Agi-Drive
Circuit Diagrams

Contents

Display Board

Function	Switch 1	Switch 2	Switch 3	Switch 4
Charge 3.6v Battery	ON			
Charge 9v Battery	OFF			
External Antenna		ON		
On-Board Antenna		OFF		
Throttle interlock Positive input			ON	
Throttle interlock Negative input			OFF	
Neutral Physical				ON
Neutral CanBus				OFF

Master Board

Switch 1	Switch 2	Function
ON	ON =	Nematic Throttle
OFF	OFF =	CanBus
ON	OFF =	Cruise Control
OFF	ON =	Remote Throttle
Switch 3	Switch 4	Function
OFF		Sundstrand EDC
ON		Rexroth
	ON	Park Brake used as Throttle Interlock
	OFF	Neutral Switch Alison Gearbox

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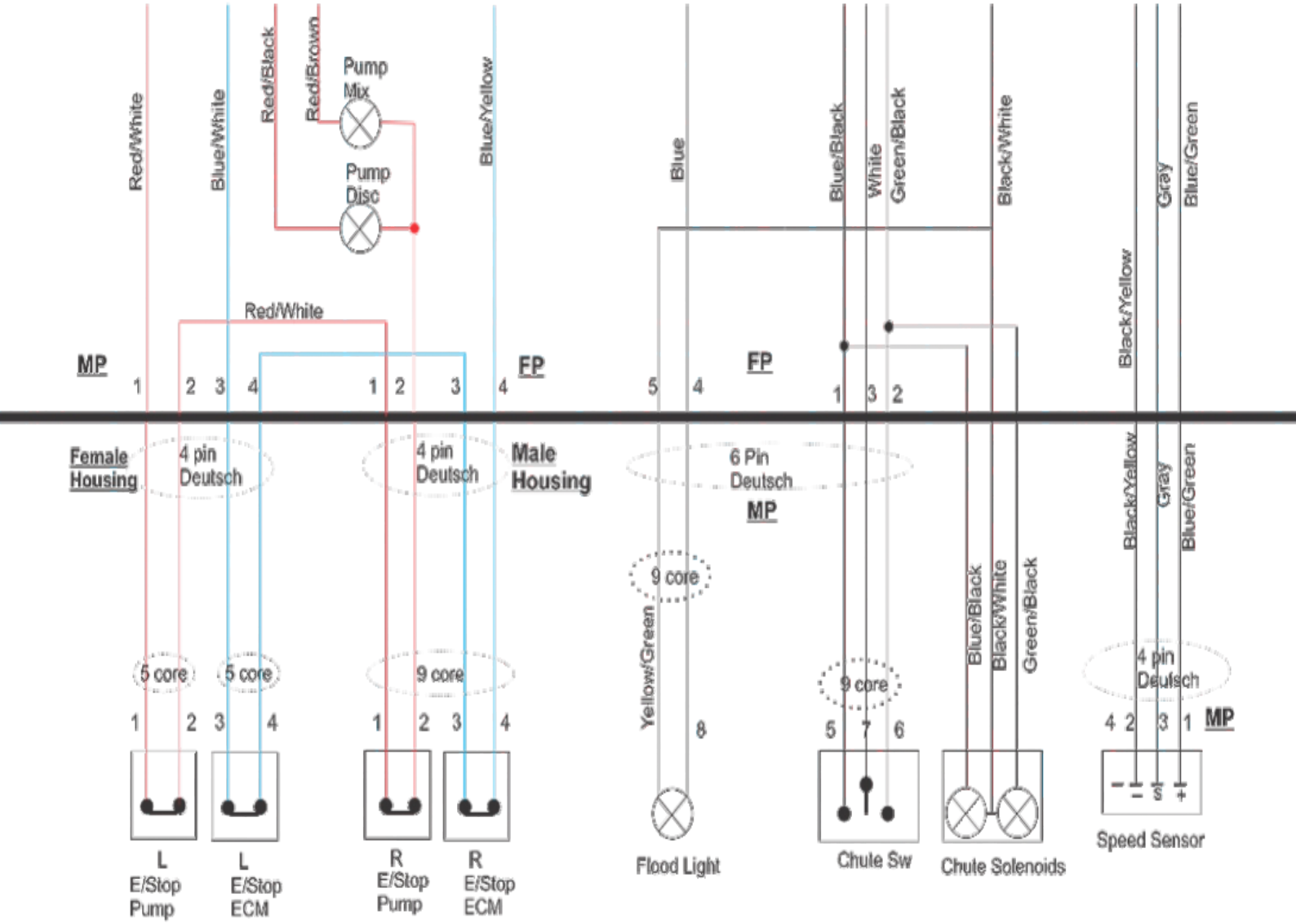
V6 G2 Circuit Diagrams

Cab Harness RexRoth



Mixer Harness
2x4 Pin Deutsch
1x6 Pin Deutsch

V6 Generation 3 Harness Pin outs

Pin	Function	Join	Colour	Location
1	Negative **0** VDC	19	Black	Dash
2	Ignition Supply **12/24** VDC		Red	Dash
3	Revs Down		Yellow	Not Used
4	Common		Pink	Not Used
5	Revs Up		Green	Not Used
6	E/Stop Signal Return		Blue/White	E/Stop Switch
7	E/Stop Signal		Blue/Yellow	E/Stop Switch
8	Neutral Input		Brown	Dash
9	VIT **0**		Orange/Violet	Airbag Sensor
10	Tacho Input		Gray	Dash
11	**5**V ECM		Orange/Yellow	Remote Throttle
12	SIG ECM		Orange/Blue	Remote Throttle
13	**0**V ECM		Orange	Remote Throttle
14	EDC		Red/Black	2 Pin Deutsch plug
15	EDC		Red/Brown	2 Pin Deutsch plug
16	Cruise/GPS Relay **N/O**		Pink/Blue	Not Used
17	Cruise/GPS Relay **Common**		Violet/Red	Not Used
18	PWM **1**		Red/Black	Rexroth pump
19	Flood Light Ground	1	Black/White	Rear Flood Light
20	PWM **2**		Red/Brown	Rexroth pump
21	Horn		Brown/White	Dash
22	Flood Light		Blue	Rear Flood Light
23	Rs232Tx		Yellow/Green (Twisted)	Not Used
24	Rs232Rx		Green/Yellow (Twisted)	Not Used
25	Chute Up		Blue/Black	Rear Chute Switch
IGN	Chute Switch Ignition		White	Rear Chute Switch
26	Chute Down		Green/Black	Rear Chute Switch
27	VIT **1**		Orange/Black	Airbag Sensor
28	Bi/0		Pink/White	Not Used
29	Fan OUTPUT		Purple	SSR Controller
30	Brake Switch Input		Green/White	Not Used
31	Rs485 +V		Red/Yellow	Remote Antenna
32	Rs485 B		Yellow/Red (Twisted)	Remote Antenna
33	Rs485 A		Green/Red (Twisted)	Remote Antenna
34	Rs485 **0**V		Black/Yellow	Remote Antenna
35	CanBus High		Yellow	Dash
36	CanBus Low		Green	Dash

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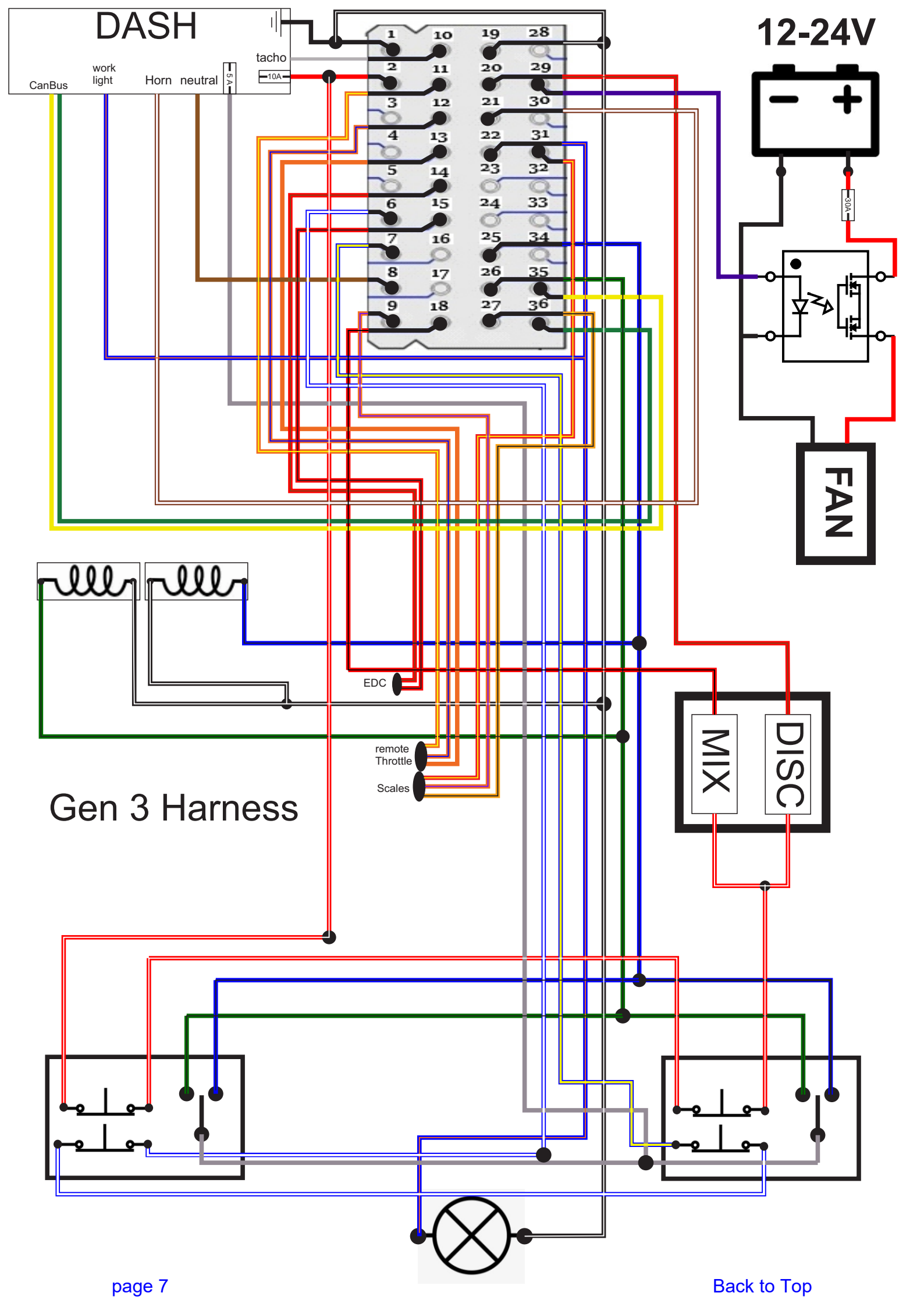

DASH
CanBus
work light
Horn
neutral
5A
tacho
10A
12-24V
30A
FAN
EDC
remote Throttle
Scales
MIX
DISC
Gen 3 Harness

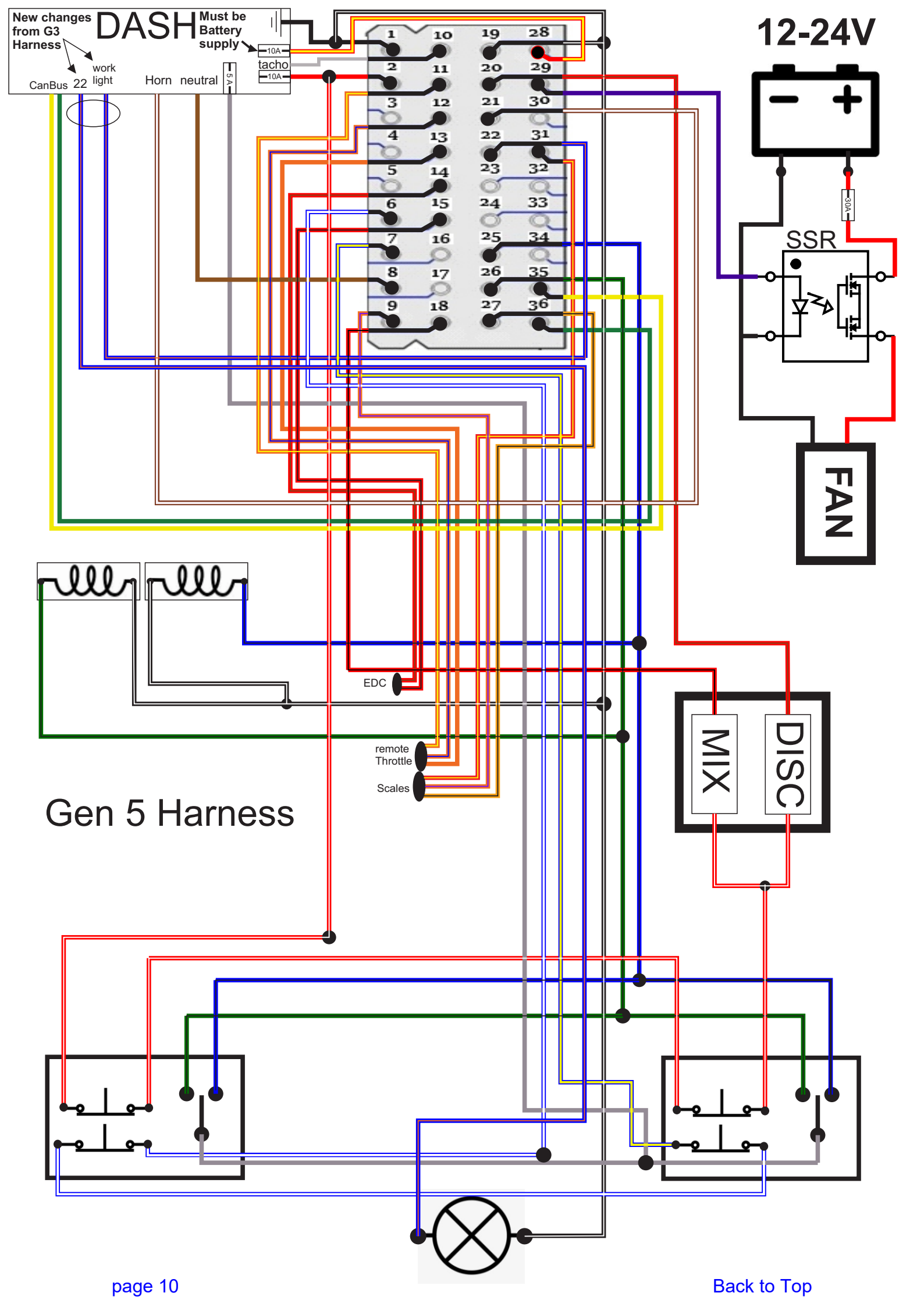
Generation 5 Harness changes

Pin 28 *is now a battery supply to the CCU to stop Memory corruption when Ignition is dropped to CCU when Cranking the truck. This battery supply is only required for V6 Agi-drives with* ***software version 5.1*** *software version 4.12 and below do not require the battery supply.*

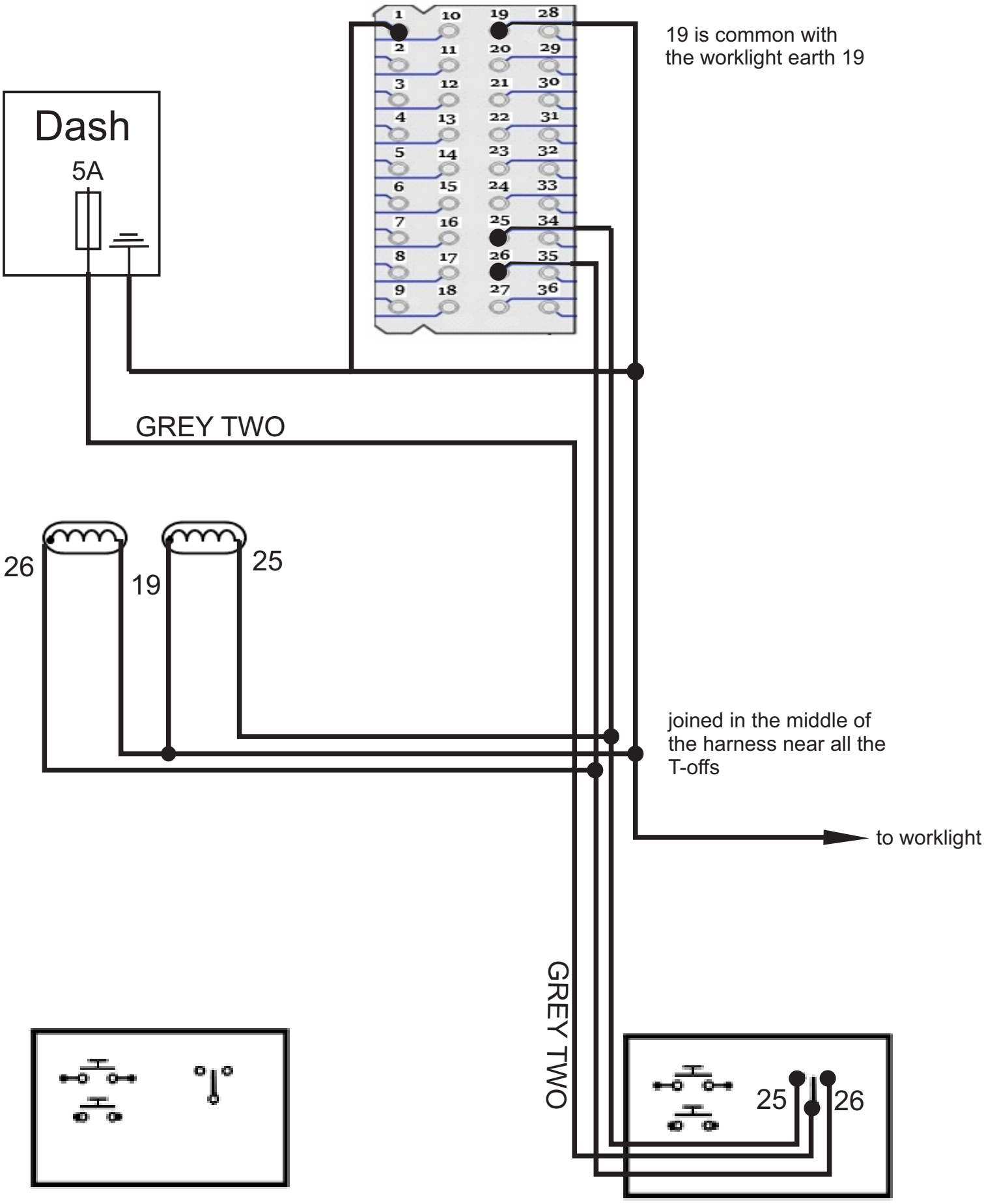
There is now ***Two*** *work light wires to facilitate a relay with an external power source for ease of installation when the worklight requires more than* ***5 Amps****. If a relay is not require and the worklight circuit is less than 5 Amp current draw then wires* ***22*** *and* ***Blue/orange*** *can be joined together without a relay and the worklight will work as normal.*
(note: anything more than ***10 Amps*** *will need a separate harness to be run for the worklight down the back of the truck as wire 22 is only rated for* ***10 Amps MAX****).*

V6 Generation 5 Harness Pin outs

Pin	Function	Join	Colour	Location
1	Negative **0** VDC	19	Black	Dash
2	Ignition Supply **12/24** VDC		Red	Dash
3	Revs Down		Yellow	Not Used
4	Common		Pink	Not Used
5	Revs Up		Green	Not Used
6	E/Stop Signal Return		Blue/White	E/Stop Switch
7	E/Stop Signal		Blue/Yellow	E/Stop Switch
8	Neutral Input		Brown	Dash
9	VIT **0**		Orange/Violet	Airbag Sensor
10	Tacho Input		Gray	Dash
11	**5**V ECM		Orange/Yellow	Remote Throttle
12	SIG ECM		Orange/Blue	Remote Throttle
13	**0**V ECM		Orange	Remote Throttle
14	EDC		Red/Black	2 Pin Deutsch plug
15	EDC		Red/Brown	2 Pin Deutsch plug
16	Cruise/GPS Relay **N/O**		Pink/Blue	Not Used
17	Cruise/GPS Relay **Common**		Violet/Red	Not Used
18	PWM **1**		Red/Black	Rexroth pump
19	Flood Light Ground	1	Black/White	Rear Flood Light
20	PWM **2**		Red/Brown	Rexroth pump
21	Horn		Brown/White	Dash
22	Flood Light		Blue	Rear Flood Light
23	Rs232Tx		Yellow/Green (Twisted)	Not Used
24	Rs232Rx		Green/Yellow (Twisted)	Not Used
25	Chute Up		Blue/Black	Rear Chute Switch
IGN	Chute Switch Ignition		White	Rear Chute Switch
26	Chute Down		Green/Black	Rear Chute Switch
27	VIT **1**		Orange/Black	Airbag Sensor
28	Battery Supply		Red/Yellow	Supply to CCU and Worklight
29	Fan OUTPUT		Purple	SSR Controller
30	Brake Switch Input		Green/White	Not Used
31	Rs485 +V		Red/Yellow	Remote Antenna
32	Rs485 B		Yellow/Red (Twisted)	Remote Antenna
33	Rs485 A		Green/Red (Twisted)	Remote Antenna
34	Bi/O 0		Black/Yellow	Remote Antenna
35	CanBus High		Yellow	Dash
36	CanBus Low		Green	Dash


New changes from G3 Harness
DASH
Must be Battery supply
10A
tacho
10A
5A
CanBus
22
work light
Horn
neutral
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
12-24V
30A
SSR
FAN
EDC
remote Throttle
Scales
MIX
DISC
Gen 5 Harness

Single Chute Switch Circuit



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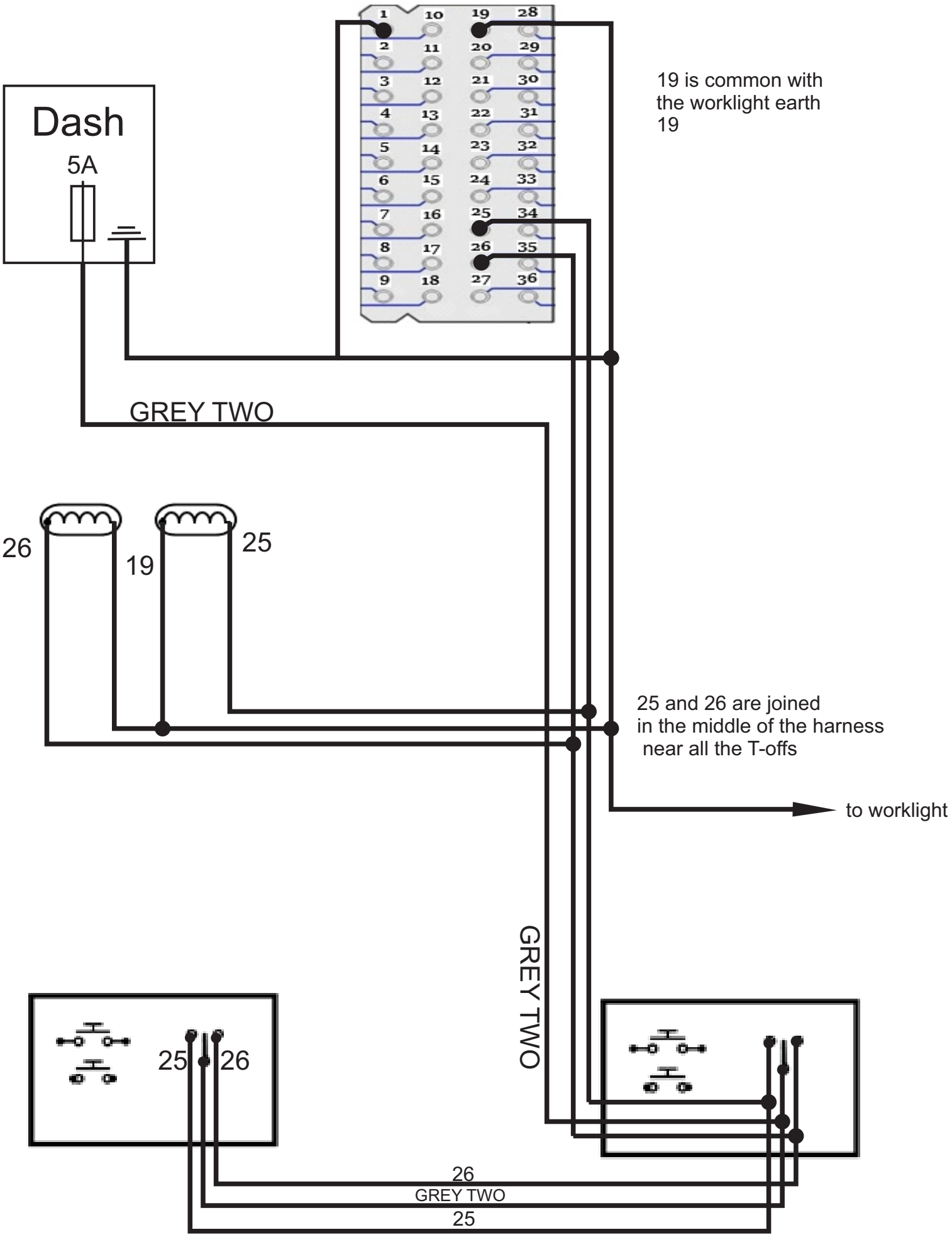
Dual Chute Switch Circuit



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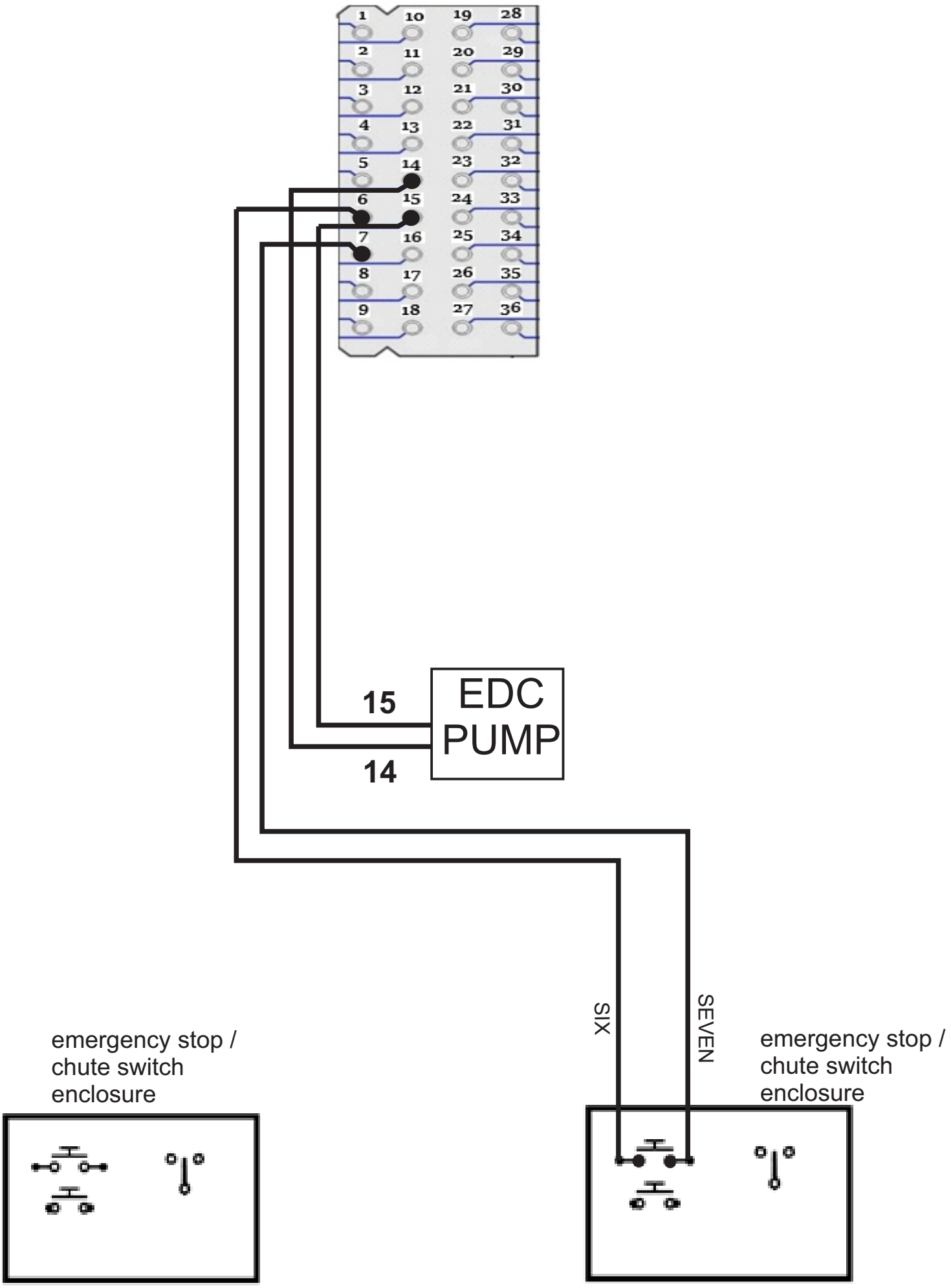
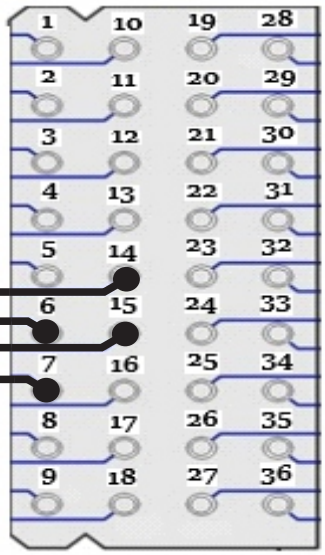
EDC Single E/stop Circuit



EDC Dual E/stop Circuit



15

14

EDC PUMP

emergency stop / chute switch enclosure

SEVEN

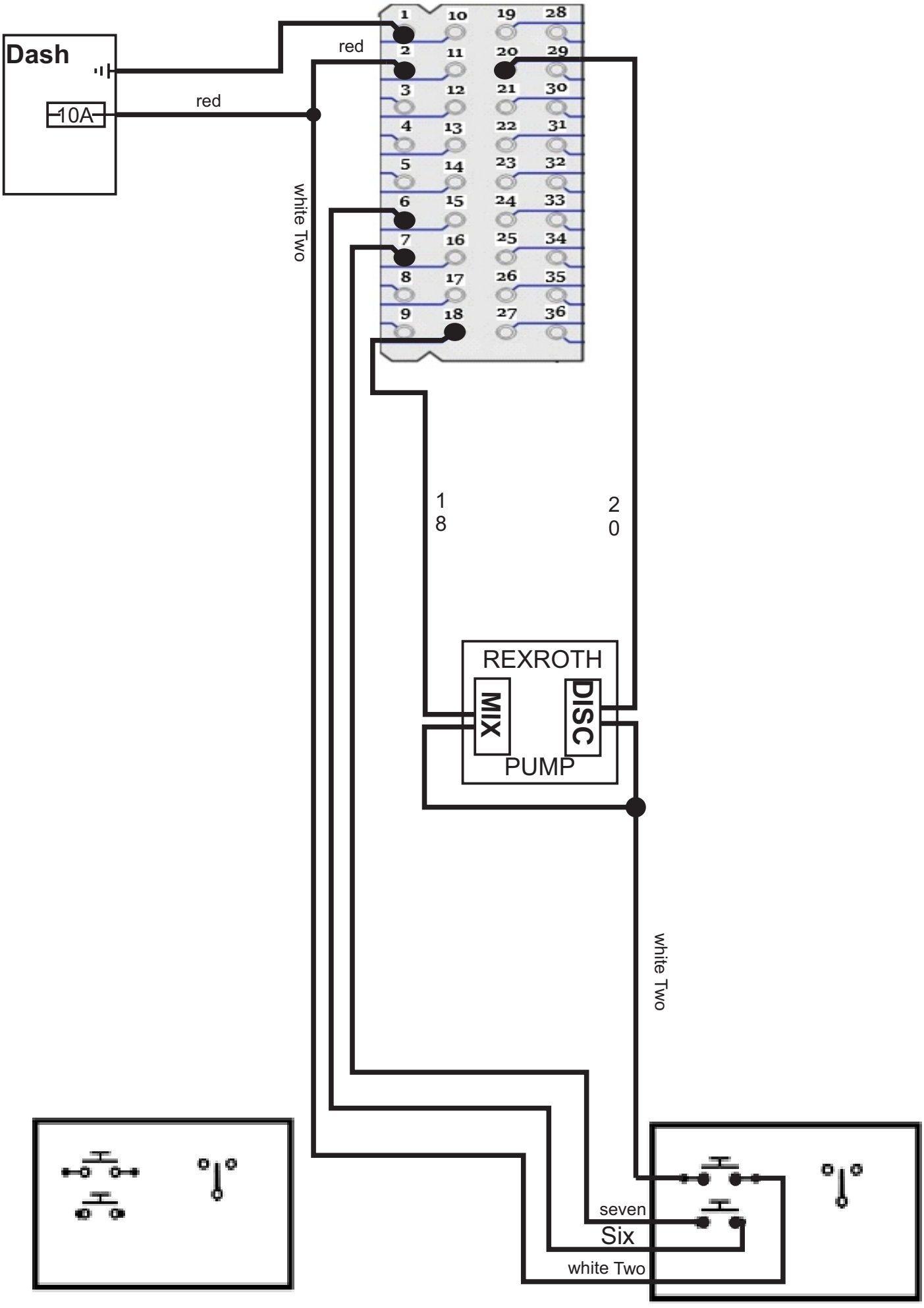
SIX

emergency stop / chute switch enclosure

SEVEN

SIX

Rexroth Single E/stop Circuit



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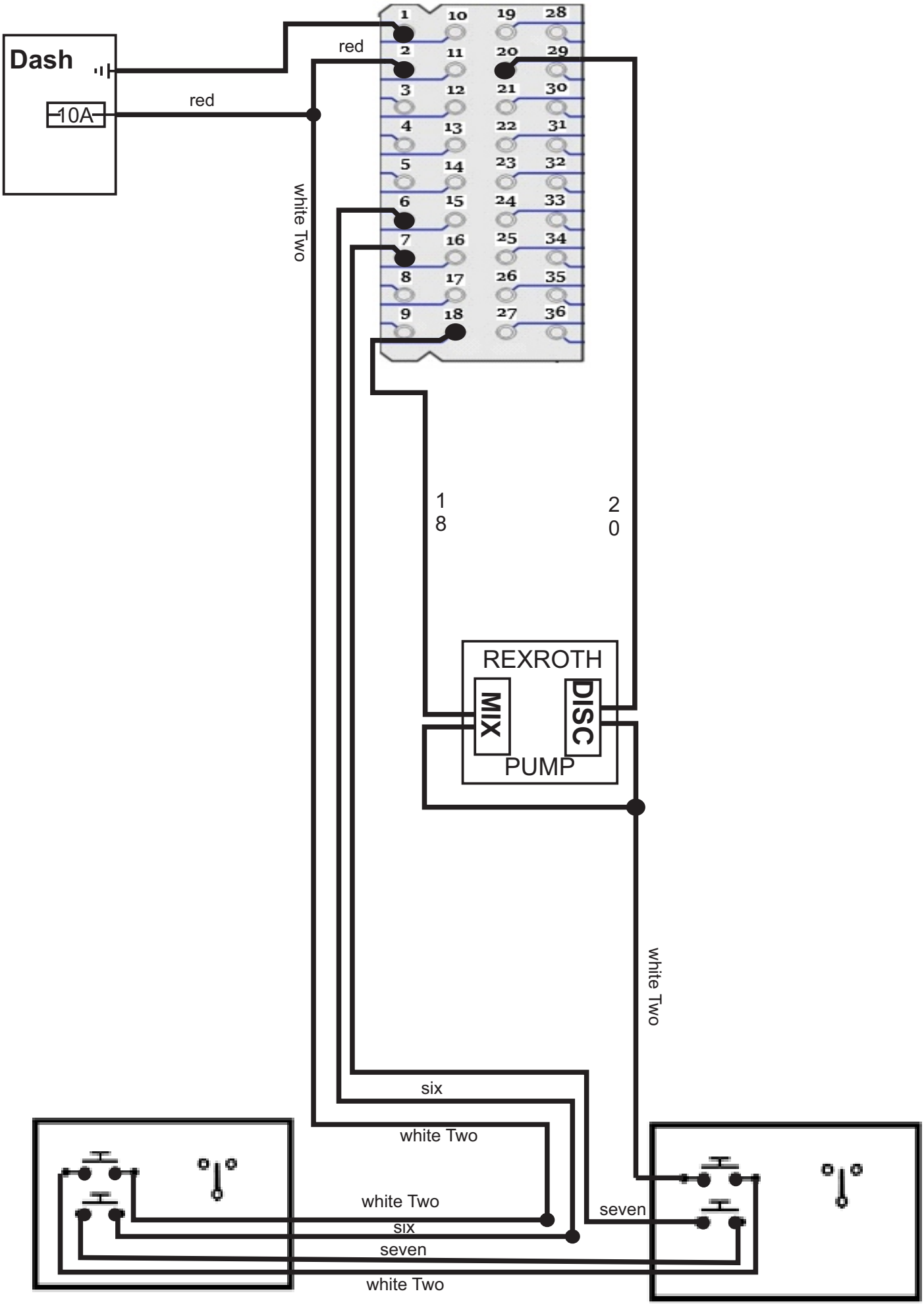
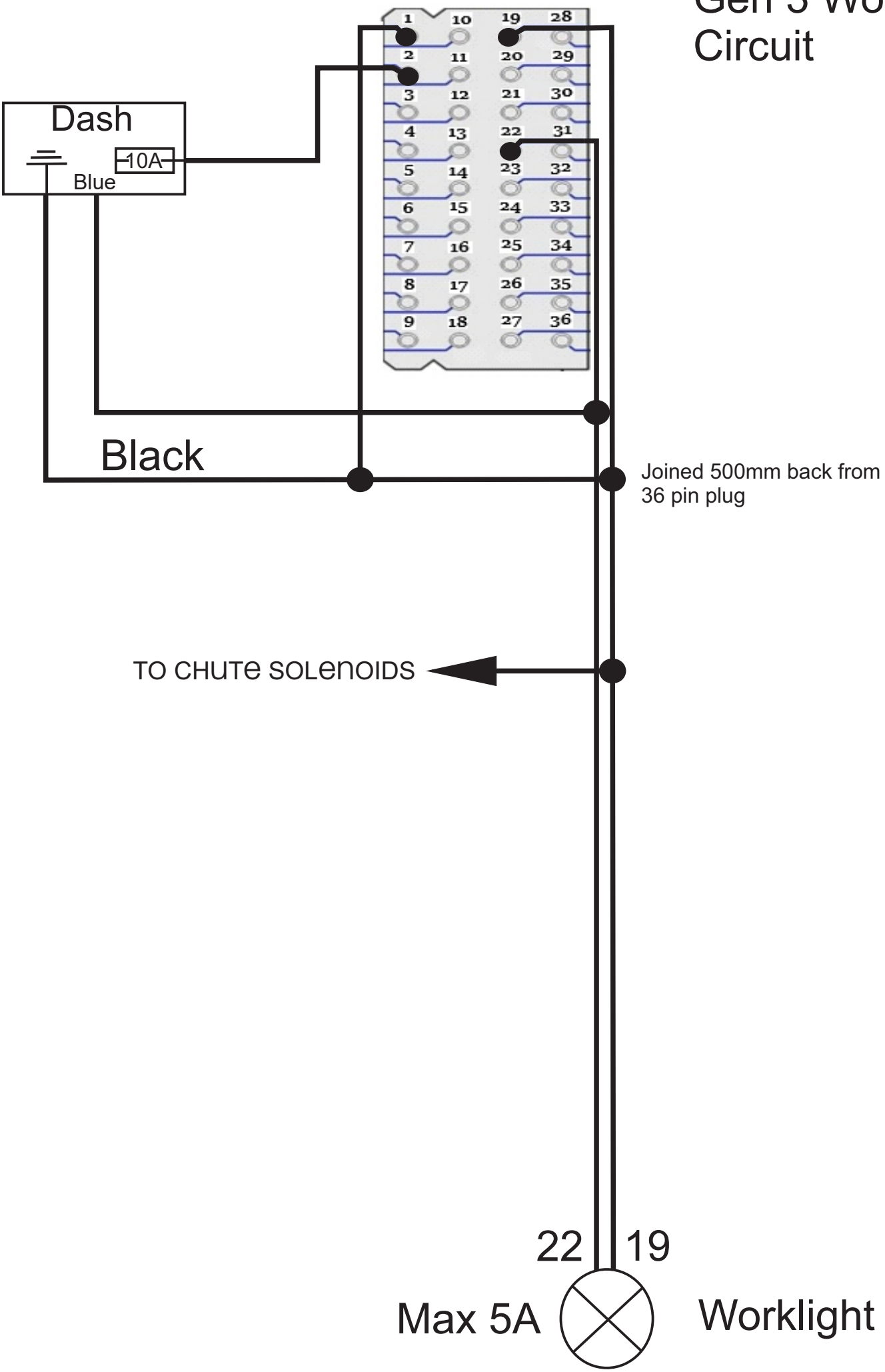
Rexroth Dual E/stop Circuit

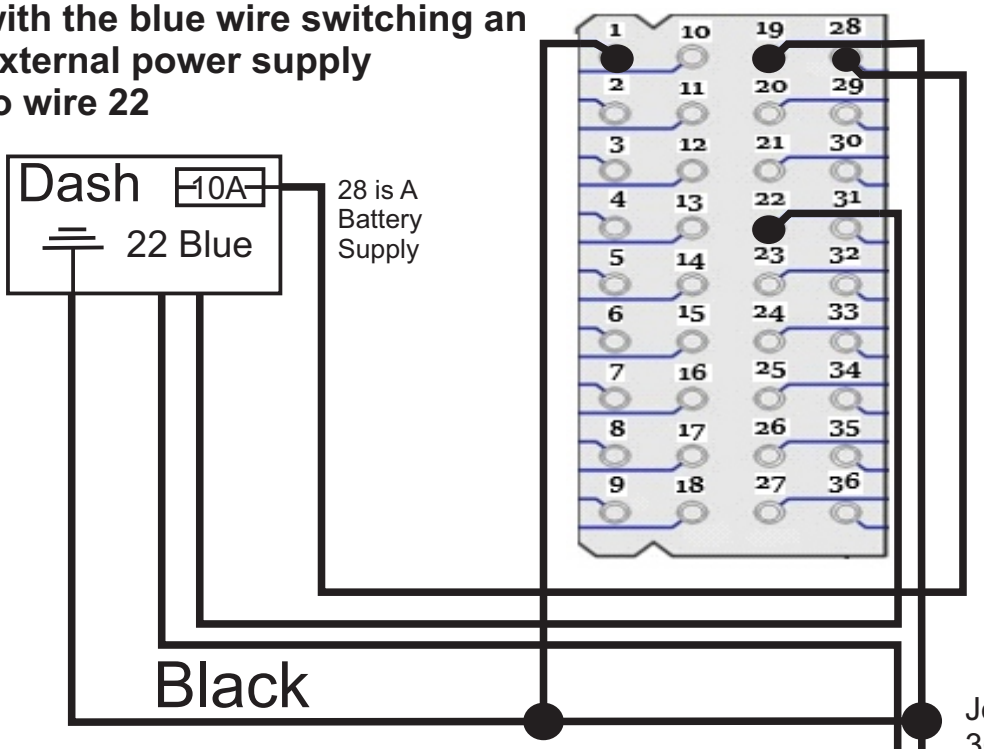


Gen 3 Worklight Circuit

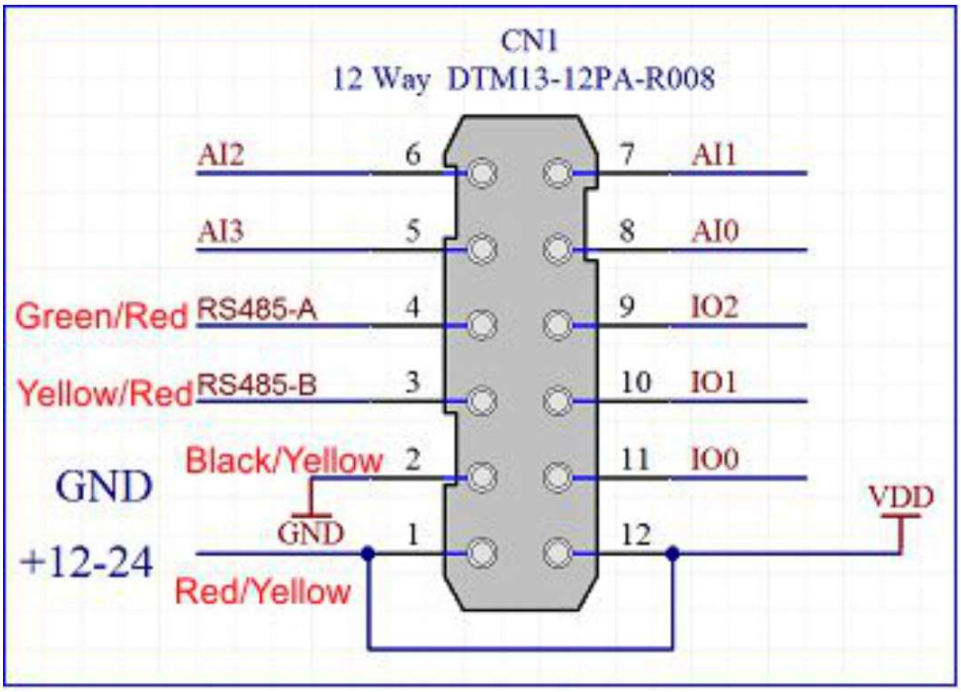


Gen 5 Worklight Circuit

Join wires blue and 22 together if work light is less than 5Amps or put a relay with the blue wire switching an external power supply to wire 22

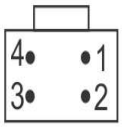


RX Scale Remote Antenna



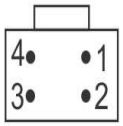
SSR Controller

Size 12 Power Connector



1- power supply through fusible link
2- Fan Output +
3- Ground
4- switch

Size 16 Data Connection



1- A (Rs485) Green/Red
2- B (Rs485) Yellow/Red
3- Sensor Supply Brown (Twin)
4- Sensor Return Blue (Twin)