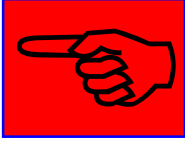


# American-Lincoln®



ALTO®

Operator's Manual  
Instruction Book  
and Parts List

Model SR7770HC  
Scrubber



Beginning Serial Number 777001

## **READ THIS BOOK**

This book has important information for the use and safe operation of this machine. Failure to read this book prior to operating or attempting any service or maintenance procedure to your machine could result in injury to you or to other personnel; damage to the machine or to other property could occur as well. you must have training in the operation of this machine before using it. If you or your operator(s) cannot read English, have this manual explained fully before attempting to operate this machine.

Si Ud. o sus operadores no pueden leer el Inglés, se hacen explicar este manual completamente antes de tratar el manejo o servicio de esta máquina.

All directions given in this book are as seen from the operator's position at the rear of the machine.

For new books, write to: Alto U.S., Inc., 1100 Haskins Road, Bowling Green, Ohio 43402

## TABLE OF CONTENTS

SPECIFICATIONS .....	1-4
MACHINE DIMENSIONS .....	1-6
STANDARD HARDWARE & TORQUE VALUES .....	1-7
HYDRAULIC TORQUE REQUIREMENTS .....	1-8
DECIMAL - METRIC CONVERSION TABLE .....	1-9
MACHINE OPERATION .....	1-10
SAFETY INSTRUCTIONS .....	1-11
OPERATION OF CONTROLS AND GAUGES .....	1-12
IGNITION SWITCH .....	1-12
LIGHT SWITCH .....	1-12
HORN PUSH BUTTON .....	1-12
CHECK ENGINE (WARNING LIGHT) .....	1-13
WATER TEMPERATURE GAUGE .....	1-13
HOUR METER .....	1-13
FUEL GAUGE .....	1-13
OIL PRESSURE GAUGE .....	1-13
VOLT METER .....	1-13
SCRUB BRUSHES SWITCH .....	1-13
BRUSH ROTATION SWITCH .....	1-13
SCRUB DECK SWITCH .....	1-14
SQUEEGEE BLADE SWITCH .....	1-14
HIGH LEVEL WARNING LIGHT .....	1-14
LOW LEVEL WARNING LIGHT .....	1-14
SOLUTION CONTROL .....	1-14
DETERGENT FLOW KNOB .....	1-14
TURN SIGNAL (OPTION) .....	1-15
THROTTLE .....	1-15
CHOKE .....	1-15
PARKING BRAKE .....	1-15
FOOT BRAKE .....	1-16
ACCELERATOR & DIRECTIONAL CONTROL PEDAL .....	1-16
BACKUP ALARM SWITCH .....	1-16
SEAT ADJUSTMENT .....	1-17
ESP SYSTEM OPERATING INSTRUCTIONS .....	1-17
ESP RECYCLING SYSTEM ON/OFF SWITCH .....	1-17
HIGH LEVEL WARNING LIGHT .....	1-17
NON-RECYCLING SCRUBBING SYSTEM - HOW IT WORKS .....	1-17
OPERATING MODE INSTRUCTIONS .....	1-18
NORMAL, HIGH CAPACITY, ESP .....	1-18
OPERATING INSTRUCTIONS .....	1-20
FILLING TANK 1 - NON-RECYCLING (STANDARD) .....	1-20
FILLING TANK 1 - HIGH CAPACITY or ESP .....	1-20
PRE-START CHECKLIST .....	1-20
BEFORE STARTING THE ENGINE .....	1-20
STARTING THE ENGINE .....	1-20
POST START CHECKLIST .....	1-21
TRANSPORTING THE MACHINE .....	1-21
BEGINNING THE CLEANING OPERATION .....	1-21
ENDING THE CLEANING OPERATION .....	1-21
POST OPERATION CHECKLIST .....	1-21
DRAINING TANK 1 .....	1-22
CLEANING TANK 1 .....	1-22
DRAINING TANKS 2 & 3 .....	1-22
CLEANING TANKS 2 & 3 .....	1-22
DOUBLE LID TANK 3 .....	1-22
TOWING INSTRUCTIONS .....	1-23

# TABLE OF CONTENTS

SERVICE CHART .....	1-24
HELPFUL HINTS FOR CLEANING OPERATION .....	1-26
GENERAL MACHINE MAINTENANCE .....	1-27
LUBRICATION .....	1-27
OPENING THE ENGINE COVER .....	1-27
HYDRAULICS .....	1-28
FILLING THE HYDRAULIC RESERVOIR .....	1-28
CLEANING THE HYDRAULIC SYSTEM .....	1-28
REPLACING THE RETURN FILTER ELEMENT .....	1-28
RECYCLING PUMP ESP SYSTEM .....	1-29
ESP SYSTEM STORAGE .....	1-29
RECOVERY TANK LID ACCESS .....	1-29
REAR SQUEEGEE .....	1-29
SQUEEGEE CASTER WHEELS .....	1-29
CASTER WHEEL ADJUSTMENT .....	1-29
BRAKE ADJUSTMENT .....	1-30
AIR INTAKE SYSTEM .....	1-31
AIR FILTER .....	1-31
REPLACING THE AIR FILTER .....	1-31
REMOVING THE AIR FILTER ELEMENT .....	1-32
CLEANING THE AIR FILTER ELEMENT .....	1-32
INSPECTING THE AIR FILTER ELEMENT .....	1-32
COOLING SYSTEM .....	1-33
COOLANT LEVEL .....	1-33
RADIATOR .....	1-33
DRIVE BELTS .....	1-33
BATTERY .....	1-34
GAS TANK .....	1-34
LP GAS SYSTEM .....	1-35
LP GAS VAPORIZER-REGULATOR QUICK CHECK .....	1-35
LP GAS FUEL TANK .....	1-35
NEUTRAL ADJUSTMENT .....	1-35
PARTS LIST LEGEND .....	1-36
GENERAL TROUBLESHOOTING .....	1-37
ORDERING PARTS .....	1-39
TABLE OF CONTENTS - CHAPTER TWO .....	2-1
FRONT TANK .....	2-2
SCRUB DECK 60" .....	2-4
SCRUB DECK LIFT .....	2-6
TRANSFER PUMP .....	2-7
RECOVERY TRANSFER .....	2-8
LOWER DOORS GROUP .....	2-9
REAR AND SIDE SQUEEGEES .....	2-10
SQUEEGEE LIFT .....	2-12
SWING SQUEEGEE SUPPORT .....	2-14
SOLUTION TANK .....	2-16
SOLUTION CONTROL GROUP .....	2-18
RECOVERY TANK LID .....	2-20
VACUUM MOTOR & FLOAT .....	2-22
RECOVERY TANK .....	2-24
FRONT BUMPER GROUP .....	2-26
FRONT WHEEL AND BRAKE .....	2-27
REAR WHEEL .....	2-28
BRAKE LINKAGE .....	2-30
FOR/REV CONTROL – FORD .....	2-32

## TABLE OF CONTENTS

MAIN FRAME .....	2-34
DRIVER COMPARTMENT .....	2-36
CONSOLE GROUP .....	2-38
INSTRUMENT PANEL (GAS) .....	2-40
INSTRUMENT PANEL (LP) .....	2-42
SQUEEGEE, SCRUB DECK, STEERING CYLINDERS AND FITTINGS .....	2-44
REAR WHEEL MOTORS AND FITTINGS .....	2-45
HYDRAULIC RESERVOIR, FILTER, AND FITTINGS .....	2-46
DRIVE PUMP AND FITTINGS .....	2-48
VACUUM MOTOR & OIL COOLER .....	2-49
POWER STEERING UNIT AND FITTINGS .....	2-50
RETURN MANIFOLD AND FITTINGS .....	2-51
MAIN CONTROL VALVE & FITTINGS .....	2-52
AUXILIARY PUMP AND FITTINGS - FORD .....	2-53
HYDRAULIC HOSE SYSTEM .....	2-54
BATTERY .....	2-58
ENGINE COVER .....	2-60
FUEL TANK .....	2-62
LP TANK .....	2-64
FORD GAS ENGINE .....	2-66
FORD LP ENGINE .....	2-70
RADIATOR AND SHROUD .....	2-74
DECALS .....	2-76
NOTES .....	2-78
CONNECTION DIAGRAM, GAS CONTROL PANEL .....	2-79
CONNECTION DIAGRAM, LP CONTROL PANEL .....	2-80
CONNECTION DIAGRAM, ENGINE ELECTRICAL (GAS & LP) .....	2-81
ELECTRICAL SCHEMATIC .....	2-82
ELECTRICAL SCHEMATIC (CON'T) .....	2-83
ELECTRICAL SCHEMATIC (CON'T) .....	2-84
HYDRAULIC SCHEMATIC .....	2-85
TABLE OF CONTENTS - CHAPTER 3 .....	3-1
OVERHEAD GUARD OPTION .....	3-2
BRUSH OPTIONS .....	3-3
BUMPER OPTION .....	3-4
BUMPER ASSEMBLY .....	3-5
BACK-UP ALARM .....	3-6
VACUUM WAND OPTION .....	3-7
LIGHTS OPTIONS .....	3-8
TURN SIGNAL OPTION .....	3-10
WARNING LIGHTS (STANDARD) .....	3-12
WARNING LIGHTS WITH OVERHEAD GUARD .....	3-14
FIRE EXTINGUISHER OPTION .....	3-16
FLAME ARRESTING GAS CAP OPTION .....	3-17
SUSPENSION SEAT .....	3-18
DEBRIS BASKET OPTION .....	3-19
ESP OPTION .....	3-20
FORD ENGINE SHUTDOWN OPTION .....	3-24
TIRE OPTIONS .....	3-26
SPARE PARTS KIT, GAS/LP .....	3-27
INDEX .....	3-28
WARRANTY .....	3-33

## SPECIFICATIONS

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### DIMENSIONS

Length	107.0 Inches - 271.8 Cm.
Width	59.0 Inches - 149.9 Cm.
Height	61.5 Inches - 156.2 Cm.
Wheel Base	56.4 Inches - 143.2 Cm.
Height with Guard	85.5 Inches - 217.2 Cm.

### DRIVES

Propelling	Variable Displacement Pump - Hydraulic Drive Motor
Scrubbing	(3) Hydraulic Motors
Vacuum - Water Pick Up	(1) Hydraulic Motor

### HYDRAULIC CONTROL

Single Foot Pedal Controls Forward, Neutral, Reverse & Dynamic Braking.  
All Electro-Hydraulic Controls To Both Sweeping And Scrubbing Functions.

### MECHANICAL SYSTEM

Steering	Power Steering with Rack and Pinion Gear.
Brakes	Parking/Foot Operated and Locked Disc Brakes
Brooms	Lift and Height Adjustment

### BRUSHES & SQUEEGEE

Brush	(3) 20 Inch (50.8Cm.) Diameter Poly-Fiber Discs
Squeegees	(1) 65Inch (165.10 Cm.) Wide Contoured Rear Swing Squeegee (2) 29 Inch (73.7 Cm.) Floating Side Squeegees, One On Either Side Of the Scrubbing Compartment

### TANK CAPACITY (Standard)

	200 Gallon (757.00 Liters) Solution Tank
	200 Gallon (757.00 Liters) Recovery Tank
High Capacity Recovery	0 Gallon Solution Tank 400 Gallon (1514 zliters) Recovery Tank

### TANK CAPACITY (ESP System)

Interconnected Tanks Provide A Total ESPI System Capacity Of 390 Gallons (1476.15Liters) Along With 5 Gallons (18.9 Liters) Of Detergent.

### FUEL SYSTEM

Engine Cooling System	Radiator and Hoses (Approximately) 3 Quarts (2.8 Liters)
Gas/LP System Total	6.75 Quarts - 6.4 Liters
Gas, Diesel Fuel Tank	9.7 Gallons - 36.71 Liters
LPG Tank	33 Pounds
Engine Oil System	
Gas and LPG	4 Quarts - 3.8 Liters
Hydraulic System	
Total System	11 Gallons - 41.6 Liters

### SPEEDS

Maximum Travel	7 Mph - 11.3 Km./Hr.
Recommended Maximum Scrubbing Speed	4.0 Mph - 6.4 Km./Hr.

### TURNING RADIUS

Left	82 Inches - 208.3 Cm.
Right	82 Inches - 208.3 Cm.
Minimum Aisle Width for 180° Turn	120 Inches - 305 Cm.
Scrubbing Width	60" Inches (227.10 Cm.) Provided By (3) 20 Inch (50.8 Cm.) Diameter Disc Brushes

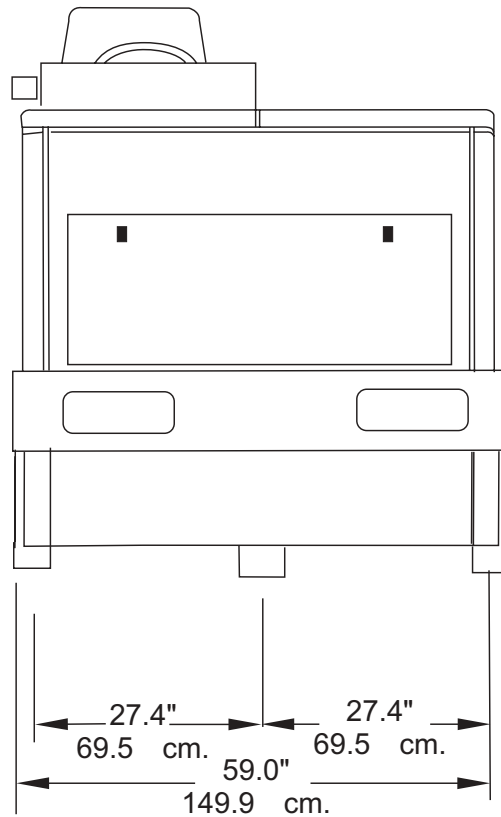
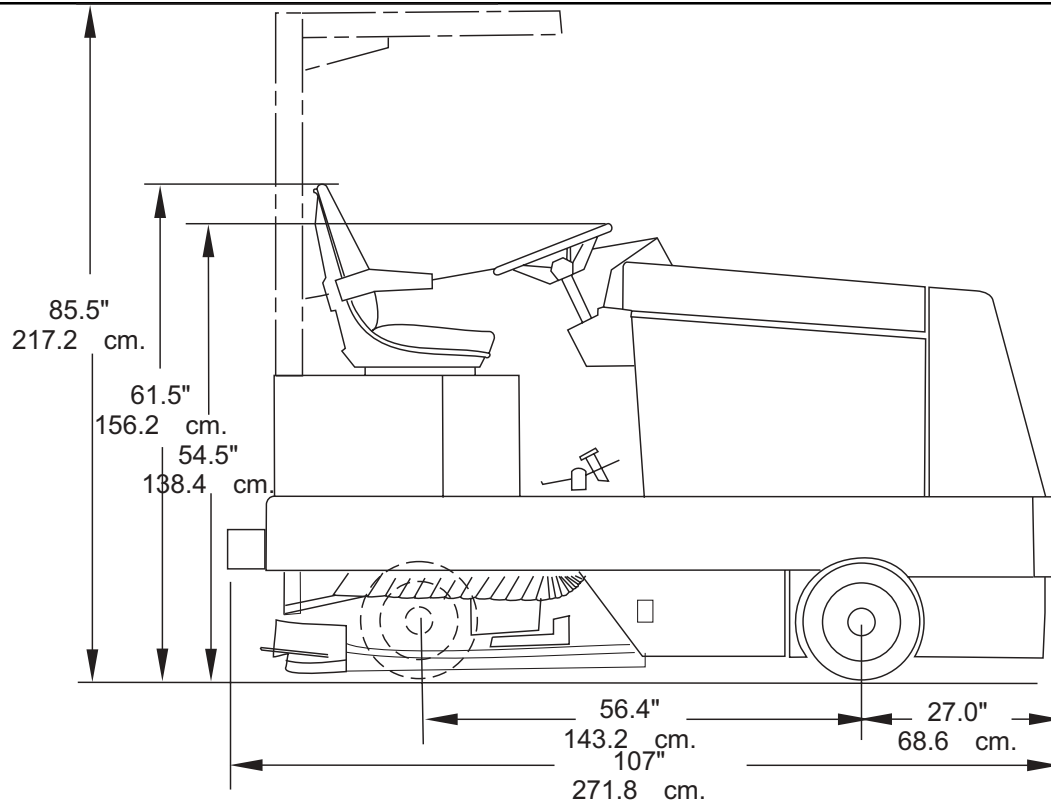
### WEIGHTS

7770	Manual Dump
Net	4150 Lb. - 1882 Kg. / 3700 Lb. - 1678 Kg.
Shipping W/ Crate	4600 Lb. - 2087 Kg./ 4150 Lb. - 1882 Kg.

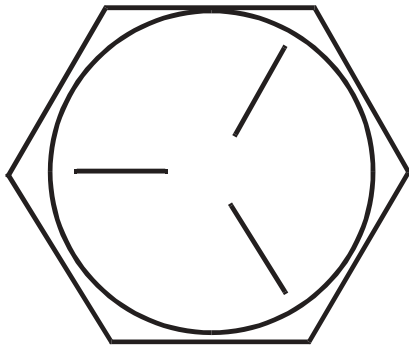
### ENGINE DATA

Ford LRG - 425	
Bore And Stroke	3.78 X 3.126 In. - 9.60 X 7.94 Cm.
Oil Capacity	4 Quarts - 3.8 Liters
Displacement	4 Cylinders - 2.3 Liters (140 Cid)
Fuel	"Regular" Unleaded Gasoline

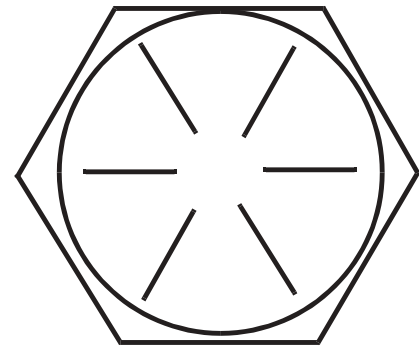
# MACHINE DIMENSIONS



# BOLT IDENTIFICATION



SAE - Grade 5



SAE - Grade 8

Screw Size	Grade 5 Plated		Grade 8 Plated		410H Stainless		Brass	Type F & T & BT		Type B, AB
	C	F	C	F	C	F		C	F	
*6	14	15	-	-	18	20	5	20	23	21
*8	27	28	-	-	33	35	9	37	41	34
*10	39	43	-	-	47	54	13	49	64	49
*1/4	86	108	130	151	114	132	32	120	156	120
5/16	15	17	22	24	19	22	6	-	-	-
3/8	28	31	40	44	34	39	10	-	-	-
7/16	44	49	63	70	55	62	16	-	-	-
1/2	68	76	95	108	85	95	-	-	-	-
9/16	98	110	138	155	-	-	-	-	-	-
5/8	135	153	191	216	-	-	-	-	-	-
3/4	239	267	338	378	-	-	-	-	-	-
7/8	387	-	545	-	-	-	-	-	-	-
1	579	-	818	-	-	-	-	-	-	-

C = Coarse Thread

F = Fine Thread

\* = Torque values for #6 through 1/4 are lb./in. All others are lb./ft.

NOTE

Decrease the torque by 20% when using thread lubricant  
The torque tolerance is  $\pm$  on torque values.

+

C2000/9905



## HYDRAULIC TORQUE REQUIREMENTS

### HYDRAULIC TORQUE REQUIREMENTS

Refer to the following chart for torque values on all hydraulic hoses and fittings.

Nominal SAE Dash Size	O-Ring Face Seal End		SAE O-Ring Boss End	
	Thread Size Inch	Swivel Nut Torque	Thread Size Inch	Str. Fitting or Locknut Torque
		LB-FT		LB-FT
-3	*	*	3/8-24	8-10
-4	9/16-18	10-12	7-16-20	14-16
-5	*	*	1/2-20	18-20
-6	11/16-16	18-20	9/16-18	24-25
-8	13/16-16	32-35	3/4-16	50-60
-10	1-14	46-50	7/8-14	72-80
-12	1 3/16-12	65-70	1 1/16-12	125-135
-14	1 3/16-12	65-70	1 3/16-12	160-180
-16	1 7/16-12	92-100	1 5/16-12	200-220
-20	1 11/16-12	125-140	1 5/8-12	210-280
-24	2-12	150-165	1 7/8-12	270-360

\* O-Ring face seal type end not defined for this tube size.

**NOTE**

**Parts must be lightly oiled with hydraulic fluid.**

C-2002

# DECIMAL-METRIC CONVERSION TABLE

## DECIMAL-METRIC CONVERSION TABLE

Fraction	Decimal	Millimeter	Fraction	Decimal	Millimeter
$\frac{1}{64}$	0.015625	0.3969	$\frac{33}{64}$	0.515625	13.0969
$\frac{1}{32}$	0.03125	0.7938	$\frac{17}{32}$	0.53125	13.4938
$\frac{3}{64}$	0.046875	1.1906	$\frac{35}{64}$	0.546875	13.8906
$\frac{1}{16}$	0.0625	1.5875	$\frac{9}{16}$	0.5625	14.2875
$\frac{5}{64}$	0.078125	1.9844	$\frac{37}{64}$	0.578125	14.6844
$\frac{3}{32}$	0.09375	2.3813	$\frac{19}{32}$	0.59375	15.0813
$\frac{7}{64}$	0.109375	2.7781	$\frac{39}{64}$	0.609375	15.4781
$\frac{1}{8}$	0.125	3.1750	$\frac{5}{8}$	0.625	15.8750
$\frac{9}{64}$	0.140625	3.5719	$\frac{41}{64}$	0.640625	16.2719
$\frac{5}{32}$	0.15625	3.9688	$\frac{21}{32}$	0.65625	16.6688
$\frac{11}{64}$	0.171875	4.3656	$\frac{43}{64}$	0.671875	17.0656
$\frac{3}{16}$	0.1875	4.7625	$\frac{11}{16}$	0.6875	17.4625
$\frac{13}{64}$	0.203125	5.1594	$\frac{45}{64}$	0.703125	17.8594
$\frac{7}{32}$	0.21875	5.5563	$\frac{23}{32}$	0.71875	18.2563
$\frac{15}{64}$	0.234375	5.9531	$\frac{47}{64}$	0.734375	18.6531
$\frac{1}{4}$	0.25	6.3500	$\frac{3}{4}$	0.75	19.0500
$\frac{17}{64}$	0.265625	6.7469	$\frac{49}{64}$	0.765625	19.4469
$\frac{9}{32}$	0.28125	7.1438	$\frac{25}{32}$	0.78125	19.8438
$\frac{19}{64}$	0.296875	7.5406	$\frac{51}{64}$	0.796875	20.2406
$\frac{5}{16}$	0.3125	7.9375	$\frac{13}{16}$	0.8125	20.6375
$\frac{21}{64}$	0.328125	8.3344	$\frac{53}{64}$	0.828125	21.0344
$\frac{11}{32}$	0.34375	8.7313	$\frac{27}{32}$	0.84375	21.4313
$\frac{23}{64}$	0.359375	9.1281	$\frac{55}{64}$	0.859375	21.8281
$\frac{3}{8}$	0.375	9.5250	$\frac{7}{8}$	0.875	22.2250
$\frac{25}{64}$	0.390625	9.9219	$\frac{57}{64}$	0.890625	22.6219
$\frac{13}{32}$	0.40625	10.3188	$\frac{29}{32}$	0.90625	23.0188
$\frac{27}{64}$	0.421875	10.7156	$\frac{59}{64}$	0.921875	23.4156
$\frac{7}{16}$	0.4375	11.1125	$\frac{15}{16}$	0.9375	23.8125
$\frac{29}{64}$	0.453125	11.5094	$\frac{61}{64}$	0.953125	24.2094
$\frac{15}{32}$	0.46875	11.9063	$\frac{31}{32}$	0.96875	24.6063
$\frac{31}{64}$	0.484375	12.3031	$\frac{63}{64}$	0.984375	25.0031
$\frac{1}{2}$	0.5	12.7000	1	1.0000	25.4000

C-2001

## MACHINE OPERATION

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**YOUR SR7770HC MACHINE HAS BEEN SHIPPED COMPLETE, BUT DO NOT ATTEMPT TO OPERATE WITHOUT FOLLOWING THESE INSTRUCTIONS.**

### **PREPARING THE MACHINE FOR OPERATION**

1. Connect and tighten battery cables.
2. Fill the tank with REGULAR GRADE gasoline.



### **WARNING**

**Never fill tank while engine is running. Always be sure gasoline container and sweeper are electrically connected before pouring gasoline. This can easily be done by providing an insulated wire (permanently attached to container) with battery clip on the other end.**

3. Check engine crankcase oil level. Although properly lubricated at factory, check before starting engine. No special break in oil is used and recommended number of operating hours before the initial oil change is the same as normal. See Maintenance.
4. Check radiator coolant level. Permanent type antifreeze is added at the factory to provide protection to approximately -35° F (37° C). To retain this protection level, always add 1/2 part water to 1/2 part anti freeze.
5. Check oil level in the hydraulic reservoir located at center of machine beside the engine. Oil fill level should be two (2) inches (5 cm.) below filler neck assembly. If oil is required, add HYDRAULIC FLUID ONLY, automatic transmission fluid FORD type "F". After the first 50 operating hours, service must be performed on your engine to insure future high performance and trouble free operation. See Maintenance.



### WARNING

**FOR SAFETY, OBSERVE THE FOLLOWING WARNINGS. FAILURE TO COMPLY MAY CREATE A SERIOUS RISK OF INJURY TO YOU AND OTHERS. THIS MACHINE SHOULD NOT BE USED IN HAZARDOUS LOCATIONS INCLUDING AREAS OF VOLATILE DUST OR VAPOR CONCENTRATIONS.**

**Operators must be trained and qualified to operate this machine. They must also understand the operator's manual before starting.**

**Use caution when mounting or dismounting the machine particularly on wet slippery surfaces.**

**Operate only from the designated operator's position. Stay inside the body of the machine. Keep hands and feet on the designated controls. Always operate in well-lit areas.**

**Exhibit extreme caution when negotiating, turning and traveling across grades or ramps.**

**Start, stop, change direction, travel and brake smoothly. Slow down when turning. Avoid uneven surfaces and loose materials.**

**Watch out for obstructions, especially overhead.**

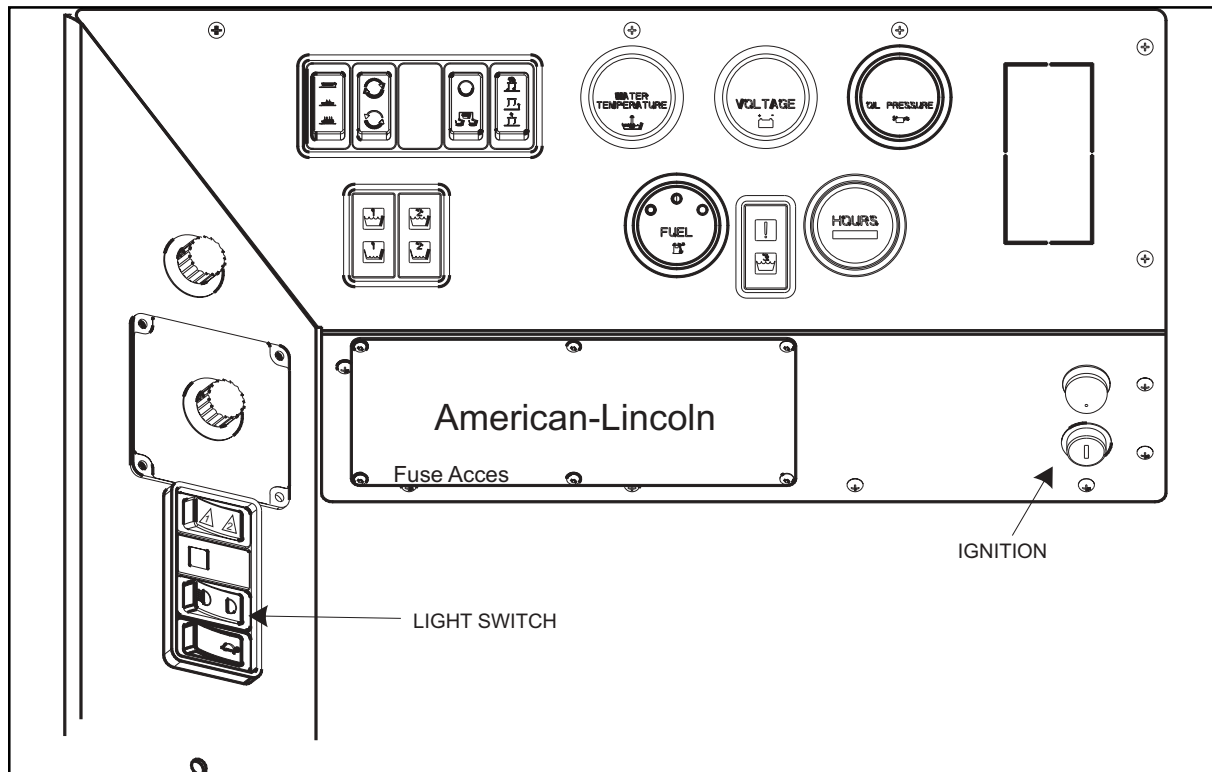
**Do not carry passengers on the machine.**

**Set parking brake when leaving the machine. Chock (block) the wheels if the machine is to be parked on a grade (ramp), or when working on it.**

**Never leave the operator's seat with the engine running.**

**Report damage or faulty operation immediately. Do not operate the machine until repairs have been completed.**

## OPERATIONS OF CONTROLS AND GAUGES



### IGNITION SWITCH

The keyed ignition switch is located to the right of the steering column on the front face of the instrument console. It has four positions.

1. The key turned to the center "OFF" position will shut off the engine. The following items can be activated in the "OFF" position.
  - (A.) Horn
  - (B.) Light Options
2. The key turned to the left "ACCESSORY" position will allow the following additional items to be activated:
  - (A.) Turn Signals
  - (B.) Instrument Gauges
3. The key turned to the right "IGN/ON" position will allow all the items listed above to be activated. This position will not start the engine.
4. The key turned to the far right "START" position will start the engine. This position is a momentary position. The key will revert to the "IGN/ON" position when it is released.

### LIGHT SWITCH

The light switch is located as shown. It will work various light options that are available for this machine, such as:

- \* HEAD LIGHTS
- \* TAIL LIGHTS
- \* INSTRUMENT LIGHTS

### HORN PUSH BUTTON

The horn button is located to the right of the steering column on the front face of instrument console. The horn button is always active. Push the horn button to sound the horn.

**CHECK ENGINE (WARNING LIGHT OPTION)**

This engine has a low oil pressure and high water temperature shutdown. If the engine oil pressure drops too low or the water temperature goes too high, the engine will shut down. Add engine oil until the oil is brought up to the correct level, or wait for engine to cool down, then check coolant level.

**WATER TEMPERATURE GAUGE**

The Water Temperature Gauge is located on the console panel above the steering wheel in the gauge cluster. The gauge is mechanical and activated by a sender in the engine. It displays the engine coolant temperature in fahrenheit.

**HOUR METER**

The Hour Meter is located on the console panel above the steering wheel in the gauge cluster. This meter is activated when the key switch is in the "ignition" position. The meter indicates actual "run" time of the machine. The meter is used to indicate when maintenance should be done to the machine.

**FUEL GAUGE/LOW LP LIGHT**

The Fuel Gauge/Low LP Light is located on the console panel above the steering wheel in the gauge cluster. This gauge indicates the level of fuel contained in the fuel tank. The low LP light indicates low LP pressure at the engine.

**OIL PRESSURE GAUGE**

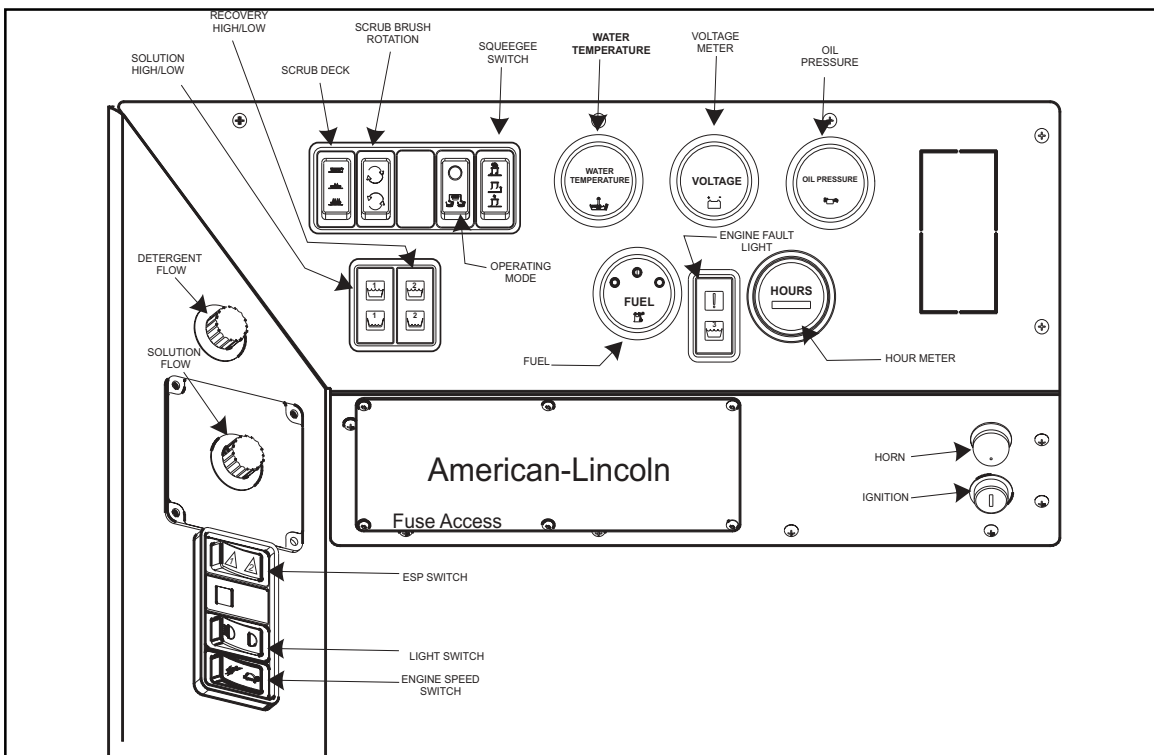
The Oil Pressure Gauge is located on the console panel above the steering wheel in the gauge cluster. The gauge is mechanical and activated by a sender in the engine. It displays the engine oil pressure in PSI.

**VOLT METER**

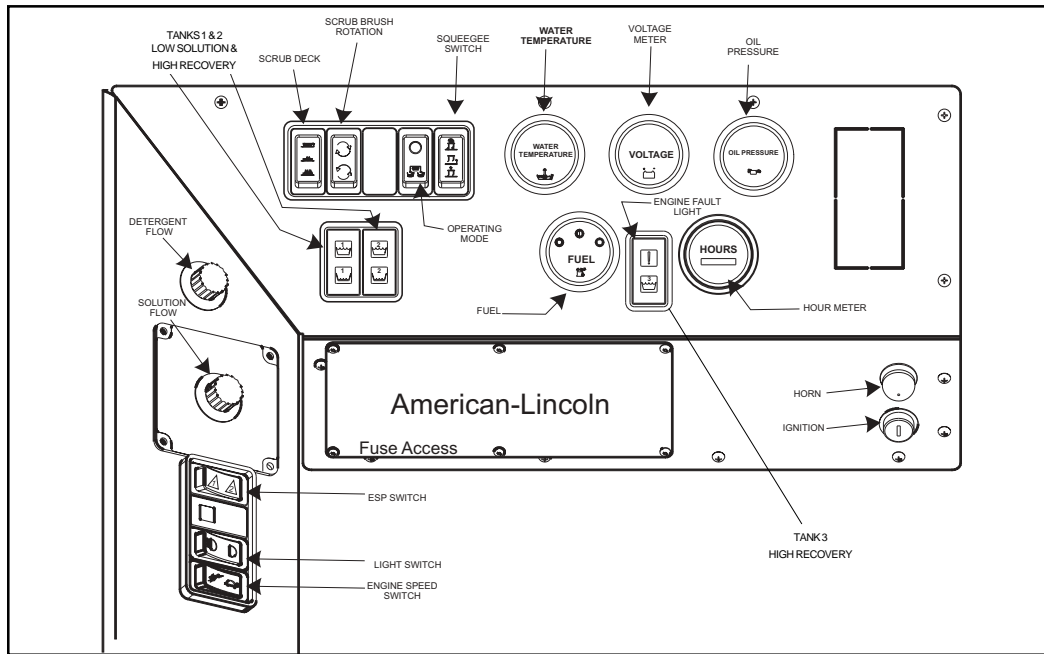
The Volt Meter is located on the console panel above the steering wheel in the gauge cluster. The gauge indicates the charging or discharging of the battery.

**BRUSH ROTATION SWITCH**

The Brush Rotation Switch is located on the console as shown. This switch reverses the rotation of the scrub brushes. This switch has two positions "NORMAL" and "REVERSED". This switch can not be activated unless the Scrub Brush Lift Switch is in the "LOWER" position.



## OPERATIONS OF CONTROLS AND GAUGES



### SCRUB DECK SWITCH

The Scrub Deck Switch is located on the console as shown. This switch raises and lowers the scrub deck. This switch has three (3) positions which are raised, "NORMAL" and "HEAVY".

### SQUEEGEE BLADE SWITCH

The Squeegee Blade Switch is located on the console as shown. This switch in the squeegee down position will lower the squeegee and activate the squeegee vacuum. This switch in the squeegee up position will stop the squeegee vacuum and raise the squeegee. A switch activated by the forward-reverse foot pedal will automatically raise the squeegee if it is in the lowered position and the machine is in reverse.

### OPERATING MODE SWITCH

The Operating Mode Switch is located on the console as shown. The switch control whether the machine is to operate in normal or high capacity mode. In the off position, "NORMAL" mode, solution is dispensed from the Tank 1 and recovered solution is collected in tanks 2 and 3. In the lower position, "HIGH CAPACITY" mode, no solution is dispensed and all three(3) tanks are used to recover solution.

### HIGH LEVEL WARNING LIGHTS TANK1 / TANK2 / TANK3

The High Level Warning Lights are located on the console as shown. The Tank3 warning light will illuminate approximately 5 minutes before the tanks are full, giving ample time to complete the scrubbing cycle before the mechanical float shuts off the vacuum to tank 3. The high level warning lights for Tank 1 and Tank 2 are indicators only.

### LOW LEVEL WARNING LIGHTS TANK 1 / TANK 2

The Low Level Warning Lights are located on the console as shown. The Low Level Warning Light will illuminate when Tank 1 or Tank 2 are low, respectively.

### SOLUTION CONTROL

To apply solution to the scrubbing brushes, turn the solution flow knob clockwise. The solution rate is continuously variable from off to approximately 1-3/4 GPM at low and 3-1/2 GPM at high. The low level warning light will illuminate when the tank is empty, marking the end of the scrubbing cycle.

### DETERGENT FLOW KNOB (ESP OPTION)

This rotary knob controls the detergent flow into the scrubbing solution. The operator may choose from any detergent setting, for light to heavy cleaning applications.

### **TURN SIGNAL - 4 Way (Option)**

The turn signal option is located on the steering column and works as automotive turn signals work, forward on the lever for right and back on the lever for left. The 4-way flasher will activate when the turn signal lever is pulled out.

### **ENGINE SPEED CONTROL**

The engine speed control located as shown. The engine must be operating at full governed speed of 2150 "no load" RPM. Before turning off the key and stopping the engine, moveswitch to the low position.

### **CHOKE**

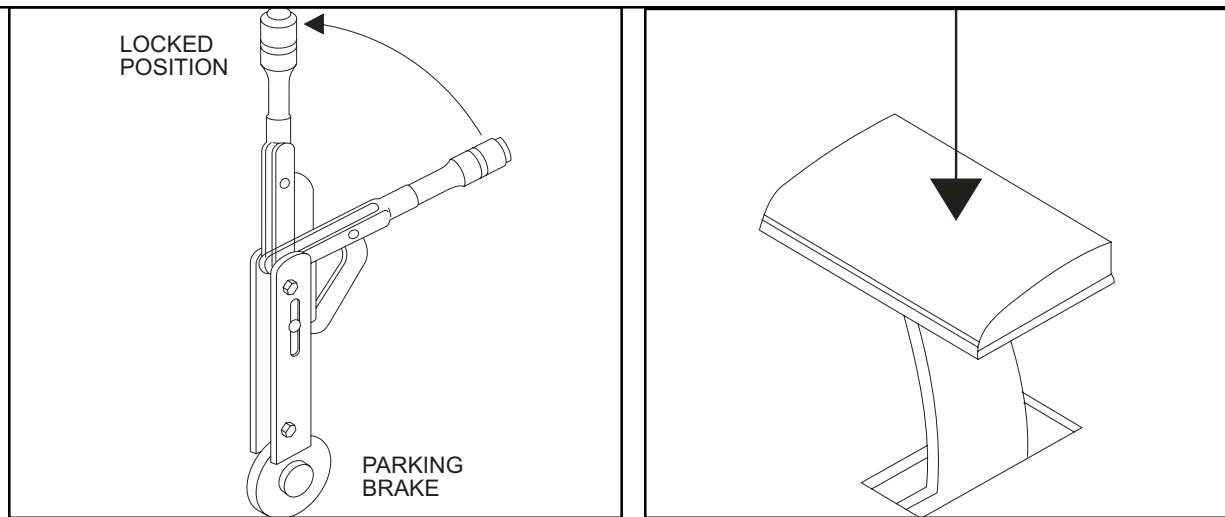
LP powered engines do not have a choke. The choke is located to the left of the engine speed control. The choke governs the mixture of air and fuel during the combustion cycle of the engine operation. The choke should be pulled out during the start of the engine and then gradually pushed back in after the engine is warm.

### **PARKING BRAKE**

The parking brake lever is located in the left side of the driver compartment floor. This lever when raised to the upright position will "lock" the foot brake pedal in the down position.



## OPERATIONS OF CONTROLS AND GAUGES

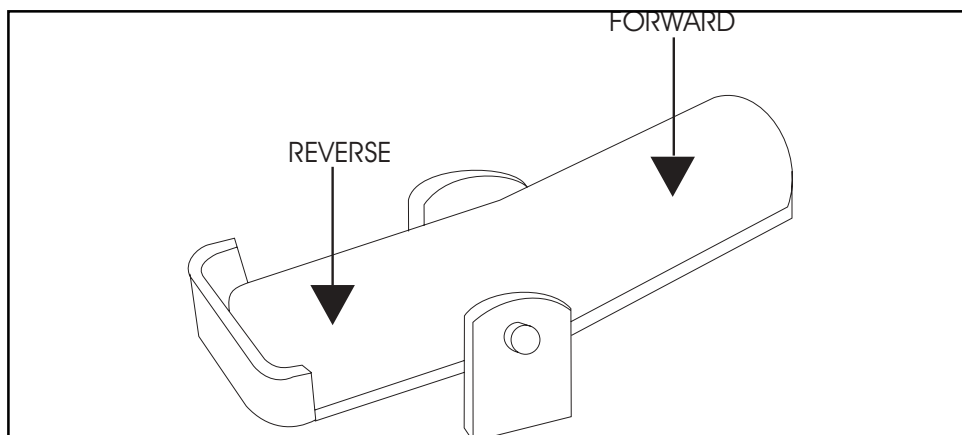


### FOOT BRAKE

The foot brake pedal is located to the right of the steering column on the floor of the driver compartment. The foot brake on front wheels is a mechanical system actuated by the brake pedal.

### ACCELERATOR & DIRECTIONAL CONTROL PEDAL

The accelerator and directional control pedal is located on the floor of the driver compartment, to the right of the



brake pedal. The accelerator and directional control pedal controls the machine direction and travel speed.

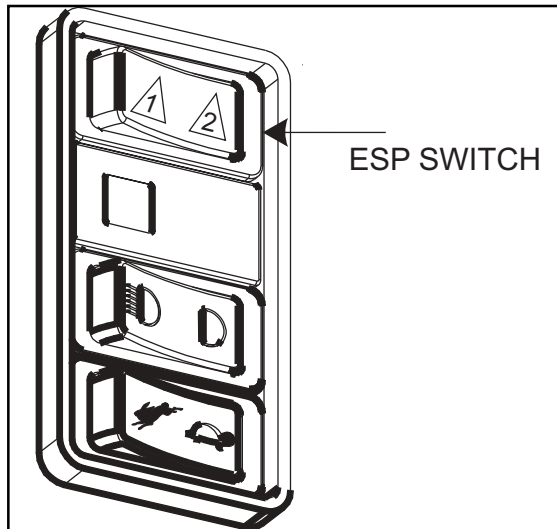
1. Put foot pressure on the upper portion of the pedal. The machine will move forward.
2. Increase the foot pressure on the upper portion of the pedal to increase the forward speed.
3. Put foot pressure on the lower portion of the pedal. The machine will move in reverse.
4. Increase the foot pressure on the lower portion of the pedal to increase the reverse speed.
5. To stop the machine, put light foot pressure on the opposite end of the accelerator and directional control pedal. If the machine is moving forward put light foot pressure on the lower portion of the pedal. If the machine is moving in reverse put light foot pressure on the upper portion of the pedal.

### BACKUP ALARM SWITCH

A switch that is located under the lower section of the Accelerator and directional control pedal operates the back up alarm. The alarm makes a loud audible noise when the machine is being driven in reverse.

### SEAT ADJUSTMENT

This lever is located on the right of the seat. This lever allows the seat to be adjusted forward or back when the lever is moved.



### **THE ESP RECYCLING SYSTEM OFF/ON-SELECT SWITCH**

This switch turns the ESP recycling system on and off, selecting recycle to Tank1 or Tank2.

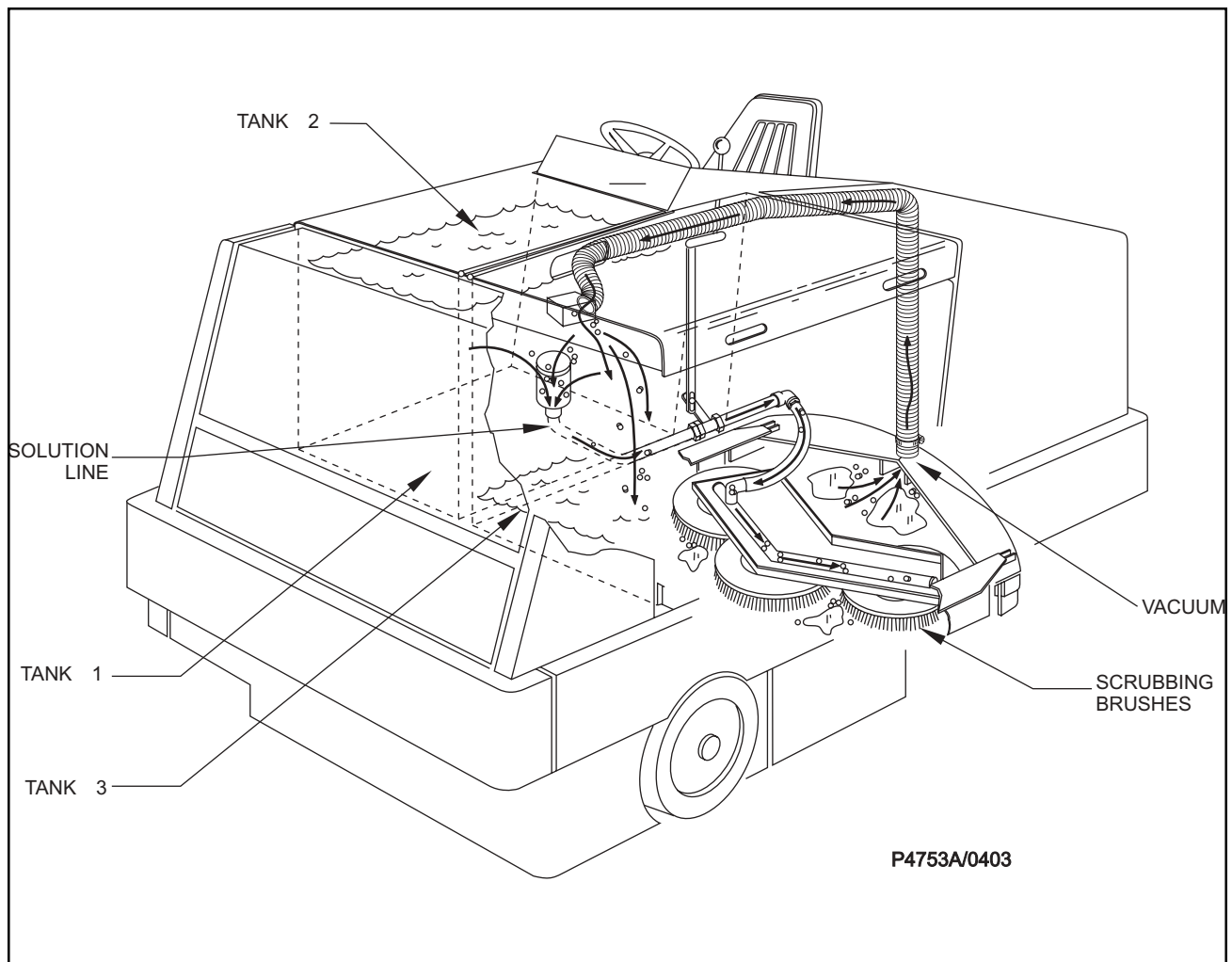
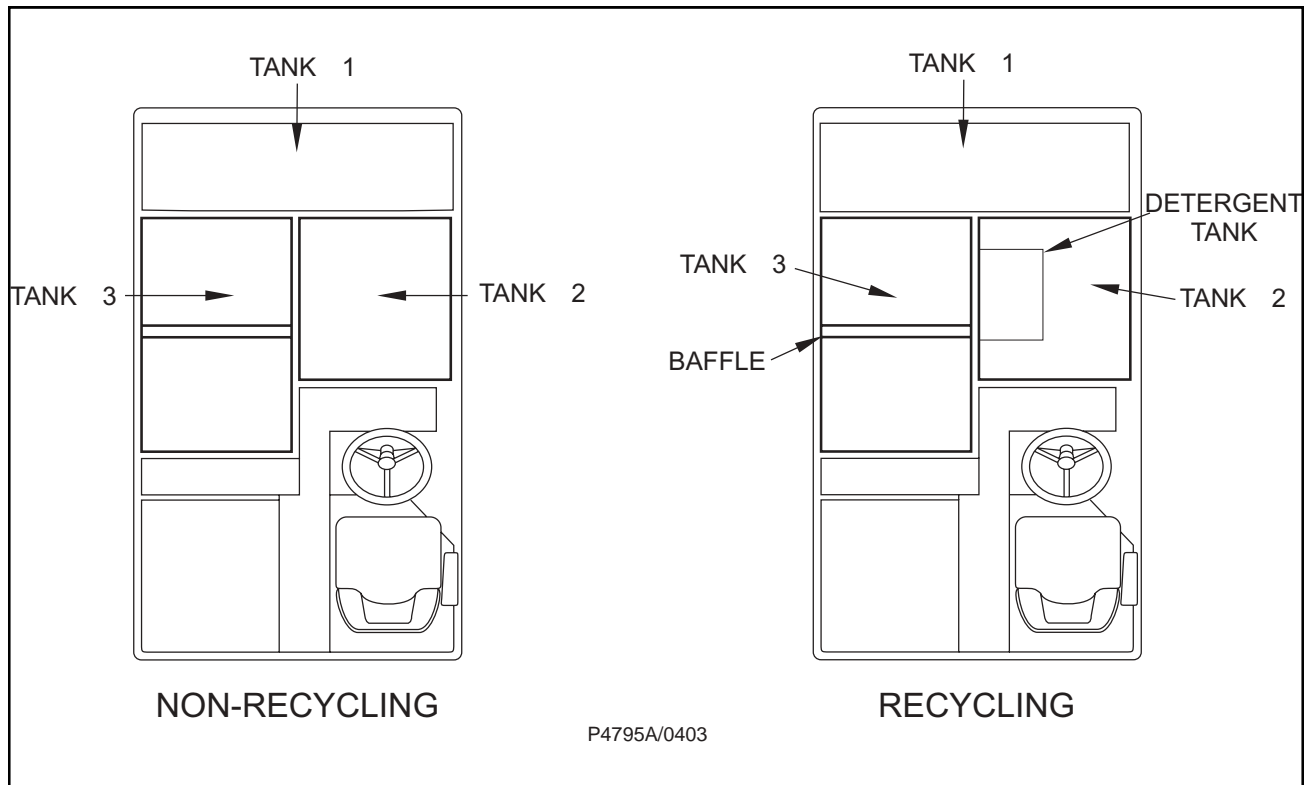
### **SOLUTION HIGH WARNING LIGHT**

There are two scrubbing systems available for the SR7770HC machine, the non-recycling or standard scrubbing system and the recycling or ESP scrubbing system.

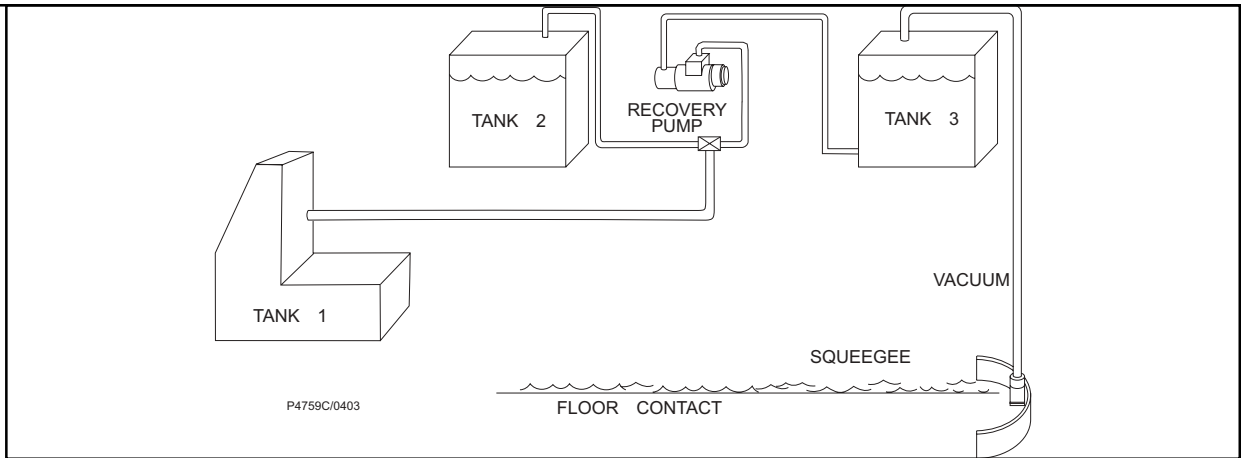
### **THE NON-RECYCLING OR STANDARD SCRUBBING SYSTEM - HOW IT WORKS**

During the scrubbing process, detergent solution water from tank1 is fed to the scrub deck line. Where three disc scrubbing brushes work to dislodge soil.

# OPERATING MODE INSTRUCTIONS



## OPERATING MODE INSTRUCTIONS



### NORMAL OPERATING MODE - HOW IT WORKS

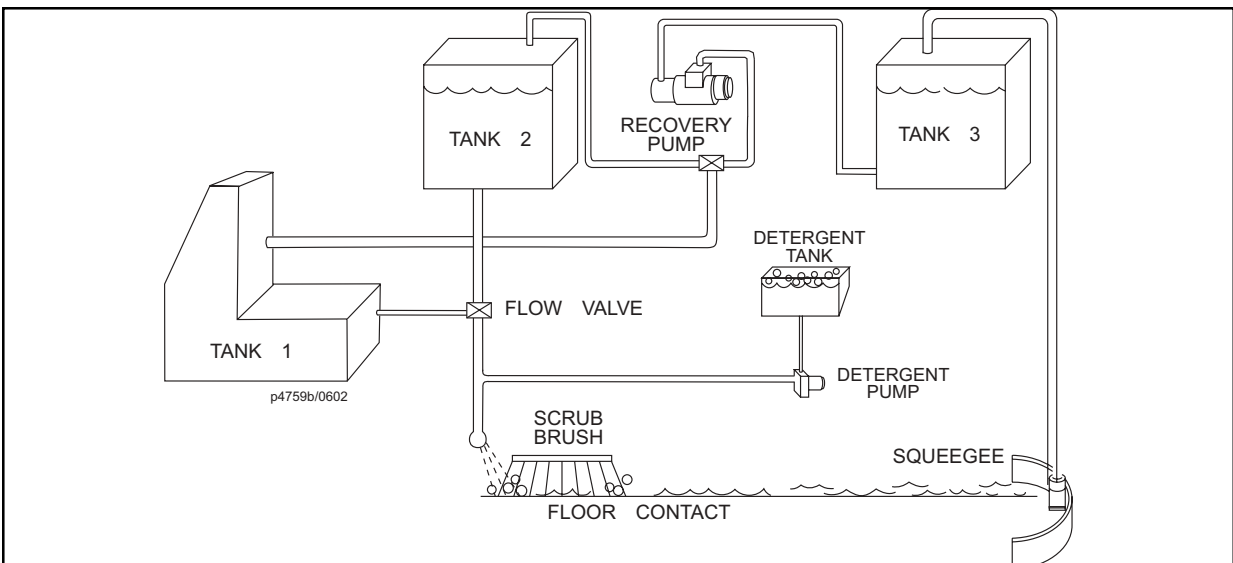
In Normal Operating Mode, water is dispensed to the floor from Tank 1, vacuumed up and collected in Tank 3. Sensors in the tank will detect when it is full, causing the High Recovery warning light to come on, and triggering the transfer pump to send screened water from Tank 3 to Tank 2. When its sensor detects Tank 2 is full, the transfer pump is shut off and Tank 3 continues collecting recovered water until its sensor detects it is full and the High Recovery warning light comes on.

### THE HIGH CAPACITY SYSTEM - HOW IT WORKS

In High Capacity mode, water is vacuumed from the floor and collected in Tank 3. Sensors in the tank detect when it is full, triggering the transfer pump and transferring water to Tank 1. When its sensor detects Tank 1 is full, the High Recovery warning light comes on; Tank 1 valve closes and Tank 2 valve opens, allowing water to be pumped into Tank 2. When its sensor detects Tank 2 is full, the High Recovery warning light comes on and the transfer pump is shut off. Tank 3 continues to collect recovered water until it is full, when the High Recovery warning light comes on.

### ESP (RECYCLING MODE) - HOW IT WORKS (see below)

In Recycling Mode, water is dispensed from either Tank 1 or Tank 2 depending on the position of the ESP Switch. If the switch is in Position 1, solution will be dispensed from and recycled back to Tank 1; Tank 2 is initially unused. If the ESP switch is in Position 2, water will be dispensed from and recycled back to Tank 2; Tank 1 is initially unused. Recovered water is collected in Tank 3. When the sensor identifies Tank 3 is full, the transfer pump is activated and begins pumping recycled water to Tank 1 or Tank 2 depending on the switch position. When the quality of the water recycled back to the first tank used becomes poor, the ESP switch should be moved to the alternate position. This engages the unused second tank of clean water and the recycling process begins again, further extending the scrubbing cycle.



## OPERATING INSTRUCTIONS

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### FILLING TANK 1

#### NON-RECYCLING or Standard Scrubbing System

1. Make sure the solution control knob is in the "Off" (rear) position.
2. Open the tank top door.
3. Fill the tank with 200 gallons of water and the correct mixture of American-Lincoln #100 Industrial Cleaner for the job on hand.
4. Close the solution tank top door.

#### Recycling or ESP System

1. Make sure the solution control knob is in the "Off" position.
2. Open the tank top door
3. Fill Tank 1 as outlined above with 200 gallons of pure water.
4. Close the tank top door.
5. Open Tank 2 lid
6. Fill Tank 2 as with tank 1 with 100 gallons of pure water
7. Fill the detergent tank with 5 gallons of American-Lincoln #100 Industrial Cleaner

#### NOTE:

Fill recovery tank 2/3 way with 150 gallons of water for the ESP system



#### WARNING

To prevent over-sudsing and machine damage, use only AMERICAN-LINCOLN Industrial Cleaning Solution # 100.



#### WARNING

DO NOT put gasoline, combustible or flammable material in Tank 1/Tank 2/ Tank 3 or detergent tanks.

#### NOTE

Before starting the engine, perform the pre-start checklist.

### PRE-START CHECKLIST

1. Clean engine air filter element
2. Check engine oil level
3. Check radiator coolant level
4. Check hydraulic fluid level
5. Check fuel level
6. Check all systems for leaks
7. Check brakes and controls for proper operation

### BEFORE STARTING ENGINE

1. Set parking brake
2. Make sure all controls are in the "Off" position

### TO START ENGINE

1. Be sure accelerator and directional control pedal is in neutral.
2. Pull choke if engine is cold (Gas engine only).
3. Turn key to "On" position and hold it until the engine starts. Push choke in when engine starts.
4. If engine fails to start after following the above procedures, refer to Engine Manual Section.



#### WARNING

It is not advised to store the machine in below freezing temperatures unless all fluids have been drained from the detergent solution and recovery tanks and associated systems. When machine has been stored in below freezing temperatures, run engine at low idle with machine standing still for 5-10 minutes to warm engine and hydraulic oil.

### POST START CHECKLIST (Engine Running)

1. Check squeegee deflection.

### TO TRANSPORT MACHINE (No scrubbing)

1. Be sure the brushes and squeegee are in the "Up" position with all other controls in the "Off" position.
2. Release parking brake.
3. Press the high speed position on the throttle control.
4. Push forward on the directional control pedal to place the machine in motion.
5. Vary your foot pressure on the directional control pedal to obtain desired travel speed.
6. To stop, allow directional control pedal to return to neutral (centered) position. (Pedal will automatically return to neutral when foot pressure is released). For Normal Operation, Depress Directional Control Pedal with Heel Into Neutral.
7. Press the low speed position on the throttle control, turn key to "Off".
8. Set parking brake.

### TO BEGIN THE CLEANING OPERATION

1. Choose the mode of operation (recycling ESP, non-recycling STANDARD, or High Capacity) as dictated by the machine fill or machine type.
2. Bring engine to full RPM.
3. Lower the scrub brushes.
4. Lower the squeegee.
5. Move solution control lever to the desired setting.
6. Turn on the ESP Recycling system switch, if applicable.
7. Begin scrubbing operation.

Single scrub the average floor with light to medium soil. In this operation the cleaning is accomplished in one pass, with simultaneous solution feed, sweeping, scrubbing and dirty water pick up. The rate of solution feed and the speed of travel required will vary with floor condition. This knowledge will come with operator experience.

### TO STOP THE CLEANING OPERATION

Discontinue the cleaning operation whenever a low level or Tank 1 high level warning or stop light is illuminated. The low level light will illuminate when the solution tanks are empty. At this time, discontinue the scrubbing cycle, put all controls in position for transport and drive to the drain area. See pages 30-32 for instructions on how to drain and clean the tanks.

The Tank 3 high level warning light will illuminate approximately 5 minutes before loss of vacuum to the tank. This warning period should give ample time to complete the scrubbing cycle and transport or scrub to the drain area.

### NOTE

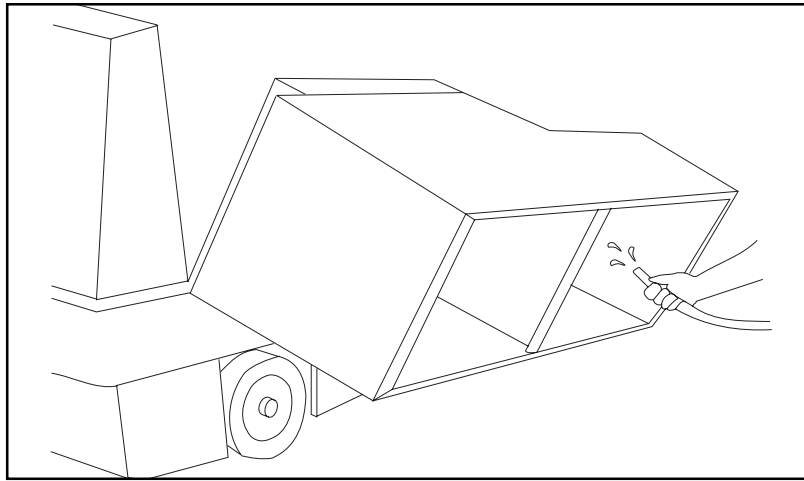
**After stopping the engine, perform this post operation checklist.**

### POST OPERATION CHECKLIST

1. Drain and clean tank1 (ESP system)
2. Clean tank1 filter screen (ESP system)
3. Drain and clean recovery tank2 and 3.
4. Clean tanks 2 and 3 screens and floats.
5. Check manifold and vacuum hoses for debris or obstructions, backflush if necessary.
6. Check scrub brushes for wear or damage.
7. Check rear and side squeegees for wear, damage and adjustment.
8. Fill fuel tank.
9. Check all systems for leaks.

## OPERATING INSTRUCTIONS

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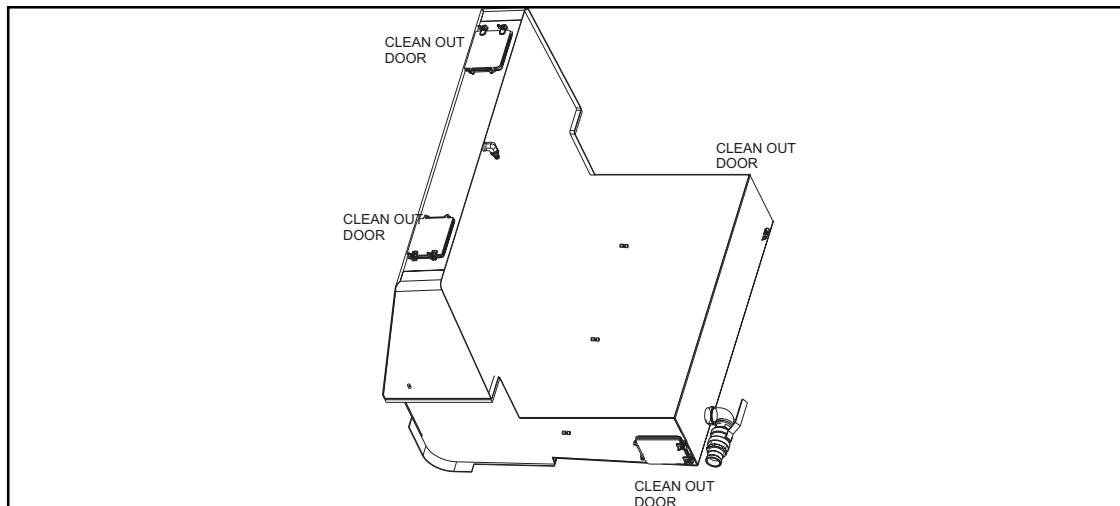


### TO DRAIN TANK1

Draining the solution tank is accomplished by a 4-foot (92 cm.) long drain hose located inside the left hand door.

### TO CLEAN TANK1 (RECYCLING OPERATION) (ESP System)

The four clean out doors located as shown simplifies the cleaning of the solution tank. Flush all deposits from the tank, also flush all probes and the solution line strainer to remove any deposits, remove strainer if necessary. When the cleaning operation is completed, turn off the valve and replace the hose. Close and secure clean out doors.



### TO DRAIN TANKS 2 and 3

Two 4-foot long drain hose for the tanks are located under the frame channel. To drain the tank lower the hose, remove the drain plug. When the draining operation is completed, flush and clean the tank as outlined below.

### TO CLEAN TANKS 2 and 3

The large access cover on the recovery tanks simplify the cleaning process. Once the recovery tank lid is opened, tip out the tank. With tanks in the tipped out position (figure 20), flush all sand, sludge, debris, etc. out of the tank with a water hose, then replace the tank and flush the manifold, ball float screen and level switch to remove any deposits.

Once the tank2 lid is opened, flush all sand, sludge, debris, etc. out of the tank, though the drain with a water hose flushing the level switches and intake screen (ESP only) to remove any deposits.

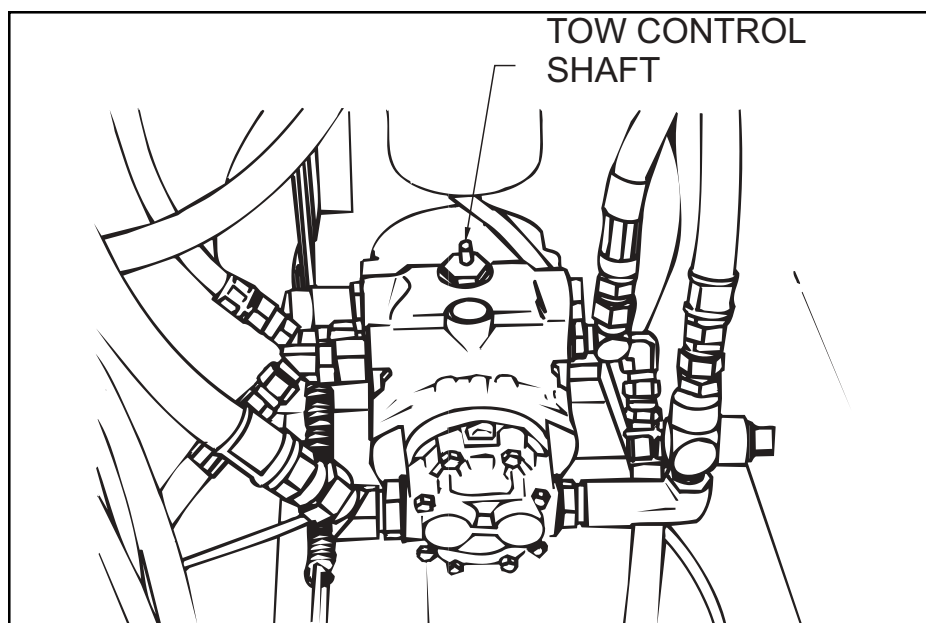


### WARNING

Do not attempt to flush large amounts of tank debris through the drain hose, this will cause clogging and hamper future drainage. Always flush the recovery tank with clean water at the end of each cleaning cycle. Never let debris accumulate, settle and harden in the tank or on associated hardware.

### DOUBLE LID TANK 3

The Tank 3 Lid is a double lid. Removing the two hex head bolts, located on the side of the lid can open the lid. The oil cooler and vacuum pump are located in the lid.



### TOWING INSTRUCTIONS

1. Locate tow control shaft extension as shown. (See arrow)
2. To open hydraulic circuit to wheel drive motor, turn shaft 90° so that the flats on the shaft are parallel to the front axle.
3. After towing, turn shaft 90° so that the flats on the shaft are parallel to the pump centerline.



## SERVICE CHART

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For service assistance, consult the yellow pages under power sweepers and scrubbers. For best performance, replace worn parts with genuine American-Lincoln parts.

EVERY 8 HOURS or DAILY operation check and clean/adjust if necessary:

1. Inspect panel filters for damage and clean.
2. Check engine oil level.
3. Check hydraulic fluid level.
4. Check radiator core for blockage.
5. Check brake pedal and parking brake.
6. Check for LPG odor at connections. LP
7. Check engine air cleaner.
8. Check hydraulic oil filter.
9. Check coolant level.

### 50 HOUR (WEEKLY) MAINTENANCE CHECKLIST

10. Tank1 (recycling or ESP system).
11. Intake filter screen (recycling or ESP system).
12. Tanks 2 and 3.
13. Tanks 2 and 3 screens and filters.
14. Scrub brushes for wear or damage.
15. Rear and side squeegees for wear or damage.
16. Check tension on all belts.
17. Check battery electrolyte level. (Unless Maintenance Free Battery)
18. Check all hydraulic hoses for wear or cuts.

Perform recommended engine maintenance (see engine manual if applicable).

### 100 HOUR MAINTENANCE CHECKLIST

19. Change crankcase oil.
20. Change engine oil filter.
21. Lubricate drive wheel, I swivel wheel bearings, and steering rack guide (engine side above rear wheel).
22. Lubricate front wheel bearings.
23. Lubricate all moving joints.
24. Check brake pads for wear and adjust accordingly.
25. Lubricate all 6 DANHOUSER Bushings with NAPA #765-1363 or equivalent anti-seize lubricant. The bushings are located on the steering, scrub deck lift, squeegee lift, and both threaded ends of the throttle cable . Perform recommended engine maintenance (see engine manual if applicable).

### 250 HOUR MAINTENANCE CHECKLIST

26. Lubricate squeegee casters.
27. Clean tank1 and filter screen.
28. Replace engine air filter element.
29. Flush radiator coolant system.
30. Remove spark plug - clean or replace. LP, G
31. Check distributor and points - service or replace. LP, G
32. Clean and lubricate governor & choke linkage. LP, G
33. Replace fuel filter.
34. Replace hydraulic filter element.

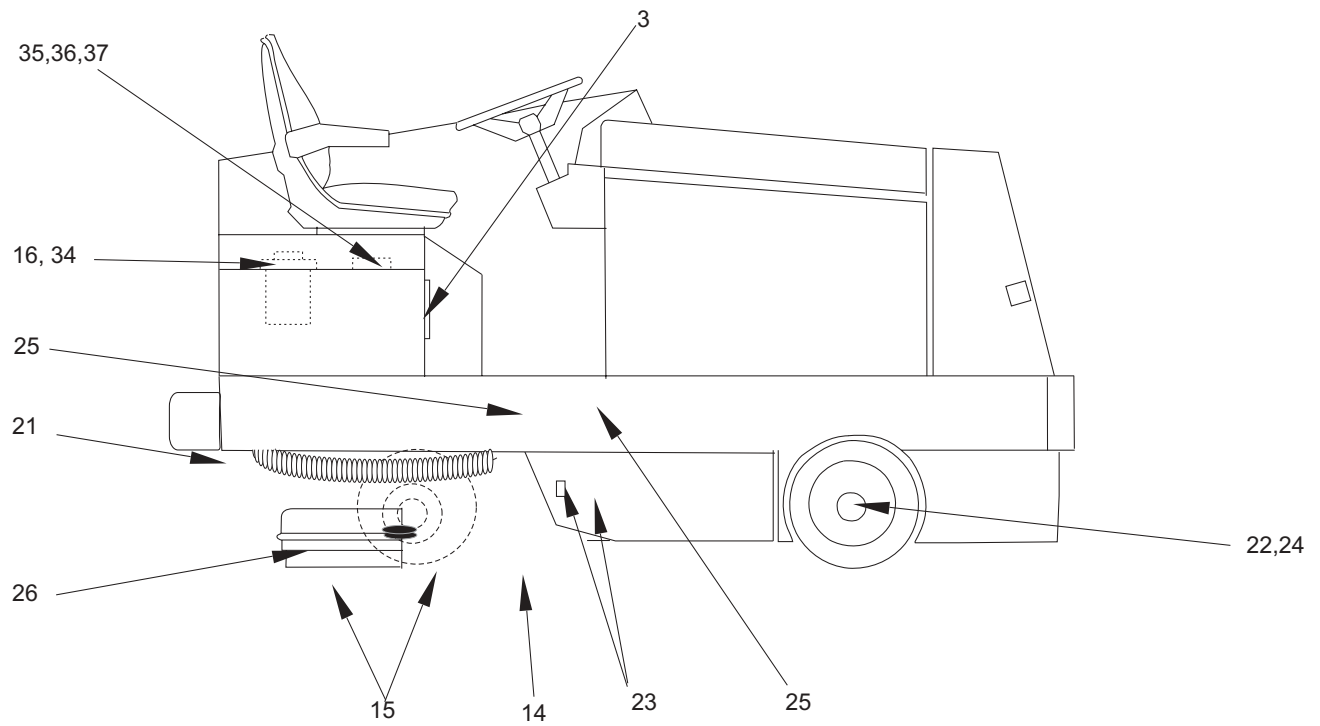
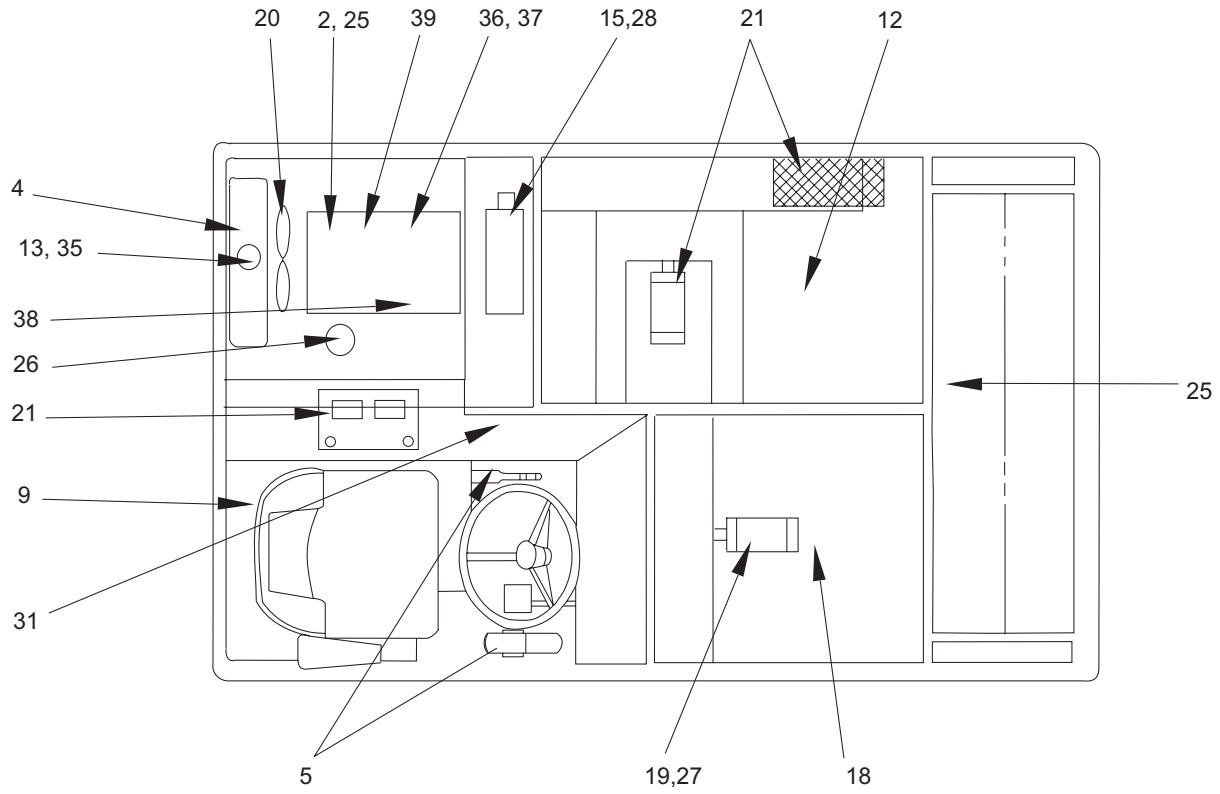
Perform recommended engine maintenance (see engine manual if applicable).

### 400 HOUR MAINTENANCE CHECKLIST

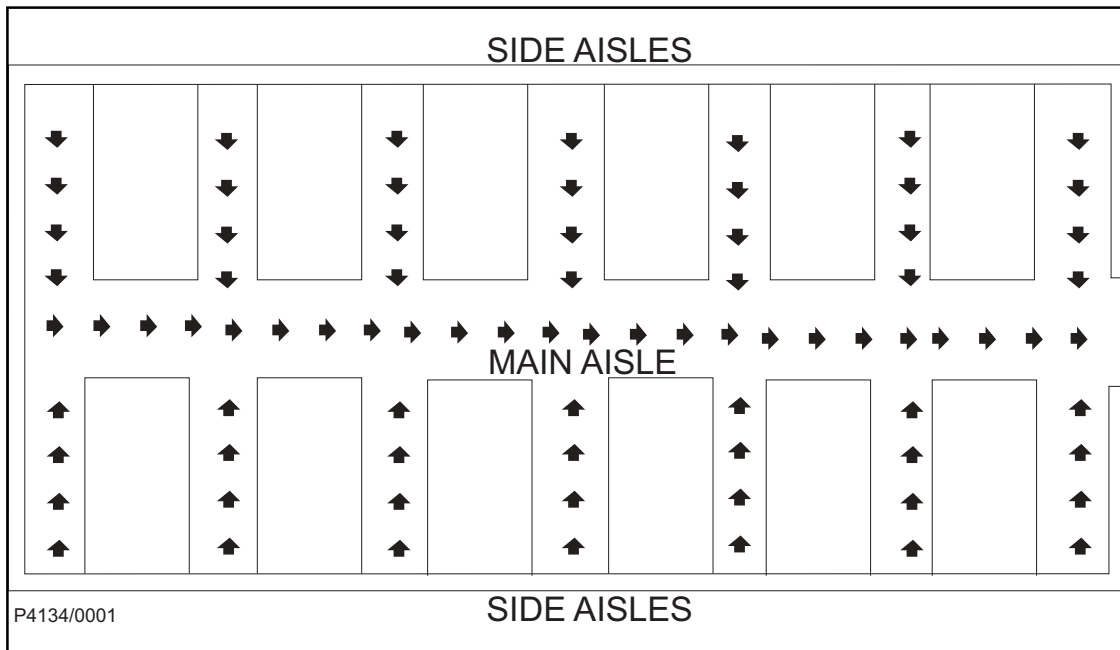
35. Clean hydraulic reservoir.
36. Clean hydraulic intake strainer.
37. Change hydraulic fluid.

Perform recommended engine maintenance (see engine manual if applicable).

LP = LPG      G = Gas



## HELPFUL HINTS FOR CLEANING OPERATION



### WARNING

**Do not turn the steering wheel sharply when the machine is in motion. The SR7770HC is very responsive to movement of the steering wheel. Do not make sudden turns.**

**Scrub in straight paths. Do not bump posts. Do not scrape the sides of the machine.**

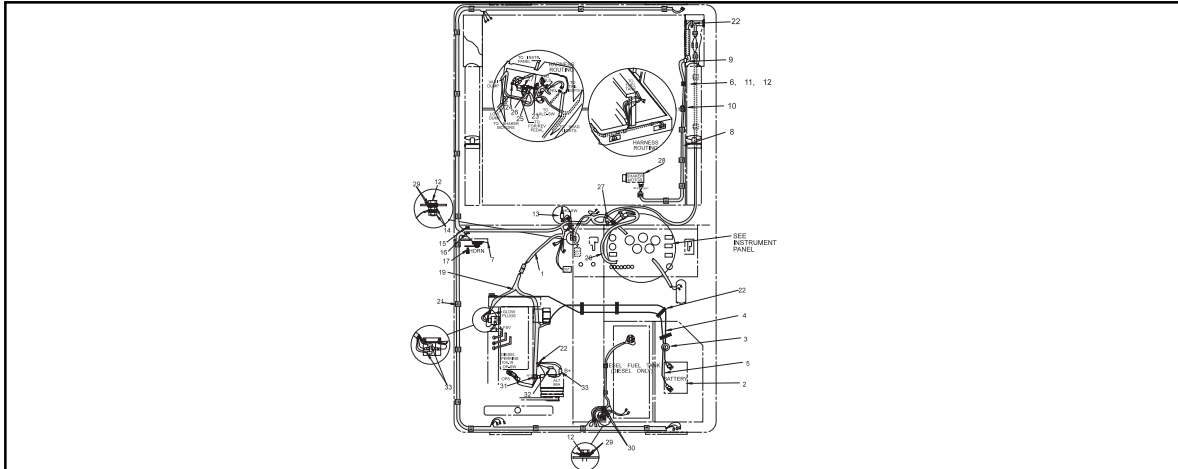
**When the machine is in motion, do not push the directional/speed control pedal all the way forward. This is the same as starting in “High” and will put a strain on the motor and drive system.**

1. Plan you scrubbing in advance. Try to arrange long runs with minimum stopping and starting.
2. Pick up oversize debris before scrubbing.
3. Allow a few inches of overlap of the scrub paths. This will eliminate leaving dirty patches.
4. Don't turn steering wheel too sharply when machine is in motion. The machine is very responsive to movement of the steering wheel - so avoid sudden turns.
5. Try to follow as straight a path as possible. Avoid bumping into posts or scraping the sides of the machine.
6. When placing the machine in motion, avoid slamming the directional control pedal all the way forward quickly. This is equivalent to starting out in “HIGH” and puts needless strain on the engine and drive system.
7. Always allow the machine to warm up before operating in cold temperatures.

### NOTE

**Replace disc brushes when bristles are reduced to 1/2 inch (1.3 cm.) in length. To order replacement brushes, see page 180. Replace squeegee rubbers when all usable edges have become rounded with wear, impairing the wiping action.**

## LUBRICATION



### 100 Hour Lubrication

1. Lubricate drive wheel swivel, wheel bearings and steering rack guide.
2. Lubricate front wheel bearings.
3. Lubricate all moving joints.
4. Lubricate all 6 DANHOUSER Bushings with NAPA #765-1363 or equivalent anti-seize lubricant. The bushings are located on the steering, scrub deck lift, squeegee lift, main broom lift, both threaded ends of the throttle cable and the variable dump door cylinders.

### 250 Hour Lubrication

5. Lubricate squeegee casters.
6. Lubricate governor & choke linkage.

Use good grade multipurpose grease. Avoid using too much grease.

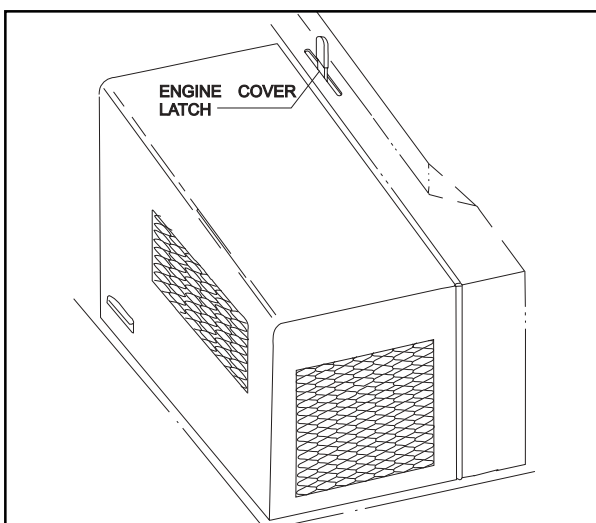


### WARNING

**Only grease these units while they are in the raised position. Application of grease while the squeegee and the scrub deck are lowered will fill an empty cavity. Avoid too much grease.**

**All other moving joints should receive a few drops of #10 oil every 100 hours to keep them from rusting and/or binding.**

### HOW TO OPEN THE ENGINE COVER

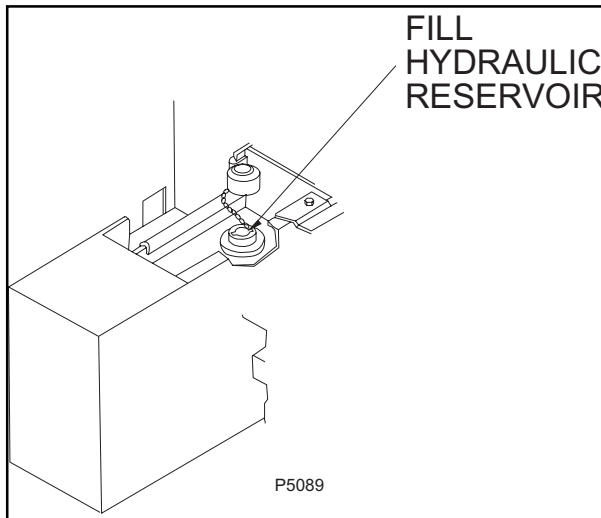


The engine cover encloses the entire engine, radiator and hydraulic reservoir assembly. The cover can be swung open to completely clear the assembly and allow easy access to the engine.

1. Release the engine cover latch.
2. Lift the cover slightly to clear the engine cover stop.
3. Swing the cover open.

# GENERAL MACHINE MAINTENANCE

## HYDRAULICS

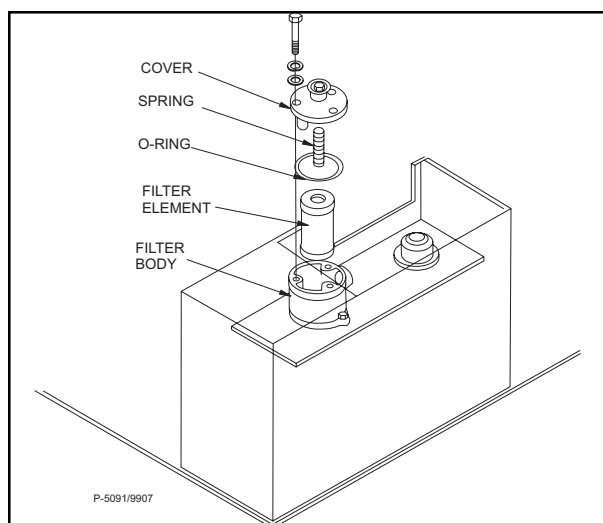


### HOW TO FILL THE HYDRAULIC RESERVOIR

1. Access to the hydraulic reservoir is located beneath the driver's seat.
2. Open the hydraulic reservoir breather filter cap.
3. Remove any debris that is in the breather filter cap screen.
4. Fill the reservoir until the fluid is at the "FULL" line on the hydraulic fluid sight gauge. The sight gauge is located on the front of the hydraulic reservoir.
5. Close the hydraulic reservoir breather filler cap.
6. Put the driver's seat back into position.

### HOW TO CLEAN THE HYDRAULIC SYSTEM

1. Put a drop cloth on the floor.
2. Drive the machine onto the drop cloth.
3. Set the parking brake.
4. Tip the seat to the side.
5. Put a container under the reservoir drain to catch the reservoir fluid.
6. Remove the drain plug. The reservoir fluid will drain. Do not use the drained reservoir fluid to refill the hydraulic reservoir. Dispose of the used fluid.
7. Flush the interior of the hydraulic reservoir with clean fluid.
8. Put the reservoir plug, removed in step six back in the hydraulic tank drain and tighten. A pipe thread sealer is required on the plug.
9. Open the breather filter cap.
10. Fill the reservoir with new FORD type "F" automotive transmission fluid. The capacity of the tank is 10 gallons. Fill to the "FULL" line on hydraulic fluid sight gauge.
11. Close the breather filter cap.
12. Tip the seat back to its original position.



### HOW TO REPLACE THE RETURN FILTER ELEMENT

1. Replace the return filter after 250 hours of machine run time.
2. Unscrew the fasteners from the filter assembly cover and retain.
3. Remove the cover and the compression spring and retain.
4. Discard old filter element.
5. Position new filter element inside the filter body.
6. Put the compression spring in position. Wipe the cover magnet free of any metal filings or debris.
7. Place O-ring (Moisten with clean hydraulic fluid) and cover into position.
8. Reattach fasteners to filter cover.
9. Wipe clean any hydraulic reservoir fluid spills. The fluid can damage painted surfaces of the machine.

### RECYCLING PUMP ESP System

The recycling pump is located directly behind and under the recovery tank. The pump is electric and except for daily cleaning of the pump intake screens, it requires no regular maintenance.

### NOTE

**Do not run pump dry. The unit depends on the liquid pumped for lubrication.**

### RECYCLING (ESP) PUMP STORAGE

Always drain pump for extended storage, especially when freezing temperatures may be encountered.

### RECOVERY TANK LID AND TANK ACCESS

Remove the two hex head screws to access the inside of the recovery tank lid. The hydraulic oil cooler is located inside the lid. To gain access to the Recovery Tank, open the engine cover and loosen the hold down strap located on the side of the recovery tank.

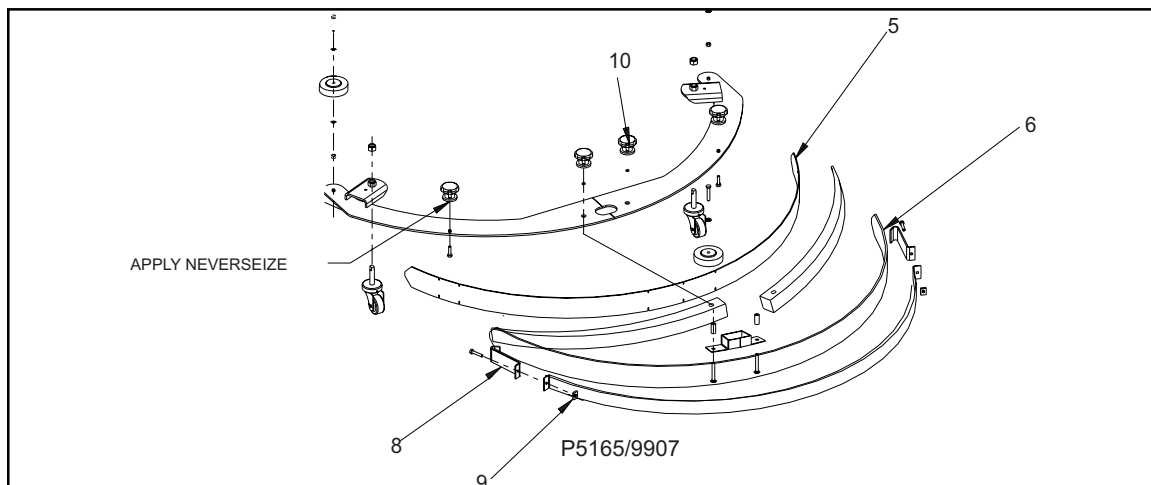
### REAR SQUEEGEE

The squeegee will require service when the inner edges of the blades become round with wear, impairing the wiping action or water pickup. To service the rear squeegee use the following steps:

1. Loosen the four aluminum knobs (item 10, these hold the squeegee tool to the squeegee support)
2. Remove the squeegee tool and turn upside down to service the blades or caster wheels. The squeegee blades are designed to flip over and use another unworn edge (item 5 & 6).

#### To service the blades:

1. Loosen the clamp bolts, which clamp items 8 & 9 together.
2. Loosen far enough to slip the end clamp brackets off the squeegee tool. This will allow flipping the blades or installing new blades.
3. Install blades so that outer blade is 3/16" longer than inner blades, this is achieved by assembling the top edge of the blade against the squeegee tool weldment.
4. Reinstall squeegee clamp band and tighten clamp bolt tight.



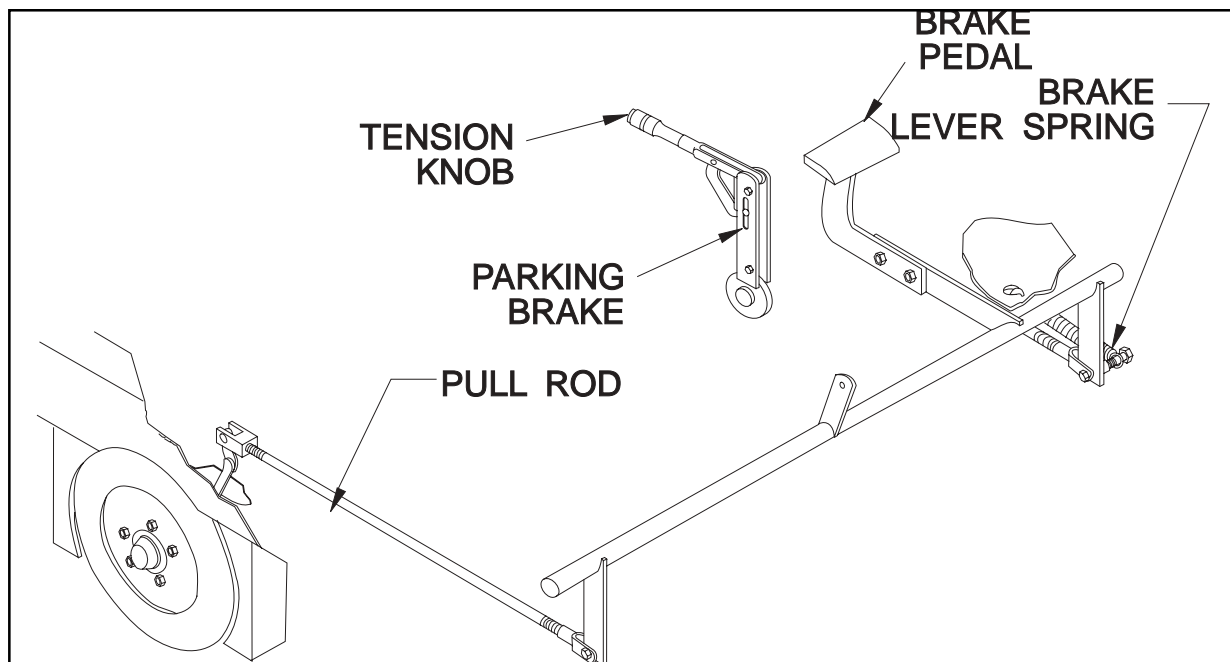
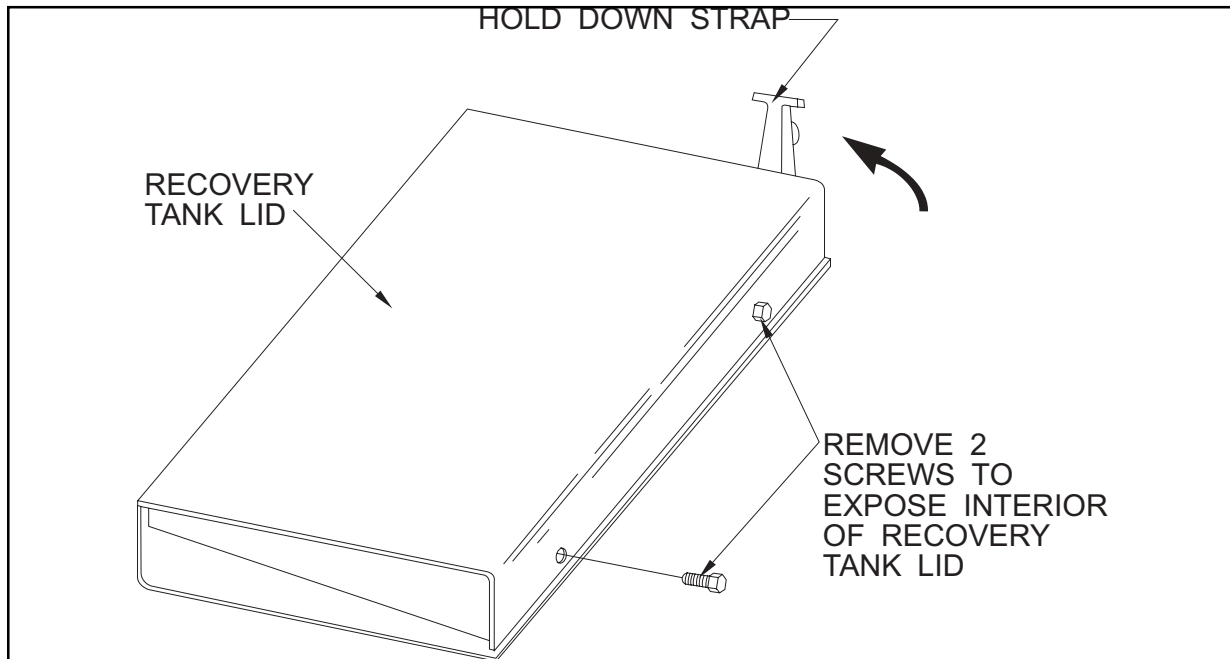
### SQUEEGEE CASTER WHEELS

Grease caster wheel zerks (2) on each caster should be greased each time the blades are serviced for a total of 3 caster wheels.

### ADJUSTING CASTERS

Lower squeegee on a flat surface, making sure the rear squeegee blade is perpendicular to the surface. Adjust caster 3/16" above the flat surface, Lock jam nuts.

## GENERAL MACHINE MAINTENANCE



### BRAKE ADJUSTMENT

1. Connect pull rod, preset to 44.5 inch (113 cm.) clevis centerlines, to brake lever then adjust to fit with brake pedal full up and the spring attached.
2. Adjust tension knob on parking brake lever to hold machine on an 8-degree incline.

## AIR INTAKE SYSTEM

### NOTE

#### Monitor the air filter indicator daily

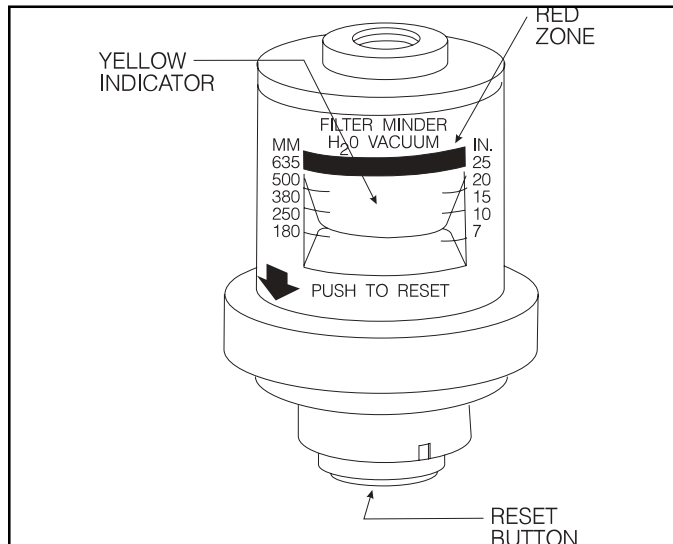
The importance of maintaining an air filter cannot be overemphasized. Dirt ingested through improperly installed, improperly serviced, or inadequate air filter elements wears out more engines than long hours of operation. Even a small amount of dirt will wear out a set of piston rings in just a few hours. Operating with a clogged air filter element also causes the fuel mixture to be richer, which can lead to formation of harmful sludge deposits in the engine. Always cover the air intake when the air filter is removed for servicing. Do not neglect servicing the air filter. Use only approved replacement parts. Keep all other air intake components, such as hoses and clamps, secure and in good condition to prevent entrance of unfiltered air.

Over maintenance can cause damage. Removing the air filter element more often than is needed allows contaminants to enter the engine unnecessarily.

### AIR FILTER

The engine air filter housing includes a dust cap and a dry cartridge type air filter element. The dust cap must be emptied of dirt daily. The air filter element must be replaced every 75 to 100 hours. The filter element must be replaced if it is damaged or has been cleaned three times.

Replace the engine air filter only when the Yellow Filter Service Indicator reaches the red band at the top of the indicator. The yellow indicator will stay at the red band when the engine is off. Reset the indicator by depressing the black button at the bottom of the indicator.



### TO REPLACE AIR FILTER ELEMENT

1. Stop the engine and engage the machine parking brake.



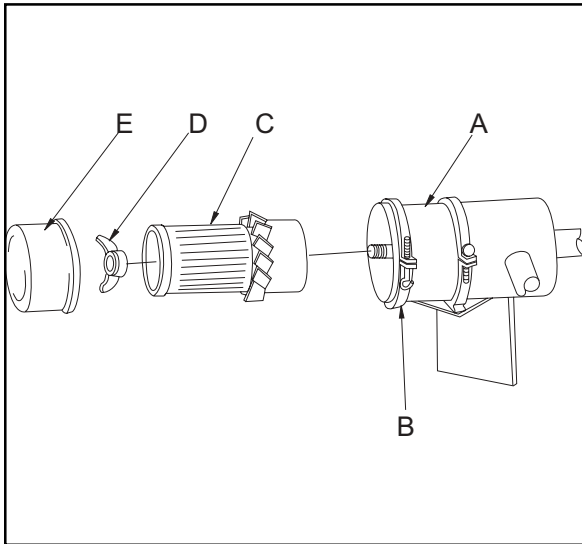
### WARNING

**Always park on a level surface, stop the engine, and engage parking brake before working on the machine to keep it from creeping or rolling.**

2. Unscrew the clamp ring on the filter.
3. Remove the dust cap.
4. Empty the dust cap.
5. Remove the filter wing nut.
6. Gently pull the filter element out of the filter housing.

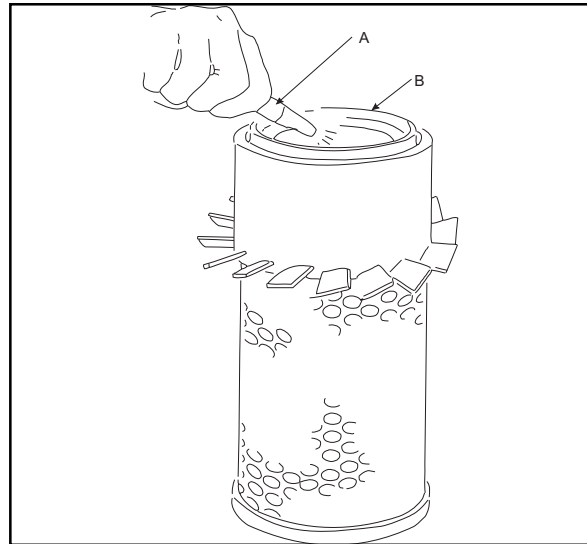


## GENERAL MACHINE MAINTENANCE



### REMOVING AIR FILTER ELEMENT

- A. Filter Housing
- B. Clamp Ring
- C. Filter Element
- D. Wing Nut
- E. Dust Cap



### CLEANING AIR FILTER ELEMENT

- A. Air Hose
- B. Filter Element

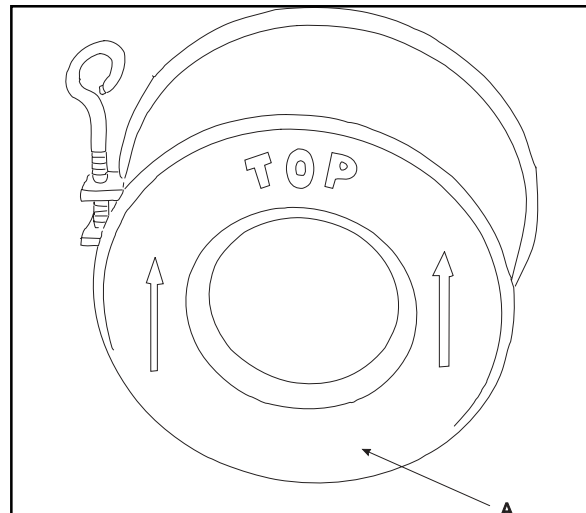
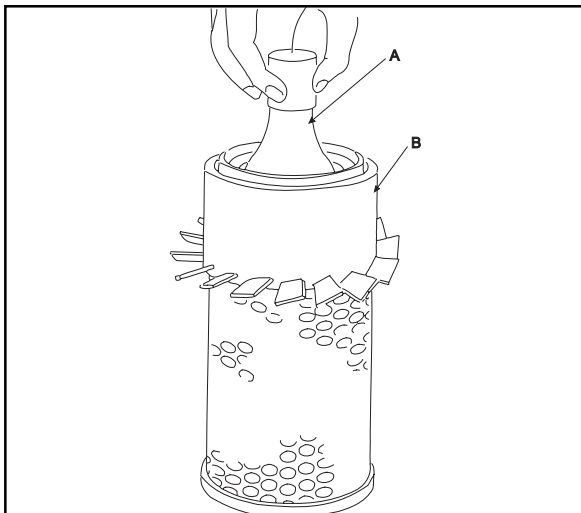
7. Clean the interior of the air cleaner housing with a damp cloth. Clean the element housing sealing surfaces.
8. Using an air hose, direct dry, clean air maximum 30 PSI up and down pleats on the inside of the filter. Do not rap, tap, or pound dust out of the element.



### WARNING

**Wear approved eye protection when using air or water hoses to prevent eye injury.**

9. After cleaning the air filter element, inspect it for damage by placing a bright light inside. The slight estruption requires replacement of the filter. Clean and inspect the ends of the element. They should be unbroken and flexible. Remember that the element must be replaced after it has been cleaned three times.



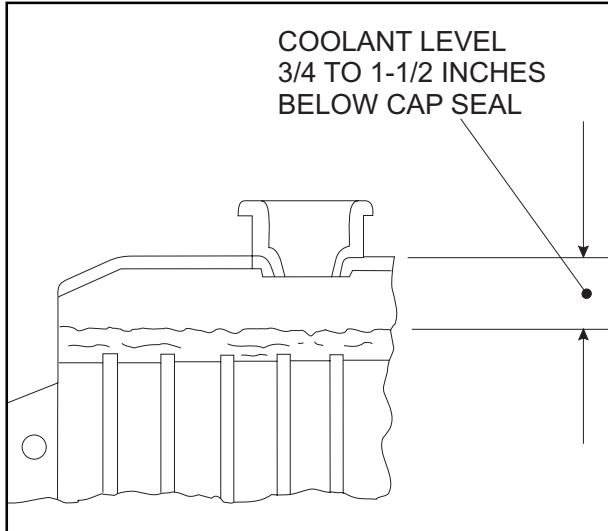
### INSPECTING AIR FILTER ELEMENT

- A. Bright Light
- B. Filter Element

### DUST CAP

- A. Dust Cap

10. Install the new or cleaned filter element so the fins on the element are at the intake end of the air cleaner. Use care so the fins are not damaged. Tighten the wing nut attaching the element.
11. Install the dust cap with the arrows pointing up. Tighten the clamp ring to hold it in place. Check all intake hose connections for leaks or abrasions.
12. Reset filter monitor after any filter service.



### COOLING SYSTEM

#### COOLANT LEVEL

Check the coolant level in the radiator daily, only when the engine is cool.

Maintain the coolant level at approximately 3/4 inches (1.9 cm.) below the filler neck seat on the radiator when the coolant is cold.

Whenever coolant level checks are made, check condition of radiator cap rubber seal. Make sure it is clean and free of any dirt particles. Rinse off with clean water if necessary. When replacing cap on radiator, also make sure radiator filler neck is clean.



### WARNING

**Never remove the radiator cap under any conditions while the engine is operating. Failure to follow these instructions could result in damage to the cooling system or engine and/or personal injury. To avoid having scalding hot coolant or steam blow out of the radiator, use extreme care when removing the cap from a hot radiator, if possible, wait until the engine has cooled, then wrap a thick cloth around the radiator cap and turn it slowly to the first stop. Step back while the pressure is released from the cooling system. When you are sure all the pressure has been released, press down on the cap (still with a cloth), turn and remove it. Do not add coolant to an engine that has become overheated until the engine cools. Adding coolant to an extremely hot engine can result in a cracked block or cylinder head.**

Use only a permanent type coolant that meets FORD specification ESE-M97B44-A such as FORD Cooling System Fluid. Refer to the coolant chart on the container for additional antifreeze protection information. Do not use alcohol or methanol antifreeze, or mix them with the specified coolant. Plain water may be used in an emergency, but replace it with the specified coolant as quickly as possible to avoid damage to the system. With only water in the system, do not let engine run hot.

### RADIATOR

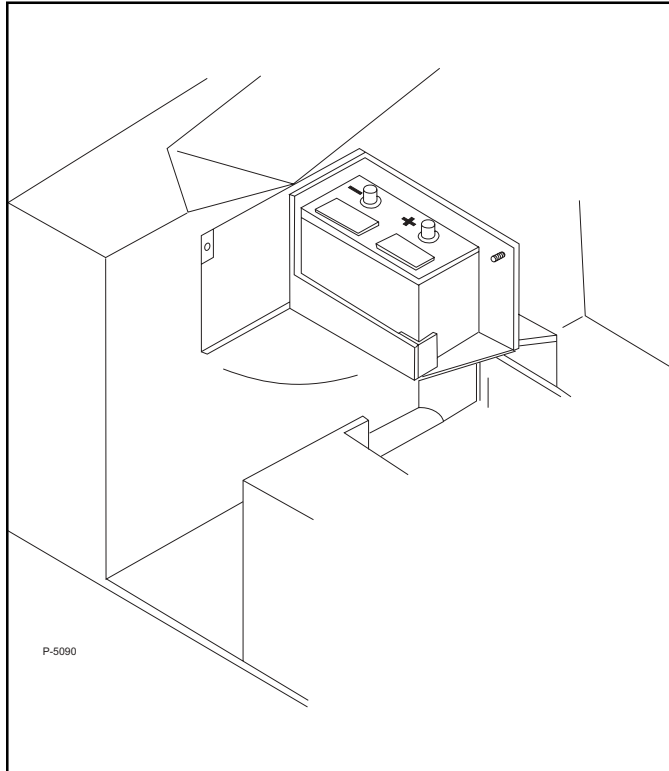
Inspect the exterior of the radiator for obstructions. Remove all bugs, dirt or foreign material with a soft brush or cloth. Use care to avoid damaging the fins. If available, use compressed air or a stream of water in the opposite direction to normal airflow. Open door for access.

Check all hoses and connections for leaks. If any of the hoses are cracked, frayed, or feel spongy, they should be replaced.

## GENERAL MACHINE MAINTENANCE

### DRIVE BELTS

The drive belt(s) should be properly adjusted at all times. Loose drive belts cause improper alternator, fan and water pump operation, and overheating. Overtightening the belt may result in excessive wear on the alternator and water pump bearings, as well as premature wear on the belt itself. Therefore, it is recommended that proper belt tension be maintained.



### BATTERY

1. Access the battery through the door located beside the driver's seat.
2. Open the seat cover and unscrew the access bolt to the battery door.
3. Swing the battery door out.
4. Keep the top of the battery clean and dry. Keep the terminals and connectors clean. To clean the tops of the batteries, use a damp cloth with a weak solution of ammonia or bicarbonate of soda solution. To clean the terminals and connectors, use a terminal and connector-cleaning tool.
5. Swing the battery door closed and fasten the access bolt.
6. Put the seat into position.

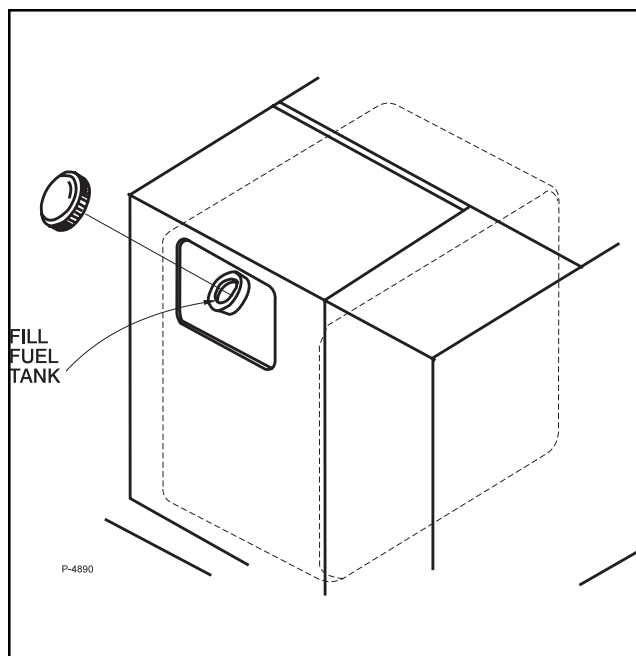


### WARNING

**NEVER allow the soda solution to enter the cells. This will permanently discharge the battery.**

### GAS TANK

The gas tank is located under the driver's seat. It may be filled from the rear of the machine.



### LP GAS SYSTEM

The propane powered SR7770HC is identical to the "standard" gasoline powered SR7770HC, except that its fuel system has been modified to operate on LP vapor fuel.

The LP fuel system consists of several components not found on the gasoline system. The LP fuel system also contains the associated mounting hardware and plumbing for the LP components. The major LP components are as follows: These components are factory set, attempts at adjusting these components should only be made by authorized service personnel.

1. An LP carburetor
2. A combination water heated vaporizer and regulator
3. A combination LP fuel line filter and lock off valve
4. An LP fuel tank and fittings

### LP GAS VAPORIZER-REGULATOR QUICK CHECK

Turn on the ignition switch and open the radiator cap. Check the coolant for bubbles. If bubbles are present, the vaporizer may have a leaking gasket or may have developed a pinhole leak, allowing the LP fuel to enter the cooling system.

### LP GAS FUEL TANK

The LP tank is located under the driver's seat. Use only the proper size and type of LP tank. The SR7770HC LP powered sweeper uses 33.5 lb. liquid withdraw tank. The DOT designation of the tank is DOT 4BW-240.

### NEUTRAL ADJUSTMENT

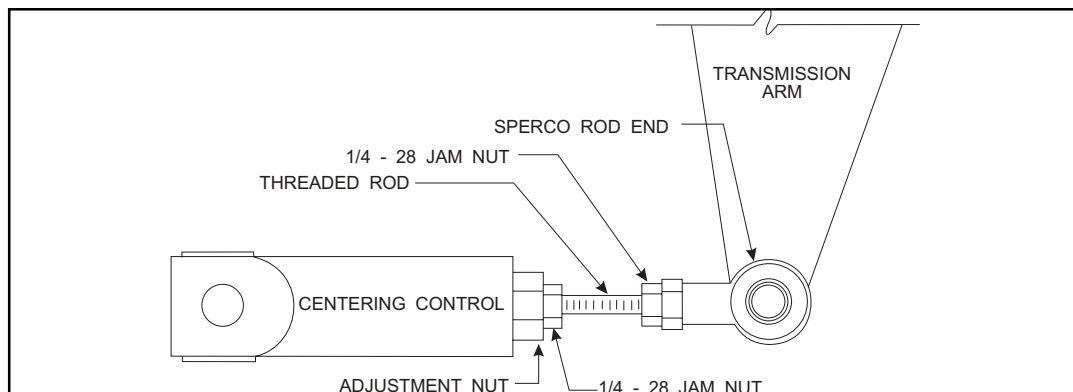
#### NOTE

Orientation of the transmission arm assembly depends upon which engine is installed in the SR7770HC.

#### NOTE

Adjustment directions given are as seen from the operator's position in the driver's seat.

1. Check engine no load RPM; SR7770HC, 2150 RPM. Check hydraulic reservoir oil level.
2. Raise rear of machine onto jack stands so rear wheel is off the ground.
3. Loosen the jam nut away from the adjustment nut.
4. If the rear drive wheel is turning forward, turn the adjustment nut clockwise (this will shorten the threaded shaft). If the rear drive wheel is turning in reverse, turn the adjustment nut counter clockwise (this will lengthen the threaded shaft).
5. Tighten the jam nut against the adjustment nut.
6. Test for operation of neutral with engine at full throttle. If the rear drive wheel turns, repeat adjustment steps 3, 4 and 5.



## PARTS LIST LEGEND

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### ABBREVIATIONS - SCREWS

ADJ	= Adjusting Screw
ADJ.SP	= Adjusting Plunger Screw
BHM	= Binding Head Machine Screw
BHS	= Button Head Socket Screw
CAPT.SL	= Captivated Slotted Screw
CAPT.WG	= Captivated Wing Screw
FHM	= Flat Head Machine Screw
FIL.HM	= Filister Head Machine Screw
HHC	= Hexagon Head Cap Screw
HHM	= Hexagon Head Machine Screw
HIHD	= 1/2 High Head Screw
HSHC	= Hexagonal Socket Head Cap Screw
HSFHC	= Hexagonal Socket Flat Head Cap Screw
KNH	= Knurled Head Screw
MHHC	= Metric Hexagon Head Cap Screw
PHM	= Pan Head Machine Screw
RHD	= Round Head Drive Screw
RHM	= Round Head Machine Screw
RHW	= Round Head Wood Screw
SHC	= Shiny Crown Cap Screw
SHTB	= Shoulder Thumb Screw
SQ	= Square Head Screw
TB	= Thumb Screw
THM	= Truss Head Machine Screw
WELD	= Weld Stud
WG	= Wing Screw

### ABBREVIATIONS - SETSCREWS

HS	= Hexagonal Socket Setscrew
S	= Slotted Setscrew
SH	= Square Head Setscrew
-KCP	= Knurled Cup Point Setscrew
-CP	= Cup Point Setscrew
-OP	= Oval Point Setscrew
-FDP	= Full Dog Point Setscrew
-HDP	= Half Dog Point Setscrew
-FP	= Flat Point Setscrew
-COP	= Cone Point Setscrew

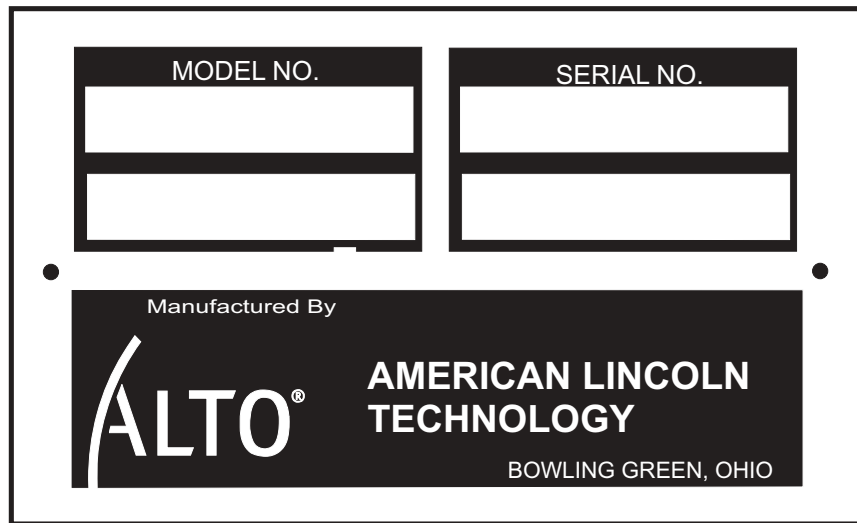
## GENERAL TROUBLESHOOTING

<b>PROBLEM</b>	<b>PROBABLE CAUSE</b>	<b>REMEDY</b>
Poor water pick up at squeegee	<ol style="list-style-type: none"> <li>1. Side or rear squeegee are worn or damaged</li> <li>2. Clogging in water pick up</li> <li>3. Air leaks in suction hose and connection</li> <li>4. Air leaks at recovery tank cover and/or manifold gaskets</li> <li>5. Poor vacuum</li> <li>6. Drain hose or drain plug leakage or not closed properly..</li> </ol>	<ol style="list-style-type: none"> <li>1. Examine squeegee rubber blade for cuts or worn spots.</li> <li>2. Repair or replace hose and connection</li> <li>3. Repair or replace gaskets</li> <li>4. Check vacuum motor</li> <li>5. Check seal on recovery tank</li> <li>6. Close, repair or replace drain plug in recovery tank.</li> </ol>
Water spill from squeegee	<ol style="list-style-type: none"> <li>1. Side squeegee blades, poor contact with floor</li> <li>2. Squeegee blades worn or damages</li> <li>3. Too much solution being applied before making turns</li> <li>4. Brushes rotating opposite direction</li> </ol>	<ol style="list-style-type: none"> <li>1. Readjust blades for proper contact</li> <li>2. Replace or adjust</li> <li>3. Shut off solution flow 5' to 10'</li> <li>4. Check position of switches.</li> </ol>
Lack or suction at rear	<ol style="list-style-type: none"> <li>1. Clogged suction hose or pick up tool</li> <li>2. Loose connections between suction hose and squeegee or between hoses or manifold inlet.</li> <li>3. Vacuum motor not operating</li> <li>4. Vacuum float cage clogged</li> <li>5. Vacuum float shut off</li> </ol>	<ol style="list-style-type: none"> <li>1. Disconnect suction hose from squeegee; flush squeegee &amp; hoses.</li> <li>2. Check all hose connections for looseness or damage.</li> <li>3. Check hydraulic motor in recovery</li> <li>4. Clean perforated metal thoroughly</li> <li>5. Excessive solution in recovery drain tank. Excessive foam build up, change cleaning chemical mixture. Use A-L approved materials.</li> </ol>

## GENERAL TROUBLESHOOTING

<b>PROBLEM</b>	<b>PROBABLE CAUSE</b>	<b>REMEDY</b>
Poor scrubbing	<ol style="list-style-type: none"> <li>1. Worn scrubbing brushes</li> <li>2. Incorrect method of operation</li> <li>3. Wrong cleaning agent or mixture</li> <li>4. Poor solution distribution</li> </ol>	<ol style="list-style-type: none"> <li>1. Inspect brushes. If worn to ½" (1.3cm) or less, replace all 3 brushes</li> <li>2. Check scrubbing procedures, brush pressure, type of brush, solution flow, &amp; cleaning chemical used. For extreme conditions double scrubbing may be necessary.</li> <li>3. Use A-L recommended materials</li> <li>4. Clean out distribution tube &amp; metering holes to brushes. Check feed hose &amp; clean if necessary. Check valve &amp; cable control system.</li> </ol>
Engine runs, but machine will not move on level ground	<ol style="list-style-type: none"> <li>1. Foot pedal and/or linkage jammed or not adjusted</li> <li>2. Front wheels jammed or brakes locked</li> <li>3. Hydraulic pump trouble</li> <li>4. Rear wheel hydraulic motor, broken shaft key, broken shaft, ect.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check pedal linkage</li> <li>2. Check wheels and brakes</li> <li>3. Check &amp; repair pump, check tow valve. See CESSNA information.</li> <li>4. Check &amp; repair. See Char-Lynn information</li> </ol>
Machine moves slowly	<ol style="list-style-type: none"> <li>1. Low hydraulic oil level</li> <li>2. Brake dragging</li> <li>3. Hydraulic oil temp, too high</li> <li>4. Worn hydraulic pump or drive wheel motor</li> </ol>	<ol style="list-style-type: none"> <li>1. Add oil to reservoir</li> <li>2. Check brakes</li> <li>3. Check oil level, add SAE 5 (FORD Type F) ATF, if required</li> <li>4. See hydraulic CESSNA</li> </ol>
Hydraulic pump making excessive noise	<ol style="list-style-type: none"> <li>1. Clogged inlet strainer or suction line</li> <li>2. Air bubbles in hydraulic fluid</li> <li>3. Hydraulic pump is worn or damaged</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean inlet strainer. Drain &amp; flush reservoir, if oil is dirty. Refill with clean SAE 5 (FORD Type F) ATF.</li> <li>2. Check for low hydraulic fluid level, leaking fittings or hoses</li> <li>3. See CESSNA Pump Section</li> </ol>

Parts may be ordered from American-Lincoln authorized distributors. Record the information from the American-Lincoln serial plate to avoid delays in filling your order:



1. Use the model number, catalog number, and serial number when ordering.
2. Give the part number, description, and quality of parts needed.
3. Give shipping instructions for either freight, UPS, or parcel post.

Parts and supplies listed in this manual can be ordered from the following address:

<p><b>American-Lincoln</b></p>	<p><b>American-Lincoln authorized distributor</b></p>
<p>1100 Haskins Road Bowling Green, Ohio 4302 1-800-331-7692</p>	

**MACHINE CATALOG NUMBERS**

<p>505-237 505-238</p>	<p>SR7770 GAS SCRUBBER (FORD LRG 425) Sr7770 LP SCRUBBER (FORD LRG 425)</p>
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## TABLE OF CONTENTS - CHAPTER 2

Front Tank .....	2-2
Scrub Deck 60" .....	2-4
Scrub Deck Lift .....	2-6
Transfer Pump .....	2-7
Recovery Transfer .....	2-8
Lower Doors Group .....	2-9
Rear and Side Squeegees .....	2-10
Squeegee Lift .....	2-12
Swing Squeegee Support .....	2-14
Solution Tank .....	2-16
Solution Control Group .....	2-18
Recovery Tank Lid .....	2-20
Vacuum Motor & Float .....	2-22
Recovery Tank .....	2-24
Front Bumper Group .....	2-26
Front Wheel and Brake .....	2-27
Rear Wheel .....	2-28
Brake Linkage .....	2-30
For/Rev Control – Ford .....	2-32
Main Frame .....	2-34
Driver Compartment .....	2-36
Console Group .....	2-38
Instrument Panel (Gas) .....	2-40
Instrument Panel (LP) .....	2-42
Squeegee, Scrub Deck, Steering Cylinders and Fittings .....	2-44
Rear Wheel Motors and Fittings .....	2-45
Hydraulic Reservoir, Filter, and Fittings .....	2-46
Drive Pump and Fittings .....	2-48
Vacuum Motor & Oil Cooler .....	2-49
Power Steering Unit and Fittings .....	2-50
Return Manifold and Fittings .....	2-51
Main Control Valve & Fittings .....	2-52
Auxiliary Pump and Fittings - Ford .....	2-53
Hydraulic Hose System .....	2-54
Battery .....	2-58
Engine Cover .....	2-60
Fuel Tank .....	2-62
LP Tank .....	2-64
Ford Gas Engine .....	2-66
Ford LP Engine .....	2-70
Radiator & Shroud .....	2-74
Decals .....	2-76
Notes .....	2-78
Connection Diagram, Gas Control Panel .....	2-79
Connection Diagram, LP Control Panel .....	2-80
Connection Diagram, Engine Electrical (Gas & LP) .....	2-81
Electrical Schematic .....	2-82
Electrical Schematic (Con't) .....	2-83
Electrical Schematic (Con't) .....	2-84
Hydraulic Schematic .....	2-85

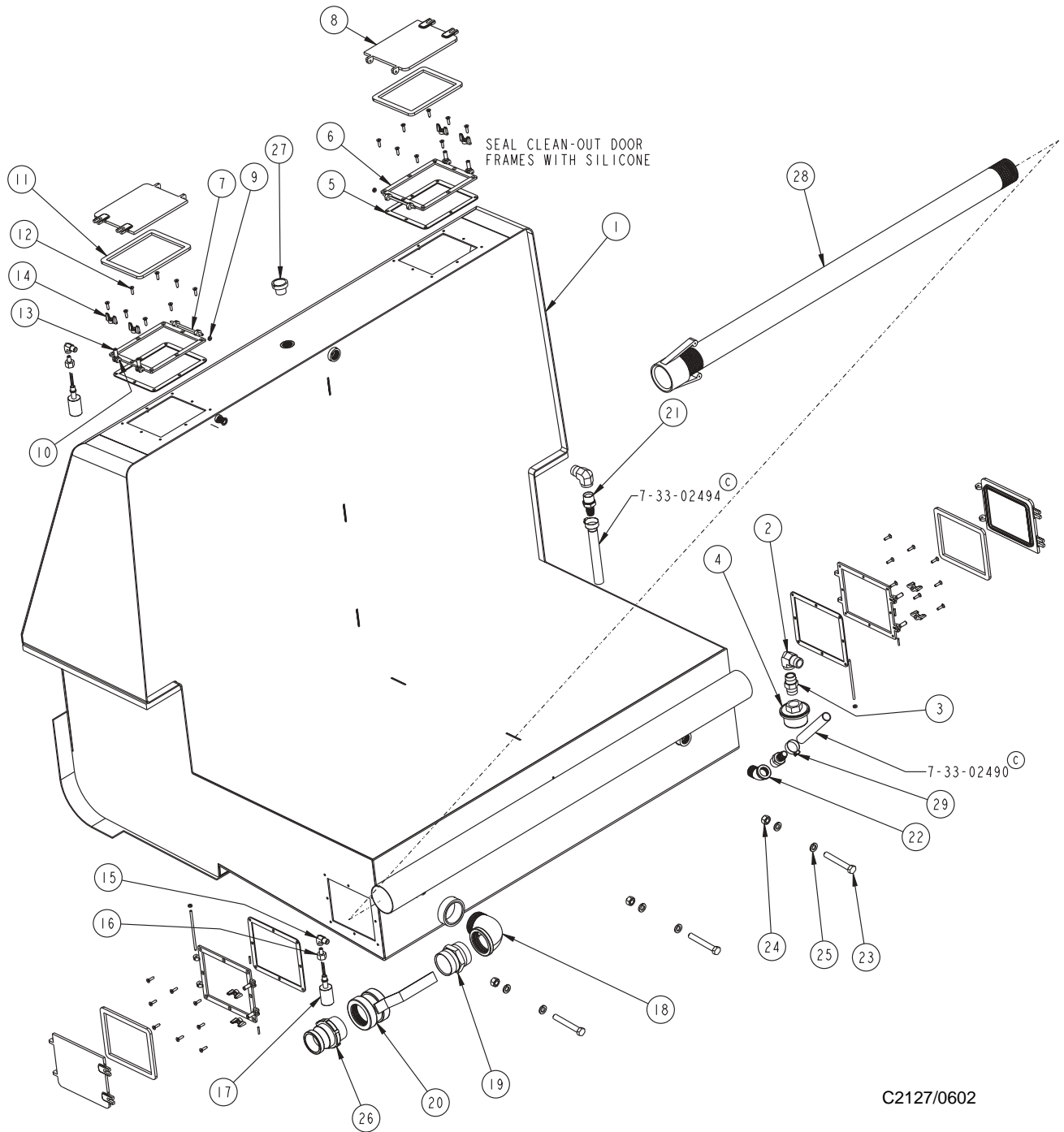
## FRONT TANK - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-83-04196	Tank Weldment	1
2	2-00-05672	Fitting, 3/4 NPT Street Elbow 90° Brass	2
3	2-00-05668	Fitting, 3/4 NPT Nipple Brass	1
4	7-24-04034	Stainer	1
5	7-29-00016	Gasket, Cleanout Door Frame	4
6	7-27-07016	Frame, Cleanout Door	4
7	7-55-08016	Pin, Cleanout Door Hinge	4
8	7-19-08002	Door, Cleanout	4
9	2-00-02325	Nut, Cap #10-32 x .410 x x.375	4
10	2-00-01475	Pin, 1/8 x 3/4 Spring Pin	8
11	7-29-00015	Gasket, Cleanout Door Frame	4
12	7-80-05004	Stud, Cleanout Door Lock	8
13	2-00-00668	Nut, Wing	8
14	2-00-05678	Fitting, 1/4" NPT Street Elbow 90° Brass	2
15	2-00-05465	Adapter, 1/4 Female x 1/8 Male	2
16	7-82-00017	Switch Liquid Level	2
17	2-00-05682	Fitting, 2" NPT Street Elbow 90° Brass	1
18	2-00-05683	Fitting, 2" NPT Nipple Brass	1
19	7-88-00096	Valve, Ball 2" NPT Female-Female Brass	1
20	2-00-05660	Fitting, 3/4" NPT Hose Barb, STR Brass	2
21	2-00-05679	Fitting, 3/4" NPT Street Elbow, 45° Brass	1
22	2-00-02617	Screw, 1/2-13 x 3.5 LG SS	3
23	2-00-00596	Nut, 1/2"	3
24	2-00-2312	Lock Washer, 1/2"	6
25	2-00-05684	Fitting, 2" NPTM Cam Coupling Adapter	1

C2127/0602

# FRONT TANK - EXPLODED VIEW



C2127/0602

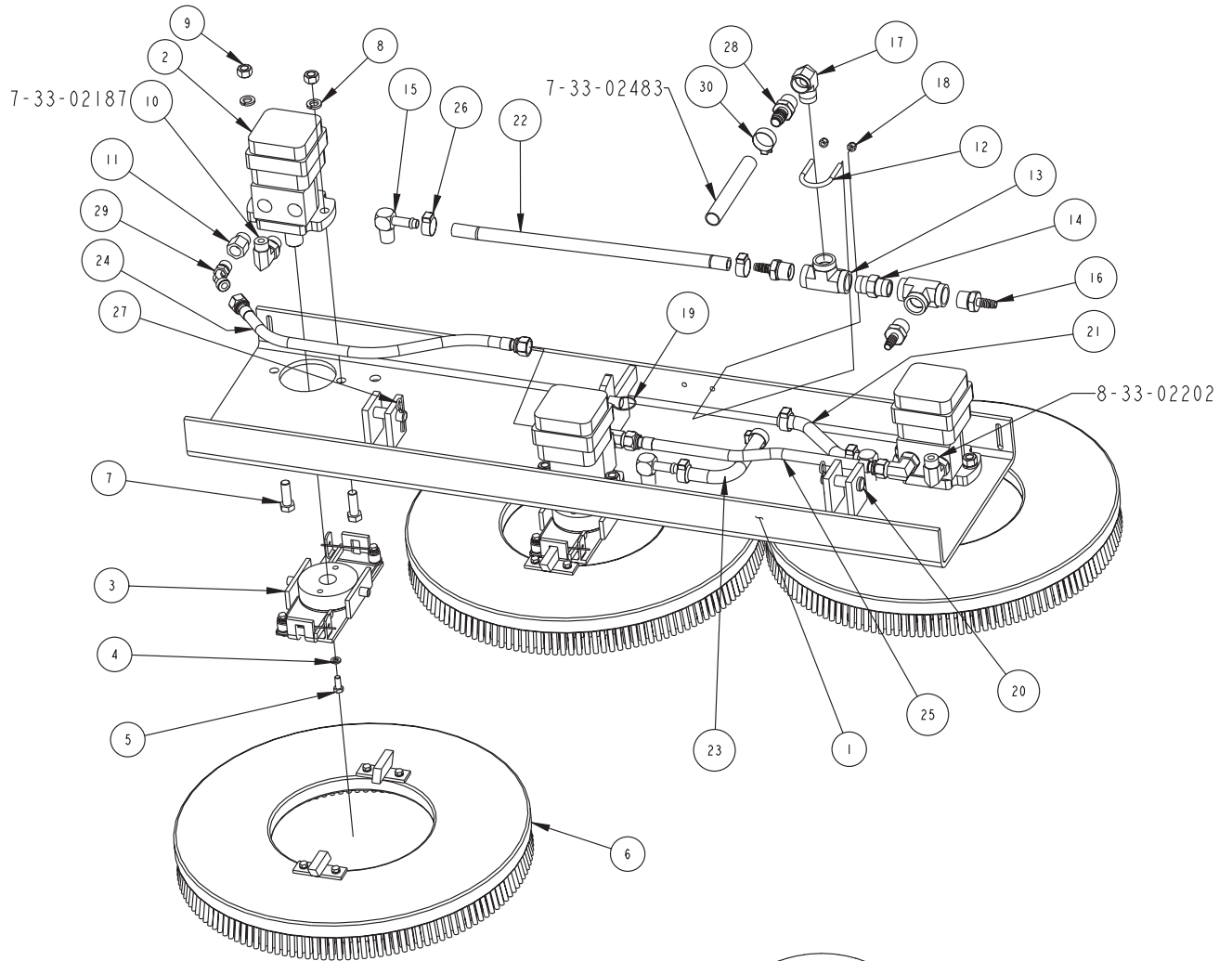
## SCRUB DECK 60" - PARTS LIST

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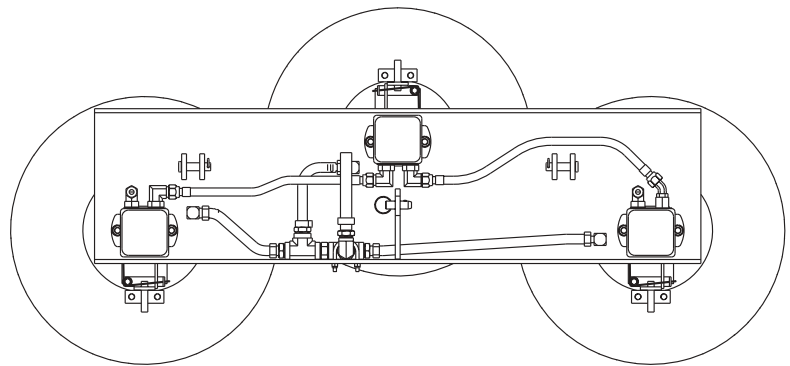
<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-27-07194	Scrub Deck, 60"	1
2	0782-111	Motor, Hydraulic Brush Drive	3
3	0702-069	Scrub Brush Hub, 9.5 DIA	3
4	2-00-00530	Lock Washer	3
5	2-00-05087	Screw, HSHC .31-18 x .75 Nylok	3
6	0765-275	Scrub Brush, 20.75 DIA	3
7	2-00-01254	Screw, HHCS 1/2-13x1.50	6
8	2-00-02312	Lock Washer, 1/2	6
9	2-00-00596	Nut, 1/2	6
10	2-00-04974	Fitting, 10 SAE 90° - 8 ORS	6
11	2-00-04990	Fitting, 10 SAE - 8 ORS	1
12	8-13-07003	U-Bolt, 1/4-20	1
13	2-00-05662	Fitting, 3/4 NPT Female Tee Brass	2
14	2-00-05668	Fitting, 3/4 NPT Nipple Brass	1
15	2-00-04723	Fitting, 1/2 NPT x 1/2 Hose Barb 90° Elbow	3
16	2-00-05681	Fitting, 3/4 NPT - 1/2 Hose STR Brass	3
17	2-00-05672	Fitting, 3/4 NPT Street Elbow 90° Brass	1
18	2-00-00641	Nut, Fiber Insert 1/4-20	2
19	7-55-08151	Pin, Lock up	1
20	7-55-08119	Pin, Lift	2
21	7-33-02441	Hose, Solution Feed 1/2 ID x 7.8	1
22	7-33-02442	Hose, Solution Feed 1/2 ID x 16.8	1
23	7-33-02443	Hose, Solution Tube 1/2 ID x 6.2	1
24	7-33-02545	Hydraulic Hose, ORS 8 STR Ends 16.5"	1
25	7-33-02444	Hydraulic Hose, ORS 8 STR Ends 15.5"	2
26	2-00-03407	Hose Clamp Witteck #10P	6
27	2-00-05320	Hairpin, Cotter	2
28	2-00-05660	Fitting, 3/4 NPT Hose Barb STR Brass	1
29	2-00-04975	Fitting, 8 SAE 45° Elbow	1
30	2-00-02220	Hose Clamp	1

C2130/0702

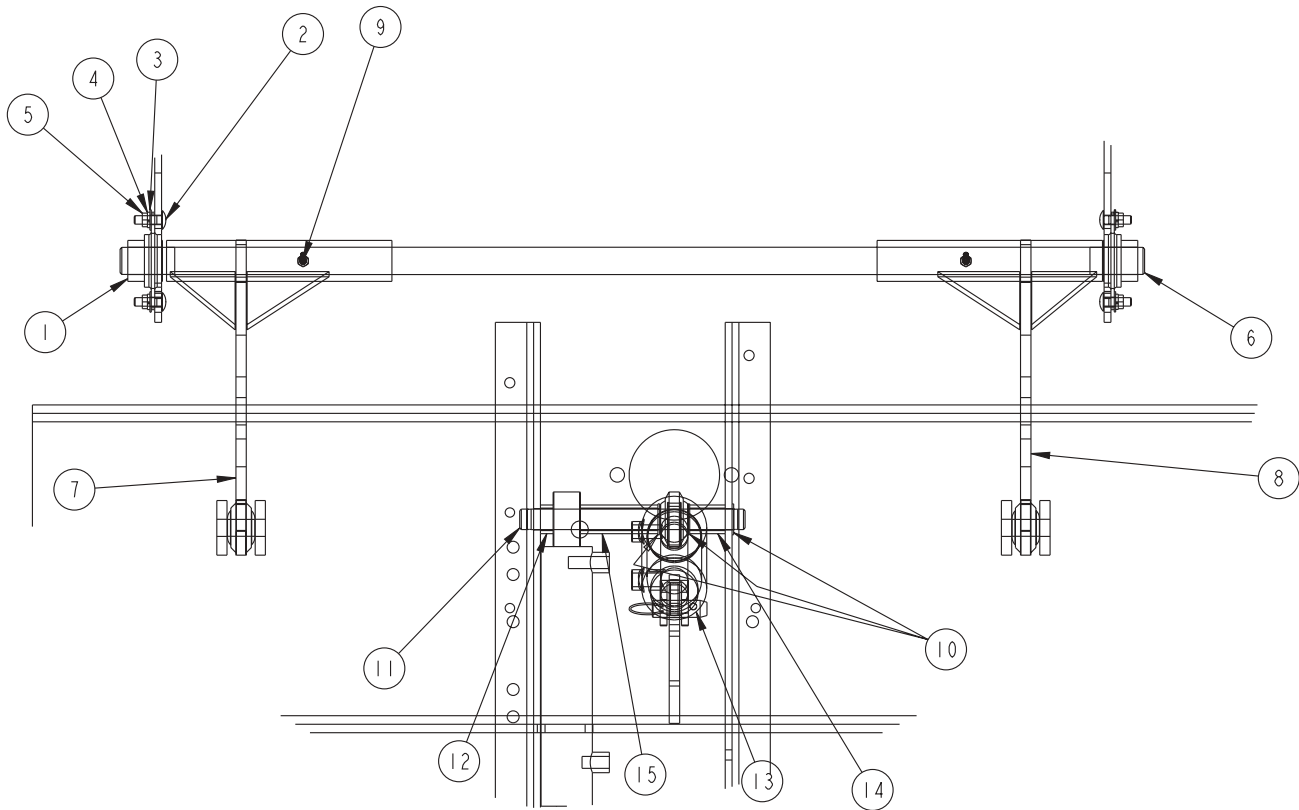
# SCRUB DECK 60" - EXPLODED VIEW



C2130/0702



# SCRUB DECK LIFT

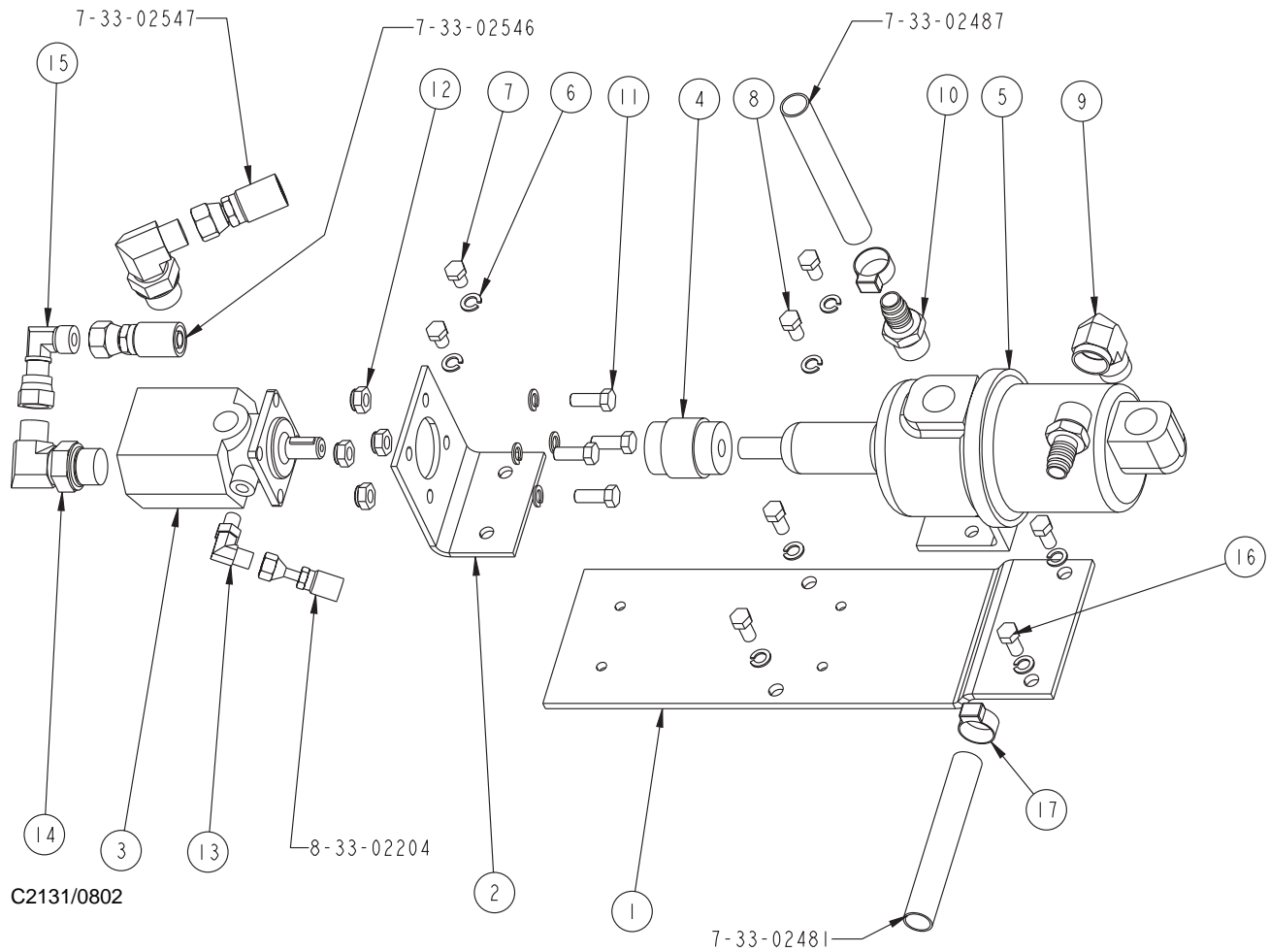


C2128/0602

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	2-00-03997	Bearing, Flangette	2
2	2-00-00196	Bolt, Carriage .31-18 x 1 GR 5ZN	4
3	2-00-05103	Flat Washer	4
4	2-00-00530	Lock Washer	4
5	2-00-00586	Nut, Jam 5/16-18	4
6	7-70-05137	Shaft	1
7	7-03-04231	Arm, Scrub Deck Lift Left	1
8	7-03-04232	Arm, Scrub Deck Lift Right	1
9	2-00-02558	Grease Fitting	2
10	2-00-00432	Flat Washer 3/4" ID	3
11	7-55-08118	Cylinder Pin	1
12	7-75-01093	Spacer	1
13	7-17-05023	Cylinder, 2" Bore x 5" Stroke 11.25 Retracted	1
14	7-75-01091	Spacer	1
15	7-75-01092	Spacer	1

C2128/0602

# TRANSFER PUMP



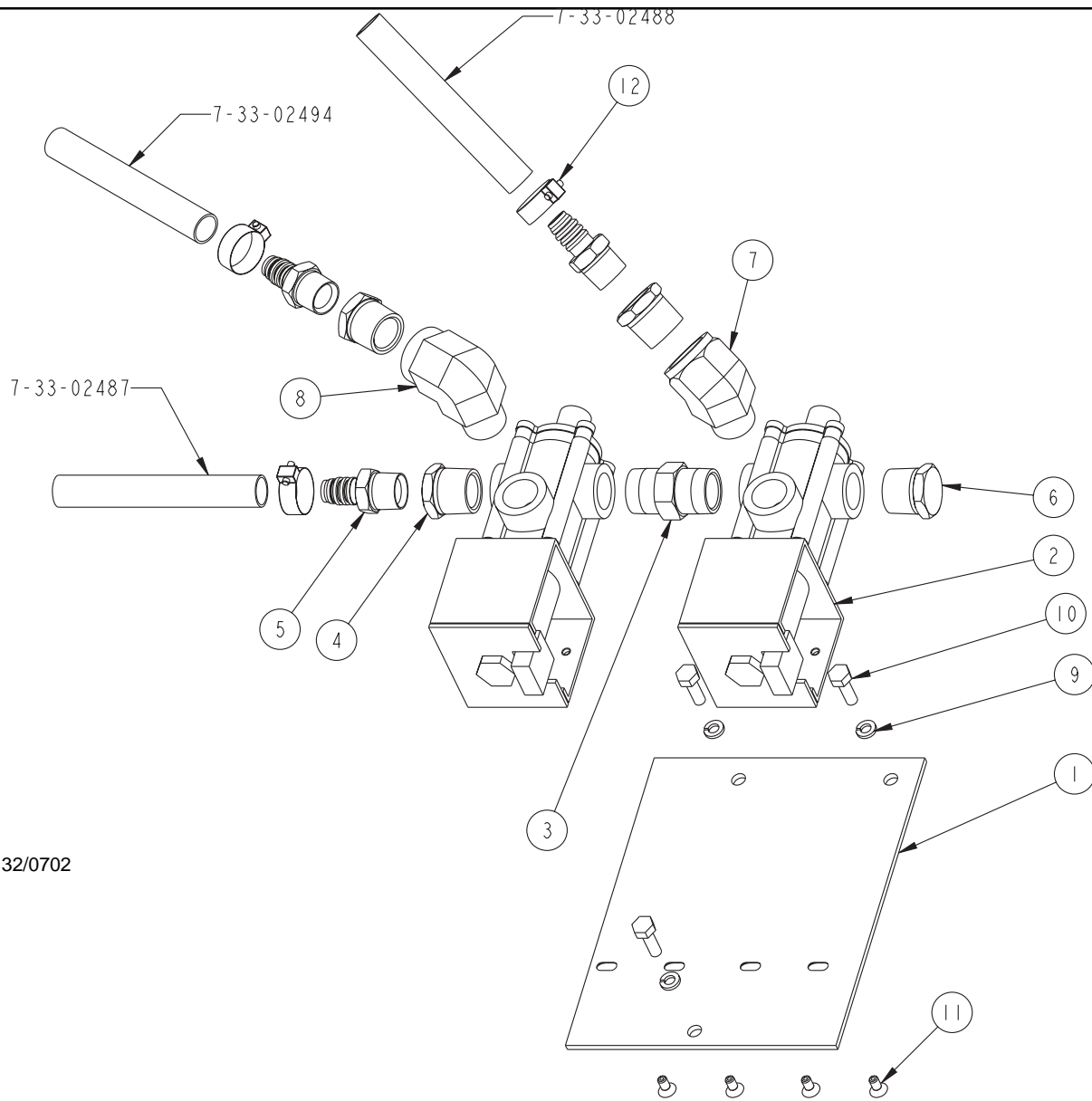
C2131/0802

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-08-01104	Bracket, Transfer Pump	1
2	7-08-01103	Bracket, Transfer Pump Motor	1
3	0782-116	Hydraulic Motor, MTE	1
4	7-16-05021	Coupling, Flex	1
5	7-60-05007	Pump, Progressive Cavity	1
6	2-00-02310	Washer, Lock 3/8" Helical Spring	12
7	2-00-00229	Bolt, Hex Head, Finished 3/8-16 x .50	4
8	2-00-00231	Screw, 3/8-16 x .625 HHC	2
9	2-00-05672	Fitting, 3/4" NPT Street Elbow 90° Brass	1
10	2-00-05660	Fitting, 3/4" NPT Hose Barb, STR, Brass	2
11	2-00-00233	Screw, HHC .375-16 x 1 GR ZN	4
12	2-00-00643	Locknut, Elastic 3/8-16	4
13	2-00-04892	Fitting, 90° Elbow (O-Ring)	1
14	2-00-04922	Fitting, -8 ORS - 10 SAE, Elbow, 90	2
15	2-00-05046	Fitting, -8 ORS Swivel 90° Elbow	1
16	2-00-00232	Hex Head Bolt, HHC 3/8-16 x .75 GR5 ZN	4
17	2-00-03407	Clamp, Hose	2

C2131/0802



# RECOVERY TRANSFER

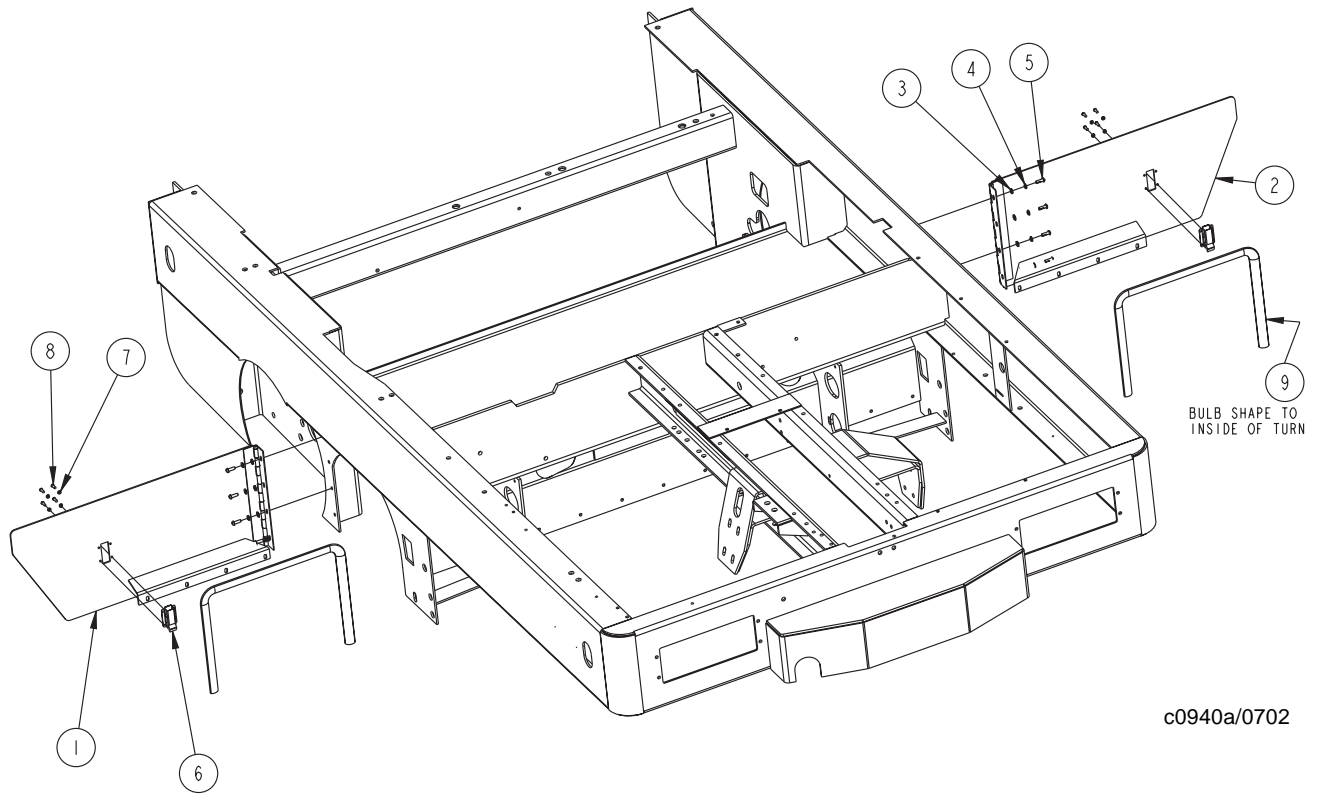


C2132/0702

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-08-01090	Bracket, Recovery Valve	1
2	7-88-00093	Valve, Solution Control #145-1	2
3	2-00-05658	Fitting, 1" NPT x 2.34 Long Nipple Brass	1
4	2-00-05659	Fitting, 1" NPT x 3/4 Reducer Bushing Nylon	3
5	2-00-05660	Fitting, 3/4 NPT Hose Barb STR Brass	3
6	2-00-05655	Fitting, 1" NPT Hex Plug Nylon	1
7	2-00-05661	Fitting, 1" NPT Street Elbow 45° Brass	1
8	2-00-05654	Fitting, 1" NPT Street Elbow 90° Brass	1
9	2-00-00530	Lock Washer	3
10	2-00-02708	Screw, Hex Head 5/16-18 x 1.00	3
11	2-00-00001	Screw, 1/4-20 x .50 FHM	4
12	2-00-02220	Clamp, Hose	3

C2132/0702

## LOWER DOORS



c0940a/0702

<b>KEY NO.</b>	<b>PART NUMBER</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	7-19-08052	Door, LH Broom Chamber	1
2	7-19-08053	Door, RH Broom Chamber	1
3	2-00-00407	Flat Washer, 1/4	8
4	2-00-00518	Lock Washer, 1/4 Helical Spring	8
5	2-00-04880	Screw, 1/4-20 x .75 BHS GR 8 ZN	8
6	8-41-00032	Latch, Flush Mount	2
7	2-00-00529	Lock Washer, #8	8
8	2-00-01081	Screw, #23 TC PH RD HD	8
9	7-29-00226	Gasket, Broom Door	2

c0940a/0702

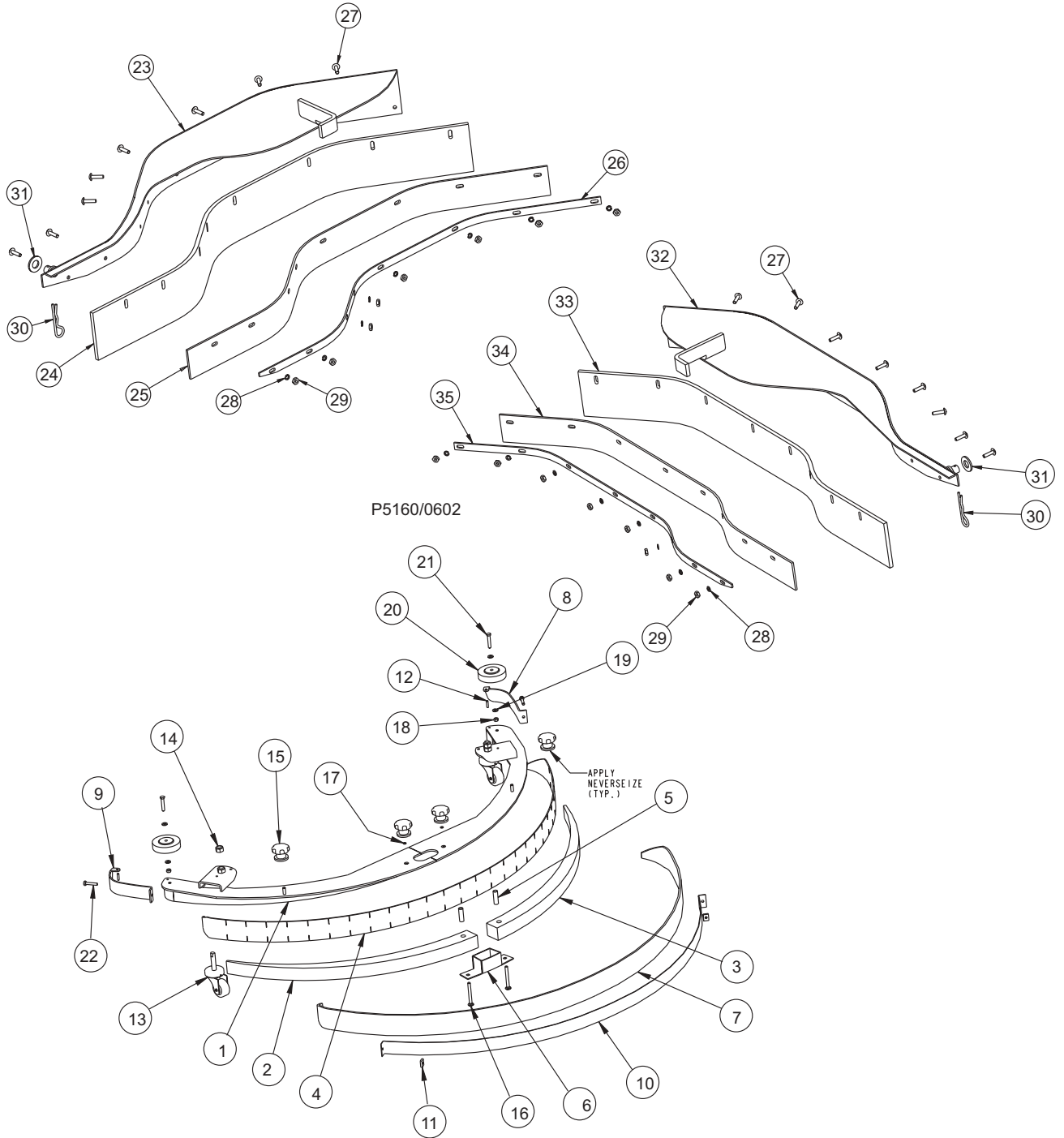
## REAR & SIDE SQUEEGEE - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-86-08061	Squeegee Welded Frame, 60" Offset	1
2	7-75-01191	Spacer, Squeegee 60" Offset (Left)	1
3	7-75-01218	Spacer, Squeegee 60" Offset (Right)	1
4	7-77-00138	Rubber, Inner Squeegee, 60" Offset	1
5	7-75-01164	Bushing, Spacer	2
6	7-20-06009	Duct, Squeegee Inlet Weldment	1
7	7-77-00139	Rubber, Outer Squeegee, 60" Offset	1
8	7-13-07218	Clamp, RH Squeegee End 60" Offset	1
9	7-13-07217	Clamp, LH Squeegee End 60" Offset	1
10	7-79-00100	Strap, Squeegee Clamp 60" Offset	1
11	7-13-07156	Nut, Clamp	2
12	2-00-03842	Pin, Roll 1/4 x 1	2
13	7-89-08073	Caster	2
14	2-00-00615	Nut, Hex 5/8-11	2
15	7-39-00026	Knob, Squeegee	4
16	2-00-05343	Bolt, Carriage 3/8-16 x 4.0"	2
17	2-00-04962	O-Ring	2
18	2-00-02360	Nut, Hex 3/8-16	2
19	2-00-00402	Washer, 25/64 ID x 3/4 OD	4
20	2-14-00184	Wheel	2
21	2-00-00216	Bolt, Hex Head 3/8-16 x 2"	2
22	2-00-05344	Bolt, Hex 5/16-18 x 1.75"	2
23	7-86-08059	Side Squeegee Weldment, Right	1
24	7-77-00163	Squeegee Rubber RH Soft	1
25	7-77-00154	Squeegee Rubber RH Hard	1
26	7-13-07220	Clamp, Right Side Squeegee Rubber	1
27	2-00-03063	Screw, #10-24 x .75 Round Head	16
28	2-00-04686	Washer, #10 Split Lock	16
29	2-00-00605	Nut, #10-24 Hex	16
30	2-00-05320	Hairpin Cotter	2
31	2-00-00405	Flat Washer, 1.063 x .531 x .094	2
32	7-86-08058	Side Squeegee Weldment, Left	1
33	7-77-00151	Squeegee Rubber, LH Soft	1
34	7-77-00152	Squeegee Rubber, LH Hard	1
35	7-13-07219	Clamp, Left Side Squeegee Rubber	1

P-5160/0602

# REAR & SIDE SQUEEGEE - EXPLODED VIEW



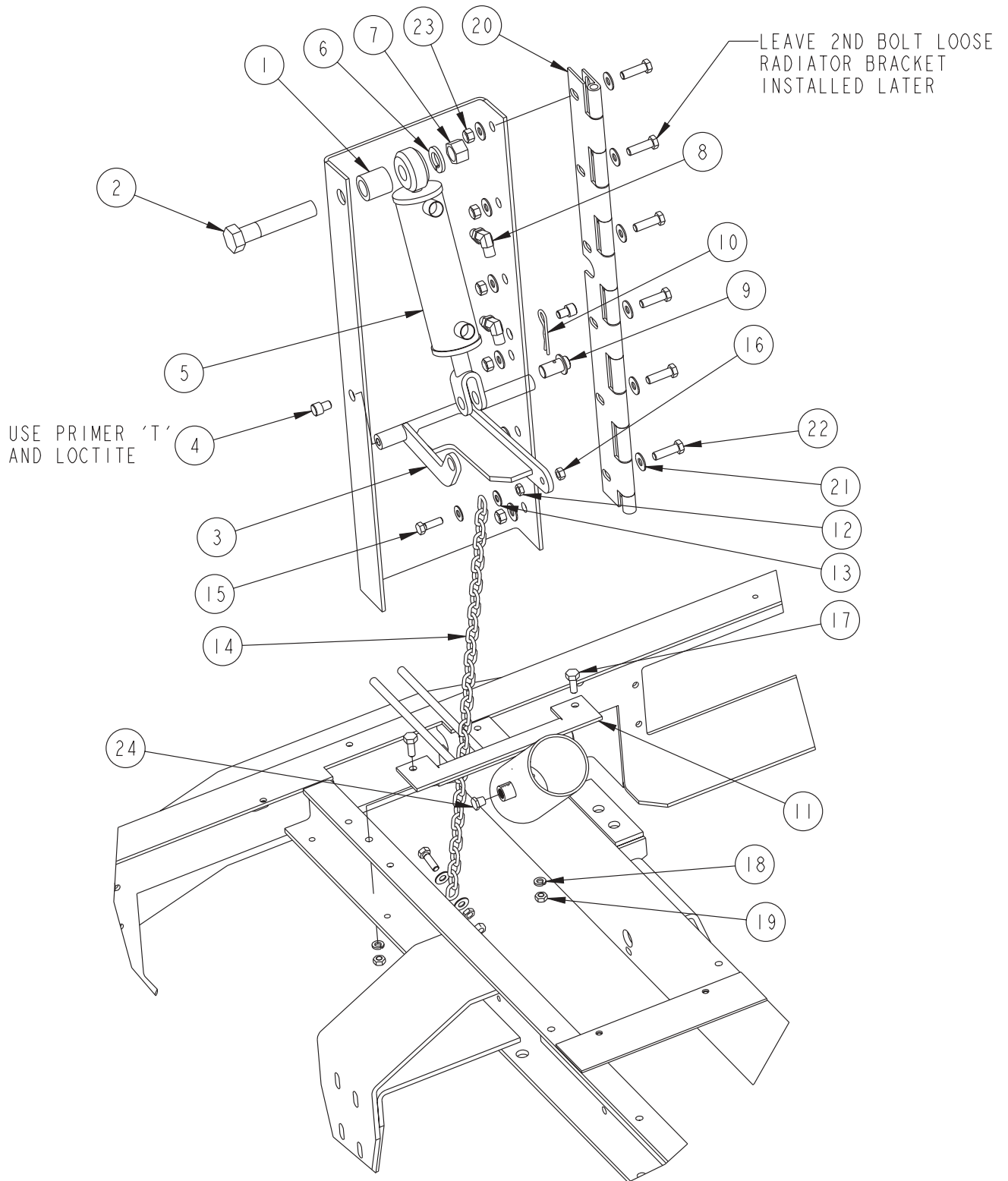
## SQUEEGEE LIFT - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-75-01166	Spacer	1
2	2-00-05345	Screw, 3/4-10 x 4.00 HHC	1
3	7-17-00013	Squeegee Lift Arm	1
4	2-00-04886	Set Screw, 3/8-16 x .500	2
5	7-17-05019	Lift Cylinder	1
6	2-00-00522	Lock Washer 3/4 Helical Spring	1
7	2-00-03293	Nut, Hex Finish, .75-10	1
8	2-00-04892	Fitting, 90°	2
9	7-55-08147	Pin Assembly	1
10	2-00-05320	Hair Pin	1
11	7-08-01124	Bracket, Rar Squeegee Vacuum	1
12	2-00-00586	Jam Nut 5/16-18	2
13	2-00-05103	Flat Washer .750 x .343 x .50	4
14	7-13-05074	Chain - Squeegee Lift	1
15	2-00-05356	Screw - HHC .313-18 x 1.25 Grade 8	2
16	2-00-00644	Hex Nut - 5/16-18, Insert Fiber	2
17	2-00-01255	Bolt, Hex Head 5/16-18	2
18	2-00-00530	Lock Washer 5/16	2
19	2-00-00585	Hex Nut 5/16-18	2
20	7-32-00022	Hinge	1
21	2-00-00410	Flat Washer, .875 x .375 x .060	12
22	2-00-00209	Hex Bolt, 3/8-16 x 1.250 HHC	6
23	2-95-04182	Hex Nut, Stop 3/8-16	6
24	2-00-02471	Fitting, Hex Plug	1

C0927a/0702

# SQUEEGEE LIFT - EXPLODED VIEW



C0927a/0702

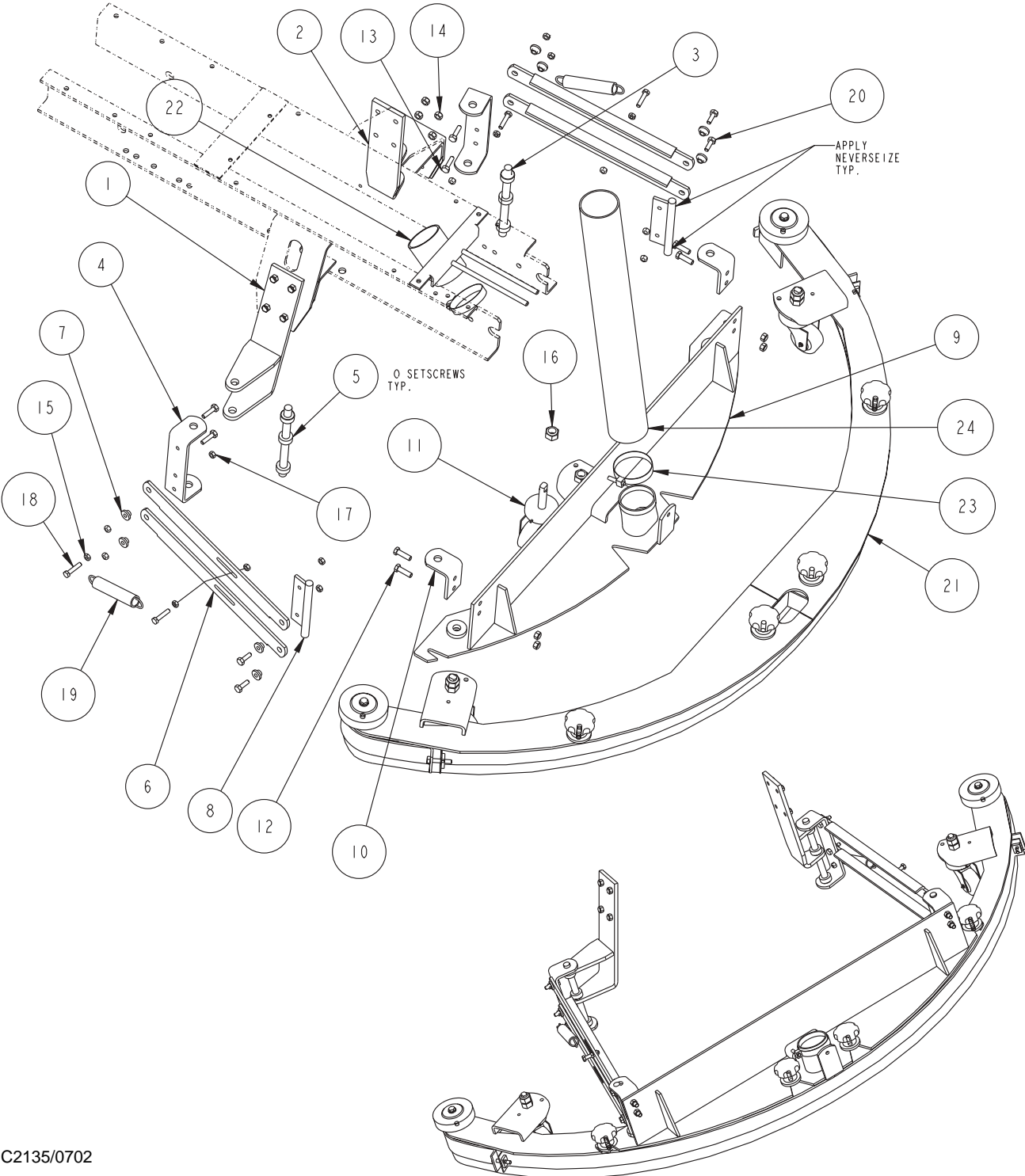
## SWING SQUEEGEE SUPPORT - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-08-00837	Weldment - Bracket LH	1
2	7-08-00838	Weldment - Bracket RH	1
3	7-70-05174	Shaft	2
4	7-81-00185	Support - Squeegee	2
5	8-15-01002	Locking Collar	6
6	7-03-04233	Arm - Squeegee Swing	4
7	7-09-01057	Bushing	8
8	7-55-08144	Weldment - Pin Assembly	2
9	7-86-08039	Weldment - Squeegee Support	1
10	7-08-00839	Bracket - Angle	2
11	7-89-08073	Wheel - Caster	1
12	2-00-00209	Hex Head Bolt, 3/8-16 x 1.250 HHC	4
13	2-00-00207	Screw, Hex Head 5/16-18 x 1.25	4
14	2-95-04182	Nut, Hex Stop 3/8-16	12
15	2-00-00585	Nut, Hex 5/16-18	4
16	2-00-00615	Nut, Hex 5/8-11	1
17	2-00-00644	Nut, Hex Insert Fiber 5/16-18	12
18	2-00-00225	Screw, Hex Head 5/16-18 x 1.00	4
19	7-76-00114	Spring	2
20	2-00-02708	Screw, Hex Head, 5/16-18 x 1.00	4
21	Ref.	Rear Squeegee Assy 60" Offset	1
22	7-08-01124	Bracket, Rear Squeegee Vacuum	1
23	7-13-07104	Clamp, Hose	2
24	7-33-02381	Hose, 3" Vacuum, 23.50" long	1

C2135/0702

**SWING SQUEEGEE SUPPORT - EXPLODED VIEW**



C2135/0702



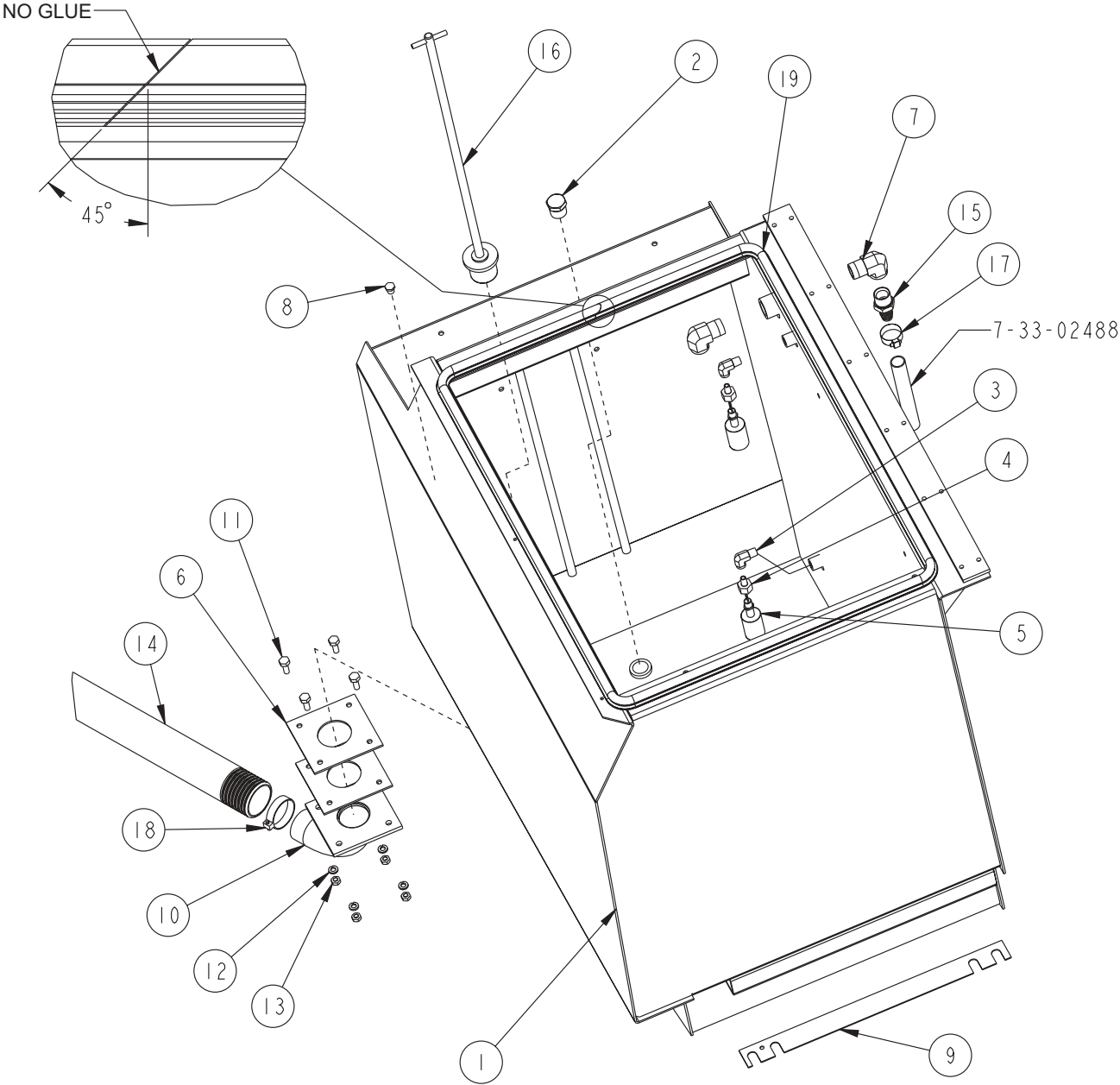
## SOLUTION TANK - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-83-04167	Weldment, Solution Tank	1
2	2-00-05724	Fitting, 3/4 NPT, Hex Plug, Nylon	1
3	2-00-05678	Fitting, 1/4" NPT Street Elbow 90° Brass	2
4	2-00-05465	Adapter, 1/4 Female x 1/8 Male	2
5	7-82-00017	Switch, Liquid Level	2
6	7-29-00100	Gasket, Tank Drain	2
7	2-00-05672	Fitting, 3/4" NPT Street Elbow 90° Brass	2
8	2-00-02471	Fitting, Hex Plug	1
9	7-75-01088	Spacer	2
10	7-25-02046	Fitting	1
11	2-00-01255	Bolt, Hex Head 5/16-18	4
12	2-00-00530	Lock Washer	4
13	2-00-00585	Hex Nut, 5/16-18	4
14	7-33-02335	Hose	1
15	2-00-05660	Fitting, 3/4" NPT Hose Barb STR Brass	1
16	7-25-02095	Drain Plug Assembly	1
17	2-00-02220	Clamp, Hose	1
18	2-00-02216	Clamp, Hose	1
19	7-29-00176	Seal, Solution Tank	1

C2134/0702

**SOLUTION TANK - EXPLODED VIEW**



C2134/0702

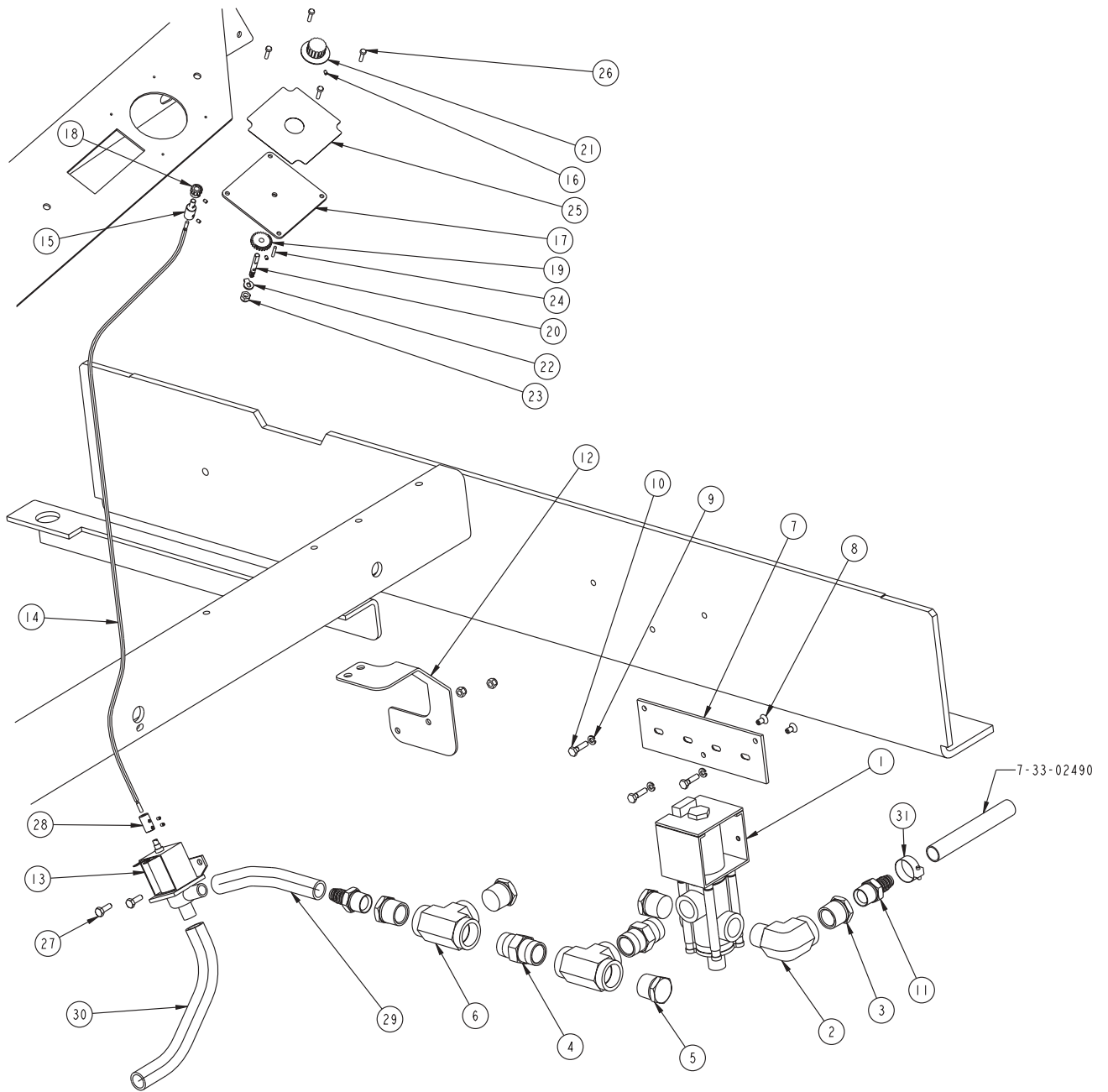
## SOLUTION CONTROL GROUP - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-88-00093	Valve, Solution Control, #145-1	1
2	2-00-05654	Fitting, 1" NPT Street Elbow, 90°, Nylon	1
3	2-00-05659	Fitting, 1" NPT x 3/4" NPT, Reducer Bushing	2
4	2-00-05664	Fitting, 1" NPT, Nipple, Nylon	2
5	2-00-05655	Fitting, 1" NPT, Hex Plug, Nylon	3
6	2-00-05657	Fitting, 1" NPT Female Tee, Nylon	2
7	7-08-01088	Bracket, Solution Valve	1
8	2-00-00001	Screw, 1/4-20 x .50 FHM	2
9	2-00-00518	Lock Washer, 1/4" Helical Spring	3
10	2-00-00244	Screw, 1/4-20 x 1.00 HHC	3
11	2-00-05660	Fitting, 3/4" NPT, Hose Barb, Straight, Brass	2
12	7-08-01089	Bracket, Solution Control Valve	1
13	7-88-00095	Valve, Solution w/adj. backstop, 12 VDC	1
14	7-10-00050	Cable, Solution Control	1
15	7-03-00060	Adapter, Solution Control Cable	1
16	2-00-05652	Screw, #6-32 x .187 Flat Pt Soc Set	6
17	7-52-00183	Panel, Solution Control Knob	1
18	7-29-05046	Gear, Solution Control (.50 PD)	1
19	7-29-05047	Gear, Solution Control (1.00 PD)	1
20	7-70-05204	Shaft, Solution Control Knob	1
21	7-39-00037	Knob, Solution Control	1
22	7-82-05003	Tab, Solution Control Orientation	1
23	2-00-00641	Nut, Fiber Insert 1/4-20	3
24	2-00-01475	Pin, 1/8 x 3/4 Spring	1
25	7-18-00281	Decal, Solution Control	1
26	2-00-05337	Screw, #8-32 x .75 BHSC	4
27	2-00-00221	Bolt, Hex Head, Finished, 1/4-20	2
28	7-03-00061	Adapter, Solution Control Cable	1
29	7-33-02482	Hose, 3/4" ID Heater x 8.0" LG	1
30	7-33-02483	Hose, 3/4" ID Heater x 16.0" LG	1
31	2-00-02220	Clamp, Hose	1

C2133/0802

# SOLUTION CONTROL GROUP - EXPLODED VIEW



C2133/0802

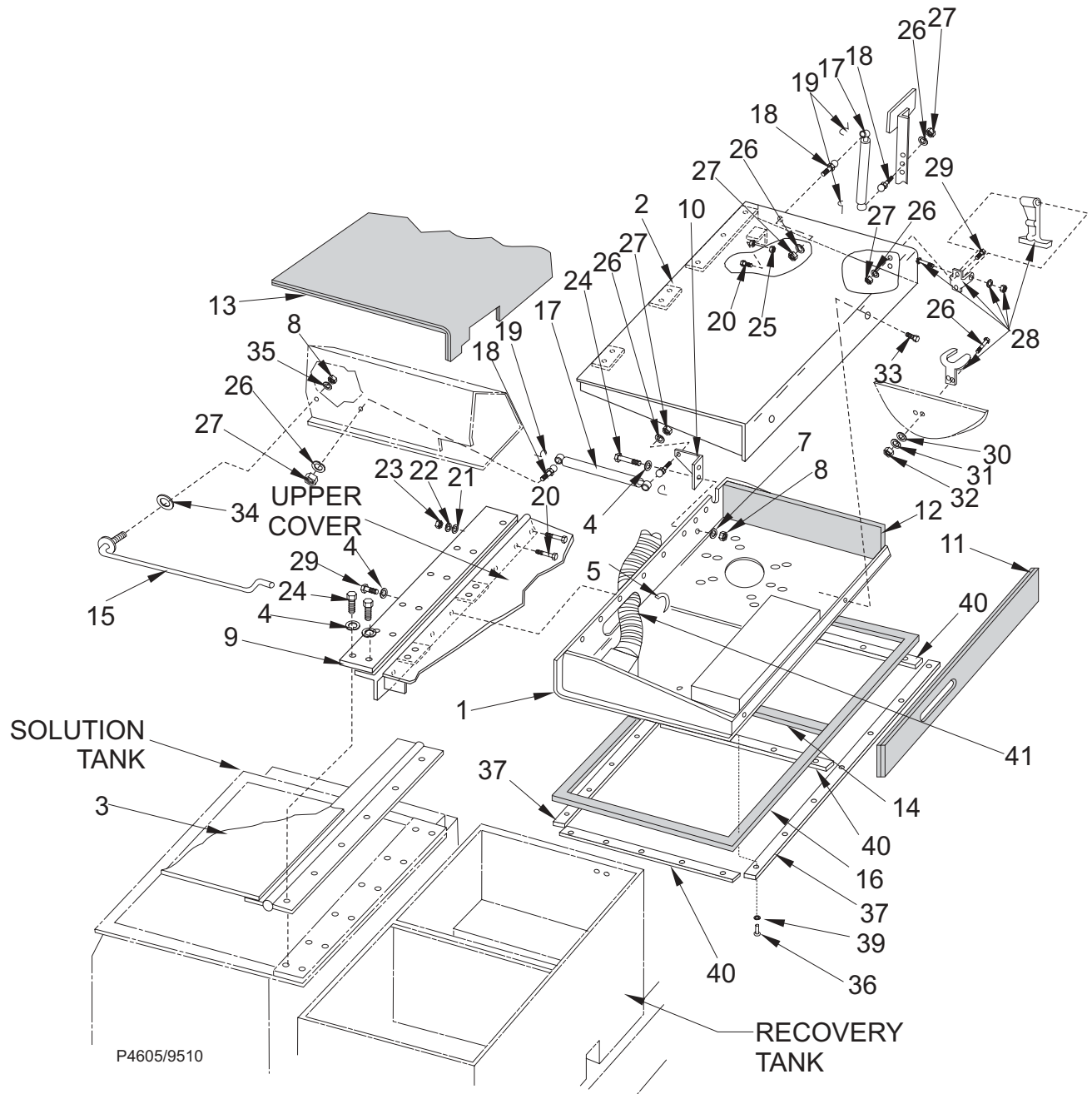
## RECOVERY TANK LID - PARTS LIST

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-16-07380	Recovery Tank Upper Cover	1
2	7-16-07295	Recovery Tank Lower Cover	1
3	7-16-07275	Solution Tank Cover	1
4	2-00-03702	Flat Washer, 1/4	2
5	3-73-00076	Edging	2.33'
6	2-00-01255	Screw, 5-16-18 x .88 HHC	2
7	2-00-01803	Flat Washer, 5/16	6
8	2-00-00644	Nut, Hex Fiber Insert 5/16-18	1
9	7-79-00057	Strap	2
10	7-08-00490	Bracket	1
11	7-34-09020	Lower Cover Insulation	1
12	7-34-09019	Lower Cover Insulation	1
13	7-34-09021	Lower Cover Insulation	1
14	7-29-00229	Gasket, Center Section	1
15	7-66-00145	Cover Support Rod	1
16	7-29-00228	Gasket, Perimeter	1
17	7-76-00104	Gas Spring	2
18	7-80-05067	Stud	4
19	7-13-07102	Clip	4
20	2-00-01254	Screw, 1/2-13 x 1.500 HHC	Ref.
21	2-00-00518	Lock Washer, 1/4	6
22	2-00-00594	Nut, Hex 1/4 - 20 x .437 x .218	2
23	2-00-04876	Screw, 1/4 - 20 x .500 BHS	8
24	2-00-00221	Screw, 1/4 - 20 x .750 HHC	14
25	2-00-00596	Nut, Hex 1/2 - 13 x .750 x .437	Ref.
26	2-00-00530	Lock Washer, Helical Spring 5/16 med	8
27	2-00-00585	Nut, 5/16-18	6
28	8-41-00033	Latch Assembly	1
29	2-00-00118	Screw, #10 - 24 x .625 RHM	4
30	2-00-01974	Sealing Washer, .562 x #10 x .065	2
31	2-00-00519	Lock Washer, Helical Spring #10 Med	4
32	2-00-00605	Nut, Hex MS #10-24 x .375 x .125	4
33	2-00-00208	Screw, 5/16-18 x .750 HHC	2
34	7-23-03048	Spring Washer, .750 x .312 x .013	1
35	2-00-00409	Flat Washer, .687 x .343 x .062	3
36	2-00-04707	Pop Rivet, .125 Dia.	31
37	7-79-00081	Strap, Gasket Retainer	2
38	7-79-00082	Strap, Gasket Retainer	1
39	2-00-00455	Flat Washer #6	31
40	7-79-00087	Strap, Gasket Retainer	2
41	7-33-02321	Vac Hose	1

Key No.s 4, 5 and 6 must be ordered together for proper fit.

P-4605/9809

# RECOVERY TANK LID - EXPLODED VIEW



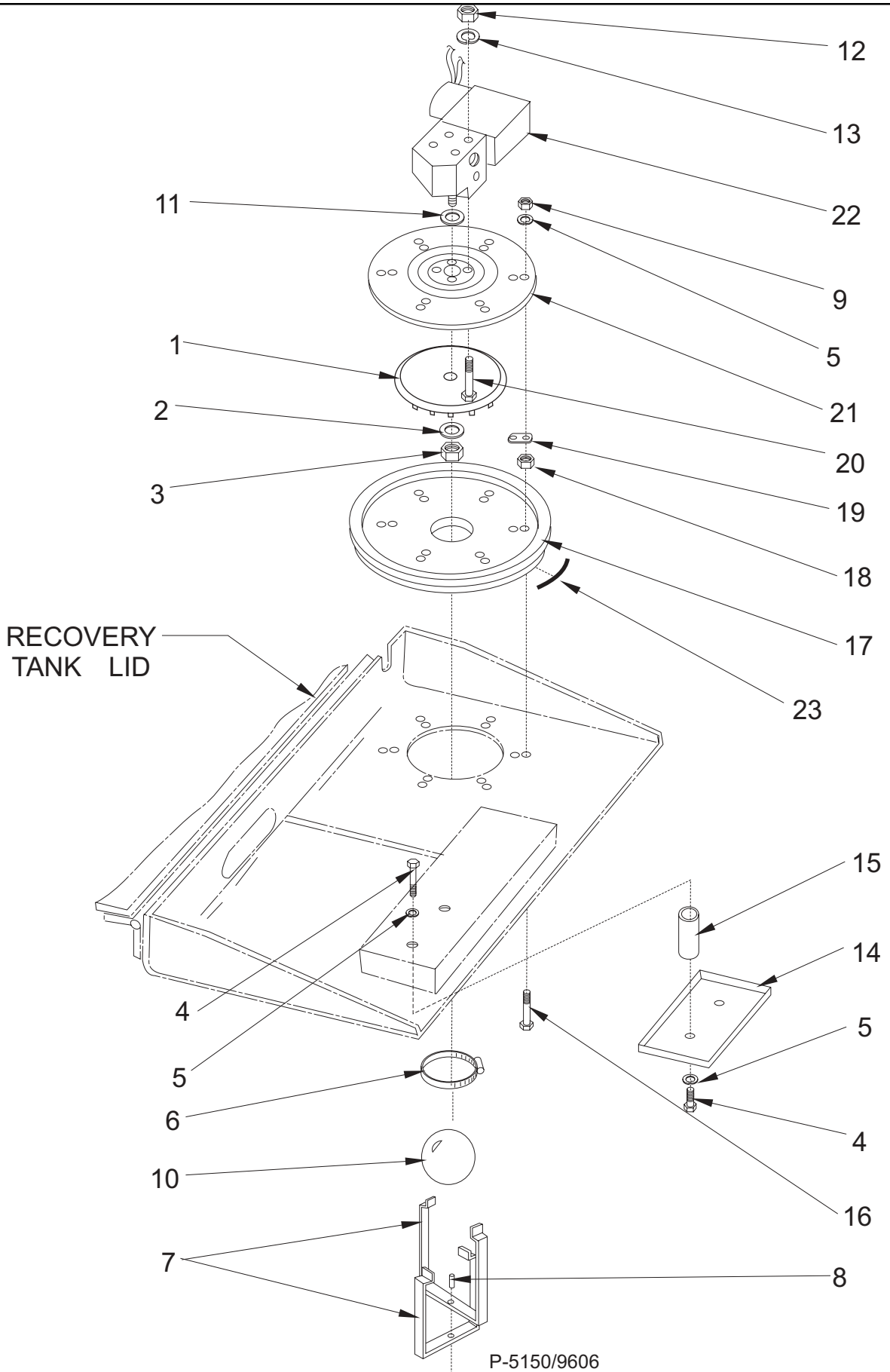
## VACUUM MOTOR & FLOAT - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-34-04002	Impellor	1
2	2-00-00402	Flat Washer, .750 x .390 x .093	1
3	2-00-03412	Nut, Lock 3/8 - 24 x .562 x .281	1
4	2-00-00251	Screw, 1/4 - 20 x .500 HHCBB	4
5	2-00-00518	Lock Washer, Helical Spring 1/4 Med	16
6	2-00-03959	Hose Clamp, 3.562 - 4.500	1
7	7-79-00061	Strap-Float Ball	2
8	2-00-04115	Pop Rivet	1
9	2-00-00594	Nut, Hex 1/4 - 20 x .437 x .218	12
10	7-26-04011	Ball Float	1
11	2-00-00484	Spacer, .625 x .375 x .046	1
12	2-00-00585	Nut, Hex 5/16 - 18 x .50 x .265	4
13	2-00-00530	Lock Washer, Helical Spring 5/16 Med	4
14	7-68-00025	Screen	1
15	7-81-00134	Support	2
16	2-00-00222	Screw, 1/4 - 20 x 1.250 HHC	12
17	7-20-06004	Fan Duct	1
18	2-00-00641	Nut, Hex Fiber Insert 1/4 - 20	12
19	7-75-01159	Spacer	6
20	2-00-02653	Screw, 5/16 - 18 x 3.500 HHC	4
21	7-16-07276	Fan Cover	1
22	0782-136	Vacuum Motor	1
23	7-21-04029	Edging	1
24	2-00-04707	Rivet, 1/8 x .312	31
25	7-79-00081	Strap, Gasket Retainer	2
26	7-79-00082	Strap, Gasket Retainer	1
27	2-00-00455	Flat Washer, #10 Brass	31
28	7-79-00087	Strap, Gasket Retainer	2

P-4721/9609

VACUUM MOTOR & FLOAT - EXPLODED VIEW



P-5150/9606



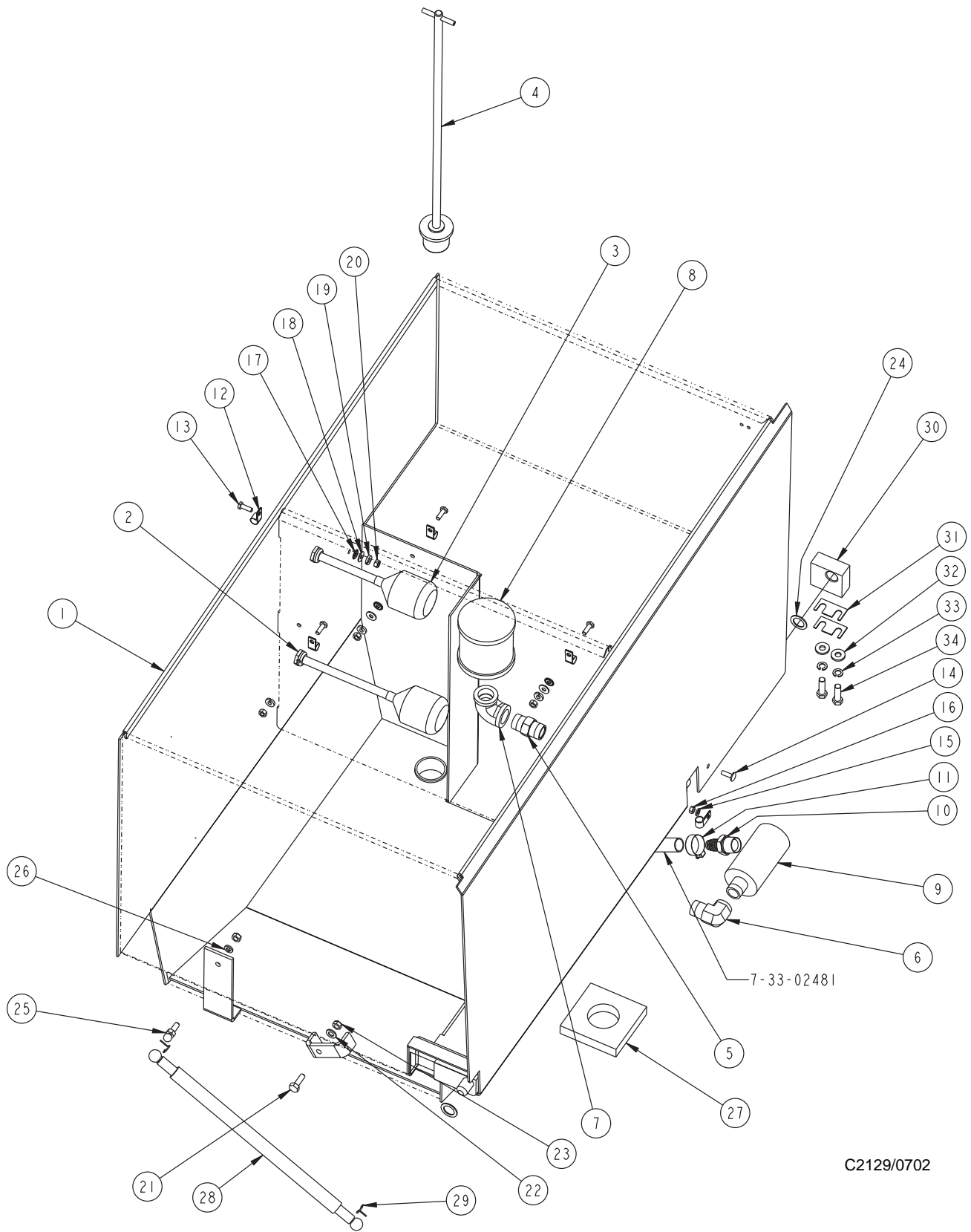
## RECOVERY TANK - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-83-04201	Recovery Tank	1
2	8-09-01083	Connector, Bulkhead	2
3	7-82-00021	Switch Float (Red)	2
4	7-25-02095	Drain Plug Assy	1
5	2-00-05668	Fitting, 3/4" NPT Nipple, Brass	1
6	2-00-05672	Fitting, 3/4" NPT Street Elbow 90°, Brass	1
7	2-00-05665	Fitting, 3/4" NPTF Elbow 90° Brass	1
8	7-24-04022	Strainer, Pump Inlet	1
9	2-00-05667	Fitting, Swivel 3/4 NPT 90° SS	1
10	2-00-05660	Fitting, 3/4 NPT Hose Barb STR Brass	1
11	2-00-02220	Clamp, Hose	1
12	2-00-04602	Clamp	5
13	2-00-04685	Screw, Hex, 1/4-20 x .75 SS	4
14	2-00-00183	Screw, Round Head, 1/4-20	1
15	2-00-00518	Lock Washer, 1/4 Helical Spring	1
16	2-00-00594	Hex Nut, 1/4-20	1
17	2-00-04590	Washer, Sealing	3
18	2-00-04689	Washer, 11/16 OD x .260 ID x .050 THK	3
19	2-00-04687	Lock Washer, 1/4 Helical Spring	4
20	2-00-04688	Hex Nut, 1/4-20 SS	4
21	2-00-00206	Bolt, 5/16-10 3/4 LG	1
22	2-00-00409	Washer, Flat 5/16 SS	1
23	2-00-00644	Hex Nut, 5/16-18 SS	2
24	2-00-00432	Washer, Flat 3/4 ID	2
25	7-80-05067	Stub, Ball, Gas Spring	1
26	2-00-00530	Lock Washer, 5/16	1
27	7-29-00146	Gasket	1
28	7-76-00103	Spring, Gas, Recovery Tank Tilt	1
29	7-13-07102	Clip, Gas spring Safety	2
30	7-81-00126	Support	1
31	7-71-00009	Shim	2
32	2-00-04801	Flat Washer, 1.00 x .39 x .06	2
33	2-00-02310	Lock Washer, 3/8 Helical Spring	2
34	2-00-04705	Hex Bolt, Finished, 3/8-16 x 1.25 LG	2

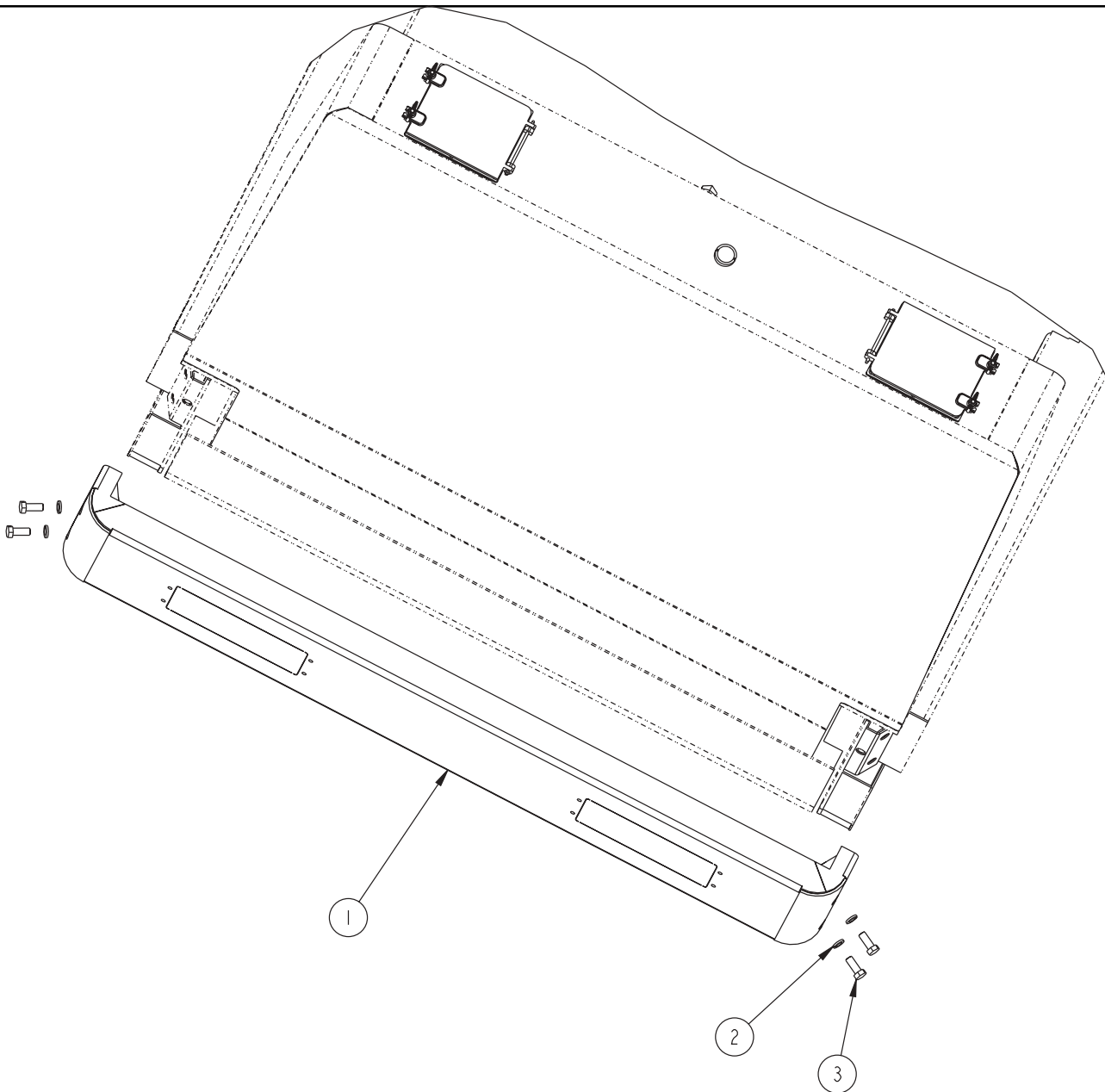
C2129/0702

# RECOVERY TANK - EXPLODED VIEW



C2129/0702

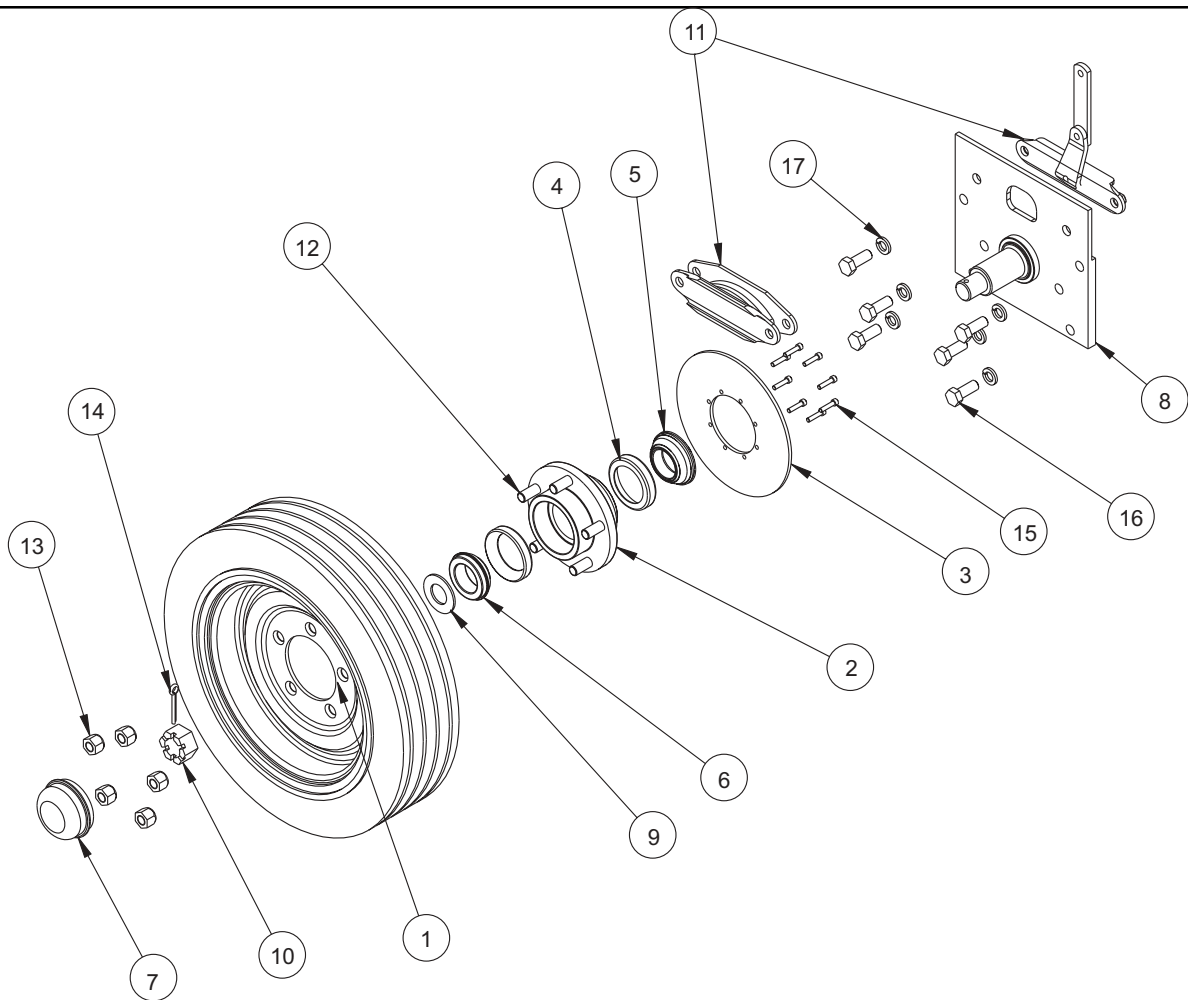
# FRONT BUMPER



<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
1	7-08-07089	Weldment, Front Bumper	1
2	2-00-02312	Washer, 1/2" lock	4
3	2-00-00240	Screw, 1/2-13 x 1.250 HHC	4

C926a/0702

## FRONT WHEEL & BRAKE



<b>KEY NO.</b>	<b>PART NUMBER</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	7-89-08097	Wheel, 16" Dia x 4" Wide	1
2	7-33-09049	Hub, Front Wheel	1
3	7-08-02024	Brake Disc	1
4	2-00-05535	Bearing, Outer Race (Cup Only)	2
5	2-00-05534	Roller Bearing	1
6	2-00-05536	Roller Bearing	1
7	8-11-00055	Grease Cap	1
8	7-03-09018	Axle, Front	1
9	2-00-05024	Washer, Flat	1
10	2-00-05026	Nut Slotted Head	1
11	7-08-02028	Brake Caliper	1
12	8-80-05036	Stud	5
13	8-23-03065	Nut Wheel	5
14	2-00-02436	Cotter Pin, .187 x 1.500	1
15	2-00-04347	Cap Screw, 10-24 x 7/8	8
16	2-00-00240	Screw, 1/2-13 x 1.250 HHC	6
17	2-00-02312	Lock Washer, Helical Spring 1/2 Med.	6

P-5155a/0602

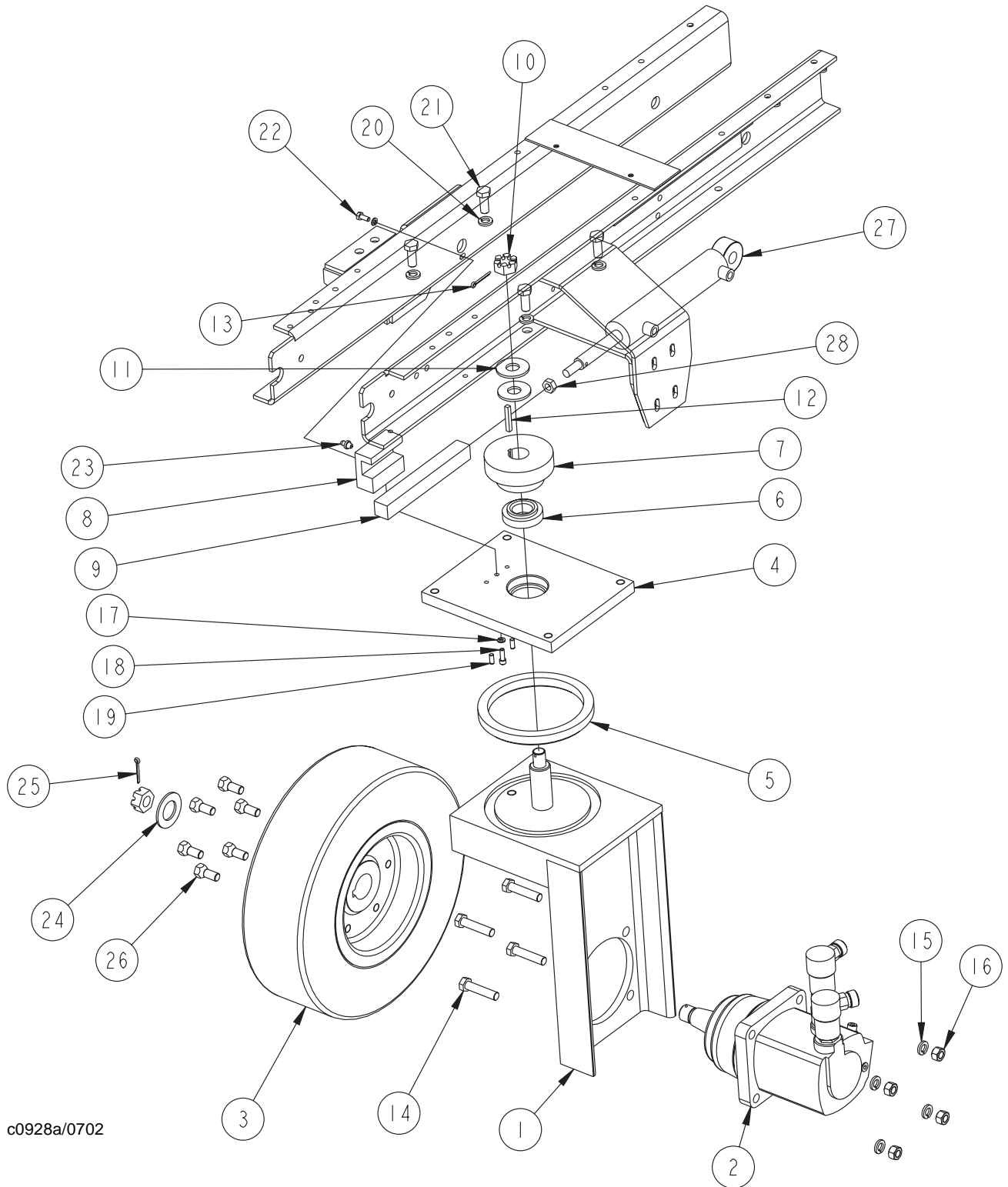
## REAR WHEEL - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-81-00125	Rear Fork	1
2	0885-098	Motor, Wheel Drive, 19.0 cu. in., w/shuttle	1
3	7-89-08071	Wheel Assy.	1
4	7-58-05229	Bearing Plate	1
5	2-00-04455	Thrust Bearing (TIMKEN -#T581)	1
6	2-00-04456	Cup Bearing (TIMKEN - #15245)	1
7	7-29-05037	Spur Gear	1
8	7-30-08012	Rack Guide	1
9	7-62-00006	Rack	1
10	2-00-04841	Nut, Hex Slotted 3/4-16 x 1.125 x .641	2
11	8-75-01157	Flat Washer, 3/4 Series W	2
12	2-00-03761	Key, .250 x 1.750 SQ.	1
13	2-00-00776	Cotter Pin, .125 x 1.500	1
14	2-00-00242	Screw, 1/2 - 13 x 2.250 HHC	4
15	2-00-02312	Lock Washer, Helical Spring 1/2 Med	4
16	2-00-00596	Nut, Hex 1/2 - 13 x .750 x .437	4
17	2-00-00518	Lock Washer, Helical Spring 1/4 Med	2
18	2-00-03051	Screw, 1/4-20 x .750 SHCS	1
19	2-00-01260	Dowel Pin, .250 x .625	2
20	2-00-02312	Lock Washer, Helical Spring 1/2 Med	4
21	2-00-00240	Screw, 1/2 - 13 x 1.250 HHC	4
22	2-00-00220	Screw, 1/4 - 20 x .625 HHC	1
23	2-00-00566	Lubrication Fitting, Straight 1/8 NPT	1
24	2-00-05225	Washer, 1.25 ID x 2.25 OD x .13	1
25	2-00-00776	Cotter Pin, .125 x 1.500	1
26	8-80-05035	Stud, Wheel	6
27	7-17-05010-1	Power Steering Hydraulic Cylinder	1
28	2-00-00591	Nut, Hex Jam 1/2 - 20 x .750 x .312	1

c0928a/0702

# REAR WHEEL - EXPLODED VIEW



c0928a/0702

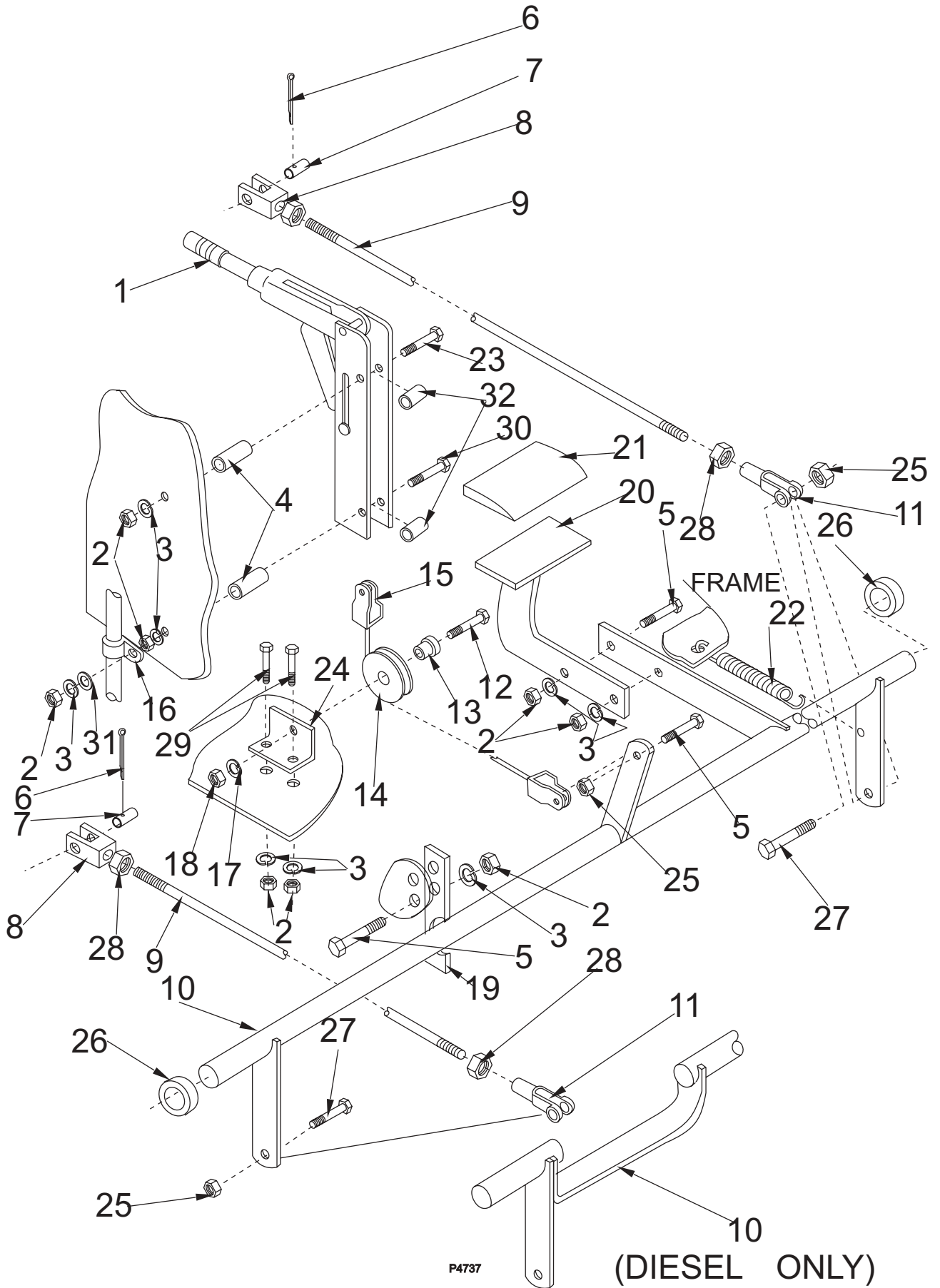
## BRAKE LINKAGE - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-41-05083	Parking Brake Lever	1
2	2-00-00585	Nut, Hex 5/16 - 18 x .500 x .265	9
3	2-00-00530	Lock Washer, Helical Spring 5/16 Med	9
4	7-75-01096	Lever Mounting Spacer	2
5	2-00-02708	Screw, 5/16 - 18 x 1.000 HHC	5
6	2-00-02428	Cotter Pin, .062 x .750	2
7	7-55-08122	Brake Clevis Pin	2
8	8-14-01007-1	Brake Pedal Clevis	2
9	7-66-00143	Brake Rod	2
10	7-70-05173	Cross Shaft	1
10	7-70-05145	Cross Shaft (Diesel Only)	1
11	8-14-01001	Clevis	2
12	2-00-00234	Screw, 3/8 - 16 x 1.500 HHC	1
13	8-09-01065	Bushing, Flanged .875 x .390 x .650	1
14	8-60-00140	Pulley	1
15	7-10-00019	Parking Brake Cable	1
16	2-00-04873	Cable Clamp, .500	1
17	2-00-02310	Lock Washer, Helical Spring 3/8 Med	1
18	2-00-02360	Nut, Hex 3/8 - 16 x .562 x .328	1
19	7-08-00502	Brake Cross Shaft Bracket	1
20	7-55-00009	Brake Pedal	1
21	7-50-05145	Brake Pedal Pad	1
22	7-76-00102	Spring	1
23	2-00-01770	Screw, 5/16 - 18 x 2.750 HHC	1
24	7-08-00501	Brake Pulley Bracket	1
25	2-00-00644	Nut, Hex Fiber Insert 5/16 - 18	3
26	7-15-01014	Setscrew Collar, 1.625 x 1.000 x .750	2
27	2-00-00207	Screw, 5/16 - 18 x 1.250 HHC	2
28	2-00-02369	Nut, Hex Jam 3/8-16 x .562 x .218	4
29	2-00-00208	Screw, 5/16-18 x .750 HHC	2
30	2-00-02597	Screw, 5/16-18 x 3.250 HHC	1
31	2-00-00409	Flat Washer, .687 x .343 x .062	1
32	7-75-01126	Spacer, .500 x .327 x .780 Part of #1)	2

P-4737/9609

**BRAKE LINKAGE - EXPLODED VIEW**



P4737

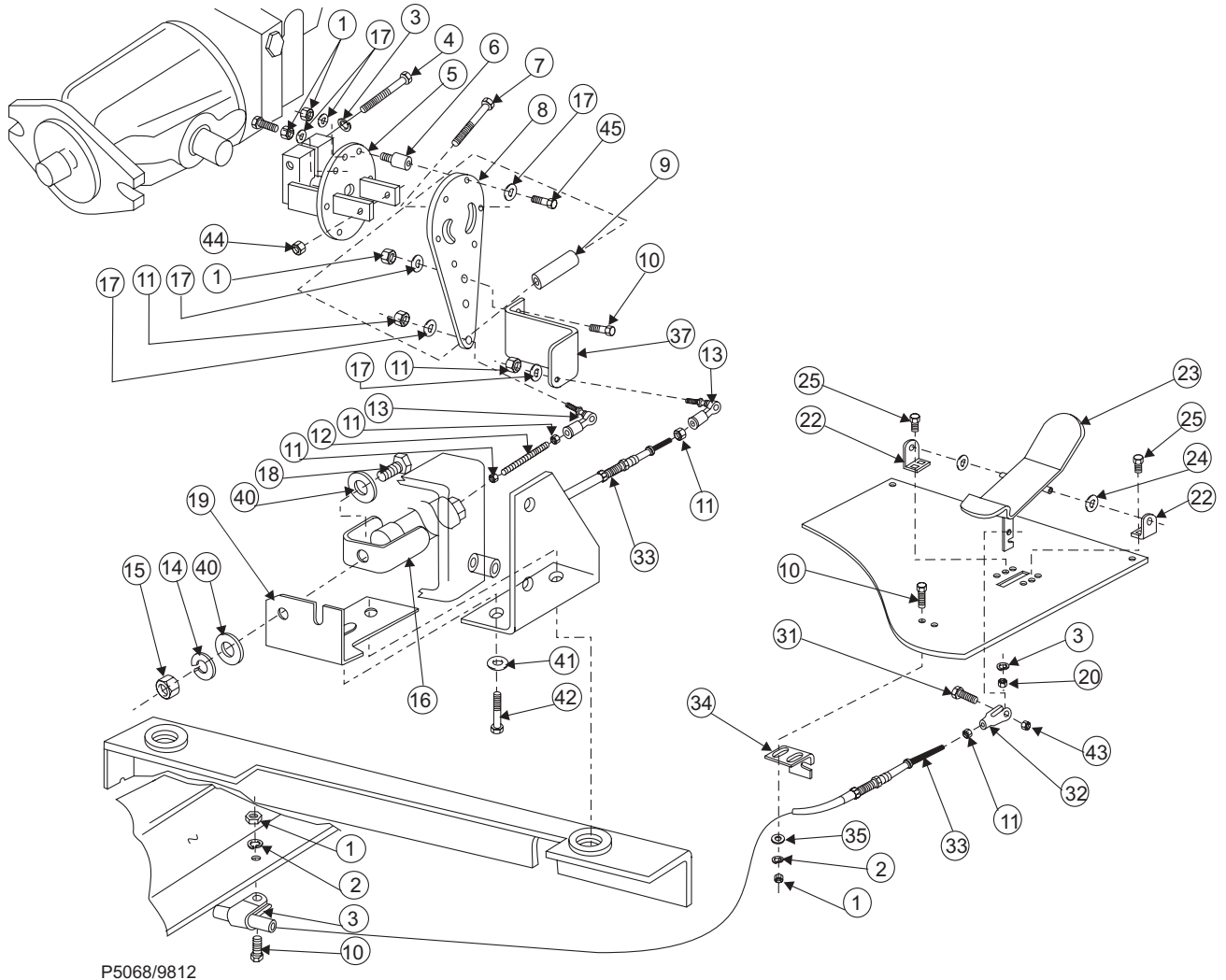


## FORWARD/REVERSE CONTROL (FORD 425) - PARTS LIST

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	2-00-00594	Nut, Hex 1/4 - 20 x .437 x .218	13
2	2-00-00518	Lock Washer, Helical Spring 1/4 Med	3
3	2-00-00530	Lock Washer, Helical Spring 5/16 Med	5
4	2-00-00225	Screw, 5/16-18 x 1.500 HHC	1
5	7-03-04105	Transmission Arm	1
6	7-75-01089	Isolator	6
7	2-00-00246	Screw, 1/4-20 x 2.250 HHC	1
8	7-58-05220	Transmission Arm Plate	1
9	7-75-01110	Spacer	1
10	2-00-00221	Screw, 1/4-20 x .750 HHC	5
11	2-95-01999	Nut, Hex Jam 1/4-28 x .437 x .156	6
12	7-66-00147	Rod, 1/4-28 x 3.000	1
13	7-25-02050	Rod End, 1/4-28	2
14			
15			
16	8-16-00025	Centering Control	1
17	2-00-00501	Lock Washer, 1/4 Int.	17
18			
19	7-08-00917	Bracket Centering Control	1
20	2-00-00585	Nut, Hex 5/16-18 x .500 x.265	4
21			
22	8-08-00327	Forward Reverse Pedal Bracket	2
23	7-55-00010	Forward Reverse Pedal	1
24	2-00-00402	Flat Washer, .750 x .390 x .093	2
25	2-00-03569	Carriage Bolt, 5/16 - 18 x .75	4
26			
27			
28	2-00-00244	Screw, 1/4-20 x 1.00 HHC	1
29			
30			
31	2-00-04563	Screw, #10-24 x .625 x .375 Sh	1
32	8-14-01006	Clevis	1
33	7-16-00009	Forward / Reverse Cable	1
34	8-08-00506	Cable Mounting Bracket	1
35	2-00-00451	Flat Washer, .750 x .312 x .065	2
36	2-00-04602	Hose Clamp, .500	1
37	7-03-04183	Arm, Transmission Link	1
38			
39			
40	2-00-00405	Flat Washer, .750 x .281 x .062	2
41	2-00-02310	Lock Washer, Helical Spring 3/8 Med	1
42	2-00-00232	Screw, 3/8 - 16 x .75 Lg. HHC	1
43	2-00-01246	Nut, Hex Fiber Insert #10-24	1
44	2-00-00641	Nut, Hex Fiber Insert 1/4-20	1
45	2-00-00219	Screw, 1/4-20 x .500 HHC	6

P-5068/9812

# FORWARD/REVERSE CONTROL (FORD 425) - EXPLODED VIEW



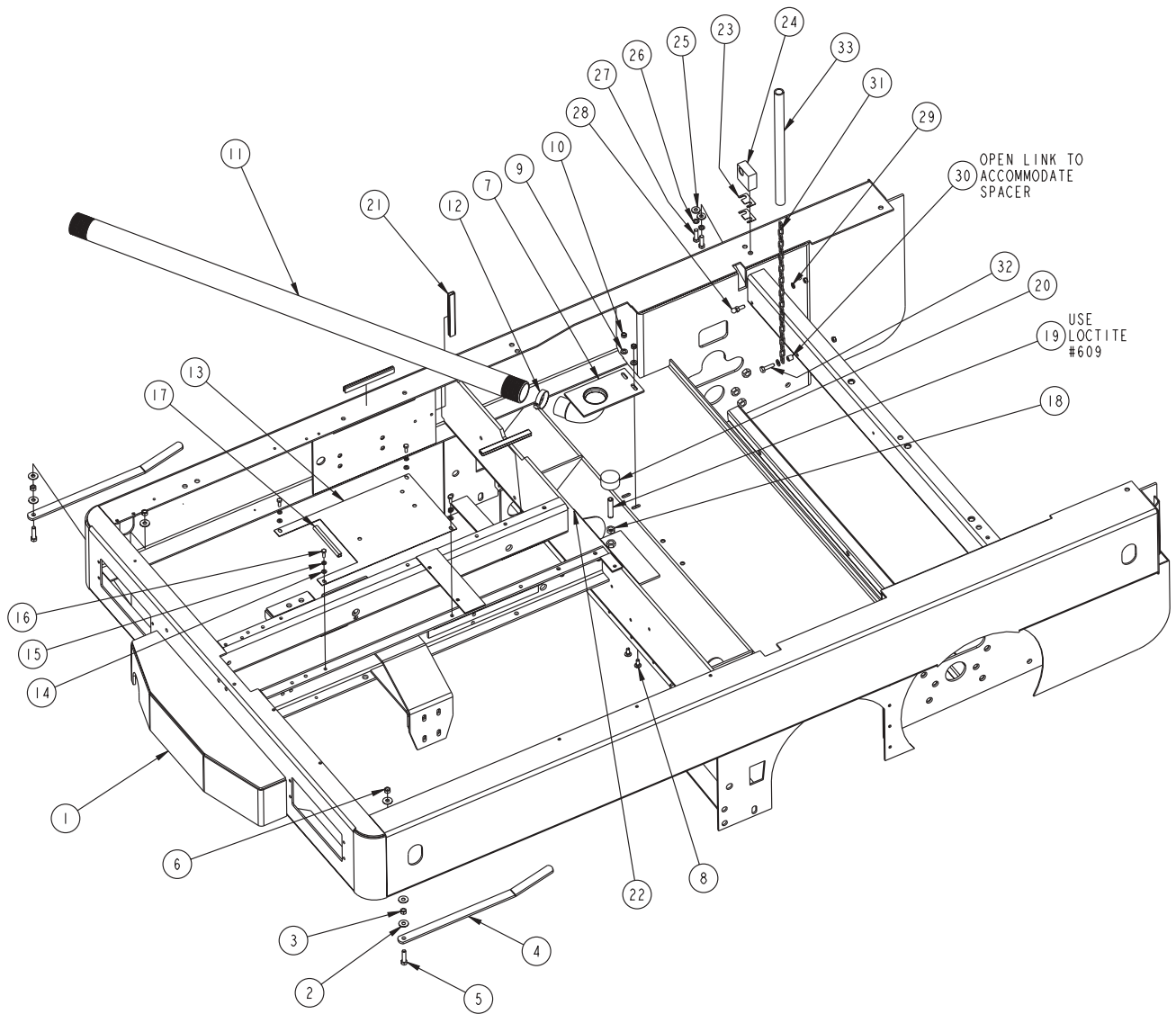
## MAIN FRAME - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
1	7-27-07210	Main Frame	1
2	2-00-03979	Flat Washer, 1.00 x .39 x .062	6
3	2-00-02360	Nutm 3/8-16	2
4	7-32-03020	Hose Holder	2
5	2-00-00234	Screw, 3/8-16 x 1.50 HHC	2
6	2-95-04182	Nut, Elastic Stop 3/8-16	2
7	7-56-05029	Pipe, Recovery Tank Drain	1
8	2-00-03569	Carriage Bolt	2
9	2-00-00409	Flat Washer, .687 x .344 x .062	3
10	2-00-00664	Hex Nut, Insert Fiber, 5/16-18	4
11	7-33-02336	Hose, 50.00	1
12	2-00-02216	Hose Clamp	1
13	7-16-07386	Steering Gear Cover	1
14	2-00-00407	Flat Washer, .562 x .265 x .062	4
15	2-00-00518	Lock Washer, Helical Spring ¼ Med.	4
16	2-00-00221	Screw, ¼ - 20 x .750 HHC	4
17	8-21-04016	Bumper	1
18	2-00-02371	Nut 1/2-13	1
19	8-80-05014	Stud, 1/2-13UNC-2A x 2.50	1
20	7-78-05009	Stop, 1/2-13	1
21	7-21-04031	Edging, Brush Drive Support	3
22	7-21-04031	Edging, Brush Drive Support	1
23	7-71-00009	Shim	2
24	7-81-00126	Support	1
25	2-00-04801	Flat Washer, 1.00 x .39 x .06	2
26	2-00-02310	Lock Washer, 3/8 Helical Spring	2
27	2-00-04705	Hex Bolt, Finished, 3/8-16 x 1.25 LG	2
28	7-80-05067	Ball Stub, Gas Spring	1
29	2-00-00530	Lock Washer 5/16	1
30	7-75-01130	Spacer	1
31	7-13-05073	Chain, Squeegee Lift	1
32	2-00-00207	Screw, 5/16-18 x 1.25 HHC	1
33	7-34-09018	Sleeve, Insulating	1

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# MAIN FRAME - EXPLODED VIEW



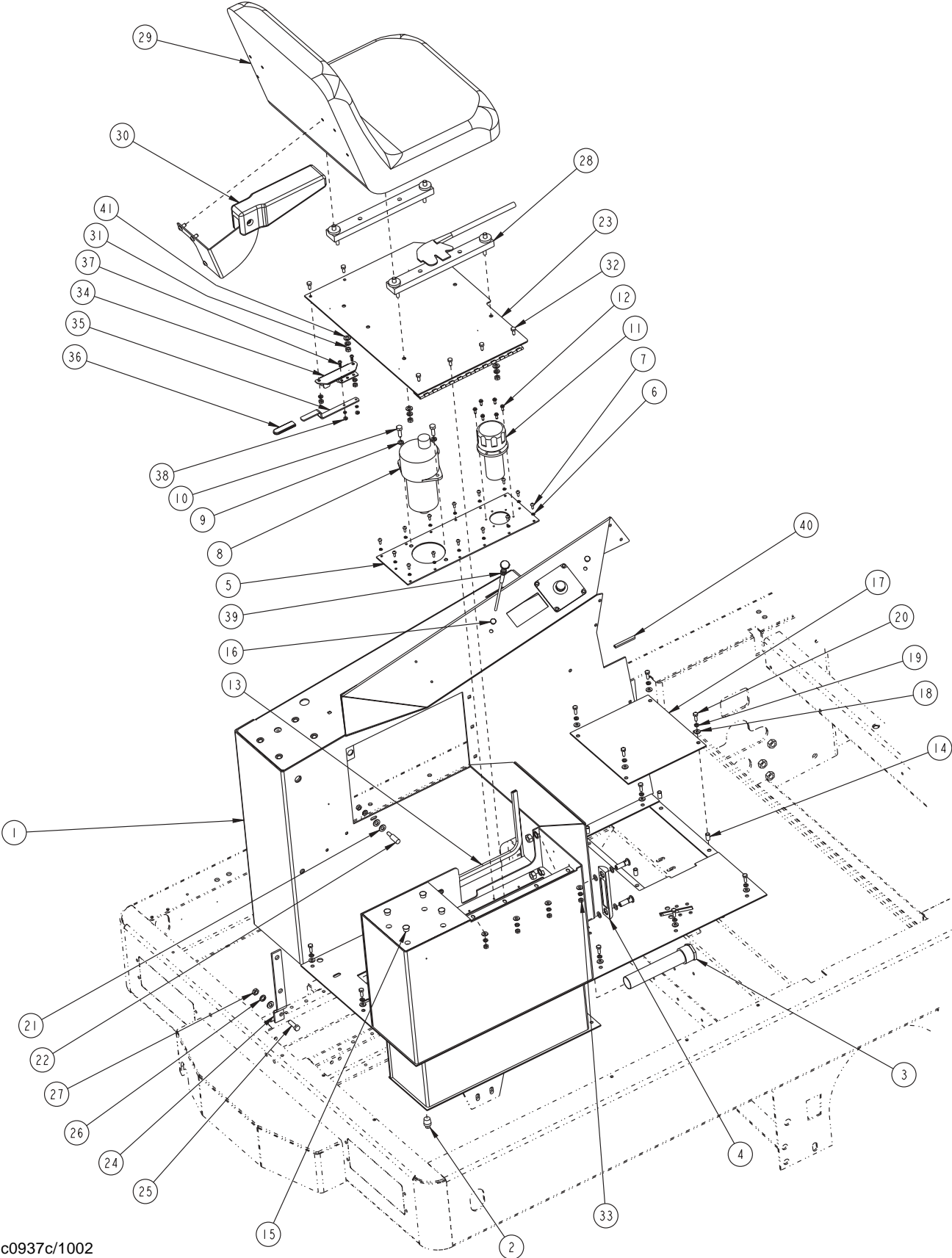
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## DRIVER COMPARTMENT - PARTS LIST

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-70-08006	Drive Compartment	1
2	2-00-05362	Plug, 1/2 NPT Hex Soc Pipe	1
3	8-24-04115	Strainer, Hydraulic Reservoir	1
4	8-84-05034	Gauge, Fluid Level (Hydraulic Oil)	1
5	7-16-07282	Plate, Reservoir Cover	1
6	2-00-00519	Lock Washer, #10-24 Helical Spring	16
7	2-00-00049	Screw, RHM 10-24 x .50 ZN PL	14
8	7-24-04031	Filter, Return (Immursed)	1
9	2-00-00530	Lock Washer, 5/16	7
10	2-00-02708	Hex Screw, 5/16-18 x 1.00	2
11	8-11-00026	Filter Cap, Reservoir	1
12	2-00-03940	Screw, T/C HH, 10-24 x .50 LG	6
13	7-21-03003	Edging	1
14	2-00-05261	Threaded Insert, 1/4-20	4
15	2-00-04514	Plug, Plastic, .562 Dia.	4
16	2-00-02011	Plug, Plastic, .44 Dia.	2
17	7-52-00149	Panel, Access	1
18	2-00-03702	Washer, .625 x .281 x .063	14
19	2-00-00518	Lock Washer, 1/4 Helical Spring	16
20	2-00-00221	Hex Bolt, Finished, 1/4-20	10
21	2-00-00402	Washer, 25/64 ID x 3/4 OD	3
22	7-55-08116	Striker Pin	1
23	7-16-07281	Cover, Weldment	1
24	7-08-00845	Bracket, Driver Compartment Support	1
25	2-00-00209	Hex Bolt, 3/8-16 x 1.250 HHC	1
26	2-00-00530	Lock Washer, 5/16	1
27	2-00-00585	Hex Nut, 5/16-18	1
28	7-72-05005	Slide Adjuster Kit	1
29	7-69-00006	Seat	1
30	7-03-04165	Arm Rest Kit	1
31	2-00-00585	Hex Nut, 5/16-18	5
32	2-00-00220	Screw, 1/4-20 x .625 HHC	6
33	2-00-00594	Hex Nut, 1/4-20	6
34	8-41-00037	Latch, Rotary	1
35	7-31-06076	Handle, Seat Cover Latch	1
36	7-31-06061	Grip, Cover Latch	1
37	2-00-04794	Screw, 10-24 x .63 BHS	2
38	2-00-00605	Hex Nut, 10-24	2
39	7-16-00016	Cable, Choke (Gas Only)	1
40	8-21-04019	Edging	1
41	2-00-00409	Flat Washer, .687 x .344 x .062	4

c0937c/1002

DRIVER COMPARTMENT - EXPLODED VIEW



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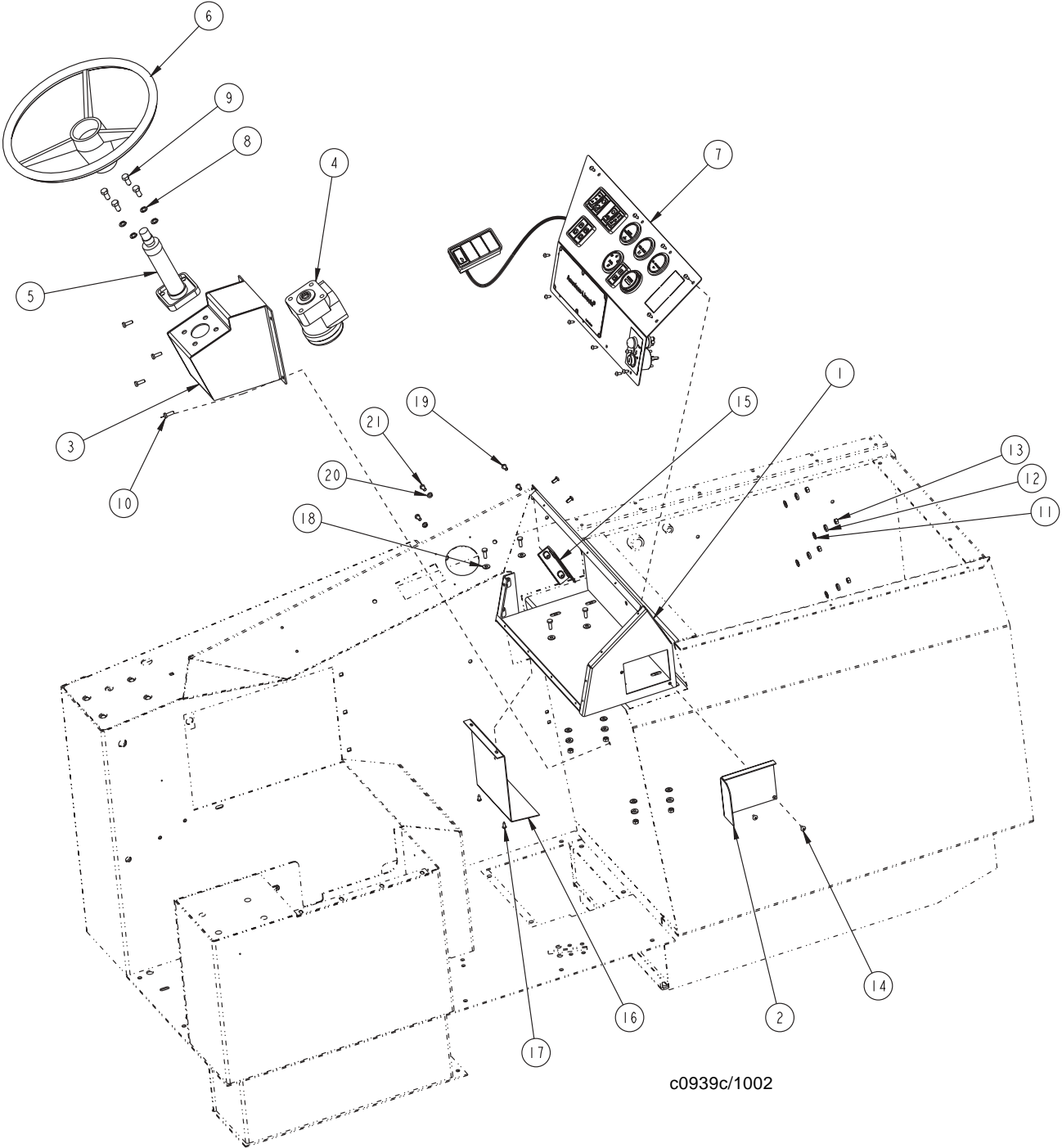
## CONSOLE - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-33-05096	Housing, Console	1
2	7-52-00185	Side Panel	1
3	7-33-05099	Housing, Steering	1
4	7-60-05029	Power Steering Unit	1
5	7-70-05135	Steering Column Assy.	1
6	7-89-08041	Steering Wheel	1
7	0775-259	Instrument Panel (Gas)	1
	0775-524	Instrument Panel (LP)	1
8	2-00-02310	Lock Washer, 3/8 Helical Spring	4
9	2-00-00232	Hex Bolt, Finished, 3/8-16	4
10	2-00-04685	Hex Screw, 1/4-20 x .75 SS	8
11	2-00-04590	Sealing Washer	8
12	2-00-04687	Lock Washer, 1/4 Helical Spring	8
13	2-00-04688	Hex Nut, 1/4-20 SS	8
14	2-00-03059	Screw, 10-24 x 3/8 THMS	2
15	7-08-00510	Bracket, Console Support	1
16	7-16-07283	Cover, Panel	1
17	2-00-03466	Screw, 10-16 x .50 T/FRH	2
18	2-00-03702	Washer, .625 x .281 x .063	4
19	2-00-04876	Screw, 1/4-20 x .50 BH	4
20	2-00-00518	Lock Washer, 1/4 Helical Spring	2
21	2-00-00219	Hex Bolt, Finished, 1/4-20	2

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CONSOLE - EXPLODED VIEW



c0939c/1002

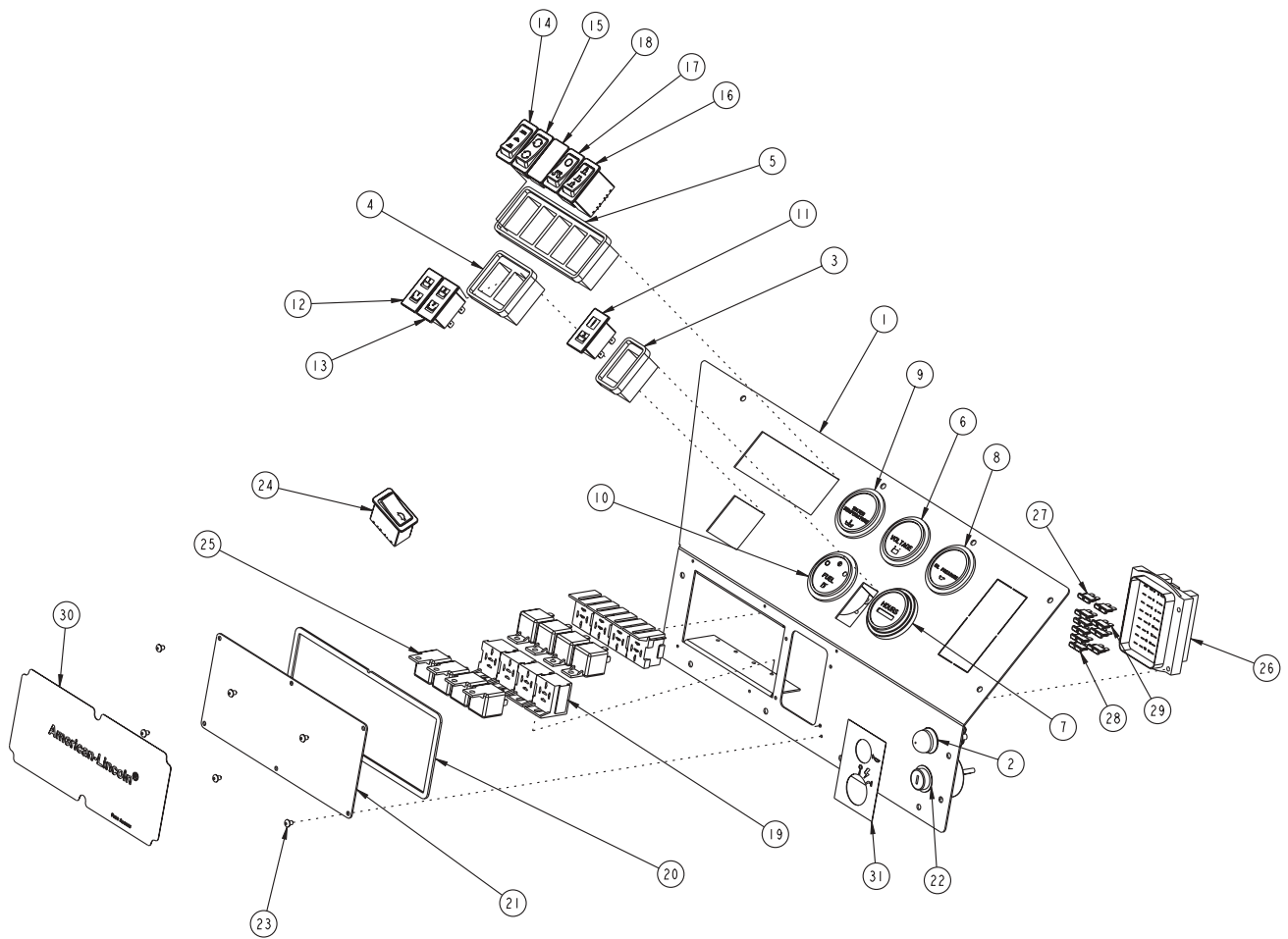


## INSTRUMENT PANEL (GAS) - PARTS LIST

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-52-00184	Instrument Panel	1
2	8-82-00024	Horn, Push Button	1
3	2-00-05779	Mount, Carling Switch Panel, Single, 11 ga.	1
4	2-00-05751	Mount, Carling Switch Panel, End, 11 ga.	4
5	2-00-05752	Mount, Carling Switch Panel, Middle, 11 ga.	3
6	8-48-00016	Voltmeter	1
7	8-48-05023	Gauge, Hour Meter	1
8	8-48-05027	Gauge, Oil Pressure	1
9	8-48-05028	Gauge, Water Temperature	1
10	8-48-05032	Gauge, Fuel (Gas Only)	1
11	2-00-05787	Indicator, Engine Fault/Tank 3 Low	1
12	2-00-05785	Indicator, Tank 1 High/Low Level	1
13	2-00-05786	Indicator, Tank 2 High/Low Level	1
14	2-00-05770	Actuator, Scrub Deck	1
15	2-00-05775	Actuator, Brush Rotation	1
16	2-00-05773	Actuator, Squeegee	1
17	2-00-05772	Actuator, Tanker Mode	1
18	2-00-05758	Cover, Blank Switch	1
19	2-00-05761	Base, Amp Relay	8
20	**	Gasket, Panel Cover	1
21	7-58-05315	Plate, Instrument Panel Cover	1
22	8-82-00041	Key Switch (Ignition)	1
23	2-00-00042	Screw, #8-32 x .25 RHM	6
24	2-00-05763	Actuator, Idle/Fast Speed	1
25	8-64-05009	Relay, 12VDC	8
26	**	Block, Fuse, 16-Place	1
27	**	Fuse, 10A, Buss ATC	5
28	**	Fuse, 5A, Buss ATC	3
29	**	Fuse, 20A, Buss ATC	2
30	7-18-00305	Decal, Fuse Access	1
31	7-18-00306	Decal, Horn/Ignition	1
32	**	Harness, Panel (not shown)	1

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# INSTRUMENT PANEL (GAS) - EXPLODED VIEW



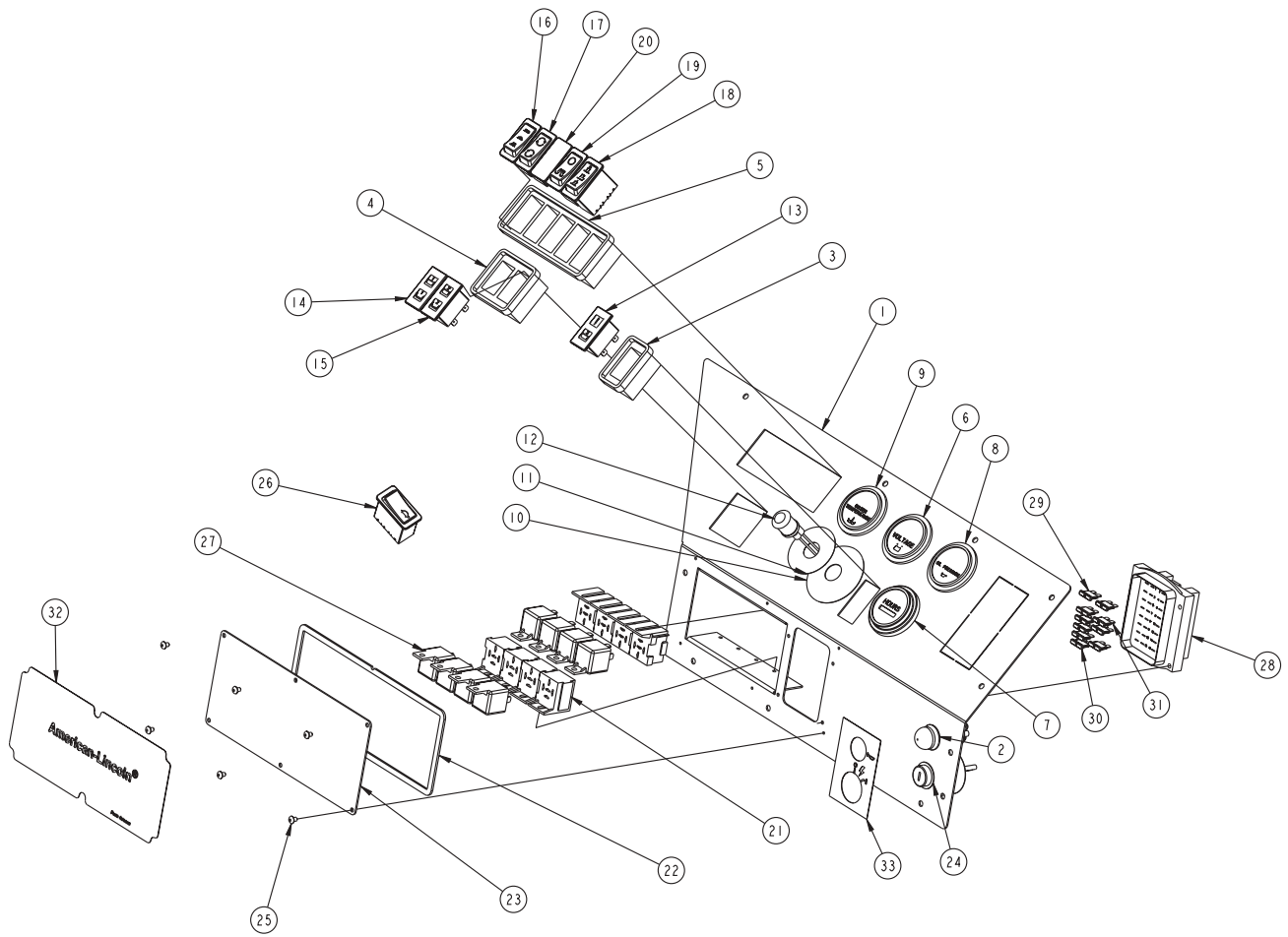
c0944b/0702

## INSTRUMENT PANEL (LP) - PARTS LIST

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-52-00184	Instrument Panel	1
2	8-82-00024	Horn, Push Button	1
3	2-00-05779	Mount, Carling Switch Panel, Single, 11 ga.	1
4	2-00-05751	Mount, Carling Switch Panel, End, 11 ga.	4
5	2-00-05752	Mount, Carling Switch Panel, Middle, 11 ga.	3
6	8-48-00016	Voltmeter	1
7	8-48-05023	Gauge, Hour Meter	1
8	8-48-05027	Gauge, Oil Pressure	1
9	8-48-05028	Gauge, Water Temperature	1
10	N3-0100	Hole Plug (Fuel Gauge)	1
11	N3-0074	Decal, Low LP Fuel	1
12	N3-0101	LP Low Fuel Light	1
13	2-00-05787	Indicator, Engine Fault/Tank 3 Low	1
14	2-00-05785	Indicator, Tank 1 High/Low Level	1
15	2-00-05786	Indicator, Tank 2 High/Low Level	1
16	2-00-05770	Actuator, Scrub Deck	1
17	2-00-05775	Actuator, Brush Rotation	1
18	2-00-05773	Actuator, Squeegee	1
19	2-00-05772	Actuator, Tanker Mode	1
20	2-00-05758	Cover, Blank Switch	1
21	2-00-05761	Base, Amp Relay	8
22	**	Gasket, Panel Cover	1
23	7-58-05315	Plate, Instrument Panel Cover	1
24	8-82-00041	Key Switch (Ignition)	1
25	2-00-00042	Screw, #8-32 x .25 RHM	6
26	2-00-05763	Actuator, Idle/Fast Speed	1
27	8-64-05009	Relay, 12VDC	8
28	**	Block, Fuse, 16-Place	1
29	**	Fuse, 10A, Buss ATC	5
30	**	Fuse, 5A, Buss ATC	3
31	**	Fuse, 20A, Buss ATC	2
32	7-18-00305	Decal, Fuse Access	1
33	7-18-00306	Decal, Horn/Ignition	1
34	**	Harness, Panel (not shown)	1

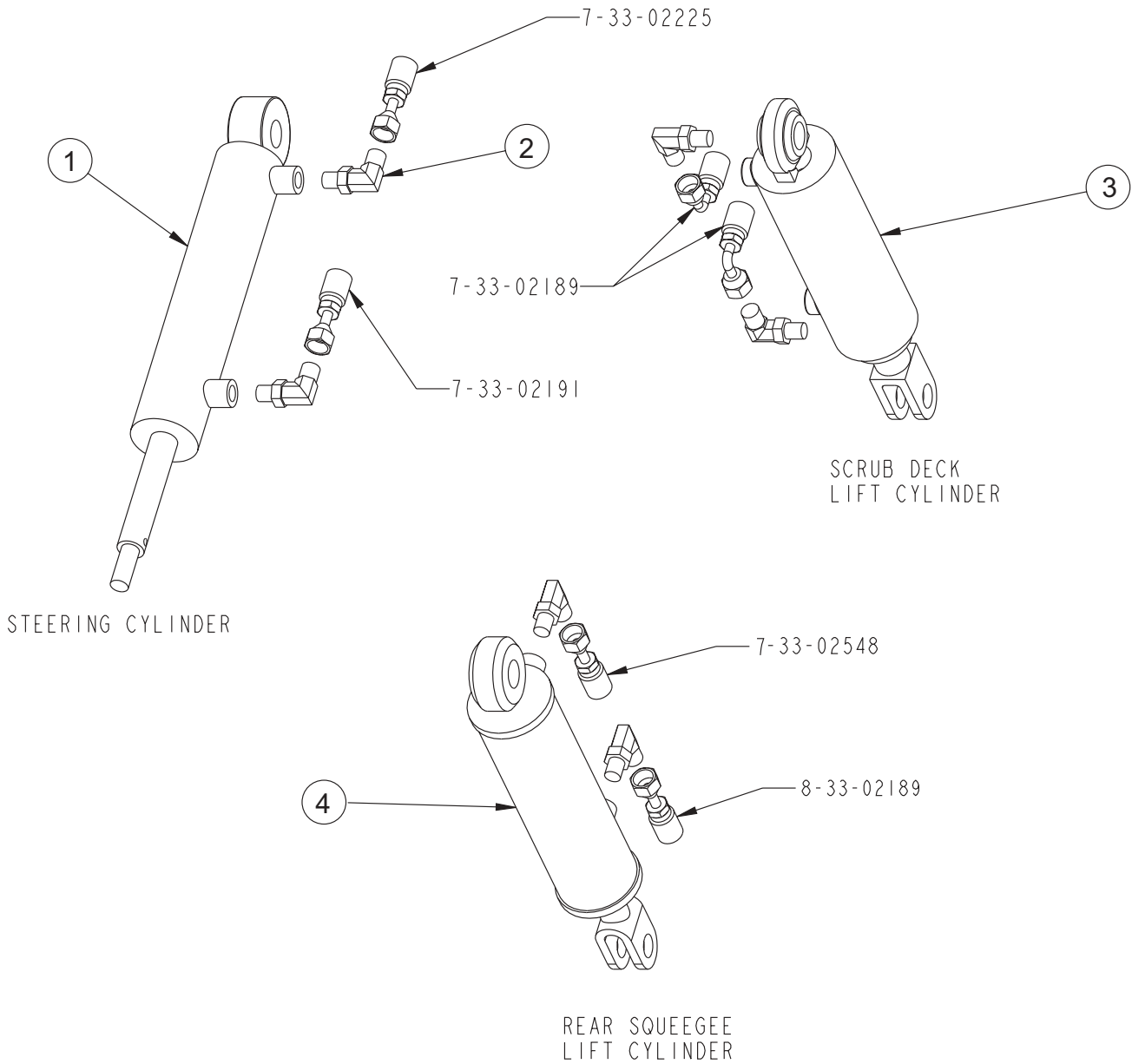
c2181/0702

# INSTRUMENT PANEL (LP) - EXPLODED VIEW



c2181/0702

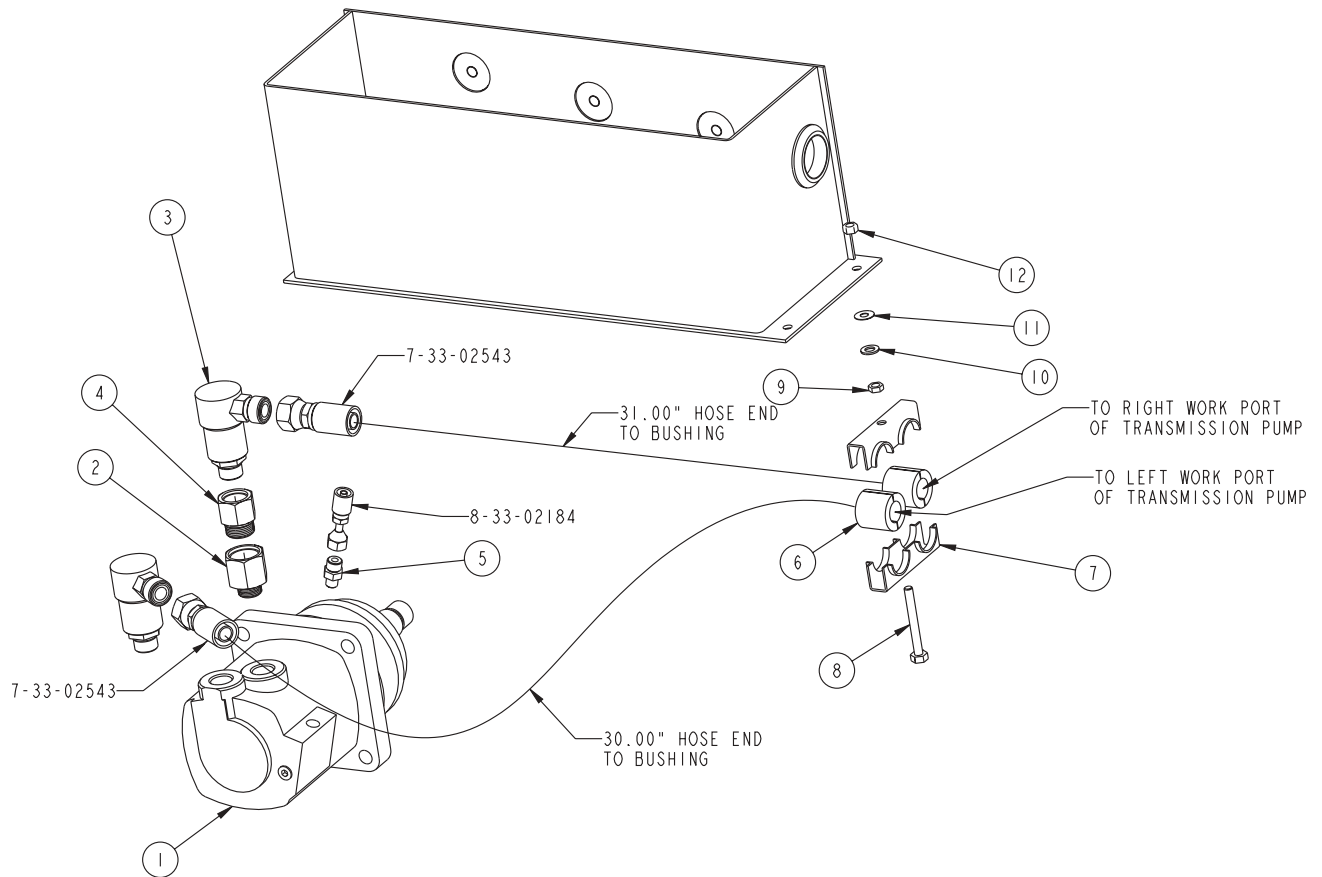
# SQUEEGEE, SCRUB DECK, & STEERING CYLINDERS, & FITTINGS



<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-17-05010-1	Steering Cylinder	1
2	2-00-04892	Fitting, 90° Elbow (O-Ring)	6
4	7-17-05019	Hydraulic Cylinder	1
3	7-17-05011-1	Hydraulic Cylinder	1

c0930a/0702

## REAR WHEEL MOTOR & FITTINGS



<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	0885-098	Motor, Wheel Drive, 19.0 cu. in. w/shuttle	1
2	2-00-05727	Fitting, Expander, -10 SAE x -12 SAE	1
3	2-00-05728	Fitting, Swivel, -10 SAE x -10 ORS	2
4	2-00-05726	Fitting, Reducer, -12 SAE x -10 SAE	1
5	2-00-04895	Fitting, Straight Connector	1
6	7-09-01121	Bushing, Split Hose	2
7	7-13-07110	Clamp, Hose Unit	2
8	2-00-01770	Screw, 5/16-18 x 2.750 HHC	1
9	2-00-00586	Jam Nut, 5/16-18	1
10	2-00-00409	Flat Washer, .687 x .344 x .062	1
11	7-23-03048	Washer, SPR, Shakeproof	1
12	2-00-00644	Hex Nut, Insert Fiber, 5/16-18	1

c0931a/0702

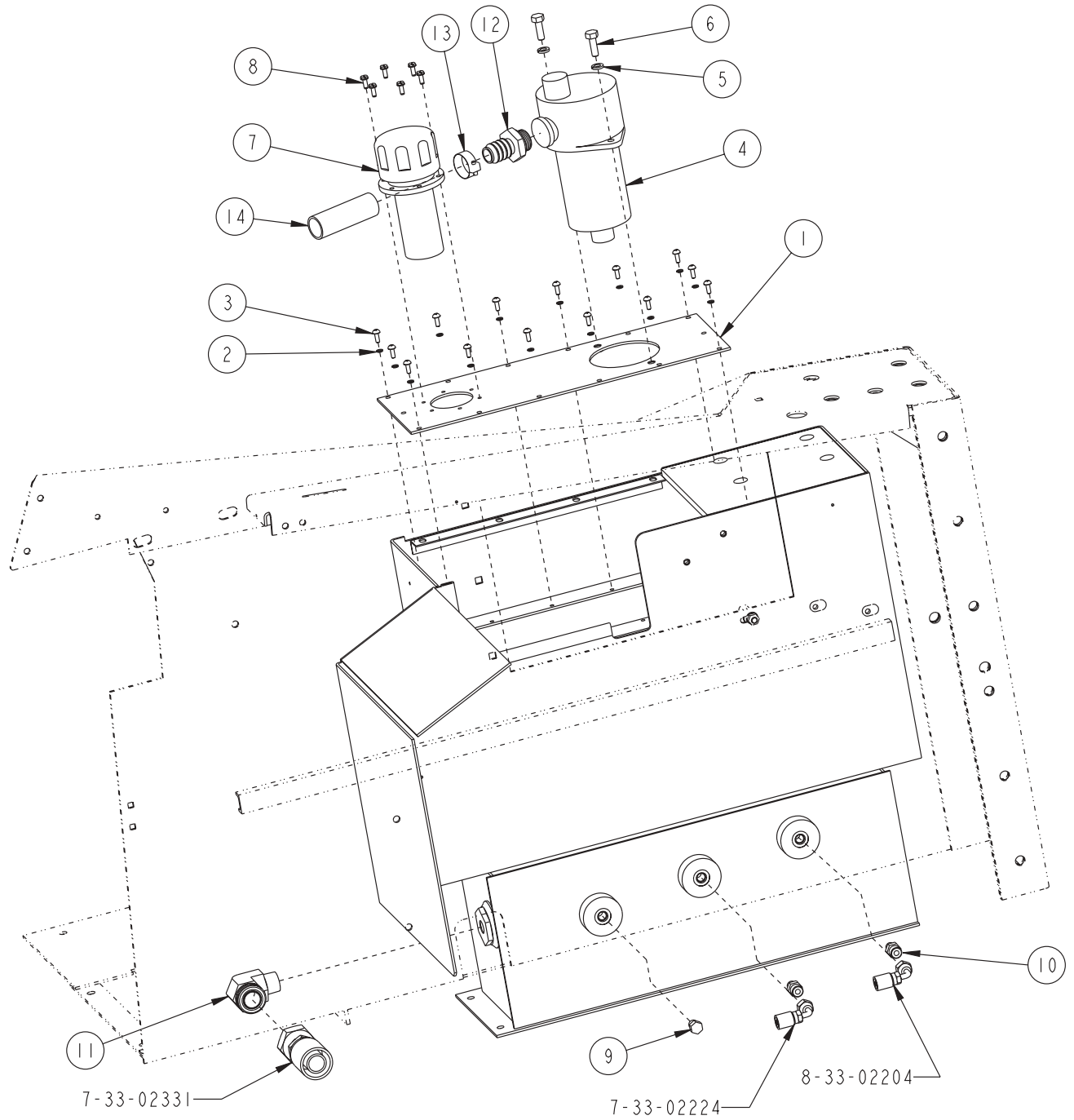
## HYDRAULIC RESERVOIR, FILTER, & FITTINGS - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-16-07282	Plate, Reservoir Cover	1
2	2-00-00519	Lock Washer, #10	14
3	2-00-00049	Screw, #10-24 x .500 RHM	14
4	7-24-04031	Return Filter (Immersed)	1
5	2-00-00530	Lock Washer, Helical Spring 5/16 Med	3
6	2-00-02708	Screw, Hex Head 5/16-18 x 1.000 HHC	2
7	8-11-00026	Cap, Reservoir Filter	1
8	2-00-03940	Screw, #10-24 x .50 LG TC/HH	6
9	2-00-05177	Fitting, -4 ORB, Hex Plug	1
10	2-00-04895	Fitting, Straight Connector	2
11	2-00-05354	Fitting, 3/4 NPT x -16 ORS Elbow 90	1
12	2-00-05073	Fitting, -16 ORB, Straight Hose Barb	1
13	2-00-02220	Clamp, Hose	1
14	7-33-02244	Hose, 1" ID, 30" Long	1

c0952b/1002

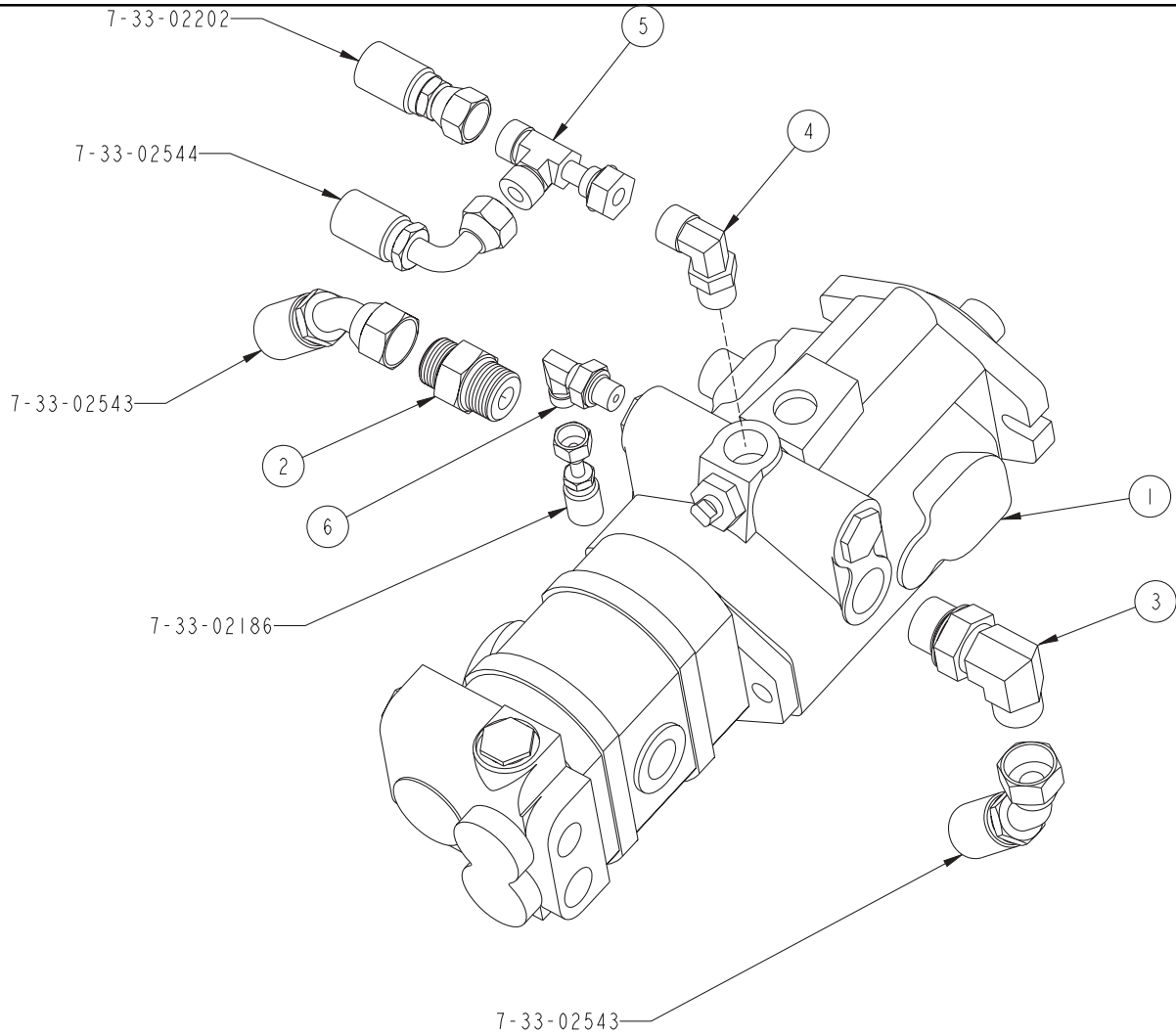
# HYDRAULIC RESERVOIR, FILTER, & FITTINGS - EXPLODED VIEW



c0952b/1002



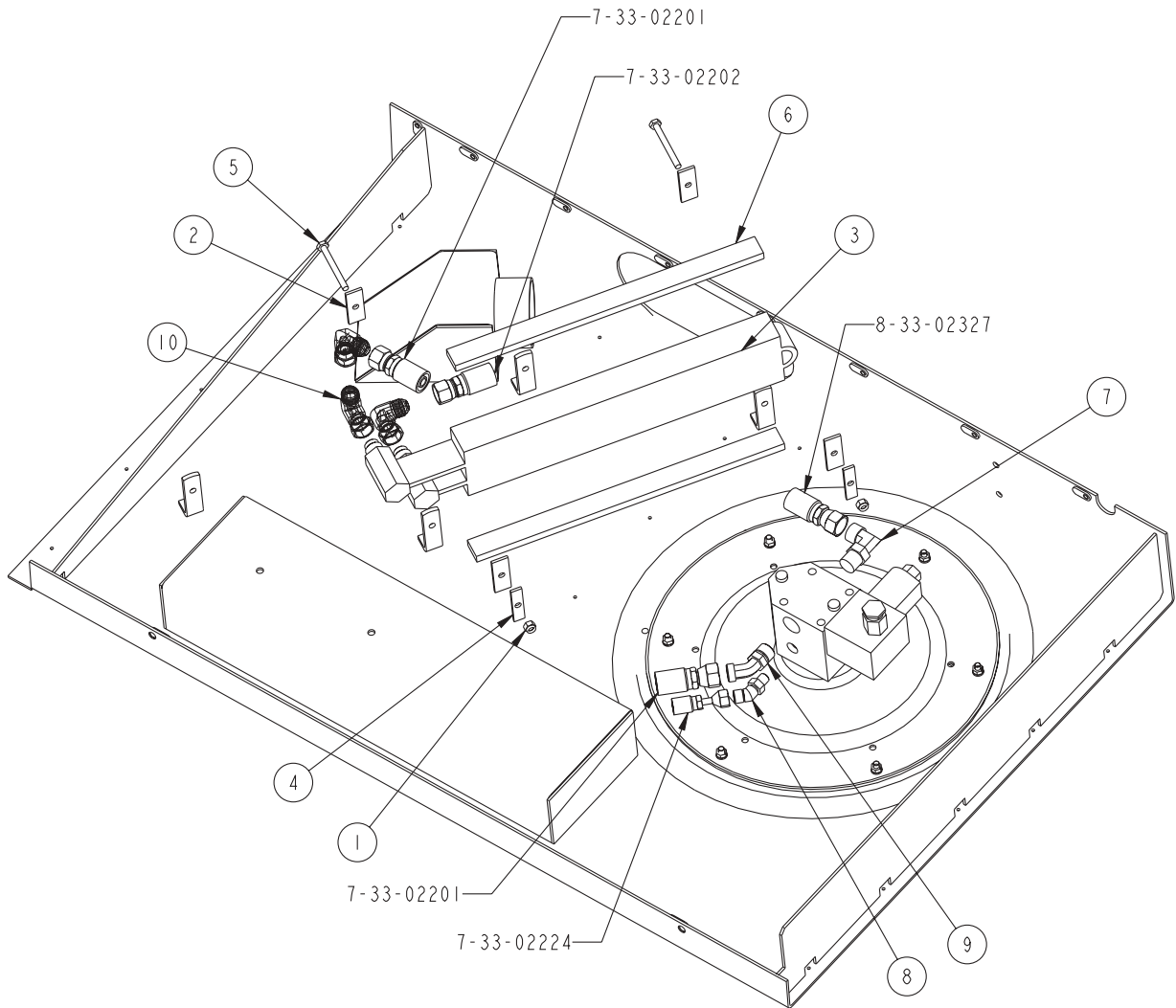
## DRIVE PUMP & FITTINGS



<b>KEY NO.</b>	<b>PART NUMBER</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	7-60-05026	Drive Pump	1
2	2-00-05730	Fitting, STR, -12 SAE x -10 ORS	1
3	2-00-04961	Fitting, 90° Elbow, -12 SAE x -10 ORS	1
4	2-00-04885	Fitting, 90° Elbow (O-Ring)	1
5	2-00-04928	Fitting, Tee, 13/16-16 x 13/16-16	1
6	2-00-04926	Fitting, Elbow, 9/16-18 x 9/16-18	1

c0934a/0702

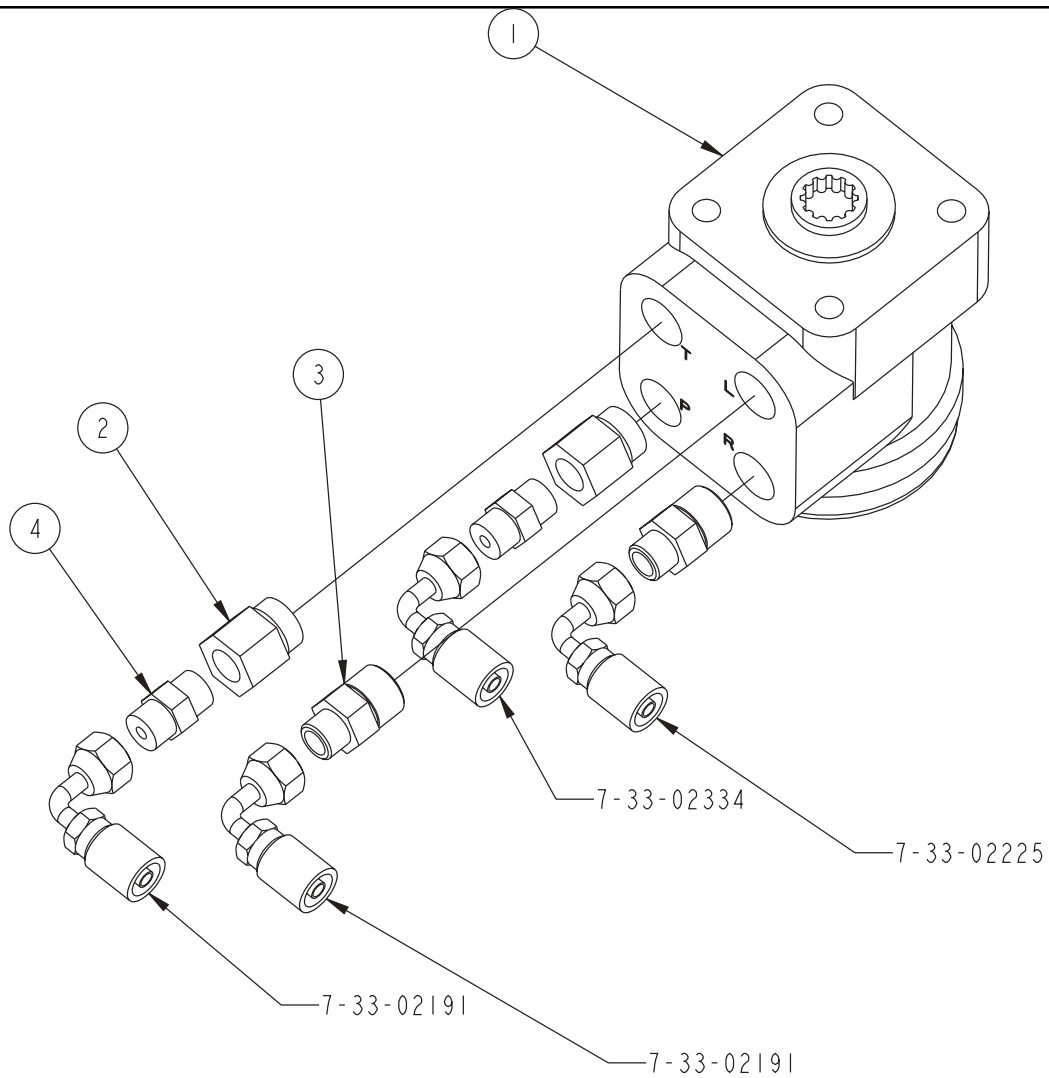
# VACUUM MOTOR & OIL COOLER



<b>KEY NO.</b>	<b>PART NUMBER</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	2-00-00641	Nut , 1/4-20 Fibre Insert	2
2	7-29-00192	Gasket, Oil Cooler	4
3	8-62-01010	Oil Cooler	1
4	8-13-07088	Clip	2
5	2-00-01980	Screw - 1/4-20 x 2.5 LG	2
6	7-29-00207	Gasket, Tank Cover (Ends) SOL	2
7	2-00-04885	Fitting, 90° Elbow (O-Ring)	1
8	2-00-04976	Fitting, 45° Elbow, -4 ORD -4 ORS	1
9	2-00-04975	Fitting, 8 SAE 45° Elbow	1
10	2-00-04822	Fitting, 90° Elbow, -8 37° Swivel	3

c0936a/0702

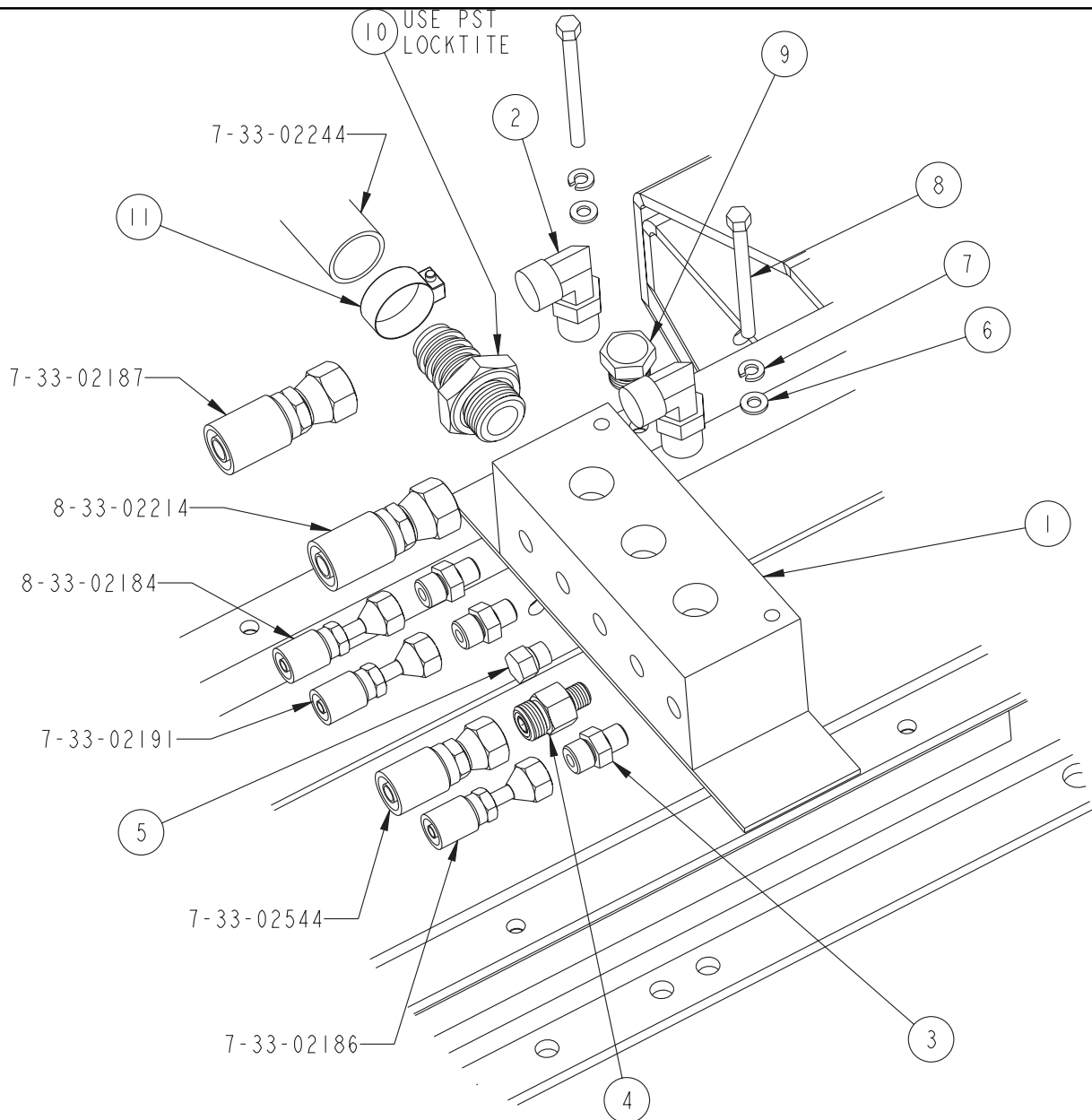
# POWER STEERING UNIT & FITTINGS



<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-60-05029	Power Steering Unit	1
2	2-00-04932	Fitting, Reducer	2
3	2-00-05264	Fitting, Connector #8 SAE - #4 ORS	2
4	2-00-04918	Connector, Straight Connector	2

c0932a/0702

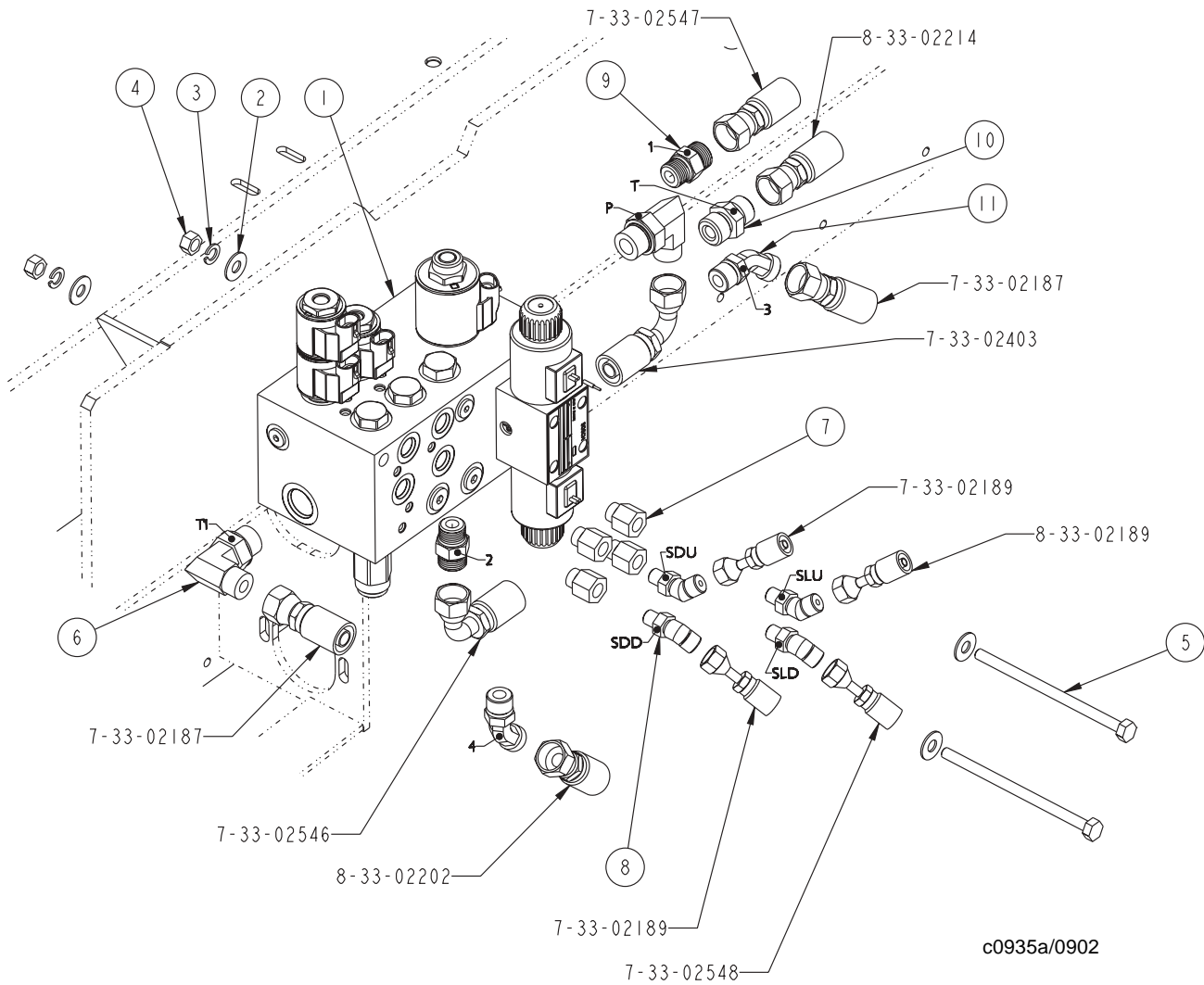
## RETURN MANIFOLD & FITTINGS



<b>KEY NO.</b>	<b>PART NUMBER</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	7-48-00019	Manifold, Hydraulic	1
2	<b>2-00-04885</b>	<b>90° Elbow (O-Ring)</b>	2
3	2-00-04895	Fitting, Straight Connector	4
4	2-00-05177	Fitting, -4 ORB Hex Plug	1
5	2-00-00407	Flat Washer, 1/4	2
6	2-00-00518	Lock Washer, 1/4 Helical Spring	2
7	2-00-02638	Screw, 1/4-20 x 3.000 HHC	2
8	2-00-05772	Fitting, -8 ORB Hex Plug	1
9	2-00-05073	Fitting, -16 ORB, Straight Hose Barb	1
10	2-00-02220	Hose Clamp	1

c0929a/0702

# MAIN CONTROL VALVE & FITTINGS

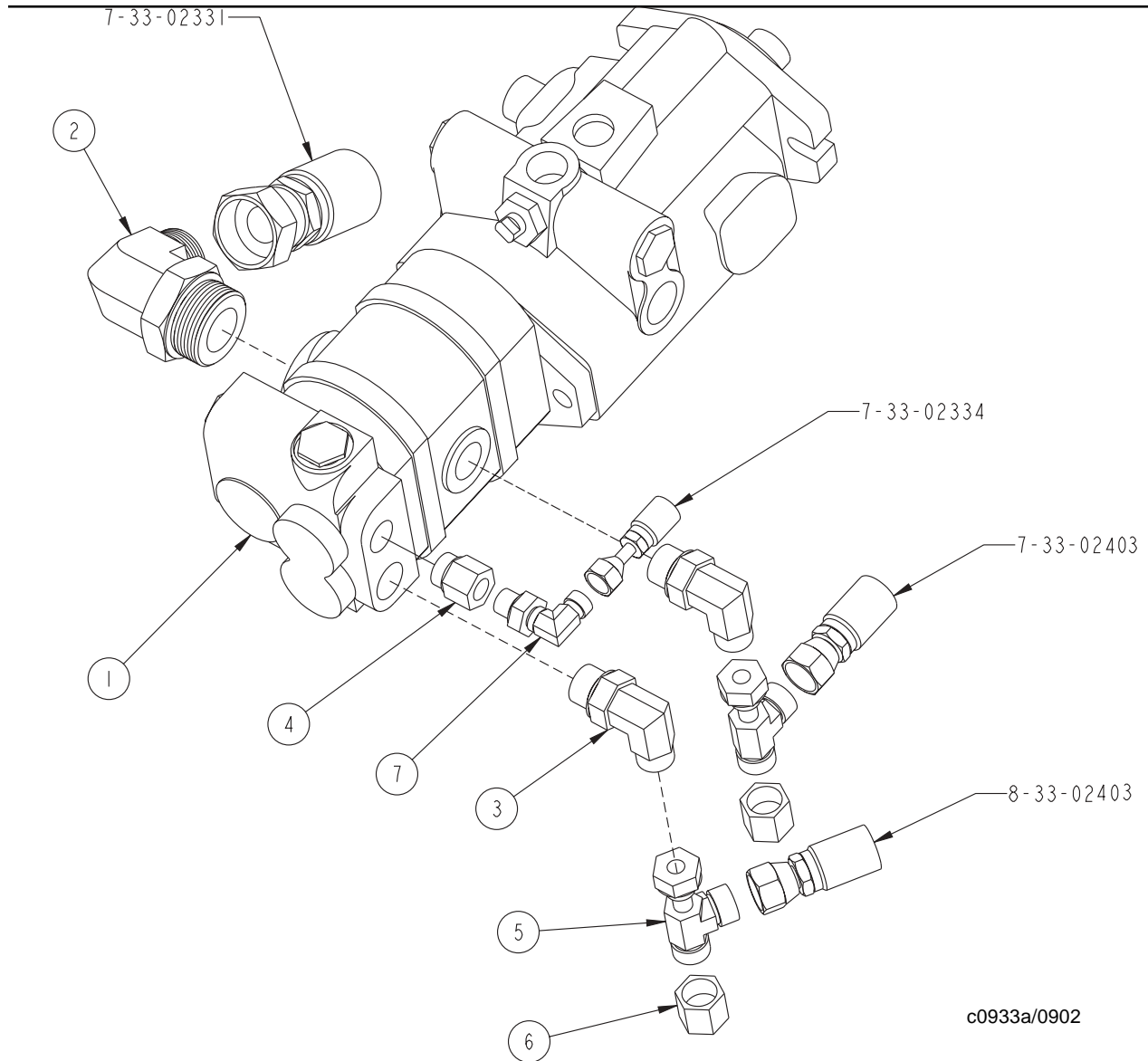


c0935a/0902

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-88-00091	Valve, Main Hydraulic	1
2	2-00-00410	Flat Washer, .875 x .375 x .060	4
3	2-00-02310	Lock Washer, 3/8 Helical Spring	2
4	2-00-02360	HEX nUT, 3/8-16	2
5	2-00-05276	Screw, 3/16-18 x 5.50 long HHC	2
6	2-00-04921	Fitting, 10 SAE 90° -8 ORS	2
7	2-00-04917	Fitting, Reducer, -6 ORB -4 ORB	4
8	2-00-04976	Fitting, -4 ORD -4 ORS, 45° Elbow	4
9	2-00-04970	Fitting, STR -8 ORS x -8 SAE	2
10	2-00-04974	Fitting, Connector, #8 ORS to #10 SAE	1
11	2-00-04975	Fitting, 8SAE, 45° Elbow	2

c0935a/0902

## AUXILIARY PUMP & FITTINGS (FORD)



c0933a/0902

<b>KEY NO.</b>	<b>PART NUMBER</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	7-60-05027	Auxiliary Pump	1
2	2-00-05353	Fitting, 90° Elbow	1
3	2-00-04921	Fitting, 90° Elbow	2
4	2-00-04932	Fitting, Reducer	1
5	2-00-04928	ORFS Run Tee, 13/16 - 16	1
6	2-00-04957	ORFS Cap, #8 ORS	1
7	2-00-04926	Fitting, 90° Elbow	1

c0933a/0902

## HYDRAULIC HOSE SYSTEM - PARTS LIST

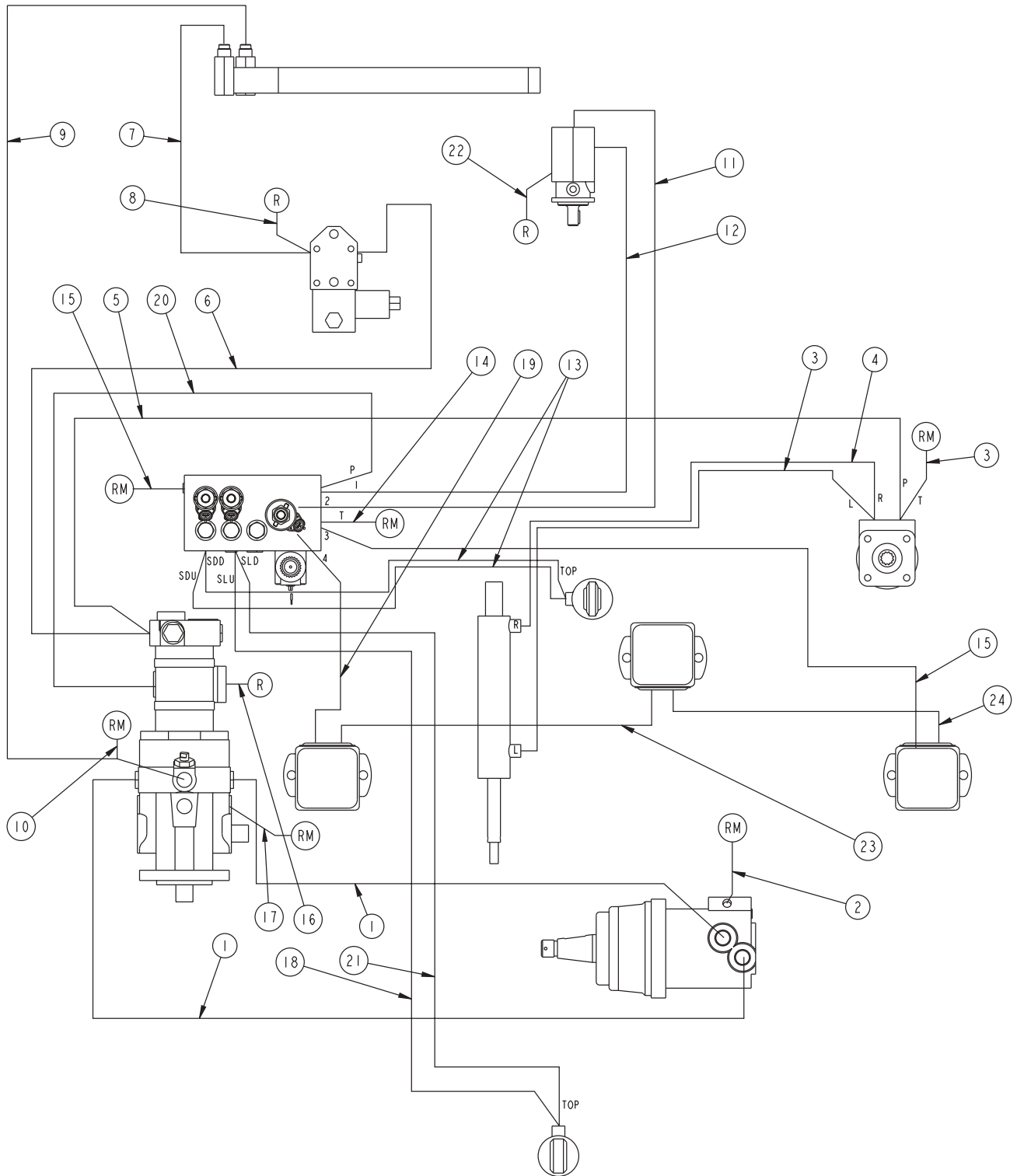
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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-33-02543	Hose, #10 ORS, STR 45, 87" long	2
2	8-33-02184	Hose, #4 STR-STR 9/16-18 both ends, 50.5" long	1
3	7-33-02191	Hose, #4 STR-90, 9/16-18 both ends, 42" long	2
4	7-33-02225	Hose, #4 STR-90, 9/16-18 both ends, 38" long	1
5	7-33-02334	Hose, #4 ORS, STR-90, 47.5" long	2
6	8-33-02327	Hose, #8 STR-STR 13/16-16 both ends, 94" long	1
7	7-33-02201	Hose, #8 ORS-#8 JIC, STR, 20.5" long	1
8	7-33-02224	Hose, #4 ORS, STR-90, 155" long	1
9	7-00-02202	Hose, #8 ORS - #8 JIC, STR, 23" long	1
10	7-33-02544	Hose, #8 ORS - #6 hose, STR, 23" long	1
11	7-33-02546	Hose, #8 ORS, STR-90, 42.5" long	1
12	7-33-02547	Hose, #8 ORS, STR, 36" long	1
13	7-33-02189	Hose, #4 ORS, STR-90, 26" long	2
14	8-33-02214	Hose, #8 STR-STR 13/16-16 both ends, 29" long	1
15	7-33-02187	Hose, #8 ORS, STR, 42" long	2
16	7-33-02331	Hose, #16 STR, 7/16-12 both ends, 46" long	1
17	7-33-02186	Hose, #4 ORS, STR, 30" long	1
18	8-33-02189	Hose, #4 STR-STR, 9/16-18 both ends, 66" long	1
19	8-33-02202	Hose, #8 ORS, STR-90, 20" long	1
20	7-33-02348	Hose, #8 ORS, STR-90, 24" long	1
21	7-33-02548	Hose, #4 ORS, STR, 69" long	1
22	8-33-02204	Hose, #4 ORS, STR-90, 76" long	1
*23	7-33-02545	Hose, #8 ORS, STR, 16.5" long	1
*24	8-33-02190	Hose, #8 ORS, STR, 21" long	1
*25	7-33-02244	Hose, 1" ID, 30" long	1

\*Not included in hose kit m760-674

c0941a/0902

# HYDRAULIC HOSE SYSTEM - EXPLODED VIEW



c0941a/0902



## HYDRAULIC HOSE SYSTEM - PARTS LIST (con't)

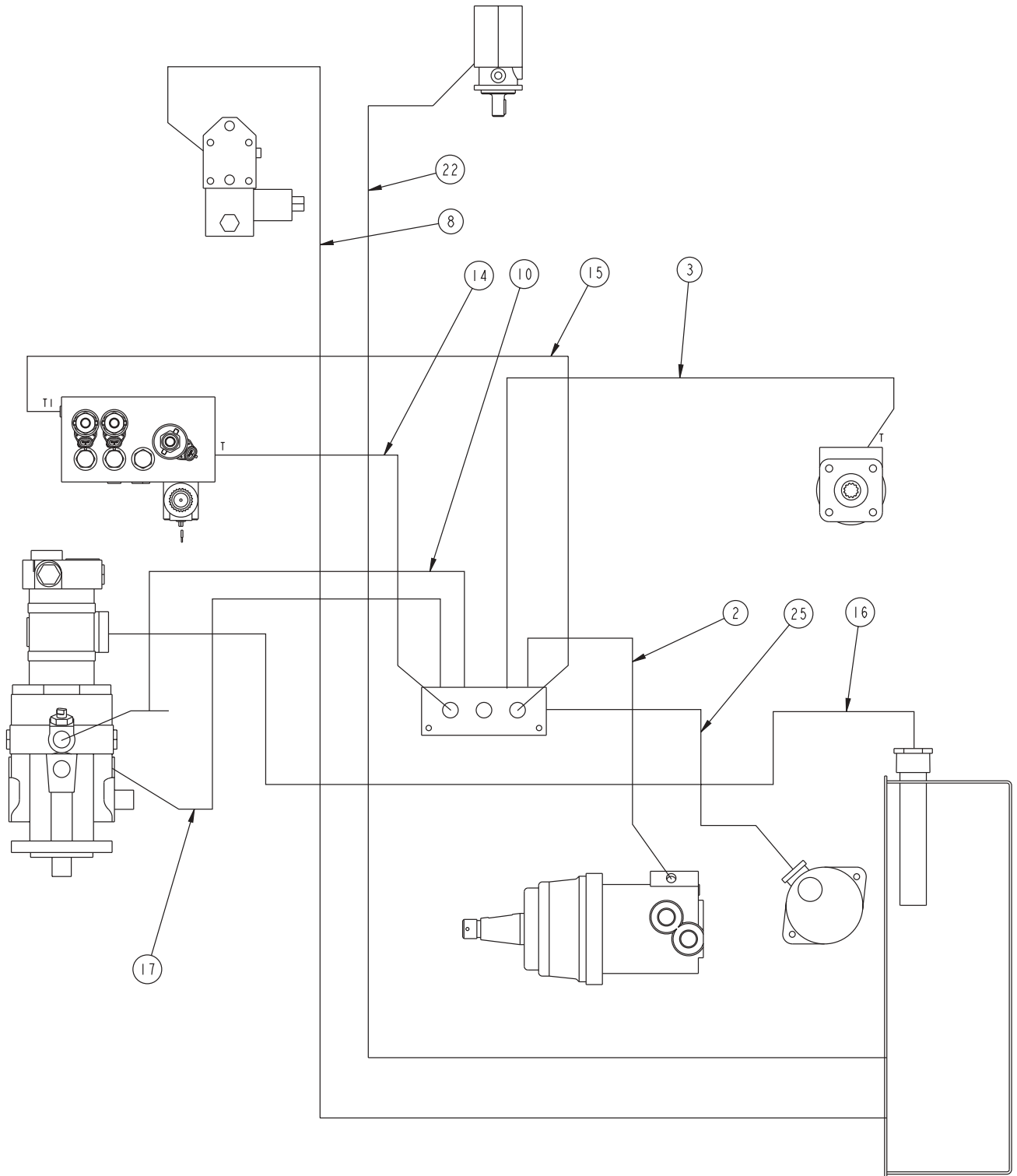
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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-33-02543	Hose, #10 ORS, STR 45, 87" long	2
2	8-33-02184	Hose, #4 STR-STR 9/16-18 both ends, 50.5" long	1
3	7-33-02191	Hose, #4 STR-90, 9/16-18 both ends, 42" long	2
4	7-33-02225	Hose, #4 STR-90, 9/16-18 both ends, 38" long	1
5	7-33-02334	Hose, #4 ORS, STR-90, 47.5" long	2
6	8-33-02327	Hose, #8 STR-STR 13/16-16 both ends, 94" long	1
7	7-33-02201	Hose, #8 ORS-#8 JIC, STR, 20.5" long	1
8	7-33-02224	Hose, #4 ORS, STR-90, 155" long	1
9	7-00-02202	Hose, #8 ORS - #8 JIC, STR, 23" long	1
10	7-33-02544	Hose, #8 ORS - #6 hose, STR, 23" long	1
11	7-33-02546	Hose, #8 ORS, STR-90, 42.5" long	1
12	7-33-02547	Hose, #8 ORS, STR, 36" long	1
13	7-33-02189	Hose, #4 ORS, STR-90, 26" long	2
14	8-33-02214	Hose, #8 STR-STR 13/16-16 both ends, 29" long	1
15	7-33-02187	Hose, #8 ORS, STR, 42" long	2
16	7-33-02331	Hose, #16 STR, 7/16-12 both ends, 46" long	1
17	7-33-02186	Hose, #4 ORS, STR, 30" long	1
18	8-33-02189	Hose, #4 STR-STR, 9/16-18 both ends, 66" long	1
19	8-33-02202	Hose, #8 ORS, STR-90, 20" long	1
20	7-33-02348	Hose, #8 ORS, STR-90, 24" long	1
21	7-33-02548	Hose, #4 ORS, STR, 69" long	1
22	8-33-02204	Hose, #4 ORS, STR-90, 76" long	1
*23	7-33-02545	Hose, #8 ORS, STR, 16.5" long	1
*24	8-33-02190	Hose, #8 ORS, STR, 21" long	1
*25	7-33-02244	Hose, 1" ID, 30" long	1

\*Not included in hose kit m760-674

c0942a/0902

# HYDRAULIC HOSE SYSTEM - EXPLODED VIEW (con't)



c0942a/0902

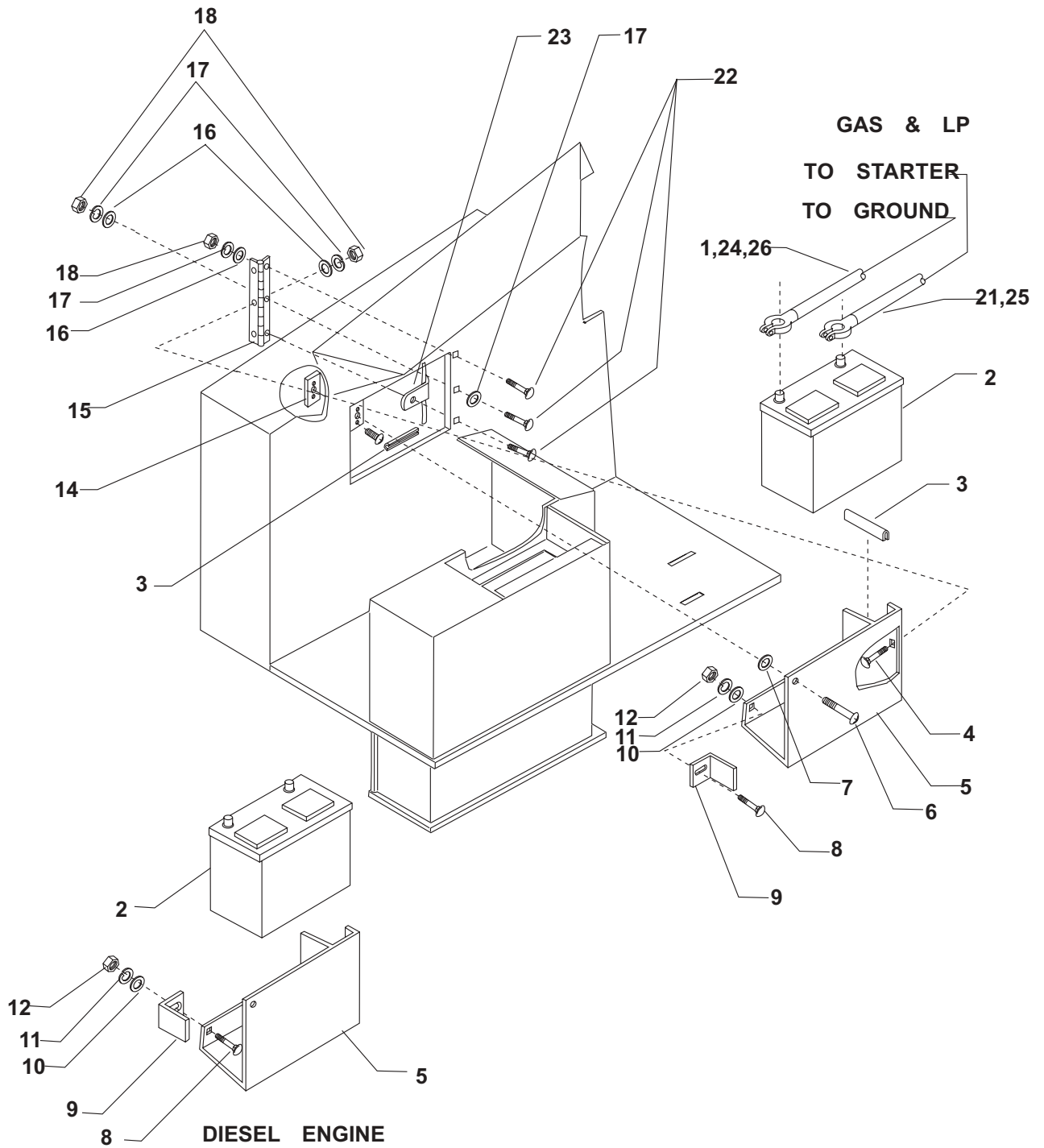
## BATTERY - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	8-90-07167	Wire, to Starter	1
2	0875-008	Battery (Gas & LP)	1
2	0875-057	Battery (Diesel)	1
3	8-21-04016	Edging	2
4	2-00-03569	Carriage Bolt, 5/16 - 18 x .750	3
5	7-19-08059	Battery Access Door	1
6	7-23-03113	Screw, #17 (.312) x 1.000 CAPT.SL.	1
7	7-23-03106	Retainer Washer, .265 x .625 x .025	2
8	2-00-03575	Carriage Bolt, ¼ - 20 x .750	1
9	7-13-07109	Battery Clamp	1
10	2-00-03702	Flat Washer, .625 x .281 x .062	1
11	2-00-00518	Lock Washer, Helical Spring ¼ Med.	1
12	2-00-00594	Nut, Hex ¼ - 20 x .437 x .218	1
13			
14	7-23-03108	Receptacle Bracket	1
15	7-23-00023	Hinge	1
16	2-00-00409	Flat Washer, .687 x .343 x .062	6
17	2-00-00530	Lock Washer, Helical Spring 5/16 Med.	6
18	2-00-00585	Nut, Hex 5/16 - 18 x .500 x .265	6
19			
20			
21	7-90-07262	Wire, to Ground (Ford 423)	1
22	2-00-00196	Screw, 5/16 - 18 x 1.000 Carriage	3
23	2-00-05253	Cable Clamp, .500	1
24	2-00-05171	Boot, Protective (Red)	1
25	2-00-05173	Boot, Protective (Black)	1
26	7-90-07280	Battery (+) Cable (Diesel Only)	1

P-5086a/9611

# BATTERY - EXPLODED VIEW



P-5086a/9611

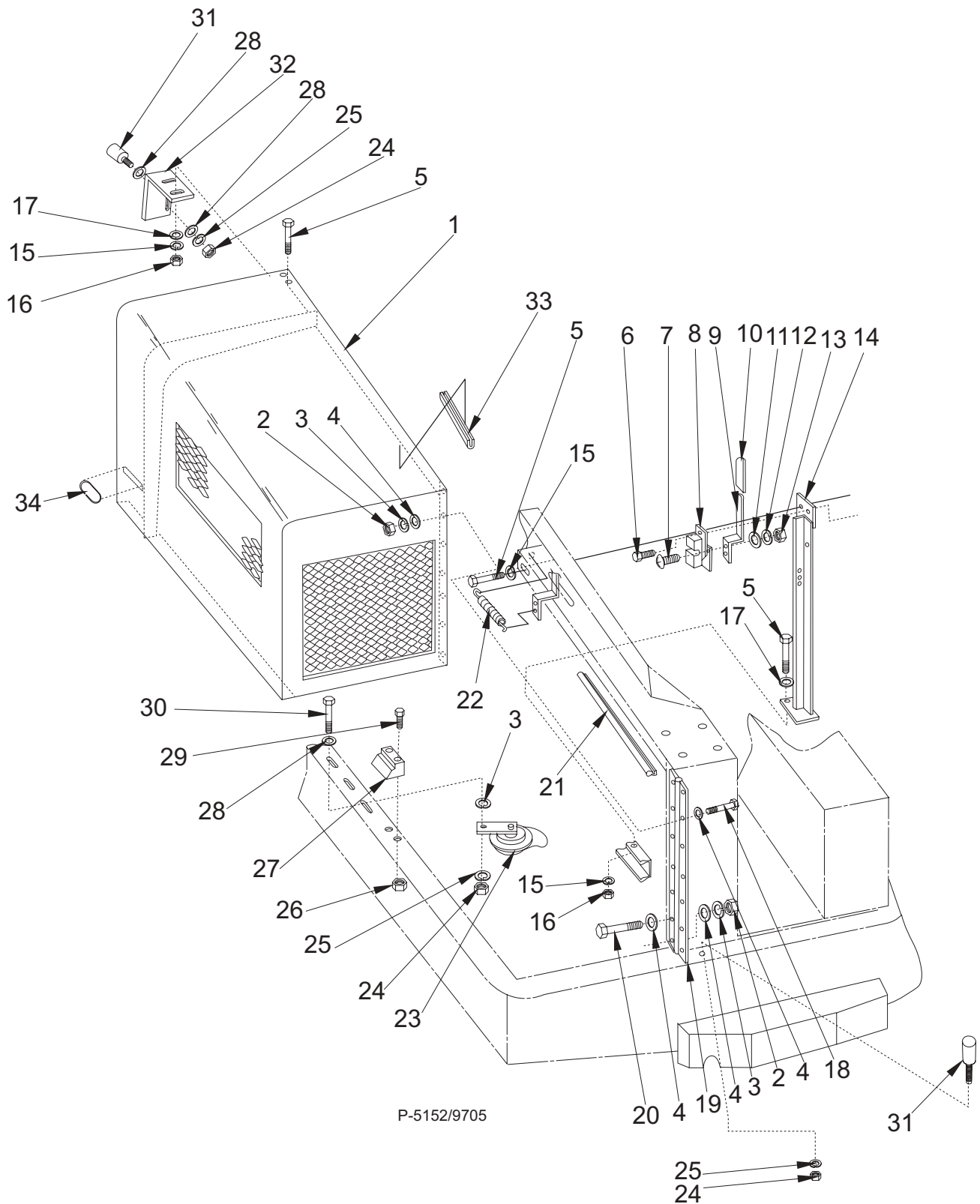
## ENGINE COVER - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-16-07279	Engine Cover	1
2	2-95-04182	Nut, Hex 3/8-16 x .562 x .328 Fiber	14
3	2-00-02303	Lock Washer, 5/16	1
4	2-00-00410	Flat Washer, .875 x .375 x .062	28
5	2-00-01490	Screw, 1/4 - 20 x .875 HHC	4
6	2-00-00221	Screw, 1/4 - 20 x .750 HHC	2
7	2-00-04794	Screw, #10-24 x .625 HHC	2
8	8-41-00037	Engine Cover Latch	1
9	7-31-06062	Handle Cover Latch	1
10	7-31-06061	Cover Latch Grip	1
11	2-00-00426	Flat Washer, .500 x .218 x .062	2
12	2-00-00519	Lock Washer, Helical Spring #10 Med	2
13	2-00-00605	Nut, Hex MS #10 - 24 x .375 x .125	2
14	7-81-00138	Center Support	1
15	2-00-00518	Lock Washer, Helical Spring 1/4 Med	6
16	2-00-00594	Nut, 1/4-20 x .437 x .218	4
17	2-00-03702	Flat Washer, .625 x .281 x .062	3
18	2-00-00233	Screw, 3/8-16 x 1.000 HHC	6
19	7-32-00022	Hinge	1
20	2-00-00209	Screw, 3/8-16 x 1.250 HHC	6
21	7-29-00157	Gasket	1
22	7-76-00106	Spring	1
23	8-32-09013	Horn,	1
24	2-00-00585	Nut, Hex 5/16-18 x .500 x .265	3
25	2-00-00530	Lock Washer, Helical Spring 5/16 Med	3
26	2-00-00641	Nut, Hex Fiber Insert 1/4 - 20	2
27	7-78-05016	Engine Cover Stop	1
28	2-00-00409	Flat Washer, .687 x .343 x .062	3
29	2-00-01769	Screw, 1/4-20 x 1.75 HHC	2
30	2-00-01255	Screw, 5/16-18 x .88 HHC	1
31	7-55-08116	Striker Pin	2
32	7-08-00532	Engine Cover Bracket	1
33	8-08-07045	Edging	1
34	8-21-04038	Edging	1

P-5152

# ENGINE COVER - EXPLODED VIEW



P-5152/9705

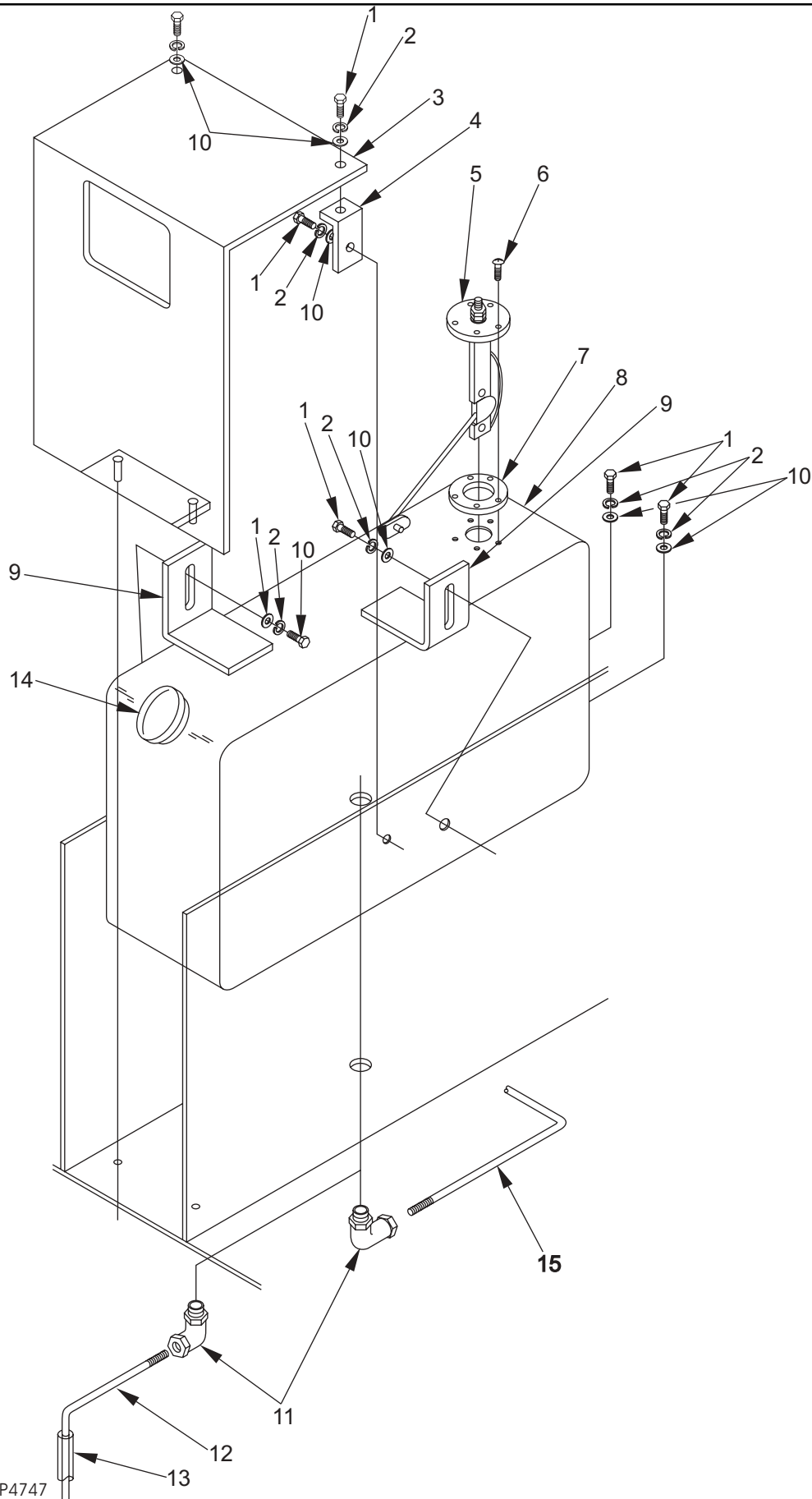
## FUEL TANK - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	2-00-00221	Screw, 1/4-20 x .750 HHC	8
2	2-00-00518	Lock Washer, Helical Spring 1/4 Med	8
3	7-16-07280	Cover	1
4	7-08-00479	Bracket	2
5	8-26-04003	Float	1
6	2-00-04737	Screw, #10-32 x .44 (Self Seal)	5
7	8-29-00131	Gasket	1
8	8-83-04029	Fuel Tank	1
9	7-13-07100	Bracket	2
10	2-00-03702	Flat Washer, 1.062 x .265 x .062	8
11	2-00-04494	Compression Male 90° Elbow, 1/8	1
12	7-87-02148	Fuel Line (Gas Only)	1
13	8-08-07038	Fuel Line Bumper (Gas Only)	3
14	7-11-00029	Fuel Cap	1
15	7-87-02160	Fuel Line (Diesel Only)	1

P-4747/9606

# FUEL TANK - EXPLODED VIEW



P4747



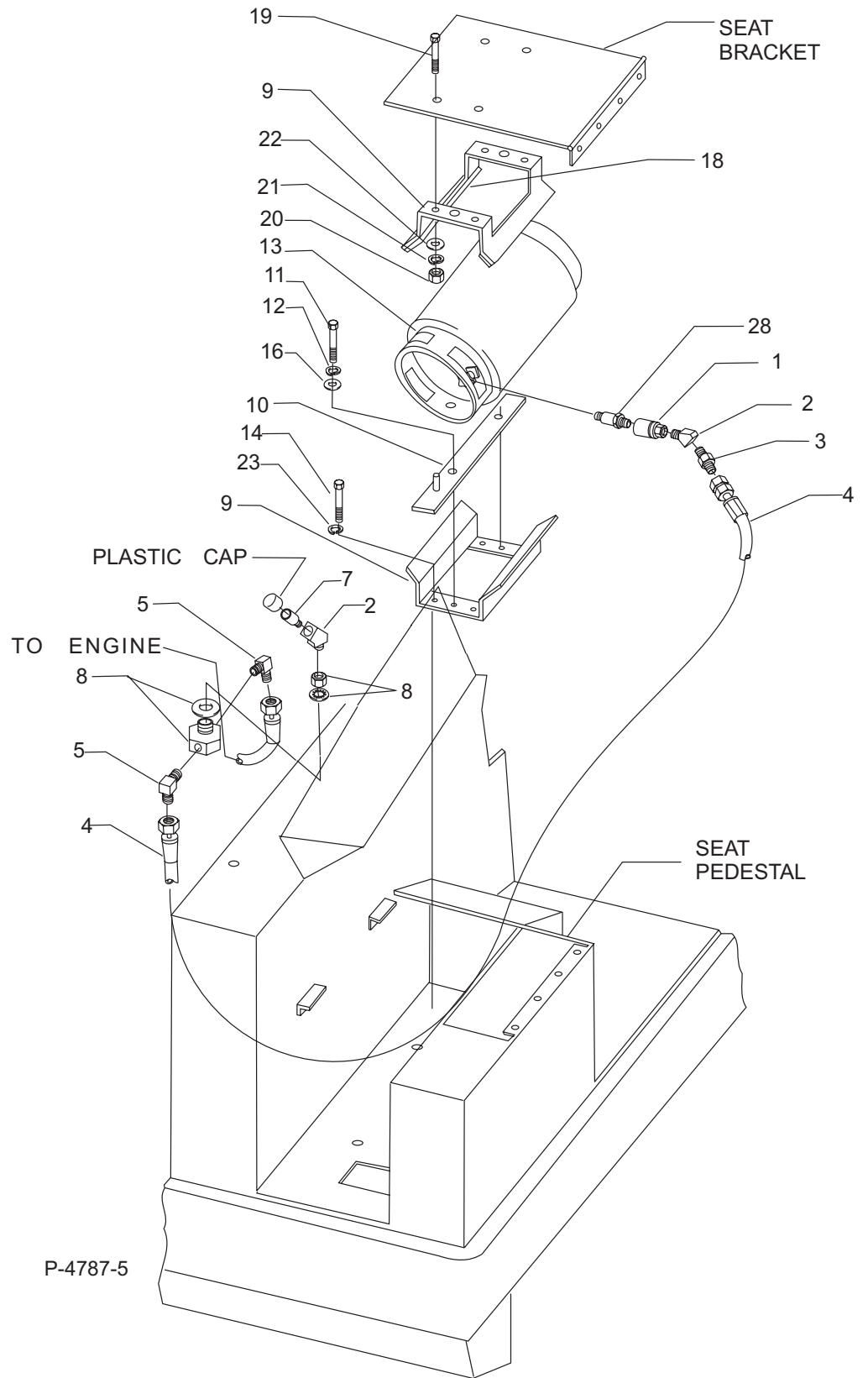
## LP TANK SYSTEM OPTION - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
1	N3-0042-1	Coupling	1
2	*	Fitting, 1/4 NPT x 1/4 FM 45°	2
3	N2-1107	Fitting, 1/4 NPT x 3/8 SAE Straight	1
4	*	Hose, 5/16 ID x 53" Lg. #6 UL	1
5	*	Fitting, 1/4 NPT x 3/8 SAE 90°	2
6			
7	N3-0038-1	Relief Valve	1
8	N3-0037	Fitting, Bulkhead	1
9	7-15-01038	Collar Weldment	2
10	7-43-05004	Lock Weldment	1
11	2-00-00220	Screw, 1/4-20 x .63 Lg.	2
12	2-00-00518	Washer, Lock 1/4	2
13	8-83-04016	Tank, LP(comes with fitting)	1
14	2-00-00233	Screw, HHC 3/8-16 x 1.00 Lg.	4
15			
16	2-00-03702	Washer, Flat	2
17			
18	7-50-05143	Pad	2
19	2-00-02708	Screw, HHC 5/16-18 x 1.00Lg.	4
20	2-00-00585	Nut, Hex 5/16-18 THDs	4
21	2-00-00530	Washer, Lock 5/16	4
22	2-00-00409	Washer, Flat	4
23	2-00-02310	Washer, Lock 3/8	4

P4787-5/9609

# LP TANK SYSTEM OPTION - EXPLODED VIEW

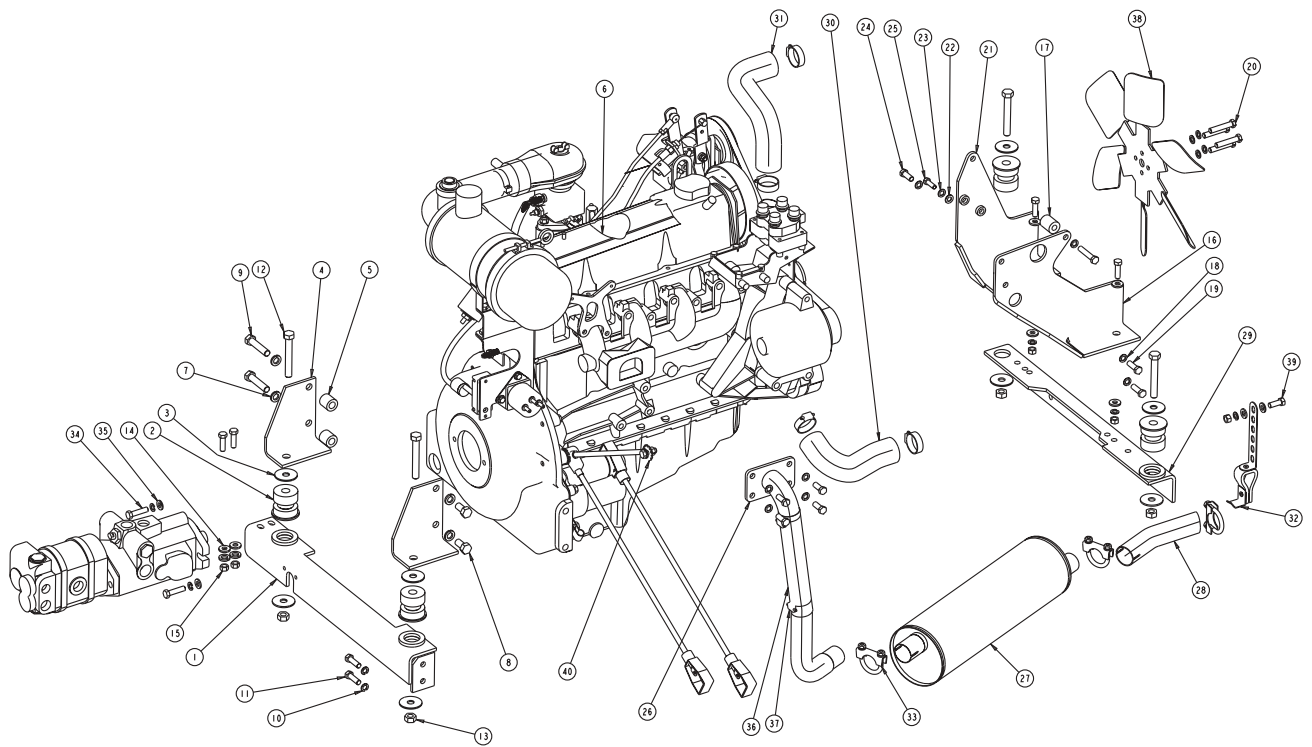


## FORD 425 ENGINE (GAS) - PARTS LIST

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-81-00140	Support, Rear Engine	1
2	7-35-00017	Isolator, Engine Mount (Red Dot)	4
3	2-00-05067	Spacer, Snubbing Washer	8
4	7-08-00919	Bracket, Outboard Engine Mount	2
5	7-75-01187	Spacer, Engine Mount (Ford LRG 425)	2
6	0877-077	Engine, Ford LRG 425 GAS	1
	0877-077-1	***Engine, Ford LRG 425 GAS (California only)	1
7	2-00-02312	Lock Washer, 1/2"	6
8	2-00-02689	Screw, 1/2-13 x 1.00 LG HHC	2
9	2-00-02694	Screw, 1/2-20 x 2.00 LG HHC	2
10	2-00-02310	Washer, Lock 3/8 Helical Spring	7
11	2-00-04705	Bolt, Hex Head Finished 3/8-16 x 1.25 LG	6
12	2-00-02698	Screw, 1/2-20 x 3.50 LG HHC	4
13	2-00-00640	Nut, 1/2-20 Fiber Insert	4
14	2-00-04801	Flat Washer, 1.00 x .39 x .06	6
15	2-00-02360	Nut, Hex 3/8-16	6
16	7-08-00829	Bracket, Motor Mount	1
17	8-75-01210	Bracket, Engine Mount	1
18	2-00-00505	Lock Washer, 7-16 HS Med.	5
19	2-00-05005	Screw, M10 x 1.5 x 30mm LG HHC	2
20	2-00-05328	Screw, M10 x 1.5 x 50mm LG HHC	1
21	7-08-00846	Bracket, Motor Mount	1
22	2-00-00409	Flat Washer, .687 x .344 x .062	1
23	2-00-02303	Lock Washer, 5/16 HS Med	1
24	2-00-04366	Screw, M10 x 1.5 x 25mm HHC	1
25	2-00-04948	Screw, M8 x 1.25 x 25mm LG Med	1
26	7-56-04054	Exhaust Pipe	1
27	7-49-00031	Muffler	1
28	7-56-04055	Tail Pipe	1
29	7-81-00132	Support, Front Engine	1
30	8-33-02336	Hose, Lower Radiator	1
31	8-33-02337	Hose, Upper Radiator	1
32	7-31-07017	Hanger, Muffler	1
33	2-00-04040	Clamp, Muffler 1 1/4	3
34	2-00-00234	Bolt, Hex Head Finished 3/8-16 x 1.50 LG	2
35	2-00-00402	Washer, 25/64 ID x 3/4 OD	6
36	7-34-09016	Sleeve, Insulating	1
37	2-00-03404	Clamp	6
38	7-23-00018	Fan, Engine	1
39	2-00-00233	Bolt, Hex Head Finished 3/8-16	2
40	2-00-03829	Lock Washer, 3/8 Int.Ext Tooth	1

\*\*\*Build code on or before 12/2000

# FORD 425 ENGINE (GAS) - EXPLODED VIEW



c2180/0802

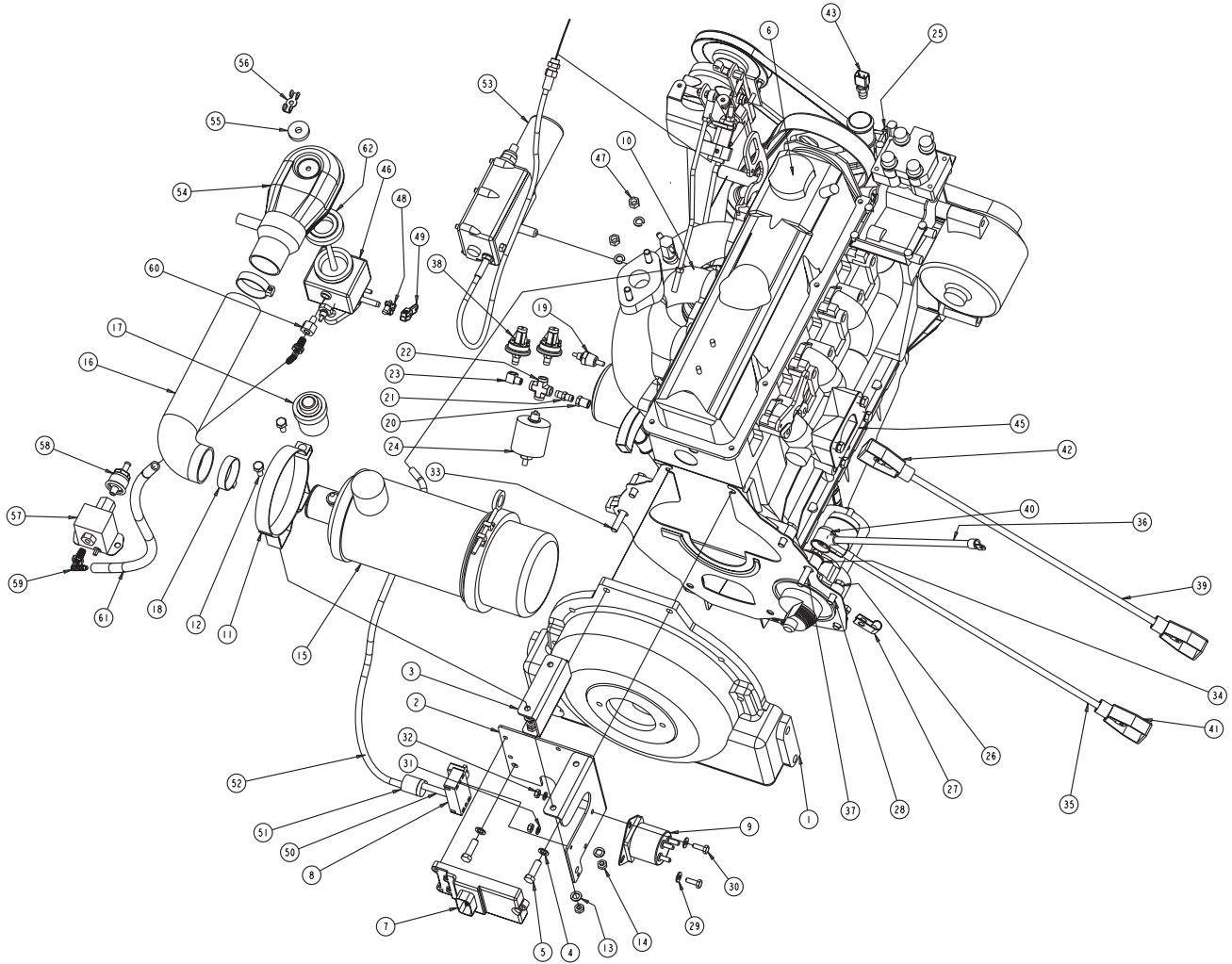
## FORD 425 ENGINE (GAS) - PARTS LIST 2

KEY NO.	PART NUMBER	DESCRIPTION	QTY
*1	7-33-05098	Housing, Flywheel (Cast Iron)	1
*2	7-08-01031	Bracket, 425 Control Module	1
*3	7-08-01032	Bracket, Air Cleaner Riser	1
4	2-00-00505	Lock Washer, 1/16 HS Med.	10
5	2-00-05005	Screw, M10 x 1.5 x 30mm LG HHC	2
6	0877-077	Engine, Ford LRG 425 GAS	1
	0877-077-1	***Engine, Ford LRG 425 GAS (California only)	1
7	0769-024	Module, Control	1
8	0769-027	Sensor, Mapp	1
9	8-74-00012	Solenoid, Starter	1
10	2-00-04366	Screw, M10 x 1.5 x 25mm HHC	5
11	8-24-04093	Clamp, Air Cleaner	1
12	2-00-00208	Screw, 5/16-18 x .750 HHC	4
13	2-00-02303	Lock Washer, 5/16 HS Med	4
14	2-00-00585	Hex Nut, 5/16-18	4
15	8-24-04100	Air Cleaner	1
16	7-33-02207	Hose	1
17	8-24-04101	Gauge, Filter	1
*18	2-00-02216	Clamp, Hose	2
19	8-69-00013	Sensor, Water Temperature	2
20	2-00-04853	Fitting, 1/4 NPT - 1/8 NPT Reducer Bushing	1
21	***	Fitting, 1/8 NPT Nipple	1
22	***	Fitting, 1/8 NPT Female Cross	1
*23	2-00-03799	Fitting, 1/8 NPT Street Elbow 90	1
24	8-69-00005	Sensor, Oil Pressure	1
25	2-00-05328	Screw, M10 x 1.5 x 50mm LG HHC	4
26	2-00-02310	Lock Washer, 3/8 Helical Spring	6
27	2-00-04873	Clamp, Cable	1
28	2-00-04705	Bolt, Hex Head Finished 3/8-16 x 1.25 LG	5
29	2-00-03702	Washer, .625 x .281 x .063	2
30	2-00-00221	Bolt, Hex Head Finished 1/4-20	2
31	2-00-00518	Lock Washer, 1/4 Helical Spring	2
32	2-00-00594	Hex Nut, 1/4-20	2
33	2-00-00216	Bolt, Hex Head, 3/8-16 x 2"	1
*34	2-00-03829	Lock Washer, 3/8 Int./Ext. Tooth	1
*35	7-90-07262	Wire, Battery Connection (Black)	1
36	8-90-07328	Wire, Ground to Frame	1
37	2-00-02599	Bolt, Hex Head, 3/8-16 x 2.25"	1
38	8-82-00046	Switch, Oil Pressure	2
39	8-90-07167	Wire, Battery Connection (Red)	1
40	2-00-04952	Boot, Protective (Red)	1
41	2-00-05173	Insulator, Battery	1
*42	2-00-05171	Boot, Protective (Red)	2
*43	8-63-05011	Switch, Temperature	1
44	0795-166	Harness, Ford LRG425 Engine (not shown)	1
45	***	Gasket, Exhaust Manifold	1
46	***	Carburetor, Gasoline	1
47	2-00-02360	Hex Nut, 3/8-16	2
48	***	Stop, Throttle Lever	1
49	***	Arm, Throttle Lever	1
50	***	Hose, 7/32 ID	1
51	***	Stop, Vapor	1
52	***	Hose, 7/32 ID	1
53	***	Addco Throttle Controller	1
54	***	Air Horn	1
55	***	Washerm Felt	1
56	***	Nut, Wing	1
57	8-60-05028	Pump, Fuel	1
58	8-24-04138	Filter, Fuel	1
59	***	Fitting, 1/8 NPT x 7/32 Hose Barb 90	2
60	2-00-05465	Adapter, 1/4 Female x 1/8 Male	1
61	8-33-02154	Hose, Fuel Line	1
62	***	Gasket, Carburetor	1

\*Parts supplied in Kit 0760-675

\*\*\*Build code on or before 12/2000

# FORD 425 ENGINE (GAS) - EXPLODED VIEW 2



c0954b/0902

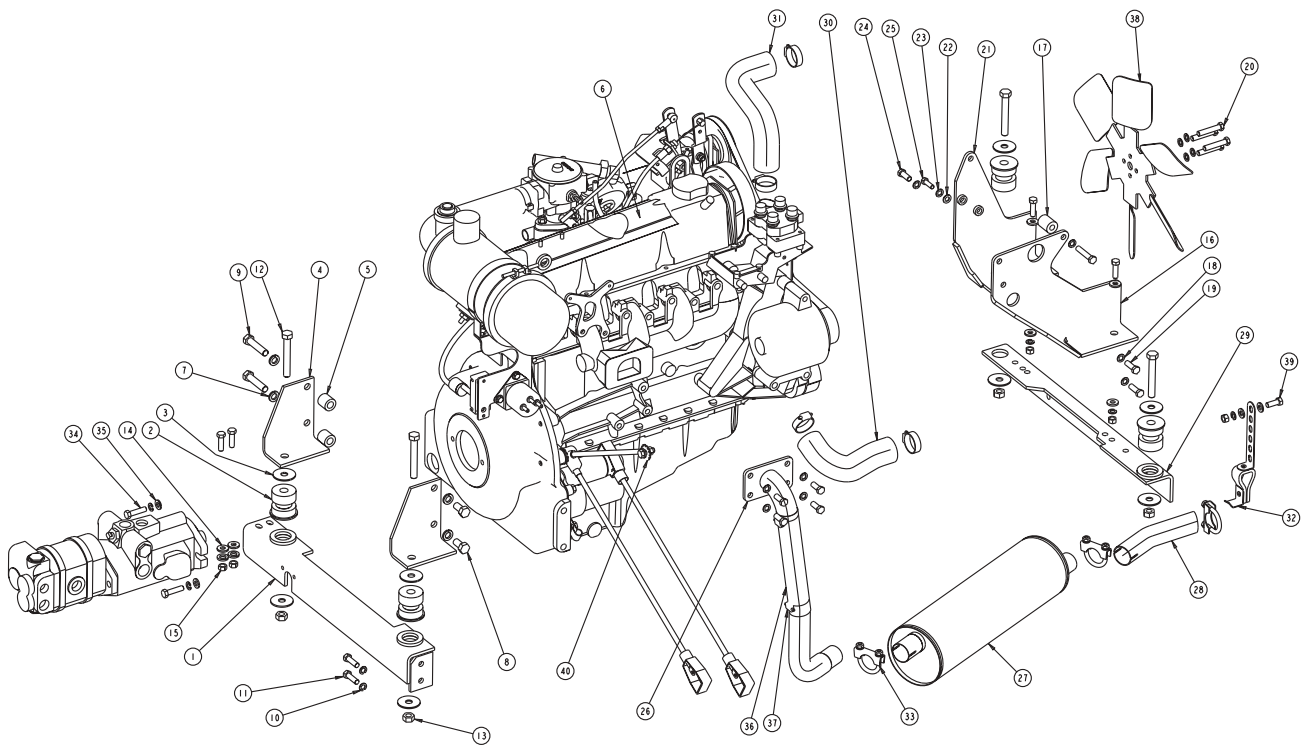
## FORD 425 ENGINE (LP) - PARTS LIST

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-81-00140	Support, Rear Engine	1
2	7-35-00017	Isolator, Engine Mount (Red Dot)	4
3	2-00-05067	Spacer, Snubbing Washer	8
4	7-08-00919	Bracket, Outboard Engine Mount	2
5	7-75-01187	Spacer, Engine Mount (Ford LRG 425)	2
6	0877-072	Engine, Ford LRG 425 LP	1
	0877-072-1	***Engine, Ford LRG 425 LP (California only)	1
7	2-00-02312	Lock Washer, 1/2"	6
8	2-00-02689	Screw, 1/2-13 x 1.00 LG HHC	2
9	2-00-02694	Screw, 1/2-20 x 2.00 LG HHC	2
10	2-00-02310	Washer, Lock 3/8 Helical Spring	7
11	2-00-04705	Bolt, Hex Head Finished 3/8-16 x 1.25 LG	6
12	2-00-02698	Screw, 1/2-20 x 3.50 LG HHC	4
13	2-00-00640	Nut, 1/2-20 Fiber Insert	4
14	2-00-04801	Flat Washer, 1.00 x .39 x .06	6
15	2-00-02360	Nut, Hex 3/8-16	6
16	7-08-00829	Bracket, Motor Mount	1
17	8-75-01210	Bracket, Engine Mount	1
18	2-00-00505	Lock Washer, 7-16 HS Med.	5
19	2-00-05005	Screw, M10 x 1.5 x 30mm LG HHC	2
20	2-00-05328	Screw, M10 x 1.5 x 50mm LG HHC	1
21	7-08-00846	Bracket, Motor Mount	1
22	2-00-00409	Flat Washer, .687 x .344 x .062	1
23	2-00-02303	Lock Washer, 5/16 HS Med	1
24	2-00-04366	Screw, M10 x 1.5 x 25mm HHC	1
25	2-00-04948	Screw, M8 x 1.25 x 25mm LG Med	1
26	7-56-04054	Exhaust Pipe	1
27	7-49-00031	Muffler	1
28	7-56-04055	Tail Pipe	1
29	7-81-00132	Support, Front Engine	1
30	8-33-02336	Hose, Lower Radiator	1
31	8-33-02337	Hose, Upper Radiator	1
32	7-31-07017	Hanger, Muffler	1
33	2-00-04040	Clamp, Muffler 1 1/4	3
34	2-00-00234	Bolt, Hex Head Finished 3/8-16 x 1.50 LG	2
35	2-00-00402	Washer, 25/64 ID x 3/4 OD	6
36	7-34-09016	Sleeve, Insulating	1
37	2-00-03404	Clamp	6
38	7-23-00018	Fan, Engine	1
39	2-00-00233	Bolt, Hex Head Finished 3/8-16	2
40	2-00-03829	Lock Washer, 3/8 Int.Ext Tooth	1

\*\*\*Build code on or before 12/2000

C2136/0802

# FORD 425 ENGINE (LP)- EXPLODED VIEW



C2136/0802



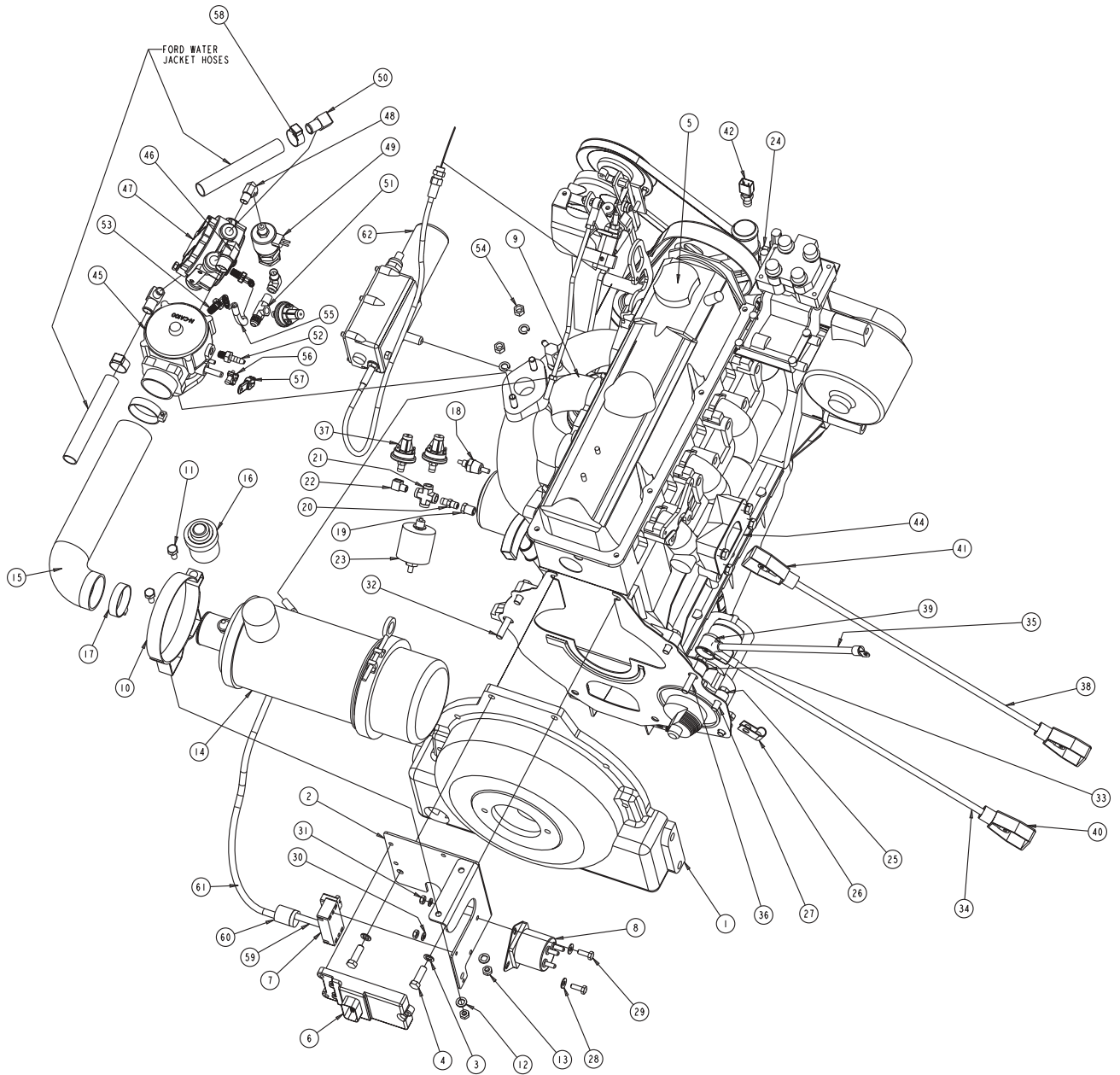
## FORD 425 ENGINE (LP) - PARTS LIST 2

KEY NO.	PART NUMBER	DESCRIPTION	QTY
*1	7-33-05098	Housing, Flywheel (Cast Iron)	1
*2	7-08-01031	Bracket, 425 Control Module	1
3	2-00-00505	Lock Washer, 1/16 HS Med.	10
4	2-00-05005	Screw, M10 x 1.5 x 30mm LG HHC	2
5	***	Engine, Ford LRG 425	1
6	0769-024	Module, Control	1
7	0769-027	Sensor, Mapp	1
8	8-74-00012	Solenoid, Starter	1
9	2-00-04366	Screw, M10 x 1.5 x 25mm HHC	5
10	8-24-04093	Clamp, Air Cleaner	1
11	2-00-00208	Screw, 5/16-18 x .750 HHC	4
12	2-00-02303	Lock Washer, 5/16 HS Med	4
13	2-00-00585	Hex Nut, 5/16-18	4
14	8-24-04100	Air Cleaner	1
15	7-33-02207	Hose	1
16	8-24-04101	Gauge, Filter	1
17	2-00-02216	Clamp, Hose	2
*18	8-69-00013	Sensor, Water Temperature	2
19	2-00-04853	Fitting, 1/4 NPT - 1/8 NPT Reducer Bushing	1
20	***	Fitting, 1/8 NPT Nipple	1
21	***	Fitting, 1/8 NPT Female Cross	1
22	2-00-03799	Fitting, 1/8 NPT Street Elbow 90	1
*23	8-69-00005	Sensor, Oil Pressure	1
24	2-00-05328	Screw, M10 x 1.5 x 53mm LG HHC	4
25	2-00-02310	Lock Washer, 3/8 Helical Spring	6
26	2-00-04873	Clamp, Cable	1
27	2-00-04705	Bolt, Hex Head Finished 3/8-16 x 1.25 LG	5
28	2-00-03702	Washer, .625 x .281 x .063	2
29	2-00-00221	Bolt, Hex Head Finished 1/4-20	2
30	2-00-00518	Lock Washer, 1/4 Helical Spring	2
31	2-00-00594	Hex Nut, 1/4-20	2
32	2-00-00216	Bolt, Hex Head, 3/8-16 x 2"	1
33	2-00-03829	Lock Washer, 3/8 Int./Ext. Tooth	1
*34	7-90-07262	Wire, Battery Connection (Black)	1
*35	8-90-07328	Wire, Ground to Frame	1
36	2-00-02599	Bolt, Hex Head, 3/8-16 x 2.25"	1
37	8-82-00046	Switch, Oil Pressure	2
*38	8-90-07167	Wire, Battery Connection (Red)	1
39	2-00-04952	Boot, Protective (Red)	1
40	2-00-05173	Insulator, Battery	1
41	2-00-05171	Boot, Protective (Red)	2
*42	8-63-05011	Switch, Temperature	1
*43	0795-166	Harness, Ford LRG425 Engine (not shown)	1
44	***	Gasket, Exhaust Manifold	1
45	0769-015	Carburetor, CA -100	1
46	2-00-04577	Fitting, 1/2 NPT Elbow 90	1
47	0769-018	Regulator, Vaporizer, Model N-J	1
48	2-00-05678	Fitting, 1/4 NPT Street Elbow 90 Brass	2
49	0769-025	Valve, Fuel Shut-off Solenoid	1
50	N2-1306	Fitting, 3/8 NPT x 5/8 Hose 90	2
51	***	Fitting, 1/4 NPT x 1/8 NPT x 3/8 JIC Tee	1
52	***	Fitting, 1/8 NPT x 7/32 Hose Barb STR	1
53	***	Fitting, 1/8 NPT x 7/32 Hose Barb 90	2
54	2-00-02360	Hex Nut, 3/8-16	2
55	***	Hose, 7/32 ID	1
56	***	Stop, Throttle Lever	1
57	***	Arm, Throttle Lever	1
58	2-00-03407	Clamp, Hose, Witteck #10P	2
59	***	Hose, 7/32 ID	1
60	***	Stop, Vapor	1
61	***	Hose, 7/32 ID	1
62	***	Addco Throttle Controller	1

\*Parts supplied in Kit 0760-675

\*\*\*Build code on or before 12/2000

# FORD 425 ENGINE (LP)- EXPLODED VIEW 2



c0955a/0802

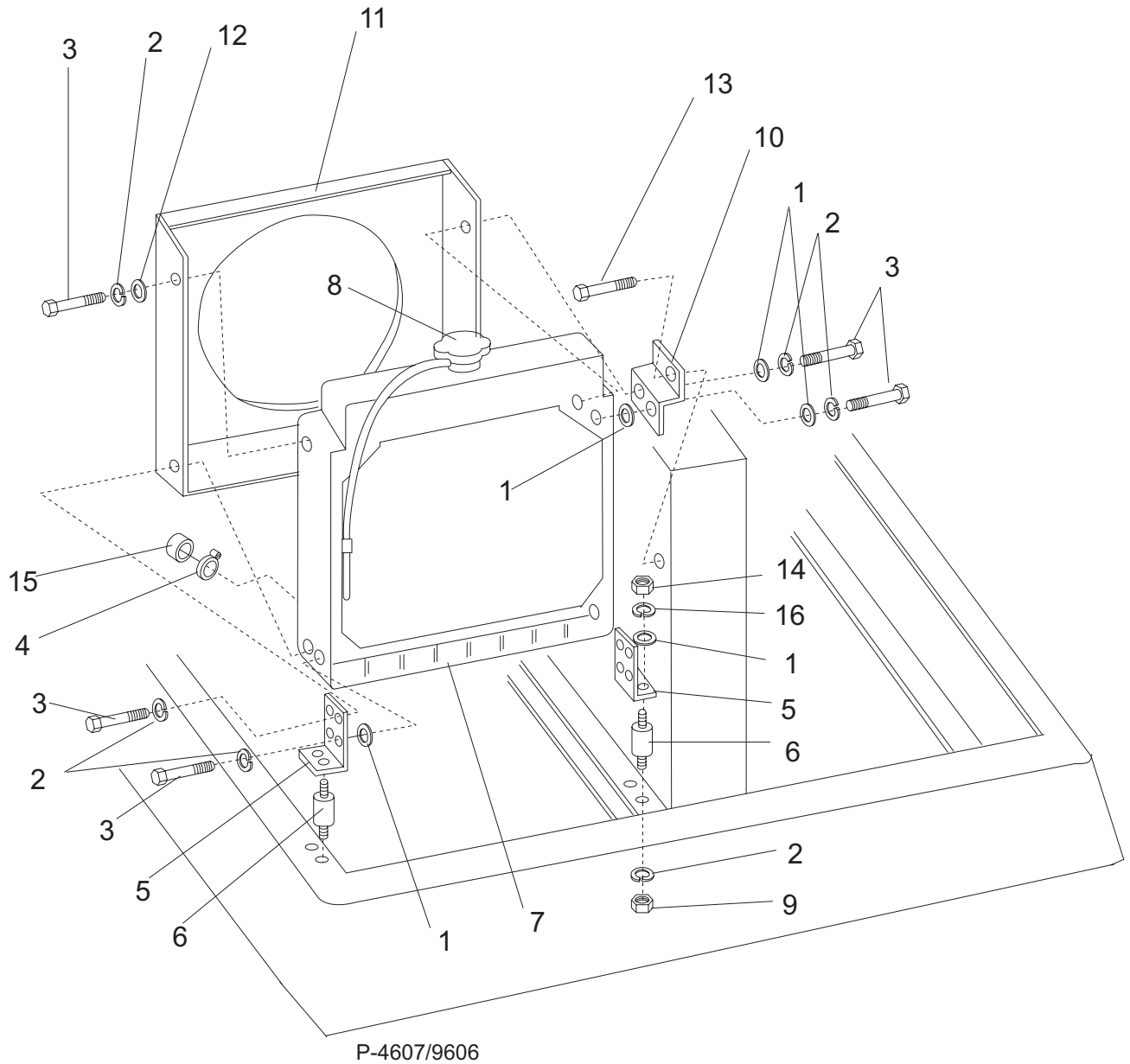
## RADIATOR & SHROUD - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	2-00-03702	Flat Washer, .625 x .281 x .062	8
2	2-00-00518	Lock Washer, Helical Spring 1/4 Med	16
3	2-00-00220	Screw, 1/4 - 20 x .625 HHC	7
4	2-00-03404	Hose Clamp, 1.062 - 2.000	1
5	7-08-00834	Radiator Mounting Bracket	2
6	8-50-05053	Pad, Radiator Mount	4
7	8-62-01011	Radiator	1
8	8-11-00045	Radiator Cap	1
9	2-00-00501	Lock Washer, 1/4 Int.	4
10	7-08-00483	Radiator Mounting Bracket	1
11	7-72-00012	Fan Shroud (Gas Only)	1
11	7-72-00008	Fan Shroud (Diesel Only)	1
12	2-00-01676	Flat Washer, 1.062 x .265 x .06	1
13	2-00-00209	Screw, 3/8 - 16 x 1.250 HHC	Ref.
14	2-00-00589	Nut, Hex Jam 1/4-20 x .437 x .156	4
15	2-00-04913	Hose Plug	1

P-4607/9606

# RADIATOR & SHROUD - EXPLODED VIEW



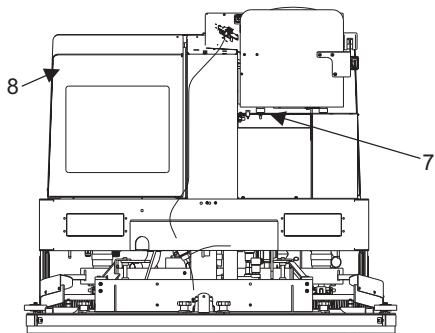
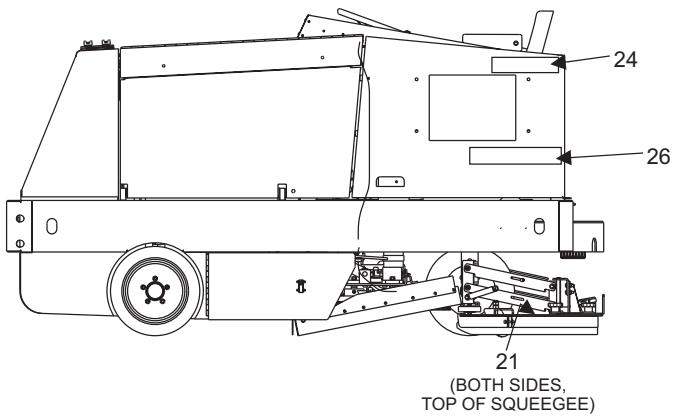
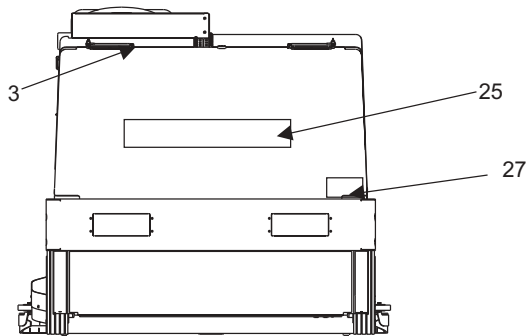
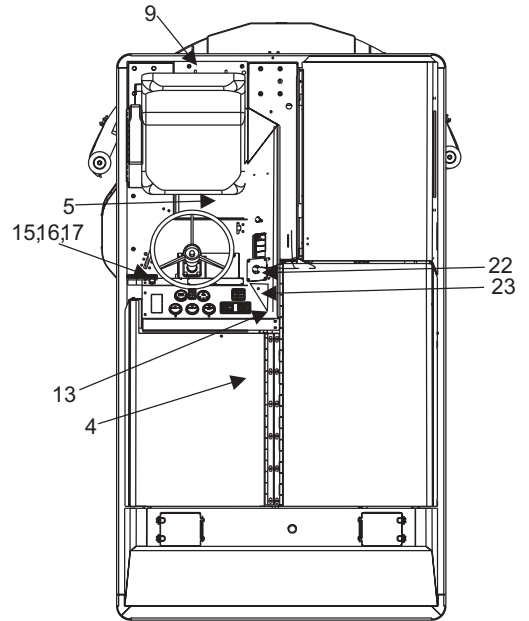
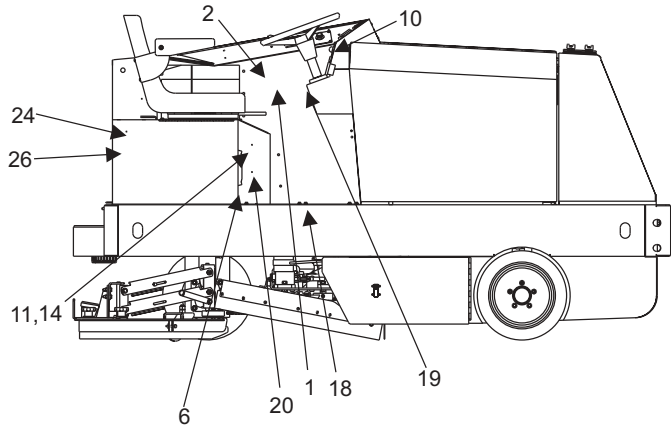
## DECALS - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-18-00148	Decal - Maintenance Chart	1
2	8-18-00394	Decal - Warning (General)	1
3	7-18-00081	Decal -Fill Level (Solution Tank)	1
4	7-18-00099	Decal -Warning (Combustables)	1
5	8-18-00313	Decal -Seat Adjustment	1
6	8-18-00306	Decal -Hydraulic Fluid Only	1
7	8-18-00310	Decal -Gasoline Only	1
8	8-18-00399	Decal -Warning (Fan & Belt)	1
9	8-18-00277	Decal -Warning (Fire Hazard)	1
10	7-18-00205	Decal -Ignition	1
11	8-18-00014	Decal -Serial Number Tag	1
12	7-18-00149	Decal -Maintenance Diagram	1
13	7-18-00216	Decal -Choke Cable	1
14	2-00-04115	Rivet	2
15	8-50-05022	Pad - Foot Pedal	3
16	7-40-00005	Decal - Forward	1
17	7-40-00006	Decal - Reverse	1
18	7-50-05136	Pad - Edge	1
19	8-18-00395	Decal -Warning (Key Switch)	1
20	7-18-00228	Decal -Patent	1
21	7-18-00236	Decal -No Step	3
22	7-18-00281	Decal -Solution Control	1
23	7-18-00309	Decal -Detergent Control	1
24	7-18-00285	Decal -SR7770HC	2
25	7-18-00291	Decal -American Lincoln (Adhesive) 25"	1
26	7-18-00297	Decal -American Lincoln (Adhesive) 12.25"	2
27	7-18-00287	Decal -ALTO (Adhesive)	1

C0953a/0702

# DECALS - EXPLODED VIEW

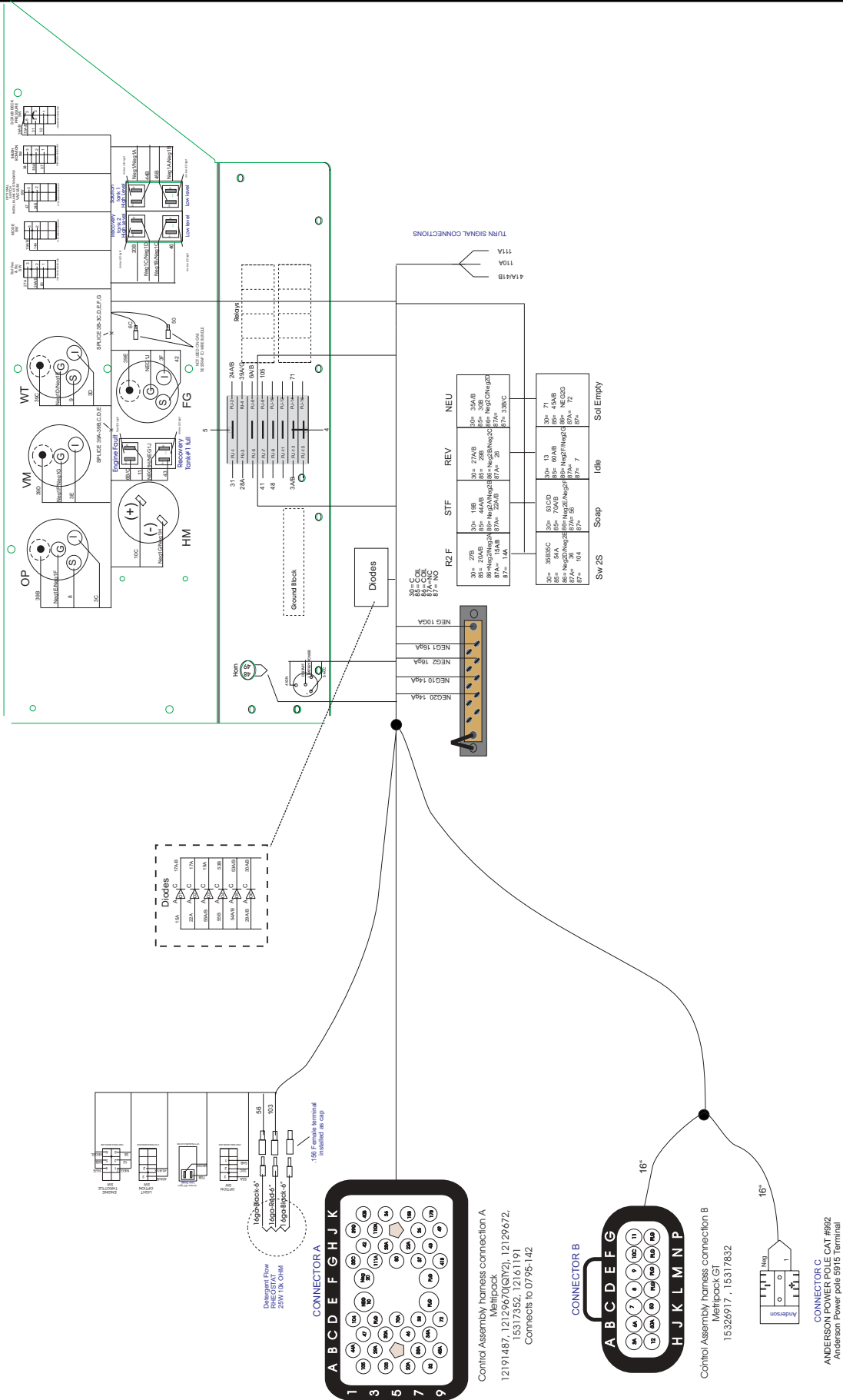


C0953a/0702

**NOTES**

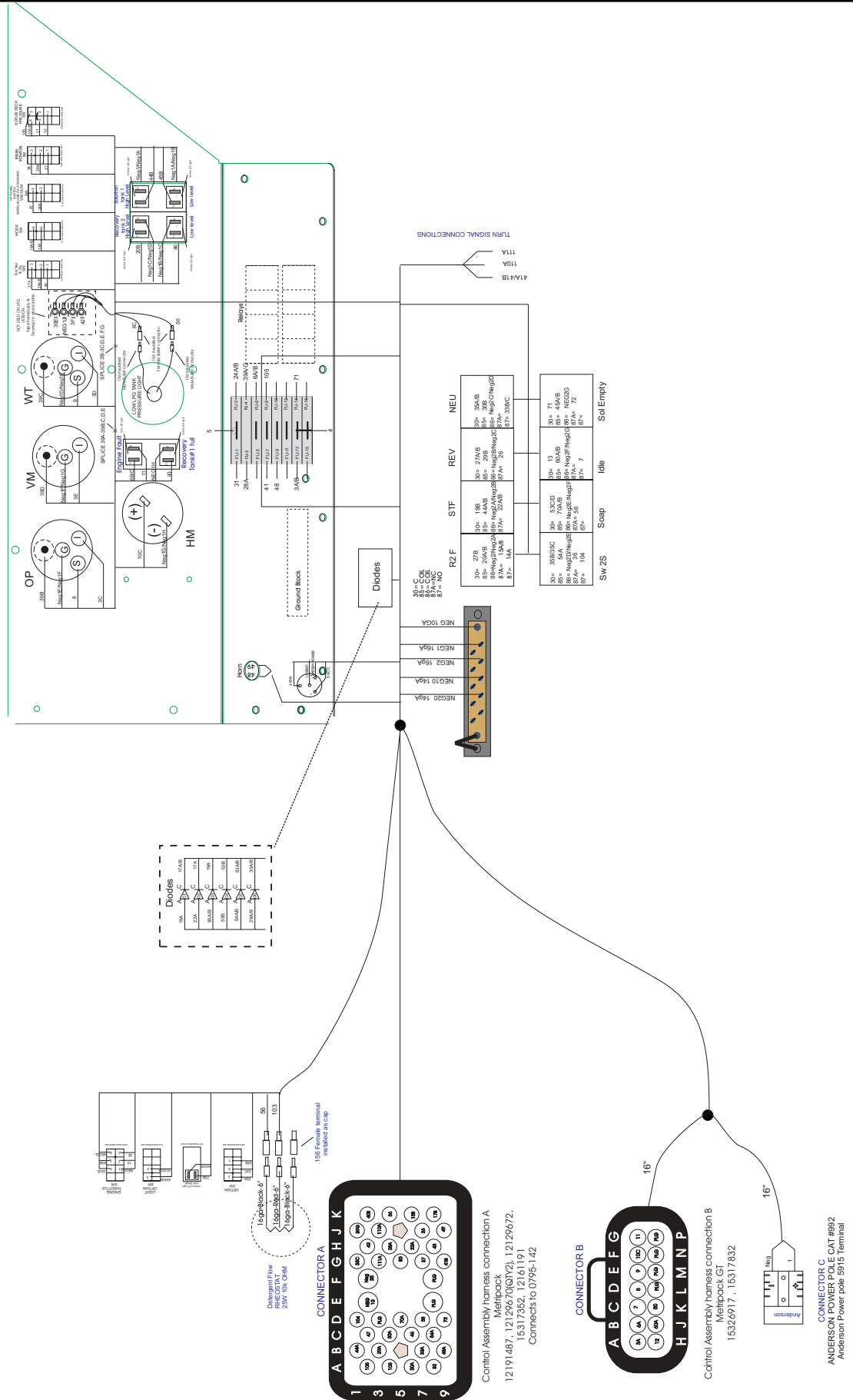
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# CONTROL PANEL CONNECTION DIAGRAM - GAS

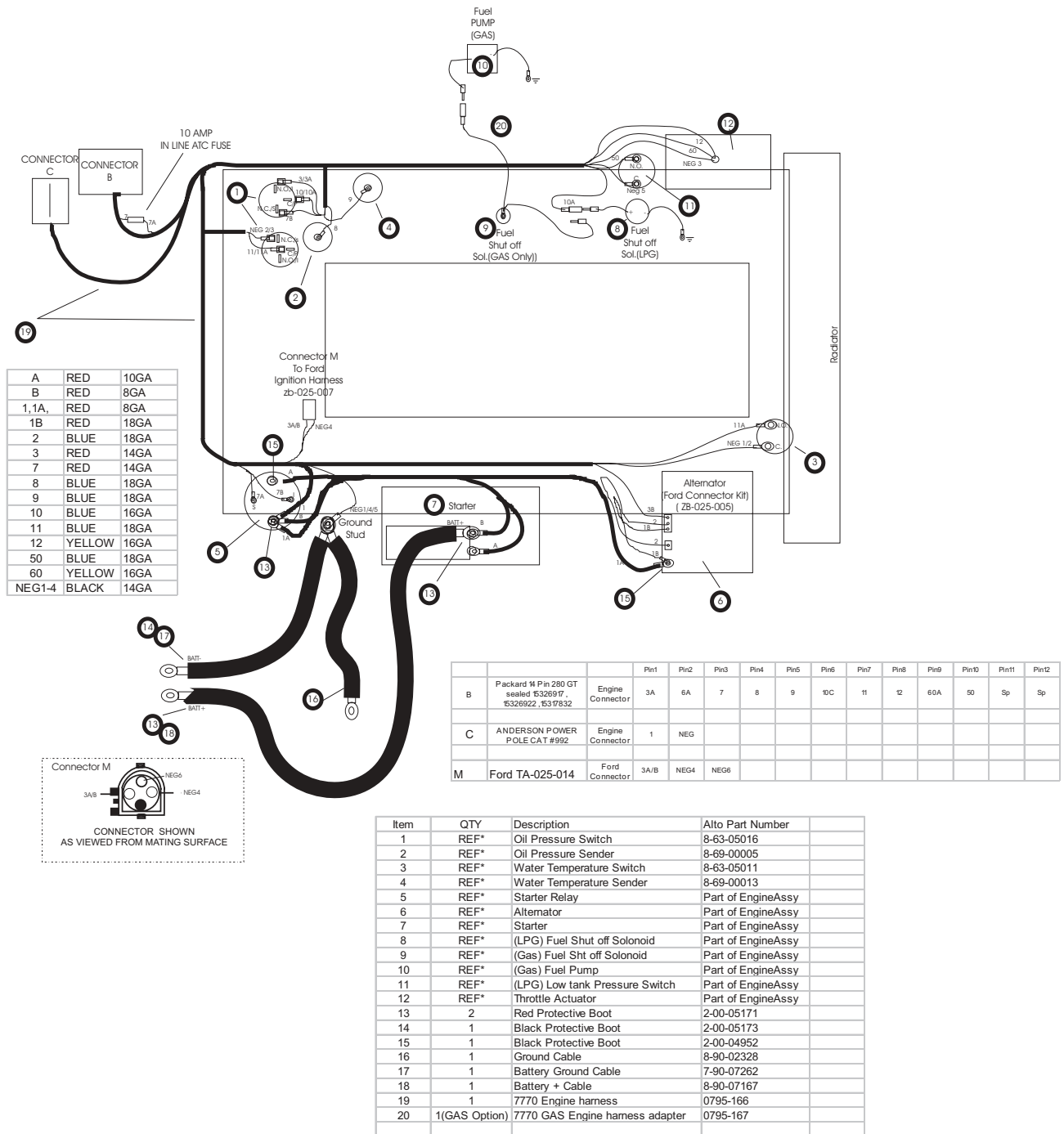




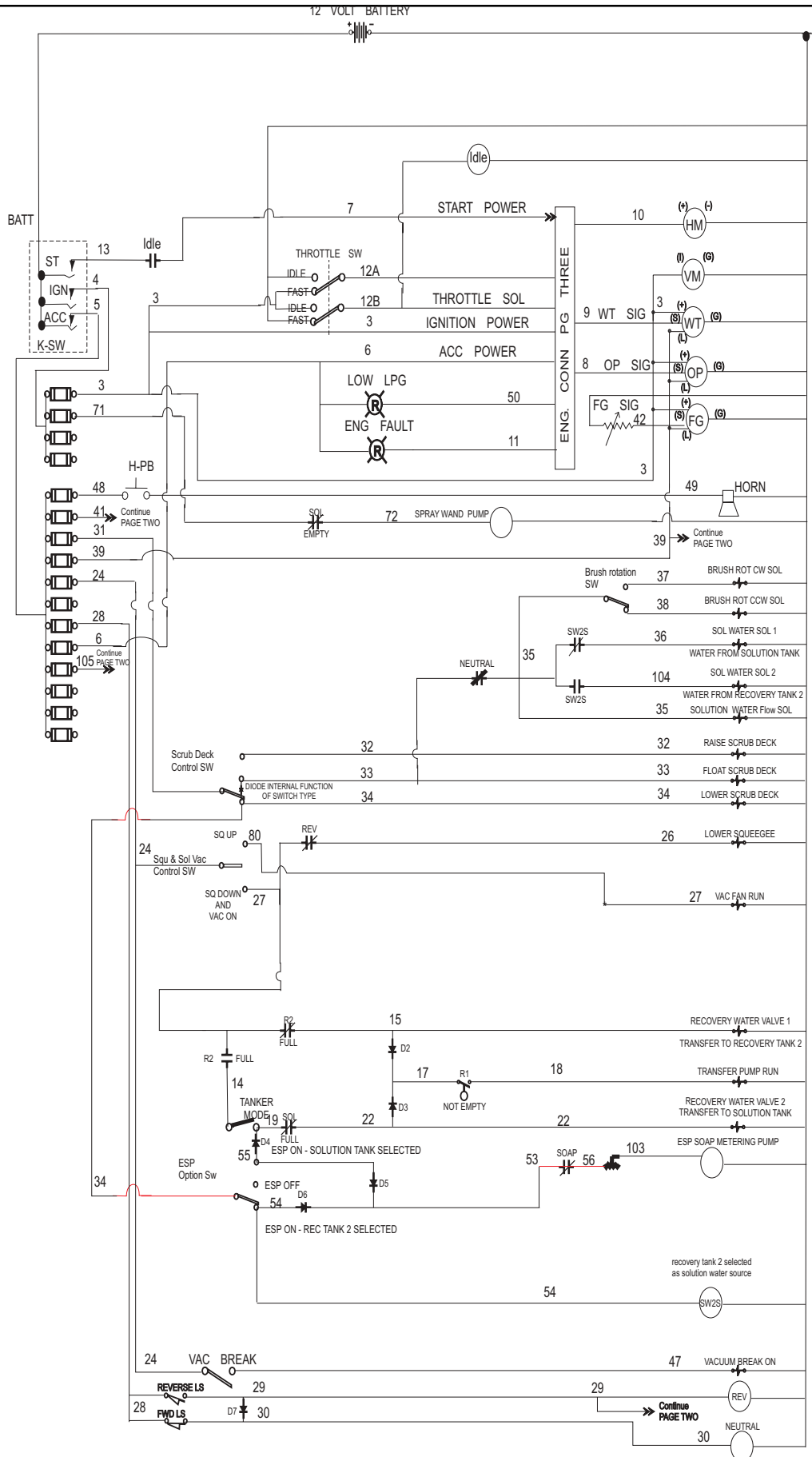
# CONTROL PANEL CONNECTION DIAGRAM - LP



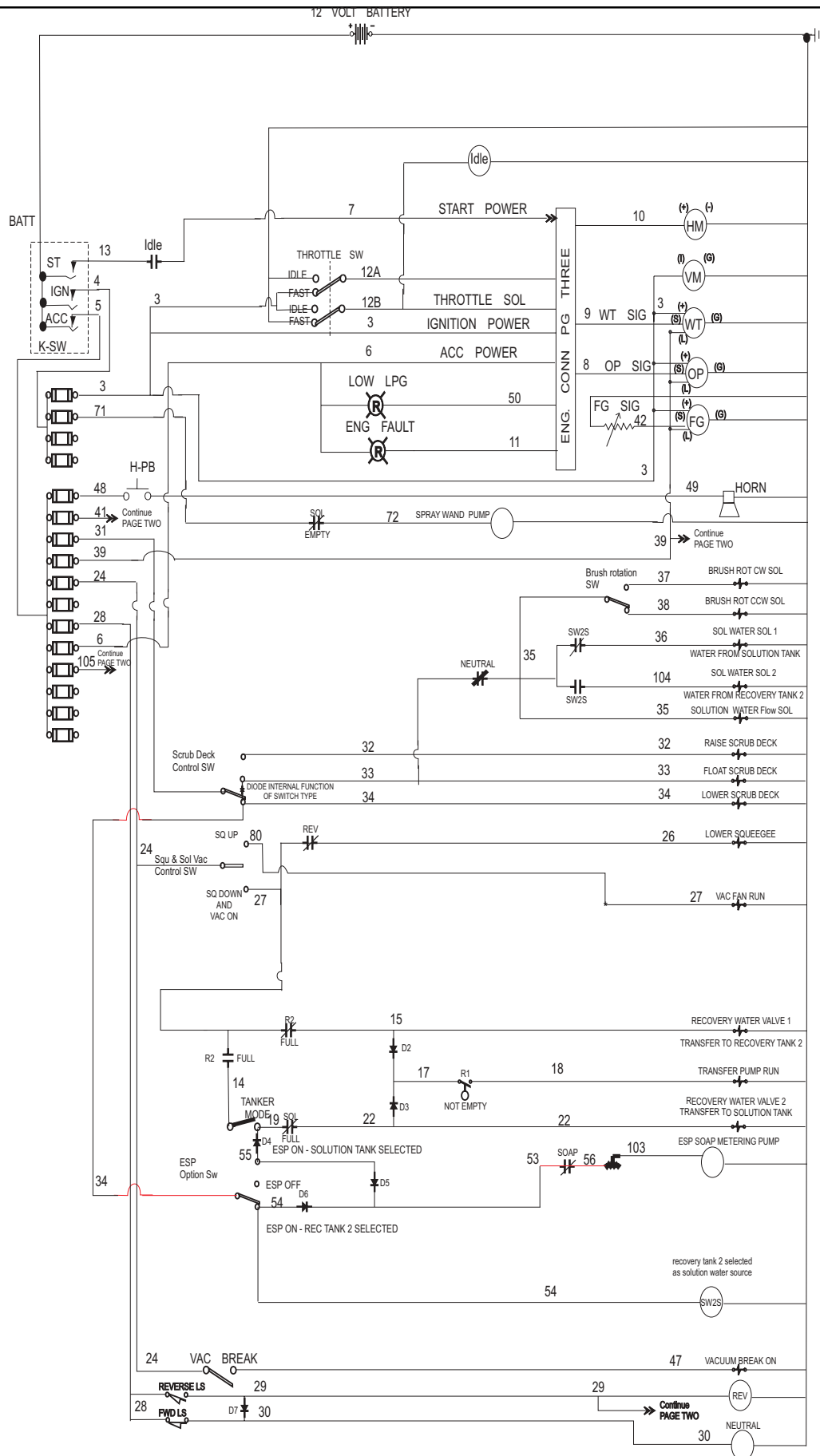
# ENGINE ELECTRICAL CONNECTION DIAGRAM - GAS/LP



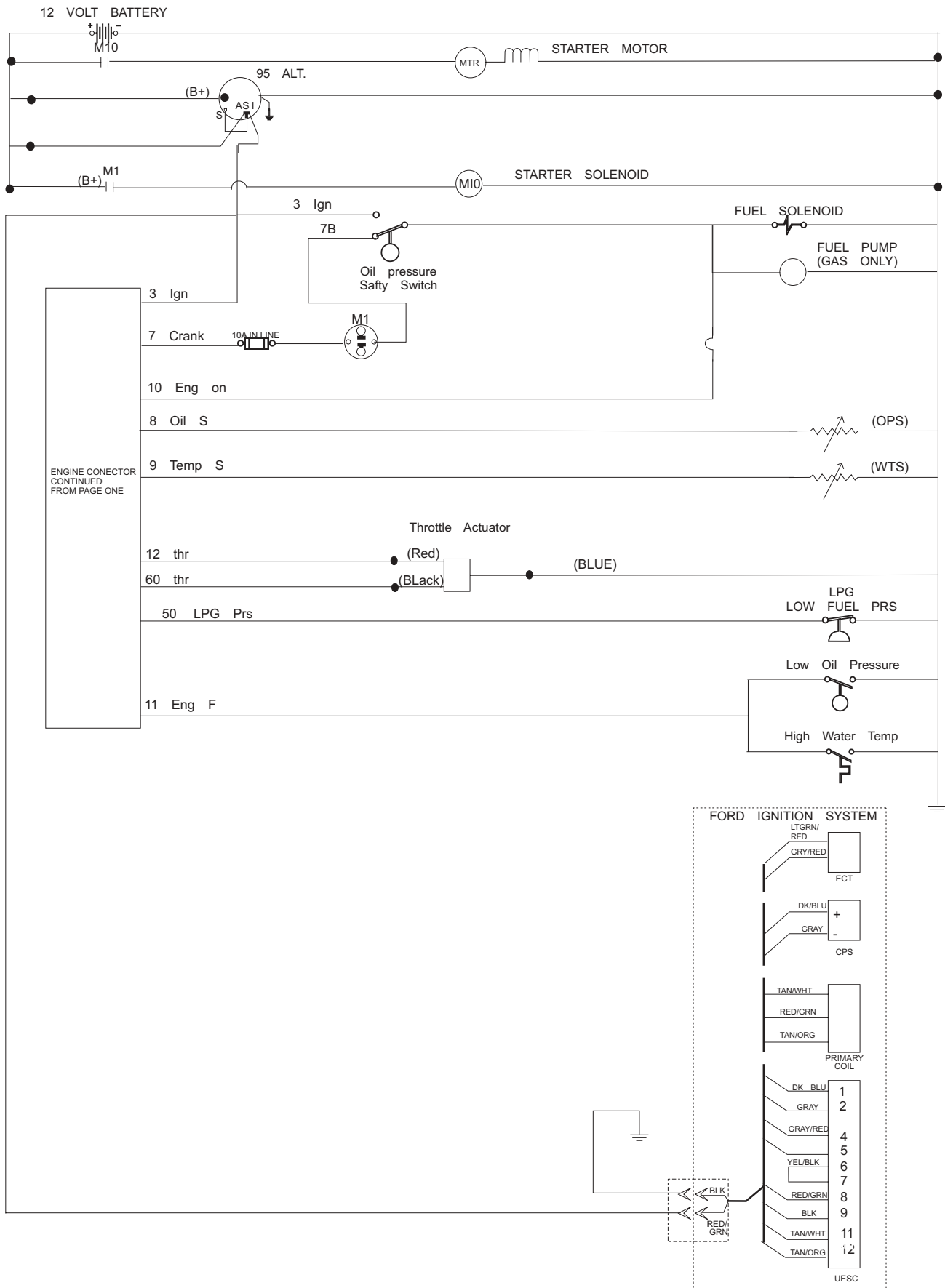
# ELECTRICAL SCHEMATIC



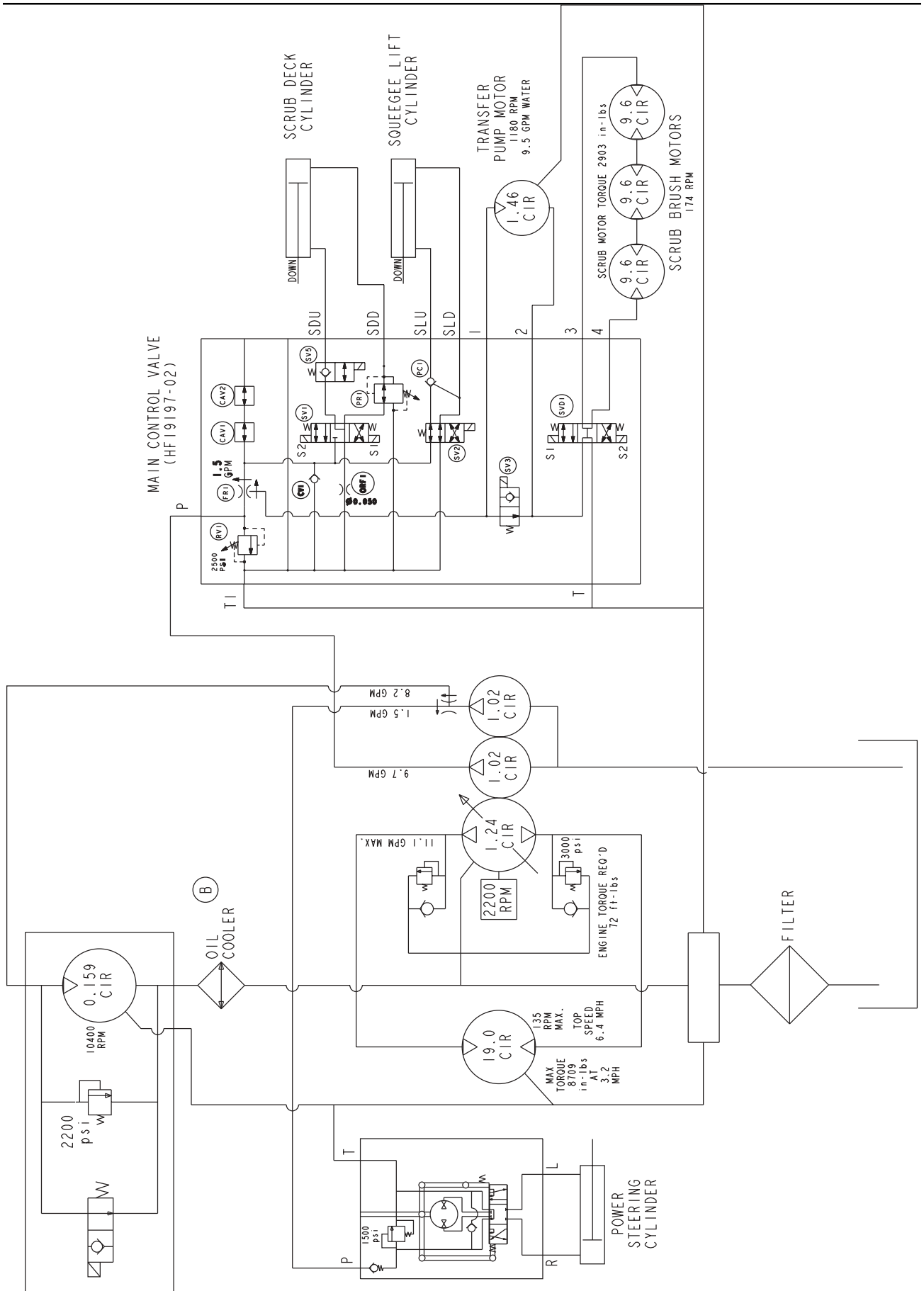
# ELECTRICAL SCHEMATIC



# ELECTRICAL SCHEMATIC

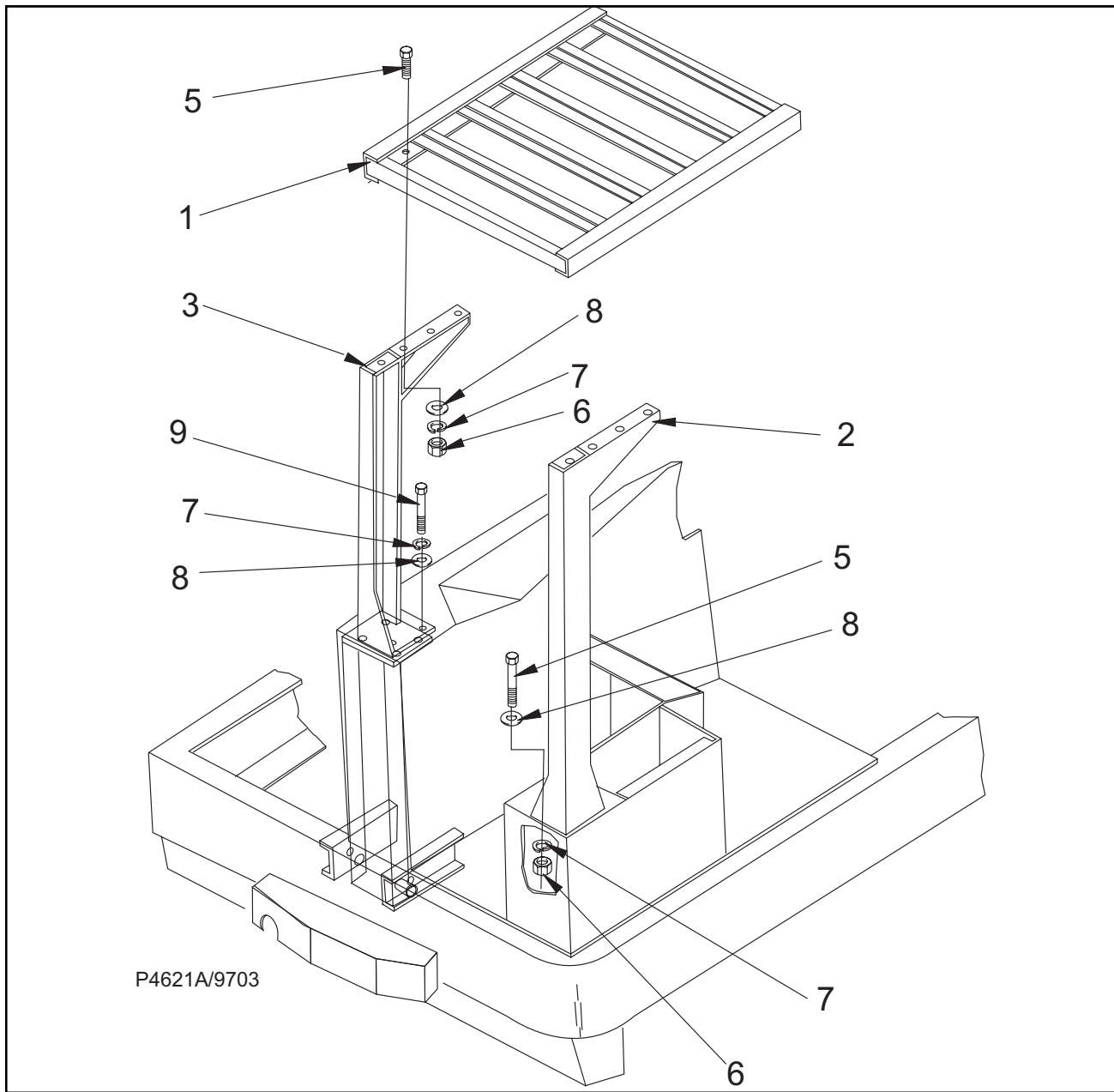


# HYDRAULIC SCHEMATIC



Overhead Guard Option ..... 3-2  
Brush Options ..... 3-3  
Bumper Option ..... 3-4  
Bumper Assembly ..... 3-5  
Back-up Alarm ..... 3-6  
Vacuum Wand Option ..... 3-7  
Lights Options ..... 3-8  
Turn Signal Option ..... 3-10  
Warning Lights (Standard) ..... 3-12  
Warning Lights with Overhead Guard ..... 3-14  
Fire Extinguisher Option ..... 3-16  
Flame Arresting Gas Cap Option ..... 3-17  
Suspension Seat ..... 3-18  
Debris Basket Option ..... 3-19  
ESP Option ..... 3-20  
Ford Engine Shutdown Option ..... 3-24  
Tire Options ..... 3-26  
Spare Parts Kit, Gas/LP ..... 3-27  
Index ..... 3-28  
Warranty ..... 3-33

# OVERHEAD GUARD OPTION

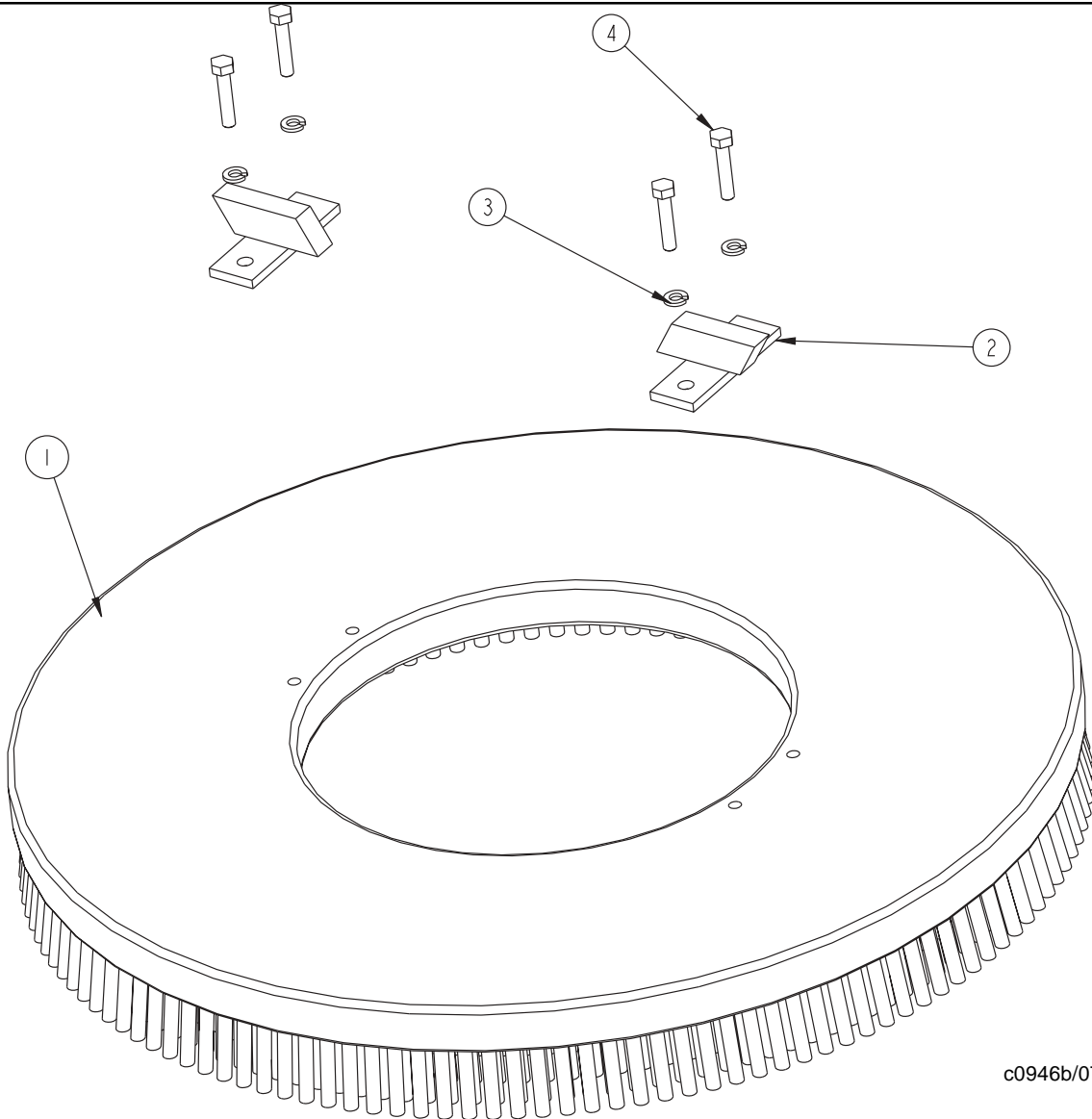


## OPTION NO. 0780-379

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-30-05086	Guard ( Weldment )	1
2	7-81-00120	Support ( Weldment )	1
3	7-81-00121	Support-( Weldment )	1
4	7-81-00188	Support-( Weldment )	Ref.
5	2-00-00239	Screw, 1/2 - 13 x 1.000 HHC	12
6	2-00-02352	Nut, Hex 1/2 - 13 x .875 x .484	12
7	2-00-02312	Lock Washer, Helical Spring 1/2 Med	16
8	2-00-01444	Flat Washer, .750 x .520 x .062	16
9	2-00-00240	Screw, 1/2 - 13 x 1.250 HHC	4

P-4621/9703



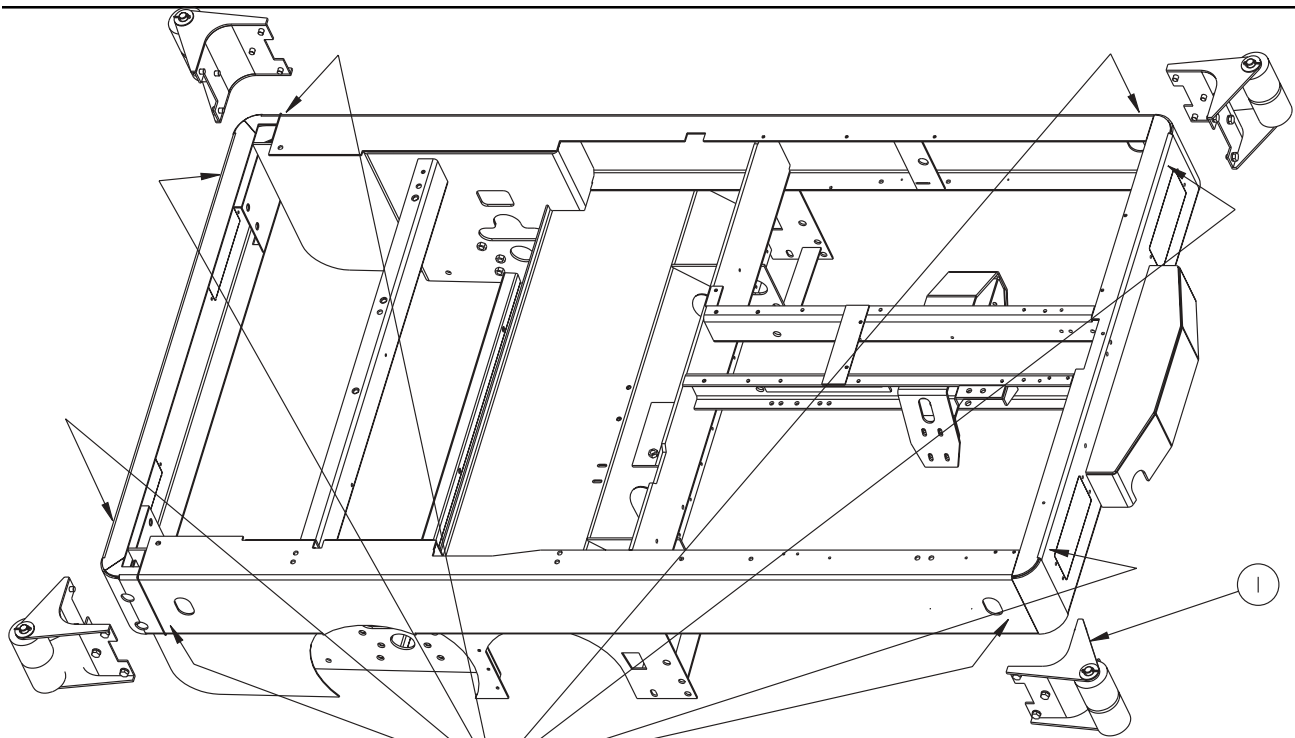


c0946b/0702

**OPTION NO. 0765-275**

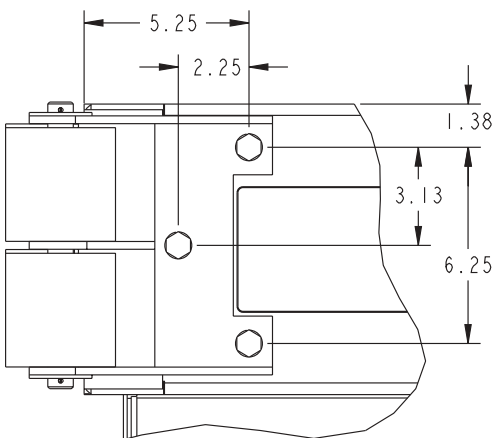
<b><u>KEY NO.</u></b>	<b><u>PART NUMBER</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>QTY</u></b>
<b>Disc Brushes:</b>			
1	7-08-03281	Black Nylon (20.75" dia.)	1
	7-08-03282	Polypropylene (20.75" dia.)	1
	7-08-03283	Supergrit (20.75" dia.)	1
	7-08-03284	Cleangrit (20.75" dia.)	1
2	7-45-05026	Lug, Brush Drive	2
3	2-00-00518	Lock Washer, 1/4" Helical Spring	4
4	2-00-02587	Hex Head Cap Screw, .25-20 x 1.25	4
<b>Assembly Numbers:</b>			
	0765-275	3 Black Nylon + Hardware	
	0765-276	3 Poly + Hardware	
	0765-277	3 Supergrit + Hardware	
	0765-278	3 Cleangrit + Hardware	

**BUMPER OPTION**

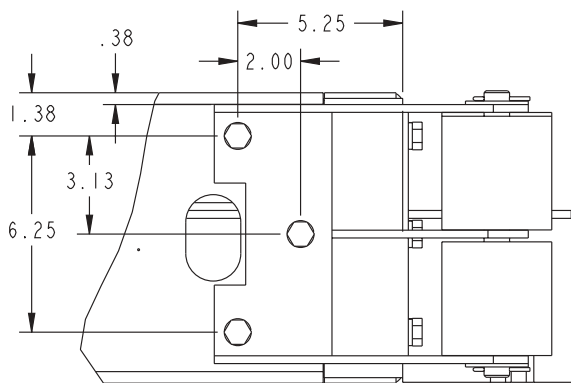


DRILL AND TAP FRAME  
 1/2-13UNC  
 TYP. 24 PLACES

c0950a/0802



END VIEW  
 SCALE 0.250



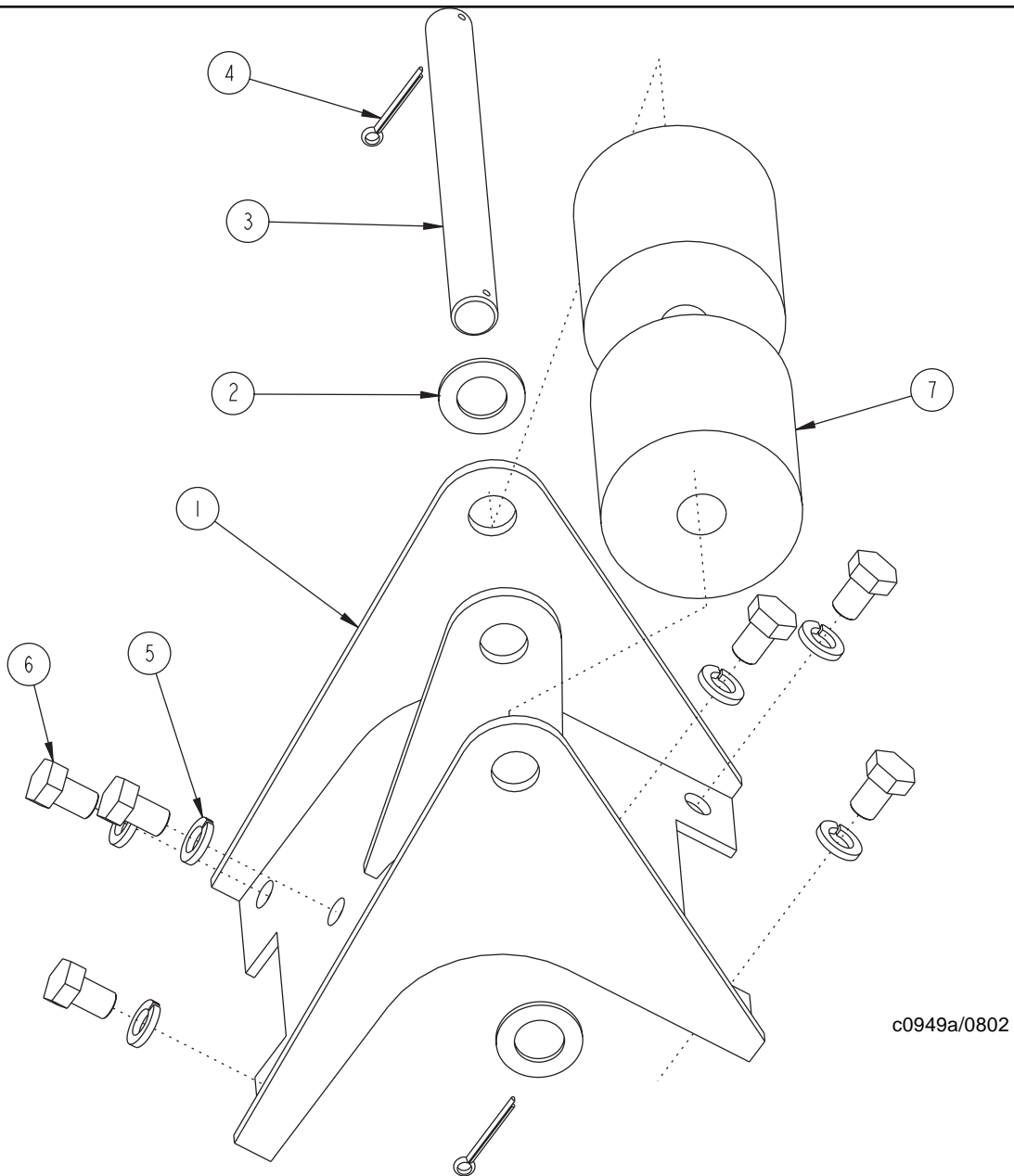
SIDE VIEW  
 SCALE 0.250

**OPTION NO. 0780-549**

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	0760-689	Bumper Assembly	4

c0950a/0802

# BUMPER ASSEMBLY

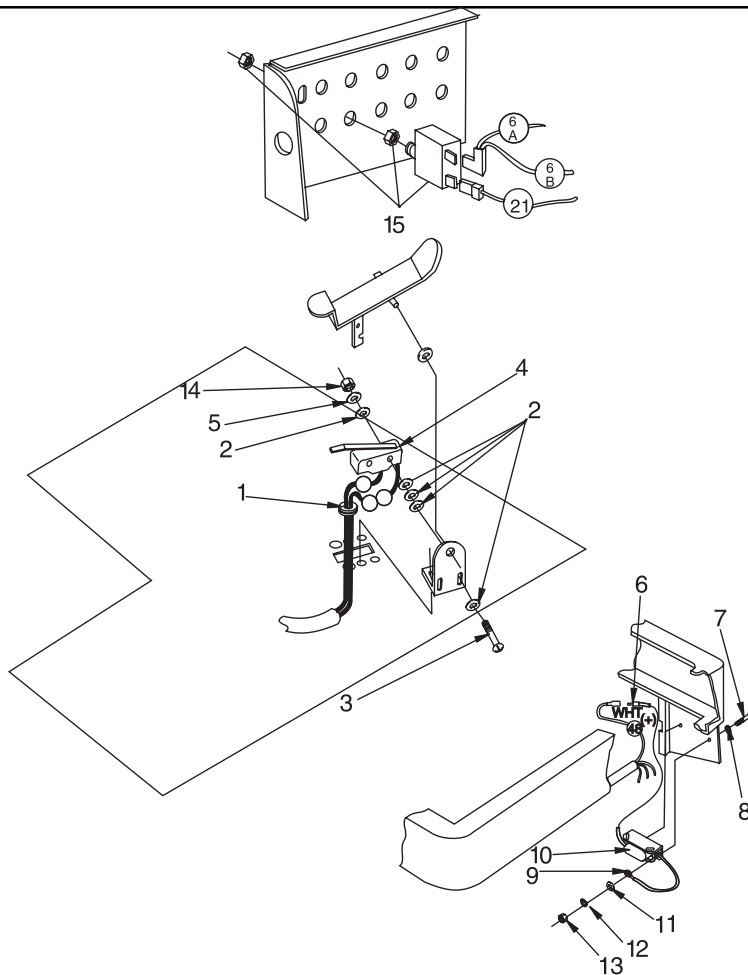


c0949a/0802

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-08-01130	Bracket, Bumper Mount	1
2	2-00-04176	Flat Washer	2
3	7-70-05206	Shaft, Bumper	1
4	2-00-00776	Cotter Pin, 1/8 x 1-1/2 LG	2
5	2-00-02312	Lock Washer, 1/2"	6
6	2-00-02676	Screw, 1/2-13 x .75 LG	6
7	7-66-05009	Roller, Bumper	2

c0949a/0802

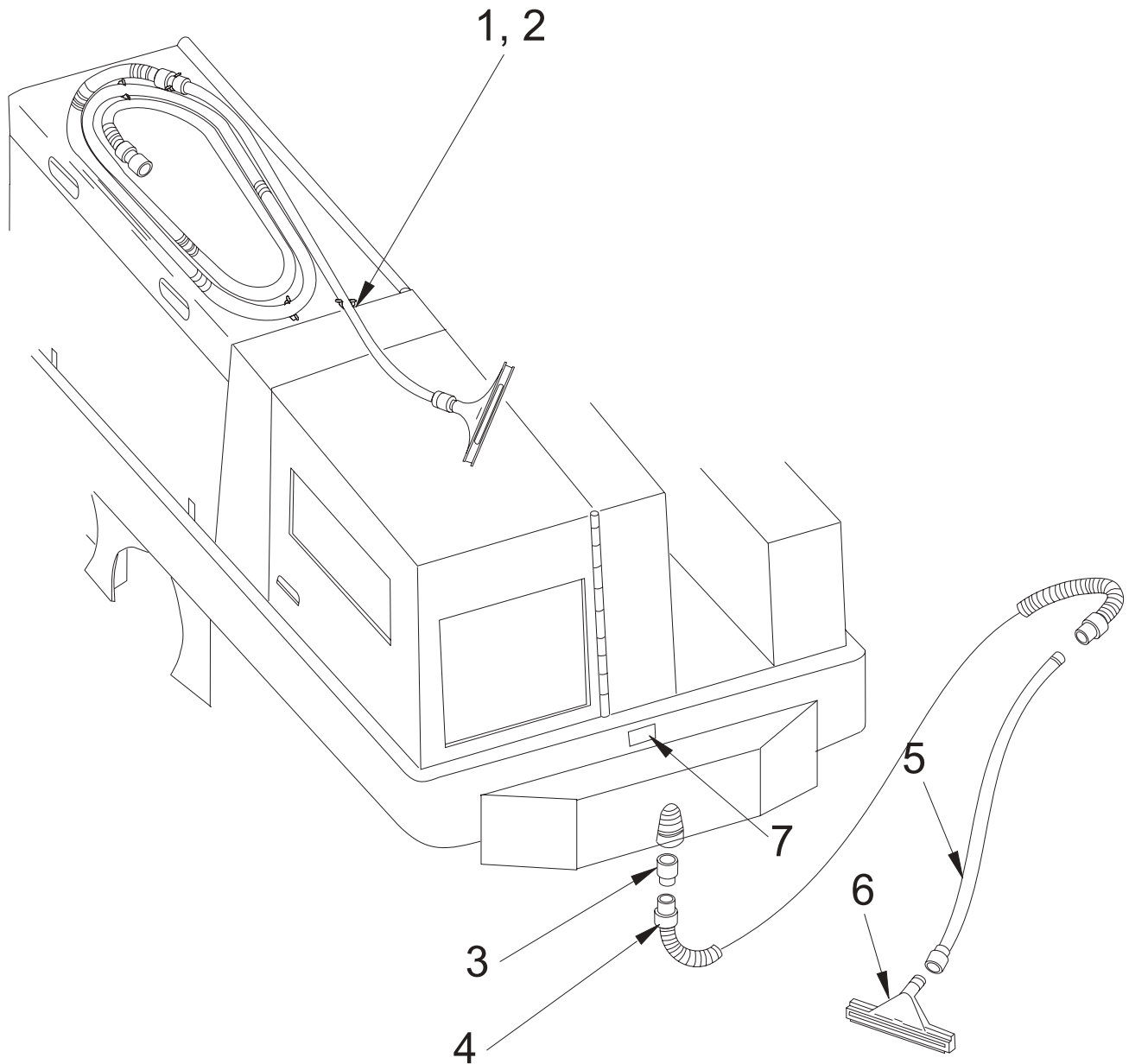
# BACK-UP ALARM



## OPTION NO. 0780-377

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	2-00-00491	Grommet	1
2	2-00-00455	Flat Washer, .375 x .156 x .062	10
3	2-00-05119	Screw, #6-32 x 1.50 RHMS	2
4	7-82-00008	Switch	1
5	2-00-01499	Lock Washer, #6 -32 Helical Spring	1
6	2-00-04578	Male Bullet Plug	1
7	2-00-00221	Screw, 1/4 - 20 x .750 HHC	2
8	2-00-00501	Lock Washer, 1/4 Int.	1
9	2-00-00828	Terminal	1
10	8-32-09009	Backup Alarm	1
11	2-00-00409	Flat Washer, .687 x .343 x .062	2
12	2-00-00518	Lock Washer, Helical Spring 1/4 Int.	2
13	2-00-00594	Nut, Hex 1/4 - 20	2
14	2-00-00624	Nut, #6 - 32 Hex	2
15	8-64-00008	Circuit Breaker 15 AMP	1
16	2-00-00507	Star Washer 1/4 INT.	1

## VACUUM WAND OPTION



### OPTION NO. 0780-382

KEY NO.	PART NUMBER	DESCRIPTION	QTY
1	7-13-07097	Clip	10
2	2-00-04312	Screw, #10 - 24 x .625 T/C HH	10
3	7-03-00040	Adapter	1
4	634118-4	Clarke Hose	1
5	639804-4	Clarke 1 1/2" Wand Assembly	1
6	638828-4	14" Squeegee	1
7	7-18-00121	Decal, Warning	1

P-4930/9601

## LIGHTS OPTION - PARTS LIST

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HEADLIGHTS/TAILLIGHTS/INSTRUMENT LIGHTS: 0880-351

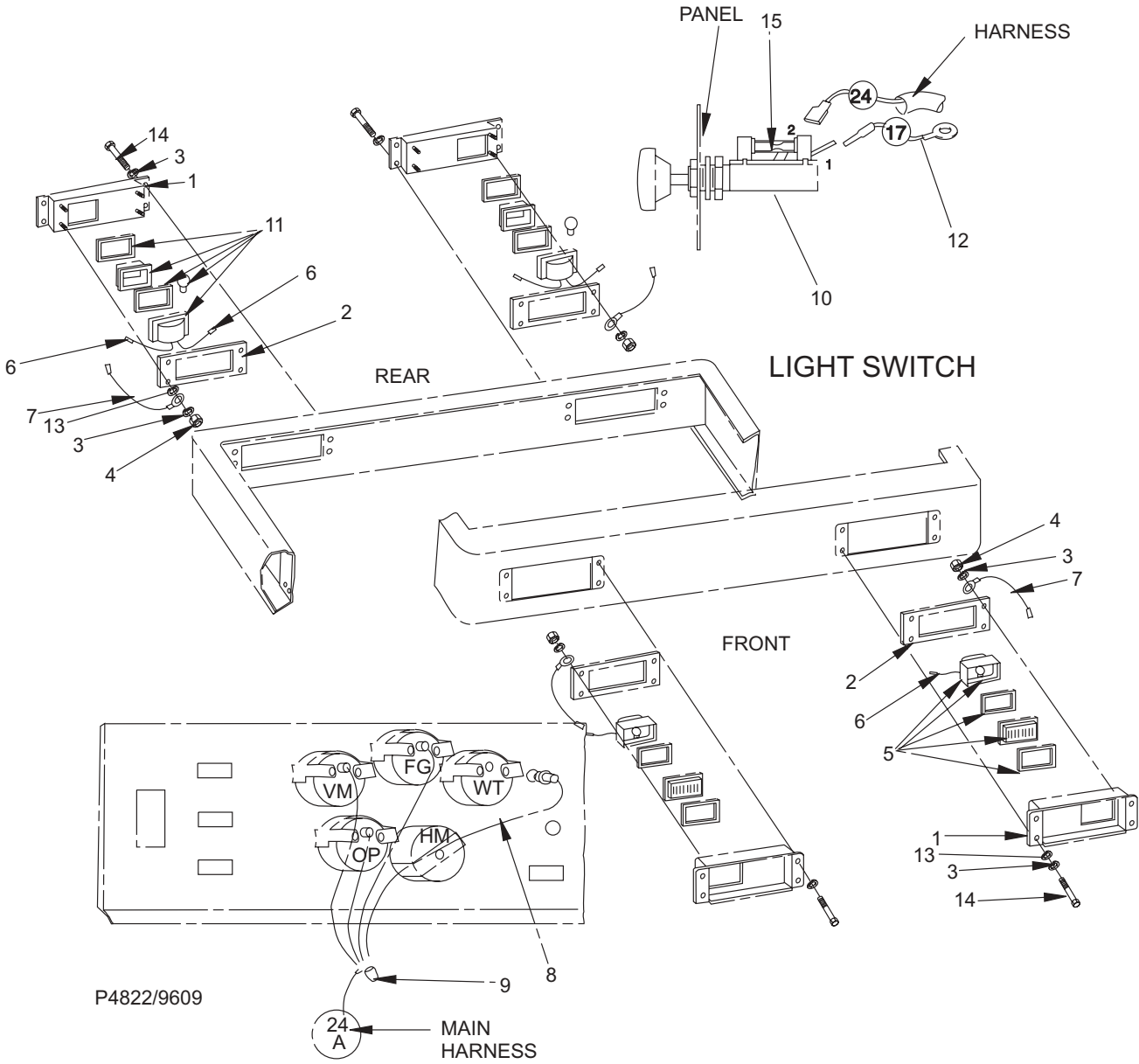
HEADLIGHTS/TAILLIGHTS/BRAKE LIGHTS/INSTRUMENT LIGHTS: 0880-354

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	8-08-00871	Light Bracket with Knockouts	4
2	8-08-00872	Backing Plate	4
3	2-00-00501	Lock Washer, 1/4 Int.	32
4	2-00-00594	Nut, Hex 1/4 - 20 x .437 x .218	16
5	8-40-05028	Headlight	2
6	2-00-04578	Male Bullet Plug	4
7	8-90-07358	Ground Wire	4
8	8-40-05030	Instrument Light and Lead	4
9	2-00-04588	Wire Nut	1
10	8-82-00027	Light Switch, Push/Pull	1
11	8-40-05029	Taillight	2
12	7-90-07229	Wire	1
13	2-00-00409	Flat Washer, .687 x .343 x .062	2
14	2-00-04876	Screw, 1/4 - 20 x .500 BHS	16
15	8-28-05011	Fuse, FU-1 15 Amp	1

P-4822/9609

HEADLIGHTS/TAILLIGHTS/INSTRUMENT LIGHTS/  
BRAKE LIGHTS & TURN SIGNALS: 0880-355

**LIGHTS OPTION - EXPLODED VIEW**



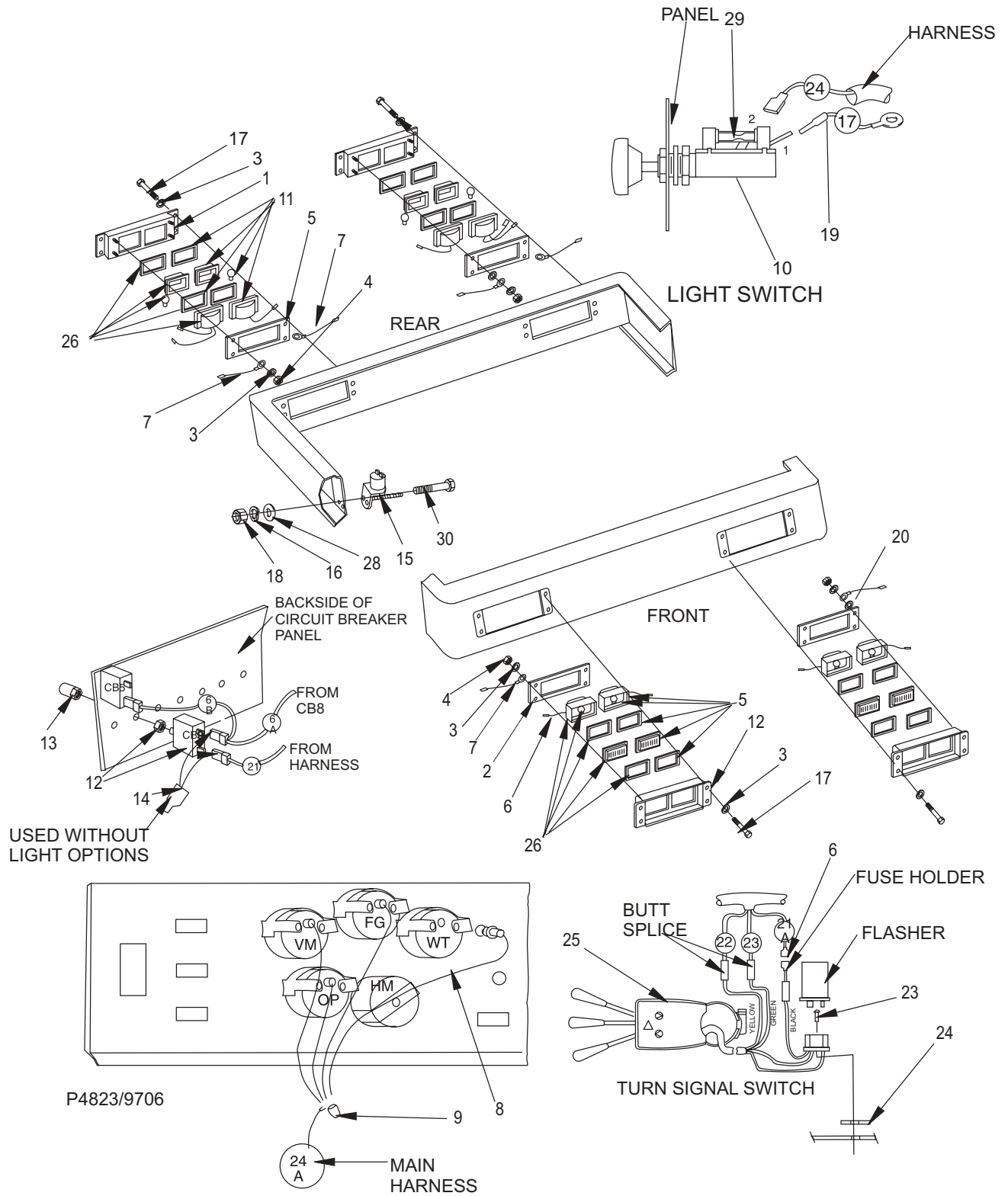
## TURN SIGNAL OPTION - PARTS LIST

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	8-08-00871	Knockout Light Bracket	4
2	8-08-00872	Backing Plate	4
3	2-00-00501	Lock Washer, 1/4 Int.	32
4	2-00-00594	Nut, Hex 1/4 - 20 x .437 x .218	16
5	8-40-05028	Head Light	2
6	2-00-04578	Bullet Plug (Male)	10
7	8-90-07358	Ground Wire	8
8	8-40-05030	Instrument Light and Lead	4
9	2-00-04588	Wire Nut	1
10	8-82-00027	Light Switch, Push/Pull	1
11	8-40-05029	Tail Light / Brake Light	2
12	8-64-00008	Circuit Breaker (15 Amp)	1
13	8-11-00044	Boot	1
14	8-11-00015	Terminal	1
15	8-82-00039	Switch, Brake	1
16	2-00-00519	Lock Washer, # 10 Hel.	2
17	2-00-04876	Screw, 1/4 - 20 x .500 BHS	16
18	2-00-00605	Nut, Hex MS 1/4 - 20 x .437 x .187	2
19	7-90-07229	Wire	1
20	2-00-00409	Flat Washer, .687 x .343 x .062	2
21			
22			
23	2-00-01994	Screw, # 8 - - 15 x .750 T/F RH	1
24	2-14-03197	Rubber Washer, 1.000 x .187 x .125	1
25	8-82-00025	Turn Signal Switch	1
26	8-40-05027	Turn Signal Light	4
27			
28	2-00-00455	Flat Washer # 10	2
29	8-28-05011	Fuse, FU-1 15 Amp	1
30	2-00-00220	Screw, 1/1 - 20 x .625 HHC	2

P 4823/9609



# TURN SIGNAL OPTION - EXPLODED VIEW



## WARNING LIGHTS (STANDARD) - PARTS LIST

---

### ROTATING LIGHT

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	8-40-05033	Red	1
	8-40-05041	Yellow	1
2	2-00-04578	Connector	1
3	2-00-00491	Grommet	1
4	2-00-00512	Lock Washer, #10 Int	2

### FLASHING LIGHT

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
5	8-40-05033	Red	1
	8-40-05041	Yellow	1
6	2-00-04578	Connector	1
7	2-00-00491	Grommet	1
8	2-00-00512	Lock Washer, #10 Int	2
9	2-00-04897	Screw, #10 - 24 x 1.250 THM	2
10	2-00-00605	Nut, Hex MS #10 - 24 x .375 x .125	2

### STROBE LIGHT

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
11	8-40-05033	Red	1
	8-40-05041	Yellow	1
12	2-00-00838	Terminal	1
13	2-00-00491	Grommet	1
14	2-00-00512	Lock Washer, #10 Int	2
15	2-00-04578	Connector	1
16	2-00-04341	Grommet	1
17	2-00-03063	Screw, #10 - 24 x .750 THM	2
18	2-00-00605	Nut, Hex MS #10 - 24 x .375 x .125	2

### LIGHT SUPPORT

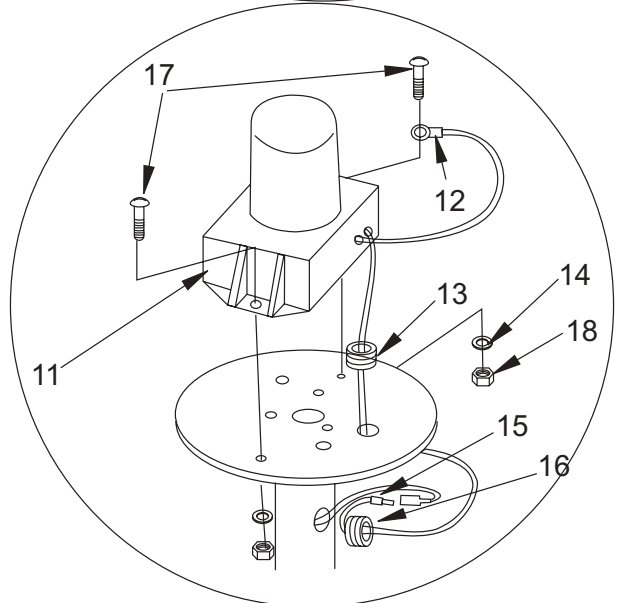
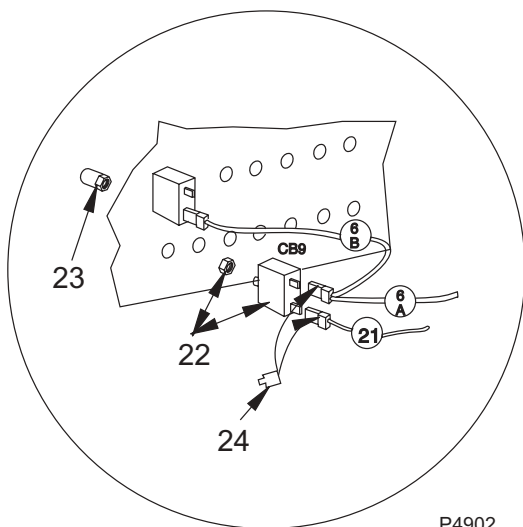
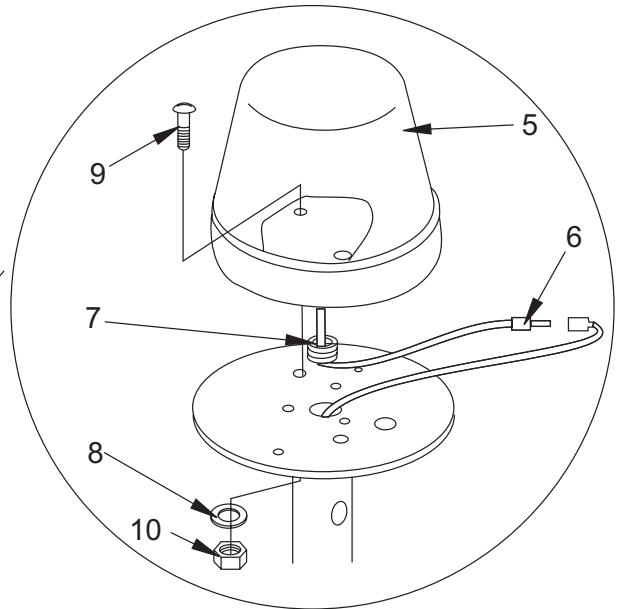
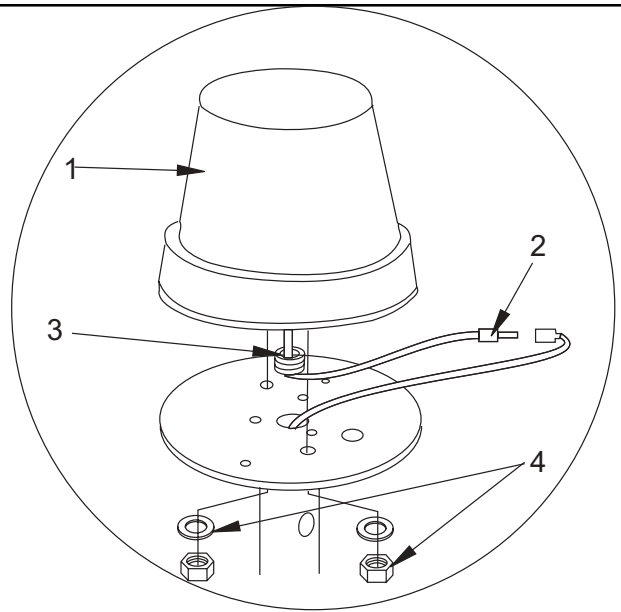
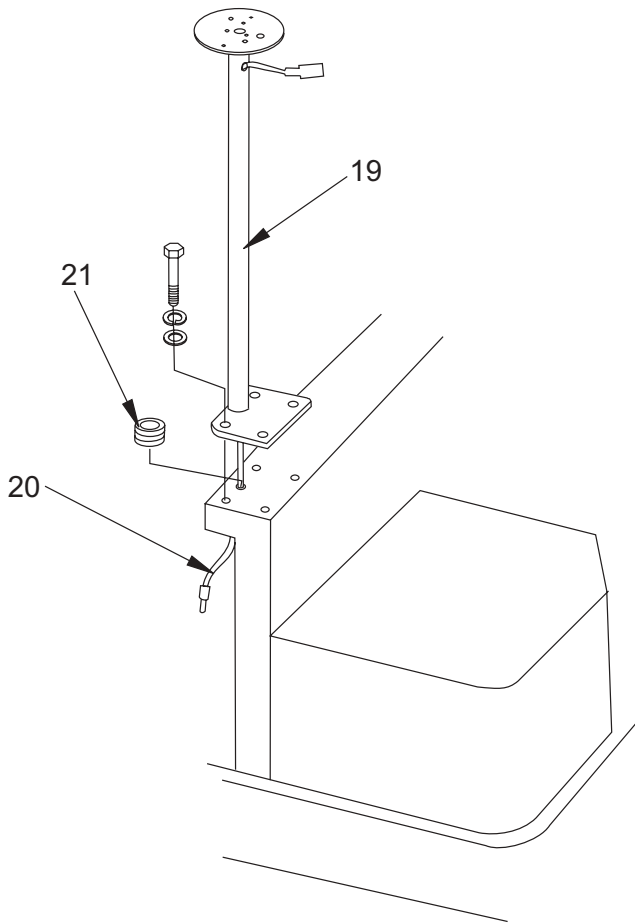
<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
19	8-81-00145	Weldment	1
20	8-90-07362	Wire Assembly	1
21	2-00-00491	Grommet	1

### CIRCUIT BREAKER

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
22	8-64-00008	Circuit Breaker (15AMP)	1
23	8-11-00044	Boot	1
24	8-11-00015	Terminal	1

P-4902/9609

# WARNING LIGHTS (STANDARD) - EXPLODED VIEW



P4902

# WARNING LIGHT with OVERHEAD GUARD - PARTS LIST

## ROTATING LIGHT

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	8-40-05033	Red	1
	8-40-05041	Amber	1
2	2-00-04578	Connector	1
3	2-00-00491	Grommet	1
4	2-00-00512	Lock Washer, #10 Int	2

## FLASHING LIGHT

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
5	8-40-05033	Red	1
	8-40-05041	Amber	1
6	2-00-04578	Connector	1
7	2-00-00491	Grommet	1
8	2-00-00512	Lock Washer, #10 Int	2
9	2-00-04897	Screw, #10 - 24 x 1.250 THM	2
10	2-00-00605	Nut, Hex MS #10 - 24 x .375 x .125	2

## STROBE LIGHT

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
11	8-40-05033	Red	1
	8-40-05041	Amber	1
12	2-00-00838	Terminal	1
13	2-00-00491	Grommet	1
14	2-00-00512	Lock Washer, #10 Int	2
15	2-00-04578	Connector	1
16	2-00-00605	Nut, Hex MS #10 - 24 x .375 x .125	2
17	2-00-03063	Screw, #10 - 24 x .750 THM	2

## GUARD WIRE & SUPPORT ASSEMBLY

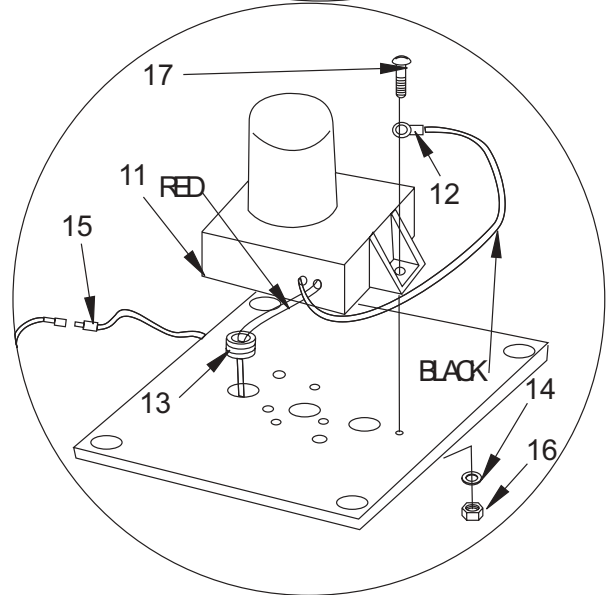
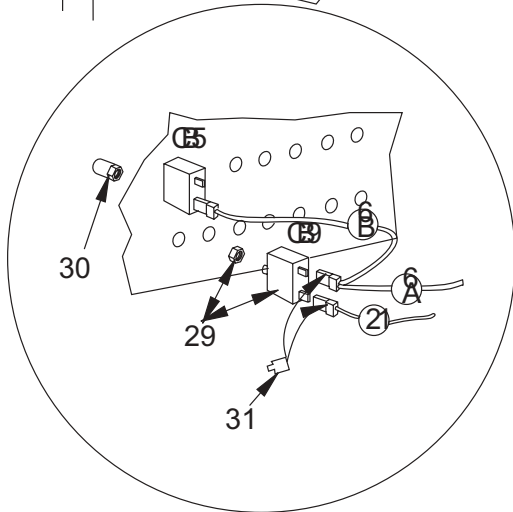
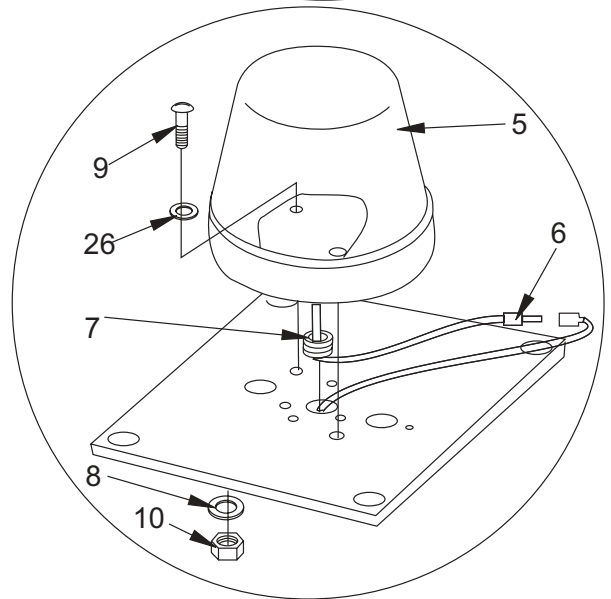
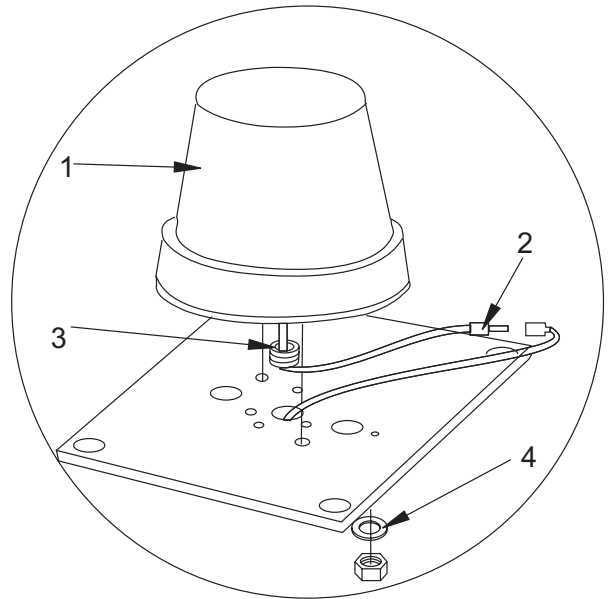
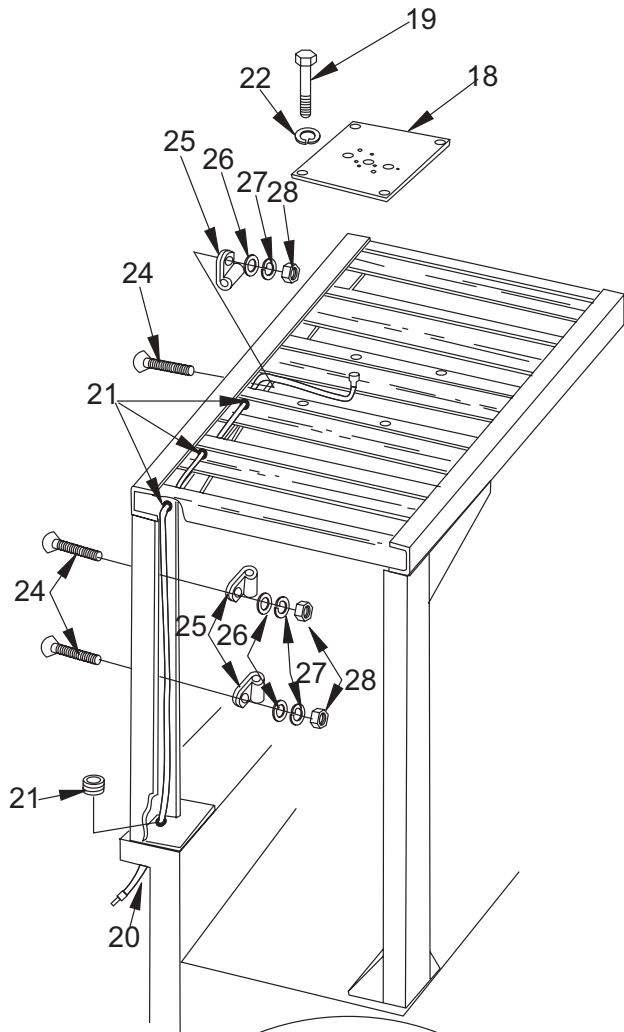
<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
18	8-58-05228	Light Support	1
19	2-00-00221	Screw, 1/4 - 20 x .750 HHC	4
20	8-90-07363	Wire Assembly	1
21	2-00-00491	Grommet	1
22	2-00-00518	Lock Washer, Helical Spring 1/4 Med	4
23			
24	2-00-03063	Screw, #10 - 24 x .750 THM	3
25	2-00-04209	Clamp	3
26	2-00-00426	Flat Washer, .500 x .218 x .062	3
27	2-00-00512	Lock Washer, #10 Int	3
28	2-00-00605	Nut, Hex MS #10 - 24 x .375 x .125	3

## CIRCUIT BREAKER

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
29	8-64-00008	Circuit Breaker (15AMP)	1
30	8-11-00044	Boot	1
31	8-11-00015	Terminal	1

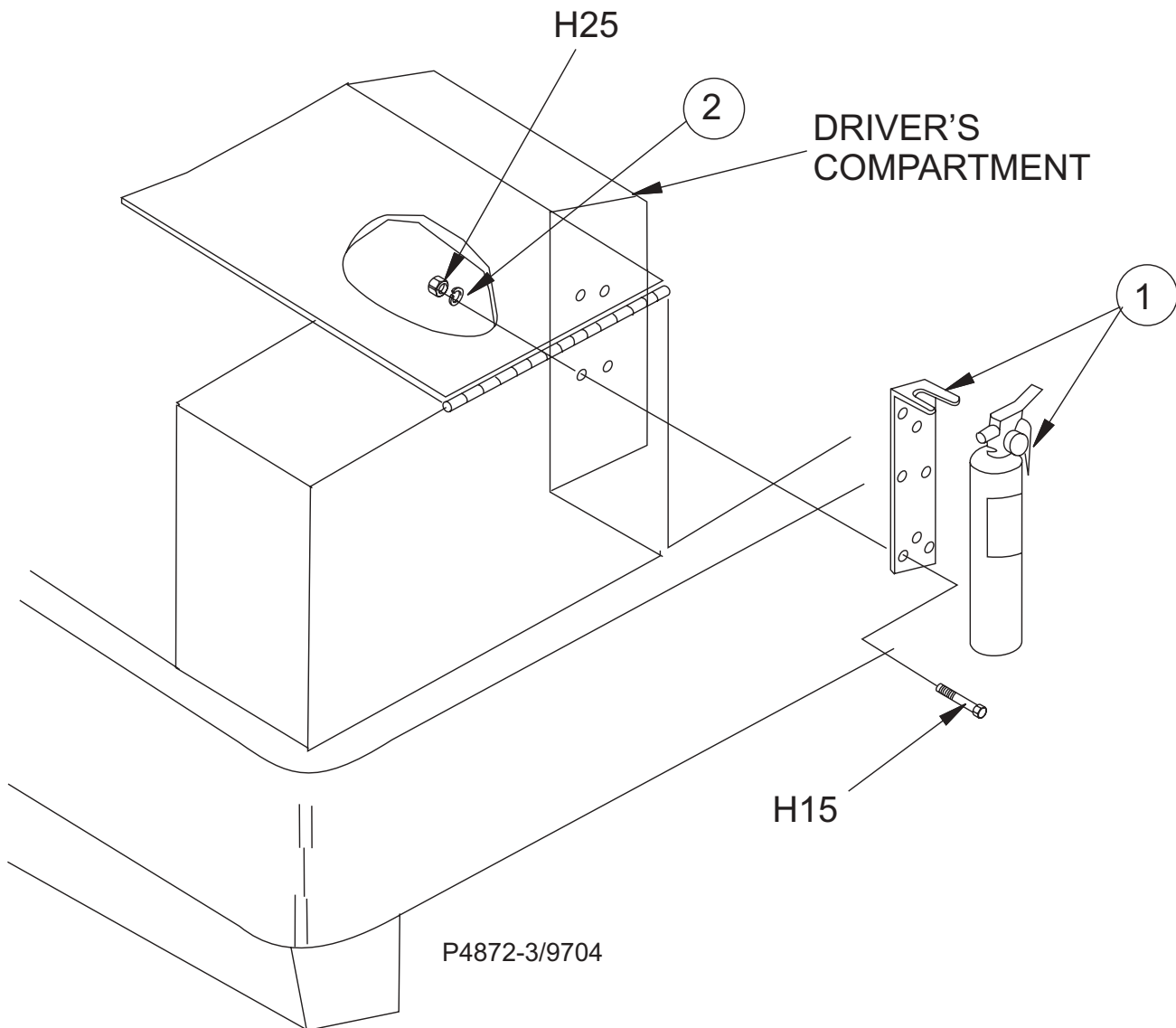
P-4901/9609

**WARNING LIGHTS with OVERHEAD GUARD - EXPLODED VIEW**



P4901/9511

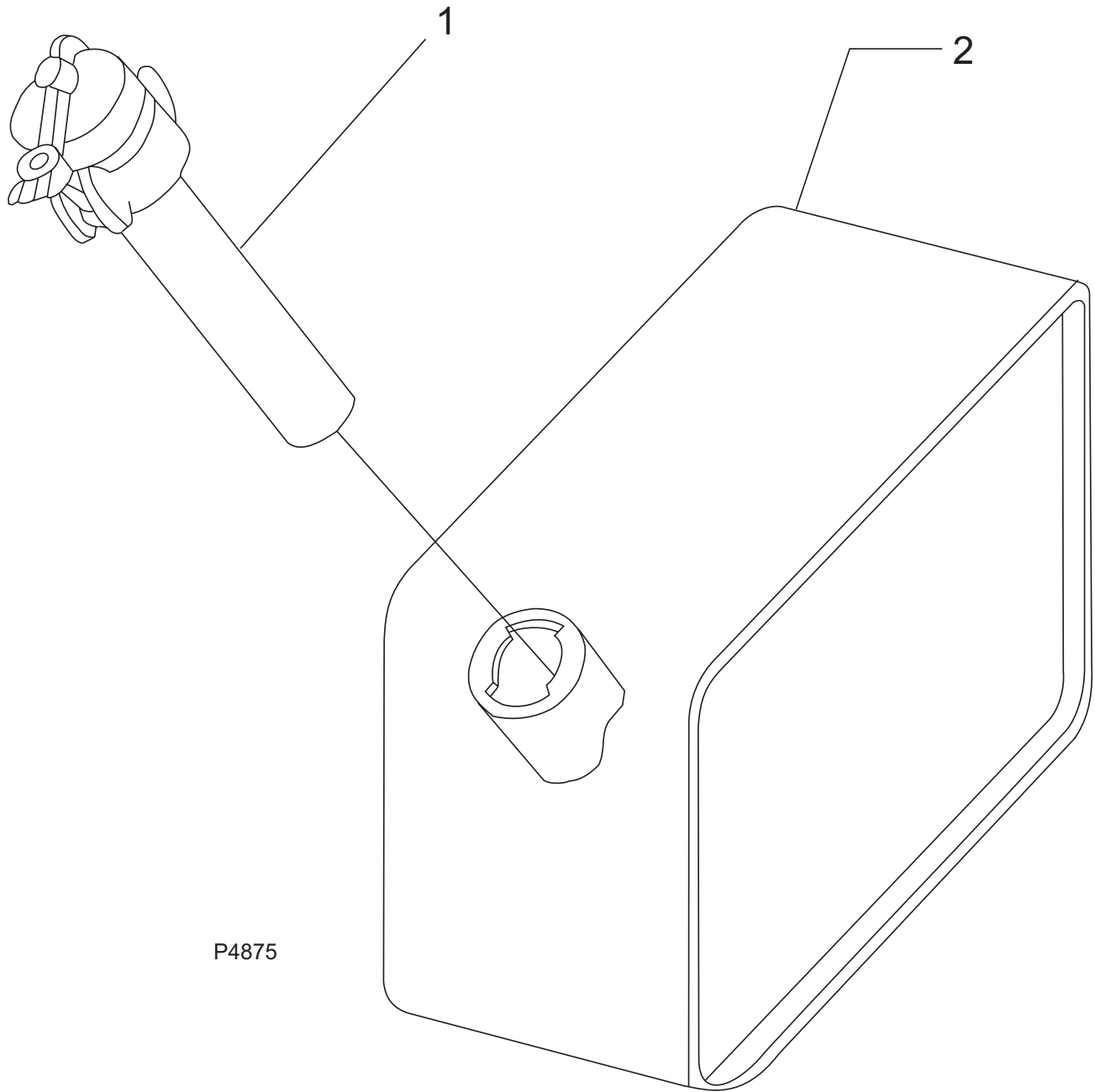
# FIRE EXTINGUISHER



<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	8-83-04033	Fire Extinguisher	1
2	2-00-00221	Screw, 1/4 - 20 x .750 HHC	4
3	980657-1	Lock Washer, 1/4 Split	4
4	2-00-00594	Nut, Hex 1/4 - 20 x .437 x .218	4

P-4872-3/9704

# FLAME ARRESTING GAS CAP



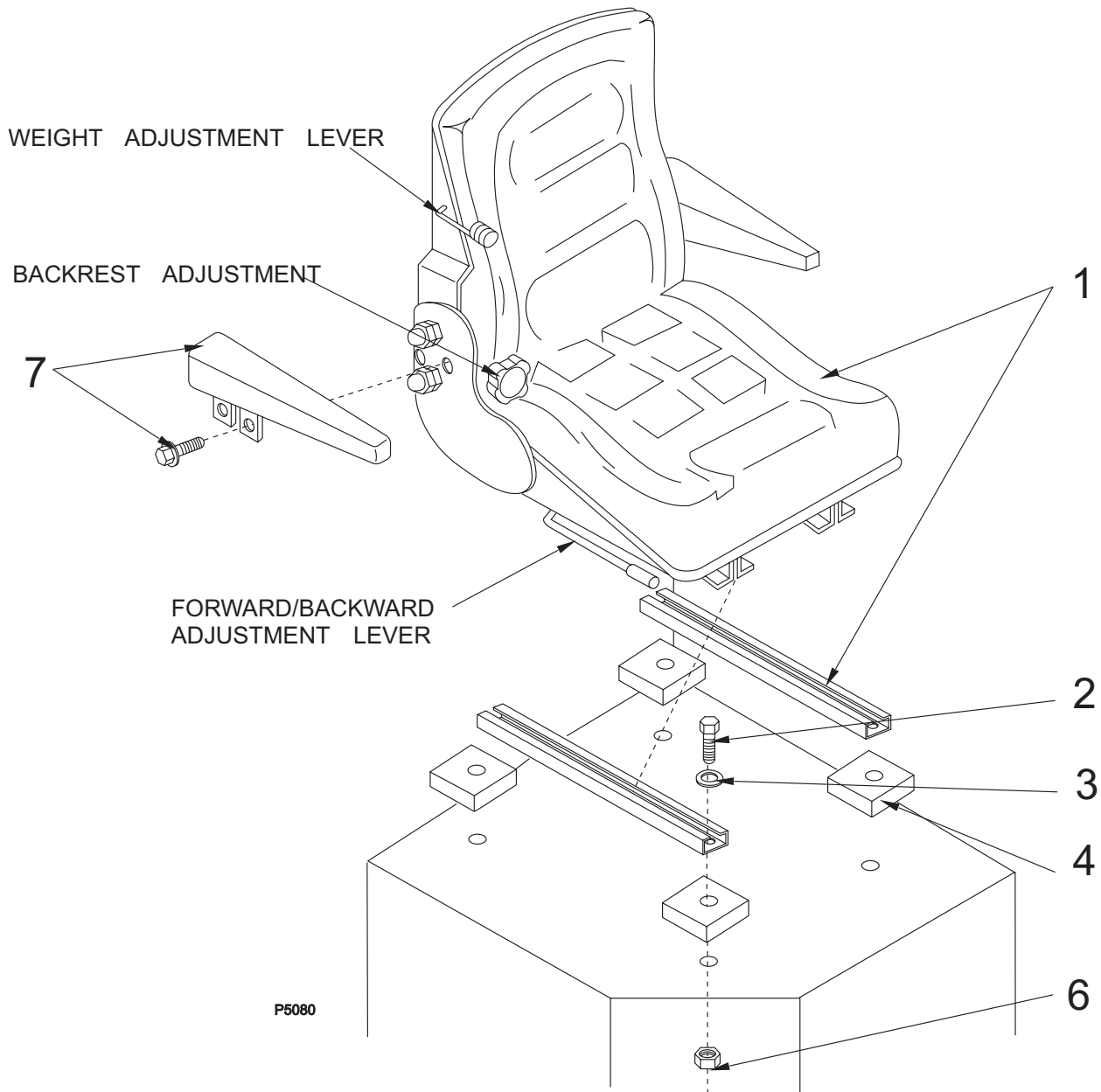
P4875

## OPTION NO. 0880-105

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	8-11-00024	Flame Arresting Gas Cap	1
2	8-83-04022	Fuel Tank with Gauge	1

P-4875/9601

# SUSPENSION SEAT

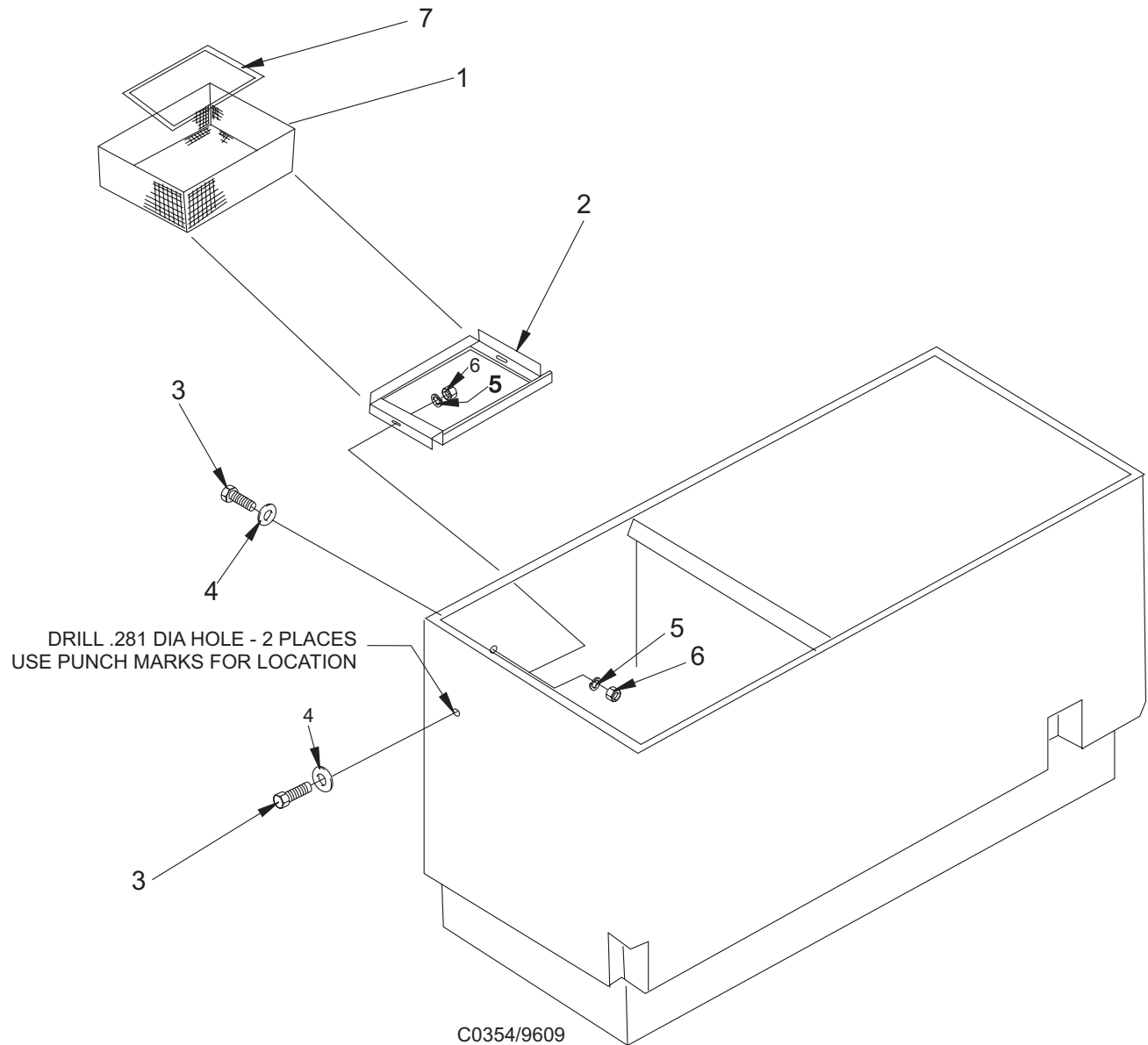


KEY NO.	PART NUMBER	DESCRIPTION	QTY
1	8-69-00015	Seat without armrests	1
2	2-00-00225	Screw, 5/16-18 x 1.500 HHC	4
3	2-00-00409	Flat Washer, .687 x .343 x .062	4
4	8-71-00016	Shim Block	4
5	2-00-02322	Lock Washer 5/16	4
6	2-00-00644	Nut, 5/16-18 Lock	4
7	8-09-04272	Armrest Kit (Includes both Armrests)	1
	0780-109	Suspension Seat Option (Includes all the Above)	

P-5080/9601



# DEBRIS BASKET



KEY NO.	PART NUMBER	DESCRIPTION	QTY
1	7-06-00001	Debris Basket	1
2	7-27-07156	Debris Basket Frame	1
3	2-00-04685	Screw, 1/4-20 x .750 HHC	2
4	2-00-04590	Sealing Washer, 1/4	2
5	2-00-04686	Lock Washer, 1/4	2
6	2-00-04688	Nut, Hex 1/4-20	2
7	3-73-00024	Edging	3.75 ft.

C-0354/9609

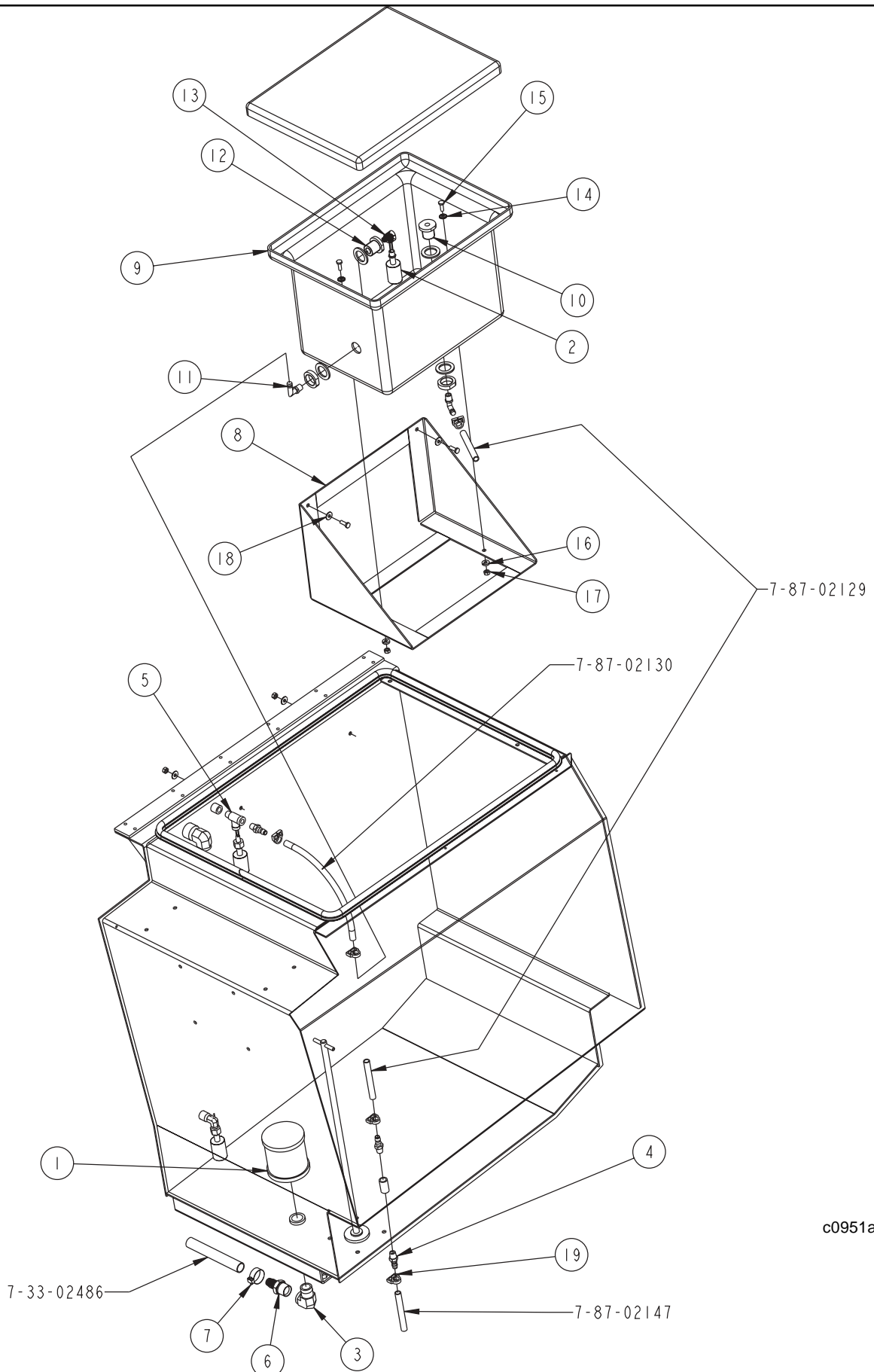
## ESP OPTION (TANK GROUP) - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-24-04022	Strainer, Pump Inlet	1
2	7-82-00017	Switch, Liquid Level	3
3	2-00-05672	Fitting, 3/4" NPT Street Elbow, 90°, Brass	2
4	2-74-00001	Fitting, Plastic	3
5	2-00-04515	Fitting, 1/4 NPT, Running Tee	1
6	2-00-05660	Fitting, 3/4" NPT-Hose Barb, Straight, Brass	1
7	2-00-02220	Clamp, Hose	1
8	7-81-00187	Support, Detergent Tank	1
9	7-83-04162	Tank, Detergent	1
10	2-00-05346	Fitting, Bulkhead (Detergent Tank)	1
11	2-00-04654	Fitting, 1/4 NPT x 3/8 Hose Barb, 90°	2
12	7-25-02080	Fitting, Bulkhead (Detergent Float)	1
13	2-00-05035	Fitting, 1/4 NPT x 1/8 NPT, Street Elbow, 90°	1
14	2-00-04590	Washer, Sealing	2
15	2-00-04685	Screw, 1/4-20 x .75 HHC SS	4
16	2-00-04687	Lock Washer, 1/4" Helical Spring	2
17	2-00-04688	Hex Nut, 1/4-20 SS	4
18	2-00-04689	Flat Washer, .687 OD X.260 ID x .050	4
19	7-13-07084	Hose Clamp	5

c0951a/0702

# ESP OPTION (TANK GROUP) - EXPLODED VIEW



c0951a/0702

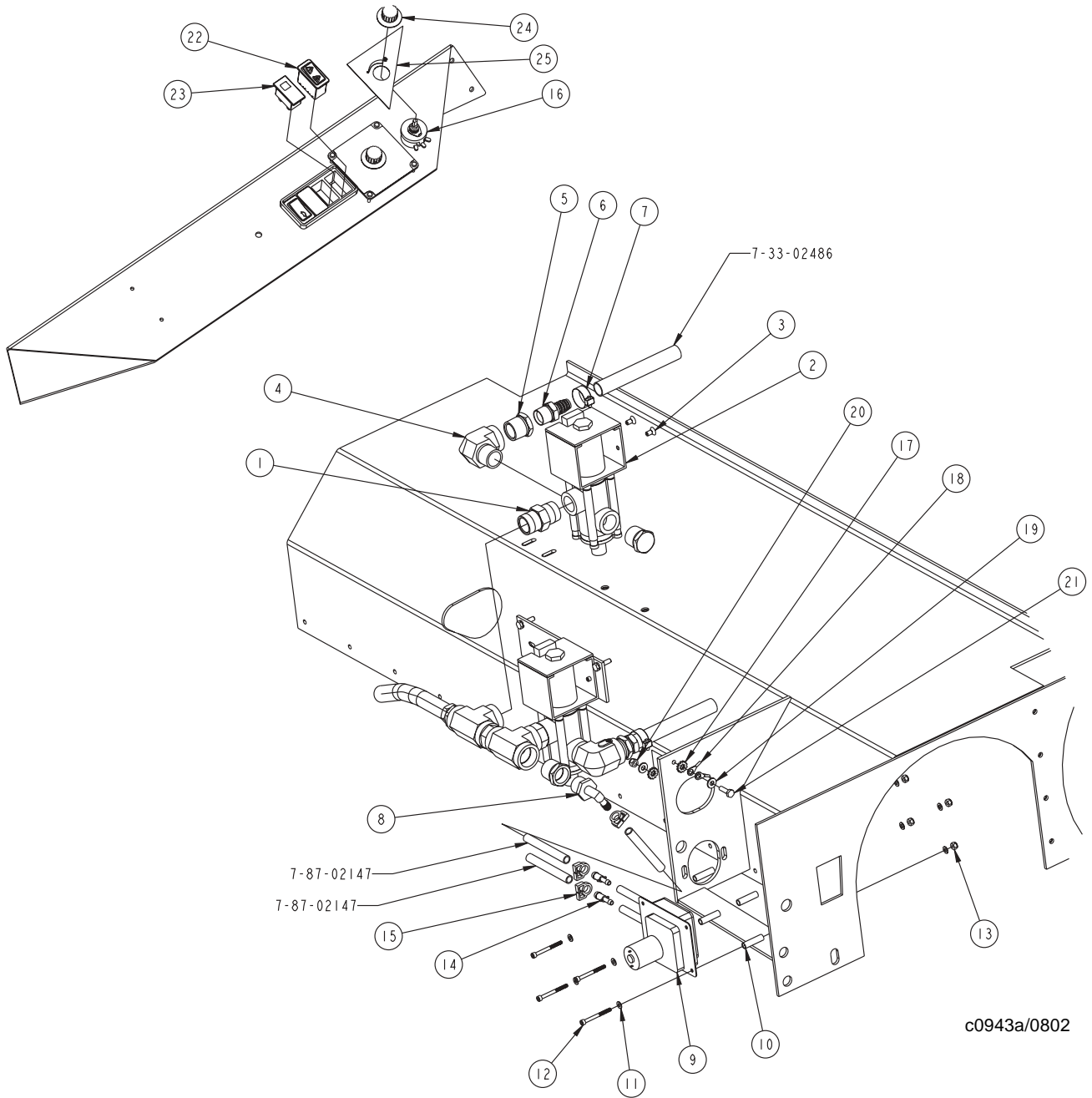
## ESP OPTION (DETERGENT PUMP GROUP) - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	2-00-05664	Fitting, 1" NPT, Nylon Nipple	1
2	7-88-00093	Valve, Solution control, #145-1	1
3	2-00-00001	Screw, 1/4-20 x .50 FHM	2
4	2-00-05654	Fitting, 1" NPT Street Elbow, 90°, Nylon	1
5	2-00-05659	Fitting, 1" NPT x 3/4" NPT, Reducer Bushing	2
6	2-00-05660	Fitting, 3/4" NPT-Hose Barb, Straight, Brass	1
7	2-00-02220	Clamp, Hose	1
8	2-00-04655	Fitting, 90° Elbow (Nylon)	1
9	7-60-05031	Pump, Peristaltic Metering	1
10	8-75-01207	Spacer, Tail Light Mtg.	4
11	2-00-00426	Flat Washer, .500 x .219 x .063	8
12	2-00-05056	Screw, #10-24 x 2.00 SHC	4
13	2-00-01246	Nut, #10-24 Elastic Stop	4
14	2-00-05412	Reducer Connection	2
15	7-13-07084	Hose Clamp	3
16	7-64-05009	Rheostat, 10 OHM, 25W	1
17	2-00-00498	Lock Washer, #10 EXT.	2
18	2-00-00828	Ring Terminal	2
19	2-00-03702	Washer, .625 x .281 x .063	2
20	2-00-00641	Nut, Fiber Insert 1/4-20	1
21	2-00-01490	Hexhead Screw, 1/4-20 x .875	1
22	2-00-05774	Actuator, 7770 ESP	1
23	2-00-05788	Indicator, Detergent Control	1
24	7-39-00021	Knob, Detergent Control	1
25	7-18-00310	Decal, Detergent Control	1

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# ESP OPTION (DETERGENT PUMP GROUP) - EXPLODED VIEW



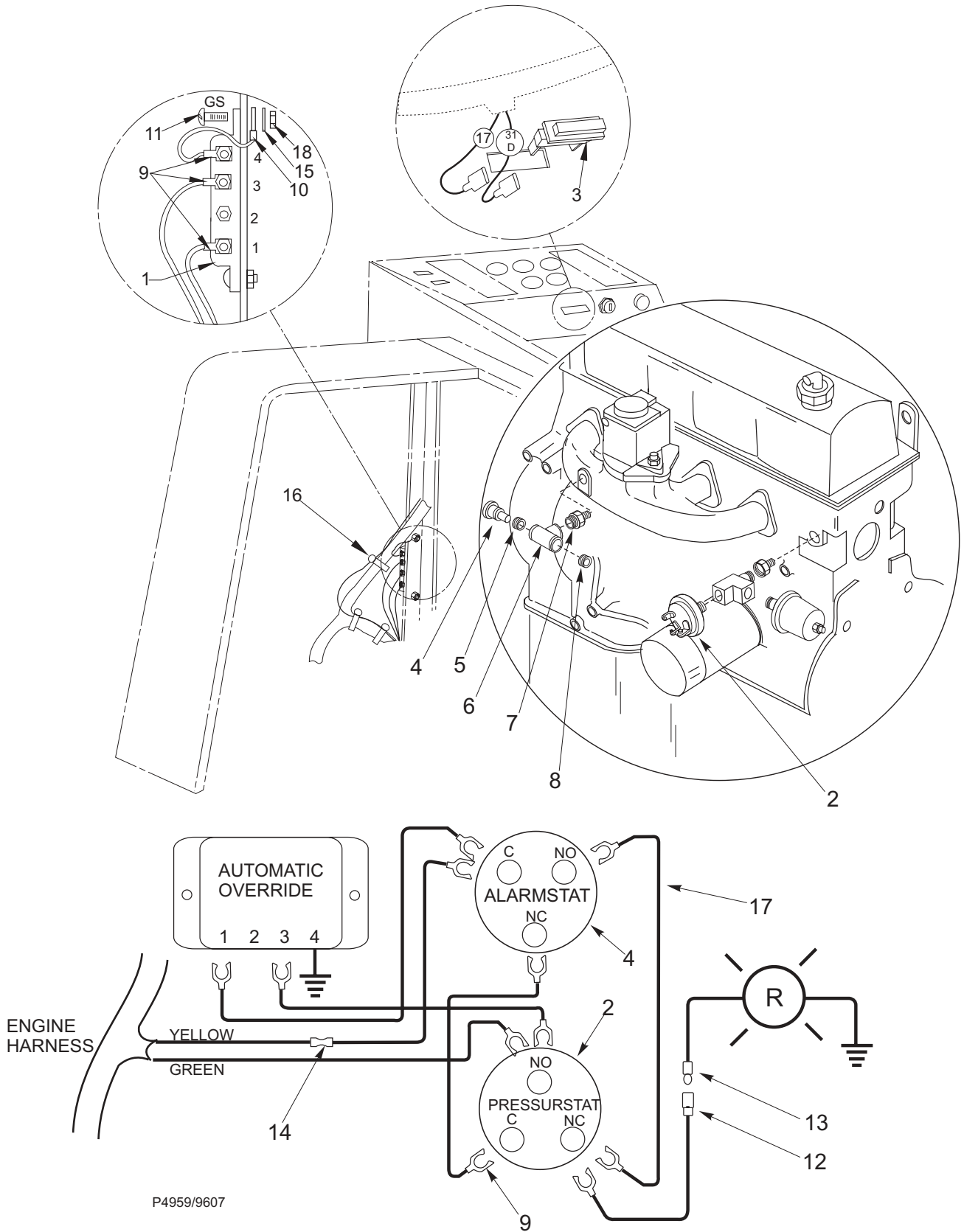
## FORD ENGINE SHUTDOWN - PARTS LIST

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	8-64-00004	Relay, Automatic Override	1
2	8-63-05013	Regulator, Pressurestat	1
3	7-40-05028	Light, Warning	1
4	8-63-05011	Regulator, Alarmstat	1
5	8-09-01070	Bushing, 3/8 NPT x 1/2 NPT	1
6	2-95-02537	Pipe Tee, 1/2 NPT (Galv.)	1
7	2-00-04638	Pipe, Nipple 1/2 NPT x 3/8 NPT	1
8	2-00-02474	Plug, 1/2 NPT Hex HD	1
9	2-00-04808	Terminal, Amp. 52936 or Equiv.	11
10	2-00-00838	Terminal, Etc. B-337-10 or Equiv.	1
11	2-00-00049	Screw, #10-24 x .500 RHM	2
12	2-00-04626	Terminal, Holl. FP5336F or Equiv.	1
13	2-00-04576	Terminal, Holl. XMP9654S or Equiv.	1
14	2-00-01128	Terminal, Butt Splice	1
15	2-00-00519	Washer, #10 Lock	2
16	2-00-04345	Tye Rap	10
17	3-61-00189	Stranded, 16 awg. Black	20'
18	2-00-00605	Nut, #10-24	2

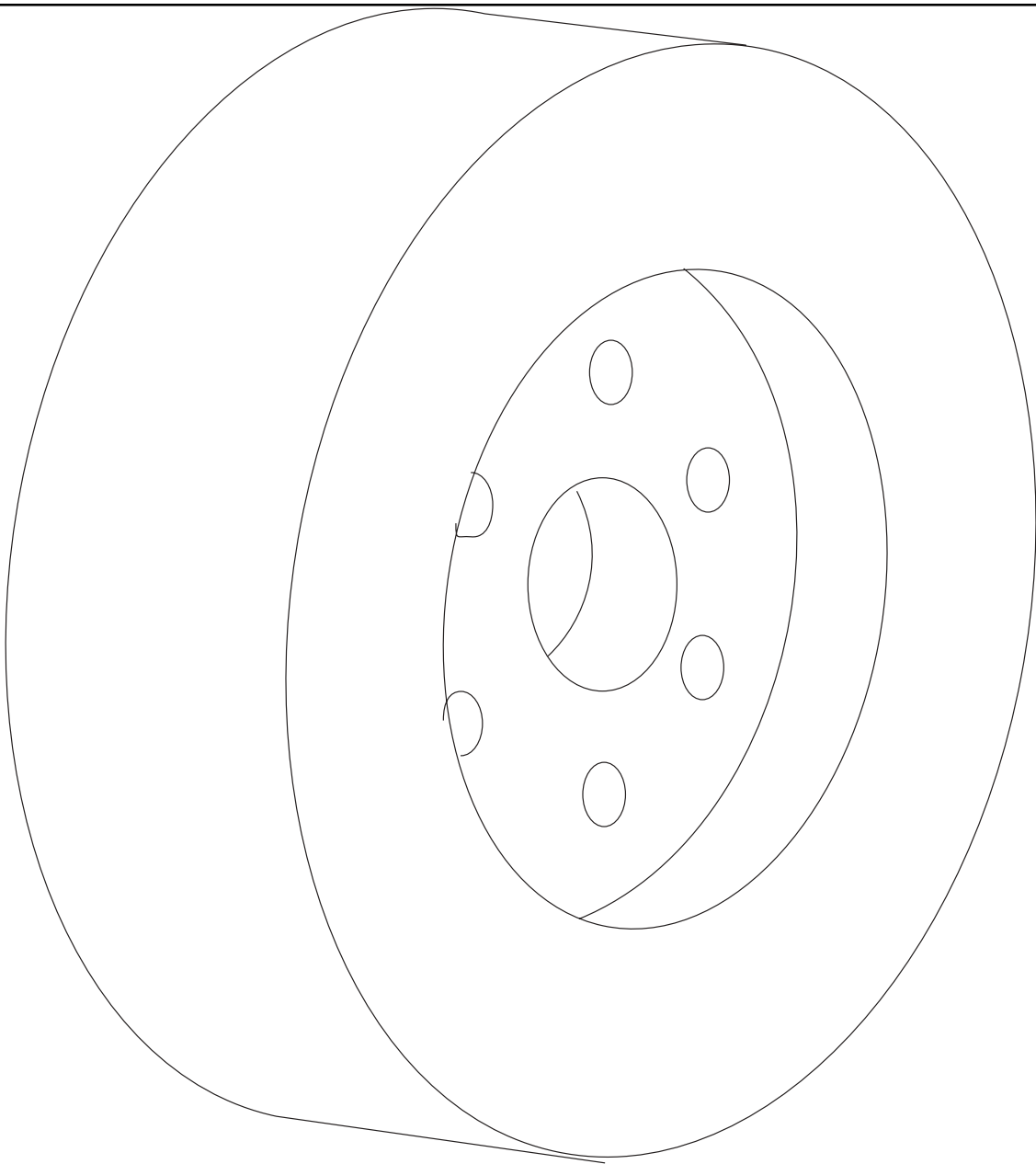
P-5126/9609

# FORD ENGINE SHUTDOWN - EXPLODED VIEW



# TIRE OPTIONS

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<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	7-89-08068	Rear Drive Tire, 6" Wide	1
1	7-89-08071	Siped Rear Drive Tire	1
1	0780-098	Front Tire, Urethane	2

P4554



## SPARE PARTS - GAS/LP MACHINES

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### OPTION NO. 0780-529

<u>KEY NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
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#### SQUEEGEE COMPONENTS

	7-77-00138	Rubber Inner Squeegee	1
	7-77-00139	Rubber Outer Squeegee	1
	7-77-00153	Rubber Side Squeegee Outer RH	1
	7-77-00154	Rubber Side Squeegee Inner RH	1
	7-77-00151	Rubber Side Squeegee Outer LH	1
	7-77-00152	Rubber Side Squeegee Inner LH	1
	7-33-02381	Squeegee Vacuum Hose 23.5"	1
	7-25-08095	Front Scrub Flap	1

#### FILTERS

	8-24-04106	Engine Air Cleaner Element	1
	7-24-04032	Hydraulic Return Filter Element	1

# INDEX

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ACCELERATOR & DIRECTIONAL CONTROL PEDAL .....	1-16
AIR FILTER .....	1-31
AIR FILTER ELEMENT, CLEANING THE .....	1-32
AIR FILTER ELEMENT, INSPECTING THE .....	1-32
AIR FILTER ELEMENT, REMOVING THE .....	1-32
AIR FILTER, REPLACING THE .....	1-31
AIR INTAKE SYSTEM .....	1-31
AUXILIARY PUMP AND FITTINGS FORD .....	2-53
BACKUP ALARM SWITCH .....	1-16
BACK-UP ALARM OPTION .....	3-6
BATTERY .....	1-34, 2-58
BRAKE ADJUSTMENT .....	1-30
BRAKE LINKAGE .....	2-30
BRUSH OPTIONS .....	3-3
BRUSH ROTATION SWITCH .....	1-13
CASTER WHEEL ADJUSTMENT .....	1-29
CHECK ENGINE (WARNING LIGHT) .....	1-13
CHOKE .....	1-15
CLEANING OPERATION, BEGINNING THE .....	1-21
CLEANING OPERATION, ENDING THE .....	1-21
CONNECTION DIAGRAM, GAS, CONTROL PANEL .....	2-79
CONNECTION DIAGRAM, LP, CONTROL PANEL .....	2-80
CONNECTION DIAGRAM, GAS/LP, ELECTRICAL .....	2-81
COOLANT LEVEL .....	1-33
COOLING SYSTEM .....	1-33
DEBRIS BASKET OPTION .....	3-19
DECALS .....	2-76
DECIMAL - METRIC CONVERSION TABLE .....	1-9
DETERGENT FLOW KNOB .....	1-14
DOUBLE LID TANK 3 .....	1-22
DRIVE BELTS .....	1-33
DRIVE PUMP & FITTINGS .....	2-48
DRIVER COMPARTMENT .....	2-36
ELECTRICAL SCHEMATICS .....	2-82
ELECTRICAL SCHEMATICS (CON'T) .....	2-83
ELECTRICAL SCHEMATICS (CON'T) .....	2-84
ENGINE COVER .....	2-56
ENGINE COVER, OPENING THE .....	1-27
ENGINE, BEFORE STARTING THE .....	1-20
ENGINE SHUTDOWN OPTION, FORD .....	3-24
ENGINE, STARTING THE .....	1-20
ESP OPTION .....	3-20
ESP SYSTEM CONTROLS & OPERATION .....	1-17
OIL COOLER & FITTINGS .....	2-49
OIL PRESSURE GAUGE .....	1-13

FIRE EXTINGUISHER OPTION .....	3-16
FLAME ARRESTING GAS CAP OPTION .....	3-17
FOOT BRAKE .....	1-16
FORD LRG425 ENGINE (GAS) .....	2-66
FORD LRG425 ENGINE (LP) .....	2-70
FORWARD/REVERSE CONTROL - FORD .....	2-32
FRONT WHEEL AND BRAKE .....	2-27
FUEL GAUGE .....	1-13
FUEL TANK .....	2-58
GAS TANK .....	1-49
GENERAL TROUBLESHOOTING .....	1-52
HELPFUL HINTS FOR CLEANING OPERATION .....	1-26
HIGH LEVEL WARNING LIGHT .....	1-14
HOPPER LIFT .....	1-19
HOPPER SAFETY LOCK ARM .....	1-22
HORN PUSH BUTTON .....	1-12
HOUR METER .....	1-13
HYDRAULIC RESERVOIR, FILLING THE .....	1-28
HYDRAULIC RESERVOIR, FILTER & FITTINGS .....	2-76
HYDRAULIC SCHEMATIC .....	2-82
HYDRAULIC SCHEMATIC (CON'T) .....	2-83
HYDRAULIC SCHEMATIC (CON'T) .....	2-84
HYDRAULIC SYSTEM, CLEANING THE .....	1-28
HYDRAULIC TORQUE REQUIREMENTS .....	1-8
HYDRAULICS .....	1-28
IGNITION SWITCH .....	1-12
INDEX .....	3-28
INSTRUMENT PANEL - GAS .....	2-40
INSTRUMENT PANEL - LP .....	2-42
LIGHTS OPTION .....	3-8
LIGHT SWITCH .....	1-12
LOW LEVEL WARNING LIGHT .....	1-14
LOWER DOORS .....	2-9
LP GAS FUEL TANK .....	1-35
LP GAS SYSTEM .....	1-35
LP GAS VAPORIZER-REGULATOR QUICK CHECK .....	1-35
LUBRICATION .....	1-27
MACHINE DIMENSIONS .....	1-6
MACHINE MAINTENANCE .....	1-27
MAIN CONTROL VALVE AND FITTINGS .....	2-52
MAIN FRAME .....	2-34
NEUTRAL ADJUSTMENT .....	1-35
NON-RECYCLING SCRUBBING SYSTEM, HOW IT WORKS .....	1-17

# INDEX

---

OPERATING INSTRUCTIONS .....	1-20
ORDERING PARTS .....	1-39
OVERHEAD GUARD OPTION .....	3-2
PARKING BRAKE .....	1-15
PARTS LEGEND .....	1-36
POST OPERATION CHECKLIST .....	1-21
POST START CHECKLIST .....	1-21
POWER STEERING UNIT AND FITTINGS .....	2-50
PRE-START CHECKLIST .....	1-20
PREPARING THE MACHINE FOR OPERATION .....	1-10
RADIATOR .....	1-33
RADIATOR AND SHROUD .....	2-70
REAR AND SIDE SQUEEGEES .....	2-10
REAR WHEEL .....	2-28
REAR WHEEL MOTOR & FITTINGS .....	2-45
REAR SQUEEGEE .....	1-29
RECOVERY TANK .....	2-24
RECOVERY TANK LID .....	2-20
RECYCLING PUMP ESP SYSTEM .....	1-29
RETURN MANIFOLD AND FITTINGS .....	2-51
SAFETY INSTRUCTIONS .....	1-13
SCHEMATIC DIAGRAM OPTIONS .....	1-11
SCRUB BRUSHES SWITCH .....	1-14
SCRUB DECK AND BRUSHES .....	2-4
SEAT ADJUSTMENT .....	1-17
SERVICE CHART .....	1-24
SOLUTION CONTROL .....	1-14, 2-18
SOLUTION HIGH WARNING LIGHT .....	1-22
SPARE PARTS KIT, GAS/LP .....	3-34
SPECIFICATIONS .....	1-4
SQUEEGEE AND SCRUB DECK CYLINDERS & FITTINGS .....	2-44
SQUEEGEE BLADE SWITCH .....	1-4
SQUEEGEE CASTER WHEELS .....	1-29
SQUEEGEE LIFT .....	2-6
STANDARD HARDWARE & TORQUE VALUES .....	1-7
INSTRUMENT PANEL (GAS) .....	2-40
INSTRUMENT PANEL (LP) .....	2-42
SUSPENSION SEAT, OPTION .....	3-32
SWING SQUEEGEE SUPPORT .....	2-14

---

TANK .....	2-16
TANKS, CLEANING .....	1-30-31
TANKS, DRAINING .....	1-30-31
TANKS, FILLING (ESP) .....	1-20
THROTTLE .....	1-15
TIRE OPTIONS .....	3-33
TOWING INSTRUCTIONS .....	1-23
TRANSPORTING THE .....	1-21
TURN SIGNAL (OPTION) .....	1-15, 3-16
VACUUM WAND OPTION .....	3-44
VACUUM MOTOR & FITTINGS .....	2-49
VACUUM MOTOR & FLOAT .....	2-22
VOLT METER .....	1-13
WARNING LIGHTS (STANDARD) .....	3-22
WARNING LIGHTS with OVERHEAD GUARD .....	3-24
WARRANTY .....	3-33
WATER TEMPERATURE GAUGE .....	1-13

**NOTES**

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**AMERICAN-LINCOLN®**  
**RIDER SWEEPER / SCRUBBER**  
**"BUMPER-TO-BUMPER" LIMITED WARRANTY**

**I. COVERAGE**

A. Subject to the terms and limitations stated herein, American-Lincoln warrants, to the original purchaser only, to repair or replace, at its option and upon the terms set out below, this product or any parts thereof (excluding normal maintenance items) which are defective in materials or workmanship, for a period of (2) two years or 2,000 hours of normal operation from the date of purchase, whichever comes first, provided that the product is operated and maintained in accordance with American-Lincoln's Maintenance and Operations Instruction.

1. (a) During the first (90) ninety days from the date of purchase, American-Lincoln will provide, without charge, parts and on-site labor (including up to three (3) hours total round-trip travel time) to remedy a defective product or part.

(b) During the next (9) nine months or 1,000 hours (whichever come first) American-Lincoln will provide, without charge, parts and labor to remedy a defective product or part; however all travel time for on-site remedy and all shipping and freight charges for off-site remedy of the product or parts thereof shall be the sole responsibility of the purchaser.

(c) During the next (12) twelve months or a total of 2000 hours (whichever comes first) American Lincoln will provide, without charge, parts to remedy a defective product or part, however all labor, travel time for on-site remedy and all shipping and freight charges for off-site remedy of the product or parts thereof shall be the sole responsibility of the purchaser.

B. In addition to the terms listed above, if applicable, the following additional warranty coverage is applied.

1. (a) American-Lincoln warrants to the original purchaser only, to repair or replace, at its option and upon the terms set out below, the drive line electrical components including the electric drive propulsion motor, electric wheel drive motor and electronic drive controller, and all hydraulic pumps and motors, to provide replacement parts which are defective in material or workmanship, for a period of (3) years or 3000 hours (whichever comes first) provided that the product is operated and maintained in accordance with American-Lincoln's Maintenance and Operations Instruction.

(b) American Lincoln warrants to the original purchaser only, to repair or replace, at its option and upon the terms set out below, the internal combustion liquid cooled engine, to provide replacement parts which are defective in material or workmanship, for a period of (5) five years or unlimited hours of normal operation. All labor, travel time, shipping and freight charges shall be the sole responsibility of the purchaser.

(c) American-Lincoln, warrants to the original purchaser only, to repair or replace, at its option and upon the terms set out below, the main frame, debris hopper, solution tank, and the recovery tank, for the life of the machine against failure caused by defects in workmanship or total rust through. For purposes of this coverage, cosmetic deterioration or surface rust does not constitute a failure.

(d) American-Lincoln, warrants to the original purchaser only, to repair or replace, at its option and upon the terms set out below, the batteries which becomes unserviceable under normal use within a period of ninety (90) days from date of sale to the original user with new batteries of equal value. After expiration of the above ninety (90) day period, any battery which fails under normal use will be adjusted to the original user with a new battery of equal specifications on an eighteen (18) months pro rate basis from the date of purchase. Adjustment will be determined using the then current list price, plus transportation costs. Warranty is rendered NULL and Void if battery is not kept filled to the proper level with DISTILLED WATER.

**II. EXCLUSIONS**

● This warranty **does not** cover normal maintenance parts and labor, including but not limited to, rubber parts, seals, flaps, brushes, engine maintenance parts, hoses, carbon motor brushes, fluids and routine adjustments.

● This warranty **does not** cover damage or failure of the product or any parts thereof which is the result of misuse, negligent operation, handling or repair, or which is the result of modification by any person other than an authorized American-Lincoln service representative.

**III. LIMITATIONS**

A. AMERICAN-LINCOLN MAKES NO WARRANTIES OTHER THAN THOSE SPECIFIED HEREIN. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. AMERICAN-LINCOLN LIABILITY UNDER THIS WARRANTY IS LIMITED TO REPAIR AND/OR REPLACEMENT OF PRODUCTS OR PARTS AS SET OUT HEREIN. AMERICAN-LINCOLN SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES WHICH MAY RESULT FROM A PRODUCT OR PART DEFECT OR FAILURE. ANY EXTENSIONS OF OR MODIFICATIONS MADE TO THIS WARRANTY BY A DISTRIBUTOR OF AMERICAN-LINCOLN ARE THE SOLE RESPONSIBILITY OF THE DISTRIBUTOR.

IV. PROCEDURES AND CONDITIONS FOR WARRANTY CLAIMS AMERICAN-LINCOLN SHALL NOT BE LIABLE FOR REPAIR OR REPLACEMENT OF ANY DEFECTIVE PRODUCT OR PART THEREOF UNLESS AND UNTIL THE ORIGINAL PURCHASER FULFILLS THE FOLLOWING CONDITIONS PRECEDENT TO RECOVERY UNDER THIS WARRANTY:

● The original purchaser shall promptly complete and return the warranty and installation registration form included with the product at the time of the purchase;

● Upon product or part failure, the original purchaser shall promptly provide notice thereof to his nearest authorized American-Lincoln Service Representative; and

● The original purchaser shall permit the product or part to be inspected by American-Lincoln or its authorized representatives, as necessary and expenses for shipping or travel time shall be borne by the parties itemized in paragraph I herein above.

American-Lincoln Technology reserves the right to make changes and improvements to its machines without notice. For best results, use only the correct American-Lincoln Service parts.

American-Lincoln®  
1100 HASKINS ROAD  
BOWLING GREEN, OHIO 43402