SUBARU
Industrial Power Products

Vertical Shaft OHC > Print chart

5.5HP / EA190V

Performance Curve:

Engine Overview:
Overhead Cam Vertical Shaft

Engine Family Overview:
Featuring a vertical shaft configuration, Subaru's new EA175V and EA190V are the first to offer chain-driven overhead cam (OHC) technology to the small, air-cooled, vertical shaft engine market. Featuring an innovative and completely original design, the engines are built lightweight, yet rugged and powerful enough for demanding applications such as; lawn mower and garden applications including pressure washers, walk behind string trimmers, aerators and lawn vacs to name a few. By incorporating industry-leading technology and numerous advanced features, the vertical shaft engines offer superior power and reliability to competitive engines.

Specifications:

Class	Air Cooled, 4-Stroke, Overhead Cam, Chain Drive, Gasoline Engine
Shaft	Vertical
Cylinders	1
Displacement	189cc
Cycles	4
Fuel	Automotive Unleaded
Max HP/RPM (Gross HP)	5.5/3600
Bore x Stroke mm	68 x 52
Compression Ratio	9:1

Starter	Recoil
Dry Weight lbs	29.7
Dry Weight kg	13.5
Length inches (mm)	423
Width inches (mm)	350
Height inches (mm)	288
Fuel Capicity US Gallons (ltrs)	1qt (1L)
Lube Type	SAE 10W-30
Air Cleaner	Foam (Optional Paper)
Muffler (type)	Low Tone Rigid Mount
Ignition System	Solid State
Lube System	Splash with Chain Carry
Color	Black Standard
Governor System	Mechanical Flyweight
Fuel System	Carbureted Float

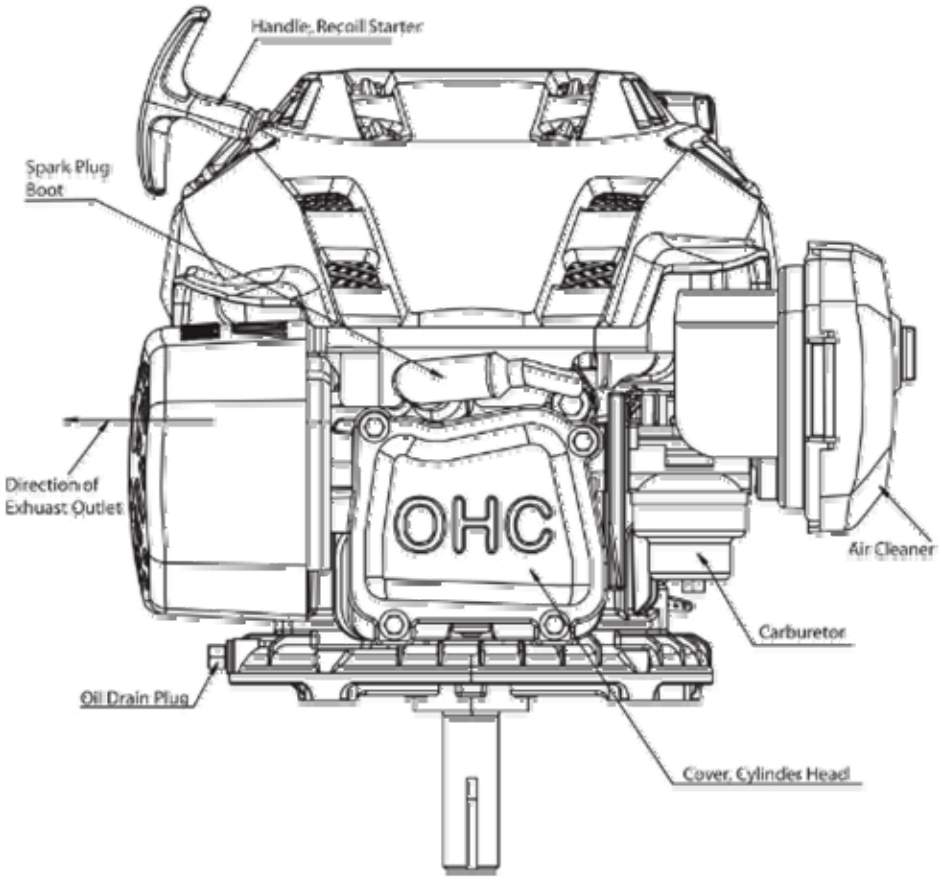
Key Features & Benefits:

3 Year Residential 1 Year Commercial	This engine come with 3 year Residential and 1 year Commercial Use Warranty
High Efficiency Intake Port	The illustration shows the straight intake port on the right side of the picture. The lower resistance to the flow of the air/fuel mixture improves the power, efficiency and lowers emissions. Overhead Cam (OHC) technology allows the intake and exhaust valves to be positioned for optimum performance.
High Performance Pent Roof Design	Overhead Cam (OHC) technology and the Pent-Roof combustion chamber allow the Subaru EA190 vertical shaft engine to use a higher compression ratio of 9:1. The higher compression ratio increases the power produced for a given size engine. It also improves efficiency and overall performance.
Cast Iron Cylinder Liner with Heavy Duty Piston Rings	Heavy-duty piston rings coupled with a cast-iron cylinder liner resist wear and ensure a long engine life.
Chain Drive Overhead Cam	Chain-driven Overhead Cam design offers superior power and performance with an automatic decompression system to reduce the required pulling force by 30 to 40 percent, and ensure starting on the first pull.
Forged Steel Crankshaft	Forged high-carbon steel crankshaft provides maximum reliability under demanding loads, thus providing longer engine life. The drop forging process increases the strength and durability of the crankshaft by re-aligning the molecules in the steel. This process hardens the complete crankshaft. Most engines use cast-iron steel crankshafts.
Crankshaft Ball Bearing Support	Ball bearing crankshaft support offers maximum stability under demanding loads.
Camshaft with Automatic Compression Release	The camshaft and the sprocket are made of special sintered alloy and constructed as a single piece. The camshaft is provided with a separate lobe for the intake and exhaust valve . The decompression release lever is mounted on the sprocket end side.

Hardened Steel Rocker Arms	Hardened steel rocker arms with precision tappet adjusters are used for greater durability and reduce service requirements.

Dimensional Diagram:

EA190V
Front View



For Additional Views and Dimensions
View the PDF File Link Above