HASPORT PERFORMANCE

Installation Instructions For: Part Number EGJ2 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 <u>www.hasport.com</u>.

Please read all instructions before proceeding with the installation

EGJ2

WARNING:

The instructions here, deal only with the installation of the engine and transmission using Hasport's EGJ2 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	
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Qty	Description	Qty	Description	Qty	Description	
2	M12 x 1.25 x 70mm Bolts	2	M10 x 1.25 x 40mm Bolts	1	M10 x 1.25 x 35mm Bolts	
1	M12 x 1.25 x 55mm Bolt	2	M10 Flat Washers	1	M10 Flat Washers	
4	M12 Flat Washers	2	M12 Flat Washers	2	M12 Flat Washers	
3	M12 Nyloc Nuts	1	M12 x 1.25 x110mm 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 Washers	4	M10 x 1.25 x 30mm Bolts	
1	M12 x 1.25 x 60mm Bolt	2	M10 x 1.25 x150mm Bolts	4	M10 Flat Washers	
1	M12 x 1.25 x 30mm Bolts	2	M10 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 <u>www.helminc.com</u> or Honda/Acura Dealer)

Please read all instructions before proceeding with the installation

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 manual 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 manual transmissions. Manual transmissions for this swap can be found on the following models. 2003 and later model Accord with V6 and 2004 -2007 Acura TL Sport. The 2003 Acura CL Sport transmission can also be used with some modification. There were block changes on the 2008 and later J-series engines on most of the Honda and Acura models. They adopted the same bolt pattern found on the Ridgeline V6. These blocks require 2008 and later manual transmissions.

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.

Quantity	Description	
1	1 Hasport EGJ2 Bolt In Mount Kit (This Kit)	
1	1 J-Series Engine complete (see list of recommended engines below)	
1	Hasport Performance EGJ-series Swap Axles	
1	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	

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

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	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 Kseries engines. The J-series engine if mounted with normal clearance would stick up several inches above the hood line. This kit is designed to mount a J32A2 engine low enough to clear the hood. This means the oil pan hangs significantly below the subframe of the car and may hit the ground or other objects during normal driving. Hasport makes no claims as to the drivability of your car with this engine. The Hasport Mount kit is designed to mount the engine with more ground clearance if you desire.
- 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.
- 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 manual transmission shift mechanism and cables from the V6 equipped Accord can be used to operate the TL and Accord J-series manual transmissions. The 2003 Acura CL Sport 6 speed transmission can also be used with some modification to the transmission. A boss on the transmission will have to be drilled and tapped.
- 6. Cooling and radiator In order to mount the engine below the hood line the engine has been moved forward for axle-subframe clearance. The stock radiator mount location no longer works. Fabrication and possibly a custom radiator may be required.
- 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!)

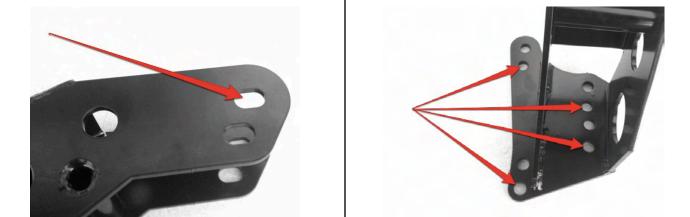
- 1. Discharge R134A from AC system. Disconnect the hoses from the compressor. You will be removing the compressor with the engine. (Have a professional evacuate your system.)
- 2. Follow the appropriate Honda/Acura Service Manual's instructions for removing the engine from your car. Although the Service 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. You should remove the radiator and fans for extra working room before you try removing the engine.

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 or 1/2 inch pilot point drill bit	
3	Begin by center punching all the spot-welds on the mount. This is drilling. Next use the 1/8 inch drill to drill a hole approximately 3/16 inche point drill from drifting. Don't worry if you drill completely throu Now use the pilot point drill to drill a hole as deep as the bracket s	s deep. This will prevent the pilot gh the sheet metal.
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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 left over material.	

Prep	aring the Engine Bay:	
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, tw frame rail. Start by sliding the bracket over the frame rail so the h up with the torque mount holes on the bottom of the frame rail. N using the mount bracket as a guide. After removing the bracket, tw two holes in the frame rail.	oles at the bottom of the bracket line ext mark the frame rail on the top
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.	

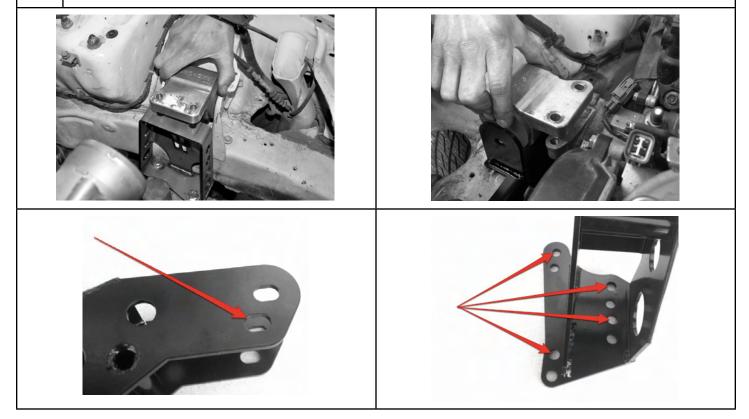
Prep	Preparing the Engine Bay:		
9	To install the rear mount you will need the 10mm x 35mm bolt and washer along with two of the stock 10mm rear mount bolts.		
	At this time install the new Hasport rear engine mount on the rear engine crossmember. Use the longer Hasport supplied bolt for the front of the mount and the two stock bolts at the rear. Leave the bolts finger tight at this time.		

Usi	ng the Dual Height Mounts:		
1	The next four pictures show how the mount are used for mounting the engine for hood clearance. The pictures of the rear bracket show which holes should be used. Using the mounts incorrectly may cause the urethane to fail.		



Using the Dual Height Mounts:

2 The next four pictures show how the mount are used for mounting the engine for more ground clearance. It will not clear the hood in this position. The pictures of the rear bracket show which holes should be used.



Installing the Engine:
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.

1 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.



Insta	lling the Engine:	
2	To install the rear bracket you will need the four 10mm x 35mm bolts and washers.	
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 10mm x 35mm hex to attach the bracket to the block. Finger-tighten at this time.	
4	Slide the engine back towards the rear bracket. Attach the right-han engine using the hardware from the right-hand mount hardware ba this time.	
To the		
5	You will need the 12mm x 60mm and 12mm x 30mm bolts to install the left-hand bracket	

Insta	lling the Engine:
6	Install the left-hand on the transmission leaving the bolts finger tight.
7	Install the left-hand mount on the transmission bracket using the two 10mm x 40mm bolts washers and nyloc nuts. Use the stock 12mm bolt to attach the mount to the bracket. Now tighten all left-hand and right-hand mount bolts including the left-hand transmission bracket to the proper specification. Torque 10mm bolts to 33 ft/lbs and 12mm bolts to 43 ft/lbs.
8	Now that the engine is supported by the left and right-hand mounts we can connect the rear bracket to the rear mount. Use the 12mm x 100mm bolt, washers and nyloc nut. You may need to left the rear of the engine slightly to get the mount hole to line up line up with the bracket. Once this is done tighten all the mount and bracket bolts. Use the same torque specs as above.