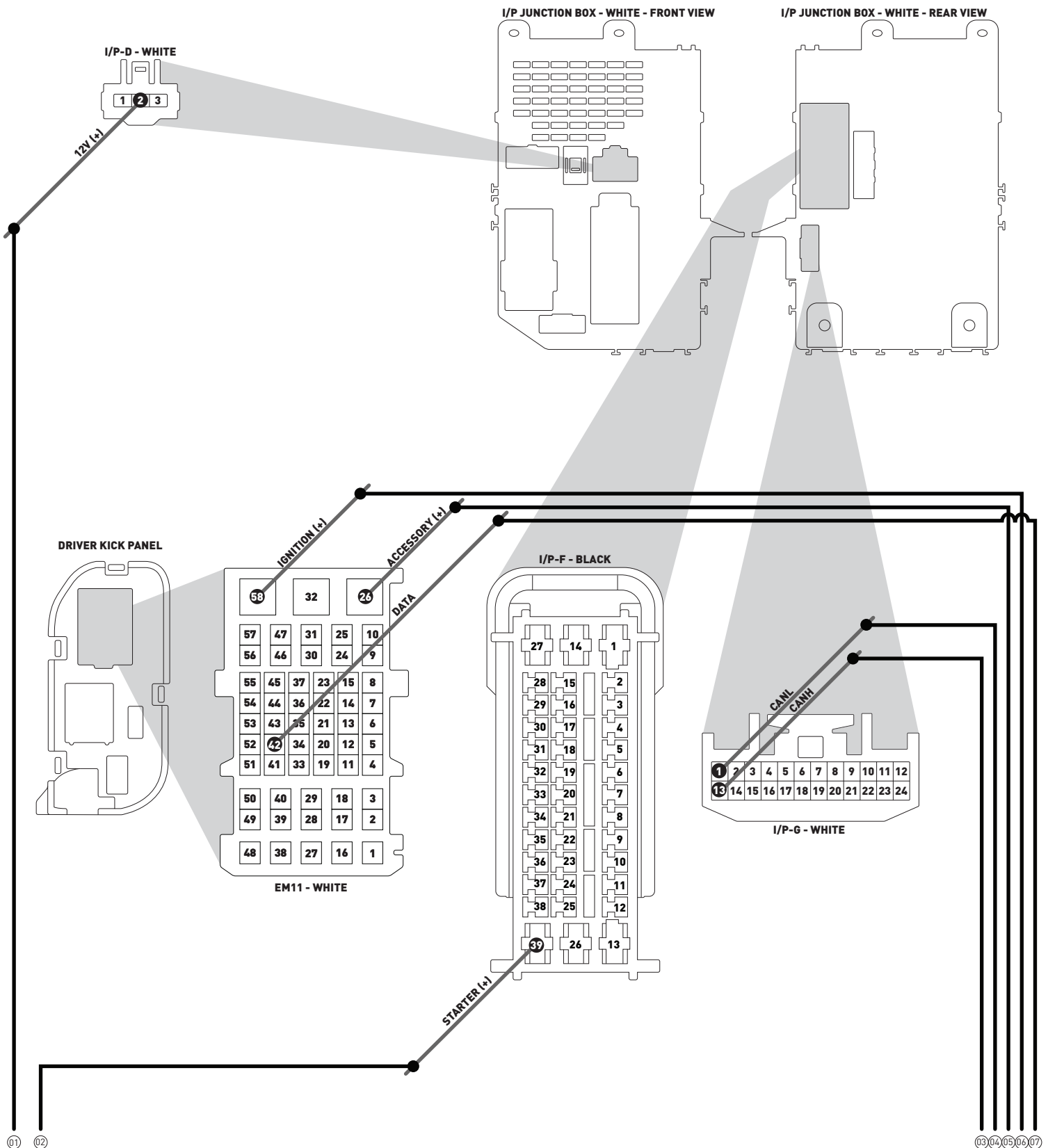
TYPE 17 - WIRING DIAGRAM - 2 OF 2



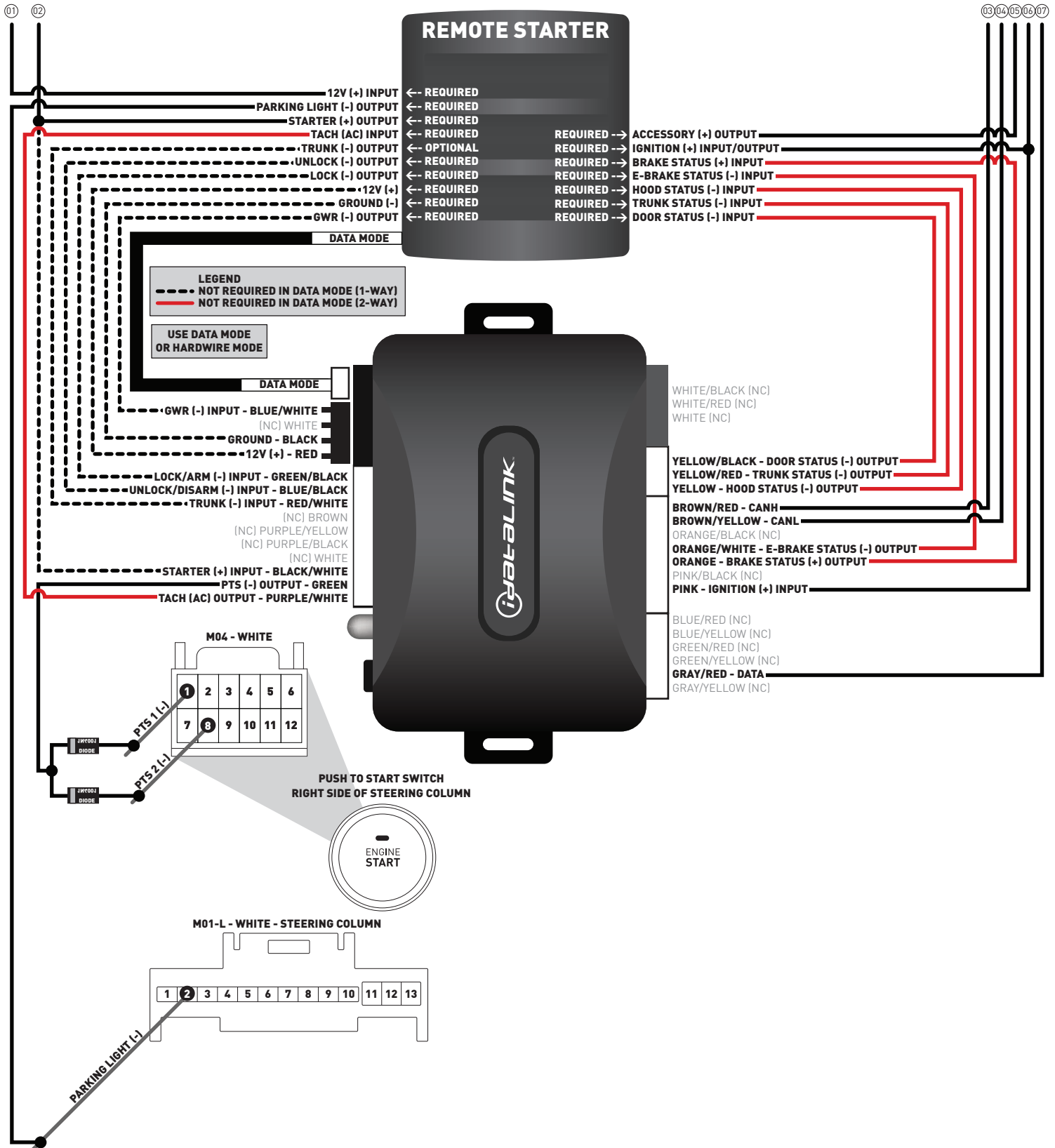
TYPE 18 - WIRE CROSS REFERENCE CHART - 1 OF 1

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Elantra Sedan PTS AT/MT	14-16	12V	I/P D	White	03 pin	02	Red	(+)	I/P front side, driver side dash	A
			Accessory	EM11	White	58 pin	26	Orange	(+)	Driver kick panel	C
			CanH	I/P G	White	24 pin	13	Green	(DATA)	I/P rear side, driver side dash	A
			CanL	I/P G	White	24 pin	01	Orange	(DATA)	I/P rear side, driver side dash	A
			Data	EM11	White	58 pin	42	Brown/Orange	(DATA)	Driver kick panel	C
			Ignition	EM11	White	58 pin	58	Pink	(+)	Driver kick panel	C
			Parking Light	M01-L	White	13 pin	02	Pink	(-)	Steering column	~
			PTS 1	M04	White	12 pin	01	Yellow/Black	(-)	Push button	D
			PTS 2	M04	White	12 pin	08	Yellow/Orange	(-)	Push button	D
Starter	I/P F	Black	39 pin	39	Yellow	(+)	I/P rear side, driver side dash	A			

TYPE 18 - WIRING DIAGRAM - 1 OF 2



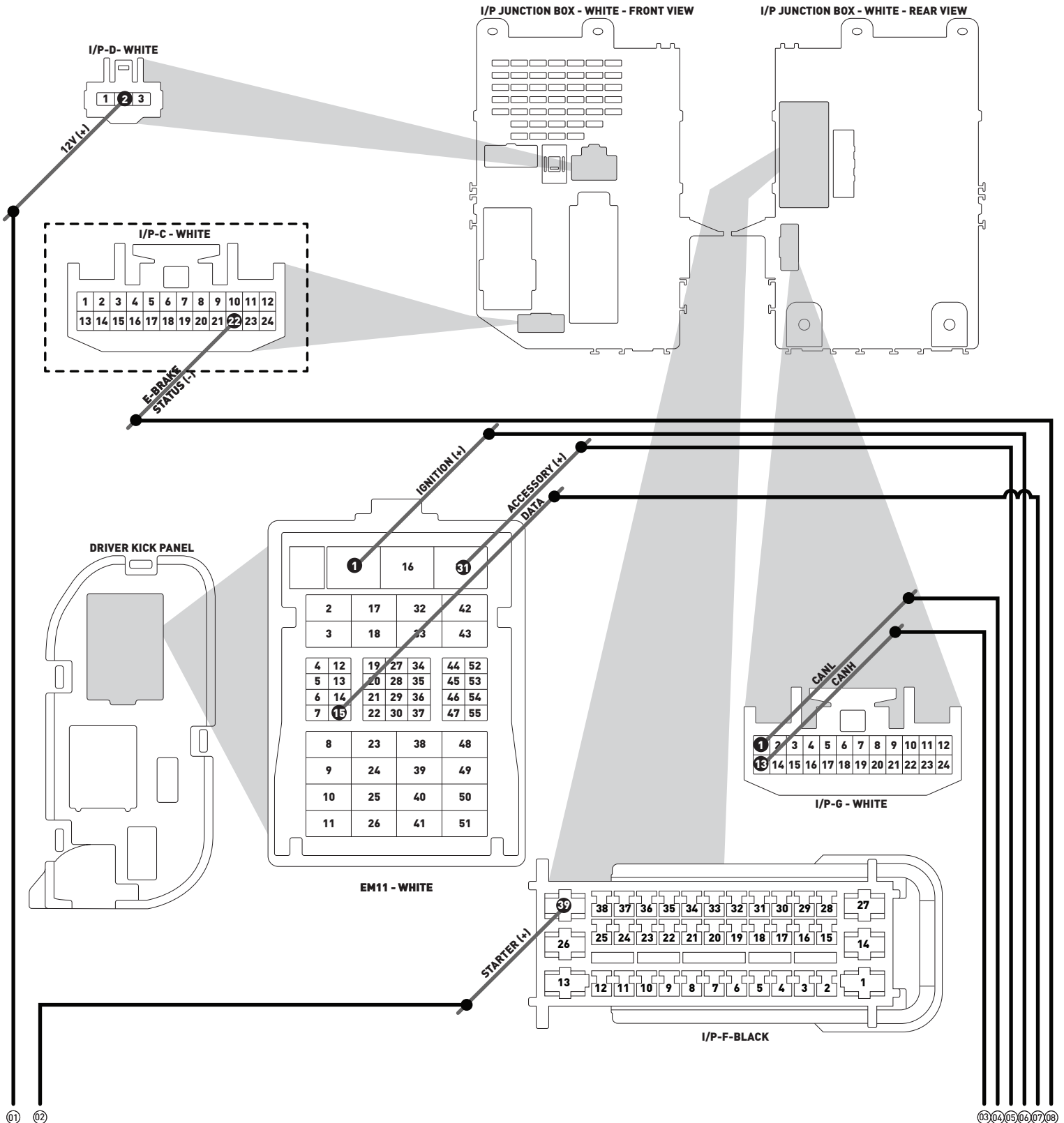
TYPE 18 - WIRING DIAGRAM - 2 OF 2



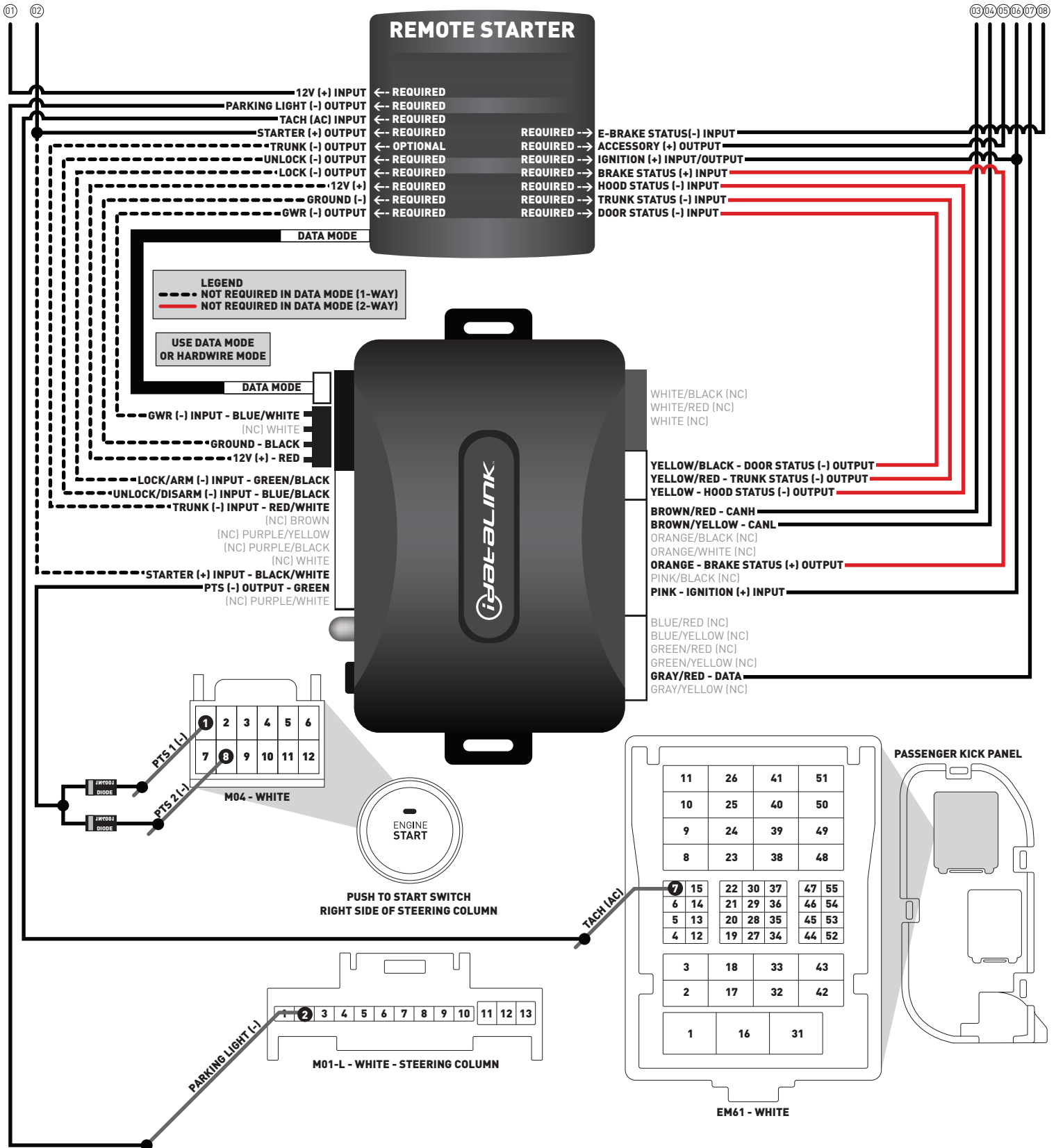
TYPE 19 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Elantra Coupe PTS AT/MT	14	12V	I/P-D	White	03 pin	02	Red	(+)	I/P front side, driver side dash	A
			Tach	EM61	White	55 pin	07	Green	(AC)	Passenger kick panel	B
			Starter	I/P-F	Black	39 pin	39	Yellow	(+)	I/P rear side, driver side dash	A
			Ignition	EM11	White	55 pin	01	Pink	(+)	Driver kick panel	C
			Accessory	EM11	White	55 pin	31	Orange	(+)	Driver kick panel	C
			CanH	I/P-G	White	24 pin	13	Green	(DATA)	I/P rear side, driver side dash	A
			CanL	I/P-G	White	24 pin	01	Orange	(DATA)	I/P rear side, driver side dash	A
			Parking Light	M01-L	White	13 pin	02	Pink	(-)	Steering Column	~
			E-Brake	I/P-C	White	24 pin	22	Orange	(-)	I/P front side, driver side dash	A
			Data	EM11	White	55 pin	15	Brown/Orange	(DATA)	Driver kick panel	C
			PTS 1	M04	White	12 pin	01	Yellow/Black	(-)	Push button	D
			PTS 2	M04	White	12 pin	08	Yellow/Orange	(-)	Push button	D

TYPE 19 - WIRING DIAGRAM - 1 OF 2



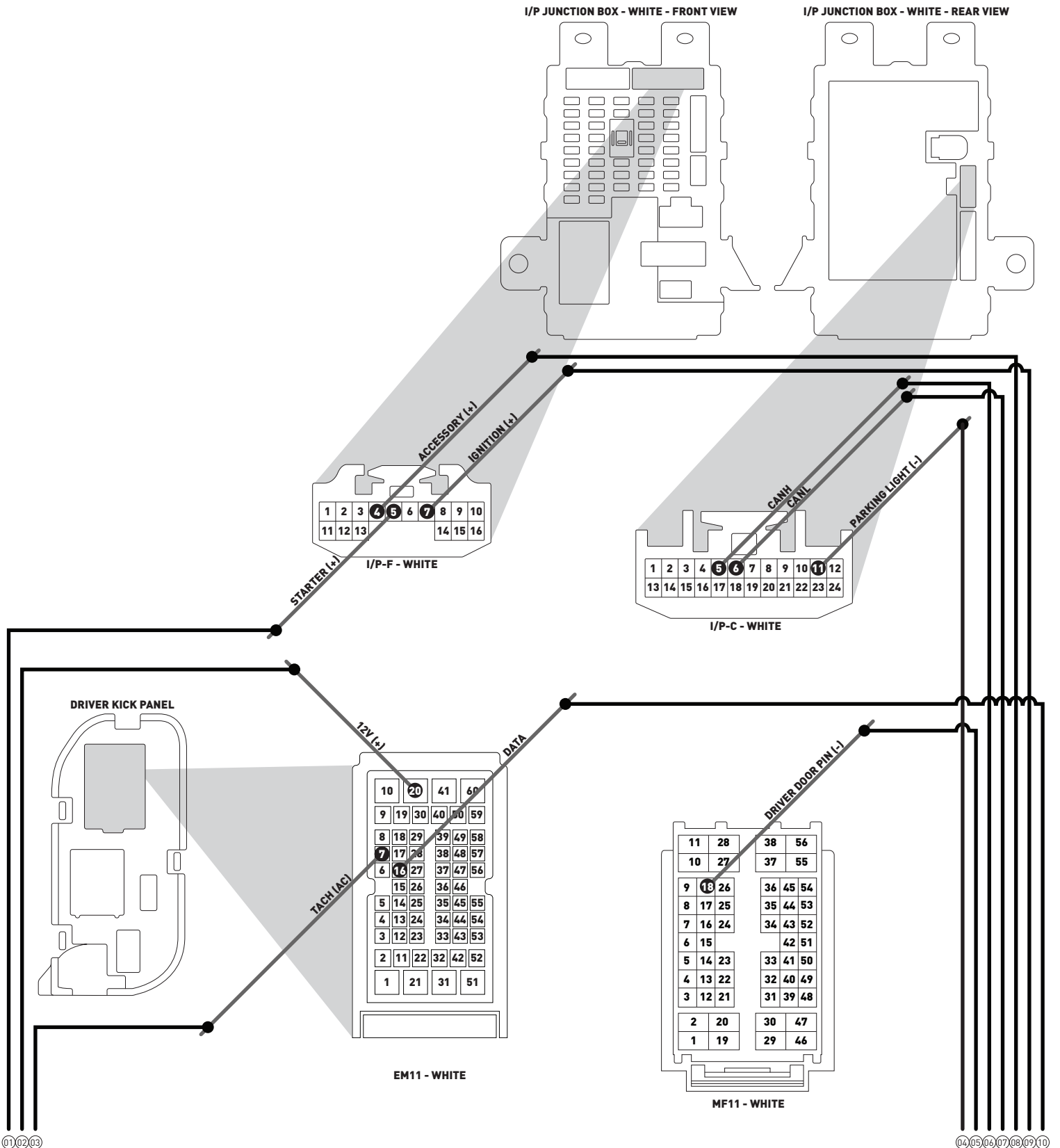
TYPE 19 - WIRING DIAGRAM - 2 OF 2



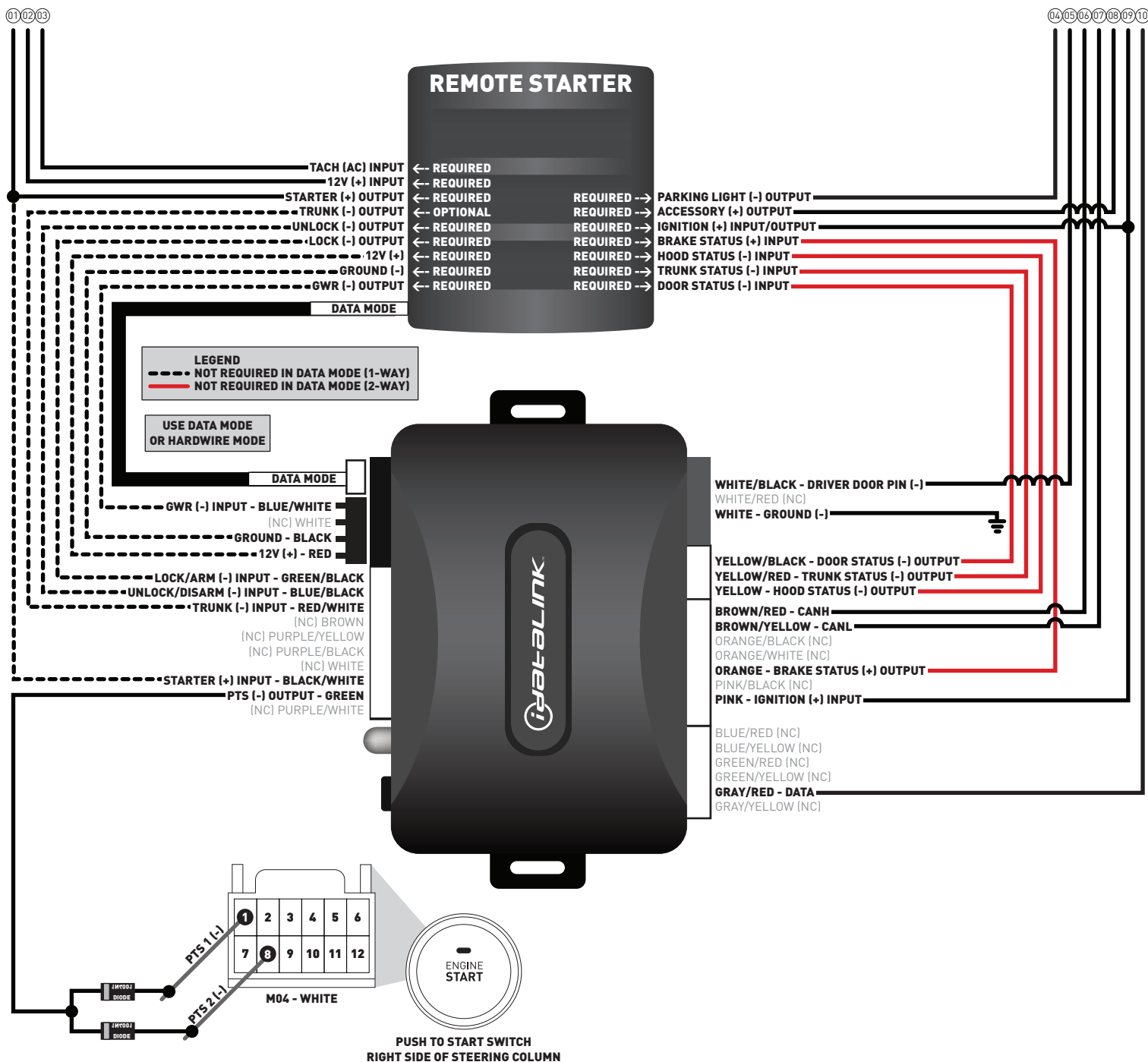
TYPE 20 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Veloster PTS AT	14-15	CanH	I/P-C	White	24 pin	05	White/Orange	[DATA]	I/P rear side, driver side dash	A
			CanL	I/P-C	White	24 pin	06	Yellow/Orange	[DATA]	I/P rear side, driver side dash	A
			Data	EM11	White	60 pin	16	Blue	[DATA]	Driver kick panel	C
			Parking Light	I/P-C	White	24 pin	11	Pink	[-]	Driver kick panel	C
			Driver Door Pin	MF11	White	56 pin	18	Brown	[-]	Driver kick panel	C
			Ignition	I/P-F	White	16 pin	07	Pink	[+]	I/P front side, driver side dash	A
			Accessory	I/P-F	White	16 pin	04	Red	[+]	I/P front side, driver side dash	A
			Starter	I/P-F	White	16 pin	05	Yellow	[+]	I/P front side, driver side dash	A
			Tach	EM11	White	60 pin	07	Orange	[AC]	Driver kick panel	C
			12V	EM11	White	60 pin	20	Red	[+]	Driver kick panel	C
			PTS 1	M04	White	12 pin	01	Yellow/Black	[-]	Push button	D
			PTS 2	M04	White	12 pin	08	Yellow/Orange	[-]	Push button	D
	Veloster PTS AT	16	CanH	I/P-C	White	24 pin	05	Red	[DATA]	I/P rear side, driver side dash	A
			CanL	I/P-C	White	24 pin	06	Blue	[DATA]	I/P rear side, driver side dash	A
			Data	EM11	White	60 pin	16	Blue	[DATA]	Driver kick panel	C
			Parking Light	I/P-C	White	24 pin	11	Pink	[-]	Driver kick panel	C
			Driver Door Pin	MF11	White	56 pin	18	Brown	[-]	Driver kick panel	C
			Ignition	I/P-F	White	16 pin	07	Pink	[+]	I/P front side, driver side dash	A
			Accessory	I/P-F	White	16 pin	04	Red	[+]	I/P front side, driver side dash	A
			Starter	I/P-F	White	16 pin	05	Yellow	[+]	I/P front side, driver side dash	A
			Tach	EM11	White	60 pin	07	Orange	[AC]	Driver kick panel	C
			12V	EM11	White	60 pin	20	Red	[+]	Driver kick panel	C
			PTS 1	M04	White	12 pin	01	Yellow/Black	[-]	Push button	D
			PTS 2	M04	White	12 pin	08	Yellow/Orange	[-]	Push button	D

TYPE 20 - WIRING DIAGRAM - 1 OF 2



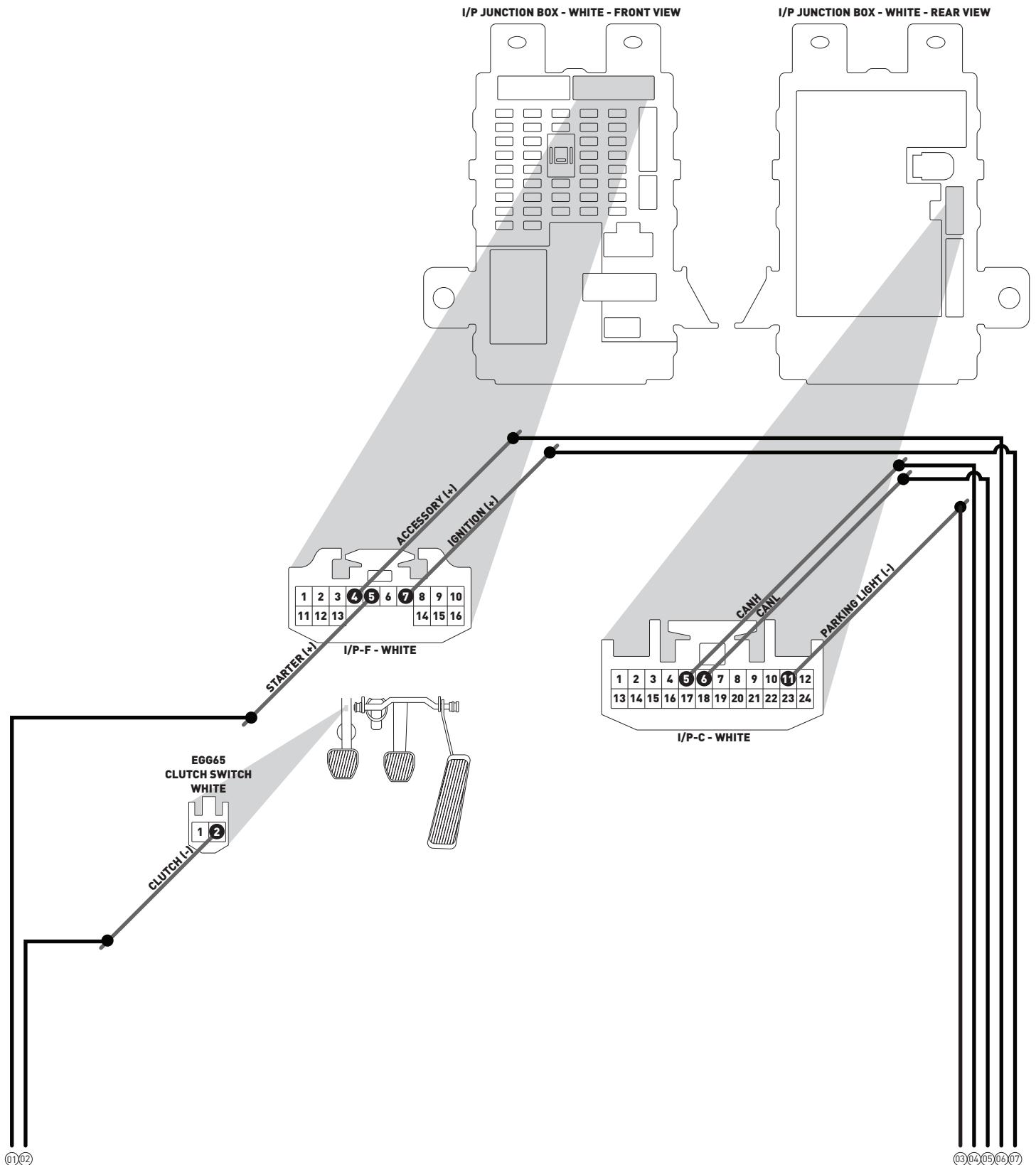
TYPE 20 - WIRING DIAGRAM - 2 OF 2



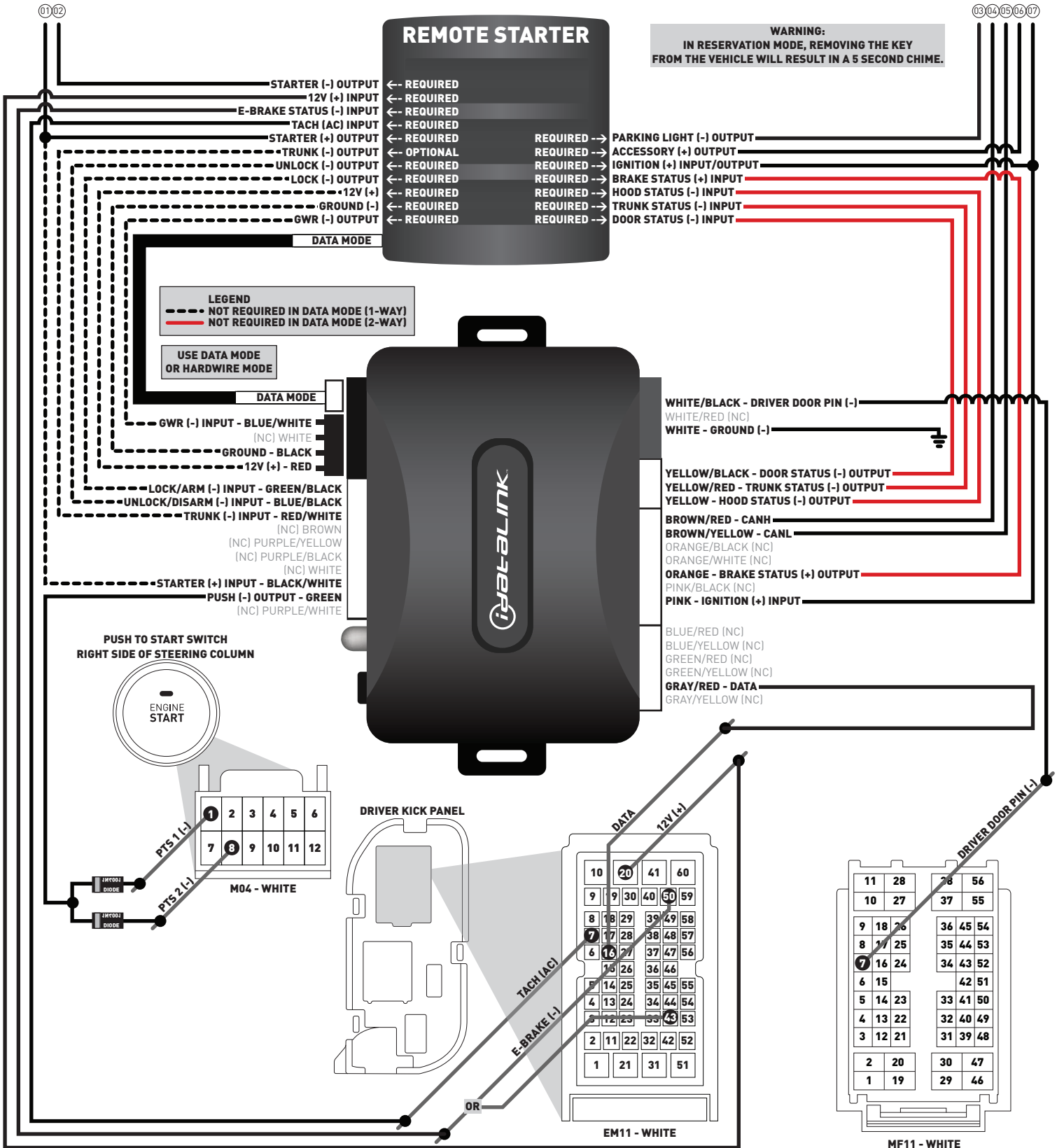
TYPE 21 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Veloster PTS MT	14-15	CanH	I/P-C	White	24 pin	05	White/Orange	(DATA)	I/P rear side, driver side dash	A
			CanL	I/P-C	White	24 pin	06	Yellow/Orange	(DATA)	I/P rear side, driver side dash	A
			Data	EM11	White	60 pin	16	Blue	(DATA)	Driver kick panel	C
			Parking Light	I/P-C	White	24 pin	11	Pink	(-)	I/P rear side, driver side dash	A
			Driver Door Pin	MF11	White	56 pin	07	Brown	(-)	Driver kick panel	C
			Ignition	I/P-F	White	16 pin	07	Pink	(+)	I/P front side, driver side dash	A
			Accessory	I/P-F	White	16 pin	04	Red	(+)	I/P front side, driver side dash	A
			Starter	I/P-F	White	16 pin	05	Yellow	(+)	I/P front side, driver side dash	A
			Tach	EM11	White	60 pin	07	Orange	(AC)	Driver kick panel	C
			12V	EM11	White	60 pin	20	Red	(+)	Driver kick panel	C
			PTS 1	M04	White	12 pin	01	Yellow/Black	(-)	Push button	D
			PTS 2	M04	White	12 pin	08	Yellow/Orange	(-)	Push button	D
			E-brake	EM11	White	55 pin	50	Blue	(-)	Driver kick panel	C
			Clutch	EGG65	White	02 pin	02	Green	(-)	Clutch switch	E
	Veloster PTS MT	16	CanH	I/P-C	White	24 pin	05	Red	(DATA)	I/P rear side, driver side dash	A
			CanL	I/P-C	White	24 pin	06	Blue	(DATA)	I/P rear side, driver side dash	A
			Data	EM11	White	60 pin	16	Blue	(DATA)	Driver kick panel	C
			Parking Light	I/P-C	White	24 pin	11	Pink	(-)	I/P rear side, driver side dash	A
			Driver Door Pin	MF11	White	56 pin	07	Brown	(-)	Driver kick panel	C
			Ignition	I/P-F	White	16 pin	07	Pink	(+)	I/P front side, driver side dash	A
			Accessory	I/P-F	White	16 pin	04	Red	(+)	I/P front side, driver side dash	A
			Starter	I/P-F	White	16 pin	05	Yellow	(+)	I/P front side, driver side dash	A
			Tach	EM11	White	60 pin	07	Orange	(AC)	Driver kick panel	C
			12V	EM11	White	60 pin	20	Red	(+)	Driver kick panel	C
PTS 1			M04	White	12 pin	01	Yellow/Black	(-)	Push button	D	
PTS 2			M04	White	12 pin	08	Yellow/Orange	(-)	Push button	D	
E-brake	EM11	White	55 pin	43	Blue/Orange	(-)	Driver kick panel	C			
Clutch	EGG65	White	02 pin	02	Green	(-)	Clutch switch	E			

TYPE 21 - WIRING DIAGRAM - 1 OF 2



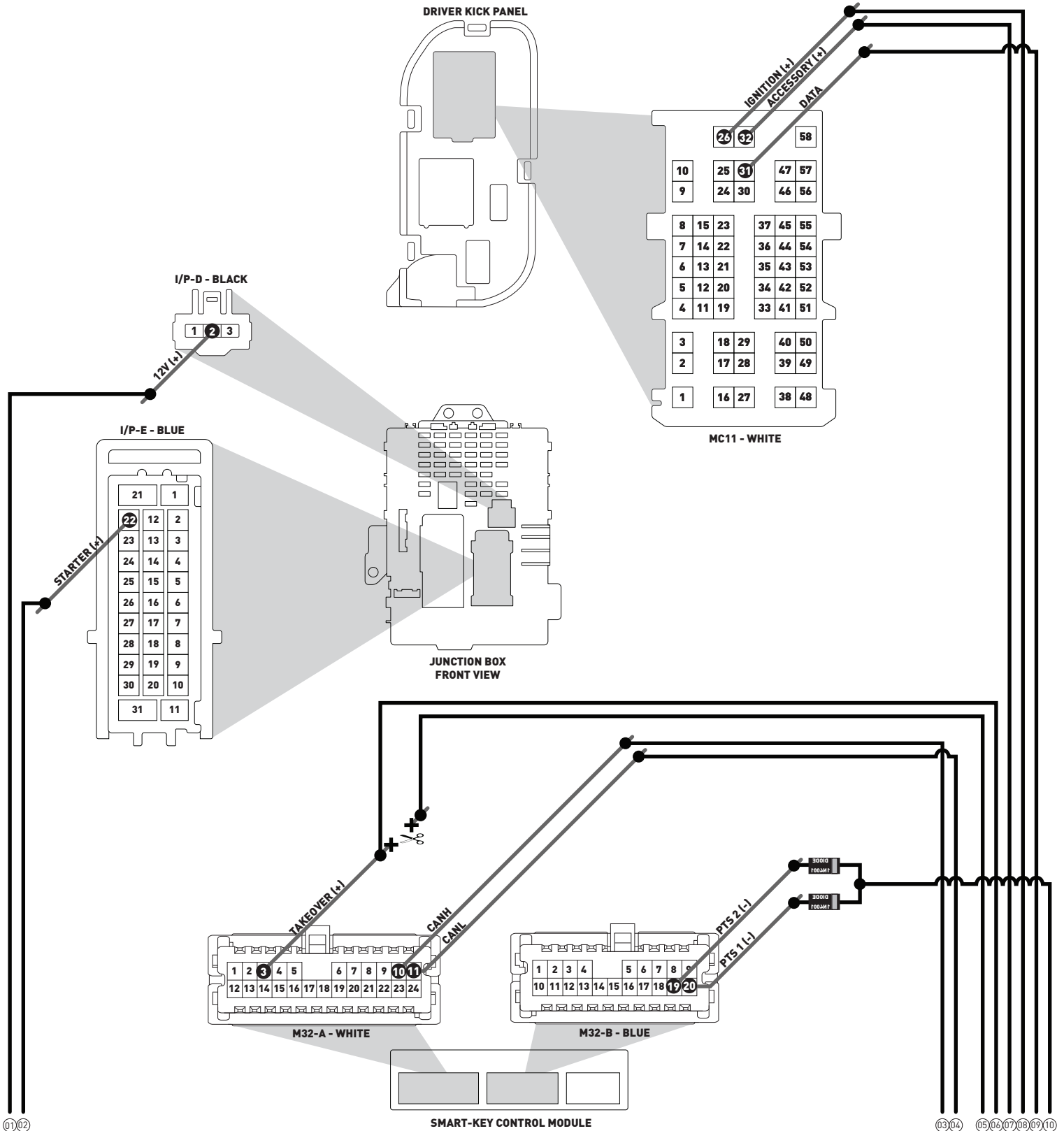
TYPE 21 - WIRING DIAGRAM - 2 OF 2



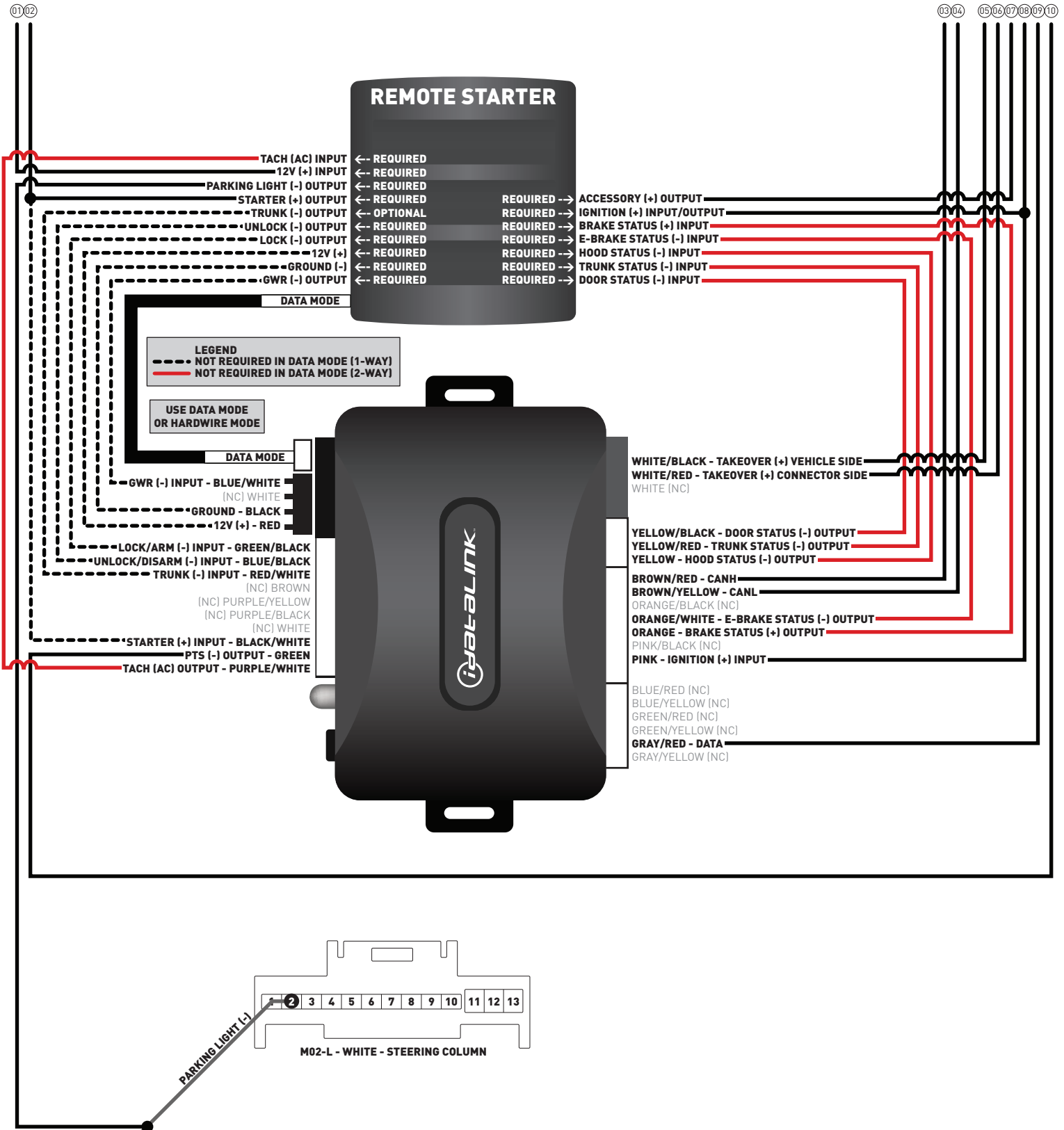
TYPE 22 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
KIA	Soul PTS AT	14-16	12V	IP/D	Black	03 pin	02	Red	(+)	Junction box, front view	A
			Starter	IP-E	Blue	31 pin	22	Orange	(+)	Junction box, front view	A
			Accessory	MC11	White	58 pin	32	Red	(+)	Driver kick panel	C
			Ignition	MC11	White	58 pin	26	Black	(+)	Driver kick panel	C
			CanH	M32-A	White	24 pin	10	Orange	(DATA)	Smart-key control module	F
			CanL	M32-A	White	24 pin	11	Green	(DATA)	Smart-key control module	F
			Parking Light	M02-L	White	13 pin	02	Pink	(-)	Parking light switch	~
			Data	MC11	White	58 pin	31	Brown/Orange	(DATA)	Driver kick panel	C
			PTS 1	M32-B	Blue	20 pin	20	Yellow/Black	(-)	Smart-key control module	F
			PTS 2	M32-B	Blue	20 pin	19	Yellow/Orange	(-)	Smart-key control module	F
			Takeover	M32-A	White	24 pin	03	Pink/Black	(+)	Smart-key control module	F

TYPE 22 - WIRING DIAGRAM - 1 OF 2



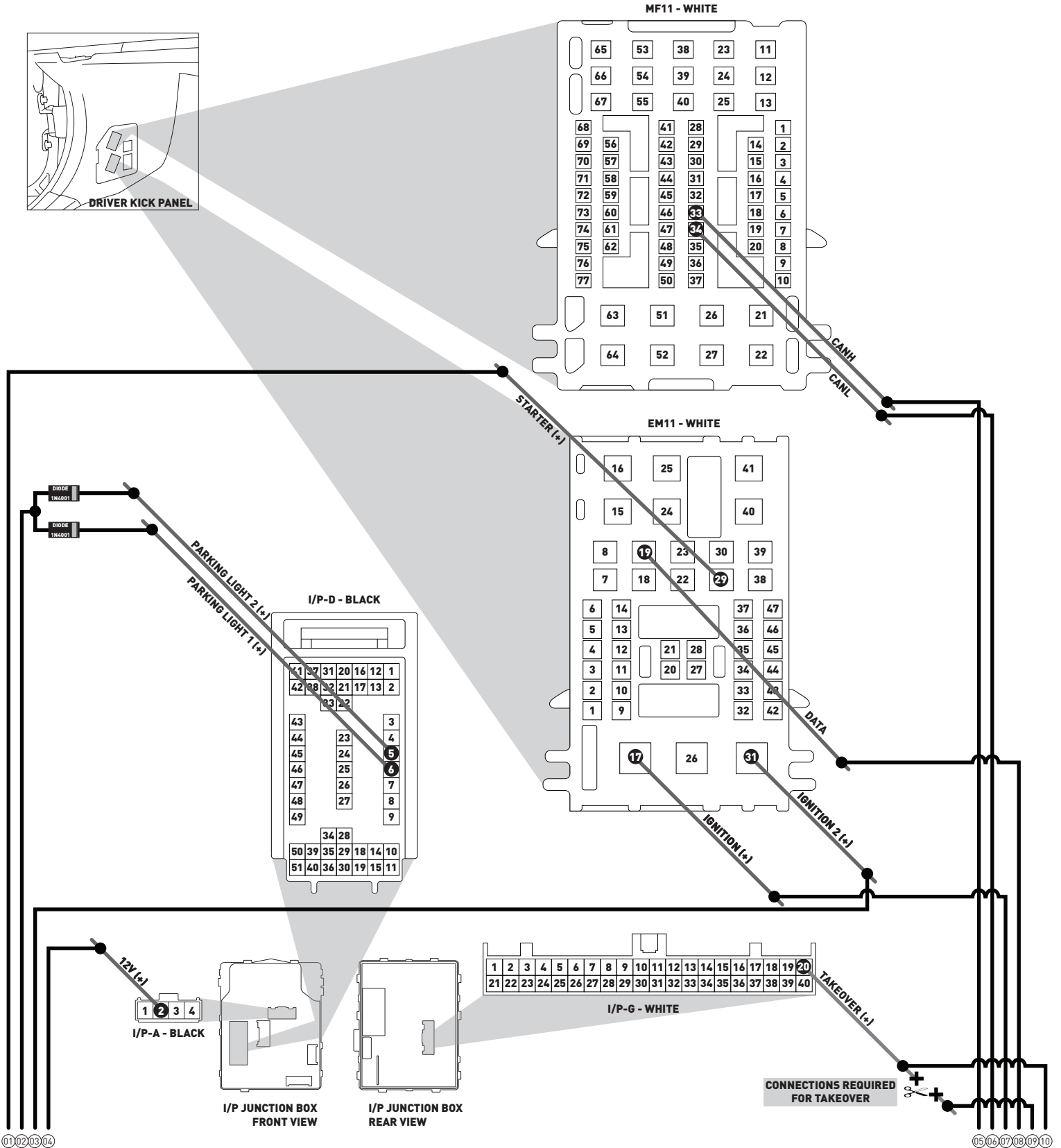
TYPE 22 - WIRING DIAGRAM - 2 OF 2



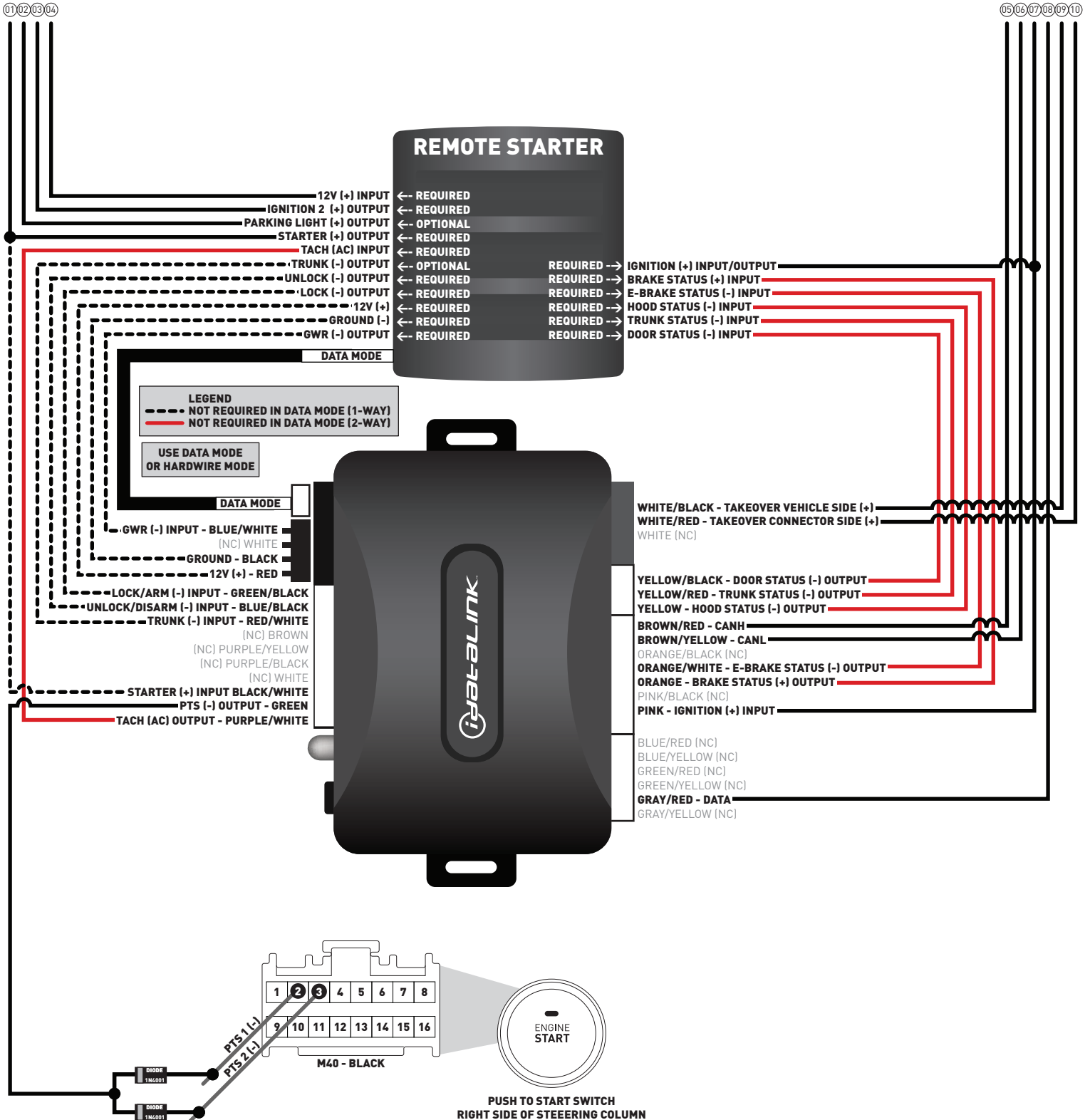
TYPE 23 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Sonata PTS AT	15	12V	IP/A	Black	04 pin	02	Black	(+)	Junction box, front view	A
			Ignition	EM11	White	47 pin	17	Pink	(+)	Driver kick panel	C
			Ignition 2	EM11	White	47 pin	31	White	(+)	Driver kick panel	C
			Starter	EM11	White	47 pin	29	Yellow	(+)	Driver kick panel	C
			CanH	MF11	White	77 pin	33	Yellow	(DATA)	Driver kick panel	C
			CanL	MF11	White	77 pin	34	Black	(DATA)	Driver kick panel	C
			Data	EM11	White	47 pin	19	Blue/Orange	(DATA)	Driver kick panel	C
			Parking Light 1	I/P-D	Black	51 pin	06	Green/Black	(+)	Junction box, front view	A
			Parking Light 2	I/P-D	Black	51 pin	05	Brown/Black	(+)	Junction box, front view	A
			PTS 1	M40	Black	16 pin	02	Yellow/Black	(-)	Push button	D
			PTS 2	M40	Black	16 pin	03	Yellow/Orange	(-)	Push button	D
			Takeover	I/P-G	White	40 pin	20	Pink/Orange	(+)	Junction box, rear view	A

TYPE 23 - WIRING DIAGRAM - 1 OF 2



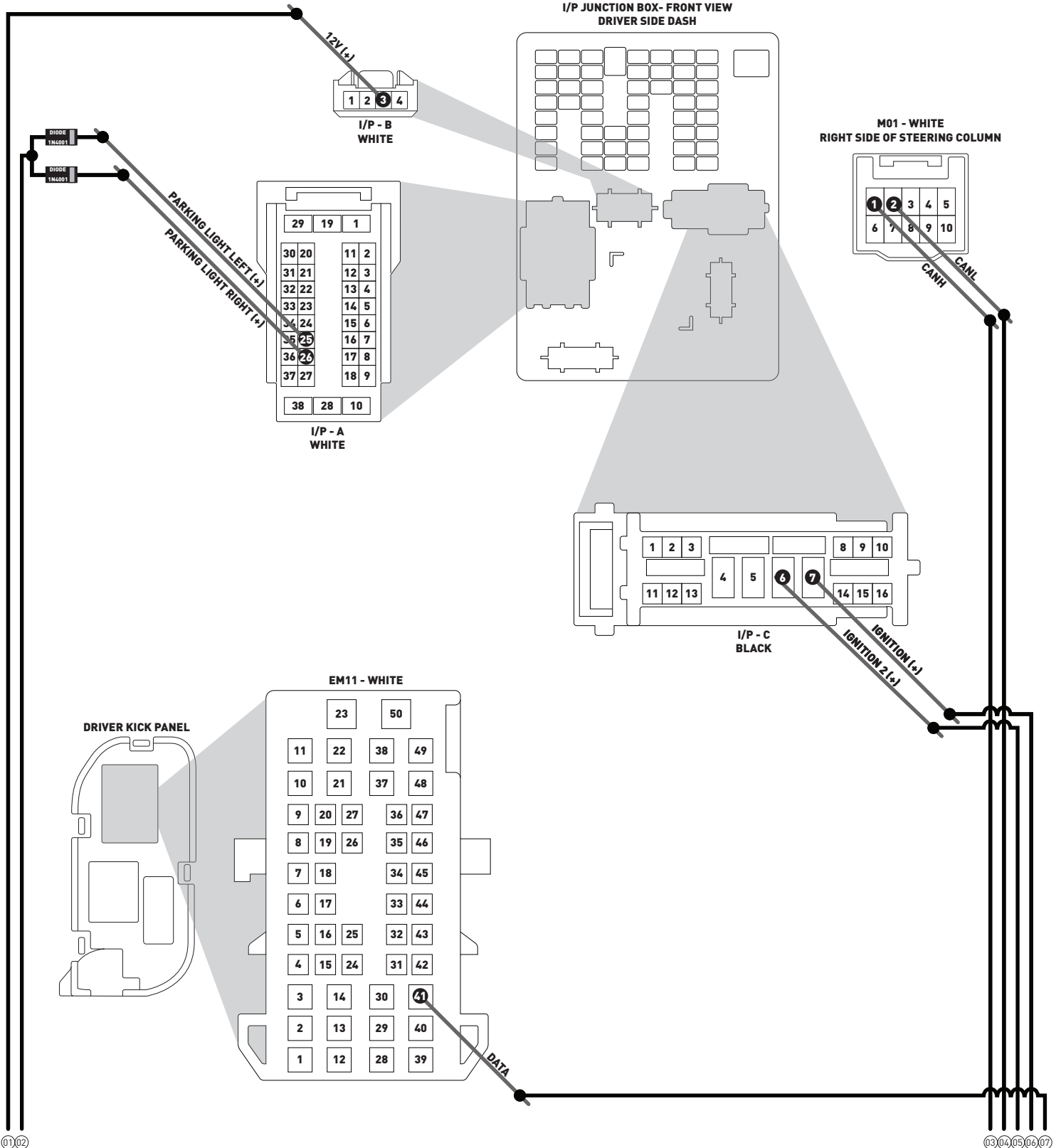
TYPE 23 - WIRING DIAGRAM - 2 OF 2



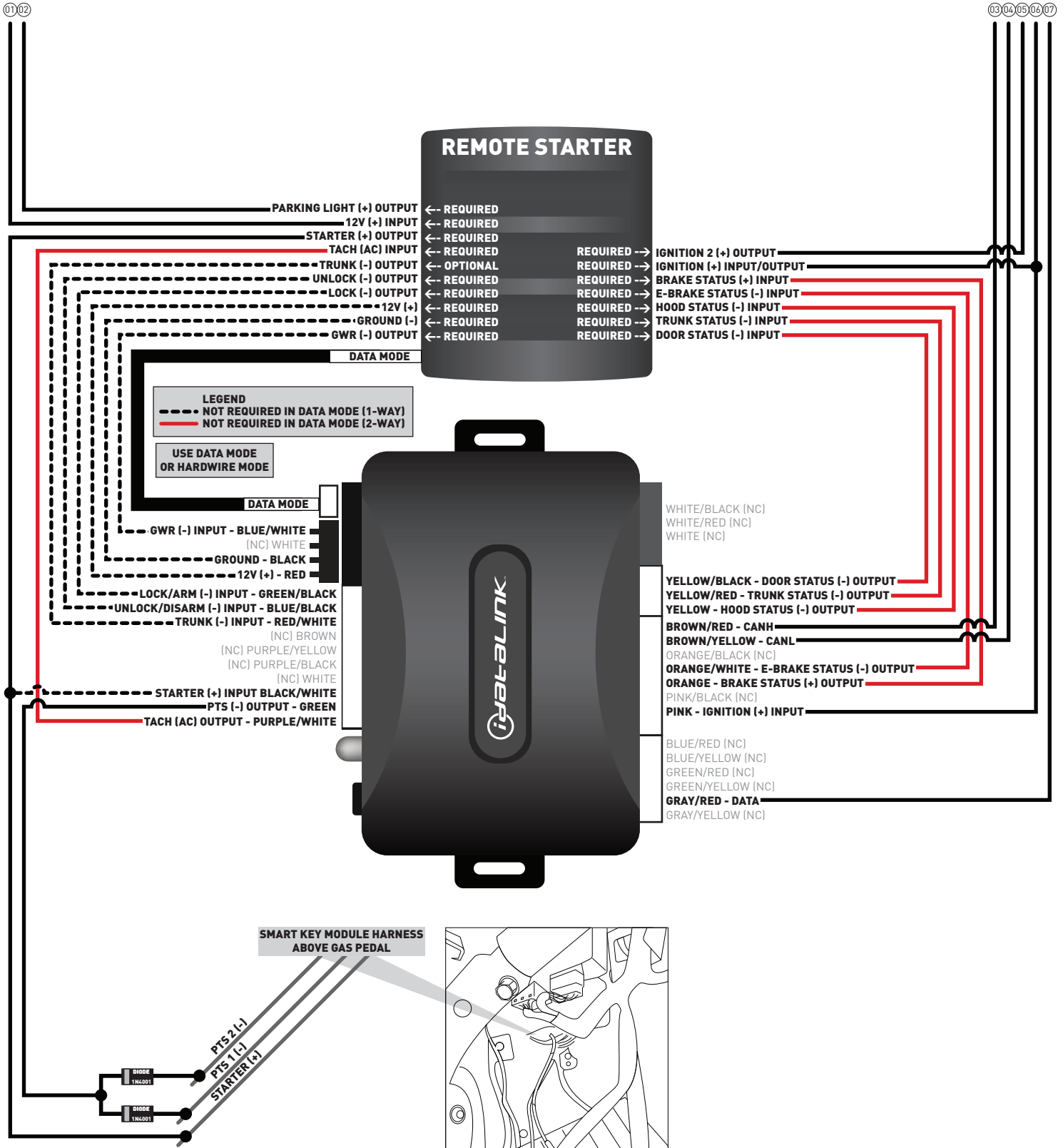
TYPE 24 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Genesis Sedan PTS AT	15	12V	I/P-B	White	04 pin	03	Red	(+)	I/P Junction box front view, driver side dash	A
			Starter	~	~	~	~	Brown/Orange	(+)	Smart key module harness, above gas pedal	G
			Ignition	I/P-C	Black	16 pin	07	White	(+)	I/P Junction box front view, driver side dash	A
			Ignition 2	I/P-C	Black	16 pin	06	Yellow	(+)	I/P Junction box front view, driver side dash	A
			CanH	M01	White	10 pin	01	Green	(DATA)	Right side of steering column	H
			CanL	M01	White	10 pin	02	Orange	(DATA)	Right side of steering column	H
			Parking Light Left	I/P-A	White	38 pin	25	Green/Black	(+)	I/P Junction box front view, driver side dash	A
			Parking Light Right	I/P-A	White	38 pin	26	Brown/Black	(+)	I/P Junction box front view, driver side dash	A
			Data	EM11	White	50 pin	41	Red	(DATA)	Driver kick panel	C
			PTS 1	~	~	~	~	Brown/Black	(-)	Smart key module harness, above gas pedal	G
			PTS 2	~	~	~	~	Orange/Black	(-)	Smart key module harness, above gas pedal	G

TYPE 24 - WIRING DIAGRAM - 1 OF 2



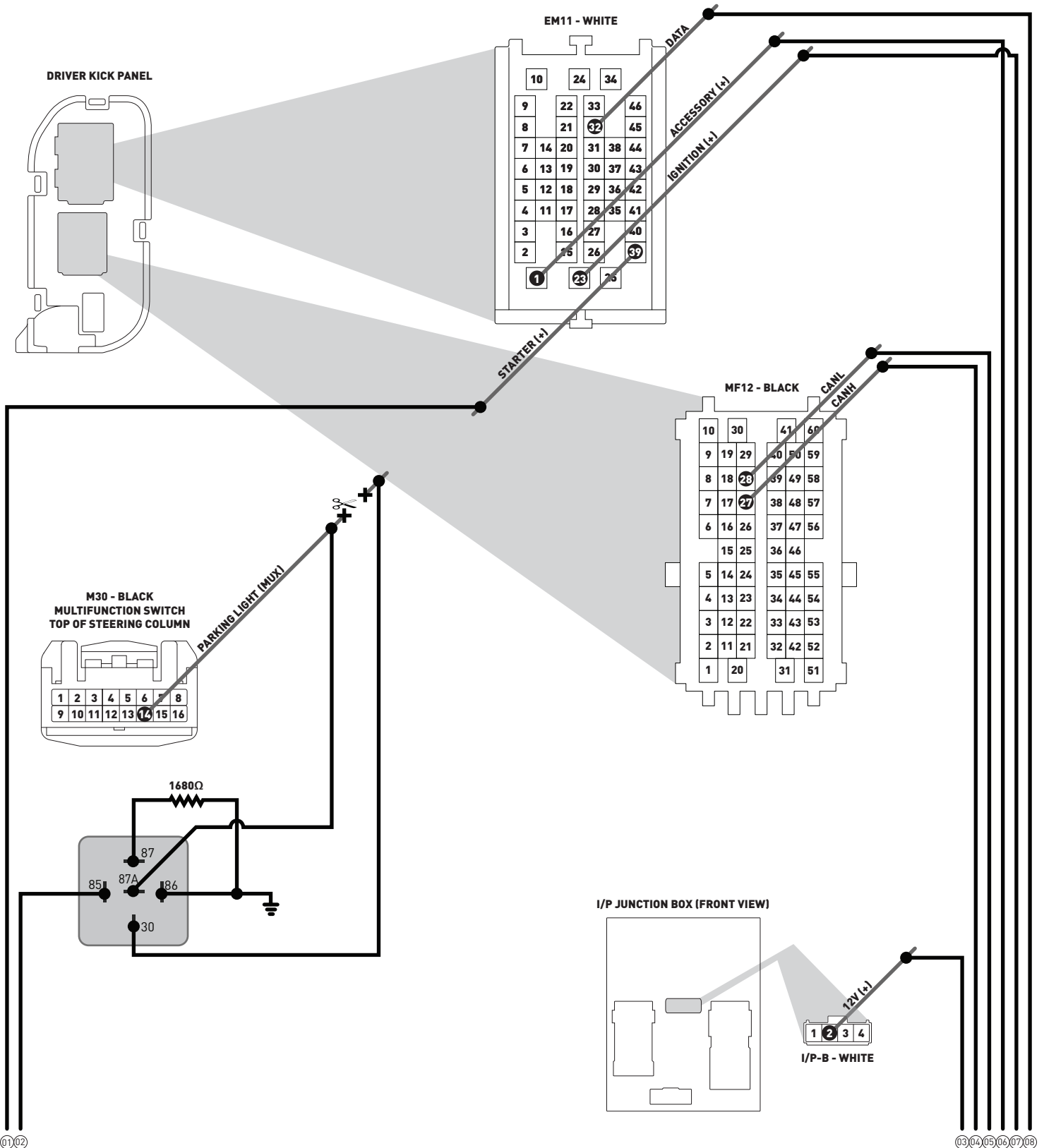
TYPE 24 - WIRING DIAGRAM - 2 OF 2



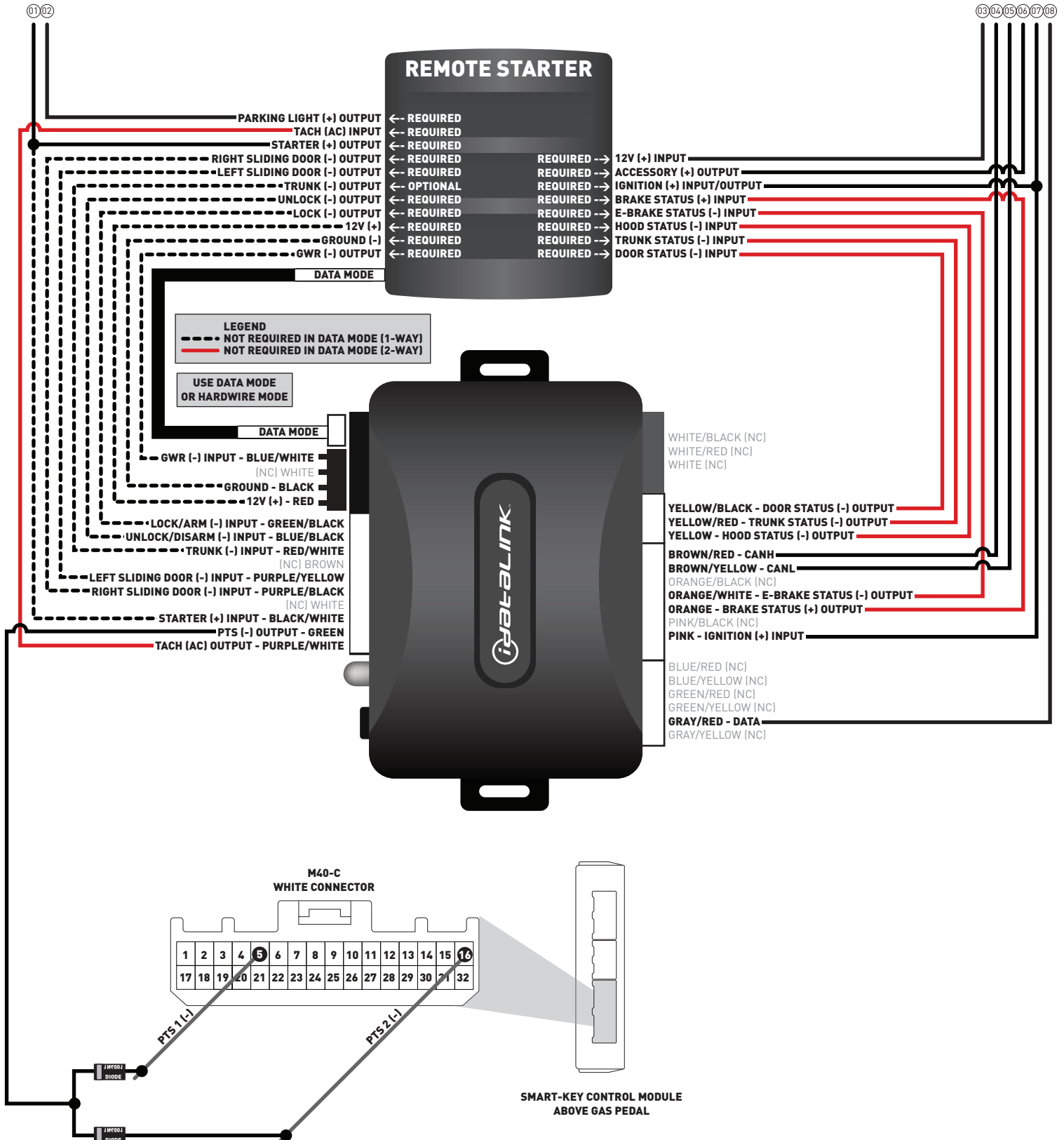
TYPE 25 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
KIA	Sedona PTS AT	15-16	12V	I/P-B	Black	04 pin	02	Blue	(+)	I/P junction box, front side	A
			Ignition	EM11	White	46 pin	23	Green	(+)	Driver kick panel	C
			Accessory	EM11	White	46 pin	01	Blue	(+)	Driver kick panel	C
			Starter	EM11	White	46 pin	39	Pink	(+)	Driver kick panel	C
			CanH	MF12	Black	60 pin	27	Blue	[DATA]	Driver kick panel	C
			CanL	MF12	Black	60 pin	28	Red	[DATA]	Driver kick panel	C
			Data	EM11	White	46 pin	32	White/Orange	[DATA]	Driver kick panel	C
			Parking Light	M30	Black	16 pin	14	Blue/Orange	(MUX)	Multifunction switch, top of steering column	F
			PTS 1	M40-C	White	32 pin	05	Yellow/Orange	(-)	Smart-key control module, above gas pedal	G
			PTS 2	M40-C	White	32 pin	16	Orange/Black	(-)	Smart-key control module, above gas pedal	G

TYPE 25 - WIRING DIAGRAM - 1 OF 2



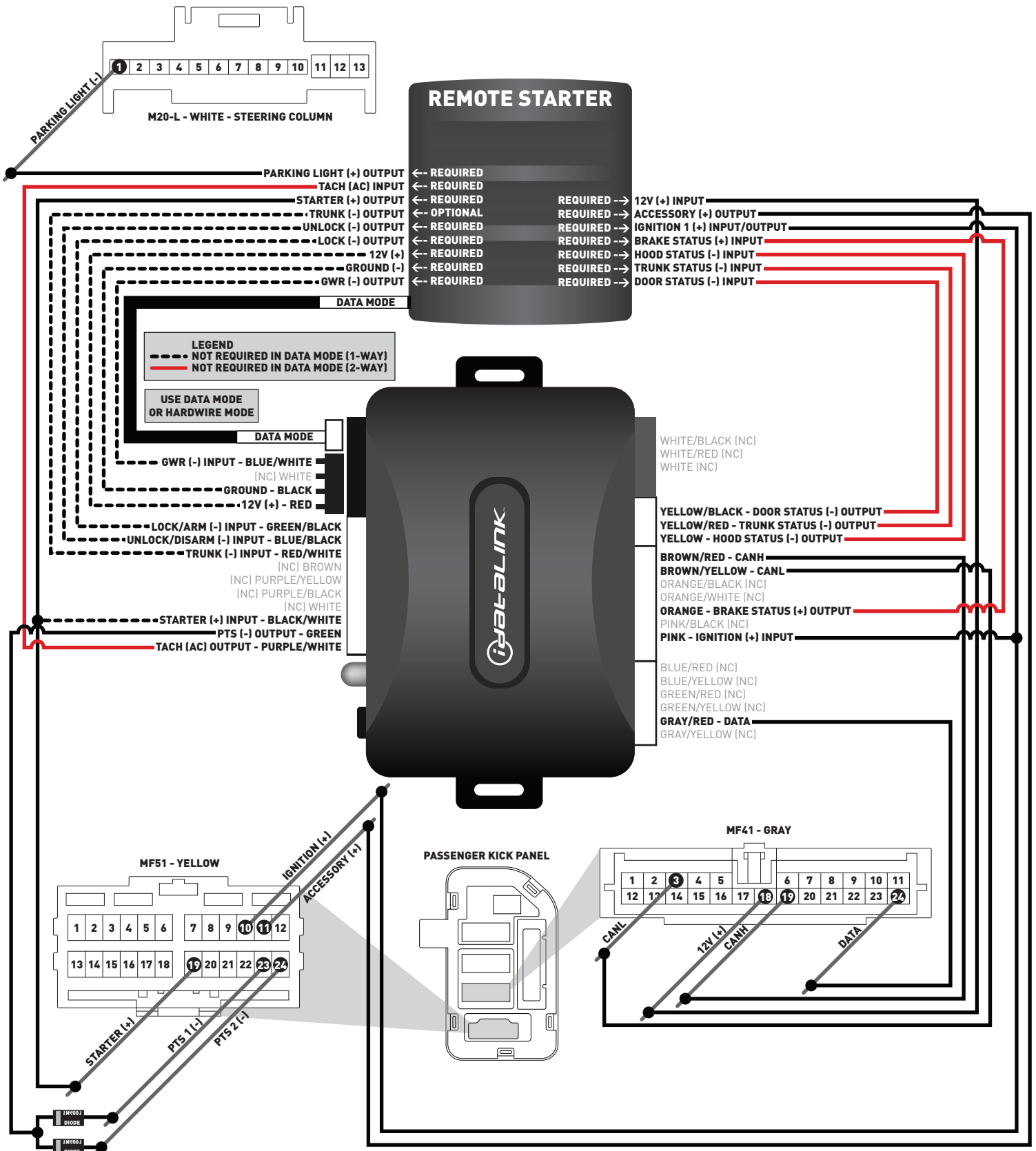
TYPE 25 - WIRING DIAGRAM - 2 OF 2



TYPE 26 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Tucson PTS AT	14-15	Accessory	MF51	Yellow	24 pin	11	Red	(+)	Passenger kick panel	B
			Ignition	MF51	Yellow	24 pin	10	White	(+)	Passenger kick panel	B
			Starter	MF51	Yellow	24 pin	19	Red/Black	(+)	Passenger kick panel	B
			PTS 1	MF51	Yellow	24 pin	23	White	(-)	Passenger kick panel	B
			PTS 2	MF51	Yellow	24 pin	24	Blue	(-)	Passenger kick panel	B
			12V	MF41	Gray	24 pin	18	Blue	(+)	Passenger kick panel	B
			CanH	MF41	Gray	24 pin	19	Blue	(DATA)	Passenger kick panel	B
			CanL	MF41	Gray	24 pin	03	Red	(DATA)	Passenger kick panel	B
			Data	MF41	Gray	24 pin	24	White/Orange	(DATA)	Passenger kick panel	B
			Parking Light	M20-L	White	13 pin	01	Yellow	(-)	Parking light switch, steering column	~

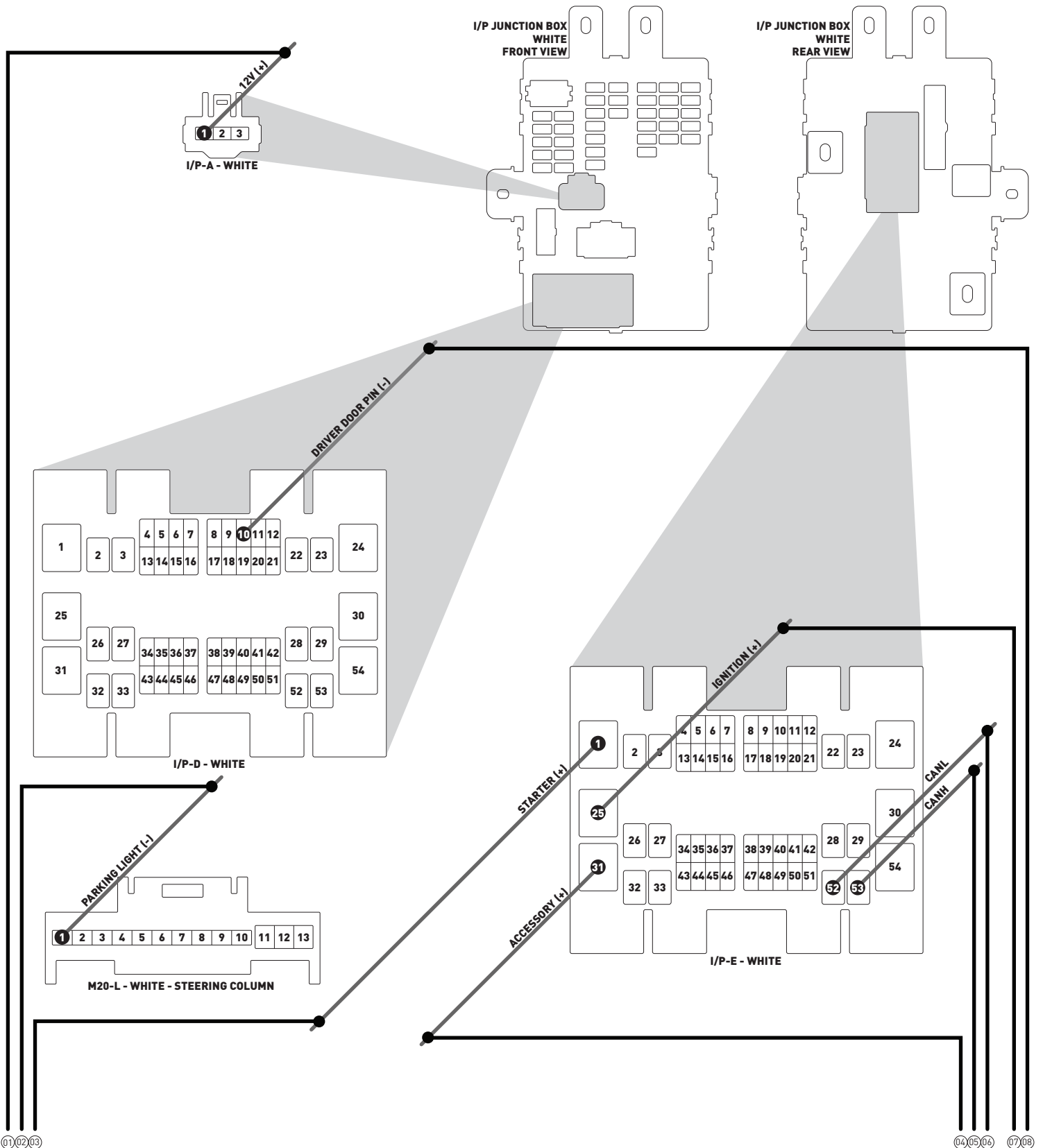
TYPE 26 - WIRING DIAGRAM - 1 OF 1



TYPE 27 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
KIA	Sportage PTS AT	14-16	12V	I/P-A	White	03 pin	01	Red	(+)	I/P front side, driver side dash	A
			Accessory	I/P-E	White	54 pin	31	White or Blue	(+)	I/P rear side, driver side dash	A
			Starter	I/P-E	White	54 pin	01	Red	(+)	I/P rear side, driver side dash	A
			Ignition	I/P-E	White	54 pin	25	Blue	(+)	I/P rear side, driver side dash	A
			CanH	I/P-E	White	54 pin	53	Blue	[DATA]	I/P rear side, driver side dash	A
			CanL	I/P-E	White	54 pin	52	Red	[DATA]	I/P rear side, driver side dash	A
			Driver Door Pin	I/P-D	White	54 pin	10	Green/Orange or Green	(-)	I/P front side, driver side dash	A
			Parking Light	M20-L	White	13 pin	01	Blue	(-)	Steering Column	~
			Data	MC11	Yellow	24 pin	07	Blue	[DATA]	Passenger kick panel	B
			Tach	MC11	Yellow	24 pin	04	Green	[AC]	Passenger kick panel	B
			PTS 1	M61	Black	12 pin	01	White	(-)	Push button	D
			PTS 2	M61	Black	12 pin	08	White/Black	(-)	Push button	D

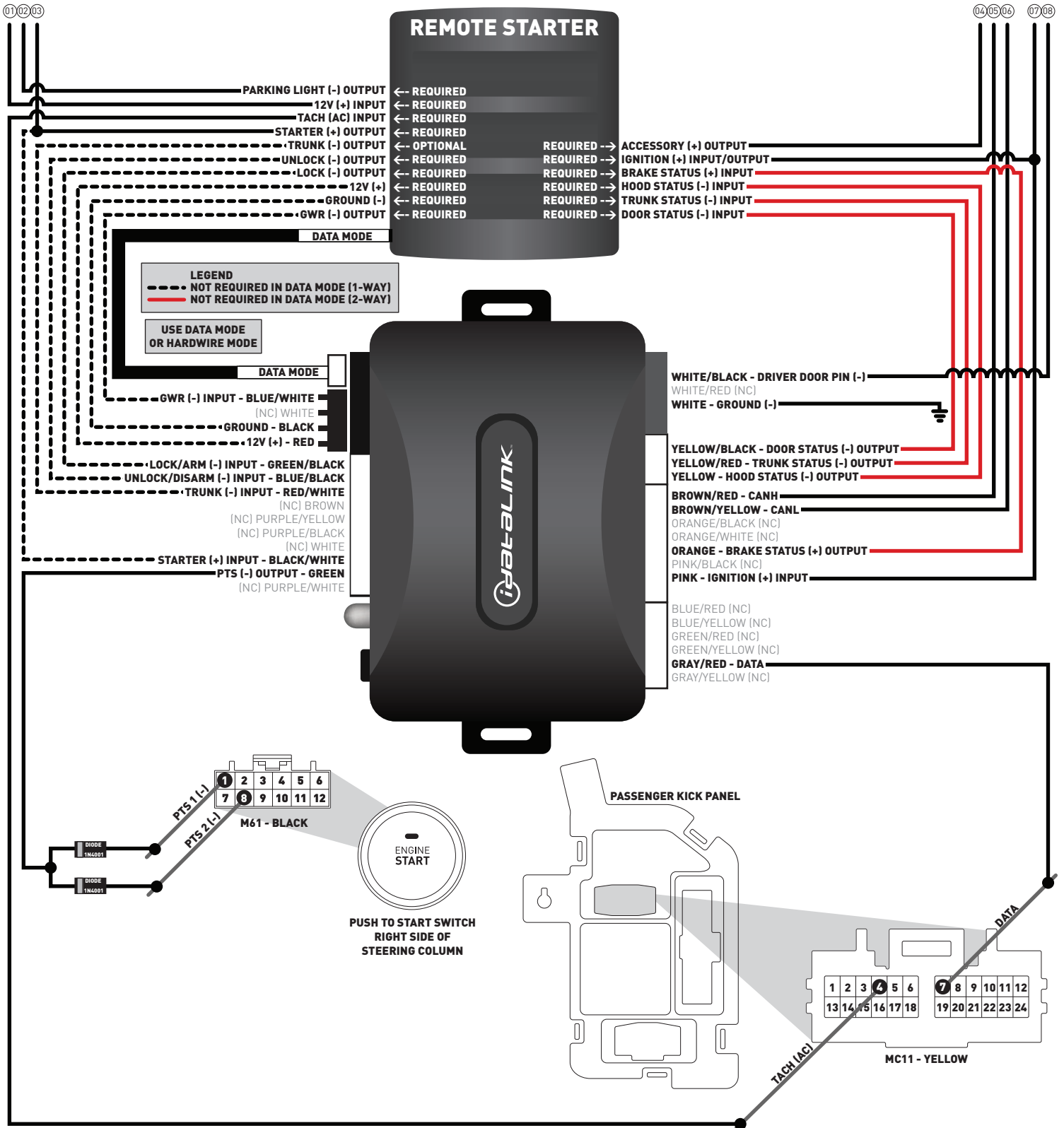
TYPE 27 - WIRING DIAGRAM - 1 OF 2



01 02 03

04 05 06 07 08

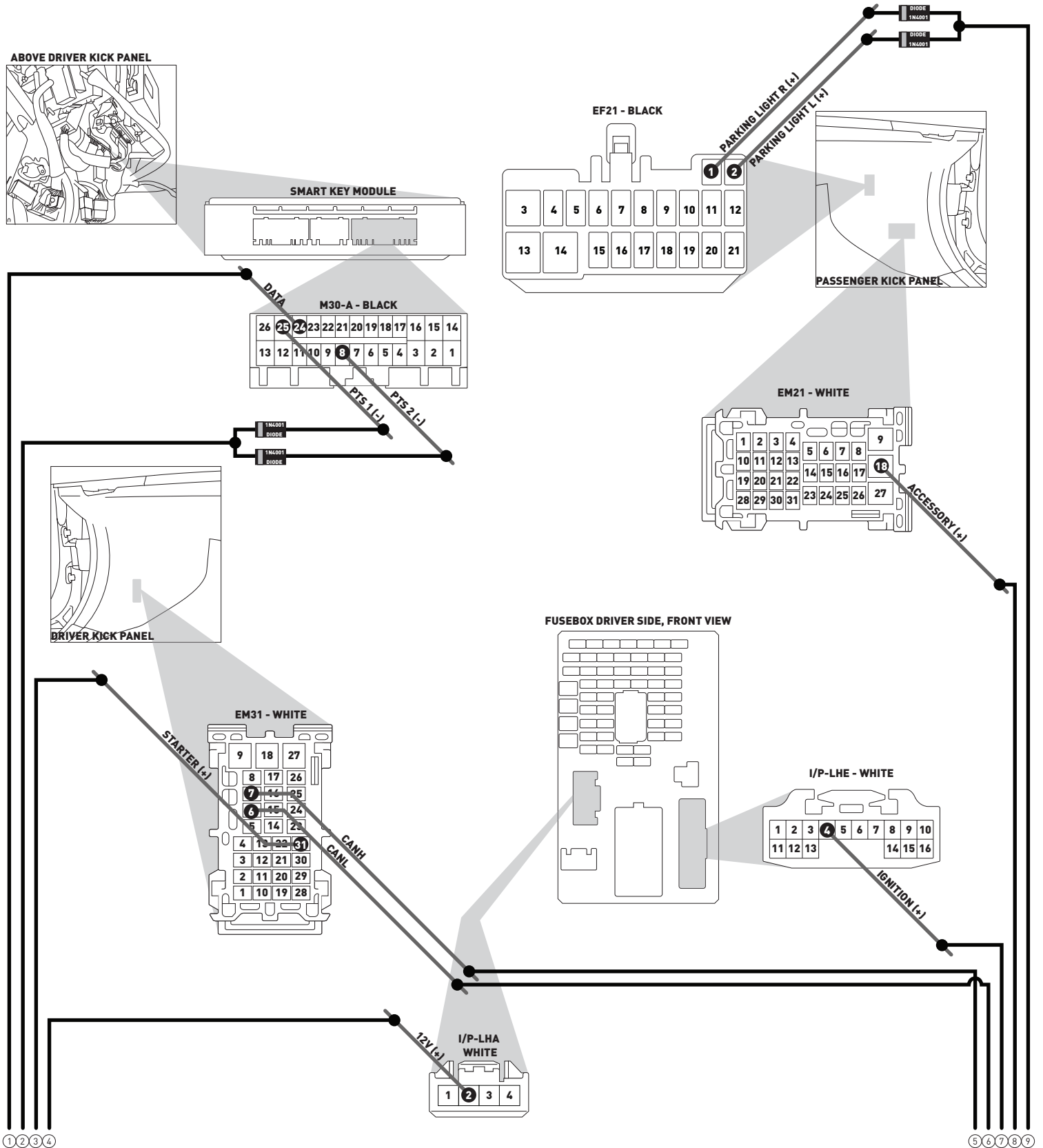
TYPE 27 - WIRING DIAGRAM - 2 OF 2



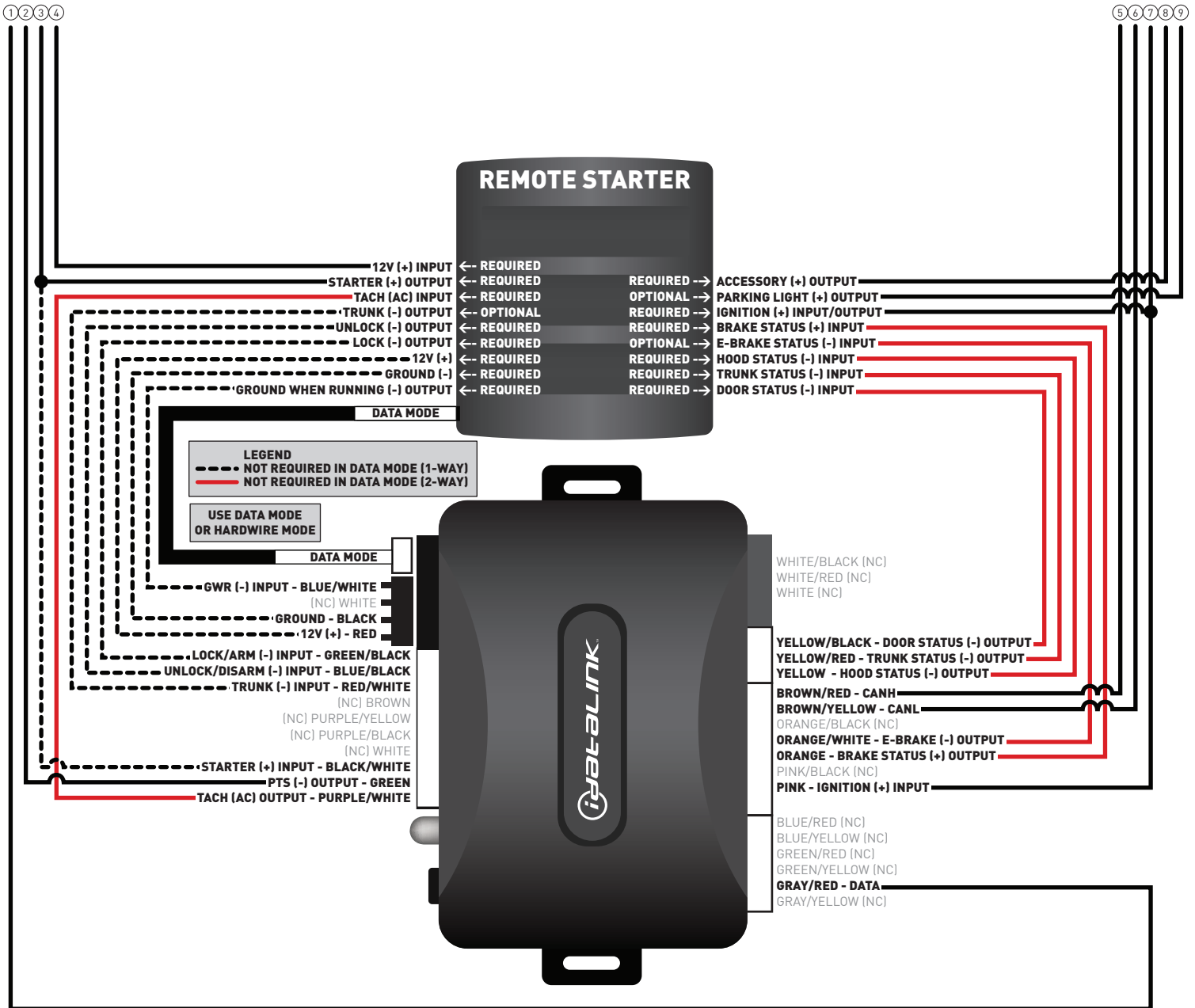
TYPE 28 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Equus PTS AT	14-15	12V	I/P-LHA	White	04 pin	02	Red	(+)	Fusebox, driver side (front)	A
			Accessory	EM21	White	31 pin	18	Yellow	(+)	Passenger kick panel	B
			Starter	EM31	White	31 pin	31	Yellow	(+)	Driver kick panel	C
			Ignition	I/P-LHE	White	16 pin	04	Grey	(+)	Fusebox, driver side (front)	A
			CanH	EM31	White	31 pin	07	Brown	(DATA)	Driver kick panel	C
			CanL	EM31	White	31 pin	06	White	(DATA)	Driver kick panel	C
			Parking Light L	EF21	Black	21 pin	02	Brown	(+)	Passenger kick panel	B
			Parking Light R	EF21	Black	21 pin	01	Orange/Black	(+)	Passenger kick panel	B
			Data	M30-A	Black	26 pin	24	Pink	(DATA)	Smart key module, above driver kick panel	C
			PTS 1	M30-A	Black	26 pin	25	Orange/Black	(-)	Smart key module, above driver kick panel	C
			PTS 2	M30-A	Black	26 pin	08	White	(-)	Smart key module, above driver kick panel	C

TYPE 28 - WIRING DIAGRAM - 1 OF 2



TYPE 28 - WIRING DIAGRAM - 2 OF 2

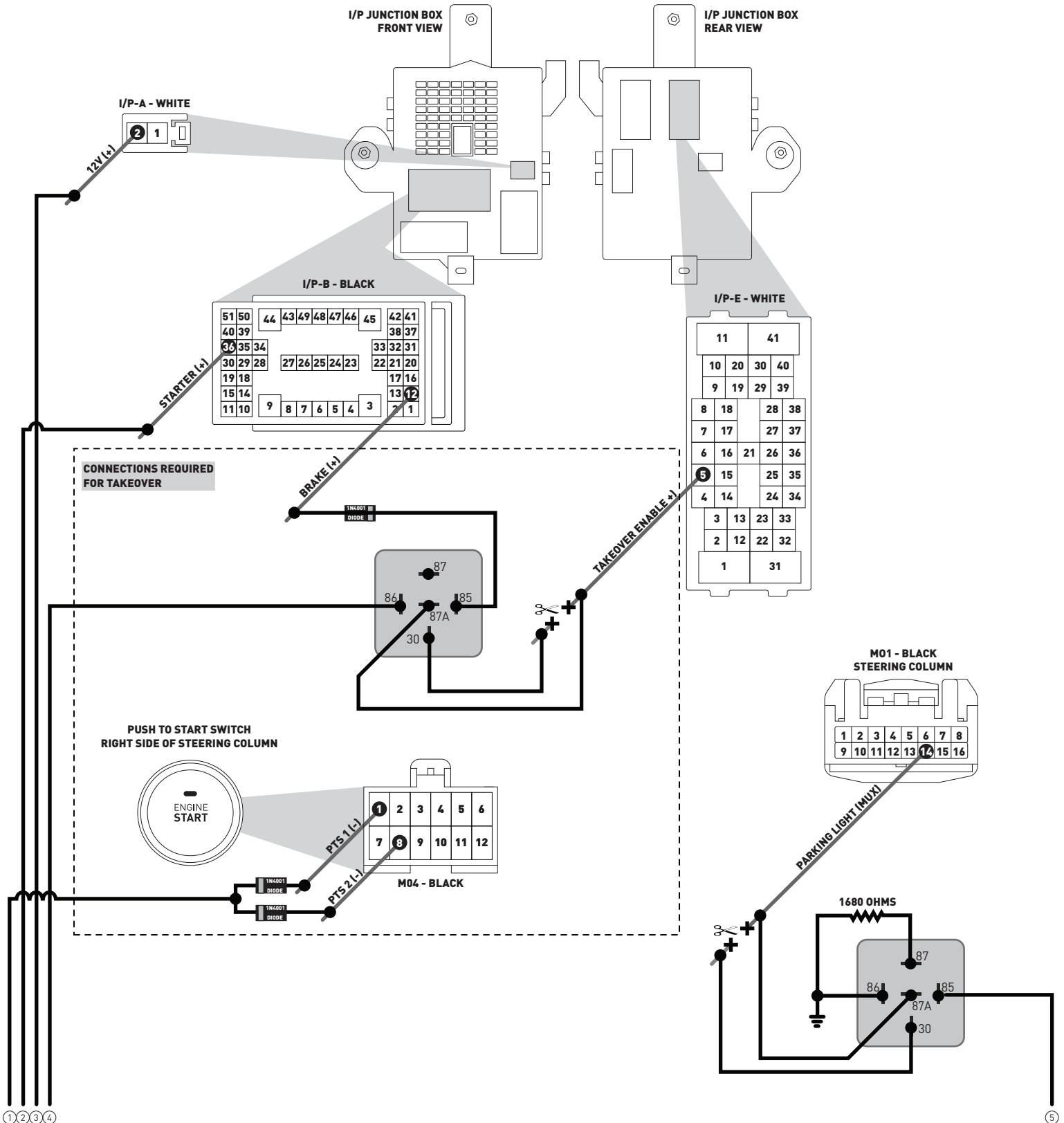


TYPE 29 - WIRE CROSS REFERENCE CHART

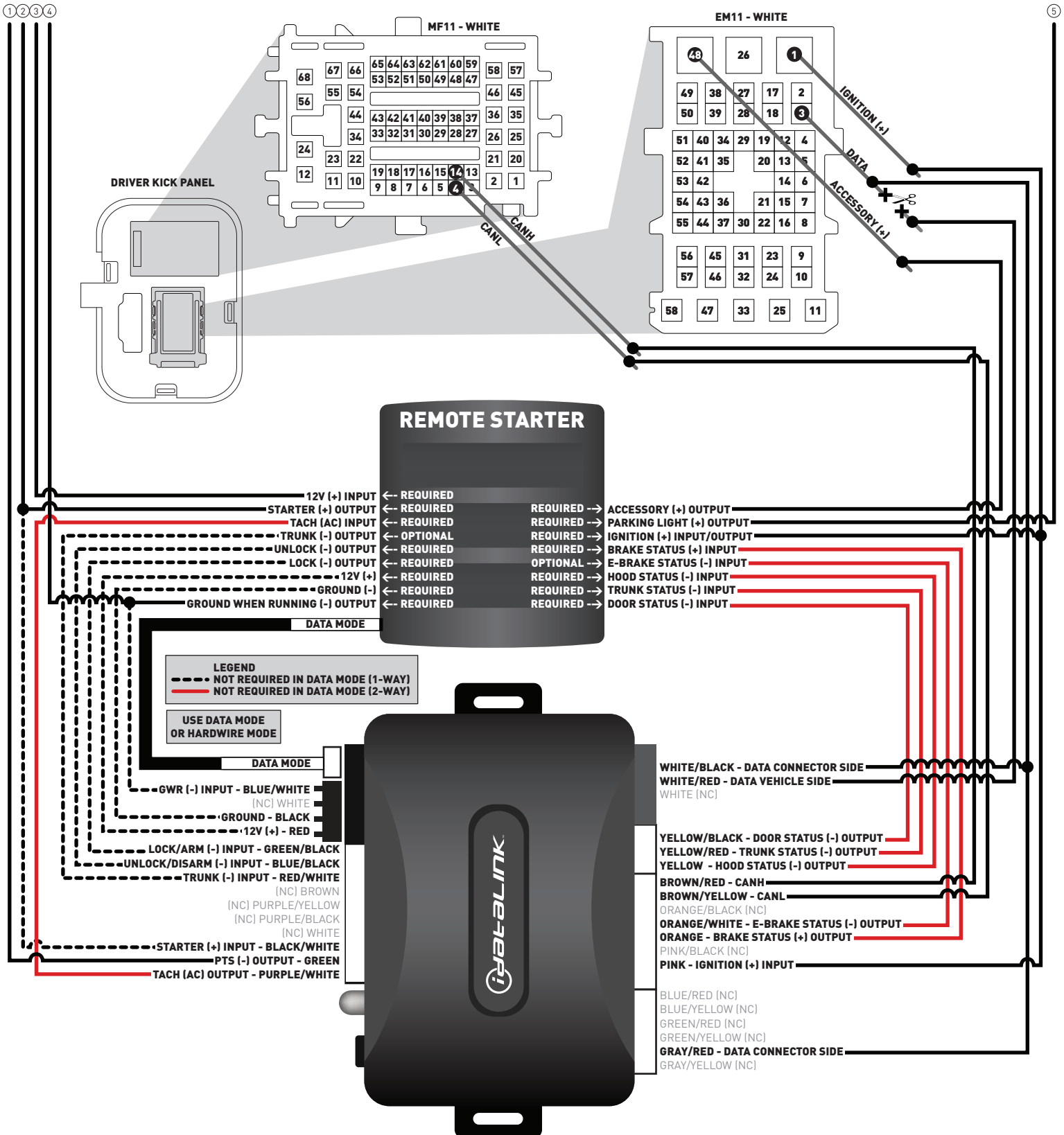
MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
KIA	Sorento PTS AT	16-17	12V	I/P-A	Black	2 pin	02	Red	(+)	I/P junction box, front view	A
			Starter	I/P-B	Black	51 pin	36	Pink	(+)	I/P junction box, front view	A
			Brake*	I/P-B	Black	51 pin	12	Green/Orange	(+)	I/P junction box, front view	A
			Takeover Enable*	I/P-E	White	41 pin	05	Gray/Orange	(+)	I/P junction box, rear view	A
			Accessory	EM11	White	58 pin	48	Blue	(+)	Driver kick panel	C
			Ignition	EM11	White	58 pin	01	Yellow	(+)	Driver kick panel	C
			Immobilizer Data	EM11	White	58 pin	03	White/Orange	[DATA]	Driver kick panel	C
			CanH	MF11	White	68 pin	14	Red	[DATA]	Driver kick panel	C
			CanL	MF11	White	68 pin	04	Blue	[DATA]	Driver kick panel	C
			PTS 1*	M04	Black	12 pin	01	Yellow/Orange	(-)	PTS Button	D
			PTS 2*	M04	Black	12 pin	08	Orange/Black	(-)	PTS Button	D
Parking Light	M01	Black	16 pin	14	Blue	(MUX)	Steering Column	F			

*Connection required for takeover.

TYPE 29 - WIRING DIAGRAM - 1 OF 2



TYPE 29 - WIRING DIAGRAM - 2 OF 2

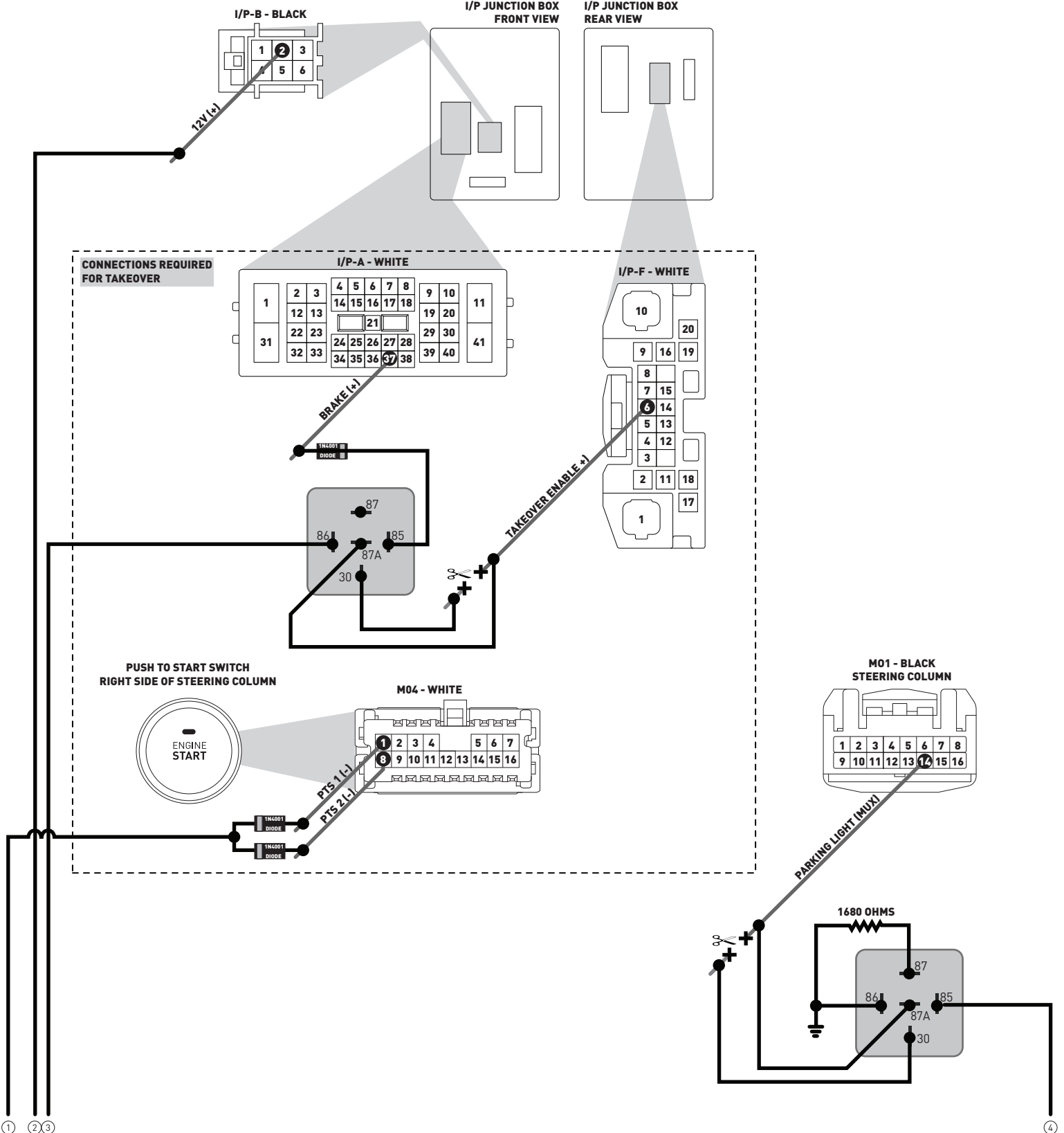


TYPE 30 - WIRE CROSS REFERENCE CHART

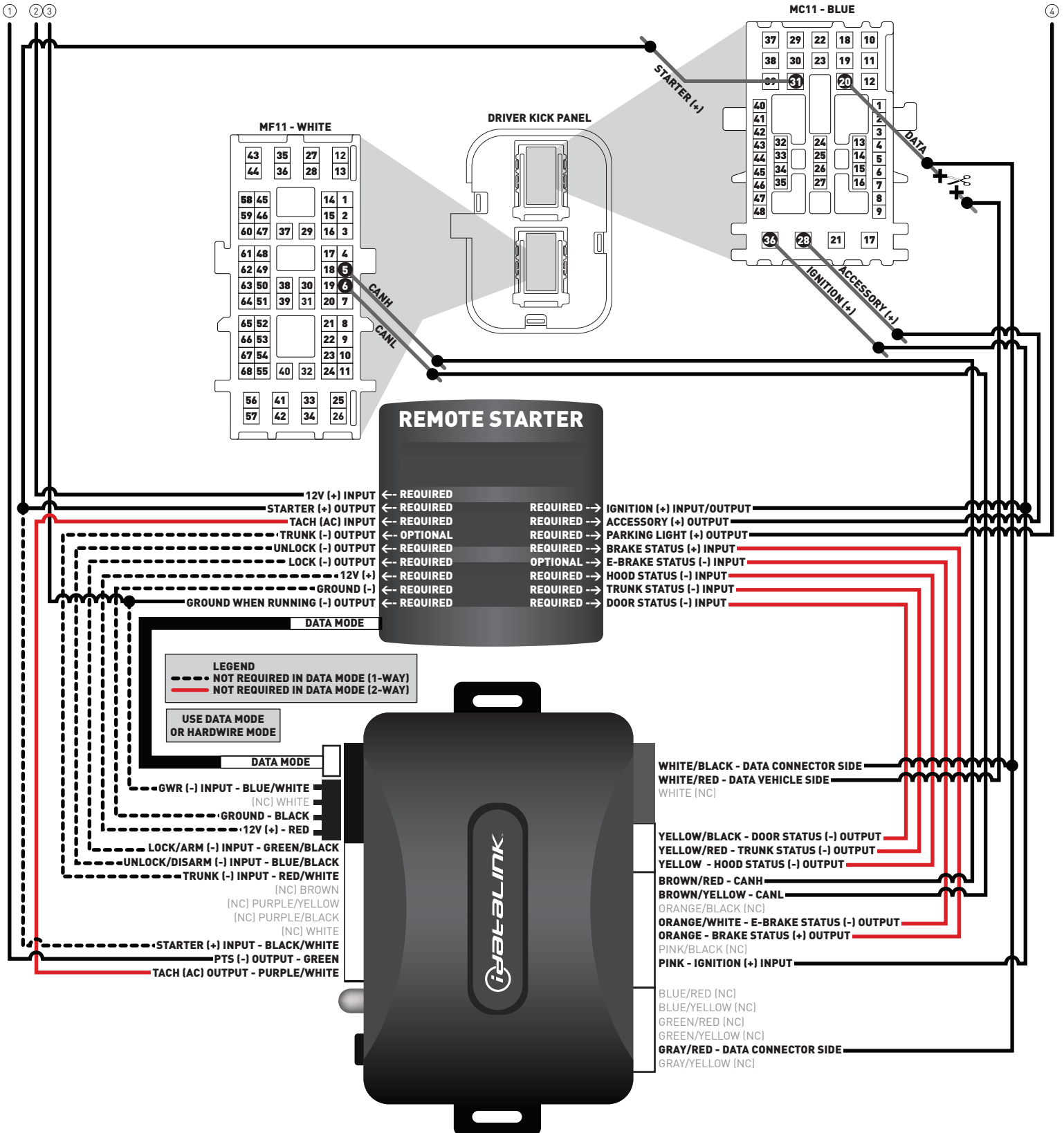
MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Tucson PTS AT	16	12V	I/P-B	Black	6 pin	02	Red	(+)	I/P junction box, front view	A
			Starter	MC11	Blue	48 pin	31	Red/Black	(+)	Driver kick panel	C
			Brake*	I/P-A	White	41 pin	12	Green/Black	(+)	I/P junction box, front view	A
			Takeover Enable*	I/P-F	White	18 pin	06	Green	(+)	I/P junction box, rear view	A
			Accessory	MC11	Blue	48 pin	28	Green	(+)	Driver kick panel	C
			Ignition	MC11	Blue	48 pin	36	Blue	(+)	Driver kick panel	C
			Immobilizer Data	MC11	Blue	48 pin	20	Blue or Blue/Black	[DATA]	Driver kick panel	C
			CanH	MF11	White	68 pin	05	Green/Black	[DATA]	Driver kick panel	C
			CanL	MF11	White	68 pin	06	Blue/Black	[DATA]	Driver kick panel	C
			PTS 1*	M04	White	16 pin	01	White	(-)	PTS Button	D
			PTS 2*	M04	White	16 pin	08	Blue	(-)	PTS Button	D
Parking Light	M01	Black	16 pin	14	Yellow	(MUX)	Steering Column	F			

*Connection required for takeover.

TYPE 30 - WIRING DIAGRAM - 1 OF 2



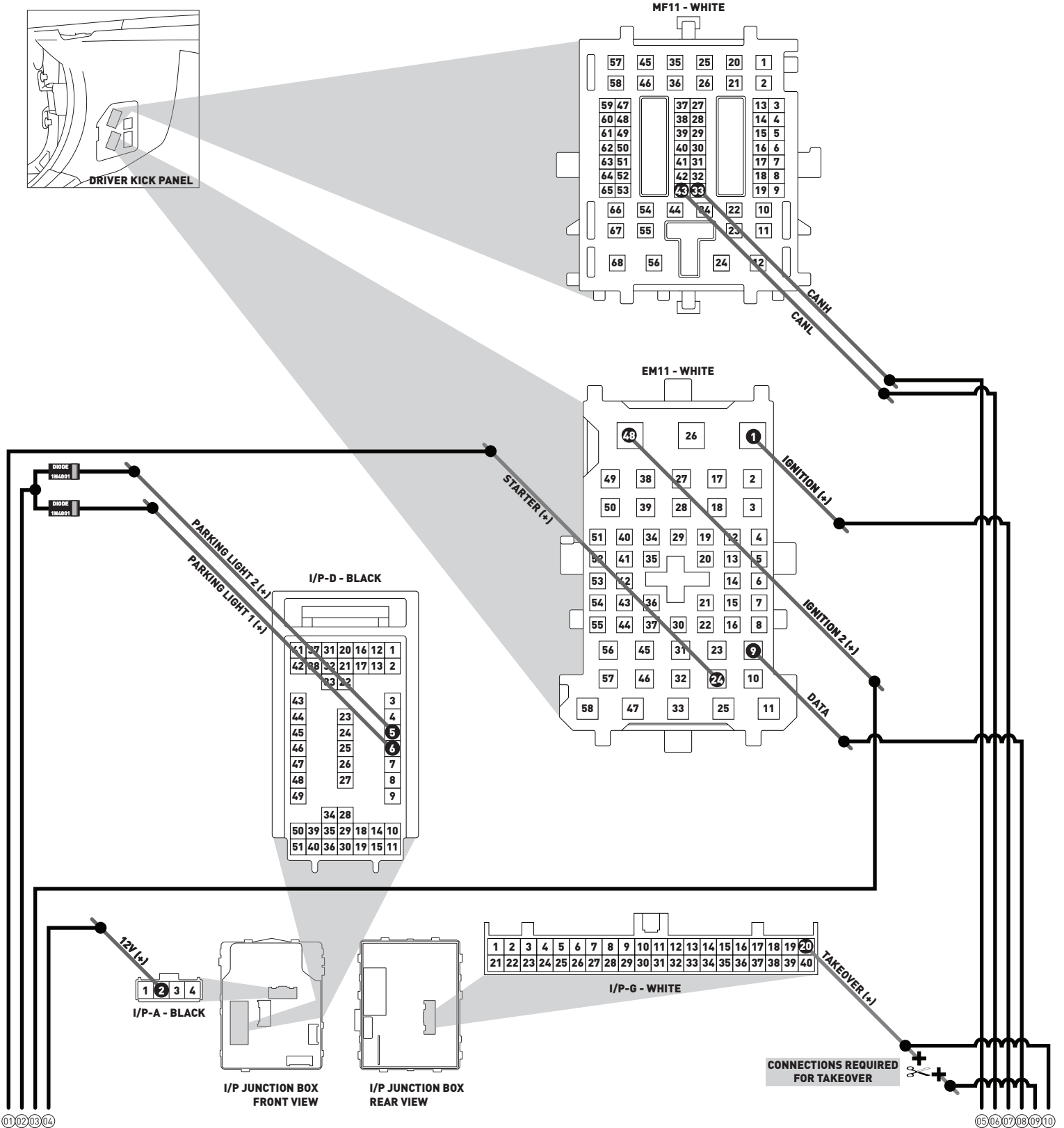
TYPE 30 - WIRING DIAGRAM - 2 OF 2



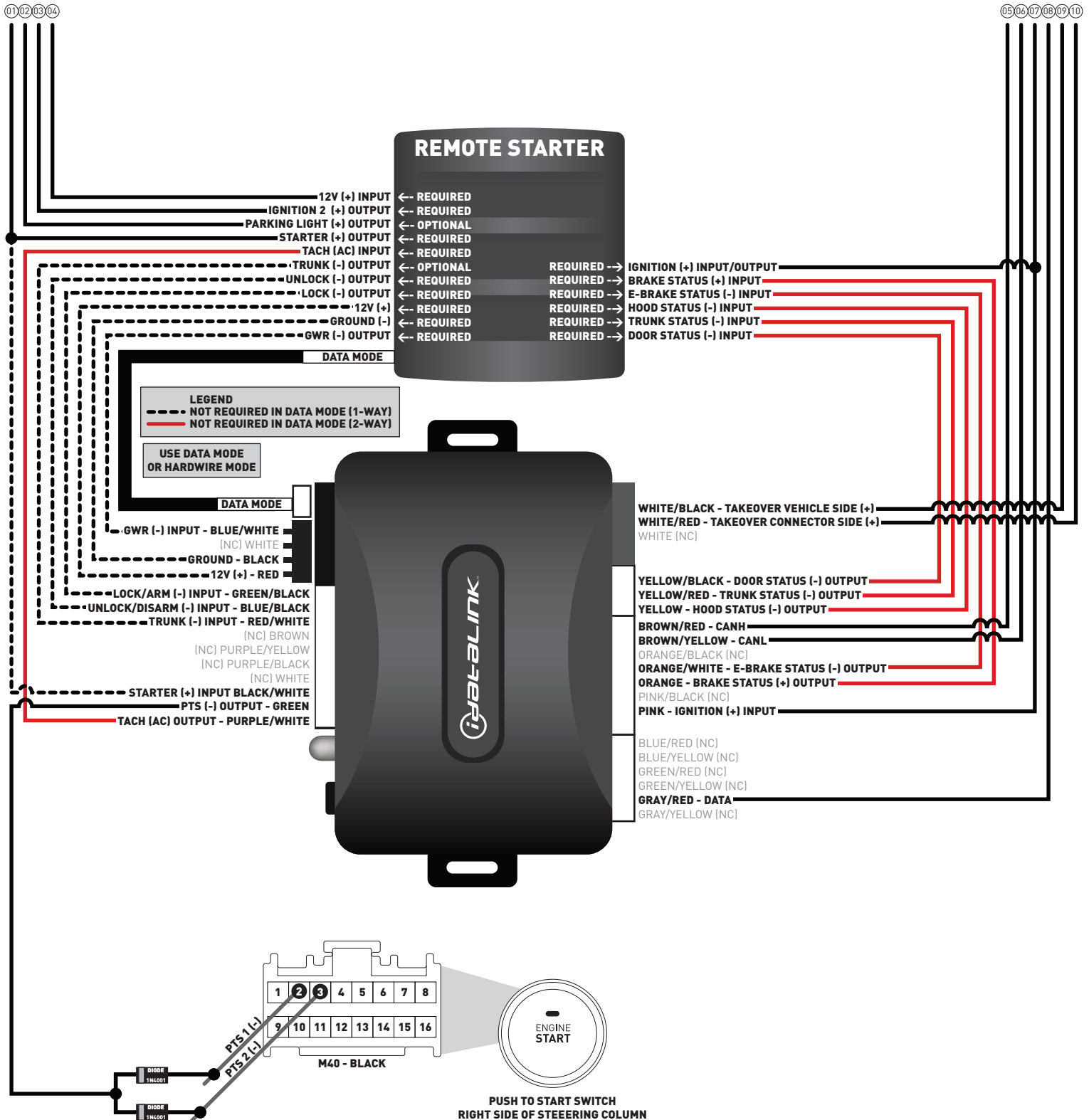
TYPE 31 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Sonata Hybrid PTS AT	16	12V	IP/A	Black	04 pin	02	Red	(+)	Junction box, front view	A
			Ignition	EM11	White	58 pin	01	Pink	(+)	Driver kick panel	C
			Ignition 2	EM11	White	58 pin	48	White	(+)	Driver kick panel	C
			Starter	EM11	White	58 pin	24	Gray	(+)	Driver kick panel	C
			CanH	MF11	White	68 pin	33	Red	(DATA)	Driver kick panel	C
			CanL	MF11	White	68 pin	43	Blue	(DATA)	Driver kick panel	C
			Data	EM11	White	58 pin	09	White	(DATA)	Driver kick panel	C
			Parking Light 1	I/P-D	Black	51 pin	06	Green/Black	(+)	Junction box, front view	A
			Parking Light 2	I/P-D	Black	51 pin	05	Brown/Black	(+)	Junction box, front view	A
			PTS 1	M40	Black	16 pin	02	Yellow	(-)	Push button	D
			PTS 2	M40	Black	16 pin	03	Gray	(-)	Push button	D
			Takeover	I/P-G	White	40 pin	20	Brown	(+)	Junction box, rear view	A

TYPE 31 - WIRING DIAGRAM - 1 OF 2



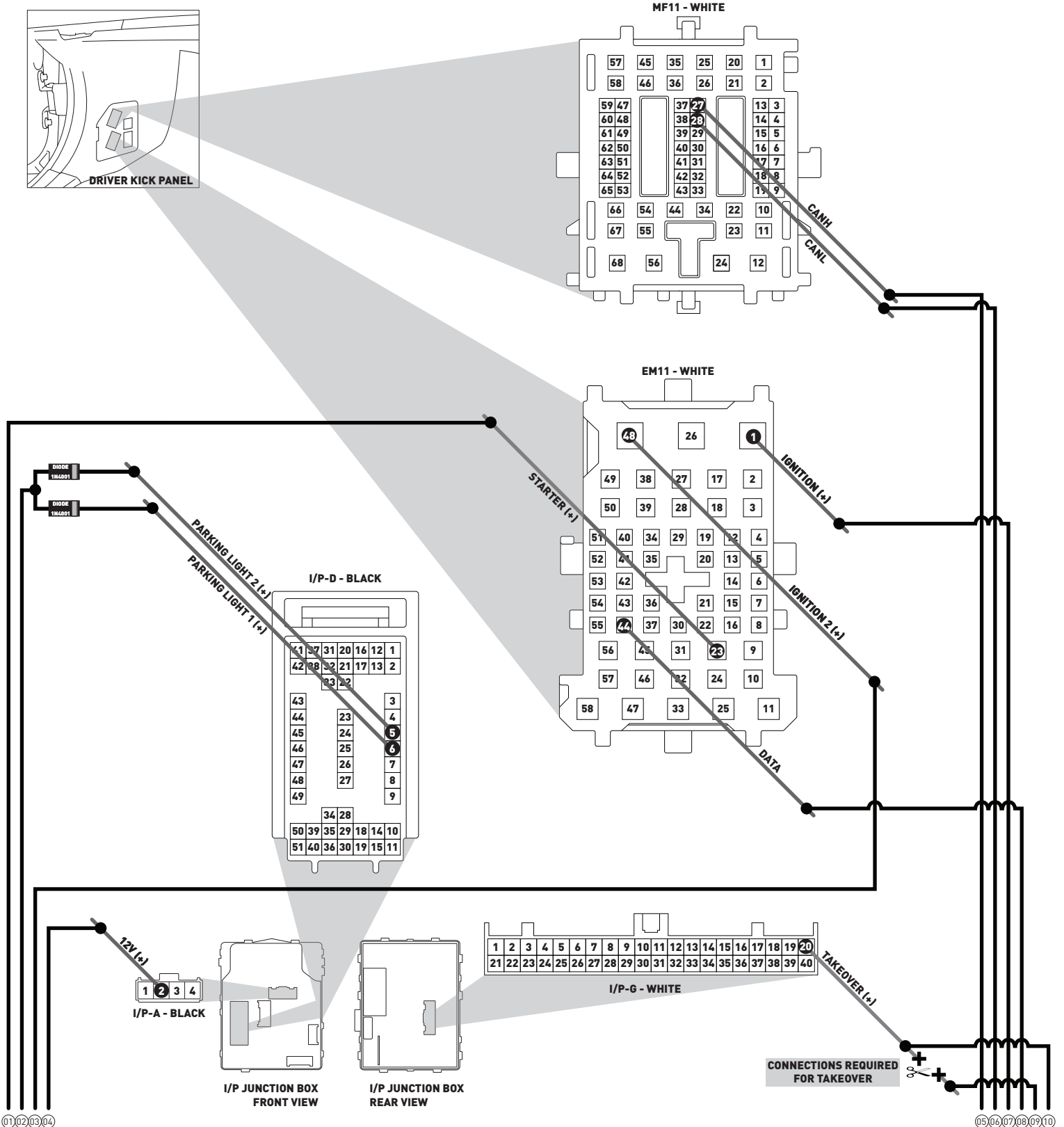
TYPE 31 - WIRING DIAGRAM - 2 OF 2



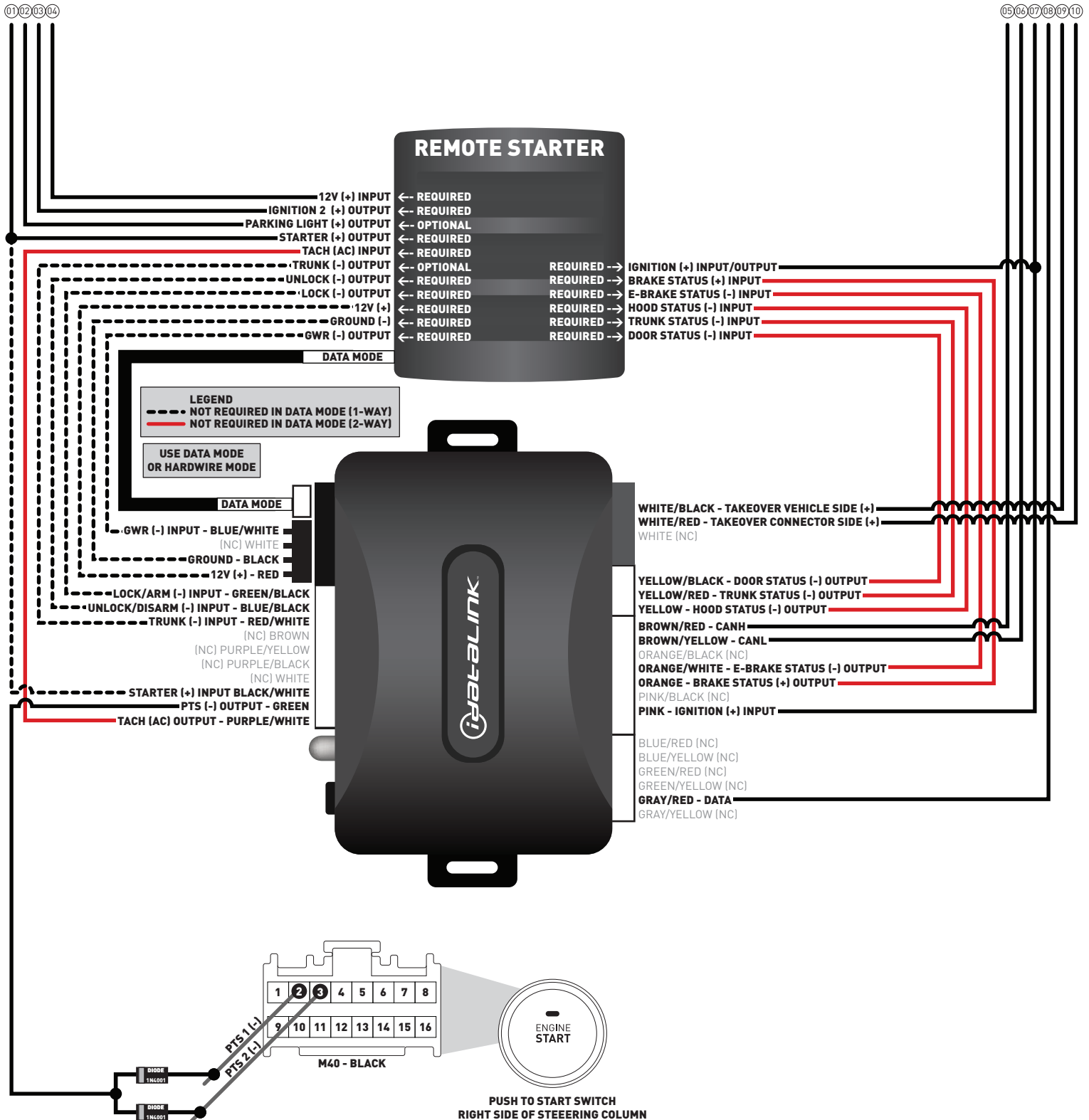
TYPE 32 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Sonata PTS AT	16	12V	IP/A	Black	04 pin	02	Black	(+)	Junction box, front view	A
			Ignition	EM11	White	58 pin	01	Pink	(+)	Driver kick panel	C
			Ignition 2	EM11	White	58 pin	48	White	(+)	Driver kick panel	C
			Starter	EM11	White	58 pin	23	Yellow	(+)	Driver kick panel	C
			CanH	MF11	White	68 pin	27	Yellow	(DATA)	Driver kick panel	C
			CanL	MF11	White	68 pin	28	Black	(DATA)	Driver kick panel	C
			Data	EM11	White	58 pin	44	Blue/Orange	(DATA)	Driver kick panel	C
			Parking Light 1	I/P-D	Black	51 pin	06	Green/Black	(+)	Junction box, front view	A
			Parking Light 2	I/P-D	Black	51 pin	05	Brown/Black	(+)	Junction box, front view	A
			PTS 1	M40	Black	16 pin	02	Yellow/Black	(-)	Push button	D
			PTS 2	M40	Black	16 pin	03	Yellow/Orange	(-)	Push button	D
			Takeover	I/P-G	White	40 pin	20	Pink/Orange or White/Orange	(+)	Junction box, rear view	A

TYPE 32 - WIRING DIAGRAM - 1 OF 2



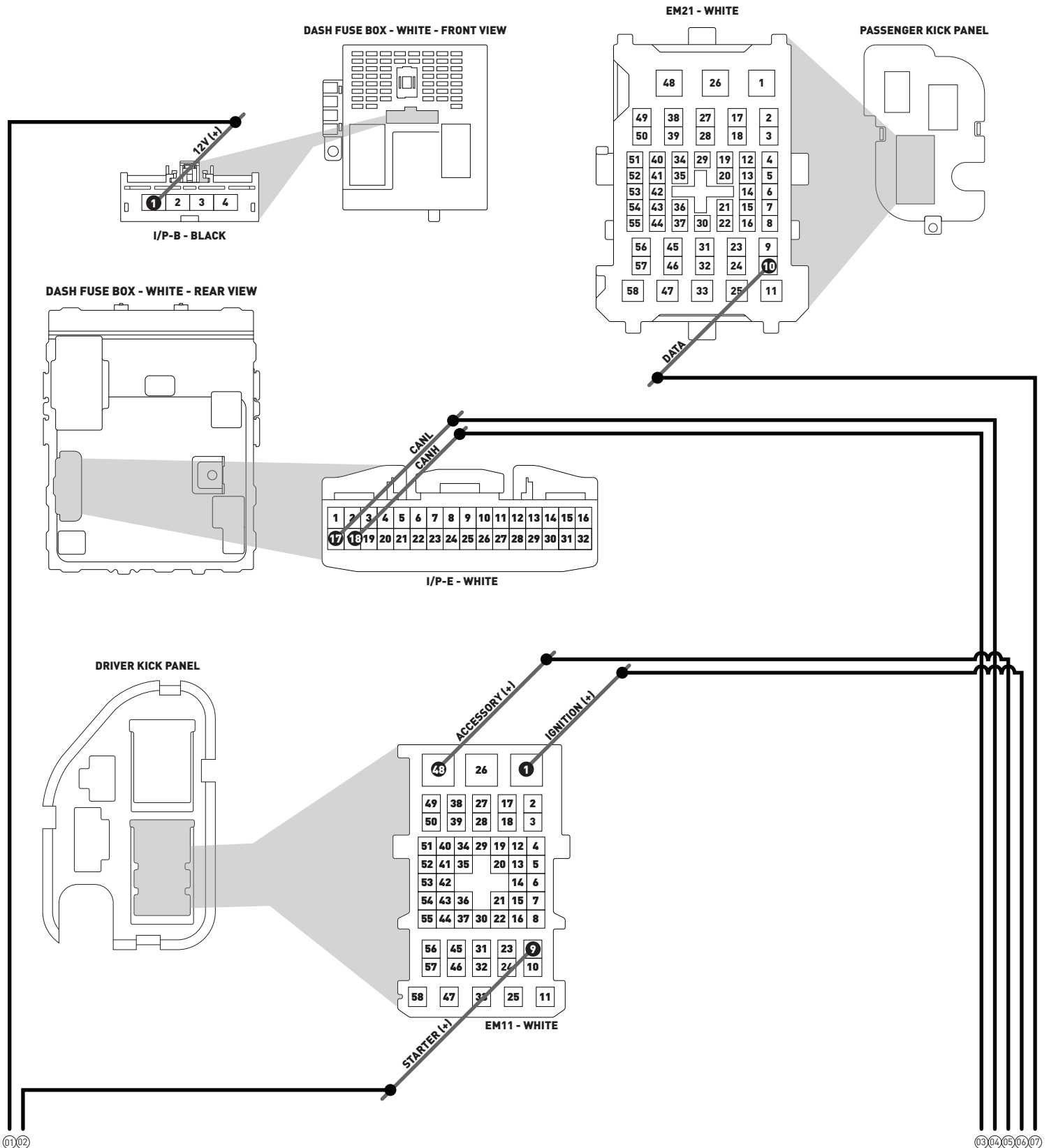
TYPE 32 - WIRING DIAGRAM - 2 OF 2



TYPE 33 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
KIA	Optima PTS AT	16	12V	I/P-B	Black	04 pin	01	Red	(+)	Dash fuse box, front view	A
			Starter	EM11	White	58 pin	09	Gray	(+)	Driver kick panel	C
			Accessory	EM11	White	58 pin	48	White	(+)	Driver kick panel	C
			Ignition	EM11	White	58 pin	01	Pink	(+)	Driver kick panel	C
			CanH	I/P-E	White	32 pin	18	yellow	[DATA]	Back of dash fuse box	A
			CanL	I/P-E	White	32 pin	17	Black	[DATA]	Back of dash fuse box	A
			Parking Light	M01	Black	16 pin	14	Gray	[MUX]	Headlight switch	~
			Data	EM21	White	58 pin	10	White	[DATA]	Passenger kick panel	B
			PTS 1	M04	White	16 pin	01	Yellow/Black	(-)	PTS button	D
			PTS 2	M04	White	16 pin	07	Yellow/Orange	(-)	PTS button	D

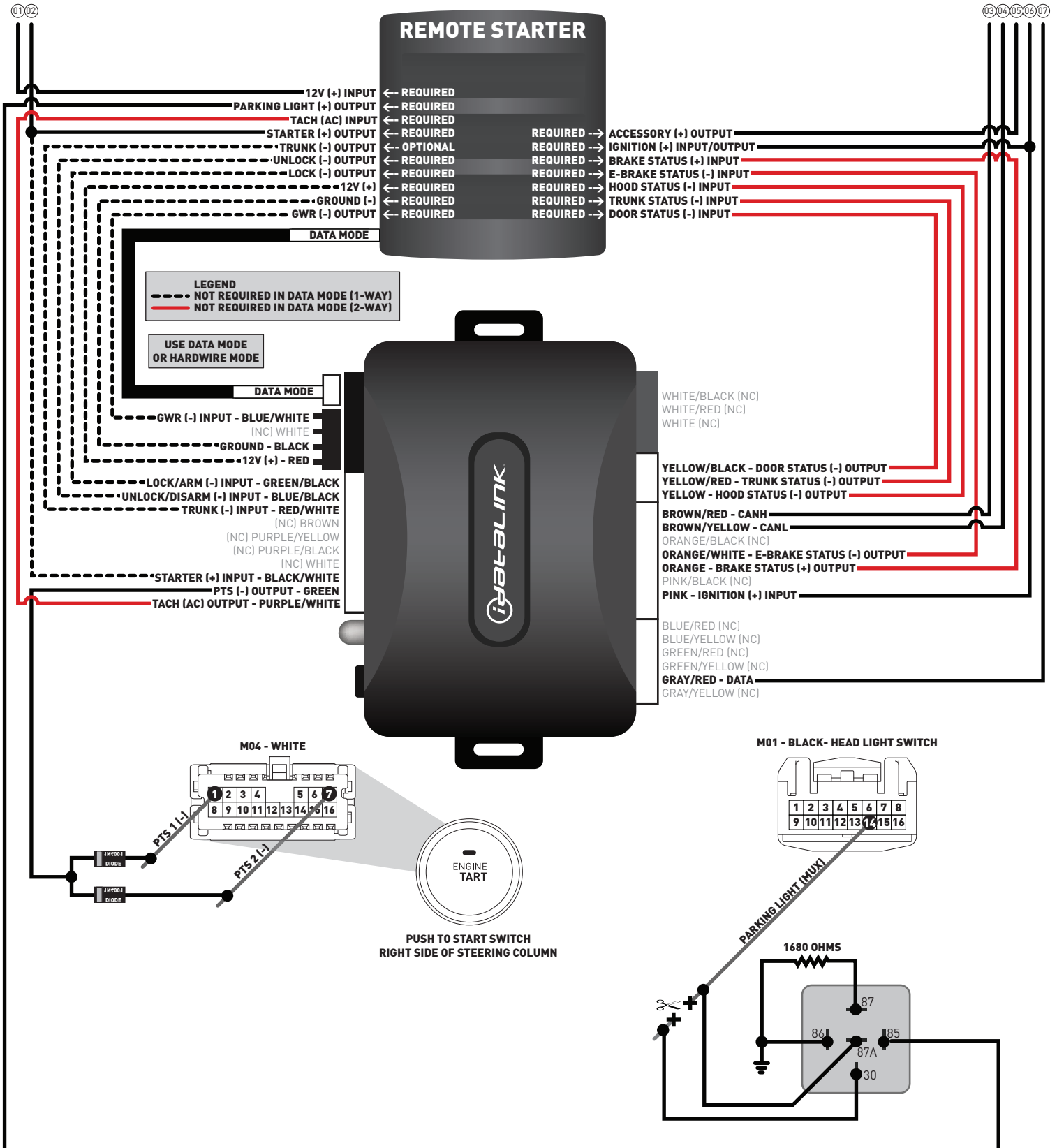
TYPE 33 - WIRING DIAGRAM - 1 OF 2



01 02

03 04 05 06 07

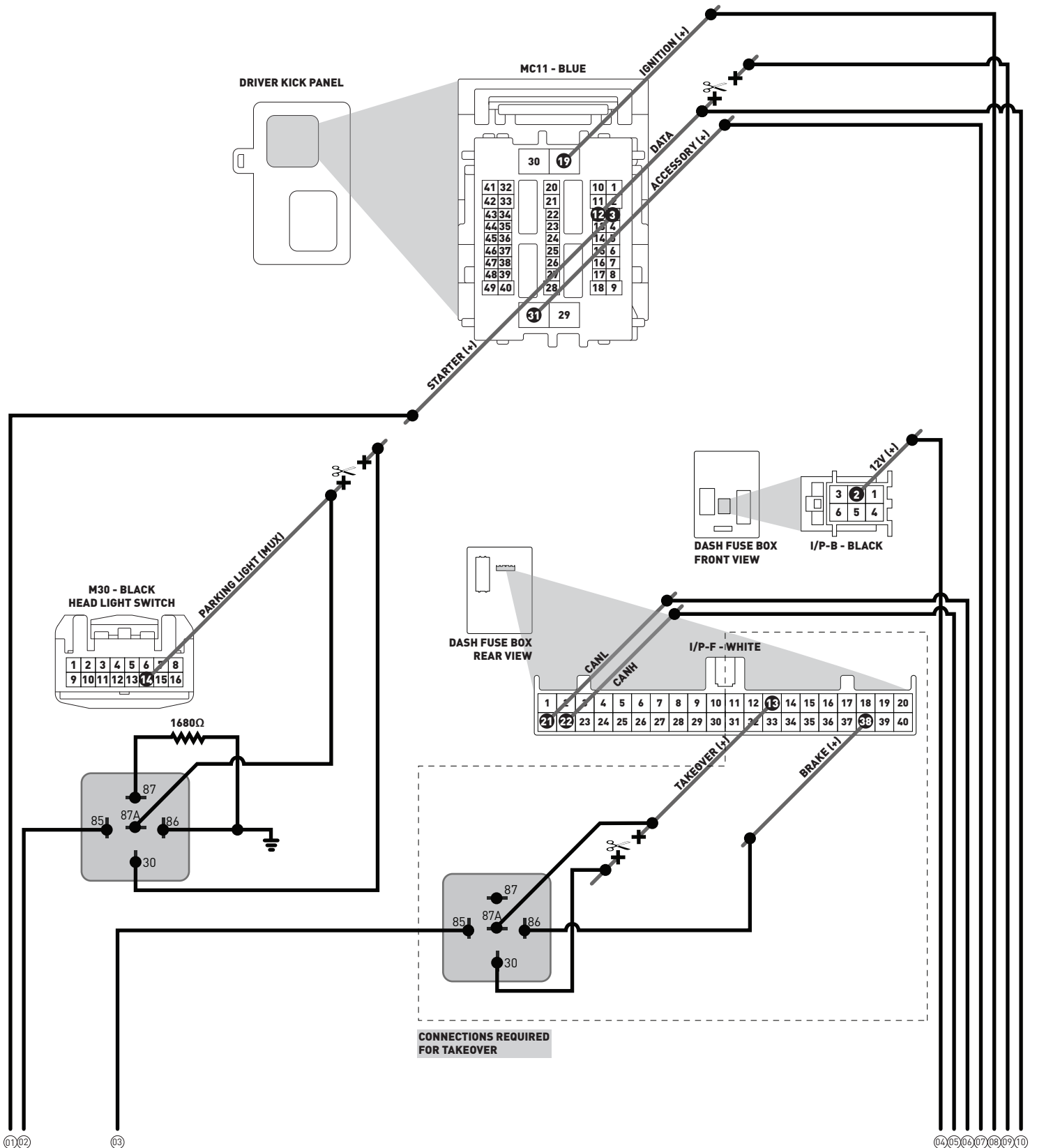
TYPE 33 - WIRING DIAGRAM - 2 OF 2



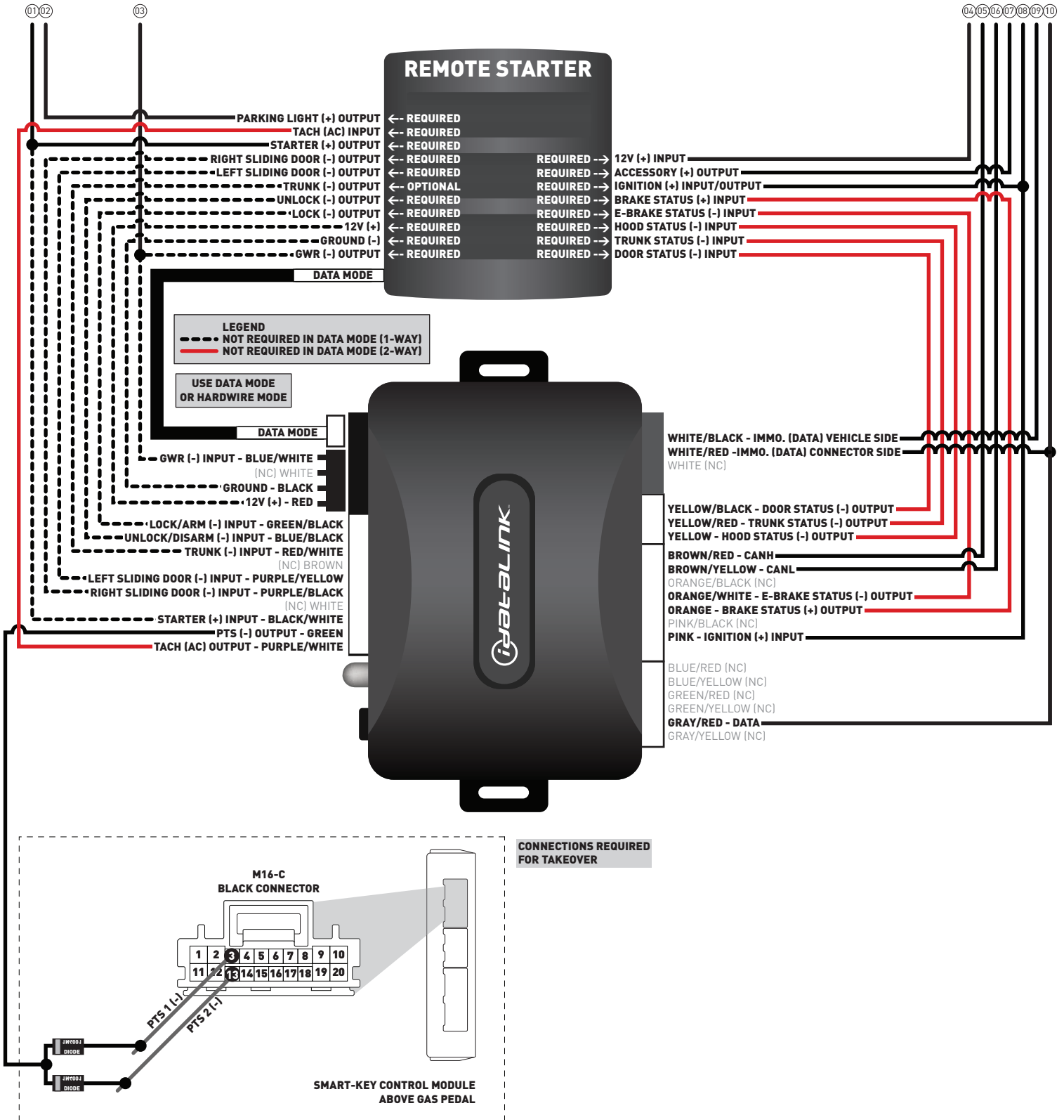
TYPE 34 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
KIA	Sportage PTS AT	17	12V	I/P-B	Black	06 pin	02	Green	(+)	Dash fuse box, front view	A
			Accessory	MC11	Blue	49 pin	31	Pink	(+)	Driver kick panel	C
			Starter	MC11	Blue	49 pin	03	Yellow/Orange	(+)	Driver kick panel	C
			Ignition	MC11	Blue	49 pin	19	Blue	(+)	Driver kick panel	C
			CanH	I/P-F	White	40 pin	22	Blue	[DATA]	Dash fuse box, rear view	A
			CanL	I/P-F	White	40 pin	21	White	[DATA]	Dash fuse box, rear view	A
			Parking Light	M01	Black	16 pin	14	Yellow	[MUX]	Head light switch	~
			Data	MC11	Blue	49 pin	12	White/Orange or Blue	[DATA]	Driver kick panel	C
			PTS 1	M16-C	Black	20 pin	03	White	(-)	Smart key module, above gas pedal	G
			PTS 2	M16-C	Black	20 pin	13	Green/Black	(-)	Smart key module, above gas pedal	G
			Takeover	I/P-F	White	40 pin	13	Yellow	(+)	Dash fuse box, rear view	A
			Brake	I/P-F	White	40 pin	38	Pink	(+)	Dash fuse box, rear view	A

TYPE 34 - WIRING DIAGRAM - 1 OF 2



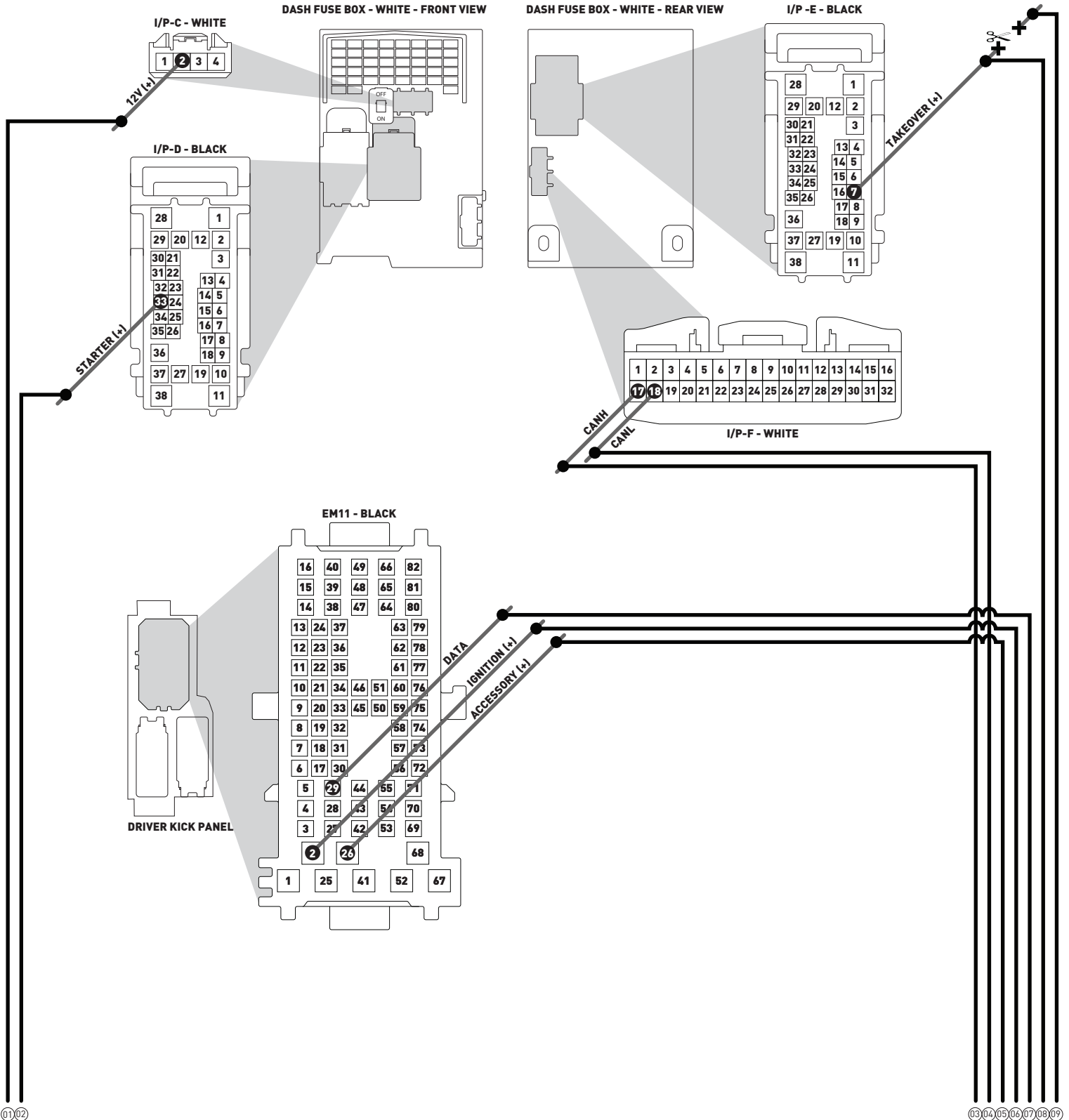
TYPE 34 - WIRING DIAGRAM - 2 OF 2



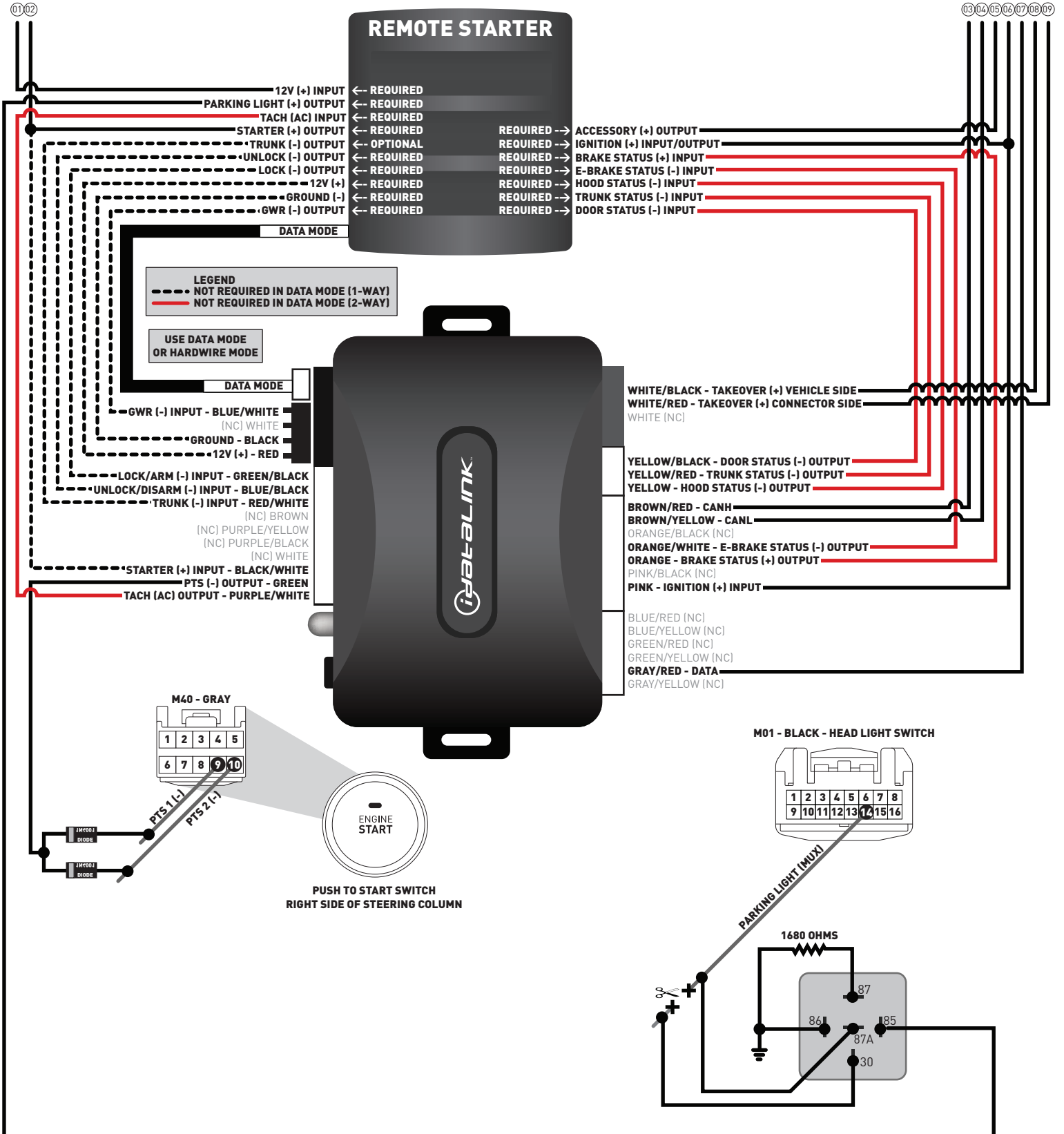
TYPE 35 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Elantra PTS AT	17	12V	I/P-C	White	4 pin	02	Red	(+)	Dash fuse box, front view	A
			Starter	I/P-D	Black	38 pin	33	Orange	(+)	Dash fuse box, front view	A
			Takeover	I/P-E	Black	38 pin	07	Brown	(+)	Dash fuse box, rear view	A
			Accessory	EM11	Black	82 pin	26	Green	(+)	Driver kick panel	C
			Ignition	EM11	Black	82 pin	02	Pink	(+)	Driver kick panel	C
			Data	EM11	Black	82 pin	29	Brown/Orange	[DATA]	Driver kick panel	C
			CanH	I/P-F	White	32 pin	17	White	[DATA]	Dash fuse box, rear view	A
			CanL	I/P-F	White	32 pin	18	Brown	[DATA]	Dash fuse box, rear view	A
			PTS 1	M40	Gray	10 pin	09	Yellow/Black	(-)	PTS Button	D
			PTS 2	M40	Gray	10 pin	10	Yellow/Orange	(-)	PTS Button	D
			Parking Light	M01	Black	16 pin	14	Blue	(MUX)	Headlight switch	~

TYPE 35 - WIRING DIAGRAM - 1 OF 2



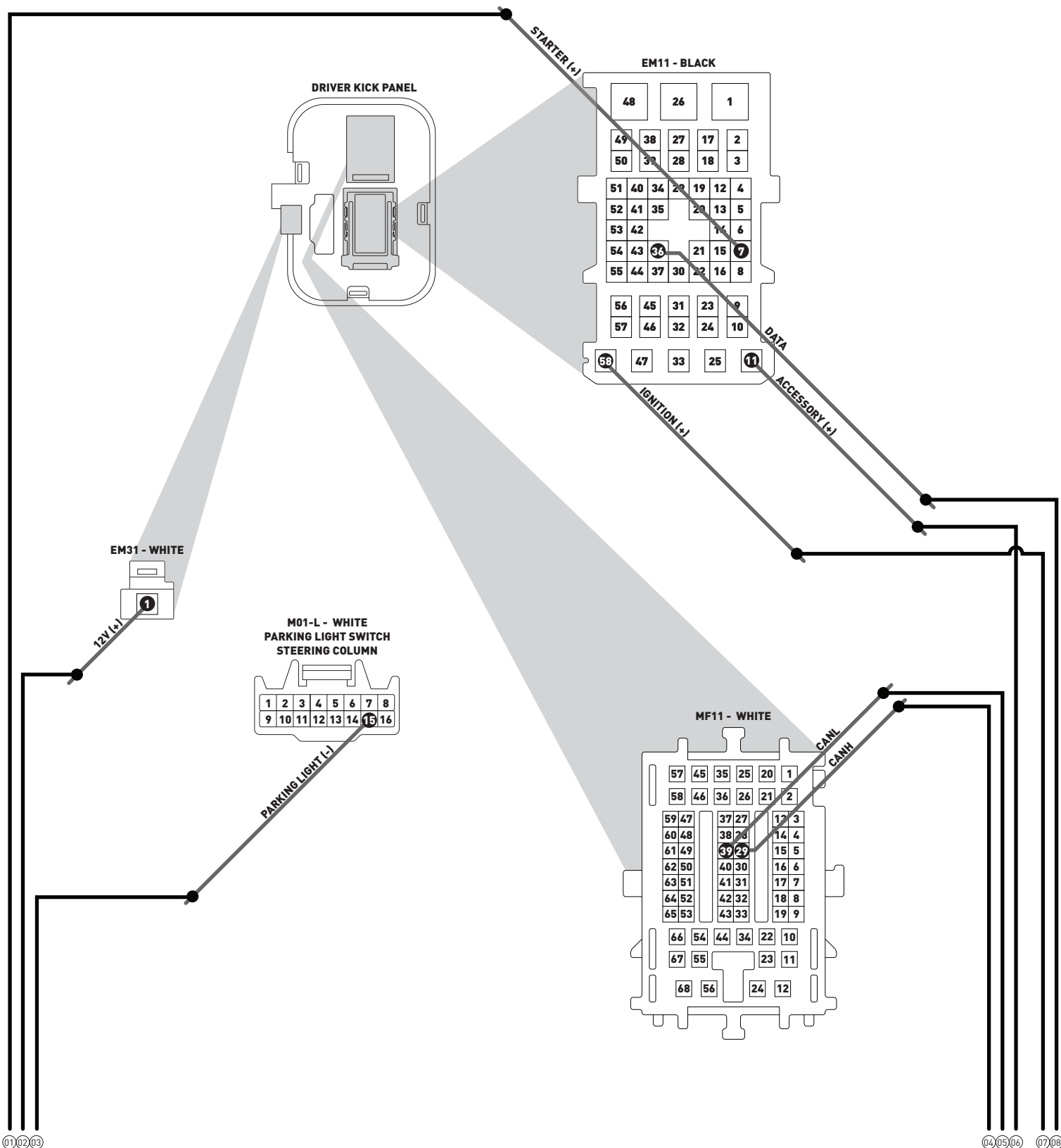
TYPE 35 - WIRING DIAGRAM - 2 OF 2



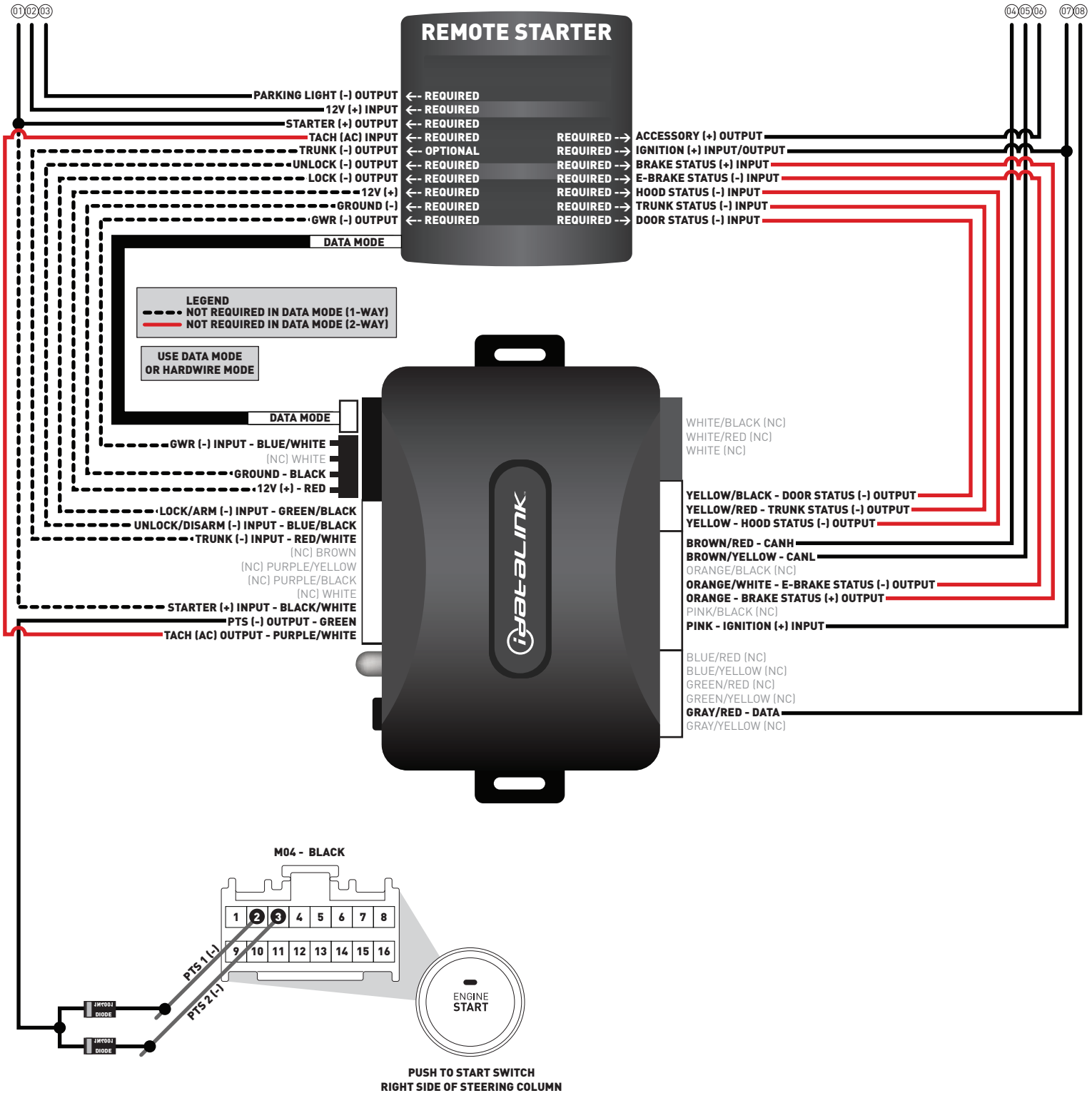
TYPE 36 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
HYUNDAI	Santa Fe PTS AT	17	12V	EM31	White	01 pin	01	Red	(+)	Driver kick panel	C
			Ignition	EM11	White	58 pin	58	Green	(+)	Driver kick panel	C
			Accessory	EM11	White	58 pin	11	Blue	(+)	Driver kick panel	C
			Starter	EM11	White	58 pin	07	Pink	(+)	Driver kick panel	C
			CanH	MF11	White	68 pin	29	Blue	(DATA)	Driver kick panel	C
			CanL	MF11	White	68 pin	39	Red	(DATA)	Driver kick panel	C
			Data	EM11	White	58 pin	36	White/Orange	(DATA)	Driver kick panel	C
			Parking Light	M01-L	White	16 pin	15	Pink	(-)	Parking light switch, steering column	F
			PTS 1	M04	Black	16 pin	02	Yellow/Orange	(-)	Push button	D
			PTS 2	M04	Black	16 pin	03	Orange/Black	(-)	Push button	D

TYPE 36 - WIRING DIAGRAM - 1 OF 2



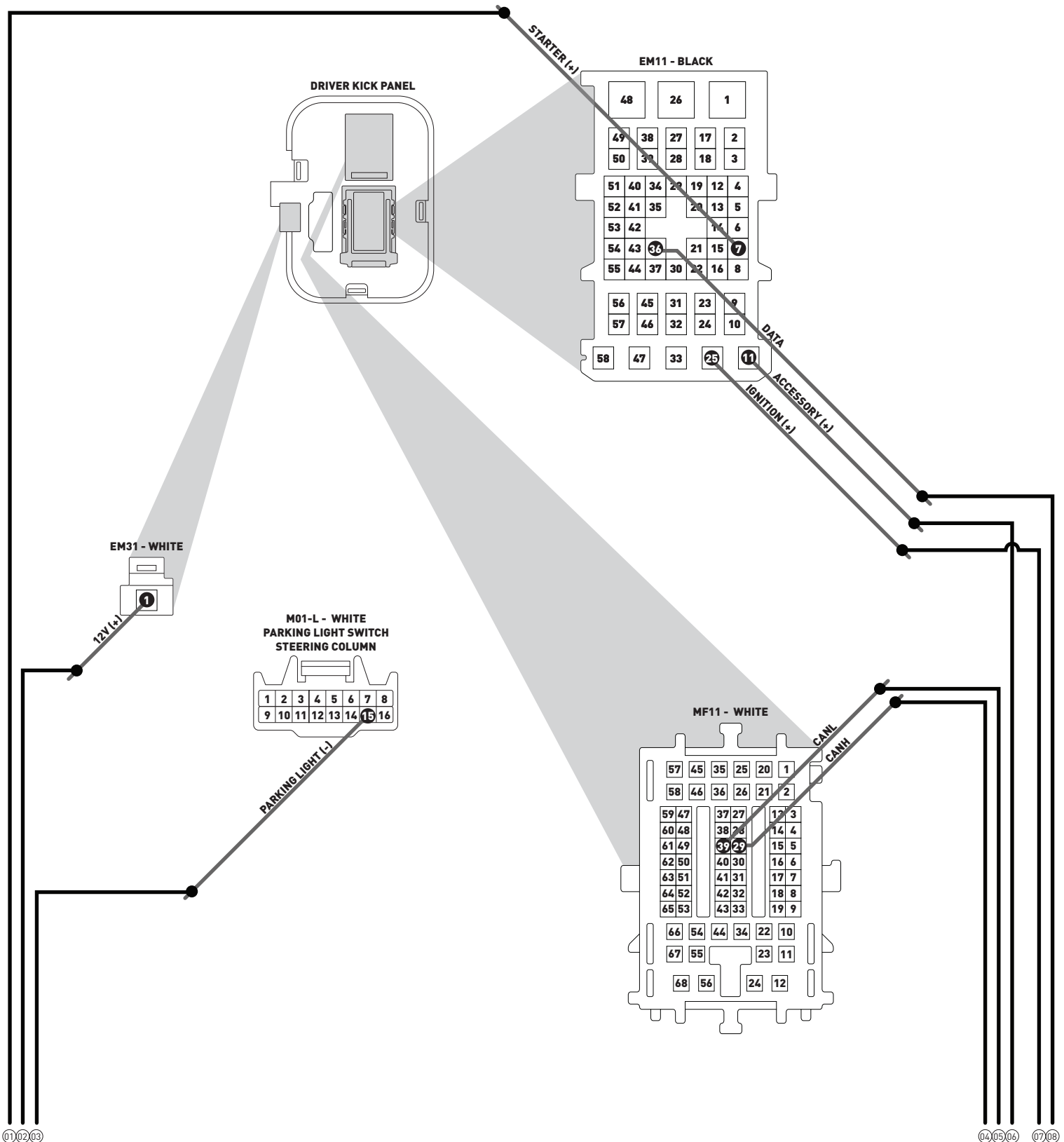
TYPE 36 - WIRING DIAGRAM - 2 OF 2



TYPE 37 - 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 Sport PTS AT	17	12V	EM31	White	01 pin	01	Red	(+)	Driver kick panel	C
			Ignition	EM11	White	58 pin	25	Green	(+)	Driver kick panel	C
			Accessory	EM11	White	58 pin	11	Blue	(+)	Driver kick panel	C
			Starter	EM11	White	58 pin	07	Pink	(+)	Driver kick panel	C
			CanH	MF11	White	68 pin	29	Blue	(DATA)	Driver kick panel	C
			CanL	MF11	White	68 pin	39	Red	(DATA)	Driver kick panel	C
			Data	EM11	White	58 pin	36	White/Orange	(DATA)	Driver kick panel	C
			Parking Light	M01-L	White	16 pin	15	Pink	(-)	Parking light switch, steering column	F
			PTS 1	M04	Black	16 pin	02	Yellow/Orange	(-)	Push button	D
			PTS 2	M04	Black	16 pin	03	Orange/Black	(-)	Push button	D

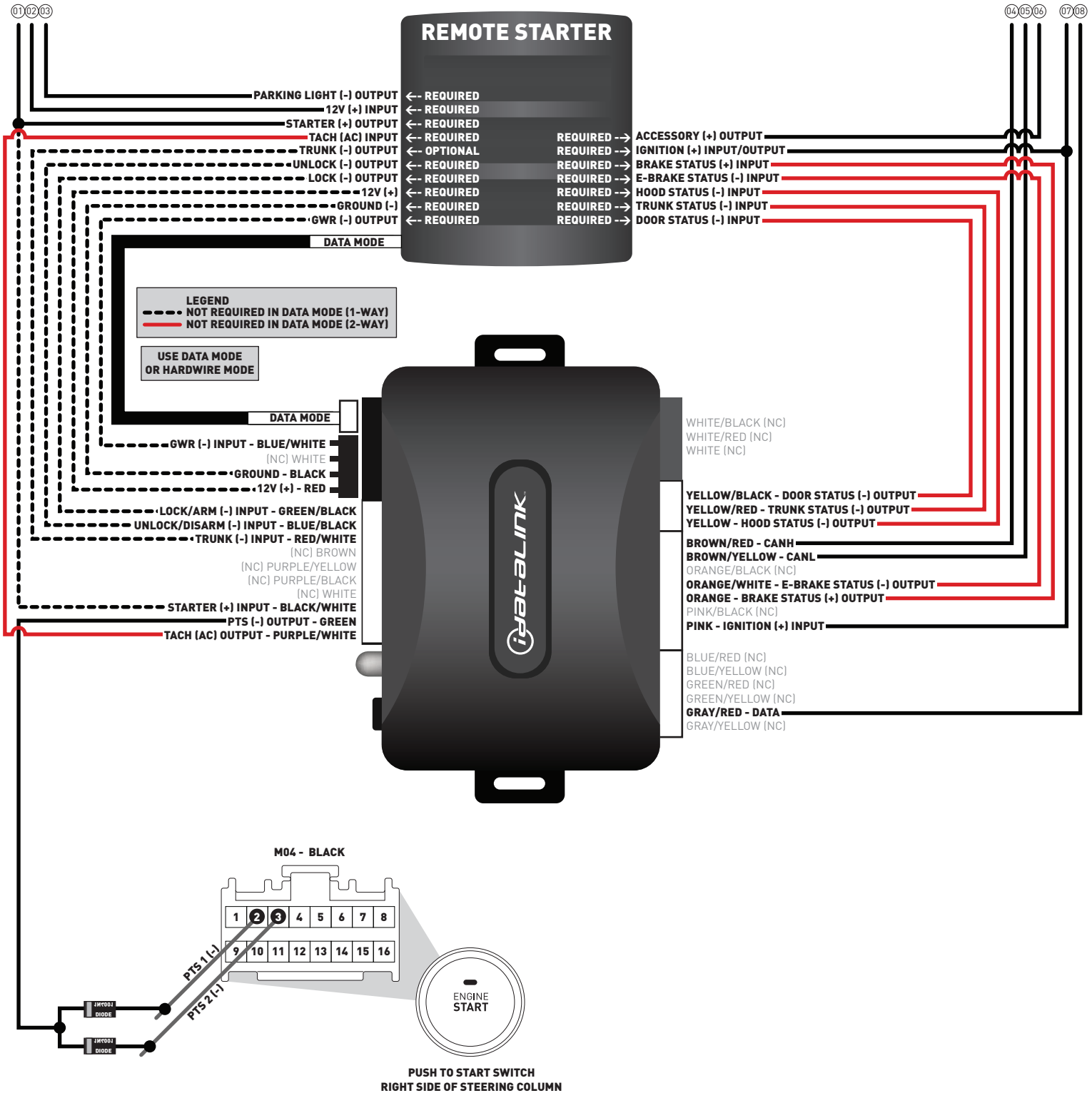
TYPE 37 - WIRING DIAGRAM - 1 OF 2



01 02 03

04 05 06 07 08

TYPE 37 - WIRING DIAGRAM - 2 OF 2

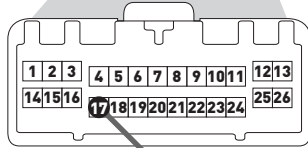
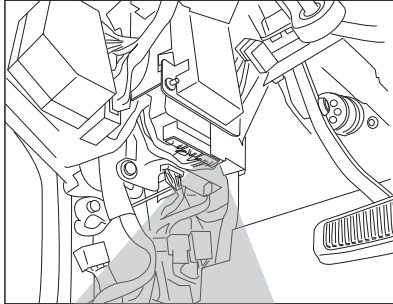


TYPE 38 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
KIA	K900 PTS AT	15-16	12V	I/P-D	Black	38 pin	29	Blue	(+)	I/P junction box rear view, driver side dash	A
			Ignition 1	I/P-D	Black	38 pin	19	Red	(+)	I/P junction box, driver side dash	A
			Ignition 2	I/P-D	Black	38 pin	01	Pink	(+)	I/P junction box rear view, driver side dash	A
			Accessory	I/P-D	Black	38 pin	28	Yellow	(+)	I/P junction box rear view, driver side dash	A
			Starter	M13-A	White	26 pin	17	Yellow	(+)	Smart Key module, above driver kick panel	A
			CanH	MF11	White	55 pin	21	Green	(DATA)	Driver kick panel	C
			CanL	MF11	White	55 pin	22	Orange	(DATA)	Driver kick panel	C
			Data	EM11	White	43 pin	26	Red/Orange	(DATA)	Driver kick panel	C
			Parking Light 1	I/P-D	Black	38 pin	31	Yellow	(+)	I/P junction box rear view, driver side dash	A
			Parking Light 2	I/P-D	Black	38 pin	33	Brown	(+)	I/P junction box rear view, driver side dash	A
			PTS 1	M17	Black	16 pin	02	Red	(-)	PTS button	D
			PTS 2	M17	Black	16 pin	03	Brown	(-)	PTS button	D

TYPE 38 - WIRING DIAGRAM - 1 OF 2

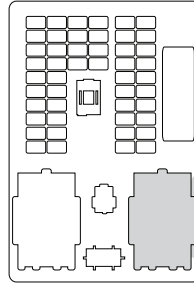
SMART KEY MODULE - ABOVE DRIVER KICK PANEL



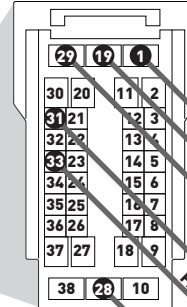
M13-A - WHITE

STARTER (+)

I/P JUNCTION BOX
DRIVER SIDE DASH



I/P-D - BLACK



IGNITION 2 (+)
IGNITION 1 (+)
12V (+)

PARKING LIGHT 1 (+)
PARKING LIGHT 2 (+)
ACCESSORY (+)

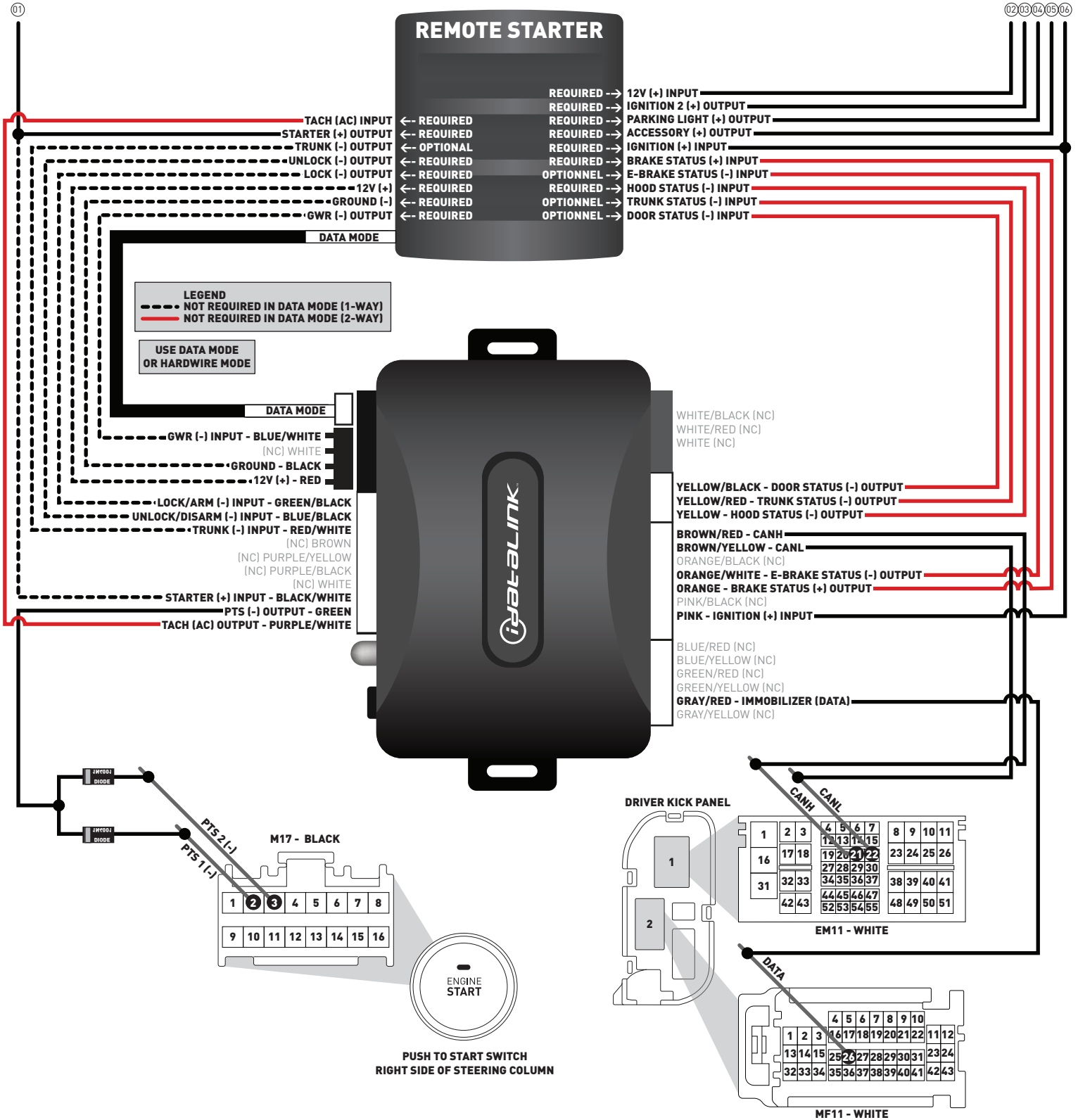
6AMP
DIODE
6AMP
DIODE



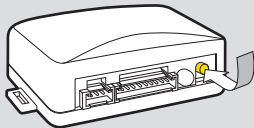
01



02 03 04 05 06

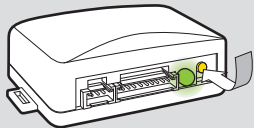
TYPE 38 - WIRING DIAGRAM - 2 OF 2



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 - PTS

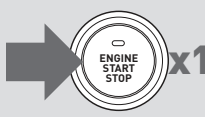
NOTE

- I **WARNING:** All vehicle doors must be closed and locked prior to remote start sequence.
- II When programming, only one key fob will be used. The other one must be located at least 10 feet away from the vehicle.



1  Push start button twice [2x] to ON position.

2  Wait, LED will turn solid GREEN for **2 seconds**.

3  Push start button once [1x] to OFF position.

4 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
B	1981	M	1991	1	2001	B	2011
C	1982	N	1992	2	2002	C	2012
D	1983	P	1993	3	2003	D	2013
E	1984	R	1994	4	2004	E	2014
F	1985	S	1995	5	2005	F	2015
G	1986	T	1996	6	2006	G	2016
H	1987	V	1997	7	2007	H	2017
J	1988	W	1998	8	2008	J	2018
K	1989	X	1999	9	2009	K	2019

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.

WARNING: READ BEFORE REMOTE STARTING THE VEHICLE

IMPORTANT

I All vehicle doors must be closed and locked prior to remote start sequence. Failure to comply will result in remote starter malfunction.

TAKE OVER PROCEDURE - PTS - TO THE VEHICLE OWNER

NOTE

I All vehicle doors must be closed and locked prior to remote start sequence.



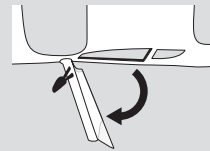
TIME RESTRICTION COMING UP !

1



Unlock vehicle door using OEM or after-market remote, or door request switch.

2



TIME RESTRICTION

Within 45 SECONDS from previous step:

Open vehicle door.
Enter vehicle.
Close vehicle door.

Press and release BRAKE pedal.

3

Take over procedure completed.



Failure to follow procedure will result in vehicle engine shutdown.