



# *Specifications*

**Hino Motors, Ltd.**  
TOKYO, JAPAN

**SPECIFICATIONS**

Spec. No. SS-SG312B  
Drawing No. CDRSG311A



# HINO 500 Series

**4x2, Tractor Chassis**

Left-hand drive  
340 PS (Euro-2)  
40.0 ton GCMR

**RATINGS & AXLE LOAD LIMIT (kg)**

	GVM	GCM	Front Axle	Rear Axle
Ratings	18,000 *	40,000	7,500	11,500
Axle load limit	11.00R20-16 (Standard)		6,200	11,140
	11R22.5-148/145 (Optional)		6,300	11,500
	12R22.5-152/148 (Optional)		7,100	11,500
	275/70R22.5-148/145 (Optional)		6,300	11,500
	275/80R22.5 (Optional)		6,900	11,500

\*: GVM Rating is varied depend on tire size.

**CHASSIS DIMENSIONS (mm)** : All dimensions are to standard specifications and unladen chassis

(with Fifth-wheel Optional)

Model		HINO 51835
Production code		SG2PF7B-MG2
Application		Semi tractor
Wheelbase	WB	3,630
Overall length	OL	5,995
Overall width	OW	2,490
Overall height	OH	2,915
Kingpin offset	KO	(455)
Front fitting radius	FFR	(2,205)
Lower fitting radius	LFR	(1,680)
Fifth wheel height (kingpin size: 2 inch)	FWH	(1,335)
Front overhang	FOH	1,380
Rear overhang (at frame end)	ROHF	985
Front chassis height	HF	1,010
Rear chassis height	HR	1,095
Road clearance (at diff. case)	RC	265
Front tread	FT	2,050
Rear tread	RT	1,835
Turning radius on tire		6,400
Turning radius on wall to wall		7,200

**CHASSIS MASS (kg)** : Chassis mass quoted is to standard specifications without spare tire and standard tool set

(with Fifth-wheel Optional)

Chassis mass	(Total)	5,835 / (6,090)
	(Front)	3,680 / (3,710)
	(Rear)	2,155 / (2,380)
Fifth wheel capacity	(11.00R20)	(10,000)

**PERFORMANCE & GEAR RATIOS** : Calculations based on 40.0 ton GCM, 11.00R20 tire

Max. speed (km/h)		128
Gradeability tanθ (%)		28.7
Transmission gear ratio (:1)	Model	M009
	1st	10.178
	2nd	6.986
	3rd	5.063
	4th	3.636
	5th	2.633
	6th	1.921
	7th	1.392
	8th	1.000
	9th	0.724
	Rev.	9.874
Rear axle	Model	SH18
	Gear ratio (:1)	4.875

**ENGINE**

Model	■ HINO P11C-VP
Maximum power	■ 257 kW {350 PS} at 2,100 r/min (JIS Gross) 250 kW {340 PS} at 2,100 r/min (ISO NET)
Maximum torque	■ 1,314 Nm {134 kgfm} at 1,500 r/min (JIS Gross) 1,275 Nm {130 kgfm} at 1,500 r/min (ISO NET)
Maximum engine speed	■ 2,300 r/min
Type	■ Diesel, turbocharged and intercooled, 4-cycle, in-line 6-cylinder, overhead valve, water-cooled
Combustion system	■ Direct injection type
Bore x Stroke	■ 122 X 150 mm
Piston displacement	■ 10.520 L
Compression ratio	■ 16.0 : 1
Engine oil capacity	■ 29.5 L
Fuel injection pump	■ Electronic control, common rail type
Air compressor	■ Single-cylinder, bore 85 mm, stroke 60 mm
Air cleaner	■ Stack type, dry element <input type="checkbox"/> Stack type, dry with safety element - Optional
Air cleaner dust indicator	■ Equipped
Exhaust tail	■ Short tail type <input type="checkbox"/> Stack tail type - Optional <input type="checkbox"/> Right side outlet type - Optional
Fun clutch	■ Equipped
Engine control link	■ Not equipped <input type="checkbox"/> Equipped - Optional
Cold start aid	■ Not equipped <input type="checkbox"/> Intake air heater (3kW) (set for 120Ah battery) - Optional
Insect protection	■ Not equipped <input type="checkbox"/> Equipped - Optional

**CLUTCH**

Model	■ CSP-430, dry single plate with damper springs, facing outside diameter 430 mm
Facing material	■ Mold type (non-asbestos) <input type="checkbox"/> Cera-metallics - Optional
Control	■ Hydraulic with air booster
Clutch automatic gap adjuster	■ Not equipped <input type="checkbox"/> Equipped - Optional

**TRANSMISSION**

Model	■ M009, manual 9-speeds, synchromesh, overdrive
-------	---

**POWER TAKE OFF (PTO)**

Transmission PTO	■ Not equipped <input type="checkbox"/> Equipped (343 Nm) - Optional
Control	■ Not equipped <input type="checkbox"/> Equipped (set for transmission PTO) - Optional <input type="checkbox"/> Wire harness only - Optional

**PROPELLER SHAFT**

Model	■ HY1345 series
-------	-----------------

**FRONT AXLE**

Model	■ MF78IL
Type	■ I-beam, reverse Elliot

**REAR AXLE**

Model	■ SH18
Type	■ Full-floating, single reduction, single speed by hypoid gearings

**SERVICE BRAKE**

Type	■ Full air, S-cam, leading and trailing shoes
Service brake line	■ Dual circuit
Drum diameter x Lining Width	
- Front	■ 410 x 150 mm
- Rear	■ 410 x 220 mm
Auto brake shoes adjuster	■ Not equipped □ Equipped - Optional
ABS (antilock brake system)	■ Not equipped □ Equipped - Optional
Air dryer	■ Equipped (without heater) □ Equipped (with heater) - Optional

**AUXILIARY BRAKE**

Retarder brake	■ Not equipped
Exhaust brake	■ Equipped

**PARKING BRAKE**

Type	■ Air operated spring brake acting on rear axle, for emergency and parking purpose □ Air operated spring brake acting on front and 1st rear axle, for emergency and parking purpose - Optional
------	---

**STEERING**

Type	■ Telescopic and tilt steering column, Recirculating ball integral power steering
------	---

**FRONT SUSPENSION**

Type	■ Semi-elliptic leaf springs with single action shock absorbers
------	---

**REAR SUSPENSION**

Type	■ Semi-elliptic main leaf springs and auxiliary springs
------	---

**WHEEL AND TIRE**

Tire size	■ 11.00R20-16 (20 x 7.50V wheel) □ 11R22.5-148/145 (22.5 x 7.50 wheel) - Optional □ 12R22.5-152/148 (22.5 x 8.25 wheel) - Optional □ 275/70R22.5-148/145 (22.5 x 8.25 wheel) (not selectable with 390L fuel tank) - Optional □ 275/80R22.5 (22.5 x 8.25 wheel) - Optional
Wheel size	■ 20 x 7.50V □ 22.5 x 7.50 - Optional □ 22.5 x 8.25 - Optional
Wheel bolt type	■ ISO 10-stud
Spare tire	■ Not equipped □ Equipped - Optional
Tire carrier	■ Not equipped □ Temporary setting - Optional
Tire inflator	■ Not equipped □ Equipped - Optional

**FUEL TANK**

Capacity	■ 200 L □ 200 L with leak prevent valve - Optional □ 320 L - Optional □ 390 L - Optional □ 320 L with leak prevent valve - Optional □ 390 L with leak prevent valve - Optional
Cap-key	■ Not equipped □ Equipped - Optional
Fuel pre-filter and sedimenter	■ Equipped (2 pcs)

**CHASSIS FRAME**

Type	■ Ladder-shaped channel section side rails
Rear frame width	■ 840 mm
Max. section (depth x flange x thickness)	■ 275 x 80 x 7.0 mm
Tensile strength	■ 620 N/mm <sup>2</sup> {63 kgf/mm <sup>2</sup> }
Front bumper	■ Cab colored type □ Dark grey type (no-painting) - Optional
Rear bumper	■ Not equipped
Front under guard	■ Not equipped
Front underrun protector	■ Not equipped
Front tow hook	■ Equipped
Deck plate	■ Not equipped □ Equipped (steel) without side guard - Optional
Rear fender	■ Equipped □ Not equipped - Optional
License plate bracket	■ Standard type □ Large type - Optional

**CAB**

Type	■ Forward control, all steel welded construction
Cab mounting type	■ Semi floating (rubber mounting)
Cab tilt mechanism	■ Torsion bar type
Front windshield	■ Heat-absorbing laminated glass
Seating capacity	■ Three □ Two (set for center console) - Optional
Driver seat	■ High-back 750mm, 8-way adjustable seat, vinyl cover □ High-back 750mm, 8-way adjustable seat, fabric cover - Optional
Outer passenger seat	■ High-back 750mm, reclining seat, vinyl cover □ High-back 750mm, reclining seat, fabric cover - Optional
Center passenger seat	■ Equipped with tray, vinyl cover (folding type) □ Equipped with console, vinyl cover (folding type) - Optional □ Equipped with tray, fabric cover (folding type) - Optional □ Equipped with console, fabric cover (folding type) - Optional □ Not equipped - Optional
Center console	■ Not equipped □ Equipped (set for two seating capacity) - Optional
Seat suspension	■ Non-suspension □ Air suspension for driver seat - Optional
Seat belt	■ Equipped with ELR (Emergency Locking Retractor) □ Equipped with ELR (Emergency Locking Retractor) and warning - Optional
Sleeping bed	■ Not equipped □ Equipped - Optional
Sleep bed curtain	■ Not equipped □ Equipped - Optional □ Equipped (round type) - Optional
Floor mat	■ Vinyl type
Overhead console	■ Equipped (driver side) □ Equipped (both sides), (set for sun visor) - Optional
Sun visor	■ Equipped (driver side) □ Equipped (both sides), (set for overhead console) - Optional
Cab trim	■ Semi trim (roof and side) □ Full trim (roof, side and back) - Optional
Cab pocket	■ Door pocket □ Door + driver seat (not selectable with seat suspension) - Optional □ Door + outer passenger seat - Optional □ Door + driver seat and outer passenger seat (not selectable with seat suspension) - Optional
Quarter pocket	■ Equipped (both sides)
Grab handle (interior)	■ A-pillar mounted (driver 1 + passenger 2) and B-pillar mounted (driver 1 + passenger 1)
Air deflector	■ Not equipped
Side visor	■ Not equipped

Power window	<input checked="" type="checkbox"/> Not equipped <input type="checkbox"/> Equipped (set for power door lock) - Optional
Power door lock	<input checked="" type="checkbox"/> Not equipped <input type="checkbox"/> Equipped (set for power window) - Optional
Outside mirror	<input checked="" type="checkbox"/> Convex type <input type="checkbox"/> EC type (set for side under mirror and manual folding mirror stay) - Optional
Mirror stay	<input checked="" type="checkbox"/> Fixed type <input type="checkbox"/> Manual folding type (set for EC type outside mirror) - Optional
Front under mirror	<input checked="" type="checkbox"/> Not equipped <input type="checkbox"/> Equipped - Optional
Side under mirror	<input checked="" type="checkbox"/> Not equipped <input type="checkbox"/> Equipped (set for EC type outside mirror or front under mirror) - Optional
Door under mirror	<input checked="" type="checkbox"/> Not equipped <input type="checkbox"/> Equipped (set for EC type outside mirror) - Optional
Inside mirror	<input checked="" type="checkbox"/> Not equipped <input type="checkbox"/> Equipped - Optional <input type="checkbox"/> Equipped (EC type) - Optional
Windshield wiper	<input checked="" type="checkbox"/> 2-speed with wash and intermittent feature
Air inlet filter	<input checked="" type="checkbox"/> Mesh type <input type="checkbox"/> Fabric type - Optional
Air conditioner	<input checked="" type="checkbox"/> Not equipped <input type="checkbox"/> Equipped (set for heater and defroster) - Optional
Heater and defroster	<input checked="" type="checkbox"/> Not equipped <input type="checkbox"/> Equipped - Optional
Cruise control	<input checked="" type="checkbox"/> Not equipped
Tachograph	<input checked="" type="checkbox"/> Not equipped <input type="checkbox"/> 140 km/h 7-days - Optional <input type="checkbox"/> 140 km/h 7-days with engine revolution recording - Optional
Radio	<input checked="" type="checkbox"/> Not equipped <input type="checkbox"/> AM/FM radio with CD player - Optional <input type="checkbox"/> AM/FM radio - Optional <input type="checkbox"/> Antenna only - Optional
Speaker	<input checked="" type="checkbox"/> Not equipped <input type="checkbox"/> 2-speaker - Optional
Map light	<input checked="" type="checkbox"/> Equipped
Reading light	<input checked="" type="checkbox"/> Not equipped <input type="checkbox"/> Equipped (fluorescent light) - Optional
Cigar lighter	<input checked="" type="checkbox"/> Not equipped <input type="checkbox"/> Equipped - Optional
Ash tray	<input checked="" type="checkbox"/> Equipped (driver) <input type="checkbox"/> Equipped (driver and outer passenger) - Optional
Cup holder	<input checked="" type="checkbox"/> Not equipped <input type="checkbox"/> Equipped - Optional
Rear body control lever	<input checked="" type="checkbox"/> Not equipped <input type="checkbox"/> Equipped (dump lever) - Optional
Fire extinguisher	<input checked="" type="checkbox"/> Not equipped <input type="checkbox"/> Equipped - Optional
Side reflector	<input checked="" type="checkbox"/> Not equipped <input type="checkbox"/> Equipped - Optional
Tool set	<input checked="" type="checkbox"/> Equipped <input type="checkbox"/> Not equipped - Optional
Hydraulic jack	<input checked="" type="checkbox"/> Equipped <input type="checkbox"/> Not equipped - Optional
Cab color	<input checked="" type="checkbox"/> White <input type="checkbox"/> Yellow - Optional <input type="checkbox"/> Blue - Optional

**INSTRUMENTS**

Speedometer	■ Equipped (km/h)
Tachometer and over-run warning	■ Equipped (r/min) with buzzer
Fuel gauge	■ Equipped
Air pressure gauge	■ Front and rear (kPa)
Coolant level warning	■ Equipped with indicator light and buzzer
Hour meter	■ Not equipped
	□ Equipped - Optional
Meter unit symbol	■ SI unit

**ELECTRICAL EQUIPMENT**

Batteries	■ 24 V, 65 Ah (234 kC) at 20-hour rate, 65D23L (2) □ 24 V, 120 Ah (432 kC) at 20-hour rate, 115F51 (2) - Optional
Battery cover	■ Equipped
Alternator	■ 24 V, 60 A
Starter	■ 24 V, 6.0 kW
Headlight	■ Halogen type
Headlight leveling	■ Not equipped
	□ Manual type - Optional
Fog light	■ Not equipped
	□ White halogen type - Optional
	□ White halogen type (EC type) - Optional
Position light	■ Equipped
Turn signal light (front)	■ Equipped
	□ Equipped with front side marker light - Optional
Turn signal light (door)	■ Equipped
Roof marker light	■ Not equipped
	□ Equipped (2 pcs) - Optional
Stop, turn, tail light	■ Equipped
Back-up light	■ Equipped (1 pc) □ Equipped (2 pcs) - Optional
Rear fog light	■ Not equipped
	□ Equipped - Optional
Work light	■ Equipped (back of cab)
Side marker light	■ Not equipped
	□ Equipped (front) - Optional
	□ Equipped (front and rear) - Optional
Horn	■ Electric horn
Back-up buzzer	■ Not equipped
	□ Equipped - Optional

**TRAILER EQUIPMENTS**

Trailer connection	■ Wire harness and air line only □ SAE 7-way electrical socket and glad hands (service and emergency air line) with trailer hoses - Optional
Trailer brake hand control valve	■ Not equipped
Fifth-wheel coupling	■ Not equipped
	□ Base plate only, kingpin offset 455 mm - Optional
	□ Single axle coupler, kingpin 2 inch diameter, offset 455 mm, right hand release - Optional
Lead on ramp	■ Not equipped
	□ Equipped - Optional

**Note:**

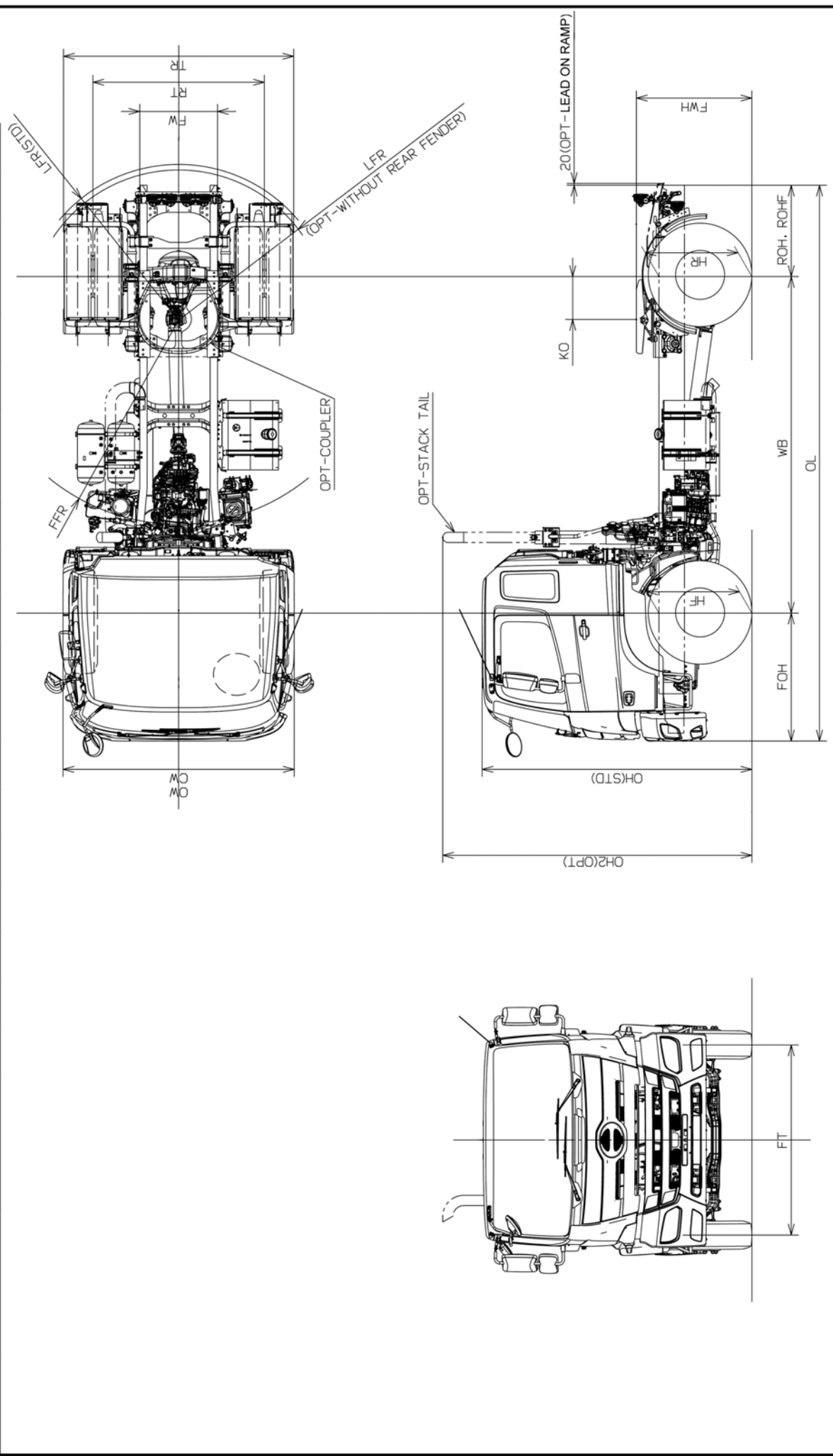
All specifications of the products are with normal manufacturing allowances and tolerances.

Hino Motors, Ltd. reserves the right to alter specifications at any time without prior notice.

Figures of axle capacity can be changed by the operating conditions and specifications of equipments concerned.

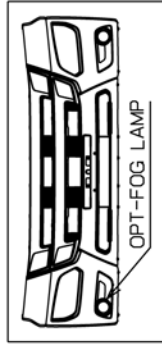
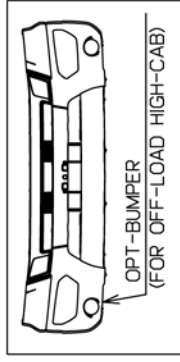
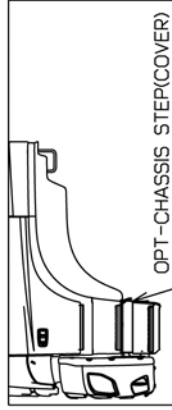
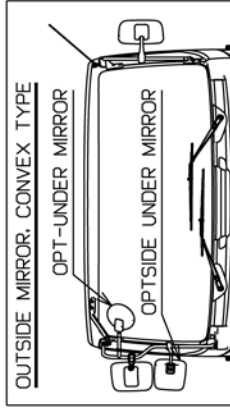
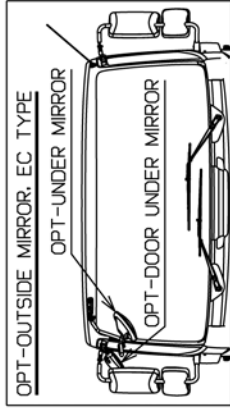
When selecting optional equipment, consult Hino technical staff as the adaptation of some of the optional equipment on production line may require an extra lead time.

MODEL	TIRE	WHEEL	HF	HR	OH (STD)	OH2 (OPT)	FT	RT	CW	TR	OW	FOH	WB	ROH	OL	ROHF	FW	FFR	LFR (STD)	LFR (OPT)	KO	FWH
SG2PF7B-MG2	11.00R20-16	20X7.50V	1010	1095	2915	3340	2050	1835	2490	2450	2490	1380	3630	985	5995	985	840	2205	1680	1575	455	1335
	11R22.5 148/145	22.5X7.50	995	1075	2900	3320	2055	1835	2490	2430	2490	1380	3630	985	5995	985	840	2205	1680	1560	455	1320
	12R22.5 152/148	22.5X8.25	1010	1095	2915	3340	2050	1835	2490	2460	2490	1380	3630	985	5995	985	840	2205	1680	1580	455	1335
	275/70R22.5 148/145	22.5X8.25	950	1030	2855	3280	2050	1835	2490	2445	2490	1380	3630	985	5995	985	840	2205	1680	1540	455	1275
	275/80R22.5	22.5X8.25	975	1060	2880	3305	2050	1835	2490	2445	2490	1380	3630	985	5995	985	840	2205	1680	1555	455	1300



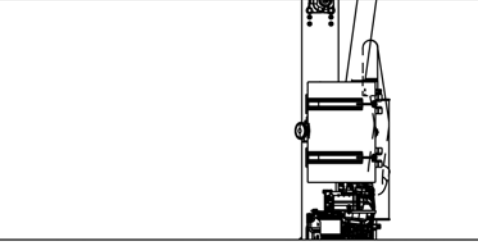
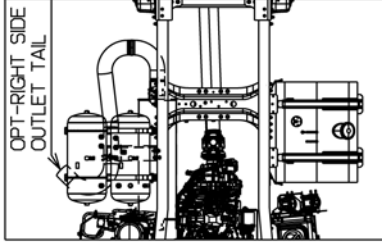
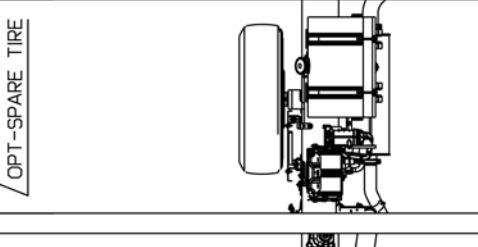
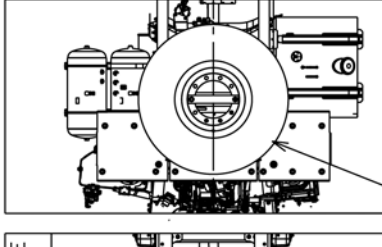
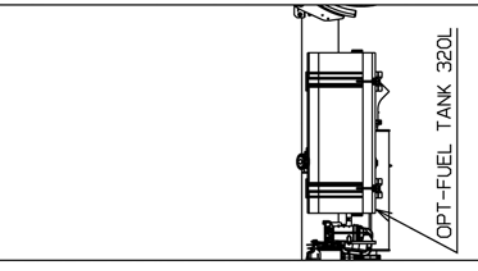
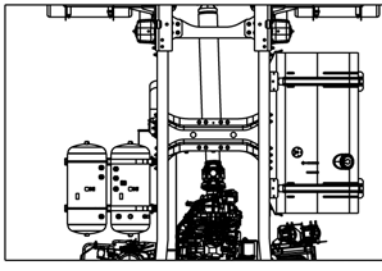
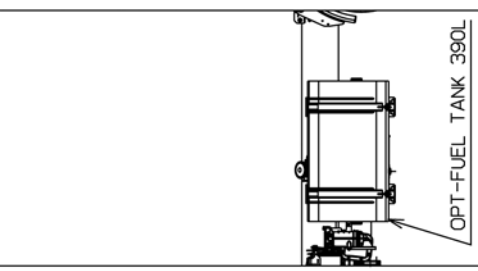
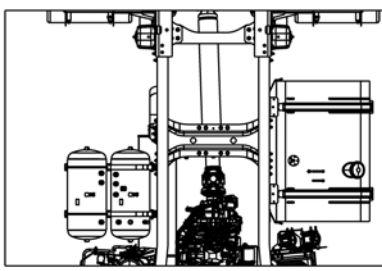
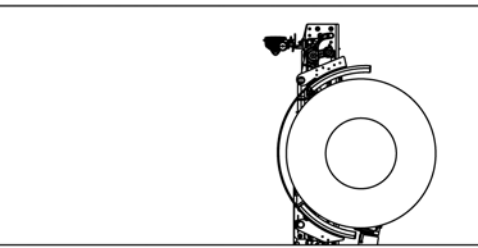
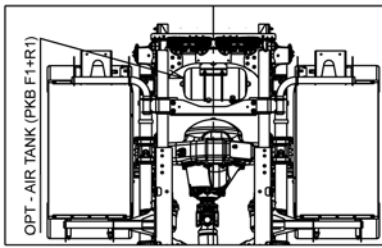
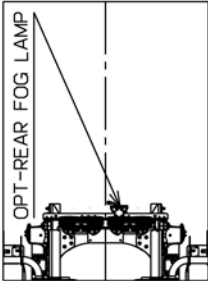
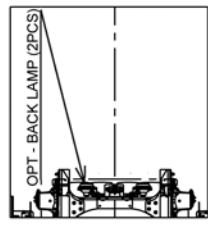
MODEL : HINO SG2PF7B CHASSIS  
DRAWING NO. : CDRSG311A-0





MODEL : HINO SG2PF7B CHASSIS

DRAWING No. : CDRSG311A-1



MODEL : HINO SG2PF7B CHASSIS

DRAWING NO. : CDRSG311A-2