

BLADE

SERIES

Automotive Data Solutions Inc.

INSTALL GUIDE

BLADE-AL(DL)-MA4-EN

MA4

AVAILABLE FOR: ADS-BLADE AL

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PATENT NO. US 8,856,780 CA 2759622

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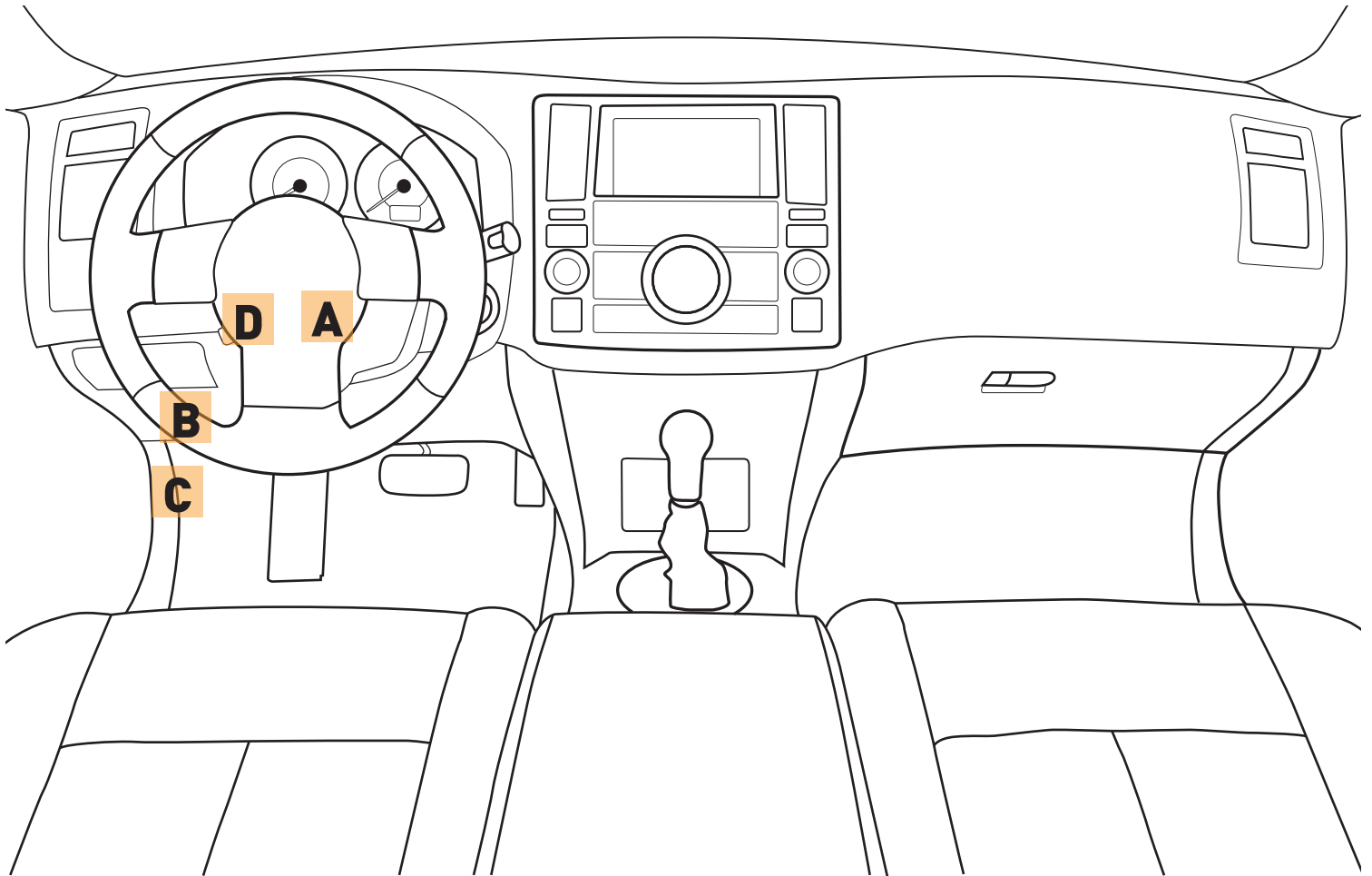
mazda

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INSTALL TYPE SELECTION

MAKE	MODEL	YEAR	INSTALL TYPE	FEATURES											
				ARM OEM ALARM	DISARM OEM ALARM	DOOR LOCK	DOOR UNLOCK	PRIORITY UNLOCK	DOOR STATUS OUTPUT	TRUNK STATUS OUTPUT	BRAKE PEDAL STATUS OUTPUT	TACHOMETER OUTPUT	DATA IMMOBILIZER BYPASS		
MAZDA	2 STD Key	11-14	12	•	•	•	•	•	•	•	•	•	•	•	•
	3 STD Key	04-09	3							•	•			•	•
	3 STD Key	10-13	11	•	•	•	•	•	•	•	•	•	•	•	•
	5 STD Key	05-10	5							•	•			•	•
	5 STD Key	11-17	6							•	•			•	•
	6 STD Key	03-05	1	•	•	•	•	•					•	•	•
	6 STD Key	06-08	2	•	•	•	•	•					•	•	•
	6 Smart Key	06-08	2	•	•	•	•	•					•	•	•
	6 STD Key	09-13	10	•	•	•	•	•	•	•	•	•	•	•	•
	CX-7 STD Key	07-09	7	•	•	•	•	•	•	•	•	•	•	•	•
	CX-7 Smart Key	07-09	7	•	•	•	•	•	•	•	•	•	•	•	•
	CX-7 STD Key	10-12	8	•	•	•	•	•	•	•	•	•	•	•	•
	CX-7 Smart Key	10-12	8	•	•	•	•	•	•	•	•	•	•	•	•
	CX-9 Smart Key	07-15	9	•	•	•	•	•	•	•	•	•	•	•	•
	CX-9 STD Key	07-15	9	•	•	•	•	•	•	•	•	•	•	•	•
	MX-5 Miata Smart Key	06-14	4	•	•	•	•	•					•	•	•
	MX-5 Miata STD Key	06-14	4	•	•	•	•	•					•	•	•
	RX-8 STD Key	04-11	1	•	•	•	•	•					•	•	•

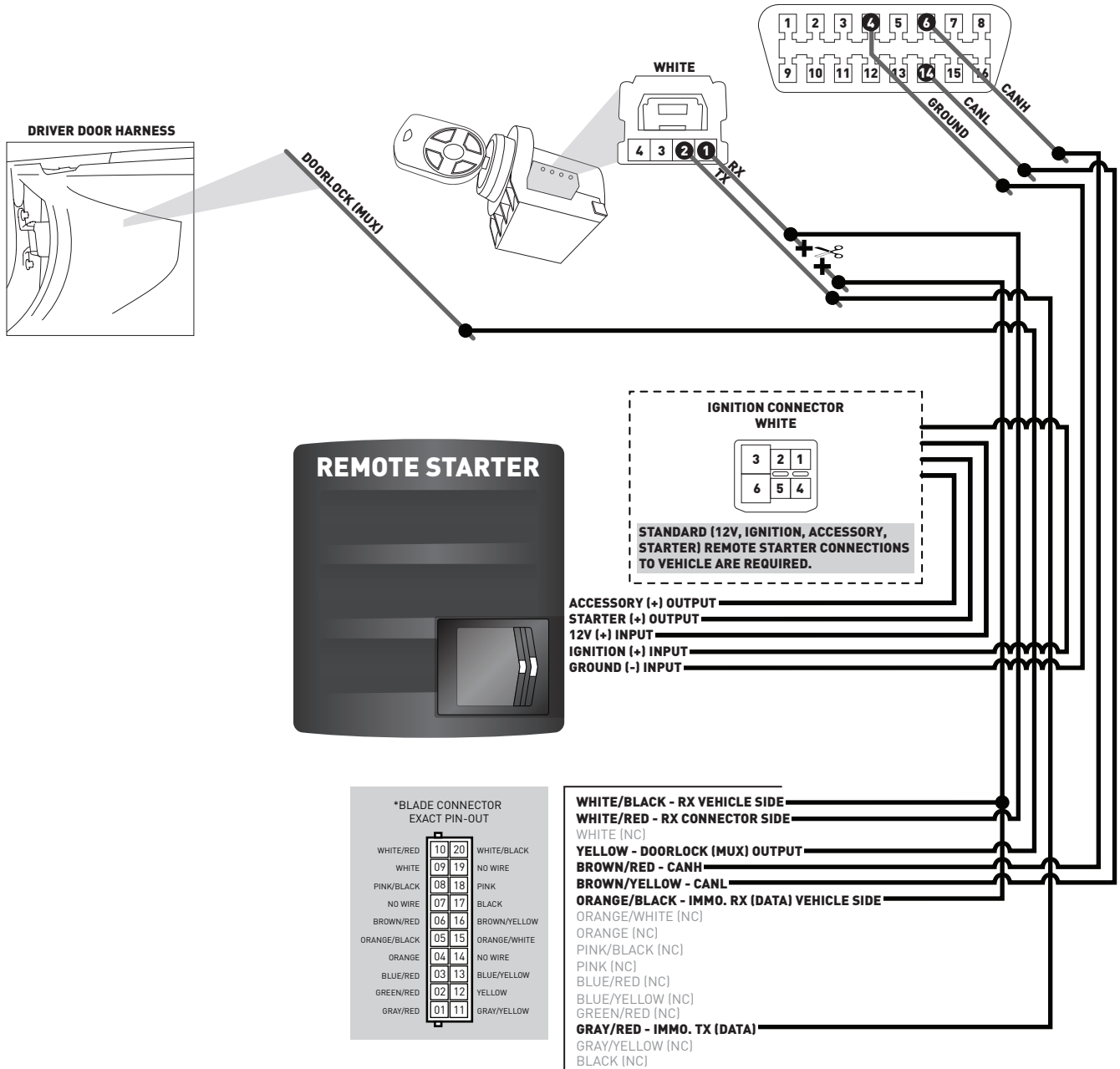
COMPONENT LOCATOR



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
MAZDA	6 STD Key AT/MT	03-05	Immobilizer RX	~	White	04 pin	01	Orange/LtBlue	(DATA)	Immobilizer near key barrel	A
			Immobilizer TX	~	White	04 pin	02	Green	(DATA)	Immobilizer near key barrel	A
			Ignition	~	White	06 pin	02	Blue	(+)	Ignition switch	A
			CanH	~	Black	16 pin	06	Red	(DATA)	OBDII connector	B
			CanL	~	Black	16 pin	14	Blue	(DATA)	OBDII connector	B
			Doorlock	~	~	~	~	LtGreen or LtBlue	(MUX)	Driver door harness	C
	RX-8 STD Key AT/MT	04-11	Immobilizer RX	~	White	04 pin	01	Yellow/Black	(DATA)	Immobilizer near key barrel	A
			Immobilizer TX	~	White	04 pin	02	LtBlue/Orange	(DATA)	Immobilizer near key barrel	A
			Ignition	~	White	08 pin	02	Blue/Black or Black/Yellow	(+)	Ignition switch	A
			CanH	~	Black	16 pin	06	Blue/White	(DATA)	OBDII connector	B
			CanL	~	Black	16 pin	14	Green/Black	(DATA)	OBDII connector	B
			Doorlock	~	~	~	~	Green/Red	(MUX)	Driver door harness	C

TYPE 1 - WIRING DIAGRAM



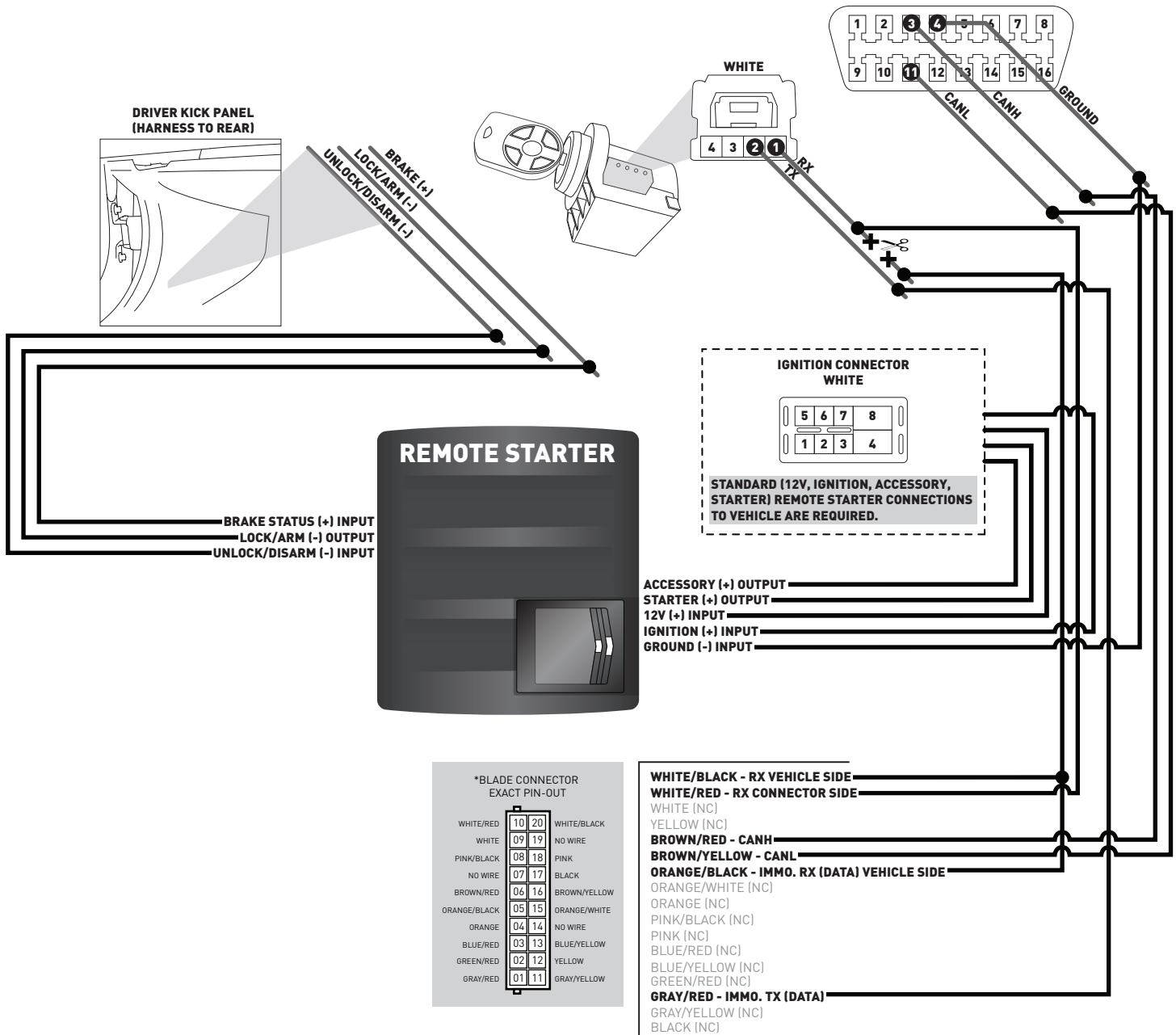
TYPE 2 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
MAZDA	6 Smart Key AT/MT	06-08	Immobilizer RX	~	White	04 pin	01	Gray	(DATA)	Immobilizer near key barrel	A
			Immobilizer TX	~	White	04 pin	02	Yellow/Green	(DATA)	Immobilizer near key barrel	A
			Ignition	~	White	06 pin	02	Blue	(+)	Ignition switch	A
			CanH	~	Black	16 pin	06	Red	(DATA)	OBDII connector	B
			CanL	~	Black	16 pin	14	Blue	(DATA)	OBDII connector	B
			Doorlocks	~	White	24 pin	17	Blue or Blue/white	(MUX)	BCM, driver kick panel	C
	6 STD Key AT/MT	06-08	Immobilizer RX	~	White	04 pin	01	Orange/LtBlue	(DATA)	Immobilizer near key barrel	A
			Immobilizer TX	~	White	04 pin	02	Green	(DATA)	Immobilizer near key barrel	A
			Ignition	~	White	08 pin	02	Blue	(+)	Ignition switch	A
			CanH	~	Black	16 pin	06	Red	(DATA)	OBDII connector	B
			CanL	~	Black	16 pin	14	Blue	(DATA)	OBDII connector	B
			Doorlocks	~	White	24 pin	17	Blue or Blue/White	(MUX)	BCM, driver kick panel	C

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
MAZDA	3 STD Key AT/MT	04-09	Immobilizer RX	~	White	04 pin	01	White/LtGreen	(DATA)	Immobilizer near key barrel	A
			Immobilizer TX	~	White	04 pin	02	Gray/Orange	(DATA)	Immobilizer near key barrel	A
			Ignition	~	White	08 pin	01	Green/Yellow	(+)	Ignition switch	A
			CanH	~	Black	16 pin	03	Gray/Purple	(DATA)	OBDII connector	B
			CanL	~	Black	16 pin	11	Blue/White	(DATA)	OBDII connector	B
			Lock/Arm	~	~	~	~	Black/Blue	(-)	Driver kick panel, harness to rear	C
			Unlock/Disarm	~	~	~	~	Black/White	(-)	Driver kick panel, harness to rear	C
			Brake	~	~	~	~	Red/White	(+)	Driver kick panel, harness to rear	C

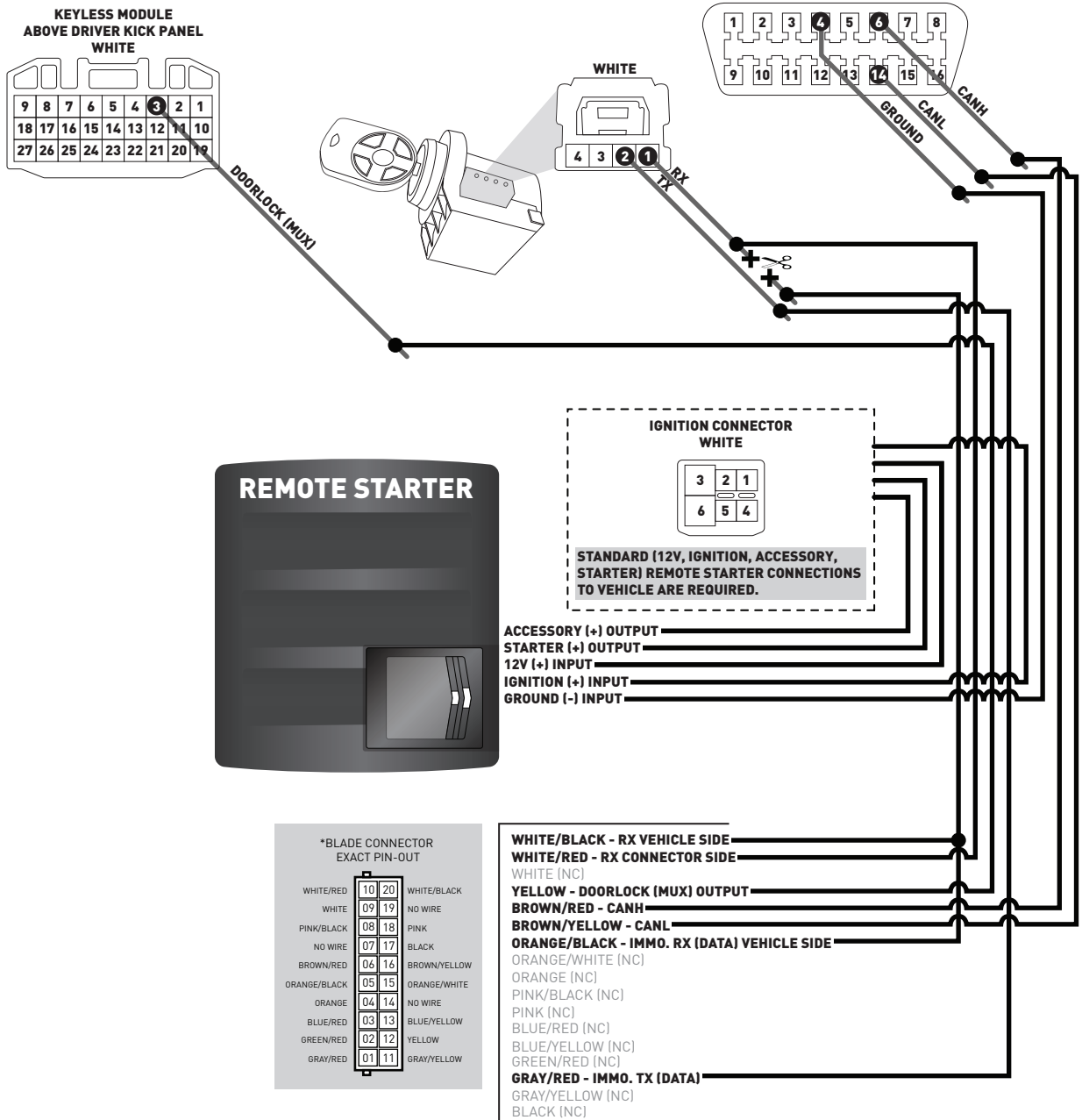
TYPE 3 - WIRING DIAGRAM



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
MAZDA	MX-5 Miata STD Key AT/MT	06-15	Immobilizer RX	~	White	04 pin	01	LtBlue/Orange	(DATA)	Immobilizer near key barrel	A
			Immobilizer TX	~	White	04 pin	02	Yellow/Black	(DATA)	Immobilizer near key barrel	A
			Ignition	~	White	06 pin	02	Green/White	(+)	Ignition switch	A
			CanH	~	Black	16 pin	06	Blue/White	(DATA)	OBDII connector	B
			CanL	~	Black	16 pin	14	Green/Black	(DATA)	OBDII connector	B
			Doorlock	~	White	27 pin	03	Gray/Red	(MUX)	Keyless module, above driver kick panel	C
	MX-5 Miata Smart Key AT/MT	06-15	Immobilizer RX	~	White	04 pin	01	Purple	(DATA)	Immobilizer near key barrel	A
			Immobilizer TX	~	White	04 pin	02	Gray/LtBlue	(DATA)	Immobilizer near key barrel	A
			Ignition	~	White	06 pin	02	Green/White	(+)	Ignition switch	A
			CanH	~	Black	16 pin	06	Blue/White	(DATA)	OBDII connector	B
			CanL	~	Black	16 pin	14	Green/Black	(DATA)	OBDII connector	B
			Doorlock	~	White	27 pin	03	Gray/Red	(MUX)	Keyless module, above driver kick panel	C

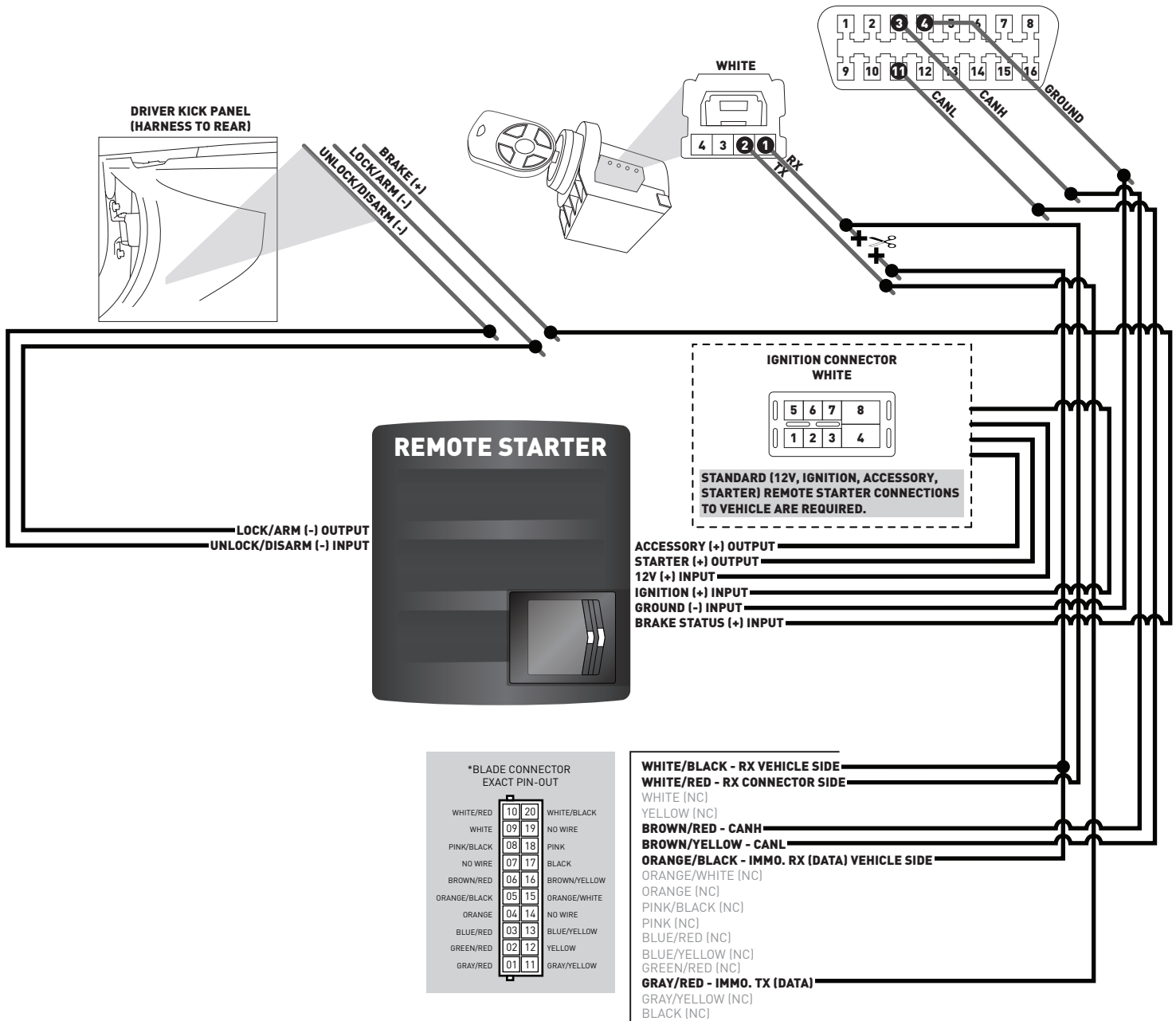
TYPE 4 - WIRING DIAGRAM



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
MAZDA	5 STD Key AT/MT	05-10	Immobilizer RX	~	White	04 pin	01	Pink/Black	(DATA)	Immobilizer near key barrel	A
			Immobilizer TX	~	White	04 pin	02	Green	(DATA)	Immobilizer near key barrel	A
			Ignition	~	White	08 pin	01	Blue	(+)	Ignition switch	A
			CanH	~	~	16 pin	03	Purple	(DATA)	OBDII connector	B
			CanL	~	~	16 pin	11	Gray	(DATA)	OBDII connector	B
			Lock/Arm	~	~	~	~	Blue/Orange	(-)	Driver kick panel	C
			Unlock/Disarm	~	~	~	~	LtGreen/Red	(-)	Driver kick panel	C
			Brake	~	~	~	~	Green/Yellow	(+)	Driver kick panel	C

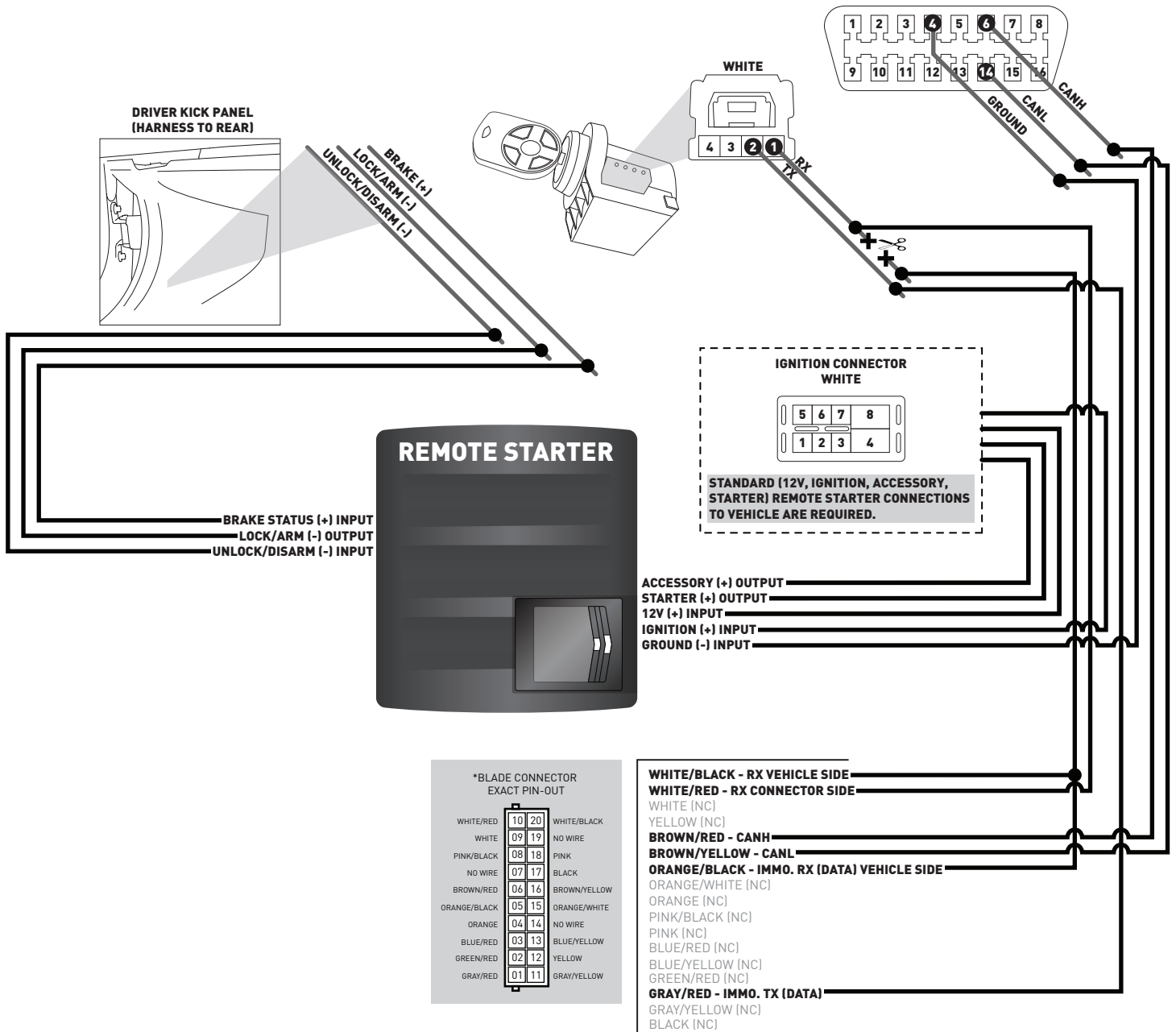
TYPE 5 - WIRING DIAGRAM



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
MAZDA	5 STD Key AT/MT	11-17	Immobilizer RX	~	White	04 pin	01	Gray	(DATA)	Immobilizer near key barrel	A
			Immobilizer TX	~	White	04 pin	02	Blue/Orange	(DATA)	Immobilizer near key barrel	A
			Ignition	~	White	08 pin	01	Blue	(+)	Ignition switch	A
			CanH	~	Black	16 pin	06	Green/Yellow	(DATA)	OBDII connector	B
			CanL	~	Black	16 pin	14	Red/Yellow	(DATA)	OBDII connector	B
			Lock/Arm	~	~	~	~	Blue/Orange	(-)	Driver kick panel	C
			Unlock/Disarm	~	~	~	~	LtGreen/Red	(-)	Driver kick panel	C

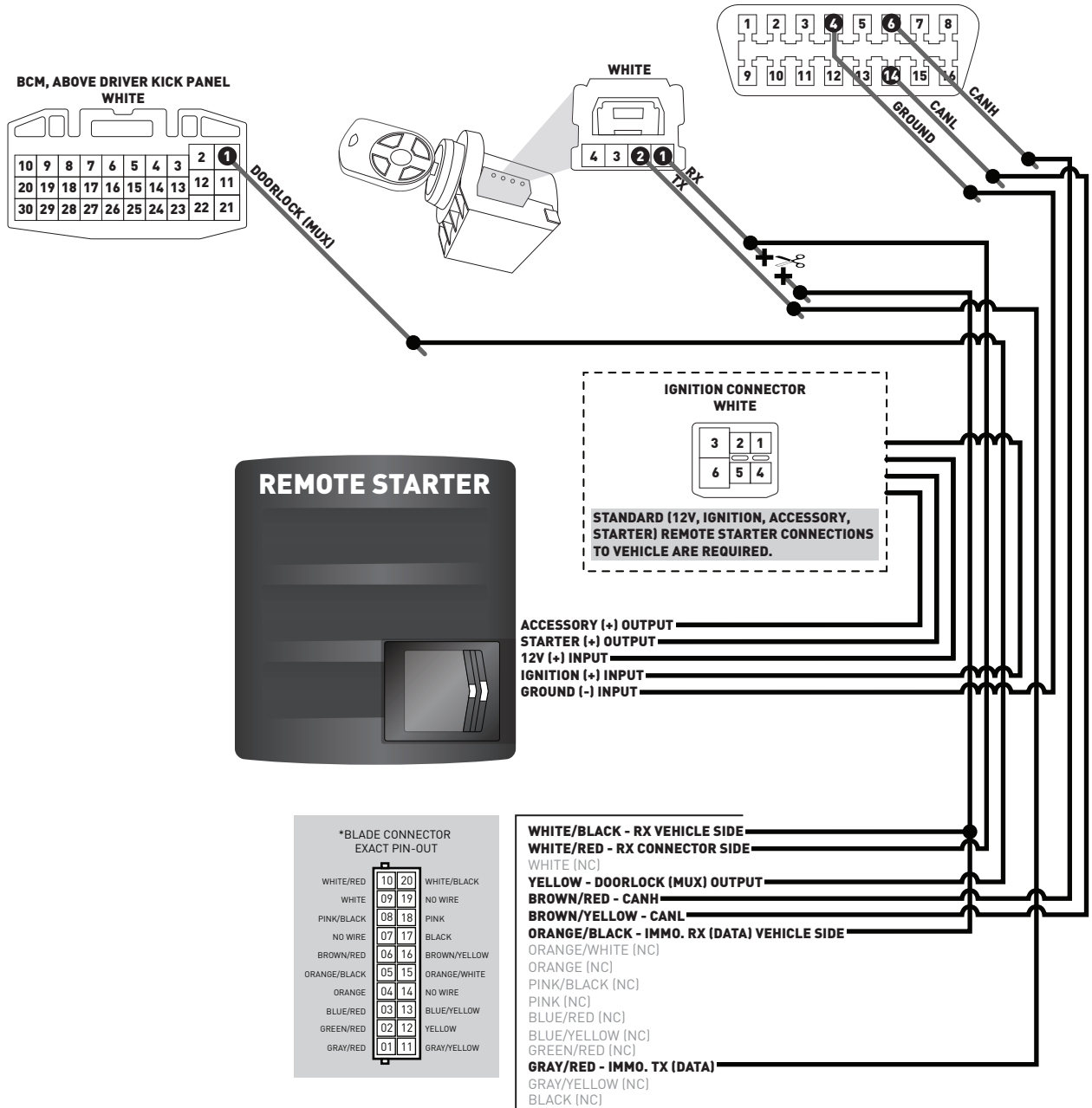
TYPE 6 - WIRING DIAGRAM



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
MAZDA	CX-7 STD Key AT/MT	07-09	Immobilizer RX	~	White	04 pin	01	White/LtGreen	(DATA)	Immobilizer near key barrel	A
			Immobilizer TX	~	White	04 pin	02	Gray/Orange	(DATA)	Immobilizer near key barrel	A
			Ignition	~	White	06 pin	02	DkGreen/Yellow	(+)	Ignition switch	A
			CanH	~	Black	16 pin	06	Gray/Purple	[DATA]	OBDII connector	B
			CanL	~	Black	16 pin	14	Blue/White	[DATA]	OBDII connector	B
			Doorlock	~	White	30 pin	01	Black/White	(MUX)	Driver kick panel	C
	CX-7 Smart Key AT/MT	07-09	Immobilizer RX	~	White	04 pin	01	White/LtGreen	(DATA)	Immobilizer near key barrel	A
			Immobilizer TX	~	White	04 pin	02	Gray/Orange	(DATA)	Immobilizer near key barrel	A
			Ignition	~	White	06 pin	02	DkGreen/Yellow	(+)	Ignition switch	A
			CanH	~	Black	16 pin	06	Gray/Purple	[DATA]	OBDII connector	B
			CanL	~	Black	16 pin	14	Blue/White	[DATA]	OBDII connector	B
			Doorlock	~	White	30 pin	01	Black/White	(MUX)	Driver kick panel	C

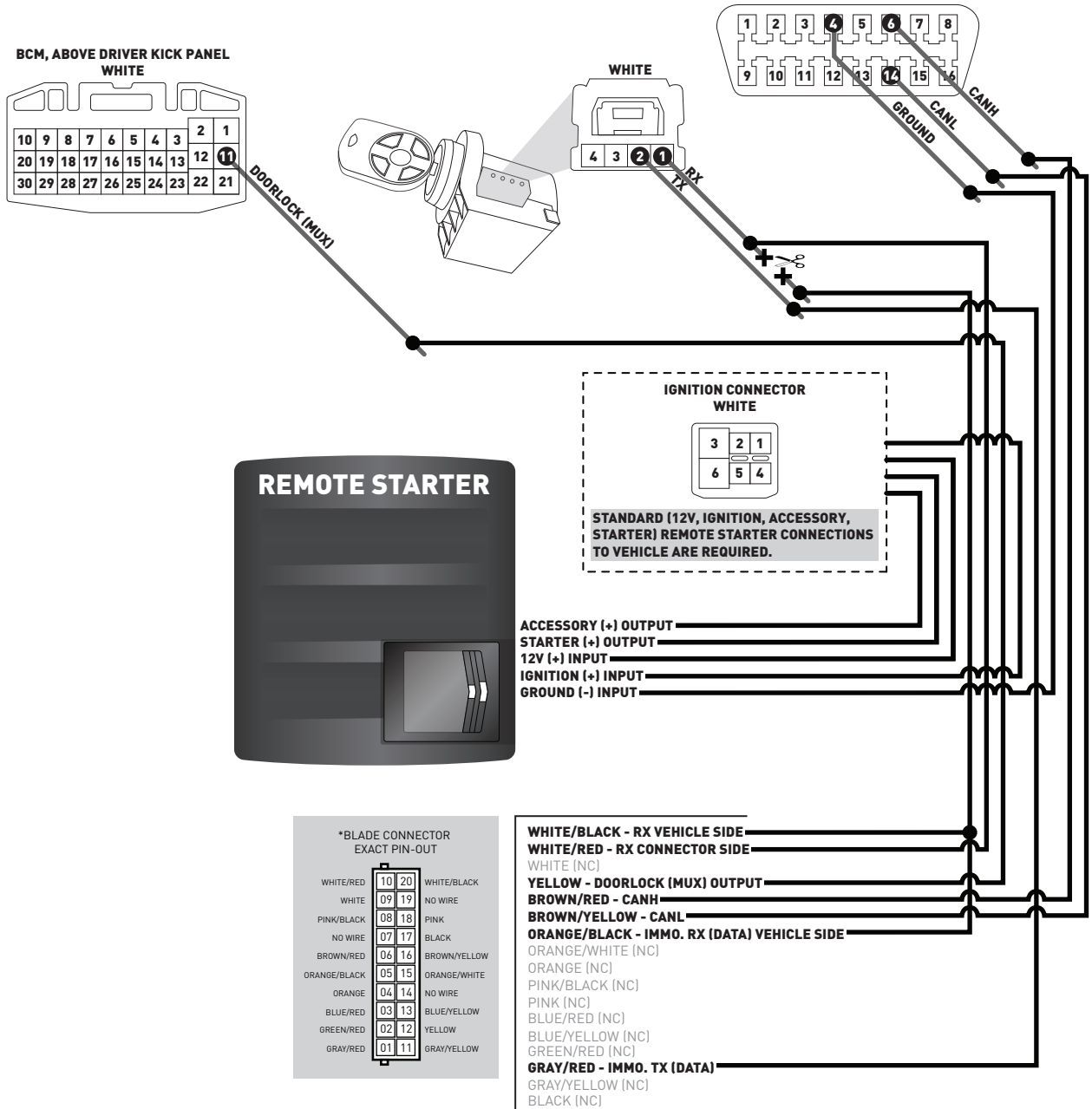
TYPE 7 - WIRING DIAGRAM



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
MAZDA	CX-7 STD Key AT/MT	10-12	Immobilizer RX	~	White	04 pin	01	White/LtGreen	(DATA)	Immobilizer near key barrel	A
			Immobilizer TX	~	White	04 pin	02	Gray/Orange	(DATA)	Immobilizer near key barrel	A
			Ignition	~	White	06 pin	02	DkGreen/Yellow	(+)	Ignition switch	A
			CanH	~	Black	16 pin	06	Gray/Blue	[DATA]	OBDII connector	B
			CanL	~	Black	16 pin	14	Blue/White	[DATA]	OBDII connector	B
			Doorlock	~	White	30 pin	11	Black/White	(MUX)	Driver kick panel	C
	CX-7 Smart Key AT/MT	10-12	Immobilizer RX	~	White	04 pin	01	White/LtGreen	(DATA)	Immobilizer near key barrel	A
			Immobilizer TX	~	White	04 pin	02	Gray/Orange	(DATA)	Immobilizer near key barrel	A
			Ignition	~	White	06 pin	02	DkGreen/Yellow	(+)	Ignition switch	A
			CanH	~	Black	16 pin	06	Gray/Blue	[DATA]	OBDII connector	B
			CanL	~	Black	16 pin	14	Blue/White	[DATA]	OBDII connector	B
			Doorlock	~	White	30 pin	11	Black/White	(MUX)	Driver kick panel	C

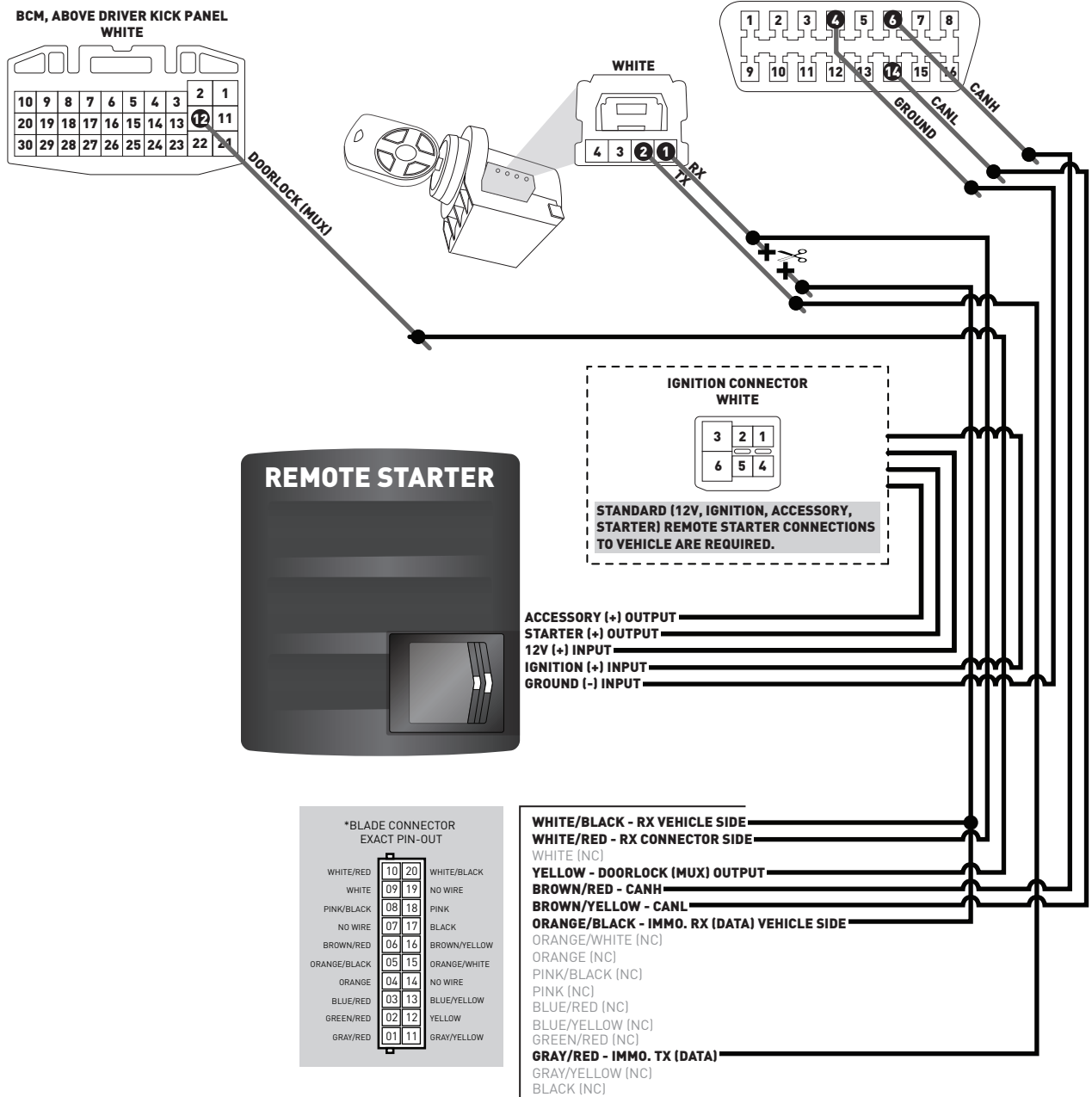
TYPE 8 - WIRING DIAGRAM



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
MAZDA	CX-9 STD Key AT/MT	07-15	Immobilizer RX	~	White	04 pin	01	Blue/Orange	(DATA)	Immobilizer near key barrel	A
			Immobilizer TX	~	White	04 pin	02	Blue/Yellow	(DATA)	Immobilizer near key barrel	A
			Ignition	~	White	06 pin	02	Blue	(+)	Ignition switch	A
			CanH	~	White	16 pin	06	Red	[DATA]	OBDII connector	B
			CanL	~	White	16 pin	14	Blue	[DATA]	OBDII connector	B
			Doorlock	~	White	30 pin	12	LtGreen	(MUX)	Driver kick panel	C
	CX-9 Smart Key AT/MT	07-15	Immobilizer RX	~	White	04 pin	01	Blue/Orange	(DATA)	Immobilizer near key barrel	A
			Immobilizer TX	~	White	04 pin	02	Blue/Yellow	(DATA)	Immobilizer near key barrel	A
			Ignition	~	White	06 pin	02	Blue	(+)	Ignition switch	A
			CanH	~	White	16 pin	06	Red	[DATA]	OBDII connector	B
			CanL	~	White	16 pin	14	Blue	[DATA]	OBDII connector	B
			Doorlock	~	White	30 pin	12	LtGreen	(MUX)	Driver kick panel	C

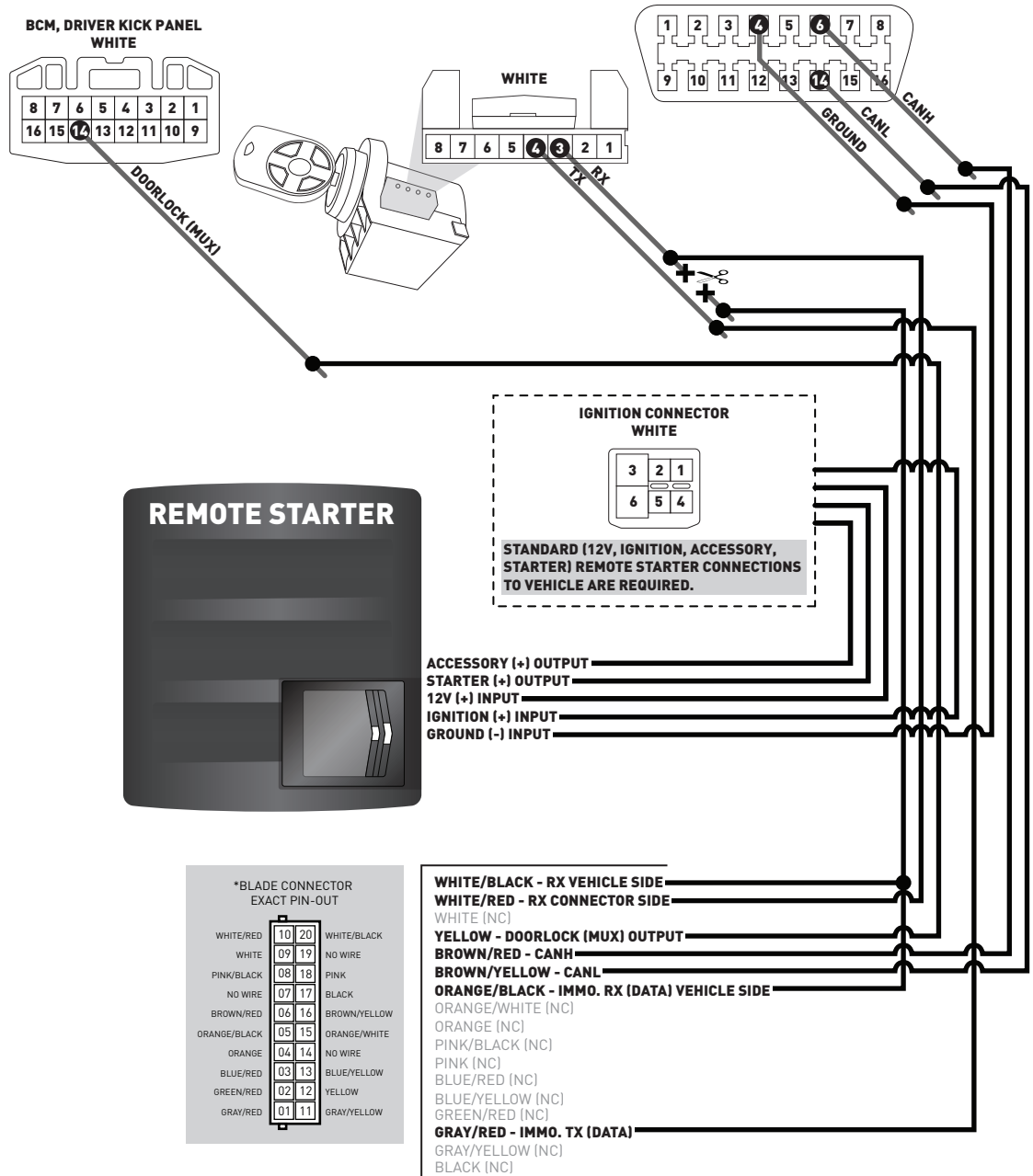
TYPE 9 - WIRING DIAGRAM



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
MAZDA	6 STD Key AT/MT	09-13	Immobilizer RX	~	White	08 pin	03	White/LtGreen	(DATA)	Immobilizer near key barrel	A
			Immobilizer TX	~	White	08 pin	04	Gray/Orange	(DATA)	Immobilizer near key barrel	A
			Ignition	~	White	06 pin	02	Green/Yellow	(+)	Ignition switch	A
			CanH	~	Black	16 pin	06	Gray/Red	(DATA)	OBDII connector	B
			CanL	~	Black	16 pin	14	Blue/Red	(DATA)	OBDII connector	B
			Doorlocks	~	White	16 pin	14	Black	(MUX)	BCM, driver kick panel	C

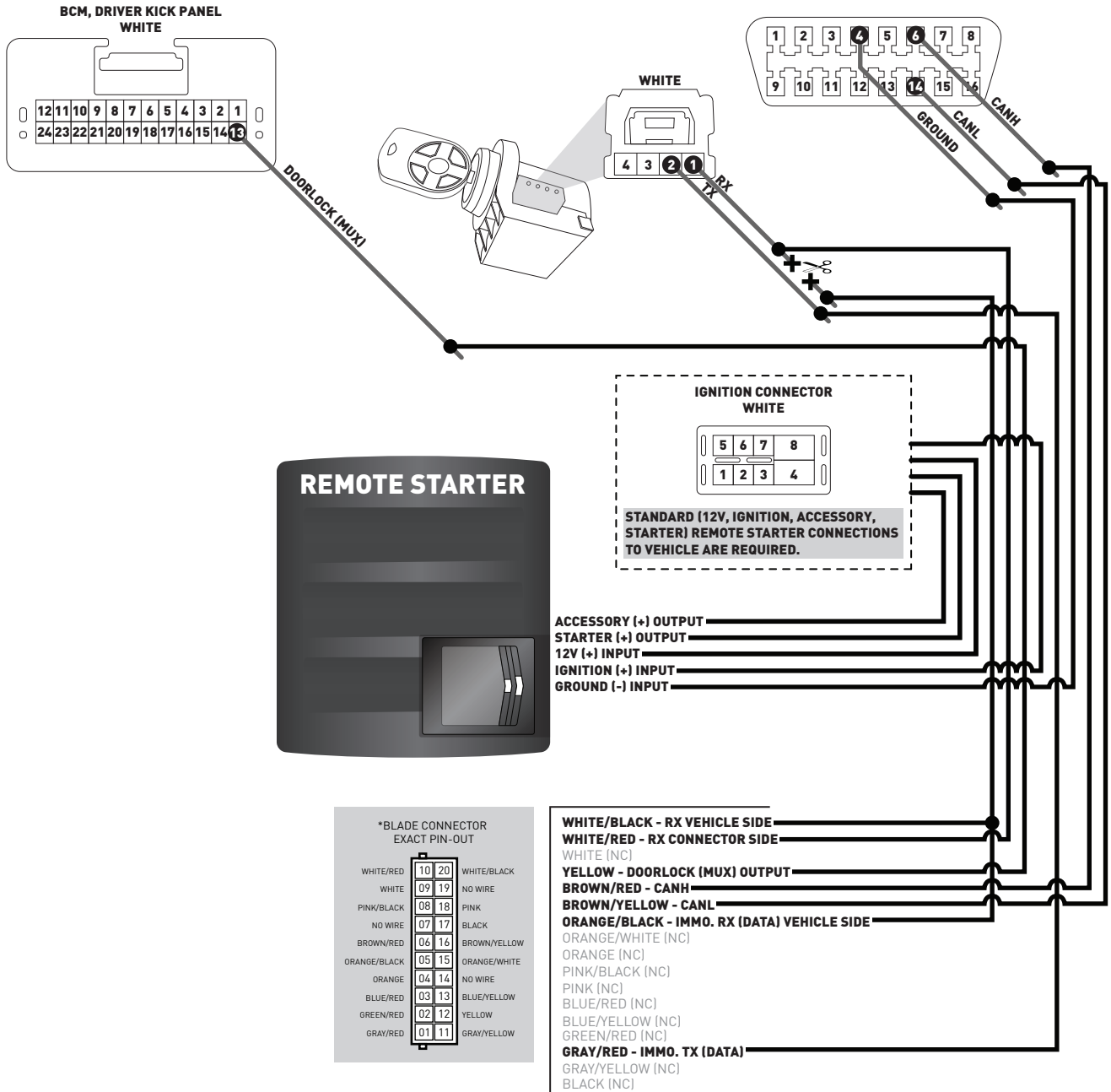
TYPE 10 - WIRING DIAGRAM



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
MAZDA	3 STD Key AT/MT	10-13	Immobilizer RX	~	White	04 pin	01	Blue	(DATA)	Immobilizer near key barrel	A
			Immobilizer TX	~	White	04 pin	02	LtBlue	(DATA)	Immobilizer near key barrel	A
			Ignition	~	White	06 pin	01	Blue	(+)	Ignition switch	A
			CanH	~	Black	16 pin	06	White	(DATA)	OBDII connector	B
			CanL	~	Black	16 pin	14	Red	(DATA)	OBDII connector	B
			Doorlocks	~	White	24 pin	13	Green	(MUX)	BCM, driver kick panel	C

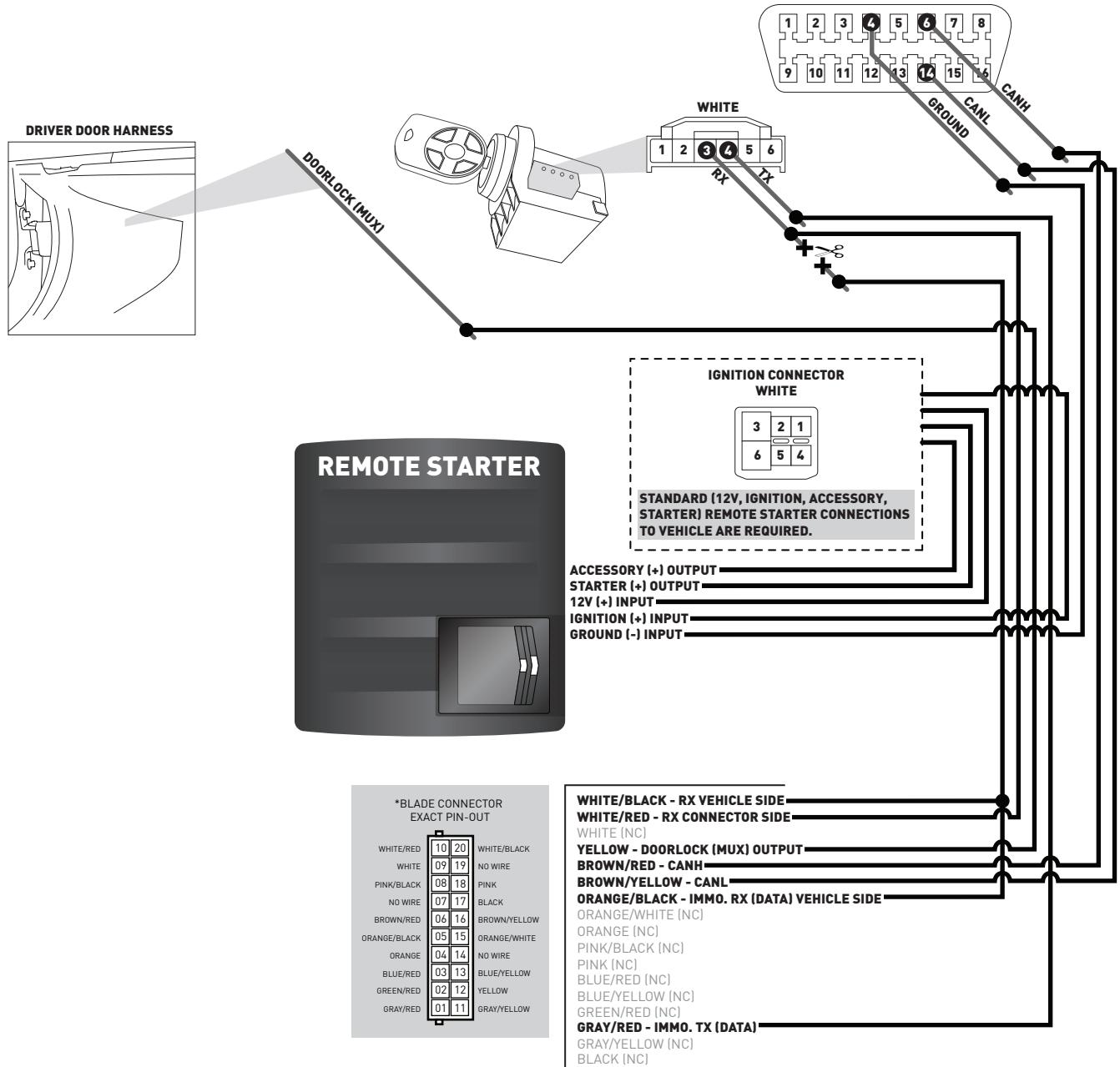
TYPE 11 - WIRING DIAGRAM



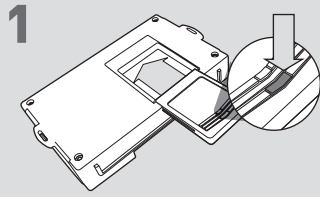
TYPE 12 - WIRE CROSS REFERENCE CHART

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
MAZDA	2 STD Key AT/MT	11-14	Immobilizer RX	~	White	06 pin	03	Gray	(DATA)	Immobilizer near key barrel	A
			Immobilizer TX	~	White	06 pin	04	Green	(DATA)	Immobilizer near key barrel	A
			Ignition	~	White	06 pin	05	Black/Yellow	(+)	Ignition switch	A
			CanH	~	Black	16 pin	06	Red	(DATA)	OBDII connector	B
			CanL	~	Black	16 pin	14	Blue	(DATA)	OBDII connector	B
			Doorlocks	~	~	~	~	Green	(MUX)	Driver door harness	~

TYPE 12 - WIRING DIAGRAM



CARTRIDGE INSTALLATION



1 Slide cartridge into unit. Notice button under LED.

2

Ready for Module Programming Procedure.

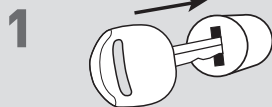
MODULE PROGRAMMING PROCEDURE

NOTE: SMART KEY VEHICLES



Keep all OEM remotes at least 10 feet away from the vehicle.

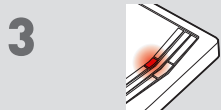
Use valet key for the module programming procedure.



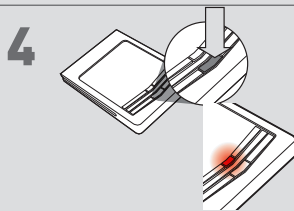
1 Insert key into ignition.



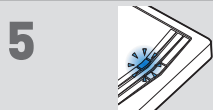
2 Turn key to ON position.



3 Wait, LED will turn solid RED, proceed with following step within **5 seconds**, after LED turns OFF.



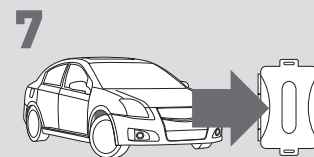
4 Press and hold programming button until LED turns solid RED, then release.



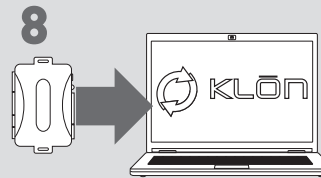
5 Wait, LED will flash BLUE.



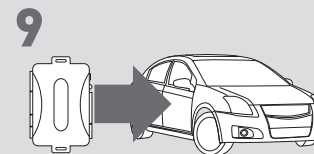
6 Turn key to OFF position.



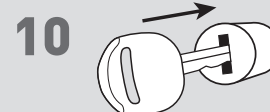
7 WARNING: Disconnect power last. Disconnect RS from vehicle.



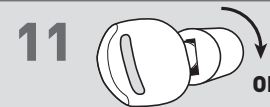
8 Connect RS to computer and proceed with extended programming.



9 WARNING: Do not press RS programming button. Connect power first. Connect RS to vehicle.



10 Insert key into ignition.



11 Turn key to ON position.



12 Wait, LED will turn solid BLUE for **2 seconds**.



13 Turn key to OFF position.

14

Module Programming Procedure completed.

IDENTIFY VEHICLE YEAR

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



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

MODULE DIAGNOSTICS

LED STATUS	DIAGNOSTICS		
	DURING PROGRAMMING	DURING REMOTE START	WITH IGNITION OFF
Flashing RED	Missing/wrong information from firmware or vehicle	Incorrectly programmed	Incorrectly programmed or connected
Solid RED	Waiting for more vehicle information	Incorrectly programmed	Not programmed waiting for more vehicle information
Flashing BLUE	Additional steps required to complete programming	Correctly programmed and operational	False ground when running status from remote starter
Solid BLUE 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** cartridge from remote starter.
- PRESS AND HOLD** programming button while re-connecting cartridge to remote starter.

- LED will flash red. Immediately **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.