

# Mack

## model A-20H Highway Chassis



**N**EW standards for uniformity of performance, efficiency of operation and overall ability to do hard work have been set by the Model A-20 H Highway truck. Developed primarily as a medium-capacity chassis for short haul and delivery service, it is adaptable for any type of duty within its class. Although it may be considered a relatively small truck when compared with many of its big brothers of the Mack family, it lives up to the Mack reputation for long life, economy and dependability.

Powered by a compact and thrifty Mack built Magnadyne engine of 291 cubic inch displacement, drive is through the five-speed transmission to the rugged spiral-bevel single-reduction rear axle. Ample strength is assured by the one-piece banjo housing and efficiency, quietness and long life by the exceptionally wide gears, generated on the Orthopoid principle — an exclusive Mack development.

Chassis maintenance is reduced materially by the deep-section frame, adequately reinforced by exclusive box-girder type crossmembers and by the long easy springs retained in Mack's exclusive rubber Shock Insulators.

**MACK MANUFACTURING CORP.**  
New York, N. Y.



**AUTOLIT**

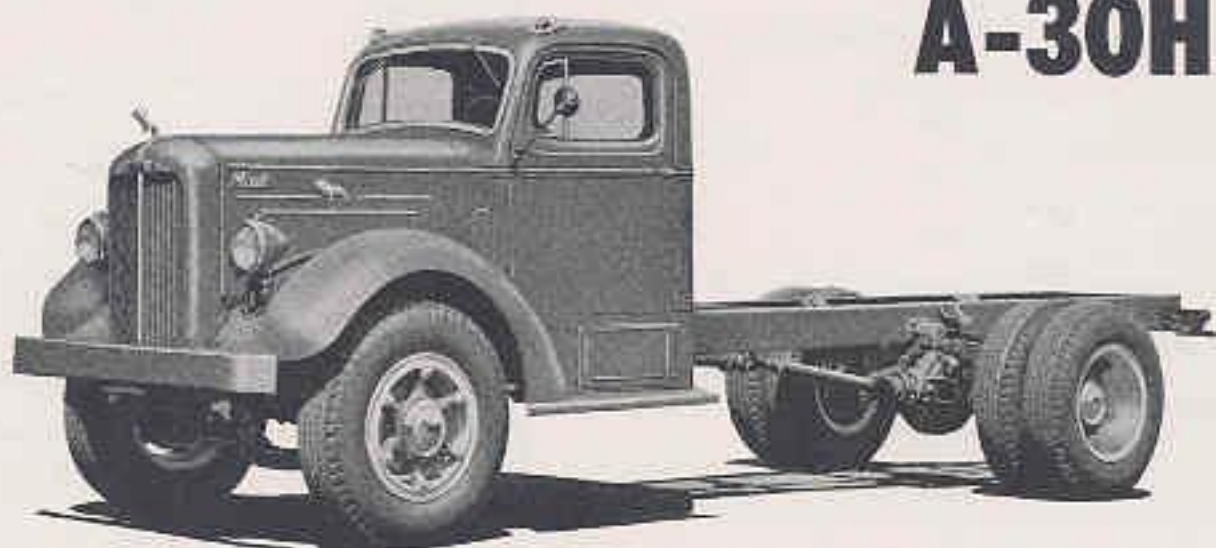


Automobile - Truck - Motorcycle 1900 to Present  
ORIGINAL Sales Brochures, Manuals, Books, Posters,  
Catalogs, and MUCH More. World's largest selection!

# Mack

## MODEL

# A-30H



### COMPONENT PARTS

|  |          |
|--|----------|
| Engine, Standard .....                                   | EN 331   |
| Clutch, Standard .....                                   | CL 471   |
| Transmission, Standard, Five-speed direct (Fuller) ..... | TR 69    |
| Five-speed overgear (Fuller), optional .....             | TR 690   |
| Front Axle, Standard .....                               | FA 300   |
| Rear Axle, Standard, Single-reduction .....              | RAS 300  |
| Two-speed Dual Reduction (Timken), optional .....        | RA2D 300 |
| Steering Gear, Standard .....                            | SG 30    |

### Capacity and Weight

| TIRE SIZE        | ITEM    | HIGHWAY RATING<br>21,000 LBS. G.V.W. |                         |                              | PERMISSIBLE CITY SERVICE<br>24,000 LBS. G.V.W. |                         |                              |
|------------------|---------|--------------------------------------|-------------------------|------------------------------|--|-------------------------|------------------------------|
|                  |         | GROSS LOAD CAPACITY                  | CHASSIS SHIPPING WEIGHT | MAXIMUM GROSS VEHICLE WEIGHT | GROSS LOAD CAPACITY                            | CHASSIS SHIPPING WEIGHT | MAXIMUM GROSS VEHICLE WEIGHT |
| 9.00-20<br>(10P) | Total   | 14,500                               | 6,500                   | 21,000                       | 17,500   | 6,500                   | 24,000                       |
|                  | Front   | 1,500                                | 3,400                   | 4,700                        | 1,375  | 3,400                   | 4,975                        |
|                  | Rear    | 13,000                               | 3,100                   | 16,300                       | 15,925   | 3,100                   | 19,025                       |
|                  | Dist. % | 9-91                                 | 52-48                   | 22-78                        | 9-91   | 52-48                   | 21-79                        |

Note: The above contemplates the standard wheelbase with standard frame length and with body overhang not exceeding 3 inches. Longer wheelbases will slightly decrease rear tire loading. Increased body overhang or extra-length frames will seriously overload the rear tires. Such cases should be thoroughly analyzed.

## AUTOLIT



Automobile - Truck - Motorcycle 1900 to Present  
ORIGINAL Sales Brochures, Manuals, Books, Posters,  
Catalogs, and MUCH More. World's largest selection!

# MODEL A-30H

## STANDARD EQUIPMENT

### Condensed Specifications

WHEELBASE—144½", Platform—112"

#### A-5 ENGINE:

|                                       |  |
|---------------------------------------|--|
| Model                                 | EN 331 Magnadyne   |
| Number of cylinders                   | Six  |
| Bore and stroke                       | 4" by 4¾"  |
| Piston displacement, cu. in.          | 330  |
| Maximum horsepower @ 2200 r.p.m.      | 150  |
| Brake horsepower @ 2800 r.p.m. (gov.) | 122  |
| Max. torque @ 1400 r.p.m.             |  |
| Pound-inches                          | 3168   |
| Pound-feet                            | 264  |
| Cylinders, cast in                    | Block  |
| Material                              | Chromium-nickel alloy  |
| Valves, type, inlet                   | Poppet   |
| exhaust                               | Poppet, positive type rotators                                   |
| Location                              | I-head at right  |
| Material, inlet                       | Nickel Chromium steel  |
| exhaust                               | Stab-lite (nickel-chromium-molybdenum steel)                     |
| Exhaust valve seats                   | Permalit inserts of Niferite, copper-plated, faced with Stellite |

#### A-7 CLUTCH:

|                             |                   |
|-----------------------------|-------------------|
| Model                       | CL 471            |
| Type                        | Single-plate, dry |
| Area of engagement, sq. in. | 202               |

#### A-5 FUEL SYSTEM:

|                          |                        |
|--------------------------|------------------------|
| Carburetor               | Zenith, dual downdraft |
| Tank capacity & location | 21 gal.; underseat     |

#### A-5 COOLING SYSTEM:

|                          |                              |
|--------------------------|------------------------------|
| Radiator, type           | Continuous-finned, flat tube |
| Frontal area, sq. in.    | 575                          |
| Thermostat               | Bellows, water-circulation   |
| Water pump               | Centrifugal                  |
| Fan, material            | Pressed steel                |
| Type                     | Asymmetrical                 |
| Water Capacity of system | 28 quarts                    |

#### A-5 ELECTRIC SYSTEM:

|                      |                        |
|----------------------|------------------------|
| Voltage and capacity | 6V; 35 Amp.            |
| Generator, make      | Delco-Remy             |
| Starting motor, make | Delco-Remy             |
| Battery, make        | Exide or Auto-Lite (1) |

#### B-3 TRANSMISSION:

|   |                          |
|---|--------------------------|
| Model   | TR-69 (Fuller)           |
| Type  | Selective, constant mesh |
| No. of speeds, forward  | Five                     |
| reverse   | One                      |
| Ratios, 5th 1.00; 4th 1.42; 3rd 2.52; 2nd 4.30; 1st 7.55; Rev. 7.37 |                          |

#### D-4 DRIVESHAFTS:

|                |                 |
|----------------|-----------------|
| Diameter       | 3" welded steel |
| Wall thickness | 0.095"          |

#### C-3 FRONT AXLE:

|       |                          |
|-------|--------------------------|
| Model | FA 300                   |
| Type  | Reversed Elliott, I-beam |

#### D-5 REAR AXLE:

|                       |   |
|-----------------------|---|
| Model                 | RAS 300                                 |
| Final drive           | Single-reduction                        |
| Housing, material     | Pressed steel, banjo type               |
| Axle shafts, material | Chromium-molybdenum steel, heat-treated |
| Final ratios          | 5.63, 6.14, 6.86 to 1                   |

#### BRAKES:

|           |                              |
|-----------|------------------------------|
| Type      | Internal expanding, enclosed |
| Actuation | Vacuum-hydraulic             |

C-5 Front, size 14" by 21¼" by 5/16"

D-5 Rear, size 15" by 5" by 3/8"

Total braking area, sq. in. 457

E-14 Hand, size 10" by 3" by 1/4"

Lining area, sq. in. 85

#### E-1 FRAME:

|                             |                             |
|-----------------------------|-----------------------------|
| Material                    | Pressed carbon steel        |
| Side-members, size          | 8" by 3" by 1/2"            |
| No. of cross members & type | Two box-girder, two channel |

#### E-9 SPRINGS:

|              |               |
|--------------|---------------|
| Type         | Semi-elliptic |
| Front, size  | 42" by 2½"    |
| Rear, size   | 50½" by 3"    |
| Helper, size | 34¼" by 3"    |

#### TIRES:

|      |                      |
|------|----------------------|
| Size | 9.00-20 (16P)        |
| Rims | 7.0, including spare |

#### WHEELS:

|      |                            |
|------|----------------------------|
| Type | Steel castings, six-spokes |
|------|----------------------------|

#### E-7 STEERING GEAR:

|                          |                    |
|--------------------------|--------------------|
| Model                    | SG 30              |
| Type                     | Twin lever and cam |
| Steering wheel, diameter | 20"                |

#### F-1 CAB:

|               |                                       |
|---------------|---------------------------------------|
| Model         | CA 12                                 |
| Type          | Deluxe, all-steel welded construction |
| Overall width | 60" at belt rail                      |

#### INSTRUMENT PANEL

|         |  |
|---------|--|
| GAUGES: | Speedometer, fuel gauge, ammeter, oil pressure gauge, temperature gauges in cluster. |
|---------|--|

CHASSIS EQUIPMENT: Painting in synthetic enamel (Mack green, red, yellow or blue) one piece steel fenders with skirting; running boards and aprons; channel type front bumper; sealed-beam headlights; combination stop and tail light; electric horn; defroster nozzles; tool kit; rear view mirror, left side.



## MODEL A-40H

### OPTIONAL EQUIPMENT

#### Condensed Specifications

|                    |                   |
|--------------------|-------------------|
| <b>WHEELBASES:</b> | <b>Platforms:</b> |
| 176"               | 150"              |
| 194"               | 180"              |
| 212"               | 210"              |

**A-9 ELECTRICAL SYSTEM:**

|                      |                        |
|----------------------|------------------------|
| Voltage and capacity | 12V., 50 Amp.          |
| Generator, make      | Delco-Remy             |
| Starting motor, make | Delco-Remy             |
| Battery, make        | Exide or Auto-Lite (2) |

**TACHOMETER:**

|      |                         |
|------|-------------------------|
| Type | Single- or Maximum-Hand |
|------|-------------------------|

**B-3 TRANSMISSION:**

|                       |                          |
|-----------------------|--------------------------|
| Model                 | TR 6610                  |
| Type                  | Selective, constant mesh |
| No. of speeds forward | Five                     |
| reverse               | One                      |

**RATIOS**

|       |         |
|-------|---------|
| Shift | TR 6610 |
| 5th   | 0.79    |
| 4th   | 1.00    |
| 3rd   | 1.31    |
| 2nd   | 3.60    |
| 1st   | 6.65    |
| Rev.  | 6.71    |

|                       |                                    |
|-----------------------|------------------------------------|
| <b>B-9 Models</b>     | TRD 663, 663A<br>TRD 6630 or 6630A |
| Type                  | Selective, constant mesh           |
| No. of speeds forward | Ten                                |
| reverse               | Two                                |

**RATIOS**

|       |                       |              |                         |              |
|-------|-----------------------|--------------|-------------------------|--------------|
| Shift | TRD 663 &<br>TRD 663A |              | TRD 6630 &<br>TRD 6630A |              |
|       | High<br>Range         | Low<br>Range | High<br>Range           | Low<br>Range |
| 5th   | 1.00                  | 1.28         | 0.79                    | 1.09         |
| 4th   | 1.62                  | 2.07         | 1.00                    | 1.38         |
| 3rd   | 2.66                  | 3.39         | 1.31                    | 2.64         |
| 2nd   | 4.36                  | 5.57         | 3.60                    | 4.98         |
| 1st   | 8.05                  | 10.29        | 6.65                    | 9.21         |
| Rev.  | 8.13                  | 10.38        | 6.71                    | 9.30         |

**D-13 REAR AXLE:**

|                       |   |
|-----------------------|---|
| Model                 | RAD 500                                       |
| Final Drive           | Dual Reduction                                |
| Housing, material     | Pressed steel, Iamjo type                     |
| Axle shafts, material | Chromium-<br>molybdenum steel<br>heat-treated |
| Ratios                | 6.26, 7.25 to 1                               |

**BRAKES:**

|                             |                                 |
|-----------------------------|---------------------------------|
| Type                        | Internal expanding,<br>enclosed |
| Actuation                   | Air                             |
| <b>E-3</b> Front, size      | 16 1/2" x 3" x 1/2"             |
| <b>D-13</b> Rear, size      | 16 1/2" x 6" x 3/4"             |
| <b>E-14</b> Hand, size      | 10" x 3" x 1/4"                 |
| Total Braking area, sq. in. | 703                             |

**E-1 FRAME:**

|                                   |  |
|-----------------------------------|--|
| Reinforcement                     | 3/4" fishplate   |
| No. of cross-members and<br>types | Three box girder, two<br>channel (176", 194"<br>WB)<br>Four box girder, one<br>channel (212" WB)<br>(one additional<br>channel for 158" WB<br>when 10-speed<br>transmission is<br>installed) |

**SHOCK ABSORBERS—  
FRONT:**

|      |                      |
|------|----------------------|
| Type | Houdaille, hydraulic |
|------|----------------------|

**TIRES:**

|      |                      |
|------|----------------------|
| Size | 10.00-22 (12P)       |
| Rims | 7.5, including spare |

**WHEELS:**

|      |                               |
|------|-------------------------------|
| Type | Budd Disc, including<br>spare |
|------|-------------------------------|

**COWL ONLY:**

Flat Face or standard  
with instrument and  
including toeboard,  
floor board, floor mat,  
engine hood, fenders,  
running boards,  
running board aprons  
and temporary  
driver's seat

**AUXILIARY FUEL  
TANKS:**

|          |                                 |
|----------|---------------------------------|
| Type     | Mack Safety                     |
| Capacity | 40 gallons                      |
| Location | Right side, or one each<br>side |

**CHASSIS EQUIPMENT:** Underframe type size carrier,  
12,000 B.T.U. hot water heater with defroster, automatic  
radiator shutters, 2-cyl., 7 1/2 cu. ft. compressor with low pres-  
sure buzzer type indicator, front wheel brake floating valve,  
separator for air system, air lines, indicator guard, plate type



## MODEL A-40H

## ROAD SPEED AND GRADE ABILITY

With IN 577 Engine  
10.00-20 Tires (Max.)Net Horsepower 127 @ 2800 r.p.m.  
Gross Vehicle Weight 24,000 lbs.

| Trans. Speed  | Total Ratio | Rear Axle<br>RAS 400 Single-reduction |            |            | Rear Axle<br>RAD 500 Dual Reduction |            |       | Total Ratio | Miles Per Hour | Percent Grade Ability | Total Ratio | Miles Per Hour | Percent Grade Ability | Total Ratio | Miles Per Hour | Percent Grade Ability |
|---|-------------|---------------------------------------|------------|------------|-------------------------------------|------------|-------|-------------|----------------|-----------------------|-------------|----------------|-----------------------|-------------|----------------|-----------------------|
|   |             | 5.63 Ratio                            | 6.14 Ratio | 6.86 Ratio | 6.26 Ratio                          | 7.23 Ratio |       |             |                |                       |             |                |                       |             |                |                       |
| <b>TR 661 5-Speed Direct Transmission (Direct in 5th)</b> |             |                                       |            |            |                                     |            |       |             |                |                       |             |                |                       |             |                |                       |
| Fifth   | 5.63        | 37.8                                  | .6         | 6.14       | 53.0                                | 4.3        | 6.86  | 47.4        | 4.2            | 6.26                  | 52.0        | 4.3            | 7.23                  | 45.0        | 2.5            |                       |
| Fourth  | 7.37        | 44.4                                  | 2.3        | 7.98       | 40.8                                | 2.7        | 8.92  | 36.5        | 3.3            | 8.14                  | 40.0        | 2.8            | 8.40                  | 34.6        | 3.6            |                       |
| Third   | 13.01       | 25.0                                  | 5.9        | 14.18      | 22.9                                | 6.6        | 15.84 | 20.5        | 7.4            | 14.46                 | 22.5        | 6.6            | 16.70                 | 19.5        | 8.0            |                       |
| Second  | 24.55       | 13.2                                  | 12.4       | 26.77      | 12.1                                | 13.5       | 29.91 | 10.9        | 15.1           | 27.29                 | 11.9        | 14.8           | 31.52                 | 10.3        | 16.1           |                       |
| First   | 45.32       | 7.2                                   | 23.6       | 49.43      | 6.6                                 | 25.8       | 55.22 | 5.9         | 29.6           | 50.39                 | 6.5         | 28.2           | 58.20                 | 5.6         | ▲30.6          |                       |
| Reverse   | 45.77       | 7.1                                   | 23.9       | 49.92      | 6.5                                 | 26.2       | 55.77 | 5.8         | 29.6           | 50.89                 | 6.4         | 28.7           | 58.78                 | 5.5         | ▲31.2          |                       |

TRD 663 10-Speed Direct Duplex Mono-Shift Transmission (Direct in 10th) and  
TRD 663A 10-Speed Direct Two-lever Duplex Transmission (Direct in 10th)

| 5th | High<br>Low | 5.63 Ratio     |                       |             | 6.14 Ratio     |                       |             | 6.86 Ratio     |                       |             | 6.26 Ratio     |                       |             | 7.23 Ratio     |                       |             |
|-----|-------------|----------------|-----------------------|-------------|----------------|-----------------------|-------------|----------------|-----------------------|-------------|----------------|-----------------------|-------------|----------------|-----------------------|-------------|
|     |             | Miles Per Hour | Percent Grade Ability | Total Ratio | Miles Per Hour | Percent Grade Ability | Total Ratio | Miles Per Hour | Percent Grade Ability | Total Ratio | Miles Per Hour | Percent Grade Ability | Total Ratio | Miles Per Hour | Percent Grade Ability | Total Ratio |
| 4th | High        | 9.17           | 35.7                  | 3.4         | 9.95           | 32.7                  | 4.0         | 11.11          | 29.3                  | 4.8         | 10.14          | 32.1                  | 4.2         | 11.71          | 27.8                  | 5.1         |
|     | Low         | 11.65          | 27.9                  | 5.1         | 12.71          | 25.6                  | 5.0         | 14.20          | 23.9                  | 6.6         | 12.96          | 25.1                  | 5.9         | 14.97          | 21.8                  | 7.0         |
| 3rd | High        | 14.98          | 21.7                  | 7.0         | 16.33          | 19.9                  | 7.8         | 18.25          | 17.8                  | 8.9         | 16.55          | 19.6                  | 8.0         | 19.23          | 16.9                  | 9.4         |
|     | Low         | 19.09          | 17.0                  | 9.4         | 20.81          | 15.6                  | 10.4        | 23.26          | 14.0                  | 11.6        | 21.22          | 15.3                  | 10.5        | 24.57          | 13.3                  | 12.2        |
| 2nd | High        | 24.55          | 13.2                  | 12.4        | 26.77          | 12.1                  | 13.5        | 29.91          | 10.9                  | 15.1        | 27.29          | 11.9                  | 14.8        | 31.52          | 10.3                  | 16.1        |
|     | Low         | 31.36          | 10.4                  | 16.0        | 34.20          | 9.5                   | 17.7        | 38.21          | 8.5                   | 19.0        | 34.87          | 9.3                   | 18.1        | 40.27          | 8.1                   | 20.9        |
| 1st | High        | 45.32          | 7.2                   | 23.6        | 49.43          | 6.6                   | 25.8        | 55.22          | 5.9                   | 29.6        | 50.39          | 6.5                   | 26.2        | 58.20          | 5.6                   | ▲30.6       |
|     | Low         | 37.93          | 5.6                   | ▲36.6       | 63.18          | 5.1                   | ▲35.7       | 70.69          | 4.6                   | ▲37.5       | 64.42          | 5.1                   | ▲33.7       | 74.40          | 4.1                   | ▲39.1       |
| Rev | High        | 45.77          | 7.1                   | 23.9        | 49.92          | 6.5                   | 26.2        | 55.77          | 5.8                   | 29.6        | 50.89          | 6.4                   | 26.7        | 58.78          | 5.5                   | ▲31.2       |
|     | Low         | 38.44          | 5.6                   | ▲36.5       | 63.75          | 5.1                   | ▲33.7       | 71.21          | 4.6                   | ▲37.5       | 64.98          | 5.0                   | ▲34.3       | 75.05          | 4.3                   | ▲40.2       |

## Transmissions

TR 6610 5-Speed Overgear (Direct in 4th)

TRD 6630 10-Speed Overgear Duplex Mono-Shift (Direct in 8th)

TRD 6630A 10-Speed Overgear Two-lever Duplex (Direct in 8th)

| 5th | High<br>Low | *61.0 @ 2540 r.p.m. |                       |             | *63.5 @ 2650 r.p.m. |                       |             | *64.0 @ 2725 r.p.m. |                       |             | *65.5 @ 2800 r.p.m. |                       |             | Total Ratio | Miles Per Hour | Percent Grade Ability |
|-----|-------------|---------------------|-----------------------|-------------|---------------------|-----------------------|-------------|---------------------|-----------------------|-------------|---------------------|-----------------------|-------------|-------------|----------------|-----------------------|
|     |             | Miles Per Hour      | Percent Grade Ability | Total Ratio | Miles Per Hour      | Percent Grade Ability | Total Ratio | Miles Per Hour      | Percent Grade Ability | Total Ratio | Miles Per Hour      | Percent Grade Ability | Total Ratio |             |                |                       |
| 4th | High        | 5.63                | 37.8                  | .7          | 6.14                | 53.0                  | 1.1         | 6.86                | 47.4                  | 1.9         | 6.26                | 52.0                  | 1.1         | 7.23        | 45.0           | 2.1                   |
|     | Low         | 7.37                | 41.9                  | 2.5         | 8.47                | 38.4                  | 3.7         | 9.47                | 34.5                  | 3.8         | 8.64                | 37.7                  | 3.1         | 9.96        | 32.6           | 4.0                   |
| 3rd | High        | 10.78               | 30.3                  | 4.8         | 11.71               | 27.7                  | 5.0         | 13.10               | 24.8                  | 5.9         | 11.96               | 27.2                  | 5.1         | 13.81       | 23.6           | 6.2                   |
|     | Low         | 14.98               | 21.9                  | 7.0         | 16.21               | 20.1                  | 7.7         | 18.11               | 18.0                  | 8.8         | 16.51               | 19.7                  | 7.9         | 19.09       | 17.1           | 9.1                   |
| 2nd | High        | 20.77               | 16.0                  | 10.1        | 22.30               | 14.7                  | 10.9        | 24.70               | 13.2                  | 12.4        | 21.94               | 14.4                  | 11.1        | 26.05       | 12.3           | 13.1                  |
|     | Low         | 28.04               | 11.6                  | 14.1        | 30.58               | 10.6                  | 15.6        | 34.16               | 9.3                   | 17.7        | 31.17               | 10.4                  | 16.7        | 36.07       | 9.0            | 18.7                  |
| 1st | High        | 37.44               | 8.7                   | 19.4        | 40.93               | 8.0                   | 21.0        | 45.62               | 7.1                   | 23.9        | 41.53               | 7.8                   | 21.7        | 48.09       | 6.8            | 25.0                  |
|     | Low         | 31.85               | 6.3                   | 27.2        | 36.55               | 5.8                   | 29.3        | 43.18               | 5.1                   | ▲33.7       | 37.65               | 5.6                   | ▲30.6       | 46.59       | 4.9            | ▲35.1                 |
| Rev | High        | 37.75               | 8.6                   | 19.6        | 41.20               | 7.9                   | 21.3        | 46.05               | 7.1                   | 23.9        | 42.00               | 7.8                   | 21.7        | 48.31       | 6.7            | 25.3                  |
|     | Low         | 32.34               | 6.2                   | 27.5        | 37.10               | 5.7                   | 29.8        | 43.80               | 5.1                   | ▲33.7       | 38.22               | 5.6                   | ▲30.6       | 47.24       | 4.8            | ▲35.8                 |

\* With highway rating maximum load.

‡ With empty truck (See page 4).

These are the highest possible sustained speeds on level concrete in still air with the effect of air resistance considered.

Favoring winds and/or gently rolling terrain may permit somewhat higher speeds.

▲ Calculated grade ability. Actual maximum grade limited by traction.

‡ The five and ten speed transmissions are shown combined above. For five speed performance use the "high" figures only. For ten speed performance use all figures.





## MODEL A-51H



**D**EMANDS for greater profits, expressed by operators of many types of motor haulage have resulted in the development of the Mack Model A-51H diesel chassis. Built-in reliability, traditional with Mack is attained by a complete balance of all chassis components and the maintaining of high factors of safety in every unit of the assembly.

Powerful, reliable and efficient, the Mack diesel, of 510 cubic inch displacement gives far greater fuel mileage than gas engines of equal power and in addition, diesel fuel costs considerably less than gasoline. Great flexibility and responsiveness is provided by the exclusive Mack Synchronance, which permits variable and automatic injection timing synchronized to the engine speed.

Great structural strength and ability to resist abnormal strains is obtained by reinforcing the deep section pressed-steel frame with crossmembers, the majority of which are of the rigid, exclusive box-girder type. Added cushioning against road shock is through the Mack rubber Shock Insulators in which all springs are suspended.



# MODEL A-51H

## STANDARD EQUIPMENT (Cont'd.)

### Condensed Specifications

**INSTRUMENT PANEL GAUGES:** Speedometer, Fuel gauge, oil pressure gauge, ammeter and temperature gauges in cluster. Electrical switches, fuel oil pressure gauge, air gauge, normal engine stop control, emergency engine stop control, tachometer (single-hand), throttle control knob,

**CHASSIS EQUIPMENT:** Painting in synthetic enamel (Mack green, red, yellow or blue); one-piece steel fenders with skirting; running boards and aprons; channel type front bumper; sealed-beam headlights; combination stop and tail light; electric horn; defroster nozzles; tool kit; rear view mirror left side; I.C.C. and marker lights; radiator shutters, automatic.

## OPTIONAL EQUIPMENT

### Condensed Specifications

**WHEELBASES:** Platforms:

194"  
212"

180"  
210"

**TACHOMETER:**

Type \_\_\_\_\_ Maximum-hand

**TRANSMISSIONS:**

Model \_\_\_\_\_ TR 6610  
Type \_\_\_\_\_ Selective, constant mesh  
No. of speeds forward \_\_\_\_\_ Five  
reverse \_\_\_\_\_ One

**RATIOS**

| Shift | TR 6610 |
|-------|---------|
| 5th   | 0.79    |
| 4th   | 1.00    |
| 3rd   | 1.91    |
| 2nd   | 3.60    |
| 1st   | 6.65    |
| Rev.  | 6.71    |

Model \_\_\_\_\_ TRD 6630 &  
TRD 6630A

Type \_\_\_\_\_ Selective, constant mesh  
No. of speeds forward \_\_\_\_\_ Ten  
reverse \_\_\_\_\_ Two

**RATIOS**

| Shift | TRD 6630 &<br>TRD 6630A |           |
|-------|-------------------------|-----------|
|       | High Range              | Low Range |
| 5th   | 0.79                    | 1.00      |
| 4th   | 1.00                    | 1.38      |
| 3rd   | 1.91                    | 2.64      |
| 2nd   | 3.60                    | 4.98      |
| 1st   | 6.65                    | 9.21      |
| Rev.  | 6.71                    | 9.30      |

**AUXILIARY**

**TRANSMISSIONS:** (For use with TR 6610)

Models \_\_\_\_\_ B-1, 6231-A or D  
Type \_\_\_\_\_ 3-Speed

**RATIOS**

| Shift | 6231-A | 6231-D |
|-------|--------|--------|
| 1st   | 1.24   | 2.14   |
| 2nd   | 1.00   | 1.00   |
| 3rd   | 0.86   | 0.74   |

**REAR AXLE:**

Model \_\_\_\_\_ RAD 500 (Obligatory)  
Final drive \_\_\_\_\_ Dual Reduction  
Housing, material \_\_\_\_\_ Pressed Steel, banjo type  
Axle shaft, material \_\_\_\_\_ Chromium-molybdenum, heat-treated  
Final ratios \_\_\_\_\_ 5.74, 6.26, 7.23, 7.89, 8.68 to 1

**FRAME:**

Reinforcement \_\_\_\_\_ 1/8" fishplate  
No. of cross-members and types \_\_\_\_\_ Three box-girder, two channel with 194" WB. Four box-girder, one channel with 212" WB.

**TIRES:**

Size \_\_\_\_\_ 11.00-20 (12P)  
Rims \_\_\_\_\_ 8.0, including spate

**WHEELS:**

Type \_\_\_\_\_ Budd Disc, including spate

**AUXILIARY FUEL TANK:**

Type \_\_\_\_\_ Mack Safety  
Capacity \_\_\_\_\_ 40 gallons  
Location \_\_\_\_\_ Left side

**CHASSIS EQUIPMENT:** Underframe type tie carrier; 12,000 B.T.U. hot water heater and defroster; radiator guard; front wheel brake limiting valve; apparatus for air brake system; air horns; vertical exhaust.

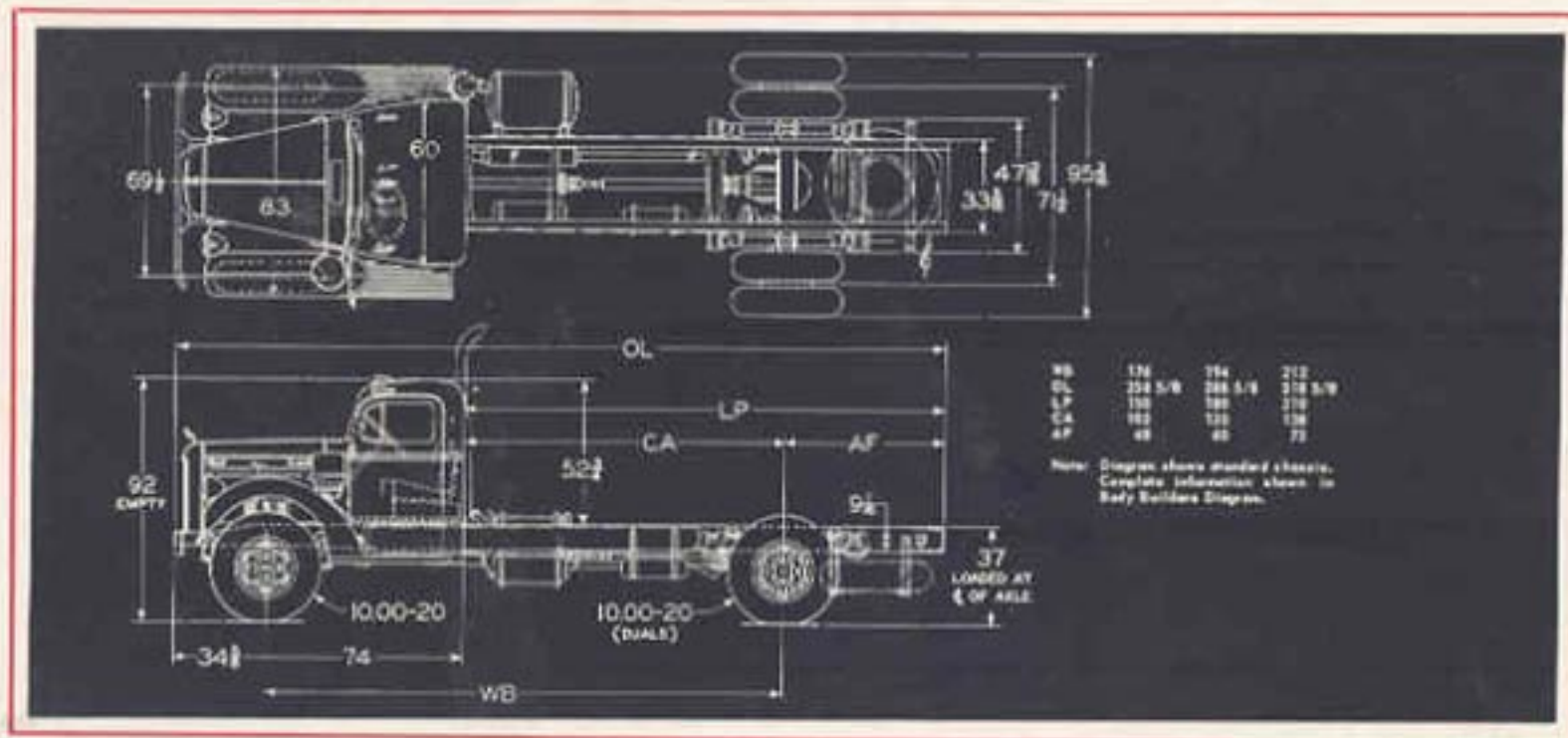
**AUTOLIT**



Automobile - Truck - Motorcycle 1900 to Present  
ORIGINAL Sales Brochures, Manuals, Books, Posters,  
Catalogs, and MUCH More. World's largest selection!

# MODEL A-51H

## CHASSIS DIAGRAM



**MACK MANUFACTURING CORPORATION**  
New York, N. Y.

There being no model or series models of MACK products, refinements and improvements are effected whenever sound development and thorough trial prove them to be advantageous. The right is therefore reserved to change specifications or prices without notice.

**AUTOLIT**



Automobile - Truck - Motorcycle 1900 to Present  
ORIGINAL Sales Brochures, Manuals, Books, Posters,  
Catalogs, and MUCH More. World's largest selection!



# Mack

## model A-51T Diesel Tractor



M 14700

**G**AIN in earning power without sacrifice in performance ability is attained by the Mack Model A-51 T diesel tractor. Developed primarily for long-haul, medium-heavy duty work, this tractor will haul capacity loads through a long useful life and will save money every mile it runs. The reason for this is that the mileage per gallon of diesel fuel is far greater than with gasoline. Besides which, diesel fuel costs less.

Dependable power is delivered by the highly developed four-stroke Mack diesel engine having a displacement of 510 cubic inches. Of the energy cell combustion chamber design, controlled combustion and lower peak pressures result in smooth sustained power at all speeds.

Maximum operating efficiency is attained through either a five- or ten-speed over-geared transmission. The latter provides ten useful speeds with but five movements of the gear shift lever. Safety is enhanced by bracing the deep-section frame with exclusive box-girder type cross-members and by the masterful air brakes of exceptionally large braking area.

**MACK MANUFACTURING CORP.**  
New York, N. Y.



**AUTOLIT**



Automobile - Truck - Motorcycle 1900 to Present  
ORIGINAL Sales Brochures, Manuals, Books, Posters,  
Catalogs, and MUCH More. World's largest selection!

# MODEL A-51T DIESEL SPECIFICATIONS

**WHEELBASES:** 146" or 164"

**ENGINE:** Mack Diesel, six-cylinder, overhead valves

Bore and stroke, 4-7/16" by 5 1/2"

Piston displacement, 510 cu. in.

Horsepower, 138 @ 2400 r.p.m.

Torque, 368 pound-feet @ 1400 r.p.m.

Cylinders, cast in block with dry liners;

Cylinder heads, two-piece, detachable

Valves, intake, 45-deg. face, 1-25/32" clear diameter

Exhaust, 45-deg. face, 1-13/32" clear diameter

Exhaust seat inserts, Permafit or Niferfite, Stellite

Pistons, aluminum alloy, transverse-slot type

Crankshaft, seven-bearing, Tocco case-hardened, with twelve counterbalance weights

Connecting rods, I-beam, drop-forged, 35-deg. cap angle

Fuel injection, multiple-unit pump, with Mack Synchronance timing and automatic torque control

Air cleaner, pot type, oil bath type

Water pump, centrifugal at front of engine

Thermostat, warm circulation by-pass type

Fan, 21", pressed steel, asymmetrical, two V-belts

Radiator, continuous-finned, flat tube, Mack Anti-spill type with pressure cap

Fuel capacity, 40 gallons

**CLUTCH:** Single-plate, dry

Area of engagement 220 sq. in.

**TRANSMISSION:** Five-speed or ten-speed Mono-shift; 2-lever duplex, selective, constant mesh

## RATIOS

| Shift | Five-Speed<br>Overgear | Duplex<br>or<br>Mono-Shift<br>Downgear |              |
|-------|------------------------|--|--------------|
|       |                        | High<br>Range                          | Low<br>Range |
| 5th   | 0.79                   | 0.79                                   | 1.09         |
| 4th   | 1.00                   | 1.00                                   | 1.38         |
| 3rd   | 1.91                   | 1.91                                   | 2.64         |
| 2nd   | 3.60                   | 3.60                                   | 4.98         |
| 1st   | 6.65                   | 6.65                                   | 9.21         |
| Rev.  | 6.71                   | 6.71                                   | 9.30         |

**TIRES:** 11:00-20, dual rear, maximum

**WHEELS:** Open spider type, six cast spokes

**UNIVERSAL JOINTS:** Two or three, Spicer, needle-bearing type, according to wheelbase

**REAR AXLE:** Dual-reduction

Housing, pressed steel, heat-treated, banjo type

Final ratios, 6.26 or 7.23 to 1

Axle shafts, graduated heat-treated; involute free splines both ends

**BRAKES:** Air

Front, size, 16 1/4" by 3" by 1/2"

Rear, size, 16 1/2" by 6" by 3/4"

Area, four wheels, 618 sq. in.

Hand, 10" x 3" x 1/4", contracting, rear of transmission

Total braking area, 703 sq. in.

**FRAME:** Pressed carbon steel

Side-members, size, 9" x 3 1/4" x 1/4"

Cross-members, three box girder (plus one channel with TRD663 or 6630 trans.)

**STEERING GEAR:** Twin cam and lever, 23.4-19.5-23.4 to 1 ratio

**SPRINGS:** Front, 42 1/2" x 2 1/2"

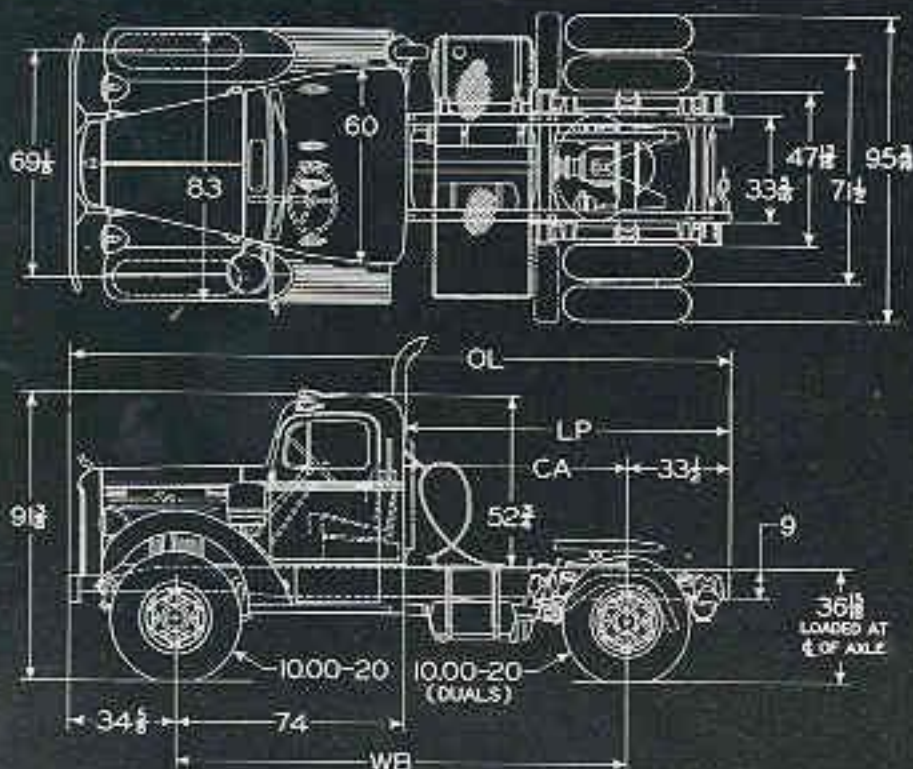
Rear, 52-11/16" x 3 1/2"

Helper, 38" x 3 1/2"

Suspension, Mack rubber Shock Insulators

**STANDARD EQUIPMENT:** Deluxe cab; marker and L.C.C. lights; seat-view mirror; painting in synthetic enamel; electric starting and lighting; sealed-beam headlights; combination stop and tail light; electric horn; speedometer; spare rim; front bumper; tool kit; front shock absorbers; defroster nozzles; tachometer; radiator shutters, automatic; brakes and electrical connections.

**OPTIONAL EXTRAS:** Mono-shift transmission; auxiliary fuel tanks; disk wheels; tire carrier; radiator guard; heater; air horn; front wheel brake limiting valve; air separator; hand control valve; trailer light voltage control; vacuum adapter for trailer brake.



|    |         |         |
|----|---------|---------|
| WB | 146     | 164     |
| OL | 214 1/2 | 232 1/2 |
| LP | 100 1/2 | 100     |
| CA | 72      | 66 1/2  |

\* Given for sleeper cab which is 24" longer than standard cab.

Note: Diagram shows standard chassis. Complete information shown in Body Builders Diagram.

