

ENGINE POWERED FORKLIFT

8FG/8FD 1.0 to 3.5 ton

TOYOTA  
**8**  
SERIES



 **TOYOTA**



# 2,500 Kg

## MAIN VEHICLE SPECIFICATIONS

| Characteristics        | 1                              | Manufacturer                                                              |                         |                           |                   | TOYOTA               |                   | TOYOTA                              |                   | TOYOTA               |              |           |
|------------------------|--------------------------------|---------------------------------------------------------------------------|-------------------------|---------------------------|-------------------|----------------------|-------------------|-------------------------------------|-------------------|----------------------|--------------|-----------|
|                        | 2                              | Model                                                                     |                         |                           |                   | 30-8FG25             | 32-8FG25          | 60-8FD25                            | 62-8FD25          | 70-8FD25             | 72-8FD25     |           |
|                        | 3                              | Load Capacity                                                             |                         |                           | kg                | 2500                 |                   | 2500                                |                   | 2500                 |              |           |
|                        | 4                              | Load Center                                                               |                         |                           | mm                | 500                  |                   | 500                                 |                   | 500                  |              |           |
|                        | 5                              | Power Type                                                                |                         |                           |                   | Gasoline             |                   | Diesel                              |                   | Diesel               |              |           |
|                        | 6                              | Operator Position                                                         |                         |                           |                   | Rider Seated         |                   | Rider Seated                        |                   | Rider Seated         |              |           |
|                        | 7                              | Tire Type                                                                 |                         | Front/Rear                |                   | Pneumatic            |                   | Pneumatic                           |                   | Pneumatic            |              |           |
|                        | 8                              | Wheels (x = driven)                                                       |                         | Front/Rear                |                   | 2x/2                 |                   | 2x/2                                |                   | 2x/2                 |              |           |
| Dimensions             | 9                              | Maximum Fork Height (MFH)                                                 |                         |                           | mm                | 3000                 |                   | 3000                                |                   | 3000                 |              |           |
|                        | 10                             | Free Lift                                                                 |                         |                           | mm                | 155                  |                   | 155                                 |                   | 155                  |              |           |
|                        | 13                             | Fork Size                                                                 |                         | T x W x L                 | mm                | 42x120x1070          |                   | 42x120x1070                         |                   | 42x120x1070          |              |           |
|                        |                                | Fork Spread (Outside)                                                     |                         | MAX./MIN.                 | mm                | 1020/240             |                   | 1020/240                            |                   | 1020/240             |              |           |
|                        | 14                             | Tilt Range                                                                |                         | FWD/BWD                   | deg               | 6/11                 |                   | 6/11                                |                   | 6/11                 |              |           |
|                        | 15                             | Length to Fork Face                                                       |                         |                           | mm                | 2635                 |                   | 2635                                |                   | 2635                 |              |           |
|                        | 16                             | Overall Width                                                             |                         |                           | mm                | 1150                 |                   | 1150                                |                   | 1150                 |              |           |
|                        | 17                             | Mast Lowered Height                                                       |                         |                           | mm                | 1995                 |                   | 1995                                |                   | 1995                 |              |           |
|                        | 18                             | Mast Extended Height                                                      |                         |                           | mm                | 4220                 |                   | 4220                                |                   | 4220                 |              |           |
|                        | 19                             | Overhead Guard Height                                                     |                         |                           | mm                | 2110                 |                   | 2110                                |                   | 2110                 |              |           |
|                        | 21                             | Turning Radius (Outside)                                                  |                         |                           | mm                | 2280                 |                   | 2280                                |                   | 2280                 |              |           |
|                        | 22                             | Load Distance<br>(Centerline of front axle to front face of forks)        |                         |                           | mm                | 465                  |                   | 465                                 |                   | 465                  |              |           |
|                        |                                | Rear Overhang                                                             |                         |                           | mm                | 520                  |                   | 520                                 |                   | 520                  |              |           |
|                        | 23                             | Basic Right Angle Stacking Aisle Width<br>(Add load length and clearance) |                         |                           | mm                | 2745                 |                   | 2745                                |                   | 2745                 |              |           |
|                        | Performance                    | 24                                                                        | Speeds                  | Travel, Max.<br>(FWD/RVS) | Full Load         | km/h                 | 18.0/18.0         | 17.5/17.5                           | 19.5/19.5         | 19.0/19.0            | 19.0/19.0    | 19.0/19.0 |
| No Load                |                                | km/h                                                                      |                         |                           | 18.5/18.5         | 18.0/18.0            | 20.0/20.0         | 19.5/19.5                           | 19.5/19.5         | 19.5/19.5            |              |           |
| Lifting                |                                | Full Load                                                                 |                         | mm/sec                    | 600               | 600                  | 615               | 615                                 | 650               | 650                  |              |           |
|                        |                                | No Load                                                                   |                         | mm/sec                    | 640               | 640                  | 655               | 655                                 | 675               | 675                  |              |           |
| Lowering               |                                | Full Load                                                                 |                         | mm/sec                    | 500               | 500                  | 500               | 500                                 | 500               | 500                  |              |           |
|                        |                                | No Load                                                                   |                         | mm/sec                    | 500               | 500                  | 500               | 500                                 | 500               | 500                  |              |           |
| 28                     |                                | Max. Drawbar Pull                                                         |                         | Full Load                 | N (kg)            | 16500 (1680)         | 18500 (1890)      | 17500 (1780)                        | 19000 (1940)      | 19500 (1990)         | 20000 (2040) |           |
|                        | Max. Drawbar Pull at 1.5km/h * |                                                                           | No Load                 | N (kg)                    | 8600 (880)        | 8500 (870)           | 8700 (890)        | 8700 (890)                          | 8800 (900)        | 8800 (900)           |              |           |
| 29                     | Gradeability at 1.5 km/h *     |                                                                           | Full Load               | % (tanθ)                  | —                 | 30                   | —                 | 31                                  | —                 | 29                   |              |           |
| 30                     | Max. Gradeability *            |                                                                           | Full Load               | % (tanθ)                  | 28                | 34                   | 28                | 34                                  | 33                | 32                   |              |           |
|                        |                                |                                                                           | No Load                 | % (tanθ)                  | 19                | 19                   | 19                | 19                                  | 19                | 19                   |              |           |
| Weight                 | 32                             | Total Weight                                                              |                         |                           | kg                | 3560                 |                   | 3600                                |                   | 3650                 |              |           |
|                        | 33                             | Weight<br>Distribution                                                    | Full Load               | Front                     | kg                | 5280                 |                   | 5300                                |                   | 5320                 |              |           |
|                        | Rear                           |                                                                           |                         | kg                        | 780               |                      | 800               |                                     | 830               |                      |              |           |
|                        | 34                             |                                                                           | No Load                 | Front                     | kg                | 1300                 |                   | 1320                                |                   | 1340                 |              |           |
|                        | Rear                           | kg                                                                        |                         | 2260                      |                   | 2280                 |                   | 2310                                |                   |                      |              |           |
| Wheels and Tires       | 35                             | Tires                                                                     | Number                  | Front/Rear                |                   | 2/2                  |                   | 2/2                                 |                   | 2/2                  |              |           |
|                        | Size                           |                                                                           | Front                   |                           | 7.00-12-12PR (I)  |                      | 7.00-12-12PR (I)  |                                     | 7.00-12-12PR (I)  |                      |              |           |
|                        |                                |                                                                           | Rear                    |                           | 6.00-9-10PR (I)   |                      | 6.00-9-10PR (I)   |                                     | 6.00-9-10PR (I)   |                      |              |           |
|                        | 38                             | Wheelbase                                                                 |                         |                           | mm                | 1650                 |                   | 1650                                |                   | 1650                 |              |           |
|                        | 39                             | Tread                                                                     |                         | Front                     | mm                | 960                  |                   | 960                                 |                   | 960                  |              |           |
|                        |                                |                                                                           |                         | Rear                      | mm                | 965                  |                   | 965                                 |                   | 965                  |              |           |
|                        |                                | Backrest Height                                                           |                         |                           | mm                | 1220                 |                   | 1220                                |                   | 1220                 |              |           |
|                        |                                | Overhead Guard Clearance                                                  |                         |                           | mm                | 1055                 |                   | 1055                                |                   | 1055                 |              |           |
|                        |                                | Counterweight Height                                                      |                         |                           | mm                | 1090                 |                   | 1090                                |                   | 1090                 |              |           |
|                        |                                | Drawbar Pin Center Height                                                 |                         |                           | mm                | 310                  |                   | 310                                 |                   | 310                  |              |           |
|                        |                                | Step Height/Floor Height                                                  |                         |                           | mm                | 435/675              |                   | 435/675                             |                   | 435/675              |              |           |
|                        | 40                             | Underclearance                                                            | Min. <Mast>             | mm                        | 95                |                      | 95                |                                     | 95                |                      | 95           |           |
|                        | 41                             | Center of Wheelbase                                                       |                         | mm                        | 140               |                      | 140               |                                     | 140               |                      | 140          |           |
|                        |                                | Grade Clearance                                                           | Frame/Counterweight     | % (tanθ)                  | 51/41             |                      | 51/41             |                                     | 51/41             |                      | 51/41        |           |
|                        | 42                             | Brake                                                                     | Service (Foot)          |                           |                   |                      | Hydraulic         |                                     | Hydraulic         |                      | Hydraulic    |           |
| 43                     | Parking                        |                                                                           |                         |                           | Hand              | Foot                 | Hand              | Foot                                | Hand              | Foot                 |              |           |
| Drive Unit and Control | 45                             | Battery                                                                   | Voltage/Capacity (5HR)  |                           | V/AH              | 12/27                |                   | 12/55                               |                   | 12/64                |              |           |
|                        | 49                             | Internal<br>Combustion<br>Engine                                          | Make/Model              |                           |                   | TOYOTA/4Y            |                   | TOYOTA/1DZ-II [1DZ-III] **          |                   | TOYOTA/2Z ***        |              |           |
|                        | 50                             |                                                                           | Rated Horsepower/r.p.m. |                           | kW (JIS ps)       | 40/2400 (54/2400)    |                   | 44 (60) /2600 [41 (55) /2500]       |                   | 49/2200 (66/2200)    |              |           |
|                        | 51                             |                                                                           | Rated Torque/r.p.m.     |                           | N-m (JIS kg-m)    | 162/1800 (16.5/1800) |                   | 167 (17.0) /1600 [157 (16.0) /2500] |                   | 216/1600 (22.0/1600) |              |           |
|                        | 52                             |                                                                           | Number of Cylinder      |                           |                   | 4                    |                   | 4                                   |                   | 4                    |              |           |
|                        |                                |                                                                           | Piston Displacement     |                           | cc                | 2237                 |                   | 2486                                |                   | 3469                 |              |           |
|                        |                                |                                                                           | Fuel Tank Capacity      |                           | liter             | 60                   |                   | 60                                  |                   | 60                   |              |           |
|                        | 55                             | Transmission                                                              |                         | Type                      |                   | Manual               | Powershift        | Manual                              | Powershift        | Manual               | Powershift   |           |
|                        |                                |                                                                           | Stage                   | FWD/RVS                   | 2/2               | 1/1                  | 2/2               | 1/1                                 | 2/2               | 1/1                  |              |           |
| 57                     | Operating Pressure             | For Attachments                                                           |                         | Mpa (kg/cm²) <psi>        | 14.7 (150) <2100> |                      | 14.7 (150) <2100> |                                     | 14.7 (150) <2100> |                      |              |           |

NOTE: \* Computed values.

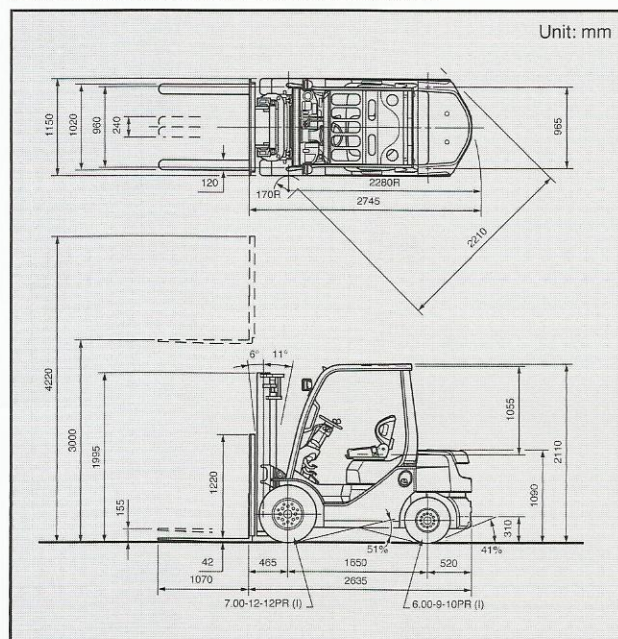
\*\* 1 DZ-II: Non-road Mobile Machinery (97/68/EC; Stage II) EPA Non-road Diesel Emissions (40 CFR Part 89; Interim Tier 2).

1 DZ-III: Non-road Mobile Machinery (97/68/EC; Stage IIIA) EPA Non-road Diesel Emissions (40 CFR Part 1039; Interim Tier 4).

\*\*\* 2 Z: Non-road Mobile Machinery (97/68/EC; Stage II).



## DIMENSIONAL DRAWINGS



## SPECIAL TREAD

| Front Tire      | Single/Dual | Single           | Dual            | Dual             |
|-----------------|-------------|------------------|-----------------|------------------|
| Front Tire Size |             | 7.00-12-12PR (I) | 5.50-15-8PR (I) | 7.00-12-12PR (I) |
| Overall Width   | mm          | 1150             | 1450            | 1610             |
| Tread, Front    | mm          | 960              | 1105            | 1190             |

## UNDERCLEARANCE mm

|                                 |     |
|---------------------------------|-----|
| Mast (Full Load)                | 95  |
| Drive Axle (Full Load)          | 130 |
| Steer Axle (No Load)            | 160 |
| Center of Wheelbase (Full Load) | 140 |
| Counterweight (No Load)         | 150 |

## RATED CAPACITIES

## V, FV Mast (PN)

| A (mm) | 4000 | 4500           | 5000           |
|--------|------|----------------|----------------|
| 500    | 2500 | 2150<br>[2450] | 1700<br>[2400] |
| 600    | 2260 | 1940<br>[2210] | 1540<br>[2170] |
| 700    | 2070 | 1780<br>[2020] | 1400<br>[1980] |
| 800    | 1900 | 1640<br>[1860] | 1290<br>[1830] |
| 900    | 1760 | 1510<br>[1730] | 1200<br>[1690] |
| 1000   | 1640 | 1410<br>[1610] | 1110<br>[1580] |
| 1100   | 1540 | 1320<br>[1510] | 1040<br>[1470] |
| 1200   | 1440 | 1240<br>[1410] | 980<br>[1390]  |
| 1300   | 1360 | 1170<br>[1330] | 920<br>[1310]  |

[ ] for dual tire models.

## FSV Mast (PN)

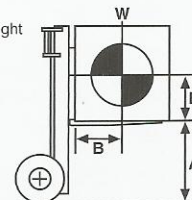
| A (mm) | 4000 | 4300           | 4500           | 4700           | 5000           | 5500           | 6000          | 6500        | 7000        |
|--------|------|----------------|----------------|----------------|----------------|----------------|---------------|-------------|-------------|
| 500    | 2500 | 2300<br>[2500] | 2000<br>[2450] | 2000<br>[2450] | 1500<br>[2400] | 1250<br>[2050] | 900<br>[1700] | —<br>[1550] | —<br>[1200] |
| 600    | 2260 | 2080<br>[2260] | 1810<br>[2220] | 1810<br>[2220] | 1360<br>[2170] | 1130<br>[1860] | 810<br>[1540] | —<br>[1400] | —<br>[1080] |
| 700    | 2070 | 1910<br>[2070] | 1660<br>[2030] | 1660<br>[2030] | 1240<br>[1990] | 1030<br>[1700] | 740<br>[1410] | —<br>[1180] | —<br>[910]  |
| 800    | 1910 | 1760<br>[1910] | 1530<br>[1870] | 1530<br>[1870] | 1140<br>[1830] | 950<br>[1560]  | 680<br>[1300] | —<br>[1180] | —<br>[910]  |
| 900    | 1760 | 1630<br>[1770] | 1420<br>[1730] | 1420<br>[1730] | 1060<br>[1700] | 880<br>[1450]  | 630<br>[1200] | —<br>[1100] | —<br>[850]  |
| 1000   | 1650 | 1520<br>[1650] | 1320<br>[1620] | 1320<br>[1620] | 990<br>[1580]  | 820<br>[1350]  | 590<br>[1120] | —<br>[1020] | —<br>[790]  |
| 1100   | 1550 | 1420<br>[1550] | 1240<br>[1510] | 1240<br>[1510] | 930<br>[1480]  | 770<br>[1270]  | 550<br>[1050] | —<br>[960]  | —<br>[740]  |
| 1200   | 1450 | 1340<br>[1450] | 1160<br>[1420] | 1160<br>[1420] | 870<br>[1400]  | 720<br>[1190]  | 520<br>[990]  | —<br>[900]  | —<br>[700]  |
| 1300   | 1370 | 1260<br>[1370] | 1100<br>[1340] | 1100<br>[1340] | 820<br>[1320]  | 680<br>[1120]  | 490<br>[930]  | —<br>[850]  | —<br>[660]  |

[ ] for dual tire models.

## FSV Mast (PSC)

| A (mm) | 5000 | 5500 | 6000 |
|--------|------|------|------|
| 500    | 1650 | 1400 | 1050 |
| 600    | 1490 | 1270 | 950  |
| 700    | 1370 | 1160 | 870  |
| 800    | 1260 | 1070 | 800  |
| 900    | 1170 | 990  | 740  |
| 1000   | 1090 | 920  | 690  |
| 1100   | 1020 | 860  | 650  |
| 1200   | 960  | 810  | 610  |
| 1300   | 900  | 770  | 570  |

A: Max. Fork Height  
B: Load Center  
W: Capacity



## MAST SPECIFICATIONS &amp; RATED CAPACITIES

| Mast Type                                          | Maximum Fork Height | Overall Height |                       |                             | Free Lift             |                             | Single Tire |     |                            |                               | Dual Tire  |     |                                                 |
|----------------------------------------------------|---------------------|----------------|-----------------------|-----------------------------|-----------------------|-----------------------------|-------------|-----|----------------------------|-------------------------------|------------|-----|-------------------------------------------------|
|                                                    |                     | Lowered        | Extended              |                             | Without Load Backrest | With Standard Load Backrest | Tilt Range  |     | Load Capacity at 500 mm LC |                               | Tilt Range |     | Load Capacity at 500 mm LC                      |
|                                                    |                     |                | Without Load Backrest | With Standard Load Backrest |                       |                             |             |     | Pneumatic Tire             | Pneumatic-Shaped Cushion Tire |            |     |                                                 |
|                                                    |                     |                |                       |                             |                       |                             | FWD         | BWD |                            |                               | FWD        | BWD | PneumaticTire/<br>Pneumatic-Shaped Cushion Tire |
|                                                    | mm                  | mm             | mm                    | mm                          | mm                    | mm                          | deg         | deg | kg                         | kg                            | deg        | deg | kg                                              |
| Wide Visible Mast (V)                              | 2700                | 1845           | 3375*                 | 3920                        | 150                   | 150                         | 6           | 11  | 2500                       | 2500                          | 6          | 11  | 2500                                            |
|                                                    | 3000                | 1995           | 3675*                 | 4220                        | 150                   | 150                         | 6           | 11  | 2500                       | 2500                          | 6          | 11  | 2500                                            |
|                                                    | 3300                | 2145           | 3975*                 | 4520                        | 150                   | 150                         | 6           | 11  | 2500                       | 2500                          | 6          | 11  | 2500                                            |
|                                                    | 3500                | 2245           | 4175*                 | 4720                        | 150                   | 150                         | 6           | 11  | 2500                       | 2500                          | 6          | 11  | 2500                                            |
|                                                    | 3700                | 2405           | 4375*                 | 4920                        | 150                   | 150                         | 6           | 11  | 2500                       | 2500                          | 6          | 11  | 2500                                            |
|                                                    | 4000                | 2595           | 4675*                 | 5220                        | 150                   | 150                         | 6           | 9   | 2500                       | 2500                          | 6          | 11  | 2500                                            |
|                                                    | 4500                | 2845           | 5175*                 | 5720                        | 150                   | 150                         | 6           | 6   | 2150                       | 2300                          | 6          | 11  | 2450                                            |
|                                                    | 5000                | 3095           | 5675*                 | 6220                        | 150                   | 150                         | 6           | 6   | 1700                       | 1850                          | 6          | 6   | 2450                                            |
| Wide Visible Full-Free Lift Two-Stage Mast (FV)    | 3000                | 1995           | 3560                  | 4175                        | 1400                  | 785                         | 6           | 11  | 2500                       | 2500                          | 6          | 11  | 2500                                            |
|                                                    | 3300                | 2145           | 3860                  | 4435                        | 1550                  | 975                         | 6           | 11  | 2500                       | 2500                          | 6          | 11  | 2500                                            |
|                                                    | 3500                | 2245           | 4060                  | 4635                        | 1650                  | 1075                        | 6           | 11  | 2500                       | 2500                          | 6          | 11  | 2500                                            |
|                                                    | 3700                | 2405           | 4260                  | 4835                        | 1810                  | 1235                        | 6           | 11  | 2500                       | 2500                          | 6          | 11  | 2500                                            |
|                                                    | 4000                | 2595           | 4560                  | 5135                        | 2000                  | 1425                        | 6           | 9   | 2500                       | 2500                          | 6          | 11  | 2500                                            |
| Wide Visible Full-Free Lift Three-Stage Mast (FSV) | 3700                | 1795           | 4270                  | 4910                        | 1225                  | 585                         | 6           | 6   | 2500                       | 2500                          | 6          | 6   | 2500                                            |
|                                                    | 4000                | 1895           | 4570                  | 5210                        | 1325                  | 685                         | 6           | 6   | 2500                       | 2500                          | 6          | 6   | 2500                                            |
|                                                    | 4300                | 1995           | 4870                  | 5510                        | 1425                  | 785                         | 6           | 6   | 2300                       | 2300                          | 6          | 6   | 2500                                            |
|                                                    | 4500                | 2065           | 5070                  | 5710                        | 1495                  | 855                         | 6           | 6   | 2000                       | 2000                          | 6          | 6   | 2450                                            |
|                                                    | 4700                | 2145           | 5270                  | 5910                        | 1575                  | 935                         | 6           | 6   | 2000                       | 2000                          | 6          | 6   | 2450                                            |
|                                                    | 5000                | 2245           | 5570                  | 6210                        | 1675                  | 1035                        | 6           | 6   | 1500                       | 1650                          | 6          | 6   | 2400                                            |
|                                                    | 5500                | 2405           | 6070                  | 6710                        | 1835                  | 1195                        | 6           | 6   | 1250                       | 1400                          | 6          | 6   | 2050                                            |
|                                                    | 6000                | 2595           | 6570                  | 7210                        | 2025                  | 1385                        | 6           | 6   | 900                        | 1050                          | 6          | 6   | 1700                                            |
|                                                    | 6500                | 2845           | 7070                  | 7710                        | 2275                  | 1635                        | —           | —   | —                          | —                             | 6          | 6   | 1550                                            |
|                                                    | 7000                | 3095           | 7570                  | 8210                        | 2525                  | 1885                        | —           | —   | —                          | —                             | 6          | 6   | 1200                                            |

NOTE: Height of standard load backrest is 1220 mm.  
\* with A4 piping, minus 15 mm.



# 3,000 Kg

## MAIN VEHICLE SPECIFICATIONS

| Characteristics        | 1  |                                                                        |                                    | TOYOTA             |                      | TOYOTA                              |              | TOYOTA               |              |
|------------------------|----|------------------------------------------------------------------------|------------------------------------|--------------------|----------------------|-------------------------------------|--------------|----------------------|--------------|
|                        |    |                                                                        |                                    | 30-8FG30           | 32-8FG30             | 60-8FD30                            | 62-8FD30     | 70-8FD30             | 72-8FD30     |
| Dimensions             | 2  | Model                                                                  |                                    |                    |                      |                                     |              |                      |              |
|                        | 3  | Load Capacity                                                          | kg                                 | 3000               |                      | 3000                                |              | 3000                 |              |
|                        | 4  | Load Center                                                            | mm                                 | 500                |                      | 500                                 |              | 500                  |              |
|                        | 5  | Power Type                                                             |                                    | Gasoline           |                      | Diesel                              |              | Diesel               |              |
|                        | 6  | Operator Position                                                      |                                    | Rider Seated       |                      | Rider Seated                        |              | Rider Seated         |              |
|                        | 7  | Tire Type                                                              | Front/Rear                         | Pneumatic          |                      | Pneumatic                           |              | Pneumatic            |              |
|                        | 8  | Wheels (x = driven)                                                    | Front/Rear                         | 2x/2               |                      | 2x/2                                |              | 2x/2                 |              |
|                        | 9  | Maximum Fork Height (MFH)                                              | mm                                 | 3000               |                      | 3000                                |              | 3000                 |              |
| Dimensions             | 10 | Free Lift                                                              | mm                                 | 135                |                      | 135                                 |              | 135                  |              |
|                        | 13 | Fork Size                                                              | T x W x L mm                       | 45x120x1070        |                      | 45x120x1070                         |              | 45x120x1070          |              |
|                        |    | Fork Spread (Outside)                                                  | MAX./MIN. mm                       | 1070/240           |                      | 1070/240                            |              | 1070/240             |              |
|                        | 14 | Tilt Range                                                             | FWD/BWD deg                        | 6/11               |                      | 6/11                                |              | 6/11                 |              |
|                        | 15 | Length to Fork Face                                                    | mm                                 | 2795               |                      | 2795                                |              | 2795                 |              |
|                        | 16 | Overall Width                                                          | mm                                 | 1240               |                      | 1240                                |              | 1240                 |              |
|                        | 17 | Mast Lowered Height                                                    | mm                                 | 2015               |                      | 2015                                |              | 2015                 |              |
|                        | 18 | Mast Extended Height                                                   | mm                                 | 4220               |                      | 4220                                |              | 4220                 |              |
| Performance            | 19 | Overhead Guard Height                                                  | mm                                 | 2170               |                      | 2170                                |              | 2170                 |              |
|                        | 21 | Turning Radius (Outside)                                               | mm                                 | 2430               |                      | 2430                                |              | 2430                 |              |
|                        | 22 | Load Distance (Centerline of front axle to front face of forks)        | mm                                 | 500                |                      | 500                                 |              | 500                  |              |
|                        |    | Rear Overhang                                                          | mm                                 | 595                |                      | 595                                 |              | 595                  |              |
|                        | 23 | Basic Right Angle Stacking Aisle Width (Add load length and clearance) | mm                                 | 2930               |                      | 2930                                |              | 2930                 |              |
|                        | 24 | Speeds                                                                 | Travel, Max. (FWD/RVS)             | Full Load km/h     | 18.5/18.5            | 18.5/18.5                           | 19.5/19.5    | 17.5/17.5            | 19.5/19.5    |
|                        |    |                                                                        |                                    | No Load km/h       | 19.0/19.0            | 19.0/19.0                           | 20.0/20.0    | 18.0/18.0            | 20.0/20.0    |
|                        | 25 |                                                                        | Lifting                            | Full Load mm/sec   | 510                  | 510                                 | 500          | 500                  | 550          |
|                        |    |                                                                        |                                    | No Load mm/sec     | 550                  | 550                                 | 530          | 530                  | 570          |
| Weight                 | 26 | Lowering                                                               | Full Load mm/sec                   | 500                | 500                  | 500                                 | 500          | 500                  | 500          |
|                        |    |                                                                        | No Load mm/sec                     | 500                | 550                  | 500                                 | 500          | 500                  | 500          |
|                        | 28 |                                                                        | Max. Drawbar Pull                  | Full Load N (kg)   | 16800 (1710)         | 18000 (1840)                        | 16700 (1700) | 19600 (2000)         | 19700 (2010) |
|                        |    |                                                                        |                                    | No Load N (kg)     | 10300 (1050)         | 10300 (1050)                        | 10400 (1060) | 10400 (1060)         | 10600 (1080) |
|                        |    | Max. Drawbar Pull at 1.5km/h *                                         |                                    | Full Load N (kg)   | —                    | 15300 (1560)                        | —            | 17600 (1790)         | —            |
|                        | 29 | Gradeability at 1.5 km/h *                                             |                                    | Full Load % (tanθ) | —                    | 22                                  | —            | 25                   | —            |
|                        |    |                                                                        |                                    | No Load % (tanθ)   | 23                   | 25                                  | 23           | 28                   | 27           |
|                        | 30 | Max. Gradeability *                                                    |                                    | No Load % (tanθ)   | 20                   | 20                                  | 20           | 20                   | 20           |
| Wheels and Tires       | 32 | Total Weight                                                           | kg                                 | 4230               |                      | 4270                                |              | 4330                 |              |
|                        | 33 | Weight Distribution                                                    | Full Load                          | Front kg           | 6200                 | 6230                                |              | 6260                 |              |
|                        |    |                                                                        |                                    | Rear kg            | 1030                 | 1040                                |              | 1070                 |              |
|                        | 34 |                                                                        | No Load                            | Front kg           | 1460                 | 1500                                |              | 1520                 |              |
|                        |    |                                                                        |                                    | Rear kg            | 2770                 | 2770                                |              | 2810                 |              |
|                        | 35 | Tires                                                                  | Number                             | Front/Rear         | 2/2                  | 2/2                                 |              | 2/2                  |              |
|                        | 36 |                                                                        | Size                               | Front              | 28x9-15-12PR(I)      | 28x9-15-12PR(I)                     |              | 28x9-15-12PR(I)      |              |
|                        | 37 |                                                                        |                                    | Rear               | 6.5-10-10PR (I)      | 6.5-10-10PR (I)                     |              | 6.5-10-10PR (I)      |              |
| Drive Unit and Control | 38 | Wheelbase                                                              | mm                                 | 1700               |                      | 1700                                |              | 1700                 |              |
|                        | 39 | Tread                                                                  | Front mm                           | 1010               |                      | 1010                                |              | 1010                 |              |
|                        |    |                                                                        | Rear mm                            | 965                |                      | 965                                 |              | 965                  |              |
|                        |    | Backrest Height                                                        | mm                                 | 1220               |                      | 1220                                |              | 1220                 |              |
|                        |    | Overhead Guard Clearance                                               | mm                                 | 1055               |                      | 1055                                |              | 1055                 |              |
|                        |    | Counterweight Height                                                   | mm                                 | 1130               |                      | 1130                                |              | 1130                 |              |
|                        |    | Drawbar Pin Center Height                                              | mm                                 | 335                |                      | 335                                 |              | 335                  |              |
|                        |    | Step Height/Floor Height                                               | mm                                 | 495/730            |                      | 495/730                             |              | 495/730              |              |
| Drive Unit and Control | 40 | Underclearance (Full Load)                                             | Min. <Mast> mm                     | 115                |                      | 115                                 |              | 115                  |              |
|                        | 41 | Grade Clearance                                                        | Center of Wheelbase mm             | 185                |                      | 185                                 |              | 185                  |              |
|                        |    |                                                                        | Frame/Counterweight % (tanθ)       | 62/49              |                      | 62/49                               |              | 62/49                |              |
|                        | 42 | Brake                                                                  | Service (Foot)                     | Hydraulic          |                      | Hydraulic                           |              | Hydraulic            |              |
|                        | 43 |                                                                        | Parking                            | Hand Foot          | Hand Foot            | Hand Foot                           |              | Hand Foot            |              |
|                        | 45 | Battery                                                                | Voltage/Capacity (5HR)             | V/AH               | 12/27                | 12/55                               |              | 12/64                |              |
|                        | 49 | Internal Combustion Engine                                             | Make/Model                         |                    | TOYOTA/4Y            | TOYOTA/1DZ-II [1DZ-III] * *         |              | TOYOTA/2Z ***        |              |
|                        | 50 |                                                                        | Rated Horsepower/r.p.m.            | kW (JIS ps)        | 43/2600 (58/2600)    | 44 (60) /2600 [41(55) /2500]        |              | 49/2200 (66/2200)    |              |
|                        | 51 |                                                                        | Rated Torque/r.p.m.                | N-m (JIS kg-m)     | 162/1800 (16.5/1800) | 167 (17.0) /1600 [157 (16.0) /2500] |              | 216/1600 (22.0/1600) |              |
|                        | 52 |                                                                        | Number of Cylinder                 |                    | 4                    | 4                                   |              | 4                    |              |
|                        |    |                                                                        | Piston Displacement                | cc                 | 2237                 | 2486                                |              | 3469                 |              |
| Drive Unit and Control |    |                                                                        | Fuel Tank Capacity                 | liter              | 60                   | 60                                  |              | 60                   |              |
|                        | 55 | Transmission                                                           | Type Stage FWD/RVS                 |                    | Manual Powershift    | Manual Powershift                   |              | Manual Powershift    |              |
|                        |    |                                                                        |                                    |                    | 2/2 1/1              | 2/2 1/1                             |              | 2/2 1/1              |              |
|                        | 57 | Operating Pressure                                                     | For Attachments Mpa (kg/cm²) <psi> |                    | 14.7 (150) <2100>    | 14.7 (150) <2100>                   |              | 14.7 (150) <2100>    |              |

NOTE: \* Computed values.

\*\* 1 DZ-II: Non-road Mobile Machinery (97/68/EC; Stage II) EPA Non-road Diesel Emissions (40 CFR Part 89; Interim Tier 2).

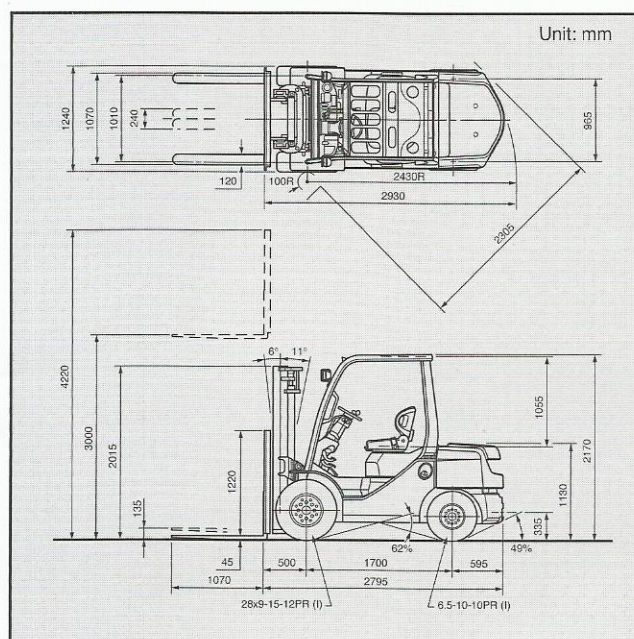
1 DZ-III: Non-road Mobile Machinery (97/68/EC; Stage IIIA) EPA Non-road Diesel Emissions (40 CFR Part 1039; Interim Tier 4).

\*\*\* 2 Z: Non-road Mobile Machinery (97/68/EC; Stage II).



Unit: kg (W)

## DIMENSIONAL DRAWINGS



## RATED CAPACITIES

## V, FV Mast (PN)

| A (mm) | 4500 | 5000           |
|--------|------|----------------|
| 500    | 3000 | 2600<br>[3000] |
| 600    | 2720 | 2360<br>[2720] |
| 700    | 2500 | 2160<br>[2500] |
| 800    | 2310 | 2000<br>[2310] |
| 900    | 2140 | 1850<br>[2140] |
| 1000   | 2000 | 1730<br>[2000] |
| 1100   | 1870 | 1620<br>[1870] |
| 1200   | 1760 | 1530<br>[1760] |
| 1300   | 1670 | 1440<br>[1670] |

[ ] for dual tire models.

## V, FV Mast (PSC)

| A (mm) | 4500 | 5000           |
|--------|------|----------------|
| 500    | 3000 | 2750<br>[3000] |
| 600    | 2720 | 2500<br>[2720] |
| 700    | 2500 | 2290<br>[2500] |
| 800    | 2310 | 2110<br>[2310] |
| 900    | 2140 | 1960<br>[2140] |
| 1000   | 2000 | 1830<br>[2000] |
| 1100   | 1870 | 1720<br>[1870] |
| 1200   | 1760 | 1620<br>[1760] |
| 1300   | 1670 | 1530<br>[1670] |

[ ] for dual tire models.

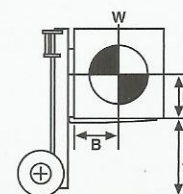
## FSV Mast (PN)

| A (mm) | 4700 | 5000           | 5500           | 6000           | 6500        | 7000        |
|--------|------|----------------|----------------|----------------|-------------|-------------|
| 500    | 3000 | 2600<br>[2950] | 1900<br>[2650] | 1500<br>[2050] | —<br>[1600] | —<br>[1200] |
| 600    | 2730 | 2360<br>[2680] | 1730<br>[2410] | 1360<br>[1860] | —<br>[1450] | —<br>[1090] |
| 700    | 2500 | 2170<br>[2460] | 1580<br>[2210] | 1250<br>[1710] | —<br>[1330] | —<br>[1000] |
| 800    | 2310 | 2000<br>[2270] | 1460<br>[2040] | 1150<br>[1580] | —<br>[1230] | —<br>[920]  |
| 900    | 2150 | 1860<br>[2110] | 1360<br>[1900] | 1070<br>[1470] | —<br>[1140] | —<br>[860]  |
| 1000   | 2010 | 1740<br>[1970] | 1270<br>[1770] | 1000<br>[1370] | —<br>[1070] | —<br>[800]  |
| 1100   | 1880 | 1630<br>[1850] | 1190<br>[1660] | 940<br>[1290]  | —<br>[1000] | —<br>[750]  |
| 1200   | 1770 | 1540<br>[1740] | 1120<br>[1570] | 880<br>[1210]  | —<br>[940]  | —<br>[710]  |
| 1300   | 1680 | 1450<br>[1650] | 1060<br>[1480] | 840<br>[1140]  | —<br>[890]  | —<br>[670]  |

[ ] for dual tire models.

## FSV Mast (PSC)

| A (mm) | 4700 | 5000 | 5500 | 6000 |
|--------|------|------|------|------|
| 500    | 3000 | 2750 | 2050 | 1650 |
| 600    | 2730 | 2500 | 1860 | 1500 |
| 700    | 2500 | 2290 | 1710 | 1370 |
| 800    | 2310 | 2120 | 1580 | 1270 |
| 900    | 2150 | 1970 | 1470 | 1180 |
| 1000   | 2010 | 1840 | 1370 | 1100 |
| 1100   | 1880 | 1730 | 1290 | 1030 |
| 1200   | 1770 | 1630 | 1210 | 970  |
| 1300   | 1680 | 1540 | 1140 | 920  |



A: Max. Fork Height  
B: Load Center  
W: Capacity

## SPECIAL TREAD

| Front Tire      | Single/Dual | Dual             | Dual             |
|-----------------|-------------|------------------|------------------|
| Front Tire Size |             | 6.00-15-10PR (I) | 28x8-15-12PR (I) |
| Overall Width   | mm          | 1520             | 1675             |
| Tread, Front    | mm          | 1150             | 1240             |

## UNDERCLEARANCE mm

|                                 |     |
|---------------------------------|-----|
| Mast (Full Load)                | 115 |
| Drive Axle (Full Load)          | 130 |
| Steer Axle (No Load)            | 180 |
| Center of Wheelbase (Full Load) | 185 |
| Counterweight (No Load)         | 175 |

## MAST SPECIFICATIONS &amp; RATED CAPACITIES

| Mast Type                                          | Maximum Fork Height | Overall Height |                       |                             | Free Lift             |                             | Single Tire |     |                                              |                               | Dual Tire  |    |                            |
|----------------------------------------------------|---------------------|----------------|-----------------------|-----------------------------|-----------------------|-----------------------------|-------------|-----|----------------------------------------------|-------------------------------|------------|----|----------------------------|
|                                                    |                     | Lowered        | Extended              |                             | Without Load Backrest | With Standard Load Backrest | Tilt Range  |     | Load Capacity at 500 mm LC                   |                               | Tilt Range |    | Load Capacity at 500 mm LC |
|                                                    |                     |                | Without Load Backrest | With Standard Load Backrest |                       |                             |             |     |                                              |                               |            |    |                            |
|                                                    |                     |                |                       |                             |                       |                             |             |     | Pneumatic Tire                               | Pneumatic-Shaped Cushion Tire |            |    |                            |
|                                                    |                     |                | FWD                   | BWD                         |                       |                             | FWD         | BWD | Pneumatic Tire/Pneumatic-Shaped Cushion Tire |                               |            |    |                            |
| mm                                                 | mm                  | mm             | mm                    | mm                          | mm                    | deg                         | deg         | kg  | kg                                           | deg                           | deg        | kg |                            |
| Wide Visible Mast (V)                              | 2700                | 1865           | 3440*                 | 3920                        | 135                   | 135                         | 6           | 11  | 3000                                         | 3000                          | 6          | 11 | 3000                       |
|                                                    | 3000                | 2015           | 3740*                 | 4220                        | 135                   | 135                         | 6           | 11  | 3000                                         | 3000                          | 6          | 11 | 3000                       |
|                                                    | 3300                | 2165           | 4040*                 | 4520                        | 135                   | 135                         | 6           | 11  | 3000                                         | 3000                          | 6          | 11 | 3000                       |
|                                                    | 3500                | 2265           | 4240*                 | 4720                        | 135                   | 135                         | 6           | 11  | 3000                                         | 3000                          | 6          | 11 | 3000                       |
|                                                    | 3700                | 2425           | 4440*                 | 4920                        | 135                   | 135                         | 6           | 11  | 3000                                         | 3000                          | 6          | 11 | 3000                       |
|                                                    | 4000                | 2615           | 4740*                 | 5220                        | 135                   | 135                         | 6           | 11  | 3000                                         | 3000                          | 6          | 11 | 3000                       |
|                                                    | 4500                | 2865           | 5240*                 | 5720                        | 135                   | 135                         | 6           | 6   | 3000                                         | 3000                          | 6          | 11 | 3000                       |
|                                                    | 5000                | 3115           | 5740*                 | 6220                        | 135                   | 135                         | 6           | 6   | 2600                                         | 2750                          | 6          | 6  | 3000                       |
| Wide Visible Full-Free Lift Two-Stage Mast (FV)    | 3000                | 2015           | 3655                  | 4260                        | 1400                  | 795                         | 6           | 11  | 3000                                         | 3000                          | 6          | 11 | 3000                       |
|                                                    | 3300                | 2165           | 3955                  | 4515                        | 1550                  | 990                         | 6           | 11  | 3000                                         | 3000                          | 6          | 11 | 3000                       |
|                                                    | 3500                | 2265           | 4155                  | 4715                        | 1650                  | 1090                        | 6           | 11  | 3000                                         | 3000                          | 6          | 11 | 3000                       |
|                                                    | 3700                | 2425           | 4355                  | 4915                        | 1810                  | 1250                        | 6           | 11  | 3000                                         | 3000                          | 6          | 11 | 3000                       |
|                                                    | 4000                | 2615           | 4655                  | 5215                        | 2000                  | 1440                        | 6           | 11  | 3000                                         | 3000                          | 6          | 11 | 3000                       |
| Wide Visible Full-Free Lift Three-Stage Mast (FSV) | 3700                | 1915           | 4315                  | 4920                        | 1300                  | 695                         | 6           | 6   | 3000                                         | 3000                          | 6          | 6  | 3000                       |
|                                                    | 4000                | 2015           | 4615                  | 5220                        | 1400                  | 795                         | 6           | 6   | 3000                                         | 3000                          | 6          | 6  | 3000                       |
|                                                    | 4300                | 2165           | 4915                  | 5520                        | 1550                  | 945                         | 6           | 6   | 3000                                         | 3000                          | 6          | 6  | 3000                       |
|                                                    | 4500                | 2215           | 5115                  | 5720                        | 1600                  | 995                         | 6           | 6   | 3000                                         | 3000                          | 6          | 6  | 3000                       |
|                                                    | 4700                | 2265           | 5315                  | 5920                        | 1650                  | 1045                        | 6           | 6   | 3000                                         | 3000                          | 6          | 6  | 3000                       |
|                                                    | 5000                | 2425           | 5615                  | 6220                        | 1810                  | 1205                        | 6           | 6   | 2600                                         | 2750                          | 6          | 6  | 2950                       |
|                                                    | 5500                | 2615           | 6115                  | 6720                        | 2000                  | 1395                        | 6           | 6   | 1900                                         | 2050                          | 6          | 6  | 2650                       |
|                                                    | 6000                | 2865           | 6615                  | 7220                        | 2250                  | 1645                        | 6           | 6   | 1500                                         | 1650                          | 6          | 6  | 2050                       |
|                                                    | 6500                | 3115           | 7115                  | 7720                        | 2500                  | 1895                        | —           | —   | —                                            | —                             | 6          | 6  | 1600                       |
|                                                    | 7000                | 3365           | 7615                  | 8220                        | 2750                  | 2145                        | —           | —   | —                                            | —                             | 6          | 6  | 1200                       |

NOTE: Height of standard load backrest is 1220 mm.

\* with A4 piping, minus 20 mm.