

**PARTS LIST FOR  
*HDC SERIES*  
(AFTER SERIAL #15019140)**

**ENGINE OIL GRADE:**

**HONDA:**

**KOLHER:**

**VANGUARD:**

**PUMP OIL GRADE:**

**PUMP OIL CAPACITY:**

**FUEL NOZZLE:**

**HDC-3005/3505:**

**HDC-4004:**

**Above 50°F = SAE30**

**SAE10W-30**

**Above 40°F = SAE30**

**Below 40°F = SAE10W-30**

**SAE 20 or 30 Non-Detergent**

**SEE INDIVIDUAL**

**MACHINE SPECIFICATIONS**

**BTU INPUT:**

**HDC-3005/3505:** 386,400

**HDC-4004:** 343,000

**PRESSURE NOZZLE SIZE:**

**HDC-3005:** 5.5

**HDC-3505:** 5.0

**HDC-4004:** 4.0

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 operating the machine, DO NOT leave the pressurized unit unattended. Shut off the unit and release trapped pressure before leaving.

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**NOTES**

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## SPECIFICATIONS FOR HDC-3005-0K6G/0V6G

MODEL NUMBER	HDC-3005-0K6G	HDC-3005-0V6G
<b>Operating Pressure (PSI/Bar):</b>	3000 / 206.8 (+/- 5%)	
<b>Water Volume (GPM/lpm):</b>	4.8 / 18.2 (+/- 5%)	
<b>Outlet Water Temperature (F/C):</b>	130°F / 54°C (+/- 10°F) rise above inlet ambient (210°F / 99°C maximum)	
<b>High Pressure Nozzle</b>	5.5	
<b>Engine:</b>	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	
Battery	BCI Group 24DC, RV / Marine Dual Purpose Deep Cycle / Cranking Battery	
Maximum No Load RPM	3600 (+/- 100)	
<b>High Pressure Pump:</b>	Belt 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	
<b>Water System:</b>		
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.	
<b>Burner Fuel System:</b>		
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	2.25 80° B Delavan	
Fuel Consumption (GPH / LPH)	2.76 / 10.45 Cont. Burning	
<b>Burner Electrical System:</b>		
Voltage	12	
Amps	16.0	
<b>Heat Exchanger:</b>	Horizontal, Side Fired, Pancake Coil	
BTU Input	386,400	
Efficiency	75% with #2 Fuel Oil / Diesel	
Smoke Density	0-3 per ASTM D2156	
<b>Safety System:</b>		
Pressure Switch	Shuts off burner fuel supply upon trigger release.	
Fuel Solenoid Valve	12 Volt, controls fuel supply to burner	
Safety Relief	Relieves excess system pressure	
<b>Hi-Limit Switch:</b>	Shuts off burner fuel supply when outlet water temperature exceeds 225°F/107°C	
<b>Unit Net Weight (Lbs/kg):</b>	725 / 329	
<b>Unit Shipping Weight (Lbs/kg):</b>	844 / 383	
<b>Unit Net Dimension (In/cm):</b>	49.5L x 33.5W x 44.5H / 125.7L x 85.1W x 113H	
<b>Unit Shipping Dimension (In/cm):</b>	57.5L x 35.5W x 59.5H / 146.1L x 90.2W x 151.1H	

## SPECIFICATIONS FOR HDC-3505-0H6G/0K6G/0V6G

MODEL NUMBER	HDC-3505-0H6G	HDC-3505-0K6G	HDC-3505-0V6G
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	
Engine:	Honda	Kohler	Vanguard
Horsepower	20.0	20.0	21.0
Engine Type		4 Stroke, Overhead Valve, Twin Cylinder	
Oil Type	Above 50°F = SAE30	SAE10-30W	Above 40°F = SAE30 / Below 40°F = SAE10W-30
Oil Capacity (oz./liter)	24 / .71	64 / 1.89	56 / 1.66
Low Oil Protection	Oil Switch	Oil Sentry™	Oil Guard™
Fuel Type		Refer to Engine Owner's Manual	
Fuel Capacity (gal./liter)		10 / 37.8	
Starting		12 Volt Electric	
Battery		BCI Group 24DC, RV / Marine Dual Purpose Deep Cycle / Cranking Battery	
Maximum No Load RPM		3600 (+/- 100)	
High Pressure Pump:		Belt 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.	
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		2.25 80° B Delavan	
Fuel Consumption (GPH / LPH)		2.76 / 10.45 Cont. Burning	
Burner Electrical System:			
Voltage		12	
Amps		16.0	
Heat Exchanger:		Horizontal, Side Fired, Pancake Coil	
BTU Input		386,400	
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		12 Volt, controls fuel supply to burner	
Safety Relief		Relieves excess system pressure	
Hi-Limit Switch:		Shuts off burner fuel supply when outlet water temperature exceeds 225°F/107°C	
Unit Net Weight (Lbs/kg):		725 / 329	
Unit Shipping Weight (Lbs/kg):		844 / 383	
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	

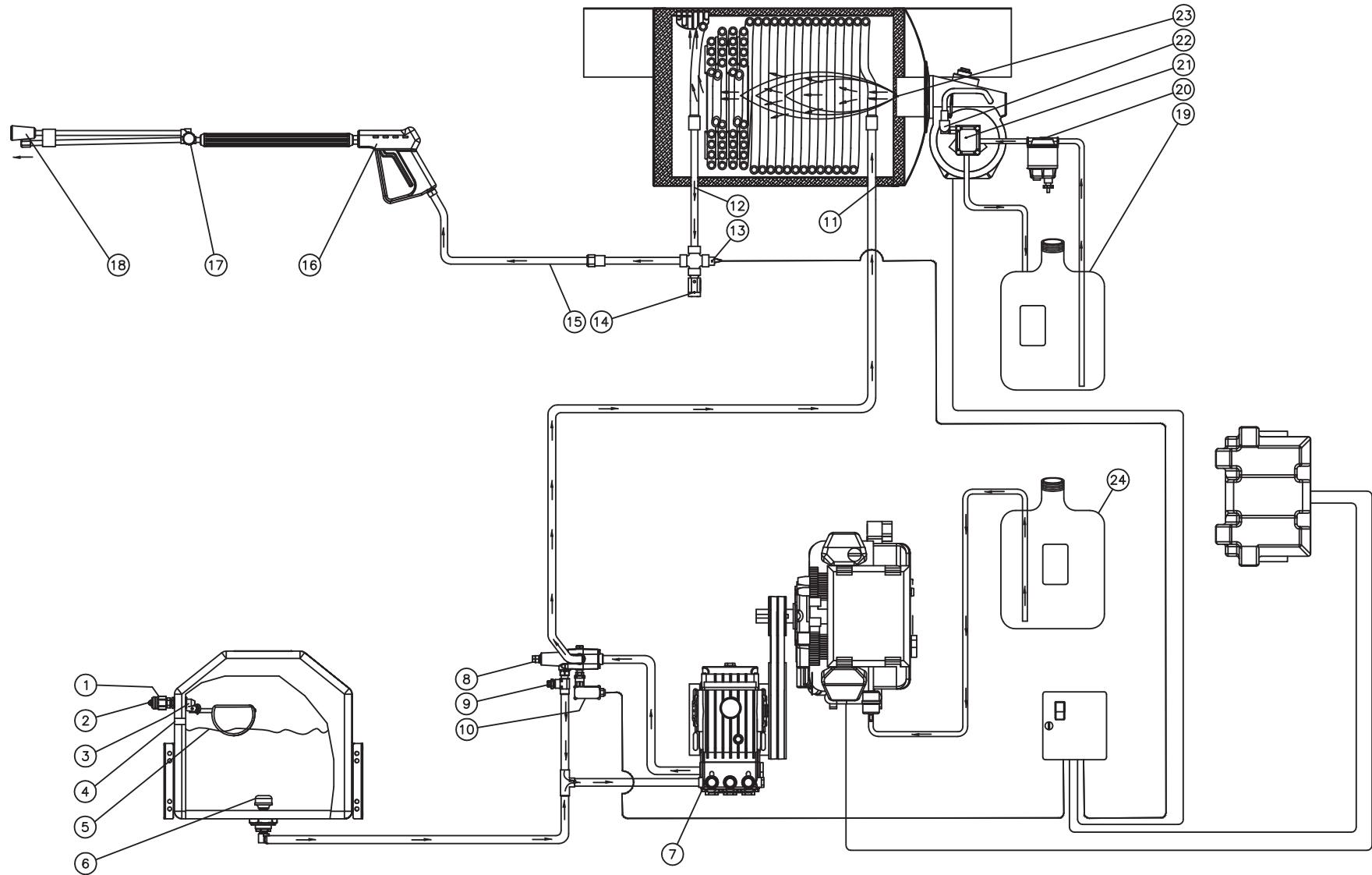
## SPECIFICATIONS FOR HDC-4004-0H6A/0K6A/0V6A

MODEL NUMBER	HDC-4004-0H6A	HDC-4004-0K6A	HDC-4004-0V6A
Operating Pressure (PSI/Bar):		4000 / 275.8 (+/- 5%)	
Water Volume (GPM/lpm):		4.0 / 15.1 (+/- 5%)	
Outlet Water Temperature (F/C):		130°F / 54°C (+/- 10°F) rise above inlet ambient (210°F / 99°C maximum)	
High Pressure Nozzle		4.0	
Engine:	Honda	Kohler	Vanguard
Horsepower	20.0		21.0
Engine Type		4 Stroke, Overhead Valve, Twin Cylinder	
Oil Type	Above 50°F = SAE30	SAE10-30W	Above 40°F = SAE30 / Below 40°F = SAE10W-30
Oil Capacity (oz./liter)	24 / 1.5	64 / 2.0	56 / 1.67
Low Oil Protection	Oil Switch	Oil Sentry™	Oil Guard
Fuel Type		Refer to Engine Owner's Manual	
Fuel Capacity (gal./liter)		10 / 37.8	
Starting		12 Volt Electric	
Battery		BCI Group 24DC, RV / Marine Dual Purpose Deep Cycle / Cranking Battery	
Maximum No Load RPM		3600 (+/- 100)	
High Pressure Pump:		Belt 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		2.00 80° B Delavan	
Fuel Consumption (GPH / LPH)		2.45 / 9.27 Cont. Burning	
Burner Electrical System:			
Voltage		12	
Amps		16.0	
Heat Exchanger:		Horizontal, Side Fired, Pancake Coil	
BTU Input		343,000	
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		12 Volt, controls fuel supply to burner	
Safety Relief		Relieves excess system pressure	
Hi-Limit Switch:		Shuts off burner fuel supply when outlet water temperature exceeds 225°F/107°C	
Unit Net Weight (Lbs/kg):		725 / 329	
Unit Shipping Weight (Lbs/kg):		844 / 383	
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	

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**NOTES**

## FLOW CHART FOR HDC-3005/3505



## GENERAL THEORY OF OPERATION FOR HDC-3005/3505

**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.

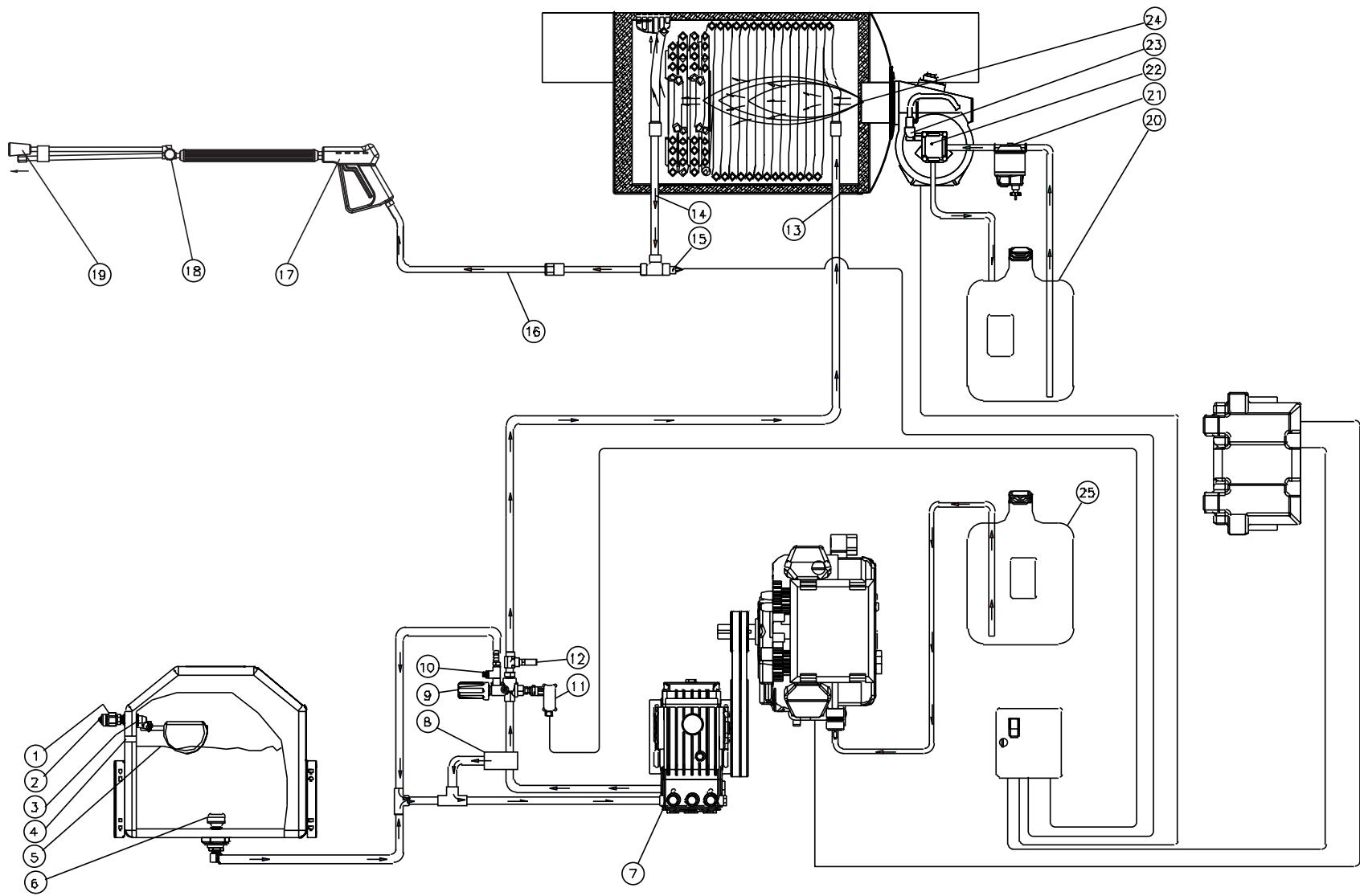
The water is then drawn through the WATER STRAINER (6) and into the TRIPLEX HIGH PRESSURE PUMP (7) which has an UNLOADER (8) that bypasses the water when the trigger gun is closed. To protect the pump from heated water during this bypass stage, a HEAT DUMP VALVE (9) will open at 140°F/60°C allowing the 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.

From there, the water flows through HEAT EXCHANGER INLET (11) where it is heated when the burner is on. As the water exits the HEAT EXCHANGER OUTLET (12), it enters a safety system which protects the operator from danger. The system also contains a HI-LIMIT TEMPERATURE SWITCH (13) which senses the water temperature and shuts off the fuel supply to the burner if the water gets too hot. If the unloader fails to bypass water or the burner remains on when the trigger gun is closed, the SAFETY RELIEF (14) will relieve and allow water to exit safely.

The heated water then flows through the HIGH PRESSURE HOSE (15) and to the TRIGGER GUN ASSEMBLY (16) which allows the operator to control the water spray. When the trigger gun is open, the water flows through the ADJUSTABLE PRESSURE DUAL LANCE (17) and exits the NOZZLE (18).

**FUEL FLOW:** The Fuel Pump draws fuel from the FUEL TANK (19) through a replaceable FUEL FILTER/WATER SEPARATOR (20) and into the FUEL PUMP (21). Fuel exits the fuel pump, into a FUEL SOLENOID VALVE (22) which controls fuel flow to the FUEL NOZZLE (23) where it ignites and burns in the heat exchanger. The engine is operated by fuel drawn from the GAS TANK (24).

## FLOW CHART FOR HDC-4004



## GENERAL THEORY OF OPERATION FOR HDC-4004

**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.

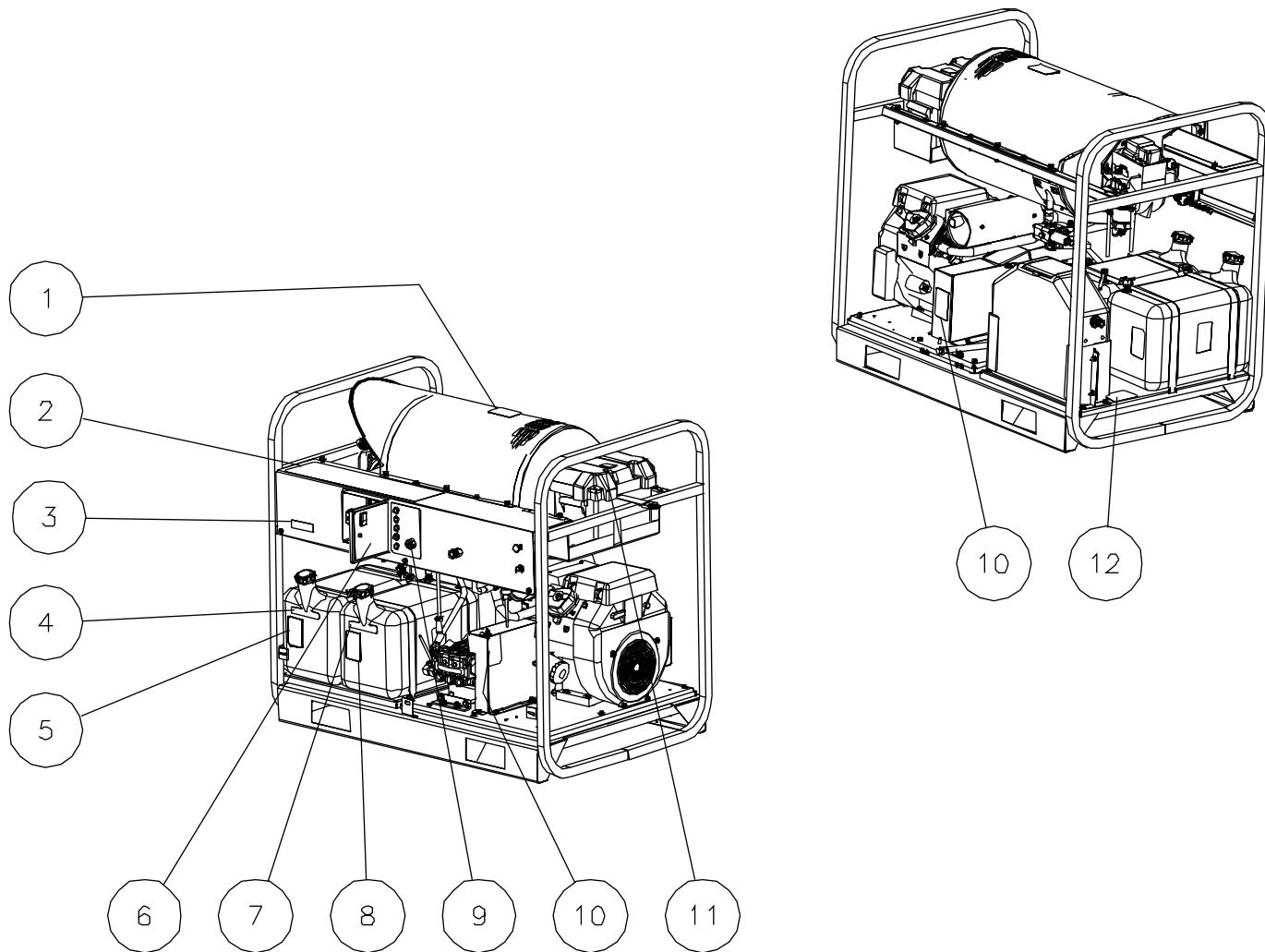
The water is then drawn through the WATER STRAINER (6) and into the TRIPLEX HIGH PRESSURE PUMP (7) which has an UNLOADER (9) that bypasses the water when the trigger gun is closed. To protect the pump from heated water during this bypass stage, a HEAT DUMP VALVE (10) will open at 140°F/60°C allowing 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.

From there, the water flows through HEAT EXCHANGER INLET (13) where it is heated when the burner is on. As the water exits the Heat EXCHANGER OUTLET (14), it enters a safety system which protects the operator from danger. The system also contains a HI-LIMIT TEMPERATURE SWITCH (15) which senses the water temperature and shuts off the fuel supply to the burner if the water gets too hot. 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 (16) and to the TRIGGER GUN ASSEMBLY (17) which allows the operator to control the water spray. When the trigger gun is open, the water flows through the ADJUSTABLE PRESSURE DUAL LANCE (18) and exits the NOZZLE (19).

**FUEL FLOW:** The Fuel Pump draws fuel from the FUEL TANK (20) through a replaceable FUEL FILTER/WATER SEPARATOR (21) and into the FUEL PUMP (22). Fuel exits the fuel pump, into a FUEL SOLENOID VALVE (23) which controls fuel flow to the FUEL NOZZLE (24) where it ignites and burns in the heat exchanger. The engine is operated by fuel drawn from the GAS TANK (25).

## SAFETY DECAL PLACEMENT

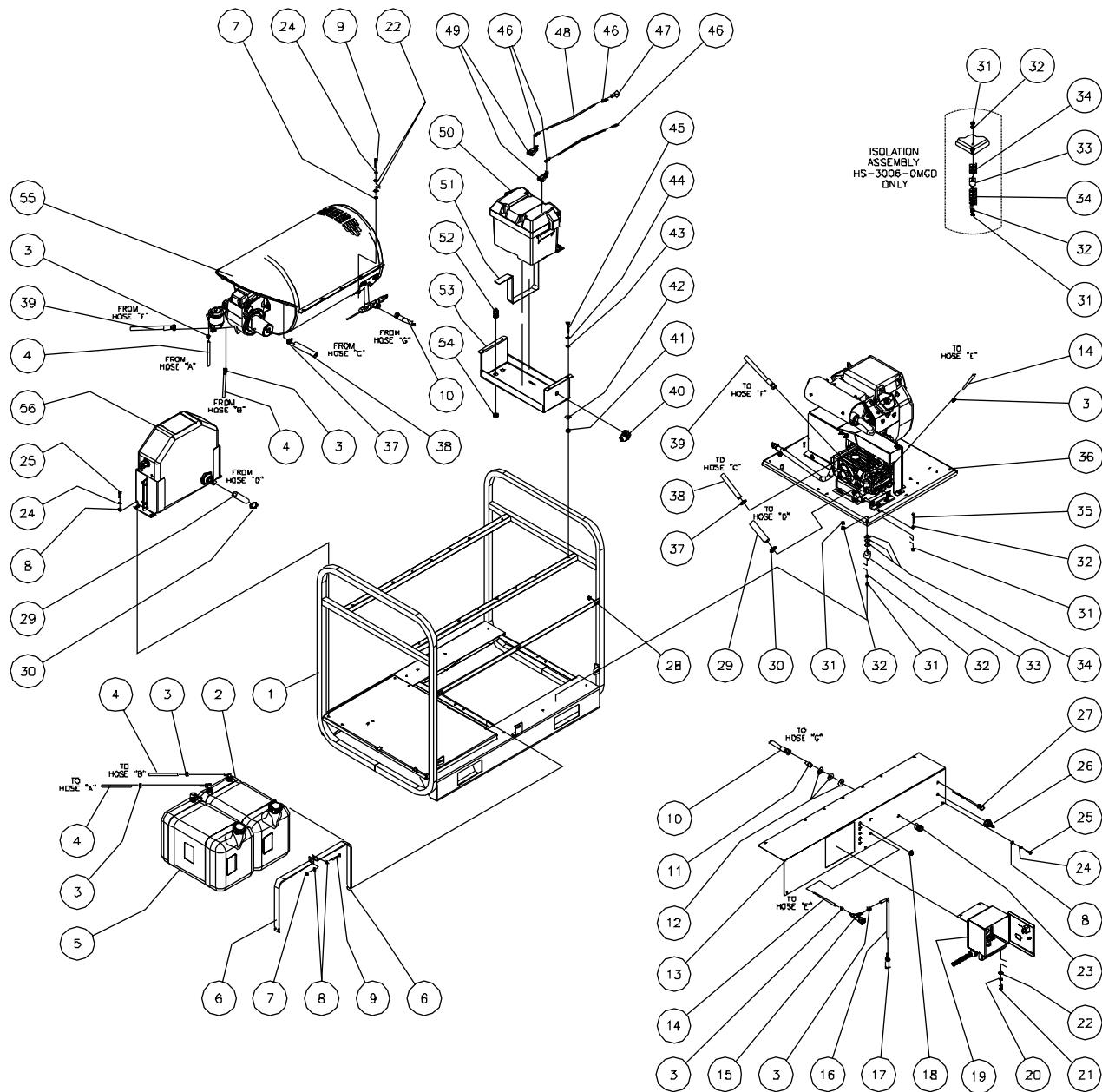


## HDC SAFETY DECAL PLACEMENT-042203-KZ

<b>SAFETY DECAL PLACEMENT</b>			
<b>REF. #</b>	<b>DESCRIPTION</b>	<b>PART #</b>	<b>QTY.</b>
1	Decal- Warning: Hot Surface (See 34-9024)	N/A Sep.	1
2	Decal- Warning/Caution/Operation (See 34-9024)	N/A Sep.	1
3	Die Cut- 3005 (HDC-3005)	34-0039	1
-	Die Cut- 3505 (HDC-3505)	34-1188	1
-	Die Cut- 4004 (HDC-4004)	34-0261	1
4	Decal- Gasoline Only (See 34-9024)	N/A Sep.	1
5	Decal- Caution: Risk of Fire- Do not use Diesel or Fuel Oil (See 34-9024)	N/A Sep.	1
6	Decal- Electrical Box w/Burner (See 34-9024)	N/A Sep.	1
7	Decal- Diesel Only (See 34-9024)	N/A Sep.	1
8	Decal- Caution: Risk of Fire- Do not use Gasoline (See 34-9024)	N/A Sep.	1
9	Decal- Nozzles (See 34-9024)	N/A Sep.	1
10	Decal- Warning: Risk of Injury- Exposed Pulleys (See 34-9024)	N/A Sep.	2
11	Decal- Caution: Disconnect Battery (See 34-9024)	N/A Sep.	1
12	Decal- Data Plate	N/A	1
	Safety Decal Kit (Includes 1-2, 4-11)	34-9024	

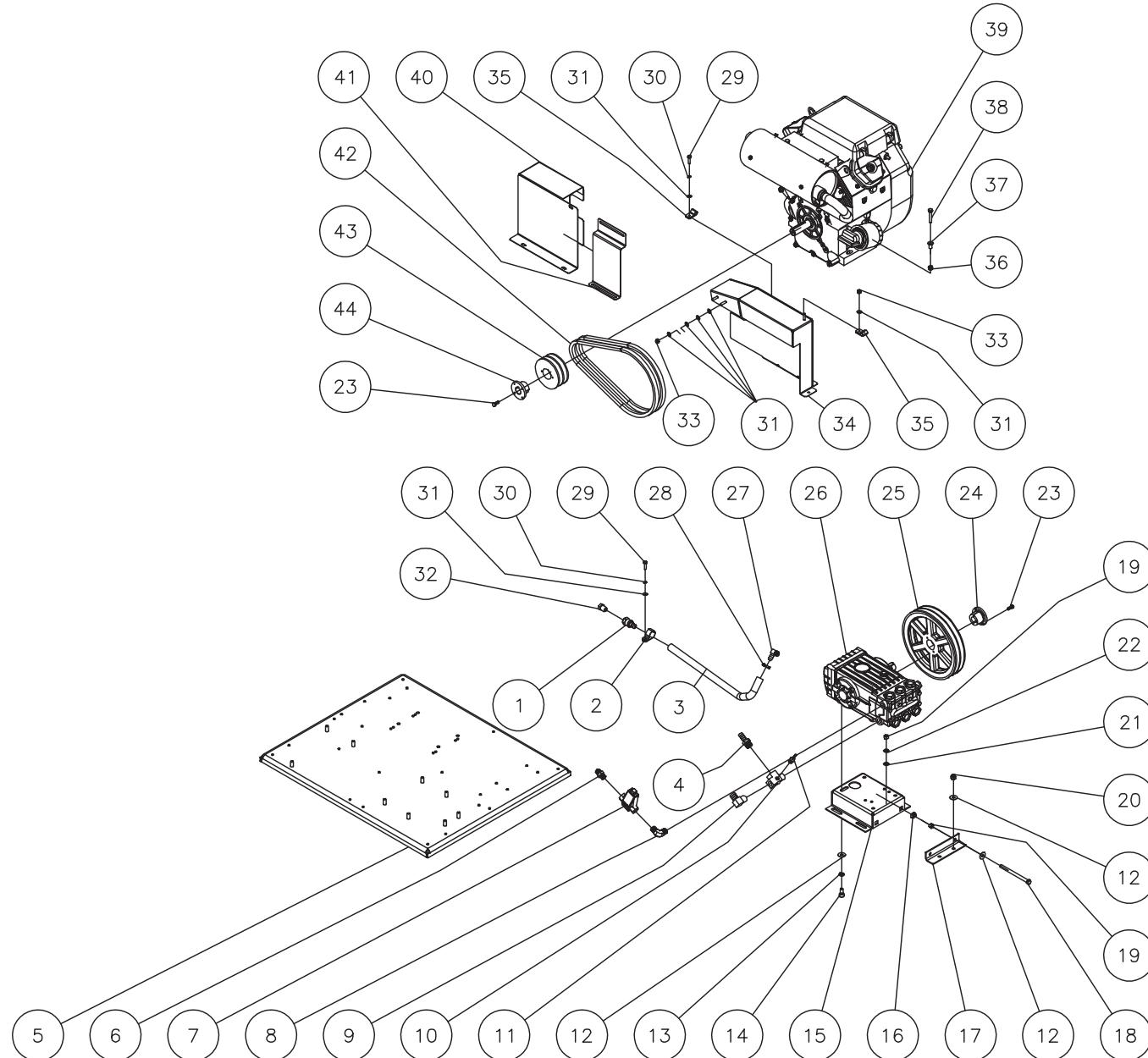
## FRAME ASSEMBLY

HDC FRAME ASSEMBLY-050703-KZ



FRAME ASSEMBLY			
REF. #	DESCRIPTION	PART #	QTY.
1	Frame Assembly	5-0169A18	1
2	Fuel Tank Assembly (See Exploded Drawing)	N/A Sep.	1
3	Clamp Worm	42-0004	7
4	Fuel Hose *(Four Feet Required)	15-0008	4
5	Gas Tank Assembly (See Exploded Drawing)	N/A Sep.	1
6	Tank Strap	20-0585A18	4
7	Locknut	30-0155	6
8	Washer	28-0002	11
9	Bolt	27-0020	6
10	Hose Assembly	15-0202	1
11	Nipple	24-0010	1
12	Flatwasher	28-0050	3
13	Control Panel	20-0663A18	1
14	Hose *(Two Feet Required)	15-0079	2
15	Detergent Valve	22-0226	1
16	Detergent Hose	15-0021	1
17	Detergent Strainer	19-0056	1
18	Grommet	33-0001	5
19	Electric Box Assembly (See Exploded Drawing)	N/A Sep.	1
20	Lockwasher	29-0007	2
21	Bolt	27-0067	2
22	Washer	28-0022	10
23	Quick Connect Socket	17-0004	1
24	Lockwasher	29-0006	11
25	Bolt	27-0016	7
26	Key Switch (See Engine Assembly)	N/A Sep.	1
27	Choke Cable	33-0081	1
28	Clip Nut	30-6027	3
29	Hose *(Four Feet Required)	15-0033	2
30	Clamp Worm	42-0003	2
*Must Order in One Foot Lengths			

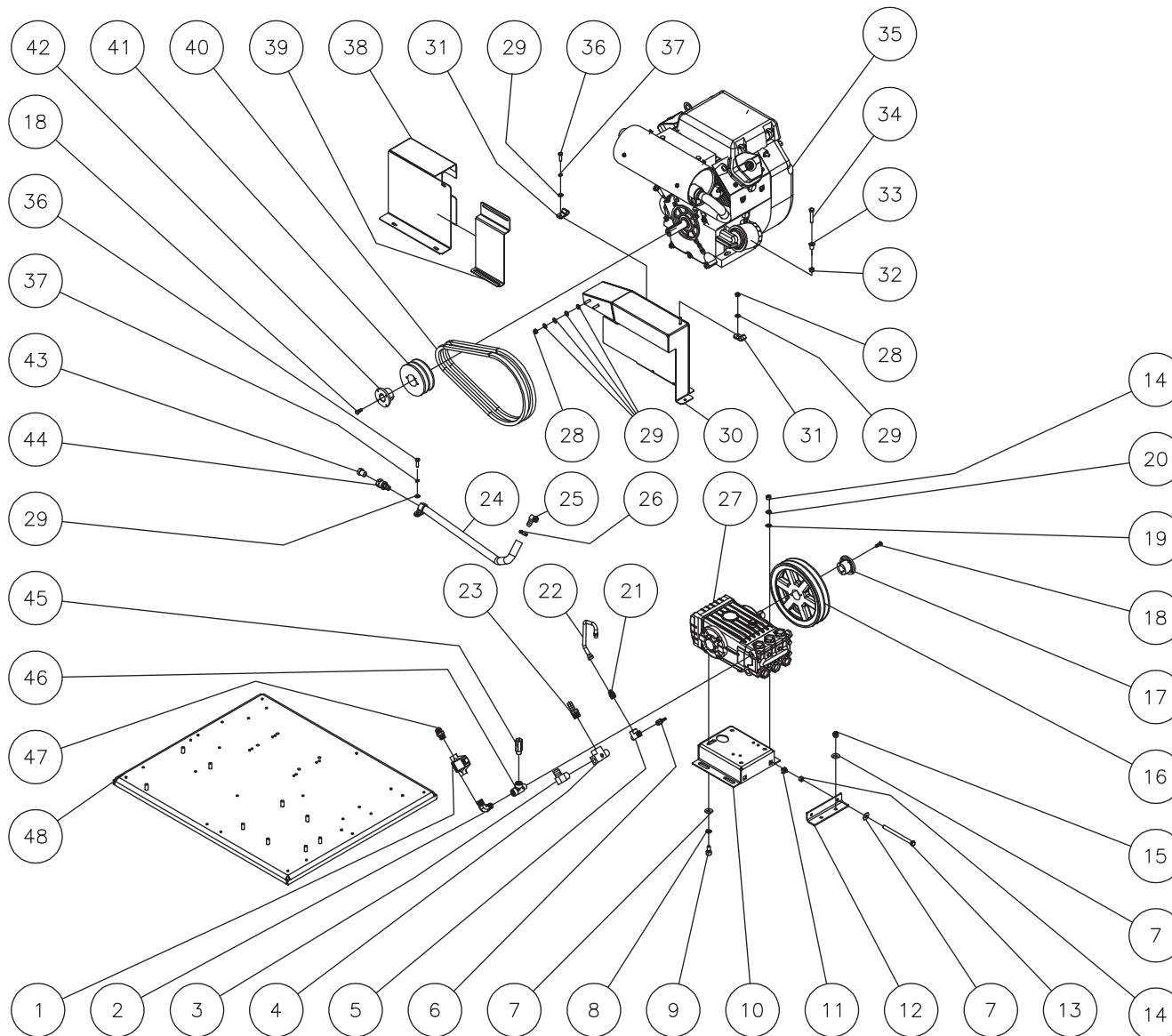
## ISOLATION PLATE FOR HDC-3005/3505 (AFTER SERIAL #15011230)



ISOLATION PLATE FOR HDC-3005/3505 (AFTER SERIAL #15011230)							
REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Hose Barb	23-0360	1	29	Bolt	27-0016	7
2	Clip	33-0291	1	30	Lockwasher	29-0006	7
3	Hose *(Two Feet Required)	15-0007	1	31	Washer	28-0002	16
4	Hose Barb	23-0045	1	32	Plug	23-0411	1
5	Isolation Plate	5-0170A18	1	33	Locknut	30-0155	3
6	Nipple	24-0002	1	34	Pump Beltguard	6-0092A18	1
7	Flow Switch	22-0348	1	35	Fuel Line Clip (Honda and Kohler Units Only)	43-0003	1
8	Elbow	24-0131	1	-	Fuel Line Clip (Vanguard Units Only)	43-0003	2
9	Elbow	23-0037	1	36	Locknut	30-0157	4
10	Street Tee	23-0388	1	-	Nut (Kohler Units Only)	30-0159	4
11	Hose Barb	23-0051	1	37	Flatwasher (Kohler Units Only)	28-0023	4
12	Flatwasher	28-0023	5	-	Flatwasher (Vanguard Units Only)	28-0003	4
13	Lockwasher	29-0054	4	-	Shim (Honda Units Only)	33-0169	4
14	Bolt	27-8884	4	38	Bolt (Kohler Units Only)	27-0120	4
15	Pump Hat	5-0153A18	1	-	Bolt	27-0070	4
16	Clip Nut	30-6025	2	39	Engine Assembly- 20HP Honda (HDC-3505-0H6G) (Before Serial #15011230)	850-0334	1
17	Tension Bracket	20-0584A18	1	-	Engine Assembly- 20HP Honda (HDC-3505-0H6G) (After Serial #15011230)	850-0349	1
18	Bolt	27-0133	2	-	Engine Assembly- 20HP Kohler (HDC-3505-0K6G)	850-0333	1
19	Hex Nut	30-0006	6	-	Engine Assembly- 18HP Kohler (HDC-3005-0K6G)	850-0332	1
20	Locknut	30-0159	2	-	Engine Assembly- 21HP Vanguard (HDC-3505-0V6G)	850-0331	1
21	Washer	28-0030	4	-	Engine Assembly- 16HP Vanguard (HDC-3005-0V6G)	850-0330	1
22	Lockwasher	29-0008	4	40	Engine Beltguard	20-0690A18	1
23	Bolt	27-0015	4	41	Bracket	20-0589A01	1
24	Bushing	9-0017	1	42	Belt	11-0052	2
25	Sheave	10-0037	1	43	Sheave	10-0125	1
26	Pump	3-0202	1	44	Bushing (HDC-3505-0K6G)	9-0007	1
27	Elbow	23-0119	1	-	Bushing (HDC-3005-0K6G)	9-0010	1
28	Worm Clamp	42-0011	1	-	Bushing (HDC-3005/3505-0V6G, HDC-3505-0H6G)	9-0005	1

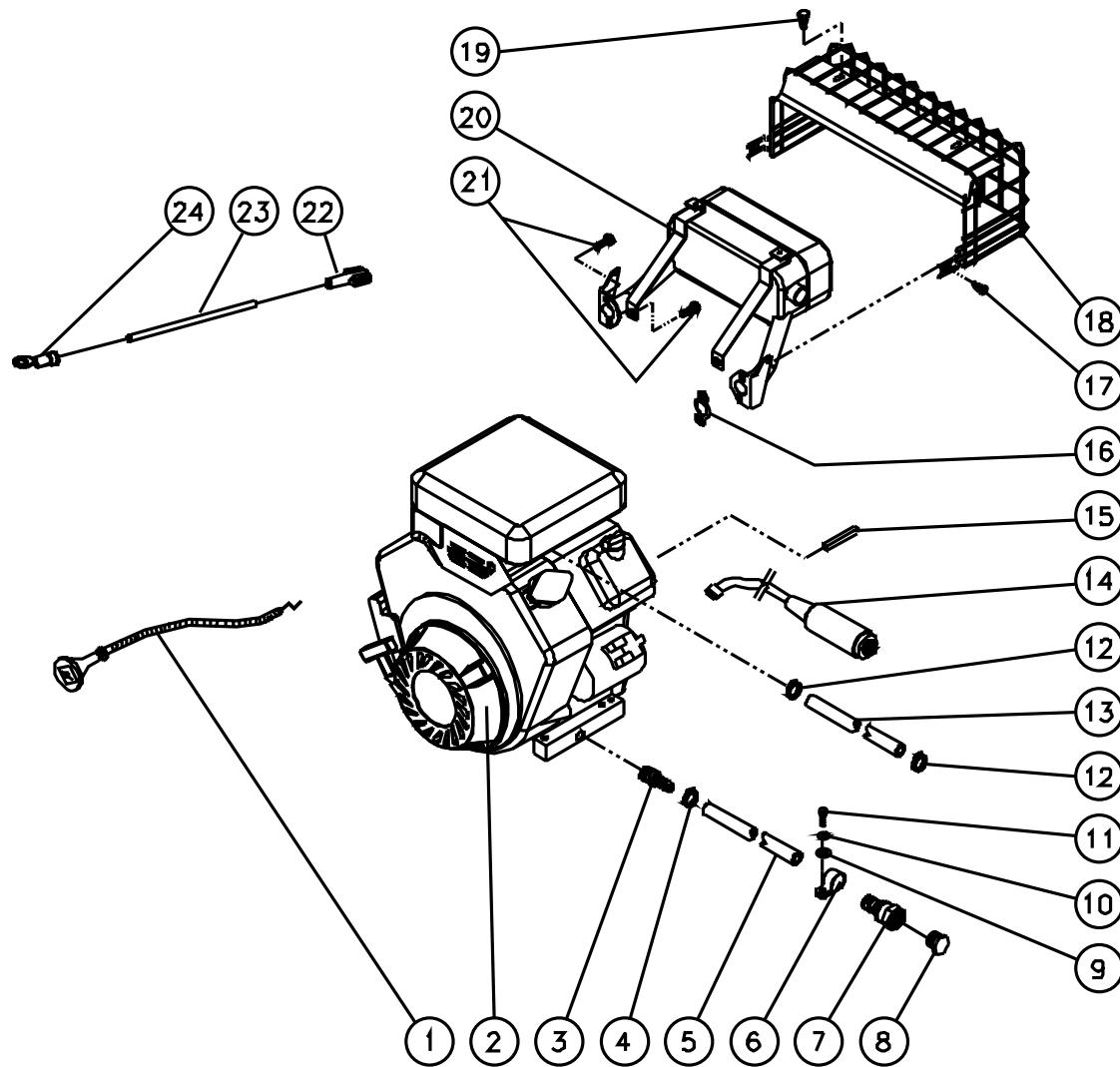
\*Must Order in One Foot Lengths

## ISOLATION PLATE FOR HDC-4004 (AFTER SERIAL #15011230)



ISOLATION PLATE FOR HDC-4004 (AFTER SERIAL #15011230)							
REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Flow Switch	22-0348	1	30	Pump Beltguard	6-0092A18	1
2	Elbow	24-0131	1	31	Fuel Lines Clip (Vanguard Units Only)	43-0003	2
3	Elbow	23-0037	1	-	Fuel Lines Clip (Honda and Kohler Units Only)	43-0003	1
4	Street Tee	23-0388	1	32	Nut (Kohler Units Only)	30-0159	4
5	Tee	23-0127	1	-	Locknut	30-0157	4
6	Hose Barb	23-0051	1	33	Shim (Honda Units Only)	33-0169	4
7	Flatwasher	28-0023	5	-	Flatwasher (Vanguard Units Only)	28-0003	4
8	Lockwasher	29-0055	4	-	Flatwasher (Kohler Units Only)	28-0023	4
9	Screw	27-8471	4	34	Bolt	27-0070	4
10	Pump Hat	5-0153A18	1	-	Bolt (Kohler Units Only)	27-0120	4
11	Clip Nut	30-6025	2	35	Engine- 21 HP Vanguard (HDC-4004-0V6A)	850-0331	1
12	Tension Bracket	20-0584A18	1	-	Engine- 20 HP Honda (HDC-4004-0H6A) (Before Serial #15011230)	850-0334	1
13	Bolt	27-0133	2	-	Engine- 20 HP Honda (HDC-4004-0H6A) (After Serial #15011230)	850-0349	1
14	Hex Nut	30-0006	6	-	Engine- 20 HP Kohler (HDC-4004-0K6A)	850-0333	1
15	Locknut	30-0159	2	36	Bolt	27-0016	7
16	Sheave	10-0012	1	37	Lockwasher	29-0006	7
17	Bushing	9-0017	1	38	Engine Beltguard	20-0690A18	1
18	Bolt	27-0015	4	39	Bracket	20-0589A18	1
19	Washer	28-0030	4	40	Belt	11-0050	2
20	Lockwasher	29-0008	4	41	Sheave	10-0125	1
21	Adapter	23-0247	1	42	Bushing (HDC-4004-0V6A/0H6A)	9-0005	1
22	Hose	15-0140	1	-	Bushing (HDC-4004-0K6A)	9-0007	1
23	Hose Barb	23-0045	1	43	Plug	23-0411	1
24	Hose *(Two Feet Required)	15-0007	1	44	Hose Barb	23-0360	1
25	Elbow	23-0119	1	45	Easy Start Valve	22-0242	1
26	Worm Clamp	42-0011	1	46	Street Tee	23-0058	1
27	Pump	3-0213	1	47	Nipple	24-0002	1
28	Locknut	30-0155	3	48	Isolation Plate	5-0170A18	1
29	Washer	28-0002	16	*Must Order in One Foot Lengths			

## ENGINE ASSEMBLY (850-0330)



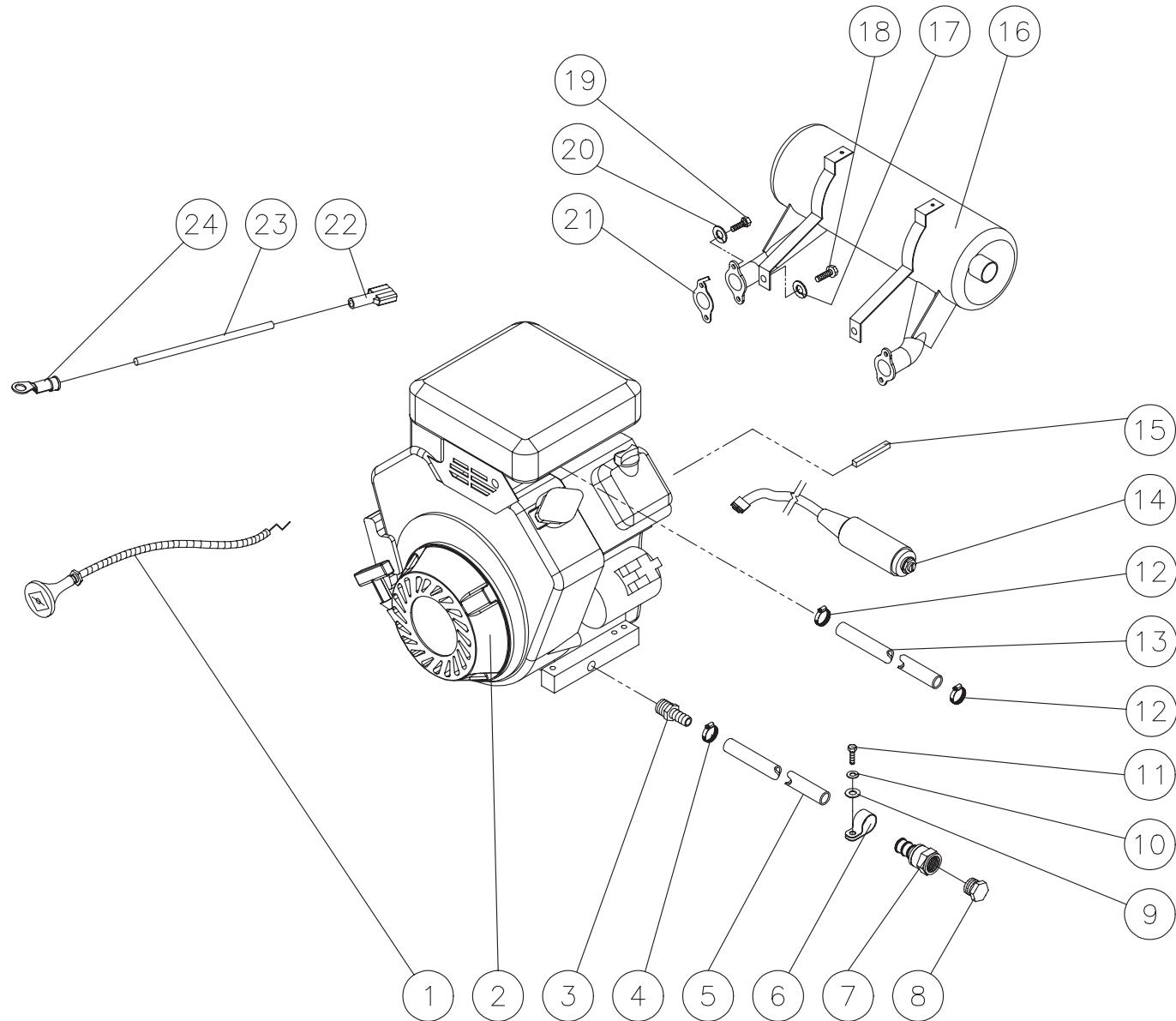
850-0330-050703-KZ

## ENGINE ASSEMBLY (850-0330)

REF #	DESCRIPTION	PART #	QTY	REF #	DESCRIPTION	PART #	QTY
1	Choke Cable	33-0081	1	13	Hose *(Six Feet Required)	15-0008	1
2	Engine- 16 HP Vanguard	1-0138	1	14	Key Switch Assembly	850-0302	1
3	Hose Barb	23-0105	1	15	Key	43-0078	1
4	Clamp Worm	42-0011	1	16	Gasket w/Muffler	45-0066	2
5	Hose *(One Foot Required)	15-0007	1	17	Screw w/Muffler	27-8966	2
6	Tube Clip	33-0291	1	18	Muffler Guard w/Muffler	45-0067	1
7	Hose Barb	23-0360	1	19	Screw w/Washer	27-8967	2
8	Plug	23-0411	1	20	Muffler	45-0064	1
9	Washer	28-0002	1	21	Screw w/Muffler	27-8968	4
10	Lockwasher	29-0006	1	22	Terminal	32-0221	1
11	Screw	27-0015	1	23	Wire- Red *(Three Feet Required)	32-0092	1
12	Clamp Worm	42-0004	2	24	Terminal Ring	32-0099	1

\*Must Order in One Foot Lengths

## ENGINE ASSEMBLY (850-0331)

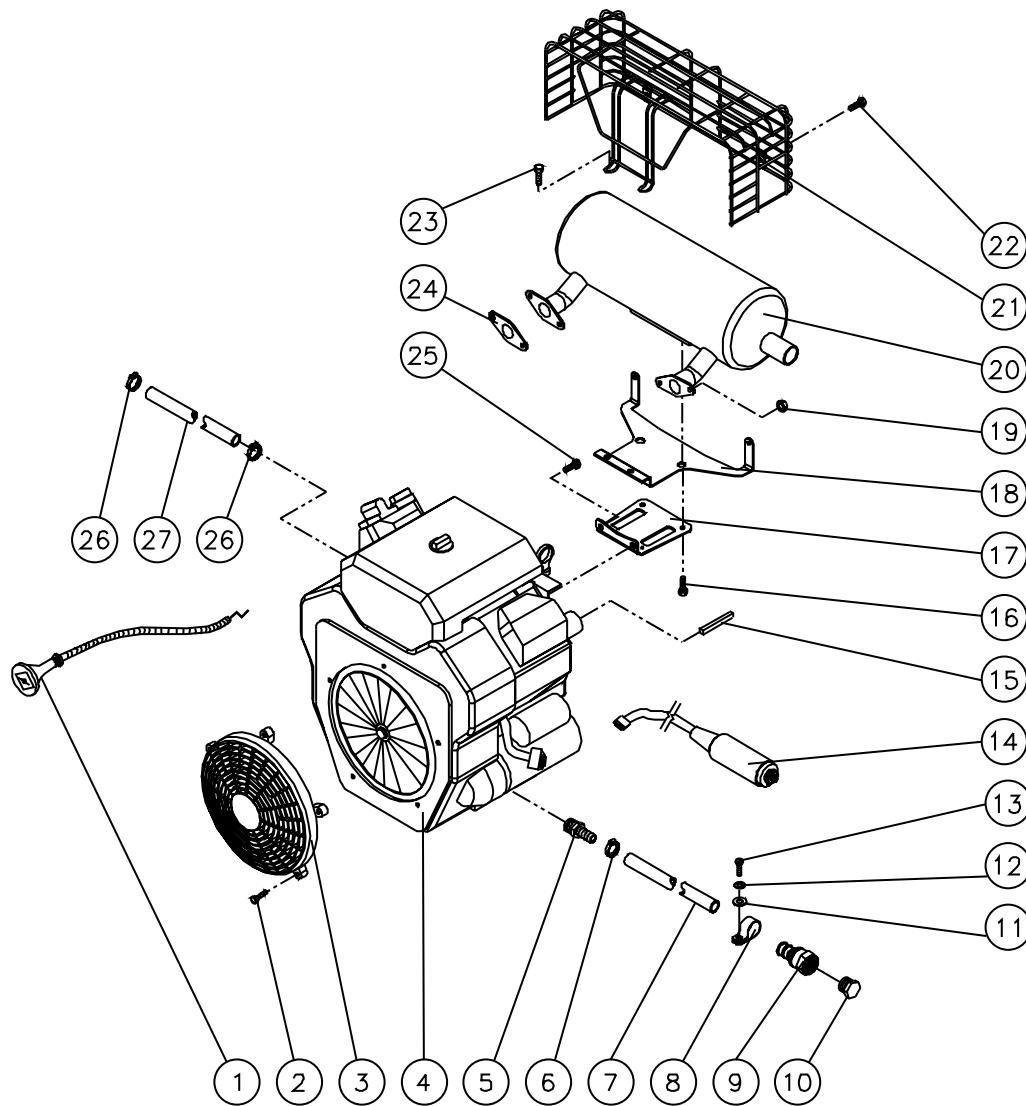


850-0331-121205-RZ

## ENGINE ASSEMBLY (850-0331)

REF #	DESCRIPTION	PART #	QTY	REF #	DESCRIPTION	PART #	QTY
1	Choke Cable	33-0081	1	13	Hose *(Six Feet Required)	15-0008	1
2	Engine- 21HP Vanguard	1-0139	1	14	Key Switch Assembly	850-0302	1
3	Hose Barb	23-0105	1	15	Key	43-0078	1
4	Clamp Worm	42-0011	1	16	Muffler	45-0075	1
5	Hose *(One Foot Required)	15-0007	1	17	Lockwasher (See 45-0075)	N/A Sep.	2
6	Tube Clip	33-0291	1	18	Bolt (See 45-0075)	N/A Sep.	2
7	Hose Barb	23-0360	1	19	Bolt (See 45-0075)	N/A Sep.	2
8	Plug	23-0411	1	20	Lockwasher (See 45-0075)	N/A Sep.	2
9	Washer	28-0002	1	21	Gasket (See 45-0075)	N/A Sep.	2
10	Lockwasher	29-0006	1	22	Terminal	32-0221	1
11	Screw	27-0015	1	23	Wire- Red *(Three Feet Required)	32-0092	1
12	Clamp Worm	42-0004	2	24	Terminal Ring	32-0099	1
*Must Order in One Foot Lengths							

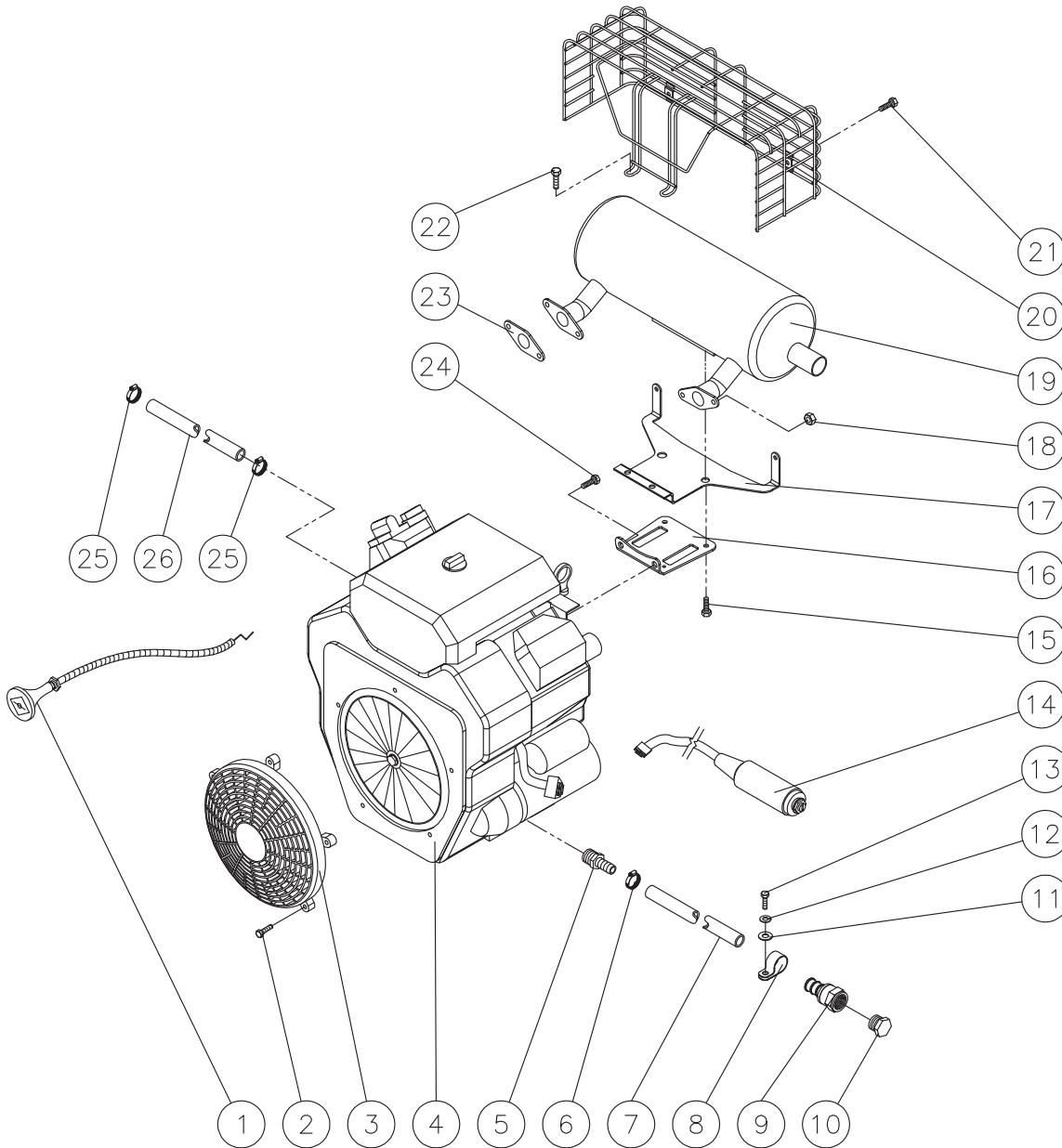
## ENGINE ASSEMBLY (850-0332)



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)

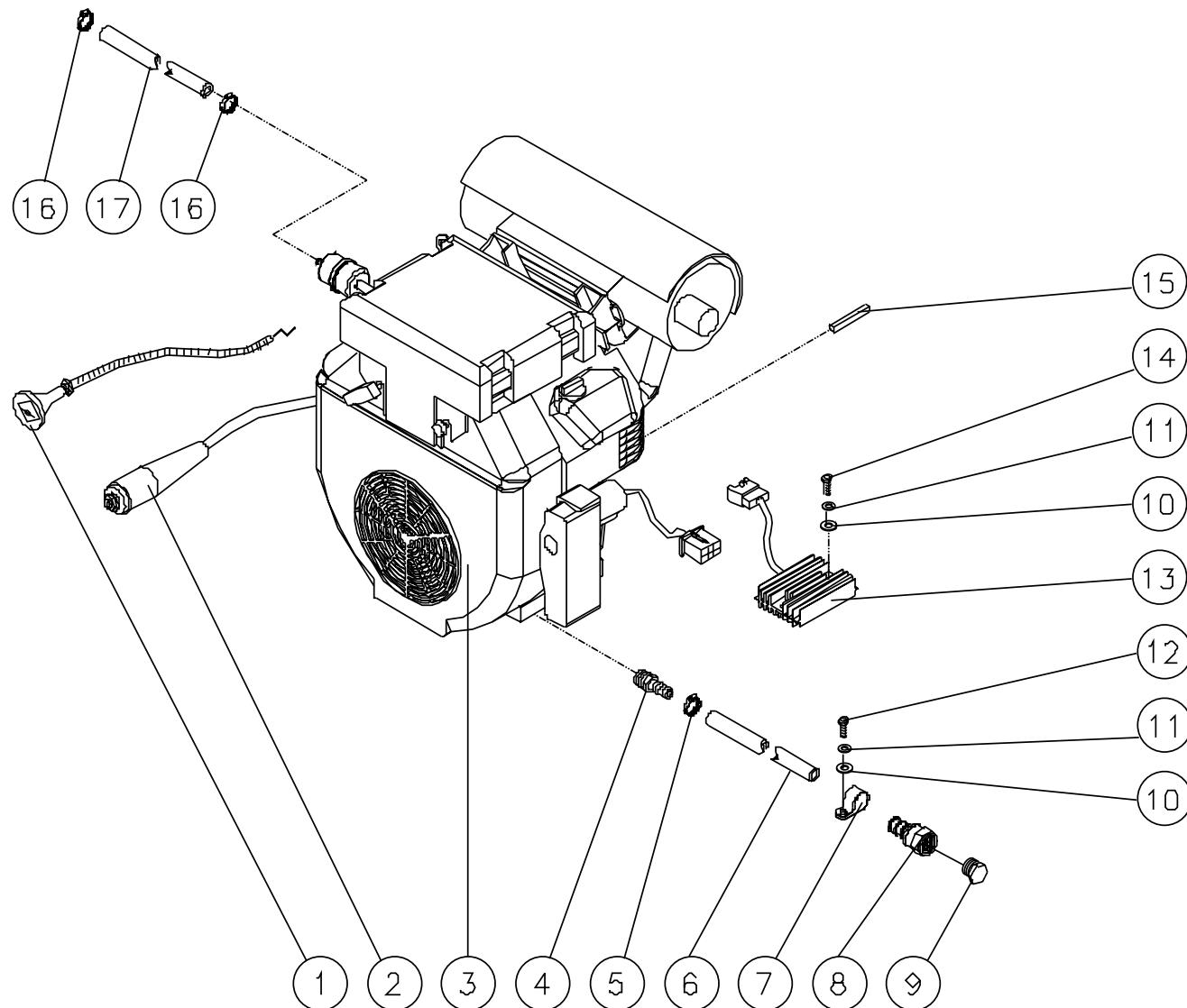


850-0333-090105-KZ

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							

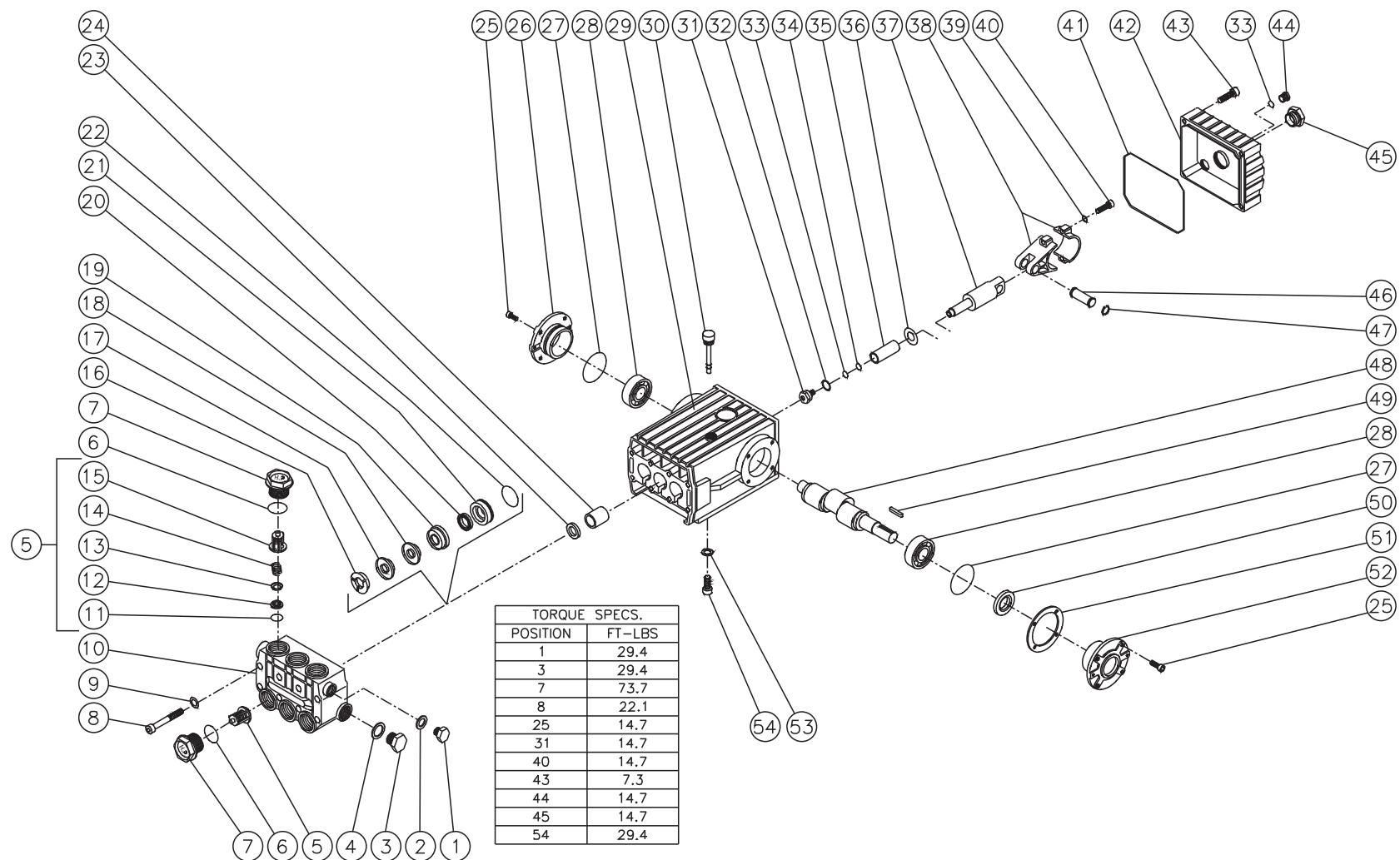
## ENGINE ASSEMBLY (850-0349)



850-0349-02/1004-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				

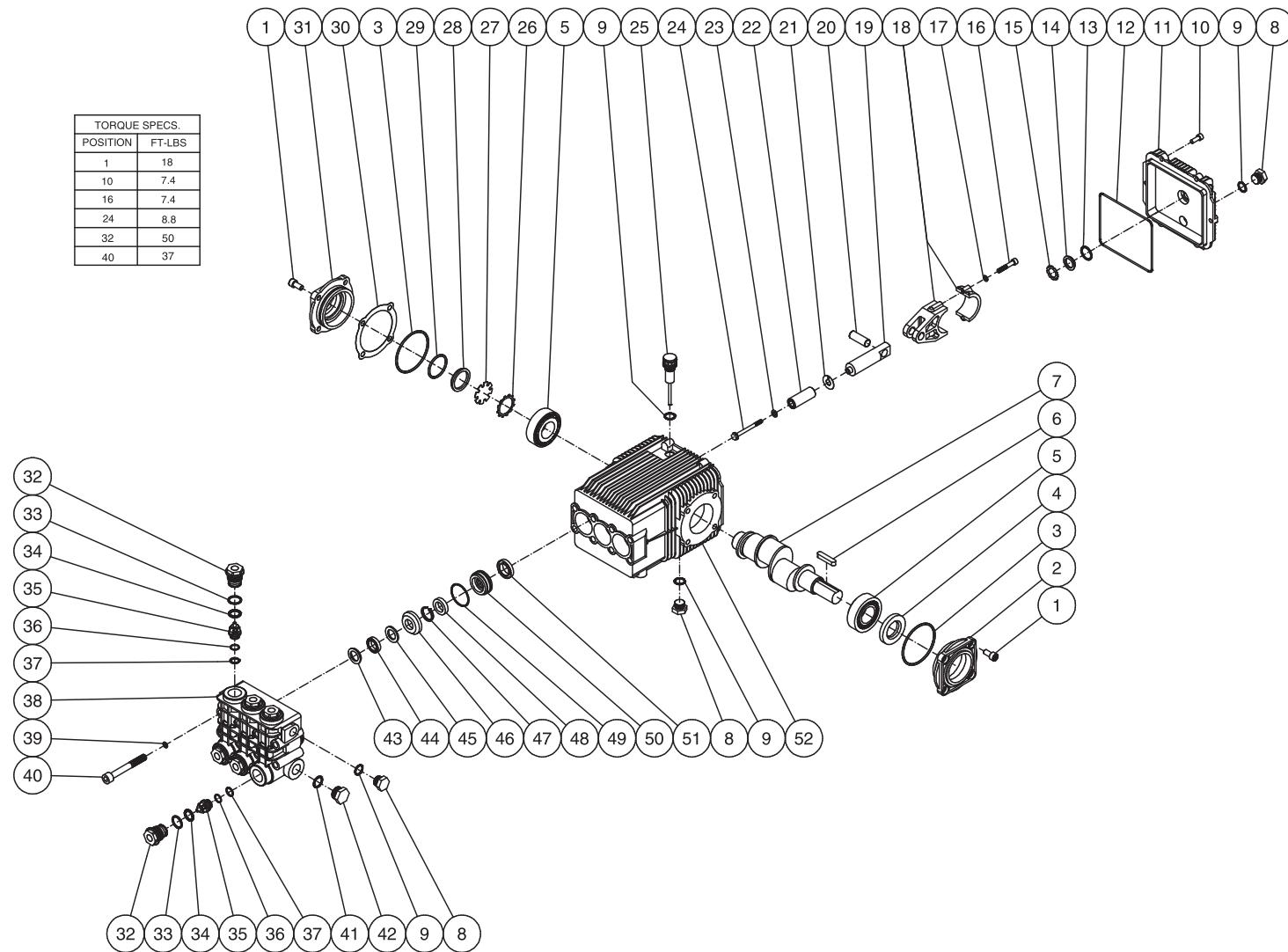
## PUMP ASSEMBLY (3-0202)



## 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	

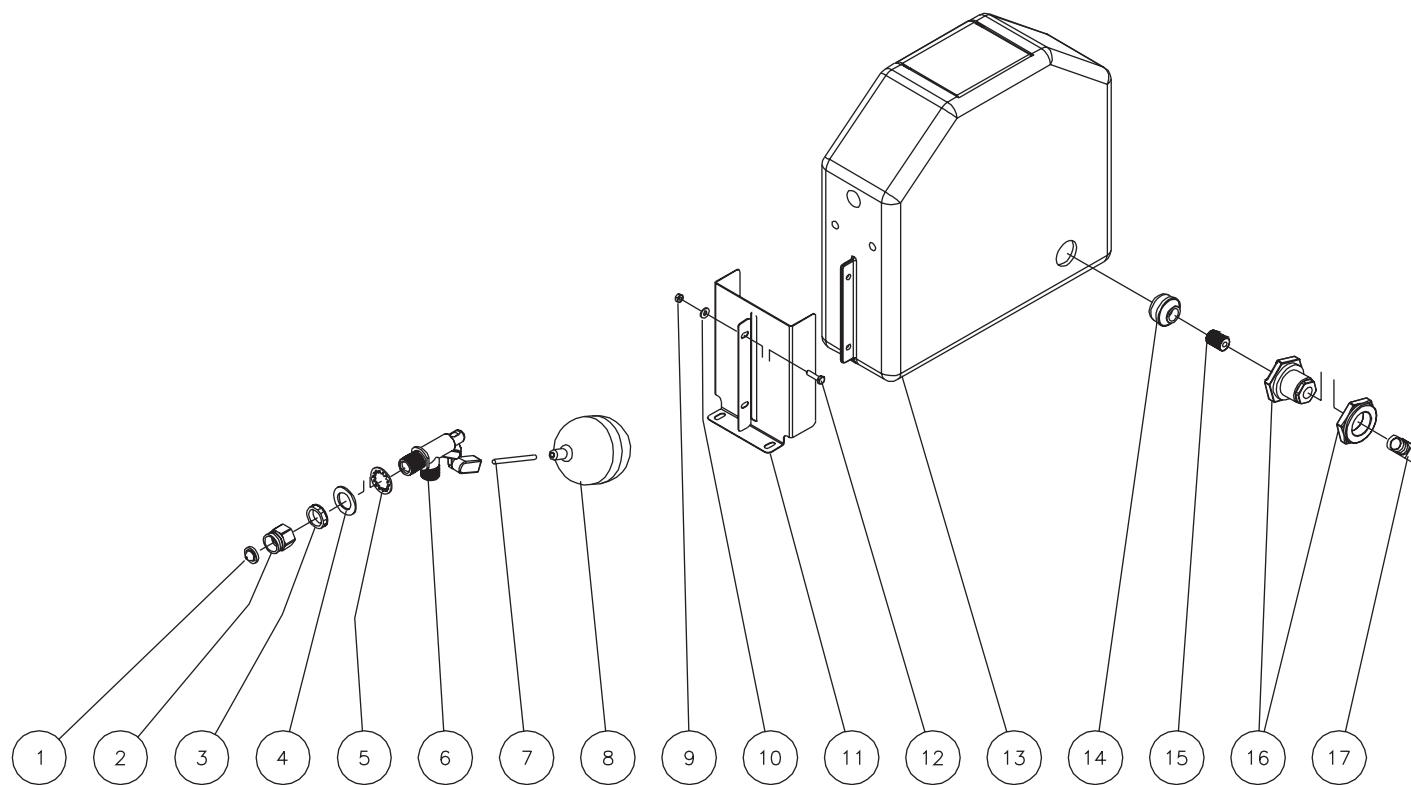
## PUMP ASSEMBLY (3-0213) (AFTER SERIAL #15019140)



## PUMP ASSEMBLY (3-0213) (AFTER SERIAL #15019140)

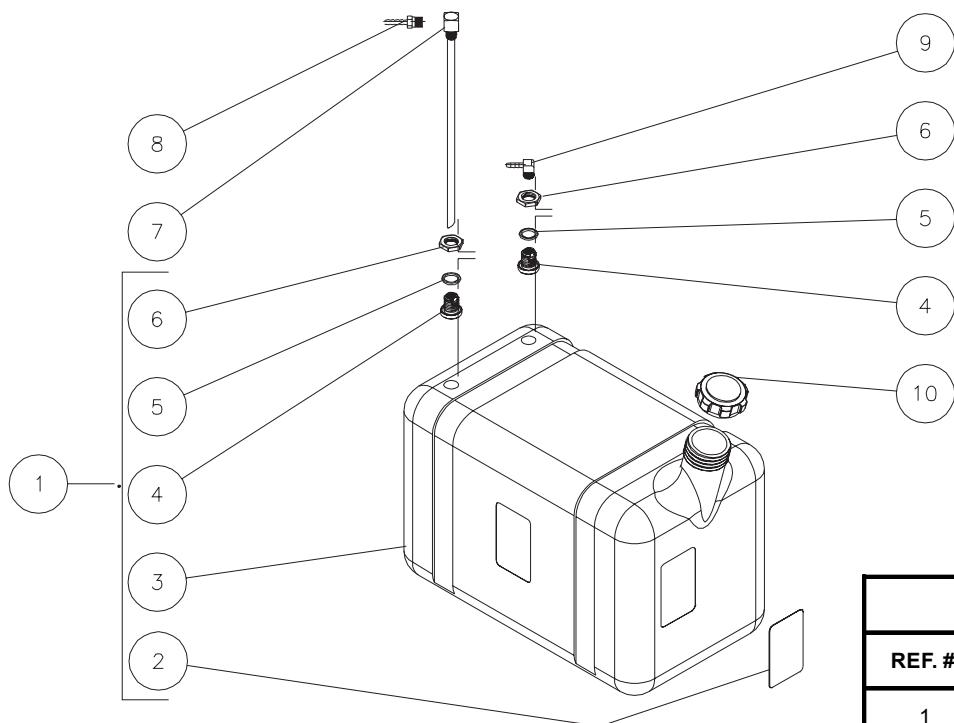
REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Screw	27-8884	8	20	Connecting Rod Pin	46-0914	3	36	Backup Ring	25-0516	6
2	Shaft Cover	46-0909	1	21	Washer	46-0916	3	37	O-ring	25-0407	6
3	O-ring	25-0512	2	22	Piston	46-0917	3	38	Pump Manifold	46-0900	1
4	Oil Seal	26-0243	1	23	Washer	29-0014	3	39	Lockwasher	29-0153	8
5	Bearing	48-0073	2	24	Screw	27-8965	3	40	Screw	27-8470	8
6	Key w/Pump	43-0091	1	25	Oil Dipstick	39-0204	1	41	O-ring	25-0372	1
7	Crankshaft	N/A	1	26	Oil Sight Glass Spring Retainer	46-0924	1	42	Plug	39-0202	1
8	Plug	39-0203	3	27	Oil Reflector	46-0925	1	43	Support Ring (See 70-0317)	N/A Sep.	3
9	O-ring	25-0510	4	28	Oil Sight Glass	46-0926	1	44	High Pressure Seal (See 70-0317)	N/A Sep.	3
10	Screw	27-8888	6	29	O-ring	25-0514	1	45	Backup Ring (See 70-0317)	N/A Sep.	3
11	Crankcase Cover (Inc. 8, 9, 13-15)	46-0912	1	30	Shim-.05 mm	46-0947	-	46	Guide Front	46-1001	3
12	O-ring	25-0513	1	-	Shim-.10 mm	46-0948	-	47	Backup Ring (See 70-0317)	N/A Sep.	3
13	O-ring	25-0370	1	-	Shim-.19 mm	46-0949	-	48	Low Pressure Seal (See 70-0317)	N/A Sep.	3
14	Oil Sight Glass	46-0670	1	-	Shim-.25 mm	46-0950	-	49	O-ring (See 70-0317)	N/A Sep.	3
15	Oil Sight Glass Spring Retainer	46-0671	1	31	Bearing Cover	46-0918	1	50	Guide Rear	46-1200	3
16	Screw	N/A	6	32	Valve Cap	39-0201	6	51	Oil Seal	26-0242	3
17	Lockwasher	N/A	6	33	Back-up Ring	25-0509	6	52	Crankcase	46-0911	1
18	Connecting Rod (Inc. 16-17)	46-0913	3	34	O-ring	25-0386	6		Valve Kit (Inc. 6 each 35-37)	70-0314	1
19	Plunger Rod	46-0915	3	35	Backup Ring Valve (See 70-0314)	N/A Sep.	6		Water Seals Kit (Inc. 3 each 43-45, 47-49)	70-0317	1

## FLOAT TANK ASSEMBLY



<b>FLOAT TANK ASSEMBLY</b>			
<b>REF. #</b>	<b>DESCRIPTION</b>	<b>PART #</b>	<b>QTY.</b>
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

## FUEL TANK ASSEMBLY

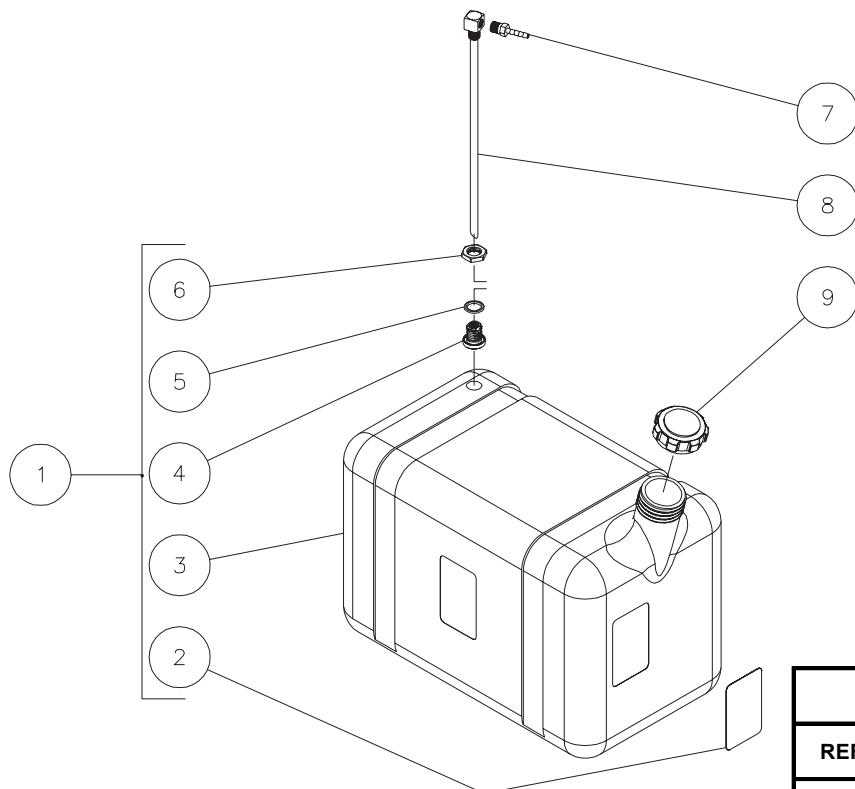


HDS FUEL TANK ASSY-051701-BAR

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	

HDS FUEL TANK ASSY-051701-BAR

## GAS TANK ASSEMBLY

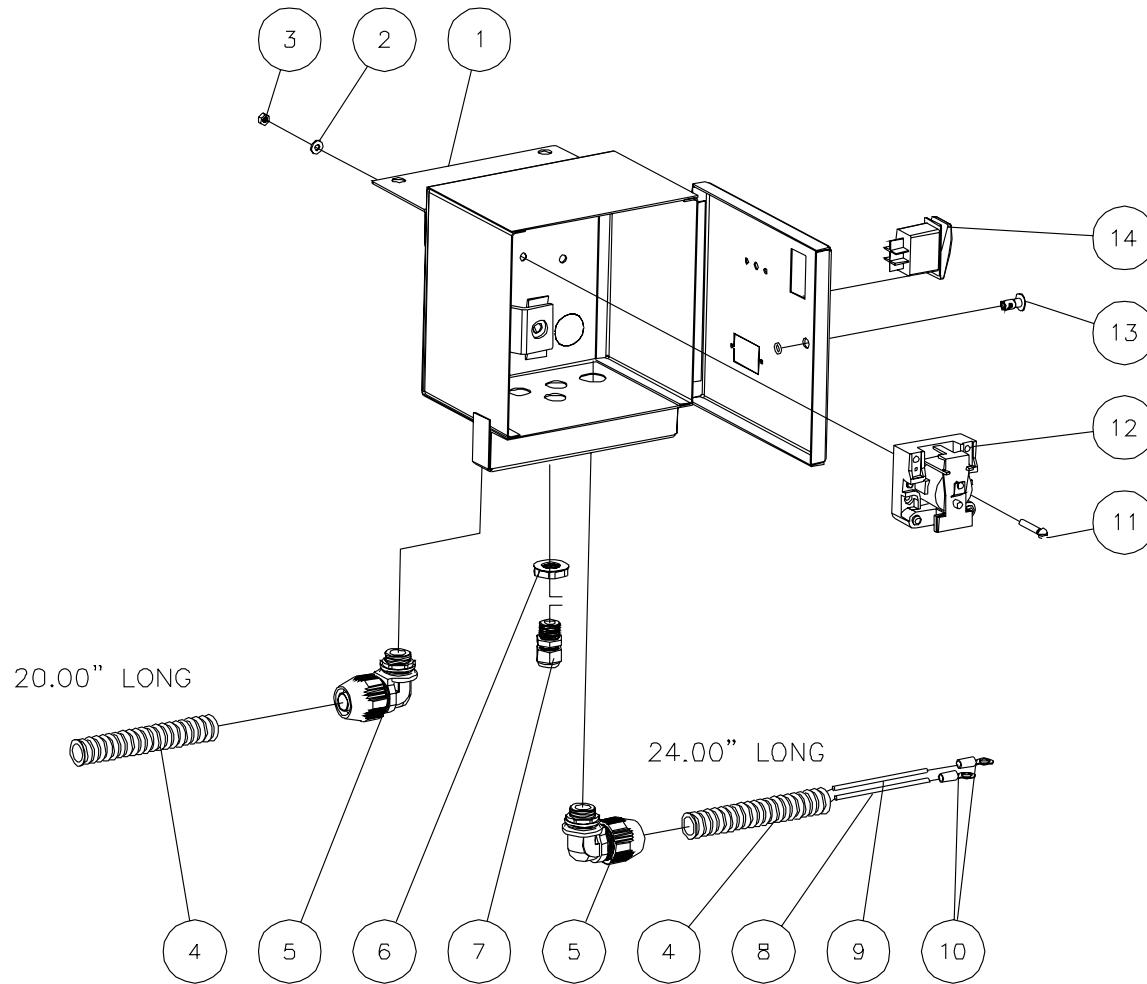


HDS GAS TANK ASSY-051701-BAR

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	

HDS GAS TANK ASSY-051701-BAR

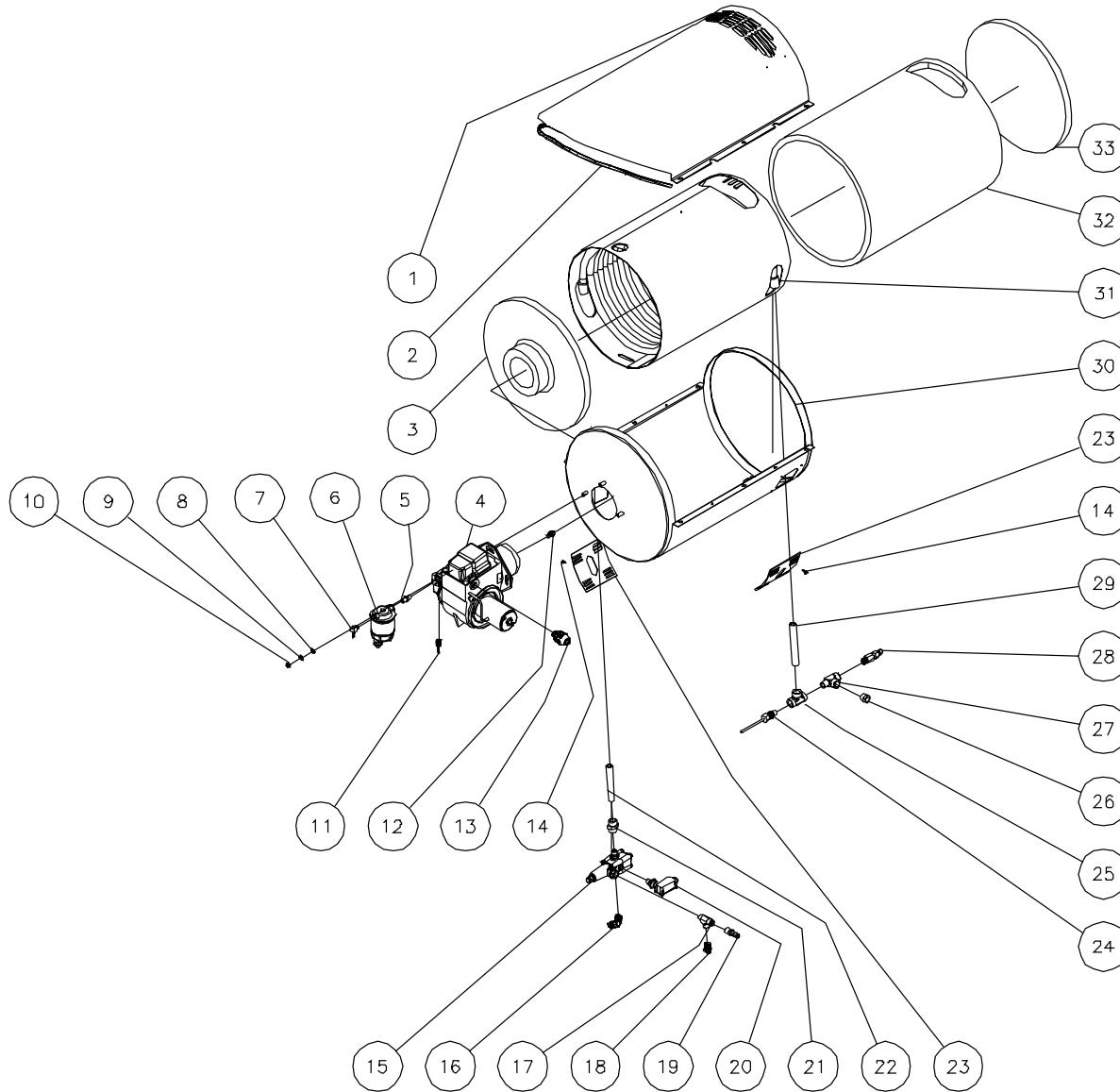
## ELECTRICAL BOX ASSEMBLY



## HDC ELECTRIC BOX ASSY-050503-KZ

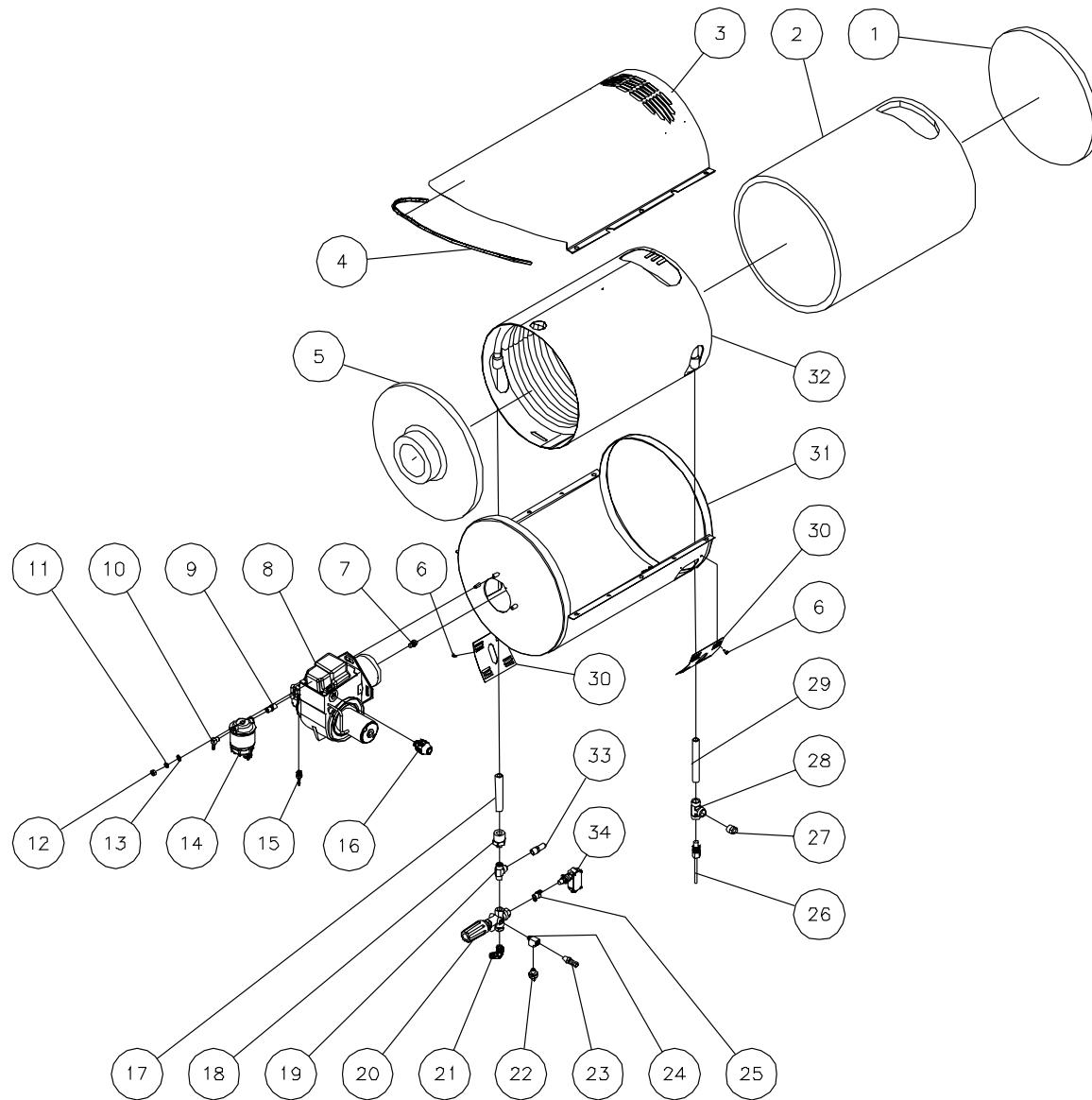
<b>ELECTRIC BOX ASSEMBLY</b>			
<b>REF. #</b>	<b>DESCRIPTION</b>	<b>PART #</b>	<b>QTY.</b>
1	Electric Box Assembly	32-0767A18	1
2	Washer	28-0001	2
3	Hex Nut	30-6001	2
4	Conduit Flex *(Four Feet Required)	32-0253	2
5	Conduit Elbow	32-0254	2
6	Locknut	32-0587	3
7	Strain Relief	32-0586	3
8	Wire- Red *(Three Feet Required)	32-0794	1
9	Wire- Black *(Four Feet Required)	32-0500	1
10	Terminal	32-0639	2
11	Screw	27-8912	2
12	Control Relay	32-0791	1
13	Fastener	33-0197	1
14	Rocker Switch	32-0669	1

## HEAT EXCHANGER ASSEMBLY FOR HDC-3005/3505



HEAT EXCHANGER ASSEMBLY FOR HDC-3005/3505								
REF. #	DESCRIPTION	PART #	QTY.		REF. #	DESCRIPTION	PART #	QTY.
1	Top Wrap	21-0129	1		18	Heat Dump Valve	22-0114	1
2	Edging *(Three Feet Required)	33-0020	1		19	Hose Barb	23-0105	1
3	Insulation Drum Head	22-0345	1		20	Pressure Switch	22-0243	1
4	Burner	4-0021	1		21	Adapter	24-0243	1
5	Hex Nipple	24-0145	1		22	Pipe Nipple	24-0245	1
6	Fuel Water Separator	19-0070	1		23	Patch Plate	20-0537A18	2
7	Elbow	23-0054	1		24	High Limit	32-0667	1
8	Flatwasher	28-0023	3		25	Street Tee	24-0055	1
9	Lockwasher	29-0008	3		26	Reducer Bushing	23-0016	1
10	Hex Nut	30-0006	3		27	Street Tee	24-0242	1
11	Hose Barb	23-0051	1		28	Safety Relief Valve	22-0309	1
12	Fuel Nozzle	18-0090	1		29	Pipe Nipple	24-0254	1
13	Conduit Straight Connect	32-0255	1		30	Bottom Wrap Assembly	20-0527A18	1
14	Screw	27-3062	8		31	Coil Assembly	66-0014	1
15	Unloader	850-0304	1		32	Insulation Blanket	850-0279	1
16	Elbow	24-0092	1		33	Insulation Disc	33-0346	1
17	Street Tee	23-0058	1		*Must Order in One Foot Lengths			

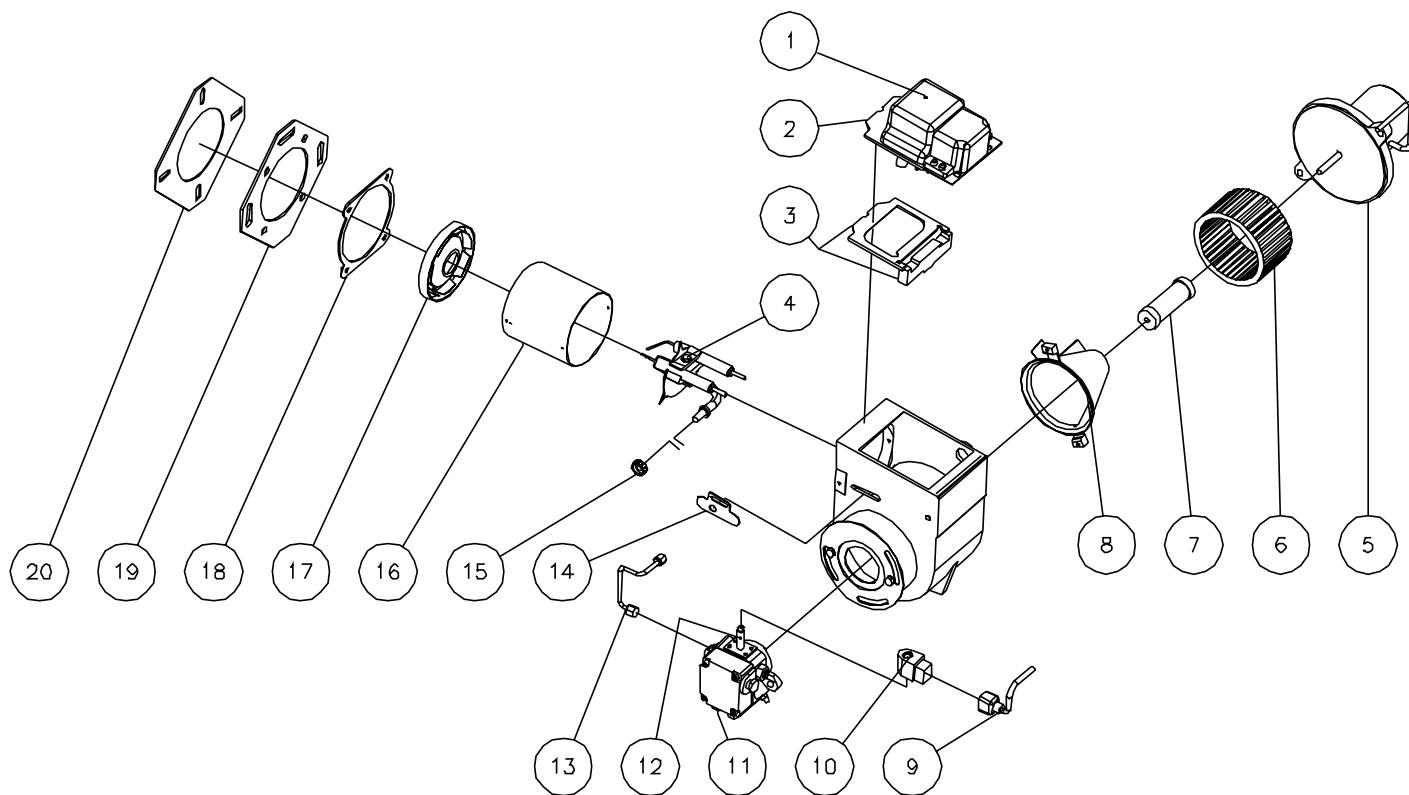
## HEAT EXCHANGER ASSEMBLY FOR HDC-4004



HEAT EXCHANGER ASSEMBLY FOR HDC-4004								
REF. #	DESCRIPTION	PART #	QTY.		REF. #	DESCRIPTION	PART #	QTY.
1	Insulation Disc	33-0346	1		18	Reducer Bushing	27-0048	1
2	Insulation Blanket	850-0279	1		19	Street Tee	23-0058	1
3	Top Wrap	21-0129	1		20	Unloader	8-0511	1
4	Edging *(Three Feet Required)	33-0020	1		21	Elbow	24-0092	1
5	Insulation Drum Head	33-0345	1		22	Thermostat Valve	22-0208	1
6	Screw	27-3062	8		23	Hose Barb	23-0120	1
7	Fuel Nozzle	18-0091	1		24	Street Tee	23-0127	1
8	Burner	4-0021	1		25	Reducer Bushing	23-0017	1
9	Hex Nipple	24-0145	1		26	High Limit	32-0667	1
10	Elbow	23-0054	1		27	Reducer Bushing	23-0016	1
11	Lockwasher	29-0008	3		28	Tee	24-0055	1
12	Hex Nut	30-0006	3		29	Pipe Nipple	24-0254	1
13	Flatwasher	28-0023	3		30	Patch Plate	20-0537A18	2
14	Fuel Water Seperator	19-0070	1		31	Bottom Wrap Assembly	20-0527A18	1
15	Hose Barb	23-0051	1		32	Coil Assembly	66-0014	1
16	Conduit Straight	32-0255	1		33	Pop Off Valve	22-0328	1
17	Pipe Nipple	24-0245	1		34	Pressure Switch	22-0243	1

\*Must Order in One Foot Lengths

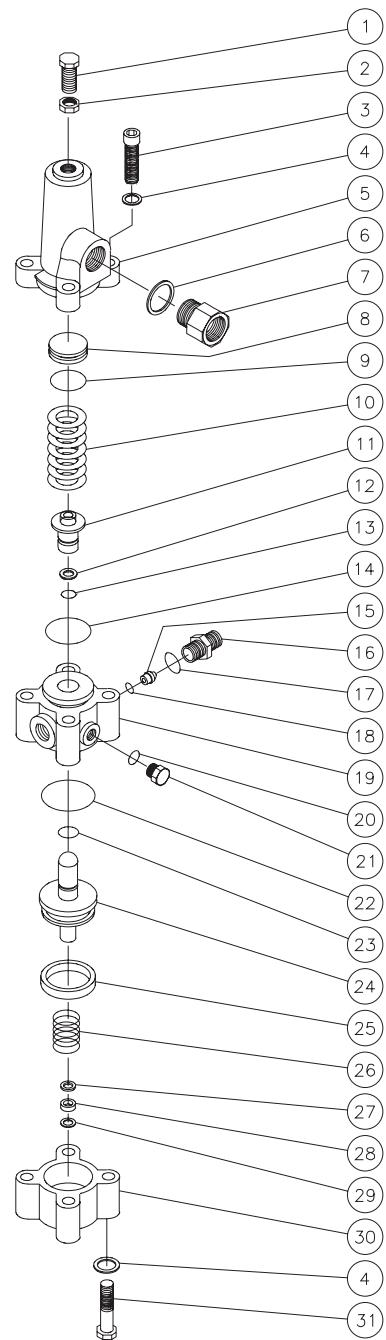
## BURNER ASSEMBLY (4-0021)



4-0021-061003-KZ

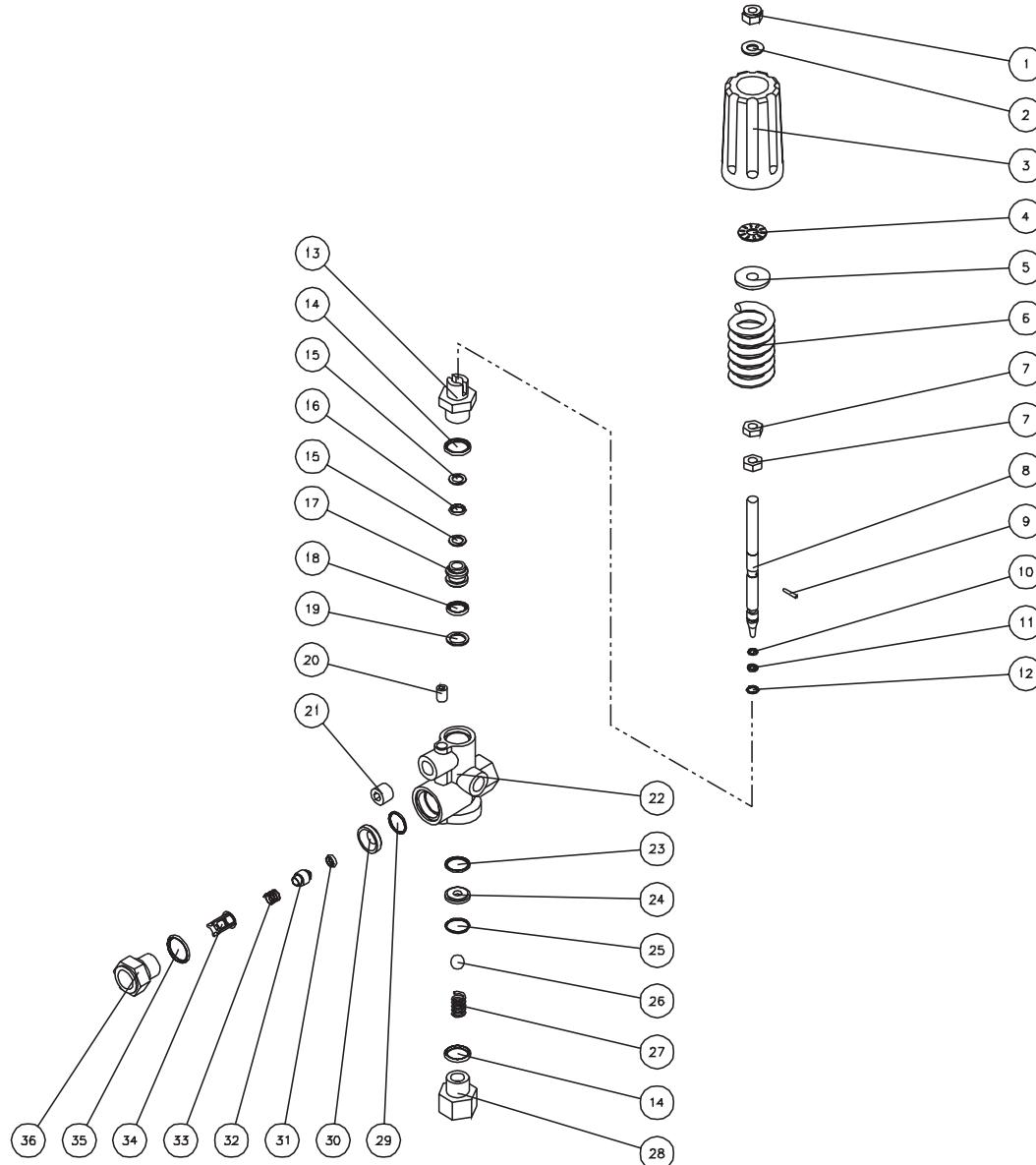
<b>BURNER ASSEMBLY (4-0021)</b>							
<b>REF.</b>	<b>DESCRIPTION</b>	<b>PART #</b>	<b>QTY.</b>	<b>REF.</b>	<b>DESCRIPTION</b>	<b>PART #</b>	<b>QTY.</b>
1	Igniter	44-0126	1	12	Tube Assembly	46-1001	1
2	Igniter Assembly	44-0125	1	13	Connect Tube Assembly	44-0025	1
3	Gasket Kit	70-0369	1	14	Escutcheon Plate	44-0031	1
4	Nozzle Line Assembly	44-0111	1	15	Nut	44-0022	1
5	Motor- 12V	2-0139	1	16	Air Tube	44-0110	1
6	Blower Wheel	44-0124	1	17	Combustion Head	44-0011	1
7	Coupling	44-0127	1	18	Gasket	26-0138	1
8	Air Guide	44-0123	1	19	Square Gasket Flange	44-0109	1
9	Cord Set	44-0122	1	20	Gasket Flange	44-0108	1
10	Solenoid Coil	46-1015	1	Complete Burner (Includes 1-20)		4-0021	1
11	Fuel Pump	3-0236	1				

## UNLOADER ASSEMBLY (850-0304)



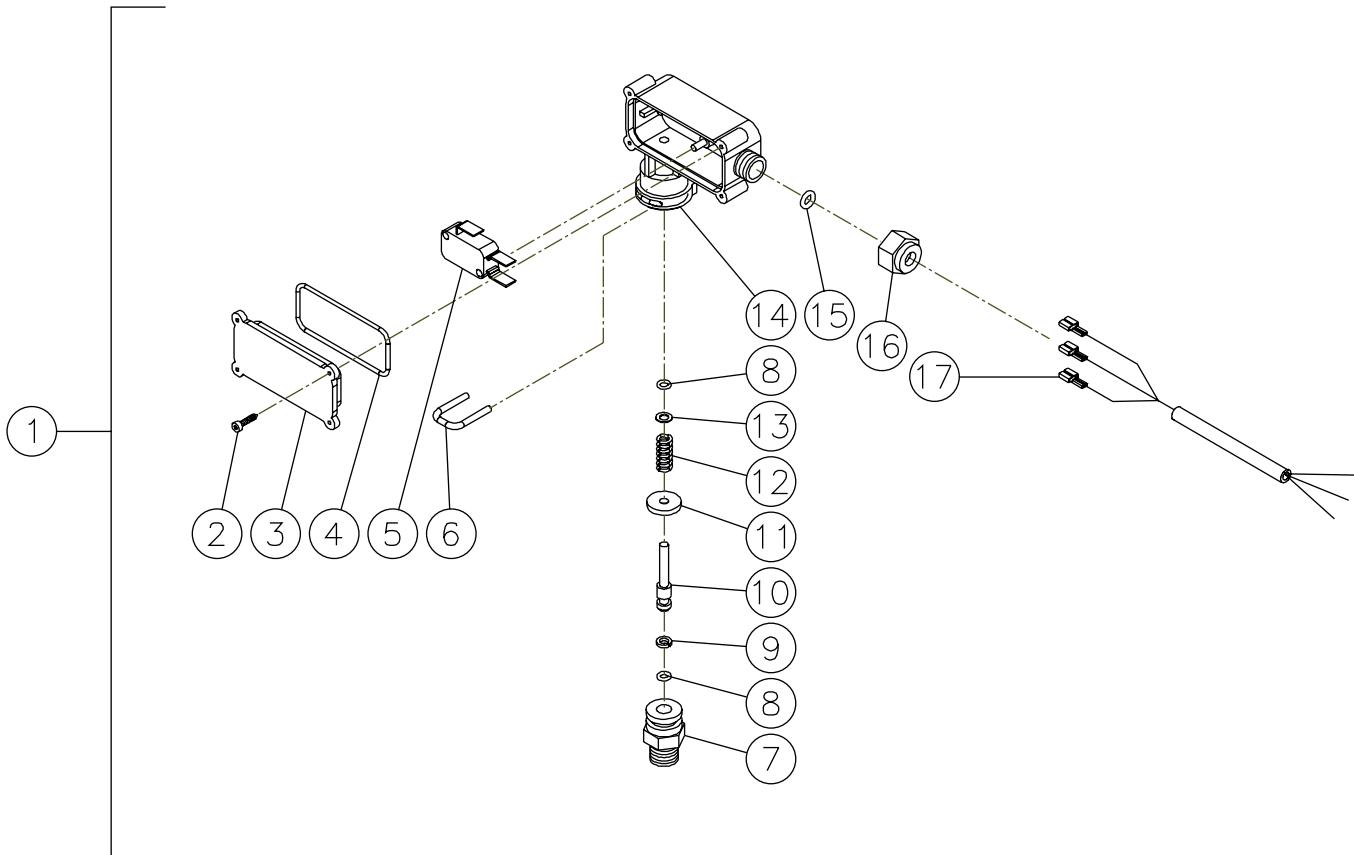
UNLOADER ASSEMBLY (850-0304)							
REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Bolt	27-8077	1	18	O-ring	25-0119	1
2	Hex Nut	30-3010	1	19	Middle Body	8-0137	1
3	Bolt	27-8434	4	20	O-ring	25-0114	2
4	Lockwasher	29-0154	8	21	Hex Plug	39-0017	2
5	Upper Body	8-0138	1	22	O-ring	25-0056	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 (22-0171 & 22-0243)

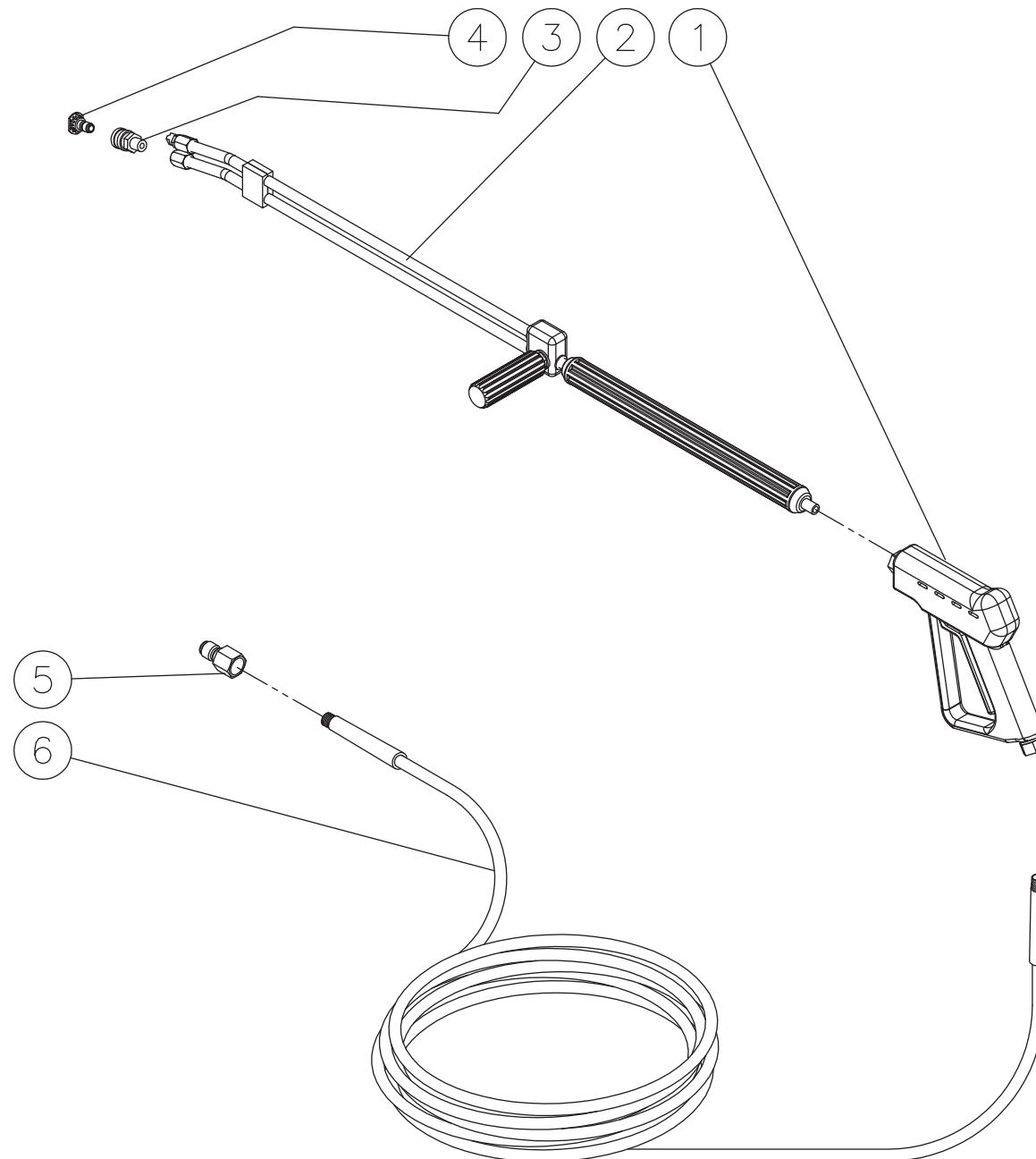


22-0171 & 22-0243-120799-BAR

22-0171 & 22-0243-120799-BAR

PRESSURE SWITCH (22-0171 & 22-0243)								
REF. #	DESCRIPTION	PART #	QTY.		REF. #	DESCRIPTION	PART #	QTY.
1	Pressure Switch- 15 BAR	22-0171	1		11	Washer	N/A	1
-	Pressure Switch- 25 BAR	22-0243	1		12	Spring- 15 BAR	49-0144	1
2	Screw	N/A	4		-	Spring- 25 BAR	49-0145	1
3	Cover	N/A	1		13	Washer	N/A	1
4	O-ring (See 70-0306)	N/A Sep.	1		14	Plastic Housing	N/A	1
5	Micro Switch	N/A	1		15	O-ring (See 70-0306)	N/A Sep.	1
6	Retainer Clip	N/A	1		16	Nut- 15 BAR	N/A	1
7	Body	N/A	1		-	Nut- 25 BAR	N/A	1
8	O-ring (See 70-0306)	N/A Sep.	2		17	Wire Assembly	N/A	1
9	Back-up Ring (See 70-0306)	N/A Sep.	1			O-ring Repair Kit (Inc. 4, 8-9, 15)	70-0306	
10	Piston	N/A	1					

## GUN/WAND/HOSE ASSEMBLY

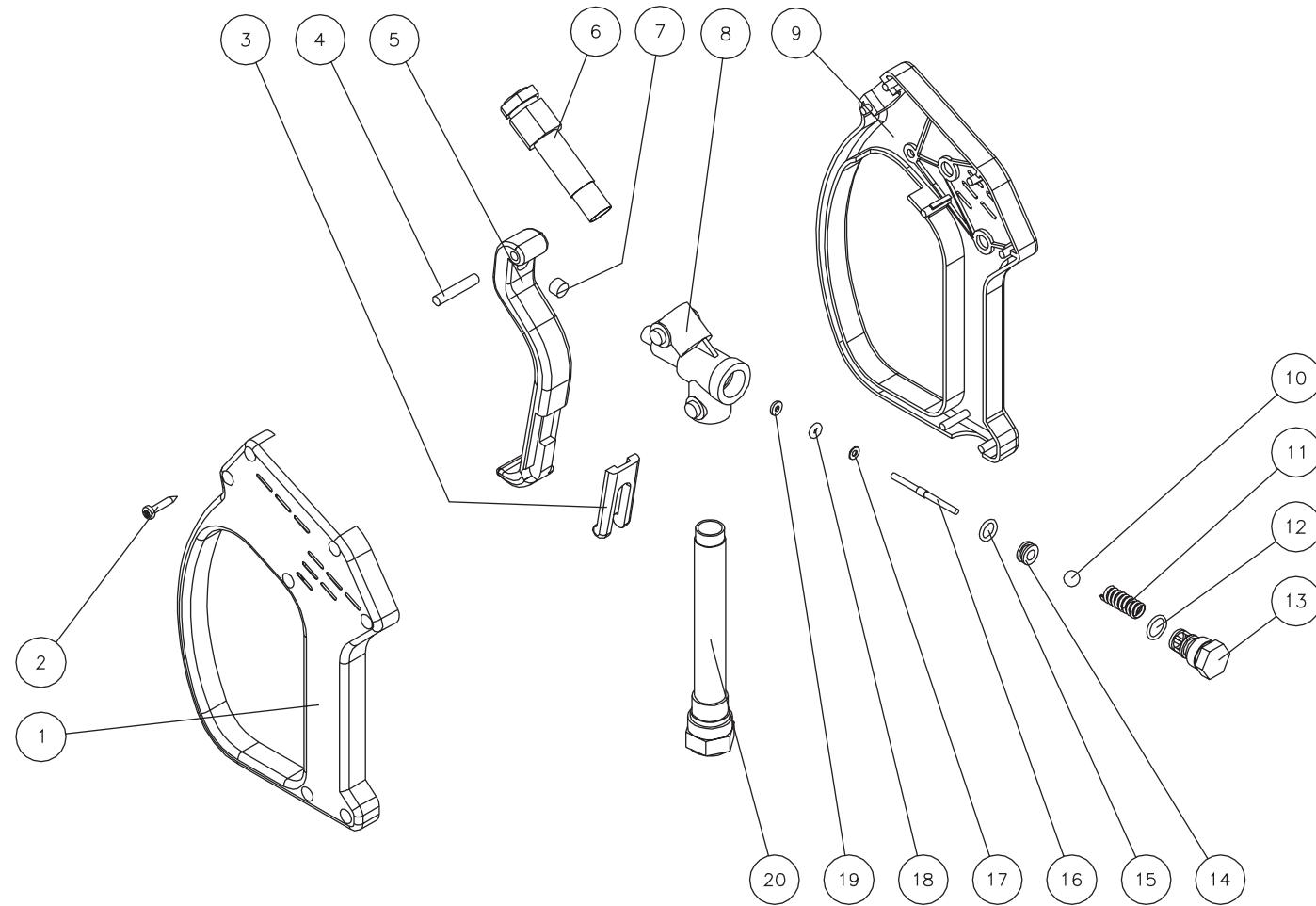


HDC GUN WAND HOSE ASSY-101905-KZ

## HDC GUN/WAND/HOSE ASSY-101905-KZ

<b>GUN/WAND/HOSE ASSEMBLY</b>			
<b>REF. #</b>	<b>DESCRIPTION</b>	<b>PART #</b>	<b>QTY.</b>
1	Gun Assembly	16-0392	1
2	Dual Lance	16-0417	1
3	Quick Connect Socket	17-0028	1
4	Nozzle- 0004 (HDC-4004)	18-0028	1
-	Nozzle- 1504 (HDC-4004)	18-0029	1
-	Nozzle- 2504 (HDC-4004)	18-0030	1
-	Nozzle- 4004 (HDC-4004)	18-0031	1
-	Nozzle- 0005 (HDC-3505)	18-0003	1
-	Nozzle- 1505 (HDC-3505)	18-0004	1
-	Nozzle- 2505 (HDC-3505)	18-0153	1
-	Nozzle- 4005 (HDC-3505)	18-0180	1
-	Nozzle- 0005.5 (HDC-3005)	18-0035	1
-	Nozzle- 1505.5 (HDC-3005)	18-0041	1
-	Nozzle- 2505.5 (HDC-3005)	18-0062	1
-	Nozzle- 4005.5 (HDC-3005)	18-0132	1
5	Quick Connect Plug	17-0006	1
6	High Pressure Hose Assembly	15-0166	1

## GUN ASSEMBLY (16-0392)

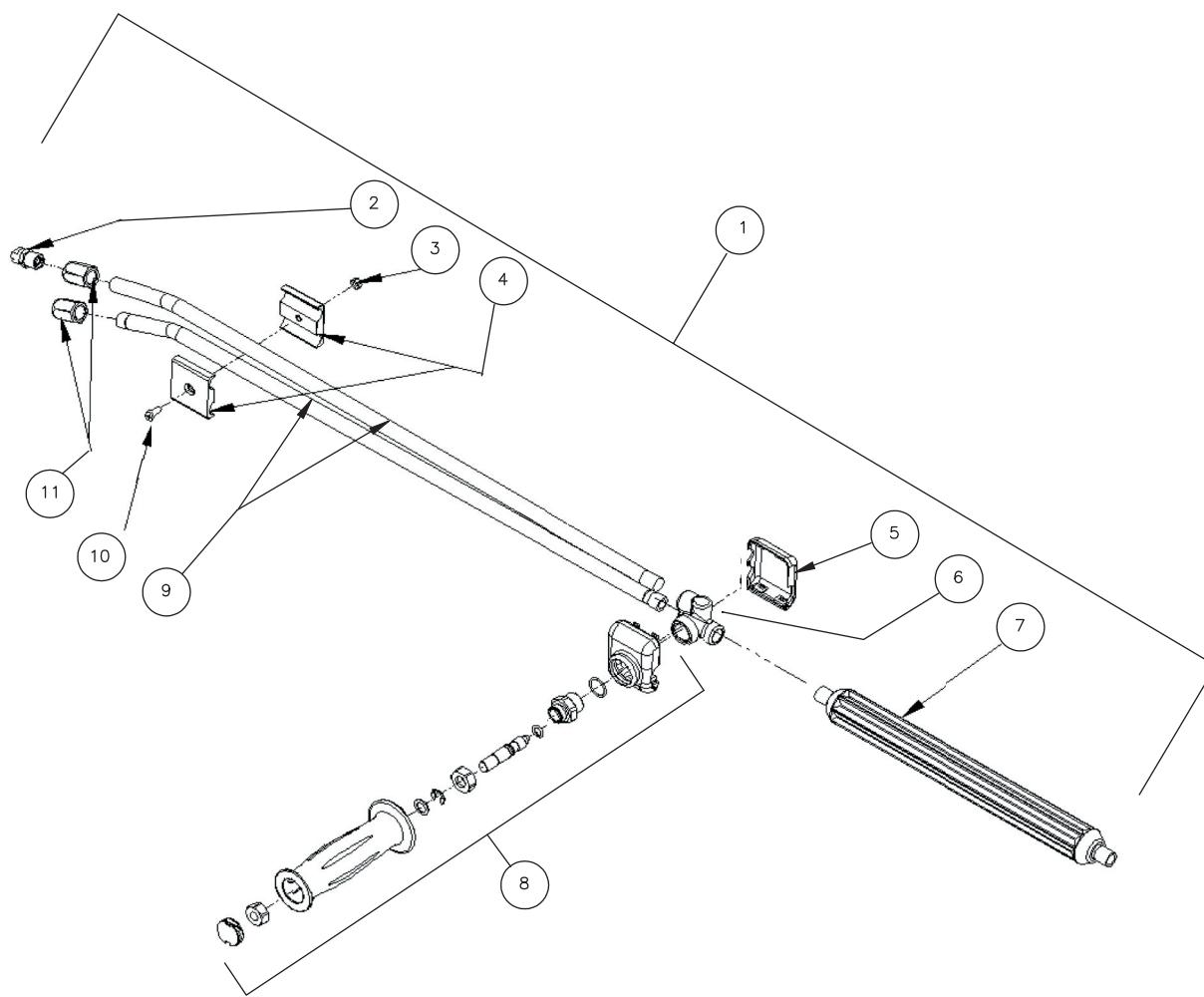


16-0392-030601-EDW

**GUN ASSEMBLY (16-0392)**

<b>REF. #</b>	<b>DESCRIPTION</b>	<b>PART #</b>	<b>QTY.</b>	<b>REF. #</b>	<b>DESCRIPTION</b>	<b>PART #</b>	<b>QTY.</b>
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)

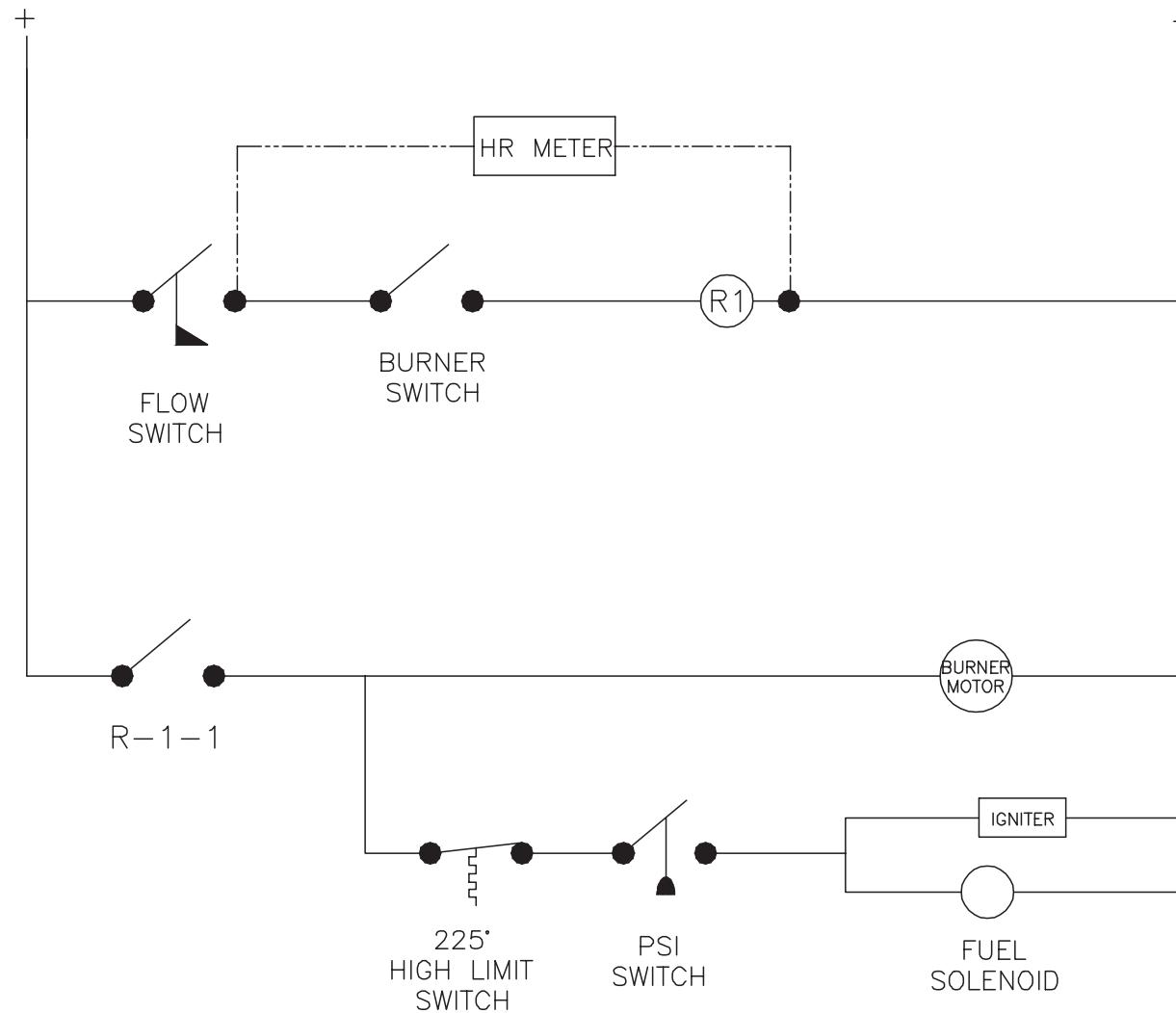


16-0416\_16-0417-102405-RZ

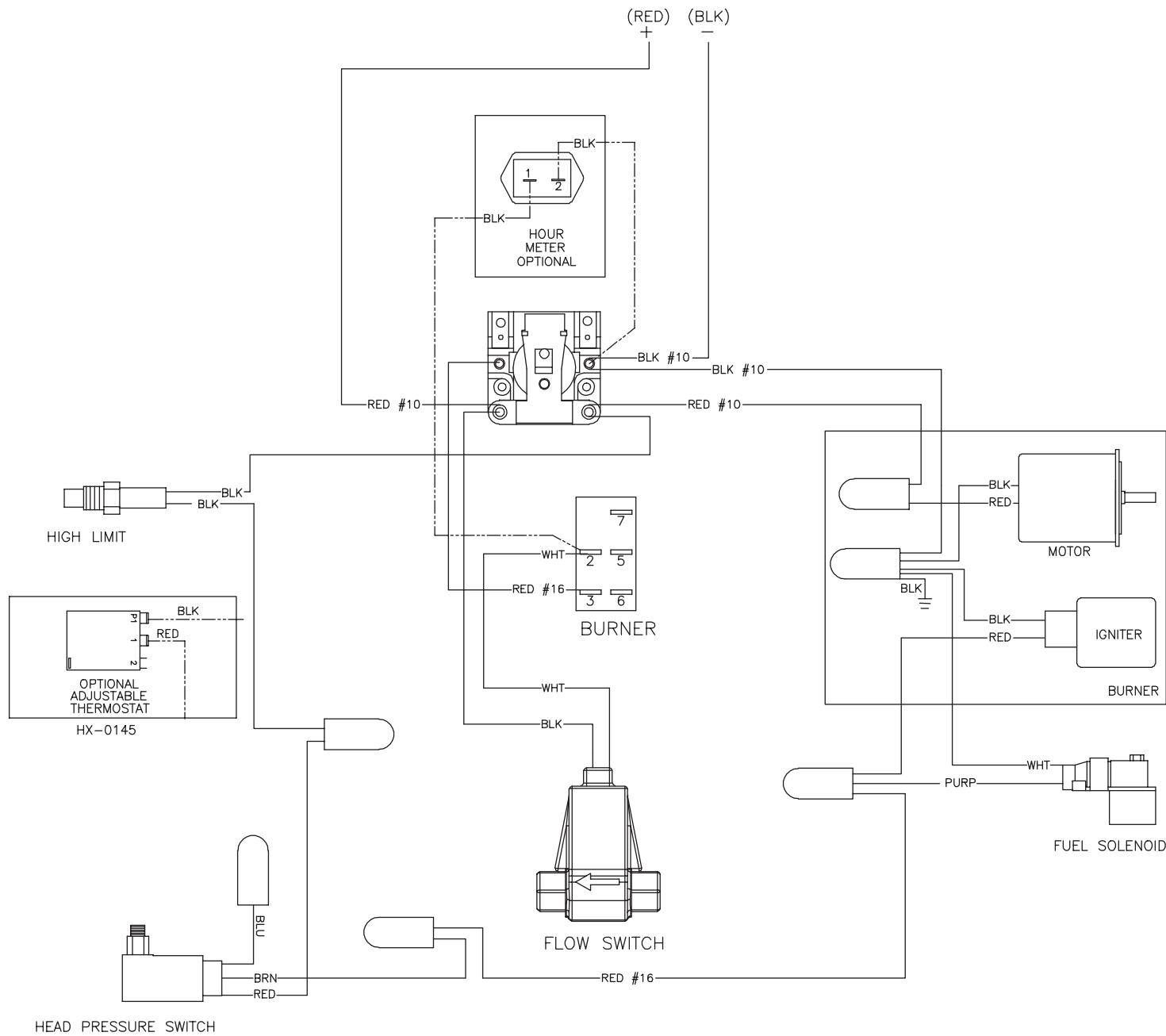
DUAL LANCE ASSEMBLY (16-0416 & 16-0417)			
REF. #	DESCRIPTION	PART #	QTY.
1	Dual Lance Assembly - 36" (Inc. 2-11)	16-0416	1
-	Dual Lance Assembly - 48" (Inc. 2-11)	16-0417	1
2	Detergent Nozzle	18-0110	1
3	Nut	30-6001	1
4	Clamp	16-0420	2
5	Lower Valve Cover (See 16-0416 or 16-0417)	N/A Sep.	1
6	Housing (See 16-0416 or 16-0417)	N/A Sep.	1
7	Lance	16-0419	1
8	Handle Repair Kit	70-0419	1
9	Lance (See 16-0416)	N/A Sep.	2
-	Lance (See 16-0417)	N/A Sep.	2
10	Screw	27-8196	1
11	Nozzle Adapter	24-0280	2

## WIRING SCHEMATIC

HDC WIRE SCHMEATIC-06203-KZ



## WIRING DIAGRAM



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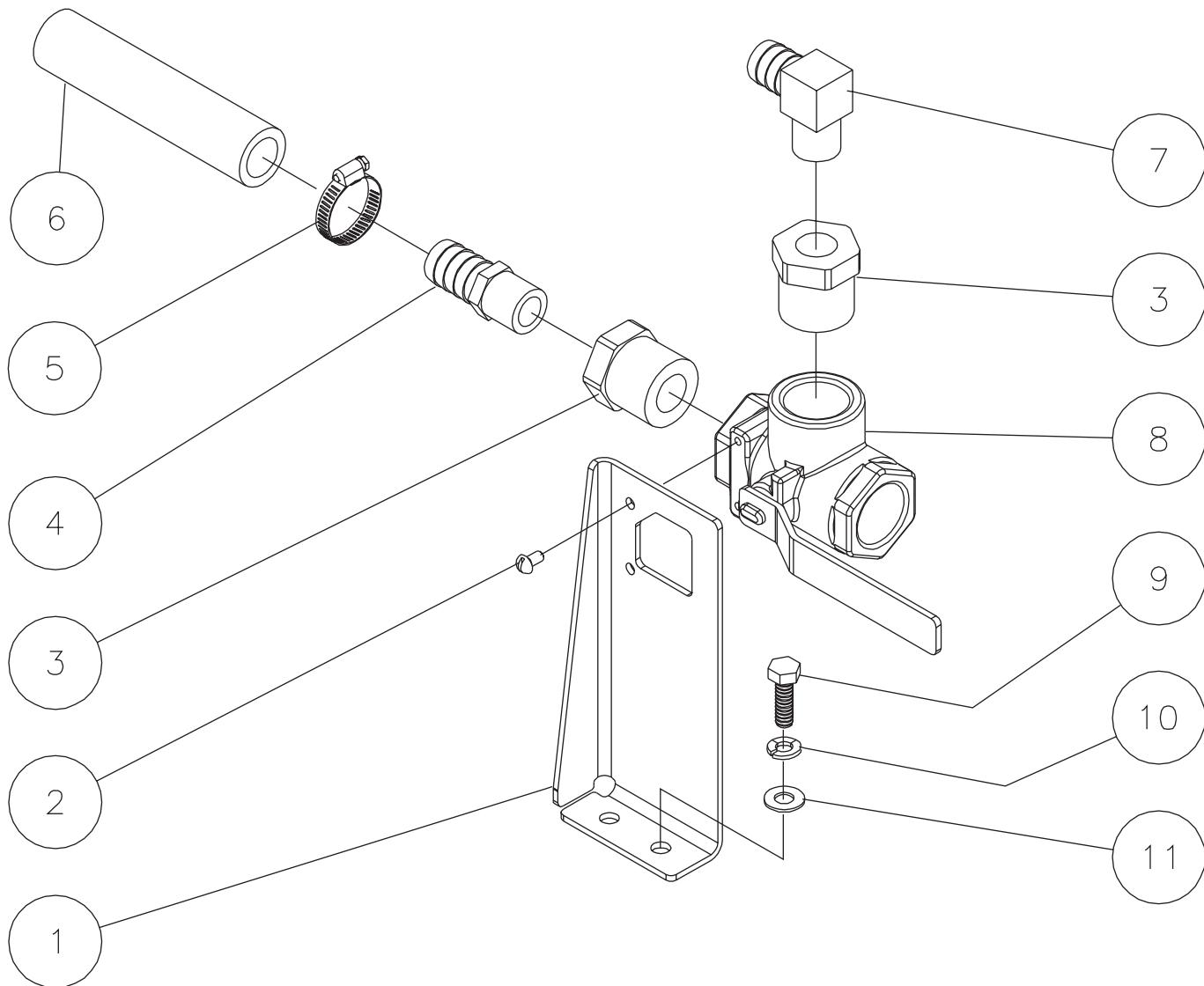
**NOTES**

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## OPTIONS

OPTIONS	DESCRIPTION	PAGE #
HX-0130	3 WAY BALL VALVE	64
HX-0143	PRESSURE TRAPPING UNLOADER (HDC-3005/3505)	66-67
HX-0145	ADJUSTABLE THERMOSTAT	68
HX-0147	LIFTING HOOK OPTION	69
HX-0156	HOURMETER	68

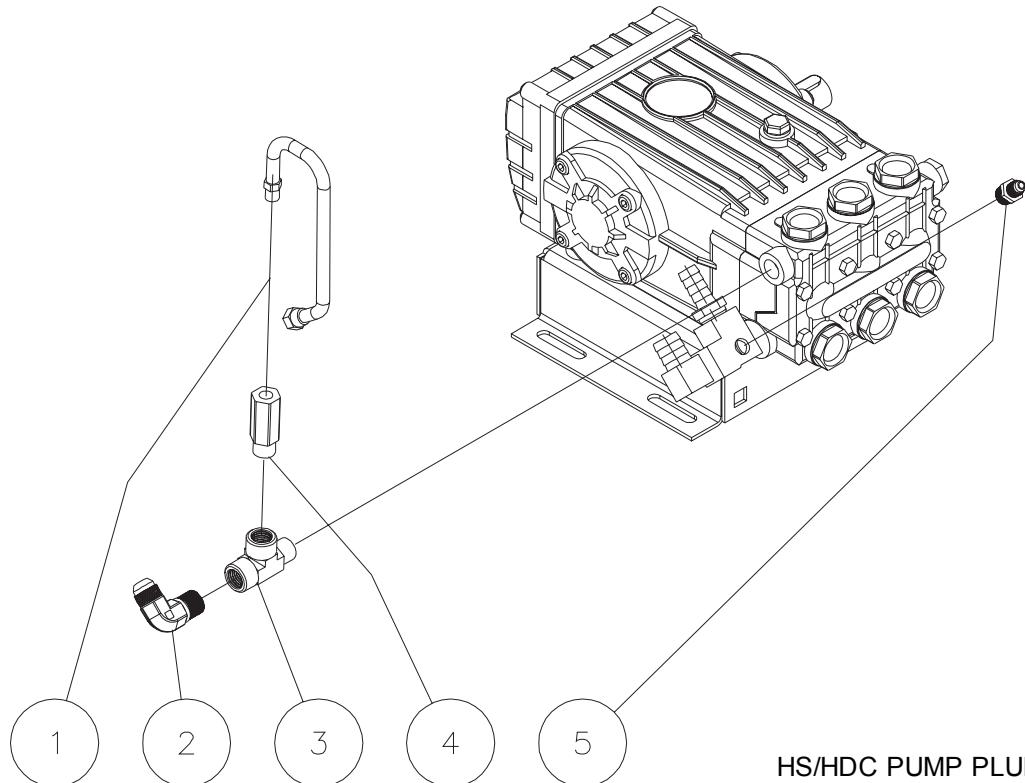
### 3-WAY BALL VALVE OPTION (HX-0130)



HS BALL VALVE ASSY-071502-BAR

3-WAY BALL VALVE OPTION (HX-0130)			
REF. #	DESCRIPTION	PART #	QTY.
1	Ball Valve Bracket	20-0560A01	1
2	Screw	27-9533	2
3	Bushing	23-0226	2
4	Hose Barb	23-0036	1
5	Clamp Worm	42-0003	2
6	Hose *(Fourteen Feet Required)	15-0033	1
7	Elbow	23-0037	1
8	Ball Valve	22-0321	1
9	Bolt	27-0067	2
10	Lockwasher	29-0007	2
11	Washer	28-0003	2
*Must Order in One Foot Lengths			

## PUMP PLUMBING: PRESSURE TRAPPING UNLOADER OPTION (HX-0143) (HDC-3005/3505)



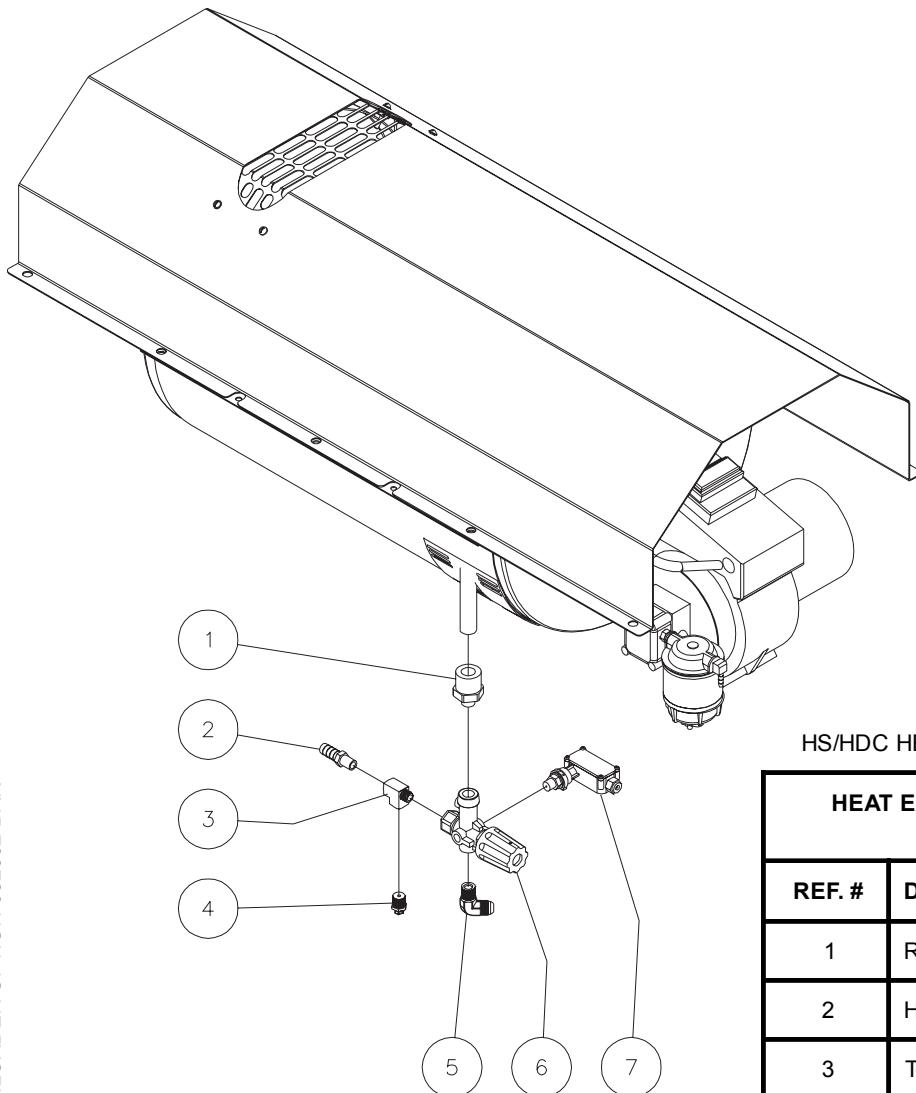
HS/HDC PUMP PLUMBING PRESSURE TRAPPING UNLOADER OPTION-082602-BAR

HS PUMP PLUMBING PRESSURE TRAPPING  
UNLOADER OPTION-082602-BAR

PUMP PLUMBING: PRESSURE TRAPPING UNLOADER OPTION (HX-0143) (HDC-3005/3505)			
REF. #	DESCRIPTION	PART #	QTY.
1	Easy Start Hose Assembly	15-0140	1
2	Elbow	24-0092	1
3	Tee	23-0058	1
4	Easy Start Valve	22-0242	1
5	Adapter	23-0247	1

## HEAT EXCHANGER PLUMBING: PRESSURE TRAPPING UNLOADER OPTION (HX-0143) (HDC-3005/3505)

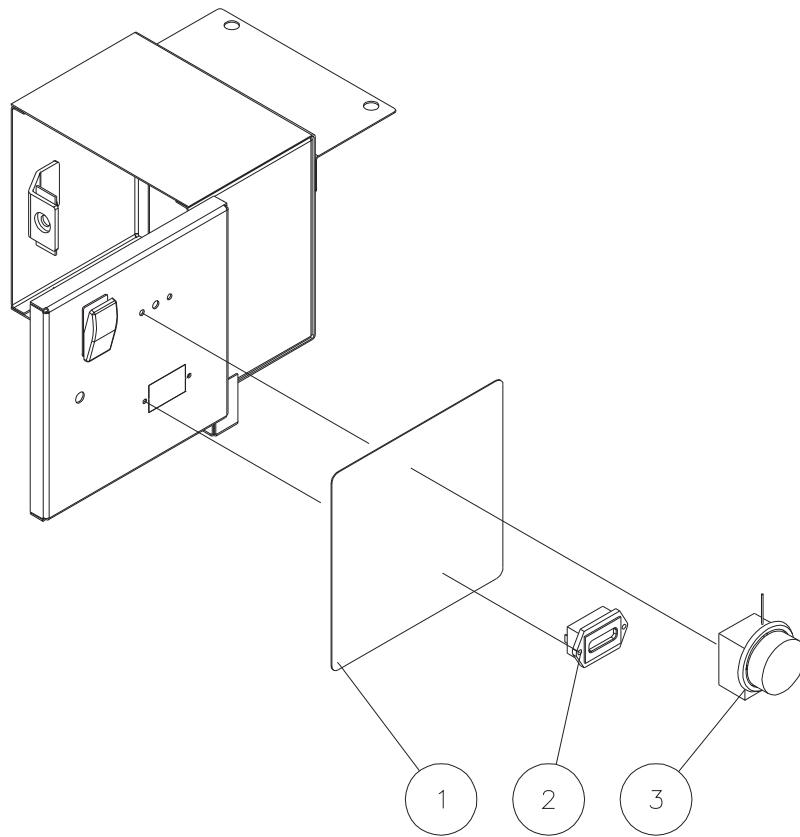
HS HEAT EXCHANGER PLUMBING PRESSURE TRAPPING UNLOADER OPTION-082602-BAR



HS/HDC HEAT EXCHANGER PLUMBING PRESSURE TRAPPING UNLOADER OPTION-082602-BAR

HEAT EXCHANGER PLUMBING: PRESSURE TRAPPING UNLOADER OPTION (HX-0143) (HDC-3005/3505)			
REF. #	DESCRIPTION	PART #	QTY.
1	Reducer	24-0048	1
2	Hose Barb	23-0120	1
3	Tee	23-0127	1
4	Thermo Valve	22-0208	1
5	Elbow	24-0092	1
6	Unloader Assembly	850-0252	1
7	Pressure Switch	22-0243	1

## ADJUSTABLE THERMOSTAT & HOURMETER OPTION (HX-0145 & HX-0156)



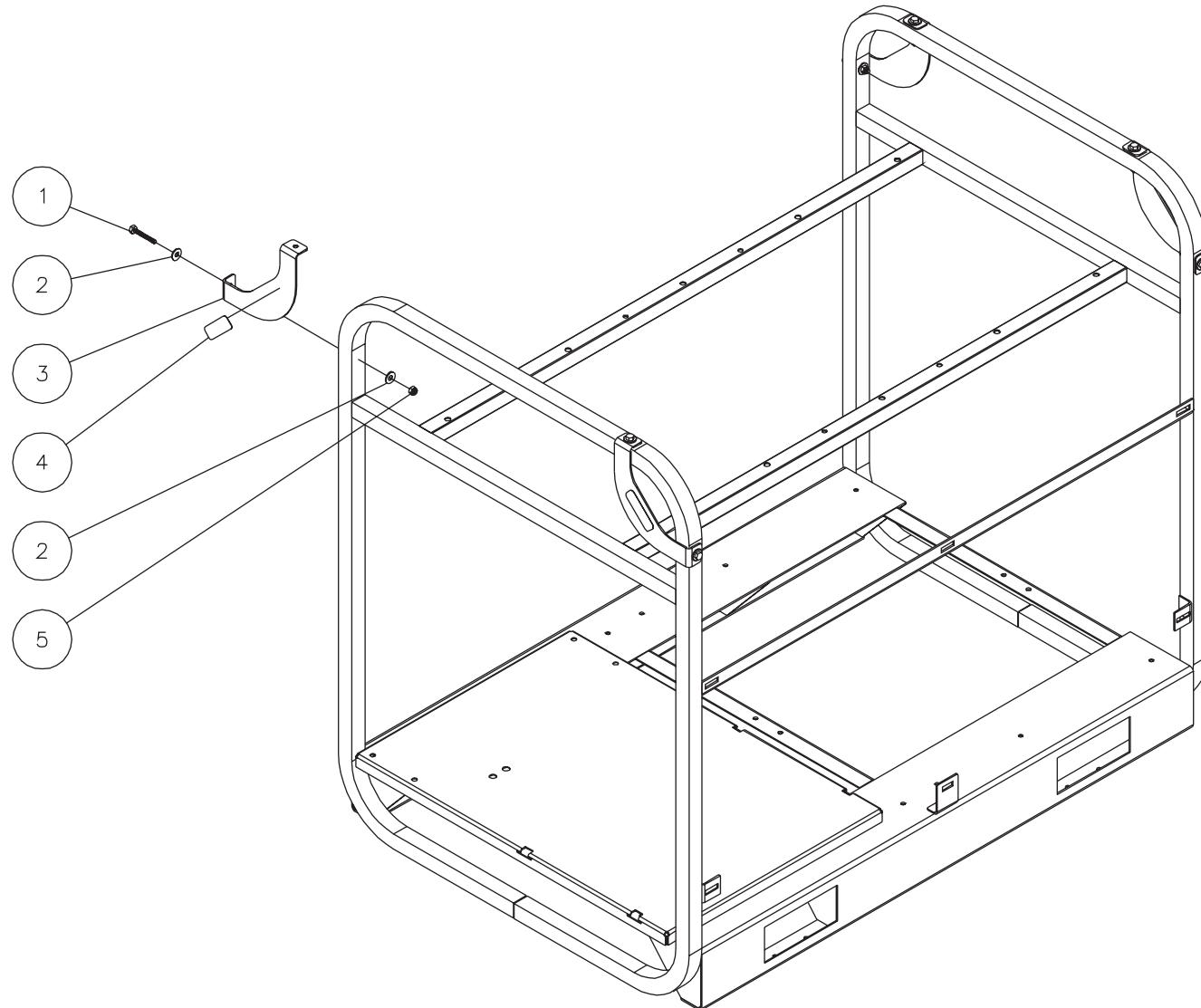
HS ADJUSTABLE THERMOSTAT &  
HOURMETER OPTION-070103-KZ

HS ADJ. THER. & HOURMETER OPTION-070103-KZ

ADJUSTABLE THERMOSTAT & HOURMETER OPTION (HX-0145 & HX-0146)			
REF. #	DESCRIPTION	PART #	QTY.
1	Decal- Electrical Box w/ Burner/ Hourmeter (HX-0146) (See 34-9024)	N/A Sep.	1
-	Decal- Electrical Box w/ Burner/ Adj. Thermostat/ Hourmeter (HX-0145 & HX-0146) (See 34-9024)	N/A Sep.	1
-	Decal- Electrical Box w/ Burner/ Adj. Thermostat (HX-0145) (See 34-9024)	N/A Sep.	1
2	Hourmeter (HX-0146)	32-0668	1
3	Adjustable Thermostat (HX-0145)	32-0734	1
	Safety Decal Kit (Includes 1)	34-9024	

## LIFTING HOOK OPTION (HX-0147)

LIFTING HOOK OPTION-071502-BAR



HS LIFTING HOOK OPTION-071502-BAR

LIFTING HOOK OPTION (HX-0147)			
REF. #	DESCRIPTION	PART #	QTY.
1	Bolt	27-0071	8
2	Washer	28-0022	16
3	Lift Bracket	20-0665A18	4
4	Decal- Lift (See 34-9024)	N/A Sep.	4
5	Locknut	30-0157	8
	Safety Decal Kit (Includes 4)	34-9024	

