

## Forward and Reversing Vibrating Plate LG 250/300/450/450L/500/550/700

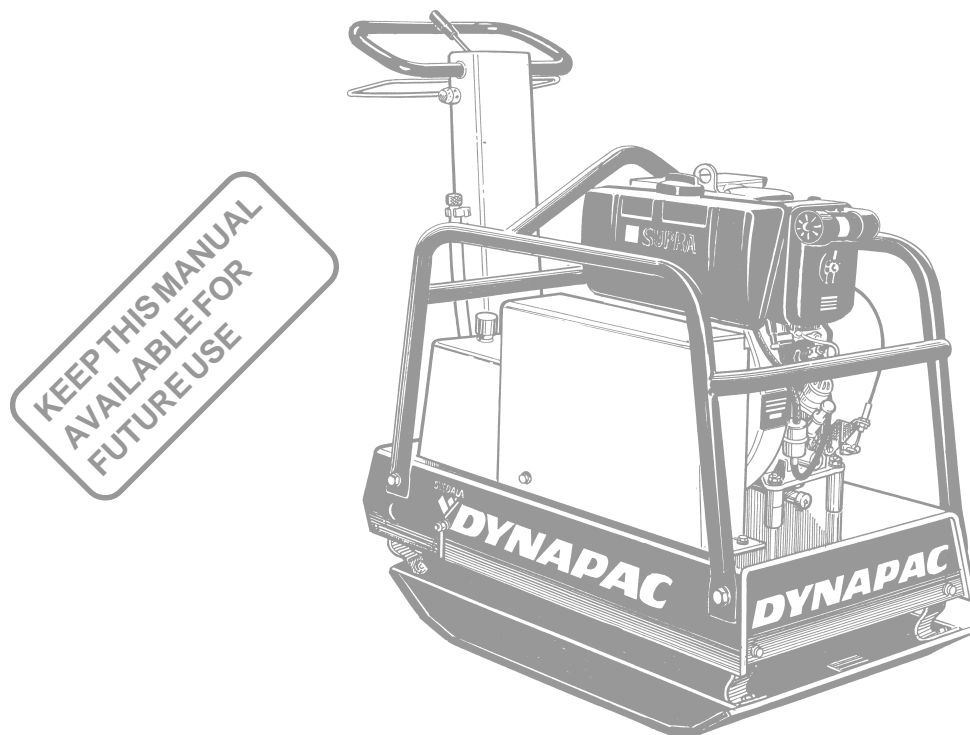
### Operation & Maintenance ILG250EN1, 97-08-15

Petrol Engine:  
Honda GX200

Diesel Engine:  
Yanmar L60AE, L100AE  
Hatz 1D31S, 1D60S, 1D60Z, 1D81S

These instructions apply from:

|         |           |            |
|---------|-----------|------------|
| LG 250  | PIN (S/N) | *32500001* |
| LG 300  | PIN (S/N) | *33000001* |
| LG 450  | PIN (S/N) | *34500001* |
| LG 450L | PIN (S/N) | *34500001* |
| LG 500  | PIN (S/N) | *35000050* |
| LG 550  | PIN (S/N) | *35500049* |
| LG 700  | PIN (S/N) | *37000001* |





## FUEL AND LUBRICANTS



### ENGINE OIL

Use SAE 15W / 40:

Honda GX200 0,6 lit. (0.65 qts), Hatz 1D31S 1,2 lit. (1.25 qts)

Yanmar L60 1,1 lit. (1.15 qts), Hatz 1D60S 2,0 lit. (2.1 qts)

Yanmar L100 1,65 lit. (1.75 qts), Hatz 1D60Z 2,0 lit. (2.1 qts)

Hatz 1D80S 2,0 lit. (2.1 qts)



### HYDRAULIC FLUID

Hydraulic fluid, recommendations:

LG 250 1,6 lit. (1.7 qts) Shell Morlina 10

LG 300 1,6 lit. (1.7 qts) Shell Morlina 10

LG 450 3,5 lit. (3.7 qts) Shell Morlina 10

LG 450L 3,5 lit. (3.7 qts) Shell Tellus TX32

LG 500 3,5 lit. (3.7 qts) Shell Morlina 10

LG 550 3,5 lit. (3.7 qts) Shell Morlina 10

LG 700 3,5 lit. (3.7 qts) Shell Morlina 10

## TECHNICAL DATA

| Order No. | LG 250 | LG 250 | LG 300 | LG 300 | LG 450L |
|-----------|--------|--------|--------|--------|---------|
|           | 770431 | 770379 | 770324 | 770380 | 770470  |

### Weight

|                       |          |          |          |          |           |
|-----------------------|----------|----------|----------|----------|-----------|
| Net weight, kg (lbs)  | 234(516) | 275(606) | 288(635) | 316(697) | 464(1023) |
| Operatingw., kg (lbs) | 236(520) | 277(611) | 290(639) | 318(701) | 466(1027) |

### Compaction data

|                      |            |            |            |            |            |
|----------------------|------------|------------|------------|------------|------------|
| Vibr.frequency, Hz   | 65         | 65         | 65         | 65         | 55         |
| Vibr.frequency, vpm  | 3900       | 3900       | 3900       | 3900       | 3300       |
| Centrifugalforce, kN | 36         | 36         | 36         | 36         | 50         |
| Amplitude, mm (in)   | 1,9(0.075) | 1,9(0.075) | 1,9(0.075) | 1,9(0.075) | 1,9(0.075) |

### Operating data

|                        |      |      |      |      |      |
|------------------------|------|------|------|------|------|
| Speed of travel, m/min | 0-22 | 0-22 | 0-22 | 0-22 | 0-24 |
| Max. tilt, °           | 20   | 20   | 20   | 20   | 20   |

### Volumes

|                               |           |           |           |           |            |
|-------------------------------|-----------|-----------|-----------|-----------|------------|
| Fuel tank, lit. (qts)         | 3,6(3.8)  | 3,5(3.7)  | 5(5.3)    | 5(5.3)    | 5,5(5.8)   |
| Crank case, lit. (qts)        |           |           |           |           |            |
| SAE 15W/40                    | 0,6(0.65) | 1,1(1.15) | 1,2(1.25) | 1,2(1.25) | 1,65(1.75) |
| Hydraulic fluid, lit. (qts)   |           |           |           |           |            |
| Shell Morlina 10              | 1,6(1.7)  | 1,6(1.7)  | 1,6(1.7)  | 1,6(1.7)  |            |
| Eccentric element, lit. (qts) |           |           |           |           | 3,5(3.7)   |
| SAE 15W/40                    | 0,5(0.5)  | 0,5(0.5)  | 0,5(0.5)  | 0,5(0.5)  |            |
| Shell Tellus TX32             |           |           |           |           | 0,8(0.85)  |
| Fuel consumption, l/h         | 1,2(1.25) | 0,9(0.95) | 1,0(1.05) | 1,0(1.05) | 1,4(1.5)   |

### Engine

|                   |                |                 |                        |                        |                  |
|-------------------|----------------|-----------------|------------------------|------------------------|------------------|
| Model             | Honda<br>GX200 | Yanmar<br>L60AE | Hatz<br>Supra<br>1D31S | Hatz<br>Supra<br>1D31S | Yanmar<br>L100AE |
|                   | Recoil start   | El.start        | Crank start            | El.start               | El.start         |
| Output, kW (hp)   | 4,8 (6,5)      | 3,9 (5,3)       | 4,9 (6,7)              | 4,9 (6,7)              | 6,5 (8,8)        |
| Engine speed, rpm | 3600           | 2850            | 2850                   | 2850                   | 3000             |

### Noise and Vibrations

|                   |   |       |       |       |       |
|-------------------|---|-------|-------|-------|-------|
| Noise level       | Sound pressure level at the operator's ear according to ISO 6394: |       |       |       |       |
| $L_{pA}$ dB (A) = | 88,6  | 93,8  | 92,4  | 94,3  | 99,3  |
|                   | Sound power level according to ISO 3744:                          |       |       |       |       |
| $L_{wA}$ dB (A) = | 102,4   | 106,6 | 107,0 | 105,3 | 111,6 |
| Vibration values  | The hand - arm vibration values according to ISO 5349:            |       |       |       |       |
| a $m/s^2$ =       | 0,1   | 1,0   | 1,2   | 2,0   | 1,0   |

The above noise level and vibration values were determined at normal speed of the engine with vibration on. The machine was placed on an elastic base. During operation these values may differ because of the actual operational conditions.

## TECHNICAL DATA

| Order No. | LG 450 | LG 450 | LG 450 | LG 450 | LG 500 | LG 500 | LG 500 |
|-----------|--------|--------|--------|--------|--------|--------|--------|
|           | 770320 | 770426 | 770321 | 770424 | 770503 | 770504 | 770505 |

### Weight

|                       |           |           |           |           |           |           |           |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Net weight, kg (lbs)  | 454(1001) | 472(1040) | 489(1078) | 507(1118) | 463(1020) | 498(1098) | 535(1179) |
| Operatingw., kg (lbs) | 457(1007) | 475(1047) | 492(1085) | 510(1125) | 465(1025) | 500(1102) | 537(1184) |

### Compaction data

|                      |           |           |           |           |           |           |           |
|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Vibr.frequency, Hz   | 55        | 55        | 55        | 55        | 60        | 60        | 60        |
| Vibr.frequency, vpm  | 3300      | 3300      | 3300      | 3300      | 3600      | 3600      | 3600      |
| Centrifugalforce, kN | 50        | 50        | 50        | 50        | 60        | 60        | 60        |
| Amplitude, mm (in)   | 2,1(0.08) | 1,9(0.07) | 2,1(0.08) | 1,9(0.07) | 2,1(0.08) | 2,1(0.08) | 2,1(0.08) |

### Operating data

|                        |      |      |      |      |      |      |      |
|------------------------|------|------|------|------|------|------|------|
| Speed of travel, m/min | 0-24 | 0-24 | 0-24 | 0-24 | 0-24 | 0-24 | 0-24 |
| Max. tilt, °           | 25   | 25   | 25   | 25   | 25   | 25   | 25   |

### Volumes

|                              |           |           |           |           |           |           |           |
|------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Fuel tank, lit. (qts)        | 7(7.4)    | 7(7.4)    | 7(7.4)    | 7(7.4)    | 7(7.4)    | 7(7.4)    | 7(7.4)    |
| Crank case, lit. (qts)       |           |           |           |           |           |           |           |
| SAE 15W/40                   | 2,0(2.1)  | 2,0(2.1)  | 2,0(2.1)  | 2,0(2.1)  | 2,0(2.1)  | 2,0(2.1)  | 2,0(2.1)  |
| Hydraulic fluid, lit. (qts)  |           |           |           |           |           |           |           |
| Shell Morlina 10             |           | 3,5(3.7)  | 3,5(3.7)  | 3,5(3.7)  | 3,5(3.7)  | 3,5(3.7)  | 3,5(3.7)  |
| Shell Tellus TX32            |           |           |           |           |           |           |           |
| Eccentricelement, lit. (qts) |           |           |           |           |           |           |           |
| SAE 15W/40                   | 0,8(0.85) | 0,8(0.85) | 0,8(0.85) | 0,8(0.85) | 0,8(0.85) | 0,8(0.85) | 0,8(0.85) |
| Fuel consumption, l/h        | 1,6(1.7)  | 1,6(1.7)  | 1,6(1.7)  | 1,6(1.7)  | 1,6(1.7)  | 1,6(1.7)  | 1,6(1.7)  |

### Engine

|                   |             |             |           |           |             |           |           |
|-------------------|-------------|-------------|-----------|-----------|-------------|-----------|-----------|
| Model             | Hatz        | Hatz        | Hatz      | Hatz      | Hatz        | Hatz      | Hatz      |
|                   | Supra       | Supra       | Supra     | Supra     | Supra       | Supra     | Supra     |
|                   | 1D60S       | 1D60S       | 1D60S     | 1D60S     | 1D60Z       | 1D60Z     | 1D60Z     |
|                   | Crank start | Crank start | El.start  | El.start  | Crank start | El.start  | El.start  |
| Output, kW (hp)   | 7,5(10,2)   | 7,5(10,2)   | 7,5(10,2) | 7,5(10,2) | 7,5(10,2)   | 7,5(10,2) | 7,5(10,2) |
| Engine speed, rpm | 3000        | 3000        | 3000      | 3000      | 3000        | 3000      | 3000      |

### Noise and Vibrations

|                          |   |       |       |       |       |       |       |
|--------------------------|---|-------|-------|-------|-------|-------|-------|
| Noise level              | Sound pressure level at the operator's ear according to ISO 6394: |       |       |       |       |       |       |
| L <sub>pA</sub> dB (A) = | 96,3  | 96,3  | 95,7  | 95,7  | 96,3  | 95,7  | 97,0  |
|                          | Sound power level according to ISO 3744:                          |       |       |       |       |       |       |
| L <sub>wA</sub> dB (A) = | 109,8   | 109,8 | 108,7 | 108,7 | 109,8 | 108,7 | 108,7 |
| Vibration values         | The hand - arm vibration values according to ISO 5349:            |       |       |       |       |       |       |
| a m/s <sup>2</sup> =     | 1,6   | 1,6   | 1,2   | 1,2   | 1,4   | 1,1   | 1,1   |

The above noise level and vibration values were determined at normal speed of the engine with vibration on. The machine was placed on an elastic base. During operation these values may differ because of the actual operational conditions.

## TECHNICAL DATA

| Order No. | LG 550 | LG 700 | LG 700 |
|-----------|--------|--------|--------|
|           | 770389 | 770322 | 770323 |

### Weight

|                       |           |           |           |
|-----------------------|-----------|-----------|-----------|
| Net weight, kg (lbs)  | 542(1195) | 665(1466) | 689(1519) |
| Operatingw., kg (lbs) | 545(1202) | 668(1473) | 692(1525) |

### Compaction data

|                      |      |      |      |
|----------------------|------|------|------|
| Vibr.frequency, Hz   | 55   | 50   | 50   |
| Vibr.frequency, vpm  | 3300 | 3300 | 3300 |
| Centrifugalforce, kN | 50   | 50   | 50   |
| Amplitude, mm (in)   | 1,9  | 2,5  | 2,5  |

### Operating data

|                        |      |      |      |
|------------------------|------|------|------|
| Speed of travel, m/min | 0-24 | 0-23 | 0-23 |
| Max. tilt, °           | 25   | 25   | 25   |

### Volumes

|                               |           |          |          |
|-------------------------------|-----------|----------|----------|
| Fuel tank, lit. (qts)         | 7(7.4)    | 7(7.4)   | 7(7.4)   |
| Crank case, lit. (qts)        |           |          |          |
| SAE 15W/40                    | 1,7(1.8)  | 2,0(2.1) | 2,0(2.1) |
| Hydraulic fluid, lit. (qts)   |           |          |          |
| Shell Morlina 10              | 3,5*(3.7) | 3,5(3.7) | 3,5(3.7) |
| Shell Tellus TX32             |           |          |          |
| Eccentric element, lit. (qts) |           |          |          |
| SAE 15W/40                    | 0,8(0.85) | 1,5(1.6) | 1,5(1.6) |
| Fuel consumption, l/h         | 1,6(1.7)  | 1,8(1.9) | 1,8(1.9) |

### Engine

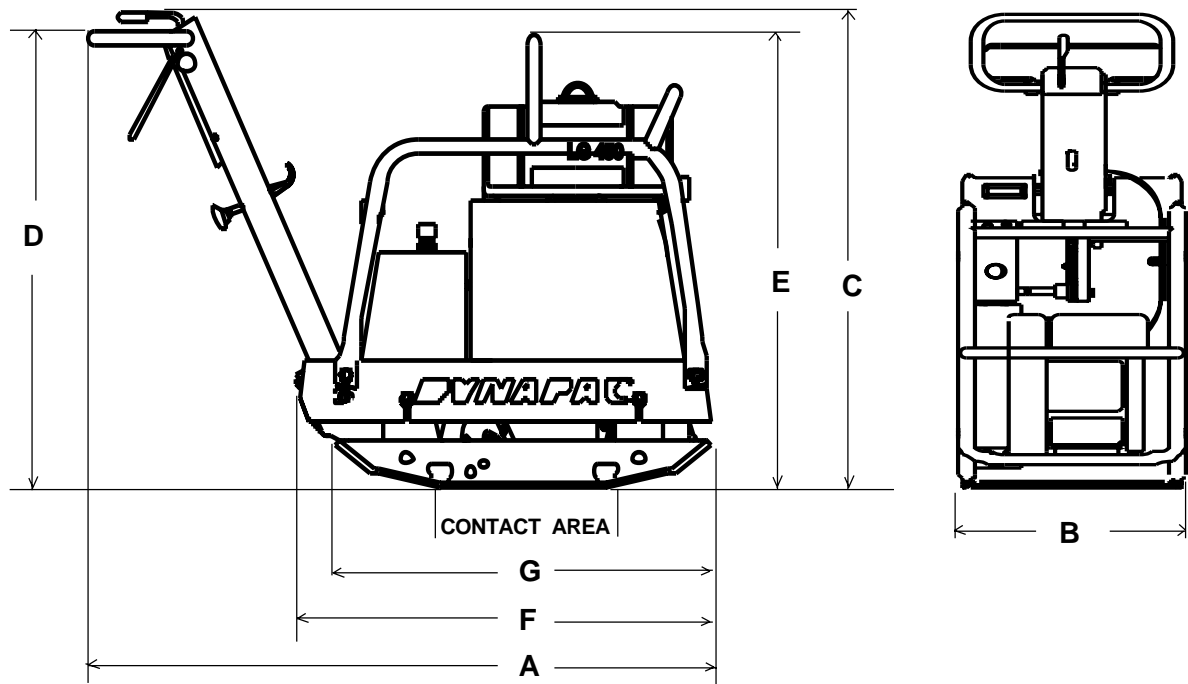
|                   |                                    |                                      |                                    |
|-------------------|------------------------------------|--------------------------------------|------------------------------------|
| Model             | Hatz<br>Supra<br>1D60S<br>El.start | Hatz<br>Supra<br>1D81S<br>Crankstart | Hatz<br>Supra<br>1D81S<br>El.start |
| Output, kW (hp)   | 7,5(10,2)                          | 10,5(14,3)                           | 10,5(14,3)                         |
| Engine speed, rpm | 3000                               | 3000                                 | 3000                               |

### Noise and Vibrations

|                        |   |       |       |
|------------------------|---|-------|-------|
| Noise level            | Sound pressure level at the operator's ear according to ISO 6394: |       |       |
| $L_{pA}$ dB (A) =      | 95,7  | 97,1  | 94,9  |
|                        | Sound power level according to ISO 3744:                          |       |       |
| $L_{wA}$ dB (A) =      | 108,7   | 110,1 | 108,7 |
| Vibration values       | The hand - arm vibration values according to ISO 5349:            |       |       |
| $a$ m/s <sup>2</sup> = | 2,0   | 2,5   | 2,0   |

The above noise level and vibration values were determined at normal speed of the engine with vibration on. The machine was placed on an elastic base. During operation these values may differ because of the actual operational conditions.

## TECHNICAL DATA - DIMENSIONS

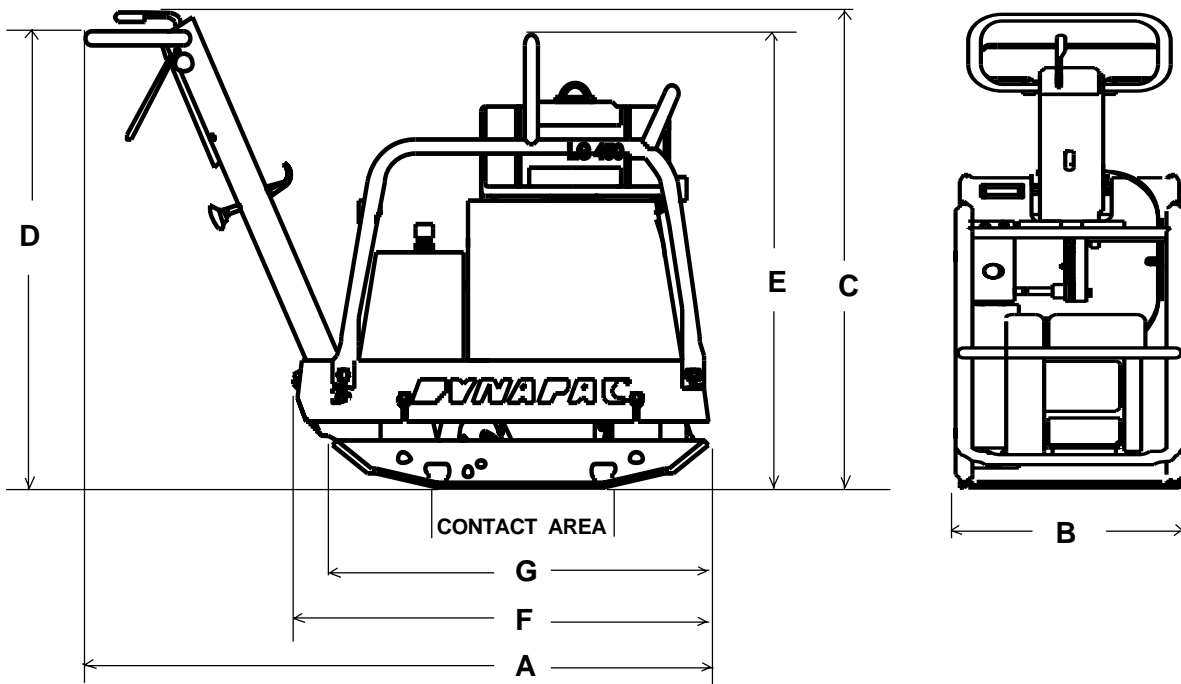


|   | LG 250/300     | LG 450/450L                  | LG 550                 | LG 700          |
|---|----------------|------------------------------|------------------------|-----------------|
| <b>A</b> mm (inch)  | 1300 (51,18)   | 1500 (59,06)                 | 1135 (45,05)           | 1610 (63,39)    |
| <b>B</b> mm (inch)  | 500 (19,68)    | 550 (21,65) <sup>1)</sup>    | 750 (31,89)            | 660 (25,98)     |
| <b>C</b> mm (inch)  | 1040 (40,95)   | 1050 (41,34)                 | 1050 (40,45)           | 1100 (43,31)    |
| <b>D</b> mm (inch)  | 1000 (39,37)   | 1000 (39,37)                 | 950 (37,05)            | 1040 (40,95)    |
| <b>E</b> mm (inch)  | 900 (35,43)    | 1000 (39,37) <sup>3)</sup>   | 1000 (39,37)           | 1000 (39,37)    |
| <b>F</b> mm (inch)  | 810 (31,89)    | 1000 (39,37)                 | 1000 (39,37)           | 1110 (43,70)    |
| <b>G</b> mm (inch)  | 700 (27,56)    | 900 (35,43)                  | 900 (35,43)            | 1000 (39,37)    |
| <b>Contactarea</b><br>m <sup>2</sup> (inch <sup>2</sup> ) | 0,1693 (262,4) | 0,2125 (329,4) <sup>2)</sup> | 0,2452 (304,8)         | 0,2797 (433,5)  |
| <b>Accessories</b>  |                |                              | IR or<br>Control cable |                 |
| <b>Extensionplates</b>                                    |                |                              |                        |                 |
| <b>Width</b> mm   | 2x50=100       | 2x150=300                    | 2x150=300              | 2x150=300       |
| <b>Weight</b> kg  | 12             | 37                           | 37                     | 48              |
| <b>Contactarea</b><br>m <sup>2</sup> (inch <sup>2</sup> ) | 0,0347 (53,78) | 0,1194 (185,07)              | 0,1194 (185,07)        | 0,1311 (203,20) |

LG 450 770415, 770424, 770426 <sup>1)</sup> = 750 mm (29,53) <sup>2)</sup> = 0,2985 m<sup>2</sup> (462,7 inch<sup>2</sup>)

LG 450L 770470 <sup>1)</sup> = 750 mm (29,53) <sup>3)</sup> = 970 mm (38,19) <sup>2)</sup> = 0,2985 m<sup>2</sup> (462,7 inch<sup>2</sup>)

## TECHNICAL DATA - DIMENSIONS



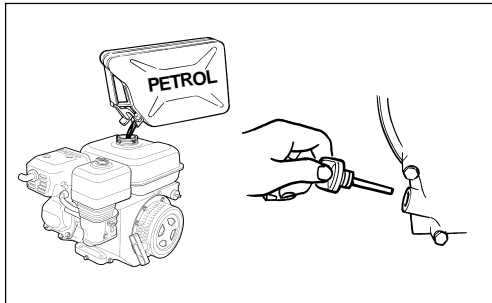
|   | LG 500 man/ext               | LG 500 el/ext                | LG 500 el/no ext |
|---|------------------------------|------------------------------|------------------|
| <b>A</b> mm (inch)  | 1658 (65,28)                 | 1658 (65,28)                 | 1658 (65,28)     |
| <b>B</b> mm (inch)  | 550 <sup>1)</sup> (21,65)    | 550 <sup>1)</sup> (21,65)    | 750 (31,89)      |
| <b>C</b> mm (inch)  | 1208 (47,56)                 | 1208 (47,56)                 | 1208 (47,56)     |
| <b>D</b> mm (inch)  | 1208 (47,56)                 | 1208 (47,56)                 | 1208 (47,56)     |
| <b>E</b> mm (inch)  | 1075 (42,32)                 | 1075 (42,32)                 | 1075 (42,32)     |
| <b>F</b> mm (inch)  | 972 (38,27)                  | 972 (38,27)                  | 972 (38,27)      |
| <b>G</b> mm (inch)  | 900 (35,43)                  | 900 (35,43)                  | 900 (35,43)      |
| <b>Contactarea</b><br>m <sup>2</sup> (inch <sup>2</sup> ) | 0,2125 (329,4) <sup>2)</sup> | 0,2125 (329,4) <sup>2)</sup> | 0,2985 (462,7)   |
| <b>Accessories</b>  |                              |                              |                  |
| <b>Extensionplates</b>                                    |                              |                              |                  |
| <b>Width</b> mm   | 2x50=100                     | 2x150=300                    |                  |
| <b>Weight</b> kg  | 37                           | 37                           |                  |
| <b>Contactarea</b><br>m <sup>2</sup> (inch <sup>2</sup> ) | 0,1194 (185,07)              | 0,1194(185,07)               |                  |

LG 500 770503, 770504 <sup>1)</sup> = With extensions = 850 mm (33,46 inch)

LG 500 770503, 770504 <sup>1)</sup> = 0,3319 m<sup>2</sup> (514,5 inch<sup>2</sup>)

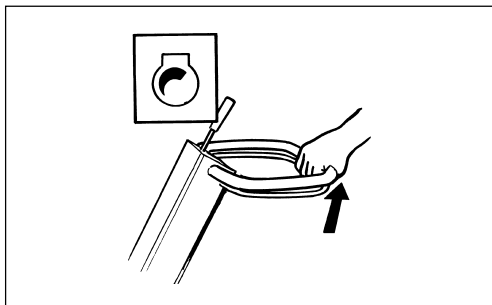


## BEFORE START

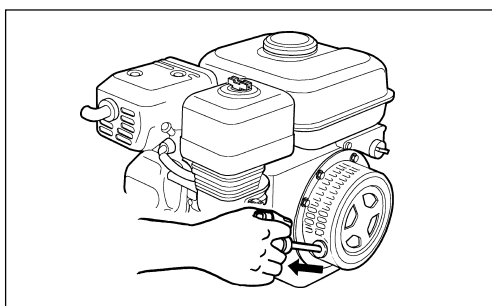
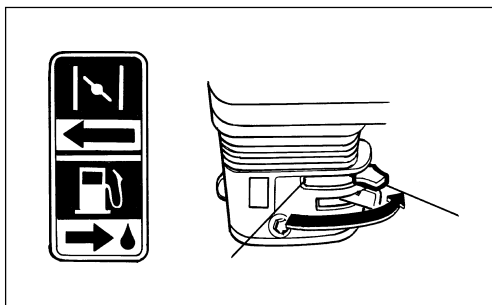


1. Fill fuel tank. Tankvolume 3,6 lit. (3.8 qts)
2. Check oil level in engine crank case. Oilvolume 0,6 lit. (0.65 qts)

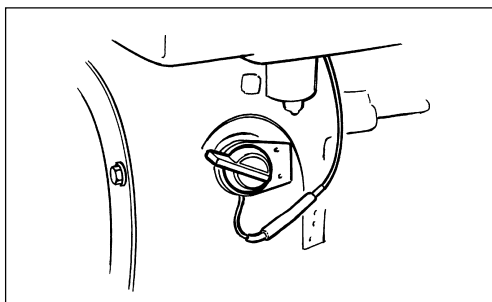
## Starting the engine.



1. Set the fuel cock at the open position.
2. Open throttle fully. Move the choke lever to the close position. Do not use the choke if the engine is warm or the air temperature is high.
3. Pull out the handle to the point where you feel strong resistance and then return it to the initial position, then pull briskly. As the engine warms up, gradually move the choke lever to the open position.
4. After the engine starts, set the speed lever to the low speed position and warm it up without load for a few minutes.



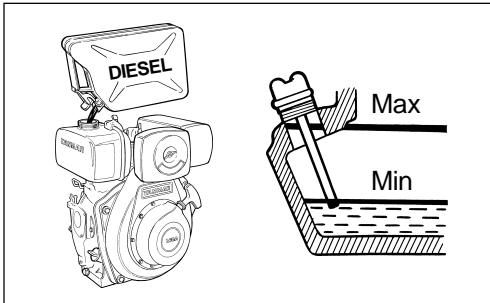
## Stopping the engine.



1. Reduce the throttle setting and let the engine idle for a minute or so.
2. Turn the stop button to stop the engine.
3. Close the fuel tap.

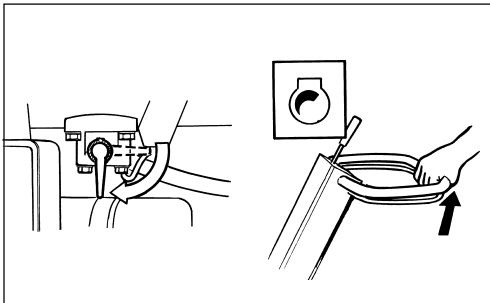
## OPERATION - YANMAR L60AE, L100AE

### BEFORE START



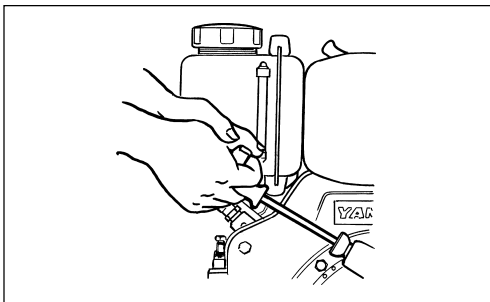
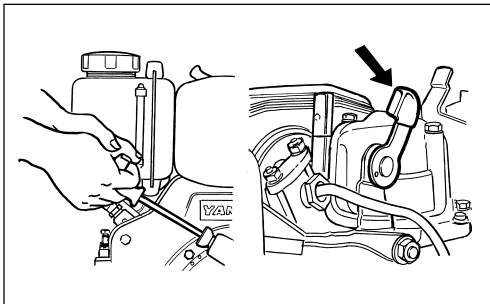
1. Fill fuel tank.  
Tankvolume L60 - 3,5 lit. (3.7 qts)  
L100 - 5,5 lit. (5.8 qts)
2. Check oil level in engine crank case.  
Oilvolume L60 - 1,1 lit. (1.15 qts)  
L100 - 1,65 lit. (1.75 qts)

### Starting the engine.

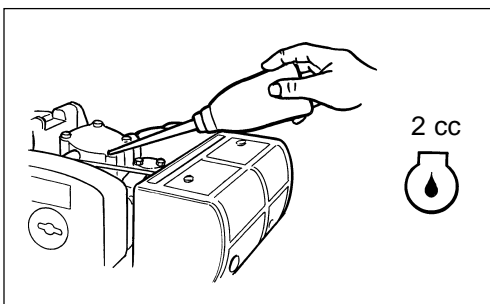


The engine is started in the manner described below.

1. Set the fuel cock at the "O" (open) position.
2. Open throttle fully.
3. Pull out the handle to the point where you feel strong resistance, and then return it to the initial position.
4. Push down the decompression lever. It will return
5. Pull out the recoil starting handle briskly with both hands. In cold weather, when your engine is hard to start, remove the rubber plug of the rocker arm cover and add 2cc of engine oil before starting. Electric starting, turn the switch key through position II to III and remove your hand from the key as soon as the engine starts. If the engine doesn't start after 10 seconds, wait a while before attempting to start again.

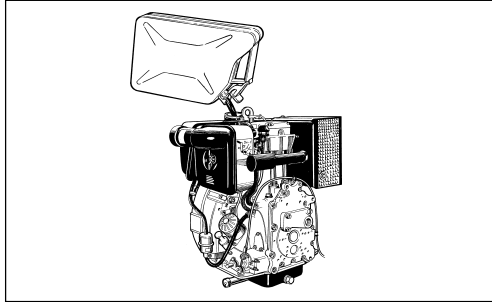


Keep the rubber plug in the cover except when adding oil. If the plug is not in place, rain dirt and other contaminants may enter the engine and cause accelerated wear of internal parts. This can cause serious problems.

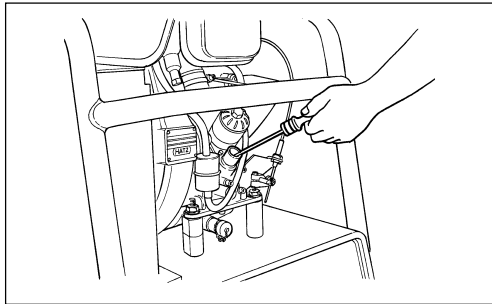


## OPERATION - HATZ 1D31S, 1D60S, 1D60Z, 1D81S (CRANK START)

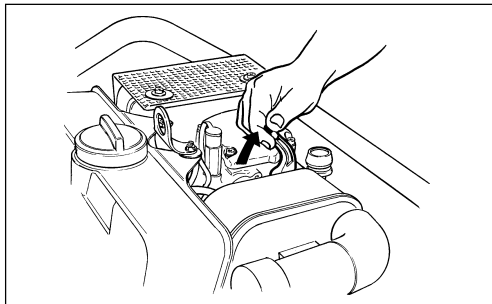
### BEFORE START



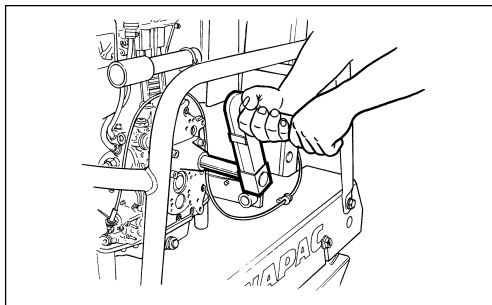
1. Fill fuel tank with diesel.
2. Check the oil level in engine crank case.



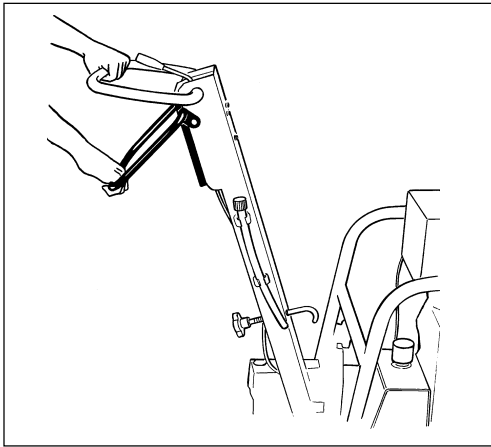
### Starting the engine.



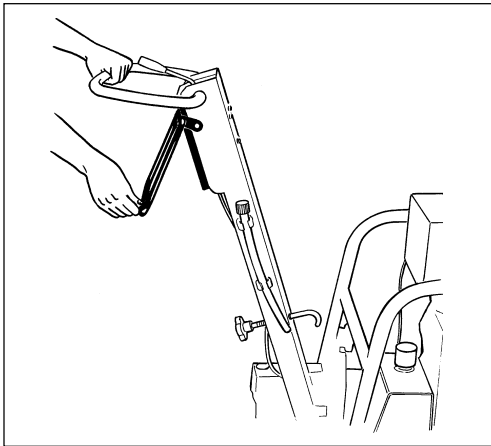
1. Pull automatic decompression device to top position.
2. Turn engine over with starting crank.
3. Run engine at idle before using full power.



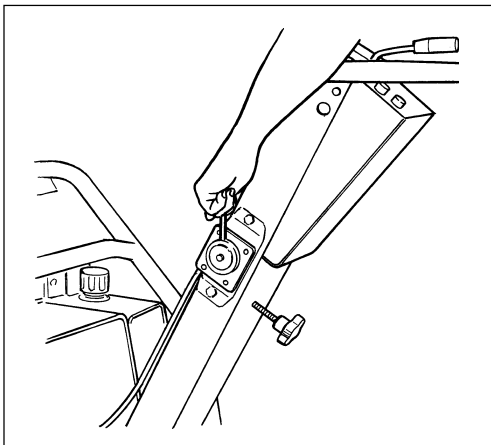
**Stopping the engine.  
(Crank start)**



1. Throttle in neutral position. Let the engine idle a few minutes.

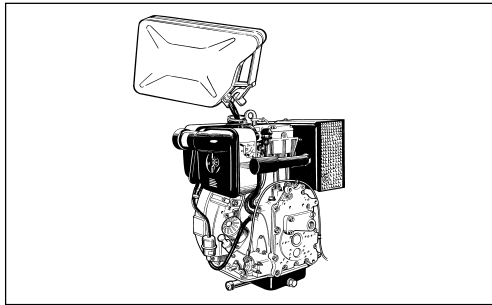


2. Throttle in stop position.

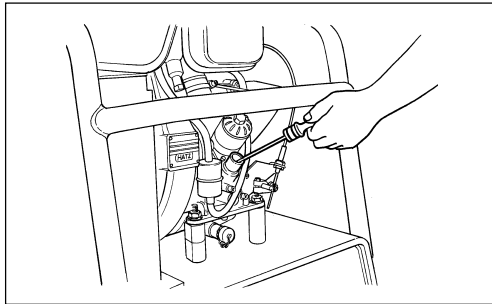


## OPERATION - HATZ 1D60S, 1D60Z, 1D81S (ELECTRIC START)

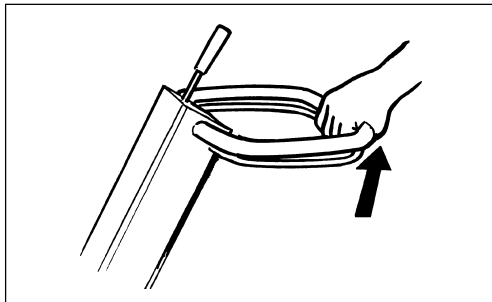
### BEFORE START



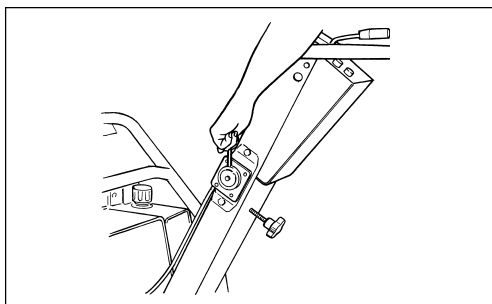
1. Fill fuel tank with diesel.
2. Check the oil level in engine crank case.



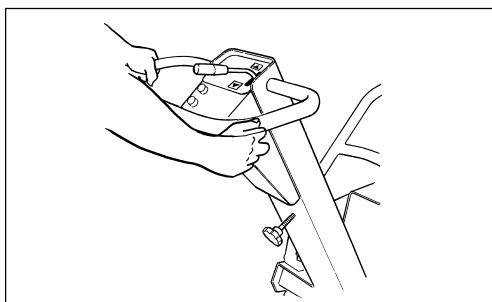
### Starting the engine.



1. Open throttle fully
2. Turn the starter key to the position I. Charging and oil pressure indicators light up.
3. Turn the switch key through position II to III.

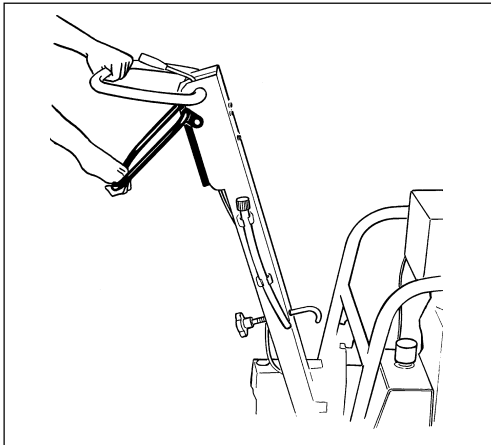


### Cold start.

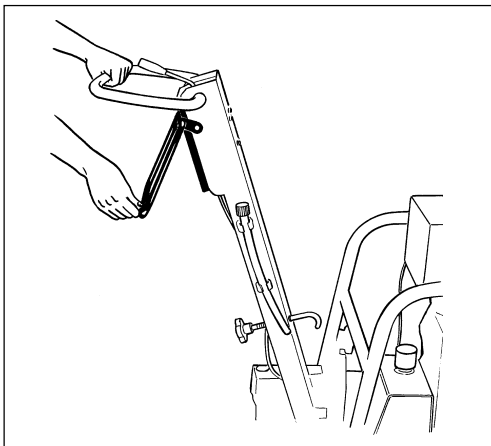


4. Turn the switch key to position II for approx. 1 minute until the preheater indicator will glow.  
Run engine at idle before using full power.

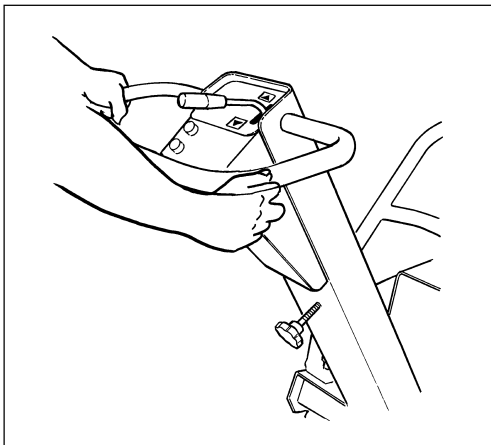
**Stopping the engine.  
(Electric start)**



1. Throttle in neutral position. Let engine run a few minutes.



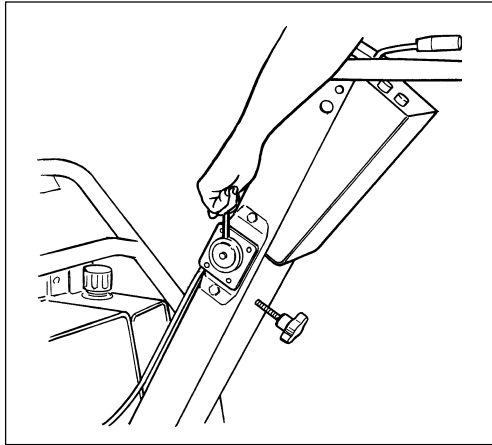
2. Throttle in stop position.



3. Turn the key to the OFF (0) position.

## OPERATION - ALL ENGINE TYPES

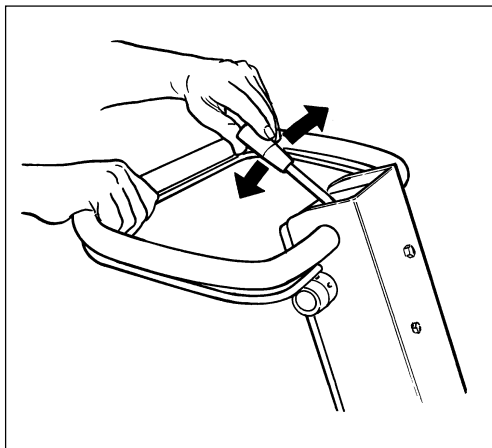
### Operating



1. Open throttle fully.



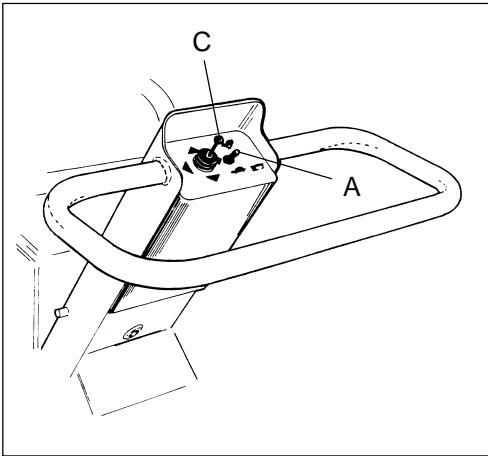
During compaction work the engine must always run at full throttle.



Drive direction and speed are infinitely variable with the hydraulic lever.

1. Forward (the hydraulic lever is pushed forward with small movements).
2. Reverse (the hydraulic lever is pushed backwards with small movements).
3. Stationary (the hydraulic lever is moved with small movements in the opposite direction until the machine is stationary).

## Operation/Vibration



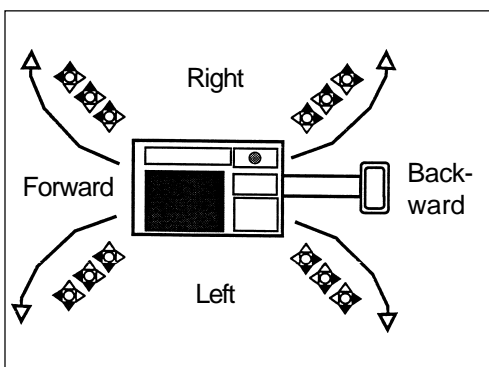
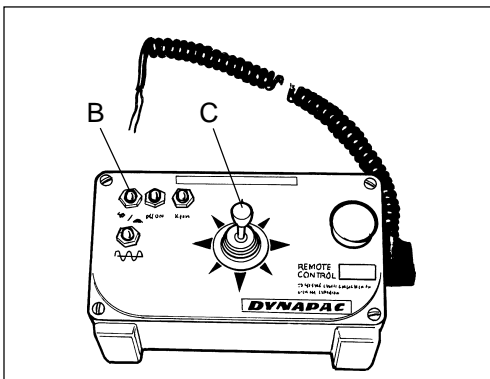
1. **Without remote control:** Set the control (A) to position (2).

**With remote control:** Set the control (A) to position (1). Use switch (B) to move between full throttle and idling.



THE ENGINE SHALL ALWAYS BE RUN AT FULL THROTTLE FOR COMPACTION.

2. **Driving direction** is selected by moving the control (C) forward or backward.

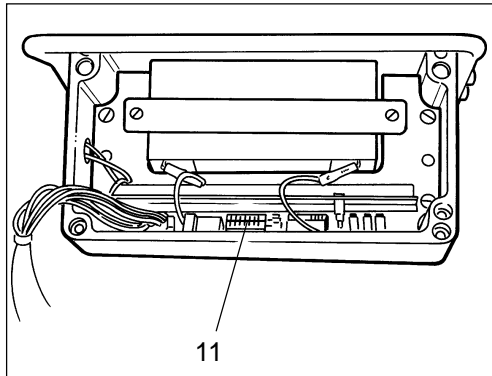


3. **Turning the plate** is done by moving control (C) to the right or left.



## PROGRAMMING THE IR-EQUIPMENT

### Transmitter



### Setting the remote-control code

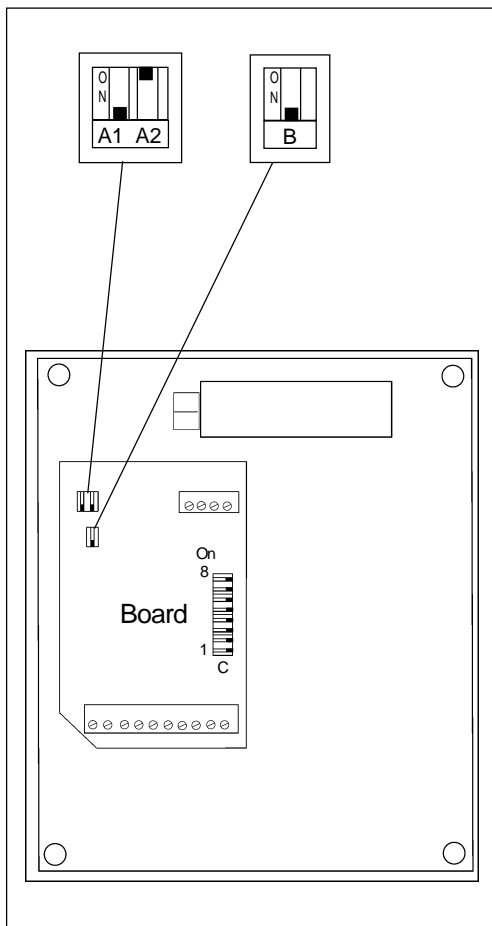
This adjustment is only necessary if more than one machine is being used at the same time on the site.

### Changing the transmitter code

The same code combination is to be used for the transmitter and the receiver. Set the transmitter code as follows:

1. Open the transmitter.
2. There are 16 DIP switches (11) on the circuit board that can be set in two different positions. Set these DIP switches in a random manner.
3. Put the cover back on the transmitter. The transmitter is now ready for use.

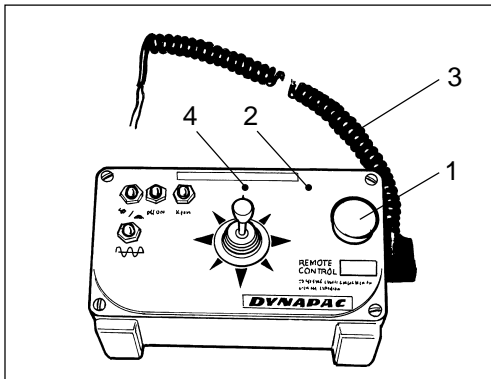
### Receiver



### Programming the receiver (Control manipulator)

1. Move toggle switch C1 to the ON position. Give the straight forward command with the control manipulator at the same time as you move toggle switch C1 back again.
2. All directions are thus correctly programmed.

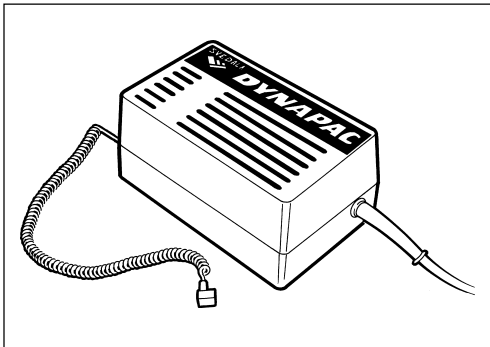
## CHARGING THE IR-TRANSMITTER



1. Main switch
2. Indicator diode for charging
3. Charging cable
4. Indicator diode

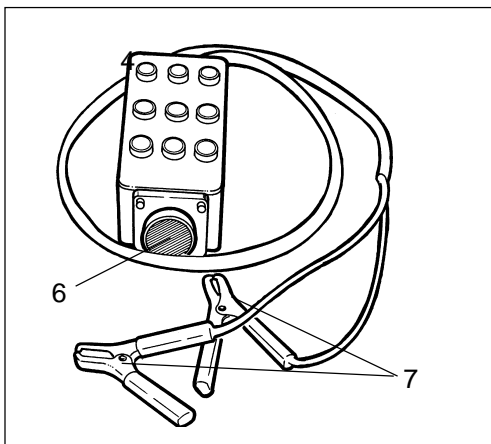
The transmitter has an enclosed lead battery, 6 V 3.2 A/h. (Art. No. 288278)  
 Discharge period 6–12 hours.  
 Charging time 2 hours gives about 4 hours of operation.  
 Charging time 8 hours gives full charge.  
 A fully charged battery will allow a range of 25 metres. The range is dependent on weather conditions and in strong sunlight the range will be reduced. The range is also reduced as the battery becomes discharged. It is time to recharge the battery when the range has fallen to about 5 metres. Unnecessary discharging of the battery is avoided by turning the main switch (1) OFF at the end of the working day and by connecting the transmitter for recharging. The transmitter is provided with an indicator diode (2) that begins to light when it is time to recharge. There will be 1–1.5 hours remaining battery capacity when the LED starts to flash. Recharge the battery immediately if the LED shows a steady light. The long charging cable (3 metres) allows the roller to be used while the transmitter is being charged. The indicator diode (4) shows when any function is activated.

### OPTIONAL CHARGER



A charger for mains power is available if you wish to charge the transmitter away from the machine.  
**Order no. 239767, 115V**  
**239875, 220V**

### Test panel for IR-receiver and cable control. Order no. 239943

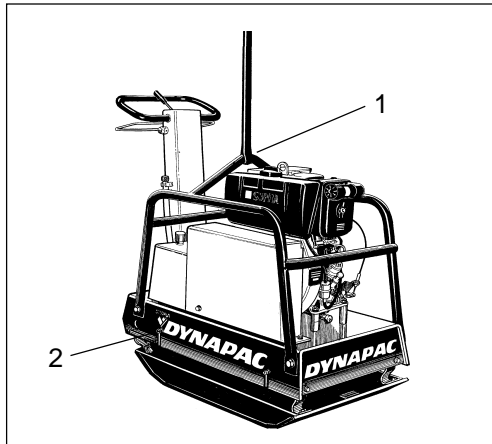


6. Socket for cable control
7. Charging terminals

Plug in the connector from the IR-receiver or the control cable to the socket (6) and connect the terminals (7) to the battery on the machine (red to positive and black to negative).  
 For cable control, the ON/OFF switch (on the cable control) must be "ON" when being tested. Carry out testing of the various functions. Lamps on the test panel light in relation to the function that is activated.

## INSTRUCTIONS FOR LIFTING

### Transport and lifting.



**Never walk or stand under a hanging machine.**



**Use only the frame lifting hook (1) for lifting the machine.**



**All lifting devices must be dimensioned in order to fulfil all regulations. Before lifting check that shock absorbers (2) and protecting frame are correctly attached and not damaged.**

## MAINTENANCE - SERVICE POINTS

1. Fuel tank
2. Intake filter
3. Air filter
4. Engine oil filter
5. Oil dipstick
6. Fuel filter
7. Battery
8. Oil drain plug

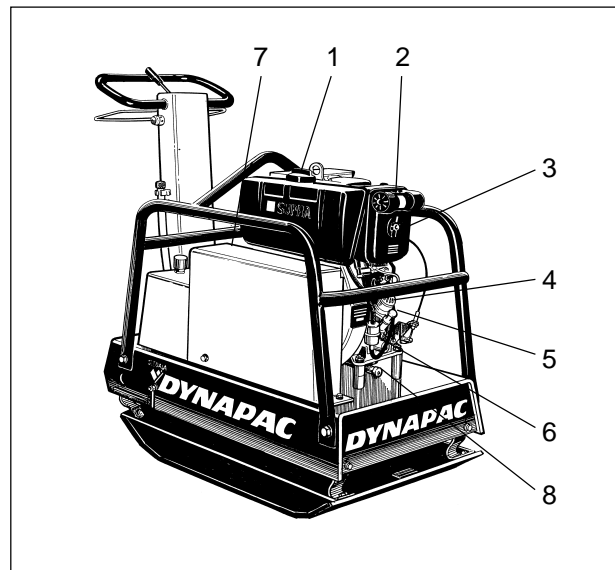


Fig 1

### Every 10 hours of operation (daily)

| Item in fig. 1 | Maintenance                          | see page | Comments |
|----------------|--------------------------------------|----------|----------|
| 1              | Check and replenish fuel oil         | 19       |          |
| 5              | Check and replenish lube oil         | 19       |          |
|                | Check for oil leakage                | 19       |          |
|                | Check and tighten engine parts       | 19       |          |
| 2              | Clean / replace air cleaner elements | 21       |          |

### The first 20 hours of operation

| Item in fig. 1 | Maintenance                                 | see page | Comments           |
|----------------|---|----------|--------------------|
|                | Change lube oil                             | 21       |                    |
| 4              | Clean / replace oil filter                  | 21       |                    |
| 2              | Clean / replace air cleaner elements        | 21       |                    |
|                | Check and adjust the engine valve clearance |          | See engine manual. |

### Every 100 hours of operation

| Item in fig. 1 | Maintenance                          | see page | Comments |
|----------------|--------------------------------------|----------|----------|
|                | Change lube oil                      | 21       |          |
| 2              | Clean / replace air cleaner elements | 21       |          |

## MAINTENANCE - SERVICE POINTS

### Every 500 hours of operation

| Item in fig. 1 | Maintenance   | see page | Comments           |
|----------------|---|----------|--------------------|
|                | Change engine oil   | 21       |                    |
|                | Change eccentric element oil                              | 22       |                    |
|                | Change hydraulic fluid                                    | 22       |                    |
| 4              | Clean / replace oil filter                                | 21       |                    |
| 2              | Clean / replace air cleaner elements                      | 21       |                    |
|                | Check fuel injection pump                                 |          | See engine manual. |
|                | Check fuel injection nozzle                               |          | See engine manual. |
|                | Adjust valve head clearance for intake and exhaust valves |          | See engine manual. |

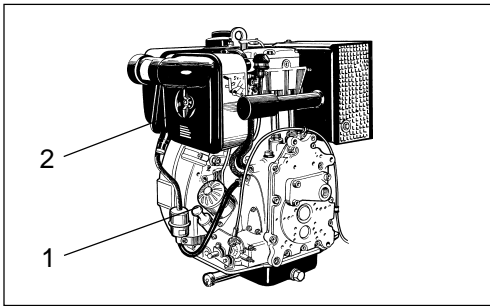
### Every 1000 hours of operation

| Item in fig. 1 | Maintenance                   | see page | Comments           |
|----------------|-------------------------------|----------|--------------------|
|                | Lap intake and exhaust valves |          | See engine manual. |
|                | Replace pistong rings         |          | See engine manual. |

### Monthly

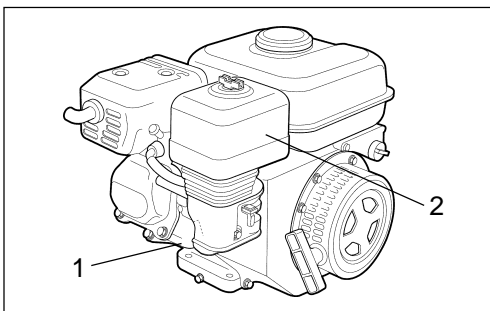
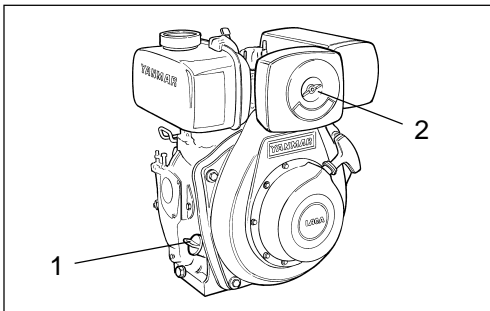
| Item in fig. 1 | Maintenance   | see page | Comments |
|----------------|---|----------|----------|
|                | Check: oil level in hydraulic tank, v-belt, battery fluid | 20       |          |

## MAINTENANCE - EVERY 10 HOURS OF OPERATION



1. Oil dipstick
2. Air cleaner

1. Check oil level engine's crankcase.
2. Check air cleaner.
3. Check the battery (Hatz electrical start).
4. Check the battery in the IR-transmitter (LG 550 IR).



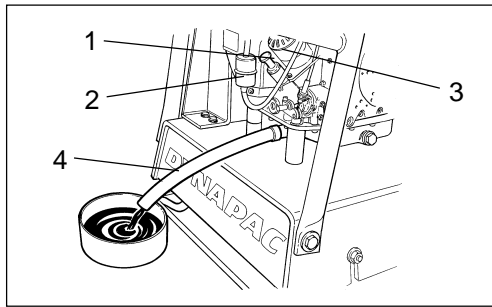
We recommend reading the detailed motor instructions supplied with the machine.



5. Check and, where necessary, tighten screws and nuts.
6. Keep machine clean.



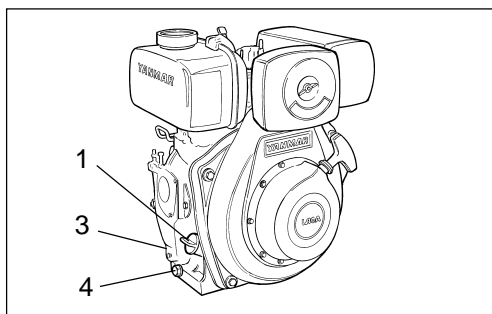
## MAINTENANCE - EVERY 100 HOURS OF OPERATION



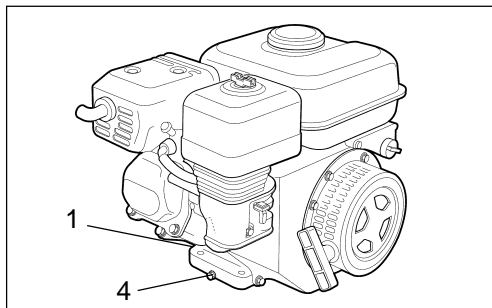
1. Oil dipstick
2. Fuel filter
3. Oil filter
4. Oil drain plug/drain hose

1. Change oil (first change after 20 hours, together with engine filter).

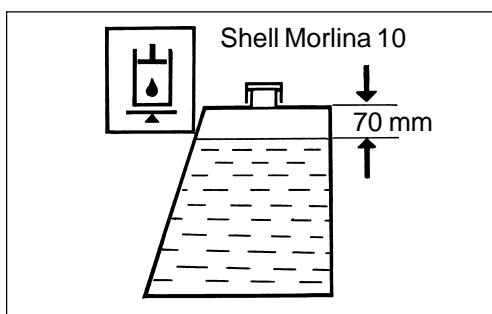
|             |                      |            |
|-------------|----------------------|------------|
| Honda GX200 | 0,6 lit. (0.65 qts)  |            |
| Yanmar L60  | 1,1 lit. (1.15 qts)  |            |
| Yanmar L100 | 1,65 lit. (1.75 qts) |            |
| Hatz 1D31S  | 1,2 lit. (1.25 qts)  |            |
| Hatz 1D60S  | 2,0 lit. (2.1 qts)   |            |
| Hatz 1D60Z  | 2,0 lit. (2.1 qts)   |            |
| Hatz 1D81S  | 2,0 lit. (2.1 qts)   | SAE 15W/40 |



2. Lubricate controls.



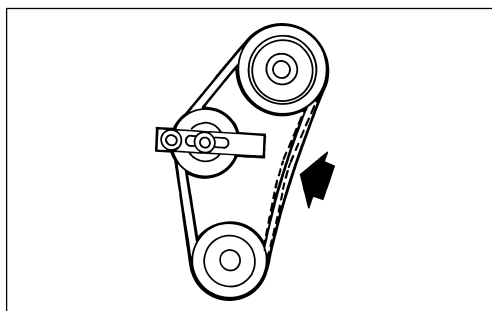
1. Check oil level in hydraulic tank.



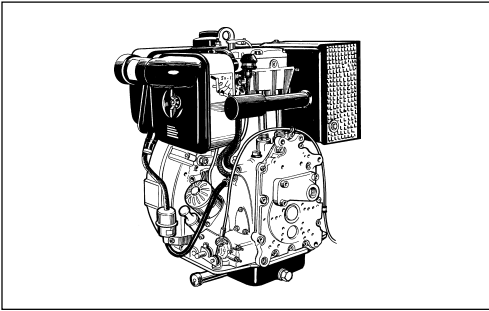
|         |                    |                   |
|---------|--------------------|-------------------|
| LG 250  | 1,6 lit. (1.7 qts) | Shell Morlina 10  |
| LG 300  | 1,6 lit. (1.7 qts) | Shell Morlina 10  |
| LG 450  | 3,5 lit. (3.7 qts) | Shell Morlina 10  |
| LG 500  | 3,5 lit. (3.7 qts) | Shell Morlina 10  |
| LG 550  | 3,5 lit. (3.7 qts) | Shell Morlina 10  |
| LG 700  | 3,5 lit. (3.7 qts) | Shell Morlina 10  |
| LG 450L | 3,5 lit. (3.7 qts) | Shell Tellus TX32 |

2. Check the V-belt.

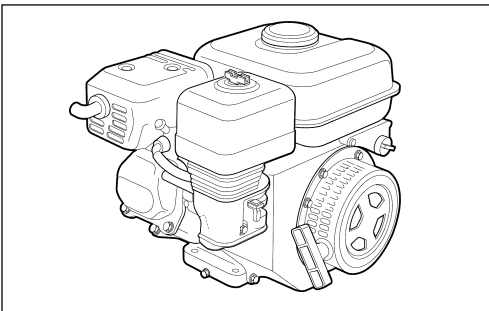
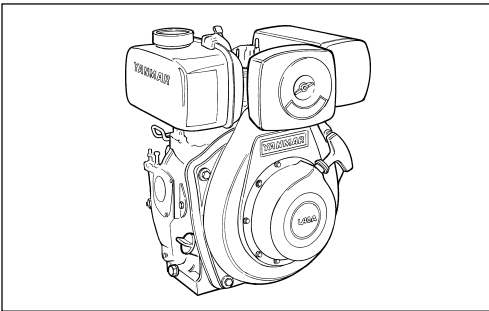
3. Check level battery fluid.



## MAINTENANCE - EVERY 500 HOURS OF OPERATION



1. Replace fuel filter. (See engine manual)
2. Change oil. (See engine manual)
3. Replace oil filter. (See engine manual)
4. Replace air cleaner element. (See engine manual)

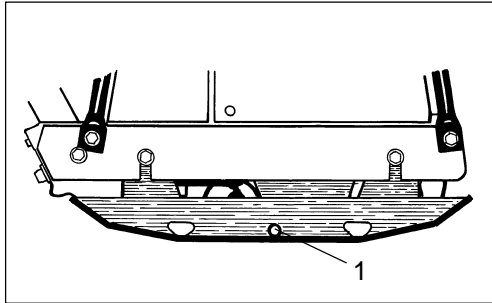




## MAINTENANCE - EVERY 1000 HOURS OF OPERATION

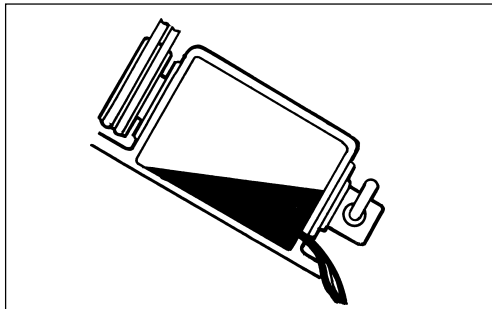
### Changing oil in eccentric element.

Recommended oil: SAE 15W/40.

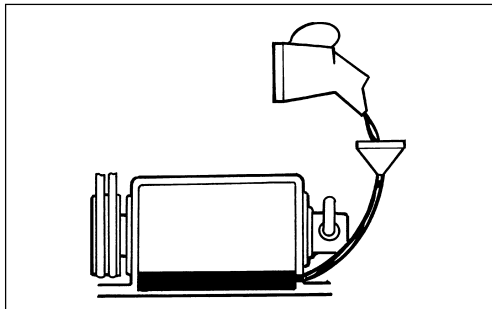


1. Oil level plug

|        |                     |
|--------|---------------------|
| LG 250 | 0,5 lit. (0.5 qts)  |
| LG 300 | 0,5 lit. (0.5 qts)  |
| LG 450 | 0,8 lit. (0.85 qts) |
| LG 500 | 0,8 lit. (0.85 qts) |
| LG 550 | 0,8 lit. (0.85 qts) |
| LG 700 | 1,5 lit. (1.6 qts)  |

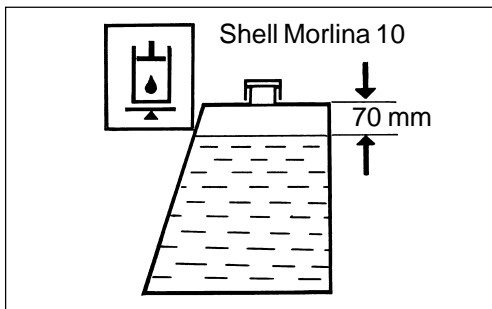


1. Slant the machine and drain oil from eccentric.
2. Clean sealing surfaces.
3. Fill with oil.
4. Tighten oil plug.



### Changing oil in hydraulic system.

Recommended oil:



|         |                    |                   |
|---------|--------------------|-------------------|
| LG 250  | 1,6 lit. (1.7 qts) | Shell Morlina 10  |
| LG 300  | 1,6 lit. (1.7 qts) | Shell Morlina 10  |
| LG 450  | 3,5 lit. (3.7 qts) | Shell Morlina 10  |
| LG 500  | 3,5 lit. (3.7 qts) | Shell Morlina 10  |
| LG 700  | 3,5 lit. (3.7 qts) | Shell Morlina 10  |
| LG 550  | 3,5 lit. (3.7 qts) | Shell Tellus TX32 |
| LG 450L | 3,5 lit. (3.7 qts) | Shell Tellus TX32 |

### Lubricating of controls and wires.

1. Remove old grease.
2. Lubricate all parts. Apply grease generously.

Recommended lubricant: Shell Alvania EP2