

\*TM 9-807

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2 $\frac{1}{2}$ -TON 6x6 TRUCK *and*  
2 $\frac{1}{2}$ - TO 5-TON 6x4 TRUCK  
(STUDEBAKER MODELS  
US 6 *and* US 6x4)

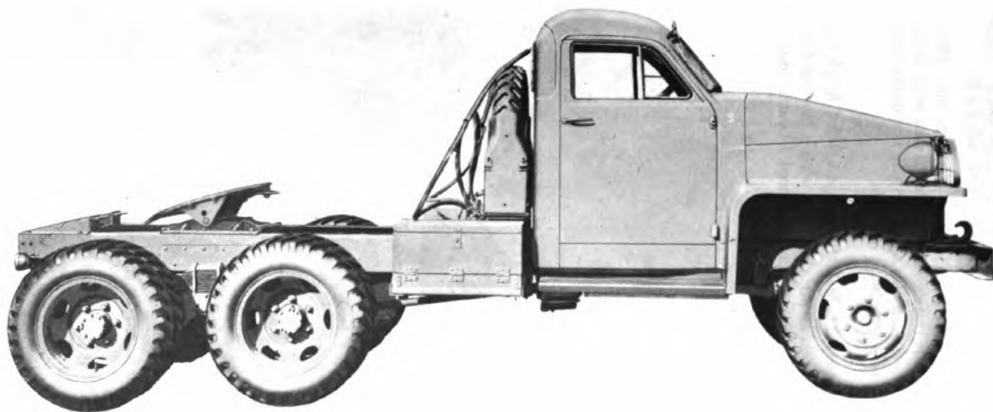


WAR DEPARTMENT  
16 December 1943

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\*This Technical Manual supersedes 1st and 2nd echelon information in TM 10-1385, 1 February 1942; TM 10-1387, 3 February 1942; TM 10-1565, 15 February 1943; TM 10-1565 Change No. 1, 4 October 1943; TB 10-1565-1, 11 August 1943; TM 10-1503, 17 July 1941.

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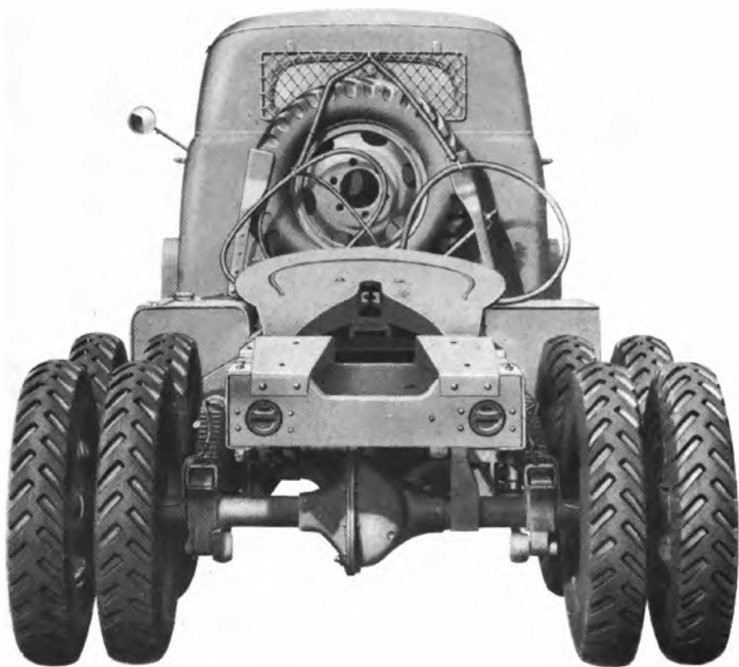
**Figure 6—148-Inch W.B. Tractor Truck US—Right Side**

**2½-TON 6x6 TRUCK AND 2½- TO 5-TON 6x4 TRUCK  
(STUDEBAKER MODELS US 6 AND US 6x4)**

cooled engine mounted near the front end of the frame. The power developed by the engine is transmitted to the driving axles by a transmission, transfer case, and propeller shafts. A cab is mounted just back of the engine, and houses the driving controls.

**3. DIFFERENCES AMONG MODELS (figs. 1, 2, 3, 4, 5, 6, 7, 8, and 9).**

a. The 6x6 cargo trucks are equipped with a driving front axle, and the 6x4 cargo trucks have a conventional I-beam front axle. A



RA PD 310000

**Figure 7—148-inch W.B. Tractor Truck US—Rear**

rugged cargo body equipped with bows, tarpaulins, and troop seats is mounted behind the cab. Otherwise the cargo trucks are the same, and may or may not be equipped with a winch. The 6x4 tractor truck is equipped with the conventional type I-beam front axle, a fifth wheel (semitrailer hitch) instead of a cargo body, and has a shorter wheelbase. The 6x6 dump trucks have a driving front axle, a conventional type

## 2½-TON 6x6 TRUCK AND 2½- TO 5-TON 6x4 TRUCK (STUDEBAKER MODELS US 6 AND US 6x4)

end or side dump body mounted behind the cab, and short wheelbase. These vehicles may or may not be equipped with a winch.

### 4. DATA.

#### a. Vehicle Specifications.

Wheelbase (cargo)	13 ft 6 in.
(tractor)	12 ft 4 in.
(dump)	12 ft 4 in.
Length, over-all (cargo with winch)	22 ft 13 <sup>1</sup> / <sub>16</sub> in.
(cargo less winch)	20 ft 10 <sup>5</sup> / <sub>8</sub> in.
(tractor)	17 ft 8 <sup>7</sup> / <sub>16</sub> in.
(dump with winch)	19 ft 11 <sup>9</sup> / <sub>16</sub> in.
(dump less winch)	18 ft 9 in.
Width, over-all (cargo)	7 ft 4 in.
(tractor)	7 ft 2 <sup>3</sup> / <sub>4</sub> in.
(dump)	7 ft 4 in.
Height, over-all (6x6 to top of cab)	7 ft 3 in.
(6x4 to top of cab)	7 ft 2 in.
(to top of bows)	8 ft 10 <sup>1</sup> / <sub>16</sub> in.
(to top of shield on dump body)	7 ft 7 <sup>3</sup> / <sub>8</sub> in.
Wheel size	20 in.
Tire size	7.50 in. x 20 in.
Tire type	8 ply ground grip—ND
Tread (center to center—6x6 front)	62 <sup>1</sup> / <sub>4</sub> in.
(conventional-type brake drum 6x4)	66 <sup>7</sup> / <sub>8</sub> in.
(demountable-type brake drum 6x4)	62 <sup>1</sup> / <sub>4</sub> in.
(rear)	67 <sup>3</sup> / <sub>4</sub> in.
Crew	2
Weight of vehicle—empty (6x6 cargo with winch)	10,485 lb
(6x6 cargo less winch)	9,875 lb
(6x4 cargo with winch)	10,165 lb
(6x4 cargo less winch)	9,555 lb
(6x4 tractor)	8,190 lb
(6x6 dump with winch)	10,760 lb
(6x6 dump less winch)	10,150 lb
Weight of vehicle—loaded (6x6 cargo with winch)	16,095 lb
(6x6 cargo less winch)	15,485 lb
(6x4 cargo with winch)	20,225 lb
(6x4 cargo less winch)	19,615 lb
(6x4 tractor with semi-trailer)	30,000 lb
(6x6 dump with winch)	
(cross country)	15,760 lb
(6x6 dump less winch)	
(cross country)	15,150 lb

## DESCRIPTION AND TABULATED DATA

(6x6 dump with winch)	
(road travel).....	20,760 lb
(6x6 dump less winch)	
(road travel).....	20,150 lb
Ground clearance.....	10 in.
Pintle height (cargo and dump trucks).....	31 in.
Kind and grade of fuel (octane rating).....	Gasoline—70 to 72

**b. Performance.**

Speeds allowable without front wheels driving (all vehicles).

Transmission	Transfer case in high
1st gear.....	6 mph
2nd gear.....	10.5 mph
3rd gear.....	20 mph
4th gear (direct).....	36 mph
5th gear (overdrive).....	45 mph

Speeds allowable with front wheels driving (6x6).

Transmission	Transfer case in low
1st gear.....	2.5 mph
2nd gear.....	4.5 mph
3rd gear.....	9 mph
4th gear (direct).....	16 mph
5th gear (overdrive).....	20 mph

Speeds allowable with transfer case in low (6x4 vehicles having shift lever).

Transmission	Transfer case in low
1st gear.....	3.7 mph
2nd gear.....	6.4 mph
3rd gear.....	12.5 mph
4th gear (direct).....	22.5 mph
5th gear (overdrive).....	28.1 mph
Approach angle (6x6 with winch).....	33 degrees
(6x6 less winch).....	55½ degrees
(6x4 with winch).....	30 degrees
(6x4 less winch).....	52 degrees
Departure angle (cargo and dump).....	44 degrees
Minimum turning radius (cargo).....	35 ft
(tractor).....	32 ft
(dump).....	32 ft

Towing facilities (front) all vehicles.....	2 hooks
(rear) cargo and dump.....	Pintle hook
(rear) tractor.....	Fifth wheel

Maximum draw-bar pull..... 12,000 lb

Maximum grade ascending ability (6x6 cargo and dump)..... 87.7%

Early production (6x4 cargo)..... 30.9%

Present production (6x4 cargo)..... 49.5%

**2½-TON 6x6 TRUCK AND 2½- TO 5-TON 6x4 TRUCK  
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Early production (6x4 tractor).....	19.7%
Present production (6x4 tractor).....	32.0%

Maximum allowable engine speed.....2620 rpm

Miles per gallon (at 25 mph).....5.9

Cruising range (at 25 mph).....236 miles

**c. Capacities.**

Transmission capacity (with power take-off).....5¼ qt  
(less power take-off).....4½ qt

Transfer case capacity.....3½ qt

Front axle capacity (6x6).....3½ qt

Front axle universal joint housing capacity (6x6).....½ qt

Rear axle capacity (per axle).....3½ qt

Fuel capacity.....40 gal

Cooling system capacity.....5¼ gal

Crankcase capacity.....6 qt

Winch capacity.....1¾ qt

Pillow block capacity.....⅝ qt

Steering gear capacity.....¾ qt

Air cleaner (oil bath) capacity.....1 qt

Hoist capacity.....14 qt

NAME PLATE	
NOMENCLATURE OF TRUCK 2½ TON 6x6	MAXIMUM TRAILED LOAD 4500 LBS.
MAKE & MODEL-STUDEBAKER-US 6 -	DATE OF DELIVERY
ARM OR SERVICE	RECOMMENDED BY MANUFACTURER:
MAINTAINING TRUCK   ORDNANCE DEPT.	OCTANE RATING OF GASOLINE 70-72
SERIAL NUMBER	S.A.E. GRADE OF OIL (ABOVE 32°F) 30
GROSS WEIGHT	S.A.E. GRADE OF OIL (BELOW 32°F) 10
MAXIMUM PAYLOAD 5000 LBS.	THE STUDEBAKER CORPORATION

RA PD 310004

**Figure 10—US 6 Model Name Plate (Cargo)**

NAME PLATE	
NOMENCLATURE TRUCK 5TON 6X4 CARGO	MAXIMUM PAYLOAD 10000 LBS.
ARM OR SERVICE	DATE OF DELIVERY
MAINTAINING TRUCK   ORDNANCE DEPT.	RECOMMENDED BY MANUFACTURER:
MAKE & MODEL-STUDEBAKER-US6X4	OCTANE RATING OF GASOLINE 70-72
SERIAL NUMBER	S.A.E. GRADE OF OIL (ABOVE 32°F) 30
GROSS WEIGHT	S.A.E. GRADE OF OIL (BELOW 32°F) 10
	THE STUDEBAKER CORPORATION

RA PD 310005

**Figure 11—US 6 x 4 Model Name Plate (Cargo)**

# DESCRIPTION AND TABULATED DATA

NAME		PLATE
NOMENCLATURE: TRACTOR-TRUCK 6X4		MAX. TRAILER WT. & PAYLOAD 21800 LBS.
ARM OR SERVICE		DATE OF DELIVERY
MAINTAINING TRUCK	ORDNANCE DEPT.	RECOMMENDED BY MANUFACTURER:
MAKE & MODEL-STUDEBAKER-US 6X4 - 48		OCTANE RATING OF GASOLINE 70-72
SERIAL NUMBER		SAE GRADE OF OIL (ABOVE 32°F) 30
GROSS WEIGHT	30000 LBS.	SAE GRADE OF OIL (BELOW 32°F) 10
		THE STUDEBAKER CORPORATION


RA PD 310006

**Figure 12—US 6 x 4 Model Name Plate (Tractor Truck)**

NOMENCLATURE	TRUCK, 2 1/2 TON 6x6, DUMP	MAXIMUM GROSS WEIGHT	20700 LBS
MAKE & MODEL	STUDEBAKER - US 6 - 48	MAXIMUM TRAILED LOAD	4500 LBS
SUPPLY SERVICE		DATE OF DELIVERY	
MAINTAINING TRUCK	ORDNANCE DEPT	RECOMMENDED BY MANUFACTURER:	
SERIAL NUMBER		OCTANE RATING OF GASOLINE	70-72
VEHICLE WEIGHT-UNLOADED		SAE GRADE OF OIL (ABOVE 32°F)	30
MAXIMUM PAYLOAD-CROSS COUNTRY	5000 LBS	SAE GRADE OF OIL (BELOW 32°F)	10
-ROAD	10000 LBS	THE STUDEBAKER CORPORATION	

RA PD 310104

**Figure 13—US 6 Model Name Plate (Dump Truck)**

TRADE		THE STUDEBAKER CORPORATION	
MARK		[Redacted]	
		SERIAL NO.	MADE IN U.S.A.
		REG. U.S. PAT OFF	

RA PD 310001

**Figure 14—Truck Serial Number Plate**

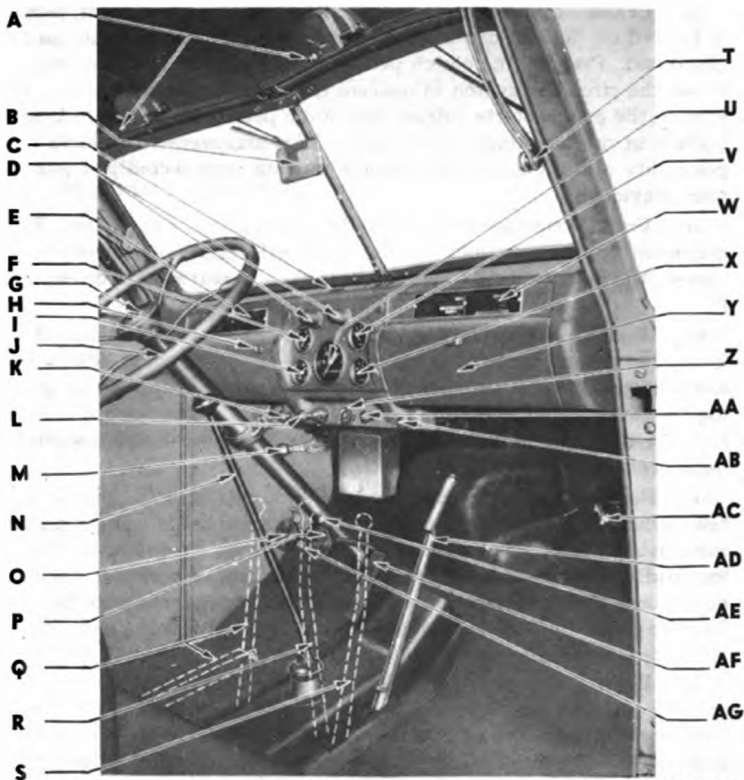
OIL PRESSURE AT WORKING SPEED	35	LBS. MIN.
FIRING ORDER 1-5-3-6-2-4		
ENGINE NO	951560	SIZE 4 X 4-1/4
MODEL	JXD	TAPPET CLEARANCE EXH. .006 INT. .006
STUDEBAKER CORPORATION		
SOUTH BEND, IND. U.S.A.		
UNITED STATES PAT. No's.		FRANCE PAT. No's.
1960093-1840010	1925883-1972752	758852 NOV 7 33
1391293-1845015		780372 JAN 29 35
1887998-1909926	CANADA PAT. No.	780801 FEB 11 35
1895632-1836949	347715 JAN 22 35	

RA PD 310002

**Figure 15—Engine Serial Plate**

**2½-TON 6x6 TRUCK AND 2½- TO 5-TON 6x4 TRUCK  
(STUDEBAKER MODELS US 6 AND US 6x4)**

n. **Transmission Shift Lever (fig. 20).** The transmission shift lever permits the selection of gear ratios or transmission speeds. The transmission has five speeds forward and one reverse. The first speed forward and reverse gear can be engaged only when the lever is pushed all the way to the right.



RA PD 310012

**Figure 20—Instruments and Controls**

**6. INSTRUMENTS AND AUXILIARY CONTROLS.**

a. **Ammeter (fig. 20).** The ammeter indicates the amount of current being drawn from the battery, the rate at which current is being supplied to the battery by the generator, or whether the electrical load or supply is predominating.

b. **Fuel Gage (fig. 20).** The fuel gage indicates the amount of fuel in the tank when the ignition switch is turned on.



## DRIVING CONTROLS AND OPERATION

c. **Heat Indicator** (fig. 20). The temperature of the coolant in the engine is indicated by the engine heat indicator. This gage is calibrated in degrees Fahrenheit. The normal operating range under average conditions should be between 140°F to 180°F.

d. **Oil Pressure Gage** (fig. 20). The oil pressure gage indicates the pressure at which oil is being circulated through the lubricating system of the engine. At a speed of 35 miles per hour, and with oil of the proper quality and viscosity, a normal reading of 35 pounds will show on the gage.

**A** WINDSHIELD WIPER CONTROLS

**B** REAR VISION MIRROR

**C** PUBLICATION DATA PLATE

**D** INSTRUMENT PANEL LIGHTS

**E** SHIFTING AND SPEED CAUTION  
PLATE

**F** OIL PRESSURE GAGE

**G** HORN BUTTON

**H** BLACKOUT DRIVING LIGHT SWITCH

**I** ENGINE HEAT INDICATOR

**J** STEERING WHEEL

**K** CARBURETOR CHOKE CONTROL

**L** MAIN LIGHTING SWITCH

**M** COWL VENTILATOR CONTROL

**N** TRANSMISSION SHIFT LEVER

**O** CLUTCH PEDAL

**P** BRAKE PEDAL

**Q** POWER TAKE-OFF SHIFT LEVER AND  
LOCK (WITH WINCH)

**R** FRONT AXLE CONTROL LEVER  
(ON US6 MODEL ONLY)

**S** TRANSFER CASE SHIFT LEVER  
(ON VEHICLES SO EQUIPPED)

**T** WINDSHIELD ADJUSTING ARM  
AND KNOB

**U** SPEEDOMETER

**V** FUEL GAGE

**W** NAME PLATE

**X** AMMETER

**Y** PACKAGE COMPARTMENT

**Z** IGNITION SWITCH

**AA** INSTRUMENT PANEL LIGHTS  
SWITCH

**AB** CARBURETOR HAND THROTTLE  
CONTROL

**AC** FIRE EXTINGUISHER

**AD** HAND BRAKE LEVER

**AE** CRANKING MOTOR SWITCH  
BUTTON

**AF** ACCELERATOR PEDAL

**AG** HEADLIGHT FOOT SWITCH

RA PD 310012B

### Legend for Figure 20

e. **Speedometer** (fig. 20). The speedometer shows the road speed of the vehicle in miles per hour. The indicator hand is specially treated and finished so that its position may be observed during vehicle operation under conditions of complete darkness. An odometer, incorporated at the top of the speedometer face, registers the number of miles the vehicle has been driven. The trip mileage indicator on the lower portion of the speedometer face may be set back to zero by turning the control stem on the back of the speedometer case.

f. **Horn Button** (fig. 20). The horn button is located in the center of the steering wheel.

g. **Windshield Adjusting Arms and Thumb Nuts on Steel Top Cabs** (fig. 20). Adjusting arms and knurled thumb nuts are provided