



SUNEX™
T O O L S

MODEL #5211A
4000 LB. CAPACITY
ENGINE CRANE

PARTS BREAKDOWN AND OPERATING MANUAL

OWNER/USER RESPONSIBILITY:

The owner and/or user must have an understanding of the manufacturer's operating instructions and warnings before using the engine crane. Personnel involved in the use and operation of equipment shall be careful, competent, trained, and qualified in the safe operation of the equipment and its proper use when servicing motor vehicles and their components. Warning information should be emphasized and understood. If the operator is not fluent in English, the manufacturer's instructions and warnings shall be read to and discussed with the operator in the operator's native language by the purchaser/owner, making sure that the operator comprehends its contents.

Owner and/or user must study and maintain for future reference the manufacturer's instructions and pertinent warning information. Owner and/or user is responsible for keeping all warning labels and instruction manuals legible and intact. Replacement labels and literature are available from the manufacturer.

MAINTENANCE AND INSPECTION:

Inspect the crane visually before each use. Check for cracks in the jack support, boom and boom extension. Check for loose, missing or damaged parts and for hydraulic oil leaks. If the crane is damaged in any way it should be removed from service immediately.

Check for unauthorized modification of the product. Modifications to this product and/or use of unapproved attachments are prohibited due to the potential hazards that are associated with improper use.

Any crane which appears to be damaged in any way, is found to be worn, or operates abnormally **MUST BE REMOVED FROM SERVICE UNTIL REPAIRED**. Owners and/or operators should be aware that repair of the equipment requires specialized knowledge and facilities. Only factory authorized parts, labels and decals shall be used on this equipment.

If crane is subjected to abnormal load or shock, remove from service and have it examined by an Authorized Repair Service.

Store crane with boom in fully lowered position and hydraulic ram valve closed when not in use. Keep all moving parts clean and well lubricated.

A list of authorized repair facilities is available from the manufacturer.



THIS OPERATING MANUAL CONTAINS IMPORTANT SAFETY INFORMATION. READ CAREFULLY AND UNDERSTAND ALL INFORMATION BEFORE OPERATING TOOL. SAVE THIS MANUAL FOR FUTURE USE.

!WARNING



THIS CRANE IS DESIGNED FOR ENGINE LIFTING PURPOSES ONLY.

WHEN REMOVING ENGINES FROM VEHICLES BE SURE THAT THE FRONT OF THE VEHICLE IS NOT JAMMED AGAINST THE HYDRAULIC UNIT. FAILURE TO OBSERVE THIS WARNING COULD RESULT IN A DROPPED ENGINE.

A VISUAL INSPECTION SHOULD BE MADE BEFORE EACH USE OF THE CRANE, CHECKING FOR LEAKING HYDRAULIC FLUID AND CRACKED, DAMAGED, LOOSE OR MISSING PARTS.

DO NOT OVERLOAD. OVERLOADING CAN CAUSE DAMAGE TO OR FAILURE OF THE ENGINE CRANE.

LOWER BOOM AND LOAD TO THE LOWEST POSSIBLE POSITION BEFORE TRANSPORTING.

ASSURE THAT THE LOAD IS NOT ALLOWED TO DROP SUDDENLY OR SWING DURING TRANSPORTING.

MAKE SURE THAT BOOM IS FULLY LOWERED BEFORE ADDING OIL TO UNIT RESERVOIR.

THIS ENGINE CRANE IS DESIGNED FOR USE ONLY ON HARD LEVEL SURFACES CAPABLE OF SUSTAINING THE LOAD. USE ON OTHER THAN HARD LEVEL SURFACES CAN RESULT IN ENGINE CRANE INSTABILITY AND POSSIBLE LOSS OF LOAD.

NO ALTERATIONS TO THE ENGINE CRANE SHALL BE MADE. USE ONLY SLINGS OR CHAINS WITH CAPACITY GREATER THAN THAT OF THE LOAD BEING LIFTED.

READ, STUDY AND UNDERSTAND THE INSTRUCTION MANUAL PACKED WITH THIS CRANE BEFORE USING CRANE.

FAILURE TO HEED THESE WARNINGS MAY RESULT IN LOSS OF LOAD, DAMAGE TO CRANE, AND/OR FAILURE RESULTING IN PROPERTY DAMAGE, PERSONAL OR FATAL INJURY.

ASSEMBLY INSTRUCTIONS:

NOTE: All fasteners should be only “hand tight” until Step 12.

1. Attach front legs (2) to the base (1) using bolts (16), washer (22) and nut (15).
2. Attach post support (5) into front legs (2) using bolts (29), washer (26) and nuts (25).
3. Assemble casters to rear leg extensions (3) using bolts (12), washers (32) and hex nuts (13).
4. Slide rear leg extensions (3) into base (1) with caster wheels facing down and secure with bolts (14).
5. Slide front leg extension (4R) into front leg (2), slide left front leg extension (4L) into front leg (2). Stand behind the crane as if you were going to push the crane to determine the left side of the crane from the right side of the crane.

CAUTION: The leg extension is installed correctly when the wheel is pointing straight ahead.

6. Connect main support post (6) to the rear support (5) using bolts (28), washers (26) and nuts (25).
7. Connect support straps (7) between front legs (2) and the top of main support post (6) using bolt (16) (Note: same bolts used in Step 1), washer (22) and nuts (15) at the bottom and bolt (17), washer (22) and nut (15) at the top.
8. Connect boom (9) to the main support post (6) using bolt (19), washer (20) and nut (21).
9. Slide boom extension (10) into boom (9) making sure that the slot for chain and hook faces down. Secure with bolt (24), washer (26) and nut (25), at desired capacity.
10. Connect hydraulic ram (8) to the main support post (6) using bolt (27), washer (22) and nut (15) and to the boom using bolt (31), washer (22) and nut (15).
11. Install hook and chain (30) to the boom extension (10) using bolt (24), washer (26) and nut (25).
12. Tighten all fasteners.

OPERATING INSTRUCTIONS:

1. Refer to vehicle manufacturer’s approved service manual for proper engine removal procedure.
2. To raise load, close release valve by turning pump handle clockwise. Insert handle into handle sleeve and pump to raise boom to desired height.
3. To lower load, SLOWLY turn release valve counter-clockwise.

IMPORTANT SAFETY INFORMATION:

Read these safety warnings before operation.

WARNING

Failure to heed these warnings may result in loss of load, damage to engine crane, and/or engine crane failure resulting in personal injury or property damage.

WARNING!

Do not overload engine crane beyond rated capacity of each specified boom position. Overloading can cause damage to or failure of the crane.

Always use crane on hard, level surface capable of sustaining the load. Use of crane on other than hard level surfaces can result in crane instability and possible loss of load.

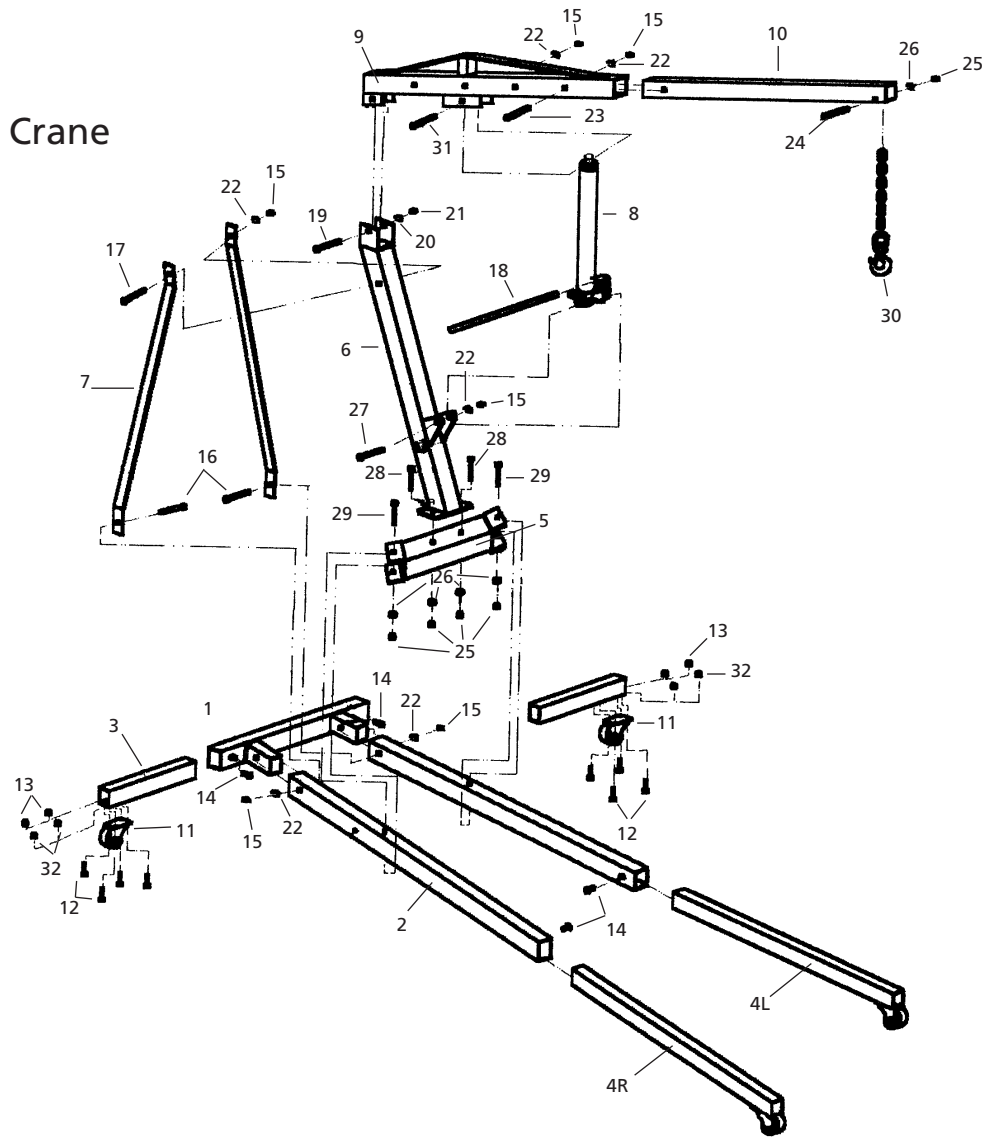
Boom and load must be in lowest possible position before moving. Move load slowly and smoothly to avoid uncontrolled swinging and possible loss of load.

Never work under load.

SPECIFICATIONS:

	Pos. 1	Pos. 2	Pos. 3	Pos. 4
Max. Boom Ht. . . . .	.95-1/2"	.89-1/2"	.82-3/4"	.77"
Min. Boom Ht. . . . .	.8-1/2"	.13-1/2"	.17-3/4"	.18"
Boom Capacity . . . . .	.1/2 Ton	.1 Ton	.1-1/2 Ton	.2 Ton
Boom Ext. From End				
to Ram . . . . .	.55"	.51"	.38-1/2"	.29-3/4"
Base Dimensions - Extended				
Width Back . . . . .	.48"			
Width Front . . . . .	.41"			
Base Dimensions - Retracted				
Width Back . . . . .	.33-1/2"			
Width Front . . . . .	.31-1/2"			
Power Unit . . . . .	.Heavy Duty			
Net Weight . . . . .	.205 Lbs.			
Gross Weight . . . . .	.215 Lbs.			

MODEL # 5211A
4000 Lb. Capacity Engine Crane



REF NUMBER	PART NUMBER	DESCRIPTION	QTY.	REF NUMBER	PART NUMBER	DESCRIPTION	QTY.
1	5211A01	Base	1	*16		Bolt M14 x 85	2
2	5211A02	Front Leg	2	*17		Bolt M16 x 110	1
3	5211A03	Rear Extension Leg	2	18	5040BHDL	Handle	1
**4R	521104R	Right Front Leg Extension with fixed wheel	1	*19		Bolt M18 x 110	1
**4L	521104L	Left Front Leg Extension with fixed wheel	1	*20		Washer 18	1
5	5211A05	Post Support	1	*21		Lock Nut M18	1
6	5211A06	Post	1	*22		Washer 16	3
7	5217A06	Support Strap	2	*23		Bolt M14 x 85	1
8	5060B	Hyd. Long Ram	1	*24		Bolt M14 x 70	1
	6645SK	Seal Kit for 5060B		*25		Nut M14	8
9	5211A09	Boom	1	*26		Washer 14	8
10	5211A10	Boom Extension	1	*27		Bolt M16 x 90	1
11	SC350A	Casters	2	*28		Bolt M14 x 110	2
*12		Bolt M8 x 16	8	*29		Bolt M14 x 120	2
*13		Nut M8	8	30	521131	Hook with Chain	1
*14		Bolt M12 x 25	4	*31		Bolt M16 x 85	1
*15		Nut M16	6	*32		Lock Washer	8

*Only available in Bolt Kit (Part #5211ABK).

**Fixed wheel replacement #W400

TROUBLESHOOTING:

Will not lift load	✓	✓	✓
Will not hold load			✓
Will not lift to full height	✓	✓	
Pumps feels "spongy" under load	✓	✓	
Handle raises under load			✓
Handle lowers under load			✓
	Power unit may be low on fluid. With jack on level surface and in down position, remove filler plug and add clean hydraulic jack fluid to level of filler hole.	Power unit may be airbound. Open the release valve a minimum of 2 full turns. Pump the handle a minimum of 20 full strokes to purge air from the system.	Valves may not be closing completely. To seat valves: a) Close release valve. b) With jack in fully lowered position, manually raise lifting arm as high as possible. c) Open release valve and allow jack to descend to lowered position.

LIMITED WARRANTY:

SUNEX INTERNATIONAL, INC. WARRANTS TO ITS CUSTOMERS THAT THE COMPANY'S SUNEX TOOLS™ BRANDED PRODUCTS ARE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS.

Sunex International, Inc. will repair or replace its Sunex Tools™ branded products which fail to give satisfactory service due to defective workmanship or materials, based upon the terms and conditions of the following described warranty plans attributed to that specific product.

This product carries a ONE-YEAR warranty. During this warranty period, Sunex Tools will repair or replace at our option any part or unit which proves to be defective in material or workmanship.

Other important warranty information...

This warranty does not cover damage to equipment or tools arising from alteration, abuse, misuse, damage and does not cover any repairs or replacement made by anyone other than Sunex Tools or its authorized warranty service centers.

The foregoing obligation is Sunex Tools' sole liability under this or any implied warranty and under no circumstances shall we be liable for any incidental or consequential damages.

Note: Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Return equipment or parts to Sunex Tools, transportation prepaid. Be certain to include your name and address, evidence of the purchase date, and description of the suspected defect.

If you have any questions about warranty service, please write to Sunex Tools. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Repair kits and replacement parts are available for many of Sunex Tools products regardless of whether or not the product is still covered by a warranty plan.

SHIPPING ADDRESS:

Sunex Tools
315 Hawkins Rd.
Travelers Rest, South Carolina 29690

MAILING ADDRESS:

Sunex Tools
P.O. Box 4215
Greenville, South Carolina 29608