

# HOW TO SELECT SIZE OF ELECTRIC CABLE

Voltage drop is the primary consideration in selecting the proper electrical wire size. The length of wire in a circuit is the major contributing factor to voltage drop. The table below may be used in determining adequate wire gauge sizes for specific lengths of cable when the amperage requirements are known.

Example: A lamp is 38 ft. from the power source and requires 10 amperes. This figure, when rounded upwards to the nearest column heading given in the table, is 40 ft. The wire gauge in the “40-ft. Column” corresponding to 10 amperes is No. 12.

## Total length of cable in circuit from battery to most distant lamp

### 12 Volt System

Amperes (Approx.)	Up To 30 Feet	40 Feet	50 Feet	60 Feet	80 Feet	100 Feet	120 Feet
	Gauge	Gauge	Gauge	Gauge	Gauge	Gauge	Gauge
1.0	14	14	14	14	14	14	14
2	14	14	14	14	14	14	14
3	14	14	14	14	14	14	12
4	14	14	14	14	14	12	12
5	14	14	14	14	12	12	12
6	14	14	14	14	12	12	10
7	14	14	14	12	12	10	10
8	14	14	12	12	10	10	10
10	14	12	12	12	10	10	8
11	14	12	12	10	10	8	8
12	14	12	12	10	10	8	8
15	12	12	10	10	8	8	8
18	12	10	10	8	8	8	8
20	12	10	10	8	8	8	6
25	12	10	8	8	8	6	6
30	12	10	8	8	8	6	6
35	12	10	8	8	6	6	6

\*Recommended minimum wire gauge size for stop light and ground circuits.

- Single trailer (up to 50' length)
- Doubles trailer (2-28' lengths)
- Doubles trailer (2-40' lengths)
- Triples trailer (3-28' lengths)

Stop Light (Red)

- 12 Gauge
- 12 Gauge
- 10 Gauge
- 10 Gauge

Ground (White)

- 10 Gauge
- 10 Gauge
- 8 Gauge
- 8 Gauge

Cable size gauge no. (Copper)	length of wire in feet	Maximum current carrying capacity with 0.5 volt drop	wire resistance ohms (Ω) per foot
20 Ga.	10 Ft.	4.74 Amps	0.01054 Ω /ft.
18 Ga.	10 Ft.	7.53 Amps	0.00663 Ω /ft.
16 Ga.	10 Ft.	11.98 Amps	0.00417 Ω /ft.
14 Ga.	10 Ft.	19.05 Amps	0.00262 Ω /ft.
12 Ga.	10 Ft.	30.30 Amps	0.00165 Ω /ft.
10 Ga.	10 Ft.	48.16 Amps	0.00103 Ω /ft.
8 Ga.	10 Ft.	76.59 Amps	0.00065 Ω /ft.

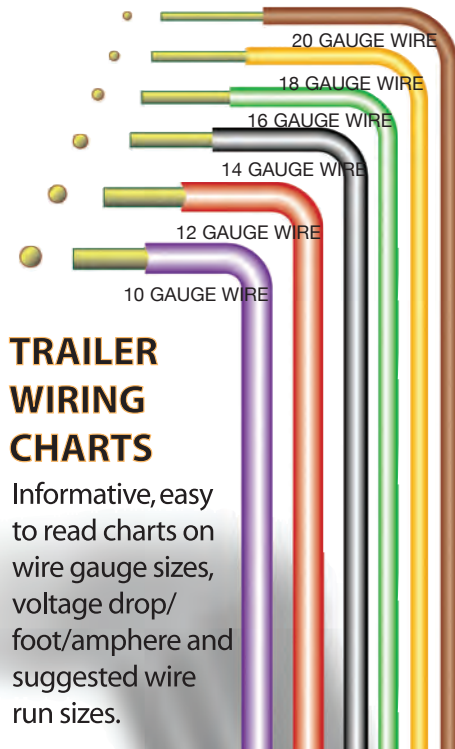
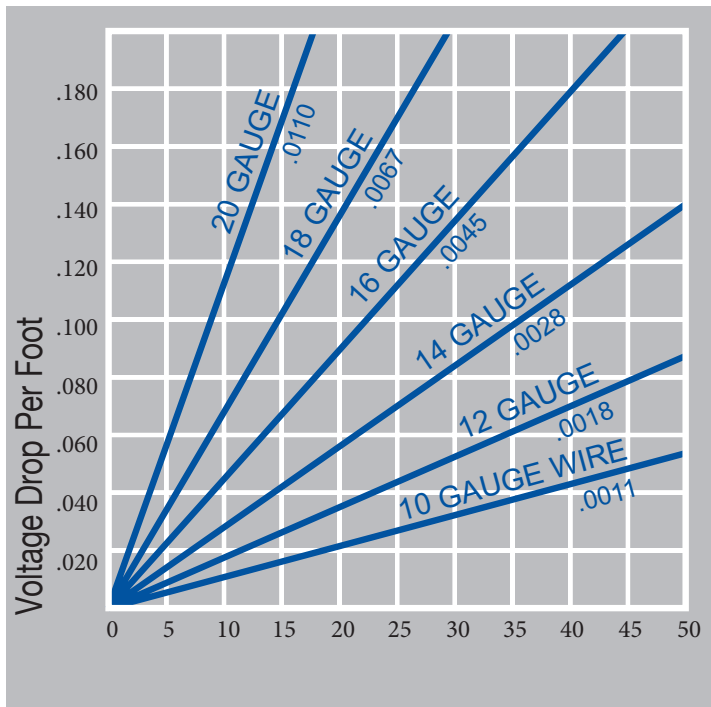
### SAE J560 Standards Conductor Identification

Wire Color	Lamp and Signal Circuits	
Wht	White	Ground return to towing vehicle
Blk	*Black	Clearance, side marker & license plate lamps
Yel	Yellow	Left hand turn signal & hazard signal lamps
Red	Red	Stop lamps and antilock devices
Grn	Green	Right hand turn signal & hazard signal lamps
Brn	*Brown	Tail, clearance, side marker lamps & identification lamps
Blu	Blue	Auxiliary/ABS power

\*It is recommended to balance the circuits as practicable.

Note: This table gives you the resistance of wire per foot so with ohms law V=I x R you can calculate voltage drops on any of the above wire gauges at any current level and length. For example, voltage drop in 50 ft. 10 AWG wire with 20 amp load is V=20 amp x (0.00103 Ω /ft.) x 50 ft. = 1.03 volts. Be sure to include both the positive and negative leads when calculating total wire length.

## Voltage Drop/Foot/Ampere




## Wire Size

**TOTAL FOOTAGE OF WIRE FROM POWER SOURCE TO THE MOST DISTANT ELECTRIC LAMP**

24 VOLT SYSTEM (AMPERES)	12 VOLT SYSTEM (AMPERES)	10'	20'	30'	40'	50'	60'	70'	80'	90'	100'
		GAUGE	GAUGE	GAUGE	GAUGE	GAUGE	GAUGE	GAUGE	GAUGE	GAUGE	GAUGE
2.0	1.0	18	18	18	18	18	18	18	18	18	18
3.0	1.5	18	18	18	18	18	18	18	18	18	18
4.0	2.0	18	18	18	18	18	18	18	16	16	16
6.0	3.0	18	18	18	18	18	16	16	16	14	14
8.0	4.0	18	18	18	16	16	16	14	14	14	12
10.0	5.0	18	18	18	16	14	14	14	12	12	12
12.0	6.0	18	18	16	16	14	14	12	12	12	12
14.0	7.0	18	18	16	14	14	12	12	12	10	10
16.0	8.0	18	16	16	14	12	12	12	10	10	10
20.0	10.0	18	16	14	12	12	12	10	10	10	10
22.0	11.0	18	16	14	12	12	10	10	10	10	8
24.0	12.0	18	16	14	12	12	10	10	10	8	8
30.0	15.0	18	14	12	12	10	10	10	8	8	8
36.0	18.0	16	14	12	10	10	8	8	8	8	8
40.0	20.0	16	12	12	10	10	8	8	8	8	6

BULK CABLE

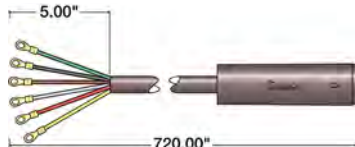
## BULK CABLE

	Part Number	Plug Side 2	Length	Gauge	Wire Type	Warranty
	52700	Blunt Cut	12000in	8/10/12	GPT	1-Year

88 SERIES

## 88 SERIES, MAIN CABLE, 6 CONDUCTOR

- Custom length available in 12" increments

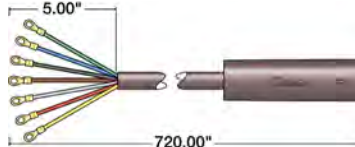
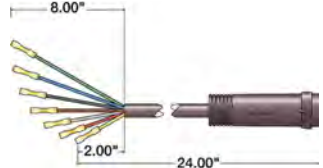
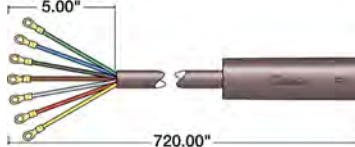
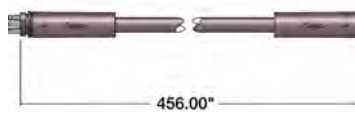
	Part Number	Wire Color	Wire Gauge	Length	Warranty
	88601	Black, Brown, Green, Red, Yellow, White	10	715in	5-Year

MAIN CABLES

88 SERIES

## 88 SERIES, MAIN CABLE, 7 CONDUCTOR

- Dimensions "A" indicated standard stocked length harness
- Custom length available in 12" increments

	Part Number	Wire Color	Wire Gauge	Length	Warranty
	88701	Black, Brown, Blue, Green, Red, Yellow, White	10 12	715in	5-Year
	88703	Black, Brown, Blue, Green, Red, Yellow, White	8 10 12	715in	5-Year
	88810	Black, Brown, Blue, Green, Red, Yellow, White	10 12	22in	5-Year
	88820	Black, Brown, Blue, Green, Red, Yellow, White	8 10 12	456in	5-Year

MAIN CABLES

## 88 SERIES, MAIN CABLE, 7 CONDUCTOR, INTEGRATED NOSE BOX

- Dimensions "A" indicated standard stocked length harness
- Custom length available in 12" increments

	Part Number	Wire Color	Wire Gauge	Length	Warranty
	50776	Black, Brown, Blue, Red, White, Yellow	8 10 12	72in	5-Year
	89810	Black, Brown, Blue, Green, Red, Yellow, White	10 12	28in	5-Year
	50969	Black, Brown, Blue, Green, Red, Yellow, White	8 10 12	14in	5-Year
	88892	Black, Brown, Blue, Green, Red, Yellow, White	8 10 20	180in	5-Year

## 88 SERIES, MAIN CABLE, 7 CONDUCTOR, INTEGRATED NOSE BOX W/DROPOUTS

- Custom length available in 12" increments

	Part Number	Wire Color	Wire Gauge	Length	Warranty
	88896	Black, Brown, Blue, Green, Red, Yellow, White	10 8 20	27in	5-Year

## 88 SERIES, MAIN CABLE, 7 CONDUCTOR, W/BREAKOUTS

- Dimensions "A" indicated standard stocked length harness
- Custom length available in 12" increments

	Part Number	Wire Color	Wire Gauge	Length	Warranty
	88750	Black, Brown, Blue, Green, Red, Yellow, White	10 12	744in	5-Year
	88751	Black, Brown, Blue, Green, Red, Yellow, White	8 10 12	744in	5-Year
	89751	Black, Blue, Brown, Green, Red, Yellow, White	8 10 12	744in	5-Year

## 88 SERIES, MAIN CABLE, 7 CONDUCTOR, ADAPTORS

- Custom length available in 12" increments

	Part Number	Wire Color	Wire Gauge	Length	Warranty
	88905	Black, Brown, Blue, Green, Red, Yellow, White	8 10 12	48in	5-Year
	88896	Black, Brown, Blue, Green, Red, Yellow, White	10 8 20	27in	5-Year
	88900	Black, Brown, Blue, Green, Red, Yellow, White	8 10 12	18in	5-Year

88 SERIES

REAR HARNESS

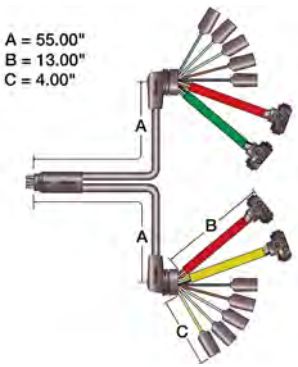
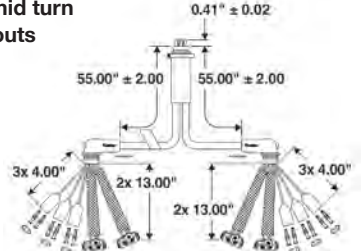
88 SERIES

REAR HARNESS

# 88 SERIES, TURN SIGNAL | LICENSE, RIGHT ANGLE PL-3 / FEMALE .180 BULLET

88 SERIES

S/T/T HARNESS

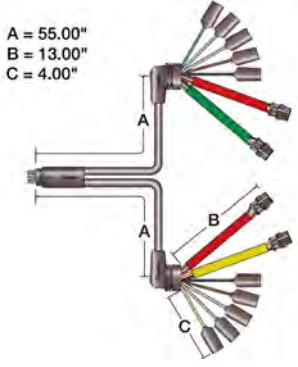
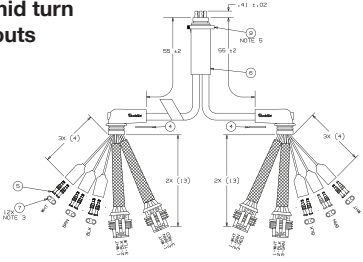
	Part Number	Wire Color	Wire Gauge	Length	Position	Warranty
 <p>A = 55.00" B = 13.00" C = 4.00"</p>	88910	Black, Brown, Green, Red, Yellow, White	14	55in	Rear	5 Year
<p>w/o mid turn dropouts</p>  <p>0.41" ± 0.02 55.00" ± 2.00 55.00" ± 2.00 2x 13.00" 2x 13.00" 3x 4.00" 3x 4.00"</p>	88915	Black, Brown, Green, Red, Yellow, White	14	55in	Rear	5 Year

# 88 SERIES, TURN SIGNAL | LICENSE, FIT 'N FORGET / FEMALE .180 BULLET



88 SERIES

S/T/T HARNESS

	Part Number	Wire Color	Wire Gauge	Length	Position	Warranty
 <p>A = 55.00" B = 13.00" C = 4.00"</p>	88930	Black, Brown, Green, Red, Yellow, White	14	55in	Rear	5 Year
<p>w/o mid turn dropouts</p>  <p>0.41" ± 0.02 55.00" ± 2.00 55.00" ± 2.00 2x 13.00" 2x 13.00" 3x 4.00" 3x 4.00"</p>	88932	Black, Brown, Green, Red, Yellow, White	14	55in	Rear	5 Year

**88 SERIES, STOP/TURN/TAIL | LICENSE, w/ABS  
RIGHT ANGLE PL-3 / FEMALE .180 BULLET**

88 SERIES

S/T/T HARNESS

AUX / ABS

	Part Number	Wire Color	Wire Gauge	Length	Position	Warranty
<p>A = 55.00" B = 13.00" C = 4.00" D = 10.00"</p>	88911	Black, Blue, Brown, Green, Red, Yellow, White	14	55in	Rear	5 Year

**88 SERIES, STOP/TURN/TAIL | LICENSE, w/ABS  
FIT 'N FORGET / FEMALE .180 BULLET**



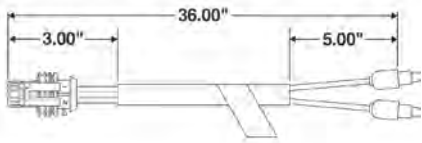
88 SERIES

S/T/T HARNESS

AUX / ABS

	Part Number	Wire Color	Wire Gauge	Length	Position	Warranty
<p>A = 55.00" B = 13.00" C = 4.00" D = 10.00"</p>	88931	Black, Blue, Brown, Green, Red, Yellow, White	14	55	Rear	5 Year

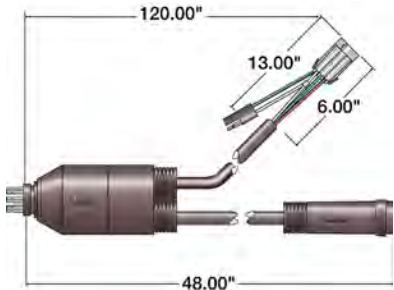
## 88 SERIES, LICENSE HARNESS

	Part Number	Wire Color	Wire Gauge	Length	Warranty
	88357	Black, White	14	36in	5 Year

88 SERIES

LICENSE HARNESS

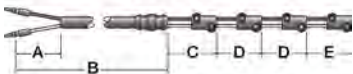
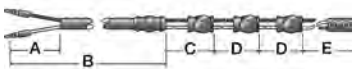
## 88 SERIES, ABS HARNESS

	Part Number	Wire Color	Wire Gauge	Length	Warranty
	88100	Blue, Red, White	12	348.5in	5 Year
	88902	Black, Brown, Blue, Green, Red, Yellow, White	8 10 12	18in	5 Year

88 SERIES

ABS HARNESS

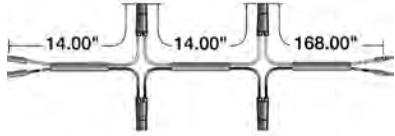
## 88 SERIES, ID/LICENSE HARNESS

	Part Number	Number of Plugs	Wire Color	Wire Gauge	Length	Position	Warranty
<p>A = 4.00" B = 60.00" C = 6.00" D = 15.00" E = 20.00"</p> 	88308	4	Brown, White	14	56in	Lower	5 Year
<p>A = 4.00" B = 60.00" C = 6.00" D = 14.25" E = 19.50"</p> 	88338	4	Black, White	14	56in	Lower	5 Year




88 SERIES

ID HARNESS

### 88 SERIES, ID HARNESS, REAR

	Part Number	Number of Plugs	Wire Color	Wire Gauge	Length	Position	Warranty
	95809	3	Brown, White	14	56in	Lower	5 Year

### 88 SERIES, ID HARNESS, LOWER

	Part Number	Number of Plugs	Wire Color	Wire Gauge	Length	Position	Warranty
<p>A = 4.00" B = 60.00" C = 6.00" D = 15.00"</p> 	88300	3	Brown, White	14	56in	Lower	5 Year
<p>A = 4.00" B = 60.00" C = 6.00" D = 8.25"</p> 	88367	3	Black, White	14	56in	Lower	5 Year
<p>A = 4.00" B = 192.00" C = 6.00" D = 8.25"</p> 	88368	3	Black, White	14	188in	Lower	5 Year
<p>A = 4.00" B = 192.00" C = 6.00" D = 14.25"</p> 	88372	3	Black, White	14	56in	Lower	5 Year

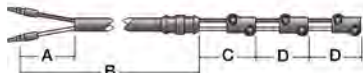
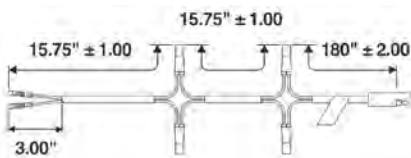
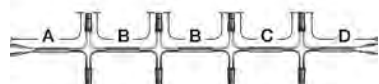
88 SERIES

ID HARNESS

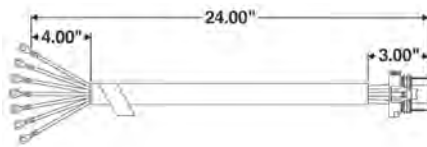
88 SERIES

ID HARNESS

### 88 SERIES, ID HARNESS, UPPER

	Part Number	Number of Plugs	Wire Color	Wire Gauge	Length	Position	Warranty
<p>A = 4.00" B = 192.00" C = 6.00" D = 15.00"</p> 	88301	3	Brown, White	14	188in	Upper	5 Year
	88358	4	Black, White	14	207.63in	Upper	1 Year
<p>A = 50.00" B = 14.00" C = 50.00" D = 144.00"</p> 	95879	8	Black, White	14	265in	Upper	5 Year

### 88 SERIES, JUNCTION BOX ADAPTOR

	Part Number	Number of Plugs	Wire Color	Wire Gauge	Length	Position	Warranty
	88824	1	Black, Brown, Blue, Green, Red, Yellow, White	14	17in	Upper	1 Year

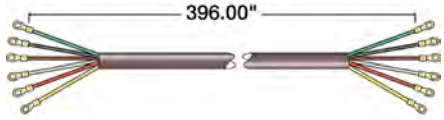
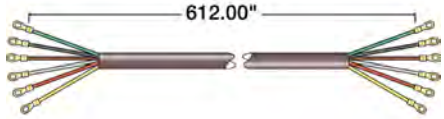
# 88 SERIES, MARKER/CLEARANCE HARNESS

88 SERIES  
MARKER/CLEARANCE

	Part Number	Number of Plugs	Wire Color	Wire Gauge	Length	Position	Warranty
<p>A = 4.00" B = 2.00"</p>	88303	2	Brown, White	14	18in		5 Year
<p>A = 4.00" B = 2.00"</p>	88307	2	Brown, White	14	36in		5 Year
<p>4.00" 12.00" 4.75"</p>	88342	2	Black, White	14	1.25in		5 Year
<p>A = 5.00" B = 4.00"</p>	88373	2	Brown, White	14	24in		5 Year
<p>A = 4.50" B = 6.50" C = 24.00" D = 4.50"</p>	88385	2	Brown, White	14	19.5in		5 Year
<p>A = 18 - 636"</p> <p>4.00" A 4.75"</p>	88401	2	Black, White	14	39.25in		5 Year
<p>A = 1.63" B = 4.00"</p>	88377	2	Black, White	16	6in		5 Year

## 50 SERIES, MAIN CABLE, 6 CONDUCTOR

- A range of custom length harnesses are available in 12" increments

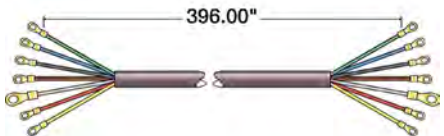
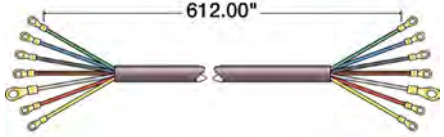
	Part Number	Wire Color	Wire Gauge	Length	Warranty
	50133	Black, Brown, Green, Red, Yellow, White	10 12	387in	5-Year
	50151	Black, Brown, Green, Red, Yellow, White	10 12	603in	5-Year

50 SERIES

MAIN CABLES

## 50 SERIES, MAIN CABLE, 7 CONDUCTOR

- A range of custom length harnesses are available in 12" increments

	Part Number	Wire Color	Wire Gauge	Length	Warranty
	52733	Black, Brown, Blue, Green, Red, Yellow, White	10 12	387in	5-Year
	52751	Black, Brown, Blue, Green, Red, Yellow, White	10 12	603in	5-Year

50 SERIES

MAIN CABLES

# 50 SERIES, STOP/TURN/TAIL HARNESS



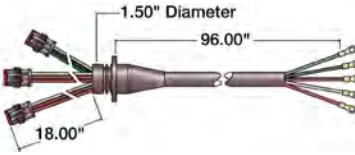


- A range of custom length harnesses are available in 12" increments

	Part Number	Number of Plugs	Wire Color	Wire Gauge	Length	Position	Warranty
	50200	2	Black, Brown, Green, Red, White	14	72in	Right Hand Side	5-Year
	50201	2	Black, Brown, Red, Yellow, White	14	72in	Left Hand Side	5-Year
	50202	2	Black, Brown, Green, Red, White	14	156in	Right Hand Side	5-Year
	50203	2	Black, Brown, Red, Yellow, White	14	156in	Left Hand Side	5-Year
	50240	2	Black, Brown, Green, Red, White	16	72in	Right Hand Side	5-Year
	50241	2	Black, Brown, Green, Red, White	16	72in	Left Hand Side	5-Year
	50282	2	Black, Brown, Yellow, Red, White	16	95in	Right Hand Side	1-Year
	50283	2	Black, Brown, Yellow, Red, White	16	95in	Left Hand Side	1-Year

50 SERIES  
S/T/T HARNESS

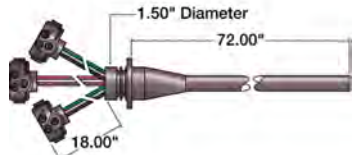
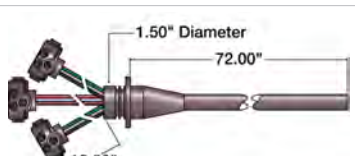
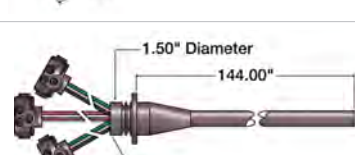
## 50 SERIES, STOP/TURN/TAIL HARNESSES (CONTINUED)

- A range of custom length harnesses are available in 12" increments

	Part Number	Number of Plugs	Wire Color	Wire Gauge	Length	Position	Warranty
	50325	1	Black, Red, White	14	180in		5-Year
	50338	1	Black, Red, White	14	456in		5-Year
	51270	3	Black, Brown, Green, Red, White	16	96in	Right Hand Side	5-Year
	51271	3	Black, Brown, Green, Red, White	16	96in	Left Hand Side	5-Year
	51325	1	Black, Red, White	14	180in		5-Year



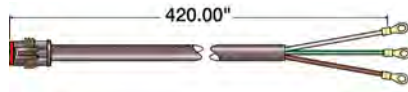
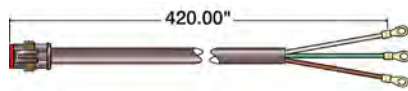
## 50 SERIES, STOP/TURN/TAIL | BACK-UP HARNESSES

- A range of custom length harnesses are available in 12" increments

	Part Number	Number of Plugs	Wire Color	Wire Gauge	Length	Position	Warranty
	50204	3	Black, Brown, Green, Red, White	14	72in	Right Hand Side	5-Year
	50205	3	Black, Brown, Red, Yellow, White	14	72in	Left Hand Side	5-Year
	50250	3	Black, Brown, Red, Yellow, White	14	139.5in	Left Hand Side	5-Year
	50251	3	Black, Brown, Green, Red, White	14	139.5in	Right Hand Side	5-Year


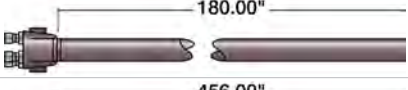



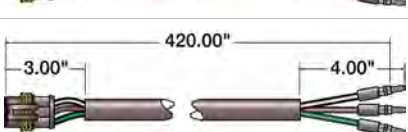
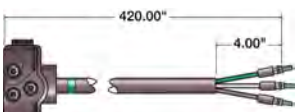
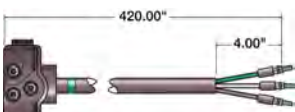
## 50 SERIES, TURN/TAIL HARNESS

• A range of custom length harnesses are available in 12" increments

	Part Number	Number of Plugs	Wire Color	Wire Gauge	Length	Position	Warranty
	50266	1	Brown, Yellow, White	14	451.5in	Right Hand Side	5-Year
	50267	1	Brown, Yellow, White	14	451.5in	Left Hand Side	5-Year
	51344	1	Brown, Green, White	14	420in	Right Hand Side	5-Year
	51345	1	Brown, Yellow, White	14	420in	Left Hand Side	5-Year

## 50 SERIES, TURN SIGNAL HARNESS

• A range of custom length harnesses are available in 12" increments

	Part Number	Number of Plugs	Wire Color	Wire Gauge	Length	Position	Warranty
	50342	1	Brown, Green, White	14	180in	Right Hand Side	5-Year
	50343	1	Brown, Green, White	14	180in	Left Hand Side	5-Year
	50344	1	Black, Green, White	14	456in	Right Hand Side	5-Year
	50345	1	Black, Green, White	14	456in	Left Hand Side	5-Year
	51342	2	Brown, Green, White	16	413in	Right Hand Side	5-Year
	51343	2	Brown, Green, White	16	413in	Left Hand Side	5-Year
	51355	2	Brown, Green, White	14	416in	Left Hand Side	5-Year
	51356	2	Brown, Green, White	14	416in	Right Hand Side	5-Year

50 SERIES




TURN/TAIL HARNESS

50 SERIES

TURN SIGNAL HARNESS

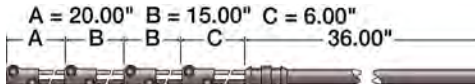
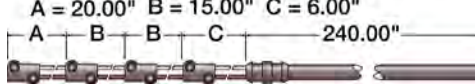
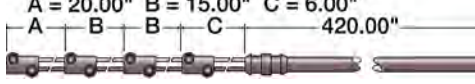
## 50 SERIES, ID HARNESS

- A range of custom length harnesses are available in 12" increments

	Part Number	Number of Plugs	Wire Color	Wire Gauge	Length	Position	Warranty
	50300	3	Brown, White	14	36in		5-Year
	50301	3	Brown, White	14	288in		5-Year
	50334	3	Brown, White	14	324in		5-Year

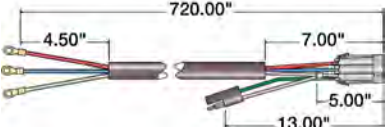
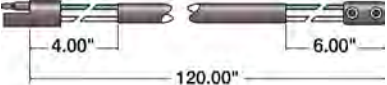
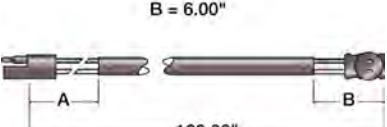
## 50 SERIES, ID | LICENSE HARNESS

- Dimensions "A" indicate standard stocked length harness
- A range of custom length harnesses are available in 12" increments

	Part Number	Number of Plugs	Wire Color	Wire Gauge	Length	Position	Warranty
	50308	4	Brown, White	14	36in	Lower	5-Year
	50335	4	Brown, White	14	240in	Upper	5-Year
	50341	4	Brown, White	14	420in	Upper	5-Year

## 50 SERIES, ABS HARNESS

- Dimensions "A" indicate standard stocked length harness
- A range of custom length harnesses are available in 12" increments

	Part Number	Number of Plugs	Wire Color	Wire Gauge	Length	Position	Warranty
	52100	2	Blue, Red, White	12	708.5in		5-Year
	52200	2	Green, White	14	110in		5-Year
	52203	2	Green, White	14	86in		5-Year

50 SERIES

ID HARNESS

50 SERIES


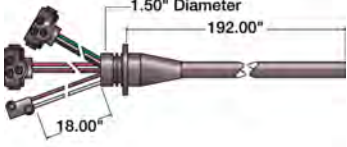


ID | LICENSE HARNESS

50 SERIES

ABS HARNESS

# 50 SERIES, MARKER/CLEARANCE | STOP/TURN/TAIL HARNESS

- A range of custom length harnesses are available in 12" increments




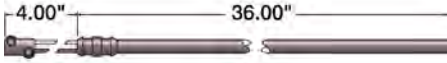






	Part Number	Number of Plugs	Wire Color	Wire Gauge	Length	Position	Warranty
	50208	3	Black, Brown, Green, Red, White	14	96in	Right Hand Side	5-Year
	50209	3	Black, Brown, Red, Yellow, White	14	96in	Left Hand Side	5-Year
	50210	3	Black, Brown, Green, Red, White	14	192in	Right Hand Side	5-Year
	50211	3	Black, Brown, Red, Yellow, White	14	192in	Left Hand Side	5-Year
	50230	3	Black, Brown, Green, Red, White	14	180in	Right Hand Side	5-Year
	50231	3	Black, Brown, Red, Yellow, White	14	180in	Left Hand Side	5-Year
	50242	3	Black, Brown, Green, Red, White	16	96in	Right Hand Side	5-Year
	50243	3	Black, Brown, Green, Red, White	16	96in	Left Hand Side	5-Year

50 SERIES

M/C | S/T/T HARNESS







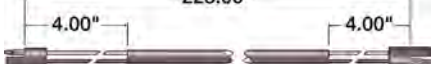






# 50 SERIES, MARKER/CLEARANCE HARNESS, 1 PLUG

- A range of custom length harnesses are available in 12" increments

	Part Number	Number of Plugs	Wire Color	Wire Gauge	Length	Position	Warranty
	50303	1	Black, White	14	72in		5-Year
	50304	1	Black, White	14	168in		5-Year
	50305	1	Black, White	14	456in		5-Year
	50307	1	Black, White	14	36in		5-Year
	50310	1	Black, White	14	336in		5-Year
	50351	1	Black, White	14	720in		5-Year
	50373	1	Black, White	14	72in		5-Year
	50374	1	Black, White	14	168in		5-Year
	50375	1	Black, White	14	456in		5-Year
	50376	1	Black, White	14	336in		5-Year

# 50 SERIES, MARKER/CLEARANCE HARNESS, 2 PLUG

• A range of custom length harnesses are available in 12" increments


	Part Number	Number of Plugs	Wire Color	Wire Gauge	Length	Position	Warranty
	50309	2	Brown White	14	168in		5-Year
	50319	2	Brown White	14	336in		5-Year
	50321	2	Brown White	14	252in		5-Year
	50324	2	Brown White	14	300in		5-Year
	50331	2	Brown White	14	384in		5-Year
	50350	2	Brown White	14	132in		5-Year
	50356	2	Brown White	14	220in		5-Year
	50377	2	Brown White	14	168in		5-Year
	50383	2	Brown White	14	132in		5-Year
	50384	2	Brown White	14	252in		5-Year
	50385	2	Brown White	14	384in		5-Year
	51409	2	Black White	14	184in		5-Year
	87357	2	Black White	14	406in		5-Year
	87358	2	Brown White	14	406in		5-Year

50 SERIES

MARKER/CLEARANCE HARNESS


## 50 SERIES, MARKER/CLEARANCE HARNESS, 3 PLUG

- A range of custom length harnesses are available in 12" increments

	Part Number	Number of Plugs	Wire Color	Wire Gauge	Length	Position	Warranty
	50322	3	Brown White	14	300in		5-Year
	50357	3	Brown White	14	100in		5-Year
	50381	3	Brown White	14	336in		5-Year
	50382	3	Brown White	14	300in		5-Year
	51375	3	Brown White	14	116in		5-Year
	50367	3	Black White	14	36in	Lower	5-Year
	50368	3	Black White	14	288in	Upper	5-Year

## 50 SERIES, MARKER/CLEARANCE HARNESS, 5 PLUG

- Dimensions "A" indicate standard stocked length harness
- A range of custom length harnesses are available in 12" increments

	Part Number	Number of Plugs	Wire Color	Wire Gauge	Length	Position	Warranty
<p>A = 20.00" B = 15.00" C = 6.00"</p> 	50302	5	Brown White	14	240in		5-Year
<p>A = 50.00" B = 10.00" C = 6.00"</p> 	50388	5	Brown White	14	240in		5-Year

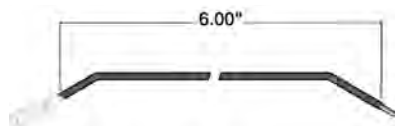
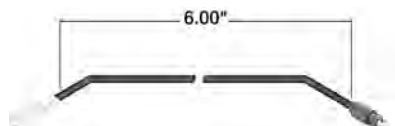
PLUGS

## PLUG DUMMY, .180 RECEPTICLE

	Part Number	Warranty
	97002	1-Year

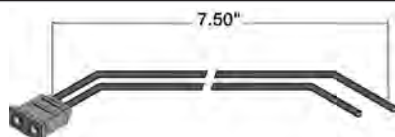
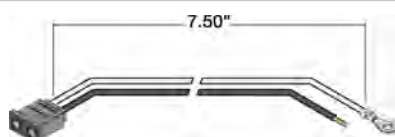
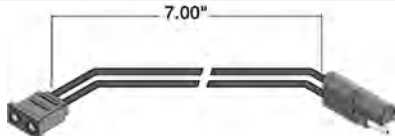
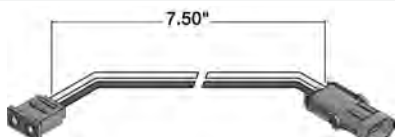
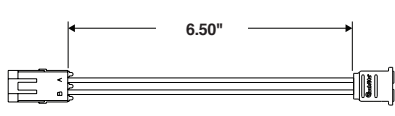
PLUGS

## PLUG, 19 SERIES HOT WIRE




	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	96904	Stripped End	6in	1	GPT	1-Year
	96919	.180 Bullet	6in	1	GPT	1-Year

PLUGS

## PLUG, 19 SERIES MALE PIN


	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	94727	Blunt Cut	7.5in	2	GPT	1-Year
	94729	Stripped End/ Ring Terminal	7.5in	2	GPT	1-Year
	94821	.180 Bullet/ Female .180 Bullet	7in	2	GPT	1-Year
	95332	Packard Connector 12010973	7.5in	2	GPT	1-Year
	96248	Packard Connector 12010973	6.5in	2	GPT	1-Year

## PLUG, 2 POSITION .180 BULLET

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	94811	Blunt Cut	50in	2	GPT	1-Year
	94812	Blunt Cut	50in	2	GPT	1-Year
	94813	Blunt Cut	50in	2	GPT	1-Year


PLUGS

## PLUG, 2 MALE BLADE TERMINAL

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	94954	2 Female Blade Terminal	12.06in	2	GPT	1-Year


PLUGS

## PLUG, 3 BLADE TERMINAL


	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	9260	Stripped End	14in	3	GPT	1-Year

PLUGS

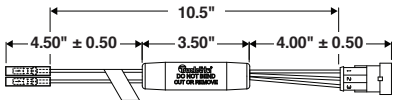
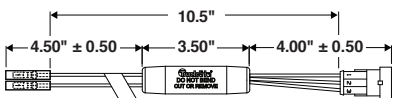
### PLUG, 3 FEMALE BLADE TERMINALS

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	9183	Stripped End	7.5in	3		1-Year

### PLUG, 3 PIN FEMALE CONNECTOR 174921

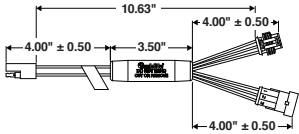
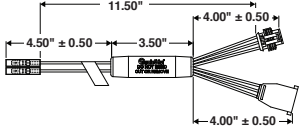
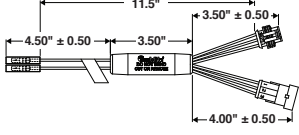
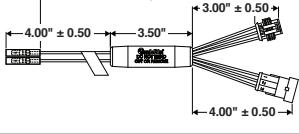
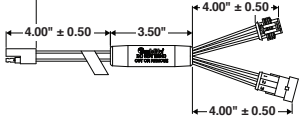
	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	95119	Stripped End	7.25in	2	GPT	1-Year

### PLUG, 3 POSITION CONNECTOR 282105

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	97437	2 Female .180 Bullet Terminals	10.5in	5	GPT	1-Year
	97364	2 Female .180 Bullet	10.5in	5	GPT	1-Year


# PLUG, 3 POSITION CONNECTOR 282105| FIT N' FORGET S.S.

PLUGS

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	97340	2 Position Plug	10.63in	8	GPT	1-Year
	97342	Female .180 Bullet	11.5in	8	GPT	1-Year
	97349	Female .180 Bullet	11.5in	8	GPT	1-Year
	97345	Female .180 Bullet	11.5in	8	GPT	1-Year
	97365	2 Position Plugs	11.5in	8	GPT	1-Year

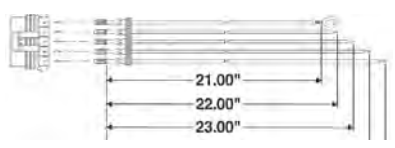
# PLUG, 5 FEMALE BLADE TERMINALS

PLUGS

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	9185	Blunt Cut	12in	5	GPT	1-Year

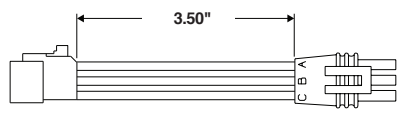
PLUGS

## PLUG, 5 PIN PACKARD CONNECTOR 12084891

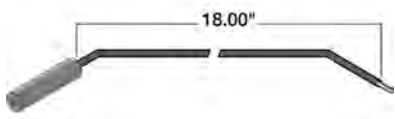
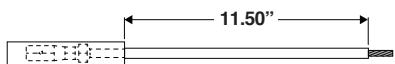
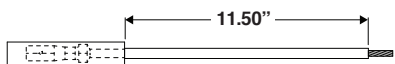
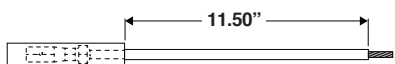
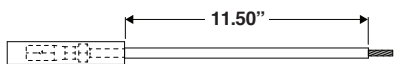
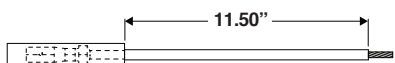
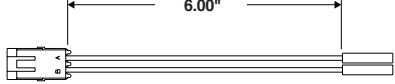
	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	9470	Stripped End  Ring Terminal	21in	5	GPT	1-Year

PLUGS

## PLUG, DEUTSCH CONNECTOR

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	94236	Packard Connector 12015793	3.5in	3	GPT	1-Year

## PLUG, FEMALE .180 BULLET

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty	Wire Color
	94923	Stripped End	19in	1	GPT	1-Year	
	95121	Stripped End	11.5in	1	SXL	1-Year	Black
	95122	Stripped End	11.5in	1	SXL	1-Year	White
	95123	Stripped End	11.5in	1	SXL	1-Year	Red/White
	95124	Stripped End	11.5in	1	SXL	1-Year	Green
	95125	Stripped End	11.5in	1	GPT	1-Year	Purple
	96253	Packard Connector 12010973	6in	2	GPT	1-Year	

## PLUG, FEMALE MALE PIN

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	96106	.180 Bullet Ring Terminal	5.9in	2	GPT	1-Year
	96107	Stripped End Ring Terminal	9.84in	3	GPT	1-Year
	96108	Stripped End Ring Terminal	9.84in	2	GPT	1-Year
	96251	.180 Bullet Female .180 Bullet Packard Connector 12010973	4.5in	4	GPT	1-Year

## PLUG, FEMALE PL-2

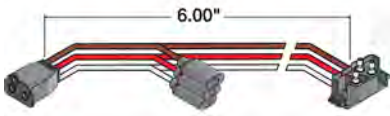
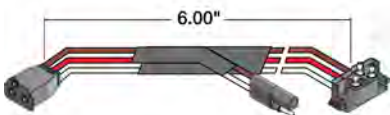
	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	94789	Fit 'N Forget S.S.	8in	2	GPT	Lifetime

# PLUG, FEMALE PL-3

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	94706	Fit 'N Forget S.S.	8in	3	GPT	Lifetime
	94750	Right Angle PL-3 / Right Angle PL-3	18in	3	GPT	1-Year
	94751	Right Angle PL-3/ PL-10	12in	5	GPT	1-Year
	94769	2 Fit 'N Forget S.S.	8in	6	GPT	Lifetime
	94770	Fit 'N Forget S.S.	19in	5	GPT	Lifetime
	94932	Right Angle PL-3 / Right Angle PL-3	10in	6	GPT	1-Year

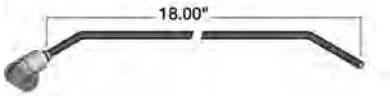
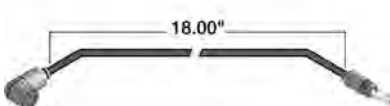
PLUGS

## PLUG, FEMALE PL-3 | RIGHT ANGLE PL-3

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	94760	Female .156 Bullet	6in	6	GPT	1-Year
	94853	2 Position Plug	6in	5	GPT	1-Year

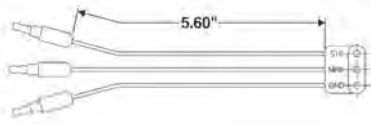
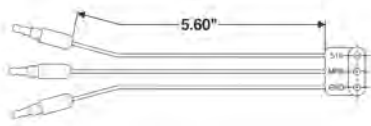
PLUGS

## PLUG, FEMALE RIGHT ANGLE .180 BULLET TERMINAL

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	94922	Blunt Cut	18in	1	GPT	1-Year
	95051	.180 Bullet	18in	1	GPT	1-Year

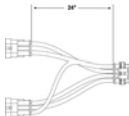
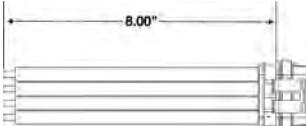
PLUGS

## PLUG, FEMALE TA-1415

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	9462	.180 Bullet Ring Terminal	5.6in	3	GPT	1-Year
	9463	.180 Bullet Ring Terminal	5.6in	3	GPT	1-Year

PLUG, FIT 'N FORGET 4 PIN S.S.

PLUGS

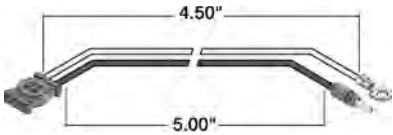
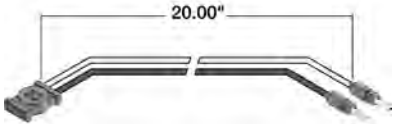
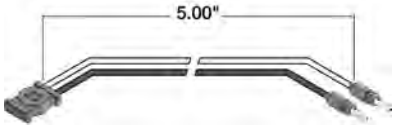
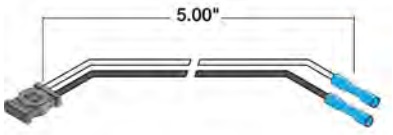
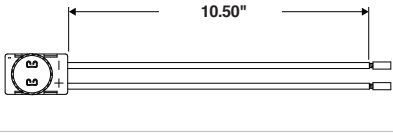
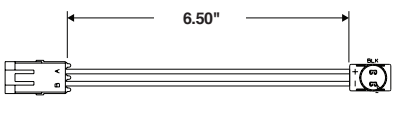
	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	94966	LED Super Seal/ 3 Position Connector 282105	24in	4	GPT	1-Year
	94831	Stripped End	8in	4	GPT	1-Year

PLUG, FIT 'N FORGET M/C

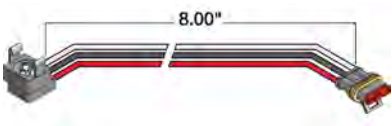
PLUGS

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	93745	Female PL-10	4in	2	GPT	Lifetime
	94609	Blunt Cut	10in	2	GPT	1-Year
	94624	Packard Connector 12010973	11.5in	2	GPT	Lifetime
	94718	.180 Bullet   Ring Terminal	5in	2	GPT	Lifetime
	94736	.180 Bullet	18in	2	GPT	Lifetime
	94861	Heat Shrink Splic- es Ring Terminal	5in	2	GPT	Lifetime
	94862	.180 Bullet Ring Terminal	5in	2	GPT	Lifetime

PLUG, FIT 'N FORGET M/C(CONTINUED)

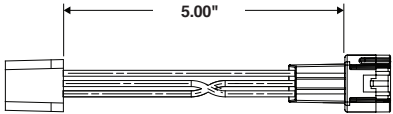
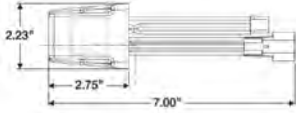
	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	94888	.156 Bullet/Ring Terminal	5in	2	GPT	Lifetime
	95306	.180 Bullet	20in	2	GPT	Lifetime
	97005	.180 Bullet	5in	2	GPT	Lifetime
	97006	Heat Shrink Splices	5in	2	GPT	Lifetime
	94237	Stripped End	10in	2	GPT	1-Year
	96252	Packard Connector 12124582	6.5in	2	GPT	1-Year

PLUG, FIT 'N FORGET S.S.

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	94707	Stripped End Ring Terminal	8in	3	GPT	Lifetime
	94759	Stripped End Ring Terminal	8in	2	GPT	Lifetime
	94766			3	GPT	1-Year
	95001	Male Pin	8in	3	GPT	Lifetime
	95002	Male Pin	13in	6	GPT	Lifetime
	95220	Stripped End Ring Terminal	8.5in	3	GPT	1-Year
	95399	3 Position Connector 282105	12in	6	GPT	Lifetime
	95424	.180 Bullet	8in	3	GPT	Lifetime
	96247	.180 Bullet Female .180 Bullet Packard Connector 12010973	4.5in	4	GPT	1-Year



PLUGS

## PLUG, H4 CONNECTOR

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	96630	H13 Connector	5in	3	SXL	1-Year
	96830	H13 Connector	4.5in	6	SXL	1-Year

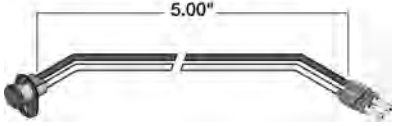
PLUGS

## PLUG, H5 CONNECTOR



	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	95400	H4 Connector	4in	3	GPT	1-Year
	95846	3 Blade Terminal	5.5in	3	GPT	1-Year

PLUGS

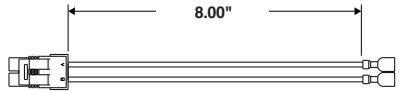

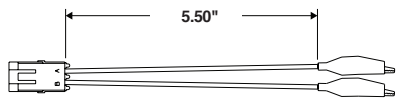
## PLUG, M/C SELF SEAL

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	95410	.180 Bullet	5in	2	GPT	Lifetime

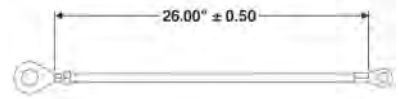
## PLUG, MALE PIN

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	94865	Right Angle PL-3 Right Angle PL-3	10in	6	GPT	1-Year
	94897	Right Angle PL-3	5in	3	GPT	1-Year

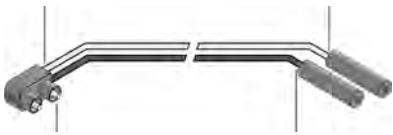
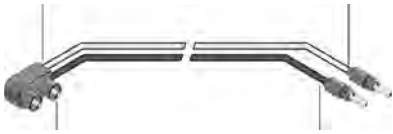
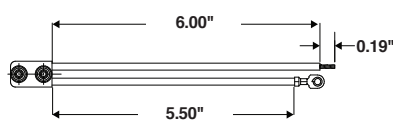

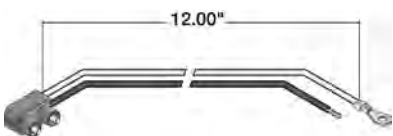
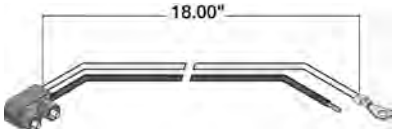
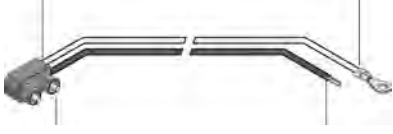
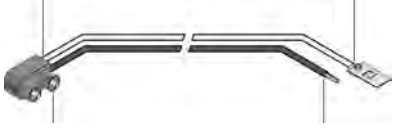

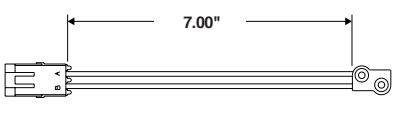
## PLUG, PACKARD CONNECTOR

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	96256	Female Blade Terminal	8in	2	GPT	1-Year
	96254	Packard Connector 12010973	8in	2	GPT	1-Year
	96255	2 Alligator Clip	5.5in	2	GPT	1-Year

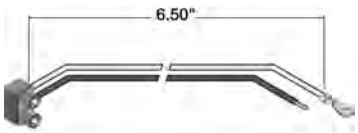
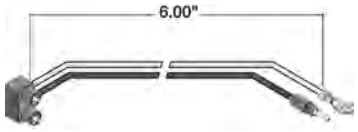
## PLUG, RING TERMINAL

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	96927	Ring Terminal	26in	1	GPT	1-Year

PLUG, PL-10

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	94848	Female .156 Bullet	4.5in	2	GPT	1-Year
	94850	.156 Bullet	6.5in	2	GPT	1-Year
	94854	Stripped End Ring Terminal	6in	2	GPT	1-Year
	94902	Stripped End Ring Terminal	7in	2	GPT	1-Year
	94909	Stripped End Ring Terminal	12in	2	GPT	1-Year
	94916	Stripped End Ring Terminal	18in	2	GPT	1-Year
	94919	Stripped End Ring Terminal	6.5in	2	GPT	1-Year
	94920	Stripped End Ground Clip	6in	2	GPT	1-Year
	94972	.180 Bullet	6.5in	2	GPT	1-Year
	96249	Packard Connector 12010973	7in	2	GPT	1-Year

## PLUG, RIGHT ANGLE PL-10

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	94924	Stripped End Ring Terminal	6.65in	2	GPT	1-Year
	94964	.156 Bullet Ring Terminal	6in	2	GPT	1-Year

## PLUG, RIGHT ANGLE PL-2

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	94837	Packard Connector 12020398	6.75in	2	SXL	1-Year
	94838	Packard Connector 12020398	6.75in	2	SXL	1-Year
	94851	Packard Connector 12020398	6.25in	2	SXL	1-Year
	94868	Packard Connector 1500027	8.5in	2	GPT	1-Year
	94991	Stripped End Ring Terminal	11in	2	GPT	1-Year
	94992	Stripped End Ring Terminal	11in	2	GPT	1-Year

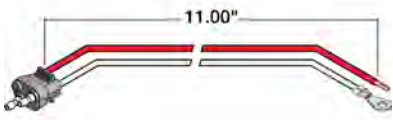
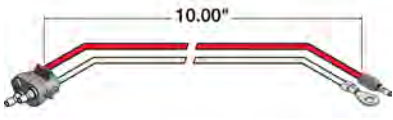
# PLUG, RIGHT ANGLE PL-3

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	94768	Fit 'N Forget S.S.	8.63in	3	GPT	Lifetime
	94802	.156 Bullet Ring Terminal	14in	3	GPT	1-Year
	94839	Packard Connector 12015793	22.25in	3	SXL	1-Year
	94840	Packard Connector 12015793	6.38in	3	SXL	1-Year
	94841	Packard Connector 12020398	6.75in	3	SXL	1-Year
	94882	.180 Bullet	14in	3	GPT	1-Year
	94931	Stripped End Ring Terminal	49in	3	GPT	1-Year
	94993	Stripped End Ring Terminal	11in	3	GPT	1-Year

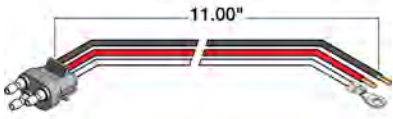
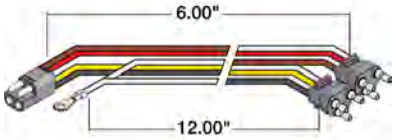
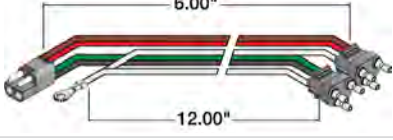

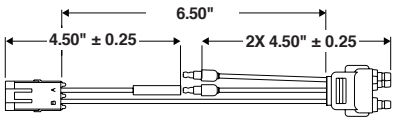
## PLUG, WEATHER PACK

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	80972	Packard Connector 12041307   Male Blade	5in			1-Year
	80974	Packard Connector 2965810   Packard Connector 2965809   Packard Connector 8917857	5in			1-Year
	80971	Packard Connector 12124580   Packard Connector 12077411   Packard Connector 12048369	10in			1-Year
	80973	Packard Connector 6288808   Packard Connector 12124580   Packard Connector 2965810	10.98in			1-Year
	80975	Packard Connector 12047955   Packard Connector 12047953   Pin Terminal	10in			1-Year
	80970	Packard Connector 12048369   Packard Connector 12124580	10in			1-Year

### PLUG, STRAIGHT PL-2

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	94925	Stripped End   Ring Terminal	11in	2	GPT	1-Year
	94961	.156 Bullet   Ring Terminal	10in	2	GPT	1-Year

### PLUG, STRAIGHT PL-3

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	94926	Stripped End   Ring Terminal	11in	3	GPT	1-Year
	94948	Ring Terminal   Molded Four Position .180	12in	6	GPT	1-Year
	94949	Ring Terminal   Molded Four Position .180	12in	6	GPT	1-Year
	94962	.156 Bullet   Ring Terminal	10in	3	GPT	1-Year
	96250	.180 Bullet   Female .180 Bullet   Packard Connector 12010973	6.5in	4	GPT	1-Year

## PLUG, STRAIGHT PL-3 | FIT 'N FORGET S.S.

PLUGS

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	97344	Female .180 Bullet	10.63in	8	GPT	1-Year
	97366	Female .180 Bullet	11.5in	8	GPT	1-Year

## PLUG, SUPER 21 PLUG

PLUGS

	Part Number	Plug Side 2	Wire Length	Number of Wires	Wire Type	Warranty
	96930	Stripped End	12in	1	GPT	1-Year
	96932	.180 Bullet	5in	1	GPT	1-Year
	96934	.156 Bullet	5in	1	GPT	1-Year
	96936	Stripped End	48in	1	GPT	1-Year

# MARKER/CLEARANCE, FIT 'N FORGET

- Keeps water, salt and other corrosives from LED lamps
- Combine with LED lamps for Lifetime Lighting Warranty eligibility
- 16 gauge GPT wire
- Brass terminals
- For use with bumpers and skirts



	Part Number	Plug Side Two	Length	Center Distance	Number of Wires	Number of Plugs
<p>A=10.00" B=88.00"</p>	95460	Stripped End	88in	10in	2	5
<p>A=10.00" B=108.00"</p>	95461	Stripped End	108in	10in	2	7
<p>A=10.00" B=128.00"</p>	95462	Stripped End	128in	10in	2	9
<p>A=10.00" B=148.00"</p>	95463	Stripped End	148in	10in	2	11
<p>A=4.5" B=61.5"</p>	95464	Stripped End	61.5in	4.5in	2	4
<p>A=4.5" B=70.00"</p>	95465	Stripped End	70.5in	4.5in	2	6
<p>A=4.5" B=79.5"</p>	95466	Stripped End	79.5in	4.5in	2	8
<p>A=4.5" B=88.5"</p>	95467	Stripped End	88.5in	4.5in	2	10

STRINGS

MARKER/CLEARANCE

FIT 'N FORGET

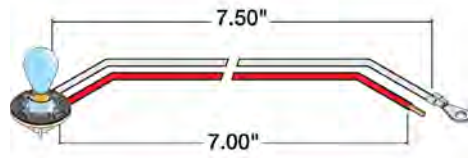
# MARKER/CLEARANCE, PL-10

- For use with bumpers and skirts
- 16 gauge GPT wire
- Tin plated or brass terminals



	Part Number	Plug Side Two	Length	Number of Wires	Center Distance	Number of Plugs
	95450	Stripped End	88	2	10in	5
	95451	Stripped End	108	2	10in	7
	95452	Stripped End	128	2	10in	9
	95453	Stripped End	148	2	10in	11
	95454	Stripped End	60	2	4in	4
	95455	Stripped End	68	2	4in	6
	95456	Stripped End	76	2	4in	8
	95457	Stripped End	84	2	4in	10

### SOCKET, 1156 COMPATIBLE BULB

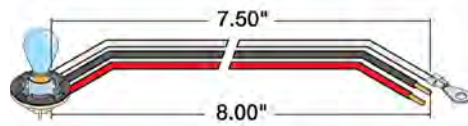


- 94937 - For use with Model 40 bulb replaceable lamps
- 16 gauge GPT wire; tin-plated brass terminals
- Bulb # 1156 included



Part Number	Plug Side 2	Length	Compatible Bulbs
94937	Stripped End / Ring Terminal	7.5in	1156

### SOCKET, 1157 COMPATIBLE BULB

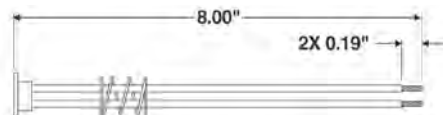


- 94938 - For use with Model 40 bulb replaceable lamps
- 16 gauge GPT wire
- Tin-plated brass terminals
- Bulb #1157 included



Part Number	Plug Side 2	Length	Compatible Bulbs
94938	Stripped End / Ring Terminal	7.5in	1157

### SOCKET, 1157/1034 COMPATIBLE BULBS

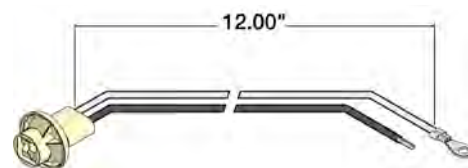


- With "in-line" guide pin for lamps with indexing, bayonet, candelabra type bases (e.g. nos. 1157\*, 1034\* bulbs)
- Supersedes part #9161



Part Number	Plug Side 2	Length	Compatible Bulbs	Light Type
9101	Stripped End	8in	1157 1034	S/T/T
9105	Stripped End	8in	1157 1034	Pedestal

### SOCKET, 194 COMPATIBLE BULB



- For use with 18300R/Y and 25760 bulb replaceable lamps
- Bulb not included
- 18 gauge wires
- Available with black or white socket



Part Number	Plug Side 2	Length	Compatible Bulbs
94940	Stripped End / Ring Terminal	12in	194

SOCKET

1156 BULB

SOCKET

1157 BULB

SOCKET

1157/1034 BULBS

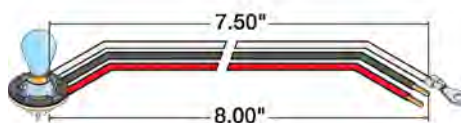
SOCKET

194 BULB

## SOCKET, 3157 COMPATIBLE BULB



- 94938 - For use with Model 40 bulb replaceable lamps
- 16 gauge GPT wire
- Tin-plated brass terminals
- Bulb #1157 included
- 95407 - For use with Model 60 and Model 91 bulb replaceable lamps
- 16 gauge GPT wire
- Tin-plated brass terminals
- Bulb #3157 included



Part Number	Plug Side 2	Length	Compatible Bulbs
95407	Stripped End / Ring Terminal	9in	3157
95415	Stripped End / Ring Terminal	9in	3157
9467	Packard Connector 12010717	7in	3157

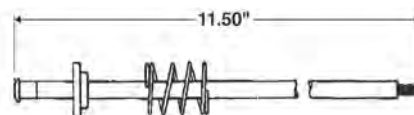
SOCKET

3157 BULBS

## SOCKET, 53/57/1895 COMPATIBLE BULBS



- For lamps with miniature bayonet type bases



Part Number	Plug Side 2	Length	Compatible Bulbs
9103	Stripped End	11.5in	53 57 1895

SOCKET

53/57/1895 BULBS

## SOCKET, 67/1073/1156 COMPATIBLE BULBS



- For lamps with bayonet, candelabra type bases
- Supersedes part #9164



Part Number	Plug Side 2	Length	Compatible Bulbs	Light Type
9102	Stripped End	8in	67 1073 1156	Pedestal
9104	Stripped End	8in	67 1073 1156	Back-Up
9160	Stripped End	8in	67 1073 1156	Back-Up, Black Wire
9162	Stripped End	8in	67 1073 1156	Pedestal, Black Wire

SOCKET

67/1073/1156 BULBS