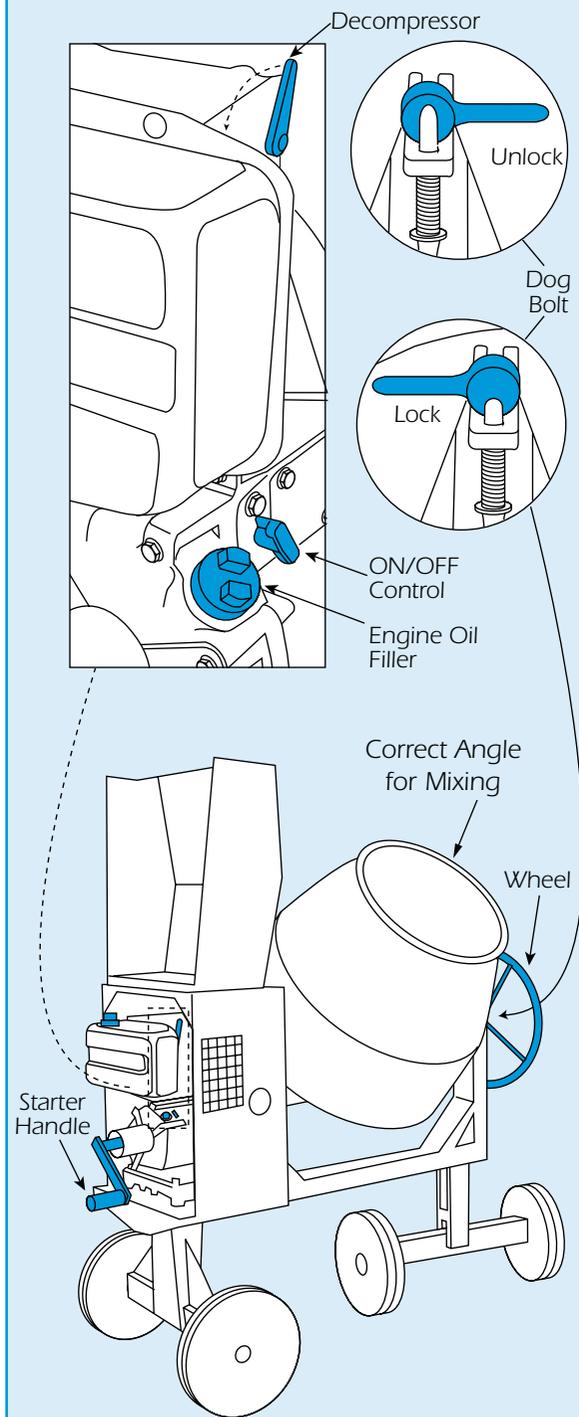


## Manual Start Mixer



Once the mix is ready, **discharge the contents into a wheel barrow.** To **tip the drum** take a firm hold on the wheel then release the dog bolt on the drum control wheel and slowly turn the wheel to discharge its contents. Be careful, use both hands on the wheel and be prepared for the transfer of weight as the mix moves to the end of the drum.

On later models, **to tip the drum grip the handwheel with both hands and depress the foot pedal located on the front axle.** Slowly turn the wheel to discharge its contents. The drum is balanced and will move easily and smoothly to the discharge position. Once emptied, **return the drum to the mixing position.** At this point it is a good idea to **pour the water for the next mix, into the drum.** This will help rinse the drum as you use/lay the mixed load.

## EQUIPMENT CARE

**Never push the equipment beyond its design limits.** If it will not do what you want with reasonable ease and speed, assume you have the wrong equipment for the job. Contact your local HSS Hire Shop for advice.

**Keep the equipment clean** - you will find this less of a chore if you clean it regularly, rather than wait until the end of the hire period.

**Regularly check the fuel level and top up as necessary** with diesel.

**Regularly check the oil level** - when the engine is cold and on level ground. Withdraw the dipstick, wipe it clean, then replace it, remove it a second time and verify that the oil level is between the min and max lines, top up as necessary. Suitable oils are available on sale or return from your local HSS Hire Shop.

When not in use, **store the equipment somewhere clean, dry and safe** from thieves.

## FINISHING OFF

**Empty out any remaining mix and wash out the rotating drum with plenty of clean water- add gravel to remove stubborn residue.**

**When the drum is clean, switch OFF engine and leave the drum in the discharge position to drain. Give the unit a final clean up ready for return, to your local HSS Hire Shop.**

## Later Models Handwheel Release



## MIX 'N' MATHS

To work out how many litres of concrete you need, simply multiply the length of the area to be covered (in metres) by the width (also in metres) then multiply the result by the desired thickness (in millimetres).

Dividing by the mixers volume (113ltr) now gives the number of loads required, while the table gives a breakdown of the ingredients needed per load, of some common mixes.

| CONCRETE    | MIX       | CEMENT    | SAND      | AGGREGATE |
|-------------|-----------|-----------|-----------|-----------|
| Normal      | 1:2:3     | 18 litres | 36 litres | 54 litres |
| Foundations | 1:2.5:3.5 | 15 litres | 39 litres | 54 litres |
| Paving      | 1:1.5:2.5 | 22 litres | 33 litres | 55 litres |
| MORTAR      | MIX       | CEMENT    | LIME      | SAND      |
| Normal      | 1:1:6     | 12 litres | 12 litres | 72 litres |
| Strong      | 1:0.25:3  | 24 litres | 6 litres  | 72 litres |

NOTE: A normal 2 gallon bucket has a capacity of about 9 litres.



## ...any comments?

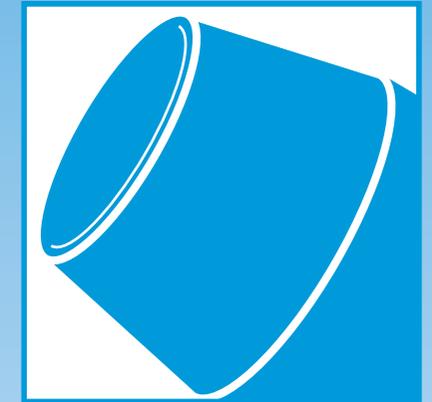
If you have any suggestions to enable us to improve the information within this guide please fax your comments or write to the Product Manager at the address below  
**Fax: 020 8687 5001**

©HSS Hire Service Group Plc 2002 No. 533/02

Group Office: 25 Willow Lane, Mitcham, Surrey CR4 4TS

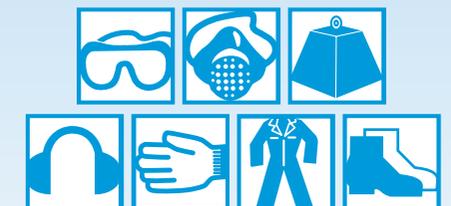
Web Site: <http://www.hss.com>

# HSS Hire Shops



## Bulk Concrete Mixer

Heavy duty diesel powered, trolley-mounted mixer for mixing bulk quantities of mortar or concrete on site.



## GENERAL SAFETY

For advice on the safety and suitability of this equipment contact your local HSS Hire Shop.

There is a serious risk of personal injury if you do not follow all instructions laid down in this guide.

The hirer has a responsibility to ensure that all necessary risk assessments have been completed prior to the use of this equipment.

This equipment should only be used by an operator who has been deemed competent to do so by his/her employer.

This equipment should be used by an able bodied, competent adult who has read and understood these instructions. Anyone with either a temporary or permanent disability, should seek expert advice before using it.

Keep children, animals and bystanders away from the work area. Cordon off a NO GO area using cones and either barriers or tape, available for hire from your local HSS Hire Shop.

  Never use this equipment if you are ill, feeling tired, or under the influence of alcohol or drugs.

 Safety goggles MUST be worn by everyone in the work area.

 This equipment generates potentially harmful noise levels. To comply with health and safety at work regulations, ear defenders must be worn by everyone in the vicinity.

 Some materials (eg cement) contain substances which, when inhaled, can be harmful to health. A suitable mask must be worn when using this equipment. Respiratory protective equipment is available for hire, contact your local HSS Hire Shop for details.

   Wear practical, protective clothing, gloves and footwear. Avoid loose garments and jewellery that could catch in moving parts. Tie back long hair.

 This equipment is heavy (390kg), never attempt to lift it, always use suitable lifting equipment.

Always switch OFF and unplug the equipment when not in use.

Ensure the work area is well lit and ventilated, if in doubt, ask about lighting and ventilation equipment at your local HSS Hire Shop.

Do not work near flammable gases or liquids, petrol or paint thinner fumes for example. Keep combustible materials at a safe distance - at least 5m.

Make sure you know how to switch this machine OFF before you switch it ON in case you get into difficulty.

Never leave the unit running and unattended.

Always switch the engine OFF and wait for moving parts to come to rest before making adjustments to it.

Engines, especially the exhausts, get very hot so switch OFF and allow to cool before touching them.

Keep flammable materials well away from engine and exhaust.

### Exhaust Danger

NEVER operate diesel engines indoors or in a confined space.

The exhaust contains gases that can kill.

### Fuel Safety

NEVER refuel while the engine is hot or running. Never smoke or allow naked lights into the area while refuelling.

Never inhale fuel vapour.

ALWAYS mop up any spilt fuel as quickly as possible, and immediately change your clothes if you get fuel on yourself.

ALWAYS store fuel in a purpose-made sealed container, in a cool, shaded, safe place well away from the work area.

Make sure that anyone in the immediate work area is warned of what you are doing.

DO NOT tow the mixer behind any vehicle, including at on site locations.

Check the condition of the equipment before use. If it shows signs of damage or excessive wear, return it to your local HSS Hire Shop.

Ensure all guards are correctly fitted and secure before starting work.

COSHH information sheets are available from your local HSS Hire Shop.

## GETTING STARTED

It is essential to familiarise yourself with all the controls before starting.

Set the mixer on firm level ground, close to the work area and with a minimum clearance all around of 2.5m.

Check fuel and oil levels (see EQUIPMENT CARE).

Before starting make sure the area is clear and no personnel are near the drum, the drum will start to rotate as soon as the engine starts.

Starting a Mixer fitted with Electric Start . . .

Apply Brake by pushing in brake lock knob and pulling brake lever up and releasing brake lock knob, reverse procedure to release brake.

Turn ON the fuel tap. If starting from cold remove rubber cap over oil primer access and add 2ccs of engine oil (10w 30). Replace the rubber cap.

Ensure that the emergency stop button is OFF by pulling it out and twisting it anticlockwise.

Turn ignition key clockwise until engine starts. When the engine has started release the ignition key.

Let the engine warm up for a few minutes

To turn OFF the engine turn the ignition key anticlockwise.

To stop the equipment in an emergency, press the emergency stop button.

Starting a manual Mixer . . .

Set the engine control lever to position 2 (engine start/idle).

Turn the decompression lever clockwise to position 1 (see illustration).

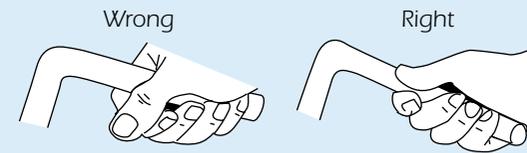
The drum will rotate as soon as the engine fires! so make sure it is clear of tools and people.

Insert the crank handle then, taking note of the warning below, crank the engine (about 5 revolutions) getting progressively faster until the engine compresses and fires.

To stop the engine, move and hold the ON/OFF control clockwise until the engine stops.

### Rule Of Thumb

There's a right way and a wrong way to hold a diesel engine's starter handle. The wrong grip could break your thumb if the handle kicks when the engines fires.



## BASIC TECHNIQUES

The most important thing to remember when using the mixer is that the drum must be rotating BEFORE loading and should continue to rotate until unloaded. Never switch the mixer ON or OFF with a load.

Set the drum at the correct angle for mixing (see diagram). To move the drum take a firm hold on the wheel then release the dog bolt on the wheel and slowly turn the wheel until the drum is in the correct position then re-set the dog bolt.

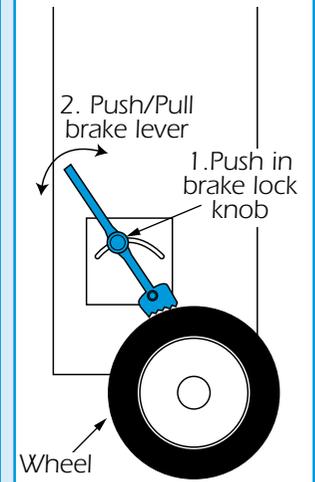
On later models set the drum by gripping the handwheel and depressing the foot pedal located on the front axle. Turn the handwheel until the drum is in the correct position. When the drum is in the correct position release the foot pedal.

Using a bucket, put half the water needed for the mix into the rotating drum.

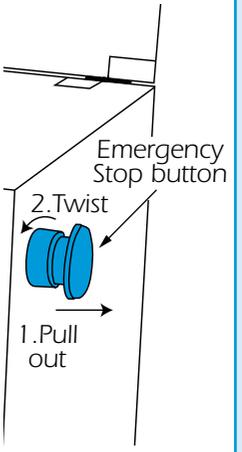
Add the aggregate followed by the cement, then pour in the remaining water. Finally, add the sand and allow the mixer to do the work.

## Electric Start Mixer

### Applying Brake



### Emergency stop button



## Engine

