

## **SERVICE & REPAIR**

---

Please call GRS® or an authorized GRS® dealer to order replacement parts and for instructions on replacement. Do not attempt to service parts that must be sent to GRS® or an authorized GRS® dealer; these must be repaired or replaced by GRS® or an authorized GRS® dealer. Servicing parts not signified as operator serviceable will void the 2-year warranty. **Any part not noted as replaceable or serviceable by the operator must be sent in to GRS® or an authorized GRS® dealer for repair.**

## **ORDER REPAIR OR REPLACEMENT PARTS**

---

*These parts are replaceable by the operator. Normal Wear and Tear, Abuse, Misuse, or Loss are not covered by warranty.*

*See illustrations on page 18.*

RHMS, #8-32 x 0.25" Z/P	.002-568
Tubing, PU CLR 0.250" O.D., 0.170" I.D. (Foot Throttle Hose)	.004-050
Fitting, PTC 0.25" 90° M1/8" NPT	.022-230
Fitting, PTC 0.25" Inline M1/8" NPT	.022-231
Assembly, 5-Micron Filter and Bowl	.022-944
RHMS, M4 x 0.7MM [Qty: 2]	.022-978
Bracket, Filter Mount	.044-051
Tubing, PU CLR 0.250" O.D., 0.130" I.D.	.044-229
Allen Wrench, 1/8"	.022-053
Fitting, B-1/4" I.D. TUBE M1/8" NPT	.002-361
Power adapter	.022-872, .022-987, .022-993
Foot Throttle (Hose 004-050 not included)	.004-519

## **OPERATOR SERVICEABLE PARTS**

---

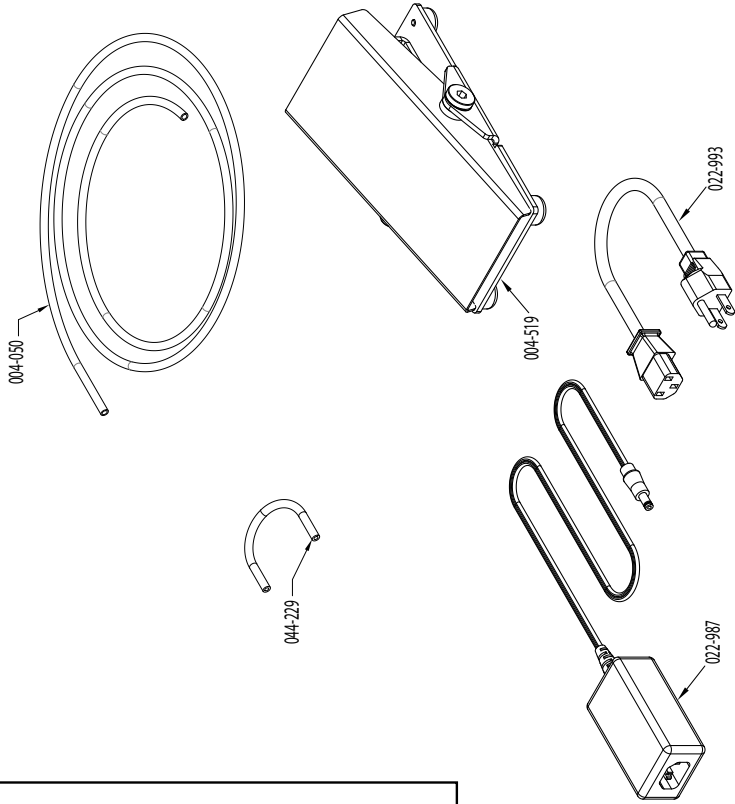
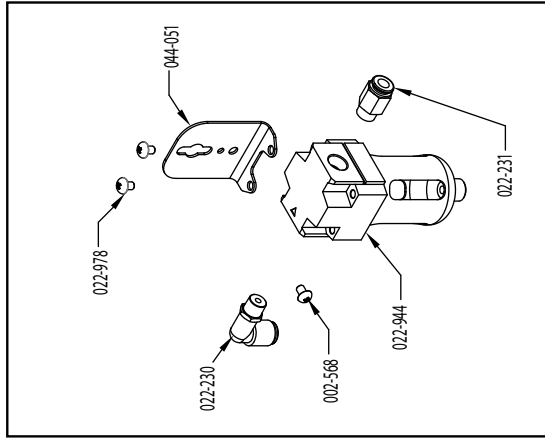
*Call GRS® or an authorized GRS® dealer for instructions and ordering information before attempting to service or replace these parts.*

GraverMach® AT Box Parts	page 19
Motor Assembly (not Motor Valve Assembly)	page 25

# GraverMach® AT Accessories

Order Replacements:

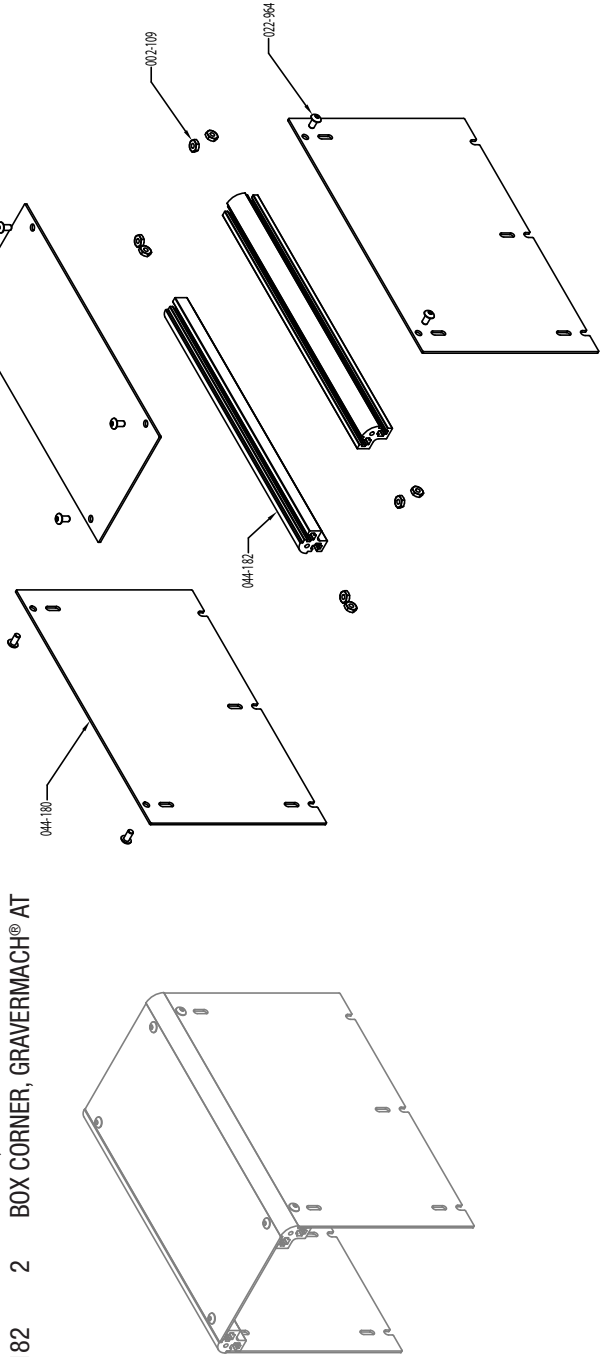
- 022-860 1 BOWL & COVER REPLACEMENT
- 022-861 1 FILTER REPLACEMENT



# GraverMach® AT Box Parts List

Contact GRS® or an authorized GRS® dealer for replacement parts or repairs. Visit [grs.com/dealers](http://grs.com/dealers) for dealers in your country.

PART NO.	QTY.	DESCRIPTION
002-109	8	NUT, #10-32 HEX Z/P
022-964	8	BHSCS, #10-32 x 0.38" BLK
044-180	2	PLATE, GRAVERMACH® AT SIDE FRAME
044-181	1	PLATE, GRAVERMACH® AT TOP FRAME
044-182	2	BOX CORNER, GRAVERMACH® AT



# GraverMach® AT Front Face Plate & Motor Valve Parts List

PART NO.	QTY.	DESCRIPTION	PART NO.	QTY.	DESCRIPTION
002-110	4	WASHER, #8 FLAT Z/P	024-039	1	DECAL, GRAVERMACH® AT AIRTACT
002-309	8	HHSMS, #6 x .38" Z/P	024-040	1	DECAL, GRAVERMACH® AT ON/OFF
002-333	1	O-RING, 0.313" O.D., 0.188" I.D.	024-120	1	KNOB, B-G 0.75" O.D., 0.19" I.D. x 0.70"
002-443	2	BHCS, #6-32 x 0.25" BLK	044-044	1	NEEDLE, VALVE
002-615	1	GAUGE, 1.63" O.D., 0-60 psi AIR	044-065	1	TUBING, PU CLR 0.250" O.D., 0.170" I.D.
002-766	6	CLAMP, WIRE, 0.25" O.D. TUBE	044-065	1	TUBING, PU CLR 0.250" O.D., 0.170" I.D.
002-971	1	PLUG, 0.190" O.D. x 0.125" SWTERED	044-067	1	TUBING, PU CLR 0.250" O.D., 0.170" I.D.
002-977	1	O-RING, 0.188" O.D., 0.063" I.D.	044-112	1	TUBING, PU CLR 0.250" O.D., 0.170" I.D.
004-966	1	VALVE, 4-WAY SWITCHING	044-177	1	PLATE, GRAVERMACH® AT FRONT FRAME
022-080	1	FITTING, B-0.17" I.D. TUBE #10-32	044-185	1	VALVE BODY, AUXILIARY AIR
022-875	1	VALVE, PTC 0.25" NEEDLE	044-186	1	BRACKET, 1.10" AIR GAUGE
022-966	1	FITTING, PTC 0.25" 90° F 1/8" NPT	044-187	1	BRACKET, 1.63" AIR GAUGE
022-970	1	SWITCH, ILLUMINATED POWER	044-224	1	TUBING, PU CLR 0.250" O.D., 0.170" I.D.
022-982	1	REGULATOR, PRECISION AIR	044-225	1	TUBING, PU CLR 0.250" O.D., 0.170" I.D.
022-982	2	KNOB, GRAY 0.75" O.D., 0.25" I.D. x 0.69"	044-225	1	TUBING, PU CLR 0.250" O.D., 0.170" I.D.
023-019	1	GAUGE, 1.10" O.D. 0-30 psi AIR	044-226	1	TUBING, PU CLR 0.250" O.D., 0.170" I.D.
023-020	1	FITTING, PTC 0.25" 90° M #10-32	044-226	1	TUBING, PU CLR 0.250" O.D., 0.170" I.D.
023-021	4	FITTING, PTC 0.25" 90° M 1/8" NPT	044-230	1	TUBING, PU CLR 0.156" O.D., 0.094" I.D.
023-030	1	FITTING, B-Y 0.19" I.D. TUBE	044-500	1	WIRE, R-L-B-22 AWG POT F-SPADE
023-054	1	KNOB, B-G 1.25" O.D., 0.25" I.D. x 0.61"	044-501	1	WIRE, R-22 AWG F-SPADE T-RING
024-038	1	DECAL, GRAVERMACH® AT FRONT	044-501	1	WIRE, R-22 AWG F-SPADE T-RING
			044-502	1	WIRE, B-22 AWG F-SPADE T-RING

# GraverMach® AT Motor Valve Assembly

PART NO.	QTY.	DESCRIPTION
004-951	1	VALVE BODY, ROTARY
022-230	2	FITTING, PTC 0.25" 90° M1/8" NPT
022-948	1	O-RING, 1.078" O.D., 0.938" I.D.
022-977	1	FITTING, PTC 0.25" T M-1/8" NPT
022-990	1	WASHER, 0.63" O.D., 0.41" I.D. x 0.03" NY
044-006	1	VALVE SHROUD, ROTARY

Contact GRS® or an authorized GRS® dealer for replacement parts or repairs.  
 Visit [grs.com/dealers](http://grs.com/dealers) for dealers in your country.

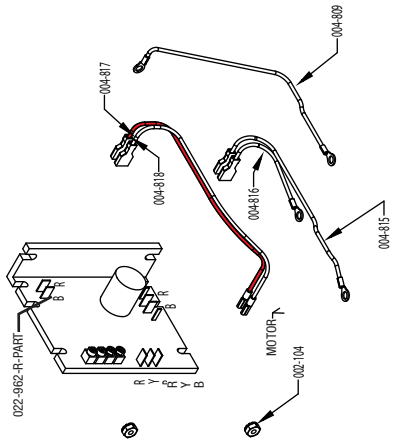
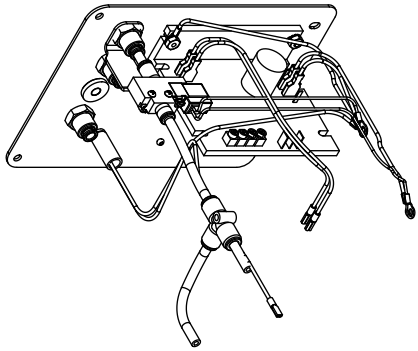
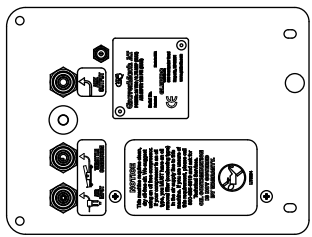
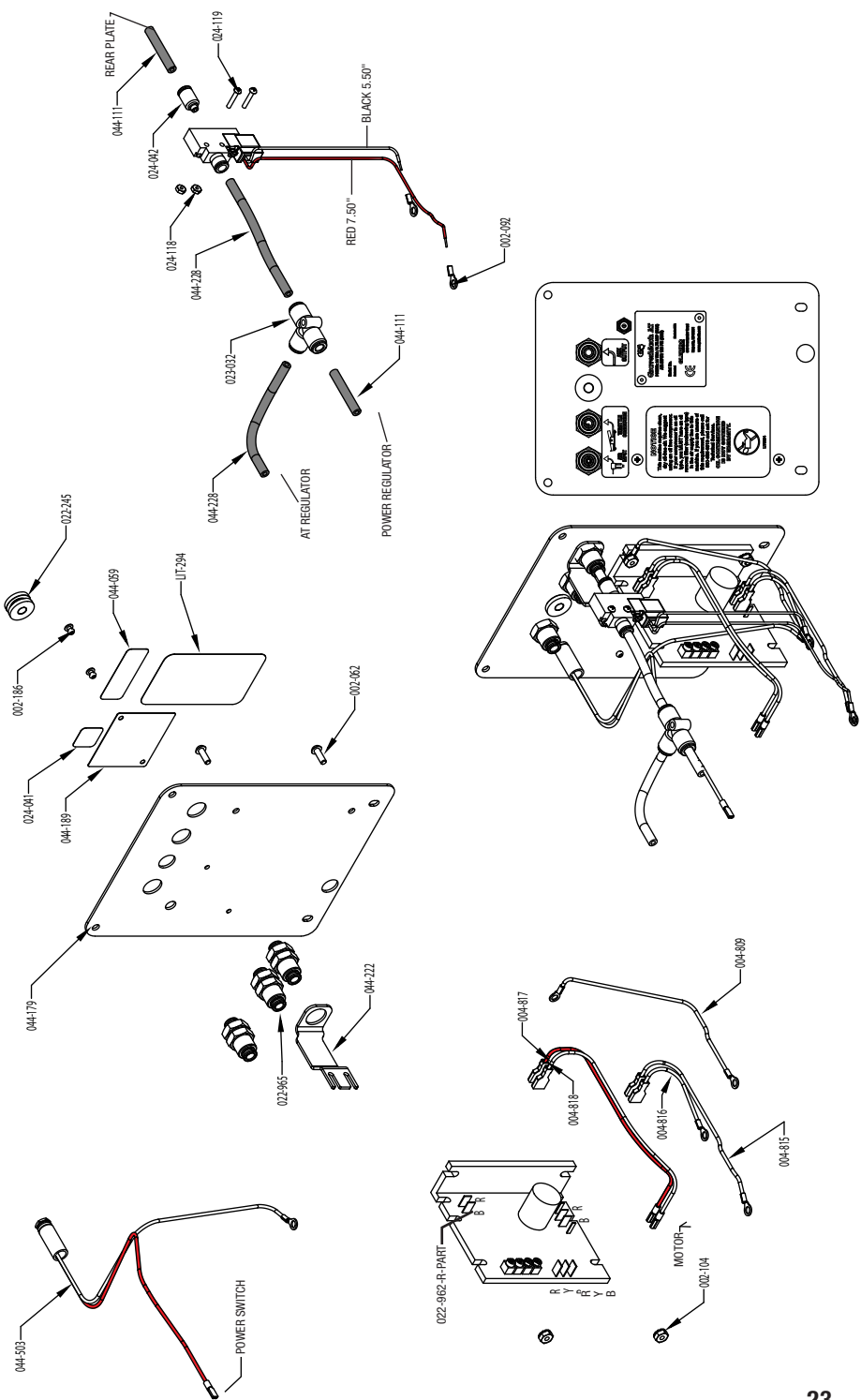


# GraverMach® AT Back Parts List

PART NO.	QTY.	DESCRIPTION	PART NO.	QTY.	DESCRIPTION
002-062	2	RHMS, #8-32 x 0.50" Z/P	024-041	1	DECAL, AUXILIARY OUTPUT
002-092	2	TERMINAL, 22-16 AWG #10 RING	024-042	1	FITTING, PTC 0.25" M#10-32
002-104	2	NUT, #8-32 HEXKEP Z/P	024-118	2	NUT, #4-40 HEX Z/P
002-186	2	RIVET, 0.125" DIA. x 0.125" POP	024-119	2	RHMS, #4-40 x 0.63" Z/P
004-809	1	WIRE, B-22 AWG T-RING T-RING	044-059	1	DECAL, AIR INPUT/THROTTLE
004-815	1	WIRE, R-22 AWG F-SPADE T-RING	044-111	2	TUBING, PU CLR 0.250" O.D., 0.130" I.D.
004-816	1	WIRE, B-22 AWG F-SPADE T-RING	044-179	1	PLATE, GRAVERMACH® AT REAR FRAME
004-817	1	WIRE, R-22 AWG F-SPADE F-SPADE	044-189	1	SERIAL PLATE, GRAVERMACH® AT
004-818	1	WIRE, B-22 AWG F-SPADE F-SPADE	044-222	1	BRACKET, SOLENOID
022-245	1	GROMMET, 0.50" O.D., 0.188" I.D. RUBBER	044-228	2	TUBING, PU CLR 0.250" O.D., 0.130" I.D.
022-962-R-PART	1	CONTROLLER, 24VDC PWM MOTOR	044-503	1	WIRE, B-R-22 AWG P-JCK F-SPD T-R
022-965	3	FITTING, PTC 0.25" BULKHEAD	LIT-294	1	DECAL, DRY AIR NOTICE
023-032	1	FITTING, PTC 0.25" T			
024-036	1	VALVE, 24VDC SOLENOID			

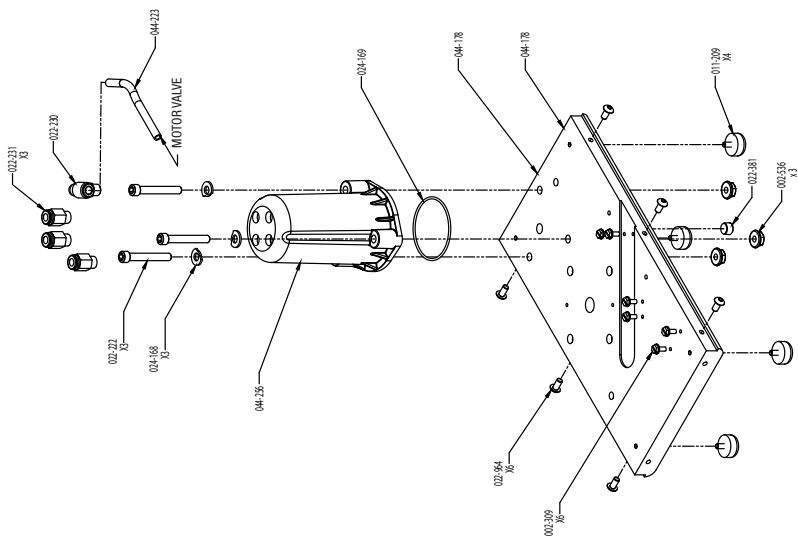
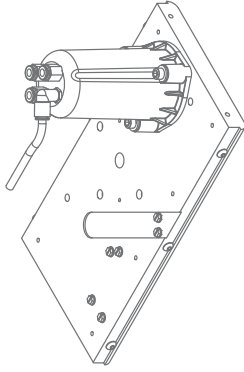
Contact GRS® or an authorized GRS® dealer for replacement parts or repairs.

Visit [grs.com/dealers](http://grs.com/dealers) for dealers in your country.



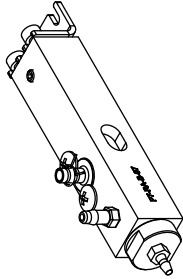
# 24 GraverMach® AT Base Parts List

PART NO.	QTY.	DESCRIPTION
002-309	6	HHSMS, #6 x 0.38" Z/P
002-536	3	NUT, 1/4"-20 FLNG LOCK Z/P
011-209	4	FOOT, #8-32 x 0.50" RUBBER
022-222	3	SOCKET HEAD CAP SCREW
022-230	1	FITTING, PTC 0.25" 90° M1/8" NPT
022-231	3	FITTING, PTC 0.25" INLINE M1/8" NPT
022-381	1	PLUG, 1/8"-27 NPT x 0.25" PIPE
022-964	6	BHSCS, #10-32 x 0.38" BLK
024-168	3	SPECIAL WASHER
024-169	1	O-RING
044-178	1	PLATE, GRAVERMACH® AT BASE
044-223	1	TUBING, PU CLR .250" O.D., 0.170" I.D.
044-256	1	MOLDED AIR TANK (FOUR HOLE VERSION)





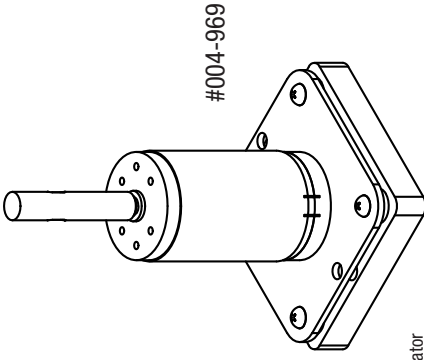
## GraverMach® AT Spool Assembly



### Spool Assembly

The Spool Assembly is NOT OPERATOR SERVICEABLE. This part is factory set to this particular system. Repair or replacement requires return of engraving system to GRS® or an authorized GRS® dealer.

## GraverMach® AT Motor Assembly



#004-969

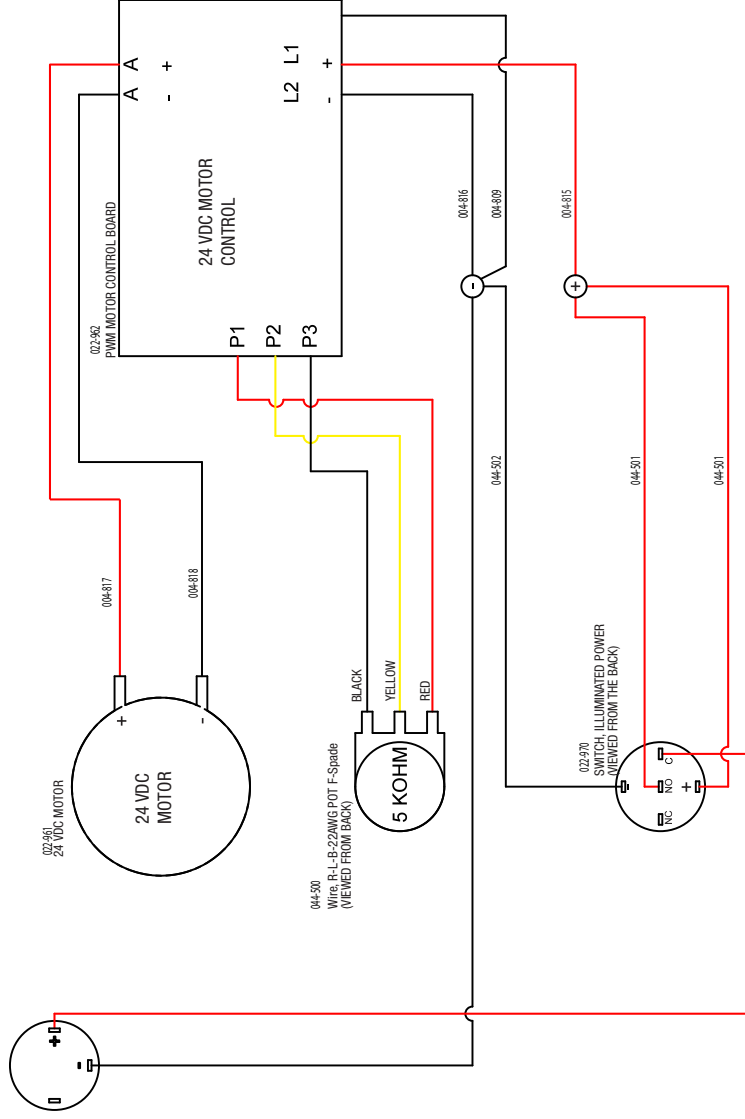
### Motor Assembly

The Motor Assembly is operator replaceable. Contact GRS® or an authorized GRS® dealer for details.

Contact GRS® or an authorized GRS® dealer for replacement parts or repairs.  
Visit [grs.com/dealers](http://grs.com/dealers) for dealers in your country.

# GraverMach® AT Wiring Diagram

044-523



# GraverMach® AT Hose Diagram

