PREMIER Pro
Series

52B400E

OPERATORS MANUAL

SERIOUS RED MOWING MACHINES
Your mower is only as safe as the operator! Operator carelessness or error may result in serious bodily injury. Improper maintenance of the machine may also result in injury. Please read and follow these instructions on Safe Operation and be certain that anyone using this mower fully understands and follows these instructions.

1. Familiarize yourself with the controls and know how to stop this mower.

**WARNING:**
DO NOT allow children to operate the machine. DO NOT allow any adult to operate the machine without proper instruction.

2. Inspect your work area carefully. Remove debris from the area to be cut. Keep all bystanders away from the mowing area.

3. Avoid contact with moving parts. Keep hands and feet clear of the mower deck and all moving parts.

4. Never direct the discharge of material toward bystanders nor allow anyone near the machine while in operation.

5. Never tamper with safety devices or guards. If a guard or safety device is damaged or removed, replace it before operating the mower.

6. Handle gasoline carefully: use an approved gasoline container; fill the fuel tank to within 1" from the neck with good quality leaded or unleaded gasoline. Operator must wear proper shoes and clothing, which may also include safety glasses and ear protection.

**CAUTION:**
Never add fuel to the tank while the engine is running or hot. ALWAYS WAIT at least five minutes before refueling and REFUEL WITH THE ENGINE OFF. KEEP FUEL AWAY FROM SPARKS OR FLAMES. WIPE AWAY any fuel spillage BEFORE starting unit. Never fill the fuel tank indoors. Wipe up any spilled gasoline. Gasoline is highly flammable - NO SMOKING.

7. Mow only during daylight hours or under very good artificial light.

8. Do NOT mow in slippery conditions, keep a firm grip on the handle bars, NEVER RUN.

9. The safety shield over the grass discharge must always be bolted in place and in the down position unless the grass catcher back plate is completely installed.

10. Do NOT leave the operator position unless the engine has been killed and blades have stopped.

11. If a solid object has been hit by the blades, stop the machine and check for damage. Repair or replace damaged/broken part(s) prior to restarting the engine.

12. Do NOT allow anyone to stand or walk on the grass discharge side of the mower when the mower is in operation.

13. Do NOT mow close to drop-offs, deep ditches or other hazards. Mow hillsides very carefully by mowing across the face of slopes, not up or down. Do NOT mow on steep slopes.

14. To avoid burns, DO NOT TOUCH the engine or muffler immediately after operation.
Assembly Instructions

1. Remove inner parts box and handle from crate. Remove outside frame work so that the mower is setting on the pallet.

2. On a 36" mower, use 3 – 5/16" X 1 3/4" bolts and 3 – 5/16" whizlocks and bolt the bumper into place. (On the 48" there are 4 - bumper bolts required.) The whizlocks should go to the inside of the deck. When assembling a 48" mower, make sure that the bumper is flush with the deck on both ends of the bumper.

3. Using 6 – 3/8" X 1" bolts (3 – used for each caster) and 6 – 3/8" whizlock nuts, bolt the casters into place. Position whizlock nuts to the inside of the deck.

4. Using 2 – 5/16" X 1" bolts with 2 – 5/16" flat washers and 2 – 15/16" nyloc nuts, take the shifter lever with grip and bolt onto the top side of the shifter bracket on the transmission. Place the 5/16" flat washers on the slotted hole side of the shifter bracket under the 5/16" nut. Position the shift lever so that it slides freely along the top side of the shifter plate but still hits the stop for reverse.

5. Mount the gas tank using the 2 – nylon hold down straps, pulling tension on the buckles until secure. Attach the quick coupler, on the end of the fuel line, to the bottom of the tank. (See Fig. 1)

6. Using the remaining 4 - 3/8" X 1" bolts and the 4 – 3/8" nyloc nuts, bolt the upper handle into position. (Remember that there are 3 – height settings for the handle for operator comfort.) Route the wiring harness along the handle, plugging it into the blade control switch, using the screws to attach the harness to the Operator Presence Control switch. There is not a specific color for hooking up the harness.

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**SPECIFICATIONS**

**Belt Tension Guide**

<table>
<thead>
<tr>
<th>Belt</th>
<th>Inch Deflection</th>
<th>How to Adjust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine to Deck</td>
<td>1/2&quot;</td>
<td>Turnbuckle at Idler</td>
</tr>
<tr>
<td>Transmission Belt</td>
<td>1/2&quot;</td>
<td>Sliding Idler</td>
</tr>
<tr>
<td>Right Blade Drive Belt</td>
<td>1/2&quot; (48&quot;, 52&quot;, And 60&quot; only)</td>
<td>Threaded Rod to Idler</td>
</tr>
<tr>
<td>Wheel Drive</td>
<td>1/2&quot;</td>
<td>Self-Adjusting</td>
</tr>
</tbody>
</table>
Assembly Instructions

7. Using drive rods provided, turn them into the 5/16" swivel located in the left and right hand idler engagement bracket. Adjust the rods so that there is approximately 1/4" to 3/8" between the rod and the bottom of the thumb latch. Rods should be locked in place by using 4 – hair pin cotters and by placing a 5/16" flat washer to be inside of the drive handle between the drive lever and hair pin cotter. (See fig.2)

8. With the thumb latches locked in the neutral position, adjust the brake swivel until you feel a slight resistance when hooking it back to the idler assembly. Remember with thumb locks in the neutral position, you should be able to free wheel the machine. When the thumb locks are rotated all the way to the lock position, the brake should lock the wheel. At this time, you may also hook up the blade engagement rod, adjusting the length of the rod so the bell crank will not bottom out in the slot.

9. At this point, oil and fuel engine. Make sure that the air pressures in the rear tires are equal at (12 psi). Adjust the front tire pressures to (20 psi). Your mower is now ready for use.

Final Check / Adjustment

1. Adjust the brake control rod to obtain “free wheeling” with the drive levers in the neutral position and positive braking when the drive levers are squeezed close to the handle grips. Shorten the effective length of the brake rod to increase braking.

2. Check air pressure in drive wheels (12 psi) and caster wheels (20psi). This is critical for appropriate mower tracking.

3. Check for proper belt tension (see belt tension guide).

Keep a 1/8" to 1/4" clearance between belt guides and belts. Be sure the drive control rod is properly adjusted in the thumb latch. (See Fig 2.)

3. After a 10 hour “Break-In” period go through steps 1 thru 3.

4. Proper adjustments must be maintained to insure safe, trouble free, long life operation of the mower. After completing the foregoing instructions and recommended procedures you are ready to put the mower into operation.

⚠️ CAUTION:
Excessive belt tension may cause damage!!
Before Operating

- Know your machine top to bottom.
- Make certain all safety standards and instructions have been fully read and understood.
- Be acquainted with all “SAFETY INSTRUCTIONS” in this manual – to start.

1. Fill the fuel tank and open the fuel valve.
2. Shift the transmission to neutral.
3. Blades engagement lever must be in the “Off” position or back.
4. Thumb latches need to be in the “Neutral Lock” position.
5. Choke the engine as required and start.
6. After engine is running, push blade engagement lever forward to engage blades.
7. Shift the transmission to the desired gear (1 thru 4) for mowing, 5th gear is for transport only.
8. Squeeze the control levers and push forward on the thumb latches to unlock the levers. Slowly release control levers to engage the drive wheels.
9. In a normal mode the mower will travel in a straight line. To turn; squeeze the drive lever on the side in which you want to turn.
10. To STOP forward motion, squeeze both drive levers, lock thumb latches and shift the transmission to neutral.
11. This unit is equipped with “Operator Presence Controls” on the upper handle. When the operator leaves the operator position removing both hands from the “Operator Presence Control” levers it will cause the engine to shutdown.

**THIS FEATURE IS FOR YOUR SAFETY!**

⚠️ CAUTION:
Machine must be at a full “STOP” before shifting from forward to reverse or from reverse to forward. Failure to do so may result in personal injury and/or damage to the transmission.

⚠️ WARNING:
FAILURE TO FOLLOW THE PREVIOUS INSTRUCTIONS MAY RESULT IN SEVERE BODILY INJURY OR MECHANICAL FAILURE.
### HEIGHT ADJUSTMENT

#### REAR DECK MOUNT IN HIGHEST POSITION

<table>
<thead>
<tr>
<th>Spacers on Top of Caster Arm</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>1 7/8&quot; to 3 1/8&quot;</td>
</tr>
<tr>
<td>4</td>
<td>2 1/8&quot; to 3 3/8&quot;</td>
</tr>
<tr>
<td>3</td>
<td>2 1/2&quot; to 3 3/4&quot;</td>
</tr>
<tr>
<td>2</td>
<td>2 5/8&quot; to 3 7/8&quot;</td>
</tr>
<tr>
<td>1</td>
<td>2 7/8&quot; to 4 1/8&quot;</td>
</tr>
</tbody>
</table>

All spacers under caster arm = 3 1/4" to 1 1/2"

**NOTE:** Use 1/4" blade spacers to achieve cutting height between the above measurements.

#### REAR DECK MOUNT IN LOWEST POSITION

<table>
<thead>
<tr>
<th>Spacers on Top of Caster Arm</th>
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<tbody>
<tr>
<td>5</td>
<td>1 1/2&quot; to 2 3/4&quot;</td>
</tr>
<tr>
<td>4</td>
<td>1 3/4&quot; to 3&quot;</td>
</tr>
<tr>
<td>3</td>
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</tr>
<tr>
<td>1</td>
<td>2 5/8&quot; to 3 7/8&quot;</td>
</tr>
</tbody>
</table>

All spacers under caster arm = 2 7/8" to 4 1/8"

### LUBRICATION / MAINTENANCE

The following recommendations should be used to ensure proper and safe operation of the mower.

#### LUBRICATION

(Units Prior to Serial Number 33333)

**Grease Daily:**
- Idler Arm
- Caster Wheels and Caster Pivots
- Drive Wheels

**Grease Every 100 Hours:**
- Bell Crank Pivot Bearing

**Grease Every 250 Hours:**
- Cutter Housing Bearings

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**CAUTION:**

When greasing Cutter Housing, grease each one with **TWO PUMPS ONLY**. Excessive greasing can force seals out causing premature bearing failure.
LUBRICATION / MAINTENANCE

LUBRICATION
(Units After Serial Number 33333)

Grease Daily:
  Idler Arm
  Caster Wheels and Caster Pivots
  Drive Wheels

Grease Every 100 Hours:
  Bell Crank Pivot Bearing

NOTE:
The Peerless Transmission is “LIFETIME LUBRICATED”. If service is required, contact an authorized Peerless Dealer or Repair Center.

MAINTENANCE

1. Engine: For complete maintenance and operating information for your engine, please refer to your engine operating and maintenance manual provided by the engine manufacturer.

2. Belts: The drive and deck belts should be checked and adjusted after the first 10 hours of use and then every 50 hours from that point on.

3. Tires: Correct tire pressure is essential for efficient operation of the mower.

4. Check tire air pressure periodically. Inflate tires to the pressures listed:
   Drive Wheels = 12 psi
   Caster Wheels = 20 psi

5. Mower Blades: Check sharpness of mower blades after every 10 hours of operation.

To sharpen blades proceed as follows:
- Block the front end of the mower up or run front end up on ramps
- Remove blade by turning bolt counter clockwise.
- Sharpen blade with a hand file, electric grinder or blade sharpener. Wear gloves and eye protection when sharpening. Grind blade at original bevel.
- Check balance of blade by positioning the blade on a nail or blade balance pedestal. Grind the blade on the end that is heavier until both sides balance.
- Reinstall blades.

6. BATTERY:
   See battery manufacturer’s instructions for proper maintenance of battery.

WARNING:

AVOID SERIOUS INJURY OR DEATH:

- THE BATTERY CONTAINS SULFURIC ACID. AVOID CONTACT WITH SKIN, EYES OR CLOTHING. ANTIDOTE: INTERNAL – DRINK LARGE QUANTITIES OF WATER OR MILK. FOLLOW WITH MILK OF MAGNESIA, BEATEN EGG OR VEGETABLE OIL. CALL A PHYSICIAN IMMEDIATELY. EYES AND SKIN – FLUSH WITH WATER AND GET PROMPT MEDICAL ATTENTION.

- BATTERIES PRODUCE EXPLOSIVE GASES, KEEP SPARKS, FLAMES AND SMOKING MATERIALS AWAY. VENTILATE WHEN CHARGING IN AN ENCLOSED SPACE. WEAR EYE PROTECTION WHEN WORKING NEAR BATTERIES.

- KEEP OUT OF REACH OF CHILDREN.

CAUTION:

DO NOT ADJUST OR CHANGE ATTACHMENTS UNLESS SPARK PLUG WIRE HAS BEEN DISCONNECTED AND THE ENGINE HAS STOPPED.
SAFETY DECALS

In order to promote safe operation, Encore Mfg. Co., Inc. supplies safety decals on all products manufactured. Because damage can occur to safety decals through shipment, use or reconditioning, Encore will, upon request, provide safety decals for any of our products in the field at **No Charge**. Contact your authorized Encore dealer for more information.

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**CAUTION**

1. **READ INSTRUCTION MANUAL BEFORE OPERATING EQUIPMENT.**
2. **BE SURE THE OPERATING CONTROLS ARE LOCKED IN NEUTRAL BEFORE STARTING THE ENGINE.**
3. **MOWER SHALL NOT BE USED UNLESS ALL GUARDS ARE BOLTED IN PLACE.**
4. **KEEP FEET, HANDS, & ALL OBJECTS FROM UNDER DECK. KEEP PEOPLE AND PETS AT A SAFE DISTANCE.**
5. **USE CAUTION ON SLOPES.**
6. **BEFORE LEAVING OPERATOR’S POSITION:**
   - **A. LOCK DRIVE LEVERS IN NEUTRAL WITH LATCHES.**
   - **B. DISENGAGE ATTACHMENT CLUTCH.**
   - **C. SHUT OFF ENGINE.**
7. **WHEN ADJUSTING WHEELS BE SURE ENGINE IS OFF.**
8. **DISCONNECT SPARK PLUG WIRE BEFORE SERVICING OR CLEANING.**
9. **DO NOT ADD FUEL WHILE ENGINE IS WARM OR RUNNING.**

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**CAUTION**

OPERATE MOWER WITH CHUTE DEFLECTOR BOLTED IN PLACE, EXCEPT WHEN USED WITH GRASS CATCHER. DO NOT REMOVE GRASS CATCHER UNTIL BLADE OR BLADES HAVE STOPPED.

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**DANGER**

KEEP HANDS and FEET AWAY

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**OPERATOR MUST DISENGAGE CLUTCH BEFORE SHIFTING GEARS**
ENCORE PART #: 363344
WIRE HARNESS FOR 32B100E ; 12 HP BRIGGS
WIRE HARNESS FOR 36B100E ; 12 HP BRIGGS
WIRE HARNESS FOR 48B300E ; 16 HP BRIGGS
WIRE HARNESS FOR 52B300E ; 16 HP BRIGGS
WIRE HARNESS FOR 60B300E ; 16 HP BRIGGS
WIRE HARNESS FOR 60B400E ; 18 HP BRIGGS
WIRE HARNESS FOR 48B350EWT ; 16 HP BRIGGS
WIRE HARNESS FOR 48B450EWT ; 18 HP BRIGGS
WIRE HARNESS FOR 52B350E ; 16 HP BRIGGS
WIRE HARNESS FOR 52B450E ; 18 HP BRIGGS
WIRE HARNESS FOR 60B350E ; 16 HP BRIGGS
WIRE HARNESS FOR 60B450E ; 18 HP BRIGGS
WIRE HARNESS FOR WB32B12ES; 12 HP BRIGGS
WIRE HARNESS FOR WB36B12ES; 12 HP BRIGGS
ENCORE PART #: 363373
WIRE HARNESS FOR 48K450EWT ; 17 HP KAWASAKI
WIRE HARNESS FOR 52K450E ; 17 HP KAWASAKI
WIRE HARNESS FOR 52K550E ; 19 OR 20 HP KAWASAKI
WIRE HARNESS FOR 60K550E ; 19 OR 20 HP KAWASAKI
WIRE HARNESS FOR WB48K17ES; 17 HP KAWASAKI
ENCORE PART #: 363388
WIRE HARNESS FOR 32B100; 12 HP BRIGGS
WIRE HARNESS FOR 36B100; 12 HP BRIGGS
WIRE HARNESS FOR WB32B12; 12 HP BRIGGS
WIRE HARNESS FOR WB36B12; 12 HP BRIGGS
ENCORE PART #: 603027
WIRE HARNESS FOR 48B300; 16 HP BRIGGS
WIRE HARNESS FOR 52B300; 16 HP BRIGGS
WIRE HARNESS FOR 52B400; 18 HP BRIGGS
WIRE HARNESS FOR 60B300; 16 HP BRIGGS
WIRE HARNESS FOR 60B400; 18 HP BRIGGS

REAR VIEW OF SAFETY MODULE CONN.
363372

18 GA RED
TO ENGINE KILL

18 GA GREEN
TO ENGINE GND.

18 GA BLACK

18 GA BROWN

18 GA YELLOW

363208 OPC SWITCH
N/O

18 GA WHITE

363207 TRANS.NEUTRAL SWITCH
N/C

18 GA VIOLET

363164 BLADE SWITCH
N/O

363372
This warranty extends to the original retail purchaser only and commences on the date of original retail purchase. Any part of the Encore commercial mower manufactured by Encore Mfg. Co., Inc. and found in reasonable judgement of Encore Mfg. Co., Inc. to be defective in material or workmanship will be repaired or replaced by an authorized Encore Mfg. Co., Inc. dealer without charge for parts and labor. The Encore mower, including any defective part, must be returned to an authorized Encore service dealer within the warranty period. The expense of delivering the mower to the dealer for warranty work and the expense of returning it back to the owner after repair or replacement will be paid by the owner. Should any part prove to be defective within the two years of original purchase (90 days for rental purposes), this part will be replace F.O.B. Beatrice, Nebraska, without charge, provided, the defective part is returned to us transportation charges prepaid. Return Authorization is not required for cutter housings, electrical components, hydraulic components or belts. Return Authorization is required for all other components. The responsibility of Encore Mfg. Co., Inc. in respect to claim is limited to making the required repair or replacements, and no claim of breach of warranty shall be cause for cancellation or recession of the contract of sale of any Encore mower. Proof of purchase will be required by the dealer to substantiate any warranty claim. All warranty work must be performed by an authorized Encore service dealer. This warranty is limited to two years from the date of original retail purchase for any Encore mower that is used for commercial purposes or 90 days rental. This warranty DOES NOT cover any Encore mower that has been subject to misuse, neglect, negligence, accident or that has been operated in any way contrary to the operating instructions as specified in the Operator’s Manual. The warranty DOES NOT apply to any damage to the mower that is the result of improper maintenance, or to any mower parts that have not been assembled or installed as specified in the assembly instructions. The warranty DOES NOT cover any mower that has been altered or modified so as to adversely affect the intended use of the product, its operation, performance or durability. In addition, the warranty DOES NOT extend to repairs made necessary by normal wear or by the use of parts or accessories which, in the reasonable judgement of Encore Mfg. Co., Inc. are either incompatible with the mower or adversely affect its operation, performance or durability. This warranty DOES NOT cover the engine, which is warranted separately by the engine manufacturer and for different periods of time. This warranty DOES cover (if equipped) the battery for a period of 90 days. Encore Mfg. Co., Inc. reserves the right to change or improve the design of any mower without assuming any obligation to modify any mower previously manufactured. Encore Mfg. Co., Inc’s. obligation under warranty is strictly and excessively limited to repair or replacement of defective parts. Encore Mfg. Co., Inc. DOES NOT assume or authorize anyone to assume for them any other obligation. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Encore Mfg. Co., Inc. assumes no responsibility for incidental, consequential or other damages including, but not limited to expense of delivering the mower to an authorized service dealer and expense of returning it back to the owner, mechanic’s travel time, telephone or telegram charges, rental of a like product during the time warranty repairs are being performed, travel, loss of use of the mower, loss of time or inconvenience. Some states do not allow the exclusion or limitation of incidental or consequential damages so that above limitation or exclusion may not apply to you. This warranty gives you specific legal rights which vary from state to state.

ENCORE MFG. CO., INC. CANNOT BE RESPONSIBLE FOR THE WAY, OR CONDITIONS IN WHICH YOU OPERATE THE MOWER. USE COMMON SENSE AT ALL TIMES.