

TAKEDOWN SCREW MOVEMENT TEST

Objective:

Measure the movement if any that occurs with the takedown screws when subjected to normal handling/shooting environments.

Tests 1:

1. Bias stock to center trigger. Set torque of front and middle screw to 40 ft/lbs.; hand tighten back screw.
 - Tap on gun stock in several locations on shooter's left and right
 - Measure torque w/ torque wrench-measurement should be taken from force needed to loosen screw.
2. Bias stock to center trigger. Set torque of front and middle screw to 60 ft/lbs.; hand tighten back screw.
 - Tap on gun stock in several locations on shooter's left and right
 - Measure torque w/ torque wrench-measurement should be taken from force needed to loosen screw.

Test 2:

3. Bias stock to center trigger. Set torque of front and middle screw to 40 ft/lbs.; hand tighten back screw.
 - Tap on gun stock in several locations on shooter's left and right
 - Retighten screws
 - Tap on gun stock in several locations on shooter's left and right
 - Measure torque w/ torque wrench-measurement should be taken from force needed to loosen screw.
4. Bias stock to center trigger. Set torque of front and middle screw to 60 ft/lbs.; hand tighten back screw.
 - Tap on gun stock in several locations on shooter's left and right
 - Retighten screws
 - Tap on gun stock in several locations on shooter's left and right
 - Measure torque w/ torque wrench-measurement should be taken from force needed to loosen screw.

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Tests 3:

5. Bias stock to center trigger. Set torque of front and middle screw to 40 ft/lbs.; hand tighten back screw.
 - Tap on gun stock in several locations on shooter's left and right
 - Retighten screws
 - Tap on gun stock in several locations on shooter's left and right
 - Retighten screws
 - Tap on gun stock in several locations on shooter's left and right
 - Retighten screws
 - Tap on gun stock in several locations on shooter's left and right
 - Measure torque w/ torque wrench-measurement should be taken from force needed to loosen screw.
6. Bias stock to center trigger. Set torque of front and middle screw to 60 ft/lbs.; hand tighten back screw.
 - Tap on gun stock in several locations on shooter's left and right
 - Retighten screws
 - Tap on gun stock in several locations on shooter's left and right
 - Retighten screws
 - Tap on gun stock in several locations on shooter's left and right
 - Retighten screws
 - Tap on gun stock in several locations on shooter's left and right
 - Measure torque w/ torque wrench-measurement should be taken from force needed to loosen screw.

Tests 4:

7. Bias stock to center trigger. Set torque of front and middle screw to 40 ft/lbs.; hand tighten back screw.
 - Tap on gun stock in several locations on shooter's left and right
 - Retighten Screws
 - Shoot (1) proof + (2) regular rounds
 - Measure torque w/ torque wrench-measurement should be taken from force needed to loosen screw.
8. Bias stock to center trigger. Set torque of front and middle screw to 60 ft/lbs.; hand tighten back screw.
 - Tap on gun stock in several locations on shooter's left and right
 - Retighten Screws
 - Shoot (1) proof + (2) regular rounds

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- Measure torque w/ torque wrench-measurement should be taken from force needed to loosen screw.

Tests 5:

9. Seat stock in natural position before setting screws. Set torque of front and middle screw to 40 ft/lbs.; hand tighten back screw.
 - Shoot (2) regular rounds
 - Measure torque w/ torque wrench-measurement should be taken from force needed to loosen screw.
10. Seat stock in natural position before setting screws. Set torque of front and middle screw to 50 ft/lbs.; hand tighten back screw.
 - Shoot (2) regular rounds
 - Measure torque w/ torque wrench-measurement should be taken from force needed to loosen screw.
11. Seat stock in natural position before setting screws. Set torque of front and middle screw to 60 ft/lbs.; hand tighten back screw.
 - Shoot (2) regular rounds
 - Measure torque w/ torque wrench-measurement should be taken from force needed to loosen screw.

TEST 6:

12. Seat stock in natural position before setting screws. Set torque of front and middle screw to 40 ft/lbs.; torque back screw to 20 ft/lbs.
---USE 4 guns
 - Shoot (5) magazines (20) regular rounds
 - Measure torque w/ torque wrench-measurement should be taken from force needed to loosen screw.
13. Set stock in natural position before setting screws. Set torque of front and middle screw to 60 ft/lbs.; torque back screw to 20 ft/lbs.
---USE 4 guns
 - Shoot (5) magazines (20) regular rounds
 - Measure torque w/ torque wrench-measurement should be taken from force needed to loosen screw.

TEST 7:

14. Seat stock in natural position before setting screws. Set torque of front and middle screw to 40 ft/lbs.; torque back screw to 20 ft/lbs.
---USED 2 guns

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- Shoot (5) magazines (20) regular rounds off shoulder
- Measure torque w/ torque wrench-measurement should be taken from force needed to loosen screw.

15. Set stock in natural position before setting screws. Set torque of front and middle screw to 60 ft/lbs.; torque back screw to 20 ft/lbs.

---USED 2 guns

- Shoot (5) magazines (20) regular rounds off shoulder
- Measure torque w/ torque wrench-measurement should be taken from force needed to loosen screw.

RESULTS:

TEST 1.1

	Before test	After Test	% Reduction
Front	40	32.5	18.75
Middle	40	38.5	3.75
Back	10	8	20

TEST 1.2

	Before test	After test	% Reduction
Front	60	45	25
Middle	60	42.5	29.2
Back	10	9	10

TEST 2.3

	Before test	After test	% Reduction
Front	40	30	25
Middle	40	35	12.5
Back	10	9	10

TEST 2.4

	Before test	After test	% Reduction
Front	60	48	20
Middle	60	44	26.7
Back	10	8	20

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TEST 3.5

	Before test	After test	% Reduction
Front	40	35	12.5
Middle	40	39	2.5
Back	10	10	0

TEST 3.6

	Before test	After test	% Reduction
Front	60	45	25
Middle	60	48	20.0
Back	10	10	0

TEST 4.7

	Before test	After test	% Reduction
Front	40	20	50
Middle	40	28	30.0
Back	10	8	20

TEST 4.8

	Before test	After test	% Reduction
Front	60	32	46.7
Middle	60	40	33.3
Back	10	9	10

TEST 5.9

	Before test	After test	% Reduction
Front	40	25	37.5
Middle	40	35	12.5
Back	10	5	50

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TEST 5.10

	Before test	After test	% Reduction
Front	50	25	50
Middle	50	32	36.0
Back	10	0	100

TEST 5.11

	Before test	After test	% Reduction
Front	60	53	11.6666667
Middle	60	50	16.7
Back	10	10	0

TEST 6.12-1

	Before test	After test	% Reduction
Front	40	10	75
Middle	40	28	30.0
Back	20	18	10

TEST 6.12-2

	Before test	After test	% Reduction
Front	40	20	50
Middle	40	28	30.0
Back	20	14	30

TEST 6.12-3

	Before test	After test	% Reduction
Front	40	19	52.5
Middle	40	30	25.0
Back	20	14	30

TEST 6.12-4

	Before test	After test	% Reduction
Front	40	18	55
Middle	40	30	25.0
Back	20	13	35

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AVERAGE TEST RESULT of 6-12:(1-4)

	Before Test	After test	% Reduction
FRONT:	40	16.75	58.2
MIDDLE:	40	29	27.5
BACK:	20	14.75	26.3

TEST 6.13-1

	Before test	After test	% Reduction
Front	60	30	50
Middle	60	32	46.7
Back	20	15	25

TEST 6.13-2

	Before test	After test	% Reduction
Front	60	18	70.0
Middle	60	42	30.0
Back	20	18	10

TEST 6.13-3

	Before test	After test	% Reduction
Front	40	28	30
Middle	40	40	0.0
Back	20	16	20

TEST 6.13-4

	Before test	After test	% Reduction
Front	60	25	58.3333333
Middle	60	38	36.7
Back	20	13	35

AVERAGE TEST RESULT of 6-13:(1-4)

	Before Test	After test	% Reduction
FRONT:	60	25.25	57.91
MIDDLE:	60	38	36.67
BACK:	20	15.5	22.5

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TEST 7.14-1

	Before Test	After test	% Reduction
Front	40	28	30
Middle	40	30	25.0
Back	20	10	50

TEST 7.14-2

	Before Test	After test	% Reduction
Front	40	35	12.5
Middle	40	30	25.0
Back	20	13	35

AVERAGE TEST RESULT of 7-14(1-2)

	Before Test	After test	% Reduction
FRONT:	40	31.5	21.3
MIDDLE:	40	30	25
BACK:	20	11.5	42.5

TEST 7.15-1

	Before Test	After test	% Reduction
Front	60	42	30
Middle	60	38	36.7
Back	20	15	25

TEST 7.15-2

	Before Test	After test	% Reduction
Front	60	38	36.7
Middle	60	38	36.7
Back	20	16	20

AVERAGE TEST RESULT of 7-15:(1-2)

	Before Test	After test	% Reduction
FRONT:	60	40	33.33
MIDDLE:	60	38	36.67
BACK:	20	15.5	22.5

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