PARTS AND OPERATION MANUAL

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MQ POWER
MODEL DCA-600SSK
PORTABLE GENERATOR

For
General Electric
Equipment Rental

(GEER)

Parts List No.; C4872300104-1999
C4872300124-2000

Revision #2 (03/14/01)

MULTIQUIP INC.
18910 WILMINGTON AVE.
CARSON, CALIFORNIA 90746
310-537-3700
800-421-1244
FAX: 310-537-3927

PARTS DEPARTMENT:
800-427-1244
FAX: 800-672-7877

SERVICE DEPARTMENT:
800-478-1244
FAX: 310-537-4259

E-mail:mq@multiquip.com • www:multiquip.com

WARNING

CALIFORNIA — Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

HERE'S HOW TO GET HELP

PLEASE HAVE THE MODEL AND SERIAL NUMBER ON-HAND WHEN CALLING

PARTS DEPARTMENT
800/427-1244 or 310/537-3700
FAX: 800/672-7877 or 310/637-3284

SERVICE DEPARTMENT
800/835-2551 or 310/537-3700
FAX: 310/638-8046

WARRANTY DEPARTMENT
800/835-2551 or 310/537-3700
FAX: 310/638-8046

MAIN
800/421-1244 or 310/537-3700
FAX: 310/537-3927

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MQPower DCA 600SSK AC Generator

NOTE

Specification and part number are subject to change without notice.

PARTS ORDERING PROCEDURES

- **Dealer account number**
- **Dealer name and address**
- **Shipping address (if different than billing address)**
- **Return fax number**
- **Applicable model number**
- **Quantity, part number and description of each part**
- **Specify preferred method of shipment:**
  - UPS Ground
  - UPS Second Day or Third Day*
  - UPS Next Day*
  - Federal Express Priority One (please provide us with your Federal Express account number)*
  - Airborne Express*
  - Truck or parcel post

Earn Extra Discounts when

All parts orders which include complete part numbers and are received by fax qualify for the following extra discounts:

Number of line items ordered	Additional Discount
1-9 items	3%

Extra Fax Discount for Domestic USA

Up to 5% extra savings!

UPS Special
For faxed orders only

Get special freight allowances when you order 10 or more line items via FAX!**

- UPS Ground Service **at no charge for freight**
- PS Third Day Service **at one-half of actual freight cost**

No other allowances on freight shipped by any other carrier.

**Common nuts, bolts and washers (all items under $1.00 list price) do not count towards the 10+ line items.

DISCOUNTS ARE SUBJECT TO CHANGE

Now! Direct TOLL-FREE access to our Parts Department!

Toll-free nationwide:

800-421-1244

Toll-free FAX:

RULES FOR SAFE OPERATION

CAUTION:

Failure to follow instructions in this manual may lead to serious injury or even death! This equipment is to be operated by trained and qualified personnel only! This equipment is for industrial use only.

The following safety guidelines should always be used when operating the DCA-600SSK portable generator:

GENERAL SAFETY

■ **DO NOT** operate or service this equipment before reading this entire manual.

■ This equipment should not be operated by persons under 18 years of age.

■ **NEVER** operate this equipment without proper protective clothing, shatterproof glasses, steel-toed boots and other protective devices required by the job.

■ **NEVER** operate this equipment when not feeling well due to fatigue, illness or taking medicine.

■ **NEVER** operate this equipment under the influence or drugs or alcohol.

■ **NEVER** use accessories or attachments, which are not recommended by MQ Power for this equipment. Damage to the equipment and/or injury to user may result.

■ Manufacturer does not assume responsibility for any accident due to equipment modifications.

■ Whenever necessary, replace nameplate, operation and safety decals when they become difficult read.

■ Always check the machine for loosened threads or bolts before starting.

■ **NEVER** touch the hot exhaust manifold, muffler or cylinder. Allow these parts to cool before servicing engine or generator.

■ **High Temperatures** – Allow the engine to cool before adding fuel or performing service and maintenance functions. Contact with *hot* components can cause serious burns.

■ The engine of this generator requires an adequate free flow of cooling air. Never operate the generator in any enclosed or narrow area where free flow of the air is restricted. If the air flow is restricted, it will cause serious damage to the generator or engine and may cause injury to people. The generator engine gives off DEADLY carbon monoxide gas.

CAUTION:

Always refuel in a well-ventilated area, away from sparks and open flames.

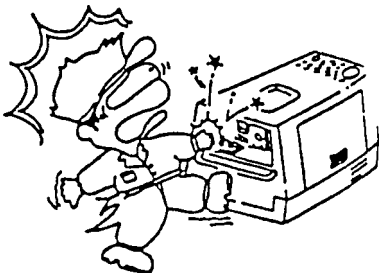
■ Always use extreme **caution** working with **flammable** liquids. When refueling, **stop the engine** and allow it to cool. **DO NOT** smoke around or near the machine. Fire or explosion could result from fuel vapors, or if fuel is spilled on a hot engine.

■ **NEVER** operate the generator in an explosive atmosphere or near combustible materials. An explosion or fire could result causing severe *bodily harm or even death.*

■ Topping-off to filler port is dangerous, as it tends to spill fuel.

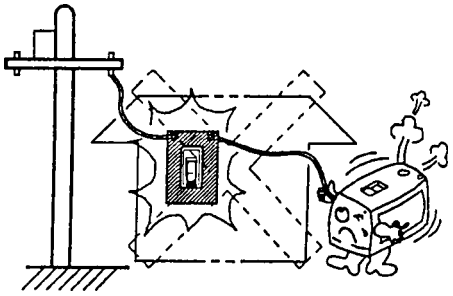
RULES FOR SAFE OPERATION

CAUTION:



■ **NEVER** touch output terminals during operation. This is extremely dangerous. Always stop the machine when contact with the output terminals.

CAUTION:



■ **Backfeed to a utility system can cause electrocution and.or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is opened.**

CAUTION:

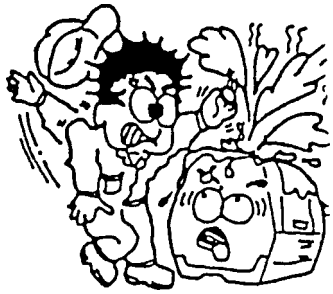
■ **Never** use damaged or worn cables when connecting power tools or equipment to the generator. Make sure power connecting cables are securely connected to the generator's output terminals, insufficient tightening of the terminal connections may cause damage to the generator and electrical shock.

CAUTION:

DO NOT touch or open any of the below mentioned components while the generator is running. Always allow sufficient time for the engine and generator to cool before performing maintenance.

Radiator

1. **Radiator Cap -** Removing the radiator cap while the engine is hot will result in high pressurized, boiling water to gush out of the radiator, therefore causing severe scalding to any persons in the general area of the generator.



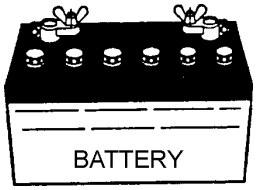
2. **Coolant Drain Plug -** Removing the coolant drain plug while the engine is hot will result in hot coolant to gush out of the coolant drain plug, therefore causing severe scalding to any persons in the general area of the generator.
3. **Engine Oil Drain Plug -** Removing the engine oil drain plug while the engine is hot will result in hot oil to gush out of the oil drain plug, therefore causing severe scalding to any persons in the general area of the generator.

Battery

CAUTION:

Never over fill the battery with water above the upper limit.

The battery contains acids that can cause injury to the eyes and skin. To avoid eye irritation, always wear safety glasses. Use well insulated gloves when picking up the battery. Use the following guidelines when handling the battery:



1. **DO NOT** drop the battery. There is the possibility of risk that the battery may explode.
2. **DO NOT** expose the battery to open flames, sparks, cigarettes etc. The battery contains combustible gases and liquids. If these gases and liquids come in contact with a flame or spark, an explosion could occur.
3. Always keep the battery charged. If the battery is not charged a buildup of combustible gas will occur.
4. Always keep battery charging and booster cables in good working condition. Repair or replace all worn cables.
5. Always recharge the battery in an open air environment, to avoid risk of a dangerous concentration of combustible gases.
6. In case the battery liquid (dilute sulfuric acid) comes in contact with ***clothing or skin***, rinse skin or clothing immediately with plenty of water.
7. In case the battery liquid (dilute sulfuric acid) comes in contact with your **eyes**, rinse eyes immediately with plenty of water, then contact the nearest doctor or hospital, and seek medical attention.

- **NEVER** Run engine without an air filter. Severe engine damage may occur.
- Always service air cleaner frequently to prevent carburetor malfunction.
- Always disconnect the battery before performing service on the generator.
- Always be sure the operator is familiar with proper safety precautions and operations techniques before using generator.
- Always store equipment properly when not in use. Equipment should be stored in a clean, dry location out of the reach of children.
- **DO NOT** leave the generator running in the manual mode unattended.
- **DO NOT** allow unauthorized people to operate this equipment.
- Always read, understand, and follow procedures in Operator's Manual before attempting to operate equipment.
- Refer to the ***Komatsu Engine Owner's Manual*** for engine technical questions or information.

Loading and Unloading (Crane)

- Before lifting, make sure the generator's lifting hook is secure and that there is no apparent damage to the generator itself (loose screws, nuts and bolts). If any part is loose or damaged, please take corrective action before lifting.
- Always drain fuel prior to lifting.
- Always make sure crane or lifting device has been properly secured to the hook of guard frame on generator.
- **NEVER** lift the machine while the engine is running.
- Use adequate lifting cable (wire or rope) of sufficient strength.
- When lifting the generator, always use the balanced center-point suspension hook and lift straight upwards.
- **NEVER** allow any person or animal to stand underneath the machine while lifting.
- When loading the generator on a truck, be sure to use the front and back frame bars as a means to secure the generator during transport.

RULES FOR SAFE OPERATION

Transporting

- Always shutdown engine before transporting.
- Tighten fuel tank cap securely.
- Drain fuel when transporting generator over long distances or bad roads.
- Always tie-down the generator during transportation by securing the generator.
- If generator is mounted on a trailer, make sure trailer complies with all local and state safety transportation laws. See page 10 for basic towing procedures.

Emergencies

- Always know the location of the nearest ***fire extinguisher*** and ***first aid kit.*** Know the location of the nearest telephone. Also know the phone numbers of the nearest ***ambulance***, ***doctor*** and ***fire department***.

Maintenance Safety

- **NEVER** lubricate components or attempt service on a running machine.
- Always allow the machine a proper amount of time to cool before servicing.
- Keep the machinery in proper running condition.
- Fix damage to the machine immediately and always replace broken parts.
- Dispose of hazardous waste properly. Examples of potentially hazardous waste are used motor oil, coolant, fuel, and fuel filters.
- **DO NOT** use plastic containers to dispose of hazardous waste.
- **DO NOT** pour waste, oil, coolant or fuel directly onto the ground, down a drain or into any water source.

Towing Safety Precautions

CAUTION :

Check with your county or state safety towing regulations department before towing your generator.

To reduce the possibility of an accident while transporting the generator on public roads, always make sure the trailer (Figure 1) that supports the generator and the towing vehicle are in good operating condition and both units are mechanically sound.

The following list of suggestions should be used when towing your generator:

- Make sure the hitch and coupling of the towing vehicle are rated equal to, or greater than the trailer "gross vehicle weight rating" (GVWR).
- **ALWAYS** inspect the hitch and coupling for wear. **NEVER** tow a trailer with defective hitches, couplings, chains etc.
- Check the tire air pressure on both towing vehicle and trailer. Also check the tire tread wear on both vehicles.
- **ALWAYS** make sure the trailer is equipped with a "**Safety Chain**".
- **ALWAYS** attach trailer's safety chain to bumper of towing vehicle.
- **ALWAYS** make sure the vehicle and trailer directional, backup, brake, and trailer lights are connected and working properly.
- Remember the maximum speed unless otherwise posted for highway towing is **45 MPH**. Recommended off-road towing is not to exceed **10 MPH** or less depending on type of terrain.
- Place *chocked blocks* underneath wheel to prevent ***rolling***, while parked.
- Place *support blocks* underneath the trailer's bumper to prevent ***tipping***, while parked.
- Use the trailer's hand winch to adjust the height of the trailer, then insert locking pin to lock wheel stand in place, while parked.
- Avoid sudden stops and starts. This can cause skidding, or jackknifing. Smooth, gradual starts and stops will improve gas milage.
- Avoid sharp turns to prevent rolling.
- Remove wheel stand when transporting.
- **DO NOT** transport generator with fuel in tank.

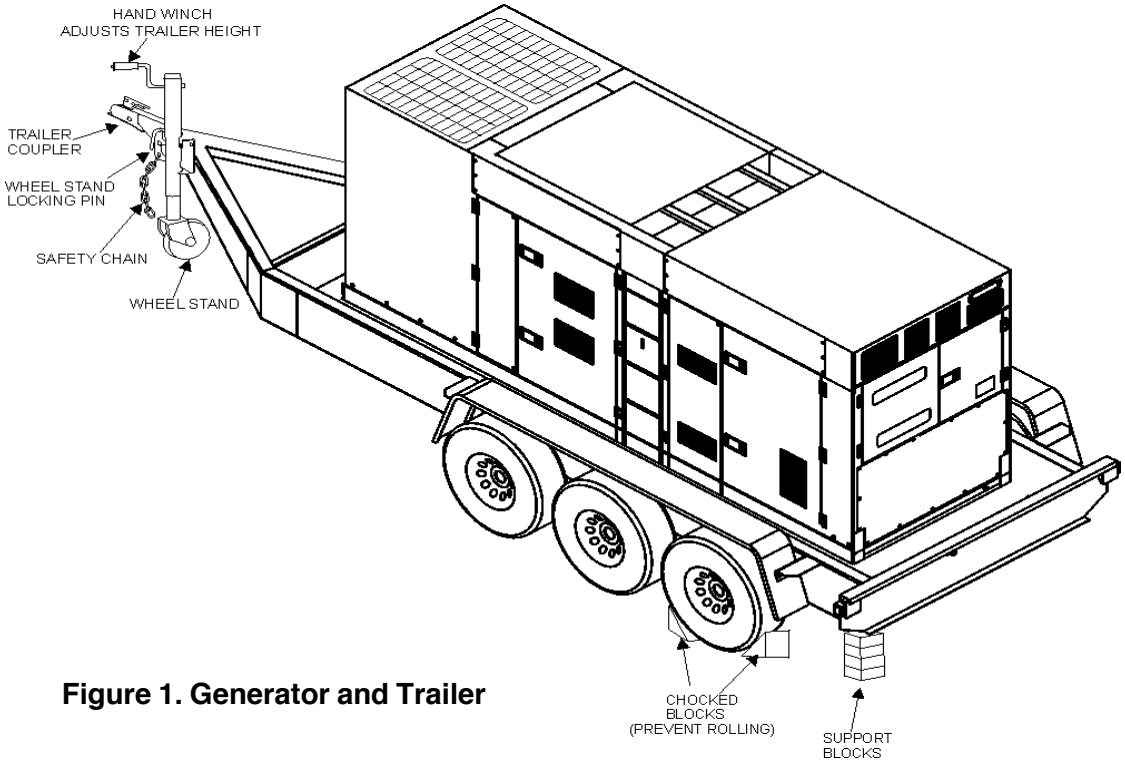


Figure 1. Generator and Trailer

DCA-600SSK — TRAILER-SAFETY GUIDELINES

CAUTION:

ALWAYS make sure the trailer is in good operating condition. Check the tires for proper inflation and wear. Also check the wheel lug nuts for proper tightness.

Explanation of Chart:
This section is intendedto provide the user with trailer service and maintenance information. The service and maintenance guidelines referenced in this section apply a wide range of trailers. Remember periodic inspection of the trailer will ensure safe towing of the equipment and will prevent damage to the equipment and personal injury.

It is the purpose of this section to cover the major maintenance components of the trailer. The following trailer components will be discussed in thie section:

- Brakes
- Tires
- Lug Nut Torquing
- Suspension
- Electrical
- Brake Troubleshooting Tables

Use the following definitions with reading Table 1.

1. **Fuel Cell -** Provides an adequate amount of fuel for the equipment in use. fuel cells must be empty when transporting equipment.
2. **Braking System** - System employed in stopping the trailer. Typical braking systems are electric, surge, hydraulic, hydraulic-surge and air.
3. **GVWR-** Gross Vehicle Weight Rating (GVWR), is the maximum number of pounds the trailer can carry, including the fuel cell (empty).
4. **Frame Length -** This measurment is from the ball hitch to the rear bumper (reflector).
5. **Frame Width -** This measurement is from fender to fender.
6. **Jack Stand -** Trailer support device with maximum pound requirement from the tongue of the trailer.
7. **Coupler -** Type of hitch used on the trailer for towing.
8. **Tire Size -** Indicates the diameter of the tire in inches (10,12,14, etc.), and the width in millimeters (175,185,205, etc.). The tire diameter must match the diameter of the tire rim.
9. **Tire Ply -** The tire ply (layers) number is rated in letters; 2-ply,4-ply,6-ply, etc.
10. **Wheel Hub -** Thr wheel hub is connected to the trailer's axle.
11. **Tire Rim -** Tires mounted on a tire rim. The tire rim must match the size of the tire.
12. **Lug Nuts -** Used to secure the wheel to the wheel hub. Always use a torque wrench to tighten down the lug nuts. See Table 4 and Figure 5 or lug nut tightening and sequence.
13. **Axle -** Indicates the maximum weight the axle can support in pounds, and the diameter of the axle expressed in inches (see Table 3). Please not that some trailers have a double axle. this will be shown as 2-6000 lbs., meaning two axles with a total weight capacity of 6000 pounds.
14. **Suspension -** Protects the trailer chassis from shocks transmitted through the wheels. Types of suspension used are leaf, Q-flex, and air ride.
15. **Electrical -** Electrical connectors (looms) are provided with the trailer so the brake lights and turn signals can be connected to the towing vehicle. See Figure 19 for proper wiring connections.
16. **Application -** Indicates which units can be employed on a particular trailer.

DCA-600SSK —TRAILER-SPECIFICATIONS

Table 1. Specifications

MODEL	APPLICATION	FUEL CELL	BRAKE SYSTEM	GVWR	FRAME LENGTH	FRAME WIDTH	JACK STAND
TRLR-10-15	TLG-12, DCA15, TLW-300	NO	NO	1900LBS	96"	50"	800LB. FULL TILT WHEEL
TRLR-10X	TLG-12, DCA15, TLW-300	NO	NO	1900LBS	96"	50"	800LB. FULL TILT WHEEL
TRLR-10XF	TLG-12, DCA15, TLW-300	51 GAL	NO	1900LBS	96"	50"	800LB. FULL TILT WHEEL
TRLR-225W	DCA-10	NO	NO	2200LBS	85"	42"	800LB. FULL TILT WHEEL
BLW-400	BLW-400	NO	ELECTRIC	2700LBS	W/MAST 154" W/O 124"	55" (78" TALL)	800LB. FULL TILT WHEEL
TRLR-15XF	DCA-15	41 GAL	NO	2700LBS	124"	55"	800LB. FULL TILT WHEEL
TRLR-50X	DCA-25	NO	NO	2700LBS	124"	55"	800LB. FULL TILT WHEEL
TRLR-50XF	DCA-25	41 GAL	NO	2700LBS	124"	55"	800LB. FULL TILT WHEEL
TRLR-25SBT	DCA-25	NO	NO	2990LBS	120"	66"	800LB. FULL TILT WHEEL
TRLR-70W	DCA-45, -60, 70	NO	SURGE	7000LBS	186"	77"	2000LB. FLAT PAD
TRLR-70X	DCA-45, -60, 70	OPT	SURGE	7000LBS	138"	66"	2000LB. FLAT PAD
TRLR-70XF	DCA-45, -60, 70	53 GAL	SURGE	7000LBS	138"	66"	2000LB. FLAT PAD
TRLR-100XF	DCA-100, 125	150 GAL	HYDRAULIC SURGE	7000LBS	190"	76"	2000LB. FLAT PAD
TRLR-85/125	DCA-85, 100, 125	145 GAL	HYDRAULIC	10000LBS	186"	77"	2000LB. FLAT PAD
TRLR-150XF	DCA-150, 180	200 GAL	HYDRAULIC SURGE	11160LBS	204"	84"	5000 LB. FLAT PAD
TRLR-220XF	DCA-220	250 GAL	HYDRAULIC SURGE	14000LBS	222"	83"	5000 LB. FLAT PAD
TRLR-300XF	DCA-300	250 GAL	HYDRAULIC SURGE	18000LBS	238"	83"	5000 LB. FLAT PAD
TRLR-400XF	DCA-400	350 GAL	ELECTRIC	18000LBS	238"	83"	5000 LB. FLAT PAD
TRLR-600XF	DCA-600, 800	550 GAL	AIR	30000LBS	384"	96"	5000 LB. FLAT PAD
TRLR-800SX	DCA-600, 800	550 GAL	AIR	30000LBS	384"	96"	5000 LB. FLAT PAD

DCA-600SSK —TRAILER-SPECIFICATIONS

Table 1. Specifications (Con't)

MODEL	COUPLER	TIRES	WHEELS	AXLE	HUBS	SUSPENSION	ELECTRICAL
TRLR-10-15W	2" BALL CLASS 2 ADJUSTABLE	175-13C	13"X4.50"	2200# 2X2	5 LUG	3 LEAF	4 WIRE LOOM W/ 4 POLE FLAT
TRLR-10X	2"BALL CLASS 2 ADJUSTABLE	175-13C	13"X4.5"	2200#2X2	5 LUG	3 LEAF	4 POLE FLAT
TRLR-10XF	2"BALL CLASS 2 ADJUSTABLE	175-13C	13"X4.5"	2200#2X2	5 LUG	3 LEAF	4 POLE FLAT
TRLR-225W	2"BALL CLASS 2 ADJUSTABLE	175-13B	13X4.5"	2200#2X2	5 LUG	Q FLEX	4 POLE FLAT
BLW 400	2"BALL CLASS 2 ADJUSTABLE	175-13C	13 X 4.5"	2200#2X2	5 LUG	3 LEAF	4 POLE FLAT
TRLR-15XF	2" BALL CLASS	B78-13LRC	13"X4.50"	3500# 2-1/2"	5 LUG	4 LEAF	4 POLE RUBBER FLAT
TRLR-50X	2" BALL CLASS	B78-13LRC	13"X4.50"	3500lbs. 2-3/8"	5 LUG	4 LEAF	4 POLE RUBBER FLAT
TRLR-50XF	2" BALL CLASS	B78-13LRC	13"X4.50"	3500lbs. 2-3/8"	5 LUG	4 LEAF	4 POLE RUBBER FLAT
TRLR-70W	2" BALL CLASS 3" ADJUSTABLE	205-14C BIAS (4)	14"X5"	3500lbs. 3"	5 LUG	5 LEAF	4 POLE RUBBER FLAT
TRLR-70X	2" BALL CLASS 3" ADJUSTABLE	205-14C BIAS (4)	14"X5"	3500lbs 3"	5 LUG	5 LEAF	4 POLE RUBBER FLAT
TRLR-70XF	2" BALL CLASS 3" ADJUSTABLE	205-14C BIAS (4)	14"X5"	3500lbs. 3"	5 LUG	5 LEAF	4 POLE RUBBER FLAT
TRLR-100XF	ADJUSTABLE 2-5/6 OPT 3" EYE	205-15C BIAS (4)	14"X5.5"	3500lbs 3"	5 LUG	5 LEAF	4 WIRE LOOM
TRLR-85/125	ADJUSTABLE 2-5/6 OPT 3" EYE	ST225/75R15D RADIAL (4)	14"x6"	(2)-6000lbs	6 LUG	7 LEAF	4 WIRE LOOM
TRLR-150XF	3" BALL EYE	750-16 E BIAS (4)	16"X7"	(2)-6000lbs	8 LUG	7 LEAF	4 WIRE LOOM
TRLR-220XF	3" EYE ADJUSTABLE	ST235/85R16E RADIAL(4)	16"X7"	(2)-7000lbs	8 LUG	Q FLEX	4 WIRE LOOM
TRLR-300XF	3" EYE ADJUSTABLE	ST235/85R16E RADIAL(6)	16"X7"	(2)-6000lbs	8 LUG	Q FLEX	4 WIRE LOOM
TRLR-400XF	3" EYE ADJUSTABLE	ST235/85R16E RADIAL(6)	16"X7"	(3)-7000lbs.	8 LUG	Q FLEX	4 WIRE LOOM
TRLR-600XF	5TH WHEEL	ST215/75R17.5H RADIAL (8)	16"X7"	(3)-10000lbs	8 LUG	7 LEAF	6 WIRE LOOM
TRLR-800AR	5TH WHEEL	ST215/75R17.5H RADIAL (8)	16"X7"	(3)-10000lbs	8 LUG	AIR-RIDE	6 WIRE LOOM

Brakes

If your trailer has a braking system, the brakes should be inspected the first 200 miles of operation. This will allow the brake shoes and drums to seat properly. After the first 200 mile interval, inspect the brakes every 3,000 miles. If driving over rough terrain, inspect the brakes more frequently.

Electric Brakes

Electrically actuated brakes (Figure 2) are similar to hydraulic brakes. The basic difference is that hydraulic brakes are actuated by an electromagnet.

Listed below are some of the advantages that electric brakes have over hydraulic brakes:

- Brake system can be manually adjusted to provide the corrected braking capability for varying road and load conditions
- Brake system can be modulated to provide more or less braking force, thus easing the brake load on the towing vehicle
- Brake system has very little lag time between the time the vehicle's brakes are actuated and the trailer's brakes are actuated
- Brake system can provide an independent emergency brake system

Remember in order to properly synchronize the tow vehicle's braking to the trailer's braking, can only be accomplished by road testing. Brake lockup, grabbiness or harshness is due to lack of synchronization between the tow vehicle and the trailer being towed or under-adjusted brakes.

Before any brake synchronizations adjustments can be made, the trailer brakes should be burnished-in by applying the brakes 20-30 times with approximately a 20 m.p.h. decrease in speed, e.g. 40 m.p.h. to 20 m.p.h. Allow ample time for brakes to cool between application. This allows the brake shoes to slightly be seated into the brake drum surface.

Figure 2 displays the major electric brake components that will require inspection and maintenance. Please inspect these components as required.

Electric Brake Adjustment

1. Place the trailer on jack stands. Make sure the jack stands are placed on secure level ground.
2. Check the wheel and drum for free rotation.
3. Remove the adjusting hole cover from the adjusting slot at the bottom brake backing plate.
4. With a screwdriver or standard adjusting tool, rotate the star wheel of the adjuster assembly to expand the brake shoes.
5. Adjust the brake shoes outward until the pressure of the lining against the wheel drum makes the wheel difficult to turn.
6. Rotate the star wheel in the opposite direction until the wheel rotates freely with slight lining drag.
7. Replace the adjusting hole cover and lower the trailer to the ground.
8. Repeat steps 1 through 6 on the remaining brakes.

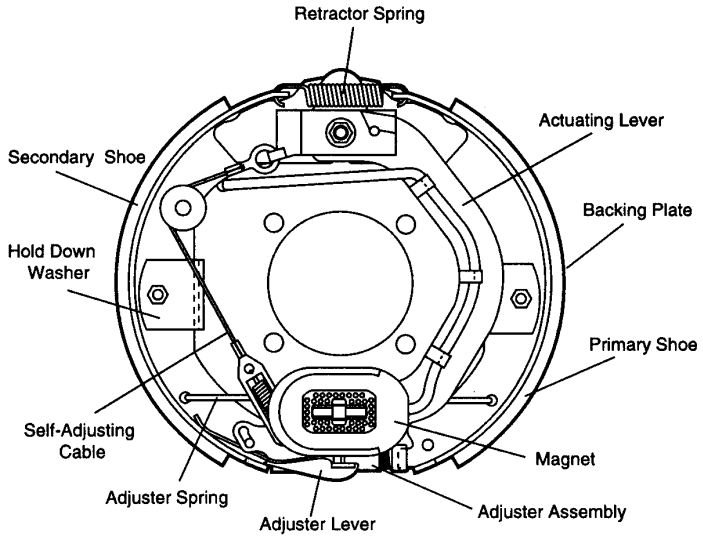


Figure 2. Electrical Brake Components

Hydraulic/Air/Surge Brakes

Hydraulic brakes (Figure 3) should not require any special attention with the exception of routine maintenance such as shoe and lining replacement. These brakes can be adjusted in the same manner as electric brakes. Brake lines should be periodically checked for cracks, kinks, or blockage.

Figure3 below displays the major hydraulic/air/surge brake components that will requrie inspection and maintenance. Please inspect these components as required using steps 1 through 6 as referenced in the electric brake adjustments section.

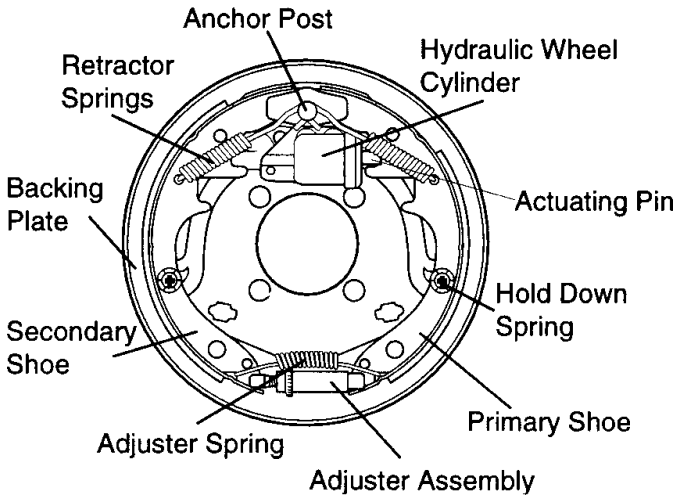


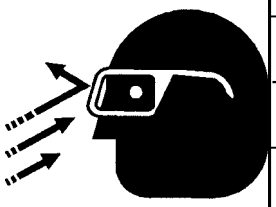
Figure 3. Hydraulic Brake Components

Tires/Wheels/Lug Nuts

Tires and wheels are a very important and critical components of the trailer. When specifying or replacing the trailer wheels it is important the wheels, tires, and axle are properly matched.

CAUTION:

DO NOT attemp to repair or modify a wheel. DO NOT install in inner tube to correct a leak through the rim. If the rim is cracked, the air pressure in the inner tube may cause pieces of the rim to explode (break off) with great force and cause serious eye or bodily injury.



Tire Wear/Inflation

Tire inflation pressure is themost important factor in tire life. Pressure should be checked cold before operation DO NOTbleed air from tires when they ar hot. Check inflation pressure weekly during use to insure the maximum tire life and tread wear.

Table 2 (Tire Wear Troubleshooting) will help pinpoint the causes and solutions of tire wear problems.

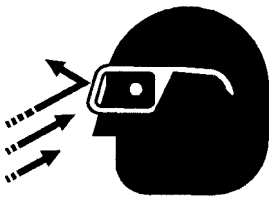
TABLE 2. TIRE WEAR TROUBLESHOOTING

WEAR PATTERN		CAUSE	SOLUTION
	Center Wear	Over Inflation.	Adjust pressure to particular load per tire manufacturer.
	Edge Wear	Under Inflation.	Adjust pressure to particular load per tire manufacturer.
	Side Wear	Loss of camber or overloading.	Make sure load does not exceed axle rating. Align wheels.
	Toe Wear	Incorrect toe-in.	Align wheels.
	Cupping	Out-of-balance.	Check bearing adjustment and balance tires.
	Flat Spots	Wheel lockup & tire skidding.	Avoid sudden stops when possible and adjust brakes.

Suspension

The leaf suspension springs and associated components (Figure 4) should be visually inspected every 6,000 miles for signs of excessive wear, elongation of bolt holes, and loosening of fasteners. Replace all damaged parts (suspension) immediately. Torqued suspension components as detailed in Table 3.

CAUTION:



NOTE

ALWAYS wear safety glasses when removing or installing force fitted parts. Failure to comply may result in serious injury.

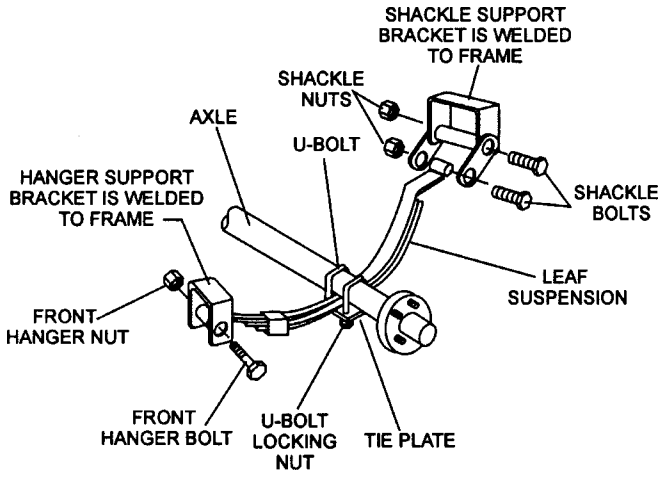


Figure 4. Major Suspension Components

Table 3. Suspension Torque Requirements	
Item	**Torque (Ft.-Lbs.)**
3/8" U-BOLT	MIN-30 MAX-35
7/16" U-BOLT	MIN-45 MAX-60
1/2" U-BOLT	MIN-45 MAX-60
SHACKLE BOLT SPRING EYE BOLT	SNUG FIT ONLY. PARTS MUST ROTATE FREELY. LOCKING NUTS OR COTTER PINS ARE PROVIDED TO RETAIN NUT-BOLT ASSEMBLY.
SHOULDER TYPE SHACKLE BOLT	MIN-30 MAX-50

Lug Nut Torque Requirements

It is extremely important to apply and maintain proper wheel mounting torque on the trailer. Be sure to use only the fasteners matched to the cone angle of the wheel. Proper procedure for attachement of the wheels is as follows:

1. Start all wheel lug nuts by hand.
2. Torque all lug nuts in sequence. See Figure 5. DO NOT torque the wheel lug nuts all the way down. Tighten each lug nut in 3 separate passes as defined by Table 4.
3. After first road use, retorque all lug nuts in sequence. Check all wheel lug nuts periodically.

Table 4. Tire Torque Requirements			
Wheel Size	First Pass FT-LBS	Second Pass FT-LBS	Third Pass FT-LBS
12"	20-25	35-40	50-65
13"	20-25	35-40	50-65
14"	20-25	50-60	90-120
15"	20-25	50-60	90-120
16"	20-25	50-60	90-120

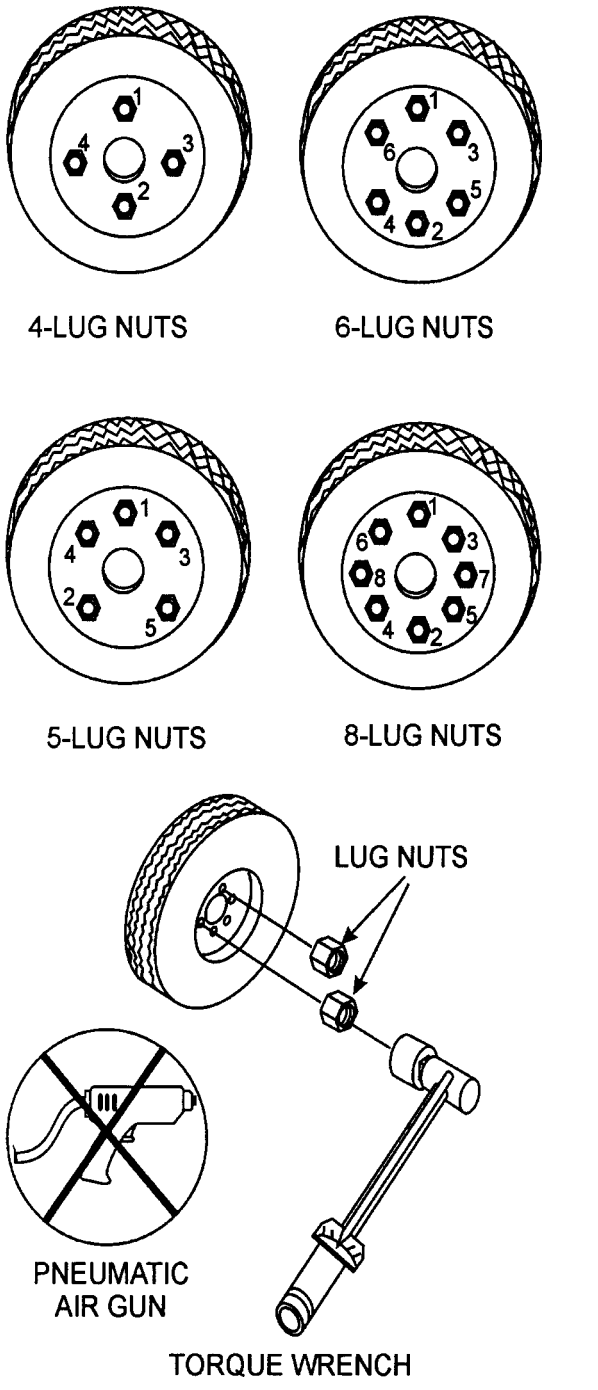
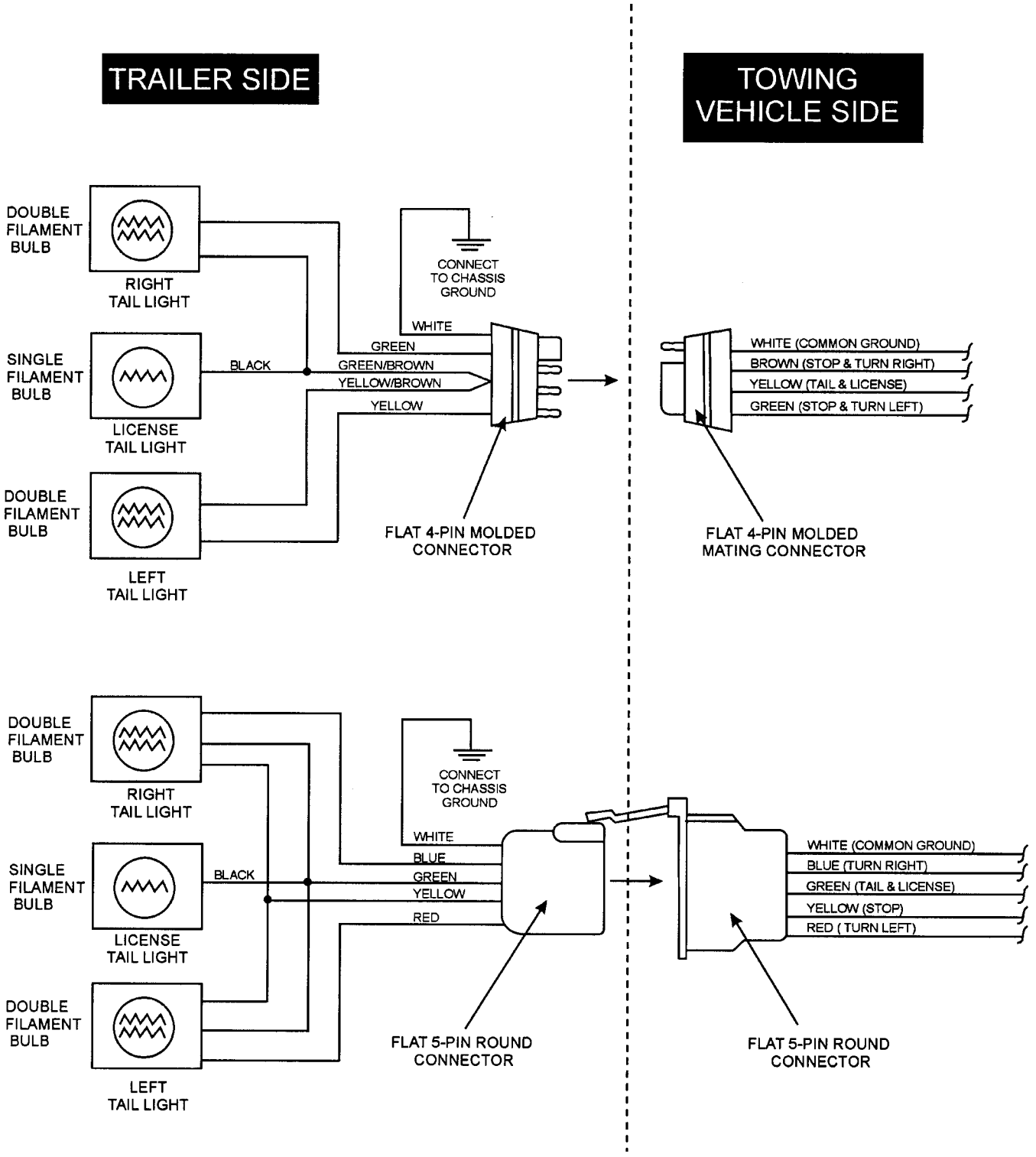


Figure 5. Wheel Lug Nuts Tightening Sequence

NOTE

NEVER use an pneumatic air gun to tighten wheel lug nuts.

DCA-600SSK —TRAILER-WIRING DIAGRAM



DCA-600SSK —TRAILER-BRAKE TROUBLESHOOTING

Table 5. Electric Brake Troubleshooting		
Symptom	**Possible Cause**	**Solution**
No Brakes or Intermittent Brakes	Any open circuits or broken wires?	Find and correct.
	Any short circuits?	Find and correct.
	Faulty controller?	Test and correct.
	Any loose connections?	Find and repair.
	Ground wire secure?	Find and secure.
Weak Brakes or Brakes Pull to One Side	Grease or oil on magnets or linings?	Clean or replace.
	Connections corroded?	Clean and correct cause of corrosion.
	Brake drums scored or grooved?	Machine or replace.
	Brakes synchronized?	Correct.
Locking Brakes	Brake components loose, bent or broken?	Replace components.
	Brake drums out-of-round?	Replace.
Noisy Brakes	System lubricated?	Lubricate.
	Brake components correct?	Replace and correct.
Dragging Brakes	Bearings of the wheel adjusted?	Adjust.

DCA-600SSK —TRAILER-BRAKE TROUBLESHOOTING

Table 6. Hydraulic Brake Troubleshooting		
Symptom	**Possible Cause**	**Solution**
No Brakes	Brake line broken or kinked?	Repair or replace.
Weak Brakes or Brakes Pull to One Side	Brake lining glazed?	Reburnish or replace.
	Trailer overloaded?	Correct weight.
	Brake drums scored or grooved?	Machine or replace.
	Tire pressure correct?	Inflate all tires equally.
	Tires unmatched on the same axle?	Match tires.
Locking Brakes	Brake components loose, bent or broken?	Replace components.
	Brake drums out-of-round?	Replace.
Noisy Brakes	System lubricated?	Lubricate.
	Brake components correct?	Replace and correct.
Dragging Brakes	Brake lining thickness correct or in right wrong position?	Install new shoes and linings.
	Enough brake fluid or correct fluid?	Replace rubber parts fill with dot4 fluid.

DCA-600SSK —OPERATION AND SAFETY DECALS

Machine Safety Decals

The DCA-600SSK generator is equipped with a number of safety decals. These decals are provided for operator safety and maintenance information. The illustration below and on the preceding pages shows the decals as they appear on the machine. Should any of these decals become unreadable, replacements can be obtained from your dealer.

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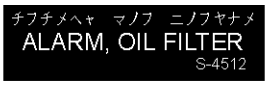

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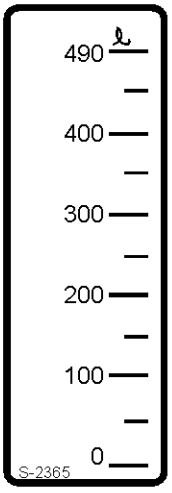

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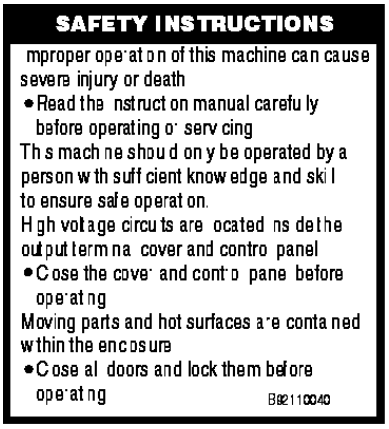
DCA-600SSK —OPERATION AND SAFETY DECALS



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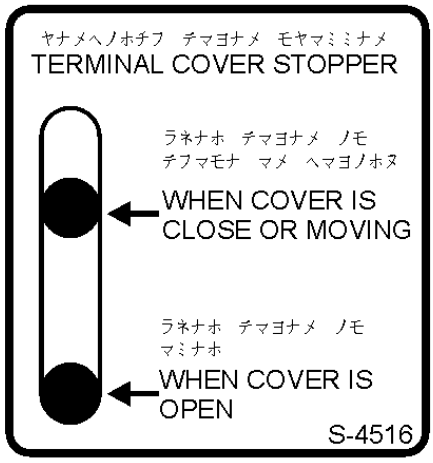

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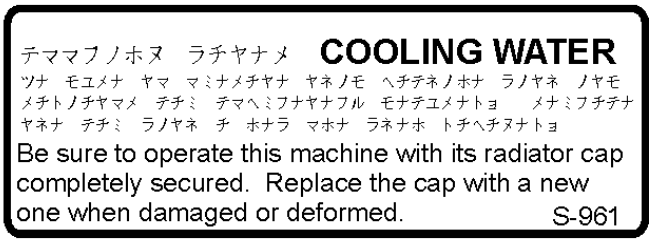

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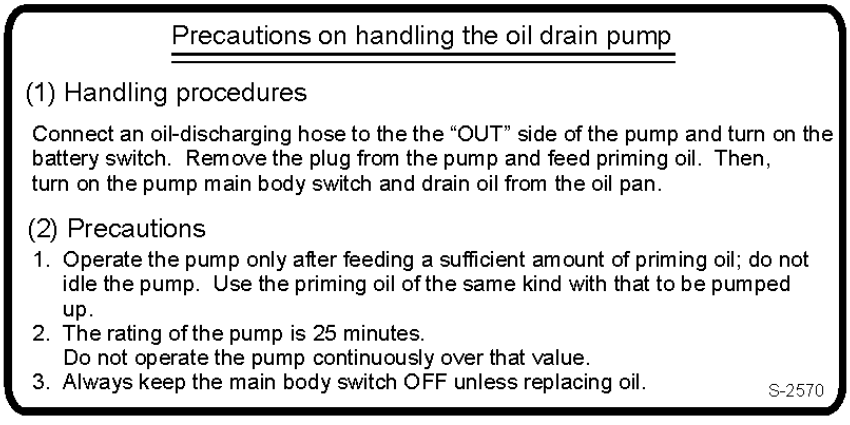

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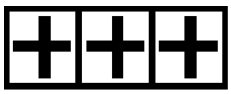
DCA-600SSK —OPERATION AND SAFETY DECALS



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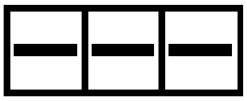

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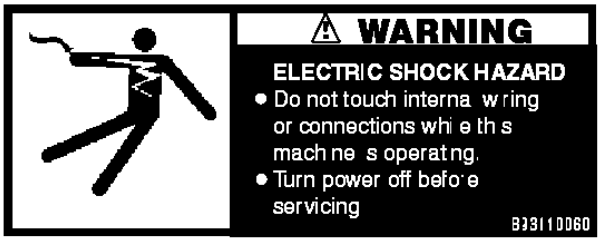

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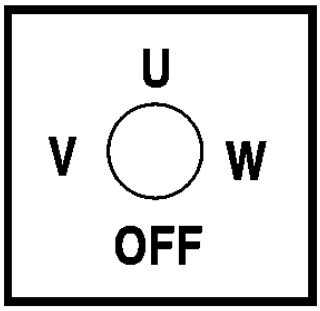

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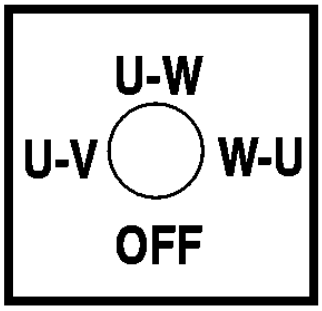

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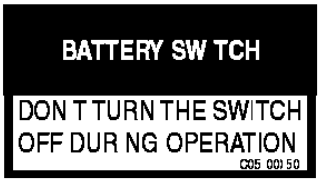

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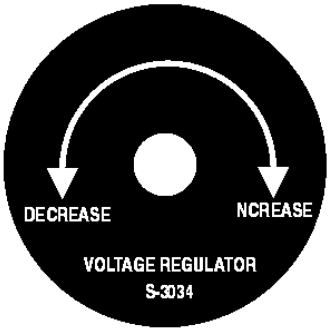

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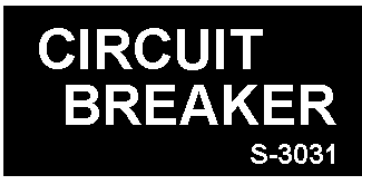

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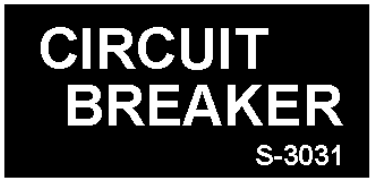
DCA-600SSK —OPERATION AND SAFETY DECALS



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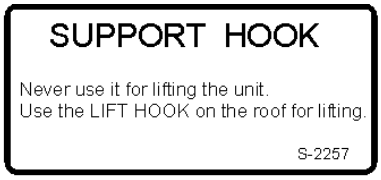

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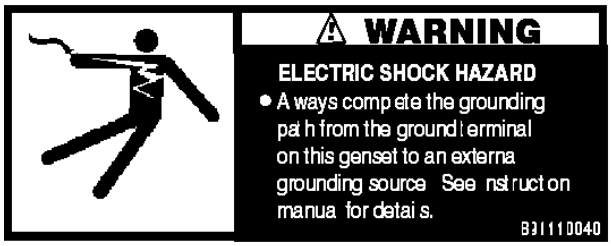

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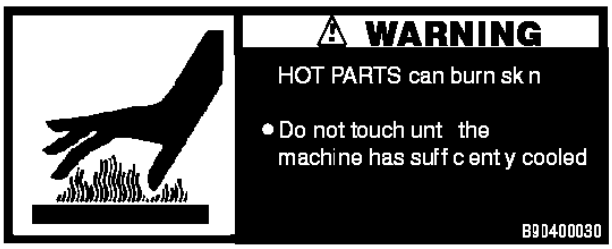

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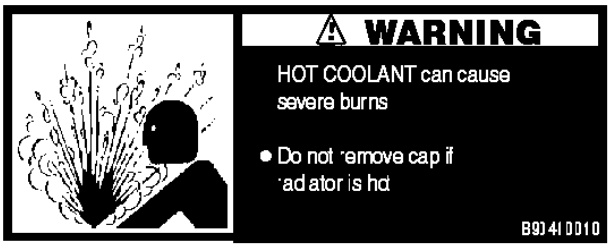

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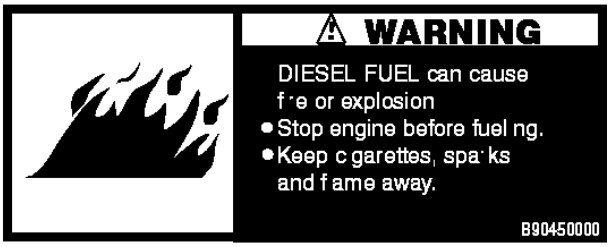

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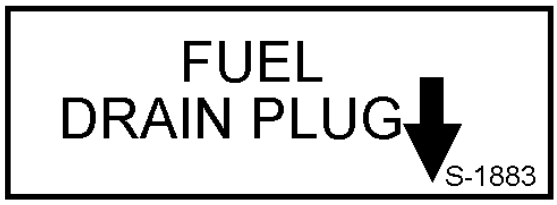

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DCA-600SSK —OPERATION AND SAFETY DECALS

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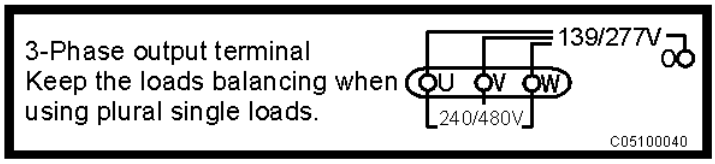

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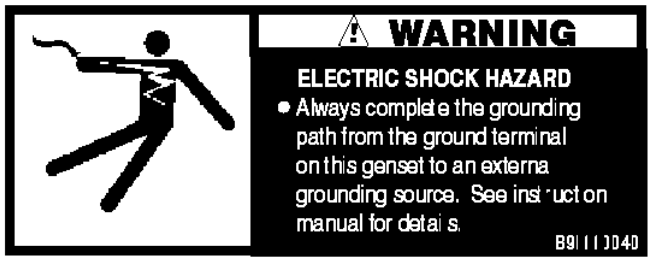

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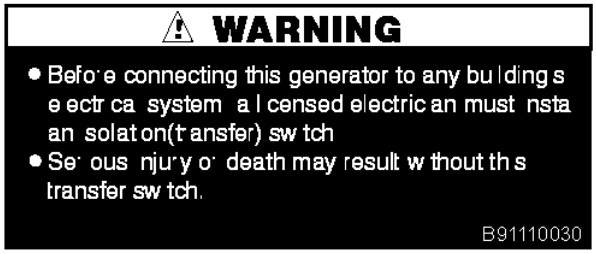

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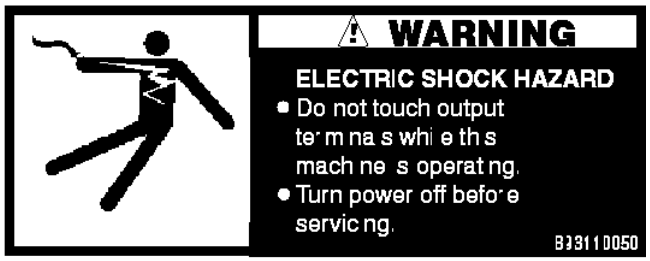

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DCA-600SSK SPECIFICATIONS

Table 7. Specifications	
Generator Specifications	
Model	DCA-600SSK
Type	Revolving field, self ventilated, drip proff, single bearing
Armature Connection	Star with Neutral
Phase	3
Standby Output	660KVA (528 KW)
Prime Output	600 KVA (480 KW)
Voltage	208,220,240,416,440,480 reconnectable (3 phase) 120,127,139,240,254,277 adjustable (single phase)
Frequency	60 Hz
Speed	1800 rpm
Power Factor	0.8
Sound Level dB(A)	75 (full load at 23 feet)
Engine Specifications	
Model	KOMATSU SA6D170AE-1
Type	direct injection, turbo-charged with after-cooler
No. of Cylinders	6 cylinders
Bore x Stroke	6.8 in. x 6.8 in. (170 mm x 170 mm)
Rated Output	688 HP/1800 rpm
Displacement	1411.5 cu. in. (23150 cc)
Starting	Electric
Coolant Capacity	28.9 gal. (109.4 liters)
Lube Oil Capacity	31.4gal. (118.8 liters)
Fuel Consumption	33.9 gal. (128.3 liters)/hr (at full load)
Battery	12V- 200 AH x 2
Fuel	#2 Diesel Fuel

DCA-600SSK — GENERAL INFORMATION

DCA-600SSK FAMILIARIZATION

Generator

The MQ Power Model DCA-600SSK is a 528 kW ***generator*** that is designed as a high quality portable (requires a trailer for transport) power source for telecom sites, lighting facilities, power tools, submersible pumps and other industrial and construction machinery.

Engine Control Panel

The "Engine Control Panel" is provided with the following:

- Tachometer
- Water Temperature Gauge
- Oil Pressure Gauge
- Charging Ammeter Gauge
- Engine Warning Lamp Module
- Engine Speed Switch
- Pre-Heat Button
- Pre-Heat Lamp
- Emergency Stop Button
- Battery Switch

Generator Control Panel

The "Generator Control Panel" is provided with the following:

- Output Voltage Adjustment Knob
- Frequency Meter (Hz)
- AC Ammeter (Amps)
- AC Voltmeter (Volts)
- Ammeter Change-Over Switch
- Voltmeter Change-Over Switch
- Panel Light
- Panel Light Switch
- MPEC Module
- Pilot Lamp

Output Terminal Panel

The "Output Terminal Panel" is provided with the following:

- Three 240/139V output receptacles, 50 amp
- Two 120V input receptacles, 20 amp
- 3 Load Circuit Breakers 265V @65 amps
- 2 Load GFCI Circuit Breakers 265V@ 20amps

Control Box

The "Control Box" is provided with the following:

- Main Circuit Breaker 600 amps
- Over-Current Relay
- High Idle Adjust Trimmer

Microprocessor Controlled Alarm System

The DCA-600SSK generator is equipped with various alarms and LED status indicators. These alarms and status indicators are provided to add safety to the generator when operating under normal conditions. The DCA-600SSK generator is designed to shutdown in the event of low oil, high coolant temperature, low battery and other operation conditions that may cause severe damage to the generator.

Open Delta Excitation System

The DCA-600SSK generator is equipped with the state of the art "***Open-Delta***" excitation system. The open delta system consist of an electrically independent winding wound among stationary windings of the AC output section.

There are four leads: A, B, C and D. During light loads, the power to the ***Automatic Voltage Regulator*** (AVR) is supplied from the leads parallel connections of B&C. When loads increase, the AVR switches and accepts power from leads A&D. The output of leads A&D increase proportionally with load. This of adding the voltages to each phase provides better voltage response during heavy loads.

The connections of the AVR to the AC output windings are for sensing only. No power is required from these windings.

The open-delta design provides virtually unlimited excitation current, offering maximum motor starting capabilities. The excitation does not have a "***fixed ceiling***" and responds according the demands of the required load.

Engine

The **DCA-600SSK** is powered by a 4 cycle, water cooled, turbocharged KOMATSU Model SAD170AE-1 ***diesel*** engine. This engine is designed to meet every performance requirement for the generator. Reference Table 7, page 22 for engine specifications.

In keeping with Multiquip's policy of constantly improving its products, the specifications quoted herein are subject to change without prior notice.

The basic controls and indicators for the DCA-600SSK generator are addressed on the following pages.

Electronic Governor System

The electronic governor system replaces the standard mechanical governor system. The frequency regulation improves from ±3.0% regulation with the mechanical governor to ±0.25% regulation with the electronic governor system.

Jacket Water Heater

The jacket water heater is a 1500-watt heater designed to keep the coolant from freezing in the engine block. The heater is thermostatically controlled and once an acceptable engine temperature is achieved it will cycle on and off, operating only about 1/3 of the time, which makes it more efficient than the direct block type heater. It is designed to keep the engine between 100 and 120 degrees fahrenheit.

Under normal conditions, 20 to 15 minutes is required to raise the engine temperature of a cold engine to 100 degrees fahrenheit.

NOTE:

The jacket water heater can be serviced if not functioning propertly.

CAUTION :

ALWAYS unplug the jacket water heater before servicing.

Battery Charger

The battery charger will operate in a 'BOOST' mode until the battery's current acceptance falls to 70% of the charger's rating. The charger will then go into a 'FLOAT' mode, where it discharges a lower voltage until an AC failure, or the battery is discharged.

Water Separator Filter

The DCA-600SSK generator is equipped with a "Water Fuel Separator. This unit is designed to prevent dirt, rust, algae, varnishes and water from entering the fuel system.

This water separator system is designed around two filters connected in parallel (Figure 6). These two filters can be configured in a variety of ways to filter water from the fuel system.

For best results it is best to have both filters active (ON) at the same time or use only one filter, and use the other filter as a reserve, that way you can use the filters alternately every time the filter element is replaced.

CAUTION:

DO NOT turn the control valve while the generator is in operation. This may stop fuel flow to the generator if both filters are set to the OFF position.

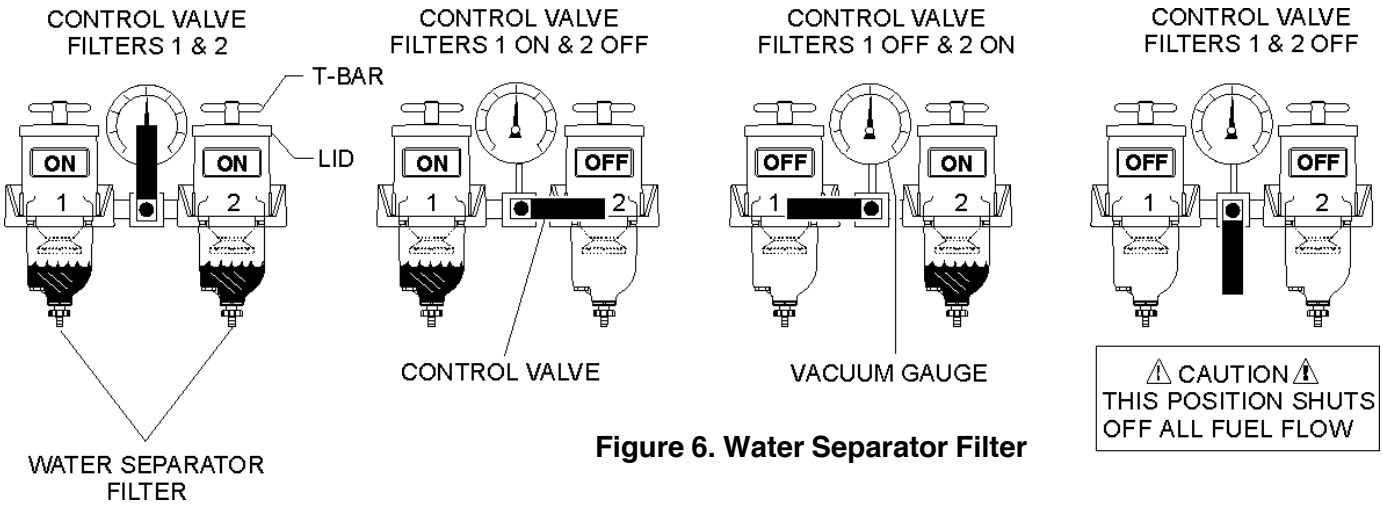


Figure 6. Water Separator Filter

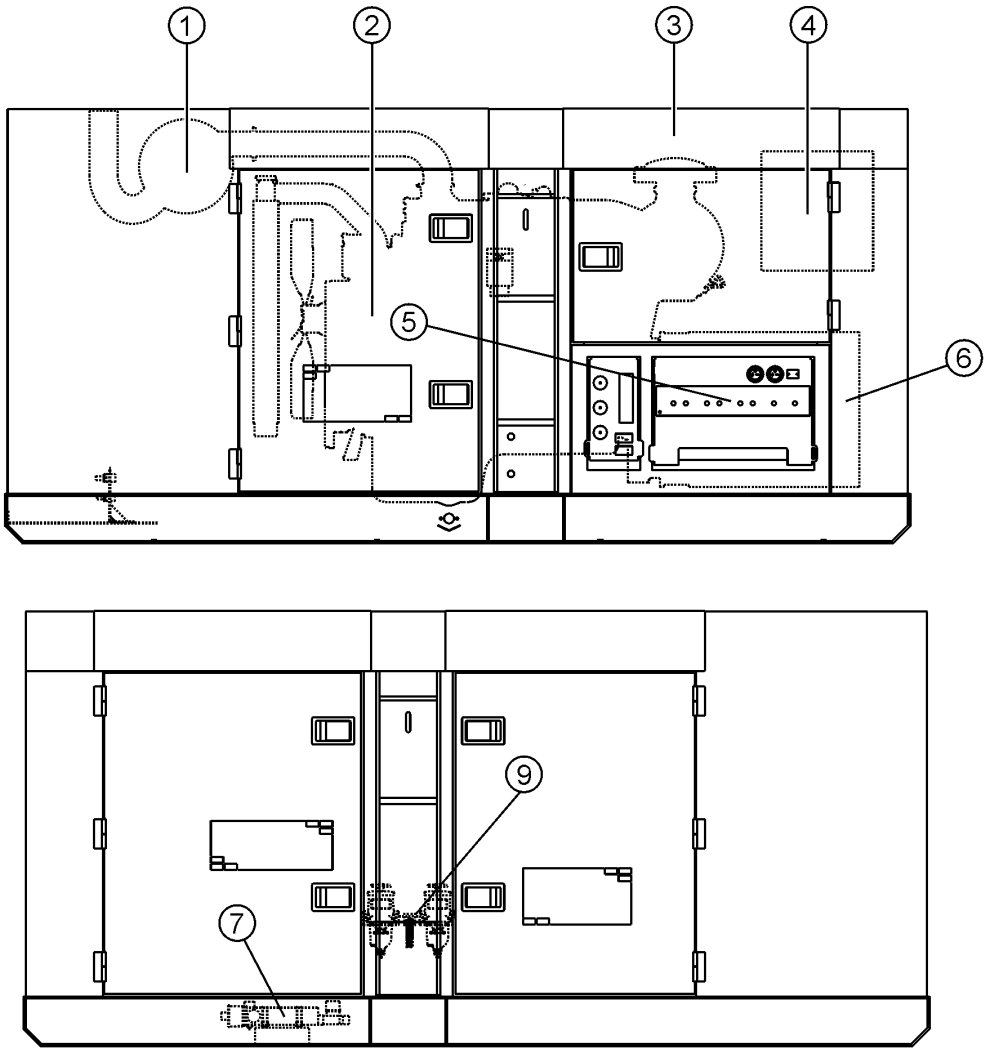
Collection Bowl Water Drainage

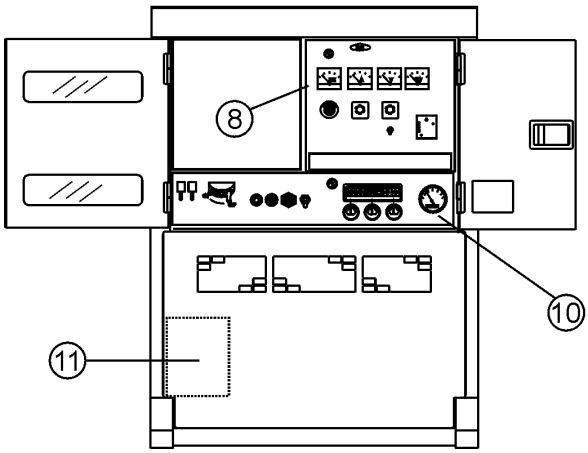
Inspect or drain the water in the collection bowl daily. The collection bowl must be drained before contaminants reach the bottom of the turbine.

To drain the collection bowl perform the following:

1. Open the self-venting drain to evacuate contaminants with a suitable collection container in place.
2. Prime the unit by removing the filter lid and filling with clean fuel.
3. Replace the filter lid and snugly tighten the T-handle by hand only.

DCA-600SSK MAJOR COMPONENTS



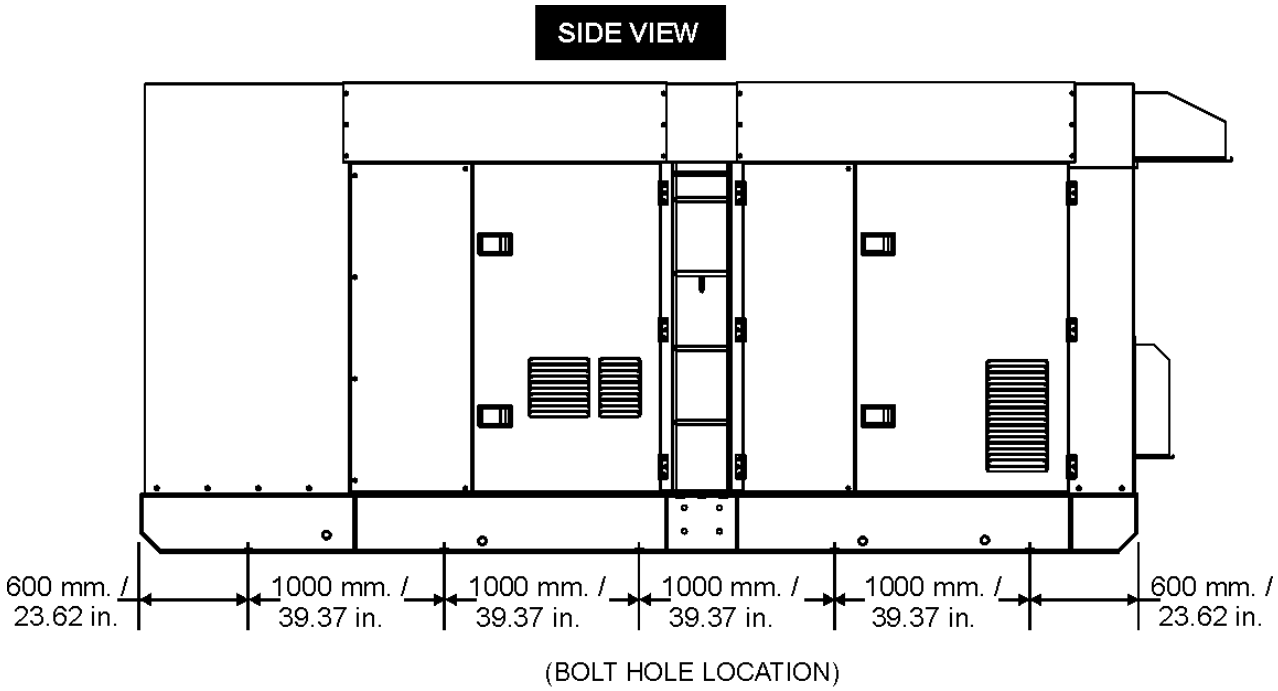


ITEM	DESCRIPTION
1	MUFFLER ASSEMBLY
2	ENGINE & RADIATOR ASSEMBLY
3	ENCLOSURE ASSEMBLY
4	CONTROL BOX ASSEMBLY
5	OUTPUT TERMINAL ASSEMBLY
6	GENERATOR ASSEMBLY
7	WATER HEATER ASSEMBLY
8	CONTROL PANEL ASSEMBLY
9	FUEL-WATER SEPARATOR ASSEMBLY
10	ENGINE OPERATING PANEL ASSEMBLY
11	BATTERY

Figure 7. Major Components

NOTE PAGE

DCA-600SSK DIMENSIONS (TOP AND SIDE)



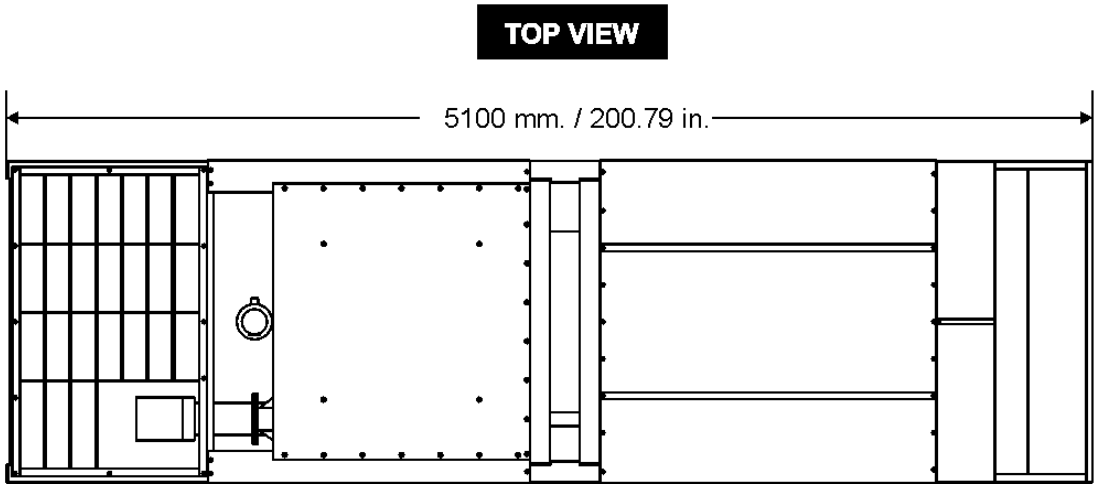


Figure 8a. Dimensions

DCA-600SSK DIMENSIONS (REAR AND FRONT)

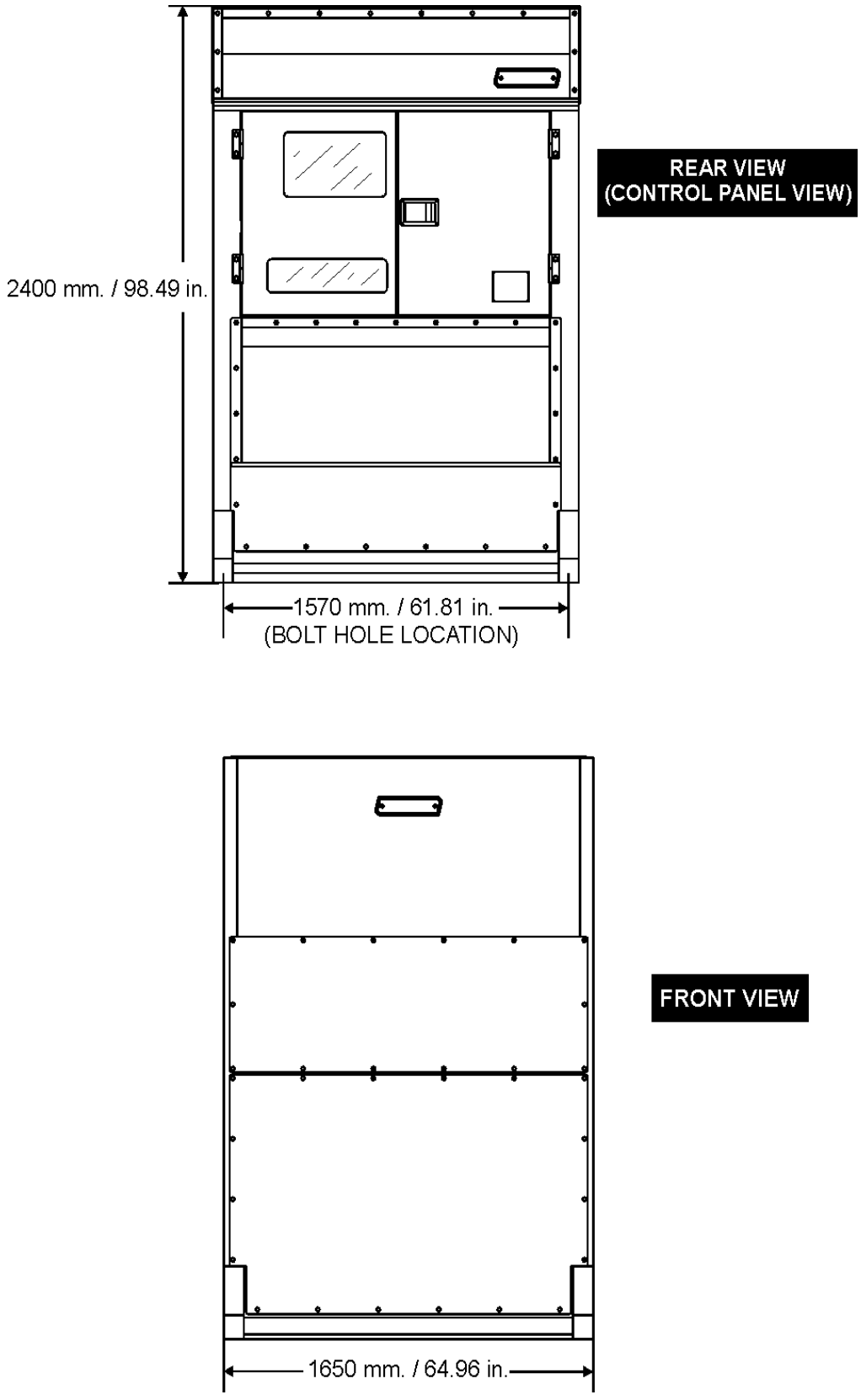
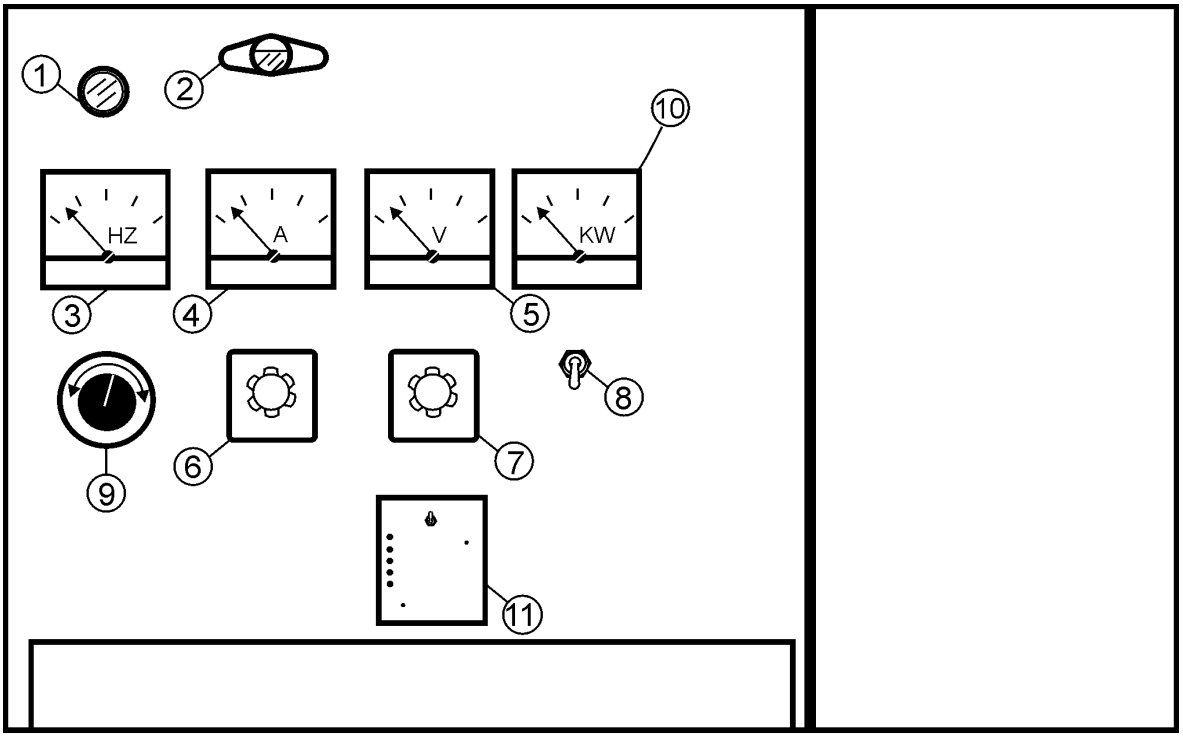


Figure 8b. Dimensions



N0.	NAME
1	PILOT LAMP
2	PANEL LIGHT
3	FREQUENCY METER
4	AC AMMETER
5	AC VOLTMETER
6	AMMETER CHANGE OVER SWITCH
7	VOLTMETER CHANGE OVER SWITCH
8	LIGHT PANEL SWITCH
9	VOLTAGE REGULATOR
10	KILOWATT METER
11	MPEC MODULE

Figure 9. Control Panel

The definitions below describe the controls and functions of the DCA-600SSK " ***Control Panel*** "(Figure9).

1. **Pilot Lamp –** Indicates that the generator is working properly.
2. **Panel Light –** Normally used in dark areas or at night time. When activated, panel lights will illuminate. When the generator is not in use be sure to turn the panel light switch to the OFF position.
3. **Frequency Meter –** Indicates the output frequency in hertz (Hz). Normally 60 Hz ±1 Hz .
4. **AC Ammeter –** Indicates the amount of current the load is drawing from the generator.
5. **AC Voltmeter –** Indicates the single phase output voltage present at the UNV terminals.
6. **Ammeter Change-Over Switch –** This switch allows the AC ammeter to indicate the current flowing to the load connected to any phase of the output terminals, or to be switched off.
7. **Voltmeter Change-Over Switch –** This switch allows the AC voltmeter to indicate phase to phase voltage between any two phases of the output terminals or to be switched off.
8. **Panel Light Switch –** When activated, will illuminate the control panel.
9. **Voltage Regulator Control –** Allows manual adjustment of the generator's output voltage.
10. **AC Wattmeter** - Indicats the output power of the generator.
11. **MPEC – Microprocessor Engine Control Module –** (MPEC) has a vertical row of status LED's (Figure 10), that when lit, indicate that an engine malfunction (fault), has been detected. When a fault has been detected the MPEC will evaluate the fault and all major faults will shutdown the generator.

Figure 10. MPEC Module

During ***cranking cycle*** , The MPEC will attempt to crank the engine for 10 seconds before disengaging. If the engine does not engage (start) by the third attempt, the engine will be shut-down by the MPEC's " Over Crank Protection" mode. If the engine engages at a speed (RPM's) that is not safe, the MPEC will shut-down the engine by initializing the "Over Speed Protection" mode.

Also the MPEC will shut-down the generator in the event of low oil pressure, high coolant temperature, low coolant level, and loss of magnetic pickup. These conditions can be observed by monitoring the LED status indicators on the front of the MPEC module.

A. **Off/Manual/Auto Switch –** This switch controls the running of the generator. If this switch is left in the "OFF" position, the generator will not run. When this switch is set to the ***manual*** position, the generator will start immediately.

   If the generator is to be connected to a building's AC power source via a transfer switch (isolation), place the switch in the ***auto*** position. In this position the generator will monitor the AC line output from the building's power source.

B. **Low Oil Pressure –** Indicates the engine pressure has fallen below 15 psi. The oil pressure is detected using variable resistive values from the oil pressure sending unit. This is considered a ***major*** fault.

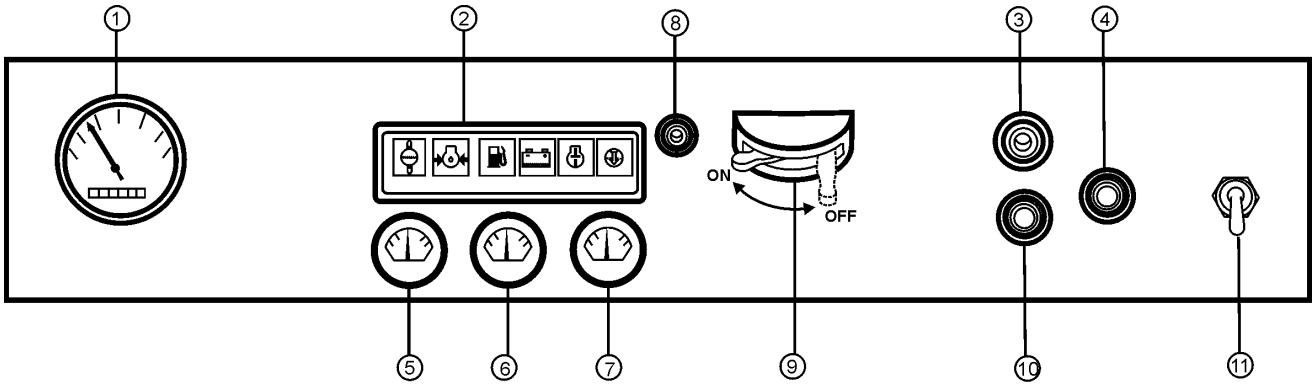
C. **High Coolant Temperature –** Indicates the engine temperature has exceeded 215°F. The engine temperature is detected using variable resistive values from the temperature sending unit. This is considered a ***major*** fault and will shut down the generator.

D. **Overcrank Shutdown –** Indicates the unit has attempted to start a pre- programmed number of times, and has failed to start. The number of cycles and duration are programmable. It is pre-set at 3 cycles with a 10 second duration. This is considered a ***major*** fault and will shut down the generator.

E. **Overspeed Shutdown –** Indicates the engine is running at an unsafe speed. This is considered a ***major*** fault and will shut down the generator.

F. **Engine Running –** Indicates that engine is running at a safe operating speed.

DCA-600SSK — ENGINE OPERATING PANEL



N0.	NAME
1	TACHOMETER
2	LED MODULE
3	PREHEAT LAMP
4	EMERGENCY STOP BUTTON
5	OIL PRESSURE GAUGE
6	WATER TEMP GAUGE
7	CHARGING AMMETER
8	FUEL LEAK DETECTOR
9	BATTERY SWITCH
10	PREHEAT BUTTON
11	ENGINE SPEED SWITCH

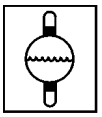
Figure 11. Engine Operating Panel

DCA-600SSK — ENGINE OPERATING PANEL

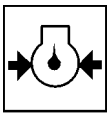
The definitions below describe the controls and functions of the DCA-600SSK " ***Engine Operating Panel*** " (Figure 11).

1. **Tachometer –** Indicates engine speed in RPM's for 60 Hz operation. This meter should indicate 1800 RPM's when the rated load is applied. In addition a built in hour meter will record the number of operational hours that the generator has been in use.
2. **Engine Warning Display Module –** This module display's the following engine failures:

A. **Overheat Lamp –** This lamp goes ON when the cooling water temperature rises abnormally. If the lamp goes ON during normal operation of the generator, the emergency shut-down device will stop the engine automatically.


WATER TEMP.

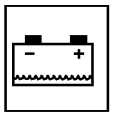
B. **Low Oil Pressure Lamp –** During normal operation of the generator this lamp should remain OFF. When the Auto-OFF/ Reset-Manual switch is set to the "Manual" position to start the engine, the lamp will illuminate. After the oil pressure rises after start-up the lamp will go OFF. If this lamp is ever illuminated (ON) during normal operation of the generator, the emergency shut-down device will stop the engine automatically.


OIL PRESS.

C. **Low Fuel Level Lamp –** When this lamp is ON, it is time to stop the engine and add fuel. Remember to let the engine cool before adding fuel.

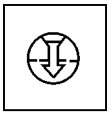

FUEL LEVEL

D. **Low Battery Fluid Lamp –** This lamp goes ON when the battery fluid is low. If this lamp goes ON during normal operation of the generator, stop the engine and fill the battery with distilled water to the specified level.



BATT. LOW LEVEL

E. **Clogged Air Filter Lamp –** This lamp goes ON when the air filter is clogged. If this lamp goes ON during normal operation of the generator, stop the engine and replace the air filter.


AIR FILTER

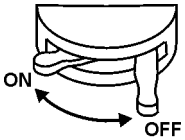
3. **Pre-Heat Lamp –** Indicates that the glow plugs of the diesel engine are hot and the engine is ready to be started.


PRE-HEAT LAMP

4. **Emergency Stop Button –** Push this button inward to stop the engine in the event of an emergency. **DO NOT** use this button as a normal means of stopping the engine.


EMERGENCY STOP BUTTON

5. **Oil Pressure Gauge –** During normal operation this gauge be should read in the "GREEN" zone. When starting the generator the oil pressure mar read a little bit higher, but after the engine warms up the oil pressure should return to the green zone.
6. **Water Temperature Gauge –** During normal operation this gauge be should read in the "GREEN" zone.
7. **Charging Ammeter Gauge –** Indicates the current being supplied by the engine's alternator which provides current for generator's control circuits and battery charging system.
8. **Fuel Leak detector -** Indicates the fuel has leaked between the inner and outer fuel tank.
9. **Battery Switch –** This switch should be set to the ON position during normal operation. When the engine has been stop, place this switch in the OFF position. **DO NOT** turn this switch during normal operation, it could cause damage to the electrical equipment.



BATTERY SWITCH

10. **Pre-Heat Button –** Press hold this button until the pre-heat lamp is lit (ON).


PRE-HEAT BUTTON

11. **Engine Speed Switch –** This switch will change the engine RPM between a normal engine speed and a low idle speed.

SPEED SWITCH

DCA-600SSK OUTPUT TERMINAL PANEL

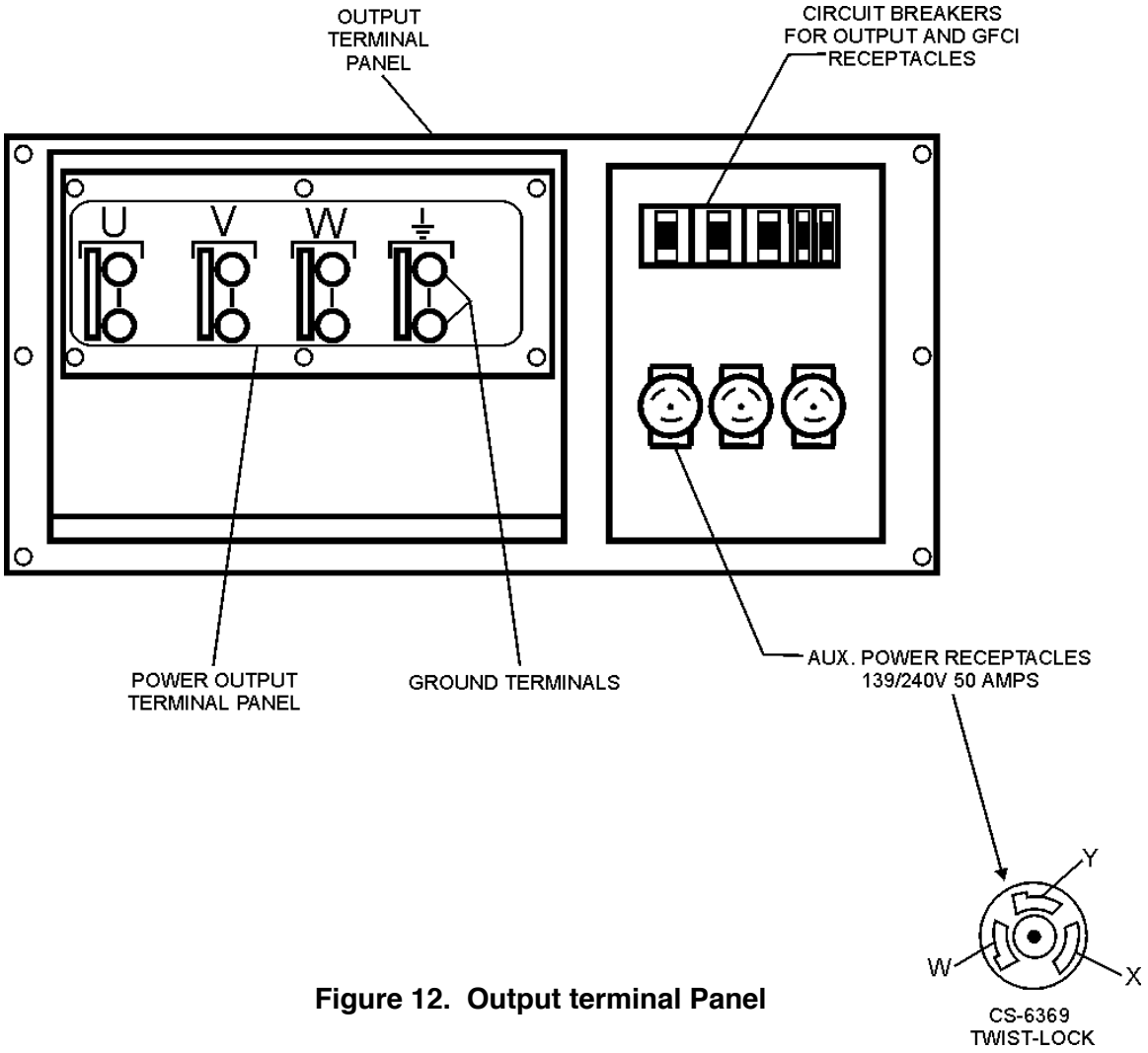


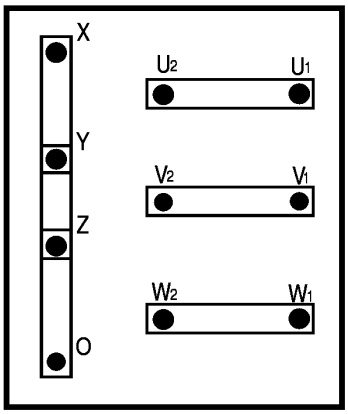
Figure 12. Output terminal Panel

120V Receptacles - These receptacles can be used anytime the generator is in operation. They are controlled by the circuit breakers above them.

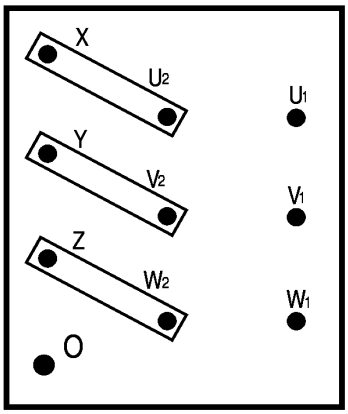
Twist Lock Dual Voltage Receptacles - To use these receptacles, place the voltage selector switch in the single phase 240/120 voltage position and adjust the output voltage to 240 volts with the voltage regulator on the Control Panel (see figure 9). Place the voltmeter change-over switch to the U-W positon and the ammeter change-over switch to the U or W to read the output.

DCA-600SSK TERMINAL VOLTAGE SELECTION

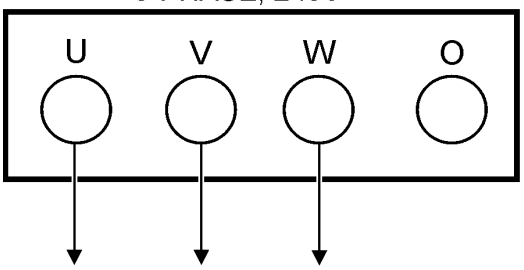
VOLTAGE CHANGE-OVER
BOARD, 240V SET



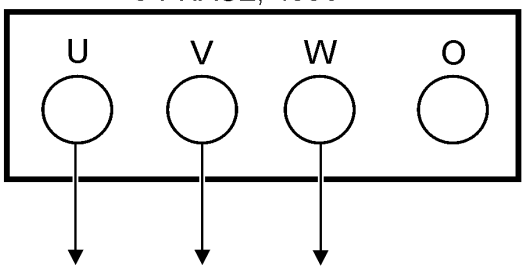
VOLTAGE CHANGE-OVER
BOARD, 480V SET



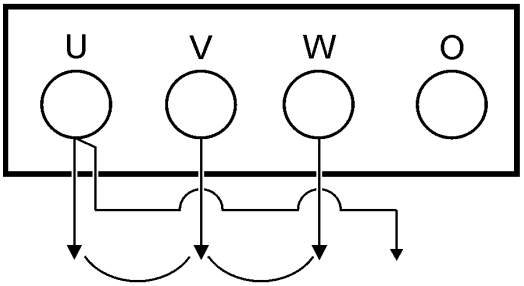
OUTPUT TERMINALS
3-PHASE, 240V



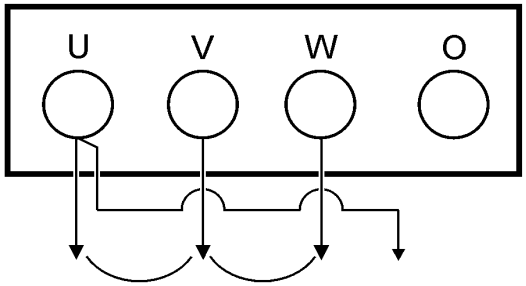
OUTPUT TERMINALS
3-PHASE, 480V



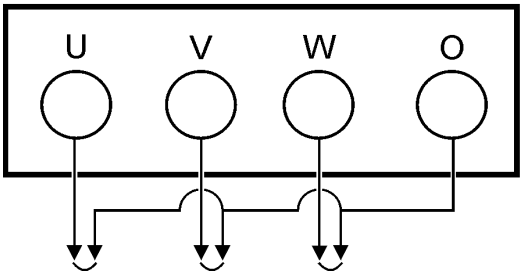
OUTPUT TERMINALS
2-PHASE, 240V



OUTPUT TERMINALS
2-PHASE, 480V



OUTPUT TERMINALS
SINGLE PHASE, 139V



OUTPUT TERMINALS
SINGLE PHASE, 277V

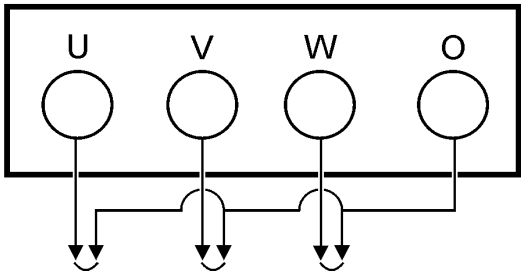


Figure 13. Output Terminal Voltage Selection

Outdoor Installation

Install the generator in a location where it will not be exposed to rain or sunshine. Make sure the generator is on secure level ground so it cannot slide or shift around. Also install the generator so the exhaust will not be discharged in the direction of nearby homes.

The installation site must be relatively free from moisture and dust. All electrical equipment should be protected from excessive moisture. Failure to do will result in deterioration of the insulation and will result in short circuits and grounding.

Foreign materials such as dust, sand, lint and abrasive materials have a tendency to cause excessive wear to the engine parts and alternator.

CAUTION :

Pay close attention to ventilation when operating the generator inside tunnels and caves. The engine exhaust contains noxious elements. Engine exhaust must be routed to a ventilated area.

Indoor Installation

Exhaust gases from diesel engines are extremely poisonous. Whenever an engine is installed indoors the exhaust fumes must be vented to the outside. The engine should be installed at least two feet from any outside wall. Using an exhaust pipe which is too long or too small can cause excessive back pressure which will cause the engine to heat excessively and possibly burn the valves.

CAUTION :

An electric shock may happen when vibrators are used. Pay close attention to handling when operating vibrators and always use rubber boots and gloves to insulate the body from electrical shock.

Generator Grounding

To guard against electrical shock and possible damage to the equipment, it is important to provide a good **EARTH** ground.

Article 250 (Grounding) of the National Electrical Code (NEC) provides guide lines for proper grounding and specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

NEC articles 250-91a and 250-95 set the following grounding requirements:

1. Use one of the following wire types to connect the generator to earth ground.
   a. Copper - 10 AWG (5.3 mm^2) or larger.
   b. Aluminum - 8 AWG (8.4 mm^2) or larger.
2. When grounding the generator (Figure 14) connect the ground cable between the lock washer and the nut on the generator and tighten the nut fully. Connect the other end of the ground cable to earth ground.
3. NEC article 250-83c specifies that the earth ground rod should be buried a minimum of 8 ft. into the ground.

NOTE

When connecting the generator to any buildings electrical system **ALWAYS** consult with a licensed electrician.

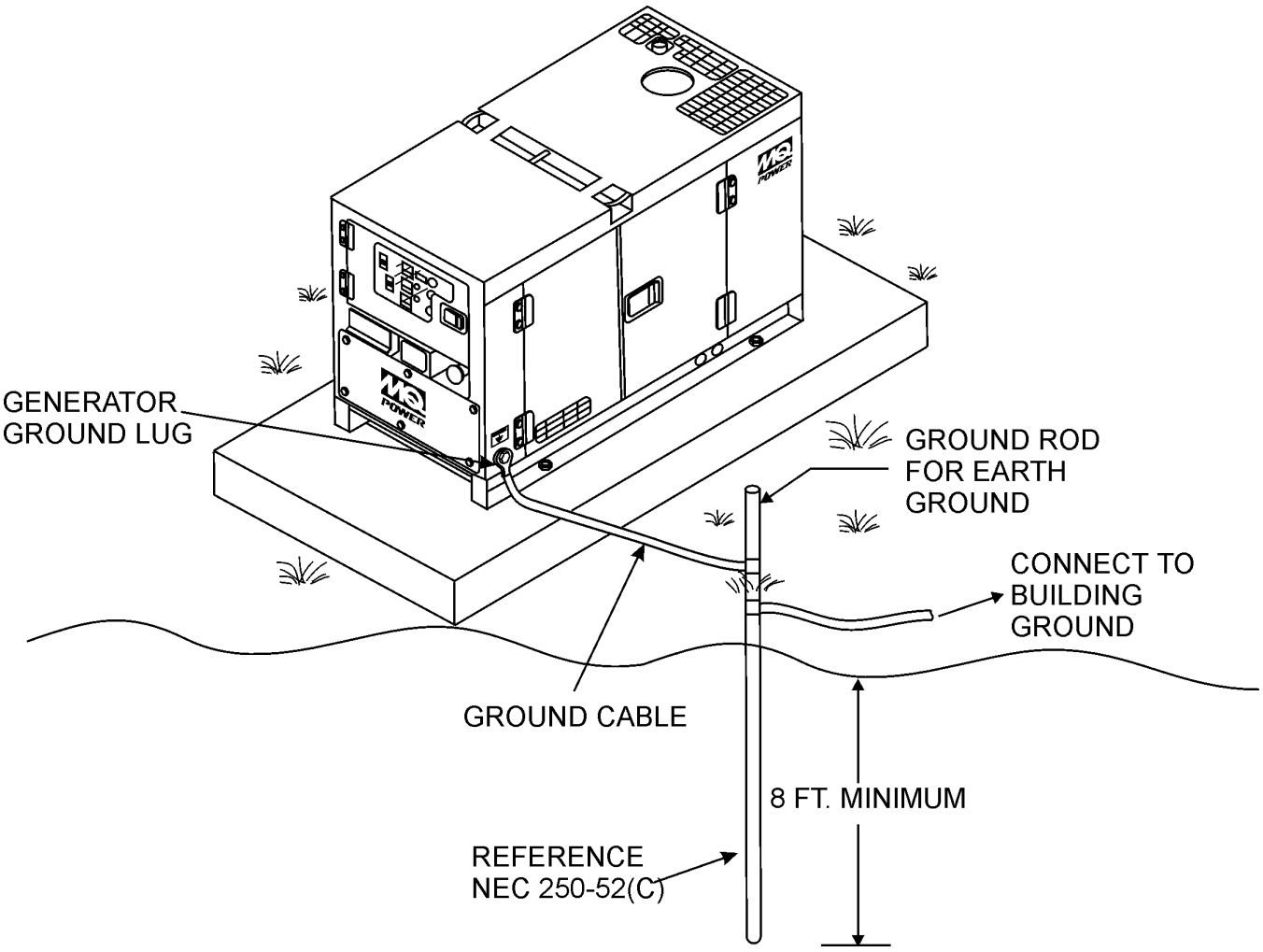


Figure 14. Typical Generator Grounding Application

General Inspection Prior to Operation

The DCA-600SSK generator has been thoroughly inspected and accepted prior to shipment from the factory. However, be sure to check for damaged parts or components, or loose nuts and bolts, which could have occurred in transit.

Extension Cable

When electric power is to be provided to various tools or loads at some distance from the generator, extension cords are normally used. Cables should be sized to allow for distance in length and amperage so that the voltage drop between the generator and point of use (load) is held to a minimum. Use the Cable Selection Guide (Table 8) as a guide for selecting proper cable size.

Circuit Breakers

To protect the generator from an overload, a 3-pole, 1600 amp, ***main*** circuit breaker is provided to protect the UNV output terminals from overload. In addition two single-pole, 20 amp ***GFCI*** circuit breakers are provided to protect the GFCI receptacles from overload. Three 50 amp ***load*** circuit breakers have also been provided to protect the load side of the generator from overload. Make sure to switch ***ALL*** circuit breakers to the "OFF" position prior to starting the engine.

NOTE

ALWAYS consult with a licensed electrician for correct extension cord wire size.

Table 8. Cable Selection (60 Hz, Single Phase Operation)

Current in Amperes	Load In Watts		Maximum Allowable Cable Length			
	At 120 Volts	At 240 Volts	#10 Wire	#12 Wire	#14 Wire	#16 Wire
2.5	300	600	1000 ft.	600 ft.	375 ft.	250 ft.
5	600	1200	500 ft.	300 ft.	200 ft.	125 ft.
7.5	900	1800	350 ft.	200 ft.	125 ft.	100 ft.
10	1200	2400	250 ft.	150 ft.	100 ft.	
15	1800	3600	150 ft.	100 ft.	65 ft.	
20	2400	4800	125 ft.	75 ft.	50 ft.	
CAUTION: Equipment damage can result from low voltage.						

Lubrication Oil

Fill the engine crankcase with lubricating oil through the filler hole, but do not overfill. Make sure the generator is level. With the dipstick inserted all the way, but without being screw into the filler hole, verify the oil level is maintained between the two notches (Figure 15) on the dipstick. See Table 9 for proper selection of engine oil.

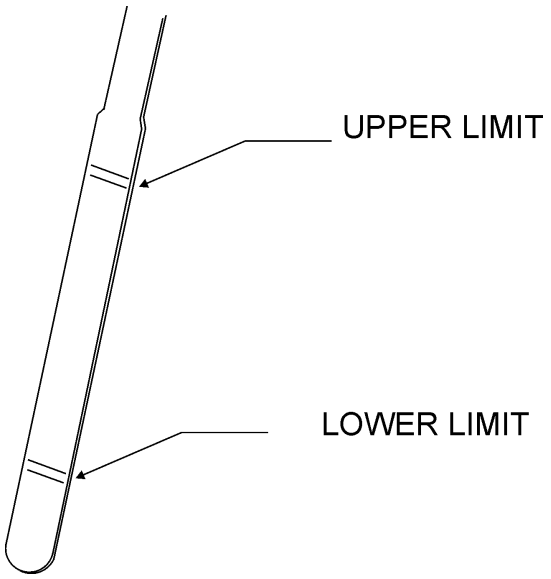


Figure 15. Engine Oil Dipstick

When checking the engine oil, be sure to check if the oil is clean and viscous. If the oil is not clean, drain the oil by removing the oil drain plug, and refill with the specified amount of oil as outlined in the **Komatsu Engine Owner's Manual.**

Fuel

Fill the fuel tank with clean and fresh ***diesel fuel.*** **DO NOT** fill the tank beyond capacity.

Pay attention to the fuel tank capacity when replenishing fuel. Refer to the fuel tank capacity listed on page 26, Specification Table 7.

The fuel tank cap must be closed tightly after filling. Handle fuel in a safety container. If the container does not have a spout, use a funnel. Wipe up any spilled fuel immediately.

CAUTION:

Never fill the fuel tank while the engine is running or in the dark. Diesel spillage on a hot engine can cause a fire or explosion. If diesel spillage occurs, wipe up the spilled diesel completely to prevent fire hazards.

Coolant

Use only drinkable tap water. If hard water or water with many impurities is used, the inside of the engine and radiator may become coated with deposits and cooling efficiency will be reduced.

An anticorrosion additive added to the water will help prevent deposits and corrosion in the cooling system. See the engine manual for further details.

Table 9. Recommended Motor Oil

Temperature Range	Type Oil
104° F ~ 23° F (40° C ~ -5°C)	SAE 30
23° F ~ 5° F (-5° C ~ -15°C)	SAE 20 or SAE 10W-30
Below 5° C (-15°)	SAE 10W or SAE 10W-30

CAUTION :

When adding coolant or antifreeze to the radiator, do not remove the radiator cap until the unit has completely cooled.

Day-to-day addition of coolant is done from the reserve tank. When adding coolant to the radiator, **DO NOT** remove the radiator cap until the unit has completely cooled. See Table 10 for engine, radiator, and reserve tank coolant capacities. Make sure the coolant level in the reserve tank is always between the "H" and the "L" markings.

Table 10. Coolant Capacity	
Engine and Radiator	28.9 Gal. (109.4 Liters)
Reserve Tank	4 Quarts (3.7 Liters)

Operation in Freezing Weather

When operating in freezing weather, be certain the proper amount of antifreeze (Table 11) has been added.

Table 11. Anti-Freeze Operating Temperatures				
Vol % Anti-Freeze	Freezing Point		Boiling Point	
	℃	℉	℃	℉
40	-24	-12	106	222
50	-37	-34	108	226

NOTE

When the anti-freeze is mixed with water, the anti-freeze mixing ratio must be less than 50%.

Cleaning the Radiator

The engine may overheat if the radiator fins become overloaded with dust or debris. Periodically clean the radiator fins with compressed air. Cleaning inside the machine is dangerous, so clean only with the engine turned off and the battery disconnected.

Air Cleaner

Periodic cleaning/replacement is necessary. Inspect it in accordance with the **Komatsu Engine Owner's Manual.**

Fan Belt Tension

A slack fan belt may contribute to overheating, or to insufficient charging of the battery. Inspect the fan belt for damage and wear and adjust it in accordance with the **Komatsu Engine Owner's Manual.**

The fan belt tension is proper if the fan belt bends 7 to 10 mm (Figure 16) when depressed with the thumb as shown below.

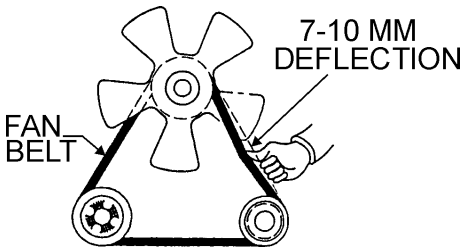


Figure 16. Fan Belt Tension

CAUTION :

Never place hands near the belts or fan while the generator set is running.

Battery

This unit is of negative ground **DO NOT** connect in reverse. Always maintain battery fluid level between the specified marks. Battery life will be shortened, if the fluid level is not properly maintained. Add only distilled water when replenishment is necessary.

The battery is sufficiently charged if the specific gravity of the battery fluid is 1.28 (at 68°F). If the specific gravity should fall to 1.245 or lower, it indicates the battery is discharged and needs to be recharged or replaced.

Check to see whether the battery cables are loose. Poor contact may result in poor starting or malfunctions. Always keep the terminals firmly tightened. Coating the terminals with a thin film of grease will help inhibit corrosion.

Battery Cable Installation

ALWAYS be sure the battery cables (Figure 17) are properly connected to the battery terminals as shown below. The ***RED*** cable is connected to the positive terminal of the battery, and the **BLACK** cable is connected to the negative terminal of the battery.

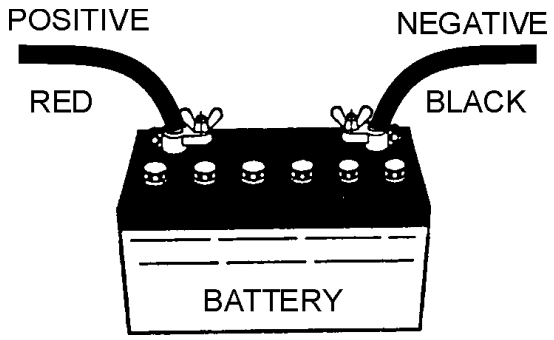


Figure 17. Battery Connections

CAUTION :

If the battery cable is connected incorrectly, electrical damage to the generator will occur. Pay close attention to the polarity of the battery when connecting the battery.

When connecting battery do the following:

1. **DO NOT** connect the battery cables to the battery terminals when the ***Off/Manual/Auto*** switch is in either the manual or auto position (ON). **ALWAYS** make sure that the Off/Manual/Auto switch is in the **OFF** position when connecting the battery..
2. Place a small amount of grease around both battery terminals. This will ensure a good connection and will help prevent corrosion around the battery terminals.

CAUTION :

Inadequate battery connections may cause poor starting of the generator, and create other malfunctions.

Wiring

Inspect the entire generator for bad or worn electrical wiring or connections. If any wiring or connections are exposed (insulation missing) replace wiring immediately.

Piping and Hose Connection

Inspect all piping, oil hose, and fuel hose connections for wear and tightness. Tighten all hose clamps and check hoses for leaks.

If any hose (fuel or oil) lines are defective replace them immediately.

Single Phase Load

Always be sure to check the nameplate on the generator and equipment to insure the wattage, amperage and frequency requirements are satisfactorily supplied by the generator for operating the equipment.

Generally, the wattage listed on the nameplate of the equipment is its rated output. Equipment may require 130—150% more wattage than the rating on the nameplate, as the wattage is influenced by the efficiency, power factor and starting system of the equipment.

NOTE

If wattage is not given on the equipment's name plate, approximate wattage may be determined by multiplying nameplate voltage by the nameplate amperage.

WATTS = VOLTAGE x AMPERAGE

The power factor of this generator is 1.0. See Table 6. below when connecting loads.

Table 12. Power Factor By Load

Type Of Load	Power Factor
Single-phase induction motors	0.4 - 0.75
Electric heaters, incandescent lamps	1.0
Fluorescent lamps, mercury lamps	0.4 - 0.9
Electronic devices, communication equipment	1.0

Three Phase Load

When calculating the power requirements for 3-phase power use the following equation:

$$KVA = \frac{VOLTAGE \times AMPERAGE \times \sqrt{3}}{1000}$$

CAUTION:

Motors and motor-driven equipment draw much greater current for starting than during operation.

An inadequate size connecting cable which cannot carry the required load can cause a voltage drop which can burn out the appliance or tool and overheat the cable.

- When connecting a resistance load such as an incandescent lamp or electric heater, a capacity of up to the generating set's rated output (kW) can be used.
- When connecting a fluorescent or mercury lamp, a capacity of up to the generating set's rated output (kW) multiplied by 0.6 can be used.
- When connecting an electric drill or other power tools, pay close attention to the required starting current capacity.

When connecting ordinary power tools, a capacity of up to the generating set's rated output (kW) multiplied by 0.8 can be used.

CAUTION:

Before connecting this generator to any building's electrical system, a licensed electrician must install an isolation (transfer) switch. Serious injury or death may result without this transfer switch.

NOTE

If output (kVA) is not given on the equipment nameplate, approximate output may be determined by multiplying voltage by amperage by $\sqrt{3}$.

DCA-600SSK — GENERATOR START-UP PROCEDURE (MANUAL)

WARNING:

- The engine's exhaust contains harmful emissions. ***ALWAYS*** ventilate the exhaust when operating inside tunnels, excavations or buildings. Direct exhaust away from nearby personnel.

Before Starting

Engine

1. Check the lubricating oil level prior to starting the engine. Make sure the generator is level. The oil level must be maintained between two notches on the dipstick.
2. When there is not enough lubricating oil, fill the crankcase with high grade motor oil. Use a high quality detergent oil classified CC or higher (See Table 9 on page 43).
3. Check the coolant level in the radiator and subtank. Replenish with antifreeze as necessary. Always maintain the coolant level between the **FULL** and **LOW** markings on the coolant container. Be sure that the radiator cap is fastened securely.
4. Check the fuel level on the fuel gauge. If fuel is low, fill the fuel tank with clean fresh unleaded automotive diesel. If diesel spillage occurs, completely wipe up the spilled fuel immediately.

Before Starting

Generator and Control Panel

CAUTION:

NEVER start the engine with the ***main, GFCI*** or ***load*** circuit breakers in the **ON** position.

1. Be sure to disconnect the electrical load and switch the ***main, load*** and ***G.F.C.I.*** circuit breakers (Figure 18) to the "OFF" position prior to starting the engine.

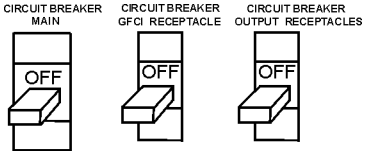


Figure 18. Main, GFCI and Load Circuit Breakers

Jacket Water Heater and Internal Battery Charger 120 VAC Output Receptacles

This generator is equipped with two 120 VAC, 20 amp output receptacles located on the output terminal panel, page 38, Figure 12.

The purpose of these receptacles is to provide power via commercial power to the jacket water heater and internal battery charger.

These receptacles will **ONLY** function when commercial power has been supplied to them (Figure 18). To apply commercial power to these receptacles, a power cord of adequate size will be required.

When using the generator in ***hot*** climates there is no reason to apply power to jacket water heater. However, if the generator will be used in ***cold*** climates it is always a good idea to apply power to the jacket water heater at all times. To apply power to the jacket water heater simply apply power to the jacket water heater receptacle via commercial power using an power cord of adequate size.

If the generator will be used daily, the battery should normally not require charging. If the generator will be idle (not used) for long periods of time, apply power to the battery charger receptacle via commercial power using an power cord of adequate size.

When connecting the generator to a isolation (transfer) switch, **ALWAYS** have power applied to the generator's internal battery charger. This will ensure that the engine will not fail due to a dead battery.

CAUTION:

Remember before connecting this generator to any buildings electrical system, have a ***licensed*** electrician perform the installation of the transfer switch.

NOTE

Connect battery charger to commercial power to avoid battery failure.

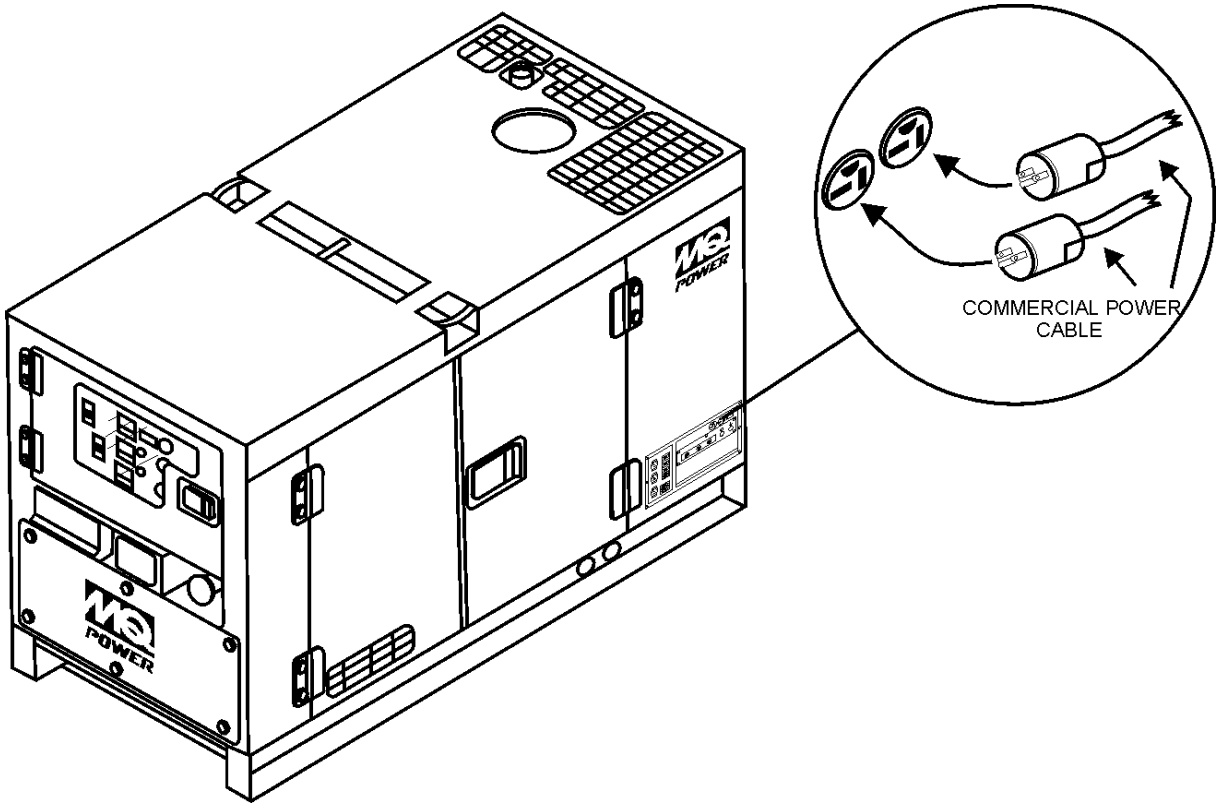


Figure 19. 120 VAC Accessory Receptacle/Cable

2. Once it is determined if commercial power is required, connect the load to the UNV terminals as shown in Figure 20. These terminals can be found on the output terminal panel, see page 38 Figure 12. To gain access to the output terminals lift the UNV cover. Make sure to tighten terminal nuts securely to prevent load wires from slipping out.

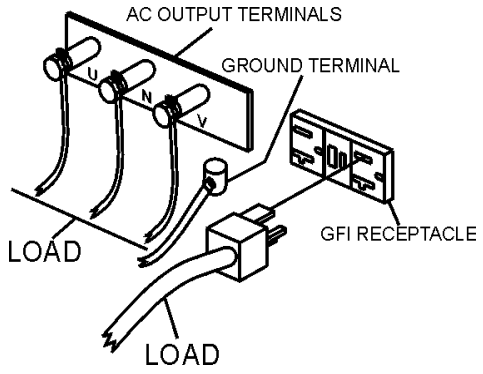


Figure 20. UNV Terminal Lugs (Load)

3. Connect the negative battery cable (BLACK) to the negative post on the battery (Figure 21).

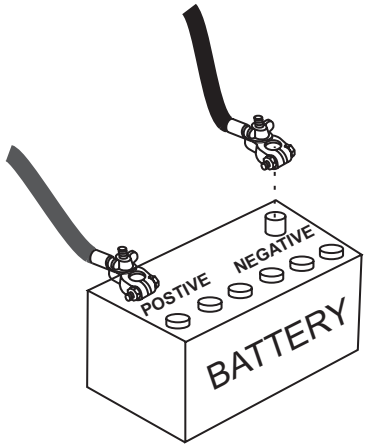


Figure 21. Battery Connections

4. Close all engine enclosure doors (Figure 22).

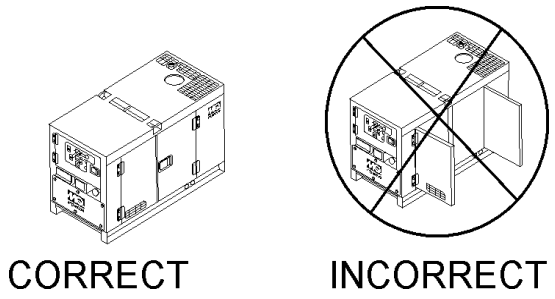


Figure 22. Engine Enclosure Doors

5. Set the battery ON/OFF switch (Figure 23) to the ON position.

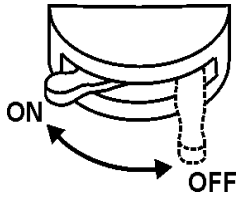


Figure 23. Battery ON/OFF Switch

6. When starting the generator in **COLD** weather conditions, press and hold the engine preheat button (Figure 24) until the pre-heat lamp (Figure 25) is lit (ON).

Figure 24. Engine Pre-Heat Button

Figure 25. Engine Pre-Heat Lamp

7. Place the Off/Manual/Auto switch (Figure 26) in the **MANUAL** position (down). Observe that the engine begins to crank.

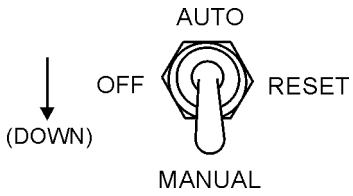


Figure 26. Off/Manual/Auto Switch (Manual)

8. After engine starts, verify that the "**Engine Running**" status LED (Figure 27) on the Microprocessor Engine Control Module (MPEC) display is "ON" (lit).

Figure 27. MPEC Engine Running Status LED

9. The generator's frequency meter (Figure 28) displays the 60 cycle output frequency in **HERTZ**.

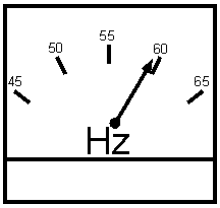


Figure 28. Frequency Meter (Hz)

10. The generator's voltage meter (Figure 29) displays the 120 VAC in **VOLTS**. If the voltage is not within the specified frequency tolerance, use the voltage adjustment control knob (Figure 30) to increase or decrease the desired voltage.

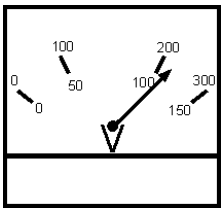


Figure 29. Voltage Meter (Volts)

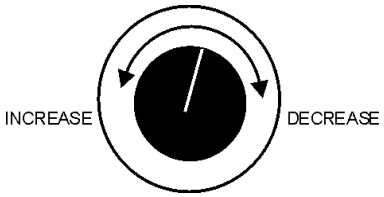


Figure 30. Voltage Adjust Control Knob

11. The ammeter (Figure 31) will indicate zero amps with no load applied. When a load is applied, this meter will indicate the amount of current that the load is drawing from the generator's alternator.

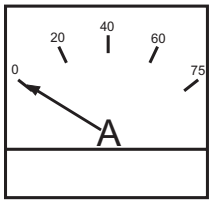


Figure 31. Ammeter (No Load)

12. The wattmeter (Figure 32) will indicate zero watts with no load applied. When a load is applied, this meter will indicate the output power of the generator with respect to the applied load.

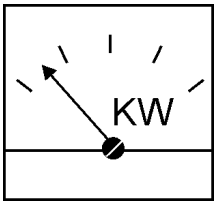


Figure 32. Kilowatt Meter

13. The engine oil pressure gauge (Figure 33) will indicate the oil pressure (kg/ cm^2) of the engine. Under normal operating conditions the oil pressure should be approximately 25 psi.

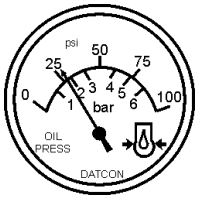


Figure 33. Oil Pressure Gauge

14. The coolant temperature gauge (Figure 34) will indicate the coolant temperature. Under normal operating conditions the coolant temperature should be between 165 and 215 degrees fahrenheit (Green Zone).

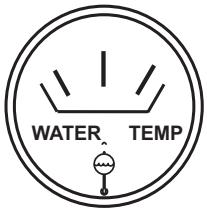


Figure 34. Coolant Temperature Gauge

15. Set the engine speed switch (Figure 35) to low to idle engine, set to high when a load is being applied.

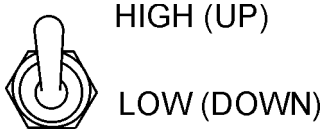


Figure 35. Engine Speed Switch

16. The tachometer (Figure 36) will indicate the speed of the engine when the generator is operating. Under normal operating conditions this speed should be approximately 1800 RPM's.

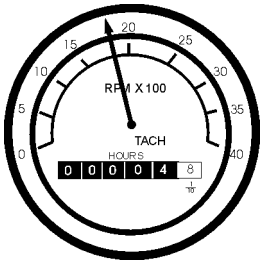


Figure 36. Engine Tachometer

17. If the engine speed is too high or low, use the high idle adjust trimmer (Figure 37) located in the control box to adjust the rated speed of the engine.

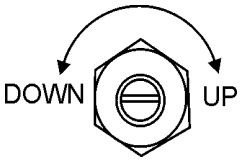


Figure 37. Engine Idle Adjust Trimmer

18. If there are no abnormal problems shown on the "MPEC" LED display, turn the MAIN, GFCI and LOAD circuit breakers to their ON position (Figure 38).

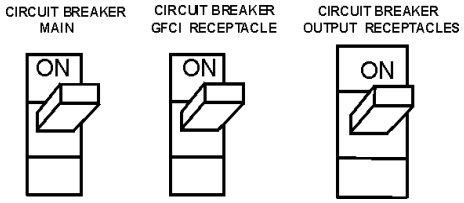


Figure 38. Main and GFCI Circuit Breakers

19. Observe the generator's ammeter (Figure 39) and verify that it reads the anticipated amount of current with respect to the load. Remember the ammeter will only display a current reading if the load is in use.

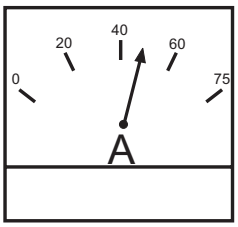


Figure 39. Ammeter (Load)

20. The generator will run until manually stopped or an abnormal condition occurs.

DCA-600SSK — GENERATOR START-UP PROCEDURE (AUTO)

CAUTION:

Before connecting this generator to any building's electrical system, a **licensed electrician** must install an isolation (transfer) switch. Serious ***injury*** or ***death*** may result without this transfer switch.

CAUTION:

When connecting the generator to a isolation (transfer) switch, **ALWAYS** have power applied to the generator's internal battery charger. This will ensure that the engine will not fail due to a dead battery.

Starting the generator in the "**AUTO**" mode is similar to starting the generator in the "**MANUAL"** mode, with a few exceptions.

CAUTION:

When running the generator in the **AUTO** mode, remember the generator can start up at any time without warning. **NEVER** attempt to perform any maintenance when the generator is in the auto mode.

When starting generator in Auto mode use the "Manual Start-up" procedure except where noted (see below).

1. Perform steps 1 through 6 (Before Starting, page 47-49) as outlined in the manual starting procedure.
2. Apply commercial power to the internal battery charger receptacle (to ensure good starting) via commercial power. An external power cord will be required.
3. Apply commercial power to the jacket water heater receptacle (not necessary for warm climates) via commercial power. An external power cord will be required.
4. Place the Off/Manual/Auto switch (Figure 40) in the **AUTO** position (up).

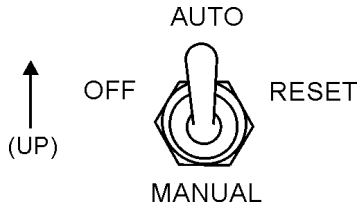


Figure 40. Off/Manual Auto Switch (AUTO)

5. Continue to follow the steps outline in the manual start-up procedure (start at step 9, page 50).

DCA-600SSK — GENERATOR SHUT-DOWN PROCEDURE

Engine Shutdown

To shut-down the generator use the following procedure:

1. Place both the **MAIN**, **GFCI** and **LOAD** circuit breakers to the "OFF position".

2. Set the engine speed switch (Figure 41) to the idle (low) position.

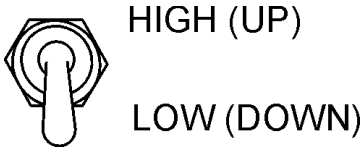


Figure 41. Engine Speed Switch

3. Let the engine cool by running it for 3-5 minutes with no load applied.

4. Place the Off/Manual/Auto Switch (Figure 42) in the "**OFF/ RESET**" position

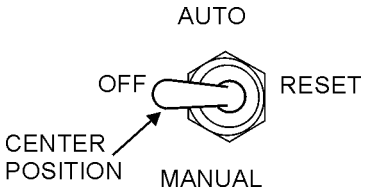


Figure 42. Off/Manual Auto Switch (OFF)

5. Verify that the "Engine Running" status LED (Figure 43) on the Microprocessor Engine Control Module (MPEC) display is "OFF" (not lit).

Figure 43. MPEC Engine Running Status LED (OFF)

6. Remove the load from the UNV terminal strip (Figure 20).

Emergency Stop

To stop the engine in the event of an emergency, **PUSH** the emergency stop button (Figure 44) inward. This button is located on the generator's engine operating panel, see page 36, Figure 9.

Figure 44. Emergency Stop Button

CAUTION:

NEVER stop the engine suddenly except in an emergency. **DO NOT** use the emergency stop switch a as method of shutting down the engine. This switch is **ONLY** to be used in the event of an emergency.

General Inspection

Prior to each use, the generating set should be cleaned and inspected for deficiencies. Check for loose, missing or damaged nuts, bolts or other fasteners. Also check for fuel or oil leaks.

Engine Side, Fuel, Oil and Coolant (Refer to the Engine Instruction Manual)

Air Cleaner

Every 50 hours: Remove air cleaner element (std. or heavy duty types), and wash in kerosene or liquid detergent and hot water. Wrap foam element in a cloth and squeeze dry. Wipe heavy duty paper element dry with toweling. Saturate element with kerosene; squeeze excess from foam element. Wipe excess from heavy duty paper element.

Fuel Addition

Add diesel fuel (the grade may vary according to season and locations). Always pour through the mesh filter.

Removing Water from the Tank

After prolonged use, water and other impurities accumulate in the bottom of the tank. Occasionally remove the drain cock and drain the contents. During cold weather, the greater the empty volume inside the tank, the easier it is for water to condense. This can be reduced by always keeping the tank as full as possible.

Air Removal

If air enters the fuel injection system of a diesel engine, starting becomes impossible. After running out of fuel, or after disassembling the fuel system, bleed the system according to the following procedure.

To restart after running out of fuel, turn the key switch to the "START" position for 15-30 seconds. Try again, if needed. This unit is equipped with an automatic air bleeding system.

Service Daily

If engine is operating in very dusty and dry grass conditions, a clogged air cleaner will result in high fuel consumption, loss of power and excessive carbon buildup in the combustion chamber.

Cleaning the Fuel Strainer

Clean the fuel strainer if it contains dust or water. Remove dust or water in the strainer cap and wash it in diesel. Securely fasten the fuel strainer cap so that fuel will not leak. Check the fuel strainer every 200 hours of operation or once a month.

Check Oil Level

Check the crankcase oil level prior to each use, or when the fuel tank is filled. Insufficient oil may cause severe damage to the engine. Make sure the generator is level. The oil level must be between the two notches on the dipstick as shown in Figure 15, page 43.

Generator Storage

For storage of the generator for over 30 days, the following is required:

- Drain the fuel tank completely.
- Completely drain the oil from the crankcase and refill with fresh oil.
- Clean all external parts of the generator with a cloth.
- Cover the generating set and store in a clean, dry place.

Water Separator Filter

Replace the water separator filter (Figure 45) every 500 hours if two filters are being used. If one filter is being used, replace every 250 hours.

The filters should also be replace if the vacuum gauge indicates between 6 to 10 inches of mercury (in Hg.)

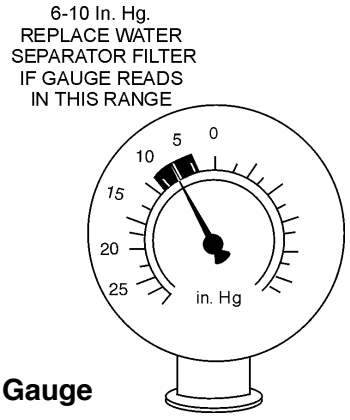


Figure 45. Water Separator Gauge

To replace the ***water separator filter*** element perform the following:

1. Remove the lid from the filter housing. Remove the element by holding the module handle and slowly pulling upward with a twisting motion.
2. Replace the lid gasket with the one supplied with the new filter element. Apply a coating of clean fuel or motor oil to seal prior to reassembly. Insert the new filter element with a slow downward twisting motion.
3. Fill the unit with clean fuel, then set the lid back on top of the filter housing, and tighten snugly using the T-bar handle.
4. Start the engine and check for any leaks. If any leaks occur with the engine running, turn the engine off and fix the leak.

Full View

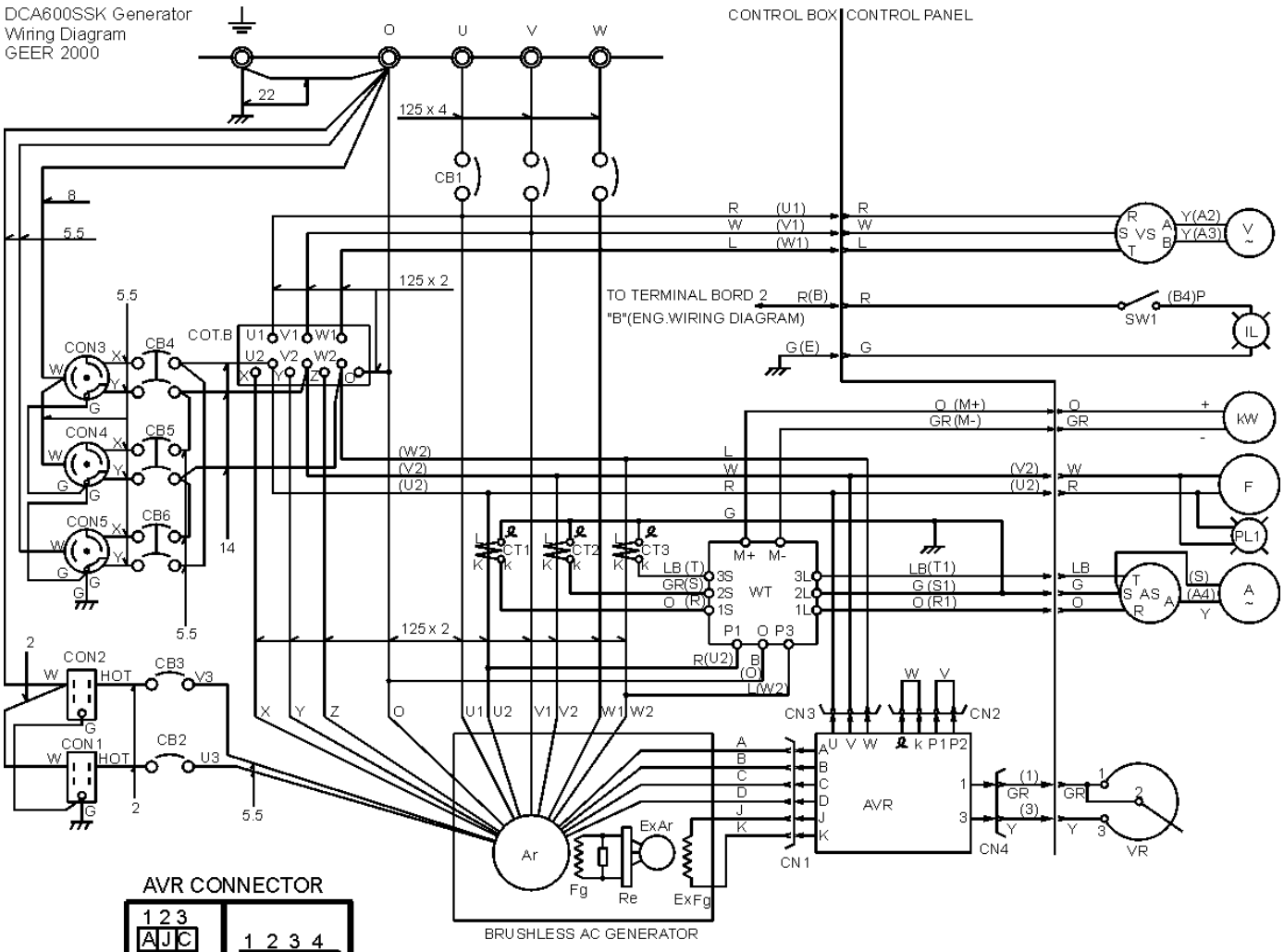
INSPECTION / MAINTENANCE		10 Hrs DAILY	250 Hrs	500 Hrs	1000 Hrs
ENGINE	Check Engine Fluid Levels	X			
	Check Air Cleaner	X			
	Check Battery Acid Level	X			
	Check Fan Belt Condition	X			
	Check for Leaks	X			
	Check for Loosening of Parts	X			
	Check Water Separator	X			
	Check Blow-by Oil Mist Tank	X			
	Replace Engine Oil and Filter *1		X		
	Clean Air Filter		X		
	Drain Bottom of Fuel Tank		X		
	Clean Unit, Inside and Outside		X		
	Change Fuel Filter *2			X	
	Replace Water Separator Element *3		(X)	X	
	Clean RAdiator and Check Coolant Protection Level			X	
	Replace Air Filter Element				X
	Change Corrosion Resistor				X
	Check all Hoses and Clamps				X
	Clean Inside of Fuel Tank				X
GENERATOR	Measure Insulation Resistance Over 3M ohms		X		

*1 Replace engine oil anf filter at 100 hours, first time only.

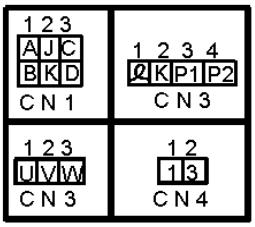
*2 Replace fuel filter at 250 Hours, first time only.

*3 Refer to the item "Water Separator Filter".

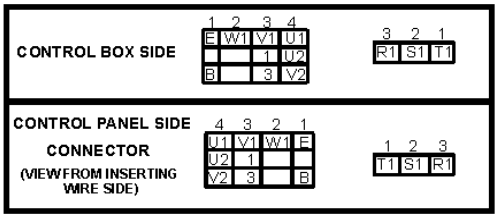
DCA-600SSK GENERATOR WIRING DIAGRAM

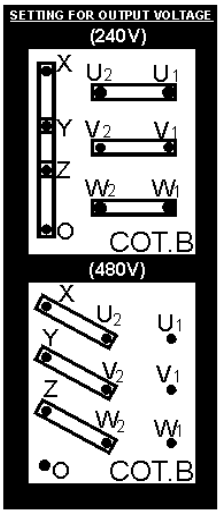


AVR CONNECTOR



(VIEW FROM INSERTING WIRE SIDE)





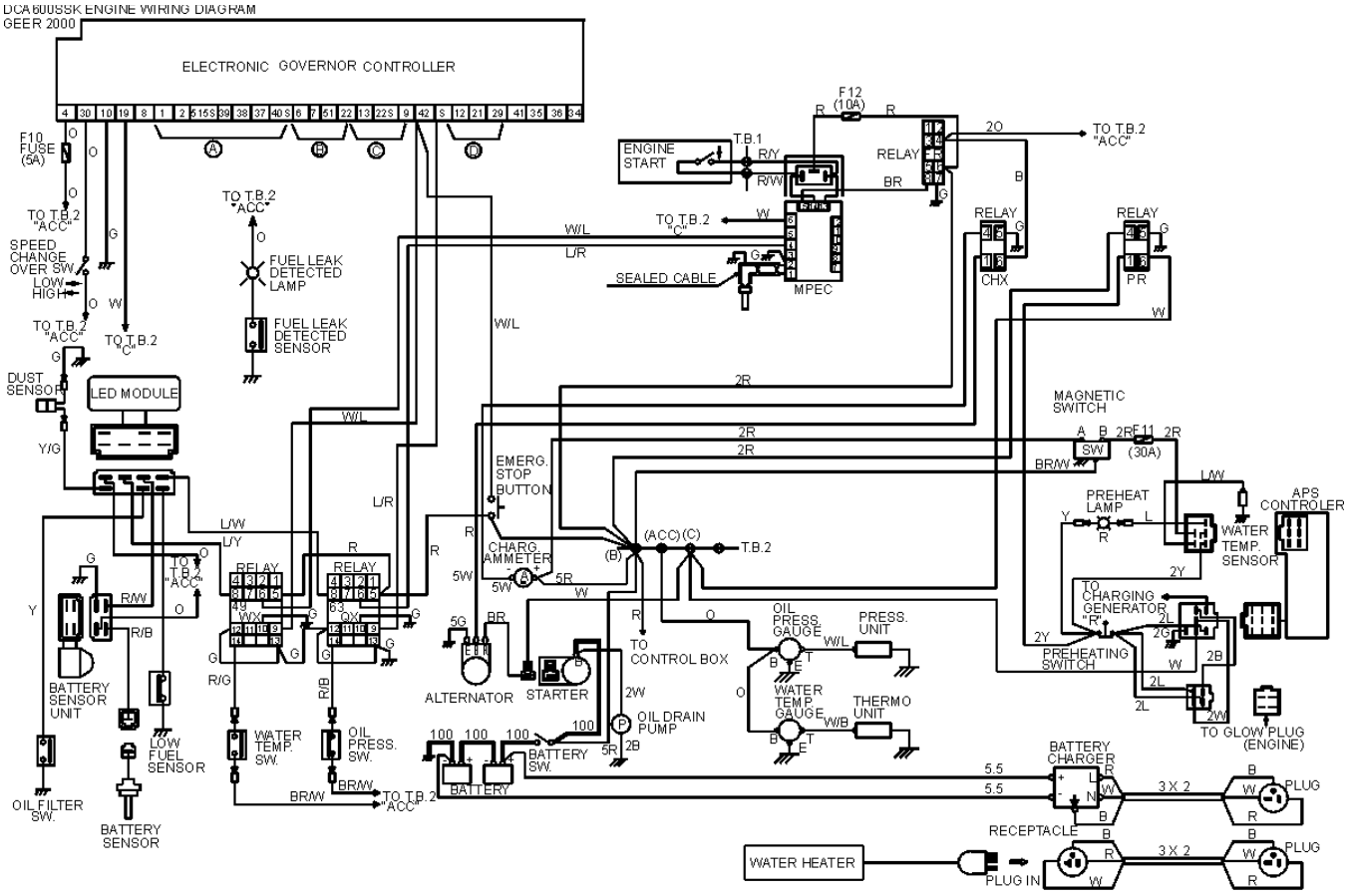
WIRE SIZE TABLE
125: 125mm²
100: 100mm²
80: 80mm²
22: 22mm²
14: 14mm²
8: 8mm²
5.5: 5.5mm²
2: 2mm²
NO MARK WIRE SIZE : 1.25mm

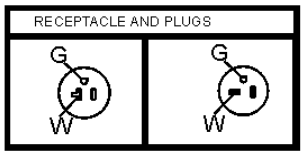
COLOR CODE TABLE			
CODE/ WIRE COLOR			
B	BLACK	R	RED
L	BLUE	W	WHITE
BR	BROWN	Y	YELLOW
G	GREEN	LB	LIGHT BLUE
GR	GRAY	LG	LIGHT GREEN
V	VIOLET	O	ORANGE
P	PINK		

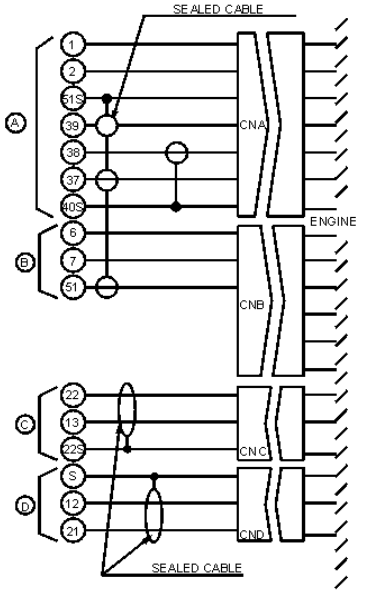
MARK	DESCRIPTION
Ar	MAIN GENERATOR ARMATURE WINDING
Fg	MAIN GENERATOR FIELD WINDING
ExAr	EXCITER ARMATURE WINDING
ExFg	EXCITER FIELD WINDING
AVR	AUTOMATIC VOLTAGE REGULATOR
VR	VOLTAGE REGULATING RHEOSTAT
Re	RECTIFIER
CT1~3	CURRENT TRANSFORMER 1200/5A
Cb1	CIRCUIT BREAKER 2000A
COT.B	VOLTAGE CHANGE-OVER BOARD
AS	AMMETER CHANGE-OVER SWITCH
Ⓐ	AC.AMMETER 0~1200,2400A
VS	VOLTMETER CHANGE-OVER SWITCH
Ⓥ	AC.VOLTMETER 0~600V
F	FREQUENCY METER 45 65Hz
PL1	PILOT LAMP
CB2,3	AUX.CIRCUIT BREAKER 20A
CB4~6	AUX.CIRCUIT BREAKER 50A
CON1,2	AUX.POWER RECEPTACLE 20A
CON3~5	AUX.POWER RECEPTACLE 50A
IL	PANEL LIGHT
SW1	PANEL LIGHT SWITCH
kW	WATTMETER -60~+600kW
WT	WATTMETER TRANSDUCER

DCA-600SSK ENGINE WIRING DIAGRAM

Full View



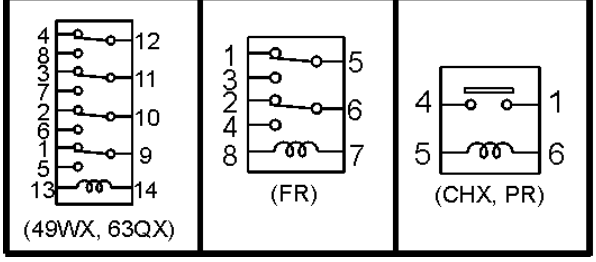




COLOR CODE TABLE

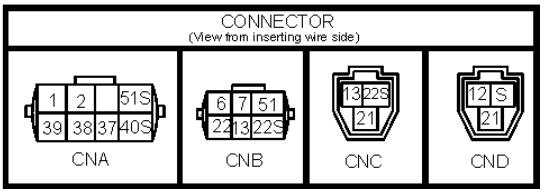
CODE/ WIRE COLOR			
B	BLACK	R	RED
L	BLUE	W	WHITE
BR	BROWN	Y	YELLOW
G	GREEN	LB	LIGHT BLUE
GR	GRAY	LG	LIGHT GREEN
V	VIOLET	O	ORANGE
P	PINK		

RELAY INSIDE CONNECTION



WIRE SIZE TABLE

100: 100mm^2
38: 38mm^2
22: 22mm^2
14: 14mm^2
5 : 5mm^2
2 : 2mm^2
NO MARK: 2 mm^2



DCA-600SSK — TROUBLESHOOTING (ENGINE)

Practically all breakdowns can be prevented by proper handling and maintenance inspections, but in the event of a breakdown, use the tables shown for diagnosis based on the Engine Troubleshooting (Table 13). If the problem cannot be remedied, consult our company's business office or service plant.

TABLE 13. ENGINE TROUBLESHOOTING

SYMPTOM	POSSIBLE PROBLEM	SOLUTION
Engine does not start.	No fuel?	Replenish fuel.
	Air in the fuel system?	Bleed system.
	Water in the fuel system?	Remove water from fuel tank.
	Fuel pipe clogged?	Clean fuel pipe.
	Fuel filter clogged?	Clean or change fuel filter.
	Excessively high viscosity of fuel or engine oil at low temperature?	Use the specified fuel or engine oil.
	Fuel with low cetane number?	Use the specified fuel.
	Fuel leak due to loose injection pipe retaining nut?	Tighten nut.
	Incorrect injection timing?	Adjust.
	Fuel cam shaft worn?	Replace.
	Injection nozzle clogged?	Clean injection nozzle.
	Injection pump malfunctioning?	Repair or replace.
	Seizure of crankshaft, camshaft, piston, cylinder liner or bearing?	Repair or replace.
	Compression leak from cylinder?	Replace head gasket, tighten cylinder head bolt, glow plug and nozzle holder.
	Improper valve timing?	Correct or replace timing gear.
	Piston ring and liner worn?	Replace.
	Excessive valve clearance?	Adjust.
Starter does not run.	Starter malfunctioning?	Repair or replace.
	Wiring disconnected?	Connect wiring.

TABLE 13. ENGINE TROUBLESHOOTING (CONTINUED)

SYMPTOM	POSSIBLE PROBLEM	SOLUTION
Engine revolution is not smooth.	Fuel filter clogged or dirty?	Clean or change.
	Air cleaner clogged?	Clean or change.
	Fuel leak due to loose injection pipe retaining nut?	Tighten nut.
	Injection pump malfunctioning?	Repair or replace.
	Incorrect nozzle opening pressure?	Adjust.
	Injection nozzle stuck or clogged?	Repair or replace.
	Fuel over flow pipe clogged?	Clean.
	Governor malfunctioning?	Repair.
Either white or blue exhaust gas is observed.	Excessive engine oil?	Reduce to the specified level.
	Piston ring and liner worn or stuck?	Repair or replace.
	Incorrect injection timing?	Adjust.
	Deficient compression?	Adjust top clearance.
Either black or dark gray exhaust gas is observed.	Overload?	Lessen the load.
	Low grade fuel used?	Use the specified fuel.
	Fuel filter clogged?	Clean or change.
	Air cleaner clogged?	Clean or change.
	Deficient nozzle injection?	Repair or replace the nozzle.
Deficient output.	Incorrect injection timing?	Adjust.
	Engine's moving parts seem to be seizing?	Repair or replace.
	Uneven fuel injection?	Repair or replace the injection pump.
	Deficient nozzle injection?	Repair or replace the nozzle.
	Compression leak?	Replace head gasket, tighten cylinder head bolt, glow plug and nozzle holder.

DCA-600SSK — TROUBLESHOOTING (GENERATOR/ENGINE)

Practically all breakdowns can be prevented by proper handling and maintenance inspections, but in the event of a breakdown, use the tables shown for diagnosis based on the Engine and Radiator Troubleshooting (Table 14). If the problem cannot be remedied, consult our company's business office or service plant.

TABLE 14. ENGINE & GENERATOR TROUBLESHOOTING

SYMPTOM	POSSIBLE PROBLEM	SOLUTION
Engine fails to start and starter does not rotated.	Dead battery?	Replace battery.
	Defective starter switch?	Replace switch.
	Fuse F5 burned out?	Replace fuse.
Engine fails to start and starter rotates.	Broken pre-heat circuit?	Check pre-heat circuit.
	No fuel?	Add fuel.
	Defective wiring?	Check wiring.
Engine starts and remains at low speed.	Clogged fuel strainer?	Clean or replace.
	Clogged air cleaner?	Clean or replace.
	Disconnected wiring?	Check and repair wiring.
Engine speed rises and no voltage is present in AC power source.	No voltage present in AC power source?	Replace rectifier (RE1).
	Defective rotor?	Replace rotor.
	Defective voltmeter?	Replace voltmeter.
	Disconnected wiring?	Check and repair wiring.
	Layer short-circuit in armature winding?	Replace armature.
Engine speed rises and AC power voltage is too low or cannot be used.	Defective circuit breaker (protector)?	Replace circuit breaker (protector).
	Layer short-circuit, broken wires in armature winding?	Repair or replace armature.
Engine speed rises and battery discharges too soon.	Defective engine regulator?	Replace regulator.
	Defective wiring?	Repair or replace wiring.
Engine speed rises and engine seems overloaded.	Defective alternator?	Repair or replace alternator.
	Damaged alternator bearing?	Replace alternator bearings.

DCA-600SSK — TROUBLESHOOTING (MPEC)

Practically all breakdowns can be prevented by proper handling and maintenance inspections, but in the event of a breakdown, use the tables shown for diagnosis based on the MPEC Troubleshooting (Table15). If the problem cannot be remedied, consult our company's business office or service plant.

TABLE 15. MPEC TROUBLESHOOTING

Sympton	Possible Cause	Solution
Low oil pressure light is on.	Low oil level?	Fill oil level.
	Oil pressure sending unit failure?	Replace oil pressure sending unit.
	Time delay malfuntion in MPEC?	Refer to dealer.
	Wire shorted?	Inspect/repair wire.
Low coolant level light is on.	Low coolant level?	Fill coolant level.
	Sending unit failure?	Replace sending unit.
	Low battery voltage?	Replace/charge battery.
High coolant temperture light is on.	Fan belt tension incorrect?	Tighten/replace fan belt.
	Air flow is not circulation through radiator?	Clean/repair radiator grill.
	Doors open?	Close doors.
	Exhaust leaking?	Replace/repair gaskets or faulty part.
	Generator being overloaded?	Check/reduce load.
	Thermostat failure?	Replace thermostat.
	Air intake blocked?	Clear all air intakes.
	Temperature switch failure?	Replace temperature switch.
Overcrank light is on.	No or low Fuel?	Fill fuel level.
	MPEC needs to be calibrated?	Refer to dealer.
Overspeed light is on.	RPM engine speed too high?	Adjust RPM.
	Governor actuator needs to be adjusted?	Adjust governor actuator.
	Governor controller needs to be adjusted?	Adjust governor controller.
	MPEC needs to be calibrated?	Refer to dealer.
Loss of MPU light(s) or on.	Magnetic pick up out of adjustment?	Adjust magnetic pick up.
	Magnetic pick up dirty?	Clean magnetic pick up.

EXPLANATION OF CODE IN REMARKS COLUMN

How to read the marks and remarks used in this parts book.

Items Found In the "Remarks" Column

Serial Numbers-Where indicated, this indicates a serial number range (inclusive) where a particular part is used.

Model Number-Where indicated, this shows that the corresponding part is utilized only with this specific model number or model number variant.

Items Found In the "Items Number" Column

All parts with same symbol in the number column, *, #, +, %, or ■, belong to the same assembly or kit.

Note: If more than one of the same reference number is listed, the last one listed indicates newest (or latest) part available.

DCA-600SSK W/KOMATSU SAD170AE-1DIESEL ENGINE 1 TO 3 UNITS

Qty. P/N Description

1 to 5 Units

Qty.	P/N	Description
3	6125817032	AIR FILTER
3	6003117111	FUEL FILTER
3	6002111231	OIL FILTER
3	6004111030	CARTRIDGE, CORROSION RESISTOR
1	0601805313	CIRCUIT BREAKER
1	0601810575	PILOT LAMP, ENGINE TROUBLE
1	0601810576	PILOT LAMP, ENGINE TROUBLE
1	0412222568	ENGINE FAN BELT
1	6008155390	SWITCH, STARTER
3	615	KEY SET, STARTER SWITCH (2)
2	0602122281	OIL SWITCH
1	6995621691	RADIATOR HOSE (UPPER)
1	6162639650	RADIATOR HOSE (LOWER)
1	0605505030	FUEL CAP
1	0601820625	AUTOMATIC VOLTAGE REGULATOR
1	0601807030	MAIN CIRCUIT BREAKER
1	0601805840	CIRCUIT BREAKER
1	0601802525	HANDLE, MAIN CIRCUIT BREAKER
1	0601840073	VOLTAGE REGULATOR (RHEOSTAT)
2	0601840121	KNOB, VOLTAGE REGULATOR
1	0601810072	PILOT LAMP
2	0601810261	BULB, PILOT LAMP
1	23S0311150M	CAP, RADIATOR
1	0602122203	UNIT, OIL PRESSURE
1	0602123206	UNIT, WATER TEMPERATURE
3	RR25P	FILTER ELEMENT, FUEL/WATER SEPARATOR
6	R2020PMOR	RACOR ELEMENT (2000 VERSION)

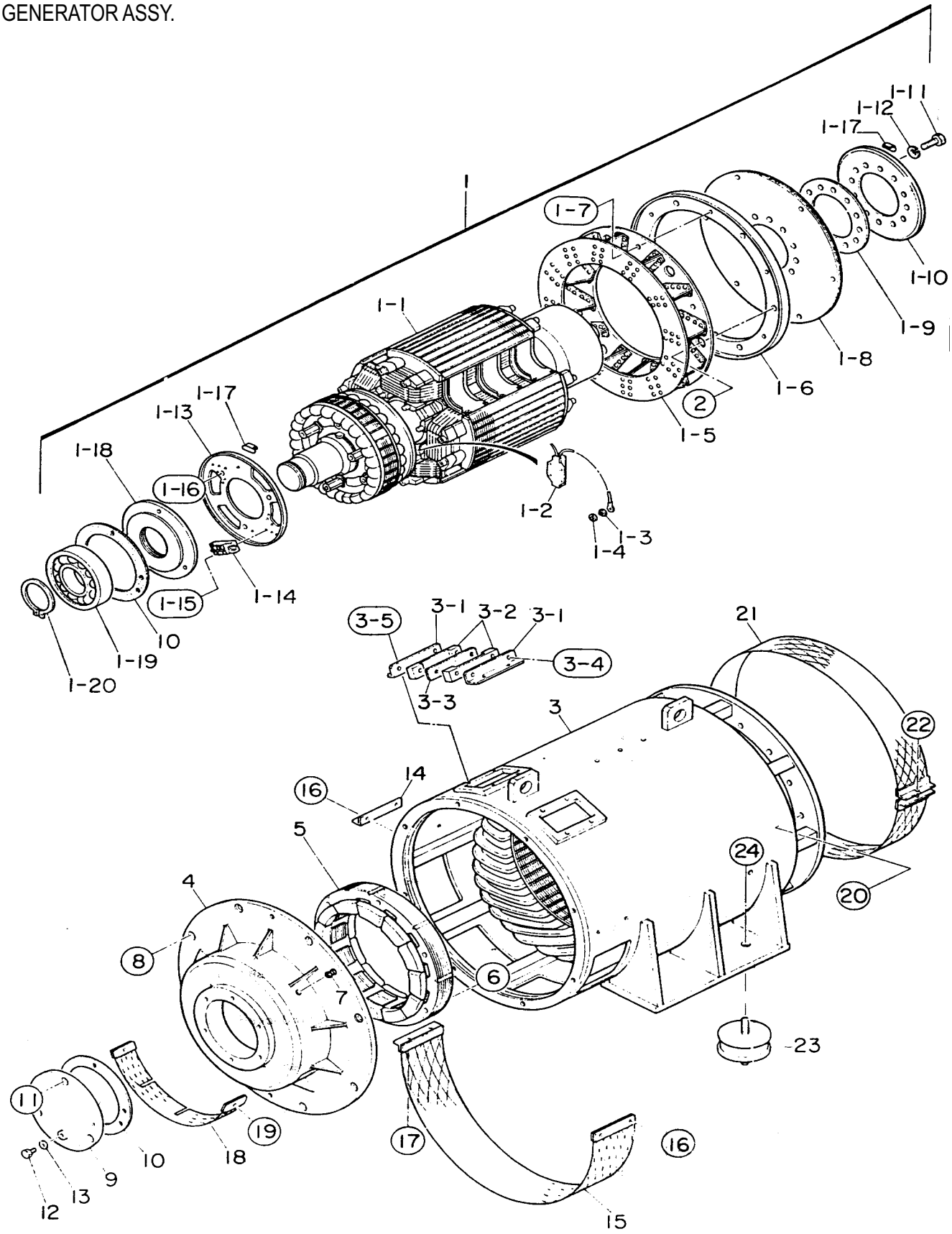
Full View

NOTE

Part number on this Suggested Spare Parts list may supercede/replace the P/N shown in the text pages of this book.

DCA-600SSK GENERATOR ASSY.

GENERATOR ASSY.



DCA-600SSK GENERATOR ASSY.

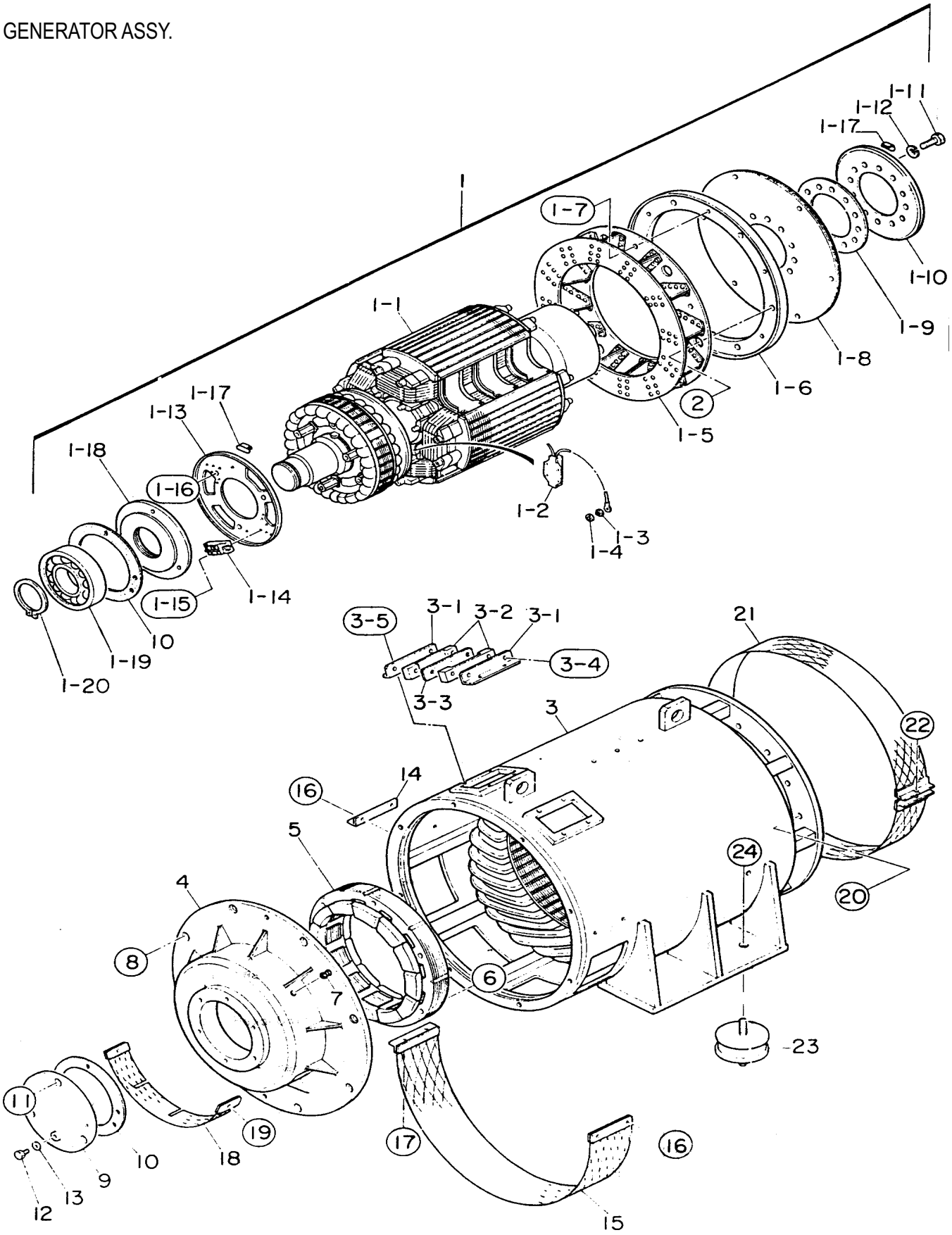
GENERATOR ASSY.

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	8461000002	ROTOR ASS'Y	1	
1-1		FIELD ASS'Y	1	
1-2	0601842366	RESISTOR	4	SMRK 80W 50 OHM K
1-3	8171020004	INSULATOR WASHER	6	
1-4	8171020504	INSULATOR WASHER	6	
1-5	8461070002	FAN	1	
1-6	8461614003	COUPLING RING	1	
1-7	012212025	HEX. HEAD BOLT	6	REPLACES 0010312025
	0042512000	LOCK WASHER	6	
1-8	C4163100004	COUPLING DISK ASS'Y	1	
1-9	8461612004	WASHER, COUPLING HUB	1	
1-10	8461015003	BALANCING PLATE	1	
1-11	0012120055	HEX. HEAD BOLT	12	
1-12	0042620000	LOCK WASHER	12	
1-13	8461026023	SET PLATE, RECTIFIER	1	
1-14	0601823282	RECTIFIER	2	RM50TC24
1-15	0018205020	HEX. SOCKET HEAD CAP SCREW	4	
	0032005000	LOCK WASHER	4	REPLACES 0040005000
	0401450050	PLAIN WASHER	4	REPLACES 0041205000
1-16	0010112020	HEX. HEAD BOLT	6	
	0040012000	LOCK WASHER	6	
1-17	0601000209	BALANCING WEIGHT KIT	1	
1-18	7431014003	BEARING FLANGE	1	
1-19	0070106321	BEARING	1	6321 Z
1-20	0080000105	SNAP RING	1	
2	0012116060	HEX, HEAD BOLT	6	
	0042516000	LOCK WASHER	6	
3	C4130100203	STATOR ASS'Y	1	
3-1	7431323003	CLAMPER	4	
3-2	7431323123	CLAMPER	4	
3-3	7431323204	CLAMPER	2	
3-4	0016310080	HEX. HEAD BOLT	4	
	020310080	HEX. NUT	4	REPLACES 0030010000
	0040010000	LOCK WASHER	8	
	031110160	PLAIN WASHER	4	REPLACES 0041210000
3-5	012210020	HEX. HEAD BOLT	8	REPLACES 0017110020
4	8461315002	END BRACKET	1	
5	C4137000003	FIELD ASS'Y, EXCITER	1	
6	0012110075	HEX. HEAD BOLT	6	
	0042610000	LOCK WASHER	6	
	031110160	PLAIN WASHER	6	REPLACES 0041210000
7	0845044904	GROMMET	1	

view

DCA-600SSK GENERATOR ASSY.

GENERATOR ASSY.



DCA-600SSK GENERATOR ASSY.

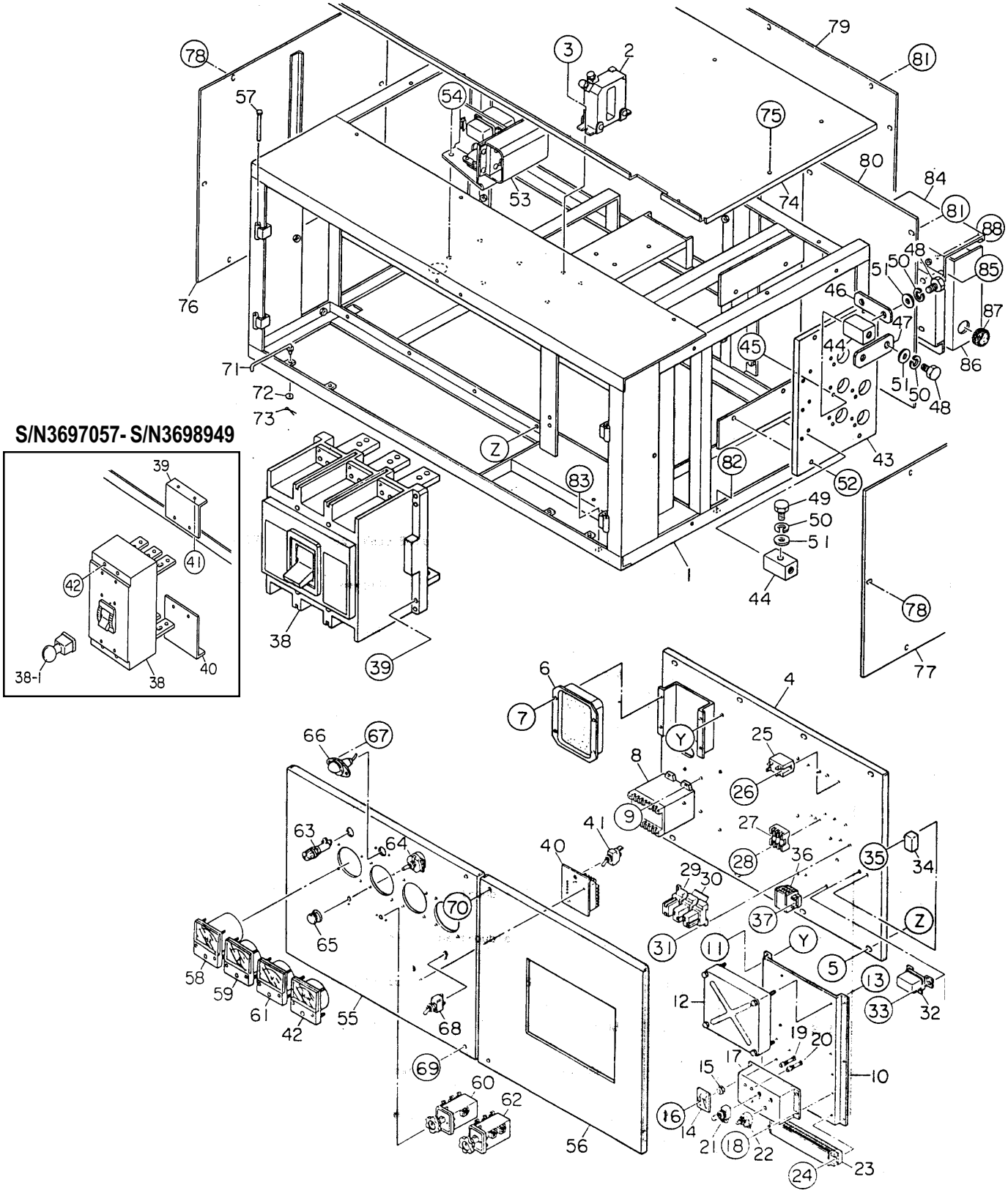
GENERATOR ASSY.

NO.	PART NO.	PART NAME	QTY.	REMARKS
8	0016316045	HEX. HEAD BOLT	8	
	0040016000	LOCK WASHER	8	
	0041216000	PLAIN WASHER	8	
9	7431310003	COVER, BEARING	1	
10	8461312004	GASKET, BEARING	2	
11	0016308095	HEX. HEAD BOLT	3	
	0040008000	LOCK WASHER	3	
	031108160	PLAIN WASHER	3	REPLACES 0041208000
12	0010110016	HEX. HEAD BOLT	1	
13	0803000104	PACKING	1	
14	8451335004	BRACKET, COVER	1	
15	8461334003	COVER, STATOR	1	
16	0105050616	HEX. HEAD BOLT	4	REPLACES 0017106012
17	0017106050	HEX. HEAD BOLT	2	
18	8461333003	COVER, EXCITER	1	
19	1015050616	HEX. HEAD BOLT	2	REPLACES 0017106012
20	0012112040	HEX. HEAD BOLT	16	
	0042512000	LOCK WASHER	16	
21	8461332003	COVER, FAN	1	
22	0017106050	HEX. HEAD BOLT	1	
23	0605000012	RUBBER SUSPENSION	4	
24	0030020000	HEX. NUT	8	
	0030220510	LOCK WASHER	8	REPLACES 0040020000

Full View

DCA-600SSK CONTROL BOX ASSY.

CONTROL BOX ASSY.



DCA-600SSK CONTROL BOX ASSY.

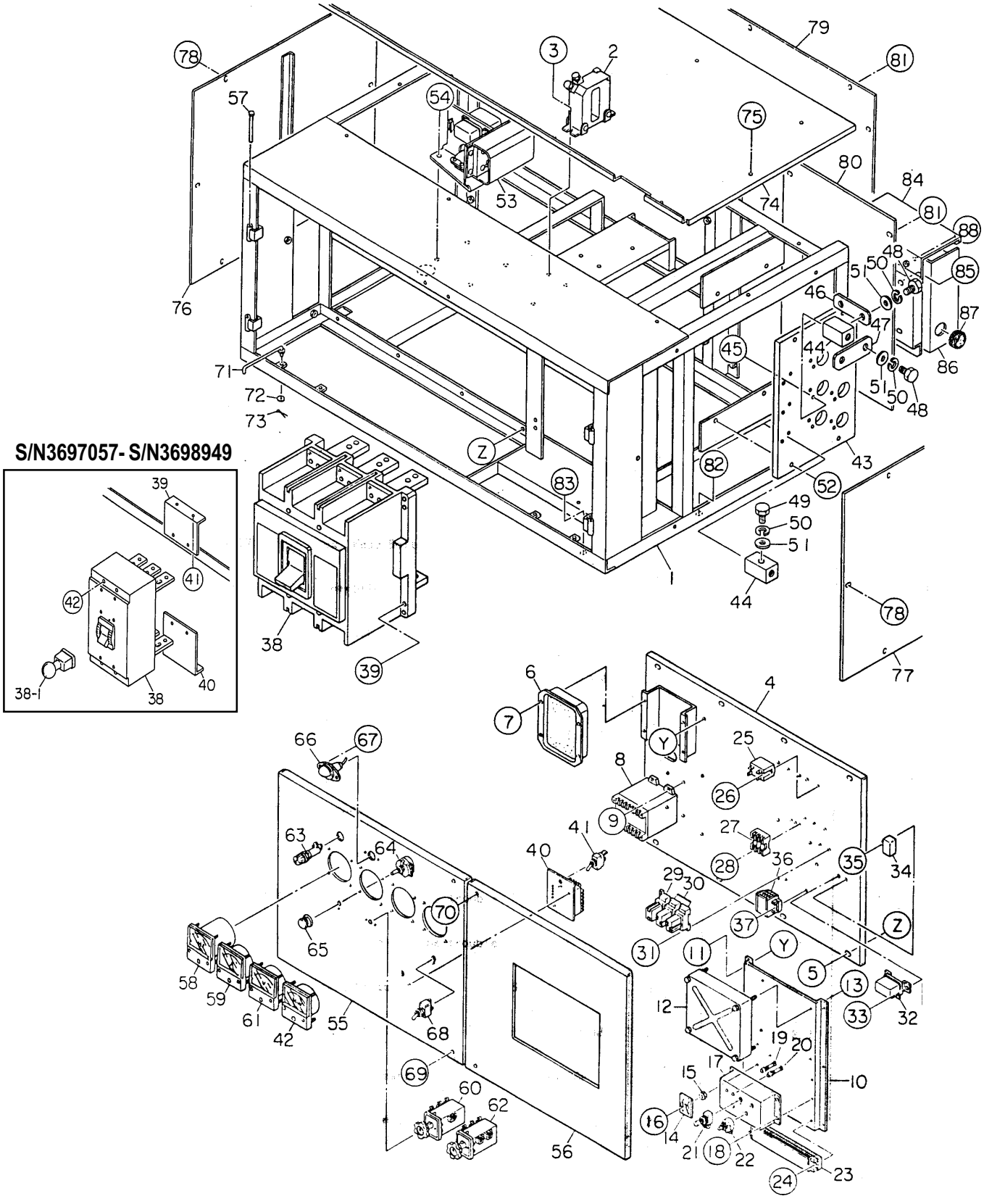
CONTROL BOX ASSY.

Full View

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	C4215000002	CONTROL BOX	1	S/N3698950~
1	8481812502	CONTROL BOX	1	S/N3697057 TO S/N3698949
2	0601806153	CURRENT TRANSFORMER, AMMETER	3	CW40LM 1200/SA
3	011008020	HEX. HEAD BOLT	6	REPLACES 0017108020
4	C4262500203	SET PANEL, ELECTRIC PARTS	1	S/N3698950~
4	C4262500003	SET PANEL, ELECTRIC PARTS	1	S/N3697057 TO S/N3698949
5	011208030	HEX. HEAD BOLT	8	REPLACES 0017108030
6	0601820625	AUTOMATIC VOLTAGE REGULATOR	1	NTA5A2T
7	0027105016	MACHINE SCREW	4	
8	0601808504	TRANSDUCER, WATTMETER;WT283S34	1	S/N3698950~
8	0601820892	OVER CURRENT RELAY;TH-N20HZKP	1	S/N3697057 S/N3698949
9	0027105020	MACHINE SCREW	2	S/N3698950~
9	0027104016	MACHINE SCREW	2	S/N3697057 TO S/N3698949
10	C5352800003	BRACKET	1	
11	0017106016	HEX. HEAD BOLT	6	
12	6162839180	CONTROLLER	1	REPLACES 0602202536
13	0207006000	HEX. NUT	4	
14	Z0110000904	RESISTOR UNIT	2	1/4W 560 OHM X 4
15	020106050	HEX. NUT	2	REPLACES 0030006000
16	0027105020	MACHINE SCREW	2	
17	C5352800104	BRACKET	1	
18	0017105016	HEX. HEAD BOLT	4	
19	0601810575	PILOT LAMP, ENGINE TROUBLE	1	KRE1084R DC24V
20	0601810576	PILOT LAMP, ENGINE TROUBLE	1	KRE1084G DC24V
21	0601831205	RESET SWITCH	1	SB221 N/O
22	0601840009	RHEOSTAT	2	RA20A2SE502BJ 2W 5K OHM
23	0601815802	TERMINAL BOARD	1	TS1.25 28P
24	0027104020	MACHINE SCREW	2	
25	0601823706	RELAY	2	HE1A
26	0027104014	MACHINE SCREW	4	
27	0601802133	FUSE (LEFT)	1	5A
	0601802165	FUSE	1	30A
	0601802149	FUSE (RIGHT)	1	10A
	0601802218	HOLDER, FUSE	1	
28	0027104020	MACHINE SCREW	3	
29	LY2US24VDC	RELAY	1	REPLACES 0601827655 S/N3698950~
29	LY2DC24V	RELAY	1	REPLACES 0601823732; S/N3697057 S/N3698949
	PTF08A	SOCKET	1	REPLACES 0601823109
	PYCA1	HOLDER	1	REPLACES 0601824400
30	MY4DC24V	RELAY	2	REPLACES 0601823759
	PYF14A	SOCKET	2	REPLACES 0601823146
	PYCA1	HOLDER	2	REPLACES 0601824400
31	0027104016	MACHINE SCREW	6	
32	1750733520	RELAY	1	REPLACES 0602201246
33	0017105016	HEX. HEAD BOLT	2	
34	0602201911	UNIT, BATTERY SENSOR	1	C7038A0000
35	011206020	HEX. HEAD BOLT	1	REPLACES 0017106020

DCA-600SSK CONTROL BOX ASSY.

CONTROL BOX ASSY.



DCA-600SSK CONTROL BOX ASSY.

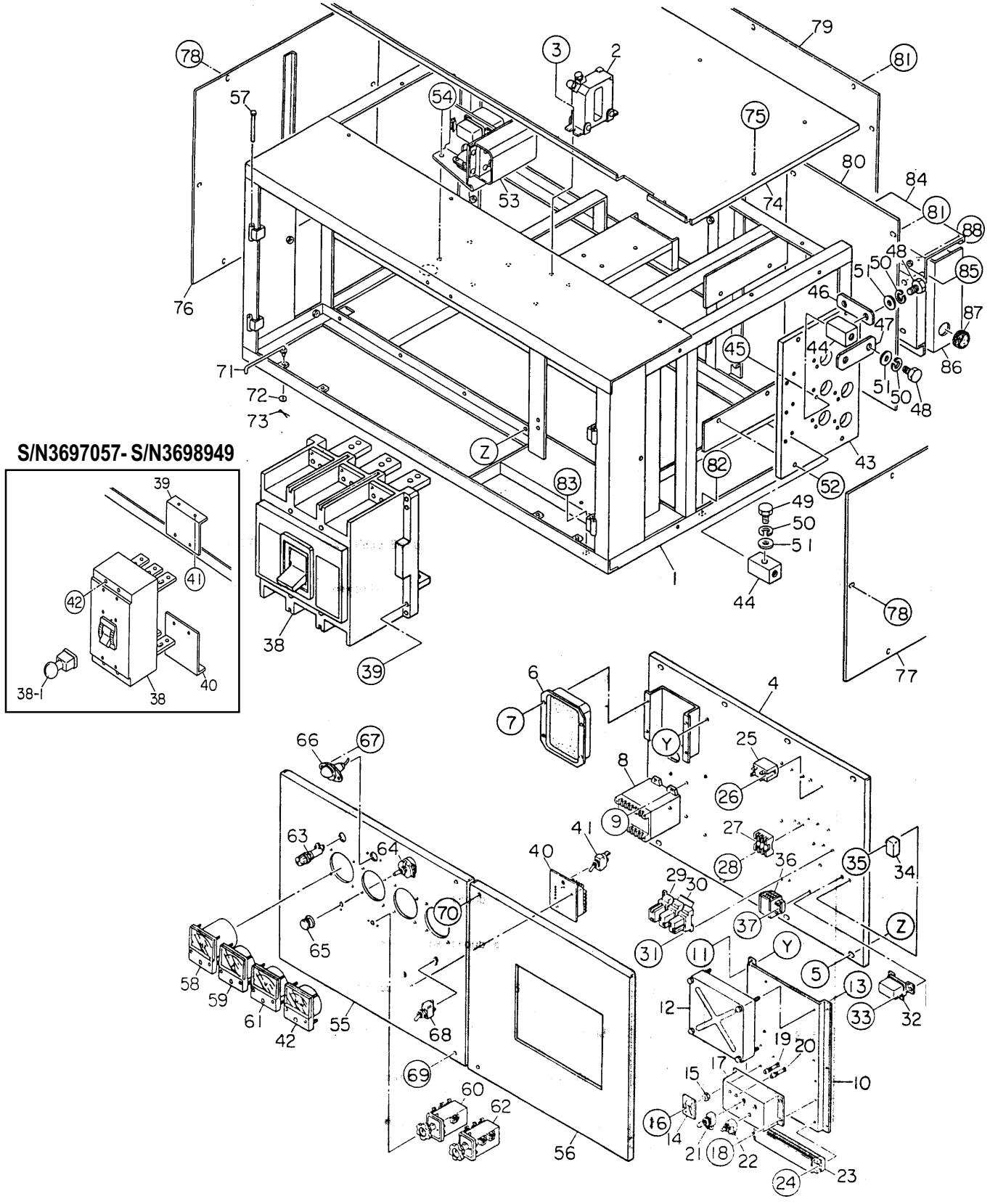
CONTROL BOX ASSY.

NO.	PART NO.	PART NAME	QTY.	REMARKS
36	0601815402	TERMINAL BOARD	1	TS14 4P
37	0027104020	MACHINE SCREW	2	
38	RD320T33W	CIRCUIT BREAKER	1	REPLACES 0601870400 S/N3698950~
38	0601807030	CIRCUIT BREAKER;XS1600NA 1600A	1	S/N3697057 TO S/N3698949
38-1	0601802525	HANDLE, CIRCUIT BREAKER	1	XHA9; S/N3697057 TO S/N3698949
39	0015310045	HEX. SOCKET HEAD SCREW	8	S/N3698950~
	0040010000	LOCK WASHER	8	S/N3698950~
	0041210000	PLAIN WASHER	8	S/N3698950~
39	7971816104	BRACKET, CIRCUIT BREAKER	1	S/N3697057 TO S/N3698949
40	ECU9988N	ENGINE CONTROLLER	1	REPLACES 0602202545 S/N3698950~
	0602120495	SEALED CABLE	1	S/N3698950~
	0602120494	SPEED SENSOR	1	S/N3698950~
40	ECU8899N	ENGINE CONTROLLER	1	REPLACES 0601827396; S/N3697057 TO S/N3698949
	0602120495	SEALED CABLE	1	S/N3697057 TO S/N3698949
	0602120494	SPEED SENSOR	1	S/N3697057 TO S/N3698949
41	0601830765	SWITCH	1	S303T; S/N3698950~
41	0601831340	SWITCH;82608DPDT	1	S/N3697057 TO S/N3698949
42	0601808703	WATTMETER;PXK100C60 ~600K	1	S/N3698950~
42	0021008045	MACHINE SCREW	4	S/N3697057 TO S/N3698949
	0030008000	HEX. NUT	4	S/N3697057 TO S/N3698949
	0040008000	LOCK WASHER	4	S/N3697057 TO S/N3698949
	0041208000	PLAIN WASHER	4	S/N3697057 TO S/N3698949
43	7431861113	CHANGE- OVER BOARD, VOLTAGE	1	
44	7431852104	CHANGE TERMINAL	10	
45	011208035	HEX. HEAD BOLT	20	REPLACES 0017108035
46	7971852504	TERMINAL PLATE	7	
47	7431853104	CHANGE PLATE	6	
48	0801832504	HEX. HEAD BOLT	17	
49	0801830904	HEX. HEAD BOLT	3	
50	0040020000	LOCK WASHER	20	
51	0041420000	PLAIN WASHER	20	
52	0010110040	HEX. HEAD BOLT	4	
	0040010000	LOCK WASHER	4	
	0041210000	PLAIN WASHER	4	
53	6008153600	APS UNIT	1	REPLACES 0602201245
54	0017110025	HEX. HEAD BOLT	4	
55	C4225000103	CONTROL PANEL	1	S/N3698950~
55	C4224001403	CONTROL PANEL	1	S/N3697057 TO S/N3698949
56	C4225000203	CONTROL PANEL	1	S/N3698950~
56	7971822603	CONTROL PANEL	1	S/N3697057 TO S/N3698949
56-1	0228800124	RUBBER SEAL	2	S/N3697057 TO S/N3698949
56-2	0228800100	RUBBER SEAL	2	S/N3697057 TO S/N3698949
57	0605011211	PIN	4	
58	0601800480	FREQUENCY METER	1	PAK100 45 ~65HZ 220V

Full View

DCA-600SSK CONTROL BOX ASSY.

CONTROL BOX ASSY.



DCA-600SSK CONTROL BOX ASSY.

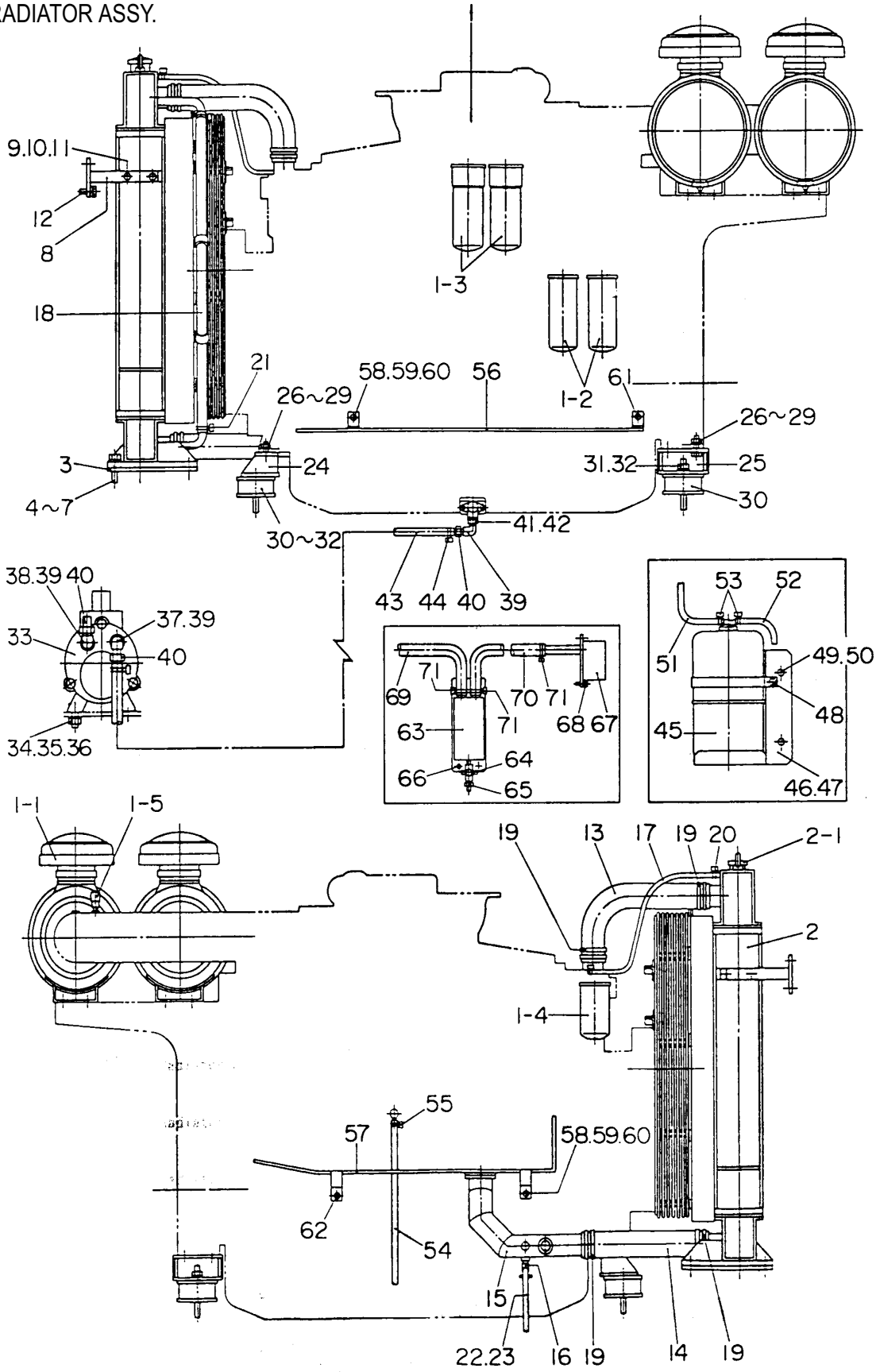
CONTROL BOX ASSY.

Full View

NO.	PART NO.	PART NAME	QTY.	REMARKS
59	0601800736	AC AMMETER	1	PSK100 0 ~1200A 0 ~2400A
60	0601801040	CHANGE- OVER SWITCH, AMMETER	1	SL2 AS
61	0601800252	AC VOLTMETER	1	PCK1000 ~ 600V
62	0601801041	CHANGE- OVER SWITCH, VOLTMETER	1	SL2 VS
63	0601810072	PILOT LAMP	1	LP132DC 220V
	0601810261	BULB	1	CT13W
64	0601840073	RHEOSTAT (VOLTAGE REGULATOR)	1	RA20A2SE102BJ 2W 1K OHM
65	0601840121	KNOB	1	
66	0601810161	PANEL LIGHT	1	V325070
	0601810214	BULB	1	
67	0030004000	HEX. NUT	2	REPLACES 0207004000
68	0601830710	SWITCH, PANEL LIGHT	1	S301T
69	C9221100004	HEX. HEAD BOLT	2	
	0040008000	LOCK WASHER	2	
	031108160	PLAIN WASHER	2	REPLACES 0041208000
	0080200007	SNAP RING	2	
70	C9221100004	HEX. HEAD BOLT	2	
	0040008000	LOCK WASHER	2	
	0311080160	PLAIN WASHER	2	REPLACES 0041208000
	0080200007	SNAP RING	2	
71	3871824004	STOPPER, CONTROL PANEL	2	
72	9524004470	PLAIN WASHER	2	REPLACES 0041206000
73	505015300	SNAP PIN	2	REPLACES 0605010502
74	8481814503	COVER, CONTROL BOX	1	
75	011008020	HEX. HEAD BOLT	10	REPLACES 0017108020
76	8481812104	SIDE PANEL, CONTROL BOX	1	
77	C4215300004	SIDE PANEL, CONTROL BOX	1	
78	011008020	HEX. HEAD BOLT	12	REPLACES 0017108020
79	8481825104	PANEL, CONTROL BOX	1	
80	C4215400004	PANEL, CONTROL BOX	1	
81	011008020	HEX. HEAD BOLT	15	REPLACES 0017108020
82	012010030	HEX. HEAD BOLT	5	REPLACES 0017110030
83	011008020	HEX. HEAD BOLT	3	REPLACES 0017108020
84	C426260004	BRACKET, BATTERY CHARGER	1	
85	011008020	HEX. HEAD BOLT	4	REPLACES 0017108020
86	RC24102011U	BATTERY CHARGER	1	REPLACES 0601823091
87	0601850263	GROMMET	2	
88	0017106016	HEX. HEAD BOLT	4	

DCA-600SSK ENGINE AND RADIATOR ASSY.

ENGINE & RADIATOR ASSY.



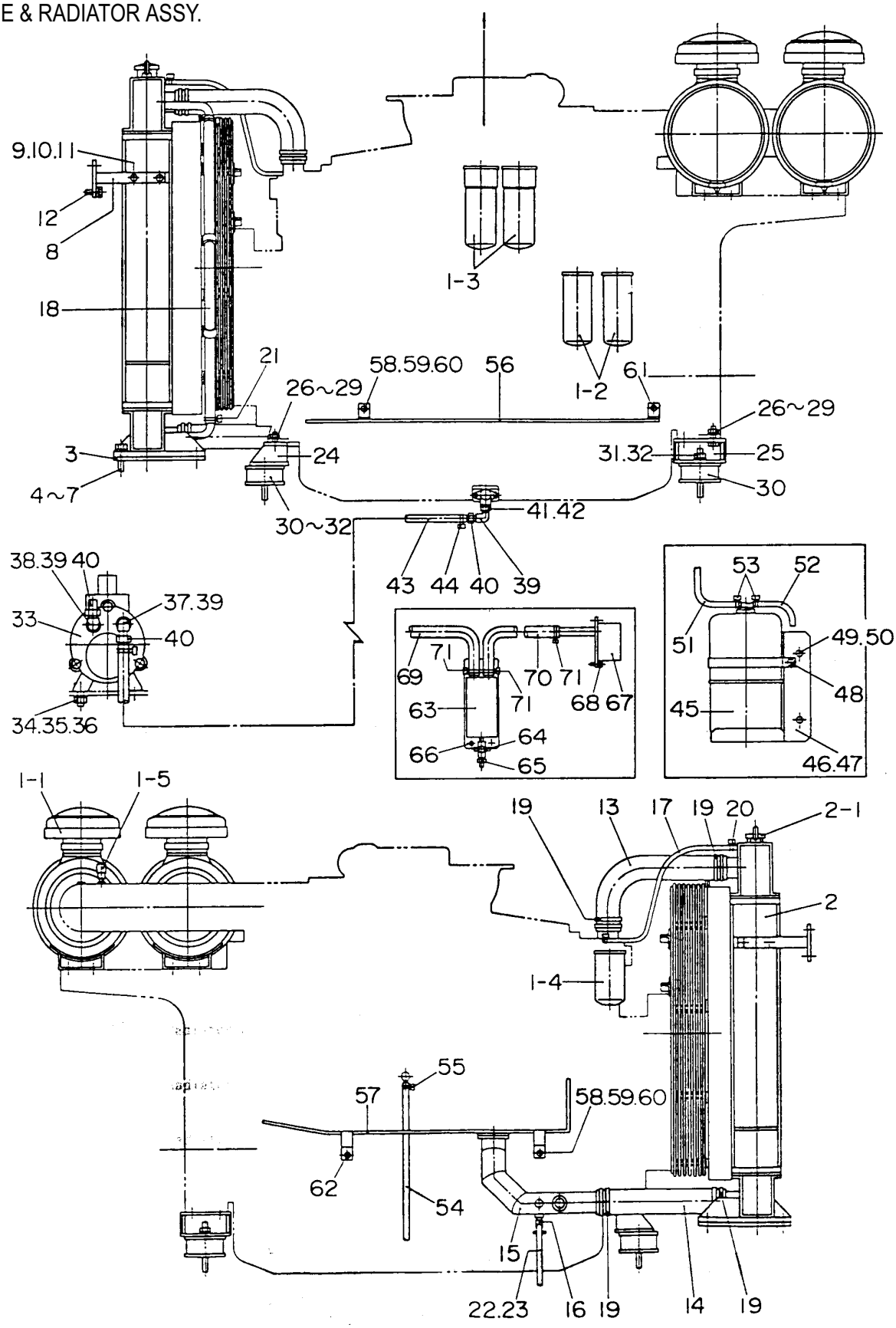
DCA-600SSK ENGINE AND RADIATOR ASSY.

ENGINE & RADIATOR ASSY.

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	C4925200014	ENGINE	1	KOMATSU SA6D170AE- 1
1-1	6125817032	ELEMENT, AIR CLEANER	2	REPLACES 0602040156
1-2	6002111231	CARTRIDGE, OIL FILTER	2	REPLACES 0602041146
1-3	6003117111	CARTRIDGE, FUEL FILTER	1	REPLACES 0602042155
1-4	6004111030	CARTRIDGE, CORROSION RESISTOR	1	REPLACES 0602045149
1-5	6008157930	DUST SENSOR	1	REPLACES 0602040647
2	6162639171	RADIATOR	1	REPLACES 0602011986
2-1	23S0311150M	CAP, RADIATOR	1	REPLACES 0602011058
3	6995621350	RUBBER SHEET	2	REPLACES 0605000098
4	0010118100	HEX. HEAD BOLT	8	
5	0030018000	HEX. NUT	16	
6	0040018000	LOCK WASHER	8	
7	0041218000	PLAIN WASHER	16	
8	8495123004	BRACKET, RADIATOR	2	
9	0010112025	HEX. HEAD BOLT	4	
10	0040012000	LOCK WASHER	4	
11	0041212000	PLAIN WASHER	4	
12	0017110025	HEX. HEAD BOLT	4	
13	6995621691	RADIATOR HOSE, UPPER	1	REPLACES 0602014517
14	6162639650	RADIATOR HOSE, LOWER	1	REPLACES 0602014649
15	6162639640	RADIATOR PIPE	1	REPLACES 0602013305
16	0773050004	DRAIN VALVE	1	REPLACES 0602012054
17	0726120911	RADIATOR HOSE	1	REPLACES 0602014541
18	6128619650	RADIATOR HOSE	1	REPLACES 0602013954
19	0728101029	HOSE BAND	8	REPLACES 0602014350
20	0728100197	HOSE BAND	2	REPLACES 0602014058
21	0728100489	HOSE BAND	2	REPLACES 0602014351
22	0727061510	DRAIN HOSE	1	REPLACES 0602014648
23	0728012123	HOSE BAND	1	REPLACES 0602014055
24	7435112004	ENGINE FOOT	1	
25	8485112004	ENGINE FOOT	2	
26	0010118060	HEX. HEAD BOLT	6	
27	0030018000	HEX. NUT	6	
28	0040018000	LOCK WASHER	6	
29	0041218000	PLAIN WASHER	6	
30	0605000012	RUBBER SUSPENSION	4	
31	0030020000	HEX. NUT	8	
32	030220510	LOCK WASHER	8	REPLACES 0040020000
33	0602023160	PUMP	1	GM- 2524H
34	0010108025	HEX. HEAD BOLT	4	
35	031108160	PLAIN WASHER	4	REPLACES 0041208000

DCA-600SSK ENGINE AND RADIATOR ASSY.

ENGINE & RADIATOR ASSY.



DCA-600SSK ENGINE AND RADIATOR ASSY.

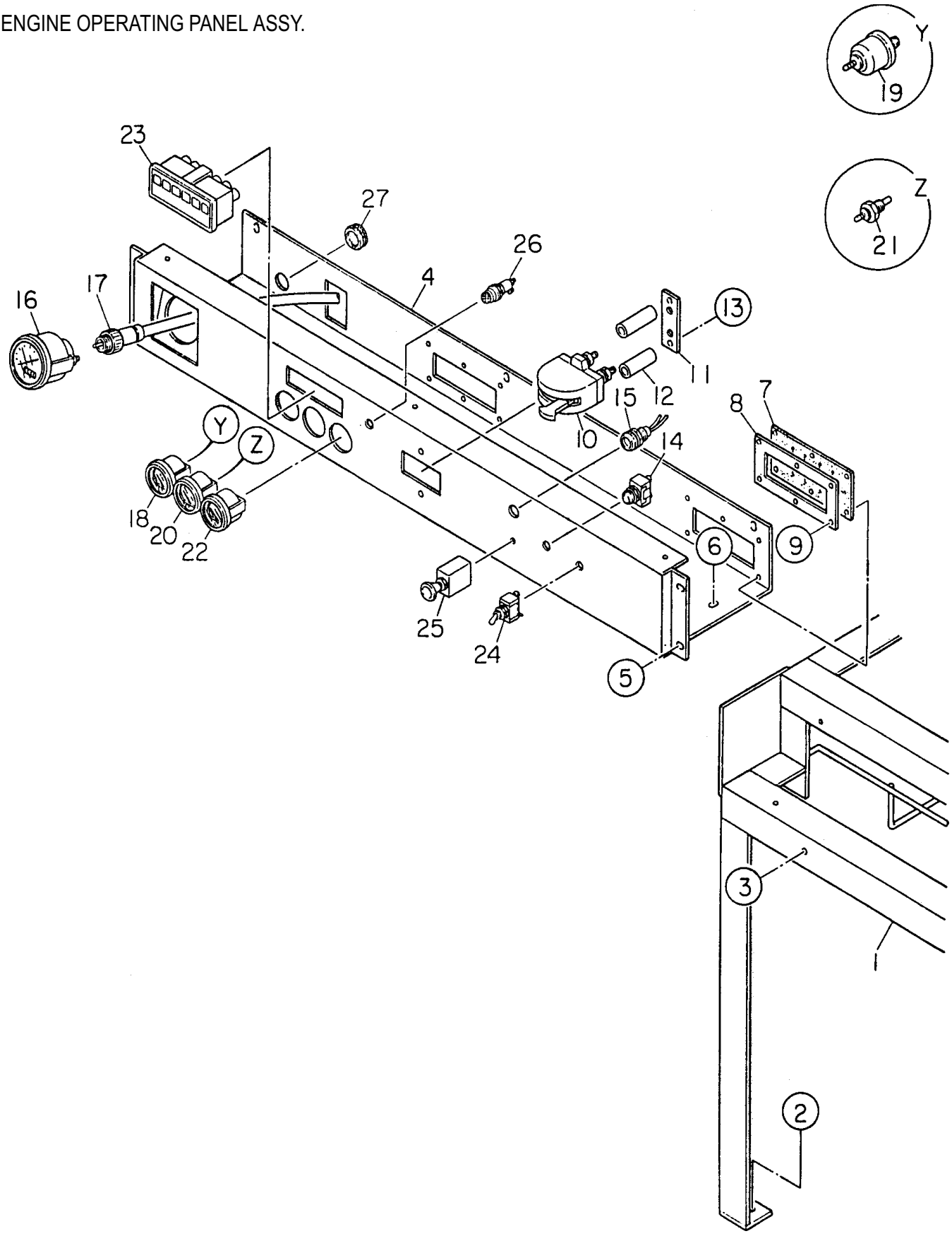
ENGINE & RADIATOR ASSY.

Full View

NO.	PART NO.	PART NAME	QTY.	REMARKS
36	020108060	HEX. NUT	4	REPLACES 0207008000
37	0131710060	BUSHING	1	1X1/2
38	0131708060	BUSHING	1	3/4X1/2
39	0130206000	STREET ELBOW	3	1/2
40	0602022202	HOSE JOINT	3	
41	3502054124	DRAIN JOINT	1	
42	0802024004	PACKING	1	
43	0191601350	HOSE	1	
44	0605515134	HOSE BAND	2	
45	0602010230	RESERVE TANK	1	022810 4860
46	8492082103	BRACKET, RESERVE TANK	1	
47	0229200700	RUBBER CUSHION	1	
48	0017106030	HEX. HEAD BOLT	1	
49	0021108020	MACHINE SCREW	2	
50	020108060	HEX. NUT	1	REPLACES 0207008000
51	0199601200	HOSE	1	
52	0194001600	HOSE	1	
53	0605515013	HOSE BAND	3	
54	0194201000	HOSE	1	
55	0605515019	HOSE BAND	1	
56	8482256304	CLAMPER ROD	1	
57	8482256104	CLAMPER ROD	1	
58	0010118040	HEX. HEAD BOLT	2	
59	0040018000	LOCK WASHER	2	
60	0041218000	PLAIN WASHER	2	
61	0017110025	HEX. HEAD BOLT	1	
62	0017112025	HEX. HEAD BOLT	1	
63	C4325100003	OIL MIST TANK	1	S/N3698950~
64	0603325011	VALVE;BBS7715	1	S/N3698950~
65	0602022293	HOSE JOINT	1	S/N3698950~
66	011008020	HEX. HEAD BOLT	4	REPLACES 0017108020 S/N3698950~
67	C4328100003	BREATHER PIPE	1	S/N3698950~
68	0017110025	HEX. HEAD BOLT	2	S/N3698950~
69	0269802300	HOSE	1	S/N3698950~
70	0269800800	HOSE	1	S/N3698950~
71	0605515212	HOSE BAND	4	S/N3698950~

DCA-600SSK ENGINE OPERATING PANEL ASSY.

ENGINE OPERATING PANEL ASSY.



DCA-600SSK ENGINE OPERATING PANEL ASSY.

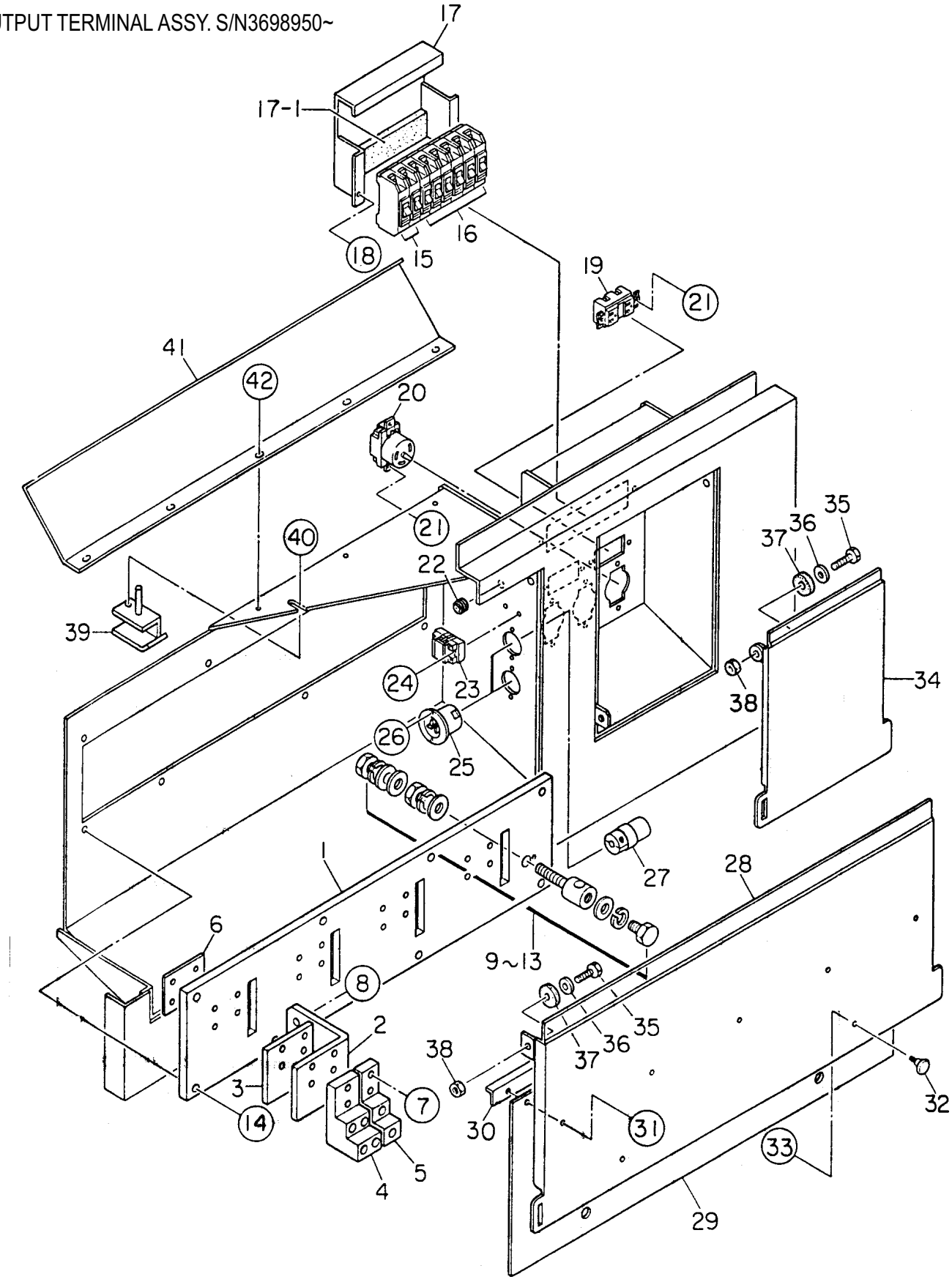
ENGINE OPERATING PANEL ASSY.

Full View

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	C4484000602	SUPPORT LEG	1	
2	012212035	HEX. HEAD BOLT	4	REPLACES 0010012035
	0030012000	HEX. NUT	4	
	0040012000	LOCK WASHER	4	
	031112230	PLAIN WASHER	4	REPLACES 0041212000
3	0017110025	HEX. HEAD BOLT	2	
4	C4353100003	OPERATING PANEL	1	
5	011008020	HEX. HEAD BOLT	4	REPLACES 0017108020
6	011008020	HEX. HEAD BOLT	6	REPLACES 0017108020
7	8085182004	RUBBER COVER	2	
8	8085183004	SET FRAME, RUBBER COVER	2	
9	011206020	HEX. HEAD BOLT	12	REPLACES 0017106020
10	0315262002	BATTERY SWITCH	1	REPLACES 0602101012
11	0805008804	SET PLATE, BATTERY SWITCH	1	
12	0805008704	STAY, BATTERY SWITCH	2	
13	0021008070	MACHINE SCREW	2	
	0040008000	WASHER	2	
	031108160	PLAIN WASHER	2	REPLACES 0041208000
14	0806410000	EMERGENCY STOP BUTTON	1	REPLACES 0602104045
15	0814721200	PREHEAT LAMP	1	REPLACES 0602103043
16	0602120054	TACHOMETER	1	25000KX4110
17	0602120165	CABLE, TACHOMETER	1	62500KA8610 L=3500
18	0602122060	OIL PRESSURE GAUGE	1	42000KX1410
19	0602122203	UNIT, OIL PRESSURE	1	53600KX0501
20	0602123061	WATER TEMPERATURE GAUGE	1	40000KX0910
21	0602123206	UNIT, WATER TEMPERATURE	1	751400KS0600
22	0602121052	CHARGING AMMETER	1	43000- KV0300
23	0602115014	ENGINE WARNING DISPLAY	1	V3376600000
24	0601830710	ENGINE SPEED SWITCH	1	S301T
25	0806130070	PREHEATING SWITCH	1	REPLACES 0602210649
26	0602103091	DETECTED LAMP, FUEL LEAK	1	REPLACES 0602103090
	0601810244	BULB	1	
27	0601850267	GROMMET	1	

DCA-600SSK OUTPUT TERMINAL ASSY.

OUTPUT TERMINAL ASSY. S/N3698950~



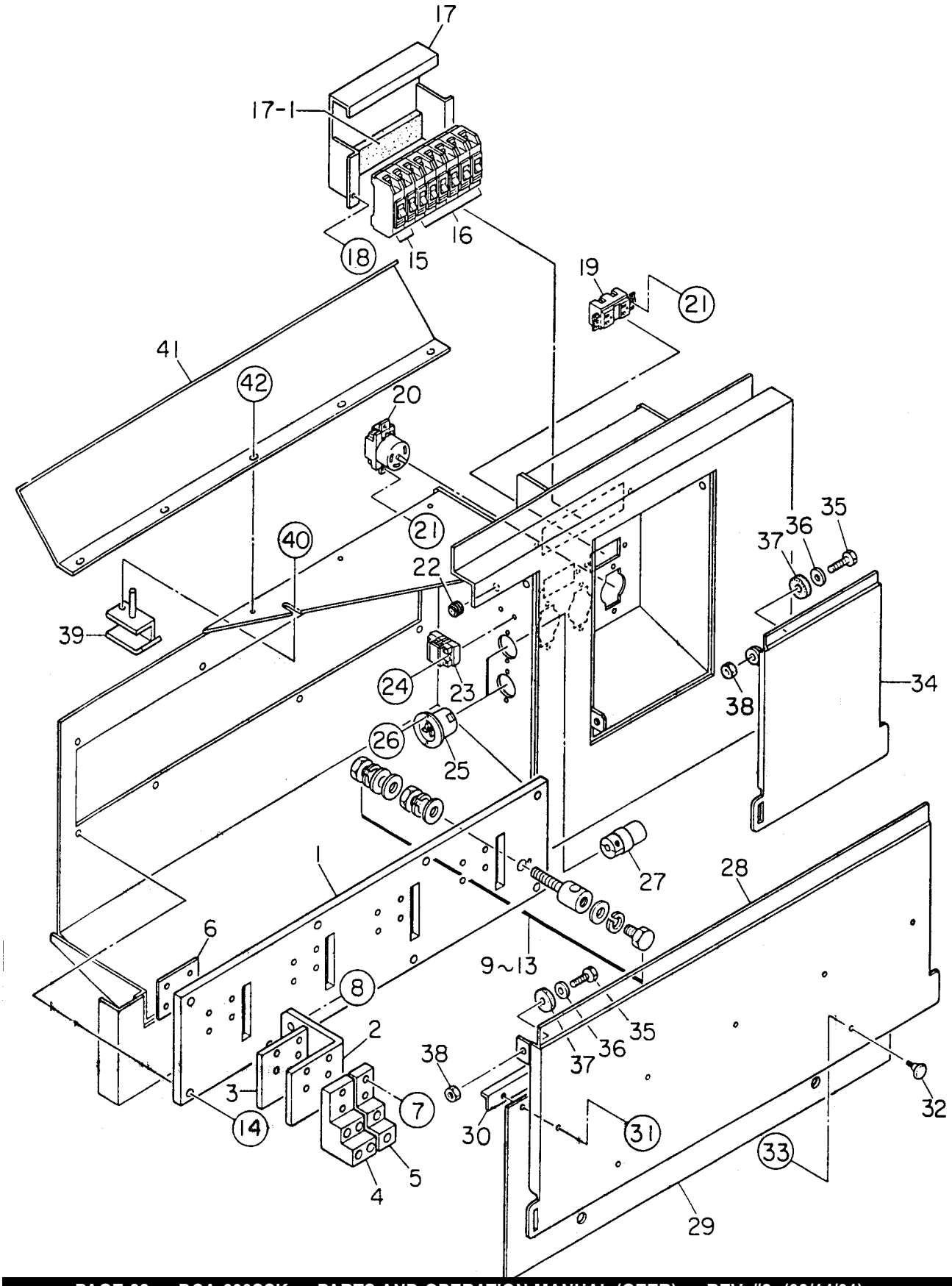
DCA-600SSK OUTPUT TERMINAL ASSY.

OUTPUT TERMINAL ASSY.S/N3698950~

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	C4232700003	SET BOARD, OUTPUT TERMINAL	1	
2	C4235200004	PLATE, OUTPUT TERMINAL	4	
3	C4235500004	SPACER	4	
4	K22A36U2	UNIVERSAL TERMINAL	4	REPLACES 0601815177
5	K11A36U2	UNIVERSAL TERMINAL	4	REPLACES 0601815178
6	C4235500104	PLATE	4	
7	0342410090	HEX. HEAD BOLT	16	
	020310080	HEX. NUT	16	REPLACES 0030010000
	0040010000	LOCK WASHER	32	
	031110160	PLAIN WASHER	16	REPLACES 0041210000
8	0010112040	HEX. HEAD BOLT	8	
	0030012000	HEX. NUT	8	
	0040012000	LOCK WASHER	8	
	031112230	PLAIN WASHER	16	REPLACES 0041212000
9	0801830404	TERMINAL	1	
10	0801830904	HEX. HEAD BOLT	1	
11	0039320000	HEX. NUT	2	
12	030220510	LOCK WASHER	3	REPLACES 0040020000
13	0041420000	PLAIN WASHER	4	
14	0019112050	HEX. HEAD BOLT	8	
	0042312000	LOCK WASHER	8	
	0042412000	PLAIN WASHER	8	
15	0601804887	CIRCUIT BREAKER;KM51B 265V 20A	2	REPLACES 0601805313
16	0601805840	CIRCUIT BREAKER;KM52 265V 50A	3	
17	C4261601203	BRACKET, CIRCUIT BREAKER	1	
17-1	0223300200	RUBBER CUSHION	1	
18	0017106030	HEX. HEAD BOLT	2	
19	0601812597	RECEPTACLE;GF530EM	2	REPLACES 0601812598
20	0601811034	RECEPTACLE;CS6369	3	REPLACES 0601812565
21	0027104016	MACHINE SCREW	10	
	0030004000	HEX. NUT	10	
	031104080	PLAIN WASHER	10	REPLACES 0041204000
22	0601850275	GROMMET	1	
23	0601815324	TERMINAL BOARD	1	TS22P
24	0027104020	MACHINE SCREW	2	

DCA-600SSK OUTPUT TERMINAL ASSY.

OUTPUT TERMINAL ASSY. S/N3698950~



DCA-600SSK OUTPUT TERMINAL ASSY.

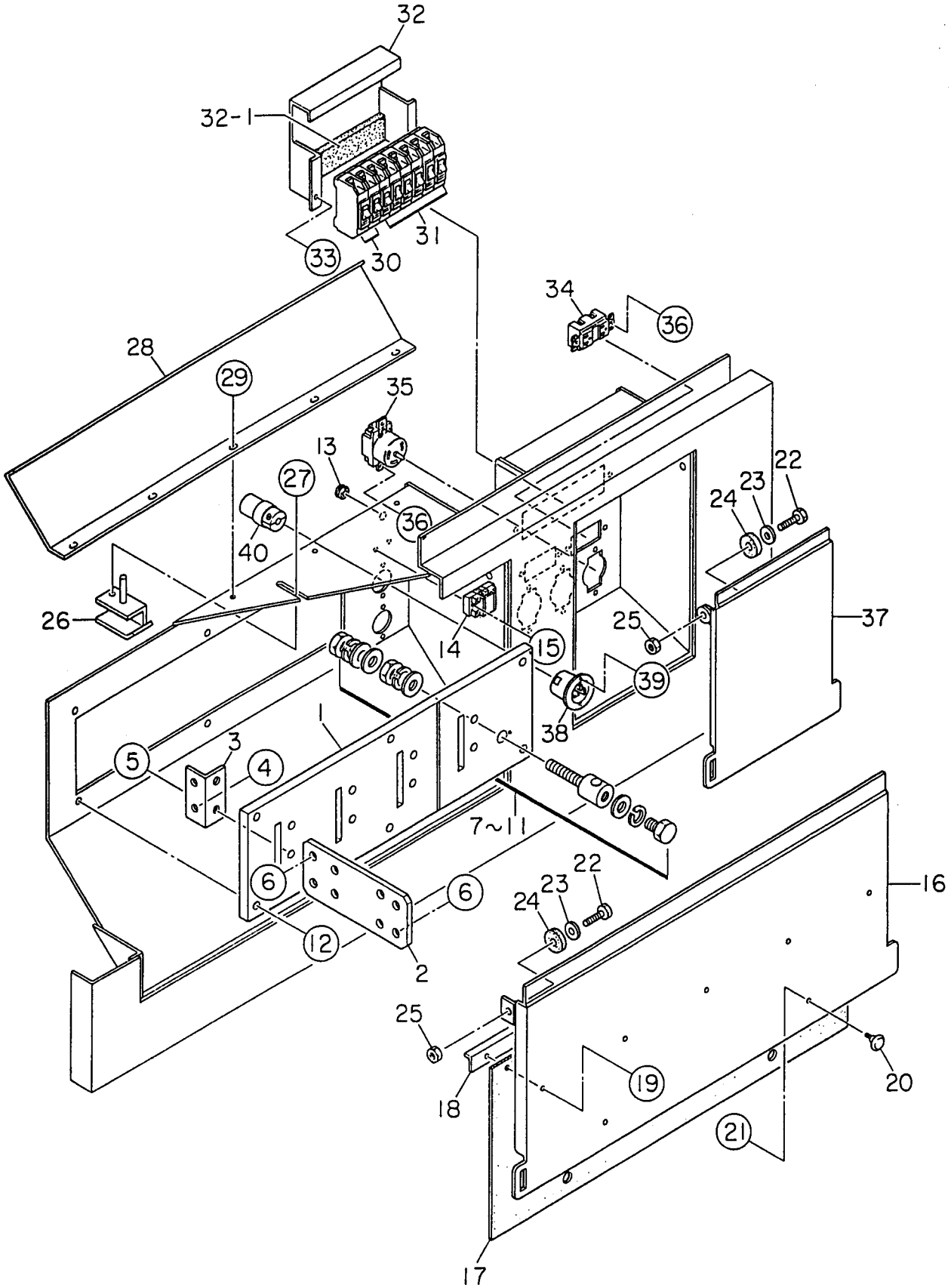
OUTPUT TERMINAL ASSY. S/N3698950~

NO.	PART NO.	PART NAME	QTY.	REMARKS
25	0601811189	PLUG	2	HBL5378C 125V 20A
26	0027103010	MACHINE SCREW	4	
27	0601812537	RECEPTACLE	1	HBL5369C 125V 20A
28	C4238100004	COVER, OUTPUT TERMINAL	1	
29	C4238400004	RUBBER SHEET	1	
30	C4238400104	SET PLATE, RUBBER SHEET	1	
31	0019106020	HEX. HEAD BOLT	5	
	0042306000	LOCK WASHER	5	
	0042406000	PLAIN WASHER	5	
32	0605010660	KNOB	2	KMM21XM6
33	0207006000	HEX.NUT	2	
34	C4237101203	COVER	1	
35	012212045	HEX. HEAD BOLT	4	REPLACES 0010112045
36	031112230	PLAIN WASHER	4	REPLACES 0041212000
37	0805009804	STAY RUBBER	4	
38	0030012000	HEX. NUT	4	
39	7521865603	STOPPER	1	
40	0010108030	HEX. HEAD BOLT	1	
	020108060	HEX. NUT	1	REPLACES 0030008000
	031108160	PLAIN WASHER	2	REPLACES 0041208000
41	C4238100104	COVER	1	
42	011008020	HEX. HEAD BOLT	5	REPLACES 0017108020

Full View

DCA-600SSK OUTPUT TERMINAL ASSY.

OUTPUT TERMINAL ASSY. S/N3697057 TO S/N3698949



DCA-600SSK OUTPUT TERMINAL ASSY.

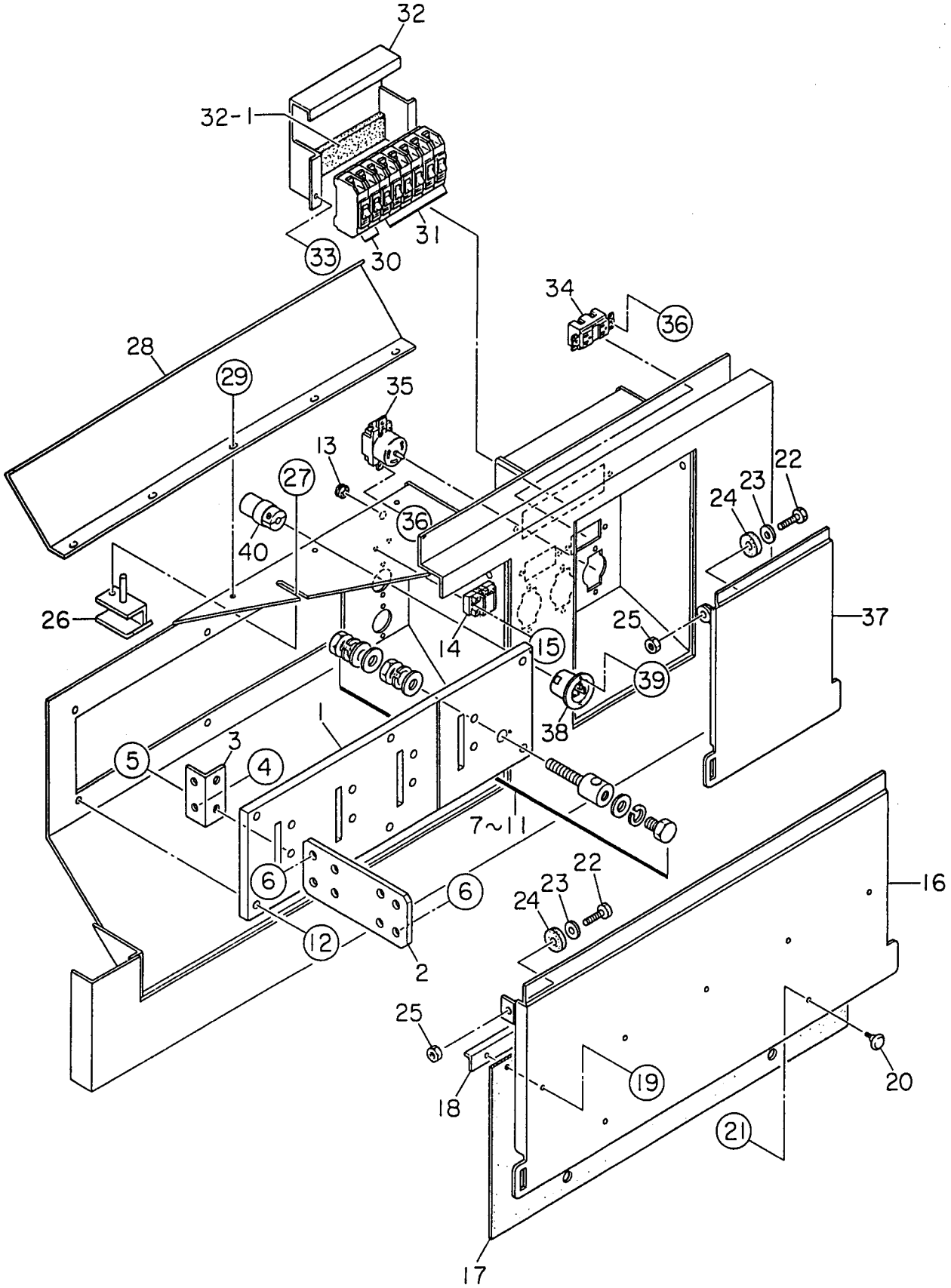
Full View

OUTPUT TERMINAL ASSY.S/N3697057 TO S/N3698949

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	C4231700603	SET BOARD, OUTPUT TERMINAL	1	
2	7521860504	OUTPUT TERMINAL	4	
3	7521850504	BRACKET, OUTPUT TERMINAL	4	
4	0010112040	HEX. HEAD BOLT	8	
	0030012000	HEX. NUT	8	
	0040012000	LOCK WASHER	8	
	031112230	PLAIN WASHER	8	REPLACES 0041212000
5	012212045	HEX. HEAD BOLT	8	REPLACES 0010112045
	0030012000	HEX. NUT	8	
	0040012000	LOCK WASHER	8	
	031112230	PLAIN WASHER	8	REPLACES 0041212000
6	0010112040	HEX. HEAD BOLT	24	
	0030012000	HEX. NUT	24	
	0040012000	LOCK WASHER	24	
	031112230	PLAIN WASHER	48	REPLACES 0041212000
7	0801830404	TERMINAL	1	
8	0801830904	HEX. HEAD BOLT	1	
9	0039320000	HEX. NUT	2	
10	030220510	LOCK WASHER	3	REPLACES 0040020000
11	0041420000	PLAIN WASHER	4	
12	0010112050	HEX. HEAD BOLT	6	
	0040012000	LOCK WASHER	6	
	031112230	PLAIN WASHER	12	REPLACES 0041212000
13	0601850275	GROMMET	1	
14	0601815324	TERMINAL BOARD	1	TS2SP
15	0027104020	MACHINE SCREW	2	
16	C4237101304	COVER, OUTPUT TERMINAL	1	
17	7971867114	RUBBER SHEET	1	
18	7521865804	SET PLATE, RUBBER SHEET	1	
19	0019106020	HEX. HEAD BOLT	5	
	0042306000	LOCK WASHER	5	
	0042406000	PLAIN WASHER	5	
20	0605010660	KNOB	2	
21	0207006000	HEX. NUT	2	
22	012212045	HEX. HEAD BOLT	4	REPLACES 0010112045
23	0311122230	PLAIN WASHER	4	REPLACES 0041212000
24	0805009804	STAY RUBBER	4	
25	0030012000	HEX. NUT	4	
26	7521865603	STOPPER	1	
27	0010108030	HEX. HEAD BOLT	1	
	020108060	HEX. NUT	1	REPLACES 0030008000
	031108160	PLAIN WASHER	2	REPLACES 0041208000
28	C4237100504	COVER	1	

DCA-600SSK OUTPUT TERMINAL ASSY.

OUTPUT TERMINAL ASSY. S/N3697057 TO S/N3698949



DCA-600SSK OUTPUT TERMINAL ASSY.

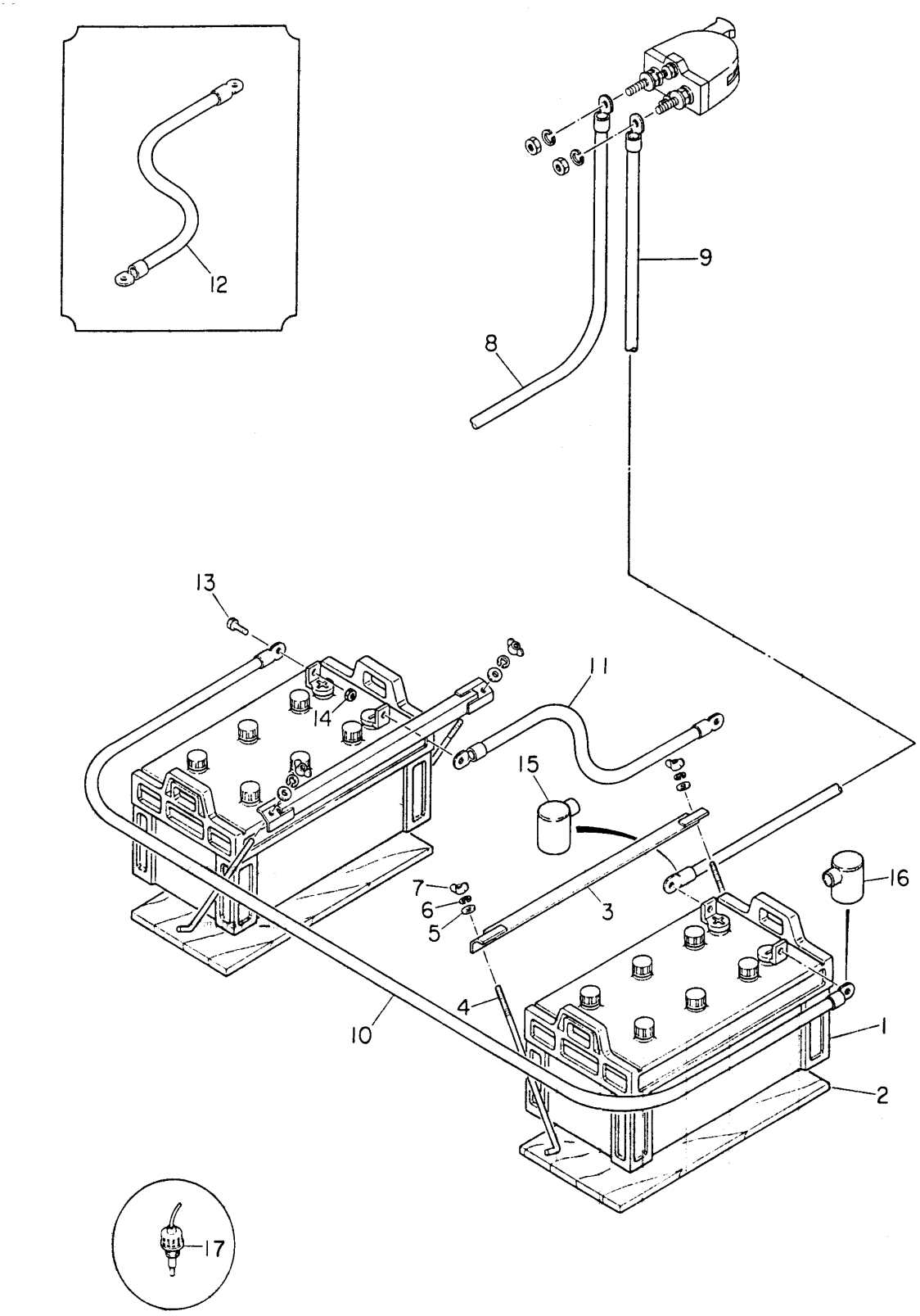
OUTPUT TERMINAL ASSY.S/N3697057 TO S/N3698949

Full View

NO.	PART NO.	PART NAME	QTY.	REMARKS
29	011008020	HEX. HEAD BOLT	5	REPLACES 0017108020
30	0601804887	CIRCUIT BREAKER;KM51 265V 20A	2	REPLACES 0601805313
31	0601805840	CIRCUIT BREAKER;KM52 265V 50A	3	
32	C4261601203	BRACKET, CIRCUIT BREAKER	1	
32-1	0223300200	RUBBER CUSHION	1	
33	0017106030	HEX. HEAD BOLT	2	
34	0601812597	RECEPTACLE;GF530EM	2	REPLACES 0601812598
35	0601811034	RECEPTACLE;CS6369	3	REPLACES 0601812565
36	0027104016	MACHINE SCREW	10	
	0030004000	HEX. NUT	10	
	0041204000	PLAIN WASHER	10	
37	C4237101203	COVER	1	
38	0601811189	RECEPTACLE	2	HBL5378C 125V 20A
39	0027103010	MACHINE SCREW	4	
40	0601812537	ADAPTER	1	HBL5369C 125V 20A

DCA-600SSK BATTERY ASSY.

BATTERY ASSY.



DCA-600SSK BATTERY ASSY.

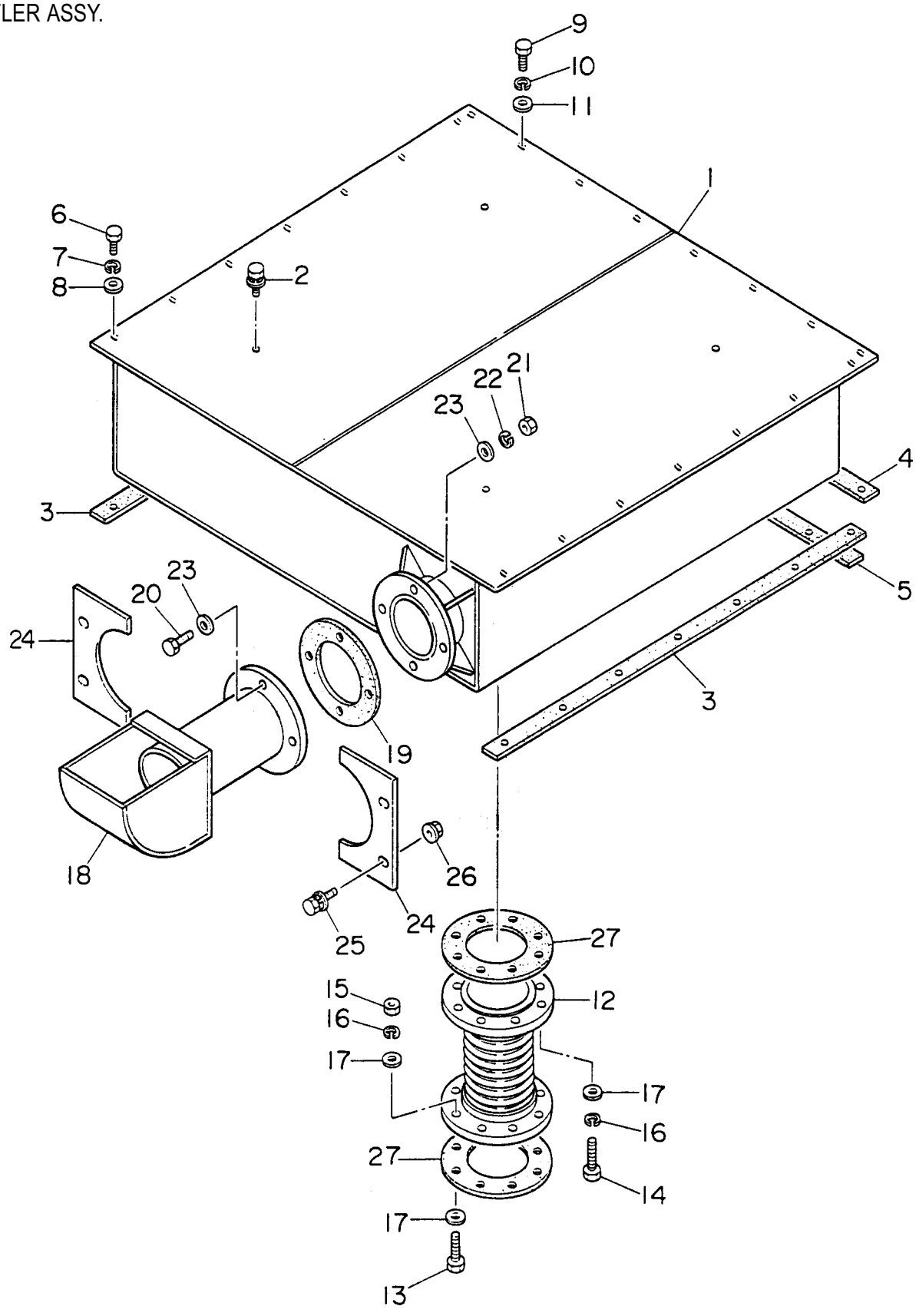
BATTERY ASSY.

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	0168719052	BATTERY	2	190H52
2	0805018904	BATTERY SHEET	2	
3	0805007804	BATTERY BAND	2	
4	0805006504	BATTERY BOLT	4	
5	0037808000	WING NUT	4	
6	0040008000	LOCK WASHER	4	
7	031108160	PLAIN WASHER	4	REPLACES 0041208000
8	8472280104	BATTERY CABLE	1	
9	8482280304	BATTERY CABLE	1	
10	7432280504	BATTERY CABLE	1	
11	7432280904	BATTERY CABLE	1	
12	7432281104	EARTH CABLE	1	
13	0347010030	HEX. HEAD BOLT	4	
14	0208110000	HEX. NUT	4	
15	0845040114	TERMINAL CAP (+)	1	
16	0845041004	TERMINAL CAP (-)	1	
17	0602220205	BATTERY SENSOR	1	AISP

Full View

DCA-600SSK MUFFLER ASSY.

MUFFLER ASSY.



DCA-600SSK MUFFLER ASSY.

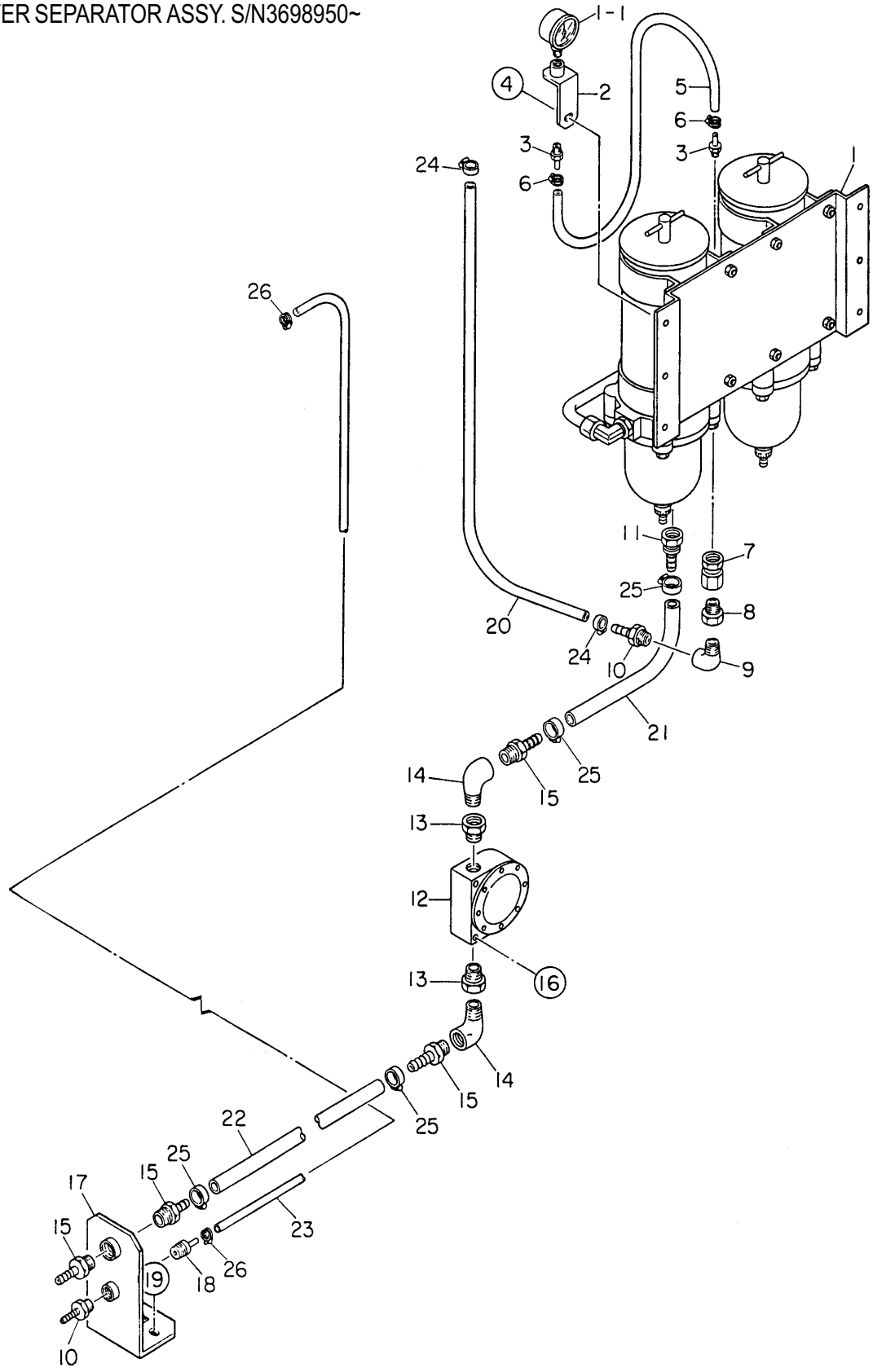
MUFFLER ASSY.

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	8482311002	MUFFLER	1	
2	0019210020	HEX. HEAD BOLT	4	
3	7432356504	PACKING	2	
4	7432356604	PACKING	1	
5	7432356704	PACKING	1	
6	0019110030	HEX. HEAD BOLT	14	
7	0042310000	LOCK WASHER	14	
8	0042410000	HEX. HEAD BOLT	14	
9	0019108030	HEX. HEAD BOLT	8	
10	030208200	LOCK WASHER	8	REPLACES 0042308000
11	031108160	PLAIN WASHER	8	REPLACES 0042408000
12	C4334000513	EXHAUST PIPE	1	
13	0010116060	HEX. HEAD BOLT	8	
14	0010116050	HEX. HEAD BOLT	8	
15	0030016000	HEX. NUT	8	
16	0040016000	LOCK WASHER	16	
17	0041216000	PLAIN WASHER	24	
18	7472355003	OUTLET PIPE	1	
19	C3334200704	GASKET	1	
20	0010112050	HEX. HEAD BOLT	4	
21	0030012000	HEX. NUT	4	
22	0040012000	LOCK WASHER	4	
23	031112230	PLAIN WASHER	8	REPLACES 0041212000
24	8225125604	COVER	2	
25	011008020	HEX. HEAD BOLT	4	REPLACES 0017108020
26	020108060	HEX. NUT	4	REPLACES 0207008000
27	C4334200504	GASKET	2	

Full View

DCA-600SSK FUEL WATER SEPARATOR ASSY.

FUEL, WATER SEPARATOR ASSY. S/N3698950~



DCA-600SSK FUEL WATER SEPARATOR ASSY.

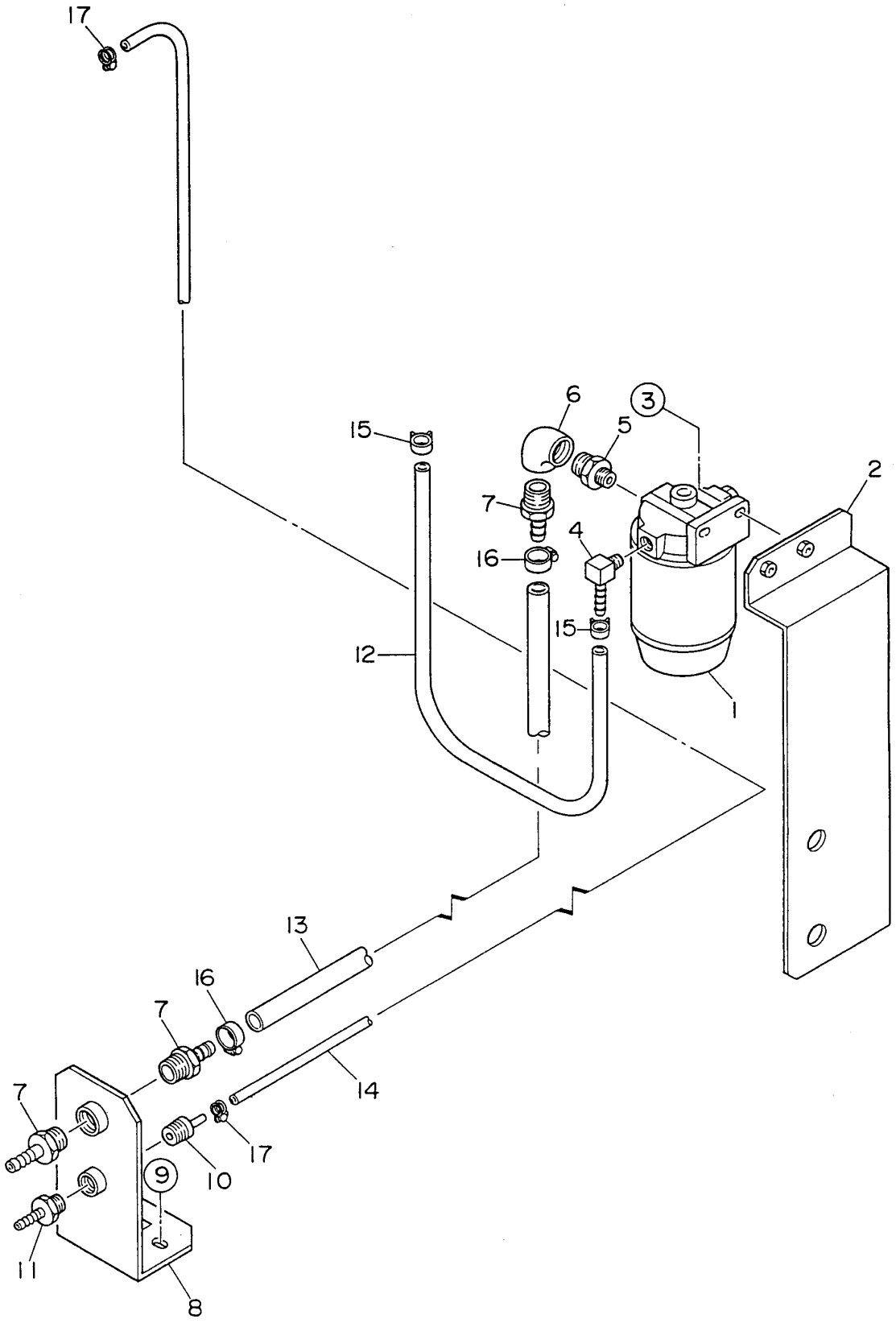
FUEL WATER SEPARATOR ASSY. S/N3698950~

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	751000FGX	FUEL WATER SEPARATOR	1	REPLACES 0602042272
1-1	RK19476	PRESSURE GAUGE	1	REPLACES 0602130190
2	C0368700004	BRACKET, PRESSURE GAUGE	1	
3	C9202000604	HOSE JOINT	2	
4	011008020	HEX. HEAD BOLT	6	REPLACES 0017108020
5	0191000410	HOSE	1	
6	0605515013	HOSE BAND	2	
7	911W10F8	ADAPTER	1	REPLACES 0602022789
8	C9202000304	ADAPTER	1	
9	0130206000	STREET ELBOW	1	1/2
10	0602022203	HOSE JOINT	2	
11	955W10H10	HOSE JOINT	1	REPLACES 0602022788
12	LGX1500	FUEL CONDITIONER	1	REPLACES 0602042491
13	C9202000404	ADAPTER	2	
14	0130208000	STREET ELBOW	2	3/4
15	0602022284	HOSE JOINT	4	
16	0017108055	HEX. HEAD BOLT	2	
17	C4368700104	BRACKET	1	
18	6185517204	HOSE JOINT	1	
19	0017110025	HEX. HEAD BOLT	2	
20	0191300800	SUCTION HOSE	1	
21	0191500500	SUCTION HOSE	1	
22	0191502550	SUCTION HOSE	1	
23	0191004550	RETURN HOSE	1	
24	0605515109	HOSE BAND	2	
25	0605515074	HOSE BAND	4	
26	0605515220	HOSE BAND	2	

Full View

DCA-600SSK FUEL WATER SEPARATOR ASSY.

FUEL, WATER SEPARATOR ASSY. S/N3697057 TO S/N3698949



DCA-600SSK FUEL WATER SEPARATOR ASSY.

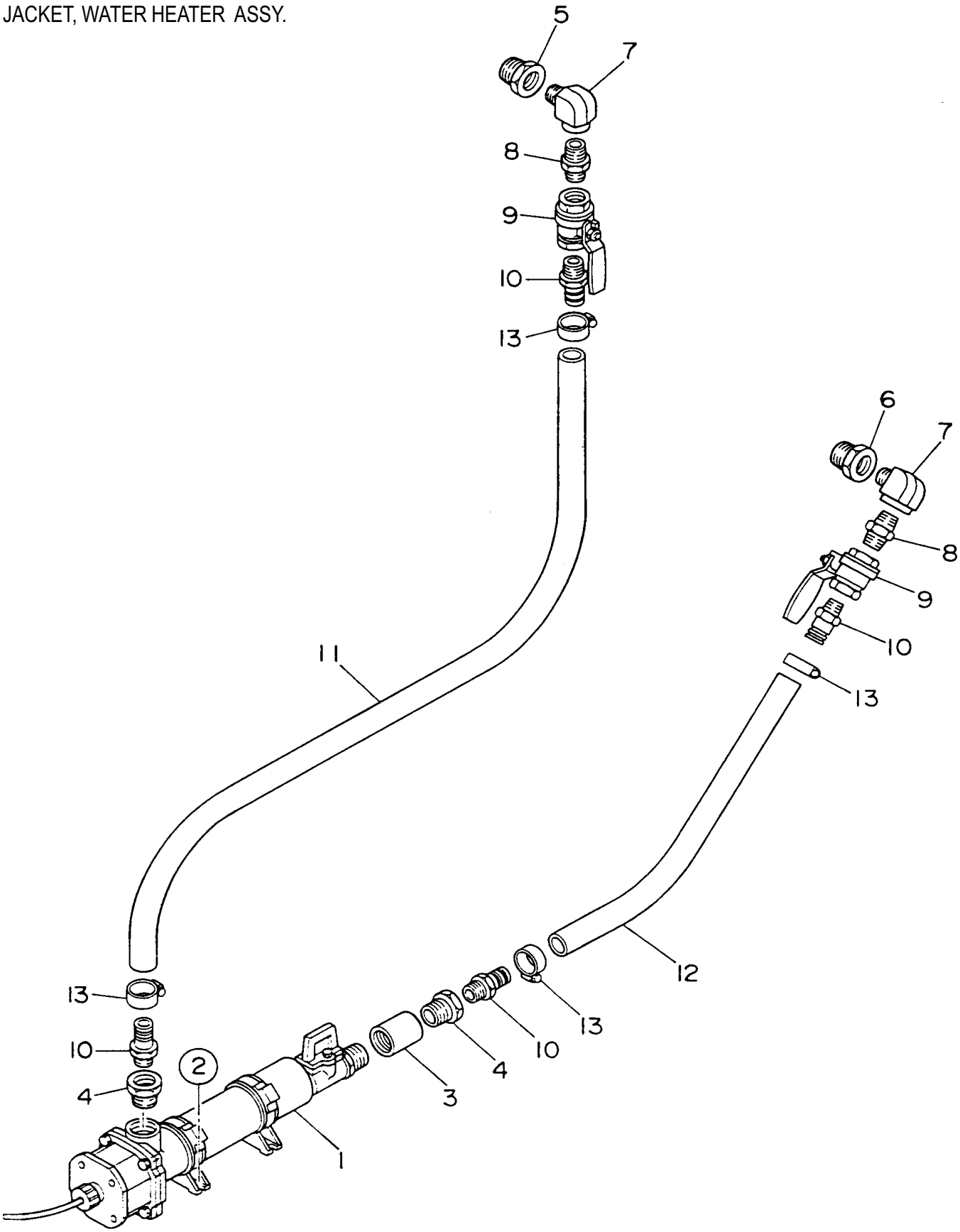
FUEL WATER SEPARATOR ASSY. S/N3697057 TO S/N3698949

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	0602042288	WATER SEPARATOR	1	245R
	RR25P	ELEMENT, WATER SEPARATOR	1	REPLACES 0602042289
2	C4368700004	BRACKET, WATER SEPARATOR	1	
3	0017108030	HEX. HEAD BOLT	2	
4	0603306495	ELBOW JOINT	1	
5	C9202000004	JOINT	1	
6	0130008000	ELBOW JOINT, 3/4	1	
7	0602022284	HOSE JOINT	3	
8	C4368700104	BRACKET	1	
9	0017110025	HEX. HEAD BOLT	2	
10	6185517204	HOSE JOINT	1	
11	0602022203	HOSE JOINT	1	
12	0191300700	SUCTION HOSE	1	
13	0191503150	SUCTION HOSE	1	
14	0191004350	RETURN HOSE	1	
15	0605515109	HOSE BAND	2	
16	0605515074	HOSE BAND	2	
17	0605515013	HOSE BAND	2	

Full View

DCA-600SSK JACKET WATER HEATER ASSY.

JACKET, WATER HEATER ASSY.



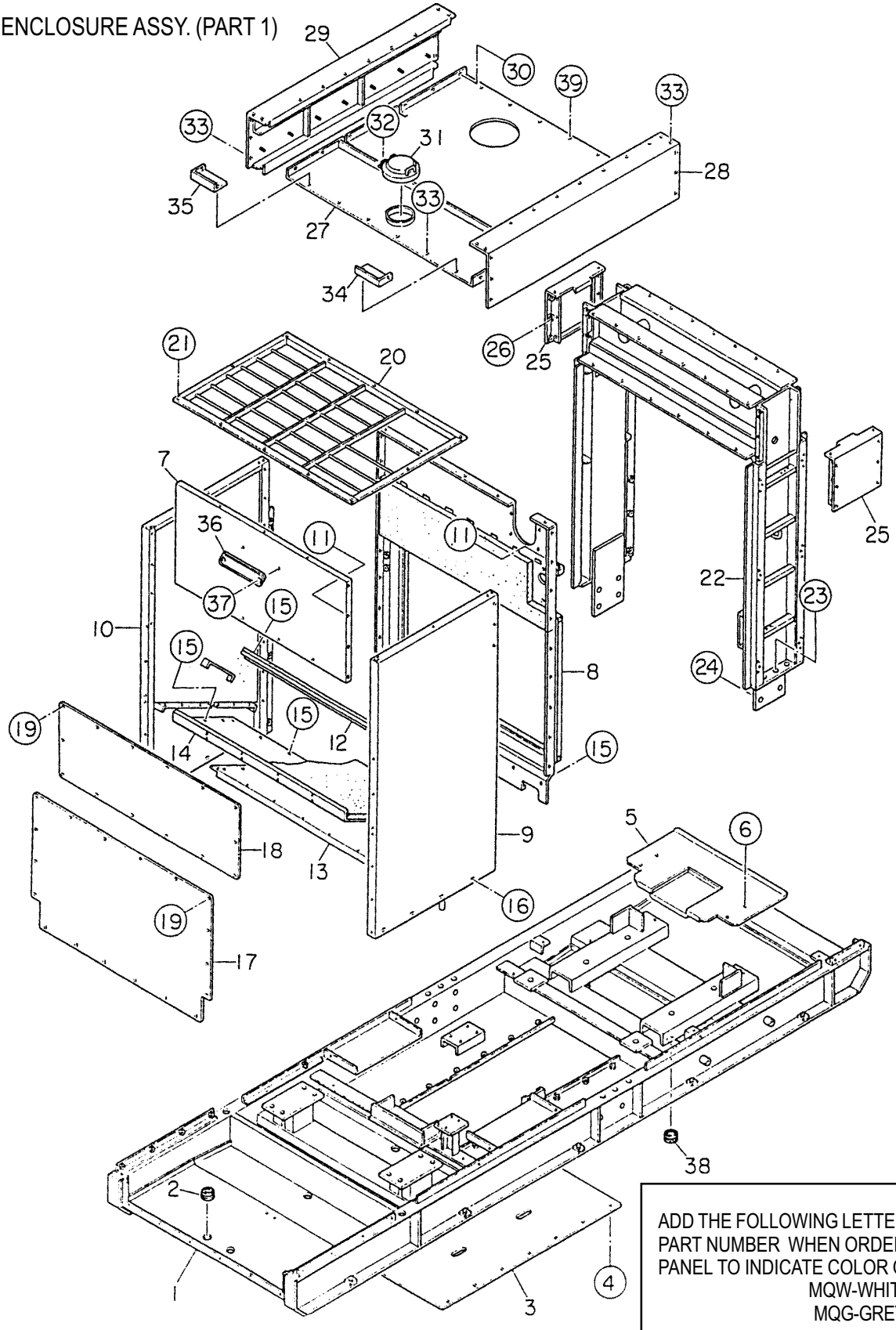
DCA-600SSK JACKET WATER HEATER ASSY.

JACKET, WATER HEATER ASSY.

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	SB120110000	WATER HEATER	1	REPLACES 0602014294
2	011206020	HEX. HEAD BOLT	4	REPLACES 0017106020
3	0603307690	SOCKET	1	NPT1
4	C9202000104	BUSHING	2	NPT1X3/4
5	0732611006	BUSHING	1	REPLACES 0603306881
6	0732611206	BUSHING	1	REPLACES 0603306882
7	0603306224	STREET ELBOW	2	
8	0603306313	NIPPLE	2	
9	0603325077	VALVE	2	400 3/4
10	0602022758	HOSE JOINT	4	WHN3/4
11	C4322700004	HOSE	1	S/N3698950~
11	0265901200	HOSE	1	S/N3697050 TO S/N3698949
12	C4322700104	HOSE	1	S/N3698950~
12	0265900480	HOSE	1	S/N3697050 TO S/N3698949
13	0605515069	HOSE BAND	4	

DCA-600SSK ENCLOSURE ASSY. (PART 1)

ENCLOSURE ASSY. (PART 1)



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MQW-WHITE

MQG-GREY

THE SERIAL NUMBER MAY BE REQUIRED.

DCA-600SSK ENCLOSURE ASSY. (PART 1)

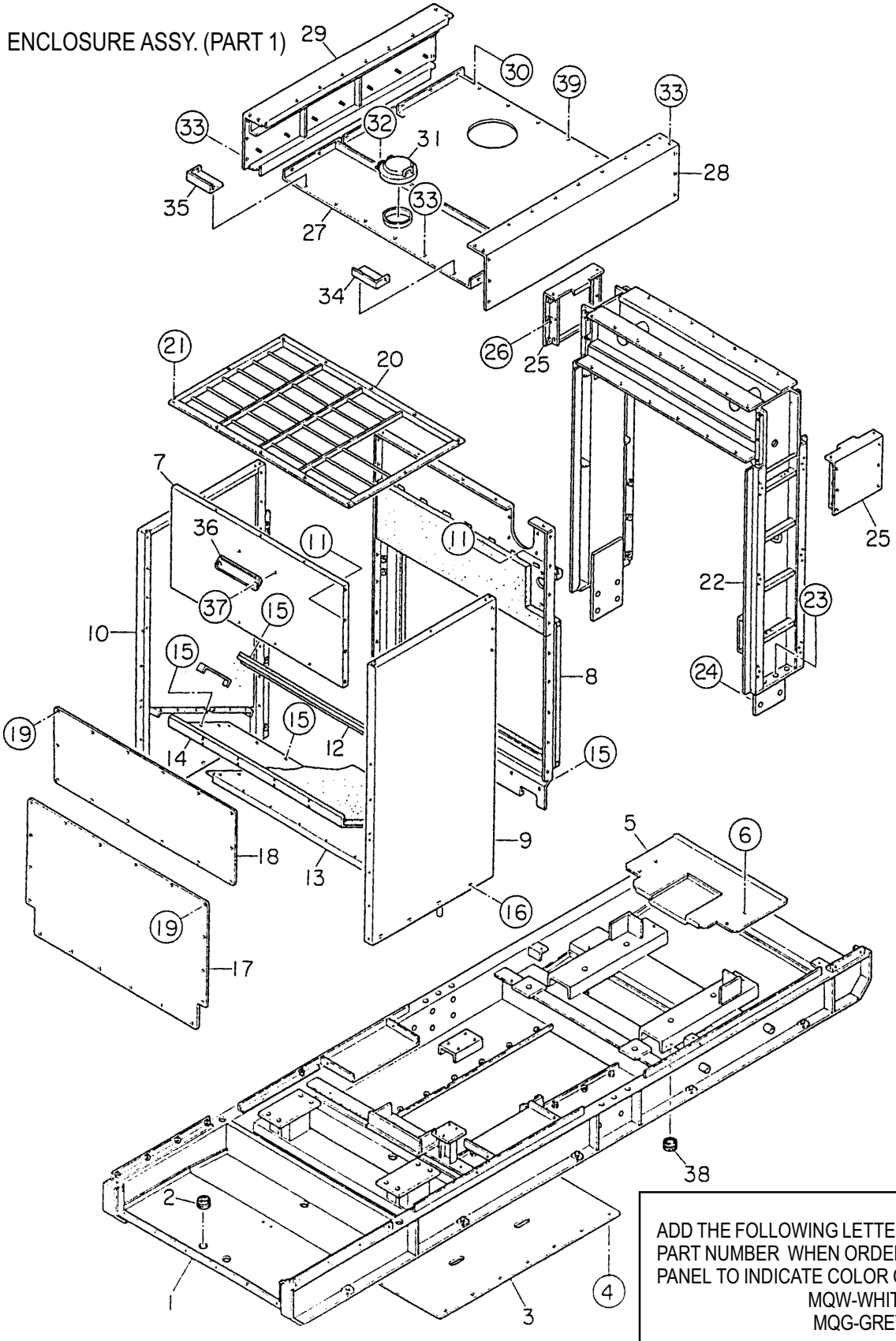
ENCLOSURE ASSY. (PART 1)

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	C4415000022	BASE	1	S/N3699234 TO S/N3700265
1	C4415000012	BASE	1	S/N3698950 TO S/N3699233
1	C4415000002	BASE	1	S/N3697050 TO S/N3698949
2	0601851733	GROMMET	4	
3	7435116104	FLOOR PANEL	1	S/N3699234 TO S/N3700265
3	7435116114	FLOOR PANEL	1	S/N3698950 TO S/N3699233
4	011008020	HEX. HEAD BOLT	14	REPLACES0017108020
5	8495118003	GUIDE PANEL, AIR	1	
6	011008020	HEX. HEAD BOLT	4	REPLACES 0017108020
7	C4424002303	FRONT FRAME	1	
	C4495100003	LINING	1	S/N3698950~
	C4494100203	LINING	1	S/N3697050 TO S/N3698949
8	04425000003	FRONT FRAME	1	S/N3698950~
	C4495100003	LINING	1	S/N3698950~
8	C4424000403	FRONT FRAME	1	S/N3697050 TO S/N3698949
	C4494100203	LINING	1	S/N3697050 TO S/N3698949
9	C4425000102	FRONT FRAME	1	S/N3698950~
	C4495100003	LINING	1	S/N3698950~
9	C4424000302	FRONT FRAME	1	S/N3697050 TO S/N3698949
	C4494100203	LINING	1	S/N3697050 TO S/N3698949
10	C4425000202	FRONT FRAME	1	S/N3698950~
	C4495100003	LINING	1	S/N3698950~
10	C4424000202	FRONT FRAME	1	S/N3697050 TO S/N3698949
	C4494100203	LINING	1	S/N3697050 TO S/N3698949
11	011008020	HEX. HEAD BOLT	26	REPLACES 0017108020
12	C4424700004	GUIDE PANEL, AIR	1	
	C4495100003	LINING	1	S/N3698950~
	C4494100203	LINING	1	S/N3697050 TO S/N3698949
13	C4425300003	GUIDE PANEL, AIR	1	S/N3698950~
	C4495100003	LINING	1	S/N3698950~
13	C4424300203	GUIDE PANEL, AIR	1	S/N3697050 TO S/N3698949
	C4494100203	LINING	1	S/N3697050 TO S/N3698949
14	C4424300003	GUIDE PANEL, AIR	1	S/N3698950~
	C4495100003	LINING	1	S/N3698950~
14	C4424300003	GUIDE PANEL, AIR	1	S/N3697050 TO S/N3698949
	C4494100203	LINING	1	S/N3697050 TO S/N3698949
15	011008020	HEX. HEAD BOLT	30	REPLACES 0017108020
16	0019210025	HEX. HEAD BOLT	8	
17	C4424200703	COVER, FRONT FRAME	1	
18	8485125104	COVER, FRONT FRAME	1	
	8465924104	LINING	1	
19	011008020	HEX. HEAD BOLT	32	REPLACES 0019208020
20	8475125003	COVER, FRONT FRAME	1	

Full View

DCA-600SSK ENCLOSURE ASSY. (PART 1)

ENCLOSURE ASSY. (PART 1)



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MQW-WHITE
MQG-GREY

THE SERIAL NUMBER MAY BE REQUIRED.

DCA-600SSK ENCLOSURE ASSY. (PART 1)

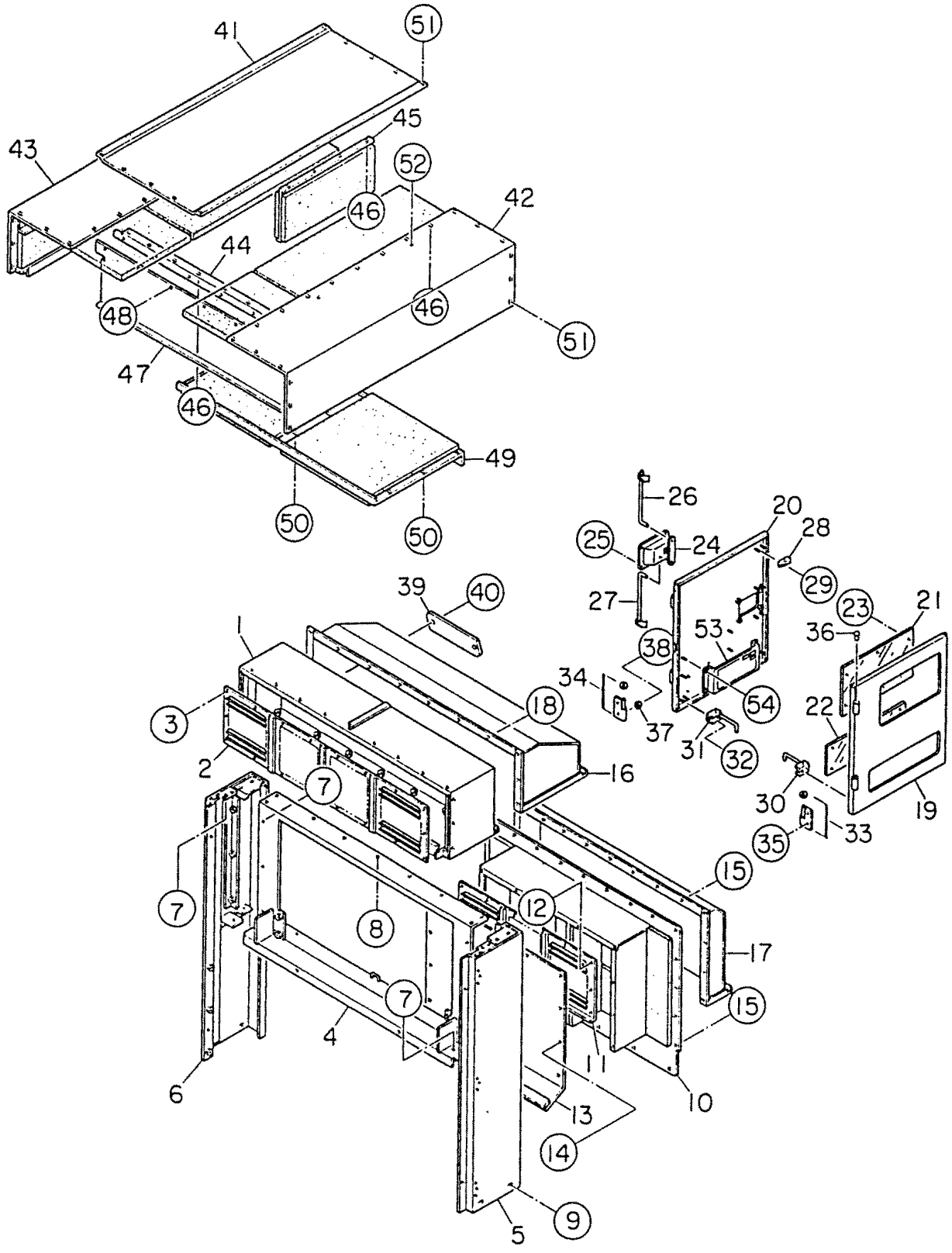
ENCLOSURE ASSY. (PART 1)

NO.	PART NO.	PART NAME	QTY.	REMARKS
21	011008020	HEX. HEAD BOLT	12	REPLACES 0019208020
22	C4435000002	CENTER FRAME	1	S/N3698950~
22	C4434000112	CENTER FRAME	1	S/N3697050 TO S/N3698949
23	0010120075	HEX. HEAD BOLT	6	
	0030020000	HEX. NUT	6	
	0030020000	LOCK WASHER	6	
	0041220000	PLAIN WASHER	12	
24	0010120065	HEX. HEAD BOLT	8	
	0030020000	HEX. NUT	8	
	030220510	LOCK WASHER	8	REPLACES 0040020000
	0041220000	PLAIN WASHER	16	
25	C4434200013	COVER	2	
26	011008020	HEX. HEAD BOLT	12	REPLACES 0017108020
	020108060	HEX. NUT	12	REPLACES 0207008000
27	C4465100003	ROOF PANEL	1	S/N3698950~
27	8495161103	ROOF PANEL	1	S/N3697050 TO S/N3698949
28	C4464100003	ROOF PANEL	1	
29	C4464100103	ROOF PANEL	1	
30	020108060	HEX. NUT	14	REPLACES 0207008000
31	0800251701	FILTER COVER	1	
32	0019206016	HEX. HEAD BOLT	2	
33	011008020	HEX. HEAD BOLT	30	REPLACES 0019208020 S/N3698950 TO S/N3699233
33	011008020	HEX. HEAD BOLT	30	REPLACES 0019208020 S/N3699234 TO S/N3700265
	0044508019	SEAL WASHER	24	S/N3699234 TO S/N3700265
34	0600500090	EMBLEM	1	
35	0021106016	MACHINE SCREW	2	
36	C4465500004	COVER (LEFT)	1	S/N3698950~
37	C4465500104	COVER (RIGHT)	1	S/N3698950~
38	0601851736	GROMMET	2	S/N3699234 TO S/N3700265
39	011008020	HEX. HEAD BOLT	6	S/N3699234 TO S/N3700265; REPLACES 0019208020

Full View

DCA-600SSK ENCLOSURE ASSY. (PART 2)

ENCLOSURE ASSY. (PART 2)



DCA-600SSK ENCLOSURE ASSY. (PART 2)

ENCLOSURE ASSY. (PART 2)

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	C4444000003	REAR FRAME	1	
2	3875151004	LOUVER PANEL	1	
3	0207006000	HEX. NUT	21	S/N3699234 TO S/N3700265
3	0205006000	HEX. NUT	21	S/N3698950 TO S/N3699233
	0042306000	LOCK WASHER	21	
	0042406000	PLAIN WASHER	21	
4	C4444000103	REAR FRAME	1	
5	C4444000203	REAR FRAME	1	
6	C4444000303	REAR FRAME	1	
7	0017110025	HEX. HEAD BOLT	18	
8	011008020	HEX. HEAD BOLT	5	REPLACES 0017108020
9	0019210025	HEX. HEAD BOLT	4	
10	7975155003	COVER, REAR FRAME	1	
	3875944104	LINING	1	
11	3875151104	LOUVER PANEL	1	
12	0207006000	HEX. NUT	16	S/N3699234 TO S/N3700265
12	0205006000	HEX. NUT	16	S/N3698950 TO S/N3699233
	0042306000	LOCK WASHER	16	
	0042406000	PLAIN WASHER	16	
13	7975156004	DUCT COVER	1	
	8495946104	LINING	1	
14	011008020	HEX. HEAD BOLT	17	REPLACES 0017108020
15	011008020	HEX. HEAD BOLT	23	REPLACES 0019208020
16	C4444300703	VISOR	1	
17	3875165803	VISOR	1	
18	011008020	HEX. HEAD BOLT	12	REPLACES 0019208020
19	7975143003	DOOR, REAR FRAME	1	
20	7975143113	DOOR, REAR FRAME	1	
21	3875147204	WINDOW PLATE	1	
22	3875147304	WINDOW PLATE	1	
23	020106050	HEX. NUT	12	REPLACES 0207306000
24	B9114000102	DOOR HANDLE	1	
25	0021806016	MACHINE SCREW	4	
26	7975146004	DOOR ROD	1	
27	7975146104	DOOR ROD	1	
28	0845050704	STAY	4	
29	0207006000	HEX. NUT	8	
30	0805011304	STOPPER, DOOR	1	
31	0805011204	STOPPER, DOOR	1	
32	0207006000	HEX. NUT	4	
33	M9110100204	HINGE	2	REPLACES 0845047104

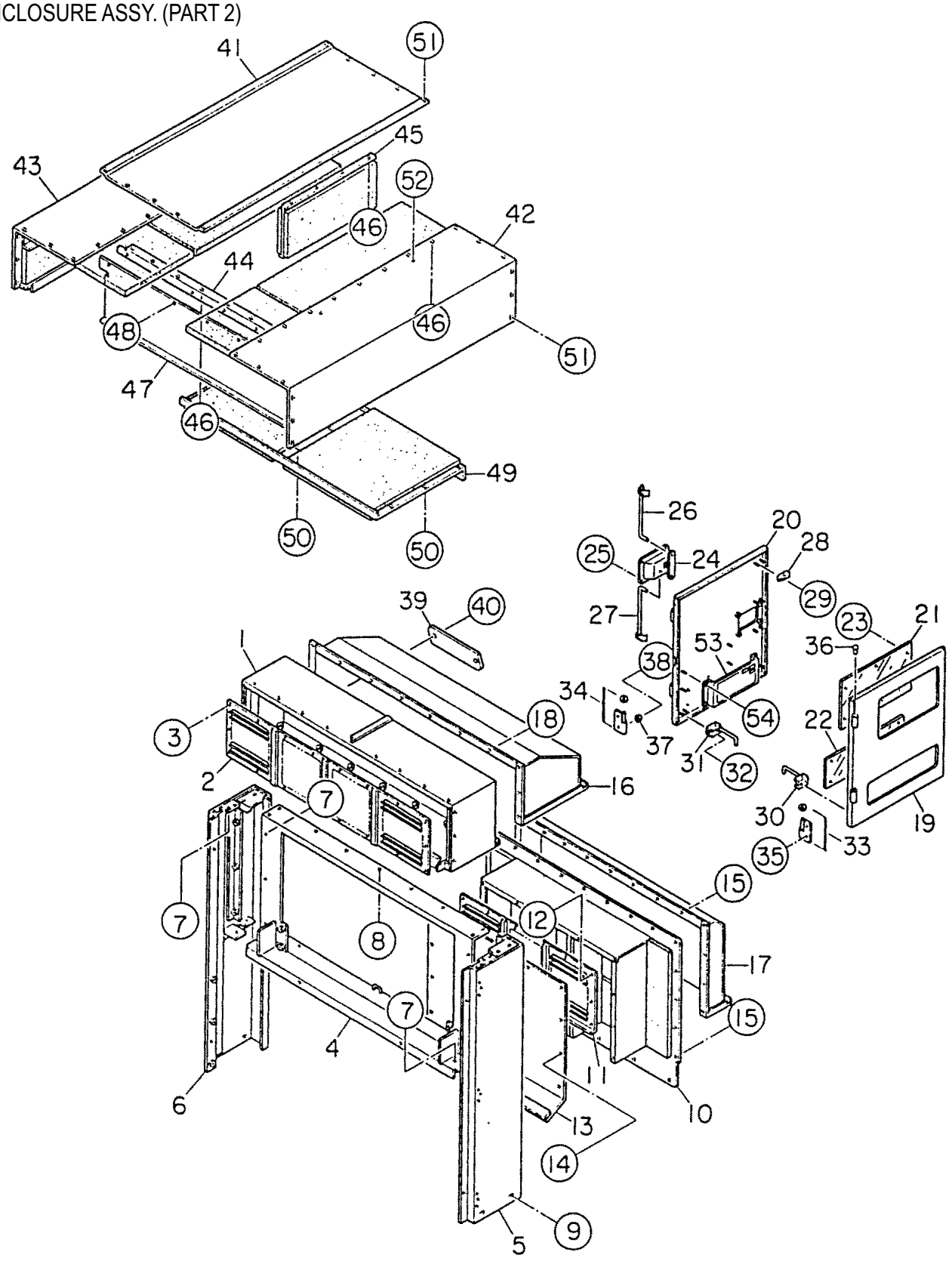
ADD THE FOLLOWING LETTERS AFTER THE PART NUMBER WHEN ORDERING ANY PAINTED PANEL TO INDICATE COLOR OF UNIT:

MQW-WHITE
MQG-GREY
THE SERIAL NUMBER MAY BE REQUIRED.

Full View

DCA-600SSK ENCLOSURE ASSY. (PART 2)

ENCLOSURE ASSY. (PART 2)



DCA-600SSK ENCLOSURE ASSY. (PART 2)

Full View

ENCLOSURE ASSY. (PART 2)

NO.	PART NO.	PART NAME	QTY.	REMARKS
	0845045004	WASHER	2	
34	M9110100304	HINGE	2	REPLACES 0845047204
	0845045004	WSHER	2	
35	011008020	HEX. HEAD BOLT	6	REPLACES 0019208020
36	0845031504	CAP	4	
37	0601850097	STOPPER	2	
38	011208025	MACHINE SCREW	2	REPLACES 0021008025
39	0600500090	EMBLEM	1	
40	0021106016	MACHINE SCREW	2	
41	C4464200303	ROOF PANEL	1	
	8485960104	LINING	1	
42	C4464200403	ROOF PANEL	1	
	8485960104	LINING	1	
43	C4464200503	ROOF PANEL	1	
	8485960104	LINING	1	
44	C4464500304	GUIDE	1	
45	C4464500204	PANEL	1	
	8485960104	LINING	1	
46	020108060	HEX. NUT	27	REPLACES 0207008000
47	C4464500404	PANEL	1	
48	011008020	HEX. HEAD BOLT	11	REPLACES 0017108020
49	8485166004	COVER, ROOF PANEL	1	
	8485968104	LINING	1	
50	011008020	HEX. HEAD BOLT	9	REPLACES 0017108020
51	011008020	HEX. HEAD BOLT	30	REPLACES 0019208020
	0044508019	SEAL WASHER	30	S/N3699234 TO S/N3700265
52	0019210025	HEX. HEAD BOLT	4	
53	B9114500104	DOOR POCKET	1	
54	0207006000	HEX. NUT	4	

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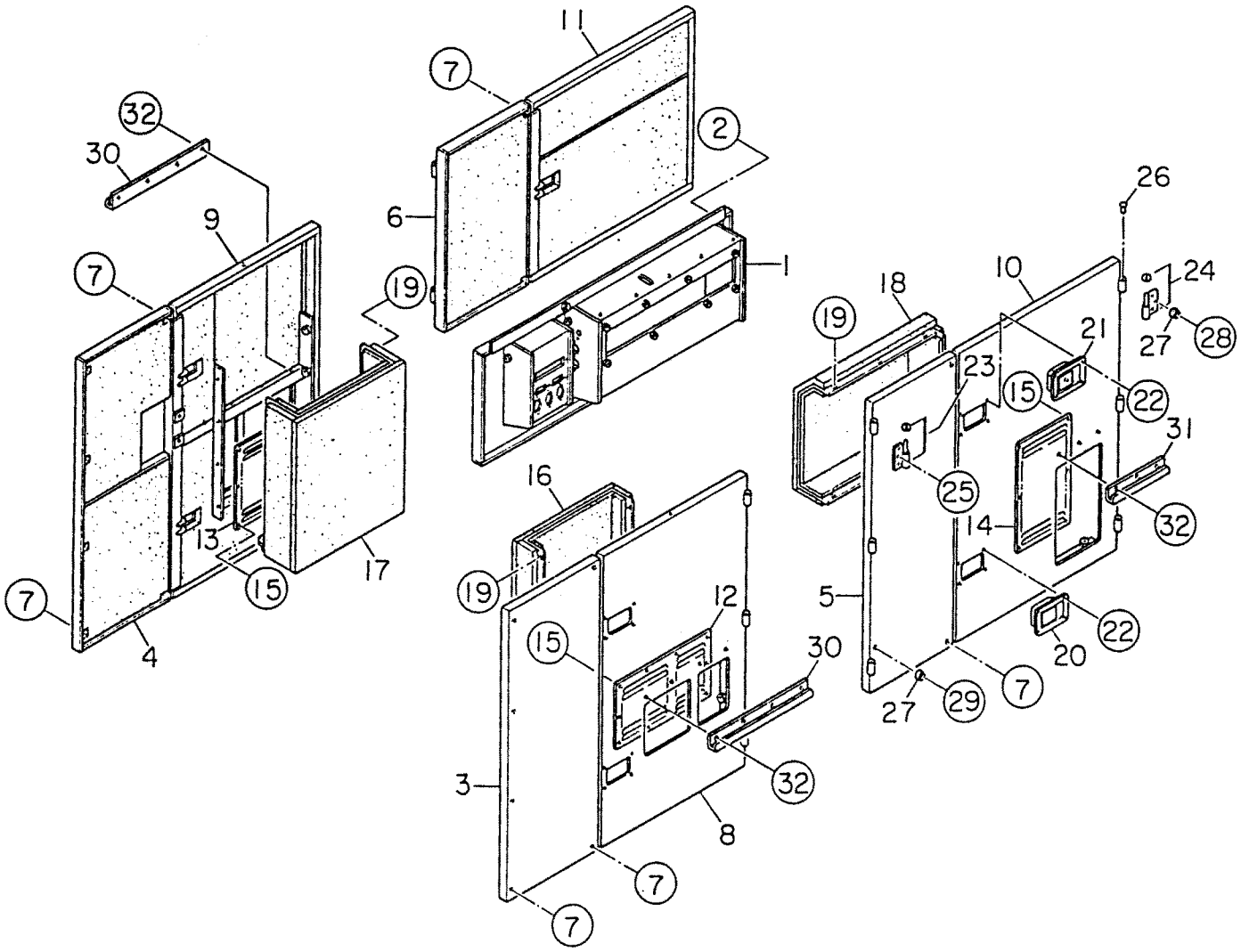
MQG-GREY

THE SERIAL NUMBER MAY BE REQUIRED.

DCA-600SSK ENCLOSURE ASSY. (PART 3)

ENCLOSURE ASSY. (PART 3)



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MQW-WHITE
MQG-GREY

THE SERIAL NUMBER MAY BE REQUIRED.

ENCLOSURE ASSY. (PART 3)

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	C4455200013	SPLASHER PANEL	1	S/N3699234 TO S/N3700265
1	C4455200003	SPLASHER PANEL	1	S/N3698950 TO S/N3699233
2	0019110070	HEX. HEAD BOLT	6	
	0042310000	LOCK WASHER	6	
	0042410000	PLAIN WASHER	6	
	0044510022	SEAL WASHER	6	S/N3699234 TO S/N3700265
3	C4455100003	SIDE PANEL	1	S/N3698950~
	C4495400004	LINING	1	S/N3698950~
3	8495172003	SIDE PANEL	1	S/N369895057 TO S/N3698949
	8495972104	LINING	1	S/N369895057 TO S/N3698949
4	8495172103	SIDE PANEL	1	
	8495972304	LINING	1	
5	8495172203	SIDE PANEL	1	
	8495972504	LINING	1	
6	8495172303	SIDE PANEL	1	
	8495972704	LINING	1	
7	0019108070	HEX. HEAD BOLT	16	
	030208200	LOCK WASHER	16	REPLACES 0042308000
	031108160	PLAIN WASHER	16	REPLACES 0042408000
	0044508019	SEAL WASHER	16	S/N3699234 TO S/N3700265
8	C4455000003	SIDE DOOR	1	S/N3699234 TO S/N3700265
8	8485171003	SIDE DOOR	1	S/N3698950 TO S/N3699233
	8485970103	LINING	1	
9	C4455000103	SIDE DOOR	1	S/N3699234 TO S/N3700265
9	8485171103	SIDE DOOR	1	S/N3698950 TO S/N3699233
	8485970303	LINING	1	
10	C4455000203	SIDE DOOR	1	S/N3699234 TO S/N3700265
10	7975171413	SIDE DOOR	1	S/N3698950 TO S/N3699233
	8485970503	LINING	1	
11	7975171203	SIDE PANEL	1	
	7975970704	LINING	1	
12	7525151504	LOUVER PANEL	1	
13	7525151404	LOUVER PANEL	1	
14	7975151004	LOUVER PANEL	1	
15	0207006000	HEX.NUT	28	S/N3699234 TO S/N3700265
15	0205006000	HEX. NUT	28	S/N3698950 TO S/N3699233
	0042306000	LOCK WASHER	28	
	0042406000	PLAIN WASHER	28	
16	8485176004	DUCT	1	
	8485976104	LINING	1	
17	7865176004	DUCT	1	

ENCLOSURE ASSY. (PART 3)

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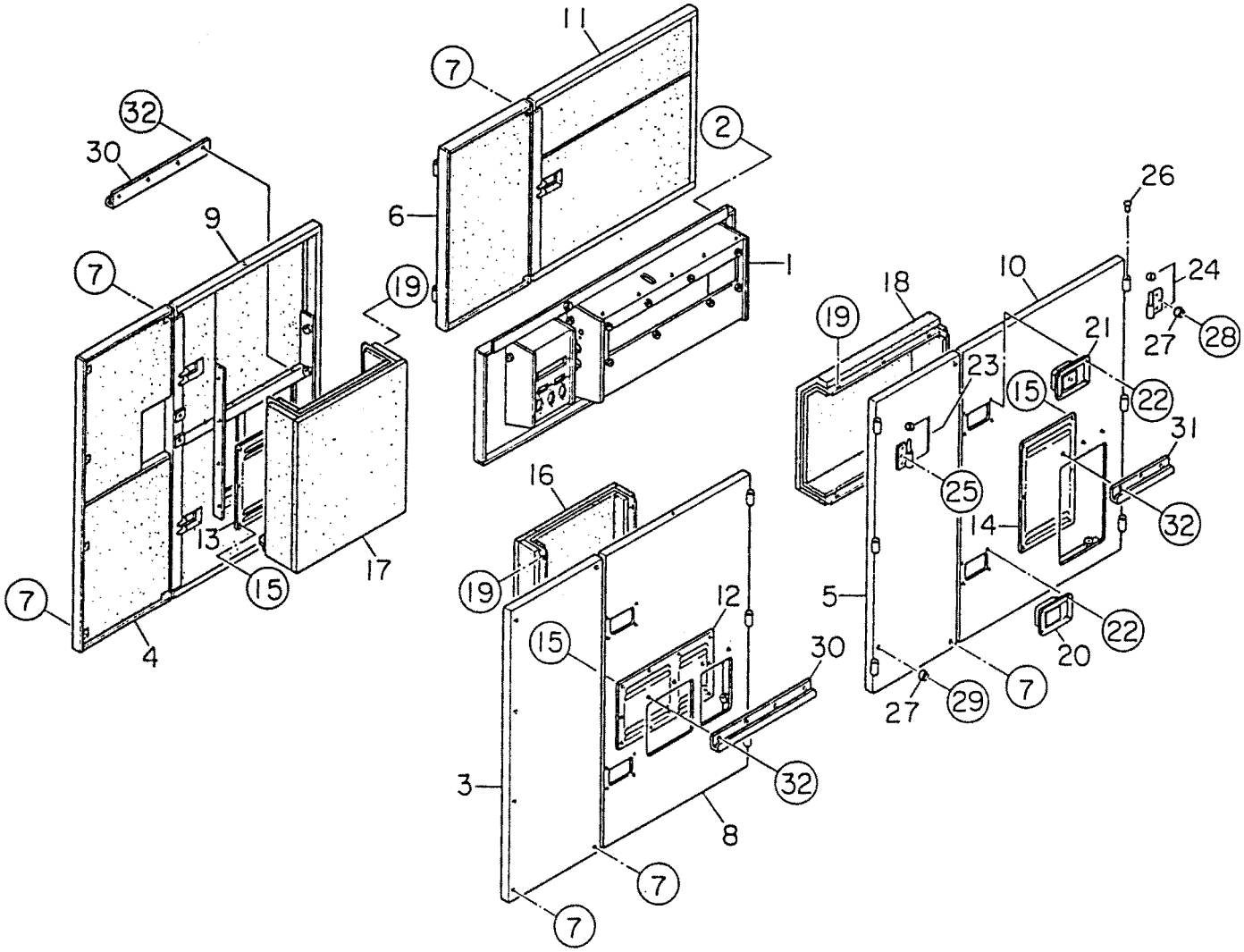

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