

2019 – 2022 Honda CRF250F Service Info

Document created by: Road and Trail (<https://roadandtrail.net>)

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Sources: 2019-2022 Honda CRF250F Factory Service Manual, 2021 (61K9903) and 2022 Honda CRF250F Owner's manual.

Use this document at your own risk.

Torque Values

Item	Thread Dia. (mm)	N.m	lbf.ft	Remark
General / Standard Torque Values				
5 mm bolt and nut		5.2	3.8	
6 mm bolt and nut		10	7	Includes SH flange bolt
8 mm bolt and nut		22	16	
10 mm bolt and nut		34	25	
12 mm bolt and nut		54	40	
5 mm screw		4.2	3.1	
6 mm screw		9.0	6.6	
6 mm flange bolt		12	9	8 mm head, large flange
8 mm flange bolt and nut		27	20	
10 mm flange bolt and nut		39	29	
Specific Fasteners (incomplete list)				
Front fuel tank mounting bolt	8	27	20	
Spark plug	10	16	12	
Engine oil drain bolt	12	24	18	
Oil filter cover bolt		12	9	
Cylinder head (valve) cover	6	10	7	
Rocker arm shaft stopper bolt	5	5.2	3.8	
Timing hole cap		10	7	Apply oil to threads, seating surface
Crankshaft hole cap		15	11	Apply oil to threads, seating surface
Clutch center lock nut	16	108	80	
Clutch spring bolt	6	12	9	
Change pedal mounting bolt	6	12	9	ALOC bolt; replace with a new one
Drive sprocket fixing plate bolt	6	10	7	
Driven sprocket nut	8	32	24	Self-lock
Rear axle nut	16	108	80	Self-lock
Rim lock	8	12.2	9	
Exhaust pipe band bolt	8	20	15	Connects to muffler
Muffler mounting bolt	8	26	19	
Muffler mounting nut	8	26	19	
Exhaust pipe joint nut	8	27	20	At engine

Item	Thread Dia. (mm)	N.m	lbf.ft	Remark
Exhaust pipe protector mounting bolt	6	14	10	Heat shield
Muffler tail cover bolts	6	12	9	
Side stand pivot bolt	10	10	7	
Side stand pivot nut	10	39	29	Self-lock
Front axle shaft	12	59	44	
Axle holder nut	6	12	9	Self-lock
Front brake disc bolt	6	20	15	ALOC bolt; replace with new one
Fork socket bolt	8	20	15	Apply thread locker
Fork cap	-	22.5	17	
Fork top bridge pinch bolt	8	27	20	
Fork bottom bridge pinch bolt	8	31.5	23	
Front brake caliper mounting bolt	8	30	22	ALOC bolt; replace with new one
Handlebar holder bolt	8	26	19	
Front master cylinder holder bolt	6	9.8	7.2	
Steering stem adjusting nut	26	3.5	2.6	
Steering stem nut	24	108	80	
Front brake hose clamp bolt	6	10	7	
Rear brake disc bolt	8	42	31	ALOC bolt; replace with new one
Shock absorber mounting nuts	10	44	32	Self-lock
Shock arm nut (swingarm side)	12	78	58	Self-lock
Shock link rod nut	10	44	32	Self-lock
Drive chain guide bolt	6	11.9	9	ALOC bolt; replace with new one
Drive chain slider screw	5	4.2	3.1	ALOC screw; replace with new one
Chain guide slider mounting nut	6	2.5	1.8	Self-lock
Swingarm pivot nut	14	88	65	Self-lock
Rear brake hose guide bolt	6	10	7	
Brake caliper bleed valve	8	5.4	4.0	
Brake caliper pad pin	10	17.2	13	
Front brake caliper pad pin plug	10	2.5	1.8	
Front brake caliper pin bolt A	8	22	16	Apply thread locker
Rear brake caliper pin bolt A	8	27	20	
Rear brake caliper guard mounting bolt	6	11.9	9	
Brake lever pivot bolt	6	1.0	0.7	
Brake lever pivot nut	6	5.9	4.4	
Brake hose oil bolt	10	34	25	
Brake pedal mounting bolt	8	27	20	ALOC bolt; replace with new one

ALOC bolts have a pre-applied locking agent on them.

Spark Plug Gap

0.8 – 0.9 mm (0.03 – 0.04 in)

Tightening the Spark Plug

The service manual specifies hand tightening the plug until it seats, then tightening it with a torque wrench to 16 N.m (12 lbf.ft). The owner's manual specifies an alternate method (good to know if you don't have access to a torque wrench): for an old plug, tighten it 1/5 turn after it seats. For a new plug, tighten it 1/4 turn after it seats, loosen it, and then tighten it 1/5 turn after it seats.

Valve Clearances (per Honda service manual)

Engine cold: below 35C (95F)

Intake: 0.10 +/- 0.03 mm (0.004 +/- 0.001 in)

Exhaust: 0.15 +/- 0.03 mm (0.006 +/- 0.001 in)

Valve Clearances (per 2022 owner's manual)

Engine cold: below 35C (95F)

Intake: 0.10 +/- 0.02 mm (0.004 +/- 0.001 in)

Exhaust: 0.15 +/- 0.02 mm (0.006 +/- 0.001 in)

Idle Speed

1400 +/- 100 rpm

The idle speed cannot be adjusted.

Before checking the idle speed, check the following:

- no malfunction indicator light (MIL) lighting
- spark plug condition
- air filter
- throttle operation and free-play at the grip

The engine must be at normal operating temperature for accurate idle speed measurement. If the idle speed is not correct, it may be due to:

- an air leak in the intake
- an engine top-end issue
- problem with the idle air control valve (IACV) operation

The IACV is attached to the throttle body and can be removed for inspection.