

# MotorGuide® REPAIR PARTS

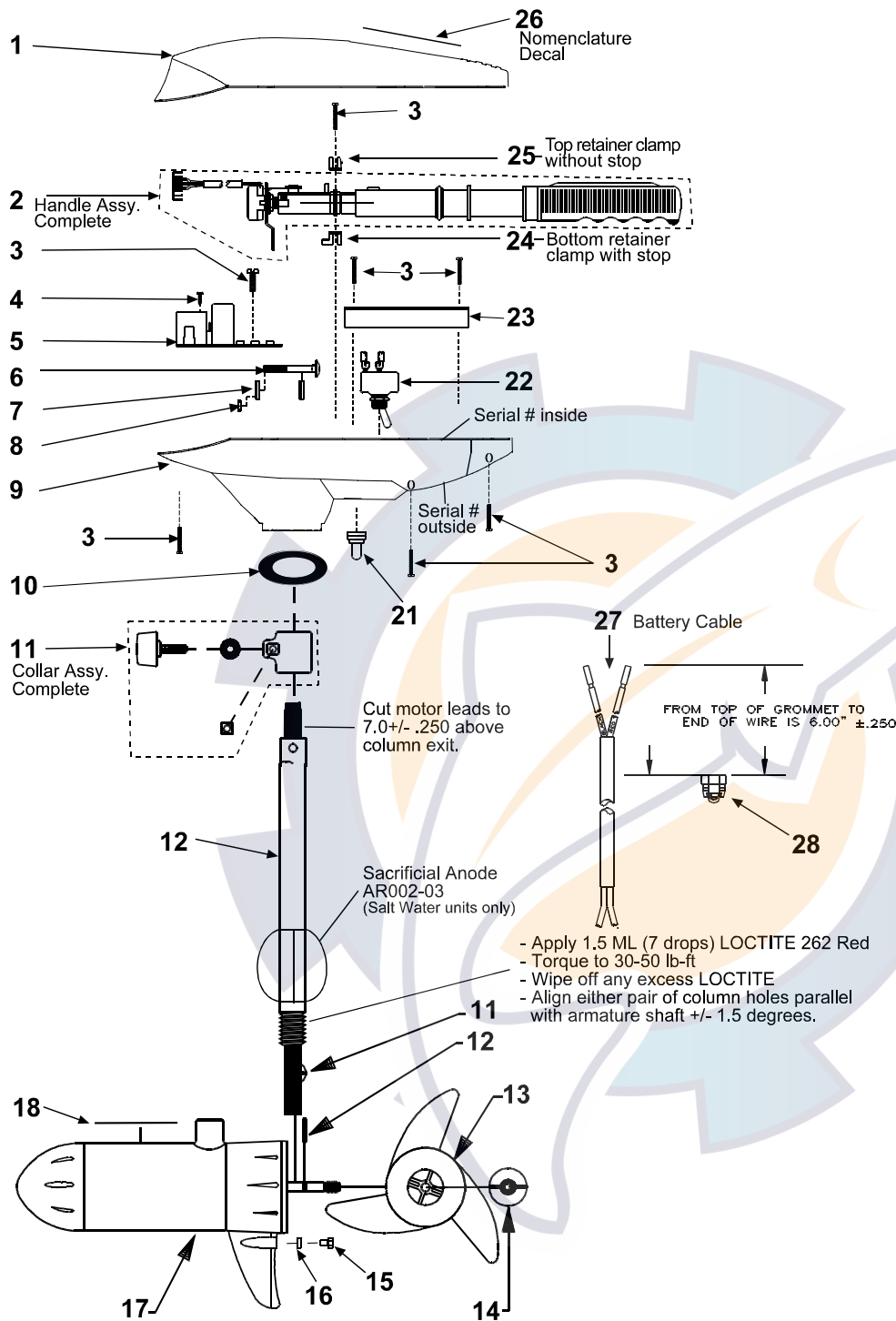
**Model:** ENERGY  
**BETR52V**

**SPECIFICATIONS:**

Year of Intro	2000
Thrust	52 LBS
Volts	12VDC
Amp Draw	0 to 48 amps
Mount	09 Transom
Speeds	Variable

**TO ORDER PARTS:**

MotorGuide Consumer Relations  
 Phone 918-831-6989  
 Fax 800-982-8093

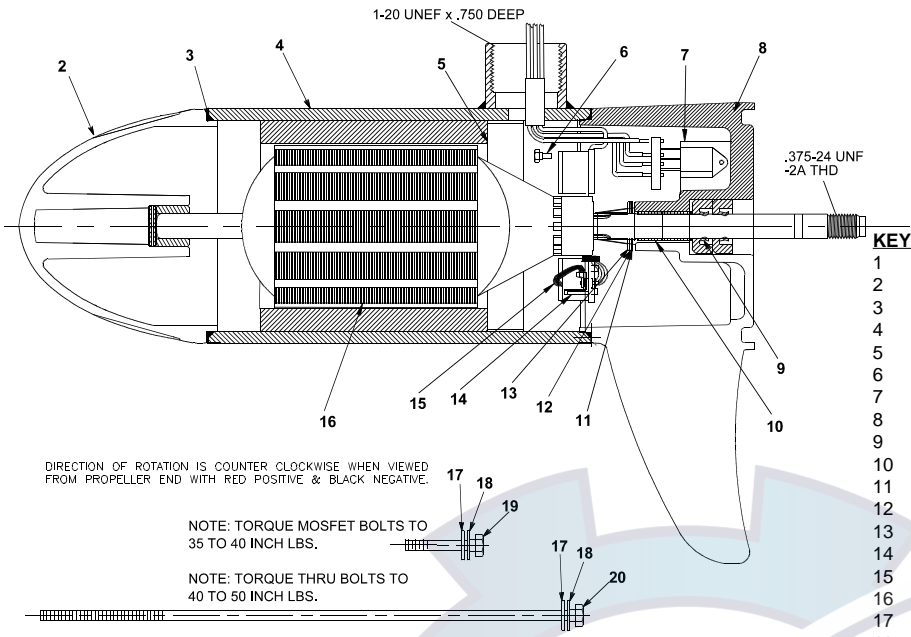


- Apply 1.5 ML (7 drops) LOCTITE 262 Red  
 - Torque to 30-50 lb-ft  
 - Wipe off any excess LOCTITE  
 - Align either pair of column holes parallel with armature shaft +/- 1.5 degrees.

KEY	DESCRIPTION	PART #	KEY	DESCRIPTION	PART #	KEY	DESCRIPTION	PART #
1	TOP HOUSING COVER BLACK	ET053-17	12	COLUMN 36"	TT049-05	20	LOWER UNIT DECAL	ET060-07
2	HANDLE ASY	ET372-06		COLUMN 42"	TT049-06	21	SWITCH BOOT	FP177-01
3	#8 X 5/8 SCREW	AT141-01		COLUMN 50"	FR049-13	22	TOGGLE SWITCH	FP153-07
4	#4 SELF TAPPING SCREW	XT141-02	13	MONOFILAMENT WASHER	AR175-01	23	CABLE PLATE	AT155-06
5	BOARD FOR/REV	AT157-01	14	PROP DRIVE PIN	BR102-01	24	BOTTOM RETAINER CLAMP	AR036-02
6	BOLT	TT134-02	15	PROP/3 BLADE	AF124-12	25	UPPER RETAINER CLAMP	AR036-04
7	CURVED WASHER	TT171-08	16	PROP/2 BLADE	AF124-07	26	NOMENCLATURE DECAL	ET056-19
8	NYLON LOCK NUT	XT098-02	17	PROP NUT	AR099-01	27	BATTERY CABLE	XT328-06
9	T/H BASE BLACK	AT004-11	18	ANODE BOLT (Saltwater models only)	DK133-01	28	GROMMET	GR019-01
10	COLUMN SEAL	AT079-01	19	MOTOR	AR002-02			
11	DEPTH ADJUSTMENT COLLAR	AR158-01			CF397-17			

# LOWER UNIT BREAKDOWN

**Model: ENERGY**  
**BETR52V**



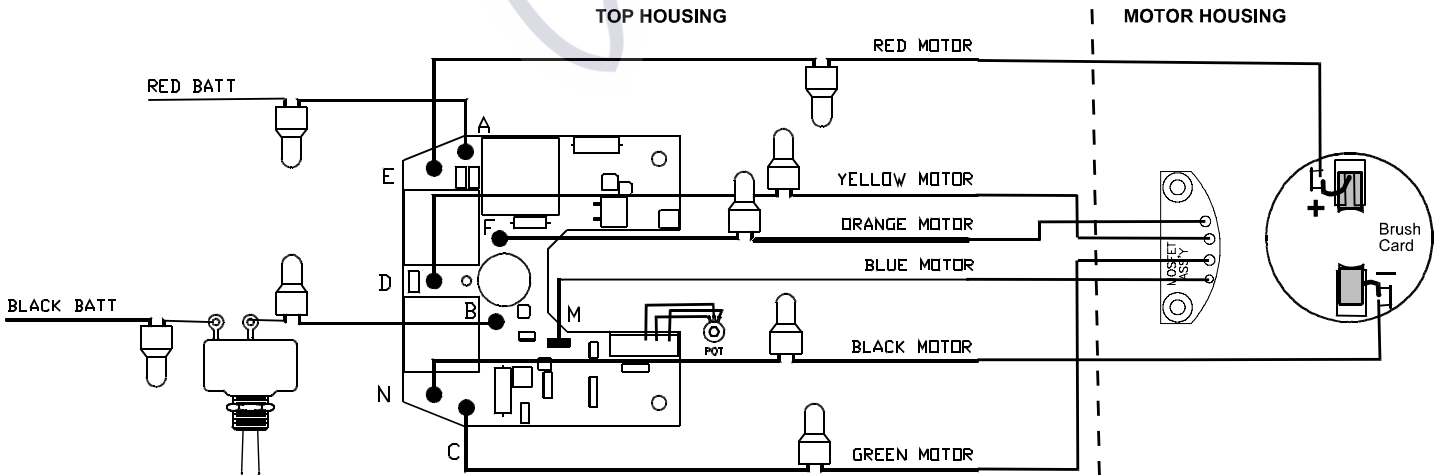
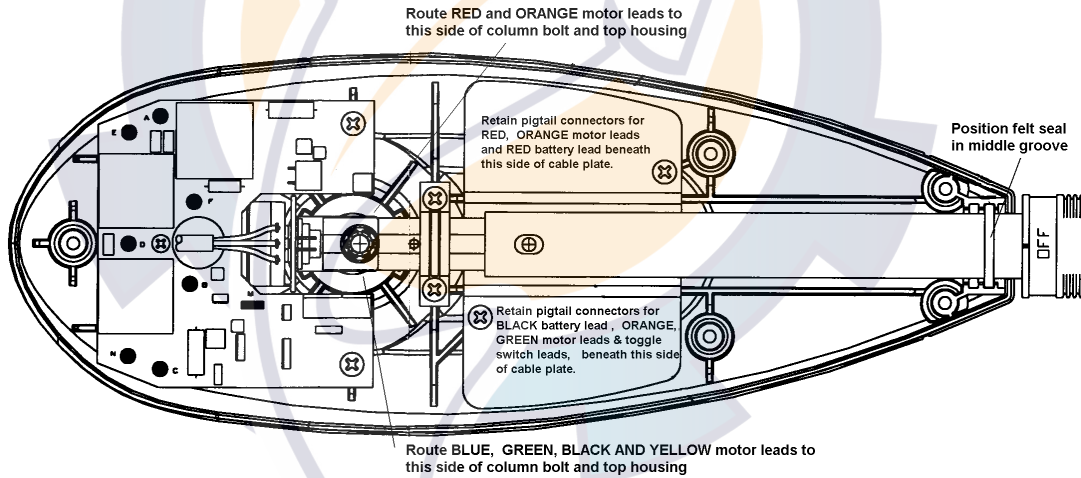
DIRECTION OF ROTATION IS COUNTER CLOCKWISE WHEN VIEWED FROM PROPELLER END WITH RED POSITIVE & BLACK NEGATIVE.

NOTE: TORQUE MOSFET BOLTS TO 35 TO 40 INCH LBS.

NOTE: TORQUE THRU BOLTS TO 40 TO 50 INCH LBS.

KEY	QTY	DESCRIPTION	PART NO.
1	X	MOTOR	CF397-17
2	1	NOSE CAP	XF3212-01
3	2	O RING SEAL	MR217-01
4	1	HOUSING ASY	JF3210-01
5	1	RETAINER	JF233-01
6	2	BRUSH CARD SCREW	MR228-01
7	1	DURA AMP MODULE	JF096-09
8	1	COMM CAP	XF3205-01
9	2	SHAFT SEAL	MR223-01
10	1	BEARING	MR206-01
11	1	NYLATRON WASHER	MR226-01
12	1	WASHER	MR227-01
13	1	E RING	MR219-02
14	2	BRUSH SPRINGS	XF214-01
15	1	BRUSH ASY LESS SPRING	XF3201-01
16	1	ARMATURE	CF3207-02
17	4	STATIC SEAL	MR222-01
18	4	THRU BOLT WASHER	MR216-01
19	2	DURA AMP SCREW	MR229-04
20	2	THRU BOLT	MR218-02

## WIRING



 **SUBJECT TO DAMAGE BY STATIC ELECTRICITY ASSEMBLE AT STATIC FREE WORK STATION!**