# HASPORT PERFORMANCE

Installation Instructions For: Part Number EGJ1 for J-series V6 engines into 1992-1995 Honda Civic, 1994-1997 Del Sol And 1994-2001 Acura Integra

**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 the art machining facility. Hasport Performance motor mounts control engine movement, transferring more power to the wheels. All mounts and brackets have a limited lifetime warranty against any defects. Complete warranty information is available at www.hasport.com.

Please read all instructions before proceeding with the installation



# **NSTALLATION INSTRUCTIONS**

## WARNING:

The instructions here, deal only with the installation of the engine and transmission using Hasport's EGJ1 mount kit. There are no instructions for hooking up Air Conditioning, Power Steering, Wiring, Emissions Equipment, Exhaust or other peripherals. Please read through the entire instructions before attempting this engine swap. If you have questions regarding other aspects of this swap please call Hasport @ 602.470.0065

### List of Parts included in this kit:

Left-hand Mount		Right-hand Mount			Rear Mount	
Qty	Description	Qty	Description	Qty	Description	
2	M12 x 1.25 x 70mm Bolts	2	M10 x 1.25 x 40mm Bolts	3	M10 x 1.25 x 35mm Bolts	
1	M12 x 1.25 x 55mm Bolt	2	M10 Flat Washers	3	M10 Flat Washers	
4	M12 Flat Washers	2	M12 Flat Washers	2	M12 Flat Washers	
3	M12 Nyloc Nuts	1	M12 x 1.25 x 110mm Bolt	1	M12 x 1.25 x 100mm Bolt	
		1	M12 Nyloc Nut	1	M12 Nyloc Nut	
	Left-hand Bracket		Right-hand Bracket		Rear Bracket	
Qty	Description	Qty	Description	Qty	Description	
2	M12 Flat Washers	4	M10 Flat Wahsers	4	M10 x 1.25 x 30 mm	
1	M12 x 1.25 x 60mm Bolt	2	M10 x 1.25 x 150mm Bolts		Flange Bolts	
	M12 x 1.25 x 30mm Bolt	2	M10 Nyloc Nuts			
Alterr	ator Bracket	Qty 1			-	
		1	M8 x 1.25 x 50mm Flange Bolt		-	
		1	<u> </u>		-	
		1	1M8 Nyloc Nut1M8 Flat Washer		-	
			1M8 Flat washer1M6 x 1.00 x 20mm Bolt		-	
		1			-	
2.		2	M6 Flat Washers		-	

### Extra Tools Required for this Swap Center Punch, Electric Hand Drill, 1/8" Drill Bit, 3/8" Pilot Point Drill Bit, Die Grinder

Additional Recommended Items Factory Service Manual for the chassis you are using (Available from www.helminc.com or Honda/Acura Dealer)

### <u>Please read all instructions before proceeding with the installation</u>

This is a complicated engine swap requiring modifications to the chassis. If you have never performed an engine swap before, Hasport recommends that you have this swap performed by a competent shop. These instructions pertain **ONLY** to the **ENGINE MOUNTING** of a J-Series motor and transmission into a 92-95 Civic, 92-97 Del Sol, and 94-01 Integra chassis. There are still many other parts including wiring and ECU that will be needed for proper operation of the engine. These parts may be available from Hasport and other companies.

Our kit will allow the mounting of J-Series V6 engines and their transmissions. Manual transmissions for this swap can be found on the following models. 2003 and later model Accord with V6, 2003 Acura CL Sport, 2004 and later Acura TL.

It is important to remember that engine swaps are not legal in all states or countries. It's best to check local laws regarding engine swaps before proceeding.

A general list of additional parts needed for the J-Series swap is listed below.

Quantity	Description
1	Hasport EGJ1 Bolt In Mount Kit (This Kit)
1	J-Series Engine complete (see list of recommended engines below)
1	Hasport Performance EGJ-series Swap Axles
1	J-Series Manual Transmission from 03-07 Accord, Acura TL or Acura CL
1	Intermediate Shaft (See list of compatible J-series intermediate shafts below)
1	Compatible Engine harness and ECU

List of compatible engines is below. As a general rule the J-series V6 engines with the cable operated throttle bodies are compatible. The newer engines may require modifications to the rear bracket and use a difficult to find intermediate shaft.

Engine Code	Year and Model
J30A1	00-02 Honda Accord, 97-99 Acura CL
J30A4	03-04 Accord
J32A1	01-03 Acura TL, 01-03 Acura CL
J32A2	01-03 Acura CL Type S, 02-03 Acura TL Type S
J35A1	99-01 Honda Odyssey
J35A3	01-02 Acura MDX
J35A4	03-04 Honda Pilot, 02-04 Honda Odyssey,

List of compatible intermediate shafts below. The following intermediate shafts are found on automatic transmission engines. Unlike B, H and K-series engines these automatic transmission intermediate shafts will work with the 6 speed manual transmissions.

Engine Code	Description
J30A1	98-02 Honda Accord, 97-99 Acura CL
J30A4	03-04 Accord
J32A1	01-03 Acura TL, 01-03 Acura CL
J32A2	01-03 Acura CL Type S, 02-03 Acura TL Type S

### Things you should know about this swap

The following is a list of information you should know before performing this swap. Please visit <u>www.hasport.com</u> for the latest information on this swap.

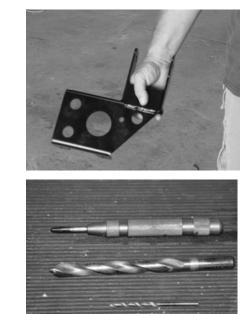
- 1. Ground and hood clearance The J-series engine is a tall engine. It is much taller than the H22 and K-series engines. Hasport engine mounts are designed to hold the engine with the same ground clearance you would find on a K-series engine swapped vehicle. The engine sticks up several inches above the hood line. A custom or modified hood is needed.
- 2. Hasport does not make a conversion engine harness for the swap.
- 3. Power Steering The Civic or Integra power steering hose will not work with the J-series power steering pump. Just like with K-series swaps, new power steering hoses need to be made and the reservoir will need to be relocated.
- 4. AC To retain AC, you will need an AC compressor from a J-series engine and have custom AC lines made to fit the car.
- 5. Shift mechanism The 03-07 shift mechanism from the V6 equipped Accord and cables are needed to operate the TL and Accord K-series transmissions.
- 6. Cooling and radiator The stock radiator has the outlets in the wrong location for easy use with the J-series. The Civic and Del sol radiators can be used if you remount them on to the left-hand side of the bay. You can also use the EP3 radiator by relocating the bottom mounts and making new top brackets. The engine sits very close to the radiator in both the Civic and Del Sol, so a slim radiator fan will need to be used.
- 7. Clutch Actuation The stock clutch master will operate the J-series slave cylinder. You will need some custom lines to make the connection.
- 8. Fuel line and regulator Some of the J-series engines have a fuel pressure regulator located in the fuel tank and some are located on the fuel rail. If your engine came from a vehicle with the pressure regulator in the tank, one will need to be added to the fuel system the same way you would for a K-series swap.

### Removing the Engine: (Save all Bolts, You May Need One!)

- 1. Discharge R134A from AC system. Disconnect the hoses from the compressor. You will be removing the compressor with the engine. (Have a professional evacuate your system.)
- 2. Follow the appropriate Honda/Acura Service Manual's instructions for removing the engine from your car. Although the Service Manual shows a hoist being used and lifting the engine out of the top, this process can be simplified if you have access to a chassis lift. With the lift, you can use a flat surface about 10 inches tall to support the engine from underneath while unbolting it from the vehicle. After it is unbolted use the lift to raise the chassis off the engine. One key point to pay attention to, is to remove the front suspension crossmember and radius rods. It's impossible to remove or install the new engine from the bottom with the crossmember and radius rods in place. It is a good idea to also remove the radiator and fans for extra working room.

### **Preparing the Engine Bay:**

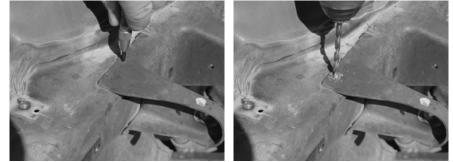
1. The major change to the engine bay is the installation of the new passenger side engine bracket from Hasport. It will replace the current right-hand transmission bracket in the car.



- 2. To make removing the existing transmission bracket easier, you will need these tools:
  - Center punch
  - 1/8 inch drill bit
  - 3/8 inch or larger pilot point drill bit

3. Begin by center punching all the spot-welds on the mount. This is so the drill bit won't drift when drilling. Next use the 1/8 inch drill to drill a hole approximately 3/16 inches deep. This will prevent the pilot point drill from drifting. Don't worry if you drill completely through the sheet metal.

Now use the pilot point drill to drill a hole as deep as the bracket sheet metal is thick.



4. A chisel and hammer can now be used to finish removing the bracket. Once it is off use the die grinder with a sanding wheel to remove any excess material left over.





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- 5. To install the right-hand mount bracket you will need the two 10mm x 150mm bolts, four 10mm washers and two 10mm nyloc nuts.

6. To properly attach the Hasport mount bracket on the frame rail, two holes will need to be drilled in the frame rail. Start by sliding the bracket over the frame rail so the holes at the bottom of the bracket line up with the torque mount holes on the bottom of the frame rail. Next mark the frame rail on the top using the mount bracket as a guide. After removing the bracket, use a 3/8ths inch drill bit and drill the two holes in the frame rail.



7. Slide the bracket back on the frame rail and thread the two bolts down through the bracket and out the bottom. Tighten the bolts to about 10ft/lbs of torque. Be careful to check the alignment of the bracket so the bolts thread easily all the way through the bracket. Do not over tighten.

8. Using a wrench to keep the bolt from moving install the 10mm Nyloc nuts and tighten the bolts to 36 ft/lbs of torque.

9. At this time install the new Hasport rear engine mount on the rear engine crossmember. Leave the bolts finger tight at this time.

### **Prepping the engine:**

1. Install the transmission bracket on the transmission on the using the hardware marked left-hand bracket hardware.











### **Installing the Engine:**

### 1. **Installing from the bottom**

Place the engine and transmission on an engine stand or cart positioned under the vehicle. Make the engine as level as possible on the cart, this will aid installation.

### Installing from the top

Attach the engine to an engine hoist using the hangers on the engine. Be careful with the hoist chain and don't let it do damage to the throttlebody components.

2. Lower the car or the engine slowly taking care not to hit the engine on the way down. Keep a close eye on the subframe to make sure it doesn't come into contact with any parts of the engine or wiring harness. This is a two-person job.

3. Once the engine is in the engine bay shift it forward as far as it will go and install the rear bracket on the rear mount. Use the 12mm x 110mm hex to attach the bracket to the mount. Finger-tighten at this time.

4. Slide the engine back towards the rear bracket. Attach the right-hand mount to the bracket and the engine using the hardware from the right-hand mount hardware bag. Leave all the bolts finger tight at this time.







5. The left-hand should be installed using the left-hand mount hardware. Use the original Honda bolt to attach the mount to the car. On the two longer bolts used to attach the mount to the transmission bracket, a washer is used only on the top of the bolt. No washer is used on the underside of the bracket. All the other bolts use a washer on both sides of the bolt.

Once the left and right-hand mounts are bolted up they should be tightened to the appropriate torque specification. 10mm bolts should be tightened to 33 ft/lbs and 12mm bolts to 43 ft/lbs of torque.



6. Now that the engine is supported by the left and right-hand mounts we can connect the rear bracket to the engine. There are some differences in the J-series engines and how the rear bracket attaches. Earlier model J-series engine use 10mm bolts to hold on the rear bracket and later models use 12mm bolts. Using the appropriate hardware thread the bolts through the rear bracket into the block. You may need to rock the engine forward or back to make sure the bracket is square and the bolts are not cross threaded. Tight the 10mm bolts to 33 ft/lbs. Once this is done tighten the rear mount to the subframe and bracket using the same torque specs. Some bolts may be easier to access from underneath.



7 A new alternator bracket is provided with the Hasport kit to move the alternator so it doesn't interfere with the EG headlight. The Hasport bracket replaces the stock upper bracket and tilts the alternator forward to clear the EG headlamp. To use the bracket install the alternator using the stock lower bolt in the stock lower mounting hole. Tilt the alternator as far forward as is possible. Using the hardware provided bolt the Hasport bracket to the top alternator mount hole and the block where the stock bracket was originally. The alternator wiring can be bolted to the Hasport bracket as it did with the stock bracket.

