

1987 Arctic Cat Jag-Panther-Super Jag[®] Service Manual

ARCTIC CAT[®]

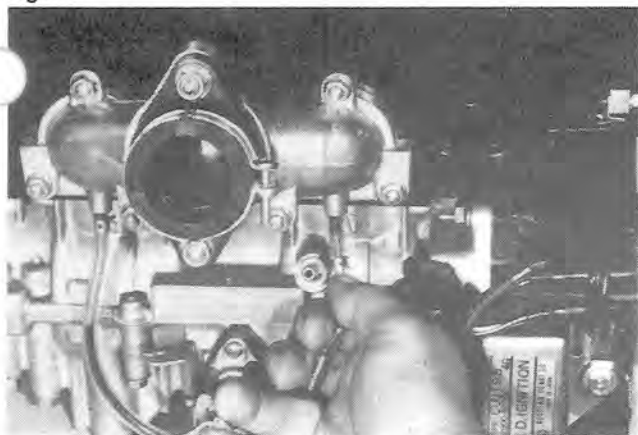
Get on it.



Specifications*

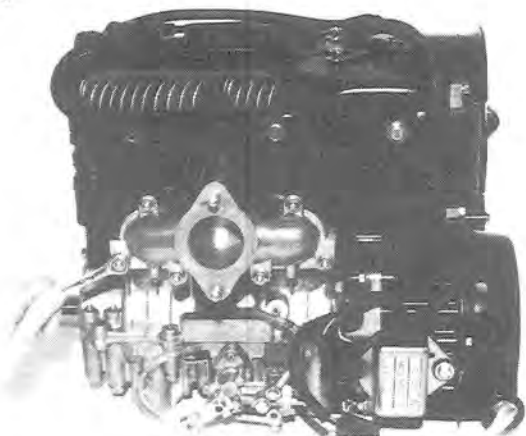
ENGINE AND DRIVE		JAG 340	JAG 440	PANTHER	SUPER JAG
Engine Model		AF34A6	AG44A8	AL50A6	AG44A8
Displacement	cc (cu in.)	339 (20.68)	431 (26.29)	500 (30.5)	431 (26.29)
Bore x Stroke	mm (in.)	60 x 60 (2.362 x 2.362)	65 x 65 (2.559 x 2.559)	70 x 65 (2.756 x 2.559)	65 x 65 (2.559 x 2.559)
Compression Ratio		6.8:1	6.5:1	6.5:1	6.5:1
Piston-Ring End Gap Range	mm (in.)	0.15-0.80 (0.006-0.031)	0.20-0.83 (0.008-0.033)	0.20-0.83 (0.008-0.033)	0.20-0.83 (0.008-0.033)
Piston Skirt/Cylinder Clearance Range	mm (in.)	0.058-0.15 (0.0023-0.006)	0.084-0.15 (0.0033-0.006)	0.084-0.15 (0.0033-0.006)	0.084-0.15 (0.0033-0.006)
Piston Pin Diameter Range	mm (in.)	15.994-16.000 (0.6297-0.6299)	15.994-16.000 (0.6297-0.6299)	17.995-18.000 (0.7085-0.7087)	15.994-16.000 (0.6297-0.6299)
Piston - Pin Bore Diameter Range	mm (in.)	15.996-16.004 (0.6298-0.6301)	15.996-16.004 (0.6298-0.6301)	17.998-18.006 (0.7086-0.7089)	15.996-16.004 (0.6298-0.6301)
Connecting-Rod Small End Diameter Range	mm (in.)	21.00-21.01 (0.8268-0.8273)	21.00-21.01 (0.8268-0.8273)	23.00-23.01 (0.9056-0.9059)	21.00-21.01 (0.8268-0.8273)
Crankshaft End Play Range	mm (in.)	0.05-0.10 (0.002-0.004)	0.05-0.10 (0.002-0.004)	0.05-0.10 (0.002-0.004)	0.05-0.10 (0.002-0.004)
Crankshaft Runout (max.) (Total Indicator Reading)	mm (in.)	0.05 (0.002)	0.05 (0.002)	0.05 (0.002)	0.05 (0.002)
Cylinder Trueness (max.)	mm (in.)	0.1 (0.0039)	0.1 (0.0039)	0.1 (0.0039)	0.1 (0.0039)
Drive Clutch/Driven Pulley Offset	mm (in.)	35 (1.365)	35 (1.365)	35 (1.365)	35 (1.365)
Center-to-Center Distance	cm (in.)	28 (11.375)	28 (11.375)	25.9 (10.2)	25.9 (10.2)
Engagement Speed		3600-4000	3600-4000	3600-4000	3600-4000
Peak RPM		6500-6700	6000-6200	7000-7200	6000-6200
Ramp	p/n	0646-026	0146-414	0146-414	0146-414
Spring (Green)	p/n	0146-068	0146-068	0146-068	0146-068
Weight	p/n	0146-166	0146-104	0146-104	0146-104
Chain Pitch		70	68	68	68
Sprocket Ratio		20 x 39	20 x 35	20 x 35	20 x 35
Lighting Coil Output @ 3000 RPM		12V/150W	12V/150W	12V/150W	12V/150W
Ignition Type		CDI/NCI	CDI/NCI	CDI/NCI	CDI/NCI
Spark Plug		NGKBR8ES	NGKBR9ES	NGKBR9ES	NGKBR9ES
Brake Type		Mechanical Disc w/Parking Brake			
Track Width	cm (in.)	38 (15)	38 (15)	40.5 (16)	40.5 (16)
Overall Track Length	cm (in.)	295 (116)	295 (116)	307 (121)	396 (156)
Track Length on Ground	cm (in.)	94 (37)	94 (37)	94 (37)	96.5 (38)
Drive Belt	p/n	0227-100	0227-100	0227-030	0227-030

Fig. 2-9



5. Remove the six nuts securing the intake manifold and remove the manifold w/flange from the engine. Discard the two gaskets.

Fig. 2-10



6. Remove the intake-manifold cooling shroud from the engine. Discard the two gaskets.
7. Using a spanner wrench to secure the crankshaft, remove the three bolts and lock washers securing the starter pulley to the flywheel. Remove the starter pulley; then carefully pry the fan-belt drive pulley from its seated position on the flywheel and remove.

Fig. 2-11



8. Temporarily install the starter pulley on the flywheel with three bolts. Using a spanner wrench to secure the crankshaft, loosen and remove the flywheel nut and washers.

Fig. 2-12

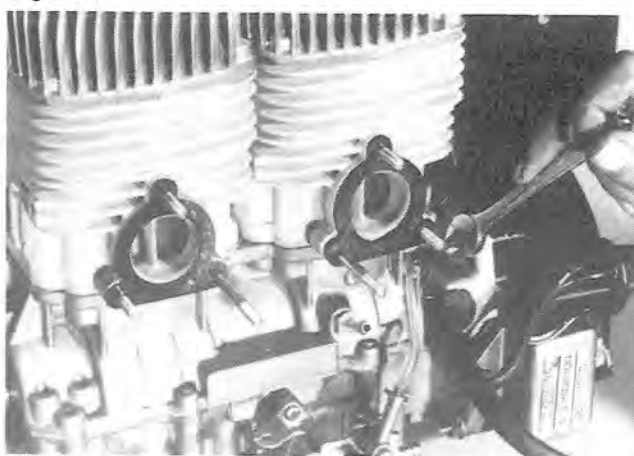


NOTE: If an impact wrench is being used, use of a spanner wrench will not be necessary.

9. Remove the three bolts securing the starter pulley to the flywheel and remove the pulley.
10. Remove the four nuts securing the fan case to the crankcase; then remove the PTO-side bolt and washer securing the CDI unit. Remove the fan case. Remove (if in need of replacement) the ignition coil and CDI unit from the fan case.

NOTE: For further servicing of the axial fan components, see page 33.

Fig. 2-13



11. Install a protective cap onto the end of the crankshaft.

NOTE: A protective cap can be made by welding a 3 mm (1/8 in.) washer on one side of a spare flywheel nut.