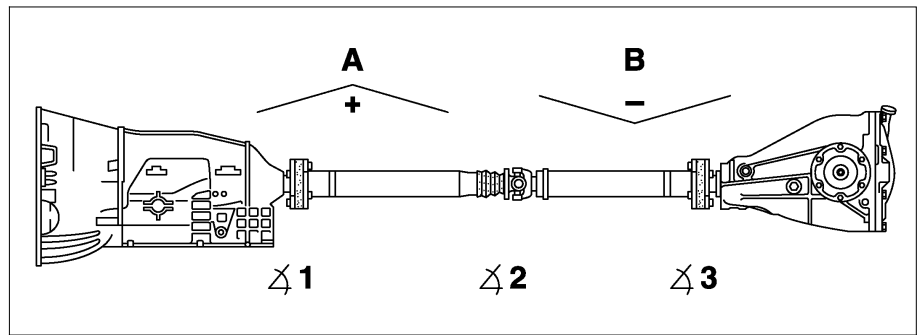


Model 172, 204, 207, 212, 218, 231

### Modification notes

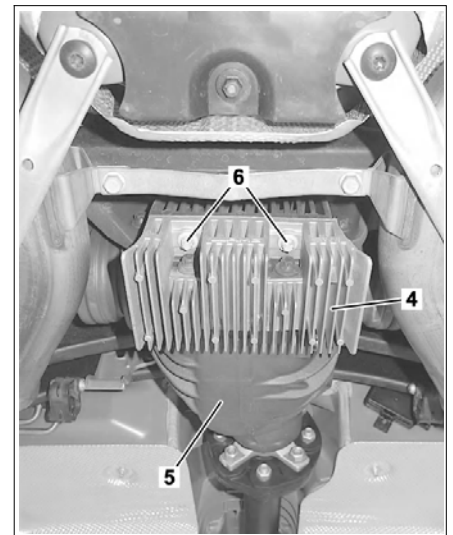
31.01.2014	Front inclination angle of transmission relative to front propeller shaft ( $\sphericalangle$ 1)	MODEL 212.074/075/077/274/275/277	BE41.10-P-1001-01G
31.01.2014	Front inclination angle of transmission relative to front propeller shaft ( $\sphericalangle$ 1)	MODEL 218.374/375/974/975	BE41.10-P-1001-01G
31.01.2014	Inclination angle of front propeller shaft relative to rear propeller shaft ( $\sphericalangle$ 2)	MODEL 212.074/075/077/274/275/277	BE41.10-P-1002-01G
31.01.2014	Inclination angle of front propeller shaft relative to rear propeller shaft ( $\sphericalangle$ 2)	MODEL 218.374/375/974/975	BE41.10-P-1002-01G
31.01.2014	Rear articulation angle from rear drive shaft to rear axle differential ( $\sphericalangle$ 3)	MODEL 218.374/375/974/975	BE41.10-P-1003-01G
07.09.2018	Bolt, rear engine support to frame floor assembly	model 204	BA22.10-P-1005-03E
07.09.2018	Bolt, rear engine support to frame floor assembly	Model 207	BA22.10-P-1005-03E
07.09.2018	Bolt, rear engine support to frame floor assembly	Model 212	BA22.10-P-1005-03E
07.09.2018	Bolt, rear engine support to frame floor assembly	Model 218	BA22.10-P-1005-03E

- A Positive articulation angle upwards "+"
- B Negative inclination angle downwards "-"
- ( 1 Inclination angle from automatic transmission to front half of propeller shaft
- ( 2 Inclination angle from front half to rear half of propeller shaft
- ( 3 Inclination angle from rear half of propeller shaft to rear axle differential











P41.10-2044-04












- 4 Heat sink
- 5 Rear axle gear
- 6 Bolts




P41.10-2379-02

	Notes on self-locking nuts and bolts		AH00.00-N-0001-01A
	<b>Measure</b>		
1.1	Drive the vehicle onto a suitable pit and secure using the parking brake	When using a pit	
1.2	Drive vehicle onto a measuring lifting platform, secure with the parking brake and lift up	When using a measuring lifting platform	

2.1	Remove engine compartment paneling	<p>Model 172.4 with engine 152, 271, 274, 276  Model 204, 207, 212 with engine 271  Model 204, 207, 212 with engine 272  Model 204, 207, 212, 218 with engine 274  Model 204, 207, 212, 218 with engine 276  Model 204, 212 with engine 156  Model 207, 212 with engine 273  Model 207, 212, 218 with engine 278  Model 212, 218 with engine 157  Model 231  Model 231  Model 204.0/2 with engine 156, 271, 272, 274, 276  Model 204.3 with engine 156, 271, 274, 276  Model 207 with engine 271, 272, 273, 274, 276, 278  Model 212 with engine 156, 157, 271, 272, 273, 274, 276, 278  Model 218 with engine 157, 274, 276, 278  Model 204.9 with engine 272, 274, 276  Model 172.4 with engine 152, 271, 274, 276</p>	<p>AR61.20-P-1105RK  AR61.20-P-1105EW  AR61.20-P-1105CY  AR61.20-P-1105W</p>
2.2	Remove bottom sections of soundproofing	<p>Model 172.4 with engine 651  Model 204 with engine 646  Model 204, 207, 212, 218 with engine 642  Model 204, 207, 212, 218 with engine 651  Model 204.0 with engine 642, 646, 651  Model 204.2 with engine 642, 646, 651  Model 204.3 with engine 651  Model 207 with engine 642, 651  Model 212 with engine 642, 651  Model 218 with engine 642, 651  Model 172.4 with engine 651</p>	<p>AR94.30-P-5300EW  AR94.30-P-5300W</p>
3	Prepare vehicle for measurement	<p> The vehicle must be on its wheels for the measurement. Otherwise the measurement will be inaccurate.   The transmission mounts and exhaust system must not be stressed during the inclination angle measurement.</p>	
4	 WS Prepare articulation angle meter 000 588 04 19 00 Articulation angle inclinometer		<p>AR41.10-P-0086-02P  WS26.00-P-0140B</p>
5	 WS Check articulation angle meter, adjust if necessary 000 588 04 19 00 Articulation angle inclinometer		<p>WS26.00-P-0140B</p>
6	 WS Measure articulation angle ( $\sphericalangle$ 1) 000 588 04 19 00 Articulation angle inclinometer	<p>Model 172, 204, 207, 212, 218 with transmission 722.9  Model 172, 207, 212, 218 with transmission 725.0  Model 204, 207, 212 with transmission 722.6  Model 212 with transmission 724.2  Model 172, 204, 207, 212 with transmission 711.6, 716  Model 231</p>	<p>AR41.10-P-0085-01PA  AR41.10-P-0085-01T  AR41.10-P-0085-01RKC  WS26.00-P-0140B</p>
7	 WS Measure articulation angle ( $\sphericalangle$ 2) 000 588 04 19 00 Articulation angle inclinometer		<p>AR41.10-P-0085-02T  WS26.00-P-0140B</p>
8	Unscrew screws/bolts (6) and remove heat sink (4) from rear axle differential (5)	Model 231 with engine 279	
9	 WS Measure inclination angle ( $\sphericalangle$ 3) 000 588 04 19 00 Articulation angle inclinometer		<p>AR41.10-P-0085-03T  WS26.00-P-0140B</p>
10	 WS Read out inclination angles ( $\sphericalangle$ 1, $\sphericalangle$ 2, $\sphericalangle$ 3) from memory of inclinometer 000 588 04 19 00 Articulation angle inclinometer	<p>Model 172 (except 172.475)  Model 172.475  Model 231.457/461/465/473  Model 231.474/479 Front inclination angle of transmission relative to front propeller shaft (<math>\sphericalangle</math> 1)</p>	<p>AR41.10-P-0086-01R  WS26.00-P-0140B  *BE41.10-P-1001-01A</p>

		<p>Model 172 (except 172.475) Model 172.475 Model 231.457/461/465/473 Model 231.474/479Inclination angle of front propeller shaft relative to rear propeller shaft (<math>\angle 2</math>)</p> <p>Model 172 (except 172.475) Model 172.475 Model 231.457/461/465/473 Model 231.474/479Rear inclination angle of rear propeller shaft relative to rear axle differential (<math>\angle 3</math>)</p> <p>Model 204 (except 204.077/277/377) Model 204.077/277/377 Model 207 Model 212 (except 212.074/075/076/077/092/274/275/276/277/292) Model 212.074/075/077/274/275/277 Model 212.076/092/276/292 Model 218 (except 218.374/375/376/392/974/975/976/992) Model 218.374/375/974/975 Model 218.376/392/976/992Front inclination angle of transmission relative to front propeller shaft (<math>\angle 1</math>)</p> <p>Model 204 (except 204.077/277/377) Model 204.077/277/377 Model 207 Model 212 (except 212.074/075/076/077/092/274/275/276/277/292) Model 212.074/075/077/274/275/277 Model 212.076/092/276/292 Model 218 (except 218.374/375/376/392/974/975/976/992) Model 218.374/375/974/975 Model 218.376/392/976/992Inclination angle of front propeller shaft relative to rear propeller shaft (<math>\angle 2</math>)</p> <p>Model 204 (except 204.077/277/377) Model 204.077/277/377 Model 207 Model 212 (except 212.074/075/076/077/092/274/275/276/277/292) Model 212.074/075/077/274/275/277 Model 212.076/092/276/292 Model 218 (except 218.374/375/376/392/974/975/976/992) Model 218.374/375/974/975 Model 218.376/392/976/992Rear inclination angle of rear propeller shaft relative to rear axle differential (<math>\angle 3</math>)</p>	<p>*BE41.10-P-1002-01A</p> <p>*BE41.10-P-1003-01A</p> <p>*BE41.10-P-1001-01G</p> <p>*BE41.10-P-1002-01G</p> <p>*BE41.10-P-1003-01G</p>
11	<p>Correct inclination angle (<math>\angle 1</math>)</p> <p> WS 000 588 10 62 00 Support plate</p> <p> WS 000 588 11 62 00 Major assembly mount</p>	<p>If necessary</p> <p> Screw/bolt, rear engine support to frame floor assembly</p> <p> Rear engine mount on engine support</p>	<p>AR41.10-P-0086-03CW</p> <p>WS26.00-P-3309B</p> <p>WS01.00-P-0092B</p> <p>*BA22.10-P-1005-03E</p> <p>*BA22.10-P-1004-03E</p>
12	<p>Correct the inclination angle (<math>\angle 2</math>)</p> <p> WS 000 588 11 62 00 Major assembly mount</p> <p> WS 000 588 10 62 00 Support plate</p>	<p>If necessary</p> <p> Bolt, propeller shaft center support bearing to frame floor assembly</p>	<p>AR41.10-P-0086-04CW</p> <p>WS01.00-P-0092B</p> <p>WS26.00-P-3309B</p> <p>*BA41.40-P-1001-01F</p>
13	<p>Correct articulation angle (<math>\angle 3</math>)</p> <p> WS 000 588 11 62 00 Major assembly mount</p> <p> WS 000 588 10 62 00 Support plate</p>	<p>If necessary</p> <p> Model 204, 207, 212, 218, 231Rear axle differential to front adapter</p> <p> Model 172Bolt, rear axle differential to front cross member</p>	<p>AR41.10-P-0086-05CW</p> <p>WS01.00-P-0092B</p> <p>WS26.00-P-3309B</p> <p>*BA35.10-P-1005-01N</p> <p>*BA35.10-P-1009-01N</p>
14	<p>Carry out a check measurement again each time the inclination angle is corrected</p>	<p>When inclination angle correction has been performed</p>	<p>AR41.10-P-0086-01R</p>

WS	000 588 04 19 00 Articulation angle inclinometer	<p>Model 172 (except 172.475) Model 172.475 Model 231.457/461/465/473 Model 231.479Front inclination angle of transmission relative to front propeller shaft ( <math>\sphericalangle</math> 1)</p> <p>Model 172 (except 172.475) Model 172.475 Model 231.457/461/465/473 Model 231.479Inclination angle of front propeller shaft relative to rear propeller shaft ( <math>\sphericalangle</math> 2)</p> <p>Model 172 (except 172.475) Model 172.475 Model 231.457/461/465/473 Model 231.479Rear inclination angle of rear propeller shaft relative to rear axle differential ( <math>\sphericalangle</math> 3)</p> <p>Model 204 (except 204.077/277/377) Model 204.077/277/377 Model 207 Model 212 (except 212.074/075/076/077/092/274/275/276/277/292) Model 212.074/075/077/274/275/277 Model 212.076/092/276/292 Model 218 (except 218.374/375/376/392/974/975/976/992) Model 218.374/375/974/975 Model 218.376/392/976/992Front inclination angle of transmission relative to front propeller shaft ( <math>\sphericalangle</math> 1)</p> <p>Model 204 (except 204.077/277/377) Model 204.077/277/377 Model 207 Model 212 (except 212.074/075/076/077/092/274/275/276/277/292) Model 212.074/075/077/274/275/277 Model 212.076/092/276/292 Model 218 (except 218.374/375/376/392/974/975/976/992) Model 218.374/375/974/975 Model 218.376/392/976/992Inclination angle of front propeller shaft relative to rear propeller shaft ( <math>\sphericalangle</math> 2)</p> <p>Model 204 (except 204.077/277/377) Model 204.077/277/377 Model 207 Model 212 (except 212.074/075/076/077/092/274/275/276/277/292) Model 212.074/075/077/274/275/277 Model 212.076/092/276/292 Model 218 (except 218.374/375/376/392/974/975/976/992) Model 218.374/375/974/975 Model 218.376/392/976/992Rear inclination angle of rear propeller shaft relative to rear axle differential ( <math>\sphericalangle</math> 3)</p>	<p>WS26.00-P-0140B</p> <p>*BE41.10-P-1001-01A</p> <p>*BE41.10-P-1002-01A</p> <p>*BE41.10-P-1003-01A</p> <p>*BE41.10-P-1001-01G</p> <p>*BE41.10-P-1002-01G</p> <p>*BE41.10-P-1003-01G</p>
15	Attach heat sink (4) to rear axle differential (5) and screw in screws/bolts (6)	Model 231 with engine 279	*BA35.31-P-1004-02H
16.1	Install lower engine compartment paneling	<p> Bolt, heat sink to end cover</p> <p>Model 172.4 with engine 152, 271, 274, 276 Model 204, 207, 212 with engine 271 Model 204, 207, 212 with engine 272 Model 204, 207, 212, 218 with engine 274 Model 204, 207, 212, 218 with engine 276 Model 204, 212 with engine 156 Model 207, 212 with engine 273 Model 207, 212, 218 with engine 278 Model 212, 218 with engine 157 Model 231 Model 231 Model 172.4 with engine 152, 271, 274, 276</p>	<p>AR61.20-P-1105RK</p> <p>AR61.20-P-1105W</p>

		Model 204.0/2 with engine 156, 271, 272, 274, 276 Model 204.3 with engine 156, 271, 274, 276 Model 207 with engine 271, 272, 273, 274, 276, 278 Model 212 with engine 156, 157, 271, 272, 273, 274, 276, 278 Model 218 with engine 157, 274, 276, 278 Model 204.9 with engine 272, 274, 276	AR61.20-P-1105EW       AR61.20-P-1105CY
16.2	Install bottom section of soundproofing	Model 172.4 with engine 651 Model 204 with engine 646 Model 204, 207, 212, 218 with engine 642 Model 204, 207, 212, 218 with engine 651 Model 172.4 with engine 651 Model 204.0 with engine 642, 646, 651 Model 204.2 with engine 642, 646, 651 Model 204.3 with engine 651 Model 207 with engine 642, 651 Model 212 with engine 642, 651 Model 218 with engine 642, 651	AR94.30-P-5300W AR94.30-P-5300EW

Check values for propeller shaft inclination angle

Number	Designation	Model 172 (except 172.475)	Model 172.475
BE41.10-P-1001-01A	Front inclination angle of transmission relative to front propeller shaft ( $\angle$ 1)	-0,33°...+0,67°	-0,30°...+0,30°

Check values for propeller shaft inclination angle

Number	Designation	MODEL 231.457/461/465/473	Model 231.474/479
BE41.10-P-1001-01A	Front inclination angle of transmission relative to front propeller shaft ( $\angle$ 1)	-0,33°...+0,67°	-0,20°...+0,20°

Check values for propeller shaft articulation angle

Number	Designation	Model 204 (except 204.077/277/377)	Model 204.077/277/377
BE41.10-P-1001-01G	Front inclination angle of transmission relative to front propeller shaft ( $\angle$ 1)	-0,50...+0,67	-0,50...+0,67

Check values for propeller shaft articulation angle

Number	Designation	Model 207	Model 212 (except 212.074/075/076/077/092/274/275/276/277/292)
BE41.10-P-1001-01G	Front inclination angle of transmission relative to front propeller shaft ( $\angle$ 1)	-0,50...+0,67	-0,50...+0,67

Check values for propeller shaft articulation angle

Number	Designation	Model 212.074/075/077/274/275/277	Model 212.076/092/276/292
BE41.10-P-1001-01G	Front inclination angle of transmission relative to front propeller shaft ( $\angle$ 1)	-0,30...+0,30	-0,30...+0,30

Check values for propeller shaft articulation angle

Number	Designation	Model 218 (except 218.374/375/376/392/974/975/976/992)	Model 218.374/375/974/975
BE41.10-P-1001-01G	Front inclination angle of transmission relative to front propeller shaft ( $\angle$ 1)	-0,33...+0,67	-0,30...+0,30

Check values for propeller shaft articulation angle

Number	Designation	Model 218.376/392/976/99 2
BE41.10-P-1001-01G	Front inclination angle of transmission relative to front propeller shaft ( $\sphericalangle$ <sup>1</sup> )	-0,30...+0,30

Check values for propeller shaft inclination angle

Number	Designation	Model 172 (except 172.475)	Model 172.475
BE41.10-P-1002-01A	Inclination angle of front propeller shaft relative to rear propeller shaft ( $\sphericalangle$ <sup>2</sup> )	+0,00°...+1,17°	+0,10°...+0,50°

Check values for propeller shaft inclination angle

Number	Designation	MODEL 231.457/ 461/465/473	Model 231.474/479
BE41.10-P-1002-01A	Inclination angle of front propeller shaft relative to rear propeller shaft ( $\sphericalangle$ <sup>2</sup> )	-0,20°...+1,00°	+0,10°...+0,45°

Check values for propeller shaft articulation angle

Number	Designation	Model 204 (except 204.077/277/377)	Model 204.077/277/377
BE41.10-P-1002-01G	Inclination angle of front propeller shaft relative to rear propeller shaft ( $\sphericalangle$ <sup>2</sup> )	+0,00...+0,83	+0,00...+0,83

Check values for propeller shaft articulation angle

Number	Designation	Model 207	Model 212 (except 212.074/075/076/07 7/092/274/275/276/2 77/292)
BE41.10-P-1002-01G	Inclination angle of front propeller shaft relative to rear propeller shaft ( $\sphericalangle$ <sup>2</sup> )	+0,00...+0,83	+0,00...+1,00

Check values for propeller shaft articulation angle

Number	Designation	Model 212.074/075/077/274 /275/277	Model 212.076/092/276/29 2
BE41.10-P-1002-01G	Inclination angle of front propeller shaft relative to rear propeller shaft ( $\sphericalangle$ <sup>2</sup> )	+0,10...+0,50	+0,10...+0,40

Check values for propeller shaft articulation angle

Number	Designation	Model 218 (except 218.374/375/376/392 /974/975/976/992)	Model 218.374/375/974/97 5
BE41.10-P-1002-01G	Inclination angle of front propeller shaft relative to rear propeller shaft ( $\sphericalangle$ <sup>2</sup> )	+0,17...+1,00	+0,10...+0,50

Check values for propeller shaft articulation angle

Number	Designation	Model 218.376/392/976/99 2
BE41.10-P-1002-01G	Inclination angle of front propeller shaft relative to rear propeller shaft ( $\sphericalangle$ <sup>2</sup> )	+0,10...+0,40

Check values for propeller shaft inclination angle

Number	Designation		Model 172 (except 172.475)	Model 172.475
BE41.10-P-1003-01A	Rear inclination angle of rear propeller shaft relative to rear axle differential ( $\sphericalangle 3$ )	$\sphericalangle^\circ$	-1,17°...-0,33°	-1,00°...-0,50°

Check values for propeller shaft inclination angle

Number	Designation		MODEL 231.457/461/465/473	Model 231.474/479
BE41.10-P-1003-01A	Rear inclination angle of rear propeller shaft relative to rear axle differential ( $\sphericalangle 3$ )	$\sphericalangle^\circ$	-1,00°...-0,17°	-0,90°...-0,50°

Check values for propeller shaft articulation angle

Number	Designation		Model 204 (except 204.077/277/377)	Model 204.077/277/377
BE41.10-P-1003-01G	Rear inclination angle of rear propeller shaft relative to rear axle differential ( $\sphericalangle 3$ )	$\sphericalangle^\circ$	-1,00...-0,17	-0,98...-0,33

Check values for propeller shaft articulation angle

Number	Designation		Model 207	Model 212 (except 212.074/075/076/077/092/274/275/276/277/292)
BE41.10-P-1003-01G	Rear inclination angle of rear propeller shaft relative to rear axle differential ( $\sphericalangle 3$ )	$\sphericalangle^\circ$	-1,00...-0,17	-1,00...-0,17

Check values for propeller shaft articulation angle


Number	Designation		Model 212.074/075/077/274/275/277	Model 212.076/092/276/292
BE41.10-P-1003-01G	Rear inclination angle of rear propeller shaft relative to rear axle differential ( $\sphericalangle 3$ )	$\sphericalangle^\circ$	-0,90...-0,60	-0,85...-0,50

Check values for propeller shaft articulation angle

Number	Designation		Model 218 (except 218.374/375/376/392/974/975/976/992)	Model 218.374/375/974/975
BE41.10-P-1003-01G	Rear inclination angle of rear propeller shaft relative to rear axle differential ( $\sphericalangle 3$ )	$\sphericalangle^\circ$	-1,00...-0,17	-0,90...-0,60

Check values for propeller shaft articulation angle

Number	Designation		Model 218.376/392/976/992
BE41.10-P-1003-01G	Rear inclination angle of rear propeller shaft relative to rear axle differential ( $\sphericalangle 3$ )	$\sphericalangle^\circ$	-0,85...-0,50

 Engine mount, engine support (engine side)

Number	Designation		Model 172	Model 204
BA22.10-P-1004-03E	Rear engine mount on engine support	Nm	28	28

 Engine mount, engine support (engine side)

Number	Designation		Model 207	Model 212
BA22.10-P-1004-03E	Rear engine mount on engine support	Nm	28	28

**Nm** Engine mount, engine support (engine side)

Number	Designation		Model 218	Model 231
BA22.10-P-1004-03E	Rear engine mount on engine support	Nm	28	30

**Nm** Engine mount, engine support (engine side)

Number	Designation		Model 172	Model 204		
BA22.10-P-1005-03E	Screw/bolt, rear engine support to frame floor assembly	M10x22	Silver	Nm	65	70
			Black	Nm	-	55
		M10x24	Black	Nm	-	-
		M10x38		Nm	-	-
		M10x20	Stage 1	Nm	-	30
			Stage 2	Nm	-	50

**Nm** Engine mount, engine support (engine side)

Number	Designation		Model 207	Model 212		
BA22.10-P-1005-03E	Screw/bolt, rear engine support to frame floor assembly	M10x22	Silver	Nm	-	-
			Black	Nm	-	-
		M10x24	Black	Nm	-	-
		M10x38		Nm	-	-
		M10x20	Stage 1	Nm	30	35
			Stage 2	Nm	50	50

**Nm** Engine mount, engine support (engine side)

Number	Designation		Model 218	Model 231		
BA22.10-P-1005-03E	Screw/bolt, rear engine support to frame floor assembly	M10x22	Silver	Nm	-	-
			Black	Nm	-	-
		M10x24	Black	Nm	-	-
		M10x38		Nm	-	45
		M10x20	Stage 1	Nm	35	-
			Stage 2	Nm	50	-

**Nm** Rear axle carrier

Number	Designation		Model 204	Model 207
BA35.10-P-1005-01N	Rear axle differential to front adapter	Nm	65	65

**Nm** Rear axle carrier

Number	Designation		Model 212	Model 218
BA35.10-P-1005-01N	Rear axle differential to front adapter	Nm	65	65

**Nm** Rear axle carrier

Number	Designation		Model 231
BA35.10-P-1005-01N	Rear axle differential to front adapter	Nm	65



**Nm** Rear axle carrier

Number	Designation		Model 172
BA35.10-P-1009-01N	Bolt, rear axle differential to front cross member	Nm	43

**Nm** Rear axle differential housing

Number	Designation		Model 231
BA35.31-P-1004-02H	Bolt, heat sink to end cover	Nm	35

**Nm** Propeller shaft intermediate bearing

Number	Designation		Model 172	Model 204
BA41.40-P-1001-01F	Bolt, propeller shaft center support bearing to frame floor assembly	Self-tapping screw Nm	23	20

**Nm** Propeller shaft intermediate bearing

Number	Designation		Model 207	Model 212
BA41.40-P-1001-01F	Bolt, propeller shaft center support bearing to frame floor assembly	Self-tapping screw Nm	20	20

**Nm** Propeller shaft intermediate bearing

Number	Designation		Model 218	Model 231
BA41.40-P-1001-01F	Bolt, propeller shaft center support bearing to frame floor assembly	Self-tapping screw Nm	20	28