

**PARTS LIST FOR
HDS SERIES
(AFTER SERIAL #15023975)**

ENGINE OIL GRADE:		FUEL NOZZLE:	2.75 90°B Delavan
DEUTZ-RUGGERINI:	5°F TO 104°F = SAE 15-40	BTU INPUT:	471,800
KOLHER:	SAE10W-30	PRESSURE NOZZLE SIZE:	
HONDA:	ABOVE 50°F = SAE30	HDS-3005:	5.5 / 5.0 WET STEAM
VANGUARD:	ABOVE 40°F = SAE30	HDS-3006:	6.5 / 6.0 WET STEAM
	BELOW 40°F = SAE10W-30	HDS-3505:	5.0 / 5.0 WET STEAM
PUMP OIL GRADE:	SAE 20 OR 30 NON-DETERGENT	HDS-3506:	6.0 / 5.5 WET STEAM
PUMP OIL CAPACITY:	SEE INDIVIDUAL MACHINE SPECIFICATIONS	HDS-4005-0K6G/0H6G:	4.5 / 3.5 WET STEAM
		HDS-4005-0K6A/0H6A:	5.0 / 3.5 WET STEAM

This Parts Listing has been compiled for your benefit. You can be assured your hot water pressure washer was constructed and designed with quality and performance in mind. Each component has been rigorously tested to insure the highest level of quality.

The contents of this Parts Listing are based on the latest product information available at the time of publication. The manufacturer reserves the right to make changes in price, color, materials, equipment, specifications or models at any time without notice.

WARNING

THIS IS A PROFESSIONAL HIGH PRESSURE, HOT WATER PRESSURE WASHER. CAUTION SHOULD BE OBSERVED WHEN USING OR REPAIRING THIS UNIT! READ AND FOLLOW THE SAFETY WARNINGS LISTED BELOW BEFORE ATTEMPTING ANY REPAIRS ON THIS PRESSURE WASHER!

SAFETY WARNINGS

1. NEVER alter or modify the equipment. Be sure any accessory items and system components being used will withstand the pressure developed. Use only genuine manufacturer parts for repair of your pressure washer. Failure to do so can cause hazardous operating conditions and will VOID warranty.
2. NEVER make adjustments on machinery while the unit is connected to the engine without first removing the ignition cable from the spark plug. Turning over the machinery by hand during adjustment or cleaning might start the engine and machinery with it, causing serious injury to the operator.
3. Know how to stop and bleed pressures quickly. Be thoroughly familiar with controls.
4. Before servicing the unit, turn unit off, relieve the water pressure and allow the unit to cool down. Do not make repairs while the unit is running. Service in a clean, dry, flat area. Block the wheels to prevent the unit from moving. Be especially careful to properly dispose of any flammable materials.
5. After testing the machine, DO NOT leave the pressurized unit unattended. Shut off the unit and release trapped pressure before leaving.

NOTES

Table of Contents

NOTES	3
SPECIFICATIONS FOR HDS-3005-0K6A/0V6A.....	6
SPECIFICATIONS FOR HDS-3005-0K6G/0V6G.....	7
SPECIFICATIONS FOR HDS-3006-0R7G.....	8
SPECIFICATIONS FOR HDS-3505-0R7G.....	9
SPECIFICATIONS FOR HDS-3505-0K6A/0V6A/0H6A.....	10
SPECIFICATIONS FOR HDS-3505-0K6G/0V6G/0H6G	11
SPECIFICATIONS FOR HDS-3506-0K6A/0H6A.....	12
SPECIFICATIONS FOR HDS-3506-0K6G/0H6G	13
SPECIFICATIONS FOR HDS-4005-0K6A/0H6A.....	14
SPECIFICATIONS FOR HDS-4005-0K6G/0H6G	15
FLOW CHART FOR HDS-3005/3006/3505/3506.....	16
GENERAL THEORY OF OPERATION FOR HDS-3005/3006/3505/3506.....	17
FLOW CHART FOR HDS-4005.....	18
GENERAL THEORY OF OPERATION FOR HDS-4005.....	19
SAFETY DECAL PLACEMENT.....	20
FRAME ASSEMBLY	22
ISOLATION PLATE FOR HDS-3005/3006/3505/3506 (AFTER SERIAL #15022139).....	24
ISOLATION PLATE FOR HDS-4005 (AFTER SERIAL #15022139).....	26
ENGINE ASSEMBLY (850-0293).....	28
ENGINE ASSEMBLY (850-0294).....	30
ENGINE ASSEMBLY (850-0295).....	32
ENGINE ASSEMBLY (850-0301) (AFTER SERIAL #15013196)	34
ENGINE ASSEMBLY (850-0332).....	36
ENGINE ASSEMBLY (850-0333).....	38
ENGINE ASSEMBLY (850-0349).....	40
PUMP ASSEMBLY (3-0169)	42
PUMP ASSEMBLY (3-0202)	44
PUMP ASSEMBLY (3-0211)	46
PUMP ASSEMBLY (3-0212)	48
GENERATOR (850-0352)	50
BATTERY BOX ASSEMBLY (HDS-3006/3505-0R7G).....	51
FLOAT TANK ASSEMBLY.....	52
BALL VALVE ASSEMBLY	54
FUEL TANK ASSEMBLY	56
GAS TANK ASSEMBLY.....	58
CONTROL PANEL.....	60
HEAT EXCHANGER ASSEMBLY FOR HDS-3005/3006/3505/3506 (AFTER SERIAL #15023975).....	62
HEAT EXCHANGER ASSEMBLY FOR HDS-4005 (AFTER SERIAL #15023975).....	64

Table of Contents

BURNER ASSEMBLY (4-0017) (AFTER SERIAL #15008085)	66
UNLOADER ASSEMBLY (850-0304)	68
UNLOADER ASSEMBLY (8-0511)	70
PRESSURE SWITCH (22-0243)	72
GUN/WAND/HOSE ASSEMBLY (AFTER SERIAL #15023975)	74
GUN ASSEMBLY (16-0392)	76
DUAL LANCE ASSEMBLY (16-0417)	78
WIRING SCHEMATIC	80
WIRING DIAGRAM	81
NOTES	82
OPTION LISTINGS	83
ISOLATION PLATE FOR HX-0100 STEAM OPTION AND HX-0150 & HX-0151 & HX-0152 & HX-0155 TRAPPING UNLOADER OPTIONS	84
CONTROL PANEL FOR HX-0100 STEAM OPTION	86
HEAT EXCHANGER ASSEMBLY FOR HX-0100 STEAM OPTION	88
GUN/WAND/HOSE ASSEMBLY FOR HX-0100 STEAM OPTION (AFTER SERIAL #15023975)	90
WIRING SCHEMATIC HX-0100 STEAM OPTION	92
WIRING DIAGRAM HX-0100 STEAM OPTION	93
HEAT EXCHANGER ASSEMBLY FOR HX-0150 & HX-0151 & HX-0152 & HX-0155 TRAPPING UNLOADER OPTION	94
CONTROL PANEL FOR HX-0150 & HX-0151 & HX-0152 & HX-0155 TRAPPING UNLOADER OPTION	96
GUN/WAND/HOSE ASSEMBLY FOR HX-0150 & HX-0151 & HX-0152 & HX-0155 TRAPPING UNLOADER OPTION (AFTER SERIAL #15023975)	98

SPECIFICATIONS FOR HDS-3005-0K6A/0V6A

HDS-3005-0K6A/0V6A		
MODEL NUMBER	HDS-3005-0K6A	HDS-3005-0V6A
Operating Pressure (PSI/Bar):	3000 / 206.8 (+/- 5%)	
Water Volume (GPM/lpm):	4.8 / 18.2 (+/- 5%)	
Outlet Water Temperature (F/C):	130°F / 54°C (+/- 10°F) rise above inlet ambient (210°F / 99°C maximum)	
High Pressure Nozzle		5.5 / 5.0 Wet Steam
Engine:	Kohler	Vanguard
Horsepower	18.0	16.0
Engine Type	4 Stroke, Overhead Valve, Twin Cylinder	
Oil Type	SAE10-30W	Above 40°F = SAE30 / Below 40°F = SAE10W-30
Oil Capacity (oz./liter)	64 / 2.0	56 / 1.66
Low Oil Protection	Oil Sentry™	Oil Guard™
Fuel Type	Refer to Engine Owner's Manual	
Fuel Capacity (gal./liter)	10 / 37.8	
Starting	12 Volt Electric	
Maximum No Load RPM	3600 (+/- 100)	
High Pressure Pump:	Belt or Direct Driven, Oil Bath, Triplex Piston	
Oil Type	SAE20 or 30 Non-Detergent	
Oil Capacity (oz./liters)	15 / .45	
Plungers	Ceramic	
Manifold	Forged Brass	
Valves	Stainless Steel	
Unloader	Flow Sensitive - Pre-set at the factory	
Heat Dump Valve	Relieves heated water during unloader bypass stage	
Water System:		
Inlet Water Strainer	Removable Thimble for inspection and cleaning of Stainless Steel Screen	
Float Tank Strainer	Removable Strainer for inspection and cleaning of Stainless Steel Screen	
Float Tank Capacity (gal. / liters)	4.75 / 18.0	
Heat Dump Valve	Protects pump against damaging heat in recirculated and inlet water.	
Detergent System	Adjustable Metering Valve	
Burner Fuel System:		
Fuel Type	No.1 or No.2 Fuel Oil, Diesel or Kerosene	
Fuel Capacity (Gal. / liters)	10 / 37.8	
Fuel Filter/ Water Separator	Spin on (10 micron) filter / E-Z water drain	
Fuel Pump	Two Line, Single Stage	
Fuel Pressure (PSI / BAR)	150 / 10.4	
Fuel Nozzle	2.75 90° B Delavan	
Fuel Consumption (GPH / LPH)	3.37 / 12.75 Cont. Burning	
Burner Electrical System:		
Voltage	115	
Amps	3.0	
Heat Exchanger:	Horizontal, Side Fired, Pancake Coil	
BTU Input	471,800	
Efficiency	75% with #2 Fuel Oil / Diesel	
Smoke Density	0-3 per ASTM D2156	
Safety System:		
Pressure Switch	Shuts off burner fuel supply upon trigger release.	
Fuel Solenoid Valve	115 Volt, controls fuel supply to burner	
Safety Relief	Relieves excess system pressure	
Adjustable Thermostat:	86°F / 30°C - 302°F / 150°C	
Unit Net Weight (Lbs/kg):	750 / 342	
Unit Shipping Weight (Lbs/kg):	854 / 387	
Unit Net Dimension (In/cm):	49.5L x 33.5W x 44.5H / 125.7L x 85.1W x 113H	
Unit Shipping Dimension (In/cm):	57.5L x 35.5W x 59.5H / 146.1L x 90.2W x 151.1H	

SPECIFICATIONS FOR HDS-3005-0K6G/0V6G

HDS-3005-0K6G/0V6G		
MODEL NUMBER	HDS-3005-0K6G	HDS-3005-0V6G
Operating Pressure (PSI/Bar):	3000 / 206.8 (+/- 5%)	
Water Volume (GPM/lpm):	4.8 / 18.2 (+/- 5%)	
Outlet Water Temperature (F/C):	130°F / 54°C (+/- 10°F) rise above inlet ambient (210°F / 99°C maximum)	
High Pressure Nozzle	5.5 / 5.0 Wet Steam	
Engine:	Kohler	Vanguard
Horsepower	18.0	16.0
Engine Type	4 Stroke, Overhead Valve, Twin Cylinder	
Oil Type	SAE10-30W	Above 40°F = SAE30 / Below 40°F = SAE10W-30
Oil Capacity (oz./liter)	64 / 1.89	56 / 1.66
Low Oil Protection	Oil Sentry™	Oil Guard™
Fuel Type	Refer to Engine Owner's Manual	
Fuel Capacity (gal./liter)	10 / 37.8	
Starting	12 Volt Electric	
Maximum No Load RPM	3600 (+/- 100)	
High Pressure Pump:	Belt or Direct Driven, Oil Bath, Triplex Piston	
Oil Type	SAE20 or 30 Non-Detergent	
Oil Capacity (oz./liters)	41 / 1.2	
Plungers	Ceramic	
Manifold	Forged Brass	
Valves	Stainless Steel	
Unloader	Flow Sensitive - Pre-set at the factory	
Heat Dump Valve	Relieves heated water during unloader bypass stage	
Water System:		
Inlet Water Strainer	Removable Thimble for inspection and cleaning of Stainless Steel Screen	
Float Tank Strainer	Removable Strainer for inspection and cleaning of Stainless Steel Screen	
Float Tank Capacity (gal. / liters)	4.75 / 18.0	
Heat Dump Valve	Protects pump against damaging heat in recirculated and inlet water.	
Detergent System	Adjustable Metering Valve	
Burner Fuel System:		
Fuel Type	No.1 or No.2 Fuel Oil, Diesel or Kerosene	
Fuel Capacity (Gal. / liters)	10 / 37.8	
Fuel Filter/ Water Separator	Spin on (10 micron) filter / E-Z water drain	
Fuel Pump	Two Line, Single Stage	
Fuel Pressure (PSI / BAR)	150 / 10.4	
Fuel Nozzle	2.75 90° B Delavan	
Fuel Consumption (GPH / LPH)	3.37 / 12.75 Cont. Burning	
Burner Electrical System:		
Voltage	115	
Amps	3.0	
Heat Exchanger:	Horizontal, Side Fired, Pancake Coil	
BTU Input	471,800	
Efficiency	75% with #2 Fuel Oil / Diesel	
Smoke Density	0-3 per ASTM D2156	
Safety System:		
Pressure Switch	Shuts off burner fuel supply upon trigger release.	
Fuel Solenoid Valve	115 Volt, controls fuel supply to burner	
Safety Relief	Relieves excess system pressure	
Adjustable Thermostat:	86°F / 30°C - 302°F / 150°C	
Unit Net Weight (Lbs/kg):	750 / 342	
Unit Shipping Weight (Lbs/kg):	854 / 387	
Unit Net Dimension (In/cm):	49.5L x 33.5W x 44.5H / 125.7L x 85.1W x 113H	
Unit Shipping Dimension (In/cm):	57.5L x 35.5W x 59.5H / 146.1L x 90.2W x 151.1H	

SPECIFICATIONS FOR HDS-3006-0R7G

MODEL NUMBER	HDS-3006-0R7G
Operating Pressure (PSI/Bar):	3000 / 206.8 (+/- 5%)
Water Volume (GPM/lpm):	4.7 / 17.7 (+/- 5%)
Outlet Water Temperature (F/C):	130°F / 54°C (+/- 10°F) rise above inlet ambient (210°F / 99°C maximum)
High Pressure Nozzle	6.5 / 6.0 Wet Steam
Engine:	Deutz-Ruggerini
Horsepower	19.0
Engine Type	4 Stroke, Overhead Valve, Twin Cylinder
Oil Type	ABOVE 5°F to 104°F = SAE 15-40
Oil Capacity (oz./liter)	61 / 1.8
Fuel Type	Refer to Engine Owner's Manual
Fuel Capacity (gal./liter)	10 / 37.8
Starting	12 Volt Electric
Maximum No Load RPM	3600 (+/- 100)
High Pressure Pump:	Belt or Direct Driven, Oil Bath, Triplex Piston
Oil Type	SAE20 or 30 Non-Detergent
Oil Capacity (oz./liters)	15 / .45
Plungers	Ceramic
Manifold	Forged Brass
Valves	Stainless Steel
Unloader	Flow Sensitive - Pre-set at the factory
Heat Dump Valve	Relieves heated water during unloader bypass stage
Water System:	
Inlet Water Strainer	Removable Thimble for inspection and cleaning of Stainless Steel Screen
Float Tank Strainer	Removable Strainer for inspection and cleaning of Stainless Steel Screen
Float Tank Capacity (gal. / liters)	4.75 / 18.0
Heat Dump Valve	Protects pump against damaging heat in recirculated and inlet water.
Detergent System	Adjustable Metering Valve
Burner Fuel System:	
Fuel Type	No.1 or No.2 Fuel Oil, Diesel or Kerosene
Fuel Capacity (Gal. / liters)	10 / 37.8
Fuel Filter/ Water Separator	Spin on (10 micron) filter / E-Z water drain
Fuel Pump	Two Line, Single Stage
Fuel Pressure (PSI / BAR)	150 / 10.4
Fuel Nozzle	2.75 90° B Delavan
Fuel Consumption (GPH / LPH)	3.37 / 12.75 Cont. Burning
Burner Electrical System:	
Voltage	115
Amps	3.0
Heat Exchanger:	Horizontal, Side Fired, Pancake Coil
BTU Input	471,800
Efficiency	75% with #2 Fuel Oil / Diesel
Smoke Density	0-3 per ASTM D2156
Safety System:	
Pressure Switch	Shuts off burner fuel supply upon trigger release.
Fuel Solenoid Valve	115 Volt, controls fuel supply to burner
Safety Relief	Relieves excess system pressure
Adjustable Thermostat:	86°F / 30°C - 302°F / 150°C
Unit Net Weight (Lbs/kg):	756 / 343
Unit Shipping Weight (Lbs/kg):	792 / 359
Unit Net Dimension (In/cm):	49.5L x 33.5W x 44.5H / 125.7L x 85.1W x 113H
Unit Shipping Dimension (In/cm):	57.5L x 35.5W x 59.5H / 146.1L x 90.2W x 151.1H

SPECIFICATIONS FOR HDS-3505-0R7G

MODEL NUMBER	HDS-3505-0R7G
Operating Pressure (PSI/Bar):	3500 / 241.3 (+/- 5%)
Water Volume (GPM/lpm):	4.8 / 18.2 (+/- 5%)
Outlet Water Temperature (F/C):	130°F / 54°C (+/- 10°F) rise above inlet ambient (210°F / 99°C maximum)
High Pressure Nozzle	5.0 / 5.0 Wet Steam
Engine:	Deutz-Ruggerini
Horsepower	19.0
Engine Type	4 Stroke, Overhead Valve, Twin Cylinder
Oil Type	ABOVE 5°F to 104°F = SAE 15-40
Oil Capacity (oz./liter)	61 / 1.8
Fuel Type	Refer to Engine Owner's Manual
Fuel Capacity (gal./liter)	10 / 37.8
Starting	12 Volt Electric
Maximum No Load RPM	3600 (+/- 100)
High Pressure Pump:	Belt or Direct Driven, Oil Bath, Triplex Piston
Oil Type	SAE20 or 30 Non-Detergent
Oil Capacity (oz./liters)	15 / .45
Plungers	Ceramic
Manifold	Forged Brass
Valves	Stainless Steel
Unloader	Flow Sensitive - Pre-set at the factory
Heat Dump Valve	Relieves heated water during unloader bypass stage
Water System:	
Inlet Water Strainer	Removable Thimble for inspection and cleaning of Stainless Steel Screen
Float Tank Strainer	Removable Strainer for inspection and cleaning of Stainless Steel Screen
Float Tank Capacity (gal. / liters)	4.75 / 18.0
Heat Dump Valve	Protects pump against damaging heat in recirculated and inlet water.
Detergent System	Adjustable Metering Valve
Burner Fuel System:	
Fuel Type	No.1 or No.2 Fuel Oil, Diesel or Kerosene
Fuel Capacity (Gal. / liters)	10 / 37.8
Fuel Filter/ Water Seperator	Spin on (10 micron) filter / E-Z water drain
Fuel Pump	Two Line, Single Stage
Fuel Pressure (PSI / BAR)	150 / 10.4
Fuel Nozzle	2.75 90° B Delavan
Fuel Consumption (GPH / LPH)	3.37 / 12.75 Cont. Burning
Burner Electrical System:	
Voltage	115
Amps	3.0
Heat Exchanger:	Horizontal, Side Fired, Pancake Coil
BTU Input	471,800
Efficiency	75% with #2 Fuel Oil / Diesel
Smoke Density	0-3 per ASTM D2156
Safety System:	
Pressure Switch	Shuts off burner fuel supply upon trigger release.
Fuel Solenoid Valve	115 Volt, controls fuel supply to burner
Safety Relief	Relieves excess system pressure
Adjustable Thermostat:	86°F / 30°C - 302°F / 150°C
Unit Net Weight (Lbs/kg):	756 / 343
Unit Shipping Weight (Lbs/kg):	792 / 359
Unit Net Dimension (In/cm):	49.5L x 33.5W x 44.5H / 125.7L x 85.1W x 113H
Unit Shipping Dimension (In/cm):	57.5L x 35.5W x 59.5H / 146.1L x 90.2W x 151.1H

SPECIFICATIONS FOR HDS-3505-0K6A/0V6A/0H6A

HDS-3505-0K6A/0V6A/0H6A			
MODEL NUMBER	HDS-3505-0K6A	HDS-3505-0V6A	HDS-3505-0H6A
Operating Pressure (PSI/Bar):		3500 / 241.3 (+/- 5%)	
Water Volume (GPM/lpm):		4.7 / 17.7 (+/- 5%)	
Outlet Water Temperature (F/C):		130°F / 54°C (+/- 10°F) rise above inlet ambient (210°F / 99°C maximum)	
High Pressure Nozzle		5.0 / 5.0 Wet Steam	
Engine:	Kohler	Vanguard	Honda
Horsepower	20.0	21.0	20.0
Engine Type	4 Stroke, Overhead Valve, Twin Cylinder		
Oil Type	SAE10-30W	Above 40°F = SAE30 / Below 40°F = SAE10W-30	Above 50°F = SAE30
Oil Capacity (oz./liter)	64 / 2.0	56 / 1.66	24 / 1.5
Low Oil Protection	Oil Sentry™	Oil Guard™	Oil Switch
Fuel Type	Refer to Engine Owner's Manual		
Fuel Capacity (gal./liter)	10 / 37.8		
Starting	12 Volt Electric		
Maximum No Load RPM	3600 (+/- 100)		
High Pressure Pump:	Belt or Direct Driven, Oil Bath, Triplex Piston		
Oil Type	SAE20 or 30 Non-Detergent		
Oil Capacity (oz./liters)	32 / .95		
Plungers	Ceramic		
Manifold	Forged Brass		
Valves	Stainless Steel		
Unloader	Flow Sensitive - Pre-set at the factory		
Heat Dump Valve	Relieves heated water during unloader bypass stage		
Water System:			
Inlet Water Strainer	Removable Thimble for inspection and cleaning of Stainless Steel Screen		
Float Tank Strainer	Removable Strainer for inspection and cleaning of Stainless Steel Screen		
Float Tank Capacity (gal. / liters)	4.75 / 18.0		
Heat Dump Valve	Protects pump against damaging heat in recirculated and inlet water.		
Detergent System	Adjustable Metering Valve		
Burner Fuel System:			
Fuel Type	No.1 or No.2 Fuel Oil, Diesel or Kerosene		
Fuel Capacity (Gal. / liters)	10 / 37.8		
Fuel Filter/ Water Separator	Spin on (10 micron) filter / E-Z water drain		
Fuel Pump	Two Line, Single Stage		
Fuel Pressure (PSI / BAR)	150 / 10.4		
Fuel Nozzle	2.75 90° B Delavan		
Fuel Consumption (GPH / LPH)	3.37 / 12.75 Cont. Burning		
Burner Electrical System:			
Voltage	115		
Amps	3.0		
Heat Exchanger:	Horizontal, Side Fired, Pancake Coil		
BTU Input	471,800		
Efficiency	75% with #2 Fuel Oil / Diesel		
Smoke Density	0-3 per ASTM D2156		
Safety System:			
Pressure Switch	Shuts off burner fuel supply upon trigger release.		
Fuel Solenoid Valve	115 Volt, controls fuel supply to burner		
Safety Relief	Relieves excess system pressure		
Adjustable Thermostat:	86°F / 30°C - 302°F / 150°C		
Unit Net Weight (Lbs/kg):	750 / 342		
Unit Shipping Weight (Lbs/kg):	854 / 387		
Unit Net Dimension (In/cm):	49.5L x 33.5W x 44.5H / 125.7L x 85.1W x 113H		
Unit Shipping Dimension (In/cm):	57.5L x 35.5W x 59.5H / 146.1L x 90.2W x 151.1H		

SPECIFICATIONS FOR HDS-3505-0K6G/0V6G/0H6G

MODEL NUMBER	HDS-3505-0K6G	HDS-3505-0V6G	HDS-3505-0H6G	HDS-3505-0K6G/0V6G/0H6G
Operating Pressure (PSI/Bar):		3500 / 241.3 (+/- 5%)		
Water Volume (GPM/lpm):		4.7 / 17.7 (+/- 5%)		
Outlet Water Temperature (F/C):		130°F / 54°C (+/- 10°F) rise above inlet ambient (210°F / 99°C maximum)		
High Pressure Nozzle		5.0 / 5.0 Wet Steam		
Engine:	Kohler	Vanguard	Honda	
Horsepower	20.0	21.0	20.0	
Engine Type		4 Stroke, Overhead Valve, Twin Cylinder		
Oil Type	SAE10-30W	Above 40°F = SAE30 / Below 40°F = SAE10W-30		Above 50°F = SAE30
Oil Capacity (oz./liter)	64 / 1.89	56 / 1.66		24 / .71
Low Oil Protection	Oil Sentry™	Oil Guard™		Oil Switch
Fuel Type		Refer to Engine Owner's Manual		
Fuel Capacity (gal./liter)		10 / 37.8		
Starting		12 Volt Electric		
Maximum No Load RPM		3600 (+/- 100)		
High Pressure Pump:		Belt or Direct Driven, Oil Bath, Triplex Piston		
Oil Type		SAE20 or 30 Non-Detergent		
Oil Capacity (oz./liters)		41 / 1.2		
Plungers		Ceramic		
Manifold		Forged Brass		
Valves		Stainless Steel		
Unloader		Flow Sensitive - Pre-set at the factory		
Heat Dump Valve		Relieves heated water during unloader bypass stage		
Water System:				
Inlet Water Strainer		Removable Thimble for inspection and cleaning of Stainless Steel Screen		
Float Tank Strainer		Removable Strainer for inspection and cleaning of Stainless Steel Screen		
Float Tank Capacity (gal. / liters)		4.75 / 18.0		
Heat Dump Valve		Protects pump against damaging heat in recirculated and inlet water.		
Detergent System		Adjustable Metering Valve		
Burner Fuel System:				
Fuel Type		No.1 or No.2 Fuel Oil, Diesel or Kerosene		
Fuel Capacity (Gal. / liters)		10 / 37.8		
Fuel Filter/ Water Separator		Spin on (10 micron) filter / E-Z water drain		
Fuel Pump		Two Line, Single Stage		
Fuel Pressure (PSI / BAR)		150 / 10.4		
Fuel Nozzle		2.75 90° B Delavan		
Fuel Consumption (GPH / LPH)		3.37 / 12.75 Cont. Burning		
Burner Electrical System:				
Voltage		115		
Amps		3.0		
Heat Exchanger:		Horizontal, Side Fired, Pancake Coil		
BTU Input		471,800		
Efficiency		75% with #2 Fuel Oil / Diesel		
Smoke Density		0-3 per ASTM D2156		
Safety System:				
Pressure Switch		Shuts off burner fuel supply upon trigger release.		
Fuel Solenoid Valve		115 Volt, controls fuel supply to burner		
Safety Relief		Relieves excess system pressure		
Adjustable Thermostat:		86°F / 30°C - 302°F / 150°C		
Unit Net Weight (Lbs/kg):		750 / 342		
Unit Shipping Weight (Lbs/kg):		854 / 387		
Unit Net Dimension (In/cm):		49.5L x 33.5W x 44.5H / 125.7L x 85.1W x 113H		
Unit Shipping Dimension (In/cm):		57.5L x 35.5W x 59.5H / 146.1L x 90.2W x 151.1H		

SPECIFICATIONS FOR HDS-3506-0K6A/0H6A

MODEL NUMBER	HDS-3506-0K6A	HDS-3506-0H6A
Operating Pressure (PSI/Bar):	3500 / 241.3 (+/- 5%)	
Water Volume (GPM/lpm):	5.6 / 21.2 (+/- 5%)	
Outlet Water Temperature (F/C):	130°F / 54°C (+/- 10°F) rise above inlet ambient (210°F / 99°C maximum)	
High Pressure Nozzle	6.0 / 5.5 Wet Steam	
Engine:	Kohler	Honda
Horsepower	25.0	24.0
Engine Type	4 Stroke, Overhead Valve, Twin Cylinder	
Oil Type	SAE10-30W	Above 50°F = SAE30
Oil Capacity (oz/liter)	64 / 2.0	24 / 1.5
Low Oil Protection	Oil Sentry™	Oil Switch
Fuel Type	Refer to Engine Owner's Manual	
Fuel Capacity (gal./liter)	10 / 37.8	
Starting	12 Volt Electric	
Maximum No Load RPM	3600 (+/- 100)	
High Pressure Pump:	Belt or Direct Driven, Oil Bath, Triplex Piston	
Oil Type	SAE20 or 30 Non-Detergent	
Oil Capacity (oz/liters)	32 /.95	
Plungers	Ceramic	
Manifold	Forged Brass	
Valves	Stainless Steel	
Unloader	Flow Sensitive - Pre-set at the factory	
Heat Dump Valve	Relieves heated water during unloader bypass stage	
Water System:		
Inlet Water Strainer	Removable Thimble for inspection and cleaning of Stainless Steel Screen	
Float Tank Strainer	Removable Strainer for inspection and cleaning of Stainless Steel Screen	
Float Tank Capacity (gal. / liters)	4.75 / 18.0	
Heat Dump Valve	Protects pump against damaging heat in recirculated and inlet water.	
Detergent System	Adjustable Metering Valve	
Burner Fuel System:		
Fuel Type	No.1 or No.2 Fuel Oil, Diesel or Kerosene	
Fuel Capacity (Gal. / liters)	10 / 37.8	
Fuel Filter/ Water Separator	Spin on (10 micron) filter / E-Z water drain	
Fuel Pump	Two Line, Single Stage	
Fuel Pressure (PSI / BAR)	150 / 10.4	
Fuel Nozzle	2.75 90° B Delavan	
Fuel Consumption (GPH / LPH)	3.37 / 12.75 Cont. Burning	
Burner Electrical System:		
Voltage	115	
Amps	3.0	
Heat Exchanger:	Horizontal, Side Fired, Pancake Coil	
BTU Input	471,800	
Efficiency	75% with #2 Fuel Oil / Diesel	
Smoke Density	0-3 per ASTM D2156	
Safety System:		
Pressure Switch	Shuts off burner fuel supply upon trigger release.	
Fuel Solenoid Valve	115 Volt, controls fuel supply to burner	
Safety Relief	Relieves excess system pressure	
Adjustable Thermostat:	86°F / 30°C - 302°F / 150°C	
Unit Net Weight (Lbs/kg):	750 / 342	
Unit Shipping Weight (Lbs/kg):	854 / 387	
Unit Net Dimension (In/cm):	49.5L x 33.5W x 44.5H / 125.7L x 85.1W x 113H	
Unit Shipping Dimension (In/cm):	57.5L x 35.5W x 59.5H / 146.1L x 90.2W x 151.1H	

SPECIFICATIONS FOR HDS-3506-0K6G/0H6G

MODEL NUMBER	HDS-3506-0K6G	HDS-3506-0H6G
Operating Pressure (PSI/Bar):	3500 / 241.3 (+/- 5%)	
Water Volume (GPM/lpm):	5.6 / 21.2 (+/- 5%)	
Outlet Water Temperature (F/C):	130°F / 54°C (+/- 10°F) rise above inlet ambient (210°F / 99°C maximum)	
High Pressure Nozzle		6.0 / 5.5 Wet Steam
Engine:	Kohler	Honda
Horsepower	25.0	24.0
Engine Type	4 Stroke, Overhead Valve, Twin Cylinder	
Oil Type	SAE10-30W	Above 50°F = SAE30
Oil Capacity (oz./liter)	64 / 2.0	24 / .71
Low Oil Protection	Oil Sentry™	Oil Switch
Fuel Type	Refer to Engine Owner's Manual	
Fuel Capacity (gal./liter)	10 / 37.8	
Starting	12 Volt Electric	
Maximum No Load RPM	3600 (+/- 100)	
High Pressure Pump:	Belt or Direct Driven, Oil Bath, Triplex Piston	
Oil Type	SAE20 or 30 Non-Detergent	
Oil Capacity (oz./liters)	32 / .95	
Plungers	Ceramic	
Manifold	Forged Brass	
Valves	Stainless Steel	
Unloader	Flow Sensitive - Pre-set at the factory	
Heat Dump Valve	Relieves heated water during unloader bypass stage	
Water System:		
Inlet Water Strainer	Removable Thimble for inspection and cleaning of Stainless Steel Screen	
Float Tank Strainer	Removable Strainer for inspection and cleaning of Stainless Steel Screen	
Float Tank Capacity (gal. / liters)	4.75 / 18.0	
Heat Dump Valve	Protects pump against damaging heat in recirculated and inlet water.	
Detergent System	Adjustable Metering Valve	
Burner Fuel System:		
Fuel Type	No.1 or No.2 Fuel Oil, Diesel or Kerosene	
Fuel Capacity (Gal. / liters)	10 / 37.8	
Fuel Filter/ Water Separator	Spin on (10 micron) filter / E-Z water drain	
Fuel Pump	Two Line, Single Stage	
Fuel Pressure (PSI / BAR)	150 / 10.4	
Fuel Nozzle	2.75 90° B Delavan	
Fuel Consumption (GPH / LPH)	3.37 / 12.75 Cont. Burning	
Burner Electrical System:		
Voltage	115	
Amps	3.0	
Heat Exchanger:	Horizontal, Side Fired, Pancake Coil	
BTU Input	471,800	
Efficiency	75% with #2 Fuel Oil / Diesel	
Smoke Density	0-3 per ASTM D2156	
Safety System:		
Pressure Switch	Shuts off burner fuel supply upon trigger release.	
Fuel Solenoid Valve	115 Volt, controls fuel supply to burner	
Safety Relief	Relieves excess system pressure	
Adjustable Thermostat:	86°F / 30°C - 302°F / 150°C	
Unit Net Weight (Lbs/kg):	750 / 342	
Unit Shipping Weight (Lbs/kg):	854 / 387	
Unit Net Dimension (In/cm):	49.5L x 33.5W x 44.5H / 125.7L x 85.1W x 113H	
Unit Shipping Dimension (In/cm):	57.5L x 35.5W x 59.5H / 146.1L x 90.2W x 151.1H	

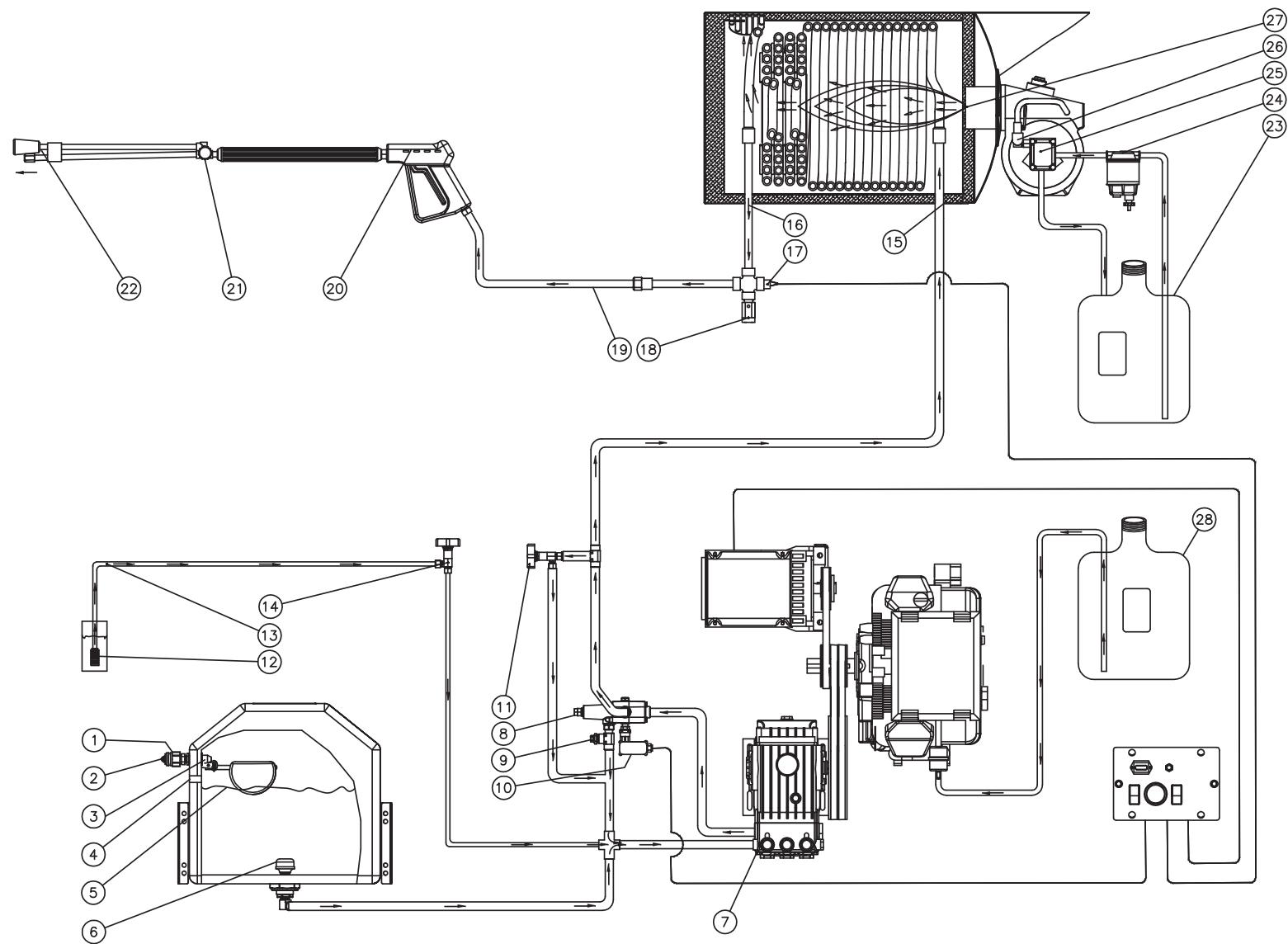
SPECIFICATIONS FOR HDS-4005-0K6A/0H6A

MODEL NUMBER	HDS-4005-0K6A	HDS-4005-0H6A	HDS-4005-0K6A/0H6A
Operating Pressure (PSI/Bar):	4000 / 275.8 (+/- 5%)		
Water Volume (GPM/lpm):	5.0 / 18.9 (+/- 5%)		
Outlet Water Temperature (F/C):	130°F / 54°C (+/- 10°F) rise above inlet ambient (210°F / 99°C maximum)		
High Pressure Nozzle	5.0 / 3.5 Wet Steam		
Engine:	Kohler	Honda	
Horsepower	25.0	24.0	
Engine Type	4 Stroke, Overhead Valve, Twin Cylinder		
Oil Type	SAE10-30W	Above 50°F = SAE30	
Oil Capacity (oz./liter)	64 / 2.0	24 / 1.5	
Low Oil Protection	Oil Sentry™	Oil Switch	
Fuel Type	Refer to Engine Owner's Manual		
Fuel Capacity (gal./liter)	10 / 37.8		
Starting	12 Volt Electric		
Maximum No Load RPM	3600 (+/- 100)		
High Pressure Pump:	Belt or Direct Driven, Oil Bath, Triplex Piston		
Oil Type	SAE20 or 30 Non-Detergent		
Oil Capacity (oz./liters)	32 / .95		
Plungers	Ceramic		
Manifold	Forged Brass		
Valves	Stainless Steel		
Unloader	Pressure Trapping - Pre-set at the factory		
Heat Dump Valve	Relieves heated water during unloader bypass stage		
Water System:			
Inlet Water Strainer	Removable Thimble for inspection and cleaning of Stainless Steel Screen		
Float Tank Strainer	Removable Strainer for inspection and cleaning of Stainless Steel Screen		
Float Tank Capacity (gal. / liters)	4.75 / 18.0		
Heat Dump Valve	Protects pump against damaging heat in recirculated and inlet water.		
Detergent System	Adjustable Metering Valve		
Burner Fuel System:			
Fuel Type	No.1 or No.2 Fuel Oil, Diesel or Kerosene		
Fuel Capacity (Gal. / liters)	10 / 37.8		
Fuel Filter/ Water Separator	Spin on (10 micron) filter / E-Z water drain		
Fuel Pump	Two Line, Single Stage		
Fuel Pressure (PSI / BAR)	150 / 10.4		
Fuel Nozzle	2.75 90° B Delavan		
Fuel Consumption (GPH / LPH)	3.37 / 12.75 Cont. Burning		
Burner Electrical System:			
Voltage	115		
Amps	3.0		
Heat Exchanger:	Horizontal, Side Fired, Pancake Coil		
BTU Input	471,800		
Efficiency	75% with #2 Fuel Oil / Diesel		
Smoke Density	0-3 per ASTM D2156		
Safety System:			
Pressure Switch	Shuts off burner fuel supply upon trigger release.		
Fuel Solenoid Valve	115 Volt, controls fuel supply to burner		
Safety Relief	Relieves excess system pressure		
Adjustable Thermostat:	86°F / 30°C - 302°F / 150°C		
Unit Net Weight (Lbs/kg):	750 / 342		
Unit Shipping Weight (Lbs/kg):	854 / 387		
Unit Net Dimension (In/cm):	49.5L x 33.5W x 44.5H / 125.7L x 85.1W x 113H		
Unit Shipping Dimension (In/cm):	57.5L x 35.5W x 59.5H / 146.1L x 90.2W x 151.1H		

SPECIFICATIONS FOR HDS-4005-0K6G/0H6G

HDS-4005-0K6G/0H6G		
MODEL NUMBER	HDS-4005-0K6G	HDS-4005-0H6G
Operating Pressure (PSI/Bar):	4000 / 275.8 (+/- 5%)	
Water Volume (GPM/lpm):	4.5 / 17.0 (+/- 5%)	
Outlet Water Temperature (F/C):	130°F / 54°C (+/- 10°F) rise above inlet ambient (210°F / 99°C maximum)	
High Pressure Nozzle	4.5 / 3.5 Wet Steam	
Engine:	Kohler	Honda
Horsepower	25.0	24.0
Engine Type	4 Stroke, Overhead Valve, Twin Cylinder	
Oil Type	SAE10-30W	Above 50°F = SAE30
Oil Capacity (oz/liter)	64 / 2.0	24 / 1.5
Low Oil Protection	Oil Sentry™	Oil Switch
Fuel Type	Refer to Engine Owner's Manual	
Fuel Capacity (gal./liter)	10 / 37.8	
Starting	12 Volt Electric	
Maximum No Load RPM	3600 (+/- 100)	
High Pressure Pump:	Belt or Direct Driven, Oil Bath, Triplex Piston	
Oil Type	SAE20 or 30 Non-Detergent	
Oil Capacity (oz/liters)	41 / 1.2	
Plungers	Ceramic	
Manifold	Forged Brass	
Valves	Stainless Steel	
Unloader	Pressure Trapping - Pre-set at the factory	
Heat Dump Valve	Relieves heated water during unloader bypass stage	
Water System:		
Inlet Water Strainer	Removable Thimble for inspection and cleaning of Stainless Steel Screen	
Float Tank Strainer	Removable Strainer for inspection and cleaning of Stainless Steel Screen	
Float Tank Capacity (gal. / liters)	4.75 / 18.0	
Heat Dump Valve	Protects pump against damaging heat in recirculated and inlet water.	
Detergent System	Adjustable Metering Valve	
Burner Fuel System:		
Fuel Type	No.1 or No.2 Fuel Oil, Diesel or Kerosene	
Fuel Capacity (Gal. / liters)	10 / 37.8	
Fuel Filter/ Water Separator	Spin on (10 micron) filter / E-Z water drain	
Fuel Pump	Two Line, Single Stage	
Fuel Pressure (PSI / BAR)	150 / 10.4	
Fuel Nozzle	2.75 90° B Delavan	
Fuel Consumption (GPH / LPH)	3.37 / 12.75 Cont. Burning	
Burner Electrical System:		
Voltage	115	
Amps	3.0	
Heat Exchanger:	Horizontal, Side Fired, Pancake Coil	
BTU Input	471,800	
Efficiency	75% with #2 Fuel Oil / Diesel	
Smoke Density	0-3 per ASTM D2156	
Safety System:		
Pressure Switch	Shuts off burner fuel supply upon trigger release.	
Fuel Solenoid Valve	115 Volt, controls fuel supply to burner	
Safety Relief	Relieves excess system pressure	
Adjustable Thermostat:	86°F / 30°C - 302°F / 150°C	
Unit Net Weight (Lbs/kg):	750 / 342	
Unit Shipping Weight (Lbs/kg):	854 / 387	
Unit Net Dimension (In/cm):	49.5L x 33.5W x 44.5H / 125.7L x 85.1W x 113H	
Unit Shipping Dimension (In/cm):	57.5L x 35.5W x 59.5H / 146.1L x 90.2W x 151.1H	

FLOW CHART FOR HDS-3005/3006/3505/3506



GENERAL THEORY OF OPERATION FOR HDS-3005/3006/3505/3506

WATER FLOW: Connect a pressurized water source to the INLET GARDEN HOSE CONNECTION (1) and turn on the water supply. The water will flow through a INLET WATER STRAINER (2) and then through a FLOAT VALVE (3) into a WATER FLOAT TANK (5). If the water rises above the OVERFLOW HOLES (4), the excess water will drain out the unit.

The water is then drawn through the WATER STRAINER (6) and into the TRIPLEX HIGH PRESSURE PUMP (7) which has an UNLOADER (8) that bypasses the water when the trigger gun is closed. To protect the pump from heated water during this bypass stage, a HEAT DUMP VALVE (9) will open at 140°F/60°C allowing the heated water to escape. The Heat Dump Valve automatically resets when the water cools. The BURNER CONTROL PRESSURE SWITCH (10) controls the fuel supply to the burner. Following is the STEAM ADJUSTMENT VALVE (11) which controls the water flow in the wet steam mode.

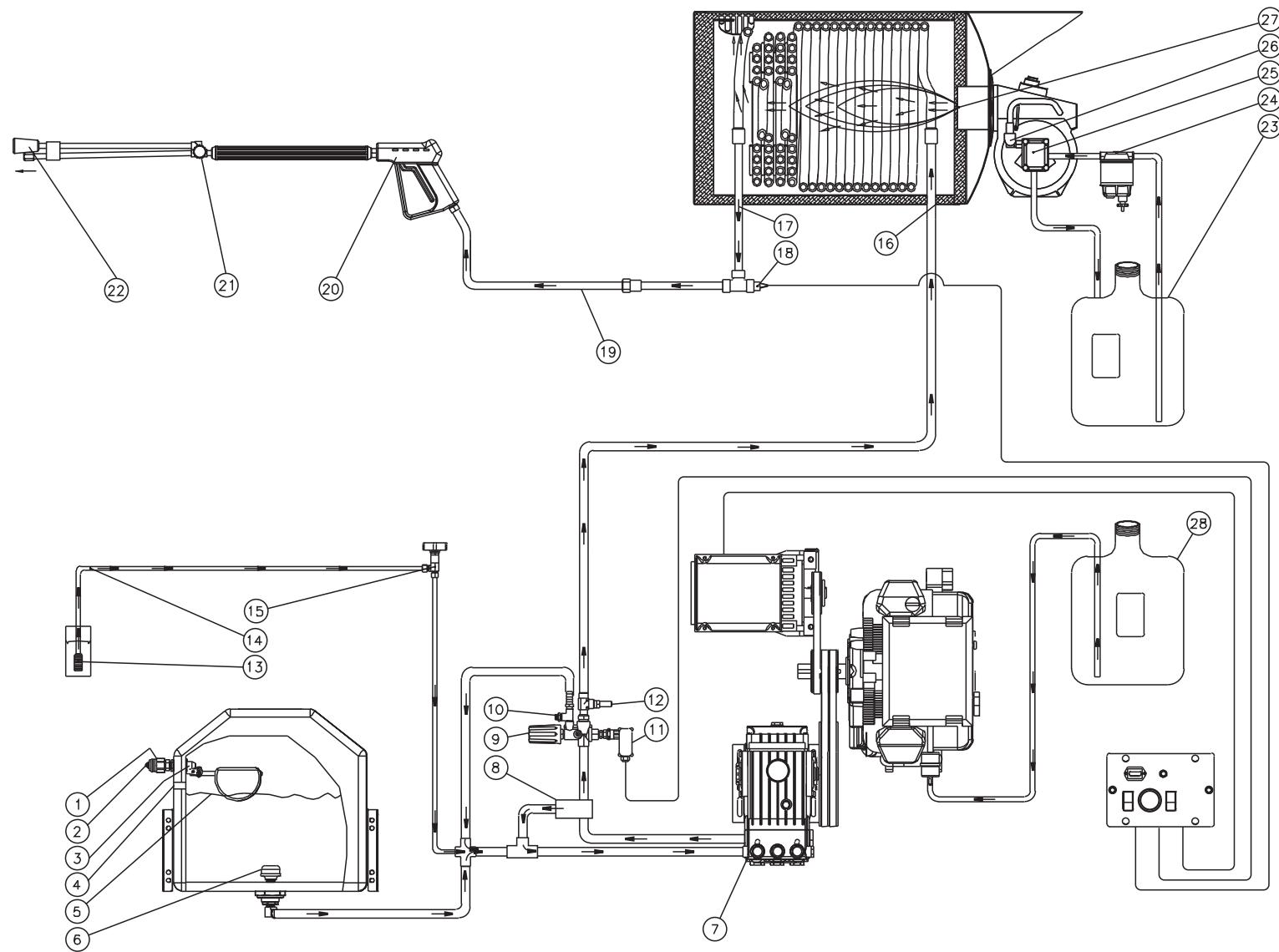
When using detergents, the solution passes through the DETERGENT STRAINER (12) located on the DETERGENT HOSE (13). The detergent solution then travels through the DETERGENT METERING VALVE (14).

From there, the water flows through HEAT EXCHANGER INLET (15) where it is heated when the burner is on. As the water exits the HEAT EXCHANGER OUTLET (16), it enters a safety system which protects the operator from danger. The system also contains a ADJUSTABLE THERMOSTAT (17) which controls the working temperature of the unit, allowing the operator to set the unit to the desired water temperature setting. If the unloader fails to bypass water or the burner remains on when the trigger gun is closed, the SAFETY RELIEF (18) will relieve and allow water to exit safely.

The heated water then flows through the HIGH PRESSURE HOSE (19) and to the TRIGGER GUN ASSEMBLY (20) which allows the operator to control the water spray. When the trigger gun is open, the water flows through the ADJUSTABLE PRESSURE DUAL LANCE (21) and exits the NOZZLE (22).

FUEL FLOW: The Fuel Pump draws fuel from the FUEL TANK (23) through a replaceable FUEL FILTER/WATER SEPARATOR (24) and into the FUEL PUMP (25). Fuel exits the fuel pump, into a FUEL SOLENOID VALVE (26) which controls fuel flow to the FUEL NOZZLE (27) where it ignites and burns in the heat exchanger. The engine is operated by fuel drawn from the GAS TANK (28).

FLOW CHART FOR HDS-4005



GENERAL THEORY OF OPERATION FOR HDS-4005

WATER FLOW: Connect a pressurized water source to the INLET GARDEN HOSE CONNECTION (1) and turn on the water supply. The water will flow through a INLET WATER STRAINER (2) and then through a FLOAT VALVE (3) into a WATER FLOAT TANK (5). If the water rises above the OVERFLOW HOLES (4), the excess water will drain out the unit.

The water is then drawn through the WATER STRAINER (6) and into the TRIPLEX HIGH PRESSURE PUMP (7) which has an UNLOADER (9) that bypasses the water when the trigger gun is closed. To protect the pump from heated water during this bypass stage, a HEAT DUMP VALVE (10) will open at 140°F/60°C allowing the heated water to escape. The Heat Dump Valve automatically resets when the water cools. The EASY START VALVE (8) will allow the engine to start without a load. The water recirculates until pressure builds up and forces the seat closed. The BURNER CONTROL PRESSURE SWITCH (11) controls the fuel supply to the burner.

When using detergents, the solution passes through the DETERGENT STRAINER (13) located on the DETERGENT HOSE (14). The detergent solution then travels through the DETERGENT METERING VALVE (15).

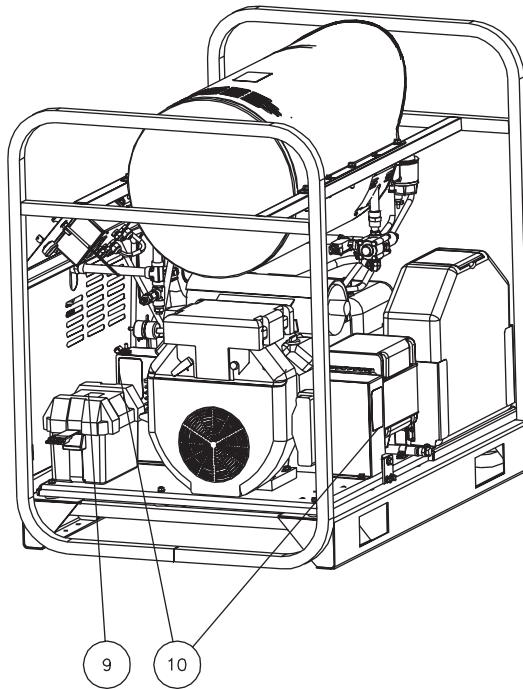
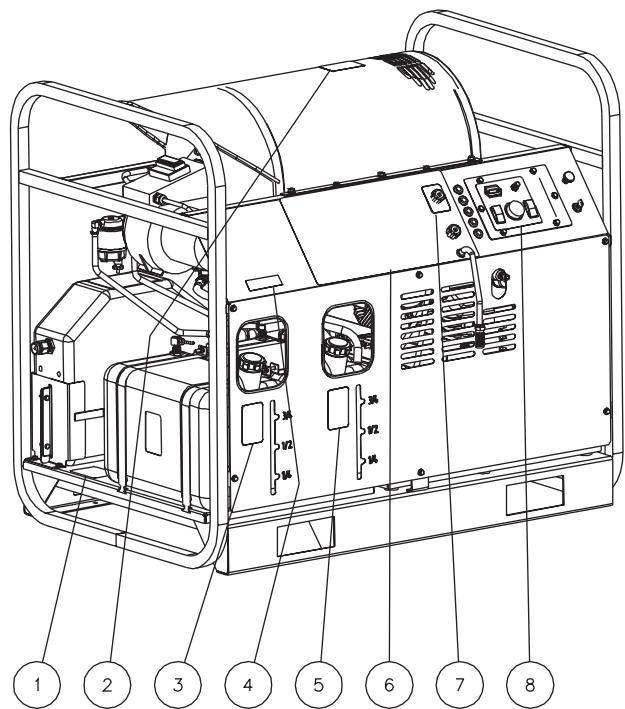
From there, the water flows through HEAT EXCHANGER INLET (16) where it is heated when the burner is on. As the water exits the HEAT EXCHANGER OUTLET (17), it enters a safety system which protects the operator from danger. The system also contains a ADJUSTABLE THERMOSTAT (18) which controls the working temperature of the unit, allowing the operator to set the unit to the desired water temperature setting. If the unloader fails to bypass water or the burner remains on when the trigger gun is closed, the SAFETY RELIEF (12) will relieve and allow water to exit safely.

The heated water then flows through the HIGH PRESSURE HOSE (19) and to the TRIGGER GUN ASSEMBLY (20) which allows the operator to control the water spray. When the trigger gun is open, the water flows through the ADJUSTABLE PRESSURE DUAL LANCE (21) and exits the NOZZLE (22).

FUEL FLOW: The Fuel Pump draws fuel from the FUEL TANK (23) through a replaceable FUEL FILTER/WATER SEPARATOR (24) and into the FUEL PUMP (25). Fuel exits the fuel pump, into a FUEL SOLENOID VALVE (26) which controls fuel flow to the FUEL NOZZLE (27) where it ignites and burns in the heat exchanger. The engine is operated by fuel drawn from the GAS TANK (28).

SAFETY DECAL PLACEMENT

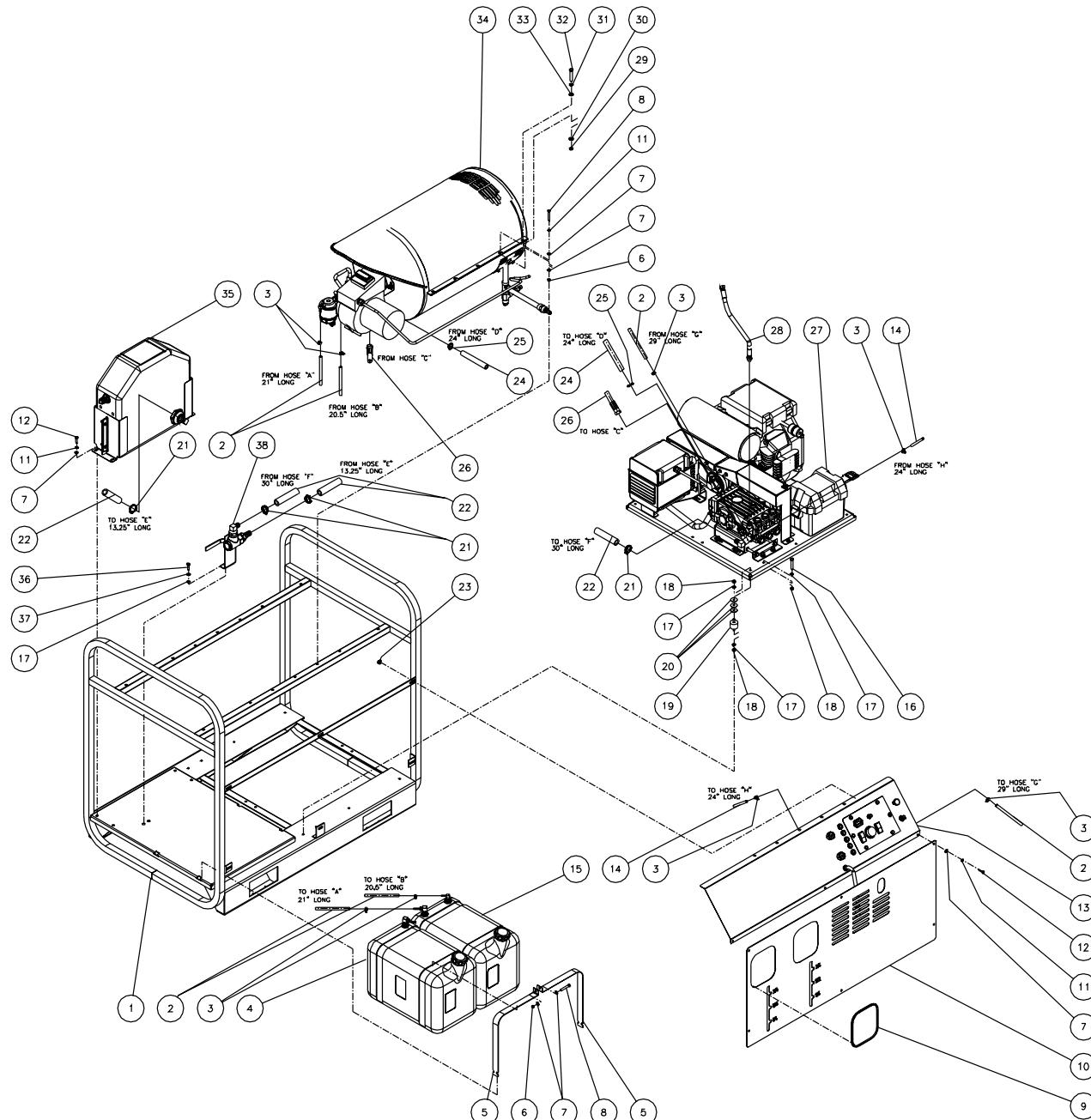
HDS-DECAL PLACEMENT-051403-KZ



HDS DECAL PLACEMENT-051403-KZ

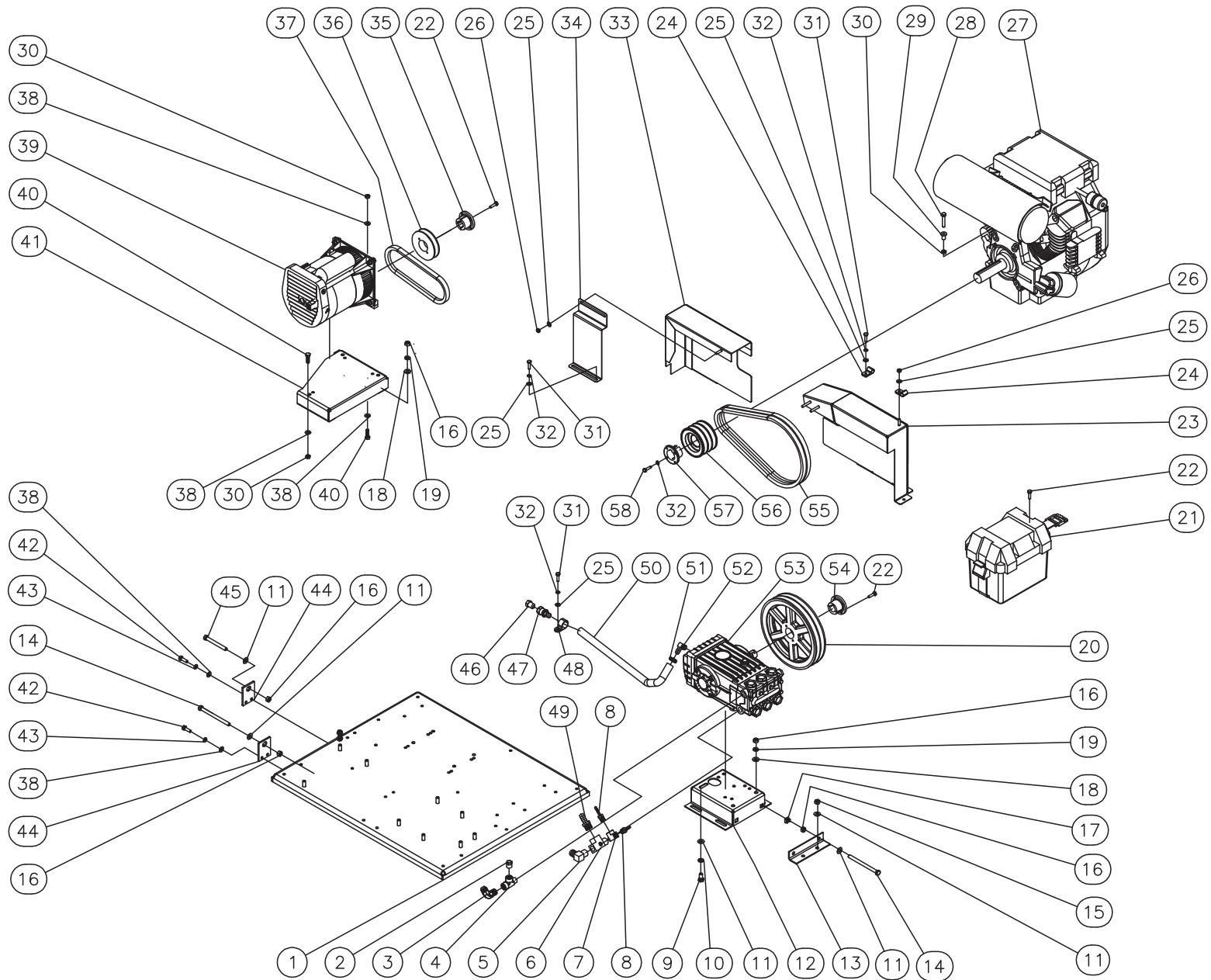
SAFETY DECAL PLACEMENT			
REF. #	DESCRIPTION	PART #	QTY.
1	Decal: Data Plate	N/A	1
2	Decal- Warning: Hot Surfaces (See 34-9000)	N/A Sep.	1
3	Decal- Caution: Risk of Fire- Do Not Use Diesel or Fuel Oil (See 34-9000)	N/A Sep.	2
4	Decal- Die Cut- 3506	34-1217	1
-	Decal- Die Cut- 3505	34-1188	1
-	Decal- Die Cut- 3005	34-0039	1
-	Decal- Die Cut- 4005	34-0833	1
5	Decal- Caution: Risk of Fire- Do Not Use Gasoline (See 34-9000)	N/A Sep.	2
6	Decal- Warning/Caution/Operation (See 34-9000)	N/A Sep.	1
7	Decal- Steam Valve (See 34-9000)	N/A Sep.	1
8	Decal- Electric Panel (See 34-9000)	N/A Sep.	1
9	Decal- Caution: Disconnect Battery (See 34-9000)	N/A Sep.	1
10	Decal- Warning: Risk of Injury (See 34-9000)	N/A Sep.	2
	Safety Decal Kit (Includes 2, 3, 5-10)	34-9000	

FRAME ASSEMBLY



FRAME ASSEMBLY				
REF #	DESCRIPTION	PART #	QTY.	
1	Frame Assembly	5-0169A18	1	
2	Hose *(Two Feet Required)	15-0008	1	
3	Clamp (HDS-3006/3505-0R7G)	42-0004	10	
-	Clamp	42-0004	8	
-	Clamp (HDS-4004)	42-0004	6	
4	Gas Tank Assembly (See Exploded Drawing)	N/A Sep.	1	
5	Hold Down Strap	20-0585A18	4	
6	Nut	30-0155	6	
7	Flatwasher	28-0002	22	
8	Bolt	27-0020	6	
9	Trimlock *(Three Feet Required)	33-0020	1	
10	Front Cover Panel	21-0146	1	
11	Lockwasher	29-0006	14	
12	Bolt	27-0016	10	
13	Control Panel Assembly (See Exploded Drawing)	N/A Sep.	1	
14	Detergent Hose *(Two Feet Required)	15-0021	2	
15	Fuel Tank Assembly (HDS-3005/350/3506/4004) See Exploded Drawing)	N/A Sep.	1	
-	Fuel Tank Assembly (HDS-3006/3505-0R7G) (See Exploded Drawing)	N/A Sep.	2	
16	Bolt	27-0071	2	
-	Bolt (HDS-3006/3505-0R7G)	27-0072	2	
17	Flatwasher	28-0003	20	
18	Nut	30-0157	18	
19	Isolator	33-0028	8	
*Must be Order in One Foot Lengths				

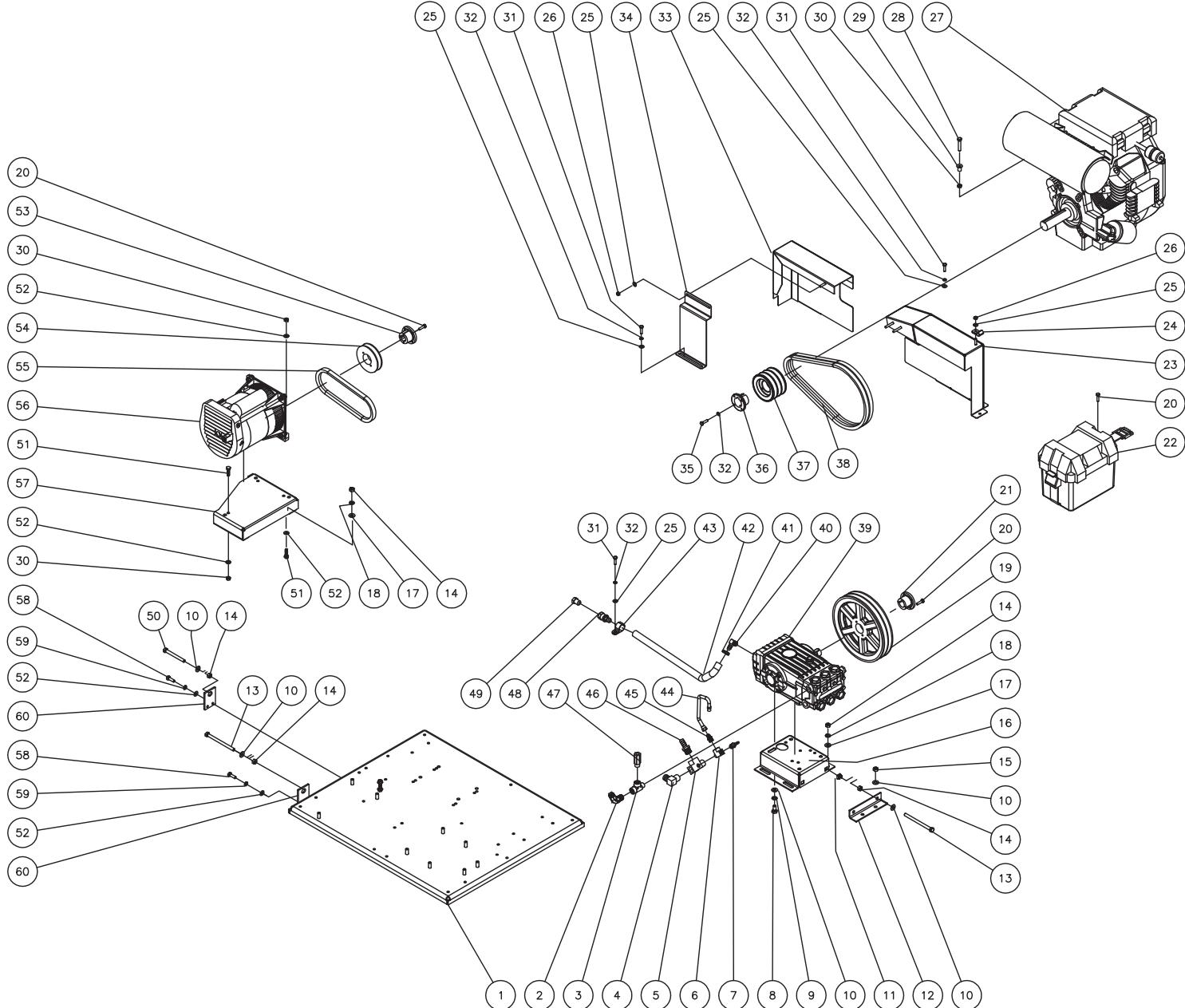
ISOLATION PLATE FOR HDS-3005/3006/3505/3506 (AFTER SERIAL #15022139)



ISOLATION PLATE FOR HDS-3005/3006/3505/3506 (AFTER SERIAL #15022139)

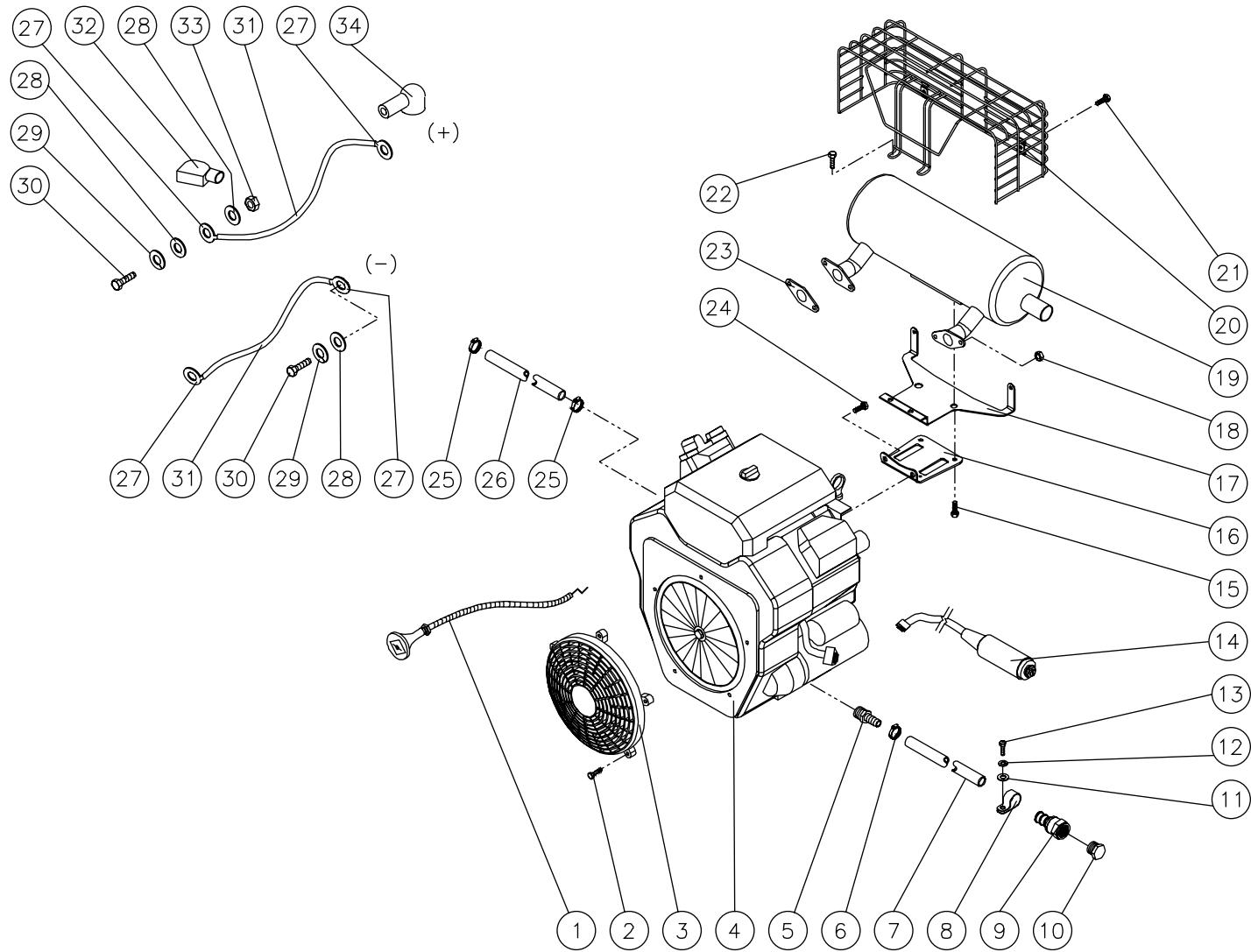
REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Isolation Plate (HDS-3005/3505/3506)	5-0170A18	1	24	Fuel Line Clip	43-0003	2	37	Belt	11-0048	1
-	Isolation Plate (HDS-3006/3505-0R7G)	5-0180A18	1	25	Washer	28-0002	11	38	Washer	28-0003	9
2	Bushing	23-0017	1	26	Nut	30-0155	4	39	Generator	850-0352	1
3	Elbow	24-0092	1	27	Engine (HDS-3506-0H6A/G)	850-0301	1	40	Bolt	27-0068	3
4	Tee	23-0058	1	-	Engine (HDS-3505-0V6A/G)	850-0295	1	41	Generator Hat	20-0583A18	1
5	Elbow	23-0037	1	-	Engine (HDS-3505-0H6A/G) (Before Serial #15011230)	850-0300	1	42	Bolt	27-0067	4
6	Street Tee	23-0388	1	-	Engine (HDS-3505-0H6A/G) (After Serial #15011230)	850-0349	1	43	Lockwasher	29-0007	4
7	Tee	23-0127	1	-	Engine (HDS-3005-0V6A/G)	850-0294	1	44	Generator Tension Bracket	20-0587A18	2
8	Barb	23-0051	2	-	Engine (HDS-3005-0K6A/G)	850-0332	1	45	Bolt	27-0127	1
9	Bolt (HDS-3005/3006/3505/3506-0K6A/0V6A/0H6A, HDS-3006/3505-0R7G)	27-8471	4	-	Engine (HDS-3506-0K6A/G)	850-0293	1	46	Plug	23-0411	1
-	Bolt (HDS-3005/3505/3506-0K6G/0V6G/0H6G)	27-8884	4	-	Engine (HDS-3505-0K6A/G)	850-0333	1	47	Hose Barb	23-0360	1
10	Lockwasher (HDS-3005/3006/3505/3506-0K6A/0V6A/0H6A, HDS-3006/3505-0R7G)	29-0055	4	-	Engine (HDS-3006/3505-0R7G)	1-0137	1	48	Clip	33-0291	1
-	Lockwasher (HDS-3005/3505/3506-0K6G/0V6G/0H6G)	29-0054	4	28	Bolt (HDS-3005/3505/3506-0HV6A/G)	27-0070	4	49	Hose Barb	23-0045	1
11	Washer	28-0023	7	-	Bolt (HDS-3005/3505/3506-0K6A/G)	27-0120	4	50	Hose	15-0007	1
12	Pump Hat	5-0153A18	1	-	Screw (HDS-3006/3505-0R7G)	27-0118	4	51	Clamp	42-0011	1
-	Pump Hat (HDS-3005/3006/3505-0K6A/0V6A, HDS-3006/3505-0R7G)	5-0154A18	1	29	Shim (HDS-3505/3506-0H6A/G)	33-0169	4	52	Elbow	23-0119	1
13	Pump Tension Bracket	20-0584A18	1	-	Washer (HDS-3006/3505-0R7G)	28-0022	8	53	Pump (HDS-3005/3006/3505/3506-0K6G/0V6G/0H6G, HDS-3006/3505-0R7G)	3-0202	1
14	Bolt	27-0133	3	-	Washer (HDS-3005/3505/3506-0V6A/G)	28-0003	4	-	Pump (HDS-3505/3506-0K6A/0V6A/0H6A)	3-0212	1
15	Nut	30-0159	2	-	Washer (HDS-3006/3505-0R7G)	28-0023	4	-	Pump (HDS-3005-0K6A/0V6A)	3-0211	1
16	Hex Nut	30-0006	11	30	Nut (HDS-3005/3505/3506-0HV6A/G)	30-0157	7	54	Bushing	9-0017	1
17	Clip Nut	30-6025	2	-	Nut (HDS-3005/3006/3505/3506-0K6A/G, HDS-3006/3505-0R7G)	30-0159	4	55	Belt (HDS-3506)	11-0050	2
18	Washer	28-0030	7	-	Nut (HDS-3005/3006/3505/3506-0K6A/G, HDS-3006/3505-0R7G)	30-0157	3	-	Belt (HDS-3005/3505)	11-0052	2
19	Lockwasher	29-0008	7	31	Bolt	27-0016	7	-	Belt (HDS-3006)	11-0051	2
20	Sheave (HDS-3005/3505)	10-0037	1	32	Lockwasher	29-0006	9	56	Sheave	10-0061	1
-	Sheave (HDS-3006/3506)	10-0012	1	33	Beltguard	6-0091A18	1	57	Bushing (HDS-3005-0K6A/G, HDS-3506-0H6A/G, HDS-3006/3505-0R7G)	9-0010	1
21	Battery Box	33-0092	1	34	Bracket Cover	20-0589A18	2	-	Bushing (HDS-3505-0K6A/G, HDS-3506-0K6A/G)	9-0007	1
22	Bolt	27-0015	10	35	Bushing	9-0033	1	-	Bushing (HDS-3005-0V6A/G, HDS-3505-0H6A/G, 0V6A/G)	9-0005	1
23	Pump Beltguard	6-0092A18	1	36	Sheave	10-0028	1	58	Screw	27-0771	2

ISOLATION PLATE FOR HDS-4005 (AFTER SERIAL #15022139)



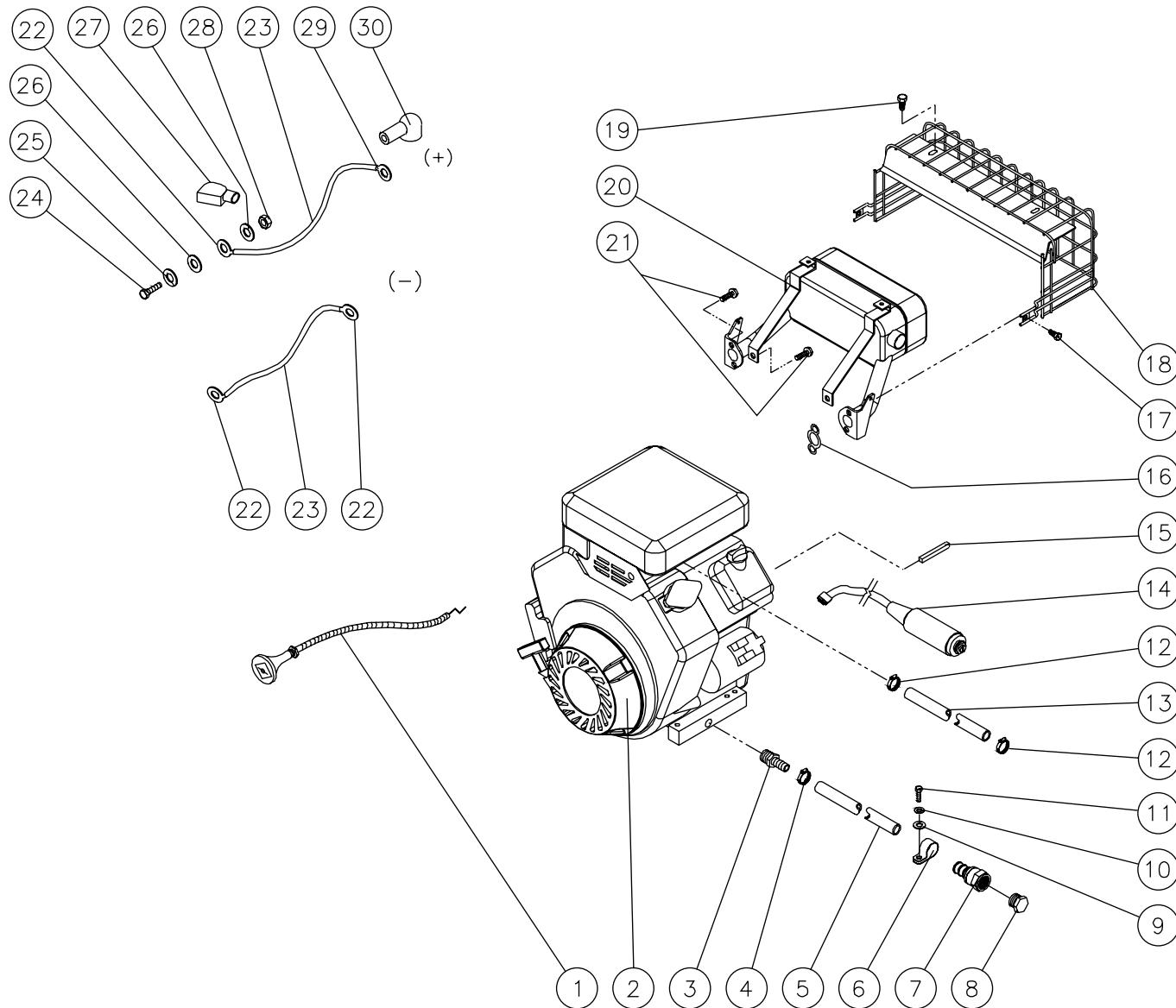
ISOLATION PLATE FOR HDS-4005 (AFTER SERIAL #15022139)											
REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Isolation Plate	5-0170A18	1	22	Battery Box	33-0092	1	38	Belt (HDS-4005-0K6A/0H6A)	11-0052	2
2	Elbow	24-0092	1	23	Pump Beltguard	6-0092A18	1	39	Pump (HDS-4005-0K6G/0H6G)	3-0169	1
3	Tee	23-0058	1	24	Fuel Line Clip	43-0003	1	-	Pump (HDS-4005-0K6A/0H6A)	3-0212	1
4	Elbow	23-0037	1	25	Washer	28-0002	11	40	Elbow	23-0119	1
5	Street Tee	23-0388	1	26	Nut	30-0155	4	41	Clamp	42-0011	1
6	Tee	23-0127	1	27	Engine (HDS-4005-0H6A/G)	850-0301	1	42	Hose	15-0007	1
7	Barb	23-0051	1	-	Engine (HDS-4005-0K6A/G)	850-0293	1	43	Clip	33-0291	1
8	Bolt (HDS-4005-0K6A/0H6A)	27-8471	4	28	Bolt (HDS-4005-0H6A/G)	27-0070	4	44	Easy Start Hose Assembly	15-0140	1
-	Bolt (HDS-4005-0K6G/0H6G)	27-8884	4	-	Bolt (HDS-4005-0K6A/G)	27-0120	4	45	Fitting	23-0247	1
9	Lockwasher (HDS-4005-0K6A/0H6A)	29-0055	4	29	Shim (HDS-4005-0H6A/G)	33-0169	4	46	Barb	23-0045	1
-	Lockwasher (HDS-4005-0K6G/0H6G)	29-0054	4	-	Washer (HDS-4005-0V6A/G)	28-0003	4	47	Easy Start Valve	22-0242	1
10	Washer	28-0023	7	-	Washer (HDS-4005-0K6A/G)	28-0023	4	48	Hose Barb	23-0360	1
11	Clip Nut	30-6025	2	30	Nut (HDS-4005-0H6A/G)	30-0157	7	49	Plug	23-0411	1
12	Pump Tension Bracket	20-0584A18	1	-	Nut (HDS-4005-0K6A/G)	30-0159	4	50	Bolt	27-0127	1
13	Bolt	27-0133	3	-	Nut (HDS-4005-0K6A/G)	30-0157	3	51	Bolt	27-0068	3
14	Hex Nut	30-0006	11	31	Bolt	27-0016	7	52	Washer	28-0003	9
15	Nut	30-0159	2	32	Lockwasher	29-0006	9	53	Bushing	9-0033	1
16	Pump Hat	5-0153A18	1	33	Generator Beltguard	6-0091A18	1	54	Sheave	10-0028	1
17	Washer	28-0030	7	34	Bracket Cover	20-0589A18	2	55	Belt	11-0048	1
18	Lockwasher	29-0008	7	35	Screw	27-0771	2	56	Generator	850-0352	1
19	Sheave (HDS-4005-0K6A/0H6A)	10-0037	1	36	Bushing (HDS-4005-0H6A/G)	9-0010	1	57	Generator Hat	20-0583A18	1
-	Sheave (HDS-4005-0K6G/0H6G)	10-0117	1	-	Bushing (HDS-4005-0K6A/G)	9-0007	1	58	Bolt	27-0067	4
20	Bolt	27-0015	10	37	Sheave	10-0061	1	59	Lockwasher	29-0007	4
21	Bushing	9-0017	1	38	Belt (HDS-4005-0K6G/0H6G)	11-0051	2	60	Generator Tension Bracket	20-0587A18	2

ENGINE ASSEMBLY (850-0293)



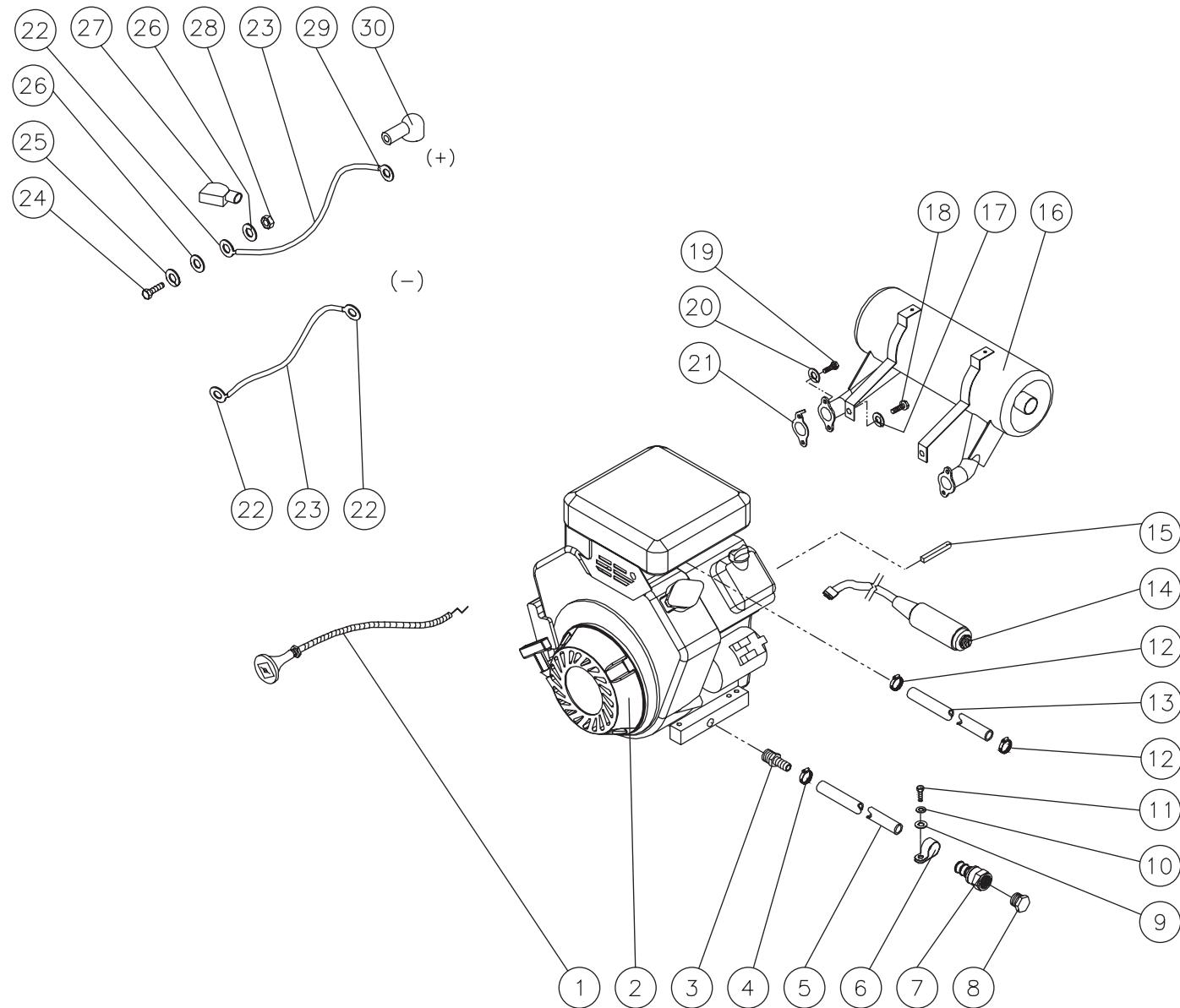
ENGINE ASSEMBLY (850-0293)								
REF #	DESCRIPTION	PART #	QTY	REF #	DESCRIPTION	PART #	QTY	
1	Choke Cable	33-0081	1	19	Canister Muffler	45-0074	1	
2	Bolt (See 45-0072)	N/A Sep.	5	20	Muffler Guard	45-0077	1	
3	Front Guard	45-0072	1	21	Bolt (See 45-0077)	N/A Sep.	2	
4	Engine- 25HP Kolher	1-0124	1	22	Gasket (See 45-0077)	N/A Sep.	2	
5	Hose Barb	23-0105	1	23	Gasket (See 45-0073)	N/A Sep.	2	
6	Clamp Worm	42-0011	1	24	Bolt (See 45-0073)	N/A Sep.	2	
7	Hose *(One Foot Required)	15-0007	1	25	Clamp	42-0004	2	
8	Tube Clip	33-0291	1	26	Hose *(Three Feet Required)	15-0008	1	
9	Hose Barb	23-0360	1	27	Terminal Ring	32-0097	4	
10	Plug	23-0411	1	28	Washer	28-0003	5	
11	Washer	28-0002	1	29	Lockwasher	29-0007	3	
12	Lockwasher	29-0006	1	30	Screw	27-0066	3	
13	Screw	27-0015	1	31	Cable- Ground *(Two Feet Required)	32-0065	1	
14	Key Switch Assembly	850-0299	1	-	Cable- Pos *(Three Feet Required)	32-0065	1	
15	Bolt (See 45-0073)	N/A Sep.	2	32	Terminal Protector- Red	33-0004	1	
16	Muffler Support (See 45-0073)	N/A Sep.	1	33	Nut	30-0005	2	
17	Guard Support (See 45-0073)	N/A Sep.	1	34	Terminal Protector- Black	33-0273	1	
18	Nut (See 45-0073)	N/A Sep.	4	*Must Order in One Foot Lengths				

ENGINE ASSEMBLY (850-0294)



ENGINE ASSEMBLY (850-0294)									
REF #	DESCRIPTION	PART #	QTY		REF #	DESCRIPTION	PART #	QTY	
1	Choke Cable	33-0081	1		17	Screw	27-8966	2	
2	Engine- 16HP Vanguard	1-0129	1		18	Muffler Guard	45-0067	1	
3	Hose Barb	23-0105	1		19	Screw	27-8967	2	
4	Clamp Worm	42-0011	1		20	High Mount Muffler	45-0064	1	
5	Hose *(One Foot Required)	15-0007	1		21	Screw	27-8968	4	
6	Tube Clip	33-0291	1		22	Terminal Ring	32-0097	3	
7	Hose Barb	23-0360	1		23	Cable- Ground *(Two Feet Required)	32-0065	1	
8	Plug	23-0411	1		-	Cable- Pos *(Three Feet Required)	32-0065	1	
9	Washer	28-0002	1		24	Screw	27-0066	2	
10	Lockwasher	29-0006	1		25	Lockwasher	29-0007	2	
11	Screw	27-0015	1		26	Washer	28-0003	4	
12	Clamp	42-0004	2		27	Terminal Protector- Red	33-0004	1	
13	Hose *(Six Feet Required)	15-0008	1		28	Nut	30-0005	2	
14	Key Switch Assembly	850-0302	1		29	Terminal Ring	32-0098	1	
15	Key	43-0078	1		30	Terminal Protector- Black	33-0273	1	
16	Gasket	45-0066	2		*Must Order in One Foot Lengths				
17	Screw	27-8966	2						

ENGINE ASSEMBLY (850-0295)

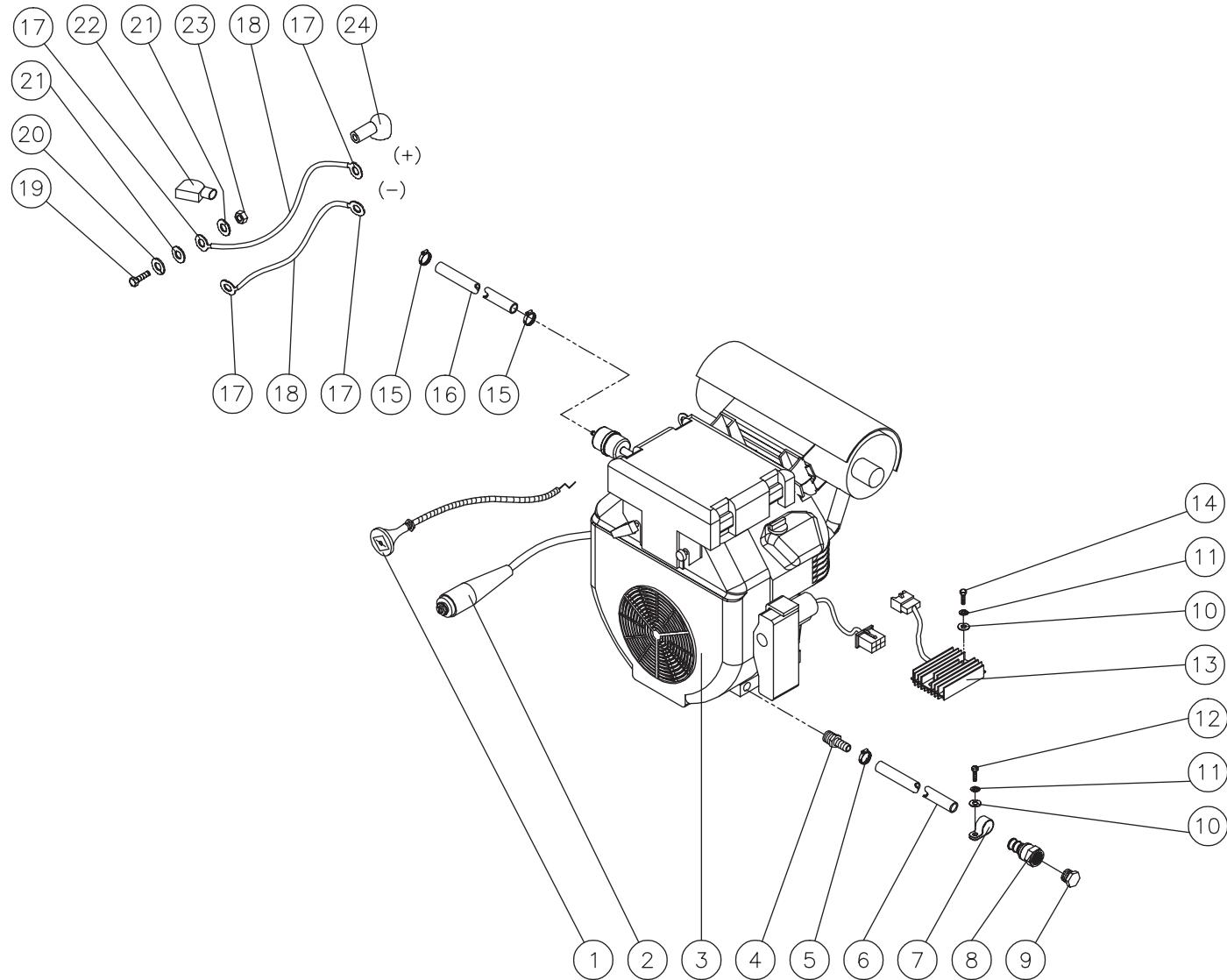


850-0295-052-01-BAR

ENGINE ASSEMBLY (850-0295)

REF #	DESCRIPTION	PART #	QTY	REF #	DESCRIPTION	PART #	QTY
1	Choke Cable	33-0081	1	17	Lockwasher (See 45-0075)	N/A Sep.	2
2	Engine- 21HP Vanguard	1-0130	1	18	Bolt (See 45-0075)	N/A Sep.	2
3	Hose Barb	23-0105	1	19	Bolt (See 45-0075)	N/A Sep.	2
4	Clamp Worm	42-0011	1	20	Lockwasher (See 45-0075)	N/A Sep.	2
5	Hose *(One Foot Required)	15-0007	1	21	Gasket (See 45-0075)	N/A Sep.	2
6	Tube Clip	33-0291	1	22	Terminal Ring	32-0097	3
7	Hose Barb	23-0360	1	23	Cable- Ground *(Two Feet Required)	32-0065	1
8	Plug	23-0411	1	-	Cable- Pos *(Three Feet Required)	32-0065	1
9	Washer	28-0002	1	24	Screw	27-0066	2
10	Lockwasher	29-0006	1	25	Lockwasher	29-0007	2
11	Clamp	42-0004	2	26	Washer	28-0003	4
12	Hose *(Six Feet Required)	15-0008	1	27	Terminal Protector- Red	33-0004	1
13	Screw	27-0015	1	28	Nut	30-0005	2
14	Key Switch Assembly	850-0302	1	29	Terminal Ring	32-0098	1
15	Key	43-0078	1	30	Terminal Protector- Black	33-0273	1
16	Muffler	45-0075	1	*Must Order in One Foot Lengths			

ENGINE ASSEMBLY (850-0301) (AFTER SERIAL #15013196)

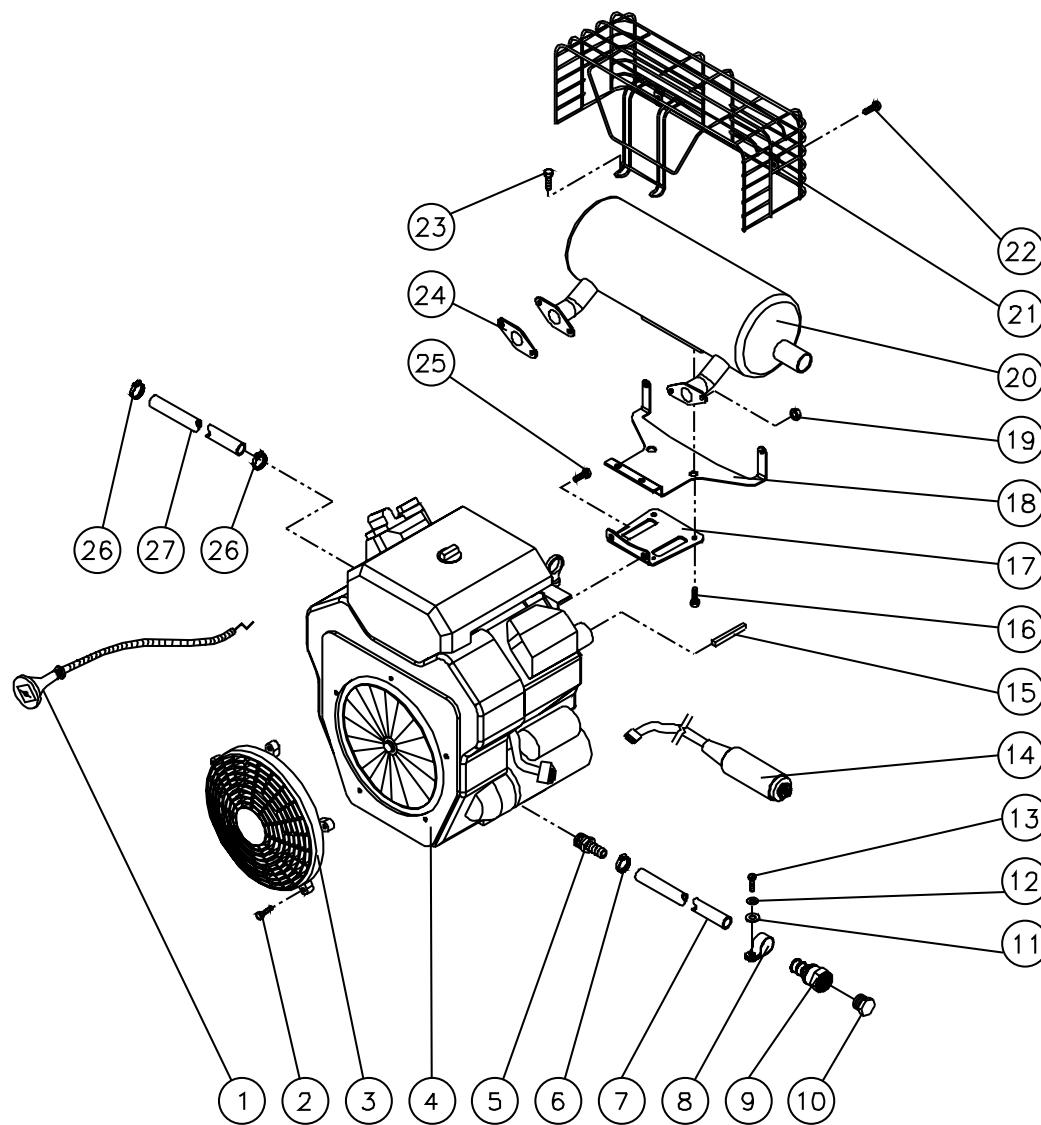


850-0301-031504-KZ

ENGINE ASSEMBLY (850-0301) (AFTER SERIAL #15013196)

REF #	DESCRIPTION	PART #	QTY	REF #	DESCRIPTION	PART #	QTY	
1	Choke Cable	33-0081	1	14	Screw	27-0016	2	
2	Key Switch Assembly (w/ 1-0128)	45-0076	1	15	Clamp	42-0004	2	
3	Engine- 24HP Honda	1-0143	1	16	Hose *(Four Feet Required)	15-0008	1	
4	Barb	23-0105	1	17	Terminal Ring	32-0097	4	
5	Clamp Worm	42-0011	1	18	Cable- Ground *(Two Feet Required)	32-0065	1	
6	Hose *(One Foot Required)	15-0007	1	-	Cable- Pos *(Three Feet Required)	32-0065	1	
7	Tube Clip	33-0291	1	19	Screw	27-0066	2	
8	Hose Barb	23-0360	1	20	Lockwasher	29-0007	2	
9	Plug	23-0411	1	21	Washer	28-0003	4	
10	Washer	28-0002	3	22	Terminal Protector- Red	33-0004	1	
11	Lockwasher	29-0006	3	23	Nut	30-0005	2	
12	Screw	27-0015	1	24	Terminal Protector- Black	33-0273	1	
13	Rectifier (See 1-0128)	N/A Sep.	1	*Must Order in One Foot Lengths				

ENGINE ASSEMBLY (850-0332)

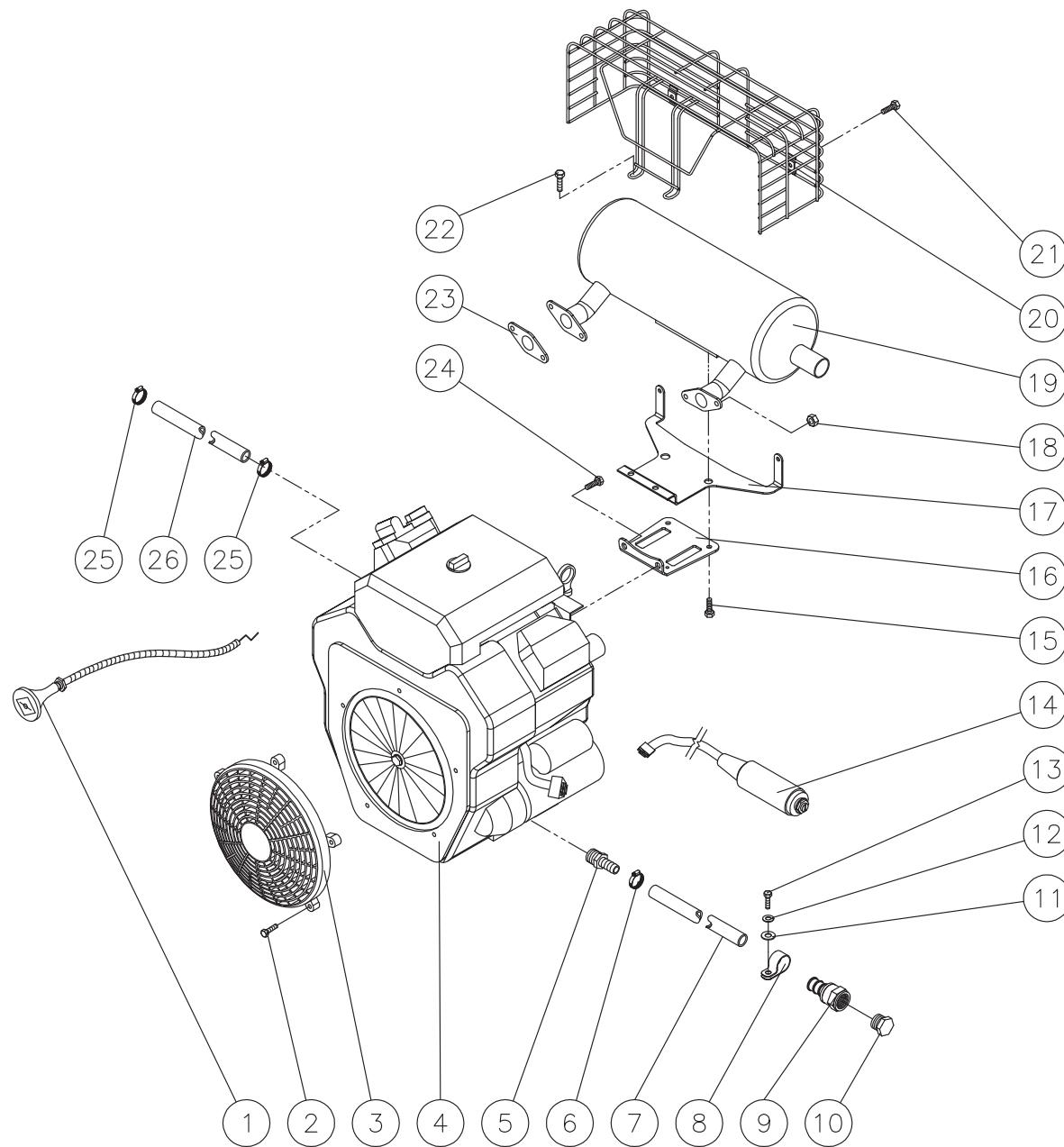


850-0332-042103-KZ

ENGINE ASSEMBLY (850-0332)

REF #	DESCRIPTION	PART #	QTY	REF #	DESCRIPTION	PART #	QTY	
1	Choke Cable	33-0081	1	15	Key	43-0078	1	
2	Bolt (See 45-0072)	N/A Sep.	5	16	Bolt (See 45-0073)	N/A Sep.	2	
3	Blower Housing Front Guard w/Engine	45-0072	1	17	Muffler Support (See 45-0073)	N/A Sep.	1	
4	Engine- 18HP Kolher	1-0140	1	18	Muffler Guard Support (See 45-0077)	N/A Sep.	1	
5	Hose Barb	23-0105	1	19	Nut (See 45-0073)	N/A Sep.	4	
6	Clamp Worm	42-0011	1	20	Canister Muffler	45-0073	1	
7	Hose *(One Foot Required)	15-0007	1	21	Muffler Guard	45-0077	1	
8	Tube Clip	33-0291	1	22	Bolt (See 45-0077)	N/A Sep.	2	
9	Hose Barb	23-0360	1	23	Bolt (See 45-0077)	N/A Sep.	2	
10	Plug	23-0411	1	24	Gasket (See 45-0073)	N/A Sep.	2	
11	Washer	28-0002	1	25	Bolt (See 45-0073)	N/A Sep.	2	
12	Lockwasher	29-0006	1	26	Clamp Worm	42-0004	2	
13	Screw	27-0015	1	27	Hose *(Three Feet Required)	15-0008	1	
14	Key Switch Assembly	850-0299	1	*Must Order in One Foot Lengths				

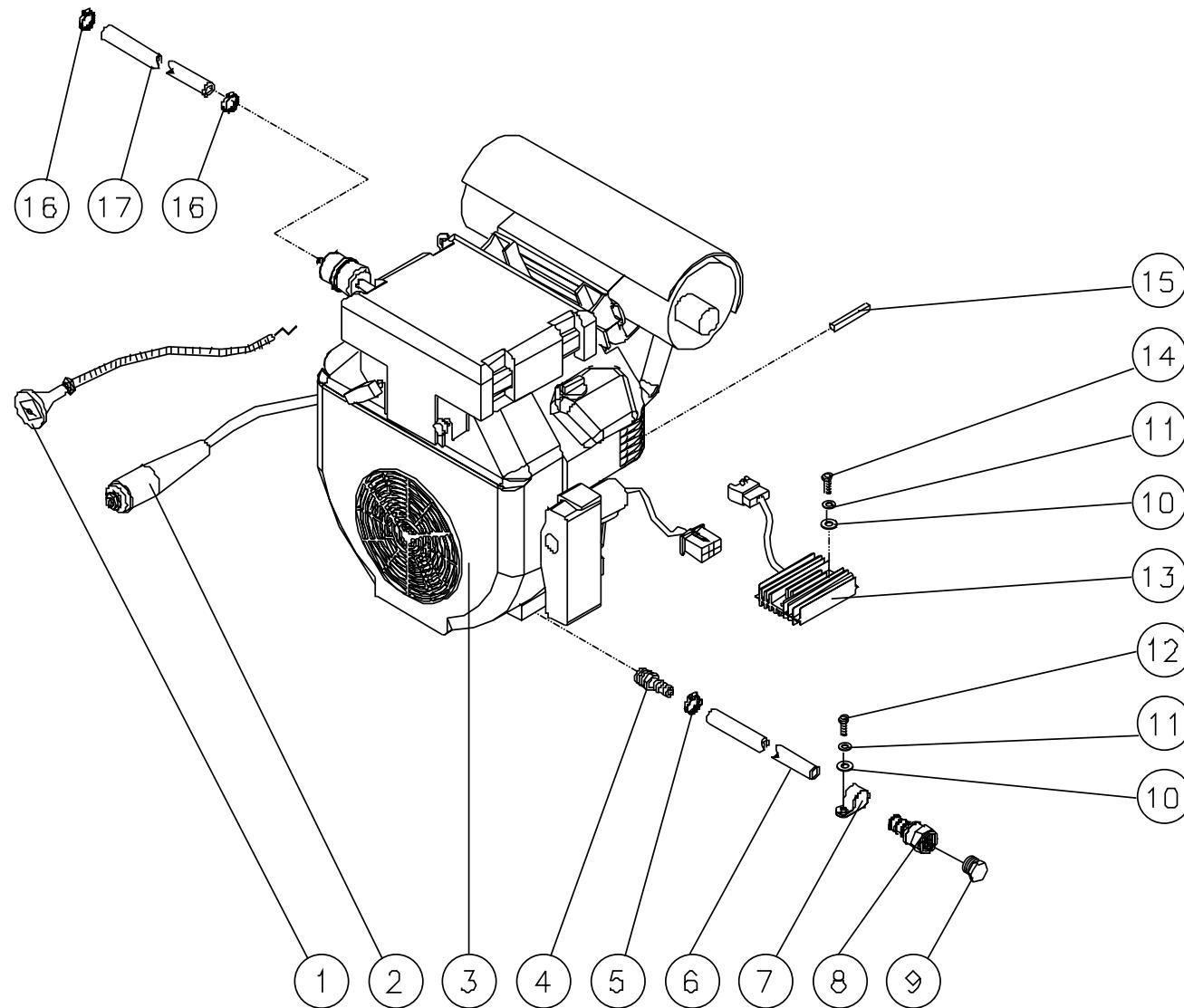
ENGINE ASSEMBLY (850-0333)



850-0333-090105-KZ

ENGINE ASSEMBLY (850-0333)								
REF #	DESCRIPTION	PART #	QTY		REF #	DESCRIPTION	PART #	QTY
1	Choke Cable	33-0081	1		14	Key Switch Assembly	850-0299	1
2	Bolt (See 45-0072)	N/A Sep.	5		15	Bolt (See 45-0073)	N/A Sep.	2
3	Blower Housing Front Guard w/Engine	45-0072	1		16	Muffler Support (See 45-0073)	N/A Sep.	1
4	Engine- 20HP Kolher	1-0141	1		17	Muffler Guard Support (See 45-0077)	N/A Sep.	1
5	Hose Barb	23-0105	1		18	Nut (See 45-0073)	N/A Sep.	4
6	Clamp Worm	42-0011	1		19	Canister Muffler	45-0073	1
7	Hose *(One Foot Required)	15-0007	1		20	Muffler Guard	45-0077	1
8	Tube Clip	33-0291	1		21	Bolt (See 45-0077)	N/A Sep.	2
9	Hose Barb	23-0360	1		22	Bolt (See 45-0077)	N/A Sep.	2
10	Plug	23-0411	1		23	Gasket (See 45-0073)	N/A Sep.	2
11	Washer	28-0002	1		24	Bolt (See 45-0073)	N/A Sep.	2
12	Lockwasher	29-0006	1		25	Clamp Worm	42-0004	2
13	Screw	27-0015	1		26	Hose *(Three Feet Required)	15-0008	1
*Must Order in One Foot Lengths								

ENGINE ASSEMBLY (850-0349)

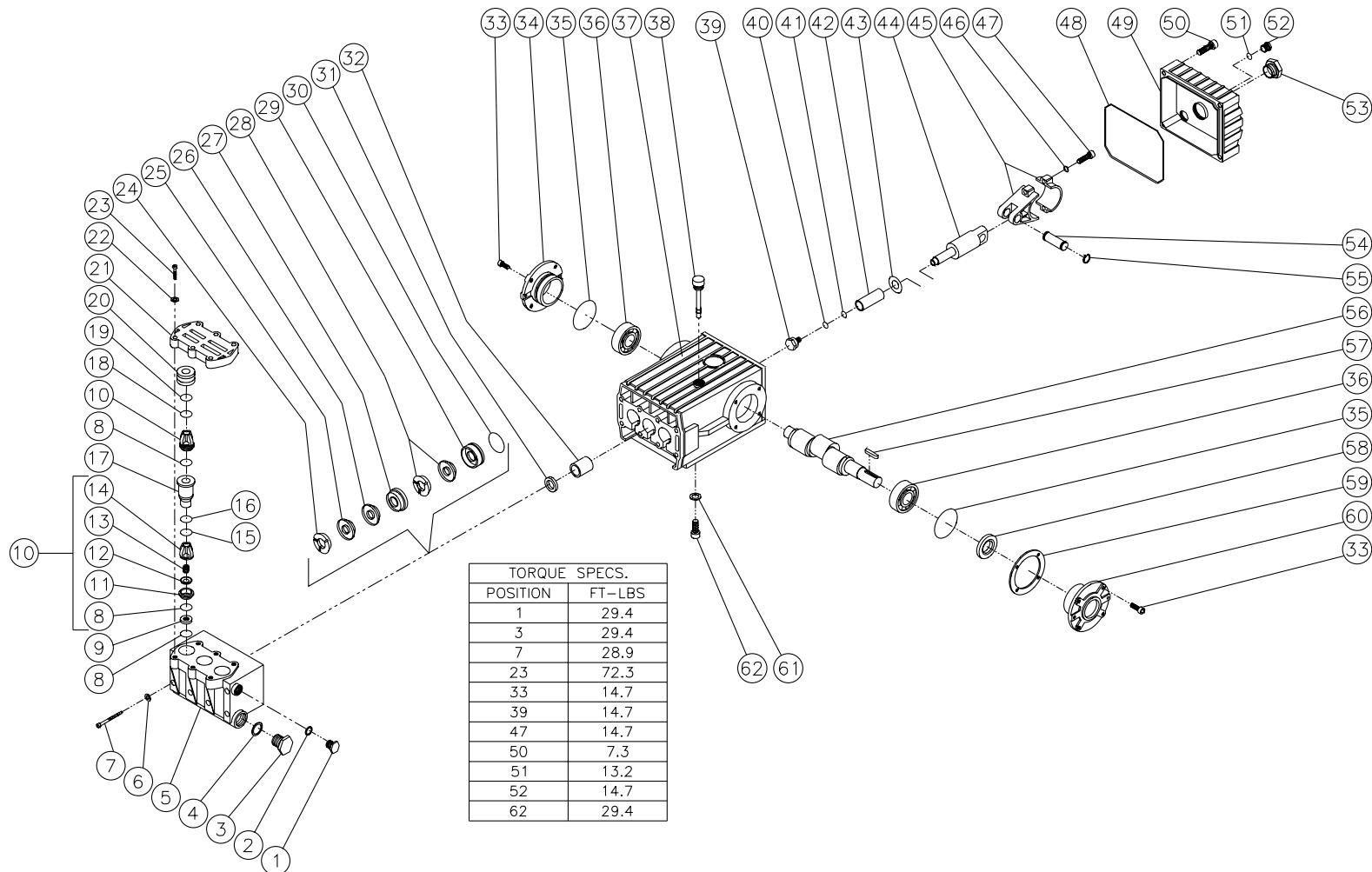


850-0349-021004-KZ

850-0349-021004-KZ

ENGINE ASSEMBLY (850-0349)								
REF #	DESCRIPTION	PART #	QTY		REF #	DESCRIPTION	PART #	QTY
1	Choke Cable	33-0081	1		10	Washer	28-0002	3
2	Key Switch Assembly (w/ 1-0142)	45-0076	1		11	Lockwasher	29-0006	3
3	Engine- 20HP Honda	1-0142	1		12	Screw	27-0015	1
4	Barb	23-0105	1		13	Rectifier (See 1-0142)	N/A Sep.	1
5	Clamp Worm	42-0011	1		14	Screw	27-0016	2
6	Hose *(One Foot Required)	15-0007	1		15	Key	43-0078	1
7	Tube Clip	33-0291	1		16	Clamp	42-0004	2
8	Hose Barb	23-0360	1		17	Hose *(Four Feet Required)	15-0008	1
9	Plug	23-0411	1		*Must Order in One Foot Lengths			

PUMP ASSEMBLY (3-0169)

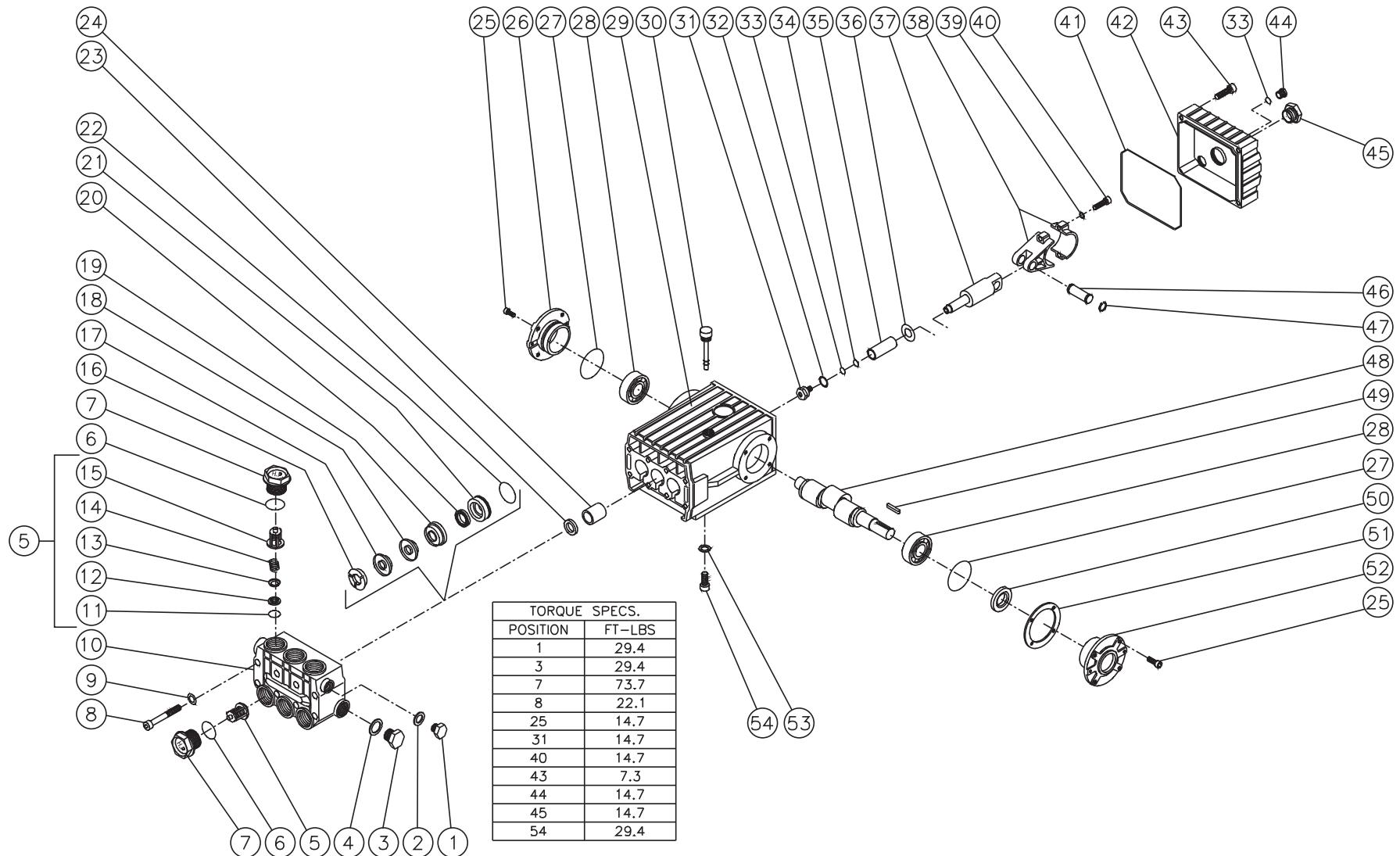


3-0169-013105-GJH

PUMP ASSEMBLY (3-0169)

REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Plug	39-0018	1	24	High Pressure Head Ring (See 70-0211)	N/A Sep.	3	47	Bolt	27-8435	6
2	Washer	28-0600	1	25	High Pressure V-Packing (See 70-0211)	N/A Sep.	3	48	O-ring	25-0339	1
3	Plug	39-0019	1	26	V-Packing Support (See 70-0211)	N/A Sep.	3	49	Crankcase Cover	46-0295	1
4	Washer	28-0601	1	27	High Pressure Intermediate Seal Retainer (See 70-0211)	N/A Sep.	3	50	Bolt	27-8404	5
5	Manifold	46-0770	1	28	Low Pressure Seal (See 70-0211)	N/A Sep.	3	51	Oil Level Indicator	46-0114	1
6	Washer	28-0210	8	29	Low Pressure Seal Retainer	46-0891	3	52	Plug	39-0017	1
7	Bolt	27-8239	8	30	O-ring	25-0015	3	53	O-ring	25-0014	1
8	O-ring (See 70-0212)	N/A Sep.	8	31	Oil Seal (See 70-0208)	N/A Sep.	3	54	Connecting Rod Pin	43-0032	3
9	Spacer	46-0771	3	32	Bushing	9-0029	3	55	Retaining Ring	46-0103	6
10	Valve Assembly (Inc. 8, 11-14) (See 70-0212)	N/A Sep.	6	33	Bolt	27-8431	8	56	Crankshaft	46-0776	1
11	Valve Seat (See 70-0212)	N/A Sep.	6	34	Crankcase Cover- Closed	46-0336	1	57	Key	43-0048	1
12	Valve Plate (See 70-0212)	N/A Sep.	6	35	O-ring	25-0013	2	58	Oil Seal (See 70-0209)	N/A Sep.	1
13	Valve Spring (See 70-0212)	N/A Sep.	6	36	Bearing	48-0012	2	59	Shim	46-0113	1
14	Valve Cage (See 70-0212)	N/A Sep.	6	37	Crankcase	46-0292	1	60	Crankcase Cover- Open	46-0296	1
15	Back-up Ring	25-0430	3	38	Oil Dip Stick	46-0144	1	61	Lockwasher	29-0055	4
16	O-ring	25-0160	3	39	Piston Screw	46-0285	3	62	Bolt	27-8471	4
17	Guide	46-0772	3	40	Plunger	46-0337	3		Valve Assembly (6 each 10)	70-0212	
18	O-ring	25-0151	3	41	O-ring	25-0138	3		Head Ring Kit (3 each 24)	70-0031	
19	Back-up Ring	25-0431	3	42	Back-up Ring	25-0137	3		V-Packing Kit (3 each 25, 26, 28)	70-0042	
20	Cap	46-0773	3	43	Washer	46-0283	3		Oil Seal Kit (3 each 31)	70-0208	
21	Valve Cover Plate	46-0774	1	44	Piston Rod	46-0294	3		Oil Seal Kit (2 each 58)	70-0209	
22	Lockwasher	29-0156	6	45	Connecting Rod	46-0051	3		Intermediate Retainer (Inc. 24-30)	70-0210	
23	Bolt	27-8492	6	46	Lockwasher	29-0154	6		Packing Assembly (Inc. 24-30)	70-0211	

PUMP ASSEMBLY (3-0202)

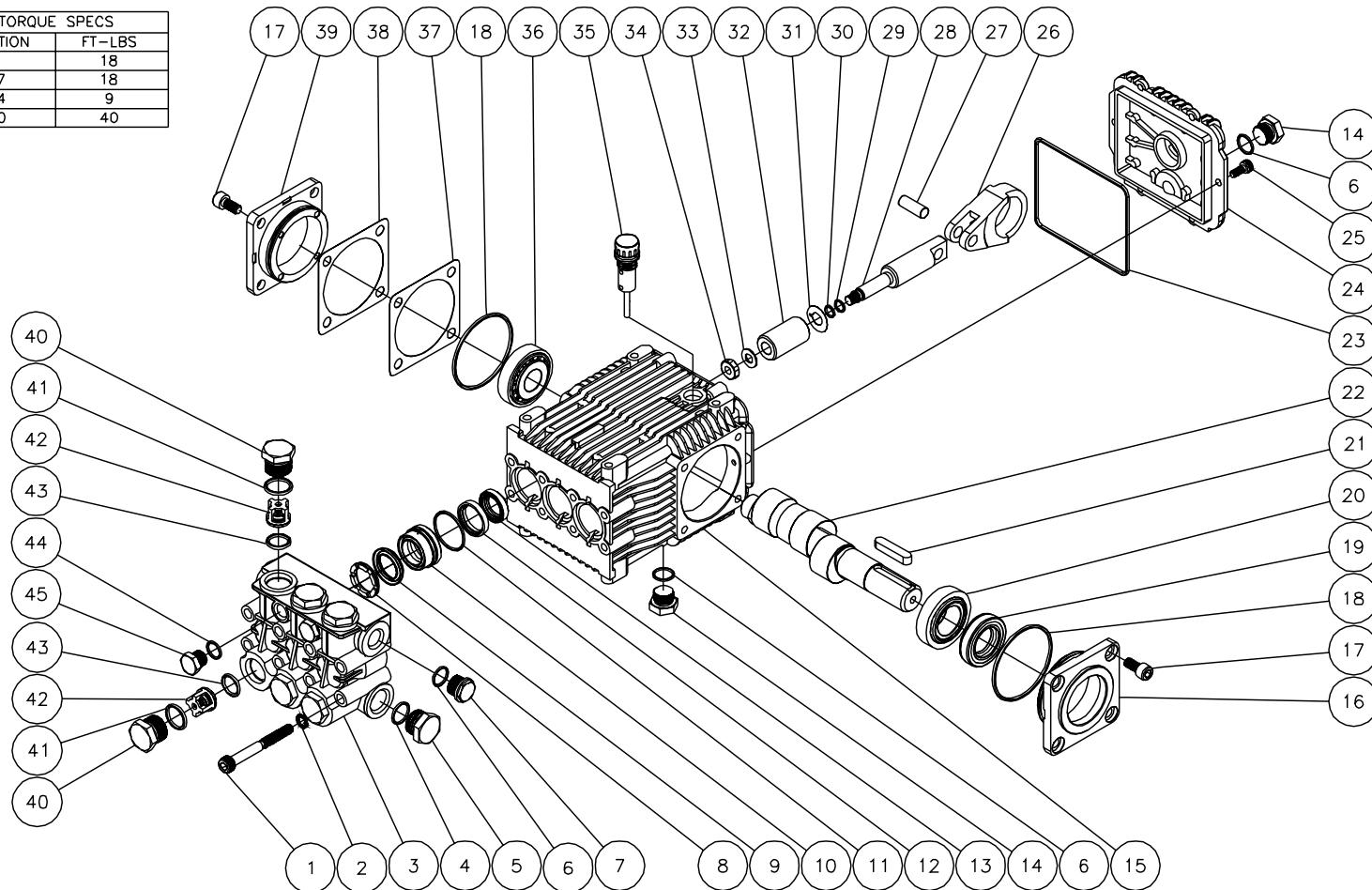


PUMP ASSEMBLY (3-0202)

REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Plug	39-0018	1	21	Low Pressure Seal Retainer	46-0887	3	41	O-ring Cover	25-0339	1
2	Washer	28-1002	1	22	O-ring	25-0015	3	42	Crankcase Cover	46-0295	1
3	Plug	39-0019	1	23	Oil Seal	26-0047	3	43	Bolt	27-8404	5
4	Washer	28-1038	1	24	Bushing	9-0029	3	44	Plug	39-0017	1
5	Valve Assembly (Inc. 11-15) (See 70-0009)	N/A Sep.	6	25	Bolt	27-8431	8	45	Oil Level Indicator	46-0114	1
6	O-ring	25-0012	6	26	Crankcase Cover	46-0336	1	46	Connecting Rod Pin	43-0032	3
7	Valve Plug	46-0889	6	27	O-ring	25-0013	2	47	Retaining Ring	46-0103	6
8	Bolt	27-8185	8	28	Bearing	48-0012	2	48	Crankshaft	46-0050	1
9	Flatwasher	28-1039	8	29	Crankcase	46-0292	1	49	Key	43-0048	1
10	Manifold	46-0890	1	30	Oil Dip Stick	46-0144	1	50	Oil Seal	26-0049	1
11	O-ring (See 70-0009)	N/A Sep.	6	31	Bolt	46-0069	3	51	Shim	46-0113	1
12	Valve Seat (See 70-0009)	N/A Sep.	6	32	Gasket	28-0400	3	52	Crankcase Open Cover	46-0296	1
13	Valve Plate (See 70-0009)	N/A Sep.	6	33	O-ring	25-0014	4	53	Lockwasher	29-0055	4
14	Valve Spring (See 70-0009)	N/A Sep.	6	34	Back-up Ring	46-0109	3	54	Bolt	27-8471	4
15	Valve Cage (See 70-0009)	N/A Sep.	6	35	Plunger	46-0052	3		Valve Assembly (6 each 5, 11-15)	70-0009	
16	High Pressure Head Ring (See 70-0030)	N/A Sep.	3	36	Washer	46-0146	3		Head Ring Kit (3 each 16)	70-0030	
17	High Pressure V-Packing (See 70-0299)	N/A Sep.	3	37	Piston Rod	46-0056	3		V-Packing Kit (3 each 17, 18, 20)	70-0299	
18	V-Packing Support (See 70-0299)	N/A Sep.	3	38	Connecting Rod	46-0051	3		Intermediate Retainer Kit (3 each 18, 19)	70-0148	
19	High Pressure Intermediate Seal Retainer	46-0659	3	39	Lockwasher	29-0154	6		Low Pressure Seal Kit (3 each 20-22)	70-0298	
20	Low Pressure Seal	46-0886	3	40	Bolt	27-8435	6		V-Packing Assembly (Inc. 16-22)	70-0300	

PUMP ASSEMBLY (3-0211)

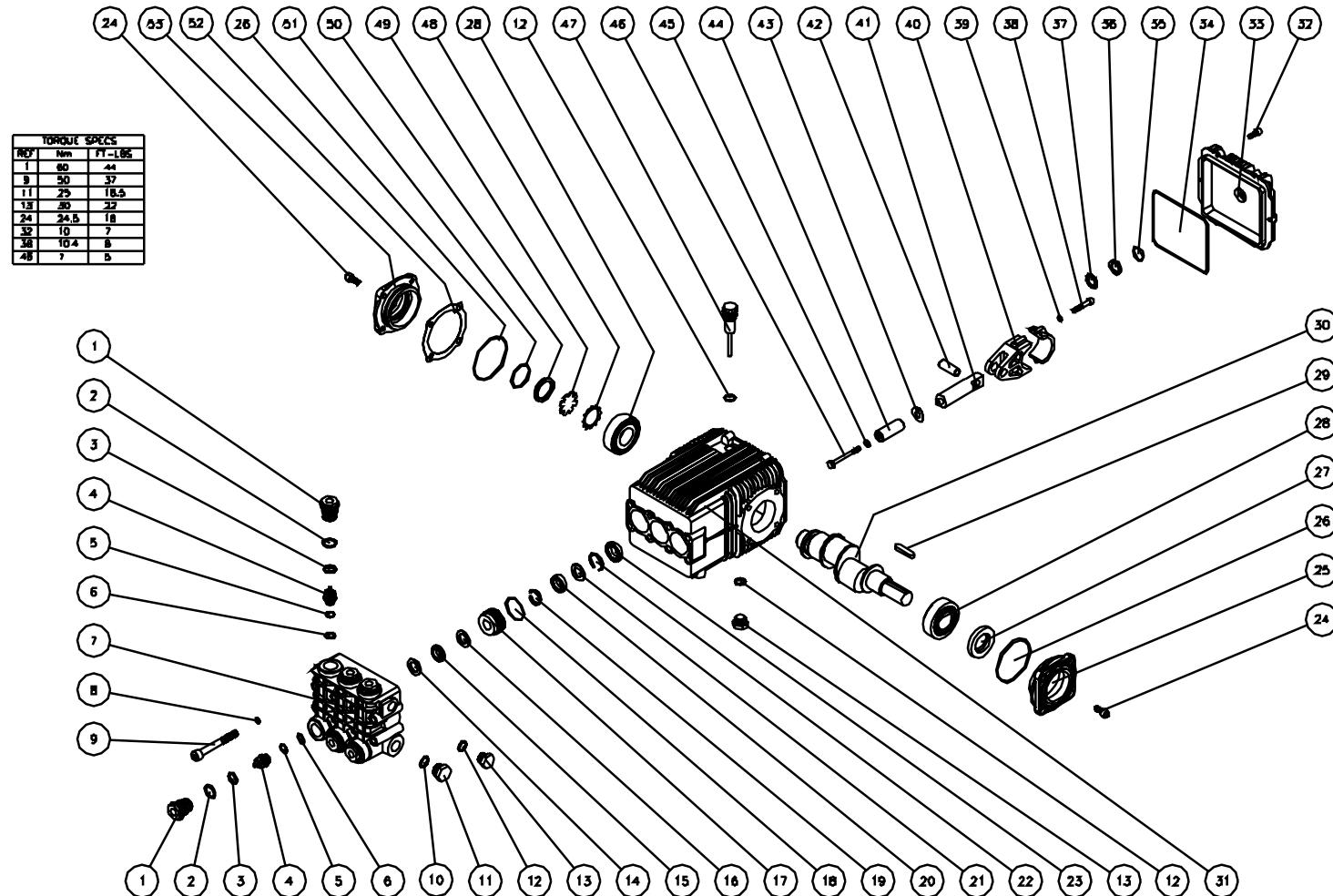
TORQUE Specs	
POSITION	FT-LBS
1	18
17	18
34	9
40	40



PUMP ASSEMBLY (3-0211)

REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Screw	27-8440	8	18	O-ring	25-0380	2	35	Oil Dipstick	39-0090	1
2	Lockwasher	29-0154	8	19	Oil Seal	26-0188	1	36	Bearing	48-0072	1
3	Pump Head	46-0927	1	20	Bearing	48-0061	1	37	Pump Shim (0.25mm)	46-0936	1
4	O-ring	25-0372	1	21	Key	43-0091	1	38	Pump Shim (0.2mm)	46-0705	1
5	Plug	39-0103	1	22	Crankshaft	46-0933	1	39	Bearing Cap/ Support	46-0703	1
6	O-ring	25-0510	3	23	O-ring	25-0398	1	40	Valve Cap	39-0105	6
7	Plug	39-0205	1	24	Crankcase Cover	46-0719	1	41	O-ring	25-0160	6
8	Support Ring (See 70-0323)	N/A Sep.	3	25	Screw	27-8401	6	42	Complete Valve (See 70-0319)	N/A Sep.	6
9	Gasket (See 70-0322)	N/A Sep.	3	26	Connecting Rod	46-0922	3	43	O-ring	25-0386	6
10	Piston Guide	46-0929	3	27	Piston Pin	46-0698	3	44	O-ring	25-0387	2
11	O-ring	25-0384	3	28	Plunger Rod	46-0699	3	45	Plug	39-0207	2
12	Gasket (See 70-0322)	N/A Sep.	3	29	Back-up Ring	25-0404	3		Valve Kit (Inc. 6 each 42)	70-0319	
13	Seal	46-0931	3	30	O-ring	25-0382	1		Piston Kit (Inc. 3 each 32)	70-0320	
14	Plug-Oil Drain	39-0206	2	31	Washer	46-0700	3		Oil Seal Kit (Inc. 4 each 13, 18-19, 23)	70-0321	
15	Crankcase	46-0811	1	32	Piston	46-0935	3		Water Seals Kit (Inc. 3 each 9, 11, 12)	70-0322	
16	Pump Shaft Cover	46-0691	1	33	Seal	26-0191	3		Support Ring Kit (Inc. 3 each 8)	70-0323	
17	Screw	27-8884	8	34	Nut	30-6020	3				

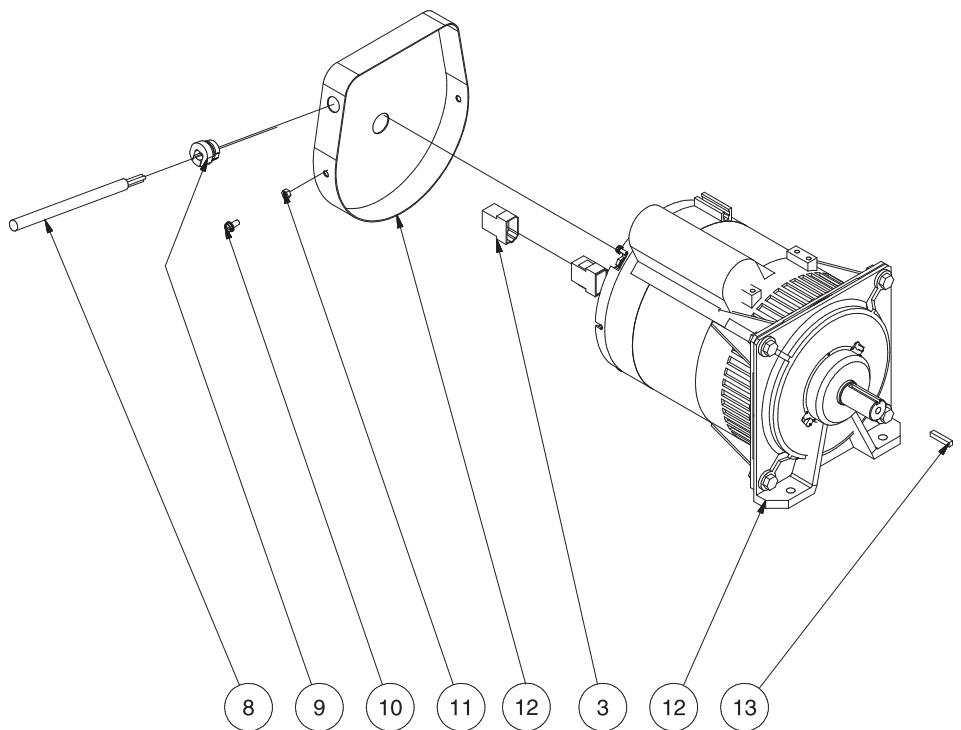
PUMP ASSEMBLY (3-0212)



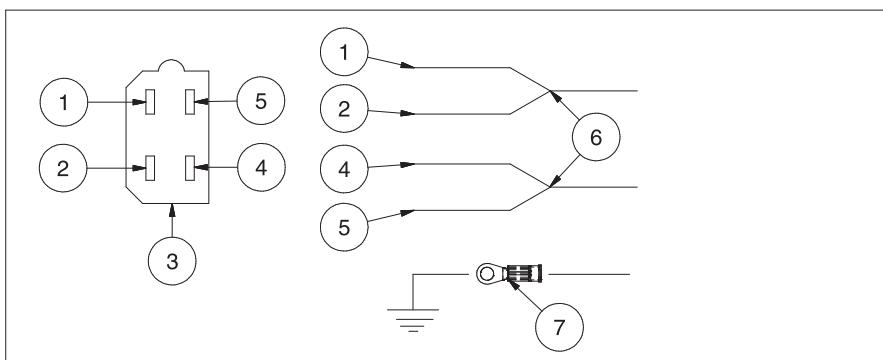
PUMP ASSEMBLY (3-0212)

REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Valve Cap	39-0201	6	20	Low Pressure Seal (See 70-0317)	N/A Sep.	3	39	Lockwasher	N/A	6
2	Back-Up Ring	25-0509	6	21	Spacer	46-0907	3	40	Connecting Rod	46-0913	3
3	O-Ring	25-0386	6	22	Snap-Ring	46-0908	3	41	Plunger Rod	46-0915	3
4	Valve w/O-ring (See 70-0314)	N/A Sep.	6	23	Oil Seal	26-0242	3	42	Connecting Rod Pin	46-0914	3
5	Back-Up Ring	25-0516	6	24	Screw	27-8884	8	43	Slinger Washer	46-0916	3
6	O-ring	25-0515	6	25	Shaft Cover	N/A	1	44	Piston	46-0917	3
7	Manifold Pump	46-0900	1	26	O-ring	25-0512	2	45	Washer	28-1041	3
8	Lockwasher	29-0155	8	27	Oil Seal	26-0243	1	46	Screw	27-8965	3
9	Screw	27-8470	8	28	Bearing	48-0073	2	47	Oil Dipstick	39-0204	1
10	O-ring	25-0372	1	29	Key	43-0091	1	48	Spring Retainer	46-0924	1
11	Plug	39-0202	1	30	Crankshaft	N/A	1	49	Reflector Pump	46-0925	1
12	O-ring	25-0510	3	31	Crankcase	46-0911	1	50	Oil Sight	46-0926	1
13	Plug	39-0203	2	32	Screw	27-8888	6	51	O-ring	25-0514	1
14	Support Ring (See 70-0317)	N/A Sep.	3	33	Crankcase Cover (Inc. 35-37)	46-0912	1	52	Shim	46-0947	1
15	High Pressure Seal (See 70-0317)	N/A Sep.	3	34	O-ring	25-0513	1	53	Support Bearing Cover (Inc. 48-51)	46-0918	1
16	Low Pressure Seal (See 70-0317)	N/A Sep.	3	35	O-ring	25-0370	1		Valve Kit (Inc. 6 each 4-6)	70-0314	1
17	Piston Guide	46-0904	3	36	Oil Sight Glass	46-0670	1		Water Seals Kit (Inc. 3 each 14-16, 18-20)	70-0317	1
18	O-ring (See 70-0317)	N/A Sep.	3	37	Spring Retainer	46-0671	1				
19	Back-Up Ring (See 70-0317)	N/A Sep.	3	38	Screw	N/A	6				

GENERATOR (850-0352)



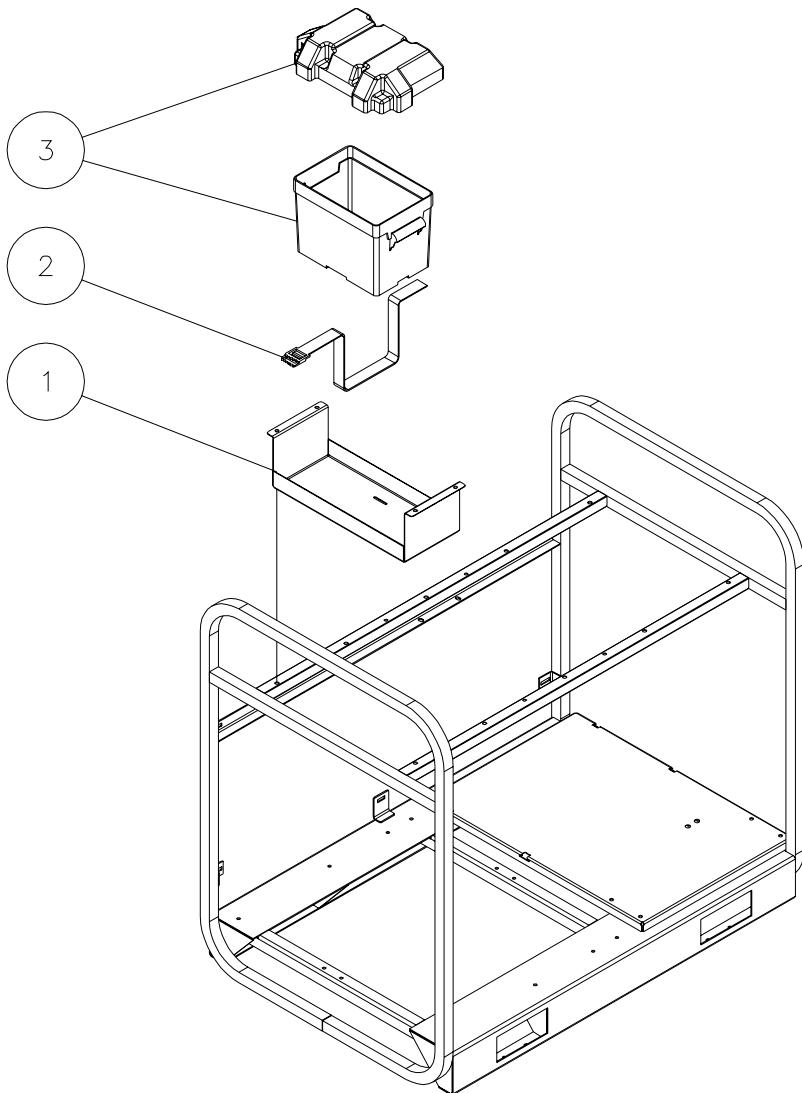
850-0352-070605-RZ



GENERATOR (850-0352)			
REF #	DESCRIPTION	PART #	QTY
1	Wire - White *(One Foot Required)	32-0452	1
2	Wire - Black *(One Foot Required)	32-0091	1
3	Connector- Male (See 32-0895)	N/A Sep.	1
4	Wire - Red *(One Foot Required)	32-0178	1
5	Wire - Yellow *(One Foot Required)	32-0853	1
6	Crimp Slice	32-0417	2
7	Terminal Ring	32-0099	1
8	Cord *(Six Feet Required)	32-0440	1
9	Bushing	9-0045	1
10	Screw	27-9593	2
11	Hex Nut	30-6001	2
12	Alternator Shaft Drive	32-0895	1
	Generator (Includes 1-12)	850-0352	

850-0352-070605-RZ

BATTERY BOX ASSEMBLY (HDS-3006/3505-0R7G)

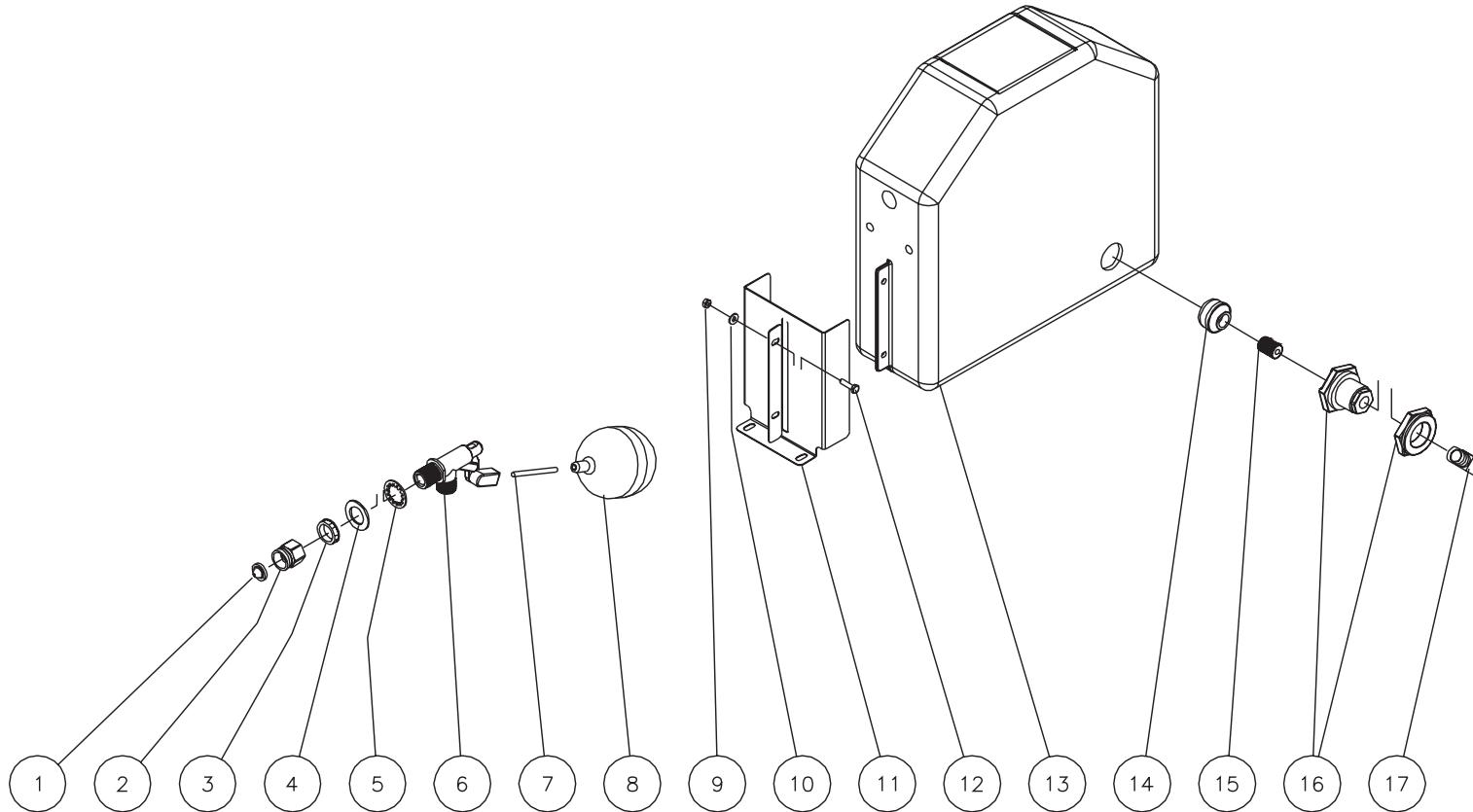


HDS-3006/3505-0R7G BATTERY BOX ASSY-042203-KZ

HDS-3006 3505-0R7G BATTERY BOX ASSY-042203-KZ

BATTERY BOX ASSEMBLY (HDS-3006/3505-0R7G)			
REF. #	DESCRIPTION	PART #	QTY.
1	Battery Bracket	20-0677A18	1
2	Strap	33-0089	1
3	Battery Box	33-0093	1

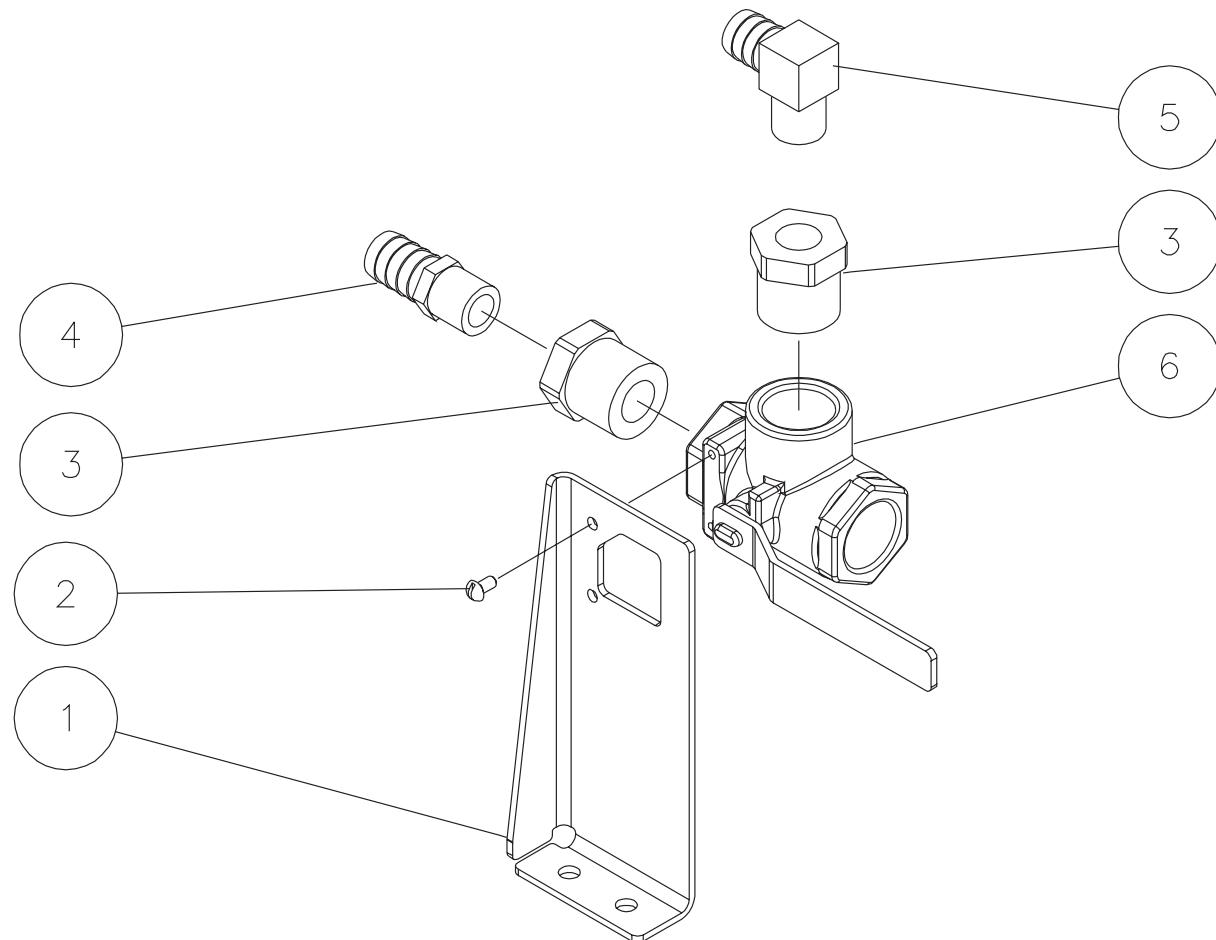
FLOAT TANK ASSEMBLY



HDS FLOAT TANK ASSY-033004-KZ

FLOAT TANK ASSEMBLY			
REF. #	DESCRIPTION	PART #	QTY.
1	Inlet Strainer Gasket	19-0001	1
2	Garden Hose Inlet	23-0021	1
3	Locknut	23-0428	1
4	Washer	28-0009	1
5	Lockwasher	29-0074	1
6	Float Valve	22-0317	1
7	Rod	31-3320	1
8	Float Ball	22-0059	1
9	Hex Nut	30-0155	4
10	Flatwasher	28-0002	4
11	Float Tank Mounting Bracket	20-0586A18	2
12	Bolt	27-0016	4
13	Float Tank Assembly (Inc. 13, 16)	850-0322	1
14	Filter	19-0203	1
15	Close Nipple	23-0019	1
16	Bulkhead	55-0886	1
17	Elbow	23-0037	1

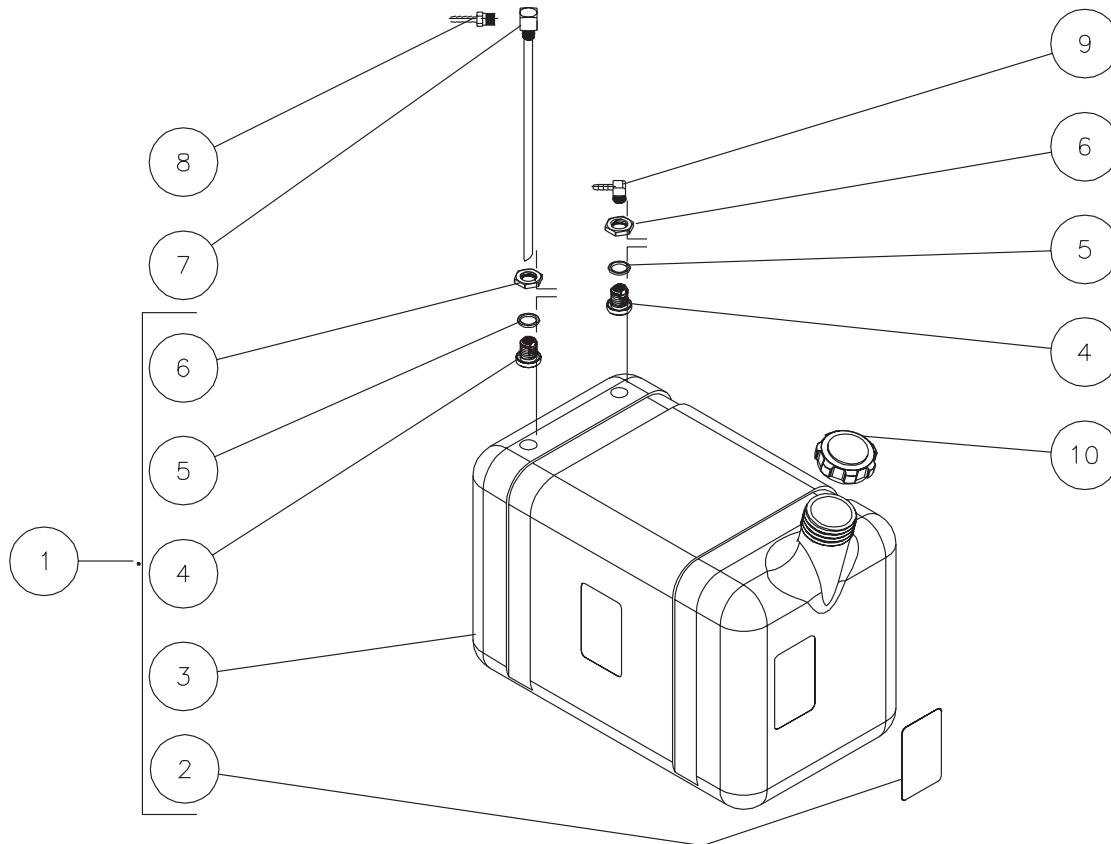
BALL VALVE ASSEMBLY



HDS BALL VALVE ASSY-033101-BAR

BALL VALVE ASSEMBLY			
REF. #	DESCRIPTION	PART #	QTY.
1	Ball Valve Bracket	20-0560A18	1
2	Screw	27-9533	2
3	Bushing	23-0226	2
4	Hose Barb	23-0036	1
5	Elbow	23-0037	1
6	Ball Valve	22-0321	1

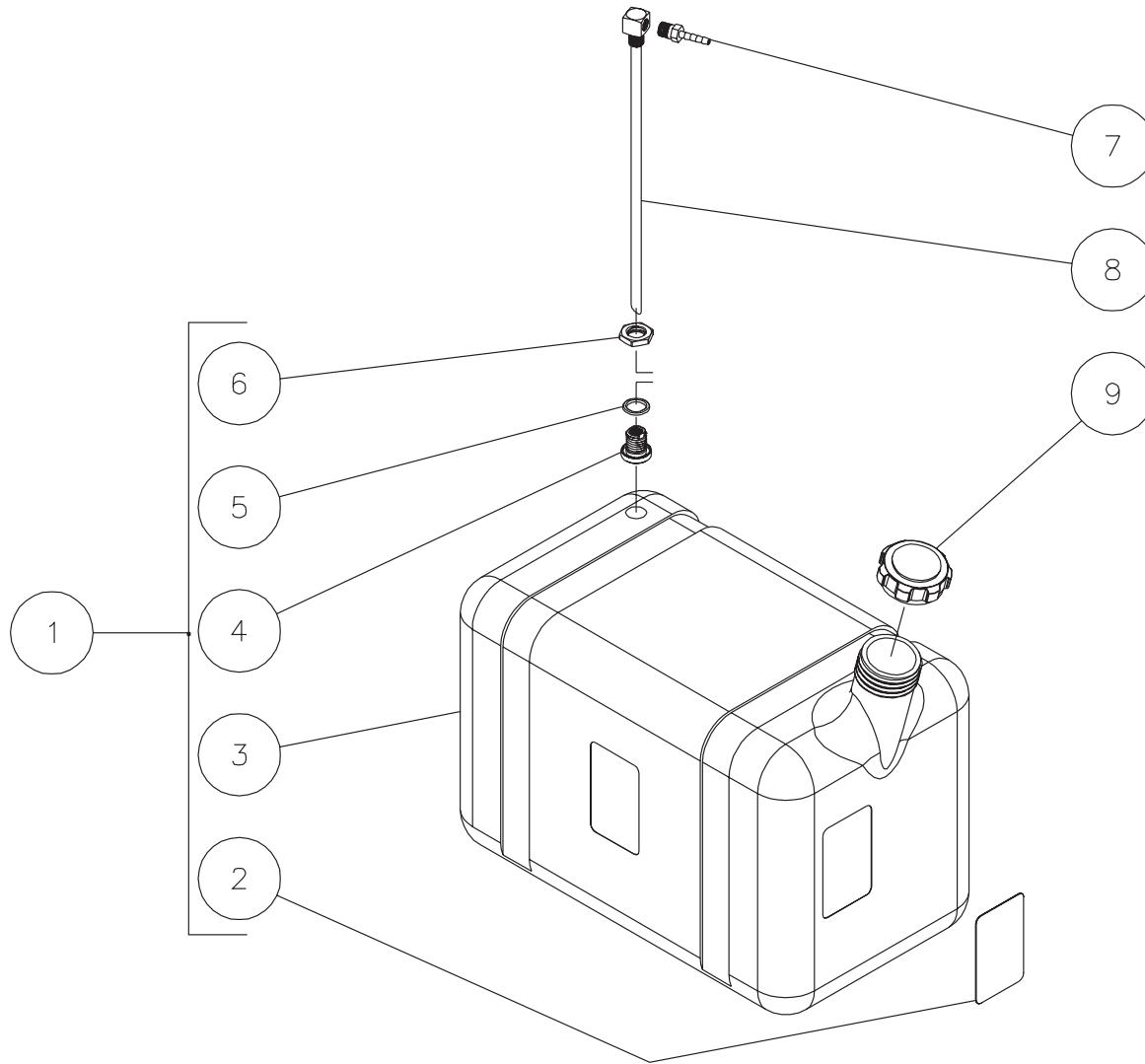
FUEL TANK ASSEMBLY



HDS FUEL TANK ASSY-051701-BAR

FUEL TANK ASSEMBLY			
REF. #	DESCRIPTION	PART #	QTY.
1	Fuel Tank Assembly (Inc. 2-6)	850-0307	1
2	Decal- Caution: Risk of Fire- Do Not Use Gasoline (See 34-9000)	N/A Sep.	1
3	Fuel Tank- Green (See 850-0307)	N/A Sep.	2
4	Bulkhead (See 850-0307)	N/A Sep.	2
5	O-ring (See 850-0307)	N/A Sep.	2
6	Hex Nut (See 850-0307)	N/A Sep.	2
7	Fuel Pick-up	33-0352	1
8	Hose Barb	23-0051	1
9	Elbow	23-0054	1
10	Vented Fuel Cap	12-0033	1
	Safety Decal Kit (Includes 2)	34-9000	

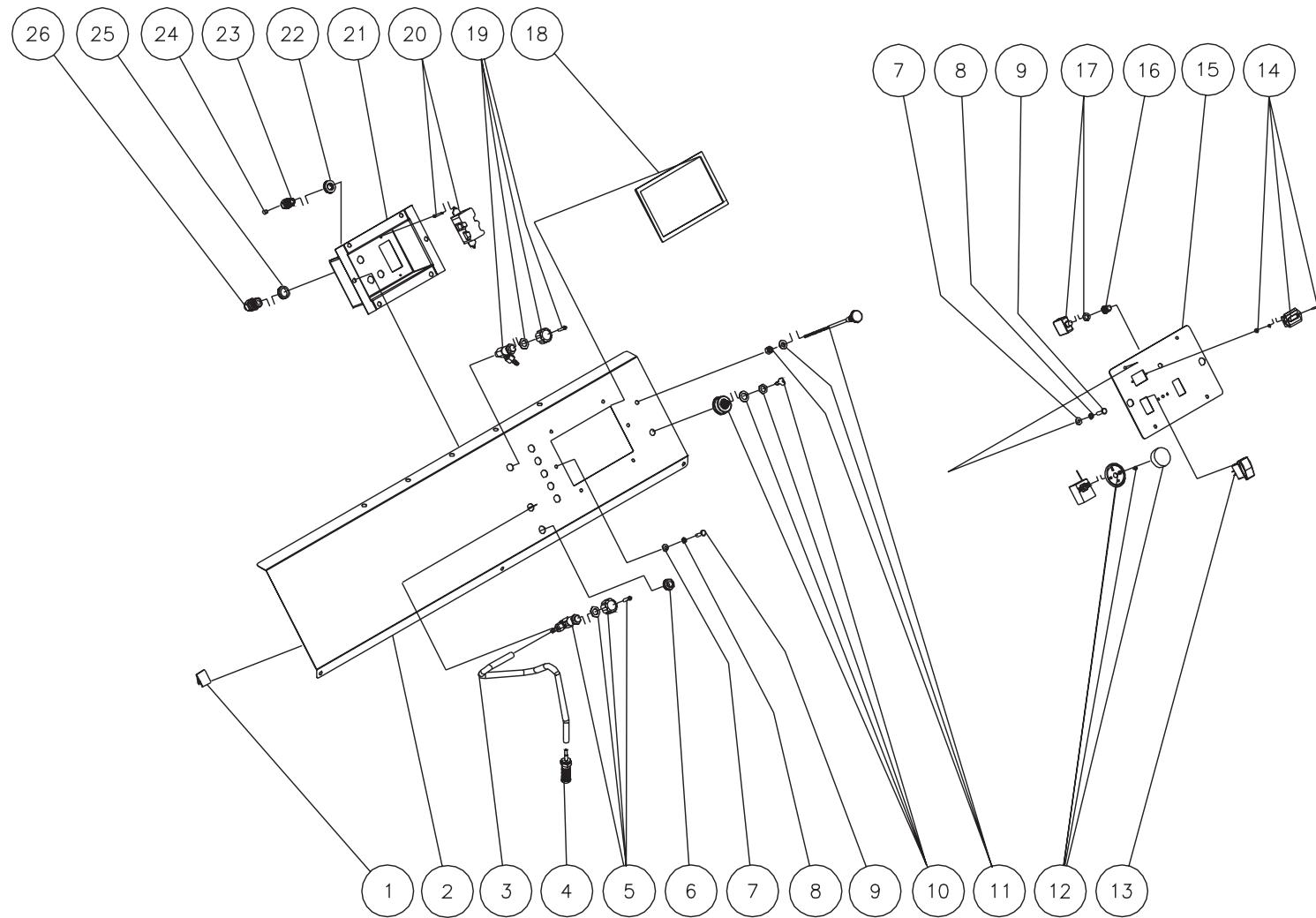
GAS TANK ASSEMBLY



HDS GAS TANK ASSY-051701-BAR

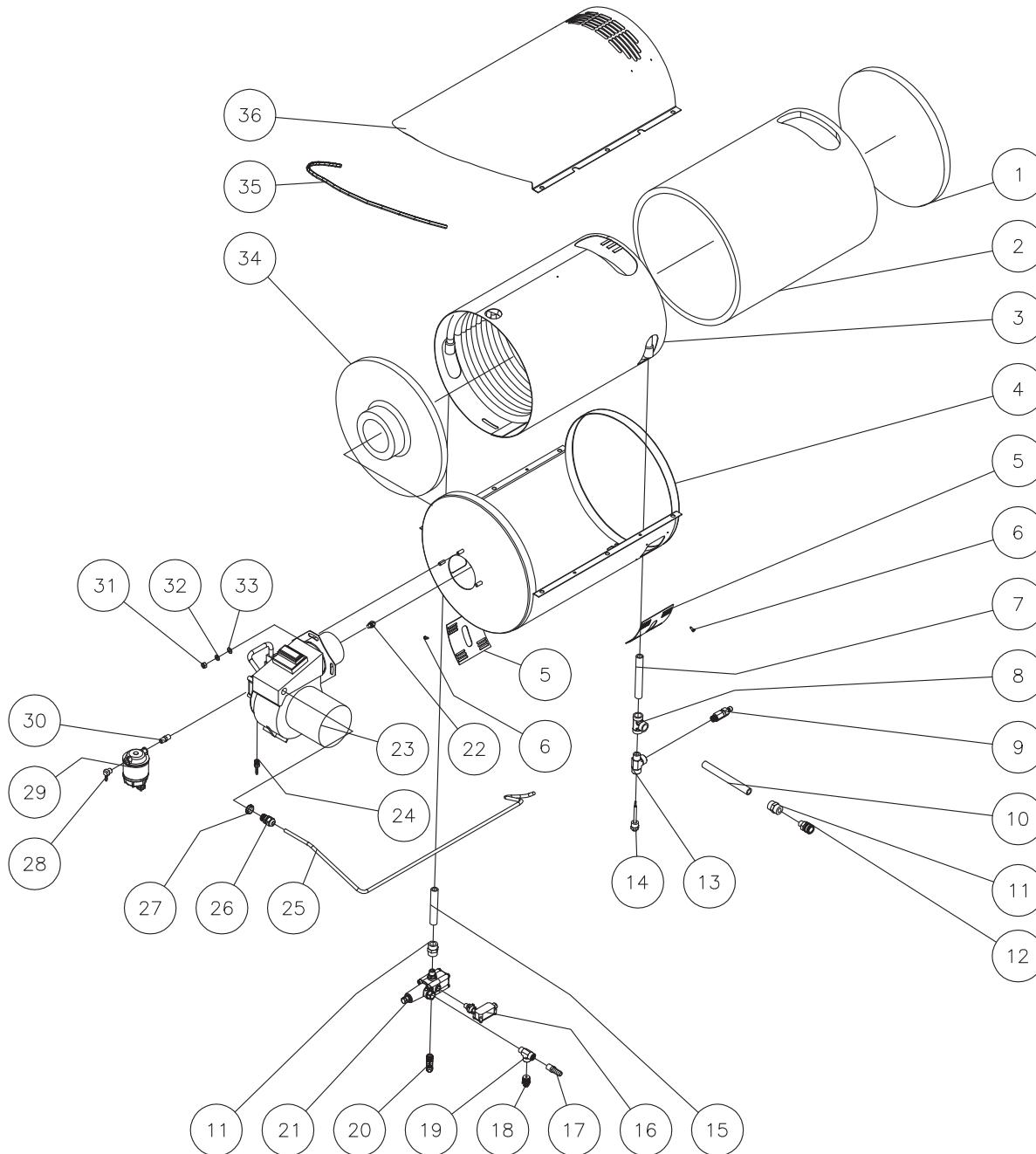
GAS TANK ASSEMBLY			
REF. #	DESCRIPTION	PART #	QTY.
1	Gas Tank Assembly (Inc. 2-6)	850-0306	1
2	Decal- Caution: Risk of Fire- Do Not Use Diesel or Fuel Oil (See 34-9000)	N/A Sep.	1
3	Gas Tank- Red (See 850-0306)	N/A Sep.	1
4	Bulkhead (See 850-0306)	N/A Sep.	1
5	O-ring (See 850-0306)	N/A Sep.	1
6	Hex Nut (See 850-0306)	N/A Sep.	1
7	Hose Barb	23-0051	1
8	Fuel Pick-up	33-0352	1
9	Vented Fuel Cap	12-0033	1
	Safety Decal Kit (Includes 2)	34-9000	

CONTROL PANEL



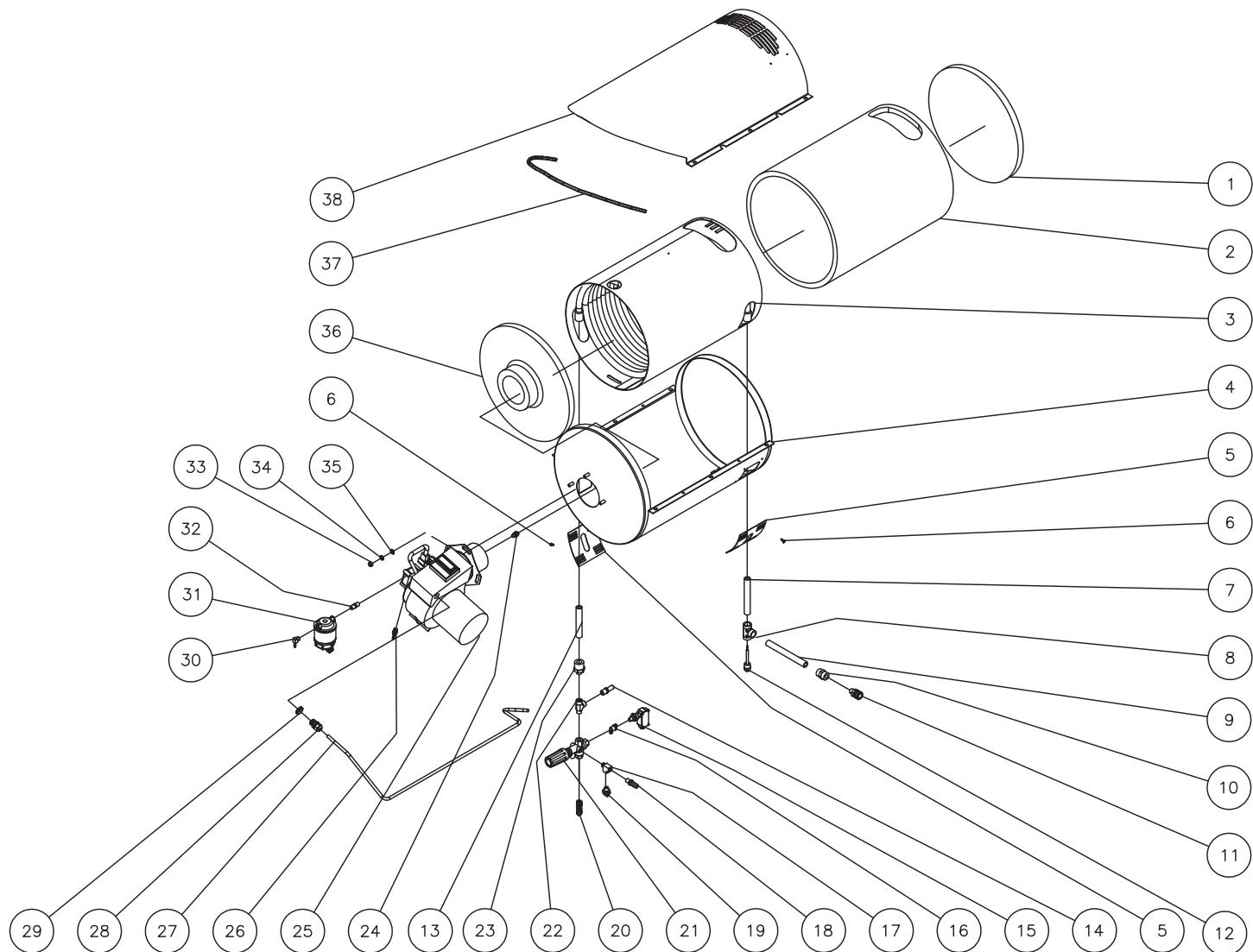
CONTROL PANEL										
REF. #	DESCRIPTION	PART #	QTY.		REF. #	DESCRIPTION	PART #	QTY.		
1	Wire Clip	33-0264	5		15	Electric Box Panel	21-0144	1		
2	Stainless Steel Control Panel	21-0143	1		16	Circuit Breaker Boot	32-0441	1		
3	Hose *(Six Feet Required)	15-0021	1		17	Circuit Breaker	32-0438	1		
4	Detergent Strainer	19-0056	1		18	Electric Box Gasket	26-0248	2		
5	Detergent Valve	22-0226	1		19	Steam Valve	22-0329	1		
6	Grommet	33-0001	6		20	GFCI Outlet	32-0245	1		
7	Washer	28-0002	6		21	Electric Box	20-0582A18	1		
8	Lockwasher	29-0006	6		22	Locknut	32-0587	3		
9	Bolt	27-0016	6		23	Strain Relief	32-0586	3		
10	Key Switch (See Engine Assembly)	N/A Sep.	1		24	Strain Relief Plug	32-0708	1		
11	Cable Kill Lever	33-0081	1		25	Locknut	32-0108	2		
12	Adjustable Thermostat	32-0734	1		26	Strain Relief	32-0437	2		
13	Rocker Switch	32-0669	2		*Must Order in One Foot Lengths					
14	Digital Hourmeter	32-0668	1							

HEAT EXCHANGER ASSEMBLY FOR HDS-3005/3006/3505/3506 (AFTER SERIAL #15023975)



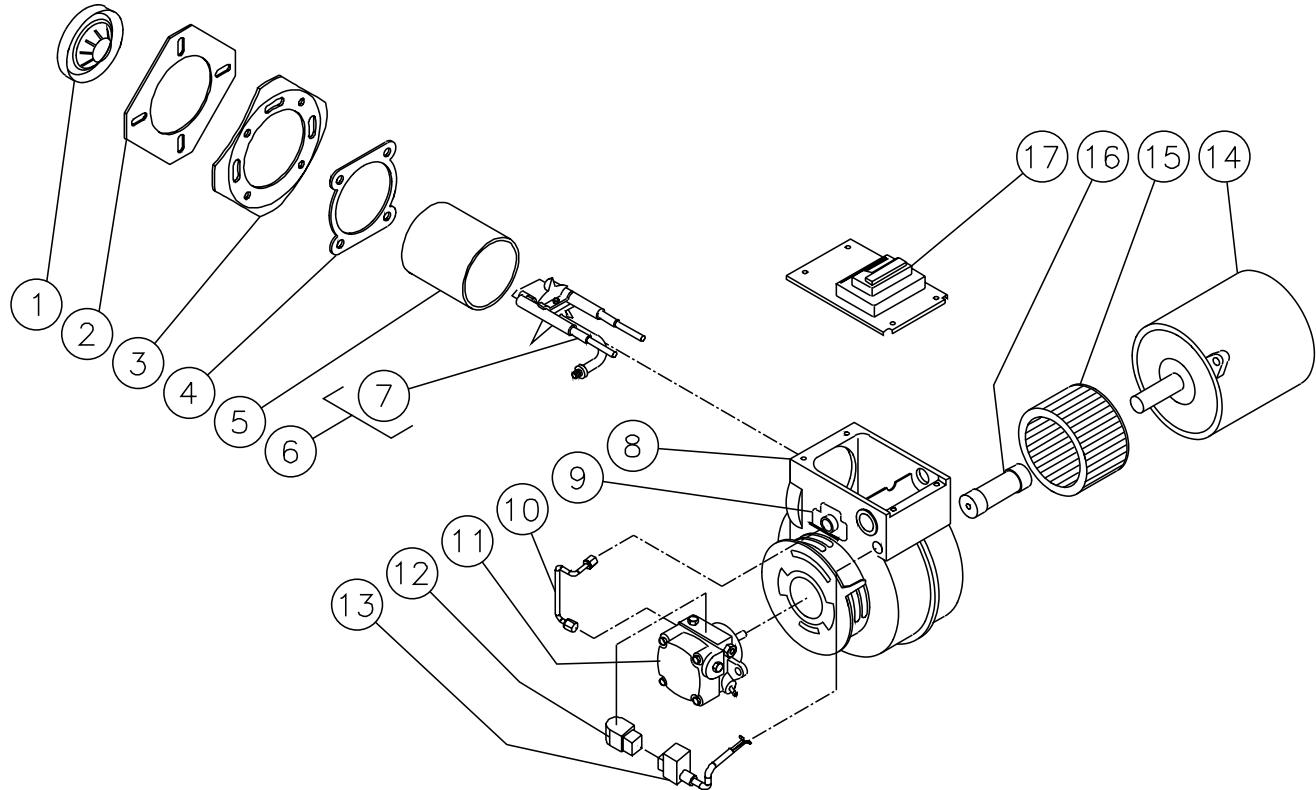
HEAT EXCHANGER ASSEMBLY FOR HDS-3005/3006/3505/3506 (AFTER SERIAL #15023975)			
REF. #	DESCRIPTION	PART #	QTY.
1	Insulation Disc	33-0346	1
2	Insulation Blanket	850-0279	1
3	Coil Assembly	66-0014	1
4	Bottom Wrap Assembly	21-0145	1
5	Patch Plate	20-0537A18	2
6	Screw	27-3062	8
7	Pipe Nipple	24-0254	1
8	Tee	24-0055	1
9	Safety Relief Valve	22-0309	1
10	Pipe Nipple	24-0255	1
11	Adapter	24-0243	2
12	Quick Connect Socket	17-0007	1
13	Street Tee	24-0242	1
14	Adjustable Thermostat	22-0310	1
15	Pipe Nipple	24-0245	1
16	Pressure Switch	22-0243	1
17	Barb	23-0105	1
18	Heat Dump Valve	22-0114	1
19	Street Tee	23-0058	1
20	Elbow	24-0092	1
21	Unloader	850-0304	1
22	Oil Nozzle	18-0361	1
23	Burner	4-0017	1
24	Hose Barb	23-0051	1
25	Cord *(Five Feet Required)	32-0247	1
26	Strain Relief	32-0437	1
27	Locknut	32-0108	1
28	Elbow	23-0054	1
29	Fuel Water Seperator	19-0070	1
30	Hex Nipple	24-0145	1
31	Hex Nut	30-0006	3
32	Lockwasher	29-0008	3
33	Flatwasher	28-0023	3
34	Insulation Drum Head	33-0345	1
35	Edging *(Three Feet Required)	33-0020	1
36	Top Wrap	21-0129	1

HEAT EXCHANGER ASSEMBLY FOR HDS-4005 (AFTER SERIAL #15023975)



HEAT EXCHANGER ASSEMBLY FOR HDS-4005 (AFTER SERIAL #15023975)			
REF. #	DESCRIPTION	PART #	QTY.
1	Insulation Disc	33-0346	1
2	Insulation Blanket	850-0279	1
3	Coil Assembly	66-0014	1
4	Bottom Wrap Assembly	21-0145	1
5	Patch Plate	20-0537A18	2
6	Screw	27-3062	8
7	Pipe Nipple	24-0254	1
8	Tee	24-0055	1
9	Pipe Nipple	24-0255	1
10	Adapter	24-0243	1
11	Quick Connect Socket	17-0007	1
12	Adjustable Thermostat	22-0310	1
13	Pipe Nipple	24-0245	1
14	Pop Off Valve	22-0328	1
15	Pressure Switch	22-0243	1
16	Bushing	23-0017	1
17	Tee	23-0127	1
18	Barb	23-0120	1
19	Heat Dump Valve	22-0208	1
REF. #	DESCRIPTION	PART #	QTY.
20	Elbow	24-0092	1
21	Unloader	8-0511	1
22	Street Tee	23-0058	1
23	Bushing	24-0048	1
24	Oil Nozzle	18-0361	1
25	Burner	4-0017	1
26	Hose Barb	23-0051	1
27	Cord *(Five Feet Required)	32-0247	1
28	Strain Relief	32-0437	1
29	Locknut	32-0108	1
30	Elbow	23-0054	1
31	Fuel Water Seperator	19-0070	1
32	Hex Nipple	24-0145	1
33	Hex Nut	30-0006	3
34	Lockwasher	29-0008	3
35	Flatwasher	28-0023	3
36	Insulation Drum Head	33-0345	1
37	Edging *(Three Feet Required)	33-0020	1
38	Top Wrap	21-0129	1

BURNER ASSEMBLY (4-0017) (AFTER SERIAL #15008085)

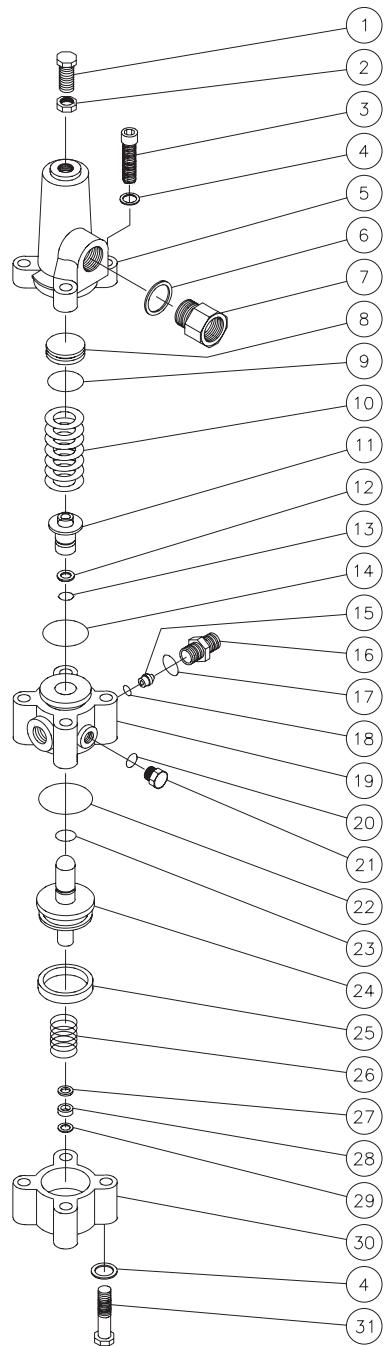


4-0017 & 4-0018-021903-KZ

4-0017-021903-KZ

BURNER ASSEMBLY (4-0017) (AFTER SERIAL #15008085)							
REF.	DESCRIPTION	PART #	QTY.	REF.	DESCRIPTION	PART #	QTY.
1	Burner Head	44-0011	1	10	Fuel Line	44-0026	1
2	Mounting Gasket	44-0108	1	11	Fuel Pump	3-0236	1
3	Flange	44-0109	1	12	Fuel Solenoid	46-1020	1
4	Gasket	26-0138	1	13	Cord Set	44-0122	1
5	Air Tube	44-0110	1	14	Motor	2-0068	1
6	Nozzle Line Assembly (Inc. 7)	44-0113	1	15	Blower Wheel	44-0071	1
7	Electrode Kit	44-0114	1	16	Coupler	44-0014	1
8	Burner Housing	44-0033	1	17	Ignition Transformer	44-0017	1
9	Escutcheon Plate	44-0031	1		Complete Burner (Includes 1-17)	4-0017	

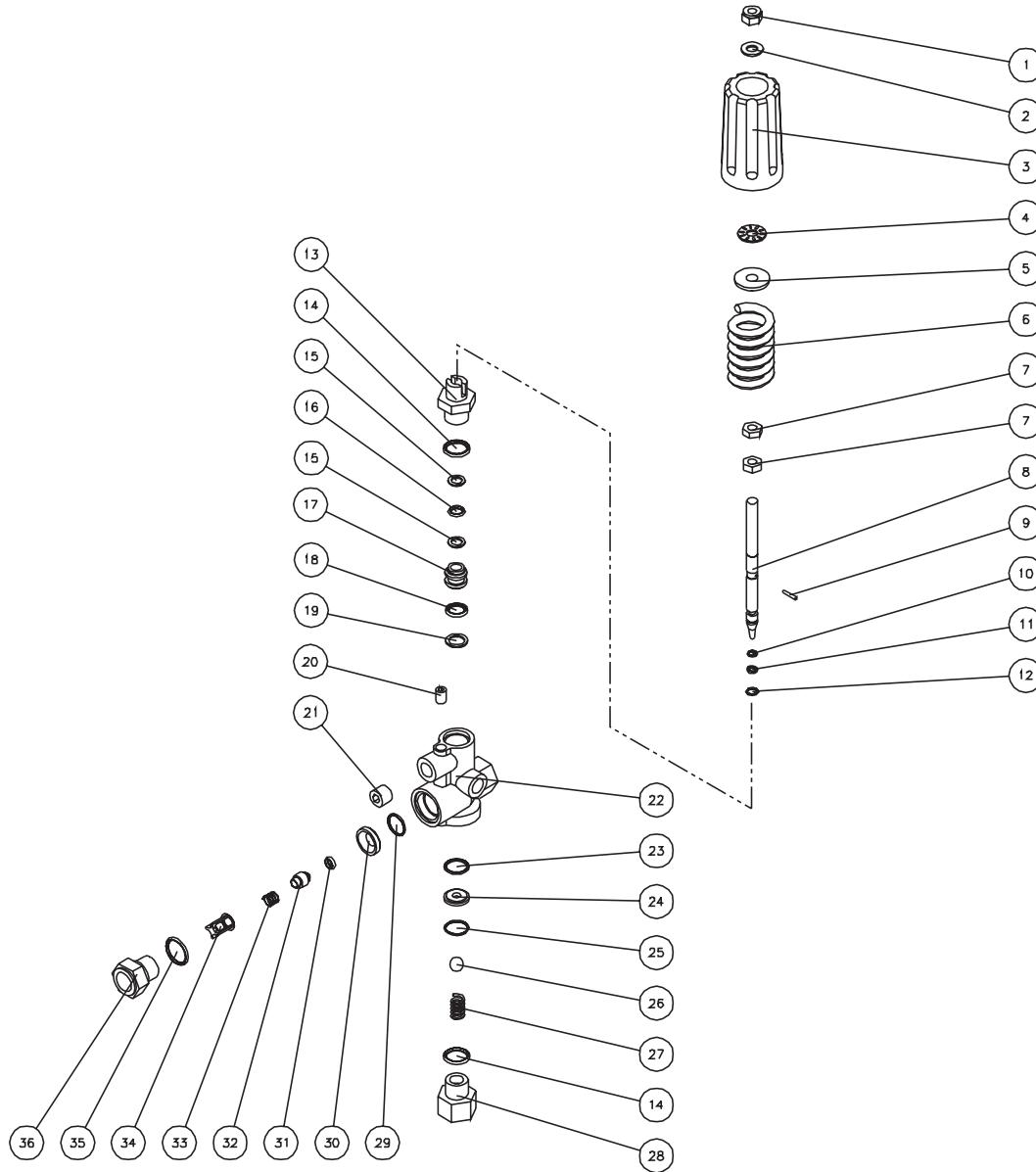
UNLOADER ASSEMBLY (850-0304)



UNLOADER ASSEMBLY (850-0304)

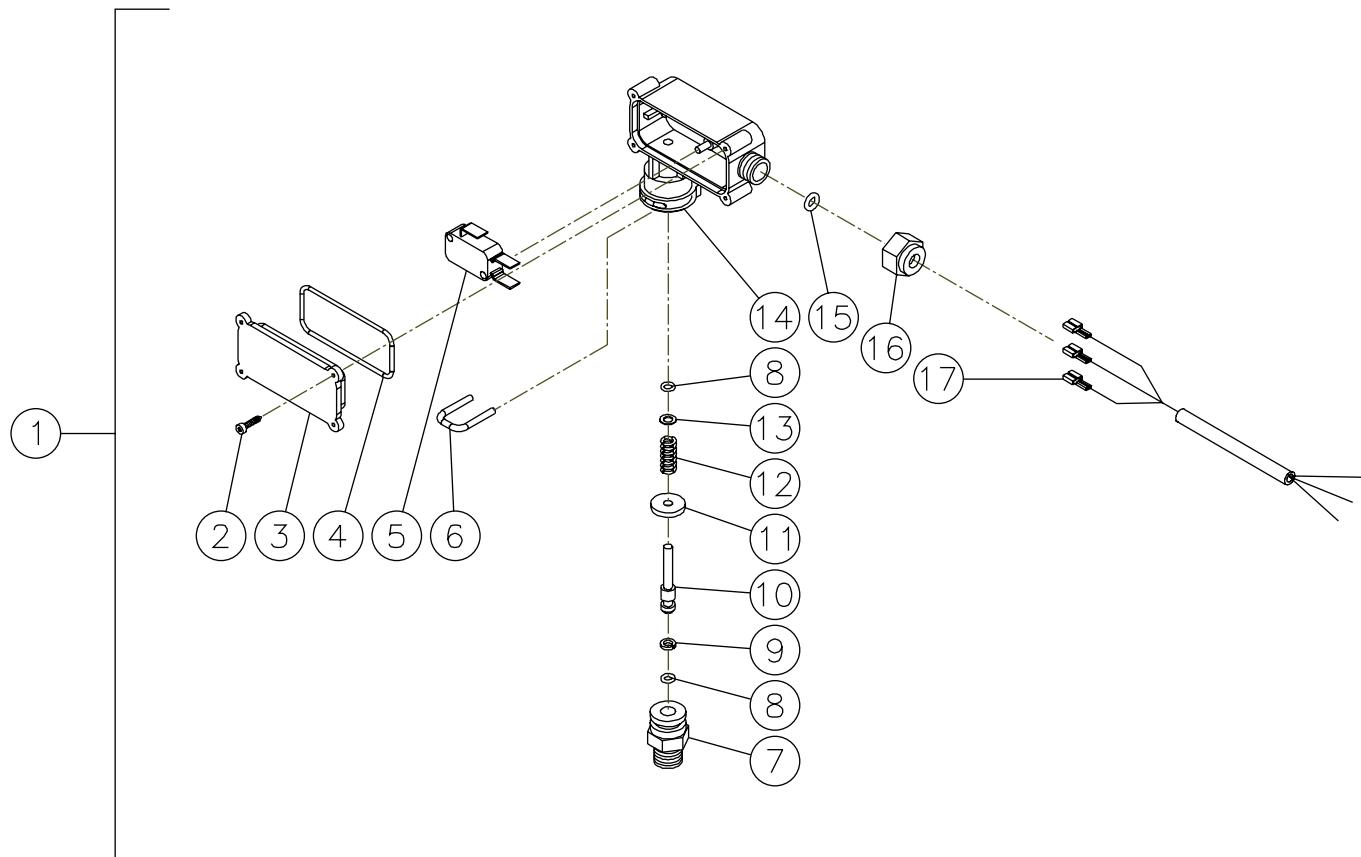
REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Bolt	27-8077	1	18	O-ring	25-0119	1
2	Hex Nut	30-3010	1	19	Middle Body	8-0137	1
3	Bolt	27-8434	4	20	O-ring	25-0114	2
4	Lockwasher	29-0154	8	21	Hex Plug	39-0017	2
5	Upper Body	8-0138	1	22	O-ring	25-0056	1
6	Washer	8-0277	1	23	O-ring	25-0120	1
7	By-Pass Restrictor	8-0124	1	24	Piston Assembly	8-0136	1
8	Spring Guide	8-0135	1	25	Seal	26-0104	1
9	O-ring	25-0118	1	26	Spring	49-0027	1
10	Spring	49-0026	1	27	Washer	8-0139	1
11	Valve Seat	8-0145	1	28	Seal	26-0105	1
12	Back-up Ring	8-0141	1	29	Back-up Ring	8-0140	1
13	O-ring	25-0121	1	30	Lower Body	8-0134	1
14	O-ring	25-0117	1	31	Bolt	27-8037	4
15	Flow Balancer	8-0127	1		Unloader Repair Kit (Inc. 9, 11, 13, 14, 17, 18, 20, 22-26, 28, 29)	70-0013	
16	Nipple	8-0131	1		Unloader Orifice Kit (Inc. 7, 15, 16)	852-0157	
17	O-ring	25-0052	1				

UNLOADER ASSEMBLY (8-0511)



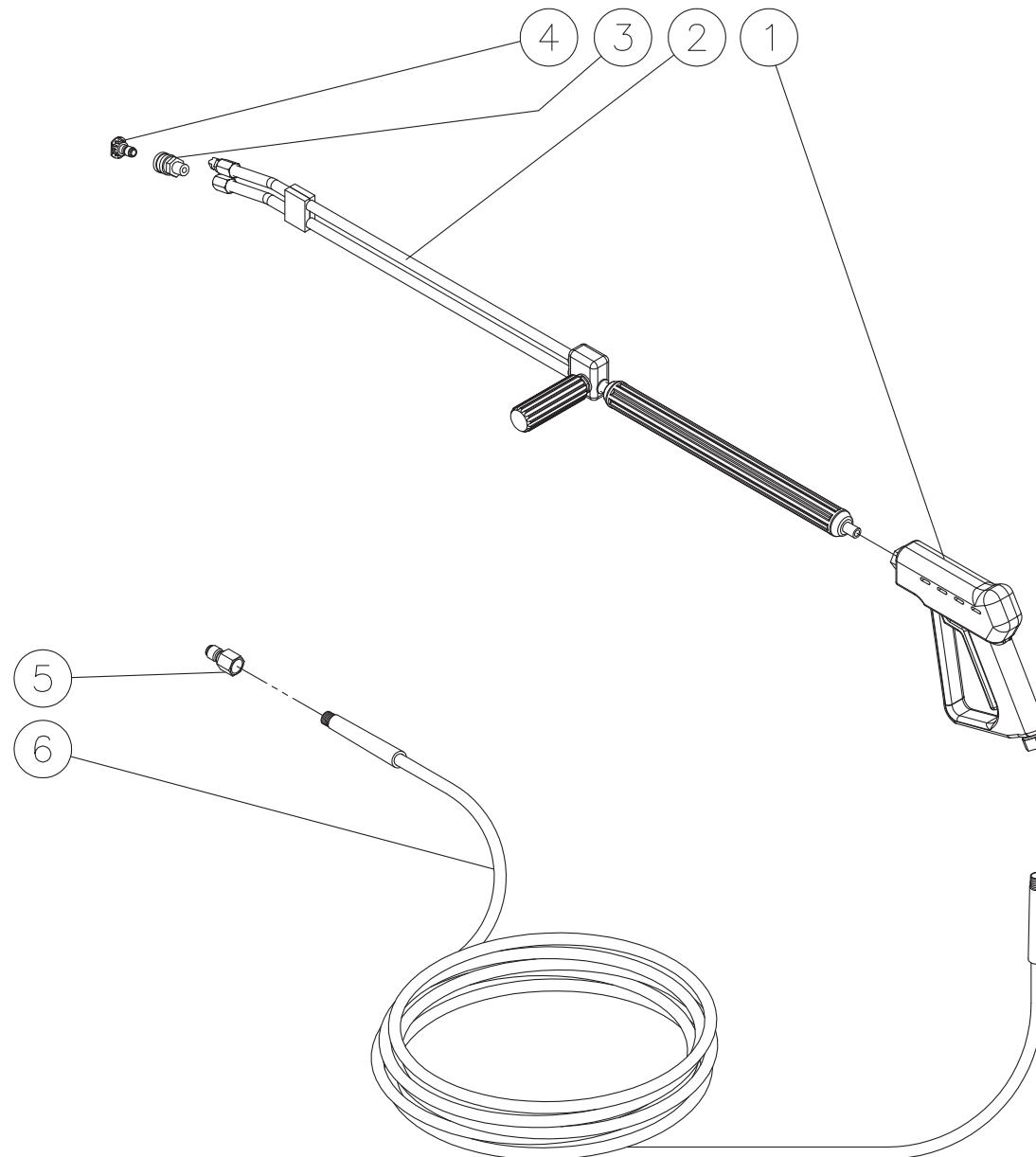
UNLOADER ASSEMBLY (8-0511)								
REF. #	DESCRIPTION	PART #	QTY.		REF. #	DESCRIPTION	PART #	QTY.
1	Locknut	N/A	1		21	Stop Nut	N/A	1
2	Washer	N/A	1		22	Housing	N/A	1
3	Hand Wheel	N/A	1		23	O-ring (See 70-0336)	N/A Sep.	1
4	Needle Bearing	N/A	1		24	Valve Seat (See 70-0336)	N/A Sep.	1
5	Pressure Piece	8-0012	1		25	Circlip for Bores (See 70-0336)	N/A Sep.	1
6	Spring	N/A	1		26	Stainless Steel Ball (See 70-0336)	N/A Sep.	1
7	Nut	N/A	2		27	Spring (See 70-0336)	N/A Sep.	1
8	Piston Rod	N/A	1		28	Inlet Fitting	8-0513	1
9	Pin	N/A	1		29	O-ring	25-0042	1
10	O-ring (See 70-0335)	N/A Sep.	1		30	Stainless Steel Seat (See 70-0334)	N/A Sep.	1
11	Back-up Ring (See 70-0335)	N/A Sep.	1		31	O-ring	25-0036	1
12	Circlip for Shafts (See 70-0335)	N/A Sep.	1		32	Valve Part	8-0105	1
13	Guiding Screw	N/A	1		33	Spring	49-0023	1
14	O-ring (See 70-0335)	N/A Sep.	2		34	Valve Housing	8-0104	1
15	Back-up Ring (See 70-0335)	N/A Sep.	2		35	O-ring (See 70-0334)	N/A Sep.	1
16	O-ring (See 70-0335)	N/A Sep.	1		36	Outlet Fitting	8-0514	1
17	Piston (See 70-0335)	N/A Sep.	1			Outlet Valve Kit (Inc. 29-35)	70-0334	
18	O-ring (See 70-0335)	N/A Sep.	1			Piston Kit (Inc. 10-12, 14-19)	70-0335	
19	Back-up Ring (See 70-0335)	N/A Sep.	1			Inlet Valve Kit (Inc. 23-27)	70-0336	
20	Stop Nut	N/A	1					

PRESSURE SWITCH (22-0243)



PRESSURE SWITCH (22-0243)			
REF. #	DESCRIPTION	PART #	QTY.
1	Pressure Switch	22-0243	1
2	Screw	N/A	4
3	Cover	N/A	1
4	O-ring (See 70-0306)	N/A Sep.	1
5	Micro Switch	N/A	1
6	Retainer Clip	N/A	1
7	Body	N/A	1
8	O-ring (See 70-0306)	N/A Sep.	2
9	Back-up Ring (See 70-0306)	N/A Sep.	1
10	Piston	N/A	1
11	Washer	N/A	1
12	Spring	49-0145	1
13	Washer	N/A	1
14	Plastic Housing	N/A	1
15	O-ring (See 70-0306)	N/A Sep.	1
16	Nut	N/A	1
17	Wire Assembly	N/A	1
	O-ring Repair Kit (Inc. 4, 8, 9, 15)	70-0306	

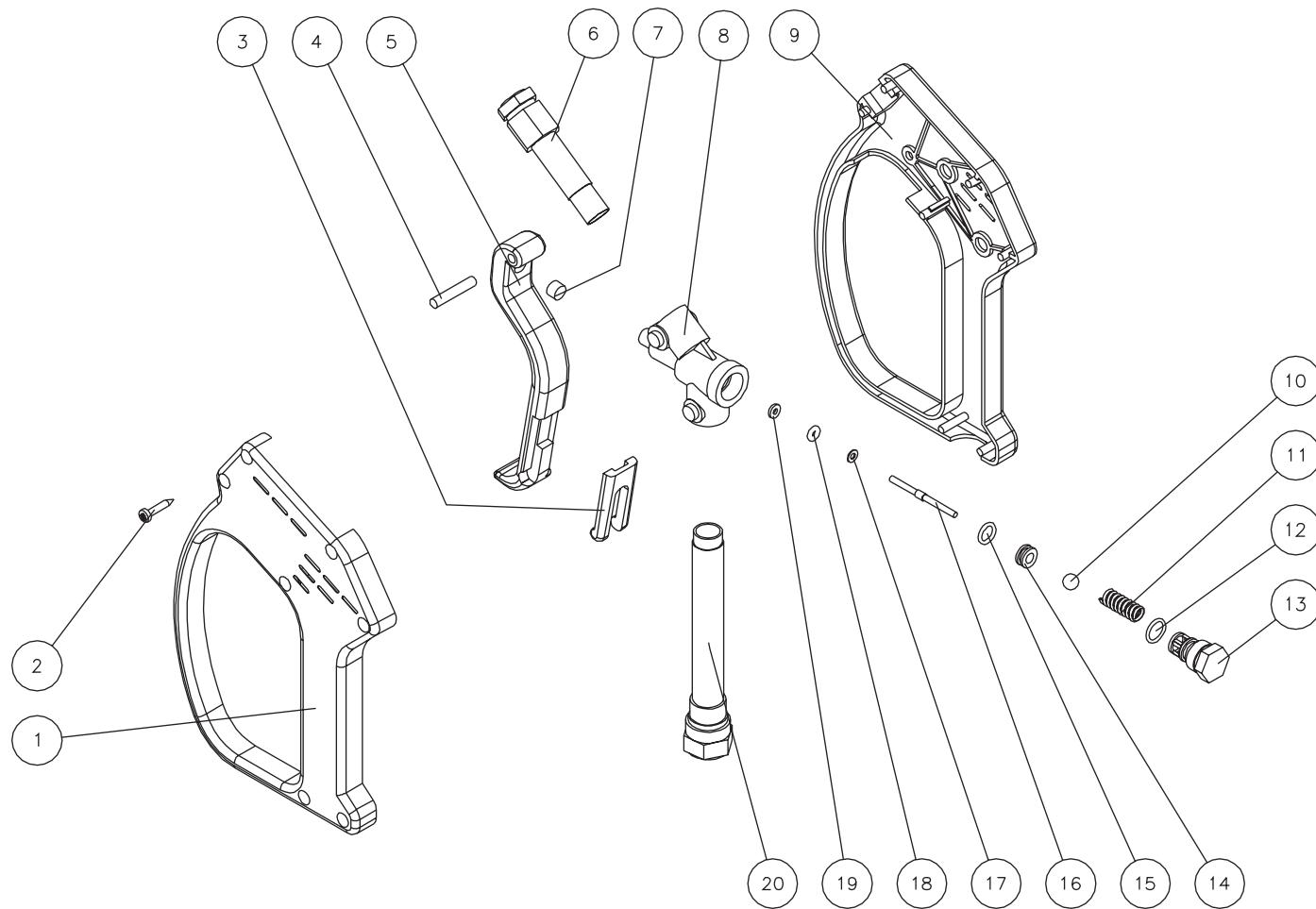
GUN/WAND/HOSE ASSEMBLY (AFTER SERIAL #15023975)



HDS GUN WAND HOSE ASSY-101805-KZ

GUN/WAND/HOSE ASSEMBLY (AFTER SERIAL #15023975)			
REF. #	DESCRIPTION	PART #	QTY.
1	Gun Assembly	16-0392	1
2	Dual Lance	16-0417	1
3	Quick Connect Socket	17-0028	1
4	Nozzle- 2503.5 (HDS-4005)	18-0259	1
-	Nozzle- 0004.5 (HDS-4005-0K6G/0H6G)	18-0033	1
-	Nozzle- 1504.5 (HDS-4005-0K6G/0H6G)	18-0039	1
-	Nozzle- 4004.5 (HDS-4005-0K6G/0H6G)	18-0065	1
-	Nozzle- 0005 (HDS-3505, HDS-4005-0K6A/0H6A)	18-0003	1
-	Nozzle- 1505 (HDS-3505, HDS-4005-0K6A/0H6A)	18-0004	1
-	Nozzle- 2505 (HDS-3005/3505)	18-0153	1
-	Nozzle- 4005 (HDS-3505, HDS-4005-0K6A/0H6A)	18-0180	1
-	Nozzle- 0005.5 (HDS-3005)	18-0035	1
-	Nozzle- 1505.5 (HDS-3005)	18-0041	1
-	Nozzle- 2505.5 (HDS-3506)	18-0062	1
-	Nozzle- 4005.5 (HDS-3005)	18-0132	1
-	Nozzle- 0006 (HDS-3506)	18-0013	1
-	Nozzle- 1506 (HDS-3506)	18-0014	1
-	Nozzle- 4006 (HDS-3506)	18-0044	1
-	Nozzle- 0006.5 (HDS-3006)	18-0328	1
-	Nozzle- 1506.5 (HDS-3006)	18-0329	1
-	Nozzle- 2506 (HDS-3006)	18-0043	1
-	Nozzle- 4006.5 (HDS-3006)	18-0331	1
5	Quick Connect Socket	17-0006	1
6	High Pressure Hose Assembly	15-0166	1

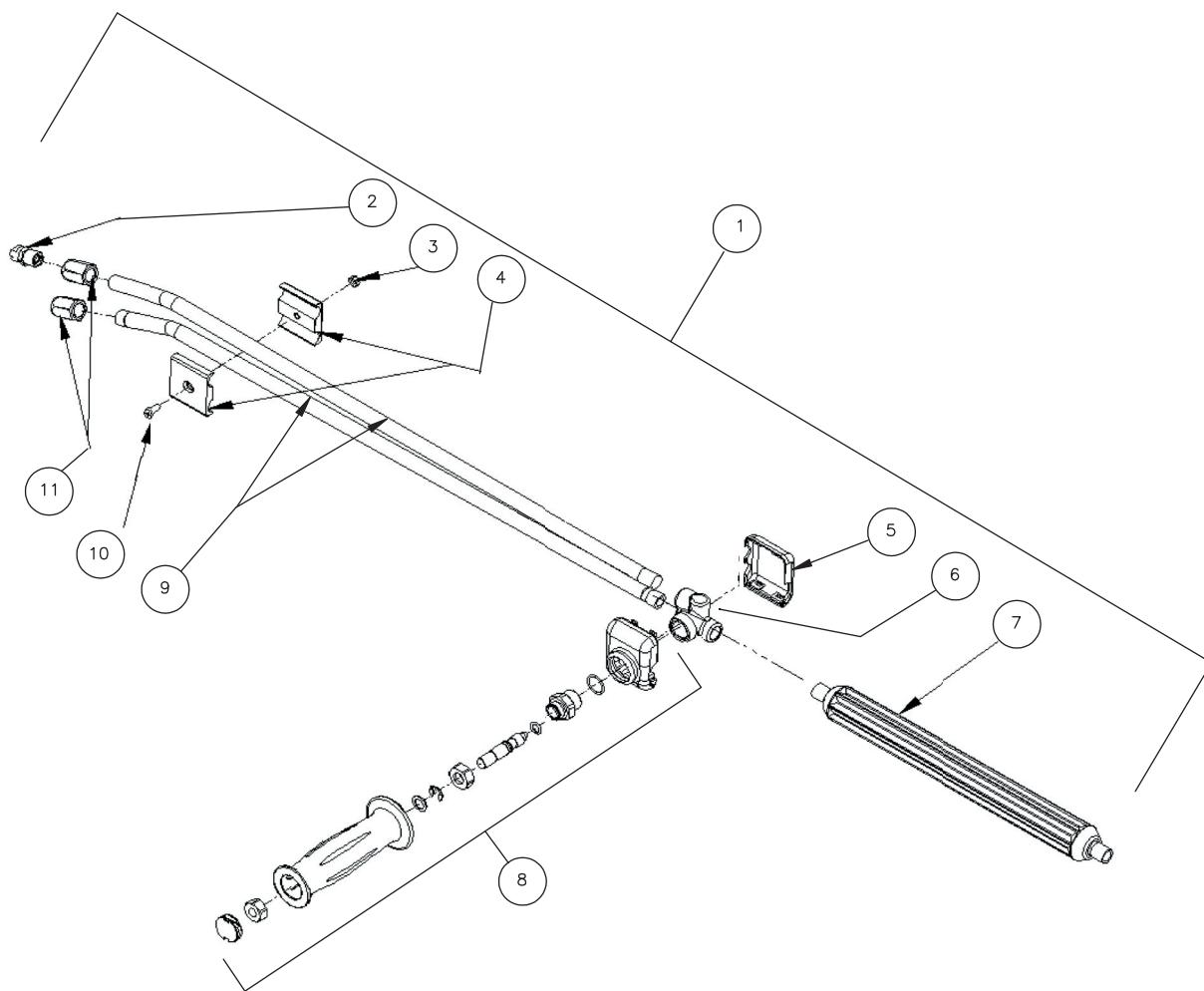
GUN ASSEMBLY (16-0392)



GUN ASSEMBLY (16-0392)

REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Plastic Housing (Left)	N/A	1	12	O-ring (See 70-0332)	N/A Sep.	1
2	Screw	N/A	7	13	Spring Housing Plug	N/A	1
3	Safety Latch	N/A	1	14	Seat (See 70-0332)	N/A Sep.	1
4	Pin	N/A	1	15	O-ring (See 70-0332)	N/A Sep.	1
5	Trigger	16-0393	1	16	Piston (See 70-0332)	N/A Sep.	1
6	Tube	16-0395	1	17	Washer	N/A	1
7	Striker	16-0394	1	18	O-ring (See 70-0332)	N/A Sep.	1
8	Body	N/A	1	19	Back-up Ring (See 70-0332)	N/A Sep.	1
9	Plastic Housing (Right)	N/A	1	20	Tube	16-0396	1
10	Ball (See 70-0332)	N/A Sep.	1		Repair Kit (Inc. 10, 12, 14-16, 18, 19)	70-0332	1
11	Spring	N/A	1				

DUAL LANCE ASSEMBLY (16-0417)

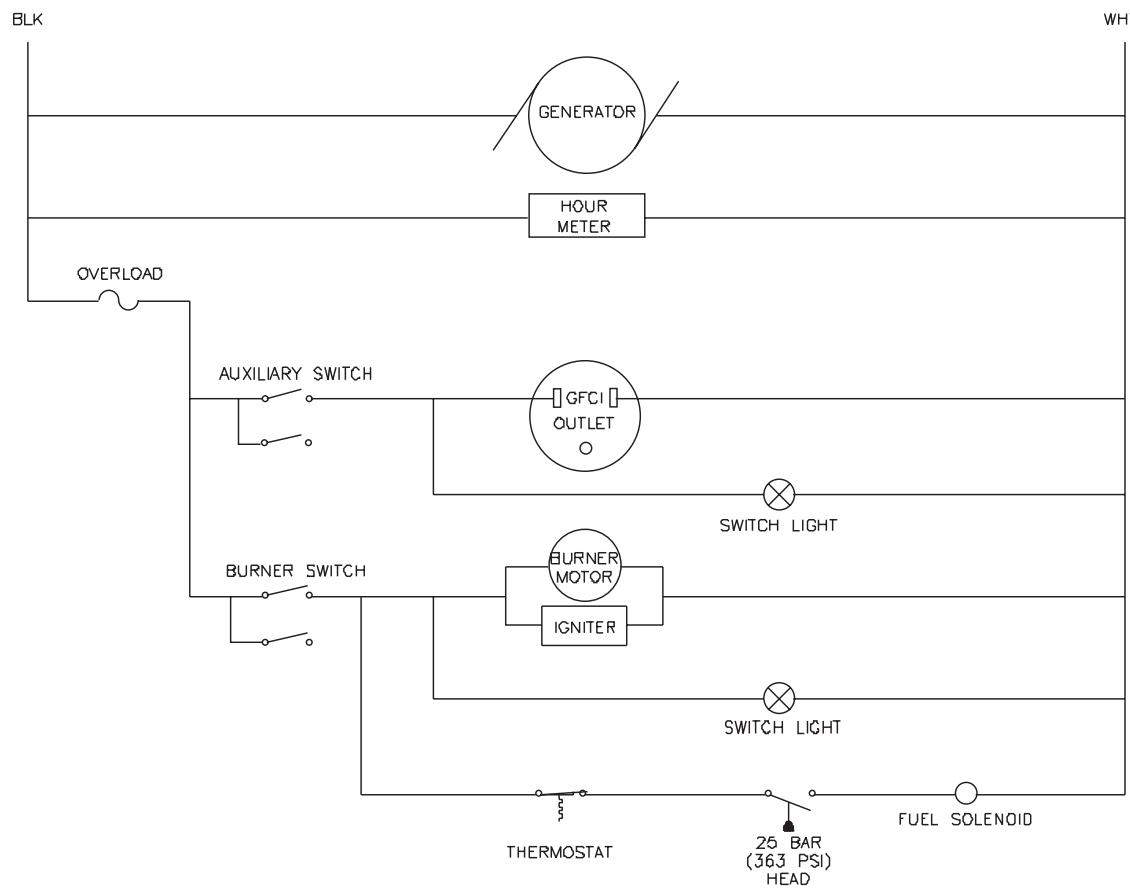


16-0416_16-0417-102405-RZ

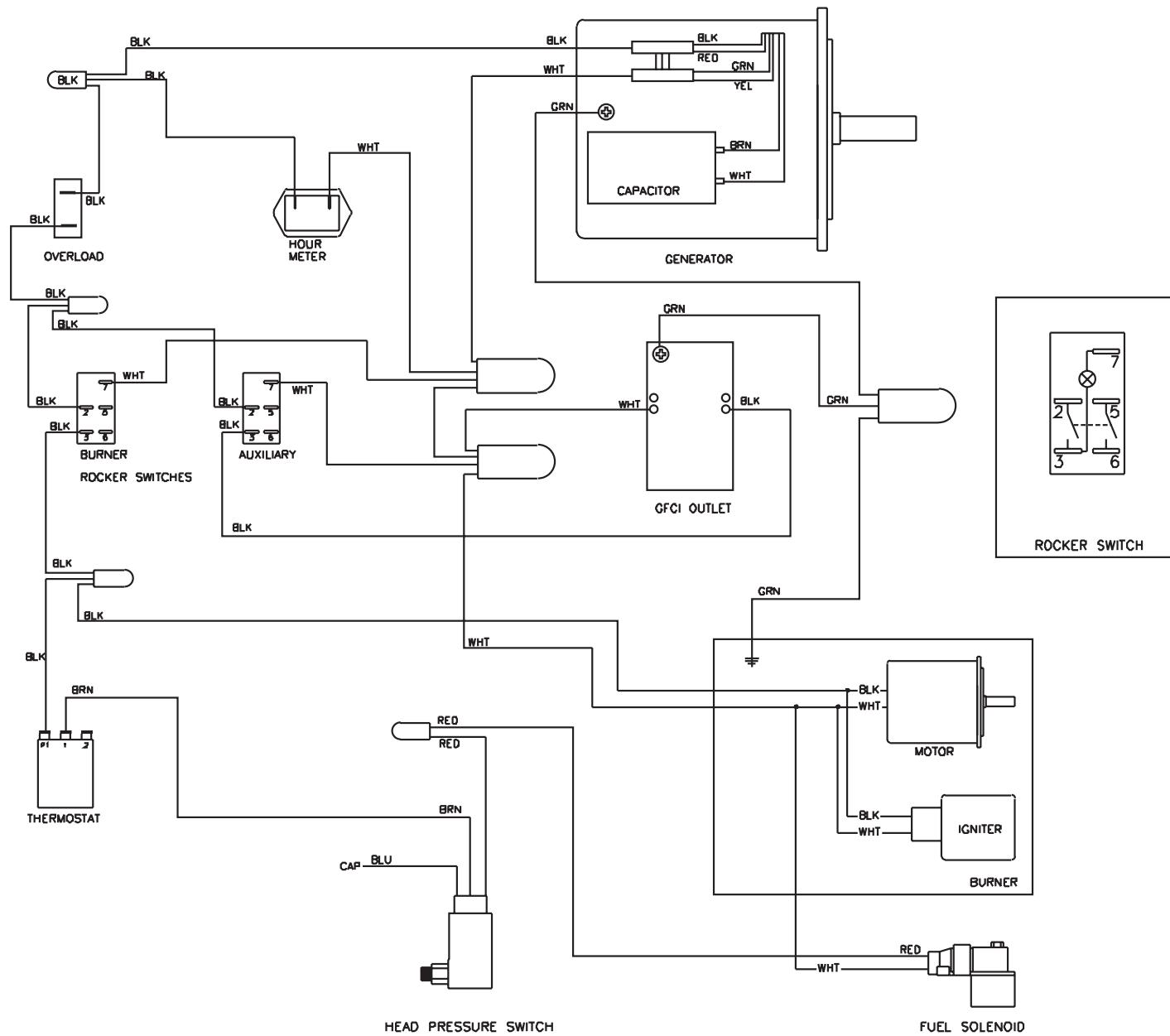
16-0417-102405-RZ

DUAL LANCE ASSEMBLY (16-0417)			
REF. #	DESCRIPTION	PART #	QTY.
1	Dual Lance Assembly - 48" (Inc. 2-11)	16-0417	1
2	Detergent Nozzle	18-0110	1
3	Nut	30-6001	1
4	Clamp	16-0420	2
5	Lower Valve Cover (See 16-0417)	N/A Sep.	1
6	Housing (See 16-0417)	N/A Sep.	1
7	Lance	16-0419	1
8	Handle Repair Kit	70-0419	1
9	Lance (See 16-0417)	N/A Sep.	2
10	Screw	27-8196	1
11	Nozzle Adapter	24-0280	2

WIRING SCHEMATIC



WIRING DIAGRAM

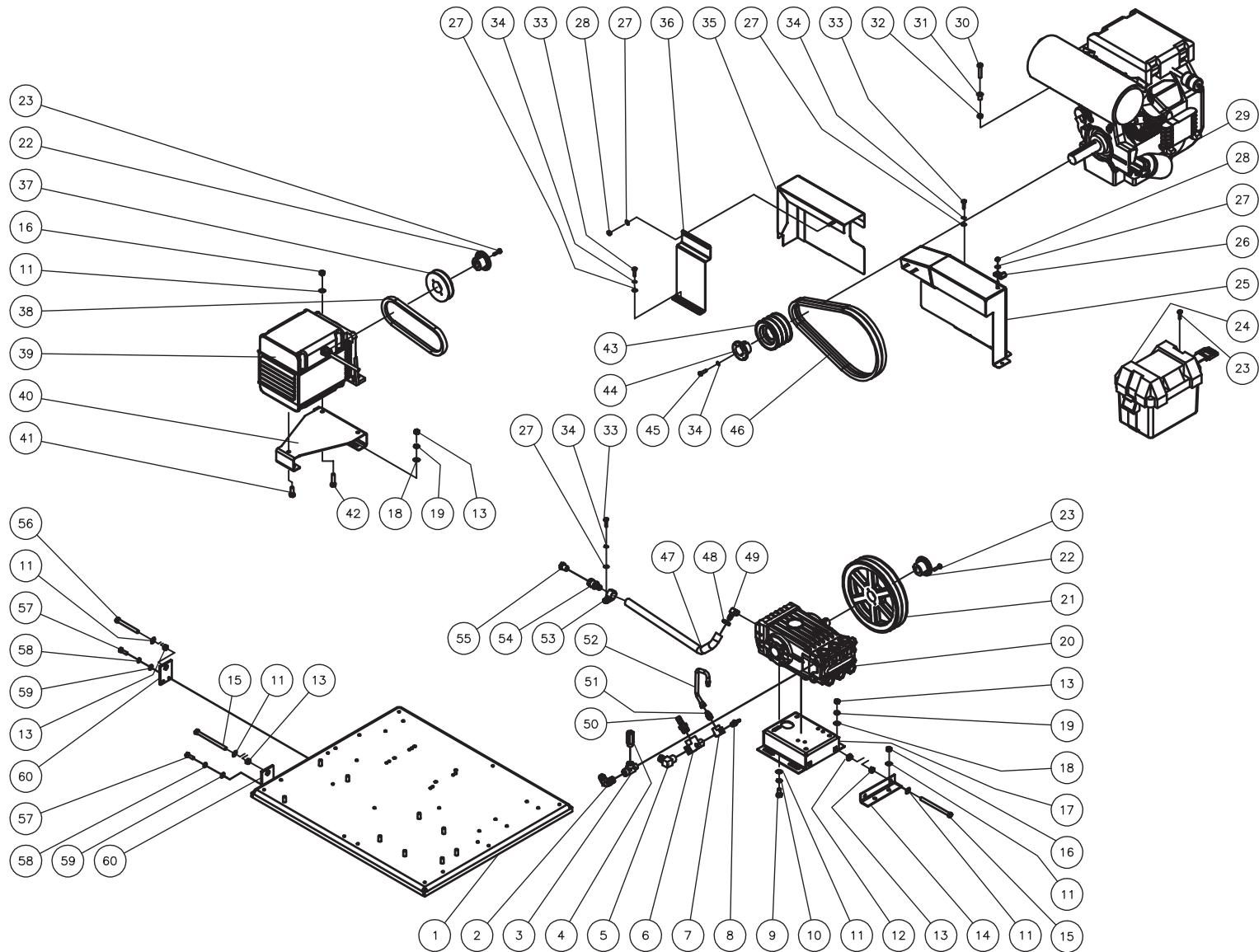


NOTES

OPTION LISTINGS

<u>OPTION</u>	<u>DESCRIPTION</u>	<u>PAGE #</u>
HX-0100	300°F STEAM OPTION	84-93
HX-0150	HDS-3005 TRAPPING UNLOADER	94-98
HX-0151	HDS-3505 TRAPPING UNLOADER	94-98
HX-0152	HDS-3506 TRAPPING UNLOADER	94-98
HX-0155	HDS-3006 TRAPPING UNLOADER	94-98

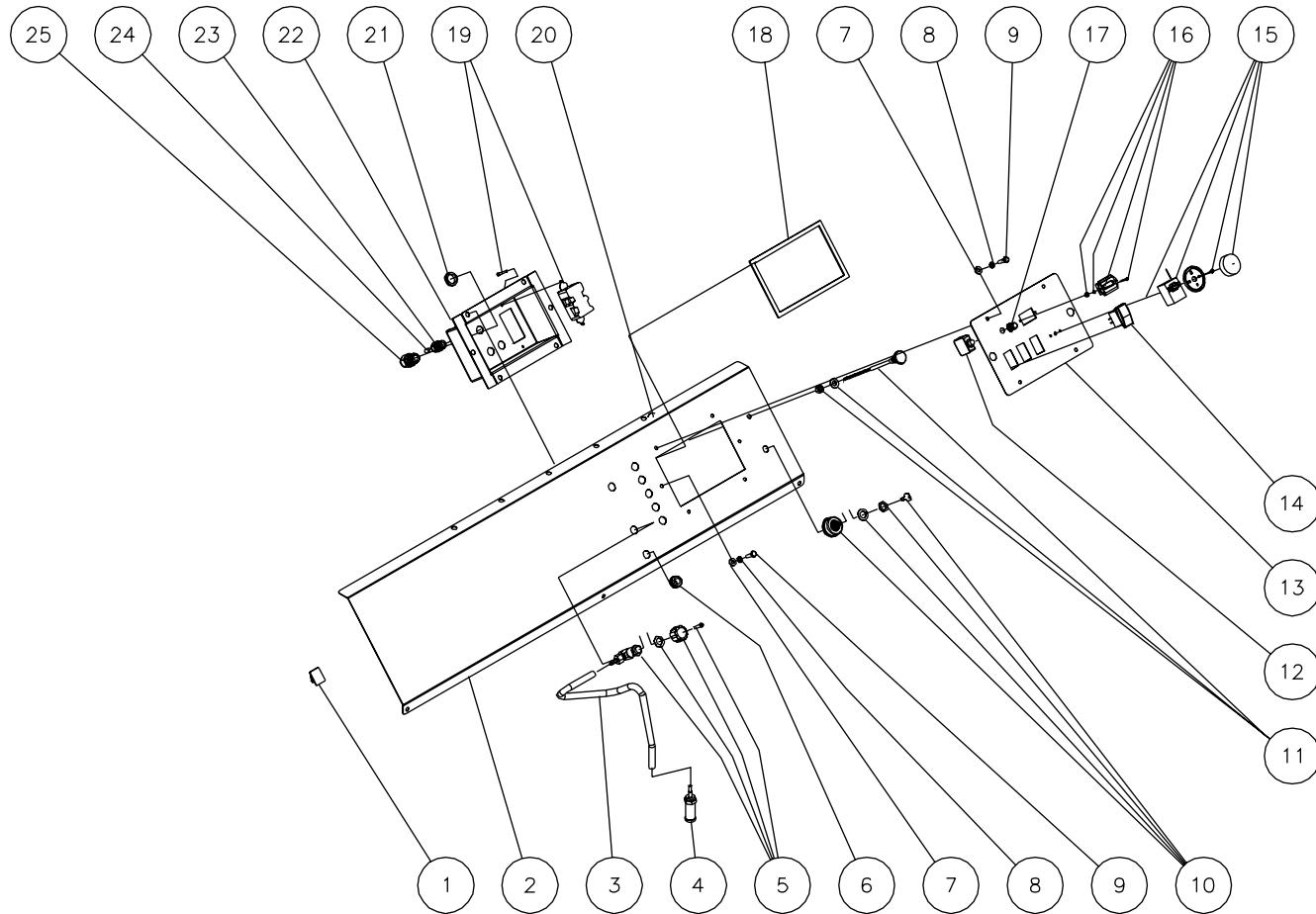
ISOLATION PLATE FOR HX-0100 STEAM OPTION AND HX-0150 & HX-0151 & HX-0152 & HX-0155 TRAPPING UNLOADER OPTIONS



ISOLATION PLATE HX-0100 STEAM
OPTION/HX-0150/HX-0151/HX-0152/
HX-0155-052104-KZ

ISOLATION PLATE FOR HX-0100 STEAM OPTION AND HX-0150 & HX-0151 & HX-0152 & HX-0155 TRAPPING UNLOADER OPTIONS											
REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Isolation Plate (HDS-3005/3505/3506)	5-0170A18	1	23	Bolt	27-0015	10	36	Bracket Cover	20-0589A18	2
-	Isolation Plate (HDS-3006/3505-0R7G)	5-0180A18	1	24	Battery Box	33-0092	1	37	Sheave	10-0028	1
2	Elbow	24-0092	1	25	Pump Beltguard	6-0092A18	1	38	Belt	11-0048	1
3	Tee	23-0058	1	26	Fuel Line Clip	43-0003	2	39	Generator	850-0298	1
4	Easy Start Valve	22-0242	1	27	Washer	28-0002	11	40	Generator Hat	20-0583A18	1
5	Elbow	23-0037	1	28	Nut	30-0155	4	41	Bolt	27-8923	1
6	Street Tee	23-0388	1	29	Engine- 24 HP Honda (HDS-3506-0H6A/0H6G)	850-0301	1	42	Bolt	27-0118	2
7	Tee	23-0127	1	-	Engine- 21 HP Vanguard (HDS-3505-0V6A/0V6G)	850-0295	1	43	Sheave	10-0061	1
8	Hose Barb	23-0051	1	-	Engine- 20 HP Honda (HDS-3505-0H6A/0H6G) (Before Serial #15011230)	850-0300	1	44	Bushing (HDS-3005-0K6A/6G, HDS-3506-0H6A/6G, HDS-3006/3505-0R7G)	9-0010	1
9	Bolt (HDS-3005/3505/3506-0H6A/0K6A/0V6A)	27-8471	4	-	Engine- 20 HP Honda (HDS-3505-0H6A/0H6G) (After Serial #15011230)	850-0349	1	-	Bushing (HDS-3505-0K6A/6G, HDS-3506-0K6A/6G)	9-0017	1
-	Bolt (HDS-3005/3505/3506-0H6G/0K6G/0V6G)	27-8884	4	-	Engine- 16 HP Vanguard (HDS-3005-0V6A/0V6G)	850-0294	1	-	Bushing (HDS-3005-0V6A/6G, HDS-3505-0H6A/6G, 0V6A/6G)	9-0005	1
10	Lockwasher (HDS-3005/3505/3506-0H6A/0K6A/0V6A)	29-0055	4	-	Engine- 18 HP Kohler (HDS-3005-0K6A/0K6G) (Before Serial #15009856)	850-0291	1	45	Screw	27-0771	2
-	Lockwasher (HDS-3005/3505/3506-0H6G/0K6G/0V6G)	29-0054	4	-	Engine- 18 HP Kohler (HDS-3005-0K6A/0K6G) (After Serial #15009856)	850-0332	1	46	Belt (HDS-3006)	11-0051	2
11	Washer	28-0023	9	-	Engine- 25 HP Kohler (HDS-3006-0K6A/0K6G)	850-0293	1	-	Belt (HDS-3005/3505)	11-0052	2
12	Clip Nut	30-6025	2	-	Engine- 20 HP Kohler (HDS-3505-0K6A / Before Serial #15011577) (HDS-3505-0K6G / Before Serial #15011286)	850-0292	1	47	Hose	15-0007	1
13	Hex Nut	30-0006	11	-	Engine- 20 HP Kohler (HDS-3505-0K6A / After Serial #15011577) (HDS-3505-0K6G / After Serial #15011286)	850-0333	1	48	Clamp	42-0011	1
14	Tension Bracket	20-0584A18	1	-	Engine- 19 HP Deutz Ruggenini (HDS-3006/3505-0R7G)	1-0137	1	49	Elbow	23-0119	1
15	Bolt	27-0133	3	30	Bolt (HDS-3005/3505/3506-0H6A/6G, 0V6A/6G)	27-0070	4	50	Hose Barb	23-0045	1
16	Nut	30-0159	4	-	Bolt (HDS-3005/3505/3506-0K6A/0K6G)	27-0170	4	51	Adapter	23-0247	1
17	Pump Hat	5-0153A01	1	-	Bolt (HDS-3006/3505-0R7G)	27-0118	4	52	Hose Assembly	15-0140	1
-	Pump Hat (HDS-3005-0K6A/0V6A)	5-0154A01	1	31	Shim (HDS-3005/3505/3506-0H6A/0H6G)	33-0169	4	53	Clip	33-0291	1
18	Washer	28-0030	7	-	Washer (HDS-3005/3505-0V6A/0V6G)	28-0003	4	54	Hose Barb	23-0360	1
19	Lockwasher	29-0008	7	-	Washer (HDS-3005/3505/3506-0K6A/0K6G)	28-0023	4	55	Plug	23-0411	1
20	Pump (HDS-3005/3505/3506-0H6G/0K6G/0V6G, HDS-3006/3505-0R7G)	3-0202	1	-	Washer (HDS-3006/3505-0R7G)	28-0022	8	56	Bolt	27-0127	1
-	Pump (HDS-3505/3506-0H6A/0K6A/0V6A)	3-0212	1	32	Nut (HDS-3005/3505/3506-0H6A/6G, 0V6A/6G)	30-0157	4	56	Bolt	27-0067	4
-	Pump (HDS-3005-0K6A/0V6A)	3-0211	1	-	Nut (HDS-3005/3505/3506-0K6A/6G, HDS-3005/3505-0R7G)	30-0159	4	57	Lockwasher	29-0007	4
21	Sheave (HDS-3005/3505)	10-0037	1	33	Bolt	27-0016	7	58	Washer	28-0003	4
-	Sheave (HDS-3506)	10-0012	1	34	Lockwasher	29-0006	9	60	Generator Tension Bracket	20-0587A18	2
22	Bushing	9-0017	2	35	Generator Beltguard	6-0091A18	1				

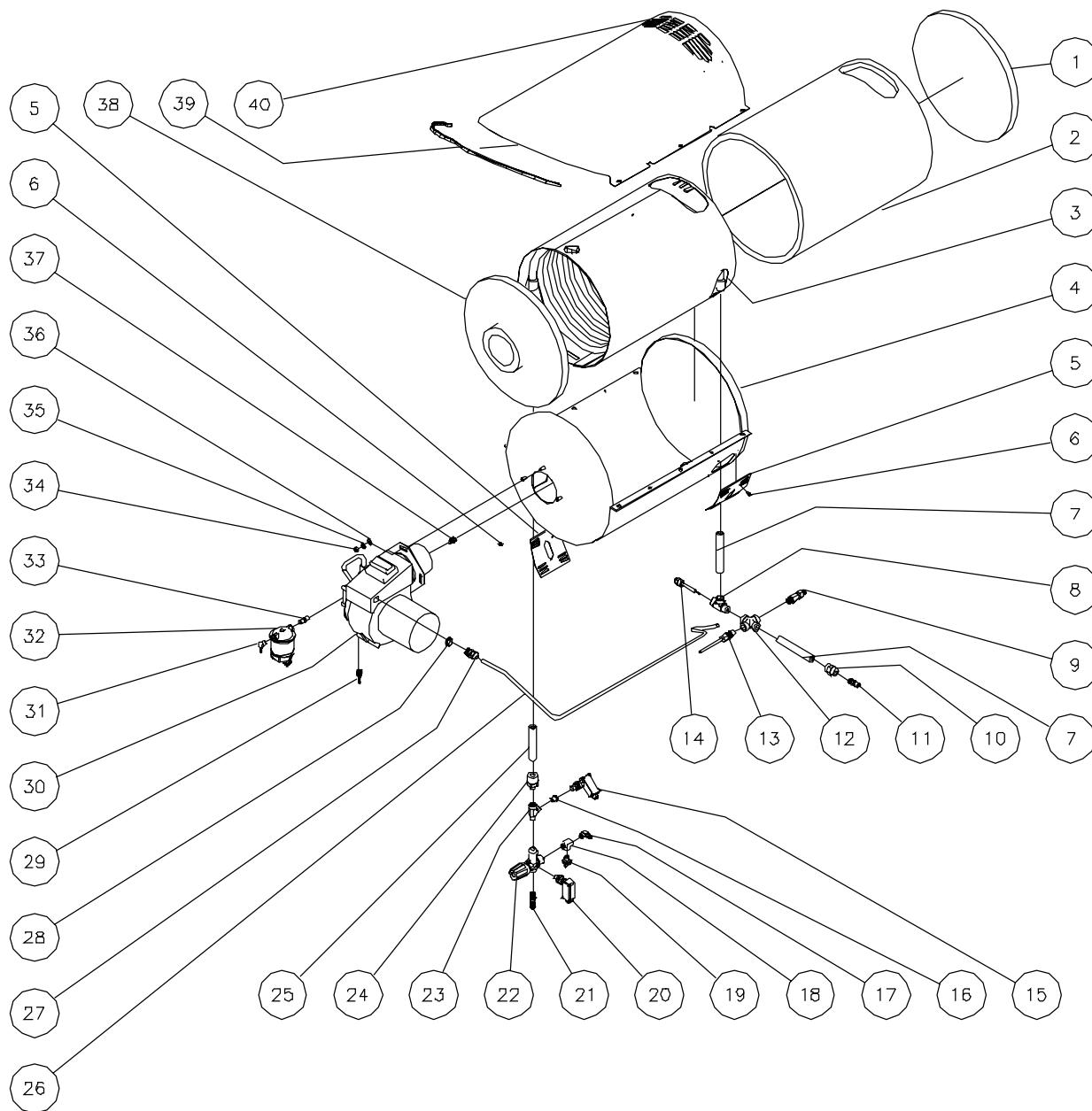
CONTROL PANEL FOR HX-0100 STEAM OPTION



CONTROL PANEL HX-0100 STEAM OPTION-061801-BAR

CONTROL PANEL FOR HX-0100 STEAM OPTION								
REF. #	DESCRIPTION	PART #	QTY.		REF. #	DESCRIPTION	PART #	QTY.
1	Wire Clip	33-0264	5		14	Rocker Switch	32-0669	3
2	Control Panel	21-0143	1		15	Adjustable Thermostat	22-0310	1
3	Hose *(Six Feet Required)	15-0021	1		16	Hour Meter	32-0668	1
4	Detergent Strainer w/Check Valve	19-0056	1		17	Circuit Breaker	32-0441	1
5	Detergent Valve	22-0226	1		18	Electric Box Gasket	26-0248	2
6	Grommet	33-0001	6		19	GFCI Outlet	32-0245	1
7	Washer	28-0002	6		20	Locknut	32-0587	3
8	Lockwasher	29-0006	6		21	Locknut	32-0108	2
9	Bolt	27-0016	6		22	Electric Box	20-0582A18	1
10	Key Switch (See Engine Assembly)	N/A Sep.	1		23	Strain Relief	32-0586	3
11	Cable Kill Lever	33-0081	1		24	Strain Relief Plug	32-0708	1
12	Circuit Breaker	32-0438	1		25	Strain Relief	32-0437	2
13	Electric Panel	21-0147	1	*Must Order in One Foot Lengths				

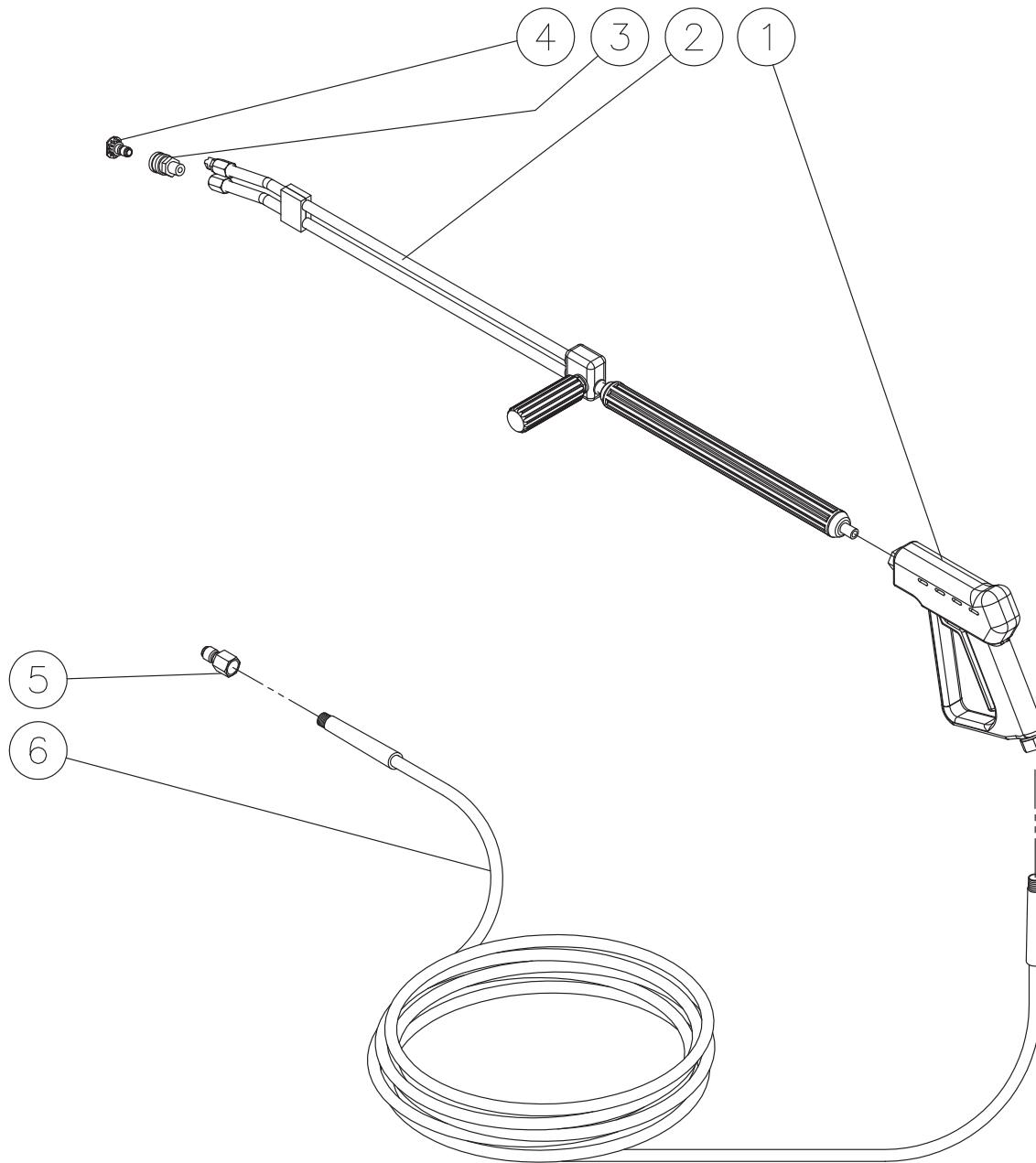
HEAT EXCHANGER ASSEMBLY FOR HX-0100 STEAM OPTION



HEAT EXCHANGER ASSY HX-0100
STEAM OPTION-061801-BAR

HEAT EXCHANGER ASSEMBLY FOR HX-0100 STEAM OPTION							
REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Insulation Disc	33-0346	1	22	Unloader Assembly	850-0267	1
2	Insulation Blanket	850-0279	1	23	Tee	23-0058	1
3	Coil Assembly	66-0014	1	24	Reducer	24-0048	1
4	Bottom Wrap Assembly	21-0145	1	25	Pipe Nipple	24-0245	1
5	Patch Plate	20-0537A01	2	26	Cord *(Five Feet Required)	32-0247	1
6	Screw	27-3062	8	27	Strain Relief	32-0437	1
7	Pipe Nipple	24-0254	2	28	Locknut	32-0108	1
8	Tee	24-0242	1	29	Hose Barb	23-0051	1
9	Pressure Relief Valve	22-0309	1	30	Burner	4-0017	1
10	Adapter	24-0243	1	31	Elbow	23-0054	1
11	Quick Connect Plug	17-0005	1	32	Fuel Water Separator	19-0070	1
12	Cross	24-0241	1	33	Hex Nipple	24-0145	1
13	Hi Limit	32-0667	1	34	Hex Nut	30-0006	3
14	Adjustable Thermostat	23-0310	1	35	Lockwasher	29-0008	3
15	Pressure Switch	22-0243	1	36	Flatwasher	28-0023	3
16	Reducer	23-0017	1	37	Nozzle- 2.75	18-0361	1
17	Elbow	23-0119	1	-	Nozzle- 3.00	18-0363	1
18	Tee	23-0127	1	38	Insulation Drum Head	33-0345	1
19	Valve	22-0208	1	39	Edging *(Three Feet Required)	33-0020	1
20	Pressure Switch	22-0171	1	40	Top Wrap	21-0129	1
21	Elbow	24-0092	1	*Must Order in One Foot Lengths			

GUN/WAND/HOSE ASSEMBLY FOR HX-0100 STEAM OPTION (AFTER SERIAL #15023975)



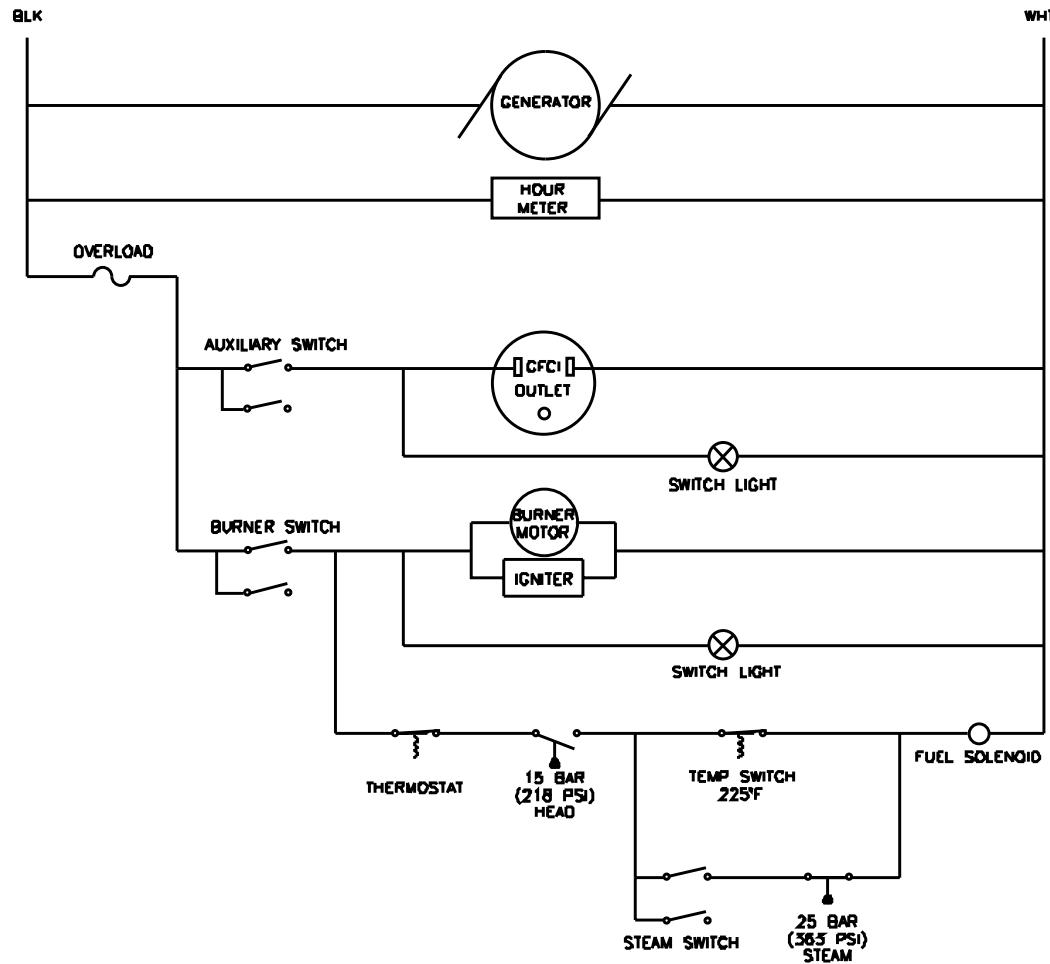
GUN HOSE ASSY HX-0100 STEAM OPTION-101805-KZ

HDS GUN WAND HOSE ASSY HX-0100 STEAM OPTION-101805-KZ

GUN/WAND/HOSE ASSEMBLY FOR HX-0100 STEAM OPTION (AFTER SERIAL #15023975)			
REF. #	DESCRIPTION	PART #	QTY.
1	Gun Assembly	16-0392	1
2	Lance Extension Assembly	16-0417	1
3	Quick Connect Socket	17-0028	1
4	Nozzle- 0005 (HDS-3505)	18-0003	1
-	Nozzle- 1505 (HDS-3505)	18-0004	1
-	Nozzle- 2505 (HDS-3005/3505)	18-0153	1
-	Nozzle- 4005 (HDS-3505)	18-0180	1
-	Nozzle- 0005.5 (HDS-3005)	18-0035	1
-	Nozzle- 1505.5 (HDS-3005)	18-0041	1
-	Nozzle- 2505.5 (HDS-3506)	18-0062	1
-	Nozzle- 4005.5 (HDS-3005)	18-0132	1
-	Nozzle- 0006 (HDS-3506)	18-0013	1
-	Nozzle- 1506 (HDS-3506)	18-0014	1
-	Nozzle- 4006 (HDS-3506)	18-0044	1
-	Nozzle- 0006.5 (HDS-3006)	18-0328	1
-	Nozzle- 1506.5 (HDS-3006)	18-0329	1
-	Nozzle- 2506.5 (HDS-3006)	18-0330	1
-	Nozzle- 4006.5 (HDS-3006)	18-0331	1
-	Steam Nozzle Assembly	850-0277	1
5	Quick Connect Plug	17-0006	1
6	High Pressure Hose Assembly	15-0077	1

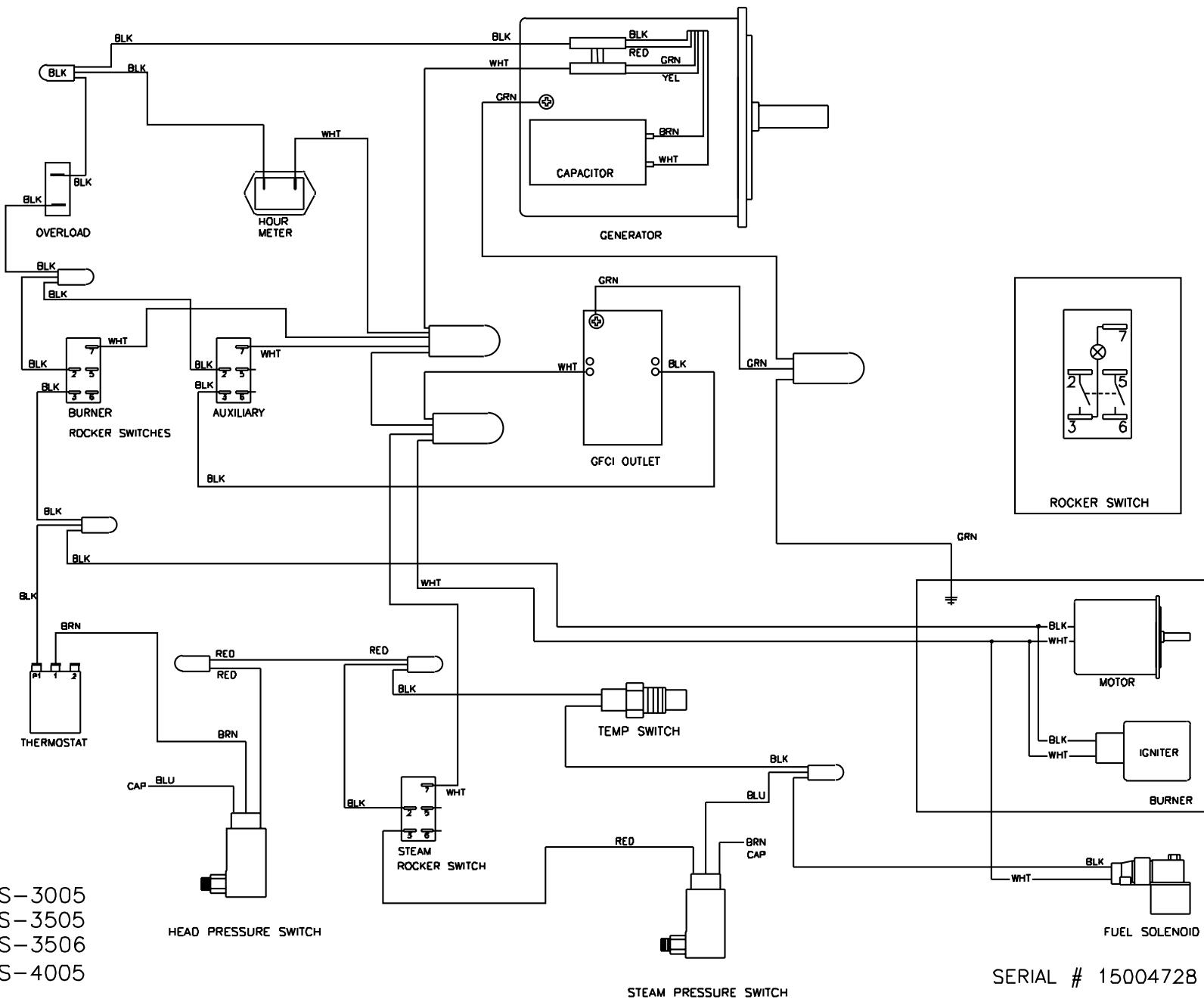
WIRING SCHEMATIC HX-0100 STEAM OPTION

WIRE SCHEMATIC HX-0100 STEAM OPTION-080702-KZ



SERIAL # 15004728

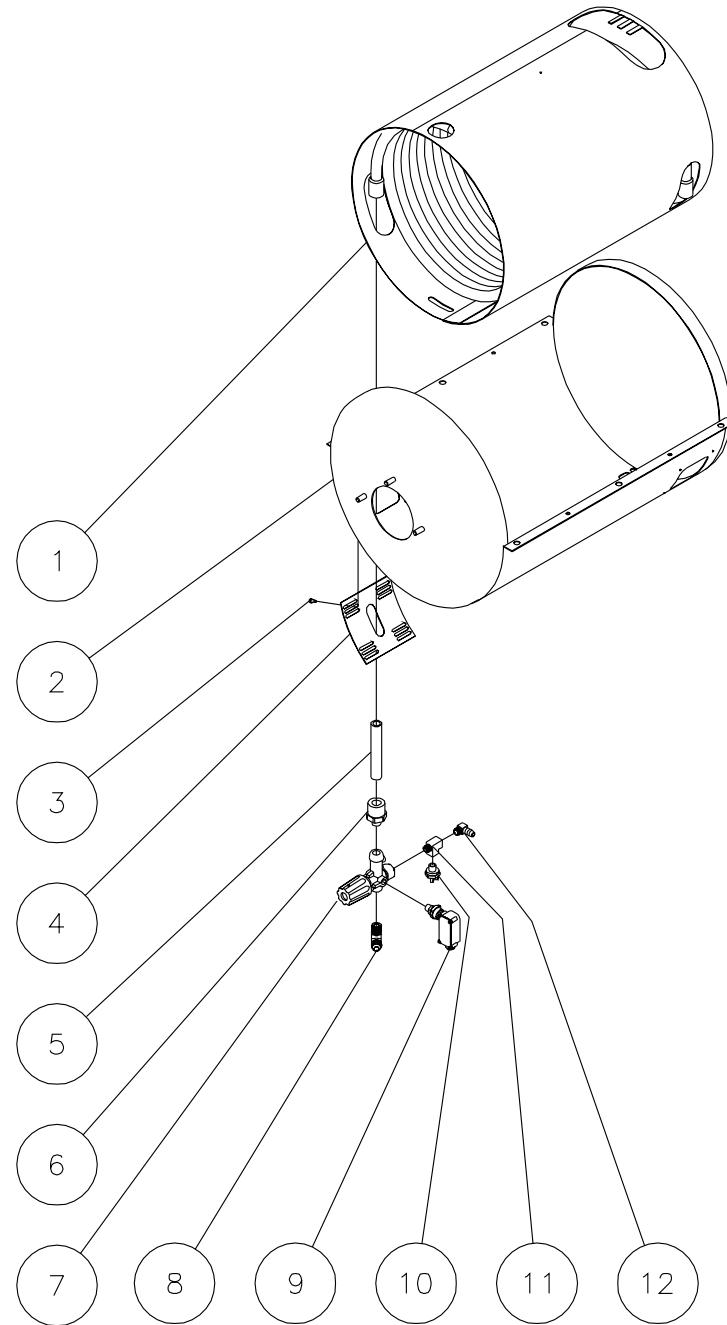
WIRING DIAGRAM HX-0100 STEAM OPTION



HDS-3005
HDS-3505
HDS-3506
HDS-4005

SERIAL # 15004728

HEAT EXCHANGER ASSEMBLY FOR HX-0150 & HX-0151 & HX-0152 & HX-0155 TRAPPING UNLOADER OPTION

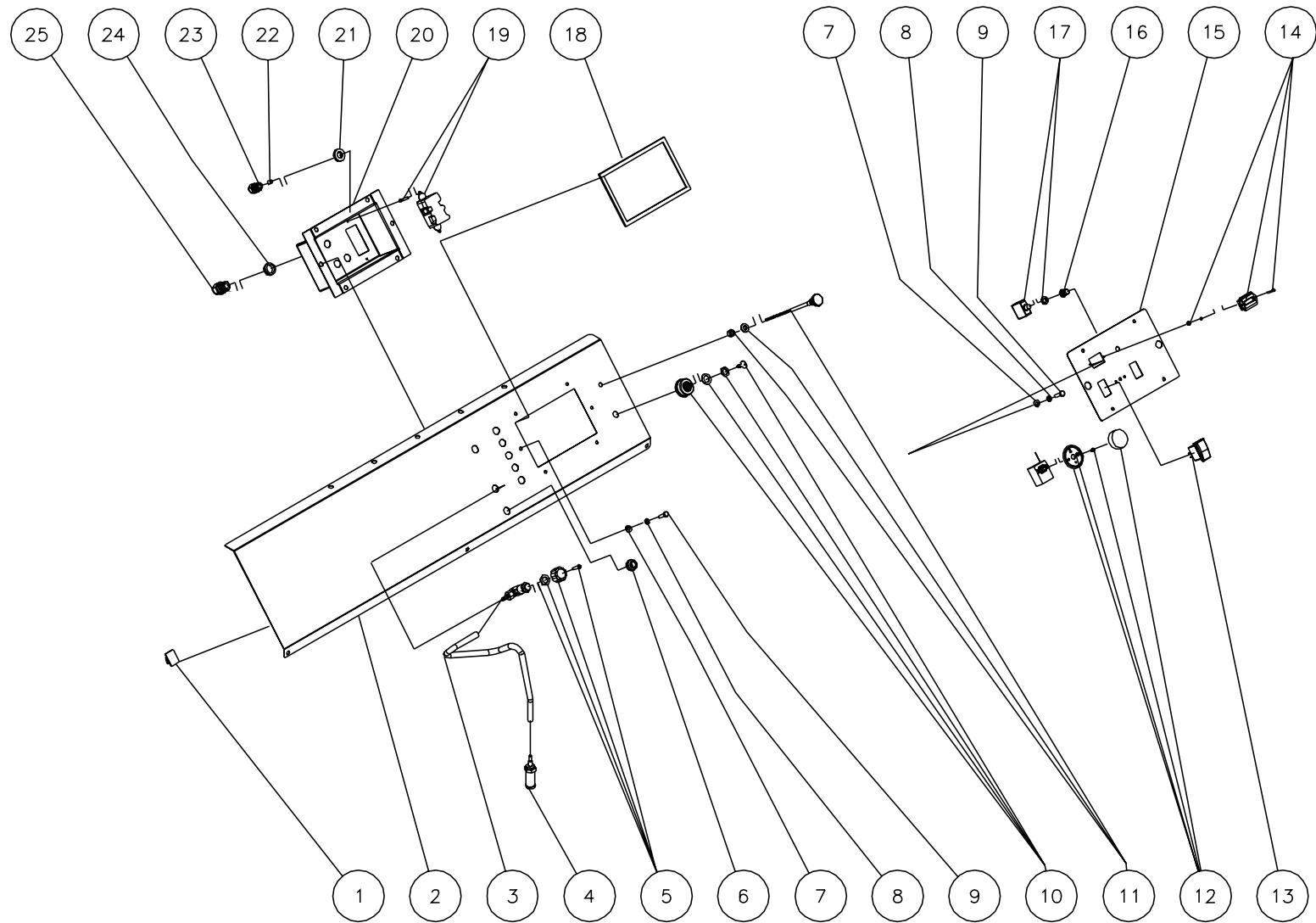


HEAT EXCHANGER ASSY HX-0150/HX-0151/
HX-0152/HX-0155 OPTION-051603-KZ

HDS HEAT EXCHANGER ASSY HX-0150_HX-0151_HX-0152_HX-0155 OPTION-051603-KZ

HEAT EXCHANGER ASSEMBLY FOR HX-0150 & HX-0151 & HX-0152 & HX-0155 TRAPPING UNLOADER OPTION			
REF. #	DESCRIPTION	PART #	QTY.
1	Coil Assembly	66-0014	1
2	Bottom Wrap Assembly	21-0145	1
3	Screw	27-3062	4
4	Patch Plate	20-0537A01	1
5	Pipe Nipple	24-0245	1
6	Reducer	24-0048	1
7	Unloader	850-0252	1
8	Elbow	24-0092	1
9	Pressure Switch	22-0171	1
10	Valve	22-0208	1
11	Tee	23-0127	1
12	Elbow	23-0119	1

CONTROL PANEL FOR HX-0150 & HX-0151 & HX-0152 & HX-0155 TRAPPING UNLOADER OPTION

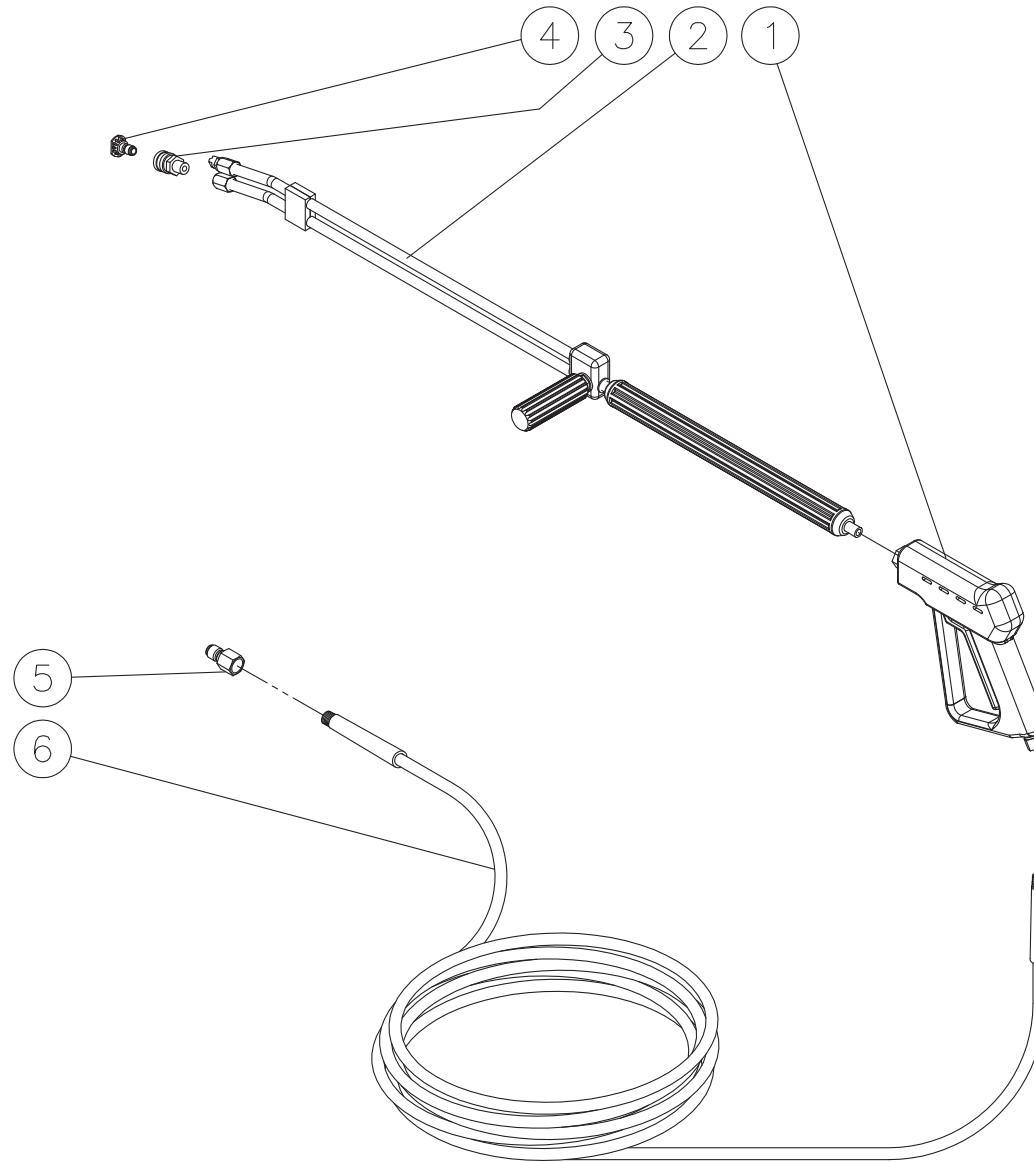


HDS CONTROL PANEL HX-150/HX-0151/
HX-0152/HX-0155 OPTION-051603-KZ

HDS CONTROL PANEL HX-0150/HX-0151/HX-0152/HX-0155 OPTION-070103-KZ

CONTROL PANEL FOR HX-0150 & HX-0151 & HX-0152 & HX-0155 TRAPPING UNLOADER OPTION							
REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Wire Clip	33-0264	5	14	Hour Meter	32-0668	1
2	Control Panel	21-0143	1	15	Electric Box Panel	21-0144	1
3	Hose *(Six Feet Required)	15-0021	1	16	Circuit Breaker Boot	32-0441	1
4	Detergent Strainer w/Check Valve	19-0056	1	17	Circuit Breaker	32-0438	1
5	Detergent Valve	22-0226	1	18	Electric Box Gasket	26-0248	2
6	Grommet	33-0001	6	19	GFCI Outlet	32-0245	1
7	Washer	28-0002	6	20	Electric Box	20-0582A18	1
8	Lockwasher	29-0006	6	21	Locknut	32-0587	3
9	Bolt	27-0016	6	22	Strain Relief Plug	32-0708	1
10	Key Switch (See Engine Assembly)	N/A Sep.	1	23	Strain Relief	32-0586	3
11	Cable Kill Lever	33-0081	1	24	Locknut	32-0108	2
12	Adjustable Thermostat	32-0734	1	25	Strain Relief	32-0437	2
13	Rocker Switch	32-0669	2	*Must Order in One Foot Lengths			

GUN/WAND/HOSE ASSEMBLY FOR HX-0150 & HX-0151 & HX-0152 & HX-0155 TRAPPING UNLOADER OPTION (AFTER SERIAL #15023975)



GUN WAND HOSE ASSY HX-0150/HX-0151/
HX-0152/HX-0155 OPTION-101805-KZ

HDS GUN WAND HOSE ASSY HX-0150/HX-0151/HX-0152_HX-0155 OPTION-101805-KZ

GUN/WAND/HOSE ASSEMBLY FOR HX-0150 & HX-0151 & HX-0152 & HX-0155 TRAPPING UNLOADER OPTION (AFTER SERIAL #15023975)			
REF. #	DESCRIPTION	PART #	QTY.
1	Gun Assembly	16-0392	1
2	Lance Extension Assembly	16-0417	1
3	Quick Connect Socket	17-0028	1
4	Nozzle- 0005 (HDS-3505) (HX-0151)	18-0003	1
-	Nozzle- 1505 (HDS-3505) (HX-0151)	18-0004	1
-	Nozzle- 2504 (HDS-3505/3506) (HX-0151/HX-0152)	18-0030	1
-	Nozzle- 4005 (HDS-3505) (HX-0151)	18-0180	1
-	Nozzle- 0005.5 (HDS-3005) (HX-0150)	18-0035	1
-	Nozzle- 1505.5 (HDS-3005) (HX-0150)	18-0041	1
-	Nozzle- 2505.5 (HDS-3005) (HX-0150)	18-0060	1
-	Nozzle- 4005.5 (HDS-3005) (HX-0150)	18-0132	1
-	Nozzle- 0006 (HDS-3506) (HX--0152)	18-0013	1
-	Nozzle- 1506 (HDS-3506) (HX--0152)	18-0014	1
-	Nozzle- 4006 (HDS-3506) (HX--0152)	18-0044	1
-	Nozzle- 0006.5 (HDS-3006) (HX-0155)	18-0328	1
-	Nozzle- 1506.5 (HDS-3006) (HX--0155)	18-0329	1
-	Nozzle- 2504 (HDS-3006) (HX--0155)	18-0030	1
-	Nozzle- 4006.5 (HDS-3006) (HX--0155)	18-0331	1
5	Quick Connect Plug	17-0006	1
6	High Pressure Hose Assembly	15-0166	1

