Shifter Converter Drawing

Last Changed: 05/09/2019
Harness: OT01-P1 or OT02-P1
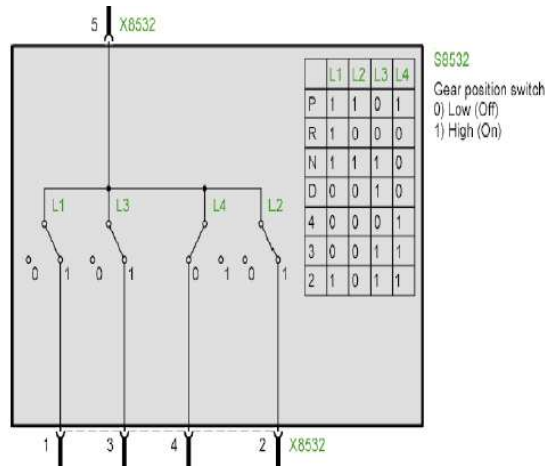
Orion

P2
P3
P4
P1
INFO
PWR
Coms

Shift

Parralel Switch to Analog Converter

Shift

Red +12V
Black — Black
Blue — Green

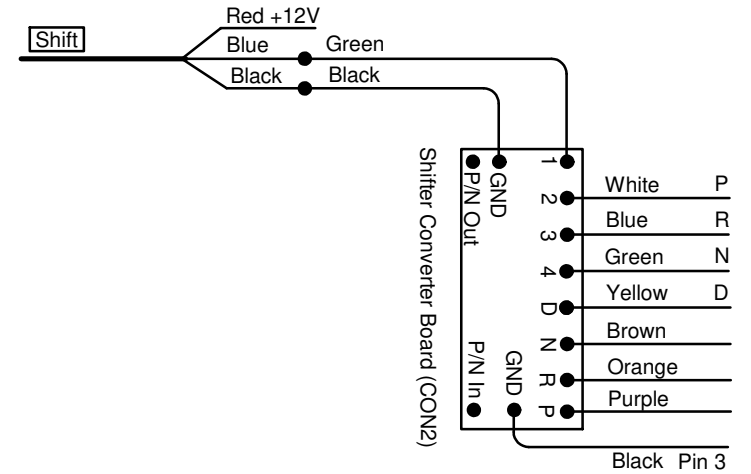CON1 PCB

Yellow 4
Green 3
Blue 2
White 1

Note that some switches have only 3 strings.
Always wire from 1 to 4.

NB! The Red wire has 12 volt from ignition.
It is used for lighting on the shifter. If not
used it must be Isolated.

	L1	L2	L3	L4
P	1	1	0	1
R	1	0	0	0
N	1	1	1	0
D	0	0	1	0
4	0	0	0	1
3	0	0	1	1
2	1	0	1	1

S8532
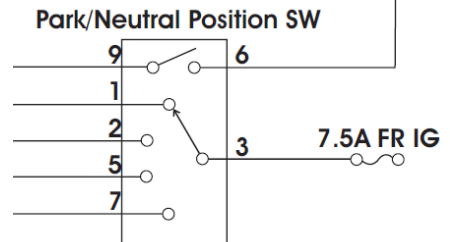Gear position switch
0) Low (Off)
1) High (On)

Example of a parallel switch. One common wire
will switch to multiple position in paralel creating
a binary code combination.

Serial Switch to Analog Converter

Shift

Red +12V
Blue   Green
Black   Black

Shifter Converter Board (CON2)

GND
P/N Out
P/N In
GND

		White	P
1			
2		Blue	R
3		Green	N
4		Yellow	D
D		Brown	
N		Orange	
R		Purple	
P			

Black   Pin 3

Note that the shifter positions on the board is incorect.
Always use the wire side position numbers.

NB! The Red wire has 12 volt from ignition.
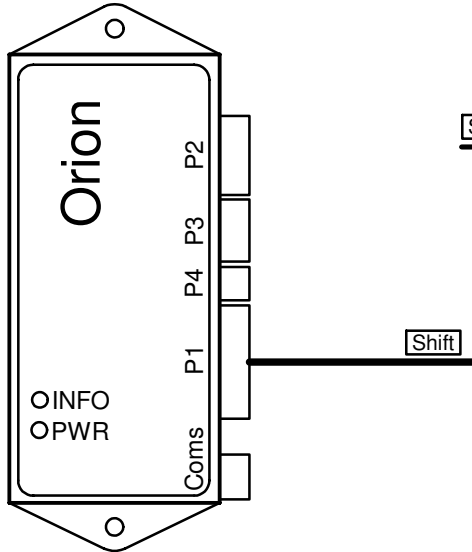It is used for lighting on the shifter. If not
used it must be Isolated.

Park/Neutral Position SW

9   6
1
2   3   7.5A FR IG
5
7

Example of a serial switch. One common wire
will switch to each individual position in series.

Shifter Converter Drawing

Serial Switch to Analog Converter

Shift — Red +12V / Blue — Green / Black — Black

Shifter Converter Board (CON2)

Pin		
1	White	P
2	Blue	R
3	Green	N
4	Yellow	D
D	Brown	
N	Orange	
R	Purple	
P		

GND / P/N Out / P/N In / GND

Black   Pin 3

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Orion

P2 P3 P4 P1 Coms
○ INFO
○ PWR

Shift

Parralel Switch to Analog Converter

Shift — Red +12V / Black — Black / Blue — Green

CON1 PCB

C B A / R4 R3 R2 R1 / C1 C2 / 6 5 4 3 2 1

Yellow 4
Green 3
Blue 2
White 1

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5   X8532

S8532
Gear position switch
0) Low (Off)
1) High (On)

	L1	L2	L3	L4
P	1	1	0	1
R	1	0	0	0
N	1	1	1	0
D	0	0	1	0
4	0	0	0	1
3	0	0	1	1
2	1	0	1	1

L1   L3   L4   L2

0 1   0 1   0 1 0 1

1   3   4   2   X8532

Example of a parallel switch. One common wire
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Park/Neutral Position SW

9 — 6
1
2 — 3   **7.5A FR IG**
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Shifter Converter Drawing

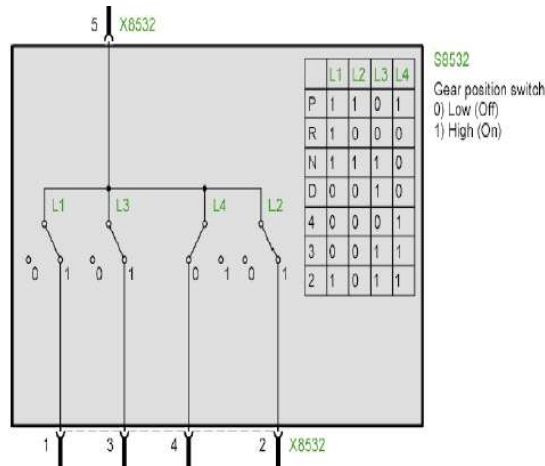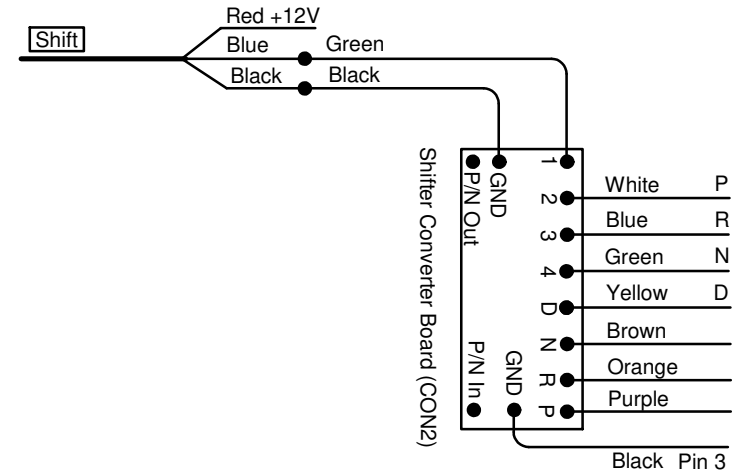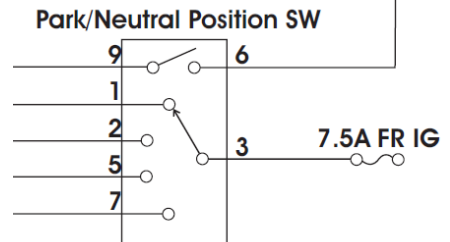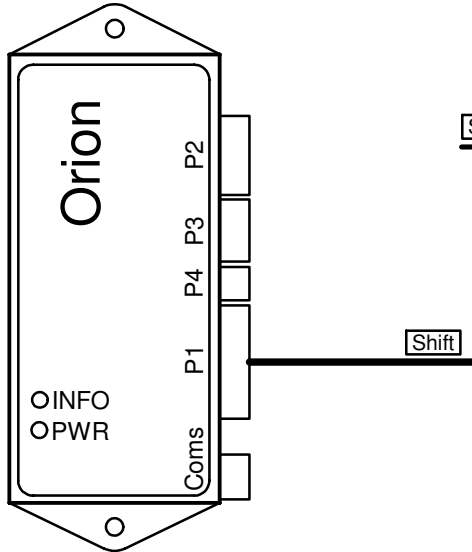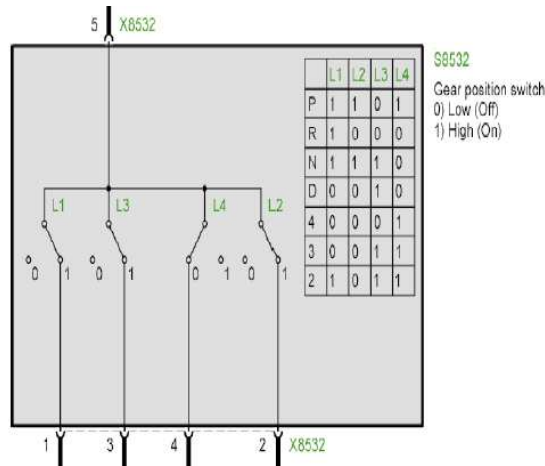Last Changed: 05/09/2019
Harness: OT01-P1 or OT02-P1

Serial Switch to Analog Converter

Shift — Red +12V / Blue Green / Black Black

Shifter Converter Board (CON2)

GND — P/N Out — P/N In — GND

Pin	Wire	Position
1	White	P
2	Blue	R
3	Green	N
4	Yellow	D
D	Brown	
N	Orange	
R	Purple	
P		

Black   Pin 3

Note that the shifter positions on the board is incorrect.
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Orion

P2
P3
P4
P1
Coms
○ INFO
○ PWR

Shift

Parralel Switch to Analog Converter

Shift — Red +12V / Black Black / Blue Green

CON1 PCB

C B A / R4 R3 R2 R1 / C1 C2 / 6 5 4 3 2 1

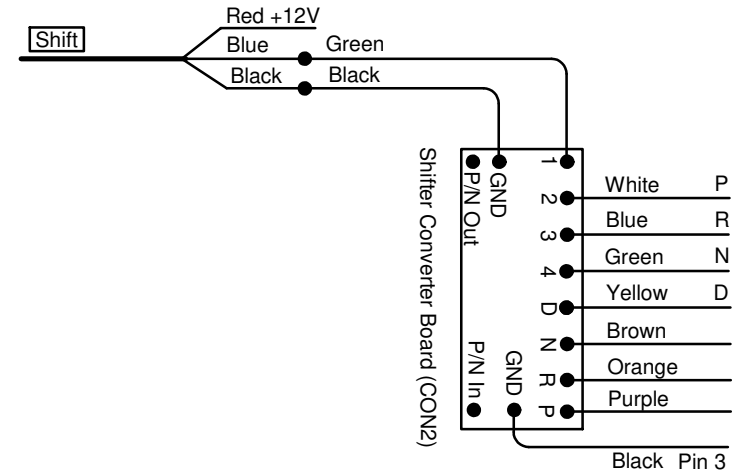Yellow 4
Green 3
Blue 2
White 1

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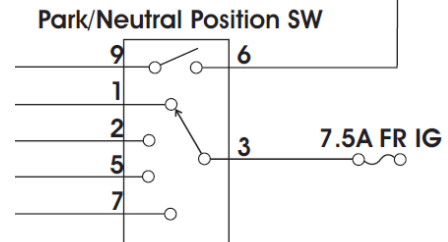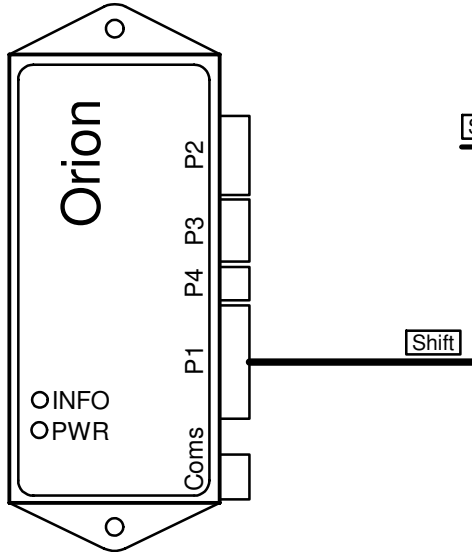used it must be Isolated.

5   X8532

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N	1	1	1	0
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4	0	0	0	1
3	0	0	1	1
2	1	0	1	1

L1   L3   L4   L2

0 1   0 1   0 1 0 1

1   3   4   2   X8532

Example of a parallel switch. One common wire
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Park/Neutral Position SW

9   6
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2   3   7.5A FR IG
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7

Example of a serial switch. One common wire
will switch to each individual position in series.

Shifter Converter Drawing

Serial Switch to Analog Converter

Shift

Red +12V
Blue   Green
Black   Black

Shifter Converter Board (CON2)

GND	1	White P
P/N Out	2	Blue R
	3	Green N
	4	Yellow D
	D	Brown
P/N In	N	Orange
GND	R	Purple
	P	

Black   Pin 3

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1
2 ─── 3   **7.5A FR IG**
5
7

Example of a serial switch. One common wire
will switch to each individual position in series.

Orion

P2
P3
P4
P1
○ INFO
○ PWR
Coms

Shift

Shift

Parralel Switch to Analog Converter

Red +12V

Shift

Black   Black
Blue   Green
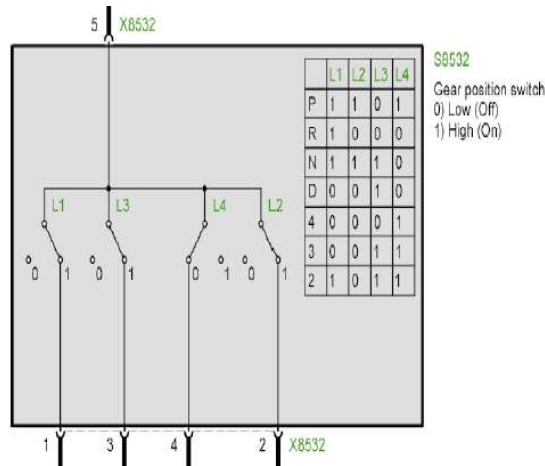
CON1 PCB

C B A
R4
R3
R2
R1
C1 C2
6 5 4 3 2 1

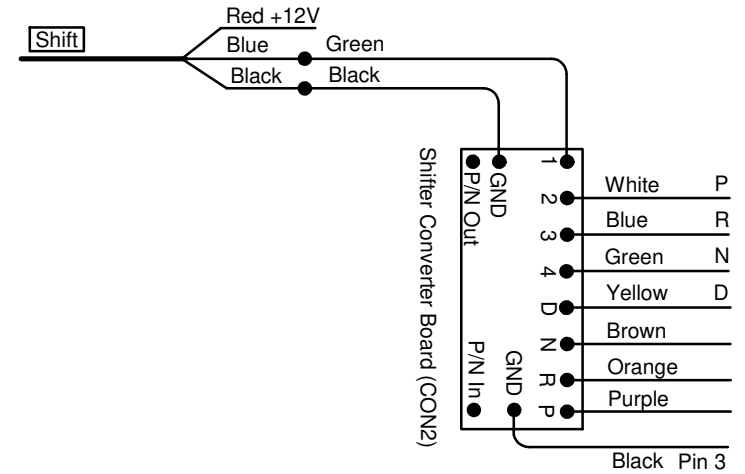Yellow 4
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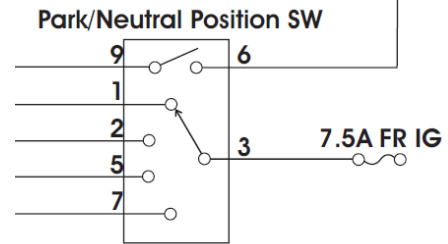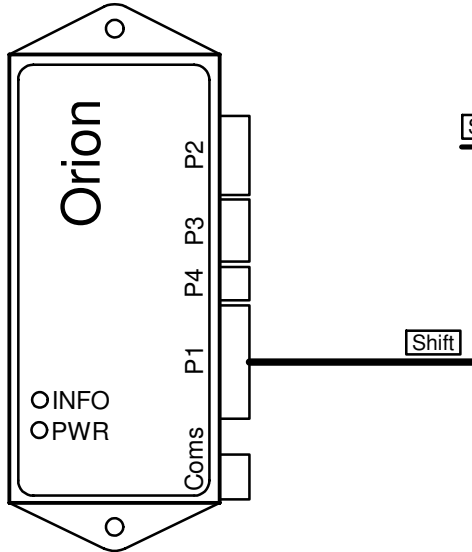used it must be Isolated.

5 X8532

S8532
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N	1	1	1	0
D	0	0	1	0
4	0	0	0	1
3	0	0	1	1
2	1	0	1	1

L1   L3   L4   L2
0 1 0 1 0 1 0 1

1   3   4   2   X8532

Example of a parallel switch. One common wire
will switch to multiple position in paralel creating
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Shifter Converter Drawing

Orion

P2
P3
P4
P1
Coms

○ INFO
○ PWR

Shift

Parralel Switch to Analog Converter

Shift

Red +12V
Black ── Black
Blue ── Green

CON1 PCB

C B A
C2 C1
R2 R1
R4 R3
6 5 4 3 2 1

Yellow 4
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5 X8532

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L1 L3 L4 L2

1 3 4 2 X8532

Example of a parallel switch. One common wire
will switch to multiple position in paralel creating
a binary code combination.

Serial Switch to Analog Converter

Shift

Red +12V
Blue ── Green
Black ── Black

Shifter Converter Board (CON2)

GND
P/N Out
P/N In
GND

1
2
3
4
D
N
R
P

White P
Blue R
Green N
Yellow D
Brown
Orange
Purple

Black Pin 3

Note that the shifter positions on the board is incorect.
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Park/Neutral Position SW

9 ── 6
1
2 ── 3 7.5A FR IG
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7

Example of a serial switch. One common wire
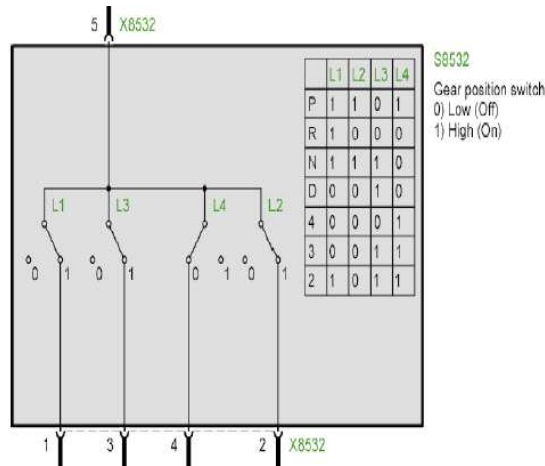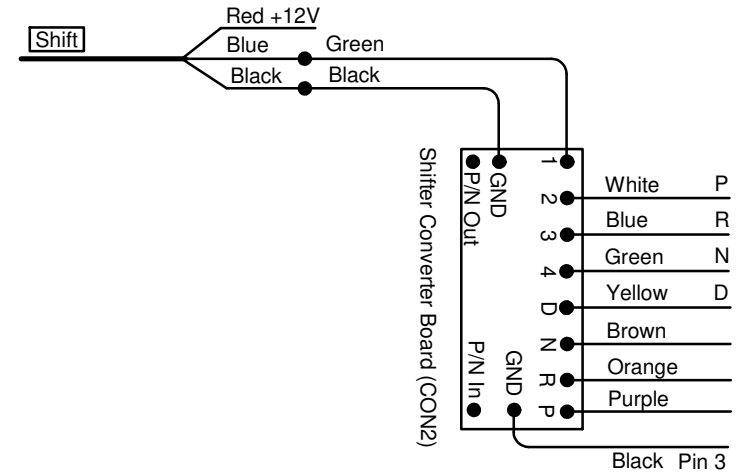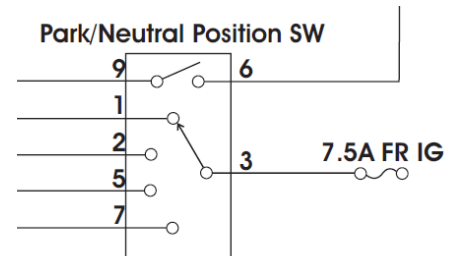will switch to each individual position in series.