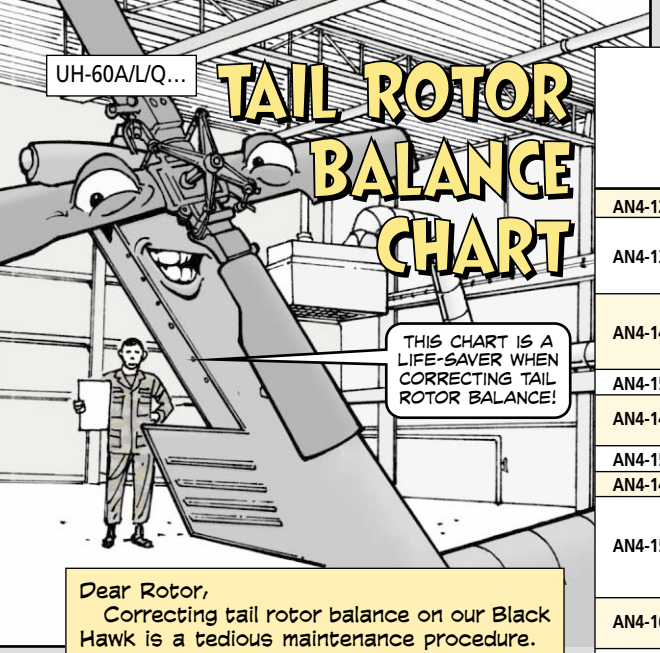
UH-60A/L/Q...

TAIL ROTOR BALANCE CHART



Dear Rotor,

Correcting tail rotor balance on our Black Hawk is a tedious maintenance procedure.

It requires having the right hardware stack-up of bolts, washers, and nuts for each quadrant and use of a gram scale for ensuring the required weight and balance.

We've come up with a handy tail rotor balance weight chart that tells you the hardware needed for a given weight needed to correct tail rotor balance. We use the chart in conjunction with procedure 5, Page 0069 00-25 listed in TM 1-6625-724-13&P and the corresponding parts list in Fig 75 of TM 1-1520-237-23P-2.

The chart is used like so: Find the weight needed in the right column, then move to the left to determine the number of washers and the correct bolt to use.

The chart allows for the thickness of the retention plate, so that for each weight shown, we have the correct amount of the threads on the end of the bolts.

The weight listed is approximate. So you'll need to verify the hardware weight with a gram scale.

SGT Steven Williams
AASF, INARNG

	SS4409-013	AN960C416	NAS1149D0463K	Grams
AN4-12A		2		16
AN4-13A		2	1	17
		3		18
	1	2		19
AN4-14A		4	1	20
	1	2	2	21
	1	3	1	22
AN4-15A		7		23
AN4-14A	2	2	1	24
	2	3		25
AN4-15A	1	6		26
AN4-14A	3	2		27
AN4-15A	2	5		28
	3	3	1	29
	3	4		30
	4	2	1	31
AN4-16A	3	6		32
	4	3	1	33
AN4-15A	5	2		34
AN4-16A	5	2	2	35
	5	3	1	36
AN4-17A	4	6	1	37
AN4-16A	6	2	1	38
	6	3		39
	7	2		40
AN4-17A	6	5		41
	7	2	2	42
	7	4		43
	8	2	1	44
AN4-20A	7	5	1	45
	7	6		46
AN4-17A	9	2		47
AN4-20A	9	2	2	48
	9	3	1	49
	9	5		50
	10	2	1	51
	10	3	1	52
AN4-21A	10	2	3	53
	10	3	2	54
	10	5		55
	11	2	2	56
	11	4		57
	12	2	1	58
	12	3		59
	13	2		60

	SS4409-013	AN960C416	NAS1149D0463K	Grams
AN4-22A	12	4	1	61
	12	5		62
	13	3	1	63
	13	4		64
	14	2	1	65
	14	3		66
	15	2		67
AN4-23A	14	4	1	68
	14	5		69
	15	3	1	70
	15	5		71
	16	2	1	72
	16	3		73
	17	2		74
AN4-24A	16	5		75
	17	2	2	76
	17	4		77
AN4-25A	17	3	3	78
AN4-24A	18	2	1	79
	18	3		80
	19	2		81
AN4-25A	18	4	1	82
	19	2	2	83
	19	3	1	84
	19	4		85
	20	2	1	86
	20	3		87
	21	2		88
AN4-26A	20	5		89
	21	2	2	90
	21	3	1	91
	21	4		92
	21	2	1	93
	22	3		94
	23	2		95
AN4-27A	22	5		96
	23	2	2	97
	23	3	1	98
AN4-30A	23	2	4	99
AN4-27A	24	2	1	100
	24	3		101
	25	2		102

	SS4409-013	AN960C416	NAS1149D0463K	Grams
AN4-30A	24	5		103
	25	2	2	104
	25	3	1	105
	25	4		106
	26	2	1	107
	26	3		108
	27	2		109
AN4-31A	26	5		110
	27	2	2	111
	27	3	1	112
	28	2	1	113

Use appropriate bolt length shown plus number of washers shown to obtain the amount of grams indicated. Weights shown include nut.

Always verify weight with gram scale

Part	NSN	Item
AN4-12A	5306-00-151-1422	Bolt
AN4-13A	5306-00-151-1421	Bolt
AN4-14A	5306-00-151-1420	Bolt
AN4-15A	5306-00-151-1419	Bolt
AN4-16A	5306-00-151-1418	Bolt
AN4-17A	5306-00-151-1417	Bolt
AN4-20A	5306-00-151-1416	Bolt
AN4-21A	5306-00-151-1415	Bolt
AN4-22A	5306-00-151-1414	Bolt
AN4-23A	5306-00-151-1413	Bolt
AN4-24A	5306-00-151-1412	Bolt
AN4-25A	5306-00-151-1411	Bolt
AN4-26A	5306-00-151-1410	Bolt
AN4-27A	5306-00-151-1409	Bolt
AN4-30A	5306-00-151-1408	Bolt
AN4-31A	5306-00-151-1407	Bolt
AN960C416	5310-00-531-9515	Washer
NAS1149D0463K	5310-01-352-9564	Washer
M220365-428	5310-00-877-5796	Nut
224409-013	5310-01-132-4408	Washer

Dear SGT Williams,
Good job. Looks like you've solved a weighty situation with this tail rotor balance chart.

Rotor Blade