



LAYCOCK SYSTEMS, INC.

1601 North 43rd Street, Tampa, FL 33605

Ph: 813-248-3555 / Fax: 813-242-0514

Email: sales@laycocksystems.com / Web: www.laycocksystems.com

INSTRUCTIONS FOR EXTERNAL BENCH GROWLER

CROWN MODEL 2505 (115VAC) & 2506 (230VAC)

Model 2505 and 2506 are handy, all-purpose instruments that offer you a wide variety of tests on armature sizes from 1/2" through 8" diameter.

ATTENTION

Use only on power supply of correct voltage and frequency as indicated on the nameplate.

PURPOSE

The Crown Growler Model 2505 and 2506 are designed to test for "short" or "open" circuits in armatures from 1/2" up to 8" diameter. The standard Growler tests armatures 2" in diameter and larger. For smaller armatures (down to 1/2" in diameter) the small iron block is placed between the Growler lamination's to reduce the space and also reduce the power so that small armatures can be suitably tested. The Growler consists essentially of a primary coil and a portion of the iron of a transformer. The iron of the armature under test completes the magnetic circuit. When an alternating current is passed through the Growler primary circuit, it sets up an alternating magnetic field around the armature, reproducing the approximate magnetic effect under which it operates when assembled in a motor.

OPERATION

An armature should be placed on the Growler before turning on the current. Failure to do so may cause current to rise above the capacity of the coil and cause overheating.

TESTING

The "Short" Test:

The most common way of using the Growler is the so-called "feeler" method, in which the feeler is a hacksaw blade. The armature should be placed in the Growler and slowly rotated by hand with the feeler held just above the slots in the armature. If the coil is short circuited, the feeler will stick and vibrate. If coils are not short circuited, no pull will be felt on the feeler. This action is quite evident and positive, so that with a little practice, short circuits are recognized quickly. NOTE: **Always** turn the power switch "OFF" when armature is removed from the Growler.

The "Open" Test:

Open circuits can usually be detected by short circuiting the ends of coils with the "feeler". This may be done quickly by successively short circuiting adjacent commutator bars. If no spark is obtained, the coil circuit is open.

De-magnetizing / Magnetizing:

These Growlers may be used for either de-magnetizing or magnetizing.

To De-magnetize tools or other objects, turn on the current, place the object between the jaws of the Growler and then draw it slowly from the jaws.

To Magnetize tools or other objects, connect the parallel blades of the power cord to a 12 volt DC, 6 amp battery charger. Place the object across the jaws, then turn on the current and strike the object sharply with a hammer or mallet. **CAUTION:** Do not leave the unit on for more than 2 minutes at one time to avoid Growler coil damage.

MAINTENANCE and STORAGE: When not in use, store unit within a plastic bag.

WARRANTY: Crown's Motor Repair Equipment is warranted to the original owner against defects in materials and workmanship for ninety (90) days from date of purchase. Any part found to be defective (except by overloading, misuse, neglect, fire, accident, tampering with by unauthorized serviceman, or other cause beyond the manufacturer's control), will be replaced or repaired free of charge.

SPECIFICATIONS FOR EXTERNAL BENCH GROWLER

CROWN MODEL 2505 (115VAC) and 2506 (230VAC)

Primary Power: 115VAC (2505), 230VAC (2506), 50/60Hz, 1-phase.

Capacity: Test armatures ½" to 8" in diameter (for "short" test, use a hacksaw blade or other soft iron material).

Construction: Metal, corrosion protected. Bench type tester, armatures.

Accessories: Supplied iron-insert block for testing smaller armatures to ½" in diameter.

Spare Parts: To be recommended upon request.

PARTS LIST
CROWN MODEL 2505 and 2506

Item#	P/N	Description	Quantity Req'd	Assy#	Current Assy Price
4	C802003	Power Cord Bushing, Heyco #1217	1	1	Contact Factory
5	C800033	Bolt 8-32x3/8" RH MS	4		
6	C800034	Nut #8-32 Hex	4		
7	C809004	Power Cord, 8-ft	1		
8	C801013	Pilot Light, Neon (2505 only)	1		
8	C801014	Pilot Light, Neon (2506 only)	1		
10	C802007	Power Switch	1		
11	C802006	Screw 6x3/8" S.T.	8		
N/A	C500040	Cover Case assy.	1		
N/A	C800027	Warning Label	1		
N/A	C800029	Hook-up Wire #18, .33-ft	1		
N/A	C800035	Nut 6-32 Hex Cad	2		
N/A	C800037	Bolt 10-32x2-3/4" RH MS	4		
N/A	C800039	Nut 10-32 Hex Cad	4		
N/A	C800046	Steel Block 1-15/16"x2x1/2"	1		
N/A	C802018	Screw 6-32x3/8" RH MS	2		
N/A	C802049	Lockwasher #6	4		
N/A	C809002	Ring Terminal	3		
N/A	C809018	Switch Plate	1		
3	C500026	Coil Transf. assy., 115VAC (2505 only)	1	2	Contact Factory
3	C500028	Coil Transf. assy., 230VAC (2506 only)	1		
13	C800007	Fiber Top Plate	2		

**Model:
2505 & 2506**

