

# toggle switches



B

FLAT HANDLE	B1
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## toggle switches

B1 54100 SERIES

### 54100 Series, 25A

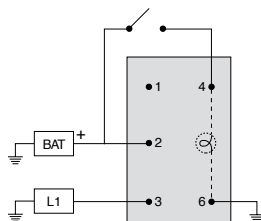
Standard or lighted handle – black nylon or clear plastic, 11/16" (17.5mm) long. Silver contacts. Mounting stem 15/32" -32 thread, 15/32" (11.9mm) long, fits panels up to 1/8" (31.8mm) thick. Includes mounting hardware: black metal facenut and nickel-plated hexnut. 25A at 12V DC. Terminals: .250" blade or 6-32 screw.



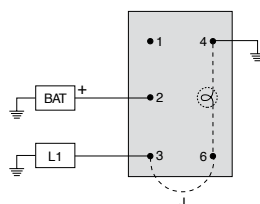
Standard Switch



Illuminated Switch



54109 & 54109-01  
Independent Wiring



54109 & 54109-01  
Dependent Wiring

### SPST

#### 54100 On-Off BP ★

Up: On, Down: Off. Two screw terminals.

#### 54100-01 On-Off BP

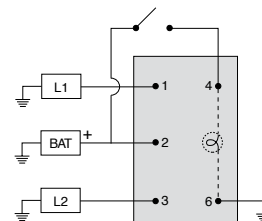
Up: On, Down: Off. Two blade terminals.

#### 54101 Mom On-Off

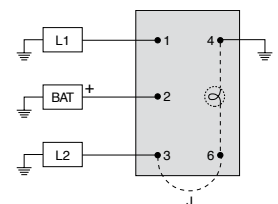
Up: Mom On, Down: Off. Two screw terminals.

#### 54101-01 Mom On-Off

Up: Mom On, Down: Off. Two blade terminals.



54110 & 54110-01  
Independent Wiring



54110 & 54110-01  
Dependent Wiring

★ Rapid ship item. BP Available in retail clamshell pack. ★ Minimum order quantity may apply. Part numbers needed in BOX require a -BX suffix on the purchase order.

# B toggle switches

**B1** 54100 SERIES

## 54109 On-Off, Illuminated BP ★

Up: On/Red, Down: Off/White. Four screw terminals.  
O-ring seal in bushing.

## 54109-01 On-Off, Illuminated ★

Up: On/Red, Down: Off/White. Four blade terminals.  
O-ring seal in bushing.

## SPDT

## 54103 On-Off-On BP

Up: On, Center: Off, Down: On. Three screw terminals.

## 54103-01 On-Off-On

Up: On, Center: Off, Down: On. Three blade terminals.

## 54104 Mom On-Off-Mom On BP

Up: Mom On, Center: Off, Down: Mom On.  
Three screw terminals.

## 54104-01 Mom On-Off-Mom On

Up: Mom On, Center: Off, Down: Mom On.  
Three blade terminals.

## 54110 On-Off-On, Illuminated

Up: On/red, Center: Off/White, Down: On/White.  
Five screw terminals. Weather-resistant: O-ring seal in bushing.  
Independent illumination.

## 54110-01 On-Off-On, Illuminated

Up: On/red, Center: Off/White, Down: On/White.  
Five blade terminals. Weather-resistant: O-ring seal in bushing.  
Independent illumination.

## DPST

## 54105 On-Off

Up: On, Down: Off. Four screw terminals.

## 54105-01 On-Off

Up: On, Down: Off. Four blade terminals.

## DPDT

## 54107 On-Off-On

Up: On, Center: Off, Down: On. Six screw terminals.

## 54107-01 On-Off-On BP ★

Up: On, Center: Off, Down: On. Six blade terminals.

# toggle switches

**B2** LIGHTED TIP

## M-54111 Lighted Tip Switches 25A

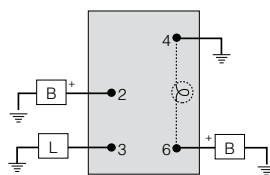
*Independent illumination switches can be wired for dependent operation. Tip of handle is illuminated red in the On position, clear in the Off position.* Tip of handle is illuminated Red in the On position, illuminated Clear in the Off position. Silver contacts. 15/32" -32 thread mounting stem. Nickel-plated brass hexnut. Black plastic handle, housing and facenut. Keyway in the down position. Blade terminals. 25A at 12V DC. Plastic facenut can be replaced with black metal facenut 83252 on page 27.

## M-54111-01 SPST On-Off BP ★

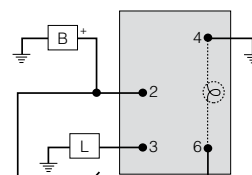
Up: On, Down: Off. Four blade terminals.

## M-54111-02 SPDT On-Off-On BP

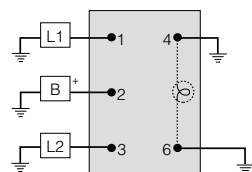
Up: On, Center: Off, Down: On. Five blade terminals.



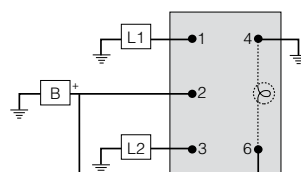
M-54111-01  
Independent Illumination



M-54111-01  
Dependent Illumination



M-54111-02  
Independent Illumination



M-54111-02  
Dependent Illumination

★ Rapid ship item. BP Available in retail clamshell pack. ★ Minimum order quantity may apply. Part numbers needed in BOX require a -BX suffix on the purchase order.

## 59024-000 Series 1" Paddle Handle Switches 25A

Silver contacts, 15/32" -32 thread mounting stem. Fits panels up to 1/4" (6.4mm) thick. Includes mounting hardware: black knurled facenut, hexnut. Keyway is in the down position. 1" (25.4mm) handle, black plastic, matte finish. 25A at 12V DC. Terminals: Brass 8-32 screw or .250 quick connect blade.



### SPST

#### 59024-100 On-Off

Up: On, Down: Off. Two blade terminals.

#### 59024-101 On-Off

Up: On, Down: Off. O-ring seal in the stem. Two blade terminals.

#### 59024-102 Mom On-Off

Up: Mom On, Down: Off. Two blade terminals.

#### 59024-144 Mom On-Off

Up: Off, Down: Mom On. Two blade terminals.

#### 59024-200 On-Off BP

Up: On, Down: Off. Two screw terminals.

#### 59024-201 On-Off

Up: On, Down: Off. O-ring seal in the stem. Two screw terminals.

#### 59024-202 Mom On-Off

Up: Mom On, Down: Off. Two screw terminals.

## Wiring Diagrams

See page 13.

### SPDT

#### 59024-104 On-On

Up: On, Down: On. Three blade terminals.

#### 59024-106 On-Off-On

Up: On, Center: Off, Down: On. Three blade terminals.

#### 59024-108 Mom On-Off-Mom On

Up: Mom On, Center: Off, Down: Mom On. Three blade terminals.

#### 59024-204 On-On

Up: On, Down: On. Three screw terminals.

#### 59024-206 On-Off-On

Up: On, Center: Off, Down: On. Three screw terminals.

#### 59024-208 Mom On-Off-Mom On

Up: Mom On, Center: Off, Down: Mom On. Three screw terminals.

### DPST

#### 59024-110 On-Off

Up: On, Down: Off. Four blade terminals.

#### 59024-210 On-Off

Up: On, Down: Off. Four screw terminals.

### DPDT

#### 59024-116 On-On

Up: On, Down: On. Six blade terminals.

#### 59024-118 On-Off-On

Up: On, Center: Off, Down: On. Six blade terminals.

#### 59024-126 Reversing Switch For Electrical Motors

Reversing (polarity) switch for changing direction of permanent magnet electrical motors. Up: Mom On, Center: Off, Down, Mom On. Four blade terminals.

#### 59024-216 On-On

Up: On, Down: On. Six screw terminals.

#### 59024-218 On-Off-On

Up: On, Center: Off, Down: On. Six screw terminals.

# B toggle switches

**B4** FREIGHTLINER REPLACEMENT

## 59024-00 Freightliner Replacement Switches 25A

*Terminals are arranged to match OEM wiring connectors. With or without brackets. Silver contacts. Black phenolic switch housing with metal cap. 15/32" -32 thread mounting stem. Fits panels to .093" (2.4mm) with spacer provided, or to .25" (6.4mm) without spacer. Includes mounting hardware: black metal facenut. Keyway is in the down position. Black plastic 1" (25.4mm) handle, matte finish. Tin-plated blade terminals. 25A at 12V DC.*



With Bracket

Without Bracket

### With Bracket

#### 59024-33 SPST On-Off ★

Up: On, Center: Off. Two blade terminals.  
Dual contacts for extra durability.

#### 59024-34 SPDT On-Off-On

Up: On, Center: Off, Down: On. Three blade terminals.  
Dual contacts for extra durability.

#### 59024-35 DPST On-Off

Up: On, Center: Off. Four blade terminals.

#### 59024-36 DPDT On-Off-On

Up: On, Center: Off, Down: On. Six blade terminals.

#### 59024-37 DPST On-Mom Off

Center: On, Down: Mom Off. Four blade terminals.

#### 59024-38 DPDT Mom On-On-Mom On

Up: Mom On, center: On, Down: On. Six blade terminals.

### Without Bracket

#### 59024-12 SPST On-Off ★

Up: On, Down: Off. Two blade terminals.  
Dual contacts for extra durability.

#### 59024-13 SPDT On-Off-On

Up: On, Center: Off, Down: On. Three blade terminals.  
Dual contacts for extra durability.

#### 59024-14 DPST On-Off

Up: On, Center: Off. Four blade terminals.

#### 59024-15 DPDT On-Off-On ★

Up: On, Center: Off, Down: On. Six blade terminals.

#### 59024-16 DPST On-Mom Off

Center: On, Down: Mom Off. Four blade terminals.

## Relays & Microrelays

Heavy Duty 40A at 12V DC,  
High Power 70A at 12V DC  
and Microrelays 25A at 12V DC.  
See page 80.



## 12V, 24V, 36V Rating

Generally, Cole Hersee heavy duty 12V non-illuminated\* toggle and rocker switches can be used at higher voltage but lower current.

Example: By calculation, 25A 12V switch will derate to 8.3A at 36V, or 12.5 at 24V.

This calculated de-rating gives a conservative result. 25A at 12V toggle switches\* can actually be used at 15A at 24V, and 10A at 36V.

**\* Exception:** This does not apply to illuminated switches. The pilot light must only be supplied with the stated voltage. Do not derate any illuminated switches.

## B5 HEAVY DUTY 25A

Standard or long handle. Universal application. Silver contacts. Mounting stem is nickel-plated brass 15/32" -32 thread, 15/32" (11.9mm) long, and fits panels up to 9/32" (7.1mm) except where stated otherwise. phenolic housing, with plated steel cap. Nickel-plated brass mounting hardware. Blade terminals: .250 quick connect. Screw terminals: 6-32 screws. 25A at 12V, 15A at 24V, and 10A at 36V DC.



Standard handle,  
11/16" (17.5mm) long.



Long handle,  
1 1/2" (38.1mm) long.



PVC coated housing  
with wire leads.

### SPST

#### 5520 On-Off BP ★

Up: On, Down: Off. Two screw terminals. O-ring seal.

#### 5582 On-Off BP ★

Up: On, Down: Off. Two screw terminals.

#### 5582-10 On-Off, PVC Coated ★

Up: On, Down: Off. Two 8" (203.2mm) leads. O-ring seal. Mounting stem is 11/32" (8.7mm) long, and fits panels up to 3/16" (4.8mm) thick.

#### 55014 On-Off BP ★

Up: On, Down: Off. Two blade terminals.

#### 55014-05 On-Off

Up: On, Down: Off. Two blade terminals. O-ring seal in the stem.

#### 55023 On-Off

Up: On, Down: Off. Two screw terminals with 2 blades attached.

#### 55055 On-Off, Long Handle BP

Up: On, Down: Off. Two blade terminals.

#### 55055-01 On-Off, Long Handle

Up: On, Down: Off. Two screw terminals.

### SPST Momentary

#### 55020 Mom On-Off BP

Up: Off, Center: Mom On. Two screw terminals.

#### 55020-02\* Mom On-Off

Up: Off, Down: Mom On. Two screw terminals. O-ring seal.

#### 55020-04 Mom On-Off, PVC Coated ★

Moisture- and dirt-resistant. PVC coated and sealed with an O-ring seal in the stem. Up: Off, Down: Mom On. Two 8" (203.2mm) leads.



#### 55037 Mom On-Off

Up: Off, Center: Mom On. Two blade terminals.

#### 55049-01 On-Mom Off

Up: On, Down: Mom Off. Two blade terminals.

#### 55052-01 On-Mom Off, Long Handle

Up: On, Center: Mom Off. Two blade terminals.

### SPST, DPDT?

See page 28.

★ Rapid ship item. BP Available in retail clamshell pack. ★ Minimum order quantity may apply. Part numbers needed in BOX require a -BX suffix on the purchase order.

## SPDT

### 5584 On-On ★

Up: On, Down: On. Three screw terminals.

### 5586 On-Off-On **BP** ★

Up: On, Center: Off, Down: On. Three screw terminals.

### 55015 On-On

Up: On, Down: On. Three blade terminals.

### 55016 On-Off-On

Up: On, Center: Off, Down: On. Three blade terminals.

### 55016-06 On-Off-On

Up: On, Center: Off, Down: On. O-ring seal in the stem. Three blade terminals.

### 55036 On-Off-On, PVC Coated **BP** ★

Up: On, Center: Off, Down: On. PVC coated housing, with three 9.5" (241.3mm) leads. Leads have tinned brass terminals. O-ring seal in the stem.

## SPDT Momentary

### 55021 Mom On-Off-Mom On **BP** ★

Up: Mom On, Center: Off, Down: Mom On. Three screw terminals.

### 55021-04 Mom On-Off-Mom On

Up: Mom On, Center: Off, Down: Mom On. O-ring seal in the stem. Three screw terminals.

### 55021-07 Mom On-Off-Mom On, PVC Coated **BP** ★

Up: Mom On, Center: Off, Down: Mom On. PVC coated housing with three 8" (203.2mm) leads. O-ring seal in the stem.

### 55021-08 Mom On-Off-Mom On, Long Handle

Up: Mom On, Center: Off, Down: Mom On. Three screw terminals.

### 55033-01 Mom On-Off-Mom On ★

Up: Mom On, Center: Off, Down: Mom On. Three blade terminals.

### 55033-02 Mom On-Off-Mom On, Long Handle

Up: Mom On, Center: Off, Down: Mom On. Three blade terminals.

### 55088 On-Off-Mom On ★

Up: On, Center: Off, Down: Mom On. Three screw terminals.

## DPST

### 5588 On-Off **BP** ★

Up: On, Down: Off. Four screw terminals.

### 55017 On-Off ★

Up: On, Down: Off. Four blade terminals.

### 55017-02 On-Off

Up: On, Down: Off. O-ring seal in the stem. Four blade terminals.

## DPDT

### 5590 On-On ★

Up: On, Down: On. Six screw terminals.

### 5592 On-Off-On **BP** ★

Up: On, Center: Off, Down: On. Six screw terminals.

### 55018 On-On ★

Up: On, Down: On. Six blade terminals.

### 55019 On-Off-On **BP** ★

Up: On, Center: Off, Down: On. Six blade terminals.

### 55057 On-Off-On, Long Handle ★

Up: On, Center: Off, Down: On. Six blade terminals.

## DPDT Momentary

### 55054 Mom On-Off-Mom On **BP** ★

Up: Mom On, Center: Off, Down: Mom On. Six screw terminals.

### 55054-04 Mom On-Off-Mom On, Long Handle

Up: Mom On, Center: Off, Down: Mom On. Six screw terminals.

### 55065-02 Mom On-Off-Mom On, Long Handle ★

Up: Mom On, Center: Off, Down: Mom On. Six blade terminals.



## 55065-03 Mom On-Off-Mom On ★

Up: Mom On, Center: Off, Down: Mom On.  
On. Six blade terminals.

## 55081 On-Off-Mom On

Up: On, Center: Off, Down: Mom On. Six blade terminals.

## 55094\* Mom On-On-Off, Ignition/Start

Up: Mom On terminals 2&3, 5&6, Center: On terminals 2&3,  
Down: Off. Four screw terminals. For starting and running  
coil type ignition engines.

## DPDT Reversing Polarity

*Forward/reverse switches for use with permanent magnet motors.*

## 55018-01 On-On

Up: On, Down: On. Four blade terminals.

## 55046 Mom On-Off-Mom On ★

Up: Mom On, Center: Off, Down: Mom On.  
Four blade terminals.

## 55046-06 Mom On-Off-Mom On, Long Handle

Up: Mom On terminals 1&5, 2&4, Center: Off, Down: Mom On  
terminals 1&2, 4&5. Four blade terminals. O-ring seal.

## 13-pole

12300 socket and 12301 plug provide six additional  
circuits within the dimensions of a standard 7-pole  
connector! See page 137.



## Reversing Polarity Switches

For changing the direction of permanent magnet motors.

### Toggle Switches (Section B)

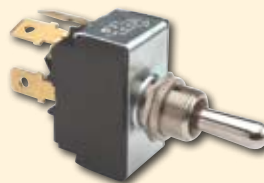
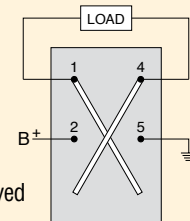
55018-01 On-On  
55046 Mom On - Off - Mom On  
55046-06 Mom On - Off - Mom On

### Rotary Switches (Section D)

90005-03 Mom On - Off - Mom On  
90005-01 Mom On - Off - Mom On. Keyed

### Rocker Switches (Section A)

57014-03 Mom On - Off - Mom On  
58027-18 Mom On - Off - Mom On



## Saves Batteries

No more dead batteries! Low Voltage Disconnect Switches  
automatically disconnect non-critical loads when battery  
voltage is low; automatically reconnect when battery is  
being charged. See page 85 and 86.



# B toggle switches

**B6** ON -OFF

*Down: Off, Up: On. Standard or ball handle. In chrome plated brass or nickel-plated brass handle, facenut and mounting stem. Silver contacts. Mounting stem has 15/32" -32 thread, 15/32" (11.9mm) long, and fits panels up to 9/32" (7.2mm) thick. Screw or blade terminals, or wire leads. Phenolic housing with plated steel frame. Keyway is in the down position. 10A at 12V DC.*



Ball handle: 3/8"  
(9.52mm) long.

Standard handle: 11/16"  
(17.46mm) long.

## Nickel-Plated Brass Handle

**5507 Ball Handle, Two Screw Terminals**

**5558 Standard Handle, Two Screw Terminals** BP ★

**5568 Ball Handle, Two 6" Leads**

**5570 Standard Handle, Two 6" Leads**

**55012 Ball Handle, Two Blade Terminals**

**55013 Standard Handle, Two Blade Terminals**

## Chrome-Plated Brass Handle

**M-484 Standard Handle, Two Screw Terminals** BP ★

Also available by special order as a panel assembly.  
(M-515-01, M-516-01, M-517.)

**M-493 Ball Handle, Two Screw Terminals** BP

**M-584 Standard Handle, Two 6" Leads** BP ★

**M-586 Standard Handle, Two Blade Terminals**

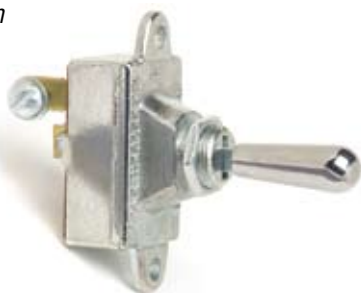
# toggle switches

**B7** HEAVY DUTY 20A & 30A

## 551800 Series Heavy Duty & Extra Heavy Duty Switches 20A and 30A

*Universal application. Diecast housing. For stem- or bracket-mounting. 15/32" -32 thread mounting stem, with keyway.*

Brackets: .170" (4.3mm) diameter holes, 1.72" (43.7mm) on centers. Fits panels up to 3/16" (4.8mm) thick. Chrome plated brass handle, 1 1/16" long (27.0mm). Steel screw or blade terminals. Plated steel hexnut.



## Heavy Duty

*20A at 6-12V DC.*

**551001 SPST Mom On-Off**

Up: Mom On, Center: Off. Two blade terminals.

**551800 SPST On-Off** ★

Up: On, Center: Off. Two screw terminals.

**551801 SPST Mom On-Off**

Up: Mom On, Center: Off. Two screw terminals.

**551802 SPDT On-Off-On**

Up: On, Center: Off, Down: On. Three screw terminals.

**551805 DPST On-Off**

Up: On, Center: Off. Four screw terminals.

★ Rapid ship item. BP Available in retail clamshell pack. ★ Minimum order quantity may apply. Part numbers needed in BOX require a -BX suffix on the purchase order.



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## 551806 DPDT On-Off-On

Up: On, Center: Off, Down On. Six screw terminals.

## M-594 SPST On-Off

Up: On, Center: Off. Two screw terminals.  
Golden dichromate dip housing, brass terminals.

## M-595 SPDT On-Off-On

Up: On, Center: Off, Down: On. Three screw terminals.  
Golden dichromate dip housing, brass terminals.

## Extra Heavy Duty

30A at 6-12V DC, 15A at 24-36V DC. Silver-plated contacts.

## 551840 SPST On-Off BP ★

Up: On, Center: Off. Two screw terminals.

## 551841 SPST Mom On-Off

Up: Mom On, Center: Off. Two screw terminals.  
This universal switch can also be used to control day signaling lamps.

## 551842 SPDT On-Off-On ★

Up: On, Center: Off, Down: On. Three screw terminals.

## 551843 SPDT On-Off-Mom On

Up: On, Center: Off, Down: Mom On. Three screw terminals.

## 551844 SPDT Mom On-Off-Mom On ★

Up: Mom On, Center: Off, Down: Mom On.  
Three screw terminals.

## 551845 DPST On-Off

Up: B-2, Center: Off. Four screw terminals.

## 551846 DPDT On-Off-On ★

Up: On, Center: Off, Down: On. Six screw terminals.

## 551849 SP3C On-On-Off

Up: B-T-H, Center: B-P-T, Down: Off. Four screw terminals.  
This universal switch can also be used to control headlamps and Park & Tail lamps.

## 551850 SPDT On-On

Up: On, Center: On. Three screw terminals.

## 12V, 24V 36V Rating

Generally, Cole Hersee heavy duty 12V non-illuminated\* toggle and rocker switches can be used at higher voltage but lower current.

Example: By calculation, 25A 12V switch will derate to 8.3A at 36V, or 12.5A at 24V.

This calculated de-rating gives a conservative result. 25A at 12V toggle switches\* can actually be used at 15A at 24V, and 10A at 36V.

*\*Exception: This does not apply to Illuminated switches. The pilot light must only be supplied with the stated voltage. Do not derate any illuminated switches.*

## 551851 SPST On-Mom Off

Up: Mom Off, Center: On. Two screw terminals.  
This universal switch can also be used to control night signaling lamps.

## 551852 SP2C On-On-Off

Up: B-H, Center: B-L, Down: Off. Three screw terminals.  
This universal switch can also be used to control heaters/defrosters. Supplied without resistors.

## 551855 SP1C Mom Off-On-Off

Up: Mom Off, Center: On, Down: Mom Off.  
Two screw terminals. This universal switch can also be used to control signaling and marker lamps.

## 551861\* SP2C On-Off

Up: On B-1&2, Center: Off. Three screw terminals.

## 551862 DP2C Mom On-Run-Off

Up: Mom S-S, Center: Open, Down: Off M-M. Four screw terminals. This universal switch is primarily used to control magneto ignition. For battery ignition see 59071 and 55094 on page 25.

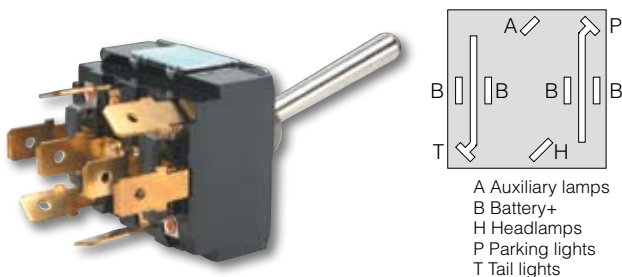
# B toggle switches

## B8 SPECIALIZED APPLICATIONS

Silver contacts. 15/32" -32 thread mounting stem, .46" (11.9mm) long, mounts in panels up to 9/32" (7.1mm) thick. Nickel-plated brass handle: standard .687" (17.5mm) or long 1.5" (38.1mm). Brass blade terminals. Black phenolic housing with metal frame. Nickel-plated brass hardware. Keyway is in the down position. 25A at 12V DC, except as noted.

### 55058-01 4-Pole, 4-Circuit Headlamp Switch

Allows splitting of a heavy load into four separate circuits. Eight blade terminals. Long handle. Up: Park, Tail & Headlamps - Center: Off - Down: Park, Tail & Auxiliary Lamps.



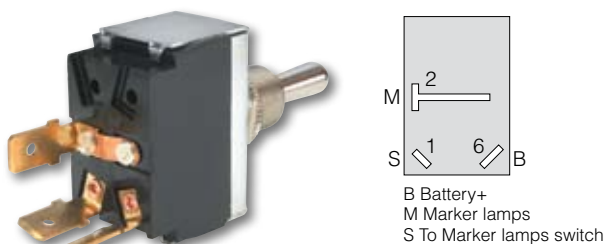
### 55064 DPDT 4-Circuit Headlamp Switch

Up: Park, Tail & Headlamps - Center: Off - Down: Park, Tail & Auxiliary Lamps. Six blade terminals. Long handle.



### 55071 DP 2-Circuit Marker Lamp Switch

Up: Mom On B, 1&2 (day signaling) - Center: On 1&2 - Down: Mom Off (night signaling). Three blade terminals. Standard handle.



### 55093 DPDT Two-Speed Heater Fan Switch ★

Double pole, two-circuit. Three blade terminals. Up: Battery & High - Center: Battery & Low - Down: Off. Standard handle. Terminal connections: 3 low speed, 5 Battery +, 6 high speed.



### 55015-03 3-Way Lighting Switch

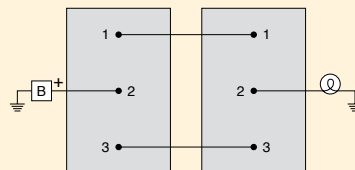
SPDT On-On. See sidebar below. Three blade terminals.



## 3- and 4-Way Lighting

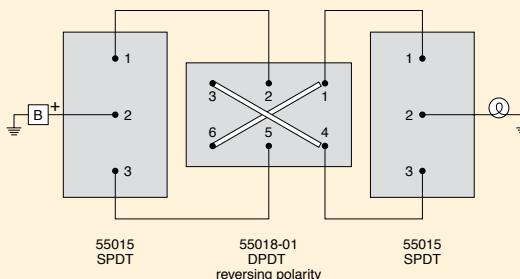
3-way lighting permits a light (or set of lights) to be controlled from two switches usually mounted in different locations. Similarly, 4-way lighting enables control from three switch locations.

#### 3-WAY LIGHTING



Use two SPDT On-On switches such as 55015-03 or 55015

#### 4-WAY LIGHTING



## DP Ignition/Start 25A at 12V DC.

### 59071 Mom On-On-Off

Down: Off, Center: On 4&5, Up: Mom On 1, 4&5. White plastic handle. Three blade terminals.



### 55094\* Mom On-On-Off

Up: Mom On 2&3, 5&6, Center: On 2&3, Down: Off. Standard handle. Four screw terminals.

## Other Specialized Application Switches

*Silver contacts. 15/32" -32 thread mounting stem, .46" (11.9mm) long, mounts in panels up to 9.32" (7.1mm) thick. Brass blade terminals. Black phenolic housing with metal frame. Keyway is in the down position.*

### 5543 SPST On-Off In Recessed Plate ★

5558 switch mounted in 5543-15 recessed plate to prevent damage or accidental actuation inside a trailer or other location. Plate fits into a 2" dia (50.8mm) panel hole. Depth is 1.75" minimum (44.5mm). Two screw terminals.



### 55089 SPST Light Duty Grounding Switch

Up: Off, Down: On. Terminal is grounded to switch frame. Mounts with two hexnuts into panels up to .189" (4.8mm) thick. One blade terminal. Standard handle. 5A at 12V DC.



## M-597 Marine Emergency Cutoff <sup>BP</sup>

*Weather-resistant switch provides added safety for boat operators. The lanyard connects the boater to a switch which kills the ignition circuit if the boater falls overboard, or is at an unsafe distance from the controls, thus preventing a dangerous runaway situation. Unlike other devices, the M-597 can be turned on again if need be by a boater other than the operator.*

Switch can be installed either in boat systems that require a grounded emergency stop, or in systems that have an open circuit emergency stop. The switch works on virtually any powerboat with an inboard or outboard motor. Full wiring instructions are included. **For safety, this switch should only be installed by a technically competent person.**

Switch housing dimensions 2 3/4" x 2" (69.9 x 50.8mm) requires a space of 1/2" (12.7mm) behind the panel, and mounts in a 1 1/2" (38.1mm) diameter hole. Rubber coated toggle switch is sealed to IP-66 to protect against salt spray and water ingress. Strong self-retracting coiled lanyard has a clip for attachment to the operator. 10A at 12-24V DC.



With the lanyard out of the housing.

*For safety or lifesaving applications, the switch should be installed by a qualified individual. User assumes all responsibility for determining the suitability of this product for his application.*

## M-598 Replacement Lanyard <sup>BP</sup>

We recommend that the lanyard be replaced annually or in cases of extreme wear, as necessary.

★ Rapid ship item. <sup>BP</sup> Available in retail clamshell pack. ★ Minimum order quantity may apply. Part numbers needed in BOX require a -BX suffix on the purchase order.

# B toggle switches

## B9 ACCESSORIES

### Switch Guards

*Switch guards help prevent accidental actuation of a toggle switch and protect it from damage.*

#### Typical uses:

*Switch is in a vulnerable position – like a light switch in a truck cargo section.*

*Switch controls a vital function that must not be accidentally operated – like the hose return switch on an oil truck.*

*Switch is important, but infrequently used – like an emergency switch.*

Cole Hersee switch guards give you a choice of protection from the simple flanged faceplate to the recessed faceplate, or the complete protection of the 82468 flip cover. For complete lockout protection of electrical circuits, we recommend rotary Master Disconnect Switches with lockout/tagout protection, such as 2484 with 24505.

### 82465 Walled Faceplate Switch Guard

Guard is easily added to an already installed switch, providing lateral mechanical protection. For switches with 15/32" diameter mounting stems with a keyway. Stamped On, Off. 1" x 2.125" (25.4 x 54.0mm). Two .140" (3.6mm) mounting holes 1.87" (47.6mm) on centers.



### 5543-15 Recessed Faceplate Switch Guard

Faceplate only; does not include switch. Needs to be counter-sunk in a 2" (50.8mm) hole. 3 3/16" (81.0mm) diameter with three 7/32" (5.6mm) holes on a 2 3/4" (69.9mm) diameter circle. Requires a clearance depth of .890" (22.6mm), not including clearance for a switch. Other colors, metals and finishes are available on special order. Contact Cole Hersee.



### 82468 Flip Cover Switch Guard BP ★



With cover up.



With cover closed.

Provides the maximum protection, and can be easily added to an already installed switch by unscrewing and replacing the facenut. Spring-loaded snap action cover returns the switch to the 'safe' position when closed, and secures it there. Rugged red melamine cover is colorfast at temperature extremes and is resistant to most contaminants, like fuel oil. Other colors are available by special order. Recommended for use with standard 11/16" toggle handle Off-On or On-On switches with a keyway in the bushing. Steel faceplate with black glossy finish. Height closed 1.08" (27.4mm); height open 1.71" (43.5mm). 1.80" (45.8mm) long x .67" (17.0mm) wide. Mounting hole diameter .47" (11.9mm). Accepts switches with standard 15/32" diameter mounting stems.

### Handle Extensions

*Rigid plastic extension snaps over standard or ball handled toggle switches, extending a standard handle to 1 7/8" (47.6mm) long. Enables switches to be easily color-coded. Packed 10 of each color per package.*



**81271 Red**

**81272 Yellow**

**81273 Black**

**81261\* Fluorescent Green**

**81262 Fluorescent Blue**

**81263 Fluorescent White**

## Toggle Boot Seals

*Durable silicone rubber bonded to a standard 15/32" -32 thread nickel plated brass hexnut. When the nut is tightened to the stem of a toggle switch, the rubber forms an O-ring seal with the panel. Full boots completely cover a standard 11/16" (17.5mm) handle. Boot seals protect switches from moisture and dirt; colored boots provide color-coding for ready identification of switches.*



81264 Gray **BP** ★

81264-05 Red

81264-01 Black **BP**

81264-06 Brown

81264-02 Blue

81264-07 Yellow

81264-03 Clear

81264-08 Orange

81264-04 Green

## Half-Boot Seal

81255 **BP** ★

Allows any length of handle to protrude, yet seals tightly to handle. Suitable for all toggle switches in this catalog excepting paddle handle switches in section B3.



## 83252 Black Facenut

Brass facenut, black finish. For 54100 series switches, to replace plastic facenut.



## Terminal Blade Adapter

55023-10



Attaches to a No. 6 screw terminal, converting to a standard 1/4" wide blade terminal. Brass.

100 pieces per package.

## Faceplates

*Fit all toggle switches with standard 15/32" diameter mounting stem and keyway.*

8250 Nickel-Plated ★

Nickel-plated steel. 1"x 5/8" (25.40 x 15.87mm). Stamped On, Off.



**M-518\* Chrome-Plated**

Same as 8250, except chrome-plated brass.

## Economical

Illuminated tip toggle switches M-54111-01 and M-54111-02 combine the properties of a switch and a pilot light. Switch tips are illuminated White when Off – which makes it easier to locate in the dark.

When the switch is On, the tip is illuminated Red.





# B toggle switches

B10 INFORMATION

## SPST SPDT DPST DPDT

*SP and DP refer to single pole and double pole, ST and DT refer to single throw and double throw.*

*Pole refers to the number of circuits controlled by the switch: SP switches control only one electrical circuit.*

*DP switches control two independent circuits (and act like two identical switches that are mechanically linked).*

*Do not confuse 'pole' with 'terminal'. The DPST switch, for example, has four terminals, but it is a DP, not a 4P switch.*

*Throw refers to the extreme position of the actuator:*

*ST switches close a circuit at only one position.*

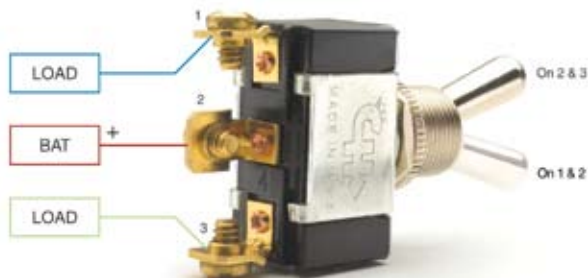
*The other position of the handle is Off.*

*DT switches close a circuit in the Up position, as well as the Down position (On-On). A DT switch can also have a center position (frequently On-Off-On).*

*The following switch diagrams illustrate the most common types of toggle and rocker switch.*



SPST On-Off



SPDT On-On

Only one of the loads can be energized at a time.



SPDT On-Off-On

Only one of the loads can be energized at a time.



DPST On-Off

Both load terminals can be energized at the same time. They are independent of each other and could be of different voltages.



DPDT On-On

Functions like two separate SPDT switches operated by the same actuator. Only two loads can be On at a time.



DPDT On-Off-On

Functions like two separate SPDT switches operated by the same actuator. Only two loads can be On at a time.

*Single pole/throw and double pole/throw switches are by far the most common switches, but triple and quadruple configurations are also available. They are commonly denoted 3PST, 3PDT, 4PDT, etc. For our switches of this type, see Rotary Switches, section D1.*