

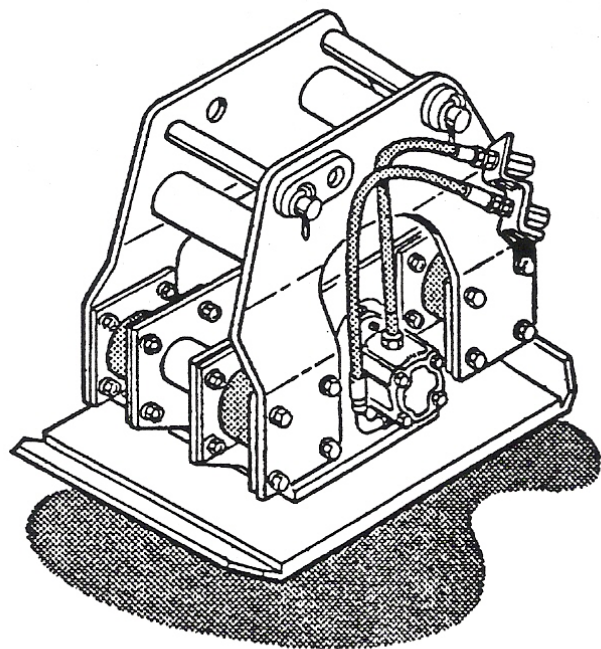
# **Gentec**

[www.gentecequipment.com](http://www.gentecequipment.com)

**MODEL GE – 980**

**Boom Mounted  
Compactor / Driver**

**GENPAC**



**INSTALLATION  
OPERATING  
SERVICE AND SAFETY  
INSTRUCTIONS**

**PARTS LIST**

## 1.0 INTRODUCTION

The Genpac GE-980 is a boom-mounted hydraulic vibrating plate compactor and driver. Primarily, it is used for soil compaction and sheet driving by construction and industry.

### CAUTION



Instructions given with this symbol are for personal safety and full service life of the compactor. Follow them carefully.

Operation or service other than in accordance with these instructions may subject the compactor to conditions beyond the design capability. Improper operation or servicing may result in failure or personal injury. Read this manual thoroughly before operating or maintaining the unit.

## 2.0 DESCRIPTION

The Genpac GE-980 is a high energy impulse tool utilizing three basic forces:

- ★ HIGH IMPULSE FORCE of the eccentric turning at high r.p.m. not only produces impulse force, but also when properly controlled, gives impact force.
- ★ The 2000 r.p.m. frequency produces VIBRATION for maximum effectiveness in the compaction of granular material.
- ★ DOWN PRESSURE of the backhoe or other carrier provides a high static pressure to develop the resistance necessary for compaction. The greater the down pressure or resistance, the higher the developed hydraulic pressure.

## 3.0 SPECIFICATIONS

### U.S. / Metric

|                         |                                     |
|-------------------------|-------------------------------------|
| Impulse Force           | 18 000 lbs / 72.170 N               |
| Cycles Per Minute       | 2 100                               |
| Hydraulic Flow Required | 34 g.p.m. / 129 l.p.m.              |
| Operating Pressure      | 2 200 p.s.i. / 158 bar              |
| Base plate:             |                                     |
| Dimensions              | 29 in. x 32 in. / 74 cm. X 81 cm.   |
| Compaction Area         | 6.7 sq. ft. / 49 m <sup>2</sup>     |
| Lift Compaction         |                                     |
| Weight                  | 1750 lbs / 795 kg.                  |
| Height                  | 40 in. / 100 cm.                    |
| Width                   | 29 in. / 71 cm.                     |
| Boom Pin Diameter       | 3.250 in. / 80 mm. **optional T top |
| Bracket Spacing         | 12 in. / 300 mm. **optional T top   |
| Hose Size:              |                                     |
| Pressure Line           | 1" in. / 25 mm.                     |
| Return Line             | 1" in. / 25 mm.                     |

#### **4.0 PRINCIPLE OF OPERATION**

The Genpac GE-980 consists of the following major subassemblies:

- ★ Live Frame – The vibration generator (motor, bearings, eccentric mass and housing) mounted to the base plate.
- ★ Suspension System – Rubber mounts which suspend, stabilize and isolate the “live frame”.
- ★ Mountain Frame – Adapts the “suspension system” of the “live frame” to the boom of the carrier unit.

#### **5.0 INSTALLATION ON CARRIERS**

The Model GE-980 Genpac is designed for installation on rubber tire backhoe / loaders and excavators. As a rule, productivity increases as the machine weight increases.

Pressure relief valve should be set no higher than 2 500 p.s.i.

Hydraulic flow should never exceed 34 g.p.m. at 2 000 p.s.i.

#### **6.0 GENERAL CONSTRUCTION SAFETY**

The standard procedures that are expected and / or required of those working in construction should be followed including location of existing underground service lines, establishing pedestrian barriers and personal protective equipment, etc.

In addition, comply with the recommendations of the occupational safety and health standards of the U.S. Department of Labor. For OSHA construction guidelines contact your local federal government office, bookstore or write:

U.S. Government Printing Office  
Superintendent of Documents  
Washington, D.C. 20402

Ask for Construction Industry  
OSHA Safety and Health Standards  
29 CFR 1926 / 1910



## 7.0 SAFETY PRECAUTIONS

- ✓ Stay clear while in operation.
- ✓ Never activate the compactor unless the operator is in full control of the machine.
- ✓ Never operate an excavator or backhoe except from the operators seat.
- ✓ Do not operate the compactor above 180° F. hydraulic oil temperature.
- ✓ Do not operate the compactor above 1 500 - 2 000 p.s.i. / 103 – 138 bar operating pressure.
- ✓ Use only Gentec replacement parts.
- ✓ All fasteners must be retorqued every day for the first twenty hours of use.
- ✓ Make frequent visual inspections of fasteners, boom pins, hose fittings, ect.
- ✓ Use caution when torquing fasteners. A previously overstressed part may fail.
- ✓ Do not overtorque fasteners. Adhere to specifications only.
- ✓ Install all hydraulic hoses outside of cab.
- ✓ The major Genpac components are heavy.
- ✓ Never mount the Genpac on a machine that cannot adequately handle the weight (900 lbs. or more).
- ✓ When installing or removing keep hands and fingers clear of mounting pin holes and linkage. Instruct operator to touch controls only when instructed.
- ✓ Be caution of possible flying metal particles when striking any hardened surfaces with a hand-held tool. Always protect your eyes when driving boom pins, etc.
- ✓ Wear ear protection if conditions warrant. Consult OSHA regulations.
- ✓ Properly inspect and maintain all reciprocating parts and shock absorbers.
- ✓ Operate mindful of the effect vibration may have on trench walls.
- ✓ Never operate un a trench with construction workers nearby.
- ✓ Never service in an open trench or other unsare area.
- ✓ As with all hydraulic tools clean up oil spills.

## 8.0 OPERATION

The Model GE-980 will achieve compaction density of 95% Proctor with granular material in 2 to 4 ft. lifts and up to 3 ft. lifts in clay material. Moisture content near optimum increases production rate.

Best results are usually obtained with two passes. For the initial pass, time for each position of the base plate is only as long as visible compaction is apparent (usually 10 to 15 seconds). The second pass should be with greater down-pressure, smoothing or ironing as required. Do not bottom mounting frame arms on base plate.

The Model GE-980 is also a very effective sheet or pile driver. In moist sand or clay, straight down pressure producing vibration perpendicular to the sheeting is sufficient. If excessive driving resistance is encountered, as in dry or rocky material for example, position the base plate 1/4 to 1/3 from the edge of the sheeting. The resulting slapping or impacting of the base plate will improve driving.

Hydraulic pressure during operation is that which is developed by the work resistance. When the compactor is in midair, the pressure will be approximately 500 p.s.i., and when compacting, will rise between that pressure and relief setting.

### NOTE : IMPORTANT CONSIDERATIONS

- ★ DO NOT BOTTOM OUT MOUNTING FRAME ON BASE PLATE.
- ★ DO NOT OPERATE THE COMPACTOR WITHOUT BASE PLATE.

## 9.0 SERVICE AND MAINTENANCE

### 9.1 GENERAL GUIDELINES

Use standard mechanical technical techniques to disassemble and assemble the Genpac. Observe all safety practices.

- ★ Keep the hoses in a “loop” between motor and top mounting bracket. Angle fittings to maintain 1 ½ inch hose clearance from vertical sides of mounting bracket.
- ★ Keep return line restrictions to a minimum and maintain clear oil. Follow the backhoe manufacturer’s recommendations on hydraulic system maintenance.
- ★ Torque:
  1. Clean fasteners and mating surfaces and apply grease to threads and washer faces.
  2. Draw the surfaces snug tight by exerting medium effort with wrench of normal length.
  3. Preload the fastener by turning the screw head or nut an additional 1/3 turn (2 flats); this should require a “cheater bar”.
- ★ Periodically check fastener tightness, especially during the first few hours use after torquing.
- ★ Limit the reuses of fasteners to two or three times.

### 9.3 BEARING REPLACEMENT

USE ONLY GENTEC SUPPLIED BEARINGS.  
THEY ARE SPECIFICALLY SELECTED FOR THE APPLICATION.

Step 1 – Remove bearing housing assembly from the main housing.

Step 2 – Press the inner race of the bearing from the back side of the bearing housing.

Step 3 – Grease lubricate the replacement bearing before installing. Work grease into all cavities of one side until it appears on the opposite side.

Step 4 – The bearing is a press fit in the housing and must be forced in by pressing on the outer race only.

Step 5 – After complete assembly, grease an additional 20 “shots” to fill bearing cavity.

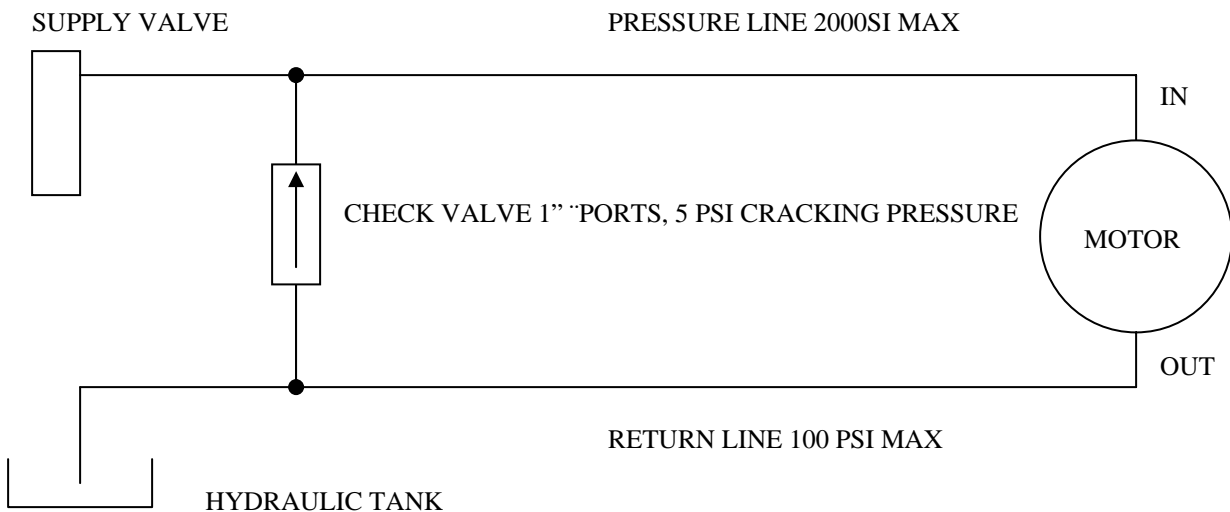
### 9.4 LUBRIFICATION

Under normal operating conditions, bearings should be lubricated every 2 running hours. Extreme conditions (such as high temperature) require more frequent lubrication. Approximately 10 “shots” per bearing is recommended.

Use these greases or equivalent:

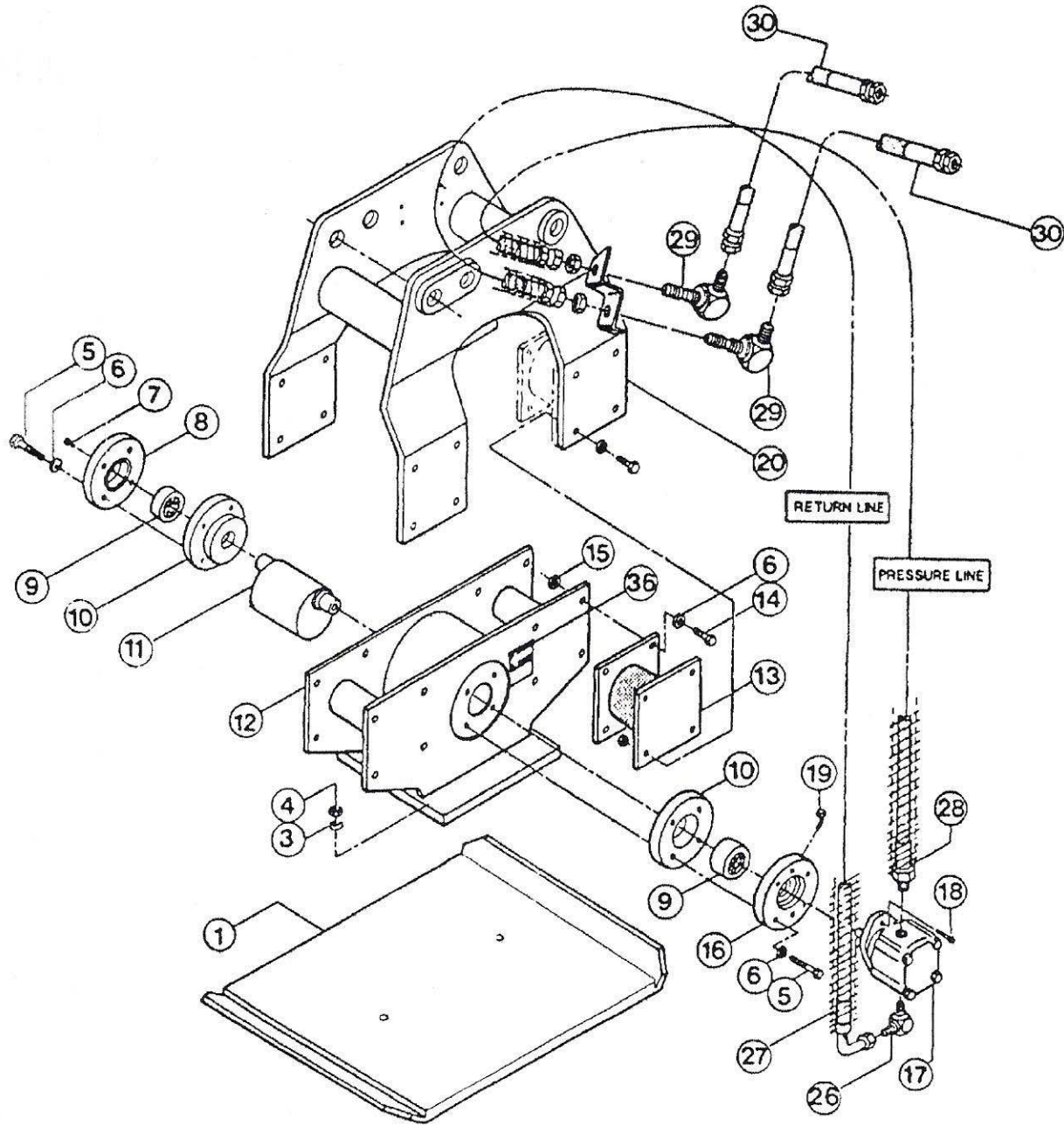
Shell Oil – Alvania EP2; Mobile Oil Co. – Mobilux EP2; Texaco Inc. – RB2

### CHECK VALVE INSTALLATION FOR GENPAC GE-870 & GE-970



# MODEL GE - 980 GENPAC

## BASIC COMPONENTS



**MODEL GE – 980 GENPAC**  
**PART NUMBER 0878**

**PARTS LIST**

| <b>ITEM NO.</b> | <b>QTY.</b> | <b>PART NO.</b> | <b>DESCRIPTION</b>            |
|-----------------|-------------|-----------------|-------------------------------|
| 1               | 1           | 980878          | BASE PLATE                    |
| 2               | 4           | 980851          | HEX HEAD CAP SCREW            |
| 3               | 8           | 980900          | HARDENED FLAT WASHER          |
| 4               | 4           | 980900          | HEX NUT                       |
| 5               | 8           | 980851          | HEX HEAD CAP SCREW            |
| 7               | 1           | 980819          | 90° GREASE FITTING            |
| 8               | 1           | 980851          | COVER PLATE                   |
| 9               | 2           | 980850          | ROLLER BEARING                |
| 10              | 2           | 980850          | BEARING HOUSING               |
| 11              | 1           | 980870          | ECCENTRIC                     |
| 12              | 1           | 980878          | HOUSING                       |
| 13              | 4           | 980974          | RUBBER MOUNT                  |
| 14              | 32          | 980973          | HEX HEAD CAP SCREW            |
| 15              | 32          | 980878          | ELASTIC STOP NUT              |
| 16              | 1           | 980877          | ADAPTOR PLATE                 |
| 17              | 1           | 980877          | HYDRAULIC MOTOR               |
| 18              | 2           | 980879          | SCREW                         |
| 19              | 1           | 980871          | 90° GREASE FITTING            |
| 20              | 1           | 980878          | TOP MOUNTING FRAME            |
| 21              | 1           | 980877          | NAME PLATE                    |
| 22              | 4           | 980703          | DRIVE SCREW                   |
| 26              | 1           | 980653          | ELBOW                         |
| 27              | 1           | 980399          | HOSE ASSEMBLY                 |
| 28              | 1           | 980879          | HOSE ASSEMBLY                 |
| 29              | 2           | 980879          | 90° BULKHEAD UNION            |
| 30              | 2           | 980682          | HOSE ASSEMBLY                 |
| 31              | 2           | 980872          | MALE CONNECTOR WITH TEST PORT |
| 32              | 2           | 980756          | HEX HEAD PIPE PLUG            |
| 36              | 2           | 980927          | LUBRIFICATION DECAL           |

***GENTEC EQUIPMENT INC.***  
***Fax: 613-833-0584***  
***E-mail: gentecequip@rogers.com***