

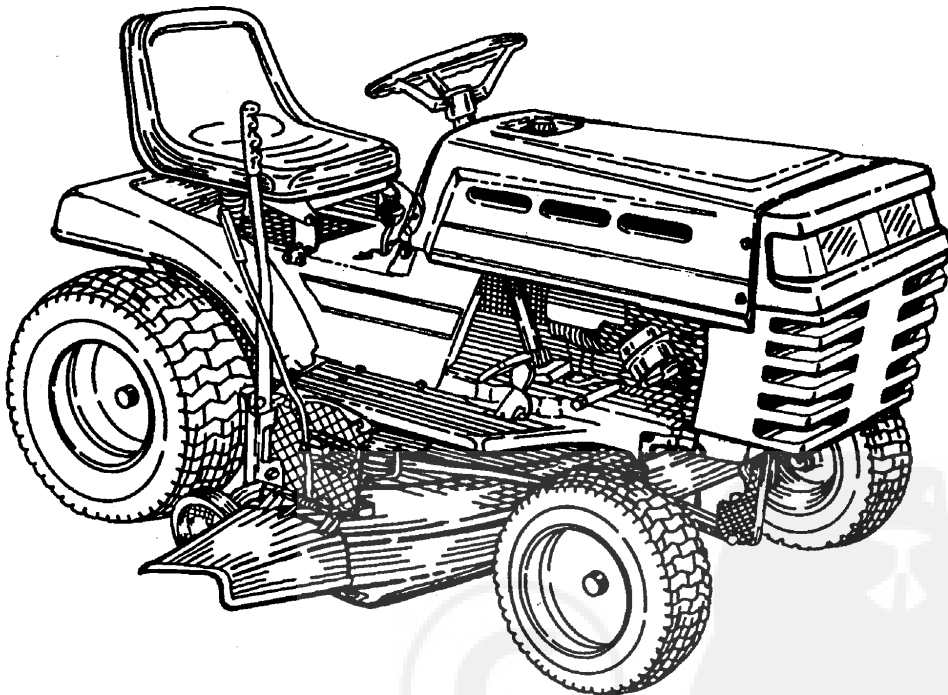


# OWNER'S MANUAL

MODEL A4518-080

(TSC # 44-20252)

ASSEMBLY - OPERATION - MAINTENANCE - PARTS



**IMPORTANT: Read Operational Precautions and Instructions Carefully**

Part No. 312424

Price \$2.00

0490

Printed in U.S.A.

### **TWO YEAR LIMITED WARRANTY**

For one (2) years from date of purchase by the first consumer for residential use (thirty (30) days commercial use), NOMA Outdoor Products Incorporated warrants that it will replace free of charge, including labor, any original part of any NOMA Outdoor Products Incorporated product found to be defective by any authorized Service Dealer or the factory, except the battery which is warranted for ninety (90) days from date of purchase.

This warranty does not cover engine, transmission, transaxle or differential (these items are covered by their manufacturer's own warranty). This warranty does not cover parts that have failed due to normal wear or parts that have failed subject to misuse or abuse. Transportation of the unit or part to and from an authorized Service Dealer or factory is the responsibility of the owner.

A step by step explanation as to what procedure should be followed for this warranty is:

1. If a part becomes defective, contact the store where the unit was purchased for the name and address of the authorized Service Dealer nearest to you.
2. If you cannot locate an authorized Service Dealer, write Service Department of NOMA Outdoor Products Incorporated for the name and address of the authorized Service Dealer in your area or call the Service Department at 1-901-422-1690.
3. Return the defective product, along with proof of purchase to such authorized Service Dealer for replacement of any defective part where covered by this warranty.

There is no other express warranty. Implied warranties, including those of merchantability and fitness for a particular purpose are limited to two (2) years from date of purchase. Liability for incidental or consequential damages are excluded.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

**NOMA Outdoor Products Incorporated**

**Caller 8000**

**Jackson, TN 38308-8000**

### **UNIT PARTS AND SERVICE**

This manual contains instructions for safety, assembly and maintenance. Read this manual carefully and completely so that you will know proper assembly, use and care of your unit. Also fill in and mail the registration card packed with the unit. For service other than covered in this manual, contact an authorized service dealer. A nationwide parts and service organization has been established to provide locally available parts and service. A list of authorized parts distributors has been included in this manual. When ordering repair parts, always give the following information: 1. The Part Name; 2. The Part Number; 3. The Quantity desired; 4. The Full (eight digit) Model Number of the unit. The model number will be found on a plate attached to the unit.

Look for this symbol.



It means - **ATTENTION! BECOME ALERT! A HAZARD TO OPERATOR, BYSTANDER, PROPERTY OR EQUIPMENT MAY EXIST.**

**NOMA Outdoor Products Incorporated**  
Caller 8000  
Jackson, TN 38308-8000

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### NOTICE

Some riding mower models may require different instructions for assembly and/or repair than shown in this manual. The **Repair Parts Section** (supplied with this model) will contain these instructions if required on your model.



## OPERATIONAL PRECAUTIONS

THESE INSTRUCTIONS ARE FOR YOUR PROTECTION. PLEASE READ THEM CAREFULLY.



1. Know the controls and how to stop quickly. READ THIS OPERATOR'S MANUAL and instructions furnished with attachments.
2. Wear safety glasses or eye shields when assembling or operating riding mower.
3. Do not allow children to operate the machine. Do not allow adults to operate it without proper instruction.
4. Do not carry passengers. Do not mow when children and others are around. Disengage power to blade(s) or attachment(s) and stop the engine while others are in the vicinity of the mower.
5. Battery fluid (electrolyte) is an ACID and is extremely dangerous. Do not smoke while servicing the battery. Do not service the battery near a open flame or spark.
6. Handle gasoline with care, it is highly flammable.
  - A. Use approved gasoline container.
  - B. Never remove the fuel cap of, or add gasoline to, a running or hot engine, or an engine that has not been allowed to cool for several minutes after running. Never fill the tank indoors and always clean up spilled fuel immediately.
  - C. Do not smoke while filling fuel tank.
  - D. Do not run the engine indoors. Open doors if engine must be run in garage. Exhaust fumes contain CARBON MONOXIDE, an ODORLESS and DEADLY GAS.
7. Check fuel supply before each use allowing space for expansion as the heat of the engine and/or sun can cause gasoline to expand.
8. Do not operate mower when barefooted. Always wear substantial footwear, preferably steel-toed shoes. Do not wear loose fitting clothing that could get caught in moving parts.
9. Clear the work area of objects (wire, rocks, etc.) which might be picked up and thrown. Check all controls for proper function.
10. Disengage all attachment clutches, shift to neutral, and set parking brake before attempting to start the engine (motor). When starting engine equipped with a pull starter, stand firm and make sure your feet are well away from the blade(s).
11. Disengage power to blade(s) or other attachments(s) and stop the engine (motor) before leaving the operator's position. Always dismount from the left side.
12. Disengage power to blade(s) or other attachment(s) and stop the engine (motor) before making any repairs or adjustments.
13. Disengage power to blade(s) or other attachment(s) when transporting or not in use.
14. Take all possible precautions when leaving the vehicle unattended, such as disengaging power to blade(s) or attachment(s), lowering the attachment(s), setting the parking brake, stopping the engine (motor), and removing the key.
15. Do not stop or start suddenly when going uphill or downhill. Mow up and down the face of steep slopes; never across the face.
16. Reduce speed and exercise extreme caution on slopes and in sharp turns to prevent tipping or loss of control. Be especially cautious when changing direction on slopes.
17. Stay alert for holes, rocks, and roots in the terrain and other hidden hazards. Keep away from drop-off. Never operate your riding mower on wet or slippery grass or at a speed which could cause a skid. Exercise care when mowing around a fixed object to prevent the blade(s) from striking it. Never deliberately run over any foreign object.
18. Always disengage blade control lever before attempting to remove the mower from a hole or other obstruction.
19. Use care when pulling loads or using heavy equipment.
  - A. Use only approved drawbar hitch points.
  - B. Limit loads to those that you can safely control.
  - C. Do not turn sharply. Use care when backing.
  - D. Use counterweight(s), wheel weights or tire chains when suggested in attachment(s) instructions.
20. Watch for traffic when crossing or near roadways.
21. When using attachment(s), never direct discharge of material toward bystanders nor allow anyone near the vehicle while in operation.
22. Keep the vehicle and attachments in good operating condition, and keep safety devices in place and in working condition.
23. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
24. Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.
25. To reduce fire hazard, keep the engine free of grass, leaves or excessive grease.
26. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object, and the damage should be repaired before restarting and operating the equipment.
27. Do not change the engine governor settings or over-speed engine.
28. When using the vehicle with mower, proceed as follows:
  - A. Mow only in daylight or in good artificial light.
  - B. Never make a cutting height adjustment while the engine (motor) is running if the operator must dismount to do so.
  - C. Shut the engine (motor) off when removing the grass catcher or unclogging chute.
  - D. Check the blade mounting bolts for proper tightness at frequent intervals.
29. Under normal usage, the grass catcher bag material is subject to deterioration and wear. Check the bag frequently for deterioration and wear and replace worn bags. Check that replacement bags comply with the original manufacturer's recommendations or specifications.
30. Disengage power to mower before backing up. Do not mow in reverse unless absolutely necessary and then only after careful observation of the entire area behind the mower.

## OWNER'S INFORMATION

Record the following information about your unit so that you will be able to provide it in case of loss or theft.

MODEL NUMBER:     -     (Enter complete 8 digit number from model plate on unit)

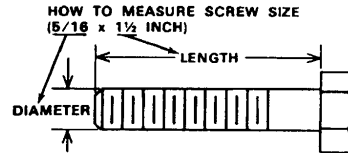
PURCHASE DATE: \_\_\_ / \_\_\_ / \_\_\_ CODE NO.: \_\_\_\_\_ SERIAL NO.: \_\_\_\_\_

DEALER'S NAME AND ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ TELEPHONE: \_\_\_\_\_

### CONTENTS OF SHIPPING CARTON

- 1 - Tractor (with 45 inch deck)
- 1 - Owner's Manual
- 1 - Engine Manual
- 1 - Steering Wheel
- 1 - Steering Shaft Cover
- 1 - Spacer
- 1 - Seat
- 1 - Chute Deflector
- 1 - Battery
- 1 - Bag of Deck Wheel Parts Containing:
  - 2 - 6 inch Deck Wheels
  - 2 - Shoulder Bolts
  - 2 - 3/8 inch Locknuts
- 1 - Bag of Assembly Parts Containing:
  - 1 - Oil Drain Trough
  - 1 - Pivot Rod (chute deflector)
  - 1 - Torsion Spring (chute deflector)
  - 1 - Battery Hold-Down Rod
  - 1 - Battery Hold-Down Rod, Top
  - 1 - Bag of Battery Hold-Down Parts Containing:
    - 1 - Plastic Wing Nut
  - 1 - Bag of Battery Cable Parts Containing:
    - 2 - 1/4 x 5/8 inch Hex Head Screws
    - 2 - 1/4 inch Keps, Nuts (star washer attached)
  - 1 - Bag of Seat Mounting Parts Containing:
    - 4 - 5/16 x 3/4 inch Hex Head Screws
    - 4 - 5/16 inch Split Lockwashers
    - 4 - 11/32 inch Flatwashers
    - 1 - Roll Pin



### DANGER



This riding mower can be dangerous if carelessly used.

Read Owner's Manual thoroughly before operating riding mower.

Always wear safety glasses or eye shields while assembling or operating riding mower.

DO NOT carry passengers at any time.

Keep hands, feet, hair and loose clothing away from discharge area, underside of mower deck or any moving parts while engine is running.

DO NOT allow children or young teenagers to operate or be near riding mower while it is operating.

## ASSEMBLY

### ⚠ DANGER ⚠

This riding mower can be dangerous if carelessly used.

Read Operator's Manual thoroughly before operating tractor.

Always wear safety glasses or eye shields while assembling or operating tractor.

DO NOT carry passengers at any time.

Keep hands, feet, hair and loose clothing away from discharge area, underside of mower deck or any moving parts while engine is running.

DO NOT allow children or young teenagers to operate or be near tractor while it is operating.

Your riding mower has a right side and left side as you face forward while seated in operator's seat.

### TOOLS REQUIRED FOR ASSEMBLY

- 1 - 3/4 inch Wrench (or adjustable wrench)
- 1 - 5/8 inch Wrench (or adjustable wrench)
- 1 - 9/16 inch Wrench (or adjustable wrench)
- 2 - 1/2 inch Wrenches (or adjustable wrenches)
- 1 - 7/16 inch Wrench (or adjustable wrench)
- 1 - Hammer (plastic or rawhide preferred)

### TO ACTIVATE BATTERY

1. Raise seat plate, lift out battery carton. **CAUTION:** Battery carton may not be sealed. Use care when lifting so that battery does not drop out of carton.
2. Remove battery from carton and remove vent caps from all cells.
3. Fill battery to indicator ring with electrolyte battery acid, available at most service stations or auto supply stores (follow instructions outlined on electrolyte package).

### ⚠ DANGER ⚠

Handle electrolyte with care. It is an acid and poison. Always wear eye shields, and protect skin when handling acid or battery.

**POISON - CAUSES SEVERE BURNS**

Contains sulfuric acid.  
Avoid Contact with skin, eyes or clothing.  
To prevent accidents, neutralize excess acid with baking soda and rinse empty container with water.

#### ANTIDOTE:

**EXTERNAL** - Flush with water.  
**INTERNAL** - Drink large quantities of water or milk. Follow with milk of magnesia, beaten eggs or vegetable oil. Call physician immediately.  
**EYES** - Flush with water for 15 minutes and get prompt medical attention.

4. Before placing battery into riding mower, battery should be charged at 2 to 6 amps for 4 to 6 hours.
5. Reinstall and tighten vent caps on all cells after charging.

If battery charger is not available, allow battery to set for 20 minutes before installing in riding mower. Battery should be strong enough to start engine. Operate riding mower engine continuously for 20 to 30 minutes in order to sufficiently

charge the battery. **NOTE:** Skip battery installation and complete assembly section of this manual while waiting for battery to charge.

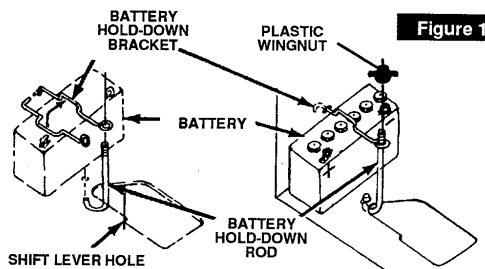
### BATTERY INSTALLATION

1. Raise seat and place battery back into tractor with positive (+) terminal (figure 2) toward right side of tractor.
2. Place battery hold-down bracket through slot in back of console as shown in figure 1. **NOTE:** Turn bracket to side, place through slot in console and rotate upright.

### CAUTION

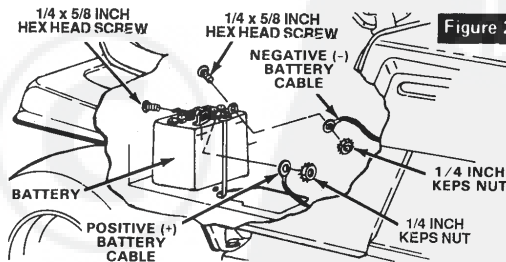
Be sure that battery hold-down bracket does not touch battery terminals. When installing battery cables, install positive (red) cable first. When disconnecting battery cables, disconnect negative (black) cable first. Be sure that wrench does not touch any metal surface or both terminals, as damage to electrical system could result.

3. Place hook end of battery hold-down rod through shift lever hole in main frame and hook into small hole in front of battery as shown in figure 1.
4. Place threaded end of hold-down rod through loop in bracket and secure with a plastic wingnut as (see figure 1).



**Figure 1**

5. Attach positive (red) battery cable (figure 2) to positive (+) terminal on battery with a 1/4 x 5/8 inch hex head screw and a 1/4 inch keps nut.
6. Attach negative (black) battery cable (figure 2) to negative (-) terminal on battery with a 1/4 x 5/8 inch hex head screw and a 1/4 inch keps nut.



**Figure 2**

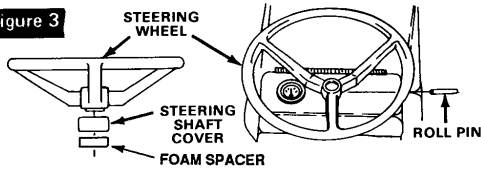
### STEERING WHEEL INSTALLATION

1. Position front wheels straight forward.
2. Place foam spacer on steering shaft
3. Place steering shaft cover onto hub on bottom steering wheel (figure 3).



- 4. Push steering wheel onto the steering shaft.
- 5. Align cross holes in steering wheel with the holes in the steering shaft.
- 6. Drive roll pin through holes with a hammer.

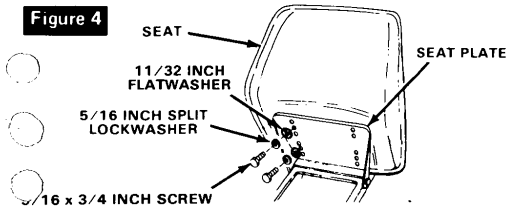
**Figure 3**



### SEAT INSTALLATION

1. Raise seat plate (figure 4) and attach seat to plate with four 5/16 x 3/4 inch screws, four 5/16 inch split lockwashers and four 11/32 inch flatwashers as shown.
2. Attach seat arm rest kit (if so equipped) to seat. **NOTE:** Assembly parts and instructions are packed with arm rest kit.

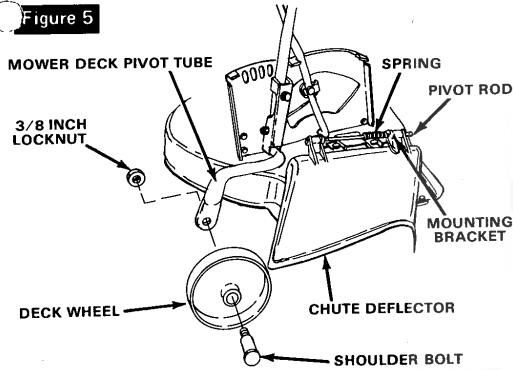
**Figure 4**



### MOWER DECK ASSEMBLY

1. Attach mower deck wheels to mower deck pivot tube assembly with shoulder bolts and 3/8 inch locknuts as shown in figure 5. **NOTE:** Wheels must be on outside of deck pivot tube.
2. Place discharge chute deflector onto mower deck as shown in figure 5.
3. Slide smooth end of pivot rod through front mounting tab on chute deflector and front tab on mounting bracket.
4. Place spring onto pivot rod with short end of spring as close as possible to front tab on mounting bracket.
5. Rotate long end of spring under pivot rod and place end onto top of chute deflector.
6. Tap front end of pivot rod with a hammer until rod is flush with front mounting tab on chute deflector.

**Figure 5**



### MOWER DECK INSTALLATION

1. Place mower deck on right side of tractor with control levers away from tractor.

2. Slide deck under right side of riding mower. **NOTE:** Sliding mower deck under rider will be easier if front wheels are turned to the left and rider is raised enough to allow deck hitch to slide under right wheel.

3. Move deck forward enough to allow rear deck guide to align with guide bar attached under rider (insert figure 6).

4. Note position of lower engine belt guides (insert figure 6) and loosen belt guides.

5. Place mower deck drive belt around lower engine pulley.

6. Reposition lower engine pulley belt guides (1/16 inch between guide and belt) and tighten guides.

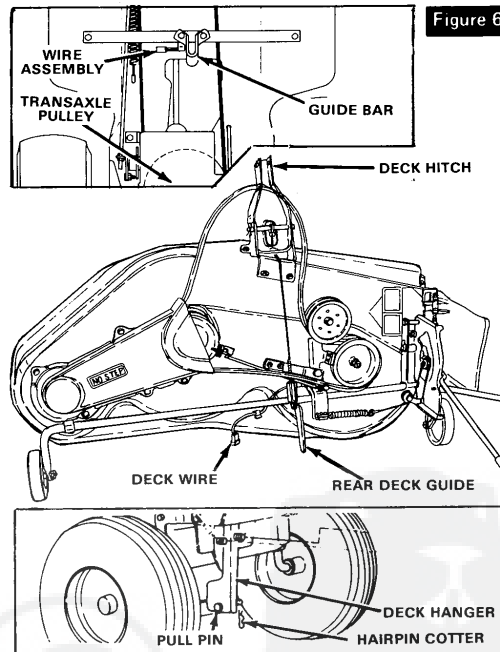
7. Move mower deck back allowing rear deck guide to slide into guide bar.

8. Remove hairpin cotter from pull pin located on mower deck hitch bar and remove pull pin.

9. Raise mower deck bar into deck hanger bracket on front of tractor (insert figure 6) and slide pull pin through hanger bracket and hitch bar. Install hairpin cotter into pull pin.

10. Connect mower deck wire to tractor wire assembly near tractor guide bar.

**Figure 6**



### TO SERVICE ENGINE

1. Place rider so engine is in a level position and remove gas tank fill cap (figure 7).

2. Pull out and rotate hood latches (figure 7) back away from hood pins. Pull out on bottom rear of hood and lift hood toward front.

3. Remove oil fill cap (figure 7). Using funnel, fill engine crankcase with oil. See **Engine Operation and Maintenance Manual** for proper procedure.

4. Reinstall oil fill cap (figure 7) and tighten securely.

5. Check to make sure that spark plug wires are attached to spark plugs. Close hood.

6. Fill gas tank (figure 7) with clean, fresh lead-free gasoline with a minimum rating of 77 octane. Low-lead or regular grade gasolines are acceptable. **Do not mix oil with gasoline.** Be certain container is clean and free from rust or other foreign particles. Never use gasoline that may be stale from long periods of storage in the container.

7. Reinstall gas tank fill cap.



## ⚠ DANGER ⚠

**Never fill the gas tank while the engine is running or is hot. Immediately wipe off any spilled gasoline before attempting to start engine.**

### TO SERVICE RIDER

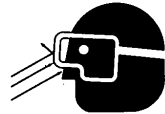
1. Check tire pressure. Correct tire pressure (10 to 12 pounds in rear tires and 14 pounds in front tires) should be printed on sidewalls of tire.
2. Check all nuts and bolts to be sure none are loose.
3. Check to make sure mower deck was installed level. See **Deck Leveling Adjustment** paragraph in **Adjustment** section.
3. Return to **Battery Installation** paragraph and complete battery installation.

## OPERATION

### WARNING

This rider is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered, grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator. See your authorized Engine Service Dealer for proper spark arrester muffler for the engine on your rider.

The operation of this riding mower can result in objects being thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating a riding mower. We recommend standard safety glasses or Wide Vision Safety Mask for over spectacles.



Get to know your riding mower and its controls. Be sure you (or any other operator) have read and understood the **Operational Precautions** listed on page 3 of this manual.

## ⚠ DANGER ⚠

**DO NOT operate this riding mower without the chute deflector in place. A riding mower can be dangerous to operate if misused. On slopes, be very cautious and avoid sharp turns to prevent tipping or loss of control. NEVER carry passengers.**

Your new riding mower will give years of service if cared for properly. Never run into trees, curbs, etc. Service regularly and store in a dry area. Operate at slow speeds until you become familiar with the machine. Avoid sharp turns at high speed and uphill or downhill turns. Operate carefully, be especially cautious on hills. When riding down inclines, keep shift control in low speed with brake-clutch pedal out. This allows the engine to control the speed. Use brake for fast stop on hill.

**KEEP MOWER CLEAN.** Grass clippings may pack under the mower chassis due to the internal moisture content of the grass. This accumulation of cut grass should be removed after each mowing. Disconnect spark plug wires, remove ignition key and scrape accumulation off with a putty knife or similar tool. Cleaning of the underside is easier if mower

deck is removed. See **Mower Deck Removal** paragraph in **Maintenance** section of this manual. Remove dirt and debris from engine area with a brush or cloth.

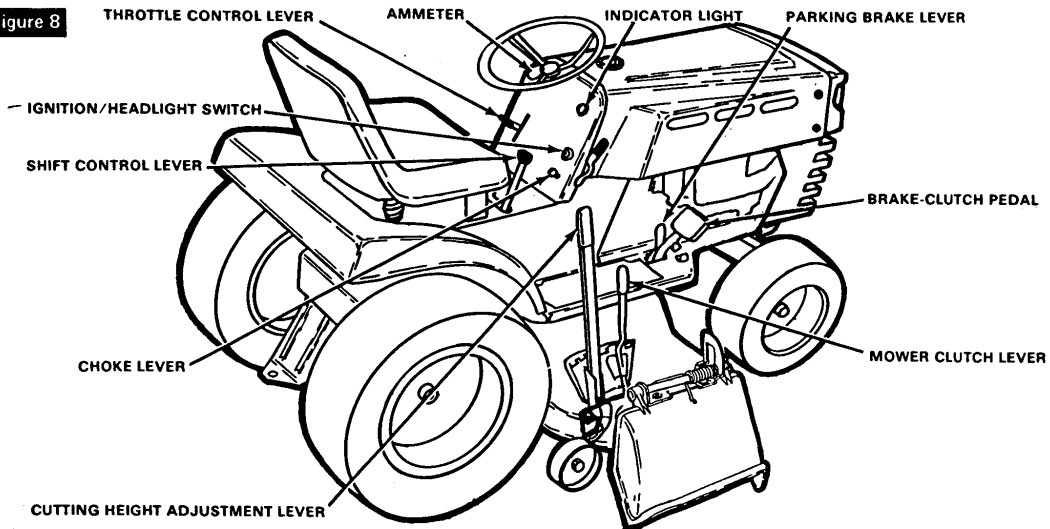
### CONTROLS

Figure 8 shows all operating controls. The controls and their functions are as follows:

- **Throttle Control Lever** - Regulates engine and blade speeds. Engine should always be run at full speed for best grass cutting. **NOTE:** On riders not equipped with choke lever, throttle control lever is also used to choke engine when in START position. Push sideways and up on throttle lever to get into START position.
- **Choke Lever** - Used to start cold engine.
- **Ignition/Headlight Switch** - Used to start and stop engine and turn headlights on and off. Turn key all the way right to 4th position to start engine. When key is released after starting engine it will return to 3rd (engine runs with headlights off) position. To turn headlights on, turn key left to 2nd (engine runs with headlights on) position. To stop engine, turn key to 1st position. Remove key to lock ignition.
- **Ammeter (if so equipped)** - Indicates whether battery is being recharged when engine is running. If charge (+) is not indicated while engine is running at full throttle, have engine charging system checked by a competent engine repairman.
- **Indicator Light (if so equipped)** - Red light on dash will glow and engine will not crank if safe starting conditions are not met.
- **Shift Control Lever** - Used to select ground speed ranges as well as direction of motion (forward-neutral-reverse). Forward speed ranges are labeled 1-2-3-4 or 1-2-3-4-5.
  - No. 1 range is a creeping gear for use with some attachments.
  - No. 2 range is a slow forward speed (used for cutting tall or heavy grass), best gear for traveling up or down steep hills or when pulling heavy loads.
  - No. 3 range is best mowing speed.
  - No. 4 range is for very light mowing with a 5 speed transaxle, and transporting mower only with a 4 speed transaxle.
  - No. 5 range should be used for transporting mower only with a 5 speed transaxle.



Figure 8



## CAUTION

Come to a full stop before changing gears.

- **Brake-Clutch Pedal** - This is a dual purpose control. Press pedal halfway down to disengage clutch. It is used for changing speed range or direction of travel (forward or reverse). Release pedal to engage clutch. With pedal completely depressed, brake is applied.
- **Parking Brake Lever** - Used to lock brake-clutch pedal in brake position. **NOTE:** Check gear shift position and know operating intentions before releasing brake.
  1. Depress brake-clutch pedal fully, engaging brake.
  2. Push parking brake lever (attached to brake-clutch pedal) forward and engage notch in lower end of lever against slot in main frame.
  3. To release parking brake, apply pressure to pedal and spring will release parking brake lever.
- **Cutting Height Adjustment Lever** - Used to change height of cut. The front notch on quadrant is lowest cutting height and rear notch is highest cutting height. Other notches change height of cut about 1/2 inch each.
  1. Grasp lever (figure 8) with right hand and push outward to disengage lever from notch on quadrant.
  2. Move lever to desired cutting height (toward rear of mower for high cut and forward for low cut).
  3. After positioning lever at desired height of cut be sure lever engages notch on quadrant completely.
- **Mower Clutch Lever** - Used to engage or disengage the power to the blades at any time while power to the drive wheels is still maintained and controllable. With mower clutch lever moved all the way to DISENGAGE (rearward) position, blades should stop in a safe period of time. Use DISENGAGE position when using as a tractor for yard jobs such as pulling a roller, seeder, sweeper or other accessories.
  1. Move lever slowly (**Never "snap" the lever**) toward front of mower and latch into notch on quadrant to engage power to blades. It is important to engage mower clutch lever while engine is running at full speed. This prevents excessive strain to belt.

2. Move lever toward rear of mower to disengage power to blades and to apply blade brake.

**Mower clutch lever must always be in full DISENGAGE position to start engine. Never place lever in ENGAGE position until engine is warmed up and operator is on seat, ready to start mowing. Always return lever to DISENGAGE position before leaving operator's position.**

## ⚠ DANGER ⚠

Blades will not stop immediately. Keep hands and feet from under mower and away from the discharge chute.

### TO START ENGINE (Check oil level)

**IMPORTANT:** Your riding mower has two lockout switches that connect the solenoid to the brake-clutch pedal and mower clutch lever. When starting engine, the brake-clutch pedal must be fully depressed and mower clutch lever must be in full DISENGAGE position to engage the lockout switches. The red indicator light, if so equipped, will glow on dash and engine will not crank unless these conditions are met. **NOTE: Engine is supplied with little or no oil. Be sure oil has been added.** To start engine, proceed as follows:

1. Check to make sure fuel tank contains clean, fresh gasoline, and engine crankcase is full of oil.
2. Depress and hold brake-clutch pedal all the way down. Place shift lever in NEUTRAL position.
3. Place mower clutch lever to DISENGAGE position.
4. Place throttle control lever to FAST position. **NOTE:** On tractors not equipped with choke lever, place throttle control lever into START position on a cold engine, FAST position on a warm engine.
5. Pull choke lever out. **NOTE:** A warm engine will require little or no choking.
6. Turn ignition key to START. **NOTE:** If engine becomes flooded, turn engine over (with starter) several times with choke lever pushed all the way in to clear excess fuel.
7. After engine starts, move throttle lever to desired engine speed and gradually push choke lever all the way in.

8. To stop engine, turn ignition key to OFF position.

**If engine cranks but fails to start, proceed as follows:**

1. Check to make sure fuel tank contains clean, fresh gasoline.
2. Check to make sure fuel shut-off valve is open (if so equipped).
3. Check to make sure spark plug is tightened securely into engine and spark plug wire is attached to spark plug.
4. Carburetor adjustment may be necessary (see **Engine Operation and Maintenance Manual** for proper procedure).

**If engine fails to crank, check the following:**

1. Be sure brake-clutch pedal is fully depressed and mower clutch lever is in DISENGAGE position.
2. Be sure the battery has been serviced and charged.
3. Be sure deck safety wire is connected to wire harness.
4. Check fuse in red wire near back of ignition switch.

**⚠ DANGER ⚠**

Never run engine indoors or in enclosed, poorly ventilated areas. Engine exhaust contains **CARBON MONOXIDE**, an **ODORLESS** and **DEADLY GAS**.

Keep hands, feet, hair and loose clothing away from any moving parts on engine or riding mower.

**WARNING** - Temperature of muffler and nearby areas may exceed 150° F. Avoid these areas.

### RIDING MOWER OPERATION

Take a comfortable riding position on seat of rider and start engine as outlined. After engine warmup, depress brake-clutch pedal halfway and move shift control lever to desired gear. **Slowly** release brake-clutch pedal to start rider in motion. Until you get the feel of the rider, stay near the SLOW throttle position. To change gear range, depress brake-clutch pedal fully, come to a complete stop, and move shift lever to desired position. With mower blades stopped, make your first run in a large, open, level area. Learn to start stop, and change direction in this area.

Once you learn to maneuver your rider, increase throttle speed to FAST. **Slowly** move mower clutch lever to ENGAGE position and start mowing. To stop blades, move lever to DISENGAGE position.

To stop engine, move throttle control to SLOW position, turn ignition key to OFF position. **CAUTION: Disengage mower clutch lever, set parking brake, stop engine, and remove key before leaving operators position. Always dismount from left side.**

### MOWING HINTS

The engine should be run at fast throttle and ground speed controlled by shift lever position. Forward speed of the rider must be controlled in accordance with the type and quantity of grass being mowed. The more grass that must be cut, the slower the speed forward should be. When cutting light grass, the forward speed can be increased. By observing the cutting action of your mower, you can determine how fast you can travel.

Your mower may tend to leave unmowed strips when long and tender grass is being mowed. Tender grass has a high internal moisture content and is easily depressed by the tractor wheels, and may not always spring back in time to be cut. To overcome this condition, we advise mowing the lawn in a counterclockwise direction, overlapping the previous cut, which allows the lifting action of the rotating blades to lift the grass into the cutting path.

The rear wheels are driven by a transaxle, similar to an automobile differential. This makes short turns possible and prevents marring of the lawn. It is possible to spin the drive wheels of the tractor under adverse conditions. When one wheel slips, shift your weight over this wheel to obtain more pulling power. Your tractor is very maneuverable and can be reversed to back out of dead ends. **CAUTION: Disengage mower blades before backing up. Carefully check area behind mower for children or pets before backing up!**

This riding mower is equipped with a frame hitch for use in pulling light loads, such as lawn sweeper, utility cart, or seeder/ fertilizer spreader.



### CAUTION

#### TO AVOID INJURY

- Read Operator's Manual(s).
- Know location & function of all controls.
- Keep safety devices (guards, shields, and switches in place and working.
- Remove objects that could be thrown by blade.
- Do not mow when children & others are around.
- Never carry passengers.
- Always look behind machine before backing.
- Do not mow where machine could tip or slip.
- If machine stops going uphill, stop blade and back slowly down.
- Be sure blade & engine are stopped before placing hands or feet near blade.
- Remove key when leaving machine.

## MAINTENANCE

The warranty on this riding mower does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, operator must maintain rider as instructed in this manual. The following

**Maintenance Check List** is supplied to assist operator to properly maintain rider. This is a check list only. Adjustments referred to will be found in **Adjustments** section of this manual.

<b>MAINTENANCE CHECK LIST</b>	AFTER FIRST 5 HOURS BEFORE EACH USE	AFTER EACH USE FREQUENTLY	MONTHLY	EVERY 25 HOURS	EVERY 50 HOURS	BEGINNING EACH SEASON BEFORE STORAGE	<b>SERVICE RECORD</b> FILL IN DATES AS YOU COMPLETE REGULAR SERVICE
Check Engine Oil Level	●					●	
Change Engine Oil	●			●		●	
Check Battery Fluid Level			●			●	
Clean and Re-Oil Air Cleaner				●		●	
Check Spark Plug				●			
Check Tire Pressure (12-14 lbs.)					●		
Tighten all Loose Screws & Nuts				●		●	
Inspect for Worn/Damaged Parts				●		●	
Clean Mower Deck		●				●	
Clean Tractor			●			●	
Check Drive Belt Adjustment				●			
Check Tractor Brake Adjustment				●			
Check Mower Deck Belt Adjustment				●			
Lubricate Steering Shaft				●			
Lubricate Steering Sector Gear				●			
Lubricate Front Spindles				●			
Lubricate Front Wheel Bearings				●			
Lubricate Linkage & Pivot Points				●			

### CAUTION

At no time during maintenance or adjustments can the riding mower be lifted more than 20 inches from level position without taking the following precautions:

1. Remove gasoline from tank and run engine until carburetor is dry.
2. Remove battery (see BATTERY REMOVAL paragraph in MAINTENANCE section).
3. Remove oil from crankcase.

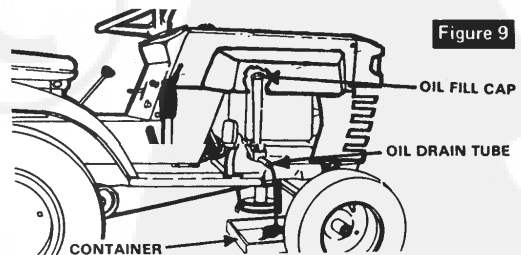
### LUBRICATION

For lubrication frequency see **Maintenance Check List**. For lubrication points and type of lubricant see **Lubrication Chart**.

### TO CHANGE CRANKCASE OIL

Crankcase oil should be changed after first 5 hours of operation and every 25 hours thereafter. See **Engine Operation and Maintenance Manual** for proper procedure. Check oil level before each use. Add oil as required.

1. Disconnect spark plug wires.



2. Place a flat bottom 2 quart container beneath oil drain tube (figure 9).

3. Remove plug to drain oil. **NOTE:** Oil fill cap should be loosened to serve as an air vent.

4. Reinstall plug, remove oil fill cap and refill crankcase as outlined in **Engine Operation and Maintenance Manual**.

5. Reinstall oil fill cap and reconnect spark plug wires.

### AIR FILTER MAINTENANCE

The air filter should be cleaned and re-oiled every 25 hours of operation under normal operating conditions; more often under dusty conditions. To clean air filter, proceed as instructed in **Engine Operation and Maintenance Manual**.

### CAUTION

**Never run the engine without the air cleaner element installed. A defective air cleaner can result in loss of engine power and can create excessive wear or damage to engine components if dirt or dust is permitted to enter engine through the carburetor. A damaged air cleaner, or one that is clogged with dust or dirt should be replaced immediately.**

### SPARK PLUG MAINTENANCE

Spark plug should be checked periodically for excessive carbon and gap. The spark plug gap should be checked with a wire feeler gauge and set at .030 inch.

### CLEANING RIDER/MOWER

Grass clippings may pack under the mower chassis due to the internal moisture content of the grass. This accumulation of cut grass should be removed after each mowing. Disconnect spark plug wires, remove ignition key and scrape accumulation off with a putty knife or similar tool. Cleaning of the underside is easier if mower deck is removed. See paragraph **Mower Deck Removal**. Remove dirt and debris from engine area with a brush or cloth.

### BATTERY MAINTENANCE

Check electrolyte level once a month. If found below indicator ring, add clean water to restore level to indicator ring. **NEVER ADD ELECTROLYTE!**

If battery needs more than 2 or 3 ounces of water in each cell per month, the charging system may be malfunctioning. Have battery and/or engine checked by a trained serviceman.

When starter operates properly and battery connections are clean and tight but cranking difficulty is experienced, battery may not be charged. Battery should be taken to a qualified service station and tested.

If engine will not start right away under normal cranking speed, continued cranking will run down the battery and may cause damage to starter. Check ignition and fuel systems and correct any faults.

The battery should be kept clean. If the top has an accumulation of dirt or grease, remove the battery from the tractor for cleaning. The battery should be cleaned with a mild solution of baking soda and water. **Brush this on, keeping vent plugs tightly in place to prevent any solution from entering the cells.** Allow the solution to work for a few minutes, then rinse with clean water and wipe battery dry. If battery terminals are corroded, clean with a wire brush and coat terminals with petroleum jelly. **Be sure to reinstall battery in the same position and properly reconnect battery cables (red to positive, black to negative).**

Proper care will lengthen battery life. When replacement becomes necessary, use battery of same size and type for continued trouble-free service (see **Repair Parts Manual**).

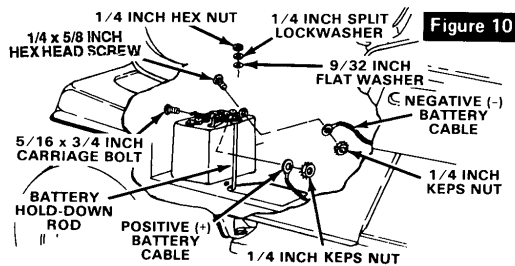
### BATTERY REMOVAL

1. Raise seat and disconnect negative (black) battery cable (figure 10) and tie back.

### CAUTION

**Be sure that battery hold-down bracket does not touch battery terminals. When installing battery cables, install positive (red) cable first. When disconnecting battery cables, disconnect negative (black) cable first. Be sure that wrench does not touch any metal surface or both terminals, as damage to electrical system could result.**

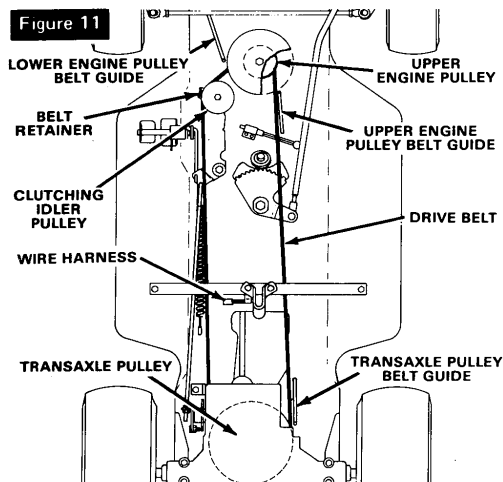
2. Disconnect positive (red) battery cable and tie back.
3. Remove a 1/4 inch hex nut, 1/4 inch split lockwasher and 9/32 inch flatwasher from battery hold-down rod (figure 10).
4. Remove battery hold-down rod and battery hold-down bracket.
5. Lift battery out of tractor.
6. Installation of battery is reverse of removal or refer to **Battery Installation** paragraph in **Assembly** section of this manual. **NOTE:** Be sure to reconnect positive (red) cable first and do not allow wrench to touch any metal surface or other terminal.



### UNIT DRIVE BELT REPLACEMENT

Your rider uses three v-belts made of special compounds. If any of these belts become worn or break, replace with **original equipment belts** (see **Repair Parts Manual**). **NEVER USE A SUBSTITUTE.** To replace unit drive belt.

1. Disconnect spark plug wires.
2. Remove mower deck. See **Mower Deck Removal** paragraph.
3. Depress brake-clutch pedal and set parking brake.
4. Loosen clutching idler pulley belt retainer (figure 11) and remove belt from pulley.
5. Loosen upper engine pulley and transaxle pulley belt guides (figure 11) and pull away from pulleys.
6. Remove belt from transaxle pulley (roll belt off over top of pulley).
7. Remove belt from engine pulley.
8. Form a loop in belt. Push loop up through main frame, over shift lever and back down through main frame.
9. Install new original equipment belt in reverse order of removal.
10. With parking brake lever in third notch, secure belt retainer on clutching idler pulley as shown in figure 12. **NOTE:** Belt retainer should point toward position where running board meets main frame.
11. Adjust upper engine pulley and transaxle pulley belt guides. See **Belt Guides** paragraph in **Adjustmen** section of this manual.

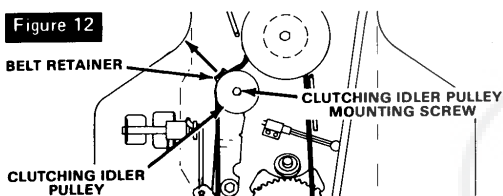


12. Check unit drive belt adjustment and make adjustment if necessary. See **Unit Drive Belt Adjustment** paragraph in **Adjustments** section of this manual.

13. Check unit brake adjustment and make adjustment if necessary. See **Unit Brake Adjustment** paragraph in **Adjustments** section of this manual.

14. If blade drive belt is to be replaced, do so before reinstall deck assembly.

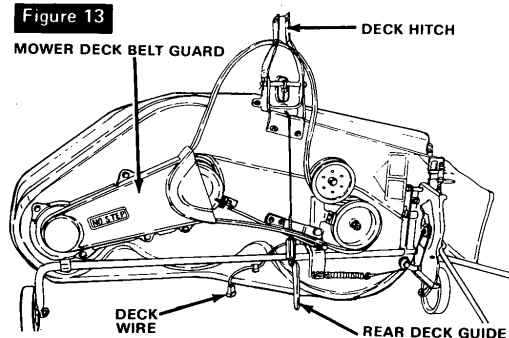
15. Reinstall mower deck assembly and reconnect spark plug wires.



### MOWER DECK REMOVAL

1. Disconnect spark plug wires and place height adjustment lever in lowest cut position.

2. Disconnect mower deck wire assembly (figure 13) from wire harness. **NOTE:** Wire harness must be connected to bypass wire (figure 11) attached to wire harness to start engine with deck removed.



3. Note which hole in deck hanger that pull pin is installed so that same hole will be used when reinstalling deck. Remove hairpin cotter from pull pin and remove the pull pin (figure 14).

4. Note original position of lower engine pulley belt guide (figure 11) — 1/16 inch between guide and belt — then loosen belt guide and swing away from pulley.

5. Move mower deck forward and remove belt from lower engine pulley.

6. Move deck further forward to disengage the rear deck guide (figure 13) from the guide bar (figure 11) which is attached to the underside of the unit.

7. Deck can now be worked out from the right side of unit. **NOTE:** Deck removal will be easier if front wheels are turned to the left and unit is raised enough to allow deck hitch to slide out under right front wheel.

8. Installation of deck is reverse of removal.

9. Reconnect deck wire to unit wire assembly and spark plug wires to spark plugs.

### BLADE DRIVE BELT REPLACEMENT

The mower deck has two drive belts. The long belt transmits power from the lower engine pulley to the center and right hand blade quills. The short belt transmits power from the center blade quill to the left hand blade quill. To replace belts, proceed as follows:

1. Disconnect spark plug wires and remove mower deck. See **Mower Deck Removal** paragraph.

2. Remove mower deck belt guard (figure 13).

3. Note the position of the belt retainer on idler pulley (figure 15) so that retainer can be repositioned properly after belt installation. Loosen idler pulley.

4. Remove old belts and replace with new **original equipment belts**. **NOTE:** Small belt must be on inside of spring loaded idler pulley as shown in figure 15.

5. Replace belt guard.

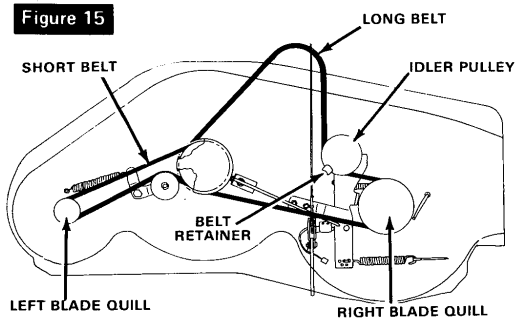
6. Adjust belt retainer and retighten idler pulley.

7. Reinstall mower deck assembly.

8. Adjust belt as described in **Blade Drive Belt Adjustment** paragraph in **Adjustment** section.



## LUBRICATION CHART



### BLADE REPLACEMENT

The cutting blades should be sharp and well-balanced to run smoothly. Blades should have correct amount of "lift" for proper cutting and discharge of clippings. Lift is created by upturned bent tip edges (figure 16) of blade ends. As cutting edges of blades wear, the bent tip edges also wear, decreasing blade lift, resulting in decreased cutting ability. Because of this, sharpening of blades will not help much. It is recommended that blades be replaced.

**IMPORTANT:** Stop engine, disconnect spark plug wire and inspect blades at once if you strike any solid unyielding object. Check to make sure blade mounting screws are tight. To remove blades:

1. Disconnect spark plug wires and remove mower deck. See Mower Deck Removal paragraph.

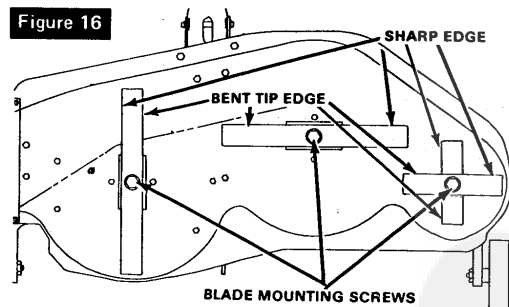
### **⚠ DANGER ⚠**

**DO NOT** handle blade with bare hands. Wear gloves or wrap blade with newspaper or other material while removing or reinstalling blade.

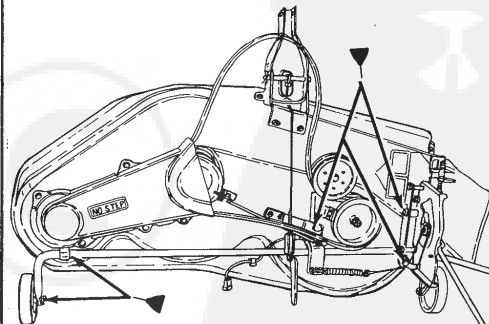
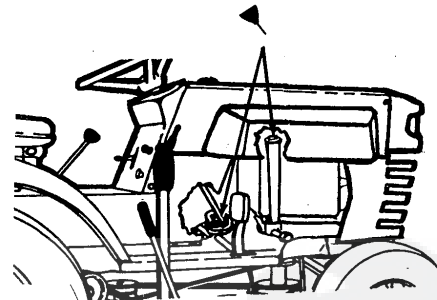
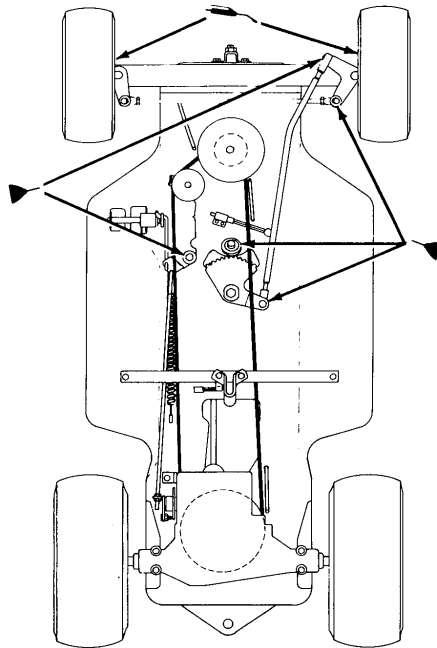
- 2 With a 9/16 inch wrench, remove blade mounting screws (figure 16) by turning screws counter-clockwise.

When replacing blades, be sure all parts are reassembled in proper order (see **Repair Parts Manual** for proper order) or severe vibration will occur. Bent tip edges of blades must be up toward top of mower deck or blades will not cut. **NOTE: Make sure blade mounting screws are tightened securely.** We recommend a 10 inch wrench or a torque wrench. If torque wrench is used, torque blade mounting screws to between 30 and 35 foot pounds.

3. Reinstall mower deck, reconnect deck wire to unit wire harness and reconnect spark plug wires.



Orientation view only. Do not stand on end.



- ➔ USE A GOOD GRADE OF CUP GREASE
- USE SAME OIL USED IN CRANKCASE



## ADJUSTMENTS

### ⚠ DANGER ⚠

**Keep hands, feet, hair and loose clothing away from any moving parts on engine or riding mower when making any adjustments that require engine to be running. DO NOT carry passengers.**

Located beneath the main frame are three v-belts. One v-belt (unit drive belt) transmits power to the transaxle which, in turn transmits power to the rear wheels. The other v-belts (blade drive belts) transmits power to the mower blades.

Located on the mower deck is a clutch that disengages power to the blades and a deck leveling adjustment.

Before any adjustments are made, it is necessary that you understand the function of the brake, clutch, and the brake-clutch pedal. The pedal disengages the clutch when partially depressed and applies the brake when fully depressed. Adjustment of the unit drive belt and brake must be synchronized so brake does not grab before clutch disengages. An incorrect adjustment causes brake to grab or hold while power is being transmitted to the rear wheels. Rider will try to move with brake applied, this will cause difficulty when shifting from one speed range or direction to another.

To replace drive belts, you must remove mower deck. Removal of deck isn't necessary for other adjustments, but if several adjustments are needed, it will be more convenient if deck is removed.

### CAUTION

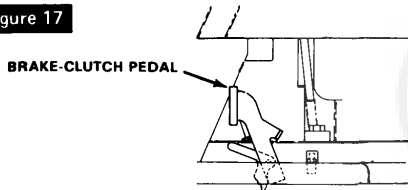
At no time during adjustments or repairs can the rider be lifted more than 20 inches from level position without taking the following precautions.

1. Remove gasoline from tank and run engine until carburetor is dry.
2. Remove battery (see BATTERY REMOVAL paragraph in MAINTENANCE section of this manual).
3. Remove oil from crankcase.

### UNIT DRIVE BELT ADJUSTMENT

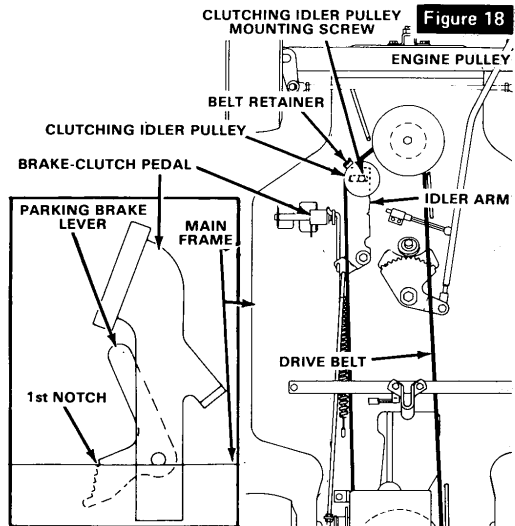
The drive belt is kept tight by a spring attached to the brake-clutch pedal assembly. When drive belt is properly adjusted, brake-clutch pedal, in fully released position, should appear as shown in figure 17. If drive belt requires adjustment, adjust as follows:

Figure 17



1. Disconnect spark plug wires.
2. Depress brake-clutch pedal far enough to latch parking brake in first notch (insert, figure 18).
3. Drive belt should not be loose. If belt is loose, proceed as follows:
  - A. Loosen clutching idler pulley (figure 18) mounting screw.

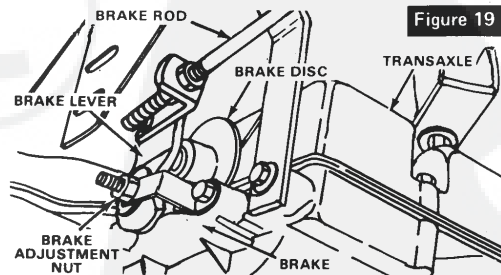
- B. Push idler pulley toward outside of main frame (away from engine pulley) until belt is tight.
- C. Retighten idler pulley mounting screw. **NOTE:** Be sure belt retainer is positioned as shown in figure 18.
4. Check brake adjustment and adjust if necessary. See **Unit Brake Adjustment** paragraph.
5. Reconnect spark plug wires.



### UNIT BRAKE ADJUSTMENT

This riding mower is equipped with an adjustable disc brake mounted on the transaxle. Place shift control lever to neutral position and depress brake-clutch pedal enough to latch parking brake lever in second notch. Brake should be disengaged and you should be able to push riding mower. If you are unable to push riding mower, brake is too tight and you need to loosen brake. With shift control lever in neutral position and parking brake lever in fourth notch, brake should be applied. If you are able to push riding mower, brake is too loose and you need to tighten brake. Brake must be set when parking brake lever is in the fourth position. To adjust brake, proceed as follows:

1. Disconnect spark plug wire.
2. Place shift control lever to neutral position and depress brake-clutch pedal enough to latch parking brake lever in second notch.



3. Turn brake adjusting nut (figure 19) clockwise to tighten (counterclockwise to loosen) until brake pad clears brake disc.

4. Check riding mower brake adjustment as described above.

5. Reconnect spark plug wire.

### MOWER DECK LEVELING ADJUSTMENT

The cutting height (from blade tip to ground) should be from 0 inch to 1/8 inch less at front of deck than at rear of deck. **To adjust:**

1. Disconnect spark plug wires and place mower deck cutting height adjustment lever into mid cut position.

2. Measure height of blade from level floor at front and rear deck (make sure tires are properly inflated). If distances are equal or not more than 1/8 inch less in the front, no adjustment is necessary.

3. If adjustment is necessary, place cutting height adjustment lever in extreme low position (full forward).

4. Place a block under front of mower deck (figure 20) to remove weight from bar hitch. Lift cable will be slack.

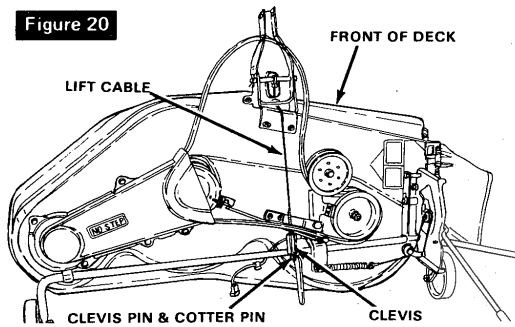
5. Remove cotter pin from clevis pin. Remove clevis pin (figure 20).

6. Turn rear clevis clockwise to raise front of deck. Turn counterclockwise to lower front of deck. Each 1 1/2 complete turns of clevis represents approximately 1/8 inch change in the front of mower deck.

7. Reinstall clevis and clevis pin. Remove block. Check front and rear measurements. If measurements are correct, reinstall cotter pin. If more adjustment is necessary, repeat preceding instructions.

8. Reconnect spark plug wires.

Figure 20



### BLADE DRIVE BELT ADJUSTMENT

When mower blades will not rev to full speed or slip while mowing, the blade drive belt should be tightened. **To adjust:**

1. Disconnect spark plug wires and place mower clutch lever in disengage position.

2. Loosen idler pulley locknut (figure 21).

3. Slide idler pulley toward center of deck to tighten belt. **NOTE:** Only a small amount of movement should be required.

4. Retighten locknut on idler pulley.

5. To check adjustment, reconnect spark plug wires, start engine and run engine at FAST throttle setting. Engage mower clutch lever and allow sufficient time for blades to run to full speed, then disengage mower clutch lever. Blades should stop within a few seconds and remain stopped. If blades do not stop or tend to creep, adjustment is too tight.

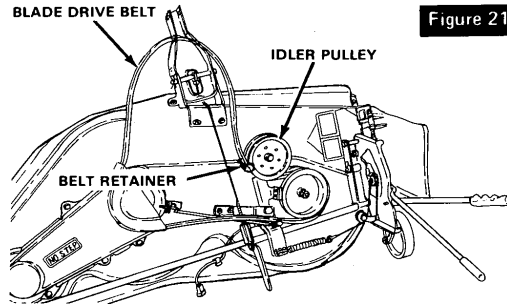


Figure 21

**⚠ DANGER ⚠**  
Blades will not stop immediately. Keep hands and feet from under mower and away from the discharge chute.

6. To loosen blade drive belt, reverse step 3 above.

7. Reconnect spark plug wires to spark plugs.

### BLADE BRAKE ADJUSTMENT

Brake pads should completely clear quill assemblies when blade engage lever is in engage position. **To adjust:**

1. Disconnect spark plug wires and remove deck. See **Mower Deck Removal** paragraph in **Maintenance** section.

2. Set mower clutch lever in disengage position.

3. Check distance mower clutch lever can be moved before brake pad on right hand quill assembly begins to move away from quill pulley (figure 22). Lever should move forward at least 3/4 inch, but not more than 1 inch, away from rear stop before brake pad moves.

4. If adjustment is necessary, proceed as follows:

A. Note in which hole (there are five) on brake arm the spring (figure 22) which is attached to the mower clutch cable is attached.

B. Moving the spring to a hole away from the clutch cable will shorten the distance mower clutch lever travels before moving brake pad. **NOTE:** Moving the spring one hole will change the mower clutch lever about 1/4 inch.

C. Moving the spring to a hole closer to the clutch cable will increase the distance mower clutch lever will travel before brake pad moves.

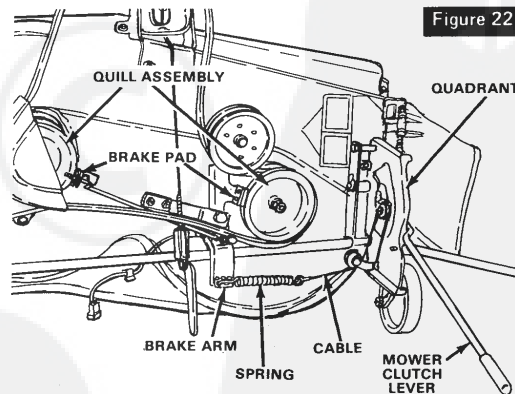


Figure 22

5. Check adjustment on center brake pad. Locknut on end of brake rod should be approximately 1/8 inch from brake pad mounting bracket with mower clutch lever disengaged and left hand brake pad against left quill pulley. Adjust locknut if necessary.

6. Reinstall deck on unit (reverse of removal) and re-connect spark plug wires.

### CARBURETOR ADJUSTMENT

Never make unnecessary adjustments. The factory settings are correct for most applications. If necessary, however, refer to **Engine Operation and Maintenance Manual**.

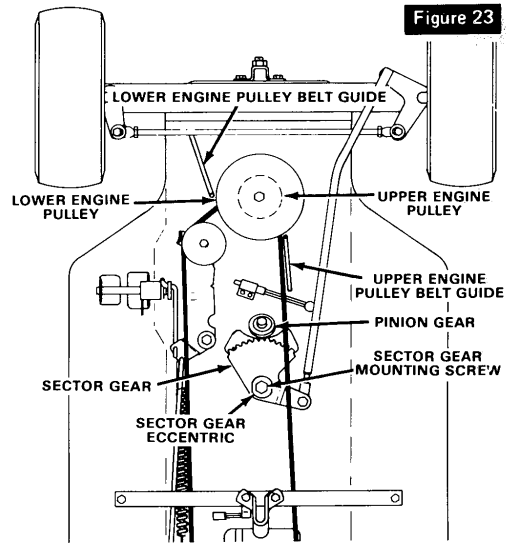
### BELT GUIDES

This unit is equipped with belt guides (figure 23) located next to the engine pulley. These belt guides are angle rods secured to the main frame. The guides are moved (by loosening locknuts) before replacing belts. When repositioning (after new belt installation) allow 1/16 inch gap between guide and belt.

### STEERING GEAR ADJUSTMENT

If excessive play develops in the steering, adjust pinion and sector gears (figure 23) as follows:

1. Disconnect spark plug wires.
2. Slightly loosen sector gear mounting screw under main frame (figure 23).
3. Turn sector gear eccentric (figure 23) to move sector gear forward or backward as needed.
4. Hold sector gear eccentric with wrench while tightening mounting screw securely.
5. Reconnect spark plug wires.



## STORAGE

The riding mower should be immediately prepared for storage at the end of the season or if it is to be un-used for 30 days or more. **Gasoline, if permitted to stand un-used for extended periods (30 days or more), may develop gummy deposits which can adversely affect the engine carburetor and cause engine malfunction.**

### ⚠ DANGER ⚠

**Never store engine with fuel in tank indoors or in enclosed, poorly ventilated enclosures, where fuel fumes may reach an open flame, spark or pilot light as on a furnace, water heater, clothes dryer, etc.**

**Handle gasoline carefully. It is highly flammable and careless use could result in serious fire damage to your person and/or property.**

**Drain fuel into an approved container outdoors, away from open flame.**

To prepare rider for storage, proceed as follows:

1. Clean the rider thoroughly.
2. Inspect the rider for worn or damaged parts and tighten all loose screws and nuts.

3. Drain fuel from tank and run engine until it stops due to lack of fuel.

4. While engine is still warm, change crankcase oil as instructed in **To Change Engine Oil** paragraph in **Maintenance** section of this manual.

5. Remove spark plug and pour one ounce of engine oil through spark plug hole into cylinder. Crank engine several times to distribute oil. Reinstall spark plug.

6. Lubricate all points shown in **Lubrication Chart**.

7. Remove battery (see **Battery Removal** paragraph in **Maintenance** section of this manual).

8. Clean battery as instructed in **Battery Maintenance** paragraph in **Maintenance** section of this manual. Add clean water to raise level to **UPPER LEVEL** line on side of battery and fully charge battery. A discharged battery will freeze and may burst. If possible, place battery in a cool dry area. Charge battery overnight every 30 days.

9. Store the rider in a clean, dry area and cover for additional protection.

A yearly check-up or tune-up by a qualified repairman is a good way of insuring that your rider will provide maximum performance for the next season.

The following **Trouble Shooting Guide** (2 pages) is designed to apply to all riding type mowers manufactured by Western International Incorporated. Some of the problems and corrections will not apply to your unit.

<b>TROUBLE SHOOTING GUIDE</b>	
<b>DANGER: ALWAYS DISCONNECT SPARK PLUG WIRE BEFORE ATTEMPTING ANY INSPECTION OR ADJUSTMENT.</b>	
<b>PROBLEM</b>	<b>CORRECTION</b>
<b>Mower Cuts Ragged or Uneven</b>	<ol style="list-style-type: none"> <li>1. Remove any accumulation of grass clippings from underside of mower deck housing.</li> <li>2. Make certain blades are sharp and in good condition (not bent or incorrectly mounted).</li> <li>3. Check blade mounting screw(s). Blade screw(s) must be tight.</li> <li>4. Check mower deck leveling adjustment per manual. Adjust if necessary.</li> <li>5. Check blade belt tension per manual. Adjust if necessary.</li> <li>6. Check quill assembly(s) for damage or wear. Replace if necessary.</li> <li>7. Check for possible damage to mower deck housing. Repair or replace if necessary.</li> <li>8. Check pivot tube assembly for damage. If bent or damaged, repair or replace.</li> </ol>
<b>Mower Leaves Unmowed Strip Between Blades</b>	<ol style="list-style-type: none"> <li>1. Mowing a heavy strand of grass or grass with excessive surface moisture could allow mower to leave an unmowed strip. Mow counterclockwise (side discharge only). <b>Do not</b> mow wet grass.</li> <li>2. Forward speed should be adjusted to mowing conditions by gear selection. Engine should be run at full throttle.</li> <li>3. Make certain blades are sharp and in good condition. Replace if necessary.</li> <li>4. Check blade belt tension. Adjust if necessary.</li> <li>5. Check quill assembly(s) for damage or wear. Replace if necessary.</li> <li>6. Check for damage to mower deck housing. Repair or replace if necessary.</li> </ol>
<b>Mower Scalps Lawn</b>	<ol style="list-style-type: none"> <li>1. Check mower height adjustment setting and readjust if needed. Scalping is more likely on rough or uneven lawns.</li> <li>2. Check for damage to mower deck housing. Repair or replace if necessary.</li> <li>3. Check for bent blade(s) or quill assembly(s). Replace if necessary.</li> <li>4. Check mower deck leveling adjustment and adjust if necessary.</li> </ol>
<b>Mower Will Not Discharge Clippings</b>	<ol style="list-style-type: none"> <li>1. Remove any accumulation of grass clippings from underside of mower deck housing.</li> <li>2. Wet conditions can cause the discharge chute and underside of mower deck to become plugged with clippings. <b>Do not</b> mow wet grass.</li> <li>3. Forward speed should be adjusted to mowing conditions by gear selection. Engine should be run at full throttle.</li> <li>4. When mowing long grass make first cutting in high position, then recut at normal cutting height.</li> <li>5. Check blade belt tension per manual. Adjust if necessary.</li> <li>6. If blade(s) have been replaced, make sure they have been correctly mounted.</li> </ol>
<b>Blade Drive Belt Comes Off During Use</b>	<ol style="list-style-type: none"> <li>1. Blade drive belt may suffer internal damage to cords when it comes off during use. If belt still comes off after checking all steps below, replace belt with a new original equipment belt.</li> <li>2. Check belt tension per manual. Adjust if necessary.</li> <li>3. Check belt guide. Correct clearance is 1/16 inch from belt when blade engage lever is engaged.</li> <li>4. Check mower deck leveling adjustment per manual. Adjust if necessary.</li> <li>5. Check for and remove any foreign objects interfering with belt travel.</li> <li>6. Check all pulleys on mower deck. A bent or split pulley could cause problems. Replace if necessary.</li> <li>7. Check engine drive pulley inner surface. If inner surface is rough or split, pulley should be replaced.</li> <li>8. Check blade throw-out assembly for wear. Replace necessary parts.</li> </ol>
<b>Blade Drive Belt Slips</b>	<ol style="list-style-type: none"> <li>1. If grass is too high or wet, belt slippage may occur.</li> <li>2. Check belt for wear or damage. Replace if necessary.</li> <li>3. Check blade belt tension per manual. Adjust if necessary.</li> <li>4. Check blade drive belt tension spring. If spring is stretched or damaged, replace spring.</li> </ol>
<b>Blade Drive Belt Wears Excessively</b>	<ol style="list-style-type: none"> <li>1. Check all belt guides. Correct clearance is 1/16 inch from belt when blade engage lever is engaged.</li> <li>2. Check for and remove any foreign objects interfering with belt travel.</li> <li>3. Check pulleys for damage. Replace if necessary.</li> <li>4. Make certain belt brake is clearing belt when mower is engaged. If brake cable is too long or broken, adjust or replace.</li> <li>5. Make certain mower deck leveling adjustment is correct. Adjust if necessary.</li> <li>6. Check blade belt tension per manual. Adjust if necessary.</li> </ol>
<b>Blade(s) Will Not Engage</b>	<ol style="list-style-type: none"> <li>1. Check belt. If worn or broken, replace. If belt is too loose, make belt adjustment.</li> <li>2. Check engagement spring on deck engagement idler. If broken or damaged, replace.</li> <li>3. Check for and remove any foreign objects interfering with engagement idler travel.</li> </ol>
<b>Blade(s) Will Not Disengage</b>	<ol style="list-style-type: none"> <li>1. Check blade belt tension per manual. Adjust if necessary.</li> <li>2. If blade drive belt adjustment will not provide enough slack in drive belt, replace with correct <b>Original Equipment Belt</b>.</li> <li>3. Check for and remove any foreign objects interfering with engagement idler travel.</li> </ol>

## **TROUBLE SHOOTING GUIDE (Continued)**

**DANGER: ALWAYS DISCONNECT SPARK PLUG WIRE BEFORE ATTEMPTING ANY INSPECTION OR ADJUSTMENT.**

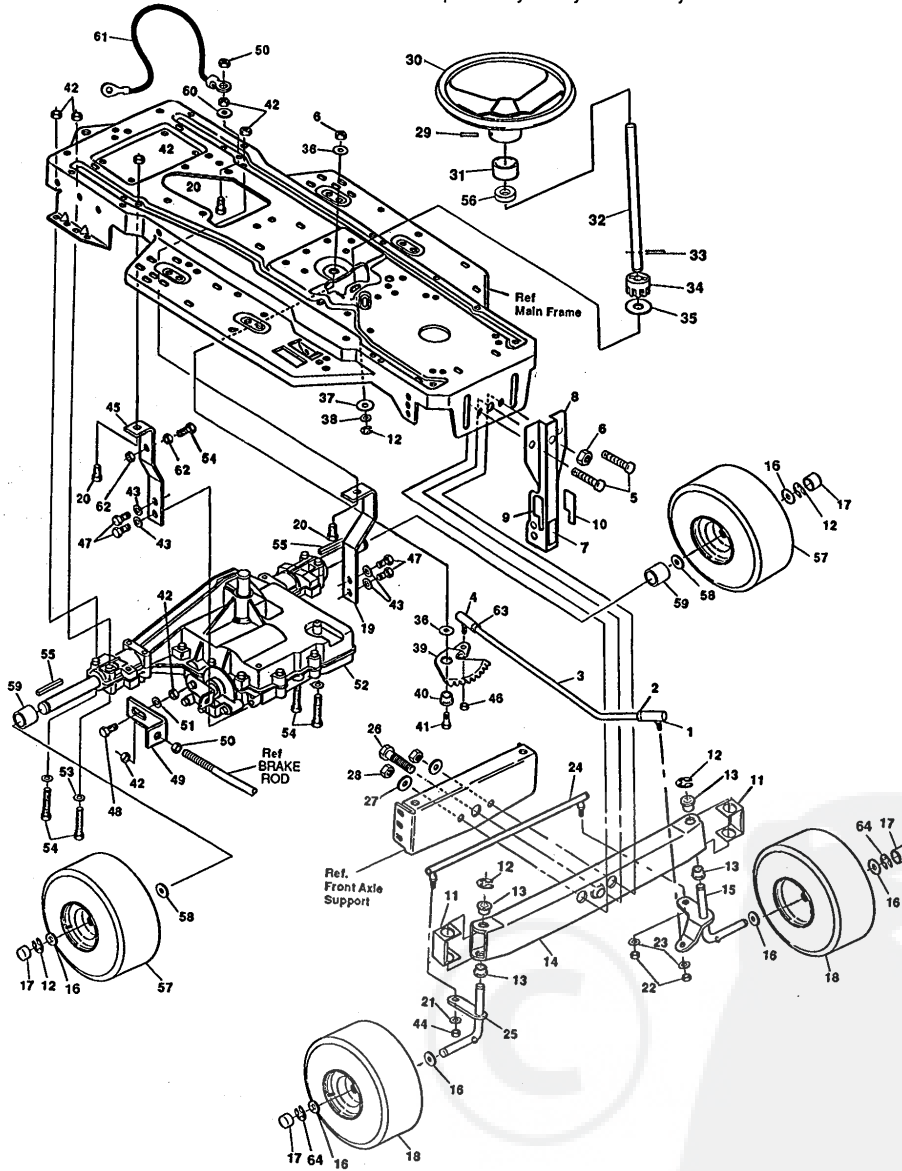
PROBLEM	CORRECTION
Extreme Vibration Occurs When Blade is Engaged	<ol style="list-style-type: none"> <li>1. Check blade(s) and make certain they are not bent, out of balance or loose. Replace if necessary.</li> <li>2. Check belt for burn spots or irregularities that might cause vibration. Replace if necessary.</li> <li>3. Check quill assembly(s) for damage or wear. Replace if necessary.</li> <li>4. Check for worn or damaged blade engagement parts. Repair or replace as necessary.</li> <li>5. Check engine drive pulley inner surface. If inner surface is rough or split, pulley should be replaced.</li> <li>6. Check under side of mower deck housing for accumulation of clippings. Remove accumulated clippings.</li> <li>7. Check for loose or damaged engine mounts. Tighten or replace as necessary.</li> <li>8. Check blade belt tension per manual. Adjust if necessary.</li> </ol>
Deck Lift Cable Broken	<ol style="list-style-type: none"> <li>1. Check operating procedure. Excessive ground speed on rough lawn may cause mower deck bounce, resulting in lift cable failure.</li> <li>2. Remove excessive clippings from underside of mower deck housing (build-up of clippings adds excessive weight to mower deck).</li> </ol>
Unit Drive Belt Slips	<ol style="list-style-type: none"> <li>1. Check unit drive belt adjustment(s). Adjust if necessary.</li> <li>2. Check for damaged or broken clutching idler spring. Replace if necessary.</li> <li>3. Check belt(s) for wear or damage. Replace if necessary.</li> <li>4. Check for and remove any foreign objects obstructing clutching idler mechanism.</li> <li>5. Check for split engine or transmission pulley. Replace if necessary.</li> <li>6. Check for damaged engine mounts (shock mounted engine only). Replace if necessary.</li> </ol>
Unit Drive Belt Squeals When Brake is Applied	<ol style="list-style-type: none"> <li>1. Check riding mower drive belt adjustment and riding mower brake adjustment per manual. Adjust if necessary.</li> <li>2. Check for and remove any foreign objects obstructing vari-speed or clutching idler mechanism.</li> </ol>
Unit Drive Belt Comes Off During Use	<ol style="list-style-type: none"> <li>1. Check belt tension. Adjust if necessary.</li> <li>2. Check belt guides. Adjust if necessary.</li> <li>3. Check for split or damaged pulley(s). Replace if necessary.</li> <li>4. Check clutching idler pulley alignment. If out of alignment, idler bracket may be bent. Replace if necessary.</li> </ol>
Unit Will Not Propel Itself When Clutch is Engaged	<ol style="list-style-type: none"> <li>1. See <b>Steps 1 through 6</b> in <b>Unit Drive Belt Slips</b> section of this chart.</li> <li>2. Check engine, transmission or transaxle pulley(s) for sheared or missing key. Replace if necessary.</li> <li>3. Check transmission or transaxle to make certain it is operable. Make certain chain (chain drive units only) is intact.</li> </ol>
Extreme Vibration Occurs When Clutch is Engaged (Let-Out)	<ol style="list-style-type: none"> <li>1. Check for split or damaged pulley(s). Replace if necessary.</li> <li>2. Check belt for irregularities or burned spots. Replace if necessary.</li> <li>3. Make certain belt tension is correct. Adjust if necessary.</li> <li>4. Check clutching idler assembly for wear or damage. Replace parts as necessary.</li> <li>5. On chain drive units, check sprockets for proper alignment and chain damage. Replace if necessary.</li> <li>6. Check for loose or damaged engine mounts. Tighten or replace as necessary.</li> </ol>
Unit Will Not Shift or Shifts Hard	<ol style="list-style-type: none"> <li>1. Check shifting procedure. Unit <b>MUST</b> come to a complete stop before shifting.</li> <li>2. Check riding mower drive belt adjustment and riding mower brake adjustment per manual. Adjust if necessary.</li> <li>3. Have transmission or transaxle checked by a competent repairman</li> </ol>
Steering Slips or is Loose	<ol style="list-style-type: none"> <li>1. Check for steering sector gear and pinion looseness. If gears are loose, make sector gear adjustment.</li> <li>2. Check ball joints for wear. Replace if necessary.</li> </ol>
Engine Will Not Turn Over	<ol style="list-style-type: none"> <li>1. Check starting procedure. Make sure starting instructions are followed.</li> <li>2. Check fuse (if so equipped).</li> <li>3. Check battery for charge. Make sure battery has been activated and charged (on new units).</li> <li>4. On new units, remove spark plug and check cylinder for accumulation of oil due to improper handling.</li> <li>5. Make visual check of electrical system to make sure all connections and lockout switches are secure.</li> <li>6. Check engine according to engine manufacturers instructions.</li> <li>7. Have electrical system checked by a competent repairman.</li> </ol>
Engine Turns Over But will Not Start	<ol style="list-style-type: none"> <li>1. Check starting procedure. Make sure starting instructions are followed.</li> <li>2. Make certain fuel tank is filled with clean, fresh gasoline.</li> <li>3. Make certain fuel shut-off is open (if so equipped).</li> <li>4. Make certain that throttle is in start or fast position.</li> <li>5. Check engine according to engine manufacturers instructions.</li> <li>6. On recoil start unit, make visual check of wiring system to make sure all connections and lockout switches are secure.</li> <li>7. Have wiring and lockout switches (on recoil start unit) checked by a competent repairman.</li> <li>8. Check fuel filter for obstructions.</li> </ol>



# REPAIR PARTS

45" RIDING MOWER A4518-080 (TSC # 44-20252)

**NOTE:** ALWAYS USE ORIGINAL EQUIPMENT PARTS. Use of service/replacement parts other than original equipment parts may void your warranty.



ALL UNNUMBERED  
ITEMS ARE INTERCHANGEABLE  
WITH OPPOSITE SIDE



**45" RIDING MOWER A4518-080 (TSC # 44-20252)**

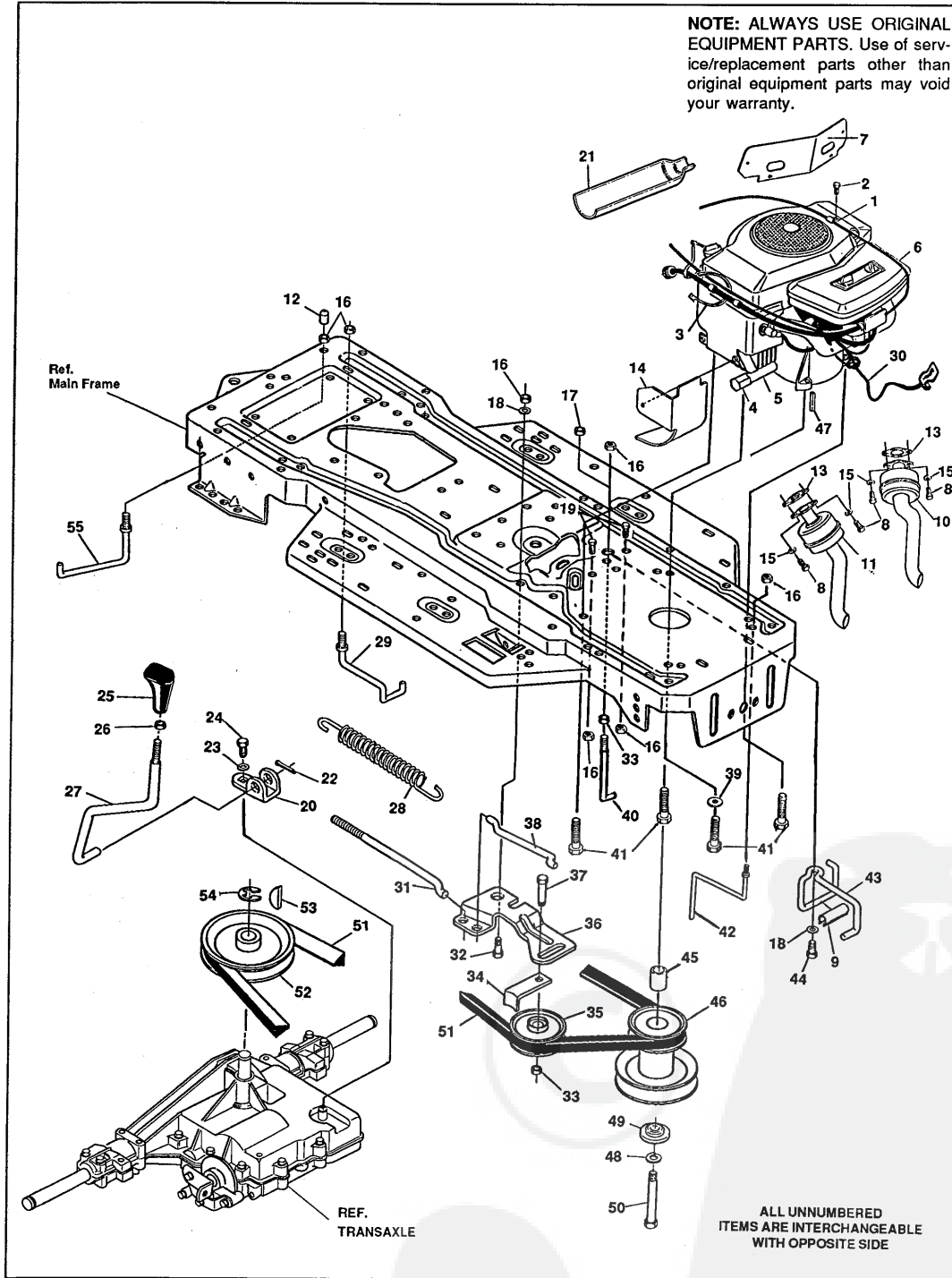
Key No.	Part No.	Description	Key No.	Part No.	Description
1	302865	Ball Joint	33	58274	Roll Pin
2	124925	Nut, Hex Jam, 3/8 - 24 Thd.	34	58244	Pinion
3	302864	Drag Link	35	301410	Bushing
4	57158	Ball Joint	36	22265	Washer
5	122207	*Screw, Hex Hd, 3/8 - 16 x 3 In.	37	301398	Flatwasher
6	1500	Locknut, 1/2 - 13 Thd.	38	21682	Flatwasher, 3/4 In.
7	70574	Decal, Caution	39	58289	Sector Gear
8	8349	Bracket, Deck Hanger	40	52406	Eccentric, Steering Adjust
9	68180	Decal, Deck Hanger, R. H.	41	180177	*Screw, Hex Hd, 1/2 - 13 x 1 1/2 In.
10	68181	Decal, Deck Hanger, L. H.	42	1498	Locknut, Hex, 5/16 - 18 Thd.
11	53373	Cover, Axle End	43	120638	Lockwasher, Split, 5/16 in.
12	306255	"E" Ring	44	271506	Nut, Reg. Hex, 7/16-20 Thd.
13	52407	Bearing, Front Spindle	45	302811	Bracket, Stabilizer, RH
14	312644	Front Axle Assembly	46	46692	Nut, Flanged Lock, 3/8-24 Thd.
15	9782	Front Spindle Assembly, L.H.	47	35498	Screw, hex, Wa hd, 5/16 - 18 x 3/4 In.
16	642	Flatwasher	48	20507	Shoulder Bolt
17	40394	Hub Cap	49	57217	Bracket, Brake
18	57656	Front Wheel and Tire Assembly:	50	271184	*Nut, Keps, 5/16 - 18 Thd.
	24167	Valve Stem	51	45602	Washer
	706	Grease Fitting	52	Transaxle	^Peerless, Model 820-5SP
	49401	Wheel Hub	53	120393	Flatwasher, 5/16 In.
	49613	Bushing	54	180089	*Screw, Hex Hd, 5/16 - 18 x 2 3/4 In.
	57914	Tire, 16 x 6.50	55	305562	Key
19	310450	Stabilizer Bracket, LH	56	301413	Steering Shaft Spacer
20	122017	Screw, Hex Hd, 5/16-18 x 1 In.	57	304183	Rear Tire and Wheel Assembly:
21	120383	Lockwasher, Split		24167	Valve Stem
22	120369	*Nut, Hex 3/8 - 24 Thd.		53655	Tire, 23 x 9.50
23	120382	*Lockwasher, Split, 3/8 In.		394184	Tire and Rim
24	300328	Tie Rod	58	51579	Flatwasher
25	9274	Front Spindle Assy., R. H.	59	57744	Spacer
26	52403	Bolt, Front Axle Pivot	60	138538	Washer, Int. Lock
27	2483	Spring Washer	61	55511	Ground Wire
28	1499	Locknut, 3/8 - 16 Thd.	62	55273	Nut, 5/16-18 Thd.
29	456378	Roll Pin, 1/4 x 2 - 1/4 In.	63	272123	Nut, Hex Jam 7/16 - 20 Thd.
30	309393	Steering Wheel	64	36625	E-Ring
31	311465	Cover, Steering Shaft	65	312424	Owner's Manual (Not Illustrated)
32	58243	Shaft, Steering Wheel			

(\* Standard Hardware Items - May Be Purchased Locally.

(^) Contact Tecumseh/Peerless authorized service dealer for parts and warranty.

45" RIDING MOWER A4518-080 (TSC # 44-20252)

**NOTE: ALWAYS USE ORIGINAL EQUIPMENT PARTS.** Use of service/replacement parts other than original equipment parts may void your warranty.



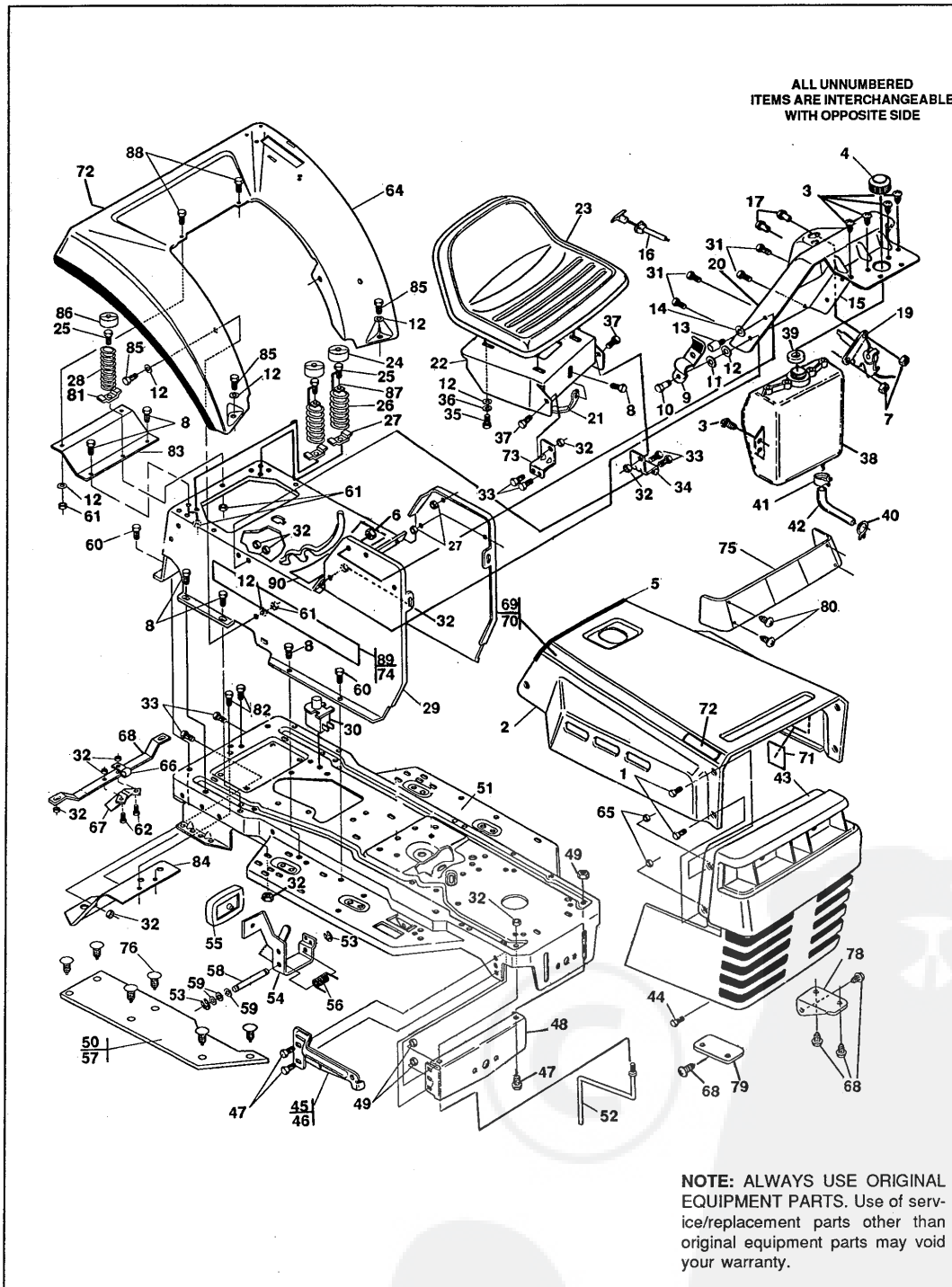
**45" RIDING MOWER A4518-080 (TSC # 44-20252)**

Key No.	Part No.	Description	Key No.	Part No.	Description
1	56538	Wire Retainer	29	308609	Belt Retainer
2	35258	Screw, Tapite, No. 10 - 24 x 3/8 In.	30	310748	Lanyard Hood
3	57444	Tie, Wire	31	303110	Brake Rod
4	47828	Cap, Oil Drain Tube	32	300793	Shoulder Bolt
5	52404	Tube, Oil Drain	33	1499	Locknut, Hex, 3/8 - 16 Thd.
6	Engine	~See Footnote Below	34	39659	Belt Retainer
7	7399	Bulkhead, Hood	35	35374	Pulley, Idler
8	180020	Screw, Hex Hd, 1/4 - 20 x 3/4 In.	36	300154	Idler Arm
9	303278	Plastic Extrusion, Belt Guide	37	45892	Carriage Bolt, 3/8 - 16 x 1 - 1/4 In.
10	58145	Muffler, L.H.	38	57204	Rod Clutch
11	58144	Muffler, R.H.	39	138489	Washer, Int. Lock
12	313136	Cap, Plug (Engine Part)	40	301713	Rod, Upstop
13	56640	Gasket, Muffler	41	50947	Screw, Tapite, 5/16 - 18 x 1 - 1/4 In.
14	8620	Cool Air Deflector	42	300440	Belt Guide
15	120380	Lockwasher	43	58356	Belt Guide
16	1498	Locknut, Hex, 5/16 - 18 Thd.	44	180079	*Screw, Hex Hd, 5/16 - 18 x 1 In.
17	271190	*Nut, Keps, 3/8 - 16 Thd.	45	304246	Spacer, Engine Pulley
18	45602	Washer, 5/16 In.	46	300743	Pulley, Engine
19	120229	*Screw, Hex, 5/16 - 18 x 7/8 In.	47	57555	Key, Square
20	302716	Bracket Shift	48	120383	Lockwasher, Split, 7/16 In.
21	54873	Oil Drain Trough	49	56431	Washer, Pilot
22	137185	Cotter Pin	50	215688	Screw, Hex Hd, 7/16 - 20 x 5-3/4 In.
23	57157	Washer	51	302719	V-Belt
24	56255	Screw, Nylock, 1/4 - 28 x 3/4 In.	52	54692	Pulley, Input
25	304438	Knob, Shift Lever	53	3021	Key, Woodruff, No. 606
26	120238	Jam Nut, 1/2 - 13 Thd.	54	22053	Retaining Ring
27	302718	Shift Lever	55	312124	Belt Guide
28	56359	Spring, Clutch	56	57157	Special Washer

(\*) Standard Hardware Items - May Be Purchased Locally.

(~) Contact Engine Manufacturer's authorized service dealer (See Engine Manual) for parts and warranty.

45" RIDING MOWER A4518-080 (TSC # 44-20252)

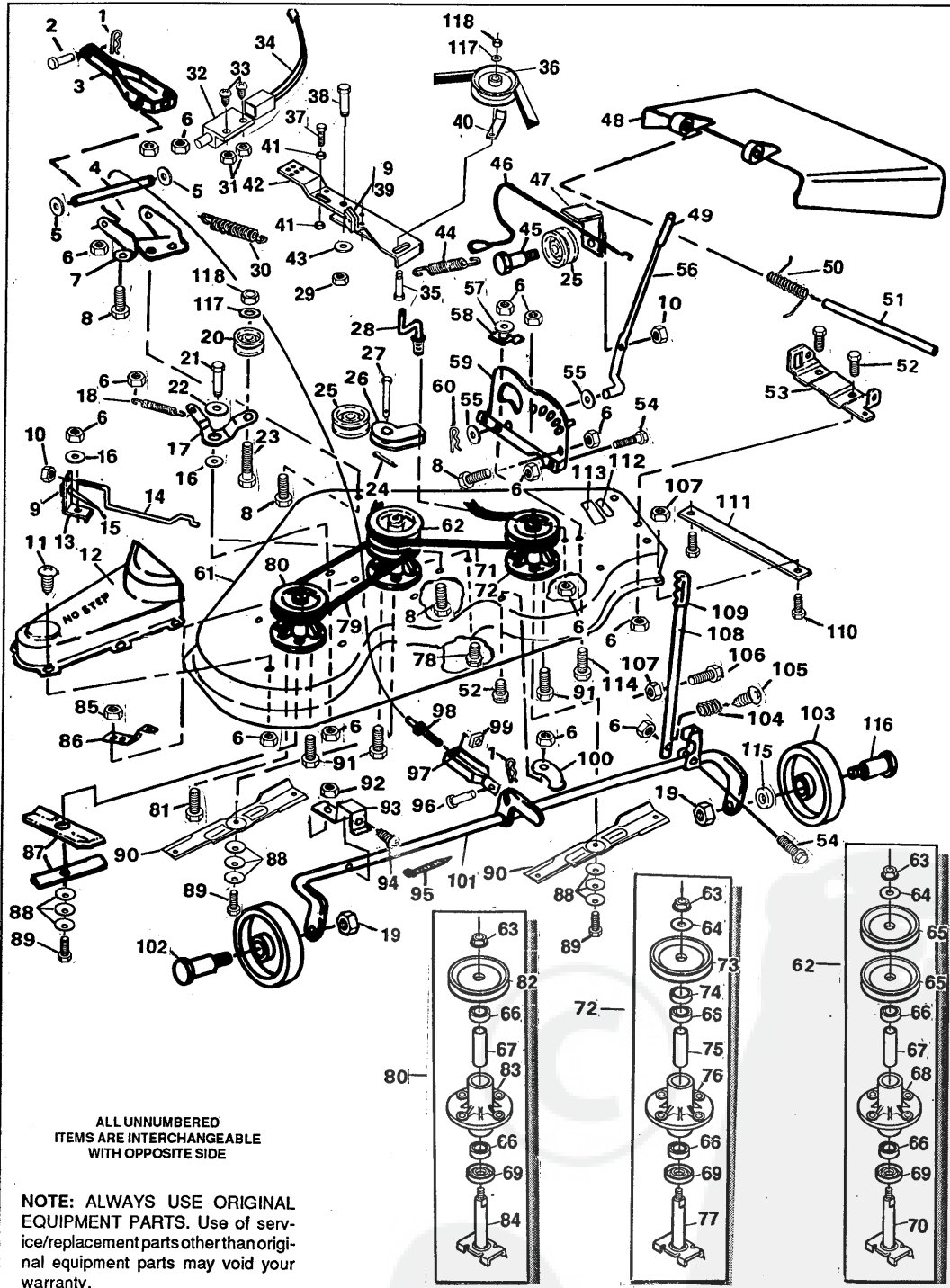


**45" RIDING MOWER A4518-080 (TSC # 44-20252)**

Key No.	Part No.	Description	Key No.	Part No.	Description
1	53225	Screw, Hex Hd, 1/4 - 20 x 1 - 1/4 In.	47	56030	Screw, Hex Wa Hd, 5/16 - 18 x 3/4 In.
2	7342	Hood	48	56361	Bracket, Axle Support, Front
3	49050	Screw, Plastite, 1/4 - 10 x 3/4 In.	49	55273	Wide Flange Locknut, 5/16 - 18 Thd.
4	46704	Gas Cap	50	310007	Foot Pad, L.H.
5	47453	Edging, Hood, 27.5 In.	51	312428	Main Frame
6	45174	Locknut, Wide Fl, 5/16 - 18 Thd.	52	300635	Belt Guide
7	271166	*Nut, Keps, No. 10 - 24 Thd.	53	20864	Retaining Ring
8	995346	*Screw, Taptite, 1/4 - 20 x 1/2 In.	54	300308	Brake Pedal Assembly
9	57159	Latch, Hood	55	48160	Rubber Pad, Pedal
10	8482	Shoulder Bolt	56	57847	Spring
11	120394	*Flatwasher, 3/8 In.	57	310008	Foot Pad, R.H.
12	120393	*Flatwasher, 5/16 In. I.D.	58	57196	Rod, Brake-Clutch
13	53446	Pin, Hood Latch	59	2968	Washer
14	138538	Washer, Internal Tooth, 5/16 In.	60	35497	Screw, Taptite, 5/16 - 18 x 1/2 In.
15	9420	Dash	61	1502	Locknut, Hex, 1/4 - 20 Thd.
16	300432	Cable, Choke	62	122017	*Screw, Hex Hd, 5/16 - 18 x 1 In.
17	35291	Screw, Hex Hd, No. 10 - 24 x 1/2 In.	63	446363	Flatwasher
18	50607	Knob, Throttle Control	64	8950	Fender
19	300456	Throttle Control	65	50352	Nut, Wide Flange Lock, 1/4 - 20 Thd.
20	302892	Decal, Dash	66	57569	Retainer, Wire
21	9235	Bracket, Seat Switch	67	49777	Guide, Rear, Mower Deck
22	9140	Seat Plate	68	43964	Guide Support, Rear
23	303024	Seat	69	306172	Decal, Hood Stripe, R.H.
24	53205	Cover, Seat Spring	70	306171	Decal, Hood Stripe, L.H.
25	44811	Screw, Taptite, 1/4 - 20 x 3/4 In.	71	301452	Foil Heat Reflector
26	49335	Spring, Seat	72	304960	Nameplate, Huskie
27	53744	Clamp, Seat Spring	73	9233	Bracket, Seat Support, RH
28	58366	Spring	74	302948	Decal, Console RH
29	310418	Console	75	302073	Lens, Clear
30	58277	Switch, Seat	76	309235	Ratchet Fastener
31	995338	Screw, Taptite, 1/4-20 x 5/8 In.	77	56021	Screw, 1/4 - 14 x 3/4 In.
32	1498	Locknut, Hex, 5/16 - 18 Thd.	78	9699	Bracket, Grille, L.H.
33	120228	*Screw, Hex Hd, 5/16 - 18 x 5/8 In.	79	9697	Bracket, Grille, R.H.
34	9228	Bracket, Support Seat, LH	80	57796	Screw, Plastite, #6 x 1/2 In.
35	122007	*Screw, Hex Hd, 5/16 - 18 x 3/4 In.	81	9224	Spring Clamp
36	120638	*Lockwasher, Split, 5/16 In.	82	48148	Screw, Taptite, 3/8-16 x 1 In.
37	20507	Shoulder Bolt	83	9267	Fender Bracket
38	302580	Tank, Fuel	84	312429	Tractor Hitch
39	54885	Pad, Fuel Tank	85	180022	Screw, 1/4-20 x 1 In.
40	41008	Clamp, Fuel Line	86	308115	Seat Spring Cover
41	47345	Clamp, Fuel Line	87	300292	Seat Stop
42	47452	Tubing, Fuel line	88	48900	Screw, 1/4-20 x 1 In.
43	303055	Grille	89	302949	Decal, Console LH
44	36149	Shoulder Bolt	90	302888	Decal, Console
45	12643	Bracket, Grille, L.H.			
46	12644	Bracket, Grille, R.H.			

(\*) Standard Hardware Items - May Be Purchased Locally.

45" RIDING MOWER A4518-080 (TSC # 44-20252)





**45" RIDING MOWER A4518-080 (TSC # 44-20252)**

Key No.	Part No.	Description	Key No.	Part No.	Description
1	56180	Hairpin Cotter	60	8260	Hairpin Cotter
2	47816	Pin, Clevis	61	305679	Mower Deck
3	57340	Pivot Bracket	62	304076	Quill Assembly
4	57196	Pivot Rod	63	1282	Locknut, Flange
5	20864	"E" Ring	64	56365	SpecialFlatwasher
6	1498	Locknut, 5/16 - 18 Thd.	65	304077	Pulley
7	57327	Front Bracket	66	49562	Bearing
8	120228	*Screw, Hex Hd, 5/16 - 18 x 5/8 In.	67	58128	Spacer, Tube
9	306973	Brake Pad	68	58124	Quill
10	1502	Locknut, 1/4 - 20 Thd.	69	50616	Dust Shield
11	40886	Screw, Taptite, 1/4 - 20 x 3/8 In.	70	58165	Saddle & Shaft Assembly
12	300238	Belt Guard	71	58170	V Belt
13	303247	Blade Brake Assy. (Incl. Nos. 9 & 15)	72	56424	Quill Assembly
14	300315	Rod, Brake Release	73	56390	Pulley
15	135624	Rivet, Brake Pad	74	51449	Spacer
16	120393	Flatwasher, 11/32 In.	75	50818	Spacer, Tube
17	1343	Idler Arm	76	55547	Quill Casting
18	300215	Spring	77	56425	Saddle & Shaft Assembly
19	1499	Locknut, 3/8 - 16 Thd.	78	180077	*Screw, Hex Hd, 5/16 - 18 x 3/4 In.
20	300920	Pulley, Idler	79	300142	V-Belt
21	41890	Shoulder Bolt, 5/16-18 Thd.	80	58125	Quill Assembly
22	4107	Flatwasher	81	50634	Screw, Hex Hd, 5/16 - 18 x 7/8 In.
23	45892	Shoulder Bolt, 3/8-16 x 1-1/2 In.	82	300294	Pulley Half
24	121222	*Cotter Pin, 3/32 x 3/4 In.	83	58162	Quill Casting, LH
25	39298	Pulley, Nylon	84	58122	Saddle & Shaft Assembly
26	49320	Support, Cable Pulley	85	44108	Nut, Hex, Wide Fl, 5/16 - 18 Thd.
27	49332	Pin, 3/8 x 1 In.	86	300179	Bracket, Idler
28	57318	Retainer, Belt	87	300323	Blade, 9 - 5/8 In.
29	45171	Wide Flange Locknut, 5/16 - 18 Thd.	88	2483	Formed Washer
30	35410	Spring	89	39573	Screw, Hex hd, 3/8 - 24 x 1 In.
31	271166	Nut, Keps, No. 10 - 24 Thd.	90	58212	Blade
32	57476	Switch	91	300345	*Screw, Hex Hd, 5/16 - 18 x 1 - 3/8 In.
33	159943	Screw, Pan Hd, No. 10 - 24 x 5/8 In.	92	120376	Nut, 5/16 - 18 Thd.
34	57588	Wire Assembly	93	300318	Bracket, Pivot Tube
35	57325	Carriage Bolt, 3/8 - 16 x 2 In.	94	300314	Screw, Hex Wa. Tap, 1/4 - 20 x 7/8 In.
36	300841	Pulley, Idler	95	57444	Wire Tie
37	121954	*Screw, Hex Hd, 1/4 - 20 x 2 In.	96	39522	Pin, Clevis
38	300180	Shoulder Bolt	97	9405	Clevis, Lift Cable
39	41601	Rivet, Brake Pad	98	58166	Lift Cable
40	1346	Retainer, Belt	99	120372	*Nut, Square, 1/4 - 20 x 7/8 In.
41	271172	*Keps Nut, 1/4 - 20 Thd.	100	51985	Support, Pivot Tube
42	300491	Idler Arm Assy. (Incl. Nos. 9 & 39)	101	300322	Pivot Tube Assembly
43	996416	*Flatwasher, 3/8 In.	102	23763	Bolt, Wheel Axle
44	300683	Spring, Clutch	103	302611	Wheel, Deck
45	57322	Shoulder Bolt	104	57319	Spring
46	57326	Clutch Cable	105	995338	Screw, Taptite, 1/4 - 20 x 5/8 In.
47	1288	Retainer, Cable	106	57324	Bolt, Latch
48	57818	Chute Guard	107	271184	*Nut, Keps, 5/16 - 18 Thd.
49	46478	Grip, Clutch Lever	108	57329	Height Adjust Lever
50	55767	Spring, Discharge Chute	109	56924	Grip, Height Adjust Lever
51	57317	Chute Pivot Rod	110	126216	*Carriage Bolt, 5/16 - 18 Thd.
52	120834	*Screw, Hex Hd, 5/16 - 18 X 1/2 In.	111	57314	Skid Bar
53	57360	Bracket, Pivot	112	68547	Decal, Caution
54	122040	*Screw, Hex Hd, 5/16 - 18 x 1 - 1/2 In.	113	300191	Decal, Height Adjust
55	120396	Flatwasher	114	122007	*Screw, Hex Hd, 5/16 - 18 x 3/4 In.
56	300188	Clutch Lever	115	310809	Spacer
57	120386	*Flatwasher, 5/16 In. I.D.	116	310424	Bolt, 3/8-16 Thd.
58	57321	Spring	117	120377	Nut, 3/8-16 Thd.
59	57337	Quadrant	118	120382	Lockwasher

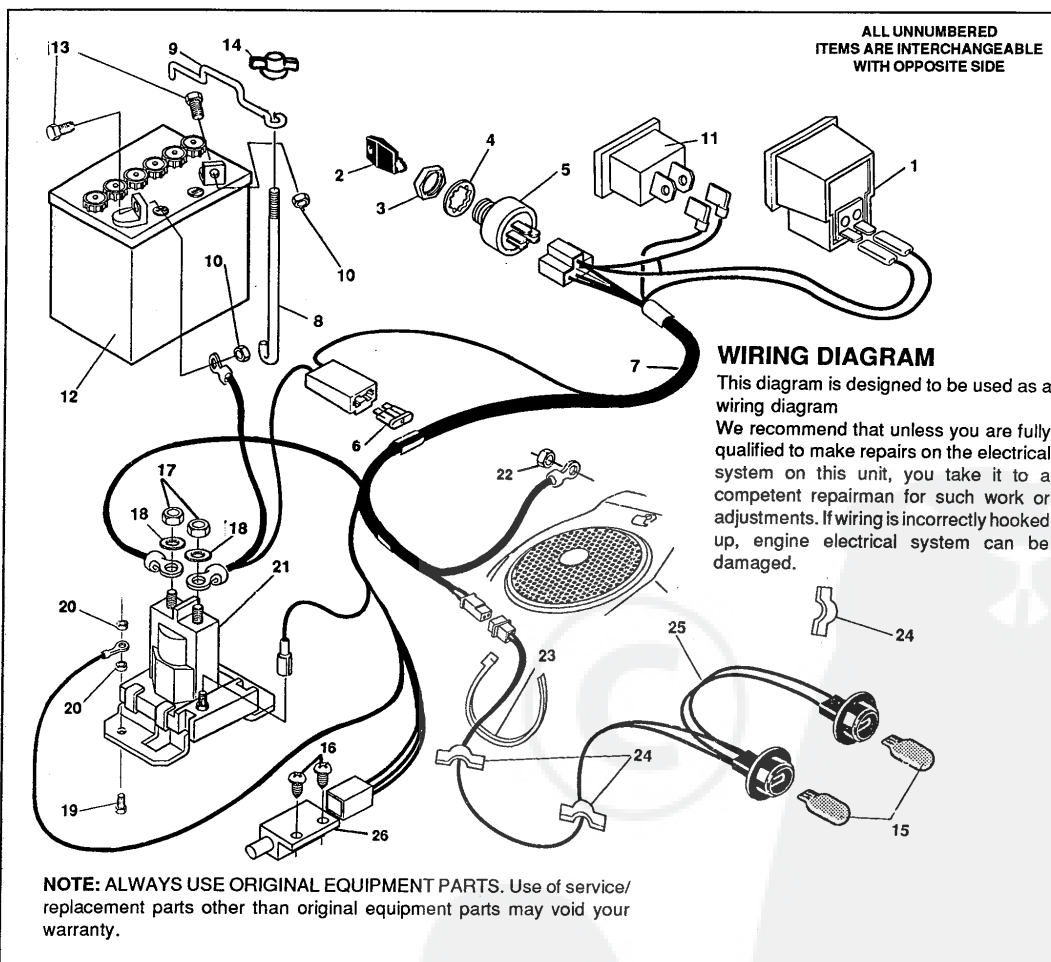
(\*) Standard Hardware Items - May Be Purchased Locally.

# ELECTRICAL DIAGRAM

45" RIDING MOWER A4518-080 (TSC # 44-20252)

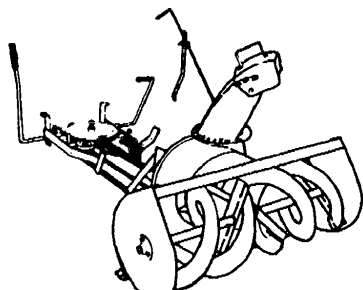
Key No.	Part No.	Description	Key No.	Part No.	Description
1	300133	Ammeter	15	52572	Bulb, Headlight
2	300626	Key, Ignition	16	57220	Screw, Tapite, No. 10 x 1/2 In.
3	48140	Locknut (Switch Part)	17	120368	*Nut, Hex, 5/16 - 24 Thd.
4	138557	Lockwasher (Switch Part)	18	138485	*Washer, Ext., Shakeproof, 5/16 In.
5	300687	Switch, Ignition	19	187745	*Screw, Hex Hd, 1/4 - 20 x 3/4 In.
6	302031	Fuse	20	1502	Locknut, Hex, 1/4 - 20 Thd.
7	300813	Wire Harness Assembly	21	53716	Solenoid
8	57552	Battery Rod	22		Engine Part
9	57551	Bracket, Battery, Hold-Down	23	57444	Retainer, Wire
10	271172	*Nut, Keps, 1/4 - 20 Thd.	24	41482	Wire Clip, Press
11	300255	Indicator Light	25	303064	Lead Wire, Headlight
12	302257	Battery	26	57211	Switch, Screw Mount
13	120854	Screw, Hex Hd, 1/4 - 20 x 5/8 In.			
14	310067	Plastic Wing Nut			

(\*) Standard Hardware Items - May Be Purchased Locally.



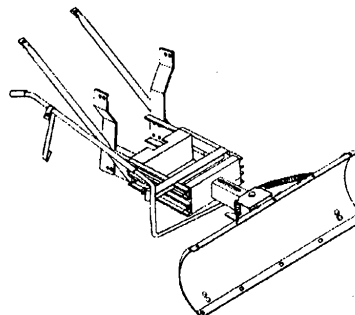
## ACCESSORIES

Contact the dealer where your tractor was purchased for the available accessories. If you are unable to contact the dealer, write to the address on page 2.



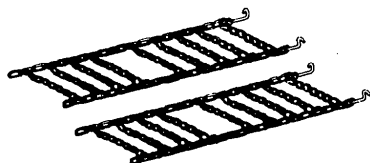
### TWO STAGE SNOW THROWER

A powerful two stage snow thrower with a 1/4 inch second stage impeller capable of moving more than 70 tons of snow per hour and throwing it accurately in any direction you choose. Driver controlled discharge chute turns a 160 degree arc. Wheel weights and tire chains are recommended.



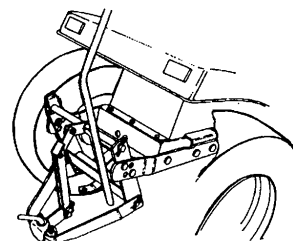
### 42" SNOW & GRADER BLADE

Rugged, heavy gauge steel blade. Spring loaded blade glides over uneven surfaces. Can be adjusted from seat for straight position, or 35 degrees left or right. Locks in raised position for traveling. Wheel and tire chains are recommended.



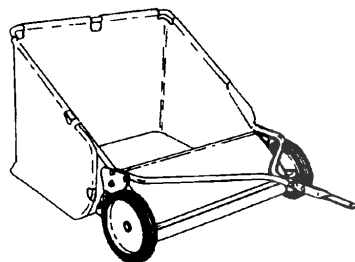
### TIRE CHAINS

Tire chains for added traction are available. Specify tire size when ordering.



### HEAVY DUTY HITCH

Includes lift bar mechanism. Heavy duty hitch is required when using some attachments.



### LAWN SWEEPER

Features extra heavy duty wheels and heavy duty basket. Basket is water, shrink and mildew proof with 6 bushel capacity. Dump release and height adjuster can both be operated from the tractor seat.

### FRONT WHEEL WEIGHTS

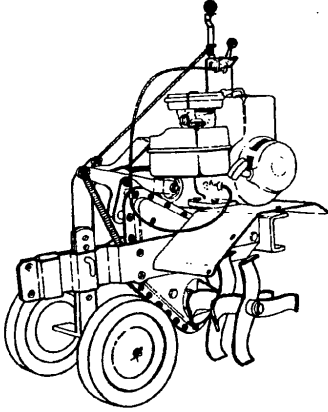
One pair, 20 pounds each. Total weight 40 pounds. Includes mounting hardware.

### REAR WHEEL WEIGHTS

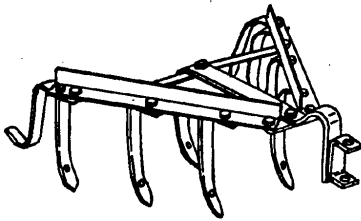
One pair, 50 pounds each. Total weight 100 pounds. Includes mounting hardware.

## ACCESSORIES

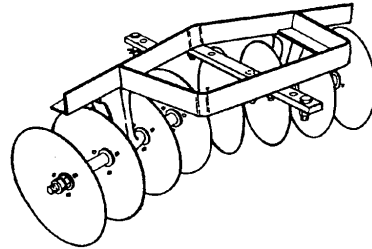
Contact the dealer where your tractor was purchased for the available accessories. If you are unable to contact the dealer, write to the address on the front cover of this manual.



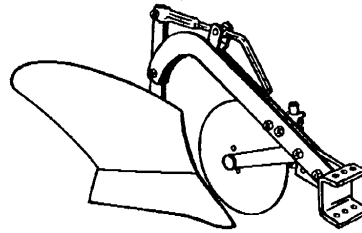
**28" - 5 H.P. MOTORIZED REAR MOUNTED TILLER**  
Heavy duty chain drive with #50 chain, 5 H.P. B & S horizontal shaft engine. 14 inch slasher type tines. Adjustable tilling depth. 10 inch steel wheels. Clutch and throttle operated from drivers seat. Moves and tills under its own power. Heavy duty hitch required.



**CULTIVATOR**  
Cultivator has 7 forged high-carbon steel shanks bolted in place. Ideal for working a variety of crops, letting you straddle rows or work between them. Adjusts from 6 to 42 inches. Convenient leveling and depth adjustment at the hitch end. Single pin connects cultivator to heavy duty hitch. Heavy duty hitch required.



**DISC HARROW**  
Eight 11 inch diameter steel disc blades can be adjusted for a discing width from 29 to 39 inches. Individual gangs have a position angle adjustment of 10, 15 & 20 degrees. J-bolt holds standard 16 inch concrete block for added discing weight. Heavy duty hitch required.



**8" or 10" PLOW**  
Plowing depth is adjustable up to 6 inches without leaving drivers seat. Plows up to an 8 or 10 inch furrow, and is equipped with a free-swinging 11 inch rolling coulter for cutting sod. A single pin connects plow to heavy duty hitch. Heavy duty hitch required; wheel weights recommended.

**CONTACT ANY OF THE FOLLOWING DISTRIBUTORS: Parts for: HOMKO - LAWN SCOUT - AMF - TURFMASTER - DYNAMARK - or any other CANADIANA, WESTERN INTERNATIONAL INCORPORATED or NOMA OUTDOOR PRODUCTS INCORPORATED product.**

**ALABAMA**

Automotive Elect. Serv.  
415-419 Meridian St.  
Huntsville, AL 35801  
(205) 539-2131  
AL WATS 800-421-1392  
\*b,c,f,g,h

**CALIFORNIA**

Billiou's  
75 No. D Street  
Porterville, CA 93257  
(209) 784-4102  
CA WATS 800-228-7286  
WATS 800-245-5468  
FAX (209) 784-4108  
(auto)  
\*b,c,e,f,g,h

**COLORADO**

Spitzer Ind. Prod. Co.  
6601 N Washington  
Thornton, CO 80229  
(303) 287-3414  
FAX (303) 287-0549  
(auto)  
\*b,c,e,f,g,h

**FLORIDA**

G.L.O Products Inc.  
13201 S. Belcher Rd.  
Largo, FL 33543  
(813) 530-9723  
FL WATS 800-225-5456  
FAX (813) 539-8603  
(auto)  
\*c,e,h

Radco Distributors Inc.  
4909 Victor St., Box 5459  
Jacksonville, FL 32207-0459  
(904) 733-7957  
FL WATS 800-727-8701  
FAX (904) 737-9575  
(auto)  
\*b,c,e,g,h

**ILLINOIS**

Garmoe Distr. Inc.  
2620 N Mannheim Road  
Franklin Park, IL 60131  
(708) 455-3588  
FAX (708) 455-6069  
(auto)  
\*b,c,e,f,g

Small Engine Parts  
3515 Auburn St.  
Rockford, IL 61103  
(815) 964-1754  
\*c,f,g,h

**INDIANA**

Thompson Sales & Serv.  
2400 W. Ridge Road  
Gary, IN 46408  
(219) 980-3282  
FAX (219) 980-3283  
(PBX)  
\*c,e,f,g,h

**IOWA**

Bruce Engine  
1829 N.W. 86th  
Des Moines, IA 50322  
(515) 278-5151  
Recorder WATS  
800-747-1829  
\*b,c,e,f,g,h

**KANSAS**

Colladay Hdwe. Co.  
201 N Plum, Box 766  
Hutchinson, KS 67501  
(316) 663-4477  
\*a,d,e

**KENTUCKY**

Auto-Electric Inc.  
715 W. Hwy 80, Box 671  
Somerset, KY 42501  
(606) 679-1171  
\*c,e,f,g,h

Cayce Mill Supply Co.  
505 E 1st St.  
Hopkinsville, KY 42240  
(502) 886-3335  
FAX (502) 886-3335  
(PBX ext 43)  
\*b,c,f,g,h

Kentucky Engine Service  
1003-08 E. Broadway  
Louisville, KY 40204  
(502) 587-7976  
\*b,c,e,f,g,h

**LOUISIANA**

United Engine Serv., Inc.  
11923 Cloverland Ave.  
Baton Rouge, LA 70809  
(504) 291-2622  
FAX (504) 292-2442  
(auto)  
\*c,e,f,g,h

**MARYLAND**

Center Supply Co.  
6802 Industrial Dr. #208  
Beltsville, MD 20705  
(301) 595-0860  
\*b,c,e,f,g,h

Kunkel Service Co.  
6252 Frankford Ave  
Baltimore, MD 21206  
(301) 377-4008  
MD WATS 800-492-8886  
FAX (301) 325-1314  
(auto)  
\*b,c,e,f,g,h

**MASSACHUSETTS**

Morton B. Collins Co.  
300 Birnie Ave. Box  
70058  
Springfield, MA 01107  
(413) 732-7449  
\*c,e,g,h

Crandall-Hicks Co.  
30 Oak St  
Westboro, MA 01581  
(617) 898-2808  
MA WATS 800-572-9342  
FAX (617) 898-3160  
(auto)  
\*b,d

**MICHIGAN**

Air Cooled Engine Div.  
1116 26th Ave.  
Menominee, MI 49858  
(906) 863-6332  
MI WATS 800-562-4825  
WATS 800-334-9535  
FAX (906) 863-1204  
(PBX)  
\*c,e,f,g,h

**MINNESOTA**

Hance Distr.  
12795 16th Ave. N.  
Plymouth, MN 55441  
(612) 559-2299  
FAX (612) 559-2365  
(auto)  
\*b,c,e,f,g,h

**MISSOURI**

Gunther's Serv. & Supply  
7320 Wornall Road  
Kansas City, MO 64114  
(816) 523-1952  
\*a,d,e,f,g,h

Wilson Engine & Parts  
Inc.  
4159 Shoreline Drive  
Earth City, MO 63045  
(314) 739-1313  
WATS 800-367-2787  
FAX (314) 739-8767  
(auto)  
\*b,d,e,f,g,h

**NEW JERSEY**

Power Distributors, Inc.  
71 N. Field Ave.  
Edison, NJ 08837  
(201) 225-4922  
FAX (201) 225-4922  
(auto)  
\*i

**NEW YORK**

Loepler & Ladd Inc.  
3950 Broadway, Box 214  
Buffalo, NY 14225  
(716) 684-0600  
\*c,e

Stiefvater Dist. Inc.  
Clinton Road, Route 12B  
New Hartford, NY 13413  
(315) 853-5581  
\*c,e,f,g,h

**NORTH CAROLINA**

Dixie Sales Co. Inc.  
5920 Summit Ave.,  
Box 1408  
Browns Summit, NC  
27402  
(919) 375-7500  
WATS 800-438-1069  
FAX (919) 274-2758  
(auto)  
\*b,e,f,g,h

**OHIO**

American Power Distr.  
2430 Tremainsville Rd.  
Box 5815  
Toledo, OH 43613  
(419) 475-7261  
FAX (419) 475-0467  
(auto after 5.00 pm)  
\*a,b,e,f,g,h

Small Engine Distr.  
5250 N Dixie, Box 14481  
Dayton, OH 45414  
(513) 278-8241  
\*b,d,e,f,g,h

**PENNSYLVANIA**

Bluemont Co.  
11101 Frankstown Road  
Pittsburgh, PA 15235  
(412) 242-1622  
PA WATS 800-344-1200  
WATS 800-431-2716  
FAX (412) 243-5673  
(auto)  
\*b,c,e,f,g,h

Scranton Auto Ignition  
1133-1135 Wyoming Ave.  
Scranton, PA 18509  
(717) 342-8133  
\*b,f,g,h

**SOUTH CAROLINA**

Magneto & Elect. Service  
103 Assembly St.  
Columbia, SC 29201  
(803) 771-4044  
SC WATS 800-922-1118  
WATS 800-334-4832  
FAX (803) 256-2727  
\*c,e,f,g,h

**TENNESSEE**

Chilton A/C Engines  
319 4th Ave. S.,  
Box 150806  
Nashville, TN 37201  
(615) 254-1634  
FAX (615) 242-6618  
(auto)  
\*b,c,e,f,g,h

Ace Distr. Inc.  
2103 E. Magnolia Ave.  
Knoxville, TN 37917  
(615) 524-5359  
TN WATS 800-332-9904  
FAX (615) 524-8263  
(auto)  
\*c,e,f,g,h

**TEXAS**

Marr Bros. Inc.  
423 E. Jefferson  
Dallas, TX 75203  
(214) 948-7387  
FAX (214) 946-6259  
(auto)  
\*a,d,e,f,g,h

Midland Small Engine  
Sales  
106 Carlton, Box 4215  
Midland, TX 79704  
(915) 684-5553  
\*b,d,e,f,g,h

**VIRGINIA**

NorVa Small Engines  
7010 Wellington Rd.  
Manassas, VA 22110  
(703) 369-3387  
\*c,e,f,g,h

RBI Corporation  
101 Cedar Ridge Rd.  
Lakeridge Park  
Ashland, VA 23005  
(804) 550-2207  
FAX (804) 550-2386 (auto)  
\*b,c,f,g,h

**WASHINGTON**

Pacific A/C Engine Inc.  
7925 2nd Ave S.  
Seattle, WA 98108  
(206) 623-6906  
c,e,f,h

**WISCONSIN**

Praefke A/C Eng.  
4050 N. 128th St  
Brookfield, WI 53005  
(414) 781-7010  
\*c,e,f,g,h

Wiggert Brothers  
4th & Jay, Box 1267  
La Crosse, WI 54601  
(608) 784-4790  
\*b,c,e,f,g,h

**CANADA**

Noma Outdoor Prod., Inc.  
155 Orenda Rd.  
Brampton, Ontario L6W  
1W3  
(416) 457-1433  
\*i

Rev. 12/27/89

**(\*) General Information Codes:**

- (a) Advance Payment Required
- (b) Accepts Credit Cards
- (c) C.O.D. okay
- (d) No C.O.D.
- (e) Accessories Available
- (f) Briggs & Stratton dealer or distributor
- (g) Tecumseh/Peerless dealer or distributor
- (h) Foote dealer or distributor
- (i) Dealer sales only, contact for closest dealer.