

Onan[®] **MARINE GENERATORS**



ACCESSORIES & SERVICE SUPPORT CATALOG

MDK, Admiral and Platinum Series

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To easily locate the nearest Onan Distributor/Dealer, or for more information, contact Onan at 1-800-888-ONAN or 763-574-5000; 1400 73rd Avenue N.E., Minneapolis, MN 55432 U.S.A.; fax 763-528-7242; e-mail feedback@onan.com; www.onan.com.

Onan Marine Gensets

These accessories/options apply to 60 and 50 hertz models unless specifically noted otherwise.

Complete Product Line

| 60-Hz Models & Ratings | | | 50-Hz Models & Ratings | | | Fuel |
|---------------------------|------------|------|---------------------------|------------|-----|-------------------|
| 1999 and later | Up to 1998 | | 1999 and later | Up to 1998 | | |
| 5 | MDKAU* | | 4 | MDKAU* | | Diesel |
| 6.5 | MDKUB | 6.0 | 5 | MDKUB | 5.5 | Diesel |
| 9 | MDKAL | 8 | 7 | MDKAL | 6.5 | Diesel |
| 9 | MDKAV* | | 7 | MDKAV* | | Diesel |
| 9 | MDKBG* | | 7 | MDKBG* | | Diesel |
| 10 | MDKWB | 9 | 8 | MDKWB | 7.5 | Diesel |
| 11.5 | MDKAA | 10.5 | 9.5 | MDKAA | 8.5 | Diesel |
| 11.5 | MDKAW* | | 9.5 | MDKAW | | Diesel |
| 13.5 | MDKAB | 12.5 | 11 | MDKAB | 10 | Diesel |
| 13.5 | MDKAZ* | | 11 | MDKAZ* | | Diesel |
| 17 | MDKAD | 15 | 13.5 | MDKAD | 12 | Diesel |
| 17 | MDKBD* | | 13.5 | MDKBD* | | Diesel |
| 21.5 | MDKAE | 20 | 17.5 | MDKAE | 16 | Diesel |
| 21.5 | MDKBE* | | 17.5 | MDKBE* | | Diesel |
| 27.5 | MDKAF | 25 | 22.5 | MDKAF | 20 | Diesel |
| 27.5 | MDKBF* | | 22.5 | MDKBF* | | Diesel |
| 35 | MCGBA | | 30 | MCGBA | | Diesel |
| 45 | MCGCA | | 35 | MCGCA | | Diesel |
| 55 | MCGGA | | 45 | MCGGA | | Diesel |
| 70 | MCGDA | | 60 | MCGDA | | Diesel |
| 90 | MCGDB | | 65 | MCGDB | | Diesel |
| 75 | MDGDA | | 65 | MDGDA | | Diesel |
| 95 | MDGDB | | 75 | MDGDB | | Diesel |
| 55 | MDGDC | | 45 | MDGDC | | Diesel |
| 70 | MDGDD | | 60 | MDGDD | | Diesel |
| 8 | MGKBD** | | Not Available | | | Gasoline (Petrol) |
| 10 | MGKBC** | | 8 | MGKBC** | | Gasoline (Petrol) |

* These models are in the e-QD Series of marine gensets. ** These models are in the e-QG Series of marine gensets. Applicable accessories and options are detailed in the e-QG and e-QD Accessories Catalog (F-1379).

Factory-Installed Options

The following genset options must be factory installed. No field installation kits are available. (Note that not all features below are available on all models as factory options.)

- Extended stack AC generator
- Three-phase AC generator
- Overspeed shutdown¹
- 24V DC electrical system available for MDK series, MCG and MDG series gensets.
- DC gauges installed in set mounted control box²
- Keel cooling³
- Fuel/water separator mounted on the genset⁴
- Isolated ground⁵

(1) Accessory kit for MCG and MDG series. It is a standard feature on the MDK series.

(2) Accessory kits for MCG/MDG Series MDKAA, MDKAB and MDKAL are available.

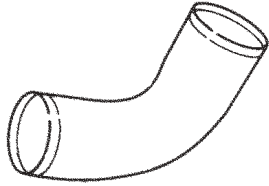
(3) Accessory kit for models MDKAA, MDKAB, MDKAD, MDKAE, MDKAF, and MDKAL are available.

(4) Accessory kit for MCG/MDG Series is available. Standard feature in the integral fuel filter on MDK series models.

(5) Accessory kits for models MDKUB, MDKAL, MDKWB, MDKAA, and MDKAB are available.

Field Installed Options: Exhaust Accessories, Sound Shields & Cooling System Conversions

Stainless Steel Exhaust Elbow



For exhaust connections made through the generator sound shield

| Model (50/60 Hz) | 155-2033* |
|------------------|-----------|
| MDKUB | ◆ |
| MDKAL | ◆ |
| MDKWB | ◆ |
| MDKAA | ◆ |
| MDKAB | ◆ |
| MDKAD | ◆ |
| MDKAE | ◆ |
| MDKAF | ◆ |

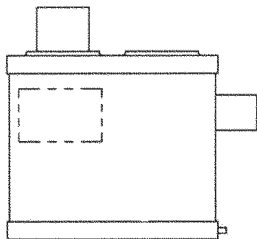
* 90° elbow, 2" OD.

Wet Exhaust Hose For Exhaust Systems

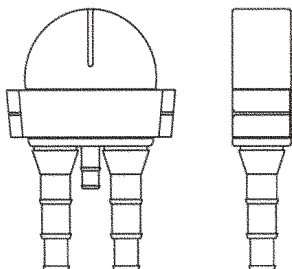
| Model | Hose ID (inches) | 10 Feet | Make from Onan pn. |
|-------------------|------------------|----------|--------------------|
| MDKUB | 2" | 503-1353 | 503-1320 |
| MDKAL | 2" | 503-1353 | 503-1320 |
| MDKWB | 2" | 503-1353 | 503-1320 |
| MDKAA | 2" | 503-1353 | 503-1320 |
| MDKAB | 2" | 503-1353 | 503-1320 |
| MDKAD | 2" | 503-1353 | 503-1320 |
| MDKAE | 2" | 503-1353 | 503-1320 |
| MDKAF | 2" | 503-1353 | 503-1320 |
| MDKAF * | 2-1/2" | 503-1302 | 503-1288 |
| MCG or MDG series | 3-1/2" | 503-1308 | 503-1290 |

* For use on exhaust outlet connection on water lift muffler that has a 2 1/2" diameter outlet.

Wet Exhaust Muffler



Waterlift Muffler (WL)
(155-3222 shown)



Water Separator with Mounting Bracket (SEP)

| Model | 155-2030 | 155-3147 | 155-2019 | 155-3222 |
|-------------------|----------|----------|----------|------------|
| Connection Size | WL | WL & RES | WL | WL |
| | 2" | 2" | 3-1/2" | 2 x 2-1/2" |
| MDKUB | | ◆ | | |
| MDKAL | ◆ | | | |
| MDKWB | ◆ | | | |
| MDKAA | ◆ | | | |
| MDKAB | ◆ | | | |
| MDKAD | ◆ | | | |
| MDKAE | ◆ | | | |
| MDKAF | | | | ◆ |
| MCG or MDG series | | | ◆ | |

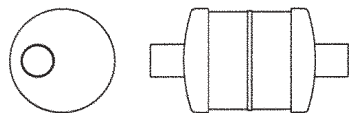
WL - Waterlift Muffler
RES - Resonator (Secondary Muffler)
SEP - Water Separator (Secondary Muffler)

The exhaust resonator or water separator in kits have much lower exhaust noise levels than kit 155-2030 water lift muffler alone in the exhaust system.

Field Installed Options: Exhaust Accessories, Sound Shields & Cooling System Conversions

Wet Exhaust Muffler

(Continued from previous page.)



Resonator (RES)

| Model | 155-3223 WL & SEP | 155-3224 SEP | 155-3217 WL & SEP | 155-3216 SEP | 155-2230* WL | 541-0599 WL & RES |
|-----------------|----------------------|-----------------|----------------------|-----------------|-----------------|----------------------|
| Connection Size | 2 x 2-1/2" | 2-1/2" | 2" | 2" | 2" | 2" x 2" |
| MDKUB | | | ◆ | ◆ | ◆ | ◆ |
| MDKAL | | | ◆ | ◆ | | ◆ |
| MDKWb | | | ◆ | ◆ | ◆ | ◆ |
| MDKAA | | | ◆ | ◆ | ◆ | ◆ |
| MDKAB | | | ◆ | ◆ | | |
| MDKAD | | | ◆ | ◆ | | |
| MDKAE | | | ◆ | ◆ | | |
| MDKAF | ◆ | ◆ | | | | |

WL - Waterlift Muffler

RES - Resonator (Secondary Muffler)

SEP - Water Separator (Secondary Muffler)

* Water lift muffler with end inlet and outlet for low profile applications (available from Parts Distribution (MDC)).

Front Exhaust Exit (Wet Exhaust-Engine End)

| Model | 155-3240 | 155-3257 | 155-3284 * |
|-------|----------|----------|------------|
| MDKAL | ◆ | | |
| MDKAA | | ◆ | |
| MDKAB | | ◆ | |
| MDKAD | | | ◆ |
| MDKAE | | | ◆ |
| MDKAF | | | ◆ |

* Kit consists of rubber elbow and hardware to allow directing exhaust towards front. Installer to route exhaust connection inside sound shield to exhaust elbow.

Dry Exhaust Muffler

| Model | Industrial 155-2063-09 | Critical 155-2064-09 | Industrial 155-0077 * |
|------------------|---------------------------|-------------------------|--------------------------|
| MDKAL 1-1/4" NPT | | | ◆ |
| MDKAA 1-1/4" NPT | | | ◆ |
| MDKAB 1-1/4" NPT | | | ◆ |
| MDKAD 2" NPT | ◆ | ◆ | |
| MDKAE 2" NPT | ◆ | ◆ | |
| MDKAF 2" NPT | ◆ | ◆ | |

| | Part Number** | Application |
|---------------|---------------|-------------|
| MCGBA, CA | 155-2535 | Industrial |
| MCGBA, CA | 155-2540 | Critical |
| MCGGA, DA, DB | 155-2536 | Industrial |
| MDGDA, DB | 155-2536 | Industrial |
| MCGGA, DA, DB | 155-2537 | Critical |
| MDGDA, DB | 155-2537 | Critical |

* Requires installer to supply flexible exhaust connection and elbow—Mufflers have end inlet & outlet (available from Parts Distribution (MDC)).

Field Installed Options: Exhaust Accessories, Sound Shields & Cooling System Conversions

Dry Exhaust Conversion

| Model | 155-3094 | 155-2980 | 155-3146 |
|------------------|----------|----------|----------|
| MDKAL 1-1/4" NPT | | | ◆ |
| MDKAA 1-1/4" NPT | | | ◆ |
| MDKAB 1-1/4" NPT | | | ◆ |
| MDKAD 2" NPT | ◆ | ◆ | |
| MDKAE 2" NPT | ◆ | ◆ | |
| MDKAF 2" NPT | ◆ | ◆ | |

These kits can be used with a keel cooling conversion kit or alone. Installer will need to develop adequate protection against contact or fire hazard. If used with a housed set the housing roof will need to be modified for the exhaust exit and exhaust section inside the sound shield insulated to prevent any additional heat rejection inside the sound shield.

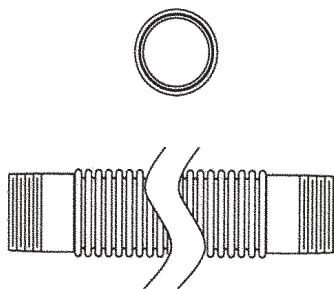
Keel Cooling Conversion System

| Model | 155-3199 | 155-3087 | 155-3148-01* | 155-3148-02* |
|-------|----------|----------|--------------|--------------|
| MDKAL | ◆ | | | |
| MDKAA | ◆ | | | |
| MDKAB | ◆ | | | |
| MDKAD | | ◆ | ◆ | |
| MDKAE | | ◆ | ◆ | |
| MDKAF | | ◆ | | ◆ |

* Keel cooling kit used with wet exhaust system. Remaining kits require selection from "dry exhaust conversion" kit and related accessories.

If the total coolant volume exceeds 2.5 gallons an external expansion tank (with a minimum of 5% by volume of total liquid capacity) is required and the set mounted pressure relief cap has to be located on the expansion tank. The genset engine would be equipped with a non-pressure relief cap 130-4718 for MDKAD/E spec A or B; MDKAF spec A (order separately); 130-4642 cap for MDKAD/E/F later specs.

Flexible Exhaust Tube (For Dry Exhaust Systems)



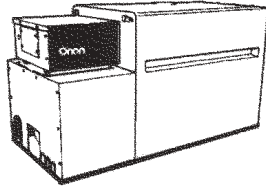
| Model | Flexible Coupling | |
|-------------------|-------------------|-------------|
| | 155-2355-02 | 155-2955-04 |
| MDKAL 1-1/4" NPT | ◆ | |
| MDKAA 1-1/4" NPT | ◆ | |
| MDKAB 1-1/4" NPT | ◆ | |
| MDKAD 2" NPT | | ◆ |
| MDKAE 2" NPT | | ◆ |
| MDKAF 2" NPT | | ◆ |
| MCG or MDG series | * | 155-2356-09 |

Flexible coupling has flange connections that are 18 in. (45.7 cm) long stainless steel spiral or annular corrugated open pitch type tubing.

* Flange dimensions: OD: 7.5 in; ID: 3 in nominal pipe; 4 holes with 0.75 in diameter; 6 in between centers.

Field Installed Options: Exhaust Accessories, Sound Shields & Cooling System Conversions

Sound Shield



Sound shields* For MCG, MDG Series with low profile, wet exhaust options. Consult factory for dry exhaust applications.

*All MCG/MDG Series Sound Shields require Circuit Breaker Mounting Box (K882) and Oil Filter Fuel Pump Side Option (H519) features on the generator set.

| Model | 405-5253 | 405-5252 | 405-5743 | 405-6081 | 405-6136 |
|-------|----------|----------|----------|----------|----------|
| MDKAL | | | | ◆ | |
| MDKAA | | | | | ◆ |
| MDKAB | | | | | ◆ |
| MDKAD | ◆ | | | | |
| MDKAE | | ◆ | | | |
| MDKAF | | | ◆ | | |

Sheet steel, insulated with sound attenuating material, easily removable panels, for convenient access to controls, brilliant white paint. Order Option F142 for factory installations.

| Sound Shield Kit | Length | Width | Height | Weight lb. (kg) |
|------------------|--------------|--------------|---------------|-----------------|
| 405-5253 | 44.3 | 23.7 | 28.8 | 130 (59) |
| 405.5252 | 45.7 | 23.7 | 28.8 | 130 (59) |
| 405-5743 | 53.5 (1355) | 23.7 (602.2) | 31.34 (795.9) | 145 (65.8) |
| 405-6081 | 36 (915) | 22.4 (568) | 23.5 (596) | 85 (38.6) |
| 405-6136 | 40.83 (1037) | 22.4 (568) | 23.5 (596) | 85 (38.6) |

| Model No. | Housing Part No. | Use With | Generator Frame No. |
|----------------------------|------------------|--|---------------------|
| 30/35 MCGBA | 405-5461 | 2C, 2D, 2G, 2F, 2G | |
| 35/45 MCGCA | 405-5461 | All except for options listed below | 2G, 2F, 2G, 3G |
| | 405-5462 | B269, B341 | 3C |
| 45/55 MCGGA | 405-5463 | B256, B257, B274, B275, B328, B329 | 2E, 2F, 2G, |
| MDGDC | 405-5464 | B268, B340, B341 | 3D |
| | 405-5465 | B269 | |
| 60/70 | 405-5465 | B269 | 3E |
| MCGDA & | 405-5463 | B256 | 3C |
| 65/75 | | B257, B268, B274, B275, B328, B329, B269, B341 | 3D, 3F, 3D, 3C |
| MDGDA | 405-5465 | B347 | 3E |
| MDGDD | | | |
| 65/95 | 405-5463 | All except for options listed below | |
| MCGDB & | 405-5464 | B256, B257, B274, B275, B328, B329, B268, B269, B340, B341, B347 | 3D |
| 75/95 MDGDB | 405-5465 | | 3E, 3F |
| All Models MCG, MDG Series | 405-5460 | Sound shield conversion kit for PTO | |

| Model Kit | Length | Width | Height | Weight lb. (kg) |
|-----------|--------------|--------------|---------------|-----------------|
| 405-5253 | 44.3 | 23.7 | 28.8 | 130 (59) |
| 405.5252 | 45.7 | 23.7 | 28.8 | 130 (59) |
| 405-5743 | 53.5 (1355) | 23.7 (602.2) | 31.34 (795.9) | 145 (65.8) |
| 405-6081 | 36 (915) | 22.4 (568) | 23.5 (596) | 85 (38.6) |
| 405-6136 | 40.83 (1037) | 22.4 (568) | 23.5 (596) | 85 (38.6) |

| Model | Engine & Generator Frame* | Sound Shield Kit | Length | Width | Height |
|---|---------------------------|------------------|--------------|------------|-------------|
| MCGBA, MCGCA | 4 Cyl. & 2C-2G | 405-5461 | 69.25 (1759) | 36 (914.4) | 40.9 (1038) |
| MCGCA | 4 Cyl. & 3C-3G | 405-5462 | 69.25 (1759) | 36 (914.4) | 40.9 (1038) |
| MCGGA, MDGDC | 6 Cyl. & 2C-2G | 405-5463 | 78.7 (1999) | 36 (914.4) | 40.9 (1038) |
| MCGGA, MCGDA, MCGDB, MDGDA, MDGDB, MDGDC, MDGDD | 6 Cyl. & 3C-3D | 405-5464 | 78.7 (1999) | 36 (914.4) | 40.9 (1038) |
| MCGGA, MCGDA, MCGDB, MDGDA, MDGDB, MDGDC, MDGDD | 6 Cyl. & 3E-3H | 405-5465 | 85 (2159) | 36 (914.4) | 40.9 (1038) |
| All Models | All Models | 405-5460 | | 36 (914.4) | 40.9 (1038) |

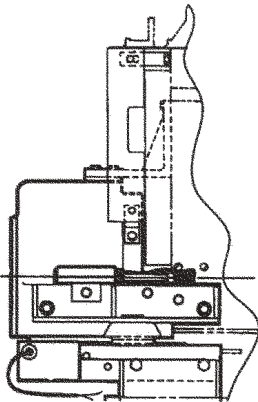
* See Generator Frame Selection chart next page.

Field Installed Options: Exhaust Accessories, Sound Shields & Cooling System Conversions

Generator Frame Selection Chart GEN. OPTION

| | GEN. FRAME | | | | | | | | |
|---|------------|-------|-------|-------|-------|-------|-------|-------|-------|
| | MCGBA | MCGCA | MCGGA | MCGDA | MCGDB | MDGDA | MDGDB | MDGDC | MDGDD |
| B256 60 hz, 12L, 105C, broad range | 2C | 2E | 2F | 3C | 3D | 3C | 3D | 2F | 3C |
| B268 60 hz, 12L, Full 1 ph, 105C, broad range | 2F | 2G | 2D | 3F | 3H | 3F | 3H | 2D | 3F |
| B257 60 hz, 12L, 80C, broad range | 2D | 2F | 2G | 3D | 3E | 3D | 3E | 2G | 3D |
| B269 60 hz, 12L, Full 1 ph, 80C, broad range | 2G | 2C | 2E | 3F | 3H | 3F | 3H | 2E | 3F |
| B274 60 hz, 4L, 1 phase, 105C | 2D | 2E | 2F | 3C | 3E | 3C | 3E | 2F | 3C |
| B275 60 hz, 4L, 1 phase, 80C | 2D | 2F | 2G | 3D | 3F | 3D | 3F | 2G | 3D |
| B328 50 hz, 12L, 105C, broad range | 2C | 2E | 2F | 3C | 3D | 3C | 3D | 2F | 3C |
| B340 50 hz, 12L, Full 1 ph, 105C, broad range | 2F | 2G | 2D | 3D | 3E | 3F | 3G | 2D | 3F |
| B329 50 hz, 12L, 80C, broad range | 2D | 2F | 2F | 3D | 3D | 3D | 3E | 2F | 3D |
| B341 50 hz, 12L, Full 1 ph, 80C, broad range | 2F | 2C | 2D | 3E | 3E | 3F | 3H | 2D | 3F |
| B346 50 hz, 4L, 1 phase, 105C | 2D | 2E | 2F | 3D | 3D | 3D | 3D | 2F | 3D |
| B347 50 hz, 4L, 1 phase, 80C | 2E | 2F | 2F | 3E | 3E | 3E | 3E | 2F | 3E |

Front Power Take-Off (FPTO)



| Model | Kit Number | Application |
|--------------|------------|----------------|
| All MCG/MDG* | 190-0725 | 12V DC, 70 HP |
| All MCG/MDG* | 190-0726 | 24V DC, 70 HP |
| All MCG/MDG* | 190-0727 | 12V DC, 100 HP |
| All MCG/MDG* | 190-0728 | 24V DC, 100 HP |

* Front power take-off is configured for a "C" splined 1-1/4 pump shaft (SAE J744). Includes torsional coupling and electric clutch. Option codes A348 and A357.

| Group No. | I | I | II | II | III | III | III |
|-----------|----------|----------|----------|----------|----------|----------|------------|
| | 190-0738 | 190-0739 | 190-0740 | 190-0741 | 405-6576 | 405-6579 | 190-0744 |
| | 12V | 24V | | | | | |
| Content | PTO | PTO | Adapter | Adapter | Panel | Panel | Belt Guard |
| MDKAD | ♦ | ♦ | ♦ | | ♦ | | ♦ |
| MDKAE | ♦ | ♦ | ♦ | | ♦ | | ♦ |
| MDKAF | ♦ | ♦ | | ♦ | | ♦ | ♦ |

The Front power take-off is configured for SAE splined 2 & 4 bolt mounting (SAE J744). Includes torsional coupling and electric clutch. (Option A183 (12V) or (24V) based on feature on engine). When configuring set with PTO the following guideline is offered:

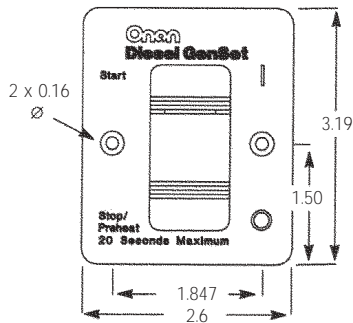
1. The PTO is only compatible on MDKAD/MDKAE in spec letter B or later.
2. Select PTO from Group I.
3. Select engine adapter from Group II.
4. Select housing panel for housed set or belt guard for unhoused set from Group III.

PTO Available HP

| Model | Hp (kw) @50 Hz (1500 rpm) | Hp (kw) @60 Hz (1800 rpm) |
|---------------|---------------------------|---------------------------|
| MDKAD | 20 (14.9) | 24 (17.9) |
| MDKAE | 25.4 (18.9) | 30 (22.4) |
| MDKAF | 30.5 (22.8) | 36 (26.9) |
| MCGBA | 45 (34) | 55 (41) |
| MCGCA | 56 (42) | 71 (53) |
| MCGGA | 67 (50) | 81 (61) |
| MCGDA & MDGDA | 96 (72) | 100 (75) |
| MCGDB & MDGDB | 96 (72) | 100 (75) |

Field Installed Options: Meter Panels & Gauges

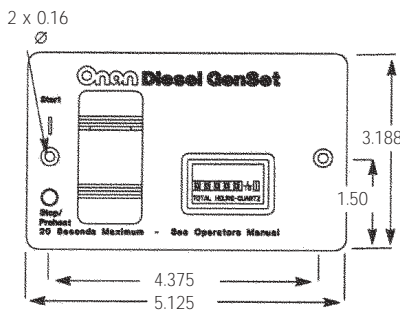
Basic Panel



| Type of Control Model | 300-4990-01 With Preheat (12V) | 300-4990-02 With Preheat (24V) | 300-4990-03 Without Preheat (12V) | 300-4990-04 Without Preheat (24V) |
|-----------------------|-----------------------------------|-----------------------------------|--------------------------------------|--------------------------------------|
| MDKUB | ◆ | | | |
| MDKAL | ◆ | ◆* | | |
| MDKWB | ◆ | | | |
| MDKAA | ◆ | ◆ | | |
| MDKAB | ◆ | ◆ | | |
| 10/12.5 MDKAD | ◆ | ◆ | | |
| MDKAD | ◆ | ◆ | | |
| MDKAE | ◆ | ◆ | | |
| MDKAF | ◆ | ◆ | | |
| MCG or MDG Series | | | ◆ | ◆ |

* MDKAL Spec B.

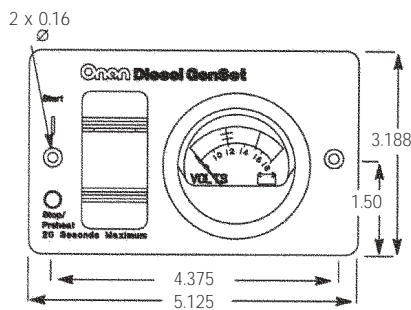
Deluxe Panel With Hourmeter



| Type of Control Model | 300-4991-01 (12V) | 300-4991-02 With Preheat (24V) | 300-4991-03 Without Preheat (12V) | 300-4991-04 Without Preheat (24V) |
|-----------------------|----------------------|-----------------------------------|--------------------------------------|--------------------------------------|
| MDKUB | ◆ | | | |
| MDKAL | ◆ | ◆* | | |
| MDKWB | ◆ | | | |
| MDKAA | ◆ | ◆ | | |
| MDKAB | ◆ | ◆ | | |
| MDKAD | ◆ | ◆ | | |
| MDKAE | ◆ | ◆ | | |
| MDKAF | ◆ | ◆ | | |
| MCG or MDG Series | | | ◆ | ◆ |

* MDKAL Spec B.

Deluxe Panel With Voltmeter



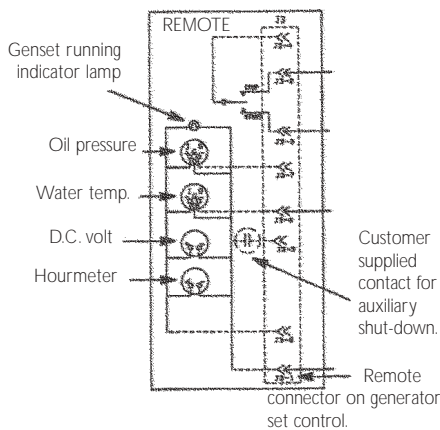
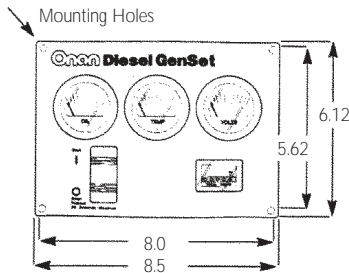
| Type of Control Model | 300-4989-01 With Preheat (12V) | 300-4989-02 (24V) | 300-4989-03 Without Preheat (12V) | 300-4989-04 Without Preheat (24V) |
|-----------------------|-----------------------------------|----------------------|--------------------------------------|--------------------------------------|
| MDKUB | ◆ | | | |
| MDKAL | ◆ | ◆* | | |
| MDKWB | ◆ | | | |
| MDKAA | ◆ | ◆ | | |
| MDKAB | ◆ | ◆ | | |
| 10/12.5 MDKAD | ◆ | ◆ | | |
| MDKAD | ◆ | ◆ | | |
| MDKAE | ◆ | ◆ | | |
| MDKAF | ◆ | ◆ | | |
| MCG or MDG Series | | | ◆ | ◆ |

* MDKAL Spec B.

Field Installed Options: Meter Panels & Gauges

Remote Gauge Panels

4 x 0.16



| Model | 300-5018-01 (12V) | 300-5018-02 (24V) | 300-5018-03 (12V) | 300-5018-04 (24V) | 300-5040 Senders Neg. Gd | 300-5041 Senders Iso. Gd. |
|---------------------|----------------------|----------------------|----------------------|----------------------|--------------------------------|---------------------------------|
| MDKUB* | ◆ | | | | ◆ | ◆ |
| MDKAL+ | ◆ | ◆ | | | ◆ | ◆ |
| MDKWB* | ◆ | | | | ◆ | ◆ |
| MDKAA+ | ◆ | ◆ | | | ◆ | ◆ |
| MDKAB+ | ◆ | ◆ | | | ◆ | ◆ |
| 10/12.5 MDKAD+ | ◆ | ◆ | | | ◆ | ◆ |
| MDKAD+ | ◆ | ◆ | | | ◆ | ◆ |
| MDKAE+ | ◆ | ◆ | | | ◆ | ◆ |
| MDKAF+ | ◆ | ◆ | | | ◆ | ◆ |
| MCG or MDG Series** | | | ◆ | ◆ | | |

+ Remote panel kits for use on MDKxx series sets do not include senders. If the set is not equipped with the gauge panel option (H506) then sender kit must also be ordered from this list. If two gauge panels are connected to the set one set of gauges must be disconnected or a momentary dual gauge switch must be installed in the set control also (see separate section for switch selection).

* MDKUB/MDKWB models require oil pressure sender installation adapter kit 100-3440 and must also be ordered.

** MCG & MDG series gensets include a gauge panel and senders on the set. Remote accessory gauge panel requires disconnecting the set mounted gauges or installation of a dual gauge momentary switch for correct operation (see separate section for switch selection).

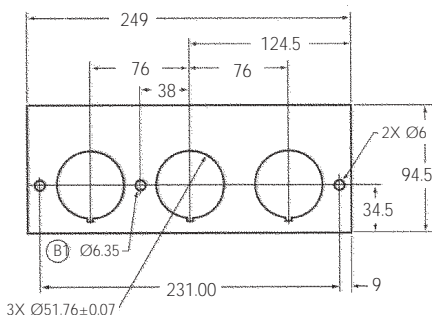
Start/stop switch, hour meter, voltmeter, oil pressure gauge on a surface-mounted panel with all wiring terminated to a plug to fit the optional wiring harness between genset and remote panel.

Dual Gauge Conversion

Momentary switch mounts in the DC control panel. Allows operation of set mounted gauges oil pressure and water temperature momentarily at the set when required. Operates the remote panel the rest of the time.

| Model | 300-4835 | 300-4835-01 | 300-4835-02 |
|-------------------|----------|-------------|-------------|
| MDKAL | | ◆ | |
| MDKAA | | ◆ | |
| MDKAB | | ◆ | |
| MDKAD | ◆ | | |
| MDKAE | ◆ | | |
| MDKAF | ◆ | | |
| MCG or MDG Series | | | ◆ |

Set Mounted Gauge Panel



| Model | Part No. | 300-5038 Panel (12V) | 300-5039 Panel (24V) | 300-5040 Senders Neg. Grnd. | 300-5041 Senders Iso. Grnd. |
|-------------|-------------|----------------------------|----------------------------|-----------------------------------|-----------------------------------|
| MDKAL | Application | ◆ | ◆ | ◆ | ◆ |
| MDKAA | | ◆ | ◆ | ◆ | ◆ |
| MDKAB | | ◆ | ◆ | ◆ | ◆ |
| MDKAD/E/F * | | ◆ | ◆ | ◆ | ◆ |

This panel assembly replaces the blank panel on a set not equipped with gauge option (H506) and has a mating plug to connect to the connector inside the DC control box. Separate sender kit has to be procured depending whether it has a negative ground or isolated system on the genset. Panel and sender kit selection allows installation of option H506 (gauge panel) in the field.

* When customer requires the set mounted gauge panel feature (H506) on models MDKAD/MDKAE/MDKAF not equipped with this feature the above kits can be selected to locate a three gauge panel mounted off the set in the engine room instead. The arrangement consists of a panel with gauges, an extension harness of appropriate length and Y adapter har-

ness (part no. 338-3697, 249 mm long).

Field Installed Options: Meter Panels & Gauges

A/C Meter Panel

| Model | Kit Number |
|-------------|------------|
| All MCG/MDG | 300-3972 |

Includes A/C Voltmeter, frequency meter, phase selector switch and wiring harness. If an ammeter is to be supplied, pick a kit from the list of ammeter/CT kits below. Option code K001.

Ammeter/CT Kits

| Kit Number | Scale (Amps) |
|------------|--------------|
| 300-3973 | 0-50/0-100 |
| 300-3974 | 0-75/0-150 |
| 300-3975 | 0-100/0-200 |
| 300-3976 | 0-150/0-300 |
| 300-3977 | 0-200/0-400 |
| 300-3978 | 0-250/0-500 |
| 300-3979 | 0-375/0-750 |

MCG or MDG Series only.

Kits include dual scale ammeter, 3 current transformers, and wire ties. Use with AC meter panel above.

Oil Temperature Gauge

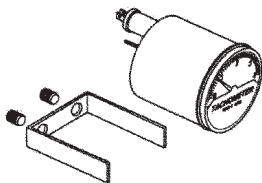
| Model | Kit Number | Application | Feature Option | Instruction Sheet |
|-------------|------------|-------------|----------------|-------------------|
| All MCG/MDG | 300-4011 | 12 VDC | K486 | C373 |
| All MCG/MDG | 300-4026 | 24 VDC | K486 | C373 |

Provides temperature of the lube oil in the oil pan.

Genset must have 6 ga. panel (option H507) and optional harness (option H510).

Tachometer

| Model | Kit Number | Application | Instruction Sheet |
|---------------|------------|--------------|-------------------|
| All MCG/MDG's | 300-4007 | 12V* | C371 |
| All MCG/MDG's | 300-4025 | Mechanical** | C371 |



* For 24V add resistor 193-0250

** Requires set equipped with option A039—No Alternator (idler pulley only).

Measures and indicates engine speed in revolutions per minute. Option code K145. Genset must have option H507 gauge panel and option H510 harness.

Safety Shutdown Override

| Model | Kit Number | Feature Option | Instruction Sheet | Application |
|---------------|------------|----------------|-------------------|-------------|
| All MCG/MDG's | 300-4012 | K838 | C376 | 12 VDC |
| All MCG/MDG's | 300-4027 | K838 | C376 | 24 VDC |

Provides a switch wired in the safety shutdown system that will allow the operator to by-pass the safety shutdowns and allow the genset to continue to run.

Control Options

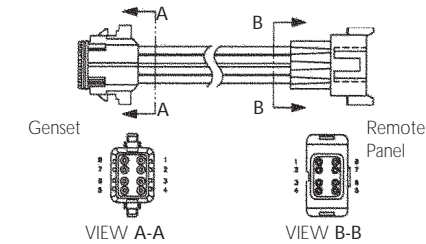
6 Gauge Control Conversions

| Model | Kit Number | Feature Option | Instruction Sheet |
|---------------|------------|----------------|-------------------|
| All MCG/MDG's | 300-4004 | H507 | C367 |

Kit contains sheet metal only for mounting up to 6 gauges and all individual annunciation. Select additional gauges and other options from above. Requires re-mounting of gauge (4) removed from the standard genset control.

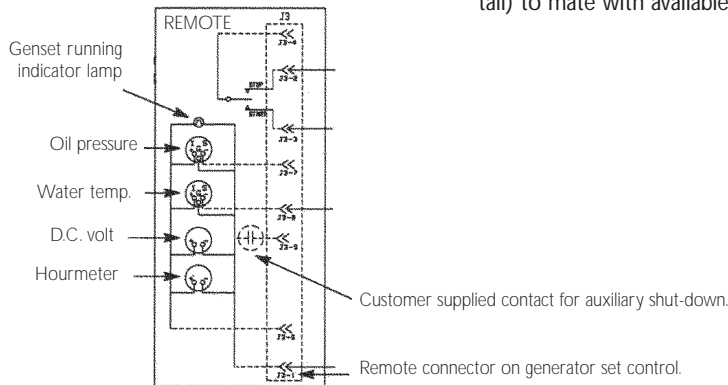
Field Installed Options: Harnesses

Harnesses for all the Accessory Panels—Basic, Deluxe, or Gauge Package

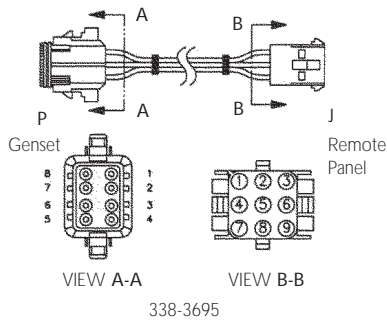


| | 15 FT | 25 FT | 45 FT | 75 Ft | 100 FT | 150 FT | Pigtail |
|-------------------|----------|----------|----------|-------------|-------------|-------------|----------|
| Model | 338-3167 | 338-3168 | 338-3169 | 338-3169-01 | 338-3169-02 | 338-3169-03 | 338-3098 |
| MDKUB | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ |
| MDKAL | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ |
| MDKWB | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ |
| MDKAA | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ |
| MDKAB | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ |
| MDKAD | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ |
| MDKAE | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ |
| MDKAF | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ |
| MCG or MDG Series | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ |

These harnesses are equipped with Deutsch water proof connectors on both ends (except pigtail) to mate with available panels and set mounted remote connector.



Adapter Harnesses

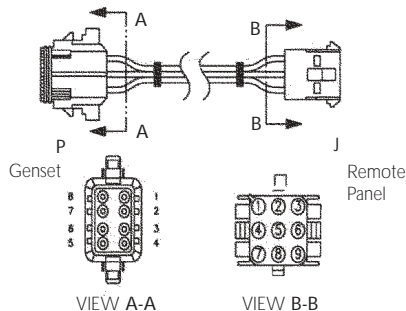


338-3695

| Model | 338-3695* | 338-3696** |
|-------|-----------|------------|
| MDKUB | ◆ | ◆ |
| MDKAL | ◆ | ◆ |
| MDKWB | ◆ | ◆ |
| MDKAA | ◆ | ◆ |
| MDKAB | ◆ | ◆ |
| MDKAD | ◆ | ◆ |
| MDKAE | ◆ | ◆ |
| MDKAF | ◆ | ◆ |

* ADAPTER HARNESSES FOR ALL MDK series set for re-power installations when replacing a MDKC, MDKD, MDL3, MDL4 or MDL6 marine generator set that had a single switch for start/stop and pre-heat. Approximately 6 inches long.

** ADAPTER HARNESSES FOR ALL MDK series set for re-power installations when replacing a MDL3, MDL4 or MDL6 marine generator set that had a separate pre-heat switch system. Approximately 6 inches long.



338-3696

Field Installed Options: Harnesses

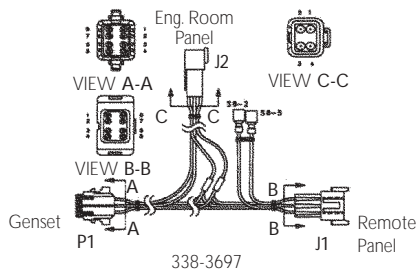
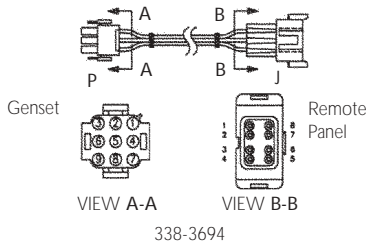
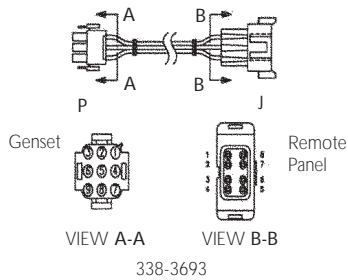
Adapter Harnesses

Harnesses for connecting current remote accessory panels to noncurrent marine generator sets.

ADAPTER HARNESSES FOR MDKC, MDKD, MDL series sets to connect any of the current remote accessory panels. The marine genset should have a separate pre-heat circuit for this to apply. Approximately 6 inches long. PN 338-3693.

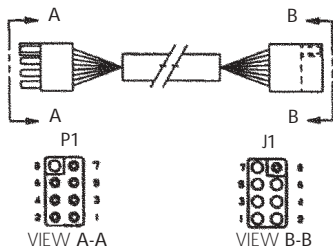
ADAPTER HARNESSES FOR MDKC, MDKD, MDL series sets to connect any of the current remote accessory panels. The marine genset should have a single stop/start and pre-heat circuit as the pre-heat cycle was part of the standard cranking process. Approximately 6 inches long. PN 338-3694.

ADAPTER HARNESSES FOR ALL MDKD, MDKAE & MDKAF sets (dual gauges in the system) when installing a remote panel in the engine room (because the set does not have a gauge panel option in the control) and another accessory panel remote from the genset. PN 338-3697.



AC Control Extension Harness (20 Feet)

Wiring Harnesses for remote mounting AC control panel.



If the AC control is to be mounted remotely from the genset, the following harness extension may be used.

| Model | Part Number |
|-------------|-------------|
| All MCG/MDG | 338-2694 |

DC Control Harness Extension

If a set control is to be remotely mounted from the generator set, the following harnesses may be used. *Note: For standard controls with options (H510) an additional harness PN 338-2597 is required on MCG and MDG series product.

| Model | Length | Part Number | Application | Instruction Sheet |
|--------------------------------|--------|-------------|----------------------|-------------------|
| MCG/MDG | 20 ft. | 338-2597* | 4 Gauge Control | None |
| MCG/MDG | 20 ft. | 338-2599* | 6 Gauge Control | None |
| MDKAL/Spec A | 10 ft. | 338-3643 | DC Control | None |
| MDKAL/Spec B, MDKAA & MDKAB | 10 ft. | 338-3730 | DC Control | None |
| MDKAL/MDKAA/ MDKAB | 10 ft. | 338-3644 | AC Voltage Regulator | None |

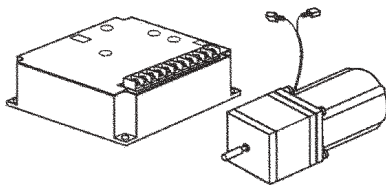
Field Installed Options: Miscellaneous Electric

Control Options Wiring Harness

When adding the 6 gauge control conversion and any of the following options, you must order one of these harnesses. Options B181, H389, H514, K145, K486, E086.

| Model | Kit Number | Feature Options | Instruction Sheet |
|---------------------------|------------|-----------------|-------------------|
| MCG or MDG BA, CA | 300-4013 | H510 | C370 |
| MCG or MDG GGA, DA, DB | 300-4006 | H510 | C370 |

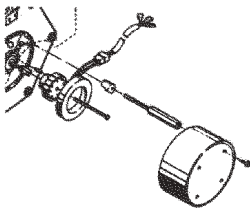
Electronic Governor



| Model | 150-2541 (12 VDC) | 150-2538 (24 VDC) |
|-------------|----------------------|----------------------|
| All MCG/MDG | ◆ | ◆ |

Electronic governors provide precise frequency control of the engine generator set. The electronic governor system consists of a magnetic pick-up, the governor control, the actuator and related wiring. The frequency regulation of electronic governors is isochronous for any constant load from no load to 100% load. This governor therefore maintains a constant steady-state speed regardless of the load applied to the generator set. Random frequency variation does not exceed (0.25%). Option code A275.

PMG Upgrade



| Model | Kit Number |
|-------------|------------|
| All MCG/MDG | 300-4676 |

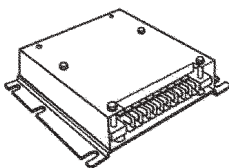
This kit includes the PMG voltage regulator, PMG rotor and stator, end bell cover, and associated wiring for upgrading to a PMG system from a shunt excited system. Option code B184.

Compensator—Droop

Required for paralleling with Electronic Governor and PMG Upgrade.

| Kit Number | Selection guideline |
|-------------|--|
| 300-3766-03 | UC2 generator frame, 3 phase |
| 300-3766-04 | UC3 generator frame, 3 phase |
| 300-3766-05 | UC2 generator frame, 1 phase, 45 kw or above |
| 300-3766-06 | UC3 generator frame, 1 phase |
| 300-3766-09 | UC2 generator frame, 1 phase, 35 kw or smaller |

Voltage Regulator, Manual



| Model | Kit Number |
|-------------|------------|
| All MCG/MDG | 300-3713 |

A hand controlled excitation system for emergency operation. Designed to trail an automatic voltage regulator in parallel. Option code K939.

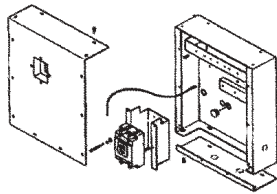
Field Installed Options: Miscellaneous Electric

Heater Oil Pan

| Model | AC Volts | Watts | Kit Number |
|-------------|----------|-------|------------|
| All MCG/MDG | 120V | 150 | 333-0482 |
| All MCG/MDG | 240V | 150 | 333-0483 |

An immersion type heater installed in the oil pan in one of the drain holes. This heater is not thermostatically controlled. Option codes H487, H479.

Circuit Breaker Mounting Kit



| Model | Kit Number |
|-------------|------------|
| All MCG/MDG | 320-1711 |

This kit includes the circuit breaker mounting box and all of the associated mounting hardware, but does not include the circuit breaker. Pick the appropriate circuit breaker from tables on pages 22 to 24. Option code K882.

Cross Current Compensation

Provides a parallel droop compensator for adjusting the share of total reactive load carried by the generator sets. For paralleled sets, generator set must use MX321 AC voltage regulator (PMG option B184) with this option.

| Model | Kit Number | Feature Option | Remarks | Application |
|-------------------------------|-------------|----------------|-----------|-------------|
| MCGBA | 300-5341-01 | K611 | 3PH, only | Frame UC2 |
| MCGCA, MCGGA | 300-5341-02 | K611 | 3PH, only | Frame UC2 |
| MCGCA, MCGGA, MCGDA, MCGDB | 300-5341-03 | K611 | 3PH, only | Frame UC3 |

For single-phase output paralleling transformer selection consult factory.

Annunciation

Provides for local annunciation of all safeties on the genset; low oil pressure, high engine temperature, low coolant level, overspeed, high exhaust temperature and low oil level. The safeties are not included in this kit and must be present for this accessory to operate.

| Model | Kit Number | Feature Options | Instruction Sheet |
|-------------|------------|-----------------|-------------------|
| All MCG/MDG | 300-4008 | H514 | C374 |

Dry Contacts Alarm Relay

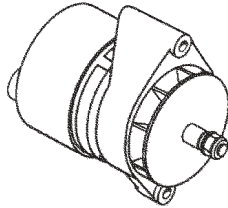
Provides a relay with a N/O contact that would give a common alarm of the safety devices for customer remote annunciation. Contact rated 15 amp at 125 VAC or 250 VAC or 10 amp at 277 VAC.

| Model | Kit Number | Application | Feature Option | Instruction Sheet |
|-------------|------------|-------------|----------------|-------------------|
| All MCG/MDG | 300-4009 | 12 VDC | H194 | C374 |
| All MCG/MDG | 300-4023 | 24 VDC | H194 | C374 |

Field Installed Options: Miscellaneous Electric

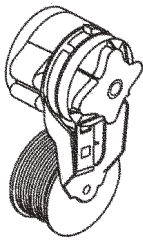
Alternator

45 amp battery charging alternator. Option Code A-334.



| Model | Kit Number | Application |
|-------------|-------------|---------------------|
| All MCG/MDG | 191-2206-01 | 12V Isolated Ground |
| All MCG/MDG | 191-2206-02 | 24V Isolated Ground |
| All MCG/MDG | 191-2205-01 | 12V Negative Ground |
| All MCG/MDG | 191-2205-02 | 24V Negative Ground |

Belt Tensioner



| Model | Kit Number |
|-------------|------------|
| All MCG/MDG | 191-2098 |

When the battery charging alternator is removed, a belt tensioner is required in the place where the alternator was, to take up belt tension. Option code A039.

Heater Battery

| Model | Part Number |
|-------|-------------|
| All | 333-0469 |

A heater pad to keep a little warmth in the battery for better starting in low ambients, 200 watts-120 VAC.

Overspeed Shutdown

| Model | Kit Number | Application | Feature Option | Instruction Sheet |
|-------------|-------------|-------------|----------------|-------------------|
| All MCG/MDG | 300-5339-01 | 12 VDC | B222 | N/A |
| All MCG/MDG | 300-5339-02 | 24 VDC | B222 | N/A |
| All MCG/MDG | 300-4010* | 12 VDC | B181 | C372 |
| All MCG/MDG | 300-4024* | 24 VDC | B181 | C372 |

Kit consists of an electronic overspeed switch, interconnecting relay, wires and mounting hardware that allows shutdown of the set in an overspeed condition and operates the fault circuit breaker. This option requires the set to be equipped with the DC alternator option A344 for signal input. Consult factory for set not equipped with the standard alternator.

* Overspeed shutdown switch only available with PMG (option B184).

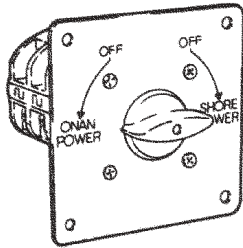
Isolated DC Conversion System

The following kits allow conversion of the generator set DC system from negative ground to isolated DC. Please note that the DC isolation is effective when the set is not operating or is running. It is grounded during cranking and pre-heat cycles.

| Model | Part Number | Application | Instruction Sheet |
|--------------------------------|-------------|-------------|-------------------|
| MDKUB/MDKWB | 300-4960 | 12 VDC | C-543 |
| MDKAL/Spec A | 300-5122 | 12VDC | None |
| MDKAL/Spec B, MDKAA & MDKAB | 300-5170 | 12 VDC | M-099 |

Field Installed Options: Miscellaneous Accessories

Manual Transfer Switch



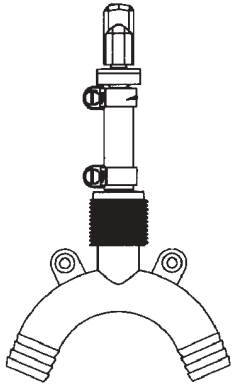
| Model | 308-0269* | 308-0270** |
|-------|-----------|------------|
| MDKUB | ◆ | ◆ |
| MDKAL | ◆ | ◆ |
| MDKWb | ◆ | ◆ |
| MDKAA | ◆ | ◆ |
| MDKAB | ◆ | ◆ |
| MDKAD | ◆ | ◆ |

*2-wire, 120V

**3-wire, 120/240V

A simply designed rotary switch transfers loads from generator to shore power—rated for max. of 63 amps per pole.

Siphon Break Kit

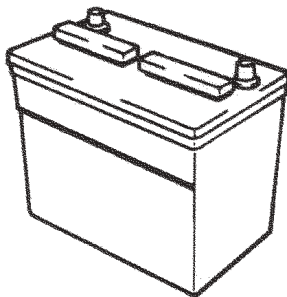


| Model | 541-0877-01 | 541-0863-02 | 541-0863-01 | 541-0867-01 |
|-------------------|-------------|-------------|-------------|-------------|
| MDKUB | | ◆ | | |
| MDKAL | | | | ◆ |
| MDKWb | | ◆ | | |
| MDKAA | | | | ◆ |
| MDKAB | | | | ◆ |
| MDKAD | | | ◆* | ◆ |
| MDKAE | | | ◆* | ◆ |
| MDKAF | | | | ◆ |
| MCG or MDG Series | ◆ | | | |

Prevent flotation water from being siphoned into the exhaust manifold and cylinders on engines installed below the load waterline.

* Spec A only

Starting Batteries



| Model | 416-0457* | 416-0796** | 416-0823*** |
|----------------------|-------------|-------------|-------------|
| MDKUB | Qty 1 | | |
| MDKWb | Qty 1 | | |
| MDKAA, MDKAB, MDKAD, | Qty 2 (12V) | Qty 1 (12V) | Qty 1 (12V) |
| MDKAE, MDKAF, MDKAL | | Qty 2 (24V) | Qty 2 (24V) |
| MDKAB | Qty 2 (12V) | Qty 1 (12V) | Qty 1 (12V) |
| | | Qty 2 (24V) | Qty 2 (24V) |
| MCG or MDG series | | Qty 1 (12V) | Qty 1 (12V) |
| | | Qty 2 (24V) | Qty 2 (24V) |

*6V, 560 CCA

**12V, 625 CCA

***12V, 650 CCA

CCA rating is at 0 degrees F. All batteries are shipped dry. Order electrolytes from your Onan distributor.

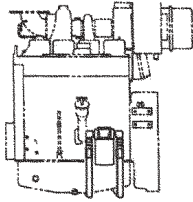
Metric Adapter Fittings For Fuel Lines

| Model | 149-2612 |
|---------------------|----------|
| MDKAL, MDKAA, MDKAB | ◆ |
| MDKAD, MDKAE, MDKAF | ◆ |

Two fittings for fuel supply and return. Convert 1/4 in NPT to 8 mm pipe thread (compression fittings). These fittings are standard on 50 Hz MDKUB and MDKWb gensets.

Field Installed Options: Miscellaneous Accessories

Engine Oil Filter Fuel Pump Side



| Model | Kit Number |
|--------------------------|------------|
| MCGBA, GA Nat. Aspirated | 122-0786 |
| MCGCA - W/E073 | 122-0795 |
| MCGCA - W/E086 | 122-0796 |
| MCGDA, DB - W/E073 | 122-0787 |
| MCGDA, DB - W/E086 | 122-0797 |

Kit contains the oil filter, oil lines and associated hardware for mounting the filter on the fuel pump side of the engine. Oil lines comply with US Coast Guard regulations. Option code H519.

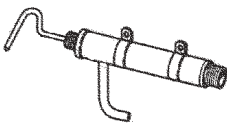
Low Coolant Level Shutdown

Measures coolant level in the expansion tank and provides warning of low coolant level and set shutdown. These kits are the same for negative ground or isolated DC systems. MCD/MDG series include a relay and leads for mounting inside the DC control.

| Model | Kit Number | Application | Feature Option | Instruction Sheet |
|-----------------|-------------|--------------|----------------|-------------------|
| All MCG/MDG | 300-5340-01 | 12 VDC | H389 | C375 |
| All MCG/MDG | 300-5340-02 | 24 VDC | H389 | C375 |
| MDKAL*/AD/AE/AF | 300-4686 | 12 or 24 VDC | H549 | C492 |
| MDKAA/AB/AL | 300-5197 | 12 or 24 VDC | H549 | C492 |

* MDKAL spec A only.

Sump Pump



| Model | Kit Number | Instruction Sheet |
|---------------|------------|-------------------|
| MCGBA, CA, CB | 120-1261 | G136 |
| MCGGA, DA, DB | 120-1262 | G136 |

Kit contains pump and mounting hardware for hand operated sump pump. Mounts on front left side of engine. Allows for removal of lube oil in the sump when unit is low or inaccessible to drain directly from the pan. Option code H520.

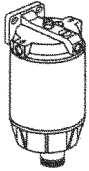
Drip Pan

| Model | Kit Number | Instruction Sheet |
|---------------|------------|-------------------|
| MCGBA, CA | 403-3168 | G141 |
| MCGGA, DA, DB | 403-3167 | G141 |

Kit contains all of the necessary material to mount a drip pan in the genset frame, under the engine, to collect any oil drippings from the genset. Option code F146.

Field Installed Options: Miscellaneous Accessories

Separator, Fuel/Water



This is a fuel filter that separates water that may be in the fuel and does not allow it to get into the injection system. Water is quite harmful to injectors, as the fuel is also a lubricant in the injectors. Option code C156 for all MCG or MDG series.

| Model | 149-2073* 30 Micron | 149-2313* 30 Micron | 149-2317** 20 Micron |
|-------------------|------------------------|------------------------|-------------------------|
| MDKUB | ◆ | | |
| MDKAL | | ◆ | |
| MDKWB | ◆ | | |
| MDKAA | | ◆ | |
| MDKAB | | ◆ | |
| MDKAD | | ◆ | |
| MDKAE | | ◆ | |
| MDKAF | | ◆ | |
| MCG or MDG series | | | ◆ |

* 149-1914-05 (2 Micron), 149-1914-02 (10 Micron), and 149-1914-01 (30 Micron) fuel filter replacement cartridges are available for kit 3's 149-2073 and 149-2313.

** 149-2406 (2 Micron) replacement fuel filter cartridge is available for kit #149-2317.

Oil Level Indicator

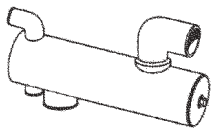
| Model | Kit Number |
|---------------------|------------|
| MCGBA, MCGCA | 309-0621 |
| MCGGA, MCGDA, MCGDB | 309-0622 |
| MDGDC, MDGDD | 309-0622 |

Kit contains hoses, oil level indicator, sight glass with adjustable indicating arrows, and necessary hardware for mounting on left side of skid. Gives a visual indication of oil level. Option code H512. Genset must also have optional harness H510.

| Model | Kit Number | Instruction Sheet |
|--------------|------------|-------------------|
| MDKUB, MDKWB | 123-2136 | M-104 |

Kit contains extended oil level indicator, tube assembly, and access cover for the sound shield roof and mounting hardware to install on the genset. Requires drilling holes for rivets and access hole to mount access cover in the sound shield top by the installer. This kit allows oil level check from the top of the sound shield without opening the sound shield door. (Factory installed option H575).

Heat Exchanger



| Model | Kit Number |
|---------------------|------------|
| MCGBA, MCGCA | 130-4272 |
| MCGGA, MCGDA, MCGDB | 130-4273 |
| MDGDC, MDGDD | 130-4273 |

Kit contains the heat exchanger, sea water pump, transfer tubing hoses and necessary mounting hardware to convert a keel cooled unit to heat exchanger cooling. Option code E079.

Set Mounted Marine Generator Circuit Breaker Selection

The following tables to be used to select the appropriate AC main circuit breaker. To select the correct circuit breaker, identify the model, voltage code and frequency.

*If the set is equipped with a 2 pole circuit breaker and a single pole circuit breaker is to be mounted in its place a separate blank plate 320-1813-02 must also be ordered.

| Model | kW | Voltage Code | Phase | AC Voltage | AC Line Breaker | Amps | Poles | Frequency |
|-------|-----|--------------|-------------|------------|-----------------|------|-------|-----------|
| MDKAL | 7 | R003 | 3 | 240/416 | 320-1891-09 | 13 | 3 | 50 |
| | | R004 | 3 | 110/190 | 320-1836-03 | 25 | 3 | 50 |
| | | R020 | 3 | 127/220 | 320-1836-03 | 25 | 3 | 50 |
| | | R023 | 3 | 254/440 | 320-1891-09 | 13 | 3 | 50 |
| | | R028 | 3 | 110/220 | 320-1836-03 | 25 | 3 | 50 |
| | | R029 | 3 | 230/400 | 320-1891-09 | 13 | 3 | 50 |
| | | R041 | 1 | 115/230 | 320-1689-04 | 30 | 2 | 50 |
| | | R046 | 1 | 110/220 | 320-1689-04 | 30 | 2 | 50 |
| | | R050 | 3 | 115/200 | 320-1836-03 | 25 | 3 | 50 |
| | | R071 | 3 | 115/230 | 320-1836-03 | 25 | 3 | 50 |
| | 9 | R098 | 3 | 120/208 | 320-1836-03 | 25 | 3 | 50 |
| | | R099 | 3 | 220/380 | 320-1836-03 | 25 | 3 | 50 |
| | | R104 | 1 | 120/240 | 320-1891-09 | 13 | 3 | 50 |
| | | R106 | 3 | 120/240 | 320-1689-04 | 30 | 2 | 50 |
| | | R110 | 1 | 220 | 320-1836-02 | 20 | 3 | 50 |
| | | R002 | 3 | 277/480 | 320-1690-15 | 30 | 1* | 50 |
| | | R003 | 3 | 240/416 | 320-1891-09 | 13 | 3 | 60 |
| | | R020 | 3 | 127/220 | 320-1891-05 | 15 | 3 | 60 |
| | | R023 | 3 | 254/440 | 320-1836-04 | 30 | 3 | 60 |
| | | R046 | 1 | 110/220 | 320-1891-09 | 13 | 3 | 60 |
| MDKAA | 9.5 | R067 | 3 | 139/240 | 320-1689-06 | 40 | 2 | 60 |
| | | R086 | 1 | 120 | 320-1836-03 | 25 | 3 | 60 |
| | | R098 | 3 | 120/208 | 320-1690-04 | 70 | 1* | 60 |
| | | R104 | 1 | 120/240 | 320-1836-04 | 30 | 3 | 60 |
| | | R106 | 3 | 120/240 | 320-1689-05 | 35 | 2 | 60 |
| | | R003 | 3 | 240/416 | 320-1836-03 | 25 | 3 | 60 |
| | | R004 | 3 | 110/190 | 320-1891-05 | 15 | 3 | 50 |
| | | R020 | 3 | 127/220 | 320-1836-05 | 35 | 3 | 50 |
| | | R023 | 3 | 254/440 | 320-1836-04 | 30 | 3 | 50 |
| | | R028 | 3 | 110/220 | 320-1891-05 | 15 | 3 | 50 |
| R029 | 3 | 230/400 | 320-1836-04 | 30 | 3 | 50 | | |
| R041 | 1 | 115/230 | 320-1891-06 | 18 | 3 | 50 | | |
| R046 | 1 | 110/220 | 320-1689-06 | 40 | 2 | 50 | | |
| R050 | 3 | 115/200 | 320-1689-06 | 40 | 2 | 50 | | |
| R071 | 3 | 115/230 | 320-1836-05 | 35 | 3 | 50 | | |
| R098 | 3 | 120/208 | 320-1836-04 | 30 | 3 | 50 | | |

Set Mounted Marine Generator Circuit Breaker Selection

| Model | kW | Voltage Code | Phase | AC Voltage | AC Line Breaker | Amps | Poles | Frequency | | |
|-------|------|--------------|---------|-------------|-----------------|---------|-------------|-----------|---|----|
| MDKAA | 9.5 | R099 | 3 | 220/380 | 320-1891-06 | 18 | 3 | 50 | | |
| | | R104 | 1 | 120/240 | 320-1689-06 | 40 | 2 | 50 | | |
| | | R106 | 3 | 120/240 | 320-1836-04 | 30 | 3 | 50 | | |
| | | R110 | 1 | 220 | 320-1690-02 | 40 | 1* | 50 | | |
| | | R002 | 3 | 277/480 | 320-1891-06 | 18 | 3 | 60 | | |
| | | R003 | 3 | 240/416 | 320-1891-03 | 20 | 3 | 60 | | |
| | | R020 | 3 | 127/220 | 320-1836-05 | 35 | 3 | 60 | | |
| | | R023 | 3 | 254/440 | 320-1891-06 | 18 | 3 | 60 | | |
| | | R046 | 1 | 110/220 | 320-1689-08 | 50 | 2 | 60 | | |
| | 11 | R067 | 3 | 139/240 | 320-1836-05 | 35 | 3 | 60 | | |
| | | R086 | 1 | 120 | 320-1690-06 | 90 | 1* | 60 | | |
| | | R098 | 3 | 120/208 | 320-1836-06 | 40 | 3 | 60 | | |
| | | R104 | 1 | 120/240 | 320-1689-07 | 45 | 2 | 60 | | |
| | | R106 | 3 | 120/240 | 320-1836-05 | 35 | 3 | 60 | | |
| | | MDKAB | 11 | R003 | 3 | 240/416 | 320-1891-06 | 18 | 3 | 50 |
| | | | | R004 | 3 | 110/190 | 320-1836-06 | 40 | 3 | 50 |
| | | | | R020 | 3 | 127/220 | 320-1836-05 | 35 | 3 | 50 |
| | | | | R023 | 3 | 254/440 | 320-1891-06 | 18 | 3 | 50 |
| R028 | 3 | | | 110/220 | 320-1836-05 | 35 | 3 | 50 | | |
| R029 | 3 | | | 230/400 | 320-1891-03 | 20 | 3 | 50 | | |
| R041 | 1 | | | 115/230 | 320-1689-07 | 45 | 2 | 50 | | |
| R046 | 1 | | | 110/220 | 320-1689-08 | 50 | 2 | 50 | | |
| R050 | 3 | | | 115/200 | 320-1836-06 | 40 | 3 | 50 | | |
| 13.5 | R071 | | 3 | 115/230 | 320-1836-05 | 35 | 3 | 50 | | |
| | R098 | | 3 | 120/208 | 320-1836-05 | 35 | 3 | 50 | | |
| | R099 | | 3 | 220/380 | 320-1836-05 | 35 | 3 | 50 | | |
| | R104 | | 1 | 120/240 | 320-1891-03 | 20 | 3 | 50 | | |
| | R106 | | 3 | 120/240 | 320-1689-07 | 45 | 2 | 50 | | |
| | R110 | | 1 | 220 | 320-1836-05 | 35 | 3 | 50 | | |
| | R002 | | 3 | 277/480 | 320-1690-08 | 50 | 1* | 50 | | |
| | R003 | | 3 | 240/416 | 320-1891-03 | 20 | 3 | 60 | | |
| | R020 | | 3 | 127/220 | 320-1891-01 | 25 | 3 | 60 | | |
| 60 | R023 | 3 | 127/220 | 320-1836-07 | 45 | 3 | 60 | | | |
| | R046 | 1 | 254/440 | 320-1891-03 | 20 | 3 | 60 | | | |
| | R067 | 3 | 110/220 | 320-1689-10 | 60 | 2 | 60 | | | |
| | R086 | 1 | 139/240 | 320-1836-06 | 40 | 3 | 60 | | | |
| | R098 | 3 | 120 | 320-1690-07 | 100 | 1* | 60 | | | |
| | R104 | 1 | 120/208 | 320-1836-07 | 45 | 3 | 60 | | | |
| | R106 | 3 | 120/240 | 320-1836-07 | 55 | 2 | 60 | | | |
| | | | | | | | | 60 | | |
| | | | | | | | | 60 | | |

Set Mounted Marine Generator Circuit Breaker Selection

| Model | kW | Voltage Code | Phase | AC Voltage | AC Line Breaker | Amps | Poles | Frequency |
|-------|------|--------------|-------|------------|-----------------|------|-------|-----------|
| MDKAD | 13.5 | R003 | 3 | 240/416 | 320-1891-01 | 25 | 3 | 50 |
| | | R004 | 3 | 110/190 | 320-1836-05 | 55 | 3 | 50 |
| | | R020 | 2 | 127/220 | 320-1836-06 | 40 | 3 | 50 |
| | | R023 | 3 | 254/440 | 320-1891-03 | 20 | 3 | 50 |
| | | R028 | 3 | 110/220 | 320-1836-06 | 40 | 3 | 50 |
| | | R029 | 3 | 230/400 | 320-1891-01 | 25 | 3 | 50 |
| | | R041 | 1 | 115/230 | 320-1689-09 | 55 | 2 | 50 |
| | | R046 | 1 | 110/220 | 320-1689-10 | 60 | 2 | 50 |
| | | R050 | 3 | 115/200 | 320-1836-07 | 45 | 3 | 50 |
| | | R071 | 3 | 115/230 | 320-1836-06 | 40 | 3 | 50 |
| | 17 | R098 | 3 | 120/208 | 320-1836-07 | 45 | 3 | 50 |
| | | R099 | 3 | 220/380 | 320-1891-01 | 25 | 3 | 50 |
| | | R104 | 1 | 120/240 | 320-1689-09 | 55 | 2 | 50 |
| | | R106 | 3 | 120/240 | 320-1836-06 | 40 | 3 | 50 |
| | | R110 | 1 | 220 | 320-1690-10 | 55 | 1* | 50 |
| | | R002 | 3 | 277/480 | 320-1891-02 | 30 | 3 | 60 |
| | | R003 | 3 | 240/416 | 320-1891-02 | 30 | 3 | 60 |
| | | R020 | 3 | 127/220 | 320-1836-09 | 55 | 3 | 60 |
| | | R023 | 3 | 254/440 | 320-1891-02 | 30 | 3 | 60 |
| | | R046 | 1 | 110/220 | 320-1689-12 | 70 | 2 | 60 |
| MDKAE | 17.5 | R067 | 3 | 139/240 | 320-1836-09 | 55 | 3 | 60 |
| | | R098 | 3 | 120/208 | 320-1836-05 | 55 | 3 | 60 |
| | | R104 | 1 | 120/240 | 320-1689-12 | 70 | 2 | 60 |
| | | R106 | 3 | 120/240 | 320-1836-09 | 55 | 3 | 60 |
| | | R003 | 3 | 240/416 | 320-1891-02 | 30 | 3 | 50 |
| | | R004 | 3 | 110/190 | 320-1836-11 | 65 | 3 | 50 |
| | | R020 | 3 | 127/220 | 320-1836-09 | 55 | 3 | 50 |
| | | R023 | 3 | 254/440 | 320-1891-02 | 30 | 3 | 50 |
| | | R028 | 3 | 110/220 | 320-1836-09 | 55 | 3 | 50 |
| | | R029 | 3 | 230/400 | 320-1891-02 | 30 | 3 | 50 |
| | 17.5 | R041 | 1 | 115/230 | 320-1689-12 | 70 | 2 | 50 |
| | | R046 | 1 | 110/220 | 320-1689-13 | 75 | 2 | 50 |
| | | R050 | 3 | 115/200 | 320-1836-10 | 60 | 3 | 50 |
| | | R071 | 3 | 115/230 | 320-1836-09 | 55 | 3 | 50 |
| | | R098 | 3 | 120/208 | 320-1836-10 | 60 | 3 | 50 |
| | | R099 | 3 | 220/380 | 320-1891-04 | 35 | 3 | 50 |
| | | R104 | 1 | 120/240 | 320-1689-12 | 70 | 2 | 50 |

Set Mounted Marine Generator Circuit Breaker Selection

| Model | kW | Voltage Code | Phase | AC Voltage | AC Line Breaker | Amps | Poles | Frequency | | |
|-------|------|--------------|---------|-------------|-----------------|---------|-------------|-----------|---|----|
| MDKAE | 17.5 | R106 | 3 | 120/240 | 320-1836-08 | 50 | 3 | 50 | | |
| | | R110 | 1 | 220 | 320-1690-12 | 75 | 1* | 50 | | |
| | | R002 | 3 | 277/480 | 320-1891-04 | 35 | 3 | 60 | | |
| | | R003 | 3 | 240/416 | 320-1891-04 | 35 | 3 | 60 | | |
| | | R020 | 3 | 127220 | 320-1836-12 | 70 | 3 | 60 | | |
| | | R023 | 3 | 254/440 | 320-1891-04 | 35 | 3 | 60 | | |
| | | R046 | 1 | 110/220 | 320-1689-17 | 95 | 2 | 60 | | |
| | | R067 | 3 | 139/240 | 320-1836-11 | 65 | 3 | 60 | | |
| | 21.5 | R098 | 3 | 120/208 | 320-1836-12 | 70 | 3 | 60 | | |
| | | R104 | 1 | 120/240 | 320-1689-15 | 85 | 2 | 60 | | |
| | | R106 | 3 | 120/240 | 320-1836-11 | 65 | 3 | 60 | | |
| | | MDKAF | 22.5 | R003 | 3 | 240/416 | 320-1891-04 | 35 | 3 | 50 |
| | | | | R004 | 3 | 110/190 | 320-1836-14 | 80 | 3 | 50 |
| | | | | R020 | 3 | 127/220 | 320-1836-12 | 70 | 3 | 50 |
| | | | | R023 | 3 | 254/440 | 320-1891-04 | 35 | 3 | 50 |
| | | | | R028 | 3 | 110220 | 320-1836-12 | 70 | 3 | 50 |
| R029 | 3 | | | 230/400 | 320-1891-08 | 40 | 3 | 50 | | |
| R041 | 1 | | | 115/230 | 320-1689-16 | 90 | 2 | 50 | | |
| R046 | 1 | | | 110/220 | 320-1689-17 | 95 | 2 | 50 | | |
| 27.5 | R050 | | 3 | 115/200 | 320-1836-13 | 75 | 3 | 50 | | |
| | R071 | | 3 | 115/230 | 320-1836-11 | 65 | 3 | 50 | | |
| | R098 | | 3 | 120/208 | 320-1836-12 | 70 | 3 | 50 | | |
| | R099 | | 3 | 220/380 | 320-1891-08 | 40 | 3 | 50 | | |
| | R104 | | 1 | 120/240 | 320-1689-15 | 85 | 2 | 50 | | |
| | R106 | | 3 | 120/240 | 320-1836-11 | 65 | 3 | 50 | | |
| | R110 | | 1 | 220 | 320-1690-14 | 95 | 1* | 50 | | |
| | R002 | | 3 | 277/480 | 320-1891-08 | 40 | 3 | 60 | | |
| 27.5 | R003 | 3 | 240/416 | 320-1891-07 | 45 | 3 | 60 | | | |
| | R020 | 3 | 127220 | 320-1836-15 | 85 | 3 | 60 | | | |
| | R023 | 3 | 254/440 | 320-1891-07 | 45 | 3 | 60 | | | |
| | R067 | 3 | 139/240 | 320-1836-14 | 80 | 3 | 60 | | | |
| | R098 | 3 | 120/208 | 320-1836-16 | 90 | 3 | 60 | | | |
| | R104 | 1 | 120/240 | 320-1689-18 | 100 | 2 | 60 | | | |
| | R106 | 3 | 120/240 | 320-1836-14 | 80 | 3 | 60 | | | |

Set Mounted Marine Generator Circuit Breaker Selection MCG, MDG Series Generator Sets

The following table should be used to size the main line circuit breaker for MCG Series generator sets:

After calculating the amperage of the generator based on its kW rating, pick either the standard or optional circuit breaker which is closest in size and meets the systems requirements and follow the table across to determine which leads are needed.

Mounting Kit 320-1711 should be ordered for all ratings.

1 phase: $(kW \times 1000 \times 1.2) / (0.8 \times AC \text{ volt output}) = \text{amps}$

3 phase: $(kW \times 1000 \times 1.2) / (0.8 \times AC \text{ volt output} \times 1.732) = \text{amps}$

Example 1: 55 kW set, 1phase, 120/240 volts output:

$(55 \times 1000 \times 1.2) / (0.8 \times 240 \text{ volts}) = 344 \text{ amps}$

The nearest size circuit breaker would be a 2-pole 350 amperes rating.

Example 2: 55 kW set, 3 phase, 120/208 volts/fs:

$(55 \times 1000 \times 1.2) / (0.8 \times 208 \text{ volts} \times 1.732) = 229 \text{ amps}$

The nearest size circuit breaker would be a 3-pole 225 amperes rating.

The mounting is identical to the production version of the option. The part no. of the circuit breaker alone does not include ANY hardware. If the circuit breaker is replaced with another, additional hardware may be required including interconnect lead assemblies.

| Amp Rating | Pole | Volt Rating | Standard Circuit Breaker Part Number | Optional | | | Lead-L0 * Part Number & Quantity Needed | Lead-L1 * Part Number & Quantity Needed | Lead-L2 * Part Number & Quantity Needed | Lead-L3 * Part Number & Quantity Needed |
|------------|------|-------------|--------------------------------------|--|--|-------------------|---|---|---|---|
| | | | | 12V Shunt Trip Circuit Breaker Part Number | 24V Shunt Trip Circuit Breaker Part Number | Auxiliary Contact | | | | |
| 125 | 2 | 240 | 320-1555-01 | 320-1557-01 | 320-1557-12 | 320-1556-01 | 226-3455-01 (1) | 226-3455-02 (1) | — | |
| 150 | 2 | 240 | 320-1555-02 | 320-1557-02 | 320-1557-13 | 320-1556-02 | 226-3455-01 (1) | 226-3455-02 (1) | — | |
| 175 | 2 | 240 | 320-1555-03 | 320-1557-03 | 320-1557-14 | 320-1556-03 | 226-3455-01 (1) | 226-3455-02 (1) | — | |
| 200 | 2 | 240 | 320-1555-04 | 320-1557-04 | 320-1557-15 | 320-1556-04 | 226-3455-01 (1) | 226-3455-02 (1) | — | |
| 225 | 2 | 240 | 320-1555-05 | 320-1557-04 | 320-1557-59 | 320-1556-05 | 226-3455-01 (1) | 226-3455-02 (1) | — | |
| 250 | 2 | 240 | 320-1555-11 | 320-1557-51 | 320-1557-60 | 320-1556-11 | 226-3455-01 (2) | 226-3455-02 (2) | — | |
| 300 | 2 | 240 | 320-1555-12 | 320-1557-52 | 320-1557-61 | 320-1556-12 | 226-3455-01 (2) | 226-3455-02 (2) | — | |
| 350 | 2 | 240 | 320-1555-13 | 320-1557-53 | 320-1557-62 | 320-1556-13 | 226-3455-01 (2) | 226-3455-02 (2) | — | |
| 400 | 2 | 240 | 320-1555-14 | 320-1557-54 | | 320-1556-14 | 226-3455-01 (1) | 226-3455-02 (2) | — | |

* All separate lead assemblies have to be ordered through PDC (Parts Dept.) and not through the Accessories Group. The circuit breakers are to be ordered through the Accessories Group.

Set Mounted Marine Generator Circuit Breaker Selection MCG, MDG Series Generator Sets

| Amp Rating | Pole | Volt Rating | Standard Circuit Breaker Part Number | Optional | | | Lead-LO * Part Number & Quantity Needed | Lead-L1 * Part Number & Quantity Needed | Lead-L2 * Part Number & Quantity Needed | Lead-L3 * Part Number & Quantity Needed |
|------------|------|-------------|--------------------------------------|--|--|-------------------|---|---|---|---|
| | | | | 12V Shunt Trip Circuit Breaker Part Number | 24V Shunt Trip Circuit Breaker Part Number | Auxiliary Contact | | | | |
| 125 | 2 | 600 | 320-1513-01 | 320-1557-06 | 320-1522-06 | 320-1516-10 | 226-0893 (1) | 226-3455-01 (1) | 226-3455-02 (1) | — |
| 150 | 2 | 600 | 320-1513-02 | 320-1557-07 | 320-1522-07 | 320-1516-11 | 226-0893 (1) | 226-3455-01 (1) | 226-3455-02 (1) | — |
| 175 | 2 | 600 | | 320-1557-08 | | | 226-0893 (1) | 226-3455-01 (1) | 226-3455-02 (1) | — |
| 200 | 2 | 600 | | | 320-1522-09 | | 226-0893 (1) | 226-3455-01 (1) | 226-3455-02 (1) | — |
| 225 | 2 | 600 | | 320-1557-10 | 320-1522-10 | 320-1556-06 | 226-0893 (1) | 226-3455-01 (1) | 226-3455-02 (1) | — |
| 250 | 2 | 600 | 320-1513-06 | | 320-1522-11 | 320-1556-07 | 226-0893 (2) | 226-3455-01 (2) | 226-3455-02 (2) | — |
| 300 | 2 | 600 | | | 320-1522-12 | | 226-0893 (2) | 226-3455-01 (2) | 226-3455-02 (2) | — |
| 350 | 2 | 600 | 320-1513-08 | 320-1557-57 | | | 226-0893 (2) | 226-3455-01 (2) | 226-3455-02 (2) | — |
| 400 | 2 | 600 | 320-1513-09 | 320-1557-58 | 320-1557-16 | 320-1556-10 | 226-0893 (2) | 226-3455-01 (2) | 226-3455-02 (2) | — |
| 450 | 2 | 600 | 320-1513-10 | | 320-1557-17 | 320-1556-15 | 226-0893 (3) | 226-3455-01 (3) | 226-3455-02 (3) | — |
| 500 | 2 | 600 | 320-1513-11 | | 320-1557-18 | 320-1556-16 | 226-0893 (3) | 226-3455-01 (3) | 226-3455-02 (3) | — |
| 600 | 2 | 600 | 320-1513-12 | | 320-1557-19 | | 226-0893 (3) | 226-3455-01 (3) | 226-3455-02 (3) | — |
| 125 | 3 | 240 | 320-1555-06 | | 320-1557-20 | 320-1556-18 | 226-0893 (1) | 226-3455-01 (1) | 226-3455-02 (1) | 226-3455-03 (1) |
| 150 | 3 | 240 | 320-1555-07 | | 320-1557-63 | | 226-0893 (1) | 226-3455-01 (1) | 226-3455-02 (1) | 226-3455-03 (1) |
| 175 | 3 | 240 | 320-1555-08 | 320-1468-06 | 320-1557-64 | 320-1464-02 | 226-0893 (1) | 226-3455-01 (1) | 226-3455-02 (1) | 226-3455-03 (1) |
| 200 | 3 | 240 | 320-1555-09 | 320-1468-07 | | | 226-0893 (1) | 226-3455-01 (1) | 226-3455-02 (1) | 226-3455-03 (1) |
| 225 | 3 | 240 | 320-1555-10 | 320-1468-08 | 320-1557-66 | 320-1464-04 | 226-0893 (1) | 226-3455-01 (1) | 226-3455-02 (1) | 226-3455-03 (1) |
| 250 | 3 | 240 | 320-1555-15 | 320-1468-09 | | | 226-0893 (2) | 226-3455-01 (2) | 226-3455-02 (2) | 226-3455-03 (2) |
| 300 | 3 | 240 | 320-1555-16 | 320-1468-10 | | 320-1464-06 | 226-0893 (2) | 226-3455-01 (2) | 226-3455-02 (2) | 226-3455-03 (2) |
| 350 | 3 | 240 | 320-1555-17 | 320-1468-11 | | 320-1464-07 | 226-0893 (2) | 226-3455-01 (2) | 226-3455-02 (2) | 226-3455-03 (2) |
| 400 | 3 | 240 | 320-1555-18 | 320-1468-12 | 320-1472-04 | 320-1464-08 | 226-0893 (2) | 226-3455-01 (2) | 226-3455-02 (2) | 226-3455-03 (2) |
| | | | | | | 320-1464-09 | | | | |
| 125 | 3 | 600 | 320-1460-01 | | 320-1472-06 | 320-1464-10 | 226-0893 (1) | 226-3455-01 (1) | 226-3455-02 (1) | 226-3455-03 (1) |
| 150 | 3 | 600 | 320-1460-02 | | 320-1472-07 | 320-1464-11 | 226-0893 (1) | 226-3455-01 (1) | 226-3455-02 (1) | 226-3455-03 (1) |
| 175 | 3 | 600 | 320-1460-03 | | 320-1472-08 | 320-1464-12 | 226-0893 (1) | 226-3455-01 (1) | 226-3455-02 (1) | 226-3455-03 (1) |
| 200 | 3 | 600 | 320-1460-04 | | 320-1472-09 | | 226-0893 (1) | 226-3455-01 (1) | 226-3455-02 (1) | 226-3455-03 (1) |

* All separate lead assemblies have to be ordered through PDC (Parts Dept.) and not through the Accessories Group. The circuit breakers are to be ordered through the Accessories Group.

Set Mounted Marine Generator Circuit Breaker Selection MCG, MDG Series Generator Sets

| Amp Rating | Pole | Volt Rating | Standard Circuit Breaker Part Number | Optional | | | Lead-LO * Part Number & Quantity Needed | Lead-L1 * Part Number & Quantity Needed | Lead-L2 * Part Number & Quantity Needed | Lead-L3 * Part Number & Quantity Needed |
|------------|------|-------------|--------------------------------------|--|--|-------------------|--|--|--|--|
| | | | | 12V Shunt Trip Circuit Breaker Part Number | 24V Shunt Trip Circuit Breaker Part Number | Auxiliary Contact | | | | |
| 225 | 3 | 600 | 320-1460-05 | N/A | 320-1472-10 | N/A | 226-0893 (1) | 226-3455-02 (1) | 226-3455-02 (1) | |
| 250 | 3 | 600 | 320-1460-06 | N/A | 320-1472-11 | N/A | 226-0893 (2) | 226-3455-02 (2) | 226-3455-02 (2) | |
| 300 | 3 | 600 | 320-1460-07 | N/A | 320-1472-12 | N/A | 226-0893 (2) | 226-3455-02 (2) | 226-3455-02 (2) | |
| 350 | 3 | 600 | 320-1460-08 | N/A | | N/A | 226-0893 (2) | 226-3455-02 (2) | 226-3455-02 (2) | |
| 400 | 3 | 600 | 320-1460-09 | N/A | N/A | N/A | 226-0893-(2) | 226-3455-02 (2) | 226-3455-02 (2) | |
| 450 | 3 | 600 | 320-1460-10 | N/A | N/A | N/A | 226-0893-(3) | 226-3455-02 (3) | 226-3455-02 (3) | |
| 500 | 3 | 600 | 320-1460-11 | N/A | N/A | N/A | 226-0893-(3) | 226-3455-02 (3) | 226-3455-02 (3) | |
| 600 | 3 | 600 | 320-1460-12 | N/A | N/A | N/A | 226-0893-(3) | 226-3455-02 (3) | 226-3455-02 (3) | |
| 40 | 3 | 480 | 320-1458-21 | N/A | N/A | N/A | 226-3505 01 (1) | 226-3456-02 (1) | 226-3456-03 (1) | |
| 45 | 3 | 480 | 320-1458-22 | N/A | N/A | N/A | 226-3505 01 (1) | 226-3456-02 (1) | 226-3456-03 (1) | |
| 50 | 3 | 480 | 320-1458-23 | N/A | N/A | N/A | 226-3505 01 (1) | 226-3456-02 (1) | 226-3456-03 (1) | |
| 60 | 3 | 480 | 320-1458-24 | N/A | N/A | N/A | 226-3505 01 (1) | 226-3456-02 (1) | 226-3456-03 (1) | |
| 70 | 3 | 480 | 320-1458-25 | N/A | N/A | N/A | 226-3505 01 (1) | 226-3456-02 (1) | 226-3456-03 (1) | |
| 80 | 3 | 480 | 320-1458-26 | N/A | N/A | N/A | 226-0893 00 (1) | 226-3455-02 (1) | 226-3455-03 (1) | |
| 90 | 3 | 480 | 320-1458-27 | N/A | N/A | N/A | 226-0893 00 (1) | 226-3455-02 (1) | 226-3455-03 (1) | |
| 100 | 3 | 480 | 320-1458-28 | N/A | N/A | N/A | 226-0893 00 (1) | 226-3455-02 (1) | 226-3455-03 (1) | |
| 40 | 3 | 600 | 320-1458-38 | N/A | N/A | N/A | 226-3505-01 (1) | 226-3456-02 (1) | 226-3456-03 (1) | |
| 45 | 3 | 600 | 320-1458-39 | N/A | N/A | N/A | 226-3505-01 (1) | 226-3456-02 (1) | 226-3456-03 (1) | |
| 50 | 3 | 600 | 320-1458-40 | N/A | N/A | N/A | 226-3505-01 (1) | 226-3456-02 (1) | 226-3456-03 (1) | |
| 60 | 3 | 600 | 320-1458-41 | N/A | N/A | N/A | 226-3505-01 (1) | 226-3456-02 (1) | 226-3456-03 (1) | |
| 70 | 3 | 600 | 320-1458-42 | N/A | N/A | N/A | 226-3505-01 (1) | 226-3456-02 (1) | 226-3456-03 (1) | |
| 80 | 3 | 600 | 320-1458-43 | N/A | N/A | N/A | 226-0893-00 (1) | 226-3455-02 (1) | 226-3455-03 (2) | |
| 90 | 3 | 600 | 320-1458-44 | N/A | N/A | N/A | 226-0893-00 (1) | 226-3455-02 (1) | 226-3455-03 (2) | |
| 100 | 3 | 600 | 320-1458-45 | N/A | N/A | N/A | 226-0893-00 (1) | 226-3455-02 (1) | 226-3455-03 (2) | |

* All separate lead assemblies have to be ordered through PDC (Parts Dept.) and not through the Accessories Group. The circuit breakers are to be ordered through the Accessories Group.

Marine Service Support Literature (English*)

For a complete list of Onan Marine literature, including manuals for older models, see the Onan Product Guide Post-Sale Literature Index #932-0112, or contact your Onan distributor.

Manuals:

| Current Model (diesel fuel) Series | Engine Operator Manual | Engine Operator Manual | Engine Service Manual | Generator Parts Manual | Generator Service Manual | Installation Manual | Parts Manual |
|--|------------------------------|------------------------------|-----------------------------|------------------------------|--------------------------------|------------------------|-----------------|
| MDKUB Spec A-C | 981-0134 | | 981-0514 | | 981-0512 | 981-0602 | 981-0251 |
| MDKUB Spec D-E | 981-0151 | | | | 981-0512 | 981-0602B | 981-0262B |
| MDKAL Spec A | 981-0102 | | 981-0528 | | 981-0524B | 981-0616 | 981-0261B |
| MDKAL Spec B | 981-0103B | | 981-0528 | | 981-0524C | 981-0616B | 981-0261B |
| MDKWB Spec A-C | 981-0134 | | 981-0514 | | 981-0512 | 981-0602 | 981-0252 |
| MDKWB Spec D-E | 981-0151B | | | | 981-0512 | 981-0602B | 981-0262B |
| MDKAA | 981-0103B | | 981-0528 | | 981-0524C | 981-0616B | 981-0260B |
| MDKAB | 981-0103B | | 981-0528 | | 981-0524C | 981-0616B | 981-0260B |
| MDKAD Spec A | 981-0140 | | 981-0521 | | 981-0520B | 981-0608 | 981-0264 |
| MDKAD Spec B | 981-0140 | | 981-0521 | | 981-0520B | 981-0608 | 981-0264 |
| MDKAD Spec C | 981-0156 | | 981-0521 | | 981-0520B | 981-0617 | 981-0264 |
| MDKAE Spec A | 981-0140 | | 981-0521 | | 981-0520B | 981-0608 | 981-0264 |
| MDKAE Spec B | 981-0140 | | 981-0521 | | 981-0520B | 981-0608 | 981-0264 |
| MDKAE Spec C | 981-0156 | | 981-0521 | | 981-0520B | 981-0617 | 981-0264 |
| MDKAF Spec A | 981-0140 | | 981-0521 | | 981-0520B | 981-0608 | 981-0265 |
| MDKAF Spec B | 981-0156 | | 981-0521 | | 981-0520B | 981-0617 | 981-0265 |
| MCGBA Spec A-C | 960-0148 | 960-0020 | NA | 960-0022 | 960-0506 | 960-0613 | 960-0200 |
| MCGBA Spec D | 960-0151 | 960-0020 | NA | 960-0022 | 960-0508 | 960-0616 | 960-0206 |
| MCGCA Spec A-C | 960-0148 | 960-0020 | NA | 960-0022 | 960-0506 | 960-0613 | 960-0200 |
| MCGCA Spec D | 960-0151 | 960-0020 | NA | 960-0022 | 960-0508 | 960-0616 | 960-0206 |
| MCGGA Spec A-C | 960-0148 | 960-0020 | NA | 960-0032 | 960-0506 | 960-0613 | 960-0200 |
| MCGGA Spec D | 960-0151 | 960-0020 | NA | 960-0032 | 960-0508 | 960-0616 | 960-0206 |
| MCGDA Spec A-C | 960-0148 | 960-0020 | NA | 960-0508 | 960-0506 | 960-0613 | 960-0200 |
| MCGDA Spec D | 960-0151 | 960-0020 | NA | 960-0508 | 960-0508 | 960-0616 | 960-0206 |
| MCGDB Spec A-C | 960-0148 | 960-0020 | NA | 960-0032 | 960-0506 | 960-0613 | 960-0200 |
| MCGDB Spec D | 960-0151 | 960-0020 | NA | 960-0032 | 960-0508 | 960-0616 | 960-0206 |
| MDGDA Spec A-C | 960-0146 | 960-0020 | NA | 960-0508 | 960-0506 | 960-0612 | 960-0200 |
| MDGDA Spec D | 960-0151 | 960-0020 | NA | 960-0508 | 960-0508 | 960-0616 | 960-0206 |
| MDGDB Spec A-C | 960-0146 | 960-0020 | NA | 960-0032 | 960-0506 | 960-0612 | 960-0200 |
| MDGDB Spec D | 960-0151 | 960-0020 | NA | 960-0032 | 960-0508 | 960-0616 | 960-0206 |

Discontinued Models (gasoline fueled)

| | | | | | | | |
|----------|----------|--|----------|--|----------|----------|----------|
| MAJB | 933-0121 | | 933-0502 | | 933-0502 | 933-0600 | 933-0221 |
| MCCK A-G | | | 927-0752 | | 927-0752 | 927-0121 | 927-0221 |
| MCCK H-J | 927-0121 | | 927-0752 | | 927-0752 | 927-0121 | 927-0024 |
| MCE | 927-0124 | | 927-0505 | | 927-0505 | 927-0600 | 927-0225 |
| MME | 918-0100 | | 918-0500 | | 918-0500 | 918-0100 | 918-0200 |

Discontinued Models (diesel fueled)

| | | | | | | | |
|-------|----------|----------|----------|----------|----------|----------|----------|
| MDKC | 981-0120 | | 981-0501 | | 981-0502 | 981-0600 | 981-0220 |
| MDKD | 981-0120 | | 981-0501 | | 981-0502 | 981-0600 | 981-0222 |
| MDL3 | 934-0124 | | 934-0500 | | 934-0500 | 934-0602 | 934-0229 |
| MDL4 | 934-0124 | | 934-0500 | | 934-0500 | 934-0602 | 934-0229 |
| MDL6 | 934-0124 | | 934-0500 | | 934-0500 | 934-0602 | 934-0229 |
| MCGCB | 960-0148 | 960-0020 | NA | 960-0022 | 960-0506 | 960-0613 | 960-0200 |

*Other languages available for some models. Contact your Onan distributor for more information.
Operator, installation and parts manual included with every set.

Marine Service Parts

After Sale Support

Genuine Onan Maintenance Parts and Products—For your ongoing satisfaction and the dependability of your Onan marine gensets, Onan offers a complete line of replacement and tune-up parts, accessories and oil and maintenance chemicals. Onan marine parts are packaged for correct selection and convenient on-board storage.

Easy to locate certified Onan Service and Parts Dealer—Onan has the largest and best-trained worldwide certified Distributor/Dealer network in the industry, offering on-time parts and service and installation assistance. Onan Distributor/Dealers stock and sell commonly used Onan marine genset maintenance parts, accessories and products, plus operator manuals and literature on current Onan gensets. They can help you select and install the right genset for a new vessel or accessories on older models, or provide answers to questions on proper operation and maintenance procedures.

Onan® Marine Generators offer cruise kits designed to keep you cruising.

Models and part numbers include:

| <u>Model</u> | <u>Part Number</u> |
|----------------------------|--------------------|
| MDKAU | 100-3478-08* |
| MDKUB | 100-3478-01** |
| MDKUB/Spec E | 100-3478-07 |
| MDKD | 100-3478-03 |
| MDKAL/MDKAV/MDKBG | 100-3478-02 |
| MDKWB | 100-3478-01** |
| MDKWB/Spec E | 100-3478-07 |
| MDKAA/MDKAW | 100-3478-02 |
| MDKAB/MDKAZ | 100-3478-02 |
| MDKAD/MDKBD | 100-3478-04 |
| MDKAE/MDKBE | 100-3478-04 |
| MKDAF/MDKBF | 100-3478-06 |
| MGKBC/D | 100-3478-09* |
| Isolated Ground: | |
| MDKAD/E/F and MDKBD/E/F | 100-3478-05 |



Included in the cruise kits are the following commonly used maintenance and service parts:

- Oil Filter–2
- Sea Water Pump Impeller Kit–2
- Alternator Belt–1
- Zinc Pencil–2*
- Fuel Filter–2**
- Spark Plugs–2*
- Convenient Plastic Carrying Case

* Note: For MDKAU, and MGKBC/D: zinc pencil not required and not included; oil filter wrench and spark plugs are included.

** Note: For MDKUB and MDKWB (prior to Spec E), fuel filter not included.

To easily locate the nearest Onan Distributor/Dealer, or for more information, contact Onan at 1-800-888-ONAN or 763-574-5000; 1400 73rd Avenue N.E., Minneapolis, MN 55432 U.S.A.; fax 763-528-7242; e-mail feedback@onan.com; www.onan.com.

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Contact your Distributor/Dealer for more information:



To easily locate the nearest Onan Distributor/Dealer, or for more information,
contact Onan at 1-800-888-Onan or 763-574-5000; 1400 73rd Ave. N.E. ,
Minneapolis, MN 55432 U.S.A.; fax 763-528-7242; email feedback@onan.com;
www.onan.com.

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