

GRADE	SIZE	W L L	U L
120 ALLOY 4:1 <small>Design Factor</small>	5/16	6,600	26,400
	3/8	10,600	42,400
	1/2	17,900	71,600
100 ALLOY 4:1 <small>Design Factor</small>	1/4	4,300	17,000
	5/16	5,700	22,800
	3/8	8,800	32,200
	1/2	15,000	60,000
	5/8	22,600	90,400
80 ALLOY 4:1 <small>Design Factor</small>	1/4	3,500	14,000
	5/16	4,500	18,000
	3/8	7,100	28,400
	1/2	12,000	48,000
	5/8	18,100	72,400
70 ALLOY TRANSPORT	1/4	3,150	12,600
	5/16	4,700	18,800
	3/8	6,600	26,400
	1/2	11,300	45,200



WRECKMASTER

LEVEL 6/7: Training Evaluation

EXAM MATERIALS

Use the following charts to help you with questions throughout the exam. On this page you will find charts for:

- CHAIN W.L.L.
- WIRE ROPE W.L.L.
- ANGLE FACTOR MULTIPLIER

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6X19 CLASS Extra Improved Plow Steel (EIPS) - Right Regular Lay (RRL) based on Design Factor of 4 to 1

WIRE	FIBER CORE	FIBER CORE	STEEL CORE	STEEL CORE
DIAMETER	W L L	U L	W L L	U L
3/8	3,350	13,400	3,750	15,000
7/16	4,550	18,200	5,100	20,400
1/2	5,900	23,600	6,650	26,600
9/16	7,400	29,600	8,400	33,600
5/8	9,200	36,800	10,300	41,200
3/4	13,100	52,400	14,700	58,800
7/8	17,700	70,800	19,900	79,600
1	22,950	91,800	25,850	103,400

6X19 CLASS Extra Improved Plow Steel (EIPS) - Right Regular Lay (RRL) based on Design Factor of 4 to 1

WIRE	FIBER CORE	FIBER CORE	STEEL CORE	STEEL CORE
DIAMETER	W L L	U L	W L L	U L
3/8	3,350	13,400	3,750	15,000
7/16	4,550	18,200	5,100	20,400
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9/16	7,400	29,600	8,400	33,600
5/8	9,200	36,800	10,300	41,200
3/4	13,100	52,400	14,700	58,800
7/8	17,700	70,800	19,900	79,600
1	22,950	91,800	25,850	103,400

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WIRE	FIBER CORE	FIBER CORE	STEEL CORE	STEEL CORE
DIAMETER	W L L	U L	W L L	U L
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7/16	4,550	18,200	5,100	20,400
1/2	5,900	23,600	6,650	26,600
9/16	7,400	29,600	8,400	33,600
5/8	9,200	36,800	10,300	41,200
3/4	13,100	52,400	14,700	58,800
7/8	17,700	70,800	19,900	79,600
1	22,950	91,800	25,850	103,400

ANGLE FACTOR MULTIPLIER

ANGLE	FACTOR	ANGLE	FACTOR	ANGLE	FACTOR	ANGLE	FACTOR	ANGLE	FACTOR	ANGLE	FACTOR
0	2.00	30	1.93	60	1.73	90	1.41	125	.93	150	.52
10	1.99	40	1.87	70	1.64	100	1.29	130	.84	160	.35
20	1.97	45	1.84	75	1.59	110	1.15	135	.76	170	.17
25	1.96	50	1.81	80	1.53	120	1.00	140	.68	180	.00

ANGLE FACTOR MULTIPLIER

ANGLE	FACTOR	ANGLE	FACTOR	ANGLE	FACTOR	ANGLE	FACTOR	ANGLE	FACTOR	ANGLE	FACTOR
0	2.00	30	1.93	60	1.73	90	1.41	125	.93	150	.52
10	1.99	40	1.87	70	1.64	100	1.29	130	.84	160	.35
20	1.97	45	1.84	75	1.59	110	1.15	135	.76	170	.17
25	1.96	50	1.81	80	1.53	120	1.00	140	.68	180	.00

ANGLE FACTOR MULTIPLIER

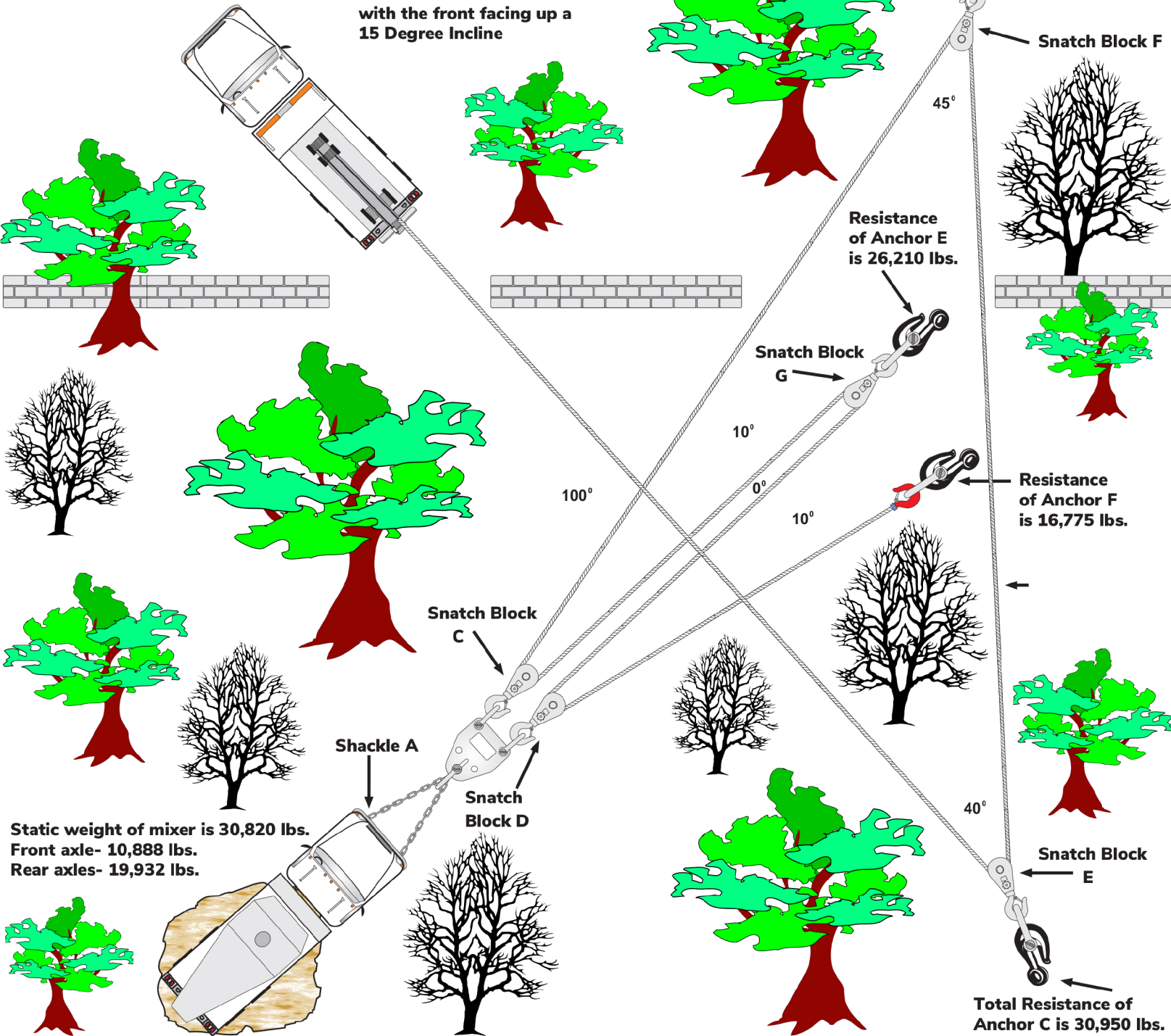
ANGLE	FACTOR	ANGLE	FACTOR	ANGLE	FACTOR	ANGLE	FACTOR	ANGLE	FACTOR	ANGLE	FACTOR
0	2.00	30	1.93	60	1.73	90	1.41	125	.93	150	.52
10	1.99	40	1.87	70	1.64	100	1.29	130	.84	160	.35
20	1.97	45	1.84	75	1.59	110	1.15	135	.76	170	.17
25	1.96	50	1.81	80	1.53	120	1.00	140	.68	180	.00



WRECKMASTER

Level 6/7 Exam

Static weight of wrecker is 37,404 lbs.
 Front axle- 12,120 lbs.
 Rear axles - 25,284 lbs.
 The Tow Truck is on a hard surface
 with the front facing up a
 15 Degree Incline



Resistance of Anchor D is 33,650 lbs.

Snatch Block F

45°

Resistance of Anchor E is 26,210 lbs.

Snatch Block G

10°

0°

10°

Resistance of Anchor F is 16,775 lbs.

100°

Snatch Block C

Shackle A

Snatch Block D

40°

Snatch Block E

Static weight of mixer is 30,820 lbs.
 Front axle- 10,888 lbs.
 Rear axles- 19,932 lbs.

Total Resistance of Anchor C is 30,950 lbs.