



# List of Workshop Manual Repair Groups

**Repair Group** 03 - Maintenance, Diagnosis

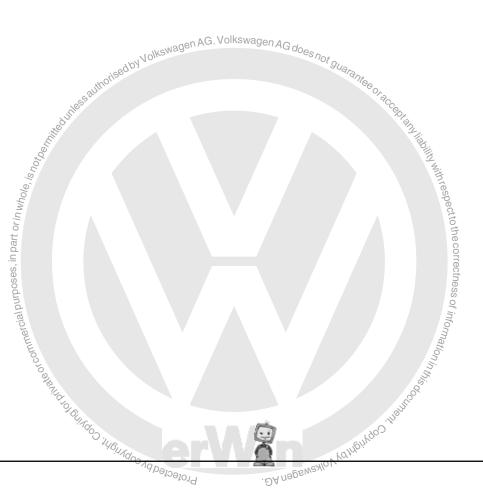


Technical information should always be available to the foremen and mechanics, because their careful and constant adherence to the instructions is essential to ensure vehicle road-worthiness and safety. In addition, the normal basic safety precautions for working on motor vehicles must, as a matter of course, be observed. C05

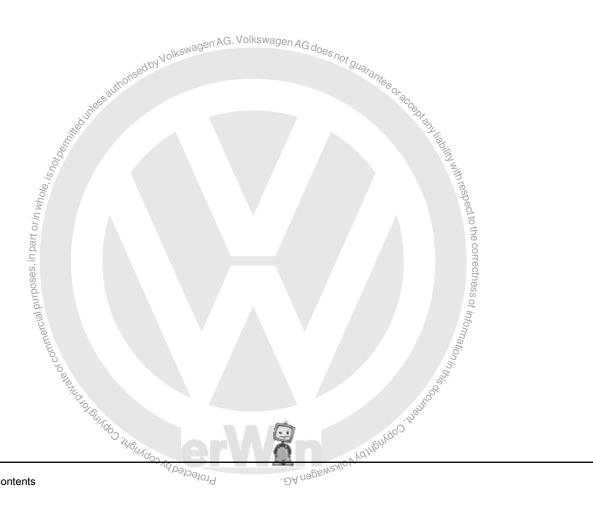
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# 03 – Maintenance, Diagnosis

## 1 Engine Oil Types

(Edition 01.2018)

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All quantities are approximate. Always refer to the Repair Manual and/or the Maintenance Procedures for correct filling instructions.

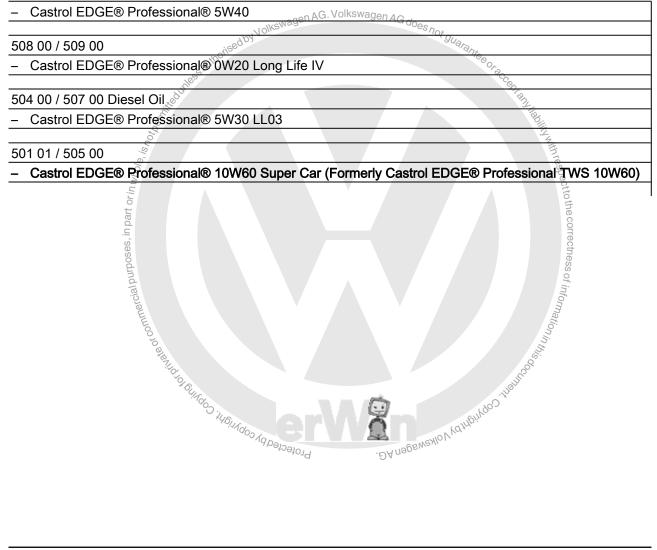
Refer to Technical Bulletin 2012855 for engine oils meeting the required VW oil quality standards.

Part numbers are for reference only. Always check with your parts department for the latest information.



Developed by Castrol®, in strategic co-operation with Volkswagen Group, the following Castrol® products meet VW/Audi specifications.

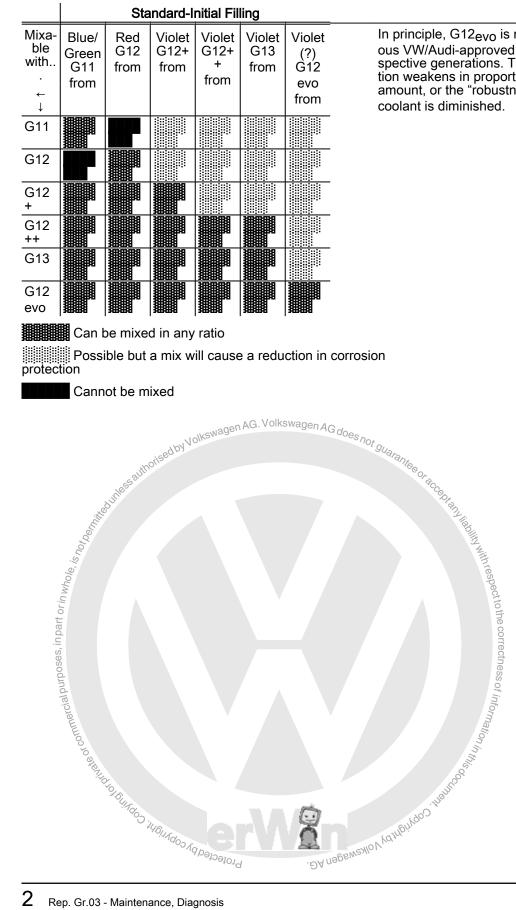
502 00 / 505 00 / 505 01





## 2 **Engine Coolant Mixing**

## Mixability of G12evo with other Coolant Generations



In principle, G12<sub>evo</sub> is mixable with all previous VW/Audi-approved coolants for the respective generations. The corrosion protection weakens in proportion to the mixture amount, or the "robustness" of the G12<sub>evo</sub> coolant is diminished.

# 3 Beetle/Beetle Convertible (5C2/528)

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All quantities are approximate. Always refer to the Repair Manual and/or the Maintenance Procedures for correct filling instructions.

Refer to Technical Bulletin 2012855 for engine oils meeting the required VW oil specifications.

Component/System		Capacity	Part Number/ Specification
2.0L — B-cycle Engine (DDSA/DDSB)			
1) If you must add oil and no oil is available that meets the Volkswagen oil quality standard required for your engine, you can add a maximum 0.5 liters (0.5 qt) of		5.7L (6.0 qt.)	VW 508 00 VW 504 00 1) VW 502 00 1)
engine oil that meets the ACEA A3 /B4 and API SN specification, and has a viscosity grade of SAE 0W-20.	Coolant	10.0L (10.6 qt.)	Refer to Parts Catalog
Using oil with a different viscosity grade than SAE 0W-20 can cause the vehicle emissions and fuel con- sumption to increase.			
Only use different oils in cases of emergency.			
6-Speed Automatic Transmission (09G) swagen AG da			
6-Speed Automatic Transmission (09G) swagen AG does	not glinitial Fill	7.0L (7.4 qt.)	Refer to Parts
thorises	Refill	3.0L (3.2 qt.)	Catalog
Brake System	OF RCC		
illo dull	Brake Fluid	1.2L (1.3 qt.)	Refer to Parts Catalog
A/C System		OIIII	
Dle, is no	Refrigerant	525 +/- 25g (18.5 +/- 0.8 oz.)	Refer to Parts Catalog
ses, in part or in whole, is no	Oil for Refriger- ant Compressor (Sanden)	110 cc +/- 10 cc (3.7 +/- 0.3 fl. oz.)	Refer to Parts Catalog
ses, in pa	Oil for Refriger- ant Compressor (Denso)	90 cc +/- 10 cc (3.0 +/- 0.3 fl. oz.)	Refer to Parts Catalog
Window/Headlamp Washer System		O SS	
hercial	Washer Fluid	3.6 - 4.5L (3.8 - 4.7 qt.)	Refer to Parts Catalog
Protected by copyright, Copyright Co	SHOMANDUMO THEMAN	netionin this	



## Jetta/GLI (BU3) 4

All Models 2018 >	owagen AG.	Volkswagen AG doo	
Fluid Capacity Tables - Edition 01.2018	sed by Volksw	-oesn	Ot guarans
Fluid Capacity Tables - Edition 01.2018 Jetta/GLI (BU3)			TICE OF CCE
			Pt any
All quantities are approximate. Always refer to the Rep ual and/or the Maintenance Procedures for correct filli structions.	pair Man- ng in-	Volkswagen AG does n Capacity 4.0L (4.2 qt.)	
Refer to Technical Bulletin 2012855 for engine oils me required VW oil specifications.	eting the		
Part numbers are for reference only Always check wit parts department for the latest information.	th your		
see see			
Component/System		Capacity	Part Number/ Specification
1.4L (DGXA)			
1) If you must add oil and no oil is available that meets he Volkswagen oil quality standard required for your engine, you can add a maximum 0.5 liters (0.5 qt) of	Oil and Filter Change	4.0L (4.2 qt.)	VW 508 00 VW 504 00 1) VW 502 00 1)
engine oil that meets the ACEA A3 /B4 and API SN	Coolant	10.0L (10.5 qt.)	Refer to Parts Catalog
specification, and has a viscosity grade of SAE-0W-20. Using oil with a different viscosity grade than SAE OW-20 can cause the vehicle emissions and fuel con- sumption to increase. Only use different oils in cases of emergency.	undon Cont		OVVER AND NOT AND NOT A
Only use different oils in cases of emergency.	Protected by	. DA nageway	101.
.0L (DKFA)		r	r
) If you must add oil and no oil is available that meets ne Volkswagen oil quality standard required for your engine, you can add a maximum 0.5 liters (0.5 qt) of	Oil and Filter Change	5.7 L (6.0 qt.)	VW 508 00 VW 504 00 1) VW 502 00 1)
engine oil that meets the ACEA A3 /B4 and API SN specification, and has a viscosity grade of SAE 0W-20. Jsing oil with a different viscosity grade than SAE DW-20 can cause the vehicle emissions and fuel con- sumption to increase.	Coolant	TBD	Refer to Parts Catalog
Only use different oils in cases of emergency.			
-Speed Manual Transmission (02S)	Initial Fill	Approximately	Refer to Parts
	Refill	2.3L (2.4 qt.) Approximately	Catalog Refer to Parts
		2.1L (2.2 qt.)	Catalog
	Initial Fill	Approximately 6.3L (6.7 qt.)	Refer to Parts Catalog
Brake System			
	Brake Fluid	1.2L (1.3 qt.)	Refer to Parts Catalog
VC System (R1234yf)			[
	Refrigerant	460 +/- 5 g (18.5 +/- 0.9 oz.)	Refer to Parts Catalog
	Oil for Refriger- ant Compressor (Denso)	110 +/- 10 cc <sup>3</sup> (3.7 +/- 0.3 fl. oz.)	Refer to Parts Catalog
	Oil for Refriger- ant Compressor (Sanden)	75 +/- 10 cc <sup>3</sup> (2.5 +/- 0.3 fl. oz.)	Refer to Parts Catalog

All Models 2018 ►
Fluid Capacity Tables - Edition 01.2018

Component/System		Capacity	Part Number/ Specification
	Washer Fluid	3.0 - 5.0L (3.1 - 5.2 qt.)	Refer to Parts Catalog





# 5 Golf/GTI (AU2)

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All quantities are approximate. Always refer to the Repair Manual and/or the Maintenance Procedures for correct filling instructions.

Refer to Technical Bulletin 2012855 for engine oils meeting the required VW oil specifications.

Component/System		Capacity	Part Number/ Specification
1.8L Engine (CXBA/CXBB)	llen		
1.8L Engine (CXBA/CXBB)	Oil and Filter Change	5.7 L (6.0 qt.)	VW 502 00
ssattpolise	Coolant	10.0L (10.6 qt.)	Refer to Parts Catalog
		C BOF	
Z.UL Engline (CACB)	Oil and Filter Change	5.7L (6.0 qt.)	VW 502 00
6' <i>is 1</i> 0'	Coolant	10.0L (10.6 qt.)	Refer to Parts Catalog
5-Speed Manual Transmission (0A4)			spec
orin	Initial Fill	1.9L (2.0 qt.)	Refer to Parts
Dart	Refill	1.7L (1.8 qt.)	Catalog
6-Speed Manual Transmission (02Q)			orre
asodur	Initial Fill	2.3L (2.4 qt.)	Refer to Parts
6-Speed Automatic Transmission (09G)			of int
	Initial Fill	7.0L (7.4 qt.)	Refer to Parts
Julio	Refill	3.0L (3.1 qt.)	Catalog
6-Speed Direct Shift Gearbox (09D)		in th	
Brake System	Initial Fill	6.9 - 7.2L (7.3 - 7.6 qt.)	Refer to Parts Catalog
SUIT GO	Refill	5.2L (5.5 qt.)	
Copyright.	Mechatronic Only	3.0 4.0L (3.1 - 4.2 qt.)	
Brake System	. DA NOGENZY		
	Brake Fluid	1.2L (1.3 qt.)	Refer to Parts Catalog
A/C System		,	
	Refrigerant	500 +/- 15 g (17.6 +/- 0.5 oz.)	Refer to Parts Catalog
	Oil for Refriger- ant Compressor (Sanden)	75 +/- 10 cc (2.5 +/- 0.3 fl. oz.)	Refer to Parts Catalog
	Oil for Refriger- ant Compressor (Delphi)	110 +/- 10 cc (3.7 +/- 0.3 fl. oz.)	Refer to Parts Catalog
Window/Headlamp Washer System			



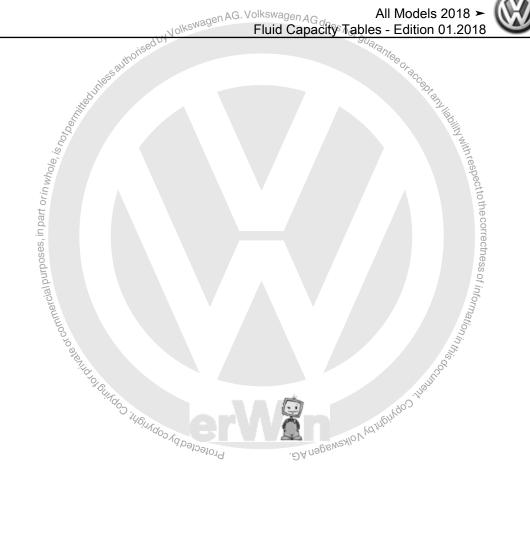
Component/System		Capacity	Part Number/ Specification
	Washer Fluid	3.0 - 5.0L (3.1 - 5.2 qt.)	Refer to Parts Catalog





#### A CAUTION

All Models 2018 > Fluid Capacity Tables - Edition 01.2018	orised by Volkswas		-us not guara
	authorise		ante Or
6 Golf R (BQ1)	52		
All quantities are approximate. Always refer to the Rep ual and/or the Maintenance Procedures for correct fill structions.	oair Man- ing in-		Part Number/ Specification VW 502 00 Refer to Parts Catalog
Refer to Technical Bulletin 2012855 for engine oils me required VW oil specifications.	eting the		
Part numbers are for reference only. Always check wi parts department for the latest information	ith your		
Component/System		Capacity	Part Number/
2.0L Engine (DJJA)			
Solution of the second s	Oil and Filter Change	5.7L (6.0 qt.)	VW 502 00
	Coolant	10.0L (10.5 qt.)	Refer to Parts Catalog
6-Speed Manual (0FB)	Talon	Ó	(10)
	Inițial Fill	2.3L (2.4 qt)	Refer to Parts Catalog
6-Speed Direct Shift Gearbox (0GC)	Diected by copy	Pro	PDEWEXL
`,`,`,	Initial Fill	6.8L +/- 0.1L (7.2 qt. +/- 0.1 qt.)	Refer to Parts Catalog
	Refill	6.0L (6.3 qt.)	
	Bevel Box	approx 0.85L (0.9 qt.) Filled for life, no change	
Rear Final Drive	1	1	
	Final Drive Ca- pacity	0.95L (1.0 qt.)	Refer to Parts Catalog
	AWD Coupling Capacity	0.75L (0.8 qt.)	Refer to Parts Catalog
	Refill AWD Cou- pling	0.65L (0.7 qt.)	Refer to Parts Catalog
Brake System	1	1	
	Brake Fluid	1.2L (1.3 qt.)	Refer to Parts Catalog
A/C System (R1234yf)			
	Refrigerant	460 +/- 15 g (17.6 +/- 0.5 oz.)	Refer to Parts Catalog
	Oil for Refriger- ant Compressor (Sanden)	75 +/- 10 cc (2.5 +/- 0.3 fl. oz.)	Refer to Parts Catalog
	Oil for Refriger- ant Compressor (Mahle/Delphi & Denso)	110 +/- 10 cc (3.7 +/- 0.3 fl. oz.)	Refer to Parts Catalog
Window/Headlamp Washer System	I	r	
	Washer Fluid	3.0 - 5.0L (3.1 - 5.2 qt.)	Refer to Parts Catalog





# 7 e-Golf (BE2)

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All quantities are approximate. Always refer to the Repair Manual and/or the Maintenance Procedures for correct filling instructions.

Component/System		Capacity	Part Number/ Specification	
Electric Motor — 134 HP (EAZA)				
Single Gear (0MD) <sup>sodby Volkswagen</sup> AG. Volkswagen AG does no	Coolant	Follow proce- dure for Coolant Draining and Filling. Refer to ⇒ Elec- tric Drive (270,LS2); Rep. Gr. 93 ; High- Voltage Cooling System; Cool- ant Draining and Filling	Refer to Parts Catalog	
Single Gear (0MD)	antee			
Aunessain .	Initial Fill/Refill	0.8L (0.85 qt.)	Refer to Parts Catalog	
Brake System	12/10			
s not be	Brake Fluid	1.2L (1.3 qt.)	Refer to Parts Catalog	
A/Q System A/C System (R1234yf)		I res		
or in wh	Refrigerant with heat pump	850 +/- 15 g (29.9 +/- 0.5 oz.)	Refer to Parts Catalog	
in part	Refrigerant w/o heat pump	430 +/- 15 g (15.2 +/- 0.5 oz.)		
mmercial purposes, in part or in wh	PAG Oil, Vis- teon with heat pump	250 +/- 10 cc (8.45 +/- 0.3 fl. oz.)	Refer to Parts Catalog	
ummercial	PAG Oil, Vis- teon w/o heat pump	120 +/- 10 cc (4.05 +/- 0.3 fl. oz.)		
all R THOTOLOGY	Washer Fluid	Approximately 3.0 - 5.0L (3.1 - 5.2 qt.)	Refer to Parts Catalog	
Window Washer System	on Kayu Andon yu			

# 8 Golf Sportwagen/Alltrack (BX6)

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All quantities are approximate Always refer to the Repair Manual and/or the Maintenance Procedures for correct filling instructions.

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Refer to Technical Bulletin 2012855 for engine oils meeting the required VW oil specifications.

Part numbers are for reference only. Always check with your parts department for the latest information.

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0	th		
Component/System		Capacity	Part Number/ Specification
1.8L Engine (CXBA/CXBB)			hfor
	Oil and Filter Change	5.7 L (6.0 qt.)	VW 502 00
o are nig	Coolant	10.0L (10.6 qt.)	Refer to Parts Catalog
5-Speed Manual Transmission (0A4)			USUN
6-Speed Manual Transmission (02Q)	Initial Fill	1.9L (2.0 qt.) 1.7L (1.8 qt.)	Refer to Parts Catalog
6-Speed Manual Transmission (02Q)	Ttenin g	Hapewayon	
	Initial Fill	2.3L (2.4 qt.)	Refer to Parts Catalog
6-Speed Direct Shift Gearbox (09D)			
	Initial Fill	6.9 - 7.2L (7.3 - 7.6 qt.)	Refer to Parts Catalog
	Refill	5.2L (5.5 qt.)	
	Mechatronic Only	3.0 - 4.0L (3.1 - 4.2 qt.)	
	Rear Final Drive	0.95L (1.0 qt.)	Refer to Parts Catalog
	Bevel Box	0.9L (1.0 qt.)	Refer to Parts
	AWD Clutch Ini- tial Fill	655 ml (22.0 oz.)	Catalog
Brake System			
	Brake Fluid	1.2L (1.3 qt.)	Refer to Parts Catalog
A/C System			
	Refrigerant	500 +/- 15 g (17.6 +/- 0.5 oz.)	Refer to Parts Catalog
	Oil for Refriger- ant Compressor (Sanden)	75 +/- 10 cc (2.5 +/- 0.3 fl. oz.)	Refer to Parts Catalog
	Oil for Refriger- ant Compressor (Delphi)	110 +/- 10 cc (3.7 +/- 0.3 fl. oz.)	Refer to Parts Catalog
Window/Headlamp Washer System			
	Washer Fluid	3.0 - 5.0L (3.1 - 5.2 qt.)	Refer to Parts Catalog



# 9 Passat (A33)

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All quantities are approximate. Always refer to the Repair Manual and/or the Maintenance Procedures for correct filling instructions.

Refer to Technical Bulletin 2012855 for engine oils meeting the required VW oil specifications.

Component/System		Capacity	Part Number/ Specification
2.0L — B-cycle Engine (DDSA/DDSB)	Volkswagen AG do-	1	
1) If you must add oil and no oil is available that meets the Volkswagen oil quality standard required for your engine, you can add a maximum 0.5 liters (0.5 qt) of	Oil and Filter Change	ot 5.7L (6.0 qt.)	VW 508 00 VW 504 00 1) VW 502 00 1)
engine oil that meets the ACEA A3 /B4 and API SN specification, and has a viscosity grade of SAE 0W-20. Using oil with a different viscosity grade than SAE 0W-20 can cause the vehicle emissions and fuel con- sumption to increase. Only use different oils in cases of emergency.	Coolant	10.0L (10.63gt.)	Refer to Parts Catalog
3.6L Engine (CDVB)			pectil
part or	Oil and Filter Change	5.5L (5.8 qt.)	VW 502 00
.i.	Coolant	9.0L (9.5 qt.)	Refer to Parts Catalog
6-Speed Automatic Transmission (09G)			SS(
lercial p	Initial Fill Refill	7.0L (7.4 qt.) 3.0L (3.1 qt.)	Refer to Parts Catalog
6-Speed Direct Shift Gearbox (02E)		(0.1. q.)	ation
1 Division of the other of the other	Initial Fill	6.9 - 7.2L (7.3 - 7.6 qt.)	Refer to Parts Catalog
Proko Svotom	Refill	5.2L (5.5 qt)	
Brake System	Brake Fluid	1.26 (1.3 qt.)	Refer to Parts Catalog
A/C System (R134a)	. ĐA nagewa,		
	Refrigerant	575 +/- 5 g (20.3 +/- 0.2 oz.)	Refer to Parts Catalog
	Oil for Refriger- ant Compressor	110 +/- 10 cc (3.7 +/- 0.3 fl. oz.)	Refer to Parts Catalog
A/C System (R1234yf)			
	Refrigerant	480 +/- 15 g (16.9 +/- 0.5 oz.)	Refer to Parts Catalog
	Oil for Refriger- ant Compressor	110 +/- 10 cc (3.7 +/- 0.3 fl. oz.)	Refer to Parts Catalog
Window/Headlamp Washer System			



## All Models 2018 ➤ Fluid Capacity Tables - Edition 01.2018

	naden AG. Volkswagen AG.				
Component/System	Volkswagen A.G. Volksi	Capacity of gua	Part Number/		
adunes auti	Washer Fluid w/ o Headlight Washer		Refer to Parts Catalog		
s not bernii	Washer Fluid with Headlight Washer	4.5L (4.7 qt.)	J Hability With		
Component/System	μοιθοίθασμα	ру паремениоли	Refer to Parts Catalog		



# 10 Arteon (3H7)

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All quantities are approximate. Always refer to the Repair Manual and/or the Maintenance Procedures for correct filling instructions.

Refer to Technical Bulletin 2012855 for engine oils meeting the required VW oil specifications.

Component/System		Capacity	Part Number/ Specification
2.0L Engine (DLRB)			
1) If you must add oil and no oil is available that meets the Volkswagen oil quality standard required for your engine, you can add a maximum 0.5 liters (0.5 \ctr}) of a	Oil and Filter Change	5.7L (6.0 qt.)	VW 508 00 VW 504 00 1) VW 502 00 1)
engine oil that meets the ACEA A3 /B4 and API SN specification, and has a viscosity grade of SAE 0W-20. Using oil with a different viscosity grade than SAE 0W-20 can cause the vehicle emissions and fuel con- sumption to increase. Only use different oils in cases of emergency.	en AG doeslant Coolant	TBD	Refer to Parts Catalog
8-Speed Automatic Transmission (09P)		Bilitz	
	Initial Fill (FWD & AWD)	7.0L (7.4 qt.)	Refer to Parts Catalog
or in w <sub>h</sub>	Bevel Box (AWD)	0.9L (1.0 qt.)	Refer to Parts Catalog
bart	Rear Final Drive	0.95L (1.0 qt.§	
u, i	AWD Clutch Ini- tial Fill (0CR/0CQ)	0.75L (0.8 qt.)	Refer to Parts Catalog
vateorcommercial purposes, in part or in whole, is,	AWD Clutch Re- fill (0CR/0CQ)	0.65L (0.7 qt)	
Master of com	AWD Clutch Ini- tial Fill (0BS)	0.85L (0.9 qt.)	Refer to Parts Catalog
Broke System		UIRO.	-
A/C System (R1234yf)	Brake Fluid	1:2L (1.3 qt.)	Refer to Parts Catalog
A/C System (R1234yf)	A Matub		1
Profected by	Refrigerant	480 +/- 15 g (16.9 +/- 0.5 oz.)	Refer to Parts Catalog
	Oil for Refriger- ant Compressor	110 +/- 10 cc (3.7 +/- 0.3 fl. oz.)	Refer to Parts Catalog
Window/Headlamp Washer System			*
	Washer Fluid w/ o Headlight Washer	3.0L (3.2 qt.)	Refer to Parts Catalog
	Washer Fluid with Headlight Washer	4.5L (4.7 qt.)	





# 11 Tiguan Limited (5N2)

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All quantities are approximate. Always refer to the Repair Manual and/or the Maintenance Procedures for correct filling instructions.

Refer to Technical Bulletin 2012855 for engine oils meeting the required VW oil specifications.

Component/System		Capacity	Part Number/ Specification	
2.0L Engine (CCTA)				
	Oil and Filter Change	4.7L (4.9 qt.)	VW 502 00	
	Coolant	8.0L (8.5 qt.)	Refer to Parts Catalog	
6-Speed Automatic Transmission (09M)				
	Initial Fill	7.0L (7.4 qt.)	Refer to Parts Catalog	
	Bevel Box	0.9L (1.0 qt.)	Refer to Parts	
	Rear Final Drive	0.95L (1.0 qt.)	Catalog	
AG Volkswagen	AWD Clutch Ini- tial Fill	0.85L (0.9 qt.)	Refer to Parts Catalog	
Brake System	AWD Clutch Re-	0.7L (0.7 qt.)		
Brake System	antee or			
dunesso	Brake Fluid	1.2L (1.3 qt.)	Refer to Parts Catalog	
A/C System		A line		
is not be	Refrigerant	660 +/- 15 g (23.3 +/- 0.5 oz.)	Refer to Parts Catalog	
A/C System	Oil for Refriger- ant Compressor (Sanden)	110 +/- 10 cc (3.7 +/- 0.3 fl. oz.)	Refer to Parts Catalog	
s, in part	Oil for Refriger- ant Compressor (Denso)	140 +╊ 10 cc (4.7 +┣ 0.3 fl. oz.)	Refer to Parts Catalog	
Window/Headlamp Washer System		tnes		
cial pur	Washer Fluid	3.0L (3.1 qt.)	Refer to Parts Catalog	
Tig and the second of the seco				



## Tiguan (BW2) 12

## A CAUTION

All quantities are approximate. Always refer to the Repair Man-ual and/or the Maintenance Procedures for correct filling instructions.

Refer to Technical Bulletin 2012855 for engine oils meeting the required VW oil specifications.

Refer to Technical Bulletin 2012855 for engine oils meeting the required VW oil specifications. Part numbers are for reference only. Always check with your parts department for the latest information.			
2.0L Engine (DGUA)		(ind)	2
1) If you must add oil and no oil is available that meets the Volkswagen oil quality standard required for your engine, you can ade a maximum 0.5 liters (0.5 qt) of	Oil and Filter Change	5.7L (6.0 qt.)	VW 508 00 VW 504 00 1) VW 502 00 1)
engine oil that meets the ACEA A3 /B4 and API SN specification, and has a viscosity grade of SAE 0W-20. Using oil with a different viscosity grade than SAE 0W-20 can cause the vehicle emissions and fuel con- sumption to increase. Only use different oils in cases of emergency.	Coolant	10.0L (10.6 qt.)	Refer to Parts Catalog
8-Speed Automatic Transmission (09P)			of inf
umero	Initial Fill (FWD & AWD)	7.0L (7.4 qt.)	Refer to Parts
ate of cc	Bevel Box (AWD)	0.9L (1.0 qt.)	Refer to Parts
ling of the second seco	Rear Final Drive	0.95L (1.0 qt?)	
1011 CODING	AWD Clutch Ini- tial Fill (0CR/0CQ)	0.75L (0.8°qt.)	Refer to Parts Catalog
Protected by copyring to Hill ale of contract of the second secon	AWD Clutch Re- fill ∪≎ <sup>69</sup> Ne-√ (0CR/0CQ)	<sup>p1</sup> 0.65L (0.7 qt.)	
	AWD Clutch Ini- tial Fill (0BS)	0.85L (0.9 qt.)	Refer to Parts Catalog
	AWD Clutch Re- fill (0BS)	0.7L (0.7 qt.)	
Brake System		1	
	Brake Fluid	1.2L (1.3 qt.)	Refer to Parts Catalog
A/C System (R1234yf)		1	
	Refrigerant	460 +/- 15 g (16.2 +/- 0.5 oz.)	Refer to Parts Catalog
	Oil for Refriger- ant Compressor (Denso)	110 +/- 10 cc (3.7 +/- 0.3 fl. oz.)	Refer to Parts Catalog
	Oil for Refriger- ant Compressor (Denso)	110 +/- 10 cc (3.7 +/- 0.3 fl. oz.)	Refer to Parts Catalog





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dure		2	¢ ⊗,
Component/System		Capacity	Part Number/ Specification
Ipart or in whole, is no	Oil for Refriger- ant Compressor (Sanden)	75 +/- 10 cc (2.5 +/- 0.3 fl. oz.)	Refer to Parts Catalog
part or in <sub>v</sub>	Oil for Refriger- ant Compressor (Mahli/Delphi)	110 +/- 10 cc (3.7 +/- 0.3 fl. oz.)	Refer to Parts Catalog
Window/Headlamp Washer System			
urpose	Washer Fluid	3.0 - 5.0L (3.1 - 5.2 qt.)	Refer to Parts Catalog
Tobected by Copyrights of Commercial Purp	A DAneg	EMSHO A AQUAL ADD THE	information in this occup

# 13 Atlas (CA1)

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All quantities are approximate. Always refer to the Repair Manual and/or the Maintenance Procedures for correct filling instructions.

Refer to Technical Bulletin 2012855 for engine oils meeting the required VW oil specifications.

Part numbers are for reference only. Always check with your volkswagen AG does not guar and the latest information.

1980		- AFan	
Component/System		Capacity	Part Number/
2.0L Engine (DCGA)			R ann
	Oil and Filter Change	5.7L (6.0 qt.)	VW 502 00
ole,isn	Coolant	Approximately 20.0L (21.1 qt.)	Refer to Parts Catalog
3.6L Engine (CDVC)			)ect <sup>4</sup>
es, in part or	Oil and Filter Change	5.5L (5.8 qt.)	VW 502 00
, in	Coolant	Approximately 20.0L (21.1 qt.)	Refer to Parts Catalog
8-Speed Automatic Transmission (09P)			SS (
8-Speed Automatic Transmission (09P)	Initial Fill	7.0L (7.39 qt.)	Refer to Parts Catalog
rcomm	Bevel Box	0.9L (0.95 qt.)	Refer to Parts Catalog
and the second sec	Rear Final Drive	0.95L (1.0 qt.)	Refer to Parts Catalog
Of BUILTON	AWD Clutch Ini- tial Fill	0.75L (0.8 qt.)	Refer to Parts Catalog
HUBLADOD ADD	AWD Clutch Refill	0.65L (0.7 qt.)	Refer to Parts Catalog
Brake System	G. Protec	Апэремежи	
	Brake Fluid	1.2L (1.3 qt.)	Refer to Parts Catalog
A/C System (R1234yf)			
	Refrigerant	650 +/- 25 g (22.9 +/- 0.8 oz.)	Refer to Parts Catalog
	Oil for Refriger- ant Compressor	110 +/- 10 cc (3.7 +/- 0.3 fl. oz.)	Refer to Parts Catalog
Window/Headlamp Washer System			
	Washer Fluid w/ o Headlight Washer	Approximately 3.0 to 5.0L (3.1 to 5.2 qt.)	Refer to Parts Catalog

13. Atlas (CA1) 19



# 14 Revision History

## DRUCK NUMBER: USA5R506821

Document Revision Date	Notes	
-		
03/26/201 8	BU3 09S transmission changed to 8-speed	
03/14/201 8	AU/BX oil capacity change to 5.7 L (6.0 gt.); comage pleted new model updates for BU3 (DKFA 2.0L coolant n/a) and 3H7	n AG does not guara.
05/05/201 7	Placeholder for 2019 MY; adjust model code meta- data for 2019	4) tee of ecc
	Notes BU3 09S transmission changed to 8-speed AU/BX oil capacity change to 5.7 L (6.0 qt.); comage pleted new model updates for BU3 (DKFA 2.0L coolant n/a) and 3H7 Placeholder for 2019 MY; adjust model code meta- data for 2019	Ary liability with respect to the correctness of information in the second seco

# uthorised by Volkswagen AG. Volkswagen AG does not guarantes or aces of a cash and the sources of a cash a **Cautions & Warnings**

## Please read these WARNINGS and CAUTIONS before proceeding with maintenance and repair work. You must answer that you have read and you understand these WARNINGS and CAUTIONS before you will be allowed to view this information.

- If you lack the skills, tools and equipment, or a suitable workshop for any procedure described in this manual, we suggest you leave such repairs to an authorized Volkswagen retailer or other qualified shop. We especially urge you to consult an authorized Volkswagen retailer before beginning repairs on any vehicle that may still be covered wholly or in part by any of the extensive warranties issued by Volkswagen.
- Disconnect the battery negative terminal (ground strap) whenever you work on the fuel system or the electrical system. Do not smoke or work near heaters or other fire hazards. Keep an approved fire extinguisher handy.
- Volkswagen is constantly improving its vehicles and sometimes these changes, both in parts and specifications. are made applicable to earlier models. Therefore, part numbers listed in this manual are for reference only. Always check with your authorized Volkswagen retailer parts department for the latest information.
- Any time the battery has been disconnected on an automatic transmission vehicle, it will be necessary to reestablish Transmission Control Module (TCM) basic settings using the VAG 1551 Scan Tool (ST).
- Never work under a lifted vehicle unless it is solidly supported on stands designed for the purpose. Do not support a vehicle on cinder blocks, hollow tiles or other props that may crumple under continuous load. Never work under a vehicle that is supported solely by a jack. Never work under the vehicle while the engine is running.
- For vehicles equipped with an anti-theft radio, be sure of the correct radio activation code before disconnecting the . battery or removing the radio. If the wrong code is entered when the power is restored, the radio may lock up and become inoperable, even if the correct code is used in a later attempt.
- If you are going to work under a vehicle on the ground, make sure that the ground is level. Block the wheels to keep the vehicle from rolling. Disconnect the battery negative terminal (ground strap) to prevent others from starting the vehicle while you are under it.
- Do not attempt to work on your vehicle if you do not feel well. You increase the danger of injury to yourself and • others if you are tired, upset or have taken medicine or any other substances that may impair you or keep you from being fully alert.
- Never run the engine unless the work area is well ventilated. Carbon monoxide (CO) kills. .
- Always observe good workshop practices. Wear goggles when you operate machine tools or work with acid. Wear . goggles, gloves and other protective clothing whenever the job requires working with harmful substances.
- Tie long hair behind your head. Do not wear a necktie, a scarf, loose clothing, or a necklace when you work near . machine tools or running engines. If your hair, clothing, or jewelry were to get caught in the machinery, severe injury could result.
- Do not re-use any fasteners that are worn or deformed in normal use. Some fasteners are designed to be used only once and are unreliable and may fail if used a second time. This includes, but is not limited to, nuts, bolts, washers, circlips and cotter pins. Always follow the recommendations in this manual - replace these fasteners with new parts where indicated, and any other time it is deemed necessary by inspection.

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# **Cautions & Warnings**

- Illuminate the work area adequately but safely. Use a portable safety light for working inside or under the vehicle. Make sure the bulb is enclosed by a wire cage. The hot filament of an accidentally broken bulb can ignite spilled fuel or oil.
- Friction materials such as brake pads and clutch discs may contain asbestos fibers. Do not create dust by grinding, sanding, or by cleaning with compressed air. Avoid breathing asbestos fibers and asbestos dust. Breathing asbestos can cause serious diseases such as asbestosis or cancer, and may result in death.
- Finger rings should be removed so that they cannot cause electrical shorts, get caught in running machinery, or be crushed by heavy parts.
- Before starting a job, make certain that you have all the necessary tools and parts on hand. Read all the instructions thoroughly; do not attempt shortcuts. Use tools that are appropriate to the work and use only replacement parts meeting Volkswagen specifications. Makeshift tools, parts and procedures will not make good repairs.
- Catch draining fuel, oil or brake fluid in suitable containers. Do not use empty food or beverage containers that might mislead someone into drinking from them. Store flammable fluids away from fire hazards. Wipe up spills at once, but do not store the oily rags, which can ignite and burn spontaneously.
- Use pneumatic and electric tools only to loosen threaded parts and fasteners. Never use these tools to tighten fasteners, especially on light alloy parts. Always use a torque wrench to tighten fasteners to the tightening torque listed.
- Keep sparks, lighted matches, and open flame away from the top of the battery. If escaping hydrogen gas is ignited, it will ignite gas trapped in the cells and cause the battery to explode
- Be mindful of the environment and ecology. Before you drain the crankcase, find out the proper way to dispose of the oil. Do not pour oil onto the ground, down a drain, or into a stream, pond, or lake. Consult local ordinances that govern the disposal of wastes.
- The air-conditioning (A/C) system is filled with a chemical refrigerant that is hazardous. The A/C system should be serviced only by trained automotive service technicians using approved refrigerant recovery/recycling equipment, trained in related safety precautions, and familiar with regulations governing the discharging and disposal of automotive chemical refrigerants.
- Before doing any electrical welding on vehicles equipped with anti-lock brakes (ABS), disconnect the battery negative terminal (ground strap) and the ABS control module connector.
- Do not expose any part of the A/C system to high temperatures such as open flame. Excessive heat will increase system pressure and may cause the system to burst.
- When boost-charging the battery, first remove the fuses for the Engine Control Module (ECM), the Transmission Control Module (TCM), the ABS control module, and the trip computer. In cases where one or more of these components is not separately fused, disconnect the control module connector(s).
- Some of the vehicles covered by this manual are equipped with a supplemental restraint system (SRS), that
  automatically deploys an airbag in the event of a frontal impact. The airbag is operated by an explosive device.
  Handled improperly or without adequate safeguards, it can be accidentally activated and cause serious personal
  injury. To guard against personal injury or airbag system failure, only trained Volkswagen Service technicians
  should test, disassemble or service the airbag system.

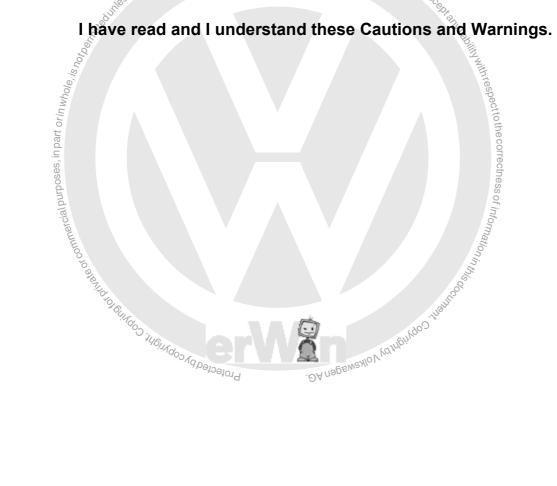
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# **Cautions & Warnings**

- Do not quick-charge the battery (for boost starting) for longer than one minute, and do not exceed 16.5 volts at the battery with the boosting cables attached. Wait at least one minute before boosting the battery a second time.
- Never use a test light to conduct electrical tests of the airbag system. The system must only be tested by trained Volkswagen Service technicians using the VAG 1551 Scan Tool (ST) or an approved equivalent. The airbag unit must never be electrically tested while it is not installed in the vehicle.
- Some aerosol tire inflators are highly flammable. Be extremely cautious when repairing a tire that may have been . inflated using an aerosol tire inflator. Keep sparks, open flame or other sources of ignition away from the tire repair tire from the rim before attempting any repair. Volkswagen AG does r area. Inflate and deflate the tire at least four times before breaking the bead from the rim. Completely remove the Volkswage
- When driving or riding in an airbag-equipped vehicle, never hold test equipment in your hands or lap while the vehicle is in motion. Objects between you and the airbag can increase the risk of injury in an accident.



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