

Torque Specifications

For Cleveland and McCauley Wheel and Brake Assemblies

Brake Assembly Back Plate Tie Bolts

Wheel Assembly Bolts

Proper torque of the back plate tie bolts is very important in preventing damage to the mounting face of the brake cylinder. Surface depressions measuring greater than 0.005 inch (0.127 mm) require cylinder replacement. Damage resulting from excessive torque can cause brakes to drag, bind or cause rapid uneven wear of the linings. Consult you aircraft maintenance manual.

Brake Assy	in-lb, Dry or Lubtork	N-m
30-4	60 D	6.8
30-5	60 D	6.8
30-6	60 D	6.8
30-7	60 D	6.8
30-4	60 D	6.8
30-9	75-80 D	8.5-9.0
30-9A	75-80 D	8.5-9.0
30-9C	75-80 D	8.5-9.0
30-9D	75-80 D	8.5-9.0
30-9E	75-80 D	8.5-9.0
30-18	75-80 D	8.5-9.0
30-19	75-80 D	8.5-9.0
30-19A	75-80 D	8.5-9.0
30-21	65-75 D	7.3-8.5
30-23	65-75 D	7.3-8.5
30-23A	65-75 D	7.3-8.5
30-23B	65-75 D	7.3-8.5
30-23C	65-75 D	7.3-8.5
30-23D	65-75 D	7.3-8.5
30-24	65-75 D	7.3-8.5
30-28B	80-90 D	9.0-10.2
30-28C	80-90 D	9.0-10.2
30-28D	80-90 D	9.0-10.2
30-30	90 D	10.2
30-31 (1/4-28 Bolts)	85-90 D	9.6-10.2
30-31 (3/8-24 Bolts)	125-150 D	14.0-17.0
30-32	65-75 D	7.3-8.5
30-32A	65-75 D	7.3-8.5
30-32B	65-75 D	7.3-8.5
30-32C	65-75 D	7.3-8.5
30-32E	65-75 D	7.3-8.5
30-35	65-75 D	7.3-8.5

30-40	60 D	6.8
30-40A	75-80 D	8.5-9.0
30-41	65-75 D	7.3-8.5
30-41A	90 D	10.2
30-41B	65-75 D	7.3-8.5
30-45	60 D	6.8
30-51	65-75 D	7.3-8.5
30-51A	65-75 D	7.3-8.5
30-51B	65-75 D	7.3-8.5
30-52	90 D	10.2
30-52A	90 D	10.2
30-52B	90 D	10.2
30-52D	90 D	10.2
30-52E	90 D	10.2
30-52F	90 D	10.2
30-52G	90 D	10.2
30-52H	90 D	10.2
30-52K	90 D	10.2
30-52L	75-80D	8.5-9.0
30-52M	90 D	10.2
30-52N	90 D	10.2
30-52P	90 D	10.2
30-52Q	90 D	10.2
30-52S	90 D	10.2
30-52T	90 D	10.2
30-52U	90 D	10.2
30-52V	90 D	10.2
30-52W	90 D	10.2
30-52X	90 D	10.2
30-52Y	90 D	10.2
30-52Z	90 D	10.2
30-52AA	90 D	10.2
30-52AB	90 D	10.2
30-52AC	90 D	10.2
30-53	75-80 D	8.5-9.0
30-53A	75-80 D	8.5-9.0
30-54	90 D	10.2
30-54A	90 D	10.2
30-54B	90 D	10.2
30-54C	85-90 D	9.6-10.2
30-55	75-80 D	8.5-9.0
30-55A	75-80 D	8.5-9.0
30-55B	75-80 D	8.5-9.0
30-56	75-80 D	8.5-9.0
30-56A	75-80 D	8.5-9.0
30-56B	75-80 D	8.5-9.0
30-56C	75-80 D	8.5-9.0

30-56D	75-80 D	8.5-9.0
30-56F	75-80 D	8.5-9.0
30-58A	75-80 D	8.5-9.0
30-58B	75-80 D	8.5-9.0
30-59	75-80 D	8.5-9.0
30-59A	75-80 D	8.5-9.0
30-59E	75-80 D	8.5-9.0
30-60	75-80 D	8.5-9.0
30-60A	65-75 D	7.3-8.5
30-60B	65-75 D	7.3-8.5
30-61	90 D	10.2
30-61A	90 D	10.2
30-61B	65-75 D	7.3-8.5
30-61D	90 D	10.2
30-61E	90 D	10.2
30-61F	90 D	10.2
30-63	75-80 D	8.5-9.0
30-63A	75-80 D	8.5-9.0
30-63B	75-80 D	8.5-9.0
30-63D	75-80 D	8.5-9.0
30-63E	75-80 D	8.5-9.0
30-63F	75-80 D	8.5-9.0
30-63J	75-80 D	8.5-9.0
30-63K	75-80 D	8.5-9.0
30-63M	75-80 D	8.5-9.0
30-63P	75-80 D	8.5-9.0
30-63Q	75-80 D	8.5-9.0
30-63S	75-80 D	8.5-9.0
30-65	75-90 D	8.5-10.2
30-65A	75-90 D	8.5-10.2
30-65E	75-90 D	8.5-10.2
30-66	90 D	10.2
30-66A	90 D	10.2
30-66B	90 D	10.2
30-66C	90 D	10.2
30-66D	90 D	10.2
30-66F	90 D	10.2
30-66G	80-90 D	9.0-10.2
30-66H	75-90 D	8.5-10.2
30-67	85-90 D	9.6-10.2
30-67A	85-90 D	9.6-10.2
30-67B	85-90 D	9.6-10.2
30-67C	85-90 D	9.6-10.2
30-67D	85-90 D	9.6-10.2
30-67E	85-90 D	9.6-10.2
30-67X	85-90 D	9.6-10.2
30-68	75-80 D	8.5-9.0

30-68A	75-80 D	8.5-9.0
30-68B	75-80 D	8.5-9.0
30-69A	85-95 D	9.6-10.7
30-69B	90 D	10.2
37-200A	65-70 D	7.3-7.9
30-74B	60-75 D	6.8-8.5
30-75	75-80 D	8.5-9.0
30-75A	75-80 D	8.5-9.0
30-75B	75-80 D	8.5-9.0
30-75X	75-80 D	8.5-9.0
30-79	90 D	10.2
30-79A	90 D	10.2
30-79B	90 D	10.2
30-83	90 D	10.2
30-83A	90 D	10.2
30-84	80-90 D	9.0-10.2
30-88	75-80 D	8.5-9.0
30-89	80-90 D	9.0-10.2
30-89A	80-90 D	9.0-10.2
30-89B	80-90 D	9.0-10.2
30-89C	80-90 D	9.0-10.2
30-89E	80-90 D	9.0-10.2
30-93	80-90 D	9.0-10.2
30-93A	80-90 D	9.0-10.2
30-93B	80-90 D	9.0-10.2
30-93C	80-90 D	9.0-10.2
30-93D	80-90 D	9.0-10.2
30-93E	90-100 D	10.2-11.3
30-94	80-90 D	9.0-10.2
30-95	60 D	6.8
30-95A	60 D	6.8
30-95B	60 D	6.8
30-96	60 D	6.8
30-97	80-90 D	9.0-10.2
30-98	80-90 D	9.0-10.2
30-98A	80-90 D	9.0-10.2
30-98B	80-90 D	9.0-10.2
30-98C	80-90 D	9.0-10.2
30-98D	80-90 D	9.0-10.2
30-99	75-80 D	8.5-9.0
30-99A	75-80 D	8.5-9.0
30-100	75-80 D	8.5-9.0
30-106	80-90 D	9.0-10.2
30-107	85-90 D	9.6-10.2
30-107A	85-90 D	9.6-10.2
30-107B	85-90 D	9.6-10.2
30-107C	85-90 D	9.6-10.2

30-107D	85-90 D	9.6-10.2
30-107E	80-95 D	9.0-10.7
30-111	80-95 D	9.0-10.7
30-113	80-95 D	9.0-10.7
30-113A	80-95 D	9.0-10.7
30-123	80-95 D	9.0-10.7
30-127	90 D	10.2
30-127A	90 D	10.2
30-127C	90 D	10.2
30-127D	90 D	10.2
30-129	75-90 D	8.5-10.2
30-131	80-90 D	9.0-10.2
30-133	75-80 D	8.5-9.0
30-138	80-90 D	9.0-10.2
30-139	75-80 D	8.5-9.0
30-141	150 D	16.9
30-142	150 D	16.9
30-143	150 D	16.9
30-144	85-90 D	9.6-10.2
30-144A	85-90 D	9.6-10.2
30-144B	85-90 D	9.6-10.2
30-145	80-90 D	9.0-10.2
30-146	85-90 D	9.6-10.2
30-146A	85-90 D	9.6-10.2
30-149	80-90 D	9.0-10.2
30-158	80-90 D	9.0-10.2
30-159	85-90 D	9.6-10.2
30-159A	85-90 D	9.6-10.2
30-159B	85-90 D	9.6-10.2
30-159C	85-90 D	9.6-10.2
30-163	85-90 D	9.6-10.2
30-164	75-80 D	8.5-9.0
30-170	80-85 D	9.0-9.6
30-176	85-90 D	9.6-10.2
30-181A	75-80 D	8.5-9.0
30-182	85-90 D	9.6-10.2
30-182A	85-90 D	9.6-10.2
30-184	80-90 D	9.0-10.2
30-195	85-90 D	9.6-10.2
30-195A	80-90 D	9.0-10.2
30-210	80-85 L *(2)	9.0-9.6
30-210A	80-85 L *(3)	9.0-9.6
30-210C	80-85 L *(3)	9.0-9.6
30-214	75-80 D	8.5-9.0
30-214B	75-80 D	8.5-9.0
30-220	85-90 D	9.6-10.2
30-224	75-80 D	8.5-9.0

30-231	80-90 D	9.0-10.2
30-233	90 D	10.2
30-233A	90 D	10.2
30-233B	90 D	10.2
30-233C	90 D	10.2
30-233E	85-90 D	9.6-10.2
30-233E RH	85-90 D	9.6-10.2
30-236	75-80 D	8.5-9.0
30-239	75-80 D	8.5-9.0
30-239A	75-80 D	8.5-9.0
30-239B	75-80 D	8.5-9.0
30-241	90 L (3)	10.2
30-269	90 D	10.2
30-280	85-90 D	9.6-10.2
30-290	85-90 D	9.6-10.2
30-293	85-90 D	9.6-10.2
30-293 RH	85-90 D	9.6-10.2
30-308	75-80 D	8.5-9.0
30-312	85-90 D	9.6-10.2
35-200A	60 D	6.8
37-200-2	90 D	10.2
3000-250	90 D	10.2
3000-500	90 D	10.2
C-30018	120-130 D	13.6-14.7
C-30018-1	120-130 D	13.6-14.7
C-30018-2	120-130 D	13.6-14.7
C-30018-3	120-130 D	13.6-14.7
C-30018-4	120-130 D	13.6-14.7
C-30018-5	120-130 D	13.6-14.7
C-30018-6	120-130 D	13.6-14.7
C-30018-7	120-130 D	13.6-14.7
D-30118-3	100-110 D	11.3-12.4
D-30118-4	100-110 D	11.3-12.4
D-30118-5	100-110 D	11.3-12.4
D-30118-6	100-110 D	11.3-12.4
D-30118-7	100-110 D	11.3-12.4
D-30118-8	100-110 D	11.3-12.4
D-30118-9	100-110 D	11.3-12.4
D-30118-10	100-110 D	11.3-12.4
C-30764-5	120-130 D	13.6-14.7
C-30764-6	120-130 D	13.6-14.7
C-30764-7	120-130 D	13.6-14.7
D-30793-3	120-130 D	13.6-14.7
D-30793-4	120-130 D	13.6-14.7
D-30793-5	120-130 D	13.6-14.7
D-30793-6	120-130 D	13.6-14.7

Thread Lubricant/Antiseize Compound:

*(2) SAE AMS2518 (MIL-T-5544)

*(3) MIL-PRF-83483 (MIL-T-83483)

For reference only.

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Wheel Assembly Bolt - Torque Specifications

Upon brake disc installation it is important to torque wheel and brake disc bolts to the proper specification.

Brake Assy	in-lb, Dry or Lubtork	N-m
27-100D (40-1)	90 D	10.2
21-100D (40-2)	90 D	10.2
3040 (40-6)	90 D	10.2
3050 (40-7)	90 D	10.2
3050A (40-7A)	90 D	10.2
3070 (40-5)	90 D	10.2
3080A (40-3)	90 D	10.2
3080B (40-4)	90 D	10.2
3080D	90 D *(5)	10.2
38501 (40-8)	90 D	10.2
40-12	90 D	10.2
40-12A	90 D	10.2
40-18	90 D	10.2
40-19	90 D	10.2
40-19A	90 D	10.2
40-21	90 D	10.2
40-24	90 D	10.2
40-28	90 D	10.2
40-28D	90 D	10.2
40-30A	90 D	10.2
40-32	90 D	10.2
40-34	90 D	10.2
40-37	90 D	10.2
40-40A	135-145 D	15.3-16.4
40-40B	135-145 D	15.3-16.4
40-40C	90 D	10.2
40-40D	150 D	16.9
40-41	150 D	16.9
40-46	90 D	10.2
40-47	150 D	16.9
40-50	90 D	10.2
40-55	90 D	10.2
40-56	150 D	16.9
40-56B	150 D	16.9
40-56C	150 D	16.9
40-57	90 D	10.2

40-57A	90 D	10.2
40-58 90	90 D	10.2
40-59 150	150 D	16.9
40-59A	150 D	16.9
40-59B	150 D	16.9
40-59D	150 D	16.9
40-59E	150 D	16.9
40-60	90 D	10.2
40-60A	90 D	10.2
40-61 90	90 D	10.2
40-66 90	90 D	10.2
40-67 90	90 D	10.2
40-74 90	90 D	10.2
40-74A	90 D	10.2
40-74B	90 D	10.2
40-75AA	150 D	16.9
40-75B	150 D	16.9
40-75D	150 D	16.9
40-75E	150 D	16.9
40-75F	150 D	16.9
40-75G	150 D	16.9
40-75H	150 D	16.9
40-75J	150 D	16.9
40-75P	150 D	16.9
40-75S	150 D	16.9
40-75T	150 D	16.9
40-75W	150 D	16.9
40-75Z	150 D	16.9
40-76A	150 D	16.9
40-76B	150 D	16.9
40-76C	150 D	16.9
40-76D	150 D	16.9
40-76E	150 D	16.9
40-76F	150 D	16.9
40-76G	150 D	16.9
40-76H	150 D	16.9
40-76P	150 D	16.9
40-76-1	150 D	16.9
40-77	Refer to PRM86	
40-77A	Refer to PRM94	
40-77B	Refer to PRM94	
40-77C	Refer to PRM83	
40-77D	90 D	10.2
40-77E	Refer to PRM83	
40-77F	Refer to PRM94	
40-77G	90 L *(2)	10.2
40-77H	90-100 L *(2)	10.2-11.3

40-78	Refer to PRM96	
40-78A	Refer to PRM96	
40-78B	Refer to PRM96	
40-78E	Refer to PRM96	
40-78J	Refer to PRM96	
40-79	150 D	16.9
40-83	150 D	16.9
40-83A	150 D	16.9
40-83B	150 D	16.9
40-84	150 D	16.9
40-84A	150 D	16.9
40-84B	150 D	16.9
40-86	150 D	16.9
40-86A	150 D	16.9
40-86B	150 D	16.9
40-86E	150 D	16.9
40-86F	150 D	16.9
40-87	*(7)	
40-87A	*(7)	
40-87C	*(7)	
40-87D	*(7)	
40-87F	*(7)	
40-87G	115-135 D	13.0-15.3
40-87H	75 D	8.5
40-88C 150 D 16.9 M	150 D	16.9
40-90 150 D 16.9 M	150 D	16.9
40-90A	150 D	16.9
40-90B 150 D 16.9 M	150 D	16.9
40-90D 150 D 16.9 M	150 D	16.9
40-90E 150 D 16.9 M	150 D	16.9
40-90F 150 D 16.9 M	150 D	16.9
40-96E 150 D 16.9 M	150 D	16.9
40-97A 150 D 16.9 M	150 D	16.9
40-97B 150 D 16.9 M	150 D	16.9
40-97C 150 D 16.9 M	150 D	16.9
40-97D 150 D 16.9 M	150 D	16.9
40-97E 150 D 16.9 M	150 D	16.9
40-97F 150 D 16.9 M	150 D	16.9
40-98 150 D 16.9 M	150 D	16.9
40-98A 150 D 16.9 M	150 D	16.9
40-98D 150 D 16.9 M	150 D	16.9
40-98E 150 D 16.9 M	150 D	16.9
40-98F 150 D 16.9 M	150 D	16.9
40-98G 150 D 16.9 M	150 D	16.9
40-98H 150 D 16.9 M	150 D	16.9
40-98N 150 D 16.9 M	150 D	16.9
40-98P 150 D 16.9 M	150 D	16.9

40-99	90 D	10.2
40-101	90 D	10.2
40-101A	90 D	10.2
40-101D	90 D	10.2
40-101E	90 D	10.2
40-101F	90 D	10.2
40-102	90 D	10.2
40-102A	90 D	10.2
40-103	90 D	10.2
40-103A	90 D	10.2
40-106	150 D	16.9
40-106A	150 D	16.9
40-107A	300 L *(2)	33.9
40-110	*(7)	
40-110B	*(7)	
40-111	150 D	16.9
40-111A	150 D	16.9
40-112	90 D	10.2
40-113	90 D	10.2
40-113A	90 D	10.2
40-113B	90 D	10.2
40-113C	90 D	10.2
40-113X	90 D	10.2
40-115	90 D	10.2
40-115A	115-135 D	13.0-15.3
40-115B	115-135 D	13.0-15.3
40-115C	115-135 D	13.0-15.3
40-117A	150 D	16.9
40-120	150 D	16.9
40-120A	150 D	16.9
40-120C	150 D	16.9
40-124	180 D	20.3
40-127	300 L *(2)	33.9
40-128	180 D	20.3
40-128A	180 D	20.3
40-128C	180 D	20.3
40-128D	180 D	20.3
40-128E	180 D	20.3
40-129	90 D	10.2
40-130	90 D	10.2
40-131	90 D *(5)	10.2
40-132	150 D	16.9
40-133	150 D	16.9
40-134	150 D	16.9
40-134A	150 D	16.9
40-135	135-145 D	15.3-16.4
40-135A	150 D	16.9

40-137	180 D	20.3
40-138A	150 D	16.9
40-138B	150 D	16.9
40-139	150 D	16.9
40-140	150 D	16.9
40-140A	150 D	16.9
40-140B	150 D	16.9
40-140C	150 D	16.9
40-141	150 D	16.9
40-142	150 D	16.9
40-142A	150 D	16.9
40-143	150 D	16.9
40-148	300 D	33.9
40-151	*(7)	
40-151A	*(7)	
40-152	*(7)	
40-162	150 D	16.9
40-163	150 D	16.9
40-166 (6)	300 D *(6)	33.9
40-167 (6)	300 D *(6)	33.9
40-168 (7)	*(7)	
40-169 (6)	150 D *(6)	16.9
40-170	300 L *(2)	33.9
40-170A	300 L *(2)	33.9
40-170B	300 L *(2)	33.9
40-171	180 D	20.3
40-172	180 D	20.3
40-174	300 L *(2)	33.9
40-175	150 D	16.9
40-176	300 D	33.9
40-176A	300 D	33.9
40-177A	150 D	16.9
40-179	150 D	16.9
40-179A	150 D	16.9
40-181B	180 D	20.3
40-181C	180 D	20.3
40-193	150 D	16.9
40-195	150 D	16.9
40-196	150 D	16.9
40-198	300 L *(2)	33.9
40-199	90 D	10.2
40-199A	90 D	10.2
40-202	300 L	33.9
40-203	290-300 L *(2)	32.8-33.9
40-204	290-300 L *(2)	32.8-33.9
40-205	180 D	20.3
40-210	150 L	16.9

40-211	300 D	33.9
040-21101	300 L *(2)	33.9
40-212	150 L *(2)	16.9
40-223	90 D	10.2
40-230	*(7)	
40-234	90 D	10.2
40-239	300 L *(2)	33.9
040-23901	300 L *(2)	33.9
40-240A	125 L *(2)	14.1
40-255	90-100 L *(2)	10.2-11.3
40-256	135-145 D	15.3-16.4
40-258	300 D	33.9
40-259	95-105 L *(2)	10.7-11.8
40-260	95-105 L *(2)	10.7-11.8
40-262A	90 D	10.2
40-262AA	90-100 L *(2)	10.2-11.3
40-270	115-135 L *(2)	13.0-15.3
40-273	300 L	33.9
40-273A	290-300 L *(2)	32.8-33.9
40-273B	290-300 L *(2)	32.8-33.9
40-276	90-100 L *(2)	10.2-11.3
40-279	300 L *(2)	33.9
40-279A	300 L *(3)	33.9
40-281	90 D	10.2
40-289	300 L *(2)	33.9
40-293	180-190 L *(2)	20.3-21.5
40-307	75 D	8.5
40-308	75 D	8.5
40-403	150 D	16.9
40-406	150 D	16.9
40-406A	150 D	16.9
40-406B	150 D	16.9
40-406C	150 D	16.9
40-407	150 D	16.9
40-414	150 D	16.9
40-414A	150 D	16.9
40-417	115-125 L *(3)	13.0-14.1
40-418	150 D	16.9
40-418A	150 D	16.9
40-418B	150 D	16.9
40-418C	150 D	16.9
40-423	170-190 L *(3)	19.2-21.5
40-426	150 D	16.9
40-426A	150 D	16.9
40-426B	150 D	16.9
40-426C	150 D	16.9
40-432	115-125 L *(3)	13.0-14.1

40-434	315-325 L *(3)	35.6-36.7
40-450	105-115 L *(2)	11.9-13.0
40-455	150 D	16.9
40-459	150 D	16.9
040-46900	115-125 L *(3)	13.0-14.1
40-481	290-300 L *(2)	32.8-33.9
40-483	290-300 L *(3)	32.8-33.9
C-30174-1	95 D	10.7
C-30179	95 D	10.7
C-30480	195 D	22
D-30204	95 D	10.7
D-30255	195 D	22
D-30260	195 D	22
D-30260-1	195 D	22
D-30291-1	195 D	22
D-30291-2	195 D	22
D-30291-3	195 D	22
D-30291-4	195 D	22
D-30291-5	195 D	22
D-30291-6	195 D	22
D-30380	95 D	10.7
D-30500	145 D	16.4
D-30500-1	145 D	16.4
D-30570	195 D	22
D-30580	195 D	22
D-30585	195 D	22
D-30660-1	145 D	16.4
D-30660-2	145 D	16.4
D-30660-3	145 D	16.4
D-30660-4	145 D	16.4
D-30660-5	145 D	16.4
D-30660-6	145 D	16.4
D-30660-7	145 D	16.4
D-30660-8	145 D	16.4
D-30660-9	145 D	16.4
D-30660-10	145 D	16.4
D-30665	145 D	16.4
D-30665-1	145 D	16.4

Thread Lubricant/Antiseize Compound:

*(2) SAE AMS2518 (MIL-T-5544)

*(3) MIL-PRF-83483 (MIL-T-83483)

*(5) Dry torque brake disc bolts to 80 in-lbs.

*(6) Dry torque brake disc bolts to 150 in-lbs.

*(7) See OEM most recent RPM of wheel assembly.

For reference only.