

Automotive Data Solutions Inc.

INSTALL GUIDE

ADS-AL(DL)-TL7-EN

TL7

AVAILABLE FOR: ADS-AL CA

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Doc. No.: ##44466##

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

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LEXUS

TOYOTA

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

MAKE	MODEL	YEAR	INSTALL TYPE	FEATURES															
				DATA IMMOBILIZER BYPASS	3X LOCK REMOTE START	PUSH TO START CTRL	ARM OEM ALARM	DISARM OEM ALARM	A/M ALARM CTRL FROM OEM REMOTES	A/M RS CTRL FROM OEM REMOTES	PRIORITY UNLOCK	DOOR LOCK	DOOR UNLOCK	TRUNK/HATCH RELEASE	DOOR STATUS OUTPUT	TRUNK STATUS OUTPUT	HOOD STATUS OUTPUT*	TACHOMETER OUTPUT	BRAKE PEDAL STATUS OUTPUT
LEXUS	IS200t PTS	16	1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	IS200t PTS	17	5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	IS250 PTS	14-15	1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	IS300 PTS	16	1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	IS300 PTS	17	5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	IS350 PTS	14-16	1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	IS350 PTS	17	5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	NX200T PTS	15-17	1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	NX300h PTS	17	1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	RC350 PTS	15-17	1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	RX350 PTS	16-17	2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	RX450h PTS	17	2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	LX570 PTS	16-17	3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
TOYOTA	Camry PTS	18	7	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	C-HR PTS	18	6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Highlander PTS	14-16	1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Highlander PTS	17	5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Highlander Hybrid PTS	14-16	1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Highlander Hybrid PTS	17	5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Land Cruiser PTS	16-17	3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Prius PTS	16-17	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Tacoma PTS	16-17	1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	

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

WARNING: DOOR LOCK SYNCHRONIZATION**IMPORTANT**

- I The door lock signal is encrypted on select models. In order for the bypass to operate properly, it must be synchronized with that encrypted signal. However, when the vehicle is driven, data is sent along the bus that desynchronizes the bypass with the encryption.

To regain synchronization once the engine is shut off, the bypass must see the factory keyless codes (OEM remote or proximity lock/unlock codes). This solution will resynchronize automatically upon seeing the first factory keyless code and will operate normally (both convenience and immobilizer bypass/remote starter functionality).

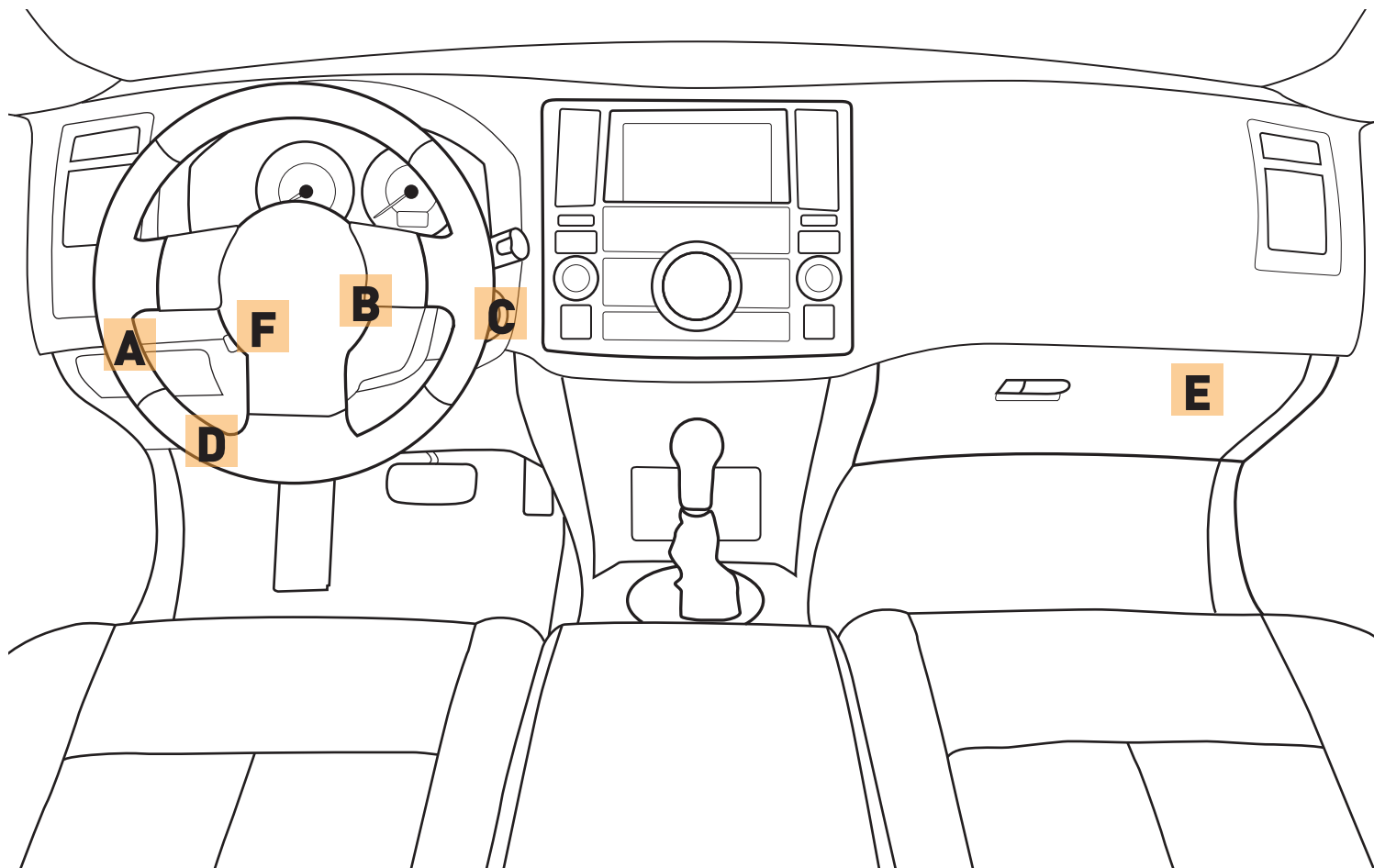
Conversely, if the vehicle is driven and the factory keyless system is not used to lock or unlock, the aftermarket remote will not be able to lock or unlock until the bypass receives factory keyless code at least once as described above.

If one does not intend to use factory keyless after driving the vehicle, additional wiring is required to ensure the bypass remains synchronized with the encryption. Remote starter door locks must be hardwired (see wiring diagram). This will permit lock/unlock with the aftermarket remote at all times without necessitating the use of the factory keyless system.

Please note that this firmware also supports "External Remote Control Arm and Disarm" which means that the bypass can arm and disarm the aftermarket alarm using OEM Keyless when paired with most popular remote starter brands. When used exclusively in this manner (i.e. without aftermarket remote controls), hardwired remote starter door locks (as described above) become unnecessary.

Finally, as factory keyless operates normally during remote start with this solution and take-over is not supported, a one-button remote control is a very good choice for these vehicles in order to prevent any possible user issues.

COMPONENT LOCATOR



TYPE 1 - WIRE CROSS REFERENCE CHART - 1 OF 3

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
LEXUS	IS200t PTS	16	CanH	N20	Black	16 pin	06	White	(DATA)	OBDDII connector	D
			CanL	N20	Black	16 pin	14	Black	(DATA)	OBDDII connector	D
			12V	N24	Black	07 pin	07	Green	(+)	Steering lock	B
			Ignition	N24	Black	07 pin	06	Black	(+)	Steering lock	B
			SLP	N24	Black	07 pin	04	Red	(-)	Steering lock	B
			PTS	N46	Black	10 pin	01	Blue	(-)	PTS button	C
			Lock/Arm	F19	White	30 pin	29	Blue	(-)	Main Body ECU	A
			Unlock/Disarm	F19	White	30 pin	02	LtGreen	(-)	Main Body ECU	A
			Auto Light	F19	White	30 pin	08	Pink	~	Main Body ECU	A
			Parking Light	F19	White	30 pin	22	Black	(-)	Main Body ECU	A
	Trunk Release	F18	White	28 pin	05	Pink	(-)	Main Body ECU	A		
	IS250 PTS	14-15	CanH	N20	Black	16 pin	06	White	(DATA)	OBDDII connector	D
			CanL	N20	Black	16 pin	14	Black	(DATA)	OBDDII connector	D
			12V	N24	Black	07 pin	07	Green	(+)	Steering lock	B
			Ignition	N24	Black	07 pin	06	Black	(+)	Steering lock	B
			SLP	N24	Black	07 pin	04	Red	(-)	Steering lock	B
			PTS	N46	Black	10 pin	01	Blue	(-)	PTS button	C
			Lock/Arm	F19	White	30 pin	29	Blue	(-)	Main Body ECU	A
			Unlock/Disarm	F19	White	30 pin	02	LtGreen	(-)	Main Body ECU	A
			Auto Light	F19	White	30 pin	08	Pink	~	Main Body ECU	A
			Parking Light	F19	White	30 pin	22	Black	(-)	Main Body ECU	A
	Trunk Release	F18	White	28 pin	05	Pink	(-)	Main Body ECU	A		
	IS300 PTS	16	CanH	N20	Black	16 pin	06	White	(DATA)	OBDDII connector	D
			CanL	N20	Black	16 pin	14	Black	(DATA)	OBDDII connector	D
			12V	N24	Black	07 pin	07	Green	(+)	Steering lock	B
			Ignition	N24	Black	07 pin	06	Black	(+)	Steering lock	B
			SLP	N24	Black	07 pin	04	Red	(-)	Steering lock	B
			PTS	N46	Black	10 pin	01	Blue	(-)	PTS button	C
			Lock/Arm	F19	White	30 pin	29	Blue	(-)	Main Body ECU	A
			Unlock/Disarm	F19	White	30 pin	02	LtGreen	(-)	Main Body ECU	A
			Auto Light	F19	White	30 pin	08	Pink	~	Main Body ECU	A
			Parking Light	F19	White	30 pin	22	Black	(-)	Main Body ECU	A
	Trunk Release	F18	White	28 pin	05	Pink	(-)	Main Body ECU	A		
	IS350 PTS	14-16	CanH	N20	Black	16 pin	06	White	(DATA)	OBDDII connector	D
			CanL	N20	Black	16 pin	14	Black	(DATA)	OBDDII connector	D
			12V	N24	Black	07 pin	07	Green	(+)	Steering lock	B
Ignition			N24	Black	07 pin	06	Black	(+)	Steering lock	B	
SLP			N24	Black	07 pin	04	Red	(-)	Steering lock	B	
PTS			N46	Black	10 pin	01	Blue	(-)	PTS button	C	
Lock/Arm			F19	White	30 pin	29	Blue	(-)	Main Body ECU	A	
Unlock/Disarm			F19	White	30 pin	02	LtGreen	(-)	Main Body ECU	A	
Auto Light			F19	White	30 pin	08	Pink	~	Main Body ECU	A	
Parking Light			F19	White	30 pin	22	Black	(-)	Main Body ECU	A	
Trunk Release	F18	White	28 pin	05	Pink	(-)	Main Body ECU	A			

TYPE 1 - WIRE CROSS REFERENCE CHART - 2 OF 3

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR	
LEXUS	NX200T PTS	15-17	CanH	OBDII	White	16 pin	06	Black	(DATA)	OBDII connector	D	
			CanL	OBDII	White	16 pin	14	White	(DATA)	OBDII connector	D	
			12V	I2	Black	07 pin	07	Blue	(+)	Steering lock	B	
			Ignition	I2	Black	07 pin	06	Pink	(+)	Steering lock	B	
			SLP	I2	Black	07 pin	04	Yellow	(-)	Steering lock	B	
			PTS	I16	Black	10 pin	01	Green	(-)	PTS button	C	
			Lock/Arm	I48	White	30 pin	29	Red	(-)	Main Body ECU	D	
			Unlock/Disarm	I48	White	30 pin	02	LtGreen	(-)	Main Body ECU	D	
			Auto Light	I48	White	30 pin	08	Green	~	Main Body ECU	D	
			Parking Light	I48	White	30 pin	22	Pink	(-)	Main Body ECU	D	
	Trunk Release	I48	White	30 pin	05	Red	(-)	Main Body ECU	D			
	NX300h PTS	17	CanH	OBDII	White	16 pin	06	Black	(DATA)	OBDII connector	D	
			CanL	OBDII	White	16 pin	14	White	(DATA)	OBDII connector	D	
			12V	I2	Black	07 pin	07	Blue	(+)	Steering lock	B	
			Ignition	I2	Black	07 pin	06	Pink	(+)	Steering lock	B	
			SLP	I2	Black	07 pin	04	Yellow	(-)	Steering lock	B	
			PTS	I16	Black	10 pin	01	Green	(-)	PTS button	C	
			Lock/Arm	I48	White	30 pin	29	Red	(-)	Main Body ECU	D	
			Unlock/Disarm	I48	White	30 pin	02	LtGreen	(-)	Main Body ECU	D	
			Auto Light	I48	White	30 pin	08	Green	~	Main Body ECU	D	
			Parking Light	I48	White	30 pin	22	Pink	(-)	Main Body ECU	D	
	Trunk Release	I48	White	30 pin	05	Red	(-)	Main Body ECU	D			
	RC350 PTS	15-17	CanH	N20	Black	16 pin	06	White	(DATA)	OBDII connector	D	
			CanL	N20	Black	16 pin	14	Black	(DATA)	OBDII connector	D	
			12V	N24	Black	07 pin	07	Green	(+)	Steering lock	B	
			Ignition	N24	Black	07 pin	06	Black	(+)	Steering lock	B	
			SLP	N24	Black	07 pin	04	Red	(-)	Steering lock	B	
			PTS	N46	Black	10 pin	01	Blue	(-)	PTS button	C	
			Lock/Arm	F19	White	30 pin	29	Blue	(-)	Main Body ECU	A	
			Unlock/Disarm	F19	White	30 pin	02	LtGreen	(-)	Main Body ECU	A	
			Auto Light	F19	White	30 pin	08	Pink	~	Main Body ECU	A	
			Parking Light	F19	White	30 pin	22	Black	(-)	Main Body ECU	A	
	Trunk Release	F18	White	28 pin	05	Pink	(-)	Main Body ECU	A			
	TOYOTA	Highlander PTS	14-16	CanH	F25	White	16 pin	06	Purple	(DATA)	OBDII connector	D
				CanL	F25	White	16 pin	14	White	(DATA)	OBDII connector	D
				12V	F54	Black	07 pin	07	Black	(+)	Steering lock	B
Ignition				F54	Black	07 pin	06	Red	(+)	Steering lock	B	
SLP				F54	Black	07 pin	04	LtGreen	(-)	Steering lock	B	
PTS				F49	Black	10 pin	01	Purple	(-)	PTS button	C	
Lock/Arm				K2	White	30 pin	29	Violet	(-)	Main Body ECU	A	
Unlock/Disarm				K2	White	30 pin	02	LtBlue	(-)	Main Body ECU	A	
Auto Light				K2	White	30 pin	08	Black	~	Main Body ECU	A	
Parking Light				K2	White	30 pin	22	LtGreen	(-)	Main Body ECU	A	
Trunk Release	K1	White	28 pin	05	Gray	(-)	Main Body ECU	A				

TYPE 1 - WIRE CROSS REFERENCE CHART - 3 OF 3

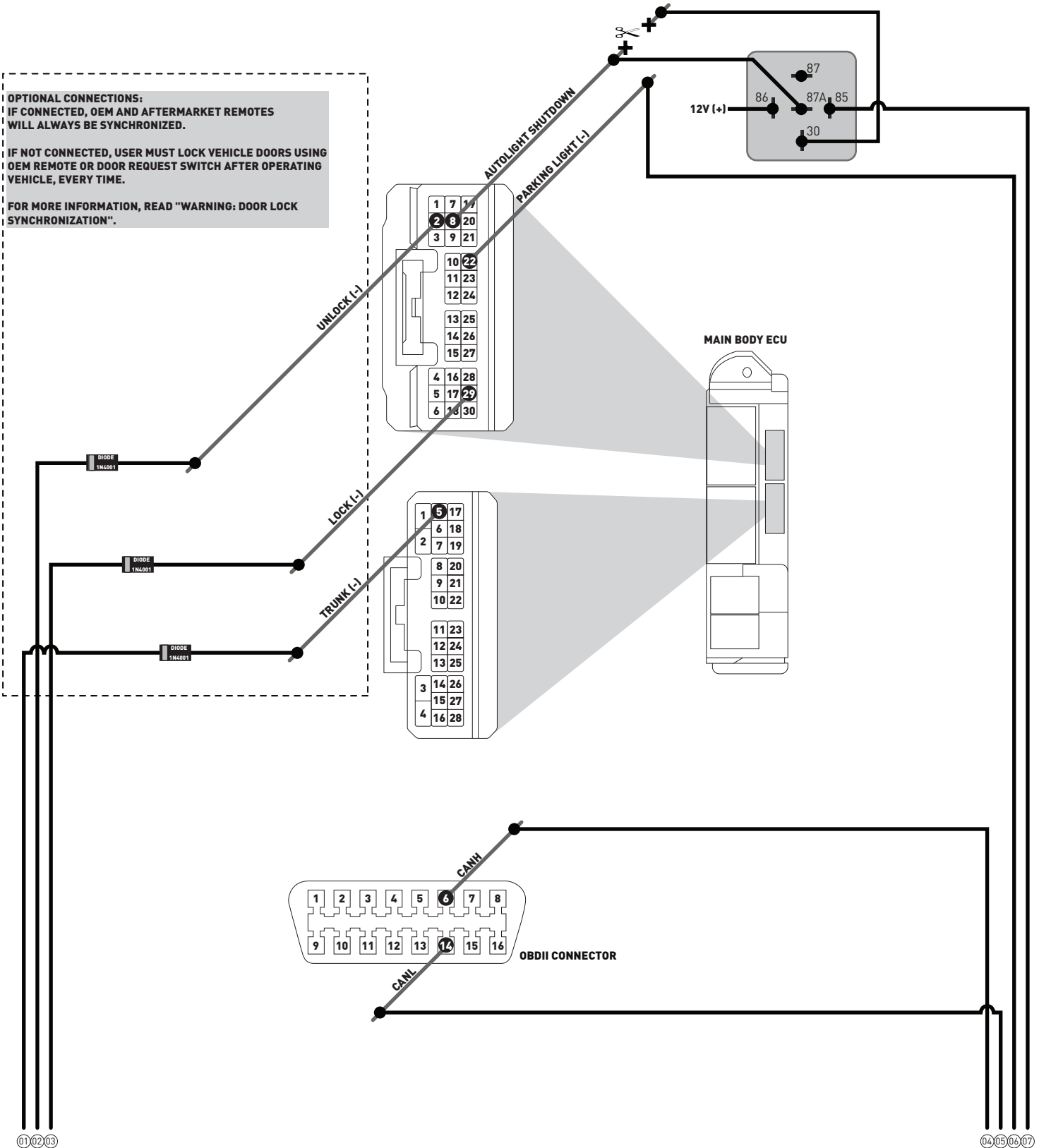
MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
TOYOTA	Highlander Hybrid PTS	14-16	CanH	F25	White	16 pin	06	Purple	(DATA)	OBDII connector	D
			CanL	F25	White	16 pin	14	White	(DATA)	OBDII connector	D
			12V	F54	Black	07 pin	07	Black	(+)	Steering lock	B
			Ignition	F54	Black	07 pin	06	Red	(+)	Steering lock	B
			SLP	F54	Black	07 pin	04	LtGreen	(-)	Steering lock	B
			PTS	F49	Black	10 pin	01	Purple	(-)	PTS button	C
			Lock/Arm	K2	White	30 pin	29	Violet	(-)	Main Body ECU	A
			Unlock/Disarm	K2	White	30 pin	02	LtBlue	(-)	Main Body ECU	A
			Auto Light	K2	White	30 pin	08	Black	~	Main Body ECU	A
			Parking Light	K2	White	30 pin	22	LtGreen	(-)	Main Body ECU	A
			Trunk Release	K1	White	28 pin	05	Gray	(-)	Main Body ECU	A
	Tacoma PTS	16-17	CanH	~	White	16 pin	06	Blue	(DATA)	OBDII connector	D
			CanL	~	White	16 pin	14	White	(DATA)	OBDII connector	D
			12V	~	Black	07 pin	07	Red	(+)	Steering lock	B
			Ignition	~	Black	07 pin	06	Black	(+)	Steering lock	B
			SLP	~	Black	07 pin	04	Tan	(-)	Steering lock	B
			PTS	~	Black	10 pin	01	Gray	(-)	PTS button	C
			Lock/Arm	~	White	30 pin	29	LtBlue	(-)	Main Body ECU	A
			Unlock/Disarm	~	White	30 pin	02	Green	(-)	Main Body ECU	A
			Auto Light	~	White	30 pin	08	White	~	Main Body ECU	A
			Parking Light	~	White	30 pin	22	Green	(-)	Main Body ECU	A
			Trunk Release	~	~	~	~	~	~	~	~

TYPE 1 - WIRING DIAGRAM - 1 OF 2

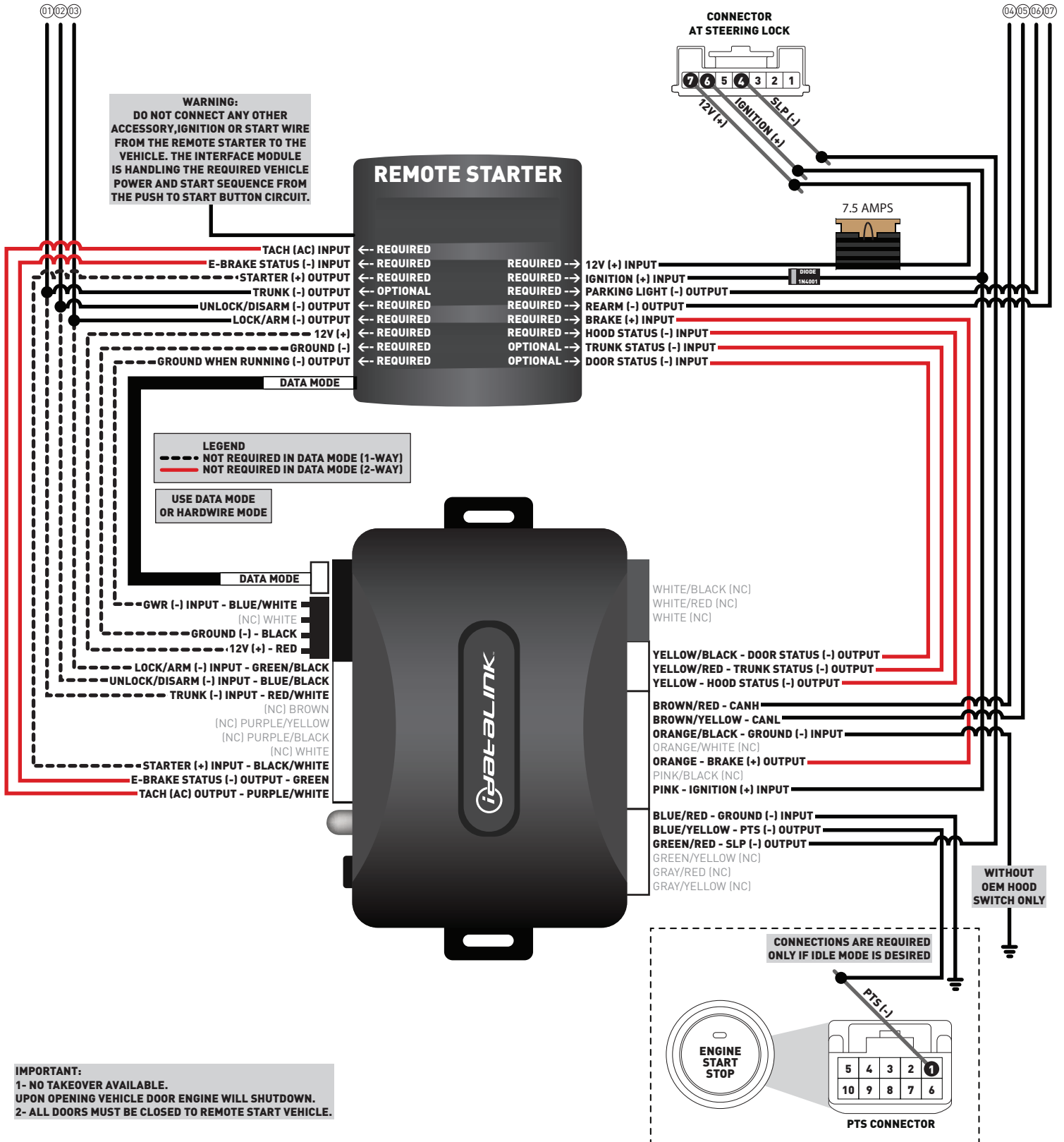
OPTIONAL CONNECTIONS:
IF CONNECTED, OEM AND AFTERMARKET REMOTES WILL ALWAYS BE SYNCHRONIZED.

IF NOT CONNECTED, USER MUST LOCK VEHICLE DOORS USING OEM REMOTE OR DOOR REQUEST SWITCH AFTER OPERATING VEHICLE, EVERY TIME.

FOR MORE INFORMATION, READ "WARNING: DOOR LOCK SYNCHRONIZATION".



TYPE 1 - WIRING DIAGRAM - 2 OF 2



TYPE 2 - WIRE CROSS REFERENCE CHART - 1 OF 1

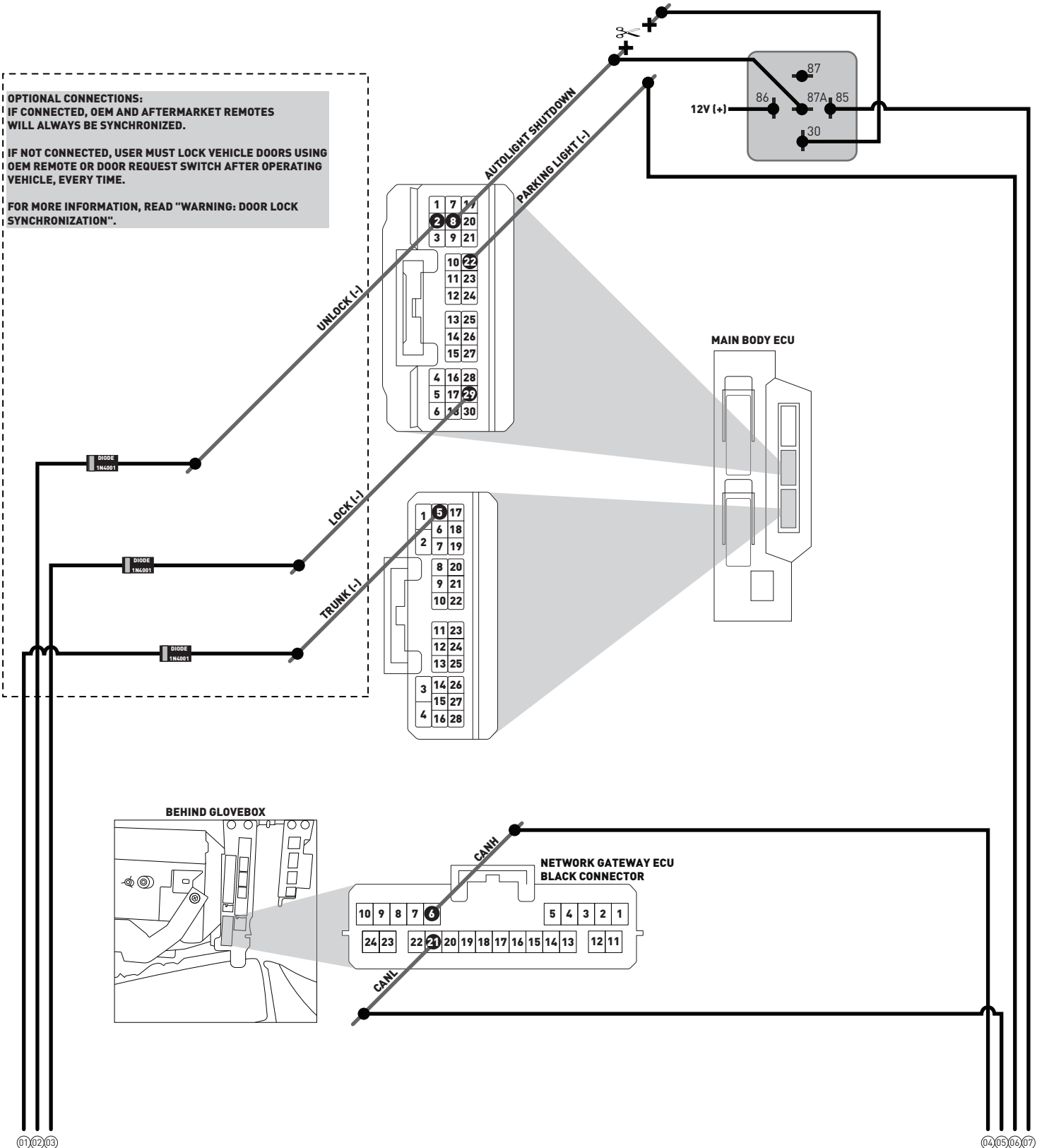
MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
LEXUS	RX350 PTS	16-17	CanH	~	Black	24 pin	06	LtBlue	(DATA)	Network Gateway ECU, behind glove box	E
			CanL	~	Black	24 pin	21	White	(DATA)	Network Gateway ECU, behind glove box	E
			12V	~	Black	07 pin	07	Purple	(+)	Steering lock	B
			Ignition	~	Black	07 pin	06	Pink	(+)	Steering lock	B
			SLP	~	Black	07 pin	04	Gray	(-)	Steering lock	B
			PTS	~	Black	10 pin	01	Purple	(-)	PTS button	C
			Lock/Arm	~	White	30 pin	29	Pink	(-)	Main Body ECU	A
			Unlock/Disarm	~	White	30 pin	02	Purple	(-)	Main Body ECU	A
			Auto Light	~	White	30 pin	08	Green	(-)	Main Body ECU	A
			Parking Light	~	White	30 pin	22	Purple	(-)	Main Body ECU	A
			Trunk Release	~	White	28 pin	05	Red	(-)	Main Body ECU	A
	RX450h PTS	17	CanH	~	Black	24 pin	06	LtBlue	(DATA)	Network Gateway ECU, behind glove box	E
			CanL	~	Black	24 pin	21	White	(DATA)	Network Gateway ECU, behind glove box	E
			12V	~	Black	07 pin	07	Purple	(+)	Steering lock	B
			Ignition	~	Black	07 pin	06	Pink	(+)	Steering lock	B
			SLP	~	Black	07 pin	04	Gray	(-)	Steering lock	B
			PTS	~	Black	10 pin	01	Purple	(-)	PTS button	C
			Lock/Arm	~	White	30 pin	29	Pink	(-)	Main Body ECU	A
			Unlock/Disarm	~	White	30 pin	02	Purple	(-)	Main Body ECU	A
			Auto Light	~	White	30 pin	08	Green	(-)	Main Body ECU	A
			Parking Light	~	White	30 pin	22	Purple	(-)	Main Body ECU	A
			Trunk Release	~	White	28 pin	05	Red	(-)	Main Body ECU	A

TYPE 2 - WIRING DIAGRAM - 1 OF 2

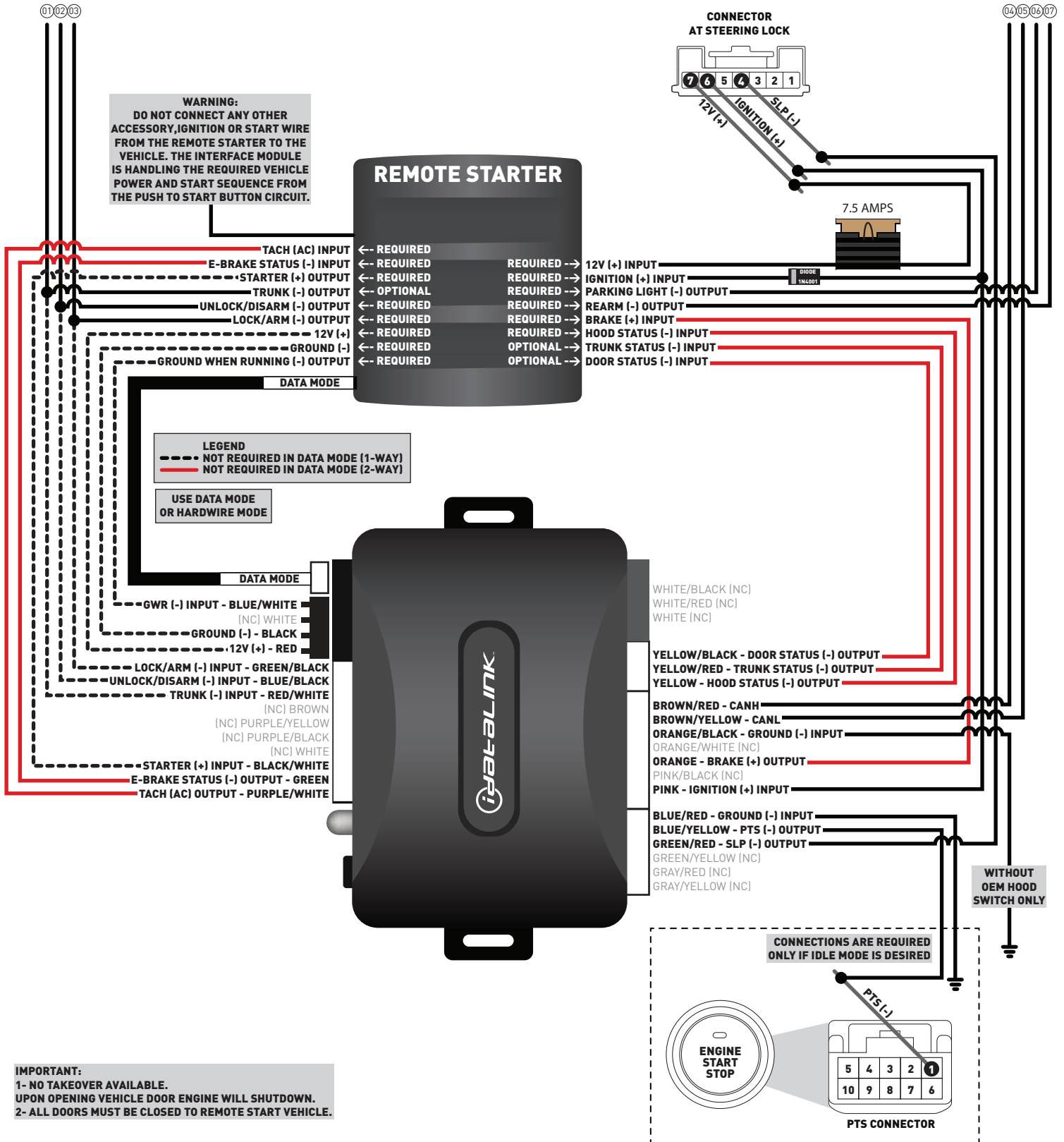
OPTIONAL CONNECTIONS:
IF CONNECTED, OEM AND AFTERMARKET REMOTES WILL ALWAYS BE SYNCHRONIZED.

IF NOT CONNECTED, USER MUST LOCK VEHICLE DOORS USING OEM REMOTE OR DOOR REQUEST SWITCH AFTER OPERATING VEHICLE, EVERY TIME.

FOR MORE INFORMATION, READ "WARNING: DOOR LOCK SYNCHRONIZATION".



TYPE 2 - WIRING DIAGRAM - 2 OF 2



IMPORTANT:
1- NO TAKEOVER AVAILABLE.
UPON OPENING VEHICLE DOOR ENGINE WILL SHUTDOWN.
2- ALL DOORS MUST BE CLOSED TO REMOTE START VEHICLE.

TYPE 3 - WIRE CROSS REFERENCE CHART - 1 OF 1

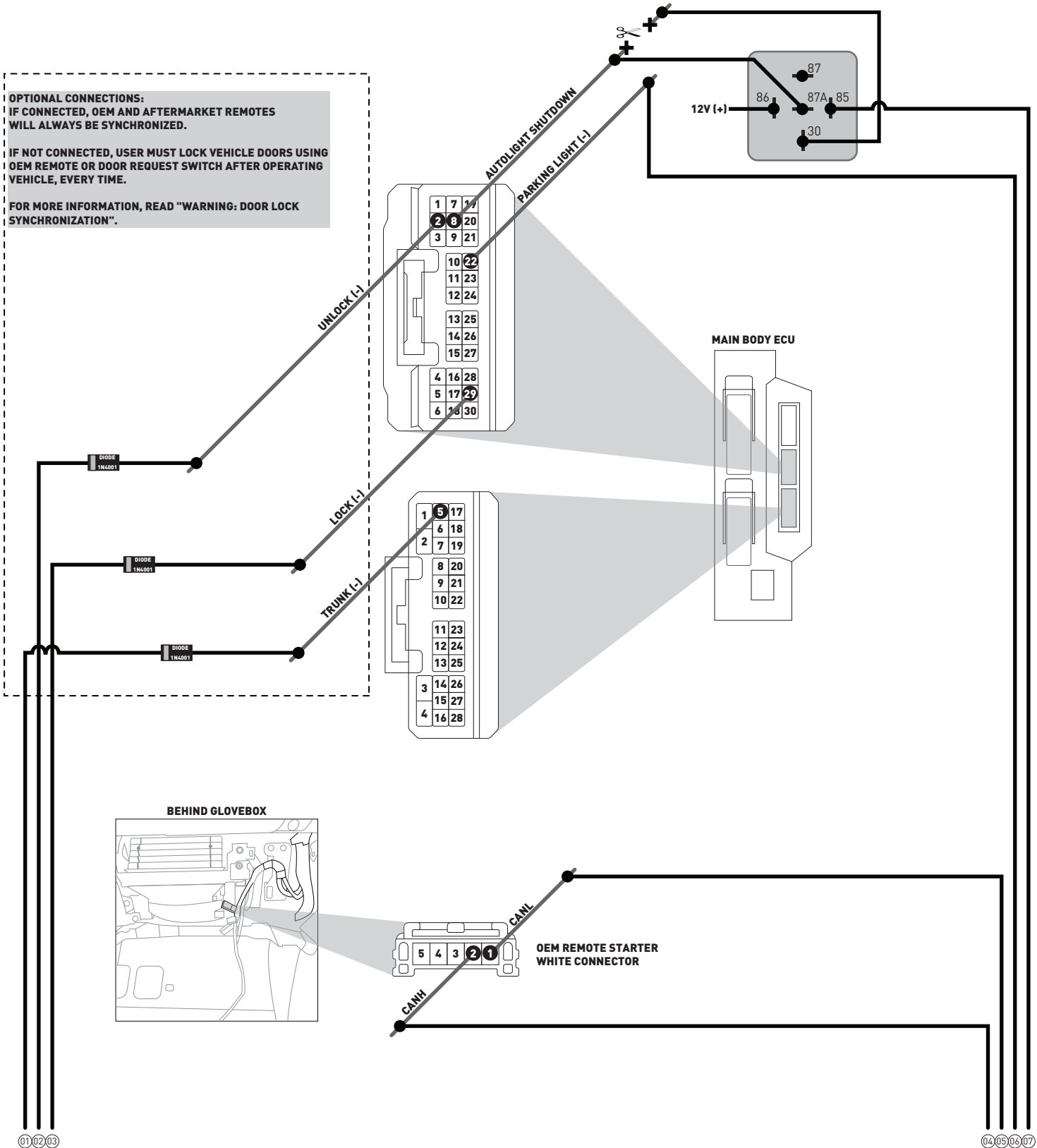
MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
LEXUS	LX570 PTS	16-17	CanH	E157	White	05 pin	02	Tan	(DATA)	OEM remote starter connector, behind glove box	E
			CanL	E157	White	05 pin	01	Gray	(DATA)	OEM remote starter connector, behind glove box	E
			12V	~	Black	07 pin	07	Green	(+)	Steering lock	B
			Ignition	~	Black	07 pin	06	Pink	(+)	Steering lock	B
			SLP	~	Black	07 pin	04	Red	(-)	Steering lock	B
			PTS	~	Black	10 pin	01	Blue	(-)	PTS button	C
			Lock/Arm	~	White	30 pin	29	Green	(-)	Main Body ECU	A
			Unlock/Disarm	~	White	30 pin	02	Pink	(-)	Main Body ECU	A
			Auto Light	~	White	30 pin	08	Pink	(-)	Main Body ECU	A
			Parking Light	~	White	30 pin	22	Black	(-)	Main Body ECU	A
			Trunk Release	~	White	28 pin	05	Black	(-)	Main Body ECU	A
TOYOTA	Land Cruiser PTS	16-17	CanH	E157	White	05 pin	02	Tan	(DATA)	OEM remote starter connector, behind glove box	E
			CanL	E157	White	05 pin	01	Gray	(DATA)	OEM remote starter connector, behind glove box	E
			12V	~	Black	07 pin	07	Green	(+)	Steering lock	B
			Ignition	~	Black	07 pin	06	Pink	(+)	Steering lock	B
			SLP	~	Black	07 pin	04	Red	(-)	Steering lock	B
			PTS	~	Black	10 pin	01	Blue	(-)	PTS button	C
			Lock/Arm	~	White	30 pin	29	Green	(-)	Main Body ECU	A
			Unlock/Disarm	~	White	30 pin	02	Pink	(-)	Main Body ECU	A
			Auto Light	~	White	30 pin	08	Pink	(-)	Main Body ECU	A
			Parking Light	~	White	30 pin	22	Black	(-)	Main Body ECU	A
			Trunk Release	~	White	28 pin	05	Black	(-)	Main Body ECU	A

TYPE 3 - WIRING DIAGRAM - 1 OF 2

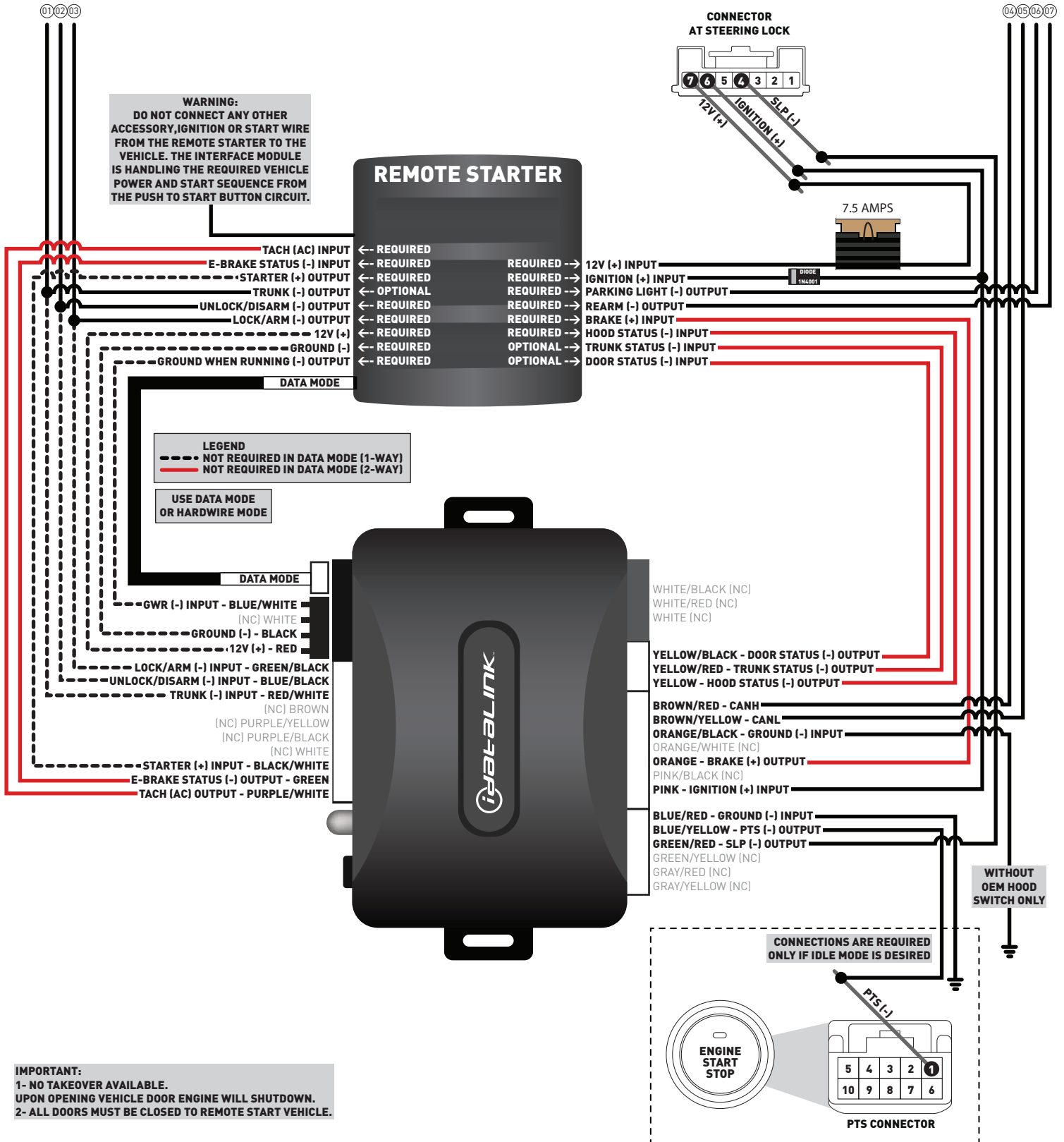
OPTIONAL CONNECTIONS:
 IF CONNECTED, OEM AND AFTERMARKET REMOTES WILL ALWAYS BE SYNCHRONIZED.

IF NOT CONNECTED, USER MUST LOCK VEHICLE DOORS USING OEM REMOTE OR DOOR REQUEST SWITCH AFTER OPERATING VEHICLE, EVERY TIME.

FOR MORE INFORMATION, READ "WARNING: DOOR LOCK SYNCHRONIZATION".



TYPE 3 - WIRING DIAGRAM - 2 OF 2



TYPE 4 - WIRE CROSS REFERENCE CHART - 1 OF 1

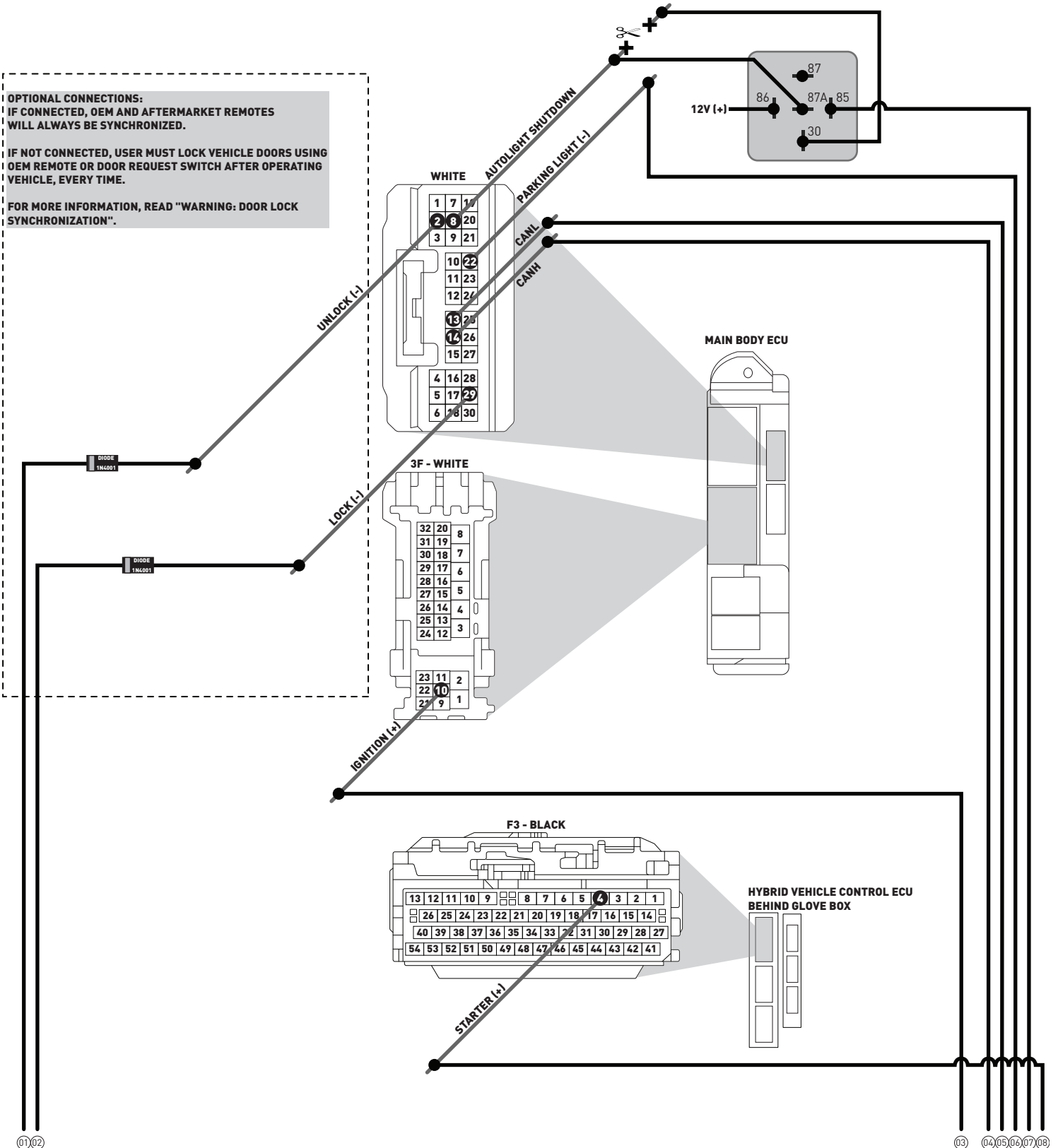
MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
TOYOTA	Prius PTS	16-17	CanH	~	White	30 pin	14	LtBlue	(DATA)	Main Body ECU	A
			CanL	~	White	30 pin	13	White	(DATA)	Main Body ECU	A
			12V	~	White	16 pin	16	Purple	(+)	OBDDII connector	D
			Ignition	3F	White	32 pin	10	Purple	(+)	Dash fuse box	A
			Starter	F3	Black	54 pin	04	Black	(+)	Hybrid vehicle control ECU, behind glove box	B
			PTS	~	Black	10 pin	01	Green	(-)	PTS button	C
			Lock/Arm	~	White	30 pin	29	Purple	(-)	Main Body ECU	A
			Unlock/Disarm	~	White	30 pin	02	Green	(-)	Main Body ECU	A
			Auto Light	~	White	30 pin	08	Black	(-)	Main Body ECU	A
Parking Light	~	White	30 pin	22	Tan	(-)	Main Body ECU	A			

TYPE 4 - WIRING DIAGRAM - 1 OF 2

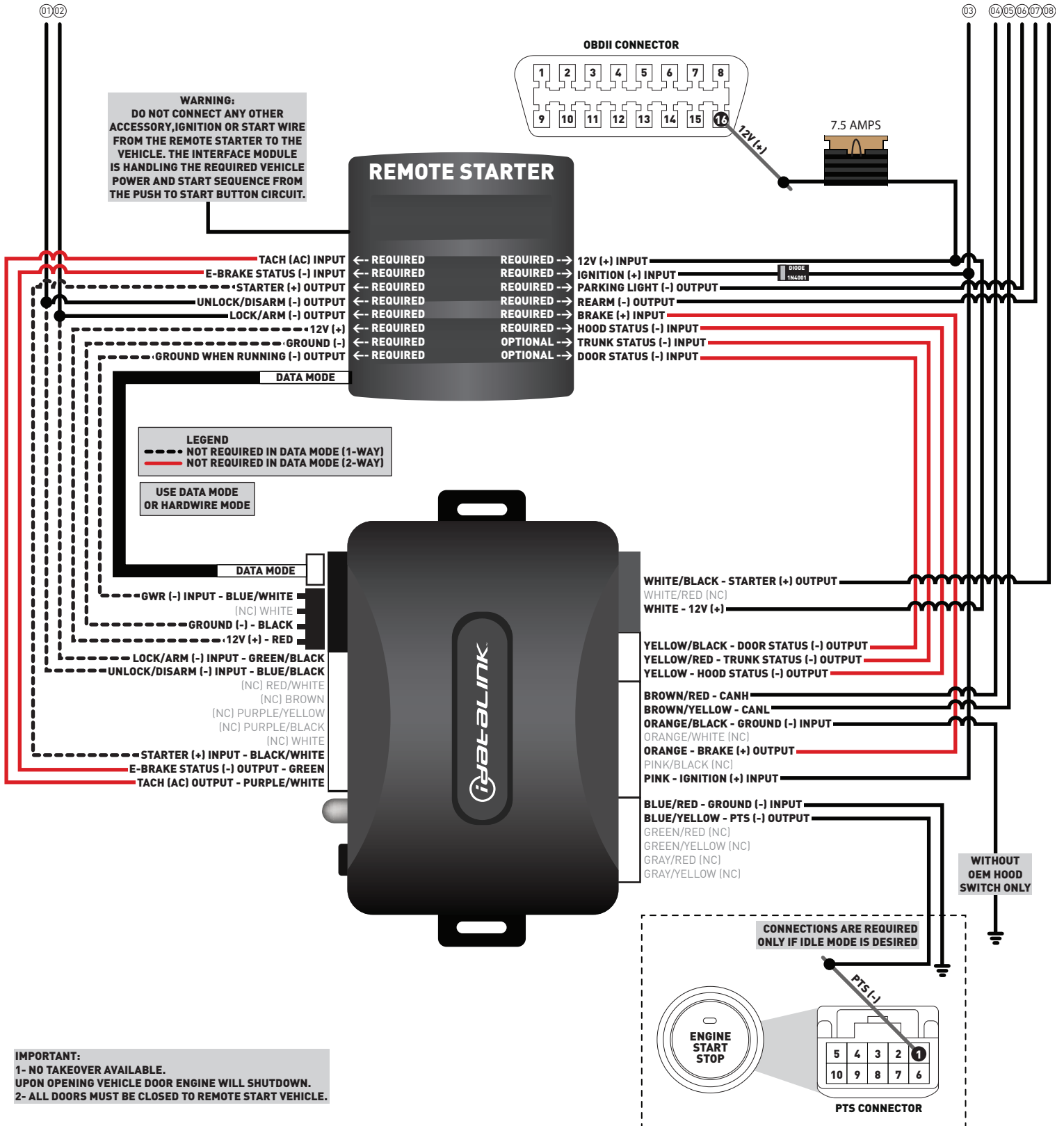
OPTIONAL CONNECTIONS:
 IF CONNECTED, OEM AND AFTERMARKET REMOTES
 WILL ALWAYS BE SYNCHRONIZED.

IF NOT CONNECTED, USER MUST LOCK VEHICLE DOORS USING
 OEM REMOTE OR DOOR REQUEST SWITCH AFTER OPERATING
 VEHICLE, EVERY TIME.

FOR MORE INFORMATION, READ "WARNING: DOOR LOCK
 SYNCHRONIZATION".



TYPE 4 - WIRING DIAGRAM - 2 OF 2



TYPE 5 - WIRE CROSS REFERENCE CHART - 1 OF 1

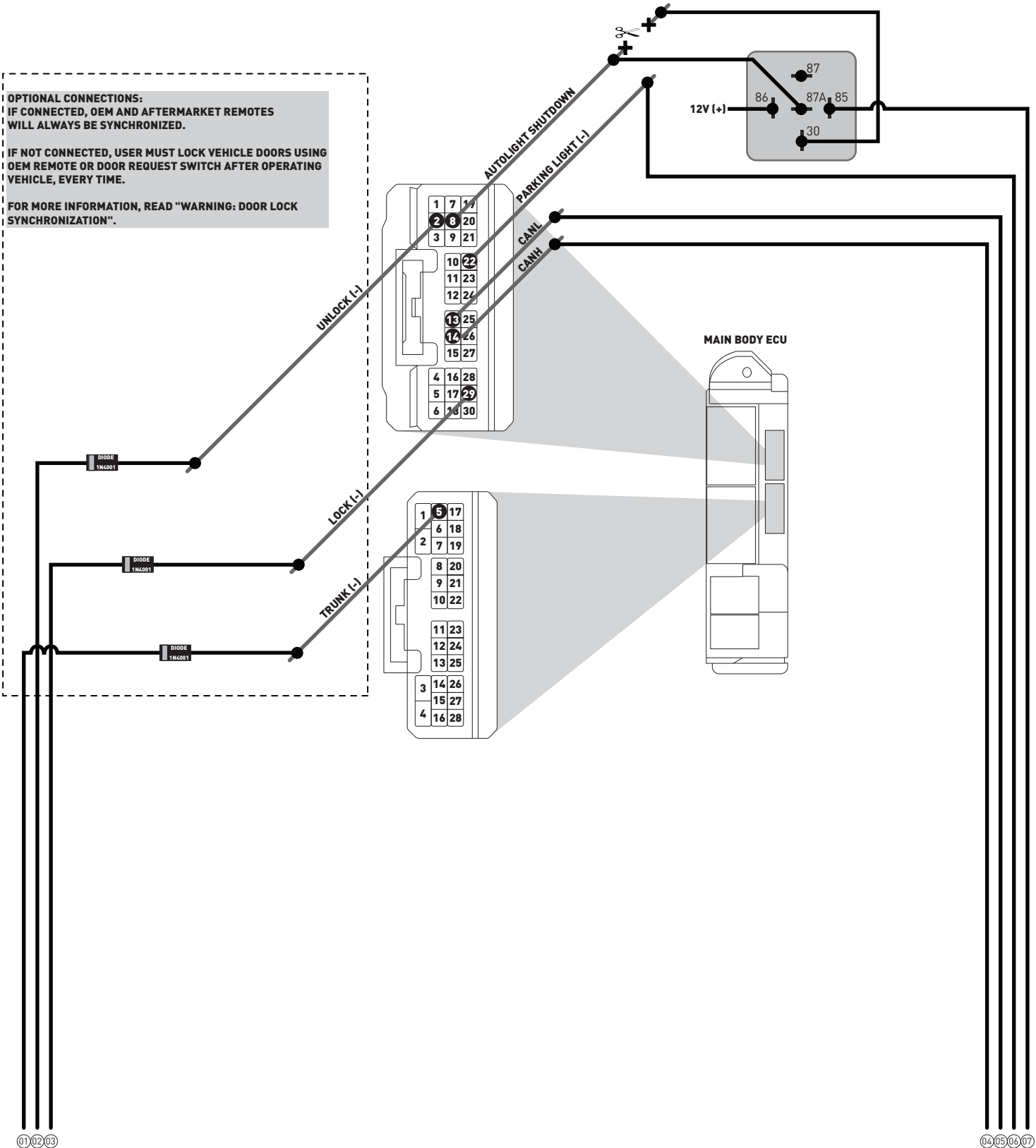
MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
TOYOTA	Highlander / Highlander Hybrid PTS	17	CanH	K2	White	30 pin	14	Red	(DATA)	Main Body ECU	A
			CanL	K2	White	30 pin	13	White	(DATA)	Main Body ECU	A
			12V	F54	Black	07 pin	07	Black	(+)	Steering lock	B
			Ignition	F54	Black	07 pin	06	Red	(+)	Steering lock	B
			SLP	F54	Black	07 pin	04	LtGreen	(-)	Steering lock	B
			PTS	F49	Black	10 pin	01	Purple	(-)	PTS button	C
			Lock/Arm	K2	White	30 pin	29	Violet	(-)	Main Body ECU	A
			Unlock/Disarm	K2	White	30 pin	02	LtBlue	(-)	Main Body ECU	A
			Auto Light	K2	White	30 pin	08	Black	-	Main Body ECU	A
			Parking Light	K2	White	30 pin	22	LtGreen	(-)	Main Body ECU	A
			Trunk Release	K1	White	28 pin	05	Gray	(-)	Main Body ECU	A
LEXUS	IS200t PTS	17	CanH	K2	White	30 pin	14	Yellow	(DATA)	Main Body ECU	A
			CanL	K2	White	30 pin	13	Black	(DATA)	Main Body ECU	A
			12V	N24	Black	07 pin	07	Green	(+)	Steering lock	B
			Ignition	N24	Black	07 pin	06	Black	(+)	Steering lock	B
			SLP	N24	Black	07 pin	04	Red	(-)	Steering lock	B
			PTS	N46	Black	10 pin	01	Blue	(-)	PTS button	C
			Lock/Arm	F19	White	30 pin	29	Blue	(-)	Main Body ECU	A
			Unlock/Disarm	F19	White	30 pin	02	LtGreen	(-)	Main Body ECU	A
			Auto Light	F19	White	30 pin	08	Pink	-	Main Body ECU	A
			Parking Light	F19	White	30 pin	22	Black	(-)	Main Body ECU	A
	Trunk Release	F18	White	28 pin	05	Pink	(-)	Main Body ECU	A		
	IS300 PTS	17	CanH	K2	White	30 pin	14	Yellow	(DATA)	Main Body ECU	A
			CanL	K2	White	30 pin	13	Black	(DATA)	Main Body ECU	A
			12V	N24	Black	07 pin	07	Green	(+)	Steering lock	B
			Ignition	N24	Black	07 pin	06	Black	(+)	Steering lock	B
			SLP	N24	Black	07 pin	04	Red	(-)	Steering lock	B
			PTS	N46	Black	10 pin	01	Blue	(-)	PTS button	C
			Lock/Arm	F19	White	30 pin	29	Blue	(-)	Main Body ECU	A
			Unlock/Disarm	F19	White	30 pin	02	LtGreen	(-)	Main Body ECU	A
			Auto Light	F19	White	30 pin	08	Pink	-	Main Body ECU	A
			Parking Light	F19	White	30 pin	22	Black	(-)	Main Body ECU	A
Trunk Release	F18	White	28 pin	05	Pink	(-)	Main Body ECU	A			
IS350 PTS	17	CanH	K2	White	30 pin	14	Yellow	(DATA)	Main Body ECU	A	
		CanL	K2	White	30 pin	13	Black	(DATA)	Main Body ECU	A	
		12V	N24	Black	07 pin	07	Green	(+)	Steering lock	B	
		Ignition	N24	Black	07 pin	06	Black	(+)	Steering lock	B	
		SLP	N24	Black	07 pin	04	Red	(-)	Steering lock	B	
		PTS	N46	Black	10 pin	01	Blue	(-)	PTS button	C	
		Lock/Arm	F19	White	30 pin	29	Blue	(-)	Main Body ECU	A	
		Unlock/Disarm	F19	White	30 pin	02	LtGreen	(-)	Main Body ECU	A	
		Auto Light	F19	White	30 pin	08	Pink	-	Main Body ECU	A	
		Parking Light	F19	White	30 pin	22	Black	(-)	Main Body ECU	A	
Trunk Release	F18	White	28 pin	05	Pink	(-)	Main Body ECU	A			

TYPE 5 - WIRING DIAGRAM - 1 OF 2

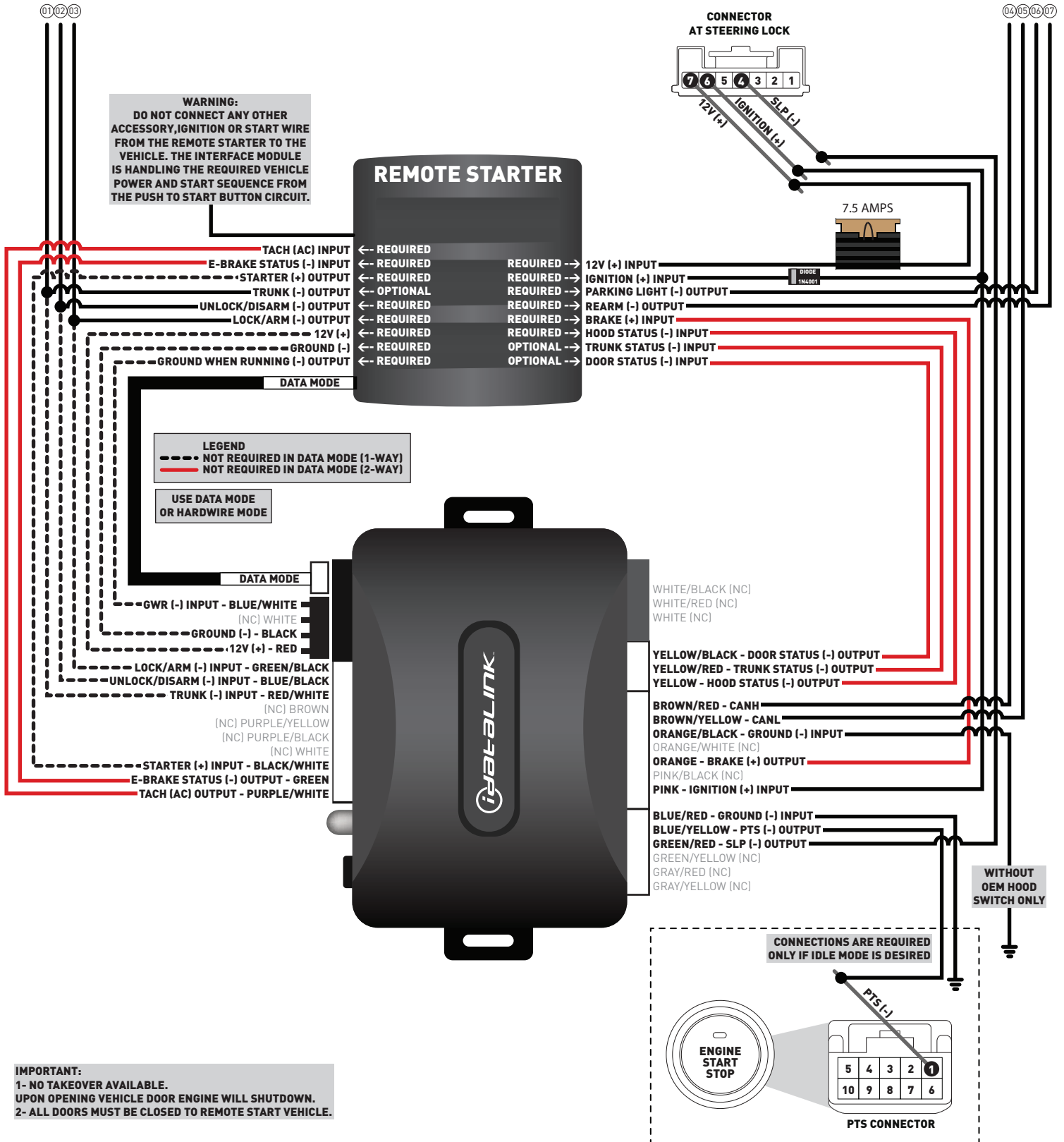
OPTIONAL CONNECTIONS:
IF CONNECTED, OEM AND AFTERMARKET REMOTES
WILL ALWAYS BE SYNCHRONIZED.

IF NOT CONNECTED, USER MUST LOCK VEHICLE DOORS USING
OEM REMOTE OR DOOR REQUEST SWITCH AFTER OPERATING
VEHICLE, EVERY TIME.

FOR MORE INFORMATION, READ "WARNING: DOOR LOCK
SYNCHRONIZATION".



TYPE 5 - WIRING DIAGRAM - 2 OF 2



IMPORTANT:
1- NO TAKEOVER AVAILABLE. UPON OPENING VEHICLE DOOR ENGINE WILL SHUTDOWN.
2- ALL DOORS MUST BE CLOSED TO REMOTE START VEHICLE.

TYPE 6 - WIRE CROSS REFERENCE CHART - 1 OF 1

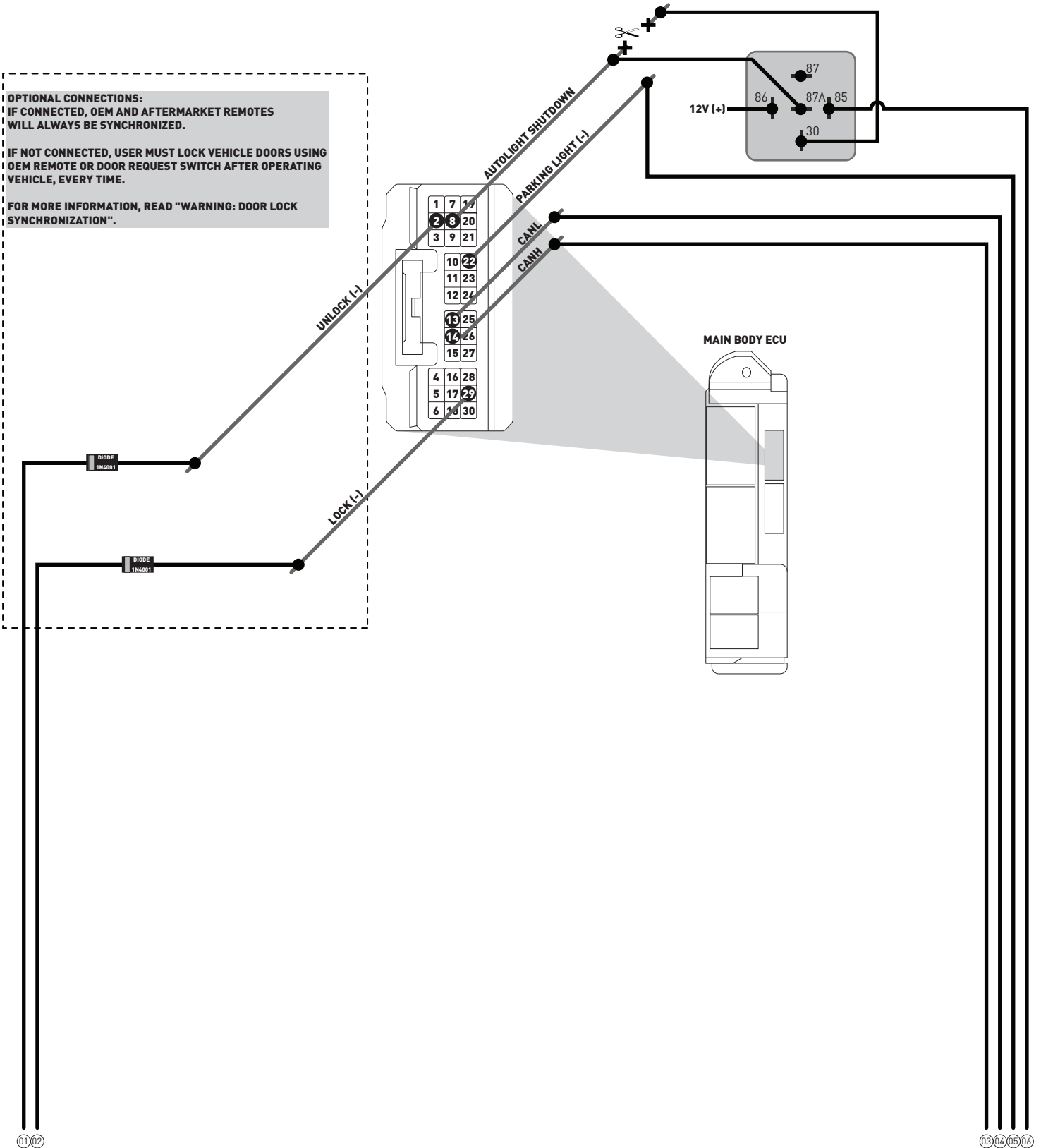
MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
TOYOTA	C-HR PTS	18	CanH	~	White	30 pin	14	Green	(DATA)	Main Body ECU	A
			CanL	~	White	30 pin	13	LtBlue	(DATA)	Main Body ECU	A
			12V	~	Black	07 pin	07	Blue	(+)	Steering lock	B
			Ignition	~	Black	07 pin	06	Black	(+)	Steering lock	B
			SLP	~	Black	07 pin	04	Green	(-)	Steering lock	B
			PTS	~	Black	10 pin	01	Gray	(-)	PTS button	C
			Lock/Arm	~	White	30 pin	29	Green	(-)	Main Body ECU	A
			Unlock/Disarm	~	White	30 pin	02	Blue	(-)	Main Body ECU	A
			Auto Light	~	White	30 pin	08	White	~	Main Body ECU	A
			Parking Light	~	White	30 pin	22	Yellow	(-)	Main Body ECU	A

TYPE 6 - WIRING DIAGRAM - 1 OF 2

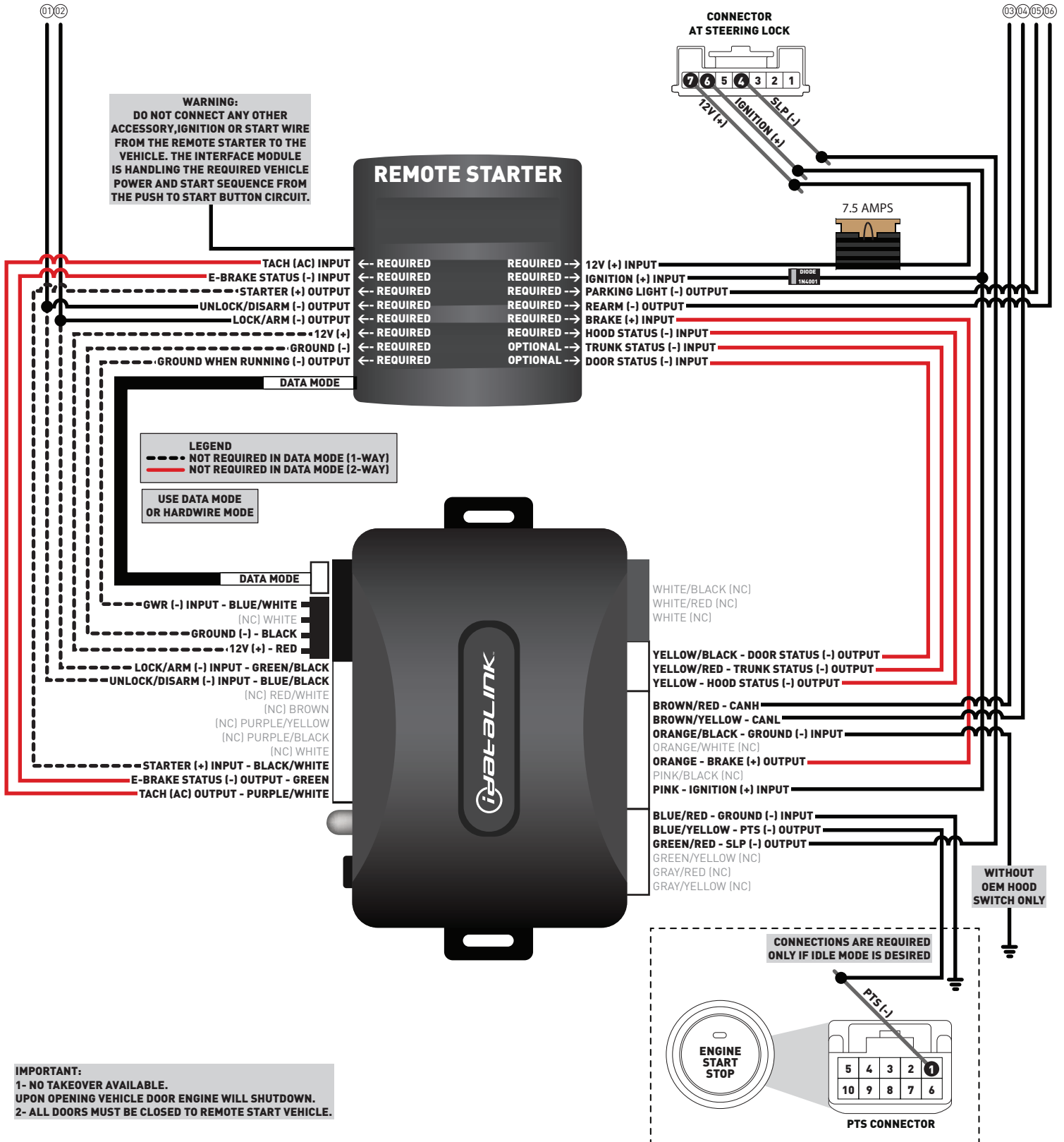
OPTIONAL CONNECTIONS:
IF CONNECTED, OEM AND AFTERMARKET REMOTES
WILL ALWAYS BE SYNCHRONIZED.

IF NOT CONNECTED, USER MUST LOCK VEHICLE DOORS USING
OEM REMOTE OR DOOR REQUEST SWITCH AFTER OPERATING
VEHICLE, EVERY TIME.

FOR MORE INFORMATION, READ "WARNING: DOOR LOCK
SYNCHRONIZATION".



TYPE 6 - WIRING DIAGRAM - 2 OF 2

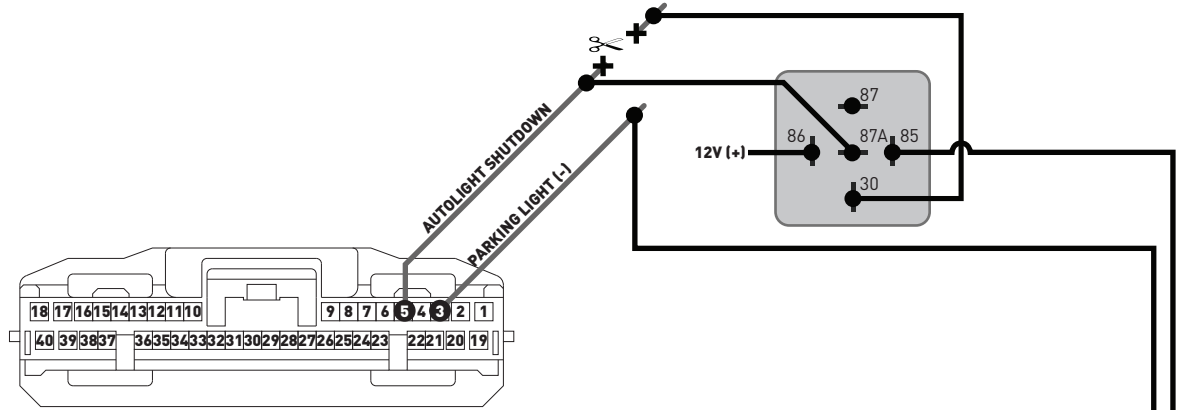


IMPORTANT:
 1- NO TAKEOVER AVAILABLE. UPON OPENING VEHICLE DOOR ENGINE WILL SHUTDOWN.
 2- ALL DOORS MUST BE CLOSED TO REMOTE START VEHICLE.

TYPE 7 - 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
TOYOTA	Camry PTS	18	CanH	K52	Black	30 pin	05	Tan	(DATA)	Main Body ECU/Dash fuse box	A
			CanL	K52	Black	30 pin	04	White	(DATA)	Main Body ECU/Dash fuse box	A
			12V	~	Black	07 pin	07	White	(+)	Steering lock	B
			Ignition	~	Black	07 pin	06	LtGreen	(+)	Steering lock	B
			SLP	~	Black	07 pin	04	Tan	(-)	Steering lock	B
			PTS	~	Black	10 pin	01	Gray	(-)	PTS button	C
			Lock/Arm	K53	Black	21 pin	18	LtGreen	(-)	Main Body ECU/Dash fuse box	A
			Unlock/Disarm	K53	Black	21 pin	17	Tan	(-)	Main Body ECU/Dash fuse box	A
			Trunk	K53	Black	21 pin	04	LtGreen	(-)	Main Body ECU/Dash fuse box	A
			Autolight	~	White	40 pin	05	White or Yellow	(-)	Headlamp switch	F
			Parking Light	~	White	40 pin	03	Blue/Black or Green	(-)	Headlamp switch	F

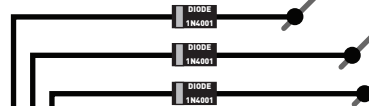
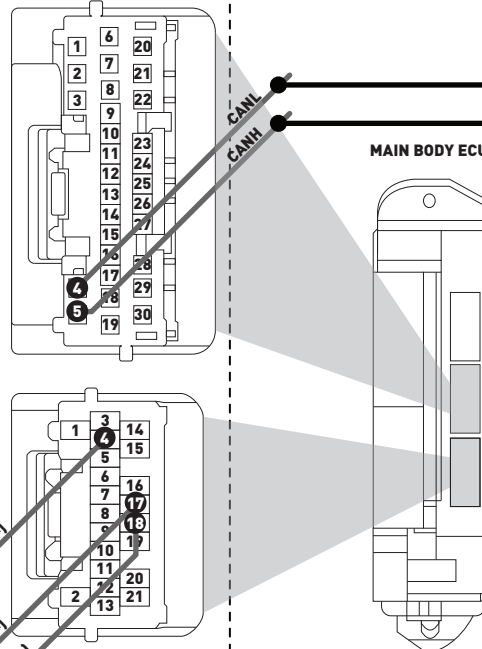
TYPE 7 - WIRING DIAGRAM - 1 OF 2



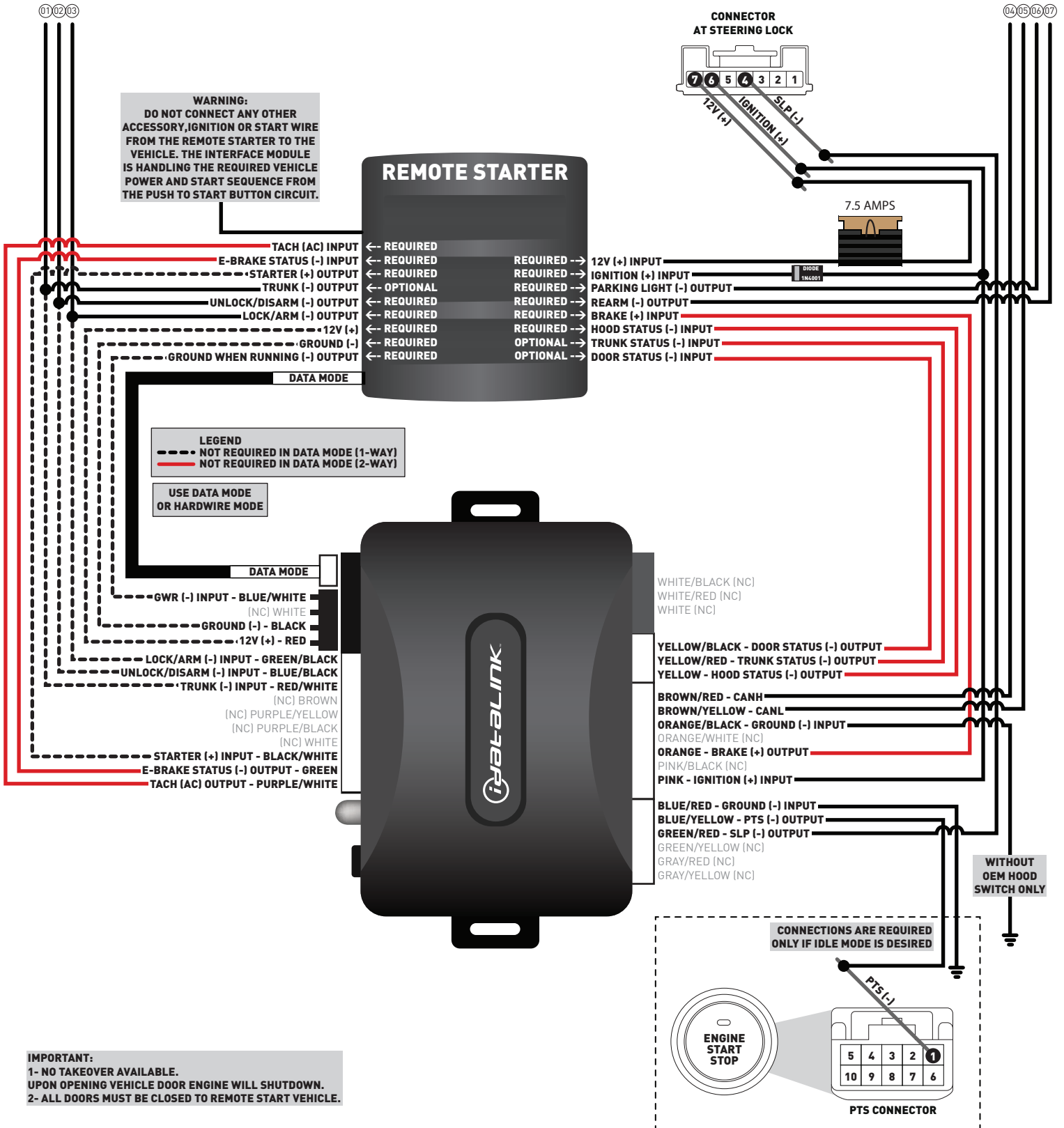
OPTIONAL CONNECTIONS:
IF CONNECTED, OEM AND AFTERMARKET REMOTES WILL ALWAYS BE SYNCHRONIZED.

IF NOT CONNECTED, USER MUST LOCK VEHICLE DOORS USING OEM REMOTE OR DOOR REQUEST SWITCH AFTER OPERATING VEHICLE, EVERY TIME.

FOR MORE INFORMATION, READ "WARNING: DOOR LOCK SYNCHRONIZATION".

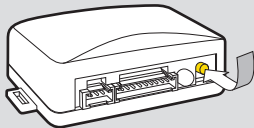



TYPE 7 - WIRING DIAGRAM - 2 OF 2

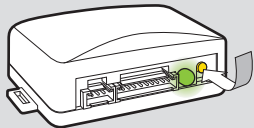


IMPORTANT:
1- NO TAKEOVER AVAILABLE. UPON OPENING VEHICLE DOOR ENGINE WILL SHUTDOWN.
2- ALL DOORS MUST BE CLOSED TO REMOTE START VEHICLE.

INSTALLATION MODE SELECTION

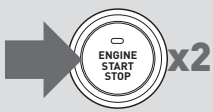
1  Press and release programming button to select installation mode.

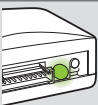
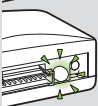
 LED flashes (1X) once = DATA MODE
 LED flashes (2X) twice = STANDARD HARDWARE MODE

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

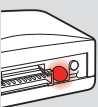
! After registration, follow Factory Reset Procedure to change installation mode and restart this procedure.


MODULE PROGRAMMING PROCEDURE

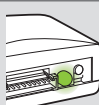
1  Push start button twice [2x] to ON position.


2  Wait, if LED turns solid GREEN for 2 seconds, proceed to step 7.
 If LED flashes GREEN rapidly, proceed to step 3.

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

4  Wait, LED will turn solid RED. (This may take up to 5 minutes.)

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

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

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

8 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.

This product is protected by one or more of the following patents: U.S. LETTERS PATENT NO. 5,719,551; 6,011,460; 6,243,004; 6,249,216; 6,275,147; 6,297,731; 6,346,876; 6,392,534; 6,529,124; 6,696,927; 6,756,885; 6,756,886; 6,771,167; 6,812,829; 6,924,750; 7,010,402; 7,031,826; 7,046,126; 7,061,137; 7,068,153; 7,015,830; 7,205,679; 7,224,083; 7,369,936; 7,378,945; 7,489,233; 7,501,937; CANADIAN PATENT NO. 2,320,248; 2,415,023; 2,426,670; 2,414,991; 2,415,011; 2,415,027; 2,415,038; 2,415,041; 2,502,893; 2,451,490; 2,452,296; 2,451,487; EUROPEAN PATENT NO. 1,053,128; DE 69807-94117; U.S. 20020145535; 20060129282; 20060129284; 20040017284; 20080030316; 20090079552; EP1500565; 1538038; 1538037;