

**BUCHER**  
hydraulics

**Wiring Guide For  
D.C. Power Units**

ISO-9001 REGISTERED

**Read and understand this pamphlet before attempting installation, operation, maintenance, or repair.**

**Inspect the battery cables for possible shorts to the vehicle. Reroute the cable as necessary to eliminate any shorts.**

**Popular Bucher Hyd. Models are shown. Use a similar representation as a guide, and wire accordingly, or contact the factory at (616) 458-1306.**

**A 15 amp fuse is recommended for use in the black power wire.**



**PLEASE REMOVE ALL RINGS,  
WATCHES AND JEWELRY PRIOR  
TO DOING ANY ELECTRICAL WORK**

**This Pamphlet Is To Remain With  
Vehicle After Pump Unit Is Installed.**



PLEASE REMOVE ALL RINGS, WATCHES AND JEWELRY PRIOR TO DOING ANY ELECTRICAL WORK

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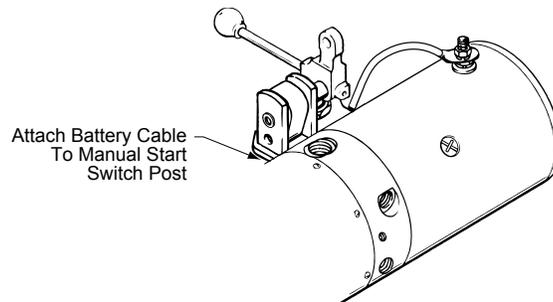
[Battery Cable Guide](#)



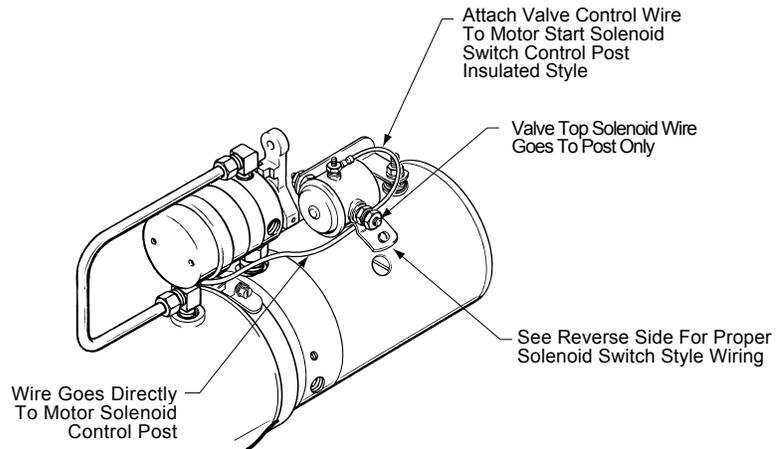
**PLEASE REMOVE ALL RINGS, WATCHES AND JEWELRY PRIOR TO DOING ANY ELECTRICAL WORK**

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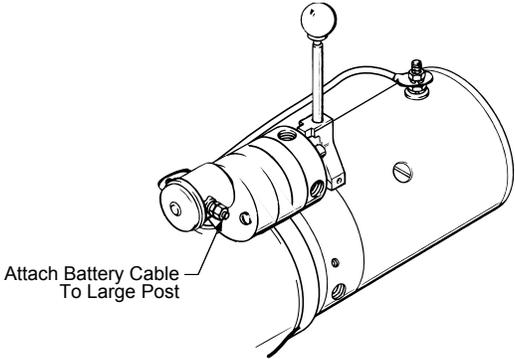
### M-301



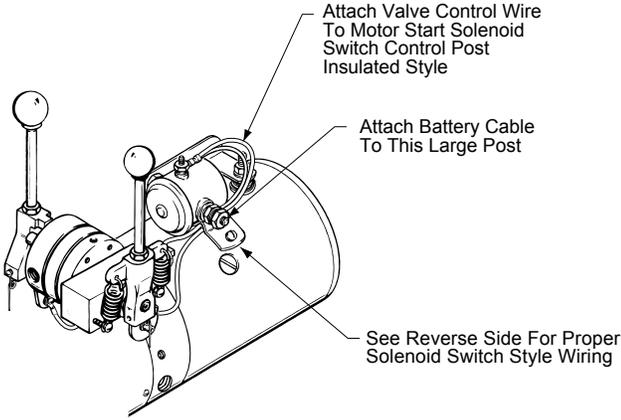
### M-310



# M-310 Cam Style



# M-500 3 Way, 4 Way



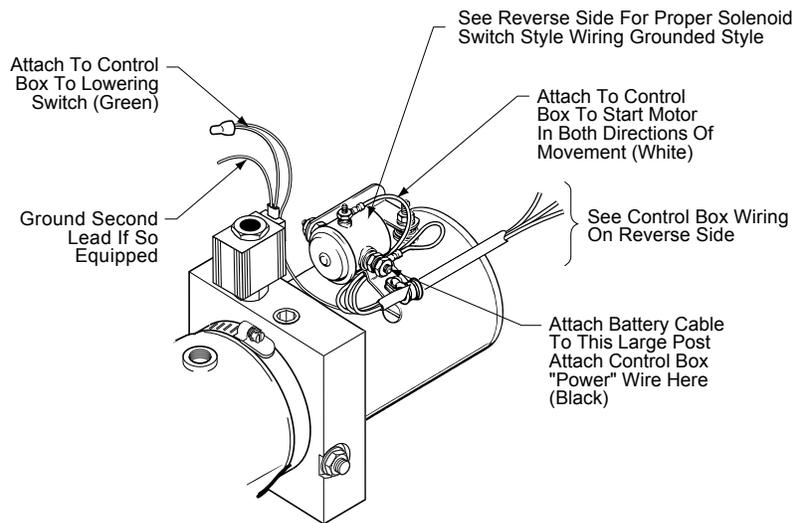


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## M-3541

**(M-342, M-3542, & M-3554 Are Similar)**

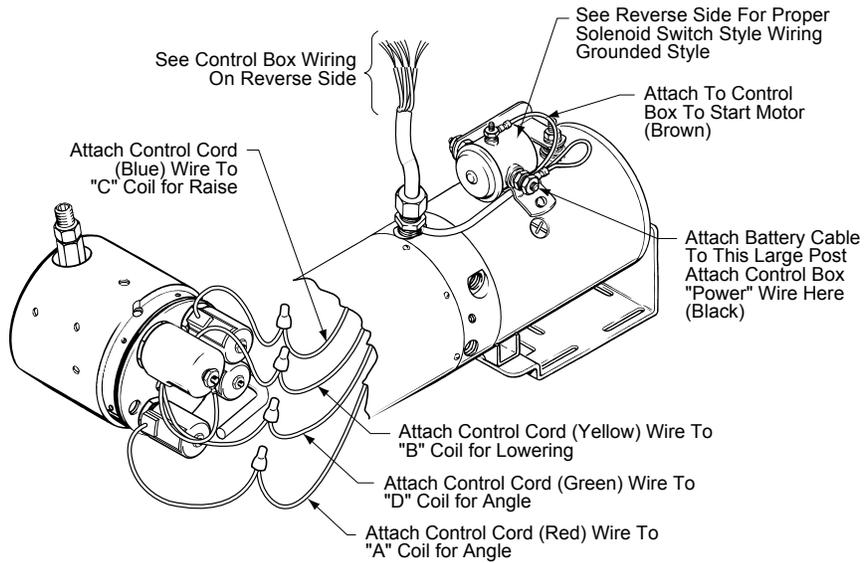




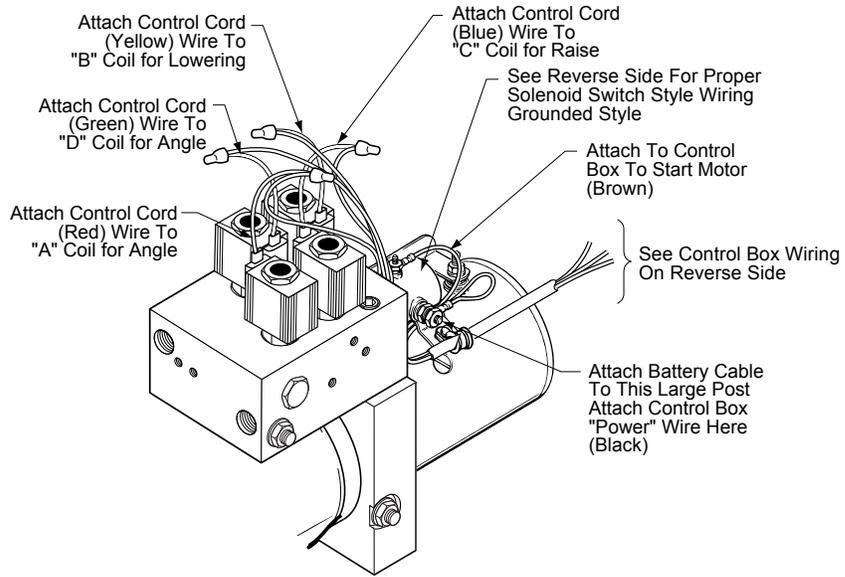
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**M-683  
(M-682, & M-693 Are Similar)**



# M-3593

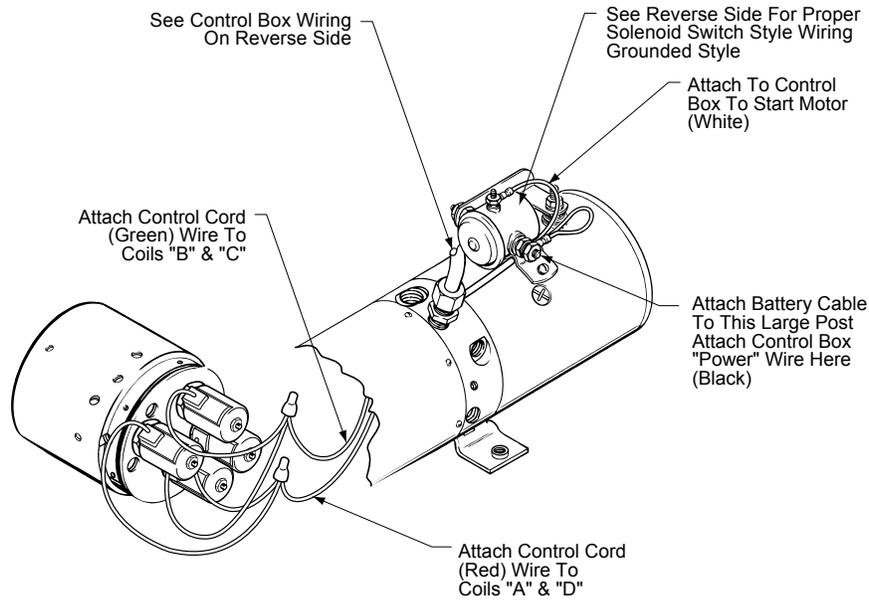




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**M-644**

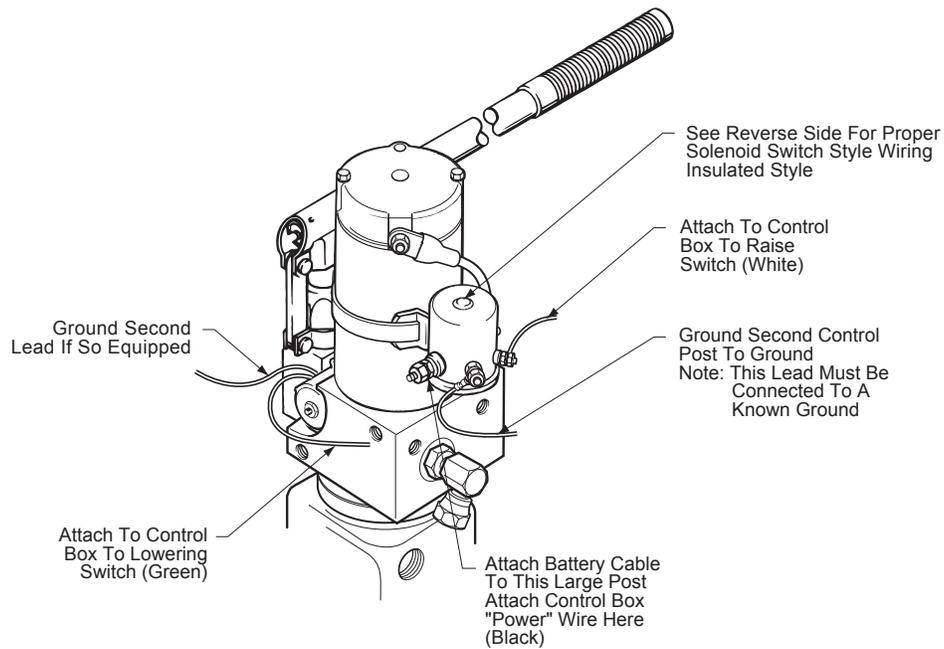




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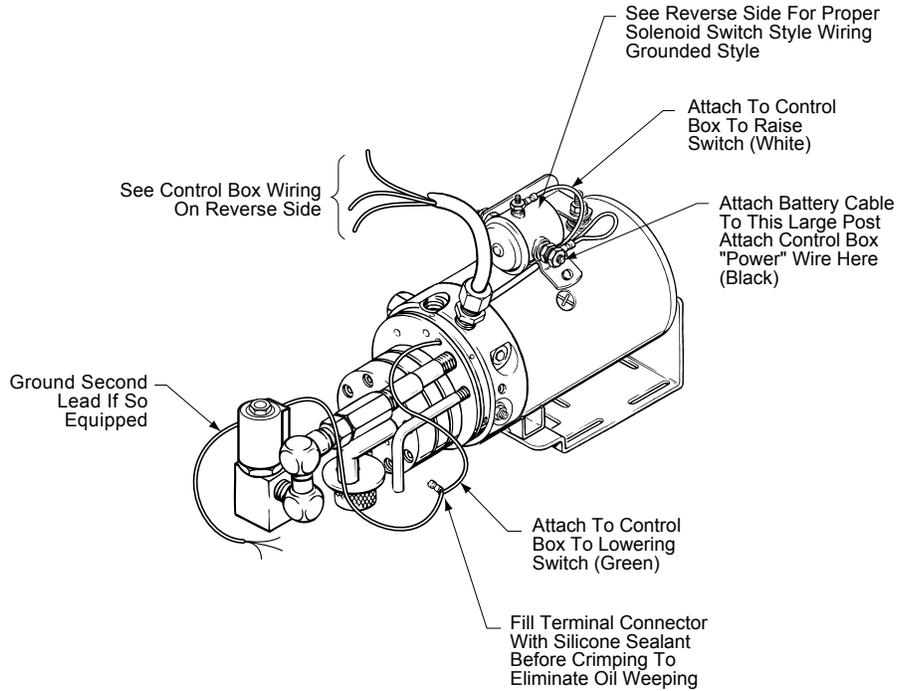
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**M-258/259**



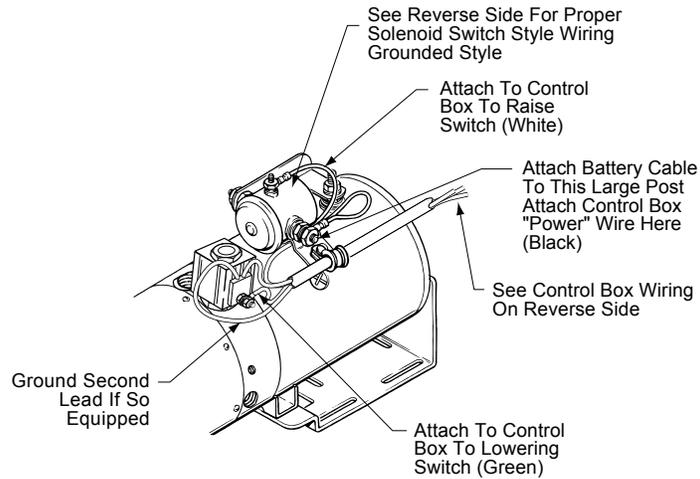
## M-303

(M-314, M-323, M-503, & M-603 Are Similar)



## M-319

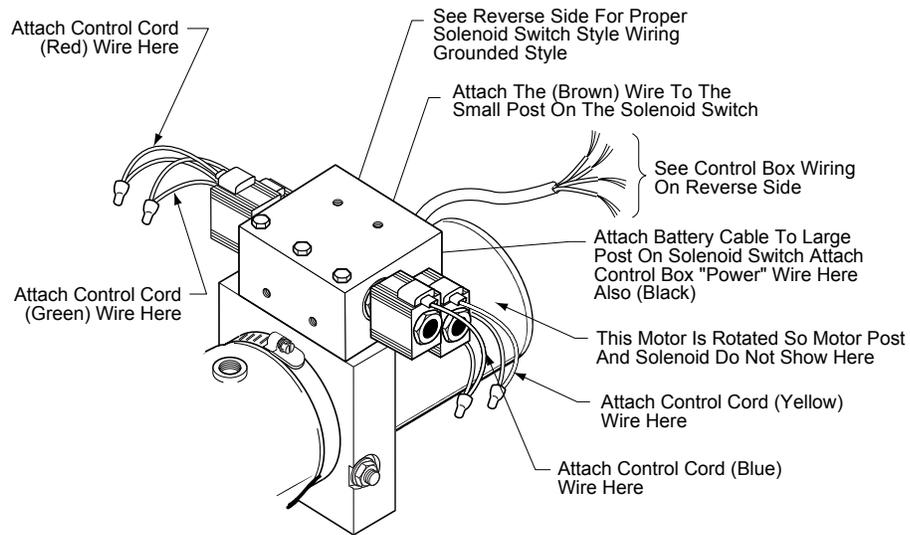
(M-719 & M-3519 Are Similar)



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**M-3547**

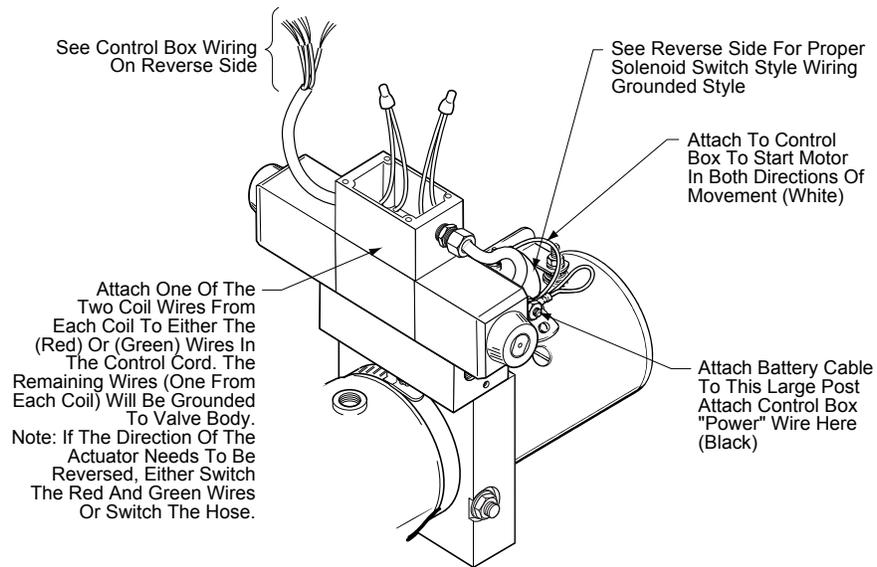




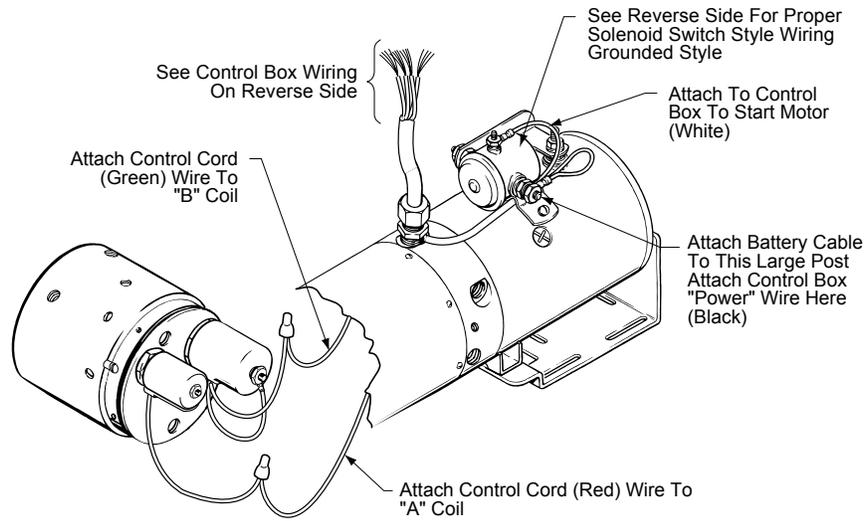
**PLEASE REMOVE ALL RINGS, WATCHES AND JEWELRY PRIOR TO DOING ANY ELECTRICAL WORK**

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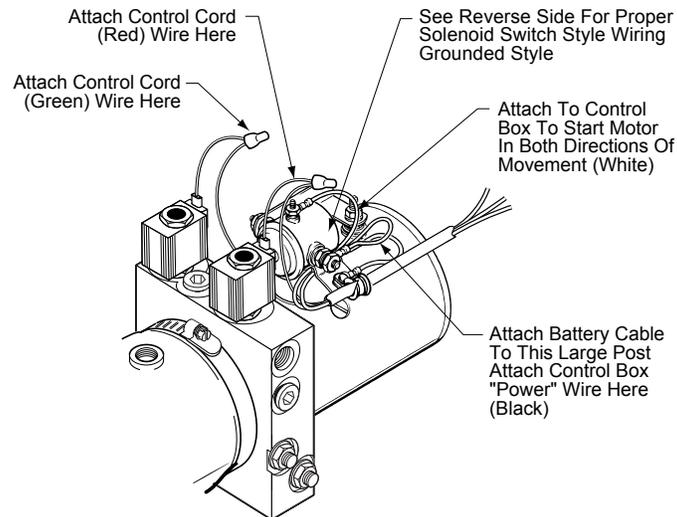
**M-3515  
(M-615 is Similar)**



# M-642



# M-3551 (M-352 is Similar)

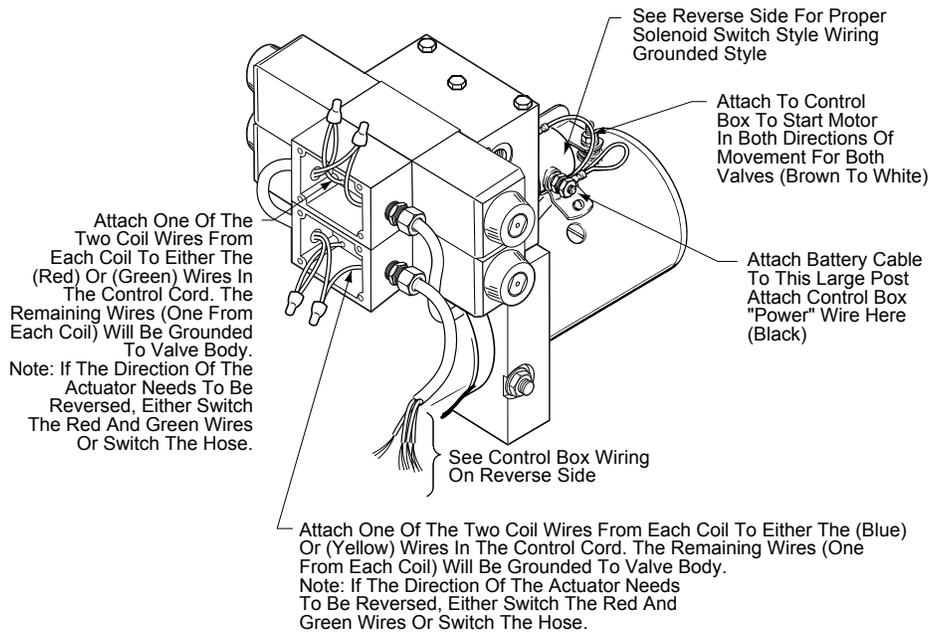




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**M-3528  
(M-628 is Similar)**



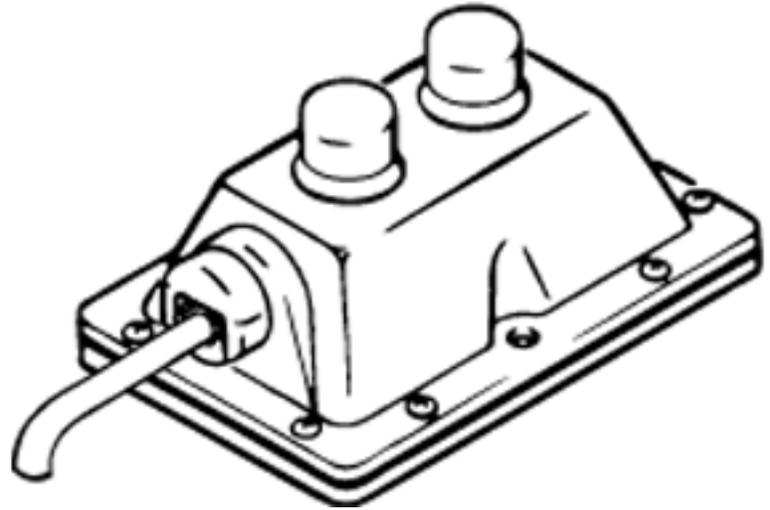


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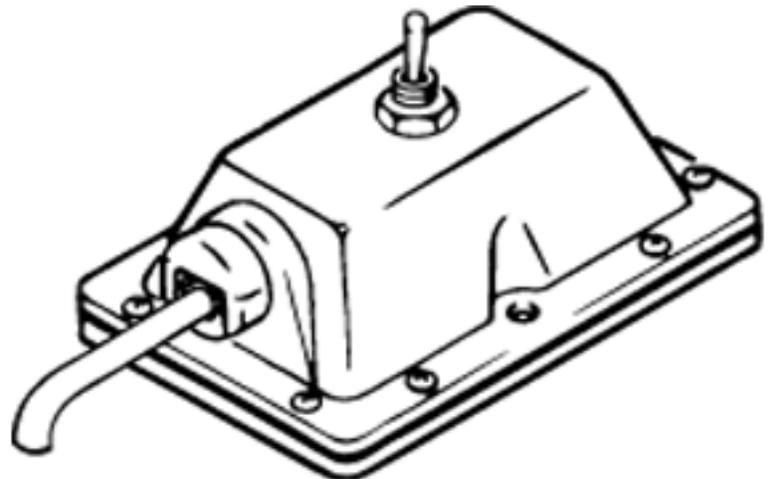
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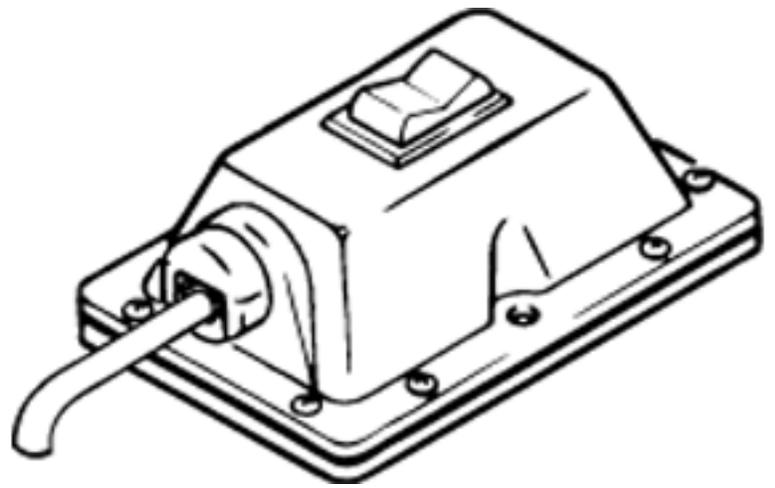
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[Dual Push Button Control Box](#)  
[03317 and 03404](#)



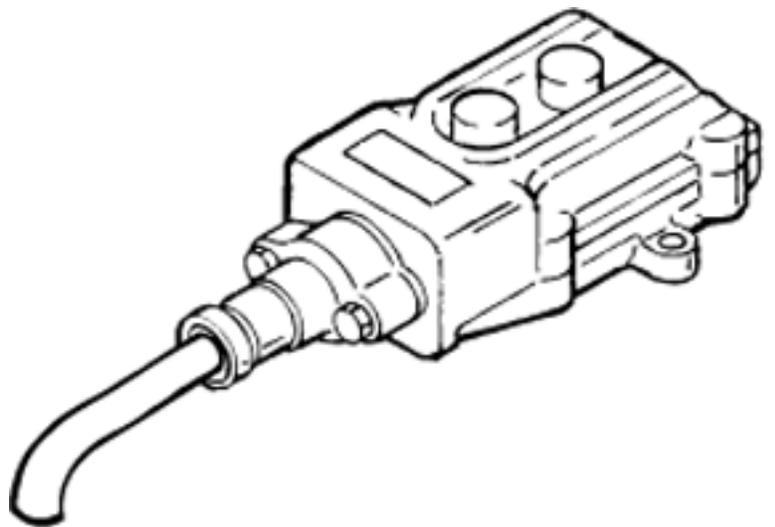
[Toggle Control Boxes](#)  
[03409 and 03487](#)





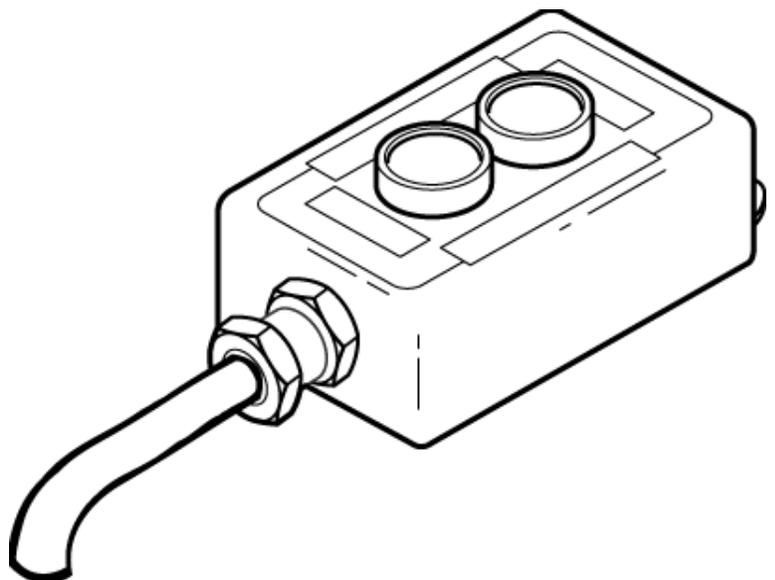
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Dual Push Button Control Box  
03240



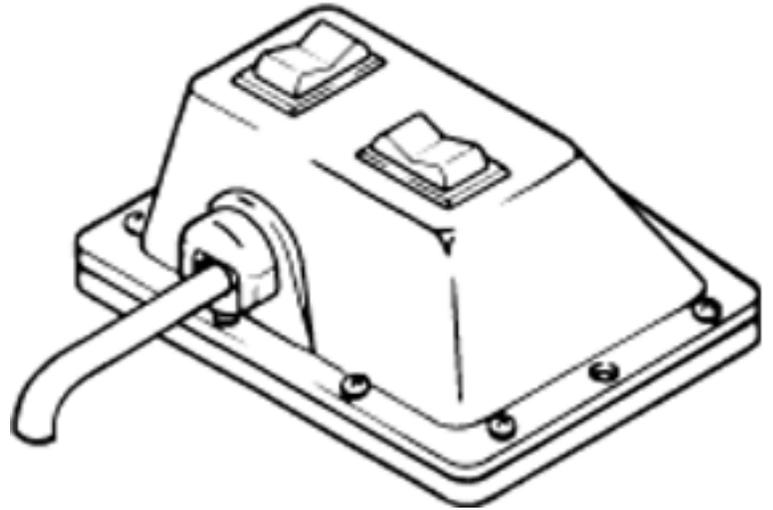
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Dual Push Button Control Box  
07995



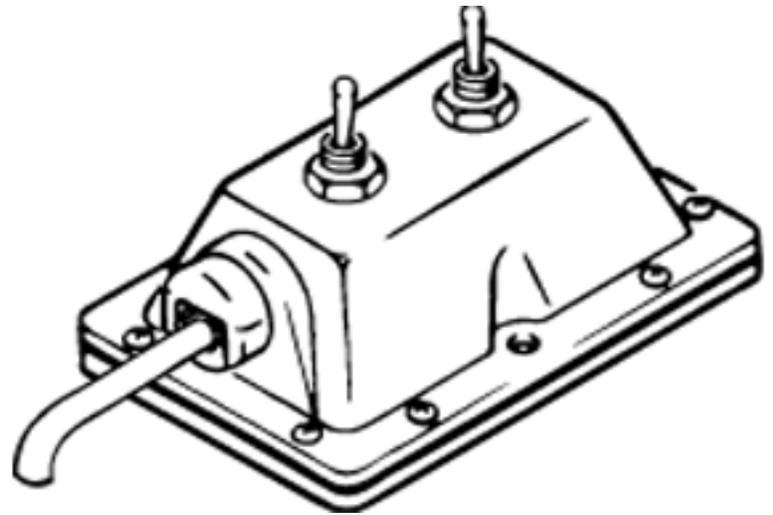
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Dual Toggle Control Box  
03197 (Detented)  
03201 (Non-Detented)



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Dual Toggle Control Box  
03451





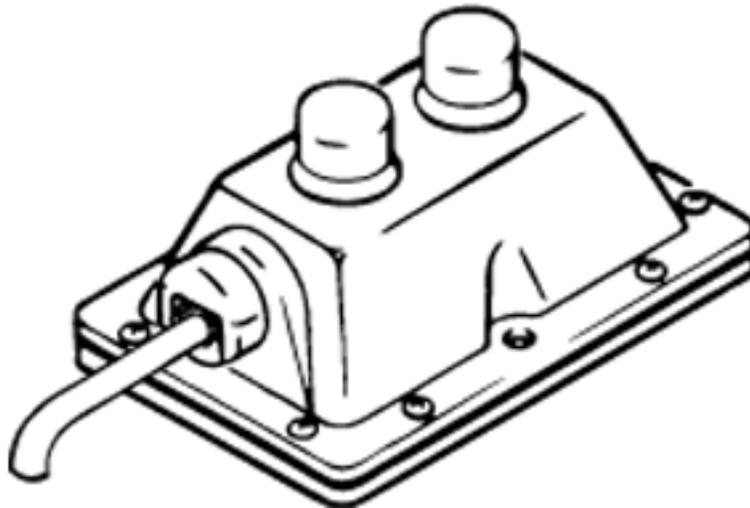
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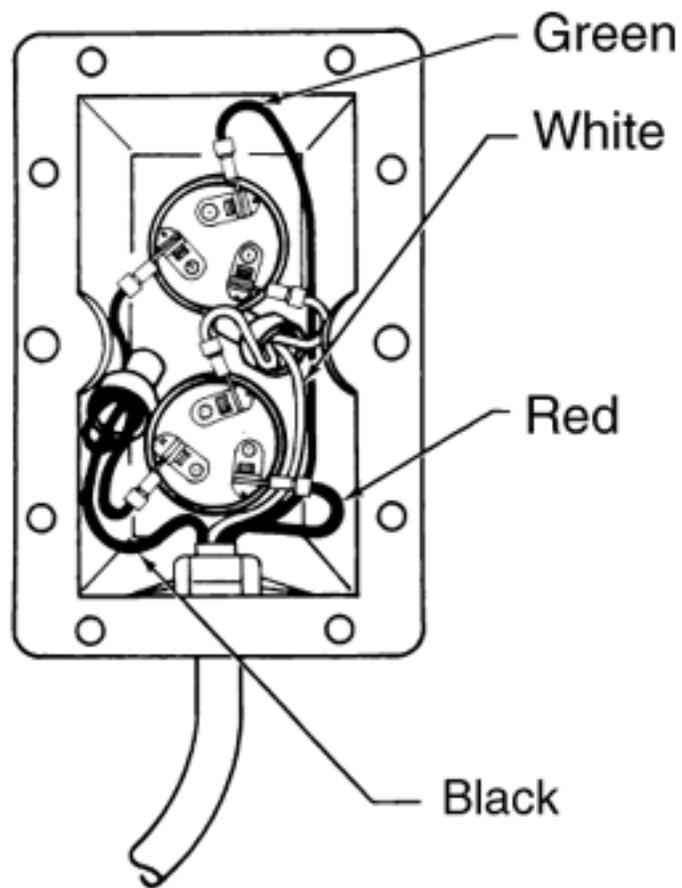
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[Other Control Boxes](#)

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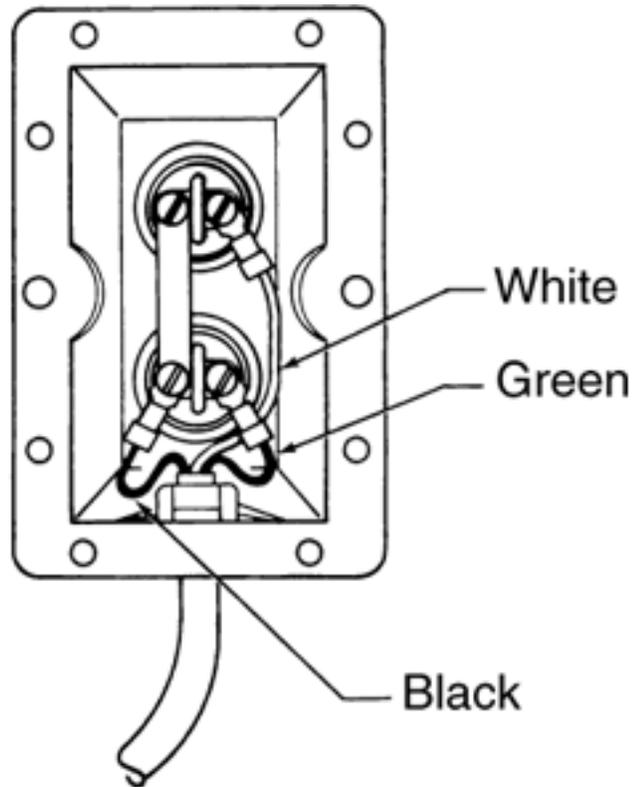
**Dual Push Button Control Box  
03317 and 03404**





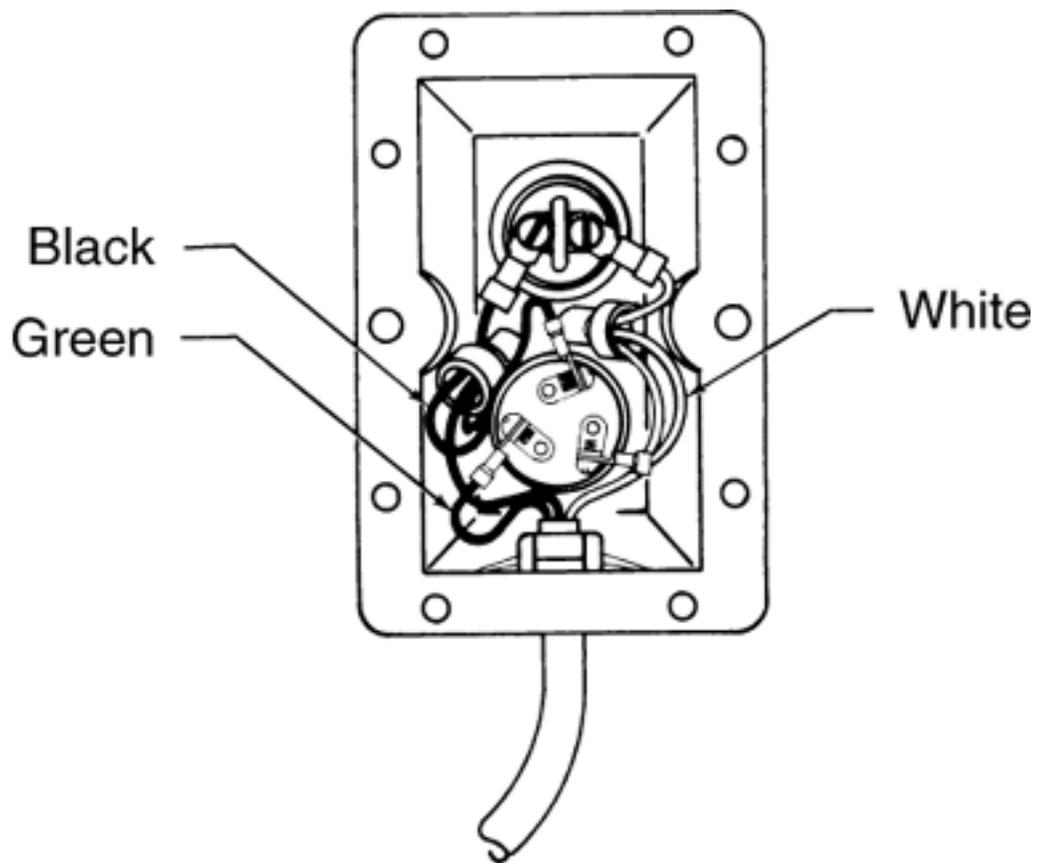
4 - Wire Cord (4 Way)  
Terminal Connections  
(M-352)(M-3551)(M-3552)  
(M-642)(M-644)

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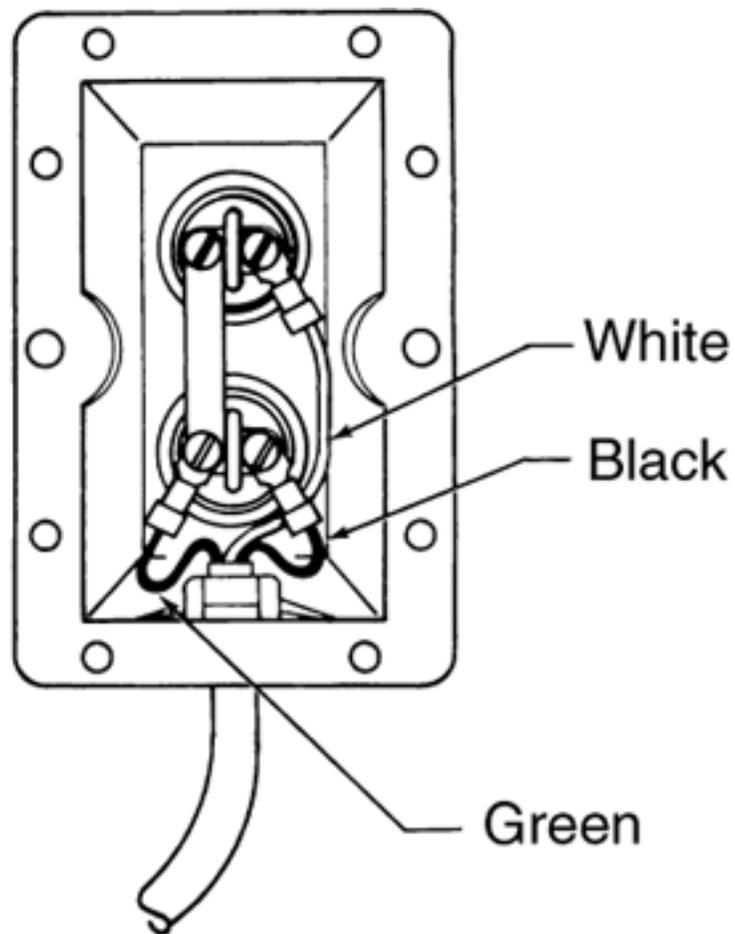
3 - Wire Cord (3 Way)  
Terminal Connections  
(M-258)(M-259)(M-303)(M-314)  
(M-319)(M-323)(M-3519)  
(M-503)

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3 - Wire Cord (4 Way)  
Terminal Connections  
(M-342)(M-3541)  
(M-3542)

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3 - Wire Cord (3 Way)  
Terminal Connections  
(M-603)

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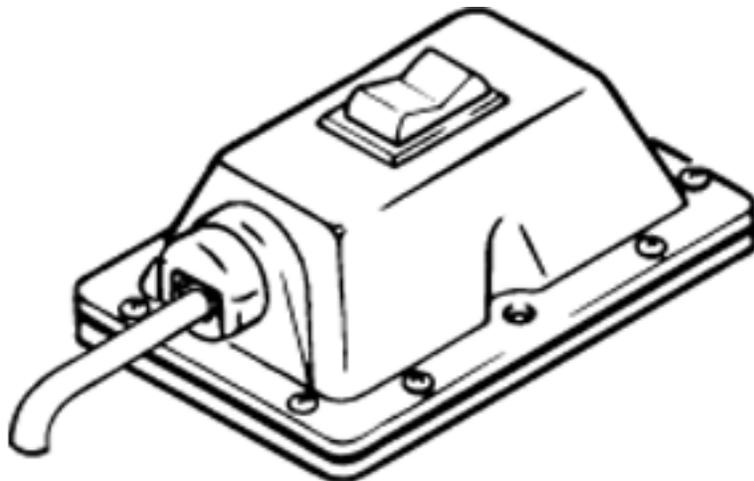
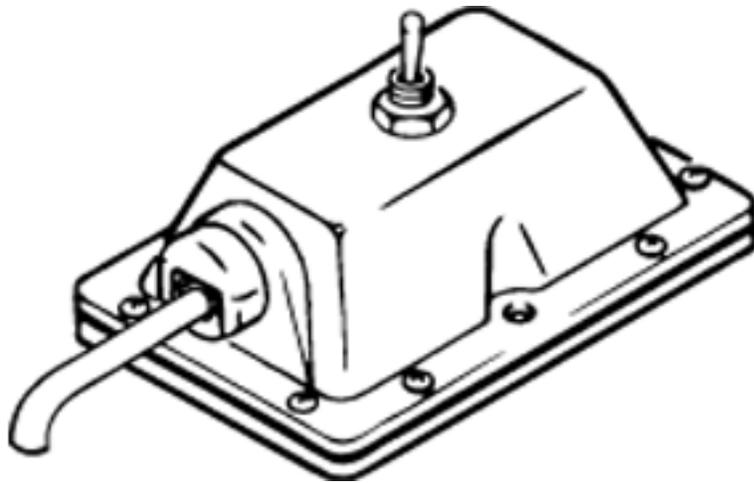
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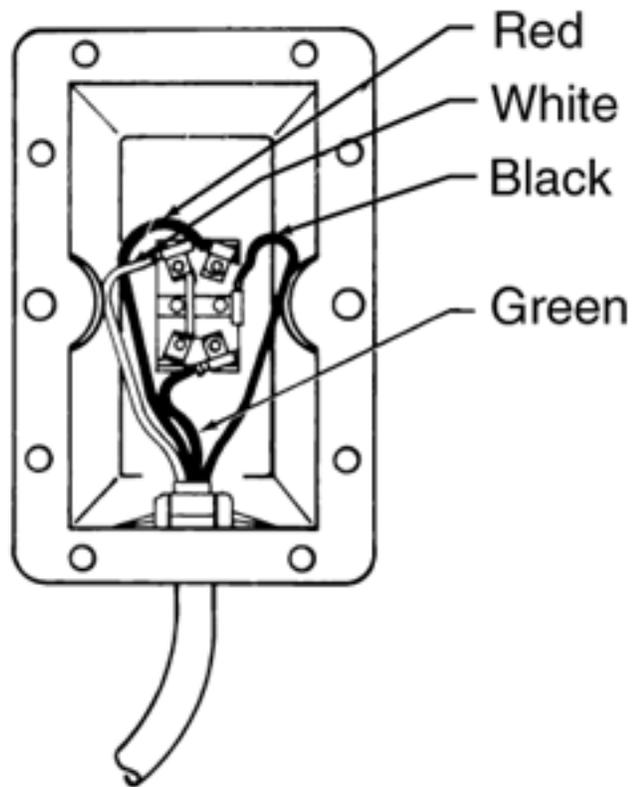
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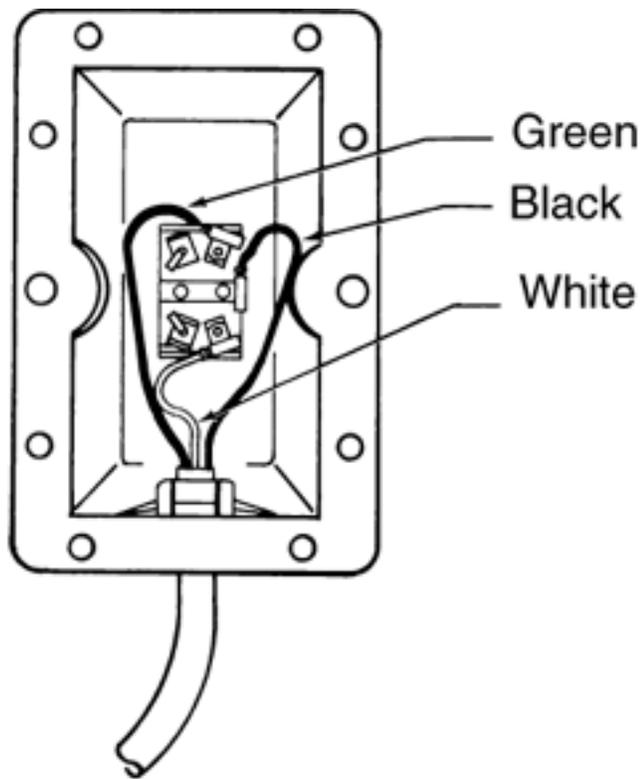
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### Toggle Control Boxes 03409 and 03487



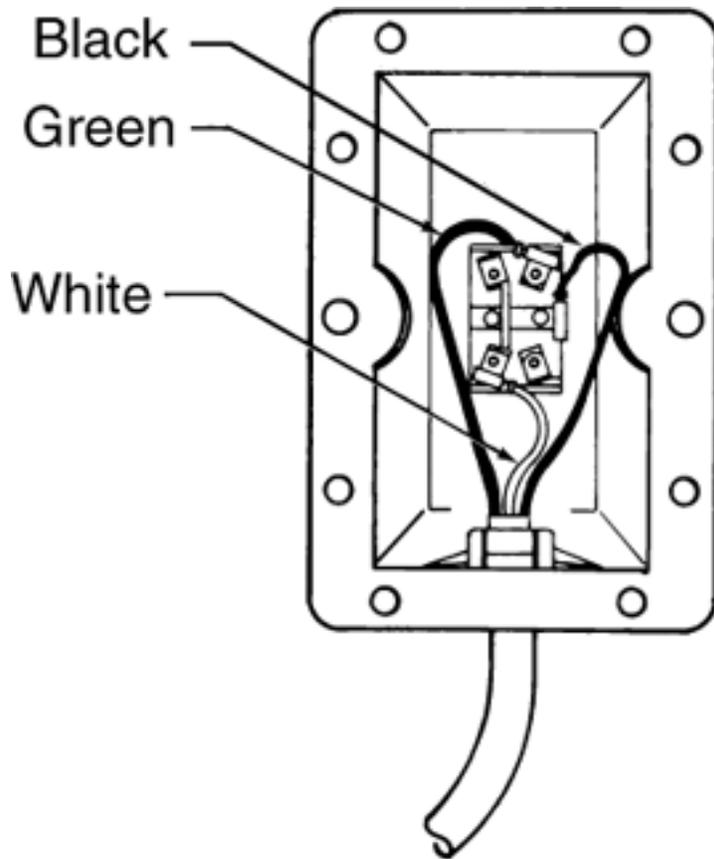


4 - Wire Cord (4 Way)  
Terminal Connections  
(M-352)(M-3551)(M-3552)  
(M-642)(M-644)



3 - Wire Cord (3 Way)  
Terminal Connections  
(M-258)(M-259)(M-303)(M-314)  
(M-319)(M-323)(M-3519)  
(M-503)

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3 - Wire Cord (4 Way)  
Terminal Connections  
(M-342)(M-3541)  
(M-3542)

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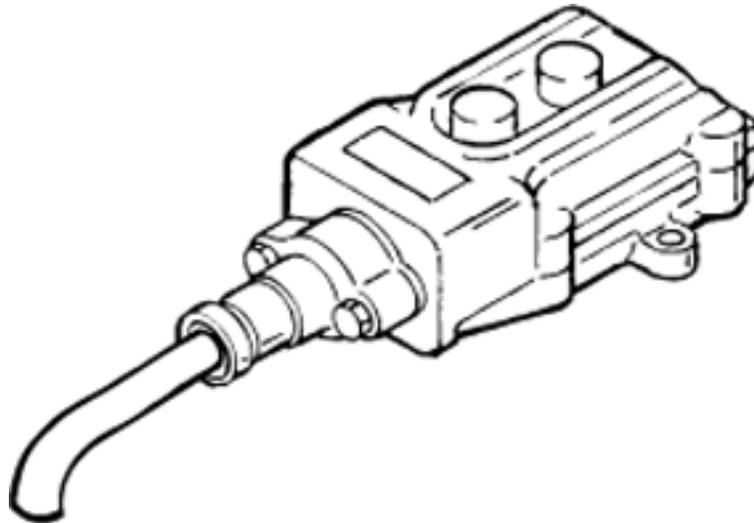
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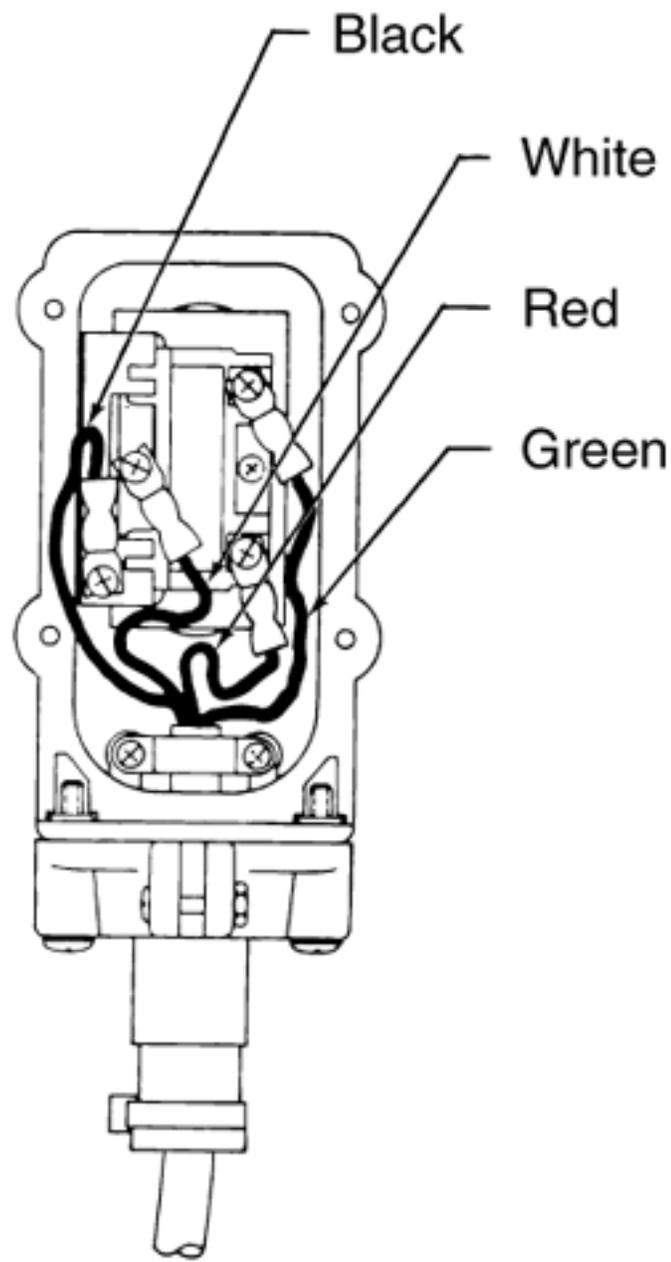
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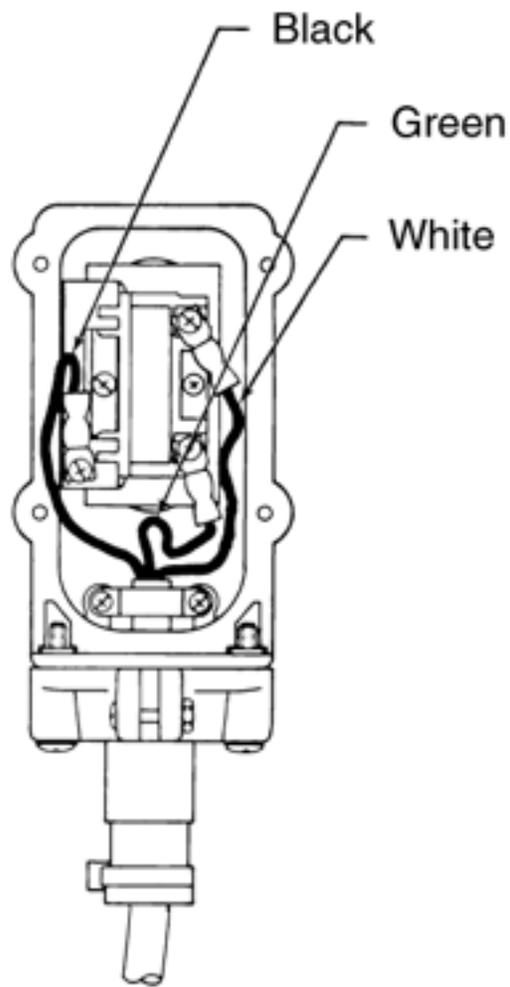
**Dual Push Button Control Box  
03240**





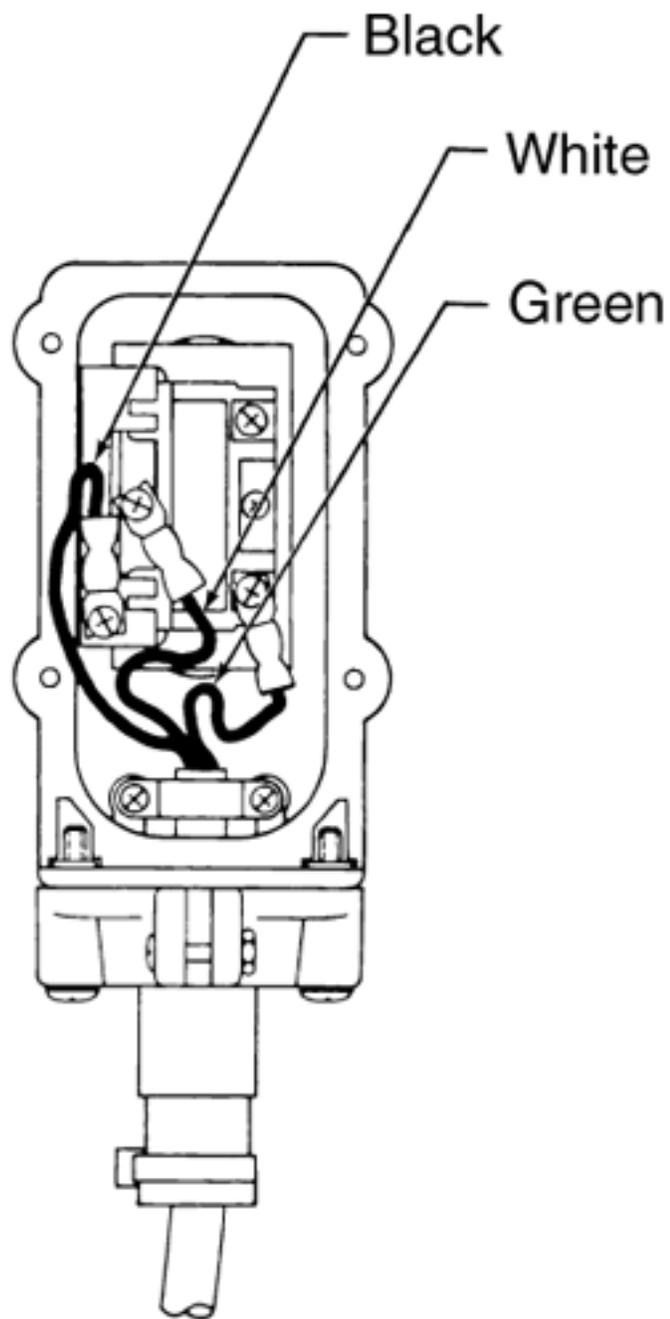
4 - Wire Cord (4 Way)  
Terminal Connections  
(M-352)(M-3552)  
(M-642)(M-644)  
(M-3551)

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3 - Wire Cord (3 Way)  
Terminal Connections  
(M-258)(M-259)(M-303)(M-314)(M-319)  
(M-323)(M-3519)(M-503)(M-719)(M-723)

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3 - Wire Cord (4 Way)  
Terminal Connections  
(M-342)  
(M-3541)  
(M-3542)

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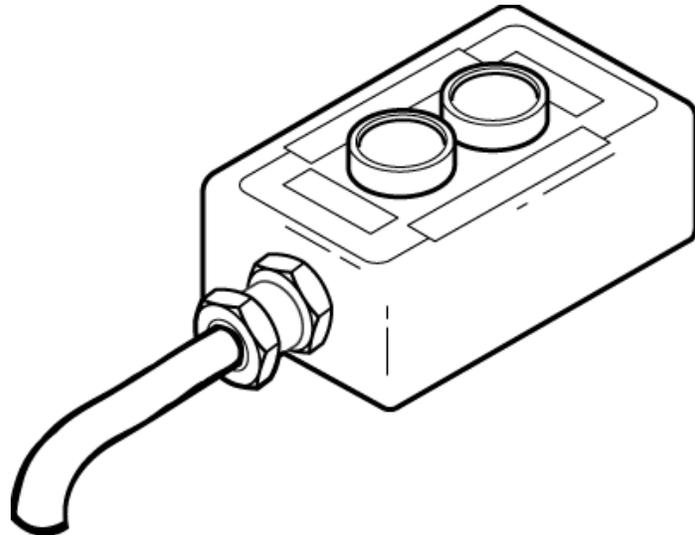
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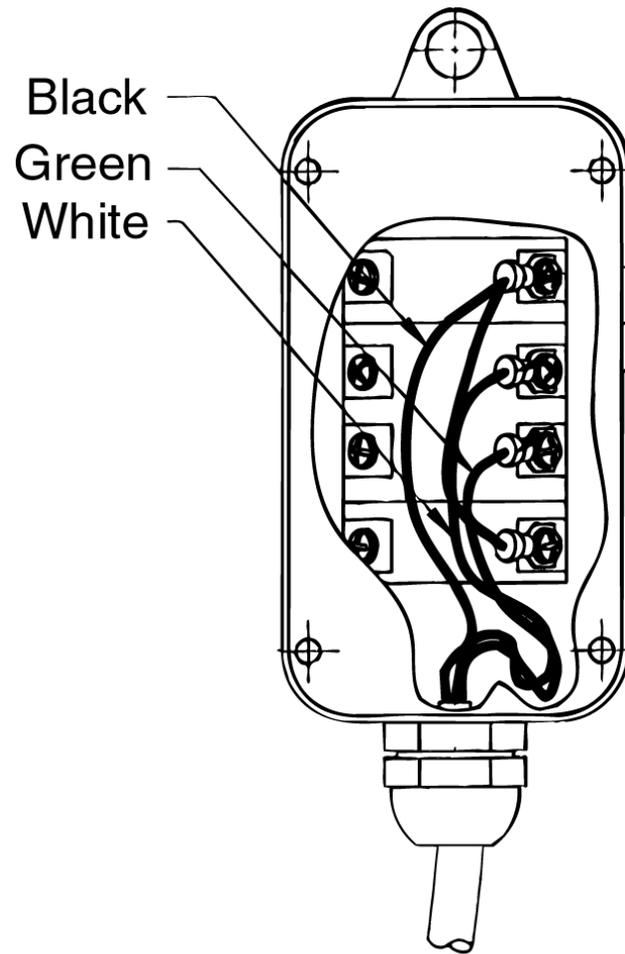
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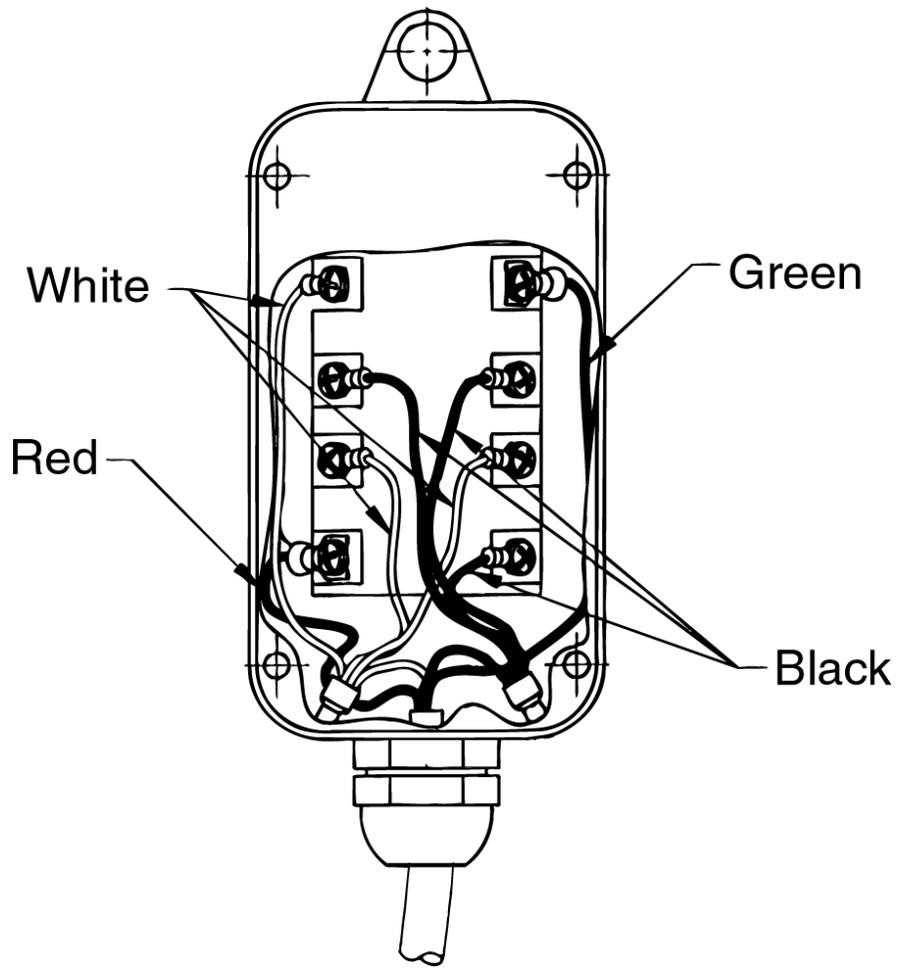
**Dual Push Button Control Box  
07995**





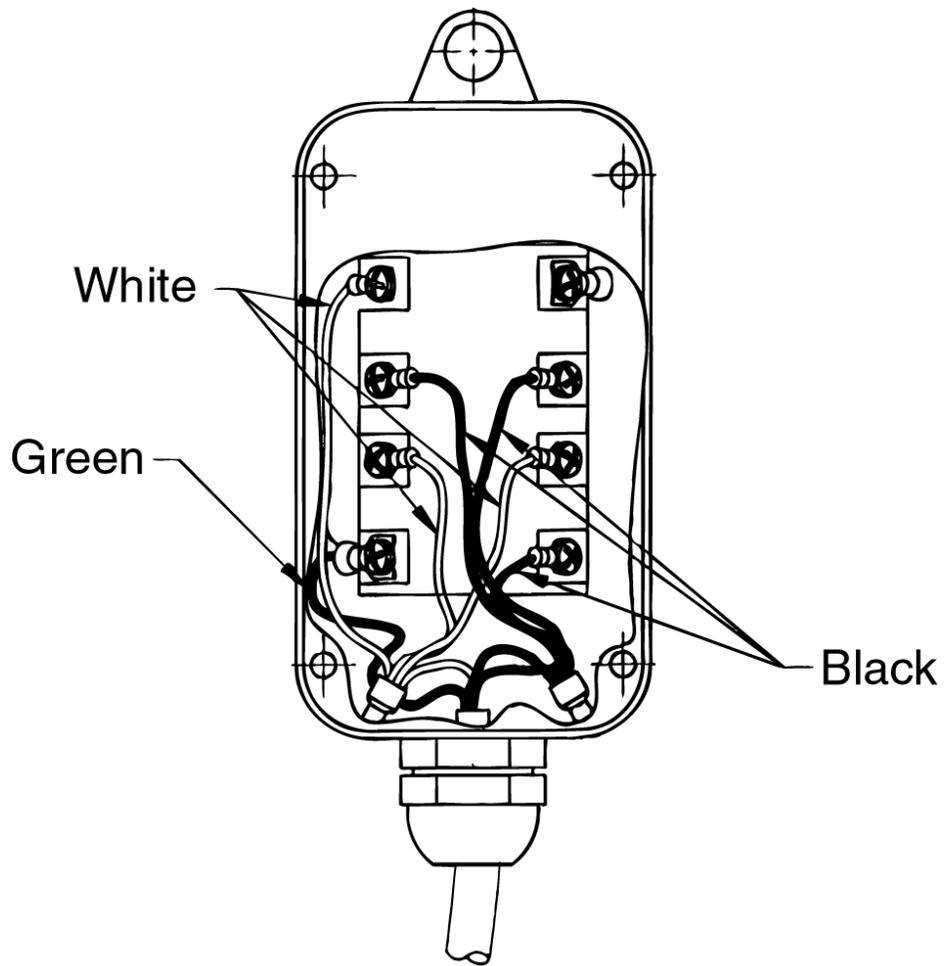
3 - Wire Cord (3 Way)  
Terminal Connections  
(M-258)(M-259)(M-303)  
(M-319)(M-3519)

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4 - Wire Cord (4 Way)  
Terminal Connections  
(M-352)(M-642)  
(M-3551)(M-3552)

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3 - Wire Cord (4 Way)  
Terminal Connections  
(M-342)(M-3541)  
(M-3542)(M-3554)

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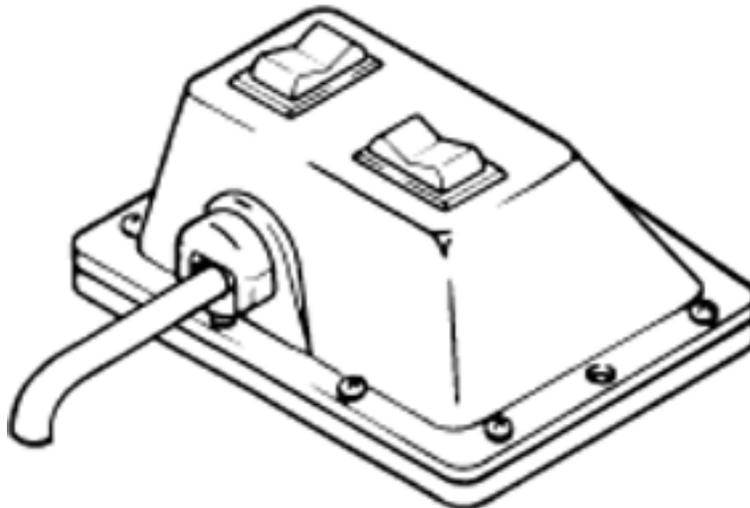
PLEASE REMOVE ALL RINGS, WATCHES AND JEWELRY PRIOR TO DOING ANY ELECTRICAL WORK

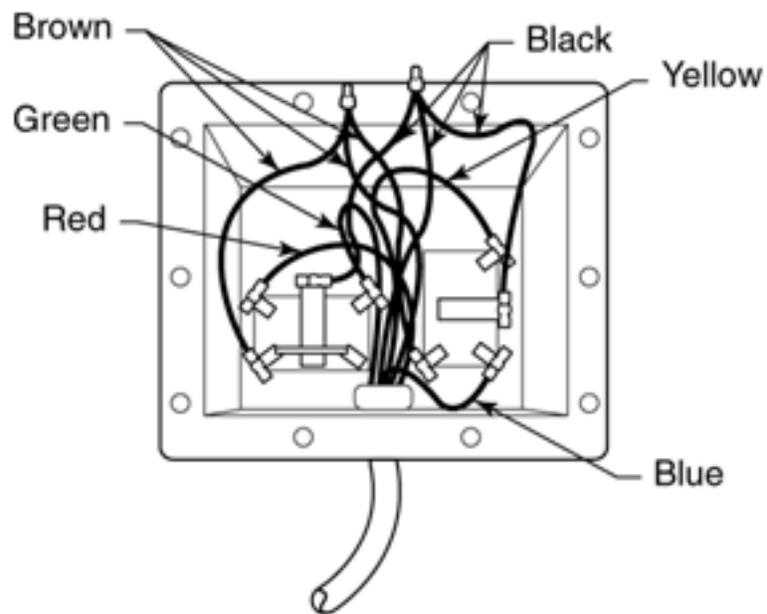
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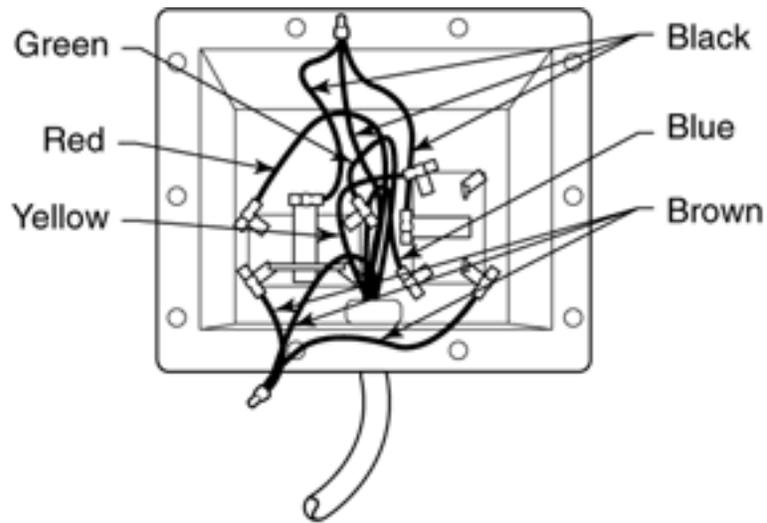
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**Dual Toggle Control Box**  
**03197 (Detented)**  
**03201 (Non-Detented)**

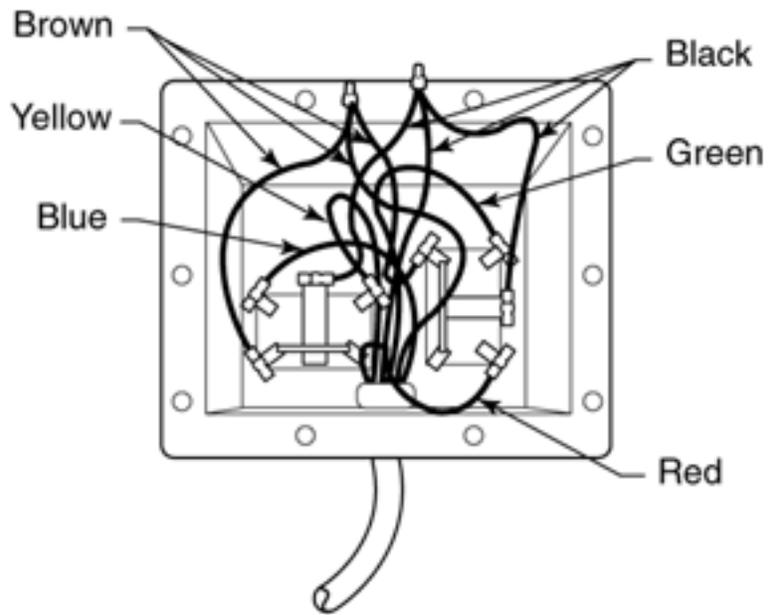




6 - Wire Cord  
Terminal Connections  
(M-683 thru M-688)  
(M-693)(M-3593)



6 - Wire Cord  
Terminal Connections  
(M-682)



6 - Wire Cord  
Terminal Connections  
(M-645 )

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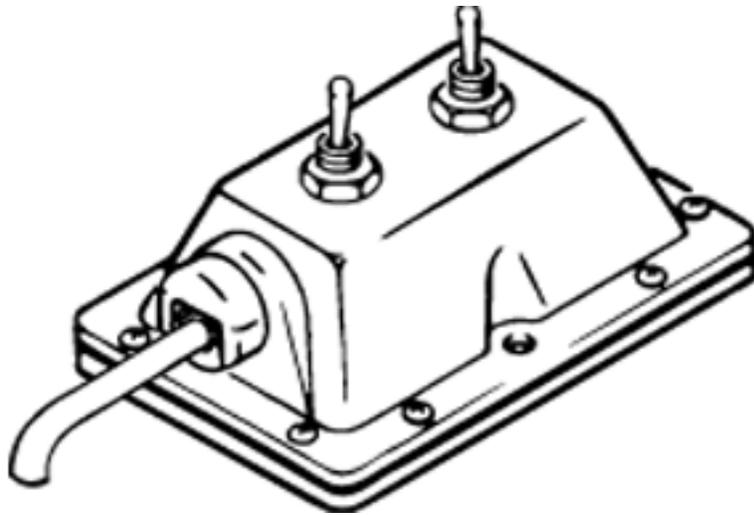
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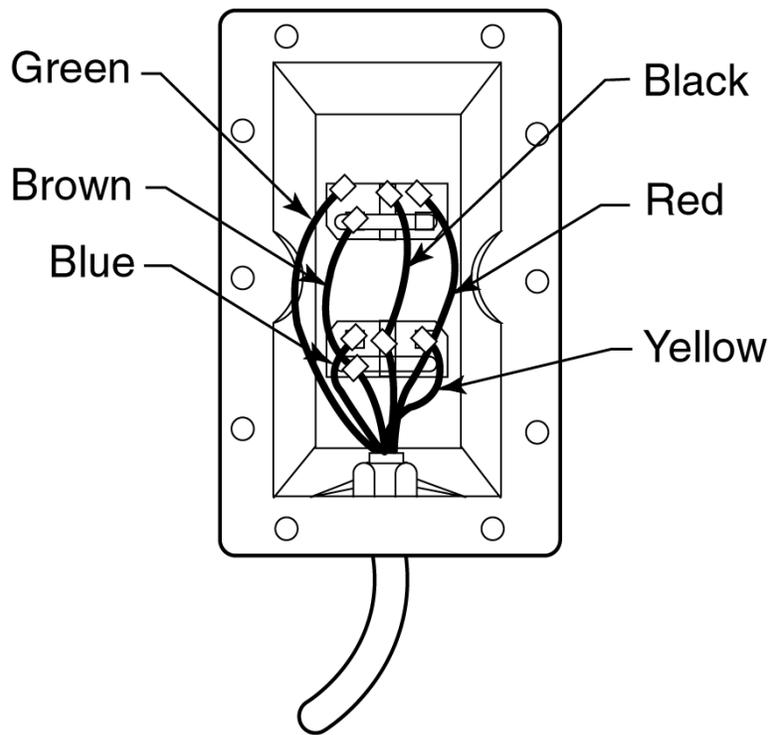
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**Dual Toggle Control Box  
03451**





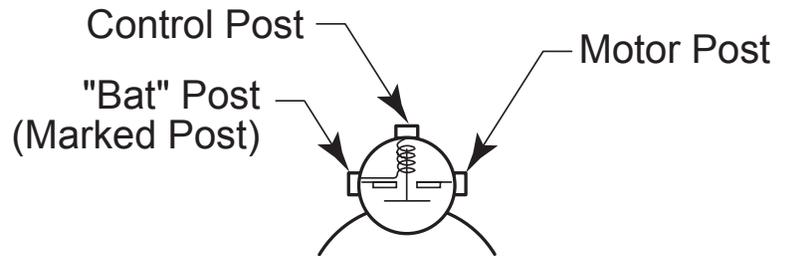
6 - Wire Cord  
Terminal Connections  
(M-3528)  
(M-628)

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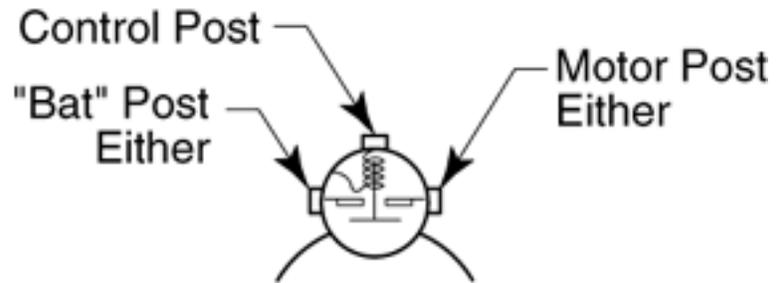
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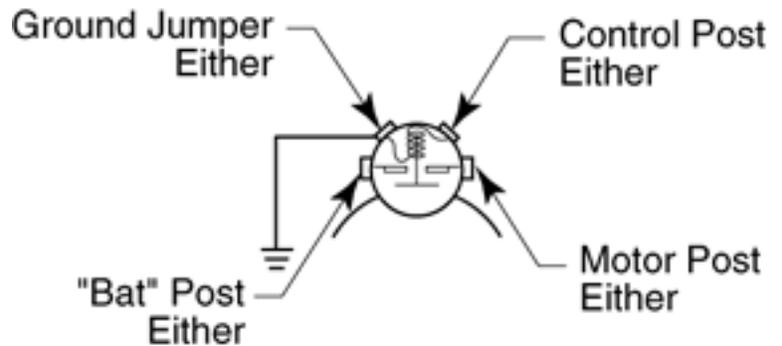
[Insulated Motor Start Switch](#)



[Grounded Motor Start Switch](#)

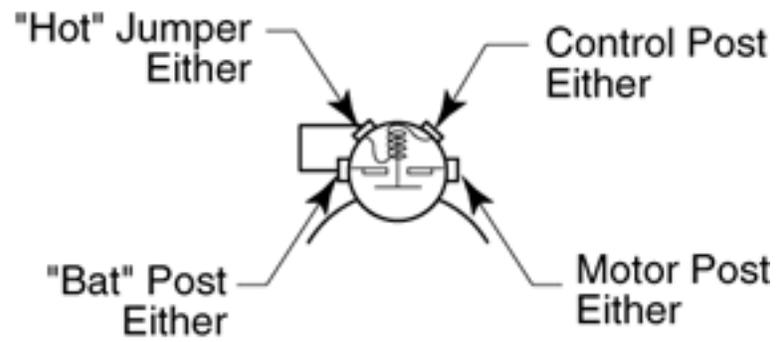


[Insulated Ground Motor Start Switch Wired to Operate Like Grounded Start Switch](#)



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Insulated Ground Motor  
Start Switch Wired to Operate Like  
Insulated Motor Start Switch

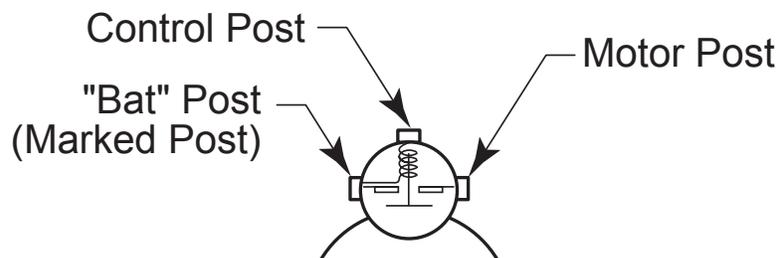


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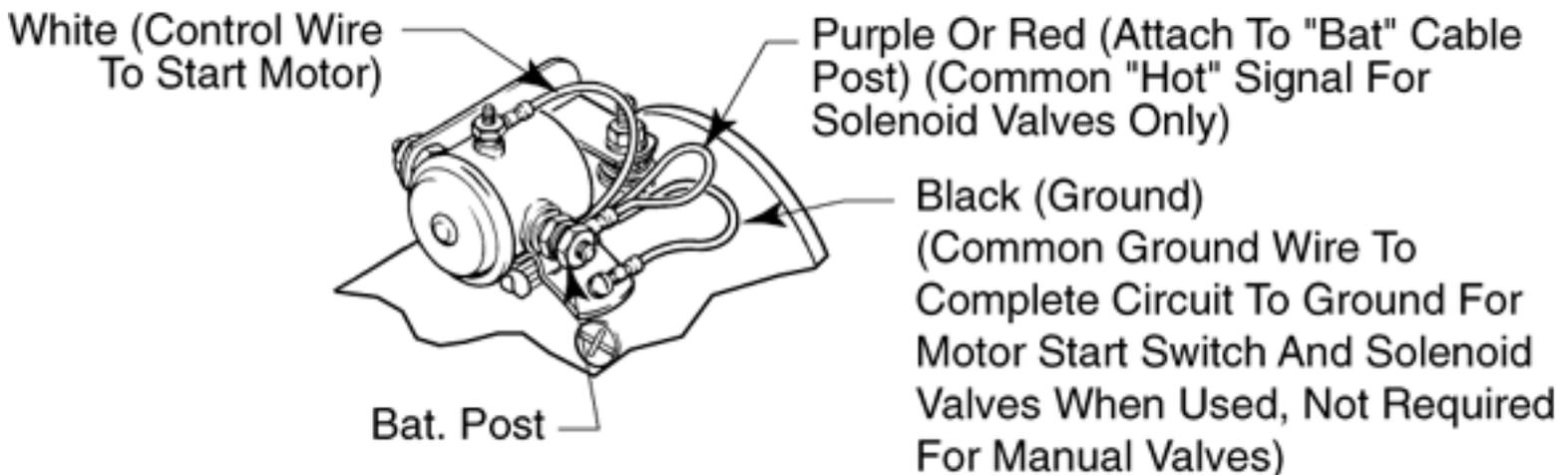
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### Insulated Motor Start Switch



**12 VDC 03336    24 VDC 03343**



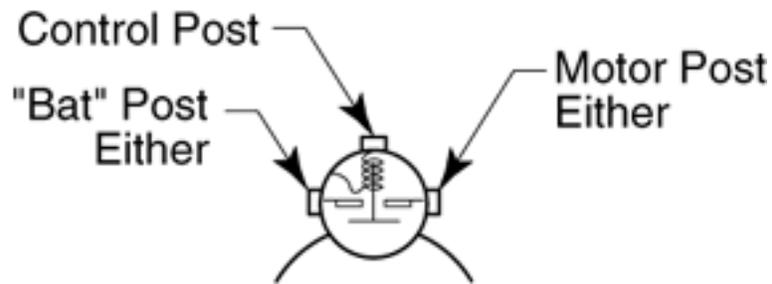
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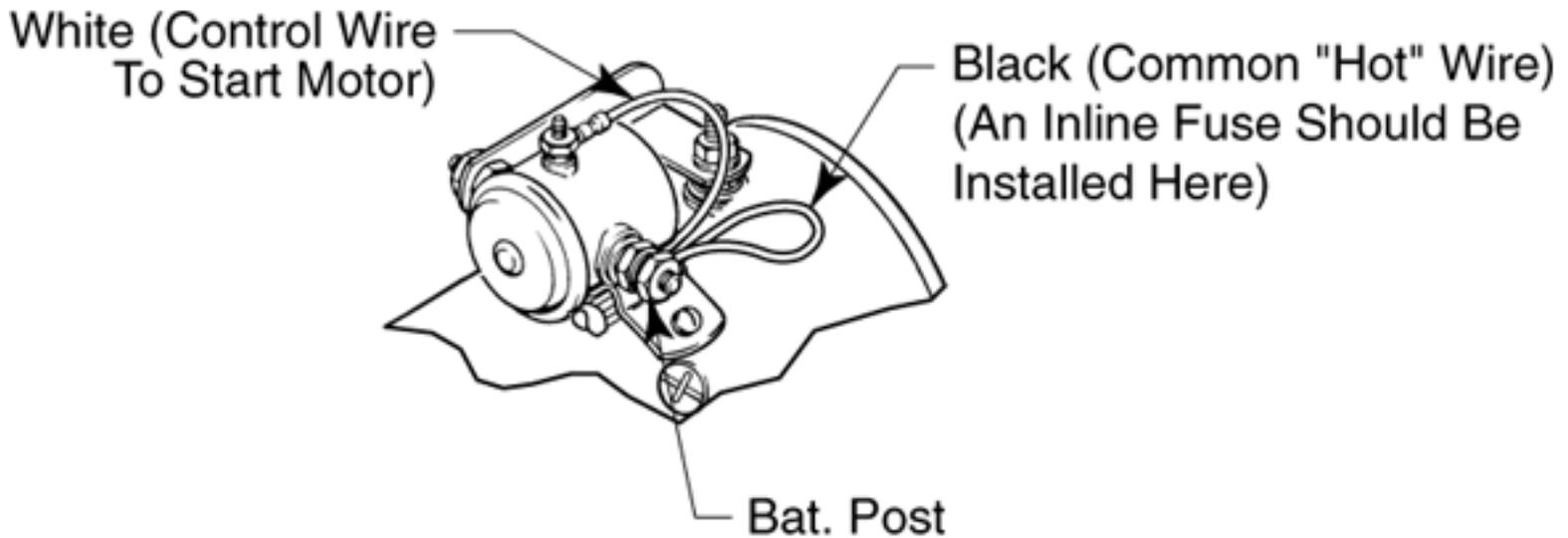
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### Grounded Motor Start Switch

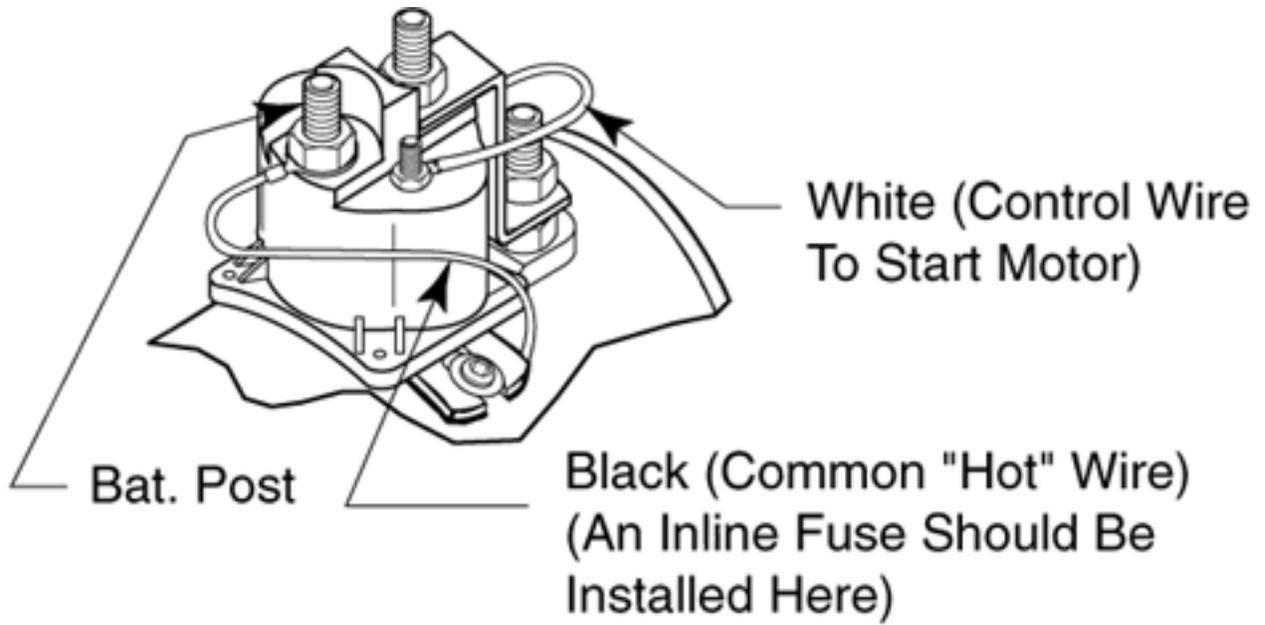


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**12 VDC 03427    24 VDC 03467**



12 VDC 07518 24 VDC 07519





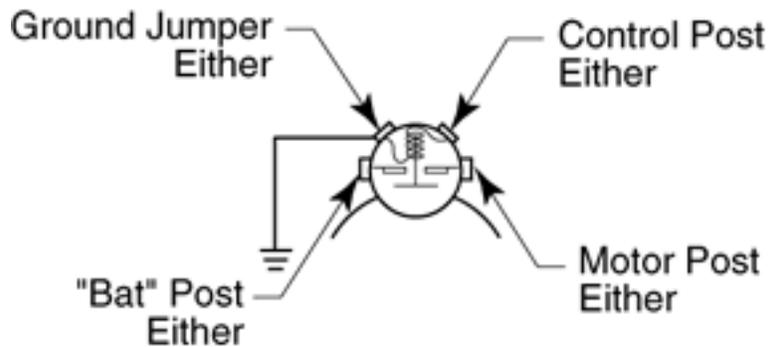
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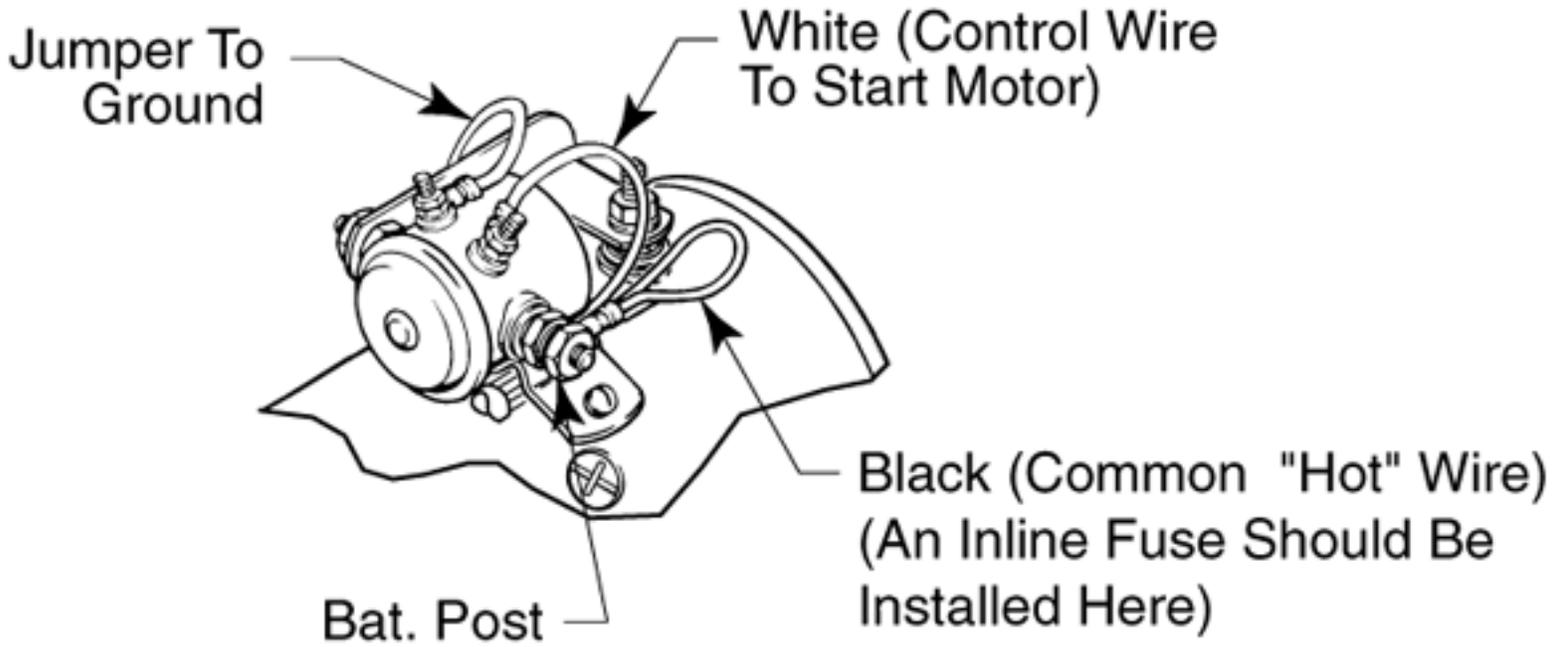
[Other Start Switches](#)

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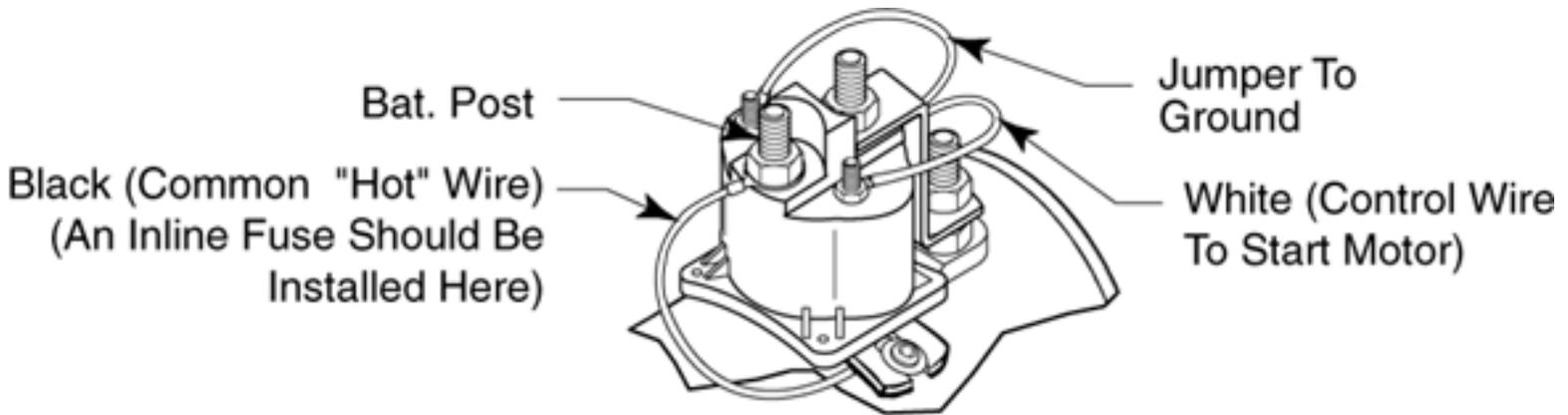
### Insulated Ground Motor Start Switch Wired to Operate Like Grounded Start Switch



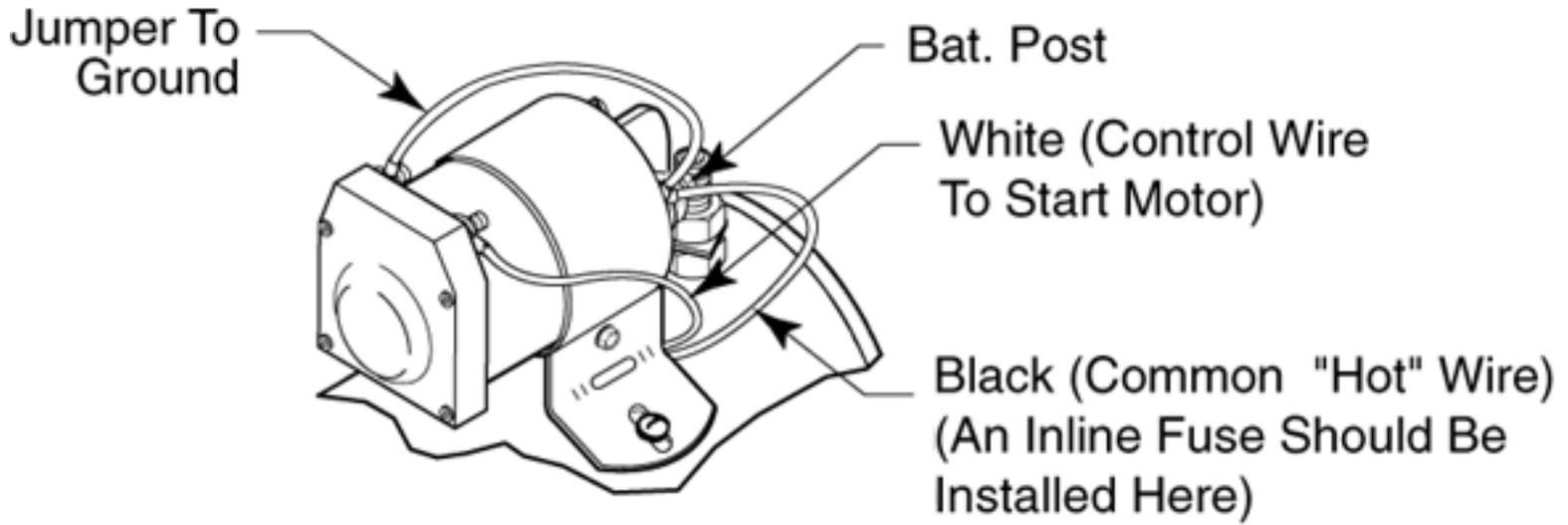
12 VDC 03335 24 VDC 03343



12 VDC 07522 24 VDC 07523



12 VDC 04295 24 VDC 04296





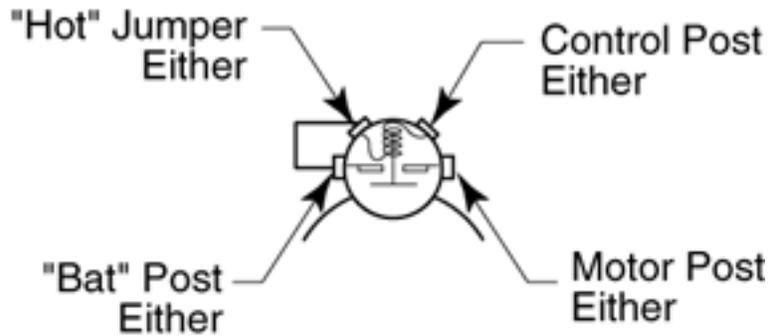
PLEASE REMOVE ALL RINGS, WATCHES AND JEWELRY PRIOR TO DOING ANY ELECTRICAL WORK

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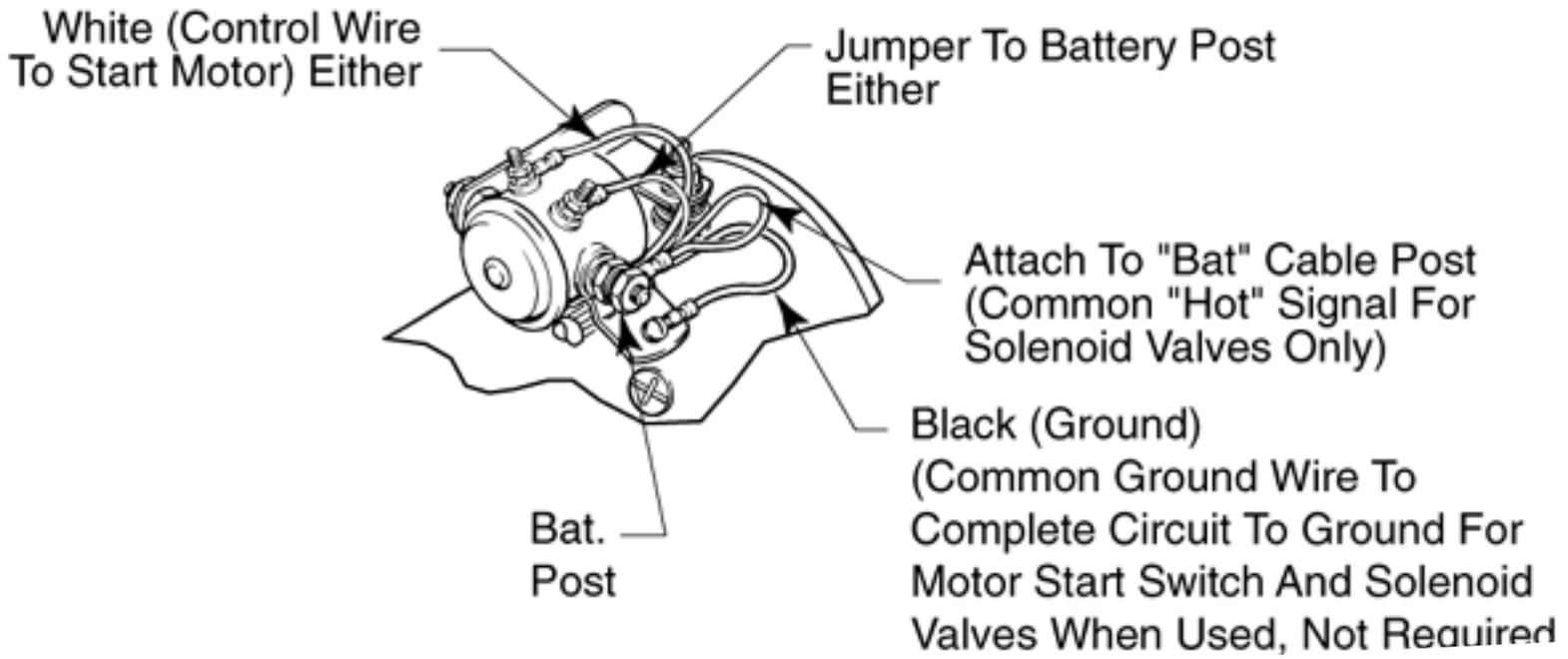
[Other Start Switches](#)

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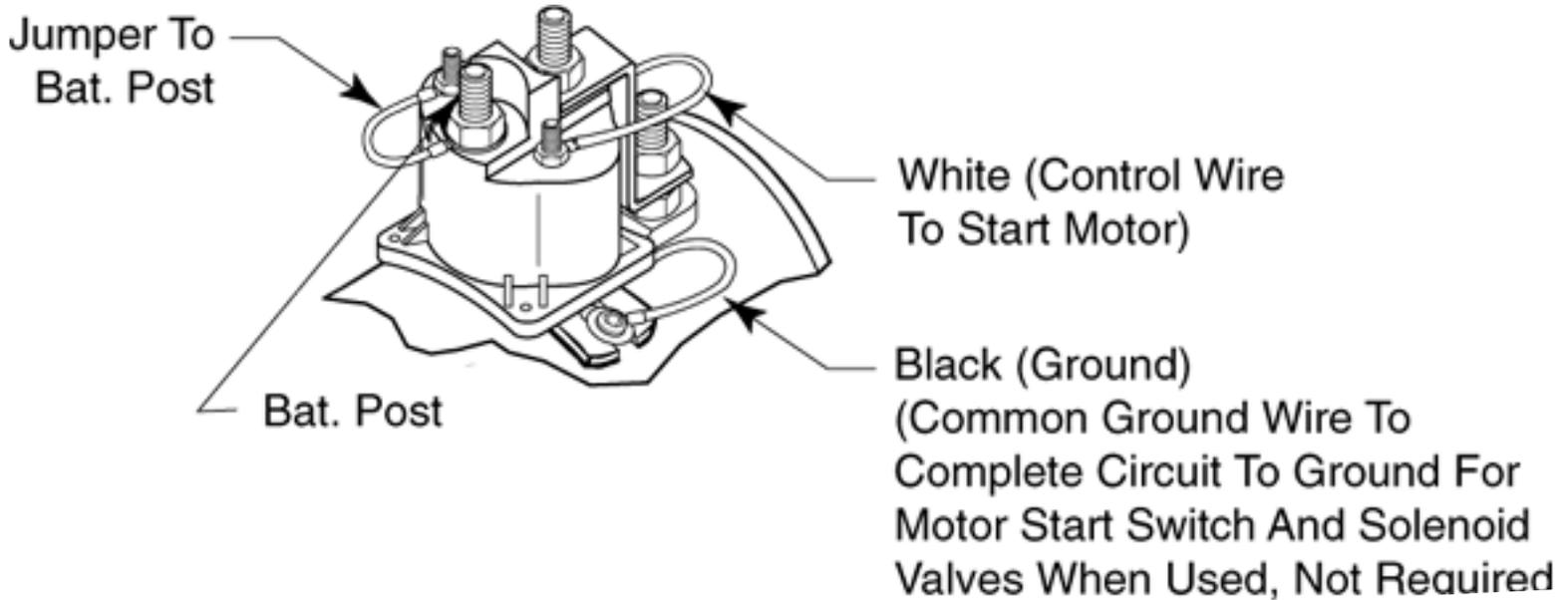
**Insulated Ground Motor Start Switch  
Wired to Operate Like Insulated Motor Start Switch**



**12 VDC 03335 24 VDC 03343**

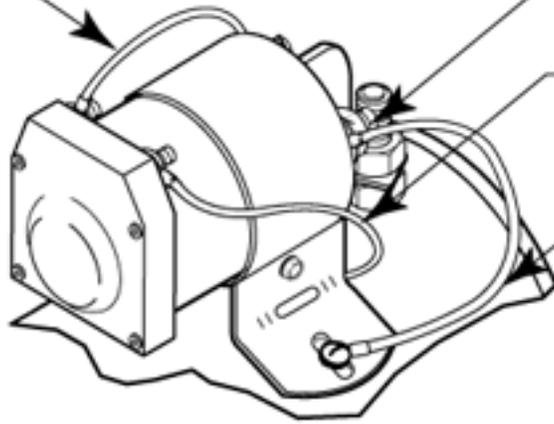


**12 VDC 07522 24 VDC 07523**



12 VDC 04295 24 VDC 04296

Jumper To  
Bat. Post



Bat. Post

White (Control Wire  
To Start Motor)

Black (Ground)  
(Common Ground Wire To  
Complete Circuit To Ground  
For Motor Start Switch And  
Solenoid Valves When Used.

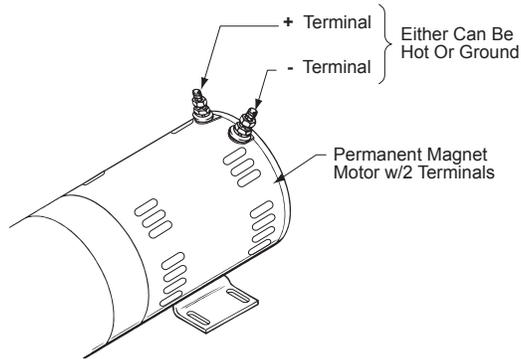
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**⚠ PLEASE REMOVE ALL RINGS, WATCHES AND JEWELRY PRIOR TO DOING ANY ELECTRICAL WORK**

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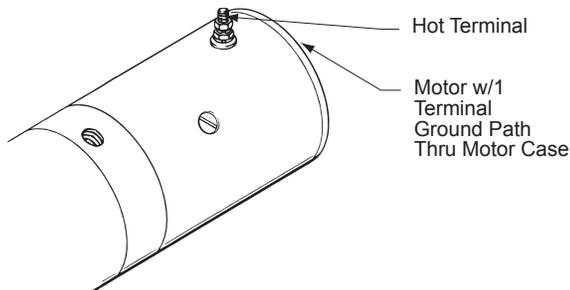
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## Permanent Magnet Motor w/2 Terminals

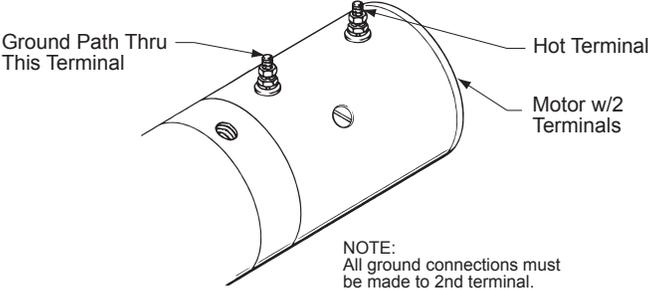


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## 1 Terminal Motor



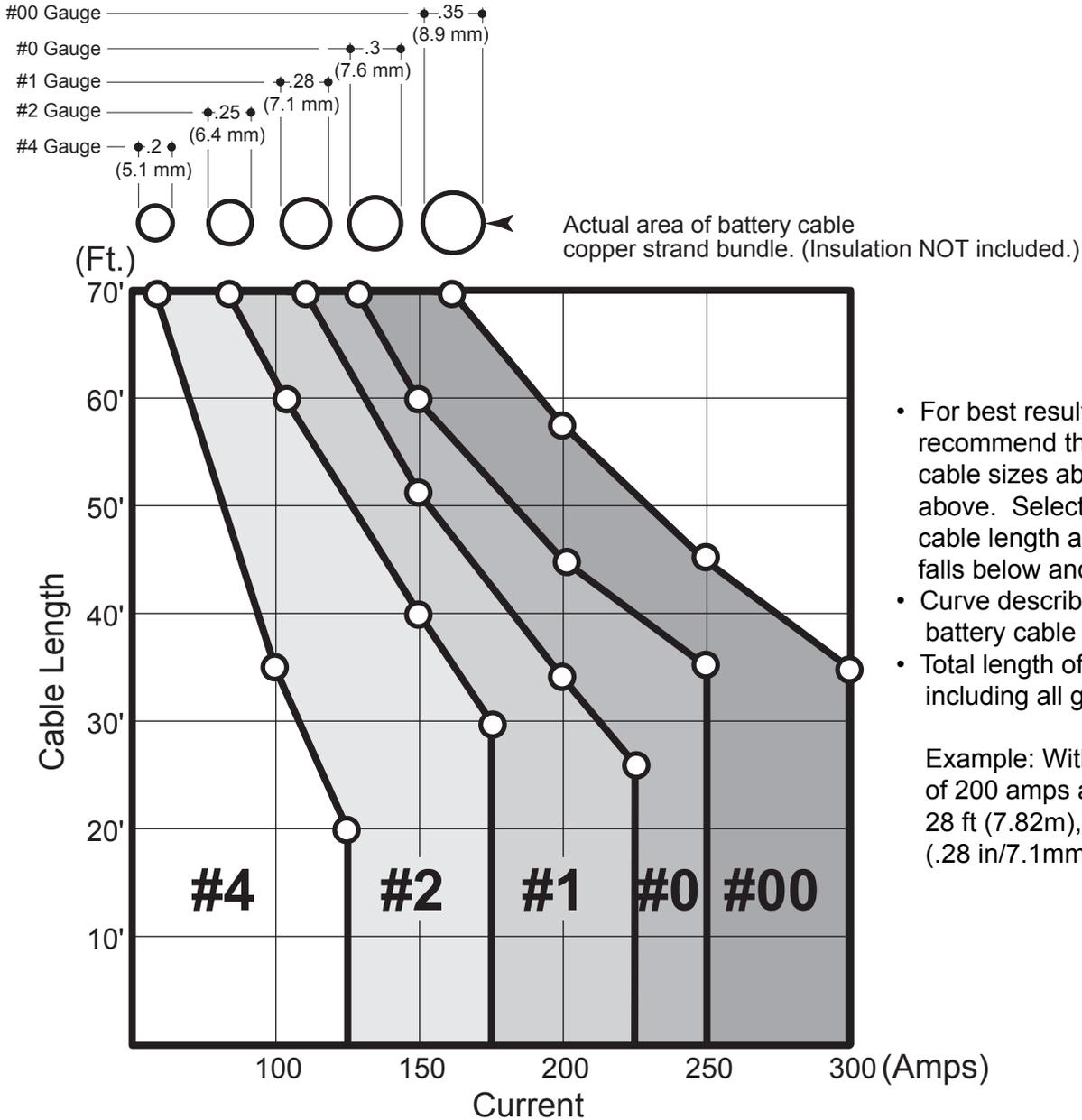
# 2 Terminal Motor





PLEASE REMOVE ALL RINGS, WATCHES AND JEWELRY PRIOR TO DOING ANY ELECTRICAL WORK

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- For best results, Monarch would recommend that you increase 1 or 2 cable sizes above the minimum shown above. Select cable size so that your cable length and maximum amp draw falls below and to the left of curve.
- Curve describes a 1 volt loss in the battery cable itself.
- Total length of battery cable(s) including all ground cables.

Example: With maximum current draw of 200 amps and total cable length of 28 ft (7.82m), Select #1 gauge (.28 in/7.1mm) or larger.