

To: All RedMax Distributors and Dealers

Subject: EBZ7500, EBZ7500RH, EBZ8500 & EBZ8500RH Repair Instruction

PRODUCT MODEL

PRODUCT SERIAL NUMBER

EBZ7500 (966 62 43-01)
EBZ7500RH (966 70 99-01)
EBZ8500 (966 62 45-01)
EBZ8500RH(966 71 00-01)

EBZ7500 : from #00000000 to #11100114
EBZ7500RH: from #00000000 to #11100272
EBZ8500 : from #00000000 to #11100260
EBZ8500RH: from #00000000 to #11100202
With Exception of Reworked Unit (See below)

Problem: Some individual units of the above stated models under certain conditions can experience piston, and/or Pre-Ignition failure that may result in a hole being melted in the crown of the piston. A preliminary analysis suggests the failure is primarily caused by leaf clogging the air intakes between frame and blower housing in combination with an engine lean condition.

Reworked Units Identification:

- Free flow net was cut (see page 3 for detail) for EBZ7500, EBZ7500RH, EBZ8500 and EBZ8500RH
or
- Carburetor has green line for EBZ8500 and EBZ8500RH

Repair: (Refer for details to page 2)

- Install Short Block Kit. Kit includes short block, 3 gaskets (carburetor, carb-block and muffler gaskets), carb-block, 4 carb-block mount bolts and spark plug.
#63 main jet is included for EBZ8500 and EBZ8500RH only.
S.B. P/N for EBZ7500 & EBZ7500RH: 579 65 16-01
S.B. P/N for EBZ8500 & EBZ8500RH: 579 65 17-01
- Cut Free Flow Net
- Replace Main Jet with #63 (EBZ8500 and EBZ8500RH only)
Jet P/N for EBZ8500 & EBZ8500RH: 579 60 53-01



Free Flow Net is cut



Green Line
(EBZ8500 Only)

Repair and Warranty Procedure: The standard flat rate time 13 units (78 minutes) for EBZ7500 and EBZ7500RH, 15 units (90 minutes) for EBZ8500 and EBZ8500RH. Each claim will be paid at your RedMax registered posted shop labor rate.

1. Fill attached free short block request form and send to your distributor service manager.

2. **IMPORTANT:** Repair unit by following these instructions in order provided.

3. Warranty Procedure

Enter product number " 966624301" for EBZ7500, "966709901" for EBZ7500RH "966624501" for EBZ8500 or "966710001" for EBZ8500RH in the "Product Number" field.

Warranty claim should be created using Product Serial Number in the "Serial Number" field.

Product Serial Number is on the blower housing and carton box.

"Authorization Code" field should be blank.

Select "Normal Warranty Claim" in the "Warranty Type" field.

Select "Failure Code" 122 in the Upper field (Component Code) and 07 in the Lower field (Defect Code)

Enter Bulletin # "SB11-03" in the "Work Performed" field.

Enter Q'ty "13" for EBZ7500 or EBZ7500RH, and "15" for EBZ8500 or EBZ8500RH to "Labor (P/N: 990505001 for US, P/N: 990505002 for Canada)"

Replaced short block is required to return.

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⚠ WARNING

Make sure that the engine has stopped and is cool before performing any service to the blower. Contact with rotating blower impeller fan or hot muffler may result in a personal injury. Make sure to wear proper clothes and gloves. Read Owner's / Operator's manual carefully before start repairing

Tools Required:

Crosshead Screwdriver, T-27 Wrench, M10&14 Box Wrench, Spark Plug Wrench or M16 long Socket. Torque Wrench, Side Cutter, Box Cutter, Loctite 242 (blue) medium strength. Loctite 515 (gasket sealer), Green Marker, Grease, Engine Tachometer, Impeller fan coupler puller (P/N: 577 40 97-01), Magneto Flywheel Puller (small jaw type-P/N: 504 90 90-02). Piston Stopper (P/N:521 34 51-01), Air gap (feeler) gauge (0.014 Inches-P/N: 516 88 03-01).

Repair Procedure

1. Preparation

- 1-1. Remove blower tubes from elbow.
- 1-2. Drain fuel from fuel tank. Pump purge to remove fuel from the carburetor. Store fuel in an approved container a minimum of 10 feet away from the work area.
- 1-3. Remove fuel lines from carburetor.
- 1-4. Remove fuel tank by removing two (2) T-27 fuel tank screws under the frame.
- 1-5. Remove stop switch wires and throttle cable from clamps on blower housing.
- 1-6. Disconnect stop switch wires .
- 1-7. Remove black throttle cable dust cover from top of carburetor.
- 1-8. Remove end of throttle cable from carburetor.
- 1-9. Remove air cleaner hose by loosening two (2) T-27 clamps (Fig. O)
- 1-10. Remove engine cover by removing five (5) T-27 screws.
- 1-11. Remove choke cup and carburetor by removing two (2) T-27 screws (Fig. P). Discard old 'carburetor to carb-block gasket'.
- 1-12. Remove carb-block by removing four (4) T-27 bolts. Discard old carb-block, old 'carb-block to cylinder gasket' and four (4) old T-27 bolts.
- 1-13. Remove muffler by removing tree (3) T-27 bolts. Discard old muffler gasket.
- 1-14. Remove recoil starter by removing four (4) T-27 bolts.
- 1-15. Remove ignition coil assembly by removing two(2) T-27 bolts. Make sure to remove 2 black insulator spacers between ignition coil and cylinder. (Fig. A)
- 1-16. Remove spark plug cap and spark plug, using spark plug wrench or M-16 long socket wrench. Discard old spark plug.
- 1-17. Install piston stopper.
- 1-18. Remove one (a) M-14 magneto flywheel mount nut. Position magneto flywheel to the thin, open side (Fig. B). Insert the ends of small jaw type flywheel pullet (Fig. C). Then, turn flywheel 90 degrees to be able to hook puller under magnets (thicker) portions (Fig. D). Remove flywheel. This procedure protects flywheel from damage.
- 1-19. Remove two (2) M-10 frame bottom shock mount nuts.
- 1-20. Remove two (2) T-27 front of frame upper shock mount screws.
- 1-21. Remove engine and blower housing from frame.

Clean leaves and debris from the inside of the frame.

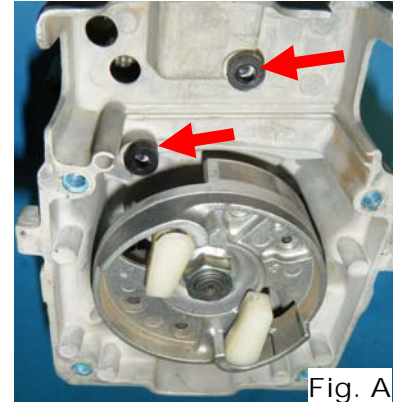


Fig. A

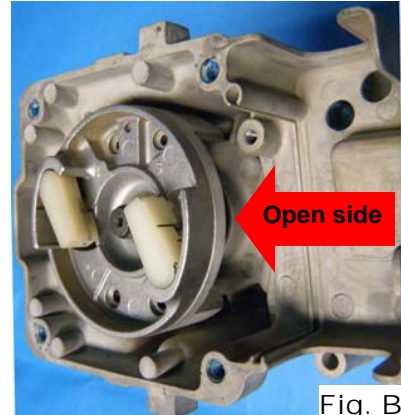


Fig. B

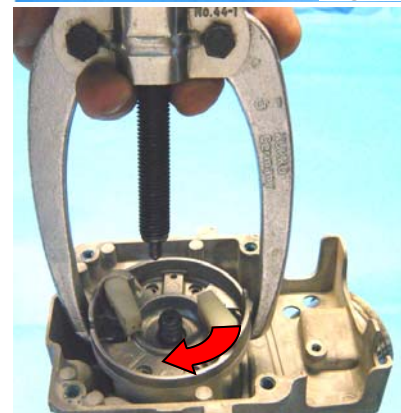


Fig.

C: Turn flywheel 90 degrees after

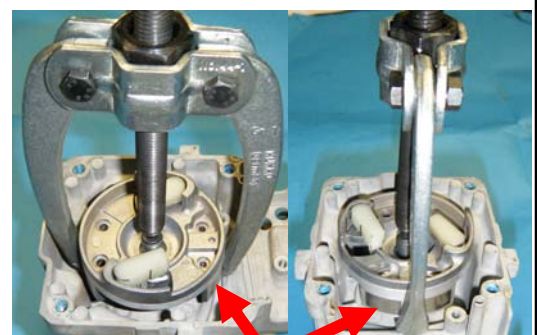


Fig. D

Magnets

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Repair Procedure

2. Free Flow Net Modification

Make 16 cuts leaving the last two (2) ribs on each side connected .
 See red mark place to remove. (Fig. E and F)



Fig. E

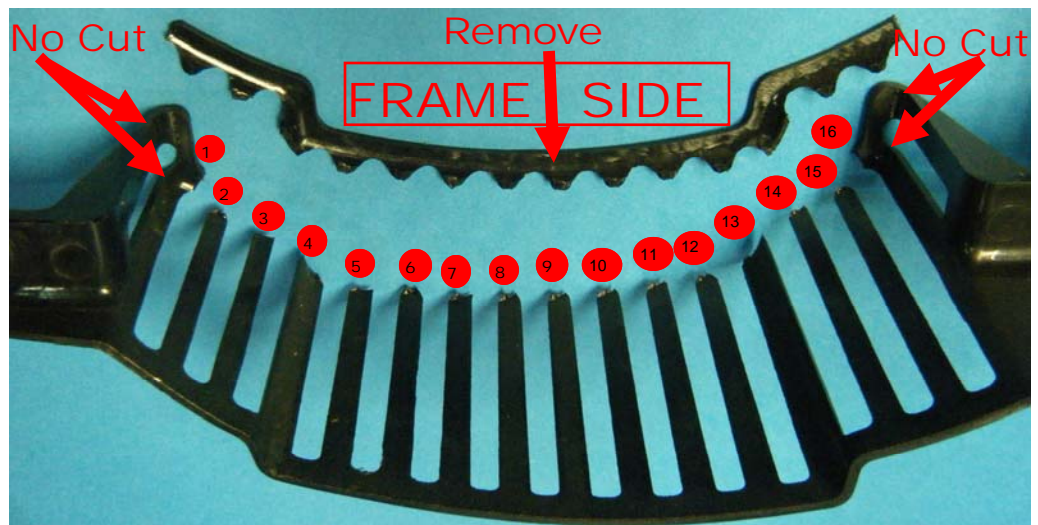


Fig. F

3. Short Block Replacement

- 3-1. Remove four (4) T-27 Impeller fan mount bolts in crisscross fashion.
- 3-2. Remove engine block from blower housing by removing four (4) T-27 crank case mount bolts in crisscross fashion.
- 3-3. Remove one (1) M-14 impeller fan coupler nut
- 3-4. Remove the impeller fan coupler, using puller (P/N: 577 40 97-01).
Remove key from crank shaft, using a side cutter.
- 3-5. Remove cylinder top plate by removing two (2) T-27 screws and install the top plate to the new short block. Tightening torque: 27-34 inch-lbs.
Install piston stopper to the new short block.
- 3-6. Install key and impeller fan coupler to fan side of crank shaft of the new short block (Fig. G). Install one (1) coupler nut, using M-14 box wrench and torque wrench. Tightening torque: 220-300 (18.5-25) inch-lbs (ft-lbs)
- 3-7. Scrape blower housing rib on engine side, if needed, using box cutter to make the muffler gasket contact surface flat. (Fig. H).
- 3-8. Install engine block to blower housing by installing four (4) T-27 crank case mount bolts with Loctite 242 (blue) in crisscross fashion.
Tightening torque: 55-65 inch-lbs
- 3-9. Install four (4) T-27 Impeller fan mount.
Tightening torque: 90-120(7.5-10) inch-lbs (ft-lbs.)
- 3-10. Apply Loctite 242 (blue) to two (2) T-27 front of frame upper shock mount screws and install. Make sure that screw heads are located in the bottom of oval holes in the frame. (Fig. I)
Tightening torque: 22-30 inch-lbs.
- 3-11. Install two (2) M-10 frame bottom shock mount nuts.
Tightening torque: 35-52 inch-lbs.

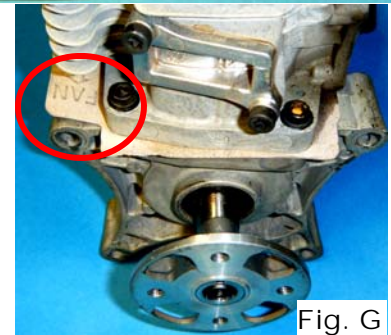


Fig. G

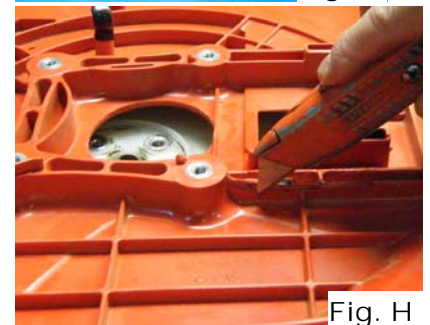


Fig. H

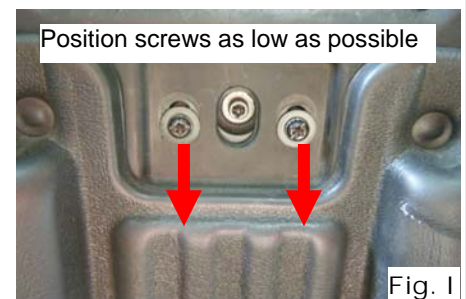


Fig. I

(Continue)

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Repair Procedure
3. Short Block Replacement (continued)

- 3-12. Install key to crank shaft, flywheel and one (a) M-14 flywheel mounting nut.
 Tightening torque: 220-300 (18.5-25) inch-lbs (ft-lbs).
- 3-13. Install two (2) black insulator spacers and ignition coil assembly, using two (2) T-27 bolts with Loctite 242 (blue)
 Tightening torque: 22-34 inch-lbs. Air gap: 0.014 Inches.
- 3-14. Install recoil starter by installing four (4) T-27 bolts with Loctite 242 (blue).
 Tightening torque: 27-39 inch-lbs.
 Align high tension cord and stop switch wires as shown (Fig J)
- 3-15. Remove piston stopper. Install spark plug (NGK CMR-7H, P/N: 506 61 51-01) and plug cap. Tightening torque: 80-110 (7-9) inch-lbs (ft. lbs).
- 3-16. Install new carb-block and new 'carb-block to cylinder gasket' coated by Loctite 515 (gasket sealer) by installing four (4) new T-27 Loctite pre-coated bolts in crisscross fashion. Tightening torque: 35-52 inch-lbs.

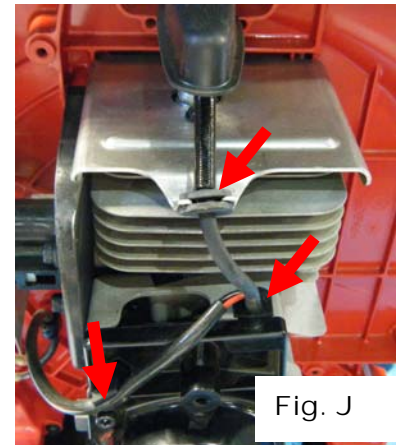


Fig. J

4. Main Jet Replacement-EBZ8500 and EBZ8500RH Only

- 4-1. Clean debris or dirt from carburetor by using solvent and blow dry with compressed air.
- 4-2. Remove four (4) crosshead screws from carburetor in crisscross fashion as shown in (Fig. K)
 Keep all screws remaining with carburetor pump body to be used in the same locations.
- 4-3. Remove pump body with fuel pump diaphragm from carburetor body.
- 4-4. Remove #61 main jet (Fig. O) and o-ring using finger. (Fig. L&M)
- 4-5. Remove o-ring from #61 main jet (Fig. N) and install the o-ring to the #63 main jet (P/N: 579 60 53-01) (Fig. M & P)
- 4-6. Install #63 main jet and o-ring flush to carburetor body using finger until main jet is seated in the carburetor body. (Fig. L)
- 4-7. Assemble pump body by secure four (4) crosshead screws in crisscross fashion as shown in (Fig. K).
 Tightening torque: 6.5-7.5 inch-lbs.
- 4-8. Mark carburetor body with green line for identification (Fig. Q)

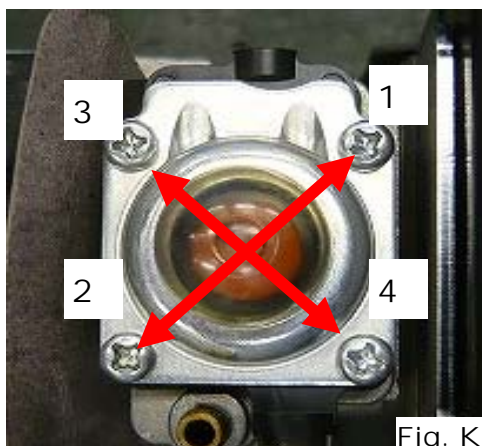


Fig. K

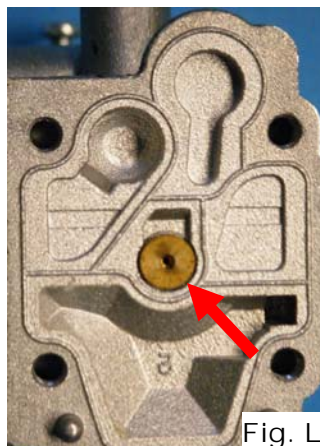


Fig. L



Fig. M

Fig. N

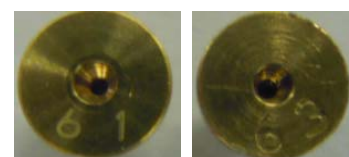


Fig. O

Fig. P



Fig. Q

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Repair Procedure

5. Completion

- 5-1. Assemble choke cup, carburetor, and new 'carburetor to carb-block gasket' (P/N: 577 08 96-01) coated by Loctite 515 (gasket sealer) by installing two (2) T-27 screws with Loctite 242 (blue).
Tightening torque: 26-39 Inch-lbs.
- 5-2. Assemble end of throttle cable to carburetor.
- 5-3. Install black throttle dust cable cover to top of carburetor.
- 5-4. Connect stop switch wires.
- 5-5. Clamp stop switch wires and throttle cable to blower housing.
(Fig. R: EBZ7500 and EBZ8500) (Fig. S: EBZ7500RH and EBZ8500RH)
- 5-6. Clean and apply film of grease to outside of air cleaner box and outside of choke cup lip, where air cleaner hoses are installed, to prevent fine dust entry.
Install air cleaner hose upper side first, then lower side.
Tighten two (2) clamps with T-27 wrench.
Align clamps with choke operation instruction decal.
Tightening torque: 18-26 Inch-lbs.
- 5-7. Install muffler with new gasket by installing three (3) T-27 bolts.
Two (2) longer bolts for upper mount. One (1) shorter bolt for lower mount.
Tightening torque: 70-100 (6-8) Inch-lbs (ft-lbs).
- 5-8. Install engine cover by installing five (5) T-27 screws.
Tightening torque: 27-34 Inch-lbs.
- 5-9. Install fuel tank to frame by installing two (2) T-27 fuel tank screws at the bottom of frame.
Tightening torque: 22-30 inch-lbs.
- 5-10. Install fuel lines to carburetor, yellow return line to curved pipe with clip and black fuel line to barbed pipe.
- 5-11. Assemble blower tubes
- 5-12. Fuel unit up. Start the engine and warm engine up for three (3) minutes at idle.
- 5-13. Adjust idle speed at 1,800-2,200RPM if needed.
- 5-14. Confirm full throttle speed. Make sure all blower tubes are in place.
Full throttle RPM should be between 7,000-7,300 for EBZ7500 or EBZ7500RH and 7,050-7,350 RPM for EBZ8500 or EBZ8500RH.
- 5-15. Submit warranty claim. Box replaced short block for return with copy of warranty claim.
- 5-16. Instruct user to inspect and clean free flow net before each usage as required in operator's manual.



Fig. R: EBZ7500 and EBZ8500



Fig. S: EBZ7500RH and EBZ8500RH

Send to your distributor service manager



RedMax NO CHARGE
SHORT BLOCK KIT
ORDER FORM (Revision 1)

FOR EBZ6500, EBZ7500 AND EBZ8500

Applicable Serial Number Range

00000000-11199999 for Over Heating, 00000000-20799999 for Crank Case Mount Breakage

DEALER INFO

DISTRIBUTOR		DATE
DEALER NAME		
AUTH RedMax DEALER #		
CONTACT PERSON		
PHONE NUMBER		
E-MAIL		

DEALER SHIP TO ADDRESS

STREET	
CITY	
STATE	
ZIP CODE	

CUSTOMER & BLOWER INFO

FAILURE INFO

YES/NO

CUSTOMER NAME		Overheating	
MODEL #		Crank Case Mount(s) Broken	
Date of Purchase		Impeller Fan Damage	
SERIAL #		Volute Case Damage	

CUSTOMER & BLOWER INFO

FAILURE INFO

YES/NO

CUSTOMER NAME		Overheating	
MODEL #		Crank Case Mount(s) Broken	
Date of Purchase		Impeller Fan Damage	
SERIAL #		Volute Case Damage	

CUSTOMER & BLOWER INFO

FAILURE INFO

YES/NO

CUSTOMER NAME		Overheating	
MODEL #		Crank Case Mount(s) Broken	
Date of Purchase		Impeller Fan Damage	
SERIAL #		Volute Case Damage	

CUSTOMER & BLOWER INFO

FAILURE INFO

YES/NO

CUSTOMER NAME		Overheating	
MODEL #		Crank Case Mount(s) Broken	
Date of Purchase		Impeller Fan Damage	
SERIAL #		Volute Case Damage	

PART NUMBER

DESCRIPTION

QUANT

579 65 56-01	Short Block Kit for EBZ6500/RH	
579 65 16-01	Short Block Kit for EBZ7500/RH	
579 65 17-01	Short Block Kit for EBZ8500/RH	