

FIVE TON HOIST

INSTALLATION INSTRUCTIONS

REV 5-92 5TH

PRINTED IN U.S.A.

PREPARING YOUR TRUCK

1. CHECK BOX CONTENTS AGAINST PARTS LIST
2. READ AND ADHERE TO ALL SAFETY INSTRUCTIONS
3. FAMILIARIZE YOURSELF WITH THE PARTS BY COMPARING THEM WITH THE DRAWINGS. READ THROUGH THE INSTRUCTIONS
4. UNBOLT THE BUMPER FROM THE FRAME AND SET IT ASIDE
5. EIGHT BOLTS SECURE THE BED TO THE FRAME. REMOVE THEM. SAVING THE REAR TWO FOR USE IN BOLTING THE HINGE ARMS ON LATER
6. DISCONNECT TAIL, TURN, AND LICENSE LIGHT WIRES
7. TAKE THE GAS FILLER NECK LOOSE FROM THE BED AND WIRE IT OUT OF THE WAY. DISCONNECT GROUND WIRES
8. LIFT THE BED OFF THE FRAME CAREFULLY AND SET IT ASIDE (ON SAWHORSES IF POSSIBLE)

UNIVERSAL HOIST™

INSTALLING THE FIVE TON HOIST

These installation instructions are not intended to be precise instructions for installing a hoist on a particular truck. There are too many variables in different trucks to cover them all. These instructions are general in nature. Installing a hoist is a compromise between lift angle and lift capacity. The position of the hoist crossmember on the truck frame depends on the customer's application or desires. The closer the hoist is mounted to the rear of the frame, the higher the lift angle, but the lift capacity is lower. Conversely, moving the hoist toward the cab decreases the lift angle and increases the lift capacity.

- 1 Remove all the attachments that hold the sills and the bed to the truck frame. Also disconnect any electrical wiring, fuel lines, and hydraulic or air lines that are attached to the bed or sills. All of the wires and tubes must be supported by the truck frame. The electrical wires for the lights on the bed must be routed to the bed at the hinges. Allow a large loop of wire at the hinge area to flex with the bed movement.
- 2 Position the bed on the truck frame to clear the cab when it is raised. Decide if the sills are going to be notched, or if furring strips are going to be used. (See the attached drawing entitled "FIVE TON HOIST INSTALLATION.") The sills must rest on the truck frame. The hoist mounting parts must not support the bed when it is in the "down" position.
- 3 Raise the rear end of the bed and sills and place blocks under them. This will allow the rear hinges to be installed. Assemble the frame and sill hinges. Place the hinge assembly on the rear of the truck frame to decide where the frame hinges are to be located. Mark the sills for notching or furring. After the correct position of the hinges is decided, weld the frame hinge to the frame and secure the sill hinge with bolts.
- 4 Assemble the scissor assembly and cylinder. (See the attached drawing entitled "FIVE TON HOIST ASSEMBLY.") Open the scissor assembly to the maximum pin-to-pin dimension. (See the attached drawing entitled "(PIN-TO-PIN DIMENSION AND OPENING ANGLE.")
- 5 Decide what lift angle the customer desires. Refer to the previous drawing to determine the relationship between lift angle and lift capacity. Raise and securely block the bed to the desired lift angle. Insert the open scissor assembly between the bottom of the sills and the top of the truck frame. This locates the position of the scissor assembly with respect to the sills and the truck frame.
- 6 Place the frame brackets under the crossmember and the outside of the truck frame. Weld all metal-to-metal joints and bolt the sill supports to the sills.

METAL PARTS

P/N	DESCRIPTION	QTY
A-494	GUIDE	2
A-219	SILL SUPPORT	2
B-230	CROSSMEMBER	1
A-492	FRAME BRACKET	2
B-231	SCISSOR TOP ASSEMBLY	1
A-218	SCISSOR LOWER ARM LEFT AND RIGHT	2
A-495	HINGE LEFT & RIGHT	2
B-229	SILL HINGE LEFT & RIGHT	2
A-228-2	SHAFT 19.50"	1
A-228-3	SHAFT 7.50"	1
A-228-6	SHAFT 8.50"	2
A-228-5	SHAFT 13.50"	1

HARDWARE KIT

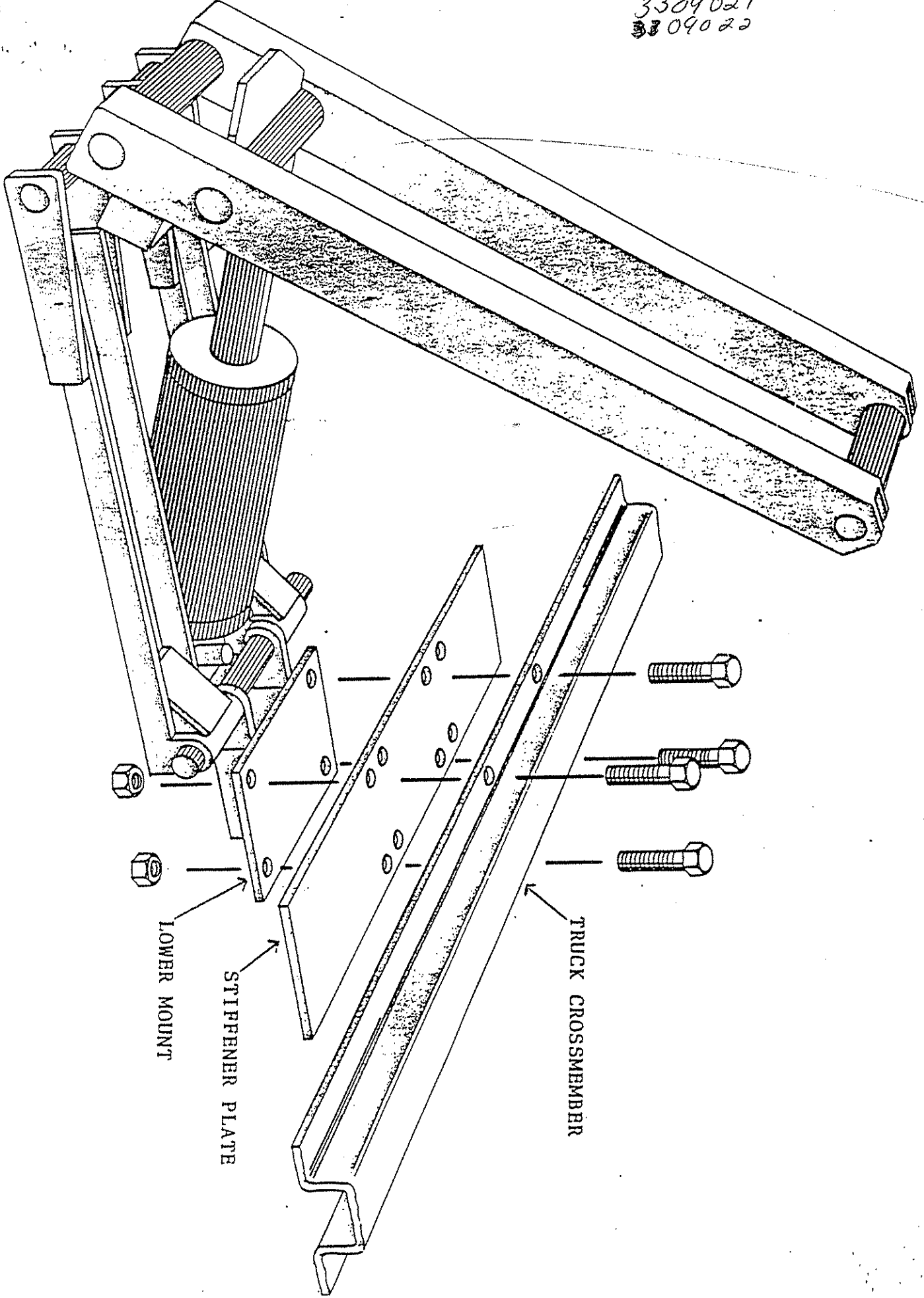
ITEM	DESCRIPTION	QTY
3/8 - 16 X 1 1/4	HEX HEAD BOLT GD 5	2
1/2 - 13 X 6	HEX HEAD BOLT GD 5	8
1/2	FLATWASHER	8
1/2 - 13	LOCKNUT	8
3/8	LOCKWASHER	2
1/8 X 2	COTTERPIN	10
3/8 ST X 3/8 JIC	ELBOW	1
3/8 JIC X 1/2NPT	ELBOW	1
INSTALLATION INSTRUCTIONS		1

ELECTRICAL KIT

SPST TOGGLE SWITCH (MOM-OFF-MOM) 125V 2.5AMP W/ MALE DISCONNECT TERMINALS	1
18 AWG STRANDED WIRE VINYL INSULATED	36'
2 CONDUCTOR 18 AWG STRANDED VINYL JACKET	11'
#4 WELDING WIRE TERMINALS (T&B LUG-IT 35401)	2
CRIMP-ON RING CONNECTOR (T&B NO. 14RB-10)	1
CRIMP-ON FEMALE DISCONNECT (T&B NO. RA 18-250F)	5
HYDRAULIC HOSE 60"	1
#4 GA. WELDING WIRE	11'

CYLINDER, IIE-ROD 4 X 14 W/CLEVIS 1
12 V POWER PACK W/ 1 GAL. RESERVOIR 1

3309021
3309022



LOWER MOUNT

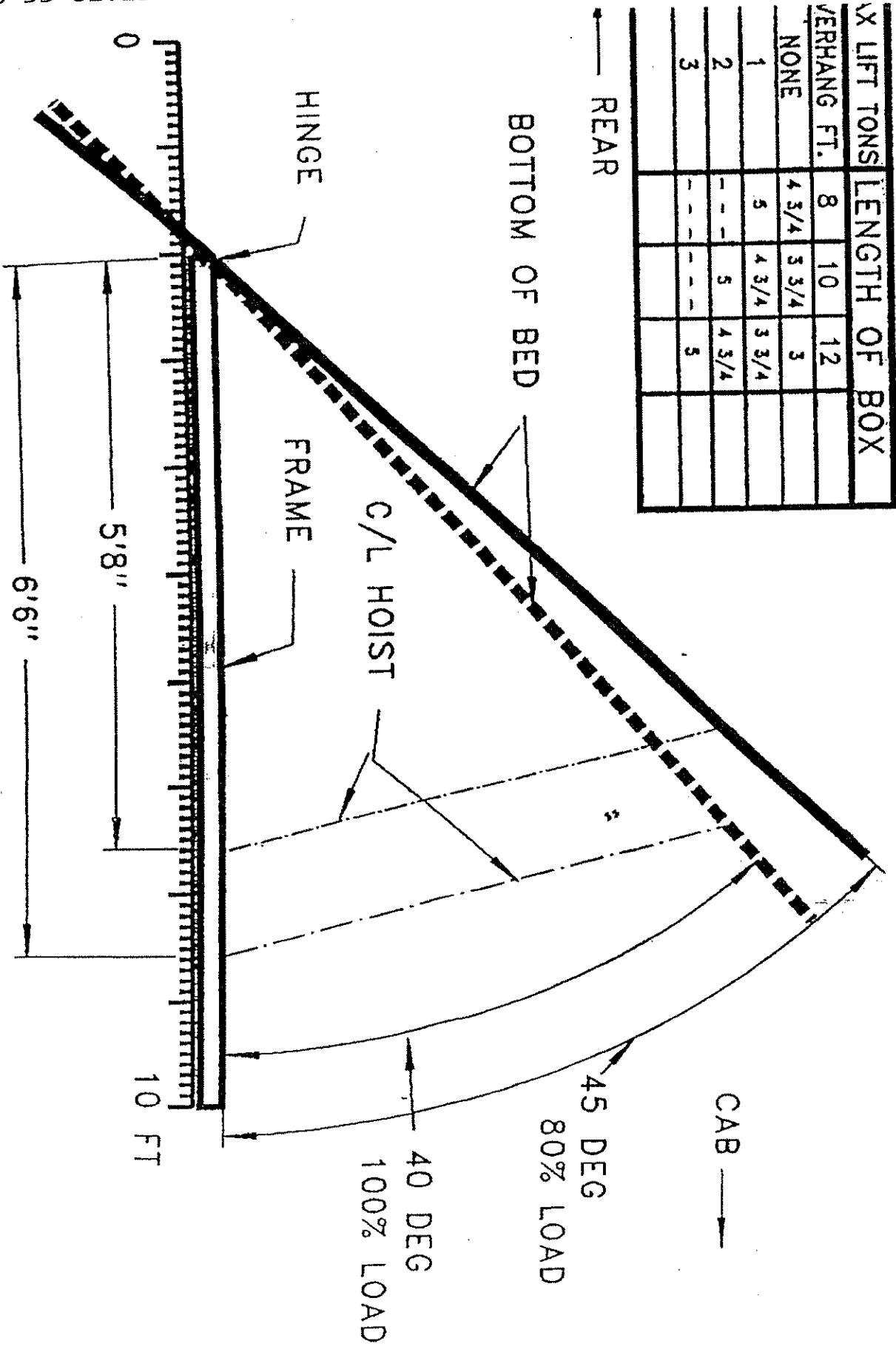
STIFFENER PLATE

TRUCK CROSSMEMBER

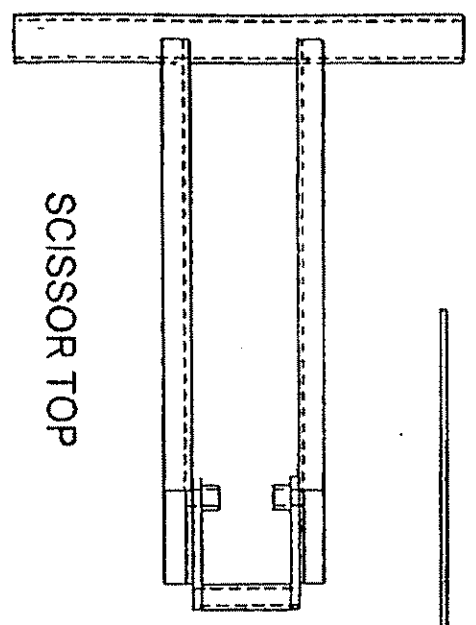
FIGURE A

10' BED W/ 2 FEET OVERHANG

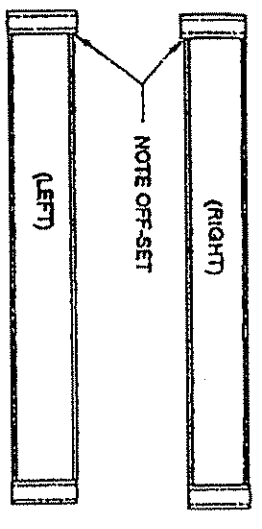
VERHANG FT.	8	10	12
NONE	4 3/4	3 3/4	3
1	5	4 3/4	3 3/4
2	5	5	4 3/4
3	5	5	5



PART IDENTIFICATION FIVE TON HOIST



SCISSOR TOP

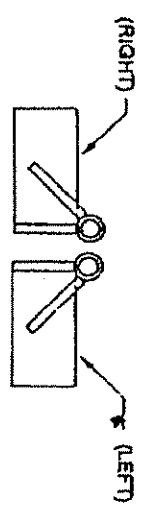


LOWER SCISSOR ARMS

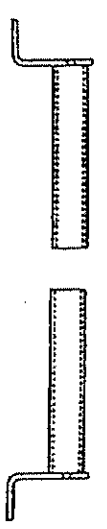
- 1 - SHAFT 1 1/4" DIA. X 19 1/2"
- 1 - SHAFT 1 1/4" DIA X 13 1/2"
- 1 - SHAFT 1 1/4" DIA. X 7 1/2"
- 2 - SHAFTS 1 1/4" DIA. X 8 1/2"
- 1 BOX - MISC. SMALL PARTS



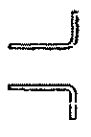
CROSSMEMBER OR LOWER FRAME



REAR FRAME HINGES



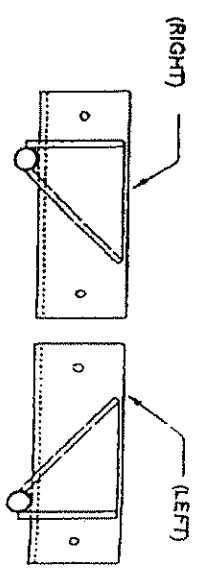
SILL SUPPORTS



CROSSMEMBER TO FRAME BRACKETS



GUIDES



REAR SILL HINGES



FIVE TON HOIST ASSEMBLY

