# OWNER'S / OPERATOR'S MANUAL



376 County Hwy. 563 / Midland City, AL 36350 / 1-800-897-3726



# **INTRODUCTION**

**CONGRATULATIONS!** You are now the owner of a Brown **EdgeMaster**™.

READ THIS MANUAL CAREFULLY! This manual will help you learn how to operate and service your **EdgeMaster**<sub>TM</sub> correctly. Failure to read and follow the instructions of this manual could result in personal injury or equipment damage. This manual should be considered a permanent part of your **EdgeMaster**<sub>TM</sub>. All operators should read and follow these instructions prior to operating the **EdgeMaster**<sub>TM</sub>.





# **TABLE OF CONTENTS**

SAFETY	1
OPERATION	5
TROUBLESHOOTING	7
WARRANTY	8
SERVICE	10
PARTS LIST	11
ASSEMBLY INSTRUCTIONS	12

All information, including illustrations and specifications, contained in this manual are based on the latest information available at the time of publication. The right is reserved to make changes, when deemed necessary, without notice.



# **SAFETY**

#### RECOGNIZE SAFETY INFORMATION

This is the safety-alert symbol. When you see this symbol in this manual or on your **EdgeMaster**<sub>TM</sub>, be alert to the potential for personal injury.



#### **UNDERSTAND SIGNAL WORDS**

**CAUTION** is used for general reminders of good safety practices



**WARNING** denotes a specific potential hazard.



**DANGER** is the most serious specific potential hazard.



These signal words are used in conjunction with the safety-alert symbol.

#### **FOLLOW SAFETY INSTRUCTIONS**

Read owner/operator manual.

Replace missing or damaged safety decals. Safety decals and this manual must be considered a permanent part of your **EdgeMaster**<sub>TM</sub>. Keep your **EdgeMaster**<sub>TM</sub> in proper repair. Safety decals, manuals and replacement parts are available through your BROWN dealer. Unauthorized modifications to the BROWN **EdgeMaster**<sub>TM</sub> are not recommended. This could impair the function, safety, and machine life. For any part of this manual that you do not understand, contact your BROWN dealer.



# **OPERATE EDGER SAFELY**

Do not let anyone operate edger without reading this manual.

Keep edging area clear of people and pets.

Wear protective clothing and eye and footwear.

Do not use edger unless all guards are in place.

Reduce ground speed on slopes, rough ground, and corners.

Operate edger from handle bar position only.

Disengage blade prior to starting engine.

Do not run engine indoors.

Do not put hands or feet near or under blade.

Do not touch muffler or other hot parts.

Do not lift edger when engine is running.

Do not leave edger unattended when engine is running.

Operate edger only in daylight.

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# WEAR PROTECTIVE CLOTHING

Wear close-fitting clothing appropriate for the job.

Wear a hearing protective device to protect from loud or uncomfortable noise.

Wear proper eye protection. Safety goggles are supplied with each BROWN **EdgeMaster** $_{\text{TM}}$ .

Wear appropriate foot wear.

Wear gloves when changing or replacing blades.



#### **HANDLE FUEL SAFELY**

Fuel is highly flammable. Handle with care.

Stop engine before refueling.

Do not refuel while smoking or near open flames.

Always fill fuel tank outdoors.

Keep edger clean of oil, grease, and dirt.

Clean up spilled fuel immediately.

Never store machine where fumes may reach flame or spark.



### **AVOID INJURY FROM THROWN OBJECTS**

Before operating edger:

Be sure all guards are in place.

Clear all objects and debris that may be thrown by blade from edging area.

Clear area of people and pets.



# AVOID ROTATING BLADE

Be sure blade guard is in place.

Do not adjust curb depth while blade is turning.

Do not put hands or feet near blade while engine is running.

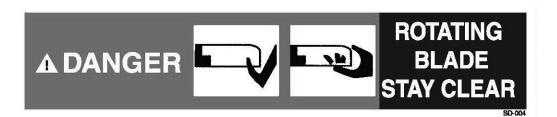
# **READ AND FOLLOW SAFETY SIGNS**

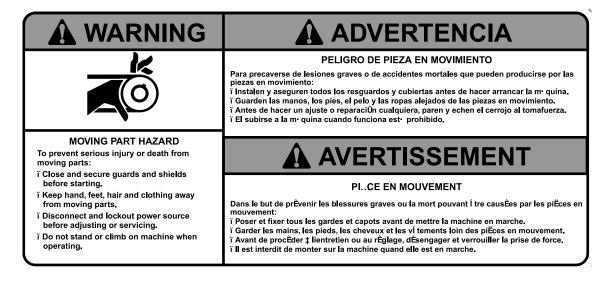
# **AWARNING**

#### **HELP AVOID INJURY**

- Read owners manual
- Always wear eye protection
- Keep shields in place
- Keep others away

SD-003





# **OPERATING INSTRUCTIONS**

NOTICE: NEW ENGINES SHIPPED WITH MACHINES ARE NOT SERVICED. ADD OIL TO CRANKCASE BEFORE STARTING.



# **WARNING: GASOLINE IS EXTREMELY FLAMMABLE AND** IS EXPLOSIVE UNDER CERTAIN CONDITIONS.

**NOTE:** FOR FURTHER INFORMATION CONCERNING THE SAFETY, OPERATING, MAINTENANCE, ETC. OF THE PARTICULAR ENGINE SUPPLIED WITH YOUR BROWN EdgeMasterTM, SEE THE EN-GINE OWNER'S MANUAL THAT IS SUPPLIED TO YOU WITH THE EdgeMaster™.

#### **BEFORE STARTING ENGINE**

#### 1. CHECK MACHINE

- A. Read and be familiar with equipment operating instructions.
- B. Be sure you have the proper blade for your edging purpose. The E-104H will accommodate blades up to 10" long. The blade must have a 1/2" arbor hole.
- C. Check blade retaining nut for tightness. Tighten blades hand tight with an eight inch wrench. Do not overtighten nut if an impact wrench is used.
- D. Be sure belt and pulleys are properly aligned and adjusted. Be sure belt stops are properly adjusted.
- E. Check blade guard for proper alignment and tightness.
- F. Check all other nuts and bolts for tightness.

#### 2. CHECK ENGINE

- A. Read and be familiar with manufacturer's operating and safety instructions for engine.
- B. Check oil level and add if necessary. Do not over-fill.
- C. Check air filter and clean frequently.
- D. Use only clean fuel. Unleaded fuel is recommended in all engines.
- E. Be sure muffler and exhaust deflector are installed, are in proper position, and are in good operating condition.

#### 3. START ENGINE

- A. Be sure belt tensioner is in disengaged position and that no tension is on the belt.
- B. Turn ignition to "ON" position.
- C. Close choke if engine is cold.
- D. Pull start cord rapidly.
- E. As the engine warms, gradually move the choke lever to the "OPEN" position.



**WARNING:** Do not operate the machine until area is cleared of people, pets, automobiles, etc. that might be damaged by projectiles.



**WARNING!** Do not operate machine without blade guard in place.



**WARNING!** Operator must wear eye protection when operating the Edge Master<sub>tm</sub>. (Eye goggles are provided with each machine.)

#### 4. ENGAGE BLADE / SET CUTTING DEPTH



**CAUTION!** Blade will begin to turn when the belt tensioner lever is moved forward.

- A. Move belt tensioner lever forward to tighten belt and set cutting depth.
- B. Insert locking pin into appropriate hole for desired cutting depth.

#### **5. ADJUST CURB HEIGHT**



**CAUTION!** adjust curb height before starting engine.

- A. Place left rear tire of edger on the curb.
- B. Loosen adjustment handle on front wheel assembly and right rear wheel assembly.
- C. Lift edger frame to level position by pushing the handle to the left until frame is level.
- D. Re-tighten wheel adjusting handles (The edger will work on curbs up to 10" high.)
- E. Proceed with operating procedures.

# **TROUBLESHOOTING**

PROBLEM	CAUSE	SOLUTION
A. Engine does not start.	<ol> <li>Engine switch in "OFF" position.</li> <li>Engine flooded.</li> <li>Out of fuel.</li> <li>Spark plug wire loose or disconnected</li> </ol>	<ol> <li>Switch to "ON"         position.</li> <li>Open choke         completely.</li> <li>Fill fuel tank.</li> <li>Reconnect wire</li> </ol>
	5. Defective spark plug.	5. Replace spark plug.
B. Other engine problems.	1	1. See engine owner manual.
C. Burning belts.	1. Pulleys worn	1. Replace pulley
C. Durning Deits.	excessively.  2. Pulleys out of alignment.	Realign pulley
D. Excessive vibration.	<ol> <li>Blade bent or broken.</li> <li>Blade bearings worn.</li> </ol>	<ol> <li>Replace blade.</li> <li>Replace bearings</li> </ol>



# WARRANTY STATEMENT

#### LIMITED WARRANTY

BROWN PRODUCTS INC. hereby warrants that Brown's EdgeMaster™ products will be free from defects in material and workmanship under normal use according to the provisions and limitations herein set forth. All parts, specifically EXCLUDING expendable "wear" parts, that become unserviceable, due to defective material or workmanship, within one year / 12 months from date of the original retail purchase, shall, at Brown's option, be repaired or replaced.

#### **LIMITATIONS**

The obligations of Brown for breach of warranty shall be limited to products manufactured by Brown; (1) that are installed, operated, and maintained according to Brown's instruction furnished and/or available to the purchaser upon request; (2) that are installed according to all other applicable Federal, State, and Local codes or regulations; and (3) that the purchaser substantiates were defective in material and workmanship notwithstanding that they were properly installed and correctly maintained as set forth and were not abused or misused.

The obligation of Brown shall be limited to replacing or repairing the defective product, at the option of Brown. Brown shall not be responsible for any labor or cost of removal or repairing or re-installment of its products and shall not be liable for transportation costs to and from its plant in Midland City, Alabama.

Use of parts for modification or repair of the EdgeMaster<sub>TM</sub> or any component part thereof not authorized or manufactured by Brown specifically for the EdgeMaster<sub>TM</sub> shall void this warranty.

This warranty shall not apply to any damage to or caused by; (1) FORCE MAJEURE, Act of God, or other accident not related to an inherent product defect; or (2) abuse, misuse, or neglect of the EdgeMaster, including any damage caused by improper assembly, installation, adjustment, or faulty instruction of the purchaser.

Other than as expressly set forth hereinabove, Brown makes no other warranty, express or implied, with respect to the EdgeMaster, including but not limited to any merchantability or fitness for a particular purpose.

In no event shall Brown be responsible for any incidental or consequential damages of any nature suffered by purchaser or any other person or entity caused in whole or in part by the EdgeMaster<sub>TM</sub>.

Any person or entity to whom this warranty extends and who claims breach of warranty against Brown must bring suit thereon within one year from the date of occurrence of such breach of warranty or be forever barred from any and all legal or other remedies for such breach of warranty.

Brown is not responsible for and hereby disclaims any undertaking, representation, or warranty made by any dealer, distributor, or other person that is inconsistent with or in any way more expansive than the provisions of this limited warranty.

This warranty grants specific legal rights and shall be read in conformity with applicable state law. In some jurisdictions, the applicable law mandates warranty provisions that provide greater rights than those provided herein. In such case, this limited warranty shall be read to include such mandated provisions; and any provision herein that is prohibited or unenforceable in any such jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or un-enforceability without invalidating the remaining provisions and without affecting the validity of enforceability of such provisions in any other jurisdiction(s).

#### STATEMENT OF POLICY

In accordance with our established policy of constant improvement, we reserve the right to amend these specifications at any time without notice.

#### **ENGINE WARRANTY**

Warranty of all engines and engine parts is the sole responsibility of the particular engine manufacturer. See engine warranty in the engine manual. Engine problems must be checked and approved for warranty by an authorized engine manufacturer's service center. Brown Products Inc. is not an authorized service center for any engine manufacturer and accepts no responsibility for engine warranties, either expressed or implied.

#### **WARRANTY BY MANUFACTURER**

Dealer/distributor understands and agrees that the manufacturer extends only the following warranty to its customers. In the event dealer/distributor extends any additional warranty such as enlarging the scope or period of warranty or undertaking a warranty of fitness for any particular purpose or obligation not encompassed in manufacturer's warranty, dealer/distributor shall be solely responsible therefore and shall have no recourse against manufacturer with respect thereto.

# **SERVICE**

#### 1. ENGINE SERVICE

A. See owner's manual for service, maintenance requirements and procedures for engine.

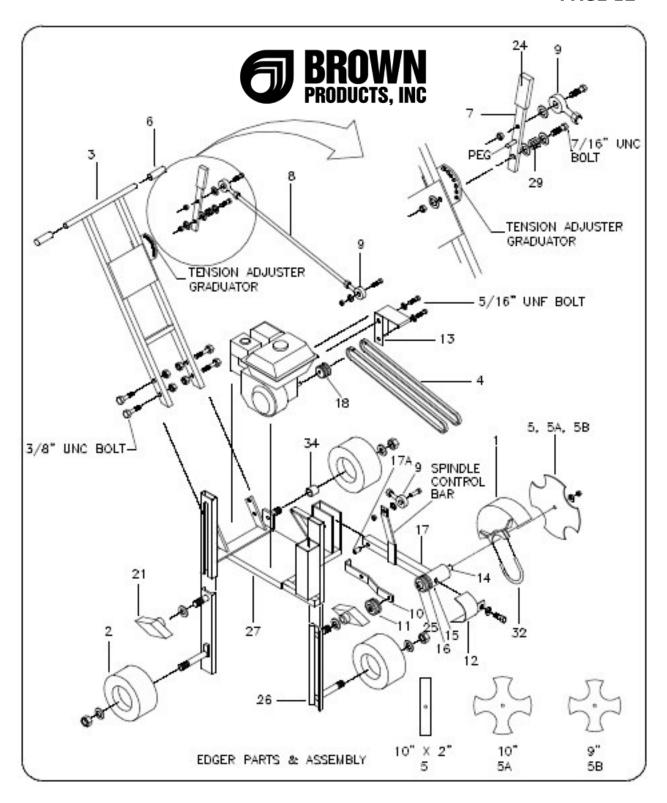
#### 2. EDGER SERVICE

- A. Check all nuts and bolts for proper tightness before initial operation and periodically thereafter.
- B. Check blade periodically. If worn excessively, replace.
- C. Check belt for wear. If necessary, replace.
- D. Check tension on belt and adjust if necessary.

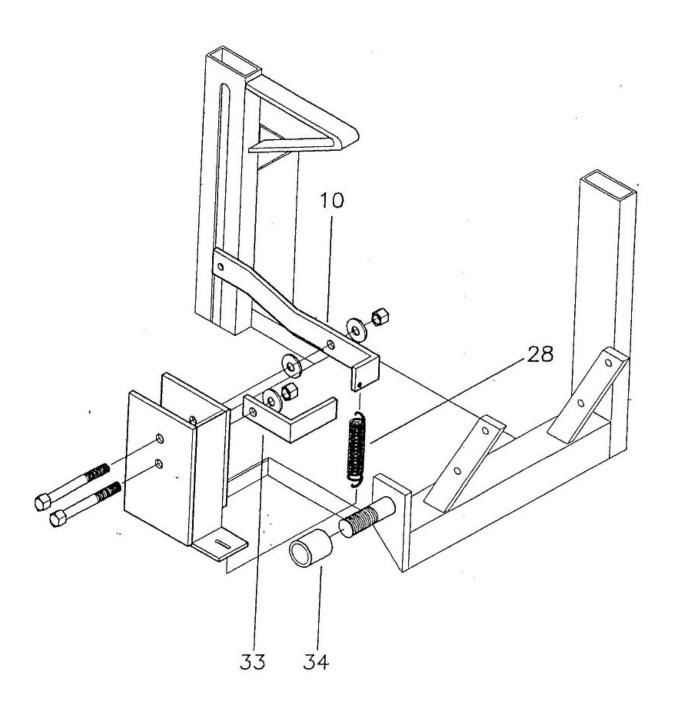
WARNING! MAKE CERTAIN THAT BLADE BOLT AND NUT ARE TIGHT AND IN GOOD CONDITION. INSPECT FREQUENTLY.

# E-104H EdgeMaster™ PARTS LIST

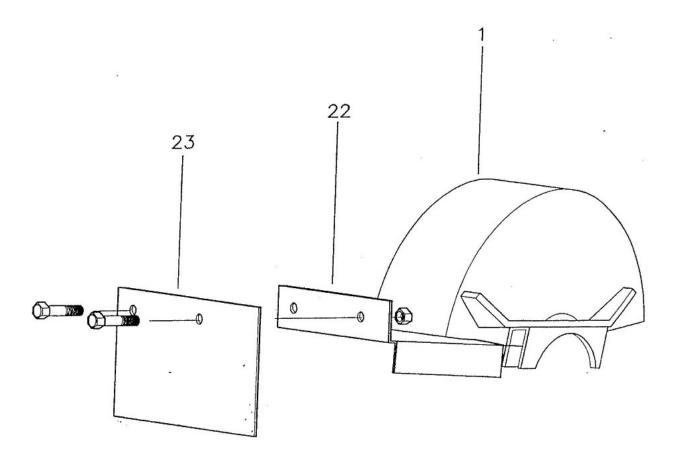
REF. NO.	PART NO.	DESCRIPTION	NO. REQ.
1	E-100-001	GUARD, BLADE 10"	1
2	12-32A	TIRE AND WHEEL ASSY.	3
3	E-100-003	HANDLE ASSY.	1
4	E-200-002	BELT	2
5	E-100-005	BLADE, EDGER 10"	1
6	12-02	HANDLE GRIP	2
7	E-100-007	LEVER, BELT TENSIONER	1
8	E-200-008	ROD, BELT TENSIONER CONTROL	1
9	E-100-009	ROD END	2
10	E-200-010	IDLER ARM	1
11	12-22-2	PULLEY, IDLER	1
12	E-100-012	BELT GUARD (FRONT)	1
13	E-200-013	BELT GUARD (REAR)	1
14	E-200-014	BLADE BOLT ASSY. (1/2" X 8 1/2" Gr. 8 w/ lock nut)	1
15	12-16	SPINDLE BEARING	2
16	780-09	PULLEY, SPINDLE	1
17	E-100-017	SPINDLE ARM	1
18	701-02-2	PULLEY, ENGINE	1
19	E-100-020	DECAL, WARNING	2
20	E-100-021	DECAL, DANGER	1
21	E-200-023	WHEEL ADJUSTING HANDLE	2
22	E-200-024	BRACKET, RUBBER FLAP	1
23	E-20-025	RUBBER FLAP	1
24	E-100-026	HANDLE GRIP, LEVER	1
25	e-200-27	SPINDLE	1
26	E-100-031	INNER WHEEL SLIDE	2
27	E-200-032	FRAME	1
28	12-05	SPRING, IDLER ARM	1
29	E-100-036	SPRING, LEVER	1
30	12-19	1/4" x 1 1/2" KEY	1
31	E-100-038	3/16" x 1 1/4" KEY	1
32	E-100-039	BLADE GUARD CLAMP	1
33	E-200-040	BELT STOP, L-SHAPED	1
34	E-200-041	SPACER, 5/8" WHEEL	1













# ASSEMBLY INSTRUCTIONS

EdgeMaster™: MODEL E-104H

#### STEP 1:

Mount adjustable wheel mounts / inner wheel slides (1) into wheel slide bracket (2). After inner wheel slide (1) is in place, install 1/2" SAE flat washer (3) and wheel adjust handles (4) onto inner wheel slide (1). Slide red 5/8" spacer (5) over left rear axle. Mount wheels to axles with valve stems to the outside. Secure wheels with 5/8" nylon lock nuts and 5/8" SAE flat washers (6). Do not overtighten, as wheels may not turn freely.

#### STEP 2:

They key stock has been installed onto the engine shaft, with the end of the key stock near flush with the end of the engine shaft. Pulley has been mounted onto shaft, with the set screws facing toward the engine. The set screws are installed, but have not been tightened at this time. This allows the pulley to be moved in order to align the pulley. Do not use a hammer to tap on the pulleys. Use a rubber mallet only if needed. (NOTE: pulleys are cast iron and are easily broken).

#### STEP 3:

Insert bushing (7A) into spindle arm. Install spindle arm (7) onto frame at spindle attaching bracket (8). Refer to drawing on page 20; Place  $1/2" \times 2 3/4"$  bolt (9) through top hole (10) in bracket (8) to hold spindle arm. Install 1/2" SAE flat washer (11), idler arm and pulley assembly (12), another 1/2" SAE flat washer (13) and 1/2" nylon jam nut (14). Tighten to allow continued movement of idler arm assembly and spindle arm assembly. Attach idler arm spring (15) to holes (16) at rear of spindle assembly attaching bracket (8) and idler arm (12).

Install belt stop (17) to inside plate of spindle attaching bracket (8) through lower hole (18) with  $3/8" \times 2 1/2"$  bolt (19), 3/8" washer and 3/8" nylon lock nut (20). Do not tighten nut yet.

Raise spindle arm assembly (7) until it is parallel to the ground. Place some type of object under the bearing housing to temporarily hold the housing assembly in place.

At this point in the assembly, the engine mounting bolts still have not been tightened. Tighten one set screw on engine pulley shaft and then back off screw slightly until pulley slides freely on shaft. Place a straight edge against inner edge of rotor pulley and outer edge of engine pulley. Align pulleys by either sliding engine pulley as necessary on the shaft or by moving the engine or both until straight edge is flush against both pulleys.

Once pulleys are aligned, tighten engine mounting bolts at the frame. Recheck alignment. If pulleys are not aligned, repeat the alignment steps above. If pulleys are still in alignment, tighten one set screw on engine pulley. Remove other set screw, place threadlock on set screw and replace and tighten set screw. Remove other set screw, place threadlock on it, replace and tighten.

Install the 2 belts on the rotor and engine pulleys. (NOTE: use only industrial grade kevlar belts.)

#### Step 4:

Bolt handle (21) onto frame using four  $3/8" \times 2"$  bolts and 3/8" nylon lock nuts (22).

#### Step 5:

Bolt the belt tensioner control rod (23) through the 1/2" hole located on the belt tensioner lever (24), using a 7/16" x 1 1/2" bolt, 7/16" lock washer and 7/16" nylon lock nut. This 7/16" lock washer also serves as a spacer between the tensioner lever (24) and the control rod end (25). (The control rod end (25) should be mounted onto the outer side of the handle.) Bolt the other end of the control rod to the inner slide of the spindle control bar (26) using a 7/16" x 1 1/2" bolt, 7/16" lock washer (27) and a 7/16" nylon lock nut. (NOTE: this 7/16" lock washer also serves as a spacer between the spindle control bar and the control rod end.)

#### Step 6:

Install rear belt guard (28) using two  $5/16'' \times 3/4''$  fine thread bolts and flat washers (29). (These bolts are bagged separately from the other hardware.) The rear belt guard is mounted directly to the aluminum engine block behind the engine pulley. (CAUTION: Do not overtighten bolts into the aluminum engine black as this could cause the threads to strip in the block.) With belt tensioner lever (24) in full forward position, front edge of belt guard should be 1/2'' above belts. (NOTE: to adjust, bend belt guard by hand.) Install front belt guard (30) to spindle bearing housing using one  $5/16'' \times 3/4''$  course thread bolt and flat washer.

#### Step 7:

Move the belt tensioner lever (24) forward, placing the peg into the lowest position/hole on the tension adjuster graduator (31). Adjust the length of the control rod (23) at the rod ends (25) to allow bottom of front belt guard to be 3/8" above the ground. After adjustment, tighten lock nuts on rod ends and bolts securing rod ends to the machine.

Bolt the hood (32) onto the spindle housing (33) using the 2 1/2" muffler clamp (34) and two 5/16" nylon lock nuts and washers. Do not completely tighten the nuts at this time. With the belt tensioner lever (24) in the full forward position, tilt the hood back until the rubber flap clears the ground by approximately 1/8". There should be approximately 1/4" space between the outer end of the spindle housing and the inside back wall of the hood. Tighten nuts on muffler clamp.

With belt tensioner lever in full forward position, adjust front belt stop (17) so it is positioned approximately 1/8" below the bottom of the belts. Tighten bolt (19) to hold belt stop (17) in place. Do not overtighten, as this may cause the spindle attaching bracket (8) to hinder movement of spindle assembly.

#### STEP 8:

Remove 1/2" nylon lock nut, lock washer and flat washer (35) from the blade axle. Place blade (up to 10" blade) onto blade axle. Replace washers and nut.

#### STEP 9:

Re-check to insure that all bolts and nuts have been properly tightened.

#### STEP 10:

Fill engine with unleaded gasoline fuel and oil as directed in engine manual. Read engine and **EdgeMaster**™ operating manual before operating.

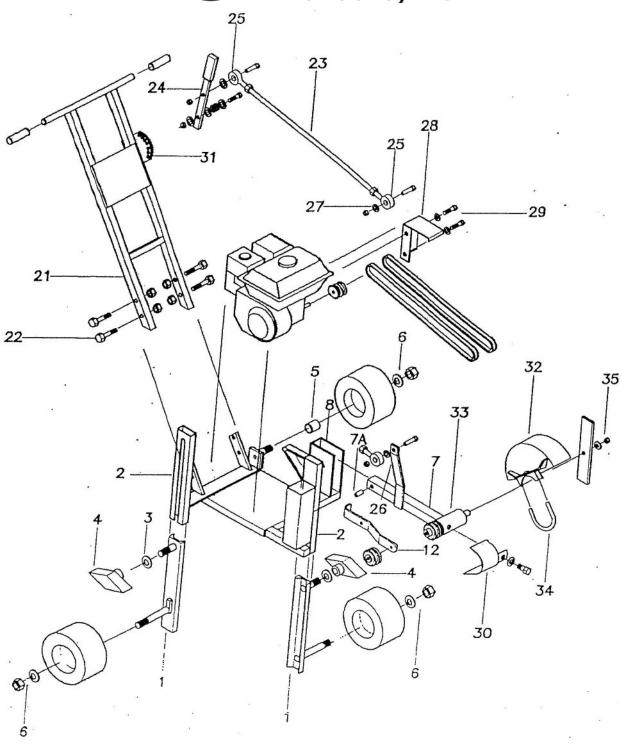
#### NOTE!!

If you have any questions or complications, please call BROWN PRODUCTS INC. at 1-800-897-3726

# **ASSEMBLY INSTRUCTIONS**

1. Inner wheel slide	18. Lower hole
2. Wheel slide bracket	19. 3/8" x 2 1/2" bolt
3. 1/2" flat washer	20. 3/8" flat washer & nylon lock nut
4. Wheel adjuster handles	21. Handle
5. 5/8" red spacer	22. 3/8" x 2" bolts and nylon lock nuts (4 each)
6. 5/8" flat washer and nylon lock nut	23. Belt tensioner control rod
7. Spindle arm assembly	24. Belt tensioner lever
7A. Spindle arm bushing	25. Control rod end
8. Spindle arm attaching bracket	26. Spindle control bar
9. 1/2" x 2 3/4" bolt	27. 7/16" lock washer
10. Upper hole	28. Rear belt guard
11. 12" SAE flat washer	29. 5/16" x 3/4" fine thread bolts & washers (2)
12. Idler arm and pulley assembly	30. Front belt guard
13. 1/2" SAE flat washer	31. Tension adjustment graduator
14. 1/2" nylon jam nut	32. Hood
15. Idler arm spring	33. Spindle housing
16. Idler arm spring attaching bolts	34. Muffler clamp
17. Belt stop	35. Blade axle lock nut

# BROWN PRODUCTS, INC



EDGER ASSEMBLY



