# 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

|            | Shapes           |               | Triple grouser |               |               |               |
|------------|------------------|---------------|----------------|---------------|---------------|---------------|
| Model      |                  |               |                |               |               |               |
| R180LC-7A  | Shoe width       | mm (in)       | 500 (20)       | 600 (24)      | 700 (28)      | 800 (32)      |
|            | Operating weight | kg (lb)       | 17950 (39580)  | 18200 (40120) | 18450 (40680) | 18700 (41230) |
|            | Ground pressure  | kgf/cm² (psi) | 0.49 (6.97)    | 0.42 (5.97)   | 0.36 (5.12)   | 0.32 (4.55)   |
|            | Overall width    | mm (ft-in)    | 2750 (9' 0")   | 2850 (9' 4")  | 2950 (9' 8")  | 3050 (10' 0") |
| R180LCD-7A | Shoe width       | mm (in)       | 500 (20)       | 600 (24)      | 700 (28)      | 800 (32)      |
|            | Operating weight | kg (lb)       | 19010 (41910)  | 19260 (42460) | 19510 (43010) | 19770 (43580) |
|            | Ground pressure  | kgf/cm² (psi) | 0.52 (7.39)    | 0.44 (6.26)   | 0.38 (5.40)   | 0.34 (4.83)   |
|            | Overall width    | mm (ft-in)    | 2750 (9' 0")   | 2850 (9' 4")  | 2950 (9' 8")  | 3050 (10' 0") |

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

| Item            | Quantity |
|-----------------|----------|
| Carrier rollers | 2EA      |
| Track rollers   | 8EA      |
| Track shoes     | 51EA     |

### 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 |
|----------------------|---------------|----------|
| 500mm triple grouser | Option        | Α        |
| 600mm triple grouser | Standard      | Α        |
| 700mm triple grouser | Option        | В        |
| 800mm triple grouser | Option        | С        |

### \* Table 2

| Category | Applications                                | Precautions  |
|----------|---|--|
| А        | Rocky ground,<br>river beds,<br>normal soil | Travel at low speed on rough ground with large obstacles such as boulders or fallen trees  |
| В        | Normal soil,<br>soft ground                 | <ul> <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</li> </ul>   |
| С        | Extremely soft ground (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</li> </ul> |