

**RECOMMENDED MATERIALS**

**1. GENERAL**

To insure the best performance, always use the specified oil, gasoline, adhesive, sealant, etc. or a substitute of equivalent quality.

**2. FUEL**

Always use gasoline of the same or higher octane value than specified in the owner’s manual. Ignoring the specifications below will result in damage or poor performance of engine and fuel injection system. To gain proper performance, always use specified gasoline.

• **Unleaded gasoline**

For vehicles equipped with a catalytic converter for reducing air pollution, use unleaded gasoline. If leaded gasoline is used, the catalytic converter may become damaged.

Model	Gasoline	Research octane value
Except for STI model	Unleaded	95 RON or more
STI model	Unleaded	98 RON or more

**3. LUBRICANTS**

Use the lubricants shown in the table below, or an alternative. See the table below to choose the correct SAE viscosity.

Lubricant	Recommended materials
	Engine oil standard

Engine oil

Choose oil suitable for the standard from the right.



Those with SN “Resource Conserving” logo in case of API standard.

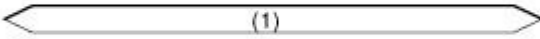
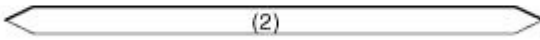
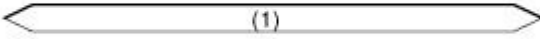
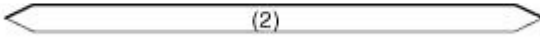
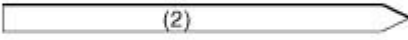
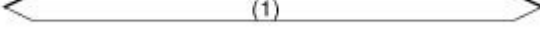


Those with GF-5 “starburst mark” displayed on top of the container in case of ILSAC standard.

A3 or A5 for ACEA standard

SAE viscosity No. and applicable temperature

1.6 L model	
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Lubricant	Recommended materials																	
	Engine oil standard																	
	<table border="1"> <tr> <td>(°C)</td> <td>-30</td> <td>-20</td> <td>-15</td> <td>0</td> <td>15</td> <td>30</td> <td>40</td> </tr> <tr> <td>(°F)</td> <td>-22</td> <td>-4</td> <td>5</td> <td>32</td> <td>59</td> <td>86</td> <td>104</td> </tr> </table>   <p style="text-align: right;">RM-00085</p> <p>(1) 0W-20 (recommended) (2) 5W-30, 5W-40 (alternative)</p>		(°C)	-30	-20	-15	0	15	30	40	(°F)	-22	-4	5	32	59	86	104
(°C)	-30	-20	-15	0	15	30	40											
(°F)	-22	-4	5	32	59	86	104											
2.0 L model	<table border="1"> <tr> <td>(°C)</td> <td>-30</td> <td>-20</td> <td>-15</td> <td>0</td> <td>15</td> <td>30</td> <td>40</td> </tr> <tr> <td>(°F)</td> <td>-22</td> <td>-4</td> <td>5</td> <td>32</td> <td>59</td> <td>86</td> <td>104</td> </tr> </table>   <p style="text-align: right;">RM-00085</p> <p>(1) 5W-30 (recommended) (2) 5W-40 (alternative)</p>		(°C)	-30	-20	-15	0	15	30	40	(°F)	-22	-4	5	32	59	86	104
(°C)	-30	-20	-15	0	15	30	40											
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2.5 L model	<table border="1"> <tr> <td>(°C)</td> <td>-30</td> <td>-20</td> <td>-15</td> <td>0</td> <td>15</td> <td>30</td> <td>40</td> </tr> <tr> <td>(°F)</td> <td>-22</td> <td>-4</td> <td>5</td> <td>32</td> <td>59</td> <td>86</td> <td>104</td> </tr> </table>   <p style="text-align: right;">RM-00083</p> <p>(1) 5W-30 (recommended), 5W-40 (2) 10W-30, 10W-40, 10W-50</p>		(°C)	-30	-20	-15	0	15	30	40	(°F)	-22	-4	5	32	59	86	104
(°C)	-30	-20	-15	0	15	30	40											
(°F)	-22	-4	5	32	59	86	104											
Lubricant		Recommended materials																
		API standard																
Manual transmission gear oil (TY85) <sup>*1</sup> and rear differential gear oil <sup>*2</sup>		GL-5																
SAE viscosity No. and applicable temperature																		

Lubricant	Recommended materials														
	API standard														
<table border="1"> <tr> <td>(°C)</td> <td>-30</td> <td>-15</td> <td>0</td> <td>15</td> <td>30</td> <td>40</td> </tr> <tr> <td>(°F)</td> <td>-22</td> <td>5</td> <td>32</td> <td>59</td> <td>86</td> <td>104</td> </tr> </table>  RM-00084 (1) 75W-90 (recommended) (2) 90		(°C)	-30	-15	0	15	30	40	(°F)	-22	5	32	59	86	104
(°C)	-30	-15	0	15	30	40									
(°F)	-22	5	32	59	86	104									

\*1

**CAUTION:****Applicable to TY85 only.**

\*2

**CAUTION:****Do not mix two different kinds or makes of gear oil.****4. FLUID**

Use the fluids specified in the table below. Do not mix two different kinds or makes of fluid.

**CAUTION:**

- **Be sure to use the recommended CVTF. Using material except recommended one would cause trouble.**
- **If an alternative transmission gear oil (TY75) is used, expected functionality and performance may not be obtained.**

Fluid		Recommended materials	Item number	Alternative
Transmission fluid	1.6 L model	SUBARU CVT FLUID LINEARTRONIC II	K0425Y0711	—
	2.0 L model	Subaru High Torque CVT Fluid	K0421Y0700	—
Transmission gear oil (TY75)		SUBARU GEAR OIL EXTRA MT	—	GL-5 (75W-90)
CVT front differential gear oil		SUBARU GEAR OIL EXTRA MT	—	GL-5 (75W-90)
Power steering fluid		SUBARU ATF	K0410Y0700	DEXRON III
Brake fluid and clutch fluid		FMVSS No. 116 DOT3, or DOT4	—	—

**5. ENGINE COOLANT**

Use genuine engine coolant to protect the engine.

Engine coolant	Recommended materials	Item number	Alternative
Coolant	SUBARU SUPER COOLANT	K0670Y0001	Non-amine type*

\* When using alternative engine coolant, follow the instructions of the engine coolant for its diluting water, maintenance cycle, freezing concentration, etc.

## 6. REFRIGERANT

Standard air conditioners on Subaru vehicles use two kinds of refrigerant depending on the specification of the air conditioner. The refrigerant used is described on the label on the hood. Do not mix it with other refrigerants. Do not use undesignated air conditioner compressor oil.

### • HFC-134a system

Air Conditioner	Recommended materials	Item number	Alternative
Refrigerant	HFC-134a	—	None
Compressor oil	DH-PR (ZXL200PG)	—	None

### • HFO-1234yf system

Air Conditioner	Recommended materials	Item number	Alternative
Refrigerant	HFO-1234yf	—	None
Compressor oil	VC200YF	—	None

## 7. GREASE

Use grease and supplementary lubricants shown in the table below.

Grease	Application point	Application point	Recommended materials (Item number)	Alternative		
Supplementary lubricants	Exhaust	Oxygen sensor	Spray type lubricant (004301003)	—		
Grease	MT	MT main shaft (spline parts)	NICHIMOLY N-130	—		
		MT main shaft (oil seal lip)				
		Transfer driven gear (front roller bearing, rear roller bearing) (TY75)				
		Clutch operating cylinder				
		Release bearing (inner circumference)				
		Clutch release lever				
		Clutch master cylinder push rod			SILICONE GREASE G-40M	—
		Gear shift lever (cable type)			Multemp HL-D	—
		Gear shift lever (rod type)			NIGHTIGHT LYW No. 2 grease	—
		Clutch pedal				
	Brake	Brake pedal				
	CVT	Select lever	Multemp D	—		
	Door	Door latch	SILICONE GREASE G-30M (004404002)	—		
Door striker						
Steering	Steering gearbox (hydraulic power steering)	One-Luber SG	—			
		Molywhite LS-G	—			

Grease	Application point	Application point	Recommended materials (Item number)	Alternative
		Steering gearbox (electric power steering) (rack and pinion)		
		Steering gearbox (electric power steering) (boot and tie-rod installation parts)	One-Luber 2128	—
	Brake	Disc brake (lock pin, guide pin)	NIGLUBE RX-2 (000041000)	—
		Between brake pad and shim	Molykote AS-880N (K0777YA010)	—
		Brake pad clip	Molykote M7439 (K0770YA000)	—
		Parking brake	Molykote 44MA	—
	Drive shaft	Front axle PTJ	NKG302	—
		Front axle EBJ	NKG814	—
		Rear axle EBJ		
		Rear axle EDJ		
		Rear axle DOJ		
		Front axle AC	Olistamoly 2LN584/Lo	—
	Front axle AAR	One-Luber GKN-C	—	

## 8. ADHESIVE

Use the adhesives shown in the table below, or an alternative.

Adhesive	Application point	Application point	Recommended materials	Alternative
Adhesive	Glass and body	Windshield glass, rear glass, rear gate glass, and body	<ul style="list-style-type: none"> <li>Dow Automotive's adhesive: Gurit-ESSEX Betaseal 1502 or equivalent</li> <li>Glass primer: Betawipe VP04604, Betaprime 5001</li> <li>Painted surface primer: Betaprime 5402</li> </ul>	—

## 9. SEAL MATERIAL

Use the seal material shown in the table below, or an alternative.

Seal material	Application point	Application point	Recommended materials (Item number)	Alternatives (Item number)
Seal material	Engine	FA/FB/EJ	THREE BOND 1324 (004403042)	—
		Engine oil pressure switch		
		PCV valve		—
		Engine oil pan		—

Seal material	Application point	Application point	Recommended materials (Item number)	Alternatives (Item number)
		Separator cover	THREE BOND 1217G (K0877Y0100) THREE BOND 1217H	
		Cylinder block		
		Rocker cover		
		Cylinder head		
		Chain cover		
		Oil pan upper		
		Camshaft carrier		
		Cylinder head gasket		
		Scavenge pump		
		Camshaft bearing cap		
	FA/FB	Camshaft cap	THREE BOND 1324 (004403042)	—
		Oil pump		
		Oil return cover bolt (when reusing bolts)		
		Engine oil separator cover mounting bolt (when reusing bolts)		
		Engine oil pump mounting bolt (when reusing bolts)		
		Timing belt guide cam sprocket side mounting bolt (when reusing bolts)		
		Service hole plug		
		Intake manifold nipple	THREE BOND 1105 (004403010)	DOW CORNING No. 7038
MT	TY75/TY85	MT transmission case	THREE BOND 1215B	DOW CORNING No. 7038 THREE BOND 1215 (004403007)
		MT transfer case		
	TY75	Transmission cover		
	TY85	Transmission oil pan		
		Clutch housing		
CVT	TR690	CVT intermediate case		

Seal material	Application point		Application point	Recommended materials (Item number)	Alternatives (Item number)	
			CVT converter case cover			
		TR580/TR690				CVT transmission case
						CVT extension case
						CVT oil pump chain cover
						CVT drive pinion retainer
						Transmission oil pan
	Steering	Hydraulic	Steering adjusting screw	THREE BOND 1102 (004403006)	—	
		Electric		SEAL END No. 22	—	
	Door	Front	Sealing cover	3M Butyl Tape 8626	—	
		Rear				
	Rear differential	T-type/VA1-type	Drive pinion shaft and self-locking nut (seating face)	THREE BOND 1324 (004403042)	—	
			Hypoid driven gear bolt			
		T-type	Filler plug, drain plug	THREE BOND 1105 (004403010)	DOW CORNING No. 7038	
Side retainer bolt			THREE BOND 1110F	THREE BOND 1110B		