



DL2900V, DL2900VMM, DL3700V Owner's Manual



DL Truck Loader Vacuum Owner's Manual

DL2900V, DL2900VMM, DL3700V
Beginning Serial #: 100515001

NOT FOR SALE IN CALIFORNIA

Original Instructions

IMPORTANT- READ CAREFULLY BEFORE USE AND KEEP FOR FUTURE REFERENCE

Table of Contents

Specifications/Accessories.....	3
Instruction Labels/Safety	4
Packing Checklist.....	5-6
Assembly	6-8
Operation.....	9-10
Maintenance.....	10-13
Troubleshooting.....	14
Service Kits	15-16
Illustrated Parts and Part Lists.....	17-24

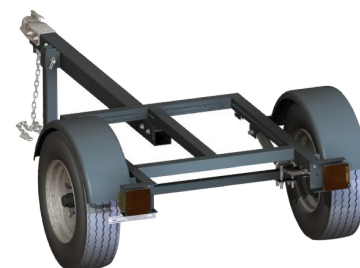
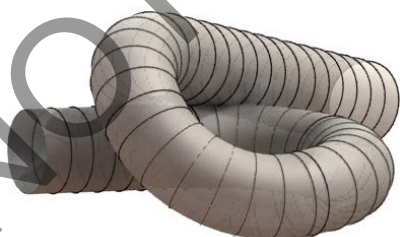
Specifications

	DL2900V	DL2900VMM	DL3700V
Engine: HP	29 HP (21.6kW)	29 HP (21.6kW)	37 HP (27.6kW)
Engine: Model	5424770004J1	5424770004J1	61E3770030J1
Engine: Type	Briggs and Stratton Vanguard	Briggs and Stratton Vanguard	Briggs and Stratton Vanguard
Engine: Fuel Capacity	6 gal. (22 L)	6 gal. (22 L)	6 gal. (22 L)
Engine: Oil Capacity	2.4 qt. (2.3 L)	2.4 qt. (2.3 L)	2.4 qt. (2.3 L)
Total Unit Weight	475 lb. (215.5 kg)	475 lb. (215.5 kg)	475 lb. (215.5 kg)
Max. Operating Slope	25°	25°	25°
Overall Length	60" (1.52m)	60" (1.52m)	60" (1.52m)
Overall Width	32.25" (0.82m)	32.25" (0.82m)	32.25" (0.82m)
Overall Height	74 7/8" (1.90m)	54" (1.37m)	74 7/8" (1.90m)

Note: Battery is not included! Your DL requires a 12V battery (40AH, 240CCA min., U1 series group) for proper fit and function.

Accessories

Hose Replacement Kit	Exhaust Hose Kit	Trailer DL
Standard on DL units. 10' (3.0m) long, clear polyurethane hose	8" x 5' (203mm x 1.5m) flexible hose increases exhaust distance. 8" x 5' (203mm x 1.5m) flexible steel hose increases exhaust distance.	Heavy duty spring axle trailer designed for towing your DL. Allows unit to be mounted for pickup from rear.
12" Hose P/N 791034 (DL2900V,DL2900VMM) 14" Hose P/N 792208 (DL3700V)	8" Flexible Hose P/N 791107 8" Flexible Steel Hose P/N 791106	P/N 791152



Instruction Labels

The labels shown below were installed on your BILLY GOAT® DL Vacuum. If any labels are damaged or missing, replace them before operating this equipment. For your convenience in ordering replacement labels, part numbers are included in the Illustrated Parts List. The correct position for each label may be determined by referring to the Figure and Item numbers shown.



Fig. 1
DANGER KEEP HANDS
AND FEET AWAY
P/N 440424



Fig. 2
WARNING SECURE
P/N 790232



Fig. 3
DANGER FLYING DEBRIS
P/N 810736

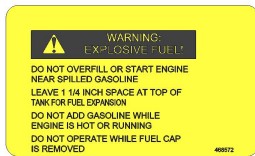


Fig. 4
EXPLOSIVE FUEL



Fig. 5
WARNING LINER DL
P/N 100330



Fig. 6
WARNING ENGINE OVERHEAT
P/N 811215



Fig. 7
DL INSTRUCT/WARN
P/N 790142



Fig. 8
SECURE NOZZLE
P/N 790301

Safety

PROPOSITION 65 STATEMENT



This product can expose you to chemicals including gasoline engine exhaust, which is known to the State of California to cause cancer, and carbon monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Read these safety rules and follow them closely. Failure to obey these rules could result in loss of control of the unit, severe personal injury or death to you, or bystanders, or damage to property or equipment.

Packing Checklist

Your Billy Goat is shipped from the factory in one carton and is completely assembled except for the exhaust elbow, nozzle, handle loop for nozzle, hose booms, hose bands, hose coupler, hose clamps and related hardware.



READ all safety instructions before assembling unit.
TAKE CAUTION when removing the unit from the box.



PUT OIL IN ENGINE BEFORE STARTING

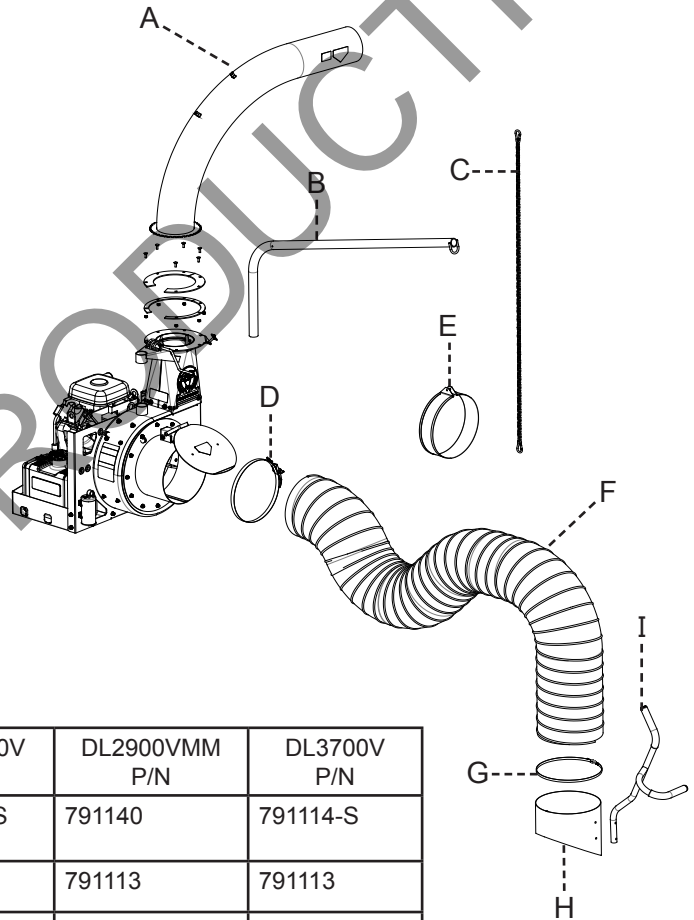
Parts Bag and Literature Assembly Includes:

Item	P/N
Warranty Card	400972
Owner's Manual	792504
General Safety and Warnings Manual	100294

NOTE: BATTERY IS NOT INCLUDED.
REQUIRES 12 V BATTERY, 40 AH, 240 CCA MIN. U1 SERIES GROUP BATTERY FOR PROPER FIT.

Boxing Parts Checklist

✓	I.D.	Item	DL2900V P/N	DL2900VMM P/N	DL3700V P/N
	A	Exhaust Elbow	791114-S	791140	791114-S
	B	Hose Boom Assembly	791113	791113	791113
	C	Boom Chain	791117	791117	791117
	D	-Clamp T-bolt Overcenter 12" Hose (DL2900V) -Clamp T-bolt Overcenter 14" Hose (DL3700V)	791065	791065	792219
	E	-Band hose boom 12" (DL2900V & DL2900VMM) -Band hose boom 14.50" (DL3700V)	790153	790153	792403
	F	Hose 12" X 10" (DL2900V & DL2900VMM) Hose 14"x 10' DL (DL3700V)	791034	791034	792208
	G	-Hose clamps 12" -Hose clamps 14"	790150	790150	792224
	H	-Nozzle intake 12" (DL2900V) -Nozzle intake 14" (DL3700V)	790149-S	790149-S	792605
	I	Handle Nozzle	791116	791116	791116
		Parts Bag & Literature Assy	792020	792020	792021



Packing Checklist Continued

Parts Bag Hardware Includes:

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	791081	BOLT EYE MACH THRD ZP G-2 3/8" x 2"	1
2	8171004	WSHR-STL, FLT, .438"X1.000"X.083" USS ZP	6
3	790230	BRACKET BATTERY QL	1
4	790231	ROD BATTERY HOLD DOWN	2
5	8160003	NUT-HEX-NYLK, .375"-16 ZP	2
6	8165003	NUT-HEX-NYLK, FLG .375-16 ZP	1
7	8041054	SCR-CAP, HEX .375"-16 X 2.000" G5 ZP	1
8	8041058	SCR-CAP, HEX .375"-16 X 3.000" G5 ZP	1
9	8165001	NUT-HEX-NYLK, FLG .250"-20 ZP	4
10	8172007	WSHR-STL, FLT, .281"X.625"X.065" SAE ZP	2
11	8041004	SCR-CAP, HEX .250"-20 X 0.750" G8 YZ	2
12 (NOT PICTURED)	792224 (DL3700V)/790150 (DL2900V/MM)	HOSE CLAMP	1

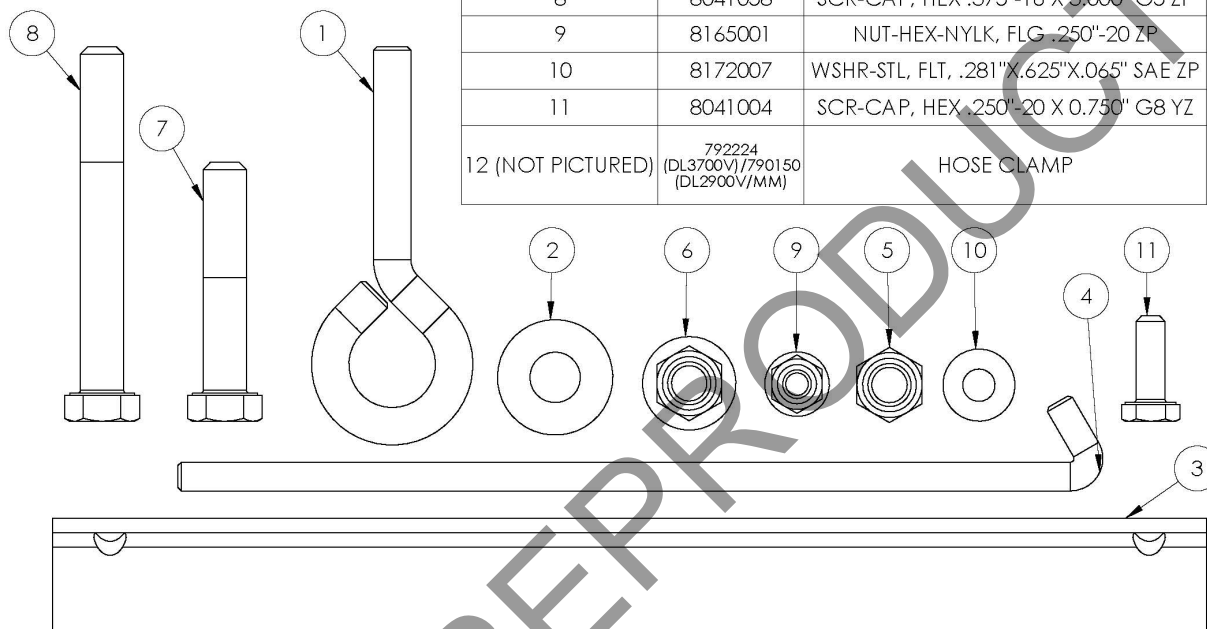


Fig. 9

Assembly

NOTE: Items in () can be referenced in the Parts Illustration and Parts List on pages 17-24.

1. SECURELY ATTACH unit to the bed of a truck or to a trailer, so that the exhaust discharges into an enclosed container. NOTE: This unit must be securely mounted to the bed of a truck or to a trailer before operating.
2. ATTACH the hose boom (item 2) to hose (item 3) by sliding the boom through the rings on the top of the housing.
3. ATTACH hose (item 3) to housing intake, using hose clamp (item 25) making sure to place the safety switch under the clamp. Then place the clamp (item 25) over and around the end of the hose to be attached to the housing. Slide the hose onto the housing intake and place the shut off switch under the clamp. Make sure the shut off switch is pressed in or the vacuum will not start, and clamp the hose to the intake. (See page 8 for illustration)
4. ASSEMBLE nozzle handle (item 6), to nozzle intake (item 9), using screw (item 7), eye bolt (item 8), washers (item 10) and lock nuts (item 11).
5. ATTACH assembled nozzle to hose using hose clamp (item 25). Before tightening hose clamp, position nozzle handle upward when hose is stretched to prevent twisting. Load on hose assembly during operation.

Assembly Continued

NOTE: Items in () can be referenced in the Parts Illustration and Parts List on pages 17-24.

6. ASSEMBLE hose band (item 2) around hose and secure chain between the flanges of the hose band using capscrew and lock nut (not pictured in Parts Drawing 1). Attach the chain (item 12) to the boom and the screw on the hose band. (See "ADJUSTING HOSE BOOM" on page 11).
7. SECURELY ATTACH exhaust elbow (item 31) capturing both flanges inside the clamp, then firmly tighten the clamp, securing the elbow to the housing (see "MOUNTING" below).
8. INSTALL a standard 12 volt lawn and garden battery "U1" series (not included) with at least 240 cold cranking amps and a 40 amp hour rating by using battery bracket (item 60), hold down rods (item 59), washers and lock nuts (Not pictured in Parts Drawing 4).
9. ATTACH the red battery cable to the + terminal and the black battery cable to – terminal on the battery.

Mounting Main Unit

General: Unit must be securely mounted to a trailer, truck bed, or other similar surface before use. Do not use this unit in a freestanding position. Unit is not stable until it has been secured in place.

Secure unit by bolting through the base of the unit and through the mounting surface using 3/8" dia. bolts, with washers and locking nuts (see Fig. 10).

Mounting: Fig. 11 illustrates the mounting position to the trailer (Billy Goat Part No. 791152) available from your Billy Goat dealer. The unit is only mounted one way.

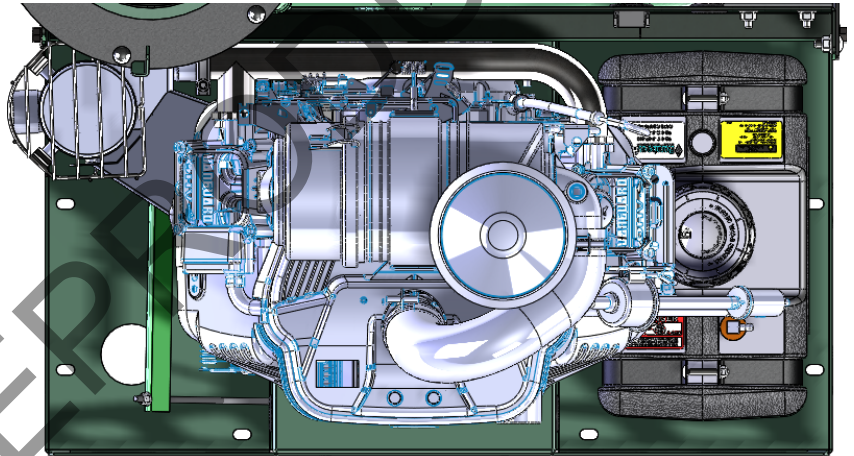


Fig. 10

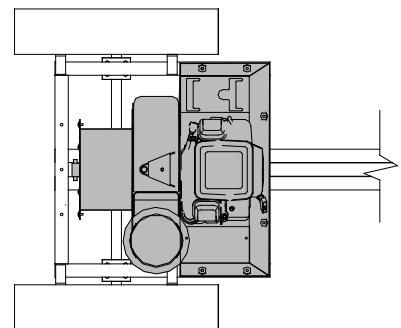


Fig. 11

Assembly Continued

Mounting Exhaust Elbow (See Fig. 12)

Note: this process requires two people, one to support the exhaust elbow and one to attach plates and hardware.

1. Remove the hardware from the clamps (items 30 and 40).
2. Apply good quality grease to the top and bottom of the toothed plate of the exhaust elbow (item 31). Also grease top surface of housing and bottom of clamp plates where the gear will rotate.
3. Place the exhaust elbow on the chute with the teeth of the flange against the worm gear and the exhaust holes, aligning.
4. Place the two bottom plates (item 35) on the opposite edges beside the elbow teeth aligning the holes.
5. Place the top plates (item 34) on top of the lower plates aligning the holes.
6. Secure the assembly with a plate half on top of the elbow flange and a plate half on bottom of the housing flange using 6, 1" carriage bolts and 6 lock nuts (removed hardware in step 1).

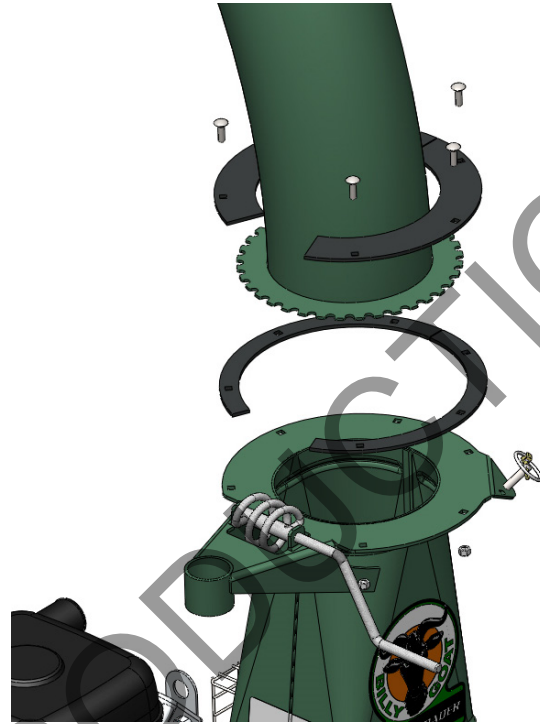


Fig. 12

Operation

Vacuuming Operation

Important

With the machine off and spark plug disconnected check the condition of the replaceable liner before every use and replace if necessary.

Exhaust Direction and Distance

Exhaust direction and distance are controlled by the rotation of the exhaust elbow. Typically debris is aimed to discharge to the rear of the container. The direction of discharge is adjusted by turning the crank on the exhaust elbow clamp and rotating the elbow to the desired direction.

Note: Elbow is heavy. Use caution when adjusting. Never stand directly under the elbow while adjusting direction of exhaust. Never direct exhaust into an area where bystanders may cross the path of the debris.

Intake Operation

With the fully assembled machine running, move the nozzle in sweeping motions over debris. Always allow air to flow into the nozzle along with the debris. Do not completely block the nozzle when vacuuming, it will reduce performance, and increase clogging (See Fig. 13). For removal of heavier debris, or debris that is stuck to the ground, rock nozzle forward to concentrate suction power around the debris (See Fig. 14).

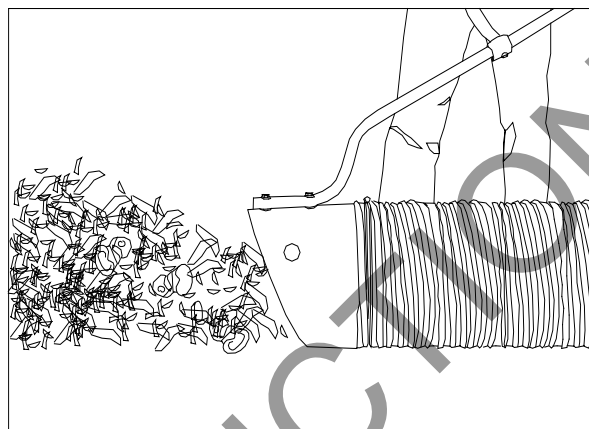


Fig. 13

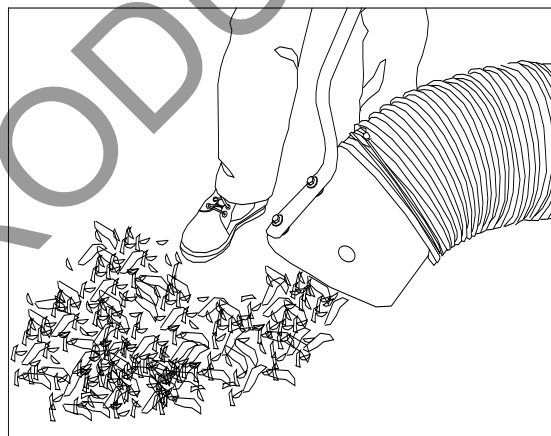


Fig. 14

Adjusting Hose Boom

Properly adjusting the boom prevents most hose clogs from occurring and maximizes vacuum performance by keeping the hose straight and perpendicular to the housing (see Fig. 15). Raise or lower one of the attachment links to a different area on the chain to make height adjustments.

A	Hose
B	Hose Band (stretch hose out before clamping).

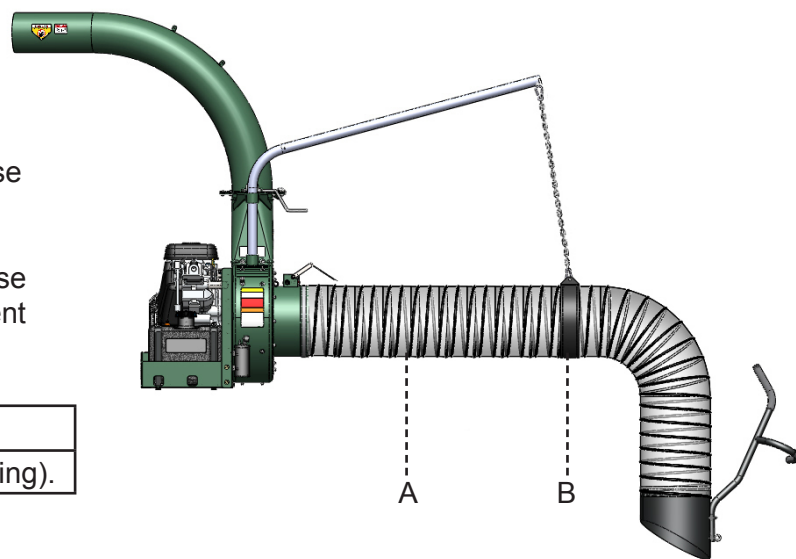


Fig. 15

Operation Continued

Unclogging a Clogged Hose

With engine running and unit secured to a trailer, truck bed, or other similar surface, fully stretch hose in a straight line to dislodge the clog. If the clog will not clear, turn unit off, and allow engine to come to a complete stop. Remove hose and manually clear the hose clog.

Note: The clogged debris may be sharp. Always wear durable gloves when removing clogs.

Unclogging a Clogged Housing or Exhaust Elbow

1. Turn engine off and wait for impeller to come to a complete stop.
2. Disconnect spark plug wires and battery cables.
3. Remove the hose from the housing and determine where the clog is located.
4. If possible, clear the clog through the intake opening. It may require removal of the intake adaptor (item 6) to allow access to clear the housing.
5. If clog is in the elbow, carefully remove the elbow. Remove elbow by removing the bolts and nuts on the elbow clamp so that the plates can be removed.

Note: Elbow is very heavy. Do not stand directly under elbow during removal!

Danger: The clog may contain sharp materials. Clear the clog wearing durable gloves! Reconnect spark plug wire.

Hose Care

To increase hose life, periodically rotate hose and reposition nozzle and coupler on front plate of unit. This ensures that the hose will not wear on only one side, further increasing its life.

Keep hose as straight as possible and avoid sharp bends during operation for best pick-up and to avoid clogs. Never drag hose. Always remove and store hose before transporting unit. Store hose straight and flat to maintain flexibility for next use.

Maintenance

Interlock System

With hose coupler installed (as shown in Fig. 16) the switch is open and engine is not grounded out, allowing engine to run. Hose must be installed and switch lever must engage switch for engine to start.

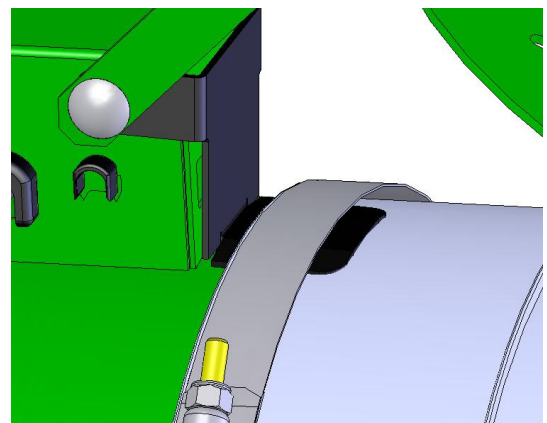


Fig. 16

Maintenance Continued

Impeller Removal

1. Wait for engine to cool and disconnect spark plug wires from the both sides of the engine.
2. Disconnect the negative battery cable (black) (item 89) from the battery.
3. Remove the hose from the unit.
4. Unattach the hose from boom assembly.
5. Remove the intake housing assembly (item 11) using 9/16" socket and socket wrench to remove (12) locknuts (item 55). Be careful to place intake assembly to the side without putting excess strain on safety switch wire harness.
6. Remove impeller bolt and lock washer by using an impact wrench (see Fig. 17).
7. Once bolt is removed impeller should slide out freely.
8. When impeller is free of the engine shaft, align impeller with the opening and pull it straight out of the housing.
9. Using a new impeller bolt, washer, and lock washer, install new impeller in reverse order.
10. Tighten impeller bolt. Torque impeller bolt to [175-180 Ft. Lbs. (237-244 N.m)].
11. Repeat steps 2 through 5 in reverse order.
12. Reinstall spark plug wires.

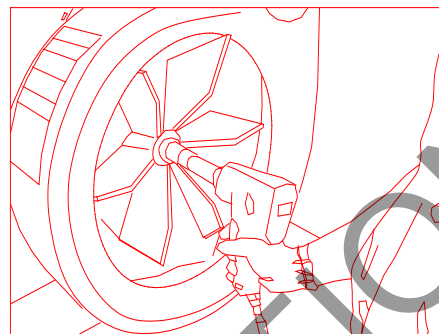


Fig. 17

Battery Care (For Electric-Starting Models)

Proper care can extend the life of a battery. Follow these recommendations to ensure your battery's best performance and long life:

- Do not allow the battery charge to get too low. If the machine is not used, charge the battery every 4 – 6 weeks with a 2 amp battery charger. Operate the engine for at least 45 minutes to maintain proper battery charge.
- Store an unused battery in a dry area that does not freeze.
- Do not charge an already charged battery. In theory, you cannot overcharge our battery with a trickle charger; however, when a battery is fully charged and the charger is still on, it generates heat that could be harmful to the battery. A fully charged battery will read 12V-13.2V with a voltmeter.
- Do not continue to crank your engine when the battery charge is low.

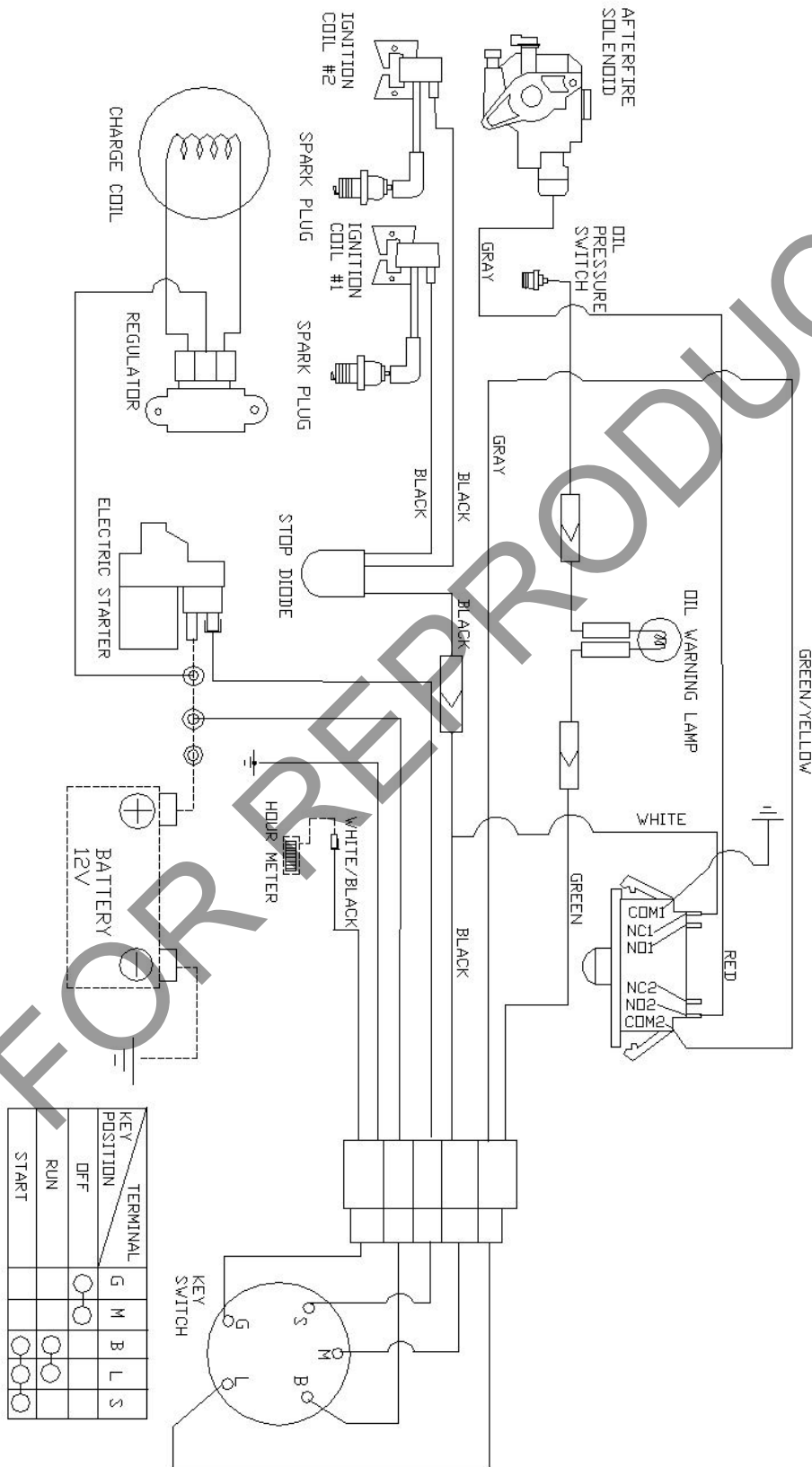
Charging the Battery

Operate the engine for at least 45 minutes to maintain proper battery charge. If the battery loses its charge, you will need to use a trickle charger to recharge it. Caution: The charger should have an output of 12 volts at no more than 2 amps. Using a charger with higher amps will cause significant damage to the battery.

- At 1 amp, the battery may need charging for as long as 48 hours.
- At 2 amps, the battery may need charging for as long as 24 hours.

Maintenance Continued

Wiring Diagram



Maintenance Continued

Periodic Maintenance

	Maintenance Operation	Each Use	Every 20 Hr or First Month	Every 50 Hrs or 3 Months	Every 100 Hrs or 6 Months	Every 250 Hrs	Every 300 Hrs
Engine Oil	Check engine oil	•					
	Change engine oil				•		
Air Filter	Check air filter	•					
	Clean air filter			•**			
	Replace air filter						•*
Spark Plug	Check/Adjust spark plug	•					
	Replace spark plug				•		
Battery	Inspect battery for corrosion or leaks	•					
	Check battery terminal for corrosion			•			
	Check/adjust valve clearance					•	
	Check replaceable liner	•					
	Check and clean engine of debris	•					
	Clean hose	•					
	Inspect for loose, worn or damaged parts	•					
	Check for excessive vibration	•					
	Clean truck loader	•					
	Check condition of fuel lines					•	
	Check all hardware for tightness					•	

* Or as needed.

** Or more often when used in dusty conditions.

Troubleshooting

Problem	Possible Cause	Solution
Will not vacuum or has poor vacuum performance	<ul style="list-style-type: none"> • Nozzle buried in debris. • Clogged hose or exhaust. • Excessive quantity of debris. 	<ul style="list-style-type: none"> • Withdraw nozzle from debris pile. • Unclog hose or exhaust (See page 12)
Engine will not start. (Starter does not turn).	<ul style="list-style-type: none"> • Battery is low or dead. • Battery cable is disconnected or battery terminal is corroded. • Harness wire is bad or disconnected from interlock switch. • Hose not installed, allowing interlock wire to ground. 	<ul style="list-style-type: none"> • Charge batter or replace if the battery does not hold charge. • Clean battery terminal and cable then reconnect. • Install hose coupler securely to the unit and check whether interlock sitch is engaged by lever. • Check harness wire connection.
Enging will not start. (Starter turns).	<ul style="list-style-type: none"> • Throttle and/or stop switch in off position. • Out of gasoline. Bad or old gasoline. Spark plug wire disconnected. Dirty air cleaner. 	<ul style="list-style-type: none"> • Check stop switches, throttle, and gasoline. • Connect spark lug wire. • Clean or replace air cleaner. • Or contact qualified service personelle.
Engine is locked and will not pull over.	<ul style="list-style-type: none"> • Debris locked against impeller. • Engine problem. 	<ul style="list-style-type: none"> • See page 12: "Unclogging a clogged housing or exhaust elbow." • Contact an engine servicing dealer for engine problems.
Engine will not stay running.	Oil reservoir overfilled.	Drain oil and refill to correct level.

Service Kits

Some parts on your BILLY GOAT® DL Vacuum can be serviced through at-home maintenance with a service kit. You can purchase a service kit by contacting BILLY GOAT® customer service. Below is a list of service kits available for the BILLY GOAT® DL Vacuums and items that each service kit includes.

Housing Service Kit

-Available for all DL models under P/N 792600

Part No.	Description	Quantity
792108	HOUSING WA DL29/37	1
100283	LABEL DL PIRANHA	1
791099	LABEL PRODUCT DECAL DL	1
790142	LABEL DL INSTRUCTION/WARN	1
811215	LABEL WARNING ENGINE OVERHEAT	1

Engine Base Service Kit

-Available for all DL models under P/N 792604

Part No.	Description	Quantity
792106	BASE ENGINE WA DL35	1
790232	LABEL WARNING SECURE	1
100164	LABEL PRODUCT DECAL DL	1

Muffler Assembly Service Kit

-Available for all DL models under P/N 792607

Part No.	Description	Quantity
792226	MUFFLER ASSY DL35	1

Flapper Intake Service Kit

-Available for DL2900V & DL2900VMM models under P/N 791103-S

-Available for DL3700V under P/N 792603

Part No.	Description	Quantity
792105	FLAPPER WA 14" INTAKE DL35	1
400424	LABEL WARNING OPEI	1

Service Kits

Impeller Service Kit (P/N 792606)

-Available for DL2900V & DL2900VMM models under P/N 792606

-Not available for DL3700V

Part No.	Description	Quantity
792251	IMPELLER WA 20.00" X 1.4375" LOADER DL29	1
792104	PIRANHA BLADE WA DL35	1
792222	SCREWCAP 5/8"-18 X 3.00" ZP GR8	1
9201200	KEY 3/8" SQ. X 4.50"	1
8171010	WASHER LOCK 5/8 S/T MED	1
100347	LIT GENERAL 3/4"-16 IMPELLER KIT	1

Impeller Assembly Service Kit

-Not available for DL2900V or DL2900VMM models

-Available for DL3700V under P/N 792601

Part No.	Description	Quantity
792102	IMPELLER WA 20.00" x 1.4375" LOADER DL35	1
792104	PIRANHA BLADE WA DL35	1
792222	SCREWCAP 5/8"-18 X 3.00" ZP GR8	1
9201200	KEY 3/8" SQ. X 4.50"	1
8171010	WASHER LOCK 5/8 S/T MED	1
100347	LIT GENERAL 3/4"-16 IMPELLER KIT	1

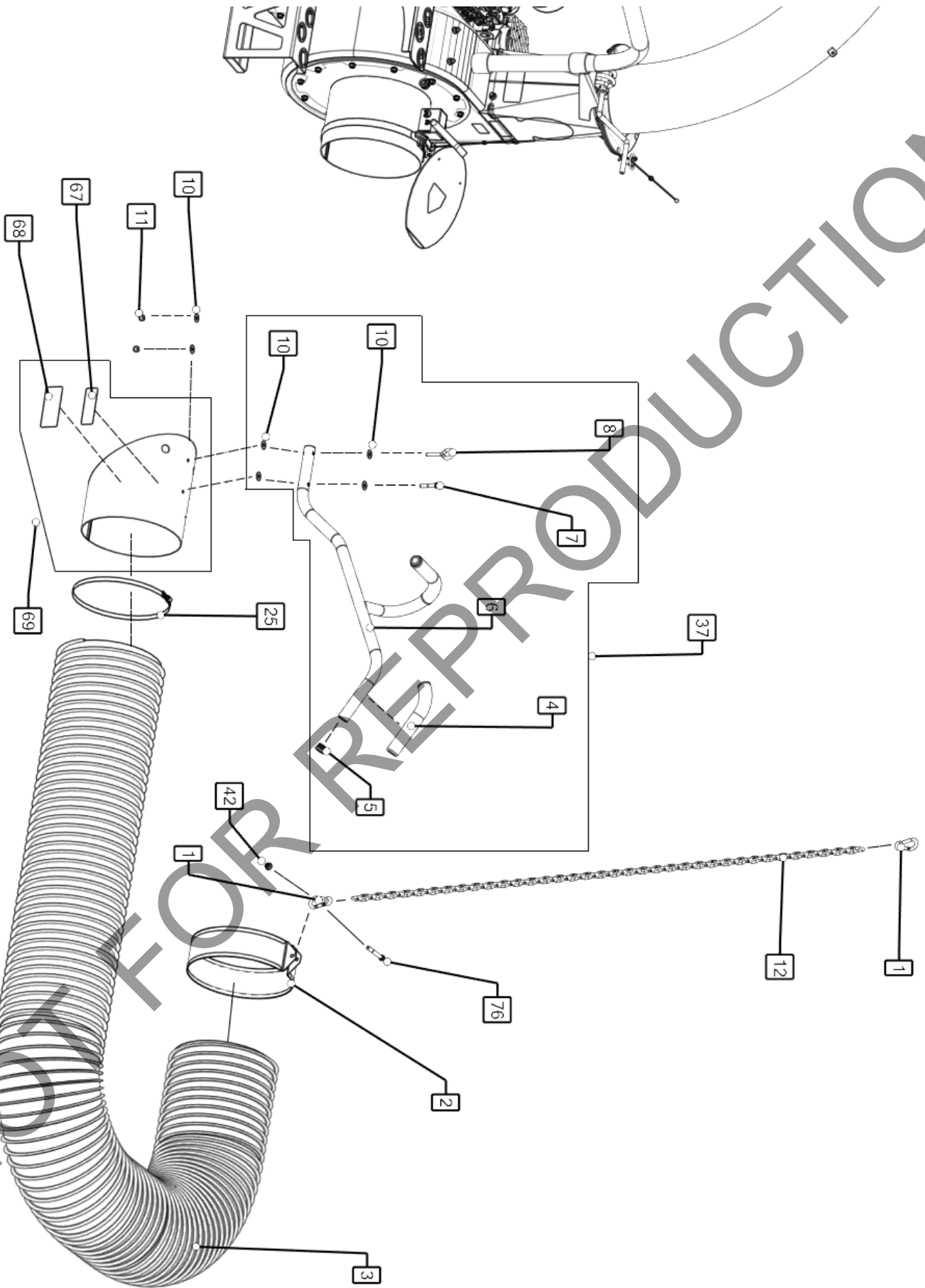
Nozzle Intake Service Kit

-Available for DL2900V & DL2900VMM models under P/N 790149-S

-Available for DL3700V under P/N 792605

Part No.	Description	Quantity
792402	NOZZLE INTAKE FORMED 14"	1
811215	LABEL WARNING ENGINE OVERHEAT	1
790301	LABEL WARNING NOZZLE	1

Parts Drawing 1



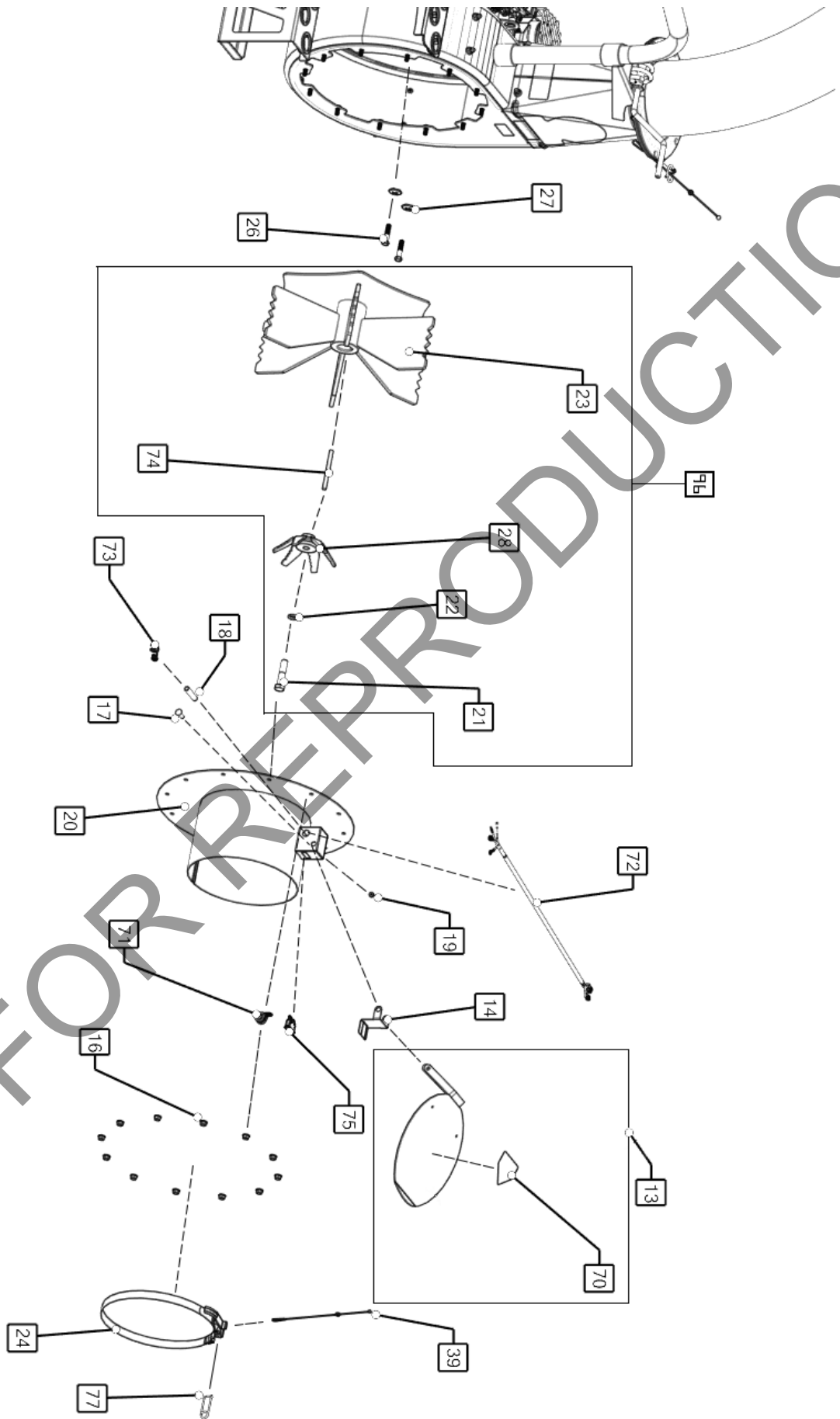
Parts List 1

DL29000V

DL2900VMM

DL3700V

Item No.	Description	Part No.	Part No.	Part No.	Quantity
1	HOOK, SNAP SAFETY 5/16" ZP	791027	791027	791027	2
2	BAND HOSE BOOM 12" FORMED	790153	790153	-	1
	BAND HOSE BOOM 14.50" FORMED	-	-	792403	1
3	HOSE INTAKE 12"X 10'	791034	791034	-	1
	HOSE 14" INTAKE x 10'	-	-	792208	1
4	GRIP 1-1/4" ID x 9.5" LONG	440146	440146	440146	2
5	PLUG TUBE INSERT 1.25" O.D.	791056	791056	791056	2
6	HANDLE NOZZLE DEBRIS LOADER	791054	791054	791054	1
7	SCREWCAP 3/8"-16 X 2" HCS ZP	8041054	8041054	8041054	1
8	BOLT EYE G-2 3/8" x 2"	791081	791081	791081	1
10	WASHER 3/8 FC 7/16 X 1 X 5/64	8171004	8171004	8171004	6
11	NUT LOCK 3/8-16 HEX	8160003	8160003	8160003	2
12	CHAIN 73 LINKS DL	791057	791057	791057	1
25	-CLAMP HOSE 12"	790150	790150	-	1
	CLAMP, DIXON HS248	-	-	792224	1
37	HANDLE NOZZLE/GRIP ASSY	791116	791116	791116	1
42	NUT-HEX-NYLK, FLG .375"-16 ZP	8165003	8165003	8165003	1
67	LABEL WARNING NOZZLE	790301	790301	790301	1
68	LABEL WARNING ENGINE OVERHEAT	811215	811215	811215	1
69	NOZZLE INTAKE 12" SERVICE	790197-S	790197-S	-	
	NOZZLE 14" INTAKE SERVICE	-	-	792605	1
76	SCREWCAP 3/8"-16 X 3" HCS ZP	8041058	8041058	8041058	1



Parts List 2

DL29000V

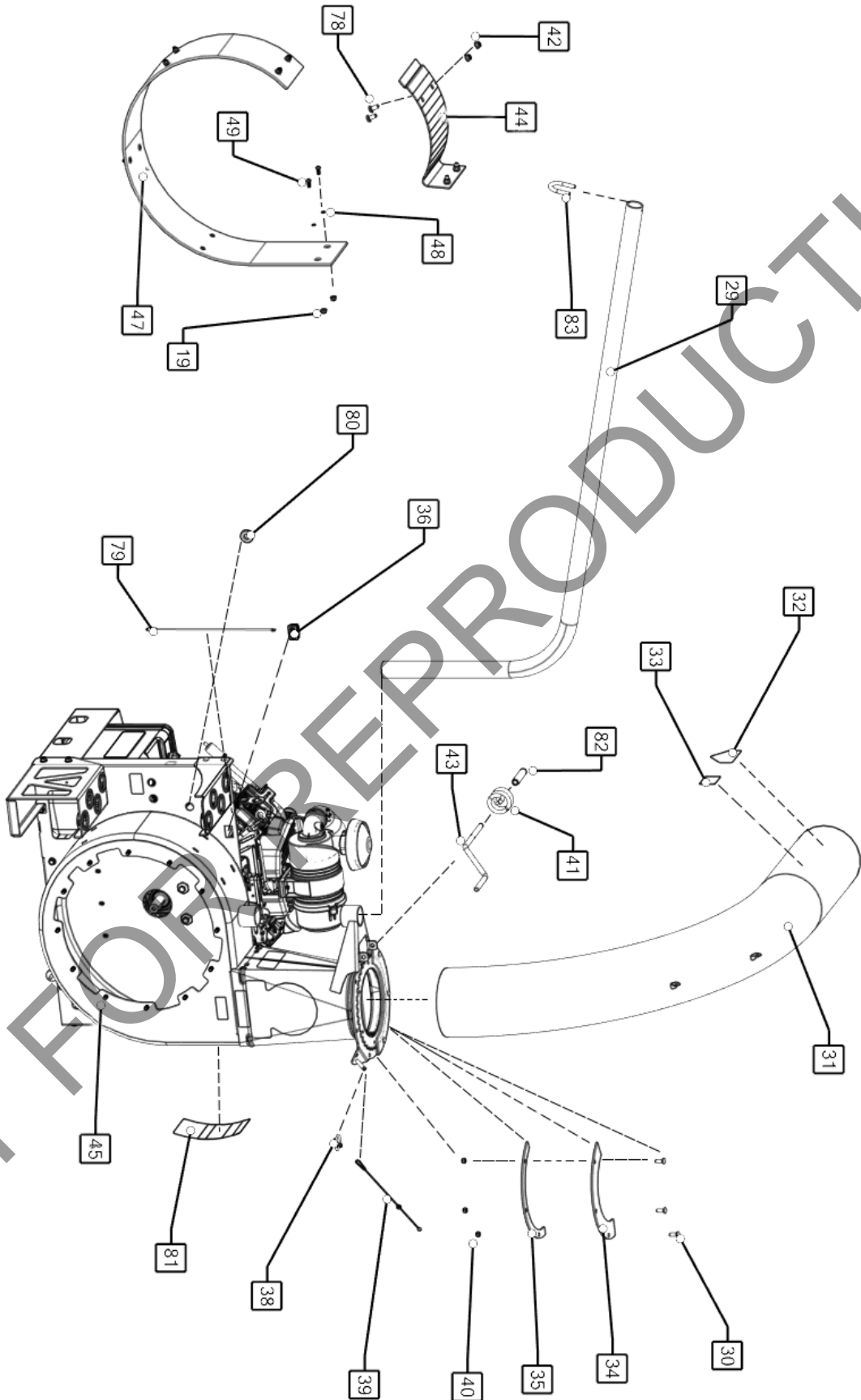
DL2900VMM

DL3700V

Item No.	Description	Part No.	Part No.	Part No.	Quantity
13	FLAPPER WA 12" SERVICE	791103-S	791103-S	-	1
	FLAPPER INTAKE 14" W/LA-BELS	-	-	792603	1
14	LEVER HOSE SWITCH	791068	791068	791068	1
16	NUT 3/8-16 SER. HEX WSHR FLNG	791079	791079	791079	12
17	BOLT CARRIAGE 5/16-18 X 3 1/2" ZP	8024050	8024050	8024050	1
18	SPACER 3/8" X 2 1/2"	900503	900503	900503	1
19	NUT-HEX-NYLK, FLG .3125"-18 ZP	8165002	8165002	8165002	1
20	-INTAKE HOUSING WA 12" DL29	792107	792107	-	1
	INTAKE HOUSING WA 14" LOADER DL35 (DL3700V)	-	-	792103	1
21	SCREWCAP 5/8"-18 X 3.00" ZP GR8	792222	792222	792222	1
22	WASHER LOCK 5/8 S/T MED	8171010	8171010	8171010	1
23	IMPELLER WA 20.00" X 1.4375" LOADER DL29	792251	792251	-	1
	IMPELLER WA 20.00" x 1.4375" LOADER DL35	-	-	792102	1
24	CLAMP T-BOLT OVERCENTER 12" HOSE	791065	791065	-	1
	CLAMP T-BOLT OVERCENTER 14" HOSE	-	-	792219	1
26	SCREWCAP 7/16"-14 X 2" GR.5 W/PATCH LOCK	790307	790307	790307	2
27	WASHER LOCK 7/16" TWISTED TOOTH	850132	850132	850132	2
28	PIRANHA BLADE WA DL35	792104	792104	792104	1
70	LABEL WARNING OPEI	400424	400424	400424	1
71	CLAMP ROUTING FUEL LINE	791070	791070	791070	1
72	HARNESS, WIRING DL	791096	791096	791096	1
73	STRAIN RELIEF HEYCO 1244	500282	500282	500282	1
74	KEY 3/8" SQ. X 4.50"	9201200	9201200	9201200	1
75	SWITCH, SAFETY INTERLOCK	791095	791095	791095	1
77	PIN SAFETY	800365	800365	800365	1
96	IMPELLER WA DL29 SERVICE	792606	792606	-	1
	IMPELLER WA 20.00" DL35/ DL37	-	-	792601	1

Parts Drawing 3

Note: Items 19, 42, 44, 47, 48, 49, and 78 are located in the interior of Item 45.



Parts List 3

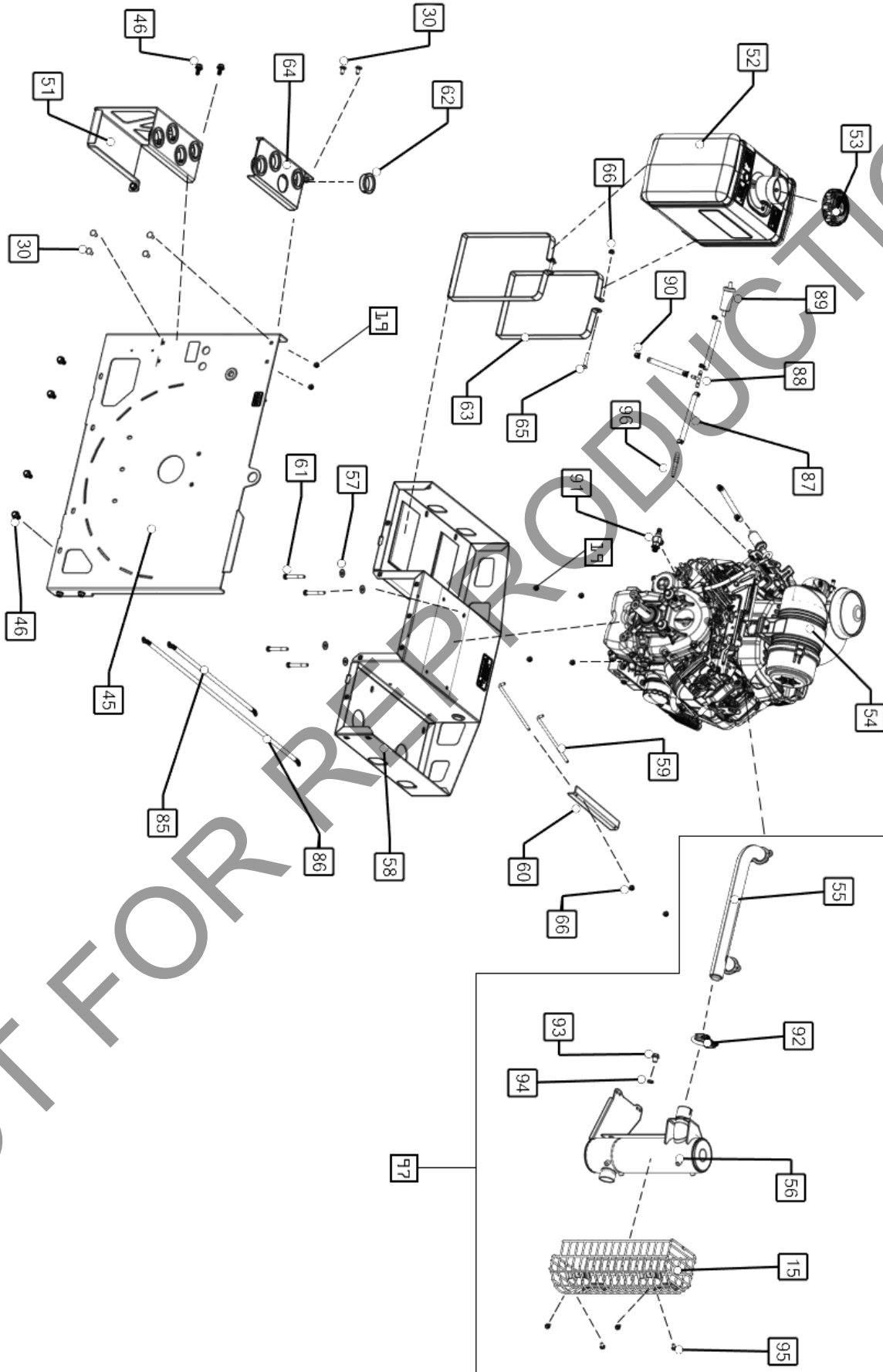
DL29000V

DL2900VMM

DL3700V

Item No.	Description	Part No.	Part No.	Part No.	Quantity
29	BOOM HOSE HANGER	791113	791113	791113	1
30	BOLT CARRIAGE 5/16-18 X 3/4" ZP	8024039	8024039	8024039	6
31	ELBOW 8" DL SERVICE	791114	-	791114	1
	ELBOW EXHAUST WA DL 12" RADIUS	-	791140	-	1
32	LABEL WARNING OPEI	400424	400424	400424	1
33	LABEL DANGER FLYING DEBRIS	810736	810736	810736	1
34	PLATE CLAMP HALF DL	791047	791047	791047	2
35	PLATE CLAMP SPLIT DL	791049	791049	791049	2
36	HOURMETER, INDUCTIVE PANEL MOUNT	373305	373305	373305	1
38	LYNCH PIN 3/16" x 1 9/16"	520004	520004	520004	1
39	LANYARD PLASTIC 10"	360243	360243	360243	1
40	NUT-HEX-NYLK, FLG .3125"-18 ZP	8165002	8165002	8165002	6
41	GEAR WORM EXHAUST ROTATE	791109	791109	791109	1
42	NUT-HEX-NYLK, FLG .375"-16 ZP	8165003	8165003	8165003	4
43	SHAFT GEAR WORM	791038	791038	791038	1
44	PLATE FLANGE HOUSING LOADER	791020	791020	791020	1
45	HOUSING WA DL29/37	792108	792108	792108	1
47	LINER REPLACEABLE LOADER	791018	791018	791018	1
48	WASHER 5/16 SAE Z/P	8172008	8172008	8172008	10
49	SCREW BUTTON HEAD 5/16 X 0.75	791078	791078	791078	10
78	BLT-RDHDSSQNK, .375"-16 X 1.000 G5 ZP	8024058	8024058	8024058	2
79	WIRE, ASSY HOUR METER DL29/37	792256	792256	792256	1
80	GROMMET 1" HOLE	520087	520087	520087	1
81	LABEL DL INSTRUCTION/WARN	790142	790142	790142	1
82	PIN ROLL 3/16 x 0.875 ZP	8195162	8195162	8195162	1
83	BOOM LOOP HOSE HANGER	791053	791053	791053	1

Parts Drawing 4



Parts List 4

DL29000V

DL2900VMM

DL3700V

Item No.	Description	Part No.	Part No.	Part No.	Quantity
15	GUARD MUFFLER DL35	792226-2	792226-2	792226-2	1
19	NUT-HEX-NYLK, FLG .3125"-18 ZP	8165002	8165002	8165002	10
45	HOUSING WA DL29/37	792108	792108	792108	1
46	SER. HEX WSHR FLNG SCR 0.375 - 16 x 0.75	791080	791080	791080	8
50	MUFFLER ASSY DL29/37	792253	792253	792253	1
51	RAKE HOLDER, LOWER DL	792244	792244	792244	1
52	TANK, CARB/EPA SIX GALLON 2.500" NECK	791157	791157	791157	1
53	CAP, CARB/EPA 3.500"	791158	791158	791158	1
54	ENGINE 29HP HORZ. SHAFT B&S	792246	792246	-	1
	ENGINE 37HP EFI HORZ. SHAFT B&S	-	-	792247	1
55	MANIFOLD DL35	792226-3	792226-3	792226-3	1
56	MUFFLER DL29/37	792252	792252	792252	1
57	WASHER 5/16 FLAT ZP	8171003	8171003	8171003	4
58	SIDE, ENGINE BASE RH	792106	792106	792106	1
59	ROD BATTERY HOLD DOWN	790231	790231	790231	2
60	BRACKET BATTERY DL	790230	790230	790230	1
61	SCREWCAP 5/16"-18 X 2 1/4" GR 5 HCS ZP	8041033	8041033	8041033	4
62	BUSHING, SNAP 1.81" ID	382292	382292	382292	8
63	CLAMP, TANK FUEL	791043	791043	791043	2
64	RAKE HOLDER, UPPER DL	792243	792243	792243	1
65	BOLT CARRIAGE 1/4-20 X 1 3/4" ZP	8024025	8024025	8024025	2
66	NUT-HEX-NYLK, FLG .250"-20 ZP	8165001	8165001	8165001	2
84	BOLT CARRIAGE 5/16-18 X 3/4" ZP	8024039	8024039	8024039	2
85	CABLE BATTERY BLACK 20"	812341	812341	812341	1
86	CABLE BATTERY RED 36"	812282	812282	812282	1
87	FUEL LINE 1/4" ID X 6"	792406	792406	792406	4
88	1/4" X 1/4" X 1/4" BARB TEE FITTING	792255	792255	792255	1
89	FUEL FILTER BRIGGS	844793	844793	844793	1
90	CLAMP, FUEL LINE 0.50"	791164	791164	791164	8
91	PLUG OIL DRAIN DL35	792234	792234	792234	1
92	CLAMP MUFFLER DL35	792226-4	792226-4	792226-4	1
93	O2 SENSOR PORT PLUG DL29	792254	792254	792254	1
94	GSKT CRUSHABLE CPR 12MM X 18MM X 2MM THK	792245	792245	792245	1
95	SCREW MUFFLER DL35	792226-5	792226-5	792226-5	4
97	DL 29/35/37 MUFFLER ASSY SERVICE	792607	792607	792607	1