

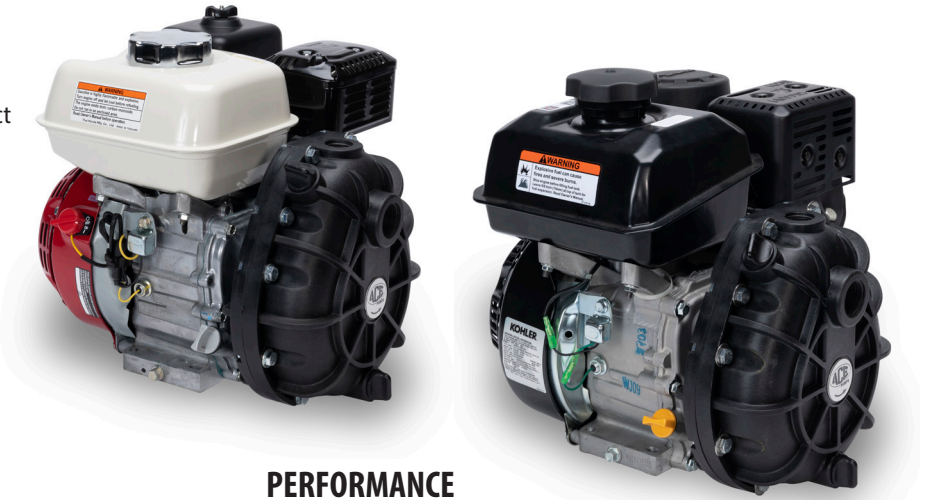


# GE-85SP Self-Priming Gas Engine Driven Centrifugal Pump

These compact corrosion resistant pumps are perfect for smaller transfer and spray applications where no other power source is available.

Features include:

- Compact, light weight design
- All polypropylene construction with stainless steel internal hardware providing excellent corrosion resistance
- Directly mounts on engine with no need for expensive gear reduction models



## SPECIFICATIONS

### Pump Specifications

Ports	1" NPT x 3/4" NPT	
Max. Flow	24 GPM (90 LPM)	
Max. Pressure	60 PSI (4.1 BAR)	
Priming Height	Maximum 6 feet (1.8 meters)	
Construction	Polypropylene Corrosion Resistant Construction	
Seal	Carbon/Ceramic/FKM or Optional Silicon Carbide/FKM	
Shaft	Mounts Directly on 3/4" Keyed Engine Shaft	
Impeller	Polypropylene with key	

### Engine Specifications

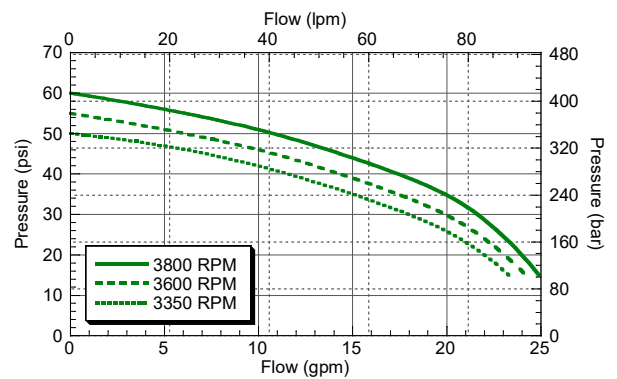
Model	Honda GX-160	Kohler Command Pro
	Commercial Series	CH245 Professional Series
Power	4.8 HP (3.6 kW) @ 3600 RPM	4.5 HP (3.3 kW)
Starting System	Recoil	Recoil
Shaft	3/4" straight keyed shaft	3/4" straight keyed shaft

### Available Models

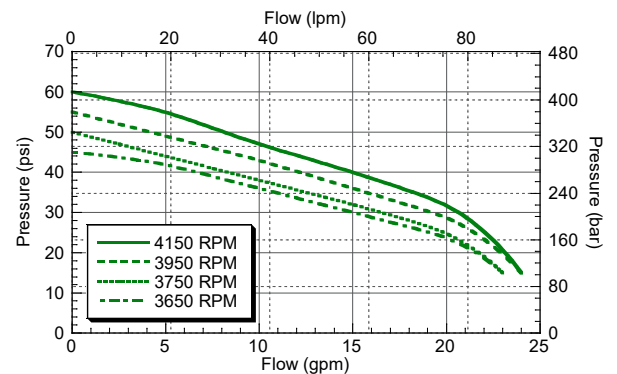
	GE-85SP-LE (Less Engine)	GE-85SP-HONDA
		GE-85SP-KOHLER

## PERFORMANCE

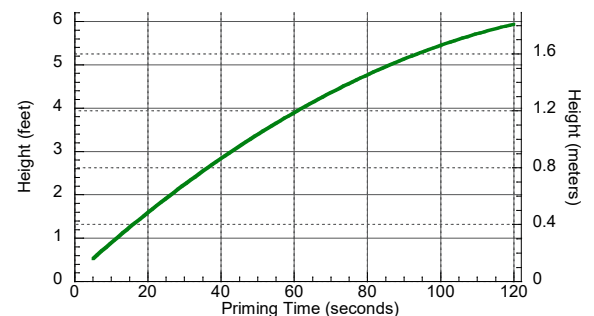
### GE-85SP-HONDA



### GE-85SP-KOHLER



### Priming Curve



**Maximum Fluid Temperature - 140° F (60° C)**

**Fill pump volute prior to starting engine.**

**Do Not Run Dry** - Seal damage will result from running dry. Impeller damage may also occur if run dry for an extended period.

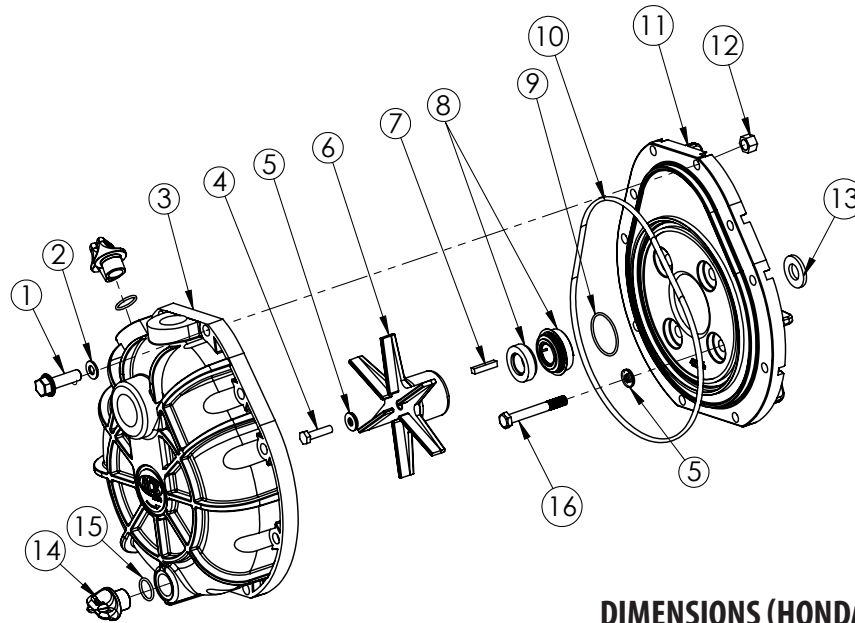
**Do Not Run With Flow Shutoff For Extended Periods**

Running the pump with no flow for extended periods of time will result in excessive heat and pump failure. A continuous bypass is recommended for low flow applications.

**Do not use with flammable liquids.**



# GE-85SP Series

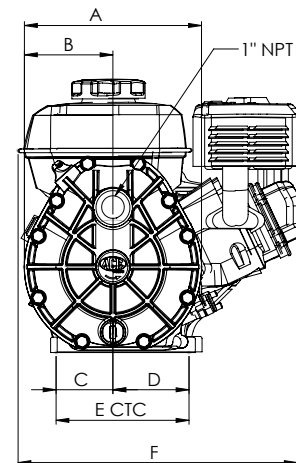


## PARTS LIST

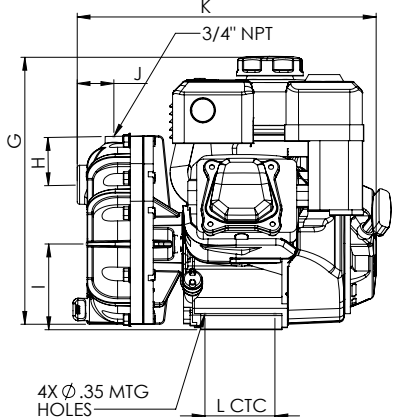
REF. #	PART NUMBER	EDP #	DESCRIPTION	REQ.
1	42237	42237	Cap screw, 5/16"-18 x 1-3/8", hex head	10
2	20730	20730	Washer, 5/16", flat, volute to bracket	10
3	GE-12-75SP	42708	Volute, 3/4" x 1", polypropylene (includes two 41122 plugs)	1
4	GE-60-SS	42235	Cap screw, 5/16" NF x 3/4", hex head, stainless steel	1
5 ①②	30028	30028	Washer, sealing, stainless steel	5
6	GE-26-85	42711	Impeller with keyway, polypropylene	1
7	41082	41082	Key, 3/16" x 3/16" x 15/16"	1
8 ①	BAC-7-660V	30225	Shaft seal, carbon/ceramic/FKM (includes 40159 O-ring)	1
8 ②	BAC-7SC-660V	30226	Shaft seal, silicon carbide/FKM (includes 40159) (optional)	1
9 ①②	40159	40159	O-ring, shaft seal, GE-85	1
10 ①②	40014	40014	O-ring, volute seal, GE-85SP	1
11	GE-14-85SP	42726	Bracket, GE-85SP, polypropylene	1
12	42270	42270	Nut, hex, 5/16"-18	10
13	BAC-54	41130	Slinger	1
14	41122	41122	Plug, volute (includes 40191 O-ring)	2
15	40191	40191	O-ring, fill and drain plug	2
16	42238	42238	Cap screw, 5/16" NF x 2-1/2", stainless steel	4
*	42062	42062	Engine, 4.8 HP Honda GX160UT1QX2	-
*	42076	42076	Engine, 4.5 HP Kohler CH245-3152	-
* ①②	30035	30035	Thread locker, removable	1
①	RK-GE-85SP	60847	Repair kit for GE-85SP	-
②	RK-GESC-85SP	60848	Repair kit for GE-85SP, silicon carbide (optional)	-

\* Not shown in parts diagram.

## DIMENSIONS (HONDA GX-160)



Ref.	A	B	C	D	E	F
Inches	9.0	4.5	2.6	3.8	6.4	14.2
MM	228.6	114.3	66.0	96.0	162.0	361.0



Ref.	G	H	I	J	K	L
Inches	13.8	2.5	4.3	2.3	15.0	3.1
MM	350.5	63.5	109.2	58.4	380	80

### 3D Model Available

<https://www.3DContentCentral.com/parts/supplier/Ace-Pumps.aspx>



## GE-85SP-LE Assembly Instructions

### WARNINGS:

**Maximum Fluid Temperature - 140° F**

**Fill pump volute prior to starting engine.**

**Do Not Run With Flow Shutoff For Extended Periods** - Running the pump with no flow for extended periods of time will result in excessive heat and pump failure. Running the pump with flow shutoff for more than 5 minutes causes the fluid temperature to rise and melt pump components. A bypass is recommended for low flow applications.

**Do Not Run Dry** - Seal damage or failure will result from running dry. Impeller damage may also occur if run dry for an extended period.

**NOTE:** Refer to the engine Owner's Manual for proper operation and safety precautions.

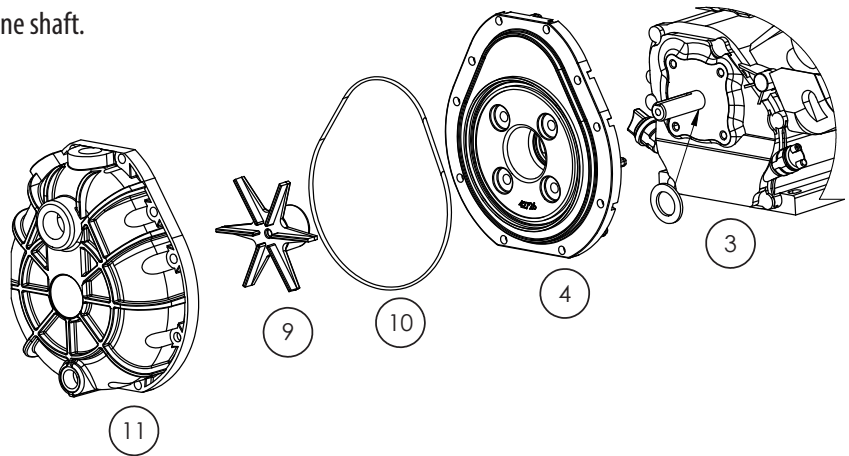
The GE-85SP-LE pump kit includes all parts necessary to assemble the pump on a gas engine with 3/4" keyed shaft.

### Assembly:

- 1) Remove box contents and verify all parts were received. The rotating seal face (Ref. 8) and 41082 key (Ref. 7) are factory installed in the impeller hub (Ref. 6). The stationary seal face (Ref. 8) and 40159 O-ring (Ref. 9) are factory installed in the bracket (Ref. 11).
- 2) Clean engine shaft internal threads with brake cleaner or similar degreasing material and dry.
- 3) Insert the BAC-54 slinger onto the engine shaft and slide over the keyway to the shaft shoulder.
- 4) Place the GE-14-85SP bracket carefully over the engine shaft.

- 5) Attach the GE-14-85SP bracket to the engine using (4) 42238 5/16"NF cap screws and (4) 30028 sealing washers. The rubber side of the washer faces the GE-14-85SP bracket. Torque bolts to 10 ft-lb (14 N-m).

**Caution:** Aluminum engine housing threads may strip if over tightened.



- 6) Verify that the slinger is on the shaft with clearance on both sides for proper function.
- 7) Verify that the key is in place in the impeller keyway. If the key is loose apply silicone and reinstall in the keyway.  
**Caution:** Be careful not to touch or contaminate the seal face.
- 8) Install the GE-26-85 impeller over the engine shaft, aligning the impeller key with the shaft keyway.
- 9) Attach the impeller with (1) GE-60-SS 5/16" cap screw and (1) 30028 5/16" sealing washer. The rubber side of the sealing washer faces the impeller.  
**Important:** Apply included removable threadlocker (Nut Lock) to screw threads and torque to 60 in-lb (7 N-m).
- 10) Lightly grease the 40014 housing seal O-ring and place onto the GE-14-85SP pump bracket around the pilot.
- 11) Install the GE-12-75SP volute to the GE-14-85SP bracket with (10) 42237 5/16" cap screws, (10) 20730 5/16" flat washers and (10) 42270 5/16" hex nuts. Start all bolts first then torque opposing bolts until all are tightened to 60 in-lb (7 N-m) of torque.
- 12) Follow engine manufacturers instructions for engine startup procedures.



## Seal Replacement Instructions

### Disassembly:

- 1) Remove (10) 42237 5/16" volute cap screws, (10) 20730 5/16" flat washers and (10) 42270 5/16" nuts.
- 2) Remove GE-12-75SP volute and 40014 volute O-ring. Discard used O-ring.  
**Note:** Do not remove the screws inside the volute. There are no serviceable parts in the assembly. Only remove in case of blockage using care to not strip the holes. Locking material should be used when reinstalling the screws.
- 3) Remove the GE-60-SS 5/16" cap screw and 30028 sealing washer from the end of the engine shaft. Discard the used sealing washer.
- 4) Remove the GE-26-85 impeller from the engine shaft.
- 5) Remove and discard the rotating seal face and rubber cup from the impeller hub by prying with a screwdriver inside the seal ID. Verify that 41082 key is in place in the impeller keyway. If the key is loose apply silicone and reinstall in the keyway.
- 6) Clean the impeller seal bore prior to installing the new seal. Wet the rubber cup with soapy water to lubricate the seal for installation. Place a clean, non-abrasive cloth over the seal face to prevent damage during installation. Use your hand to press the seal into the bore until it is seated flat.
- 7) Remove the GE-14-85SP bracket from the engine by removing (4) 42238 cap screws and (4) 30028 sealing washers. Discard the used sealing washers.
- 8) Turn the bracket over and press or tap out the stationary seal and 40159 O-ring. Discard used O-ring.
- 9) Clean the seal bore. Install the new 40159 O-ring under the seal cup on the new stationary seal. Press or tap the seal cup evenly into the seal bore with a 1-1/2" pipe nipple.  
**Caution:** Be careful not to touch or contaminate the seal face.
- 10) Refer to the pump assembly instructions on the previous page for re-assembly.