

OPERATOR'S MANUAL FOR ZTR-421, 422, 423 MOWER

## ONE-YEAR LIMITED WARRANTY

This lawn mower is warranted for one(1) year from date of delivery against all defects in materials and workmanship. Lawn mowers used for commercial service are warranted for 30 days from date of delivery. (Lawn mowers other than those used only at residence of owner are considered as commercial service.)

Each new mower is warranted against manufacturing defects in material and workmanship under normal use and service. Our obligation, under this warranty, shall be limited to the replacement to the original retail purchaser of any part or parts, which, within the warranty period, shall be shown to be defective due to faulty workmanship or materials at the factory. All parts claimed defective must be returned to the factory for inspection, repair, or replacement with transportation charges prepaid.

This warranty does not apply to damage in transit or damage caused by misuse, negligence or accident, to alterations or repairs done outside the factory or authorized service stations, nor does it obligate us to assume any transportation charges in connection with the replacement of parts claimed to be defective.

Our warranty does not apply to the blades, adapters, chains or belts on our mowers due to the very nature of the function-they perform and to the elements they are exposed to.

The warranty specifically excludes engines, tires, and batteries which are warranted separately by their respective manufacturers. All claims for defective engines or engine parts must be made in accordance with the engine manufacturer's warranty.

We reserve the right to make changes in design and changes or improvements on our product without imposing any obligation upon ourselves to install the same on products heretofore manufactured.

This warranty is null and void if any parts other than original manufacturer's parts are used. There is no other express warranty.

IMPLIED WARRANTIES, including those of merchantability and fitness for a particular purp ose, are limited to one(1) year from purchase and, to the extent permitted by law, any and all implied warranties are excluded.

## **IMPORTANT!**

The Dixon ZTR mower is both easy and fun to operate. However, any power mower must be operated properly to be safe. It is not a toy or a recreational vehicle. Before you start to use the mower, read the operator's manual carefully, and become completely familiar with the controls. Your Dixon dealer will gladly provide a check-out ride, and answer any questions.

## **READ CAREFULLY**

You have purchased a top quality lawn mower that has been inspected at the factory and found to be in perfect mechanical condition. This lawn mower is warranted for 1 year from date of delivery against all defects in materials and workmanship. Lawn mowers used for commercial service are warranted for 30 days from date of delivery.

## **SERIAL NUMBERS**

The lawn mower has two serial numbers:

Mower Number — Located on frame at right rear transaxle mount. Transaxle Number — Located on transaxle.

## **SAFETY INSTRUCTIONS**

#### **BEFORE MOWING:**

- 1. Discuss proper maintenance with your Dixon dealer, to save money and prevent injury. Consult your dealer before removing any parts.
- 2. Don't allow anyone to operate your Dixon mower without proper instruction. Young children should never be allowed to operate any power mower, riding or walking.
- 3. Before mowing, pick up all debris particularly stones and sharp objects.
- 4. Before starting the engine, make sure the gas cap is in place.

#### DURING MOWER OPERATION

 The revolutionary Dixon mower attracts many admiring neighbors. But when mowing, all persons — especially children — and pets should be cleared from the mowing area.

- 2. Wear appropriate, safe clothing when mowing close-fitting jeans or slacks and heavy leather or safety shoes with rough soles. Never use any kind of mower with bare feet or open sandals, not even an old push-type model!
- 3. When grass is wet or slippery, do not use any riding mower.
- 4. Always mow at the slowest speed that will cut satisfactorily.
- 5. Keep hands and feet away from the blade at all times.
- 6. Although the Dixon mower is equipped with a missile deflector which directs downwards all blade propelled objects, keep persons clear of the discharge chute.
- 7. Your Dixon mower is very stable because of its low center of gravity and weight biased to the rear; however, caution should be exercised when mowing hills or slopes with *any mower*.
- 8. Always disengage blades before taking the mower

- across walks or objects that project above the surface.
- 9. When the mower is not in use, turn the engine off; never leave the engine running unattended. Your Dixon mower is equipped with a weight-sensitive switch that kills the engine when operator leaves the seat while blades are engaged.
- 10. Before adjusting your mower or adding fuel, turn the engine off. Let it cool, and disconnect the spark plug so the engine cannot start by accident. Be sure all moving parts are stopped.
- 11. Never run the engine indoors; the fumes are dangerous.
- 12. Before backing your Dixon mower, stop, turn around, and look.
- 13. Gasoline fumes are explosive; use only approved gasoline containers to store small amount of fuel. No special oil/gas mixtures are needed for your Dixon mower.
- 14. If the mower should start vibrating, stop the engine immediately and check for damage or loose parts. Vibration is usually the warning of trouble.
- 15. Never lift lawn mower by the body; lift only by the frame.

## ALWAYS SET PARKING BRAKE AND DISENGAGE BLADE OPERATION BEFORE DISMOUNTING

## IMPORTANT OPERATING INSTURCTIONS

Dixon ZTR mowers offer a new concept in mowing, providing unique maneuverability and ease. The following procedures will allow one to become familiar with the unique method of control very .easily.

- 1. SET PARKING BRAKE Be sure that drive levers are free. (When drive levers are released, they will return to neutral position.)
- 2. Move "Blade Operation" lever to "Disengage" position. Engine will not start when blades are engaged.

- 3. Move throttle control to "Choke" position.
- 4. To start models with electric starting, simply insert ignition key and turn to the far right position. When the engine starts, release the ignition key and it will remain in the "RUN" position. To stop the engine simply turn the key to the "OFF" position.

NOTE: Electric start models are also equipped with manual start provision. To start engine manually turn switch to "RUN" and pull the starter rope. To start manual start models, turn switch to "RUN" position. A sharp pull will start the engine.

Release the start-

- ing rope as soon as engine starts. To stop engine turn key to "OFF" position.
- 5. Set engine to desired speed by adjusting throttle control. (Suggest set at slow speed during initial operation.)
- 6. NOTE SAFETY FEATURE: Engine stops automatically if operator leaves seat while blades are engaged.
- 7. This unit is equipped with a unique transaxle that requires only two drive levers to control braking, turning, direction and acceleration. TO GO FORWARD:

From neutral position push both drive levers slightly forward; to increase speed move levers further forward. TO GO BACKWARD:

From neutral position pull both drive levers slightly rearward. TURNING:

Turning is controlled by moving one drive lever slightly forward or rearward of the other. To turn left, move left lever rearward of right lever. To turn "square corners" move lever of desired direction to neutral. To turn on mower's own axis (Zero radius) reduce speed and move one lever to reverse position and the other to forward position.

#### **BRAKING:**

To brake mower, move both levers in direction opposite of travel, release levers to neutral, set parking brake. When stopping on incline, it may be necessary to hold slight pressure on levers in direction opposite of slope, until parking brake is set.

# ALWAYS SET PARKING.BRAKE BEFORE DISMOUNTING. INITIAL OPERATION:

It is recommended that first operation of mower be done at a slow setting of throttle speed and disengagement of mower blades until operator is thoroughly familiar with the unit.

You may have tendency to "over control" mower at first. Slight movements — fingertip control — is all that's necessary for easy operation. 8. Mower Blade Operation:

- Cutting height is set by positioning the adjustment lever.
   Push button knob on top of lever, set desired cutting height, lock into position by releasing button knob.
- To start mower blades, move lever on floor to "engage" position. To stop mower blades, move lever to "disengage" position.

# ALWAYS DISENGAGE BLADE OPERATION BEFORE DISMOUNTING.

9. Parking Brake:

Parking brake is on right hand side of floor area and is engaged by pushing full forward with foot. To disengage, pull lever back toward operator by hand. In emergency situations, brake may be used in conjunction with the natural braking of the transaxle by applying pressure with foot. Always set parking brake before dismounting. Be sure that parking brake is disengaged before moving.

## **MAINTENANCE**

#### PRE-STARTING INSTRUCTIONS

- 1. Fill fuel tank with a good grade of regular gasoline. Do not mix oil with gasoline.
- 2. Attach the spark plug wire to the spark plug.
- 3. With mower on a level surface, fill the crankcase with a good grade of multi-purpose 10-30 oil as outlined in the engine instruction manual.
- 4. On model equipped with a battery be sure the battery is filled to proper fluid level with electrolite solution. After initial filling, level may be retained with distilled water.

#### **CAUTION:**

- 5. During initial "Break In" period, the oil level should be checked often.
- Check oil level every five operating hours or each time mower is used.
- 7. Change oil every 25 operating hours or sooner if equipment is operated in extremely dusty conditions.

#### **BELT ADJUSTMENT**

Main Drive Belt - This belt should be kept taut to lengthen belt life and prevent loss of power. To tension belt, loosen 4 bolts which hold the engine to the mount and the lock nut on the tension bolt at the rear of the machine. Tighten tension bolt until belt is taut and retighten the 4 bolts holding engine and tighten tension bolt lock nut.

#### MOWER DRIVE BELT

Belt tension for the mower drive belt is adjusted by turning the turnbuckle to provide more forward movement of the engaging idler.

REPLACE BELTS WHEN ADJUSTMENT CAN NO LONGER BE MADE SATISFACTORILY OR IF BELTS BECOME WORN.

#### **BODY REMOVAL**

## A. ZTR-421 Body Removal

- 1. Disconnect throttle cable from engine.
- 2. Disconnect key switch wire loom from frame wire loom at front of body.
- 3. ^Disconnect seat switch wire loom from frame wire loom. This connection is located approximately level with the back of the seat on left hand side of frame under the body.
- 4. Remove four control lever bolts and remove upper control levers.
- 5. Remove engaging handle by removing bolt and nut under handle.
- 6. Disconnect brake pedal from brake pedal arm by removing the two bolts.
- 7. Remove two acorn nuts on front floor and the two sheet metal screws in transaxle body mount. This also removes the two brake arm clips. Body will lift clear. To replace body reverse the above procedure. When reinstalling the two screws in transaxle body mount, make certain brake arm retainer clips extend downward and are parallel with body mount.

## B. ZTR-422 Body Removal

- 1. Disconnect throttle cable from engine.
- Disconnect two wire loom plugs, one going to engine wires and one going to switch. Plugs are located between back of transaxle mount and battery.
   OMIT STEP (3) AND FOLLOW ZTR-421 BODY REMOVAL INSTRUCTIONS FROM STEP (4) ON. REMEMBER TO REINSTALL SWITCH GROUND WIRE ON LEFT REAR TRANSAXLE BODY MOUNT SCREW.

### C. ZTR-423 Body Removal

- 1. Disconnect throttle cable from engine.
- 2. Disconnect terminal running from motor terminal on switch to frame loom.
- 3. Disconnect seat switch plug from frame loom. This plug is located approximately even with back of seat on left hand side of frame under body.

FOLLOW ZTR-421 BODY REMOVAL INSTRUCTIONS FROM STEP (4) ON. REMEMBER TO REINSTALL SWITCH GROUND WIRE ON LEFT REAR TRANSAXLE BODY MOUNT SCREW.

#### **CHAIN ADJUSTMENT**

To adjust the drive chains, the body must be removed and shims added behind the transaxle. Loosen 4 bolts which hold the transaxle to the frame. Insert shims (Pt. No. 1541) as needed for adjustment between transaxle and mount plates. Tighten the 4 bolts which hold the transaxle to the frame. A few drops of oil periodically will lengthen chain life. Replace chain when rollers become loose, chain breaks, or chain fails to operate properly.

#### WHEELS AND TIRES

Correct tire pressure is essential to the correct operation of the machine. The correct pressure for the drive tires is 8-10 lbs. The front tires should be inflated to 30-35 lbs. Lug nuts should be checked periodically.

#### **ELECTRICAL SYSTEMS**

Keep all connections clean and tight. Maintain the fluid in the battery at correct level.

#### **BODY**

The body may be washed with a mild detergent and waxed with any automotive type wax.

#### **ENGINE**

Follow the manufacturer's instructions as to maintenance and repair.

#### **TRANSAXLE**

For adjustment or repair confer with authorized Dixon dealer service department. Adjustment or repair by other than authorized dealer voids warranty.

#### **SERVICE LEGS**

Service legs are located under the front end of the body of the unit. These legs serve as additional weight for the front end of the mower, and when lowered, give service access to the mower deck without having to remove this assembly.

To lower these service legs:

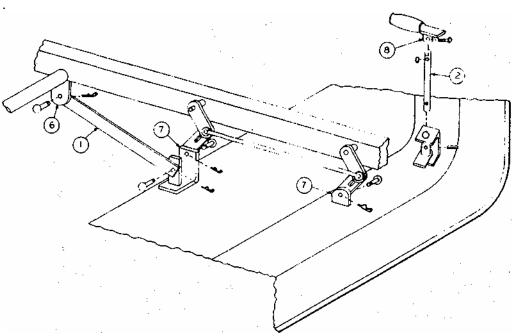
- 1. Set parking brake.
- 2. Raise mower deck to top position.
- 3. For safety, support the service legs so that they will not fall. Loosen and remove the four nuts and two bottom plates from the U-bolts. Then remove the support and lower service legs to ground.
- 4. Raise front end of unit and move the service legs into position, spreading them as wide as possible to achieve maximum stability.

#### **SPARE PARTS**

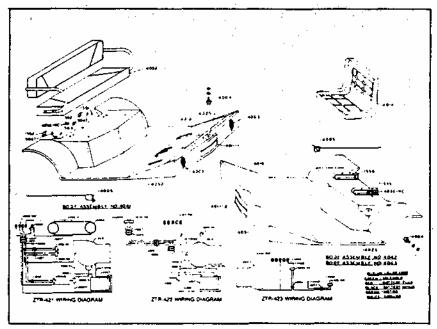
See your dealer for ordering spare parts or warranty service.

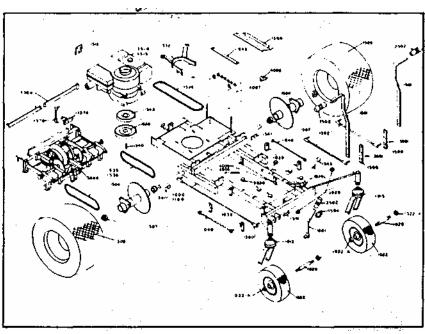
## INSTALLING AND REMOVING MOWER DECK FROM FRAME

- 1. Attach stabilizer arms to mower deck with pins and clips as shown on drawing.
- 2. Attach the 1/2" dia. engaging rod with a rollpin through the engaging cam.
- 3. Position the drive belt on pulleys.
- 4. Place mower deck under unit in approximate operating position with engaging rod through hole in the floor.
- 5. Connect drive belt to motor pulley, being certain that belt is inside of belt guides. Loosen belt keeper by loosening the two rear engine mount bolts; this will allow belt to be placed on motor pulley. Retighten engine mount bolts.
- 6. Attach stabilizer arms to pivot point on the inside of attaching plates with pins and clips.
- 7. Attach lift linkage to mower deck on the inside of the attaching lugs as shown on drawing with pins and clips. (4 places)
- 8. Place engaging handle on engaging rod and fasten with bolt and locknut.
- 9. Connect pan wire loom plug to plug on frame wire loom. Mower will not start unless this connection is

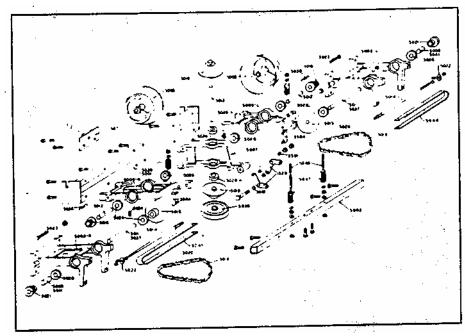


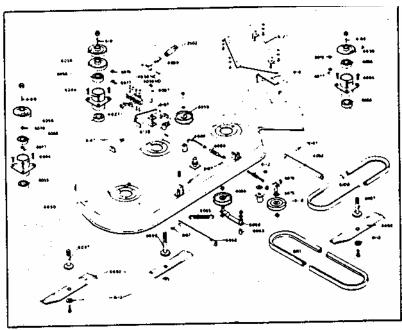
made. To operate mower with pan removed an available by-pass (P/N 4038) must be used.





BODY ASSEMBLY CHASSIS ASSEMBLY





TRANSAXLE ASSEMBLY

MOWER DECK ASSEMBLY

# **PARTS LIST**

| Part No | o. Name                    | Part No | o. Name  | Part No. | . Name                          |
|---------|----------------------------|---------|--|----------|---------------------------------|
| 1000    | Frame Weldment (Electric)  | 1542    | V-Pulley                                       | 4005     | Throttle Cable                  |
| 1015    | Caster Assembly \( \)      | 1543    | Lift Knob                                      | 4006-1   | Battery Solenoid Cable          |
| 1020    | Caster Axle                | 1552    | Belt Keeper                                    | 4006-2   | Battery Ground Cable            |
| 1022    | Caster Wheel & Tire        | 1560    | Battery Splash Guard                           | 4006-3   | Solenoid-Alternator Cable       |
| 1029L   | Lift Lever & Quadrant Left | 1564    | Brake Arm 75 Model                             | 4006-4   | Swith-Headlight Cables, ZTR-421 |
| 1039    | Lower Lift Link            | 1567    | Brake Mount 75 Model                           | 4006-5   | Front Loom Assy. Prior to 75    |
| 1040    | Lift Tie Rod               | 1574    | Brake Pivot 75 Model                           | 4006-6   | Rear Loom Assy. Prior to 75     |
| 1043    | Battery Strap              | 1579    | Short Brake Rod 75 Model                       | 4006-7   | Rear Loom Assy., ZTR-422        |
| 1100    | Frame Weldment (Manual)    | 1580    | Long Brake Rod 75 Model                        | 4007     | Battery                         |
| 1500    | Lower Control Lever        | 1581    | Brake Pedal Arm 75 Model                       | 4008     | Solenoid                        |
| 1501R   | Upper Control Lever Right  | 1584    | Brake Pedal 75 Model                           | 4009     | Wire Clip                       |
| 1501L   | Upper Control Lever Left   | 3025    | <sup>1</sup> /4 x 1 Spiral Pin                 | 4010     | Control Decal                   |
| 1502    | Control Rod Assembly       | 3026    | ¹/4 x 1 1/₂ Spiral Pin                         | 4011     | Name Decal                      |
| 1504    | Wheel Hub & Sprocket       | 3029    | Front Grommet                                  | 4014     | Standard Seat 18"               |
| 1507    | Wheel Bearings             | 3030    | Rear Grommet                                   | 4025     | Switch Decal                    |
| 1509    | Wheel& Tire                | 3054    | 3/16 x 1 Roll Pin                              | 4027     | Pan Loom ZTR-421, ZTR-422       |
| 1528    | Bellcrank                  | 3070    | <sup>1</sup> /4 x 1 <sup>1</sup> /4 Spiral Pin | 4028     | Frame Wire Loom, ZTR-422        |
| 1535    | Chain                      | 3501    | Nylon Bushing                                  | 4029     | Switch Wire Loom, ZTR-422       |
| 1536    | Connecting Link            | 3502    | Hand Grip                                      | 4030     | Seat Switch Wire Loom, ZTR-421  |
| 1538    | V-Pulley -                 | 3504    | Double Ball Joint                              | 4031     | Frame Wire Loom, ZTR-421        |
| 1539    | Drive V-Belt               | 4002    | Deluxe Seat 36", ZTR-421                       | 4032     | Pan Wire Loom, ZTR-423          |
| 1540    | Key                        | 4003    | Headlight                                      | 4033     | Frame Wire Loom. ZTR-423        |
| 1541    | Shim                       | 4004    | Switch   | 4034     | Switch Wire Loom, ZTR-423       |

| 5009LCradle - Left6052Stabilizer Arm6109V-Belt5009RCradle - Right6055Mower Bearing6110V-Idler Pulley5010RCradle Assembly Right6058V-Pulley6111V-Belt5010LCradle Assembly Left6059Flat Idler Pulley6112Engaging Spring5011Support Shaft6060Serpentine Idler Bracket6113Blade Washer5012Cradle Shaft6063Bronze Bushing6119Decal5013Frame Shaft6065Tension Spring6127Deflector Assembly5014Torque Rod6070Engaging Idler Bracket6130Engaging & Switch Cam501524 T Sprocket6075Spacer |  | 51 Body - Blue 00 Transaxle 03L Support - Left 03R Support - Right 04R Support Assembly Right 04L Support Assembly Left 05 Discup 06 Spacer 07 Center Frame 09L Cradle - Left 09R Cradle - Right | 6055 Mower Bearing |  |
|--|--|--|--------------------|--|
|--|--|--|--------------------|--|

5016 Cone

## **OWNER INFORMATION**

| Date Mower Purchased    | Mower Model Number      |  |
|-------------------------|-------------------------|--|
| Mower Purchased from    |                         |  |
|                         | dealer name & address   |  |
| Mower serial number     | Transaxle Serial Number |  |
| Oil changed this date:  |                         |  |
| 1                       |                         |  |
| 2                       |                         |  |
| 3                       |                         |  |
| Engine tuned this date: | v                       |  |
| 1                       |                         |  |
| 2                       |                         |  |



FORM NO. 812-476



 ${}^{\circledR}$  Dixon and ZTR are the trademarks of Dixon Industries Inc. Box 494 Coffeyville, Kansas 67337

LITHO IN U.S.A.

Free Manuals Download Website

http://myh66.com

http://usermanuals.us

http://www.somanuals.com

http://www.4manuals.cc

http://www.manual-lib.com

http://www.404manual.com

http://www.luxmanual.com

http://aubethermostatmanual.com

Golf course search by state

http://golfingnear.com

Email search by domain

http://emailbydomain.com

Auto manuals search

http://auto.somanuals.com

TV manuals search

http://tv.somanuals.com