# CLEGHORN WARING

### ENGINE OIL DRAIN PUMP CW 220 (12 VOLT) CW 221 (24 VOLT)



### 12/24 VOLT D.C. GEAR PUMP FOR LUBRICATION OIL ONLY

- For pumping out warm/hot oil from engine sump via dip-stick hole
- Heavy brass construction
- Flow rate: approx. 0.5 litres/min. with warm/hot engine oil
- Slow speed motor for longer life
- Can run dry for a limited period
- Inlet hoses provided:  $1 \times 850$ mm (approx. 3') of 4.5mm (3/16") i.d. tube
- Outlet connection for ½" hose.

Weight: 1.8kg

**Dimensions:** 125mm long x 75mm wide x 90 mm high

CW 220: 12 volt D.C. model, fuse 10 amp. 24 volt D.C. model, fuse 5 amp



#### **IMPORTANT**

## PUMPING COLD OIL WILL GREATLY REDUCE FLOW RATE AND SHOULD BE AVOIDED IF POSSIBLE.

#### **GENERAL FEATURES**

These pumps are standard gear type, oil pumps, designed specifically for low-pressure engine oil transfer duty. They are intended for use for oil change purposes on marine engines. The pump inlet port allows use of a small-bore pipe (supplied with the pump) which can be inserted down the dipstick aperture.

The electric motor is a slow speed type designed to match the inevitably low flow rate of viscous fluid through a small-bore pipe.

Once oil has passed through the pump head no damaged will be caused by limited dry running.

#### **BEFORE RUNNING**

Before running for the first time a few drops of oil should be fed into the pump ports to ensure that the gears are lubricated. This will assist with initial priming.

#### **FOR BEST RESULTS**

- A. Run engine long enough to warm up engine oil in sump
- B. Use largest possible suction pipe bore. A fitting for ½" hose is supplied loose.
- C. Keep suction line as short as possible. Position pump close to dip-stick hole

  if not practicable then make up composite suction pipe with change to ½" hose from dip-stick hole to pump (if small bore pipe has to be used through dip-stick hole).

#### **PERFORMANCE**

With small-bore suction hose in use, flow rate may be as low as ¼ pint per minute (one gallon in 32 minutes) - this will improve dramatically if larger bore pipe can be passed into sump.

#### **MAINTENANCE**

Clean pump head internally after each 10 hours (approx.) running to clear any metallic debris from dirty oil etc - take care steel ball is not dropped and lost when withdrawing gears (this acts as a key between motor shaft and gear wheel).

