ASSEMBLY OPERATIONS

GMC TRUCKS

6 x 4 AND 6 x 6

"TWO UNIT PACK"

UNITED STATES ARMY

General Motors Truck

REPRINTED BY JESENSKY

ASSEMBLY OPERATIONS
FOR
GMC TRUCKS
"6 X 4" AND "6 X 6"

"TWO UNIT PACK"

GENERAL MOTORS TRUCK AND COACH

Division of

Yellow Truck & Coach Manufacturing Company

PONTIAC, MICHIGAN

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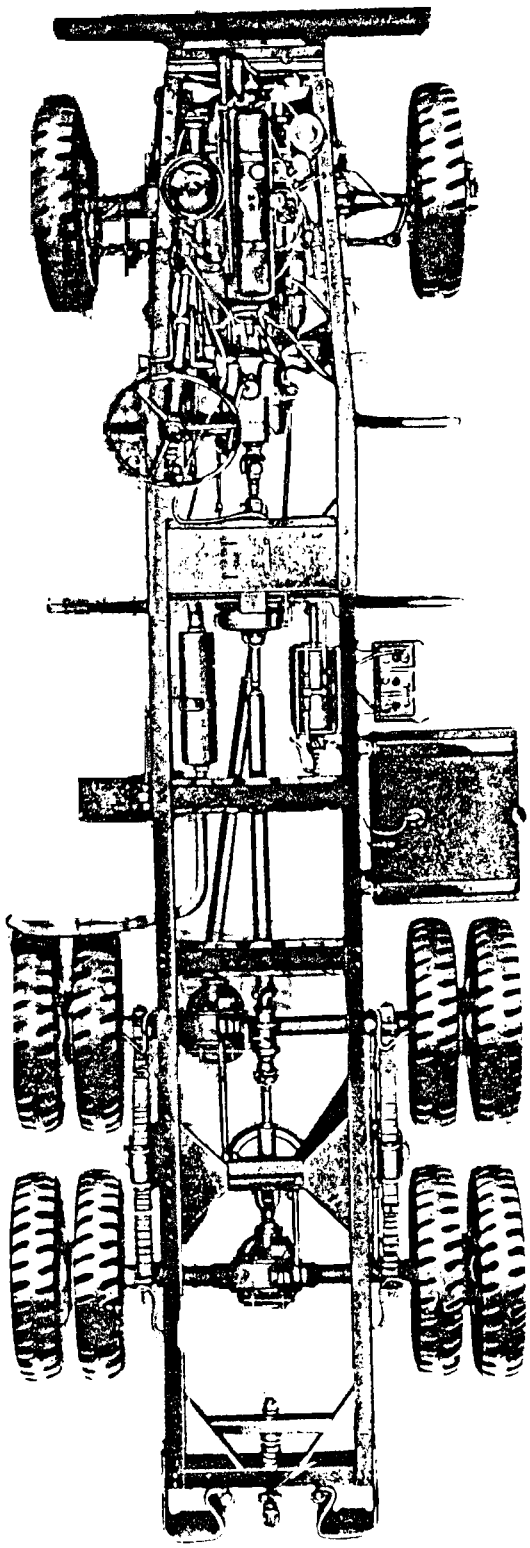


Plan View of Model CCW-353 Chassis.
(Refer to Maintenance Manual)

INTRODUCTION

This book covers all operations necessary to uncrate and assemble one GMC chassis and cab, parts of which are packed in boxes which comprise a "Two Unit Pack".

Instructions are covered in logical sequence thus providing a step by step procedure for unpacking and completely assembling either a GMC 6 x 6 or 6 x 4 unit. The instructions are grouped under the following major headings in the order as shown.

Unpacking Operations - Chassis and Cab
Assembling Operations - Chassis and Cab
Preparing Vehicle for Service
Assembling Operations - Cargo Body

In addition, a section devoted to Radio Interference Noise Suppression(Radio Suppression) will be found at the end of this book. This section provides necessary information for assembling "Radio Suppression" equipment on vehicles so equipped(as shown on composite packing lists) or whenever material is obtained for installation on a vehicle already assembled. Therefore, all assembly operations of parts affected by"Radio Suppression" are referred to this section rather than including such information in the text. This section should be read and studied before proceeding with the assembly of units which are to be equipped with "Radio Suppression".

CHASSIS IDENTIFICATION

The assembly operations in this book take into consideration various wheelbase chassis and types of equipment on GMC 6 x 6 and 6 x 4 trucks. The 6 x 6 unit incorporates a driving front axle in addition to tandem driving rear axles whereas the front axle in the 6 x 4 unit is a conventional axle (without driving mechanism). A letter "K" is used in the basic model designation to indicate a driving front axle.

Model CCKW-352 - 145" Wheelbase (6 x 6)
Model CCKW-353 - 164" Wheelbase (6 x 6)
Model CCW-353 - 164"Wheelbase (6 x 4)

In addition,the basic model(CCKW-352 or 3 or CCW-353) is suffixed with a letter and number, each of which indicates type of equipment furnished. The key to the letters and numbers is as follows:

"A" - Cargo Body · No Winch
"B" - Cargo Body - With Winch
"C" - Stock Rack
"D" - Tank - No Winch
"E" - Tank - With Winch
"1" - Split Housing Type Axles
"2" - Banjo Housing Type Axles

These assembly operations vary in some respect with type of equipment used, and differences are noted in text at the operations which are so affected.

PACKING LISTS

The two-Unit Pack (TUP)includes 2 complete truck chassis and cabs partially disassembled and packed in 3.or 4 separate shipping boxes (or cases). (1) Chassis Box, (2) Cab Box, (3) Axle Box,and(4)Tire Carrier and Fuel Tank Box furnished with CCKW 352 only). If a cargo body is supplied with any of the above vehicles two bodies including bows,tarpaulin and attaching parts are packed into a separate pack.

A packing list will be found under the metal protection plate on outside of each box or pack, giving the locations and details of each part contained therein. The smaller parts,such as bolts, nuts, and washers, will be found in bags or cartons or temporarily installed in place (whichever is the most convenient). The bag, bundles or cartons are numbered and parts are listed by name (and in some instances, part numbers) on the various packing lists. THESE PACKING LISTS MUST BE CAREFULLY CHECKED AND STUDIED BEFORE ANY ATTEMPT IS MADE TO UNPACK OR ASSEMBLE THE VEHICLE.

In addition,a composite packing list which itemizes every loose part required to assemble the complete chassis and cab will be found inside each box in the following locations:

(1) Chassis Box: Between coil and motor of top chassis wrapped with "Assembly Operations" book.
(2) Cab Box: In glove compartment.
(3) Axle Box: Nailed to top header.
(4) Tire Carrier and Fuel Tank Box:Nailed to top header.
(5) Cargo Body Box: Nailed to top header.

TOOLS AND EQUIPMENT

Two standard tool kits are packed in Chassis Box. These are the standard set of tools furnished with each chassis, and may be used, if necessary, to perform the various assembly operations.

Tools and equipment, in addition to those included in standard set, may be used to expedite. The assembly of the vehicles.

HOISTS AND SUPPORTS

Two hand-operated chain hoists were used in following operations. These hoists were supported adequately as to height and placement to expedite handling and assembling of the complete vehicle.

If suitable supports are provided, together with sufficient man-power to handle heavier parts (stripped chassis, axles, cabs, etc.), chain hoists may not be necessary. However use of one or more chain hoists will reduce assembly labor hours appreciably.

The heaviest "dead weight" lift necessary is the lifting of top chassis from bottom in Chassis Box. The "highest" and perhaps the most awkward lift necessary is the mounting of cab.

If hoists are used, support structure should be strong enough and of sufficient height to raise heaviest lift. The hoist mounting should be mobile enough to permit placement and support of various sections of chassis throughout assembly operations.

MAINTENANCE MANUAL

The maintenance manual included in tool kit incorporates all necessary service information on these vehicles. Reference to the various sections in this manual should be made when necessary to check adjustments, etc. while assembling the chassis.

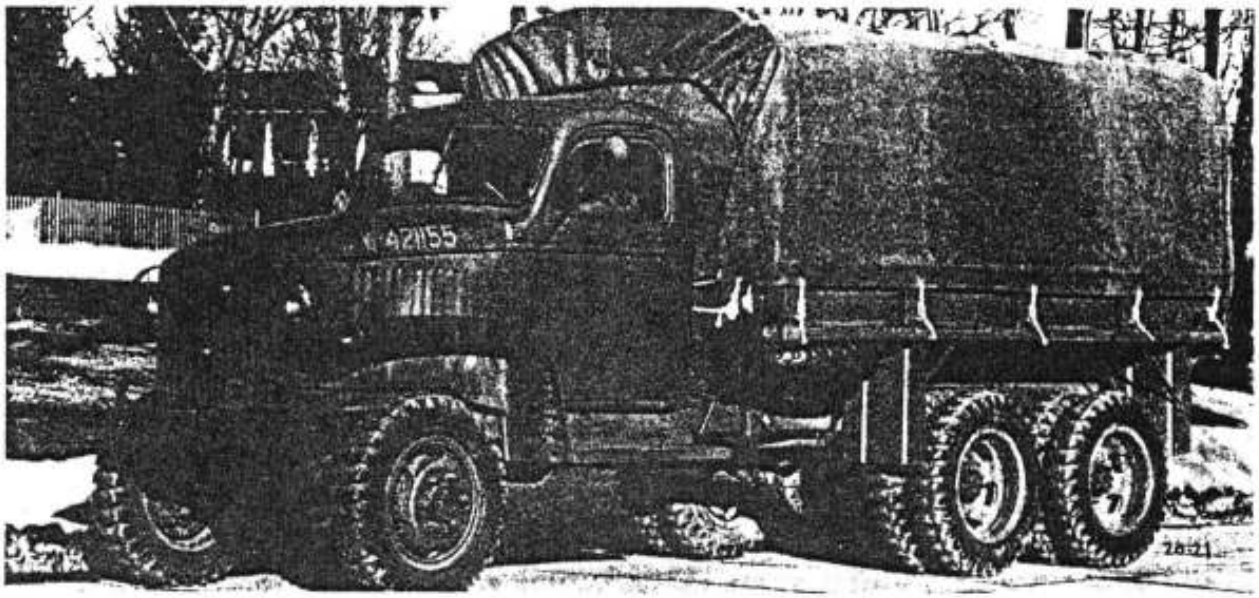
LAY OUT OF PARTS

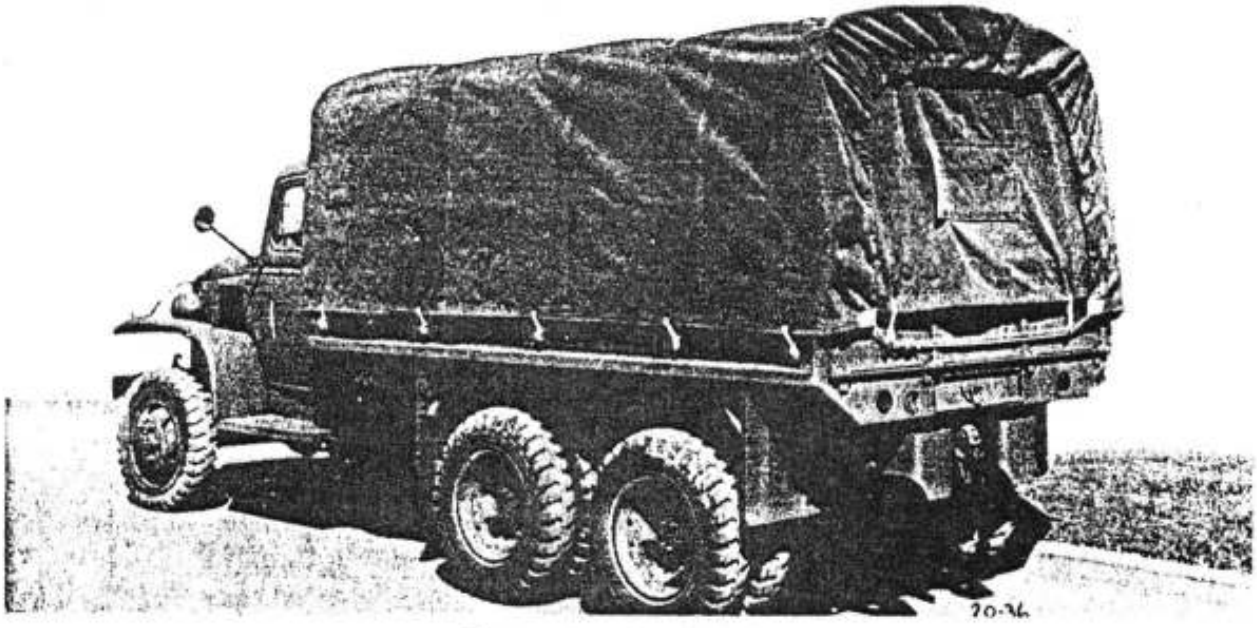
The preliminary "laying out" of parts in position to facilitate assembly is particularly important. While these assembly operations take into consideration the assembling of ONE chassis, parts for both chassis in the Two Unit Pack should be unpacked and separated before assembly operations are started.

Lumber and nails in the various boxes may be utilized to fabricate assembly tables, platforms, and supports, if desired.

READ INTRODUCTORY PAGES BEFORE UNPACKING AND ASSEMBLING.

ORDER OF OPERATIONS





Views of Completed Vehicles

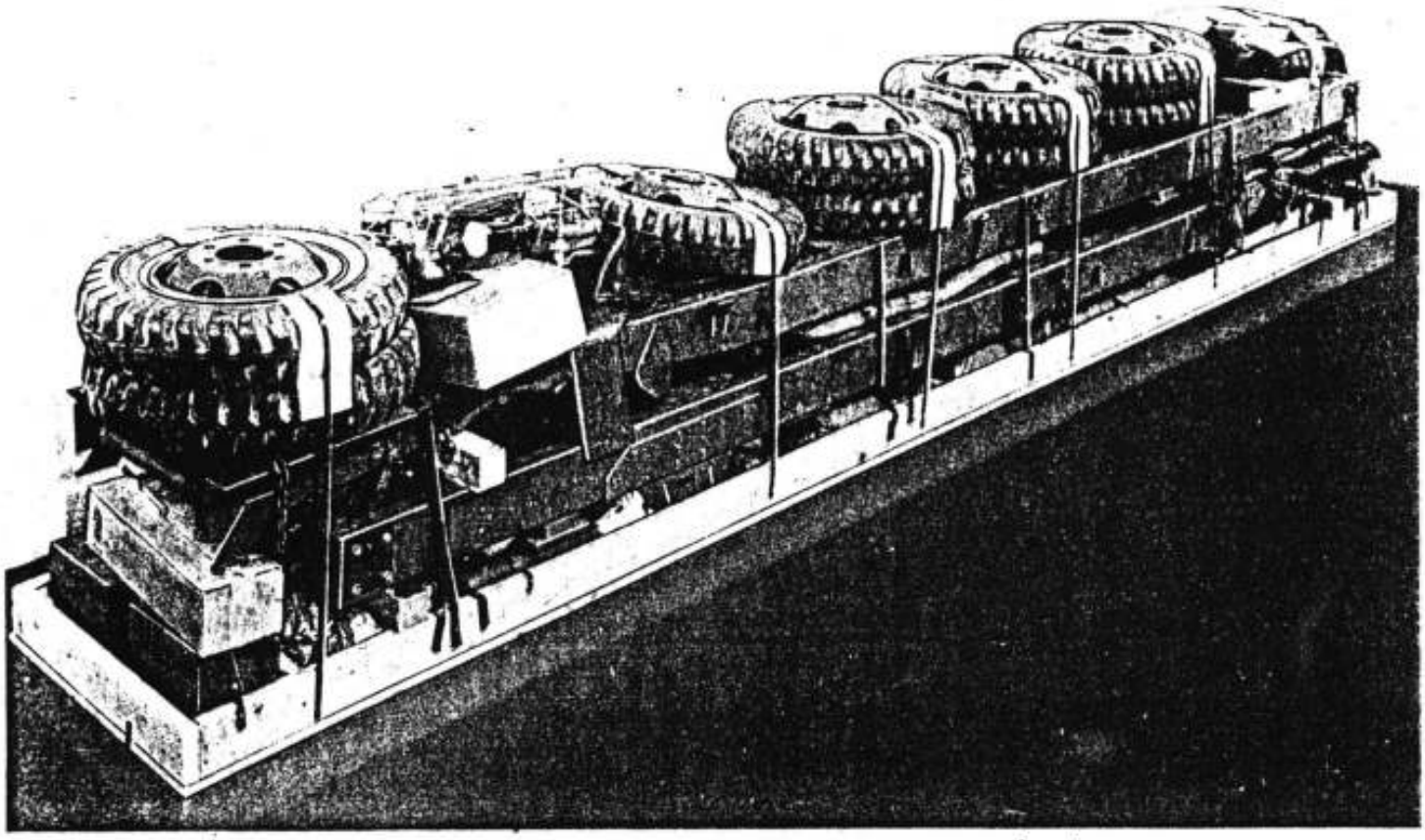


Fig. 1 Complete Chassis Box With Top and Sides Removed.

UNPACKING OPERATIONS

1. UNPACKING CHASSIS BOX

REFERENCES

Chassis Box Packing List
Figs. 1, 2, and 3

OPERATION

(a) Carefully remove top and sides of box with small pinch bar or nail puller.
(b) Lay top and sides to one side. These may be used as protection platforms to place parts on as they are removed from box.
(c) Remove enough packed parts from around top stripped chassis to permit removal of this unit.
(d) Remove(with hoists or man-power)top stripped chassis from pack (see Fig. No. 2).
(e) Place this chassis in space provided for assembly operations. Place chassis unit on suitable supports until axle units are assembled.
(f) Remove bottom stripped chassis and remaining loose parts from box (Fig. 3). Place this chassis in available assembly or storage space.
(g) Place small parts in protected positions.

2. UNPACKING AXLE BOX

REFERENCES

Axle Box Packing List
Figs. 4 and 5

OPERATION

(a) Remove top and sides from axle box.
(b) Remove all loose parts packed around axle assemblies.
(c) Axle units may then be removed with hoist. Place axles on supports or "horse"preparitory to mounting wheels.

3. UNPACKING CAB BOX

REFERENCES

Cab Box Packing List
Fig. 6

OPERATION

(a) Remove top and sides from cab box.
(b) Remove all loose parts as shown on cab packing list.
(c) Cabs may remain on box bottom until chassis is ready for cab mount.

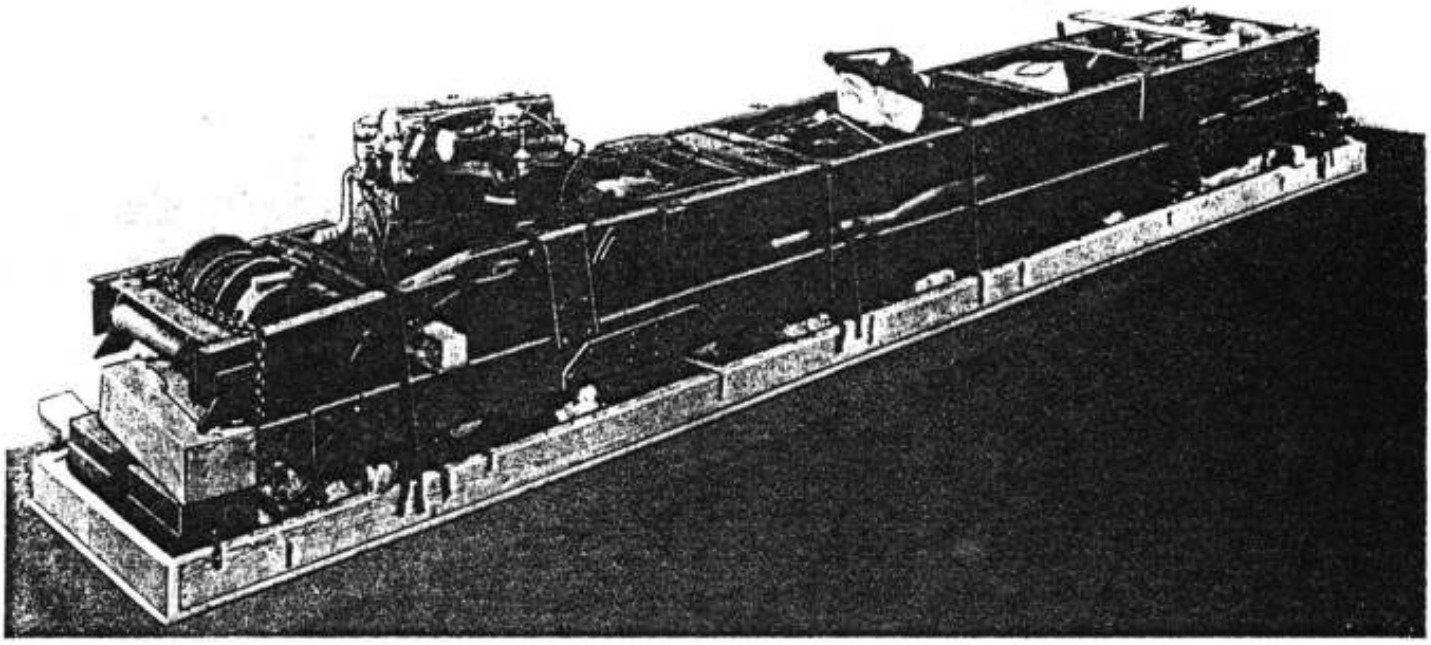


Fig. 2 Chassis Box With Loose Parts Removed Preparitory to Removing Top Chassis.

4. UNPACKING TIRE CARRIER AND FUEL TANK BOX (CCKW-352 ONLY)

REFERENCES

Composite Packing List
Fig. 7

OPERATION

(a) Remove top and sides from box.
(b) Tire carrier and fuel tank assembly may remain in box until chassis is ready for tire carrier mount.

5. LAY-OUT OF PARTS

For convenience and accessibility, it is recommended that the component parts of one complete chassis be segregated and laid out preparatory to assembling. These recommendations may be used for initial assembling of first chassis in the pack; however, rotation and sequence of parts lay-out may be altered to suit facilities, conditions, and number of men used to assemble unit.

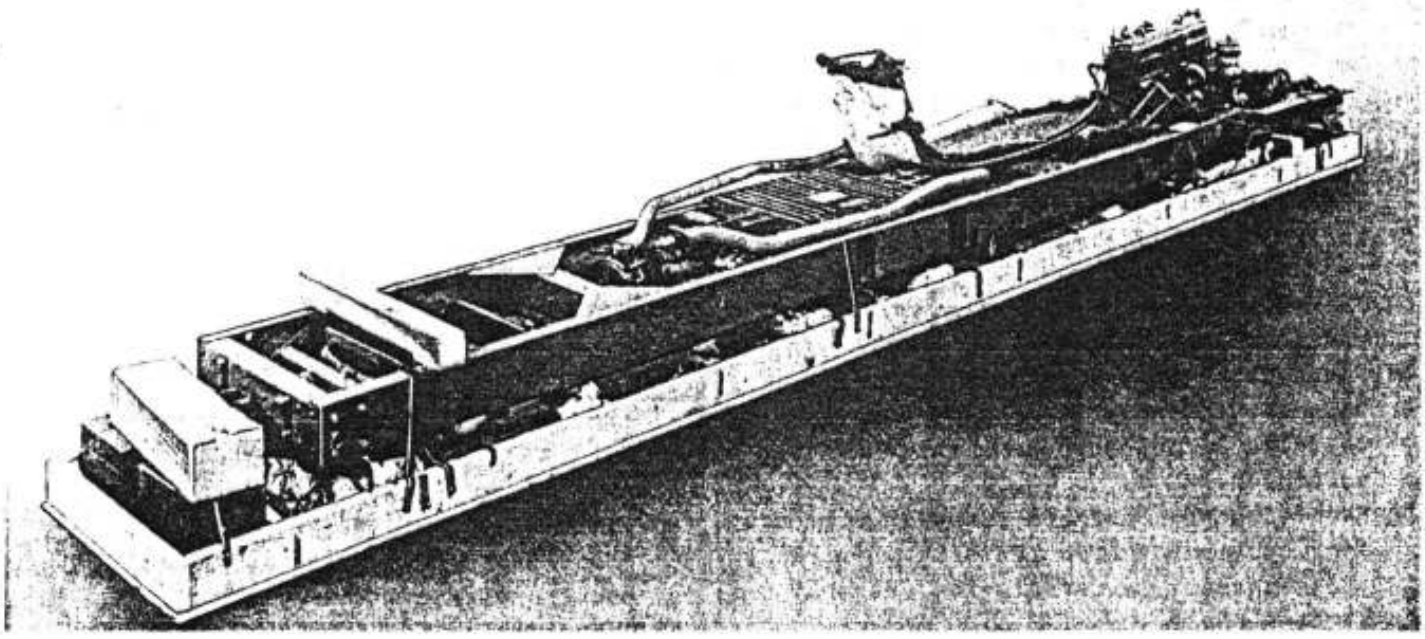


Fig. 3 Bottom Chassis in Chassis Box.

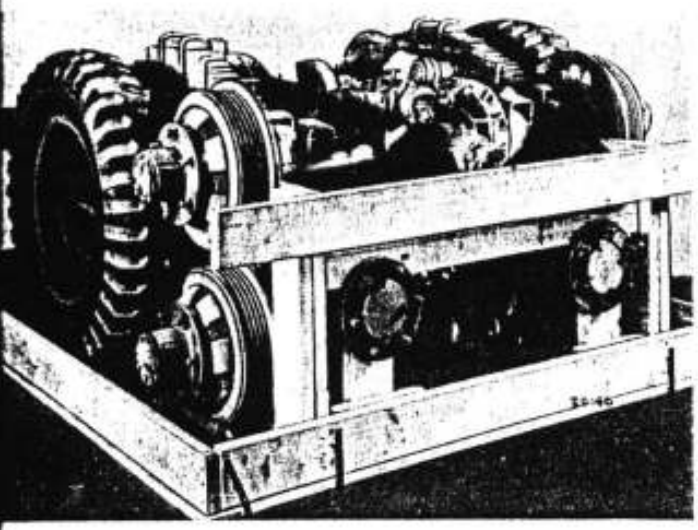


Fig. 4 Axle Box.

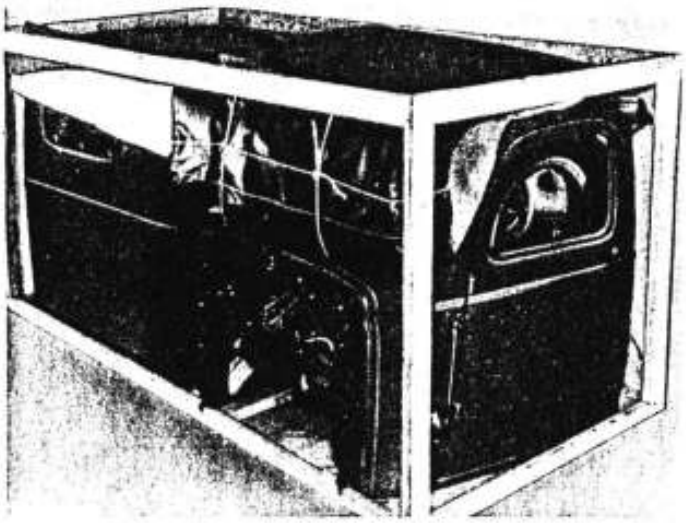


Fig. 6 Cab Box.

REFERENCES

Composite Packing List
Figs. 8 and 9

OPERATION

(a) An assembly table maybe made,if desired, from bottom of chassis box. Legs and braces may be used from 1" x 6" and 2" x 6" lumber in box without cutting.

(b) All loose parts and units should be separated into two groups - one for each chassis to be assembled except the following:
1 - Standard parts in Bag #5 & 8.
2 - Miscellaneous parts in Cartons 6 & 10.
3 - Wheel nuts in Bags #7.
4 - Cab Hold down Parts in Bag #9.
5 - Axle and Spring parts in Bag #15.

NOTE: Above bags contain sufficient standard and small parts for two chassis. References are made in text when these parts are used.

(c) DO NOT REMOVE SMALL BAGS OF PARTS WHICH ARE ATTACHED TO VARIOUS UNITS,UNTIL THESE UNITS ARE READY TO BE MOUNTED OR ASSEMBLED TO CHASSIS.
Reference is made in Assembly Operation Text to these parts as they are used.

(d) When removing parts for one chassis from packages or cartons,parts for second chassis should remain in packages or cartons for protection of parts until ready to be used.

(e) Place parts for one chassis on assembly table, if used, in manner shown in Fig. 8. These parts are placed on table in order of assembly to chassis,i.e.,front to rear(left-and right-hand side of chassis).

(f) Lay out sheet metal in manner similar to that shown in Fig. 9.

(g) Standard parts as mentioned under (a) of this operation should be placed on table accessible for use. It is suggested, however, that parts be left in individual bags until used.

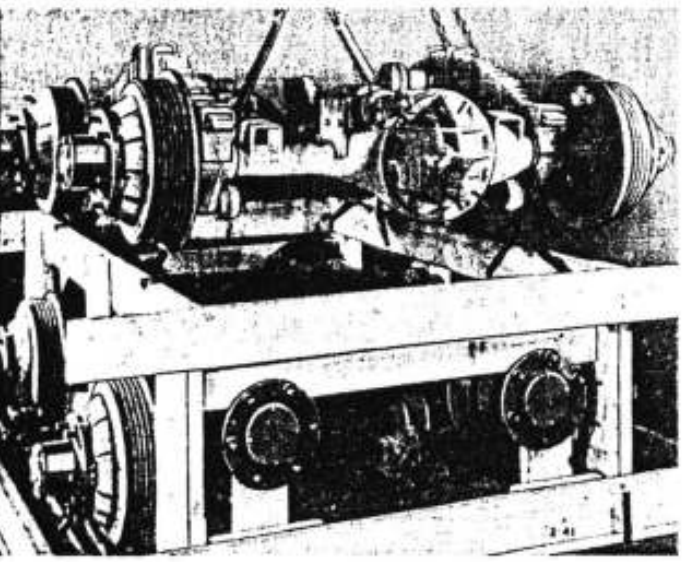


Fig. 5 Removing Rear Axle Assembly.

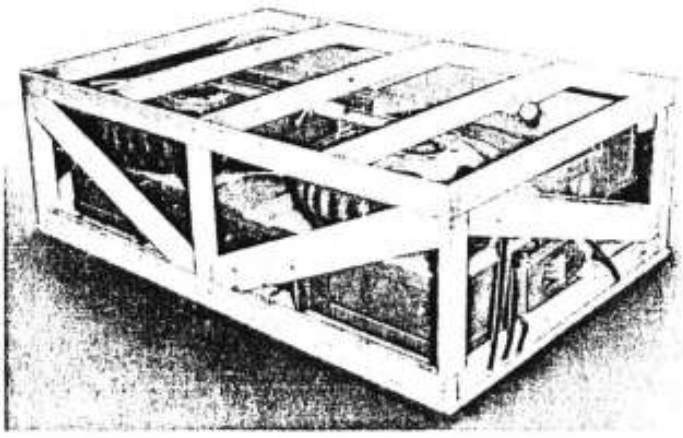


Fig. 7 Tire Carrier and Fuel Tank Box(CCKW-352 Only)