

# DC AC Ground Power Unit Series

## 90G20P

### General Specifications

The purpose the 90G20P Series is to produce and deliver regulated 400-Hz, 115/200-V AC power to a parked aircraft for operation of the aircraft's electrical equipment when the on-board generators are not running. The generator set is also capable of supplying 28.5-V DC, 35-V DC, or 112-V DC power when equipped with special optional T-R (transformerrectifier) packages.



Make: Hobart

Model: 90G20P

Category: AC/DC GPU

- Dimensions For Tractor-mounted (L x W x H): 82 inches x 36 inches x 43 inches
- Dimensions For Self-Contained (L x W x H): 91 inches x 40 inches x 51 inches
- Dimensions For Truck-mounted (L x W x H): 221 inches x 88 inches x 80 inches
- Dimensions For trailer-mounted (L x W x H): 99 inches x 78 inches x 73 inches

### Generator Protective System

- |                           |   |
|---------------------------|---|
| • Overvoltage relay       | • Trips 130 V to 134 V; resets 125 V              |
| • Undervoltage relay      | • Trips 93 V to 102 V; resets 110 V               |
| • Overfrequency relay     | • Trips 415 Hz to 425 Hz; resets 410 Hz           |
| • Underfrequency relay    | • Trips 375 Hz to 385 Hz; resets 385 Hz           |
| • Undervoltage time delay | • 4 to 12 seconds depending upon adjustment       |
| • Overload relay          | • Trips at 125% rated load in less than 5 minutes |

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### Models within the 90G20P Series

Series 90G20P generator sets are 90-kVA units and 60-kVA units. These two series are almost identical, except for engine size and power rating. Units within the 90G20P series have the same engine and basic electrical components, but may differ in regard to mounting (trailer, truck, tractor, or stationary) and may have special or extra components, according to customer requirements.

#### 90 kVA Unit

- Weight for Tractor-mounted:
  - 4,360 lbs ( 1,979 kg)
- Weight for Self-contained:
  - 4,940 lbs ( 2,242.3 kg)
- Weight for Truck-mounted:
  - 9,500lbs ( 4,312 kg)
- Weight for Trailer-mounted:
  - 9,200 lbs ( 4,175.9 kg)

#### 60 kVA Unit

- Weight for Tractor-mounted:
  - 4,070 lbs ( 1,847.4 kg)
- Weight for Self-contained:
  - 4,740 lbs ( 2,151.5 kg)
- Weight for Truck-mounted:
  - 9,200lbs ( 4,175.9 kg)
- Weight for Trailer-mounted:
  - 5,530 lbs ( 2,510 kg)

### Generator Capabilities

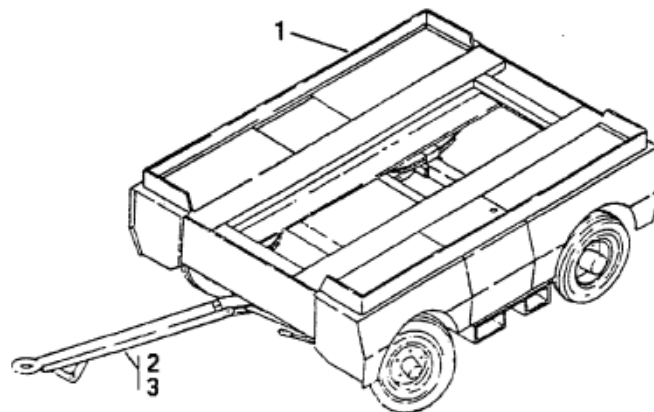
#### 90 kVA Unit

- Output power rating: 90kVA
- Output voltage: 115/200 V AC
- Rated load capacity: 250 A
- Frequency {cycles-per-second} 400Hz
- Output kilowatts: 72kw
- Power factor: 0.8 PF
- Duty cycle: 100%
- Operating speed: 2,000 rpm
- Overload capacity (125% rated load) 325 A
- Output cable size: 2/ 0
- Engine: Detroit Diesel/GM
- Engine Model: 1043-5000 (4-71N)

#### 60 kVA Unit

- Output power rating: 60kVA
- Output voltage: 115/200 V AC
- Rated load capacity: 173 A
- Frequency {cycles-per-second}: 400Hz
- Output kilowatts: 48 KW
- Power factor: 0.8 PF
- Duty cycle: 100%
- Operating speed: 2,000 rpm
- Overload capacity (125% rated load) 216 A
- Output cable size: 2/ 0
- Engine: Detroit Diesel/GM
- Engine Model: 1033-5000 (3-71N)

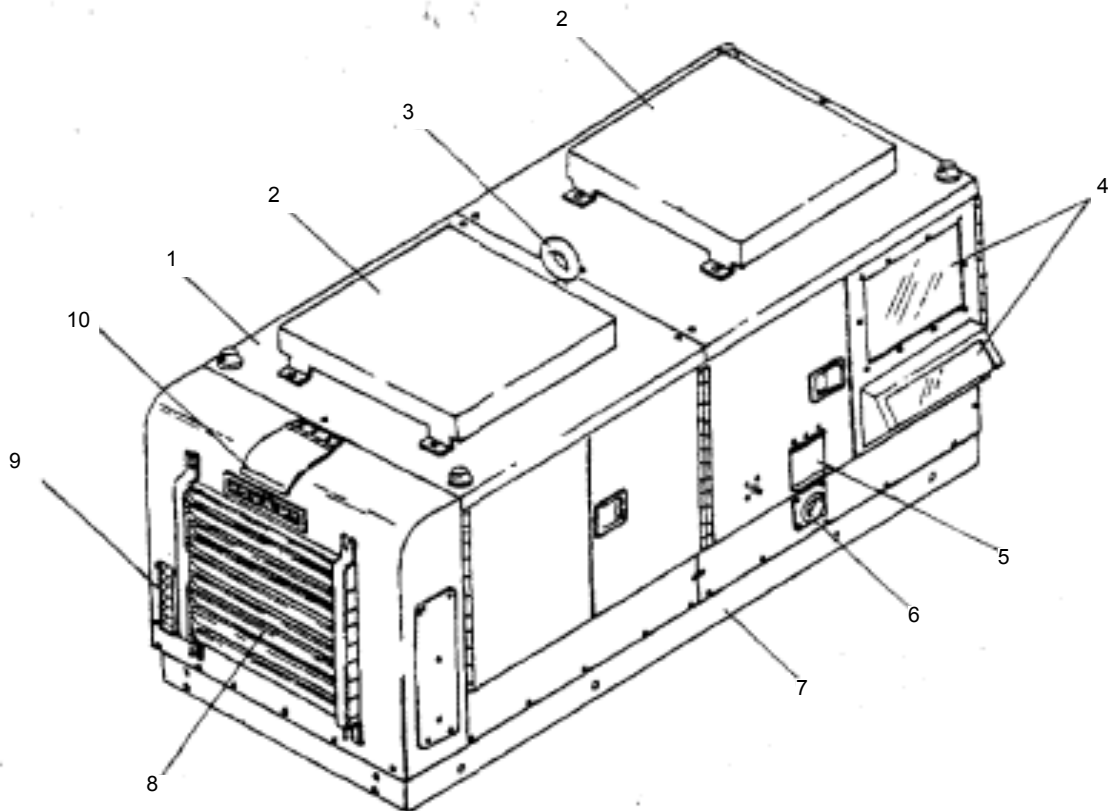
Trailer Group



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### Generator Set



1. Canopy
2. Access - vent covers
3. Lifting eye
4. Windows
5. Output receptacle cover (Two used on some units)
6. Output cable horn(Two used on some units)
7. Roll-out tracks (for tractor-mounted units only)
8. Engine fan exhaust deflectors
9. Engine exhaust pipe
10. Radiator cap access cover