



**Haynes**  
shows you how

**BMW 3-Series 320i & 320xi (12-14), 325i, 325xi, 330i & 330xi (06) & 328i & 328xi (07-14) Haynes Online Manual**

## Specifications

### Front brakes

Caliper type	Teves, ATE floating caliper or Brembo
Brake pad friction material minimum thickness	3/32 inch (2.4 mm)
Disc minimum thickness	Cast into disc
Maximum disc run-out	0.008 inch (0.2 mm)

### Rear disc brakes

Brake pad friction material minimum thickness	3/32 inch (2.4 mm)
Disc minimum thickness	Cast into disc
Maximum disc run-out	0.008 inch (0.2 mm)

### Parking brake

Shoe friction material minimum thickness	1/16 inch (1.5 mm)
--	--------------------

Ft-lbs (unless otherwise indicated)    Nm

### Torque specifications

**Note:**

One foot-pound (ft-lb) of torque is equivalent to 12 inch-pounds (in-lbs) of torque. Torque values below approximately 15 foot-pounds are expressed in inch-pounds, because most foot-pound torque wrenches are not accurate at these smaller values.

ABS pressure sensors-to-master cylinder	168 in-lbs	19
ABS wheel sensor retaining bolts	72 in-lbs	8
Brake disc retaining bolt	144 in-lbs	16
Brake hose unions		

<b>M10 thread</b>	<b>156 in-lbs</b>	<b>17</b>
<b>M12 thread</b>	<b>168 in-lbs</b>	<b>19</b>
<b>Front brake caliper</b>		
<b>Guide pins</b>		
<b>Socket head</b>		
E90, E91, E92 and E93 chassis	22	30
F30, F31 and F34 chassis	20.5	28
<b>Hexagon head</b>	<b>26</b>	<b>35</b>
<b>Mounting bracket bolts</b>	<b>81</b>	<b>110</b>
<b>Brake disc retaining bolt</b>	<b>141 in-lbs</b>	<b>16</b>
<b>Master cylinder mounting nuts*</b>	<b>16</b>	<b>22</b>
<b>Rear brake caliper</b>		
<b>Guide pin bolts</b>		
E90, E91, E92 and E93 chassis		
Socket head	22	30
Hexagon head	26	35
F30, F31 and F34 chassis	20.5	28
<b>Mounting bracket bolts</b>		
E90, E91, E92 and E93 chassis		
M10 bolt	48	65
M12 bolt	81	110
F30, F31 and F34 chassis		
Step 1	22	30
Step 2	Tighten an additional 90 degrees	
<b>Wheel bolts</b>	<b>89</b>	<b>120</b>
<b>Power brake booster mounting nuts*</b>	<b>16</b>	<b>22</b>
<b>Vacuum pump drive sprocket bolt (E-series chassis)</b>	<b>48</b>	<b>65</b>

\* Do not re-use