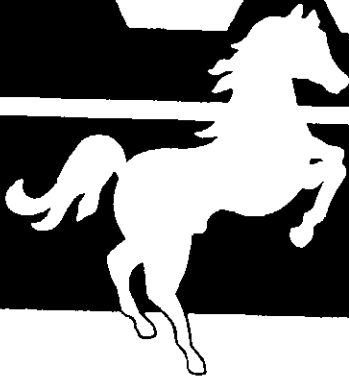


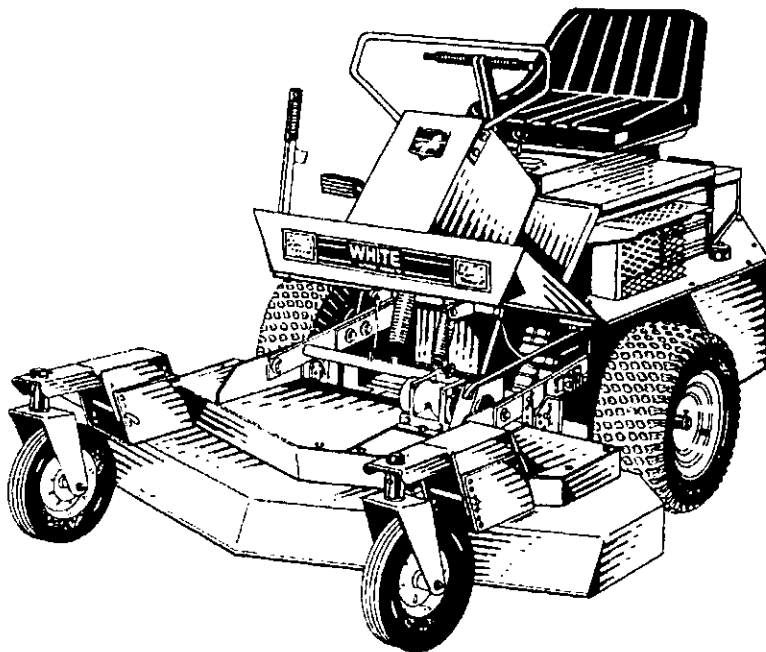
WHITE



OUTDOOR PRODUCTS OWNER'S GUIDE

Price \$4.00

**TURF BOSS
GROUNDSKEEPING TRACTOR**



FR-1800

139-013-190

FR-2000C

139-026-190

LIMITED WARRANTY

For two years from the date of original retail purchase, WHITE OUTDOOR PRODUCTS will either repair or replace at its option, free of charge, F.O.B. factory or authorized service firm any part or parts found to be defective in material or workmanship. Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by WHITE OUTDOOR PRODUCTS.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

A battery which proves defective within ninety (90) days will be replaced without charge. After 90 days but within one year from the date of purchase, WHITE OUTDOOR PRODUCTS will replace the defective battery for a charge of 1/12 of the current retail price of the battery for each full 30 day period between the date of purchase and the date of return.

Warranty on units used commercially is limited to one (1) year or as rental units thirty (30) days from original purchase.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of WHITE OUTDOOR PRODUCTS.

The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by WHITE OUTDOOR PRODUCTS.

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



WARNING

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

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester muffler is available at your nearest engine authorized service center.

CONTENTS

Adjustments.....	12-15
Brake.....	13
Deck Belts.....	15
Deck Drive Belt.....	15
Deck Height.....	14
Electric Clutch.....	14
Pump Drive Belt.....	16
Steering Cable.....	12
Break-in Service.....	9
Dealer Preparation for Operation.....	4
Decal Locations.....	20-21
Installation of Decks to Tractor.....	17
Installation of Dual Tail Wheel Kit.....	17
Lubrication and Maintenance.....	8-12
Quick Reference Maintenance Schedule.....	8
Blade Care.....	14
Cooling System.....	11
Deck Gearbox.....	11
Electrical System.....	12
Engine Air Filter.....	11
Engine Oil System.....	9
Exterior Surface.....	12
Fuel System.....	11
Hydraulic System.....	9-10
Ignition Interlock Safety System.....	8-9
Lubrication.....	10
Seat Switch.....	9
Tires and Wheels.....	12
Machine Check List.....	5
Operation.....	6-7
Parts Lists.....	23-44
Safety Alert Symbol and Notation.....	2
Safety Precautions.....	2-4
Specification.....	22
Storage.....	16
Tilting Deck for Service.....	7
Troubleshooting Guide.....	18-19
Warranty.....	Inside Front Cover
Wiring Diagram.....	23

INTRODUCTION

Your WHITE OUTDOOR PRODUCTS Operator's Manual will assist you in the operation and servicing of FR Series Mowers. The manual will acquaint you with your machine and outline how you affect the performance and longevity of your WHITE OUTDOOR PRODUCTS Mower.

Please read the manual carefully and thoroughly, paying close attention to all Safety Alert Symbols, Warnings and Cautions (See Page 2) - Safety is always a priority!

A separate manual is provided for the engine. Please note, the engine in these tractors should be serviced by a Briggs & Stratton or Onan Service Center - when ordering parts, identify the engine model, code and type number. These numbers are located on the shrouding of both the Briggs & Stratton and Onan engines.

All parts should be replaced with WHITE OUTDOOR PRODUCTS parts from your WHITE OUTDOOR PRODUCTS dealer.

MODELS

Model FR1800 - 18 HP
 139-013-190
 Briggs & Stratton Air Cooled
 2 Cylinder Gas

Model FR2000C - 20 HP
 139-026-190
 Onan Air Cooled
 2 Cylinder Gas

TRACTOR: Model Number _____
Serial Number _____
ENGINE: Make _____
Model Number _____
Code Number _____
Type Number _____

Safety Alert Symbol and Notations

The following safety notations are used throughout this manual to call attention to special information or operating procedures. Understand the message in each notation and be alert to unsafe conditions and the possibility of personal injury.

NOTE: A NOTE points out general reference information regarding proper operation and maintenance practices.

Important

An IMPORTANT statement indicates specific procedures or information that is required to prevent damage to the machine or its attachments.



This safety alert symbol is used to attract your attention! PERSONAL SAFETY IS INVOLVED! When you see this symbol - BECOME ALERT - HEED ITS MESSAGE.

Caution

A CAUTION identifies safe operating practices or indicates unsafe conditions that could result in personal injury.

Warning

A WARNING describes a condition where failure to follow the instructions could result in severe personal injury.

Danger

A DANGER designates a condition where failure to follow instructions or heed warning will most likely result in serious personal injury or death.

SAFETY FIRST

NOTE: DO NOT ATTEMPT TO START THE ENGINE UNTIL YOU HAVE READ THE ENGINE MANUAL.



THIS IS A SAFETY ALERT SYMBOL USED TO ALERT YOU TO POSSIBLE DANGER TO YOUR OR SOMEONE ELSE'S PERSONAL SAFETY. WHEN YOU SEE THIS SYMBOL, BE ALERT TO THE ACCOMPANYING MESSAGES IN THIS MANUAL.

Caution

Your WHITE OUTDOOR PRODUCTS Mower Is Equipped With An Ignition Interlock Safety System. This System Is Designed To Protect The Operator And Others In The Immediate Area By Preventing The Engine From Starting When The PTO Switch Is ON Or The Lever Lock Is Not In The Locked Position. This System Should Always Be Operative.

Listed below are a common set of rules you should read and follow, REMEMBER, your safety and the safety of others depends on the operator's awareness and adherence to these basic rules.

1. Remove all debris from area to be mowed. Keep persons and pets away from mowing area. Although area has been supposedly cleared of all debris, small objects may have been overlooked and may be discharged or thrown by moving parts - causing injury to people, pets, property or to the mower.
2. To start the engine (A) lock steering levers in neutral (B) disengage PTO switch.
3. Never place hands or feet under deck while engine is running.
4. Never fill the fuel tank while the engine is hot. Wipe off any fuel that might have spilled. Replace fuel cap on tank.
5. Only persons thoroughly acquainted with rules of safety operation should be permitted to use the mower. Never allow a small child to operate, or be in the operating area of power equipment.
6. DO NOT attempt to get off or on mower when mower deck is engaged and engine is running. Wait until mower blades stop turning before getting on or off mower. Make sure the PTO is disengaged before parking mower.
7. Keep blades sharp and properly balanced. If your equipment should start vibrating, stop the engine and check for damaged or loose parts. Vibration is generally a warning of trouble.
8. When putting on new blades, make sure they are tight.
9. DO NOT attempt to clean deck housing, or to otherwise clean, adjust or repair machine before stopping mower engine. FOR YOUR OWN SAFETY, remove ignition key and disengage PTO switch.

10. Always keep all shields and guards in place. Mower must never be operated with any shields or guards removed.
11. Never leave machine running unattended. Remove key from ignition switch to prevent children from starting the mower.
12. Never run engine inside a building without proper ventilation.
13. ALWAYS operate the machine with the deck in the lowered position.
14. Always drive slowly over varied terrain to prevent tipping the mower.
15. DO NOT operate the mower at high speed going downhill and DO NOT TURN SHARP CORNERS WHILE GOING DOWNHILL. NOTE: The hydraulic pumps produce braking action when steering levers are moved toward neutral; this procedure is recommended for braking action.
16. DO NOT operate mower on inclines greater than 25%.
17. Always observe traffic laws while driving machine from one location to another.
18. Always stop the engine and inspect the machine after striking a foreign object. If damage is found, repair the machine immediately.
19. Keep all caution and safety decals legible at all times. Replace any that are damaged.

In addition to the above safety procedures for operation of the mower, the following precautions should be observed when using fuel. Its improper use, handling and storage can be dangerous:

ALWAYS USE AN APPROVED CONTAINER. PLACE CONTAINER OUT OF REACH OF CHILDREN.

NEVER ADD FUEL TO A RUNNING OR HOT ENGINE.

FILL TANK OUT OF DOORS AND WIPE UP ANY SPILLED FUEL.

POSITIVELY NO SMOKING.

DEALER PREPARATION FOR OPERATION

CUSTOMER NOTE: Your WHITE OUTDOOR PRODUCTS Dealer is expected to complete these preparation steps and review important information, including this manual, with you before or upon delivery of this unit.

The preparation information is included here so that you and your dealer may review it together.

NOTE: All reference to "Left", "Right", "Front" and "Rear" are from operator seated on seat.

SEAT

Remove band from seat, raise seat lid and bolt seat to lid using lock washers and nuts supplied. Check to see that wires to seat switch are connected.

BATTERY

Battery is shipped without electrolyte. After removing battery from tractor, fill each cell with electrolyte to level indicator.

PERFORM ALL STEPS outlined in the Machine Check List on page 5.

IGNITION INTERLOCK SAFETY SYSTEM



Failure of Ignition InterLock Safety System, together with improper operation of unit, could result in severe personal injury.

Check the InterLock Safety System to make sure it is functioning properly. Engine must not start unless steering lever lock is locked and PTO switch is off. Engine must stop if operator leaves the seat when lever lock is unlocked.

INSTALL DECK

Refer to Installation of Deck to Tractor Section of operator's manual for instructions, see page 17.

REGISTRATION

Complete Mower Delivery report.

Warranty is registered under Catalog and Serial Number found on the left side of the body under the seat lid.

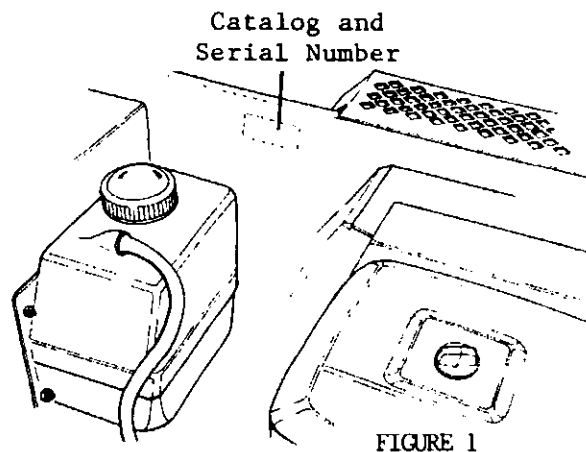


FIGURE 1

DELIVERY

Using the operator's manual, instruct the customer on controls and operation of unit. Emphasize safety and discuss the Safety Precautions.

Important

Remind the customer to change oil in engine crankcase and engine oil filter after first 5 hours. Adjust deck belts and deck drive belt after 2 hours of operation.

MACHINE CHECK LIST

The following list should be acknowledged before a new machine is put into service:

1. Check engine oil level (See engine manual for recommendations).
2. Check oil level in hydrostatic system. The oil reservoir on the Regular Models (Plastic Reservoir) should be kept 1/2 full when oil is cold. On Commercial Model (with Metal Reservoir behind gas tank) oil level should be between 1" and 1 1/2" below top of tank when cold.
3. Fill fuel tank with fresh clean gasoline.
4. Check tension on deck drive belt and deck belts. These belts should have a 1/2" deflection on the longest span when 5 pounds of pressure is applied.
5. Check pump drive belt idler to see that it operates freely and applies tension on belt.
6. Check pressure in all tires (See Tire Pressure Chart, Fig. 2). The tire pressure must be the same in each drive wheel. This also applies to the deck gauge wheels.

TIRE	PRESSURE PSI
Drive Wheels	10 to 14
Tail Wheel	10 to 18
Gauge Wheels	8 to 14

FIGURE 2

MACHINE OPERATION

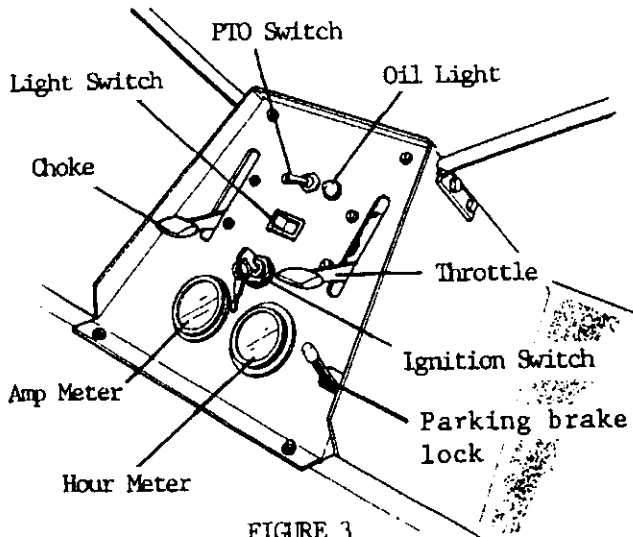


FIGURE 3

STARTING AND STOPPING THE ENGINE

NOTE: The engine starter will not engage unless the steering levers are LOCKED in neutral and the PTO switch is in the OFF position. This is identified as the IGNITION INTERLOCK SAFETY SYSTEM.

Warning

Never operate machine with Ignition Interlock Safety System disconnected, bypassed or malfunctioning.

Warning

Engine exhaust gases contain poisonous carbon monoxide. Avoid inhaling fumes and never run the engine in a closed building or confined area.

1. Move the choke to the CLOSED position. On a warm engine (normal operating temperature) place the choke in the OPEN position.
2. Open throttle midway between SLOW and FAST position.
3. Turn key to START. Return key to ON when engine starts.
4. Gradually return the choke to the OPEN position after the engine starts and warms up.

Caution

Do not crank the engine continuously for more than 10 seconds at a time. If the engine does not start, allow a 60 second cool-down period between starting attempts. Failure to follow these guidelines can burn out the starter motor.

TO STOP THE ENGINE

1. Run the engine at half throttle for a minimum of 15 seconds under no load to cool it down.
2. Turn ignition key to off and remove the key.

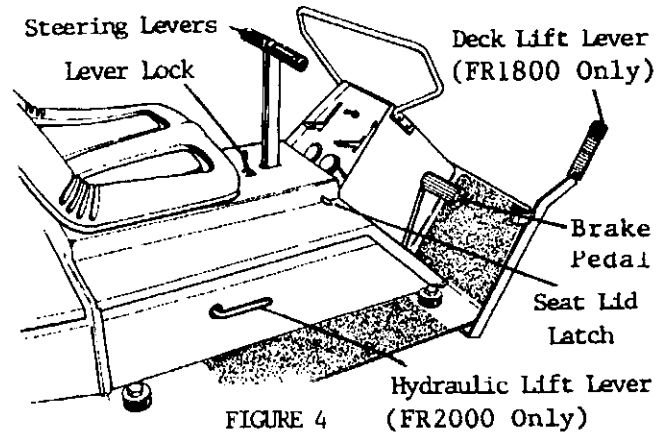


FIGURE 4

DRIVING

After starting engine, place parking brake in run and unlock lever lock. Steering levers control forward and reverse movement as well as turning and braking. Each lever controls the direction of the corresponding drive wheel. To turn the machine to the right, move the right lever back and/or left lever forward. To turn the machine to the left, move the left lever back and/or the right lever forward.

Caution

Any sudden movement of levers will result in sudden braking or opposite direction of travel.

BRAKING

Forward or reverse movement is slowed or stopped by returning the steering levers toward the neutral position.

ENGAGING PTO

The PTO switch, at the upper center of the dash panel, activates the electric clutch. To engage, set the engine throttle to 1/3 speed and pull out and up on PTO switch.

Warning

Operator must be in the seat for the PTO to activate. When rotary mower is being used, extreme care must be taken not to direct discharge in the direction of persons or pets.

Again, the PTO will only activate if seated in operator's seat and the deck safety switch is plugged in.

LIFTING THE ATTACHMENTS

Warning

Never travel at road speeds with attachment in raised position.

FR1800

The attachments for the tractor are raised and lowered by a hand lever located at the right front of the tractor. By pulling the lift lever back and down, it can be latched under the body frame to hold the attachment in the raised position for service and to clear obstacles.

An (Optional Electric Lift) can be installed by which the attachment is raised and lowered by a two-way switch located on the dash. When operating with an electric lift, the lift should be fully extended, or all the way down, to allow the attachment to float.

FR2000C

The attachments for the tractor are raised and lowered by a hydraulic valve located on the right side of the operator's seat. Raising the lever to the upmost position retracts the cylinder and raises the attachment. The next notch down will hold the attachment at a set position. The lowest position will lower the attachment and allow it to float with the terrain.

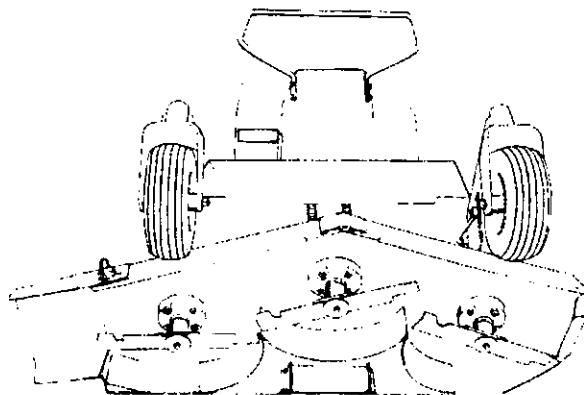


FIGURE 5

TILTING DECK FOR SERVICE

Warning

Never handle the deck while the tractor engine is running.

1. SHUT THE ENGINE OFF and remove the key.
2. Stand in front of the deck facing tractor. Push on lift lever enough to remove the 2 deck pins.
3. Push on lift lever to raise deck a little and with the other hand raise the front of the deck into an upright position. Release the lift lever and lower the deck to the ground.
4. Place one of the deck pins in the hole to lock the deck up (Fig. 6).
5. To lower the deck, remove deck pin and lower front of the deck to the ground. Push on the lift lever and replace deck pins at desired cutting height.

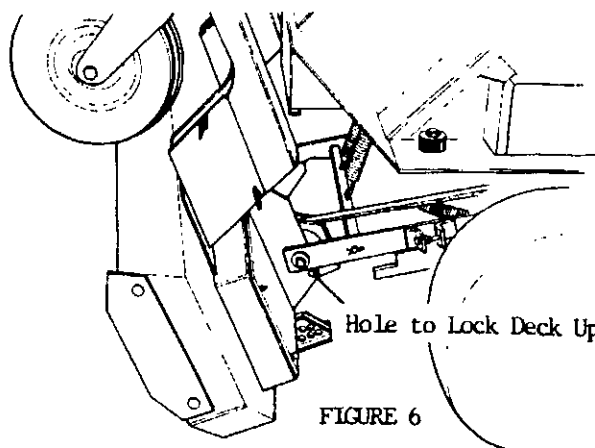


FIGURE 6

LUBRICATION AND MAINTENANCE

Warning

When servicing machine, stop engine, remove key and engage lever lock and parking brake.

Routine lubrication and maintenance is the most important step toward low upkeep, long machine life, satisfactory service and a quality mowing.

QUICK REFERENCE MAINTENANCE SCHEDULE

REF	SERVICE AT INTERVALS INDICATED	DAILY PRESTART	DAILY AFTER STOPPING	EVERY					ANNUALLY OR	
				4 HR.	8 HR.	25 HR.	40 HR.	50 HR.	100 HR.	500 HR.
A	Verify Ignition Interlock Safety System	X								
A	Check Engine Oil Level	X		X						
A	Check Fuel Level	X		X						
A	Check Hydraulic Oil Level	X								
A	Visually Inspect Tractor	X								
A	Visually Inspect Tires	X								
A	Clean Underside of Deck		X							
A	Lube Deck Gauge Wheels				X					
A	Lube Tail Wheels				X					
B	Clean Air Filter Element (1)					X				
A	Lube Gauge Wheel Fork Tubes						X			
A	Lube Tail Wheel Fork Tube						X			
A	Check Oil in Gearbox						X			
A	Lube Spindle Housing						X			
A	Check Battery and Connections						X			
C	Change Engine Oil (2)							X		
C	Change Engine Oil Filter (2)							X		
B	Clean Air Filter Paper Cartridge (1)								X	
A	Check Tire Pressure With Gauge								X	
A	Torque Wheel Nuts								X	
A	Change Hydraulic Oil Filter (3)									X

NOTES:

- (1) More often under dusty conditions
- (2) Initial oil and filter change is at 5 hours
- (3) Initial hydraulic oil filter change is 50 hours

REFERENCE:

- A - See Owner's Manual
- B - See Engine Manual
- C - See Both Owner's and Engine Manuals

FIGURE 7

IGNITION SAFETY SYSTEM

Check tractor Ignition Interlock Safety System daily, prior to operation. This system is important to the safety of persons in the area. It should be repaired immediately if malfunctioning. To check the system follow these steps:

1. Begin with parking brake engaged, PTO switch off and lever lock engaged.
2. Disengage lever lock and turn the ignition key to start position. The starter motor should not respond.

3. Lock the lever lock and turn PTO switch on and turn ignition key to start position. Starter motor should not respond.

If starter responds to either of these tests, turn off ignition and make corrections immediately. Otherwise, proceed with other preoperative checks.

SEAT SWITCH

The seat switch should be checked before each operation. The machine should not be operated with an inoperative switch. To check seat switch:

1. Start engine while seated in operator's seat. Unlock the lever lock and raise from the seat - the engine should quit.
2. Return the lever lock to lock position and restart engine. Engage PTO switch and raise from the seat - the deck should disengage.

If engine fails to quit or deck does not disengage, turn off ignition switch and correct immediately.

BREAK-IN SERVICES

A new engine requires special break-in maintenance services. Read the appropriate section of the owner's manual. Engine oil and filter should be changed after the first 5 hours of operation.

Hydraulic oil filter should be changed after the first 50 hours of operation. After changing the hydraulic filter, refill the hydraulic oil reservoir to proper level. See HYDRAULIC SYSTEM Section (page 9) for oil level.

ENGINE OIL SYSTEM

Check engine oil level at the start of each day and again after 4 hours of operation. Oil must always be between the marks on the dipstick.

Change engine oil after the first 5 hours of operation. Refer to engine manual for oil change intervals after the initial change.

To change oil, park tractor on level surface, remove ignition key, lock the lever lock and apply parking brake. Remove drain plug from bottom of engine. Remove oil filter (which is located in front of engine). Lubricate gasket on new filter with new engine oil and install. Tighten filter by hand only. Replace oil drain plug.

Add new oil through oil port plug. When adding new oil, check level with dipstick (DO NOT OVERFILL). See engine manual for oil capacity, API service class and viscosity.

Warning

During normal operation oil heats to a level that may cause severe burns. Allow engine to cool before servicing.

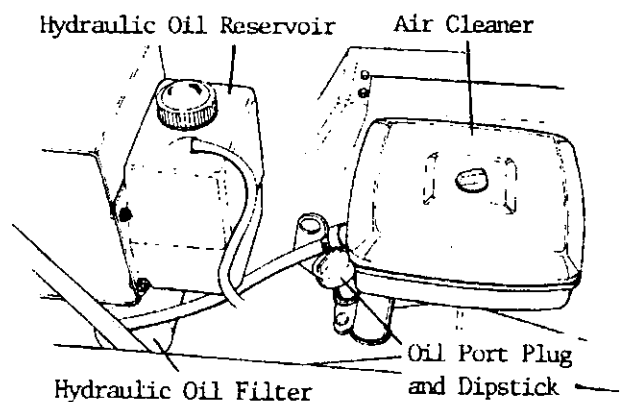


FIGURE 8

HYDRAULIC SYSTEM

Caution

Care must be taken to keep any dirt or moisture from entering the hydraulic system. Minute amounts of either will greatly reduce the life of the components.

The hydraulic system reservoir is located under the seat lid (plastic tank) on Regular Model and under the back cover (metal tank) on the Commercial Model.

Check hydraulic oil level daily. Oil level in plastic tank should be half full, in metal tank 1" to 1 1/2" below top of tank.

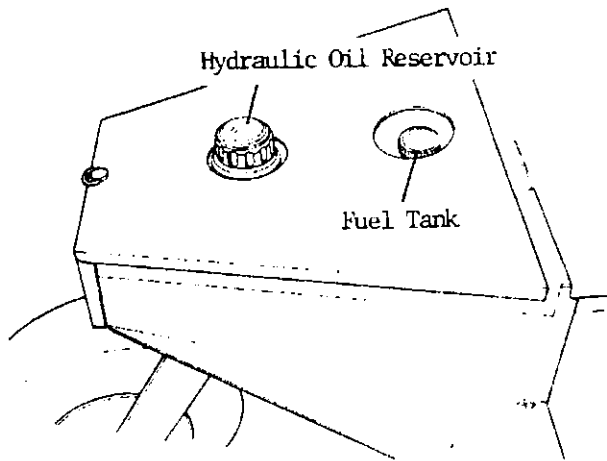


FIGURE 9

Caution

Use only 20W hydraulic fluid in the hydraulic system.

Change the hydraulic system filter element, located under the reservoir tank, after first 50 hours of operation. Change filter every 500 hours of operation or annually. Use a 10 micron filter element only. Before installing a new element, apply a light coat of oil to the element gasket. Tighten filter hand tight only.

When a leak is detected in the hydraulic system, stop the machine at once and repair the leak. Once repaired, refill hydraulic reservoir.

Warning

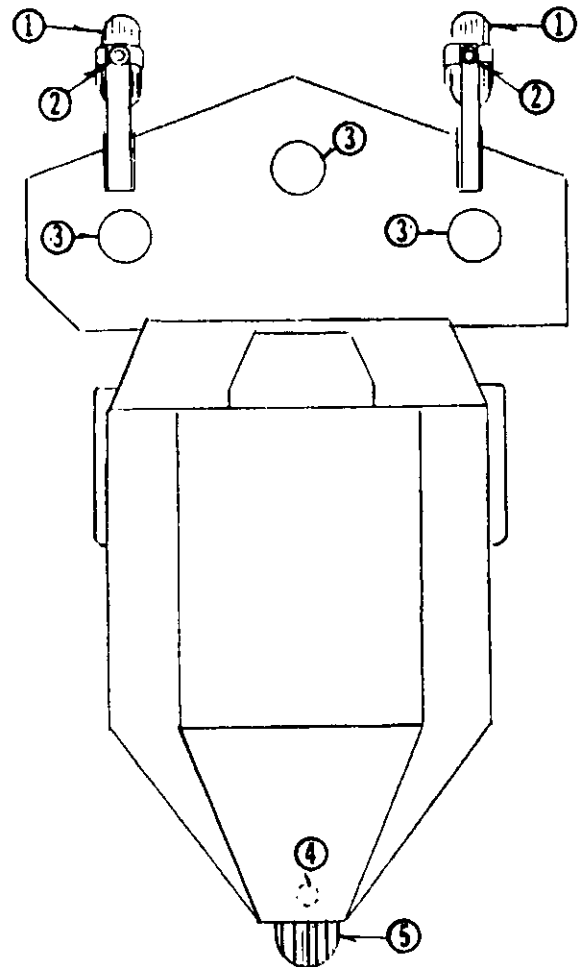
Hydraulic oil escaping under pressure can penetrate skin. Before applying pressure to hydraulic system, make sure all connections are tight and all hoses and lines are in good condition. To find a leak under pressure, use a piece of cardboard or wood - NEVER use your hands. Lower all attachments, shut engine off and remove key before opening any hydraulic lines. Eye protection should be worn when servicing hydraulic system.

It is important to keep the transmission pump's fins and cooling fans clean at all times. If a cooling fan becomes damaged it should be replaced with a new one.

LUBRICATION

There are 9 grease zerks on the machine. The deck gauge wheel axles (2 zerks) and tail wheel axle (1 zerk) should be greased every 8 hours. The spindles (3 zerks), gauge wheel fork tubes (2 zerks) and tail wheel fork tube (1 zerk) should be greased every 40 hours.

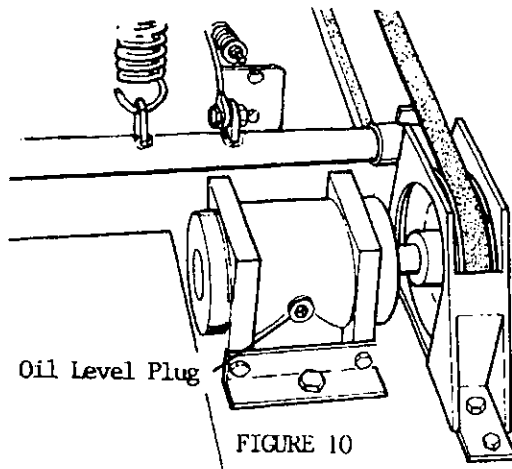
Use a SAE multi-purpose gun grease on all zerks. Do not use more than one or two pumps from grease gun each time.



1	Gauge Wheel Axle Bearings	8 Hrs.
2	Gauge Wheel Fork Bearings	40 Hrs.
3	Spindle Bearings	40 Hrs.
4	Tail Wheel Fork Bearings	40 Hrs.
5	Tail Wheel Axle Bearings	8 Hrs.

DECK GEARBOX

Oil level in the gearbox should be checked every 40 hours. Oil must be to the level of the fill plug located in the front center of the box (See Fig. 10). Use Amsoil Gear Lube SAE 75W 90 or Amoco Ultimate MP Gear Lube 75W 90. If the oil is being replaced in the gearbox it takes 4 ounces to refill the gearbox.



COOLING SYSTEM

Warning

Never attempt to clean or make adjustments on the engine while it is running.

Grass, chaff or dirt may clog the rotating screen and the air cooling system. Yearly or every 100 hours remove cooling shrouds and clean cooling fins. Also clean dust, dirt and oil from external surfaces of engine which can cause improper cooling. In extremely dusty or dirty conditions, clean more often.

Important

Do not operate engine without cooling shrouds installed. Operating the engine without cooling shrouds will cause engine damage due to overheating.

ENGINE AIR FILTER

Clean and recoil foam precleaner every 25 hours. Every 100 hours the paper cartridge should be removed and cleaned. Perform these procedures more often in dusty conditions. See your engine manual for further instructions on air cleaner care.

FUEL SYSTEM

The fuel tank is located under the tail cover just back of the operator's seat. Capacity of the fuel tank is 5 gallons. Always keep and use clean, fresh fuel. Regular UNLEADED gasoline with a minimum 87 octane rating is recommended. Leaded gasoline may be used if unleaded is not available.

NOTE: WE DO NOT recommend the use of gasoline which contains alcohol, such as gasohol. However, if gasoline with alcohol is used, it MUST NOT contain more than 10% Ethanol and MUST be removed from engine during storage. DO NOT use gasoline containing Methanol.

Warning

Observe usual fuel handling precautions. Do not smoke while refueling. Do not fill tank with engine running or while engine is hot. Allow engine to cool before storing machine inside a building. Keep fuel away from open flame or sparks. Read and observe all safety precautions in this manual.

An inline fuel filter is located under the seat lid between the engine and fuel tank. If the filter becomes clogged, it should be replaced.

There is a fuel shut-off valve located on the bottom of the fuel tank. This valve should be closed to prevent fuel loss when changing filters, doing other engine work or transporting the machine.

ELECTRICAL SYSTEM

The electrical system is 12 volt, negative ground. Factory installed battery is a size U1L9, 235 CCA. The battery is located under tail cover of the tractor.

Check battery connections every 40 hours to ensure they are clean and tight. At the same time check for proper electrolyte level.

Warning

When charging battery, keep away from open flame or sparks. Do not breathe the battery fumes. Avoid skin contact with battery acid. Wear eye protection. If contact does occur, flush area with cold water and consult a physician.

Warning

When jump starting a low or dead battery, follow these procedures to avoid sparks that could cause battery gases to explode:

1. Attach the first jumper cable from the positive (+) terminal of the good battery to the positive (+) terminal of the dead battery.
2. Attach the second jumper cable from the negative (-) terminal of the good battery to the FRAME OF THE UNIT WITH THE DEAD BATTERY.

A 30 amp fuse, located under the seat lid next to the starter solenoid on the back of the engine compartment, protects the electrical system. If there is an overload on the circuit, the fuse will blow. The cause of the blown fuse should be located and fixed before a new fuse is installed.

EXTERIOR SURFACE

Exterior surface of tractor should be washed regularly (a minimum of monthly) but more often in corrosive environments. Spray paint is available from your dealer to cover scrapes and chips and to protect against rust.

Mower deck should be cleaned after each cutting for best cutting results. If cleaned before clippings have dried, water pressure from a garden hose can be used to clean underside of deck housing. If clippings have dried, a putty knife may be used to remove accumulation from under the deck.

Every 40 hours remove the deck covers and clean debris from pulley box. Do not operate machine without covers in place. To tilt the deck for cleaning, see Machine Operation Section, TILTING DECK FOR SERVICE.

TIRES AND WHEELS

Visually inspect tires daily. Check tire pressure with gauge every 100 hours or whenever tires appear low. Tire pressure in both drive tires should be equal and set at 10 to 14 PSI. Tail wheel tire pressure should be 10 to 18 PSI. The deck gauge wheel tire pressure may vary depending on ground conditions - a minimum of 8 PSI to a maximum of 14 PSI may be used. Always keep pressure equal in gauge wheels to maintain even cutting.

STEERING CABLE ADJUSTMENT

Tractor has been preadjusted at the factory so that it will not creep forward or backward when engine is running and lever lock engaged. However, if tractor should begin to creep, the situation may be corrected as follows:

Warning

Do not attempt to adjust steering cables until you have read this entire section. Stop engine while placing the tractor on blocks.

1. Block up tractor so that both drive wheels do not touch ground and are free to move. Block tail wheel and gauge wheels so that tractor will not fall from blocks.
2. Run engine and move steering levers back and forth.
3. Lock steering levers in neutral.

4. Drive wheels should not be turning. If they are, raise seat lid and adjust steering cable by loosening nuts on end of cable.

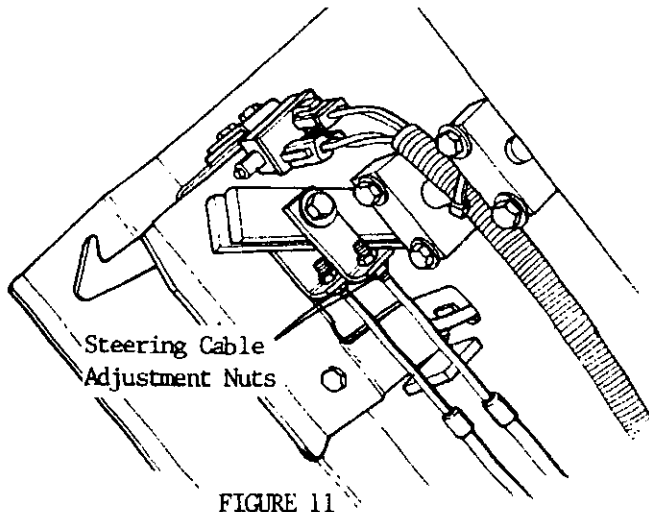


FIGURE 11

5. Adjust cable so drive wheels are not turning.
6. Lower seat lid and wiggle levers in lock position. If drive wheels do not turn, proceed with step 7. If wheels turn, repeat steps 4 and 5.
7. Raise seat lid and make sure cable nuts are tight. Adjustment is complete.

NOTE: If there is not enough adjustment to cables at the steering levers, adjustment can also be made on the steering cable at the transmission arm.

BRAKE ADJUSTMENT

Occasionally test the brake for proper adjustment by backing the machine onto a 25° incline. With engine running, engage lever lock and apply parking brake. The tractor should remain in position. If not, follow these steps to adjust brake:

REGULAR MODEL

1. Block up side of tractor that does not hold.
2. Shorten brake linkage rod by turning locknut clockwise (Fig. 12).

3. Apply parking brake and try to rotate wheel forward by hand.
4. If you can rotate wheel forward by hand, repeat steps 2 and 3. If not, unblock tractor and repeat on other side.

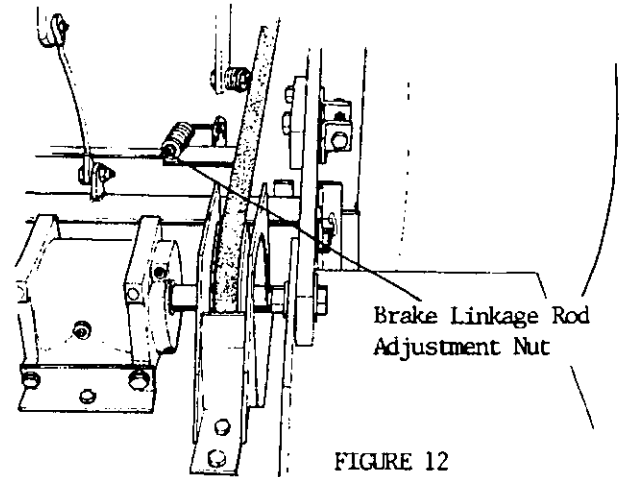


FIGURE 12

COMMERCIAL MODEL

1. Block up side of tractor that does not hold.
2. Adjust brake by loosening nuts on brake cable and shortening the length of the cable.
3. Apply parking brake and try to rotate wheel forward by hand.
4. If you can rotate wheel forward by hand, repeat steps 2 and 3. If not, unblock tractor and repeat on other side.

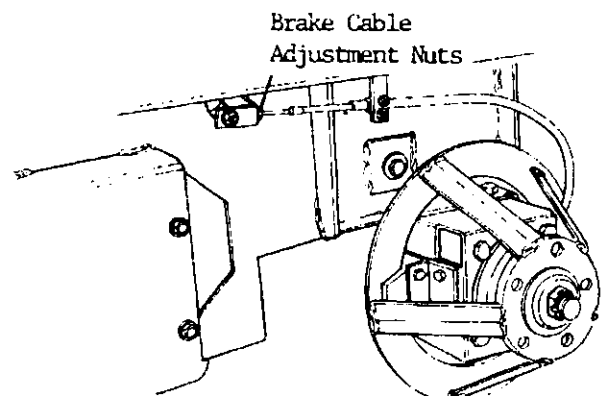


FIGURE 13

The incline test should be repeated after adjustments have been made on the parking brake.

ELECTRIC CLUTCH ADJUSTMENT

It may become necessary to adjust the electric clutch. One sign that the clutch clearance is too wide is when the clutch will engage when the tractor is cool, but will not when it is warm.

To adjust clutch, follow these steps:

1. Unplug electrical connector to clutch.
2. Remove clutch stop so the clutch body can be rotated.
3. Place a .005 feeler gauge in the oblong slot by the adjusting bolt. Adjust so that the gauge starts to drag. Adjust all three bolts the same.
4. Once adjustments are made, all three points should be checked again because adjusting one may change the others.
5. Reinstall the clutch stop and plug in the electrical connector.

DECK HEIGHT ADJUSTMENT

Cutting height of all decks on all air cooled models is 1" to 4". Place mower on level surface. Turn ignition key off and remove key.

Warning

Stop the engine. Make sure the PTO switch is off. Engage lever lock and remove ignition key before getting off machine.

Raise deck and lock in the raised position. Remove the gauge wheel wing bolts and move gauge wheels up or down to desired height. Replace wing bolts and tighten handle nuts. Remove rear deck pins and adjust back of deck. For best cutting results, in most conditions, the back of the deck should be 1/8" to 1/4" higher than the front.

Lower the deck to the ground and check cutting height.

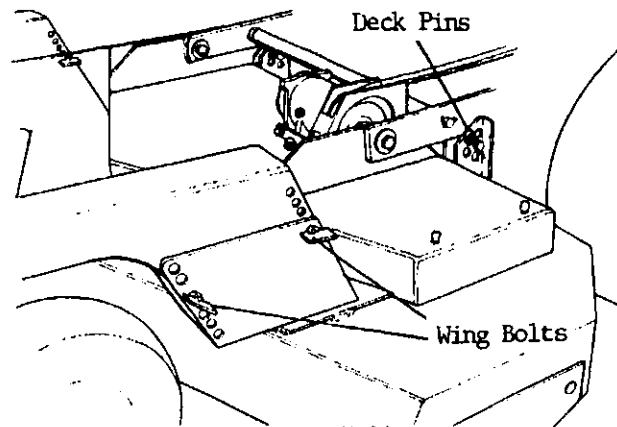


FIGURE 14

BLADE CARE

For best results, cutting blades must be kept sharp.

Danger

Never work with blades while engine is running or the PTO switch is on. Engage lever lock and remove ignition key.

To service blades, tilt and lock the deck up to remove blades. Do not sharpen blades while on the deck. Blades may be sharpened on a grinder or by filing. When grinding, care should be taken to maintain blade balance. A balancer should be used to check blade balance before reinstallation on mower. Unbalanced or bent blades will cause excessive vibration and decrease the life of the deck parts.

Remount the blades making sure the convex side of spring washer is away from blade.

Warning

Do not use any form of heat to straighten a bent blade. Do not weld a cracked or broken blade. Replace it.

BELT ADJUSTMENT

Warning

Never check or adjust any belts with engine running or the PTO switch on.

NOTE: DO NOT over tighten any belt. A belt that is too tight will run hotter, create unnecessary side pressure on bearings and cause premature failure of both the belt and bearings.

DECK DRIVE BELT

Follow these steps to adjust deck belts:

1. Loosen the two deck arm retaining bolts on both arms.
2. Turn adjusting bolt counter-clockwise to tighten belt. BOTH ARMS MUST BE KEPT AT THE SAME LENGTH. Deflection from center line should be 1/2" on deck drive belt.
3. Hold deck arms so that they are straight while retightening the deck retainer bolts.

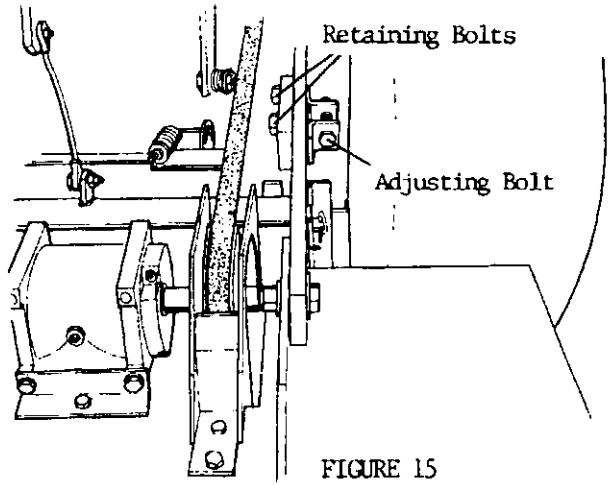


FIGURE 15

To Replace Deck Drive Belt:

1. Loosen deck arm retainer bolts on left-hand arm. Turn adjusting bolt clockwise to loosen deck drive belt.
2. Remove belt guard from gearbox mount.

3. Remove cross bar pin from left-hand arm.

Caution

Care must be taken when removing cross bar pin as the deck springs will cause the cross bar to fly up when pin is removed.

4. Remove belt and install new belt.
5. Reverse steps 1 through 3.
6. Adjust tension on belt (See instructions above). Tension on new belts should be checked after 2 hours of operation.

DECK BELTS

Care should be taken to keep tension equal on both deck belts on the 42" deck. Follow these steps to adjust deck belts:

1. Remove deck covers.
2. Loosen nut on belt tightener retainer bolt.
3. Adjust tightener bolt to obtain proper tension on belt. Deflection on longest span of belt should be 1/2" to 5/8" on deck belts.
4. Retighten retainer bolt and replace covers.

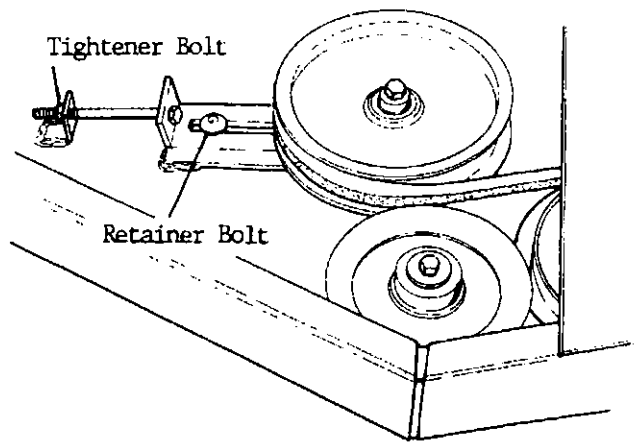


FIGURE 16

To Replace Deck Belts:

1. Loosen deck drive belt (See Deck Drive Belt Section).
2. Remove deck covers.
3. Loosen belt tightener retainer bolt and tightener adjustment bolt.
4. Unbolt gearbox mount from deck and remove belts from under gearbox pulley.
5. Remove old belts from spindle pulleys.
6. Replace with WHITE OUTDOOR PRODUCTS replacement belts.
7. Place belts in right grooves on the gearbox pulley and rebolt gearbox mount.
8. Adjust belts (See instructions above). Tension on new belts should be checked after 2 hours of operation.
9. Replace deck covers.
10. Adjust deck drive belt (See Deck Drive Belt Section).

PUMP DRIVE BELT

The pump drive belt is kept tight by a spring loaded idler. No adjusting is necessary, but the idler should be checked periodically to see that it slides properly.

To Replace Pump Drive Belt:

1. Remove belt retainer from engine pulley.
2. Remove belt retainer from pump pulley.
3. Remove 1 1/16" spacer from between pump fan and pump cross shaft.
4. Apply parking brake and lock.

5. Remove belt from engine pulley and then from pump pulley and fan.
6. Install new belt over pump pulley, then engine pulley and reverse steps above.

STORAGE

End of Season Machine Care:

When storing tractor at end of season, the following steps should be taken to insure readiness for the next mowing season:

1. Remove all grass, dirt and trash from tractor and deck. Wash both the tractor and deck, including the underside of deck.
2. Check thoroughly for any worn or damaged parts that need replacing - order them from your dealer.
3. Thoroughly lubricate machine according to lubrication instructions.
4. Lightly oil the under side of deck to prevent rusting.
5. Drain fuel tank and run engine to remove all gas from the carburetor.
6. Perform separate engine preparations as outlined in engine owner's manual.
7. Protect battery from freezing temperatures. Occasionally recharging battery during storage will extend battery life.
8. Store tractor in a dry place away from sparks or flame.

INSTALLATION OF 42" 52" & 62" DECKS

The following steps are suggested for installation of the deck:

1. Remove deck from the packing crate and place on level surface in front of tractor.
2. Remove the two 1/2" bolts and bushings from the deck mounts. Remove 1/2" deck pins from deck adjustment holes in back of deck.
3. Remove belt guard from deck gearbox pulley.
4. Push both arms down at the same time to align holes in arms with the holes in the deck mounts. Once arms are down, one arm may be released while you place the bolt and bushing in the first arm. Push the other arm back down and install bolt and bushing.

NOTE: If machine is equipped with an electric lift, it must be run to it's lowest position before you can attach arms to the deck.

NOTE: If machine is equipped with a hydraulic lift, lower arms by starting tractor, placing control valve in the float position and pushing down on lift arms.

5. Place deck drive belt over the gearbox pulley and replace belt guard.
6. Raise deck lift arms enough to install deck pins at desired cutting height.
7. Raise the deck with lift arms and lock in the raised position. Install the front gauge wheels and mounts at desired cutting height.
8. Lower deck to ground and adjust deck drive belt (See Belt Adjustment Section).
9. Install Fas-tatch foot guard and plug the deck safety wires into

the deck safety switch.

10. Check blade bolts to be sure they are tight. Also remove pulley box covers and check the deck belt tension.

Warning

When running the deck be sure that the area is clear of persons and pets. Only operate the deck while sitting in the operator's seat.

DUAL TAIL WHEEL KIT

NOTE: If machine is equipped with a tail weight, it must be removed to mount the dual tail wheels.

1. Place jack under back of tractor base and raise tail wheel high enough to remove fork from tail wheel fork tube.
2. Remove 1" set collar from top of tail wheel fork shaft. Filing the burr left by the setscrew from the fork shaft will ease the fork removal. Drive the two bearings from the tail wheel fork tube.
3. Install dual tail wheel mount placing two 5/16" x 3/4" bolts through the back plate of body and dual tail wheel mount. Place tube block into tail wheel fork tube. Run 1/2" bolt down through tube block and dual tail wheel mount. Tighten all bolts to mount.
4. Place dual tail wheel axle into mount with long end of tube to front. Install 1" pivot axle and lock with setscrew.
5. Install tail wheel forks and tail wheels. Lock setscrews.
6. Lower machine to ground and check to see if tractor is level from front to back. If not, adjust collars up or down on tail wheel forks to level tractor.

TRACTOR TROUBLE SHOOTING GUIDE

SYMPTOMS	PROBABLE CAUSES	SUGGESTED REMEDIES
Starter Does Not Crank	Ignition Interlock Safety System not Engaged	Engage System
	PTO Switch in ON Position	Put Switch in OFF Position
	Weak or Dead Battery	Recharge or Replace Battery
	Fuse Blown	Replace Fuse
	For Additional Causes	See Engine Manual
Engine Cranks But Does Not Start	No Gas or Line Plugged	Fill Tank or Replace Line
	No Fire at Spark Plug	Clean or Replace Spark Plug
		See Engine Manual or Dealer
	Numerous Other Causes	See Engine Manual or Dealer
Engine Runs with Loss of Power or Excessive Black Exhaust	Restriction in Air Cleaner	Service Air Cleaner
	Poor Compression or Timing	See Engine Manual or Dealer
Tractor Jerky When Starting or Tractor Operates in One Direction Only	Steering Cables Need Adjustment	Adjust Cables
	Pump or Wheel Motor Faulty	See Your Dealer
	Oil has been Contaminated with Water or Dirt	Drain Oil From System and Replace or See Your Dealer
Hydraulic System Operating Hot	Damaged or Broken Fan	Replace Fan
	Cooling Fins Plugged	Clean Cooling Fins
	Hydraulic Pump Faulty	See Your Dealer
Tractor Creeps When Steering Levers are in Neutral	Steering Cables Out of Adjustment	Adjust Steering Cables
Tractor Creeps or Veers in One Direction	Steering Cables Out of Adjustment	Adjust Steering Cables
	Wheel Motor Faulty	See Your Dealer
	Hydraulic Pump Faulty	See Your Dealer

TRACTOR TROUBLESHOOTING GUIDE (Cont.)

SYMPTOMS	PROBABLE CAUSES	SUGGESTED REMEDIES
Tractor Creeps With Parking Brake On	Brake Out of Adjustment	Adjust Parking Brake
Engine Overheating	Intake Screen Clogged	Clean Screen
	Cooling Fins Clogged	See Engine Manual for Cleaning
Engine Oil Pressure Low	Low Oil Level	Add Oil
	Oil Sending Unit Faulty	See Your Dealer
	Oil Diluted or Grade Too Light	Change Oil and Check for Source of Contamination
Amp Meter Shows Discharge	Wiring Defective	See Your Dealer
	Alternator Defective	See Your Dealer
High Oil Consumption Engine Knocks and Other Engine Noises	Numerous Causes	See Engine Manual
Electric Clutch Will Not Engage	Deck Safety Wires Not Plugged In	Plug Wires In
	Loose or Faulty Wiring	Check Wiring
	Seat Switch Faulty	Change Seat Switch
	Clutch Out of Adjustment	Adjust Clutch
Grass Cut Uneven	Deck Height Adjustment Not Even on Both Sides	Adjust Height
	Tire Pressure Uneven	Check Tire Pressure
	Blade Bent	Replace Blade

DECK DECALS

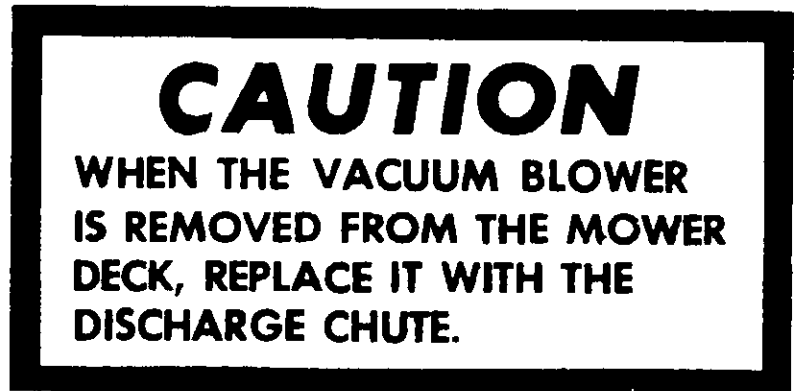
These decals have been placed on the deck to instruct the operator and to warn of safety hazards. It is very important that they be in place and visible at all times. Replace damaged or missing decals immediately! Order by the part numbers shown below.



900-5542



900-5540



900-5539



900-5549

These decals have been placed on the tractor to instruct the operator and to warn of safety hazards. It is very important that they be in place and visible at all times. Replace damaged or missing decals immediately! Order by the part numbers shown below.

OPERATION OF CONTROLS

CAUTION! READ OPERATING MANUAL BEFORE OPERATING THIS MACHINE

CONTROL THE SPEED THROUGH THE USE OF TRANSMISSION CONTROL ONLY

	• FORWARD •	
	• NEUTRAL •	
	• REVERSE •	

900-5541

900-5541

CAUTION

THIS MACHINE HAS AN IGNITION INTER-LOCK SAFETY SYSTEM ALL CONTROLS MUST BE IN NEUTRAL BEFORE THE ENGINE WILL START

900-5543

900-5543

FUEL ONLY

P N 900-5671

900-5671

HYDRAULIC OIL

P N 900 5672

900-5672

CAUTION

WHEN MOWING OR TRANSPORTING KEEP HYDRAULIC VALVE IN FLOAT POSITION!

FLOAT
PUSH DOWN TO LOCK

PN 900-5673

900-5673

DANGER

ENGINES PRODUCE CARBON MONOXIDE WHICH IS AN ODOORLESS DEADLY POISON DO NOT OPERATE IN AN ENCLOSED AREA

900-5723

UNLOCK
LOCK

900-5544

900-5544

SPECIFICATIONS

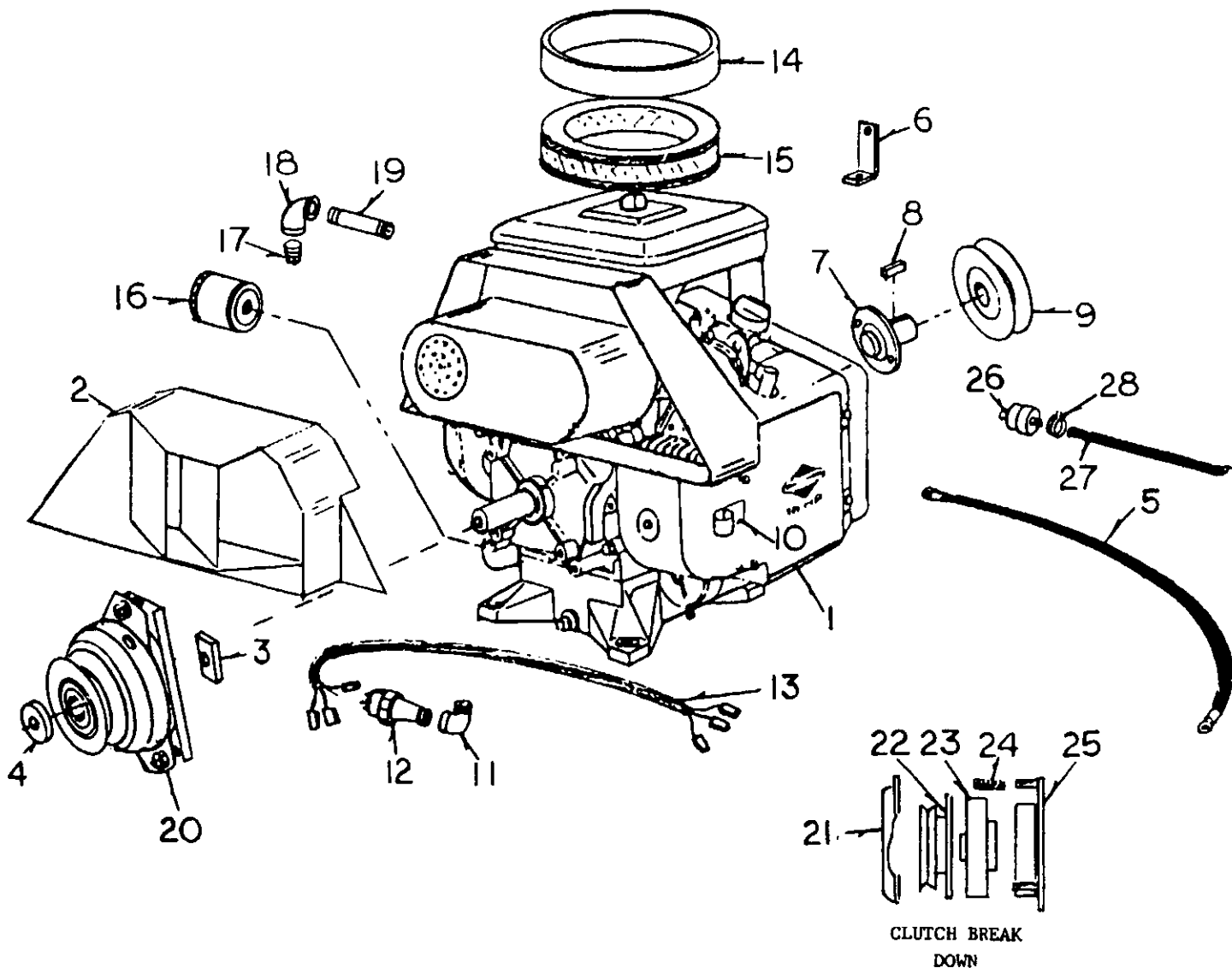
Tractor Model	FR1800	FR2000C
Engine Make	Briggs & Stratton	Onan
Type, 4 Cycle	2 Cyl Gas	
Horsepower	18	20
Displacement	42.8 Cu. In. 694 cc	47.7 Cu. In. 782 cc
Maximum RPM	3450	
Starting System	12 Volt Key and Solenoid	
Fuel Tank Capacity	5 Gallon	
Battery	12 Volt 235 CCA Size U1 L9	
Transmission	Eaton 720	Eaton 1120
Final Drive	Eaton 730	Eaton 2000
Steering	Hand Lever Control Individual Wheel	
Brake	Dynamic Braking Through Drive	
Parking Brake	Disk	
Clutch	Electric	
Attachment Drive	1 - B Belt	2 - A Belt
MPH Forward & Reverse	0-7 MPH	0-7.5 MPH
Turning Radius	Zero	
Tire Size, Drive	18 x 9.50-8 42" Deck 18 x 6.50-8	20 x 10.00-10 42" Deck 20 x 8.00-10
Tire Size, Tail	16 x 6.50-8	
Seat	Vinyl Adjustable with Optional Arm Rests	
Wheel Base	42"	44"
Height, Tractor	45"	46"
Width, Tractor	49"	50"
Length, Tractor	57"	
Weight, Tractor (Shipping)	660 Lbs.	876 Lbs.
Available Deck Widths	42", 52", 62"	
Standard Features	Manual Deck Lift (Optional Electric)	Hydraulic Deck Lift
	Tilt Back Deck Interlock Safety System Hour and Amp Meter Dual Head Lights 45 Lb. Rear Frame Weight	

PARTS LISTS

BRIGGS & STRATTON ENGINE PARTS

Item	Part No.	Description	Qty.
1		Briggs & Stratton Twin 18 HP	1
2	111-0001	Air Duct	1
3	113-0010	Clutch Stop	2
4	900-5575	Clutch Retainer Washer	1
5	900-2010	Starter Cable	1
6	111-0034	Wire Stand Off	2
7	100-0013	Stub Shaft	1
8	100-0014	Key Stock, 1/4"	1
9	900-2503	Pulley	1
10	100-0021	Starter Cable Retainer	1
11	900-5020	Street Elbow, 1/8"	1
12	900-5017	Oil Sending Unit	1
13	900-2067	Wire Harness (Oil Sending Unit)	1
14	900-5008	Pre Cleaner	1

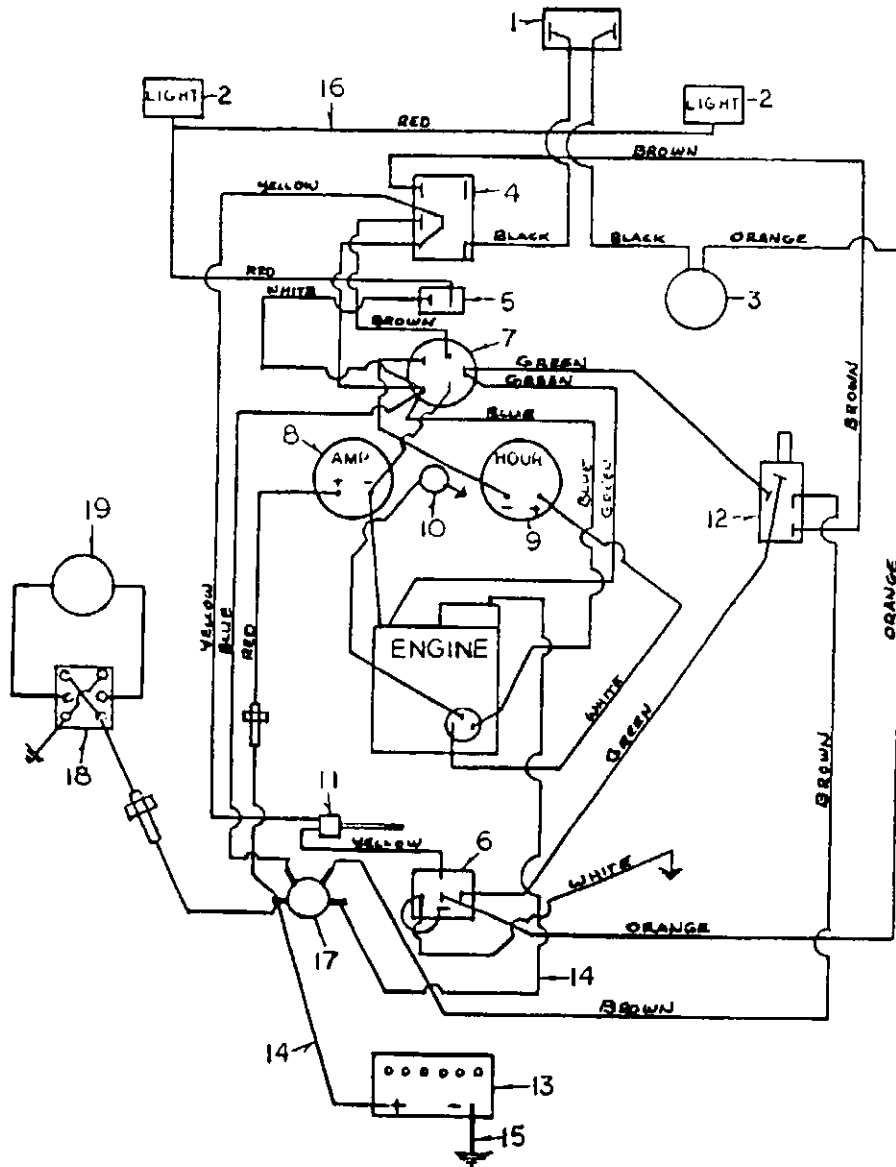
Item	Part No.	Description	Qty.
15	900-5005	Air Cleaner Cartridge	1
16	900-5022	Oil Filter	1
17	900-8024	Plug, 3/8"	1
18	900-5720	Elbow, 3/8"	1
19	900-5721	Nipple, 3/8"	1
20	900-5581	Clutch (Complete)	1
21	900-5582	Clutch Brake	1
22	900-5583	Clutch Armature	1
23	900-5584	Clutch Rotor	1
24	900-5586	Spring & Nut Set (3 Ea.)	1
25	900-5585	Clutch Coil	1
26	900-5514	Fuel Filter	1
27	900-5515	Fuel Line	1
28	900-5525	Fuel Line Clamp	4



WIRING DIAGRAM

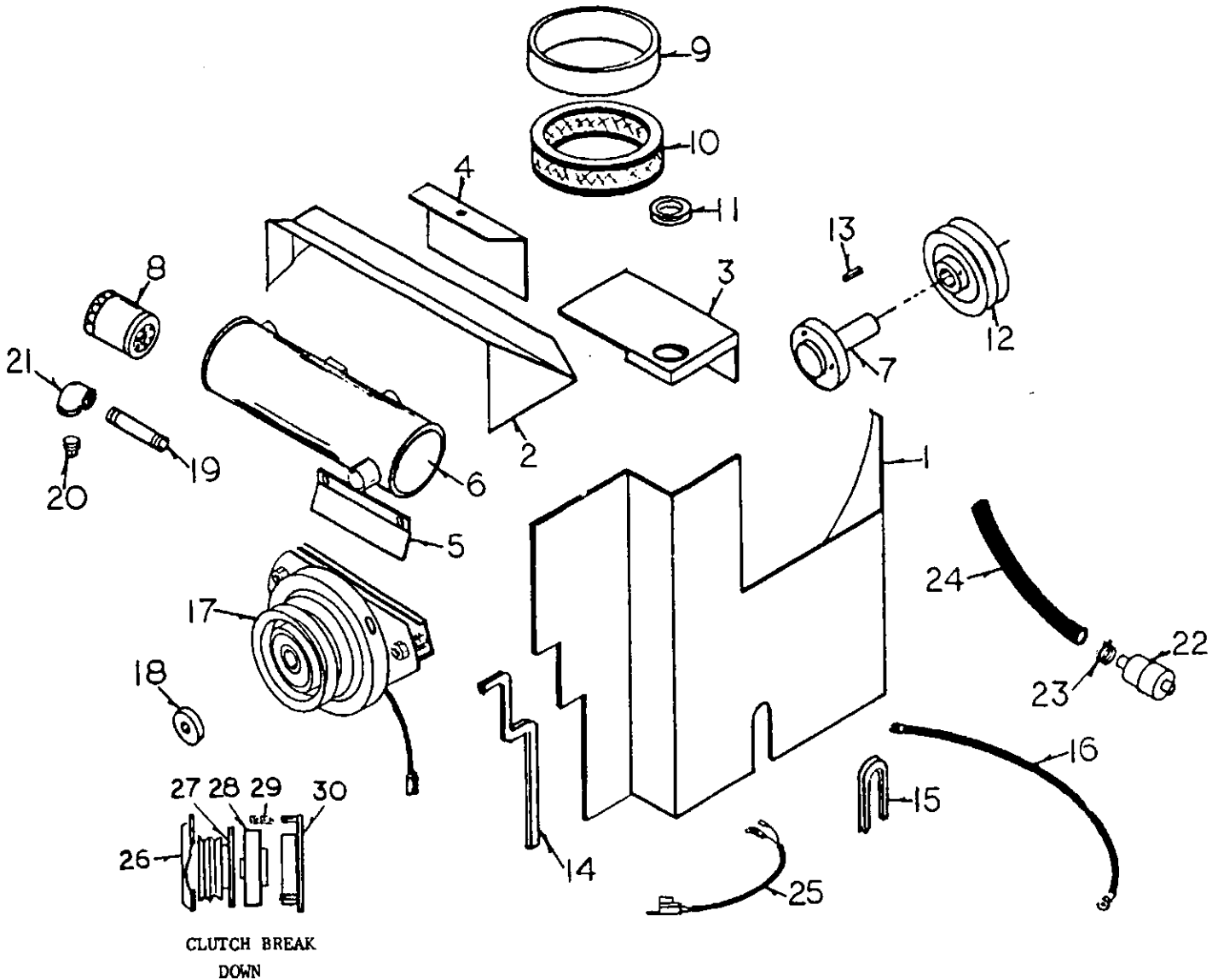
(Briggs & Stratton Engine)

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	900-2044	10 Amp Circuit Breaker	1	11	900-2001	Seat Switch	1
2	900-2014	Headlight Assembly	2	12	900-2029	Safety Switch	1
3	900-5581	Electric Clutch Assembly	1	13	900-2060	Battery	1
4	900-2028	PTO Clutch Switch	1	14	900-2010	Starter Wire	2
5	900-2027	Light Switch	1	15	900-2009	Ground Wire	1
6	900-2037	Relay	1	16	900-2032	Light to Switch Wire	1
7	900-2003	Ignition Switch	1	17	900-2005	Solenoid	1
8	900-2002	Amp Gauge	1	18	900-2020	3 Position Deck Lift Switch	-
9	900-2023	Hour Meter	1	19	900-2033	Electric Lift Actuator	-
10	900-2041	Oil Light	1		900-2035	Wiring Harness	1



ONAN ENGINE PARTS

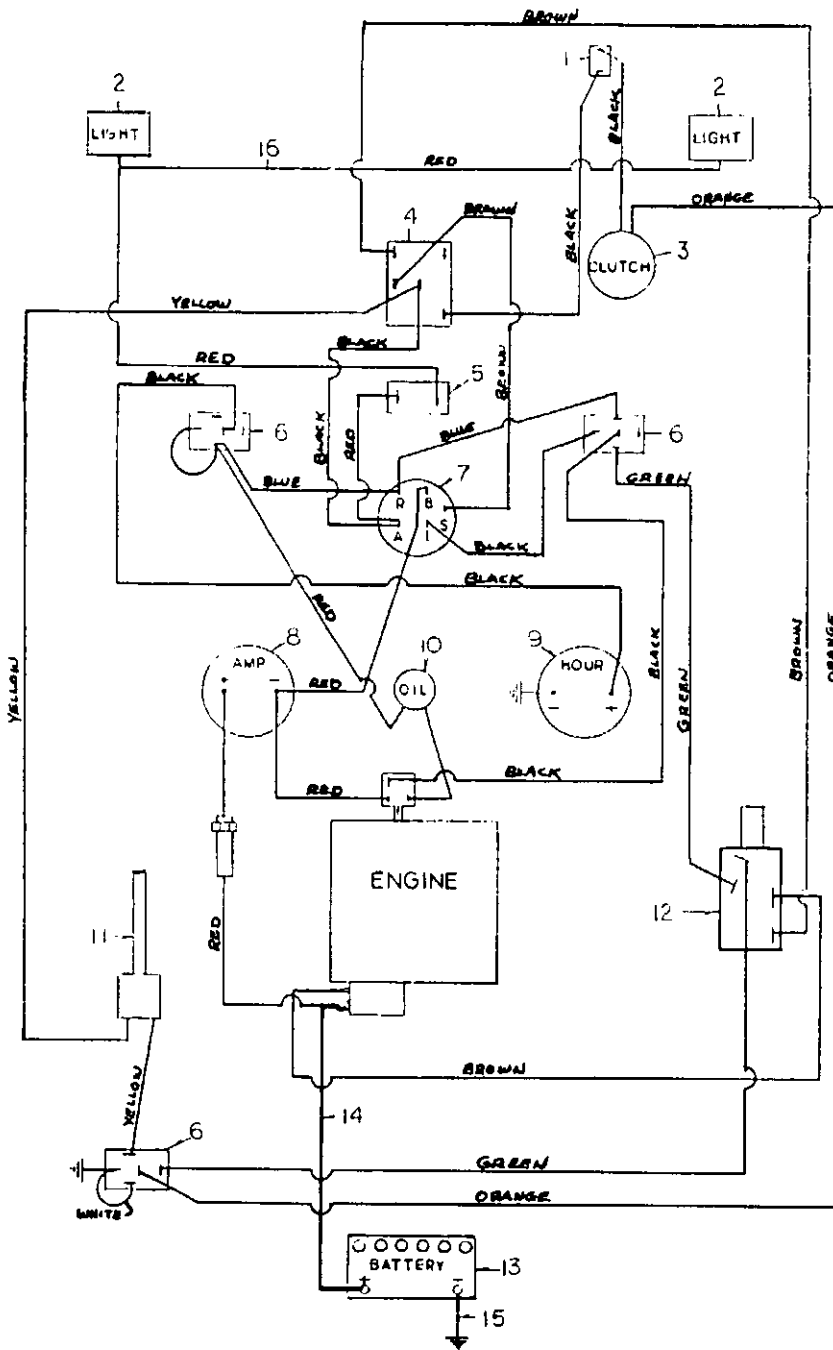
Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	112-0018	Heat Shield, Part A	1	16	900-2011	Starter Wire	1
2	112-0019	Heat Shield, Part B	1	17	900-5716	Electric Clutch (Complete)	1
3	112-0020	Heat Shield, Part C	1	18	900-5575	Clutch Retainer Washer	1
4	112-0021	Heat Shield, Part D	1	19	900-5721	Pipe Nipple, 3/8"	1
5	112-0017	Clutch Stop	1	20	900-8024	Pipe Plug, 3/8"	1
6	900-5023	Onan Muffler	1	21	900-5720	Pipe Elbow, 3/8"	1
7	900-5024	Onan Engine Shaft	1	22	900-5514	Fuel Filter	2
8	900-5025	Onan Oil Filter	1	23	900-5525	Fuel Line Clamp	4
9	900-5026	Onan Filter Element	1	24	900-5770	Fuel Line, 38"	1
10	900-5027	Onan Filter Cartridge	1	25	900-2071	Starter Harness	1
11	900-5728	Grommet	1	26	900-5582	Clutch Brake	-
12	900-2502	Pulley	1	27	900-5771	Clutch Amature	-
13	100-0014	Key Stock, 1/4" x 1"	1	28	900-5772	Clutch Rotor	-
14	900-5742	Trim, 10"	1	29	900-5586	Clutch Brake Spring (Set of 3)	-
15	900-5742	Trim, 7"	1	30	900-5773	Clutch Coil	-



WIRING DIAGRAM

(Onan Engine)

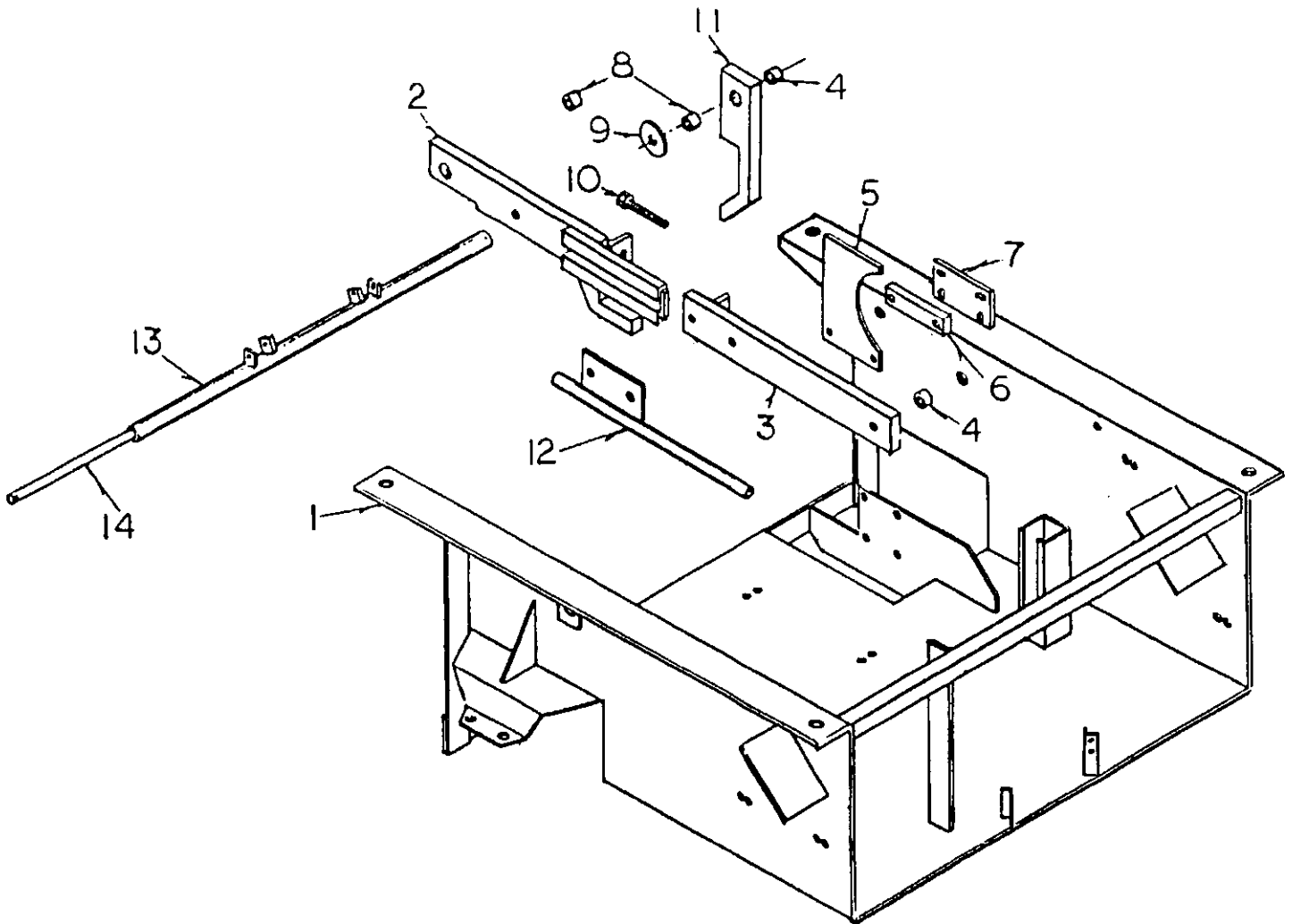
Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	900-2044	10 Amp Circuit Breaker	1	9	900-2023	Hour Meter	1
2	900-2014	Headlight Assembly	2	10	900-2041	Oil Light	1
3	900-5716	Electric Clutch Assembly	1	11	900-2001	Seat Switch	1
4	900-2028	PTO Clutch Switch	1	12	900-2029	Safety Switch	1
5	900-2027	Light Switch	1	13	900-2060	Battery	1
6	900-2037	Relay	3	14	900-2011	Starter Wire	2
7	900-2065	Ignition Switch (Onan)	1	15	900-2009	Ground Wire	1
8	900-2002	Amp Gauge	1		900-2066	Wiring Harness (Onan)	1



BASE ASSEMBLY

(FR1800)

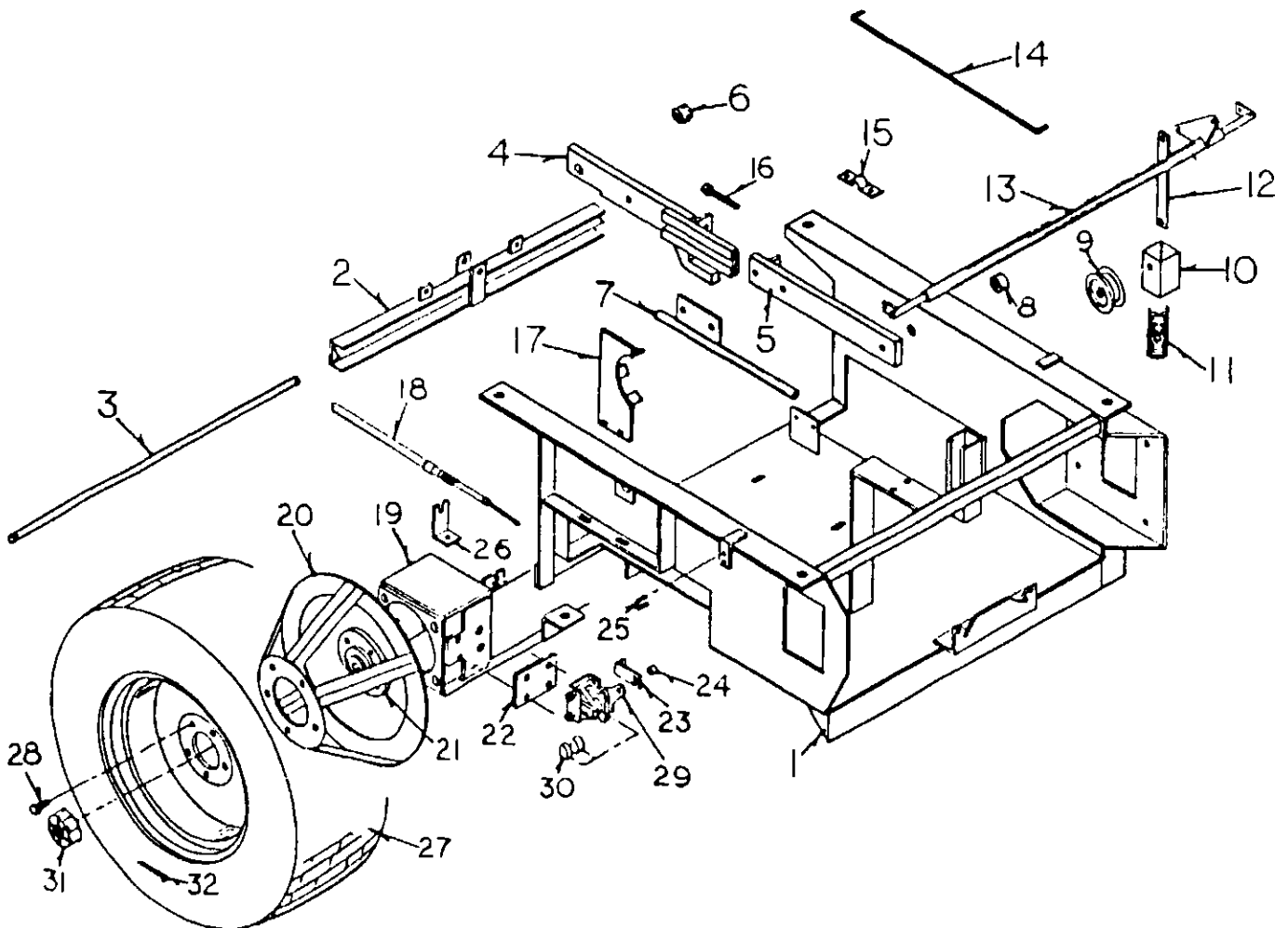
Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	113-0000	Base	1	8	300-0013	Bushing, Long	2
2	300-0023RH	Deck Lift Arm, Front RH	1	9	200-0015	Washer	1
	300-0023LH	Deck Lift Arm, Front LH	1	10	900-6088	Deck Belt Adjustment Bolt	2
3	301-0024	Deck Lift Arm, Back	2	11	111-0023	Forward Nose Down Lock	1
4	300-0013S	Bushing, Short	2	12	300-0041	Wire Tube	1
5	113-0007	Belt Retainer	1	13	300-0014	Cross Bar	1
6	113-0014	Belt Retainer Spacer	1	14	300-0022	Cross Bar Pin	1
7	112-0008	Belt Retainer Mount	1				



BASE ASSEMBLY

(FR2000C)

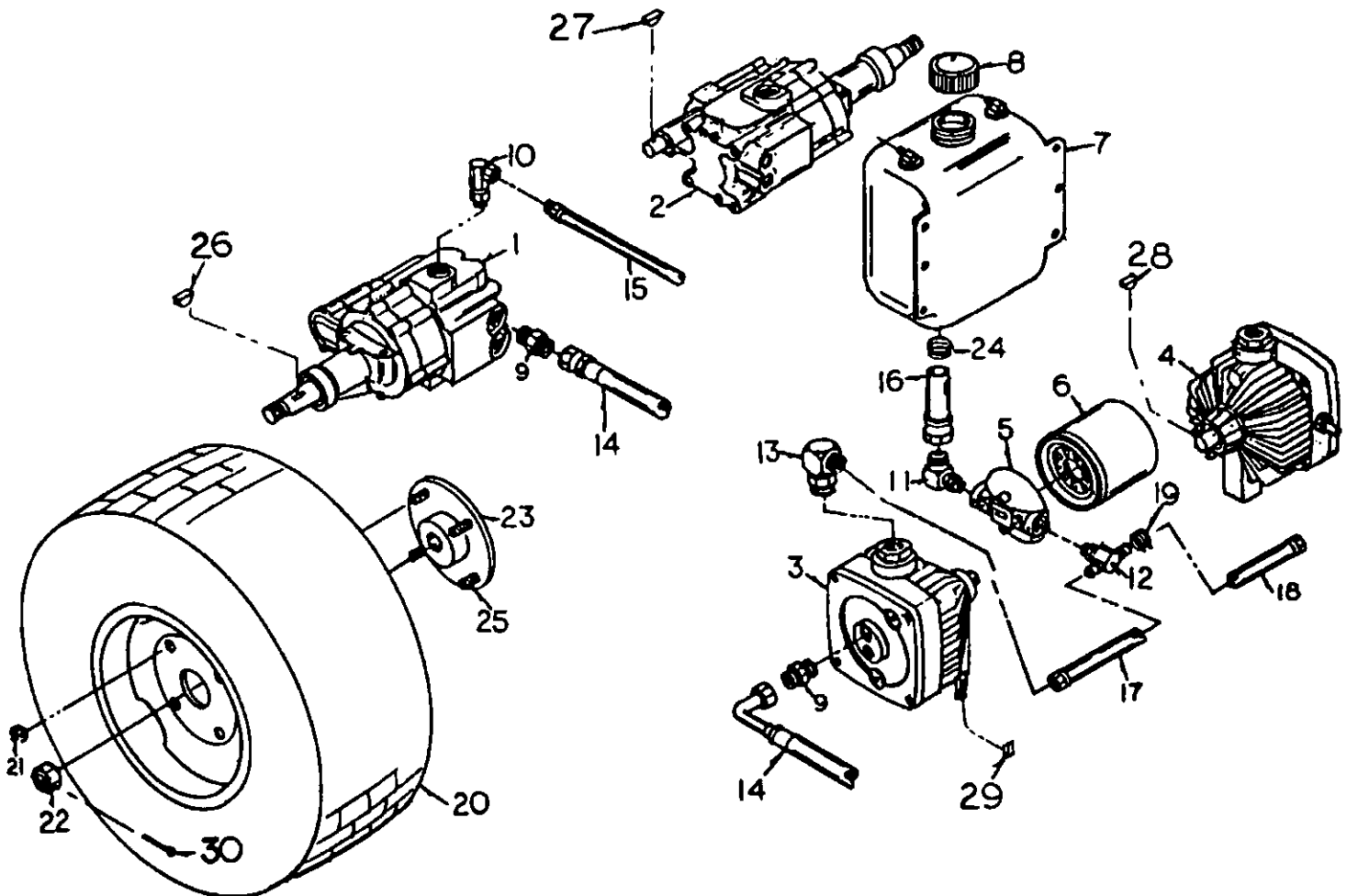
Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	112-0000	Base	1	20	140-0047	Brake Disc	2
2	112-0016	Lift Bar	1	21	900-4028	5 Bolt Hub	2
3	300-0022	Cross Bar Pin	1	22	112-0002	Brake Caliper Mount	2
4	300-0023RH	Deck Lift Arm, Front Adjustable	1	23	200-0013	Cable End	4
	300-0023LH	Deck Lift Arm, Front Adjustable	1	24	200-0014	Bushing	4
5	330-0024	Deck Lift Arm, Back	2	25	900-5503	Clamp	2
6	300-0013	Bushing, Long	2	26	112-0005	Cable Dead Head	2
7	300-0041	Wire Tube	1	27	900-4037	Tire Assembly, 20 x 8.00-10	2
8	300-0013S	Bushing, Short	2		900-4043	Tire, 20 x 8.00-10	-
9	900-2541	Idler Pulley	1		900-4044	Rim	-
10	111-0019	Spring Loaded Idler Mount	1	27	900-4039	Tire Assembly, 20 x 10.00-10	2
11	900-5580	Spring	1		900-4045	Tire, 20 x 10.00-10	-
12	112-0014	Pivot Bar Linkage	1		900-4046	Rim	-
13	112-0013	Brake Clutch Rod	1	28	900-6105	Lug Bolt	10
14	111-0006	Brake Pedal Rod	1	29	900-5691	Brake Caliper, LH (Shown)	1
15	111-0004	Cross Rod Bearing	2		900-5690	Brake Caliper, RH	1
16	900-6088	Deck Arm Adjusting Bolt	2	30	900-5567	Brake Pucks	-
17	112-0015	Belt Retainer	1	31	900-8126	Hub Nut	2
18	900-5718	Brake Cables	2	32	900-6177	Cotter Key	2
19	112-0001	Axle	1				



WHEEL MOTOR & PUMP ASSEMBLY

FR1800

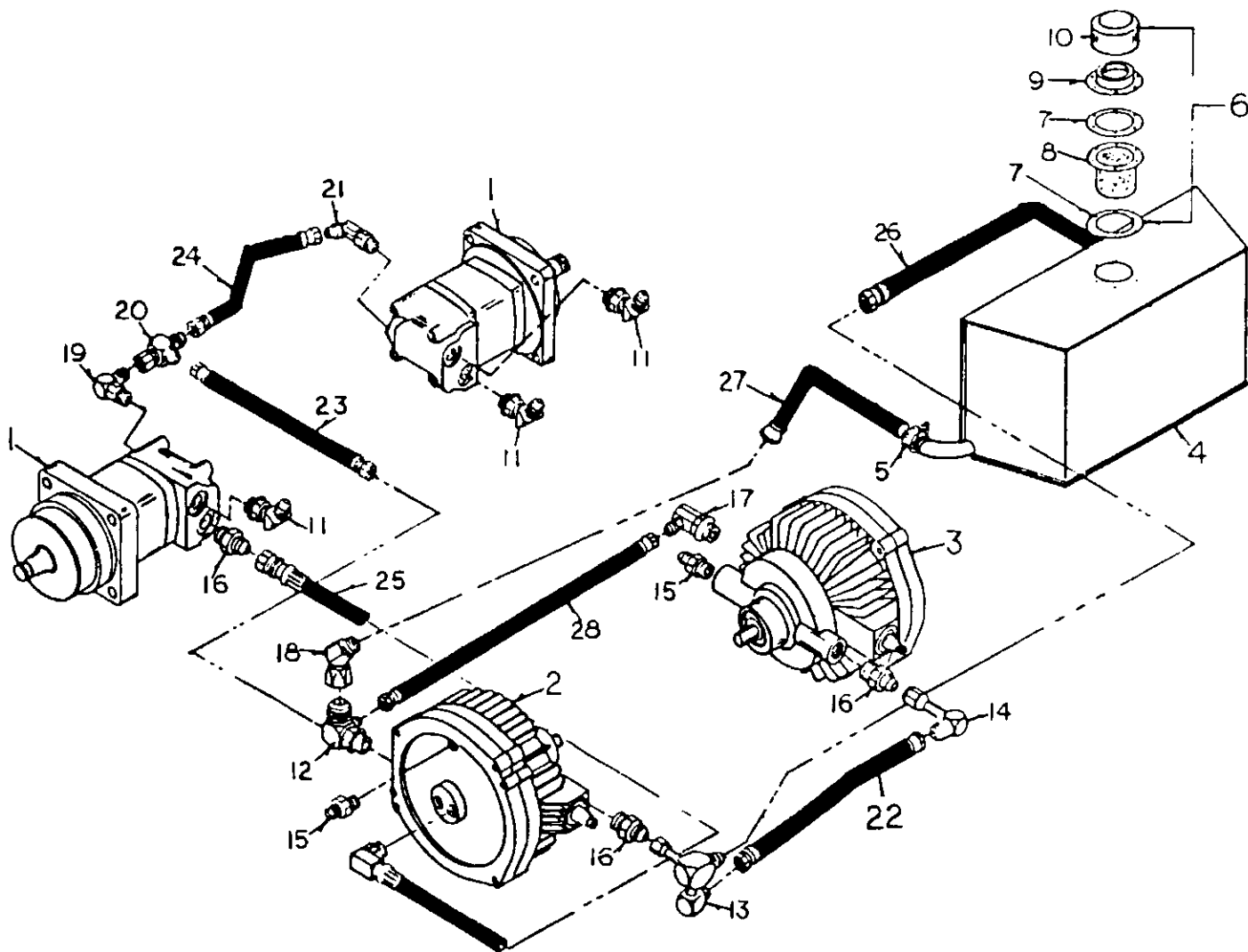
Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	900-8069	Wheel Motor, LH	1	18	900-8080	Hose, 1/2" ID x 21" Long, Easy Couple	1
2	900-8068	Wheel Motor, RH	1	19	900-5729	Hose Clamp, 1/2"	2
3	900-8067	Model 7 Pump, LH	1	20	900-4013	Wheel Ass'y., 18 x 9.50-8	2
4	900-8066	Model 7 Pump, RH	1		900-4042	Tire, 18 x 9.50-8	-
5	900-8072	Housing, Oil Filter	1		900-4008	Rim, 8" x 7"	-
6	900-8073	Element, Oil Filter	1	20	900-4038	Wheel Ass'y., 18 x 6.50-8 (Use With 42" Deck)	2
7	900-8058	3 Qt. Oil Tank	1		900-4041	Tire, 18 x 6.50-8	-
8	900-8059	Cap, Oil Tank	1		900-4040	Rim, 8 x 5 1/2"	-
9	900-8005	Male Tube, Male O-ring Adp.	8	21	900-6138	Lug Nut, 1/2-20	8
10	900-8074	Male O-ring, 90° Female Pipe Swivel Adp.	2	22	900-8125	Nut, Wheel Motor	2
11	900-8076	Male O-ring, 90° Male Tube Adp.	1	23	900-4036	4-Bolt Wheel Hub	2
12	900-8077	Male O-ring, 1/2" Hose Barb Tee	1	24	900-5733	Hose Clamp, 5/8"	1
13	900-8075	Male O-ring, 90° Male Tube Adp.	2	25	900-6137	Lug Bolt, 1/2-20 x 1 1/4"	8
14	900-8078	Hose, 1/2" ID x 28" Long	4	26	900-8124	Woodruff Key, 3/16" x 1"	2
15	900-8071	Hose, 1/4" ID x 24" Long, Easy Couple	2	27	900-8090	Woodruff Key, 3/16" x 3/4"	2
16	900-8079	Hose, 5/8" ID x 7" Long, Easy Couple	1	28	900-4508	Woodruff Key, 1/8" x 1/2"	2
17	900-8081	Hose, 1/2" ID x 15" Long, Easy Couple	1	29	900-4524	Woodruff Key, 1/8" x 3/8"	2
			1	30	900-8122	Cotter Pin, 1/8" x 1 3/4"	2



WHEEL MOTOR & PUMP ASSEMBLY

FR2000C

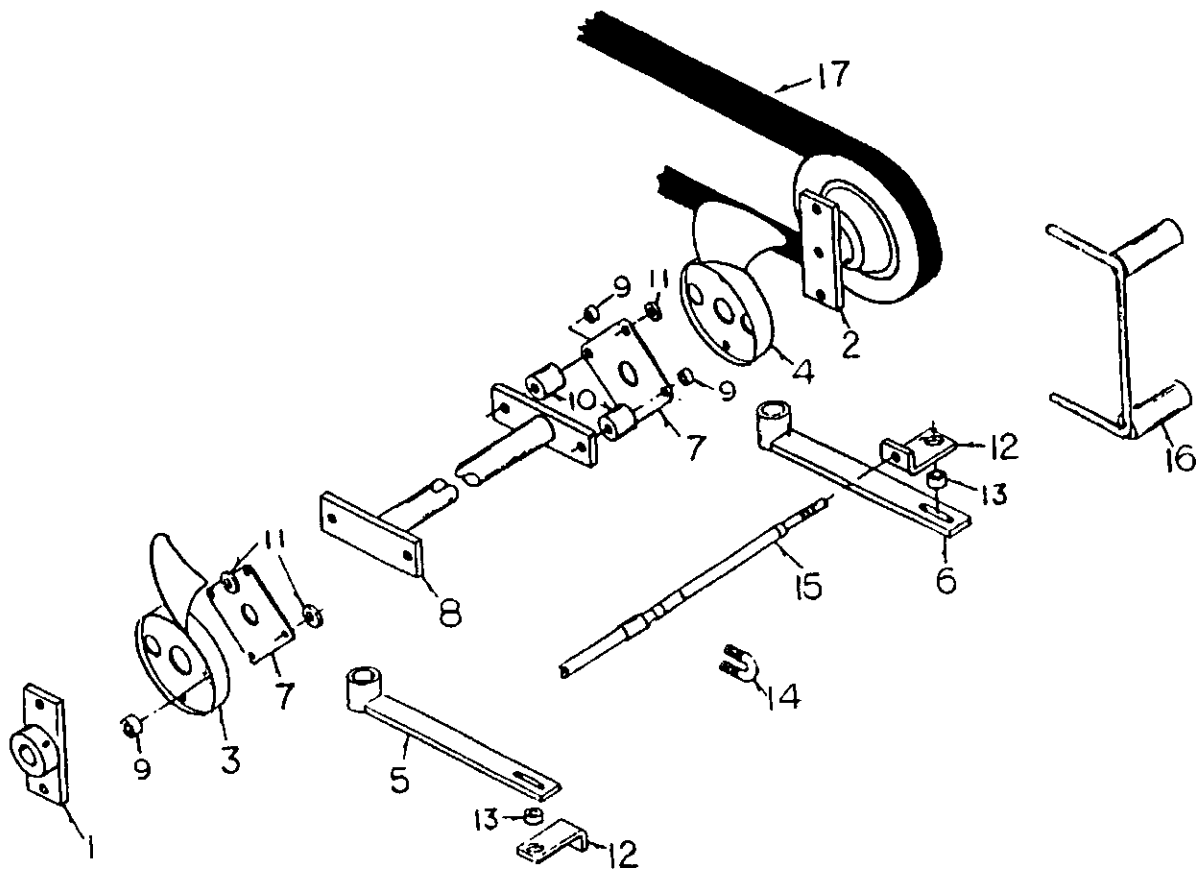
Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	900-8065	Wheel Motor	2	18	900-8093	Male Tube, 45° Female Swivel Adapter	1
2	900-8064	Pump, LH	1	19	900-8015	Male Tube, 90° Male O-ring Adapter	1
3	900-8063	Pump, RH	1	20	900-8096	Male Tube, Female Swivel Tee	1
4	900-8060	Hydraulic Oil Tank	1	21	900-8114	Male Tube, 45° Female Swivel Adapter	1
5	900-5629	Hose Clamp	2	22	900-8109	Hose, 1/2" ID x 18" Long, Easy Couple	1
6	900-8046	Hydraulic Fill Cap Assembly	1	23	900-8107	Hose, 1/4" ID x 14" Long, Easy Couple	1
7	900-8043	Gasket	-	24	900-8108	Hose, 1/4" ID x 20" Long, Easy Couple	1
8	900-8042	Strainer	-	25	900-8100	Hose, 1/2" ID x 36 1/2" Long	4
9	900-8044	Fill Neck	-	26	900-8112	Hose, 3/4" ID x 22" Long, Easy Couple	1
10	900-8045	Breather Cap	-	27	900-8111	Hose, 3/4" ID x 18" Long, Easy Couple	1
11	900-8016	Male Tube, 45° Male O-ring Adapter	3	28	900-8110	Hose, 1/2" ID x 20" Long, Easy Couple	1
12	900-8092	Special Cross	1				
13	900-8091	Special Adapter	1				
14	900-8004	Male Tube, 90° Female Swivel Adapter	1				
15	900-8094	Male Tube, Male O-ring Adapter	4				
16	900-8097	Male Tube, Male O-ring Adapter	3				
17	900-8075	Male Tube, 90° Male O-ring Adapter	1				



TRANSMISSION DRIVE

(FR1800)

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	900-4522	Hub w/Drive Plate	1	10	111-0022	Spacer	2
2	900-4521	Pulley w/Drive Plate	1	11	900-6161	Washer, 1/4", 10 Ga.	6
3	900-4527	CCW Fan	1	12	200-0013	Steering Cable End	4
4	900-4526	CW Fan	1	13	200-0014	Bushing, Steering Lever	4
5	900-4506	Transmission Arm, LH	1	14	900-5503	Steering Cable Clamp	4
6	900-4507	Transmission Arm, RH	1	15	900-5502	Steering Cable	2
7	111-0021	Drive Plate	2	16	111-0003	Belt Retainer, Transmission	1
8	113-0002	Transmission Cross Shaft	1	17	900-3011	Belt	1
9	111-0025	Bolt Spacer	4				

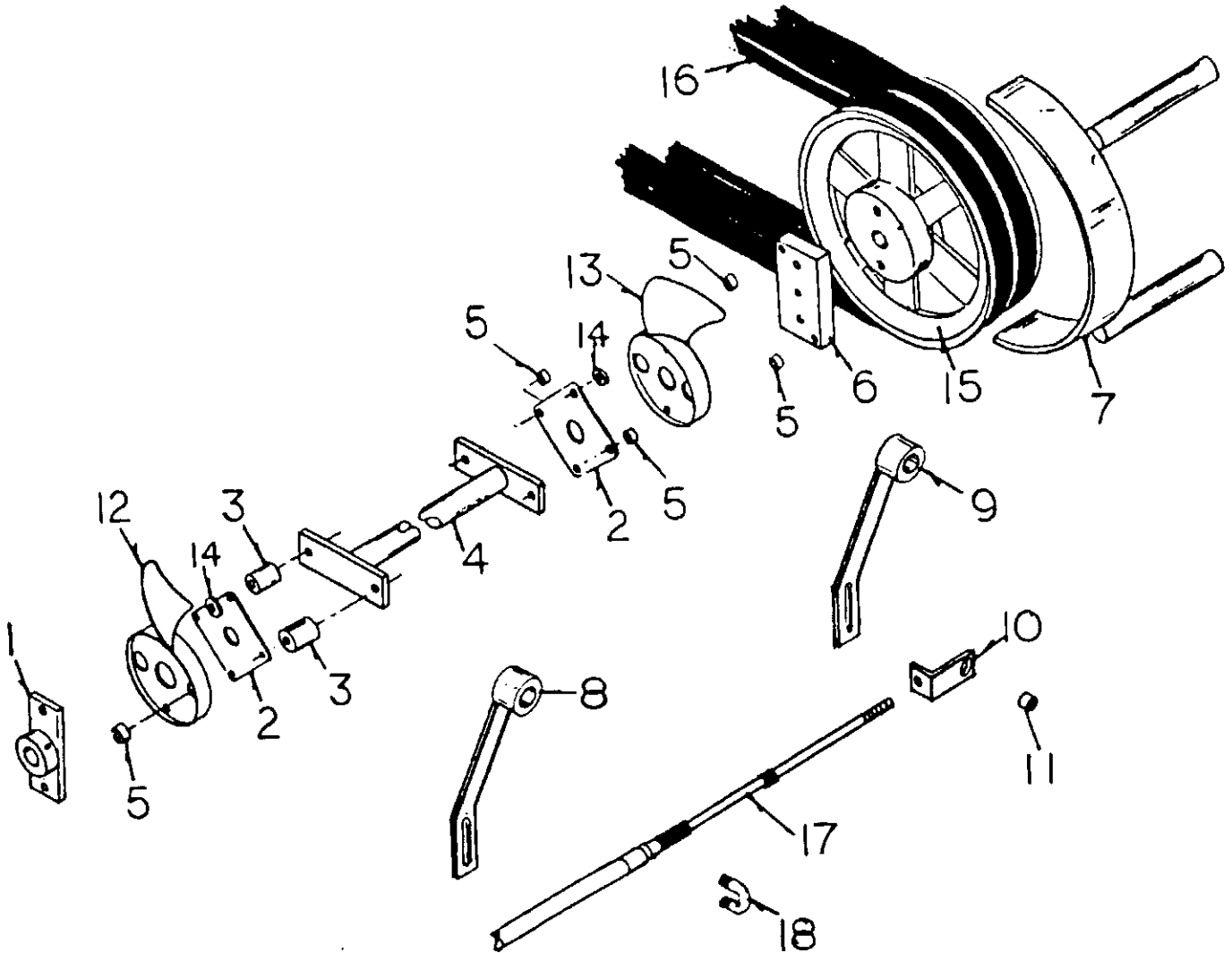


TRANSMISSION DRIVE

FR2000C

33

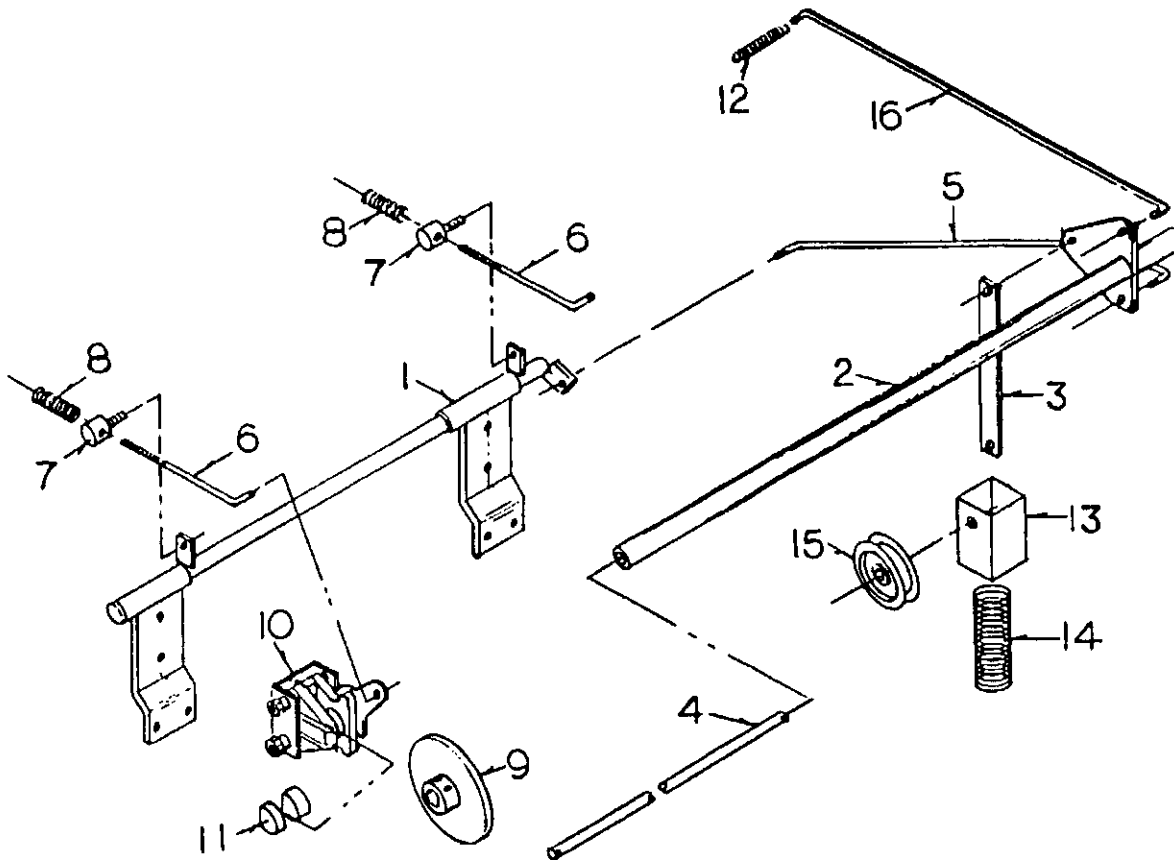
Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	112-0012	Hub w/Drive Plate	1	10	140-0023	Steering Cable Ends	4
2	111-0021	Drive Plate	2	11	200-0014	Steering Cable Ends Bushing	4
3	111-0022	Spacer	2	12	900-4527	CCW Fan, LH	1
4	112-0009	Cross Shaft	1	13	900-4526	CW Fan, RH	1
5	111-0025	Bolt Spacer	6	14	900-6161	Washer, 5/16"	4
6	112-0007	Cross Bar Block	1	15	900-2542	Pulley	1
7	112-0006	Transmission Belt Retainer	1	16	900-3022	Belts	2
8	112-0004	Transmission Arm, LH	1	17	900-5717	Steering Cable	2
9	112-0003	Transmission Arm, RH	1	18	900-5625	Clamp	2



BRAKE ASSEMBLY

(FR1800)

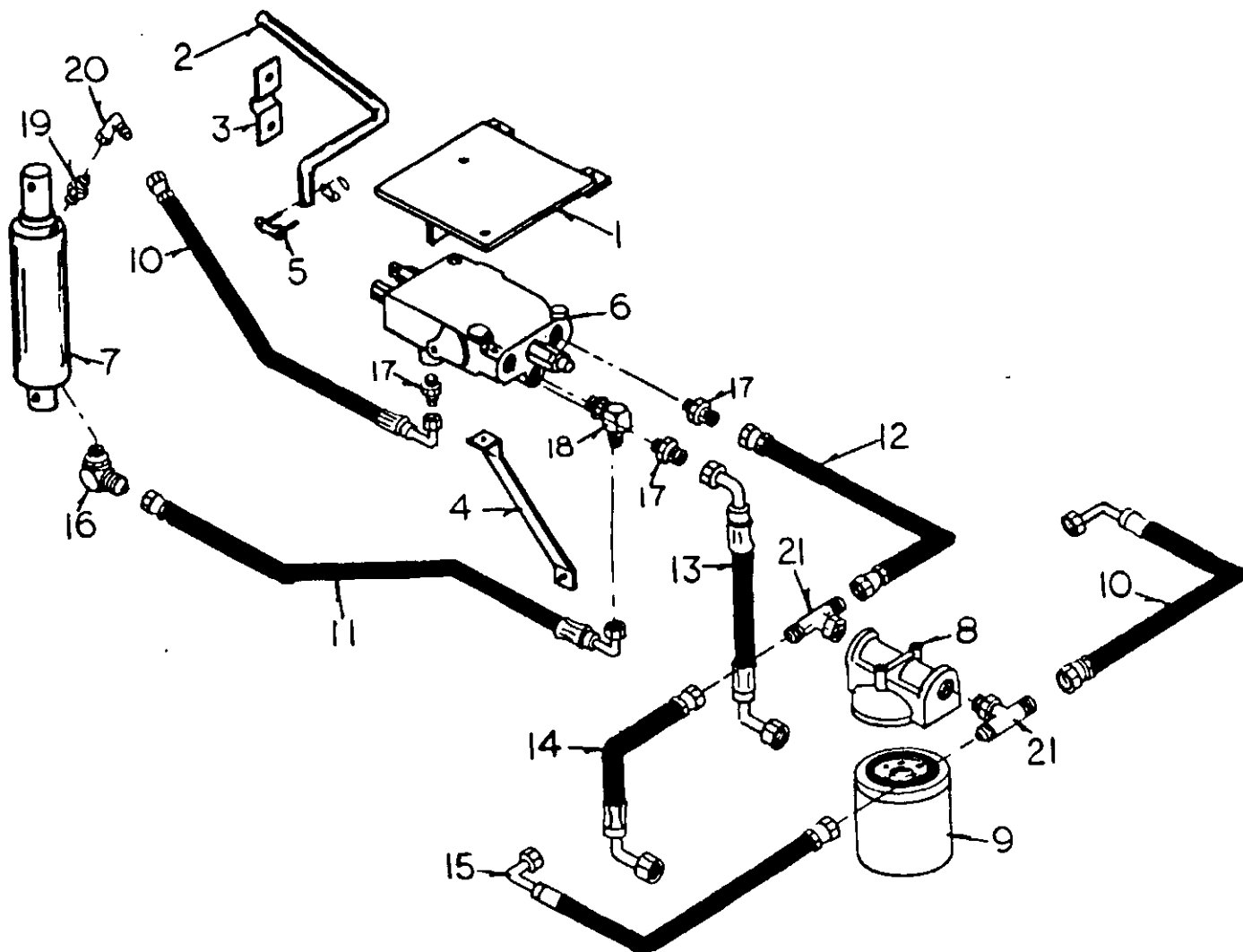
Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	113-0003	Brake Mount & Cross Rod Ass'y.	1	9	900-4525	Brake Disc	2
2	113-0013	Brake Clutch Cross Rod	1	10	900-5690	Brake Assembly	2
3	113-0012	Cross Rod to Idler Pulley Linkage	1	11	900-5567	Brake Pucks	-
4	300-0022	Cross Bar Pin	1	12	900-5501	Brake Pedal Spring	1
5	113-0006	Cross Rod to Brake Linkage	1	13	111-0019	Spring Loaded Idler Mount	1
6	113-0001	Caliper Rod	2	14	900-5580	Transmission Belt Idler Spring	1
7	111-0014	Caliper Rod Collar	2	15	900-2501	Idler Pulley	1
8	900-5722	Brake Caliper Spring	2	16	111-0006	Brake Pedal Rod	1



HYDRAULIC LIFT ASSEMBLY

Item	Part No.	Description	Qty.
1	212-0002	Valve Mount	1
2	212-0003	Valve Lever	1
3	111-0004	Bearing, Clutch Brake Cross Rod	1
4	212-0005	Valve Support	1
5	900-1004	Connecting Link, #50	1
6	900-8000	Valve	1
7	900-8070	Lift Cylinder	1
8	900-8072	Housing, Oil Filter	1
9	900-8073	Element, Oil Filter	1
10	900-8103	Hose, 3/8" ID x 26" Long	2
11	900-8106	Hose, 3/8" ID x 31" Long	1
12	900-8101	Hose, 3/8" ID x 20" Long	1
13	900-8102	Hose, 3/8" ID x 13" Long	1

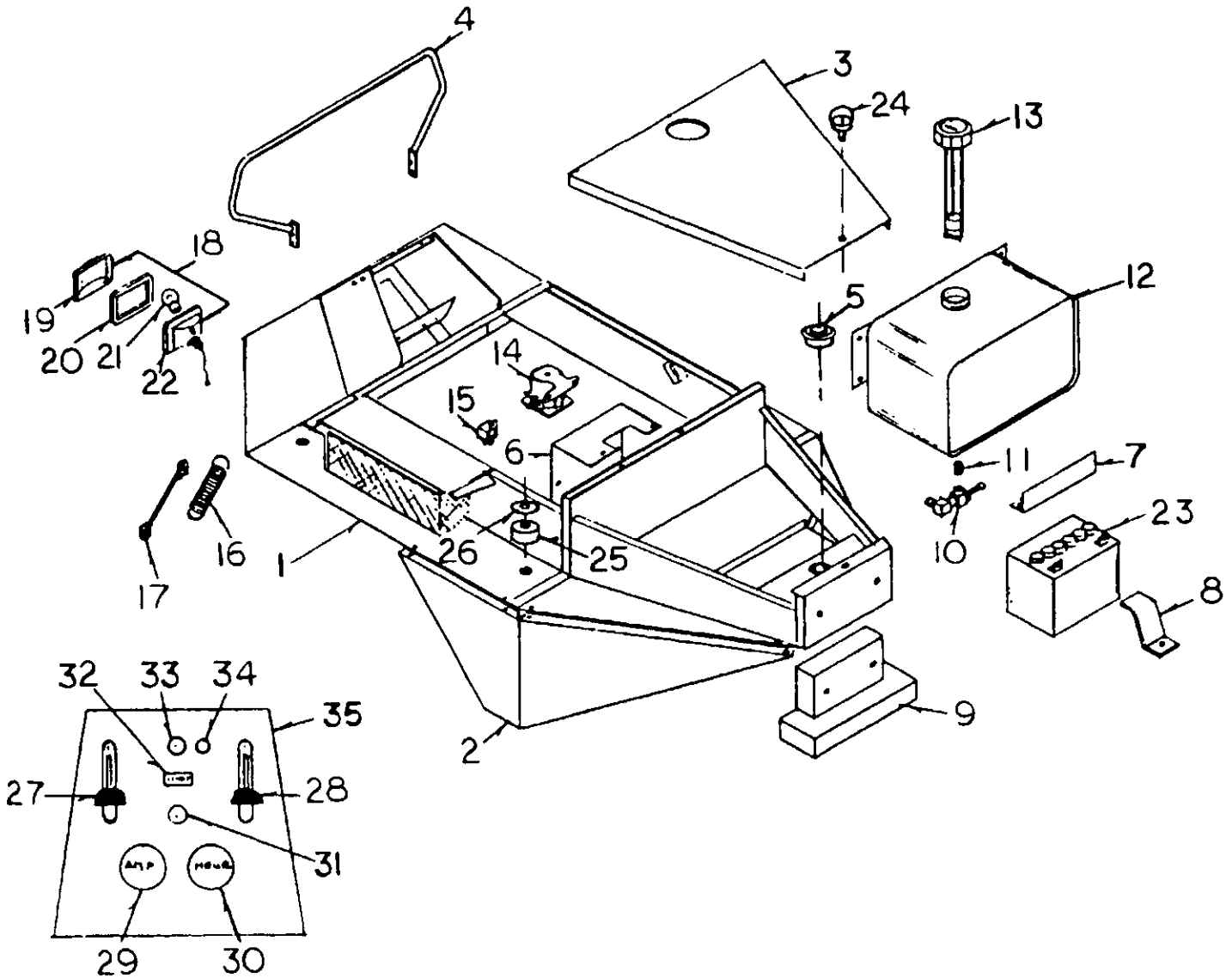
Item	Part No.	Description	Qty.
14	900-8105	Hose, 3/8" ID x 11.5" Long	1
15	900-8104	Hose, 3/8" ID x 21" Long	1
16	900-8116	Male O-ring, 90° Male Tube Adp.	1
17	900-8094	Male O-ring, Male Tube Adp.	3
18	900-8097	Male O-ring, 90° Male Tube Adp.	1
19	900-8115	Male O-ring, Male Tube Adp.	1
20	900-8121	Male Tube, 90° 37° Female Swivel Adp.	1
21	900-8095	Male Tube, Male O-ring Tee	2



BODY ASSEMBLY

FR1800

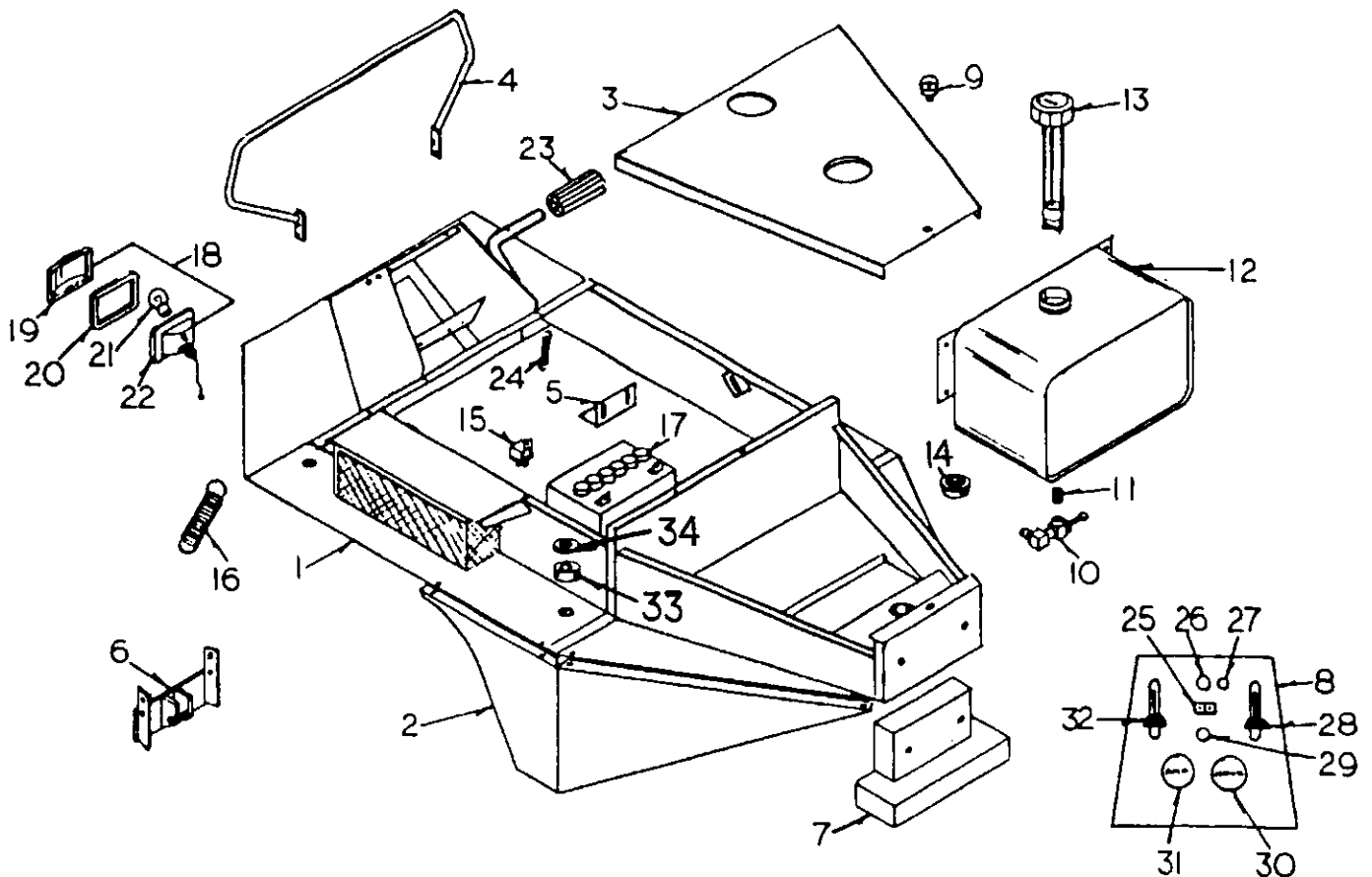
Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	201-0000	Body	1	18	900-2014	Light Assembly	2
2	201-0017	Fender, RH (Shown)	1	19	900-2024	Lens	2
	201-0016	Fender, LH	1	20	900-2068	Gasket	4
3	201-0009	Back Cover	1	21	900-2025	Bulb	2
4	200-0007	Guard Rail	1	22	900-2026	Lamp	2
5	900-3501	Bearing	2	23	900-2060	Battery	1
6	213-0001	Oil Tank Mount	1	24	900-5522	Dzus Fastener	1
7	200-0019	Hold Down	1	25	900-5509	Rubber Body Mount	8
8	200-0021	Battery Post Protector	1	26	200-0015	Body Mount Washer	4
9	230-0002	Tail Weight	1	27	900-5508	Choke Cable	1
10	900-5513	Shut-off Valve, Fuel	1	28	900-5605	Throttle Cable	1
11	900-5706	Nipple, 1/8"	1	29	900-2002	Amp Meter	1
12	900-5533	Fuel Tank	1	30	900-2023	Hour Meter	1
13	900-5561	Fuel Tank Cap w/Gauge	1	31	900-2003	Ignition Switch	1
14	900-2005	Solenoid	1	32	900-2027	Light Switch	1
15	900-2037	Relay	1	33	900-2028	Clutch Switch	1
16	900-5516	Deck Spring	2	34	900-2041	Oil Light	1
17	900-5518	Deck Lift Cable	2	35	201-0006	Dash Board	1



BODY ASSEMBLY

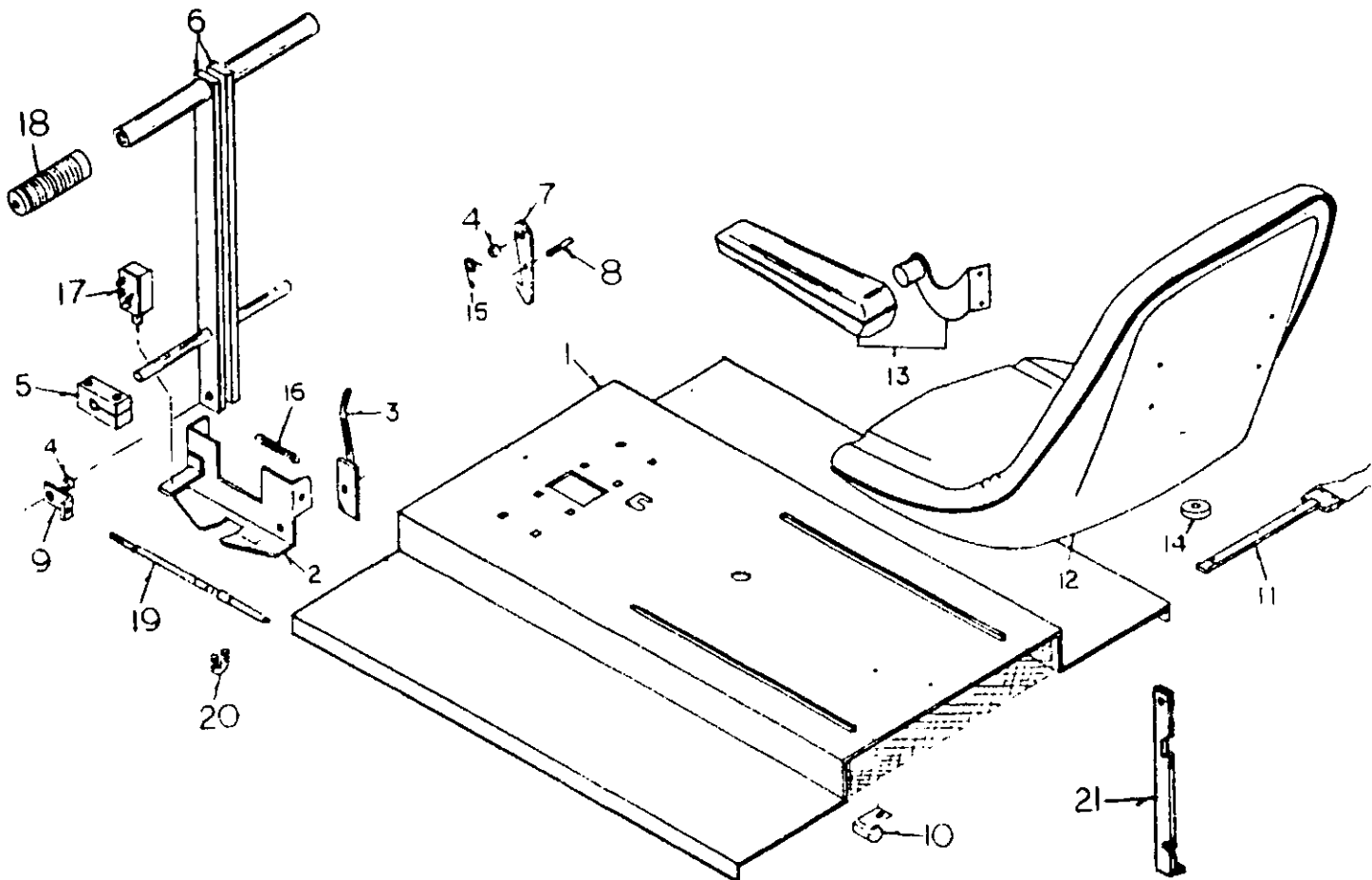
(FR2000C)

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	212-000C	Body	1	18	900-2014	Light Assembly	2
2	201-0012	Fender, LH (Shown)	1	19	900-2024	Lens	2
	201-0013	Fender, RH	1	20	900-2068	Gasket	4
3	212-0001	Back Cover	1	21	900-2025	Bulb	2
4	200-0007	Guard Rail	1	22	900-2026	Lamp	2
5	212-0006	Hold Down	1	23	900-5563	Brake Pedal Pad	1
6	212-0004	Top Cylinder Mount	1	24	900-5562	Spring	1
7	230-0002	Tail Weight	1	25	900-2027	Light Switch	1
8	201-0006	Dash Board	1	26	900-2028	Clutch Switch	1
9	900-5522	Dzus Fastener	1	27	900-2041	Oil Light	1
10	900-5513	Shut-off Valve	1	28	900-5605	Throttle Cable	1
11	900-5706	Nipple, 1/8"	1	29	900-2003	Ignition Switch	1
12	900-5533	Fuel Tank	1	30	900-2023	Hour Meter	1
13	900-5561	Fuel Tank Cap w/Gauge	1	31	900-2002	Amp Meter	1
14	900-3501	Bearing	2	32	900-5508	Choke Cable	1
15	900-2037	Relay	3	33	900-5509	Rubber Body Mount	8
16	900-5516	Deck Spring	2	34	200-0015	Body Mount Washer	4
17	900-2026	Battery	1				



SEAT LID ASSEMBLY

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	201-0004	Seat Lid	1	12	900-5597	Seat	1
2	201-0010	Lever Lock	1	13		Arm Rest Kit (Optional)	
3	200-0012	Latch, Lever Lock	1	14	900-5523	Seat Spacer	4
4	200-0014	Bushing	5	15	900-5700	Seat Lid Latch Spring	1
5	200-0010	Bearing Block	4	16	900-5501	Lever Lock Spring	1
6	200-0009	Steering Lever	2	17	900-2029	Safety Switch	1
7	201-0015	Seat Lid Latch	1	18	900-5500	Handle Grip	2
8	201-0014	Seat Lid Latch Bolt	1	19	900-5502	Steering Cable (1800)	2
9	200-0013	Steering Cable End (1800)	4		900-5717	Steering Cable (2000)	2
	140-0023	Steering Cable End (2000)	4	20	900-5503	Steering Cable Clamp (1800)	4
10	201-0018	Seat Lid Harness Retainer	1		900-5625	Steering Cable Clamp (2000)	4
11	900-2001	Seat Switch	1	21	200-0008	Lid Prop	1



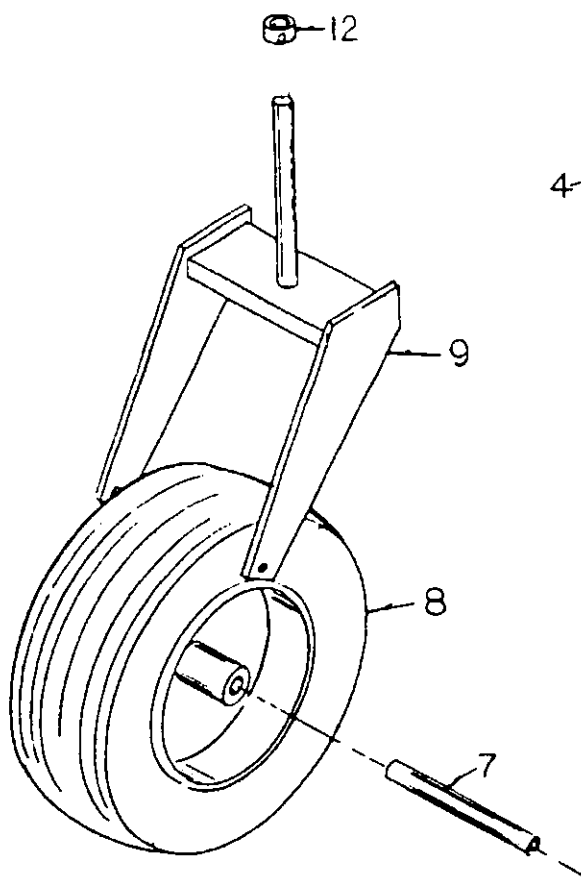
SINGLE & DUAL TAIL WHEEL ASSEMBLY

DUAL TAIL WHEEL

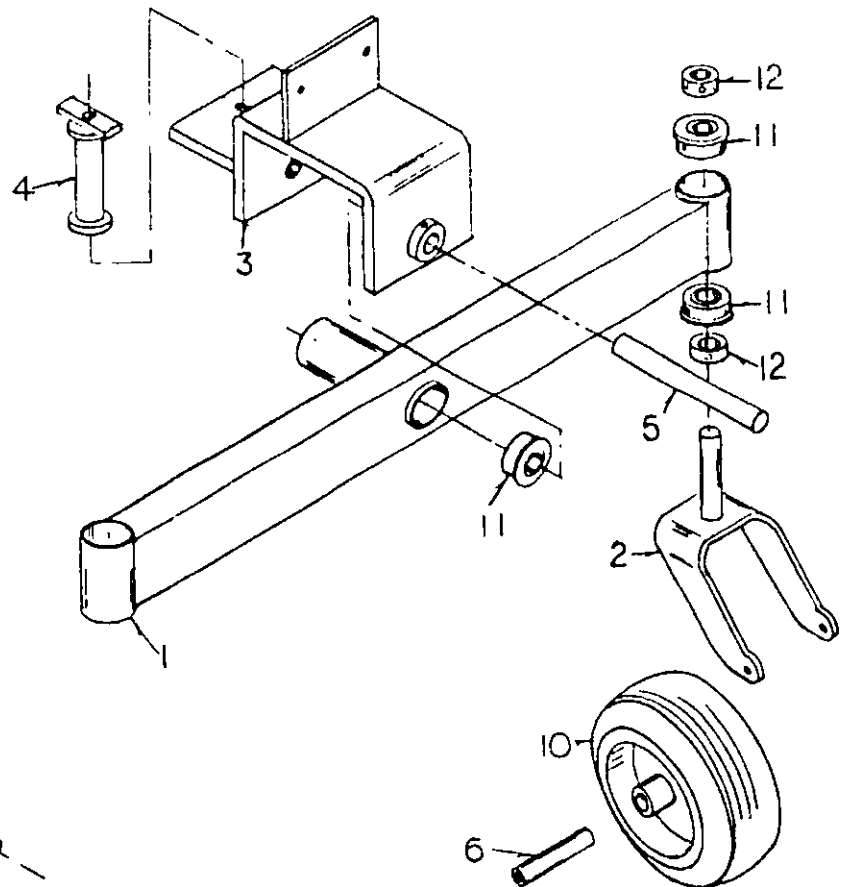
SINGLE TAIL WHEEL

Item	Part No.	Description	Qty.
1	230-0004	Dual Tail Wheel Axle	1
2	230-0007	Dual Tail Wheel Fork	2
3	230-0005	Dual Tail Wheel Mount	1
4	230-0006	Dual Tail Wheel Tube Block	1
5	230-0008	Pivot Axle	1
6	200-0017	Tail Wheel Axle	2
10	900-4022	Tail Wheel Assembly	2
	900-3505	Bearing, Wheel Assembly	4
11	900-3501	Bearing, 1"	6
12	900-5510	Set Collar, 1"	4

Item	Part No.	Description	Qty.
7	230-0017	Axle	1
8	900-4017	Tail Wheel Assembly	1
	900-3505	Bearing, Wheel Assembly	2
	900-4018	Tire, 16 x 6.50-8	
	900-4019	Rim, 8"	
9	230-0001	Tail Wheel Fork	1
12	900-5510	Set Collar, 1"	2



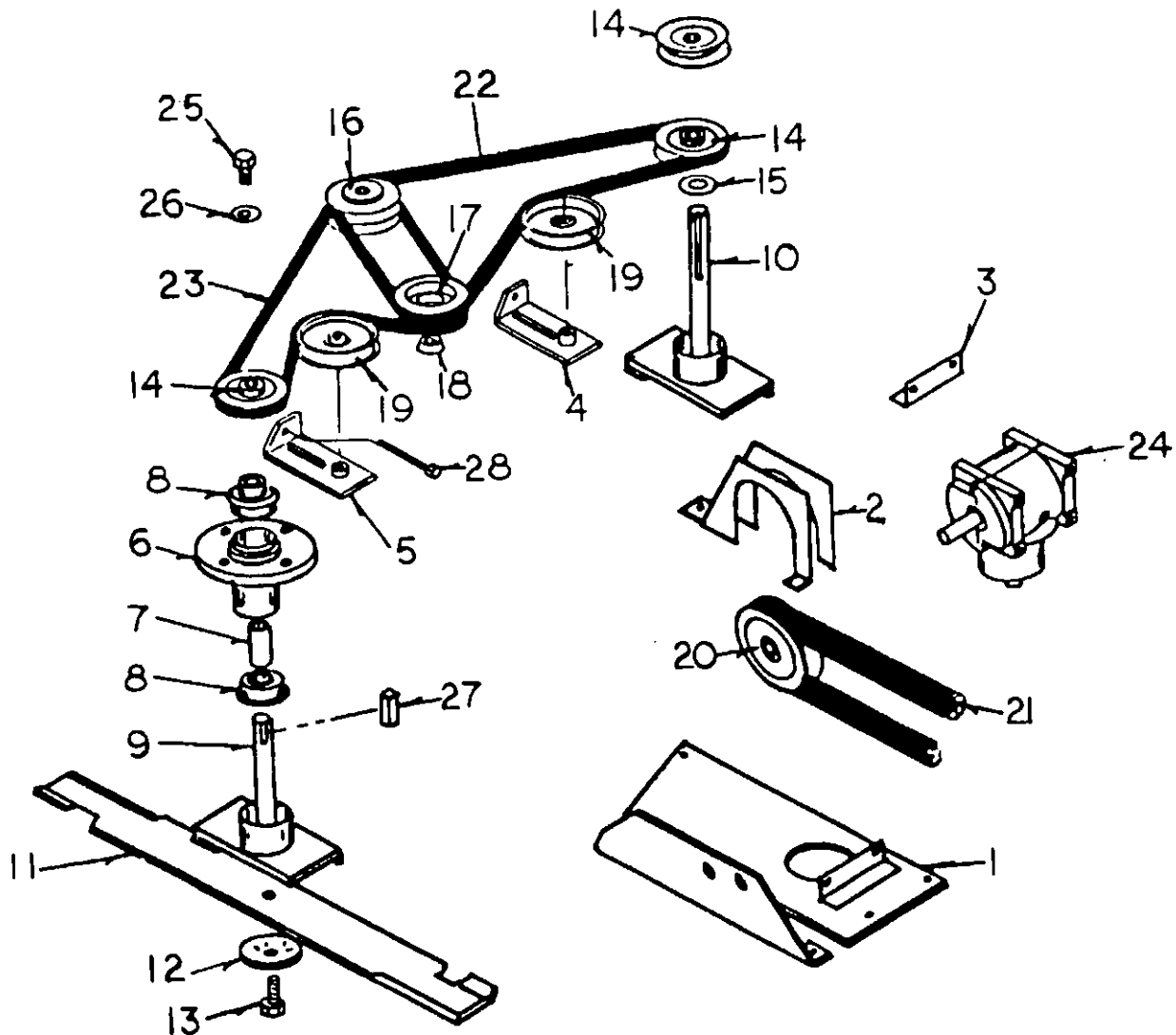
SINGLE TAIL WHEEL



DUAL TAIL WHEEL

42" DECK DRIVE

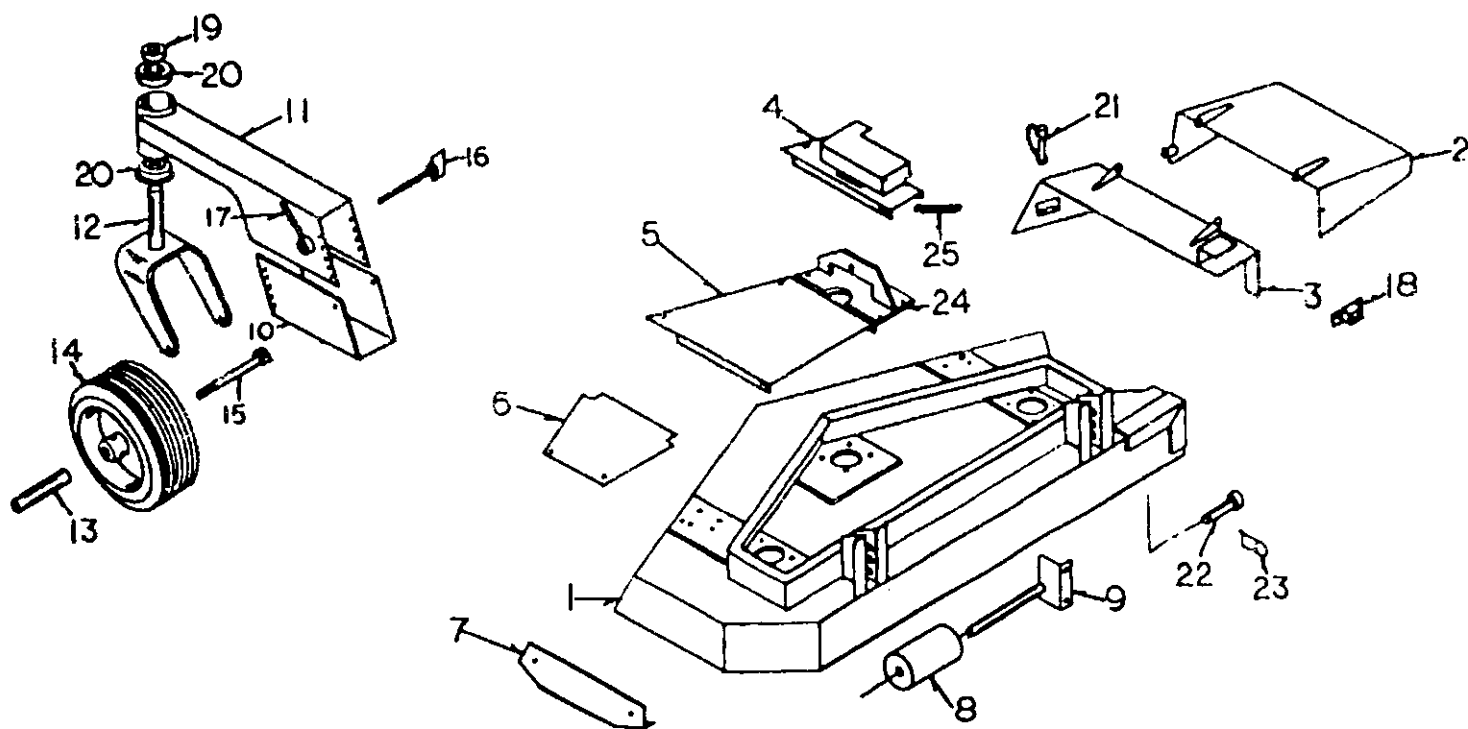
Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	311-0001	Gearbox Mount	1	16	900-2516	Spindle Pulley, Double A	1
2	311-0002	Belt Guard (1800)	1	17	900-2515	Gearbox Pulley, Out Put	1
	330-0030	Belt Guard (2000)	1	18		Hub (Included w/8002515)	1
3	310-0006	Gearbox Mount Angle	1	19	900-2518	Idler Pulley	2
4	300-0029	Belt Tightener	1	20	900-2525	Gearbox Pulley, In Put (1800)	1
5	300-0030	Belt Tightener	1		900-2543	Gearbox Pulley, In Put (2000)	1
6	300-0025	Spindle Housing	3	21	900-3004	Deck Drive Belt (1800)	1
7	300-0027	Spindle Spacer	3		900-3023	Deck Drive Belt (2000)	2
8	900-3506	Spindle Bearing	6	22	900-3006	Deck Belt	1
9	300-0026	Spindle Shaft	2	23	900-3007	Deck Beitt	1
10	300-0033	Spindle Shaft	1	24	900-5535	Gearbox	1
11	900-5530	Blade	3	25	900-6053	Hex Bolt, 5/6-24 x 3/4"	3
12	900-5534	Blade Washer	3	26	300-0017	Washer, 5/16", 10 Ga.	3
13	900-6080	Hex Bolt, 3/8-24 x 1 1/4"	3	27	300-0021	Key Stock, 3/16"	6
14	900-2507	Spindle Pulley	3	28	900-6034	Adjustment Bolt	2
15	900-6002	Spacer Washer	9				



42" DECK PARTS

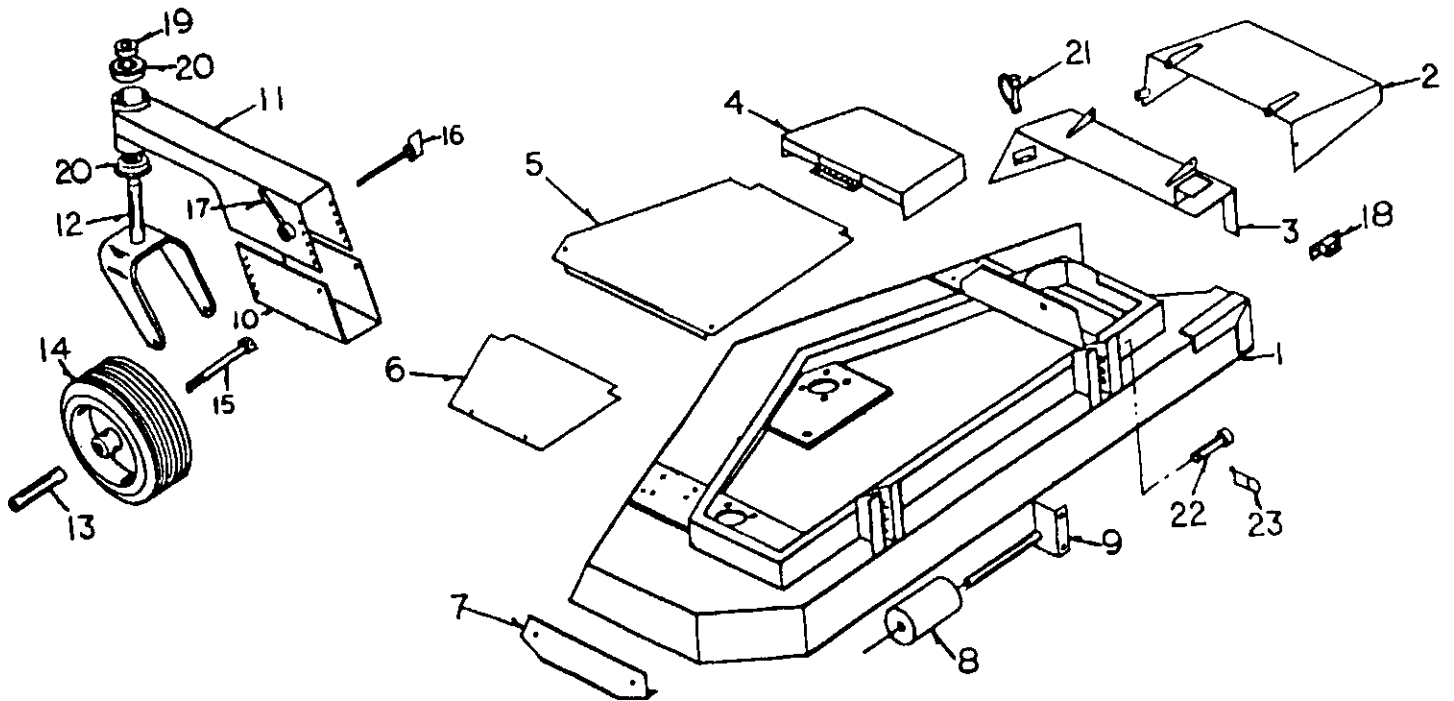
41

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	310-0000	Deck	1		900-4006	Fire, 11 x 4.00-5	
2	320-0015	Foot Guard	1		900-4005	Rim, 5"	
3	320-0016	Foot Guard Mount	1		900-3505	Bearing, Wheel Assembly	
4	310-0002	Pulley Cover	1	15	900-6133	Axle Bolt	2
5	310-0003	Center Cover	1	16	900-6096	Wing Bolt	4
6	300-0001	Cover, LH	1	17	900-6092	Handle Nut	4
7	310-0007	Shoe, LH	1	18	900-2044	10 Amp Circuit Breaker	1
8	900-5559	Anti-scalp Roller	1	19	900-5510	Set Collar, 1"	2
9	300-0038	Shaft & Bracket	1	20	900-3501	Bearing, 1"	4
10	300-0044	Gauge Wheel Mount Bracket	2	21	900-5615	Fast-tatch Pin	1
11	300-0043	Gauge Wheel Mount	2	22	900-5519	Deck Pin	2
12	330-0007	Fork	2	23	900-5520	Hair Pin Cotter	2
13	200-0017	Axle	2	24	310-0004	Deck Mount	1
14	900-4004	Gauge Wheel Assembly	2	25	900-5562	Spring	1



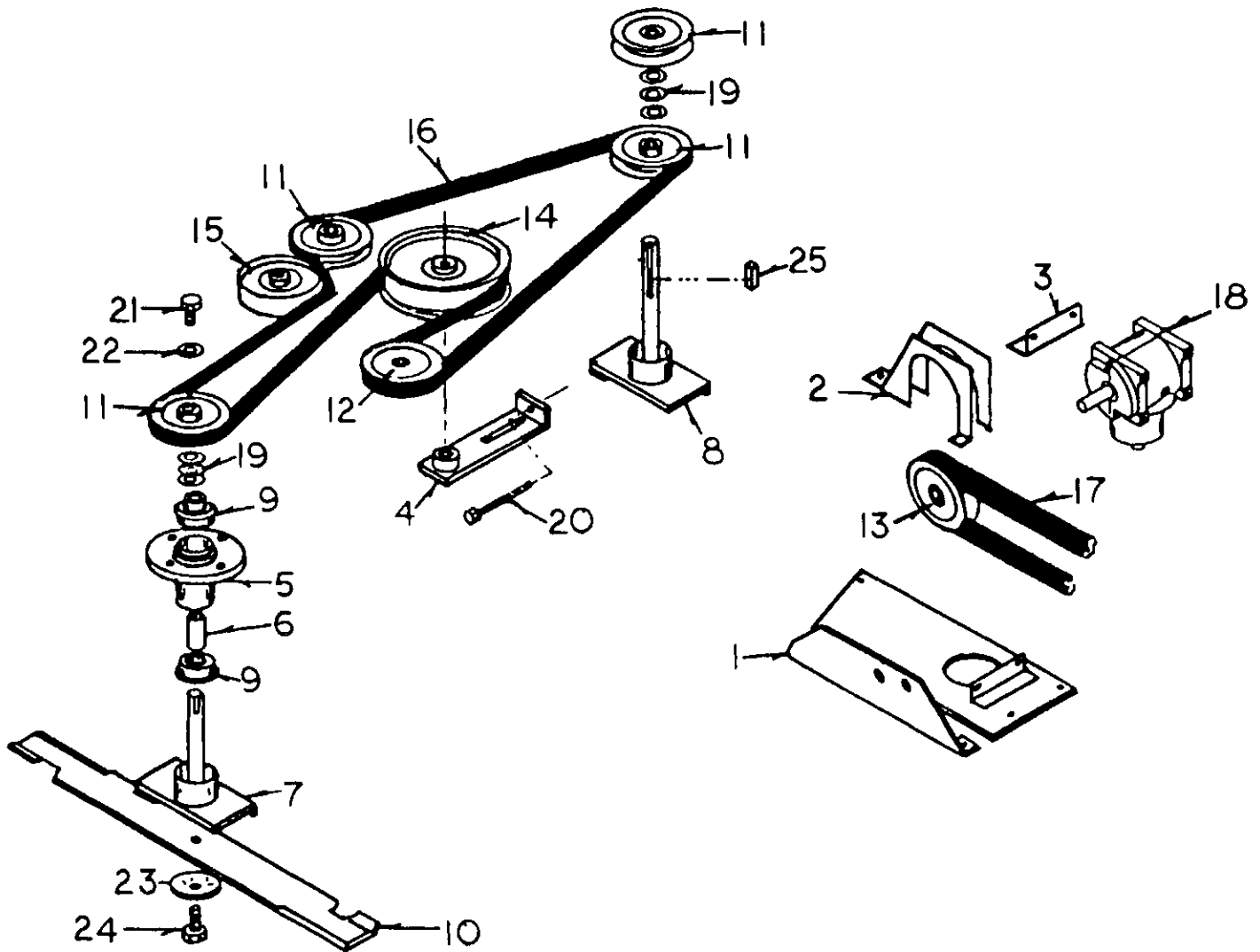
52" DECK PARTS

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	320-0000	Deck, 52"	1	14	900-4004	Gauge Wheel Assembly	2
2	320-0015	Foot Guard	1		900-4006	Tire, 11 x 4.00-5	
3	320-0016	Foot Guard Mount	1		900-4005	Rim, 5"	
4	320-0011	Pulley Cover	1		900-3505	Bearing, Wheel Assembly	
5	320-0002	Center Cover	1	15	900-6133	Axle Bolt	2
6	320-0001	Cover, LH	1	16	900-6096	Wing Bolt	4
7	320-0014	Shoe, LH	1	17	900-6092	Handle Nut	4
8	900-5559	Anti-scalp Roller	1	18	900-2044	10 Amp Circuit Breaker	1
9	300-0038	Shaft & Bracket	1	19	900-5510	Set Collar, 1"	2
10	300-0044	Gauge Wheel Mount Bracket	2	20	900-3501	Bearing, 1"	4
11	300-0043	Gauge Wheel Mount	2	21	900-5615	Fast-tatch Pin	1
12	330-0007	Fork	2	22	900-5519	Deck Pin	2
13	200-0017	Axle	2	23	900-5520	Hair Pin Cotter	2



62" DECK DRIVE

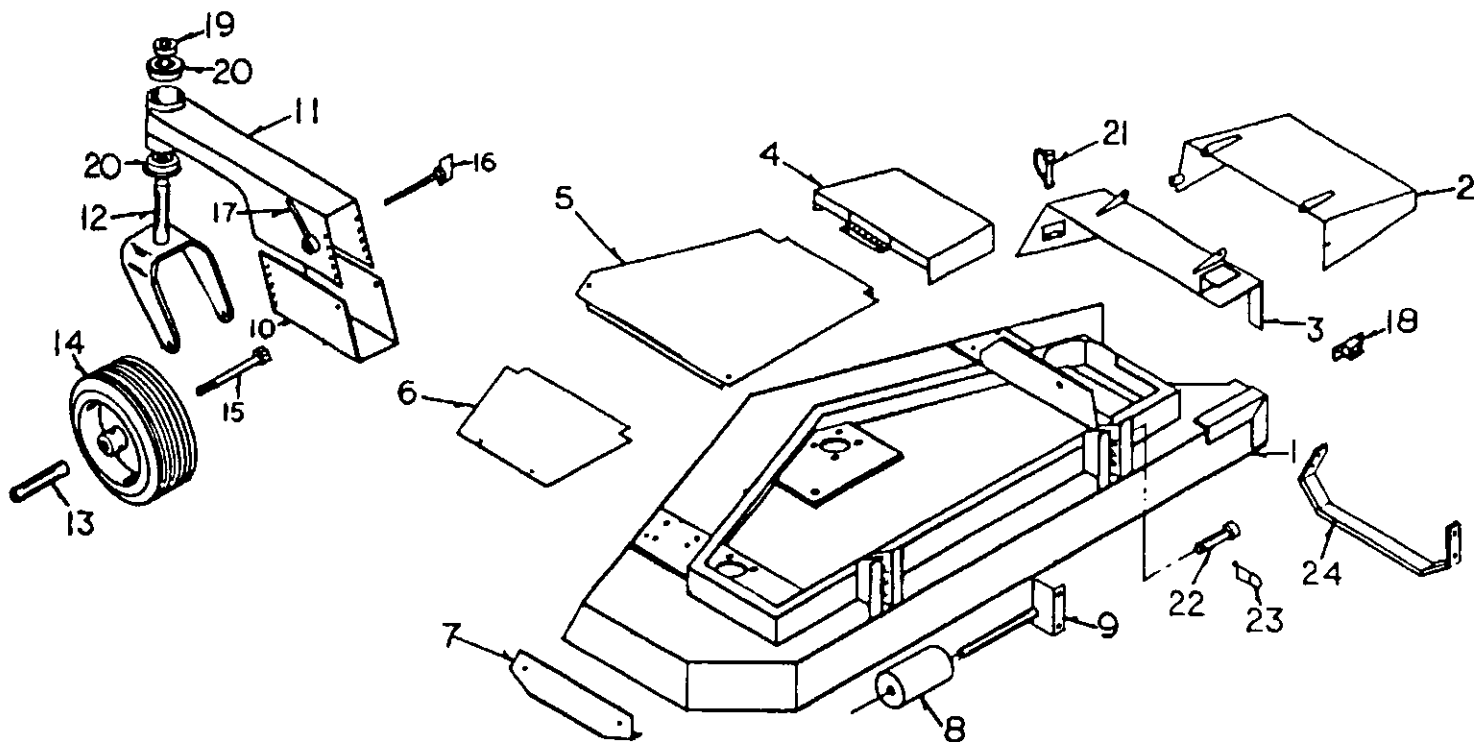
Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	331-0004	Gearbox Mount	1	900-2543	Gearbox Pulley, In Put (2000)	1	
2	311-0002	Belt Guard (1800)	1	14	900-2521	Idler Pulley, Large	1
	330-0030	Belt Guard (2000)	1	15	900-2522	Idler Pulley, Small	1
3	310-0006	Gearbox Mount Angle	1	16	900-3008B	Deck Belt	1
4	330-0012	Belt Tightener	1	17	900-3004	Deck Drive Belt (1800)	1
5	300-0031	Spindle Housing	3		900-3023	Deck Drive Belt (2000)	2
6	300-0034	Spindle Spacer	3	18	900-5535	Gearbox	1
7	300-0032	Spindle Shaft	2	19	900-6002	Spacer Washer	12
8	300-0040	Spindle Shaft, Long	1	20	900-6034	Adjustment Bolt	1
9	900-3506	Spindle Bearing	6	21	900-6053	Hex Bolt, 5/16-24 x 3/4"	3
10	900-5529	Blade	3	22	300-0017	Washer, 5/16", 10 Ga.	3
11	900-2512	Spindle Pulley	4	23	900-5534	Blade Washer	3
12	900-2510	Gearbox Pulley, Out Put	1	24	900-6080	Hex Bolt, 3/8-24 x 1 1/4"	3
13	900-2525	Gearbox Pulley, In Put (1800)	1	25	300-0021	Key Stock, 3/16"	6



62" DECK PARTS

45

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	330-0000	62" Deck	1		900-4006	Tire, 11 x 4.00-5	
2	330-0027	Foot Guard	1		900-4005	Rim, 5"	
3	330-0028	Foot Guard Mount	1		900-3505	Bearing, Wheel Assembly	
4	330-0025	Pulley Cover	1	15	900-6133	Axle Bolt	2
5	330-0002	Center Cover	1		900-6096	Wing Bolt	4
6	330-0001	Cover, LH	1	17	900-6092	Handle Nut	4
7	330-0008	Shoe, LH	1	18	900-2044	10 Amp Circuit Breaker	1
8	900-5559	Anti-scalp Roller	1	19	900-5510	Set Collar, 1"	2
9	300-0038	Shaft & Bracket	1	20	900-3501	Bearing, 1"	4
10	300-0044	Gauge Wheel Mount Bracket	2	21	900-5615	Fas-tach Pin	1
11	300-0043	Gauge Wheel Mount	2	22	900-5519	Deck Pin	2
12	330-0007	Fork	2	23	900-5520	Hair Pin Cotter	2
13	200-0017	Axle	2	24	330-0011	Shoe, RH	1
14	900-4004	Gauge Wheel Assembly	2				



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WHITE



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