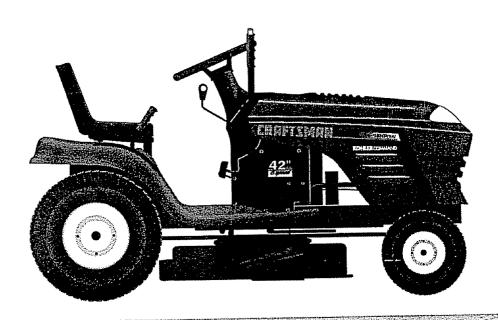
SEARS

MODEL NUMBER 917.258543 OWNER'S MANUAL

- Assembly
- Operation
- Customer Responsibilities
- Service and Adjustments
- Repair Parts







This product has a low emission engine which operates differently from previously built engines. Before you start the engine, read and understand this Owner's Manual.

GAUTION: Read and follow all safety rules and instructions before operating this equipment.

FOR CONSUMER ASSISTANCE HOT LINE, CALL THIS TOLL FREE NUMBER: 1-800-659-5917

# A

## **SAFETY RULES**

## Safe Operation Practices for Ride-On Mowers



IMPORTANT: THIS CUTTING MACHINE IS CAPABLE OF AMPUTATING HANDS AND FEET AND THROWING OBJECTS. FAILURE TO OBSERVE THE FOLLOWING SAFETY INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH.

#### GENERAL OPERATION

- Read, understand, and follow all instructions in the manual and on the machine before starting.
- Only allow responsible adults, who are familiar with the instructions, to operate the machine.
- Clear the area of objects such as rocks, toys, wire, etc., which could be picked up and thrown by the blade.
- Be sure the area is clear of other people before mowing. Stop machine if anyone enters the area.
- Never carry passengers.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- Be aware of the mower discharge direction and do not point it at anyone. Do not operate the mower without either the entire grass catcher or the guard in place.
- · Slow down before turning.
- Never leave a running machine unattended. Always turn off blades, set parking brake, stop engine, and remove keys before dismounting.
- Turn off blades when not mowing.
- Stop engine before removing grass catcher or unclogging chute
- Mow only in daylight or good artificial light.
- Do not operate the machine while under the influence of alcohol or drugs.
- Watch for traffic when operating near or crossing roadways.
- Use extra care when loading or unloading the machine into a trailer or truck.

#### II. SLOPE OPERATION

Slopes are a major factor related to loss-of-control and tipover accidents, which can result in severe injury or death. All slopes require extra caution. If you cannot back up the slope or if you feel uneasy on it, do not mow it.

#### DO:

- Mow up and down slopes, not across.
- Remove obstacles such as rocks, tree limbs, etc.
- Watch for holes, ruts, or bumps. Uneven terrain could overturn the machine Tall grass can hide obstacles.
- Use slow speed. Choose a low gear so that you will not have to stop or shift while on the slope.
- Follow the manufacturer's recommendations for wheel weights or counterweights to improve stability.
- Use extra care with grass catchers or other attachments.
   These can change the stability of the machine.
- Keep all movement on the slopes slow and gradual. Do not make sudden changes in speed or direction.
- Avoid starting or stopping on a slope. If tires lose traction, disengage the blades and proceed slowly straight down the slope.

#### DO NOT:

- Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.
- Do not mow near drop-offs, ditches, or embankments. The mower could suddenly turn over if a wheel is over the edge of a clift or ditch, or if an edge caves in.
- Do not mow on wet grass. Reduced traction could cause sliding.
- Do not try to stabilize the machine by putting your foot on the ground.
- Do not use grass catcher on steep slopes

#### III. CHILDREN

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the mowing activity. *Never* assume that children will remain where you last saw them.

- Keep children out of the mowing area and under the watchful care of another responsible adult.
- · Be alert and turn machine off if children enter the area.
- Before and when backing, look behind and down for small children
- Never carry children. They may fall off and be seriously injured or interfere with safe machine operation.
- Never allow children to operate the machine.
- Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

#### IV. SERVICE

- Use extra care in handling gasoline and other fuels. They are flammable and vapors are explosive.
  - Use only an approved container.
  - Never remove gas cap or add fuel with the engine running. Allow engine to cool before refueling. Do not smake
  - Never refuel the machine indoors.
  - Never store the machine or fuel container inside where there is an open flame, such as a water heater.
- Never run a machine inside a closed area.
- Keep nuts and bolts, especially blade attachment bolts, tight and keep equipment in good condition.
- Never tamper with safety devices. Check their proper operation regularly.
- Keep machine free of grass, leaves, or other debris build-up. Clean oil or fuel spillage. Allow machine to cool before storing.
- Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.
- Never make adjustments or repairs with the engine running.
- Grass catcher components are subject to wear, damage, and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check components and replace with manufacturer's recommended parts, when necessary.
- Mower blades are sharp and can cut. Wrap the blade(s) or wear gloves, and use extra caution when servicing them.
- Check brake operation frequently. Adjust and service as required.



Look for this symbol to point out important safety precautions. It means CAUTION!!! BECOME ALERT!!! YOUR SAFETY IS INVOLVED.



CAUTION: Always disconnect spark plug wire and place wire where it cannot contact spark plug in order to prevent accidental starting when setting up, transporting, adjusting or making repairs.

# A WARNING A

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

**CONGRATULATIONS** on your purchase of a Sears Tractor. It has been designed, engineered and manufactured to give you the best possible dependability and performance.

Should you experience any problem you cannot easily remedy, please contact your nearest Sears Authorized Service Center/Department. We have competent, well-trained technicians and the proper tools to service or repair this tractor.

Please read and retain this manual. The instructions will enable you to assemble and maintain your tractor properly. Always observe the "SAFETY RULES".

MODEL NUMBER	917.258543
SERIAL NUMBER	
DATEOFPUR	CHASE
1	ND SERIAL NUMBERS WILL BE FOUND UNDER THE SEAT.
DATE OF PUR	RECORD BOTH SERIAL NUMBER AND RCHASE AND KEEP IN A SAFE PLACE REFERENCE.

#### MAINTENANCE AGREEMENT

A Sears Maintenance Agreement is available on this product. Contact your nearest Sears store for details.

### **CUSTOMER RESPONSIBILITIES**

- Read and observe the safety rules.
- Follow a regular schedule in maintaining, caring for and using your tractor.
- Follow the instructions under "Customer Responsibilities" and "Storage" sections of this owner's manual.

### PRODUCT SPECIFICATIONS

HORSEPOWER:	15.0
GASOLINE CAPACITY AND TYPE:	1.25 GALLONS UNLEADED REGULAR
OIL TYPE (API-SF/SG/SH):	SAE 10W30 (above 32°F) SAE 5W-30 (below 32°F)
OIL CAPACITY:	W/ FILTER: 4.0 PINTS W/O FILTER: 3.5 PINTS
SPARK PLUG: (GAP: .040")	CHAMPION RC12YC
VALVE CLEARANCE:	NOT ADJUSTABLE
GROUND SPEED (MPH):	FORWARD:  1st 1.1 2nd 1.5 3rd 2.3 4th 3.5 5th 4.4 6th 5.7 REVERSE: 1.7
TIRE PRESSURE:	FRONT: 14 PSI REAR: 10 PSI
CHARGING SYSTEM:	3 AMPS BATTERY 5 AMPS HEADLIGHTS
BATTERY:	AMP/HR: 30 MIN, CCA: 240 CASE SIZE: U1R
BLADE BOLT TORQUE:	30-35 FT. LBS.

WARNING: This tractor 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 for the muffler is available through your nearest Sears Authorized Service Center/ Department (See REPAIR PARTS section of this manual).

#### LIMITED TWO YEAR WARRANTY ON CRAFTSMAN RIDING EQUIPMENT

For two (2) years from the date of purchase, if this Craftsman Riding Equipment is maintained, lubricated and tuned up according to the instructions in the owner's manual, Sears will repair or replace, free of charge, any parts found to be defective in material or workmanship.

This Warranty does not cover:

- Expendable items which become worn during normal use, such as blades, spark plugs, air cleaners, belts, etc.
- Tire replacement or repair caused by punctures from outside objects, such as nails, thorns, stumps, or glass.
- Repairs necessary because of operator abuse, negligence, improper storage or accident or the failure to maintain the
  equipment according to the instructions contained in the owner's manual.
- Riding equipment used for commercial or rental purposes.

#### LIMITED 90 DAY WARRANTY ON BATTERY

For ninety (90) days from date of purchase, if any battery included with this riding equipment proves defective in material or workmanship and our testing determines the battery will not hold a charge, Sears will replace the battery at no charge.

IN-HOME WARRANTY SERVICE ON YOUR CRAFTSMAN RIDING EQUIPMENT IS AVAILABLE AT NO-CHARGE FOR 30 DAYS FROM THE DATE OF PURCHASE. PLEASE CONTACT YOUR NEAREST SERVICE CENTER. AFTER 30 DAYS FROM THE DATE OF PURCHASE, WARRANTY SERVICE IS AVAILABLE BY TAKING YOUR CRAFTSMAN RIDING EQUIPMENT TO YOUR NEAREST SEARS SERVICE CENTER. (IN-HOME WARRANTY SERVICE WILL STILL BE AVAILABLE AFTER 30 DAYS FROM THE DATE OF PURCHASE BUT A STANDARD TRIP CHARGE WILL APPLY.) THIS WARRANTY APPLIES ONLY WHILE THIS PRODUCT IS IN THE UNITED STATES.

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

SEARS, ROEBUCK AND CO., D/817 WA, HOFFMAN ESTATES, IL 60179

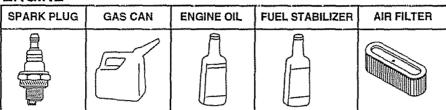
# **TABLE OF CONTENTS**

SAFETY RULES		MAINTENANCE S	CHEDULE	15
PRODUCT SPECIFICATIONS	3 9	SERVICE AND A	DJUSTMENTS	20-2
CUSTOMER RESPONSIBILITIES	3, 15-19	STORAGE		
WARRANTY	**************************************	rroubleshod:	TING	27-28
TABLE OF CONTENTS	4	REPAIR PARTS -	TRACTOR	30-47
ASSEMBLY	7-9 F	REPAIR PARTS -	ENGINEBA	48-53
OPERATION	10-14 F	PARTS ORDERIN	IG/SERVICE BA	CK PAGE
INDEX				
	W			
Accessories5	Engine:		Operation	
	Air Filter		Operating Mower	13
Adjustments:	Air Screen		Options:	
	Cooling Fins, Engine		Accessories	
Carburetor25	Oil Change		Spark Arrester	3,40
Mower:	Oil Level		P	
Front-To-Back	Oil Type		Parking Brake	
Side-To-Side	Preparation		Parts Bag	
	Repair Parts		Parts, Replacement/Repair	
Air Filter, Engine 18	Starting		Product Specifications	8
Air Screen, Engine	Storage	,	R	
Assembly7-9	F			
В	Filters:		Repair Parts	30-47
Battery:	Air		S	
Charging7	Fuel	yubanusususususus 19	Safety Rules	2
Cleaning	Fuel:		Seat,	
Starting with Weak Battery 23	Type		Service and Adjustments	
Storage	Storage		Brake	
Belts:	Fuse		Carburetor	
Motion Drive	G		Fuse	
Removal/Replacement 22	Gauge Wheels		Hood Removal/Installation	n 24
Mower Blade Drive	Н		Motion Drive Belt	
Removal/Replacement 22	Hood Removal/Installation	n 24	Removal/Replacemen	t, 22
Blade:	L		Mower Blade Drive Belt	
Sharpening	Leveling Mower Deck	21	Removal/Replacemen	t22
Replacement	Lubrication Chart		Mower Adjustment:	
Brake Adjustment	M		Front-to-Back	
C	Maintenance Schedule	15	Side-to-Side	
—	Mower:	eruserationarius and I to	Mower Installation	
Carburetor Adjustment	Adjustment, Front-to-	-Back 21	Mower Removal	20
Controls, Tractor 11	Adjustment, Side-to-		Tire Care	
Customer Responsibilities 15-19 Engine:	Blade Sharpening		Slope Guide Sheet	
Air Filter18	Blade Replacement .	. 16	Spark Plugs	
Air Screen, Engine	Cutting Height	12	Specifications	
	Installation	20	Starting the Engine	13-14
Battery	Operation		Steering Wheel	7,23
	Removal	20	Stopping the Tractor	
Engine Oil17 Fuel Filter19	Mowing Tips		Storage	26
Spark Plugs	Muffler		T	
Tractor:	Spark Arrester		Throttle Control Cable Adjustn	nent 25
Blades16	- Mulcher Plate			
Lubrication Chart15	O		Tires	27-28
Maintenance Schedule 15	Oil:		Transaxle Repair Parts.	
Tire Care	Cold Weather Condit	ions 14 17	W	9426369 FW TF
Cutting Height, Mower	Engine		Warranty	3
E	Storage		Wiring Diagram	30
Electrical:			Wiring Schematic	
Interlocks and Relays24			T F TO THE WOOD OF THE STATE OF	,01,500,000, <b>15 500</b>
Schematic				
Wiring Diagram				
Trees and the second contract of the second c				

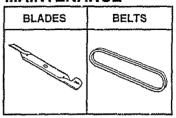
# **ACCESSORIES AND ATTACHMENTS**

These accessories and attachments were available through most Sears retail outlets and service centers when the tractor was purchased. Most Sears stores can order these items for you when you provide the model number of your tractor.

#### **ENGINE**



### MAINTENANCE



#### **PERFORMANCE**

Sears offers a wide variety of attachments that fit your tractor. Many of these are listed below with brief explanations of how they can help you. This list was current at the time of publication; however, it may change in future years - more attachments may be added, changes may be made in these attachments, or some may no longer be available or fit your model. Contact your nearest Sears store for the accessories and attachments that are available for your tractor.

Most of these attachments do not require additional hitches or conversion kits (those that do are indicated) and are designed for easy attaching and detaching.

**AERATOR** promotes deep root growth for a healthy lawn. Tapered 2.5-inch steel spikes mounted on 10-inch diameter discs puncture holes in soil at close intervals to let moisture soak in. Steel weight tray for increased penetration.

BAGGER lets you collect grass clippings and leaves for a healthier, neater looking lawn. Two Permanex containers hold 30-gallon plastic bags.

BUMPER protects front end of tractor from damage.

CARTS make hauling easy. Variety of sizes available, plus accessories such as side panel kits, tool caddy, cart cover, protective mat and dolly.

CORING AERATOR takes small plugs out of soil to allow moisture and nutrients to reach grass roots. 36-inch swath. 24 hardened steel coring tips. 150 lb. capacity weight tray.

EASY OIL DRAIN VALVE makes oil changes easier, faster.

FRONT NOSE ROLLER canters in front of mower deck to reduce chances of "scalping" on uneven terrain.

GANG HITCH lets you tow 2 or 3 pull-behind attachments at once, such as sweepers, dethatchers, aerators (not for use with rollers, carts or other heavy attachments).

**GAUGE WHEELS** on both sides of the mower deck reduce chances of "scalping" on uneven terrain. For mower decks not so equipped.

MULCH RAKE/DETHATCHER loosens soil and flips thatch and matted leaves to lawn surface for easy pickup. Twenty spring tine teeth. Useful to prepare bare areas for seeding. Available for front or rear mounting. HIGH PERFORMANCE REEL-ACTION SPRING TINE DETHATCHER covers 36-inch wide path and tosses thatch into large hopper. Mounts behind tractor.

MULCHING CLOSE-OUT PLATE KIT, once installed, lets you mulch, discharge or bag clippings (bagger optional) without changing blades. For models not equipped as 3-in-1 Convertible mowers. See "MOWER" in the Repair Parts section of this manual.

RAMP TOPS AND FEET let you load and unload tractor from a pickup truck. Use with 2 x 8 or 2 x 10 lumber.

ROLLER for smoother lawn surface. 36-inch wide, 18-inch diameterwater-tight drum holds up to 390 lbs. of weight. Rounded edges prevent harm to turf. Adjustable scraper automatically cleans drum.

SNOW BLADE for snow removal only. 14-inch high, 48-inch wide blade clears 42-inch path when angled left or right. Raises, lowers with side lever. Adjustable skids; replaceable, reversible scraper bar. (Use with tire chains and wheel weights and/or rear drawbar weight.)

**SNOWTHROWER** has 40-inch swath. Drum-type auger handles powdery and wet/heavy snow. Mounts easily with simple pin arrangement. Discharge chute adjusts from tractor seat. 6-inch diameter spout discharges snow 10 to 50 feet. Lift controlled at tractor seat. (Use with chains and wheel weights and/or rear drawbar weight.)

SPRAYERS use 12-volt DC electric motor that connects to the tractor battery or other 12-volt source. Includes booms for automatic spraying and hand held wand for spot spraying. Wand has adjustable spray pattern. For applying herbicides, insecticides, fungicides and liquid fertilizers.

SPREADER/SEEDERS make seeding, fertilizing, and weed killing easy. Broadcast spreaders are also useful for granular deicers and sand.

SWEEPERS let you collect grass clippings and leaves.

TILLER has 5 hp engine and 36-inch swath to prepare seed beds, cultivate and compost garden residue. Tiller has its own built-in lift and depth control system and does NOT require a sleeve hitch. Fits any lawn, yard or garden tractor. Simply hook up to the tractor drawbar and go! Optional accessories convert unit for dethatching, aerating, hilling...without tools.

TIRE CHAINS are heavy duty; closely spaced extra-large cross links give smooth ride, outstanding traction.

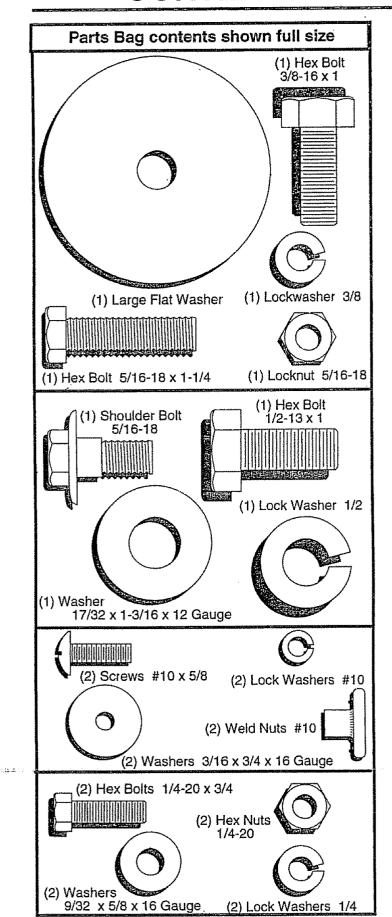
TRACTOR CAB has heavy duty vinyl fabric over tubular steel frame, ABS plastic top; clear plastic windshield offers 360 degree visibility. Hinged metal doors with catch. Keeps operator warm and dry. Remove vinyl sides and windshields for use as sun protector in summer. Optional accessories include: tinted/tempered solid safety glass windshield with hand operated wiper; 12-volt amber caution light for mounting on cab top.

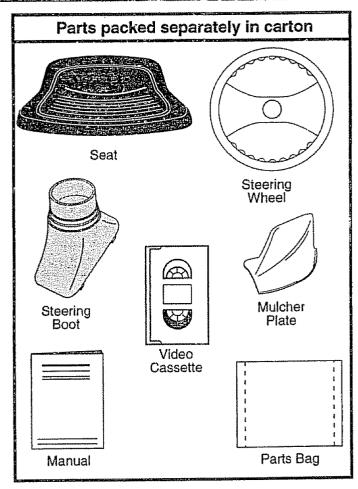
VACS for powerful collection of heavy grass clippings and leaves. Optional wand attachment to pick up debris in hard-to-reach places. VAC/CHIPPER includes a chipper-shredder.

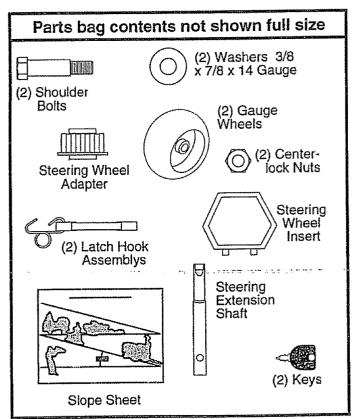
WEIGHT BRACKET for drawbar for snow removal applications. Uses (1) 55 lb. weight.

WHEEL WEIGHTS for rear wheels provide needed traction for snow removal or dozing heavy materials.

# **CONTENTS OF HARDWARE PACK**







# **ASSEMBLY**

Your new tractor has been assembled at the factory with exception of those parts left unassembled for shipping purposes. To ensure safe and proper operation of your tractor all parts and hardware you assemble must be tightened securely. Use the correct tools as necessary to insure proper tightness.

#### TOOLS REQUIRED FOR ASSEMBLY

A socket wrench set will make assembly easier. Standard wrench sizes are listed.

(1) 3/4" Socket w/drive rachet

(2) 7/16" wrenches(2) 1/2" wrenches(1) Phillips ScrewdriverTire pressure gauge

(1) 9/16" wrench Utility knife

When right or left hand is mentioned in this manual, it means when you are in the operating position (seated behind the steering wheel).

# TO REMOVE TRACTOR FROM CARTON UNPACK CARTON

- Remove all accessible loose parts and parts cartons from carton (See page 6).
- Cut, from top to bottom, along lines on all four corners of carton, and lay panels flat.
- Check for any additional loose parts or cartons and remove.

# BEFORE ROLLING TRACTOR OFF SKID ATTACH STEERING WHEEL (See Fig. 1)

ASSEMBLE EXTENSION SHAFT AND BOOT

 Slide extension shaft onto lower steering shaft. Align mounting holes in extension and lower shafts and install 5/16 hex bolt and locknut. Tighten securely.

IMPORTANT: TIGHTEN BOLT AND NUT SECURELY TO 18-22 FT. LBS TORQUE.

 Place tabs of steering boot over tab slots in dash and push down to secure.

#### **INSTALL STEERING WHEEL**

- Position front wheels of the tractor so they are pointing straight forward.
- Slide steering wheel adapter onto steering shaft extension.
- Position steering wheel so cross bars are horizontal (left to right) and slide inside boot and onto adapter.
- Assemble large flat washer, 3/8 lock washer, 3/8 hex bolt and tighten securely.
- Snap steering wheel insert into center of steering wheel.
- Remove protective materials from tractor hood and grill.

IMPORTANT: CHECK FOR AND REMOVE ANY STAPLES IN SKID THAT MAY PUNCTURE TIRES WHERE TRACTOR IS TO ROLL OFF SKID.

# TO ROLL TRACTOR OFF SKID (See Operation section for location and function of controls)

- Press lift lever plunger and raise attachment lift lever to its highest position.
- Release parking brake by depressing clutch/brake pedal.
- Place gearshift lever in neutral (N) position.
- Roll tractor backwards off skid.
- Remove banding holding discharge guard up against tractor.

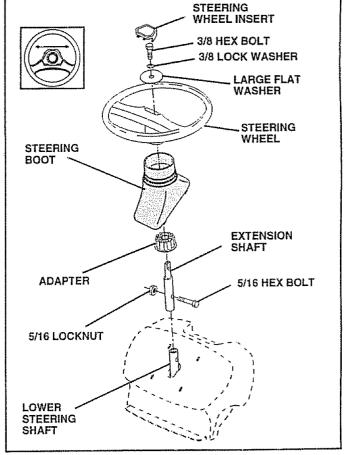


FIG. 1

### HOW TO SET UP YOUR TRACTOR

## CONNECT BATTERY (See Figs. 2 and 3)



CAUTION: Do not short battery terminals by allowing a wrench or any other object to contact both terminals at the same time. Before connecting battery, remove metal bracelets, wristwatch bands, rings, etc.

Positive terminal must be connected first to prevent sparking from accidental grounding.

- Remove cardboard packing from seat pan and lift seat pan to raised position.
- Open battery box door and remove protective plastic.
- · Remove terminal protective caps and discard.
- If this battery is put into service after month and year indicated on label (label located between terminals) charge battery for minimum of one hour at 6-10 amps.
- First connect RED battery cable to positive (+) terminal with hex bolt, flat washer, lock washer and hex nut as shown. Tighten securely.
- Connect BLACK grounding cable to negative (-) terminal with remaining hex bolt, flat washer, lock washer and hex nut. Tighten securely.
- Close battery box door.

# ASSEMBLY

Open battery box door for:

- Inspection for secure connections (to tighten hardware).
- Inspection for corrosion.
- Testing battery.
- Jumping (if required).
- Periodic charging .

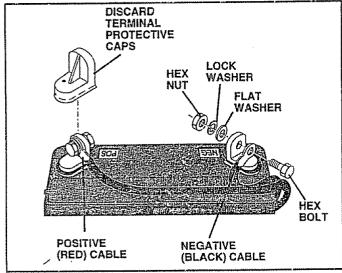


FIG. 2

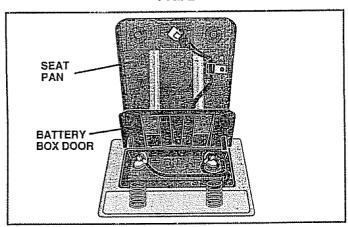


FIG. 3

## INSTALL SEAT (See Fig. 4)

Adjust seat before tightening adjustment bolt.

- · Remove cardboard packing on seat pan.
- Place seat on seat pan and assemble shoulder bolt.
- Assemble adjustment bolt, lock washer and flat washer loosely. Do not tighten.
- Tighten shoulder bolt securely.
- Lower seat into operating position and sit on seat.
- Slide seat until a comfortable position is reached which allows you to press clutch/brake pedal all the way down.
- · Get off seat without moving its adjusted position.
- Raise seat and tighten adjustment bolt securely.

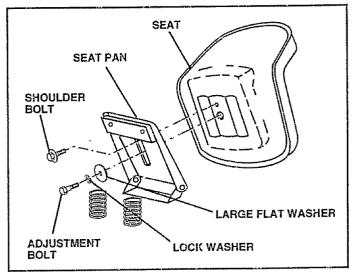


FIG. 4

#### CHECK TIRE PRESSURE

The tires on your tractor were overinflated at the factory for shipping purposes. Correct tire pressure is important for best cutting performance.

 Reduce tire pressure to PSI shown in "PRODUCT SPECIFICATIONS" on page 3 of this manual.

### **CHECK DECK LEVELNESS**

For best cutting results, mower housing should be properly leveled. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.

# CHECK FOR PROPER POSITION OF ALL BELTS

See the figures that are shown for replacing motion and mower blade drive belts in the Service and Adjustments section of this manual. Verify that the belts are routed correctly.

### **CHECK BRAKE SYSTEM**

After you learn how to operate your tractor, check to see that the brake is properly adjusted. See "TO ADJUST BRAKE" in the Service and Adjustments section of this manual.

# ASSEMBLE GAUGE WHEELS TO MOWER DECK (See Fig. 5)

The gauge wheels are designed to keep the mower deck in proper position when operating mower. Be sure they are properly adjusted to ensure optimum mower performance.

- Assemble gauge wheels with tractor on a flat level surface.
- Adjust mower to desired cutting height (See "TO AD-JUST MOWER CUTTING HEIGHT" in the Operation section of this manual).
- With mower in desired height of cut position, gauge wheels should be assembled so they are slightly off the ground. Install gauge wheel in appropriate hole with shoulder bolt, 3/8 washer, and 3/8-16 locknut and tighten securely.
- Repeat for opposite side installing gauge wheel in same adjustment hole.

# **ASSEMBLY**

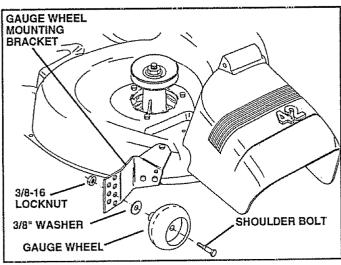


FIG. 5

# INSTALL MULCHER PLATE (See Figs. 6 & 7)

 Install two latch hooks to mulcher plate using screw, washer, lock washer, and weld nut as shown.

**NOTE:** Pre-assemble weld nut to latch hook by inserting weld nut from the top with hook pointing down.

- · Tighten hardware securely.
- Raise and hold deflector shield in upright position.
- Place front of mulcher plate over front of mower deck opening and slide into place, as shown.
- Hook front latch into hole on front of mower deck.
- Hook rear latch into hole on back of mower deck.



CAUTION: Do not remove discharge guard from mower. Raise and hold guard when attaching mulcher plate and allow it to rest on plate while in operation.

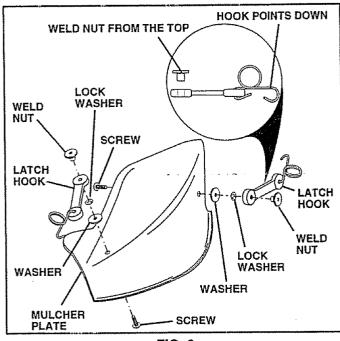


FIG. 6

# TO CONVERT TO BAGGING OR DISCHARGING

Simply remove mulcher plate and store in a safe place. Your mower is now ready for discharging or installation of optional grass catcher accessory.

**NOTE:** It is not necessary to change blades. The mulcher blades are designed for discharging and bagging also.

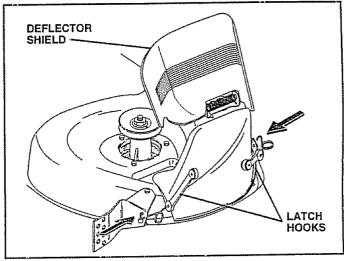


FIG. 7

## / CHECKLIST

BEFORE YOU OPERATE AND ENJOY YOUR NEW TRACTOR, WE WISH TO ASSURE THAT YOU RECEIVE THE BEST PERFORMANCE AND SATISFACTION FROM THIS QUALITY PRODUCT.

PLEASE REVIEW THE FOLLOWING CHECKLIST:

- All assembly instructions have been completed.
- No remaining loose parts in carton.
- ✓ Battery is properly prepared and charged. (Minimum 1 hour at 6 amps).
- ✓ Seat is adjusted comfortably and tightened securely.
- ✓ All tires are properly inflated. (For shipping purposes, the tires were overinflated at the factory).
- Be sure mower deck is properly leveled side-to-side/ front-to-rear for best cutting results: (Tires must be properly inflated for leveling).
- ✓ Check mower and drive belts. Be sure they are routed properly around pulleys and inside all belt keepers.
- ✓ Check wiring. See that all connections are still secure and wires are properly clamped.

WHILE LEARNING HOW TO USE YOUR TRACTOR, PAY EXTRA ATTENTION TO THE FOLLOWING IMPORTANT ITEMS:

- Engine oil is at proper level.
- Fuel tank is filled with fresh, clean, regular unleaded gasoline.
- Become familiar with all controls their location and function. Operate them before you start the engine.
- / Be sure brake system is in safe operating condition.

These symbols may appear on your tractor or in literature supplied with the product. Learn and understand their meaning.



**BATTERY** 



CAUTION OR WARNING



REVERSE



**FORWARD** 



**FAST** 



SLOW



ENGINE ON



**ENGINE OFF** 



OIL PRESSURE



**CLUTCH** 



LIGHTS ON



LIGHTS OFF



**FUEL** 



CHOKE



MOWER HEIGHT



DIFFERENTIAL LOCK



PARKING BRAKE LOCKED



UNLOCKED



MOWER LIFT



**REVERSE** 



**NEUTRAL** 



HIGH



LOW



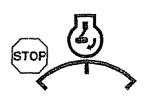
PARKING BRAKE



ATTACHMENT CLUTCH ENGAGED



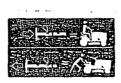
ATTACHMENT CLUTCH DISENGAGED



**IGNITION** 



DANGER, KEEP HANDS AND FEET AWAY



HYDROSTATIC FREE WHEEL (Hydro Models only)

### **KNOW YOUR TRACTOR**

## READ THIS OWNER'S MANUAL AND SAFETY RULES BEFORE OPERATING YOUR TRACTOR

Compare the illustrations with your tractor to familiarize yourself with the locations of various controls and adjustments. Save this manual for future reference.

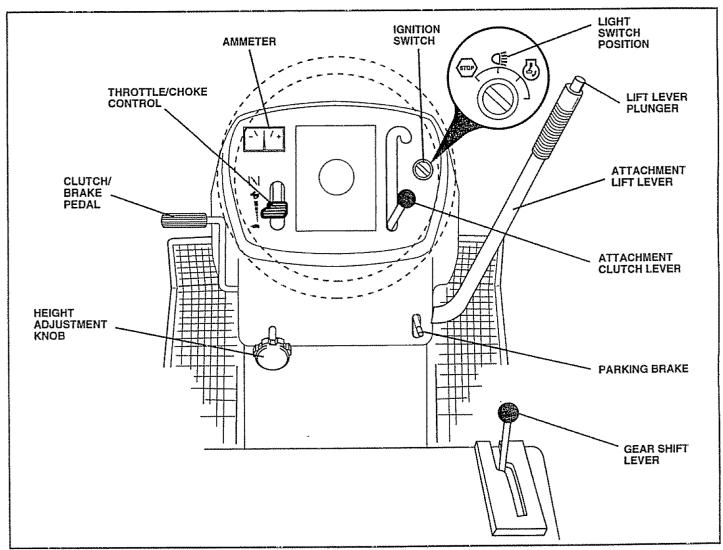


FIG. 8

Our tractors conform to the safety standards of the American National Standards Institute.

ATTACHMENT CLUTCH LEVER: Used to engage the mower blades, or other attachments mounted to your tractor.

LIGHT SWITCH: Turns the headlights on and off.

**THROTTLE/CHOKE CONTROL**: Used to control engine speed.

**CLUTCH/BRAKE PEDAL:** Used for declutching and braking the tractor and starting the engine.

PARKING BRAKE: Locks clutch/brake pedal into the brake position.

**GEAR SHIFT LEVER** - Selects the speed and direction of the tractor.

ATTACHMENT LIFT LEVER: Used to raise and lower the mower deck or other attachments mounted to your tractor.

**LIFT LEVER PLUNGER:** Used to release attachment lift lever when changing its position.

**IGNITION SWITCH:** Used for starting and stopping the engine.

**HEIGHT ADJUSTMENT KNOB:** Used to adjust the mower cutting height.

**AMMETER:** Indicates battery charging (+) or discharging (-).



The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your tractor or performing any adjustments or repairs. We recommend a wide vision safety mask over the spectacles or standard safety glasses.

### **HOW TO USE YOUR TRACTOR**

### TO SET PARKING BRAKE (See Fig. 9)

Your tractor is equipped with an operator presence sensing switch. When engine is running, any attempt by the operator to leave the seat without first setting the parking brake will shut off the engine.

- Depress clutch/brake pedal into full "BRAKE" position and hold.
- Place parking brake lever in "ENGAGED" position and release pressure from clutch/brake pedal. Pedal should remain in "BRAKE" position. Make sure parking brake will hold tractor secure.

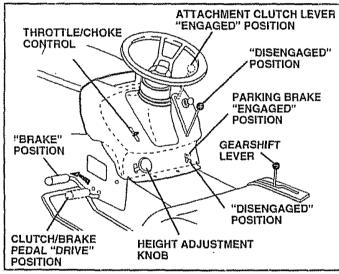


FIG. 9

## STOPPING (See Fig. 9)

**MOWER BLADES -**

Move attachment clutch lever to "DISENGAGED" position.

#### **GROUND DRIVE -**

- Depress clutch/brake pedal into full "BRAKE" position.
- Move gearshift lever to neutral (N) position.

#### **ENGINE** -

Move throttle control to slow ( ) position.

**NOTE:** Failure to move throttle control to slow ( position and allowing engine to idle before stopping may cause engine to "backfire".

- Turn ignition key to "OFF" position and remove key. Always remove key when leaving tractor to prevent unauthorized use.
- Never use choke to stop engine.

**NOTE:** Under certain conditions when tractor is standing idle with the engine running, hot engine exhaust gases may cause "browning" of grass. To eliminate this possibility, always stop engine when stopping tractor on grass areas.



CAUTION: Always stop tractor completely, as described above, before leaving the operator's position; to empty grass catcher, etc.

### TO USE THROTTLE CONTROL (See Fig. 9)

Always operate engine at full throttle.

- Operating engine at less than full throttle reduces the battery charging rate.
- Full throttle offers the best bagging and mower performance.

# TO MOVE FORWARD AND BACKWARD (See Fig. 9)

The direction and speed of movement is controlled by the gearshift lever.

- Start tractor with clutch/brake pedal depressed and gearshift lever in neutral (N) position.
- Move gearshift lever to desired position.
- Slowly release clutch/brake pedal to start movement.

IMPORTANT: BRING TRACTOR TO A COMPLETE STOP BEFORE SHIFTING OR CHANGING GEARS. FAILURE TO DO SO WILL SHORTEN THE USEFUL LIFE OF YOUR TRANSAXLE.

# TO ADJUST MOWER CUTTING HEIGHT (See Fig. 9)

The cutting height is controlled by turning the height adjustment knob in desired direction.

- Turn knob clockwise ( ) to raise cutting height.
- Turn knob counterclockwise () to lower cutting height.

The cutting height range is approximately 1-1/2" to 4". The heights are measured from the ground to the blade tip with the engine not running. These heights are approximate and may vary depending upon soil conditions, height of grass and types of grass being mowed.

- The average lawn should be cut to approximately 2-1/2 inches during the cool season and to over 3 inches during hot months. For healthier and better looking lawns, mow often and after moderate growth.
- For best cutting performance, grass over 6 inches in height should be mowed twice. Make the first cut relatively high; the second to desired height.

## TO OPERATE MOWER (See Fig. 10)

Your tractor is equipped with an operator presence sensing switch. Any attempt by the operator to leave the seat with the engine running and the attachment clutch engaged will shut off the engine.

- Select desired height of cut.
- Lower mower with attachment lift control.
- Start mower blades by engaging attachment clutch control.
- TO STOP MOWER BLADES disengage attachment clutch control.



CAUTION: Do not operate the mower without either the entire grass catcher, on mowers so equipped, or the discharge guard in place.

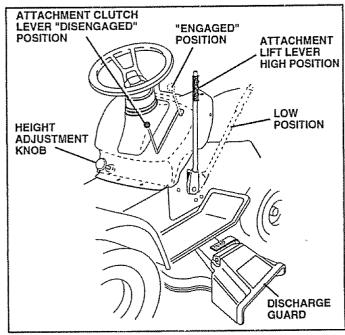


FIG. 10

#### TO OPERATE ON HILLS



CAUTION: Do not drive up or down hills with slopes greater than 15° and do not drive across any slope.

- Choose the slowest speed before starting up or down hills.
- Avoid stopping or changing speed on hills.
- If slowing is necessary, move throttle control lever to slower position.
- If stopping is absolutely necessary, push clutch/brake pedal quickly to brake position and engage parking brake.
- Move gearshift lever to 1st gear. Be sure you have allowed room for tractor to roll slightly as you restart movement.

- To restart movement, slowly release parking brake and clutch/brake pedal.
- Make all turns slowly.

#### TO TRANSPORT

- Raise attachment lift to highest position with attachment lift control.
- When pushing or towing your tractor, be sure gearshift lever is in neutral (N) position.
- Do not push or tow tractor at more than five (5) MPH.

**NOTE:** To protect hood from damage when transporting your tractor on a truck or a trailer, be sure hood is closed and secured to tractor. Use an appropriate means of tying hood to tractor (rope, cord, etc.).

# BEFORE STARTING THE ENGINE CHECK ENGINE OIL LEVEL (See Fig. 17)

- The engine in your tractor has been shipped, from the factory, already filled with summer weight oil.
- Check engine oil with tractor on level ground.
- Unthread and remove oil fill cap/dipstick; wipe oil off. Reinsert the dipstick into the tube and rest oil fill cap on the tube. Do not thread the cap onto the tube. Remove and read oil level. If necessary, add oil until "FULL" mark on dipstick is reached. Do not overfill.
- For cold weather operation you should change oil for easier starting (See "OIL VISCOSITY CHART" in the Customer Responsibilities section of this manual).
- To change engine oil, see the Customer Responsibilities section in this manual.

### ADD GASOLINE

 Fill fuel tank. Use fresh, clean, regular unleaded gasoline with a minimum of 87 octane. (Use of leaded gasoline will increase carbon and lead oxide deposits and reduce valve life). Do not mix oil with gasoline. Purchase fuel in quantities that can be used within 30 days to assure fuel freshness.

IMPORTANT: WHEN OPERATING IN TEMPERATURES BELOW 32°F(0°C), USE FRESH, CLEAN WINTER GRADE GASOLINE TO HELP INSURE GOOD COLD WEATHER STARTING.

WARNING: Experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer. Drain the gas tank, start the engine and let it run until the fuel lines and carburetor are empty. Use fresh fuel next season. See Storage Instructions for additional information. Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.



CAUTION: Fill to bottom of gas tank filler neck. Do not overfill. Wipe off any spilled oil or fuel. Do not store, spill or use gasoline near an open flame.

## TO START ENGINE (See Fig. X)

When starting the engine for the first time or if the engine has run out of fuel, it will take extra cranking time to move fuel from the tank to the engine.

- Sit on seat in operating position, depress clutch/brake pedal and set parking brake.
- Place gear shift lever in neutral (N) position.
- Move attachment clutch to "DISENGAGED" position.
- Move throttle control to choke (|\( \) position.

Note: Before starting, read the warm and cold starting procedures below.

Insert key into ignition and turn key clockwise to "START" position and release key as soon as engine starts. Do not run starter continuously for more than fifteen seconds per minute. If the engine does not start after several attempts, move throttle control to fast (4) position, wait a few minutes and try again. If engine still does not start, move the throttle control back to the choke (|\(\mathbb{\text{\tex

#### WARM WEATHER STARTING (50° F and above)

- When engine starts, move the throttle control to the fast
   (4) position.
- Thé attachments and ground drive can now be used. If the engine does not accept the load, restart the engine and allow it to warm up for one minute using the choke as described above.

#### COLD WEATHER STARTING (50° F and below)

- When engine starts, allow engine to run with the throttle control in the choke (|<|) position until the engine runs roughly, then move throttle control to fast (♣) position. This may require an engine warm-up period from several seconds to several minutes, depending on the temperature.
- The attachments can also be used during the engine warm-up period.

**NOTE:** If at a high altitude (above 3000 feet) or in cold temperatures (below 32 F) the carburetor fuel mixture may need to be adjusted for best engine performance. See "TO ADJUST CARBURETOR" in the Service and Adjustments section of this manual.

### **MOWING TIPS**

- Mower should be properly leveled for best mowing performance. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.
- The left hand side of mower should be used for trimming.
- Drive so that clippings are discharged onto the area that has been cut. Have the cut area to the right of the machine. This will result in a more even distribution of clippings and more uniform cutting.
- When mowing large areas, start by turning to the right so that clippings will discharge away from shrubs, fences, driveways, etc. After one or two rounds, mow in the opposite direction making left hand turns until finished (See Fig. 11).
- If grass is extremely tall, it should be mowed twice to reduce load and possible fire hazard from dried clippings. Make first cut relatively high; the second to the desired height.

- Do not mow grass when it is wet. Wet grass will plug mower and leave undesirable clumps. Allow grass to dry before mowing.
- Always operate engine at full throttle when mowing to assure better mowing performance and proper discharge of material. Regulate ground speed by selecting a low enough gear to give the mower cutting performance as well as the quality of cut desired.
- When operating attachments, select a ground speed that will suit the terrain and give best performance of the attachment being used.

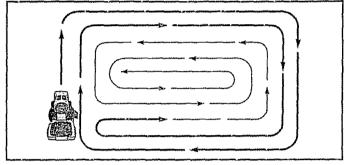


FIG. 11

#### MULCHING MOWING TIPS

IMPORTANT: FOR BEST PERFORMANCE, KEEP MOWER HOUSING FREE OF BUILT-UP GRASS AND TRASH. CLEAN AFTER EACH USE.

- The special mulching blade will recut the grass clippings many times and reduce them in size so that as they fall onto the lawn they will disperse into the grass and not be noticed. Also, the mulched grass will biodegrade quickly to provide nutrients for the lawn. Always mulch with your highest engine (blade) speed as this will provide the best recutting action of the blades.
- Avoid cutting your lawn when it is wet. Wet grass tends to form clumps and interferes with the mulching action. The best time to mow your lawn is the early afternoon. At this time the grass has dried and the newly cut area will not be exposed to the direct sun.
- For best results, adjust the mower cutting height so that the mower cuts off only the top one-third of the grass blades (See Fig. 12). For extremely heavy mulching, reduce your width of cut and mow slowly.
- Certain types of grass and grass conditions may require that an area be mulched a second time to completely hide the clippings. When doing a second cut, mow across or perpendicular to the first cut path.
- Change your cutting pattern from week to week. Mow north to south one week then change to east to west the next week. This will help prevent matting and graining of the lawn.

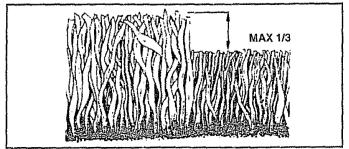


FIG. 12

FIL AS	AINTENANCE SCHEDULE L IN DATES I YOU COMPLETE GULAR SERVICE		JEFORE	EACHUE E	HOUR HOUR	3 HOUP 25 HOUP EVERY E	S HOUS O HOUS VERY V	S HOUR JOHOUR JUERY S	S EASON EFORE	SEF	GE.	E DAT	ΓES
	Check Brake Operation	1	1										
	Check Tire Pressure	V	1										
I	Check for Loose Fasteners	V				17		4					
R	Sharpen/Replace Mower Blades			<b>V</b> 4									
A	Lubrication Chart			6				1					
ĬŤ	Check Battery Level/Recharge			<b>1</b> 6									
0	Clean Battery and Terminals			V				6					
R	Check Transaxle Cooling			1									
	Adjust Blade Belt(s) Tension					<b>1</b> /5							
	Adjust Motion Drive Belt(s) Tension					<b>1</b> /5							
	Check Engine Oil Level	V	1										
	Change Engine Oil			V <sub>1,2,3</sub>				1					
E	Clean Air Filter			<b>V</b> 2									
N	Clean Air Screen			V2									
G	Inspect Muffler/Spark Arrester				6/								
	Replace Oil Filter (If equipped)					1,2							
N E	Clean Engine Cooling Fins					1/2							
	Replace Spark Plug					V	6/						·
	Replace Air Filter Paper Cartridge					<b>1</b> /2							
	Replace Fuel Filter						4						

- 1 Change more often when operating under a heavy load or in high ambient temperatures
- 2 Service more often when operating in dirty or dusty conditions.
- 3 If equipped with oil filter, change oil every 50 hours.
- 4 Replace blades more often when mowing in sandy soil.

- 5 If equipped with adjustable system.
- 6 Not required if equipped with maintenance-free battery.
- 7 Tighten front axie pivot bolt to 35 ft -ibs maximum Do not overtighten.

## **GENERAL RECOMMENDATIONS**

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

Some adjustments will need to be made periodically to properly maintain your tractor.

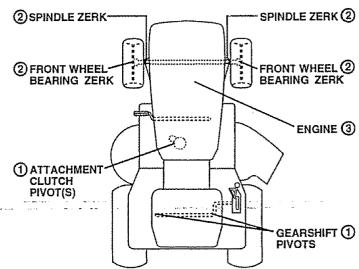
All adjustments in the Service and Adjustments section of this manual should be checked at least once each season.

 Once a year you should replace the spark plug, clean or replace air filter, and check blades and belts for wear. A new spark plug and clean air filter assure proper air-fuel mixture and help your engine run better and last longer.

#### **BEFORE EACH USE**

- Check engine oil level.
- Check brake operation.
- Check tire pressure.
- Check for loose fasteners.

### **LUBRICATION CHART**



- (1) SAE 30 OR 10W30 MOTOR OIL
- **②** GENERAL PURPOSE GREASE
- ③ REFER TO CUSTOMER RESPONSIBILITIES "ENGINE" SECTION IMPORTANT: DO NOT OIL OR GREASE THE PIVOT POINTS WHICH HAVE SPECIAL NYLON BEARINGS. VISCOUS LUBRICANTS WILL ATTRACT DUST AND DIRT THAT WILL SHORTEN THE LIFE OF THE SELF-LUBRICATING BEARINGS. IF YOU FEEL THEY MUST BE LUBRICATED, USE ONLY A DRY, POWDERED GRAPHITE TYPE LUBRICANT SPARINGLY.

#### TRACTOR

Always observe safety rules when performing any maintenance.

#### **BRAKE OPERATION**

If tractor requires more than six (6) feet stopping distance at high speed in highest gear, then brake must be adjusted. (See "TO ADJUST BRAKE" in the Service and Adjustments section of this manual).

#### TIRES

- Maintain proper air pressure in all tires (See "PROD-UCT SPECIFICATIONS" on page 3 of this manual).
- Keep tires free of gasoline, oil, or insect control chemicals which can harm rubber.
- Avoid stumps, stones, deep ruts, sharp objects and other hazards that may cause tire damage.

**NOTE:** To seal tire punctures and prevent flat tires due to slow leaks, tire sealant may be purchased from your local parts dealer. Tire sealant also prevents tire dry rot and corrosion

### **BLADE CARE**

For best results mower blades must be kept sharp. Replace bent or damaged blades.

### **BLADE REMOVAL (See Fig. 13)**

- Raise mower to highest position to allow access to blades.
- Remove hex bolt, lock washer and flat washer securing blade.
- Install new or resharpened blade with trailing edge up towards deck as shown.
- Reassemble hex bolt, lock washer and flat washer in exact order as shown.
- Tighten bolt securely (30-35 Ft. Lbs. torque).

IMPORTANT: BLADE BOLT IS GRADE 8 HEAT TREATED.

**NOTE:** We do not recommend sharpening blade - but if you do, be sure the blade is balanced.

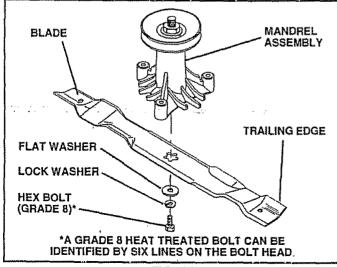


FIG. 13

### TO SHARPEN BLADE (See Fig. 14)

Care should be taken to keep the blade balanced. An unbalanced blade will cause excessive vibration and eventual damage to mower and engine.

- The blade can be sharpened with a file or on a grinding wheel. Do not attempt to sharpen while on the mower.
- To check blade balance, you will need a 5/8" diameter steel bolt, pin, or a cone balancer. (When using a cone balancer, follow the instructions supplied with balancer).
- Slide blade on to an unthreaded portion of the steel bolt or pin and hold the bolt or pin parallel with the ground.
   If blade is balanced, it should remain in a horizontal position. If either end of the blade moves downward, sharpen the heavy end until the blade is balanced.

**NOTE:** Do not use a nail for balancing blade. The lobes of the center hole may appear to be centered, but are not.

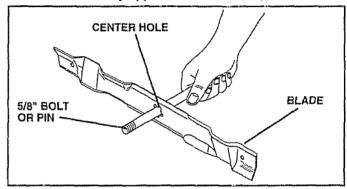


FIG. 14

#### BATTERY

Your tractor has a battery charging system which is sufficient for normal use. However, periodic charging of the battery with an automotive charger will extend its life.

- Keep battery and terminals clean.
- Keep battery bolts tight.
- Keep small vent holes open.
- Recharge at 6-10 amperes for 1 hour.

#### TO CLEAN BATTERY AND TERMINALS

Corrosion and dirt on the battery and terminals can cause the battery to "leak" power.

- Open battery box door.
- Disconnect BLACK battery cable first then RED battery cable and remove battery from tractor.
- Rinse the battery with plain water and dry.
- Clean terminals and battery cable ends with wire brush until bright.
- Coat terminals with grease or petroleum jelly.
- Reinstall battery (See "CONNECT BATTERY" in the Assembly section of this manual).

#### **V-BELTS**

Check V-belts for deterioration and wear after 100 hours of operation and replace if necessary. The belts are not adjustable. Replace belts if they begin to slip from wear.

#### TRANSAXLE COOLING

Keep transaxle free from build-up of dirt and chaff which can restrict cooling.

### **ENGINE**

#### LUBRICATION

Only use high quality detergent oil rated with API service classification SF, SG, or SH. Select the oil's SAE viscosity grade according to your expected operating temperature.

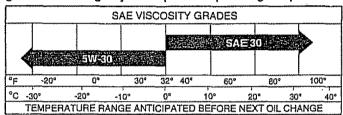


FIG. 15

Change the oil after every 50 hours of operation or at least once a year if the tractor is not used for 50 hours in one year.

Check the crankcase oil level before starting the engine and after each eight (8) hours of operation. Tighten oil fill cap/dipstick securely each time you check the oil level.

TO CHANGE ENGINE OIL (See Figs. 15 and 16)

Determine temperature range expected before oil change. All oil must meet API service classification SF, SG or SH.

- Be sure tractor is on level surface.
- Oil will drain more freely when warm.
- Catch oil in a suitable container.
- Remove oil fill cap/dipstick. Be careful not to allow dirt to enter the engine when changing oil.
- · Remove drain plug.
- After oil has drained completely, replace oil drain plug and tighten securely.
- Refill engine with oil through oil fill dipstick tube. Pour slowly. Do not overfill. For approximate capacity see "PRODUCT SPECIFICATIONS" on page 3 of this manual.
- Use gauge on oil fill cap/dipstick for checking level. Insert dipstick into the tube and rest the oil fill cap on the tube. Do not thread the cap onto the tube when taking reading. Keep oil at "FULL" line on dipstick. Tighten cap onto the tube securely when finished.

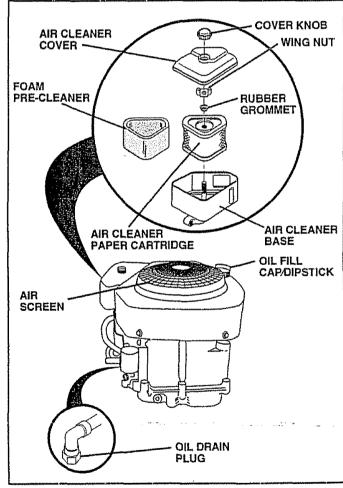


FIG. 16

### CLEAN AIR SCREEN (See Fig. 16)

Air screen must be kept free of dirt and chaff to prevent engine damage from overheating. Clean with a wire brush or compressed air to remove dirt and stubborn dried gum fibers.

### AIR FILTER (See Fig. 16)

Your engine will not run properly using a dirty air filter. Clean the foam pre-cleaner after every 25 hours of operation or every season. Service paper cartridge every 100 hours of operation or every season, whichever occurs first.

Service air cleaner more often under dusty conditions.

- · Remove knob and cover.
- · Remove wing nut and air cleaner from base.

#### TO SERVICE PRE-CLEANER

- Slide foam pre-cleaner off cartridge.
- Wash it in liquid detergent and water.
- · Squeeze it dry in a clean cloth. Allow it to dry.
- Saturate it in engine oil. Wrap it in clean, absorbent cloth and squeeze to remove excess oil.

#### TO SERVICE CARTRIDGE

Réplace a dirty, bent, or damaged cartridge.

**NOTE:** Do not wash the paper cartridge or use pressurized air, as this will damage the cartridge.

- Reinstall the pre-cleaner (cleaned and oiled) over the paper cartridge.
- Reassemble air cleaner, wing nut, cover and tighten knob securely.

#### **CLEAN AIR INTAKE/COOLING AREAS**

To insure proper cooling, make sure the grass screen, cooling fins, and other external surfaces of the engine are kept clean at all times.

Every 100 hours of operation (more often under extremely dusty, dirty conditions), remove the blower housing and other cooling shrouds. Clean the cooling fins and external surfaces as necessary. Make sure the cooling shrouds are reinstalled.

**NOTE:** 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.

#### MUFFLER

Inspect and replace corroded muffler and spark arrester (if equipped) as it could create a fire hazard and/or damage.

#### SPARK PLUGS

Replace spark plugs at the beginning of each mowing season or after every 100 hours of operation, whichever occurs first. Spark plug type and gap setting are shown in "PRODUCT SPECIFICATIONS" on page 3 of this manual.

### **ENGINE OIL FILTER (See Fig. 17)**

Replace the engine oil filter every season or every other oil change if the tractor is used more than 100 hours in one year.

- Drain oil from engine crankcase (See "TO CHANGE ENGINE OIL" in this section of this manual, through step remove drain plug).
- Remove oil filter and wipe off filter adapter.
- Apply a thin coating of new engine oil to the rubber gasket on replacement oil filter.
- Install replacement oil filter on filter adapter. Turn oil filter clockwise until rubber gasket contacts the filter adapter, then tighten filter an additional 1/2 turn.
- Fill crankcase with new oil (See "TO CHANGE EN-GINE OIL" in this section of this manual). For approximate capacity see "PRODUCT SPECIFICATIONS" on page 3 of this manual.
- Start the engine and check for oil leaks. Correct any leaks before placing engine into full operation.

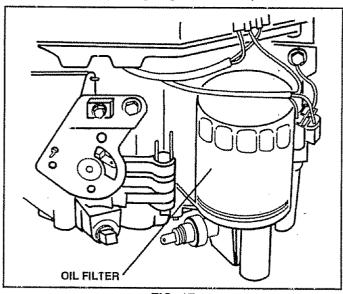


FIG. 17

## IN-LINE FUEL FILTER (See Fig. 18)

The fuel filter should be replaced once each season. If fuel filter becomes clogged, obstructing fuel flow to carburetor, replacement is required.

- With engine cool, remove filter and plug fuel line sections.
- Place new fuel filter in position in fuel line with arrow pointing towards carburetor.
- Be sure there are no fuel line leaks and clamps are properly positioned.
- Immediately wipe up any spilled gasoline.

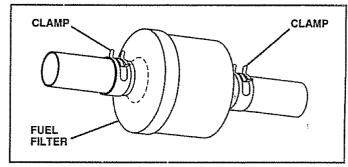


FIG. 18

### **CLEANING**

- Clean engine, battery, seat, finish, etc. of all foreign matter.
- Keep finished surfaces and wheels free of all gasoline, oil, etc.
- Protect painted surfaces with automotive type wax.

We do not recommend using a garden hose to clean your tractor unless the electrical system, muffler, air filter and carburetor are covered to keep water out. Water in engine can result in a shortened engine life.



#### **CAUTION: BEFORE PERFORMING ANY SERVICE OR ADJUSTMENTS:**

- Depress clutch/brake pedal fully and set parking brake.
- · Place gearshift lever in neutral (N) position.
- Place attachment clutch in "DISENGAGED" position.
- · Turn ignition key "OFF" and remove key.
- Make sure the blades and all moving parts have completely stopped.
- Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with plug.

### TRACTOR

## TO REMOVE MOWER (See Fig. 19)

Mower will be easier to remove from the right side of tractor.

- · Place attachment clutch in "DISENGAGED" position.
- Move attachment lift lever forward to lower mower to its lowest position.
- Roll belt off engine pulley.
- Disconnect clutch rod from clutch lever by removing retainer spring.
- Disconnect anti-sway bar from chassis bracket by removing retainer spring.
- Disconnect suspension arms from rear deck brackets by removing retainer springs.
- Disconnect front links from deck by removing retainer springs.
- Raise lift lever to raise suspension arms. Slide mower out from under tractor.

IMPORTANT: IF AN ATTACHMENT OTHER THAN THE MOWER IS TO BE MOUNTED TO THE TRACTOR, REMOVE THE FRONT LINKS.

## TO INSTALL MOWER (See Fig. 19)

- Raise attachment lift lever to its highest position.
- Slide mower under tractor with discharge guard to right side of tractor.
- Lower lift lever to its lowest position.
- Install mower in reverse order of removal instructions.

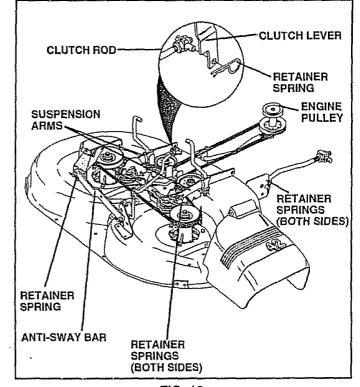


FIG. 19

#### TO LEVEL MOWER HOUSING

Adjust the mower while tractor is parked on level ground or driveway. Make sure tires are properly inflated (See "PRODUCT SPECIFICATIONS" on page 3 of this manual). If tires are over or underinflated, you will not properly adjust your mower.

SIDE-TO-SIDE ADJUSTMENT (See Figs. 20 and 21)

- · Raise mower to its highest position.
- At the midpoint of both sides of mower, measure height from bottom edge of mower to ground. Distance "A" on both sides of mower should be the same or within 1/4" of each other.
- If adjustment is necessary, make adjustment on one side of mower only.
- To raise one side of mower, tighten lift link adjustment nut on that side.
- To lower one side of mower, loosen lift link adjustment nut on that side.

**NOTE**: Each full turn of adjustment nut will change mower height about 1/8".

Recheck measurements after adjusting.

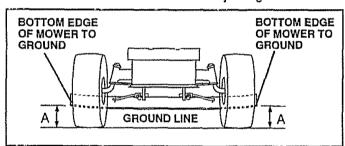


FIG. 20

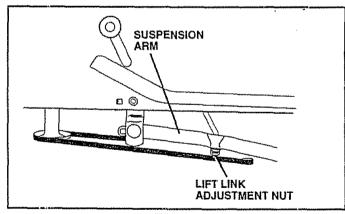


FIG. 21

FRONT-TO-BACK ADJUSTMENT (See Figs. 22 and 23)

IMPORTANT: DECK MUST BE LEVEL SIDE-TO-SIDE. IF
THE FOLLOWING FRONT-TO-BACK ADJUSTMENT IS
NECESSARY, BE SURE TO ADJUST BOTH FRONT LINKS
EQUALLY SO MOWER WILL STAY LEVEL SIDE-TOSIDE.

To obtain the best cutting results, the mower housing should be adjusted so that the front is approximately 1/8" to 1/2" lower than the rear when the mower is in its highest position.

Check adjustment on right side of tractor. Measure distance "D" directly in front and behind the mandrel at bottom edge of mower housing as shown.

- Before making any necessary adjustments, check that both front links are equal in length. Both links should be approximately 10-3/8".
- If links are not equal in length, adjust one link to same length as other link.
- To lower front of mower loosen nut "E" on both front links an equal number of turns.
- When distance "D" is 1/8" to 1/2" lower at front than rear, tighten nuts "F" against trunnion on both front links.
- To raise front of mower, loosen nut "F" from trunnion on both front links. Tighten nut "E" on both front links an equal number of turns.
- When distance "D" is 1/8" to 1/2" lower at front than rear, tighten nut "F" against trunnion on both front links.
- · Recheck side-to-side adjustment.

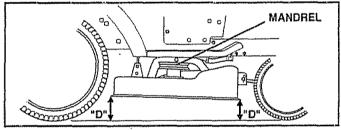
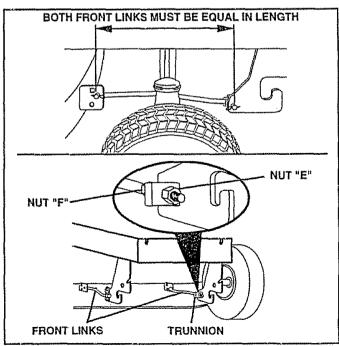


FIG. 22



# TO REPLACE MOWER BLADE DRIVE BELT (See Fig. 24)

The mower blade drive belt may be replaced without tools. Park the tractor on level surface. Engage parking brake.

#### **BELT REMOVAL -**

- Remove mower from tractor (See "TO REMOVE MOWER" in this section of this manual).
- Work belt off both mandrel pulleys and idler pulleys.
- Pull belt away from mower.

#### **BELT INSTALLATION -**

- Install new belt in reverse order of removal.
- Make sure belt is in all pulley grooves and inside all belt guides.
- Install mower in reverse order of removal instructions.

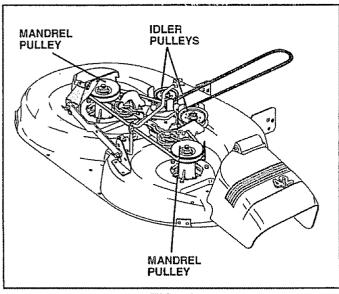


FIG. 24

## TO ADJUST BRAKE (See Fig. 25)

Your tractor is equipped with an adjustable brake system which is mounted on the right side of the transaxle.

If tractor requires more than six (6) feet stopping distance at high speed in highest gear, then brake must be adjusted.

- Depress clutch/brake pedal and engage parking brake.
- Measure distance between brake operating arm and nut "A" on brake rod.
- If distance is other than 1-1/2", loosen jam nut and turn nut "A" until distance becomes 1-1/2". Retighten jam nut against nut "A".
- Road test tractor for proper stopping distance as stated above. Readjust if necessary. If stopping distance is still greater than six (6) feet in highest gear, further maintenance is necessary. Contact your nearest authorized service center/department.

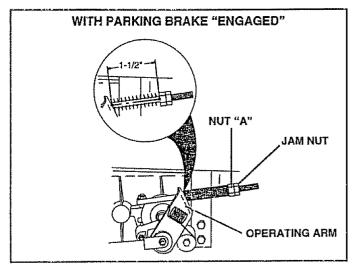


FIG. 25

# TO REPLACE MOTION DRIVE BELT (See Fig. 26)

Park the tractor on level surface. Engage parking brake. For assistance, there is a belt installation guide decal on bottom side of left footrest.

- Remove mower (See "TO REMOVE MOWER" in this section of this manual.)
- Remove upper belt keeper.
- Remove belt from stationary idler and clutching idler.
- Pull belt slack toward rear of tractor. Remove belt upwards from transaxle pulley by deflecting belt keepers.
- Pull belt toward front of tractor and remove downwards from around engine pulley.
- Install new belt by reversing above procedure.

IMPORTANT: MAKE SURE UPPER BELT KEEPER IS POSITIONED PROPERLY BETWEEN LOCATOR TABS.

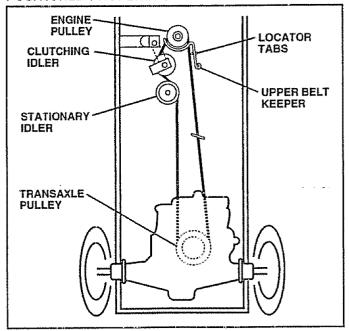


FIG. 26

### TRANSAXLE SHIFTER LINKAGE AND AD-JUSTMENT (See Figs. 27 and 28)

The transaxle should be in neutral when the gear shift lever is in the neutral (N) (lock gate) position. The adjustment is preset at the factory; however, if adjustment is needed, proceed as follows:

- Make sure transaxle is in neutral (N).
- Loosen two locknuts on tie rod.
- Turn center rod until gearshift lever falls into neutral lock gate on fender console.
- Tighten locknuts securely.

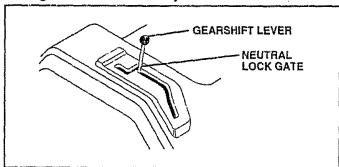


FIG. 27

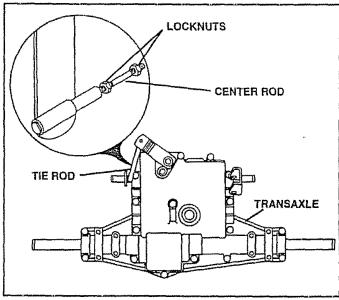


FIG. 28

#### TO ADJUST STEERING WHEEL ALIGNMENT

If steering wheel crossbars are not horizontal (left to right) when wheels are positioned straight forward, remove steering wheel and reassemble per instructions in the Assembly section of this manual.

#### FRONT WHEEL TOE-IN/CAMBER

The front wheel toe-in and camber are not adjustable on your tractor. If damage has occurred to affect the front wheel toe-in or camber, contact your nearest authorized service center/department.

#### TO REMOVE WHEEL FOR REPAIRS

FRONT WHEEL (See Fig. 29) -

- Block up axle securely.
- Remove axle cover, retaining ring and washers to allow wheel removal.
- Repair tire and reassemble.
- Replace washers and snap retaining ring securely in axle groove.
- Replace axle cover.

#### **REAR WHEEL -**

- · Block rear axle securely.
- · Remove five (5) hub bolts to allow wheel removal.
- Repair tire and reassemble. Replace and tighten hub bolts securely.

**NOTE:** To seal tire punctures and prevent flat tires due to slow leaks, tire sealant may be purchased from your local parts dealer. Tire sealant also prevents tire dry rot and corrosion.

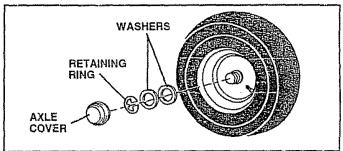


FIG. 29

# TO START ENGINE WITH A WEAK BATTERY (See Fig. 30)



CAUTION: Lead-acid batteries generate explosive gases. Keep sparks, flame and smoking materials away from batteries. Always wear eye protection when around batteries.

If your battery is too weak to start the engine, it should be recharged. If "jumper cables" are used for emergency starting, follow this procedure:

IMPORTANT: YOUR TRACTOR IS EQUIPPED WITH A 12 VOLT NEGATIVE GROUNDED SYSTEM. THE OTHER VEHICLE MUST ALSO BE A 12 VOLT NEGATIVE GROUNDED SYSTEM. DO NOT USE YOUR TRACTOR BATTERY TO START OTHER VEHICLES.

#### TO ATTACH JUMPER CABLES -

- Connect each end of the RED cable to the POSITIVE (+) terminal of each battery, taking care not to short against chassis.
- Connect one end of the BLACK cable to the NEGA-TIVE (-) terminal of fully charged battery.
- Connect the other end of the BLACK cable to good CHASSIS GROUND, away from fuel tank and battery.

#### TO REMOVE CABLES, REVERSE ORDER -

- BLACK cable first from chassis and then from the fully charged battery.
- RED cable last from both batteries.

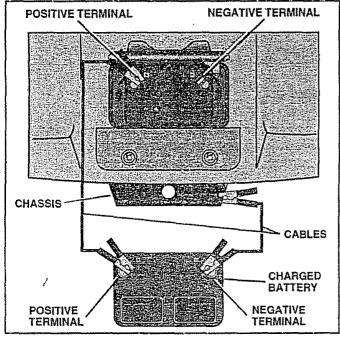


FIG. 30

### TO REPLACE HEADLIGHT BULB

- · Raise hood.
- Pull bulb holder out of the hole in the backside of the grill.
- Replace bulb in holder and push bulb holder securely back into the hole in the backside of the grill.
- Close hood.

#### INTERLOCKS AND RELAYS

Loose or damaged wiring may cause your tractor to run poorly, stop running, or prevent it from starting.

 Check wiring. See electrical wiring diagram in the Repair Parts section of this manual.

### TO REPLACE FUSE

Replace with 30 amp automotive-type plug-in fuse. The fuse holder is located behind the dash.

# TO REMOVE HOOD AND GRILL ASSEMBLY (See Fig. 31)

- · Raise hood.
- · Unsnap headlight wire connector.
- Stand in front of tractor. Grasp hood at sides, tilt toward engine and lift off of tractor.
- To replace, reverse above procedures.

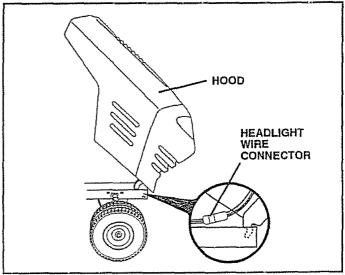


FIG. 31

#### **ENGINE**

# TO ADJUST THROTTLE CONTROL CABLE (See Fig. 32)

The throttle control has been preset at the factory and adjustment should not be necessary. Check adjustment as described below before loosening cable. If adjustment is necessary, proceed as follows:

- With engine not running, move throttle control lever from slow (-) to choke () position. Slowly move lever from choke () to fast (-) position.
- Check to see if hole in throttle lever and hole in speed control bracket are aligned.
- If holes are not aligned, loosen cable clamp screw and align the holes by inserting a pencil or a 1/4" drill bit through both holes.
- Pull throttle cable up to remove slack and tighten cable clamp screw. Remove alignment pencil or drill bit.

### TO ADJUST CARBURETOR (See Fig. 33)

The carburetor has been preset at the factory and adjustment should not be necessary. However, minor adjustment may be required to compensate for differences in fuel, temperature, altitude or load. If the carburetor does need adjustment, proceed as follows:

In general, turning the adjusting needles **in** (clockwise) decreases the supply of fuel to the engine giving a leaner fuel/air mixture. Turning the adjusting needles **out** (counterclockwise) increases the supply of fuel to the engine giving a richer fuel/air mixture.

**IMPORTANT:** DAMAGE TO THE NEEDLES AND THE SEATS IN CARBURETOR MAY RESULT IF NEEDLE IS TURNED IN TOO TIGHT.

**NOTE:** The carburetor on this engine is low emission. It is equipped with an idle fuel adjusting needle with a limiter cap, which allows some adjustment within the limits allowed by the cap. Do not attempt to remove the limiter cap. The limiter cap cannot be removed without breaking the adjusting needle.

- Be sure you have a clean air filter and the throttle control cable is adjusted properly (see above).
- Start engine and allow to warm for five minutes. Make adjustments with engine running and shift/motion control lever in neutral (N) position.
- Idle speed setting With throttle control lever in slow ( ) position, engine should idle at 1750 RPM. If engine idles too slow or fast, turn idle speed adjusting screw in or out until correct idle is attained.
- Idle fuel needle setting With throttle control lever in slow (
   ) position, turn idle fuel adjustment needle in (clockwise) until engine begins to die and then turn out (counterclockwise) until engine runs rough. Turn needle to a point midway between those two positions.
- Recheck idle speed. Readjust if necessary.

#### **ACCELERATION TEST -**

Move throttle control lever from slow ( ) to fast ( ) position. If engine hesitates or dies, turn idle fuel adjusting needle out (counterclockwise) 1/8 turn. Repeat test and continue to adjust, if necessary, until engine accelerates smoothly.

High speed stop is factory adjusted. Do not adjust - damage may result.

IMPORTANT: NEVER TAMPER WITH THE ENGINE GOVERNOR, WHICH IS FACTORY SET FOR PROPER ENGINE SPEED. OVERSPEEDING THE ENGINE ABOVE THE FACTORY HIGH SPEED SETTING CAN BE DANGEROUS IF YOU THINK THE ENGINE-GOVERNED HIGH SPEED NEEDS ADJUSTING, CONTACT YOUR NEAREST AUTHORIZED SERVICE CENTER/DEPARTMENT, WHICH HAS PROPER EQUIPMENT AND EXPERIENCE TO MAKE ANY NECESSARY ADJUSTMENTS.

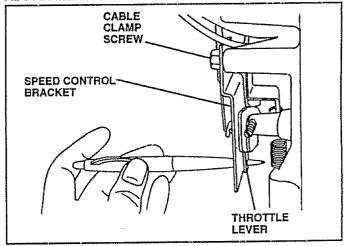


FIG. 32

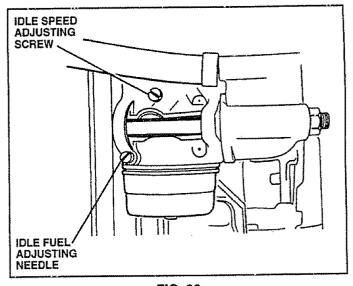


FIG. 33

# **STORAGE**

Immediately prepare your tractor for storage at the end of the season or if the tractor will not be used for 30 days or more.



CAUTION: Never store the tractor with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.

### TRACTOR

Remove mower from tractor for winter storage. When mower is to be stored for a period of time, clean it thoroughly, remove all dirt, grease, leaves, etc. Store in a clean, dry area.

- Clean entire tractor (See "CLEANING" in the Customer Responsibilities section of this manual).
- Inspect and replace belts, if necessary (See belt replacement instructions in the Service and Adjustments section of this manual).
- Lubricate as shown in the Customer Responsibilities section of this manual.
- Be sure that all nuts, bolts and screws are securely fastened. Inspect moving parts for damage, breakage and wear. Replace if necessary.
- Touch up all rusted or chipped paint surfaces; sand lightly before painting.

#### BATTERY

- Fully charge the battery for storage.
- After a period of time in storage, battery may require recharging.
- To help prevent corrosion and power leakage during long periods of storage, battery cables should be disconnected and battery cleaned thoroughly (see "TO CLEAN BATTERY AND TERMINALS" in the Customer Responsibilities section of this manual).
- After cleaning, leave cables disconnected and place cables where they cannot come in contact with battery terminals.
- · Be sure battery drain tube is securely attached.
- If battery is removed from tractor for storage, do not store battery directly on concrete or damp surfaces.

### **ENGINE**

#### **FUEL SYSTEM**

IMPORTANT: IT IS IMPORTANT TO PREVENT GUM DEPOSITS FROM FORMING IN ESSENTIAL FUEL SYSTEM PARTS SUCH AS CARBURETOR, FUEL FILTER, FUEL HOSE, OR TANK DURING STORAGE. ALSO, EXPERIENCE INDICATES THAT ALCOHOL BLENDED FUELS (CALLED GASOHOL OR USING ETHANOL OR METHANOL) CAN ATTRACT MOISTURE WHICH LEADS TO SEPARATION AND FORMATION OF ACIDS DURING STORAGE. ACIDIC GAS CAN DAMAGE THE FUEL SYSTEM OF AN ENGINE WHILE IN STORAGE.

- Drain the fuel tank.
- Start the engine and let it run until the fuel lines and carburetor are empty.
- Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.
- Use fresh fuel next season.

NOTE: Fuel stabilizer is an acceptable alternative in minimizing the formation of fuel gum deposits during storage. Add stabilizer to gasoline in fuel tank or storage container. Always follow the mix ratio found on stabilizer container. Run engine at least 10 minutes after adding stabilizer to allow the stabilizer to reach the carburetor. Do not drain the gas tank and carburetor if using fuel stabilizer.

#### **ENGINE OIL**

Drain oil (with engine warm) and replace with clean engine oil. (See "ENGINE" in the Customer Responsibilities section of this manual).

#### **CYLINDERS**

- Remove spark plug(s).
- Pour one ounce of oil through spark plug hole(s) into cylinder(s).
- Turn ignition key to "START" position for a few seconds to distribute oil.
- Replace with new spark plug(s).

### **OTHER**

- Do not store gasoline from one season to another.
- Replace your gasoline can if your can starts to rust.
   Rust and/or dirt in your gasoline will cause problems.
- If possible, store your tractor indoors and cover it to give protection from dust and dirt.
- Cover your tractor with a suitable protective cover that does not retain moisture. Do not use plastic. Plastic cannot breathe which allows condensation to form and will cause your tractor to rust.

IMPORTANT: NEVER COVER TRACTOR WHILE ENGINE AND EXHAUST AREAS ARE STILL WARM.

# TROUBLESHOOTING POINTS

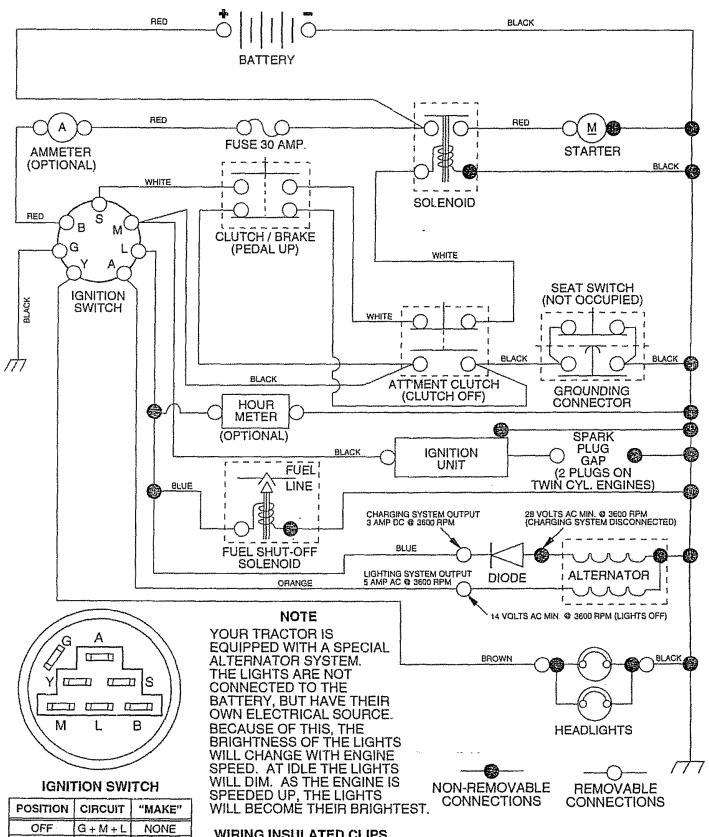
PROBLEM	CAUSE	CORRECTION
Will not start	<ol> <li>Out of fuel.</li> <li>Engine not "CHOKED" properly.</li> <li>Engine flooded.</li> <li>Bad spark plug.</li> <li>Dirty air filter.</li> <li>Dirty fuel filter.</li> <li>Water in fuel.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> </ol>	<ol> <li>Fill fuel tank.</li> <li>See "TO START ENGINE" in Operation section.</li> <li>Wait several minutes before attempting to start.</li> <li>Replace spark plug.</li> <li>Clear/replace air filter.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service Adjustments section.</li> <li>Contact an authorized service center/department.</li> </ol>
Hard to start	1. Dirty air filter. 2. Bad spark plug. 3. Weak or dead battery. 4. Dirty fuel filter. 5. Stale or dirty fuel. 6. Loose or damaged wiring. 7. Carburetor out of adjustment. 8. Engine valves out of adjustment.	<ol> <li>Clean/replace air filter.</li> <li>Replace spark plug.</li> <li>Recharge or replace battery.</li> <li>Replace fuel filter</li> <li>Drain fuel tank and refill with fresh gasoline.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service Adjustments section.</li> <li>Contact an authorized service center/department.</li> </ol>
Engine will not turn over	1. Clutch/brake pedal not depressed. 2. Attachment clutch is engaged. 3. Weak or dead battery. 4. Blown fuse. 5. Corroded battery terminals 6. Loose or damaged wiring. 7. Faulty ignition switch. 8. Faulty solenoid or starter. 9. Faulty operator presence switch(es).	1. Depress clutch/brake pedal. 2. Disengage attachment clutch. 3. Recharge or replace battery. 4. Replace fuse. 5. Clean battery terminals. 6. Check all wiring. 7. Check/replace ignition switch. 8. Check/replace solenoid or starter. 9. Contact an authorized service center/department.
Engine clicks but will not start	Weak or dead battery.     Corroded battery terminals     Loose or damaged wiring.     Faulty solenoid or starter.	1. Recharge or replace battery. 2. Clean battery terminals. 3. Check all wiring. 4. Check/replace solenoid or starter.
Loss of power	1. Cutting too much grass/too fast. 2. Throttle in "CHOKE" position. 3. Build-up of grass, leaves and trash under mower. 4. Dirty air filter. 5. Low oil level/dirty oil. 6. Faulty spark plug 7. Dirty fuel filter. 8. Stale or dirty fuel 9. Water in fuel. 10. Spark plug wire loose. 11. Dirty engine air screen/fins. 12. Dirty/clogged muffler. 13. Loose or damaged wiring. 14. Carburetor out of adjustment. 15. Engine valves out of adjustment.	<ol> <li>Set in "Higher Cut" position/reduce speed.</li> <li>Adjust throttle control.</li> <li>Clean underside of mower housing.</li> <li>Clean/replace air filter.</li> <li>Check oil level/change oil.</li> <li>Clean and regap or change spark plug.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and refill with fresh gasoline.</li> <li>Drain fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter.</li> <li>Connect and tighten spark plug wire.</li> <li>Clean engine air screen/fins.</li> <li>Clean/replace muffler.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service Adjustments section.</li> <li>Contact an authorized service center/department.</li> </ol>
Excessive vibration	Worn, bent or loose blade.     Bent blade mandrel.     Loose/darnaged part(s).	1. Replace blade. Tighten blade bolt. 2. Replace blade mandrel. 3. Tighten loose part(s). Replace damaged parts.

# TROUBLESHOOTING POINTS

PROBLEM	CAUSE	CORRECTION			
Engine continues to run when operator leaves seat with attachment clutch engaged	Faulty operator-safety presence control system.	Check wiring, switches and connections. If not corrected, contact an authorized service center/ department.			
Poor cut - uneven	<ol> <li>Worn, bent or loose blade.</li> <li>Mower deck not level.</li> <li>Buildup of grass, leaves, and trash under mower.</li> <li>Bent blade mandrel.</li> <li>Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.</li> </ol>	1. Replace blade. Tighten blade bolt. 2. Level mower deck. 3. Clean underside of mower housing. 4. Replace blade mandrel. 5. Clean around mandrels to open vent holes.			
Mower blades will not rotate	Obstruction in clutch mechanism.     Worn/damaged mower drive belt.     Frozen idler pulley.     Frozen blade mandrel.	Remove obstruction.     Replace mower drive belt.     Replace idler pulley.     Replace blade mandrel.			
Poor grass discharge	<ol> <li>Engine speed too slow.</li> <li>Travel speed too fast.</li> <li>Wet grass.</li> <li>Mower deck not level.</li> <li>Low/uneven tire air pressure.</li> <li>Worn, bent or loose blade.</li> <li>Buildup of grass, leaves and trash under mower.</li> <li>Mower drive belt worn.</li> <li>Blades improperly installed.</li> <li>Improper blades used.</li> <li>Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.</li> </ol>	1. Place throttle control in "FAST" position. 2. Shift to slower speed. 3. Allow grass to dry before mowing. 4. Level mower deck. 5. Check tires for proper air pressure. 6. Replace/sharpen blade. Tighten blade bolt. 7. Clean underside of mower housing. 8. Replace mower drive belt. 9. Reinstall blades sharp edge down. 10. Replace with blades listed in this manual. 11. Clean around mandrels to open vent holes.			
Headlight(s) not working (if so equipped)	1. Switch is "OFF". 2. Bulb(s) burned out. 3. Faulty light switch. 4. Loose or damaged wiring. 5. Blown fuse.	1. Turn switch "ON". 2. Replace bulb(s). 3. Check/replace light switch. 4. Check wiring and connections. 5. Replace fuse.			
Battery will not charge	<ol> <li>Bad battery cell(s).</li> <li>Poor cable connections.</li> <li>Faulty regulator (if so equipped)</li> <li>Faulty alternator.</li> </ol>	Replace battery.     Check/clean all connections.     Replace regulator.     Replace alternator.			
Engine "backfires" when turning engine "OFF"	Engine throttle control not set at "SLOW"     position for 30 seconds before stopping engine.	Move throttle control to "SLOW" position and allow to idle for 30 seconds before stopping engine.			

### TRACTOR - - MODEL NUMBER 917.258543

#### SCHEMATIC



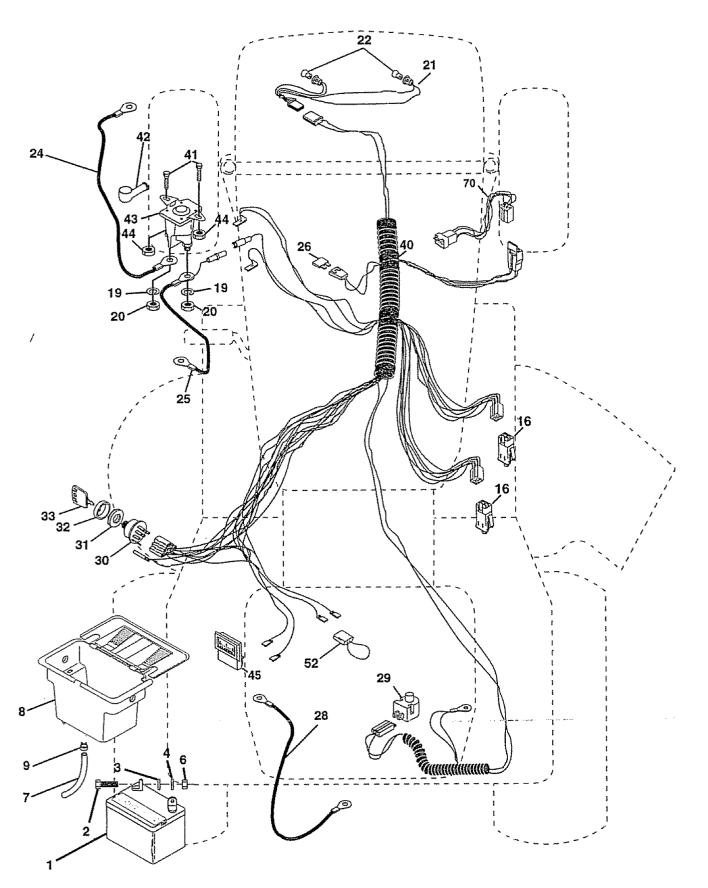
POSITION	CIRCUIT	"MAKE"		
OFF	G+M+L	NONE		
<b>RUN/LIGHT</b>	B+L	A + Y		
RUN	B+L	NONE		
START	B+L+S	NONE		

#### WIRING INSULATED CLIPS

**NOTE: IF WIRING INSULATED CLIPS WERE REMOVED FOR** SERVICING OF UNIT, THEY SHOULD BE REPLACED TO PROPERLY SECURE YOUR WIRING.

# **TRACTOR - - MODEL NUMBER 917.258543**

## **ELECTRICAL**



# **TRACTOR - - MODEL NUMBER 917.258543**

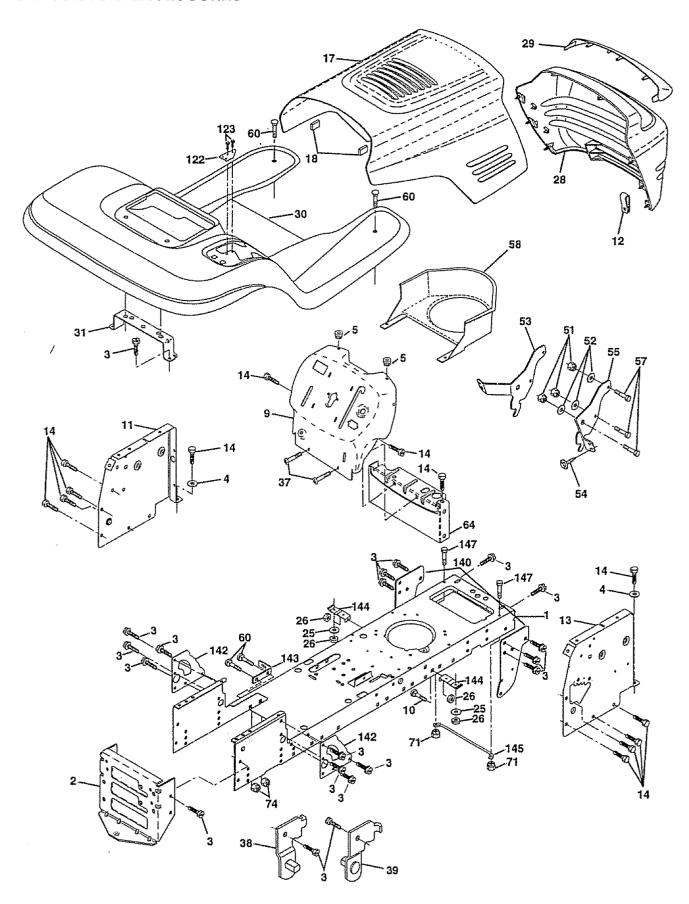
## **ELECTRICAL**

KEY NO.	PART NO.	DESCRIPTION
	146140 74760412 STD551025 STD551125 STD541025 109238X 156417 109596X 153664 STD551125 73350400 147430 4152J 4799J 146147	Battery,12 Volt 30 Amp Bolt, Hex 1/4-20 x 3/4 Washer 9/32 x 5/8 x 16 Gauge Washer, Lock 1/4 Nut, Hex 1/4-20 Tube, Plastic, 1/2" Case, Battery Mech Hinge Clamp, Hose Switch, Interlock Push-In Washer, Lock 1/4 Nut, Hex, Jam 1/4-20 UNC Harness, Light Socket (w/4152J) Light Bulb Cable, Battery, 6 Gauge, Red, 11" Cable, Battery, 6 Gauge, Red, W16
45	140301 124211X	Wire Fuse, 30 Amp Cable, Ground, 6 Gauge, Black, 12" Switch, Plunger Switch, Ignition 4 Position Nut, Ignition Cover, Ignition Switch Key, Molded, Craftsman Harness, Ignition Bolt Blk Fin Hex 1/4-20 UNC x 1/2 Cover, Terminal Solenoid Nut,Keps Blk Hex 1/4-20 UNC Ammeter, Rectangular 6 Amp Protection Wire Loop (Hour Meter) Harness, Engine Kohl Cmd-L Dual

**NOTE:** All component dimensions given in U.S. inches 1 inch = 25.4 mm

# **TRACTOR - - MODEL NUMBER 917.258543**

## **CHASSIS AND ENCLOSURES**



## **TRACTOR - - MODEL NUMBER 917.258543**

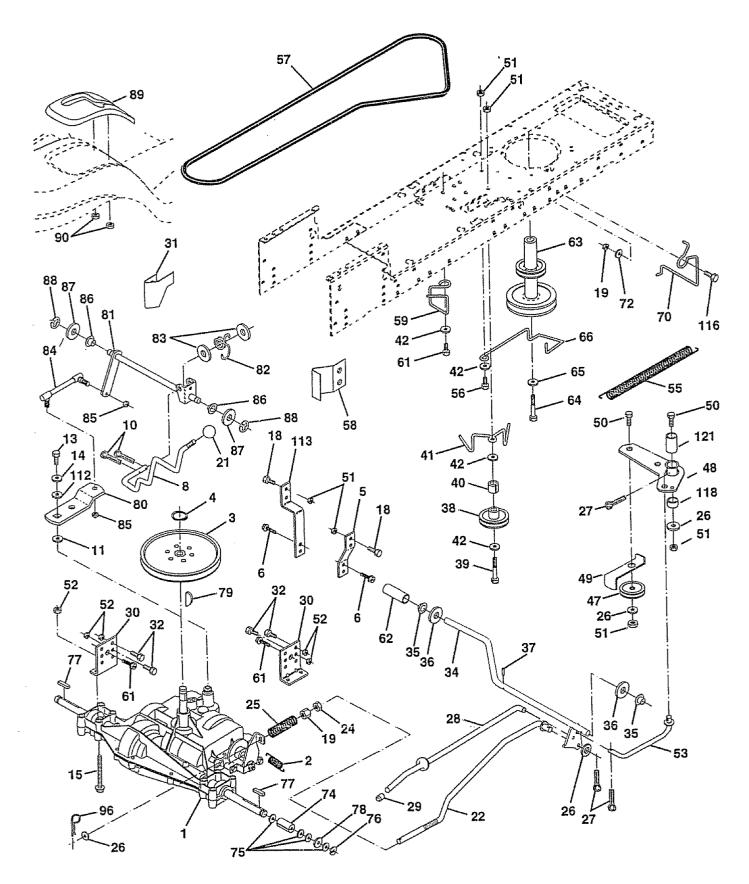
### **CHASSIS AND ENCLOSURES**

KEY NO.	PART NO.	DESCRIPTION
123459011234785689017891555556641402344	159527 140356 17490612 19131216 155272 150156X011 STD533710 155927 145660 155936 17490608 144983X558 126938X 19131312 STD541437 145198X558 145200 151287X558 139976 17490508 139886 139887 73800400 19091416 145201 17030814 145202 STD552507 150127 72140606 154798 73680600 158418 156095 154966 154966 154966 154966 154966	Chassis Assembly Drawbar Screw, Thd., Roll. 3/8-16 x 3/4 Washer 13/32 x 3/4 x 16 Gauge Bumper Hood/Dash Dash Bolt, Carriage 3/8-16 x 3/4 Panel, Dash, LH Clip Tinnerman Grille P/L Panel, Dash, RH Screw, Thd., Roll. 3/8-16 x 1/2 Hood Assembly Bumber Hood Washer 13/32 x 13/16 x 12 Gauge Locknut Grille w/Clips MS-558 Lens, Grille Fender/Footrest Pnt STLT N Hold 558 Bracket, Fender/Support Screw Thdrol 5/16-18 x 1/2 Pivot Bracket Assembly, LH, Pivot Bracket Assembly, RH, Nut Lock w/Insert 1/4 - 20 UNC Washer, 9/32 x 7/8 x 16 Gauge Bracket, Grille Pickoff LH Screw, Hex Head, Spiderlock #8 x 7/8 Bracket, Grille Pickoff HH Bolt, FinHex 1/4 -20 UNC x .75 Duct, Air Engine PL/LT Bolt, Rdhd Sqnk 3/8-16 UNC x 3/4 Dash, Lower STLT Nut, Crownlock 1/4-20 UNC Nut, Crownlock 3/8-16 UNC Bracket, Suspension Front Plate, Reinforcement STLT Backrest, Swaybar Chassis Bracket, Footrest STLT Rod Pivot Chassis/Hood Bolt Hex Hd 1/4-20 UNC x 3/4
sirMm	5479J	Plug, Button

**NOTE:** All component dimensions given in U.S. inches 1 inch = 25.4 mm

# TRACTOR - - MODEL NUMBER 917.258543

# DRIVE



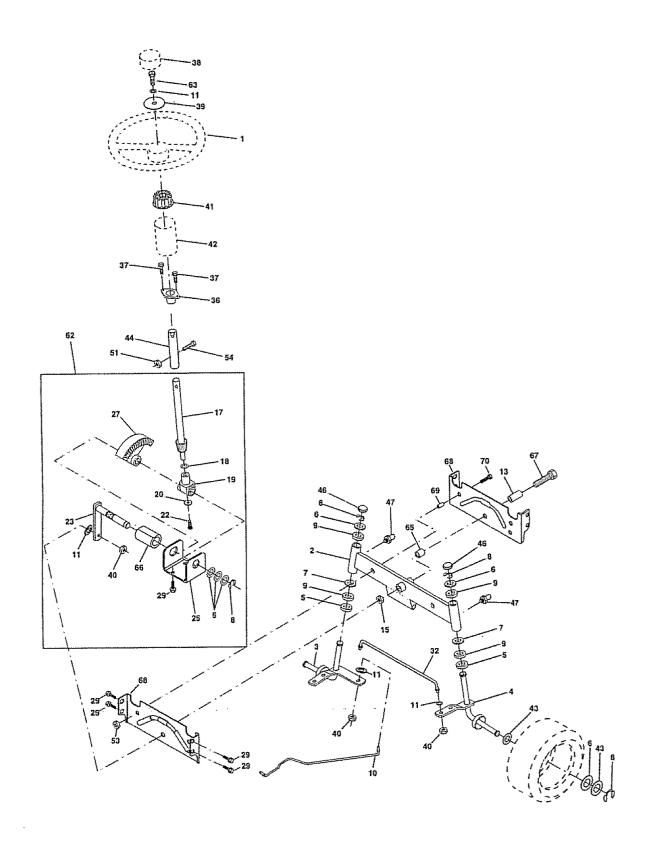
## TRACTOR - - MODEL NUMBER 917.258543

### DRIVE

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 23456801134589124567890124567890142789	146682 123666X 12000028 121520X 17490512 154792 STD561210 105701X 74550412 STD551125 74490544 STD523710 STD541437 106933X 130804 STD541237 106888X STD551037 STD551037 STD561210 145204 124236X 130807 127275X STD523107 155071 120183X STD551062 STD571810 123674X STD523727 4470J 154777 19131312 127783 154604 123205X	Transaxle(See Breakdown) Peerless, Model Number 930-057A Spring, Return, Brake Pulley, Transaxle Ring, Retainer Strap, Torque Screw, Thd., Roll. 5/16-18 x 3/4 Rod Shifter Fender STLT Pin, Cotter Washer, Shift Plate Bolt 1/4-28 UNF W/Patch Grade 8 Washer Bolt, Hex Fighd 5/16-18 Grade 5 Bolt Fin Hex 3/8-16 UNC x 1. Gr 5 Nut Knob Rod, Brake Nut Spring, Brake Rod Washer Pin Rod, Parking Brake Cap, Parking Brake, Red Bracket, Transaxle Keeper, Belt, L.H. Bolt Shaft Assembly, Foot Pedal Bearing, Nylon Washer Roll Pin Pulley, Idler, Flat Boit Spacer, Spiit .395 x .59 Keeper, Belt, Idler Fool-Proof Washer 13/32 x 13/16 x 12 Gauge Pulley, Idler, V-Groove, Plastic Bellcrank Assembly Retainer, Belt	535567896123456677274567789123888888899612113116	105710X 105709X STD523712 130801 127274X 140312 17490612 8883R 140186 71170764 STD551143 154778 134683 19132012 137057 121749X STD581075 123583X 121748X 2228M 145090 156049 123782X 19171216 145643 150360 71208 19212016 12000008 154886 124346X 4497H 19091210 127285X 72110610 154774	Link, Clutch Spring, Clutch Return Bolt Fin Hex 3/8-16 x 1-1/4 V-Belt, Ground Drive Keeper, Belt, R.H. Keeper, Belt, Center Span Screw, Thd., Roll. 3/8-16 x 3/4 Cover, Pedal Pulley, Engine Bolt, Hex Head, Fin. 7/16-20 x 4 Grade 5 Washer Keeper, Belt, Engine, Fool-Proof Guide, Mower Drive Belt, R.H. Washer 13/32 x 1-1/4 x 12 Gauge Spacer, Axle Washer 25/32 x 1-1/4 x 16 Gauge E-Ring Key, Square 2.0 x .1845/.1865 Washer 25/32 x 1-5/8 x 16 Gauge Key Woodruff #9 3/16 x 3/4 Arm, Shift Shaft Assembly Spring, Torsion Washer 17/32 x 3/4 x 16 Gauge Tie Rod Nut, Nylock Bushing, Pivot Washer E-Ring Console, Shift, STLT Nut, Self-Threading, Washer Hd 1/4 Retainer Spring 1" Zinc Cad Washer 9/32 x 3/4 x 10 Gauge Strap Torque LT Bolt Rdhd Sqneck 3/8-16 x 1.25 Spacer Bellcrank Nyliner Clutching STL
50 51 52	STD523715 STD541437 STD541431	Bolt Nut Crown Lock 3/8-16 UNC Nut Crown Lock 5/16-18 UNC	ГОИ	E: All compon 1 inch = 25	ent dimensions given in U.S. inches .4 mm

# TRACTOR - - MODEL NUMBER 917.258543

## STEERING ASSEMBLY



## **TRACTOR - - MODEL NUMBER 917.258543**

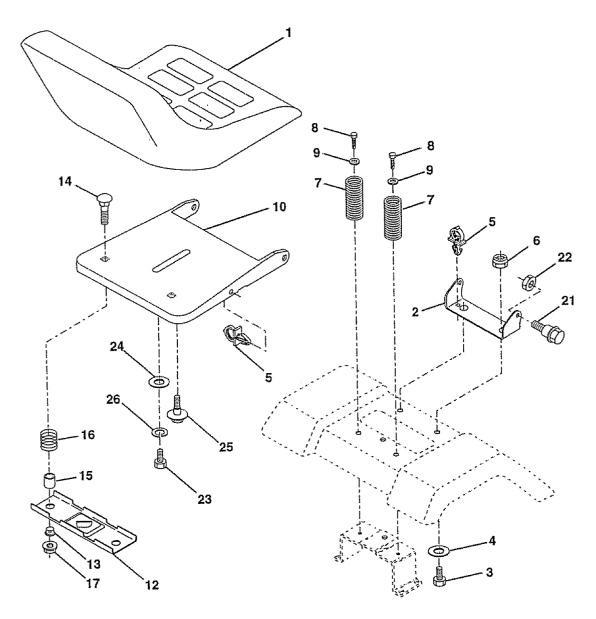
#### STEERING ASSEMBLY

KEY NO.	PART NO.	DESCRIPTION
	NO.  121472X 154427 156483 157473 6266H 121748X 19272016 12000029 3366R 156438 STD551137 154779 73901000 156546 57079 124035X 126684X STD551125 71100410 127501 154406 126847X 136874 19131416 17490612 STD561210 130465 155099 152927 126805X 19133808 SDT541537 100711L 145054 121749X 153720 121232X	Wheel, Steering Axle, Asm Front Spindle, Asm Front Spindle, Asm Rh Bearing, Race Thrust Harden Washer, 25/32 x 1 5/8 x 16ga Washer, 27/32 x 1 1/4 x 16 Ga Ring, Klip #t5304-75 Bearing, Col Strg Blk Draglink, Extended Stamped Washer, Lock Hvy Hlcl Spr 3/8 Bearing, Axle STLT/GT Locknut, Flange 5/8-11 UNC Shaft, Asm Strg Private Label Washer, Thrust 515 x 750 x 033 Support, Shaft Washer, Shim 1/4 x 5/8 x 062 Washer, Lock Hvy Helical 1/4 Screw, Hex Socket Hd 1/4-20 x 5/8 Shaft, Asm Pittman Bracket, Steering Bushing, Rod Tie Blk Lt Gear, Sector Washer, 13/32 x 7/8 x 16ga Screw, Thdrol 3/8-16x3/4 Ty-tt Pin, Cotter 1/8 x 3/4 Cad Rod, Tie Wire Form 19 75 Mech Bushing, Strg 5/8 ld Dash Screw, TT #10-32 x 5 x 3/8 Flange Insert, Steering Wheel Washer, 13/32 x 2-3/8 x 8 Gauge Gripco Nut Adaptor, Wheel Strg Boot Shaft Steering Washer, 25/32 x 1-1/4 x 16 Gauge Extension, Steering Non-Adjust Cap, Spindle Fr Top Blk Fitting, Grease Nut Lock Hex w/Ins 5/16 -18 UNC Nut, Crownlock 3/8-16 UNC Solt Fin Hex 5/16 - 18 UNC x 1 -1/4 Kit, Steering Assembly Bolt, Fin Hex 3/8-16 UNC x 1 Gr. 5 Spacer, Axle Bearing, Arm Pittman Bolt, Fin Hex 5/8-11 UNC x 2-3/4
68 69 70	154429 160367 74780636	Axle, Brace Spacer Brace Axle Bolt Fin Hex 3/8-16 UNC x 2-1/4

NOTE: All component dimensions given in U.S. inches 1 inch = 25.4 mm

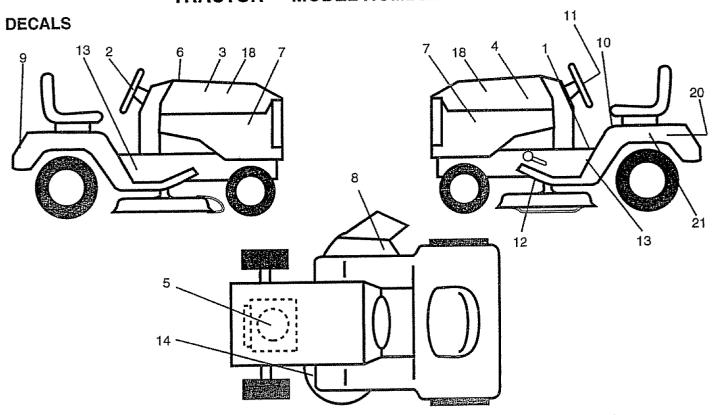
## TRACTOR - - MODEL NUMBER 917.258543

#### **SEAT ASSEMBLY**



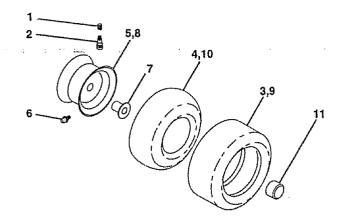
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 7 8 9 10 12 13 14	140123 140551 STD523710 19131610 145006 STD541437 124181X 17490616 19131614 155925 121246X 121248X 72050411	Seat Bracket, Pivot, Seat Bolt Washer 13/32 x 1 x 10 Gauge Clip, Push-In Hinged Nut Spring, Seat Screw, Thd., Roll. 3/8-16 x 1 Washer 13/32 x 1 x 14 Gauge Pan, Seat Emboss QCK Conn. Bracket, Switch Mounting Bushing, Snap Bolt, Carriage 1/4-20 x 1-3/8	15 16 17 21 22 23 24 25 26	134300 121250X 123976X 153236 STD541431 74780814 19171912 127018X STD551150 E: All compon- 1 inch = 25	Spacer, Split .28 x .88 Spring Locknut, Flange 1/4 Grade 5 Bolt, Shoulder 5/16-18 UNC Nut Bolt, Hex Head, Fin. 1/2-13 x 7/8 Grade 5 Washer 17/32 x 1-3/16 x 12 Gauge Bolt, Shoulder 5/16-18 x .62 Washer, Lock ent dimensions given in U.S. inches

## **TRACTOR - - MODEL NUMBER 917.258543**



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
12345678911	156368 150333 160278 160279 12-113-64 133644 149407 156787 146709 146710	Decal, Oper. Instr. Decal, Cap Cnsmr Help Line Decal, Hood, R.H. Decal, Hood, L.H. Decal, HP, Engine Decal, Customer Maintenance Decal, Side Panel Decal, Deck Mower EZ3 Decal, Fender, Craftsman Decal, Ins Whl Strg Auto Srs Gold	12 13 14 18 20 21	146046 147139 160396 151301 149516 138047 138311 154515 154516 160604	Decal, V-Belt Drive Schematic Decal, Chassis, 6 Speed/42" Decal, V-Belt Schematic Decal, Ins. Hood Decal Battery Dngr/Psn Eng Decal, Battery Diehard Sears Decal, Lift Handle Pad Footrest LH STLT Pad Footrest RH STLT Owner's Manual, English
10	156439	Decal, Fender Danger		160605	Owner's Martual, Spanish

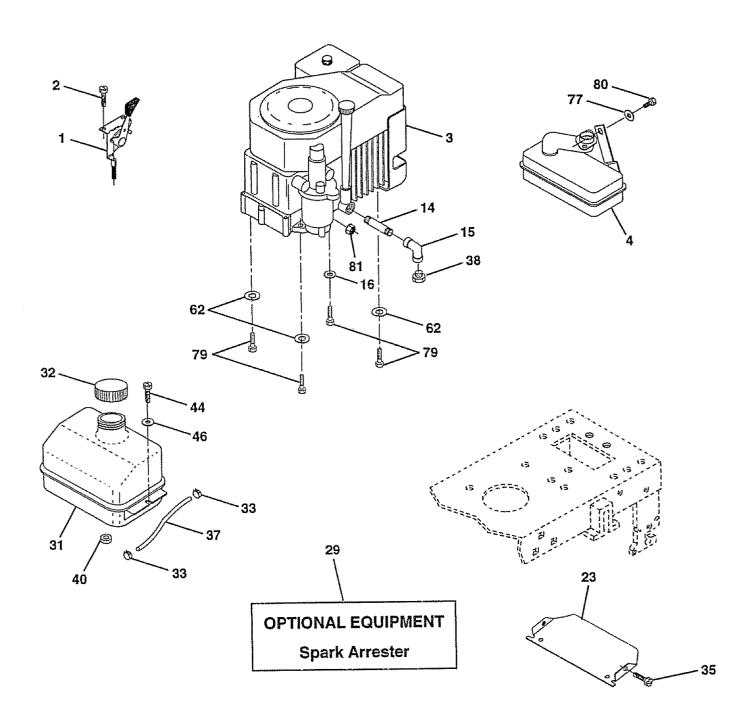
#### WHEELS & TIRES



KEY NO.		DESCRIPTION			
1	59192	Valve Cap, Tire			
2	65139	Stem, Valve			
2 3	106222X	Tire, Front			
4	59904	Tube, Front Tire			
	(A. 4. 41. 14.19. \$1.00)	(Not Provided, Service Item Only)			
5	106732X427	Řím, Front			
6	278H	Fitting, Grease (Front Wheel Only)			
7	9040H	Bearing, Flange (Front Wheel Only)			
8	106108X427	Rim, Rear			
9	138468	Tire, Rear			
10	7152J	Tube, Rear Tire			
		(Not Provided, Service Item Only)			
11	104757X	Cap, Axle			
	144334	Sealant, Tire 10 oz.			
NOTE: All component dimensions given in U.S. inches 1 inch = 25.4 mm					

## TRACTOR - - MODEL NUMBER 917.258543

#### **ENGINE**



#### **TRACTOR - - MODEL NUMBER 917.258543**

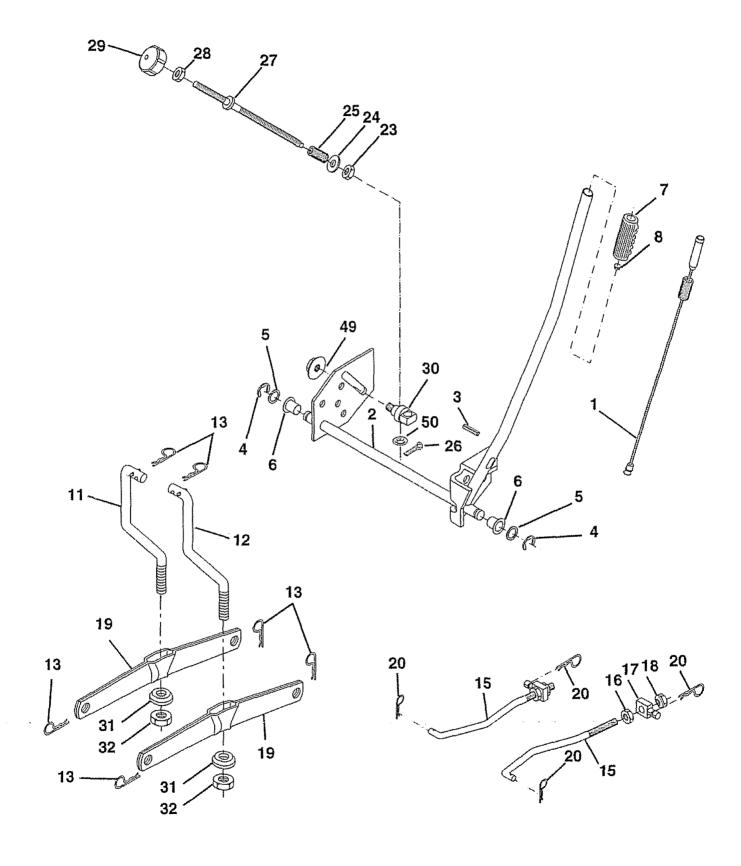
#### **ENGINE**

KEY NO.	PART NO.	DESCRIPTION
1 2 3	147025 17720410	Control, Throt Screw, Hex Thd Cut 1/4-20x5/8 T Engine (See Breakdown) Kohler Model No. CV15S-41526
4 14 15	137350 13280328 13200300 STD551231	Muffler Nipple, Pipe 3/8 NPT x 3-1/2 Elbow, Std 90 Degree 3/8-18 Npt Washer
23 29	156123 137180 109202X	Shield, Heat Arrestor, Spark Tank, Fuel
33 35	123549X 123487X 17490512	Cap Assembly, Fuel Tank, Vented Clamp, Hose Blk Screw, Thdrol 5/16-18 x 3/4 TYT
37 38	137040	Line Fuel Plug Oil Drain (Order From Engine Manufacturer)
40 44	124028X 17490412	Bushing, Snap, Fuel Line Screw, Hex Washer Head, Thd. Roll. 1/4-20 x 3/4
46 62 77 79	19091416 STD551131 19101216 M740108025	Washer, 9/32 x 7/8 x 16 Gauge Washer, Lock Washer 5/16 x 3/4 x 16 Gauge Bolt, Hex
	74760508 128861	Bolt, Hex Hd 5/16-18 UNC x 1/2 Nut, Flange 1/4-20 Starter Nut

NOTE: All component dimensions given in U.S. inches 1 inch = 25.4 mm

#### **TRACTOR - - MODEL NUMBER 917.258543**

#### **MOWER LIFT**



#### **TRACTOR - - MODEL NUMBER 917.258543**

#### **MOWER LIFT**

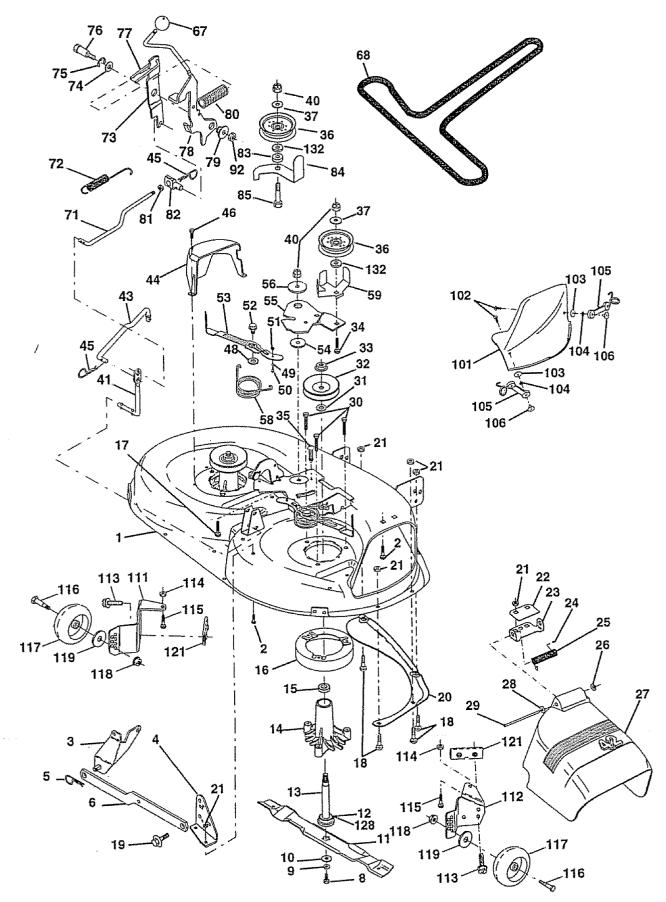
KEY NO.	PART NO.	DESCRIPTION
6 7 8 11 12 13 15 16	127218 73350800 130171	Wire Asm Inner/Sprg w/Plunger LT Shaft Asm. Lift Pin Groove E Ring #5133-62 Washer 21/32 x 1 x 21 Ga. Bearing Nylon Grip Handle Fluted Button Plunger Red Link Lift Lh Fixed Length Link Lift Rh Fixed Length Retainer Spring Link Front Nut Jam Hex 1/2-13 Unc Trunnion Blk Zinc LockNut, Hex, with Washer Insert
24 25 26 27 28 29 30 31 32	110807X 19131016	1/2-13 UNC Arm, Suspension Rear Retainer Spring Nut Spring Washer 13/32 x 5/8 x 16 Gauge Spring Pin cotter 3/32 x 1/2 Rod, Adjust,Lift Nut Hex Jam 3/8-16 UNC Knob Infinite Height Adjustment Trunnion Inf Height Bearing, Pivot, Lift Spherical Nut, Crownlock 3/8-24 Nut Hex Flange Lock Push Nut

NOTE: All component dimensions given in U.S. inches 1 inch = 25.4 mm

ere sure e u

#### TRACTOR - - MODEL NUMBER 917.258543

#### **MOWER DECK**



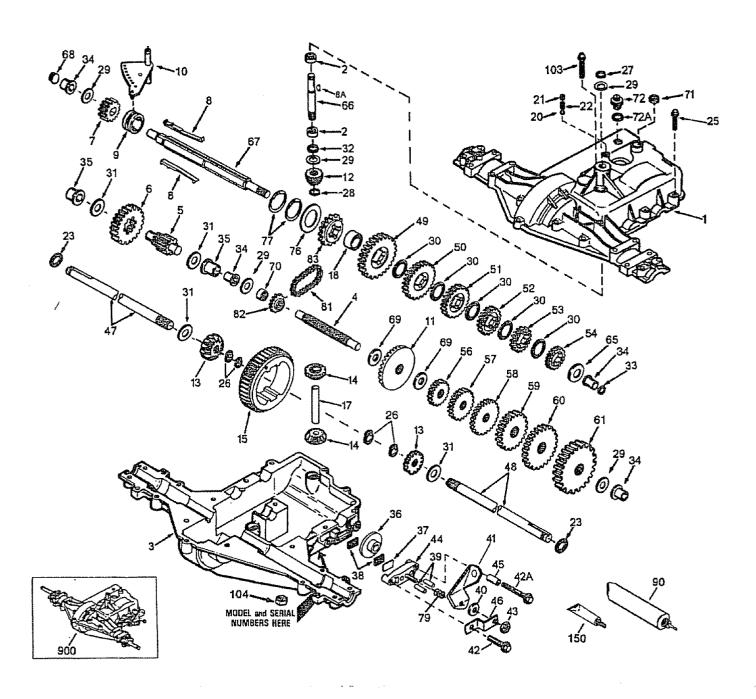
#### TRACTOR - - MODEL NUMBER 917.258543

#### **MOWER DECK**

KEY PAR NO. NO.	T DESCRIPTION	ОИ	KEY NO.		PART NO.	DESCRIPTION
1 144393 2 STD53		sing	58		0086	Spring, Torsion Brakes
2 STD533 3 138017		embly,Sway Bar, Front	59 67		1043 9846	Guard, TUV Idler Knob Custom Oval
4 138440		embly, Sway Bar			4200	V-Belt
5 STD624		ing	71		2427	Rod, Clutch, Primary, with Nibs
6 130832			72		1870	Spring, Return
8 850857		8-24 x 1.25 Grade 8			7847	Arm, Clutch, Secondary
9 STD55 <sup>-</sup> 10 140296					1748X	Washer 25/32 x 1-5/8 x 16 Gauge
11 134149			75 76		000029 8903	Ring, Klip Bolt, Shoulder 3/8-16 UNC x 1.44
12 129895	Bearing, Ball		77		7845	Keeper, Spring
13 137645	Shaft Assem	bly, Mandrel, Vented	78		4809	Lever Asm. Clutch Pri Plm STLT
	(includes Ke	y Number 6)	79	127	7498	Bushing, Large, Brass
14 128774		ndrel, Vented			3701	Spring, Mower Clutch
15 110485 16 140329		i, Mandrei hted Mower Deck	81	733	350600	Nut, Hex Jam 3/8-16 Unc
17 721106	10 Bolt, Carriag	e 3/8-16 x 1-1/4			2028 0958X	Trunnion, Adj. Washer Sintered
18 721405		e 5/16-18 x 5/8			6084	Keeper Belt Idler
19 132827	Bolt, Shoulde	er e			140618	Bolt Carriage 3/8-16 x 2-1/4
20 136888	Baffle, Vorter		92	ST	D541437	Nut
21 STD541		ck 5/16-18 UNC	101			Mulcher Cover
22 134753 23 131267	Stiffener Brad Bracket, Defl				161010	Screw
24 105304		ector			061216 D551110	Washer #10 Washer, Lock
25 123713		on, Deflector	105			Latch Assembly, Bagger
26 110452	X Nut, Push		106	202	29J	Nut, Weld
27 130968	Shield, Defle	ctor			5197	Bracket, Gauge, Wheel L.H.
28 191110 29 131491	Washer 11/3	32 x 5/8 x 16 Gauge			5198	Bracket, Gauge, Wheel R.H.
30 157722	Rod, Hinge Screw Thdro				490512	Screw Thdrol 5/16-18 x 3/4
31 129963	Washer, Spa	. vvadne, mead .cer			510500 110504	Nut, Hex, Keps 5/16-18 UNC Bolt, Carriage 5/16 UNC x 1/2
32 153535	Pulley, Mand	rel	116			Bolt, Shoulder
33 137266	Nut, Toplock		117			Wheel, Gauge
34 STD533	717 Bolt		118	739	930600	Nut, Centerlock 3/8-16
35 133835 36 131494	Fastner, Chri	stmas i ree	119	191		Washer 3/8 x 7/8 x 14 Gauge
37 191313	Pulley, Idler, 16 Washer 13/3		121 128			Bracket Washer Felt
40 STD541	437 Nut Crownloc	k 3/8-16 UNC			131312	Washer 13/32 x 13/16 x 12 Ga.
41 133551	Rod, Pivot, w		130	STI		Bolt, Fin Hex 3/8-16 UNC x 1 Gr. 5
43 140083	Rod, Clutch,	Secondary, with Nibs	131	STI	D533710	Bolt, RDHD SQNK 3/8-16 UNC x 1
44 140088	Guard, Mand	rel, L.H.	132	191	132203	Spacer, Washer 13/32 I.D. x 1-3/8
45 STD624 46 137729		Roll 1/4-20 x 5/8		400		O.D. x 1/4
48 133944	Washer, Har	dened	* -	IJ	794	Mandrel Assembly (Includes Key Numbers 8-10, 12-15, 31 and 32)
49 155066		ibly, Cam Follower		145	5411	Mower Deck, Complete (Standard
50 131340	Bolt, Shoulde	er #10-24 Grade 5				Deck, Order Separately Mulcher
51 STD541		- 540 40 LING				Plate and Gauge Wheel
52 139888 53 131845		er 5/16-18 UNC				Components, Key Nos. 101-106
54 133943	Nasher, Har	ly, Pad, Brake Jened				and 111-121)
55 155046	Arm, Idler	acijed .	NOT	<b>c.</b> /	All compone	nt dimensions given in U.S. inches
56 122052		iner			1 inch = 25.4	
	· ·				e systematic in the manager in	

## TRACTOR - - MODEL NUMBER 917.258543

## PEERLESS TRANSAXLE - MODEL NUMBER 930-057A

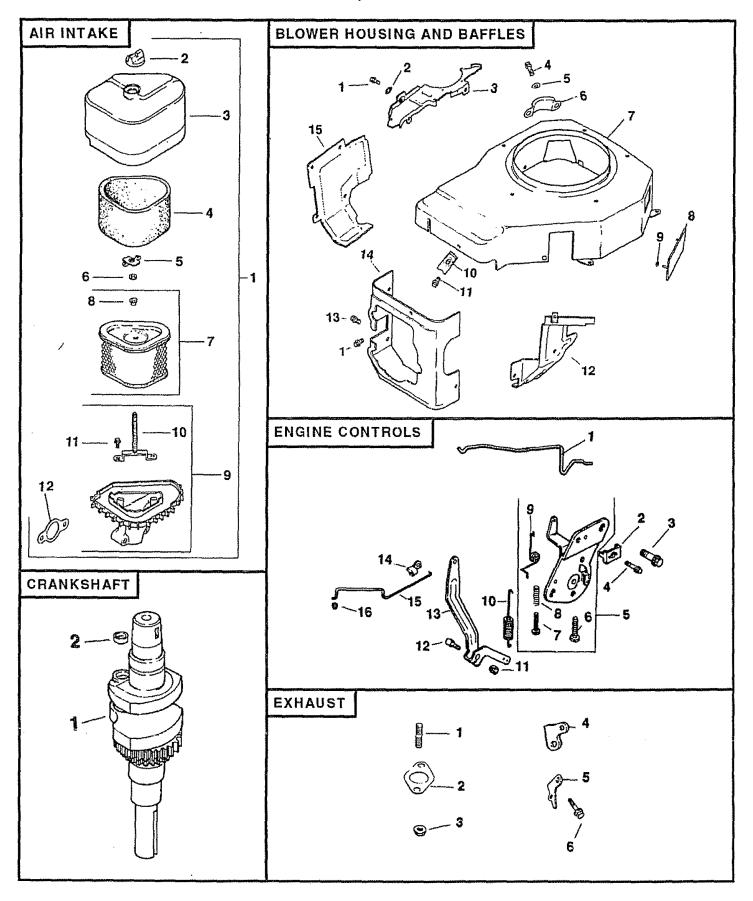


#### **TRACTOR - - MODEL NUMBER 917.258543**

#### PEERLESS TRANSAXLE - MODEL NUMBER 930-057A

REF NO.	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION
1	772108A	Cover, Transaxle	43	792075	Locknut 5/16-24
2	780086A	Bearing, Needle	44	790025	Holder, Brake Pad
3	770102A	Case, Transaxle		786066	Spacer
4	776260A	Shaft, Counter	46	786086	Bracket, Brake Lever
4 5	776219B	Shaft and Pinion Assembly, Output	47	774690	Axle 11-5/16" long
6	778139	Gear, Output, 35 Teeth		774691	Axle 16-1/2" long
7	778136	Gear, Spur, 15 Teeth, Steel		778215	Gear, Spur, 37 Teeth, Steel (1-)
8	792136A	Key, Shift		778125	Gear, Spur, 35 Teeth (2-)
	792047	Key, Woodruff	51	778124A	Gear, Spur, 30 Teeth (3-)
9	784352	Collar, Shifter		778123A	Gear, Spur, 25 Teeth (4-)
10	784355	Rod and Fork Assembly, Shift		778122A	Gear, Spur, 22 Teeth (5»)
11	778229	Gear, Bevel, 42 Teeth		778273	Gear, Spur, 19 Teeth, Steel (6 <sub>*</sub> )
12	778113A	Bevel Pinion, Input	56	778230	Gear, Spur, 12 Teeth, Steel (1.)
13	778221	Gear, Bevel, 16 Teeth	57	778151	Gear, Spur, 15 Teeth (2-)
14	778068	Gear, Bevel Pinion		778126A	Gear, Spur, 20 Teeth (34)
	778260	Gear, Ring		778127A	Gear, Spur, 25 Teeth (4-)
17	786139	Pin, Drive		778128A	Gear, Spur, 28 Teeth (5-)
	786102	Spacer, Neutral		778163	Gear, Spur, 31 Teeth (6-)
	792077	Ball, Steel 5/16" diameter		780109	Washer, Thrust
21	792078	Set Screw 3/8-16 x 3/8	66	776135	Shaft, Input
	792079	Spring	67	776315A	Shaft, Brake, 4 Keyed
	788061	Ring, Seal		786116A	Plug
25	792073	Screw, Flanged Hex Head, Thread		780051	Washer, Thrust
		Forming 1/4-20 x 1-1/4		786118	Spacer
26	792125	Ring, Retainer		788069	Square Cut Ring
		(4 Required, Package of 2)		792165	Plug, Threaded 9/16-18
27	792035	Ring, Retainer		788091	"O" Ring
	788040	Ring, Retainer		780090	Washer, Thrust
	780072	Washer, Thrust	77	788078A	Ring, Retaining, Inverted
	780108	Washer, Thrust			(Package of 2)
31	780001	Washer	79	792144	Spring, Brake
	792001	"O" Ring		786081	Chain, Roller
33	788095	Seal, Square Cut			(Number 41 Chain, 24 Links)
34	780105A	Bushing, Flanged	82	786082	Sprocket, 9 Teeth (Reverse)
	780118A	Bushing, Flanged		786123	Sprocket, 18 Teeth (Reverse)
36	790003	Disk, Brake		788067B	Grease, Bentonite, 32 Ounce Bottle
37	790007	Platé, Brake Pad		792166	Screw 1/4-20 x 2
38	799021	Pad, Brake (Package of 2)		792167	Locknut 1/4-20
39	786026	Pin, Dowel		788093	Gasket Eliminator (Loctite #515)
40	792076A	Washer, Flat		794602	Replacement Transaxle
41	790079	Lever, Brake			•
42	792073	Screw, Flanged Hex Head, Thread	NOT	E: All compone	ent dimensions given in U.S. inches
		Forming 1/4-20 x 1-1/4		1 inch = 25.	
42A	792085A	Screw 1/4-20 x 2-1/4			

#### **TRACTOR - - MODEL NUMBER 917.258543**



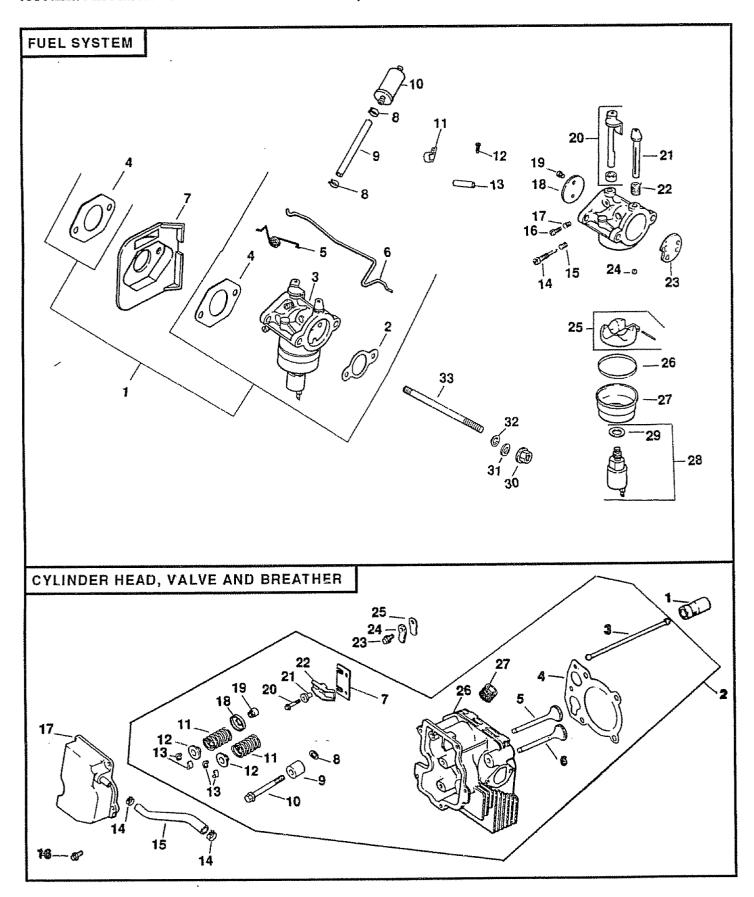
NOT ILLUSTRATED -- 12-113-64

Decal, Horsepower

## **TRACTOR - - MODEL NUMBER 917.258543**

1500	15 mm t amand a deal and a second a second and a second a						
AIR INTAKE				ENGINE CONTROLS			
KEY NO.	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION		
4 5 6 7 8 9 10 11 12 NOT	12-743-05 25-341-02 12-096-24 12-083-08 12-100-01 X-25-63 12-083-05 12-313-04 12-094-12 12-072-05 12-086-01 12-041-02 ILLUSTRATEG	Kit, Air Cleaner (Includes Key Numbers 2 thru 12) Knob, Air Cleaner Cover Cover, Air Cleaner Precleaner Element Wing Nut Washer, Plain 1/4 Element, Air Cleaner (Includes #7) Grommet Base, Air Cleaner (Includes Key Numbers 9 and 10) Stud, Mounting Plate M6 x 1.0 x 66 Screw, #10 Hi-Lo Thread Forming (2) Gasket, Air Cleaner	9 10 11 12 13 14 15	12-536-09 M-0443020	Linkage, Choke Clamp, Cable Screw, Locked Socket M6 x 1.0 x 20 (2) Screw, Hex Flange M5 x .8 x 16 Control, Speed Assembly (Includes Key Numbers 6 through 9) Screw, Pan Head M4 x 0.7 x 20 Screw, Pan Head M4 x 0.7 x 25 Spring, Choke Adjust (2) Spring, Choke Return Spring, Governor Nut, Hex Flange M6 x 1.0 Screw, Hex Flange M6 x 1.0 x 25 Lever, Governor Bushing, Throttle Linkage Linkage, Throttle Bushing, Linkage Retaining		
CRANKSHAFT				IAUST			
	PART NO.	DESCRIPTION	KEY	PART NO.	DESCRIPTION		
1 2	12-014-37 12-139-01	Crankshaft Plug, Cup		M-0829033 12-041-03	Stud, M8 x 1.25 x 33 (2) Gasket, Exhaust Manifold		
BLO	WER HOUSIN	G AND BAFFLES	4	3 M-0841080 4 12-126-11	Nut, Hex Flange M8 x 1.25 (2) Bracket, Muffler Strap, Lifting		
	PART NO.	DESCRIPTION	6	M-0645025	Screw, Hex Flange M6 x 1.0 x 25 (2)		
1	M-0545010	Screw, Hex Flange M5 x 0.8 x 10 (8)	NOT	T ILLUSTRATE	ED .		
2 3 4	24-468-10 12-146-07 M-0645020	Washer, Plain 1/4 Plate, Blower Housing Screw, Hex Flange M6 x 1.0 x 20		PART NO.	DESCRIPTION		
5 6 7	220534 24-096-05 12-027-32	Washer, Plain 5/16 (2) Cover, Pinion Housing, Blower	*** B	12-522-18 12-755-59	Short Block Gasket Set		
9 8 10	12-141-01 12-096-28 25-154-02	Ring, Retainer (2) Cover Clip, Mounting (3) Corpus How Flance, M5 x, 8 x 20 (3)	RPN RPN	M Settings: M Settings:	Low Speed: 1500-2000 High Speed: 3200-3400		
12 12-063-05 Baffle 13 M-0645016 Screv		Screw, Hex Flange M5 x .8 x 20 (3) Baffle, Intake Side Screw, Hex Flange M6 x 1.0 x 16 (2)	NO.	TE: All compor 1 inch = 25	nent dimensions given in U.S. inches 5.4 mm		
14 15	12-063-08 12-063-01	Baffle, Cylinder Head Baffle, Cylinder					

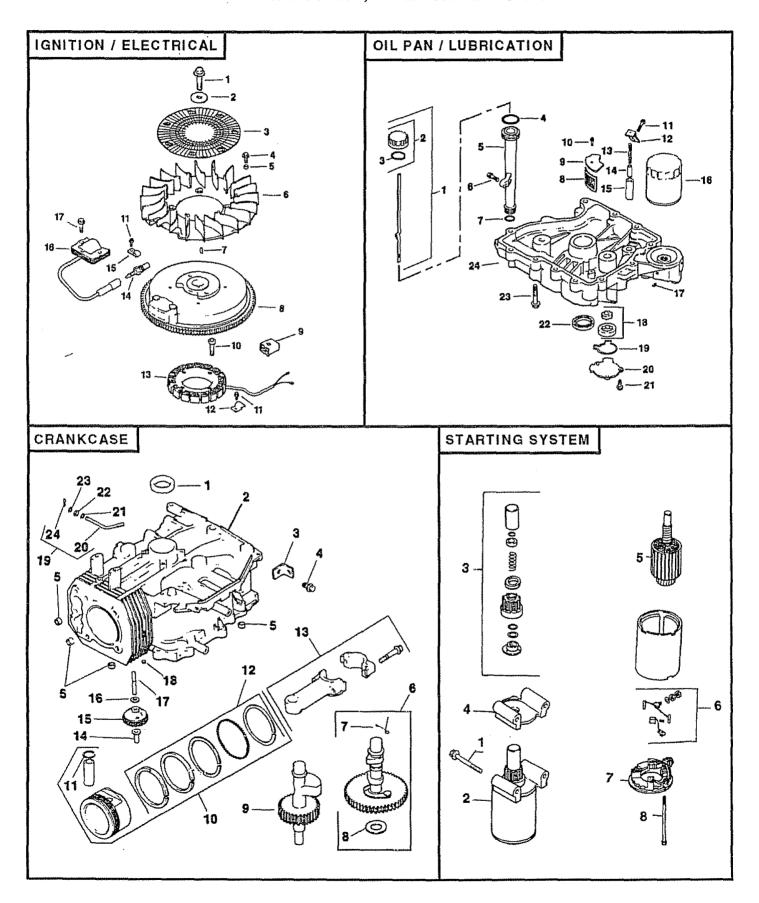
#### **TRACTOR - - MODEL NUMBER 917.258543**



#### **TRACTOR - - MODEL NUMBER 917.258543**

FUEL SYSTEM				CYLINDER HEAD, VALVE AND BREATHER		
	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION	
1 2 3	12-853-56 12-041-02 12-053-56	Kit, Carburetor (Includes #2 thru 6) Gasket, Air Cleaner Carburetor Assembly (For Information Only - Not Available Separately)	1 2 3 4 5	12-351-01 12-755-60 12-411-01 12-041-10 12-017-01	Lifter, Valve (2) Kit, Cylinder Head Rod, Push (2) Gasket, Cylinder Head Valve, Intake, Standard Size	
45678910112131451617892122324	12-041-01 12-089-23 12-079-07 12-265-04 X-426-9 25-353-10 25-050-02 47-154-01 12-086-07 12-431-01 12-368-05 12-089-09 12-086-04 12-089-09 12-146-03 25-086-27 12-144-09 12-144-08 12-089-10 12-146-02 12-146-02 12-337-03	(Includes Key Numbers 12 thru 27) Gasket, Carburetor (2) Spring, Choke Return Linkage, Choke Deflector, Heat Clamp, Hose (2) Line, Fuel, 9" Filter, Fuel Clip, Cable Screw, Hex Cap 8-32 x 3/8 Sleeve, Insulating Needle, Idle, Fuel Adjust Spring, Idle Fuel Screw, Idle Speed Adjust Spring, Idle Speed Plate, Throttle Screw, Throttle Plate (2) Shaft, Throttle with Lever and Seal Shaft, Choke Spring, Choke Plate, Choke Jet, Main	6 7 8 9 10 11 12 13 14 15 16 17 18 19	12-017-02 12-016-01 12-016-02 12-146-13 12-468-05 12-112-13 12-086-15 12-089-01 12-173-01 12-755-03 X-426-9 12-326-03 M-0645020 12-096-07 235011 24-032-05 M-0640034	Valve, Intake, .25" Oversize Valve, Exhaust, Standard Valve, Exhaust, .25" Oversize Plate, Guide Washer, Plain 13/32 Spacer, Head Bolt Exhaust Port Screw, Hex Flange M10 x 1.5 x 81 (5) Spring, Valve (2) Cap, Valve Spring (2) Kit, Retainer (2) Clamp, Hose (2) Hose, Breather Screw, Hex Flange M6 x 1.0 x 20 (5) Cover, Valve with Nipple Retainer, Spring Seal, Valve Stem Screw, Hex Flange M6 x 1 x 34 (2) Pivot, Rocker Arm (2) Arm, Rocker (2) Screw, Hex Flange	
25 26 27 28 29 30 31 32 33	12-757-02 12-041-05 12-104-01 12-757-09 12-041-06 M-0641060 X-25-63 X-22-11 M-0629122	Kit, Float Gasket, Bowl Bowl, Fuel Kit, Solenoid Assembly (Includes Key Number 29) Gasket, Bowl Retainer Screw Nut, Hex Flange M6 x 1.0 (2) Washer, Plain 1/4 Washer, Lock 1/4 Stud, M6 x 1.0 x 122 (2)	24 25 26 27	12-018-01 12-402-02 12-318-09 X-75-23	M5 x 0.8 x 10 Retainer, Breather Reed Reed, Breather Head, Cylinder Plug, Pipe, Allen Head 1/8 sent dimensions given in U.S. inches	
	ILLUSTRATE 12-041-01 12-757-03 12-518-05	• •				

TRACTOR - - MODEL NUMBER 917.258543
KOHLER ENGINE - MODEL NUMBER CV15S, TYPE NUMBER PS-41526

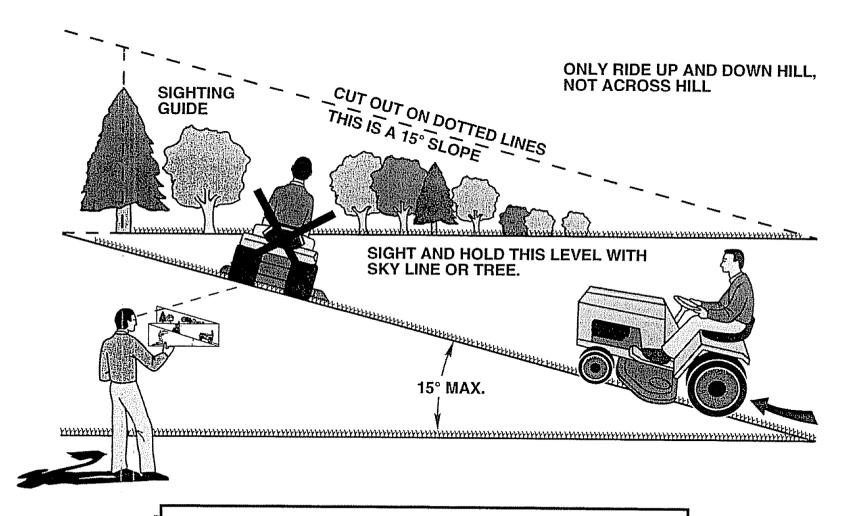


## **TRACTOR - - MODEL NUMBER 917.258543**

IGNITION / ELE	CTRICAL	CRANKCAS	Ē
KEY PART NO. NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
1 12-086-14 2 12-468-03 3 24-162-03 4 M-063901 5 12-112-01 6 12-157-02 7 X-42-15 8 12-025-25 9 41-155-02 10 M-054802 11 M-054501 12 12-154-02 13 12-085-03 14 12-132-02 15 X-728-1 16 12-584-01 17 M-054502	M10 x 1.5 x 46 Washer, Plain 3/8 Screen, Grass  Screw, Hex Flange M6 x 1 x 16 (4) Spacer, Fan (4) Fan Key Flywheel Assembly Connector (4 Contact)  Screw, Hex Cap M5 x 0.8 x 25 (2)  Screw, Hex Flange M5 x 0.8 x 10 (2) Clip, Stator Harness Stator Assembly Spark Plug Clip, Cable Module, Ignition  Screw, Hex Flange	1 12-032 2 12-522 3 12-445 4 M-0839 5 12-380 6 12-755 7 12-089 8 12-422 12-422 12-422 12-422 12-422 12-422 12-422 12-421 12-422 12-421 12-422 12-421 12-421 12-874 12-874	18 Block, Cylinder (Use Short Block) 02 Strap, Lifting 025 Screw, Hex Flange M8 x 1.25 x 25 03 Dowel, Locating (4) 49 Kit, Camshaft (Includes Key #7 & 8) 18 Spring, Actuating 08 Shim, Camshaft, Blue 09 Shim, Camshaft, Red (A.R.) 10 Shim, Camshaft, Yellow (A.R.) 11 Shim, Camshaft, Green (A.R.) 12 Shim, Camshaft, Grey (A.R.) 13 Shim, Camshaft, Grey (A.R.) 14 Shim, Camshaft, Black (A.R.) 15 Shim, Camshaft, White (A.R.) 16 Shim, Camshaft, White (A.R.) 17 Shaft, Balance 18 Piston w/Ring Set, Standard 19 Piston w/Ring Set 50" Oversize 19 Piston W/Ring Set 50" Oversize 10 Retainer, Piston Pin (2) 10 Ring Set, Standard
NOT ILLUSTRA 12-518-01	Lead, White, Ground To Kill (19", 18 Gauge, Fully Insulated Push-on Tab and Uninsulated Push-on Tab Terminals)	12-108 12-108 13 12-067 12-067 14 12-380 15 12-043 16 M-063 17 12-144 18 52-139 19 12-755	-09 Ring Set .50" Oversize -05 Connecting Rod, Standard -06 Connecting Rod .25" Oversize -01 Pin, Governor Regulating -05 Gear, Governor Assembly -05 Washer, Plain, 6mm -02 Shaft, Governor Gear -09 Plug, Cup -64 Kit, Shaft, Governor Cross, with
KEY PART NO. NO.	DESCRIPTION	20 12-144 21 X-25-1	)2 Washer, Plain 1/4
1 12-038-01 2 25-755-13 3 12-153-03	(Includes Key Numbers 2 and 3) Kit, Oil Fill Cap (Includes Key #3)	22 12-032 23 SM-06 24 12-154	31015 Washer, Plain, 6mm
3 12-153-03 4 12-153-02 5 12-123-04	O-Ring, Upper Oil Fill Tube	STARTING	SYSTEM
6 M-054502 7 12-153-01 8 25-162-07 9 12-096-03 10 M-054501 11 M-103902 12 12-126-02 13 12-089-03 14 12-462-01 15 12-208-01 16 12-050-01 17 X-75-10 18 12-393-01	O-Ring, Lower Oil Fill Tube Screen, Oil Pick-up Cover, Oil Pick-up Screen Screw, Hex Flange M5 x 0.8 x 16 Screw, Hex Flange M10 x 1.5 x 25 Bracket, Oil Pump Relief Valve Spring, Oil Pump Relief Valve Piston, Oil Pump Relief Valve Body, Oil Pump Relief Valve Filter, Oil Plug, Square Head, Solid 3/8	KEY PART NO. NO. 1 M-083 2 25-098 3 12-755 4 12-227 5 45-170 6 82-755 7 12-227 8 12-086	M8 x 1.25 x 70 (2)  -03 Starter Assembly (Includes Key Numbers 3 thru 8)  -54 Kit, Drive End  -06 Cap, Drive End  -03 Armature  -28 Kit, Brush and Spring  -11 End Cap, Commutator
19 12-032-04 20 12-096-02 21 M-05450 22 12-032-02 23 SM-0839 24 12-199-3	O-Ring, Oil Pump Cover Cover, Oil Pump Screw, Hex Flange M5 x 0.8 x 16 (3) Seal, Oil (P.T.O. End) Screw, Hex Flange M8 x 1.25 x 45 (12)	NOTE: All o	1/4-20 x 4-5/8 (2) component dimensions given in U.S. inches ch = 25.4 mm

# **SERVICE NOTES**

## SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION





Operate your Tractor up and down the face of slopes (not greater than 15°), never across the face. Make turns gradually to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.

## SEARS

# OWNER'S MANUAL

MODEL NO. 917.258543

#### IF YOU NEED REPAIR SERVICE OR PARTS:

FOR REPAIR SERVICE, CALL THIS TOLL FREE NUMBER:

1-800-4-REPAIR (1-800-473-7247)

FOR REPLACEMENT PARTS INFORMATION AND ORDERING, CALL THIS TOLL FREE NUMBER:

1-800-FON-PART (1-800-366-7278)

FOR CONSUMER ASSISTANCE HOT LINE, CALL THIS TOLL FREE NUMBER:

1-800-659-5917

# 

#### 15.0 HP ELECTRIC START 42" MOWER 6 SPEED TRANSAXLE LAWN TRACTOR

Each tractor has its own model number. Each engine has its own model number.

The model number for your tractor will be found on the model plate located under the seat.

The model number for your engine will be found on the blower housing of the engine.

All parts listed herein may be ordered from any Sears, Roebuck and Co. Service Center/Department and most Retail Stores

## WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- PRODUCT TRACTOR
- MODEL NUMBER 917.258543
- ENGINE MODEL NO. CV15S TYPE NO. PS-41526
- PART NUMBER
- PART DESCRIPTION

Your Sears merchandise has added value when you consider Sears has service units nationwide staffed with Sears trained technicians... professional technicians specifically trained to insure that we meet our pledge to you, we service what we sell.

160604 04.15.97 KFSW

Printed in U.S.A.