SIMON-RO

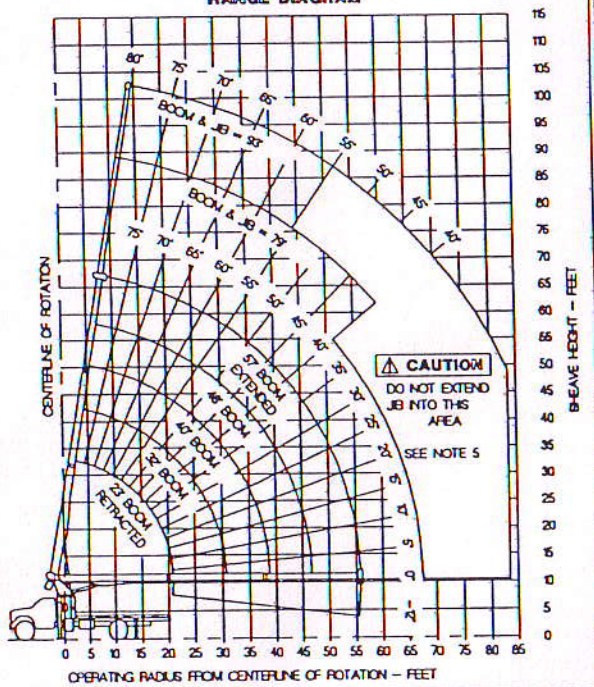
CLAY CENTER, KANSAS 67432

MODEL TC-1657

MAXIMUM LOAD CHART

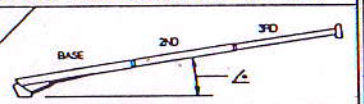
U.S. PATENT NOS. 4211332, 4450786, 5012939, 5058752 — CANADA PAT. NO. 1097265 — ECA

RANGE DIAGRAM



LOAD RATINGS IN LBS. WITH OUTRIGGERS EXTENDED

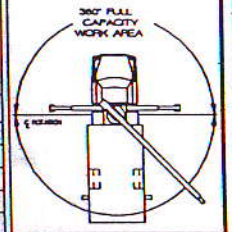
OPERATING RADIUS — LOADED BOOM ANGLE — BOOM LENGTH



	∠	23 FT	∠	32 FT	∠	40 FT	∠	48 FT	∠	57 FT
5	78	16000								
8	68	12000	75	11400	78	11100				
10	62	10000	71	9400	75	9100	78	9000		
12	56	8600	67	8000	72	7800	75	7625	78	7525
14	51	7525	63	7025	69	6725	73	6625	76	6525
16	43	6625	58	6225	66	5925	71	5825	74	5625
20	24	4925	50	5025	58	4825	65	4625	70	4525
21	15	4325	48	4825	58	4625	64	4425	69	4325
25			36	3925	51	3825	58	3625	64	3525
30			13	2625	40	3025	51	3025	58	2925
35					26	2325	42	2425	52	2425
38					12	1725	36	2125	48	2125
40							32	2025	45	1925
46							11	1225	35	1525
50		NOTE: RATINGS ABOVE THE HEAVY LINE ARE BASED ON STRUCTURAL COMPETENCE AND NOT ON MACHINE STABILITY							27	1325
55									10	825
		400		300		225		200		150

⇦ STOWED JIB DEDUCTIONS

AREA OF OPERATION



DEDUCTIONS FROM RATED LOADS FOR LOAD HANDLING DEVICES

AUXILIARY BLOCK: 50 LBS

OVERHAUL BALL: 125 LBS

CRANE LOAD BLOCK: 150 LBS

JIB CAPACITIES FOR ALL BOOM LENGTHS

CAPACITY ALERT SYSTEM, IF SO EQUIPPED, IS NOT FUNCTIONAL WHEN LIFTING WITH JIB

LOADED BOOM ANGLE	40°	45°	50°	55°	60°	65°	70°	75°	78°
RETRACTED 22 FT JIB	500	600	750	1000	1200	1500	2000	2600	3150
EXTENDED 36 FT JIB	SEE NOTE 5			550	650	850	1100	1480	1900

⚠ DANGER

1. THE OPERATOR MUST READ AND UNDERSTAND THE OWNER'S MANUAL BEFORE OPERATING THIS CRANE.
2. POSITIONING OR OPERATION OF CRANE BEYOND AREAS SHOWN ON THIS CHART IS NOT INTENDED OR APPROVED EXCEPT WHERE SPECIFIED IN OWNER'S MANUAL.
3. LOADED BOOM ANGLES AT SPECIFIED BOOM LENGTHS GIVE ONLY AN APPROXIMATION OF THE OPERATING RADIUS. THE BOOM ANGLE BEFORE LOADING SHOULD BE GREATER TO ACCOUNT FOR DEFLECTIONS. DO NOT EXCEED THE OPERATING RADIUS FOR RATED LOADS.
4. USE RATING OF NEXT LONGER BOOM FOR BOOM LENGTHS NOT SHOWN. USE RATING OF NEXT GREATER RADIUS FOR LOAD RADII NOT SHOWN.
5. BOOM MUST BE FULLY RETRACTED WHEN JIB IS ERECTED BEFORE LOWERING BELOW MINIMUM ANGLE. RETRACTED JIB HAS NO LIFTING CAPACITY BELOW A 40° BOOM ANGLE. EXTENDED JIB HAS NO LIFTING CAPACITY BELOW A 55° BOOM ANGLE.
6. USE RATING OF NEXT LOWER BOOM ANGLE FOR BOOM ANGLES NOT SHOWN ON JIB LOAD RATING CHART.
7. LIFTING OFF THE MAIN BOOM POINT WHILE THE SWING AROUND JIB IS ERECTED IS NOT INTENDED OR APPROVED.
8. CRANE LOAD RATINGS ON OUTRIGGERS ARE BASED ON FREELY SUSPENDED LOADS WITH THE MACHINE LEVELED AND STANDING ON A FIRM UNIFORM SUPPORTING SURFACE. NO ATTEMPT SHALL BE MADE TO MOVE A LOAD HORIZONTALLY ON THE GROUND IN ANY DIRECTION.
9. PRACTICAL WORKING LOADS DEPEND ON SUPPORTING SURFACE, WIND AND OTHER FACTORS AFFECTING STABILITY SUCH AS HAZARDOUS SURROUNDINGS, EXPERIENCE OF PERSONNEL, AND PROPER HANDLING. MUST ALL BE TAKEN INTO ACCOUNT BY THE OPERATOR.
10. THE MAXIMUM LOAD WHICH MAY BE TELESCOPED IS LIMITED BY HYDRAULIC PRESSURE, BOOM ANGLE, AND BOOM LUBRICATION. IT IS UNSAFE TO ATTEMPT TO TELESCOPE ANY LOAD WITHIN THE LIMITS OF THE LOAD RATING CHART.

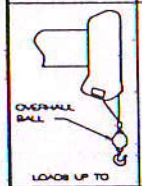
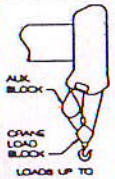
INFORMATION

1. DEDUCTIONS MUST BE MADE FROM RATED LOADS FOR STOWED JIB, OPTIONAL ATTACHMENTS, HOOKS AND LOADBLOCKS (SEE DEDUCTION CHART). WEIGHTS OF SLINGS AND ALL OTHER LOAD HANDLING DEVICES SHALL BE CONSIDERED A PART OF THE LOAD.
2. CRANE LOAD RATINGS WITH OUTRIGGERS ARE BASED ON OUTRIGGERS AND STABILIZERS EXTENDED AND SET WITH ALL LOAD REMOVED FROM THE CARRIER WHEELS.
3. LOAD RATINGS DO NOT EXCEED 85% OF TIPPING LOAD.

DEFINITIONS

1. OPERATING RADIUS IS THE HORIZONTAL DISTANCE FROM THE AXIS OF ROTATION TO THE CENTER OF THE VERTICAL HOIST LINE OR LOAD HOOK WITH LOAD SUSPENDED.
2. LOADED BOOM ANGLE, AS SHOWN IN THE COLUMN HEADED BY ∠, IS THE ACCLUDED ANGLE BETWEEN THE HORIZONTAL AND LONGITUDINAL AXES OF THE BOOM BASE AFTER LIFTING RATED LOAD AT RATED RADIUS.

REMOVAL OF THIS PLACARD IS A VIOLATION OF THE LAW

1 PART LINE	2 PART LINE	3 PART LINE
		
LOADS UP TO	LOADS UP TO	LOADS UP TO
7,800 LBS. STD. CABLE	15,300 LBS. STD. CABLE	22,800 LBS. STD. CABLE
6,400 LBS. ROT. RESISTANT CABLE	12,600 LBS. ROT. RESISTANT CABLE	18,200 LBS. ROT. RESISTANT CABLE

⚠ CAUTION

ANTI-TWO-BLOCK SYSTEM MUST BE IN GOOD OPERATING CONDITION BEFORE OPERATING CRANE. REFER TO OWNER'S MANUAL.

KEEP AT LEAST 3 WRAPS OF LOADLINE ON DRUM AT ALL TIMES.

USE ONLY 1/2" DIAMETER CABLE WITH MIN. 26,600 LB. (STD.) OR 27,000 LB. (ROT. RES.) BREAKING STRENGTH ON THIS MACHINE.

THIS MACHINE COMPLIES WITH OSHA REGULATIONS 1910.180 AND STANDARDS WHERE APPLICABLE AT DATE OF MANUFACTURE

DWG-D

LOAD CHART TC-1657