

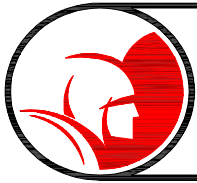


SPARTAN

Model 300 & 200 PM Motor Conversion Kit Installation Instructions



Spartan Tool L.L.C.
800.435.3866
www.spartantool.com



Model 300 & 200 PM Motor Conversion Kit
44291900 (110 Volt) 44291920 (220 Volt)



Remove Old Motor

- 1) Disconnect Power Cord
- 2) Remove & Retain (2) ¼-20x ½ machine screws from outlet box cover assembly
- 3) Disconnect motor leads from outlet box cover assembly
- 4) Remove motor mounting screws (some units have (2) gear box mounting screws in addition to (4) motor screws)
- 5) Remove motor / gear box assembly

Prepare Frame for Bridge Rectifier

- 6) Drill 7/32 hole through 300 frame as shown
- 7) Optionally, countersink this hole to 7/16 diameter

Install New Motor / Gear Box

- 8) Position motor & align it with mounting holes
- 9) Insert (4) ¼-20 x ¾ hex head machine screws and thread into motor
- 10) Tighten mounting screws while maintaining motor alignment to frame
- 11) Feed motor leads through rubber grommet and into outlet box portion of frame
- 12) Connect motor leads to bridge rectifier and outlet box cover assembly as shown in wiring diagram

Install Bridge Rectifier

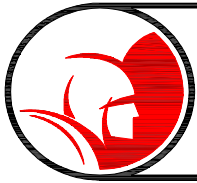
- 13) Insert # 10-32 x 1 flat head screw into hole made in step 6
- 14) Place heat sink pad inside outlet box and on # 10 screw
- 15) Add bridge rectifier to # 10 screw, thereby capturing heat sink pad
- 16) Install # 10-32 hex nut and tighten

Reinstall Outlet Box Cover

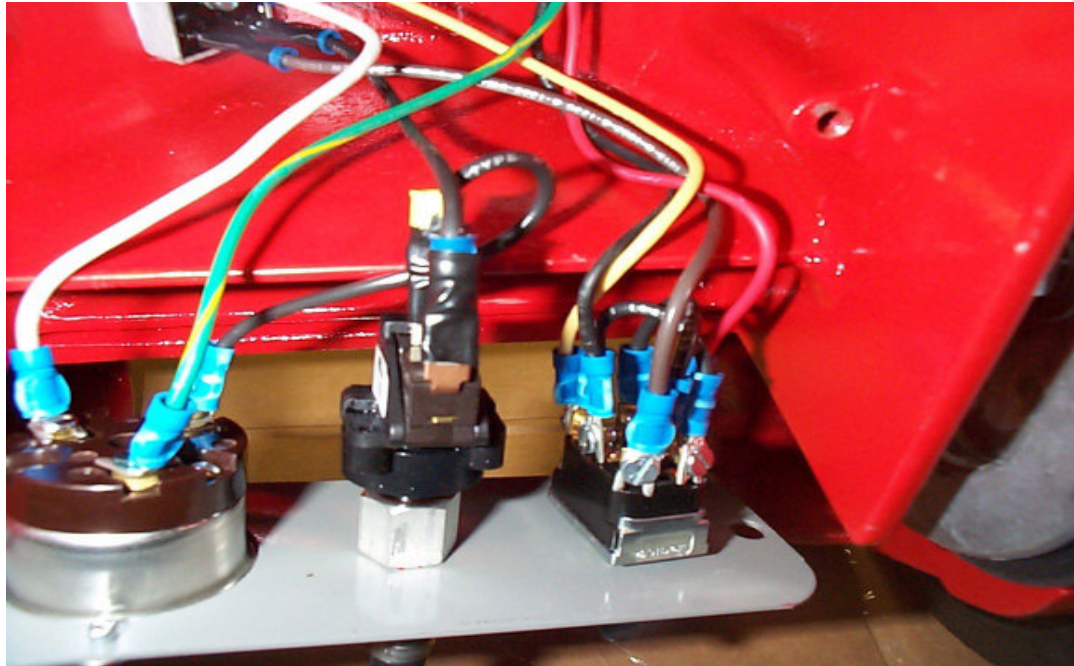
- 17) Secure insulating paper on outlet box cover assembly
- 18) Reposition cover assembly on frame
- 19) Install (2) ¼-20 x ½ mounting screws

Power Test

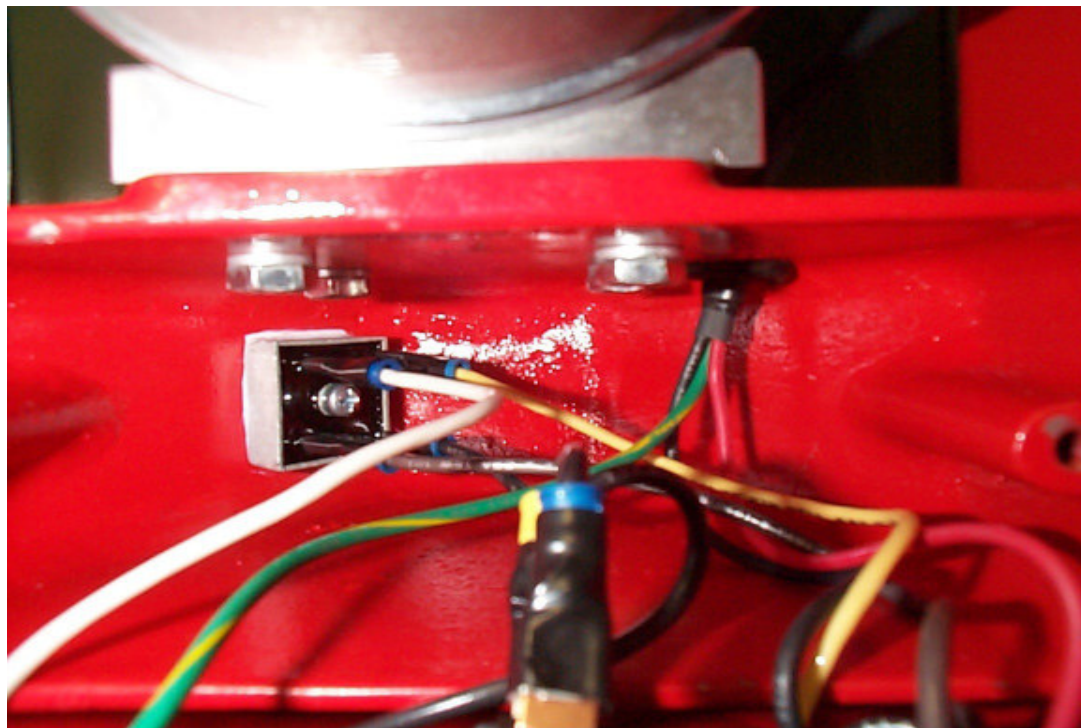
- 20) Connect power cord to outlet box cover
- 21) Verify toggle switch is in neutral (center) position
- 22) Connect power cord to 110 volt AC
- 23) Switch toggle switch to “F” (forward)
- 24) Activate Air bulb remote control
- 25) Note direction of gear box output shaft
- 26) If output shaft turns clockwise, motor leads must be swapped on at toggle switch and test repeated.



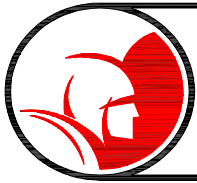
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New style motor wiring connections to outlet cover



Bridge rectifier mounting using hole drilled through frame



Wiring Diagram

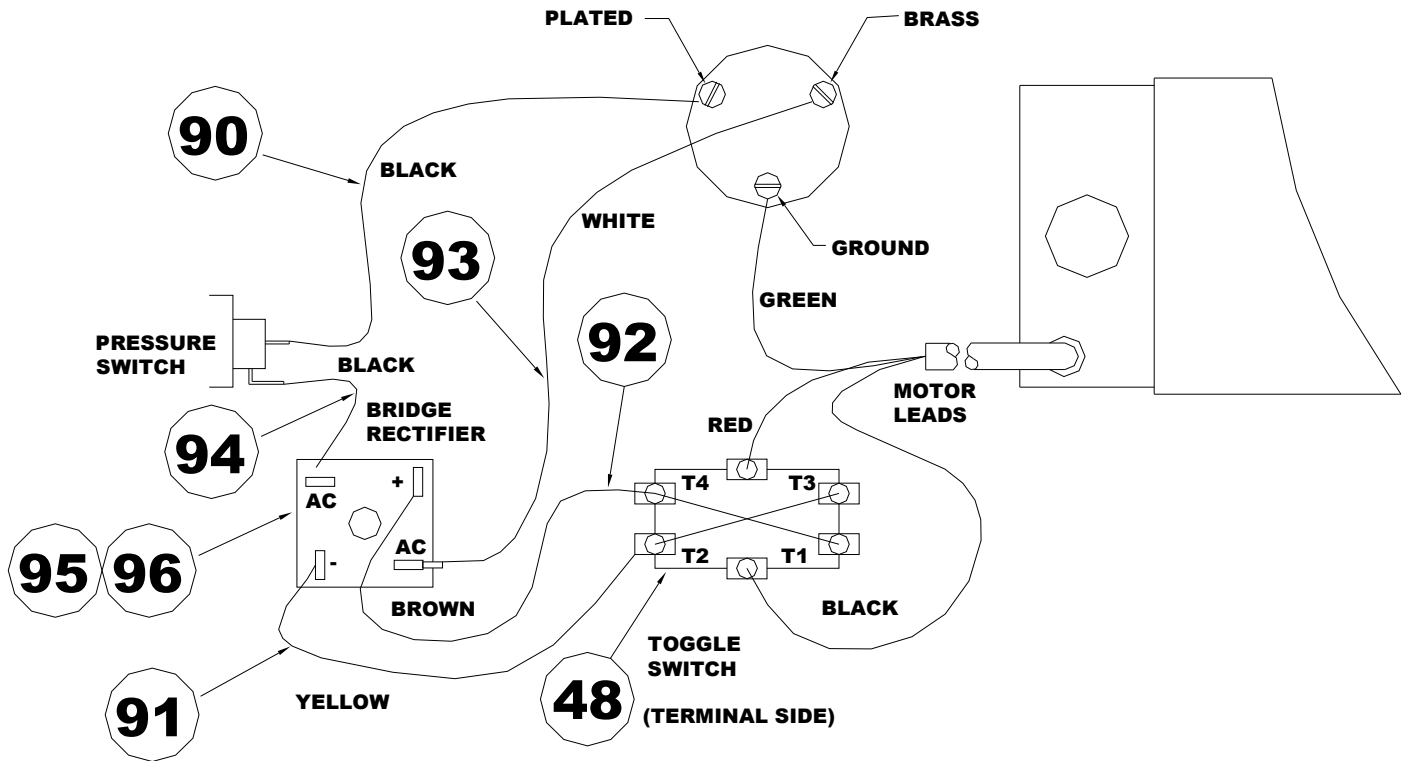
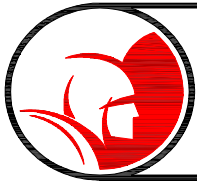


Figure 17

Item	Qty	Part Number	Description
48	1	44221500	Forward Reverse Switch
90	1	04647800	Assy. Jumper Wire 5" Black
91	1	44290800	Assy. Jumper Wire 5" Yellow
92	1	44290700	Assy. Jumper Wire 5" Brown
93	1	44292500	Assy. Jumper Wire 6" White
94	1	44292200	Assy. Jumper Wire 4" Black
95	1	44290501	Pad, Thermo - Conductive
96	1	44290500	Bridge Rectifier PM Motor



Universal (Old Style) Motor to PM (New Style) Conversion Kit



44291900 (110 Volt) 44291920 (220 Volt)

Item	QTY	Part #	Description
77	4	00165400	Lockwasher, 1/4
78	4	00113700	Screw, Hex Head Cap 1/4-20 x 3/4
79	1	44290200	PM Motor w/ Gearbox 300 (110 Volt Version Only)
80	1	44292600	PM Motor w/ Gearbox 300 (220 Volt Version Only)
85	1	02823900	Screw, Flat Head Phillips #10-32 x 1
86	1	03850100	Nut, Hex #10-32
90	1	04647800	Jumper Wire, 5" Black
91	1	44290800	Jumper Wire, 5" Yellow
92	1	44290700	Jumper Wire, 5" Brown
93	1	44292500	Jumper Wire, 6" White
94	1	44292200	Jumper Wire, 4" Black
95	1	44290501	Pad, Thermo Conduitive
96	1	44290500	Bridge Rectifier, PM Motor



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