



TRANSPORTATION SPECS - Boom Trucks

NATIONAL MODEL 1100 - 28 TON CAPACITY

COMPONENT WEIGHTS

Complete Crane
(Incl. Block, Ball & Jib)

LBS.

KGS.

49,361 22,390

Crane Only

22,480

10,225

Certificate Weight

22,300

*Actual Scaled Weight
Unit 28-7-1315

ADDITIONAL INFORMATION

22 Ton Block 1 Sheave

318

140

11.5 Ton Block 1 Sheave

182

83

4.5 Ton Ball

150

68

25' – 44' Swingaway Telejib
(28-7-1315)

1,470

670

Main Load Line (9/16" x 320')

TRANSPORTATION

Average Driving Speed

80km/h

Alberta, British Columbia and Saskatchewan

- All Seasons

Drive

DECK INFORMATION

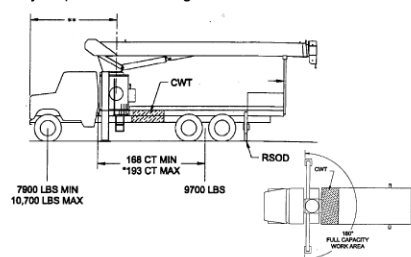
28-7-1315 8' x 20' Deck

28-7-1786 8'6" x 20' Deck

STERLING CRANE

mounting configurations

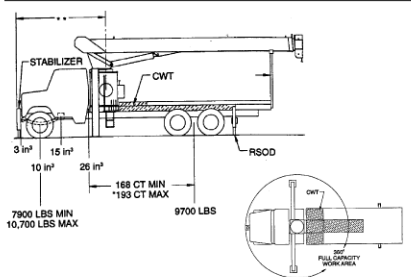
The configurations are based on the Series 1100 with an 85% stability factor. The complete unit must be installed in accordance with factory requirements and a test performed to determine actual stability and counterweight requirements since individual truck chassis vary. Trucks with a frame height in excess of 42 inches (107 cm) after mounting will have a final mounted unit height more than 13' 6" (411.5 cm). Chassis that do not meet these minimum stability weights may require counterweight.



Configuration 1 - 11105

Working area	180°
Gross Axle Weight Rating Front	18,000 lb (8 165 kg)
Gross Axle Weight Rating Rear	34,000 lb (15 422 kg)
Gross Vehicle Weight Rating	52,000 lb (23 587 kg)
Wheelbase	256 in (650 cm)
Cab to Axle/trunnion (CA/CT)	192 in (488 cm)
Frame Section Modulus (SM) under crane w/110,000 PSI (758 MPa)	15.9 in ³ (261 cm ³)
Frame Section Modulus (SM) over rear stabilizers w/110,000 PSI (758 MPa)	13.0 in ³ (213 cm ³)
Stability Weight, Front	7,900 lb (3 583 kg) minimum*
Stability Weight, Rear	9,700 lb (4 400 kg) minimum*
Estimated Average Final Weight	46,300 lb (21 001 kg)

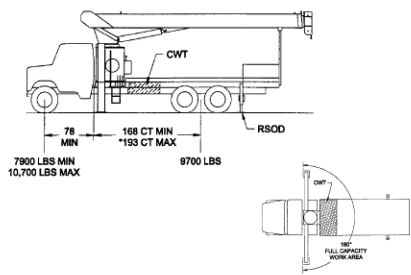
This configuration allows the installation of the Series 11105 by using the subbase for a 22-ft (6.71-m) bed.



Configuration 2 - 11105 with SFO

Working area	360°
Gross Axle Weight Rating Front	18,000 lb (7 257 kg)
Gross Axle Weight Rating Rear	34,000 lb (15 422 kg)
Gross Vehicle Weight Rating	52,000 lb (23 587 kg)
Wheelbase	256 in (650 cm)
Cab to Axle/trunnion (CA/CT)	192 in (488 cm)
Frame Section Modulus (SM) under crane w/110,000 PSI (758 MPa)	26.0 in ³ (426 cm ³)
Frame Section Modulus (SM) over rear stabilizers w/110,000 PSI (758 MPa)	15.0 in ³ (245 cm ³)
Stability Weight, Front	7,900 lb (3 583 kg) minimum*
Stability Weight, Rear	9,700 lb (4 400 kg) minimum*
Estimated Average Final Weight	46,300 lb (21 001 kg)

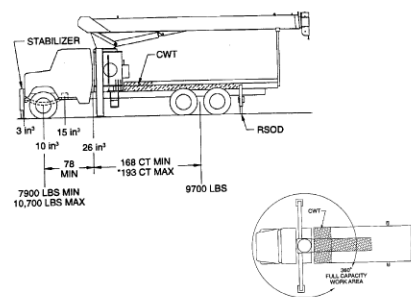
This mount requires front stabilizer for full capacity 360° around the truck. Front stabilizer gives the machine a solid base, helping the operator control loads precisely. This configuration requires a 22-ft (6.71-m) bed.



Configuration 3 - 1195 / 1169

Working area	180°
Gross Axle Weight Rating Front	18,000 lb (8 165 kg)
Gross Axle Weight Rating Rear	34,000 lb (15 422 kg)
Gross Vehicle Weight Rating	52,000 lb (23 587 kg)
Wheelbase	246 in (625 cm)
Cab to Axle/trunnion (CA/CT)	168 in (427 cm)
Frame Section Modulus (SM) under crane w/110,000 PSI (758 MPa)	15.9 in ³ (261 cm ³)
Frame Section Modulus (SM) over rear stabilizers w/110,000 PSI (758 MPa)	13.0 in ³ (213 cm ³)
Stability Weight, Front	7,900 lb (3 583 kg) minimum*
Stability Weight, Rear	9,700 lb (4 400 kg) minimum*
Estimated Average Final Weight	44,800 lb (20 321 kg)

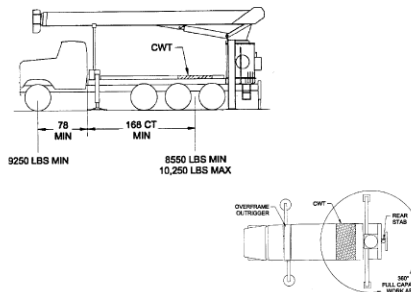
This configuration allows the installation of the Series 1195 or 1169 on a chassis with a small frame by using a subbase for a 20-ft (6.10-m) bed or a different subbase for a 22-ft (6.71-m) bed.



Configuration 4 - 1195 / 1169 with SFO

Working area	360°
Gross Axle Weight Rating Front	18,000 lb (8 165 kg)
Gross Axle Weight Rating Rear	34,000 lb (15 422 kg)
Gross Vehicle Weight Rating	52,000 lb (23 587 kg)
Wheelbase	246 in (625 cm)
Cab to Axle/trunnion (CA/CT)	168 in (427 cm)
Frame Section Modulus (SM) under crane w/110,000 PSI (758 MPa)	26.0 in ³ (426 cm ³)
Frame Section Modulus (SM) over rear stabilizers w/110,000 PSI (758 MPa)	13.0 in ³ (213 cm ³)
Stability Weight, Front	7,900 lb (3 583 kg) minimum*
Stability Weight, Rear	9,700 lb (4 400 kg) minimum*
Estimated Average Final Weight	44,800 lb (20 321 kg)

This configuration allows the installation of the 1195 or 1169 on a chassis by using a subbase for a 20-ft (6.10 m) bed or a different subbase for a 22-ft (6.71-m) bed. This mount requires front stabilizer for full capacity 360° around the truck. Front stabilizer gives the machine a solid base, helping the operator control loads.



Configuration 5 - Rear Mount

Working area	360°
Gross Axle Weight Rating Front	16,000 lb (7 257 kg)
Gross Axle Weight Rating Rear	40,000 lb (18 143 kg)
Gross Vehicle Weight Rating	56,000 lb (25 401 kg)
Wheelbase	246 in (625 cm)
Cab to Axle/trunnion (CA/CT)	168 in (427 cm)
Frame Section Modulus (SM) under crane w/110,000 PSI (758 MPa)	15.9 in ³ (261 cm ³)
Frame Section Modulus (SM) over rear stabilizers w/110,000 PSI (758 MPa)	15.9 in ³ (261 cm ³)
Stability Weight, Front	9,250 lb (4 196 kg) minimum*
Stability Weight, Rear	8,550 lb (3 878 kg) minimum*
Estimated Average Final Weight	48,000 lb (21 772 kg)

This configuration allows the rear-mount installation of the Series 1100. This configuration is 360° stable and allows the effective use of close working area to lift the heavier capacity loads. maximum bed length is 16 ft (4.87 m).

Notes:

- Gross Vehicle Weight rating (GVWR) is dependent on all components of the vehicle (axles, tires, springs, frame, etc.) meeting manufacturers' recommendations; always specify GVWR when purchasing trucks
- Diesel engines require a variable speed governor and energize-to-run fuel solenoid for smooth crane operation; electronic fuel injection requires EET engine remote throttle

- All mounting data is based on a National Series 1100 with an 85 percent stability factor
- The complete unit must be installed in accordance with factory requirements, and a test performed to determine actual stability and counterweight requirements per SAE J765; contact the factory for details
- Transmission neutral safety interlock switch is required with optional remote control

*Estimated axle scale weights prior to installation of crane, stabilizers and subbase for 85% stability.

**If the distance from the front bumper (SFO) to center of rotation exceeds 144 inches (366 cm), the 40-ft (12.19 m) overall truck length restriction will be exceeded. Overall length restrictions vary from state to state. In some states it is legal to be more than 40 ft (12.18 m) length, and some states allow overlength permits.

STERLING CRANE

accessories

Radio Remote Controls –

Eliminate the handling and maintenance concerns that accompany cabled remotes. Operate to a range of about 250 feet (76 m), varying with conditions.

- **Model NB4R**

One-Person Basket –

Strong but lightweight steel basket with 300-lb (139-kg) capacity, gravity hung with swing lock and full body harness.

- **Model B1-S**
- **Model 2B1-S** (for dual locking baskets)

Heavy-duty Personnel Basket –

1,200-lb. (544-kg) capacity steel basket with safety loops for four passengers. Gravity leveling 72- x 42-inch (183- x 107-cm) platform. Fast attachment and secure locking systems. Load chart must show 2,300 lb. (1 043 kg) minimum to operate this accessory.

- **Model BSA-1**
- **Model BSA-R1** (provides rotation)

Hydraulic Oil Cooler –

Automatic, self-contained radiator system with electric fans cools oil under continuous operation.

- **Model OC**

Continuous Rotation –

Allows rotation of turret/boom without rotation stop.

- **Model CR**

Dimensions Specifications

Mount	Series	G in (mm)	DRY WEIGHT lb (kg)	WITH OIL/WT lb (kg)
Std	1169	96 (2438)	19600 (8890)	20400 (9253)
Rear	1169	114 (2896)	23150 (10500)	23950 (10864)
Std	1195	98 (2489)	20800 (9434)	21600 (9798)
Rear	1195	117 (2972)	24350 (11045)	25150 (11408)
Std	11105	100 (2540)	21640 (9816)	22480 (10197)
Rear	11105	119 (3023)	25190 (11426)	25990 (11789)

*Weight includes all items except RSOD (1400 lbs.). Boom fully retracted
 **Weight includes all items including complete HO and SRO. Boom fully retracted.

