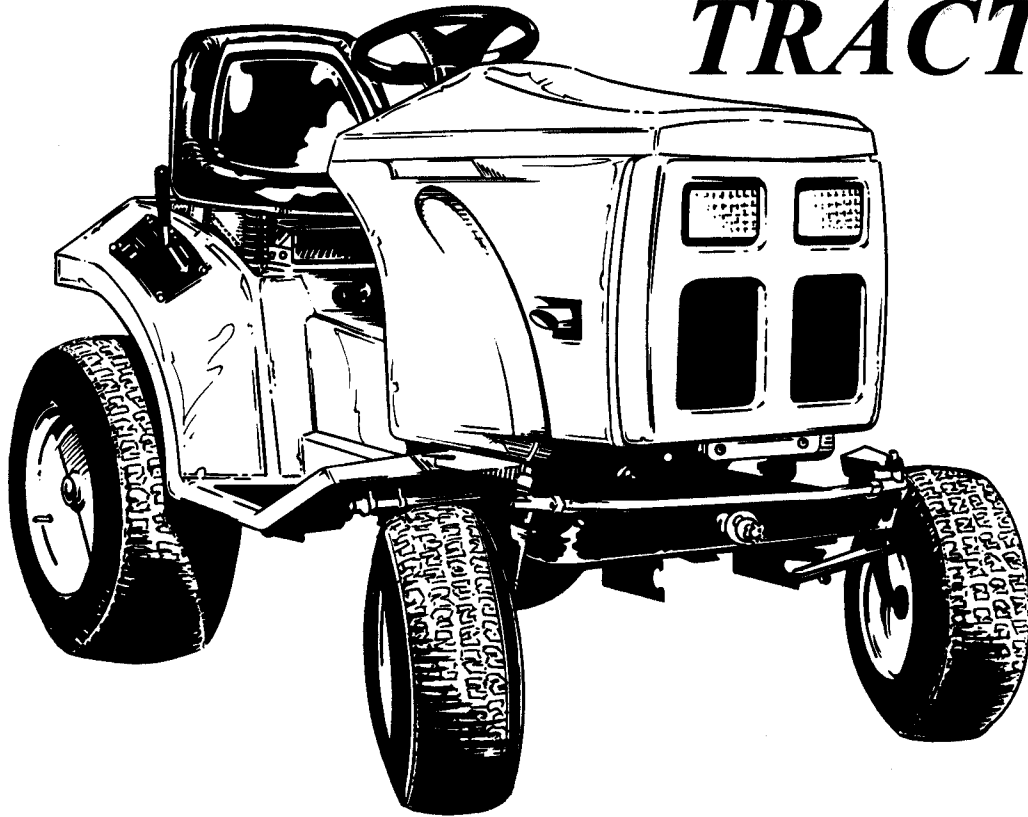


Safety Instructions & Operator's Manual

SNAPPER®

MODEL GT1848H GARDEN TRACTOR



Thank you for buying a SNAPPER product! Before operating the Tractor, read and follow the "IMPORTANT SAFETY INSTRUCTIONS" on Page 3, all other instructions contained in this manual and the accompanying booklet "About Power Mower Safety". Lawn mowers and all power equipment, can be potentially dangerous if used improperly. **REMEMBER: SAFETY REQUIRES CAREFUL USE IN ACCORDANCE WITH INSTRUCTIONS AND COMMON SENSE.**

SNAPPER® McDonough, GA., 30253 U.S.A.

MANUAL No. 2-8576 (I.R. 3/95)

IMPORTANT SAFETY INSTRUCTIONS

WARNING: This powerful cutting machine is capable of amputating hands and feet and can throw objects that can cause injury and damage! Failure to observe the following **SAFETY** instructions could result in serious injury or death. Carefully read this manual and question your dealer if something is not clear. Should the dealer be unable to answer to your satisfaction, write or call the Customer Service Department at SNAPPER, McDonough, Georgia, 30253 (Phone 404-954-2500).

PROTECTION FOR CHILDREN

1. **DO NOT** allow children in yard when machine is operated (even with the blade OFF).
2. **DO NOT** allow children to ride on machine or on attachments (even with the blade OFF).
3. **DO NOT** allow pre-teenage children to operate machine.
4. Only responsible teenagers with mature judgement shall be allowed to operate machine and only under close supervision.

PROTECTION AGAINST TIPOVERS

1. **DO NOT** operate machine on slopes exceeding 15 degrees (27% grade).
2. On slopes above 10 degrees (18% grade), exercise extreme **CAUTION**. Turn blade OFF when traveling uphill, also reduce speed and avoid sharp turns.
3. Avoid uphill starts. If machine is stopped going uphill, turn blade OFF and back slowly down the slope.
4. **DO NOT** mow under any condition where traction or stability is doubtful without first test driving over the terrain with blade OFF.
5. Stay alert for holes and other hidden hazards. Keep away from ditches, washouts, culverts, fences and protruding objects.
6. **DO NOT** mow back and forth across face of slopes.
7. **KEEP A SAFE DISTANCE** (at least three feet) away from edge of ditches and other drop offs.

OTHER IMPORTANT PRECAUTIONS

1. Read and follow operator's manuals and instructions furnished with attachments.
2. Only mature, responsible persons shall operate the machine.
3. Mount and dismount the machine from left side.
4. Wear appropriate protective clothing when mowing, such as, long pants and substantial footwear, not barefoot or with open sandals.
5. Practice operation of machine with blade OFF to learn controls and develop skill.
6. Persons under the influence of alcohol or drugs must **NOT** operate machine.
7. Know how to **STOP** blade and engine quickly in preparation for emergencies.
8. Keep people and pets a safe distance from machine.
9. Shields, deflectors, switches, blade controls and other safety devices must be in proper position and functional.

OTHER IMPORTANT PRECAUTIONS

10. Clear area to be worked of wire, rocks and other objects that could cause injury if thrown by blade.
11. **STOP** blade, **STOP** engine and remove key when leaving machine.
12. **DO NOT** operate machine unless properly seated with feet on foot rests or pedal.
13. Keep hands and feet away from rotating blade underneath deck. Never place foot on ground while blade is ON or when machine is in motion.
14. Turn blade OFF, **STOP** engine and wait for blade to **STOP** before attempting to unclog grass or leaves to prevent loss of fingers or hand.
15. Blade must be switched OFF except when cutting grass. Set cutter in highest position when mowing over rough ground.
16. Deflector or grass catcher must be in position. Never point discharge at people, passing cars, windows or doors. Watch out for traffic when crossing or near roadways.
17. Operate in reverse only with careful observation of entire area behind the machine. **DO NOT** mow in reverse unless absolutely necessary.
18. Service machine and make adjustments only when engine is stopped.
19. Have machine serviced by an authorized SNAPPER dealer at least once a year and have the dealer install any new **SAFETY** devices.
20. Use only genuine SNAPPER replacement parts to assure that original standards are maintained.
21. Tighten all nuts, bolts and screws frequently, then check, adjust, repair or replace brakes as needed.
22. Lubricate machine at intervals specified in manual to prevent controls from binding.
23. Mow only in daylight or with good artificial light.
24. Handle gasoline with care! Never remove cap while engine is running. Fill tank outdoors only with engine **STOPPED** and cool. Clean spilled gasoline from machine. Store gasoline in approved container, out of the reach of children, in well ventilated, unoccupied building.
25. **DO NOT** change engine governor speed settings or overspeed engine.
26. Check grass catcher components frequently for signs of wear or deterioration and replace as needed to prevent injury from items going through weak or worn spots.
27. Exercise **CAUTION** when pulling loads. Limit loads to those you can safely control and attach loads to hitch plate as specified with SNAPPER attachment instructions.

Table of Contents

| | |
|--|--------------------|
| Important Safety Instructions | |
| Protection for children | |
| Protection against tipovers | |
| Other important precautions | |
| Table of Contents | 1 |
| Safety Information | 2 |
| To obtain maximum benefit | 2 |
| Before operating the tractor | 2 |
| Note | 2 |
| Familiarization | 3 & 4 |
| Serial Number | 3 |
| Ordering Parts | 3 |
| Tractor Controls | 5 |
| Basic controls | 5 |
| Console gauges | 8 |
| Attachment controls | 9 |
| Tractor Operation | 10 |
| While driving the tractor | 10 |
| Starting the engine | 10 |
| Starting the engine in cold weather | 11 |
| Starting the Tractor, driving the tractor and operating attachments | 11 |
| Brake operation | 11 |
| Pushing by hand and towing | 11 |
| Troubleshooting | 12 thru 14 |
| Maintenance | 15 |
| General | 15 |
| Maintenance summary | 15 |
| Fuel, oils, grease, and lubricants | 16 |
| Belts | 15 |
| Body | 16 |
| Cleaning the body | 16 |
| Removing the body | 16 |
| Brake | 17 |
| Electrical system | 17 |
| Battery | 17 |
| Checking the battery | 17 |
| Removing the battery | 18 |
| Cleaning the battery | 18 |
| Charging the battery | 18 |
| Replacing the battery | 18 |
| Installing the battery | 18 |
| Connections and wiring | 19 |
| Fuses | 19 |
| Gauge light bulbs | 19 |
| Headlights | 19 |
| Electric clutch | 20 |
| Engine | 21 |
| Air cleaner | 21 |
| Air intake/cooling system | 22 |
| Carburetor | 22 |
| Oil & Filter | 22 |
| Checking oil | 22 |
| Changing oil and filter | 23 |
| Spark plugs | 23 |
| Fuel system | 24 |
| Adding fuel | 24 |
| Fuel screen and filter | 24 |
| Hydraulic system | 25 |
| Hoses and fittings | 25 |
| Oil & filter | 25 |
| Lubrication | 26 |
| Grease fittings | 26 |
| Tires and wheels | 27 |
| Tire maintenance | 27 |
| Tire pressure | 27 |
| Tread width | 27 |
| Changing wheels | 27 |
| Wheel weights | 28 |
| Transaxle and transmission | 29 |
| Brake | 29 |
| Tractor control linkage | 29 |
| Oil and filter | 30 |
| Tractor Storage | 31 |
| Engine | 31 |
| Battery | 32 |
| Lubrication | 32 |
| Body | 32 |
| Tires | 32 |
| Attachments | 33 |
| Standard features | 33 |
| Front hitch blocks | 33 |
| Middle lift weldment | 33 |
| Towbar | 33 |
| Transaxle tabs | 33 |
| Optional features | 33 |
| Rear PTO | 33 |
| Parts Lists and Drawings | 34 |
| Body | 34 |
| Console | 36 |
| Front end and steering | 38 |
| Motion control group | 39 |
| Hydrostatic transmission and hydraulic plumbing | 42 |
| Electrical system | 44 |
| Engine | 46 |
| Transaxle and Rear Wheel Group | 48 |
| Decals | 50 |
| Tractor Specifications | 52 & 53 |
| Available Attachments | 54 |
| Maintenance Record | 55 |
| Warranty | |

Safety Information

To obtain maximum benefit...

Proper maintenance and service are essential to obtaining the maximum benefit from your tractor. Follow the recommendations provided in this manual. Record the tractor's serial number in the space provided on the next page. Keep this manual readily accessible for referencing.

Before operating the tractor...

It is the responsibility of the user to understand and perform proper operating procedures. Read this manual thoroughly and understand the use of the tractor completely before operating the tractor. Be aware of the dangers inherent in the use of this type of product. Read, understand, and follow all DANGER, CAUTION, and WARNING messages both in this manual and on the tractor.



DANGER - Indicates that serious injury or death WILL result if instructions are not followed.



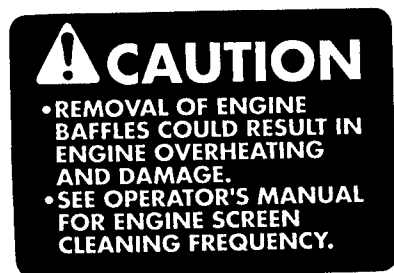
WARNING - Indicates a strong possibility that serious injury or death could result if instructions are not followed.



CAUTION - Indicates a possibility that minor injury can result if instructions are not followed.



IMPORTANT NOTICE - Indicates that equipment or property damage can result if instructions are not followed.

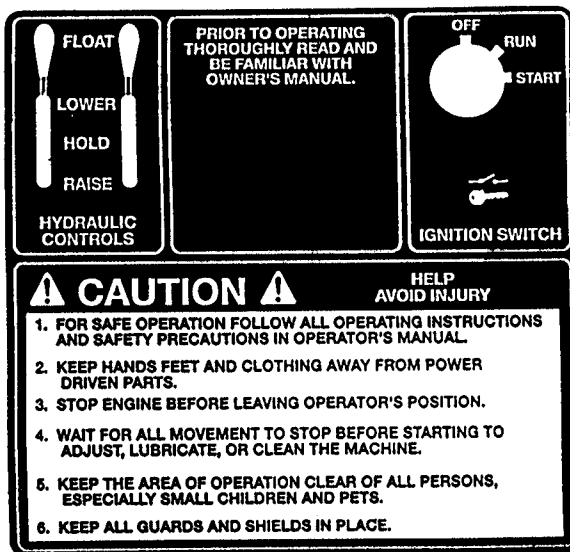


98-6968-00

Caution baffle removal
(Located under hood on engine baffle)



Danger
belt pulley



Lower console



Warning 3-point hitch (Located on frame at rear of tractor)

Note

All rights are reserved to make changes without notice. Information and illustrations in this document are the most current available and are not binding in detail.

IMPORTANT note for owners living in California: The engine on this tractor is NOT equipped with a spark arresting muffler. Use of this equipment in grass, brush or forest land without properly maintained and functioning exhaust spark arrester is in violation of California State Law Section 4442 PRC.

Familiarization

This Owner's Manual provides operational and maintenance instructions for the 1218HV/GT1848H tractor. The 1218HV/GT1848H is a twin cylinder engine hydrostatic drive garden tractor.

Serial Number

The serial number of your tractor is located on the left-hand side of the frame as shown in the following diagram. Record it in the space provided below. This will be useful in ordering parts or accessories for the tractor.

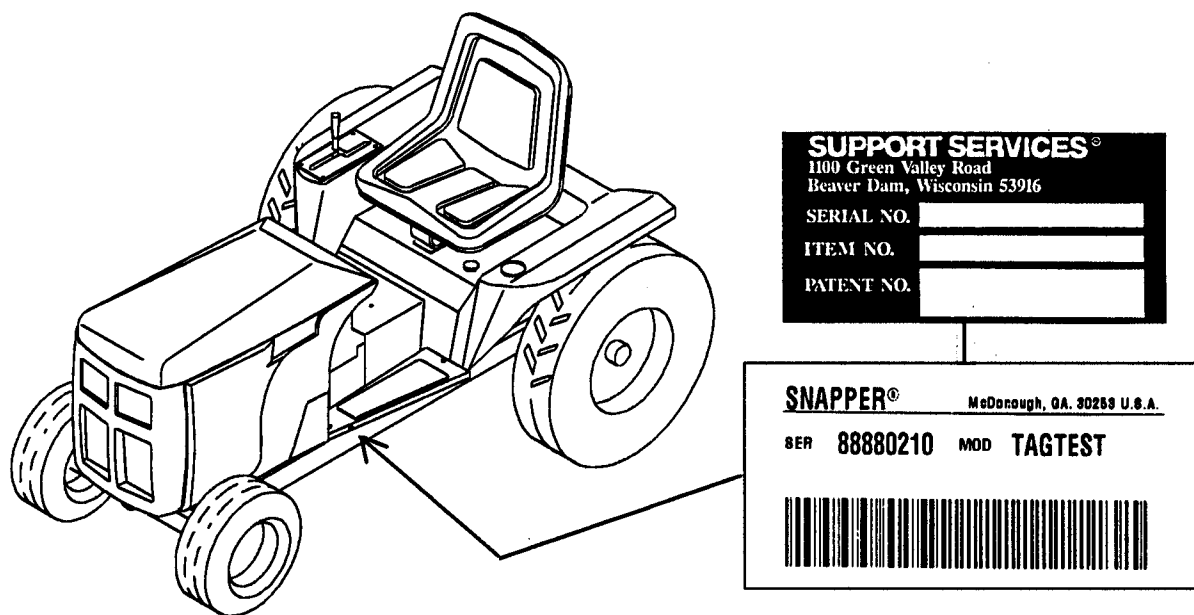


Figure 1. Location of serial number.

Ordering Parts

When ordering parts it is necessary to provide the following information. Record your tractor's serial number in the space provided.

- Model number 1218HV/GT1848H
- Serial number _____
- Part number _____
- Part name _____
- Part quantity _____

Familiarization

Tractor controls and gauges are shown in Figures 2 through 8 and described as follows. Locate these controls on your tractor and know how to use them before operating the tractor.

Left-hand and right-hand sides of the tractor are on a person's left and right, respectively, when seated on the tractor facing forward.

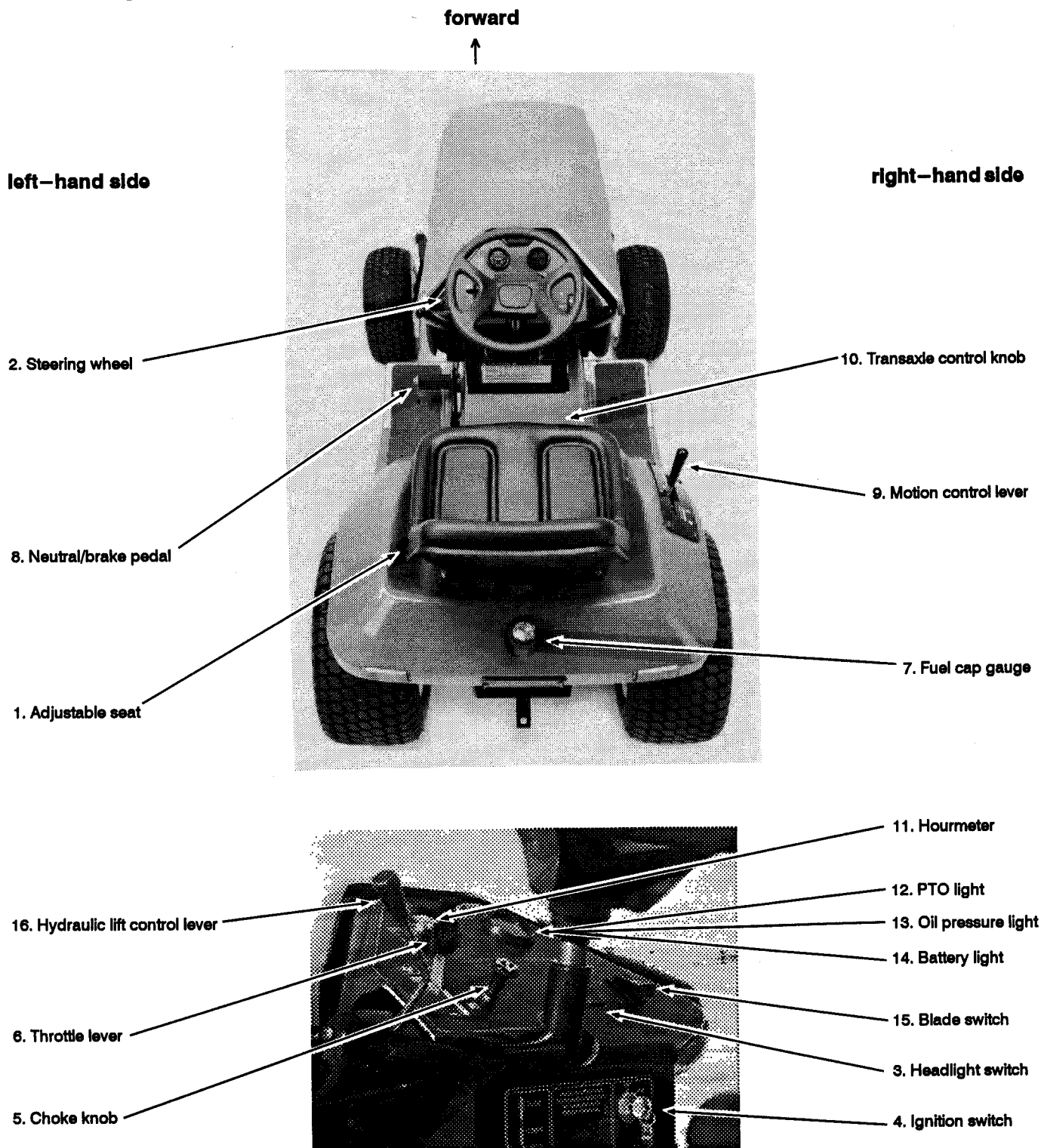


Figure 2. Operator controls.

Tractor Controls

Basic controls

1. **ADJUSTABLE SEAT** – moves forward or back, up to 3" (Refer to Figure 2).

Tilt seat forward. Remove quick change keys and pins. Slide seat assembly to suit, lining up holes with holes in bracket. Reinsert pins and quick change keys.

2. **STEERING WHEEL** – controls the front wheels of the tractor for steering (Refer to Figure 2).

3. **HEADLIGHT SWITCH** – controls the tractor's headlights (Refer to Figure 2).

Push switch to '☰' to turn headlights on. Push switch down to turn headlights off.

NOTE: The ignition switch must be "RUN" for headlights to light. Headlights go off when ignition switch is turned to the "OFF" position.

4. **IGNITION SWITCH** – starts and stops the engine. This is a 3-position, key-actuated switch (Refer to Figures 2 & 3).

Turn key to the "START" position to start engine. When released, the key automatically returns to the "RUN" position. Turn key to the "OFF" position to stop engine.

NOTE: Do not crank engine for more than 10 seconds. See also "Starting the engine" on page 10.

5. **CHOKE KNOB** – provides richer fuel-air mixture in the engine's carburetor for cold starting (Refer to Figure 2).

Pull the knob out when starting the engine. Push it in shortly after engine begins to run. See also "Starting the engine in cold weather" on page 11.

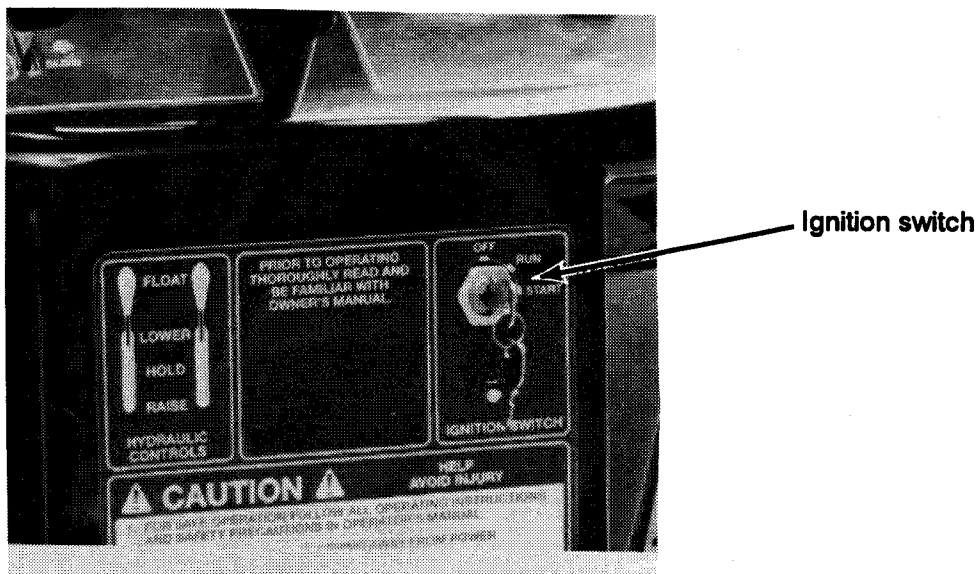


Figure 3. Ignition switch

Tractor Controls

Basic controls (continued)

6. **THROTTLE LEVER** – controls the engine speed (Refer to Figure 2).

Move upward (toward rabbit) to increase engine speed (rpm). Move downward (toward turtle) to decrease engine speed.

Set lever midway between the fast position and slow position when starting engine. Throttle speed requirements vary depending on the operation and the attachment being used. See the attachment manual for information. See also "Tractor Operation" starting on page 10 in this manual.

WARNING: Gasoline is highly flammable. Always stop the engine and turn off all electrical systems, including headlights, when dispensing fuel. Dispense fuel outdoors. DO NOT smoke or be near any flames or sparks while dispensing fuel. Replace fuel cap securely after dispensing fuel.

7. **FUEL CAP and GAUGE** – shows fuel level and unscrews for dispensing of fuel into tank. (Refer to Figures 2 & 4). Use only unleaded, minimum octane 87 gasoline. Always ensure that the small fuel cap breather hole is not clogged.

breather hole

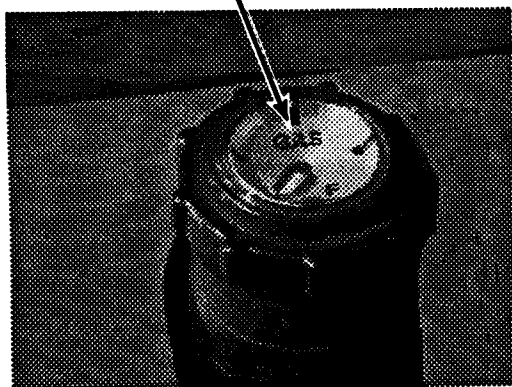
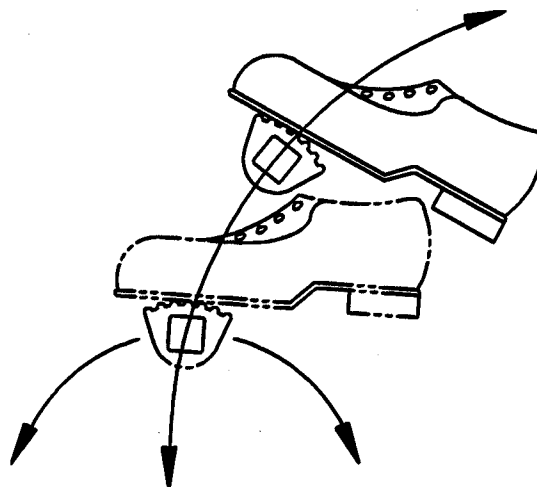


Figure 4. Fuel cap and gauge.

8. **NEUTRAL/BRAKE PEDAL** – puts the transmission (and motion control lever) in neutral and serves as a brake and parking brake latch (Refer to Figures 2 & 5).

Fully depress the pedal to put the transmission (and motion control lever) in neutral, slowing the tractor. When pedal is fully depressed rotate it forward (with toes) to latch brakes. Rotate backward, toward rear, to release parking brake. See also "Tractor Operation" starting on page 10 in this manual.



Latch Neutral Release

Figure 5. Neutral/brake pedal.

Tractor Controls

Basic controls (continued)

9. **MOTION CONTROL LEVER** – hand operated to control the direction (forward/reverse) and speed of the tractor (works in conjunction with the transaxle Hi/Lo range control knob) (Refer to Figures 2 & 6).

IMPORTANT NOTICE: ALWAYS put motion control lever in neutral before starting tractor, when slowing or stopping, and when leaving tractor unattended.

Neutral – gently push lever into neutral by hand or depress the neutral/brake pedal, causing lever (and transmission) to go into neutral automatically.

To drive forward – gently push lever (out of neutral detent) toward front of tractor (0 – 4.5 mph when transaxle knob is set to “Lo”, 0 – 8.9 mph when transaxle control knob is set to “Hi”).

To back up – gently push lever (out of neutral detent) toward rear of tractor (0 – 4.3 mph).

10. **TRANSAXLE CONTROL KNOB** – hand operated to control the gear ratio of the transaxle and the ground speed of the tractor, in conjunction with the motion control lever (Refer to Figures 2 & 6).

Lo – gently push knob into Lo for forward speeds of 0 – 4.5 mph, and for backing up (reverse).

Put knob in Lo when parking the tractor. The gear train will then act as a secondary brake.

N – gently push knob into N to move tractor when the engine is off. See also “Pushing by hand and towing”.

Hi – gently push knob into Hi for forward speeds of 0 – 8.9 mph.

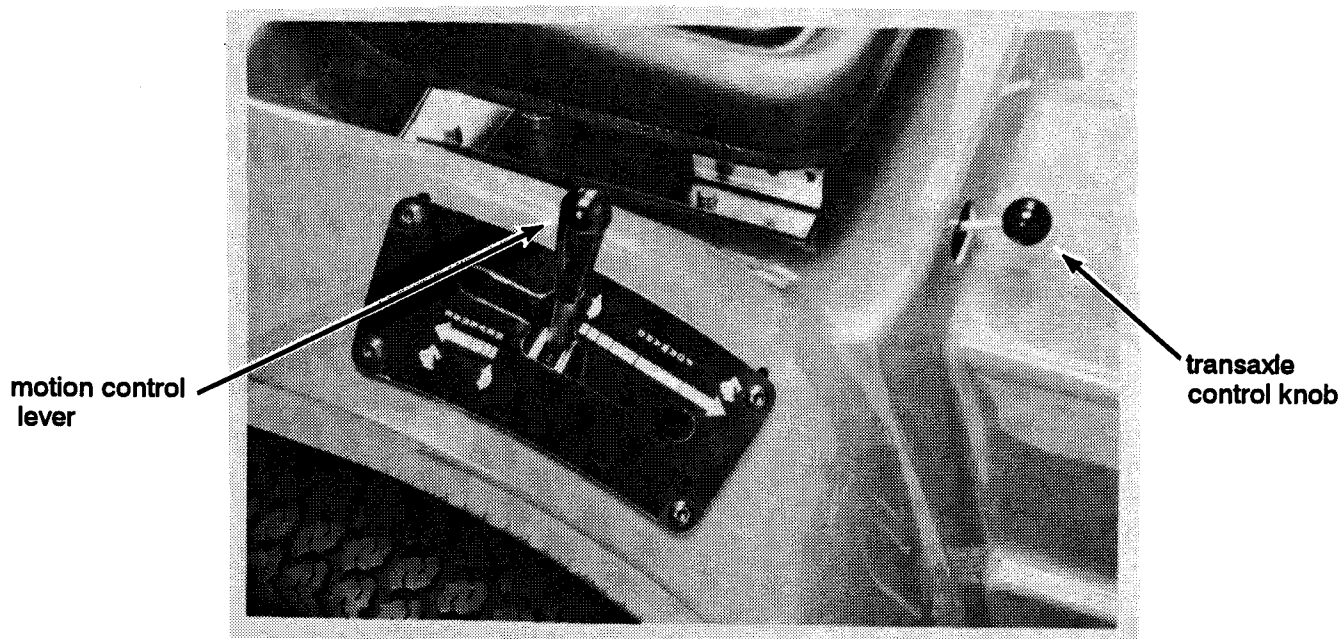


Figure 6. Motion control lever and transaxle control knob.

Tractor Controls

Console gauges

11. **HOURLMETER** – tells number of hours the tractor has operated. (Refer to Figures 2 & 7). It runs when ignition switch is “ON”. Do not leave ignition “ON” when engine is not running. Use hourmeter as a guide for when to do scheduled maintenance.

12. **PTO LIGHT** – illuminates when electric clutch / power take off (PTO) is engaged. (Refer to Figures 2 & 7).

13. **OIL PRESSURE LIGHT** – signals low oil pressure when lit. (Refer to Figures 2 & 7). It illuminates momentarily when the ignition switch is “ON”, but the engine is not running (e.g., during starting sequence).

IMPORTANT NOTICE : The low oil pressure light should go off once the engine is running. If light remains on, shut engine off immediately. Refer to “Troubleshooting” page 13 in this manual. Engine will fail if problem is not resolved.

14. **BATTERY LIGHT** – illuminates when battery is discharging. (Refer to Figures 2 & 7). It lights momentarily during starting sequence. It should be off when the engine is running above idle. If not, shut engine off and refer to “Troubleshooting” on page 14 in this manual to find the source of the problem.

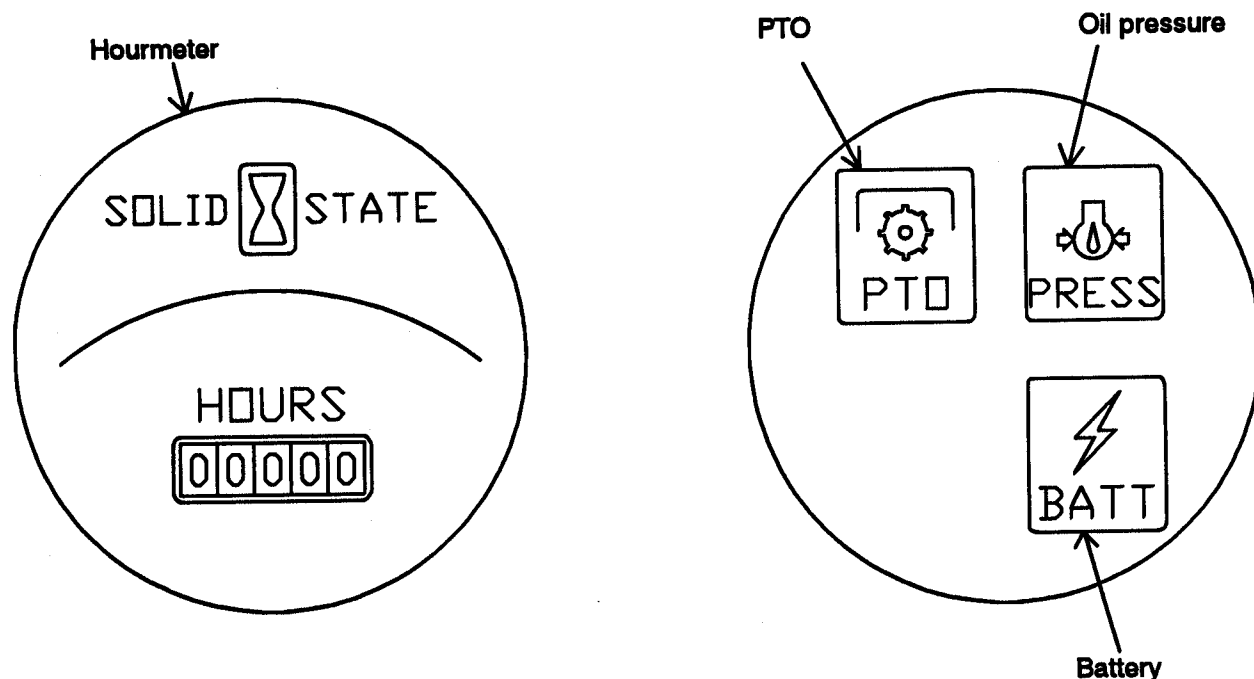


Figure 7. Console gauges.

Tractor Controls

Attachment controls

All rotary attachments are controlled by an electric clutch/power take off system. All front, middle and rear attachments are raised and lowered by the standard hydraulic lift system.

IMPORTANT NOTICE: ALWAYS lower implements fully to the ground when leaving tractor unattended.

15. BLADE SWITCH – starts and stops the electric clutch for the optional power take off (PTO). (Refer to Figures 2 & 8). The electric clutch drives all rotary implements.

The electric clutch engages when the blade switch is pulled down and lifted to the “ON” position. The electric clutch disengages when the switch is moved to the “OFF” position.

16. HYDRAULIC LIFT CONTROL LEVER – controls all attachments. It is linked to a hydraulic control valve. (Refer to Figures 2 & 8).

To lower the front and rear implements – push the lever partially forward. When the lever is released it returns to its center (hold) position. The attachments “hold” their lowered positions.

To raise the front and rear implements – pull the lever to the rear. When the lever is released, it returns to its center (hold) position. The attachments “hold” their raised positions.

To float the implements (seek their own best operating levels) – push the lever fully forward through a slight detent. When the lever is released it remains in the forward position until pulled out of its detent.

Lever control

- ↑ implements float
- ↑ implements lower
- implements hold
- ↓ implements raise

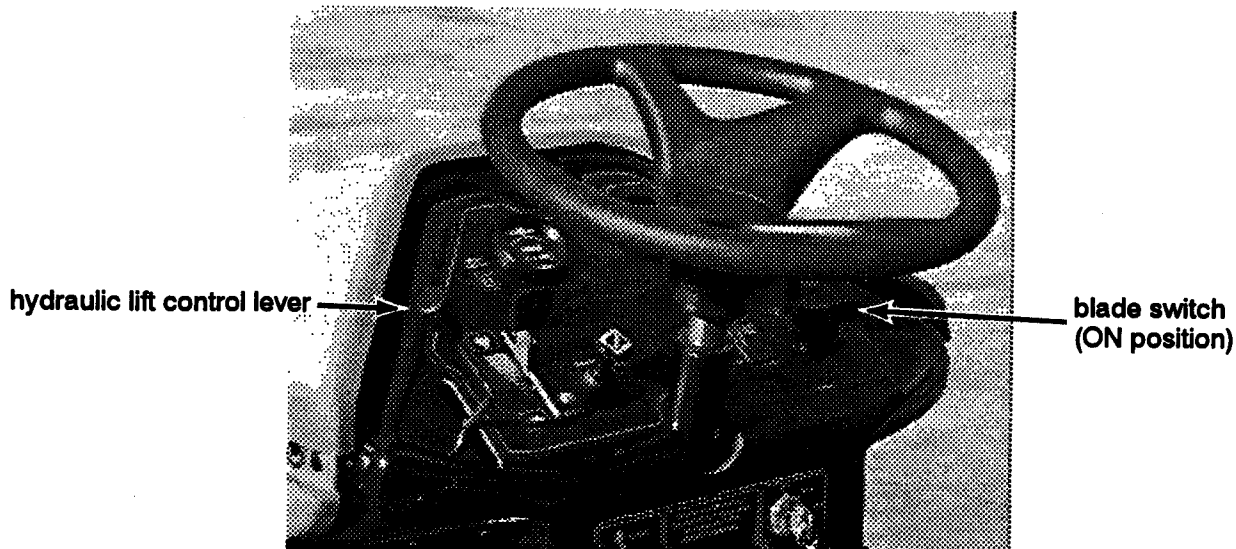


Figure 8. Blade switch and hydraulic lift control lever.

Tractor Operation

IMPORTANT: BEFORE starting or operating the tractor, READ all manuals and UNDERSTAND the operation of all tractor controls and attachments. FOLLOW all safety messages.

While driving the tractor



1. Stay alert for holes and other hidden hazards. Keep away from ditches, washouts, culverts, fences and protruding objects.
2. DO NOT operate machine on slopes exceeding 15° (27% grade). On slopes above 10° (18% grade) exercise extreme CAUTION. Turn attachments OFF when traveling uphill. Also reduce speed and avoid sharp turns.
3. When operating on slopes greater than 10° use front and rear wheel weights and low speed ranges. DO NOT operate machine on slopes exceeding 15° (27% grade).
4. When pulling loads use front wheel weights or front weight rack with counterweights. Use low speed ranges and apply power slowly. Pull from frame mounted towbar only. Do not pull from any other place on the tractor frame.
5. Never dismount until tractor is stopped, all power shut off, and parking brake lever engaged.
6. Never leave the tractor unattended with the engine running.
7. Never leave the ignition key in an unattended tractor.
8. Do not disconnect any safety interlocks. They are provided for the protection of the operator, especially when his or her attention may be momentarily distracted.

Starting the engine

1. Ensure that the fuel shutoff valve on the bottom side of the fuel tank is open (vertical). (Refer to Figure 9).

NOTE: Safety interlocks prevent the tractor from starting when steps 2, 3, and 4 are not done.

2. Be seated on the tractor.
3. Ensure that the 'neutral/brake pedal' is depressed and the 'motion control lever' is in neutral.
4. Make sure blade switch is in "OFF" position (down).
5. Pull the choke knob out.
6. Set the throttle lever about halfway between slow (turtle) and fast (rabbit).

IMPORTANT NOTICE:

To prevent overheating of the starting motor, limit continuous cranking to 10 seconds. Allow a full 60 second delay before attempting to recrank. If there is a false start, the engine must be completely stopped before making another attempt at starting.

7. Turn the ignition key to "START" and release it immediately after the engine starts. Push choke in halfway.
8. After engine is warm push choke in all the way. Then push throttle lever down until engine idles.

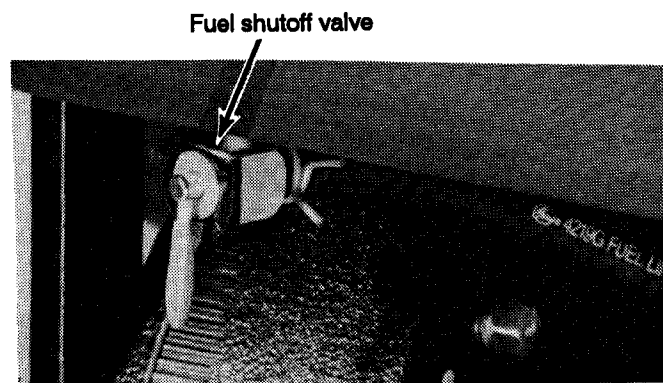


Figure 9. Fuel shutoff valve.

Tractor Operation

Starting the engine in cold weather

1. Use lighter oil. Do not use starting fluids. Keep the battery fully charged (cranking power is greatly reduced at low temperatures).
2. Follow the procedure for "Starting the engine" except allow the engine to warm up longer before pushing the choke in.

To drive backward – Shift transaxle control knob to Lo. Slowly push the motion control lever back, from neutral, toward rear of tractor.

NOTE: A safety interlock switch stops the engine and attachment if the operator leaves the tractor seat without pushing the blade switch to "OFF" and latching the neutral/brake pedal.

Starting the tractor, driving the tractor and operating attachments



WARNING: Check to be sure that the area around the tractor and attachment, and in the path you intend to travel, is clear of people, pets, and other obstructions.

Tractor ground speed and engine speed requirements vary depending on operating conditions and the attachment being used. Refer to the attachment manual for recommended operating speed.

1. If a PTO driven attachment is being used increase engine rpm (push throttle) up to half speed. Engage the electric clutch (turn blade switch "ON").

After both engine and PTO attachment are running, operate throttle to gradually increase engine rpm up to operating speed.

Engine speed below half throttle is not recommended while PTO driven attachments are engaged. Refer to the attachment manual for recommended operating speed.

To drive forward – Shift transaxle control knob to Lo (0–4.5 mph) or Hi (0–8.9 mph). Slowly push the motion control lever forward, from neutral, toward front of tractor.

Brake operation

To lock the brakes – fully depress the 'neutral/brake pedal.' Rotate the pedal forward (with toes) until brake latches. If brakes do not lock, refer to "Troubleshooting" on page 14 in this manual.

Ensure that the 'transaxle control knob' is in 'Lo' so the gear train acts as a secondary brake.

To release the brakes – rotate the 'neutral/brake pedal' backward, toward rear of tractor. If brakes do not release, refer to "Troubleshooting" on page 14 in this manual.

IMPORTANT NOTICE: Always put the motion control lever in neutral, fully lower the attachments, lock the brake, put the transaxle knob in 'Lo,' and remove the key before leaving the tractor.

Pushing by hand and towing

To push the tractor without engine power shift the transaxle control knob into neutral (N). Towing the tractor is not recommended. The back wheels must be off the ground or the transmission can be severely damaged. If the tractor must be moved long distances, load it onto a trailer.

Troubleshooting

| Malfunction | Probable Cause | No | Yes | Corrective Action | Ref. |
|---|---|-------------------------------|-----|---|--------|
| Engine will not turn over | 1. Improper starting | Go to #2 | → | 1. Check starting procedure. | Pg. 10 |
| | 2. Dead battery | Go to #3 | → | 2. Charge battery or replace. | Pg. 18 |
| | 3. Blade switch on. | Go to #4 | → | 3. Push blade switch down. | Pg. 10 |
| | 4. Transmission not in neutral | Go to #5 | → | 4. Depress & hold neutral pedal. | Pg. 10 |
| | 5. Operator not seated | Go to #6 | → | 5. Operator must be seated. | Pg. 10 |
| | 6. Open electrical circuit. | Go to #7 Corrective Action | → | 6. Check for blown fuse, loose connections, broken wires or grounded leads. | Pg. 19 |
| | | | | 7. Contact your authorized dealer. | — |
| Engine will turn over but will not start. | 1. Empty fuel tank | Go to #2 | → | 1. Fill tank | — |
| | 2. Seat safety switch open. | Go to #3 | → | 2. Operator must be seated | Pg. 10 |
| | 3. Fuel shutoff valve closed. | Go to #4 | → | 3. Open shutoff valve. | Pg. 10 |
| | 4. Faulty spark plug. | Go to #5 | → | 4. Remove and check spark plug | Pg. 23 |
| | 5. Faulty ignition connections. | Go to #6 | → | 5. Check for disconnected lead wires. | Pg. 19 |
| | 6. Air cleaner clogged. | Go to #7 | → | 6. Clean element. | Pg. 21 |
| | 7. Engine flooded (strong fuel odor). | Go to #8 Corrective Action | → | 7. Push choke in and try again. | Pg. 5 |
| | | | | 8. Contact your authorized dealer. | — |
| Engine starts but stalls in a few seconds. | 1. Fuel tank empty. | Go to #2 | → | 1. Fill tank | — |
| | 2. Fuel shutoff valve closed. | Go to #3 | → | 2. Open shutoff valve. | Pg. 10 |
| | 3. Incorrect idle adjustment. | Go to #4 | → | 3. Adjust carburetor. | * |
| | 4. Engine too cold. | Go to #5 | → | 4. Leave choke partially pulled out until engine warms up. | Pg. 10 |
| | 5. Drive train lubricants too cold. | Go to #6 | → | 5. Run in neutral or use low gear setting until warm. | — |
| | 6. Faulty fuel relay. | Go to #7 Corrective Action | → | 6. Replace fuel relay. | — |
| | | | | 7. Contact your authorized dealer. | — |
| Engine idles poorly. | 1. Idle speed too slow. | Go to #2 | → | 1. Adjust idle speed. | * |
| | 2. Idles improperly | Go to #3 | → | 2. Check idle fuel adjustment. | * |
| | 3. Faulty spark plug. | Go to #4 Corrective Action | → | 3. Check spark plug. | Pg. 23 |
| | | | | 4. Contact your authorized dealer. | — |
| Engine overheats. | 1. Engine screen or cooling fins clogged. | Go to #2 | → | 1. Clean out debris. | Pg. 21 |
| | 2. Oil level too high or too low. | Go to #3 | → | 2. Check oil level. | Pg. 22 |
| | 3. Fuel mixture too lean. | Go to #4 | → | 3. Adjust carburetor. | * |
| | 4. Engine overload. | Go to #5 Corrective Action | → | 4. Reduce load. Allow engine to cool. | — |
| | | | | 5. Contact your authorized dealer. | — |

— Contact your nearest dealer for assistance.

* Refer to the engine manufacturer's Owner's Manual for more information.

Troubleshooting

| Malfunction | Probable Cause | No | Yes | Corrective Action | Ref. |
|---|--|-------------------|-----|---|----------|
| Engine "Oil" pressure light on. | 1. Low oil level. | Go to #2 | → | 1. Check and add oil. | Pg. 22 |
| | 2. Excessive slope operation. | Go to #3 | → | 2. See "Safety" section. | T. O. C. |
| | 3. Engine not running. | Go to #4 | → | 3. Normal momentarily. | — |
| | | Corrective Action | | 4. Contact your authorized dealer. | — |
| Engine continues to run when turned off. | 1. Defective wiring or ignition switch. | Go to #2 | → | 1. Pull choke knob out to flood engine. Check wiring and connections to engine. Check ignition switch circuit through switch. | Pg. 19 |
| | | | | 2. Contact your authorized dealer. | — |
| One or both headlights do not light. | 1. Ignition switch off. | Go to #2 | → | 1. Turn ignition key to "On". | Pg. 5 |
| | 2. Open electrical circuit. | Go to #3 | → | 2. Check fuses. | Pg. 19 |
| | 3. One or both lamps out. | Go to #4 | → | 3. Replace bulbs. | Pg. 19 |
| | 4. Dead battery. | Go to #5 | → | 4. Charge battery or replace. | Pg. 18 |
| | 5. Loose connection or broken or grounded wire. | Go to #6 | → | 5. Check wiring and connections between ignition switch, light switch and lights. | Pg. 19 |
| | 6. Defective light switch. | Go to #7 | → | 6. Replace light switch. | — |
| | | Corrective Action | | 7. Contact your authorized dealer. | — |
| Electric clutch malfunction. | 1. Loose connection. | Go to #2 | → | 1. Check connections and fuses. | Pg. 19 |
| | 2. Out of adjustment. | Go to #3 | → | 2. Readjust. | Pg. 20 |
| | 3. Defective blade switch. | Go to #4 | → | 3. Replace switch. | — |
| | 4. Defective electric clutch. | Go to #5 | → | 4. Replace electric clutch. | — |
| | | Corrective Action | | 5. Contact your authorized dealer. | — |
| Tractor "creeps" when neutral pedal & motion control lever are in neutral. | 1. Hydrostatic motion control out of adjustment. | Go to #2 | → | 1. See "Transaxle". | Pg. 29 |
| | | Corrective Action | | 2. Contact your authorized dealer. | — |
| | | | | | |
| Hydrostatic system jerky or noisy when starting. | 1. Linkage. | Go to #2 | → | 1. See "Transaxle". | Pg. 29 |
| | 2. Brake/neutral synchronization. | Go to #3 | → | 2. See dealer for adjustment. | — |
| | 3. Air in system. | Go to #4 | → | 3. Check for loose fittings. Repair or replace if worn. | Pg. 21 |
| | 4. Defective valves in transmission. | Go to #5 | → | 4. See dealer for repair or replacement. | — |
| | 5. Excessive towbar load. | Go to #6 | → | 5. Reduce load. | — |
| | 6. Lack of hydraulic oil. | Go to #7 | → | 6. Fill to proper level. Check for leaks. | Pg. 25 |
| | | Corrective Action | | 7. Contact your authorized dealer. | — |
| Tractor operates in only one direction. | 1. Linkage. | Go to #2 | → | 1. See dealer for adjustment. | — |
| | 2. Defective transmission valves. | Go to #3 | → | 2. See dealer for repair or replacement. | — |
| | | Corrective Action | | 3. Contact your authorized dealer. | — |

Troubleshooting

| Malfunction | Probable Cause | No | Yes | Corrective Action | Ref. |
|--|---|-------------------|-----|---|--------|
| Tractor does not operate in either direction. | 1. Transaxle knob in neutral. | Go to #2 | → | 1. Move knob to "Low or "Hi" position. | Pg. 7 |
| | 2. Linkage. | Go to #3 | → | 2. See "Transaxle". | Pg. 29 |
| | 3. Low transmission oil level. | Go to #4 | → | 3. Fill transaxle to proper level. | Pg. 30 |
| | 4. Transmission operating hot. | Go to #5 | → | 4. Try heavier oil or replace. | Pg. 30 |
| | 5. Clogged hydrostatic transmission filter. | Go to #6 | → | 5. Clean or replace. | Pg. 30 |
| | 6. Defective charge pump. | Go to #7 | → | 6. See dealer for replacement. | — |
| | | Corrective Action | | 7. Contact your authorized dealer. | — |
| Hydraulic lift does not work properly. | 1. Low oil level. | Go to #2 | → | 1. Check and fill See "Transaxle". | Pg. 30 |
| | 2. Worn valve, cylinder, or pump. | Go to #3 | → | 2. See dealer for replacement. | — |
| | 3. Pinched or broken hose. | Go to #4 | → | 3. Correct or replace. | Pg. 25 |
| | | Corrective Action | | 4. Contact your authorized dealer. | — |
| Steering hard. | 1. No lubrication. | Go to #2 | → | 1. Check and fill See "Transaxle". | Pg. 30 |
| | 2. Front end overload. | Go to #3 | → | 2. See dealer for replacement. | — |
| | 3. Steering gear out of adjustment. | Go to #4 | → | 3. See dealer for replacement. | — |
| | 4. Steering linkage worn. | Corrective Action | | 4. Contact your authorized dealer. | — |
| Parking brake does not latch or does not release. | 1. Out of adjustment. | Go to #2 | → | 1. See dealer about adjustment. | — |
| | | Corrective Action | | 2. Contact your authorized dealer. | — |
| | | | | | |
| Battery light does not go out. | 1. Bad or corroded battery cables. | Go to #2 | → | 1. Clean or replace battery cables. | Pg. 18 |
| | 2. Bad test timer module. | Go to #3 | → | 2. Replace test timer module. | — |
| | 3. Bad battery. | Go to #4 | → | 3. Check battery or replace if necessary. | Pg. 18 |
| | 4. Malfunction in charger system. | Go to #5 | → | 4. See your dealer. | — |
| | | Corrective Action | | 5. Contact your authorized dealer. | — |

Maintenance

General

Maintaining and cleaning the tractor will keep it in prime safety and operating condition. Detailed instructions on how to service the tractor are on the following pages. Perform the maintenance as recommended. For future reference keep a log, provided on page 55, of when maintenance was done.



WARNING



Before performing maintenance on the tractor, put the motion control lever in neutral, ensure blade switch is off, fully lower the attachment, lock the brake, put the transaxle knob in "Lo" and turn off engine. Failure to do so could result in personal injury or even death.

Maintenance summary

The summary below shows when to service the tractor under normal conditions. The tractor's hourmeter tells the number of hours the tractor has been used. Service may need to be done more frequently, especially under unusual conditions, such as heavy dirt, dust, etc.

Check before every use...

- belts
- engine oil
- fasteners
- fuel level
- guards & shields
- transaxle oil

Check every 25 hours...

- air cleaner (clean)
- battery
- brake
- engine cooling fins
- fittings (grease)
- hydraulic hoses & fittings
- tire pressure

Check during and after every use...

- air cleaner
- engine air intake screens

Change after initial 50 hours...

- transaxle oil & filter

Check after first 5 hours...

- battery
- engine oil & filter (change)
- fittings

Check every 100 hours...

- air cleaner (change)
- engine oil & filter (change)
- fuel filter (change)
- fuel screen (clean)
- spark plugs (change)

Change after initial 250 hours, then every 500 hours...

- transaxle oil & filter

Maintenance

Fuel, oils, grease, and lubricants

Battery water . distilled water

Engine oil 10W30 year-round above 32° F - 2 qts.
5W30 below 32° F

Fitting grease . lithium based grease

Fuel . . unleaded gasoline, 87 min. octane - 5 gals.

Transaxle oil VG 46 hydraulic oil - 4 - 6 qts.

Belts

Check the attachment drive belts periodically for wear, cuts, breaks, and frayed conditions. Replace worn or damaged belts. Clean only with a clean, dry cloth.

For details on replacing attachment belts refer to the attachment manuals.

Body

The rear fender, hood, front grille and side panels which make up the body are made of fiber reinforced plastic.

Repair parts can be ordered from your Dealer. Maintenance and cleaning supplies can be obtained at automotive parts dealers or discount store automotive departments.

Cleaning the body

Keep the tractor free of debris, dirt, and grease. Remove mud, ice, or snow after use to prevent hardening or freezing.

Be sure side screens are clear. Cleaning may help in the discovery of minor discrepancies before they become troublesome.

Use only a car wash soap to wash. Never use dish or laundry soap as it will remove wax.

Use a premium paste wax on hood, body, and dash areas every six months in order to maintain a smooth surface finish and color (more frequently in extreme conditions). Use "rubbing" compound to remove small scratches.

Removing the body

In some instances, removal of the body facilitates cleaning, lubrication, and adjustments. Generally, removal is not necessary. If removal is desired follow these steps:

Side panels

1. Raise the hood by pulling it up from the edge that is closest to the steering wheel.
2. Each side panel is secured at the top with two cam-locs. Flip the cam-locs out. Turn them 90°, aligning them with the slots in the side panel. Lift panel off.

Hood

3. The hood is secured to the tractor with two prop rods. Remove the prop rods from the interior support structure by loosening the nuts from the hinge clips. Lift hood, with prop rods attached, from the tractor.

Front grille

4. The front grille is secured to the tractor with screws, washers, and nuts. Loosen these items.
5. Ensure that the right side panel is removed as explained in steps 1 and 2.
6. Disconnect the headlight wires at the main wiring harness (on right side, near console). Remove screws, washers, and nuts. Carefully remove grille, pulling headlight wires through opening.

Maintenance

Brake

The tractor is equipped with a transaxle disc brake. Refer to "Transaxle" on page 29 for more information.

Electrical system



WARNING: Before checking or servicing any part of the electrical system, first disconnect the black (-) battery cable. Then disconnect the red (+) cable. Failure to do so could cause severe burns.

Battery



WARNING: Dangerous Acid, Explosive Gases. DO NOT smoke or light a match near the battery! Hydrogen gas may be present and is explosive. Batteries contain sulfuric acid. Keep batteries and acid out of reach of children. Avoid contact with skin, eyes, and clothing. Flush immediately with water for 15 minutes if acid splashes on skin. Seek medical help.



WARNING: Batteries produce explosive hydrogen gas while being charged. Ventilate the area when charging the battery. Keep cigarettes, sparks, open flame, and other sources of ignition away at all times.



WARNING: Remove all jewelry when working on battery. Failure to do so could result in severe burns.

Checking the battery

Battery cables are color-coded. Remember that to:

- *Remove the cable clamps: black (-) is first.
- *Connect the cable clamps: black (-) is last.

The battery should be checked every 25 hours of operation or once a week, whichever is less.

To check the battery:

1. Open hood. The battery is located directly behind console. First disconnect the black (-) battery cable. Then disconnect the red (+) battery cable.
2. Being VERY CAREFUL not to splash liquid, remove the filler caps.
3. The electrolyte level should be at the bottom of the filler tubes. If the electrolyte is low, add clean distilled water. Do not overfill.

In freezing weather run the engine briefly after adding water. This mixes the water and electrolyte and prevents freezing.

4. Clean corrosion and dirt from cables, connections, and top of battery. Refer to "Cleaning the battery" on page 18 in this manual. Dirt and corrosion can cause self-discharging of battery. Apply a coat of a corrosion preventative to terminals.
5. First connect the red (+) battery cable. Then connect the black (-) cable. Tighten battery connection. Keep connections tight at all times to prevent arcing, pitting of connections, and eventual battery failure.

Maintenance

Electrical system (continued)

Battery (continued)

Removing the battery



WARNING: Dangerous Acid, Explosive Gases. DO NOT smoke or light a match near the battery! Keep batteries and acid out of reach of children. Avoid contact with skin, eyes, and clothing. Flush immediately with water for 15 minutes if acid splashes on skin. Seek medical help.

1. Raise the hood and locate battery and cables.
2. Remove both side panels. (Refer to "Removing the body - side panels" on page 16.)
3. Remove circle cotter pin from support bar. Raise support bar.
4. Remove the three wing nuts and washers secured to isolation baffle. Slide isolation baffle up and out, away from the battery.
5. Remove battery hold down bar.
6. The battery cables are color-coded. The black cable connects to the negative terminal on the battery. The red cable connects to the positive terminal on the battery.

ALWAYS disconnect the black (-) cable first by removing the screw and nut. Then remove the red (+) cable by removing screw and nut.

7. Remove battery and set it on a wooden rack or bench.

Cleaning the battery

1. Remove battery. (Refer to this page.)
2. To prevent any corrosive matter on cables from falling into tractor, gently pull cables to one side of tractor. Allow cables to hang over the side of tractor.
3. Clean cable clamps and battery terminals with a solution sold in automotive departments for said purpose. Inspect cables for damage.

Charging the battery



WARNING: Batteries produce explosive hydrogen gas while being charged. Ventilate the area when charging the battery. Keep cigarettes, sparks, open flame, and other sources of ignition away at all times.

If unfamiliar with charging the battery, refer to the charger manufacturer's instructions.

Replacing the battery

See your Dealer to make sure you have correct volts and amps before replacing your battery.

Installing the battery

1. **ALWAYS** connect the red (+) cable first to the positive (+) battery terminal by securing with screw and nut. Then connect black (-) cable to negative (-) terminal by securing with screw and nut.
2. Tighten both cables. Keep connections tight at all times to prevent arcing, pitting of connections, and eventual battery failure.
3. Replace battery hold down bar. Slide isolation baffle back into place. Secure wing nuts and washers to baffle.
4. Slide support bar back into support bracket. Secure with circle cotter pin. Replace side panels and close hood.

Maintenance

Electrical system (continued)

Connections and wiring

The electrical connections and wiring should be checked at least every 25 hours of tractor operation. Make sure that connections are clean and tight and that wires are not rubbing on anything.

Fuses

If an electrical failure occurs check the fuses. They are located in front of the console on the right side of the tractor.

To check a fuse pull it out of its socket. A fuse is not working if the metal inside is broken. Replace a broken fuse with one that has the same amperage.

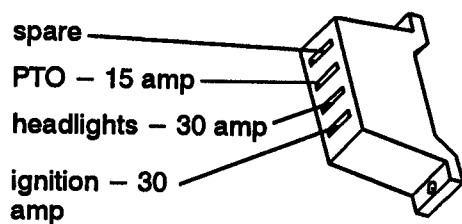


Figure 10. Fuses.

Gauge light bulbs

To replace a light bulb in the console:

1. Open hood. Rotate the black bulb holder 1/4 turn counterclockwise. Pull unit out of opening.
2. Pull bulb out. Replace with bulb of the same type and wattage.
3. Insert unit in opening. Rotate 1/4 turn clockwise to fasten. Close hood.

Headlights

If a headlight needs replacing:

1. Open hood. Remove side panels. Remove front grille, disconnecting headlight wires. Refer to "Removing the body" on page 16 for further information.
2. Rotate the black (bezel) dial 1/4 turn counterclockwise. Pull unit out of opening. Pull bulb out. Replace bulb with one of the same type and wattage. Insert unit in opening. Rotate dial 1/4 turn clockwise to fasten.
3. Reconnect wires. Replace front grille and side panels.

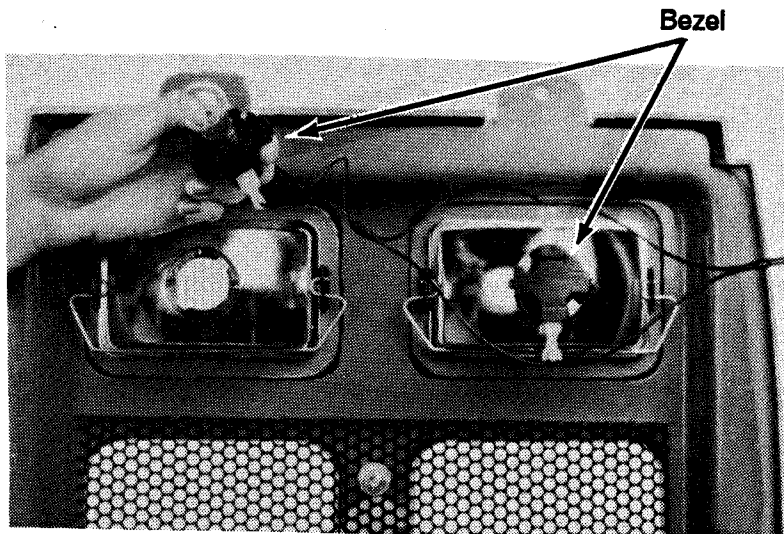


Figure 11. Headlights.

Maintenance

Electric clutch

The electric clutch needs no lubrication. If oil or grease inadvertently contaminates its working surfaces remove the contaminants by turning engine off and allowing it to cool. Then pour a generous quantity of a cleaning fluid, such as ammonia, between the working surfaces1..

The clutch portion of this clutch/brake combination unit is self-adjusting.

The brake section may require adjustment depending on usage.



DANGER: Never attempt to check or adjust the PTO or electric clutch while the PTO is engaged. This will result in personal injury or damage to property. Push blade switch down to "OFF" position, stop tractor engine, and remove key before adjusting the PTO or electric clutch.

To adjust the brake do the following steps:

1. Be sure engine is cool and not running. Turn off blade switch.

2. Raise hood. Remove side panels. Remove belt from electric clutch pulley (see attachment manual for instructions.)

NOTE: Refer to Figure 12 when doing Steps 3 thru 9.

3. Place a shim, .012" - .015" thick, in each of the three slots in the brake flange. Slots are located by the locknuts.



WARNING: Prior to adjusting brake ensure engine is not running. Failure to do so could cause injury.

4. Turn ignition switch to run (engine must not be running), turn on the blade switch.

5. Loosen the locknuts holding the flange. Push the flange until it bottoms. Retighten locknuts, using caution not to over torque them and damage the flange.

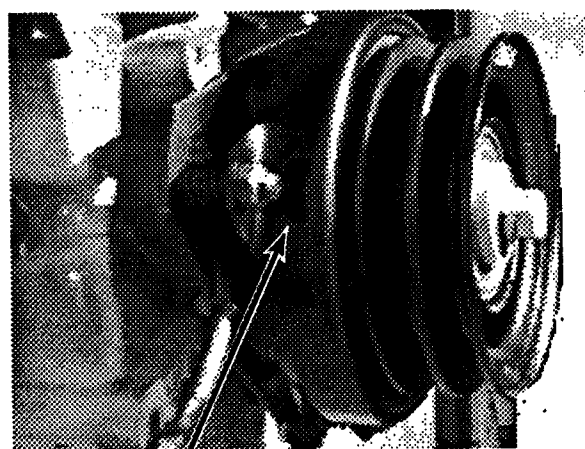
6. Turn off the blade switch. Remove the shims.

7. Check the gaps to be sure they are between .005" - .023". Readjust as required.

8. Reinstall the belt.

9. Start the engine and check the clutch operation. If the engine drags when the PTO is either OFF or ON, recheck the gap. The gap must be within the range of .005" - .023" on all three studs. Readjust if necessary.

10. Reinstall side panels.



slot (for shim)

Figure 12. Electric clutch (side view)

Maintenance

Engine

NOTE: If differences are encountered, the engine manufacturer's Owner's Manual should override this manual.

The three main causes of major engine failure are:

1. Insufficient cooling air.
2. Low oil or dirty oil.
3. Dirty carburetor air.

The engine is air-cooled. Air is drawn into the area around the engine from the rear by flywheel fins.

To prevent the engine failure or overheating, the air filter, air intake screens, and engine cooling fins **must be kept clean and unobstructed at all times.**

Air cleaner

The air cleaner is a porous paper air filter with a foam precleaner wrapped around it. It removes dust as air circulates through its surfaces. A clogged air cleaner reduces engine power and leaves unburned fuel in the engine.

The air cleaner should be checked after every use of the tractor. Clean it every 25 hours (sooner if operating in unusual conditions, such as heavy dust, etc.). Replace it every 100 hours.

Checking, cleaning, replacing

To check, clean, replace the air cleaner, refer to Figure 13 and do the following steps:

1. Turn the engine off. Open hood.
2. Locate the square, plastic unit which houses the air cleaner. Unlatch it at the sides. Remove the top. Check bottom plate to be sure it is securely mounted and undamaged.

3. Remove wing nut from air cleaner cover. Remove cover. Remove cleaner.

4. **Precleaner** – Remove the foam precleaner that is wrapped around the paper air filter. Shake out debris. Wash the precleaner in detergent and water. Rinse, dry, and lightly oil. Squeeze out excess oil. **DO NOT WASH or OIL the PAPER FILTER.**

5. **Paper air filter** – **HANDLE CAREFULLY.** Replace filter if paper surfaces or rubber gaskets are damaged or very dirty.

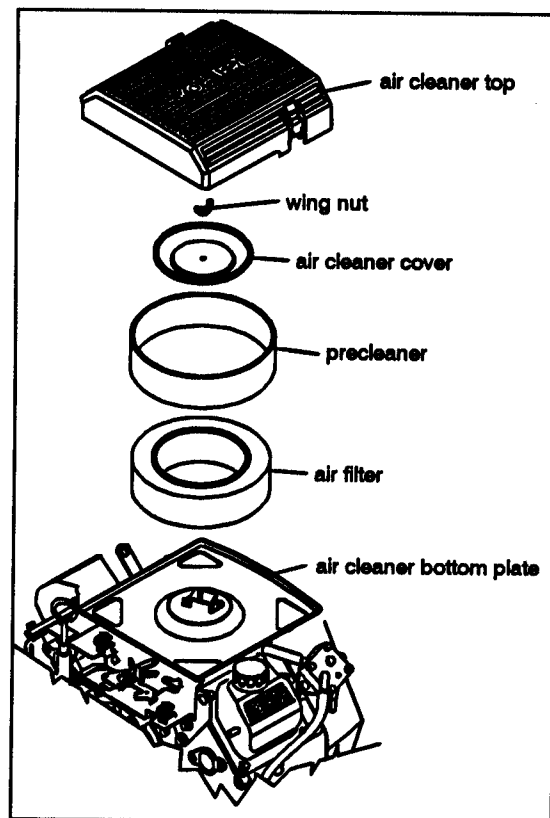


Figure 13. Air cleaner.

Maintenance

Engine (continued)

To ensure proper cooling, the grass screen, cooling fins, and other external surfaces of the engine should be kept clean **at all times**.

IMPORTANT NOTICE: Operating the engine with a blocked grass screen, dirty or plugged cooling fins, and/or cooling shrouds removed will cause engine damage due to overheating.

Air intake/cooling system

Every 100 hours of operation (more often under extremely dusty or dirty conditions) cooling fins should be cleaned. Refer to the Engine Manufacturer's Owner's Manual or see your local Dealer.

Carburetor

Lack of power accompanied by black sooty exhaust smoke usually indicates that the fuel mixture is too rich. A clogged air cleaner can cause the same symptoms. Check the air cleaner first. The carburetor may not need adjustment. Refer to the Engine Manufacturer's Owner's Manual if adjustment is necessary.

Oil & Filter

The engine oil should be checked before every use of the tractor. The oil and filter should be changed after the first five hours of operation and every 100 hours thereafter. Dipstick and oil fill are on top of engine.

Checking oil

To check oil level:

1. Pull dipstick (Refer to Figure 14) completely out of the crankcase. Wipe off oil. Reinsert dipstick completely.
2. Remove dipstick and read level.

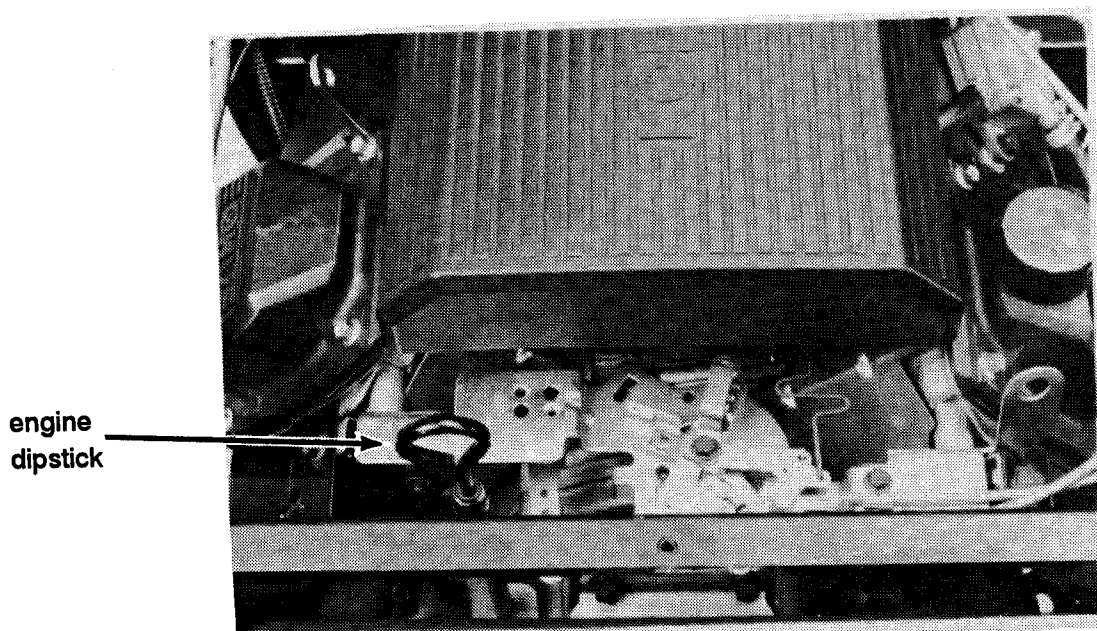


Figure 14. Engine dipstick.

Maintenance

Engine (continued)

Changing oil and filter



CAUTION: Hot engine oils can cause burns.

Hot oil drains more freely and carries away more impurities than cool oil. Either run the engine for about five minutes to thoroughly warm the oil, or drain the oil while the engine is hot. Dispose of oil properly.

To change oil and filter:

1. Remove engine drain cap and filter (Refer to Figure 15) on left-hand side of tractor. Drain oil into pan.
2. Replace plug and filter. Refill to full (F) mark on dipstick. **DO NOT OVERFILL.** Clean up spilled oil.
3. Start engine. The oil light should go out within 10 seconds. If it does not, turn off engine immediately and refer to "Troubleshooting" on page 13 in this manual.

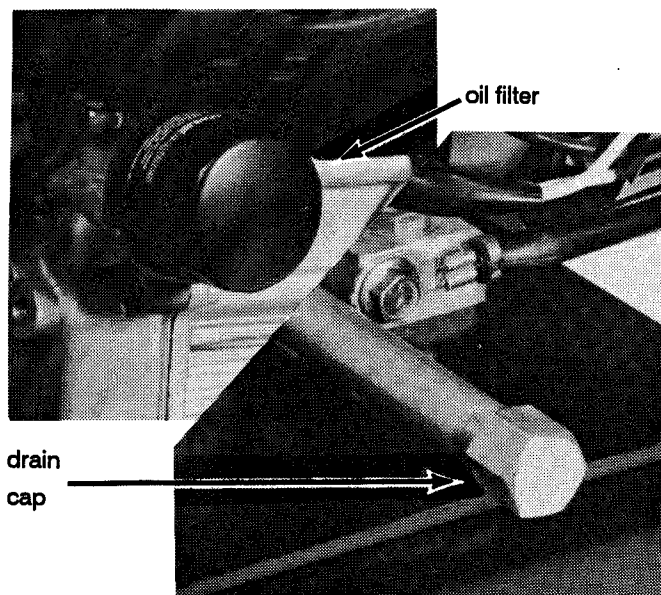


Figure 15. Engine oil filter and drain cap.

Spark plugs

After every 100 hours of use, check the condition of each spark plug and reset the gap. The gap gradually widens as the electrodes wear under normal conditions. To check each plug:



WARNING: Before checking or servicing any part of the electrical system, first disconnect the black (-) battery cable. Then disconnect the red (+) cable. Failure to do so could cause severe burns.

1. Open the hood and remove side panels. First disconnect the black (-) battery cable. Then disconnect the red (+) cable.
2. Disconnect the lead wire from the top of the plug. Clean the area around the plug to prevent dirt from dropping into the engine.
3. Using care not to crack or break ceramic insulation material, remove the spark plug.
4. Check condition of electrodes. If the plug has a light coating of gray or tan, this usually indicates normal conditions.

A white, blistered coating may indicate overheating. A black coating usually comes from operating with an overrich fuel mixture.
5. Replace both spark plugs even if only one is badly fouled or in poor condition.
6. If the old plug is in good condition, reset the gap to .040 inches.
7. Using a torque wrench, tighten each plug to 18 - 22 ft-lbs.
8. Reconnect lead wires from coil. First connect the red (+) battery cable. Then connect the black (-) battery cable. Replace side panels, and close hood.

Maintenance

Fuel system

The tractor has a fuel screen at the fuel shutoff valve and an in-line fuel filter. They should be cleaned or changed after every 100 hours of use.

When adding fuel use fresh, unleaded gasoline with an octane rating of at least 87.



WARNING: Handle fuel carefully. Always stop the engine and turn off all electrical systems, including the headlights, when servicing the fuel system. Do not permit smoking in the area. Keep flames and sparks away from the area.

Adding fuel

1. Check gauge in fuel tank cap behind seat for fuel remaining in tank.
2. Clean area around the fuel tank cap. Add fuel as required. Avoid spilling fuel.

IMPORTANT NOTICE: DO NOT ADD OIL TO THE GASOLINE. DO NOT USE GASOLINE/ALCOHOL BLENDS.

3. Wipe off any spilled fuel with rags. Allow spilled fuel and vapors to dissipate before turning on any part of the electrical system including the ignition. Place wipe-up rags in a well-ventilated area for drying.
4. Make sure the fuel tank cap breather hole is open (refer to page 6). If it is plugged, a vacuum is created and fuel cannot be drawn from the tank by the engine's fuel pump.
5. With fuel line shutoff valve open, (refer to page 10) check for leaks in the fuel tank, fuel lines and connections, fuel pump, and carburetor. Correct all leaks before starting engine.
6. When the tractor is left unattended, the rear fuel shutoff valve should be closed (turn clockwise).

Fuel screen and filter

To clean/replace the screen in the tank:

1. Close the fuel line shutoff valve at the rear of tractor (under fuel tank).
2. Disconnect fuel line at the fuel shutoff valve. Collect fuel from line in a suitable container.
3. Reopen the shutoff valve. Drain the fuel from the tank into a suitable container.
4. Pull entire shutoff valve out of tank with a twisting motion.
5. Clean the screen or replace shutoff valve. Reinstall shutoff valve. Reconnect fuel line. Fill fuel tank. Open fuel shutoff. Check for leaks.

To replace the filter in the fuel line:

1. Close fuel line shutoff valve.
2. Slide the hose clamps off. Remove the filter. Refer to Figure 16. Collect fuel in a suitable container.
3. Add new filter with arrow pointing toward carburetor. Reinstall hose and clamps.
4. Open fuel shutoff. Check for leaks.



Figure 16. In-line fuel filter.

Maintenance

Hydraulic system

The hydraulic system consists of the hydrostatic transmission, transaxle, cylinders, valves, hoses, fittings, and filter. See your Dealer to repair or replace transmission, transaxle, cylinders, and valves.



WARNING: Keep body and hands away from pin hole leaks that eject hydraulic fluid under high pressure. When searching for leaks use paper or cardboard, not hands.



WARNING: Make sure all hydraulic fluid connections are tight. Make sure all hydraulic hoses and lines are in good condition before applying pressure to the hydraulic system.

Hydraulic hoses, fittings, and filter may be replaced by the user. After replacing components check fluid level of transaxle. Refill if necessary. Run the tractor and check for leaks. Wipe any spilled oil off the tractor.



WARNING: Hoses under pressure! Escaping fluids can penetrate skin and require immediate surgical treatment.



CAUTION: Make certain implements are fully lowered to the ground before servicing any hydraulic component.



CAUTION: Do not loosen hose fittings while the engine is running. Do not overtighten fittings. Damage will result from too much force. Tighten only enough to prevent leakage. Teflon thread sealant can be used on pipe threads if necessary.

Hoses and fittings

The hoses and fittings should be checked at least every 25 hours of tractor operation. The hoses should not be loose or cracked and the fittings should be tight. If they are not in good condition obtain replacements from your Dealer.

Oil & filter

The hydraulic oil is contained in the transaxle. Refer to "Transaxle" on page 29 for information pertaining to the hydraulic oil and filter.

Maintenance

Lubrication

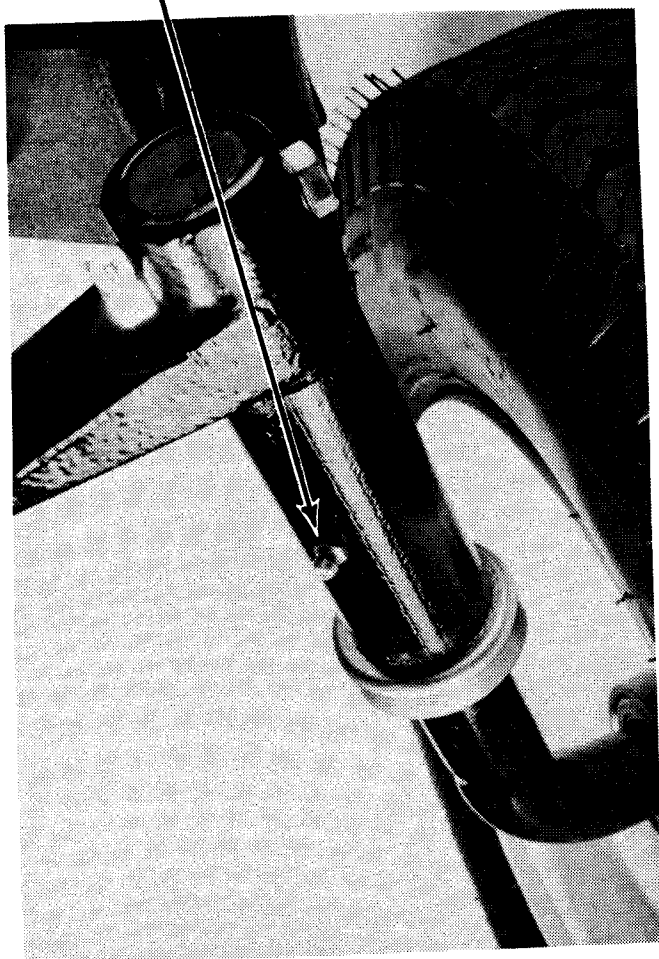
Oil, grease, and lubricate the tractor every 25 hours of use. Always clean the exposed and surrounding areas of the plugs and grease fittings before lubricating.

The cam plate and steering sector are greased at the factory. Normally they do not need lubrication. Check them periodically to ensure they remain lubricated. Use lithium based grease if necessary.

Grease fittings

There are four grease fittings, one on each steering spindle, and one on each front wheel rim. To grease the fittings jack up the tractor and support it with blocks. Pump lithium based grease into the fittings until the grease oozes out. Then turn the steering wheel a few times to distribute the grease. Lower tractor. (Refer to Figure 17).

steering spindle fitting



front wheel rim fitting

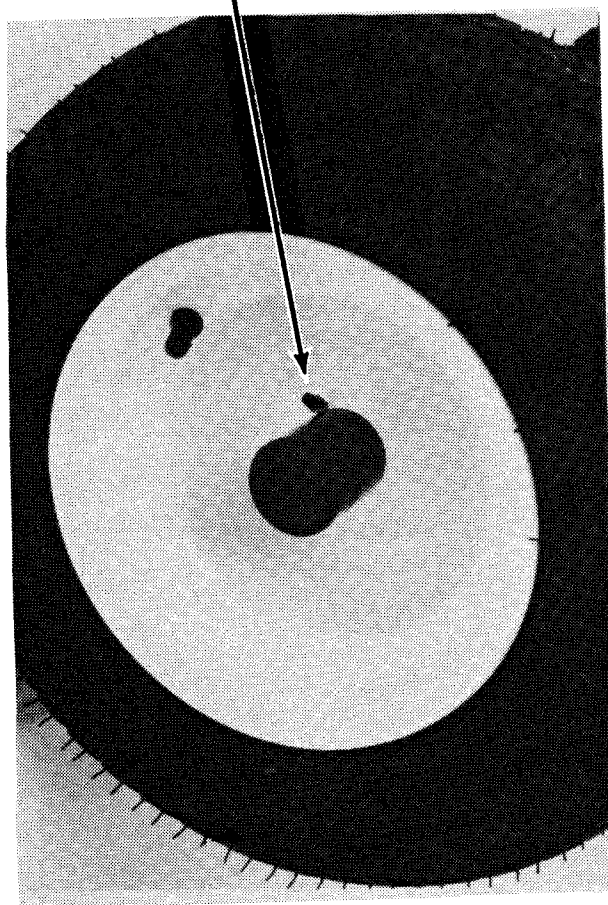


Figure 17. Grease fittings.

Maintenance

Tires and wheels

Tire maintenance

Proper tire maintenance is one of the most important factors in the satisfactory performance of your tractor. Observe the following tire care rules for best results:

1. Immediately wipe spilled oil and gasoline from tires. Do not park in spilled oil. Petroleum products attack rubber. Clean chemicals from tires as soon as possible.
2. Avoid sharp objects which may cut or puncture tires.
3. Avoid "bruising" tires by striking hard objects with heavily loaded tractor or at high speeds.
4. Do not "spin" tires during start-up.
4. Do not brake to skidding stops.

Tire pressure

Maintain proper inflation:

A correctly inflated tire results in good traction with the least wear.

Underinflation may cause rim slipping, excessive wear, and a low or uneven cut when mowing. An underinflated tire may appear to be properly inflated but will buckle when the tractor pulls a load. Sidewalls will eventually break.

Overinflation may cause the rear wheels to slip under load and cause faster tire wear as a smaller part of the tire is in contact with the ground.

A correctly inflated tire results in good traction with the least wear. The recommended pressure may vary depending upon the load. Refer to "Tractor Specifications" on page 54 in this manual for tire combination air requirements and load capacity.

Tread width

Tread width refers to the spread or spacing between the center lines of the two rear wheels or the two front wheels of the tractor.

When moving on slopes or rough uneven ground, it is important to have as wide a spread as possible between the wheels. This makes the tractor more stable and reduces the possibility of a "rollover."

REAR WHEELS - to increase the tread width from the standard position mount the right rear wheel on the left side and left rear wheel on the right side. Switching wheels from one side to the other will maintain the proper direction of tire rotation.

Changing wheels

To remove a wheel and tire:

1. Remove any wheel weights. Block the other wheels to prevent the tractor from rolling.
2. Raise the tractor with a jack under the frame. Support the tractor with blocks or jack stands to prevent it from falling.
3. Remove wheel bolts and carefully slide the wheel and tire from the tractor.

Maintenance

Tires and wheels (continued)

Wheel weights

Added weight to the front and/or rear wheels can make tractor operation easier and safer under certain conditions.

REAR WHEELS – added weight on the rear wheels will be helpful:

- When pulling – the weights will give added traction and reduce slippage.
- In maintaining traction with a heavy load at the front of the tractor (such as with a snowblower or bulldozer blade).

FRONT WHEELS – front counterweights mounted on the front wheels or on the optional front weight rack adapter will be helpful:

- In balancing the lifting action caused by rear-mounted attachments.
- To prevent loss of steering when driving up a slope.
- When pulling heavy loads on rough ground.

Wheel weights should be used in pairs to give an equal amount of added weight on each side of the tractor.

Operating with weight on only one side will cause uneven tire wear. This can cause improper operation of some attachments such as a rotary mower.

NOTE: Do not exceed three weights per wheel or any combination of loads that will exceed the rated tire capacity.

FRONT BUMPER WEIGHTS – May be used in addition to or in lieu of front wheel weights in certain applications. See your Dealer for information.

Maintenance

Transaxle and transmission

The transaxle has a disc brake for slowing/stopping the tractor. The transaxle also acts as the oil reservoir for the hydrostatic transmission and the hydraulic lift.

The hydrostatic transmission should be checked before every use of the tractor. Excessive heat reduces the efficiency and life of the transmission. Transmission cooling fins should be cleared of debris. The cooling fan should be inspected for cracked or missing blades.



WARNING: Always disengage the PTO, by turning the blade switch to OFF, before servicing the tractor.

Brake

The brake should be checked every 25 hours of tractor operation.

Tractor control linkage

Over time, normal operating vibration may cause one of the linkages between the neutral/brake pedal and the hydrostatic transmission to require adjustment.

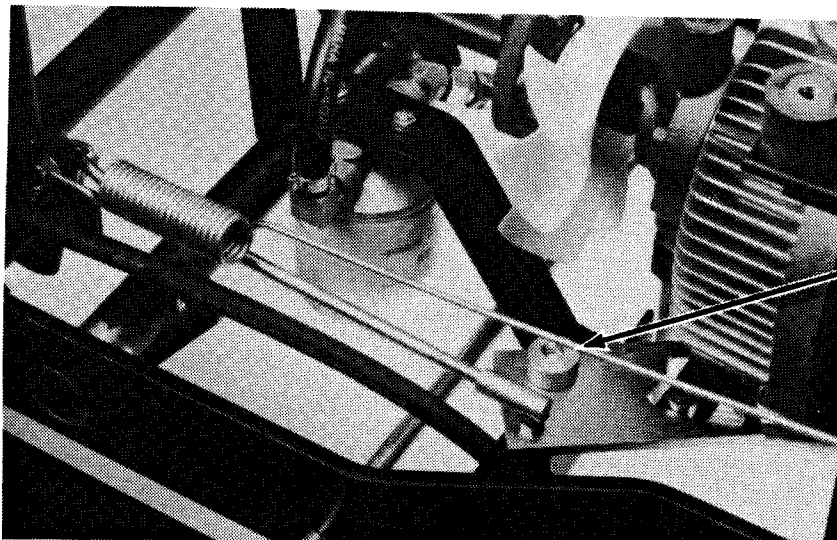
When the brake is applied, if the tractor tends to continue moving and the transmission sounds as if it were straining, the linkage may not be returning the transmission to neutral.



WARNING: If testing the adjustments by running the tractor while the rear end is raised, be sure poisonous exhaust fumes are vented to the outside.

To adjust:

1. Raise and support the rear of the tractor with both wheels off the floor. Remove the left wheel.
2. Loosen both nuts on the eccentric adjusting screw (Refer to Figure 18) located under the tractor in the pivot bracket.
3. Insert an allen head wrench in the bottom of the screw. Turn it left or right until the camplate moves the transmission control arm into neutral when the pedal is depressed slightly more than halfway.
4. Retighten both nuts on the adjusting screw.



eccentric adjusting screw
(located under this point)

Figure 18. Rod end bearing.

Maintenance

Transaxle and transmission (continued)

Oil & filter

The oil in the transaxle serves the transmission and the hydraulic lift. The oil should be checked before every use of the tractor.

The oil should be changed and the filter replaced after the initial 50 hours of tractor use, after 250 hours of tractor use, and every 500 hours thereafter.

Fill with 20W hydraulic oil to the bottom of the fill plug hole. Use 30W on older machines with worn parts.

To change oil – remove the drain plug. Drain oil into a suitable container. Replace drain plug. Remove fill plug. Fill to bottom of hole. Replace plug.

To replace the filter – gain access to it from beneath the tractor. Unscrew the filter and replace with a new filter. (Refer to Figures 19 and 20).

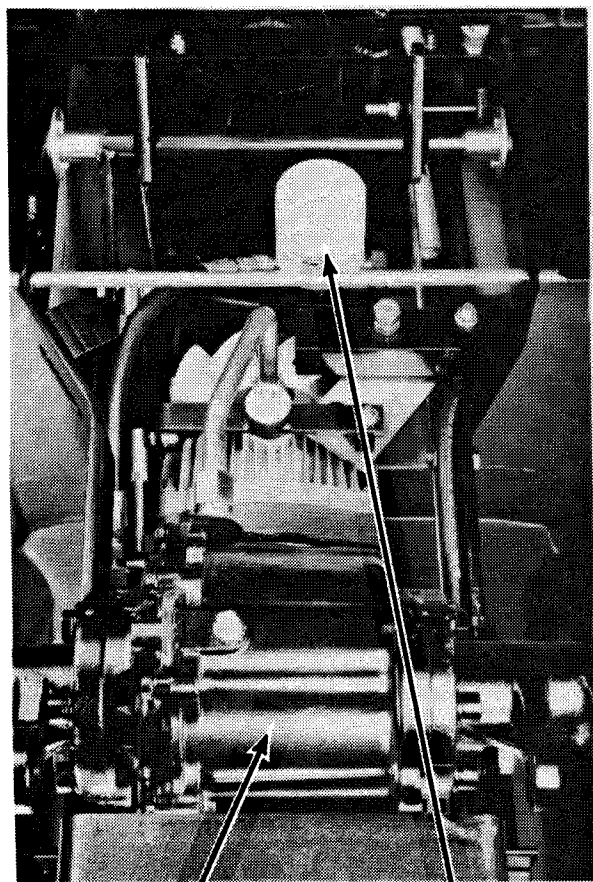


Figure 19. Transaxle and hydraulic oil filter.

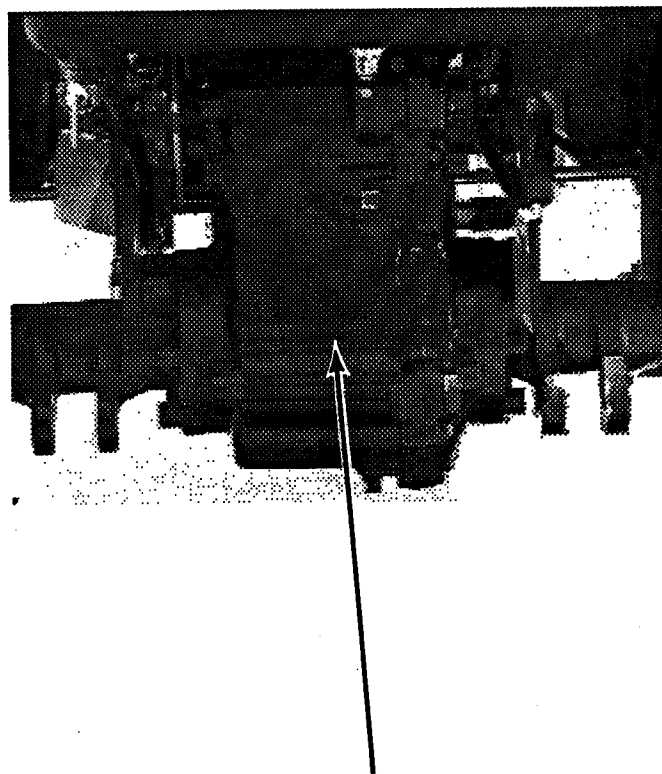


Figure 20. Transaxle (rear view).

Tractor Storage

When the tractor is not to be used for an extended period of time, it should be prepared for storage. This helps to extend its life, keep it in prime condition, and make it ready for future use.

The tractor should be stored in a dry and protected place. Unnecessary exposure to sun, wind, rain, or snow may have harmful effects on its appearance and usefulness.

The tractor should be started up and driven at least every six months to maintain critical lubrication coverage on moving parts.

Engine

To prepare the engine for storage:

1. Change the oil. Run the engine long enough to thoroughly warm the old oil in the crankcase before draining. (Refer to "Engine" on page 21).
2. Run the engine for about five minutes after adding new oil supply.
3. Close the fuel shutoff valve (Refer to Figure 21) and run engine until fuel in carburetor is used up.



WARNING: Handle fuel carefully. Always stop the engine and turn off all electrical systems, including the headlights, when servicing the fuel system. Do not permit smoking in the area. Keep flames and sparks away from the area.

4. Using a pair of notched pliers on the hose clamp, disconnect the fuel line from the fuel shutoff valve. (Refer to Figure 21) Drain fuel line into a suitable container.

5. Reopen the fuel shutoff valve and drain fuel from tank into a suitable container. When empty, remove fuel filter from valve and wash out as required. Reinstall valve and replace in tank.

IMPORTANT NOTICE: It is important to perform these fuel line functions because gum will eventually form in the tank, line, and carburetor if the tractor is not used.

Gum in the carburetor jets and passages makes engine starting difficult. Gum can be dissolved with acetone or a 50-50 mixture of alcohol and benzol.

6. Remove each spark plug and pour one tablespoon of good quality lubricating oil into each cylinder. Crank the engine two or three times to distribute the oil over the cylinder walls.
7. Recheck the gap and reinstall each plug.

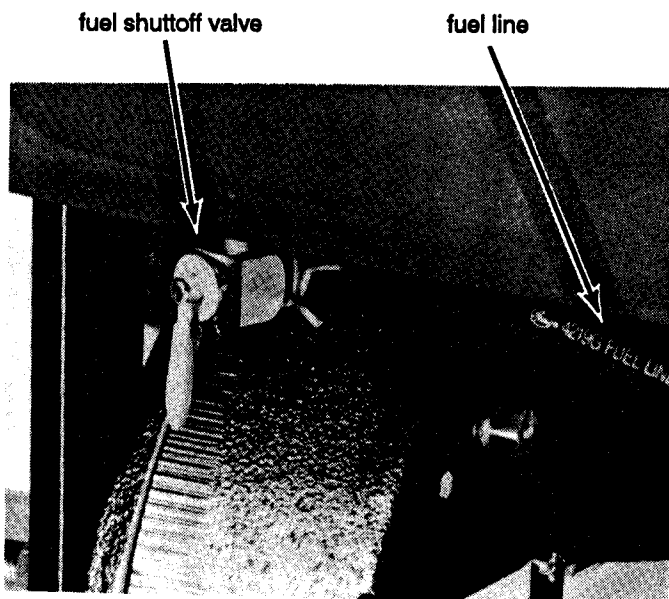



Figure 21. Fuel shutoff valve and fuel line.

Tractor Storage

Battery

 **WARNING:** Before checking or servicing any part of the electrical system, first disconnect the black (-) battery cable. Then disconnect the red (+) cable. Failure to do so could cause severe burns.

1. To remove and store the battery refer to "Removing the battery" on page 18. First disconnect the black (-) battery cable. Then disconnect the red (+) battery cable.

Refer to "Cleaning the battery" on page 18 to remove any corrosion that may have accumulated around the posts. Store the battery on a wooden rack or bench in a cool, dry place.

2. The battery should be checked every 30 to 60 days while in storage and should be recharged if necessary. When a battery becomes discharged, the electrolyte contains more water than acid. In this discharged condition, the battery could freeze and possibly crack during cold winter weather.

3. When reinstalling the battery, refer to page 18 "Installing the battery" in this manual. First connect the red (+) battery cable. Then connect the black (-) battery cable.

Keep connections tight at all times to prevent arcing, pitting of connections, and eventual battery failure.

Lubrication

Completely lubricate the tractor. Refer to "Lubrication" on page 26.

Body

1. Wash, clean, and wax the hood and body sections.
2. Paint rust-preventative oil over any area where raw metal is exposed (except pulley grooves). Do not use crankcase oil as it is not a rust preventative.

Tires

1. Store the tractor so that the tires are protected from direct sunlight.
2. Place jack stands or blocks under the tractor so that the load is off the tires.

If the tractor cannot be placed on blocks, check the tires at regular intervals and reinflate as necessary to keep them at recommended pressure.

Attachments

The tractor is equipped with front hitch blocks for attaching front implements; a lift weldment for raising/lowering implements, and a towbar and transaxle tabs for attaching rear implements. (Refer to Figure 20).

In addition to these standard features, optional features can be added to enhance the tractor's capabilities. These optional features include the addition of a rear PTO.

See your Dealer for a complete list of standard and optional attachments.

Standard features

Front hitch blocks

Metal bars are permanently affixed to the bottom front of the tractor frame. Attachments such as a dozer blade are mounted here.

Middle lift weldment

A lift weldment is mounted on the underside of the tractor between the frame side members. This weldment rotates forward or backward as the implement lift system is activated. The arm(s) that is used depends on the attachment.

Towbar

The rear-mounted towbar (Refer to Figure 22) is used when pulling trailers, spreaders, yard carts, or any other implement.



CAUTION: Never pull from any other part of the tractor frame.

Transaxle tabs

Certain rear mounted attachments utilize the two sets of tabs found on the bottom rear of the transaxle housing, inside each rear wheel. (Refer to Figure 20).

Optional features

Rear PTO

The rear PTO is used to power rear-mounted rotary attachments, such as rototillers.

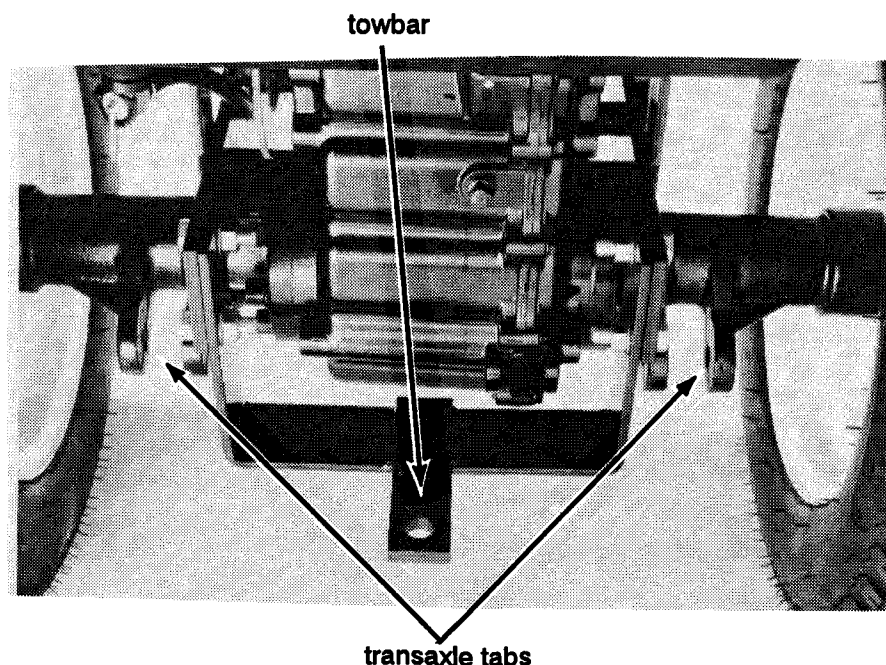


Figure 22. Towbar and transaxle tabs.

Parts Lists and Drawings

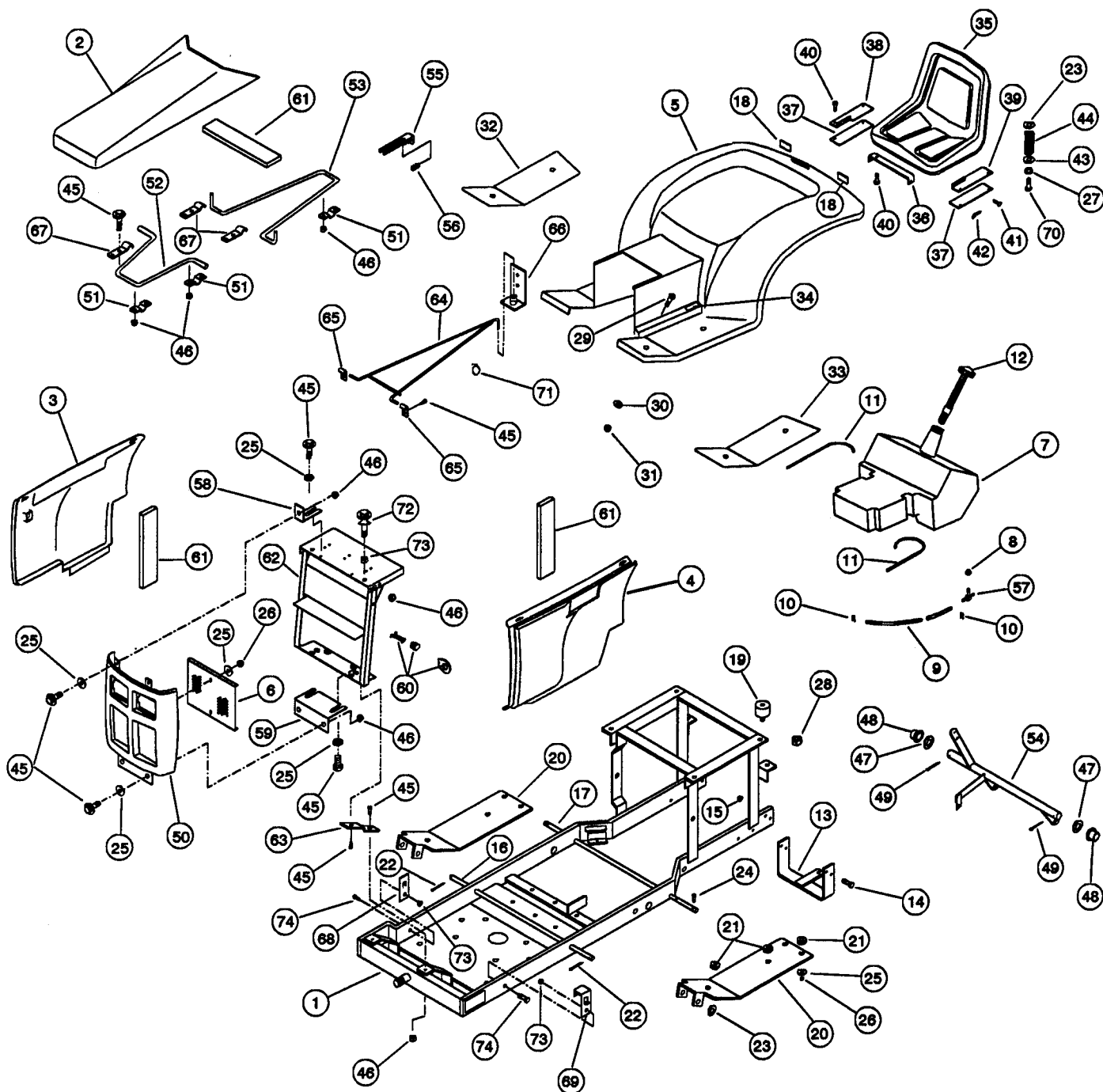
Body

| ITEM NO. | PART NO. | QTY | PART NAME | DESCRIPTION |
|----------|------------|-----|----------------|---------------------------|
| 1 | 103600 | 1 | Frame | Hydro Command |
| 2 | 104086 | 1 | Hood | Top - orange |
| (2) | 104117 | 1 | Hood | Top - (red) |
| 3 | 104087 | 1 | Hood | Panel RH - orange |
| (3) | 104118 | 1 | Hood | Panel RH - (red) |
| 4 | 104088 | 1 | Hood | Panel LH - orange |
| (4) | 104119 | 1 | Hood | Panel LH - (red) |
| 5 | 104090 | 1 | Body | Fender - orange |
| (5) | 104120 | 1 | Body | Fender - (red) |
| 6 | 103991 | 1 | Screen | Grille |
| 7 | 02-7503-00 | 1 | Tank | Gas |
| 8 | 03-2502-00 | 1 | Grommet | Valve-Fuel tank |
| 9 | 104274 | 1 | Line | Fuel 57" long |
| 10 | 85-0044-00 | 2 | Clamp | Hose fuel line |
| 11 | 02-7504-00 | 2 | Tube | Anti Vibration-fuel tank |
| 12 | 03-0902-00 | 1 | Cap | Fuel Gauge |
| 13 | 02-0514-00 | 1 | Bracket | Drawbar |
| 14 | 84-1171-00 | 4 | Screw | HHC 1/2 NF x 1-1/2 |
| 15 | 84-0130-00 | 4 | Nut | Lock Hx 1/2 NF |
| 16 | 02-6803-00 | 1 | Rod | Isolation foot rest front |
| 17 | 02-6804-00 | 1 | Rod | Isolation foot rest rear |
| 18 | 03-6702-00 | 2 | Reflector | Rear |
| 19 | 02-5104-00 | 4 | Mount | Isolation-Nat rubber |
| 20 | 02-6308-00 | 2 | Plate | Foot rest support |
| 21 | 02-2510-00 | 8 | Grommet | Foot rest RH & LH |
| 22 | 84-4013-00 | 2 | Pin | Cotter 3/32 dia x 5/8 stl |
| 23 | 84-3059-00 | 4 | Washer | Flat 1/2 type N |
| 24 | 84-2350-00 | 4 | Screw | HHC 1/4 NC x 1-1/4 |
| 25 | 10287 | 14 | Washer | Flat 1/4 type W |
| 26 | 84-0010-00 | 6 | Nut | Lock HX 1/4 NC |
| 27 | 84-3010-00 | 2 | Washer | Lock 5/16 regular |
| 28 | 102996 | 4 | Nut | Flange 5/16 NC serrated |
| 29 | 84-2042-00 | 4 | Screw | BHCS 5/16 NC x 1-1/4 |
| 30 | 84-3012-00 | 4 | Washer | Flat 5/16 type N |
| 31 | 104496 | 4 | Nut | Lock Hx 5/16 NC nyloc |
| 32 | 02-6304-00 | 1 | Pad | Foot RH anti-slip |
| 33 | 02-6305-00 | 1 | Pad | Foot LH anti-slip |
| 34 | 03-6325-00 | 1 | Pad | Brake pedal grit |
| 35 | 03-7107-00 | 1 | Seat | 14" back |

| ITEM NO. | PART NO. | QTY | PART NAME | DESCRIPTION |
|----------|------------|-----|---------------|----------------------------|
| 36 | 03-0512-00 | 1 | Bracket | Hinge-seat |
| 37 | 03-0518-00 | 2 | Bar | Reinforcement-fender body |
| 38 | 03-0510-00 | 1 | Bracket | Seat mount-RH |
| 39 | 03-0511-00 | 1 | Bracket | Seat mount-LH |
| 40 | 102995 | 6 | Screw | HWH 5/16 NC x 3/4 |
| 41 | 84-4030-00 | 2 | Pin | Clevis 5/16 dia x 31/32 lg |
| 42 | 84-4034-00 | 2 | Key | .072 Wire quick change |
| 43 | 84-3037-00 | 2 | Washer | Flat 3/8 type N |
| 44 | 83-1039-00 | 2 | Spring | Compress 1.367 x .177 |
| 45 | 104188 | 20 | Screw | HWH 1/4 NC x 3/4 |
| 46 | 200183 | 14 | Nut | Flange 1/4 NC serrated |
| 47 | 84-3079-00 | 2 | Washer | Flat 1-1/4 type N |
| 48 | 80-0014-00 | 2 | Bushing | Flange 1.25 ID |
| 49 | 84-4020-00 | 2 | Key | Cotter 5/32 x 1-1/2 |
| 50 | 103990 | 1 | Grille | Front - orange |
| (50) | 104121 | 1 | Grille | Front - (red) |
| 51 | 103978 | 3 | Clip | Hinge |
| 52 | 104281 | 1 | Rod | Hood prop front |
| 53 | 104291 | 1 | Rod | Hood prop rear |
| 54 | 104108 | 1 | Crank | Lift weldment |
| 55 | 104409 | 1 | Bracket | Hood latch |
| 56 | 104365 | 1 | Plunger | Ball 3/8 dia |
| 57 | 104197 | 1 | Valve | Fuel 90° tank mount |
| 58 | 104410 | 2 | Clip | Mounting grille top |
| 59 | 104411 | 1 | Clip | Mounting grille bottom |
| 60 | 104221 | 2 | Fastener | Cam-loc 1/4 turn |
| 61 | 104174 | 4.5 | Foam | 2.00 wide x .50 thick |
| 62 | 104282 | 1 | Bracket | Front |
| 63 | 104293 | 2 | Bracket | Extension grille support |
| 64 | 104290 | 1 | Support | Super-structure |
| 65 | 104289 | 2 | Bracket | Support hinge |
| 66 | 104288 | 1 | Bracket | Support receiver |
| 67 | 104280 | 3 | Clip | Mounting |
| 68 | 104378 | 1 | Bracket | Retaining RH |
| 69 | 104379 | 1 | Bracket | Retaining LH |
| 70 | 84-2020-00 | 2 | Screw | HHC 5/16 NC x 7/8 |
| 71 | 102999 | 1 | Pin | Circle cotter .06 x 1 |
| 72 | 104447 | 2 | Screw | Nylon Thumb 3/8 x 1.00 |
| 73 | 103124 | 4 | Nut | Flange 3/8 NC |
| 74 | 103140 | 2 | Screw | HWH 3/8 NC x 1.00 |

Parts Lists and Drawings

Body



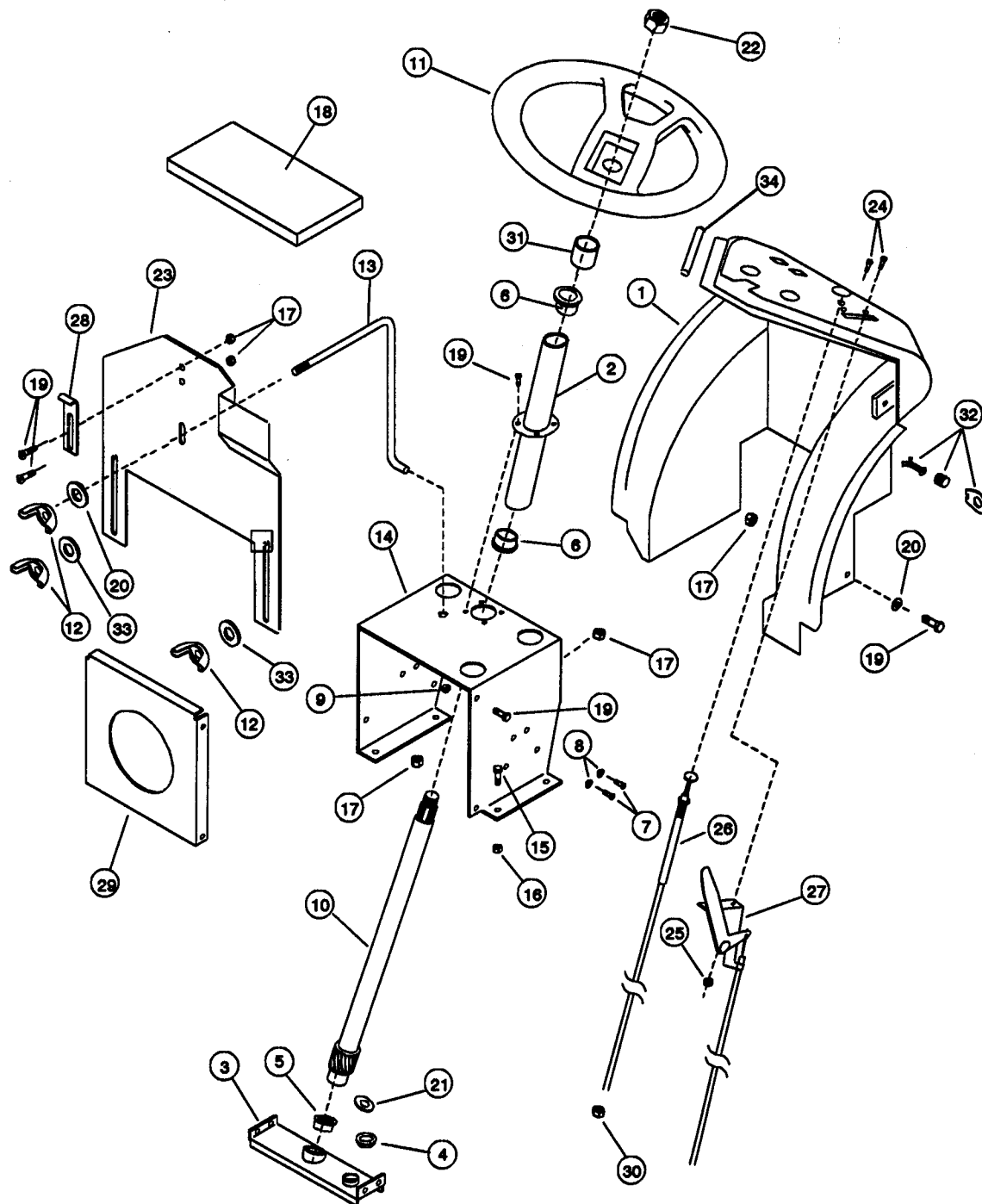
Parts Lists and Drawings

Console

| ITEM NO. | PART NO. | QTY | PART NAME | DESCRIPTION |
|----------|------------|-----|---------------|--------------------------|
| 1 | 104089 | 1 | Console | Fiber reinforced plastic |
| 2 | 104069 | 1 | Steering | Shaft support |
| 3 | 104073 | 1 | Support | Steering component |
| 4 | 80-0015-00 | 1 | Bushing | Flange .75 ID x .5" lg |
| 5 | 80-0605-00 | 1 | Bushing | Flange .75 x .50" ID |
| 6 | 09-9002-00 | 2 | Tube | Jacket Bearing |
| 7 | 84-1011-00 | 4 | Screw | RHM #10-24 x 5/8 |
| 8 | 84-3042-00 | 4 | Washer | Lock INT/EXT #10 |
| 9 | 84-0030-00 | 4 | Nut | Lock #10-24 nylon inert |
| 10 | 103962 | 1 | Steering | Shaft and Pinion |
| 11 | 103941 | 1 | Wheel | Steering complete |
| 12 | 104004 | 3 | Nut | Wing 1/4-20 NC |
| 13 | 104092 | 1 | Rod | Battery hold down |
| 14 | 104071 | 1 | Support | Console lower |
| 15 | 103027 | 4 | Screw | HWH 5/16 NC x 1 |
| 16 | 102996 | 4 | Nut | Flange 5/16 NC serrated |

| ITEM NO. | PART NO. | QTY | PART NAME | DESCRIPTION |
|----------|------------|-----|---------------|-------------------------|
| 17 | 200183 | 14 | Nut | Flange 1/4 NC serrated |
| 18 | 104093 | 1 | Pad | Rubber-Battery |
| 19 | 104188 | 14 | Screw | HWH 1/4 NC x .75 |
| 20 | 10287 | 5 | Washer | Flat 1/4 type W |
| 21 | 80-0034-00 | 1 | Race | .030 BRG Thrust |
| 22 | 100548 | 1 | Nut | Hx, 5/8 NF Jam |
| 23 | 104095 | 1 | Baffle | Isolation |
| 24 | 104097 | 2 | Screw | THM #8-32 x 5/8 |
| 25 | 104098 | 2 | Nut | Lock #8-32 nylon insert |
| 26 | 104111 | 1 | Control | Choke |
| 27 | 104112 | 1 | Control | Throttle |
| 28 | 104002 | 1 | Receiver | Hood latch |
| 29 | 104160 | 1 | Baffle | Air intake |
| 30 | 104189 | 1 | Nut | Jam Hx 3/8 NF |
| 31 | 104347 | 1 | Spacer | 1.00 x .76 x .90 |
| 32 | 104221 | 2 | Fastener | Cam-loc 1/4 turn |
| 33 | 84-3060-00 | 2 | Washer | Flat 7/16 type N |
| 34 | 104566 | 2 | Molding | Trim-Lok plastic |

Console



Parts Lists and Drawings

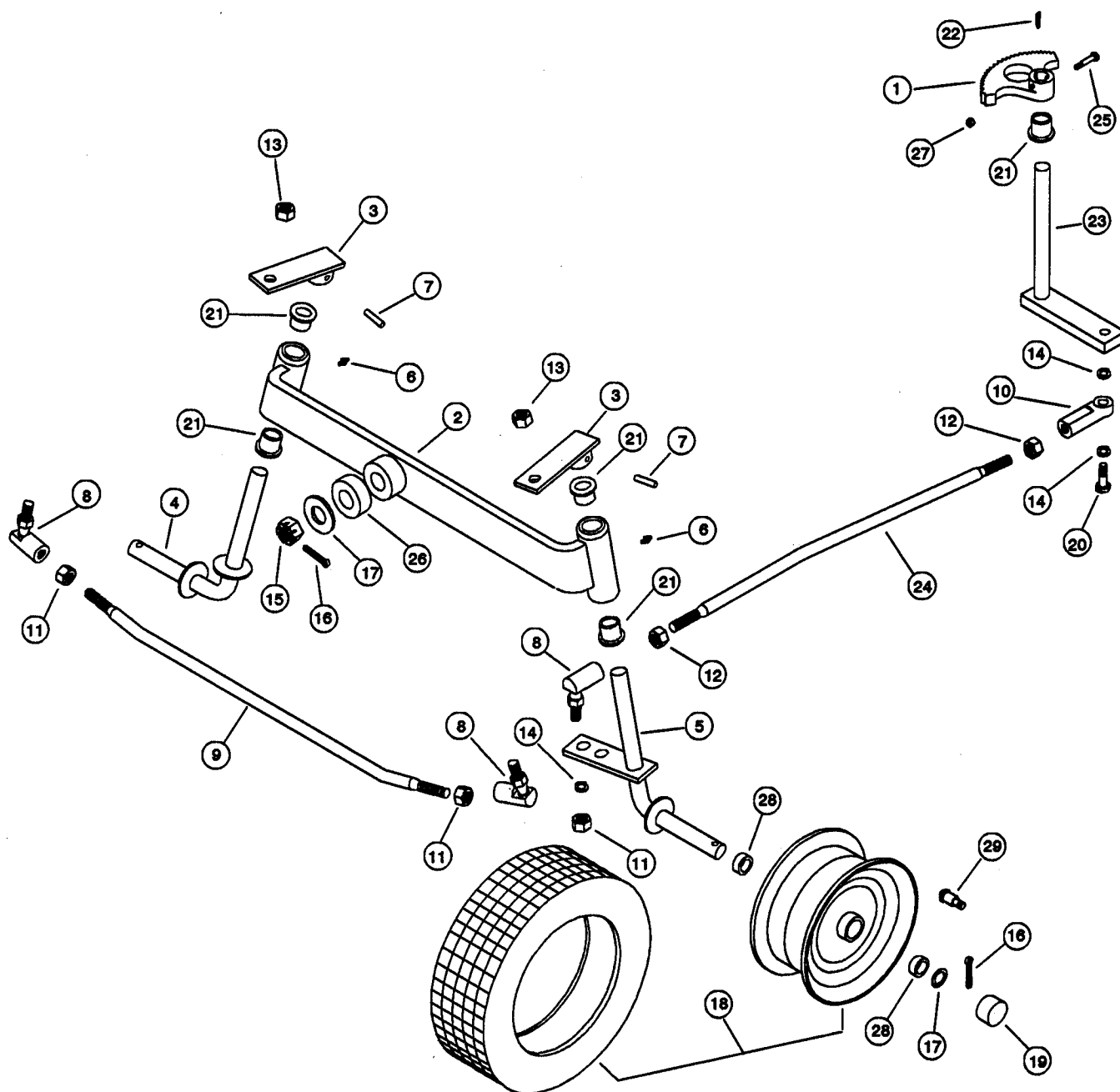
Front end and steering

| ITEM NO. | PART NO. | QTY | PART NAME | DESCRIPTION |
|----------|------------|-----|---------------|---------------------------|
| 1 | 103864 | 1 | Gear | Sector |
| 2 | 02-0101-00 | 1 | Axle | Front end support |
| 3 | 02-0104-00 | 2 | Arm | Tie rod 3/4" spindle |
| 4 | 02-7114-00 | 1 | Spindle | Front wheel 3/4" RH |
| 5 | 02-7115-00 | 1 | Spindle | Front Wheel 3/4" LH |
| 6 | 03-2102-00 | 2 | Fitting | Grease 1/4-28 |
| 7 | 84-4055-00 | 2 | Pin | Roll 5/16 Dia x 1 |
| 8 | 03-4107-00 | 3 | Knuckle | Rod end 1/2" NF Thread |
| 9 | 02-6702-00 | 1 | Rod | Tie 23.5" lg w/ .5-20 UNF |
| 10 | 03-4108-00 | 1 | Rod | End .500 UNF 28 |
| 11 | 84-0131-00 | 3 | Nut | Hx 1/2 NF |
| 12 | 84-0132-00 | 2 | Nut | Jam 1/2 NF |
| 13 | 84-0130-00 | 2 | Nut | Lock Hx 1/2 NF |
| 14 | 84-3110-00 | 3 | Washer | Lock 1/2 regular |
| 15 | 84-0073-00 | 1 | Nut | Hx 3/4 NF slotted RH |

| ITEM NO. | PART NO. | QTY | PART NAME | DESCRIPTION |
|----------|------------|-----|---------------|------------------------|
| 16 | 84-4020-00 | 3 | Key | Cotter 5/32 x 1-1/2 |
| 17 | 84-3070-00 | 3 | Washer | Flat 3/4 type N |
| 18 | 02-0203-00 | 2 | Wheel/Tire .. | Assy 6.5-8 white |
| 19 | 82-0917-00 | 2 | Cap | Plastic black |
| 20 | 84-1171-00 | 1 | Screw | HHC 1/2 NF x 1-1/2 |
| 21 | 80-0015-00 | 5 | Bushing | Flange .75 ID x .5" lg |
| 22 | 84-4042-00 | 1 | Key | Woodruff #9 3/16 x 3/4 |
| 23 | 104205 | 1 | Link | Drag |
| 24 | 02-4701-00 | 1 | Link | Steering |
| 25 | 104273 | 1 | Screw | HHC 1/4 NC x 1-3/4 |
| 26 | 80-0016-00 | 1 | Bushing | Sleeve 1" ID x 1-3/4" |
| 27 | 84-0010-00 | 1 | Nut | Lock Hx 1/4 NC |
| 28 | 80-0003-00 | 4 | Bearing | Thrust |
| 29 | 01-7521-00 | 1 | Stem | Valve 6.50 x 8 tire |

Parts Lists and Drawings

Front end and steering



Parts Lists and Drawings

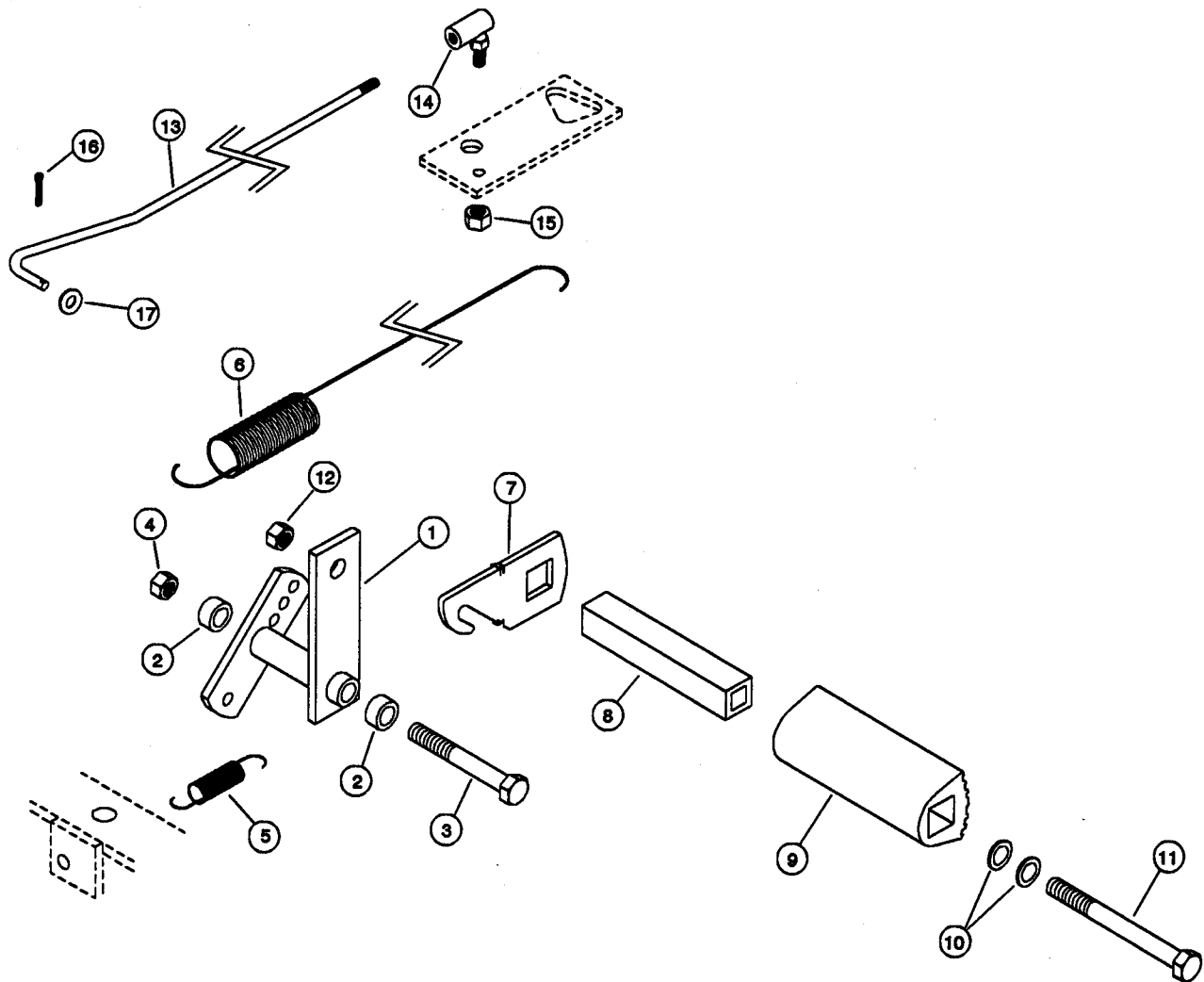
Motion control group

| ITEM NO. | PART NO. | QTY | PART NAME | DESCRIPTION |
|----------|------------|-----|---------------|---------------------------|
| 1 | 02-6312-00 | 1 | Pedal | Clutch brake weldment |
| 2 | 80-0025-00 | 2 | Bushing | .50 x .62 x .50 lg. |
| 3 | 84-2230-00 | 1 | Screw | HHC 1/2 NF x 4-1/2 |
| 4 | 84-0130-00 | 1 | Nut | Lock HX 1/2 NF |
| 5 | 83-0130-00 | 1 | Spring | Extension .750 x .093 |
| 6 | 83-0128-00 | 1 | Spring | Extension 20.38-20.50 lg. |
| 7 | 03-4706-00 | 1 | Latch | Parking brake zinc |
| 8 | 03-7112-00 | 1 | Sleeve | Brake pedal |
| 9 | 03-2512-00 | 1 | Grip | Brake-clutch |

| ITEM NO. | PART NO. | QTY | PART NAME | DESCRIPTION |
|----------|------------|-----|---------------|---------------------------|
| 10 | 84-3061-00 | 2 | Washer | Flat 1/2 type W |
| 11 | 84-2232-00 | 1 | Screw | HHC 1/2 NC x 5 |
| 12 | 84-0050-00 | 1 | Nut | HX 1/2 NC |
| 13 | 02-6705-00 | 1 | Rod | Neutral return |
| 14 | 80-6501-00 | 1 | Bearing | Rod end 5/16 |
| 15 | 84-0100-00 | 1 | Nut | Lock HX 5/16 NF |
| 16 | 84-4013-00 | 1 | Pin | Cotter 3/32 Dia x 5/8 Stl |
| 17 | 84-3012-00 | 1 | Washer | Flat 5/16 type N |

Parts Lists and Drawings

Motion control group



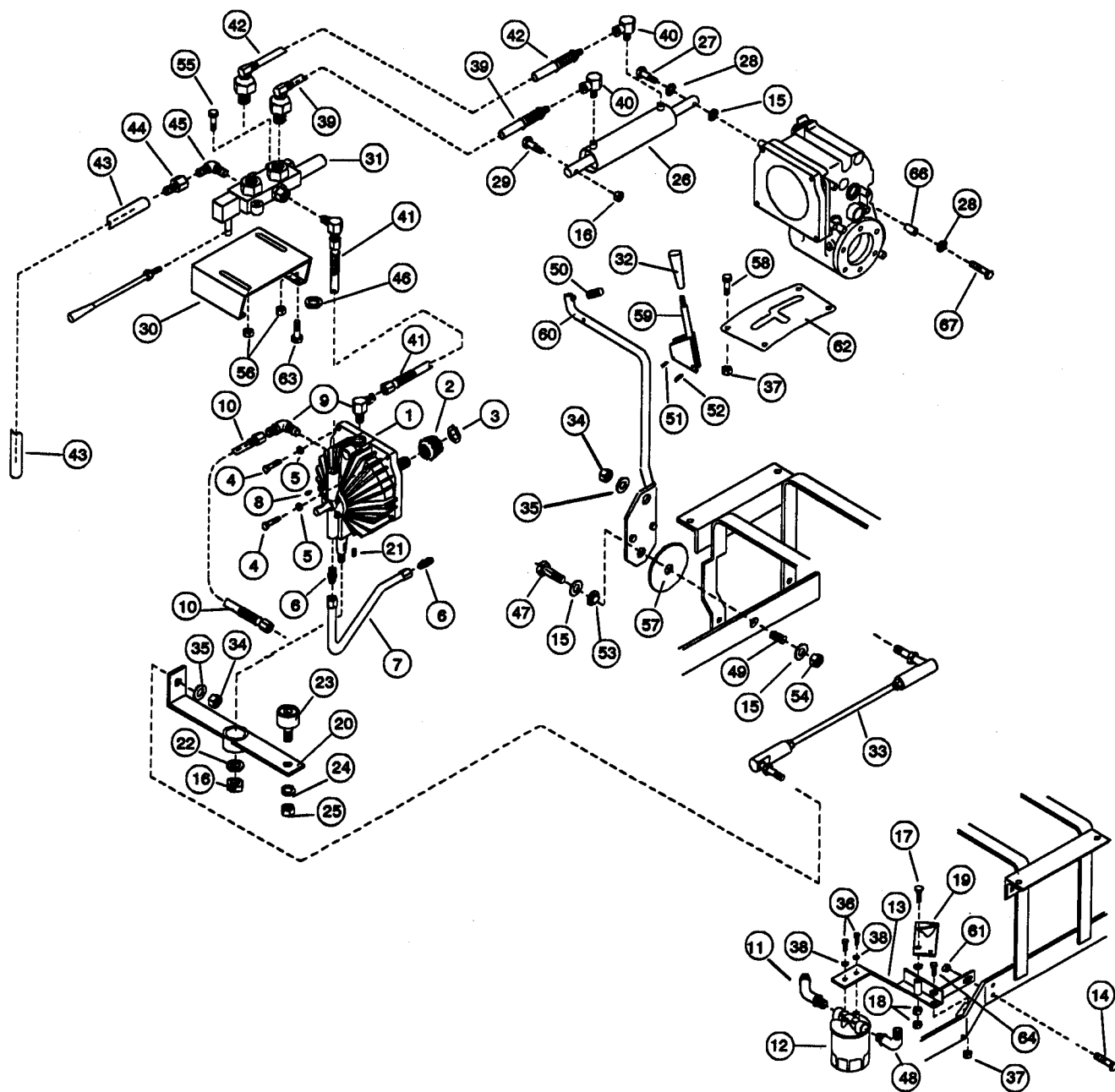
Parts Lists and Drawings

Hydrostatic transmission and hydraulic plumbing

| ITEM NO. | PART NO. | QTY | PART NAME | DESCRIPTION | ITEM NO. | PART NO. | QTY | PART NAME | DESCRIPTION |
|----------|------------|-----|----------------|--------------------------|----------|------------|-----|---------------|--------------------------|
| 1 | 02-7500-00 | 1 | Transmission | Hydrostatic | 34 | 84-0104-00 | 2 | Nut | Hex 5/16 NF |
| 2 | 02-2504-00 | 1 | Gear | Bevel-Hydro to transaxle | 35 | 84-3010-00 | 2 | Washer | Lock 5/16 regular |
| 3 | 85-0062-00 | 1 | Ring | Snap 5/8 OD external | 36 | 84-2335-00 | 2 | Screw | HHC 1/4 NC x 3/4 |
| 4 | 84-2383-00 | 4 | Screw | SHC 3/8 NC x 2-3/4 | 37 | 103124 | 5 | Nut | Flange 3/8 NC serrated |
| 5 | 84-3020-00 | 4 | Washer | Lock 3/8 regular | 38 | 84-3040-00 | 2 | Washer | 1/4" lock |
| 6 | 23-7916-00 | 2 | Fitting | 5/8MB-5/8MJ | 39 | 104101 | 1 | Hose | Ctrl valve "A"-cyl front |
| 7 | 23-7504-00 | 1 | Tube | Suction Hydro | 40 | 104102 | 2 | Fitting | 1/4 MP - 3/8 MJ 90° |
| 8 | 84-4043-00 | 1 | Key | Woodruff 3/16 x 5/8 | 41 | 104103 | 1 | Hose | Ctrl valve "P"-trans |
| 9 | 101221 | 2 | Fitting | 3/8MB-3/8MJ | 42 | 104104 | 1 | Hose | Ctrl valve "B"-cyl rear |
| 10 | 23-7503-00 | 1 | Hose | Hydro 3/8"ID x 13.0" lg | 43 | 104105 | 1 | Hose | 3/8 Low pressure x 41 |
| 11 | 23-7918-00 | 1 | Fitting | 3/8MP-3/8MJ 45 | 44 | 104106 | 1 | Fitting | 1/2 FJ - 3/8 Barb |
| 12 | 23-2101-00 | 1 | Base | Filter-Spin on W/Filter | 45 | 101217 | 1 | Fitting | 1/2MB - 1/2MJ 90° |
| 13 | 02-0520-00 | 1 | Bracket | Pivot Weldment | 46 | 10287 | 2 | Washer | Flat 1/4 type W |
| 14 | 10437 | 1 | Screw | HHC 1/2 NC x 1-1/2 | 47 | 104413 | 1 | Screw | HHC 1/2 NF x 2-1/2 |
| 15 | 84-3059-00 | 3 | Washer | Flat 1/2 type N | 48 | 23-7932-00 | 1 | Fitting | 3/8MP - 3/8 Barb |
| 16 | 84-0060-00 | 2 | Nut | Lock Hx 1/2 NC | 49 | 104385 | 1 | Spring | Compress |
| 17 | 02-7100-00 | 1 | Screw | Eccentric adjusting | 50 | 104381 | 1 | Spring | Compress .480 x .063 |
| 18 | 84-0050-00 | 2 | Nut | Hx 1/2 NC | 51 | 200100 | 1 | Pin | Roll 1/8 Dia x 7/8 Lg. |
| 19 | 103844 | 1 | Plate | Cam | 52 | 104380 | 1 | Pin | 5/32 Dia x 1 Lg. spring |
| 20 | 104371 | 1 | Arm | Hydro control | 53 | 104255 | 1 | Bushing | Flange .75 x .50 x .40 |
| 21 | 84-4040-00 | 1 | Key | Woodruff #5 1/8 x 5/8 | 54 | 84-0130-00 | 1 | Nut | Lock 1/2 NF |
| 22 | 84-3061-00 | 1 | Washer | Flat 1/2 type W | 55 | 102994 | 2 | Screw | HWH 1/4 NC x 1.00 |
| 23 | 80-0018-00 | 1 | Bearing | 5/8 Dia track follower | 56 | 200183 | 4 | Nut | Flange 1/4 NC serrated |
| 24 | 100163 | 1 | Washer | Lock INT 1/4 | 57 | 104360 | 1 | Pad | Friction |
| 25 | 84-0009-00 | 1 | Nut | Lock HX 1/4 NF | 58 | 101088 | 4 | Screw | BHSC 3/8 NC x 7/8 |
| 26 | 23-0906-00 | 1 | Cylinder | 3.65" stroke | 59 | 104250 | 1 | Handle | Shift |
| 27 | 84-2226-00 | 1 | Screw | HHC 1/2 NC x 2-1/4 | 60 | 104252 | 1 | Lever | Shift |
| 28 | 84-3110-00 | 2 | Washer | Lock 1/2 regular | 61 | 103395 | 1 | Nut | Flange 1/2 NC serrated |
| 29 | 84-2228-00 | 1 | Screw | HHC 1/2 NC x 2 | 62 | 103839 | 1 | Plate | Shifter-top |
| 30 | 103848 | 1 | Bracket | Valve mounting | 63 | 104188 | 2 | Screw | HWH 1/4 NC x 3/4 |
| 31 | 104052 | 1 | Valve | 1-Spool | 64 | 103140 | 1 | Screw | HWH 3/8 NC x 1 |
| 32 | 03-4104-00 | 1 | Knob | Shift tapered | 65 | 98-4001-00 | 12 | Oil | Pints, VG46 or 20W hyd. |
| 33 | 104372 | 1 | Turnbuckle .. | Hydro control | 66 | 80-9053-00 | 1 | Bushing | 3/4 x 1/2 ID x 1.38 |
| | | | | | 67 | 84-2227-00 | 1 | Screw | HCC 1/2 NC x 2-3/4 |

Parts Lists and Drawings

Hydrostatic transmission and hydraulic plumbing



Parts Lists and Drawings

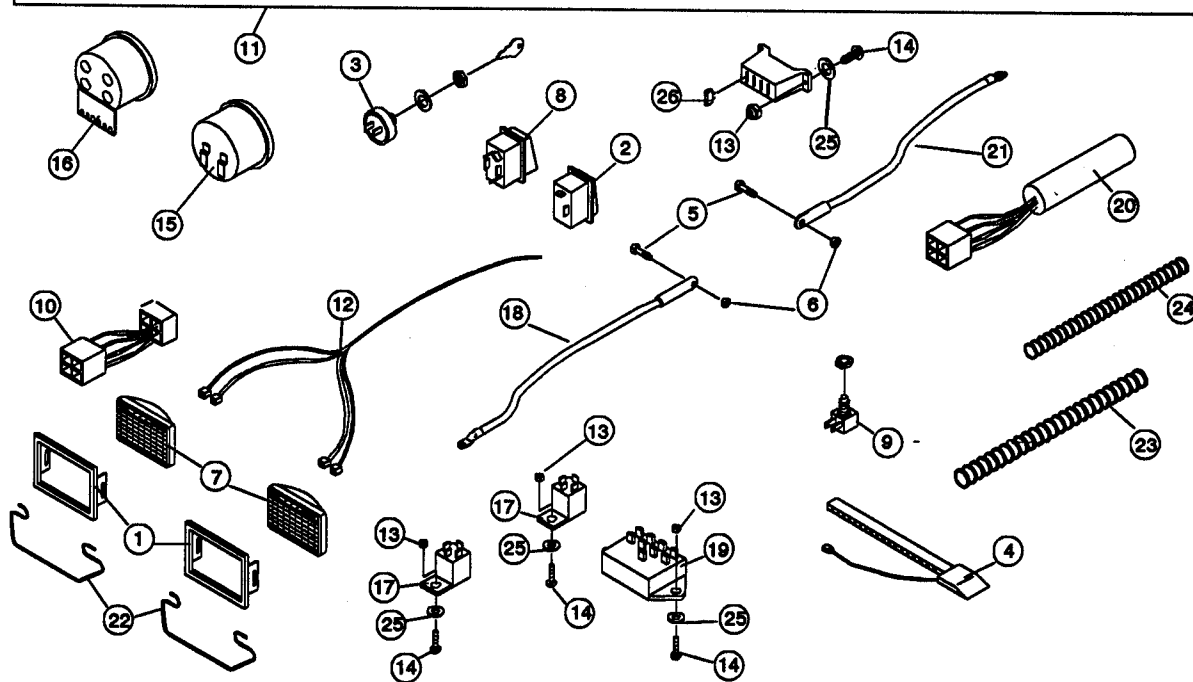
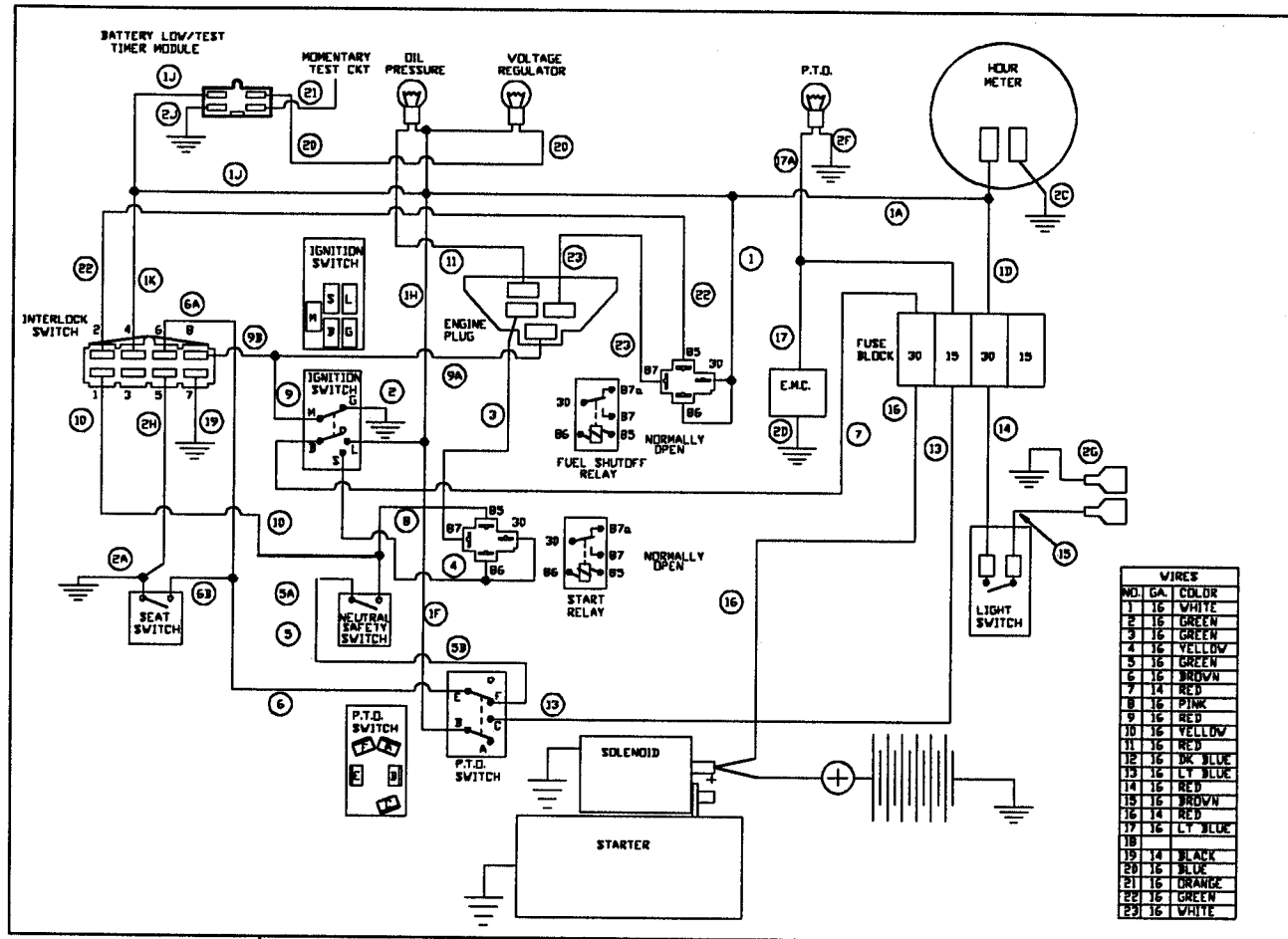
Electrical system

| ITEM NO. | PART NO. | QTY | PART NAME | DESCRIPTION |
|----------|------------|-----|--------------|-------------------------|
| 1 | 103949 | 2 | Bezel | Lamp, snap-head |
| 2 | 103964 | 1 | Switch | Rocker-light |
| 3 | 03-2018-00 | 1 | Switch | Ignition, 3-position |
| 4 | 03-2033-00 | 1 | Switch | Seat, N.O. beam type |
| 5 | 104188 | 2 | Screw | HWH, 1/4 NC x 3/4 |
| 6 | 200183 | 2 | Nut | Flange 1/4 NC |
| 7 | 103948 | 2 | Lamp | Head |
| 8 | 103963 | 1 | Switch | Safety toggle |
| 9 | 03-7115-00 | 1 | Switch | Hi/Lo, hydro/brake |
| 10 | 104304 | 1 | Harness | Adapter |
| 11 | 103650 | 1 | Harness | Main wiring |
| 12 | 103994 | 1 | Harness | Headlight |
| 13 | 84-0030-00 | 6 | Nut | Lock #10-24 nylon inert |

| ITEM NO. | PART NO. | QTY | PART NAME | DESCRIPTION |
|----------|------------|-----|----------------|-------------------------------|
| 14 | 84-2368-00 | 6 | Screw | RHM #10-24 x 3/4 |
| 15 | 103951 | 1 | Meter | Hour |
| 16 | 103950 | 1 | Light | Cluster |
| 17 | 104107 | 2 | Relay | 12VDC SPDT |
| 18 | 104132 | 1 | Cable | Pos. battery 30" |
| 19 | 104254 | 1 | Interlock | Solid stat ignition |
| 20 | 104257 | 1 | Module | Batter low / test timer |
| 21 | 104133 | 1 | Cable | Neg. battery 30" |
| 22 | 104315 | 2 | Retainer | Headlight |
| 23 | 104369 | 3.5 | Conduit | 3.5 ft., .35 corr. nylon |
| 24 | 104370 | 1.5 | Conduit | 1.5 ft., .50 corr. nylon |
| 25 | 100920 | 6 | Washer | Flat, # 10 |
| 26 | | 3 | Fuse | 15 & 30 amp, purchase locally |

Parts Lists and Drawings

Electrical system



Parts Lists and Drawings

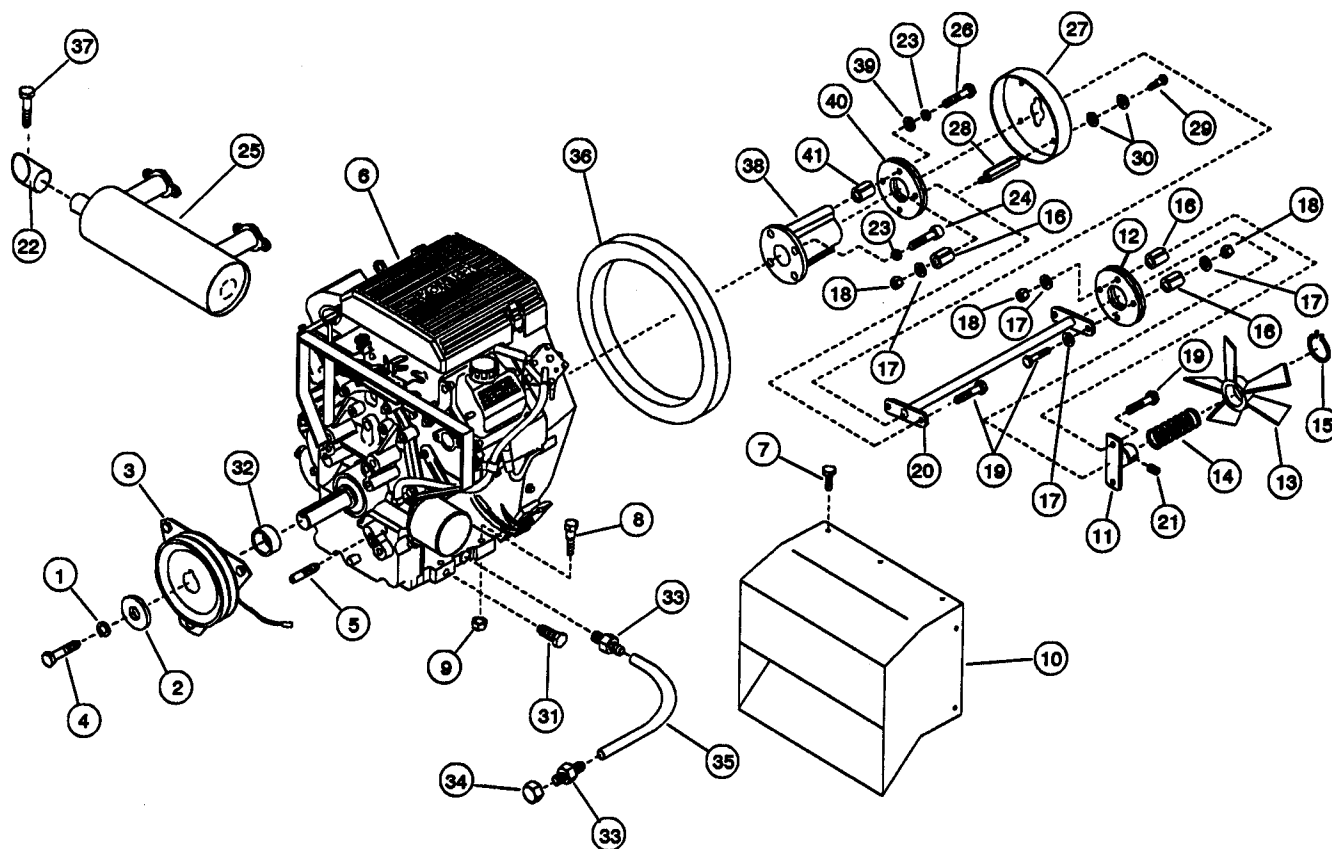
Engine

| ITEM NO. | PART NO. | QTY | PART NAME | DESCRIPTION |
|----------|------------|-----|----------------|-------------------------|
| 1 | 84-3030-00 | 1 | Washer | Lock 7/16 regular |
| 2 | 103104 | 1 | Washer | 1.38 x .47 x .25 |
| 3 | 103646 | 1 | Clutch | EMC-Bearing mount |
| 4 | 84-2170-00 | 1 | Screw | HHC 7/16 NF x 1-1/2 |
| 5 | 103660 | 1 | Stud | 3/8 NC x 1-7/16" |
| 6 | 103704 | 1 | Engine | Kohler 18HP Command |
| 7 | 103706 | 7 | Screw | HWH M6 x 1 x 12 |
| 8 | 84-2100-00 | 4 | Screw | HHC 3/8 NC x 1-3/4 |
| 9 | 103124 | 4 | Nut | Flange 3/8 NC serrated |
| 10 | 103962 | 1 | Shroud | Muffler-Command |
| 11 | 02-0907-00 | 1 | Coupling | Hub Drive shaft |
| 12 | 02-1303-00 | 1 | Disc | Coupling 3.2" OD x .35" |
| 13 | 02-2105-00 | 1 | Fan | Cooling 7"OD-10 blade |
| 14 | 83-1035-00 | 1 | Spring | Compress 1.687 x .078 |
| 15 | 85-0151-00 | 1 | Ring | Retaining-Hydro fan |
| 16 | 83-0029-00 | 6 | Spacer | Split .315-.320 x .315 |
| 17 | 84-3012-00 | 8 | Washer | Flat 5/16 type N |
| 18 | 84-0101-00 | 6 | Nut | Lock Hx 5/16 NC |
| 19 | 84-2020-00 | 6 | Screw | HHC 5/16 NC x 7/8 |
| 20 | 103668 | 1 | Drive shaft .. | Weldment |
| 21 | 84-2260-00 | 1 | Screw | Set 5/16 NC x 3/8 |
| 22 | 104286 | 1 | Pipe | Exhaust |

| ITEM NO. | PART NO. | QTY | PART NAME | DESCRIPTION |
|----------|------------|------|---------------|-------------------------|
| 23 | 84-3020-00 | 6 | Washer | Lock 3/8 regular |
| 24 | 103707 | 4 | Screw | SHC M8 x 1.25 x 30 |
| 25 | | 1 | Muffler | See local Kohler dealer |
| 26 | 84-2101-00 | 2 | Screw | HHC 3/8 NC x 1-1/4 |
| 27 | 104175 | 1 | Screen | Grass chopper |
| 28 | 104176 | 4 | Stud | Mounting-grass screen |
| 29 | 104177 | 4 | Screw | Truss HC-grass screen |
| 30 | 84-3090-00 | 8 | Washer | Flat 1/4 type N |
| 31 | 104196 | 2 | Screw | HWH M8 x 1.25 x 16 |
| 32 | 104220 | 1 | Spacer | 1.50 x 1.13 x .32 |
| 33 | 23-7930-00 | 2 | Fitting | 3/8MP-3/8 barb |
| 34 | 23-7922-00 | 1 | Fitting | Cap 3/8 NPT female |
| 35 | 101348 | 1 | Hose | 3/8 Low pressure x 7" |
| 36 | 104174 | 2 Ft | Foam | 2 Wide x .50 Thick |
| 37 | 104294 | 1 | Screw | No. 8 self drill |
| 38 | 104319 | 1 | Adapler | Flywheel |
| 39 | 84-3037-00 | 2 | Washer | Flat 3/8 type N |
| 40 | 104330 | 1 | Disc | Coupling |
| 41 | 104329 | 2 | Spacer | .452 x .378 x .300 |
| 42 | 98-4002-00 | 3.5 | Oil | Quarts, 10W-30 |

Parts Lists and Drawings

Engine



Parts Lists and Drawings

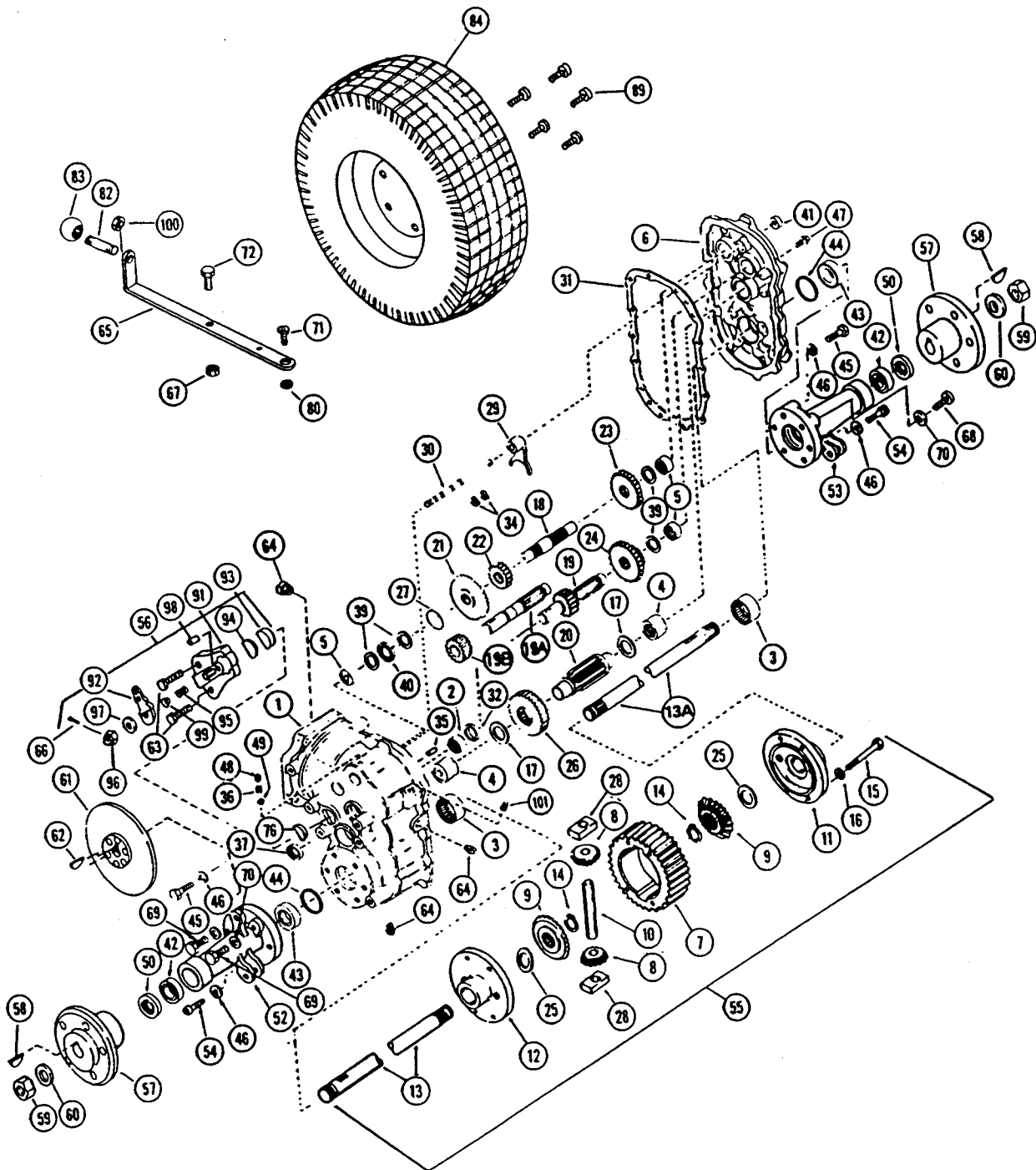
Transaxle and Rear Wheel Group

| ITEM NO. | PART NO. | QTY | PART NAME | DESCRIPTION | ITEM NO. | PART NO. | QTY | PART NAME | DESCRIPTION |
|----------|----------|-----|---------------|-----------------------------|----------|------------|-----|---------------|-------------------------------------|
| 1 | 770060A | | Assy, Case .. | Transaxle (Incl. #2 thru 5) | 45 | 792065 | | Screw | Hex hd., 1/2-13 x 1-1/2" |
| 2 | 780097 | | Bearing | Needle | 46 | 792066 | | Lockwasher . | 1/2" |
| 3 | 780098 | | Bearing | Needle | 47 | 792067 | | Screw | Thread forming hex hd., 5/16" x 1" |
| 4 | 780099 | | Bearing | Needle | 48 | 792068 | | Screw | Set, 1/4"-20 x 1/2" |
| 5 | 780100 | | Bearing | Needle | 49 | 792004 | | Ball | Steel |
| 6 | 772065 | | Assy, Cover . | Transaxle (Incl. #3 thru 5) | 50 | 788049 | | Seal | Oil |
| 7 | 778156 | | Gear | Ring | 52 | 782040 | | Housing | Axle 8-49/64" lg. |
| 8 | 778157 | | Pinion | Bevel | 53 | 782039 | | Housing | Axle 7-31/32" lg. |
| 9 | 778158 | | Gear | Bevel | 54 | 792069 | | Screw | Allen hd., 1/2-13 x 1-1/2" |
| 10 | 786096 | | Pin | Drive | 55 | 02-1300-00 | 1 | Assembly ... | Peerless Transaxle 2516A |
| 11 | 774514 | | Carrier | Differential, Right | 56 | 02-0513-00 | 1 | Assembly ... | Disc brake cam-puck & lever |
| 12 | 774515 | | Carrier | Differential, left | 57 | 02-2907-00 | 2 | Hub | Rear, 1-1/8" bore, 5 holes |
| 13 | 774513 | | Axle | 17-37/64" lg. | 58 | 84-4062-00 | 2 | Key | Woodruff #18 |
| 13A | 774512 | | Axle | 15-29/32" lg. | 59 | 84-0081-00 | 2 | Nut | 1-1/8" NF, hex, Jam |
| 14 | 792062 | | Ring | Snap | 60 | 87-3078-00 | 2 | Washer | 1-1/8" External tooth lock |
| 15 | 792101 | | Screw | 3/8"-16 x 3-3/8", HHC | 61 | 02-1302-00 | 1 | Disc | Brake, 1" bore, 6" OD |
| 16 | 792011 | | Lockwasher . | 3/8" | 62 | 84-4042-00 | 1 | Key | Woodruff #9 |
| 17 | 780141 | | Washer | Thrust | 63 | 84-2101-00 | 2 | Screw | 3/8" NC x 1-1/4" HHC |
| 18 | 776209 | | Shaft | Counter | 64 | 23-7912-00 | 2 | Fitting | Plug, hex hd. O-ring |
| 19 | 779119 | | Shaft | Brake (Hydro Model) | 65 | 02-4704-00 | 1 | Lever | Shift, hi-lo, 15-13/16" lg. |
| 19 | 778102 | | Gear | 17 teeth (Hydro Model) | 66 | 84-4013-00 | 1 | Pin | Cotter, 3/32" dia. x 5/8" |
| 19A | 776119 | | Shaft | Brake | 67 | 84-0041-00 | 1 | Nut | 3/8" NC, reg. hex |
| 19B | 778102 | | Gear | 17 teeth | 68 | 84-2228-00 | 2 | Screw | 1/2" NC x 2" HHC |
| 20 | 776120 | | Pinion | Output | 69 | 84-2229-00 | 2 | Screw | 1/2"-13 NC x 3" HHC |
| 21 | 778087 | | Gear | Bevel, 30 teeth | 70 | 84-3110-00 | 4 | Washer | 1/2" reg. lock |
| 22 | 778088 | | Gear | Spur, 16 teeth | 71 | 84-2250-00 | 1 | Screw | 1/4" NC x 1-1/4" HHC |
| 23 | 778096 | | Gear | Spur, 23 teeth | 72 | 84-2111-00 | 1 | Screw | 3/8" NC x 7/8 HHC |
| 24 | 778097 | | Gear | Cluster, 20 & 27 teeth | 76 | 02-6307-00 | 1 | Pad | Friction-carrier, side |
| 25 | 780130 | | Washer | Thrust | 80 | 84-0010-00 | 1 | Nut | 1/4" NC hex lock |
| 26 | 778103 | | Gear | Output, 33 teeth | 82 | 02-6703-00 | 1 | Rod | Shift, hi-lo, 3/8"-16 x 3-3/32" lg. |
| 27 | 786094 | | Spacer | | 83 | 03-4103-00 | 1 | Knob | Ball, 3/8" NC |
| 28 | 786098 | | Block | Drive | 84 | 02-0200-00 | 2 | Tire ASM | Turf tread, 10.50 x 12 |
| 29 | 784195 | | Fork | Shift | 89 | 84-2290-00 | 10 | Screw | 7/16" NC x 3/4" Special |
| 30 | 784196 | | Rod | Shift | 91 | 02-2921-00 | 1 | Housing | Disc brake |
| 31 | 788047 | | Gasket | Case & cover | 92 | 02-4721-00 | 1 | Lever | Disc brake |
| 32 | 792067 | | Spacer | | 93 | 02-6021-00 | 1 | Pad | Disc brake |
| 34 | 792064 | | Ring | Snap | 94 | 02-6121-00 | 1 | Plate | Disc brake |
| 35 | 786023 | | Pin | Dowel | 95 | 83-1034-00 | 1 | Spring | Disc brake |
| 36 | 792003 | | Spring | | 96 | 84-0121-00 | 1 | Nut | 5/16" NF, disc brake |
| 37 | 788008 | | Seal | Oil | 97 | 84-3021-00 | 1 | Washer | 21/64" ID x 1" OD |
| 39 | 780045 | | Washer | Thrust | 98 | 84-4121-00 | 1 | Pin | Disc brake |
| 40 | 780012 | | Bearing | Thrust | 99 | 85-2121-00 | 1 | Retainer | Disc brake |
| 41 | 788034 | | Seal | Oil | 100 | 84-0040-10 | 1 | Nut | 3/8" NC, hex lock |
| 42 | 780103 | | Bearing | Ball | 101 | 23-8350-00 | 1 | Vent | Air breather Type 2 |
| 43 | 780104 | | Bearing | Thrust | | | | | |
| 44 | 788048 | | Seal | Square cut | | | | | |

Items 1 through 54 must be ordered through a Tecumseh/Peerless service dealer, authorized service distributor, or central warehouse distributor.

Parts Lists and Drawings

Transaxle and Rear Wheel Group



Parts Lists and Drawings

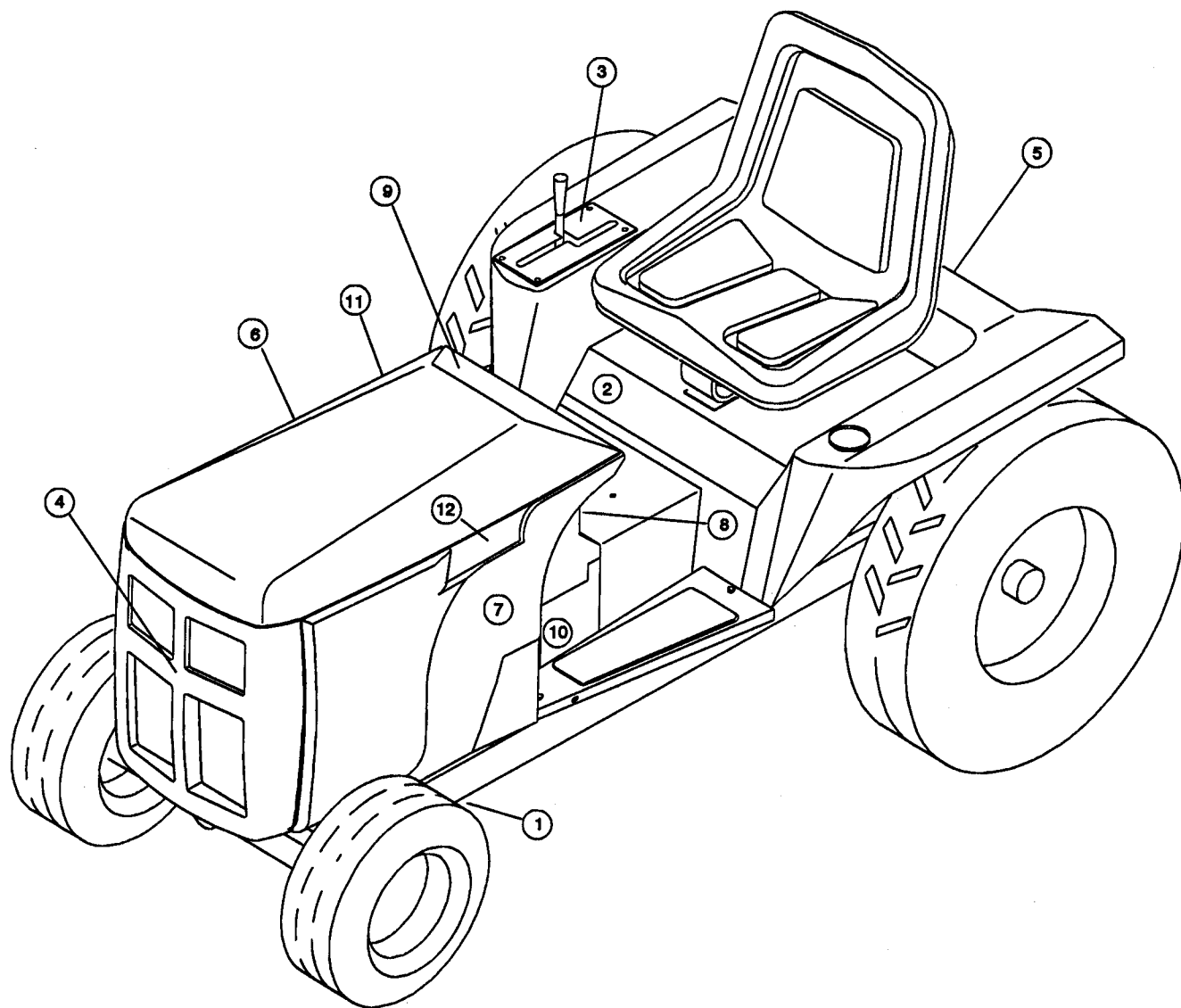
Decals

| ITEM NO. | PART NO. | QTY | PART NAME | DESCRIPTION |
|----------|------------|-----|--------------|-------------------------|
| 1 | 98-7023-00 | 2 | Decal | Danger belt pulley |
| 2 | 98-6992-00 | 1 | Decal | Differential Hi/Lo |
| 3 | 104138 | 1 | Decal | Shift quadrant |
| 4 | 104145 | 1 | Emblem | Grille - 1218HV |
| (4) | 104200 | 1 | Emblem | Grille - GT1848H |
| 5 | 104146 | 1 | Emblem | Fender rear - 1218HV |
| (5) | 104216 | 1 | Emblem | Fender rear - GT1848H |
| 6 | 104149 | 1 | Decal | RH side panel - 1218HV |
| (6) | 104212 | 1 | Decal | RH side panel - GT1848H |

| ITEM NO. | PART NO. | QTY | PART NAME | DESCRIPTION |
|----------|------------|-----|-------------|--|
| 7 | 104150 | 1 | Decal | LH side panel - 1218HV |
| (7) | 104213 | 1 | Decal | LH side panel - GT1848H |
| 8 | 104157 | 1 | Decal | Lower console - 1218HV |
| (8) | 104201 | 1 | Decal | Lower console - GT1848H |
| 9 | 104159 | 1 | Decal | Upper console - 1218HV |
| (9) | 104211 | 1 | Decal | Upper console - GT1848H |
| 10 | 98-6979-00 | 1 | Decal | Parking brake (Located on left side of console) |
| 11 | 104229 | 1 | Decal | RH side panel - GT1848H |
| 12 | 104230 | 1 | Decal | LH side panel - GT1848H |

Parts Lists and Drawings

Decals



Tractor Specifications

Tires:

| | | | |
|--------|--------------------|--------------|--------------|
| Rear: | Lug, 2 ply | 8.5-12 | |
| | | (20.8" o.d.) | |
| | Lawn, 2 ply | 10.5-12 | (22.8" o.d.) |
| | Air Pressure | 6-12 lbs. | 6-10 lbs. |
| Front: | Lawn, 2 ply | 6.5-8 | |
| | | (16" o.d.) | |
| | Air Pressure | 6-14 lbs. | |

Dimensions:

| | | |
|----------------------------------|------------|------------|
| Length Overall | 68" | 68" |
| Wheelbase | 48" | 48" |
| Width | 40" | 41" |
| Tread, Rear | 29-31-1/2" | 31-32-1/2" |
| Tread, Front | 34" | |
| Toe In | ±1/4" | ±1/4" |
| Height (at steering wheel) | 42-1/2" | 42-1/2" |
| Turning Radius | 28" | 28" |

Weight:

| | | |
|---------------------------------|----------|----------|
| Base Tractor with Wheels | 693 lbs. | 704 lbs. |
| Wheel Weight, Rear, Pair | 51 lbs. | 51 lbs. |
| Wheel Weight, Front, Pair | 37 lbs. | 37 lbs. |

Ground speeds, mph (approx.):

| | |
|----------------------|----------|
| Transaxle - Lo | 0 to 4.5 |
| Transaxle - Hi | 0 to 8.9 |

Capacities :

| | |
|-------------------------|---|
| Fuel Tank | 5 Gallons (approx.) - minimum 87 octane unleaded gasoline |
| Engine Crankcase: | 2 Quarts (approx.) - (5W30 below 32°) |
| Transaxle | 4 - 6 Quarts - VG 46 hydraulic oil |

All rights are reserved to make improvements and to change product specifications without notice or obligation.

Tractor Specifications

ENGINE: Kohler® Model CH18

- 18 hp, 30 ft/lb torque at 2500 rpm.
- V-Twin cylinders configuration with 3.03" bore and 2.64" stroke.
- 38 cu. in. displacement.
- Four-cycle, air-cooled 15 amp negative ground battery ignition.
- Spin-on filter and Oil Sentry® light.

ELECTRICAL SYSTEM: (by Kohler) 12-volt starting motor, geared to engine flywheel. Three-position key switch, 15 amp flywheel-mounted alternator and rectifier-regulator supply 12-volt battery current. Batteries: 300 CCA.

TRANSMISSION-HYDROSTATIC MODEL: Eaton Model 11. Output torque: Continuous: 30 ft/lb; Intermittent: 45 ft/lb.

TRANSAXLE: Peerless Model 2500 Series. Two speed. Cut gears of heat treated steel. Torque capacity: 1200 ft/lb. Reductions: Hi - 14:1, Lo - 27.3:1.

ADJUSTABLE REAR TREAD WIDTH: Tread widths may be changed by reversing tire and wheel on hubs. See Dimension Table for maximum adjustments.

STEERING GEAR: Helical gear and sector with 6:1 reduction.

BRAKE: Caliper and 6" disc on transaxle. Foot operated pedal with transmission linkage and parking brake latch.

FRAME: Welded construction. Front wheel support bar solid steel; pivots on 7/8" diameter pivot stud and 1-3/4" bushings.

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Attachments and Accessories

X = Required Part

| Model No. | Attachment Description | Necessary Accessories | | | | |
|-----------|-------------------------------|-----------------------|--------------------|----------------|--------------------|-------------|
| | | 60013 Deck Hitch | 70002 Tiller Hitch | 09202 Rear PTO | 09203 Pulley Group | 51006 Hitch |
| 811101 | Mower 48" | X | | | | |
| 70046 | 46" Tiller (belt driven) | | X | X | X | |
| 51003 | V-Plow with Wings to 60" | | | | | X |
| 51005 | 48" Blade | | | | | X |
| 810301 | 42" Snowblower with Hitch | | | | | |
| 09010 | Wheel weights, 12" pair ① | | | | | |
| 09021 | Chains, 10.5-12 tires, pair | | | | | |
| 09104 | Hubs caps-set, front and rear | | | | | |

① — Does not fit 8.0-10 front wheels

Maintenance Record

Use the following chart as a reference for doing maintenance and to record the dates when your tractor is serviced. The service intervals are recommended maximums and should not be exceeded. Perform maintenance more often under severe or unusual operating conditions.

Number of tractor (hourmeter) hours

| √ - check ♦ - clean ⊕ - change | Before/ during every use | After Initial 5 hours | 25 | 50 | 75 | 100 |
|--------------------------------------|-----------------------------------|-----------------------------|----|----|----|--------|
| Air cleaner | √ | | ♦ | ♦ | ♦ | ⊕ |
| Air intake/cooling system | | | | | | ♦ |
| Battery | | √ | √ | √ | √ | √ |
| Belt(s) | √ | | | | | |
| Brake | | | √ | √ | √ | √ |
| Connections & wiring (electrical) | | | √ | √ | √ | √ |
| Engine cooling fins | | | √ | √ | √ | √ |
| Engine oil | √ | ⊕ | | | | ⊕ |
| Engine oil filter | | ⊕ | | | | ⊕ |
| Fasteners, guards, shields | √ | | | | | |
| Fittings (grease) | | √ | √ | √ | √ | √ |
| Fuel level | √ | | | | | |
| Fuel screen/filter | | | | | | ♦ ⊕ |
| Hoses & fittings | | | √ | √ | √ | √ |
| Spark plugs | | | | | | √ |
| Tire pressure | | | √ | √ | √ | √ |
| Transaxle oil & filter | √ | | | ⊕* | | |

*Change transaxle oil and filter after initial 50 hours, after initial 250 hours, and every 500 hours thereafter.

SNAPPER.

TWO YEAR LIMITED WARRANTY

Snapper, through any authorized Snapper dealer, will replace, free of charge, any part or parts found upon examination by the factory, to be defective in material or workmanship or both, as follows:

- For two (2) years from purchase date for the original purchaser's residential, non-commercial use.
- For one (1) year from purchase date for the original purchaser's commercial, rental, or other non-residential use.
- For one (1) year from purchase date for any dealer tractor used for demonstration.

All transportation costs incurred by the purchaser in submitting material to the Snapper dealer for replacement under this warranty must be paid by the purchaser.

This warranty does not apply to parts that have been damaged by accident, alteration, abuse, improper lubrication, normal wear, or other cause beyond Snapper's control, nor does it cover accessories, attachments or components warranted by others, including: Engine & Engine Parts warranted by Kohler Co.; Snow Blower "Header" assemblies warranted by Haban Manufacturing Company; and Tires warranted by Goodyear Tire & Rubber Co.

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 purchase date for the original purchaser's residential, non-commercial use [one (1) year from purchase for the original purchaser's commercial, rental, or other non-residential use, and one (1) year from purchase date for dealer demonstration tractors] and to the extent permitted by law, any and all implied warranties are excluded. This is the exclusive remedy. Liabilities for incidental and consequential damages, under any and all warranties, are excluded.

Some states do not allow limitations on how long an implied warranty lasts, and/or do not allow the exclusion or limitation of incidental and consequential damages, so the above limitation and exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

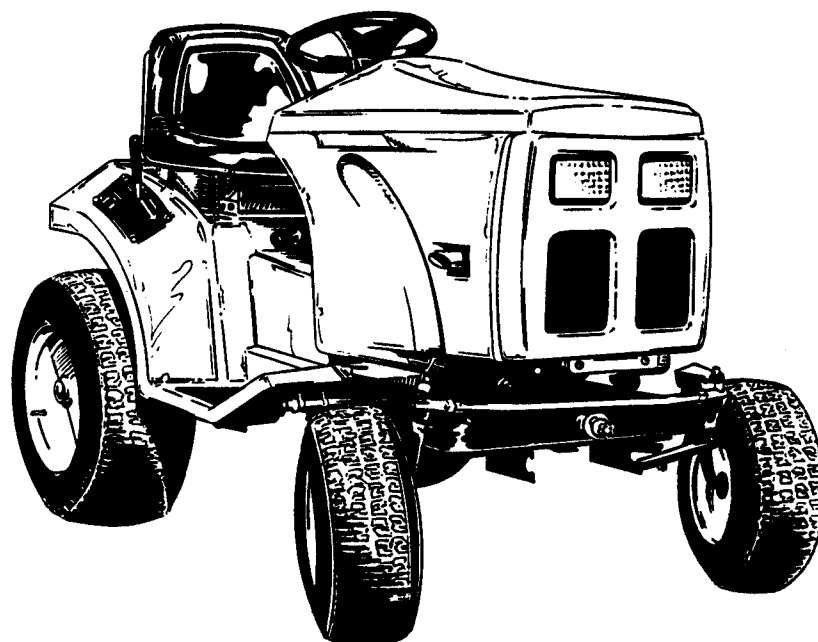
WARNING: THE USE OF REPLACEMENT PARTS OTHER THAN GENUINE SNAPPER PARTS MAY IMPAIR THE SAFETY OF SNAPPER PRODUCTS AND WILL VOID ANY LIABILITY AND WARRANTY BY SNAPPER ASSOCIATED WITH THE USE OF SUCH PARTS.

IMPORTANT: Please fill out the attached Snapper Product Registration Card immediately and mail to the address on the Product Registration Card.

Safety Instructions & Operator's Manual

SNAPPER®

MODEL GT1848H
GARDEN
TRACTOR



SNAPPER® McDonough, GA., 30253 U.S.A.