

500282

FOR YOUR RECORDS

Date of Purchase ____ / ____ / ____

Dealer's Name _____

Dealer's Phone _____

Serial Number-Machine _____

Serial Number-Engine _____

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DEWEZE MANUFACTURING, INC.

WARRANTY POLICY

STATEMENT OF WARRANTY

DewEze Mfg., Inc. warrants to each purchaser of new DewEze equipment from an authorized dealer or representative, that such equipment to be free from manufacturing defects in normal service for a period of ONE YEAR, commencing with delivery to the original user.

The obligation of DewEze Mfg., Inc. under this warranty is expressly limited to our option, to replacement or repair at a service facility designated by DewEze or at the manufacturing plant in Harper, Kansas, of such part or parts as inspection shall disclose to have been defective. This warranty does not apply to defects caused by damage or unreasonable use (including failure to provide reasonable and necessary maintenance), or to tires, belts, blades, lights, or other normal maintenance items while in the possession of the consumer.

DewEze Mfg., Inc., makes no warranty with respect to trade accessories. They are subject to the warranties of their respective manufacturers.

The engine is subject to the factory warranty as outlined in the engine OWNER'S MANUAL and must be serviced by an authorized engine service facility.

ANY IMPLIED OR STATUTORY WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. DewEze Mfg., Inc. makes no other express warranty, nor is anyone authorized to make any on behalf of DewEze Mfg., Inc.

For information on warranty procedures please contact your nearest dealer.

INTRODUCTION

TO THE DEWEZE ATM70c (ALL TERRAIN MOWER) OWNER OR OPERATOR:

It is important that you take the time to read this manual carefully before operating the machine. You should be familiar with all safety precautions and operating and service procedures. Operator knowledge and familiarity will make a difference in how the machine will perform.

This OWNER'S MANUAL was written to help you realize the full benefits of the machine and to help you maintain it so it will give you long and productive service.

The objective of DewEze Manufacturing in the design of the ATM 70c was to create a mowing machine which can function safely and comfortably on slopes and inclines. The result is a mowing machine which will automatically adjust itself to keep the operator in a vertical position on all slopes up to 30 degrees.

If you have any questions that are not covered in this manual, please feel free to contact your nearest dealer.

REGARDING PRODUCT CHANGES:

Following publication of this manual certain changes in standard equipment and options may have occurred which would not be included in these pages. Your DewEze dealer is the best source for up to date information.

DewEze Mfg., Inc. reserves the right to change product specifications at any time without incurring obligation to provide such updates to previously manufactured units.

DEWEZE MANUFACTURING, INC.

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!!! WARNING !!!

**DO NOT OPERATE THIS MACHINE
UNTIL YOU HAVE READ AND UNDER-
STOOD THIS OPERATOR'S MANUAL**

1. Never allow persons without proper instruction or children to operate the machine.
2. Wear Seat Belt at all times when operating a machine with roll over protection.
3. Never carry passengers.
4. Never direct discharge of material from the mower deck toward bystanders.
5. If leveling system malfunctions, turn down hill, proceed slowly to level ground and stop machine.
6. Never drive on a hill that is steeper than 30 degrees.
7. Before making repairs, maintenance, or adjustment, turn blade clutch to OFF. Turn the engine OFF. Remove the ignition key.
8. Before dismounting, turn off blades. Put foot control in neutral position and set parking brake. Stop engine and remove ignition key.
9. Relieve all pressure in the hydraulic system before disconnecting or working on hydraulic lines.
10. Keep all shields in place during machine operation.
11. Do not place hands or feet under deck.
12. Do not fill fuel tank while engine is running, or hot.
13. Place block under deck for support before performing maintenance on mower blades with deck raised.
14. Slow down when turning downhill. Fast turns may not allow leveling system to function properly.
15. Safety decals must be replaced on machine if missing or illegible. Safety decals are available free of charge from DewEze.

!!! WARNING !!!

**SLOW DOWN WHEN TURNING ON A HILL.
FAST TURNS MAY NOT ALLOW LEVELING
SYSTEM TO FUNCTION PROPERLY. AUTO
LEVEL WILL NOT WORK IF STEERING WHEEL
IS HELD AGAINST STOP DURING EXTREME
LEFT OR RIGHT TURN.**

!!! DANGER !!!

**TO AVOID PERSONAL INJURY, BEFORE
LEAVING THE SEAT, ALWAYS:
TURN BLADE SWITCH OFF.
RETURN FOOT CONTROL TO NEUTRAL.
SHUT OFF ENGINE.**

PRE-START INSTRUCTIONS

BEFORE STARTING: Be sure the engine is properly filled with oil and fuel.

CRANKCASE OIL: Fill the crankcase with an oil that meets the API (American Petroleum Institute) service designation CE/SF. Do not mix brands or grades of motor oil. Recommended oil viscosity for expected temperatures are listed in the service schedule on page 10.

!!! DANGER !!!
DO NOT REMOVE THE DIPSTICK WHILE THE
ENGINE IS RUNNING. OIL MAY BLOW OUT
THE FILL TUBE CAUSING INJURY.

HYDRAULIC OIL: Make sure that the hydraulic oil in the reservoir is at the proper level on dipstick. If not, fill with HD15-40 or HD10-40 motor oil. (HD15-40 SUPPLIED FROM FACTORY)

RECOMMENDED FUEL: Use clean, fresh, regular grade unleaded gasoline with an octane rating of 87 or higher. Using unleaded gasoline results in less engine maintenance. Avoid using fuel that has any alcohol content. Refer to the engine manufacturer's manual for further information on fuel.

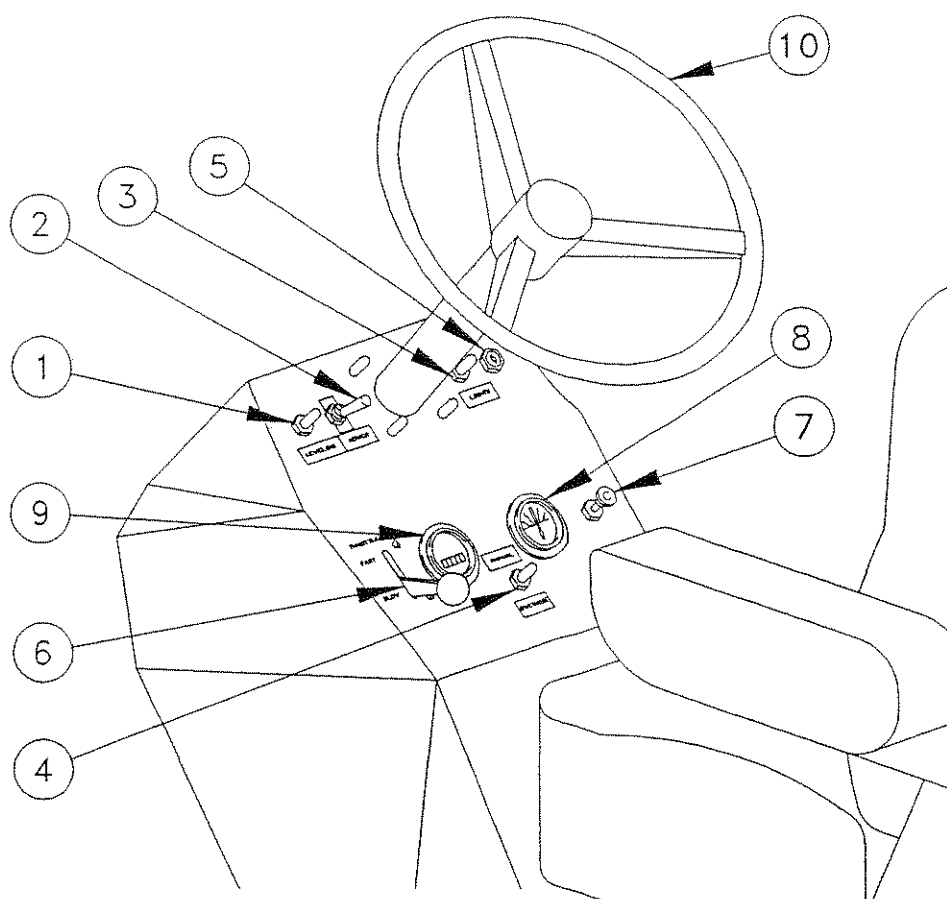
NOTE: If leaded gasoline is used continually, carbon and lead deposits must be removed from the cylinder heads as required because of engine power loss. Unleaded gasoline may be used safely after the lead deposits have been removed.

!!! WARNING !!!
AVOID POTENTIAL EXPLOSIONS! NEVER FILL
THE FUEL TANK WHILE THE ENGINE IS
RUNNING!

INSPECTION: Inspect the engine visually before starting. Check for loose or missing parts and any damage that may have occurred in shipment.

!!! IMPORTANT !!!
CHECK FOR SIGNS OF LOOSE BOLTS, BELTS,
AND HOSES AFTER ONE HOUR AND DAILY
THEREAFTER.

OPERATING CONTROLS



ITEM	DESCRIPTION
1.	Leveling Switch
2.	Blade Switch
3.	Light Switch
4.	Manual Override Switch
5.	Ignition Switch
6.	Throttle
7.	Choke
8.	Ammeter
9.	Hour Meter
10.	Steering Wheel

DRIVING THE DEWEZE ATM72

Driving the DEWEZE ATM72 with the automatic leveling device will be a new and different experience. After several minutes of driving, the smooth control and sturdy feel will become comfortable to you. The security of always sitting upright, and the feel of powerful, positive traction will give you confidence and comfort in most mowing situations. We urge EXTREME CAUTION lest your confidence in these features get you in trouble. REMEMBER: The features of the machine cannot replace good common sense!

SOME GUIDELINES:

1. Take some time to get used to the handling characteristics of the machine.
2. Always look before backing up.
3. SLOW DOWN over rough terrain.
4. DO NOT make sharp turns at high speeds.
5. Always keep your feet on the foot-rests while operating the machine.
6. Never attempt to operate the machine when it is malfunctioning.
7. Never attempt to climb slopes greater than 30 degrees.
8. If it is necessary to park the mower on a hill, be sure to USE THE PARKING BRAKE AND CHOCK THE WHEELS!
9. Wear appropriate, protective clothing while operating the mower.
10. NEVER ALLOW PEOPLE IN THE AREA YOU ARE MOWING!
11. Always avoid mowing over debris that could be projected from the mower discharge or do damage to the machine or anything in the area.
12. FOR BEST RESULTS OPERATE THE MOWER ENGINE AT FULL THROTTLE. This will allow the blades to turn at optimum speed, and the leveling device to be the most responsive. Forward speed is easily controlled with the foot control pedal.
13. Slow down when turning on a hill. Fast turns may not allow the leveling system to function properly. Auto level will not work if steering wheel is held against stop during extreme left or right turns.
14. Before dismounting, turn off blades. Place foot control in neutral position and set parking brake. Stop engine and remove ignition key.

OPERATING TIPS

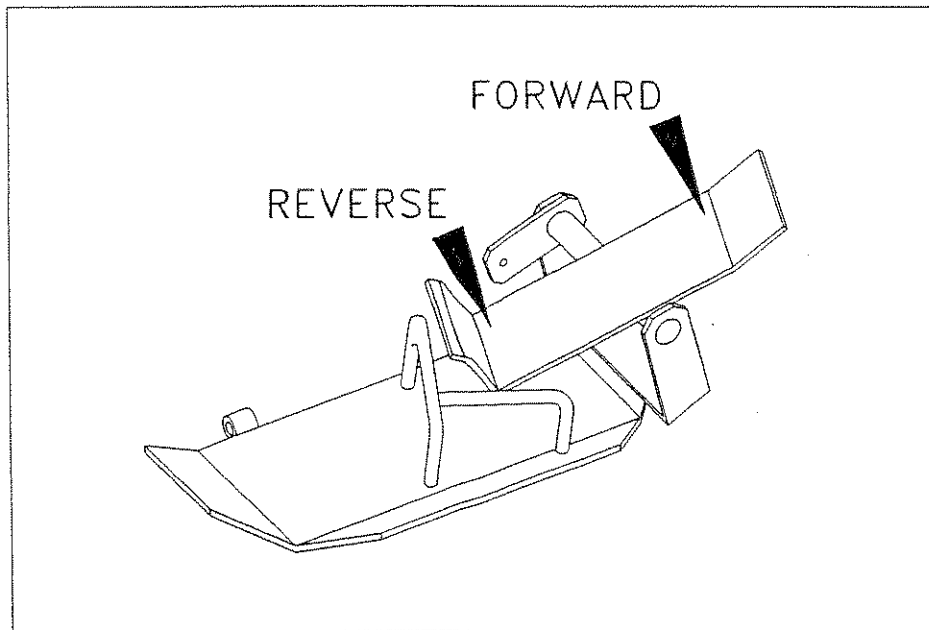
1. READ SAFETY DECALS.
2. ALWAYS CHECK ENGINE OIL AND HYDRAULIC OIL LEVELS BEFORE STARTING.
3. MAKE SURE YOU HAVE PLENTY OF FUEL.
4. VISUALLY CHECK TIRES.
5. ADJUST SEAT TO COMFORTABLE POSITION.
6. ALWAYS USE GOOD JUDGEMENT WHEN USING THIS MACHINE.

OPERATING INSTRUCTIONS

STARTING:

1. Put foot control in neutral position.
2. Turn all electrical switches to the OFF position.
3. Move throttle forward about 1/3.
4. Turn switch to HEAT position for 30 seconds if temperature is below 40 degrees.
5. Turn the key all the way to the right until the engine starts, then release key.
6. In cold weather, run engine long enough to allow the hydraulic oil to warm up before using the mower.
7. To move forward -- push toe of foot control forward.
To move backward -- push heel of foot control down.
8. To STOP -- move the foot control to neutral position.

CAUTION: ALWAYS MOVE FOOT CONTROL GRADUALLY!



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IMPORTANT: CHECK FOR SIGNS OF LOOSE BOLTS, BELTS, HOSES AND OTHER COMPONENTS AFTER ONE HOUR OF OPERATION AND DAILY THEREAFTER.

MOWER DECK SERVICE

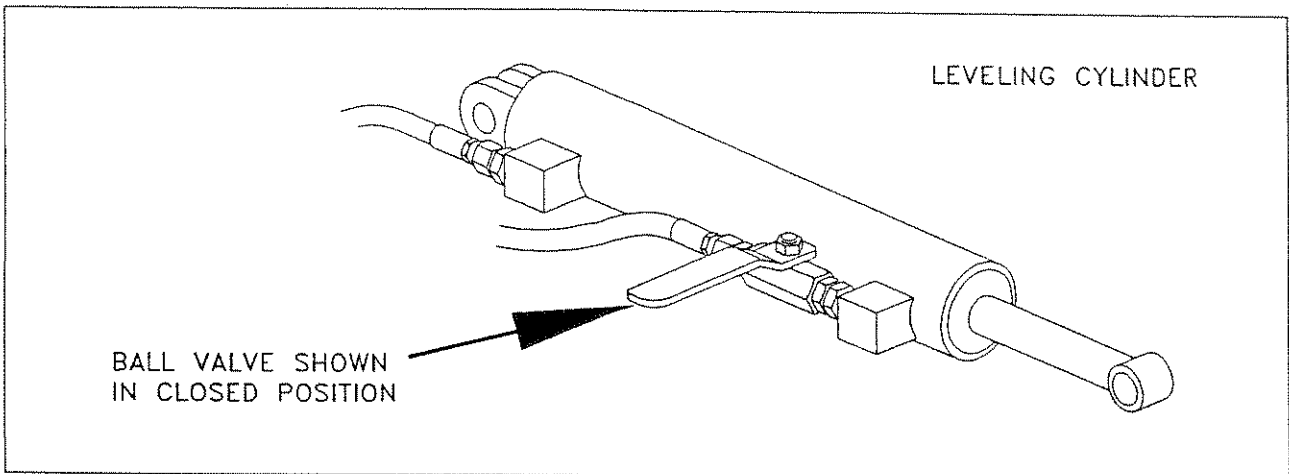
The DEWEZE ATM70c is equipped with a leveling system override. This override allows you to raise the mower decks without the need for jacks. It eliminates the need to crawl under the machine for blade and deck maintenance.

TO RAISE DECK:

1. Move foot control to neutral and make sure that the switch for the mower blades (item 2, page 4) is in the OFF position.
2. Set parking brake located on right side of seat.
3. Start engine with throttle at idle.
4. Turn the leveling switch (item 1) to the OFF position.
5. Dismount the tractor.
6. Push the override switch (item 4) in the direction you want tractor to lean, away from the deck you wish to raise. Hold switch until the tractor lays completely over.
7. Release the switch and close the ball valve on the leveling cylinder opposite of the deck to raise (refer to drawing below).
8. Push the same override switch (item 4) in the opposite direction from instruction 6. Hold switch until deck raises all the way up.
9. TURN ENGINE OFF!

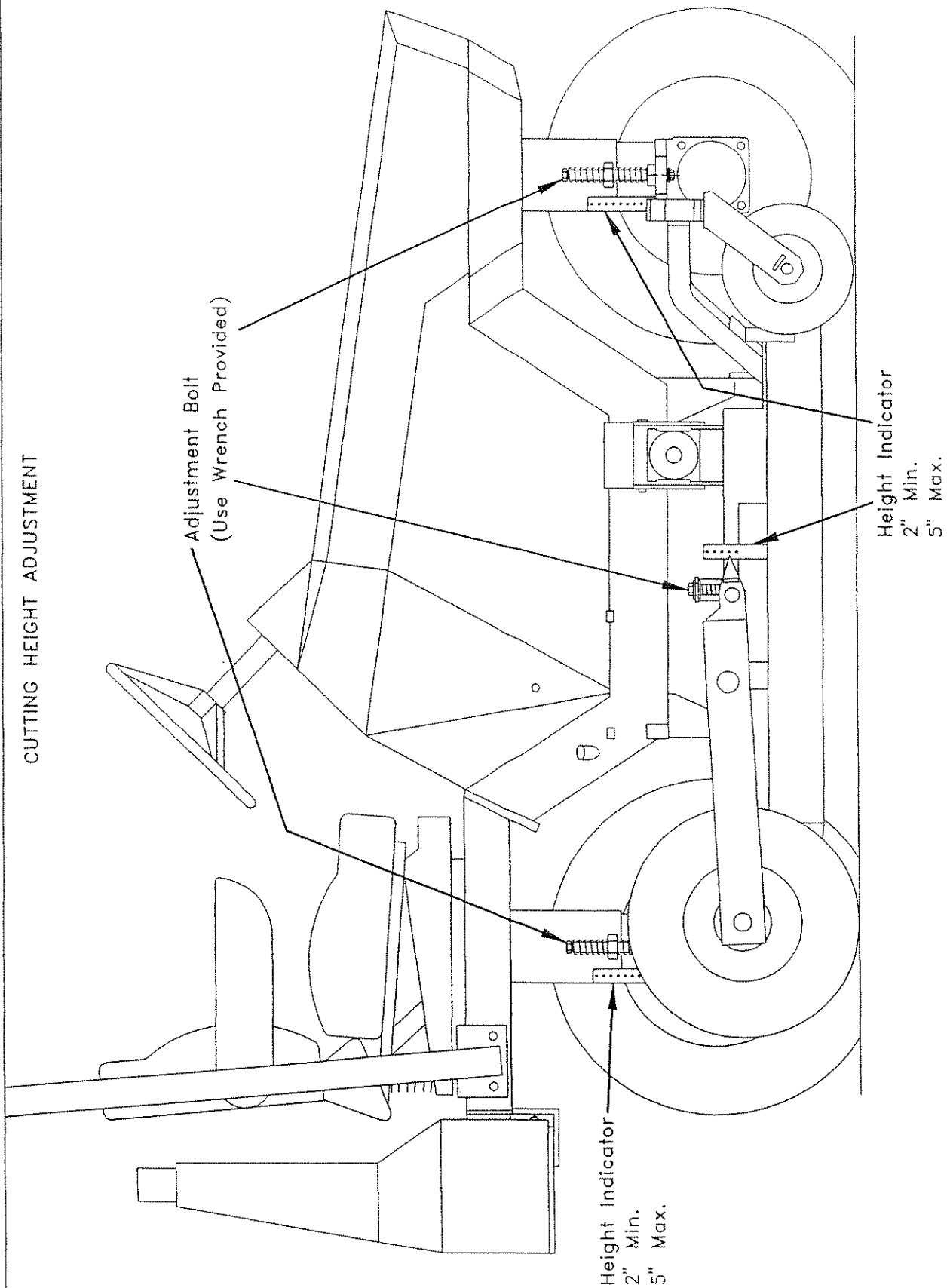
TO LOWER DECK:

1. Open the same valve that you closed previously and the deck will lower.
2. After deck has lowered, with the foot control in neutral position, start the engine.
3. Turn the leveling switch (item 1) to the ON position: mower will return to the upright position.
4. Release the parking brake.



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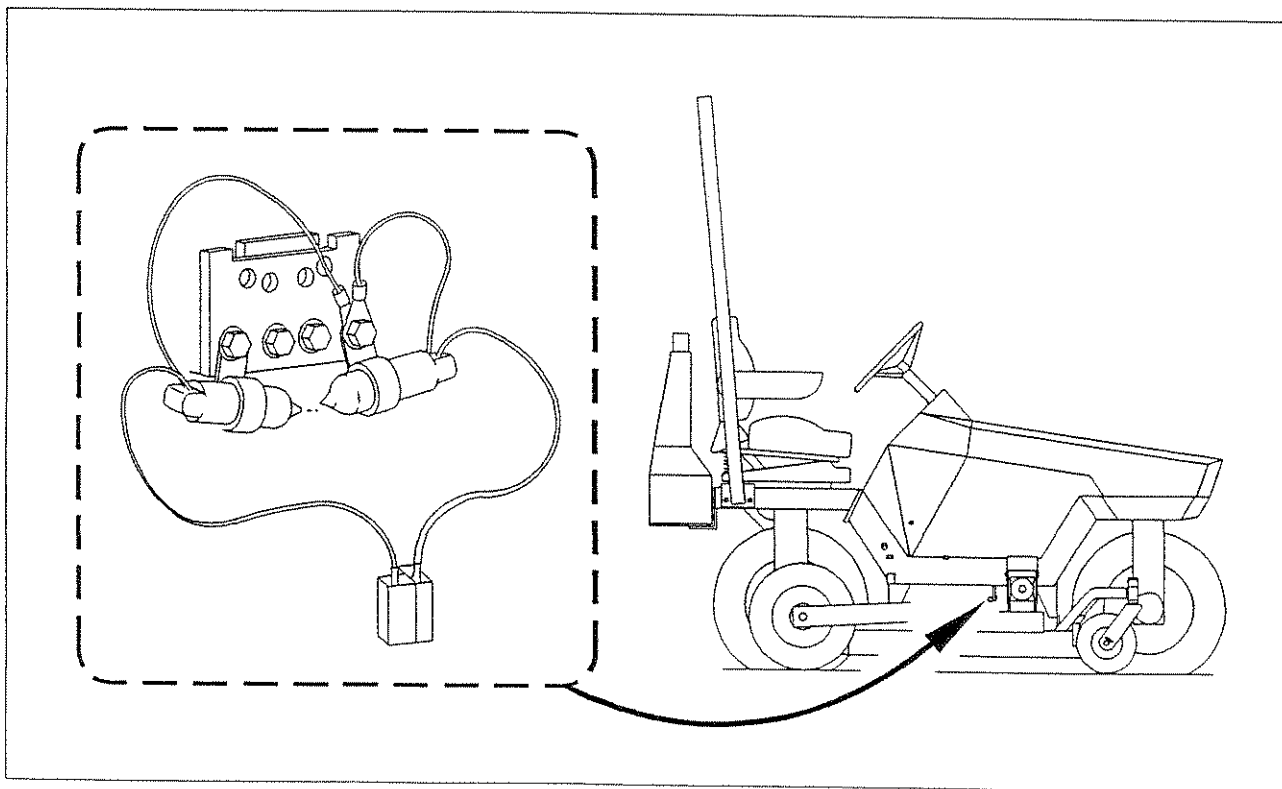
CUTTING HEIGHT ADJUSTMENT



PROCEDURE FOR ATM72 LEVELING ADJUSTMENT

1. Make sure the mower is set up for level cut and is on level ground.
2. Remove mercury switch cover.
3. Start engine and push throttle control to full open.
4. Turn leveling switch (Item 1, page 4) to ON position.
5. Hold Manual Override Switch (Item 4, page 4) to the left until tractor is leaning fully to the left. Release switch.
6. If tractor does not return to upright, loosen mounting bolt on the LEFT mercury switch. Move outer end of the LEFT mercury switch DOWN slightly. Repeat Step 6 and adjust mercury switch until tractor returns to upright. Tighten mounting bolt.
7. If tractor returns past upright, loosen mounting bolt on the LEFT mercury switch. Move outer end of the LEFT mercury switch UP slightly. Repeat Step 6 and adjust mercury switch until tractor stops at upright. Tighten mounting bolt.
8. Repeat the above procedures, tilting tractor to the RIGHT, and adjusting the RIGHT mercury switch.
9. If tractor continues to move left and right after returning to upright, move the outer end of BOTH mercury switches UP slightly and repeat the above adjusting procedures.

MERCURY SWITCHES (Looking from rear of mower)



SERVICE SCHEDULE

DAILY

1. Check fuel level ----- Use regular grade unleaded fuel.
2. Check engine oil level -----Use HD15W40
3. Check hydraulic oil level----- Use 15W40 or 10W40 motor oil.
4. Clean engine air ----- Use warm soapy water and rinse.
pre-filter
5. Visually inspect: ----- Belts, bolts, fittings, hoses and accumulator (for signs of leaks or looseness);
engine (for signs of obstruction of air cooling and excess dirt).
6. Continually look and listen for signs of hydraulic malfunction (excessive noise, sluggish control response, etc.). If signs occur STOP IMMEDIATELY or serious damage to hydraulic components could occur!
At the first sign of abnormal hydraulic function check the hydraulic oil level. Change hydraulic oil filter and refill oil as needed.

25 HOUR SERVICE - THE FOLLOWING AND ALL PREVIOUS ITEMS

1. Change engine oil ----- Use HD15W40 (Capacity - 2 Qts. with filter)
and filter
2. Clean air filter ----- Remove excess dirt and debris which restricts air flow. Keep air filter
assembly tight.
3. Check battery water -----Refill if necessary.
level.
4. Check splitter gear----- Fill with 90 weight gear lube.
box
5. Check outer gear boxes -----Fill with 90 weight gear lube.
6. Visually inspect -----Bolts, hoses, and fittings for signs of loosening.
7. Lubrication ----- Grease front casters, caster swivels, steering mechanism, and blade shafts.
8. Check tire pressure -----Front, rear drive tires ----- 9 to 11 lbs.
Stabilizer tires ----- 50 lbs.
Front caster tires ----- 60 lbs.
9. U-joints ----- Grease joints. Make sure guards are in place.

KEEP BLADES SHARP AT ALL TIMES

SERVICE SCHEDULES (cont.)

ANNUAL SERVICE SCHEDULE - THE FOLLOWING PLUS ALL PREVIOUS ITEMS

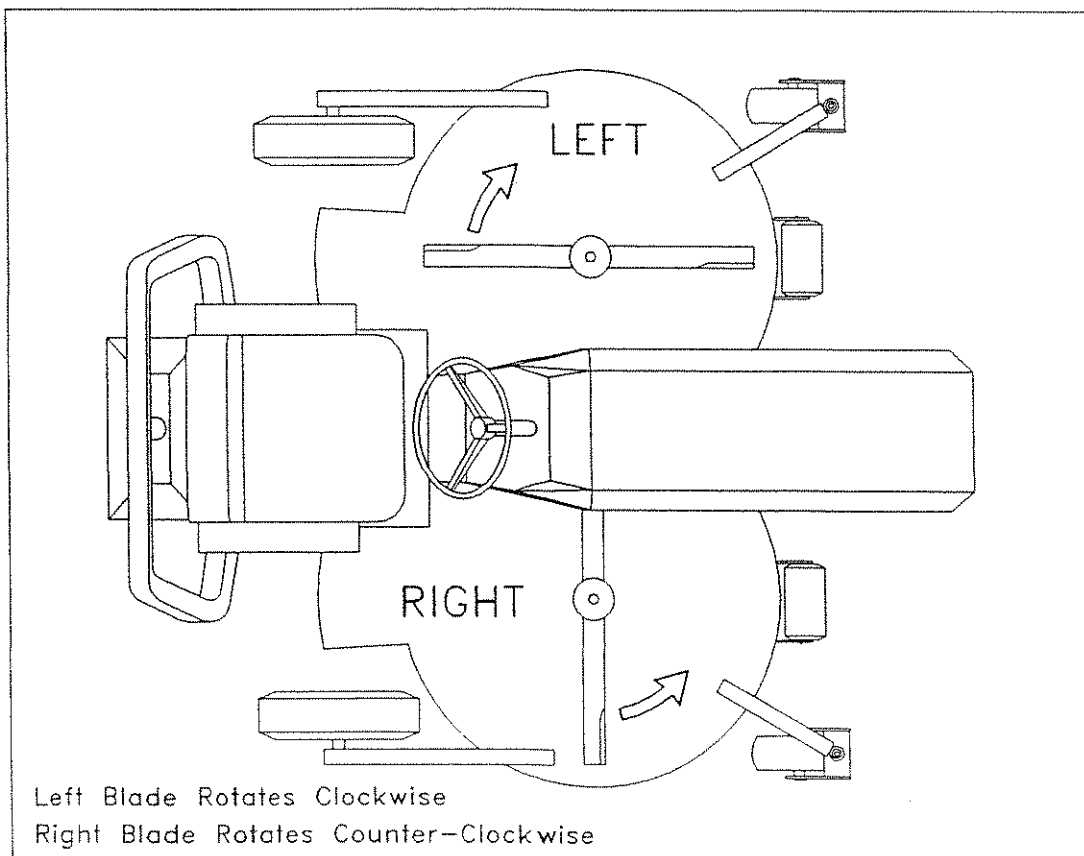
1. Replace hydraulic filter ----- Use a Zinga spin-on suction filter no. 520403 annually or every 100 hours
2. Grease stabilizer wheels ----- Use a high quality Bearing Grease
3. Upper and lower steering ---- Pack with high quality Bearing Grease pivot bearings

FOR STORAGE DURING OFF SEASON

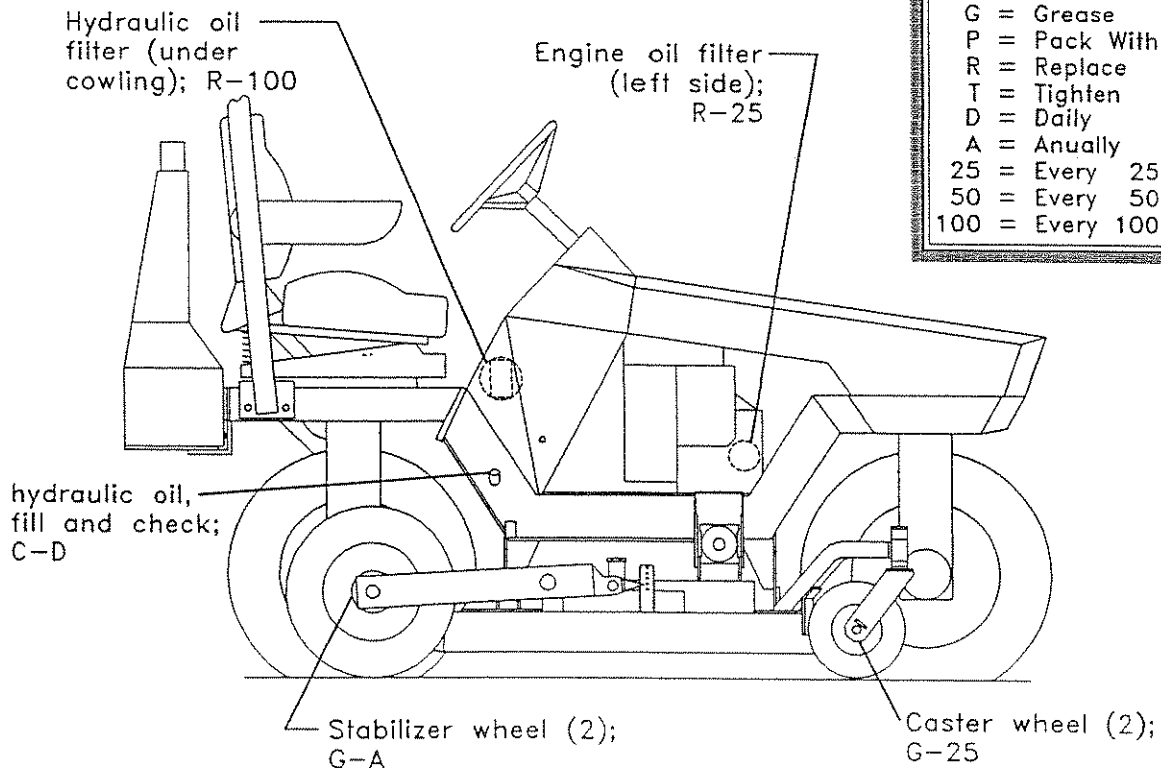
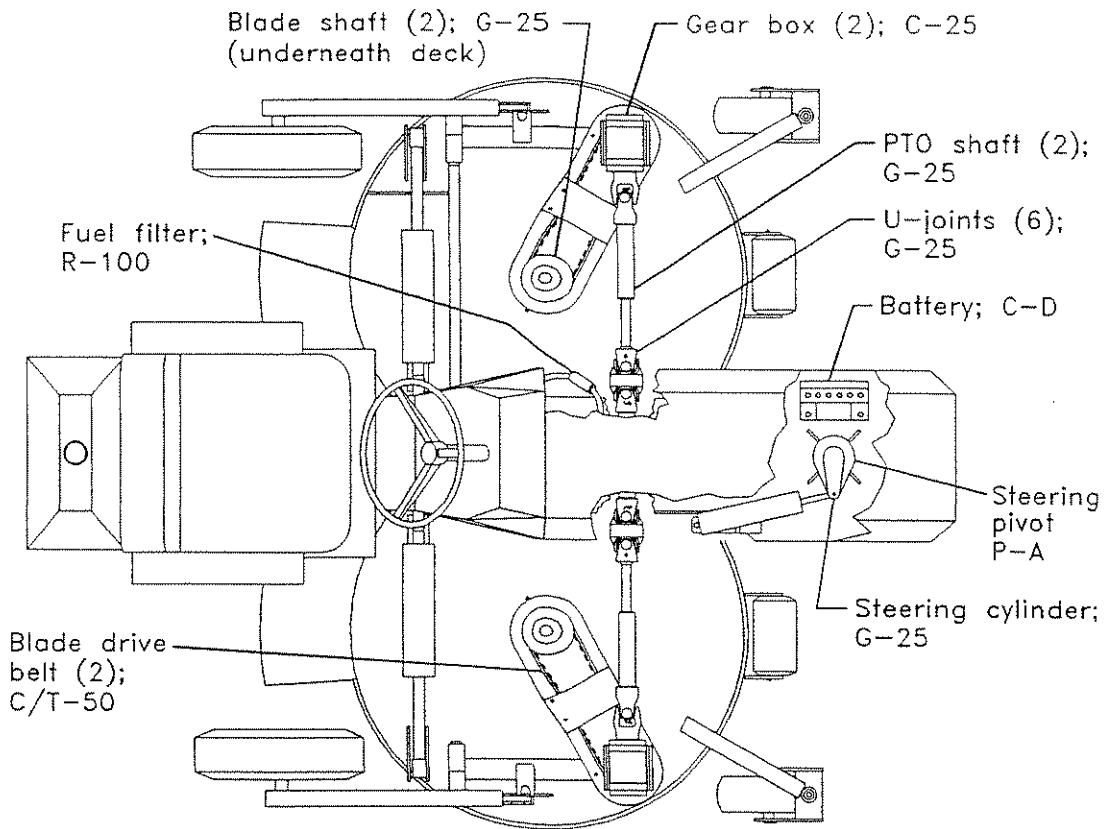
1. Shut off fuel at sediment bowl and run engine until it stops.
2. Fill tank with fuel.
3. Maintain tire pressure as specified above.

BLADE TIMING INSTRUCTIONS (see drawing below)

1. Loosen timing belt adjustment tensioner screw, remove two bolts and one nut and remove cover plate.
2. Inspect belt for wear -- Replace if worn!
3. Replace cover and bolts and nuts.
4. Loosen four bolts in cover plate that gearbox mounts to.
5. Position blades perpendicular to each other as shown.
6. Tighten belt with adjustment screw so that it takes 10 lbs. pressure to depress belt 1/4" at check port in belt shroud.
7. Tighten all bolts securely.



SERVICE CHART



C	=	Check
G	=	Grease
P	=	Pack With Grease
R	=	Replace
T	=	Tighten
D	=	Daily
A	=	Annually
25	=	Every 25 hours
50	=	Every 50 hours
100	=	Every 100 hours

TROUBLE SHOOTING

SYMPTOMS	POSSIBLE CAUSE	REMEDY
1. Engine fails to start	a. Choke not pulled -----	Pull choke
	b. Fuse blown -----	Replace fuse (30 amp)
	c. Dead battery -----	Recharge battery
	d. Dirty fuel filter -----	Replace fuel filter
	e. Out of fuel -----	Fill fuel tank
	f. Foot control not in neutral position -----	Move foot control to neutral
2. Loss of engine power	a. Dirty air cleaner -----	Clean or replace
	b. Transmission oil level low -----	Fill tank to proper level
	c. Parking brake too tight -----	Adjust brake
	d. Dirty fuel filter -----	Replace fuel filter
3. Noisy operation	a. Low oil level in hydraulic tank -----	Refill to proper level
	b. Low hydraulic pressure -----	See your dealer for repairs
	c. Air leak in pump supply line -----	Tighten or replace bad hose or fitting
	d. Low lubricant level in gear boxes -----	Refill with proper lube
	e. Blades out of time -----	See instructions page 11
	f. Blade spindle failure -----	Replace bearings
4. Loss of hydraulic power	a. Low oil level in hydraulic tank -----	Refill to proper level
	b. Low hydraulic pressure -----	See your dealer for repairs

TROUBLE SHOOTING (cont.)

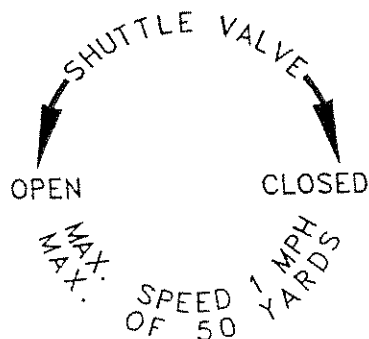
SYMPTOM	POSSIBLE CAUSE	REMEDY
5. Loss of auto-leveling	a. Fuse blown -----	Replace fuse (30 amp).
	b. Sensor(s) out of place or loose wire-----	Re-install sensor and tighten
	c. Sensor bad or wire lead broken -----	Replace sensor.
	d. Electronic relays malfunctioning -----	Replace bad relay.
	e. Solenoid valve not working -----	1. Operate valve manually to assess cause of problem 2. Replace solenoid.

NOTE: AUTO LEVEL WILL NOT WORK IF STEERING WHEEL IS HELD AGAINST STOP DURING EXTREME RIGHT OR LEFT TURN.

6. Mower blades will not engage	a. operator not seated correctly -----	Sit firmly in seat to contact safety switch
	b. Loose belts-----	Be sure all belts are tight
	c. Switch malfunction-----	Replace switch.

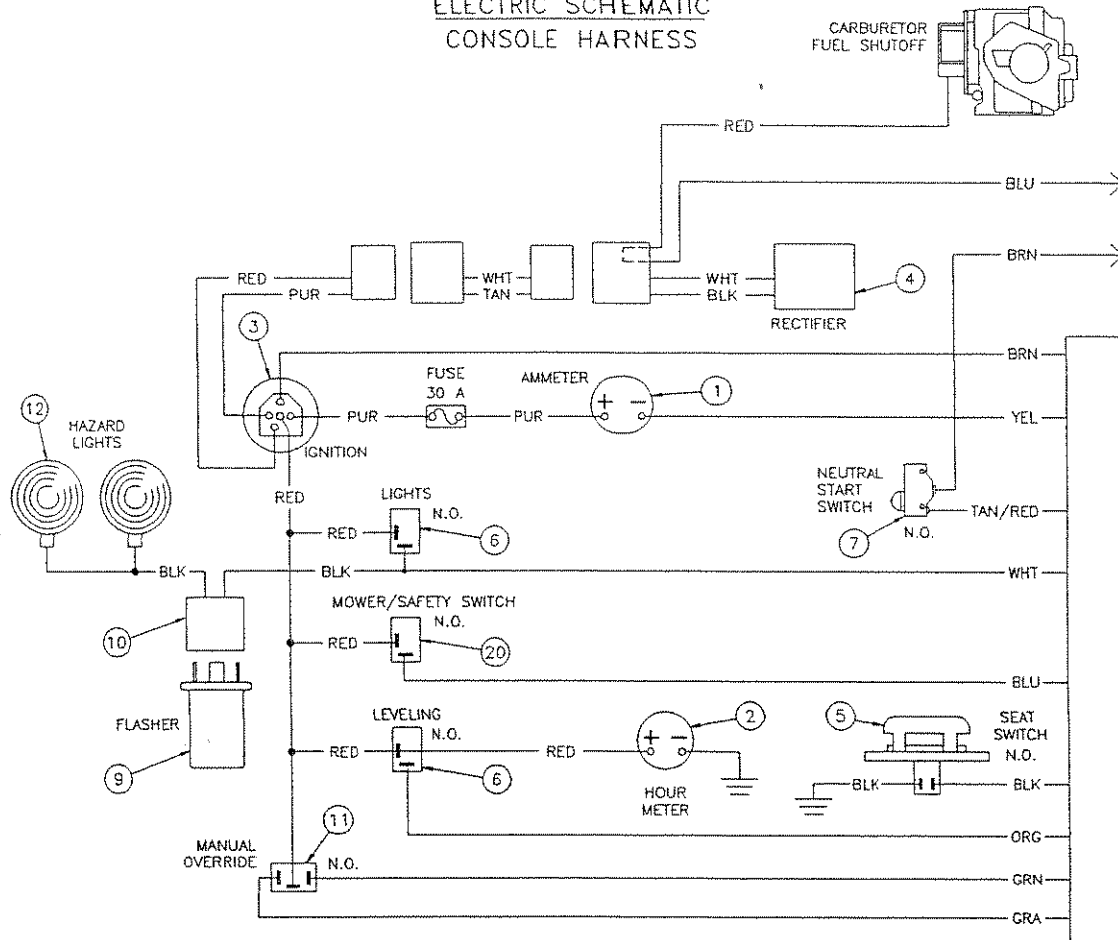
TO MOVE MOWER IN CASE OF ENGINE OR HYDRAULIC POWER FAILURE

- To move mower open shuttle valve located on right-hand side of cowl by rotating 180 degrees with a screwdriver.
- Mower may be moved a short distance with shuttle valve open.
- MOVING THE MOWER AT MORE THAN ONE M.P.H. FOR MORE THAN 50 YARDS MAY CAUSE SERIOUS DAMAGE TO THE WHEEL MOTORS AND HYDRAULIC PUMPS.
- Close shuttle valve before operating mower.



SCHEMATICS AND PARTS SECTION

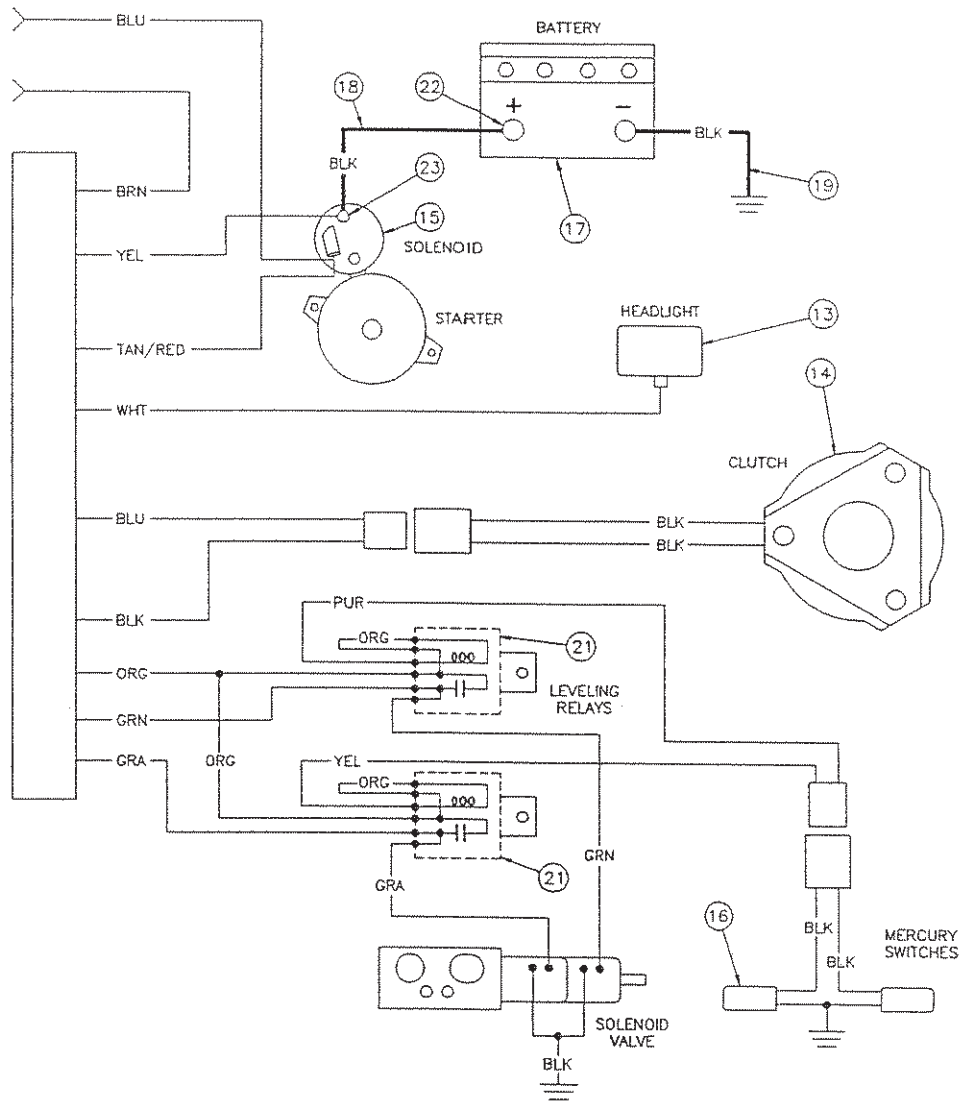
ELECTRIC SCHEMATIC CONSOLE HARNESS



N.O. = NORMALLY OPEN

1	530011	AMMETER
2	530009	HOUR METER
3	530016	IGNITION SWITCH
4	530029	RECTIFIER
5	530113	SAFETY SWITCH / SEAT
6	530007	SWITCH, SPST
7	530038	NEUTRAL START SWITCH
8	530097	CONSOLE WIRING HARNESS
9	530034	FLASHER
10	530025	FLASHER HARNESS
11	530020	SWITCH, SPDT
12	530032	HAZARD LIGHT

ELECTRIC SCHEMATIC MOWER HARNESS

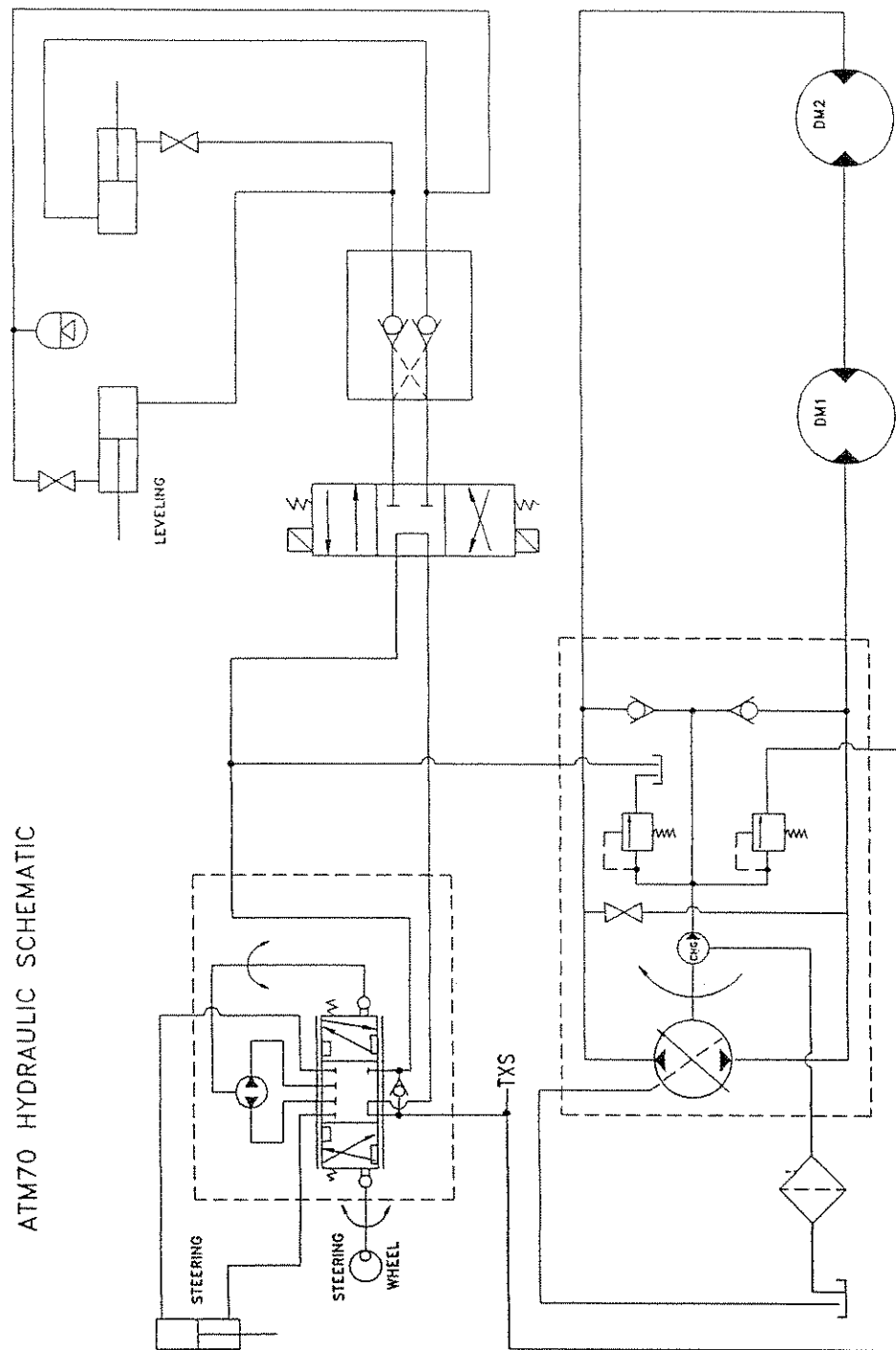


13	530010	HEADLIGHT
14	540004	BLADE CLUTCH
15	530114	SOLENOID
16	530076	MERCURY SWITCH
17	530017	BATTERY
18	530002	SOLENOID CABLE
19	530001	BATTERY GROUND CABLE
20	530100	PULL-ON SWITCH / DECK SAFETY
21	530028	RELAY
22	530035	INSULATOR / BATTERY TERM.
23	530036	INSULATOR / SOLENOID TERM.
24	530098	MOWER WIRING HARNESS

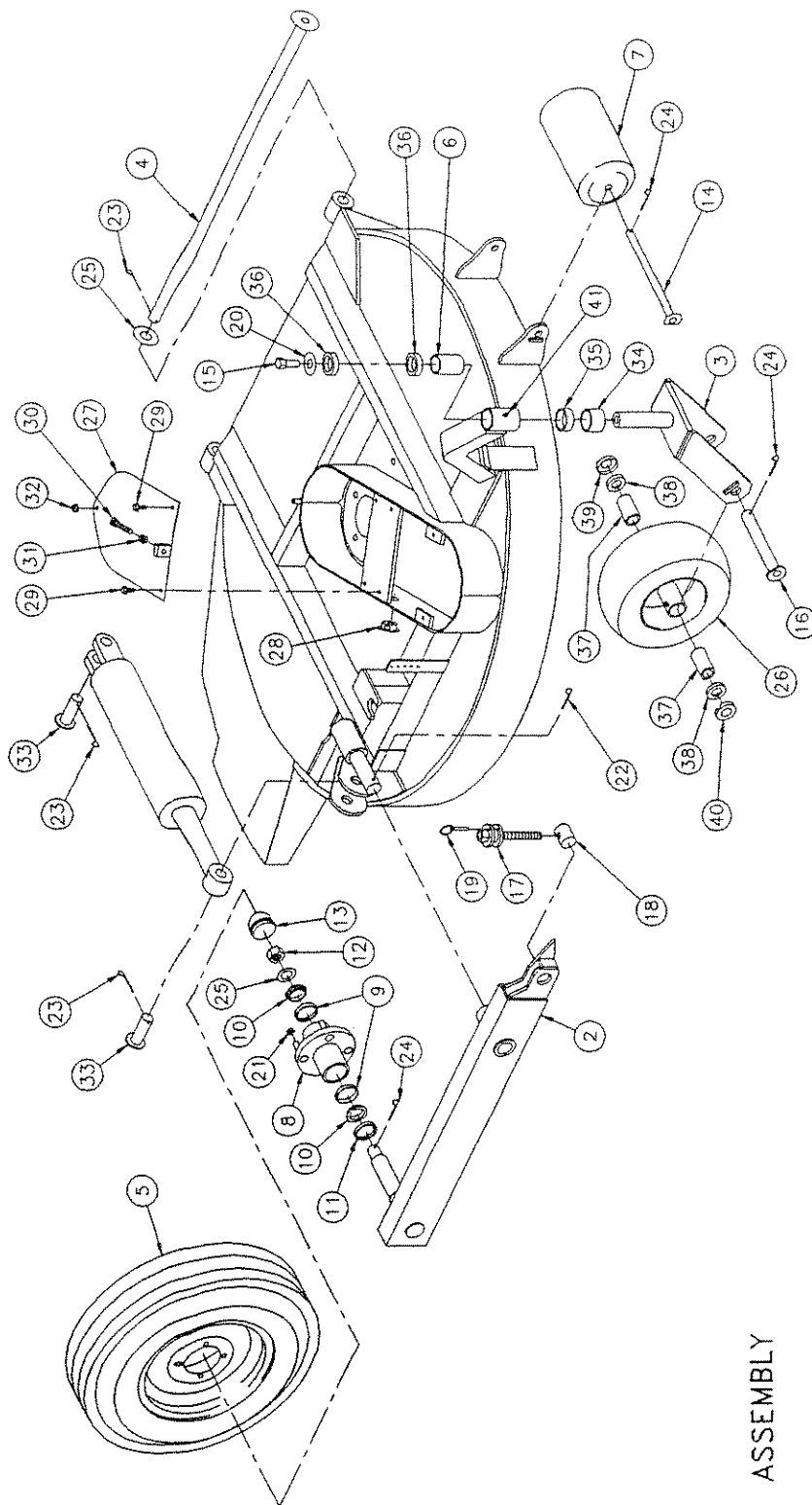
HYDRAULIC SYSTEM

ITEM	PART NO.	DESCRIPTION			
1.	720079	ADAPTER, 90 DEGREE	29.	520163	STEERING PUMP
2.	520012	ADAPTER (2)	30.	520505	SOLENOID VALVE
3.	520017	ADAPTER, TEE (3)	31.	520403	FILTER ELEMENT
4.	520018	ADAPTER, TEE (2)	32.	520402	FILTER HEAD ASSEMBLY
5.	520019	ADAPTER, 90 DEGREE	33.	520092	ACCUMULATOR
6.	520024	ADAPTER, 90 DEGREE (2)	34.	520001	STEERING CYLINDER
7.	520025	ADAPTER, 90 DEGREE	35.	520404	LEVELING CYLINDER (2)
8.	520026	ADAPTER, 90 DEGREE (2)	36.	520005	WHEEL MOTOR (2)
9.	520033	ADAPTER (3)	37.	520162	STEERING COLUMN
10.	520034	ADAPTER, 45 DEGREE (2)	38.	520421	HOSE
11.	520035	ADAPTER, 90 DEGREE (2)	39.	520420	HOSE
12.	520093	ADAPTER (2)	40.	520497	HOSE
13.	520094	ADAPTER, 45 DEGREE (2)	41.	520053	HOSE ASSEMBLY
14.	520095	ADAPTER, 90 DEGREE (2)	42.	520055	HOSE ASSEMBLY (2)
15.	520116	ADAPTER (4)	43.	520057	HOSE ASSEMBLY
16.	520118	ADAPTER, 90 DEGREE (2)	44.	520058	HOSE ASSEMBLY
17.	520030	ADAPTER, 90 DEGREE	45.	520499	HOSE ASSEMBLY
18.	520435	ADAPTER, 90 DEGREE (2)	46.	520500	HOSE ASSEMBLY
19.	520436	HOSE BARB	47.	520501	HOSE ASSEMBLY (2)
20.	520437	ADAPTER (2)	48.	-----	-----
21.	720072	STREET ELL	49.	520502	HOSE ASSEMBLY
22.	720094	HOSE BARB	50.	520503	HOSE ASSEMBLY
23.	-----	-----	51.	-----	-----
24.	520438	CAP	52.	520413	HOSE ASSEMBLY
25.	520433	BALL VALVE (2)	53.	520504	HOSE ASSEMBLY
26.	500240	HOSE CLAMP #6 (2)	54.	520414	HOSE ASSEMBLY
27.	520098	HOSE CLAMP 1/2 (4)	55.	520415	HOSE ASSEMBLY (3)
28.	520400	HYDRAULIC PUMP	56.	520461	HOSE ASSEMBLY

ATM70 HYDRAULIC SCHEMATIC

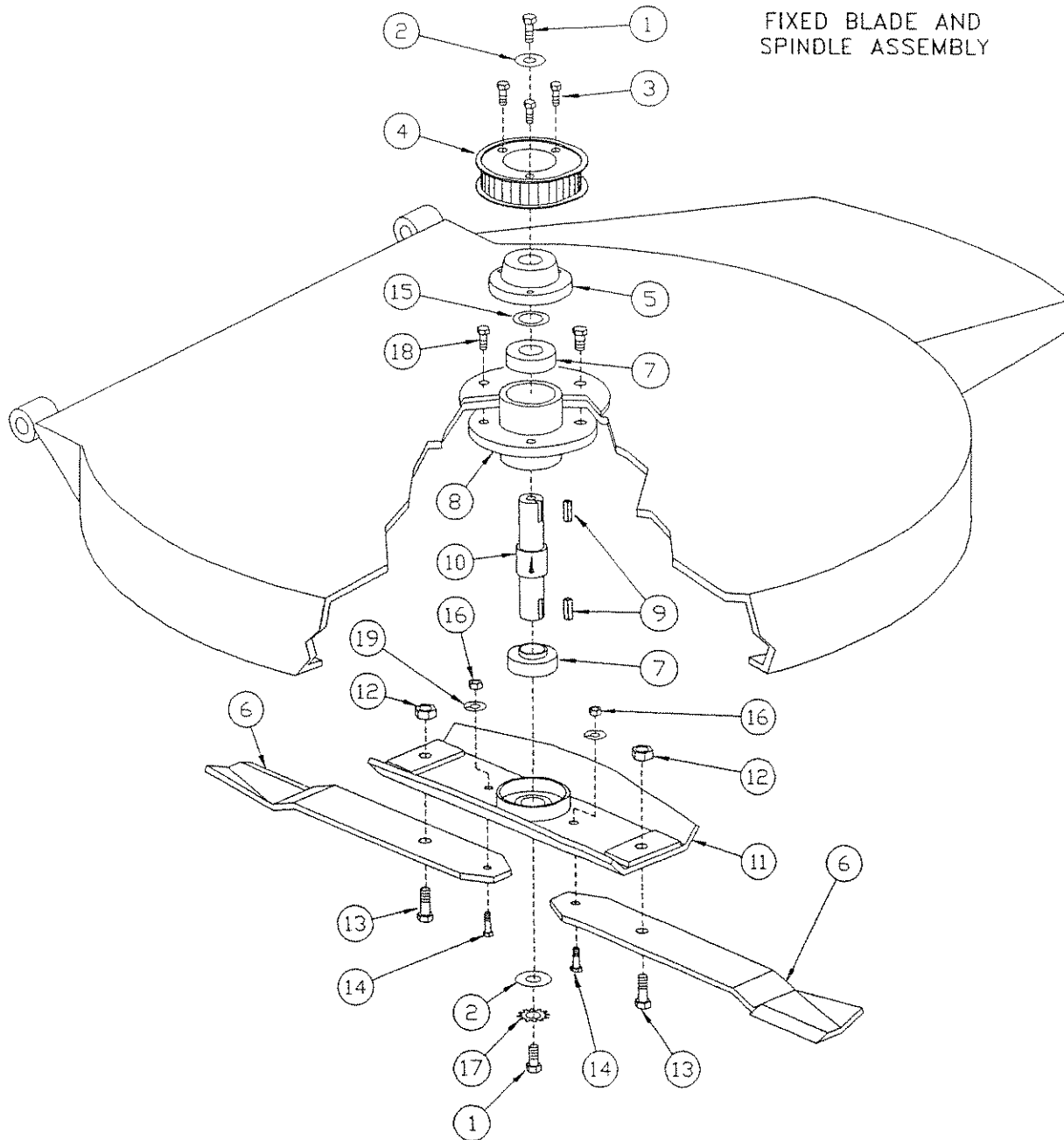


ITEM	PART NO.	DESCRIPTION			
1	510303	Mower deck, right	13	510469	Dust cap
2	510304	Mower deck, left	14	510281	Roller pin
3	510074	Stabilizer arm, right	15	110050	Bolt, 1/2NCx3/4
4	510075	Stabilizer arm, left	16	510263	Pin, caster wheel
5	510167	Yoke, caster wheel	17	510093	Adjustment screw
6	510051	Center pivot rod	18	510005	Pin, arm adjustment
7	510345	Wheel and tire assy.	19	510400	Cotterless hitch pin
8	510344	Wheel, stabilizer	20	510258	Flat washer, 7/16
9	511149	Bushing	21	510464	Lug nut
10	510047	Roller	22	510175	Cotter pin
11	500135	Hub	23	510462	Cotter pin
12	510465	Race	24	510463	Cotter pin
	510466	Bearing	25	510461	Flat washer, 3/4
	510467	Seal	26	510347	Caster tire and wheel
	510468	Castle nut	27	510187	Cover plate
			28	510186	Plug
			29	510196	Wizflange bolt
			30	510197	Bolt, 5/16NCx2-1/2 tap
			31	510208	Nut, 5/16NC
			32	510096	Nut, 5/16NC wiz
			33	510394	Pin, cylinder
			34	510822	1" shim
			35	510823	1/2" shim
			36	510824	1/4" shim
			37	511156	Bearing
			38	511157	Seal
			39	511158	End cap
			40	511159	Cap, zerk end
			41	510174	Grease zerk
			42	510235	Hub assy. (inc. 8,9,10,13,21)

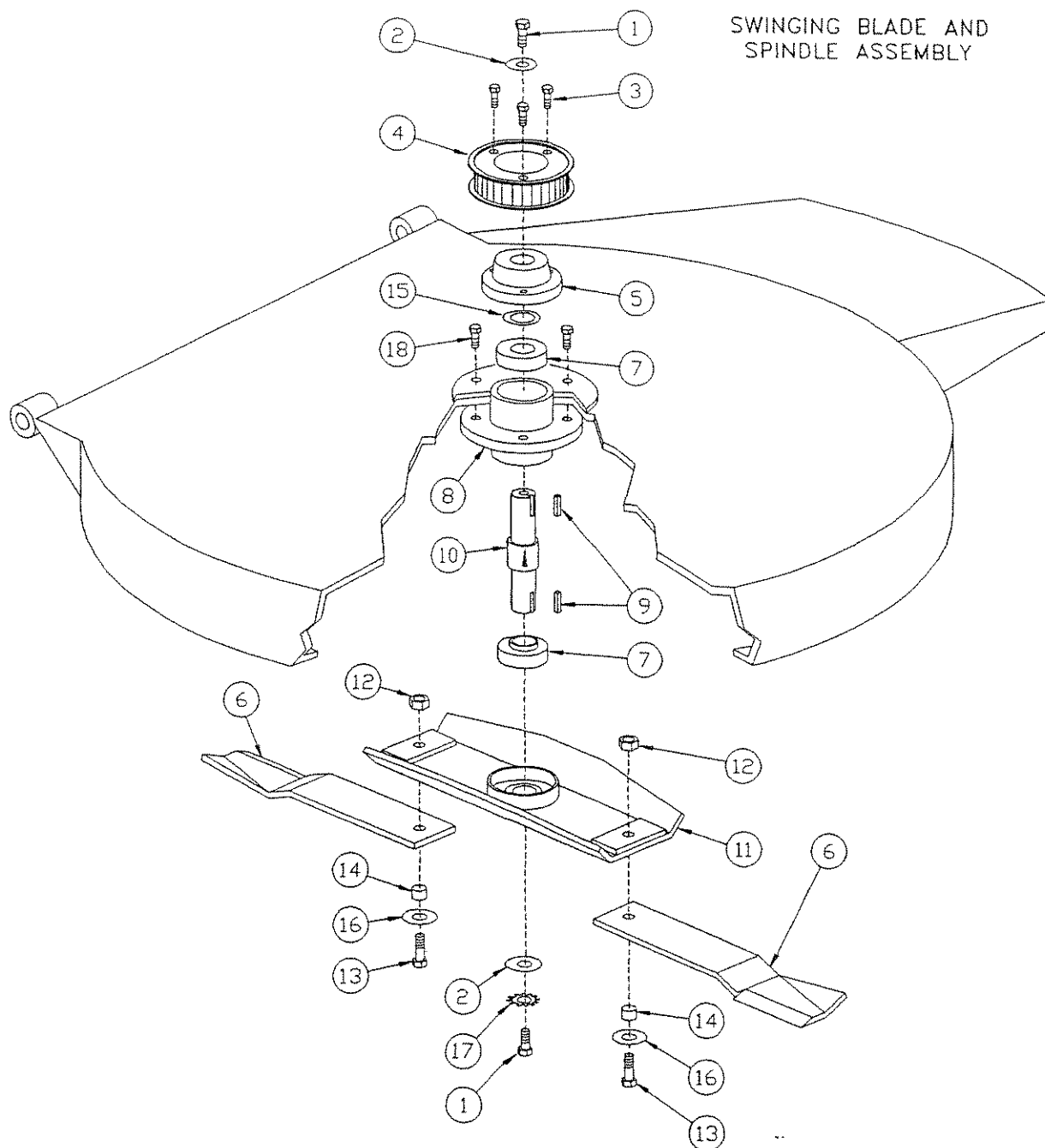


DECK ASSEMBLY

FIXED BLADE AND SPINDLE ASSEMBLY



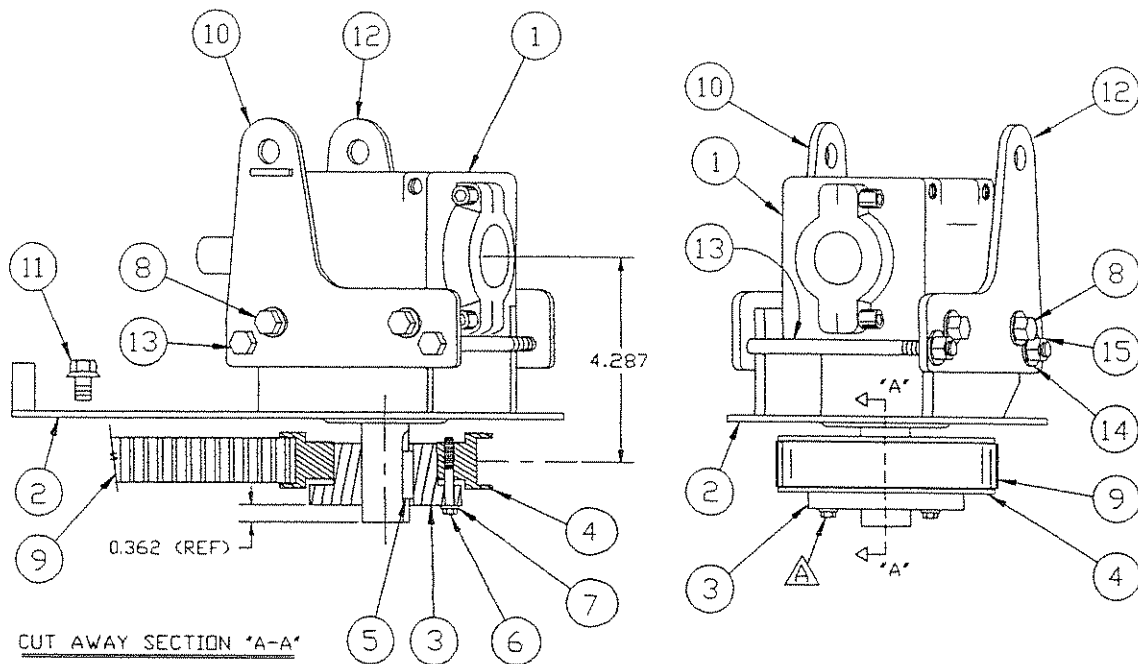
ITEM	PART #	DESCRIPTION			
1	510500	1/2-20NF X 1.0 BOLT	9	510228	1/4 X 1/4 X 1.0 KEY
2	500128	1/2 MACHINE BUSHING	10	510448	BLADE SPINDLE
3	510242	CAP SCREW	11	511128	STUMP JUMPER
4	510240	SPROCKET	12	510396	1/2-13NC LOCK NUT
5	510241	BUSHING	13	510218	1/2-13NC X 1.5 BOLT
6	500270	FIXED BLADE KIT-LEFT (INC. ITEMS 12,13,14,16,19)	14	510065	5/16-18NC X 1.25 BOLT
	500271	FIXED BLADE KIT-RIGHT (INC. ITEMS 12,13,14,16,19)	15	510055	SPACER
7	510259	BEARING	16	510208	5/16-18NC NUT
8	510413	BEARING HUB	17	510957	1/2 STAR WASHER
			18	510453	3/8NC X 1.0 WIZ BOLT
			19	510335	5/16 LOCK WASHER



SWINGING BLADE AND
SPINDLE ASSEMBLY

ITEM	PART #	DESCRIPTION			
1	510500	1/2-20NF X 1.0 BOLT	9	510228	1/4 X 1/4 X 1.0 KEY
2	500128	1/2 MACHINE BUSHING	10	510448	BLADE SPINDLE
3	510242	CAP SCREW	11	511128	STUMP JUMPER
4	510240	SPROCKET	12	540115	1/2-20NF LOCK NUT
5	510241	BUSHING	13	110051	1/2-20NF X 1.5 BOLT
6	500268	SWING. BLADE KIT-LEFT	14	511136	BUSHING
	(INC. ITEMS 12, 13, 14, 16)		15	510055	SPACER
	500269	SWING. BLADE KIT-RIGHT	16	500239	FLAT WASHER
	(INC. ITEMS 12, 13, 14, 16)		17	510957	1/2 STAR WASHER
7	510259	BEARING	18	510453	3/8NC X 1.0 WIZ BOLT
8	510413	BEARING HUB	19	510335	5/16 LOCK WASHER

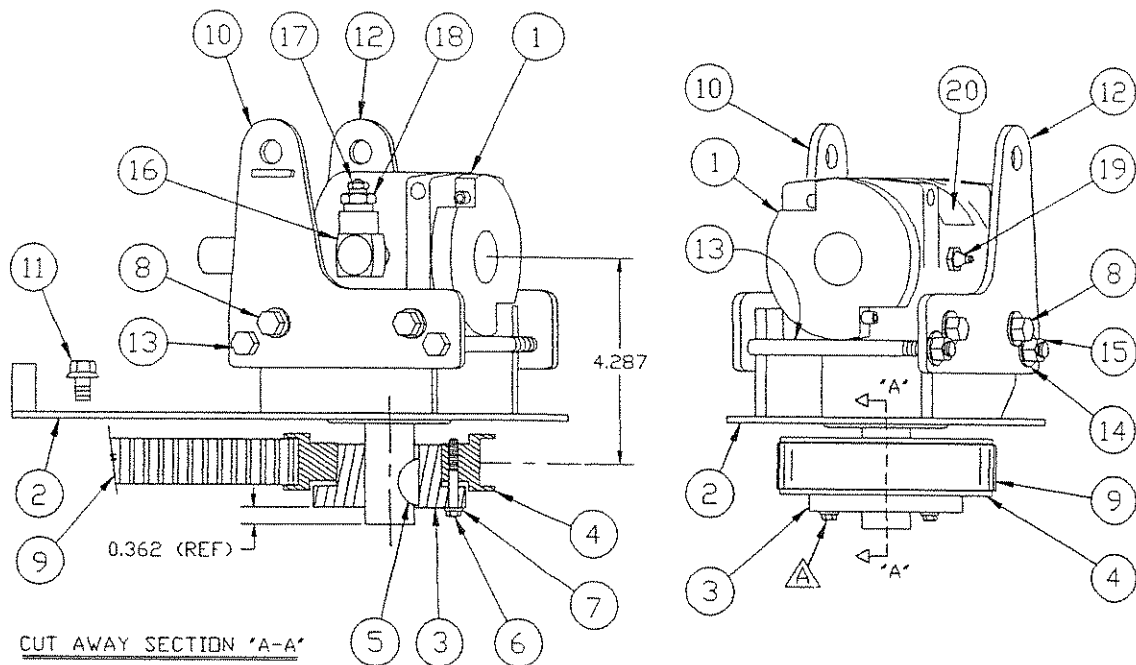
SUPERIOR GEARBOX
AND SPROCKET ASSEMBLY




⚠ CAP SCREW #510242 TO BE TORQUED AT
6 FOOT-POUNDS WITHOUT LUBRICANTS

ITEM	PART #	DESCRIPTION			
1	540280	GEARBOX	8	510992	5/16-18NC X 1 WIZBOLT
2	510189	COVER PLATE - RIGHT	9	510261	TIMING BELT
	510190	COVER PLATE - LEFT	10	511175	SHIELD MT. BRKT. W/STOP
3	510241	Q D BUSHING	11	510196	5/16-18NC X 1/2 WIZBOLT
4	510240	SPROCKET	12	511174	SHIELD MT. BRKT.
5	510228	1/4 X 1 KEY	13	710390	5/16-18NC X 5 BOLT
6	510242	CAP SCREW (W/ITEM 4)	14	510335	5/16 LOCK WASHER
7	510260	LOCK WASHER	15	510208	5/16-18NC NUT

CURTIS GEARBOX AND SPROCKET ASSEMBLY

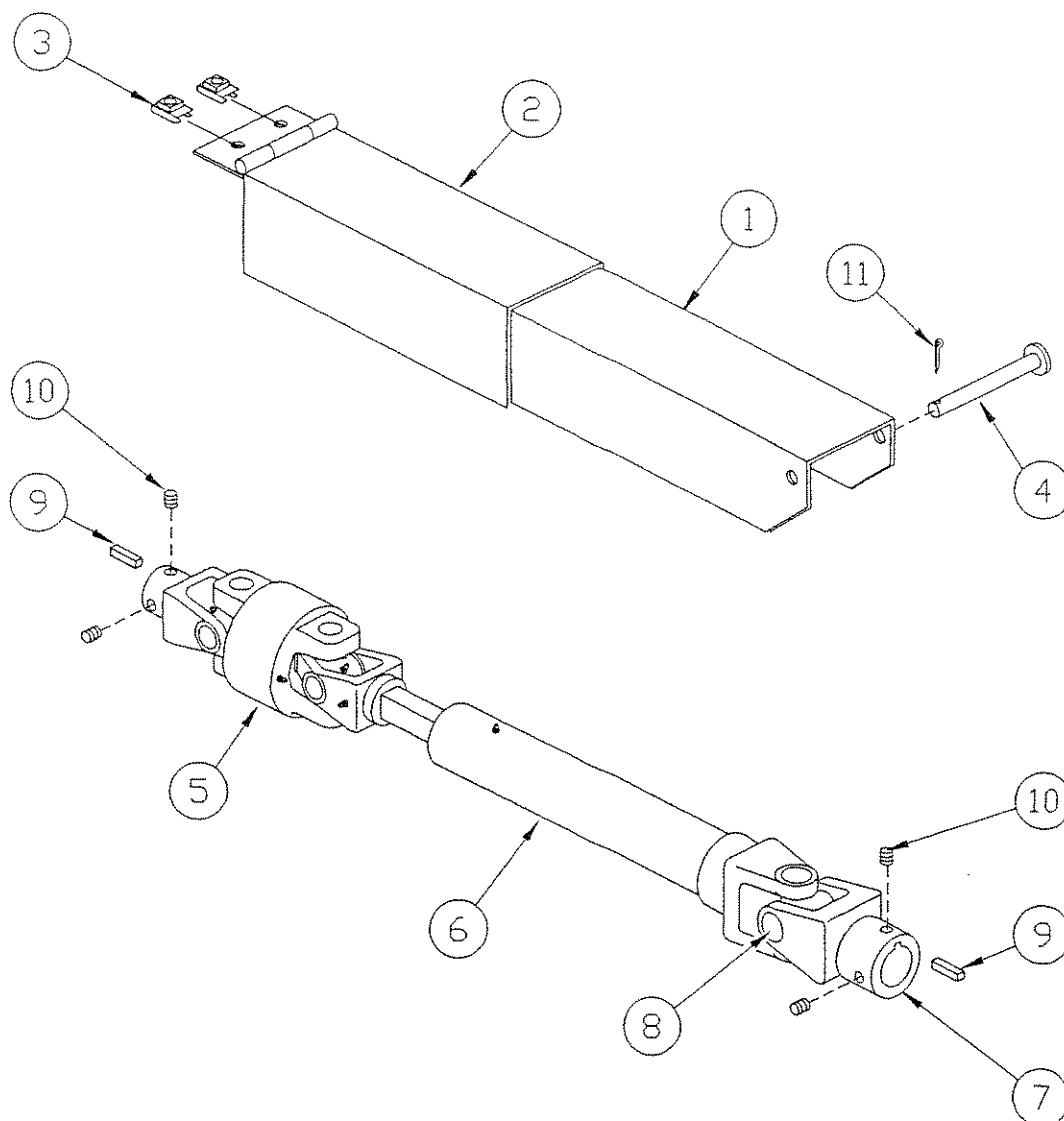


 CAP SCREW #510242 TO BE TORQUED AT
6 FOOT-POUNDS WITHOUT LUBRICANTS

ITEM	PART #	DESCRIPTION			
1	540212	GEARBOX ASSEMBLY	11	510196	5/16-18NC X 1/2 WIZBOLT
2	510189	COVER PLATE - RIGHT	12	511174	SHIELD MT. BRKT.
	510190	COVER PLATE - LEFT	13	710390	5/16-18NC X 5 BOLT
3	510241	Q D BUSHING	14	510335	5/16 LOCK WASHER
4	510240	SPROCKET	15	510208	5/16-18NC NUT
5	410321	1/4 X 1 WOODRUFF KEY	16	510321	* ADAPTER, 90°
6	510242	CAP SCREW (W/ITEM 4)	17	540148	* VENT
7	510260	LOCK WASHER	18	540150	* PIPE BUSHING
8	510992	5/16-18NC X 1 WIZBOLT	19	540149	* GREASE ZERK
9	510261	TIMING BELT	20	500206	* DECAL
10	511175	SHIELD MT. BRKT. W/STOP			

* THESE PARTS INCLUDED WITH GEARBOX ASSEMBLY #540212

P.T.O. SHAFT & SHIELD

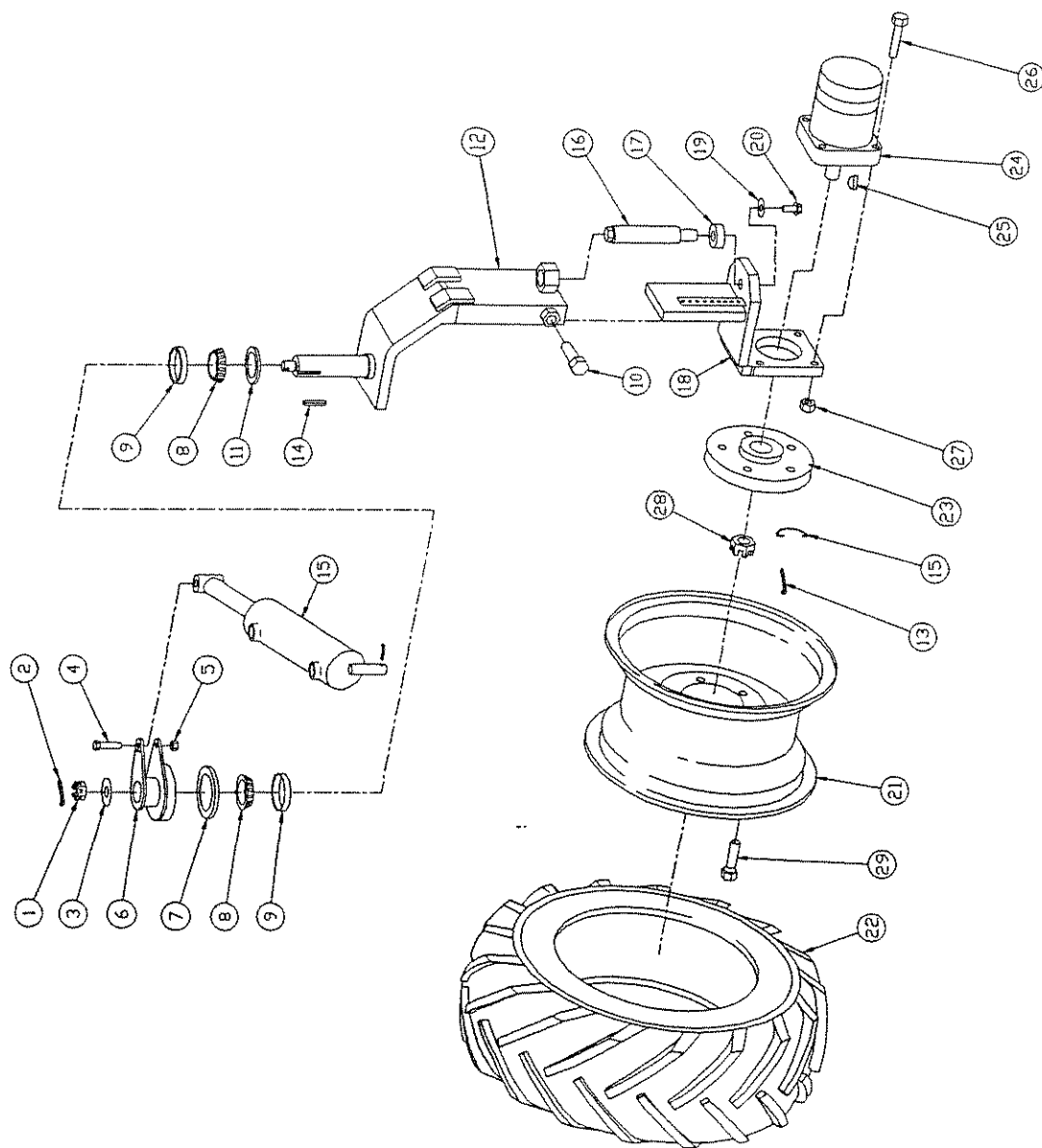


ITEM	PART NO.	DESCRIPTION
1	510446	PTO SHIELD (INNER)
2	510443	PTO SHIELD (OUTER)
3	510425	"U" TYPE RETAINER
4	510996	PIN
5	540041	U-JOINT / SHAFT ASSY
6	540042	SHAFT / YOKE ASSY
7	540043	YOKE / END
8	540044	U-JOINT / CROSS
9	510282	KEY
10	510161 *	SET SCREW
11	510176	COTTER PIN
12	540047	PTO SHAFT ASSY (INC. ITEMS 5-8)

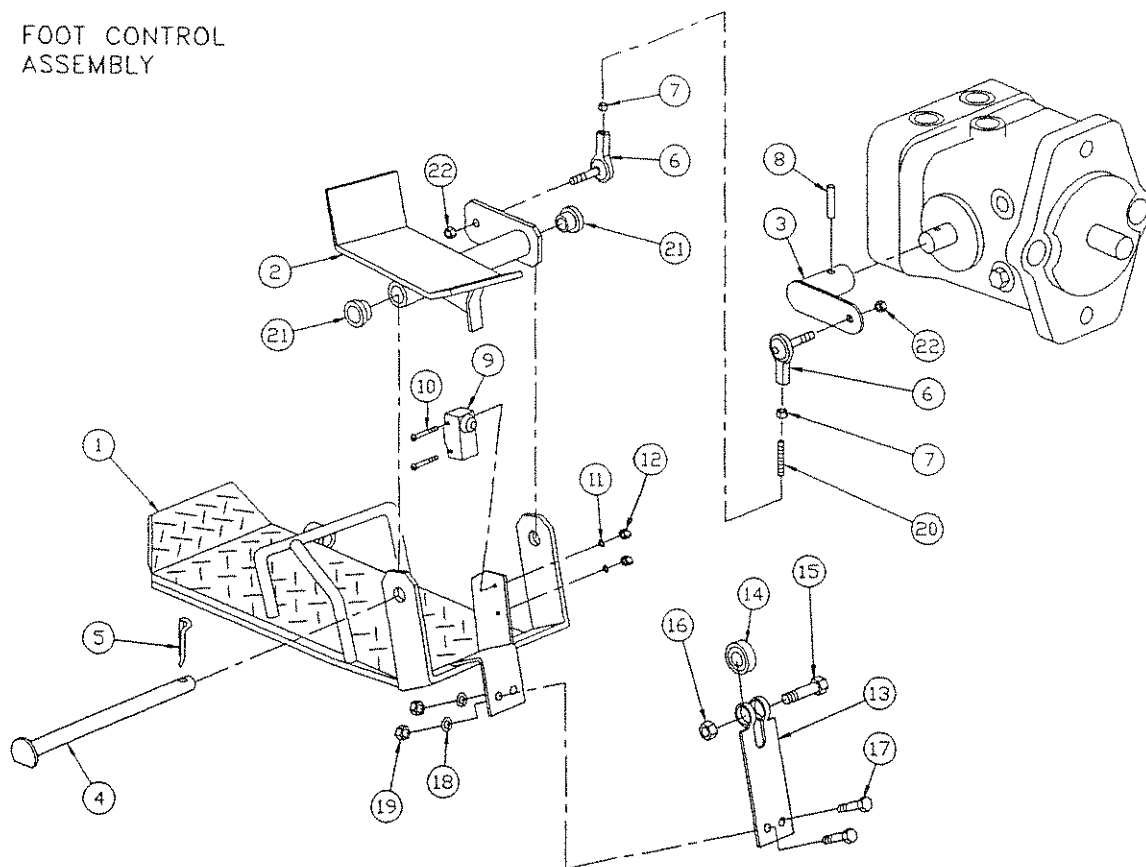
* USE LOCTITE® WHEN REPLACING

STEERING AND WHEEL DRIVE

ITEM	PART NO.	DESCRIPTION
1	510111	3/4 NC CASTLE NUT
2	510112	3/16 X 1 COTTER PIN
3	510370	3/4 FLAT WASHER
4	410267	3/8 X 2 NC BOLT
5	510471	3/8 NC LOCK NUT
6	510152	STEERING ARM
7	510108	SEAL / TOP
8	510106	BEARING
9	510209	RACE
10	510473	1/2 X 1 1/4 NC BOLT
11	510107	SEAL / BOTTOM
12	510246	SLEEVE & SPINDLE
13	510993	COTTER PIN
14	510228	1/4 X 1/4 X 1 KEY
15	520001	STEERING CYLINDER
16	510983	HEIGHT ADJ. SCREW
17	510397	THRUST BEARING
18	510245	MOTOR MOUNT BRKT.
19	510365	3/8 FLAT WASHER
20	510401	3/8NC X 3/4 WIZ BOLT
21	500181	WHEEL
22	510406	BAR TIRE
	510342	TURF TIRE
23	511042	KNOBBY TIRE
24	510238	HUB (F)
25	520005	WHEEL MOTOR
26	520135	KEY
27	510213	1/2 X 3 NC BOLT
28	510396	1/2 NC LOCK NUT
29	510994	CASTLE NUT
	510239	LUG BOLT

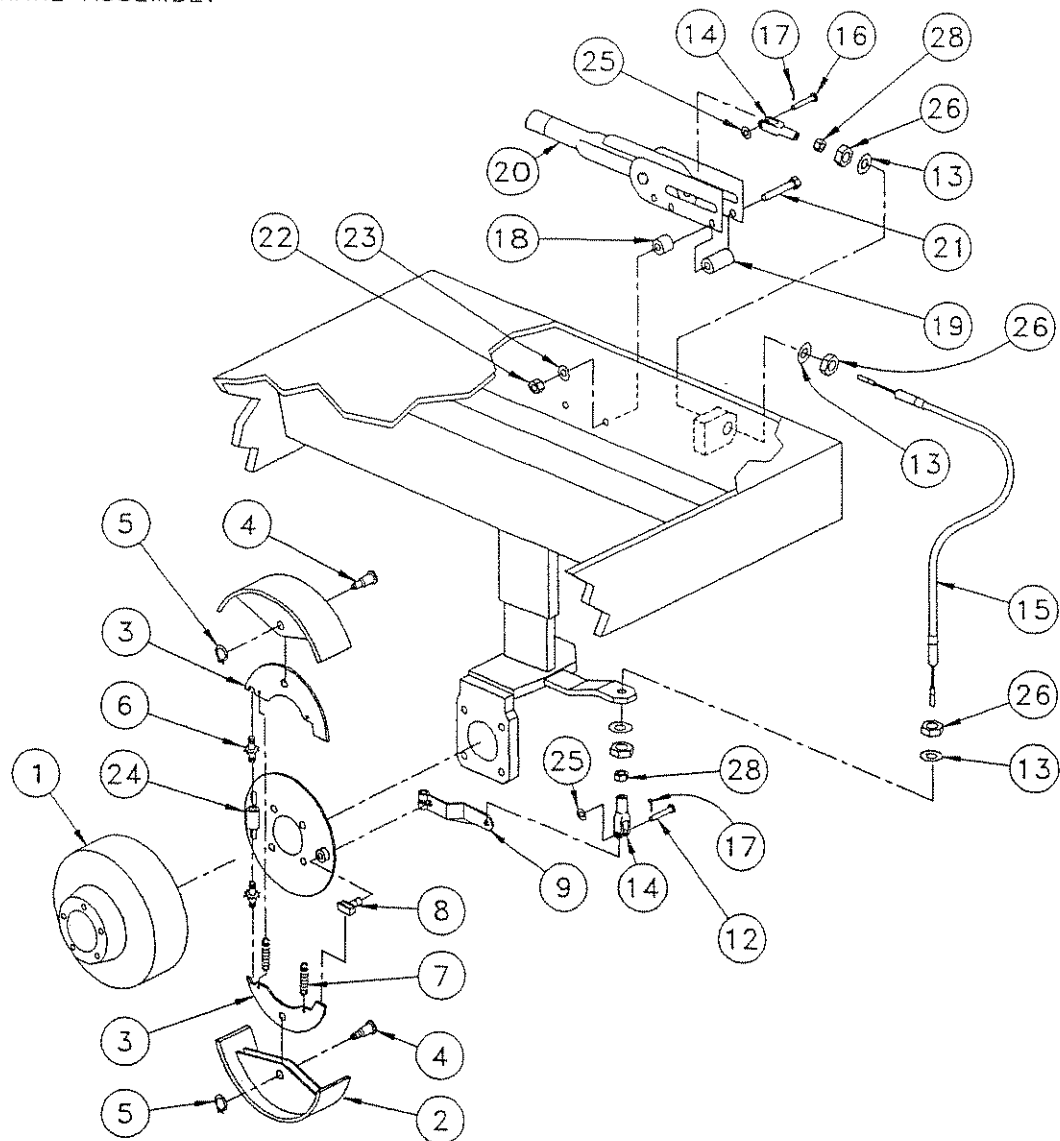


FOOT CONTROL
ASSEMBLY

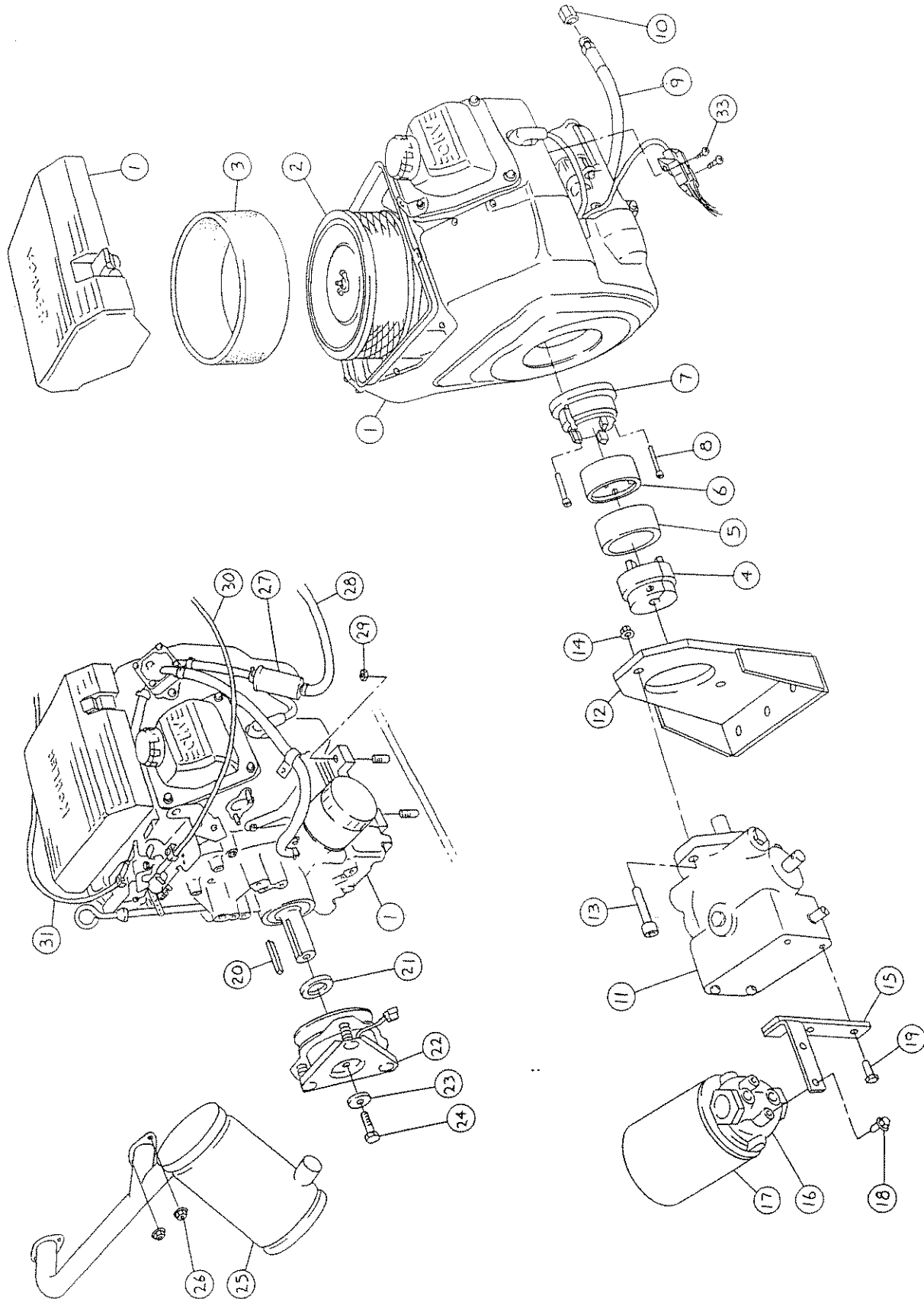


ITEM	PART #	DESCRIPTION
1	540188	RIGHT FOOTPLATE ASSY
2	540186	PEDAL ASSY
3	540181	TRACTION LEVER ASSY
4	540074	PEDAL SHAFT ASSY
5	510176	COTTER PIN 1/8 X 1.0
6	540075	ROD END BEARING
7	510478	NUT 1/4-28
8	500243	ROLL PIN 1/4 X 1.0
9	530038	NEUTRAL SWITCH
10	540089	SCREW 6-32 X 1.0
11	540091	STAR WASHER
12	540090	NUT 6-32
13	540080	LEAF SPRING
14	540079	BEARING
15	300006	BOLT 5/16-18 X 1.50
16	410222	LOCK NUT 5/16-18
17	710492	BOLT 1/4-20 X .50
18	510221	LOCK WASHER 1/4
19	510224	NUT 1/4-20
20	540312	ALL THREAD 1/4-28 X 2.75
21	540059	BRASS BUSHING
22	540085	LOCK NUT 1/4-28

BRAKE ASSEMBLY



ITEM	PART NO.	DESCRIPTION			
1	550043	BRAKE DRUM	15	550027	BRAKE CABLE
2	550029	BRAKE SHOE	16	550049	PIN
3	550028	SHOE LEVER	17	550050	COTTER PIN
4	550032	ANCHOR PIN	18	550018	MOUNT BUSHING
5	550033	RETAINING RING	19	550019	SPACER
6	550034	ADJUSTING SCREW	20	550042	HANDLE
7	550031	SPRING	21	510366	3/8 X 2 1/2 NC BOLT
8	550035	CAM	22	510272	3/8 NC NUT
9	550024	BRAKE ARM	23	510271	3/8 LOCK WASHER
10	550045	1/4 X 1 1/2 NC BOLT	24	550040	BACK PLATE ASS'Y
11	510224	1/4 NC NUT	25	510195	FLAT WASHER
12	550048	CLEVIS PIN	26	540094	JAM NUT
13	540095	STAR LOCK WASHER	27	550038	PLUG
14	550046	YOKE	28	510502	NUT



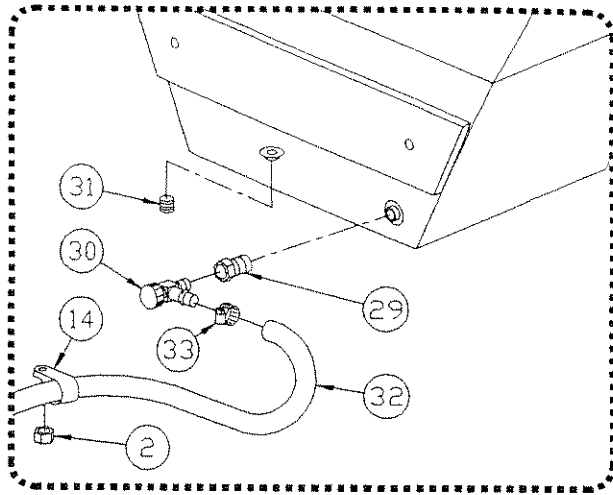
ENGINE ASSEMBLY

540324

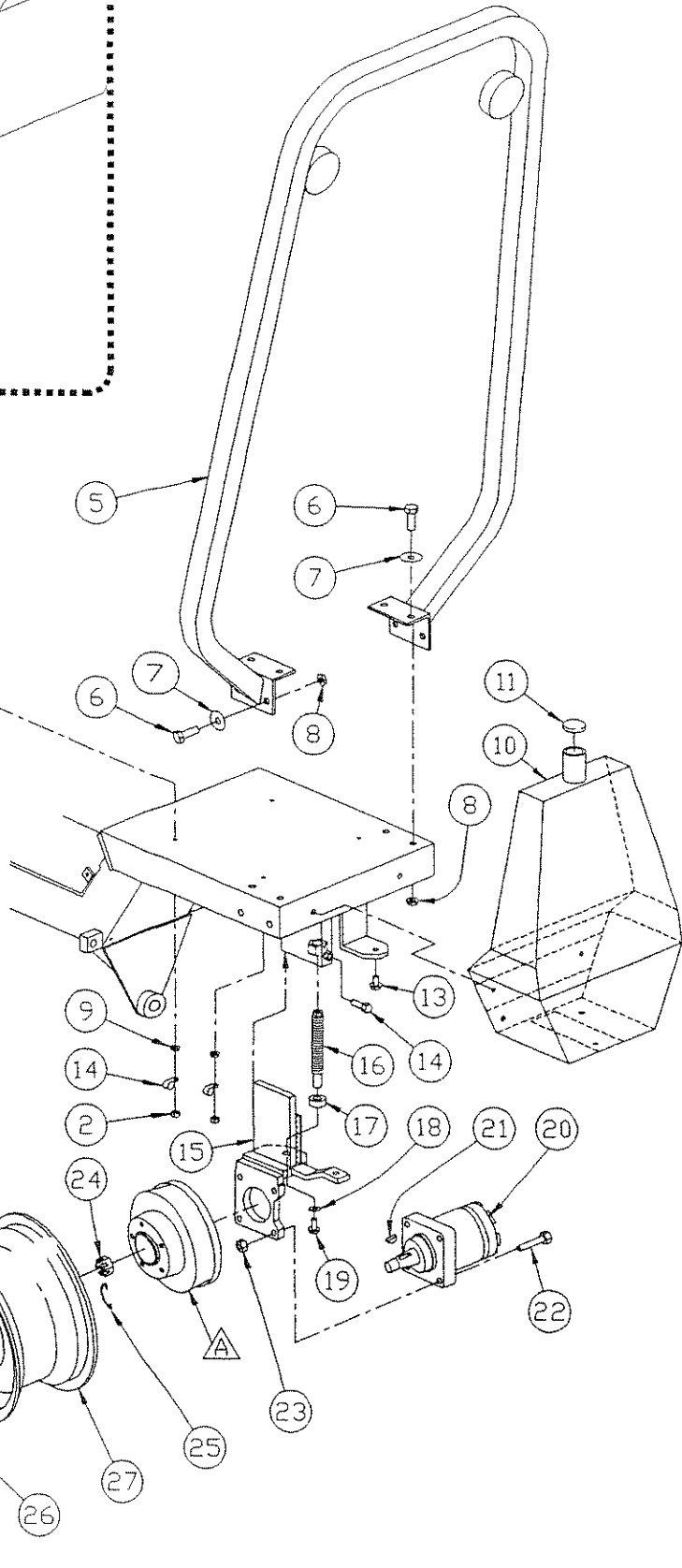
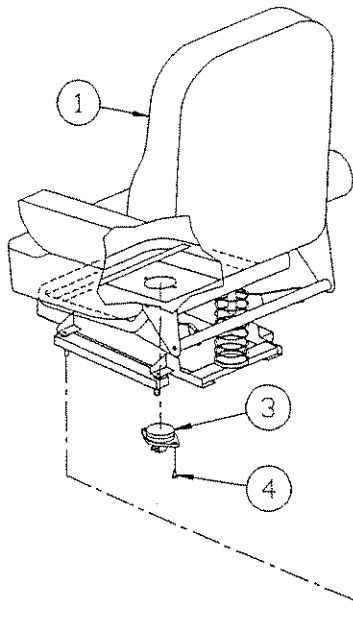
ENGINE ASSEMBLY

ITEM	PART NO.	DESCRIPTION		
1.	540303	ENGINE	18.	540084
2.	540321	AIR FILTER	19.	-----
3.	540320	PRE-CLEANER	20.	510228
4.	540206	ENGINE COUPLER A	21.	510498
5.	540027	RETAINER	22.	540004
6.	520028	INSERT COUPLER	23.	511072
7.	540307	ENGINE COUPLER B	24.	540040
8.	110111	8MM X 25MM X 1.25 SKT. HD. CAP SCREW	25.	511243
9.	520129	OIL DRAIN HOSE/ENGINE	26.	510096
10.	500004	CAP	27.	540331
11.	520400	PUMP	28.	800061
12.	511241	PUMP MOUNT BRACKET	29.	510491
13.	110112	1/2NC X 1 3/4 SKT. HD. CAP SCREW	30.	550073
14.	210350	1/2NC WIZ NUT	31.	550072
15.	511139	FILTER MOUNT BRACKET/HYD. SYSTEM	32.	540322
16.	520402	FILTER HEAD/HYD. SYSTEM	33.	150013
17.	520403	FILTER ELEMENT/HYD. SYSTEM		
				1/4NC X 3/4 WIZ BOLT
				EXISTING PUMP BOLT
				KEY
				CLUTCH SPACER
				CLUTCH
				1/4" HEAVY WASHER
				7/16NF X 1 1/2 BOLT
				MUFFLER
				5/16NC WIZ NUT
				FUEL FILTER
				FUEL HOSE
				3/8NC LOCK NUT
				THROTTLE
				CHOKE
				OIL FILTER/ENGINE
				6-32 X 1/4 SELF-TAP SCREW

REAR FRAME ASSEMBLY



FRONT VIEW OF TANK



A FOR PARTS BREAKDOWN OF BRAKE DRUM SEE PAGE 29

REAR FRAME ASSEMBLY

ITEM	PART NO.	DESCRIPTION
1.	511273	SEAT
2.	500202	5/16NC LOCK NUT
3.	530113	SEAT SWITCH
4.	510877	1/4NC X 1/2 SCREW
5.	511276	ROLL BAR
6.	510473	1/2NC X 1 1/4 BOLT
7.	410265	1/2 FLAT WASHER
8.	210350	1/2NC WIZ NUT
9.	510096	5/16NC WIZ NUT
10.	511232	FUEL TANK
11.	500069	FUEL CAP
12.	511082	3/8NC X 1/2 WIZ BOLT
13.	510401	3/8NC X 3/4 WIZ BOLT
14.	500290	HOSE CLAMP
15.	510488	REAR WHEEL MOTOR MOUNT
16.	510983	HEIGHT ADJ. SCREW
17.	510397	THRUST BEARING
18.	510365	3/8 FLAT WASHER
19.	510401	3/8NC X 3/4 WIZ BOLT
20.	520005	WHEEL MOTOR
21.	520135	KEY
22.	510213	1/2NC X 3 BOLT
23.	510396	1/2NC LOCK NUT
24.	510994	CASTLE NUT
25.	510988	SPRING CLIP
26.	510239	LUG BOLT
27.	500181	WHEEL
28.	510406	BAR TIRE
	510342	TURF TIRE
	511042	KNOBBY TIRE
29.	540150	1/4-1/8 BUSHING
30.	510207	FUEL SHUTOFF VALVE
31.	510477	1/4 PIPE PLUG
32.	800061	1/4 FUEL HOSE
33.	100361	HOSE CLAMP
34.	510335	5/16 LOCK WASHER

This exploded view diagram illustrates the assembly of the middle frame. The components are numbered 1 through 51. The diagram shows the following parts and their assembly sequence:

- 1**: Main frame plate.
- 2**: Bolt for mounting the main frame plate.
- 3**: Washer for mounting the main frame plate.
- 4**: Nut for mounting the main frame plate.
- 5**: Bolt for mounting the main frame plate.
- 6**: Washer for mounting the main frame plate.
- 7**: Nut for mounting the main frame plate.
- 8**: Bolt for mounting the main frame plate.
- 9**: Washer for mounting the main frame plate.
- 10**: Nut for mounting the main frame plate.
- 11**: Bolt for mounting the main frame plate.
- 12**: Bolt for mounting the main frame plate.
- 13**: Washer for mounting the main frame plate.
- 14**: Nut for mounting the main frame plate.
- 15**: Bolt for mounting the main frame plate.
- 16**: Washer for mounting the main frame plate.
- 17**: Nut for mounting the main frame plate.
- 18**: Bolt for mounting the main frame plate.
- 19**: Washer for mounting the main frame plate.
- 20**: Nut for mounting the main frame plate.
- 21**: Bolt for mounting the main frame plate.
- 22**: Washer for mounting the main frame plate.
- 23**: Nut for mounting the main frame plate.
- 24**: Bolt for mounting the main frame plate.
- 25**: Washer for mounting the main frame plate.
- 26**: Nut for mounting the main frame plate.
- 27**: Bolt for mounting the main frame plate.
- 28**: Washer for mounting the main frame plate.
- 29**: Nut for mounting the main frame plate.
- 30**: Bolt for mounting the main frame plate.
- 31**: Washer for mounting the main frame plate.
- 32**: Nut for mounting the main frame plate.
- 33**: Bolt for mounting the main frame plate.
- 34**: Washer for mounting the main frame plate.
- 35**: Nut for mounting the main frame plate.
- 36**: Bolt for mounting the main frame plate.
- 37**: Washer for mounting the main frame plate.
- 38**: Nut for mounting the main frame plate.
- 39**: Bolt for mounting the main frame plate.
- 40**: Washer for mounting the main frame plate.
- 41**: Nut for mounting the main frame plate.
- 42**: Bolt for mounting the main frame plate.
- 43**: Washer for mounting the main frame plate.
- 44**: Nut for mounting the main frame plate.
- 45**: Bolt for mounting the main frame plate.
- 46**: Washer for mounting the main frame plate.
- 47**: Nut for mounting the main frame plate.
- 48**: Bolt for mounting the main frame plate.
- 49**: Washer for mounting the main frame plate.
- 50**: Nut for mounting the main frame plate.
- 51**: Bolt for mounting the main frame plate.

The diagram also shows the assembly of the main frame plate (1) with the main frame plate (1) and the main frame plate (1).

511294

MIDDLE FRAME ASSEMBLY

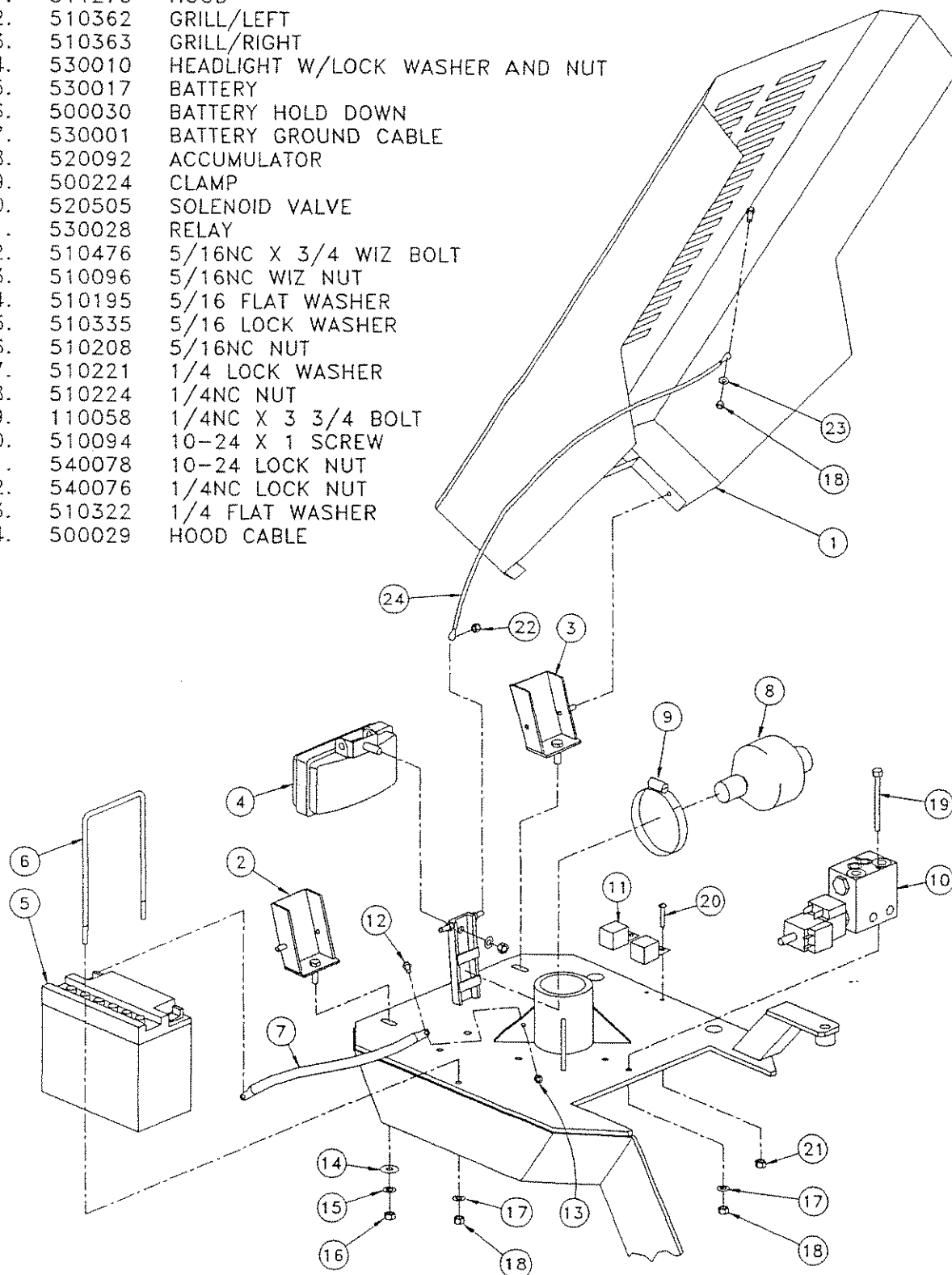
ITEM	PART NO.	DESCRIPTION			
1.	511253	MOUNTING PLATE/GEAR BOX	27.	540211	IDLER BRACKET
2.	540305	SPLITTER GEAR BOX	28.	500238	1/2NC X 1 3/4 BOLT
3.	510269	BUSHING	29.	510396	1/2NC LOCK NUT
* 4.	540304	PULLEY/6.3" DIA. (STD.)	30.	540330	IDLER PULLEY
	540338	PULLEY/5.6" DIA. (OPT.)	31.	540025	SPRING
5.	510221	1/4 LOCK WASHER	32.	511241	PUMP MOUNT BRACKET
6.	510242	1/4NC X 1 3/8 BOLT	33.	110099	1/2 X 1 1/2 STUD (NC ONE END, NF OTHER END)
7.	510282	KEY	34.	540115	1/2 LOCK NUT
8.	510321	ADAPTER/90	35.	511272	COWLING
9.	510332	1/4" PIPE	36.	550004	STEERING WHEEL
10.	510323	1/4" ELL	37.	550063	13/16-20 NUT
11.	510477	1/4" PLUG	38.	550073	THROTTLE
12.	110130	3/8NC X 1 1/2 STUD	39.	510094	10-24 X 1 SCREW
13.	510471	3/8 LOCK NUT	40.	540078	10-24 LOCK NUT
14.	510365	3/8 FLAT WASHER	41.	510401	3/8NC X 3/4 WIZ BOLT
15.	510444	CLUTCH STOP	42.	510315	INSPECTION PLATE
16.	510090	5/16NC X 1 BOLT	43.	510476	5/16NC X 3/4 WIZ BOLT
17.	500175	1/2" PIPE PLUG	44.	510472	5/16NC X 4 BOLT
18.	510181	FOOT REST/LEFT	45.	510335	5/16 LOCK WASHER
19.	540188	FOOT REST/RIGHT	46.	510096	5/16 WIZ NUT
20.	510034	PIN/FOOT REST	* 47.	540315	BELT (STD.)
21.	510249	COTTER PIN		540192	BELT (OPT.)
22.	511048	MERCURY SWITCH BRACKET	48.	510062	EDGE MOLDING
23.	530082	MERCURY SWITCH	49.	510496	HOSE CLAMP
24.	200019	ADEL CLAMP	50.	510497	8-32 NUT
25.	540084	1/4NC X 3/4 WIZ BOLT	51.	520138	DIPSTICK
26.	510224	1/4NC NUT			

* STANDARD BELT MUST BE USED WITH STANDARD PULLEY.
 OPTIONAL BELT MUST BE USED WITH OPTIONAL PULLEY.
 THE BELTS CANNOT BE INTERCHANGED.

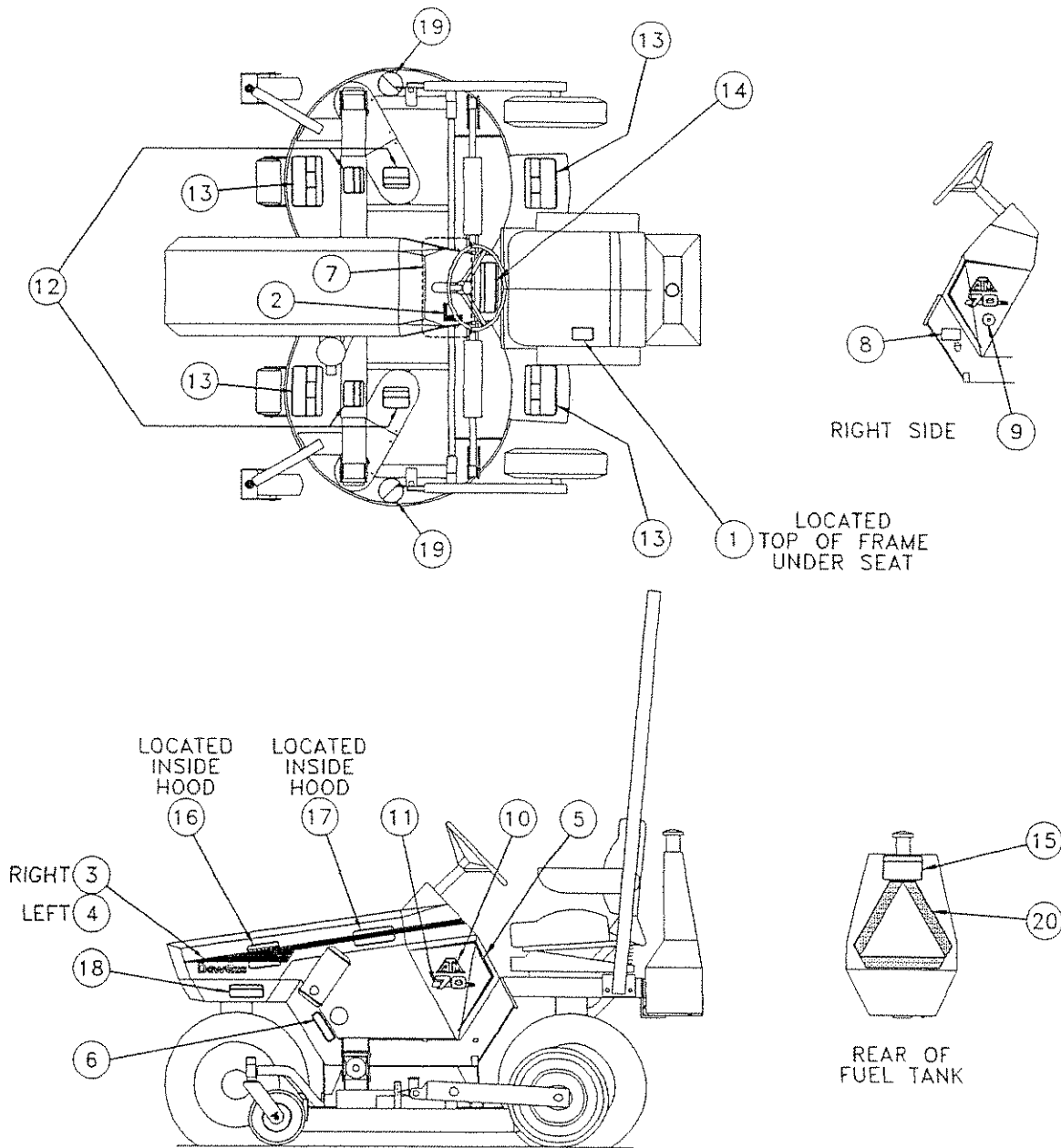
FRONT FRAME ASSEMBLY

ITEM PART NO. DESCRIPTION

1. 511270 HOOD
2. 510362 GRILL/LEFT
3. 510363 GRILL/RIGHT
4. 530010 HEADLIGHT W/LOCK WASHER AND NUT
5. 530017 BATTERY
6. 500030 BATTERY HOLD DOWN
7. 530001 BATTERY GROUND CABLE
8. 520092 ACCUMULATOR
9. 500224 CLAMP
10. 520505 SOLENOID VALVE
11. 530028 RELAY
12. 510476 5/16NC X 3/4 WIZ BOLT
13. 510096 5/16NC WIZ NUT
14. 510195 5/16 FLAT WASHER
15. 510335 5/16 LOCK WASHER
16. 510208 5/16NC NUT
17. 510221 1/4 LOCK WASHER
18. 510224 1/4NC NUT
19. 110058 1/4NC X 3 3/4 BOLT
20. 510094 10-24 X 1 SCREW
21. 540078 10-24 LOCK NUT
22. 540076 1/4NC LOCK NUT
23. 510322 1/4 FLAT WASHER
24. 500029 HOOD CABLE



DECAL LOCATION



ITEM	PART #	NAME		
1	100205	SERIAL NO.	11	500280 70c
2	500039	THROTTLE	12	500251 ROTATING DRIVE
3	500045	STRIPE/HOOD RIGHT	13	500252 ROTATING BLADES
4	500052	STRIPE/HOOD LEFT	14	500253 READ MANUAL
5	500047	C STRIPE	15	500254 FUEL WARNING
6	500056	OIL FILTER	16	500255 BATTERY ACID
7	500155	DASH SWITCHES	17	500256 HI PRESS. OIL
8	500211	HYD. OIL	18	500257 HOT MUFFLER
9	500237	SHUTTLE VALVE	19	500037 HAND/FOOT WARNING
10	500248	ATM	20	500079 SMV

