

HASPORT PERFORMANCE

Installation Instructions For:
Part Number EKK2

1996-2000 Honda Civic with EG or DC cross member, lower control arms and steering rack

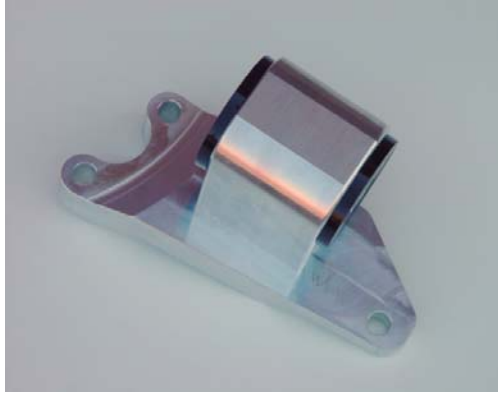
HASPORT PERFORMANCE Inc.
2849 South 44th St. Phoenix, AZ 85040
Phone: (602) 470-0065 Fax: (602) 470-0516
www.hasport.com

Hasport Performance mounts are the result of extensive research and engineering. All mounts are designed with up to date solid modeling software. Each mount is constructed of lightweight 6061-T6-billet aluminum and CNC machined in our state-of-art machining facility. Hasport Performance motor mounts control engine movement, transferring more power to the wheels. All mounts have a lifetime warranty against any defects.

Right-hand Mount



Left-hand Mount



Rear Mount



Right-hand Hardware

Qty	Description
1	12 x 1.25 x 120 Hex
3	12 x 1.25 Lock Nut
4	12mm Flat Washers

Left-hand Hardware

Qty	Description
1	12 x 1.25 x 30 Hex
2	12 x 1.25 x 50 Hex
1	12 x 1.25 x 120 Hex
1	12 x 1.25 Lock Nut
5	12mm Flat Washers

Rear Hardware

Qty	Description
2	10 x 1.25 x 40 Hex
1	10 x 1.25 x 50 Hex
3	10mm Flat Washers
1	12 x 1.25 x 50 Hex
2	12 x 1.25 x 70 Hex
1	12 x 1.25 x 100 Hex
1	12 x 1.25 Lock Nut
5	12mm Flat Washers

Right-hand Bracket



Left-hand Bracket



Rear Bracket



Tools Required

1. Metric Socket set 8mm – 19mm
2. 32mm Socket
3. 3/8" Short, Medium & Long Extension
4. 10mm Line Wrench
5. 10mm, 12mm, 14mm, 17mm, 19mm & 22mm Open-end Wrenches
6. Die Grinder with Cut-off Wheel or Sawzall
7. Hammer
8. Pry-bar
9. Roll-Pin Punch Set
10. Spot Drill
11. Drill
12. Needle-Nose Pliers
13. Hose-Clamp Pliers
14. Sharpie Marker
15. Stud Extractor

Additional Recommended Items

Automotive Lift

Factory Service Manuals for 1996-2000 Civic and 2002 RSX

(Available from www.helminc.com or Honda/Acura Dealers)

Patience

Please read all instructions before proceeding with the installation

These instructions pertain **ONLY** to the **ENGINE MOUNTING** of a K-Series Motor into an EK civic chassis.

If you are installing a K24, you will need to purchase an additional engine bracket from Honda. This bracket is needed in-order for the right-mount to properly bolt up to the K24 motor. *Honda Part #: 11910-PPA-000*

A general list of parts needed for the K-Series swap in the 1996-00 Civic is listed below

Quantity	Description
1	Hasport EKK2 Bolt In Mount Kit (This Kit)
1	K20A Intermediate Shaft
1	Hasport EKKAX Axle Set
1	K20A or K24 Motor and Transmission
1	Hasport EKKWH Conversion Harness
1	K-Series ECU with Immobilizer removed
1	RSX Shifter Box & Cables (Hasport Shifter Box Under Construction)
1	RSX Throttle Cable or Hasport EKKTC Throttle Cable
1	Custom Header, Exhaust & Catalytic Converter
1	K20 After-market Fuel Rail With Return Line Option & Regulator or External Fuel Pressure Regulator with return port and stock fuel rail
1	RSX Brake Booster Hose
1	2002 Civic Si Radiator Hoses (RSX or Si Radiator Applications)
1	EG or DC cross member with steering rack and lower control arms (PS racks must be use with PS cross members)

Removing The Engine: (Save all Bolts, You will Need Most of Them!)

1. Discharge R134A from AC system. (Have a professional evacuate your system.)
2. Place the car on a lift or on jack-stands. (Jack Optional)
3. Disconnect the negative and positive battery cables and remove the battery, with battery tray, and the 10mm bolts connecting the engine harness to the chassis. (10mm Socket)
4. Disconnect ECU from engine harness and pull ECU connectors through the firewall, clearing the harness from the chassis. (10mm Wrench)
5. Disconnect engine harness from drivers side shock-tower. (No Tools Needed)
6. Disconnect positive battery cable from starter and remove alternator cables from under hood fuse box.
7. Drain the fluids: Oil, Transmission, Radiator & Clutch (17mm Wrench, 3/8" Ratchet 10mm Line Wrench)
8. Remove shift knob from shifter. (No Tools Required)
9. Remove the lug nuts & wheels (19mm Socket & Impact Wrench)
10. Remove the left and right shock forks. (17mm, 14mm Socket & 17mm Wrench)
11. Disconnect left & right lower ball joints (17mm Socket, Ball Joint Tool, Hammer)
12. Remove CV-axles (32mm Socket, Impact Wrench & Pry-bar)
13. Remove shift linkage (Roll-pin Punch, Hammer, Extension, 12mm Socket & 12mm Wrench)
14. Remove a-pipe & catalytic converter (14mm socket, 12mm & 14mm Wrench)
15. Remove radiator with fan assembly. (10mm Socket & Hose-clamp pliers)
16. Remove heater hoses. (Hose Clamp Pliers)
17. Remove the clutch slave cylinder line connecting it to the master cylinder. (10mm Line Wrench, 12mm Socket)
18. Remove AC system: AC lines, compressor, condenser and fan. (10mm Socket)
19. Remove AC bracket and under-frame-rail mount (14mm Socket & Extension)
20. Remove transmission under-frame-rail mount and bracket. (14mm, 17mm Socket & Extension)
21. Remove fuel line & fuel return line. (22mm or 17mm Socket & Needle-Nose pliers)
22. Remove throttle cable. (12mm Wrench)
23. Remove brake booster hose from motor. (Needle-Nose Pliers)
24. Remove cruise control unit & cable (optional). (10mm Socket & 12mm Wrench)
25. Remove any additional connections that attach the motor to the chassis.
26. Secure the motor on a stand or engine hoist. (Roller Cart, Engine Hoist)
27. Remove the rear engine bracket. (17mm, 19mm Socket)
28. Remove left mount. (14mm & 17mm Socket)
29. Remove right mount. (14mm & 17mm Socket)
30. Remove motor from car and remaining rear engine mount. If you have a lift, raise the vehicle off the engine. If you have an Engine Hoist pull the motor out of the engine bay. (14mm Socket & Lift or Hoist)
31. Remove the cross member, lower control arms and steering rack and replace them with ones from a 92-95 Civic or the similar 94-01 Integra. If you use a power steering rack you will need a power steering cross member too. In order for power steering to work with you new K-series motor custom power steering lines will need to be made.

Preparing The Engine Bay

- Using the hardware provided, bolt rear mount to cross-member. (14mm or 17mm Wrench)



- Bolt the left bracket to the drivers' side frame-rail, using existing mount hardware. (14mm Socket)



- Bolt the right bracket to the passenger side frame-rail using the stock hardware. (17mm Socket)



- You will need to relocate the stock radiator if you wish to use that with the new K-series engine. Either a stock radiator moved to the left side of the car, or an EP3 radiator is usually used

. To remove the lower mounting brackets you can drill the spot welds out using a bullet point 3/8ths inch drill bit or spot weld removal bit. The brackets can then be reattached into a new location to go with the new radiator setup.

Preparing The Motor

- Connect the Hasport wiring conversion harness to all of the proper connections on the motor. Leave the ECU Plugs on top of valve cover at this time. (No Tools Needed)



- Remove the two studs on the transmission, where the Hasport mount will be used. (Stud extractor)



Installing the Motor

- The EKK2 mount kit features dual mounting holes in each bracket. By using the top holes, the kit is designed to give maximum clearance to K20 engines. You can also use these holes to mount the K24 engine, but you will need to modify the hood for clearance. Typically that means removing some of the inner support structure.

If you don't want to modify the hood you can simply use the lower mount holes.

If you are using the top mount holes on the side mounts for the higher mount position, you will use the lower mount hole on the rear bracket. This due to the fact that the left and right brackets mount to the chassis and the rear bracket mounts to the engine.

- Depending on how you are installing the engine, you may be able to go ahead and hang the rear bracket from the rear mount. If this makes the engine bay too tight, you can install it as the engine is being lowered into place. Use the long 12mm bolt to hold the bracket on the mount. Make sure you use the proper hole for the engine height. (No tools)



- If you have an engine hoist, lower the engine and transmission assembly into engine bay. If you are performing the swap on a lift, place engine and transmission assembly onto the engine stand and lower the car onto the motor as depicted below. (Engine Hoist or Lift & Engine Stand)



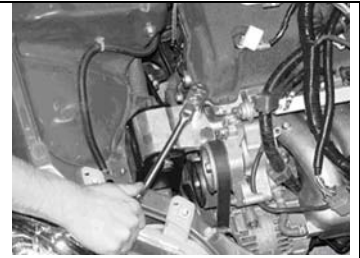
- Place the left-mount on the top of the transmission and insert the 12mm bolts and washers, supplied in the left-mount hardware bag. Snug the 12mm bolts down to the transmission but do not fully tighten them until all three mounts are in place. (19mm Socket)



5. Once the mount is lined up with the bracket, use the 12mm X 120mm bolt, 12mm locknut & 2-12mm flat washers, supplied in the left-mount hardware bag, attach the mount to the bracket. Do not fully tighten at this time. (19mm Socket, 19mm Wrench Hoist)



6. Place the right-mount over the studs on the motor's right-hand engine bracket. Install the stock 12mm flange nut onto the tall stud and the supplied 12mm locknut and washer onto the short stud. Snug the 12mm locknut and flange nut down to the bracket but do not fully tighten until the other mounts are in place. (17mm & 19mm Socket)



7. Raise the motor or lower the car so the right mount's bolt hole lines up with the right-bracket's through hole. Using the 12mm X 120mm bolt, 12mm locknut & 2-12mm flat washers, supplied in the right-mount hardware bag, attach the mount to the bracket. Snug the 12mm locknut down to the 12mm through-bolt but do not tighten until the other mounts are in place. (19mm Socket & 19mm Wrench)



8. For information purposes, this picture shows how the rear bracket will attach to the transmission. Connect it to the engine by first putting the top bolt in finger tight. Then the two bottom bolts can be installed and all tightened. You may need to lift the differential case of the engine to line up the bottom bolts.



9. Torque all mount and bracket bolts according to specifications below. (14mm, 17mm, 19mm Socket & 17mm, 19mm Wrench)

Mount / Bracket	(lbf*ft)
Hasport Mounts to Brackets	47
Left Mount to Transmission	40
Left Bracket to Frame Rail	33
Right Mount to Engine Bracket	40
Right Bracket to Frame Rail	43
Rear Mount to Transmission	47

10. Run engine harness through the firewall to the ECU and use the boot from the stock EK engine harness to attach the harness to the firewall. (10mm Socket)



11. Install battery tray and battery. (10mm, 12mm Socket)



12. Install RSX shifter cables on the transmission. Route the shifter cables into the Civic's cabin by cutting a small hole in the floor in front of the old shifter location. (Needle-Nose Pliers & Die Grinder with Cutoff Wheel)



13. Install the left and right Hasport EGKAX axles, put the suspension back together and the wheels on the car. (14mm, 17mm, 19mm, 32mm Socket & 17mm Wrench)

14. Congratulations! Hopefully, you have just successfully completed the K-series engine installation into your 1996-2000 Honda Civic. With the NEW EKK2 kit the engine will sit about two inches further rearward than the same engine with an EKK1 kit and you will gain ground clearance too. Additional information & tips pertaining to installing the accessory systems for the K-Series swap in an EK Civic can be obtained online at www.hasport.com.