

# SET-UP INSTRUCTIONS & PRE-OPERATION CHECKLIST

## SNAPPER LARGE FRAME ZERO TURNING Z-RIDER with MID MOUNT MOWER

**INTRODUCTION:** These instructions cover the set-up of the Snapper Large Frame Mid Mount Z-Rider Mower. Complete each of the following steps carefully. Review and complete each item as instructed on the Pre-Operation checklist. The Snapper Product Registration card must be filled out and sent to Customer Service department at Snapper when completed.

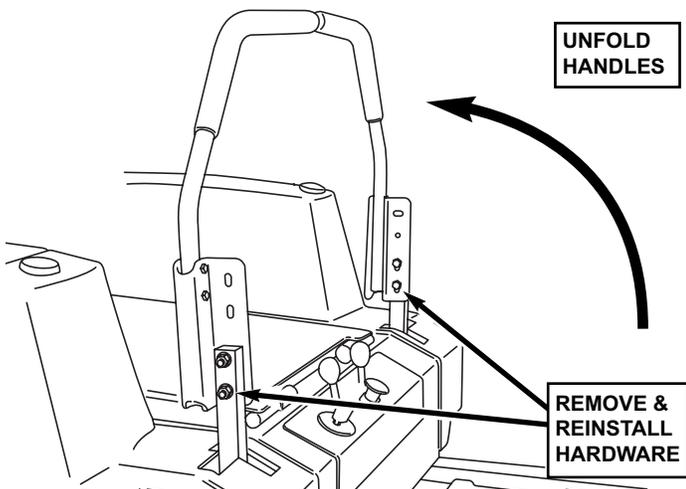
**IMPORTANT:** The battery for this unit is maintenance-free. It is filled with acid and is sealed. Do not attempt to open the battery. Pay close attention to the precautionary statements on the battery and in these instructions. If charging is needed (see below), you will need an automotive type battery charger to activate the battery for use.

**STEP 1:** Remove machine from the container.

**STEP 2:** Assemble motion control levers:

- A.** Carefully remove wire ties securing folded handles to machine.
- B.** Remove noted hardware from motion control lever blocks. See Figure 1.
- C.** Unfold motion control lever handles, and secure with removed hardware. See Figure 1. Tighten all hardware securely.

**NOTE:** Motion control levers may require adjustment. Refer to Operator's Manual for adjustment procedures.



**FIGURE 1**

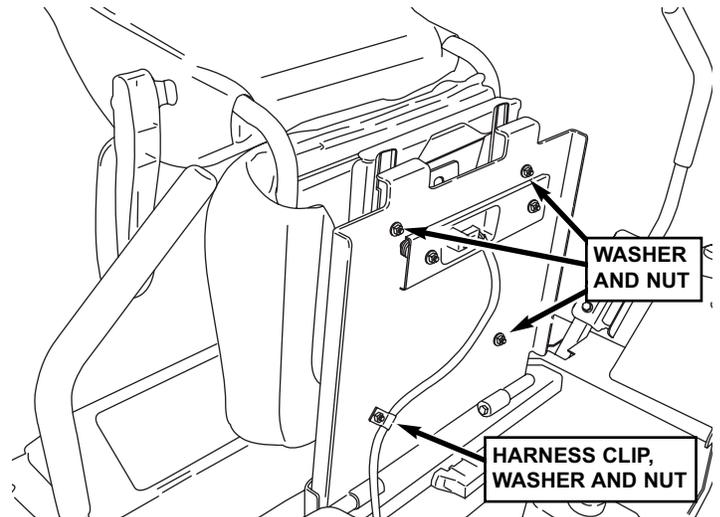
**STEP 3:** Install seat:

- A.** Check to make sure that there are two flat washers installed onto each of the four seat mounting studs and secured by a retaining ring. (If missing, replace with three standard 5/16 flat washers.)

**NOTE:** Seat must be in rearmost position during installation. Refer to Operator's manual for seat adjustment procedures.

- B.** Install seat to seat plate, and secure each stud with one 5/16 flat washer and nyloc nut. See Figure 2. Tighten securely.

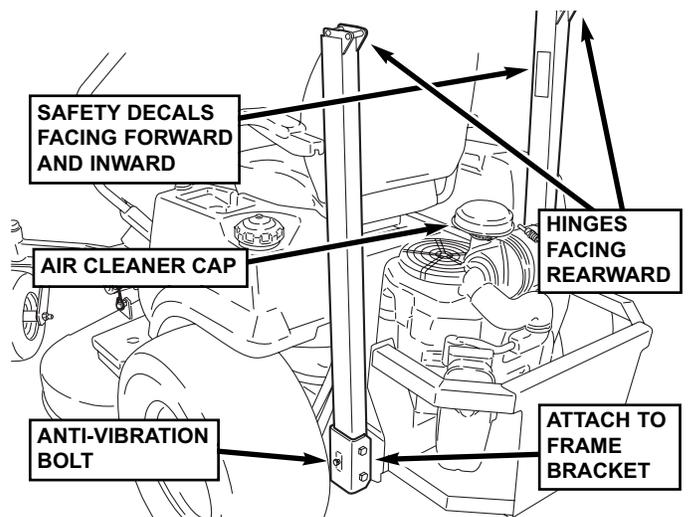
**NOTE:** Secure the harness clip to the left forward stud before installing the washer and nut. Slip the harness for the seat safety switch into this clip. See Figure 2.



**FIGURE 2**

**STEP 5:** Install roll bar protective structure:

- A.** Install side bars into frame brackets behind fuel tanks, making sure hinges on top of bars are facing toward rear of machine, and safety decals are facing forward and inward. See Figure 3. Secure each bar to its corresponding bracket with two 1/2-13 x 4-1/2" hex bolts and lock nuts. Do not tighten yet.



**FIGURE 3**

**STEP 4:** Install rain cap onto engine air cleaner assembly, securing with supplied worm drive clamp. Tighten securely. See Figure 3.

- B.** Attach roll bar to side bars, securing with two 1/2-13 x 3-3/4" hex bolts and lock nuts through the rear hinge holes. See Figure 4. **NOTE:** Slip stop brackets over hinges before installing hardware. See Figure 4.
- C.** Raise roll bar to fully upright position, aligning locking holes in roll bar with corresponding holes in side bars. Insert locking pin through each forward hole, and secure with connected bridge pin. Install plastic knobs into threaded holes in front of roll bar, and tighten securely. See Figure 4.
- D.** Tighten hardware securing side bars to frame brackets, torquing to 60-70 ft-lbs. Tighten roll bar hardware as well; however, leave loose enough so that roll bar folds and raises easily.
- E.** Install anti-vibration bolts into sides of frame brackets, tightening securely. See Figure 3.

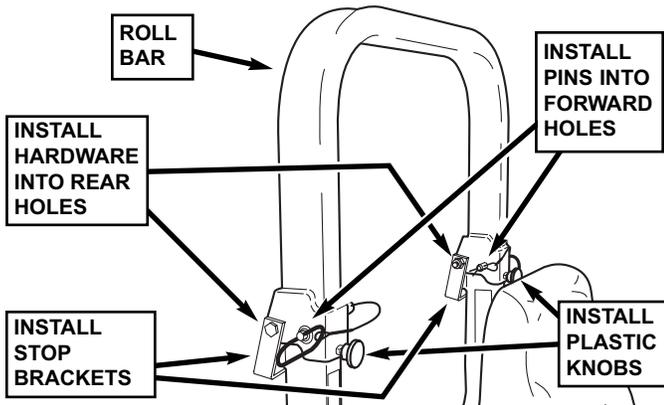


FIGURE 4

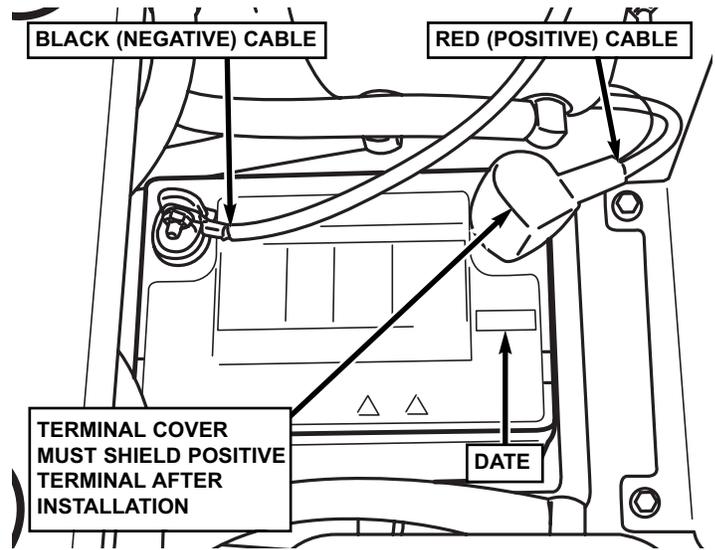


FIGURE 5

**WARNING**  
 Keep all sparks, flame and fire away from area when charging battery.

**WARNING**  
 Shield the positive terminal with terminal cover located on battery harness. This prevents metal from touching the positive terminal, which could cause sparks.

**STEP 9:** Take the necessary precautions when handling fuel. Fill the fuel tank with clean fuel. Check oil and add oil if needed as stated in Engine Owners Manual. Move fuel tank selector valve handle to the desired fuel tank.

**WARNING**  
 Handle fuel with care! Use an approved fuel container. DO NOT smoke near open fuel container and keep fuel container away from open flame. DO NOT fill fuel tank indoors or when engine is running. Allow engine to cool for at least ten minutes before refilling. Wipe off any spilled fuel before starting engine. DO NOT run engine indoors. Before attempting any adjustments, maintenance, service, or repairs, stop engine and blade, always remove key from ignition switch, remove spark plug wire(s) and secure wire(s) away from spark plug(s).

**WARNING**  
 Roll bar protective structure must be installed and all mounting hardware securely tightened before starting or operating machine. Do Not modify the structure in any way before, during or after installation. Modifying the structure can result in serious injury or death.

**STEP 6:** Check date on battery label. See Figure 5. If battery is placed into service after date shown on label, battery will have to be charged:

- A.** Remove battery from battery compartment before charging.
- B.** Place battery in a well ventilated area on a level non-concrete surface.
- C.** Charge battery at 6-10 amps for 1 hour to bring battery to full charge.

**STEP 7:** Install battery into power unit. **NOTE:** In order to raise operator seat to access battery compartment, seat must be in rearmost position.

**STEP 8:** Both bolts are already installed on both terminals. Connect positive (+) cable (red) first, from wiring harness to positive terminal (+) on battery and secure with nut provided in hardware bag. Connect negative (-) cable (black) last, to negative terminal (-) on battery and secure with nut also provided. See Figure 5. Apply a small amount of grease over terminals to prevent corrosion.

**STEP 10: MOWER DECK ADJUSTMENT (LEVELNESS)  
SIDE to SIDE and FRONT to REAR**

Before making deck leveling adjustments, inflate rear tires to 12 PSI and front tires to 25 PSI. When adjusted correctly, the deck will be level side to side within 1/8", have a low cut setting of approximately 1" (1-1/4" for 61 deck), and the blades pitched approximately 3/16" higher at the rear. If adjustment is needed:

- A. Place machine on a smooth level surface.
- B. Check blade tips by rotating blades until tips are pointing to the sides of the deck. Check the measurement of outside blade tips to the ground on both blades. The measurement of each of the outside blade tips should be within 1/8" of each other. If measurement of the blade tips is not within 1/8", adjustment should be made to the correct measurement.
- C. Move deck lift lever and set the mower deck to the highest cutting position.
- D. Relieve tension on deck lift assist spring by loosening nut on eyebolt.
- E. Place 1" blocks (1-1/4" for 61 deck) under the front and rear edge of the mower deck.
- F. Set the mower deck to the lowest cutting position until deck rests on the blocks.
- G. Loosen the top nuts that secure both front deck support eyebolts. Adjust bottom nuts until eyebolts are tight, then retighten top nuts.
- H. Loosen the bottom nuts that secure both rear deck support eyebolts. Adjust top nuts until eyebolts are tight, then tighten bottom nuts securely.
- I. Set the mower deck to the transport position and recheck side to side blade tip dimensions. The difference between the two should be 1/8" or less.

**NOTE:** The deck timing rod (rod that runs from front deck lift arm to rear deck lift arm) is preset at the factory and requires no adjustments.

- J. The leveling blocks used in Step E should result in a proper deck pitch. If a pitch adjustment is required, use the two rear deck support eyebolts. Adjust up or down as required.
- K. Reinstall deck lift assist spring. Place deck in transport position. Tighten nut on eyebolt until 2-3/4" of threads protrude past end of nut.

**STEP 11: HYDRAULIC OIL RESERVOIR**

Check the level of the fluid in both of the fluid reservoirs. The reservoirs are located underneath the operator's seat. Wipe away all dirt and debris from around reservoir cap before removing. Oil must remain absolutely clean! Check with machine on a level surface with engine "OFF". Fill reservoir as needed to bring level up. The reservoir is properly filled when the fluid level is 1 1/2" below the top of the filler neck.

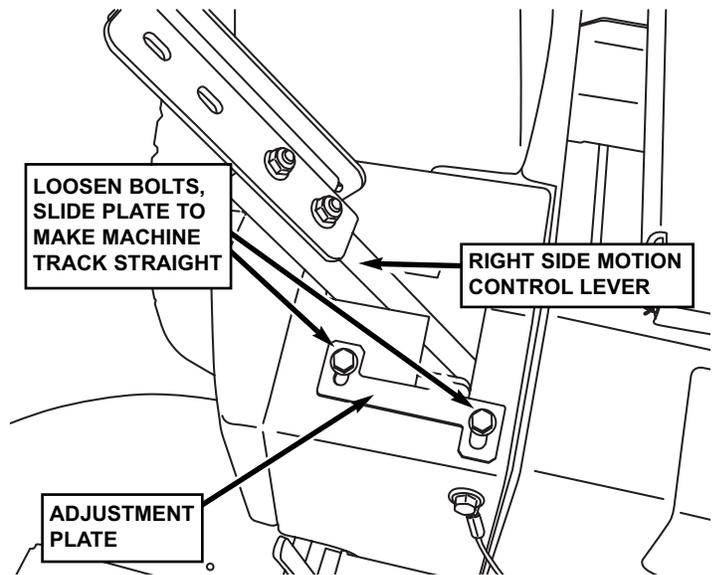
**DO NOT OVER FILL.** Use clean, fresh premium automotive oil having a viscosity equivalent to SAE 20W50 API SL. The fluid should be chemically stable, incorporating rust and oxidation inhibitors. Make sure funnels, pouring spouts and oil can are completely clean. Reinstall reservoir cap.

**IMPORTANT:** Re-check fluid level after operating machine for several minutes and adjust level as needed. If one or both of the wheel drive systems is not pulling properly, the hydraulic system may need to be purged of entrapped air. Refer to STEP 13, "HYDRAULIC SYSTEM, PURGING".

**STEP 12: TRACKING ADJUSTMENT – TWIN STICK CONTROLS**

Start machine. If the machine does not track straight when the Motion Control Levers are in the maximum forward speed position, perform the following adjustment. Rear tire pressure must be set to 12 PSI before making this adjustment.

- A. Loosen bolts that secure adjustment plates and slide plates all the way forward. Retighten bolts.
- B. Start machine and drive in smooth flat open area at maximum forward speed.
- C. If machine tracks to the right, loosen bolts that secure the left adjustment plate. Move plate rearward to slow the left wheel. Retighten bolts.
- D. If machine tracks to the left, loosen bolts that secure the right adjustment plate. Move plate rearward to slow the right wheel down. Retighten bolts. See Figure 6.
- E. Drive machine again. Repeat adjustment as necessary until machine tracks straight.



**FIGURE 6**

### STEP 13: HYDRAULIC SYSTEM, PURGING

When initially putting hydraulic system into service, one or both of the wheel drives may not pull properly. This is likely to be caused by air entrapped in the system. If you experience a pulling issue during initial setup or after completing repairs, perform the following procedure to purge the air from one or both of the hydraulic drive systems.

**IMPORTANT: WHEN REPLACING THE HYDRAULIC FLUID FILTER, PRE-FILL WITH OIL (SAE 20W50 API SL) BEFORE INSTALLING. PRE-FILLING THE FILTER WITH OIL WILL REDUCE OR POSSIBLY ELIMINATE THE NEED TO PURGE THE SYSTEM OF ENTRAPPED AIR.**

- A. Locate hydraulic reservoir underneath operator's seat. After thoroughly cleaning the area around the top of each reservoir, remove filler cap. Bring fluid to proper level (1 ½" below the top of the filler neck). With engine off, add SAE 20W50 automotive oil. See Figure 7.
- B. Open pressure relief valve on hydraulic pump, turning counter clockwise 2 full turns. See Figure 8.
- C. Carefully raise the rear of the machine so the wheels are off of the ground. Securely block the machine to prevent it from falling.
- D. While seated in the operator's position, start the engine. Place engine speed control in FAST position.
- E. Release parking brake and move motion control levers out of the neutral lock position.
- F. Slowly move motion control levers to the full forward and then to the full reverse positions. Repeat this process 6 times.
- G. Stop engine and wait for all rotation to stop before leaving the operator's position.
- H. Close pressure relief valve on hydraulic pump, turning clockwise. Tighten snugly.
- I. With pressure relief valve closed, repeat Steps D thru G.
- J. Remove blocks and lower rear of machine.
- K. Check fluid level in reservoir. Add SAE 20W50 automotive oil as required to bring fluid level to 1 ½" from top of filler neck. Do Not over fill.
- L. Install and tighten filler cap.

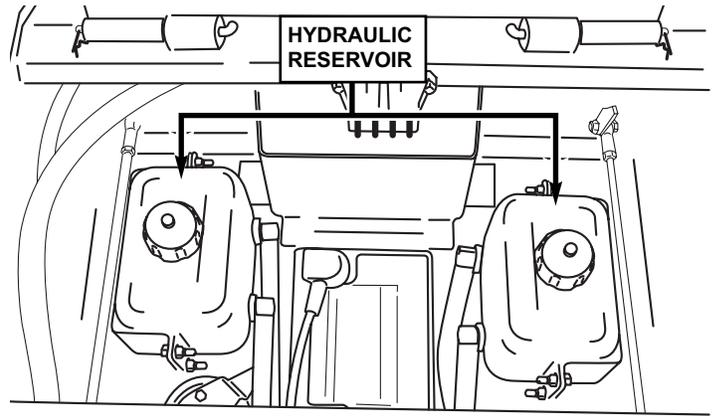


FIGURE 7

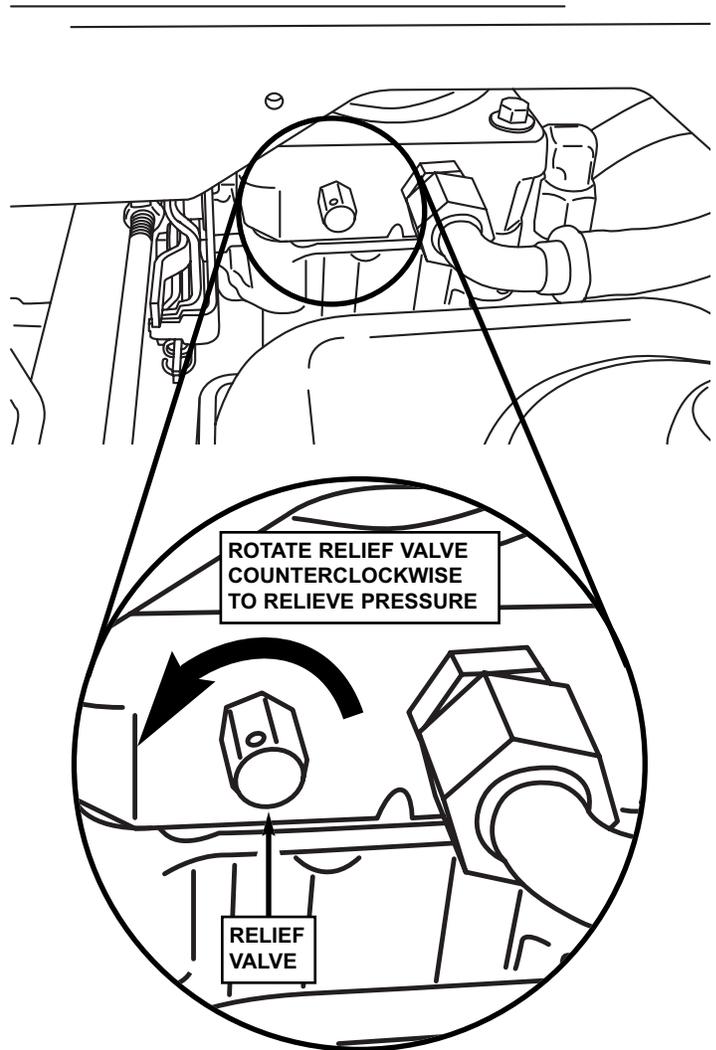


FIGURE 8



# PRE-OPERATION CHECKLIST

Snapper has completed initial adjustments and performed operational tests prior to shipping the machine. Due to the possible effects of shipping, handling and storage, Snapper intends for all of the following items to be verified and necessary final adjustments made at time of setup. It remains good practice and is strongly recommended that all the items also be checked prior to placing the machine into service. It is very important that setup is verified and all operational tests completed and results are acceptable. After completing this form, sign and retain for future reference.

## CUTTING BLADE & MOWER

- BLADE RETAINING hardware checked for proper tightness (70-80 ft. lbs. recommended).
- 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).

## PRE-START CHECKS & SERVICES

- ROLL BAR PROTECTIVE STRUCTURE installed, and hardware tightened to 60-70 ft-lbs (side bar hardware only; roll bar hardware should allow roll bar to be folded and raised easily).
- TIRES checked and inflated to correct pressures.
- ENGINE OIL level checked. See Engine Owners Manual.
- FUEL added to tank and system checked for leaks.
- BATTERY charged (if needed) and properly connected, with red boot over positive terminal.
- HYDRAULIC FLUID level checked.

## OPERATIONAL TESTS

- CHECK SEAT SWITCH for proper function.
- INTERLOCK SYSTEMS checked to insure proper functioning.
- SEAT BELTS checked for proper operation.
- ENGINE STARTED and throttle control settings checked.
- ALL OPERATIONS as listed on console checked.
- IGNITION SWITCH checked to insure engine stops when turned to OFF position.
- PARKING BRAKE tested to insure proper operation.
- BLADE ENGAGEMENT SWITCH tested for engagement and disengagement of blade.
- BLADE BRAKE function verified. Blade rotation stops in 7 seconds or less.
- MACHINE TRACKING tested and adjusted as required.

## DEMONSTRATION & INSTRUCTION

- DEMONSTRATED proper operation of mower to purchaser.
- INSTRUCTED purchaser to read and follow instructions in Operator's Manual.
- PERSONALLY HANDED Operator's Manual to purchaser.
- ASSISTED purchaser in completing Product Registration cards.

## DEALER'S RECORDS

Sale Date \_\_\_\_\_ Model \_\_\_\_\_ Serial No. \_\_\_\_\_  
Dealer's Name \_\_\_\_\_ Signature \_\_\_\_\_  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Will Mower be used Commercially? Yes \_\_\_\_\_ No \_\_\_\_\_  
Purchaser's Name \_\_\_\_\_ Signature \_\_\_\_\_  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

**IMPORTANT: This form is to be retained by the dealer for future reference regarding Warranty, proof of purchase, traceability for product recall or service, etc. Complete the Product Registration Card and Mail to Customer Service Department at SNAPPER, PO BOX 1379, McDonough, Georgia, 30253.**