GROVE

# FULL HYDRAULIC SELF-PROPELLED CRANE


## RATED LIFTING CAPACITIES IN POUNDS

### 17 - 29 ft. BOOM

| | ON OUTRIGGERS | | ON RUBBER | |
|---|---|---|---|---|
| Radius in Feet | Over Front | 360° | Over Front | 360° |
| 10 | 28,000 | 28,000 | 22,100 | 15,800 |
| 12 | 28,000 | 24,000 | 18,050 | 10,870 |
| 15 | 26,000 | 18,000 | 14,600 | 8,540 |
| 20 | 16,500 | 12,300 | 8,900 | 5,970 |
| 25 | 12,500 | 9,500 | 6,500 | 4,340 |

### 18 - 42 ft. BOOM

| | ON OUTRIGGERS | | ON RUBBER | |
|---|---|---|---|---|
| Radius in Feet | Over Front | 360° | Over Front | 360° |
| 10 | 28,000 | 28,000 | 21,500 | 15,300 |
| 12 | 27,750 | 23,500 | 17,500 | 10,350 |
| 15 | 25,500 | 17,400 | 14,000 | 8,000 |
| 20 | 15,900 | 11,700 | 8,330 | 5,400 |
| 25 | 11,700 | 8,700 | 5,860 | 3,700 |
| 30 | 8,925 | 6,700 | 4,250 | 2,465 |
| 35 | 6,800 | 5,250 | 3,140 | 1,600 |
| 40 | 5,350 | 4,250 | 2,360 | 1,300 |

### 24 - 60 ft. BOOM
PCSA CLASS (10-33)

| | ON OUTRIGGERS | | ON RUBBER | |
|---|---|---|---|---|
| Radius in Feet | Over Front | 360° | Over Front | 360° |
| 10 | 28,000 | 28,000 | 21,500 | 15,300 |
| 12 | 27,750 | 23,500 | 17,500 | 10,350 |
| 15 | 25,500 | 17,400 | 12,900 | 7,000 |
| 20 | 15,900 | 11,700 | 8,100 | 3,950 |
| 25 | 11,700 | 8,200 | 5,450 | 2,600 |
| 30 | 8,300 | 5,750 | 3,600 | 1,700 |
| 35 | 6,100 | 4,500 | 2,400 | 1,000 |
| 40 | 4,900 | 3,300 | 1,500 | 500 |
| 45 | 3,600 | 2,600 | 1,000 | |
| 50 | 2,750 | 1,900 | 500 | |
| 55 | 2,400 | 1,200 | | |
| 58 | 2,000 | 500 | | |

### 21 - 51 ft. BOOM
PCSA CLASS (10-35)

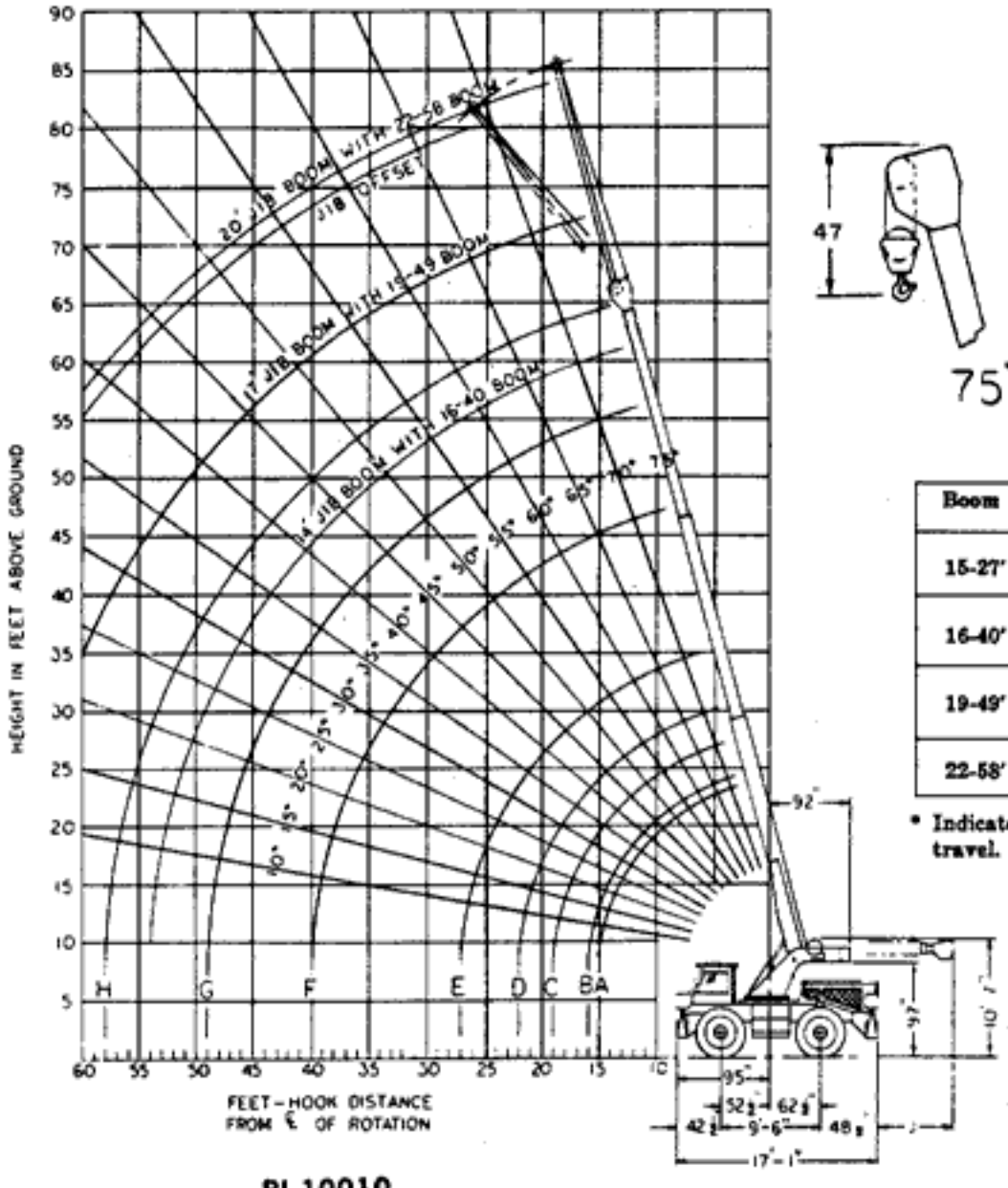
| | ON OUTRIGGERS | | ON RUBBER | |
|---|---|---|---|---|
| Radius in Feet | Over Front | 360° | Over Front | 360° |
| 10 | 28,000 | 28,000 | 21,500 | 15,300 |
| 12 | 27,750 | 23,500 | 17,500 | 10,350 |
| 15 | 25,500 | 17,400 | 13,500 | 7,500 |
| 20 | 15,900 | 11,700 | 8,250 | 4,500 |
| 25 | 11,700 | 8,500 | 5,700 | 3,200 |
| 30 | 8,500 | 5,950 | 3,900 | 2,100 |
| 35 | 6,500 | 4,675 | 3,000 | 1,300 |
| 40 | 5,100 | 3,550 | 2,100 | 850 |
| 45 | 4,000 | 3,000 | 1,700 | |
| 49 | 3,175 | 2,450 | 1,000 | |

**Capacities appearing in shaded area are based on structural strength and stability should not be relied upon as a capacity limitation. Capacities do not exceed 85% of tipping loads as determined by test in accordance with SAE recommended practice - Crane Load Stability Test Code - SAE J-765.**

## NOTES

1. Rated lifting capacities are based on freely suspended loads. They are the maximum covered by the manufacturer's warranty with the machine leveled and standing on a firm supporting surface. Ratings with outriggers are based on outriggers being extended to their maximum positions.
2. Practical working loads for each particular job shall be established by the user depending on operating conditions; including the supporting surface, wind and other factors affecting stability, hazardous surroundings, experience of personnel, handling of load, etc.
3. Operating radius is the horizontal distance from the axis of rotation to the centerline of the hoist line or tackle with loads applied.
4. "On Rubber" lifting (if permitted) depends on proper tire inflation, capacity, and condition. "On Rubber" loads may be transported at a maximum vehicle speed of 2.5 mi/hr. (4 km./hr.) on a smooth and level surface only.
5. Jibs may be used for lifting crane service only. Jib capacities are based on structural strength of jib or main boom and on main boom angle regardless of boom length.
6. Operation is not intended or approved for any conditions outside of those shown hereon. Handling of personnel from the boom is not authorized except with equipment furnished and installed by Grove Manufacturing Company.
7. For clamshell or concrete bucket operation, weight of bucket and load must not exceed 90% of rated lifting capacities.
8. Power-telescoping boom sections must be extended equally at all times. Long cantilever booms can create a tipping condition when in extended and lowered position.
9. The maximum load which may be telescoped is limited by hydraulic pressure, boom angle, boom lubrication, etc. It is safe to attempt to telescope any load within the limits of rated lifting capacity chart.
10. With certain boom and hoist tackle combinations, maximum capacities may not be obtainable with standard rope lengths.
11. With certain boom and load combinations, raising of load with boom lift cylinders may not be possible. Operational safety is not affected by this condition.
12. Keep load handling devices a minimum of 12 inches (30 CM) below boom head when lowering or extending boom.
13. For multiple part reeving, use one part of line for each 7,000 lbs. of load.
14. All load handling devices and/or boom attachments are considered part of the load and suitable allowances must be made.

# GROVE RT58







**JIB CAPACITIES**

| Min. Boom Angle | No. Offset | Max. Offset |
|---|---|---|
| 75° | 6000# | 4450# |
| 70° | 4050 | 3000 |
| 65° | 3150 | 2350 |
| 60° | 2600 | 1950 |
| 50° | 1550 | 1150 |
| 40° | 1250 | 950 |
| 30° | 1100 | 800 |

| Boom | Retracted | Extended | J |
|---|---|---|---|
| 15-27' | A* | E* | 6'-5" |
| 16-40' | B* | F* | 6'-11" |
| 19-49' | C* | G* | 9'-11" |
| 22-58' | D* | H* | 12'-11" |

* Indicates hook height and/or line of hook travel.

**Jibs are to be used for:**
*Single Line Operations Only.*

**SPECIAL NOTE:** This load chart is furnished to replace the original load chart issued when original crane was shipped from Grove Manufacturing Company. Grove Manufacturing Company assumes no responsibility, whatsoever, for any modification to original equipment shipped, in connection with stability or machinery strength of the equipment, in its present condition.

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## NOTES

1. Rated lifting capacities, with or without outriggers, are the maximum loads covered by the manufacturer's warranty with the machine standing on a firm, level and uniform supporting surface. Capacities do not exceed 85% of tipping.
2. For certain conditions, capacities are controlled by machinery strength. In these cases machine tipping must not be relied upon as the capacity limitation.
3. For clamshell and concrete bucket operation, weight of bucket and load should not exceed 90% of outrigger lifting capacities.
4. The weights of all load-handling devices are considered part of the load lifted and suitable allowances for them should be made.
5. Boom jib extensions may be used as straight gooseneck extensions, and for lifting crane service only.
6. With jib installed, lifting capacities over main boomhead must be reduced as follows:

| JIB LENGTH | REDUCED CAPACITY |
|---|---|
| 14 ft. | 500 lbs. |
| 17 ft. | 600 lbs. |
| 20 ft. | 700 lbs. |

7. The maximum boom length, including jib extension, may be raised from horizontal with outriggers set.
8. Long cantilever booms can create a tipping condition when in extended and lowered positions. Boom should be retracted proportionate to the capacity of the load chart.
9. Single line capacity 7000#. For larger capacities use multiple part reeving, (one additional line for each 7000# of capacity.)
10. Each power-telescoping boom section should be extended equally at all times. Do not operate one fully extended and another fully retracted.

# RATED LIFTING CAPACITIES

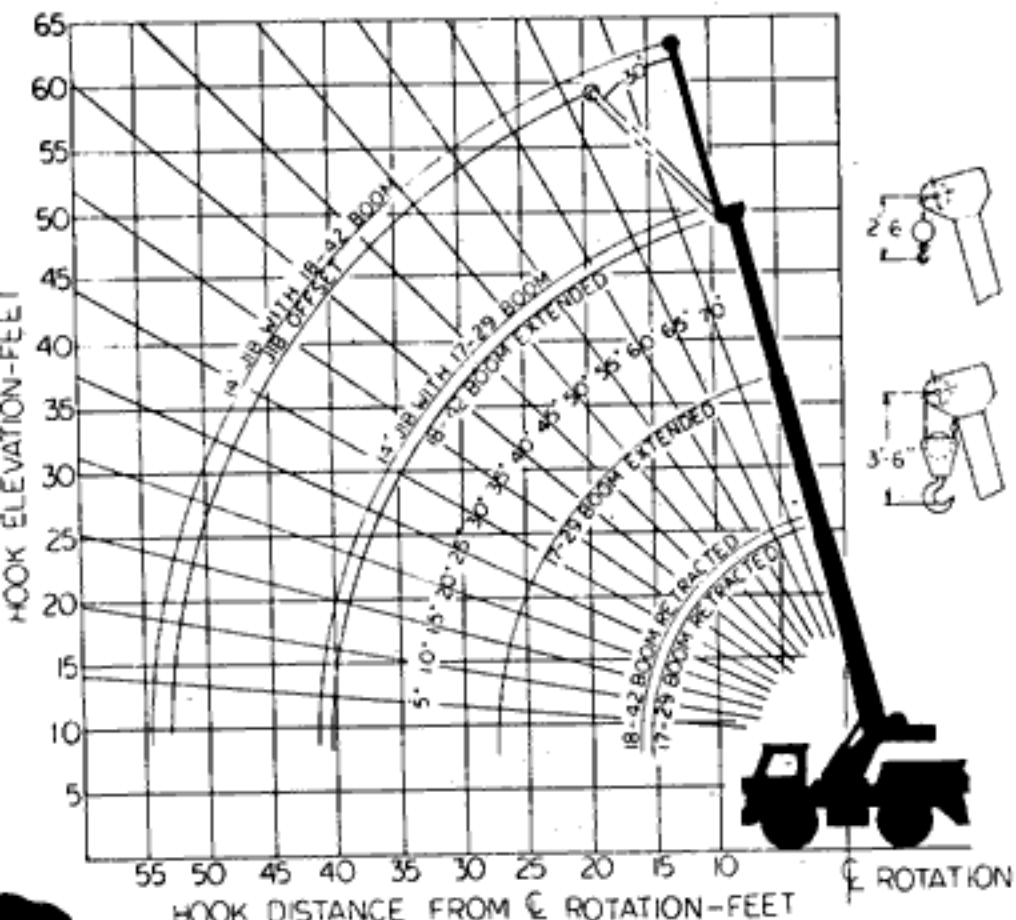
| WITH OUTRIGGERS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 15-27' Boom | | 16-40' Boom | | 19-49' Boom | | 22-58' Boom | |
| Radius | Over Front | 360° | Over Front | 360° | Over Front | 360° | Over Front | 360° |
| 10' | 28000 | 28000 | 28000 | 28000 | 28000 | 28000 | 28000 | 28000 |
| 12' | 28000 | 24000 | 27750 | 23500 | 27750 | 23500 | 27750 | 23500 |
| 15' | 26000 | 18000 | 25500 | 17400 | 25500 | 17400 | 25500 | 17400 |
| 20' | 16500 | 12300 | 15900 | 11700 | 15900 | 11700 | 15900 | 11700 |
| 25' | 12500 | 9500 | 11700 | 8700 | 11700 | 8500 | 11700 | 8200 |
| 30' | | | 8925 | 6700 | 8500 | 5950 | 8300 | 5750 |
| 35' | | | 6800 | 5250 | 6500 | 4675 | 6100 | 4500 |
| 40' | | | 5350 | 4250 | 5100 | 3550 | 4900 | 3300 |
| 45' | | | | | 4000 | 3000 | 3600 | 2600 |
| 50' | | | | | 3175 | 2450 | 2750 | 1900 |
| 55' | | | | | | | 2400 | 1200 |
| 58' | | | | | | | 2000 | 500 |

| WITHOUT OUTRIGGERS | | | | | | | |
|---|---|---|---|---|---|---|---|
| 15-27' Boom | | 16-40' Boom | | 19-49' Boom | | 22-58' Boom | |
| Over Front | 360° | Over Front | 360° | Over Front | 360° | Over Front | 360° |
| 22100 | 15800 | 21500 | 15300 | 21500 | 15300 | 21500 | 15300 |
| 18050 | 10870 | 17500 | 10350 | 17500 | 10350 | 17500 | 10350 |
| 14600 | 8540 | 14000 | 8000 | 13500 | 7500 | 12900 | 7000 |
| 8900 | 5970 | 8330 | 5400 | 8250 | 4500 | 8100 | 3950 |
| 6500 | 4340 | 5860 | 3700 | 5700 | 3200 | 5450 | 2600 |
| | | 4250 | 2465 | 3900 | 2100 | 3600 | 1700 |
| | | 3140 | 1600 | 3000 | 1300 | 2400 | 1000 |
| | | 2360 | 1300 | 2100 | 850 | 1500 | 500 |
| | | | | 1700 | | 1000 | |
| | | | | 1000 | | 500 | |
| | | | | | | | |
| | | | | | | | |

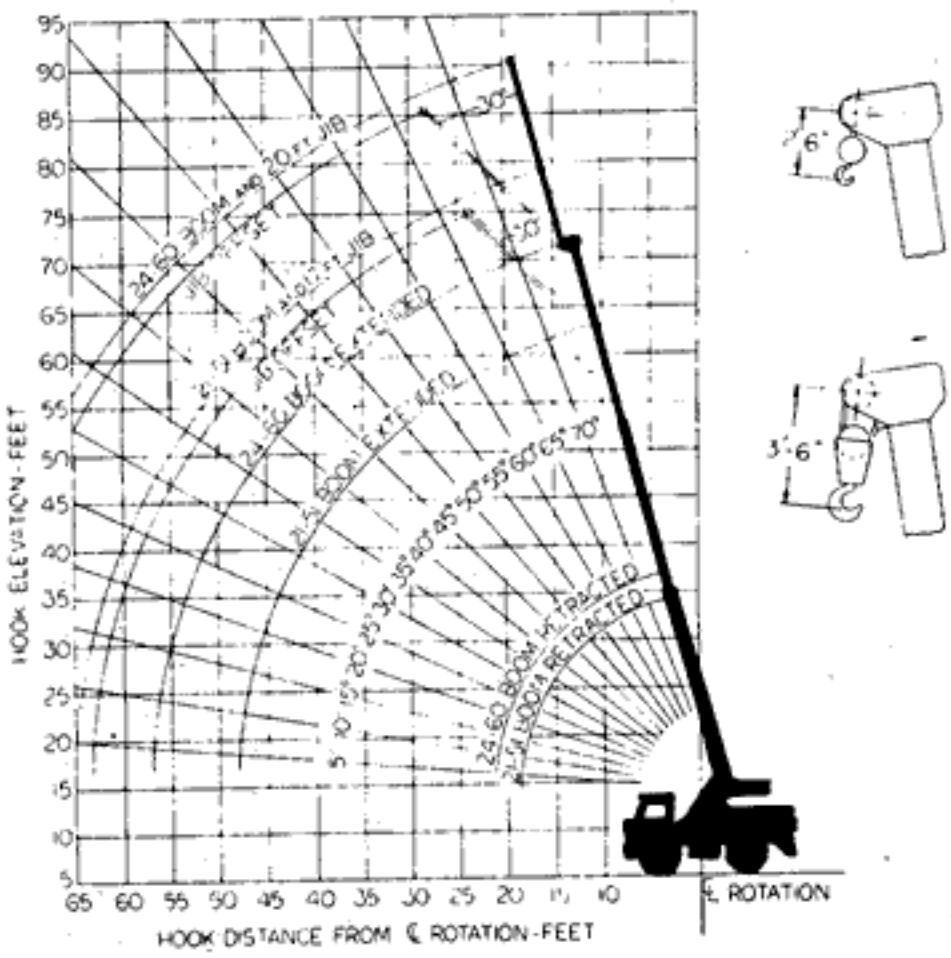
# GROVE®

# RT58

## RANGE DIAGRAM
## 17 - 29 ft. and 18 - 42 ft. BOOMS




## RANGE DIAGRAM
## 21 - 51 ft. and 24 - 60 ft. BOOMS




## 14 & 17 ft. JIB CAPACITIES

| Min. Boom Angle | No Offset | Max. Offset 30° |
|---|---|---|
| 75 | 6,200 | 3,600 |
| 70 | 5,000 | 3,000 |
| 65 | 4,300 | 2,500 |
| 60 | 3,700 | 2,100 |
| 55 | 3,300 | 1,850 |
| 50 | 2,600 | 1,700 |
| 45 | 2,400 | 1,575 |
| 40 | 2,200 | 1,500 |
| 30 | 1,900 | |

## 20 ft. JIB CAPACITIES

| Min. Boom Angle | No Offset | Max. Offset 30° |
|---|---|---|
| 75 | 6,200 | 2,600 |
| 70 | 5,000 | 2,400 |
| 65 | 4,300 | 2,300 |
| 60 | 3,700 | 2,150 |
| 55 | 3,300 | 2,100 |
| 50 | 2,600 | 1,650 |
| 45 | 2,400 | 1,500 |
| 40 | 2,200 | 1,460 |
| 30 | 1,900 | 1,200 |


GROVE®

**GROVE MANUFACTURING COMPANY**

A DIVISION OF WALTER KIDDE & COMPANY, INC.

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*MEMBER: POWER CRANE & SHOVEL ASSOCIATION*

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