# MITSUBISHI TRUCKS

## CRANE CARRIER

**Lifting Capacity 14t ~ 150t**


GENUINE PARTS • MITSUBISHI GENUINE PARTS KEEP YOUR VEHICLE AT ITS BEST FOR YEARS ON END.

Note: These specifications are subject to change without notice. Some of the equipment shown in these product illustrations is optional. Confer with your distributor to confirm the exact specifications and equipment available on your market.

MITSUBISHI MOTORS CORPORATION
TOKYO, JAPAN

TC19 (5) JAN. 85 H Printed in Japan

# Full range of models for every need

## ONE SIDE CAB

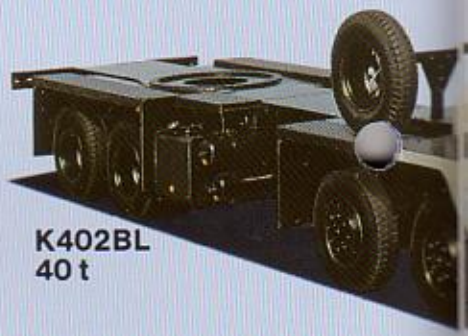

K103L
14 t


K203BL
20 t

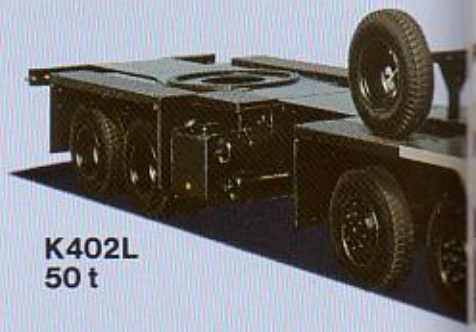

K203L
25 t


K203NZL
30 t

K303L
30 t



K402BL
40 t



K402L
50 t

K602L
70 t

| MODEL | | K103L | K203BL | K203L | K203NZL | K303L |
|---|---|---|---|---|---|---|
| LIFTING CAPACITY | t | 14 | 20 | 25 | 30 | 30 |
| DRIVE SYSTEM | | 4×2 | 6×4 | | | |
| WHEEL BASE | mm | 4,500 | 4,700 | 4,700 | 5,000 | 5,000 |
| ENGINE MODEL | | 6D22-1A | | | | |
| MAX. OUTPUT | ps/rpm (JIS) | 225/2,200 | | | | |

## LOW LINE CAB






K354L
40 t

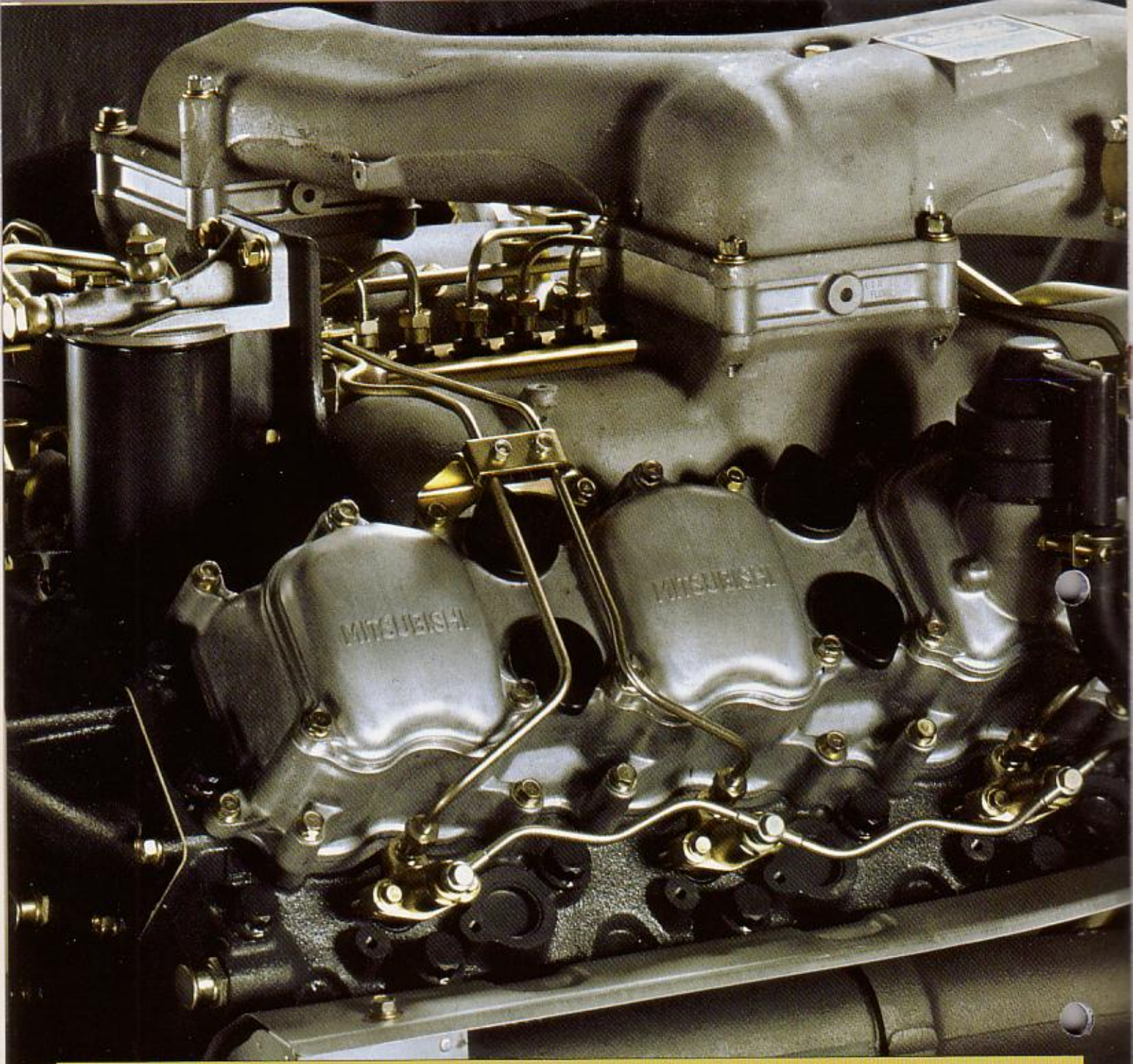

K503L
50 t


K1302L
150 t


K1303L
80t

| K402BL | K402L | K354L | K503L | K602L | K1302L | K1303L |
|---|---|---|---|---|---|---|
| 40 | 50 | 40 | 50 | 70 | 150 (Lattice boom type) | 80 |
| 8×4 | | 8×4 | | 8×4 | 8×4 | 10×4 |
| 5,250 | 5,250 | 5,250 | 5,250 | 5,800 | 5,800 | 7,000 |
| 80DC8-2A | | | | 8DC9-1A | 8DC90A | |
| 290/2,200 | | | | 320/2,200 | 310/2,300 | |

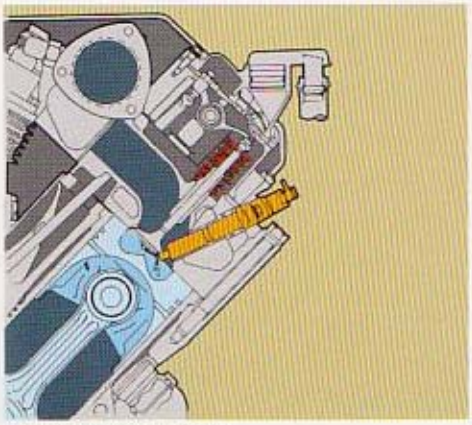
Right hand steering is available is all models. Hence, the last letter of each code for these models is "R" instead of "L."



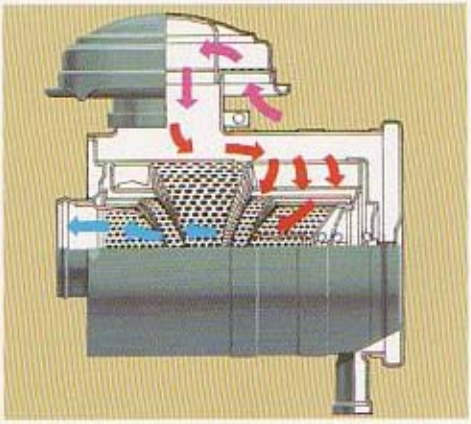

## Engine Specifications and Usage

| Engine | Used in all countries (except EC) | | | Used by countries in the EC | | | Carrier Model |
|---|---|---|---|---|---|---|---|
| | | Max. output (ps/rpm: JIS/DIN) (hp/rpm: SAE, Gross) | Max. torque (kg·m/rpm) | | Max. output (ps/rpm: JIS/DIN) (kW/rpm: EEC) | Max. torque (kg·m/rpm) (N·m/rpm: EEC) | |
| 6D22-1A | JIS | 225/2200 | 78/1400 | JIS | — | | K103L |
| | DIN | 215/2200 | 75/1400 | DIN | — | | K203(B)L |
| | SAE, Gross | 215/2200 | 75/1400 | EEC | 158/2200 | 721/1400 | K203NZL |
| 8DC8-2A | JIS | 290/2200 | 100/1400 | JIS | 290/2300 | 99/1400 | K303L |
| | DIN | 275/2200 | 96/1400 | DIN | 275/2300 | 95/1400 | K402(B)L |
| | SAE, Gross | 280/2200 | 96/1400 | EEC | 200/2300 | 912/1400 | K354L, K503L |
| 8DC9-1A | JIS | 320/2200 | 110/1400 | — | | | K602L |
| | DIN | 305/2200 | 106/1400 | | | | |
| | SAE, Gross | 310/2200 | 106/1400 | | | | |
| 8DC90A | JIS | 310/2300 | 108/1400 | — | | | K1302L |
| | DIN | 298/2300 | 105/1400 | | | | |
| | SAE, Gross | 304/2300 | 104/1400 | | | | K1303L |

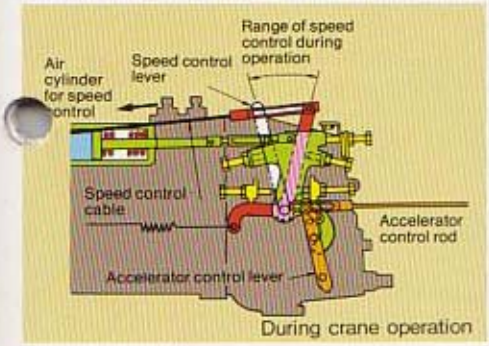
# Powerful direct-injection diesels



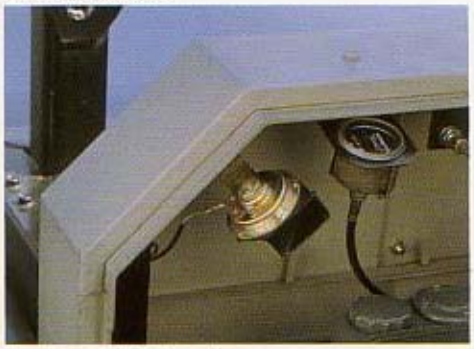
Direct-injection system



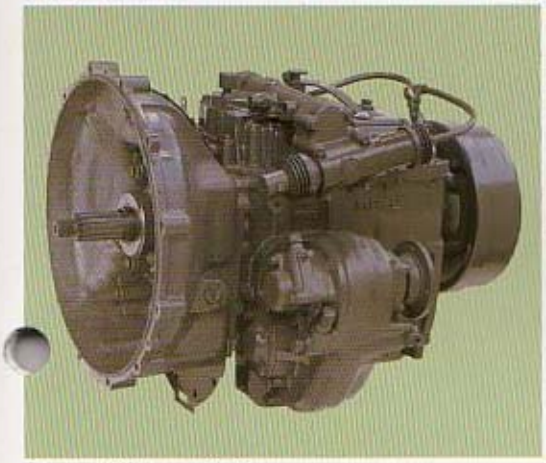
Air intake system




Governor control



Engine trouble alarm buzzer



Power shift transmission

P.T.O.

**Comparison of Stable Driving Speeds**
(K103L, K203BL, K203L, K303L)

| Driving mode | Governor control | Engine rpm | Speed | Uses |
|---|---|---|---|---|
| Normal (1st gear) | Min/max governor (pedal acceleration) | 1,200+ | 4.4km/h+ | Travel over normal roads |
| Slow (1st gear + S.S. switch) | All-speed governor (no pedal acceleration) | 1,000 (fixed) | 3.7km/h+ | Constant slow travel over uneven roads (emerging from offroad areas, etc.) |
| | | 600 (fixed) | 2.2km/h+ | Constant slow travel over flat roads (movements with lifting on rubber, etc.) |

Mitsubishi direct-injection diesel engines are engineered to deliver optimum power and sufficient torque to meet all requirements during carrier travel or crane operation. Torque is supplied smoothly and stably throughout the entire rpm range.

All engines are built for superior durability and reliability. They are also exceptionally quiet and responsive, with an ideal model to match each type of crane. Outstanding operating economy is achieved both in terms of fuel efficiency and oil consumption.

**Direct-injection system**

All engines feature a direct fuel injection system including spiral intake ports, cylindrical swirl-type combustion chambers and multi-orifice injection nozzles. The result is superior combustion efficiency and remarkably high fuel economy.

**Air intake system**

For enhanced engine performance and a longer service life, a Donaldson-type double-element air cleaner (with rain cap) is featured on all engines to protect them from excessive dust.

**Governor control**

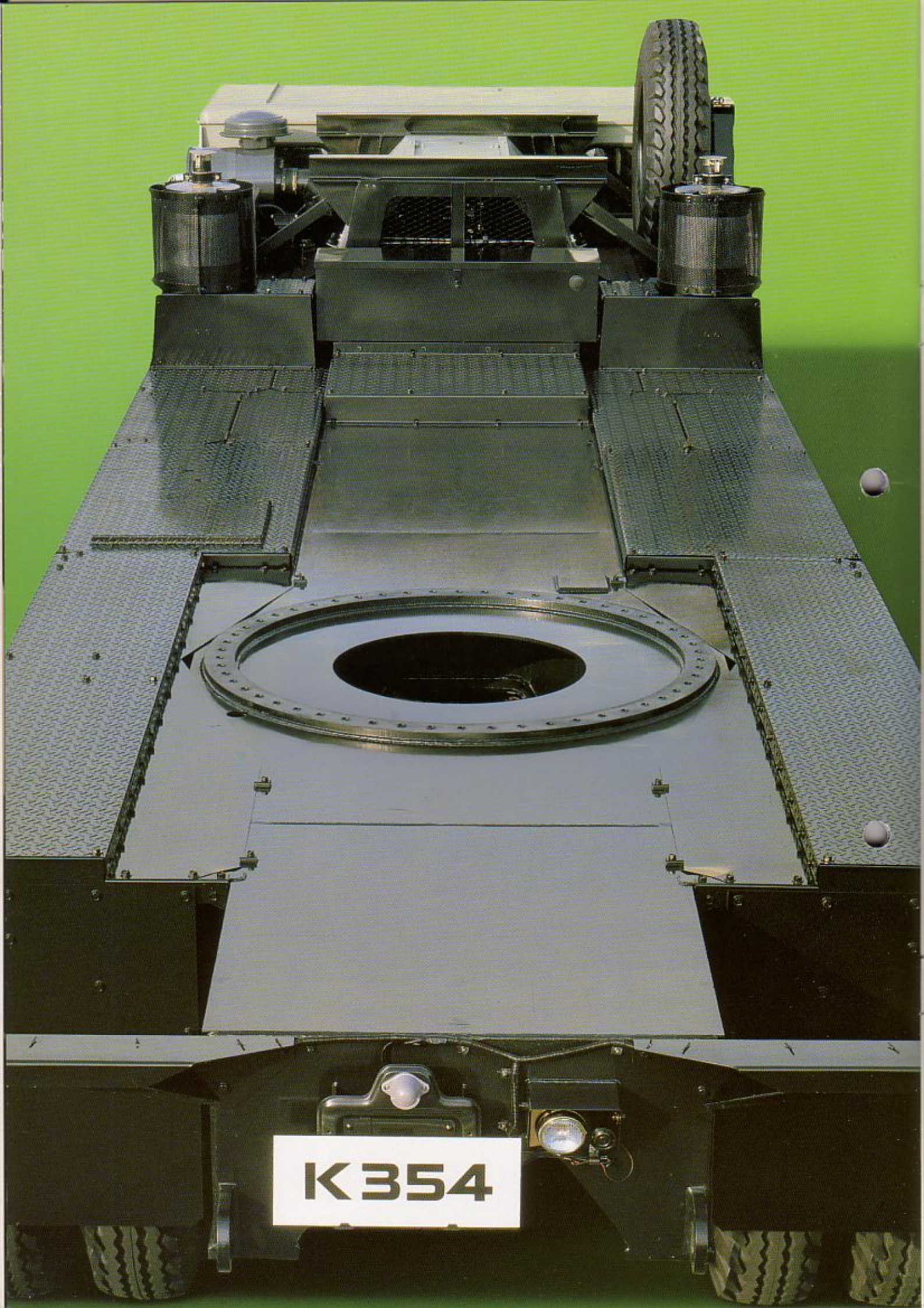
When the P.T.O. is turned on for crane operation, the governor control automatically switches to the all-speed setting to guarantee stable engine rpm. The all-speed governor is also automatically engaged when the super slow device is used.

**Engine trouble alarm buzzer**

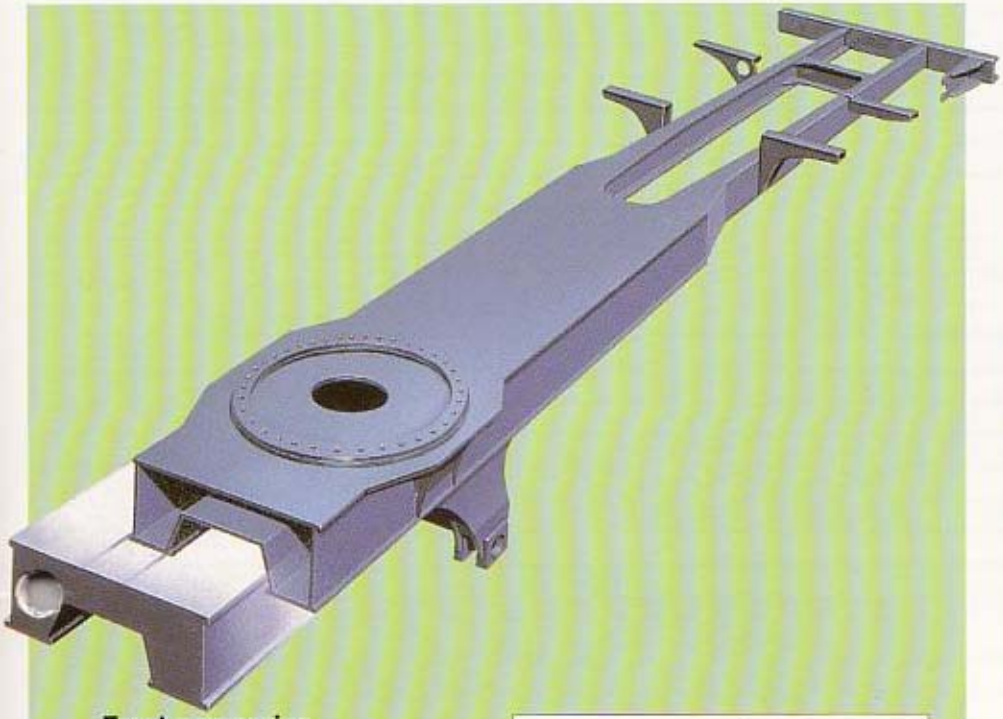
The engine trouble alarm buzzer sounds to warn of engine trouble during crane operation. The buzzer is set off by any of the following conditions: engine overheating, clogged oil filter, drop in oil pressure, or drop in air pressure in the P.T.O. control system.

**Power shift transmission**

A power shift transmission system is provided to ease gear operations and thereby reduce driver's fatigue.

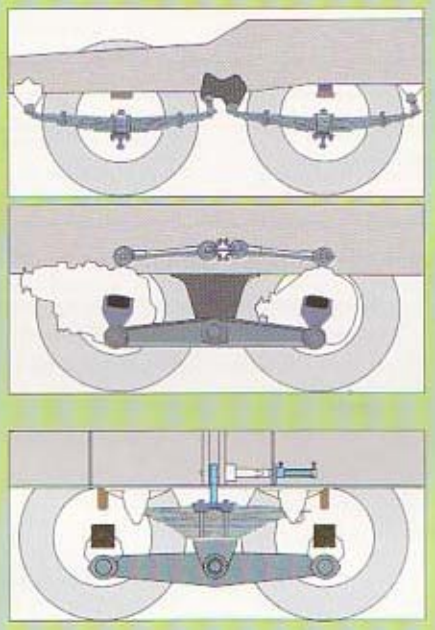

K354

# Rugged box type chassis



**Front suspension**
The front suspension system features rugged leaf springs to absorb road shocks encountered on rough terrains, resulting in remarkably smooth riding comfort.

**Rear suspension**
For enhanced stability, an equalizer beam and torque rods are featured on the rear suspension system to provide full traction even on rough road surfaces.



**Leaf spring type rear suspension (Option)**

**Rear frame**
A closed section box type chassis frame of exceptional strength has been adopted to withstand the harsh torsional and bending stresses produced during crane operation. The frame ensures stable operation, outstanding durability as well as superior ruggedness to cope with all types of shock.

**Front frame and jack (option)**
To accommodate operations where equal lifting capacity is required all around, the front frame can be equipped with an optional jack.

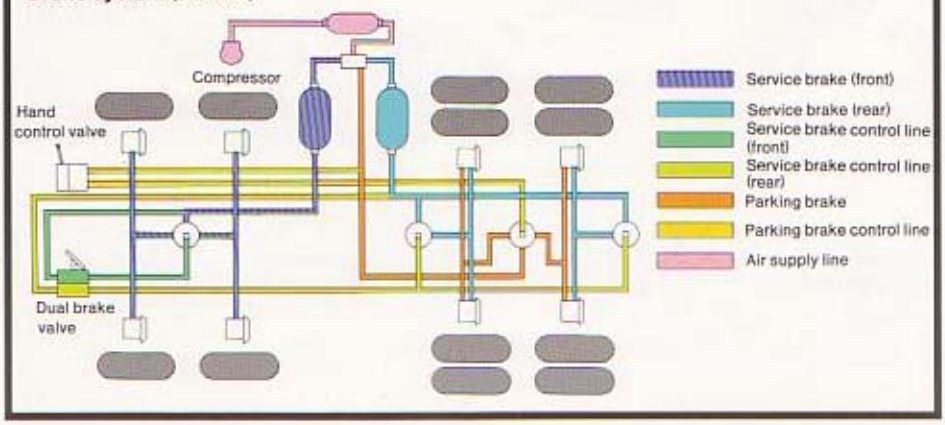
**Brake system**
For failsafe braking power, dual-circuit braking systems have been adopted on all models. Two types of brake system are available: air and air-over-hydraulic. Both types provide full braking power with minimal pedal pressure.

The spring-loaded air brakes operate on the rear wheels only and serve as both a parking brake and as an auxiliary emergency brake in case of a drop in air tank pressure. They are standard on the K402(B)L, K354L and K503.

With air-over-hydraulic brakes, light pressure on the air brake activates the power-assisted oil brake. This system is standard on the K103L, K203(B)L and K303L.

Air brakes can also be equipped on the K103L, K203(B)L and K303L as an option.

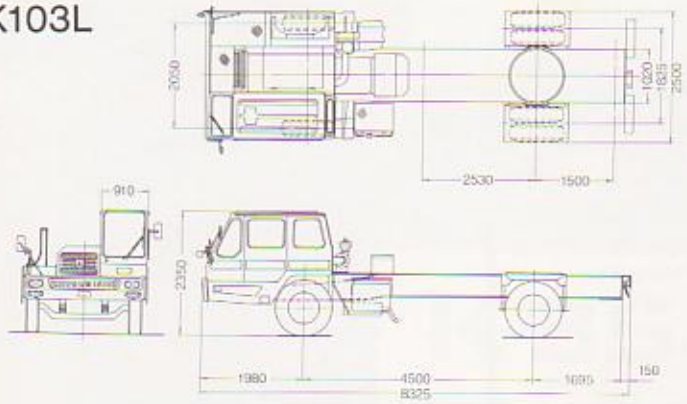
**Brake system (K354L)**



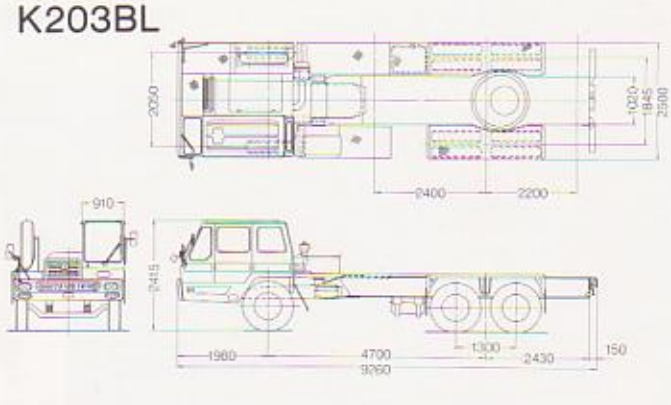
# Specifications

| MODEL | | | K103L | K203BL |
|---|---|---|---|---|
| Type | | | One side cab offset to the left | |
| Drive system | | | 4×2 | 6×4 |
| Crew | | | 2 | |
| Lifting capacity | | | 14t×3m (Hydraulic type) | 20t×3m (Hydraulic type) |
| **DIMENSIONS** | | mm | | |
| Wheelbase | | | 4,500 | 4,700 |
| Overall length | | (approx.) | 8,325 | 9,260 |
| Overall width | | (approx.) | 2,500 | 2,500 |
| Overall height | | (approx.) | 2,350 | 2,415 |
| Tread | front | | 2,050 | 2,050 |
| | rear | | 1,845 | 1,845 |
| **WEIGHTS** | | kg | | |
| Carrier | weight | (approx.) | 6,610 | 8,450 |
| | front | (approx.) | 4,090 | 4,000 |
| | rear | (approx.) | 2,520 | 4,450 |
| Rated axle load | | front | 6,000 | 6,000 |
| | | rear | 13,500 | 19,000 |
| **ENGINE** | | | | |
| Model | | | 6D22-1A,<br>4 cycle water cooled direct injection diesel engine | |
| Max. output | | (JIS) PS/rpm | 225/2,200 | |
| Max. torque | | (JIS) kg-/rpm | 78/1,400 | |
| **PERFORMANCE** | | | | |
| Max. speed | | km/h | 65 | |
| Min. speed | | km/h | 2.2 at 600rpm | |
| Max. gradeability | | (tan $\theta$)% | (with G.V.W. 15,800kg) 46.5 | (with G.V.W. 20,000kg) 35.0 |
| Min. turning radius | | m | 8.8 | 9.5 |
| **CHASSIS** | | | | |
| Transmission | | | 5 forward and 1 reverse<br>Synchromesh (2nd~5th) and constantmesh (1st & Rev.) gears | |
| Ratio | | | 7.868-4.537-2.709-1.555-1.000 Rev. 6.896 | |
| Transfer | | | — | — |
| Ratio | | | — | — |
| Axle, front | | | Reverse Elliot "I" beam type | |
| Axle, rear | | | Full floating type | |
| Final reduction ratio | | | 6.666 | |
| Tyre size | | | 10.00-20-14PR or 10.00-20-16PR | |
| Brake | | | 2 circuit air brake,<br>4 wheels internal expanding | 2 circuit air brake,<br>or 2 circuit air-over hydraulic brake,<br>6 wheels internal expanding |
| Electrical system | | | 24V (12V–120AH×2) | |
| Fuel tank capacity | | ℓ | 200 | |

K103L

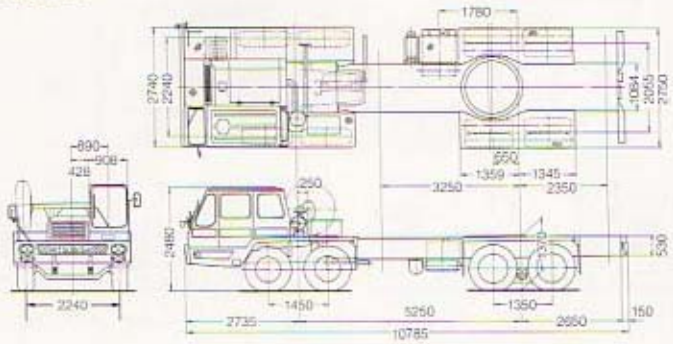



K203BL

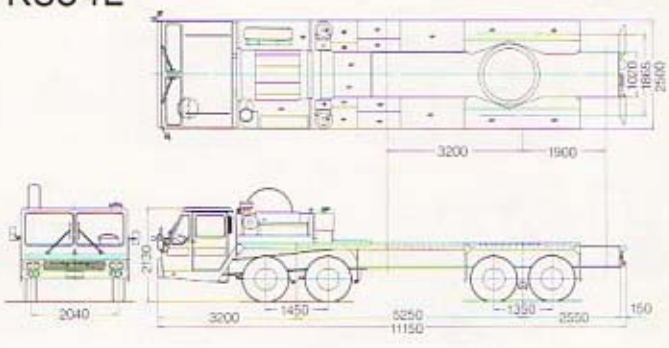


| MODEL | | | K402L | K354L |
|---|---|---|---|---|
| Type | | | One side cab offset to the left | Low line cab |
| Drive system | | | 8×4 | |
| Crew | | | 2 | |
| Lifting capacity | | | 50t×3m (Hydraulic type) | 40t×3m (Hydraulic type) |
| **DIMENSIONS** | | mm | | |
| Wheelbase | | | 5,250 | 5,250 |
| Overall length | | (approx.) | 10,785 | 11,150 |
| Overall width | | (approx.) | 2,750 (2,820) | 2,500 (2,750) |
| Overall height | | (approx.) | 2,480 | 2,150 |
| Tread | front | | 2,240 | 2,040 |
| | rear | | 2,055 | 1,845 |
| **WEIGHTS** | | kg | | |
| Carrier | weight | (approx.) | 13,400 | 12,700 |
| | front | (approx.) | 7,240 | 7,200 |
| | rear | (approx.) | 6,160 | 5,500 |
| Rated axle load | | front | 17,000 | 13,000 |
| | | rear | 24,000 | 23,000 |
| **ENGINE** | | | | |
| Model | | | 8DC8-2A,<br>4 cycle water cooled direct injection diesel engine | |
| Max. output | | (JIS) PS/rpm | 290/2,200 | |
| Max. torque | | (JIS) kg·m/rpm | 100/1,400 | |
| **PERFORMANCE** | | | | |
| Max. speed | | km/h | 80 | 75 |
| Min. speed | | km/h | 1.8 at 600rpm | 1.7 at 600rpm |
| Max. gradeability | | (tan $\theta$)% | (with G.V.W. 39,600kg) 27.0 | (with G.V.W. 36,000kg) 31.5 |
| Min. turning radius | | m | 11.5 | 11.5 |
| **CHASSIS** | | | | |
| Transmission | | | 10 forward and 2 reverse, Synchromesh (3rd~10th) and constantmesh (1st, 2nd & Rev.) gears | |
| Ratio | | | 9.153-7.098-4.783-3.709-2.765-2.144-1.666-1.292-1.000-0.775,<br>Rev. 6.286(H), 8.105(L) | |
| Transfer | | | — | — |
| Ratio | | | — | — |
| Axle, front | | | Reverse Elliot "I" beam type | |
| Axle, rear | | | Full floating type | |
| Final reduction ratio | | | 7.500 | |
| Tyre size | | | 12.00-20-18PR | 11.00-20-14PR or 11.00-20-16PR |
| Brake | | | 2 circuit air brake, 8 wheels internal expanding | |
| Electrical system | | | 24V (12V-140AH×2) | |
| Fuel tank capacity | | ℓ | 300 | |

## K402L

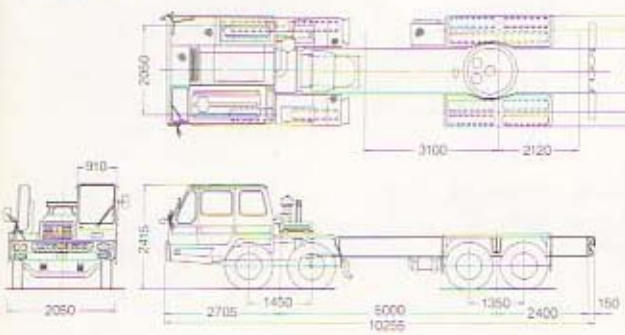



## K354L

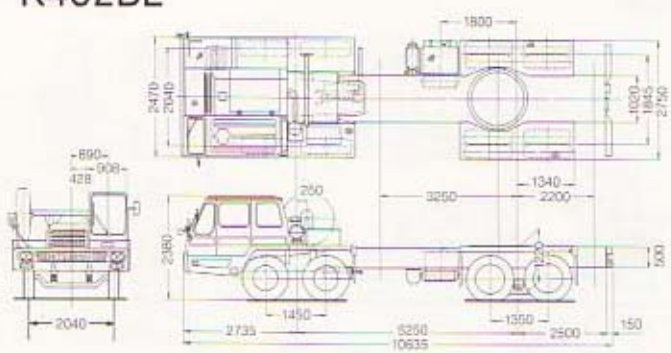


| MODEL | | | K303L | K402BL |
|---|---|---|---|---|
| Type | | | One side cab offset to the left | |
| Drive system | | | 8×4 | |
| Crew | | | 2 | |
| Lifting capacity | | | 30t×3.5m (Hydraulic type) | 40t×3m (Hydraulic type) |
| **DIMENSIONS** | | mm | | |
| Wheelbase | | | 5,000 | 5,250 |
| Overall length | | (approx.) | 10,255 | 10,635 |
| Overall width | | (approx.) | 2,500 | 2,750 |
| Overall height | | (approx.) | 2,415 | 2,390 |
| Tread | front | | 2,050 | 2,040 |
| | rear | | 1,845 | 1,845 |
| **WEIGHTS** | | kg | | |
| Carrier | weight | (approx.) | 10,480 | 11,990 |
| | front | (approx.) | 5,820 | 6,580 |
| | rear | (approx.) | 4,660 | 5,410 |
| Rated axle load | | front | 12,000 | 13,000 |
| | | rear | 23,000 | 23,000 |
| **ENGINE** | | | | |
| Model | | | 8DC8-2A,<br>4 cycle water cooled direct injection diesel engine | |
| Max. output | | (JIS) PS/rpm | 290/2,200 | |
| Max. torque | | (JIS) kg·m/rpm | 100/1,400 | |
| **PERFORMANCE** | | | | |
| Max. speed | | km/h | 65 | 75 |
| Min. speed | | km/h | 2.2 at 600rpm | 1.7 at 600rpm |
| Max. gradeability | | (tan θ)% | (with G.V.W. 31,500kg) 28.0 | (with G.V.W. 36,000kg) 31.5 |
| Min. turning radius | | m | 11 | 11.5 |
| **CHASSIS** | | | | |
| Transmission | | | 5 forward and 1 reverse, Synchromesh<br>(2nd—5th) and constantmesh<br>(1st & Rev.) gears | 10 forward and 2 reverse, Synchromesh<br>(3rd—10th) and constantmesh<br>(1st, 2nd & Rev.) gears |
| Ratio | | | 7.868-4.207-2.432-1.617-1.000,<br>Rev. 6.896 | 9.153-7.098-4.783-3.709-2.765-<br>2.144-1.666-1.292-1.000-0.775,<br>Rev. 6.286(H), 8.105(L) |
| Transfer | | | — | — |
| Ratio | | | — | — |
| Axle, front | | | Reverse Elliot "I" beam type | |
| Axle, rear | | | Full floating type | |
| Final reduction ratio | | | 6.666 | 7.500 |
| Tyre size | | | 10.00-20-14PR | 11.00-20-14PR |
| Brake | | | 2 circuit air brake or 2 circuit,<br>air-over hydraulic brake,<br>8 wheels internal expanding | 2 circuit air brake,<br>8 wheels internal expanding |
| Electrical system | | | 24V (12V—140AH×2) | |
| Fuel tank capacity | | ℓ | 200 | 300 |

## K303L

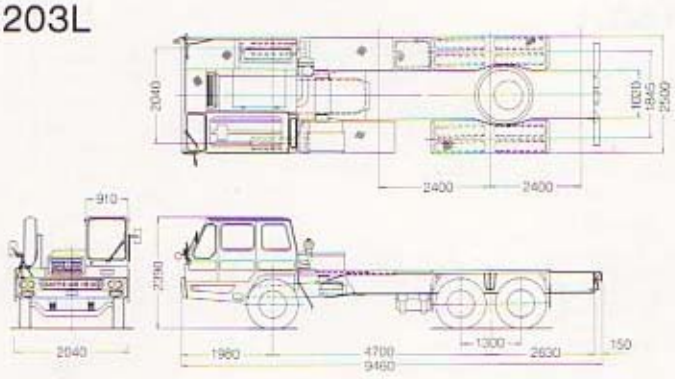



## K402BL

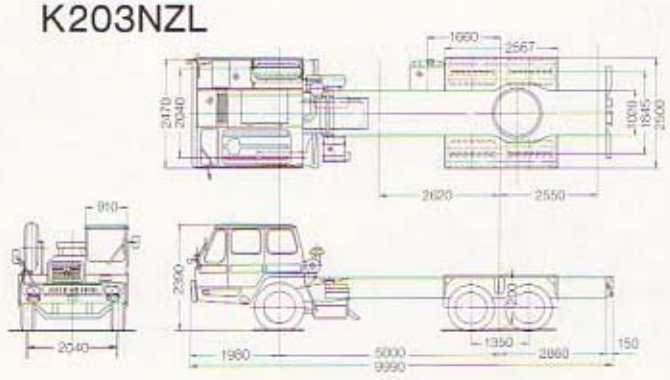


| MODEL | | | K203L | K203NZL |
|---|---|---|---|---|
| Type | | | One side cab offset to the left | |
| Drive system | | | 6×4 | |
| Crew | | | 2 | |
| Lifting capacity | | | 25t×3m (Hydraulic type) | 30t×3m (Hydraulic type) |
| **DIMENSIONS** | | mm | | |
| Wheelbase | | | 4,700 | 5,000 |
| Overall length | | (approx.) | 9,460 | 9,990 |
| Overall width | | (approx.) | 2,500 | 2,500 |
| Overall height | | (approx.) | 2,390 | 2,390 |
| Tread | front | | 2,040 | 2,040 |
| | rear | | 1,845 | 1,845 |
| **WEIGHTS** | | kg | | |
| Carrier | weight | (approx.) | 8,870 | 9,605 |
| | front | (approx.) | 4,070 | 4,015 |
| | rear | (approx.) | 4,800 | 5,590 |
| Rated axle load | | front | 6,500 | 6,500 |
| | | rear | 19,000 | 23,000 |
| **ENGINE** | | | | |
| Model | | | 6D22-1A,<br>4 cycle water cooled direct injection diesel engine | |
| Max. output | | (JIS) PS/rpm | 225/2,200 | |
| Max. torque | | (JIS) kg-m/rpm | 78/1,400 | |
| **PERFORMANCE** | | | | |
| Max. speed | | km/h | 65 | 75 |
| Min. speed | | km/h | 2.2 at 600rpm | 2.0 at 600rpm |
| Max. gradeability | | (tan $\theta$)% | (with G.V.W. 24,600kg) 27.0 | (with G.V.W. 28,200kg) 26.5 |
| Min. turning radius | | m | 9.5 | 10 |
| **CHASSIS** | | | | |
| Transmission | | | 5 forward and 1 reverse, Synchromesh<br>(2nd~5th) and constantmesh<br>(1st & Rev.) gears | 10 forward and 2 reverse, Synchromesh<br>(3rd~10th) and constantmesh<br>(1st, 2nd & Rev.) gears |
| Ratio | | | 7.868-4.537-2.709-1.555-1.000,<br>Rev. 6.896 | 7.868-6.166-4.207-3.297-2.432-1.906-<br>1.617-1.267-1.000-0.783<br>Rev. 5.405 (H), 6.896 (L) |
| Transfer | | | — | — |
| Ratio | | | — | — |
| Axle, front | | | Reverse Elliot "I" beam type | |
| Axle, rear | | | Full floating type | |
| Final reduction ratio | | | 6.666 | 7.500 |
| Tyre size | | | 10.00-20-16PR or 11.00-20-14PR | 11.00-20-14PR or 11.00-20-16PR |
| Brake | | | 2 circuit air brake or 2 circuit<br>air-over hydraulic brake,<br>6 wheels internal expanding | 2 circuit air brake,<br>6 wheels internal expanding |
| Electrical system | | | 24V (12V–120AH×2) | |
| Fuel tank capacity | | ℓ | 200 | |

K203L

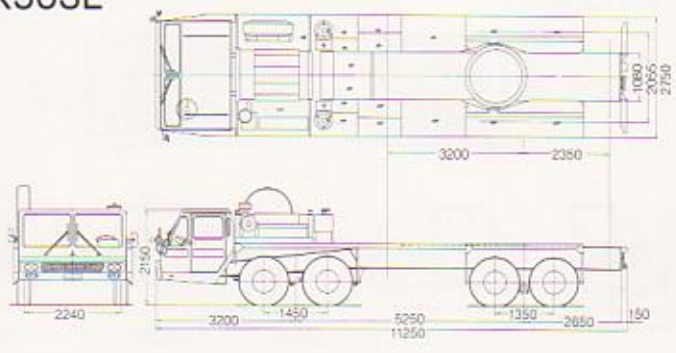



K203NZL

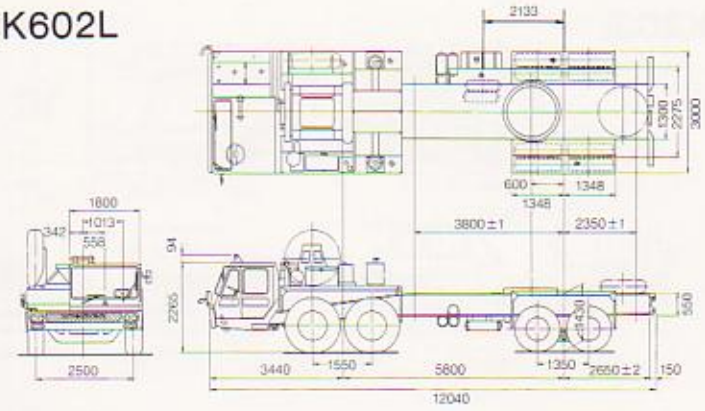


| MODEL | | | K503L | K602L |
|---|---|---|---|---|
| Type | | | Low line cab | |
| Drive system | | | 8×4 | |
| Crew | | | 2 | |
| Lifting capacity | | | 50t×3m (Hydraulic type) | 70t×3m (Hydraulic type) |
| **DIMENSIONS** | | mm | | |
| Wheelbase | | | 5,250 | 5,800 |
| Overall length | | (approx.) | 11,250 | 12,040 |
| Overall width | | (approx.) | 2,750 | 3,000 |
| Overall height | | (approx.) | 2,160 | 2,265 |
| Tread | front | | 2,240 | 2,500 |
| | rear | | 2,055 | 2,275 |
| **WEIGHTS** | | kg | | |
| Carrier | weight | (approx.) | 14,260 | 17,210 |
| | front | (approx.) | 7,900 | 9,880 |
| | rear | (approx.) | 6,360 | 7,330 |
| Rated axle load | | front | 17,000 | 22,000 |
| | | rear | 24,000 | 30,000 |
| **ENGINE** | | | | |
| Model | | | 8DC8-2A, 4 cycle water cooled direct injection diesel engine | 8DC9-1A, 4 cycle water cooled direct injection diesel engine |
| Max. output | | (JIS) PS/rpm | 290/2,200 | 320/2,200 |
| Max. torque | | (JIS) kg·m/rpm | 100/14,00 | 110/1,400 |
| **PERFORMANCE** | | | | |
| Max. speed | | km/h | 80 | 70 |
| Min. speed | | km/h | 1.8 at 600rpm | 1.5 at 600rpm |
| Max. gradeability | | (tan θ)% | (with G.V.W. 39,600kg) 27.0 | (with G.V.W. 47,000kg) 29.5 |
| Min. turning radius | | m | 11.5 | 11.8 |
| **CHASSIS** | | | | |
| Transmission | | | 10 forward and 2 reverse, Synchromesh (3rd—10th) and constantmesh (1st, 2nd & Rev.) gears | |
| Ratio | | | 9.153-7.098-4.783-3.709-2.765-2.144-1.666-1.292-1.000-0.775, Rev. 6.286(H), 8.105(L) | |
| Transfer | | | — | — |
| Ratio | | | — | — |
| Axle, front | | | Reverse Elliot "I" beam type | |
| Axle, rear | | | Full floating type | |
| Final reduction ratio | | | 7.500 | 8.788 |
| Tyre size | | | 12.00-20-18PR | 14.00-24-24PR(F), 12.00-20-18PR(R) |
| Brake | | | 2 circuit air brake, 8 wheels internal expanding | |
| Electrical system | | | 24V (12V—140AH×2) | |
| Fuel tank capacity | | ℓ | 300 | 400 |

K503L




K602L



お客様各位

三菱自動車工業株式会社

# 大型トラック・バスのメーカ推奨(指定)点検項目追加のご案内

拝啓　お客様には益々ご盛栄のこととお慶び申し上げます。また平素は三菱ふそうトラック・バスをご愛用賜り厚く御礼申し上げます。

さて、この度弊社ではお車を良好な状態でご使用いただくために、大型トラック・バスにつきまして「フロント・ホイールハブのホイールディスク取付け面の摩耗状態」の点検を法令12ヶ月点検（車検)時のメーカ推奨点検項目として追加することといたしましたのでご案内申し上げます。

つきましては、次回車検時からフロント・ホイールハブの点検をお受けの上、『定期点検整備記録簿』に点検結果の記入をお受け下さいますようお願い申し上げますとともに、お手数をおかけして大変恐縮ですが、同封の追加点検項目シートをお手持ちの整備手帳又はメンテナンスノートに貼り付け下さるようお願い申し上げます。

また、「タイヤ・ディスクホイールの取付け要領」を取り纏めました取扱説明書・追補版を同封いたしますので、日常の点検整備においてご活用下さいますよう併せてお願い申し上げます。　敬具

記

1．対象車両

・大型トラック　　８３年式以降の車両

・大型バス　　８２年式以降の車両

・お客様の対象となる車両は別紙記載のとおりです。
（弊社都合により２度に分けてご送付する場合があります）

2．追加点検項目

「フロント・ホイールハブのホイールディスク取付け面の摩耗」（１２ヶ月毎）

3．適用時期

本案内状到着以降の次回車検時から点検をお受け下さい。

4．追加点検項目シート貼り付けのお願い

同封しました点検項目シートをお手持ちの整備手帳又はメンテナンスノートの「点検整備方式」の走行装置と記載のあるページに上部を合わせて貼り付けて下さい。


以　上