

SET-UP INSTRUCTIONS

For REAR ENGINE RIDERS

The following instructions cover the set-up of the Rear Engine Rider. The unit is shipped with steering, fuel tank, and seat assemblies detached. Complete each of the following steps carefully.



WARNING



Do not attempt to start or operate this unit until all assembly steps have been completed. Serious injury or equipment damage may result.

UNCRATING

1. Remove the top and side crating, parts boxes, literature package, and all packing materials from in and around the unit.
2. Carefully cut and remove the bands securing the unit to the crate bottom.
3. Open the parts boxes and identify the components:

Fuel tank

Canister/holder assembly

Steering wheel

Foam steering shaft cover

Seat

Water bottle and holder (not all models)

Hardware bag containing:

- 1 - Thrust bushing, 5/8" ID x 1-5/16" OD
- 1 - Cotter pin, 3/16 x 1"
- 1 - Bushing cover
- 1 - Roll pin, 1/4 x 1-1/2"
- 2 - Tie rod bushings
- 2 - Flat washers, 3/8"
- 2 - Cotter pins, 5/32 x 1"
- 2 - Differential grease plugs
- 2 - Torx screws, self-tapping, 1/4 x 1/2"
- 1 - Clamp, fuel vent hose
- 2 - Seat brackets
- 4 - Carriage bolts, 5/16 x 1"
- 4 - Bolt retainers, 5/16
- 4 - Flange screws, self-tapping, 5/16 x 1/2"
- 2 - Center lock flange nuts, 5/16"
- 2 - Seat knob spacers
- 2 - Seat knobs
- 1 - Seat switch
- 2 - Center lock nuts, 1/4"
- 2 - Self-tapping screw, #10 x 1/2" (models with water bottle only)

4. Carefully stand the machine on its rear bumper, and remove the crate bottom from the assembly area.
NOTE: Keep the machine on its rear bumper during the next few assembly steps.

MOWING DECK

1. Cutting Blade

- A. Check the torque of the blade mounting bolts - 50 ft. lbs.
- B. Check blade straightness per operator's manual.



WARNING



Wear heavy leather gloves when handling or working around cutting blades. Blades are extremely sharp and can cause severe injury.

STEERING COMPONENTS

1. Steering Shaft

- A. Push the steering shaft (A, Figure 1) into place.
NOTE: Some units may have a wire tie securing the steering shaft in place. If so, remove the wire tie.
- B. Tap the upper bushing (B, Figure 2 (next page), installed) so that it contacts the control panel (A).
- C. Place the thrust washer (C) on top of the bushing.
- D. Install the 3/16" x 1" cotter-pin (D) into the steering shaft above the thrust washer.
- E. Install the bushing cover (E) over the cotter-pin, thrust washer and bushing.
- F. Slide the foam steering shaft cover (F) over the steering shaft.

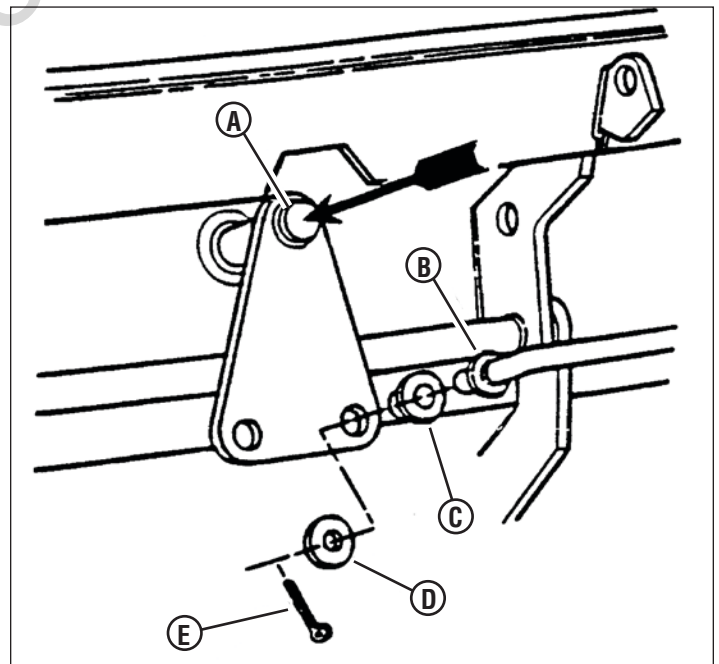


Figure 1

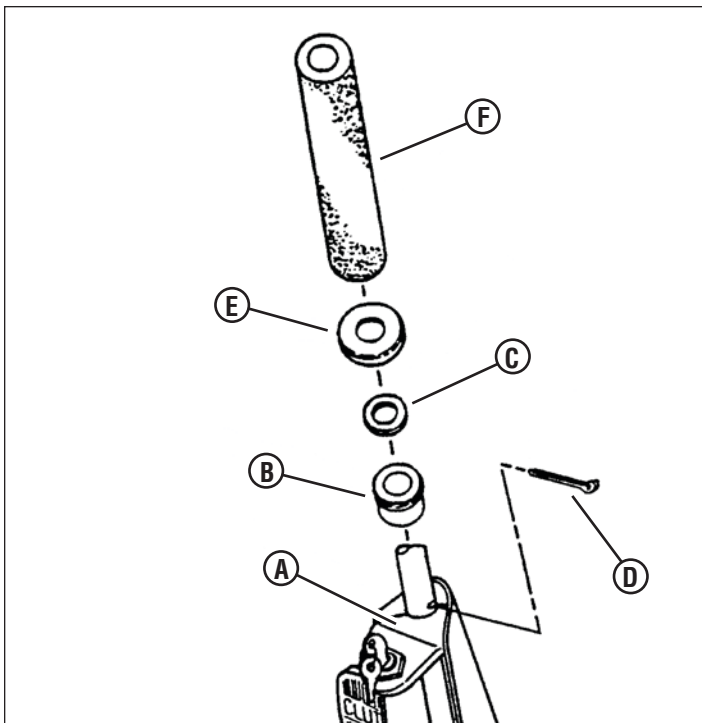


Figure 2

2. Steering Wheel Installation

NOTE: For more space between the seat and steering wheel, the steering wheel can be rotated 180 degrees from the typical position. The logo in the center of the steering wheel can be snapped out and rotated also.

- Slide the steering wheel (A, Figure 3) onto the steering shaft. Normally, the offset of the steering wheel should be towards operator's seat.
- Align the holes in the steering wheel and steering shaft. Support the steering wheel and drive the 1/4" x 1-1/2" roll pin (B) into the steering wheel and steering shaft.

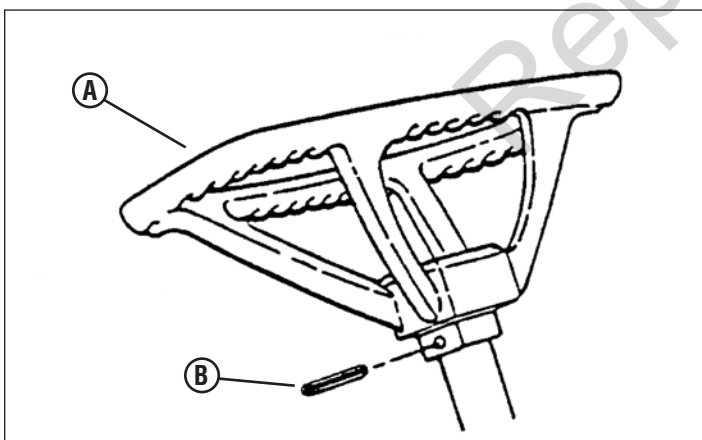


Figure 3

3. Installing Tie Rods

- Install the bushings (C, Figures 1 & 4) onto the tie rods (B).
- Install the tie rods between the steering shaft (A, Figure 1) and steering arms (A, Figure 4). Secure with two 3/8" flat washers (D, Figures 1 & 4) and 5/32" x 1" cotter pins (E).

NOTE: On some models, the tie rods come assembled.

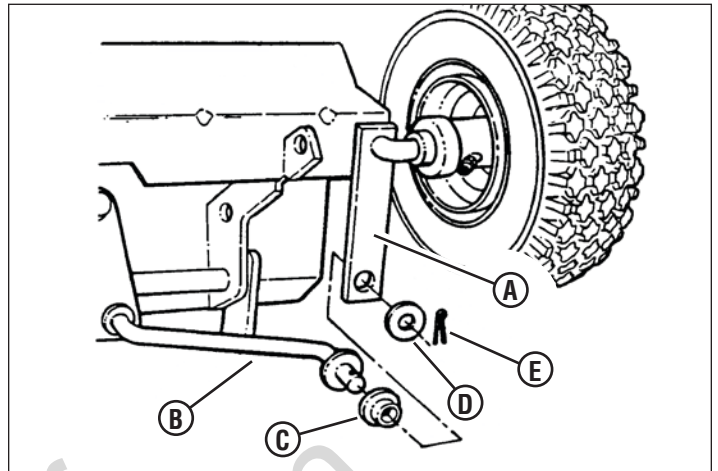


Figure 4

LUBRICATION

1. Differential

- Perform normal lubrication of the Rear Engine Rider. Check the differential for proper lubricant levels. (Refer to the Operator's Manual.)

2. Chain Case

- Perform normal lubrication of the Rear Engine Rider. Check the chain case for proper lubricant levels. (Refer to the Operator's Manual.)

After completing lubrication, carefully lower the unit to the floor to continue set-up.

FUEL SYSTEM

1. Fuel Tank Installation

- Insert the fuel tank (A, Figure 5) into the fuel tank bracket (B).

IMPORTANT: Carefully guide the fuel barb on the bottom of the fuel tank (C, inset) through the hole in the bracket (D). Improper installation may result in damage to the fuel barb and possible fuel leakage.

- Install the canister/holder assembly (A, Figure 6) over the fuel tank. Press down on the canister/holder assembly while securing the bottom of the assembly to the tank bracket with two torx screws (B). Tighten securely.
- Install the hose clamp (B, Figure 7) approx. 1" onto the end of the vent hose (A). Connect the vent hose to the vent on the top front section of the fuel tank (C), then move the hose clamp toward the end of the hose.

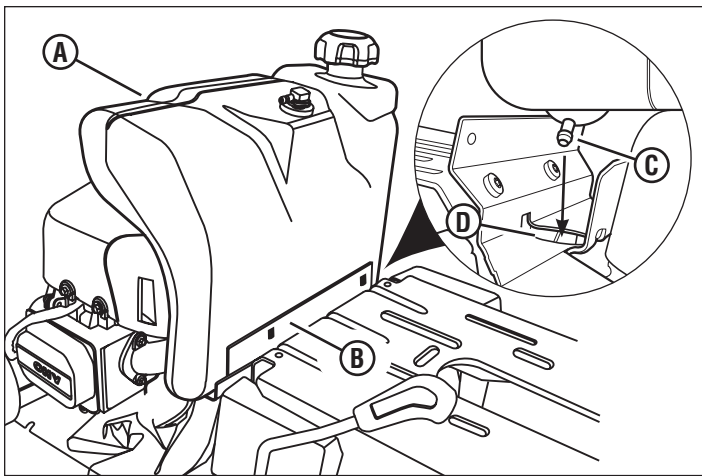


Figure 5

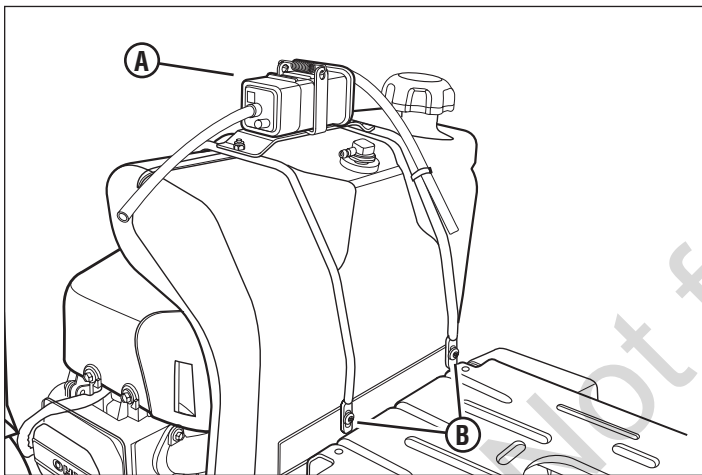


Figure 6

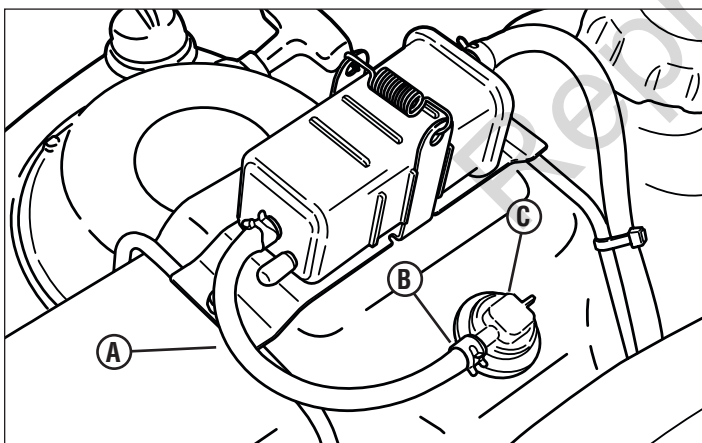


Figure 7

2. Fuel Line

- A. Install the fuel line (A, Figure 8) fully onto the fuel barbs on the bottom of the fuel tank (B). Secure with the hose clamp (C). NOTE: The hose clamp should be placed approximately 1/8" from the end of the hose.

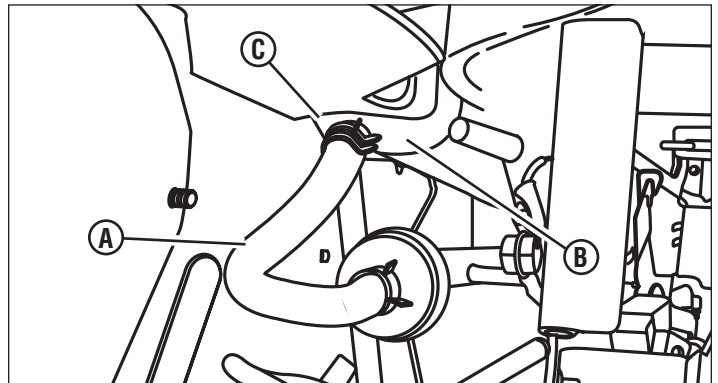


Figure 8

OPERATOR'S SEAT

1. Seat Bracket Installation

- A. Insert the 5/16" carriage bolts (B, Figure 9) into the seat brackets (A). Secure the carriage bolts with the bolt retainers (C).
- B. Secure the seat brackets onto the bottom of the seat (A, Figure 10) with the self-tapping flange screws (B). Tighten securely. NOTE: Make sure the seat brackets are installed with the carriage bolts facing outward.

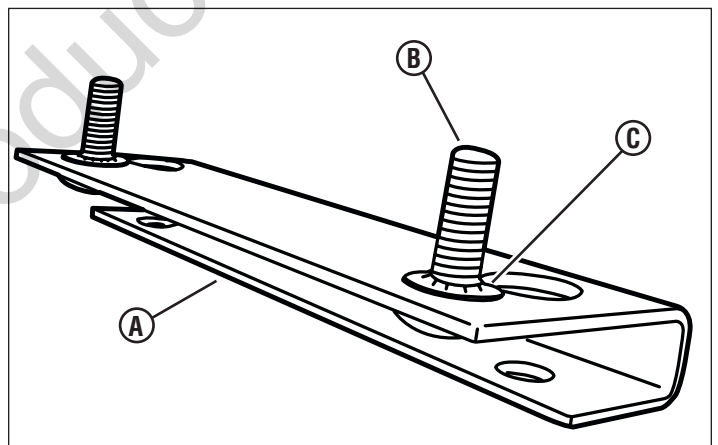


Figure 9

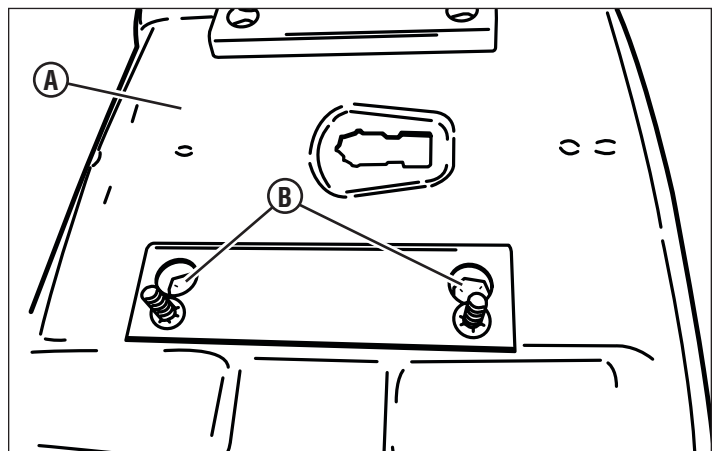


Figure 10

2. Seat Switch Installation

- A. Insert the seat switch (A, Figure 11) into the bottom of the seat (B).
- B. Slide the switch toward the rear of the seat, and pull up to snap into place (Figure 12).
- C. Make sure both tabs (A, Figure 13) are locked to the outside edge of hole.

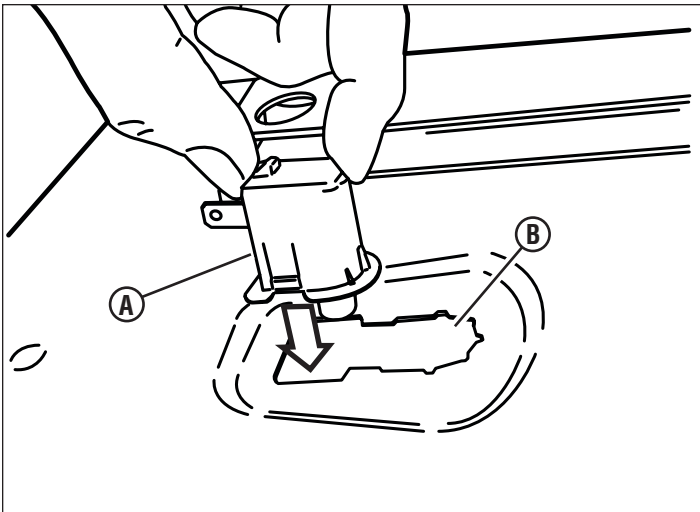


Figure 11

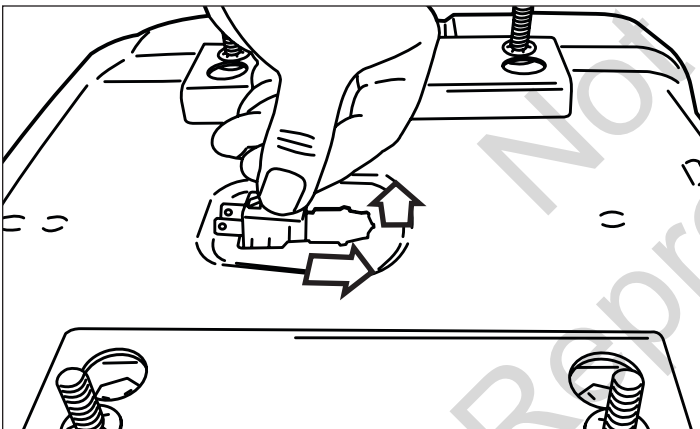


Figure 12

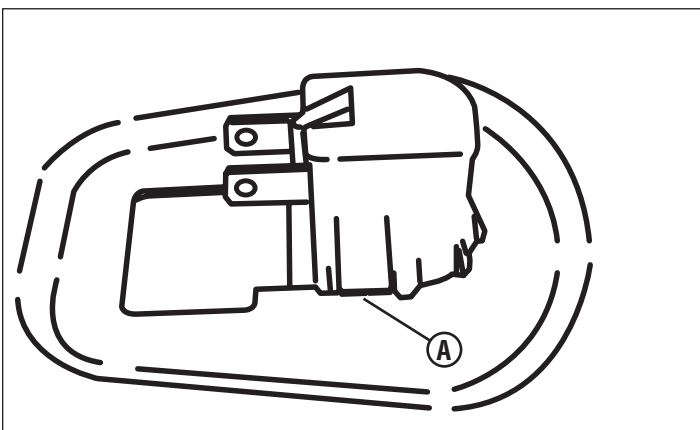


Figure 13

3. Seat Installation

- A. Position the seat (A, Figure 14) onto the seat pedestal (B).
- B. Install two 5/16 center lock flange nuts (C) onto the rear seat bolts. Tighten the nuts securely, then loosen 1 to 1-1/2 turns to allow the seat to slide freely.
- C. Install the two seat knob spacers (D) onto the front seat bolts, followed by the two seat knobs (E).
- D. Adjust the seat to the desired position. Tighten the seat knobs to secure the seat in position.
- E. Connect the switch wiring harness (A, Figure 15) to the seat switch (B, under seat). Make sure the locking tab (C) locks into place on the switch.

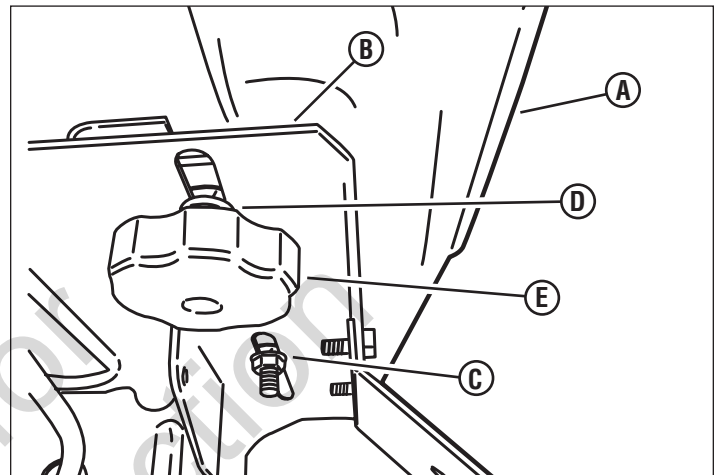


Figure 14

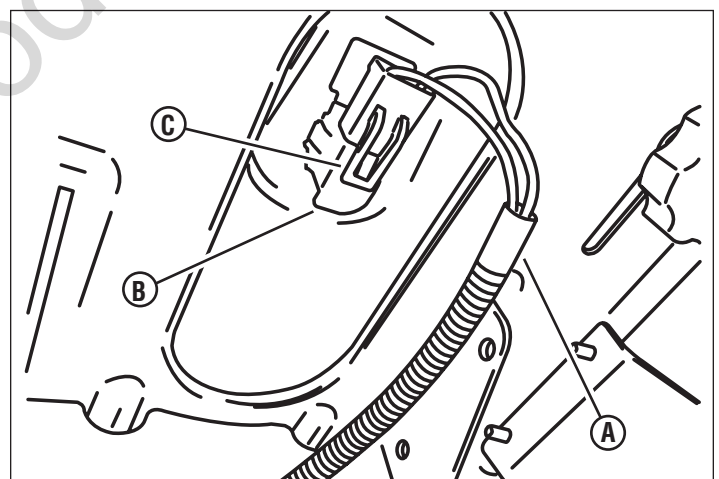


Figure 15

BATTERY CHARGING and INSTALLATION

This unit is equipped with a valve-regulated (sealed) non-spillable battery. It is maintenance-free and requires no service. However, it does require charging before being placed into service.



WARNING



The battery on this unit requires the use of a constant voltage (CV) battery charger designed for valve regulated (sealed) non-spillable batteries. Attempting to use a standard battery charger may result in damage to the battery. DO NOT use "BOOST" chargers on the battery. DO NOT attempt to charge battery while installed on the unit.

1. BATTERY REMOVAL

- A. Remove the battery cover (A, Figure 16) by pulling each side away from the ratchet fasteners (B).

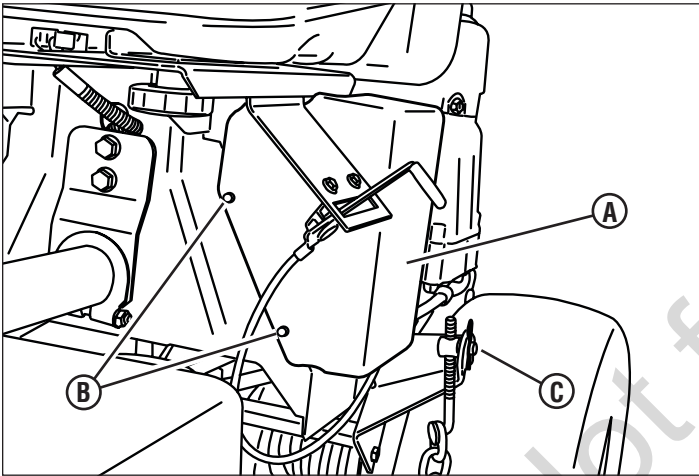


Figure 16

- B. Remove the hardware (A, Figure 17) securing the battery hold-down bracket (B), and remove the bracket.
- C. Remove the battery from the battery compartment.

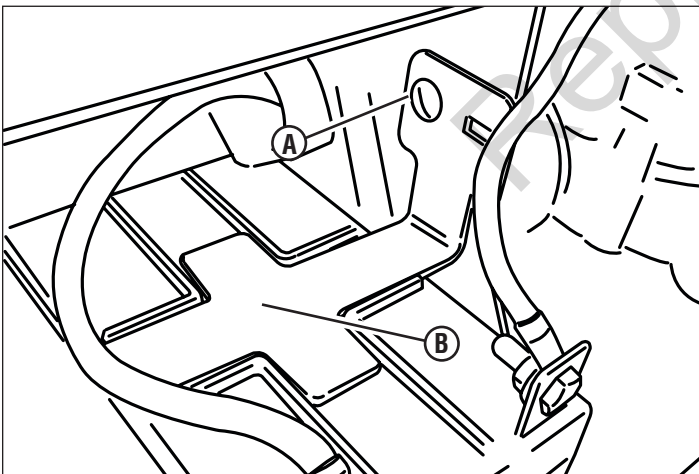


Figure 17

3. BATTERY CHARGING

- A. Place the battery in a well-ventilated area.
- B. Connect a 12-volt **constant-voltage** battery charger to the battery terminals; RED to positive (+) and BLACK to negative (-) terminal.
- C. Charge the battery for 2 to 4 hours..



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BATTERY INSTALLATION

- A. Re-install the battery into the battery compartment, with the terminals facing outward.
- C. Install the positive (+) cable (A, Figure 18) first., securing with the 1/4" center lock nuts. Place the positive (+) terminal insulator (B) over positive terminal and cable. Install negative (-) cable (C) last, after the positive terminal insulator has been installed.
- D. Reinstall the battery hold-down bracket.
- E. Reinstall the battery cover. NOTE: The negative cable will need to be routed over the side of the battery cover.

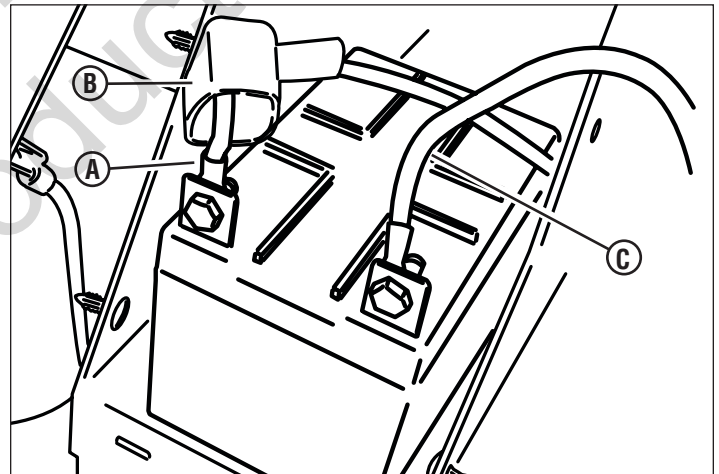


Figure 18

DISCHARGE DEFLECTOR

The discharge deflector (A, Figure 19) on some models is shipped in the "UP" position. Remove the rubber band, lower the discharge deflector, and secure to the deck with the carriage bolts, flat washers, and wing nuts (B) furnished in the deck.

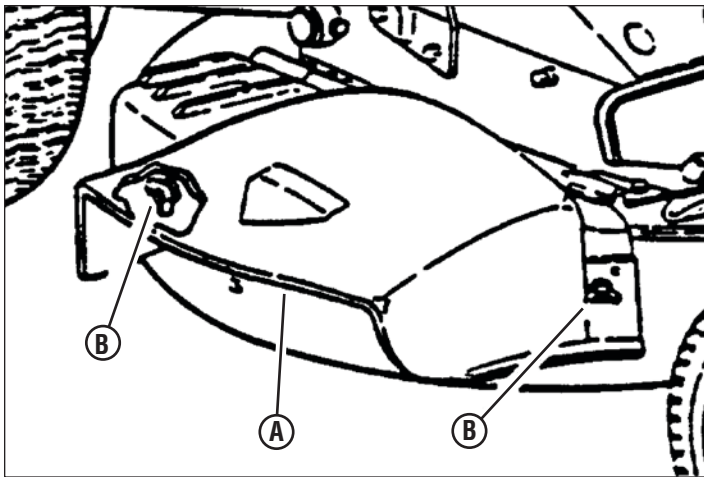


Figure 19

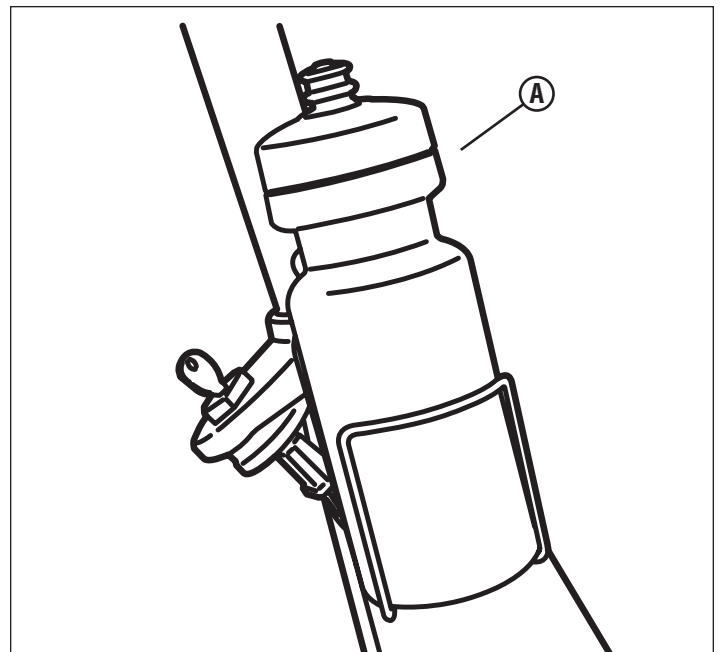


Figure 21

WATER BOTTLE (not all models)

1. Water Bottle Holder Installation

- Attach the water bottle holder (A, Figure 20) to the right side of the steering column with two hex washer self-tapping screws (B). Tighten securely.
- Insert the water bottle (A, Figure 21, next page) into the holder.

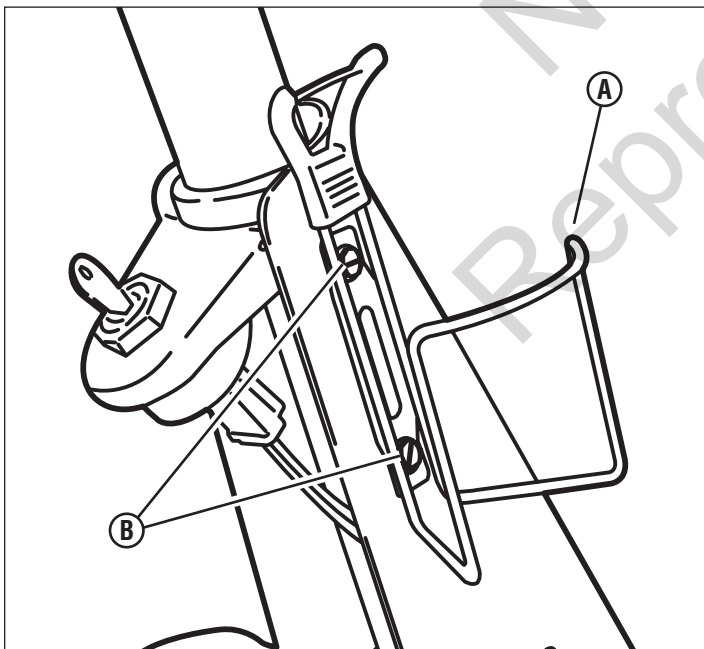


Figure 20

ELECTRICAL CIRCUIT

The electrical connection at the engine is shipped disconnected to protect the electrical system when the battery is installed and **MUST BE THE LAST STEP** in preparation.

- Connect the electrical circuit at the rear of the engine (Figure 22). NOTE: Typical Briggs engine pictured.

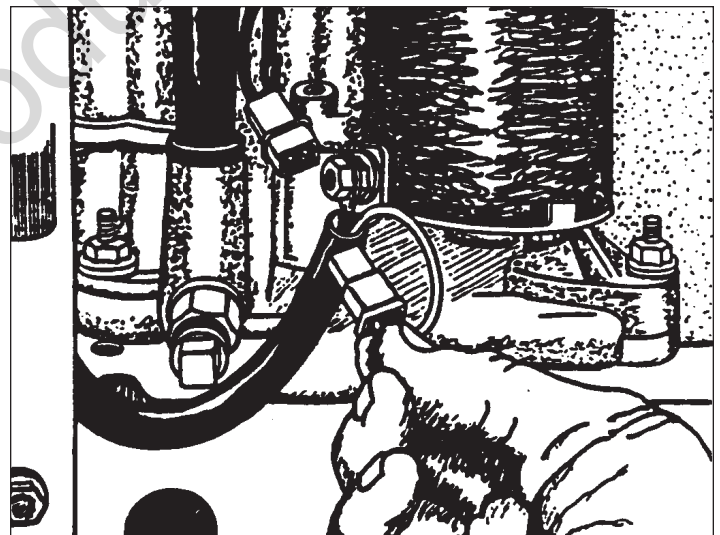


Figure 22

LUBRICATION and FUEL

1. Engine

- Perform normal engine service, oil and fuel, according to the engine manufacturer's recommendations found in the Engine Owner's Manual.

PRE-OPERATION CHECKLIST

Complete all items on the Pre-Operation Checklist as instructed.

Not for
Reproduction

PRE-OPERATION CHECKLIST

Initial adjustments have been made and operational tests performed prior to shipping the machine. Due to the possible effects of shipping, handling and storage, it is recommended that all of the following items be verified and necessary final adjustments made at time of setup. It is strongly recommended that all the items also be checked prior to placing the machine into service.

SET-UP CHECKLIST

- _____ STEERING WHEEL and steering shaft assembled.
- _____ TIE RODS connected.
- _____ LUBRICATION of entire unit completed.
- _____ OPERATOR'S SEAT installed and tightened and seat switch connected.
- _____ FUEL TANK ASSEMBLY installed and fuel line connected.
- _____ GRASS DEFLECTOR, MULCH COVER or CATCHER ADAPTER and assembly positioned, secured, checked.
- _____ BATTERY charged per instructions and installed into battery compartment on machine.

CUTTING BLADE & MOWER

- _____ BLADE RETAINING hardware checked for proper tightness.
- _____ BLADE TIP CLEARANCE inside lower edge of mower checked and corrected as needed.
- _____ BLADE STRAIGHTNESS checked and adjusted as required.
- _____ MOWER CUTTING HEIGHT settings checked and adjusted as needed (with tires properly inflated).
- _____ MOWER SIDE TO SIDE level checked and adjusted as needed (with tires properly inflated).
- _____ MOWER FRONT TO REAR setting checked and adjusted as needed (with tires properly inflated).
- _____ BLADE LEVER checked and adjusted as required.
- _____ BELT TENSION checked and adjusted as required.
- _____ REVERSE LOCKOUT MECHANISM shifter will not go into reverse when blade pedals are depressed.

PRE-START CHECKS & SERVICES

- _____ TIRES checked and inflated to correct pressures: Front tires 15 psi; Rear tires 12 psi
- _____ ENGINE OIL level checked.
- _____ DIFFERENTIAL check lubricant and add as needed.
- _____ CHAIN CASE check lubricant and add as needed.
- _____ YOKE ASSEMBLY checked for freedom of movement.
- _____ FUEL added to tank and system checked for leaks. Refer to Engine's Owner's Manual for fuel specifications.
- _____ BATTERY reinstalled and properly connected with red boot over positive terminal.

OPERATIONAL TESTS

- _____ CHECK SEAT SWITCH for proper function
- _____ INTERLOCK SYSTEMS checked to insure proper functioning.
- _____ ENGINE STARTED and throttle control settings checked.
- _____ IGNITION SWITCH checked to insure engine stops when turned to OFF position.
- _____ PARKING BRAKE tested to insure proper operation.
- _____ CLUTCH/BRAKE tested for proper operation and adjusted as required.
- _____ BLADE STOPS in 3 seconds or less after releasing the blade pedal. Adjust blade brake as required.
- _____ BLADE LEVER can be moved to OFF position with blade pedal depressed.