



# KV Series Wiring Loom Colours

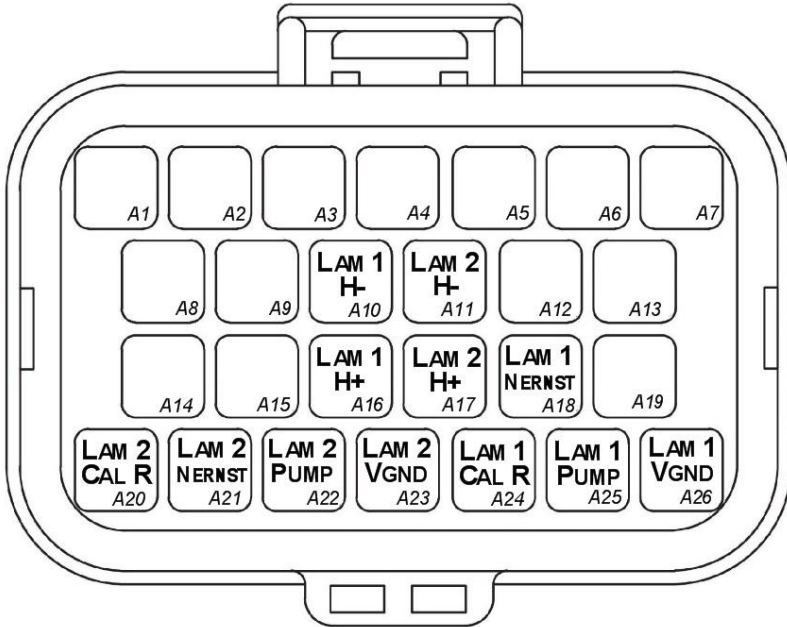
April 2015

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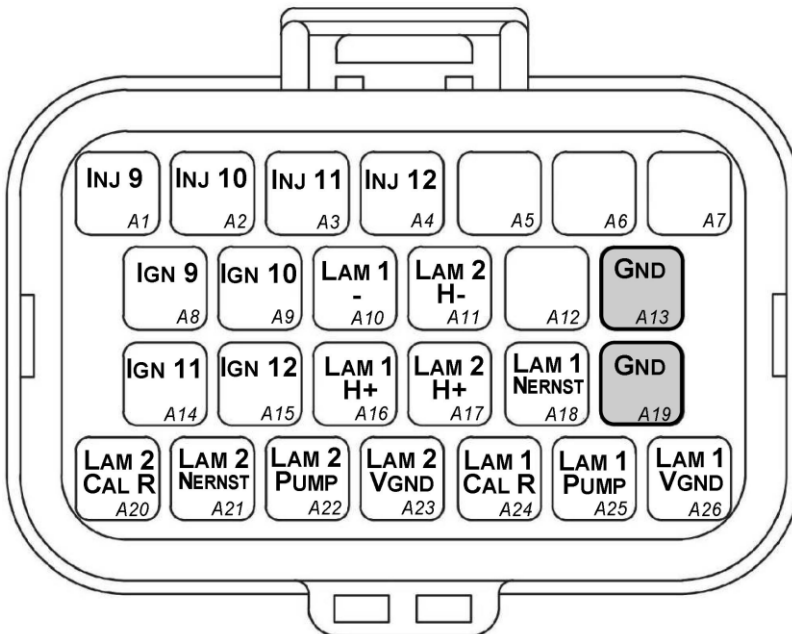
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# 1.0 Connector A

## Connector A - KV8

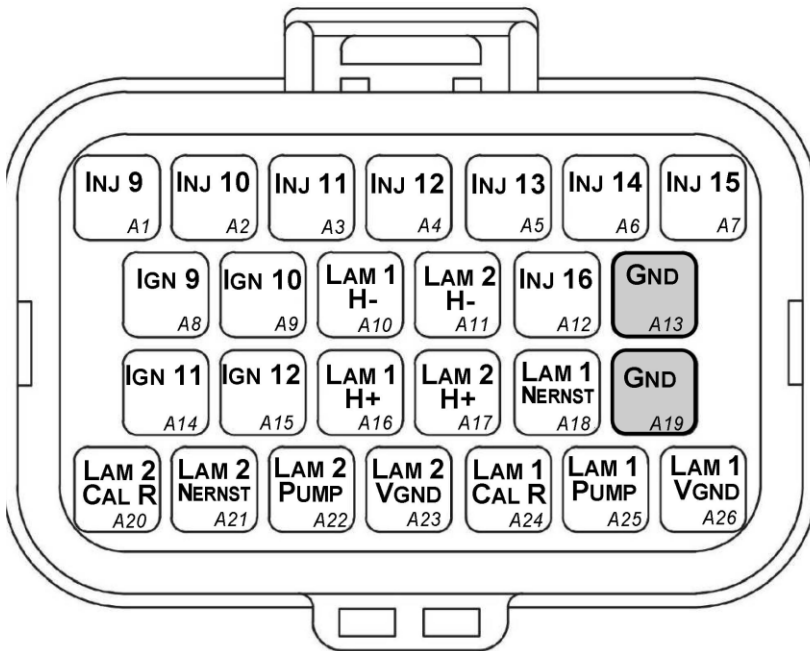


## Connector A - KV12



**CONNECTOR A**

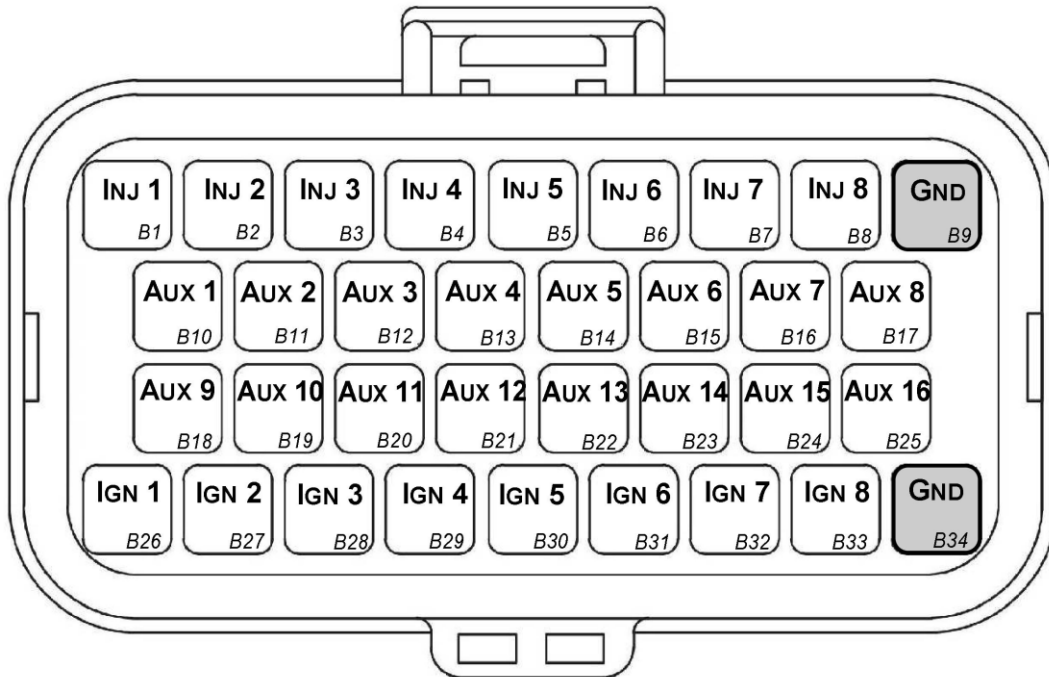
Connector A - KV16



CONNECTOR A

Channel	Pin Number	Description	Color
<b>INJ 9</b>	A1	Injector Channel 9	Grey/White
<b>INJ 10</b>	A2	Injector Channel 10	Brown/White
<b>INJ 11</b>	A3	Injector Channel 11	Yellow/White
<b>INJ 12</b>	A4	Injector Channel 12	Purple/White
<b>INJ 13</b>	A5	Injector Channel 13	Green/White
<b>INJ 14</b>	A6	Injector Channel 14	Green/Brown
<b>INJ 15</b>	A7	Injector Channel 15	Grey/Brown
<b>IGN 9</b>	A8	Ignition Channel 9	Blue/Brown
<b>IGN 10</b>	A9	Ignition Channel 10	Blue/White
<b>Lam 1 H-</b>	A10	Lambda 1 Heater -	Black/Brown
<b>Lam 2 H-</b>	A11	Lambda 2 Heater -	Black/White
<b>INJ 16</b>	A12	Injector Channel 16	Yellow/Brown
<b>GND</b>	A13	Power Ground	Black
<b>IGN 11</b>	A14	Ignition Channel 11	Red/Grey
<b>IGN 12</b>	A15	Ignition Channel 12	Red/White
<b>Lam 1 H+</b>	A16	Lambda 1 Heater 12V	Brown
<b>Lam 2 H+</b>	A17	Lambda 2 Heater 12V	White
<b>LAM 1 Nernst</b>	A18	Lambda 1 Nernst Cell	Blue/Purple
<b>GND</b>	A19	Power Ground	Black
<b>LAM 2 Cal R</b>	A20	Lambda 2 Cal Res.	Orange/Brown
<b>LAM 2 Nernst</b>	A21	Lambda 2 Nernst Cell	Black/Red
<b>LAM 2 Pump</b>	A22	Lambda 2 Pump Current	Red/Yellow
<b>LAM 2 VGND</b>	A23	Lambda 2 Virtual Gnd	Red/Green
<b>LAM 1 Cal R</b>	A24	Lambda 1 Cal Res.	Purple/White
<b>LAM 1 Pump</b>	A25	Lambda 1 Pump Current	Grey
<b>LAM 1 VGND</b>	A26	Lambda 1 Virtual Gnd	White/Brown

## 2.0 Connector B



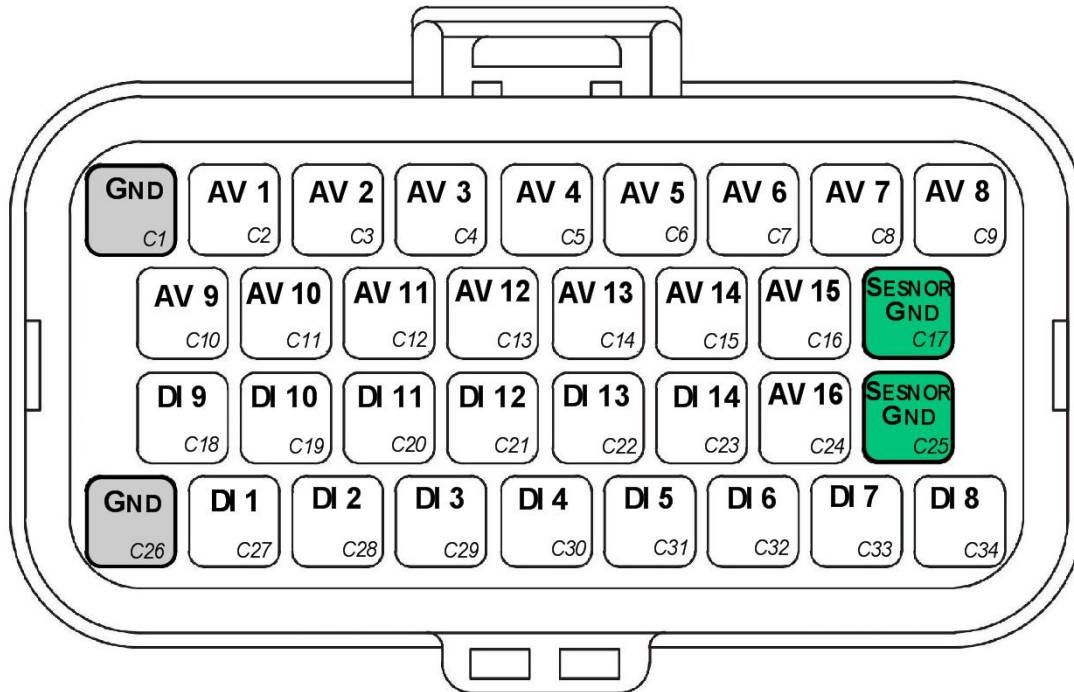
**CONNECTOR B**

Pin Name	Pin Number	Description	Color
<b>INJ 1</b>	B1	Injector Channel 1	White/Red
<b>INJ 2</b>	B2	Injector Channel 2	White/Orange
<b>INJ 3</b>	B3	Injector Channel 3	White/Yellow
<b>INJ 4</b>	B4	Injector Channel 4	White/Green
<b>INJ 5</b>	B5	Injector Channel 5	White/Blue
<b>INJ 6</b>	B6	Injector Channel 6	White/Purple
<b>INJ 7</b>	B7	Injector Channel 7	White/Pink
<b>INJ 8</b>	B8	Injector Channel 8	White/Black
<b>IGN 1</b>	B26	Ignition Channel 1	Blue/Red
<b>IGN 2</b>	B27	Ignition Channel 2	Blue/Orange
<b>IGN 3</b>	B28	Ignition Channel 3	Blue/Yellow
<b>IGN 4</b>	B29	Ignition Channel 4	Blue/Green
<b>IGN 5</b>	B30	Ignition Channel 5	Blue
<b>IGN 6</b>	B31	Ignition Channel 6	Blue/Purple
<b>IGN 7</b>	B32	Ignition Channel 7	Blue/Pink
<b>IGN 8</b>	B33	Ignition Channel 8	Blue/Black
<b>AUX 1</b>	B10	Auxiliary Channel 1	Grey/Red
<b>AUX 2</b>	B11	Auxiliary Channel 2	Grey/Orange
<b>AUX 3</b>	B12	Auxiliary Channel 3	Grey/Yellow
<b>AUX 4</b>	B13	Auxiliary Channel 4	Grey/Green
<b>AUX 5</b>	B14	Auxiliary Channel 5	Grey/Blue
<b>AUX 6</b>	B15	Auxiliary Channel 6	Grey/Purple
<b>AUX 7</b>	B16	Auxiliary Channel 7	Grey/Pink
<b>AUX 8</b>	B17	Auxiliary Channel 8	Grey/Black
<b>AUX 9</b>	B18	Auxiliary Channel 9	Brown/Red
<b>AUX 10</b>	B19	Auxiliary Channel 10	Brown/Orange

Pin Name	Pin Number	Description	Color
<b>AUX 11</b>	B20	Auxiliary Channel 11	Brown/Yellow
<b>AUX 12</b>	B21	Auxiliary Channel 12	Brown/Green
<b>AUX 13</b>	B22	Auxiliary Channel 13	Brown/Blue
<b>AUX 14</b>	B23	Auxiliary Channel 14	Brown/Purple
<b>AUX 15</b>	B24	Auxiliary Channel 15	Brown/Pink
<b>AUX 16</b>	B25	Auxiliary Channel 16	Brown/Black
<b>GND</b>	B9	Power Ground	Black
<b>GND</b>	B34	Power Ground	Black



### 3.0 Connector C

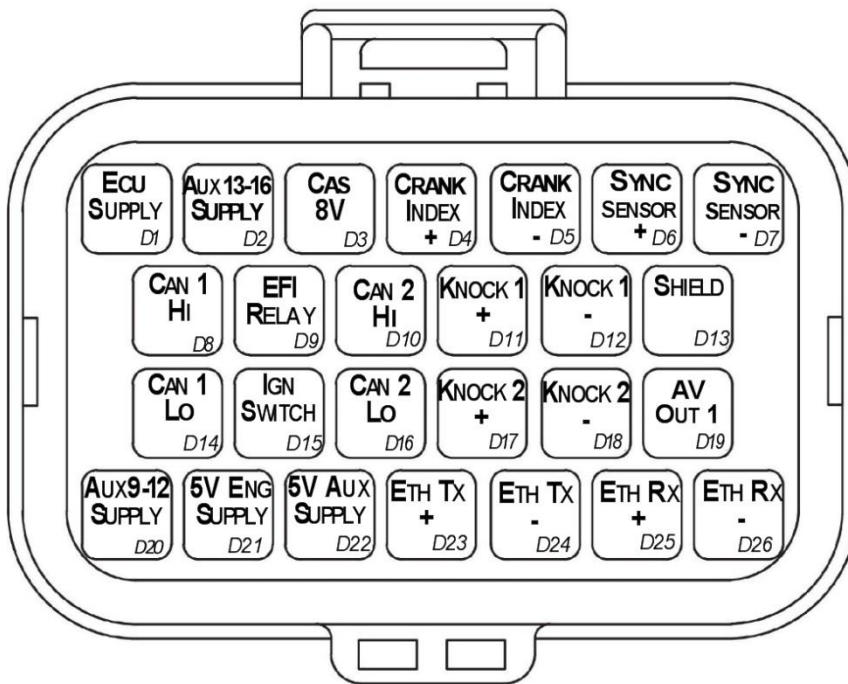


CONNECTOR C

Pin Name	Pin Number	Description	Color
<b>AV 1</b>	C2	Analog Voltage CH 1	Yellow/Red
<b>AV 2</b>	C3	Analog Voltage CH 2	Yellow/Orange
<b>AV 3</b>	C4	Analog Voltage CH 3	Yellow
<b>AV 4</b>	C5	Analog Voltage CH 4	Yellow/Green
<b>AV 5</b>	C6	Analog Voltage CH 5	Yellow/Blue
<b>AV 6</b>	C7	Analog Voltage CH 6	Yellow/Purple
<b>AV 7</b>	C8	Analog Voltage CH 7	Yellow/Pink
<b>AV 8</b>	C9	Analog Voltage CH 8	Yellow/Black
<b>AV 9</b>	C10	Analog Voltage CH 9	Orange/Red
<b>AV 10</b>	C11	Analog Voltage CH 10	Orange
<b>AV 11</b>	C12	Analog Voltage CH 11	Orange/Yellow
<b>AV 12</b>	C13	Analog Voltage CH 12	Orange/Green
<b>AV 13</b>	C14	Analog Voltage CH 13	Orange/Blue
<b>AV 14</b>	C15	Analog Voltage CH 14	Orange/Purple
<b>AV 15</b>	C16	Analog Voltage CH 15	Orange/Black
<b>AV 16</b>	C24	Analog Voltage CH 16	Orange/White
<b>Digital Input Channels</b>			
<b>DI 1</b>	C27	Digital Input CH 1	Green/Red
<b>DI 2</b>	C28	Digital Input CH 2	Green /Orange
<b>DI 3</b>	C29	Digital Input CH 3	Green /Yellow
<b>DI 4</b>	C30	Digital Input CH 4	Green
<b>DI 5</b>	C31	Digital Input CH 5	Green /Blue
<b>DI 6</b>	C32	Digital Input CH 6	Green /Purple
<b>DI 7</b>	C33	Digital Input CH 7	Green Pink
<b>DI 8</b>	C34	Digital Input CH 8	Green /Black
<b>DI 9</b>	C18	Digital Input CH 9	Purple/Red
<b>DI 10</b>	C19	Digital Input CH 10	Purple /Orange

Pin Name	Pin Number	Description	Color
<b>DI 11</b>	C20	Digital Input CH 11	Purple /Yellow
<b>DI 12</b>	C21	Digital Input CH 12	Purple/Green
<b>DI 13</b>	C22	Digital Input CH 13	Purple /Blue
<b>DI 14</b>	C23	Digital Input CH 14	Purple
<b>SENSOR GND</b>	C17	Sensor Ground	Black/Green
<b>SENSOR GND</b>	C25	Sensor Ground	Black/Green
<b>GND</b>	C1	Power Ground	Black
<b>GND</b>	C26	Power Ground	Black

## 4.0 Connector D



**CONNECTOR D**

	Pin Number	Description	Color
<b>ECU SUPPLY</b>	D1	ECU Supply	Red
<b>AUX 13-16 Supply</b>	D2	Power supply for Aux 13-16	Red/Blue
<b>CAS 8V</b>	D3	8V Cas Supply	Red/Orange
<b>CRANK INDEX +</b>	D4	Crank Index position sensor Positive	2 core Shielded Cable shared with Pin D5
<b>CRANK INDEX -</b>	D5	Crank Index position sensor Negative	2 core Shielded Cable shared with Pin D4
<b>SYNC SENSOR +</b>	D6	Sync Sensor Positive	2 core Shielded Cable shared with Pin D7
<b>SYNC SENSOR -</b>	D7	Sync Sensor Negative	2 core Shielded Cable shared with Pin D6
<b>CAN 1 HI</b>	D8	Main Engine CAN	Pink/Orange
<b>EFI RELAY</b>	D9	Main Relay Control	Pink/Black
<b>CAN 2 HI</b>	D10	Auxiliary CAN	Not Fitted
<b>KNK 1 +</b>	D11	Knock Sensor 1 +	2 core Shielded Cable shared with Pin D12
<b>KNK 1 -</b>	D12	Knock Sensor 1 -	2 core Shielded Cable shared with Pin D11
<b>SHIELD</b>	D13	Crank/Sync/Knock Shield	(Green 70mm)
<b>CAN 1 LO</b>	D14	Main Engine CAN	Pink/Yellow
<b>IGN SWITCH</b>	D15		Pink
<b>CAN 2 LO</b>	D16	Auxiliary CAN	Not Fitted
<b>KNK 2 +</b>	D17	Knock Sensor 2 +	2 core Shielded Cable shared with Pin D18
<b>KNK 2 -</b>	D18	Knock Sensor 2 -	2 core Shielded Cable shared with Pin D17
<b>AVOUT 1</b>	D19	Analog Out 1	Purple/Black
<b>AUX 9 -12 SUPPLY</b>	D20	Power supply for Aux 9-12 high side	Red/Purple

Pin Name	Pin Number	Description	Color
<b>5V ENG SUPPLY</b>	D21	Main 5V engine sensor supply (Branched Cable)	Red/Pink
<b>5V AUX SUPPLY</b>	D22	5V Auxiliary sensor supply	Red/Black
<b>Ethernet TX+</b>	D23		Twisted Pair CAT 5E
<b>Ethernet TX-</b>	D24		Twisted Pair CAT 5E
<b>Ethernet RX+</b>	D25		Twisted Pair CAT 5E
<b>Ethernet RX-</b>	D26		Twisted Pair CAT 5E