



DEINES
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MANUAL

PARTS - MAINTENANCE - OPERATION

VOLUME HT/OHV 1.0
03/01/02

HT & OHV SERIES TRACTORS



SAFETY OPERATING PRECAUTIONS

WARNING READ ENGINE OPERATING MANUAL BEFORE STARTING ENGINE

1. Remove stones, wires, cans, boards, branches, bones, and other foreign objects FROM THE AREA BEFORE EACH MOWING. Avoid striking rocks or roots. Any of the above, if struck by the mower may be thrown, causing injury to people, property, or to the mower.
2. Place mower drive control levers in neutral and mower clutch switch in neutral or disengaged position before starting engine. (The mower will not start due to safety switches unless the above is adhered to.)
3. Never place hands or feet under cutting head while motor is running.
4. Never fill the fuel tank while the engine is hot, and wipe off any gasoline that might have spilled. Replace fuel cap on tank.
5. Only persons thoroughly acquainted with rules of safety operation should be permitted to use mower. Never allow a small child to operate or be in the operating area of power equipment.
6. Do not attempt to get off or on mower when mower is engaged and motor is running. Wait until mower blades stop turning before getting on or off mower. Make sure clutch switch is in neutral or disengaged before parking mower.
7. Keep blades sharp and properly balanced. If your equipment should start vibrating, stop the engine and check for damage or loose parts. *Vibration is generally a warning of trouble.*
8. When putting on new blades, put on new spring washer and lock washer. Check blade bolt at frequent intervals making sure they are tight.
9. Always keep hands, feet, loose clothing, and other objects away from mower cutting head.
10. Do not attempt to clean housing or to otherwise clean, adjust or repair machine before stopping mower engine, disconnecting the spark plug wire, and blades engage switch is in disengaged position.
11. Never leave machine running unattended. Remove key from ignition switch to prevent children from starting mower.
12. Always keep all shields and guards in place. Mower must never operated with any shield or guard removed.
13. Never run engine inside a building without opening all doors and windows.
14. Keep persons away from mowing area, although area has been cleared of foreign objects, small objects may have been overlooked and may be discharged or thrown by moving parts.
15. Always drive slowly over unseen ground, on hills and curves to prevent tipping of mower.
16. Do not operate the mower at high speed going down hill, and do not turn sharp corners while going down hill. NOTE: The transmissions produce considerable braking action when engine is throttled back at idling speed, and this procedure is recommended for applying braking action.
17. Do not operate mower on crossways or on inclines which have greater than 25% slope. A 25% slope is a 2 1/2 foot rise every 10 feet. Do not operate mower going up or down hill if slope is greater than 35%.

In addition to the above safety procedures for operation of the Marty "J" the following precautions should be observed when using gasoline. Its improper use, handling, and storage can be dangerous.

REMEMBER:

Always use an approved container.

Place container out of reach of children.

Never add gasoline to a running or hot engine. Fill tank out of doors and wipe up spilled gasoline.

Use gasoline only as a fuel - Never as a cleaner.

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HOW TO ORDER PARTS

Each available part has been given a keynumber, which is used only as a reference in locating the part number, description and quantity in the list which follows each "exploded view". **This key number is not a part number, do not use it when ordering parts.**

WHEN ORDERING PARTS, FOLLOW THE INSTRUCTIONS LISTED BELOW, BY DOING SO, YOU WILL BE ASSURED OF RECEIVING THE CORRECT PART IN THE SHORTEST TIME.

1. Give the serial number and model number of your unit.
2. Write the complete part number and the description of the part.
3. Whenever the terms LEFT or RIGHT, FRONT or REAR are used herein it should be understood to mean the position normally assumed while operating the machine, (except where otherwise noted).
4. Give detailed shipping instructions -- that is: by truck, bus, rail, parcel post, UPS, etc.
5. Place your order with the Dealer nearest you. Write your Dealers name below so you will have it for a quick reference:

Name _____

City, St. _____

Phone _____

Address _____

Deines Manufacturing Corporation reserves the right to void any warranty when original factory specified replacement parts are not used.

Deines Manufacturing Corporation is continually striving to improve its products.

We must therefore reserve the rights to make improvements, or changes, when it becomes practical to do so, without incurring any obligation to make changes or additions, to the equipment sold previously.

HARDWARE

Throughout this operation and parts manual you will find common hardware such as bolts, nuts, and washers, illustrated or not illustrated. The service part immediately preceding a hardware listing is the part using these particular items for mounting purposes or installation. This hardware is not included with parts or assembly when ordering as a replacement.

OPERATION OF MACHINES

BEFORE MOWING

Remove foreign objects from area.
Keep people away from mowing area.
Only let people familiar with machine operate it.
Be sure all levers are in neutral. Learn operation of machine with one hand.

DURING MOWING

Right lever controls right drive wheel.
Left lever controls left drive wheel.
Speed comes from distance lever is moved.
Speed of the mower is not related to blade speed.

ENGAGE blades at 1/2 throttle.
DISENGAGE blades at LOW idle.

Make right turns when cutting 2" or less.
Make left turns when cutting high or wet grass.
Reduce travel speed if engine pulls down.

WHEN ENGINE IS RUNNING:

Do not get off machine.
Do not place hands or feet under deck.
Do not let anyone else get near cutter deck when machine is running.

NEVER:

Fill fuel with engine hot or running.
Adjust or work on mower without disconnecting spark plug wires.
Run engine in enclosed area.

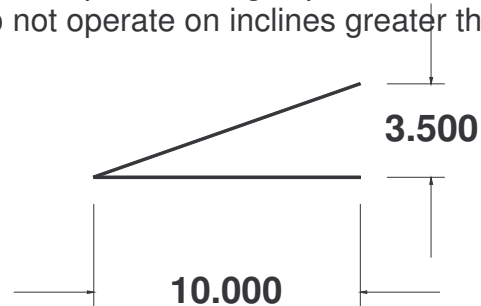
Stop machine and turn off if an unusual vibration is felt. Keep blades sharp and balanced.

CHECK BLADE BOLTS FREQUENTLY.

Keep all shields and guards in place.
To free-wheel push in dump valve on the transmission. (See instructions - page 8.)

GOING UP OR DOWN HILL:

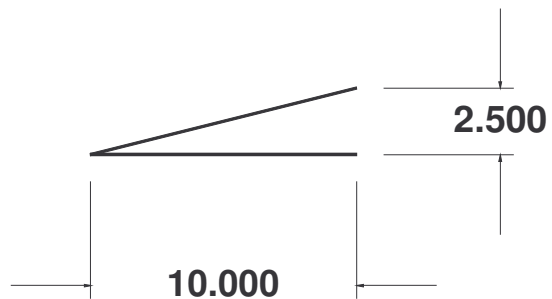
Do not turn sharp.
Do not operate at high speed.
Do not operate on inclines greater than 35%.



3-1/2 ft. rise in 10 ft.

GOING CROSSWAYS:

Do not operate on incline greater than 25%.



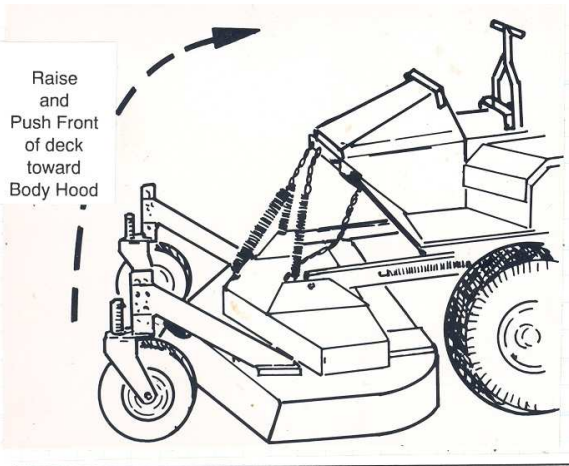
2-1/2 ft. rise in 10 ft.

MAINTENANCE AND ADJUSTMENTS

CAUTION! NEVER RAISE THE DECK WITH THE ENGINE RUNNING

To maintain the underside of the deck housing, lift the deck handle, raise and push front of the deck toward the body hood. If deck tension springs have proper adjustment, deck should not be hard to lift. When the deck is fully raised it will latch into place.

**WARNING: BE SURE THE SPARK PLUG WIRES ARE
DISCONNECTED BEFORE RAISING THE DECK.**



CLEANING THE MOWER

Water pressure from a garden hose can be used in cleaning the underside of the deck housing if cleaned immediately after use before the clippings dry out. This should be done daily or during the day whenever an accumulation of grass build up under the mower. The mower will do a better job of mowing if underside of the deck is kept clean. A wide bladed putty knife also works well for cleaning grass and dirt accumulation. A light coat of oil after cleaning is also recommended.

BLADE CARE

For best results, cutting blades must be kept sharp. The blade can be sharpened with a few strokes of a file, or on a grinding wheel.

DO NOT ATTEMPT TO SHARPEN BLADES WHILE ATTACHED TO THE MOWER.

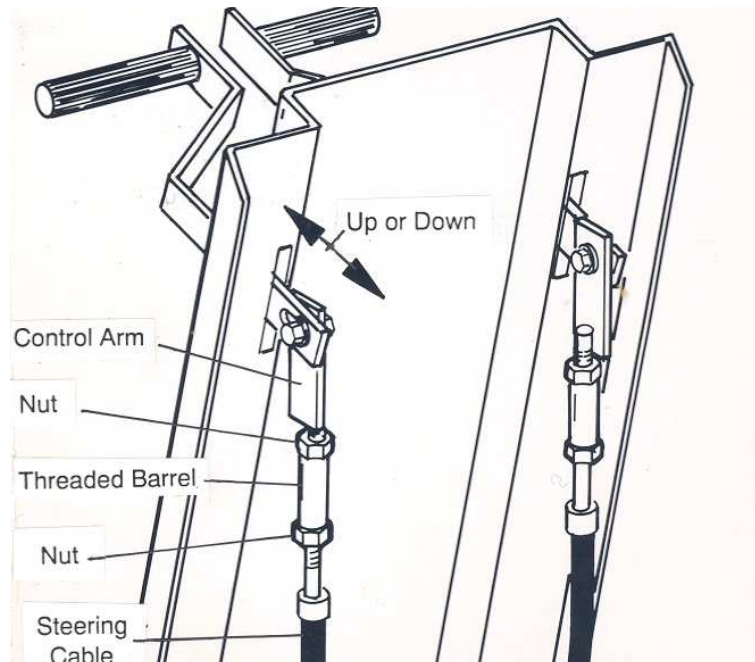
When grinding, care should be taken to maintain blade balance and the blade should be checked for proper balance before re-installation on the mower. Out of balance blades or bent blades will cause excessive vibration when running, and eventual damage to the mower.

**USE CAUTION!!!
WHEN USING
PRESSURE
WASHERS**

**PERMANENT DAMAGE
CAN RESULT**

If water pressure is used on the tractor for cleaning, be sure to not allow water pressure to be directed toward the hydrostatic reservoir as water could be forced into the breather vent. The vent is designed to stop some entrance of water, however it will not stop a continuous stream of high pressure water.

**WATER IN THE HYDROSTATIC
SYSTEM WILL DESTROY THE
SYSTEM.**



STEERING DRIVE CONTROL ADJUSTMENT

TO MAINTAIN NEUTRAL ADJUSTMENT, LOOSEN THE LOCK NUTS ON EACH END OF THE THREADED BARRELS (PART # 400-352) CONNECTING THE CONTROL CABLE ARM (PART # 400-136) AND THE STEERING CABLE (PART # 100-140). TURN RIGHT OR LEFT UNTIL THE WHEELS DO NOT TURN WHEN STEERING LEVERS ARE LOCKED IN NEUTRAL POSITION, RELOCK LOCK NUTS.

TO MAINTAIN EQUAL TRAVEL OF WHEELS WHEN DRIVING FORWARD, ADJUST STEERING CABLE ARM (PART # 400-136) UP OR DOWN IN THE SLOT OF THE STEERING LEVERS. IF THE MACHINE TURNS TO THE LEFT WHEN HOLDING LEVERS TOGETHER, MOVE THE LEFT HAND CABLE ARM DOWN IN THE LEVERS SLOT OR MOVE THE RIGHT HAND CABLE ARM UP IN THE LEVERS SLOTS.

WARNING

Do not adjust the control cable with the power on or the engine running. *Serious injury or death* could result.

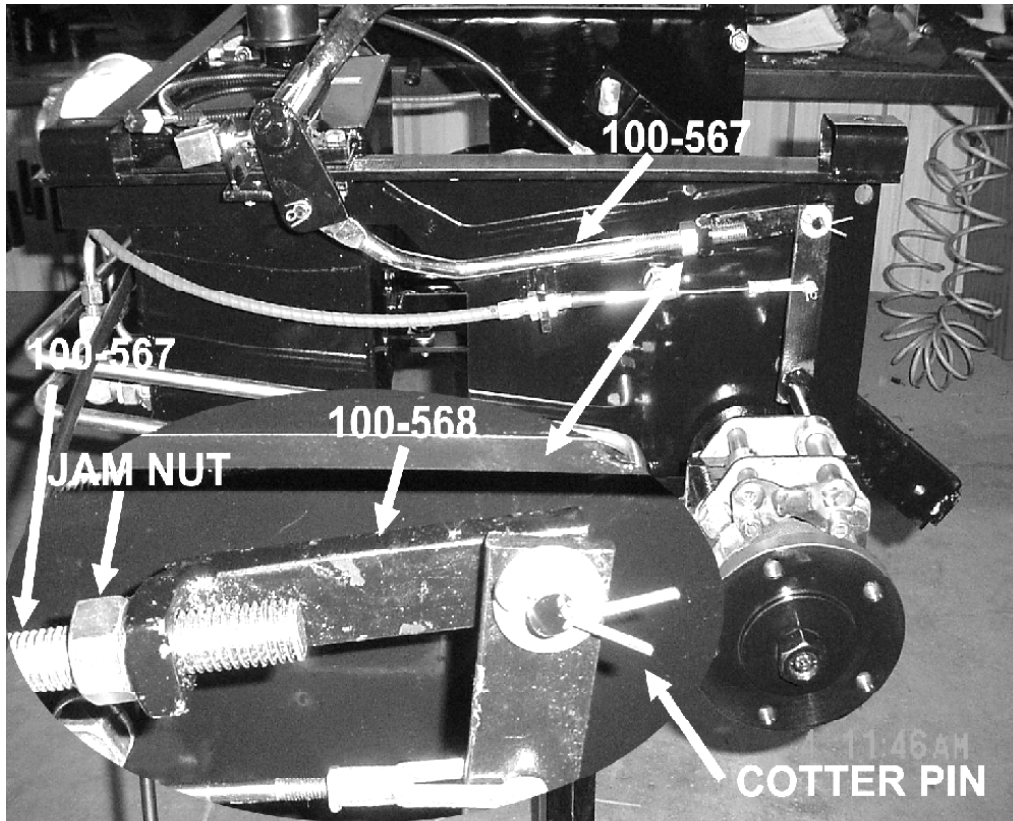
A gradual or sudden increase in the no-load friction (cable disconnect at both ends) of a control cable is an indication of a pending or present performance problem. The control cable should be replaced, otherwise *serious injury or death may result.*

A gradual or sudden decrease in the usable stroke, is an indication of a pending or present performance problem. The control cable should be replaced, otherwise *serious injury or death may result.*

Control cables which have moisture inside of them and/or have frozen should be replaced. Do not apply heat to thaw or dry control cables.

Control cables are lubricated for the life of the control cable. Do not remove the seals or lubricate the control cable.

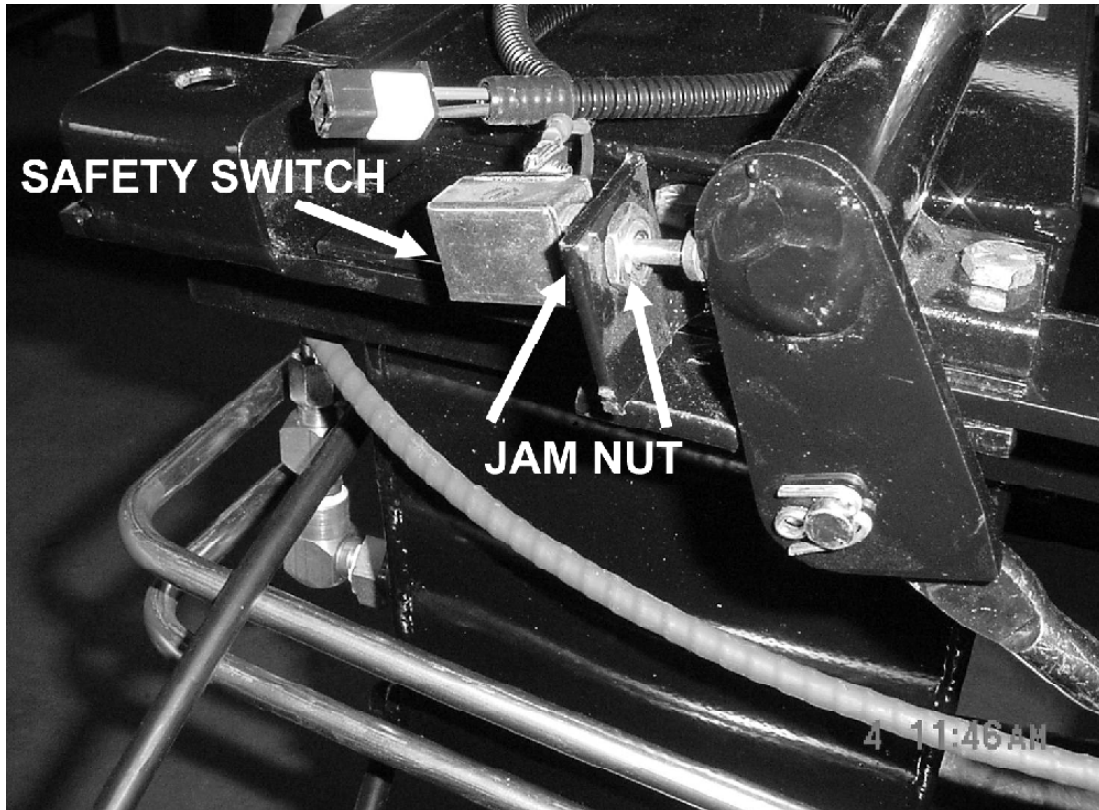
Control cables are designed to be non-repairable. Do not attempt to repair the control cable.



HYDRO-TRAC PARKING BRAKE ADJUSTMENT (HT MODELS)

OCCASIONALLY IT MAY BECOME NECESSARY TO ADJUST YOUR PARKING BRAKE, HOWEVER SINCE IT IS A PARKING BRAKE ONLY, IT SHOULD RECEIVE LITTLE OR NO WEAR.

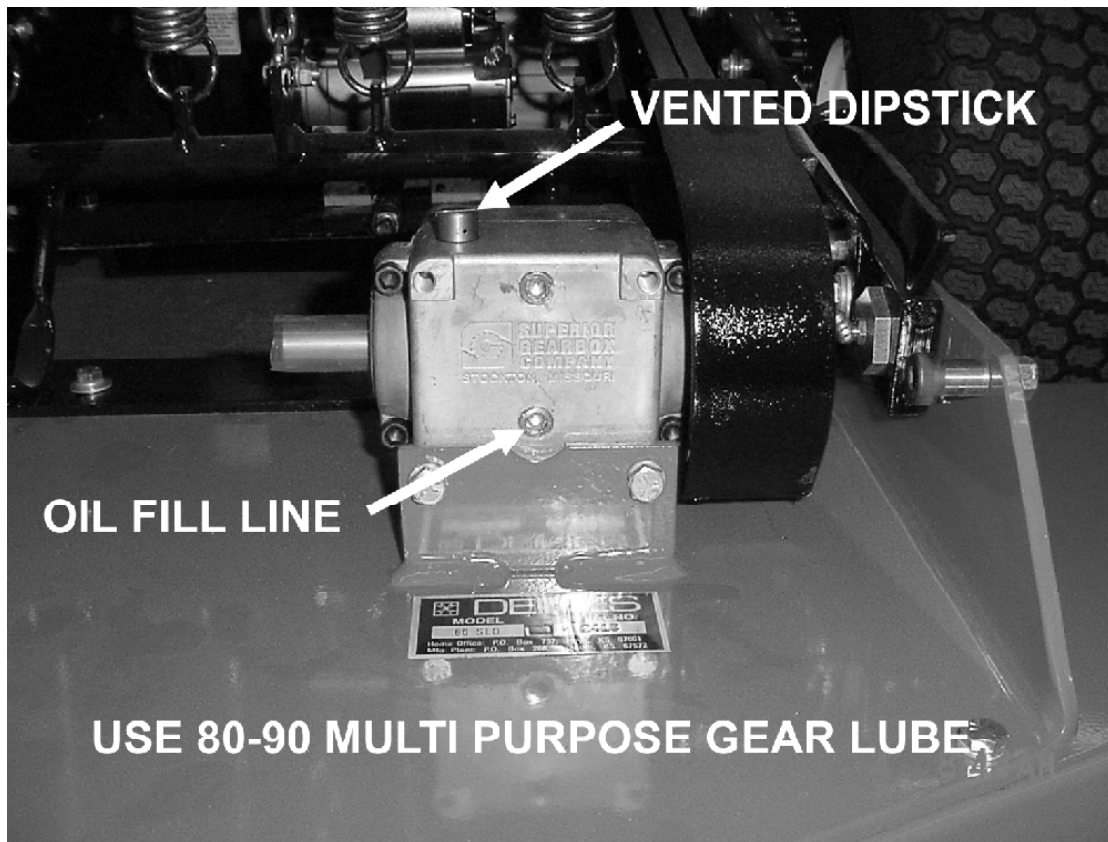
TO INCREASE TENSION ON THE BRAKE LOOSEN THE JAM NUT SHOWN IN THE ABOVE PICTURE AND REMOVE THE COTTER PIN. REMOVE THE LINKAGE FROM THE BRAKE CAM LEVER THEN TURN THE 100-568 LINKAGE SO THAT THE 100-567 & 100-568 ASSEMBLY BECOMES LONGER. REINSTALL THE LINKAGE INTO THE BRAKE CAM LEVER. DEPENDING UPON THE ADJUSTMENT YOU MAY HAVE TO ADJUST ONE WAY OR THE OTHER TO ACHIEVE THE DESIRED RESULTS.



PARKING BRAKE SAFETY SWITCH
(HT MODELS)

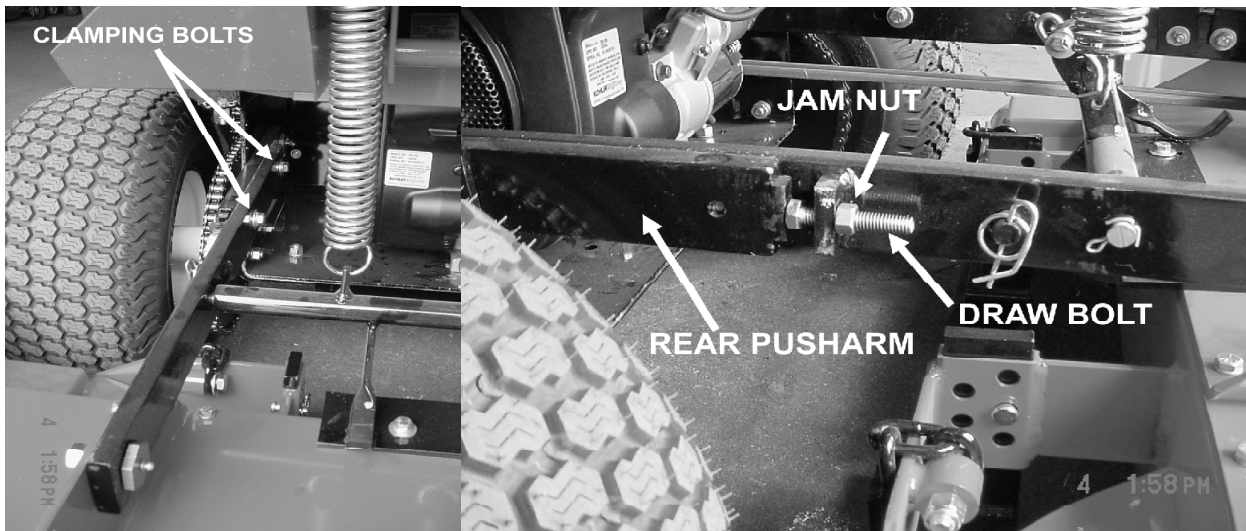
IF THE PARKING SWITCH SHOULD BECOME IMPROPERLY ADJUSTED IT WILL CAUSE THE UNIT TO CUTOUT AND RUN ROUGH OR MAYBE NOT RUN AT ALL. THIS WOULD BE CAUSED BY THE SWITCH BEING SET TOO CLOSE TO THE CAM ON THE BRAKE ARM. THE BRAKE SWITCH IS IN THE SEAT SWITCH CIRCUIT AND CAN CAUSE THE UNIT TO STOP IF PROPER ADJUSTMENT IS NOT MAINTAINED.

ADJUST THE SWITCH BY SIMPLY LOOSENING THE JAM NUTS ON THE SWITCH AND SETTING THE PLUNGER .025" FROM THE CAM ON THE BRAKE ARM IN THE OFF POSITION. THEN RETIGHTEN THE JAM NUTS.



SUPERIOR GEARBOX **(ALL MODELS)**

Check the lubricant in the gearbox every 8 hours of operation. A vented dipstick plug is located on the top of the gearbox. The oil level should be at the fill line on the dipstick tube. If the oil level is low add 80-90 weight gear lube. **CAUTION! DO NOT OVERFILL.** Tighten the dipstick finger tight, over tightening this dipstick will damage your gearbox housing and or the o-ring seal.



DECK DRIVE BELT ADJUSTMENTS (ALL MODELS)

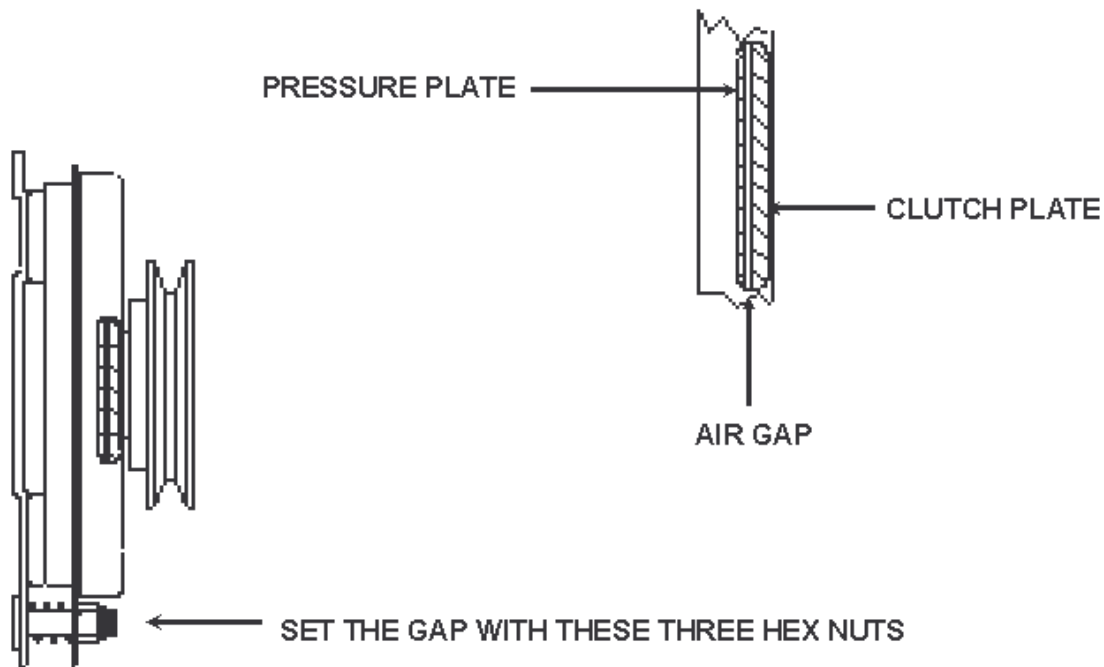
In order to properly adjust the deck belts, each pusharm should be adjusted by extending each equally from the totally retracted position. This is accomplished by simply loosening the 2 bolts that clamp the pusharm 1/2's and the jam nut, and tightening the draw bolt against the rear pusharm on each side, left and right, of the machine. Count the number of turns that each draw bolt makes from the fully retracted position. In this way the clutch sheave and the deck gear box sheave are kept in a parallel position and each of the two deck belts will be tensioned equally. By extending the pusharms as mentioned above, tighten the belts until there is 1/64th inch deflection for each inch of span length of center distance between the sheaves. There is approximately 28" of span between the sheaves (center distance). So belt deflection should be about 7/16 of an inch per strand measured perpendicular in the center of the span. The amount of force necessary to deflect one "A" section belt should be between 4 to 5 pounds. Apply force to only one of the two belts in order to check tension. Use the remaining belt to gage the amount of deflection. **Do not** over tension the deck drive belts as damage to the engine crankshaft bearings could result. After the first few hours of operation the belt tension should be checked and adjusted if necessary. After completion of the above then tighten the clamp bolt and the jamb nut to lock the draw bolt from loosening.

The belts on Deines Manufacturing Corporation products are designed especially for our application. Standard belts can be used rather than original equipment parts, however belt life can be substantially reduced. It is always best to replace belts when necessary with original equipment belts because they are the correct length and construction for the application.

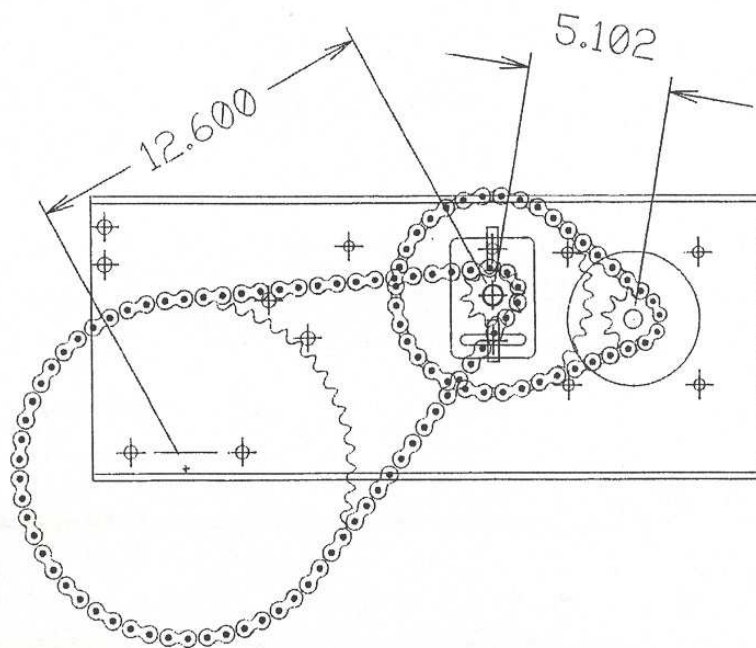
ELECTRIC CLUTCH ADJUSTMENT (ALL MODELS)

The electric clutch on your Marty-J will be delivered to the dealer properly adjusted and ready to operate. Rarely will the clutch need further adjustment. If adjustments are required you should do the following:

Your clutch is as the name suggests, a clutch and also a brake. When the clutch is turned off the brake takes effect in order to stop the turning of the blades as fast as is reasonably possible. Adjust the three bolts around the periphery of the clutch to where there is .016 (sixteen thousandths of an inch) ***air gap*** between the pressure plate and the clutch facing. Rotate the clutch to make sure all ***three*** slots on the clutch are adjusted equally. If the tension is not adjusted equally it will not allow the clutch and brake to operate properly. The clutch should only require adjustment if the gap should become less than .016 or more than .030.



WARNING
DO NOT TIGHTEN THE THREE SPRING LOADED BOLTS AND REDUCE THE AIR GAP TO "0".



DRIVE CHAIN ADJUSTMENT (OHV MODELS)

Customary chain tension is 1/4" sag per 12" of center distance. Here one chain has a center distance of 5.102", this chain should have a sag of .106". The long chain has a center distance of 12.6" and should have a sag of approximately 1/4".

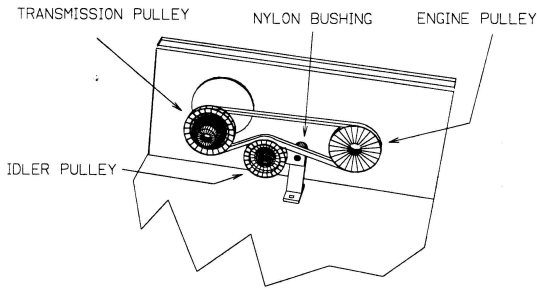
Chain will stretch in it's first few hours of use, then it will remain about the same length over it's useful life. As it begins to wear out then it will stretch again and this is when it should be replaced. If replacement does not occur then excess wear of the sprockets will begin to occur and will prematurely wear out the sprockets.

In order to adjust the chains, loosen the two carriage bolts on the top and bottom of each idler shaft. Leave the nuts tight enough that the shaft plate will remain in place.

Take a flat bar of steel or similar object and tap with a hammer up or sideways to tighten the chains to the proper tension as outlined above.

Then retighten the carriage bolts **securely.**

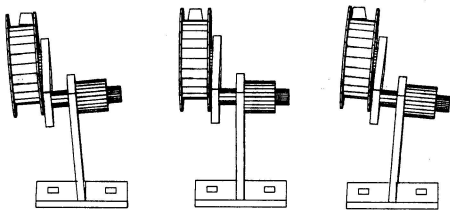
HYDROSTAT ADJUSTMENTS



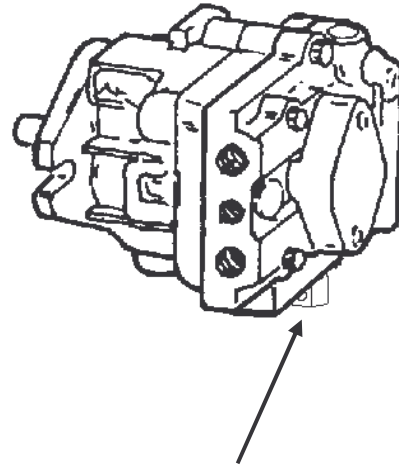
HYDROSTATIC TRANSMISSION BELT ADJUSTMENT

(ALL MODELS)

The belt from the engine to the hydrostatic transmission is located on the left hand side of the engine. No adjustment is necessary for this belt, because it is spring loaded and therefore self adjusts. The only adjustment and maintenance that is required is to lubricate the nylon bushing every 40 hours with a penetrating oil and maintain alignment of the belt through the flat idler tightener. If the idler bracket above is removed or becomes mis-aligned with the belt it will become necessary to loosen the carriage bolts attaching the bracket to the motor base and re-align and then re-torque the carriage bolts. If this does not allow the belt to track in the middle of the idler pulley then it will become necessary to bend the bracket as shown to get the belt to track in the center of the idler.



When the belt will not track in the middle of the idler and cannot be corrected with loosening the bracket and achieving parallel alignment then bend the bracket as shown in the above picture. Notice that the belt will always track to the high side of the idler. If the belt is running to one side of the idler then bend it toward that side and the belt will then track more toward the middle or opposite side. It will not take many degrees bend to move the track considerably.

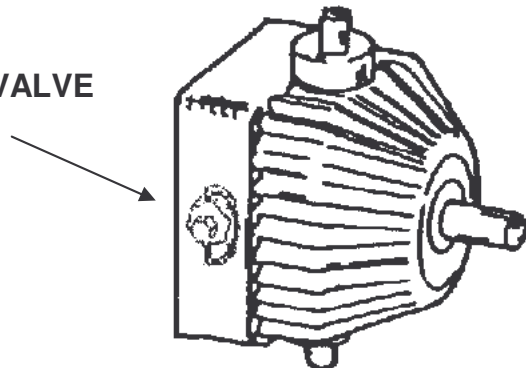


HT DUMP VALVE

HYDROSTATIC DUMP VALVE

The Marty - J comes equipped with a dump valve, should the machine need to be rolled or pulled. Bypass on the HT is done by turning the valve counterclockwise. The OHV is done by depressing the plunger and placing the clip over the plunger.

OHV DUMP VALVE



TRACTOR MAINTENANCE

AREA OF MAINTENANCE	CHECK	CHANGE	NOTES
Kohler Engines Crankcase oil	4 Hrs.	20 Hrs.	Above 32 Degrees F. use SAE 10W30 oil. Below 32 Degrees F. use 5W30. CAUTION: DO NOT OVERFILL crankcase. USE SF OR SG. DO NOT mix brands or grades of motor oil. Engine damage could result from mixing non-compatible oils
Crankcase Oil Filter		20 Hrs.	Change when oil is changed.
Foam Precleaner	4 Hrs.		Clean Precleaner every 20 hours by washing in water and detergent. Remove excess by squeezing like a sponge and allow to dry thoroughly. Distribute three (3) tablespoons of SAE 30 engine oil evenly around the precleaner. Knead into and squeeze excess oil from precleaner.
Paper Air Filter	4 Hrs.	20 Hrs.	Tap dust from element every 4 hours.
Spark Plugs	100Hrs.		Remove and Replace.
Engine Base Area	8 Hrs.		Clean area of all debris. CAUTION: <u>NEVER</u> use a high pressure washer.
Reservoir Tank (HT Models)	8 Hrs.	YEARLY OR 500 HRS.	Inspect oil level. The level of oil should be within 1" of the bottom of the fill tube. If low use SAE 20w50 MOTOR OIL. CAUTION! DO NOT let any dirt particles get into the tank, including water, contamination of the transmission oil will cause premature wear and eventual transmission failure. CHANGE THE HYDROSTATIC FILTER AND OIL AFTER ONE YEAR OF OPERATION. THEN CHANGE THE OIL (20W50) AND THE HYDRO FILTER YEARLY.
Reservoir Tank (OHV Models)	8 Hrs.		Inspect oil level. When cool the level of oil should be at the fill line indicated on the side of the tank. If low use MOBILE DTE 26 oil. CAUTION! DO NOT let any particles get into tank, including water, this causes contamination of the transmissions.
Transmission Fans (OHV Models)	8 Hrs.		Inspect to insure fan blades are intact. CAUTION! Do not run the mower without fans or broken fans.

TRACTOR MAINTENANCE

Transmission Tubes (HT Models)	20 Hrs.	Inspect for cracks or leaks.
Transmission Hoses (OHV Models)	20 Hrs.	Inspect hoses for cracks or leaks.
Hydrostatic Belt (HT Models)	40 Hrs.	Spray Idler arm Part #100-527 around spring, pin, and plastic bushing with penetrating lubricant.
Hydrostatic Belt (OHV Models)	40 Hrs.	Spray idler arm Part# 400-990 around spring, pin, and plastic bushing with penetrating lubricant.
Drive Chains (OHV Models)	8 Hrs.	Adjust the chains by removing the skirt of the tractor. Chain tension adjustments are explained in the maintenance section.
Drive Wheel Tires (OHV Models)	8 Hrs.	Maintain an inflated pressure of a maximum of 22 psi. on 1800 tractors and 10 psi. on 2000 tractors. Too much pressure will cause poor traction and too little will cause cords in the tire to break.
(HT Models)	8 Hrs.	Maintain an inflated pressure of a maximum of 22 psi on all HT Models.
Tail Wheel Tires (ALL Models)	8 Hrs.	Maintain an inflated pressure of a maximum of 16 psi. Pressures too low causes cords to break in the tire.
Battery	8 Hrs.	Check water level in each cell. The electrolyte in each cell should be at ring level at all times to prevent battery failure. When the electrolyte is below this level add pure, distilled water. Occasionally remove the battery cables brighten the terminals contact surface with wire wool and reassemble them. Apply a light coat of vasoline or chassis lubricant. Be sure the terminals are clamped tightly and that the battery is secured in the battery box.

TRACTOR MAINTENANCE

Replace unserviceable cables. Keep the vent holes in the battery filler caps open. Keeping the battery fully charged, not only adds to its life, but makes it available for instant use when needed.

Fuel Tank 4 Hrs.

Use unleaded gas only. The tank capacity is 5 gallons.

Fuel Shut Off Valve

At the start of use, be sure the valve under the tank is in the full open position. At the end of mowing be sure to SHUT OFF the valve. CAUTION! When transporting on a trailer or when the machine is not in use the fuel valve MUST be in the shut off position to prevent gasoline from possibly gravity feeding into the engine crankcase in the event of a carburetor float malfunction. Remove and replace.

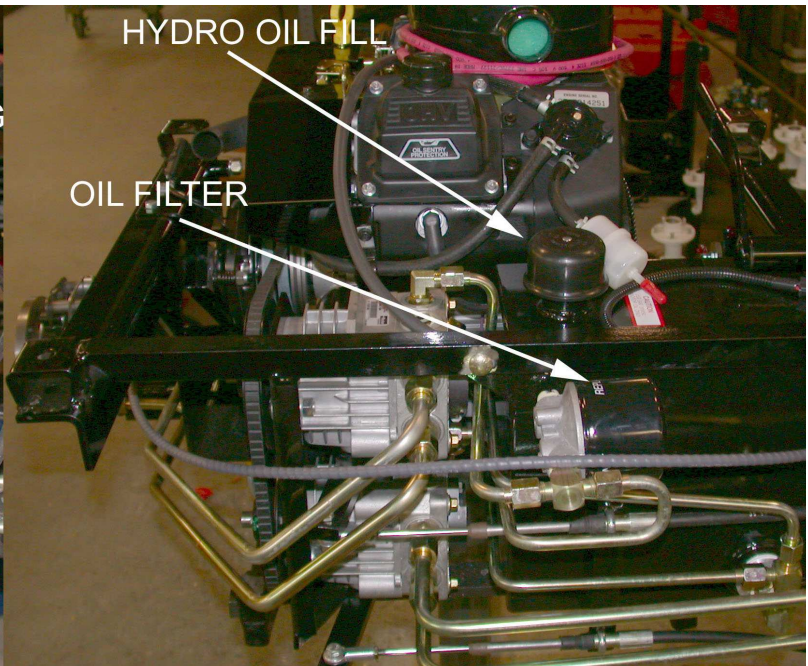
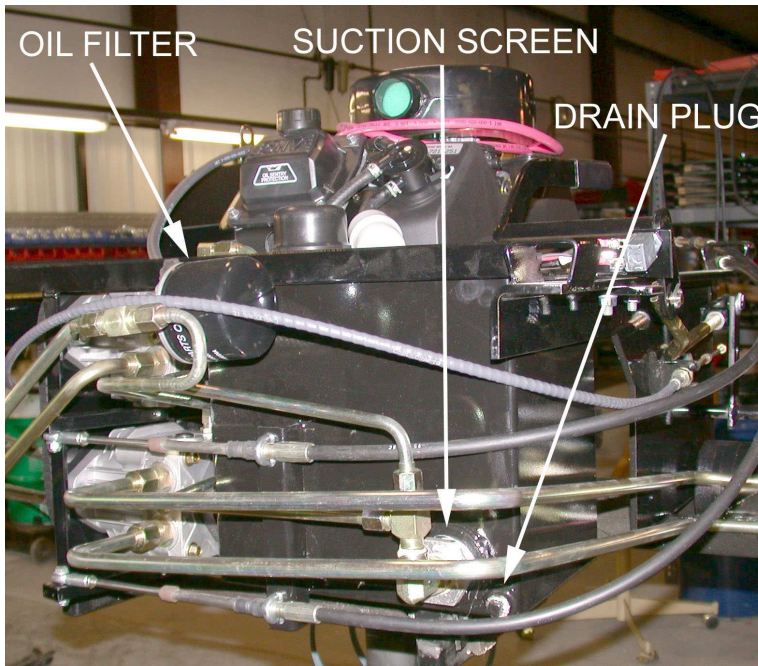
Fuel Filter 100 Hrs.

Drive Wheel Hubs (OHV Models) 200 Hrs. Remove, clean bearings thoroughly and repack bearings with shortfiber wheel bearing grease.

Hydrostatic Drive Pulleys

If the hydrostat pulleys must be removed they will need to be heated to 400 degrees farenheit prior to removal. THESE PULLEYS ON ALL UNITS ARE INSTALLED WITH LOCTITE FROM THE FACTORY.

HYDRO-TRAC OIL CHANGE (HT MODELS)



1. REMOVE THE DRAIN PLUG FROM THE RESERVOIR TANK AND DRAIN THE OIL INTO A SUITABLE CONTAINER.
2. REMOVE THE SUCTION SCREEN FROM THE TANK AND CLEAN IT WITH A FAST DRYING SOLVENT. SOME OF THE FITTINGS WILL NEED TO BE REMOVED IN ORDER TO ACCOMPLISH THIS. IT IS NOT NECESSARY TO CLEAN THIS SCREEN EVERY TIME THAT THE OIL IS CHANGED.
3. REMOVE THE OIL FILTER AND REPLACE WITH A NEW FILTER. BE SURE TO USE A 10 MICRON HYDRAULIC FILTER OF THE PROPER SIZE.
4. REPLACE THE DRAIN PLUG.
5. FILL THE RESERVOIR WITH A GOOD GRADE OF 20W50 OIL. FILL THE RESERVOIR TO THE BOTTOM OF THE FILL TUBE.
6. START THE UNIT AND LET IT RUN FOR AT LEAST 5 MINUTES. THEN DRIVE THE UNIT SLOWLY AT A REDUCED ENGINE RPM PREFERABLY IN REVERSE. THIS WILL PURGE ANY AIR IN THE CLOSED LOOP SYSTEM.

TRACTOR MAINTENANCE

AREA OF MAINTENANCE	CHECK	NOTES
Deck Lift Lever Bushing	8 Hrs.	Located on tractors with manual lift. Use 1 stroke of a lubricator with multi purpose grease. (See figure 1 below.)
Tailwheel Bearings	8 Hrs.	Located on the rear tailwheel. (See figure 2 below.)
Front and Rear Pusharm Bolts	8 Hrs.	Use 1 stroke of a lubricator with multi purpose grease. (See figure 3 below.)
Steering Lever Pivot Point	8 Hrs.	Oil with a penetrating oil lubricant.
Front gauge wheels and stems	8 Hrs.	Located on the front of the mower deck. (See figure 4 below.)
Spindle Bearings	100 Hrs.	Located under the Deines Tip Up Deck. (See figure 5 below.)
Idler Sprocket Bearings	16 Hrs.	Located under the left and right fender skirts. Used on the OHV Models Only. (See figure 6.)



FIGURE 1



FIGURE 2

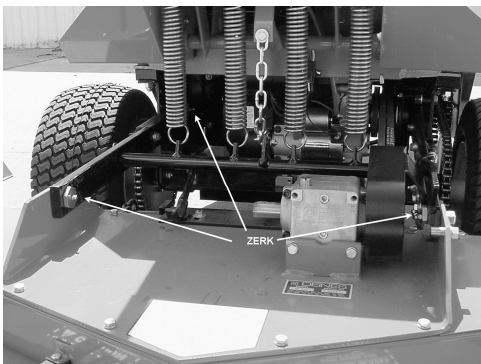


FIGURE 3



FIGURE 4

TRACTOR MAINTENANCE, continued

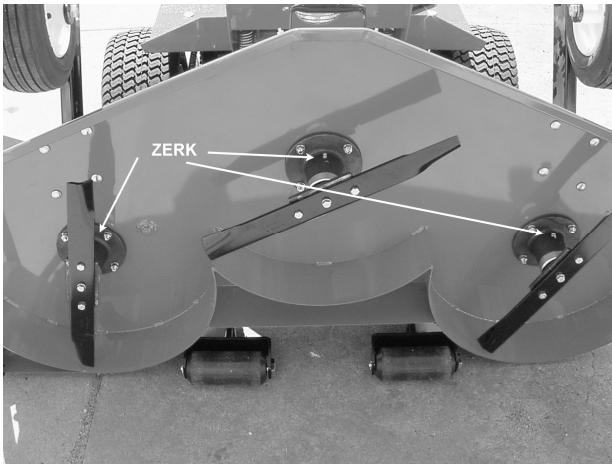


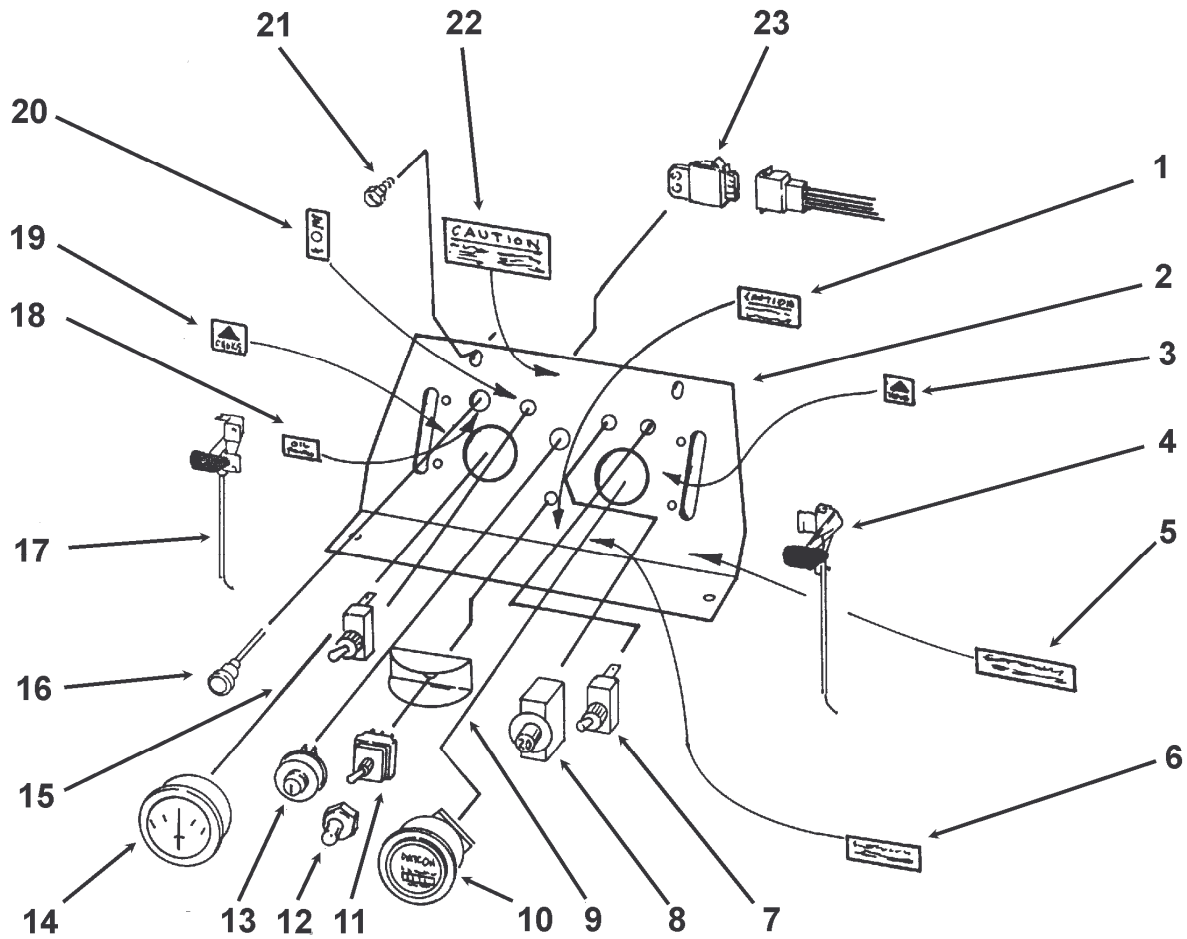
FIGURE 5



FIGURE 6

CAUTION! NEVER STORE MOWER WITH FUEL IN TANK INDOORS OR IN ENCLOSED, POORLY VENTILATED ENCLOSURES, WHERE FUEL FUMES MAY REACH AN OPEN FLAME, SPARK OR PILOT LIGHT AS ON A FURNACE, WATER HEATER, CLOTHES DRYER, ETC.

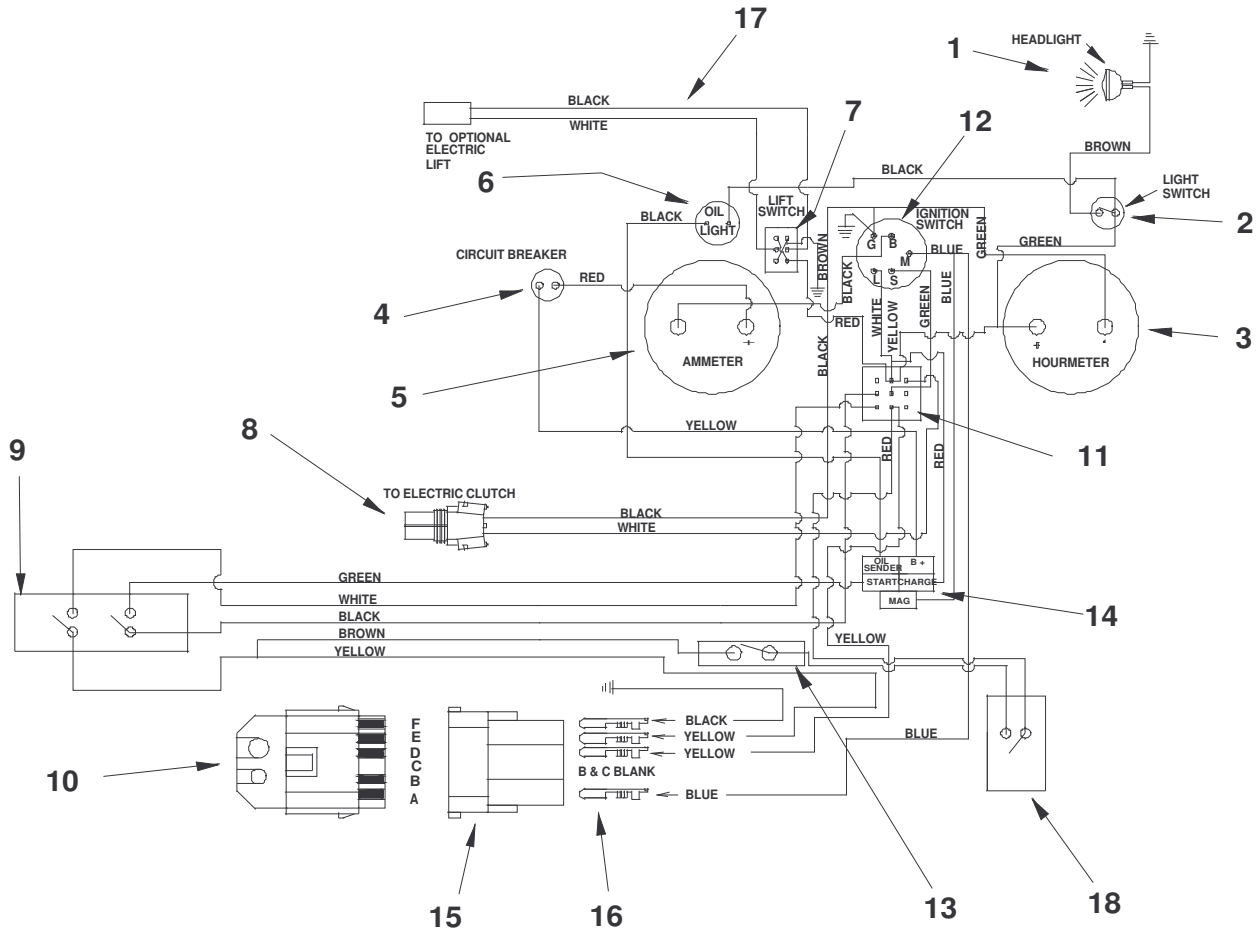
When storing for 30 days or more, prepare mower by maintaining all points. Run the engine until it reaches normal operating temperature. Turn off fuel supply and run the engine until it stops. Drain oil from oil base while the engine is still warm. Refill with fresh crankcase oil and attach a tag stating viscosity used. Remove spark plugs. Pour 1 ounce (2 tablespoons) of rust inhibitor or SAE #50 oil into the cylinders. Crank the engine over a few times. Reinstall spark plugs. Service air cleaner. Clean governor linkage and protect by wrapping with a clean cloth. Plug exhaust outlet to prevent entrance of moisture, dirt, bugs, etc.. Wipe entire unit. Coat parts that could rust with a light film of grease or oil. Disconnect battery cables. Provide a suitable cover for the entire unit. **REFER TO ENGINE OPERATORS MANUAL FOR COMPLETE ENGINE MAINTENANCE AND ADJUSTMENTS.**



DASH ASSEMBLY

REF #	PART #	DESCRIPTION	QUANTITY
1	400-790	CLUTCH WARN DECAL	1
2	100-405	DASH PANEL	1
		1/4-20 X 3/4 CARR. BOLT	2
		1/4" HEX NUT	2
		1/4" LOCK WASHER	2
	300-435	1/4" FENDER NUT	2
3	400-713	THROTTLE DECAL	1
4	400-892	THROTTLE CONTROL	1
	300-428	#12 X 5/8 SMS	5
	300-438	3/16" FENDER NUT	5
5	25-113-17	STOPPING DECAL	1
6	400-785	ELECTRIC CLUTCH DECAL	1
7	100-118	LIGHT SWITCH	1
8	900-802	CIRCUIT BREAKER	1
9	400-695	SWITCH GUARD	1
10	100-122	HOUR METER	1
11	400-674	E. C. SWITCH	1
12	400-658	SWITCH BOOT 1 ON 18HP MODELS, 2 ON 20HP MODELS	1
13	100-113	IGNITION SWITCH	1
14	100-112	AMMETER	1
15	400-659	LIFT SWITCH (2000 MODELS)	1
NOT SHOWN	400-980	PLASTIC PLUG (1800 MODELS)	1
16	100-125	OIL LIGHT	1
17	100-434	CHOKE CONTROL	1
	300-428	#12 X 5/8 SMS	2
	300-438	3/16" FENDER NUT	2
18	400-737	OIL PRESSURE DECAL	1
19	400-712	CHOKE DECAL	1
20	400-788	ELEC LIFT U/D DECAL (2000 MODELS)	1
21	300-581	1/4 - 20 X 3/4 SELF TAP SCREW	2
22	400-711	INTERLOCK DECAL	1
23	400-593	MODULE	1

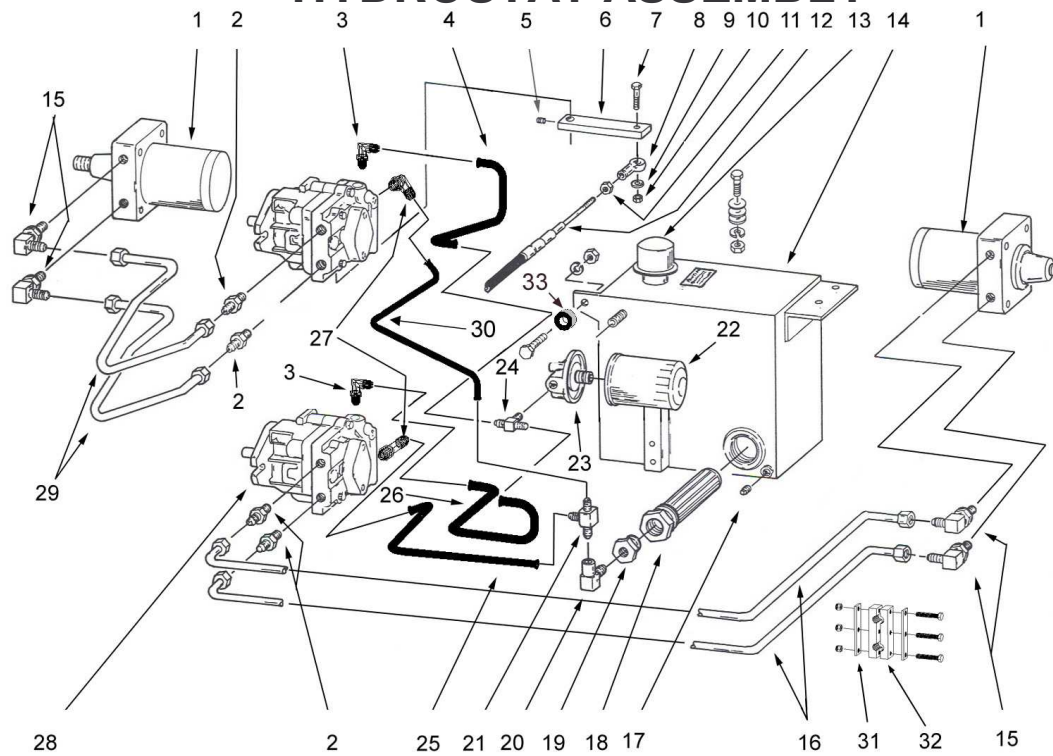
OHV & HT WIRING HARNESS



ALL MODELS

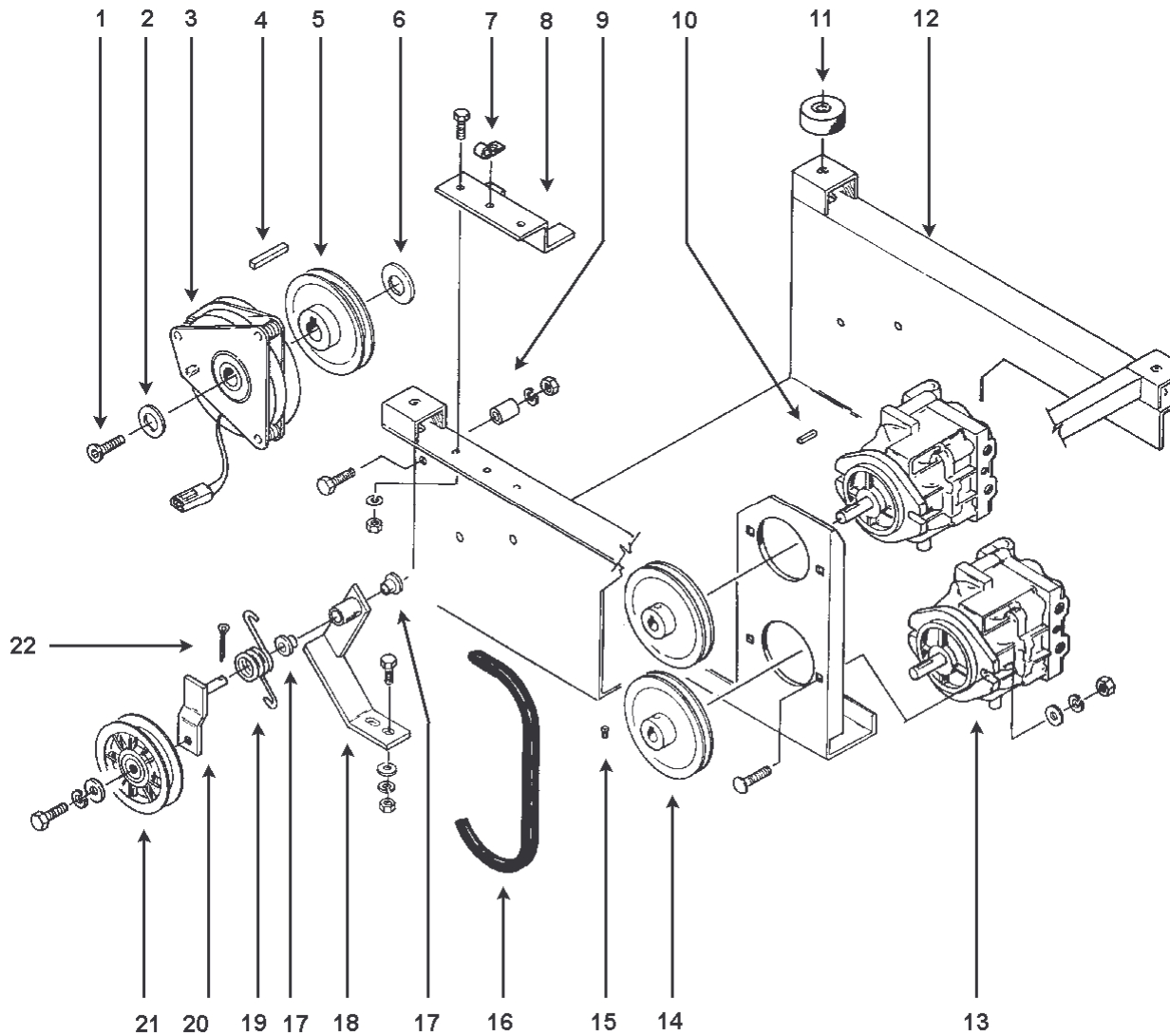
REF#	PART#	DESCRIPTION	QUANTITY
1	100-110	HEADLIGHT	1
2	100-118	LIGHT SWITCH	1
3	100-122	HOURMETER	1
4	900-802	CIRCUIT BREAKER	1
5	100-112	AMMETER	1
6	100-125	OIL LIGHT	1
7	400-659	LIFT SWITCH(ELECTRIC LIFT)	1
8	500-560	CLUTCH PLUG	1
	500-561	TERMINAL ENDS (NOT SHOWN)	4
9	400-278	DPST SWITCH	1
10	400-593	KILL MODULE	1
11	400-674	E.C. SWITCH	1
12	100-113	IGN. SWITCH	1
13	400-292	SEAT SWITCH	1
14	52-155-06	PLUG	1
15	400-594	PLUG	1
16	400-564	TERMINAL ENDS	4
17	100-310A	ELEC. LIFT HARNESS	ELEC. LIFT ONLY
18	100-569	BRAKE SWITCH (HT MODELS ONLY)	1
*	100-404	WIRING HARNESS	1

HYDROSTAT ASSEMBLY



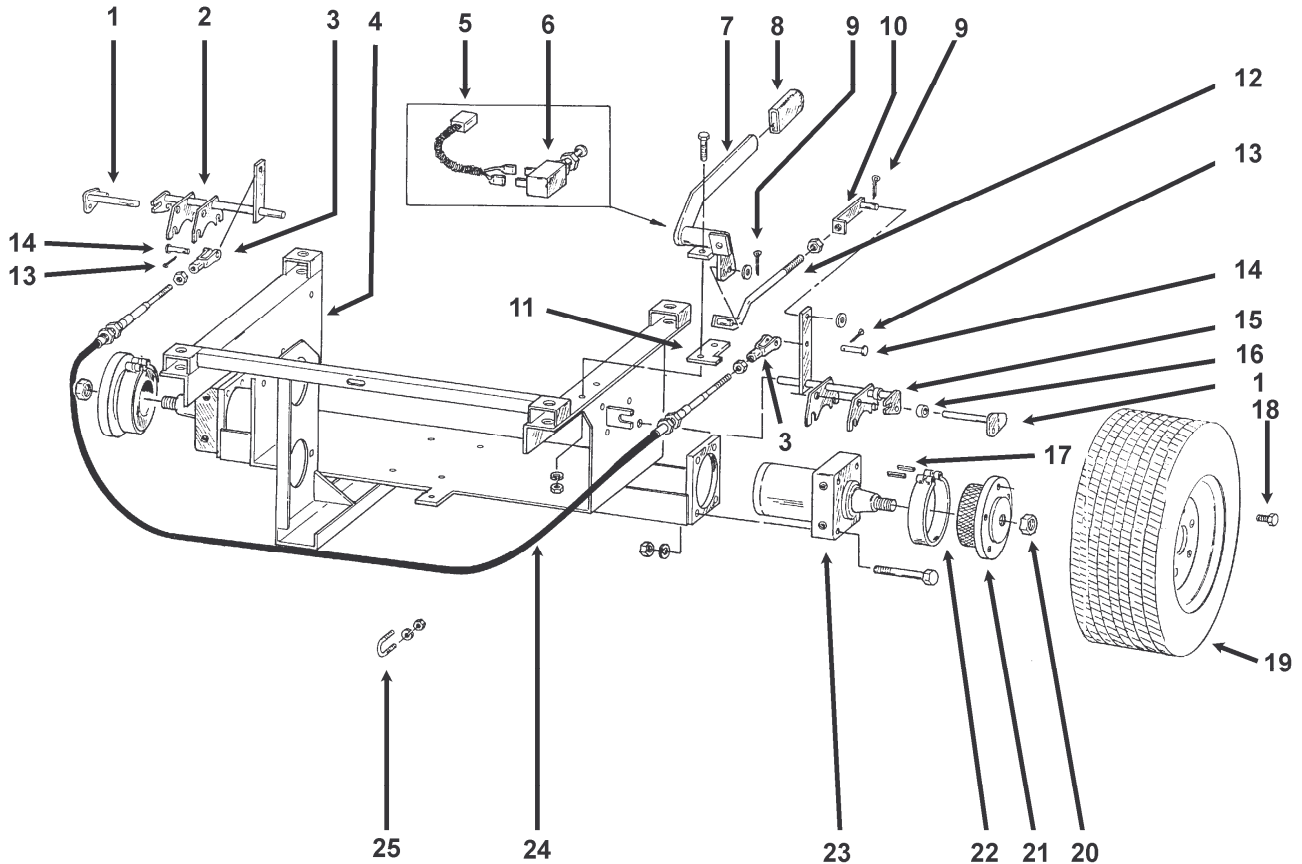
REF.	PART	DESCRIPTION	QUANTITY
1	100-560	WHEEL MOTOR	2
2	100-585	ADAPTER W/100-585A FLAREO-RING & 100-585B LARGE O-RING	4
3	100-591	ADAPTER W/100-587A FLAREO-RING & 100-588B LARGE O-RING	2
4	100-552	UPPER CASE DRAIN TUBE	1
5	300-409	1/4 - 20 - 1/4 SHSS	4
6	100-530	CONTROL ARM	2
7	300-418	1/4 - 20 - 1 1/4 HHCS	2
8	900-168	ROD END	2
9	300-402	3/16 FLAT WASHER	2
10	300-436	1/4 -20 NYLON INSERT NUT	2
11	300-433	1/4 -20 NUT	2
12	100-532	STEERING CABLE	2
13	100-584	FILLER CAP	1
14	100-519	RESERVOIR	1
15	100-586	ADAPTER W/100-585A FLAREO-RING & 100-586B LARGE O-RING	4
16	100-556	TUBE	2
17	900-539	PLUG	1
18	100-583	SUCTION SCREEN	1
19	100-590	BUSHING	1
20	100-589	ADAPTER	1
21	100-588	ADAPTER W/2EACH 10-587A FLAREO-RING	1
22	100-581	FILTER	1
23	100-582	FILTER ADAPTER	1
24	100-592	ADAPTER W/2 EACH 100-587A FLAREO-RING	1
25	100-595	LOWER SUCTION TUBE	1
26	100-553	LOWER CASE DRAIN	1
27	100-591	ADAPTER W/100-587A FLAREO-RING & 100-588B LARGE O-RING	2
28	100-559	<small>No longer used</small> PUMP, Parker-H110A2011HAAA,	2
	100-559A	<small>Current production</small> PUMP, HydroGear, PG-1HQN, REPLACES 100-559	2
29	100-554	TUBE	2
30	100-594	UPPER SUCTION TUBE	1
NOT ILLUSTRATED	400-722	20W50 DECAL	1
	100-593	O-RING KIT	
31	100-507	DAMPENER PLATE	4
32	100-505	DAMPENER	4
33	100-511	TANK SPACER	1

HT INNER BASE ASSEMBLY



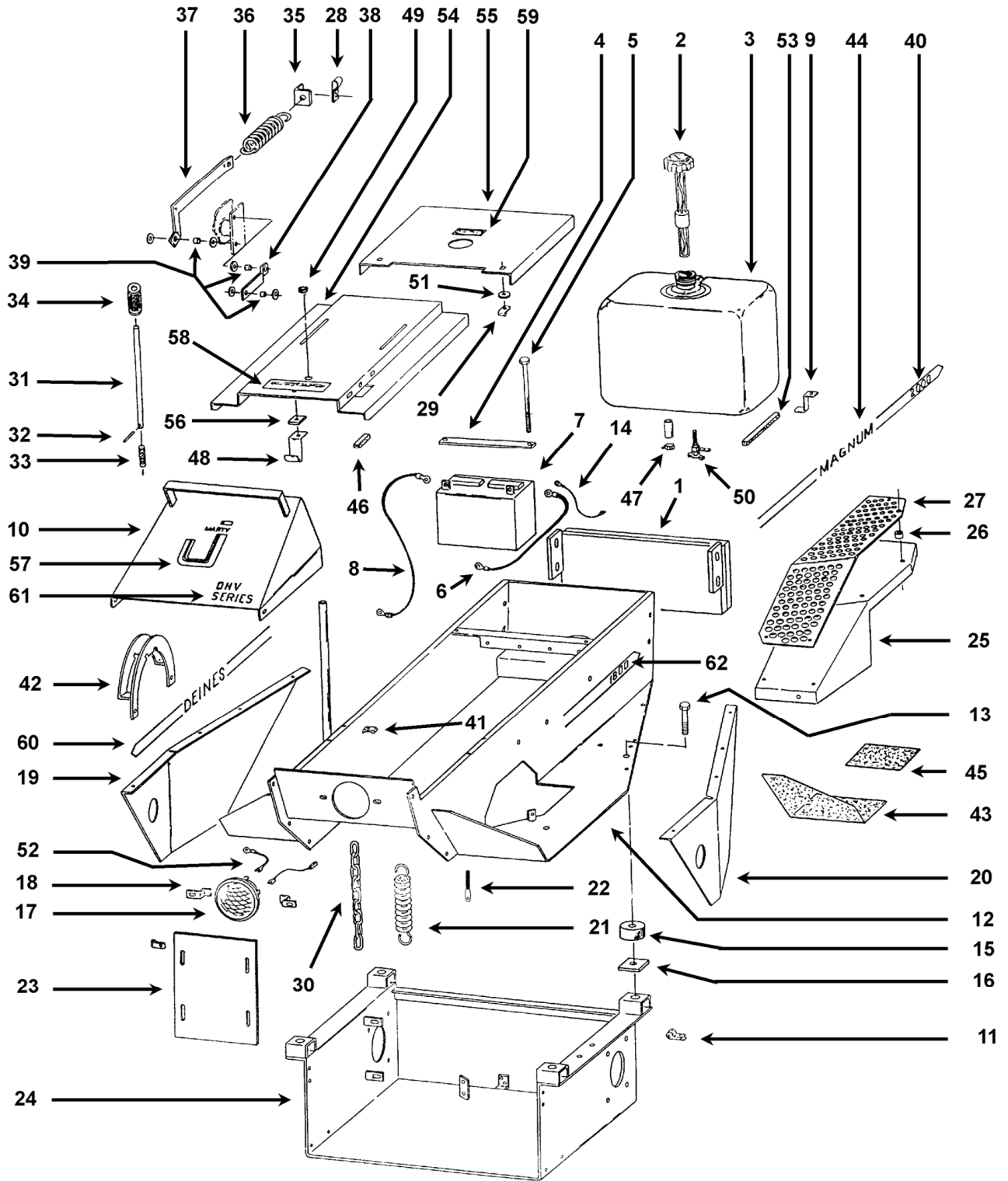
REF#	PART#	DESCRIPTION	QUANTITY
1	300-583	7/16"-20 X 1 FLAT SHCS	1
2	400-693	WASHER	1
3	400-675	CLUTCH	1
4	400-815	KEY	1
5	100-515	PULLEY	1
6	100-445	BUSHING	1
7	400-120	CLAMP	1
8	100-540	CLUTCH ANCHOR	1
9	300-319	PUSHARM STOP	1
10	100-518	KEY	2
11	300-143	RUBBER MOUNT	4
12	100-550	MOTOR FRAME	1
13	100-520	PUMP	2
14	100-522	PULLEY	2
15	300-404	1/4"-28X1/4" SHSS	4
16	100-517	BELT	1
17	100-498	BUSHING	2
18	100-527	IDLER BASE	1
19	100-525	TORSION SPRING	1
20	100-526	IDLER ARM	1
21	100-524	IDLER PULLEY	1
22	300-279	COTTER PIN	1

HT OUTER BASE ASSEMBLY



REF.	PART NUMBER	DESCRIPTION	QUANTITY
1	100-558	CAM	2
2	100-562	LH BRAKE ACTUATOR	1
3	900-528	CLEVIS	2
4	100-550	HT MOTOR BASE	1
5	100-599	PARKING BRAKE HARNESS	1
6	100-569	PARKING BRAKE SWITCH	1
7	100-566	PARKING BRAKE HANDLE ASSY	1
8	700-175	HANDLE GRIP	1
9	300-279	COTTER PIN	OHV MODELS 3 HT MODELS 5
10	100-568	LINKAGE	1
11	100-539	BRAKE STOP	1
12	100-567	ADJUSTABLE LINKAGE	1
13	100-136	COTTER PIN	2
14	100-534	CLEVIS PIN	2
15	100-563	RH BRAKE ACTUATOR	1
16	400-378	SHAFT COLLAR	2
17	100-565	SPRING PIN	4
18	900-509	LUG BOLT	10
19	100-574	20-10:00 X 10 WHEEL & TIRE	2
	100-570	18-8:50 X 10 WHEEL & TIRE (1850HT MODELS)	2
20	100-571	10" WHEEL	
21	100-521	HEX NUT	2
22	100-561	WHEEL HUB	2
23	100-560	BRAKE BAND	2
24	100-564	WHEEL MOTOR	2
25	100-564	BRAKE CABLE	1
	100-139	CLAMP	4
NOT SHOWN	300-212	DRIVE IN ZERK	18 OHV 1 20 OHV 3 18 HT 2 20 & 22 HT 4

1800 & 2000 BODY ASSEMBLY

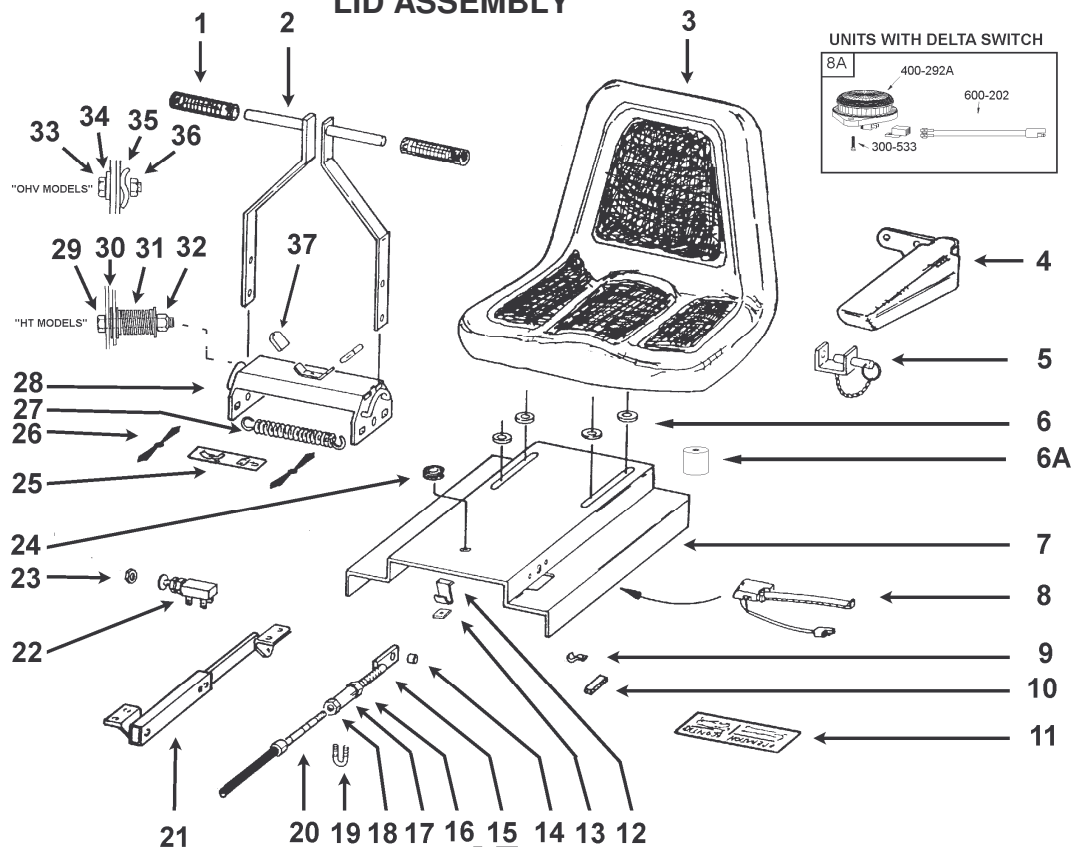


1800 & 2000 BODY ASSEMBLY

REF.	PART	DESCRIPTION	QUANTITY	REF.	PART	DESCRIPTION	QUANTITY
1	400-942	3 BAR WEIGHT (2000 MODELS & 1860HT)	1	43	300-336	LH FOOT PAD	1
	400-126	2 BAR WEIGHT (1800 MODELS)	1	44	300-337	RH FOOTPAD	1
2	300-374A	CAP & GAUGE	1	45	400-746	MAGNUM DECAL	2
3	300-370	5 GAL. GAS TANK	1	46	300-339	SQUARE FOOTPAD	1
4	100-538	BATTERY STRAP	1	47	400-845	FOAM STRIP	2
5	300-424	1/4" X 7" HHCS	2	48	100-406	CLAMP	1
6	100-529	BATTERY CABLE(-) (HT MODELS)	1	49	100-239	LID LATCH SPRING	1
	100-108	BATTERY CABLE(-) (OHV MODELS)	1	50	100-416	RUBBER GROMMET	1
7	100-111	BATTERY	1	51	400-115	FUEL VALVE	1
8	400-817	BATTERY CABLE (+) (HT MODELS)	1	52	400-461	NYLON WASHER	6
	400-817	BATTERY CABLE (+) (OHV MODELS)	1	53	400-569	HEADLIGHT GROUND WIRE	1
9	300-371	TANK MOUNTING BRKT.	2	54	100-407	RUBBER STRIP	2
10	100-410	HOOD	1	55	100-502	LID	1
11	400-120	CLAMP	1	56	100-503	BACK LID	1
12	100-500	1800 BODY (ALL)	1	57	400-277	LID LATCH WASHER	1
	100-500A	2000 BODY (ALL)	1	58	400-733	J-DECAL (OHV MODELS)	1
13	300-578	1/2"-13 X 3 1/2 CARR. BOLT	4	59	400-764	HT DECAL (HT MODELS)	1
14	400-568	GROUND WIRE	1	59	400-718	OPERATION DECAL (1800 MODELS)	1
15	300-143	RUBBER MOUNT	4		400-747	OPERATION DECAL (2000 MODELS)	1
16	300-357	SPACER (1800 OHV ONLY)	4	60	400-749	UNLEADED DECAL (2000 MODELS)	1
17	100-110	HEADLIGHT	1	61	400-725	UNLEADED DECAL (1800 MODELS)	1
18	300-116L & R	LEFT & RIGHT BRACKET	1	62	400-708	DEINES CORP. DECAL	1
19	300-101	RH FENDER SKIRT	1		400-791	OHV SERIES DECAL	1
20	300-111	LH FENDER SKIRT	1		400-792	OHV SERIES DECAL(GOLD)	1
	100-512	LH FENDER SKIRT (HT MODELS)			400-744	1800 DECAL	2
	100-513	RH FENDER SKIRT (HT MODELS)					
21	100-491	SPRING(1840&50 MODELS) (ALL 60'S & 72'S)	2 4				
22	100-488	SPADE BOLT (SAME AS ABOVE)			400-753	KEEP SHIELDS DECAL (2000 MODELS)	1
23	400-694	COMPARTMENT DIVIDER (OHV MODELS ONLY)	1		400-729	KEEP SHIELDS DECAL (1800 MODELS)	1
24	100-435	OHV MOTOR BASE	1		400-748	REAR GRILL DECAL (2000 MODELS)	1
	100-550	HT MOTOR BASE	1		400-724	REAR GRILL DECAL (1800 MODELS)	1
25	100-420	MUFFLER GUARD	1		400-762	DEINES DECAL (2000 OHV MODELS)	1
26	400-314	SPACER	8		400-763	BATTERY CABLE DECAL	1
27	100-425	HEAT SHIELD	1		400-783	NEUTRAL LOCK DECAL	1
28	100-117A	CONDUIT CLAMP (1800'S) (2000'S)	4 3		400-784	STEERING DECAL	2
29	300-435	1/4" FENDER NUT	18		400-781	LID LATCH SAFE DECAL	1
30	100-486	LIFT CHAIN	1		400-795	CABLE SAFETY DECAL	2
31	100-484	PLUNGER (1800 MODELS)	1		400-793	DO NOT WASH DECAL	1
32	200-238	ROLL PIN	1		400-794	FACE TO REAR DECAL	1
33	900-466	SPRING	1		400-730	PARKING BRAKE DECAL (HT MODELS)	1
34	100-114	HANDLE GRIP	3		100-598	BATTERY CABLE DECAL	1
35	400-940	SPRING HANGER (1800 MODELS)	1		100-237	SHORT ELEC. TIES (OHV MODELS)	5
36	100-123	SPRING (1800 MODELS)	1		100-236	LONG ELEC. TIES (HT MODELS)	7
37	100-456	LONG LIFT LINKAGE (1800 MODELS)	1		300-212	(OHV MODELS)	1
38	300-312	SHORT LIFT LINKAGE (1800 MODELS)	1		400-773	DRIVE IN ZERK	1
39	300-153	BUSHING (1800 MODELS)	5		400-765	CAUTION FILL DECAL (OHV MODELS)	1
40	400-761	2000 DECAL	2			MAGNUM DECAL (2000 OHV MODELS)	1
	400-744	1800 DECAL	2				
41	100-117A	CONDUIT CLAMP	1				
42	100-455	CATCH (1800 MODELS)	1				

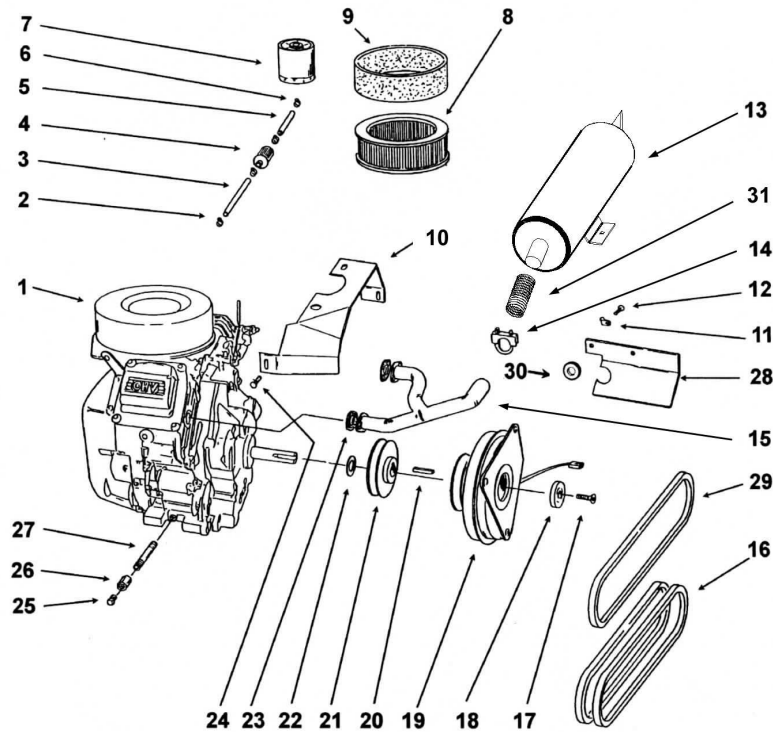
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LID ASSEMBLY



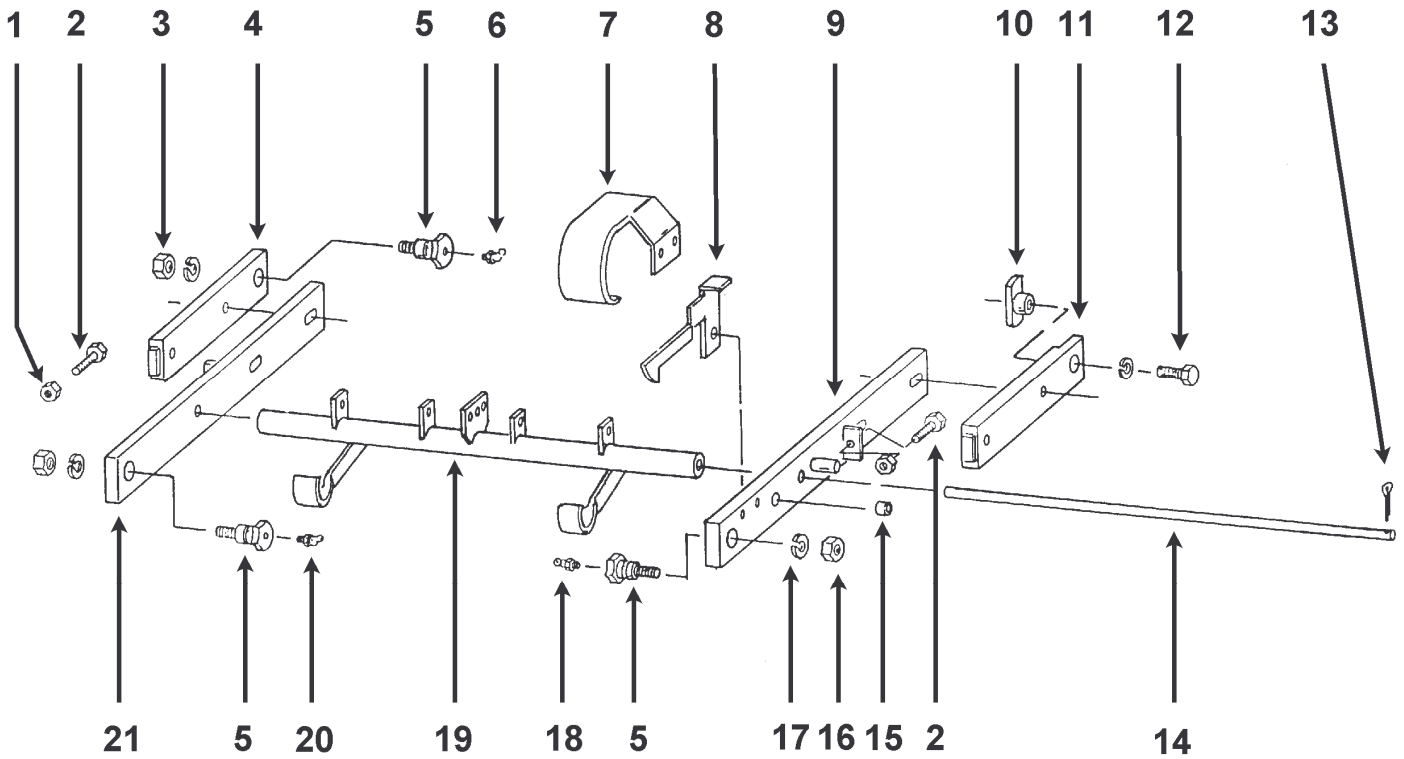
REF.	PART DESCRIPTION	QUANTITY
1	100-114 HANDLE GRIP	3
2	300-107 STEERING LEVER	2
3	100-116 SEAT	1
4	100-138-1 ARM RESTS (OPTIONAL)	
5	100-330 LID SAFETY PIN	1
6	400-461 NYLON WASHER	6
6A	400-461A NYLON WASHER	4
7	100-502 LID	1
8	400-292 SEAT SWITCH	1
9	100-117A CONDUIT CLAMP	1
10	400-845 FOAM RUBBER STRIP	2
11	400-718 OPERATION DECAL (1800 MODEL)	1
	400-747 OPERATION DECAL (2000 MODEL)	1
12	100-239 LID LATCH SPRING	1
13	100-277 LID LATCH WASHER	1
14	300-153 BUSHING	5
15	400-136 CABLE ARM	2
16	300-434 1/4" - 28 LH NUT	2
17	400-352 THREADED BARREL	2
18	300-433 1/4" - 28 NUT	4
19	100-139 U- CLAMP	4
20	100-532 STEERING CABLE (HT MODELS)	2
	100-140 STEERING CABLE (OHV MODELS)	2
21	400-238 LID PROP	1
22	400-278 DPST SWITCH	1
23	300-554 SWITCH NUT	2
24	100-416 GROMMET	1
25	400-783 DECAL	1
26	400-784 DECAL	2
27	400-153 SPRING	1
28	100-415 LEVER LOCK CONSOLE	1
29	300-542 1/2" X 2 1/4" BOLT	2
30	300-491 7/16" WASHER	6
31	100-597 SPRING	2
32	300-511 NUT NYLON INSERT NUT	2
33	300-495 BOLT	2
34	300-491 FLAT WASHER	2
35	400-121 WASHER	2
36	300-511 NUT	2
37	100-215 CAPS	2

ALL MODELS ENGINE ASSEMBLY



REF. #	PART #	DESCRIPTION	QTY.
1	400-520 400-525 400-526	18 HP KOHLER ENGINE 20 HP KOHLER ENGINE 22 HP KOHLER ENGINE	1
2	25-237-31	HOSE CLAMP	2
3	25-353-10	HOSE	1
4	25-050-22	FUEL FILTER	1
5	100-409	HOSE	1
6	400-155	HOSE CLAMP (OHV MODELS) (HT MODELS)	6 2
7	12-050-01	OIL FILTER	1
8	47-083-03	AIR FILTER	1
9	24-083-02	PRE-CLEANER	1
10	100-557 100-440	UPPER AIR DEFLECTOR (HT MODELS) UPPER AIR DEFLECTOR (OHV MODELS)	1 1
11	300-438	1/4" NUT CLIP (OHV MODELS)	1
12	300-411	1/4" X 3/4" HHCS (OHV MODELS)	1
13	100-430	MUFFLER	1
14	100-433	CLAMP (1 EA. PRIOR TO SERIAL AM)	2
15	100-431	MANIFOLD (PRIOR TO SERIAL AM)	1
15	100-431A	MANIFOLD (SERIAL AM & UP)	1
16	400-288	BELTS	2
17	300-583	7/16"-20 X 1 1/4" FLAT SHS	1
18	400-693	WASHER	1
19	400-675	ELECTRIC CLUTCH	1
20	400-815	KEY	1
21	100-515 400-676	PULLEY (HT MODELS) PULLEY (OHV MODELS)	1 1
22	100-445	MACHINE BUSHING	1
23	24-041-49	GASKET	2
24	300-579	METRIC BOLT	1
25	400-140	PIPE PLUG	1
26	400-139	PIPE COUPLING	1
27	400-138	PIPE NIPPLE	1
28	100-442	LOWER AIR DEFLECTOR	1
29	100-293 100-517	TRANS. BELT (OHV MODELS) TRANS. BELT (HT MODELS)	1 1
NOT SHOWN	400-793	DO NOT PRESS. WASH DECAL	1
NOT SHOWN	400-794	FACE TO REAR DECAL	1
30	100-296	GROMMET	1
31	100-432A	FLEXHAUST (SERIAL AM & UP)	1

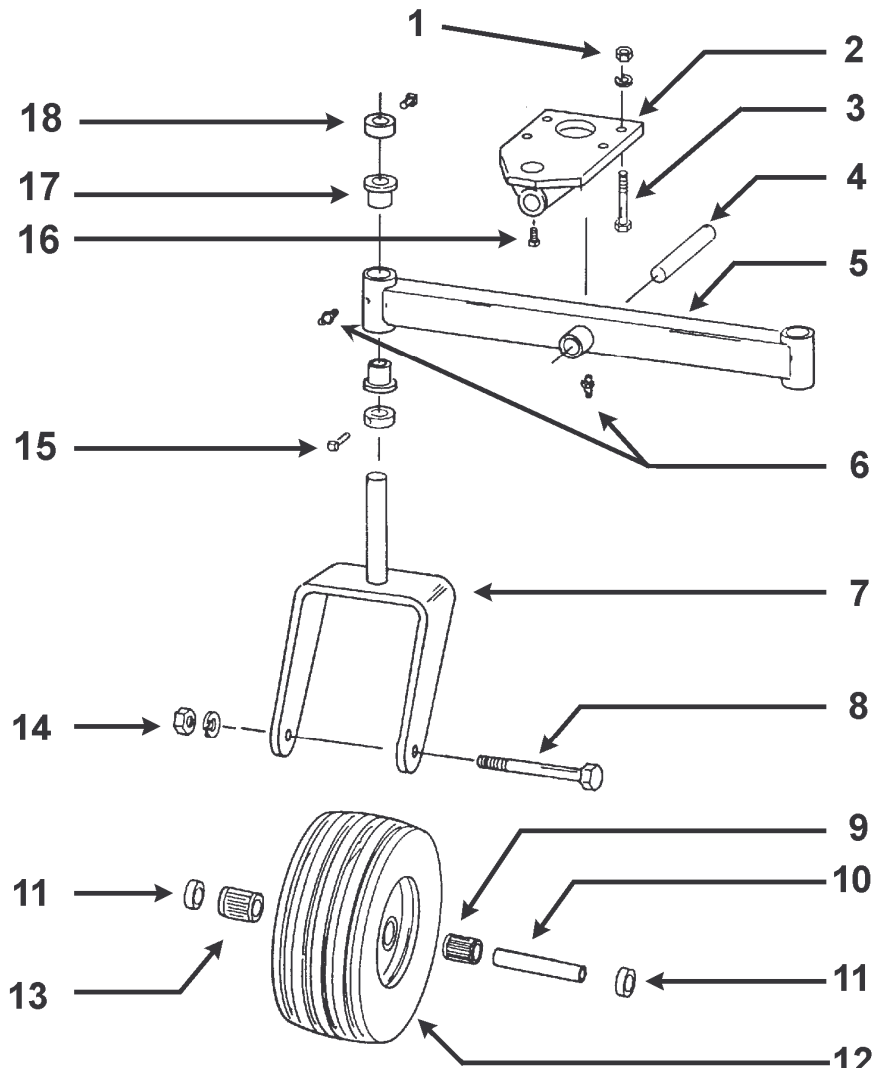
PUSHARM ASSEMBLY



ALL MODELS

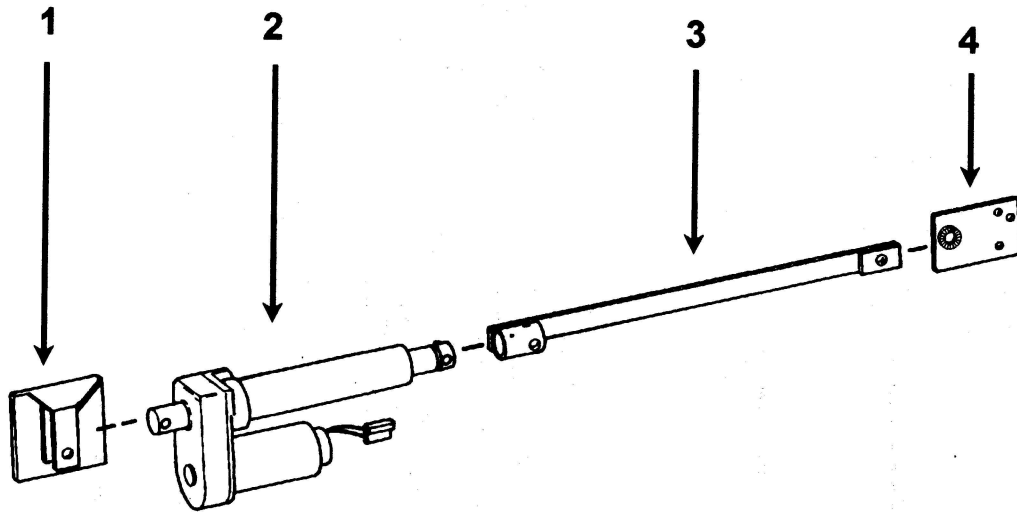
REF.	PART#	DESCRIPTION	QTY.
1	300-484	3/8" - 16 HEX NUT	2
2	400-697	3/8" - 16 X 2 TAP BOLT	2
3	300-509	1/2" - 13 HEX NUT	3
4	400-686	RH REAR PUSHARM	1
5	300-326	PUSHARM SHOULDER BOLT	3
6	300-212E	ZERK	1
7	300-671	BELT CUP (NOT USED ON 48" DECK)	1
8	100-470	CATCH	1
9	100-475	LH FRONT PUSHARM	1
10	400-685	PUSHARM NUT	1
11	400-690	LH PUSHARM	1
12	300-501	1/2" - 13 X 1 HEX BOLT	1
13	300-279	COTTER PIN	2
14	100-480	ROD	1
15	100-469	BUSHING	1
16	300-509	1/2" - 13 HEX NUT	3
17	300-506	1/2" LOCKWASHER	4
18	300-212E	90 DEGREE ZERK	1
19	100-485	DECK LIFT TUBE	1
20	300-212	STRAIGHT ZERK	1
21	100-476	RH PUSHARM	1

DUAL TAILWHEEL ASSEMBLY



REF.	PART	DESCRIPTION	QUANTITY
1	300-484	3/8-16 HEX NUT	4
2	400-967	MOUNTING PLATE	1
3	300-487	3/8-16 X 3 HEX BOLT	4
4	400-968	PIN	1
5	400-969	AXLE	1
6	300-212	ZERK	3
7	400-905	TAILWHEEL FORK	2
8	400-132	AXLE BOLT	2
9	400-361H	ROLLER BEARING	2
10	400-300	SPACER	2
11	400-242H	BUSHING	4
12	300-222	TAILWHEEL ASSY.	2
13	400-361H1	ROLLER BEARING	2
14	300-509	3/8 - 16 HEX NUT	2
15	400-129	SQ. HEAD SET SCREW	4
16	300-440	5/16 - 18 X 3/4 HHCS	2
17	100-460	BUSHING	4
18	400-137	SHAFT COLLAR	4

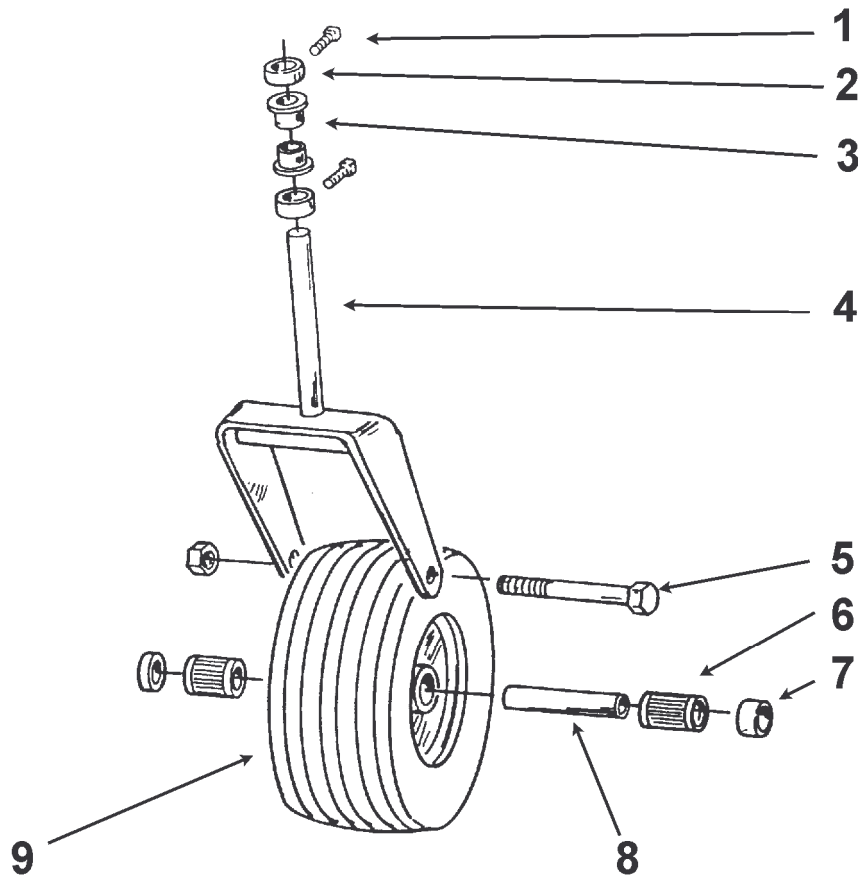
ELECTRIC LIFT ASSEMBLY



ALL MODELS

REF.	PART	DESCRIPTION	QUANTITY
1	400-672	REAR MOUNTING BRACKET	1
		5/16 - 18 X 3/4 HEX BOLT	3
		5/16 LOCKWASHER	3
		5/16 - 18 HEX NUT	3
2	400-660	ELECTRIC ACTUATOR	1
		1/2 - 20 X 2 HEX BOLT	1
	300-512	1/2 - 20 HEX LOCK NUT	1
3	400-656	EXTENSION ROD	1
		1/2 - 20 X 2 3/4 HEX BOLT	1
		1/2 - 20 HEX LOCK NUT	1
4	400-655	FRONT MOUNTING BRACKET	1
		5/16 - 18 X 1 HEX BOLT	2
		5/16 LOCK WASHER	2
		5/16 - 18 HEX NUT	2
		1/2 - 20 X 2 HEX BOLT	1
	300-512	1/2 - 20 HEX LOCK NUT	1
	NOT SHOWN		
	100-310	ELECTRIC LIFT WIRING HARNESS	1

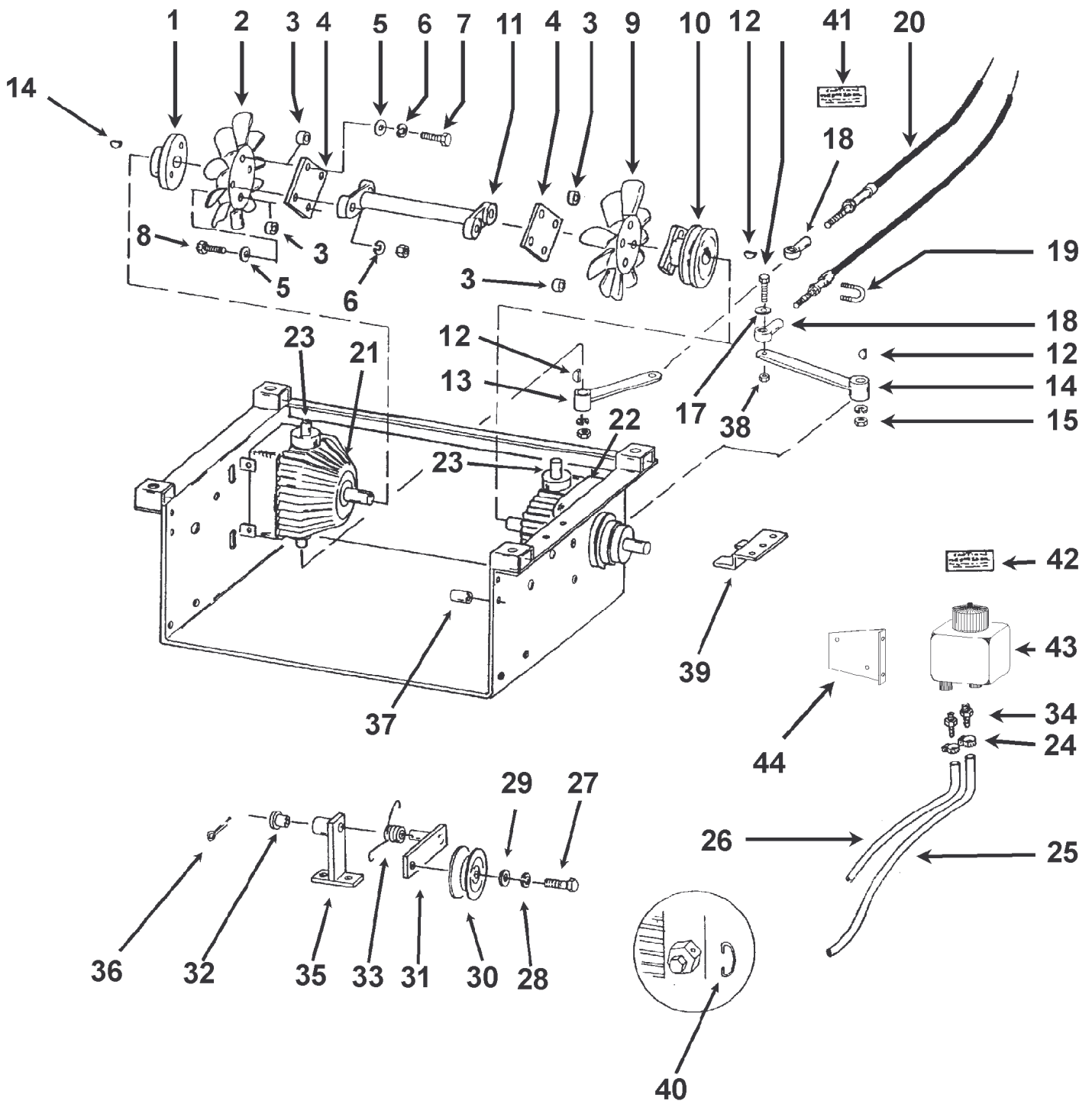
TAILWHEEL ASSEMBLY



ALL MODELS
(1800 HT & OHV MODELS)

REF.	PART #	DESCRIPTION	QTY.
1	400-129	SQ. HD. SET SCREW	2
2	400-137	SHAFT COLLAR	2
3	100-460	NYLON BUSHING	2
4	100-219	TAIL WHEEL FORK	1
5	400-132	AXLE	1
6	400-361H	BEARING	1
	400-361H1	BEARING	1
7	400-242H	BUSHING	2
8	400-300	SPACER	1
9	300-222	TAILWHEEL & TIRE	1
	400-213	TIRE (15-6:00 X 6)	
	400-214	WHEEL ONLY	

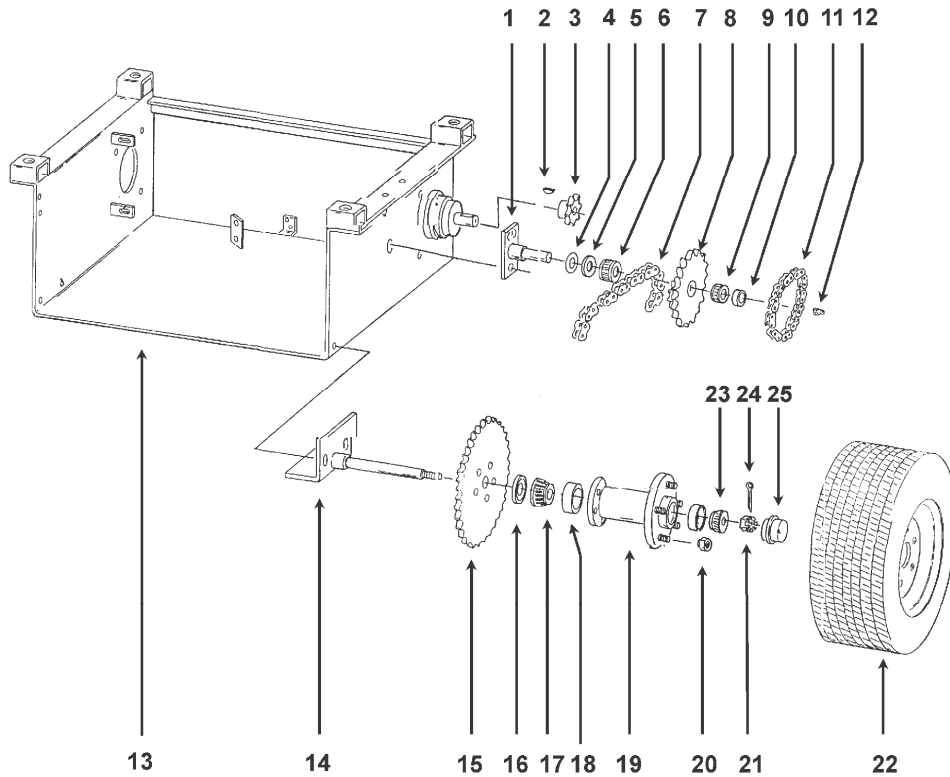
1800 OHV AND 2000OHV INNER BASE



1800OHV & 2000OHV INNER BASE

REF. #	PART #	DESCRIPTION	QUANTITY
1	400-681	RH TRANS HUB	1
		1/4 - 28 X 5/16 SHSS	2
2	400-683	RH TRANS FAN BLACK	1
3	100-508	SPACER	4
4	400-682	FLEX PLATE	2
5	300-430	FLAT WASHER, 1/4	8
6	300-451	LOCK WASHER, 5/16	8
7	300-443	BOLT, 5/16 X 1 1/4	4
8	300-440	BOLT, 5/16 X 3/4	4
9	400-684	LH TRANS FAN	1
10	400-680	LH TRANS PULLEY	1
		SET SCREW 1/4 - 28 X 5/16	2
11	100-506	CROSSHAFT	1
12	100-196	WOODRUFF KEY	4
13	300-124	RH CONTROL ARM	1
14	300-145	LH CONTROL ARM	1
15	300-484	3/8 NUT	2
		3/8 LOCKWASHER	2
16	300-418	BOLT, 1/4 X 1 1/4 HHCS	2
17	300-402	FLAT WASHER, 3/16	2
18	900-168	ROD END, FEMALE	2
19	100-139	CABLE CLAMP	2
		5/16 LOCK WASHER & NUT	4
20	100-140	CONTROL CABLE	2
		1/4 - 28 NUT	4
21	300-121	RH TRANS, CCW	1
22	300-148	LH TRANS, CW	1
		3/8 - 16 X 3 HHCS	8
		3/8 16 NUT & LOCK WASHER	8
23	97501	ADAPTER, LH THREAD	2
24	400-155	HOSE CLAMP	4
25	100-317	LONG HOSE	1
26	100-316	SHORT HOSE	1
27	300-475	3/8 - 16 X 1 1/2 HHCS	1
28	300-480	3/8 LOCK WASHER	1
29	300-481	3/8 FLAT WASHER	2
30	400-265	IDLER PULLEY	1
31	400-990	IDLER ARM	1
32	100-498	PLASTIC BUSHING	2
33	400-993	IDLER SPRING	1
34	400-116	RESERVOIR CONNECTOR	2
35	400-989	IDLER BASE	1
		5/16 X 1 CARRIAGE BOLT	4
		5/16 LOCKWASHER	4
36	300-279	COTTER KEY	1
37	300-319	PUSHARM STOP	1
		1/2 - 13 X 1 1/2 HHCS	1
		1/2 LOCK WASHER & NUT	1
38	300-436	1/4 LOCKNUT	2
39	100-540	CLUTCH ANCHOR	1
		5/16 X 3/4 BOLT	2
		5/16 NUT & LOCKWASHER	2
		5/16 FLAT WASHER	1
40	400-245	RELIEF VALVE CLIP	1
41	400-795	CONTROL CABLE WARNING	2
42	400-733	FILL LINE DECAL	1
43	300-102A	RESERVOIR	1
44	100-421	RESERVOIR BRACKET	1

1800 & 2000 BASE ASSEMBLY (OHV)



REF #	PART #	DESCRIPTION	QUANTITY
1	400-888	IDLER SHAFT	2
		TOP CARRIAGE BOLT 3/8 X 1 NC	2
		BOTTOM CARRIAGE BOLT 3/8 X 1 1/4 NC	2
		LOCK WASHER, FLAT WSHR & NUT	4
	400-295	MACHINE BUSHING	2
2	100-196	WOODRUFF KEY	2
3	300-361	TRANSMISSION SPROCKET	2
4	300-535	THIN MACHINE WASHER	2
5	300-536	THICK MACHINE WASHER	4
6	300-316	NEEDLE BEARING	2
7	400-208	CHAIN, DRIVE	2
	300-346	OFFSET LINK	2
	300-345	CONNECTING LINK	4
8	300-362	IDLER SPROCKET	2
9	300-315	NEEDLE BEARING	2
10	300-126	SHAFT COLLAR	2
11	300-363	CHAIN	2
12	300-212A	GREASE FITTING	2
13	100-435	MOTOR BASE	1
14	100-492	AXLE & PAD	2
		CARRIAGE BOLT 7/16 1 1/4 NC	6
		LOCK WASHER & NUT	6
15	300-269	DRIVE SPROCKET	2
		HHCS 5/6 X 1 NC	10
		LOCK WASHER	10
16	400-244	OIL SEAL	2
17	300-227	BEARING CONE	4
18	300-227A	BEARING CUP	4
19	400-916	WHEEL HUB - 1800 SERIES	2
	300-223	WHEEL HUB - 2000 SERIES	2
20	400-357	LUG NUT	10
21	300-193	CASTLE NUT	2
22	400-926	WHEEL & TIRE	2
	400-231A	REPLACEMENT TIRE	
	400-917	WHEEL & TIRE - 2000 SERIES	
	400-919	REPLACEMENT TIRE	
	400-927	REPLACEMENT RIM	
23	300-227	BEARING CONE	4
24	300-192	COTTER KEY	2
25	400-293	DUST CAP	2

PART # 400-729 – WHITE AND 400-753 – BLACK



CAUTION

1. KEEP ALL SHIELDS IN PLACE
2. BEFORE LEAVING THE OPERATORS POSITION
 - A. LOCK STEERING LEVERS IN NEUTRAL
 - B. SET PARKING BRAKE.
 - C. DISENGAGE ATTACHMENT CLUTCH
 - D. SHUT OFF ENGINE
 - E. REMOVE IGNITION KEY
3. WAIT FOR ALL MOVEMENT TO STOP BEFORE SERVICING MACHINE
4. KEEP PEOPLE AND PETS A SAFE DISTANCE AWAY FROM MACHINE

PART # 400-711

CAUTION

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

PART # 400-725 – WHITE PART # 400-749 – GOLD

CAUTION USE UNLEADED

PART # 400-782

CAUTION

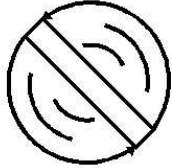
USE SAE 20 MOTOR OIL ONLY
VISCOSITY RECOMMENDATIONS
80-180 SUS, (16-39 cSt)

PART # 400-728 – WHITE PART # 400-752 – GOLD



CAUTION

WHIRLING BLADES



**KEEP HANDS AND
FEET CLEAR**

PART # 400-726



CAUTION

**STOP ALL MOTION OF MACHINE
BEFORE REMOVING HOSE.
ALSO, THIS HOSE IS SUBJECT
TO DETERIORATION AND WEAR.
CHECK OFTEN AS NEEDED.**

PART # 400-727 – WHITE PART # 400-751 – GOLD

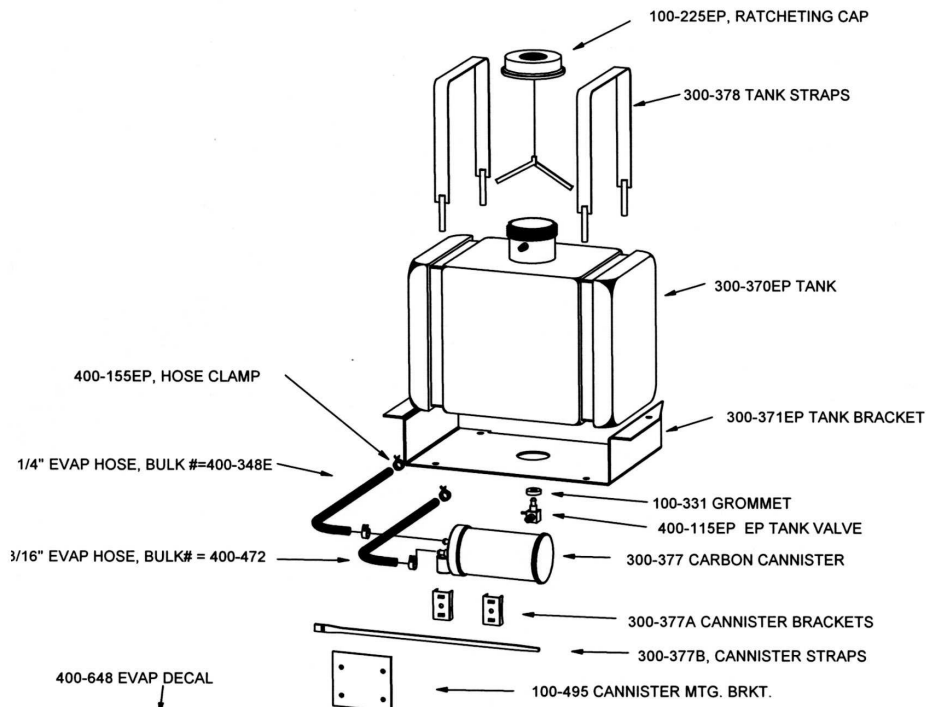


CAUTION


**DO NOT OPERATE THIS MACHINE
WITHOUT ENTIRE GRASS CHUTE
OR VACUUM ASSEMBLY FURNISHED
BY THE MANUFACTURER.**

2011 EVAPORATIVE TANK AND ASSOCIATED PARTS

This machine is equipped with EPA compliant components that are installed in order to meet EPA requirements for small spark ignited non road regulations. Please do not remove or defeat the evaporative components on this machine. Production of EPA compliant machines started on April 1, 2011. If your machine has the EPA placard under the seat lid and the yellow warning decal in front of the fuel tank cap please use this page to order repair parts.



DO NOT REMOVE THIS PLACARD

 **DEMES MANUFACTURING CORPORATION**
306 WEST HIGHWAY 4
P. O. BOX 266
RANSOM, KS 67872
800-624-6774

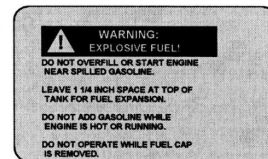
"EMISSION CONTROL INFORMATION"
THIS EQUIPMENT MEETS 2011 U.S. EPA EVAP STANDARDS:
85 CFR PART 1060 FOR NON-ROAD EQUIPMENT

CERTIFIED SYSTEM COMPONENTS:
BFLMPTANK001, E08 C-U-07-012-- FUEL TANK
BKHX.6742GC, BKHX.8242GC--ENGINE
APKPLINE397--FUEL LINE
Q-09-021--CARBON CANNISTER

EVAPORATIVE EMISSIONS FAMILY:BDNEPNHEQDMC

MONTH OF MANUFACTURE											
JAN.	FEB.	MAR.	APRIL	MAY	JUN.	2011					
JULY	AUG.	SEP.	OCT.	NOV.	DEC.						

PUNCH MONTH OF MANUFACTURE



400-649 EXPLOSIVE FUEL DECAL

DEINES MANUFACTURING CORP. LIMITED WARRANTY

Deines Manufacturing Corp., P.O. Box 266, Ransom, KS. 67572, proudly warrants to the original purchaser all products and components manufactured by Deines to be free of defects in material and workmanship.

Deines Manufacturing Corp. does not warrant trade accessory items (batteries, engines, generators, transmission, gear boxes, etc.) which are warranted by their respective manufacturers.

Deines Manufacturing Corp. will, at its option, replace or repair without charge to the purchaser for materials or labor any component or product manufactured by Deines found upon examination by any Deines Authorized Distributor or Dealer or by Deines at its plant in Ransom, KS. to be defective in material and/or workmanship.

To obtain warranty service the component, or product must be returned to an Authorized Distributor or Dealer or to the Deines Plant, TRANSPORTATION PREPAID, accompanied by a letter stating the warranty claim. Upon receipt of a Warranty Claim Letter, Deines will within ten business days commence performance of its obligations under this Warranty.

This Warranty will commence upon the date of delivery and will extend as follows: one year for Industrial and/or Commercial applications; one year for Residential applications.

THIS WARRANTY WILL NOT TAKE EFFECT unless the Warranty Registration Card is signed and returned to the Deines Manufacturing Corp. within ten days from delivery date.

This warranty is void if the component or product is modified in any manner which Deines concludes after inspection adversely affects the reliability of the component or product; if the component or product has been repaired or serviced by anyone other than an Authorized Distributor or Dealer or the Deines Plant; if the component or product is damaged because not operated in accordance with application with applicable instructions or because of accident, misuse or abuse; if the component or product is damaged because not properly maintained as set forth in applicable instructions.

This EXPRESS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES. Deines neither assumes nor authorizes any other person, natural or corporate, to assume for it any other obligations or liability in connection with or with respect to any component or product.

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DEINES SHALL UNDER NO CIRCUMSTANCES BE LIABLE FOR ANY DIRECT, INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES AND/OR EXPENSES.

The sale of this product is not subject to any implied warranties of merchantability and there are no warranties which extend beyond the description of the face hereof.

This warranty gives you specific legal rights. You also have implied warranty rights. In the event of a problem with this warranty service or performance, you may be able to go to a small claims court, a State Court, or a Federal District Court.