

Lubricant Requirements for Honda and Acura Vehicles

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- **GF-4 & GF-5**
- **Honda/Acura HTO-06**
- **0W-20 Applications**
- **Summary**

- **GF-4 & GF-5**
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GF-4 and GF-5

GF-4

- Honda currently recommends GF-4 oil for all Honda and Acura vehicles.
- No additional testing or modifications are required; “generic” GF-4 oils are acceptable for service fill.
- One exception: The turbocharged Acura RDX requires oil meeting the Honda/Acura HTO-06 specification. Several off-the-shelf oils officially meet this specification, and are labeled as such.

GF-5

- Honda also plans to accept generic GF-5 oils as appropriate for service fill.
- HTO-06-spec oils will likely be required for Honda/Acura turbocharged vehicles, depending on the final GF-5 specifications.



- **Acura RDX**
- **Excellent turbocharger durability in the field.**

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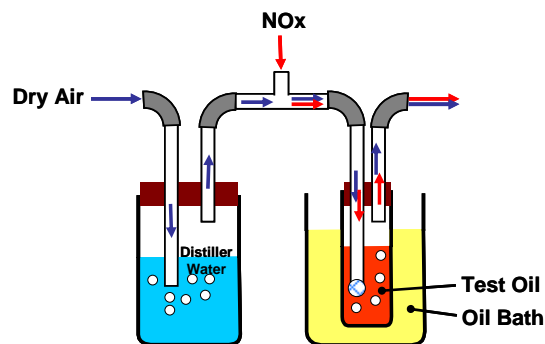
Oil Specification for Turbocharged Engines

Honda/Acura HTO-06

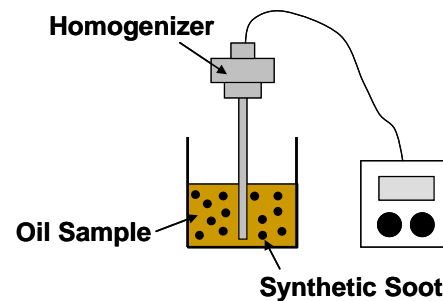
Main feature is a modified hot-tube test. Purpose:

- Evaluate the deposit-forming tendency of an oil after aging. (Testing an oil in fresh condition only is not useful.)
- The aging procedure simulates additive consumption and sludge/soot build-up.

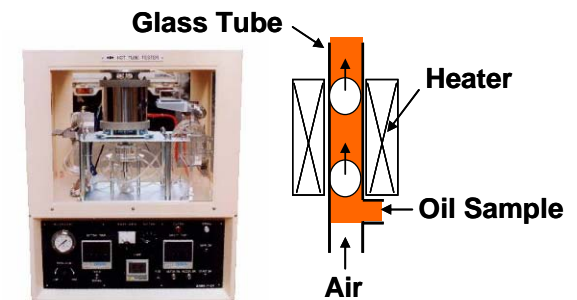
1. NO_x Bubbling (additive consumption)



2. Sludge/Soot Simulation



3. Hot Tube Procedure



- Procedure is available to lubricant and additive companies upon request.
- This procedure does not discriminate against high-moly oils. (High-moly oils are not a problem for Honda turbocharger technology.)
- This test correlates well with Honda turbocharger testing (bench and real-world).

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Honda Insight Certified with 0W-20 Oil

- The 2010 Insight was the first Honda vehicle certified with 0W-20 viscosity grade. This hybrid vehicle was introduced into the US market last month.
- Honda has used 0W-20 as factory- and service-fill oil in various vehicles for over 10 years. These vehicles were certified with higher viscosity grades, due to the lack of 0W-20 oils in the US market.
- The transition to lower viscosity oils reflects advancements in engine technology, and also Honda's commitment to lowering the CO2 footprint of our vehicles.



0W-20 Information for the Owner

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Recommended Engine Oil

Oil is a major contributor to your engine's performance and longevity.

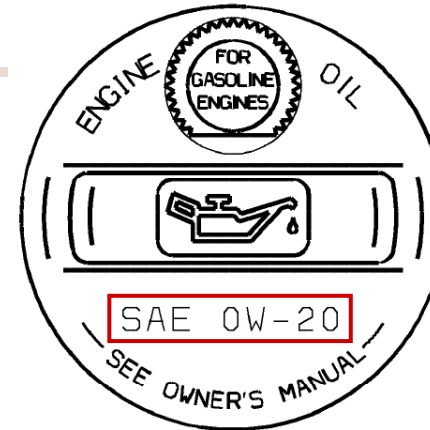
Always use a premium-grade 0W-20 detergent oil displaying the API Certification Seal. This seal indicates the oil is energy conserving, and that it meets the American Petroleum Institute's latest requirements.

API CERTIFICATION SEAL



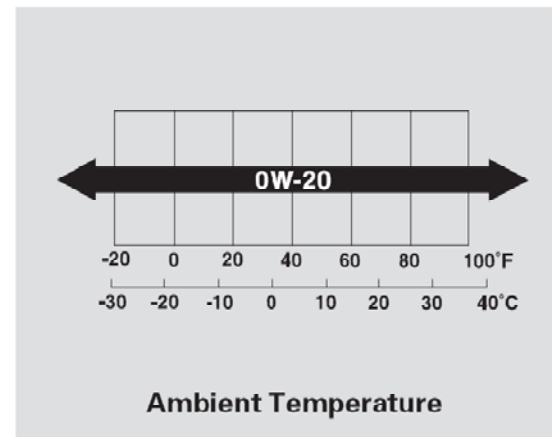
Honda Motor Oil is the preferred 0W-20 lubricant for your vehicle. It is highly recommended that you use Honda Motor Oil in your vehicle for optimum engine protection. Make sure the API Certification Seal says "For Gasoline Engines".

2010 Insight Owners Manual



Oil Filler Cap

The oil viscosity or weight is provided on the container's label.



A very low-viscosity, fuel-efficient 0W-20 oil is the engine lubricant for your Insight. This oil is formulated to help your engine use less fuel.

Synthetic Oil

You may use a synthetic motor oil if it meets the same requirements given for a conventional motor oil: it displays the API Certification Seal and it is the proper weight. You must follow the oil and filter change intervals shown on the multi-information display.

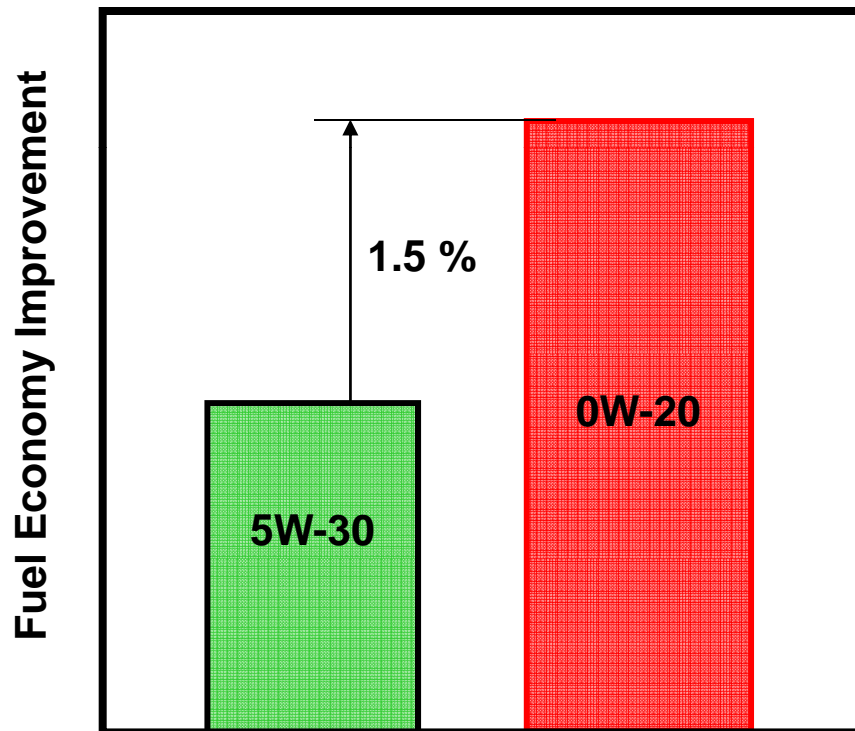
Engine Oil Additives

Your vehicle does not require any oil additives. Additives may adversely affect the engine or transmission performance and durability.

- Only 0W-20 viscosity grade is recommended.
- Same format will be used for all future 0W-20 applications.

Fuel Economy Benefit of 0W-20 Oil

- LA-4 test cycle
- Engine: 1.0L OHC
- Reference: SAE 1999-01-3468



- The effect of 0W-20 can clearly be seen in high-efficiency, low-friction engines.

Honda's 0W-20 Use in Japan and Europe

Generalized viscosity transitions:

M/Y	90	92	94	96	98	00	02	04	06	08
Oil Spec	SG			SH/GF1		SJ/GF2		SL/GF3		SM/GF4
	<p>0W-20 oil has already been applied to most models in the Japan and EU markets. (Small volume sport vehicles use 5W-30.)</p>									
Recommended Oil	Japan	5W-30			5W-20		0W-20			
	EU	5W-30			5W-20		0W-20			
	US	5W-30				5W-20				

- Honda already applied 0W-20 oil to the Japan and EU markets from the 2001 model year.
- Beginning in that model year, many US Honda and Acura models were designed to operate on 0W-20 viscosity grade (or below!), but this grade was not widely available in the market.



Current Oil Recommendations for the US Market



(Small volume sport vehicles excluded)

		Model Year	05	06	07	08
ACURA	PC	RL	5W-20			
		TL				
		CSX				
	SUV	MDX	5W-20			
HONDA	PC	ACCORD	5W-20			
		CIVIC	5W-20			
		CIVIC IMA	0W-20			
		FIT	5W-20			
	SUV	ODYSSEY	5W-20			
		PILOT				
		CR-V				
ELEMENT						
RIDGELINE						

- All 5W-20 models will eventually transition to 0W-20.
- This represents the vast majority of Honda and Acura vehicles.

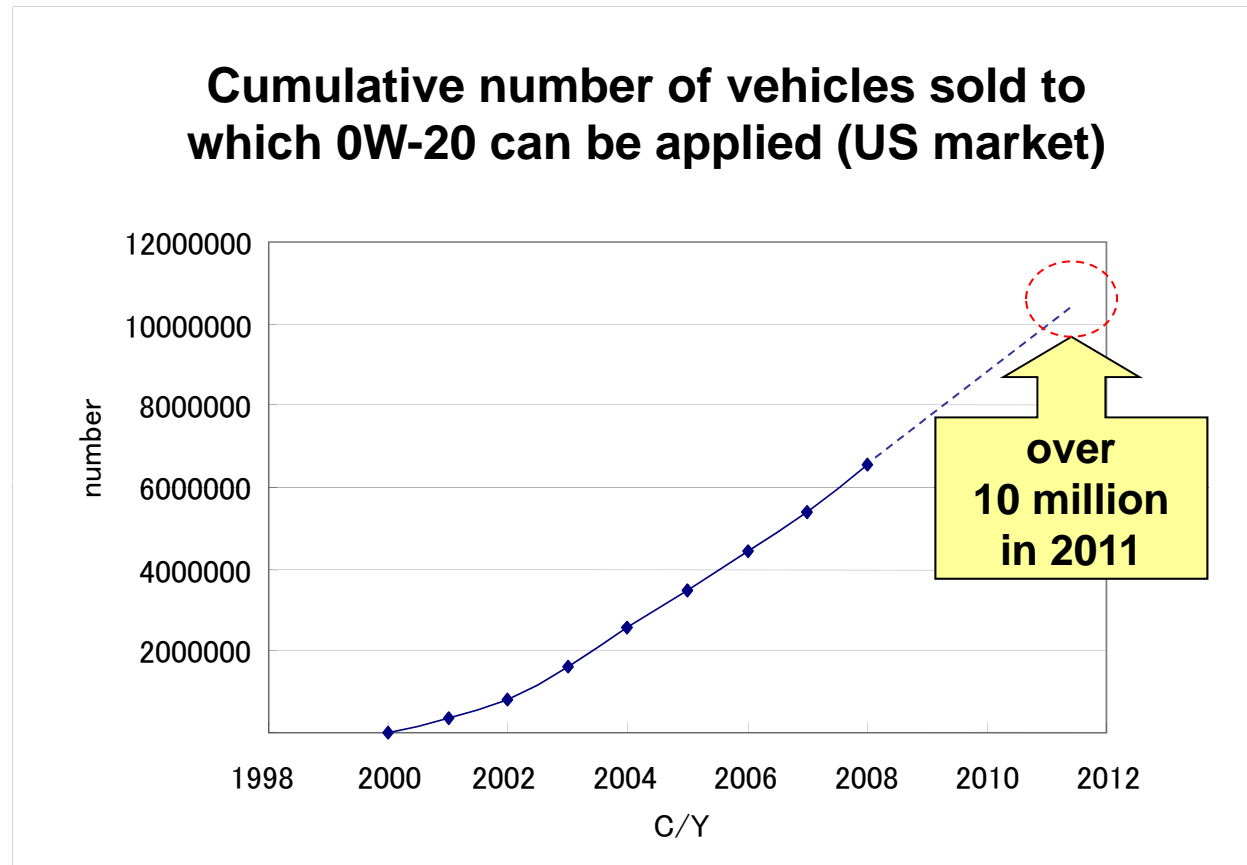
Retroactive Applications of 0W-20

- 0W-20 viscosity grade will be approved retroactively for many Honda vehicles, going back as far as model year 2001 in some cases.
- Details will be announced later this year.
- 0W-20 application information will be distributed to dealerships, oil and additive companies, “Chek-Chart,” etc.



- **1963 Honda S500**
- **First Honda production vehicle**
- **Will not be approved for 0W-20**

Projected Honda 0W-20 Demand in 2011



- There will be over 10 million Honda and Acura vehicles to which 0W-20 can be applied by model year 2011.
- This estimate does not include the 0W-20 recommendations from other OEMs, which could also be substantial.
- This estimate does not include the effects of the current economic downturn.

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1. Honda accepts GF-4 oils as service fill, with no additional requirements.
2. We plan to do the same with GF-5 oils.
3. One vehicle requires a Honda/Acura HTO-06 spec oil, but several oils already meet this specification.
4. The majority of Honda and Acura vehicles will eventually transition to 0W-20 viscosity grade.
5. 0W-20 viscosity grade will be approved retroactively for many Honda vehicles, going back as far as model year 2001 in some cases.



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