# **SPECIFICATIONS**

## **1. MAJOR COMPONENT**



# 2. SPECIFICATIONS



| Description                         |                            | Unit                | Specifi cation |
|-------------------------------------|----------------------------|---------------------|----------------|
| Operating weight                    |                            | kg                  | 20900          |
| Bucket capacity (SAE heaped), stand | dard                       | m³                  | 1.00           |
| Overall length                      | А                          |                     | 9560           |
| Overall width                       | В                          |                     | 2800           |
| Overall height of boom              | С                          |                     | 3030           |
| Superstructure width                | D                          |                     | 2740           |
| Overall height of cab               | Е                          |                     | 3000           |
| Ground clearance of counterweight   | F                          |                     | 1060           |
| Overall height of engine hood G     |                            |                     | 2390           |
| Overall height of handrail          | G'                         |                     | 2975           |
| Minimum ground clearance            | Minimum ground clearance H |                     | 480            |
| Rear-end distance                   | Ι                          | -                   | 2890           |
| Rear-end swing radius               | ľ                          |                     | 2830           |
| Distance between tumblers           | J                          |                     | 3360           |
| Undercarriage length                | К                          |                     | 4165           |
| Undercarriage width                 | L                          |                     | 2800           |
| Track gauge                         | М                          |                     | 2200           |
| Track shoe width, standard          | Ν                          |                     | 600            |
| Travel speed (low/high)             |                            | km/hr               | 3.5/5.7        |
| Swing speed                         |                            | rpm                 | 11.4           |
| Gradeability                        |                            | Degree (%)          | 35 (70)        |
| Ground pressure                     |                            | kgf/cm <sup>2</sup> | 0.47           |
| Max traction force                  |                            | kg                  | 20200          |

# 3. WORKING RANGE AND DIGGING FORCE



| Description                     | in (ft in) | Boom | 5.68 (18' 8") |
|---------------------------------|------------|------|---------------|
| Description                     | m (π-in)   | Arm  | 2.92 (9' 7")  |
| Max digging reach               |            | Α    | 9940mm        |
| Max digging reach on ground     |            | Α'   | 9780mm        |
| Max digging depth               |            | В    | 6490mm        |
| Max digging depth (8 ft level)  | mm (ft in) | Β'   | 6315mm        |
| Max vertical wall digging depth |            | С    | 5860mm        |
| Max digging height              |            | D    | 10000mm       |
| Max dumping height              |            | E    | 7150mm        |
| Min swing radius                |            | F    | 3250mm        |
| Dualact diamin a ferrer         | kgf        | SAE  | 13300kgf      |
| Bucket digging lorce            | kgf        | ISO  | 15400kgf      |
| Arm diaging force               | kgf        | SAE  | 10400kgf      |
| Arm algging lorce               | kgf        | ISO  | 12200kgf      |

# 4. WEIGHT

| ltown   | R215VS PRO |       |  |  |
|---|------------|-------|--|--|
| liem  | kg         | lb    |  |  |
| Upperstructure assembly   | 9140       | 20150 |  |  |
| Main frame weld assembly  | 1654       | 3650  |  |  |
| Engine assembly   | 522        | 1200  |  |  |
| Main pump assembly  | 122        | 270   |  |  |
| Main control valve assembly   | 140        | 310   |  |  |
| Swing motor assembly  | 250        | 550   |  |  |
| Hydraulic oil tank assembly   | 226        | 500   |  |  |
| Fuel tank assembly  | 186        | 410   |  |  |
| Counterweight   | 3800       | 8380  |  |  |
| Cab assembly  | 310        | 680   |  |  |
| Lower chassis assembly  | 7550       | 16650 |  |  |
| Track frame weld assembly   | 2370       | 5200  |  |  |
| Swing bearing   | 260        | 570   |  |  |
| Travel motor assembly   | 305        | 670   |  |  |
| Turning joint   | 53         | 120   |  |  |
| Track recoil spring   | 130        | 290   |  |  |
| Idler   | 138        | 300   |  |  |
| Carrier roller  | 21         | 46    |  |  |
| Track roller  | 38         | 84    |  |  |
| Track-chain assembly (600 mm standard triple grouser shoe)                                | 1319       | 2900  |  |  |
| Front attachment assembly (5.68 m boom, 2.92 m arm, 1.00m <sup>3</sup> SAE heaped bucket) | 4200       | 9260  |  |  |
| 5.68 m boom assembly  | 1535       | 3390  |  |  |
| 2.92 m arm assembly   | 750        | 1650  |  |  |
| 1.00m <sup>3</sup> SAE heaped bucket  | 833        | 1840  |  |  |
| Boom cylinder assembly  | 180        | 390   |  |  |
| Arm cylinder assembly   | 260        | 570   |  |  |
| Bucket cylinder assembly  | 170        | 370   |  |  |
| Bucket control link assembly  | 174        | 380   |  |  |

## 5. LIFTING CAPACITIES

| Model                 | Туре | Boom        | Arm         | Counterweight | Shoe       | Wheel      | Do    | zer  | Outri | igger |
|-----------------------|------|-------------|-------------|---------------|------------|------------|-------|------|-------|-------|
| R215VS MON<br>PRO BOO | MONO | Length [mm] | Length [mm] | weight [kg]   | width [mm] | width [mm] | Front | Rear | Front | Rear  |
|                       | BOOM | 5680        | 2920        | 3800          | 600        | -          | -     | -    | -     | -     |

| ROBI         | ROBEX 215VS PRO<br>$2.92m(9'7'')$ $5.68m(18'8'')$ $600mm(24'')$ $1.00m^{3}(1.31yd^{3})$ |        |            |        |                         |        |               |                |         |       |              |               |              |                |
|--------------|---|--------|------------|--------|-------------------------|--------|---------------|----------------|---------|-------|--------------|---------------|--------------|----------------|
|              | þ   | 1.5m   | (5ft)      | 3.0m(  | 3.0m(10 ft) 4.5m(15 ft) |        | 15 ft )       | 6.0m(          | 20 ft ) | 7.5m( | 25 ft)       |               |              |                |
| <b>−₹</b> ∮} |   | ľ      | ∎ <b>≞</b> | ŀ      | ∎ <b>a</b>              |        | ⊫∎            | ľ              | ⊫∎      | ľ     | ₽₽           | U             |              | m(ft)          |
| 7.5m         | kg<br>Ib  |        |            |        |                         |        |               |                |         |       |              | *2250         | *2250        | 6.45           |
| 6.0m         | ka  |        |            |        |                         |        |               |                |         | *2270 | *2270        | *2100         | *2100        | (21.2)<br>7.54 |
| 19.7 ft      | lb  |        |            |        |                         |        |               |                |         | *5000 | *5000        | *4630         | *4630        | (24.7)         |
| 4.5m         | kg  |        |            |        |                         |        |               | *3980          | 3900    | *3780 | 2520         | *2100         | 2060         | 8.21           |
| 14.8 ft      | lb  |        |            |        |                         |        |               | *8770          | 8600    | *8330 | 5560         | *4630         | 4540         | (27.0)         |
| 3.0m         | kg  |        |            | *9880  | *9880                   | *6140  | 5820          | *4800          | 3600    | 3970  | 2380         | *2200         | 1790         | 8.57           |
| 9.8 ft       | 1D<br>Ive   |        |            | *6960  | *6960                   | *7010  | 12830<br>5190 | -10580<br>5520 | 2200    | 2800  | 5250<br>2220 | *2420         | 3950<br>1690 | (28.1)         |
| 4.9 ft       | lb  |        |            | *15120 | *15120                  | *17440 | 11420         | 12190          | 7250    | 8380  | 4920         | *5340         | 3700         | (28.4)         |
| 0.0m         | kg  |        |            | *7770  | *7770                   | 8480   | 4790          | 5270           | 3060    | 3660  | 2100         | *2810         | 1690         | 8.47           |
| 0.0 ft       | lb  |        |            | *17130 | *17130                  | 18700  | 10560         | 11620          | 6750    | 8070  | 4630         | *6190         | 3730         | (27.8)         |
| -1.5m        | kg  | *7000  | *7000      | *10950 | 9230                    | 8310   | 4640          | 5140           | 2940    | 3600  | 2040         | 3260          | 1840         | 7.99           |
| -4.9 ft      | lb  | *15430 | *15430     | *24140 | 20350                   | 18320  | 10230         | 11330          | 6480    | 7940  | 4500         | 7190          | 4060         | (26.2)         |
| -3.0m        | kg  | *10520 | *10520     | *13780 | 9420                    | 8350   | 4670          | 5150           | 2950    |       |              | 3900          | 2240         | 7.17           |
| -9.8 ft      | lb  | *23190 | *23190     | *30380 | 20770                   | 18410  | 10300         | 11350          | 6500    |       |              | 8600          | 4940         | (23.5)         |
| -4.5m        | kg  |        |            | *25660 | 9800<br>21610           | *17550 | 4870<br>10740 |                |         |       |              | 5540<br>12210 | 3230<br>7120 | 5.80<br>(19.2) |
| -14.8 ft     | מון   |        |            | 20000  | 21010                   | 17000  | 10/40         |                |         |       |              | 12210         | 1120         | (19.2)         |

Note 1. Lifting capacity are based on ISO 10567.

- 2. Lifting capacity of the HX series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
- 3. The Lift-point is bucket pivot mounting pin on the arm (without bucket mass).
- 4. \*Indicates load limited by hydraulic capacity.

\* Lifting capacities are based upon a standard machine conditions.

Lifting capacities will vary with different work tools, ground conditions and attachments.

The difference between the weight of a work tool attachment must be subtracted.

Consult your Hyundai dealer regarding the lifting capacities for specific work tools and attachments.

▲ Failure to comply to the rated load can cause possible personal injury or property damage. Make adjustments to the rated load as necessory for non-standard configurations.

# 6. BUCKET SELECTION GUIDE



General bucket

| STD 1.00 m <sup>3</sup> SAE Heaped |  | OPD 0.92                      | m <sup>3</sup> SAE ⊦      | leaped |       |                      |
|------------------------------------|--|-------------------------------|---------------------------|--------|-------|----------------------|
|                                    | Conocity                               |                               | \\/idtb                   |        |       | MONO                 |
|                                    | Cap                                    | aoity                         | VVICUT                    |        |       | Recommendation       |
| Туре                               | SAE<br>Heaped                          | CECE<br>heaped                | Without<br>side<br>cutter | Weight | Tooth |                      |
|                                    | m <sup>3</sup>                         | m <sup>3</sup> m <sup>3</sup> |                           | kg     | EA    | 5.68 m (18' 8") Boom |
| General<br>bucket                  | 1.00m <sup>3</sup>                     | 0.86 m <sup>3</sup>           | 1315 mm                   | 833kg  | 5     |                      |
|                                    | 0.92m <sup>3</sup> 0.80 m <sup>3</sup> |                               | 1178 mm                   | 828kg  | 5     |                      |

 $\ref{scalar}$  Applicable for materials with density of 2000 kg/m³ (3370 lb/yd  $^3$  ) or less

## 7. UNDERCARRIAGE

### 1) TRACKS

X-leg type center frame is integrally welded with reinforced box-section track frames. The design includes dry tracks, lubricated rollers, idlers, sprockets, hydraulic track adjusters with shock absorbing springs, and assembled track-type tractor shoes with triple grousers.

### 2) TYPES OF SHOES

|       |                  |                     | Triple grouser |   |   |   |  |  |  |
|-------|------------------|---------------------|----------------|---|---|---|--|--|--|
| Model | Shapes           |                     |                |   |   |   |  |  |  |
|       | Shoe width       | mm                  | 600            | - | - | - |  |  |  |
|       | Operating weight | kg                  | 20900          | - | - | - |  |  |  |
| PRO   | Ground pressure  | kgf/cm <sup>2</sup> | 0.47           | - | - | - |  |  |  |
|       | Overall width    | mm                  | 2800           | - | - | - |  |  |  |

## 3) NUMBER OF ROLLERS AND SHOES ON EACH SIDE

| lte         | em           | Quantity |  |  |
|-------------|--------------|----------|--|--|
| Carrier     | rollers      | 2 EA     |  |  |
| Track shoes | R215VSPRO    | 7 EA     |  |  |
| Track shoes | KZ I SVOF KU | 46 EA    |  |  |

#### 4) SELECTION OF TRACK SHOE

Suitable track shoes should be selected according to operating conditions.

#### Method of selecting shoes

Confirm the category from the list of applications in table 2, then use table 1 to select the shoe. Wide shoes (categories B and C) have limitations on applications. Before using wide shoes, check the precautions, then investigate and study the operating conditions to confirm if these shoes are suitable.

Select the narrowest shoe possible to meet the required flotation and ground pressure.

Application of wider shoes than recommendations will cause unexpected problem such as bending of shoes, crack of link, breakage of pin, loosening of shoe bolts and the other various problems.

#### % Table 1

| Track shoe            | Specification | Category |
|-----------------------|---------------|----------|
| 600 mm triple grouser | Standard      | А        |
| 700 mm triple grouser | -             | В        |
| 800 mm triple grouser | -             | С        |

#### % Table 2

| Category | Applications                                | Precautions   |
|----------|---|---|
| A        | Rocky ground,<br>river beds,<br>normal soil | Travel at low speed on rough ground with large obstacles such as boul-<br>ders or fallen trees or a wide range of general civil engineering work  |
| В        | Normal soil,<br>soft ground                 | <ul> <li>These shoes cannot be used on rough ground with large obstacles<br/>such as boulders or fallen trees</li> <li>Travel at high speed only on flat ground</li> <li>Travel slowly at low speed if it is impossible to avoid going over obstacles</li> </ul>  |
| С        | Extremely soft ground<br>(swampy ground)    | <ul> <li>Use the shoes only in the conditions that the machine sinks and it is impossible to use the shoes of category A or B</li> <li>These shoes cannot be used on rough ground with large obstacles such as boulders or fallen trees</li> <li>Travel at high speed only on flat ground</li> <li>Travel slowly at low speed if it is impossible to avoid going over obstacles cles</li> </ul> |

# 8. SPECIFICATIONS FOR MAJOR COMPONENTS

## 1) ENGINE

| Item                                | Specification   |
|-------------------------------------|---|
| Model                               | CUMMNS QSB7   |
| Туре                                | 4-cycle, turbocharged, charge air cooled, mechanical controlled diesel engine |
| Cooling method                      | Water cooled  |
| Number of cylinders and arrangement | 6 cylinders, in-line  |
| Firing order                        | 1-5-3-6-2-4   |
| Combustion chamber type             | Direct injection type   |
| Cylinder bore×stroke                | 107 x 124 mm  |
| Piston displacement                 | 6700cc  |
| Compression ratio                   | 17.3 : 1  |
| Rated gross horse power (SAE J1995) | 167Hp(125kw)/2050rpm  |
| Maximum torque at 1300 rpm          | 67kgf.m/1200 rpm  |
| Engine oil quantity                 | 25.4L   |
| Dry weight                          | 556 kg  |
| High idling speed                   | 1950 $\pm$ 50 rpm   |
| Low idling speed                    | 850± 50rpm  |
| Rated fuel consumption              | 163.2g/KW.hr(2050rpm)   |
| Starting motor                      | Remy (24V-7.8KW)  |
| Alternator                          | DencoRemy(24V-90A)  |
| Battery                             | 2×12V×120Ah   |

## 2) MAIN PUMP

| ltem             | Specification                                  |
|------------------|--|
| Туре             | Variable displacement tandem axis piston pumps |
| Capacity         | $2 \times 117$ cc/rev                          |
| Maximum pressure | 350 kgf/cm <sup>2</sup>                        |
| Rated oil flow   | 2 × 222 ℓ /min                                 |
| Rated speed      | 1900rpm  |

## 3) GEAR PUMP

| ltem             | Specification                             |  |  |  |  |
|------------------|---|--|--|--|--|
| Туре             | Fixed displacement gear pump single stage |  |  |  |  |
| Capacity         | 15 cc/rev                                 |  |  |  |  |
| Maximum pressure | 40 kgf/cm <sup>2</sup>                    |  |  |  |  |
| Rated oil flow   | 28.5 ℓ /min                               |  |  |  |  |

## 4) MAIN CONTROL VALVE

| Item                       | Specification           |  |  |  |  |
|----------------------------|-------------------------|--|--|--|--|
| Туре                       | 9 spools mono-block     |  |  |  |  |
| Operating method           | Hydraulic pilot system  |  |  |  |  |
| Main relief valve pressure | 350 kgf/cm <sup>2</sup> |  |  |  |  |

## 5) SWING MOTOR

| Item                   | Specification                                |
|------------------------|--|
| Туре                   | Two fixed displacement axial piston motor    |
| Capacity               | 142.8 cc/rev                                 |
| Relief pressure        | 250 kgf/cm <sup>2</sup>                      |
| Braking system         | Automatic, spring applied hydraulic released |
| Braking torque         | 1183kgf/cm <sup>2</sup>                      |
| Brake release pressure | 20.9 kgf/cm <sup>2</sup>                     |
| Reduction gear type    | 2 - stage planetary                          |
| Swing speed            | 83.36 rpm                                    |

## 6) TRAVEL MOTOR

| Item                   | Specification                                |  |  |  |  |
|------------------------|--|--|--|--|--|
| Туре                   | Variable displacement axial piston motor     |  |  |  |  |
| Relief pressure        | 350 kgf/cm <sup>2</sup> (4978 psi)           |  |  |  |  |
| Reduction gear type    | 2-stage planetary                            |  |  |  |  |
| Braking system         | Automatic, spring applied hydraulic released |  |  |  |  |
| Brake release pressure | 15.2 kgf/cm <sup>2</sup>                     |  |  |  |  |
| Braking torque         | 2878 kgf · m                                 |  |  |  |  |

## 7) REMOTE CONTROL VALVE

| Item                    |         | Specification                    |  |  |  |
|-------------------------|---------|----------------------------------|--|--|--|
| Туре                    |         | Pressure reducing type           |  |  |  |
| Operating pressure      | Minimum | 6.5 kgf/cm <sup>2</sup> (92 psi) |  |  |  |
|                         | Maximum | 26 kgf/cm <sup>2</sup> (370 psi) |  |  |  |
| Single operation stroke | Lever   | 61 mm (2.4 in)                   |  |  |  |
|                         | Pedal   | 123 mm (4.84 in)                 |  |  |  |

## 8) CYLINDER

| Item            |   | Specification  |  |  |  |  |
|-----------------|---|--|--|--|--|--|
| Boom cylinder   | Bore dia $	imes$ Rod dia $	imes$ Stroke | $\emptyset$ 120 $\times$ $\emptyset$ 85 $\times$ 1290 mm |  |  |  |  |
|                 | Cushion                                 | Extend only  |  |  |  |  |
| Arm cylinder    | Bore dia $	imes$ Rod dia $	imes$ Stroke | $\emptyset$ 140 $\times$ $\emptyset$ 95 $\times$ 1510 mm |  |  |  |  |
|                 | Cushion                                 | Extend and retract                                       |  |  |  |  |
| Bucket cylinder | Bore dia $	imes$ Rod dia $	imes$ Stroke | $\emptyset$ 120 $\times$ $\emptyset$ 80 $\times$ 1055 mm |  |  |  |  |
|                 | Cushion                                 | Extend only  |  |  |  |  |

\* Discoloration of cylinder rod can occur when the friction reduction additive of lubrication oil spreads on the rod surface.

\* Discoloration does not cause any harmful effect on the cylinder performance.

#### 9) SHOE

| Item                            |  | Width Ground pressure               |    | Link quantity  | Overall width |  |
|---------------------------------|--|-------------------------------------|----|----------------|---------------|--|
| R215VSPRO Standard 600 mm (24") |  | 0.47 kgf/cm <sup>2</sup> (6.81 psi) | 46 | 2800 mm (9'2") |               |  |

### 10) BUCKET

| Item   |     | Сара                | acity               | Tooth    | Width               |                  |  |  |
|--------|-----|---------------------|---------------------|----------|---------------------|------------------|--|--|
|        |     | SAE heaped          | CECE heaped         | quantity | Without side cutter | With side cutter |  |  |
| R215VS | STD | 1.00 m <sup>3</sup> | 0.86 m <sup>3</sup> | 5        | 1315 mm             | 1410 mm          |  |  |
| PRO    | OPT | 0.92 m³             | 0.80 m <sup>3</sup> | 5        | 1178 mm             | 1275 mm          |  |  |

## 9. RECOMMENDED OILS

HYUNDAI genuine lubricating oils have been developed to offer the best performance and service life for your equipment. These oils have been tested according to the specifications of HYUNDAI and, therefore, will meet the highest safety and quality requirements.

We recommend that you use only HYUNDAI genuine lubricating oils and grease officially approved by HYUNDAI.

| Service                            |                      | Capacity                                      |             |            |           | Amb       | ient temp    | erature ° | C(°F)    |          |       |  |
|------------------------------------|----------------------|---|-------------|------------|-----------|-----------|--------------|-----------|----------|----------|-------|--|
| noint                              | Kind of fluid        | l   | -50         | -30        | -2        | 20 -      | -10 (        | ) 1       | 0 2      | 20 30    | 40    |  |
| point                              |                      |   | (-58)       | (-22)      | (-        | 4)        | (14) (3      | 32) (5    | 50) (6   | 68) (86) | (104) |  |
|                                    |                      |   |             |            |           |           |              |           |          |          |       |  |
|                                    |                      |   | ★SAE UVV-4U |            |           |           |              |           |          |          |       |  |
|                                    |                      |   |             |            | ★SA       | E 0W-3    | 30           | _         |          |          |       |  |
| Engine                             | Engine oil $\star^2$ | 25.4  |             |            |           | SA        | AE 5W-30     | 1         |          |          |       |  |
| oii pan                            | 0                    |   |             |            |           |           |              |           | 0\\/\ 20 |          |       |  |
|                                    |                      |   |             |            |           |           |              |           | 000-30   | 1        |       |  |
|                                    |                      |   |             |            |           |           | -1           | SAE       | E 15W-40 | )        |       |  |
| Swing                              |                      |   |             |            |           |           |              |           |          |          |       |  |
| drive                              |                      | 6.2   |             |            | *         | SAE 75    | N-90         | 1         | 1        |          |       |  |
| Final                              | Gear oil             |   |             |            |           |           |              |           | 1        |          |       |  |
| drive                              |                      | 4.5×2   |             |            |           |           |              | SAE 8     | 5W-140   | 1 1      |       |  |
|                                    |                      |   |             |            |           |           | 10.45        |           |          |          |       |  |
|                                    |                      |   |             |            |           | *ISO      | /G 15        | 1         |          |          |       |  |
| Hvdraulic                          |                      | Tank : 180                                    |             |            |           |           | ISO VG 3     | 32        |          |          |       |  |
| tank                               | Hydraulic oil        | oil<br>System : 270                           |             |            |           |           |              | ISOVG     | 46       |          |       |  |
|                                    |                      |   |             |            |           |           |              | 130 VG    | 40       | I I      | _     |  |
|                                    |                      |   |             |            |           |           |              |           | SO VG 6  | 8        |       |  |
|                                    |                      |   |             |            |           |           |              |           |          |          |       |  |
| Fuel tank                          | Diesel fuel          | 340   |             | ★AS        | STM E     | 0975 NG   | D.1          |           |          |          |       |  |
|                                    |                      | 0.0   |             |            |           |           |              | AST       | M D975   | NO.2     |       |  |
| <b>F</b> 101                       |                      |   |             |            |           |           |              |           |          |          |       |  |
| Fitting                            | Crosso               | As required                                   |             |            |           | ★NL       | GI NO.1      |           |          |          |       |  |
|                                    | Glease               | Frease As required                            |             |            |           |           |              | NI GI     | NO 2     |          |       |  |
|                                    | Misture of           |   |             |            |           |           | -            |           |          | +        |       |  |
| Radiator<br>(reservoir and soft 35 |                      | Ethylene glycol base permanent type (50 : 50) |             |            |           |           |              |           |          |          |       |  |
|                                    |                      | 35  | . = 1       |            |           |           |              | -         |          |          |       |  |
| tank)                              | water*1              |   | ★Ethy       | lene glyco | ol base p | permanent | type (60:40) | 4         |          |          |       |  |
| SAE :S                             | Society of Auto      | motive Engine                                 | ers         |            |           |           | * : C        | old reaid | bn       | I        |       |  |
| API · American Petroleum Institute |                      |   |             |            |           | R         | ussia. C     | IS. Mon   | aolia    |          |       |  |
| ISO ·I                             | nternational O       | rganization for                               | Stand       | lardiza    | ation     |           | *1 : S       | oft wate  | r        | 0        |       |  |

- ISO : International Organization for Standardization
- NLGI : National Lubricating Grease Institute

**ASTM** : American Society of Testing and Material

- City water or distilled water
- \*2 : Meets or exceeds

API CI-4 grade

- \* Using any lubricating oils other than HYUNDAI genuine products may lead to a deterioration of performance and cause damage to major components.
- \* Do not mix HYUNDAI genuine oil with any other lubricating oil as it may result in damage to the systems of major components.
- \* For HYUNDAI genuine lubricating oils and grease for use in regions with extremely low temperatures, please contact HYUNDAI dealers.