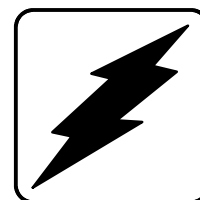


Service Parts

Industrial Generator Sets



Models:

450-800ROZD

See Group 701, Literature, for
Engine and Accessory Parts Catalogs

KOHLER[®]
POWER SYSTEMS

ISO 9001
KOHLER
GENERATORS
INTERNATIONALLY REGISTERED
U.S.A. Plant ISO Registered

Specification Series 132

TP-5601 9/98

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Introduction

This manual contains a list of generator and some engine service replacement parts for Kohler industrial generator sets. Refer to the Specification Number Index for models and specifications covered.

This manual includes the following main sections:

- *Table of Contents:* Lists the sections of this catalog.
- *Introduction (and other information sections):* Contains introductory material followed by sections on specification numbers, part numbers, and hardware.
- *Index:* Indexes generator set specifications and their groups.
- *Group Parts Lists:* List part numbers of parts in the groups.
- *Kit List and Kit Sections:* List controller and cooling system kits (by model) and their parts. See Parts Catalog TP-5707 for parts lists of optional accessory kits installed on the generator set.
- *Appendices:* Includes Glossary of Abbreviations, Common Hardware Application Guidelines, Common Hardware Identification, General Torque Specifications, and Common Hardware List.

Number Significance

This catalog uses a variety of numbering systems. A description of these follows:

- *Specification Number:* The generator specification number (spec number) is six digits with a PA-, PB-, or PE- prefix (Specification Number Index does not show prefixes). The first three digits designate generator size and engine model (specification series). The remaining digits are in sequence and identify a particular spec in a series. Spec numbers break down into groups.
- *Group Number:* A group consists of parts needed to perform one or more related functions. For example, the 101 group is the generator set Air Intake group.
- *Variation Number:* A group might have several variations. Parts comprising each variation perform the same function, but parts lists vary. For example, a 50 Hz generator alternator and 60 Hz generator alternator both perform the same function. However, they are constructed of different parts. Each of these differences necessitates the assignment of a group variation number.
- *Part Number:* The part number identifies an individual assembly, subassembly, component, or accessory kit.

How to Find Part Numbers

FOLLOW THESE STEPS to identify a part:

STEP 1: Turn to the Specification Number Index. The first column lists generator set specification numbers grouped by model. The headings across the top identify the groups of parts that make up the generator set. The intersection of the specification number and the group numbers is the variation

number corresponding to the components of that specification number. Note the variation number.

STEP 2: Find the page number of the group in the Table of Contents and turn to that page or page forward until you find the group. Variation numbers in the column heading of the group page correspond to variations found in the Specification Number Index. Find the description of the part you need in the description column. The intersection of the description row with the variation column identifies the quantity of that part used in that group. Find the part number to order to the left of the description in the part number column.

Hardware Grades

When replacing hardware do not substitute inferior grade hardware. All hex head screws are hardness grade 5, except where noted. Socket head screws are similar to grade 8. All replacement hardware should be at least equal to the original manufacturer's hardware quality. Refer to Common Hardware Application Guidelines and Common Hardware Identification in the back of the manual.

Hardware References

Many common hardware items will appear in parts catalogs as common hardware entries or hardware references. A common hardware entry refers to the size of common hardware to apply in accordance with hardware guidelines. For example, an item may appear as "3/8-16 hardware" in the text. It indicates that the piece is 3/8-16 size. See Common Hardware Application Guidelines.

A hardware reference has the abbreviation "ref." in the part's description. Hardware references specify common hardware items; however, size or some other characteristic requires specification in that application. For example, item 1 in Figure 1 below might appear in the text as:

Screw, 3/8-16 x 1, ref. X-6021-1

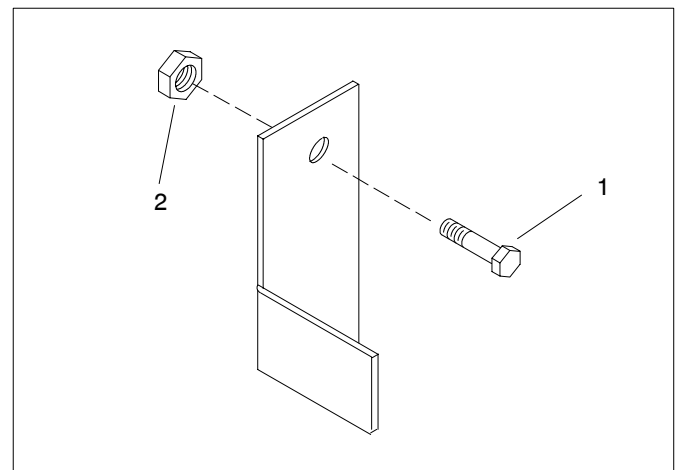


Figure 1. Hardware References

Specification Number Index

| GROUP TITLE and NUMBER | | <i>Air Intake</i> | <i>Cooling System</i> | <i>Engine</i> | <i>Nameplates and Decals</i> | <i>Oil Pressure Switches</i> | <i>Skid and Plant Mounting</i> | <i>Water Temperature Switches</i> | <i>Starter</i> | <i>Generator and Mounting</i> | <i>Controller and Mounting</i> | <i>Literature</i> | | |
|------------------------------|------------------|-------------------|-----------------------|---------------|------------------------------|------------------------------|--------------------------------|-----------------------------------|----------------|-------------------------------|--------------------------------|-------------------|--|--|
| GROUP NO. | 101 | 104 | 105 | 107 | 108 | 109 | 110 | 112 | 201 | 301 | 701 | | | |
| SPEC NO. | VARIATION NUMBER | | | | | | | | | | | | | |

| 450ROZD | | | | | | | | | | | | | | |
|---------|----|----|----|----|-----|----|-----|-----|-----|----|----|--|--|--|
| 132382 | 21 | 26 | 43 | 12 | 13 | 31 | 9 | 4 | 123 | 27 | 29 | | | |
| 132383 | 21 | * | 43 | 12 | 13 | 31 | 9 | 4 | 123 | † | 29 | | | |
| 132384 | 21 | * | 43 | 12 | 13 | 31 | 9 | 4 | 124 | † | 29 | | | |
| 132385 | 21 | * | 43 | 12 | 13 | 31 | 9 | 4 | 88 | † | 29 | | | |
| 132386 | 21 | * | 43 | 12 | 13 | 31 | 9 | 4 | 125 | † | 29 | | | |
| 132531 | 21 | 26 | 43 | 47 | 13 | 31 | 9 | 4 | 184 | 58 | 44 | | | |
| 132532 | 21 | * | 43 | 47 | 13 | 31 | 9 | 4 | 184 | † | 44 | | | |
| 132533 | 21 | * | 43 | 47 | 13 | 31 | 9 | 4 | 185 | † | 44 | | | |
| 132534 | 21 | * | 43 | 47 | 13 | 31 | 9 | 4 | 186 | † | 44 | | | |
| 132535 | 21 | * | 43 | 47 | 13 | 31 | 9 | 4 | 187 | † | 44 | | | |
| 132916 | 11 | * | 30 | 9 | 6 | 10 | 9 | 4 | 49 | † | 31 | | | |
| 132993 | 16 | 21 | 39 | 12 | 10 | 25 | 10 | 4 | 123 | 27 | 29 | | | |
| 132994 | 16 | * | 39 | 12 | 10 | 25 | 10 | 4 | 123 | † | 29 | | | |
| 132995 | 16 | * | 39 | 12 | 10 | 25 | 10 | 4 | 124 | † | 29 | | | |
| 132996 | 16 | * | 39 | 12 | 10 | 25 | 10 | 4 | 125 | † | 29 | | | |
| 132997 | 16 | * | 39 | 12 | 10 | 25 | 10 | 4 | 88 | † | 29 | | | |
| 132620 | 34 | 53 | 64 | 67 | E64 | 48 | E64 | E64 | 288 | 87 | 44 | | | |
| 132621 | 34 | 53 | 64 | 71 | E64 | 48 | E64 | E64 | 289 | 87 | 44 | | | |
| 132622 | 34 | 53 | 64 | 67 | E64 | 48 | E64 | E64 | 290 | 87 | 44 | | | |
| 132623 | 34 | 53 | 64 | 67 | E64 | 48 | E64 | E64 | 291 | 88 | 44 | | | |
| 132624 | 34 | 53 | 64 | 67 | E64 | 48 | E64 | E64 | 292 | 89 | 44 | | | |
| 132625 | 34 | 53 | 64 | 67 | E64 | 48 | E64 | E64 | 293 | 88 | 44 | | | |
| 132626 | 34 | 53 | 64 | 67 | E64 | 48 | E64 | E64 | 294 | 89 | 44 | | | |
| 132627 | * | * | 64 | 67 | E64 | * | E64 | E64 | * | † | 44 | | | |

* Desired air intake, cooling, skid, and generator kit chosen from price list. Determine kit number from generator set nameplate and see Group parts sections for parts list.

† Determine kit number from generator nameplate and see Controller Kits in kits section for parts list.

Specification Number Index

| GROUP TITLE and NUMBER | <i>Air Intake</i> | <i>Cooling System</i> | <i>Engine</i> | <i>Nameplates and Decals</i> | <i>Oil Pressure Switches</i> | <i>Skid and Plant Mounting</i> | <i>Water Temperature Switches</i> | <i>Starter</i> | <i>Generator and Mounting</i> | <i>Controller and Mounting</i> | <i>Literature</i> | | |
|------------------------------|-------------------|-----------------------|---------------|------------------------------|------------------------------|--------------------------------|-----------------------------------|----------------|-------------------------------|--------------------------------|-------------------|--|--|
| GROUP NO. | 101 | 104 | 105 | 107 | 108 | 109 | 110 | 112 | 201 | 301 | 701 | | |
| SPEC NO. | VARIATION NUMBER | | | | | | | | | | | | |
| 500ROZD | | | | | | | | | | | | | |
| 132310 | 11 | 22 | 31 | 13 | 10 | 10 | 9 | 4 | 85 | 27 | 31 | | |
| 132311 | 11 | * | 31 | 13 | 10 | 10 | 9 | 4 | 85 | † | 31 | | |
| 132312 | 11 | * | 31 | 13 | 10 | 10 | 9 | 4 | 86 | † | 31 | | |
| 132313 | 11 | * | 31 | 13 | 10 | 10 | 9 | 4 | 89 | † | 31 | | |
| 132314 | 11 | * | 31 | 13 | 10 | 10 | 9 | 4 | 87 | † | 31 | | |
| 132315 | 11 | * | 31 | 13 | 10 | 10 | 11 | 4 | 90 | † | 31 | | |
| 132362 | 11 | 22 | 31 | 13 | 10 | 10 | 11 | 4 | 86 | 27 | 31 | | |
| 132536 | 11 | 22 | 31 | 13 | 10 | 10 | 9 | 4 | 188 | 58 | 45 | | |
| 132537 | 11 | * | 31 | 13 | 10 | 10 | 9 | 4 | 188 | † | 45 | | |
| 132538 | 11 | 22 | 31 | 13 | 10 | 10 | 11 | 4 | 189 | 58 | 45 | | |
| 132539 | 11 | * | 31 | 13 | 10 | 10 | 9 | 4 | 189 | † | 45 | | |
| 132540 | 11 | * | 31 | 13 | 10 | 10 | 9 | 4 | 190 | † | 45 | | |
| 132541 | 11 | * | 31 | 13 | 10 | 10 | 9 | 4 | 191 | † | 45 | | |
| 132542 | 11 | * | 31 | 13 | 10 | 10 | 11 | 4 | 192 | † | 45 | | |
| 132628 | 35 | 57 | 65 | 67 | E65 | 49 | E65 | E65 | 295 | 87 | 45 | | |
| 132629 | 35 | 57 | 65 | 67 | E65 | 49 | E65 | E65 | 296 | 87 | 45 | | |
| 132630 | 35 | 57 | 65 | 67 | E65 | 49 | E65 | E65 | 297 | 87 | 45 | | |
| 132631 | 35 | 57 | 65 | 67 | E65 | 49 | E65 | E65 | 298 | 88 | 45 | | |
| 132632 | 35 | 57 | 65 | 67 | E65 | 49 | E65 | E65 | 299 | 89 | 45 | | |
| 132633 | 35 | 57 | 65 | 67 | E65 | 49 | E65 | E65 | 300 | 88 | 45 | | |
| 132634 | 35 | 57 | 65 | 67 | E65 | 50 | E65 | E65 | 301 | 89 | 45 | | |
| 132635 | * | * | 65 | 67 | E65 | * | E65 | E65 | * | † | 45 | | |

* Desired air intake, cooling, skid, and generator kit chosen from price list. Determine kit number from generator set nameplate and see Group parts sections for parts list.

† Determine kit number from generator nameplate and see Controller Kits in kits section for parts list.

Specification Number Index

| GROUP TITLE and NUMBER | <i>Air Intake</i> | <i>Cooling System</i> | <i>Engine</i> | <i>Nameplates and Decals</i> | <i>Oil Pressure Switches</i> | <i>Skid and Plant Mounting</i> | <i>Water Temperature Switches</i> | <i>Starter</i> | <i>Generator and Mounting</i> | <i>Controller and Mounting</i> | <i>Literature</i> | | |
|------------------------------|-------------------|-----------------------|---------------|------------------------------|------------------------------|--------------------------------|-----------------------------------|----------------|-------------------------------|--------------------------------|-------------------|--|--|
| GROUP NO. | 101 | 104 | 105 | 107 | 108 | 109 | 110 | 112 | 201 | 301 | 701 | | |
| SPEC NO. | VARIATION NUMBER | | | | | | | | | | | | |

| 600ROZD | | | | | | | | | | | | | |
|---------|----|----|----|----|-----|----|-----|-----|-----|----|----|--|--|
| 132316 | 5 | 6 | 23 | 13 | 10 | 10 | 11 | 4 | 89 | 28 | 52 | | |
| 132317 | 5 | * | 23 | 13 | 10 | 10 | 11 | 4 | 89 | † | 52 | | |
| 132318 | 5 | * | 23 | 13 | 10 | 10 | 11 | 4 | 91 | † | 52 | | |
| 132319 | 5 | * | 23 | 13 | 10 | 11 | 11 | 4 | 92 | † | 52 | | |
| 132320 | 5 | * | 23 | 13 | 10 | 10 | 11 | 4 | 93 | † | 52 | | |
| 132321 | 5 | * | 23 | 13 | 10 | 11 | 11 | 4 | 94 | † | 52 | | |
| 132363 | 5 | 6 | 23 | 13 | 10 | 10 | 11 | 4 | 91 | 28 | 52 | | |
| 132543 | 5 | 6 | 23 | 48 | 10 | 10 | 11 | 4 | 190 | 59 | 67 | | |
| 132544 | 5 | * | 23 | 48 | 10 | 10 | 11 | 4 | 190 | † | 67 | | |
| 132545 | 5 | 6 | 23 | 48 | 10 | 10 | 11 | 4 | 193 | 59 | 67 | | |
| 132546 | 5 | * | 23 | 48 | 10 | 10 | 11 | 4 | 193 | † | 67 | | |
| 132547 | 5 | * | 23 | 48 | 10 | 11 | 11 | 4 | 194 | † | 67 | | |
| 132548 | 5 | * | 23 | 48 | 10 | 10 | 11 | 4 | 195 | † | 67 | | |
| 132549 | 5 | * | 23 | 48 | 10 | 11 | 11 | 4 | 196 | † | 67 | | |
| 132636 | 36 | 51 | 66 | 67 | E66 | 49 | E66 | E66 | 296 | 90 | 67 | | |
| 132637 | 36 | 51 | 66 | 67 | E66 | 49 | E66 | E66 | 297 | 90 | 67 | | |
| 132638 | 36 | 51 | 66 | 67 | E66 | 50 | E66 | E66 | 302 | 90 | 67 | | |
| 132639 | 36 | 51 | 66 | 67 | E66 | 49 | E66 | E66 | 300 | 91 | 67 | | |
| 132640 | 36 | 51 | 66 | 67 | E66 | 50 | E66 | E66 | 301 | 92 | 67 | | |
| 132641 | 36 | 51 | 66 | 67 | E66 | 50 | E66 | E66 | 303 | 91 | 67 | | |
| 132643 | * | * | 66 | 67 | E66 | * | E66 | E66 | * | † | 67 | | |

* Desired air intake, cooling, skid, and generator kit chosen from price list. Determine kit number from generator set nameplate and see Group parts sections for parts list.

† Determine kit number from generator nameplate and see Controller Kits in kits section for parts list.

Specification Number Index

| GROUP TITLE and NUMBER | Air Intake | Cooling System | Engine | Nameplates and Decals | Oil Pressure Switches | Skid and Plant Mounting | Water Temperature Switches | Starter | Generator and Mounting | Controller and Mounting | Literature | | |
|------------------------------|------------------|----------------|--------|-----------------------|-----------------------|-------------------------|----------------------------|---------|------------------------|-------------------------|------------|--|--|
| GROUP NO. | 101 | 104 | 105 | 107 | 108 | 109 | 110 | 112 | 201 | 301 | 701 | | |
| SPEC NO. | VARIATION NUMBER | | | | | | | | | | | | |
| 750ROZD | | | | | | | | | | | | | |
| 132322 | 6 | 17 | 24 | 14 | 6 | 27 | 9 | 5 | 95 | 28 | 53 | | |
| 132323 | 6 | * | 24 | 14 | 6 | 27 | 9 | 5 | 95 | † | 53 | | |
| 132324 | 6 | * | 24 | 14 | 6 | 27 | 9 | 5 | 96 | † | 53 | | |
| 132325 | 6 | * | 24 | 14 | 6 | 27 | 9 | 5 | 97 | † | 53 | | |
| 132326 | 6 | * | 24 | 14 | 6 | 27 | 9 | 5 | 98 | † | 53 | | |
| 132327 | 6 | * | 24 | 14 | 6 | 27 | 9 | 5 | 99 | † | 53 | | |
| 132364 | 6 | 17 | 24 | 14 | 6 | 27 | 9 | 5 | 96 | 28 | 53 | | |
| 132368 | 18 | 23 | 40 | 15 | 10 | 29 | 11 | 9 | 95 | 28 | 53 | | |
| 132369 | 18 | 23 | 40 | 15 | 10 | 29 | 11 | 9 | 96 | 28 | 53 | | |
| 132370 | 18 | * | 40 | 15 | 10 | 29 | 11 | 9 | 95 | † | 53 | | |
| 132371 | 18 | * | 40 | 15 | 10 | 29 | 11 | 9 | 96 | † | 53 | | |
| 132372 | 18 | * | 40 | 15 | 10 | 29 | 11 | 9 | 97 | † | 53 | | |
| 132373 | 18 | * | 40 | 15 | 10 | 29 | 11 | 9 | 98 | † | 53 | | |
| 132374 | 18 | * | 40 | 15 | 10 | 29 | 11 | 9 | 99 | † | 53 | | |
| 132550 | 18 | 23 | 40 | 15 | 10 | 29 | 11 | 9 | 197 | 59 | 66 | | |
| 132551 | 18 | * | 40 | 15 | 10 | 29 | 11 | 9 | 197 | † | 66 | | |
| 132552 | 18 | 23 | 40 | 15 | 10 | 29 | 11 | 9 | 198 | † | 66 | | |
| 132553 | 18 | * | 40 | 15 | 10 | 29 | 11 | 9 | 198 | † | 66 | | |
| 132554 | 18 | * | 40 | 15 | 10 | 29 | 11 | 9 | 199 | † | 66 | | |
| 132555 | 18 | * | 40 | 15 | 10 | 29 | 11 | 9 | 200 | † | 66 | | |
| 132556 | 18 | * | 40 | 15 | 10 | 29 | 11 | 9 | 201 | † | 66 | | |
| 132668 | 45 | 37 | 68 | 71 | E68 | 58 | E68 | E68 | 302 | 90 | 82 | | |
| 132669 | 45 | 37 | 68 | 71 | E68 | 58 | E68 | E68 | 340 | 90 | 82 | | |
| 132670 | 45 | 37 | 68 | 71 | E68 | 58 | E68 | E68 | 342 | 90 | 82 | | |
| 132671 | 45 | 37 | 68 | 71 | E68 | 58 | E68 | E68 | 303 | 91 | 82 | | |
| 132672 | 45 | 37 | 68 | 71 | E68 | 58 | E68 | E68 | 304 | 92 | 82 | | |
| 132673 | 45 | 37 | 68 | 71 | E68 | 58 | E68 | E68 | 344 | 91 | 82 | | |
| 132674 | * | * | 68 | 71 | E68 | * | E68 | E68 | * | † | 82 | | |
| 132795 | 68 | 56 | 101 | 71 | E101 | 73 | E101 | E101 | 302 | 90 | 82 | | |
| 132796 | 68 | 56 | 101 | 71 | E101 | 73 | E101 | E101 | 340 | 90 | 82 | | |
| 132797 | 68 | 56 | 101 | 71 | E101 | 73 | E101 | E101 | 342 | 90 | 82 | | |
| 132798 | 68 | 56 | 101 | 71 | E101 | 73 | E101 | E101 | 304 | 92 | 82 | | |
| 132799 | 68 | 56 | 101 | 71 | E101 | 73 | E101 | E101 | 303 | 91 | 82 | | |
| 132849 | 68 | 56 | 101 | 71 | E101 | 73 | E101 | E101 | 344 | 91 | 82 | | |
| 132850 | * | * | 101 | 71 | E101 | * | E101 | E101 | * | † | 82 | | |

* Desired air intake, cooling, skid, and generator kit chosen from price list. Determine kit number from generator set nameplate and see Group parts sections for parts list.
† Determine kit number from generator nameplate and see Controller Kits in kits section for parts list.

Specification Number Index

| GROUP TITLE and NUMBER | <i>Air Intake</i> | <i>Cooling System</i> | <i>Engine</i> | <i>Nameplates and Decals</i> | <i>Oil Pressure Switches</i> | <i>Skid and Plant Mounting</i> | <i>Water Temperature Switches</i> | <i>Starter</i> | <i>Generator and Mounting</i> | <i>Controller and Mounting</i> | <i>Literature</i> | | |
|------------------------------|-------------------|-----------------------|---------------|------------------------------|------------------------------|--------------------------------|-----------------------------------|----------------|-------------------------------|--------------------------------|-------------------|--|--|
| GROUP NO. | 101 | 104 | 105 | 107 | 108 | 109 | 110 | 112 | 201 | 301 | 701 | | |
| SPEC NO. | VARIATION NUMBER | | | | | | | | | | | | |

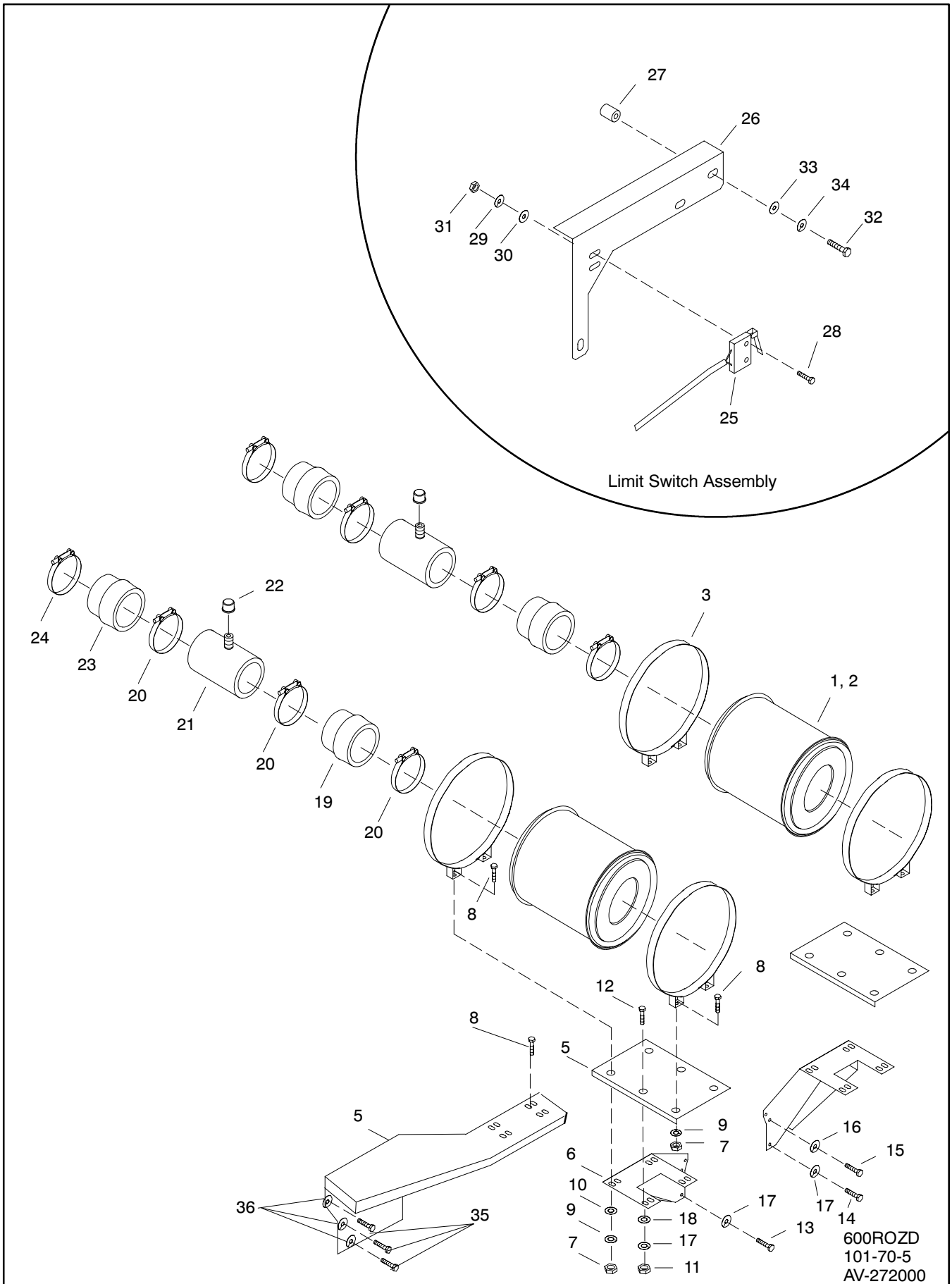
| 800ROZD | | | | | | | | | | | | | |
|---------|----|----|----|----|-----|----|-----|-----|-----|-----|----|--|--|
| 132328 | 18 | 13 | 40 | 15 | 10 | 20 | 11 | 9 | 100 | 28 | 53 | | |
| 132329 | 18 | * | 40 | 15 | 10 | 20 | 11 | 9 | 100 | † | 53 | | |
| 132330 | 18 | * | 40 | 15 | 10 | 20 | 11 | 9 | 101 | † | 53 | | |
| 132331 | 18 | * | 40 | 15 | 10 | 20 | 11 | 9 | 102 | † | 53 | | |
| 132332 | 18 | * | 40 | 15 | 10 | 20 | 11 | 9 | 103 | † | 53 | | |
| 132333 | 18 | * | 40 | 15 | 10 | 20 | 11 | 9 | 104 | † | 53 | | |
| 132365 | 18 | 13 | 40 | 15 | 10 | 20 | 11 | 9 | 101 | 28 | 53 | | |
| 132375 | 18 | 23 | 40 | 15 | 10 | 29 | 11 | 9 | 96 | 28 | 53 | | |
| 132376 | 18 | * | 40 | 15 | 10 | 29 | 11 | 9 | 96 | † | 53 | | |
| 132377 | 18 | 23 | 40 | 15 | 10 | 29 | 11 | 9 | 97 | 28 | 53 | | |
| 132378 | 18 | * | 40 | 15 | 10 | 29 | 11 | 9 | 97 | † | 53 | | |
| 132379 | 18 | * | 40 | 15 | 10 | 29 | 11 | 9 | 126 | † | 53 | | |
| 132380 | 18 | * | 40 | 15 | 10 | 29 | 11 | 9 | 98 | † | 53 | | |
| 132381 | 18 | * | 40 | 15 | 10 | 29 | 11 | 9 | 99 | † | 53 | | |
| 132557 | 18 | 23 | 40 | 49 | 10 | 29 | 11 | 9 | 198 | 59 | 66 | | |
| 132558 | 18 | * | 40 | 49 | 10 | 29 | 11 | 9 | 198 | † | 66 | | |
| 132559 | 18 | 23 | 40 | 49 | 10 | 29 | 11 | 9 | 199 | 59 | 66 | | |
| 132560 | 18 | * | 40 | 49 | 10 | 29 | 11 | 9 | 199 | † | 66 | | |
| 132561 | 18 | * | 40 | 49 | 10 | 29 | 11 | 9 | 202 | † | 66 | | |
| 132562 | 18 | * | 40 | 49 | 10 | 29 | 11 | 9 | 200 | † | 66 | | |
| 132563 | 18 | * | 40 | 49 | 10 | 29 | 11 | 9 | 201 | † | 66 | | |
| 132678 | 46 | 38 | 69 | 71 | E69 | 59 | E69 | E69 | 340 | 90 | 66 | | |
| 132679 | 46 | 38 | 69 | 71 | E69 | 59 | E69 | E69 | 342 | 90 | 66 | | |
| 132680 | 46 | 38 | 69 | 71 | E69 | 59 | E69 | E69 | 349 | 151 | 66 | | |
| 132681 | 46 | 38 | 69 | 71 | E69 | 59 | E69 | E69 | 344 | 91 | 66 | | |
| 132682 | 46 | 38 | 69 | 71 | E69 | 59 | E69 | E69 | 304 | 120 | 66 | | |
| 132683 | * | * | 69 | 71 | E69 | * | E69 | E69 | * | † | 66 | | |
| 132778 | 63 | 58 | 89 | 71 | E89 | 74 | E89 | E89 | 340 | 90 | 66 | | |
| 132779 | 63 | 58 | 89 | 71 | E89 | 74 | E89 | E89 | 342 | 90 | 66 | | |
| 132780 | 63 | 58 | 89 | 71 | E89 | 74 | E89 | E89 | 349 | 151 | 66 | | |
| 132781 | 63 | 58 | 89 | 71 | E89 | 74 | E89 | E89 | 344 | 91 | 66 | | |
| 132782 | 63 | 58 | 89 | 71 | E89 | 74 | E89 | E89 | 304 | 120 | 66 | | |
| 132783 | * | * | 89 | 71 | E89 | * | E89 | E89 | * | † | 66 | | |

* Desired air intake, cooling, skid, and generator kit chosen from price list. Determine kit number from generator set nameplate and see Group parts sections for parts list..

† Determine kit number from generator nameplate and see Controller Kits in kits section for parts list.

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Group 101: Air Intake



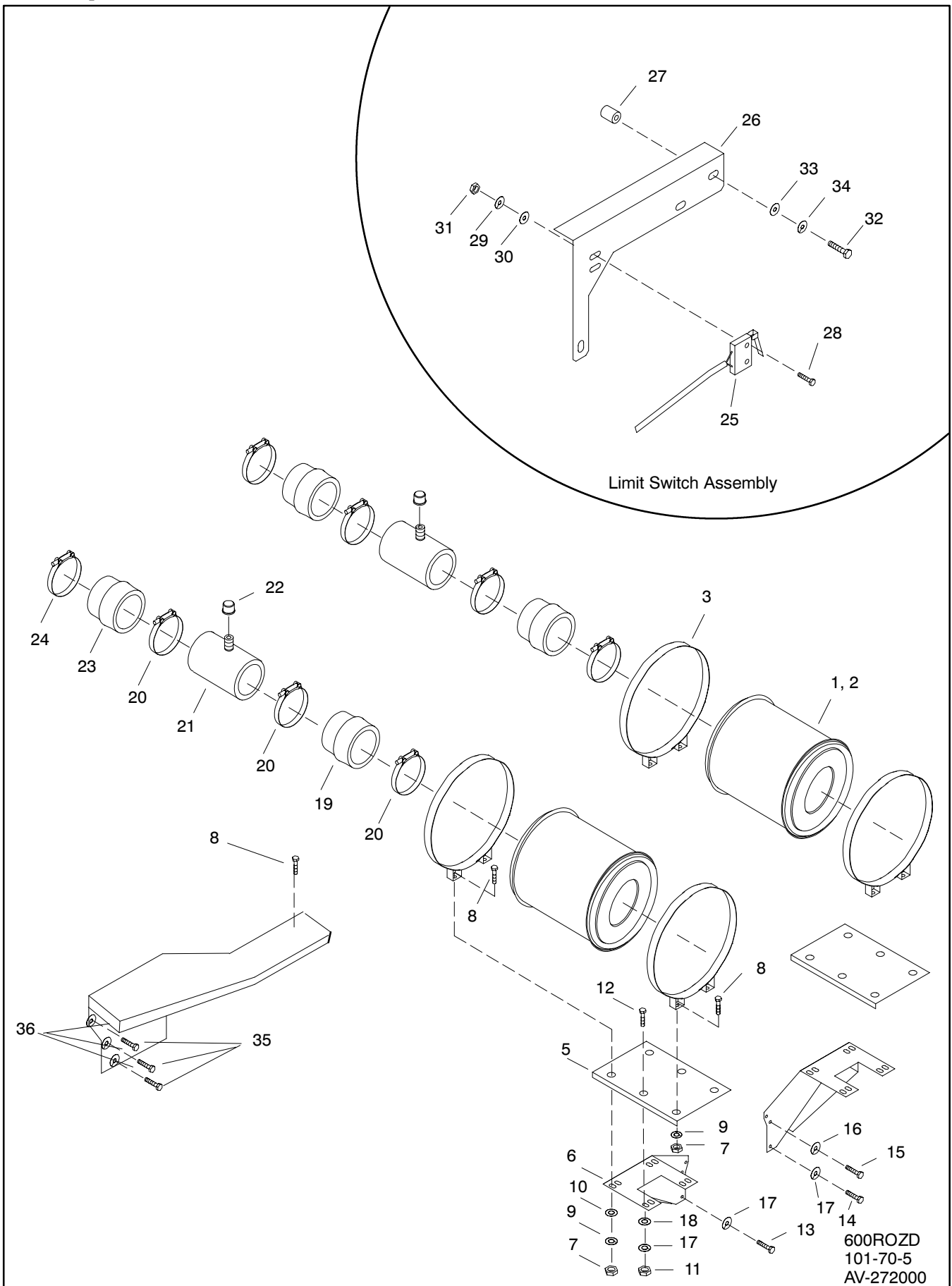
Group 101: Air Intake, continued

| Item | Part Number | Description | Quantity | | | | | | | | | | | | | | |
|------|-------------|------------------------------------|------------------|---|----|----|----|----|----|----|----|----|----|----|----|---|---|
| | | | Variation Number | | | | | | | | | | | | | | |
| | | | 5 | 6 | 11 | 16 | 18 | 21 | 34 | 35 | 36 | 45 | 46 | 63 | 68 | | |
| 1 | 272981 | Air Cleaner | 2 | | 2 | 2 | | | 2 | 2 | 2 | | | | | | |
| 1 | A-291664 | Air Cleaner | | 2 | | | | 2 | | | | | | | 2 | | |
| 1 | 354842 | Air Cleaner | | | | | | | | | | | | | | 2 | |
| 1 | 274821 | Air Cleaner | | | | | | | | | | | | | | | 2 |
| 1 | 291665 | Air Cleaner | | | | | | | | | | | | | | | 2 |
| 1 | A-279714 | Air Cleaner, Heavy-Duty | | | | | | | | | | | | | | | |
| 1 | 279722 | Rain Cap, Air Cleaner | | | | | | | | | | | | | | | |
| 2 | N/A | Element Not Sold Separately | 2 | | 2 | 2 | | | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 2 |
| 2 | 274683 | Air Cleaner Element | | 2 | | | | 2 | | | | | | | 2 | | |
| 2 | 279738 | Air Cleaner Element, Heavy-Duty | | | | | | | | | | | | | | | |
| 2 | 279739 | Air Cleaner Element, Heavy-Duty | | | | | | | | | | | | | | | |
| 3 | 272983 | Clamp, Hose (band w.mtg. 13 39/64) | 2 | | 2 | 4 | | | 4 | 2 | 2 | 2 | | | 4 | 2 | |
| 3 | 291666 | Mount, Air Cleaner, 16" | | 4 | | | | 4 | | | | | | | | | |
| 3 | 280998 | Clamp | | | | | | | | | 2 | 2 | 2 | | | | 2 |
| 3 | 279715 | Bracket, Air Cleaner | | | | | | | | | | | | | | | |
| 4 | 291665 | Cap, Inlet (not shown) | | 4 | | | | 4 | | | | | | | | | |
| 5 | 274310 | Support Plate, Air Cleaner | | | | | | | | | | | | | | | |
| 5 | 279721 | Bracket, Air Cleaner | | | | | | | | | | | | | | | |
| 5 | 354470 | Bracket, Air Cleaner | 1 | | 1 | | | | | | 1 | 1 | | | | 1 | |
| 5 | 354471 | Bracket, Air Cleaner | 1 | | 1 | | | | | | 1 | 1 | | | | 1 | |
| 6 | 279901 | Bracket, Right Air Cleaner | | | | 1 | | 1 | | | | | | | | | |
| 6 | 274286 | Bracket, Left Air Cleaner | | 1 | | | 1 | 1 | | | | | | | | | |
| 6 | 274285 | Bracket, Right Air Cleaner | | 1 | | | 1 | 1 | | | | | | | 1 | | |
| 6 | 279902 | Bracket, Left Air Cleaner | | | | 1 | | 1 | | | | | | | | | |
| 6 | 354584 | Bracket, Left Air Cleaner | | | | | | | | | 1 | | | | | | |
| 6 | 354585 | Bracket, Right Air Cleaner | | | | | | | | 1 | | | | | | | |
| 7 | * | Nut, 3/8-16 | | 8 | | | 8 | | | | | | | | | | |
| 8 | X-6238-11 | Screw, 3/8-16 x 1 | | 8 | | | 8 | | | | | | | | | | |
| 8 | X-6238-4 | Screw, 3/8-16 | | | | | | | | | | | | | | | |
| 8 | * | Screw, 3/8-16 | | | | | | | | | 4 | 4 | | | 4 | | |
| 9 | * | Washer, Split Lock, 3/8 | | 4 | | | 4 | | | | | | | | | | |
| 10 | X-25-37 | Washer, 15/32 x 13/16 | | 4 | | | 4 | | | | | | | | | | |
| 11 | * | Nut, 3/8-16 | | | | | | | | | | | | | | | |
| 12 | X-6238-11 | Screw, 3/8-16 x 1 | | | | | | | | | | | | | | | |
| 13 | X-6238-22 | Screw, 3/8-24 x 4 | 1 | 1 | | | 1 | | | | | | | | 1 | 1 | |
| 14 | X-6238-13 | Screw, Ref. | 1 | 1 | | | 1 | | | | 1 | 1 | | | 1 | 1 | |
| 14 | N/A | Use Existing Engine Hardware | | | | 1 | | 1 | | | | | | | | | |
| 15 | N/A | Use Existing Engine Hardware | 2 | 4 | | | 4 | | | | | | | | | | |
| 15 | X-6238-22 | Screw, Ref. | | | | | | | | | | | | 3 | | 2 | 3 |
| 15 | X-6024-5 | Screw, Ref. | | | | 4 | | | | | | | | | | | |
| 16 | * | 7/16-14 Hardware | | | | 4 | | | | | | | | | | | |
| 16 | * | 3/8 Hardware | 2 | | | | | | | | | | | | 3 | | 3 |
| 17 | * | Washer, Split Lock, 3/8 | 1 | | | 4 | 4 | 4 | | | | | 3 | | | 1 | |
| 17 | X-25-93 | Washer, Plain | 1 | | 1 | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 18 | X-25-37 | Washer, 15/32 x 13/16 | | 4 | | | 4 | | | | | | | | | | |
| 18 | X-25-1 | Washer, Plain | | | | | | | | | | | | | | | |
| 19 | 291679 | Hose, Hump, 7.0 ID x 6.0-7.0 L | | 2 | 2 | 2 | 2 | 2 | | | | | | | 2 | | |
| 19 | 279720 | Hose, Hump | | | | | | | | | | | | | | | |
| 19 | 354441 | Hose, Hump | | | 1 | | | | | 1 | 2 | | | | | | |
| 19 | 354447 | Hose, Hump | 2 | | | | | | | | | 2 | 2 | | | 2 | 2 |
| 20 | 280998 | Clamp, Hose (band), 7 7/8 | 2 | 6 | 2 | 6 | 6 | 6 | 2 | 2 | 2 | 2 | 2 | | 6 | 2 | |
| 20 | 279717 | Clamp, Hose | | | | | | | | | | | | | | | |
| 20 | 254344 | Clamp, Hose | | | 2 | | | | | 2 | 2 | | | | | | |
| 20 | 291504 | Clamp, Hose | | | | | | | | | | 2 | 2 | | | | 2 |
| 21 | 274624 | Tube Assembly, 7 OD x 11 L | | | | | | | | | | | | | | | |
| 21 | 274619 | Tube Assembly, 7 OD x 14.5 L | | 2 | | | 2 | | | | | | | | | 2 | |
| 21 | 274664 | Tube Assembly, 7 OD x 5 L | | | | | | 2 | | | | | | | | | |
| 22 | X-268-7 | Cap, Pipe, 1/8 NPT | | 2 | | 2 | 2 | 2 | | | | | | | | 2 | |
| 23 | 291560 | Hose, Hump, 5.5/7.0 ID x 6.0-7.4 L | | 2 | | | 2 | | | | | | | | | 2 | |
| 23 | 274430 | Hose, Hump, 5.0/7.0 ID x 7.0 L | | | | 2 | | 2 | | | | | | | | | |
| 24 | 291504 | Clamp, Hose (band), 6 | 2 | 2 | | | 2 | | | | | 2 | 2 | | 2 | 2 | |
| 24 | 254344 | Clamp, Hose (band), 5 1/2 | | | | 2 | | 2 | | | 2 | 2 | | | | | |
| 25 | 272790 | Switch Assembly, Limit | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | |
| 26 | 274312 | Bracket, Switch Mounting | 1 | 1 | 1 | | 1 | | | | | | | | | | |
| 26 | 279945 | Bracket, Switch Mounting | | | | 1 | | | | | | | | | | | |
| 27 | 265861 | Spacer, 0.281 x 0.500 x 0.37 | 2 | 2 | 2 | | 2 | | | | | | | | | | |
| 28 | X-49-6 | Screw, 6-32 x 3/4 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | |

* Common hardware; procure locally

† Heavy-duty air cleaner kit

Group 101: Air Intake, continued



Group 101: Air Intake, continued

| Item | Part Number | Description | Quantity | | | | | | | | | | | | | | |
|------|-------------|----------------------------------|------------------|---|----|----|----|----|----|----|----|----|----|----|----|---------|--|
| | | | Variation Number | | | | | | | | | | | | | | |
| | | | 5 | 6 | 11 | 16 | 18 | 21 | 34 | 35 | 36 | 45 | 46 | 63 | 68 | 354049† | |
| 29 | * | Washer, Split Lock, 6 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | |
| 30 | X-25-9 | Washer, Plain, 5/32 x 3/8 x 3/64 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | |
| 31 | * | Nut, 6-32 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | |
| 32 | X-465-7 | Screw, 1/4-20 x 1 | 3 | 3 | 3 | | 3 | | | | | | | | | | |
| 32 | N/A | Use Existing Engine Hardware | | | | 3 | | | | | | | | | | | |
| 33 | X-25-40 | Washer, 9/32 x 5/8 | 3 | 3 | 3 | | 3 | | | | | | | | | | |
| 34 | * | Washer, Split Lock, 1/4 | 3 | 3 | 3 | | 3 | | | | | | | | | | |
| 35 | * | Washer, 3/8 | | | | | | | | 6 | 6 | | | 6 | | | |
| 36 | X-6238-22 | Screw, 3/8-24 x 4 | | | | | | | | 6 | 6 | | | 6 | | | |

* Common hardware; procure locally

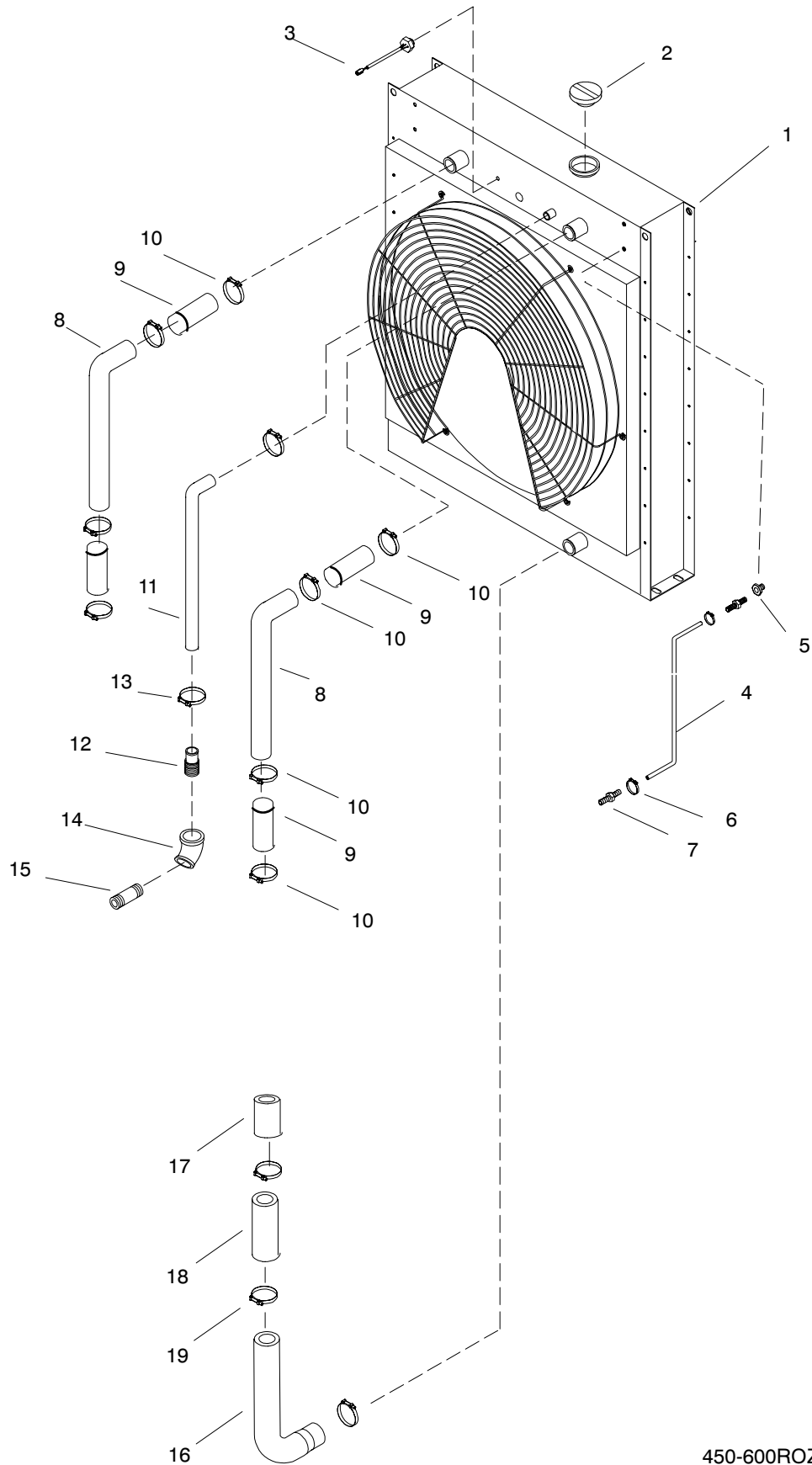
† Heavy-duty air cleaner kit

Modular Spec Cross-Reference Table

Some modular generator specs listed in the specification number index require an air cleaner kit. Refer to the generator set nameplate to identify the kit number installed on the generator set. Use the following table to identify the corresponding variation number. The kit's parts list matches the parts list for the corresponding variation number

| Air Cleaner Kit | Equivalent Variation Number |
|-----------------|-----------------------------|
| 347399 | 46 |
| 347359 | 34 |
| 347369 | 35 |
| 347378 | 36 |
| 347860 | 45 |
| 354846 | 63 |
| 354940 | 68 |

Group 104: Cooling System



450-600ROZD
104-70-6
AV-272000

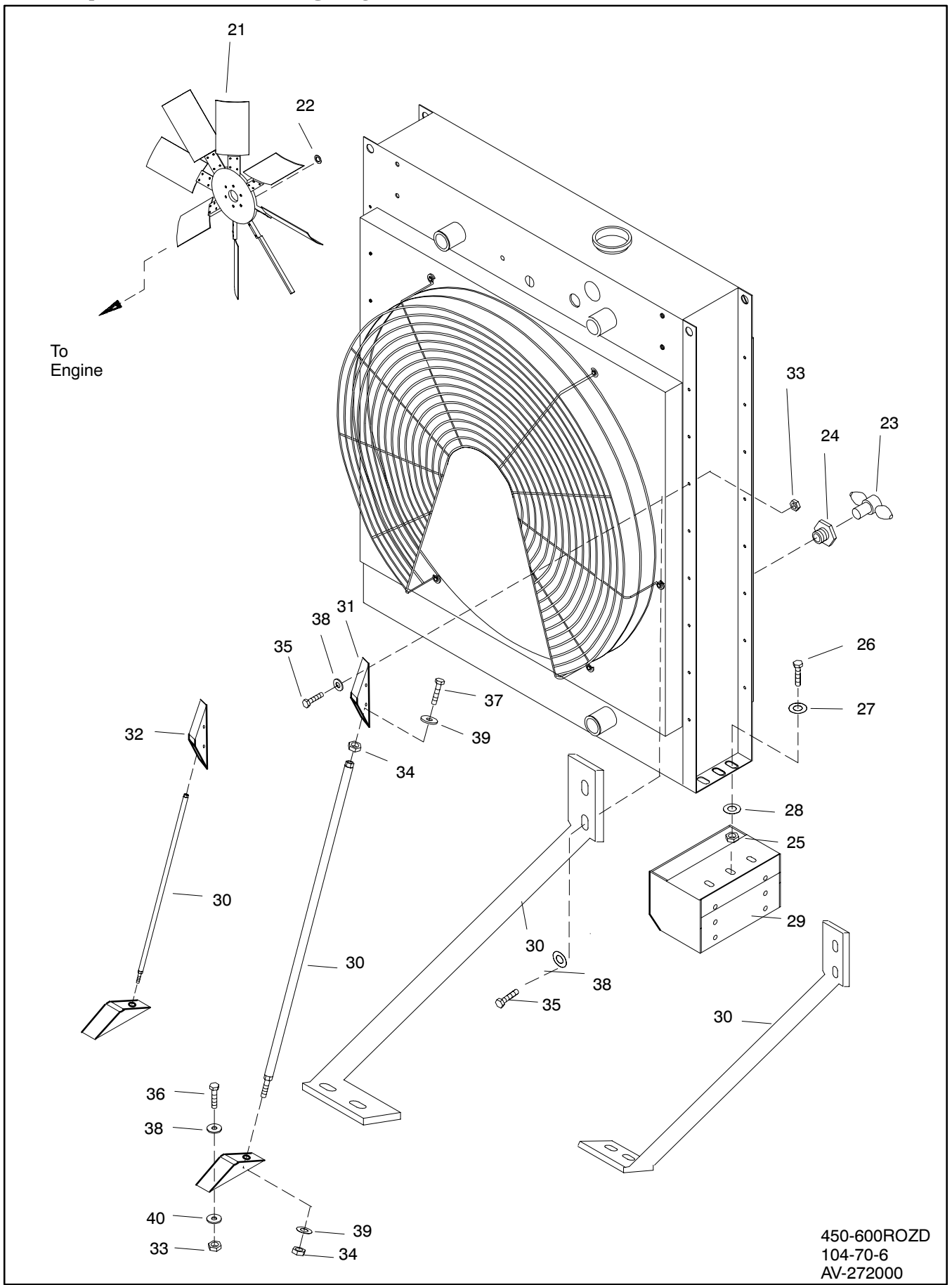
Group 104: Cooling System, continued

| Item | Part Number | Description | Quantity | | | | | | | | | | | | | | |
|------|-------------|--|------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|---|
| | | | Variation Number | | | | | | | | | | | | | | |
| | | | 6 | 13 | 17 | 21 | 22 | 23 | 26 | 37 | 38 | 51 | 53 | 56 | 57 | 58 | |
| 1 | A-272949 | Radiator Assembly | 1 | | | | | | | | | | | | | | |
| 1 | A-274309 | Radiator Assembly | | 1 | | | | | | | | | | | | | |
| 1 | A-272858 | Radiator Assembly | | | 1 | | | | | | | | | | | | |
| 1 | A-279649 | Radiator Assembly | | | | 1 | | | | 1 | | | | | | | |
| 1 | A-279999 | Radiator Assembly | | | | | 1 | | | | | | | | | | |
| 1 | A-299893 | Radiator Assembly | | | | | | 1 | | | 1 | | | | | | |
| 1 | A-347826 | Radiator Assembly | | | | | | | | | | | 1 | | | | |
| 1 | A-354539 | Radiator Assembly | | | | | | | | | 1 | | 1 | | 1 | | |
| 1 | A-354540 | Radiator Assembly | | | | | | | | | | 1 | | | | | |
| 1 | A-354840 | Radiator Assembly | | | | | | | | | | | | | | | 1 |
| 2 | 224357 | Cap, Radiator | 1 | 1 | 1 | | | | | | | | | | | | |
| 2 | 224364 | Cap, Radiator | | | | 1 | 1 | | 1 | | | | | | | | |
| 2 | 347715 | Cap, Radiator | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 |
| 3 | 273469 | Coolant Level Sensor (before serial number 363369) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | |
| 3 | 254832 | Coolant Level Sensor (serial numbers 363369 and after) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | X-6003-8 | Conduit (for exposed wires, not shown) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | X-202-28 | Bushing, Reducer, 3/8 | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 |
| 4 | X-651-11 | Line, 3/8 ID (vent) | 1 | | | 1 | | | 1 | | | | 1 | 1 | | 1 | 1 |
| 4 | X-651-12 | Line, 3/8 ID x 54 | | 1 | 1 | | | | 1 | | 1 | 1 | | | 1 | | 1 |
| 5 | X-202-12 | Bushing, Reducer, 1/4 F x 1/2 M | | 1 | 1 | | | | | | | | | | | | |
| 6 | X-426-9 | Clamp, Hose, 5/8 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 6 | X-426-8 | Clamp, Hose, 0.81-1.75 ID | | | | | | | | | | | | | | | |
| 7 | X-652-1 | Fitting, Hose, 3/8 x 1/4 NPT | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 8 | 272972 | Tube, Upper Radiator | 2 | | | | 2 | | | | | | 2 | | 2 | | 2 |
| 8 | 274401 | Tube, Upper Radiator | | 2 | 2 | | | | 2 | | 2 | 2 | | | 2 | | 2 |
| 8 | 279943 | Tube, Upper Radiator | | | | 2 | | | 2 | | | | | | | | 2 |
| 8 | 354586 | Tube, Upper Radiator | | | | | | | | | | | | | 2 | | |
| 9 | X-6014-53 | Hose, 3 ID | 4 | | | | 4 | | | | | | | | | | |
| 9 | X-507-6 | Hose, Radiator, 3 ID x 7 | 4 | | 4 | | 4 | | 4 | | 4 | 4 | | | 4 | 4 | 4 |
| 9 | X-6014-69 | Hose, Radiator, 2.5 ID x 6 L | | | | 4 | | | 4 | | | | | | | | |
| 9 | X-507-6 | Hose, Radiator, 3 ID x 7 | | 2 | | | | | 2 | | | | | | | | |
| 9 | X-507-6 | Hose, Radiator, 3 ID x .58 (upper) | | | | | | | | | | | | | 2 | | |
| 9 | X-507-5 | Hose, 3 ID x 13 | | 2 | | | | | | | | | | | | | |
| 9 | X-424-10 | Hose, 2.5 ID x .5 (lower) | | | | | | | | | | | | | 2 | | |
| 10 | 291542 | Clamp, Hose (band), 3 1/2 | 8 | 8 | 8 | | 8 | 8 | 8 | 8 | 8 | 8 | 4 | 8 | 8 | 8 | 8 |
| 10 | 275527 | Clamp, 2.81 -3.12 ID | | | | 8 | | | 8 | | | | 4 | | | | |
| 11 | X-6014-30 | Hose, Radiator Bypass, 1 1/4 ID x 54 | 1 | | | | 1 | | | | | | | | | | |
| 11 | X-6014-52 | Hose, Radiator Bypass, 1 1/4 ID x 76 | | | 1 | | | 1 | 1 | 1 | 1 | | | | 1 | | 1 |
| 11 | X-6014-33 | Hose, 1 1/2 ID x 76 | | 1 | | | | | | | | | | | | | |
| 11 | X-272-29 | Hose 1/8 ID x 66" | | | | | | | | | | 1 | | | | 1 | |
| 11 | X-272-9 | Hose 1/8 ID x 66 | | | | | | | | | | | | 1 | | | |
| 11 | X-6014-66 | Hose, 1 1/4" ID x 62.5 | | | | 1 | | | | | | | | | | | |
| 12 | 272930 | Adapter, Hose, 1 NPT x 1 1/4 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 12 | X-751-4 | Adapter, Hose, 1 1/2 NPT x 1 1/2 | | 1 | | | | | | | | | | | | | |
| 12 | X-202-11 | Bushing, Reducer, 1F x 1 1/2 M | | 1 | | | | | | | | | | | | | |
| 13 | X-426-8 | Clamp, Hose, 1 3/4 | 2 | 2 | 2 | | | | | | | | | | | | |

Serial Number—Contingent Cooling System Parts

| Part Description | Part Number | |
|--------------------------------|-----------------------------|---------------------------------|
| | Before Serial Number 363369 | Serial Numbers 363369 and After |
| Coolant Level Sensor | 273404 | 254832 |
| Bushing Reducer, 3/8 x 1/2 NPT | Not Used | X-202-28 |
| Conduit, Plastic | X-6003-8 | X-6003-8 |
| Connector, Pin Housing | 239411 | Not Used |
| Pin | 239516 | Not Used |
| Terminal 1/4 (female) | Not Used | X-431-25 |
| Terminal 1/4 (male) | Not Used | X-431-29 |
| Sensor, Low Coolant | 273520 | 347270 |

Group 104: Cooling System, continued



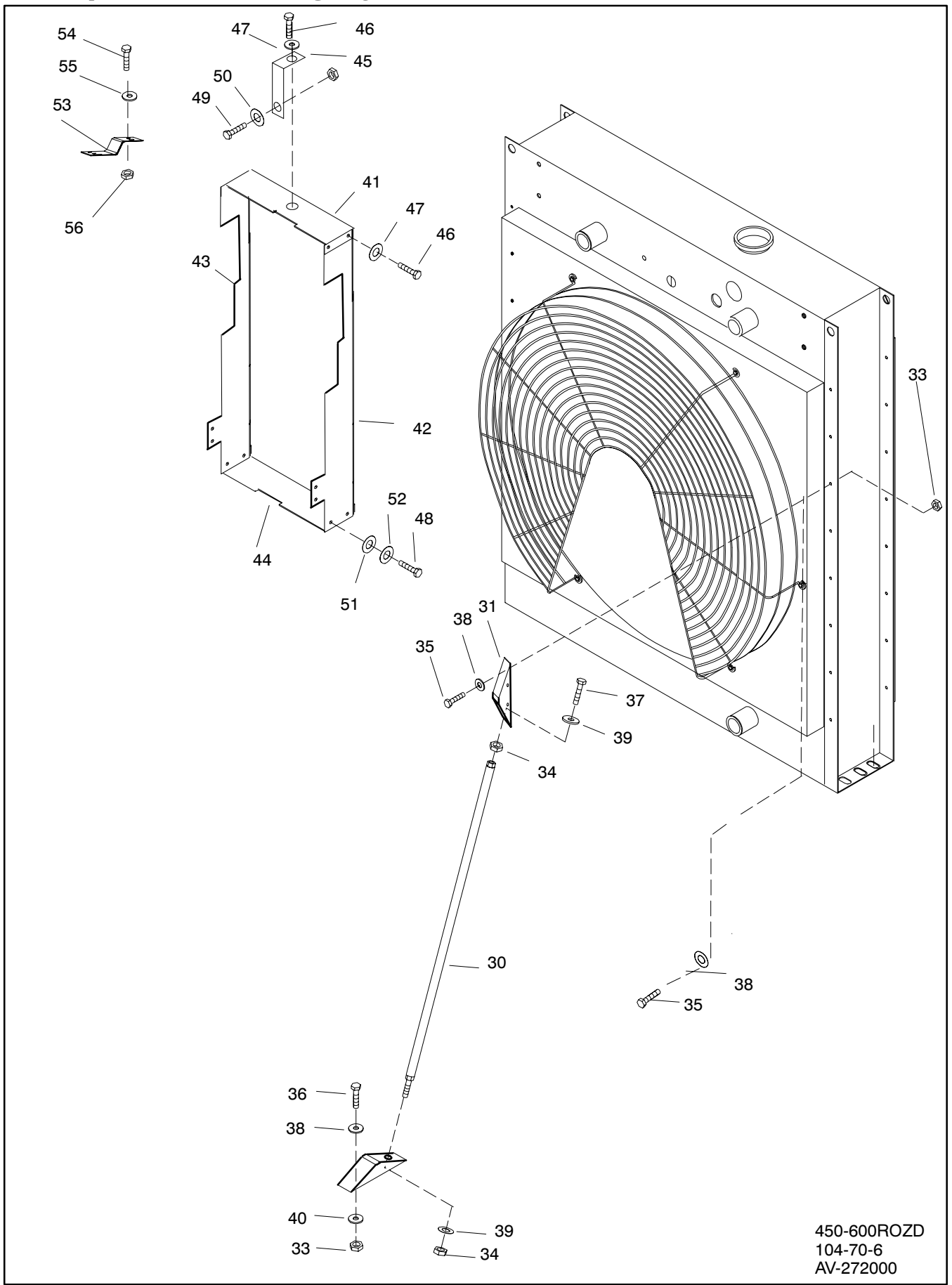
450-600ROZD
104-70-6
AV-272000

Group 104: Cooling System, continued

| Item | Part Number | Description | Quantity | | | | | | | | | | | | | | | |
|------|-------------|---|------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|---|---|
| | | | Variation Number | | | | | | | | | | | | | | | |
| | | | 6 | 13 | 17 | 21 | 22 | 23 | 26 | 37 | 38 | 51 | 53 | 56 | 57 | 58 | | |
| 13 | X-216-21 | Coupling, Pipe 1 1/2 NPSC | | 1 | | | | | | | | | | | | | | |
| 13 | 279669 | Clamp, Hose, 1.50-1.81 ID | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| 14 | X-215-15 | Elbow, Pipe, 90° 1 NPT | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | | | | | 1 | |
| 14 | X-225-9 | Elbow, Pipe, 45° 1 NPT | | | | | | | | 1 | | | | | | | 1 | |
| 15 | X-274-10 | Elbow, 45° (not shown) | | | | 1 | | | | 1 | | | | | | | 1 | |
| 15 | X-218-22 | Nipple, Pipe, 1 NPTF x 3 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | |
| 15 | X-218-24 | Nipple, Pipe, 1 x 1 1/2 | | 1 | | | | | | | | | | | | | | |
| 16 | 272988 | Hose, Lower Radiator | 1 | | | | 1 | | | | 1 | | | | | | | |
| 16 | 274402 | Hose, Lower Radiator | | 1 | | | | | | | | | | | | | | |
| 16 | 354684 | Hose, Lower Radiator | | | | | | | | | | 1 | | | | 1 | 1 | |
| 16 | 272971 | Hose, Lower Radiator | | | 1 | | | | 1 | | | 1 | | | | | | |
| 16 | 354841 | Hose, Lower Radiator | | | | | | | | | | | | | | | 1 | |
| 16 | 354699 | Hose, Lower Radiator | | | | | | | | | | | 1 | | | | | |
| 16 | X-6014-70 | Hose, Lower Radiator | | | | 1 | | | | 1 | | | | | | | | |
| 17 | X-6014-31 | Hose, Lower Radiator, 4 ID x 6 | | 1 | 1 | | | | 1 | | | 1 | 1 | | | | | |
| 17 | X-6014-91 | Hose, Lower Radiator, 4 ID x 6 | 1 | | | | | 1 | | | | | | | | | | |
| 18 | 272989 | Tube, Lower Radiator | 1 | | | | | 1 | | | 1 | | | | | | | |
| 18 | 272973 | Tube, Lower Radiator | | 1 | 1 | | | | 1 | | | 1 | | | | | | |
| 18 | 279942 | Tube, Lower Radiator | | | | 1 | | | | 1 | | | | | | | | |
| 19 | 274545 | Clamp, Hose (band), 4 1/2 | | 4 | 4 | | | | 4 | | | 4 | 4 | 2 | 1 | 2 | 2 | 2 |
| 19 | 343287 | Clamp, Hose (band), | 2 | | | | | 2 | | | | | | | | | | |
| 19 | 291537 | Clamp, 3.75-4.06 ID | | | | 4 | | | | 4 | | | | | 1 | | | |
| 21 | 274757 | Fan Assembly | 1 | | | | | 1 | | | | | | | 1 | | 1 | |
| 21 | A-274321 | Fan Assembly | | 1 | | | | | | | | | | | | | | |
| 21 | A-274715 | Fan Assembly | | | 1 | | | | | | | | | | | | | |
| 21 | 279863 | Fan Assembly | | | | 1 | | | | 1 | | | | | | | | |
| 21 | 299892 | Fan Assembly | | | | | | | 1 | | | 1 | | | | | | 1 |
| 21 | 279752 | Fan Assembly | | | | | | | | | | 1 | | | | | | |
| 21 | 347839 | Fan Assembly | | | | | | | | | 1 | | | | | 1 | | |
| 21 | 274322 | Spacer, Fan (not shown) | | 1 | 1 | | | | | | | | | | | | | |
| 21 | X-129-47 | Screw, grade 8 (not shown), 1/2-13 x 2 | | 6 | 6 | | | | 6 | | | | | | | | | |
| 21 | X-129-53 | Screw, H.C. (not shown) | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 22 | 290945 | Washer, Hardened, 17/32 x 1 1/16 x 1/16 | 6 | 6 | 6 | | | 6 | 6 | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 22 | X-801-3 | Washer, Hardened, 13/32 x 13/16 x 5/64 | | 3 | 3 | | | | 3 | | | | | | | | | |
| 22 | X-801-5 | Washer, Hardened, 0.656 ID x 1.06 OD | | | | 6 | | | | 6 | | | | | | | | |
| 23 | X-256-1 | Valve, Drain, 3/8 NPT | 1 | 1 | 1 | | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 23 | X-256-5 | Valve, Drain, 1/2 NPTF | | | | 1 | | | | 1 | | | | | | | | |
| 24 | X-202-28 | Bushing, Reducer, 3/8 F x 1/2 M | 1 | 1 | 1 | | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 25 | * | Nut, 5/8-11 | 6 | 6 | 6 | | | | 6 | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 26 | X-6021-1 | Screw, 5/8-11 x 1 3/4 | 6 | 6 | 6 | | | | 6 | | | | | | | | | |
| 26 | * | Bolt, 5/8-11 | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 27 | X-24-1 | Washer, Split lock, 5/8 | 6 | 6 | | | | | | | | | | | | | | |
| 27 | X-24-2 | Washer, Split lock, 5/8 | | | 6 | | | | 6 | | | | | | | | | |
| 28 | X-25-15 | Washer, Plain, 21/32 x 15/16 x 3/32 | | 6 | 6 | 6 | | | | | | | | | | | | |
| 28 | X-801-9 | Washer, Hardened | 6 | | | | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 29 | 354527 | Support, Radiator | | | | | | | | | | 2 | 2 | | | | | |
| 29 | 354528 | Support, Radiator | | | | | | | | | | | | 2 | | | | |
| 30 | 279541 | Brace, Radiator | 2 | | | 2 | 2 | | 2 | | | | | | | | | |
| 30 | 274257 | Brace, Radiator | | 2 | | | | | | | | | | | | | | |
| 30 | 279540 | Brace, Radiator | | | 2 | | | | 2 | | | | | | | | | |
| 30 | 354663 | Radiator Support, RH | | | | | | | | | | 1 | | | | | | 1 |
| 30 | 354530 | Radiator Support, RH | | | | | | | | | | 1 | | | | | | |
| 30 | 354532 | Radiator Support, RH | | | | | | | | | | | 1 | 1 | | | 1 | |
| 30 | 354664 | Radiator Support, LH | | | | | | | | | | 1 | 1 | | | | | 1 |
| 30 | 354531 | Radiator Support, LH | | | | | | | | | | 1 | | | | | | |
| 30 | 354533 | Radiator Support, LH | | | | | | | | | | | 1 | 1 | | | 1 | |
| 31 | 279544 | Bracket, RH Radiator | 2 | | | 2 | 2 | | 2 | | | | | | | | | |
| 31 | 274259 | Support, RH Radiator | | 2 | | | | | | | | | | | | | | |
| 31 | 279542 | Bracket, RH Radiator | | | 2 | | | | 2 | | | | | | | | | |
| 32 | 279545 | Bracket, LH Radiator | 2 | | | 2 | 2 | | 2 | | | | | | | | | |
| 32 | 274260 | Support, LH Radiator | | 2 | | | | | | | | | | | | | | |
| 32 | 279543 | Bracket, RH Radiator | | | 2 | | | | 2 | | | | | | | | | |
| 33 | X-85-3 | Nut, 5/8-11 | 8 | 8 | 8 | | | 8 | | 8 | | | | | | | | |
| 33 | * | Nut, 5/8-11 | | | | | | | | | | | | 8 | 4 | | | 4 |
| 34 | X-88-12 | Nut, hex, 3/4-10 | 4 | | 4 | | | 4 | 4 | | | | | | | | | |
| 35 | X-6021-2 | Screw, 5/8-11 x 1 1/2 | 4 | 4 | 4 | | | 4 | 4 | | | | | | | | | |
| 36 | X-6021-5 | Screw, 5/8-11 x 2 1/4 | 4 | 4 | | | | 4 | 4 | | | | | | | | | |
| 36 | * | 5/8-11 Hardware | | | | | | | | | 8 | 8 | | | | 4 | | 4 |

* Common Hardware; Procure Locally

Group 104: Cooling System, continued



450-600ROZD
104-70-6
AV-272000

Group 104: Cooling System, continued

| Item | Part Number | Description | Quantity | | | | | | | | | | | | | |
|------|-------------|--|------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | Variation Number | | | | | | | | | | | | | |
| | | | 6 | 13 | 17 | 21 | 22 | 23 | 26 | 37 | 38 | 51 | 53 | 56 | 57 | 58 |
| 37 | X-6239-2 | Screw, Hardened, 3/4-10 x 1 1/2 | 2 | | | | | | | | | | | | | |
| 37 | X-6239-3 | Screw, Hardened, 3/4-10 x 1 | | | 2 | | | 2 | | | | | | | | |
| 38 | X-24-1 | Washer, Split Lock, 5/8 | 8 | 8 | 8 | | 8 | | | | | | | | | |
| 38 | X-801-9 | Washer, Hardened | | | | | | | 8 | 8 | 8 | 4 | 4 | 8 | 8 | |
| 39 | X-26-10 | Washer, Lock, 3/4 | 2 | | 2 | | 2 | | | | | | | | | |
| 40 | X-6011-3 | Washer, Beveled, 11/16 ID | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | 4 | |
| 41 | 274594 | Guard, Belt (top) | 1 | | | | 1 | | | | | | | | | |
| 41 | 279965 | Guard, Belt (top) | | | | 1 | | | 1 | | | | | | | |
| 41 | 354707 | Guard, Belt (top) | | | | | | | | | | 1 | | | | |
| 41 | 354538 | Guard, Belt (top) | | | | | | | | | | | 1 | | 1 | |
| 42 | 274428 | Guard, Belt RH | 1 | | | | 1 | | | | | | | | | |
| 42 | 274562 | Guard, Belt RH | | 1 | 1 | | | 1 | | | | | | | | |
| 42 | 279966 | Guard, Belt RH | | | | 1 | | | 1 | | | | | | | |
| 42 | 354115 | Guard, Belt RH | | | | | | | | 1 | 1 | | | 1 | | |
| 42 | 354708 | Guard, Belt RH | | | | | | | | | | 1 | | | | |
| 42 | 354536 | Guard, Belt RH | | | | | | | | | | 1 | | | 1 | |
| 43 | 274429 | Guard, Belt LH | 1 | | | | 1 | | | | | | | | | |
| 43 | 274563 | Guard, Belt LH | | 1 | 1 | | | 1 | | | | | | | | |
| 43 | 279967 | Guard, Belt LH (use existing hardware) | | | | 1 | | | 1 | | | | | | | |
| 43 | 354114 | Guard, Belt LH | | | | | | | | 1 | 1 | | | 1 | 1 | |
| 43 | 354537 | Guard, Belt LH | | | | | | | | | | 1 | | | 1 | |
| 43 | 354709 | Guard, Belt LH | | | | | | | | | | | 1 | | | |
| 44 | 274801 | Guard, Belt (bottom) | 1 | 1 | 1 | | | 1 | | | | | 1 | | 1 | |
| 44 | 347828 | Guard, Belt (bottom) | | | | | | | | 1 | 1 | | | | | |
| 44 | 354710 | Guard, Belt (bottom) | | | | | | | | | | | 1 | | | |
| 45 | 279595 | Bracket, Top Belt Guard Mounting | 1 | | | | 1 | | | | | 1 | | | 1 | |
| 45 | 279968 | Bracket, Top Belt Guard Mounting | | | | | | | | | | | 1 | | | |
| 45 | 274716 | Bracket, Guard Support (Top Right) | 5 | 1 | 1 | | | 5 | 1 | | 1 | 1 | | 1 | 1 | |
| 46 | X-465-6 | Screw, 1/4-20 x 1/2 | | | | | | | | | | | | | | |
| 46 | X-81-1 | Nut, 1/4-20 | | 1 | 1 | | | | 1 | | | | | | | |
| 46 | X-82-2 | Nut, 5/16-18 | | 2 | 2 | | | | 2 | | | | | | | |
| 46 | X-465-2 | Screw, 1/4-20 x 5/8 | | 7 | 7 | | | | 7 | | | | | | | |
| 46 | X-125-3 | Screw, 5/16-18 x 3/4 | | 2 | 2 | | | | 2 | | | | | | | |
| 46 | * | 1/4-20 Hardware | | | | | | | | 1 | 1 | 1 | 2 | 1 | 1 | |
| 46 | * | 5/16-18 Hardware | | | | | | | | 2 | 2 | | | | | |
| 47 | X-20-1 | Washer, Split Lock, 1/4 | 5 | 7 | 7 | | 5 | 7 | | | | | | | | |
| 47 | * | 1/4-20 Hardware | | | | | | | | 1 | 1 | | | | | |
| 47 | * | 5/16-18 Hardware | | | | | | | | 2 | 2 | | | | | |
| 48 | X-6244-1 | Screw, 9/16-12 x 1 | 2 | 3 | 3 | | 2 | 3 | | | | 2 | | | 2 | |
| 48 | * | 1/4-20 Hardware | | | | | | | | 6 | 6 | | 1 | 1 | 6 | |
| 48 | * | 1/4-20 Hardware | | | | | | | | 6 | 6 | | | | | |
| 48 | * | 1/4-20 Hardware | | | | | | | | | | | | | | |
| 49 | X-6238-11 | Screw, Ref., 3/8-16 x 1 | 1 | 1 | 1 | | 1 | 1 | | | | | 1 | | | |
| 49 | * | Screw, 1/4-20 | | | | 1 | | | 1 | | | | | | 6 | |
| 49 | * | Engine Lifting Eye Hardware | | | | | | | | 1 | 1 | | | | | |
| 50 | X-22-1 | Washer, Split Lock, 3/8 | 1 | 1 | 1 | | 1 | 1 | | | | | | | | |
| 50 | * | Engine Lifting Eye Hardware | | | | | | | | 1 | 1 | | | | | |
| 51 | X-25-15 | Washer, Plain, 21/32 x 15/16 x 3/32 | 2 | 3 | 3 | | 2 | | 3 | | | | | | | |
| 52 | X-24-1 | Washer, Split Lock, 5/8 | 2 | 3 | 3 | | 2 | | 3 | | | | | | | |
| 52 | * | Washer, 5/8 | | | | | | | | | | 1 | | | 1 | |
| 52 | * | 1/4-20 Hardware | | | | | | | | | | | 2 | | | |
| 53 | 279970 | Support, Belt Guard | | | | | | | | | | | 1 | | | |
| 54 | X-6238-11 | Screw, h.c. 3/8-16 x 1 | | | | | | | | | | | 2 | | | |
| 55 | * | Washer, 3/8 | | | | | | | | | | | 2 | | | |
| 56 | * | Hardware, 1/4-20 | | | | | | | | | | | 1 | | | |

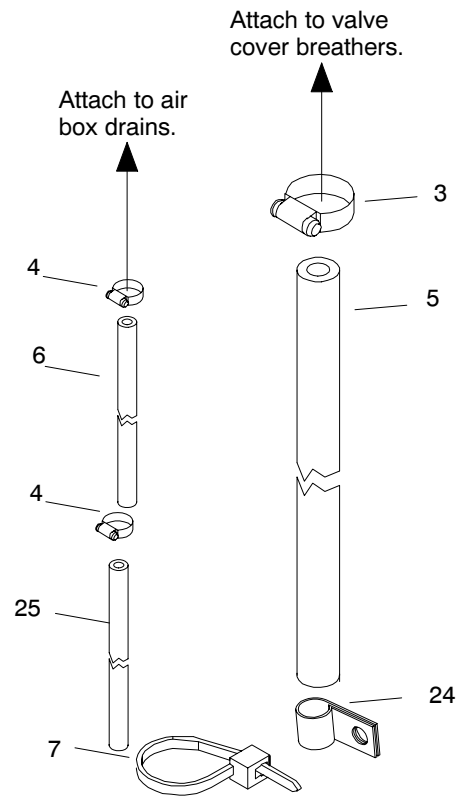
* Common Hardware; Procure Locally

Modular Spec Cross-Reference Table

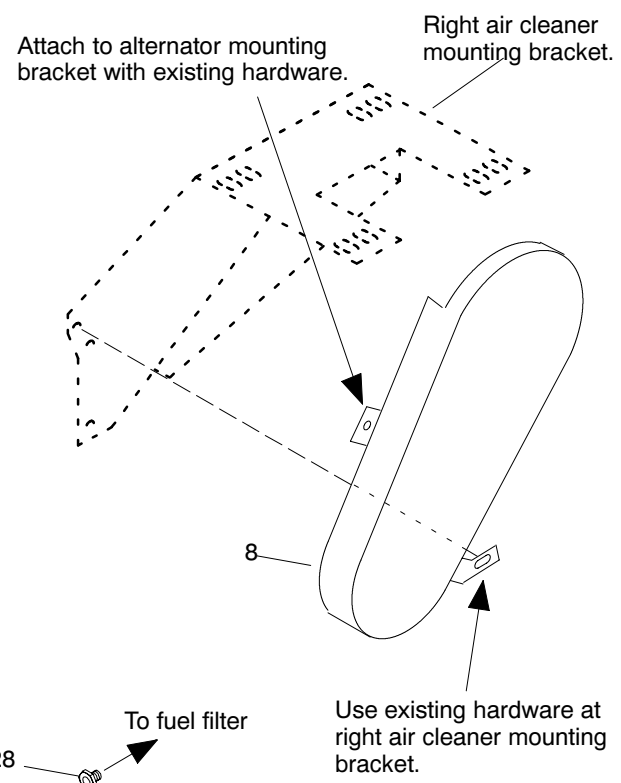
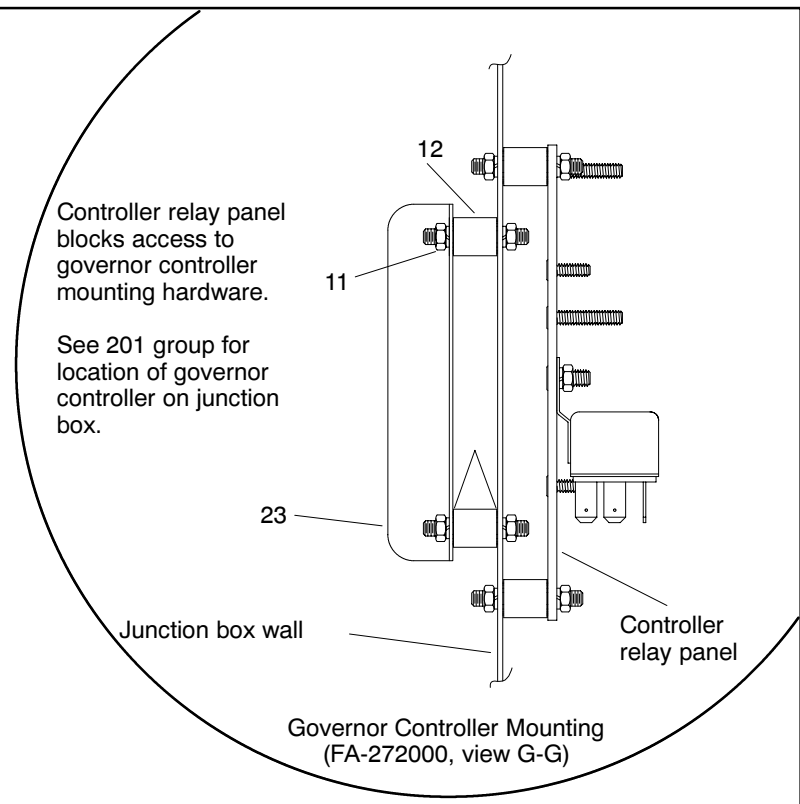
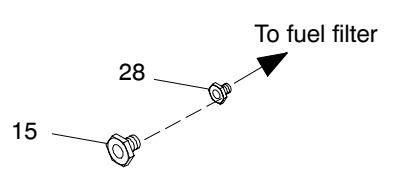
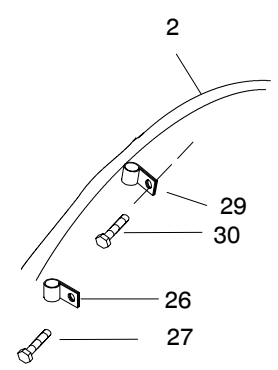
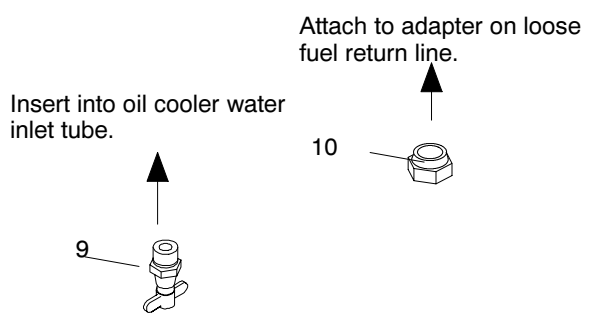
Some modular generator specs listed in the specification number index require a cooling system kit. Refer to the generator set nameplate to identify the kit number installed on your generator set. Use the following table to identify the corresponding variation number. The kit's parts list matches the parts list for the corresponding variation number.

| Cooling System Kit | Equivalent Variation Number |
|--------------------|-----------------------------|
| 347861 | 37 |
| 354108 | 38 |
| 354559 | 57 |
| 354560 | 51 |
| 354608 | 53 |
| 354672 | 56 |
| 354844 | 58 |

Group 105: Engine



Cable ties secure valve cover breather hoses and air box drain lines together at their ends.



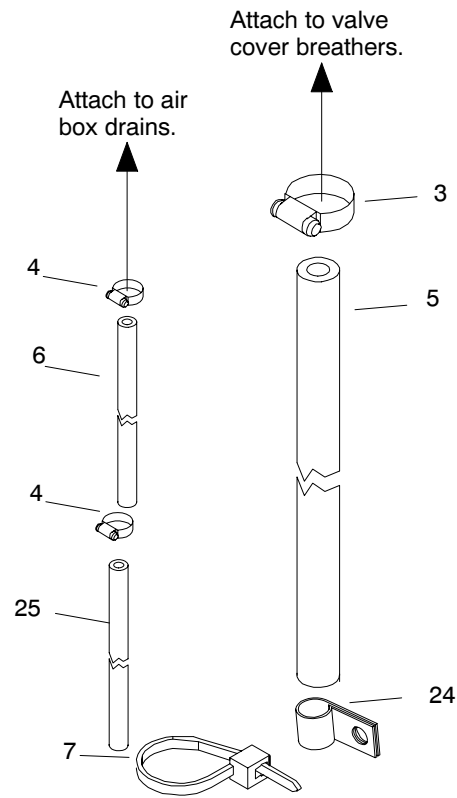
600ROZD
105-70-23
AV-272000

Group 105: Engine, continued

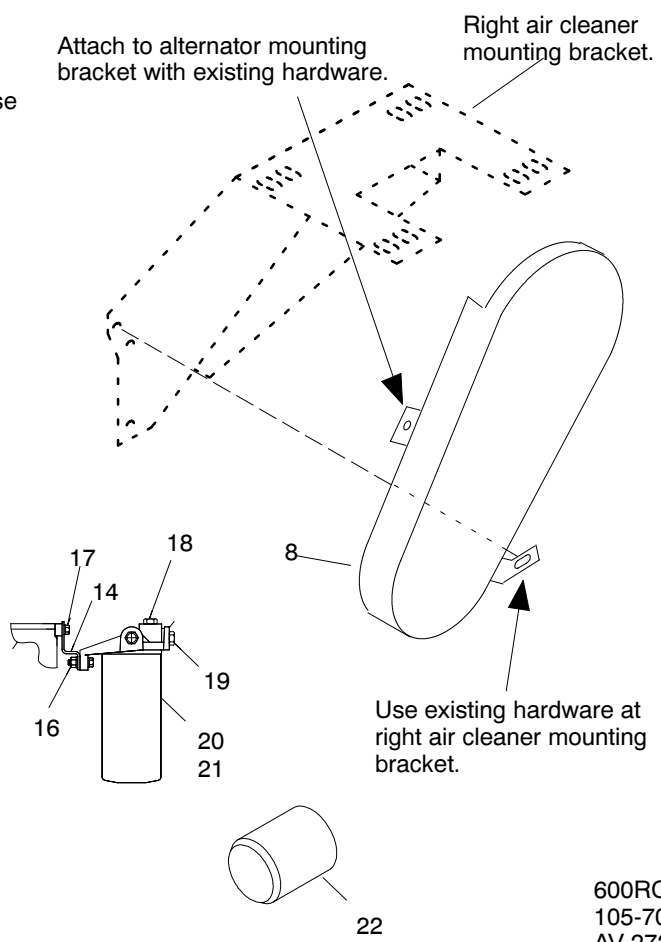
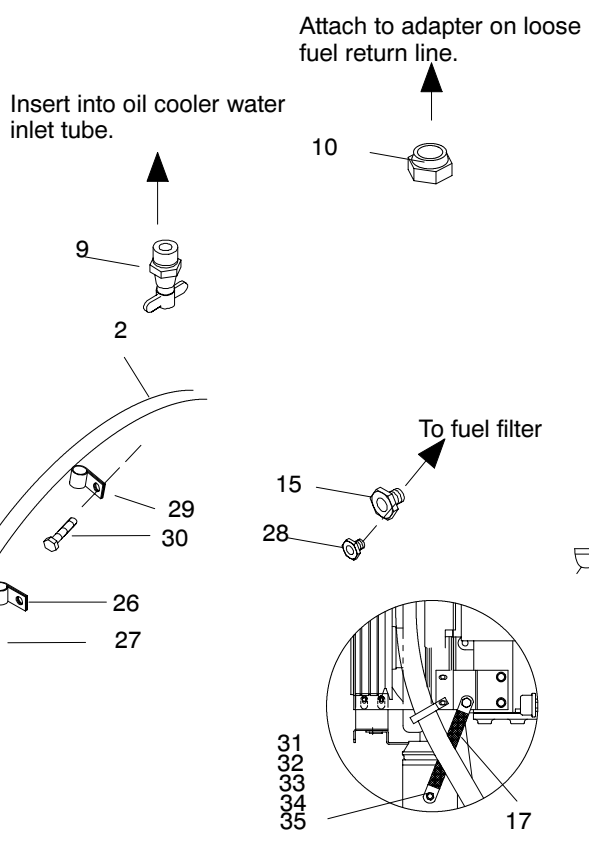
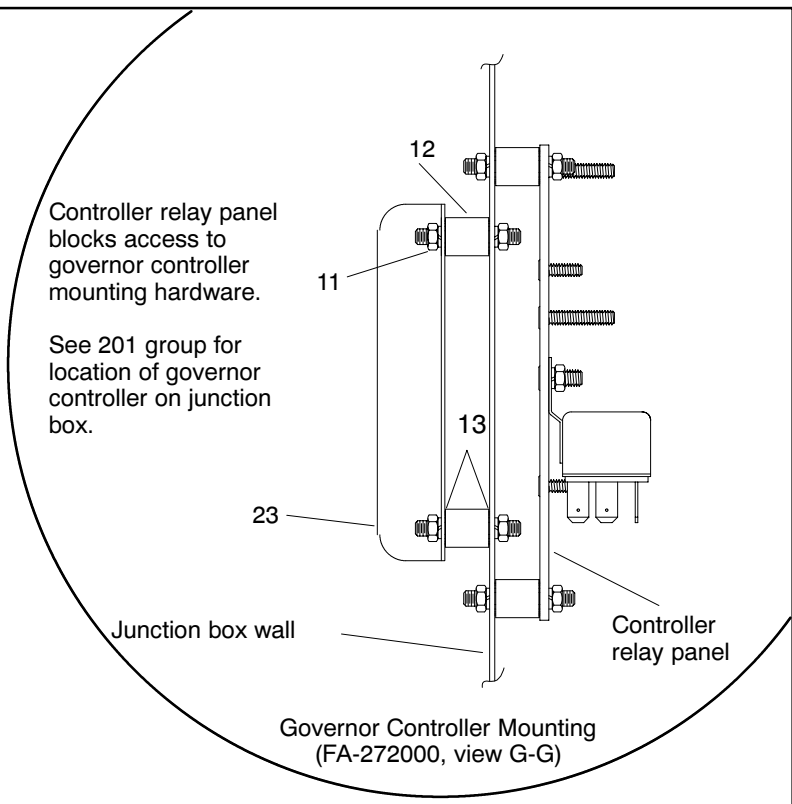
| Item | Part Number | Description | Quantity | | | | | | |
|------|-------------------|---------------------------------------|------------------|----|----|----|----|----|----|
| | | | Variation Number | | | | | | |
| | | | 23 | 24 | 30 | 31 | 39 | 40 | 43 |
| 1 | A-347100 | Engine Assembly (12V-92TA) | 1 | | | | | | |
| 1 | A-272751 | Engine Assembly (16V-92TA) | | 1 | | | | | |
| 1 | A-347099 | Engine Assembly (12V-92TA) | | | | 1 | | | |
| 1 | A-279546 | Engine Assembly (12V-71TA) | | | | | 1 | | |
| 1 | A-274272 | Engine Assembly | | | 1 | | | | |
| 1 | A-347098 | Engine Assembly | | | | | | | 1 |
| 1 | A-347856 | Engine Assembly (16V-92TA) | | | | | | | 1 |
| 1 | A-347101 | Engine Assembly (16V-92TA) | | | | | | | 1 |
| 2 | See Chart Page 21 | Harness, Engine Wiring | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 233959 | Diode, 6 Amp. 100 volt | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 2 | 292370 | Connector, 2 Position | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 292800 | Connector, Cable | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 295145 | Connector, 24 Position | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 292838 | Pin, Female Gold-Plated (as required) | AR | AR | AR | AR | AR | AR | AR |
| 2 | 292879 | Terminal | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 3 | X-426-8 | Clamp, Hose, 1 3/4 | 4 | 4 | 4 | 4 | 2 | 4 | 2 |
| 4 | X-426-9 | Clamp, Hose, 5/8 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 5 | X-6260-2 | Hose, 1.25 ID x 30 L | | | 4 | | | | |
| 5 | X-6260-7 | Hose, 1.25 ID x 32 L | | 4 | | | | | |
| 5 | X-6260-8 | Hose, 1.25 ID x 59 L | | | | | 2 | | 2 |
| 5 | X-6260-5 | Hose, 1.25 ID L | 4 | | | 4 | | 4 | |
| 6 | X-651-27 | Hose, 0.375 ID x 20 L | 4 | | 4 | 4 | 4 | | 4 |
| 6 | X-432-12 | Line, Fuel (not shown) | | | | | 2 | | |
| 6 | X-651-19 | Hose, 0.375 ID x 25 L | | 4 | | | | 4 | |
| 7 | X-468-4 | Tie, Cable 14" | 4 | 4 | 4 | 4 | 2 | 4 | 2 |
| 8 | 274444 | Guard, Belt | 1 | 1 | 1 | 1 | | 1 | |
| 9 | X-256-3 | Valve, Drain 1/4 NPT | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 10 | X-268-3 | Cap, Pipe | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 10 | X-268-9 | Cap, Pipe | | | | | | | |
| 10 | X-514-4 | Fitting (not shown) | | | | | | | |
| 11 | * | Hardware, 8-32 | 4 | 4 | 4 | 4 | | 4 | |
| 12 | 282829 | Mount, Vibro | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 13 | X-22-20 | Washer, Shakeproof, 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 14 | 274227 | Bracket, Fuel Filter (not shown) | | | | | 1 | | 1 |
| 15 | 279676 | Fitting, Fuel 3/8-18 UNS-2B F x 3/8 | | | | | 1 | | 1 |
| 16 | * | Hardware, 3/8-16 (not shown) | | | | | 2 | | 2 |
| 17 | 287363 | Strap, Ground (at starter solenoid) | | | 1 | | 1 | | 1 |
| 18 | X-75-10 | Plug, Pipe, 3/8 (not shown) | | | | | 1 | | 1 |
| 19 | X-75-28 | Plug, Pipe, 1/2 (not shown) | | | | | 3 | | 3 |
| 20 | 328215 | Fuel Filter, Primary | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 21 | 328216 | Fuel Filter, Secondary | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 22 | 279260 | Oil Filter | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 23 | 347840 | Controller, Governor | 1 | | 1 | | | 1 | 1 |
| 24 | X-67-18 | Clamp, Insulated | | | | | | | |
| 25 | X-432-12 | Line, Fuel | | | | | | | |
| 26 | X-672-3 | Clamp, Insulated | | | | | | | |
| 27 | X-6238-10 | Screw, Expense | | | | | | | |
| 28 | X-202-28 | Bushing, Reducer | | | | | | | |
| 29 | X-672-13 | Clamp, Insulated | | | | | | | |
| 30 | X-50-15 | Screw | | | | | | | |
| 30 | * | Washer, 3/8 | | | | | | | |
| 31 | X-6024-2 | Screw (not shown) | | | | | | | |
| 32 | X-22-26 | Washer, Lock 1/2 (not shown) | | | | | | | |
| 33 | * | Washer, 7/16 (not shown) | | | | | | | |
| 34 | X-22-16 | Washer, 5/16 (not shown) | | | | | | | |
| 35 | * | Hardware, 1/4-20 (not shown) | | | | | | | |

* Common hardware; procure locally

Group 105: Engine, continued



Cable ties secure valve cover breather hoses and air box drain lines together at their ends.



600ROZD
105-70-23
AV-272000

Group 105: Engine, continued

| Item | Part Number | Description | Quantity | | | | | | |
|------|-----------------|---------------------------------------|------------------|----|----|----|----|----|-----|
| | | | Variation Number | | | | | | |
| | | | 64 | 65 | 66 | 68 | 69 | 89 | 101 |
| 1 | A-354619 | Engine Assembly | 1 | | | | | | |
| 1 | A-347099 | Engine Assembly | | 1 | | | | | |
| 1 | A347100 | Engine Assembly | | | 1 | | | | |
| 1 | A-347856 | Engine Assembly (16V-92TA) | | | | 1 | | | 1 |
| 1 | A-347101 | Engine Assembly (16V-92TA) | | | | | 1 | 1 | |
| 2 | See Chart Below | Harness, Engine Wiring | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 233959 | Diode, 6 Amp, 100 Volt | 4 | 3 | 3 | 4 | 4 | 4 | 4 |
| 2 | 292370 | Connector, 2 Position | | | | 1 | 1 | 1 | 1 |
| 2 | 292800 | Connector, Cable | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 295145 | Connector, 24 Position | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 292838 | Pin, Female Gold-Plated (as required) | AR | AR | AR | AR | AR | AR | AR |
| 2 | 292879 | Terminal | 3 | 3 | 3 | 4 | 4 | 4 | 4 |
| 3 | X-426-8 | Clamp, Hose, 1 3/4 | 2 | 4 | 4 | 4 | 4 | 4 | 4 |
| 4 | X-426-9 | Clamp, Hose, 5/8 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 5 | X-6260-8 | Hose, 1.25 ID L | 2 | | | | | | |
| 5 | X-6260-5 | Hose, 1.25 ID L | | 4 | 4 | 4 | 4 | 4 | 4 |
| 6 | X-651-27 | Hose, 0.375 ID x 20 L | 2 | 4 | 4 | | | | |
| 6 | X-651-19 | Hose, 0.375 ID x 25 L | | | | 4 | 4 | 4 | 4 |
| 7 | X-468-4 | Tie, Cable, 14" | 2 | 4 | 4 | 4 | 4 | 4 | 4 |
| 8 | 274444 | Guard, Belt | | 1 | 1 | 1 | 1 | 1 | 1 |
| 9 | X-256-3 | Valve, Drain, 1/4 NPT | 1 | 1 | 1 | | 1 | 1 | 1 |
| 10 | X-268-9 | Cap, Pipe | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 10 | X-514-4 | Fitting (not shown) | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 11 | * | Hardware, 8-32 | 8 | 1 | 1 | 4 | 4 | 8 | 8 |
| 12 | 282829 | Mount, Vibro | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 13 | X-22-20 | Washer, Shakeproof, 8 | 8 | | | 8 | 8 | 8 | |
| 14 | 274227 | Bracket, Fuel Filter | 1 | | | | | | |
| 15 | 279676 | Fitting, Fuel, 3/8-18 UNS-2B F x 3/8 | 1 | | | | | | |
| 16 | * | Hardware, 3/8-16 | 2 | | | | | | |
| 17 | 287363 | Strap, Ground (at starter solenoid) | 1 | 1 | 1 | | | 2 | 2 |
| 17 | X-22-14 | Washer, Lock | | 2 | 2 | | | 2 | 2 |
| 17 | X-6238-11 | Bolt, Hex Cap | | 1 | 1 | | | 2 | 2 |
| 17 | X-6042-2 | Bolt, Hex Cap | 1 | | | | | | |
| 18 | X-75-10 | Plug, Pipe, 3/8 | 1 | | | | | | |
| 19 | X-75-28 | Plug, Pipe, 1/2 | 3 | | | | | | |
| 20 | 328215 | Fuel Filter, Primary | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 21 | 328216 | Fuel Filter, Secondary | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 22 | 279260 | Oil Filter | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 23 | 347840 | Controller, Governor | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 24 | X-672-18 | Clamp, Insulated | 2 | | | | | | |
| 25 | X-432-12 | Line, Fuel | 1 | | | | | | |
| 26 | X-672-3 | Clamp, Insulated | 1 | | | | | | |
| 26 | X-268-9 | Clamp, Insulated | | | | | | 1 | |
| 27 | X-6238-10 | Screw, 3/8-16 x 3/4 | 1 | | | | | 1 | |
| 28 | X-202-28 | Bushing, Reducer | 1 | | | | | | |
| 29 | X-672-13 | Clamp, Insulated | 1 | 1 | 1 | 1 | 1 | 1 | |
| 30 | X-50-15 | Screw, #10-24 x 1/2 | | 1 | 1 | 1 | 1 | | |
| 30 | X-6238-10 | Screw, 3/8-16 x 3/4 | 1 | | | | | | |
| 30 | * | Washer, 3/8 | 1 | | | | | | |
| 31 | X-6024-2 | Screw, 7/16-14 x 1 | 1 | | | | | | |
| 32 | X-22-26 | Washer, Lock 1/2 | 1 | | | | | | |
| 33 | * | Washer, 7/16 | 1 | | | | | | |
| 34 | X-22-16 | Washer, 5/16 | 1 | | | | | | |
| 35 | * | Hardware, 1/4-20 | 1 | | | | | | |

* Common hardware; procure locally

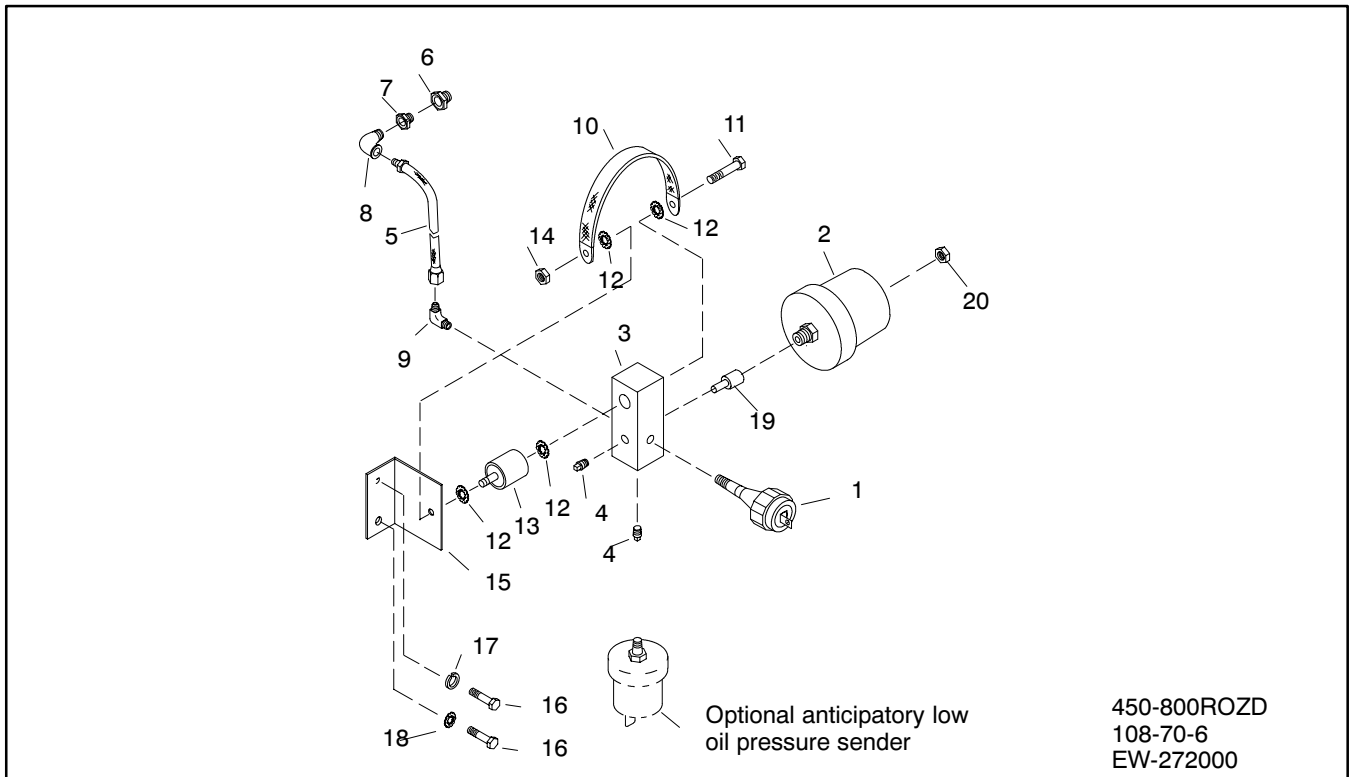
Serial Number-Contingent Engine Parts

| Variations | Wiring Harness Part Number | |
|-----------------|-----------------------------|---------------------------------|
| | Before Serial Number 363369 | Serial Numbers 363369 and After |
| 23, 30, 31 | 347163 | 347358 |
| 24, 40 | 347162 | 347303 |
| 39, 43 | 279263 | 347357 |
| 68, 69, 89, 101 | NA | 347303 |
| 64 | NA | 347357 |
| 65, 66 | NA | 347358 |

Group 107: Nameplates and Decals

| Item | Part Number | Description | Quantity | | | | | | | | | | |
|------|-------------|---|----------------------|----|----|----|----|----|----|----|----|----|---|
| | | | Variation/Kit Number | | | | | | | | | | |
| | | | 9 | 12 | 13 | 14 | 15 | 47 | 48 | 49 | 67 | 71 | |
| 1 | 238402 | Decal, Positive Terminal | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 249809 | Decal, Warning (hot engine) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | X-67-5 | Screw, Drive, 2 x 3/16 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| 4 | X-6275-3 | Logo, Kohler | 1 | | | 2 | | | | | | | |
| 4 | X-6275-7 | Logo, Kohler | | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 4 | X-6275-8 | Logo, Kohler | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | X-6276-8 | Logo, Kohler | | | | | | | | | | | 1 |
| 5 | 224234 | Decal, 1-800 Number | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 | 257438 | Decal, Danger: Haz. Volt./Moving Rotor | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 7 | 258815 | Decal, Warning: Haz. Volt./Backfeed | 1 | 1 | 1 | 1 | 1 | | | | | | |
| 8 | 249808 | Decal, Warning: Rotating Parts | | | | 1 | | | | | | | |
| 9 | 279598 | Tag, Caution: Manually Operate Air Dampers | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | |
| 10 | 279564 | Tag, Caution: Do Not Stand on Connecting Rods | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | |
| 11 | 279986 | Nameplate | | 1 | 1 | 1 | 1 | | | | | | |
| 11 | 291536 | Nameplate | 1 | | | | | | | | | | |
| 11 | 327004 | Nameplate | | | | | | | | | | 1 | |
| 12 | X-6332-2 | Decal, Stripes | | | | | | | | | | | |
| 12 | X-6232-6 | Decal, Stripes | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 12 | X-6232-7 | Decal, Stripes | | | | | 1 | | | | 1 | | |
| 13 | 293990 | Decal, Caution | 1 | 1 | 1 | | | 1 | 1 | | | | |
| 14 | X-6246-1 | Decal, Kohler Power Systems | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 15 | X-6347-1 | Decal, kW | | 1 | | | | | | | | | |
| 15 | X-6347-4 | Decal, kW | | | 1 | | | | | | | | |
| 15 | X-6347-6 | Decal, kW | | | | | 1 | | | | | | |
| 15 | X-6347-3 | Decal, kW | | | | | | 1 | | | | | |
| 15 | X-6347-5 | Decal, kW | | | | | | | 1 | | | | |
| 15 | X-6347-7 | Decal, kW | | | | | | | | 1 | | | |
| 16 | 347272 | Decal, Power | | 1 | 1 | | 1 | 1 | 1 | 1 | 2 | 2 | 2 |
| 17 | 347273 | Decal, System | | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 18 | 255822 | Decal | | | | | | | | | | | 1 |
| 19 | 274323 | Decal, Warning: Rotating Parts | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 20 | 347166 | Decal, CSA | | | | | | 1 | 1 | 1 | 1 | 1 | 1 |
| 21 | 249810 | Decal, Warning: Hot Coolant | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 22 | 255798 | Tag, Instruction | | | | | | 1 | 1 | 1 | 1 | 1 | 1 |
| 23 | 255882 | Decal, Caution: Transfer Switch Connection | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 24 | 293990 | Decal, Caution: Lifting Support | 1 | 1 | 1 | | | 1 | 1 | | | 1 | 1 |

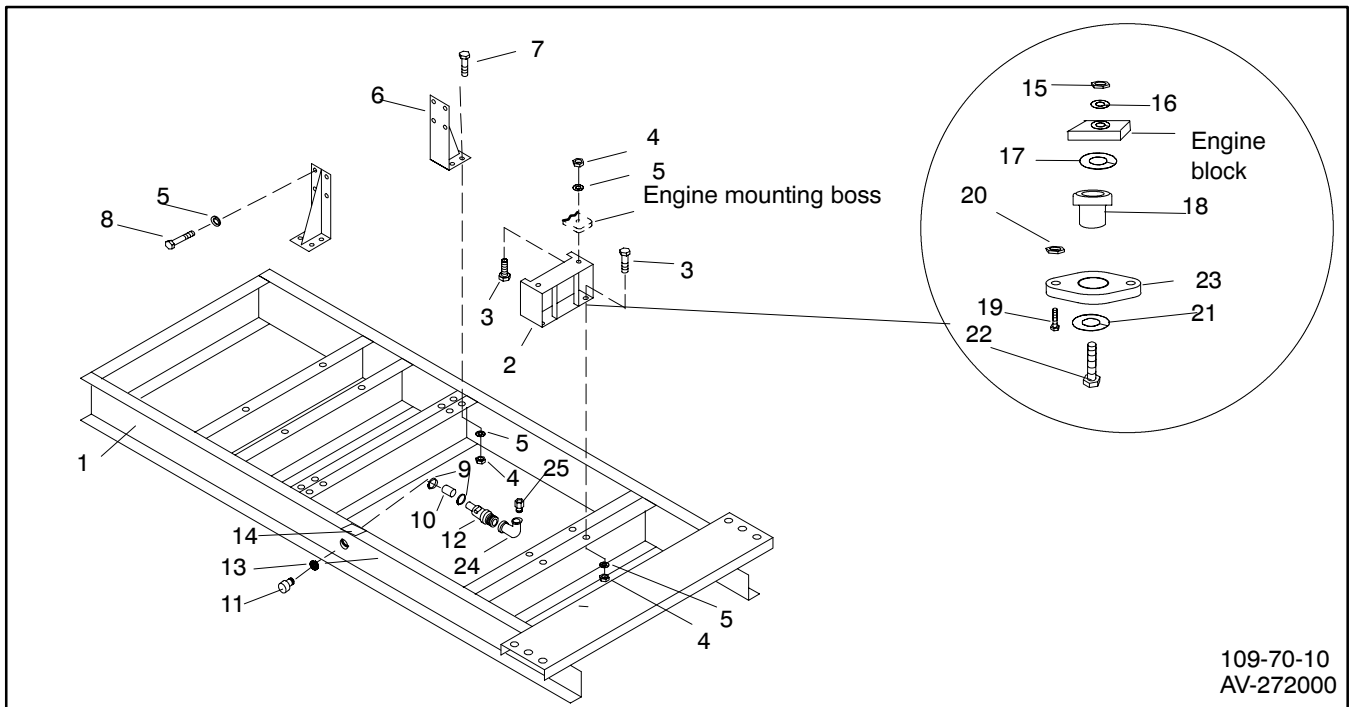
Group 108: Oil Pressure Switches



| Item | Part Number | Description | Quantity | | | | | | | | | |
|------|-------------|---|------------------|----|----|-----|-----|-----|-----|-----|-----|------|
| | | | Variation Number | | | | | | | | | |
| | | | 6 | 10 | 13 | E64 | E65 | E66 | E68 | E69 | E89 | E101 |
| 1 | 328309 | Switch, Oil Pressure | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 264390 | Sender, Oil Pressure | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | 267548 | Block, Oil Gauge | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | X-75-4 | Plug, Pipe (brass), 1/8 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 1 |
| 4 | X-75-1 | Plug, Pipe (steel), 1/8 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 1 |
| 5 | 239728 | Line, Flex Fuel, 7/16-20 F x 1/8 NPTF M x 8 L | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 | 153659 | Bushing, Reducer, 1/2 F x 3/4 M | | | | | | | 1 | 1 | | |
| 6 | X-202-56 | Bushing, Reducer, 1/8 F x 3/4 M | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 7 | X-202-29 | Bushing, Reducer, 1/8 F x 1/2 M | | | | | | | 1 | 1 | | |
| 8 | X-211-10 | Elbow, Street, 1/8 NPTF | 1 | | | | | | 1 | 1 | | |
| 8 | X-555-2 | Elbow, Street, 1/8 PTF | | | | 1 | 1 | 1 | | | 1 | 1 |
| 9 | X-447-10 | Elbow, 90°, 7/16-20 x 1/8 NPT | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 10 | 223033 | Strap, Ground, 3/8 x 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 11 | X-465-8 | Screw, 1/4-20 x 1 1/4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 12 | X-22-12 | Washer, Int./Ext. Tooth Lock, 1/4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 13 | 259632 | Bumper | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 14 | * | Nut, 1/4-20 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 15 | 274299 | Bracket, Sender | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 16 | X-6238-11 | Screw, 3/8-16 x 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 |
| 17 | * | Washer, Split Lock, 3/8 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| 18 | X-22-14 | Washer, Int./Ext. Tooth Lock, 3/8 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 4 | 4 |
| 19 | 267429 | Adapter, Restricted Pipe | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 20 | * | Nut, 10-32 | | | | 2 | 2 | 2 | | | 2 | 2 |

* Common Hardware; Procure Locally

Group 109: Skid and Plant Mounting



| Item | Part Number | Description | Quantity | | | | | | | | | | | | | | |
|------|-------------|-------------------------------|------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|---|
| | | | Variation Number | | | | | | | | | | | | | | |
| | | | 10 | 11 | 20 | 25 | 27 | 29 | 31 | 48 | 49 | 50 | 58 | 59 | 73 | 74 | |
| 1 | 279522 | Skid | 1 | | | | | | | | | | | | | | |
| 1 | 279523 | Skid | | 1 | | | | | | | | | | | | | |
| 1 | 279472 | Skid | | | 1 | | | | | | | | | | | | |
| 1 | 279867 | Skid | | | | 1 | | | | | | | | | | | |
| 1 | 279985 | Skid | | | | | 1 | 1 | | | | | | | | | |
| 1 | 299941 | Skid | | | | | | | | 1 | | | | | | | |
| 1 | 354599 | Skid | | | | | | | | | 1 | | | | | | |
| 1 | 354534 | Skid | | | | | | | | | | 1 | | | | | |
| 1 | 354535 | Skid | | | | | | | | | | | 1 | | | | |
| 1 | 347827 | Skid | | | | | | | | | | | | 1 | | | |
| 1 | 354170 | Skid | | | | | | | | | | | | | 1 | | |
| 1 | 354808 | Skid | | | | | | | | | | | | | | 1 | |
| 1 | 354843 | Skid | | | | | | | | | | | | | | | 1 |
| 2 | 328235 | Support, Front Engine | 1 | 1 | | 1 | 1 | | | | | | | | | | |
| 2 | 279473 | Support, Front Engine | | | 1 | | | | | | | | | | | | |
| 2 | 279866 | Support, Front Engine | | | | 1 | | | | | | | | | | | |
| 2 | 299935 | Support, Front Engine | | | | | | | | 1 | | | | | | | |
| 2 | 328235 | Support, Front Engine | | | | | | | | | | | 1 | 1 | | | 1 |
| 2 | 354521 | Support, Front Engine | | | | | | | | | | 1 | 1 | | | 1 | 1 |
| 2 | 354589 | Support, Front Engine | | | | | | | | | 1 | | | | | | |
| 2 | X-25-30 | Washer, Plain (not shown) | | | | | | | | 4 | | | | | | | |
| 2 | 274266 | Mount, Vibro (not shown) | | | | | | | | 2 | | | | | | | |
| 2 | 286020 | Damper, Vibration (not shown) | | | | | | | | 2 | | | | | | | |
| 3 | X-6021-5 | Screw, 5/8-11 x 2 1/4 | 4 | 4 | | | 4 | 4 | | | | | | | | | |
| 3 | X-6021-6 | Screw, 5/8-11 x 2 1/2 | 2 | 2 | 6 | | 2 | 2 | | | | | | | | | |
| 3 | * | Hardware, 5/8-11 | | | | 4 | | | | | 4 | 6 | 6 | 6 | 6 | 6 | 6 |
| 4 | X-85-3 | Nut, 5/8-11 | 1 | 1 | 1 | | 1 | 1 | | | | | | | | | |
| 5 | X-24-1 | Washer, Split Lock, 5/8 | 2 | 2 | 2 | | 2 | 2 | | | | | | | | | |
| 5 | X-801-5 | Washer, Hardened | 4 | 4 | 4 | | | 4 | | | | | | | | 4 | 4 |
| 6 | 272864 | Support, Rear Engine | | | | | | 2 | | | | | | | | | |
| 6 | 274316 | Support, Rear Engine | | | | 2 | | | | | | | | | | | |
| 7 | 273049 | Screw, 5/8-11 x 2 | 8 | 8 | | | | 8 | 8 | | | | | | | | |
| 8 | X-6021-2 | Screw, 5/8-11 x 1 1/2 | 8 | 8 | 8 | | | 8 | 8 | | | | | | | | |
| 9 | X-426-10 | Clamp, Hose | | | | | | | | | | | 2 | 2 | 2 | 2 | 2 |
| 9 | X-426-3 | Clamp, Hose | | | | | | | | | | 2 | 2 | | | | |
| 10 | X-577-35 | Hose, Oil Drain | | | | | | | | 1 | 1 | | | 1 | 1 | 1 | 1 |
| 10 | X-577-44 | Hose, Oil Drain | | | | | | | | | | | | | | | |
| 10 | X-577-36 | Hose, Oil Drain | | | | | | | | | | 1 | 1 | | | | |
| 11 | 241062 | Plug, Drain | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 12 | 272701 | Valve, Oil Drain | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

* Common Hardware; Procure Locally

Group 109: Skid and Plant Mounting, continued

| Item | Part Number | Description | Quantity | | | | | | | | | | | | | | |
|------|-------------|---------------------------------|------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|---|
| | | | Variation Number | | | | | | | | | | | | | | |
| | | | 10 | 11 | 20 | 25 | 27 | 29 | 31 | 48 | 49 | 50 | 58 | 59 | 73 | 74 | |
| 13 | 276552 | Washer, Nylon | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 |
| 14 | 280562 | Decal, Oil Drain | | | | | | | | | | 1 | 1 | 1 | 1 | | |
| 15 | X-101-15 | Nut, Elastic Stop, 5/8 | | | | | | | | | | 2 | | | | | |
| 16 | X-801-5 | Washer, Hardened, 13/20 ID 1 OD | | | | | | | | | | 2 | | | | | |
| 17 | X-25-148 | Washer, Plain, .64 ID 3.5 OD | | | | | | | | | | 2 | | | | | |
| 18 | 354261 | Mount, Vibration | | | | | | | | | | 2 | | | | | |
| 19 | X-129-21 | Bolt, h.c. 1/2-13 x 2 | | | | | | | | | | 4 | | | | | |
| 20 | * | Nut, 1/2-13 | | | | | | | | | | 4 | | | | | |
| 21 | X-25-149 | Washer, Plain .64 ID 2.5 OD | | | | | | | | | | 2 | | | | | |
| 22 | X-6021-11 | Screw, h.c. 5/8-11 x 4.5 | | | | | | | | | | 2 | | | | | |
| 23 | 354718 | Plate, Generator Mounting | | | | | | | | | | 2 | | | | | |
| 24 | X-211-1 | Elbow, Street | | | | | | | | | | 1 | 1 | 1 | | | |
| 25 | X-202-41 | Bushing, Reducer | | | | | | | | | | 1 | 1 | 1 | | | |

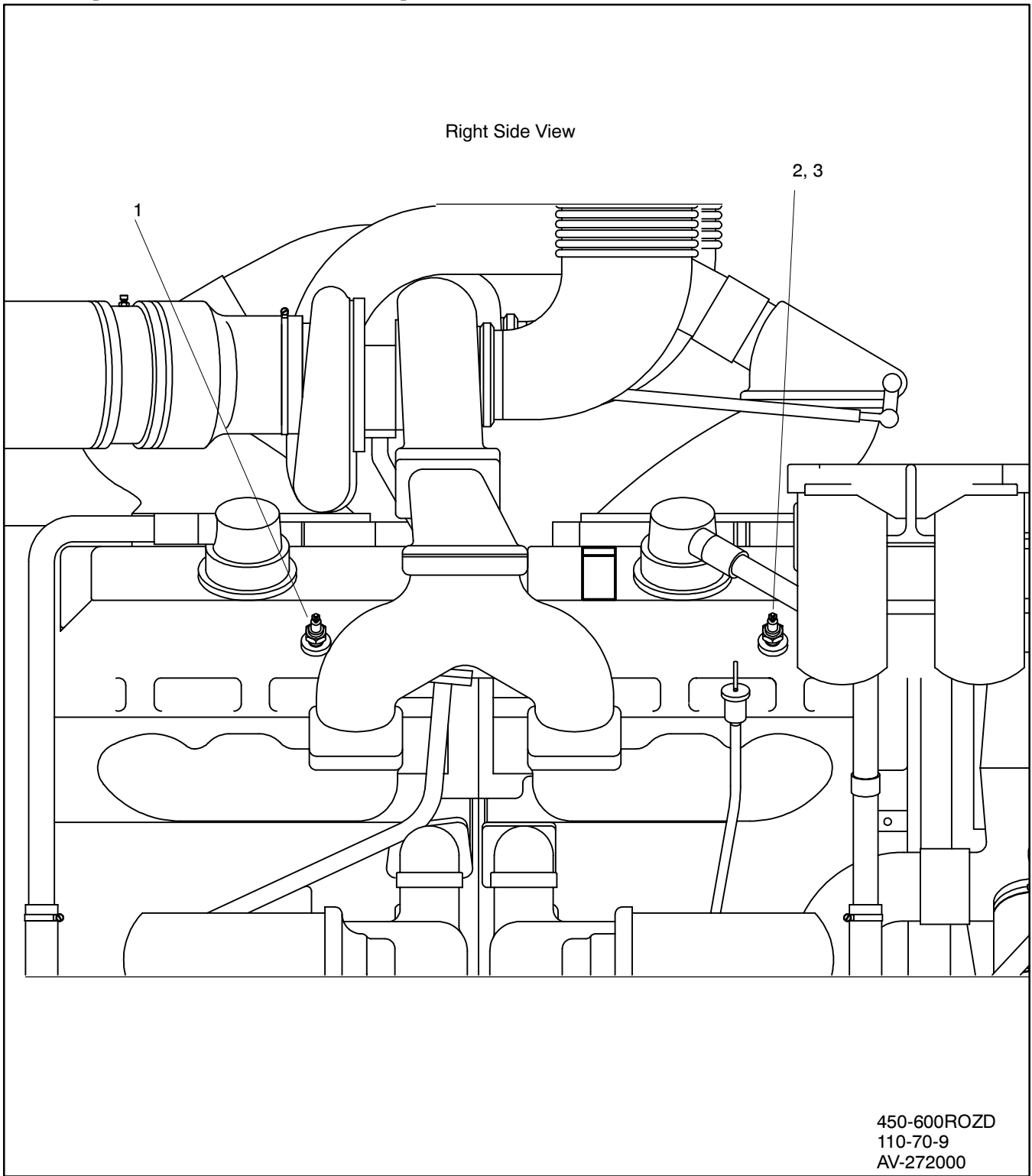
* Common Hardware; Procure Locally

Modular Spec Cross-Reference Table

Some modular generator specs listed in the specification number index require a skid kit. Refer to the generator set nameplate to identify the kit number installed on your generator set. Use the following table to identify the equivalent variation number. The kit's parts list matches the parts list for the equivalent variation number.

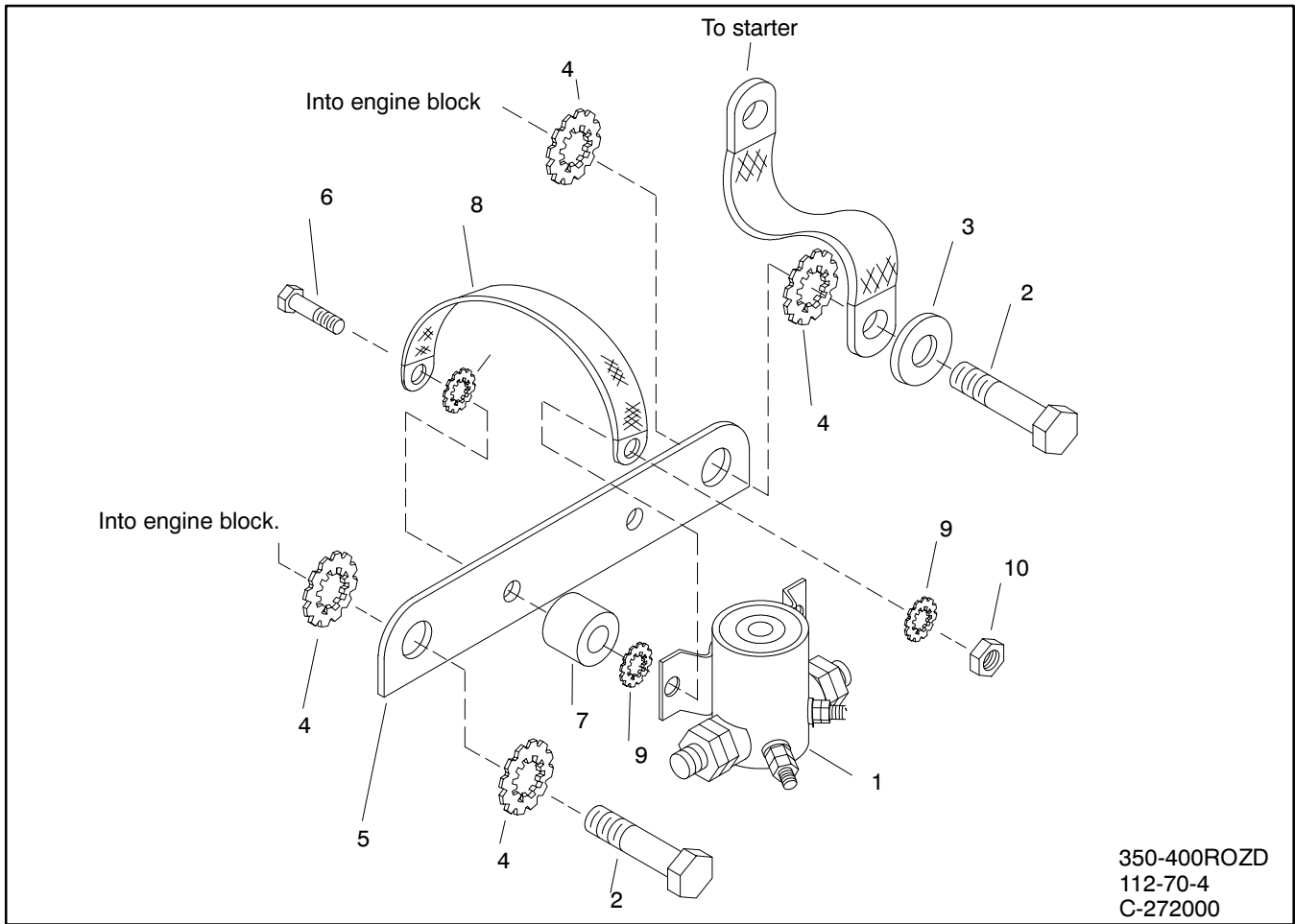
| Skid Kit | Equivalent Variation Number |
|----------|-----------------------------|
| 347368 | 48 |
| 347370 | 49 |
| 347400 | 59 |
| 347380 | 50 |
| 347862 | 59 |
| 354673 | 56 |
| 354845 | 74 |

Group 110: Water Temperature Switches



| Item | Part Number | Description | Quantity | | | | | | | | | | |
|------|-------------|------------------------------------|----------------------|----|----|----|-----|-----|-----|-----|-----|-----|------|
| | | | Variation/Kit Number | | | | | | | | | | |
| | | | 9 | 10 | 11 | 12 | E64 | E65 | E66 | E68 | E69 | E89 | E101 |
| 1 | 268298 | Sender, Water Temperature | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 241481 | Switch, Water Temperature Shutdown | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | 153659 | Bushing, Reducer, 1/2 F x 3/4 M | | 1 | | 1 | 1 | | | | | | |

Group 112: Starter



350-400ROZD
112-70-4
C-272000

| Item | Part Number | Description | Quantity | | | | | | | | | |
|------|-------------|-----------------------------------|----------------------|----|----|-----|-----|-----|-----|-----|-----|------|
| | | | Variation/Kit Number | | | | | | | | | |
| | | | 4 | 5 | 9 | E64 | E65 | E66 | E68 | E69 | E89 | E101 |
| 1 | 272713 | Solenoid, Cranking | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| 2 | X-6238-11 | Screw, 3/8-16 x 1 | 4 | 6 | 6 | 2 | 2 | 2 | 2 | 2 | 4 | 4 |
| 3 | X-25-37 | Washer, Plain, 13/32 x 13/16 | 1 | 4 | 4 | | | | | | | |
| 3 | * | Washer, 3/8 | | | | 1 | 1 | 1 | | | 2 | 2 |
| 4 | X-22-14 | Washer, Int./Ext. Tooth Lock, 3/8 | 4 | 10 | 10 | 4 | 2 | 2 | 10 | 10 | 4 | 4 |
| 5 | 272762 | Bracket, C-Relay | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| 6 | X-465-6 | Screw, 1/4-20 x 1/2 | 2 | 4 | 4 | 2 | 1 | 1 | 2 | 2 | 2 | 2 |
| 7 | 259632 | Bumper | 2 | 4 | 4 | 2 | 2 | 2 | 4 | 4 | 4 | 4 |
| 8 | 223033 | Strap, Ground, 5" | 1 | 2 | 2 | 1 | 1 | 1 | | | 2 | 2 |
| 8 | 287363 | Strap, Ground, 8" | 1 | 2 | 2 | | | | 2 | 2 | | |
| 9 | X-22-12 | Washer, Int./Ext. Tooth Lock, 1/4 | 5 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 10 | * | Nut, 1/4-20 | 2 | 4 | 4 | 2 | 2 | 2 | 4 | 4 | 4 | 4 |

* Common Hardware; Procure Locally

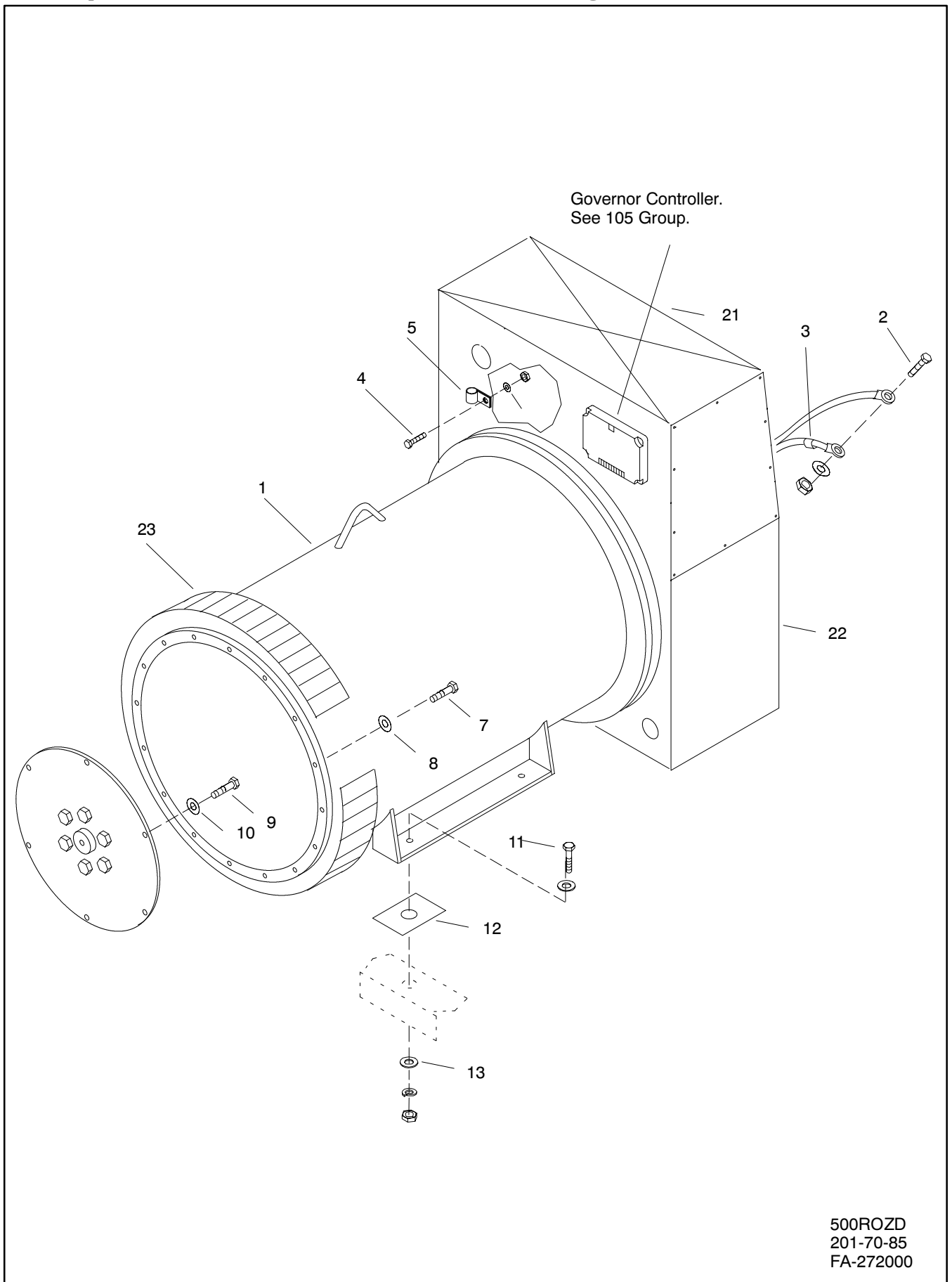
Recommended Spare Parts

| Part Description | Model/Spec | | | | |
|-----------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| | 450ROZD spec 132531 | 500ROZD spec 132536 | 600ROZD spec 132543 | 750ROZD spec 132668 | 800ROZD spec 132678 |
| Fuse, 1.5 Amp | 291207 | 291207 | 291207 | 291207 | 291207 |
| Fuse, 3 Amp | 243273 | 243273 | 243273 | 243273 | 243273 |
| Fuse, 15 Amp | 283645 | 283645 | 283645 | 283645 | 283645 |
| Voltage Regulator | 328725 | 328725 | 328725 | 328725 | 328725 |
| Main Circuit Board | A-336415 | A-336415 | A-336415 | A-336415 | A-336415 |
| Indicator Board | A-336432 | A-336432 | A-336432 | A-336432 | A-336432 |
| Speed Sensor | 291288 | 291288 | 291288 | 291288 | 291288 |
| Bulb | 283420 | 283420 | 283420 | 283420 | 283420 |
| Lamp | 291740 | 291740 | 291740 | 291740 | 291740 |
| Upper Radiator Hose | X-6014-69 | X-6014-53 | X-6014-53 | X-507-6 | X-507-6 |
| Lower Radiator Hose | X-6017-70 | 272988 | 272988 | 272988 | 272971 |
| Belt Set | | 347702 | | | |
| Thermostat | 328585 | 328585 | 328585 | 328585 | 328585 |
| Thermostat Seal | 328586 | 328586 | 328586 | 328586 | 328586 |
| Thermostat Gasket | 328587 | 328587 | 328587 | 347335 | 347335 |
| Air Cleaner | 272981 | 272981 | 272981 | 274821 | 274683 |
| Primary Fuel Filter | 328215 | 328215 | 328215 | 328215 | 328215 |
| Secondary Fuel Filter | 328216 | 328216 | 328216 | 328216 | 328216 |
| Oil Filter | 279260 | 279260 | 279260 | 279260 | 279260 |

Maintenance Kit 328746 includes 272981 (2), 279260 (2), 328215, and 328216.

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Group 201: Generator and Mounting



500ROZD
201-70-85
FA-272000

Group 201: Generator and Mounting, continued

| Item | Part Number | Description | Quantity | | | | | | | | | | | | | | |
|------|-------------|---------------------------------------|----------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | Variation/Kit Number | | | | | | | | | | | | | | |
| | | | 49 | 85 | 86 | 87 | 88 | 89 | 89 | 90 | 91 | 92 | 92 | 93 | | | |
| 1 | A-292473 | Alternator Assembly† | 1 | | | | | | | | | | | | | | |
| 1 | B-292439 | Alternator Assembly† | | 1 | | | | | | | | | | | | | |
| 1 | B-292440 | Alternator Assembly† | | | 1 | | | | | | | | | | | | |
| 1 | B-292472 | Alternator Assembly† | | | | 1 | | | | | | | | | | | |
| 1 | A-279976 | Alternator Assembly† | | | | | 1 | | | | | | | | | | |
| 1 | B-292441 | Alternator Assembly† | | | | | | 1 | | | | | | | | | |
| 1 | B-279587 | Alternator Assembly† | | | | | | | 1 | | | | | | | | |
| 1 | B-292442 | Alternator Assembly† | | | | | | | | 1 | | | | | | | |
| 1 | B-292443 | Alternator Assembly† | | | | | | | | | 1 | | | | | | |
| 1 | B-279909 | Alternator Assembly† | | | | | | | | | | 1 | | | | | |
| 1 | A-279977 | Alternator Assembly† | | | | | | | | | | | | | 1 | | |
| 1 | B-292444 | Alternator Assembly† | | | | | | | | | | | | | | 1 | |
| 2 | * | Hardware, 3/8-16 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | X-750-14 | Marker, L1 Lead | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | X-750-15 | Marker, L2 Lead | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | X-750-16 | Marker, L3 Lead | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | X-50-15 | Screw, r.h.m. 10-24 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 5 | X-672-13 | Clamp, Insulated, 7/8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 | * | Hardware, 10-24 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 7 | X-129-20 | Screw, ref. 1/2-13 x 1 3/4 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| 8 | 290945 | Washer, Hardened, 17/32 x 1 1/16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| 9 | X-6021-13 | Screw, ref. 5/8-11 x 1 3/4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 10 | X-801-5 | Washer, Hard., 21/32 x 1 1/16 x 3/32 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 11 | * | Hardware, 3/4-10 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 12 | 290743 | Shim, 16 ga. | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 12 | 290744 | Shim, 7 ga. | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| 12 | 291191 | Shim, 0.010 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 13 | X-801-8 | Washer, Hardened | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 14 | 279864 | Mount, Vibration (not shown) | | | | | 2 | | | | | | | | | | |
| 15 | X-400-182 | Spacer, 0.656 ID x 3.94 L (not shown) | | | | | 2 | | | | | | | | | | |
| 16 | * | Hardware, 5/8-11 (not shown) | | | | | 2 | | | | | | | | | | |
| 17 | 279865 | Support, Generator (not shown) | | | | | 1 | | | | | | | | | | |
| 18 | 274314 | Support, Generator (not shown) | | | | | | | | | | | | | | | |
| 19 | * | Hardware, 3/4-10 (not shown) | | | | | | | | | | | | | | | |
| 20 | X-6217-10 | Screw, Hex Flange (not shown) | | | | | | | | | | | | | | | |
| 21 | 328897 | Cover, Top Back | | | | | | | | | | | | | | | |
| 22 | 328900 | Cover, Louvered | | | | | | | | | | | | | | | |
| 23 | 328890 | Screen | | | | | | | | | | | | | | | |

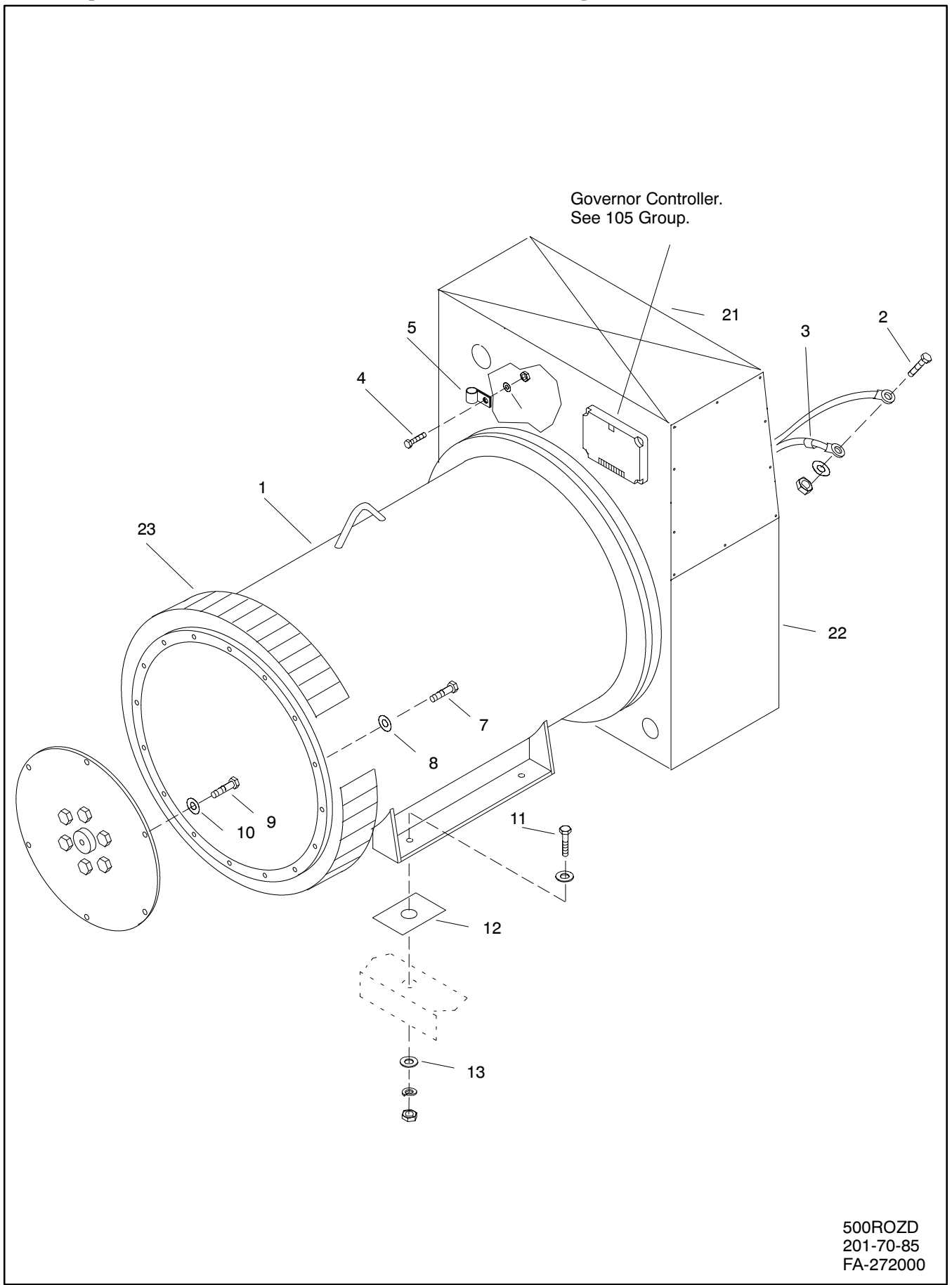
* Common hardware; procure locally

Alternator Assembly Components

† Alternator assembly includes the parts listed in the table below. Parts are not shown on the illustration.

| Part Description | Part Number |
|---|-------------|
| Exciter Rectifier Assembly (includes diodes and surge suppressor) | 347071 |
| Diode, Standard Polarity | 279772 |
| Diode, Reversing Polarity | 279774 |
| Surge Suppressor | 279776 |
| Capacitor | 347160 |
| Fuse, 5 Amp | 279778 |
| Fuse Cap | 279779 |

Group 201: Generator and Mounting, continued



500ROZD
201-70-85
FA-272000

Group 201: Generator and Mounting, continued

| Item | Part Number | Description | Quantity | | | | | | | | | | | | | |
|------|-------------|---------------------------------------|----------------------|----|----|----|----|----|-----|-----|-----|-----|-----|-----|----|----|
| | | | Variation/Kit Number | | | | | | | | | | | | | |
| | | | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 123 | | |
| 1 | A-279977 | Alternator Assembly† | 1 | | | | | | | | | | | | | |
| 1 | B-292443 | Alternator Assembly† | | 1 | | | | | | | | | | | | |
| 1 | B-292444 | Alternator Assembly† | | | 1 | | | | | | 1 | | | | | |
| 1 | B-279959 | Alternator Assembly† | | | | 1 | | | | | 1 | | | | | |
| 1 | A-279981 | Alternator Assembly† | | | | | 1 | | | | | | 1 | | | |
| 1 | A-279978 | Alternator Assembly† | | | | | | | 1 | | | | | | 1 | |
| 1 | B-279960 | Alternator Assembly† | | | | | | | | | | 1 | | | | |
| 1 | B-292439 | Alternator Assembly† | | | | | | | | | | | | | | 1 |
| 2 | * | Hardware, 3/8-16 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | X-750-14 | Marker, L1 Lead | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | X-750-15 | Marker, L2 Lead | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | X-750-16 | Marker, L3 lead | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | X-50-15 | Screw, r.h.m., 10-24 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 5 | X-672-13 | Clamp, Insulated, 7/8 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 | * | Hardware, 10-24 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 7 | X-129-20 | Screw, ref., 1/2-13 x 1 3/4 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| 8 | 290945 | Washer, Hardened, 17/32 x 1 1/16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| 9 | X-6021-13 | Screw, ref., 5/8-11 x 1 3/4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 10 | X-801-5 | Washer, Hard., 21/32 x 1 1/16 x 3/32 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 11 | * | Hardware, 3/4-10 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 12 | 290743 | Shim, 16 ga. | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 12 | 290744 | Shim, 7 ga. | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| 12 | 291191 | Shim, 0.010 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 13 | X-801-8 | Washer, Hardened | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 14 | 279864 | Mount, Vibration (not shown) | | | | | | | | | | | | | | 2 |
| 15 | X-400-182 | Spacer, 0.656 ID x 3.94 L (not shown) | | | | | | | | | | | | | | 2 |
| 16 | * | Hardware, 5/8-11 (not shown) | | | | | | | | | | | | | | 2 |
| 17 | 279865 | Support, Generator (not shown) | | | | | | | | | | | | | | 1 |
| 18 | 274314 | Support, Generator (not shown) | | | | | | | | | | | | | | |
| 19 | * | Hardware, 3/4-10 (not shown) | | | | | | | | | | | | | | |
| 20 | X-6217-10 | Screw, Hex Flange (not shown) | | | | | | | | | | | | | | |
| 21 | 328897 | Cover, Top Back | | | | | | | | | | | | | | |
| 22 | 328900 | Cover, Louvered | | | | | | | | | | | | | | |
| 23 | 328890 | Screen | | | | | | | | | | | | | | |

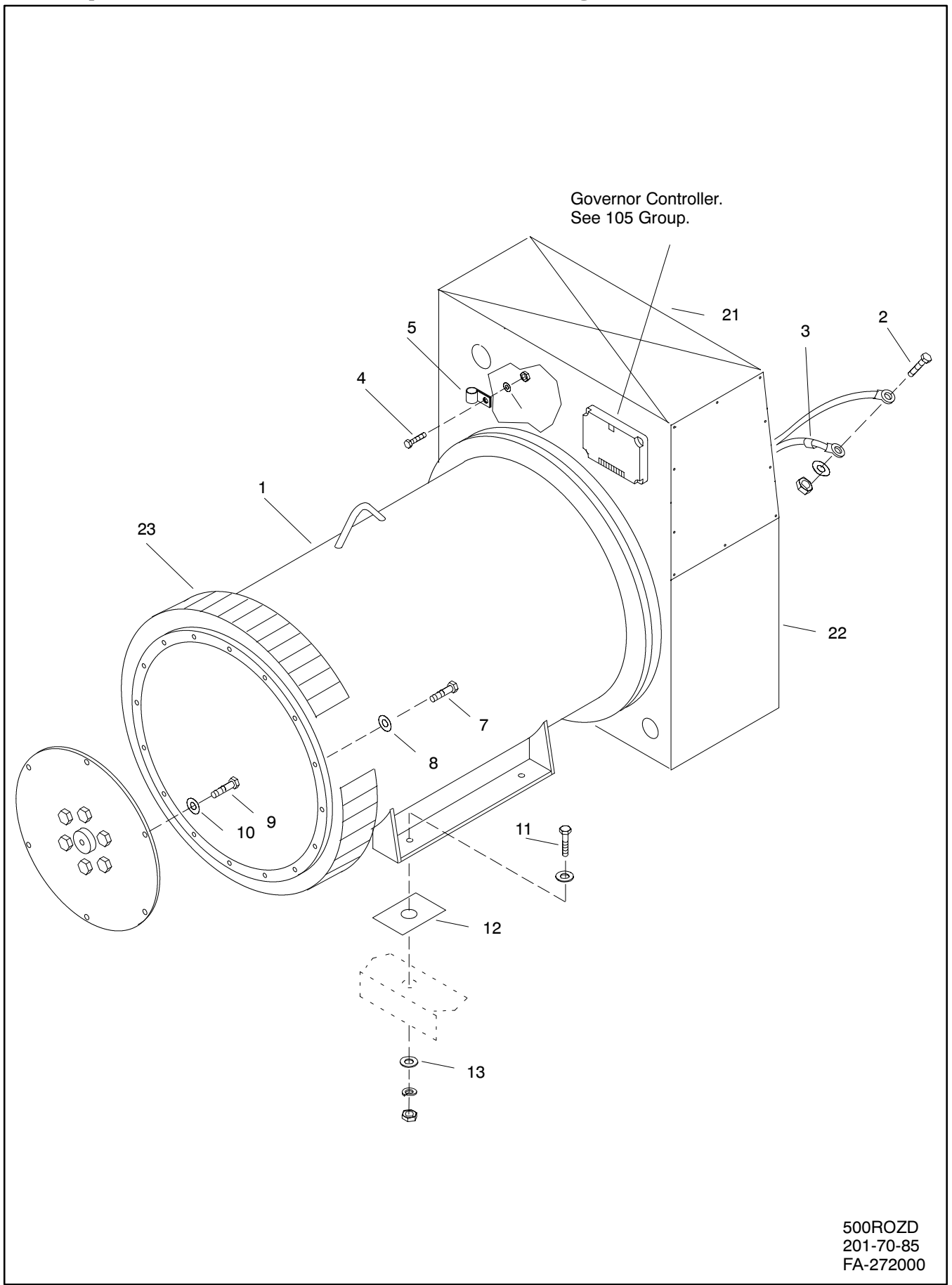
* Common hardware; procure locally

Alternator Assembly Components

† Alternator assembly includes the parts listed in the table below. Parts are not shown on the illustration.

| Part Description | Part Number |
|---|-------------|
| Exciter Rectifier Assembly (includes diodes and surge suppressor) | 347071 |
| Diode, Standard Polarity | 279772 |
| Diode, Reversing Polarity | 279774 |
| Surge Suppressor | 279776 |
| Capacitor | 347160 |
| Fuse, 5 Amp | 279778 |
| Fuse Cap | 279779 |

Group 201: Generator and Mounting, continued



500ROZD
201-70-85
FA-272000

Group 201: Generator and Mounting, continued

| Item | Part Number | Description | Quantity | | | | | | | | | | | | | | |
|------|-------------|---------------------------------------|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|
| | | | Variation/Kit Number | | | | | | | | | | | | | | |
| | | | 124 | 125 | 126 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | | | |
| 1 | B-292440 | Alternator Assembly† | 1 | | | | | | | | | | | | | | |
| 1 | B-292472 | Alternator Assembly† | | 1 | | | | | | | | | | | | | |
| 1 | B-279960 | Alternator Assembly† | | | 1 | | | | | | | | | | | | |
| 1 | A-328100 | Alternator Assembly† | | | | 1 | | | | | 1 | | | | | | |
| 1 | A-328102 | Alternator Assembly† | | | | | 1 | | | | | 1 | | | | | |
| 1 | A-328128 | Alternator Assembly† | | | | | | | 1 | | | | | | | 1 | |
| 1 | A-328118 | Alternator Assembly† | | | | | | | | 1 | | | | | | | |
| 1 | A-328103 | Alternator Assembly† | | | | | | | | | | | 1 | | | | |
| 1 | A-328119 | Alternator Assembly† | | | | | | | | | | | | | | | 1 |
| 2 | * | Hardware, 3/8-16 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | X-750-14 | Marker, L1 Lead | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | X-750-15 | Marker, L2 Lead | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | X-750-16 | Marker, L3 Lead | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | X-50-15 | Screw, r.h.m. 10-24 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 5 | X-672-13 | Clamp, Insulated, 7/8 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 | * | Hardware, 10-24 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 7 | X-129-20 | Screw, ref., 1/2-13 x 1 3/4 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| 8 | 290945 | Washer, Hardened, 17/32 x 1 1/16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| 9 | X-6021-13 | Screw, ref., 5/8-11 x 1 3/4 | 6 | 6 | 6 | | | | | | | | | | | | |
| 9 | X-6021-14 | Screw, ref., 5/8-11 x 1 3/4 | | | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 10 | X-801-5 | Washer, Hard., 21/32 x 1 1/16 x 3/32 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 11 | * | Hardware, 3/4-10 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 12 | 290743 | Shim, 16 ga. | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 12 | 290744 | Shim, 7 ga. | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| 12 | 291191 | Shim, 0.010 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 13 | X-801-8 | Washer, Hardened | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 14 | 279864 | Mount, Vibration (not shown) | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | | | | | | | |
| 15 | X-400-182 | Spacer, 0.656 ID x 3.94 L (not shown) | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | | | | | | | |
| 16 | * | Hardware, 5/8-11 (not shown) | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | | | | | | | |
| 17 | 279865 | Support, Generator (not shown) | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | | | | | | |
| 18 | 274314 | Support, Generator (not shown) | | | | | | | | | | | | | | | |
| 19 | * | Hardware, 3/4-10 (not shown) | | | | | | | | | | | | | | | |
| 20 | X-6217-10 | Screw, Hex Flange (not shown) | | | | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 |
| 21 | 328897 | Cover, Top Back | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 22 | 328900 | Cover, Louvered | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 23 | 328903 | Screen | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

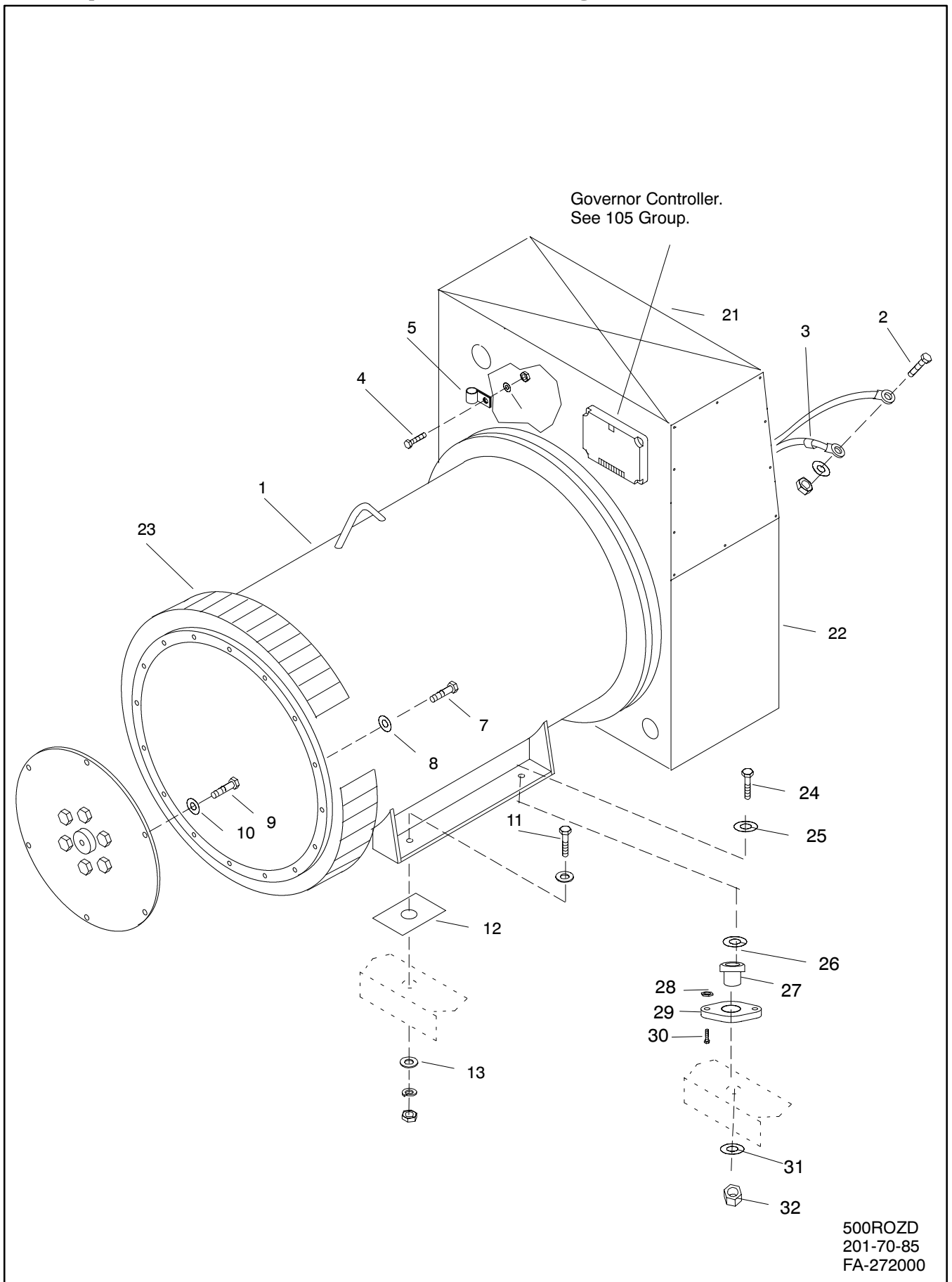
* Common hardware; procure locally

Alternator Assembly Components

† Alternator assembly includes the parts listed in the table below. Parts are not shown on the illustration.

| Part Description | Part Number |
|---|-------------|
| Exciter Rectifier Assembly (includes diodes and surge suppressor) | 347071 |
| Diode, Standard Polarity | 279772 |
| Diode, Reversing Polarity | 279774 |
| Surge Suppressor | 279776 |
| Capacitor | 347160 |
| Fuse, 5 Amp | 279778 |
| Fuse Cap | 279779 |

Group 201: Generator and Mounting, continued



500ROZD
201-70-85
FA-272000

Group 201: Generator and Mounting, continued

| Item | Part Number | Description | Quantity | | | | | | | | | | | | |
|------|-------------|---------------------------------------|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|
| | | | Variation/Kit Number | | | | | | | | | | | | |
| | | | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 | 201 | 202 | | | |
| 1 | A-328104 | Alternator Assembly† | 1 | | | | | | | | | | | | |
| 1 | A-328105 | Alternator Assembly† | | 1 | | | | 1 | | | | | | | |
| 1 | A-328129 | Alternator Assembly† | | | 1 | | | | | | | | | | |
| 1 | A-328120 | Alternator Assembly† | | | | 1 | | | | | | | | | |
| 1 | A-328106 | Alternator Assembly† | | | | | | | 1 | | | | | | |
| 1 | A-328107 | Alternator Assembly† | | | | | | | | 1 | | | | | |
| 1 | A-328131 | Alternator Assembly† | | | | | | | | | 1 | | | | |
| 1 | A-328121 | Alternator Assembly† | | | | | | | | | | 1 | | | |
| 1 | A-328108 | Alternator Assembly† | | | | | | | | | | | | 1 | |
| 2 | * | Hardware, 3/8-16 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | X-750-14 | Marker, L1 Lead | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | X-750-15 | Marker, L2 Lead | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | X-750-16 | Marker, L3 Lead | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | X-50-15 | Screw, r.h.m. 10-24 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 |
| 5 | X-672-13 | Clamp, Insulated 7/8 | 1 | 1 | 1 | 2 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 | * | Hardware, 10-24 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 7 | X-129-20 | Screw, ref., 1/2-13 x 1 3/4 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| 8 | 290945 | Washer, Hardened, 17/32 x 1 1/16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| 9 | X-6021-14 | Screw, ref., 5/8-11 x 1 3/4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 10 | X-801-5 | Washer, Hard., 21/32 x 1 1/16 x 3/32 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 11 | * | Hardware, 3/4-10 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 12 | 290743 | Shim, 16 ga. | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 12 | 290744 | Shim, 7 ga. | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| 12 | 291191 | Shim, 0.010 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 13 | X-801-8 | Washer, Hardened | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 14 | 279864 | Mount, Vibration (not shown) | | | | | | | | | | | | | |
| 15 | X-400-182 | Spacer, 0.656 ID x 3.94 L (not shown) | | | | | | | | | | | | | |
| 16 | * | Hardware, 5/8-11 (not shown) | | | | | | | | | | | | | |
| 17 | 279865 | Support, Generator (not shown) | | | | | | | | | | | | | |
| 18 | 274314 | Support, Generator (not shown) | | | | | | | | | | | | | |
| 19 | * | Hardware, 3/4-10 (not shown) | | | | | | | | | | | | | |
| 20 | X-6217-10 | Screw, Hex., Flange (not shown) | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 |
| 21 | 328897 | Cover, Top Back | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 22 | 328900 | Cover, Louvered | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 23 | 328903 | Screen | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

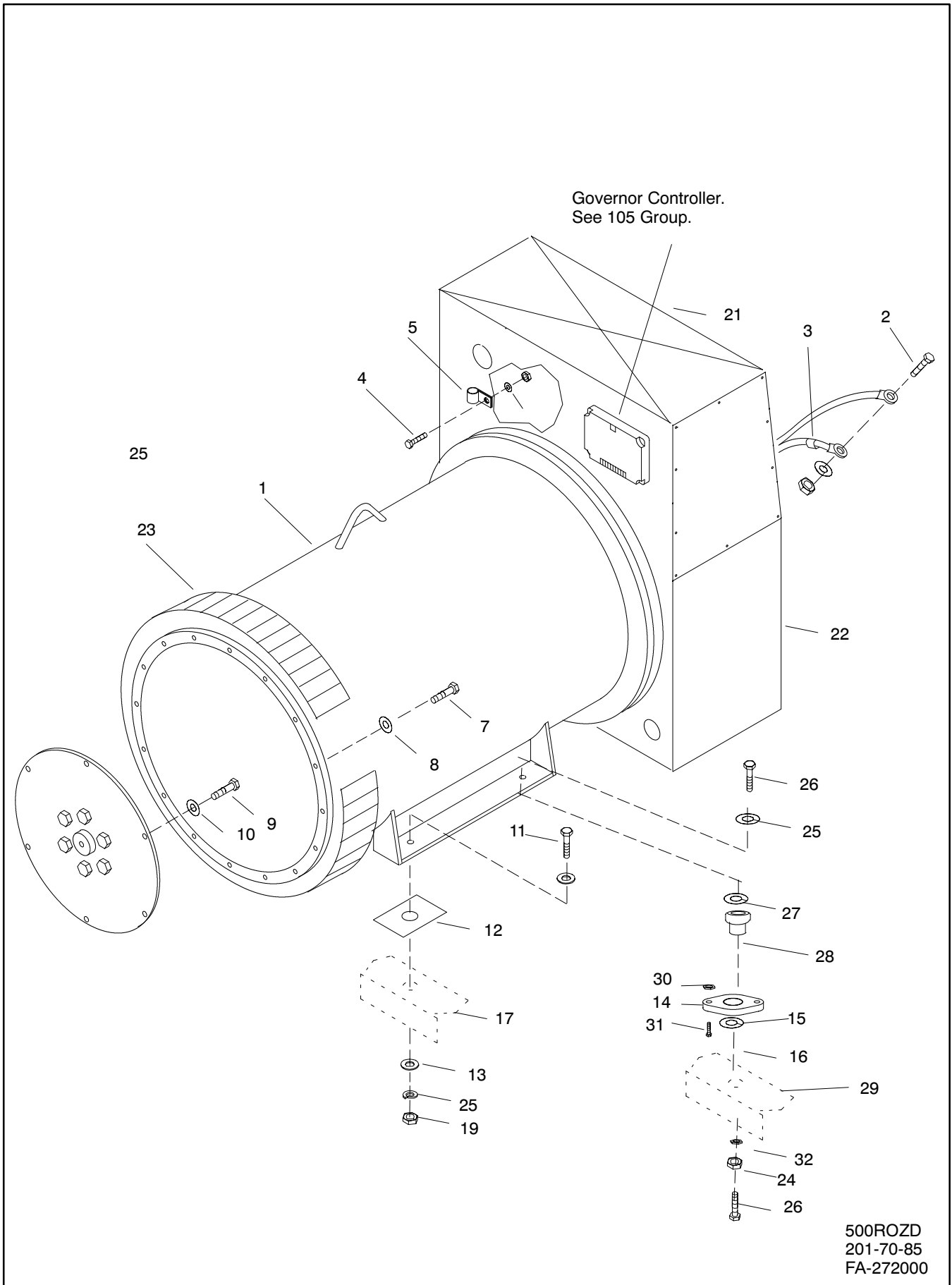
* Common hardware; procure locally

Alternator Assembly Components

† Alternator assembly includes the parts listed in the table below. Parts are not shown on the illustration.

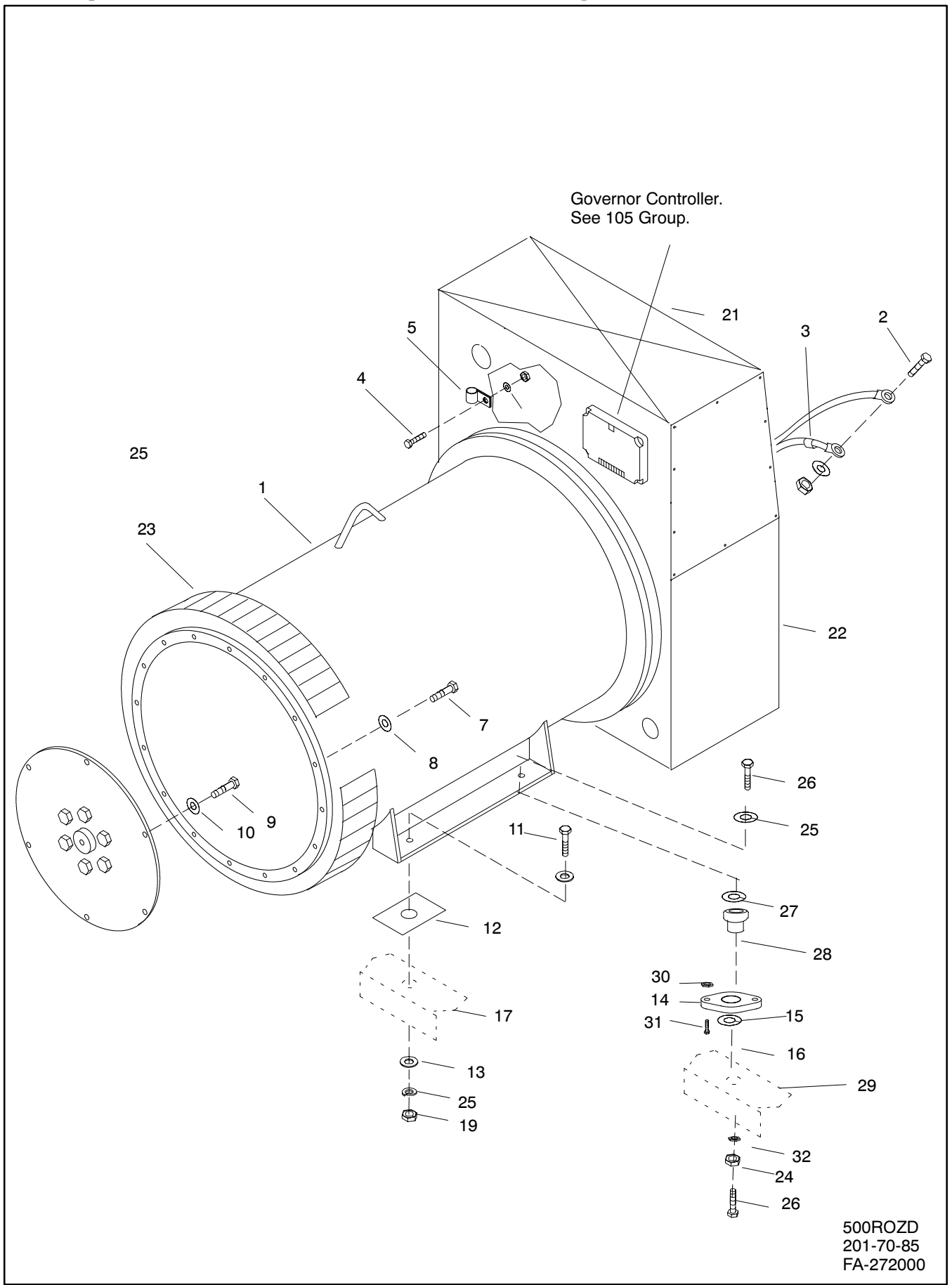
| Part Description | Part Number |
|---|-------------|
| Exciter Rectifier Assembly (includes diodes and surge suppressor) | 347071 |
| Diode, Standard Polarity | 279772 |
| Diode, Reversing Polarity | 279774 |
| Surge Suppressor | 279776 |
| Capacitor | 347160 |
| Fuse, 5 Amp | 279778 |
| Fuse Cap | 279779 |

Group 201: Generator and Mounting, continued



500ROZD
201-70-85
FA-272000

Group 201: Generator and Mounting, continued



500ROZD
201-70-85
FA-272000

Group 201: Generator and Mounting, continued

| Item | Part Number | Description | Quantity | | | | | | | | | | | | | | | | | |
|------|-------------|---------------------------------------|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|
| | | | Variation/Kit Number | | | | | | | | | | | | | | | | | |
| | | | 299 | 300 | 301 | 302 | 303 | 304 | 340 | 342 | 344 | 349 | | | | | | | | |
| 1 | A-328119 | Alternator Assembly† | 1 | | | | | | | | | | | | | | | | | |
| 1 | A-328129 | Alternator Assembly† | | 1 | | | | | | | | | | | | | | | | |
| 1 | A-328120 | Alternator Assembly† | | | 1 | | | | | | | | | | | | | | | |
| 1 | A-328105 | Alternator Assembly† | | | | 1 | | | | | | | | | | | | | | |
| 1 | A-328130 | Alternator Assembly† | | | | | 1 | | | | | | | | | | | | | |
| 1 | A-328121 | Alternator Assembly† | | | | | | | | 1 | | | | | | | | | | |
| 1 | A-328106 | Alternator Assembly† | | | | | | | | | 1 | | | | | | | | | |
| 1 | A-328107 | Alternator Assembly† | | | | | | | | | | 1 | | | | | | | | |
| 1 | A-328131 | Alternator Assembly† | | | | | | | | | | | 1 | | | | | | 1 | |
| 1 | A-328108 | Alternator Assembly† | | | | | | | | | | | | | | | | | | 1 |
| 2 | * | Hardware, 3/8-16 | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | X-750-14 | Marker, L1 lead | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | X-750-15 | Marker, L2 lead | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | X-750-16 | Marker, L3 lead | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | X-50-15 | Screw, r.h.m., 10-24 | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 5 | X-672-13 | Clamp, Insulated, 7/8 | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 | * | Hardware, 10-24 | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 7 | X-129-20 | Screw, ref., 1/2-13 x 1 3/4 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| 8 | 290945 | Washer, Hardened, 17/32 x 1 1/16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| 9 | X-6021-14 | Screw, ref. | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 10 | X-801-5 | Washer, Hard., 21/32 x 1 1/16 x 3/32 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 11 | * | Hardware, 3/4-10 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 12 | 290743 | Shim, 16 ga. | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 12 | 291191 | Shim, 0.010 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 13 | X-801-8 | Washer, Hardened | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 14 | 279864 | Mount, Vibration (not shown) | | | | | | | | | | | | | | | | | | |
| 15 | X-400-182 | Spacer, 0.656 ID x 3.94 L (not shown) | | | | | | | | | | | | | | | | | | |
| 16 | * | Hardware, 5/8-11 (not shown) | | | | | | | | | | | | | | | | | | |
| 17 | 279865 | Support, Generator (not shown) | | | | | | | | | | | | | | | | | | |
| 18 | 274314 | Support, Generator (not shown) | | | | | | | | | | | | | | | | | | |
| 19 | * | Hardware, 3/4-10 (not shown) | | | | | | | | | | | | | | | | | | |
| 20 | X-6217-10 | Screw, Hex Flange (not shown) | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 |
| 21 | 328897 | Cover, Top Back | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 22 | 328900 | Cover, Louvered | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 23 | 328903 | Screen | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 24 | X-6239-10 | Bolt, h.c. 3/4-10 x 4.5 | | | | | | | | | | | | | | | | | | |
| 25 | X-801-8 | Washer, Hardened, .406 ID .812 OD | | | | | | | | | | | | | | | | | | |
| 26 | X-25-150 | Washer, Plain, .80 ID 4.25 OD | | | | | | | | | | | | | | | | | | |
| 27 | 354622 | Mount, Vibration | | | | | | | | | | | | | | | | | | |
| 28 | * | Nut, 1/2-13 | | | | | | | | | | | | | | | | | | |
| 29 | 354717 | Plate, Generator Mounting | | | | | | | | | | | | | | | | | | |
| 30 | X-129-21 | Bolt, h.c. 1/2-13 x 2 | | | | | | | | | | | | | | | | | | |
| 31 | X-25-151 | Washer, Plain, .80 ID 3.0 OD | | | | | | | | | | | | | | | | | | |
| 32 | X-101-26 | Nut, Elastic Stop, 3/4-10 | | | | | | | | | | | | | | | | | | |

* Common hardware; procure locally

Alternator Assembly Components

† Alternator assembly includes the parts listed in the table below. Parts are not shown on the illustration.

| Part Description | Part Number |
|---|-------------|
| Exciter Rectifier Assembly (includes diodes and surge suppressor) | 347071 |
| Diode, Standard Polarity | 279772 |
| Diode, Reversing Polarity | 279774 |
| Surge Suppressor | 279776 |
| Capacitor | 347160 |
| Fuse, 5 Amp | 279778 |
| Fuse Cap | 279779 |

Group 201: Generator and Mounting, continued

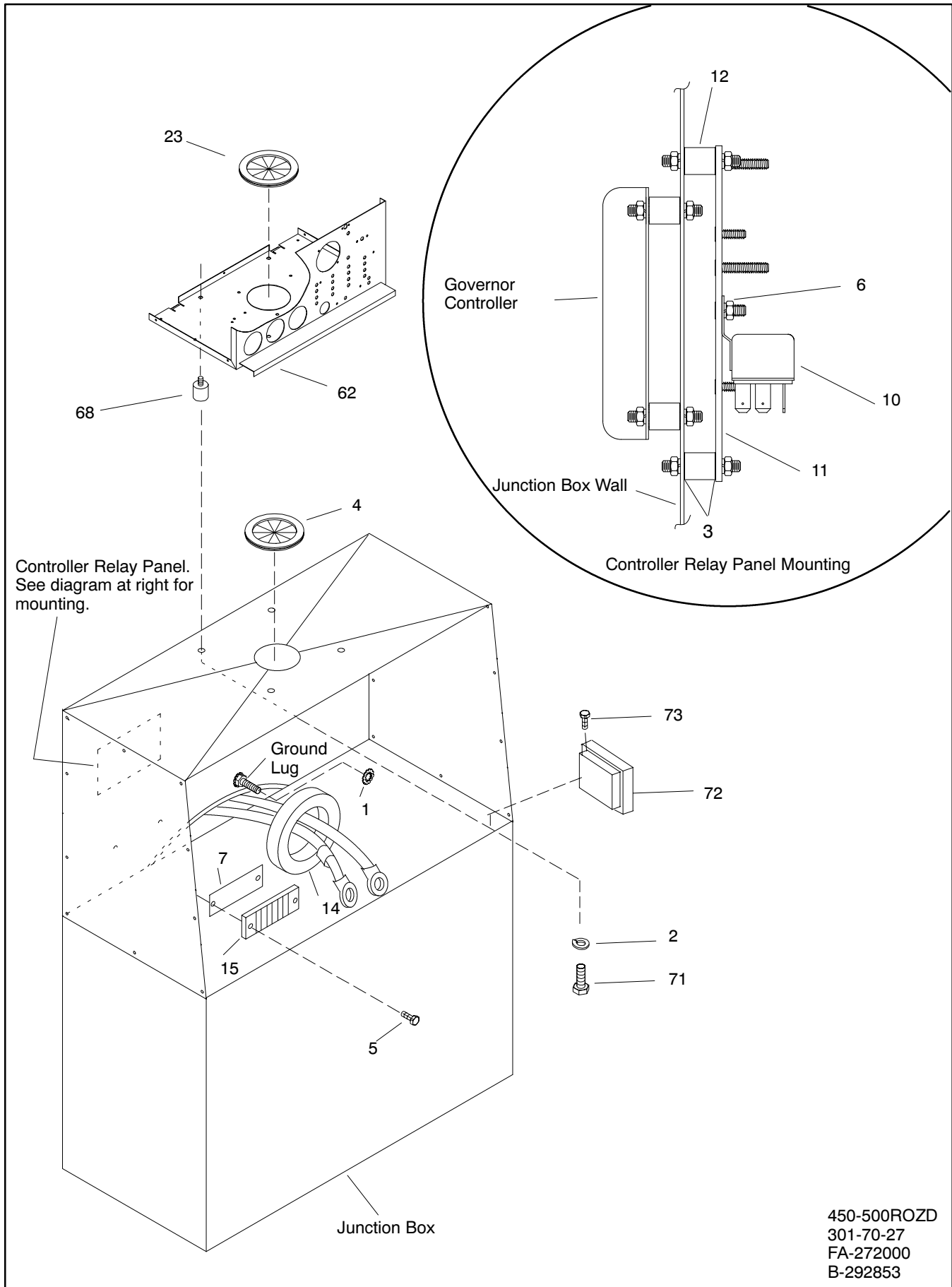
Modular Spec Cross-Reference Table

Some modular generator specs listed in the specification number index require a generator kit. Refer to the generator set nameplate to identify the kit number installed on your generator set. Use the following table to identify the equivalent variation number. The kit's parts list matches the parts list for the equivalent variation number.

| Alternator Kit | Equivalent Variation Number |
|-----------------------|------------------------------------|
| 347361 (5M4024) | 288 |
| 347362 (5M4027) | 289 |
| 347363 (5M4028) | 290 |
| 347364 (5M4270) | 291 |
| 347365 (5M4160) | 292 |
| 347366 (5M4272) | 293 |
| 347367 (5M4162) | 294 |
| 347371 (5M4027) | 295 |
| 347372 (5M4028) | 296 |
| 347373 (5M4030) | 297 |
| 347374 (5M4270) | 298 |
| 347375 (5M4160) | 299 |
| 347376 (5M4272) | 300 |
| 347377 (5M4164) | 301 |
| 347405 (5M4034) | 340 |
| 347406 (5M4036) | 342 |
| 347407 (5M4038) | 349 |
| 347408 (5M4278) | 344 |
| 354134 (5M4276) | 303 |
| 354143 (5M4032) | 302 |
| 345144 (5M4166) | 304 |

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Group 301: Controller and Mounting



Group 301: Controller and Mounting, continued

| Item | Part Number | Description | Quantity | | | | | | | | | | | |
|------|-----------------|----------------------------|----------------------|----|----|----|----|----|----|----|----|----|-----|-----|
| | | | Variation/Kit Number | | | | | | | | | | | |
| | | | 27 | 28 | 58 | 59 | 87 | 88 | 89 | 90 | 91 | 92 | 120 | 151 |
| 1 | X-22-14 | Washer, Shakeproof, 3/8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | X-22-16 | Washer, Lock, 5/16 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 3 | X-22-20 | Washer, Ext. Tooth Lock, 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 4 | X-284-25 | Grommet | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 5 | X-51-11 | Screw, 8/32 x 3/4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 6 | X-6210-1 | Nut, Whiz Lock | 1 | 1 | 1 | 1 | | | | | 1 | 1 | 1 | 1 |
| 6 | * | Nut, #10-32 | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 7 | 255080 | Marker, Strip | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 8 | 258453 | Harness, Wiring CT | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 9 | 258455 | Harness, Wiring AC | 1 | 1 | 1 | 1 | 1 | | | | 1 | | | 1 |
| 9 | 274964 | Harness, Wiring AC | | | | | | 1 | 1 | | 1 | | | 1 |
| 10 | 272684 | Relay | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 |
| 11 | 274796 | Panel, Relay | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 12 | 282829 | Mount, Vibro | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 13 | 291288 | Pickup, Speed (not shown) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 14 | 297675 | Transformer, Current | | 3 | | 3 | | | | 3 | | | | |
| 14 | 291548 | Transformer, Current | 3 | | 3 | | 3 | | | | | | 3 | |
| 14 | 291546 | Transformer, Current | | | | | | | 3 | | 3 | | | |
| 14 | 291547 | Transformer, Current | | | | | | | | | | 3 | | 3 |
| 14 | 248877 | Transformer, Current | | | | | | 3 | | | | | | |
| 15 | 295314 | Block, Terminal | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 16 | See Chart Below | Controller Assembly | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

* Common hardware; procure locally

† Controller assembly component

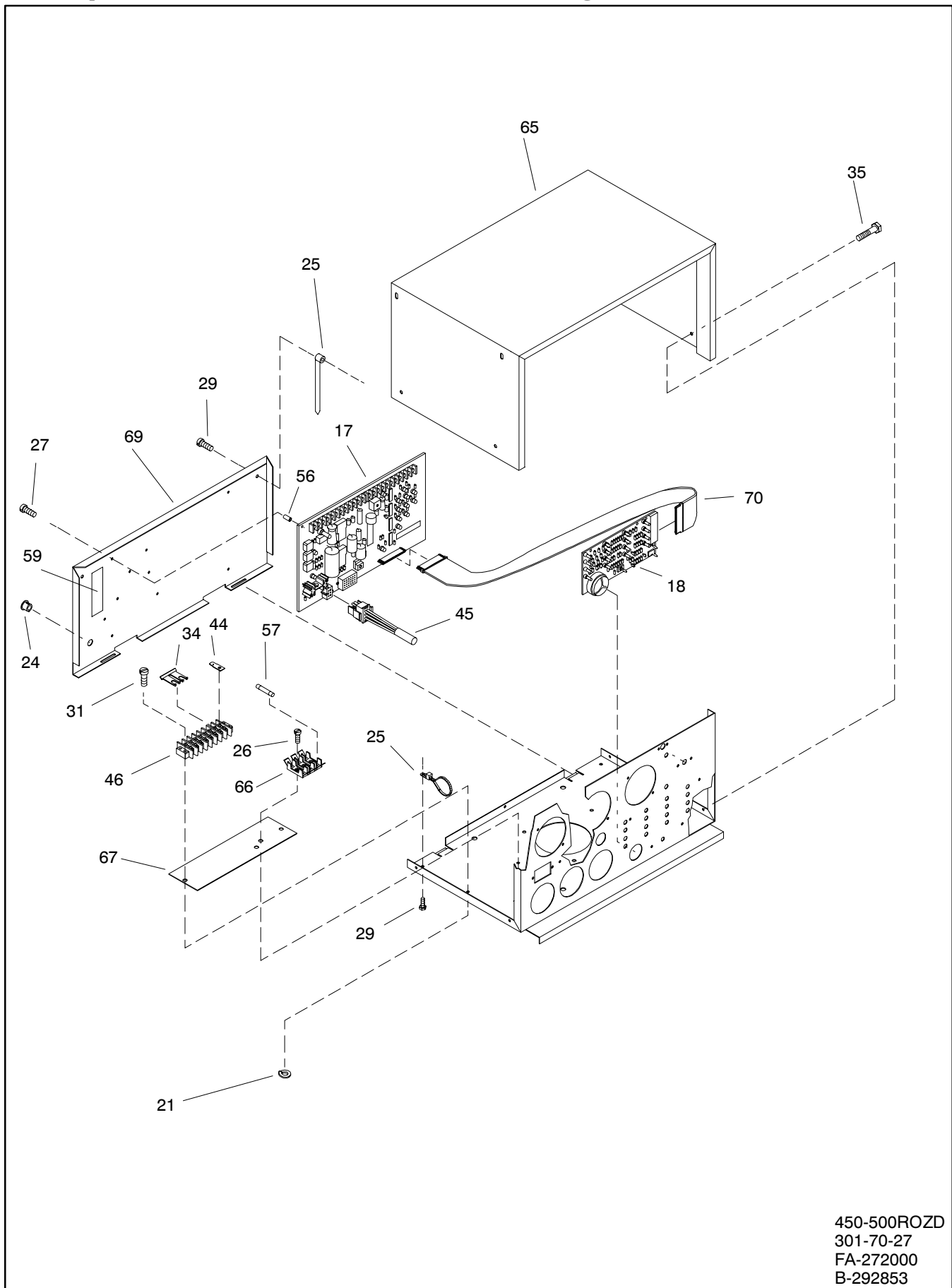
Serial Number-Contingent Controller Assemblies

| Variation Number | Controller Assembly Part Number | |
|------------------|---------------------------------|---------------------------------|
| | Before Serial Number 363369 | Serial Numbers 363369 and after |
| 27, 58 | B-292853 | A-328935 |
| 28, 59 | B-292854 | A-328937 |
| 87, 89 | Not Applicable | A-328935 |
| 88 | Not Applicable | A-328936 |
| 90, 92, 151 | Not Applicable | A-328937 |
| 91 | Not Applicable | A-328938 |
| 120 | Not Applicable | A-328939 |

Serial Number-Contingent Controller Parts

| Part Description | Part Number | |
|-------------------------|-----------------------------|---------------------------------|
| | Before Serial Number 363369 | Serial Numbers 363369 and After |
| Main Circuit Board | G-292806 | A-336415 |
| Indicator Board | B-292357 | A-336432 |
| Controller Ribbon Cable | 292836 | 336428 |

Group 301: Controller and Mounting, continued



450-500ROZD
301-70-27
FA-272000
B-292853

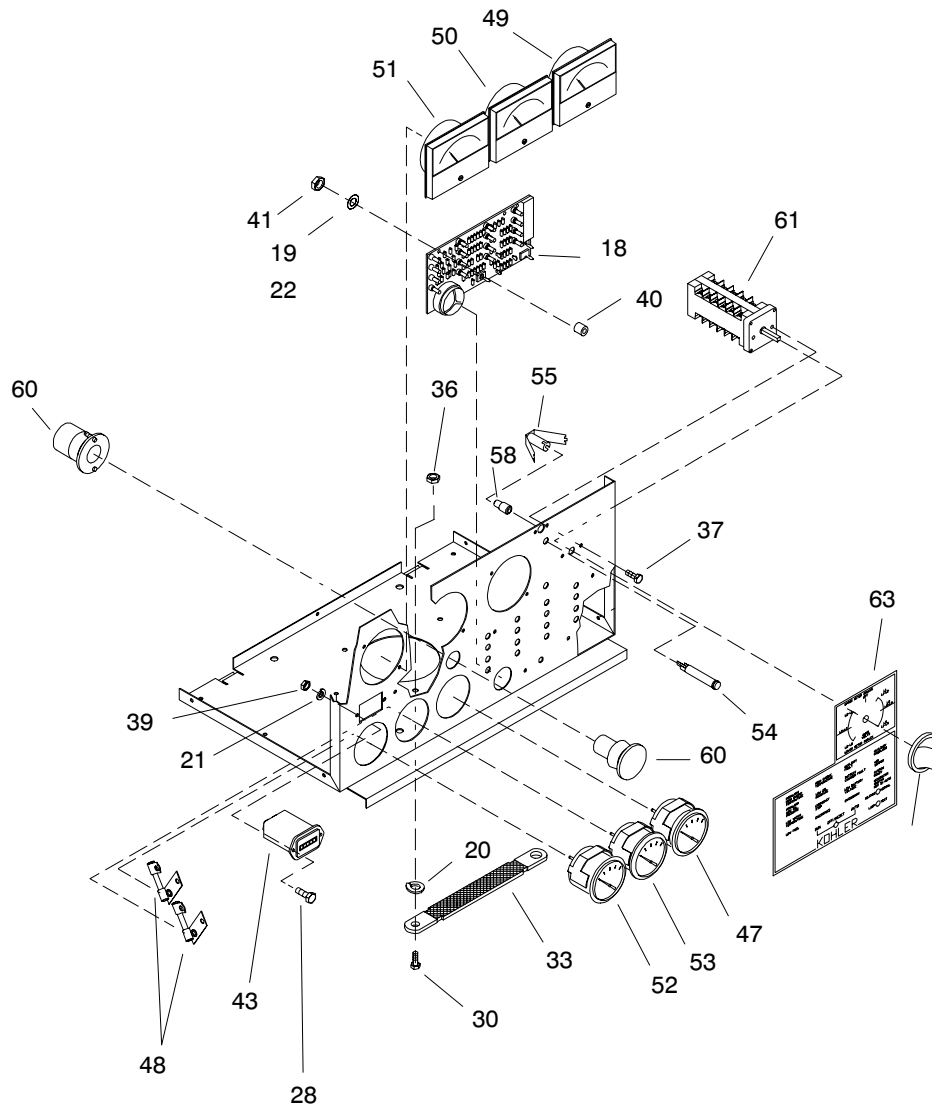
Group 301: Controller and Mounting, continued

| Item | Part Number | Description | Quantity | | | | | | | | | | | |
|------|-------------------|------------------------------|----------------------|----|----|----|----|----|----|----|----|----|-----|-----|
| | | | Variation/Kit Number | | | | | | | | | | | |
| | | | 27 | 28 | 58 | 59 | 87 | 88 | 89 | 90 | 91 | 92 | 120 | 151 |
| 16 | See chart page 45 | Controller Assembly | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 17 | See chart page 45 | Controller Includes | | | | | | | | | | | | |
| 18 | See chart page 45 | Circuit Board, Main† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 19 | See chart page 45 | Circuit Board, Indicator† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | X-22-20 | Washer, Shakeproof† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 20 | X-22-50 | Washer, Lock† | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| 21 | X-22-6 | Washer, Lock #6† | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| 22 | X-22-7 | Washer, Lock #8† | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| 23 | X-284-31 | Grommet† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 24 | X-301-34 | Plug, Button† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 25 | X-468-3 | Tie, Cable Nylon† | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| 26 | X-49-2 | Screw, r.h.m. 6-32 x 3† | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| 27 | X-49-25 | Screw, r.h.m. 6-32 x 1† | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | |
| 28 | X-49-39 | Screw, Pan Head, 6-32 x .50† | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| 29 | X-50-3 | Screw, r.h.m. 10-24 x .75† | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| 30 | X-50-70 | Screw, r.h.m. 10-24 x 1† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 31 | X-51-53 | Screw, r.h.m. 8-32 x .625† | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| 32 | X-519-1 | Plug, Cap, 1/8 Inch† | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| 33 | X-6046-2 | Strap, Ground† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 34 | X-6048-2 | Jumper, Terminal Block† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 35 | X-6216-1 | Screw, Hex Crimptite† | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | |
| 36 | X-6234-6 | Nut, Hex† | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| 37 | X-67-127 | Screw, Thread Forming† | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| 38 | X-696-5 | Sleeve† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 39 | X-71-2 | Nut, Hex† | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| 40 | X-712-9 | Spacer† | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| 41 | X-72-4 | Nut, Hex. † | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| 42 | 201620-86 | Tab, Identification† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 43 | 238736 | Meter, Hour† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 44 | 238898 | Terminal† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 45 | 241617 | Connector, 6 Position† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 46 | 246115 | Block, Terminal† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 47 | 255224 | Voltmeter† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 48 | 268297 | Resistor, 24 Volt† | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| 49 | 282810 | Ammeter, AC† | | | | | | 1 | | | | | | |
| 49 | 282811 | Ammeter, AC† | 1 | | 1 | | 1 | | 1 | | 1 | | | |
| 49 | 282812 | Ammeter, AC† | | 1 | | 1 | | | | 1 | | 1 | | |
| 49 | 282813 | Ammeter, AC† | | | | | | | | | | 1 | 1 | |
| 50 | 282817 | Voltmeter, AC† | | | | | | 1 | | 1 | | | | |
| 50 | 282816 | Voltmeter, AC† | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | |
| 51 | 282818 | Meter, Frequency† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 52 | 282897 | Gauge, Oil Pressure† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 53 | 282898 | Gauge, Water Temperature† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 54 | 283420 | Bulb† | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| 55 | 284990 | Socket, Lamp† | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| 56 | 287948 | Spacer, Circuit Board† | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | |
| 57 | 291207 | Fuse, 1.5 Amp† | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| 58 | 291740 | Lamp† | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | Parts list continues | | | | | | | | | | | | |

* Common hardware; procure locally

† Controller assembly component

Group 301: Controller and Mounting, continued



450-500ROZD
301-70-27
FA-272000
B-292853

Group 301: Controller and Mounting, continued

| Item | Part Number | Description | Quantity | | | | | | | | | | | |
|------|-------------|------------------------------|----------------------|----|----|----|----|----|----|----|----|----|-----|-----|
| | | | Variation/Kit Number | | | | | | | | | | | |
| | | | 27 | 28 | 58 | 59 | 87 | 88 | 89 | 90 | 91 | 92 | 120 | 151 |
| 59 | 292347 | Decal† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 60 | 292364 | Switch, Pushbutton† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 61 | 292374 | Switch, Selector† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 62 | 292375 | Box, Controller† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 63 | 292383 | Nameplate† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 64 | 292467 | Decal, Emergency Stop† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 65 | 292818 | Cover, Controller† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 66 | 292821 | Holder, Fuse† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 67 | 292823 | Marker, Strip† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 68 | 292834 | Bumper† | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 69 | 292908 | Plate, Hinged Back† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 70 | See Page 45 | Cable Assembly† | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 71 | X-125-23 | Screw, Ref., 5/15-18 x 3 1/2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 72 | 258990 | Transformer, Current | | | | | | 3 | | | 3 | | | |
| 72 | 276578 | Transformer, Current | | | | | | | | | 3 | 3 | 3 | |
| 73 | X-794-2 | Screw, drill | | | | | | 6 | | | 6 | 6 | 6 | 6 |

* Common hardware; procure locally

† Controller assembly component

Group 701: Literature

| Item | Part Number | Description | Quantity | | | | | | | | |
|------|-------------|--|----------------------|----|----|----|----|----|----|----|----|
| | | | Variation/Kit Number | | | | | | | | |
| | | | 29 | 31 | 44 | 45 | 52 | 53 | 66 | 67 | 82 |
| 1 | TP-5700 | Installation Manual | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | TP-5611 | Operation Manual, DDC 71, 92, 149 Series Engine | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | TP-5750 | Operation Manual, Generator Set | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | TP-5578 | Operation Manual, MagnaMax Alternator | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 5 | TP-5278 | Operation Manual, PM100 Voltage Regulator | 1 | 1 | | | 1 | 1 | | | |
| 5 | TP-5579 | Operation Manual, Digital Voltage Regulator | | | 1 | 1 | | | 1 | 1 | 1 |
| 6 | TP-5615 | Service Manual, DDC 12V-71 Series Engine | 1 | | 1 | | | | | | |
| 6 | TP-5382 | Service Manual, DDC 92 Series Engine | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 |
| 7 | TP-5311 | Service Manual, Generator Set | 1 | 1 | | | 1 | 1 | | | |
| 7 | TP-5583 | Service Manual, Generator Set | | | 1 | 1 | | | 1 | 1 | 1 |
| 8 | TP-5576 | Parts Catalog, DDC 12V71 Series Engine | 1 | | 1 | | | | | | |
| 8 | TP-5640 | Parts Catalog, DDC 92 Series Engine (500 kW) | | 1 | | 1 | | | | | |
| 8 | TP-5641 | Parts Catalog, DDC 92 Series Engine (600 kW) | | | | | 1 | | | 1 | |
| 8 | TP-5642 | Parts Catalog, DDC 92 Series Engine (750/800 kW) | | | | | | 1 | 1 | | |
| 8 | TP-5840 | Parts Catalog, DDC 92 Series Engine (750 kW) | | | | | | | | | 1 |
| 9 | TP-5601 | Parts Catalog, 450-800 kW Generator Set | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 10 | TP-5707 | Parts Catalog, Accessories | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 11 | TP-5722 | Wiring Diagram Manual | | | 1 | 1 | | | 1 | 1 | 1 |

Kit List

Modular generator sets listed in the Specification Number Index require a controller and cooling kit. Refer to the generator set nameplate or the list below to identify the kit

number installed on your generator set. See Figure 2 for an example of a generator set nameplate. See the following sections for parts list of the kit.

| | 450ROZD | 500ROZD | 600ROZD | 750ROZD | 800ROZD |
|--|---------|---------|---------|---------|---------|
| CONTROLLER KITS | | | | | |
| 6- and 7-Light | | | | | |
| Standard Meterbox | 328150 | 328150 | 328155 | 328155 | 328155 |
| Standard Meterbox | 293897 | 293897 | 293898 | 293898 | 293898 |
| Standard Meterbox (5M4034, 5M4036) | N/A | N/A | N/A | N/A | 328155 |
| Standard Meterbox (5M4038) | N/A | N/A | N/A | N/A | 328179 |
| Standard Meterbox, 380 V | 328167 | 328167 | 328171 | 328171 | 328171 |
| Standard Meterbox, 380 V | 293944 | 293944 | 293956 | 293956 | 293956 |
| Standard Meterbox, 380 V | | | | | 354140 |
| Standard Meterbox, 600 V | 328159 | 328159 | 328163 | 328163 | 328163 |
| Standard Meterbox, 600 V | 293921 | 293921 | 293922 | 293922 | 293922 |
| Oversized Meterbox | 293901 | 293901 | 293902 | 293902 | 293902 |
| Oversized Meterbox | 328152 | 328152 | 328157 | 328157 | N/A |
| Oversized Meterbox (5M4034, 5M4036) | N/A | N/A | N/A | N/A | 328157 |
| Oversized Meterbox (5M4038) | N/A | N/A | N/A | N/A | 328181 |
| Oversized Meterbox, 380 V | 328169 | 328169 | 328173 | 328173 | 328173 |
| Oversized Meterbox, 380 V | 293952 | 293952 | 293953 | 293953 | 293953 |
| Oversized Meterbox, 380 V | | | | | 354136 |
| Oversized Meterbox, 600 V | 328161 | 328161 | 328165 | 328165 | 328165 |
| Oversized Meterbox, 600 V | 293930 | 293930 | 293931 | 293931 | 293931 |
| 16-Light | | | | | |
| Standard Meterbox | 293911 | 293911 | 293912 | 293912 | 293912 |
| Standard Meterbox | 328149 | 328149 | 328154 | 328154 | N/A |
| Standard Meterbox (5M4034, 5M4036) | N/A | N/A | N/A | N/A | 328154 |
| Standard Meterbox (5M4038) | N/A | N/A | N/A | N/A | 328178 |
| Standard Meterbox, 380 V | 328166 | 328166 | 328170 | 328170 | 328170 |
| Standard Meterbox, 380 V | 293939 | 293939 | 293940 | 293940 | 293940 |
| Standard Meterbox, 380 V | | | | | 354135 |
| Standard Meterbox, 600 V | 328158 | 328158 | 328162 | 328162 | 328162 |
| Standard Meterbox, 600 V | 293916 | 293916 | 293917 | 293917 | 293917 |
| Oversized Meterbox | 328151 | 328151 | 328156 | 328156 | 328156 |
| Oversized Meterbox | 293899 | 293899 | 293900 | 293900 | 293900 |
| Oversized Meterbox (5M4034, 5M4036) | N/A | N/A | N/A | N/A | 328156 |
| Oversized Meterbox (5M4038) | N/A | N/A | N/A | N/A | 328180 |
| Oversized Meterbox, 380 V | 328168 | 328168 | 328172 | 328172 | 328172 |
| Oversized Meterbox, 380 V | 293948 | 293948 | 293957 | 293957 | 293957 |
| Oversized Meterbox, 380 V | | | | N/A | 354137 |
| Oversize Meterbox, 600 V | 328160 | 328160 | 328164 | 328164 | 328164 |
| Oversize Meterbox, 600 V | 293925 | 293925 | 293926 | 293926 | 293926 |
| Meterbox for Switchgear | 328153 | 328153 | 328153 | 328153 | 328153 |
| Meterbox for Switchgear | 273940 | 273940 | 273940 | 273940 | 273940 |
| Meterbox for Switchgear, 600 V | 328087 | 328087 | 328087 | 328087 | 328087 |
| Meterbox for Switchgear, 600 V | 273939 | 273939 | 273939 | 273939 | 273939 |
| Manual Paralleling Controllers, 24 vdc | | | | | |
| 24 vdc, 208 vac | 328845 | 328845 | 328857 | 328857 | 328857 |
| 24 vdc, 240 vac | 328846 | 328846 | 328858 | 328858 | 328858 |
| 24 vdc, 380/416 vac | 328848 | 328848 | 328860 | 328860 | N/A |
| 24 vdc, 380/416 vac (5M4034, 5M4036) | N/A | N/A | N/A | N/A | 328860 |
| 24 vdc, 380/416 vac (5M4038) | N/A | N/A | N/A | N/A | 328875 |
| 24 vdc, 380 vac | 354822 | 354822 | 354823 | 354823 | 328875 |
| 24 vdc, 480 vac | 328849 | 328849 | 328861 | 328861 | N/A |
| 24 vdc, 480 vac (5M4034, 5M4036) | N/A | N/A | N/A | N/A | 328861 |
| 24 vdc, 480 vac (5M4038) | N/A | N/A | N/A | N/A | 328876 |
| 24 vdc, 600 vac | 328850 | 328850 | 328862 | 328862 | 328862 |
| Decision Maker 340™ Controllers, 24 vdc | | | | | |
| Standard voltage | 347919 | 347919 | 347920 | 347920 | N/A |
| Standard voltage (5M4034, 5M4036) | N/A | N/A | N/A | N/A | 347920 |
| Standard voltage (5M4038) | N/A | N/A | N/A | N/A | 347926 |
| 380 vac | 347923 | 347923 | 347924 | 347924 | 347924 |
| 600 vac | 347921 | 347921 | 347922 | 347922 | 347922 |

N/A Not Applicable

Kit List, continued

| | 450ROZD | 500ROZD | 600ROZD | 750ROZD | 800ROZD |
|---|---------|---------|---------|---------|---------|
| COOLING SYSTEM KITS | | | | | |
| Block Heater (single), 190-208-210/240-380/480V | 354720 | 354720 | 354720 | 354720 | 354720 |
| Block Heater, 190-208-210/240-380/480V | 279928 | 279928 | 279928 | 279929 | 279929 |
| Block Heater (dual), 190-208-210/240-380/480V | 354705 | 354685 | 354685 | 354685 | 354685 |
| Duct Flange, Radiator, 40° C Ambient | 272965 | 272965 | 272965 | 347865 | 272963 |
| Duct Flange, Radiator, 40° C Ambient | N/A | N/A | N/A | 272963 | 274233 |
| Duct Flange, Radiator, 40° C Ambient | N/A | N/A | N/A | N/A | 347865 |
| Duct Flange, Radiator, 50° C Ambient | 279764 | 279764 | 279764 | N/A | N/A |
| Duct Flange, Radiator, 50° C Ambient | N/A | 347865 | N/A | N/A | N/A |
| Radiator, 40° C Ambient | 279860 | 279487 | 274934 | 347861 | 354108 |
| Radiator, 40° C Ambient | N/A | N/A | N/A | 299894 | 299894 |
| Radiator, 40° C Ambient | N/A | N/A | N/A | 274935 | 274936 |
| Radiator, 40° C Ambient | 354608 | 354559 | 354560 | 354672 | 354844 |
| Radiator, 50° C Ambient | 279486 | 279753 | 279753 | N/A | N/A |
| Radiator, 50° C Ambient | 354609 | 354558 | N/A | N/A | N/A |
| City Water Cooling | 279296 | 354568 | 354568 | 347877 | 347877 |
| Remote Radiator Setup, Dry Manifold | 328001 | 279855 | 279855 | 279854 | N/A |
| Remote Radiator Setup, Dry Manifold | 279295 | N/A | N/A | 347878 | N/A |
| Remote Radiator Setup, Dry Manifold | 354615 | 354567 | 354567 | 347877 | 347878 |
| Remote Radiator Setup, 5M4032 or 5M4164 | N/A | N/A | 328651 | 347878 | 347878 |

AIR CLEANER KITS

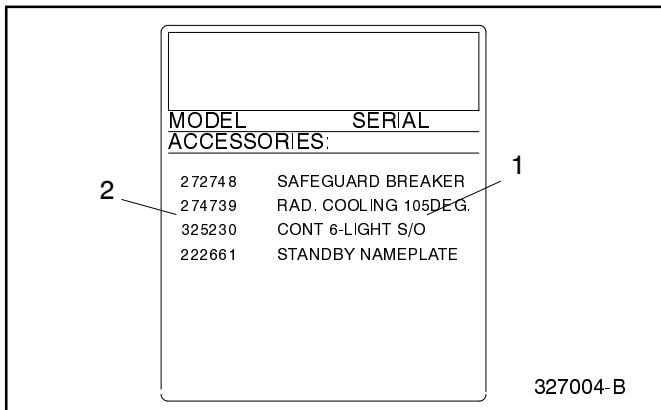
| | | | | | |
|------------|--------|--------|--------|--------|--------|
| Heavy-Duty | 354588 | 354566 | 354561 | 354049 | 354049 |
|------------|--------|--------|--------|--------|--------|

OPTIONAL KITS

See Parts Catalog TP-5707 for parts lists of optional kits (kits other than controllers and cooling).

Paint and Miscellaneous Parts

| | |
|--|--------|
| Generator Paint, Kohler Cream Beige (Spray Can) | 221338 |
| Generator Paint, Kohler Cream Beige (Gallon Can) | 221337 |



1. Kit Description
2. Factory-installed Kit Number

Figure 2. Generator Accessory Nameplate

N/A Not Applicable

6- and 7-Light Controller Kits

| 6- and 7-Light Microprocessor Controller Kit Parts | | | | | | | |
|--|----------------------|--------------|--------------------------|------------------|------------------|------------------|------------------|
| Qty. | Description | Common Parts | Kit Numbers/Unique Parts | | | | |
| | | | 293897 328150 | 293898 328155 | 293901 328152 | 293902 328157 | 293921 328159 |
| 1 | Controller Assembly* | | A-292458 | A-292459 | A-273802 | A-273803 | A-274925 |
| 1 | Controller Assembly* | | A-347008† | A-347010† | A-347047† | A-347044† | A-347009† |
| 1 | Grommet | X-284-25 | | | | | |
| 1 | Marker, Strip | 255080 | | | | | |
| 1 | Harness, Wiring | 258453 | | | | | |
| 2 | Relay | 272684 | | | | | |
| 1 | Panel, Relay | 274796 | | | | | |
| 1 | Harness, Wiring | | 258455 | 258455 | 258455 | 258455 | 297964 |
| 4 | Mount, Vibro | 282829 | | | | | |
| 3 | Transformer | | N/A | N/A | N/A | N/A | 258990 |
| 1 | Speed Pickup | 291288 | | | | | |
| 3 | Transformer, Current | | 291548 | 297675 | 291548 | 297675 | 248877 |
| 1 | Block, Terminal | 295314 | | | | | |

| 6- and 7-Light Microprocessor Controller Kit Parts | | | | | | | |
|--|----------------------|--------------|--------------------------|------------------|------------------|------------------|------------------|
| Qty. | Description | Common Parts | Kit Numbers/Unique Parts | | | | |
| | | | 293922 328163 | 293930 328161 | 293931 328165 | 293944 328167 | 293952 328169 |
| 1 | Controller Assembly* | | A-274923 | A-274930 | A-274931 | A-292458 | A-273802 |
| 1 | Controller Assembly* | | A-347011† | A-347043† | A-347045† | A-347008† | A-347042† |
| 1 | Grommet | X-284-25 | | | | | |
| 1 | Marker, Strip | 255080 | | | | | |
| 1 | Harness, Wiring | 258453 | | | | | |
| 2 | Relay | 272684 | | | | | |
| 1 | Panel, Relay | 274796 | | | | | |
| 1 | Harness, Wiring | | 274964 | 274964 | 258455 | 274964 | 274964 |
| 4 | Mount, Vibro | 282829 | | | | | |
| 3 | Transformer | | 258990 | 258990 | 258990 | 276578 | 276578 |
| 1 | Speed Pickup | 291288 | | | | | |
| 3 | Transformer, Current | | 291546 | 248877 | 291546 | 291546 | 291546 |
| 1 | Block, Terminal | 295314 | | | | | |

| 6- and 7-Light Microprocessor Controller Kit Parts | | | | | | | |
|--|----------------------|--------------|--------------------------|------------------|--|--|--|
| Qty. | Description | Common Parts | Kit Numbers/Unique Parts | | | | |
| | | | 293953 328173 | 293956 328171 | | | |
| 1 | Controller Assembly* | | A-273803 | A-292459 | | | |
| 1 | Controller Assembly* | | A-347044† | A-347010† | | | |
| 1 | Grommet | X-284-25 | | | | | |
| 1 | Marker, Strip | 255080 | | | | | |
| 1 | Harness, Wiring | 258453 | | | | | |
| 2 | Relay | 272684 | | | | | |
| 1 | Panel, Relay | 274796 | | | | | |
| 1 | Harness, Wiring | | 274964 | 274964 | | | |
| 4 | Mount, Vibro | 282829 | | | | | |
| 3 | Transformer | | 276578 | 276578 | | | |
| 1 | Speed Pickup | 291288 | | | | | |
| 3 | Transformer, Current | | 291548 | 291547 | | | |
| 1 | Block, Terminal | 295314 | | | | | |

* See Controller Assembly section beginning on page 55 for parts list.

† This controller assembly used in kit effective with generator set serial number greater than or equal to 363369.

6- and 7-Light Controller Kits, continued

| 6- and 7-Light Microprocessor Controller Kit Parts | | | | | | | |
|--|----------------------|--------------|--------------------------|----------|----------|----------|--|
| Qty. | Description | Common Parts | Kit Numbers/Unique Parts | | | | |
| | | | 328179 | 328181 | 354136 | 354138 | |
| 1 | Controller Assembly* | | A-347012 | A-347046 | A-347046 | A-347012 | |
| 1 | Washer, Lock, 3/8 | X-22-14 | | | | | |
| 4 | Washer, Lock, 5/16 | X-22-16 | | | | | |
| 1 | Washer, Lock, #8 | X-22-20 | | | | | |
| 1 | Grommet | X-284-25 | | | | | |
| 2 | Screw, r.h.m. 8-32 | X-51-11 | | | | | |
| 6 | Screw, Drill | X-794-2 | | | | | |
| 1 | Marker, Strip | 255080 | | | | | |
| 1 | Harness, Wiring | 258453 | | | | | |
| 2 | Relay | 272684 | | | | | |
| 1 | Panel, Relay | 274796 | | | | | |
| 1 | Harness, Wiring | 274964 | | | | | |
| 4 | Mount, Vibro | 282829 | | | | | |
| 3 | Transformer | | 287684 | 287684 | 276578 | 276578 | |
| 1 | Speed Pickup | 291288 | | | | | |
| 3 | Transformer, Current | 291548 | | | | | |
| 1 | Block, Terminal | 295314 | | | | | |

* See Controller Assembly section beginning on page 55 for parts list.

6- and 7- Light Controller Assemblies

| Qty. | Description | Common Parts | Controller Assembly Number/Unique Parts | | | | |
|------|------------------------------|--------------|---|----------|----------|----------|----------|
| | | | A-273802 | A-273803 | A-274923 | A-274925 | A-274930 |
| 1 | Resistor, 24 Volt | 268297 | | | | | |
| 1 | 6-Light Circuit Board | B-292381 | | | | | |
| 1 | Main Circuit Board | G-292806 | | | | | |
| 1 | Washer, Shakeproof E.T. | X-22-20 | | | | | |
| 2 | Washer, Lock | X-22-50 | | | | | |
| 4 | Washer, Lock #6 | X-22-6 | | | | | |
| 3 | Washer, Lock #8 | X-22-7 | | | | | |
| 8 | Washer, Plain | X-25-73 | | | | | |
| 1 | Grommet | X-284-31 | | | | | |
| 1 | Plug, Button | X-301-29 | | | | | |
| 1 | Plug, Button | X-301-34 | | | | | |
| 2 | Screw, r.h.m., 6-32 x 3/8 | X-49-2 | | | | | |
| 18 | Screw, r.h.m., 6-32 x 1/4 | X-49-25 | | | | | |
| 2 | Screw, Pan Head | X-49-39 | | | | | |
| 4 | Screw, r.h.m., 10-24 x 3/4 | X-50-3 | | | | | |
| 1 | Screw, Pan Head Machine | X-50-70 | | | | | |
| 2 | Screw, r.h.m. | X-51-53 | | | | | |
| 1 | Strap, Ground | X-6046-2 | | | | | |
| 1 | Jumper | X-6048-2 | | | | | |
| 12 | Screw, Hex Head | X-6216-1 | | | | | |
| 2 | Nut, Hex | X-6234-6 | | | | | |
| 2 | Screw, Thread Forming | X-67-127 | | | | | |
| 1 | Sleeve | X-696-5 | | | | | |
| 4 | Spacer | X-712-9 | | | | | |
| 1 | Tab, Ident. | 201620-86 | | | | | |
| 1 | Meter, Hour | 238736 | | | | | |
| 1 | Terminal | 238898 | | | | | |
| 1 | Connector, Plug 6 Position | 241617 | | | | | |
| 1 | Block, Terminal | 246115 | | | | | |
| 1 | Voltmeter | 255224 | | | | | |
| 3 | Bulb | 283420 | | | | | |
| 2 | Lamp, Meter Scale | 291740 | | | | | |
| 4 | Bumper | 255443 | | | | | |
| 1 | Plate, Hinge | | 273785 | 273785 | 292908 | 292908 | 273785 |
| 1 | Voltmeter, AC | | 282816 | 282816 | 282817 | 282817 | 282817 |
| 1 | Gauge, Oil Pressure | 282897 | | | | | |
| 1 | Gauge, Water Temperature | 282898 | | | | | |
| 1 | Ammeter, AC | | 282811 | 282812 | 282811 | 282813 | 282810 |
| 3 | Socket, Lamp | 284990 | | | | | |
| 8 | Spacer, Circuit Board | 287948 | | | | | |
| 3 | Fuse, 1.5 Amp | 291207 | | | | | |
| 1 | Decal | 292347 | | | | | |
| 1 | Resistor | 292352 | | | | | |
| 1 | Decal, Emergency Stop | 292467 | | | | | |
| 1 | Switch, Selector | 292374 | | | | | |
| 1 | Holder, Fuse | 292821 | | | | | |
| 1 | Marker, Strip | 292823 | | | | | |
| 1 | Bumper | 292834 | | | | | |
| 1 | Harness, Cable | 292836 | | | | | |
| 1 | Meter, Frequency | 282818 | | | | | |
| 1 | Cover, Controller | | 273838 | 273838 | 292818 | 292818 | 273838 |
| 1 | Nameplate | 292385 | | | | | |
| 1 | Box, Silkscreened Controller | | 273813 | 273813 | 292375 | 292375 | 273813 |
| 1 | Switch, Pushbutton | 292364 | | | | | |

b.

6- and 7-Light Controller Assemblies, continued

| Qty. | Description | Common Parts | Controller Assembly Number/Unique Parts | | | | |
|------|------------------------------|--------------|---|----------|----------|--|--|
| | | | A-274931 | A-292458 | A-292459 | | |
| 1 | Resistor, 24 Volt | 268297 | | | | | |
| 1 | 6-Light Circuit Board | B-292381 | | | | | |
| 1 | Main Circuit Board | G-292806 | | | | | |
| 1 | Washer, Shakeproof, E.T. | X-22-20 | | | | | |
| 2 | Washer, Lock | X-22-50 | | | | | |
| 4 | Washer, Lock #6 | X-22-6 | | | | | |
| 3 | Washer, Lock #8 | X-22-7 | | | | | |
| 8 | Washer, Plain | X-25-73 | | | | | |
| 1 | Grommet | X-284-31 | | | | | |
| 1 | Plug, Button | X-301-29 | | | | | |
| 1 | Plug, Button | X-301-34 | | | | | |
| 2 | Screw, r.h.m., 6-32 x 3/8 | X-49-2 | | | | | |
| 18 | Screw, r.h.m., 6-32 x 1/4 | X-49-25 | | | | | |
| 2 | Screw, Pan Head | X-49-39 | | | | | |
| 4 | Screw, r.h.m., 10-24 x 3/4 | X-50-3 | | | | | |
| 1 | Screw, Pan Head Machine | X-50-70 | | | | | |
| 2 | Screw, r.h.m. | X-51-53 | | | | | |
| 1 | Strap, Ground | X-6046-2 | | | | | |
| 1 | Jumper | X-6048-2 | | | | | |
| 12 | Screw, Hex Head | X-6216-1 | | | | | |
| 2 | Nut, Hex. | X-6234-6 | | | | | |
| 2 | Screw, Thread-forming | X-67-127 | | | | | |
| 1 | Sleeve | X-696-5 | | | | | |
| 4 | Spacer | X-712-9 | | | | | |
| 1 | Tab, Ident. | 201620-86 | | | | | |
| 1 | Meter, Hour | 238736 | | | | | |
| 1 | Terminal | 238898 | | | | | |
| 1 | Connector, Plug 6 Position | 241617 | | | | | |
| 1 | Block, Terminal | 246115 | | | | | |
| 1 | Voltmeter | 255224 | | | | | |
| 3 | Bulb | 283420 | | | | | |
| 2 | Lamp, Meter Scale | 291740 | | | | | |
| 4 | Bumper | 255443 | | | | | |
| 1 | Plate, Hinge | | 273785 | 292908 | 292908 | | |
| 1 | Voltmeter, AC | | 282817 | 282816 | 282816 | | |
| 1 | Gauge, Oil Pressure | 282897 | | | | | |
| 1 | Gauge, Water Temperature | 282898 | | | | | |
| 1 | Ammeter, AC | | 282811 | 282811 | 282812 | | |
| 3 | Socket, Lamp | 284990 | | | | | |
| 8 | Spacer, Circuit Board | 287948 | | | | | |
| 3 | Fuse, 1.5 Amp | 291207 | | | | | |
| 1 | Decal | 292347 | | | | | |
| 1 | Resistor | 292352 | | | | | |
| 1 | Decal, Emergency Stop | 292467 | | | | | |
| 1 | Switch, Selector | 292374 | | | | | |
| 1 | Holder, Fuse | 292821 | | | | | |
| 1 | Marker, Strip | 292823 | | | | | |
| 1 | Bumper | 292834 | | | | | |
| 1 | Harness, Cable | 292836 | | | | | |
| 1 | Meter, Frequency | 282818 | | | | | |
| 1 | Cover, Controller | | 273838 | 292818 | 292818 | | |
| 1 | Nameplate | 292385 | | | | | |
| 1 | Box, Silkscreened Controller | | 273813 | 292375 | 292375 | | |
| 1 | Switch, Pushbutton | 292364 | | | | | |

6- and 7-Light Controller Assemblies, continued

| Qty. | Description | Common Parts | Controller Assembly Number/Unique Parts | | | | | |
|------|------------------------------|--------------|---|----------|----------|----------|----------|----------|
| | | | A-347008 | A-347009 | A-347010 | A-347012 | A-347042 | A-347043 |
| 1 | Resistor, 24 Volt | 268297 | | | | | | |
| 1 | Indicator Circuit Board | A-336430 | | | | | | |
| 1 | Main Circuit Board | A-336415 | | | | | | |
| 1 | Washer, Shakeproof, E.T. | X-22-20 | | | | | | |
| 2 | Washer, Lock | X-22-50 | | | | | | |
| 4 | Washer, Lock #6 | X-22-6 | | | | | | |
| 3 | Washer, Lock #8 | X-22-7 | | | | | | |
| 8 | Washer, Plain | X-25-73 | | | | | | |
| 1 | Grommet | X-284-31 | | | | | | |
| 4 | Terminal | | | | X-285-9 | | | |
| 1 | Plug, Button | | X-301-29 | X-301-29 | | X-301-29 | X-301-29 | X-301-29 |
| 1 | Plug, Button | X-301-34 | | | | | | |
| 2 | Screw, r.h.m., 6-32 x 3/8 | X-49-2 | | | | | | |
| 18 | Screw, r.h.m., 6-32 x 1/4 | X-49-25 | | | | | | |
| 2 | Screw, Pan Head | X-49-39 | | | | | | |
| 4 | Screw, r.h.m., 10-24 x 3/4 | X-50-3 | | | | | | |
| 1 | Screw, Pan Head Machine | X-50-70 | | | | | | |
| 2 | Screw, r.h.m. | X-51-53 | | | | | | |
| 2 | Plug, Cap, 1/8 | | | | X-519-1 | | | |
| 1 | Strap, Ground | X-6046-2 | | | | | | |
| 1 | Jumper | X-6048-2 | | | | | | |
| 12 | Screw, Hex Head | X-6216-1 | | | | | | |
| 2 | Nut, Hex | X-6234-6 | | | | | | |
| 2 | Screw, Thread-forming | X-67-127 | | | | | | |
| 1 | Sleeve | X-696-5 | | | | | | |
| 4 | Spacer | X-712-9 | | | | | | |
| 1 | Tab, Ident. | 201620-86 | | | | | | |
| 1 | Meter, Hour | 238736 | | | | | | |
| 1 | Terminal | 238898 | | | | | | |
| 1 | Connector, Plug 6 Position | 241617 | | | | | | |
| 1 | Block, Terminal | 246115 | | | | | | |
| 1 | Voltmeter | 255224 | | | | | | |
| 3 | Bulb | 283420 | | | | | | |
| 2 | Lamp, Meter Scale | 291740 | | | | | | |
| 4 | Bumper | 255443 | | | | | | |
| 1 | Plate, Hinge | | 292908 | 292908 | 292908 | 292908 | 273785 | 273785 |
| 1 | Voltmeter, AC | | 282816 | 282817 | 282816 | 282816 | 282816 | 282817 |
| 1 | Gauge, Oil Pressure | 282897 | | | | | | |
| 1 | Gauge, Water Temperature | 282898 | | | | | | |
| 1 | Ammeter, AC | | 282811 | 282810 | 282812 | 282813 | 282811 | 282810 |
| 3 | Socket, Lamp | 284990 | | | | | | |
| 8 | Spacer, Circuit Board | 287948 | | | | | | |
| 3 | Fuse, 1.5 Amp | 291207 | | | | | | |
| | Lamp | | | | 291740 | | | |
| 1 | Decal | 292347 | | | | | | |
| 1 | Resistor | 292352 | | | | | | |
| 1 | Decal, Emergency Stop | 292467 | | | | | | |
| 1 | Switch, Selector | 292374 | | | | | | |
| 1 | Holder, Fuse | 292821 | | | | | | |
| 1 | Marker, Strip | 292823 | | | | | | |
| 1 | Bumper | 292834 | | | | | | |
| 1 | Harness, Cable | 336428 | | | | | | |
| 1 | Meter, Frequency | 282818 | | | | | | |
| 1 | Cover, Controller | | 292818 | 292818 | 292818 | 292818 | 273838 | 273838 |
| 1 | Nameplate | 328910 | | | | | | |
| 1 | Box, Silkscreened Controller | | 292375 | 292375 | 292375 | 292375 | 273813 | 273813 |
| 1 | Switch, Pushbutton | 292364 | | | | | | |
| 1 | Plug, Timing Hole Plug | | | | 336438 | | | |

6- and 7-Light Controller Assemblies, continued

| Qty. | Description | Common Parts | Controller Assembly Number/Unique Parts | | | | |
|------|------------------------------|--------------|---|----------|----------|----------|--|
| | | | A-347044 | A-347045 | A-347046 | A-347047 | |
| 1 | Resistor, 24 Volt | 268297 | | | | | |
| 1 | Indicator Circuit Board | A-336430 | | | | | |
| 1 | Main Circuit Board | A-336415 | | | | | |
| 1 | Washer, Shakeproof, E.T. | X-22-20 | | | | | |
| 2 | Washer, Lock | X-22-50 | | | | | |
| 4 | Washer, Lock #6 | X-22-6 | | | | | |
| 3 | Washer, Lock #8 | X-22-7 | | | | | |
| 8 | Washer, Plain | X-25-73 | | | | | |
| 1 | Grommet | X-284-31 | | | | | |
| 1 | Plug, Button | X-285-9 | | | | | |
| 1 | Plug, Button | | X-301-29 | X-301-29 | | X-301-29 | |
| 1 | Plug, Button | X-301-34 | | | | | |
| 2 | Screw, r.h.m., 6-32 x 3/8 | X-49-2 | | | | | |
| 18 | Screw, r.h.m., 6-32 x 1/4 | X-49-25 | | | | | |
| 2 | Screw, Pan Head | X-49-39 | | | | | |
| 4 | Screw, r.h.m., 10-24 x 3/4 | X-50-3 | | | | | |
| 1 | Screw, Pan Head Machine | X-50-70 | | | | | |
| 2 | Screw, r.h.m. | X-51-53 | | | | | |
| 1 | Strap, Ground | X-6046-2 | | | | | |
| 1 | Jumper | X-6048-2 | | | | | |
| 12 | Screw, Hex Head | X-6216-1 | | | | | |
| 2 | Nut, Hex | X-6234-6 | | | | | |
| 2 | Screw, Thread-forming | X-67-127 | | | | | |
| 1 | Sleeve | X-696-5 | | | | | |
| 4 | Spacer | X-712-9 | | | | | |
| 1 | Tab, Ident. | 201620-86 | | | | | |
| 1 | Meter, Hour | 238736 | | | | | |
| 1 | Terminal | 238898 | | | | | |
| 1 | Connector, Plug 6 Position | 241617 | | | | | |
| 1 | Block, Terminal | 246115 | | | | | |
| 1 | Voltmeter | 255224 | | | | | |
| 3 | Bulb | 283420 | | | | | |
| 2 | Lamp, Meter Scale | 291740 | | | | | |
| 4 | Bumper | 255443 | | | | | |
| 1 | Plate, Hinge | 273785 | | | | | |
| 1 | Voltmeter, AC | | 282816 | 282817 | 282816 | 282816 | |
| 1 | Gauge, Oil Pressure | 282897 | | | | | |
| 1 | Gauge, Water Temperature | 282898 | | | | | |
| 1 | Ammeter, AC | | 282812 | 282811 | 282813 | 282810 | |
| 3 | Socket, Lamp | 284990 | | | | | |
| 8 | Spacer, Circuit Board | 287948 | | | | | |
| 3 | Fuse, 1.5 Amp | 291207 | | | | | |
| 1 | Decal | 292347 | | | | | |
| 1 | Resistor | 292352 | | | | | |
| 1 | Switch, Pushbutton | | | | 292364 | | |
| 1 | Decal, Emergency Stop | 292467 | | | | | |
| 1 | Switch, Selector | 292374 | | | | | |
| 1 | Holder, Fuse | 292821 | | | | | |
| 1 | Marker, Strip | 292823 | | | | | |
| 1 | Bumper | 292834 | | | | | |
| 1 | Harness, Cable | 336428 | | | | | |
| 1 | Meter, Frequency | 282818 | | | | | |
| 1 | Cover, Controller | 273838 | | | | | |
| 1 | Nameplate | 328910 | | | | | |
| 1 | Box, Silkscreened Controller | 273813 | | | | | |
| 1 | Switch, Pushbutton | 292364 | | | | | |

16-Light Controller Kits

| 16-Light Microprocessor Controller Kit Parts | | | | | | | |
|--|----------------------|--|-------------------------|------------------|------------------|------------------|------------------|
| Qty. | Description | Common Parts | Kit Number/Unique Parts | | | | |
| | | | 293899 328151 | 293900 328156 | 293911 328149 | 293912 328154 | 293916 328158 |
| 1 | Controller Assembly* | X-284-25 255080 258453 272684 | A-273830 | A-273831 | B-292853 | B-292854 | A-274917 |
| 1 | Controller Assembly* | | A-328970† | A-328972† | A-328935† | A-328937† | A-328936† |
| 1 | Grommet | | | | | | |
| 1 | Marker, Strip | | | | | | |
| 1 | Harness, Wiring | | | | | | |
| 2 | Relay | | | | | | |
| 1 | Panel, Relay | 274796 | | | | | |
| 1 | Harness, Wiring | | 258455 | 258455 | 258455 | 258455 | 274964 |
| 4 | Mount, Vibro | | | | | | |
| 3 | Transformer | | N/A | N/A | N/A | N/A | 258990 |
| 1 | Speed Pickup | 291288 | | | | | |
| 3 | Transformer, Current | | 291548 | 297675 | 291548 | 297675 | 248877 |
| 1 | Block, Terminal | 295314 | | | | | |

| 16-Light Microprocessor Controller Kit Parts | | | | | | | |
|--|----------------------|--|-------------------------|------------------|------------------|------------------|------------------|
| Qty. | Description | Common Parts | Kit Number/Unique Parts | | | | |
| | | | 293917 328162 | 293925 328160 | 293926 328164 | 293939 328166 | 293940 328170 |
| 1 | Controller Assembly* | X-284-25 255080 258453 272684 | A-274918 | A-274591 | A-274926 | B-292853 | B-292854 |
| 1 | Controller Assembly* | | A-328938† | A-328971† | A-328973† | A-328935† | A-328937† |
| 1 | Grommet | | | | | | |
| 1 | Marker, Strip | | | | | | |
| 1 | Harness, Wiring | | | | | | |
| 2 | Relay | | | | | | |
| 1 | Panel, Relay | 274796 | | | | | |
| 1 | Harness, Wiring | | 274964 | 274964 | 274964 | 274964 | 274964 |
| 4 | Mount, Vibro | 282829 | | | | | |
| 3 | Transformer | | 258990 | 258990 | 258990 | 276578 | 276578 |
| 1 | Speed Pickup | 291288 | | | | | |
| 3 | Transformer, Current | | 291546 | 248877 | 291546 | 291546 | 291547 |
| 1 | Block, Terminal | 295314 | | | | | |

| 16-Light Microprocessor Controller Kit Parts | | | | | | | |
|--|----------------------|--|-------------------------|------------------|--|--|--|
| Qty. | Description | Common Parts | Kit Number/Unique Parts | | | | |
| | | | 293948 328168 | 293957 328172 | | | |
| 1 | Controller Assembly* | X-284-25 255080 258453 272684 | A-273830 | A-273831 | | | |
| 1 | Controller Assembly* | | A-328970† | A-328972† | | | |
| 1 | Grommet | | | | | | |
| 1 | Marker, Strip | | | | | | |
| 1 | Harness, Wiring | | | | | | |
| 2 | Relay | | | | | | |
| 1 | Panel, Relay | 274796 | | | | | |
| 1 | Harness, Wiring | 274964 | | | | | |
| 4 | Mount, Vibro | | 282829 | 282829 | | | |
| 3 | Transformer | | 276578 | 276578 | | | |
| 1 | Speed Pickup | 291288 | | | | | |
| 3 | Transformer, Current | | 291546 | 291547 | | | |
| 1 | Block, Terminal | 295314 | | | | | |

* See Controller Assembly section beginning on page 61 for parts list.

† This controller assembly used in kit effective with generator set serial number greater than or equal to 363369.

16-Light Controller Kits, continued

| 16-Light Microprocessor Controller Kit Parts | | | | | | | |
|--|----------------------|--------------|-------------------------|----------|----------|----------|--|
| Qty. | Description | Common Parts | Kit Number/Unique Parts | | | | |
| | | | 328178 | 328180 | 354135 | 354137 | |
| 1 | Controller Assembly* | | A-328939 | A-328974 | A-328934 | A-328974 | |
| 1 | Washer, Lock, 3/8 | X-22-14 | | | | | |
| 4 | Washer, Lock, 5/16 | X-22-16 | | | | | |
| 8 | Washer, Lock, #8 | X-22-20 | | | | | |
| 1 | Grommet | X-284-25 | | | | | |
| 2 | Screw, r.h.m., 8-32 | X-51-11 | | | | | |
| 6 | Screw, Drill | X-794-2 | | | | | |
| 1 | Marker, Strip | 255080 | | | | | |
| 1 | Harness, Wiring | 258453 | | | | | |
| 1 | Relay | 272684 | | | | | |
| 1 | Panel, Relay | 274796 | | | | | |
| 1 | Harness, Wiring | 274964 | | | | | |
| 3 | Transformer | | 287684 | 287684 | 276578 | 276578 | |
| 1 | Mount, Vibro | 282829 | | | | | |
| 1 | Speed Pickup | 291288 | | | | | |
| 3 | Transformer, Current | 291548 | | | | | |
| 1 | Block, Terminal | 295314 | | | | | |

* See Controller Assembly section beginning on page 61 for parts list.

16-Light Controller Assemblies

| Qty. | Description | Common Parts | 16-Light Controller Assembly Number/Unique Parts | | | | |
|------|------------------------------|--------------|--|----------|----------|----------|----------|
| | | | A-273830 | A-273831 | A-274591 | A-274917 | A-274918 |
| 1 | Resistor, 24 Volt | 268297 | | | | | |
| 1 | 16-Light Circuit Board | B-292356 | | | | | |
| 1 | Main Circuit Board | G-292806 | | | | | |
| 1 | Washer, Shakeproof, E.T. | X-22-20 | | | | | |
| 2 | Washer, Lock | X-22-50 | | | | | |
| 4 | Washer, Lock #6 | X-22-6 | | | | | |
| 3 | Washer, Lock #8 | X-22-7 | | | | | |
| 8 | Washer, Plain | X-25-73 | | | | | |
| 1 | Grommet | X-284-31 | | | | | |
| 1 | Plug, Button | X-301-29 | | | | | |
| 1 | Plug, Button | X-301-34 | | | | | |
| 2 | Screw, r.h.m., 6-32 x 3/8 | X-49-2 | | | | | |
| 18 | Screw, r.h.m., 6-32 x 1/4 | X-49-25 | | | | | |
| 2 | Screw, Pan Head | X-49-39 | | | | | |
| 4 | Screw, r.h.m. 10-24 x 3/4 | X-50-3 | | | | | |
| 1 | Screw, Pan Head Machine | X-50-70 | | | | | |
| 2 | Screw, r.h.m. | X-51-53 | | | | | |
| 1 | Strap, Ground | X-6046-2 | | | | | |
| 1 | Jumper | X-6048-2 | | | | | |
| 12 | Screw, Hex Head | X-6216-1 | | | | | |
| 2 | Nut, Hex | X-6234-6 | | | | | |
| 2 | Screw, Thread-forming | X-67-127 | | | | | |
| 1 | Sleeve | X-696-5 | | | | | |
| 4 | Spacer | X-712-9 | | | | | |
| 1 | Tab, Ident. | 201620-86 | | | | | |
| 1 | Meter, Hour | 238736 | | | | | |
| 1 | Terminal | 238898 | | | | | |
| 1 | Connector, Plug 6 Position | 241617 | | | | | |
| 1 | Block, Terminal | 246115 | | | | | |
| 1 | Voltmeter | 255224 | | | | | |
| 3 | Bulb | 283420 | | | | | |
| 2 | Lamp, Meter Scale | 291740 | | | | | |
| 4 | Bumper | 255443 | | | | | |
| 1 | Plate, Hinge | | 273785 | 273785 | 273785 | 292908 | 292908 |
| 1 | Voltmeter, AC | | 282816 | 282816 | 282817 | 282817 | 282817 |
| 1 | Gauge, Oil Pressure | 282897 | | | | | |
| 1 | Gauge, Water Temperature | 282898 | | | | | |
| 1 | Ammeter, AC | | 282811 | 282812 | 282810 | 282810 | 282811 |
| 3 | Socket, Lamp | 284990 | | | | | |
| 8 | Spacer, Circuit Board | 287948 | | | | | |
| 3 | Fuse, 1.5 Amp | 291207 | | | | | |
| 1 | Decal | 292347 | | | | | |
| 1 | Resistor | 292352 | | | | | |
| 1 | Decal, Emergency Stop | 292467 | | | | | |
| 1 | Switch, Selector | 292374 | | | | | |
| 1 | Holder, Fuse | 292821 | | | | | |
| 1 | Marker, Strip | 292823 | | | | | |
| 1 | Bumper | 292834 | | | | | |
| 1 | Harness, Cable | 292836 | | | | | |
| 1 | Meter, Frequency | 282818 | | | | | |
| 1 | Cover, Controller | | 273838 | 273838 | 273838 | 292818 | 292818 |
| 1 | Nameplate | 292385 | | | | | |
| 1 | Box, Silkscreened Controller | | 273813 | 273813 | 273813 | 292375 | 292375 |
| 1 | Switch, Pushbutton | 292364 | | | | | |

C.

16-Light Controller Assemblies, continued

| Qty. | Description | Common Parts | 16-Light Controller Assembly Number/Unique Parts | | | | |
|------|------------------------------|--------------|--|----------|----------|--|--|
| | | | A-274926 | B-292853 | B-292854 | | |
| 1 | Resistor, 24 Volt | 268297 | | | | | |
| 1 | 16-Light Circuit Board | B-292357 | | | | | |
| 1 | Main Circuit Board | G-292806 | | | | | |
| 1 | Washer, Shakeproof, E.T. | X-22-20 | | | | | |
| 2 | Washer, Lock | X-22-50 | | | | | |
| 4 | Washer, Lock #6 | X-22-6 | | | | | |
| 3 | Washer, Lock #8 | X-22-7 | | | | | |
| 8 | Washer, Plain | X-25-73 | | | | | |
| 1 | Grommet | X-284-31 | | | | | |
| 1 | Plug, Button | X-301-29 | | | | | |
| 1 | Plug, Button | X-301-34 | | | | | |
| 2 | Screw, r.h.m., 6-32 x 3/8 | X-49-2 | | | | | |
| 18 | Screw, r.h.m., 6-32 x 1/4 | X-49-25 | | | | | |
| 2 | Screw, Pan Head | X-49-39 | | | | | |
| 4 | Screw, r.h.m., 10-24 x 3/4 | X-50-3 | | | | | |
| 1 | Screw, Pan Head Machine | X-50-70 | | | | | |
| 2 | Screw, r.h.m. | X-51-53 | | | | | |
| 1 | Strap, Ground | X-6046-2 | | | | | |
| 1 | Jumper | X-6048-2 | | | | | |
| 12 | Screw, Hex Head | X-6216-1 | | | | | |
| 2 | Nut, Hex | X-6234-6 | | | | | |
| 2 | Screw, Thread-forming | X-67-127 | | | | | |
| 1 | Sleeve | X-696-5 | | | | | |
| 4 | Spacer | X-712-9 | | | | | |
| 1 | Tab, Ident. | 201620-86 | | | | | |
| 1 | Meter, Hour | 238736 | | | | | |
| 1 | Terminal | 238898 | | | | | |
| 1 | Connector, Plug 6 Position | 241617 | | | | | |
| 1 | Block, Terminal | 246115 | | | | | |
| 1 | Voltmeter | 255224 | | | | | |
| 3 | Bulb | 283420 | | | | | |
| 2 | Lamp, Meter Scale | 291740 | | | | | |
| 4 | Bumper | 255443 | | | | | |
| 1 | Plate, Hinge | | 273785 | 292908 | 292908 | | |
| 1 | Voltmeter, AC | | 282817 | 282816 | 282816 | | |
| 1 | Gauge, Oil Pressure | 282897 | | | | | |
| 1 | Gauge, Water Temperature | 282898 | | | | | |
| 1 | Ammeter, AC | | 282811 | 282811 | 282813 | | |
| 3 | Socket, Lamp | 284990 | | | | | |
| 8 | Spacer, Circuit Board | 287948 | | | | | |
| 3 | Fuse, 1.5 Amp | 291207 | | | | | |
| 1 | Decal | 292347 | | | | | |
| 1 | Resistor | 292352 | | | | | |
| 1 | Decal, Emergency Stop | 292467 | | | | | |
| 1 | Switch, Selector | 292374 | | | | | |
| 1 | Holder, Fuse | 292821 | | | | | |
| 1 | Marker, Strip | 292823 | | | | | |
| 1 | Bumper | 292834 | | | | | |
| 1 | Harness, Cable | 292836 | | | | | |
| 1 | Meter, Frequency | 282818 | | | | | |
| 1 | Cover, Controller | | 273838 | 292818 | 292818 | | |
| 1 | Nameplate | 292385 | | | | | |
| 1 | Box, Silkscreened Controller | | 273813 | 292375 | 292375 | | |
| 1 | Switch, Pushbutton | 292364 | | | | | |

16-Light Controller Assemblies, continued

| Qty. | Description | Common Parts | 16-Light Controller Assembly Number/Unique Parts | | | | | |
|------|------------------------------|--------------|--|----------|----------|----------|----------|----------|
| | | | A-328934 | A-328935 | A-328936 | A-328937 | A-328938 | A-328939 |
| 1 | Resistor, 24 Volt | 268297 | | | | | | |
| 1 | 16-Light Circuit Board | A-336432 | | | | | | |
| 1 | Main Circuit Board | A-336415 | | | | | | |
| 1 | Washer, Shakeproof, E.T. | X-22-20 | | | | | | |
| 2 | Washer, Lock | X-22-50 | | | | | | |
| 4 | Washer, Lock #6 | X-22-6 | | | | | | |
| 3 | Washer, Lock #8 | X-22-7 | | | | | | |
| 8 | Washer, Plain | X-25-73 | | | | | | |
| 1 | Grommet | X-284-31 | | | | | | |
| 1 | Plug, Button | | | X-301-29 | X-301-29 | X-301-29 | X-301-29 | |
| 1 | Plug, Button | X-301-34 | | | | | | |
| 2 | Screw, r.h.m., 6-32 x 3/8 | X-49-2 | | | | | | |
| 1 | Terminal | | X-431-42 | | | | | X-431-42 |
| 18 | Screw, r.h.m., 6-32 x 1/4 | X-49-25 | | | | | | |
| 5 | Tie, Cable Nylon | | X-468-3 | | | | | X-468-3 |
| 2 | Screw, Pan Head | X-49-39 | | | | | | |
| 4 | Screw, r.h.m. 10-24 x 3/4 | X-50-3 | | | | | | |
| 1 | Screw, Pan Head Machine | X-50-70 | | | | | | |
| 2 | Screw, r.h.m. | X-51-53 | | | | | | |
| 2 | Plug, Cap, 1/8 | | X-519-1 | | | | | X-519-1 |
| 1 | Strap, Ground | X-6046-2 | | | | | | |
| 1 | Jumper | X-6048-2 | | | | | | |
| 12 | Screw, Hex Head | X-6216-1 | | | | | | |
| 2 | Nut, Hex | X-6234-6 | | | | | | |
| 2 | Screw, Thread-forming | X-67-127 | | | | | | |
| 1 | Sleeve | X-696-5 | | | | | | |
| 2 | Nut, Hex 6-32 | | X-71-2 | | | | | X-71-2 |
| 4 | Spacer | X-712-9 | | | | | | |
| 2 | Nut, Hex 8-32 | | X-72-4 | | | | | X-72-4 |
| 1 | Tab, Ident. | 201620-86 | | | | | | |
| 1 | Meter, Hour | 238736 | | | | | | |
| 1 | Terminal | 238898 | | | | | | |
| 1 | Connector, Plug 6 Position | 241617 | | | | | | |
| 1 | Block, Terminal | 246115 | | | | | | |
| 1 | Voltmeter | 255224 | | | | | | |
| 3 | Bulb | 283420 | | | | | | |
| 2 | Lamp, Meter Scale | 291740 | | | | | | |
| 4 | Bumper | | | 255443 | 255443 | 255443 | 255443 | |
| 1 | Plate, Hinge | | 292908 | 292908 | 292908 | 292908 | 292908 | 292908 |
| 1 | Voltmeter, AC | | 282817 | 282816 | 282817 | 282816 | 282817 | 282816 |
| 1 | Gauge, Oil Pressure | 282897 | | | | | | |
| 1 | Gauge, Water Temperature | 282898 | | | | | | |
| 1 | Ammeter, AC | | 282809 | 282811 | 282810 | 282812 | 282811 | 282813 |
| 3 | Socket, Lamp | 284990 | | | | | | |
| 8 | Spacer, Circuit Board | 287948 | | | | | | |
| 3 | Fuse, 1.5 Amp | 291207 | | | | | | |
| 1 | Decal | 292347 | | | | | | |
| 1 | Resistor | 292352 | | | | | | |
| 1 | Decal, Emergency Stop | 292467 | | | | | | |
| 1 | Switch, Selector | 292374 | | | | | | |
| 1 | Holder, Fuse | 292821 | | | | | | |
| 1 | Marker, Strip | 292823 | | | | | | |
| 1 | Bumper | 292834 | | | | | | |
| 1 | Harness, Cable | 336428 | | | | | | |
| 1 | Meter, Frequency | 282818 | | | | | | |
| 1 | Cover, Controller | | 292818 | 292818 | 292818 | 292818 | 292818 | 292818 |
| 1 | Nameplate | | 354386 | 292383 | 292383 | 292383 | 292383 | 354386 |
| 1 | Box, Silkscreened Controller | | 292375 | 292375 | 292375 | 292375 | 292375 | 292375 |
| 1 | Switch, Pushbutton | 292364 | | | | | | |

16-Light Controller Assemblies, continued

| Qty. | Description | Common Parts | 16-Light Controller Assembly Number/Unique Parts | | | | |
|------|------------------------------|--------------|--|-----------|-----------|-----------|-----------|
| | | | A-328970 | A-328971 | A-328972 | A-328973 | A-328974 |
| 1 | Resistor, 24 Volt | 268297 | | | | | |
| 1 | 16-Light Circuit Board | A-336432 | | | | | |
| 1 | Main Circuit Board | A-336415 | | | | | |
| 1 | Washer, Shakeproof, E.T. | X-22-20 | | | | | |
| 2 | Washer, Lock | X-22-50 | | | | | |
| 4 | Washer, Lock #6 | X-22-6 | | | | | |
| 3 | Washer, Lock #8 | X-22-7 | | | | | |
| 8 | Washer, Plain | X-25-73 | | | | | |
| 1 | Grommet | X-284-31 | | | | | |
| 1 | Plug, Button | | X-301-29 | X-301-29 | X-301-29 | X-301-29 | |
| 1 | Plug, Button | X-301-34 | | | | | |
| 5 | Tie, Cable Nylon | | | | | | X-468-3 |
| 2 | Screw, r.h.m., 6-32 x 3/8 | X-49-2 | | | | | |
| 18 | Screw, r.h.m., 6-32 x 1/4 | X-49-25 | | | | | |
| 2 | Screw, Pan Head | X-49-39 | | | | | |
| 4 | Screw, r.h.m., 10-24 x 3/4 | X-50-3 | | | | | |
| 1 | Screw, Pan Head Machine | X-50-70 | | | | | |
| 2 | Screw, r.h.m. | X-51-53 | | | | | |
| 2 | Plug, Cap | | | | | | X-519-1 |
| 1 | Strap, Ground | X-6046-2 | | | | | |
| 1 | Jumper | X-6048-2 | | | | | |
| 12 | Screw, Hex Head | X-6216-1 | | | | | |
| 2 | Nut, Hex | X-6234-6 | | | | | |
| 2 | Screw, Thread-forming | X-67-127 | | | | | |
| 1 | Sleeve | X-696-5 | | | | | |
| 2 | Nut, Hex 6-32 | | | | | | X-71-2 |
| 4 | Spacer | X-712-9 | | | | | |
| 4 | Nut, Hex 8-32 | | | | | | X-72-4 |
| 1 | Tab, Ident. | | 201620-86 | 201620-86 | 201620-86 | 201620-86 | 201620-85 |
| 1 | Meter, Hour | 238736 | | | | | |
| 1 | Terminal | 238898 | | | | | |
| 1 | Connector, Plug 6 Position | 241617 | | | | | |
| 1 | Block, Terminal | 246115 | | | | | |
| 1 | Voltmeter | 255224 | | | | | |
| 3 | Bulb | 283420 | | | | | |
| 2 | Lamp, Meter Scale | 291740 | | | | | |
| 4 | Bumper | 255443 | | | | | |
| 1 | Plate, Hinge | 273785 | | | | | |
| 1 | Voltmeter, AC | | 282816 | 282817 | 282816 | 282817 | 282816 |
| 1 | Gauge, Oil Pressure | 282897 | | | | | |
| 1 | Gauge, Water Temperature | 282898 | | | | | |
| 1 | Ammeter, AC | | 282811 | 282810 | 282812 | 282811 | 282813 |
| 3 | Socket, Lamp | 284990 | | | | | |
| 8 | Spacer, Circuit Board | 287948 | | | | | |
| 3 | Fuse, 1.5 Amp | 291207 | | | | | |
| 1 | Decal | 292347 | | | | | |
| 1 | Resistor | 292352 | | | | | |
| 1 | Decal, Emergency Stop | 292467 | | | | | |
| 1 | Switch, Selector | 292374 | | | | | |
| 1 | Holder, Fuse | 292821 | | | | | |
| 1 | Marker, Strip | 292823 | | | | | |
| 1 | Bumper | 292834 | | | | | |
| 1 | Bumper | | | | | | 255443 |
| 1 | Harness, Cable | 336428 | | | | | |
| 1 | Meter, Frequency | 282818 | | | | | |
| 1 | Cover, Controller | 273838 | | | | | |
| 1 | Nameplate | | 292383 | 292383 | 292383 | 292383 | 354386 |
| 1 | Box, Silkscreened Controller | 273813 | | | | | |
| 1 | Switch, Pushbutton | 292364 | | | | | |

Manual Paralleling Controller Kits

| Manual Paralleling Controller Kit Parts | | | | | | | |
|---|-------------------------|--------------|--------------------------|----------|----------|----------|--|
| Qty. | Description | Common Parts | Kit Numbers/Unique Parts | | | | |
| | | | 328845 | 328846 | 328848 | 328849 | |
| 1 | Controller Assembly | | A-328401 | A-328418 | A-328452 | A-328469 | |
| 4 | Screw, h.c., 10-24 | X-117-5 | | | | | |
| 1 | Washer, Lock, 3/8 | X-22-14 | | | | | |
| 4 | Washer, Lock, 5/16 | X-22-16 | | | | | |
| 8 | Washer, Lock, #8 | X-22-20 | | | | | |
| 1 | Grommet | X-284-25 | | | | | |
| 2 | Screw, r.h.m., 8-32 x 3 | X-51-11 | | | | | |
| 3 | Clamp | X-672-10 | | | | | |
| 3 | Screw, Drill Hex | X-794-1 | | | | | |
| 1 | Marker, Strip | 255080 | | | | | |
| 2 | Relay | 272684 | | | | | |
| 1 | Panel, Relay | 274796 | | | | | |
| 1 | Mount, Vibro | 282829 | | | | | |
| 1 | Pick-up, Speed | 291288 | | | | | |
| 3 | Transformer, Current | 291548 | | | | | |
| 1 | Block, Terminal | 295314 | | | | | |
| 1 | Harness, Wiring | 328776 | | | | | |
| 1 | Module, Single Phase | 328784 | | | | | |

| Manual Paralleling Controller Kit Parts | | |
|---|--------------------------|----------|
| Qty. | Description | 328850 |
| 1 | Controller Assembly | A-328483 |
| 8 | Screw, h.c. 10-24 | X-117-5 |
| 4 | Washer, Lock, 5/16 | X-22-16 |
| 2 | Washer, Lock, #4 | X-22-24 |
| 2 | Screw, RDH 4-40 x 7 | X-49-35 |
| 3 | Clamp | X-672-10 |
| 7 | Screw, Drill Hex | X-794-1 |
| 1 | Sensor, Ferromagnetic | 241623 |
| 1 | Bracket, Sensor Mounting | 257070 |
| 2 | Relay | 272684 |
| 3 | Transformer, Current | 354689 |
| 1 | Bracket, CT Mounting | 352382 |
| 1 | Harness, Wiring | 328776 |
| 1 | Module, Single Phase | 328784 |

| Manual Paralleling Controller Kit Parts | | | | | | | |
|---|-----------------------|--------------|--------------------------|----------|----------|----------|--|
| Qty. | Description | Common Parts | Kit Numbers/Unique Parts | | | | |
| | | | 328857 | 328858 | 328860 | 328861 | |
| 1 | Controller Assembly | | A-328402 | A-328419 | A-328453 | A-328470 | |
| 4 | Screw, h.c. 10-24 | X-117-5 | | | | | |
| 1 | Washer, Lock, 3/8 | X-22-14 | | | | | |
| 4 | Washer, Lock, 5/16 | X-22-16 | | | | | |
| 8 | Washer, Lock, #8 | X-22-20 | | | | | |
| 1 | Grommet | X-284-25 | | | | | |
| 2 | Screw, r.h.m., 8-32X3 | X-51-11 | | | | | |
| 3 | Clamp | X-672-10 | | | | | |
| 3 | Screw, Drill Hex | X-794-1 | | | | | |
| 1 | Marker, Strip | 255080 | | | | | |
| 2 | Relay | 272684 | | | | | |
| 1 | Panel, Relay | 274796 | | | | | |
| 1 | Mount, Vibro | 282829 | | | | | |
| 1 | Pick-up, Speed | 291288 | | | | | |
| 1 | Block, Terminal | 295314 | | | | | |
| 3 | Transformer, Current | 297675 | | | | | |
| 1 | Harness, Wiring | 328776 | | | | | |
| 1 | Module, Single Phase | 328784 | | | | | |

Manual Paralleling Controller Kits, continued

| Manual Paralleling Controller Kit Parts | | | | | | | |
|---|-----------------------|--------------|--------------------------|----------|----------|----------|----------|
| Qty. | Description | Common Parts | Kit Numbers/Unique Parts | | | | |
| | | | 328862 | 328875 | 328876 | 354822 | 354823 |
| 1 | Controller Assembly | | A-328843 | A-328454 | A-328471 | A-328452 | A-328453 |
| 4 | Screw, h.c., 10-24 | X-117-5 | | | | | |
| 1 | Washer, Lock, 3/8 | X-22-14 | | | | | |
| 4 | Washer, Lock, 5/16 | X-22-16 | | | | | |
| 8 | Washer, Lock, #8 | X-22-20 | | | | | |
| 1 | Grommet | X-284-25 | | | | | |
| 2 | Screw, r.h.m., 8-32X3 | X-51-11 | | | | | |
| 3 | Clamp | X-672-10 | | | | | |
| 3 | Screw, Drill Hex | X-794-1 | | | | | |
| 3 | Screw, Drill | | | X-794-2 | X-794-2 | | |
| 1 | Marker, Strip | 255080 | | | | | |
| 2 | Relay | 272684 | | | | | |
| 1 | Panel, Relay | 274796 | | | | | |
| 1 | Mount, Vibro | 282829 | | | | | |
| 1 | Pick-up, Speed | 291288 | | | | | |
| 1 | Block, Terminal | 295314 | | | | | |
| 3 | Transformer, Current | | 291546 | 291548 | 291548 | 291546 | 291547 |
| 1 | Harness, Wiring | | 328776 | 328905 | 328905 | 328776 | 328776 |
| 1 | Module, Single Phase | 328784 | | | | | |
| 1 | Screen | | | 328904 | | | |

Manual Paralleling Controller Assemblies

| Qty. | Description | Common Parts | Manual Paralleling Controller Assembly Number/Unique Parts | | | | | |
|------|----------------------------|--------------|--|----------|-----------|-----------|-----------|-----------|
| | | | A-328401 | A-328402 | A-328418 | A-328419 | A-328452 | A-328453 |
| 1 | Main Circuit Board | A-336415 | | | | | | |
| 1 | 16-Light Circuit Board | A-336432 | | | | | | |
| 1 | Washer, Shakeproof | X-22-20 | | | | | | |
| 2 | Washer, Lock | X-22-50 | | | | | | |
| 2 | Washer, Lock #6 | X-22-6 | | | | | | |
| 5 | Washer, Lock #8 | X-22-7 | | | | | | |
| 8 | Washer, Lock #10 | X-22-9 | | | | | | |
| 1 | Washer, Plain | X-25-139 | | | | | | |
| 1 | Grommet | X-284-31 | | | | | | |
| 4 | Terminal, Push-on | | | | X-431-25 | X-431-25 | X-431-25 | X-431-25 |
| 3 | Tie, Cable Nylon | X-468-3 | | | | | | |
| 2 | Resistor | X-472-6 | | | | | | |
| 6 | Screw, r.h.m., 6-32 x 3/8 | X-49-2 | | | | | | |
| 18 | Screw, r.h.m., 6-32 x 1/4 | X-49-25 | | | | | | |
| 2 | Screw, Pan Head | X-49-39 | | | | | | |
| 5 | Screw, r.h.m., 10-24 x 3/4 | X-50-3 | | | | | | |
| 1 | Screw, Pan Head Machine | X-50-70 | | | | | | |
| 2 | Screw, r.h.m. | X-51-11 | | | | | | |
| 2 | Screw, r.h.m. | X-51-53 | | | | | | |
| 1 | Strap, Ground | X-6046-2 | | | | | | |
| 1 | Jumper | X-6048-2 | | | | | | |
| 1 | Relay, Reverse Power | X-6115-10 | | | | | | |
| 1 | Relay, Synch Check | X-6120-17 | | | | | | |
| 2 | Knob, Potentiometer | | | | X-6136-35 | X-6136-35 | X-6136-35 | X-6136-35 |
| 12 | Screw, h.c. | X-6216-1 | | | | | | |
| 2 | Nut, Hex | X-6234-6 | | | | | | |
| 2 | Screw, Thread Forming | X-67-127 | | | | | | |
| 1 | Sleeve | X-696-5 | | | | | | |
| 2 | Nut, Hex | X-70-12 | | | | | | |
| 2 | Nut, Hex | X-71-2 | | | | | | |
| 4 | Spacer | X-712-9 | | | | | | |
| 2 | Nut, Hex, 6-32 | X-72-4 | | | | | | |
| 1 | Ring Lock Switch | 151511 | | | | | | |
| 1 | Tab, Ident. | 201620-86 | | | | | | |
| 3 | Diode, 6 Amp | 233959 | | | | | | |
| 1 | Meter, Hour | 238736 | | | | | | |
| 1 | Terminal | 238898 | | | | | | |
| 2 | Socket | 243645 | | | | | | |
| 2 | Bulb | 243987 | | | | | | |
| 1 | Block, Terminal | 246115 | | | | | | |
| 1 | Switch, Toggle | 249689 | | | | | | |
| 1 | Voltmeter | 255224 | | | | | | |
| 1 | Lamp, Meter Scale | 264513 | | | | | | |
| 2 | Resistor, 24V | 268297 | | | | | | |
| 1 | Potentiometer | 273767 | | | | | | |
| 1 | Wattmeter | | 274337 | 274337 | 274337 | 274338 | 274337 | 274338 |
| 1 | Ammeter | | 282811 | 282812 | 282811 | 282812 | 282811 | 282812 |
| 1 | Voltmeter, AC | 282816 | | | | | | |
| 1 | Meter, Frequency | 282818 | | | | | | |
| 1 | Gauge, Oil Pressure | 282897 | | | | | | |
| 1 | Gauge, Water Temperature | 282898 | | | | | | |
| 3 | Bulb | 283420 | | | | | | |
| 1 | Fuse, 15 Amp | 283645 | | | | | | |
| 4 | Fuse, 1 Amp | 284205 | | | | | | |
| 3 | Socket, Lamp | 284990 | | | | | | |
| 9 | Spacer | 287948 | | | | | | |
| 3 | Fuse, 1.5 amp | 291207 | | | | | | |
| 2 | Relay | 291309 | | | | | | |
| 2 | Lamp | 291740 | | | | | | |
| 1 | Decal | 292347 | | | | | | |
| 1 | Switch, Pushbutton | 292364 | | | | | | |
| 1 | Switch, Selector | 292374 | | | | | | |
| 1 | Decal, Emergency Stop | 292467 | | | | | | |
| 2 | Holder, Fuse | 292821 | | | | | | |
| 2 | Socket, Relay | 295034 | | | | | | |
| 2 | Block, Terminal | 295266 | | | | | | |
| 2 | Relay | | 295318 | 295318 | | | | |
| 1 | Lamp, Socket | 295325 | | | | | | |
| 1 | Lens | 295328 | | | | | | |
| 2 | Cover, Terminal Strip | 295925 | | | | | | |
| 1 | Box, Controller | 328488 | | | | | | |
| 1 | Cover, Controller | 328489 | | | | | | |

Parts list continues

Manual Paralleling Controller Assemblies, continued

| Qty. | Description | Common Parts | Manual Paralleling Controller Assembly Number/Unique Parts (Continued) | | | | | |
|------|-------------------------------|--------------|---|----------|----------|----------|----------|----------|
| | | | A-328401 | A-328402 | A-328418 | A-328419 | A-328452 | A-328453 |
| 1 | Panel, Hinge | 328491 | | | | | | |
| 1 | Transducer, Watt | | 328506 | 328507 | 328520 | 328521 | 328548 | 328549 |
| 4 | Mount, Controller | 328644 | | | | | | |
| 4 | Mount, Controller | 328645 | | | | | | |
| 4 | Transformer | | | | 328673 | 328673 | 328674 | 328674 |
| 1 | Harness, Wiring | 328772 | | | | | | |
| 1 | Switch, Pushbutton | 328773 | | | | | | |
| 1 | Switch, Toggle | 328789 | | | | | | |
| 1 | Nameplate, Engraved | 328790 | | | | | | |
| 1 | Nameplate, Engraved | 328791 | | | | | | |
| 1 | Nameplate, Engraved | 328792 | | | | | | |
| 1 | Cable, Ribbon | 336579 | | | | | | |
| 1 | Bracket, Transformer Mounting | 342176 | | | | | | |
| 1 | Strip, Marker | 342177 | | | | | | |
| 1 | Strip, Marker | 342178 | | | | | | |
| 1 | Strip, Marker | 342179 | | | | | | |
| 4 | Clip, Retaining | 352911 | | | | | | |
| 1 | Nameplate | 354386 | | | | | | |

Manual Paralleling Controller Assemblies, continued

| Qty. | Description | Common Parts | Manual Paralleling Controller Assembly Number/Unique Parts | | | | | |
|------|---------------------------|--------------|--|----------|----------|----------|----------|--|
| | | | A-328454 | A-328469 | A-328470 | A-328471 | A-328483 | |
| 1 | Main Circuit Board | A-336415 | | | | | | |
| 1 | 16-Light Circuit Board | A-336432 | | | | | | |
| 1 | Washer, Shakeproof | X-22-20 | | | | | | |
| 2 | Washer, Lock | X-22-50 | | | | | | |
| 2 | Washer, Lock #6 | X-22-6 | | | | | | |
| 5 | Washer, Lock #8 | X-22-7 | | | | | | |
| 8 | Washer, Lock #10 | X-22-9 | | | | | | |
| 1 | Washer, Plain | X-25-139 | | | | | | |
| 1 | Grommet | X-284-31 | | | | | | |
| 4 | Terminal, Push-on | X-431-25 | | | | | | |
| 3 | Tie, Cable Nylon | X-468-3 | | | | | | |
| 2 | Resistor | X-472-6 | | | | | | |
| 6 | Screw, r.h.m. 6-32 x 3/8 | X-49-2 | | | | | | |
| 18 | Screw, r.h.m. 6-32 x 1/4 | X-49-25 | | | | | | |
| 2 | Screw, Pan Head | X-49-39 | | | | | | |
| 5 | Screw, r.h.m. 10-24 x 3/4 | X-50-3 | | | | | | |
| 1 | Screw, Pan Head Machine | X-50-70 | | | | | | |
| 2 | Screw, r.h.m. | X-51-11 | | | | | | |
| 2 | Screw, r.h.m. | X-51-53 | | | | | | |
| 1 | Strap, Ground | X-6046-2 | | | | | | |
| 1 | Jumper | X-6048-2 | | | | | | |
| 1 | Relay, Reverse Power | X-6115-10 | | | | | | |
| 1 | Relay, Synch Check | X-6120-17 | | | | | | |
| 2 | Knob, Potentiometer | X-6136-35 | | | | | | |
| 12 | Screw, h.c. | X-6216-1 | | | | | | |
| 2 | Nut, Hex. | X-6234-6 | | | | | | |
| 2 | Screw, Thread-forming | X-67-127 | | | | | | |
| 1 | Sleeve | X-696-5 | | | | | | |
| 2 | Nut, Hex | X-70-12 | | | | | | |
| 2 | Nut, Hex | X-71-2 | | | | | | |
| 4 | Spacer | X-712-9 | | | | | | |
| 2 | Nut, Hex, 6-32 | X-72-4 | | | | | | |
| 1 | Ring Lock Switch | 151511 | | | | | | |
| 1 | Tab, Ident. | 201620-86 | | | | | | |
| 3 | Diode, 6 Amp | 233959 | | | | | | |
| 1 | Meter, Hour | 238736 | | | | | | |
| 1 | Terminal | 238898 | | | | | | |
| 2 | Socket | 243645 | | | | | | |
| 2 | Bulb | 243987 | | | | | | |
| 1 | Block, Terminal | 246115 | | | | | | |
| 1 | Switch, Toggle | 249689 | | | | | | |
| 1 | Voltmeter | 255224 | | | | | | |
| 1 | Lamp, Meter Scale | 264513 | | | | | | |
| 2 | Resistor, 24V | 268297 | | | | | | |
| 1 | Potentiometer | 273767 | | | | | | |
| 1 | Wattmeter | | 274339 | 274337 | 274338 | 274339 | 274337 | |
| 1 | Ammeter | | 282813 | 282811 | 282812 | 282813 | 282810 | |
| 1 | Voltmeter, AC | | 282816 | 282816 | 282816 | 282816 | 282817 | |
| 1 | Meter, Frequency | 282818 | | | | | | |
| 1 | Gauge, Oil Pressure | 282897 | | | | | | |
| 1 | Gauge, Water Temperature | 282898 | | | | | | |
| 3 | Bulb | 283420 | | | | | | |
| 1 | Fuse, 15 Amp | 283645 | | | | | | |
| 4 | Fuse, 1 Amp | 284205 | | | | | | |
| 3 | Socket, Lamp | 284990 | | | | | | |
| 9 | Spacer | 287948 | | | | | | |
| 3 | Fuse, 1.5 Amp | 291207 | | | | | | |
| 2 | Relay | 291309 | | | | | | |
| 2 | Lamp | 291740 | | | | | | |
| 1 | Decal | 292347 | | | | | | |
| 1 | Resistor | | | | | | 292352 | |
| 1 | Switch, Pushbutton | 292364 | | | | | | |
| 1 | Switch, Selector | 292374 | | | | | | |
| 1 | Decal, Emergency Stop | 292467 | | | | | | |
| 2 | Holder, Fuse | 292821 | | | | | | |
| 2 | Socket, Relay | 295034 | | | | | | |
| 2 | Block, Terminal | 295266 | | | | | | |
| 1 | Lamp, Socket | 295325 | | | | | | |
| 1 | Lens | 295328 | | | | | | |
| 2 | Cover, Terminal Strip | 295925 | | | | | | |
| 1 | Box, Controller | 328488 | | | | | | |
| 1 | Cover, Controller | 328489 | | | | | | |

Parts list continues

Manual Paralleling Controller Assemblies, continued

| Qty. | Description | Common Parts | Manual Paralleling Controller Assembly Number/Unique Parts (continued) | | | | | |
|------|-------------------------------|--------------|---|----------|----------|----------|----------|--|
| | | | A-328454 | A-328469 | A-328470 | A-328471 | A-328483 | |
| 1 | Panel, Hinge | 328491 | | | | | | |
| 1 | Transducer, Watt | | 328550 | 328562 | 328563 | 328564 | 328574 | |
| 4 | Mount, Controller | 328644 | | | | | | |
| 4 | Mount, Controller | 328645 | | | | | | |
| 4 | Transformer | | 328674 | 328675 | 328675 | 328675 | 328676 | |
| 1 | Harness, Wiring | 328772 | | | | | | |
| 1 | Switch, Pushbutton | 328773 | | | | | | |
| 1 | Switch, Toggle | 328789 | | | | | | |
| 1 | Nameplate, Engraved | 328790 | | | | | | |
| 1 | Nameplate, Engraved | 328791 | | | | | | |
| 1 | Nameplate, Engraved | 328792 | | | | | | |
| 1 | Cable, Ribbon | 336579 | | | | | | |
| 1 | Bracket, Transformer Mounting | 342176 | | | | | | |
| 1 | Strip, Marker | 342177 | | | | | | |
| 1 | Strip, Marker | 342178 | | | | | | |
| 1 | Strip, Marker | 342179 | | | | | | |
| 4 | Clip, Retaining | 352911 | | | | | | |
| 1 | Nameplate | 354386 | | | | | | |

Decision Maker 340™ Kits

| Decision Maker 340™ Controller Kits | | | | | | | | |
|-------------------------------------|----------------------|--------------|--------------------------|--------|---------|---------|---------|---------|
| Qty. | Description | Common Parts | Kit Numbers/Unique Parts | | | | | |
| | | | 347919 | 347920 | 347921 | 347922 | 347923 | 347924 |
| 1 | Controller Assembly* | A-347947 | | | | | | |
| 1 | Washer, Lock, 3/8 | X-22-14 | | | | | | |
| 4 | Washer, Lock, 5/16 | X-22-16 | | | | | | |
| 8 | Washer, Lock, #8 | X-22-20 | | | | | | |
| 1 | Grommet | X-284-25 | | | | | | |
| 2 | Screw, r.h.m., 8-32 | X-51-11 | | | | | | |
| 1 | Marker, Strip | 255080 | | | | | | |
| 1 | Harness, Wiring | 258453 | | | | | | |
| 1 | Harness, Wiring | | 258455 | 258455 | 274964 | 274964 | 274964 | 274964 |
| 1 | Relay | 272684 | | | | | | |
| 1 | Panel, Relay | 274796 | | | | | | |
| 4 | Mount, Vibro | 282829 | | | | | | |
| 1 | Pick-up, Speed | 291288 | | | | | | |
| 3 | Transformer, Current | | 291548 | 297675 | 354689 | 291546 | 291546 | 291547 |
| 1 | Block, Terminal | 295314 | | | | | | |
| 6 | Screw, Drill | | | | X-794-2 | X-794-2 | X-794-2 | X-794-2 |
| 3 | Transformer | | | | 258990 | 258990 | 276578 | 276578 |

*See Controller Assembly table below for parts list.

| Decision Maker 340™ Controller Assemblies | | | | | | | | |
|---|-------------------------|--------------|--------------------------|--|--|--|--|--|
| Qty. | Description | Common Parts | Kit Numbers/Unique Parts | | | | | |
| | | | A-347947 | | | | | |
| 1 | Controller Assembly | | PA-354267 | | | | | |
| 1 | Plug, Button | | X-301-23 | | | | | |
| 1 | Switch, Emergency Stop | | 292364 | | | | | |
| 1 | Switch, Selector | | 347969 | | | | | |
| 2 | Lamp, Panel | | 283420 | | | | | |
| 4 | Bumper | | 292834 | | | | | |
| 1 | Holder, Fuse | | 292821 | | | | | |
| 3 | Fuse, 1.5 Amp, 250 Volt | | 291207 | | | | | |

Meterbox for Paralleling Kits

| Meterbox For Paralleling Kits | | | | | | | |
|-------------------------------|------------------------------|------------------|-------------------------|----------|----------|----------|--|
| Qty. | Description | Common Parts | Kit Number/Unique Parts | | | | |
| | | | 273939 | 273940 | 328087 | 328153 | |
| 1 | Controller Assembly* | 263438 272684 | A-273762 | A-276281 | A-328082 | A-276281 | |
| 1 | Switch Assembly, Limit | | | | | | |
| 2 | Relay | | | | | | |
| 1 | Grommet | | N/A | X-284-25 | X-284-25 | X-284-25 | |
| 1 | Marker, Strip | | N/A | 255080 | 255080 | 255080 | |
| 1 | Panel, Relay | | N/A | 274796 | 274796 | 274796 | |
| 4 | Mount, Vibro | | N/A | 282829 | 282829 | 282829 | |
| 1 | Block, Terminal (6-Terminal) | | N/A | 295314 | 295314 | 295314 | |

*See Controller Assembly table below for parts list.

| Meterbox For Paralleling Assemblies | | | | | | |
|-------------------------------------|------------------------------|--------------|---|----------|----------|--|
| Qty. | Description | Common Parts | Controller Assembly Number/Unique Parts | | | |
| | | | A-273762 | A-276281 | A-328082 | |
| 1 | Potentiometer Assembly | | A-255041 | N/A | N/A | |
| 1 | Strap, Ground | X-6046-2 | | | | |
| 1 | Switch, Speed | X-6122-1 | | | | |
| 1 | Meter, Hour | 238736 | | | | |
| 1 | Voltmeter | 255224 | | | | |
| 1 | Box, Controller | 263153 | | | | |
| 1 | Panel | 263154 | | | | |
| 1 | Resistor, 24 Volt | 268297 | | | | |
| 1 | Harness, Wiring (24-Pin) | 273764 | | | | |
| 1 | Strip, Marker | 273781 | | | | |
| 1 | Harness, Wiring (4-Lead) | 273983 | | | | |
| 1 | Harness, Wiring (Shielded) | 273984 | | | | |
| 1 | Gauge, Oil Pressure | | 282897 | 282897 | 328072 | |
| 1 | Gauge, Water Temperature | 282898 | | | | |
| 6 | Strip, Terminal (9-Terminal) | 283060 | | | | |
| 3 | Bulb | 283420 | | | | |
| 3 | Socket, Lamp | 284990 | | | | |
| 1 | Decal | | 292361 | N/A | N/A | |
| 1 | Switch, Pushbutton | 292364 | | | | |
| 1 | Decal, Emergency Stop | 292467 | | | | |
| 1 | Cover, Controller | 292818 | | | | |
| 4 | Bumper | 292834 | | | | |

N/A Not Applicable

Cooling System Kits

| Qty. | Description | Part No. |
|------|-------------|----------|
|------|-------------|----------|

Block Heater

279928

| | | |
|----|--|----------|
| 10 | Washer, Shakeproof, 1/4 | X-22-12 |
| 1 | Elbow, 45°, 3/4 | X-274-2 |
| 4 | Clamp, Hose | X-426-2 |
| 3 | Tie, Cable | X-468-1 |
| 2 | Connector, Hose, 3/4 ID 3/4 NPT | X-582-8 |
| 1 | Hose, 0.75 x 65 L | X-691-19 |
| 1 | Hose, Oil-Proof, 0.75 ID x 30 L | X-691-28 |
| 1 | Bushing, Reducing, 1/2 x 3/4 | 153659 |
| 1 | Strap, Ground, 3/8 x 5 | 223033 |
| 4 | Bumper, 1/4-20 | 259632 |
| 1 | Bracket, Block Heater | 274977 |
| 1 | Tag, Hang, Caution Block Heater Damage | 279047 |
| 1 | Tag, Hang, Instruction | 279280 |
| 1 | Thermostat, Block Heater | 279813 |
| 1 | Heater, Block | 279816 |
| 1 | Box, Block Heater Control | 279874 |

Block Heater

279929

| | | |
|---|---------------------------------------|----------|
| 1 | Washer, Shakeproof, 1/4 | X-22-12 |
| 1 | Elbow, 45°, 3/4 | X-274-2 |
| 4 | Clamp, Hose, 0.69-1.25 ID | X-426-12 |
| 3 | Tie, Cable | X-468-1 |
| 2 | Connector, Hose 3/4 ID 3/4 NPT | X-582-8 |
| 1 | Hose, 0.75 x 65 L | X-691-19 |
| 1 | Hose, 0.75 x 39 | X-691-26 |
| 1 | Bushing, Reducing, 1/2 x 3/4 | 153659 |
| 1 | Strap, Ground, 3/8 x 5 | 223033 |
| 4 | Bumper 1/4-20 | 259632 |
| 1 | Tag, Hang Caution Block Heater Damage | 279047 |
| 1 | Bracket, Block Heater | 279481 |
| 1 | Thermostat, Block Heater | 279813 |
| 1 | Heater, Block | 279816 |
| 1 | Box, Block Heater Control | 279874 |

| Qty. | Description | Part No. |
|------|-------------|----------|
|------|-------------|----------|

Block Heater

354685

| | | |
|----|------------------------------|-----------|
| 2 | Elbow | SA-472 |
| 10 | Washer Lock 1/4 | X-22-12 |
| 8 | Clamp, Hose 1.25 | X-426-12 |
| 1 | Screw, r.h.m. 8-32 | X-51-15 |
| 4 | Connector, Hose | X-582-8 |
| 1 | Block, Fuse | X-6129-8 |
| 1 | Fuse, 20 Amp | X-6135-32 |
| 1 | Nut, Whiz | X-6210-4 |
| 4 | Hose, .75" | X-6367-1 |
| 4 | Screw, h.c | X-97-13 |
| 1 | Bushing, Reducing 3/4 | 153659 |
| 1 | Strap, Ground 3/8 x 5 | 223033 |
| 4 | Bumper | 259632 |
| 2 | Tag, Hang | 279047 |
| 2 | Tag, Instruction | 279280 |
| 1 | Thermostat, Block Heater | 279813 |
| 2 | Heater, Block | 279816 |
| 4 | Gasket, Washer | 297001 |
| 1 | Box, Block Heater Controller | 354316 |
| 1 | Cover, Block Heater | 354317 |
| 1 | Gasket, Control Box | 354318 |
| 1 | Decal, Warning | 354326 |
| 1 | Label, Wiring Diagram | 354328 |
| 2 | Bracket, Block Heater | 354687 |

Block Heater

354705

| | | |
|----|------------------------------|-----------|
| 2 | Elbow | SA-472 |
| 10 | Washer, Lock, 1/4 | X-22-12 |
| 8 | Clamp, Hose, 1.25 | X-426-12 |
| 1 | Screw, r.h.m. 8-32 x 1 | X-51-15 |
| 4 | Connector, Hose | X-582-8 |
| 1 | Block, Fuse | X-6129-8 |
| 1 | Fuse, 20 Amp | X-6135-32 |
| 1 | Nut, Whiz | X-6210-4 |
| 3 | Hose, .75" X 44" | X-6367-1 |
| 1 | Hose, .75" X 52" | X-6367-2 |
| 4 | Screw, h.c. | X-97-13 |
| 1 | Bushing, Reducing 3/4 | 153659 |
| 1 | Strap, Ground, 3/8 x 5 | 223033 |
| 4 | Bumper | 259632 |
| 2 | Tag, Hang | 279047 |
| 2 | Tag, Instruction | 279280 |
| 1 | Thermostat | 279813 |
| 2 | Heater, Block | 279816 |
| 4 | Gasket, Washer | 297001 |
| 1 | Box, Block Heater Controller | 354316 |
| 1 | Cover, Block Heater | 354317 |
| 1 | Gasket, Control Box | 354318 |
| 1 | Decal, Warning | 354326 |
| 1 | Label, Wiring Diagram | 354328 |
| 2 | Bracket, Block Heater | 354687 |

Cooling System Kits, continued

| Qty. | Description | Part No. |
|------|-------------|----------|
|------|-------------|----------|

Block Heater

354720

| | | |
|----|--------------------------------|----------|
| 1 | Elbow | SA-472 |
| 10 | Washer Lock 1/4 | X-22-12 |
| 4 | Clamp, Hose 1.25 | X-426-12 |
| 3 | Tie, Cable | X-468-9 |
| 1 | Screw, r.h.m. 8-32 | X-51-15 |
| 2 | Connector, Hose | X-582-8 |
| 1 | Block, Fuse | X-6129-8 |
| 1 | Fuse, 600v10a | X-6135-6 |
| 1 | Nut, Whiz 8 | X-6210-4 |
| 1 | Hose, .75" | X-6367-1 |
| 1 | Hose, Coolant .75" | X-6367-3 |
| 4 | Screw, h.c. | X-97-13 |
| 1 | Bushing, Reducing 3/4 | 153659 |
| 1 | Strap, Ground 3/8 | 223033 |
| 4 | Bumper | 259632 |
| 1 | Tag, Hang | 279047 |
| 1 | Thermostat | 279813 |
| 1 | Heater, Block | 279816 |
| 4 | Gasket, Washer | 297001 |
| 1 | Box, Block Heater Controller | 354316 |
| 1 | Cover, Block Heater Controller | 354317 |
| 1 | Gasket, Control Box | 354318 |
| 1 | Decal, Warning | 354326 |
| 1 | Label, Wiring Diagram | 354328 |
| 1 | Bracket, Block Heater | 354687 |

Radiator Duct Flange

272963

| | | |
|---|-----------------|--------|
| 2 | Frame, Air Duct | 272978 |
| 2 | Frame, Air Duct | 272979 |

Radiator Duct Flange

272965

| | | |
|---|-----------------|--------|
| 2 | Frame, Air Duct | 272958 |
| 2 | Frame, Air Duct | 272959 |

Radiator Duct Flange

274233

| | | |
|---|----------------------------|--------|
| 2 | Frame, Air Duct Sides | 274303 |
| 2 | Frame, Air Duct Top/Bottom | 274304 |

Radiator Duct Flange

279764

| | | |
|---|-----------------|--------|
| 2 | Frame, Air Duct | 279762 |
| 2 | Frame, Air Duct | 279763 |

Radiator Duct Flange

347865

| | | |
|---|-----------------|--------|
| 2 | Frame, Air Duct | 347863 |
| 2 | Frame, Air Duct | 347864 |

| Qty. | Description | Part No. |
|------|-------------|----------|
|------|-------------|----------|

Radiator Cooling

274934

| | | |
|---|--|-----------|
| 1 | Radiator Assembly | A-272949 |
| 1 | Bushing, Reducer, 1/4 F X 1/2 M | X-202-12 |
| 1 | Bushing, Reducer, 3/8 X 1/2 NPT | X-202-28 |
| 1 | Elbow, Pipe, 1 NPT | X-215-15 |
| 1 | Nipple, Pipe, 1 NPTF X 3 | X-218-22 |
| 1 | Valve, Drain, 3/8 NPTF | X-256-1 |
| 2 | Clamp, Hose, 0.25-0.62 ID | X-426-9 |
| 4 | Washer, Beveled, 0.68 | X-6011-3 |
| 1 | Hose, Radiator, 1.25 X 54.0" | X-6014-30 |
| 1 | Hose, Radiator Wire Insert, 4.00 X 8.00" | X-6014-31 |
| 4 | Hose, 3.00 X 6.00" | X-6014-53 |
| 2 | Screw, 9/16-12 X 1.000 | X-6244-1 |
| 2 | Fitting, Hose, 3/8 ID 1/4 NPT 1.65 L | X-652-1 |
| 1 | Adapter, Hose, 1 1/4 ID 1 NPT | 272930 |
| 2 | Tube, Rad. Upper, 3.00 ID | 272972 |
| 1 | Hose, Radiator, 4.00 ID | 272988 |
| 1 | Tube, Radiator (stl) 4.00, Plug 3/4 NPT | 272989 |
| 1 | Switch Assembly, Level | 273469 |
| 1 | Guard, Belt RH | 274428 |
| 1 | Guard, Belt LH | 274429 |
| 4 | Clamp, Hose, 4.25-4.56 ID | 274545 |
| 1 | Guard, Top Belt | 274594 |
| 1 | Fan | 274757 |
| 2 | Brace, Radiator | 279541 |
| 2 | Support, Radiator | 279544 |
| 2 | Support, Radiator | 279545 |
| 1 | Bracket, Mounting | 279595 |
| 2 | Clamp, Hose, 1.50-1.81 ID | 279669 |
| 6 | Washer, Hardened, 17/32 X 1 1/16 | 290945 |
| 8 | Clamp, Hose, 3.25-3.56 ID | 291542 |
| 1 | Guard, Belt LH | 274563 |

Radiator Cooling

274935

See Group 104, Variation 17 For Parts List.

Cooling System Kits, continued

| Qty. | Description | Part No. |
|-------------------------|--|---------------|
| Radiator Cooling | | |
| | | 274936 |
| 1 | Radiator Assembly | A-274309 |
| 1 | Fan Assembly | A-274321 |
| 1 | Nipple, Pipe, 1 x 2 L, 1 NPTF | K-122 |
| 6 | Screw, 1/2-13 x 2.0 | X-129-47 |
| 1 | Bushing, Reducer, 1 x 1 1/2 | X-202-11 |
| 1 | Bushing, Reducer, 1/4 F x 1/2 M | X-202-12 |
| 1 | Bushing, Reducer, 3/8 x 1/2 NPT | X-202-28 |
| 1 | Valve, Drain, 3/8 NPTF | X-256-1 |
| 2 | Clamp, Hose, 0.25-0.62 ID | X-426-9 |
| 2 | Hose, Radiator, 3.00 ID | X-507-5 |
| 2 | Hose, Radiator, 3.00 ID | X-507-6 |
| 4 | Washer, Beveled, 0.68 | X-6011-3 |
| 1 | Hose, Radiator Wire Insert, 4.00 x 8.00" | X-6014-31 |
| 1 | Hose, 1.50 x 76.00" | X-6014-33 |
| 3 | Screw, 9/16-12 x 1.000 | X-6244-1 |
| 1 | Hose, 3/8 x 54 L | X-651-12 |
| 2 | Fitting, Hose, 3/8 ID, 1/4 NPT 1.65 L | X-652-1 |
| 1 | Adapter, 1 1/2 ID, 1 1/2 NPT | X-751-4 |
| 1 | Screw, Drill Hex, 1/4-14 | X-794-1 |
| 3 | Washer, Hardened, 0.406 ID, 0.812 OD | X-801-3 |
| 1 | Elbow, 90° 1 1/2 NPT | 151771 |
| 2 | Clamp, Hose, 1.75-2.00 ID | 249888 |
| 1 | Tube, Rad. Lower, 4.00 ID | 272973 |
| 1 | Switch Assembly, Level | 273469 |
| 1 | Spacer, Fan | 274322 |
| 2 | Tube, Radiator (steel), 3.00 ID | 274401 |
| 1 | Hose, Radiator Lower, 4.00 ID | 274402 |
| 4 | Clamp, Hose, 4.25-4.56 ID | 274545 |
| 1 | Guard, Belt RH | 274562 |
| 1 | Guard, Belt LH | 274563 |
| 1 | Bracket | 274716 |
| 1 | Guard, Belt Bottom | 274801 |
| 2 | Support, Radiator | 279542 |
| 2 | Support, Radiator | 279543 |
| 2 | Brace, Radiator | 279709 |
| 6 | Washer, Hardened, 17/32 X 1 1/16 | 290945 |
| 8 | Clamp, Hose, 3.25-3.56 ID | 291542 |

| Qty. | Description | Part No. |
|-------------------------|---------------------------------------|---------------|
| Radiator Cooling | | |
| | | 279486 |
| 1 | Radiator Assembly | A-279299 |
| 1 | Bushing, Reducer, 1/4 F x 1/2 M | X-202-12 |
| 1 | Elbow, Pipe, 1 NPT | X-215-15 |
| 1 | Nipple, Pipe, 1 NPTF x 1.50 | X-218-22 |
| 1 | Valve, Drain, 1/2 NPTF | X-256-5 |
| 1 | Elbow, 45° | X-274-10 |
| 2 | Clamp, Hose, 0.25-0.62 ID | X-426-9 |
| 4 | Washer, Beveled, 0.68 ID x 2/12 Slope | X-6011-3 |
| 1 | Hose, Radiator, 1/25 ID x 54 L | X-6014-66 |
| 4 | Hose, Radiator, 2.5 ID x 6 L | X-6014-69 |
| 1 | Hose, Radiator, 3.5 ID x 6 L | X-6014-70 |
| 1 | Hose, 0.375 x 46 L | X-651-11 |
| 2 | Fitting, Hose, 1/4 ID | X-652-1 |
| 6 | Washer, Hardened, 0.656 ID x 1.06 OD | X-801-5 |
| 1 | Adapter, Hose, 1 1/4 ID x 1 NPT | 272930 |
| 1 | Switch Assembly, Level | 273469 |
| 8 | Clamp, Hose, 2.81-3.12 ID | 275527 |
| 2 | Brace, Radiator | 279541 |
| 2 | Support, Radiator | 279544 |
| 2 | Support, Radiator | 279545 |
| 2 | Clamp, Hose, 1.50-1.81 ID | 279669 |
| 1 | Fan, Pusher | 279863 |
| 2 | Support, Radiator | 279876 |
| 1 | Tube, Lower Radiator | 279942 |
| 2 | Tube, Upper Radiator | 279943 |
| 1 | Guard, Belt Top | 279965 |
| 1 | Guard, Belt RH | 279966 |
| 1 | Guard, Belt LH | 279967 |
| 1 | Support, Belt Guard | 279968 |
| 1 | Bracket, Belt Guard | 279969 |
| 1 | Support, Belt Guard | 279970 |
| 1 | Support | 279971 |
| 4 | Clamp, Hose, 3.75-4.06 ID | 291537 |

Cooling System Kits, continued

| Qty. | Description | Part No. |
|------|-------------|----------|
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Radiator Cooling

279487

| | | |
|---|-----------------------------------|-----------|
| 1 | Radiator Assembly | A-279999 |
| 1 | Bushing, Reducer, 1/4 F x 1/2 M | X-202-12 |
| 1 | Bushing, Reducer, 3/8 F x 1/2 M | X-202-28 |
| 1 | Elbow, Pipe, 1 NPT | X-215-15 |
| 1 | Nipple, Pipe, 1 NPTF x 3 | X-218-22 |
| 1 | Valve, Drain, 3/8 | X-256-1 |
| 2 | Clamp, Hose, 0.25-0.62 ID | X-426-9 |
| 4 | Washer, Beveled, 0.68, 2/12 Slope | X-6011-3 |
| 1 | Hose, Radiator, 1 1/4 ID x 54 L | X-6014-30 |
| 1 | Hose, Radiator, 4.0 ID x 8 L | X-6014-31 |
| 4 | Hose, Radiator, 3.0 ID x 6 L | X-6014-53 |
| 2 | Screw, 9/16-12 x 1 | X-6244-1 |
| 2 | Fitting, Hose, 1/4 NPT x 3/8 | X-652-1 |
| 1 | Adapter, Hose, 1 NPT X 1 1/4 | 272930 |
| 2 | Tube, Upper Radiator, 3 OD | 272972 |
| 1 | Hose, Lower Radiator, 4 ID | 272988 |
| 1 | Tube, Lower Radiator, 4 OD | 272989 |
| 1 | Switch Assembly, Level | 273469 |
| 1 | Guard, Belt RH | 274428 |
| 1 | Guard, Belt LH | 274429 |
| 4 | Clamp, Hose, 4.25-4.56 ID | 274545 |
| 1 | Guard, Belt Top | 274594 |
| 1 | Fan | 274757 |
| 2 | Brace, Radiator | 279541 |
| 2 | Support, Radiator | 279544 |
| 2 | Support, Radiator | 279545 |
| 1 | Bracket, Mounting | 279595 |
| 2 | Clamp, Hose, 1.50-1.81 ID | 279669 |
| 6 | Washer, Hardened, 17/32 x 1 1/16 | 290945 |
| 8 | Clamp, Hose, 3.25-3.56 ID | 291542 |

| Qty. | Description | Part No. |
|------|-------------|----------|
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Radiator Cooling

279753

| | | |
|---|--------------------------------------|-----------|
| 1 | Radiator Assembly | A-279751 |
| 6 | Screw, Hex Cap 1/2-13 x 2.75, Gr. 8 | X-129-48 |
| 1 | Bushing, Reducer, 1/4 F x 1/2 M | X-202-12 |
| 1 | Bushing, Reducer, 3/8 F x 1/2 M | X-202-28 |
| 1 | Pipe, Black Iron | X-209-15 |
| 1 | Elbow, Pipe, 1 NPT | X-215-15 |
| 1 | Coupling, Pipe, 1/2 | X-216-20 |
| 1 | Nipple, Pipe, 1 NPTF x 3 | X-218-22 |
| 1 | Valve, Drain, 3/8 NPTF | X-256-1 |
| 2 | Clamp, Hose, 5/8 | X-426-9 |
| 4 | Washer, Beveled, 0.68 ID, 2/12 Slope | X-6011-3 |
| 1 | Hose, Radiator, 1 1/4 ID x 54" | X-6014-30 |
| 1 | Hose, Radiator Wire, 4 ID x 8" | X-6014-31 |
| 4 | Hose, Radiator Wire, 3 ID x 6" | X-6014-53 |
| 2 | Screw, 9/16-12 X 1 | X-6244-1 |
| 2 | Fitting, Hose, 1/4 ID | X-652-1 |
| 1 | Adapter, Hose, 1 1/4 ID X 1 NPT | 272930 |
| 2 | Tube, Rad. Upper, 3 OD | 272972 |
| 1 | Hose, Radiator Lower, 4 ID | 272988 |
| 1 | Tube, Radiator Lower, 4 OD | 272989 |
| 1 | Switch Assembly, Level | 273469 |
| 1 | Guard, Belt RH | 274428 |
| 1 | Guard, Belt LH | 274429 |
| 4 | Clamp, Hose, 4 1/2 | 274545 |
| 1 | Guard, Top Belt | 274594 |
| 2 | Brace, Radiator | 279541 |
| 2 | Support, RH Radiator | 279544 |
| 2 | Support, LH Radiator | 279545 |
| 1 | Bracket, Mounting | 279595 |
| 2 | Clamp, Hose, 1 1/2 Min. Dia. | 279669 |
| 1 | Fan | 279752 |
| 6 | Washer, Hardened, 17/32 x 1 1/16 | 290945 |
| 8 | Clamp, Hose, 3 1/4 Min. Dia. | 291542 |

Cooling System Kits, continued

| Qty. | Description | Part No. |
|-------------------------|--------------------------------------|---------------|
| Radiator Cooling | | |
| | | 279860 |
| 1 | Radiator Assembly | A-279649 |
| 1 | Bushing, Reducer, 1/4 F x 1/2 M | X-202-12 |
| 1 | Elbow, Pipe, 1 NPT | X-215-15 |
| 1 | Nipple, Pipe, 1 NPTF x 1.50 | X-218-22 |
| 1 | Valve, Drain, 1/2 NPTF | X-256-5 |
| 2 | Clamp, Hose, 0.25-0.62 ID | X-426-9 |
| 4 | Washer, Beveled, 0.68 ID, 2/12 Slope | X-6011-3 |
| 1 | Hose, Radiator, 1 1/4 ID x 54 L | X-6014-66 |
| 2 | Hose, Radiator, 2.5 ID x 6 L | X-6014-69 |
| 2 | Hose, Radiator, 3.5 ID x 6 L | X-6014-70 |
| 1 | Hose, 0.375 x 46 L | X-651-11 |
| 2 | Fitting, Hose, 1/4 ID | X-652-1 |
| 6 | Washer, Hardened, 0.656 ID x 1.06 OD | X-801-5 |
| 1 | Adapter, Hose, 1 1/4 x 1 NPT | 272930 |
| 1 | Switch Assembly, Level | 273469 |
| 8 | Clamp, Hose, 2.81-3.12 ID | 275527 |
| 2 | Brace, Radiator | 279541 |
| 2 | Support, Radiator | 279544 |
| 2 | Support, Radiator | 279545 |
| 2 | Clamp, Hose, 1.50-1.81 ID | 279669 |
| 1 | Fan, Pusher | 279863 |
| 2 | Support, Radiator | 279876 |
| 1 | Tube, Lower Radiator, 3.5 OD | 279942 |
| 2 | Tube, Upper Radiator, 2.5 OD | 279943 |
| 1 | Guard, Belt Top | 279965 |
| 1 | Guard, Belt RH | 279966 |
| 1 | Guard, Belt LH | 279967 |
| 1 | Support, Belt Guard | 279968 |
| 1 | Bracket, Belt Guard | 279969 |
| 1 | Support, Belt Guard | 279970 |
| 1 | Support | 279971 |
| 4 | Clamp, Hose, 3.75-4.06 ID | 291537 |
| 1 | Elbow, 45° | X-274-10 |

| Qty. | Description | Part No. |
|-------------------------|---|---------------|
| Radiator Cooling | | |
| | | 299894 |
| 1 | Radiator Assembly | A-299893 |
| 1 | Fan | 299892 |
| 6 | Screw, 1/2-13 x 2.0 | X-129-47 |
| 6 | Screw, 1/2-13 x 3.0 | X-129-49 |
| 1 | Bushing, Reducer, 1/4 F x 1/2 M | X-202-12 |
| 1 | Bushing, Reducer, 3/8 x 1/2 NPT | X-202-28 |
| 1 | Elbow, Pipe, 1 | X-215-15 |
| 1 | Nipple, Pipe, 1 x 3 | X-218-22 |
| 6 | Washer, Lock, 5/8 x 1/8 | X-24-2 |
| 1 | Valve, Drain, 3/8 NPTF | X-256-1 |
| 2 | Clamp, Hose, 0.25-0.62 ID | X-426-9 |
| 2 | Hose, Radiator, 3.00 ID | X-507-5 |
| 2 | Hose, Radiator, 3.00 ID | X-507-6 |
| 4 | Washer, Beveled, 0.68 | X-6011-3 |
| 1 | Hose, Radiator Wire Insert 4.00 x 8.00" | X-6014-31 |
| 1 | Hose, Radiator, 1.25 x 76.00" | X-6014-52 |
| 3 | Screw, 9/16-12 x 1.000 | X-6244-1 |
| 1 | Hose, 3/8 x 54 L | X-651-12 |
| 2 | Fitting, Hose, 3/8 ID 1/4 NPT 1.65 L | X-652-1 |
| 1 | Screw, Drill Hex., 1/4-14 | X-794-1 |
| 3 | Washer, Hardened, 0.406 ID, 0.812 OD | X-801-3 |
| 1 | Adapter, Hose, 1 1/4 ID 1 NPT | 272930 |
| 1 | Hose, Radiator Lower, 4.00 ID | 272971 |
| 2 | Tube, Radiator Upper, 3.00 ID | 272972 |
| 1 | Tube, Radiator Lower, 4.00 ID | 272973 |
| 1 | Switch Assembly, Level | 273469 |
| 4 | Clamp, Hose, 4.25-4.56 ID | 274545 |
| 1 | Guard, Belt RH | 274562 |
| 1 | Guard, Belt LH | 274563 |
| 1 | Bracket | 274716 |
| 1 | Guard, Belt Bottom | 274801 |
| 2 | Brace, Radiator | 279540 |
| 2 | Support, Radiator | 279542 |
| 2 | Support, Radiator | 279543 |
| 2 | Clamp, Hose, 1.50-1.81 ID | 279669 |
| 6 | Washer, Hardened, 17/32 X 1 1/16 | 290945 |
| 8 | Clamp, Hose, 3.25-3.56 ID | 291542 |

Radiator Cooling **347861**
See Group 104, Variation 37 for Parts List.

Radiator Cooling **354108**
See Group 104, Variation 38 for Parts List.

Cooling System Kits, continued

| Qty. | Description | Part No. |
|------|-------------|----------|
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Radiator Cooling

354558

| | | |
|----|----------------------|----------|
| 1 | Radiator Assembly | A-347826 |
| 2 | Bushing, Reducer 3/8 | X-202-28 |
| 1 | Elbow, Pipe | X-215-15 |
| 1 | Nipple, Pipe | X-218-22 |
| 1 | Valve, Drain, 3/8 | X-256-1 |
| 1 | Hose, Radiator | X-272-29 |
| 2 | Clamp, Hose | X-426-9 |
| 4 | Hose, Radiator | X-507-6 |
| 1 | Conduit, Convoluted | X-6003-8 |
| 1 | Hose, 3/8 | X-651-12 |
| 2 | Fitting, Hose | X-652-1 |
| 14 | Washer, Hardened | X-801-9 |
| 1 | Sensor, Low Fluid | 254832 |
| 1 | Adapter, Hose | 272930 |
| 2 | Tube, Radiator | 274401 |
| 2 | Clamp, Hose | 274545 |
| 1 | Bracket, Mounting | 279595 |
| 2 | Clamp, Hose | 279669 |
| 1 | Fan | 279752 |
| 6 | Washer, Hardened | 290945 |
| 8 | Clamp, Hose | 291542 |
| 2 | Support, Radiator | 354528 |
| 1 | Support, Radiator | 354530 |
| 1 | Support, Radiator | 354531 |
| 1 | Guard, Belt | 354536 |
| 1 | Guard, Belt | 354537 |
| 1 | Guard, Belt Top | 354538 |

Radiator Cooling

354559

| | | |
|----|----------------------|----------|
| 1 | Radiator Assembly | A-354539 |
| 2 | Bushing, Reducer | X-202-28 |
| 1 | Elbow, Pipe | X-215-15 |
| 1 | Nipple, Pipe | X-218-22 |
| 1 | Valve, Drain, 3/8 | X-256-1 |
| 1 | Hose, Radiator | X-272-29 |
| 2 | Clamp, Hose | X-426-9 |
| 4 | Hose, Radiator | X-507-6 |
| 1 | Conduit, Convoluted | X-6003-8 |
| 1 | Hose, .375 | X-651-11 |
| 2 | Fitting, Hose | X-652-1 |
| 14 | Washer, Hardened | X-801-9 |
| 1 | Sensor, Low Fluid | 254832 |
| 1 | Adapter, Hose | 272930 |
| 2 | Tube, Radiator Upper | 272972 |
| 2 | Clamp, Hose | 274545 |
| 1 | Fan | 274757 |
| 1 | Bracket, Mounting | 279595 |
| 2 | Clamp, Hose | 279669 |
| 6 | Washer, Hardened | 290945 |
| 8 | Clamp, Hose | 291542 |
| 2 | Support, Radiator | 354527 |
| 1 | Support, Radiator | 354532 |
| 1 | Support, Radiator | 354533 |
| 1 | Guard, Belt | 354536 |
| 1 | Guard, Belt | 354537 |
| 1 | Guard, Belt Top | 354538 |
| 1 | Hose, Radiator Lower | 354684 |

| Qty. | Description | Part No. |
|------|-------------|----------|
|------|-------------|----------|

Radiator Cooling

354560

| | | |
|----|----------------------|----------|
| 1 | Radiator Assembly | A-354540 |
| 2 | Bushing, Reducer 3/8 | X-202-28 |
| 1 | Elbow, Pipe | X-215-15 |
| 1 | Nipple, Pipe | X-218-22 |
| 1 | Valve, Drain 3/8 | X-256-1 |
| 1 | Hose, Radiator | X-272-29 |
| 2 | Clamp, Hose | X-426-9 |
| 4 | Hose, Radiator | X-507-6 |
| 1 | Conduit, Convoluted | X-6003-8 |
| 1 | Hose, .375" | X-651-11 |
| 2 | Fitting, Hose | X-652-1 |
| 14 | Washer, Hardened | X-801-9 |
| 1 | Sensor, Low Fluid | 254832 |
| 1 | Adapter, Hose | 272930 |
| 2 | Tube, Radiator Upper | 272972 |
| 2 | Clamp, Hose | 274545 |
| 1 | Bracket, Mounting | 279595 |
| 2 | Clamp, Hose | 279669 |
| 1 | Fan | 279752 |
| 6 | Washer, Hardened | 290945 |
| 8 | Clamp, Hose | 291542 |
| 2 | Support, Radiator | 354527 |
| 1 | Support, Radiator | 354532 |
| 1 | Support, Radiator | 354533 |
| 1 | Guard, Belt | 354536 |
| 1 | Guard, Belt | 354537 |
| 1 | Guard, Belt Top | 354538 |
| 1 | Hose, Radiator Lower | 354684 |

Radiator Cooling

354608

| | | |
|----|----------------------|----------|
| 1 | Radiator Assembly | A-354539 |
| 2 | Bushing, Reducer | X-202-28 |
| 1 | Nipple, Pipe | X-218-22 |
| 1 | Elbow, 45° | X-225-9 |
| 1 | Valve, Drain, 3/8 | X-256-1 |
| 1 | Hose, Radiator | X-272-29 |
| 1 | Elbow, 45° | X-274-10 |
| 2 | Hose, Radiator | X-424-10 |
| 2 | Clamp, Hose | X-426-9 |
| 2 | Hose, Radiator | X-507-6 |
| 1 | Conduit, Convoluted | X-6003-8 |
| 1 | Hose, 3/8 | X-651-11 |
| 2 | Fitting, Hose | X-652-1 |
| 14 | Washer, Hardened | X-801-9 |
| 4 | Clamp, Hose | 291542 |
| 2 | Support, Radiator | 354527 |
| 1 | Support, Radiator | 354532 |
| 2 | Support, Radiator | 354533 |
| 1 | Tube, Radiator Upper | 354586 |
| 1 | Hose, Radiator Lower | 354699 |
| 1 | Guard, Belt Top | 354707 |
| 1 | Guard, Belt | 354708 |
| 1 | Guard, Belt | 354709 |
| 1 | Guard, Belt Bottom | 354710 |

Cooling System Kits, continued

| Qty. | Description | Part No. | Qty. | Description | Part No. |
|-------------------------|-----------------------|---------------|-------------------------|------------------------|---------------|
| Radiator Cooling | | | Radiator Cooling | | |
| | | 354609 | | | 354672 |
| 1 | Radiator Assembly | A-354540 | 1 | Radiator Assembly | A-347826 |
| 6 | Bolt, h.c. | X-129-56 | 6 | Screw, h.c. | X-129-53 |
| 2 | Bushing, Reducer, 3/8 | X-202-28 | 2 | Bushing, Reducer, 3/8x | X-202-28 |
| 1 | Nipple, Pipe | X-218-22 | 1 | Elbow, Pipe | X-215-15 |
| 1 | Elbow, 45° | X-225-9 | 1 | Nipple, Pipe | X-218-22 |
| 1 | Valve, Drain, 3/8 | X-256-1 | 1 | Valve, Drain, 3/8 | X-256-1 |
| 1 | Hose, Radiator | X-272-29 | 2 | Clamp, Hose | X-426-9 |
| 1 | Elbow, 45° | X-274-10 | 4 | Hose, Radiator | X-507-6 |
| 1 | Hose, Radiator | X-424-10 | 4 | Washer, Beveled | X-6011-3 |
| 2 | Clamp, Hose | X-426-9 | 1 | Hose, Radiator | X-6014-52 |
| 2 | Hose, Radiator | X-507-6 | 1 | Hose 3/8 | X-651-12 |
| 2 | Conduit, Convoluted | X-6003-8 | 2 | Fitting, Hose | X-652-1 |
| 1 | Hose, .375 | X-651-11 | 14 | Washer, Hardened | X-801-9 |
| 1 | Fitting, Hose | X-652-1 | 1 | Sensor, Low Fluid | 254832 |
| 14 | Washer, Hardened | X-801-9 | 1 | Adapter, Hose | 272930 |
| 1 | Sensor, Low Fluid | 254832 | 2 | Tube, Radiator | 274401 |
| 1 | Adapter, Hose | 272930 | 2 | Clamp, Hose | 274545 |
| 8 | Clamp, Hose | 274545 | 1 | Bracket | 274716 |
| 2 | Clamp, Hose | 275527 | 1 | Guard, Belt Bottom | 274801 |
| 1 | Clamp, Hose | 279669 | 2 | Clamp, Hose | 279669 |
| 1 | Fan | 279752 | 6 | Washer, Hardened | 290945 |
| 1 | Support, Belt Guard | 279968 | 8 | Clamp, Hose | 291542 |
| 1 | Bracket, Belt Guard | 279969 | 1 | Fan, Pusher | 347839 |
| 1 | Support, Belt Guard | 279970 | 1 | Guard, Belt | 354114 |
| 6 | Washer, Hardened | 290945 | 1 | Guard, Belt | 354115 |
| 1 | Clamp, Hose | 291537 | 2 | Support, Radiator | 354528 |
| 4 | Clamp, Hose | 291542 | 1 | Support, Radiator | 354530 |
| 2 | Support, Radiator | 354527 | 1 | Support, Radiator | 354531 |
| 1 | Support, Radiator | 354532 | 1 | Hose, Radiator Lower | 354684 |
| 1 | Support, Radiator | 354533 | | | |
| 2 | Tube, Radiator Upper | 354586 | | | |
| 1 | Tube, Radiator Lower | 354587 | | | |
| 1 | Guard, Belt Top | 354707 | | | |
| 1 | Guard, Belt | 354708 | | | |
| 1 | Guard, Belt | 354709 | | | |
| 1 | Guard, Belt | 354710 | | | |

Cooling System Kits, continued

| Qty. | Description | Part No. |
|-------------------------|-----------------------|---------------|
| Radiator Cooling | | |
| | | 354844 |
| 1 | Radiator Assembly | A-354840 |
| 6 | Screw, h.c | X-129-53 |
| 2 | Bushing, Reducer, 3/8 | X-202-28 |
| 1 | Elbow, Pipe | X-215-15 |
| 1 | Nipple, Pipe | X-218-22 |
| 1 | Valve, Drain, 3/8 | X-256-1 |
| 2 | Clamp, Hose | X-426-9 |
| 4 | Hose, Radiator | X-507-6 |
| 1 | Conduit, Convolved | X-6003-8 |
| 4 | Washer, Beveled | X-6011-3 |
| 1 | Hose, Radiator | X-6014-52 |
| 1 | Hose, 3/8 | X-651-12 |
| 2 | Fitting, Hose | X-652-1 |
| 14 | Washer, Hardened | X-801-9 |
| 1 | Sensor, Low Fluid | 254832 |
| 1 | Adapter, Hose | 272930 |
| 2 | Tube, Radiator | 274401 |
| 4 | Clamp, Hose | 274545 |
| 1 | Bracket | 274716 |
| 1 | Guard, Belt Bottom | 274801 |
| 2 | Clamp, Hose | 279669 |
| 6 | Washer, Hardened | 290945 |
| 8 | Clamp, Hose | 291542 |
| 1 | Fan, Pusher | 299892 |
| 1 | Guard, Belt | 354114 |
| 1 | Guard, Belt | 354115 |
| 1 | Support, Radiator | 354663 |
| 1 | Support, Radiator | 354664 |
| 1 | Hose, Lower Radiator | 354841 |

| Qty. | Description | Part No. |
|---------------------------|-----------------------------|---------------|
| City Water Cooling | | |
| | | 279296 |
| 1 | Bushing, Reducer, 1 1/2 x 1 | X-202-11 |
| 2 | Bushing, Reducer, 1/2 x 1/4 | X-202-12 |
| 2 | Bushing, Reducer, 3 x 2 1/2 | X-202-16 |
| 2 | Bushing, Reducer, 4 x 3 | X-202-19 |
| 2 | Bushing, Reducer, 3 x 1 1/2 | X-202-20 |
| 1 | Bushing, Reducer, 3 x 1/2 | X-202-44 |
| 1 | Tee, Pipe | X-203-4 |
| 1 | Nipple, Pipe, 3/8 x 2 | X-204-6 |
| 2 | Elbow, Pipe, 1 | X-215-15 |
| 3 | Elbow, Pipe, 3 | X-215-7 |
| 1 | Coupling, Pipe, 3/8 x 1-3 | X-216-23 |
| 1 | Nipple, Pipe, 1 x 3 | X-218-22 |
| 2 | Nipple, Pipe, 1 x 1 1/2 | X-218-24 |
| 1 | Valve, Drain, 3/8 | X-256-1 |
| 1 | Elbow, 45° | X-274-10 |
| 1 | Valve, Solenoid | X-350-9 |
| 1 | Line, Fuel | X-386-96 |
| 2 | Connector, Hose | X-391-16 |
| 2 | Bolt, U | X-397-9 |
| 4 | Clamp, Hose | X-426-10 |
| 3 | Pipe, 3 x 3 | X-533-17 |
| 1 | Pipe, 3 x 3/4 | X-533-18 |
| 2 | Adapter, Hose | X-570-1 |
| 1 | Hose, Radiator 1.25 x 54" | X-6014-30 |
| 2 | Hose, Radiator 3.5 x 7" | X-6014-74 |
| 1 | Hose, Radiator 3 x 31" | X-6014-75 |
| 2 | Nipple, Combination | X-6268-4 |
| 1 | Hose, Rubber, 3/8 x 34" | X-651-15 |
| 1 | Hose, Rubber, 3/8 x 6" | X-651-22 |
| 2 | Fitting, Hose | X-652-1 |
| 6 | Clamp, Insulated | X-672-7 |
| 1 | Adapter, Hose | X-751-3 |
| 1 | Elbow, 90°, 1 1/2 | 151771 |
| 2 | Nipple, Pipe, 1 1/2 x 1 3/4 | 155040 |
| 4 | Clamp, Hose | 250081 |
| 1 | Adapter, Hose | 272930 |
| 2 | Hose, Radiator | 273444 |
| 1 | Switch Assembly, Level | 273469 |
| 1 | Regulator, Water | 274743 |
| 2 | Bracket, Tank | 274745 |
| 1 | Tank, Surge | 274746 |
| 2 | Bracket, Support | 274892 |
| 1 | Guard, Belt | 279289 |
| 1 | Guard, Belt | 279290 |
| 1 | Guard, Belt Top | 279291 |
| 1 | Guard, Belt Bottom | 279292 |
| 1 | Guard, Belt Front | 279293 |
| 1 | Exchanger, Heat | 279297 |
| 1 | Bracket, Mounting | 279668 |
| 2 | Clamp, Hose | 279669 |
| 1 | Support, Belt Guard | 279968 |
| 1 | Support, Belt Guard | 279970 |
| 4 | Clamp, Hose | 291537 |
| 2 | Clamp, Hose | 291542 |
| 1 | Tee, Pipe (adapter) | 299832 |
| 2 | Bracket, Support | 299911 |
| 1 | Bracket, Support | 299912 |
| 1 | Tube, Water | 299913 |
| 1 | Adapter, Hose | 299914 |

Cooling System Kits, continued

| Qty. | Description | Part No. | Qty. | Description | Part No. |
|---------------------------|------------------------------|---------------|---------------------------|----------------------------|---------------|
| City Water Cooling | | | City Water Cooling | | |
| | | 347877 | | | 354568 |
| 2 | Bushing, Reducer, 1/2 x 1/4 | X-202-12 | 1 | Bushing, Reducer 1-1/2 | X-202-11 |
| 3 | Bushing, Reducer, 4 x 3 | X-202-19 | 2 | Bushing, Reducer 1/4 | X-202-12 |
| 2 | Bushing, Reducer, 3 x 1 1/2 | X-202-20 | 3 | Bushing, Reducer | X-202-19 |
| 1 | Bushing, Reducer, 1/2 x 3/8 | X-202-28 | 2 | Bushing, Reducer | X-202-20 |
| 1 | Bushing, Reducer, 3 x 1/2 | X-202-44 | 1 | Bushing, Reducer | X-202-44 |
| 2 | Nipple, Pipe, 3/8 x 2 | X-204-6 | 1 | Bushing, Reducer | X-202-46 |
| 2 | Nipple, 1 1/4 x 1 5/8 | X-210-8 | 1 | Tee, Pipe | X-203-24 |
| 2 | Elbow, Pipe, 1 1/4 | X-215-14 | 2 | Nipple, Pipe 3/8x2 | X-204-6 |
| 3 | Elbow, Pipe, 4 | X-215-8 | 1 | Elbow, Pipe | X-215-15 |
| 2 | Coupling, Pipe, 3/8 x 1-3 | X-216-23 | 3 | Elbow, Pipe | X-215-8 |
| 2 | Valve, Drain, 3/8 | X-256-1 | 2 | Coupling, Pipe 3/8 | X-216-23 |
| 1 | Elbow, 45° | X-274-10 | 2 | Nipple, Pipe 1x1-1/2 | X-218-24 |
| 1 | Valve, Solenoid | X-350-9 | 2 | Valve, Drain 3/8 | X-256-1 |
| 1 | Line, Fuel | X-386-96 | 1 | Valve, Solenoid | X-350-9 |
| 2 | Connector, Hose | X-391-16 | 1 | Line, Fuel | X-386-96 |
| 2 | Bolt, U | X-397-10 | 2 | Connector, Hose | X-391-16 |
| 4 | Clamp, Hose, 2 17/32 | X-426-1 | 2 | Bolt, U | X-397-10 |
| 4 | Clamp, Hose | X-426-10 | 4 | Clamp, Hose, 2-17/32 | X-426-1 |
| 1 | Pipe | X-549-13 | 4 | Clamp, Hose | X-426-10 |
| 3 | Pipe | X-549-6 | 1 | Pipe | X-549-13 |
| 3 | Adapter, Hose | X-570-24 | 3 | Pipe | X-549-6 |
| 1 | Hose, Radiator, 1.25 x 54" | X-6014-30 | 3 | Adapter, Hose | X-570-24 |
| 1 | Hose, Radiator, 4 x 8" | X-6014-31 | 1 | Hose, Radiator | X-6014-30 |
| 1 | Hose, Radiator, 4 x 38" | X-6014-84 | 1 | Hose, Radiator Wire Insert | X-6014-31 |
| 2 | Nipple, Combination | X-6268-4 | 1 | Hose, Radiator | X-6014-84 |
| 1 | Hose, Rubber, 3/8 x 34" | X-651-15 | 2 | Nipple, Combination | X-6268-4 |
| 1 | Hose, Rubber, 3/8 x 6" | X-651-22 | 1 | Hose, Rubber, .375 | X-651-15 |
| 2 | Fitting, Hose | X-652-1 | 1 | Hose, Rubber, .375 | X-651-22 |
| 2 | Clamp, Insulated | X-672-7 | 2 | Fitting, Hose | X-652-1 |
| 1 | Adapter, Hose | X-751-3 | 6 | Clamp, Insulated | X-672-7 |
| 1 | Elbow, 90°, 1 1/2 | 151771 | 1 | Adapter, Hose | X-751-3 |
| 1 | Elbow | 151385 | 1 | Elbow, 90° | 151771 |
| 1 | Bushing, 2 1/16 x 1 1/4 | 153016 | 2 | Nipple, Pipe 1-1/2 | 155040 |
| 2 | Nipple, Pipe, 1 1/2 x 1 3/4 | 155040 | 1 | Sensor, Low Fluid | 254832 |
| 1 | Switch Assembly, Fluid Level | 254832 | 1 | Cap, Pressure | 258037 |
| 1 | Adapter, Hose | 272930 | 6 | Clamp, Hose | 274545 |
| 6 | Clamp, Hose | 274545 | 1 | Regulator, Water | 274743 |
| 1 | Tank, Surge | 274746 | 1 | Tank, Surge | 274746 |
| 1 | Bracket, Mounting | 279595 | 1 | Bracket, Mounting | 279595 |
| 2 | Clamp, Hose | 279669 | 2 | Clamp, Hose | 279669 |
| 1 | Guard, Belt | 279850 | 1 | Guard, Belt Top | 279849 |
| 1 | Guard, Belt | 279851 | 1 | Guard, Belt RH | 279850 |
| 1 | Guard, Belt Top | 279849 | 1 | Guard, Belt LH | 279851 |
| 1 | Guard, Belt Front | 279852 | 1 | Guard, Belt Front | 279852 |
| 2 | Bracket, Tank | 328758 | 2 | Bracket, Tank | 328758 |
| 1 | Bracket, Mounting | 328759 | 1 | Bracket, Mounting | 328759 |
| 1 | Exchanger, Heat | 328761 | 1 | Bracket, Support | 328760 |
| 1 | Tube, Radiator Lower | 328762 | 1 | Exchanger, Heat | 328761 |
| 1 | Hose, Upper Right | 328763 | 1 | Tube, Radiator Lower | 328762 |
| 1 | Hose, Upper Left | 328764 | 1 | Hose, Upper | 328763 |
| 1 | Bracket, Support | 328770 | 1 | Hose, Upper | 328764 |
| 1 | Hose, Lower | 328771 | 1 | Hose, Lower | 328771 |
| 1 | Regulator, Water | 347072 | 1 | Tee, Pipe | 347168 |
| 1 | Tee, Pipe (adapter) | 347168 | | | |

Cooling System Kits, continued

| Qty. | Description | Part No. |
|------|-------------|----------|
|------|-------------|----------|

Remote Radiator Setup

279295

| | | |
|---|---------------------------------|-----------|
| 1 | Elbow, Pipe, 1 NPT | X-215-15 |
| 1 | Nipple, Pipe, 1 x 1 1/2 NPT | X-218-24 |
| 1 | Valve, Drain, 1/4 | X-256-3 |
| 2 | Hose, Radiator, 2.5 ID x 6 L | X-6014-69 |
| 2 | Hose, Radiator, 3.5 ID x 6 L | X-6014-70 |
| 1 | Adapter, Hose, 1 1/4 ID x 1 NPT | 272930 |
| 4 | Clamp, Hose, 2.81-3.12 ID | 275527 |
| 1 | Guard, Belt RH | 279289 |
| 1 | Guard, Belt LH | 279290 |
| 1 | Guard, Belt Top | 279291 |
| 1 | Guard, Belt Bottom | 279292 |
| 1 | Guard, Belt Front | 279293 |
| 1 | Skid | 279294 |
| 2 | Clamp, Hose, 1.50-1.81 ID | 279669 |
| 1 | Tube, Radiator Lower | 279942 |
| 1 | Support, Belt Guard | 279968 |
| 1 | Bracket, Belt Guard | 279969 |
| 1 | Support, Belt Guard | 279970 |
| 4 | Clamp, Hose, 3.75-4.06 ID | 291537 |

Remote Radiator Setup

279854

| | | |
|---|--------------------------------------|-----------|
| 1 | Elbow, Pipe, 1 NPT | X-215-15 |
| 1 | Nipple, Pipe, 1 NPT x 3 | X-218-22 |
| 1 | Valve, Drain, 1/4 | X-256-3 |
| 2 | Hose, Radiator, 3 ID x 5.5 L | X-507-5 |
| 4 | Washer, Beveled, 0.44 ID, 2/12 Slope | X-6011-4 |
| 1 | Hose, Radiator, 4 ID x 8 L | X-6014-31 |
| 2 | Screw, 9/16-12 x 1 | X-6244-1 |
| 1 | Adapter, Hose, 1 1/4 x 1 NPT | 272930 |
| 1 | Hose, Radiator Lower, 4 ID | 272971 |
| 1 | Tube, Radiator Lower, 4 OD | 272973 |
| 4 | Clamp, Hose, 4.25-4.56 ID | 274545 |
| 1 | Guard, Belt Top | 279849 |
| 1 | Guard, Belt RH | 279850 |
| 1 | Guard, Belt LH | 279851 |
| 1 | Guard, Belt Front | 279852 |
| 1 | Skid | 279853 |
| 4 | Clamp, Hose, 3.25-3.56 ID | 291542 |
| 1 | Bracket, Mounting | 299899 |

Remote Radiator Setup

279855

| | | |
|---|------------------------------|-----------|
| 1 | Elbow, Pipe, 1 NPT | X-215-15 |
| 1 | Nipple, Pipe, 1 NPT x 3 | X-218-22 |
| 1 | Valve, Drain, 1/4 | X-256-3 |
| 2 | Clamp, Hose, 1 15/16 | X-426-8 |
| 2 | Hose, Radiator, 3 ID x 5.5 L | X-507-3 |
| 1 | Hose, Radiator, 4 ID x 8 L | X-6014-31 |
| 1 | Hose, 1.25 ID x 34 L | X-6014-42 |
| 2 | Screw, 9/16-12 x 1 | X-6244-1 |
| 1 | Adapter, Hose, 1 1/4 x 1 NPT | 272930 |
| 1 | Hose, Radiator Lower, 4 ID | 272988 |
| 1 | Tube, Radiator Lower, 4 OD | 272989 |
| 4 | Clamp, Hose, 4.25-4.56 ID | 274545 |
| 1 | Bracket, Mounting | 279959 |
| 1 | Guard, Belt Top | 279849 |
| 1 | Guard, Belt RH | 279850 |
| 1 | Guard, Belt LH | 279851 |
| 1 | Guard, Belt Front | 279852 |
| 1 | Skid | 279856 |
| 4 | Clamp, Hose, 3.25-3.56 ID | 291542 |

| Qty. | Description | Part No. |
|------|-------------|----------|
|------|-------------|----------|

Remote Radiator Setup

328001

| | | |
|---|------------------------------|-----------|
| 1 | Valve, Drain, 1/4 | X-256-3 |
| 2 | Hose, Radiator, 2.5 ID x 6 L | X-6014-69 |
| 2 | Hose, Radiator, 3.5 ID x 6 L | X-6014-70 |
| 4 | Clamp, Hose, 2.81-3.12 ID | 275527 |
| 1 | Guard, Belt RH | 279289 |
| 1 | Guard, Belt LH | 279290 |
| 1 | Guard, Belt Top | 279291 |
| 1 | Guard, Belt Bottom | 279292 |
| 1 | Guard, Belt Front | 279293 |
| 1 | Skid | 299987 |
| 1 | Tube, Radiator Lower | 279942 |
| 1 | Support, Belt Guard | 279968 |
| 1 | Bracket, Belt Guard | 279969 |
| 1 | Support, Belt Guard | 279970 |
| 4 | Clamp, Hose, 3.75-4.06 ID | 291537 |

Remote Radiator Setup

328651

| | | |
|---|------------------------------|-----------|
| 1 | Valve, Drain, 1/4 | X-256-3 |
| 2 | Hose, Radiator, 3 ID x 5.5 L | X-507-3 |
| 1 | Hose, Radiator, 4 ID x 8 L | X-6014-31 |
| 1 | Hose, 1.25 ID x 34 L | X-6014-42 |
| 2 | Screw, 9/16-12 x 1 | X-6244-1 |
| 1 | Hose, Radiator Lower, 4 ID | 272988 |
| 1 | Tube, Radiator Lower, 4 OD | 272989 |
| 4 | Clamp, Hose, 4.25-4.56 ID | 274545 |
| 1 | Bracket, Mounting | 279595 |
| 1 | Guard, Belt Top | 279849 |
| 1 | Guard, Belt RH | 279850 |
| 1 | Guard, Belt LH | 279851 |
| 1 | Guard, Belt Front | 279852 |
| 1 | Skid | 328650 |
| 4 | Clamp, Hose, 3.25-3.56 ID | 291542 |

Remote Radiator Set Up

347878

| | | |
|---|--------------------------------------|-----------|
| 1 | Elbow, Pipe, 1 NPT | X-215-15 |
| 1 | Nipple, Pipe, 1 NPT x 3 | X-218-22 |
| 1 | Valve, Drain, 1/4 | X-256-3 |
| 2 | Hose, Radiator, 3 ID x 5.5 L | X-507-6 |
| 4 | Washer, Beveled, 0.44 ID, 2/12 Slope | X-6011-4 |
| 1 | Hose, Radiator, 4 ID x 8 L | X-6014-31 |
| 2 | Screw, 9/16-12 x 1 | X-6244-1 |
| 1 | Adapter, Hose, 1 1/4 x 1 NPT | 272930 |
| 1 | Hose, Radiator Lower | 272988 |
| 1 | Tube, Radiator Lower | 272989 |
| 4 | Clamp, Hose, 4.25-4.56 ID | 274545 |
| 1 | Guard, Belt Top | 279849 |
| 1 | Guard, Belt RH | 279850 |
| 1 | Guard, Belt LH | 279851 |
| 1 | Guard, Belt Front | 279852 |
| 4 | Clamp, Hose, 3.25-3.56 ID | 291542 |
| 1 | Plate, Cover | 347879 |

Cooling System Kits, continued

| Qty. | Description | Part No. |
|------|-------------|----------|
|------|-------------|----------|

Remote Radiator Setup

354567

| | | |
|---|----------------------|---------|
| 1 | Valve, Drain 1/4 | X-256-3 |
| 2 | Hose, Radiator | X-507-6 |
| 2 | Clamp, Hose | 274545 |
| 1 | Bracket, Mounting | 279595 |
| 1 | Guard, Belt Top | 279849 |
| 1 | Guard, Belt RH | 279850 |
| 1 | Guard, Belt LH | 279851 |
| 1 | Guard, Belt Front | 279852 |
| 4 | Clamp, Hose | 291542 |
| 1 | Plate, Cover | 347879 |
| 1 | Hose, Radiator Lower | 354684 |

| Qty. | Description | Part No. |
|------|-------------|----------|
|------|-------------|----------|

Remote Radiator Setup

354615

| | | |
|---|----------------------|----------|
| 1 | Valve, Drain, 1/4 | X-256-3 |
| 2 | Hose, Radiator | X-424-10 |
| 1 | Clamp, Hose | 274545 |
| 4 | Clamp, Hose | 275527 |
| 1 | Guard, Belt | 279289 |
| 1 | Guard, Belt | 279290 |
| 1 | Guard, Belt Top | 279291 |
| 1 | Guard, Belt Bottom | 279292 |
| 1 | Guard, Belt Front | 279293 |
| 1 | Support, Belt Guard | 279968 |
| 1 | Bracket, Belt Guard | 279969 |
| 1 | Support, Belt Guard | 279970 |
| 1 | Clamp, Hose | 291537 |
| 1 | Hose, Radiator Lower | 354699 |

Air Cleaner Kits

| Qty. | Description | Part No. |
|------|-------------|----------|
|------|-------------|----------|

| Qty. | Description | Part No. |
|------|-------------|----------|
|------|-------------|----------|

Heavy-Duty Air Cleaner Kit

354049

| | | |
|---|----------------------------|----------|
| 2 | Cleaner Assembly, Air | A-279714 |
| 1 | Element, Air Cleaner | 279738 |
| 8 | Washer, Plain | X-25-1 |
| 1 | Bracket, Air Cleaner Right | 274285 |
| 1 | Bracket, Air Cleaner Left | 274286 |
| 2 | Tube Assembly | 274619 |
| 4 | Bracket, Air Cleaner | 279715 |
| 2 | Clamp, Hose | 279717 |
| 2 | Hose, Hump | 279720 |
| 2 | Bracket, Air Cleaner | 279721 |
| 2 | Cap, Rain | 279722 |
| 4 | Clamp | 280998 |
| 2 | Clamp, Hose | 291504 |
| 2 | Hose, Hump | 291560 |

Heavy-Duty Air Cleaner Kit

354561

| | | |
|---|----------------------------|----------|
| 2 | Cleaner Assembly, Air | A-279713 |
| 1 | Element, Air Cleaner | 279736 |
| 8 | Washer, Plain | X-25-1 |
| 1 | Tube, Steel | X-522-72 |
| 2 | Clamp | 254013 |
| 2 | Cap, Rain | 272674 |
| 1 | Bracket, Air Cleaner Right | 274285 |
| 1 | Bracket, Air Cleaner Left | 274286 |
| 2 | Bracket, Air Cleaner | 279721 |
| 2 | Hose, Hump | 279744 |
| 4 | Clamp | 280998 |
| 2 | Clamp, Hose | 291504 |
| 4 | Bracket, Air Cleaner | 291666 |
| 2 | Hose, Hump | 354447 |

Heavy-Duty Air Cleaner Kit

354588

| | | |
|---|-----------------------|----------|
| 2 | Cleaner Assembly, Air | A-279713 |
| 1 | Element, Air Cleaner | 279736 |
| 2 | Tube, Steel | X-522-66 |
| 2 | Clamp | 254013 |
| 2 | Clamp, Hose | 254344 |
| 2 | Cap, Rain | 272674 |
| 1 | Bracket, Air Cleaner | 279284 |
| 1 | Bracket, Air Cleaner | 279285 |
| 2 | Hose, Hump | 279744 |
| 4 | Clamp | 280998 |
| 4 | Bracket, Air Cleaner | 291666 |
| 2 | Hose, Hump | 354441 |

Heavy-Duty Air Cleaner Kit

354566

| | | |
|---|----------------------------|----------|
| 2 | Cleaner Assembly, Air | A-279713 |
| 1 | Element, Air Cleaner | 279736 |
| 8 | Washer, Plain | X-25-1 |
| 2 | Tube, Steel | X-522-72 |
| 2 | Clamp | 254013 |
| 2 | Clamp, Hose | 254344 |
| 2 | Cap, Rain | 272674 |
| 1 | Bracket, Air Cleaner Right | 274285 |
| 1 | Bracket, Air Cleaner Left | 274286 |
| 2 | Bracket, Air Cleaner | 279721 |
| 2 | Hose, Hump | 279744 |
| 4 | Clamp | 280998 |
| 4 | Bracket, Air Cleaner | 291666 |
| 2 | Hose, Hump | 354441 |

Appendix A. Glossary of Abbreviations

Abbreviations are used throughout this manual. Normally in the text they will appear in complete form with the abbreviation following in parenthesis the first time they are used. After that they will appear in the abbreviated form. The commonly used abbreviations are shown below.

| | | | | | |
|------------|---|---------------------|---|------------|--|
| AC | alternating current | gph | gallons per hour | N.C. | normally closed |
| AISI | American Iron and Steel Institute | gpm | gallons per minute | NEC | National Electrical Code |
| Amp | ampere | gr. | grade | NEMA | National Electrical Manufacturers Association |
| Amps | amperes | grd. | ground | NFPA | National Fire Protection Association |
| ANSI | American National Standard Institute | HCHT | high cylinder head temperature | Nm | Newton meter, Newton meters |
| API | American Petroleum Institute | HET | high exhaust (or engine) temperature | no., nos | number, numbers |
| approx. | approximate, approximately | Hg | mercury (element) | NPT | National Standard taper pipe thread per general use |
| A/R | as required, as requested | H ₂ O | water | N/R | not required |
| A/S | as supplied, as stated, as suggested | HP | horsepower | OC | overcrank |
| ASA | American Standards Association | hr, hrs | hour | OD | outside diameter |
| ASME | American Society of Mechanical Engineers | Hz | hertz (cycles per second) | OEM | original equipment manufacturer |
| assy. | assembly | ID | inside diameter | OS | overspeed, oversize |
| ASTM | American Society for Testing Materials | IEEE | Institute of Electrical and Electronic Engineers | O/S | oversize |
| ATDC | after top dead center | in. | inch(es) | OSHA | Occupational Safety and Health Act |
| aux. | auxiliary | in. | inch | OV | overvoltage |
| AWG | American Wire Gauge | in. lbs. | inch pounds | oz. | ounce, ounces |
| AWM | appliance wiring material | int. | internal | PF | power factor |
| BBDC | before bottom dead center | int.-ext. | internal-external | PMG | permanent magnet generator |
| BDC | before dead center | ISO | International Standards Organization | pot. | potentiometer |
| BHP | brake horsepower | J | joule, joules | ppm | parts per million |
| bmp | brake mean effective pressure | JIS | Japanese Industry Standard | psi | pounds per square inch |
| Btu | British thermal unit | kg | kilogram, kilograms | pt., pts. | pint, pints |
| °C | Celsius degree | kg/cm ² | kilograms per square centimeter | PVC | polyvinyl chloride |
| cc | cubic centimeter | kgm | kilogram meter(s) | qt., qts. | quart, quarts |
| CCA | cold cranking Amps. | kJ | kilojoules (btu cal) | qty. | quantity |
| CEC | Canadian Electrical Code | km | kilometer, kilometers | ref. | reference |
| cfh | cubic feet per hour | kPa | kiloPascal, kiloPascals | RFI | radio frequency interference |
| cfm | cubic feet per minute | kph | kilometers per hour | r.h.m. | round-head machine (screw) |
| CID | cubic inch displacement | kV | kilovolt | rms | root mean square |
| cm | centimeter, centimeters | kVA | kilovolt amperes | RPM | revolutions per inch |
| cmm | cubic meters per minute | kW | kilowatt, kilowatts | RTV | room temperature vulcanization |
| co. | company | kWH | kilowatt hour | SAE | Society of Automotive Engineers |
| cont'd. | continued | L | liter, liters | SCR | silicon-controlled rectifier |
| CSA | Canadian Standards Association | LxWxH | length x width x height | sec. | second, seconds |
| CT | current transformer | LED(s) | light emitting diode | spec. | specs, specification |
| cu. in. | cubic inch, cubic inches | lb., lbs. | pound, pounds | sq. | square |
| cyl. | cylinder | L/hr. | liter per hour, liters per hour | sq. cm | square centimeters |
| dB | decibel | L/min. | liter(s) per minutes | sq. in. | square inch, square inches |
| dBA | decibels (A weighted) | LOP | low oil pressure | tach | tachometer |
| DC | direct current | LP | liquefied petroleum | TDC | top dead center |
| DCR | direct current resistance | m | meter, meters | tech. pub. | technical publications |
| deg. | degree | m ³ | cubic meter, cubic meters | temp. | temperature |
| dept. | department | max. | maximum | TIF | telephone influence factor |
| dia. | diameter | MCM | one thousand circular mils. | TP, TPs | technical publications |
| e.g. | example given | megger | megohmmeter | turbo | turbocharger |
| EIA | Electronic Industries Association | MHz | megahertz | UHF | ultrahigh frequency |
| EMI | electromagnetic interference | mi. | mile, miles | UNC | Unified coarse thread (was NC) |
| EPA | Environmental Protection Agency | mil | one one-thousandth of an inch | UNF | Unified fine thread (was NF) |
| etc. | et cetera (and so forth) | min. | minimum | UL | Underwriter's Laboratories, Inc. |
| ext. | external | mJ | millijoule, millijoules | U/S | undersize |
| °F | Fahrenheit degree | MJ | mega joule, mega joules | U.S.A. | United States of America |
| fl. oz. | fluid ounce, fluid ounces | mm | millimeter, millimeters | v | volt, volts |
| FM | frequency modulation | m ³ /min | cubic meters per minute | vac | volts alternating current |
| ft. | foot, feet | MPa | megaPascal | vdc | volts direct current |
| ft. lbs. | foot pound, foot pounds | mW | milliwatt, milliwatts | VHF | very high frequency |
| ga. | gauge | MW | megawatt, megawatts | W | watt, watts |
| gal./gals. | gallon, gallons | N/A | not available or not applicable | | |
| | | NBS | National Bureau of Standards | | |

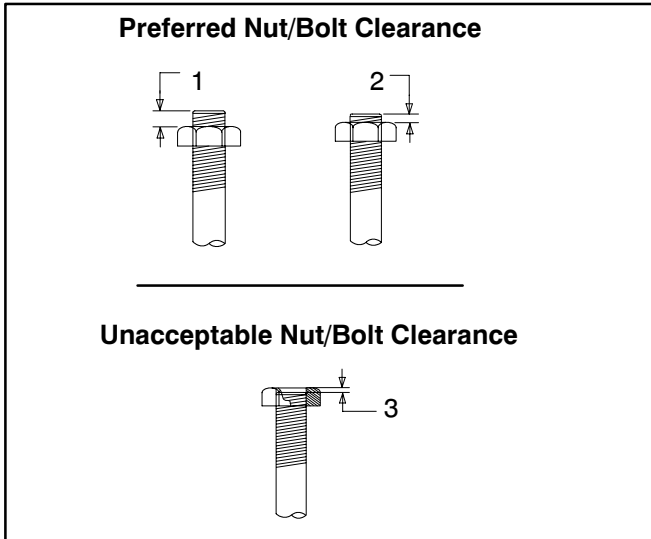
Appendix B. Common Hardware Application Guidelines

Use the information below and on the following pages to identify proper fastening techniques when no specific reference for reassembly is made.

Bolt/Screw Length: When bolt/screw length is not given, use Figure 3 as a guide. As a general rule, a minimum length of one thread beyond the nut and a maximum length of 1/2 the bolt/screw diameter beyond the nut is the preferred method.

Washers and Nuts: Use split lock washers as a bolt locking device where specified. Use SAE flat washers with whiz nuts, spirallock nuts, or standard nuts and preloading (torque) of the bolt in all other applications.

See General Torque Specifications and other torque specifications in the service literature.



1. 1/2 of Bolt Diameter
2. Min. 1 Full Thread Beyond Top of Nut
3. Below Top of Nut

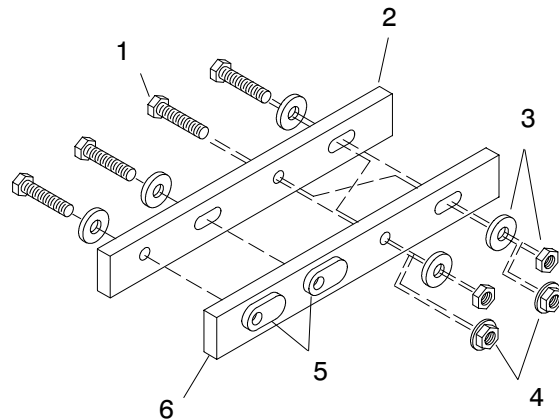
Figure 3. Acceptable Bolt Lengths

Steps for common hardware application:

1. Determine entry hole type: round or slotted.
2. Determine exit hole type: fixed female thread (weld nut), round, or slotted.

For round and slotted exit holes, determine if hardware is greater than 1/2 inch in diameter, or 1/2 inch in diameter or less. Hardware that is *greater than 1/2 inch* in diameter takes a standard nut and SAE washer. Hardware *1/2 inch or less* in diameter can take a properly torqued whiz nut or spirallock nut. See the diagram below.

3. Follow these SAE washer rules after determining exit hole type:
 - a. Always use a washer between hardware and a slot.
 - b. Always use a washer under a nut (see 2 above for exception).
 - c. Use a washer under a bolt when the female thread is fixed (weld nut).
4. Refer to the diagram below, which depicts the preceding hardware configuration possibilities.



1. Cap screw
2. Entry hole types
3. Standard nut and SAE washer
4. Whiz nut or spirallock: up to 1/2" dia. hardware
5. Weld nuts: above 1/2" dia. hardware
6. Exit hole types

Figure 4. Acceptable Hardware Combinations

Appendix C. General Torque Specifications

SAE Fasteners

Use the following specifications for SAE fasteners when no torque values are given elsewhere in this or the service manual for a specified bolt.

The values given are based on new plated threads. Increase values by 20% if nonplated threads are used.

| Size | Torque Measurement | Assembled into Cast Iron or Steel | | | Assembled into |
|---------|--------------------|-----------------------------------|------------|------------|-----------------------|
| | | Grade 2 | Grade 5 | Grade 8 | Aluminum Grade 2 or 5 |
| 8-32 | in. lbs. (Nm) | 16 (1.8) | 20 (2.3) | – | 16 (1.8) |
| 10-24 | in. lbs. (Nm) | 26 (2.9) | 32 (3.6) | – | 26 (2.9) |
| 10-32 | in. lbs. (Nm) | 26 (2.9) | 32 (3.6) | – | 26 (2.9) |
| 1/4-20 | in. lbs. (Nm) | 60 (6.8) | 96 (10.8) | 132 (14.9) | 60 (6.8) |
| 1/4-28 | in. lbs. (Nm) | 72 (8.1) | 108 (12.2) | 144 (16.3) | 72 (8.1) |
| 5/16-18 | in. lbs. (Nm) | 120 (13.6) | 192 (21.7) | 264 (29.8) | 120 (13.6) |
| 5/16-24 | in. lbs. (Nm) | 132 (14.9) | 204 (23.1) | 288 (32.5) | 132 (14.9) |
| 3/8-16 | in. lbs. (Nm) | 18 (24) | 28 (38) | 39 (53) | 18 (24) |
| 3/8-24 | ft. lbs. (Nm) | 20 (27) | 31 (42) | 44 (60) | 20 (27) |
| 7/16-14 | ft. lbs. (Nm) | 29 (39) | 44 (60) | 63 (85) | |
| 7/16-20 | ft. lbs. (Nm) | 32 (43) | 50 (68) | 70 (95) | |
| 1/2-13 | ft. lbs. (Nm) | 44 (60) | 68 (92) | 96 (130) | |
| 1/2-20 | ft. lbs. (Nm) | 49 (66) | 76 (103) | 108 (146) | |
| 9/16-12 | ft. lbs. (Nm) | 60 (81) | 98 (133) | 138 (187) | |
| 9/16-18 | ft. lbs. (Nm) | 67 (91) | 109 (148) | 154 (209) | |
| 5/8-11 | ft. lbs. (Nm) | 83 (113) | 135 (183) | 191 (259) | |
| 5/8-18 | ft. lbs. (Nm) | 94 (128) | 153 (208) | 216 (293) | |
| 3/4-10 | ft. lbs. (Nm) | 147 (199) | 240 (325) | 338 (458) | |
| 3/4-16 | ft. lbs. (Nm) | 164 (222) | 268 (363) | 378 (513) | |
| 1-8 | ft. lbs. (Nm) | 191 (259) | 532 (721) | 818 (1109) | |
| 1-12 | ft. lbs. (Nm) | 209 (283) | 582 (789) | 895 (1214) | |





















Metric Fasteners















Use the following specifications for metric fasteners when no torque values are given elsewhere in this manual for a specified bolt. These values are based on new plated threads.

Increase values by 20% if nonplated threads are used. Screws threaded into aluminum must have two diameters of threads engaged and may require 30% or more reduction in the torque.

| Size (mm) | Torque ft-lb (Nm) | | | Fasteners Assembled Into |
|-----------|-------------------|-----------|-----------|--------------------------|
| | 5.8 | 6.8 | 10.9 | Aluminum |
| 6 x 1.00 | 5 (7) | 6 (9) | 9 (12) | 5 (7) |
| 8 x 1.25 | 14 (19) | 14 (20) | 20 (37) | 14 (19) |
| 8 x 1.00 | 16 (21) | 17 (24) | 23 (31) | 16 (21) |
| 10 x 1.50 | 25 (35) | 27 (37) | 38 (51) | 25 (35) |
| 10 x 1.25 | 29 (39) | 34 (46) | 45 (61) | 29 (39) |
| 12 x 1.75 | 42 (57) | 45 (61) | 65 (89) | |
| 12 x 1.50 | 48 (65) | 55 (75) | 78 (106) | |
| 14 x 2.00 | 64 (86) | 69 (94) | 101 (137) | |
| 14 x 1.50 | 74 (100) | 81 (110) | 116 (157) | |
| 16 x 2.00 | 98 (133) | 104 (141) | 150 (204) | |
| 16 x 1.50 | 104 (141) | 116 (157) | 168 (228) | |
| 18 x 2.50 | 133 (181) | 145 (196) | 208 (283) | |
| 18 x 1.50 | 145 (196) | 156 (212) | 226 (306) | |

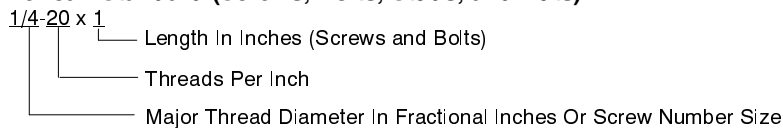
Appendix D. Common Hardware Identification

| Screws/Bolts/Studs Head Styles | |
|---|---|
| Hex. Head or Machine Head |   |
| Hex. Head or Machine Head with Washer |  |
| Flat Head (f.h.m.) |  |
| Round Head (r.h.m.) |  |
| Pan Head |  |
| Socket Head Cap or Allen Head Cap |  |
| Socket Head or Allen Head Shoulder Bolt |  |
| Sheet Metal Screw |  |
| Stud |  |
| Drive Styles | |
| Hex. |  |
| Hex. and Slotted |  |
| Phillips |  |
| Slotted |  |
| Hex. Socket |  |
| Hardness Grade | |
| American Standard | |
| Grade 2 |  |
| Grade 5 |  |
| Grade 8 |  |
| Grade 8/9 |  |
| Metric | |
| Number stamped on hardware; 5.8 shown |  |

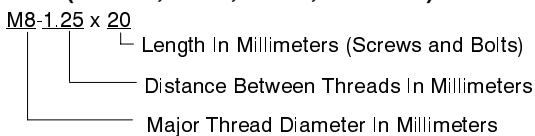
| Nuts Nut Styles | |
|------------------------------|---|
| Hex. Head |  |
| Lock Nut or Nylock Nut |  |
| Square Nut |  |
| Cap Nut or Acorn Nut |  |
| Wing Nut |  |
| Nut Hardness Grades | |
| American Standard | |
| Grade 2 |  |
| Grade 5 |  |
| Metric | |
| Number stamped on hardware |  |
| Washers | |
| Washer Styles | |
| Plain |  |
| Split Lock or Spring |  |
| Spring or Wave |  |
| External Tooth Lock |  |
| Internal Tooth Lock |  |
| Internal-External Tooth Lock |  |
| | |
| | |
| | |

Sample Dimensions

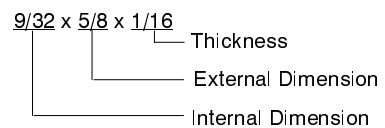
American Standard (Screws, Bolts, Studs, and Nuts)



Metric (Screws, Bolts, Studs, and Nuts)



Plain Washers



Lock Washers



Appendix E. Common Hardware List

The Common Hardware List gives part numbers and dimensions for common hardware items.

HEX BOLTS (GRADE 5)

| Part No. | Dimensions |
|-----------|----------------|
| X-465-17 | 1/4-20 x .38 |
| X-465-6 | 1/4-20 x .50 |
| X-465-2 | 1/4-20 x .62 |
| X-465-16 | 1/4-20 x .75 |
| X-465-18 | 1/4-20 x .88 |
| X-465-7 | 1/4-20 x 1.00 |
| X-465-8 | 1/4-20 x 1.25 |
| X-465-9 | 1/4-20 x 1.50 |
| X-465-10 | 1/4-20 x 1.75 |
| X-465-11 | 1/4-20 x 2.00 |
| X-465-12 | 1/4-20 x 2.25 |
| X-465-14 | 1/4-20 x 2.75 |
| X-465-21 | 1/4-20 x 5.00 |
| | |
| X-465-25 | 1/4-28 x .38 |
| X-465-20 | 1/4-28 x 1.00 |
| X-125-33 | 5/16-18 x .50 |
| X-125-23 | 5/16-18 x .62 |
| X-125-3 | 5/16-18 x .75 |
| X-125-31 | 5/16-18 x .88 |
| X-125-5 | 5/16-18 x 1.00 |
| X-125-24 | 5/16-18 x 1.25 |
| X-125-34 | 5/16-18 x 1.50 |
| X-125-25 | 5/16-18 x 1.75 |
| X-125-26 | 5/16-18 x 2.00 |
| | |
| 230578 | 5/16-18 x 2.25 |
| | |
| X-125-29 | 5/16-18 x 2.50 |
| X-125-27 | 5/16-18 x 2.75 |
| X-125-28 | 5/16-18 x 3.00 |
| X-125-22 | 5/16-18 x 4.50 |
| X-125-32 | 5/16-18 x 5.00 |
| X-125-35 | 5/16-18 x 5.50 |
| X-125-36 | 5/16-18 x 6.00 |
| X-125-40 | 5/16-18 x 6.50 |
| | |
| X-125-43 | 5/16-24 x 1.75 |
| X-125-44 | 5/16-24 x 2.50 |
| X-125-30 | 5/16-24 x .75 |
| X-125-39 | 5/16-24 x 2.00 |
| X-125-38 | 5/16-24 x 2.75 |
| X-6238-2 | 3/8-16 x .62 |
| X-6238-10 | 3/8-16 x .75 |
| X-6238-3 | 3/8-16 x .88 |
| X-6238-11 | 3/8-16 x 1.00 |
| X-6238-4 | 3/8-16 x 1.25 |
| X-6238-5 | 3/8-16 x 1.50 |
| X-6238-1 | 3/8-16 x 1.75 |
| X-6238-6 | 3/8-16 x 2.00 |
| X-6238-17 | 3/8-16 x 2.25 |
| X-6238-7 | 3/8-16 x 2.50 |
| X-6238-8 | 3/8-16 x 2.75 |
| X-6238-9 | 3/8-16 x 3.00 |
| X-6238-19 | 3/8-16 x 3.25 |
| X-6238-12 | 3/8-16 x 3.50 |
| X-6238-20 | 3/8-16 x 3.75 |
| X-6238-13 | 3/8-16 x 4.50 |
| X-6238-18 | 3/8-16 x 5.50 |
| X-6238-25 | 3/8-16 x 6.50 |
| | |
| X-6238-14 | 3/8-24 x .75 |
| X-6238-16 | 3/8-24 x 1.25 |
| X-6238-21 | 3/8-24 x 4.00 |
| X-6238-22 | 3/8-24 x 4.50 |
| X-6024-5 | 7/16-14 x .75 |
| X-6024-2 | 7/16-14 x 1.00 |
| X-6024-8 | 7/16-14 x 1.25 |
| X-6024-3 | 7/16-14 x 1.50 |
| X-6024-4 | 7/16-14 x 2.00 |
| X-6024-11 | 7/16-14 x 2.75 |
| X-6024-12 | 7/16-14 x 6.50 |
| X-129-15 | 1/2-13 x .75 |

HEX BOLTS (GRADE 5), continued

| Part No. | Dimensions |
|-----------|---------------|
| X-129-17 | 1/2-13 x 1.00 |
| X-129-18 | 1/2-13 x 1.25 |
| X-129-19 | 1/2-13 x 1.50 |
| X-129-20 | 1/2-13 x 1.75 |
| X-129-21 | 1/2-13 x 2.00 |
| X-129-22 | 1/2-13 x 2.25 |
| X-129-23 | 1/2-13 x 2.50 |
| X-129-24 | 1/2-13 x 2.75 |
| X-129-25 | 1/2-13 x 3.00 |
| X-129-27 | 1/2-13 x 3.50 |
| X-129-29 | 1/2-13 x 4.00 |
| X-129-30 | 1/2-13 x 4.50 |
| X-463-9 | 1/2-13 x 5.50 |
| X-129-44 | 1/2-13 x 6.00 |
| X-129-51 | 1/2-20 x .75 |
| X-129-45 | 1/2-20 x 1.25 |
| X-129-52 | 1/2-20 x 1.50 |
| X-6021-3 | 5/8-11 x 1.00 |
| X-6021-4 | 5/8-11 x 1.25 |
| X-6021-2 | 5/8-11 x 1.50 |
| X-6021-1 | 5/8-11 x 1.75 |
| 273049 | 5/8-11 x 2.00 |
| X-6021-5 | 5/8-11 x 2.25 |
| X-6021-6 | 5/8-11 x 2.50 |
| X-6021-7 | 5/8-11 x 2.75 |
| X-6021-12 | 5/8-11 x 3.75 |
| X-6021-11 | 5/8-11 x 4.50 |
| X-6021-10 | 5/8-11 x 6.00 |
| X-6021-9 | 5/8-18 x 2.50 |
| | |
| X-6239-1 | 3/4-10 x 1.00 |
| X-6239-8 | 3/4-10 x 1.25 |
| X-6239-2 | 3/4-10 x 1.50 |
| X-6239-3 | 3/4-10 x 2.00 |
| X-6239-4 | 3/4-10 x 2.50 |
| X-6239-5 | 3/4-10 x 3.00 |
| X-6239-6 | 3/4-10 x 3.50 |
| | |
| X-792-1 | 1-8 x 2.25 |
| X-792-5 | 1-8 x 3.00 |
| X-792-8 | 1-8 x 5.00 |

NUTS

| Part No. | Dimensions | Type |
|-----------|------------|---------------|
| X-6009-1 | 1-8 | Std. Nut |
| | | |
| X-6210-3 | 6-32 | Whiz Nut |
| X-6210-4 | 8-32 | Whiz Nut |
| X-6210-5 | 10-24 | Whiz Nut |
| X-6210-1 | 10-32 | Whiz Nut |
| X-6210-2 | 1/4-20 | Spiralock Nut |
| X-6210-6 | 1/4-28 | Spiralock Nut |
| X-6210-7 | 5/16-18 | Spiralock Nut |
| X-6210-8 | 5/16-24 | Spiralock Nut |
| X-6210-9 | 3/8-16 | Spiralock Nut |
| X-6210-10 | 3/8-24 | Spiralock Nut |
| X-6210-11 | 7/16-14 | Spiralock Nut |
| X-6210-12 | 1/2-13 | Spiralock Nut |
| X-6210-15 | 7/16-20 | Spiralock Nut |
| X-6210-14 | | Spiralock Nut |
| | | |
| X-85-3 | 5/8-11 | Std. Nut |
| X-88-12 | 3/4-10 | Std. Nut |
| X-89-2 | 1/2-20 | Std. Nut |

WASHERS

| Part No. | ID | OD | Thickness | Bolt/ Screw |
|----------|-------|-------|-----------|----------------|
| X-25-46 | .125 | .250 | .022 | #4 |
| X-25-9 | .156 | .375 | .049 | #6 |
| X-25-48 | .188 | .438 | .049 | #8 |
| X-25-36 | .219 | .500 | .049 | #10 |
| X-25-40 | .281 | .625 | .065 | 1/4 |
| X-25-85 | .344 | .687 | .065 | 5/16 |
| X-25-37 | .406 | .812 | .065 | 3/8 |
| X-25-34 | .469 | .922 | .065 | 7/16 |
| X-25-26 | .531 | 1.062 | .095 | 1/2 |
| X-25-15 | .656 | 1.312 | .095 | 5/8 |
| X-25-29 | .812 | 1.469 | .134 | 3/4 |
| X-25-127 | 1.062 | 2.000 | .134 | 1 |

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