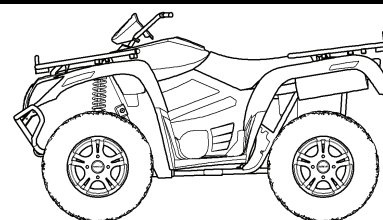


Arctic Cat® ATV/Prowler

Installation Instructions - Service Parts

550 H1 Short Block Kit (p/n 0801-181)



■ **NOTE:** Read these installation instructions thoroughly before beginning the installation process. Retain these Installation Instructions for future reference.

Application: All 550 H1 models

Kit includes:

p/n	QTY	DESCRIPTION
0801-184	1	Short Block
0832-047	1	Bearing
0812-083	1	Oil Pump Driven Gear
0801-165	1	Gasket Kit
0812-083	1	Oil Pump Driven Gear*
0830-128	1	Magneto Cover Gasket*
0830-116	1	Clutch Cover Gasket*
0830-174	1	V-Belt Cover Gasket*
0830-084	1	Base Gasket*
0412-338	1	Exhaust Pipe Gasket*
0830-018	1	Tensioner Adjuster Assembly Gasket*
0830-107	4	Fastener Seal*
0830-147	4	Steel Washer*
0828-004	1	Cam Shaft Lock Washer*
0830-129	1	Odometer Drive Gasket*
0812-026	4	Washer Gasket*
0830-097	1	Cylinder Head Gasket*
0827-013	2	Shoulder Nut*
0453-626	1	Instructions

* Included in Gasket Kit (p/n 0801-165)

■ **NOTE:** Refer to the appropriate Arctic Cat ATV/Prowler Service Manual for more specific instructions.

This kit contains a complete inner crankshaft/transmission assembly, necessary gaskets, and head-bolt steel washers. The outer components must be removed from the existing engine to install the new short block kit.

■ **NOTE:** The illustrations in the service manual may differ somewhat from the engine being repaired, but the components and placement are basically the same.

DISASSEMBLING ENGINE

Refer to Section 3 in the appropriate service manual for removing the top-, right-, and left-side components.

■ **NOTE:** Do not remove the valves or replace the valve seals unless there is an issue with these components.

⚠ CAUTION

When using the rotor/flywheel removal tool, use a crankshaft protector or damage to the crankshaft will occur.

■ **NOTE:** Additional spacers may be present when removing the drive clutch and driven pulley. Note their location for assembly purposes.

INSPECTING/CLEANING COMPONENTS

■ **NOTE:** The service technician should use sound judgment and discretion when inspecting for wear and/or damage. If wear is normal and within acceptable limits according to specifications, there is no need to replace components.

Inspect all bearings for damage, roughness, and debris and replace if necessary.

Inspect the cylinder head, cam shaft, rocker arms, and piston for unusual wear. If no unusual wear is noted, clean the components and mating surfaces. If unusual wear is noticed, refer to the appropriate service manual for service information on the individual components.

ASSEMBLING ENGINE

Refer to Section 3 in the appropriate service manual for installing the top-, right-, and left-side components.

■ **NOTE:** Remove and discard the existing oil pump driven gear and install new Oil Pump Driven Gear according to the instructions in the service manual.

■ **NOTE:** When installing the one-way bearing for the centrifugal clutch, the dot or word **OUTSIDE** faces away from the crankshaft.

■ **NOTE:** Remove and discard the existing bearing from the clutch cover and install new Bearing according to the instructions in the service manual.

■ **NOTE:** Be sure to install the cam chain before installing the centrifugal clutch.

■ **NOTE:** When installing the water pump, make sure the slot on the pump shaft is properly aligned with the slot on the drive gear shaft.

■ **NOTE:** When assembling the top end, install the new head-bolt steel washers and new cam sprocket bolt lock tab supplied with the kit. Lubricate the head bolt threads and steel washers and tighten to proper torque specifications.

■ **NOTE:** When installing the head cover bolts, be sure to use four new gaskets included in the kit.

INSTALLING ENGINE

■ **NOTE:** When connecting the front and rear drive output yokes, make sure to use new Shoulder Nuts supplied in kit.

p/n	Description	Dimension	Torque (ft-lb)
0808-037	Head Bolt***	M10x1.25x195	40
0812-025	Oil Cooler Fitting Bolt	M14x1.25x12	20
0818-004	Cam Stopper Support*	M6x1.0x37	8.5
0823-178	Driven Pulley Nut**	M20x1.5	80
0826-001	Cam Cover Bolt	M6x1.0x55	8.5
0826-002	Cam Cover Bolt	M6x1.0x30	8.5
0826-005	Cam Cover Bolt	M6x1.0x35	8.5
0826-006	Gear Shift Cam Plate	M6x1.0x25	8.5
0826-006	Cam Cover Bolt	M6x1.0x25	8.5
0826-029	Air Intake Plate Screw*	M6x1.0x12	10.5
0826-033	Oil Pump Drive Gear*	M10x1.25x20	63
0826-034	Cam Sprocket Bolt	M6x1.0x10.5	10.5
0826-036	Cam Chain Guide Bolt	M8x1.25x40	11
0826-039	Oil Pump Screw*	M6x1.0x25	8.5
0827-010	Drive Clutch Nut**	M20x1.5	165
0827-011	Centrifugal Clutch Nut**	M18x1.5	221
0827-013	Output Yoke Nut** - stake	M16x1.5	74
0827-014	Flywheel/rotor Nut	M16x1.5	107
8424-602	Cam Stopper Spring	M6x1.0	8.5
8424-604	Cylinder Nut	M6x1.0	10.5
8424-804	Cylinder Nut	M8x1.25	18.5
8468-620	Shift Lever Bolt	M6x1.0x20	8.5
8468-625	Magneto Cover Screw	M6x1.0x25	8.5
8468-625	Cam Chain Tensioner	M6x1.0x25	10.5
8468-630	Starter Motor Bolt	M6x1.0x30	10.5
8468-640	Clutch Cover Screw	M6x1.0x40	10.5
8468-640	Magneto Cover Screw	M6x1.0x40	8.5
8468-645	V-Belt Cover Screw	M6x1.0x45	8.5
8468-645	Crankcase Machine Screw	M6x1.0x45	8.5
8468-655	V-Belt Cover Screw	M6x1.0x55	8.5
8468-665	Water Pump Screw	M6x1.0x65	8.5
8470-520	Gear Position Switch Machine Screw	M5x0.8x20	4.5

*Blue Loctite #243

**Red Loctite #271

***Tighten in three steps 20/30/40 ft-lb