

PARTS AND OPERATION MANUAL

MQ POWER MODEL DCA-800SSK PORTABLE GENERATOR (Standard)

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PARTS LIST NO. C5872300004
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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

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MQ Power DCA-800SSK AC Generator

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NOTE

*Specification and part number
are subject to change without
notice.*

- 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

**Normally shipped the same day the order is received, if prior to 2PM west coast time.*

Earn Extra Discounts when you order by FAX!

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

<u>Number of line items ordered</u>	<u>Additional Discount</u>
1-9 items	3%
10+ items**	5%

**Extra Fax Discount
for Domestic USA
Dealers Only**

**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

Fax order discount and UPS special programs revised June 1, 1995

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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-800SSK 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 of 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.

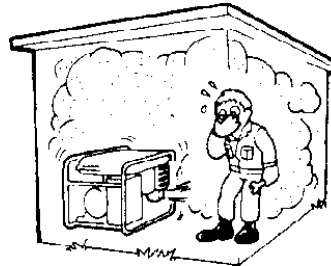
- Always check the machine for loosened threads or bolts before starting.

- **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 when 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.

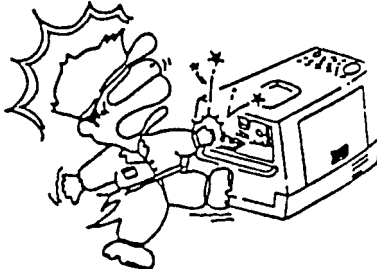


- **NEVER** operate the generator in an explosive atmosphere or near combustible materials. An explosion or fire could result causing severe *bodily harm or even death*.

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

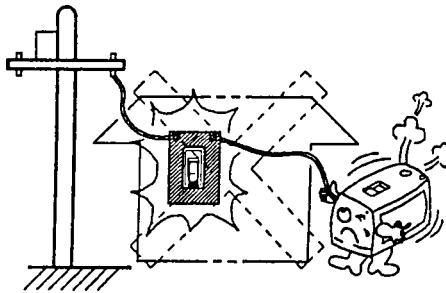
RULES FOR SAFE OPERATION

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.

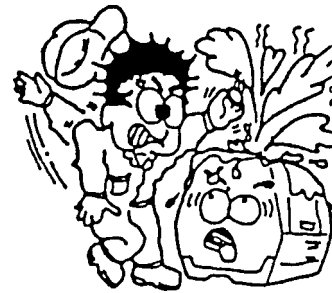
CAUTION:



■ **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.

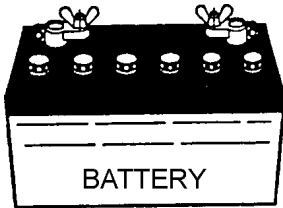
RULES FOR SAFE OPERATION

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 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 it is not being used. 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.
- Always be sure the operator is familiar with proper safety precautions and operations techniques before using generator.
- 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, fuel, and fuel filters.
- **DO NOT** use plastic containers to dispose of hazardous waste.
- **DO NOT** pour waste, oil 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 the towing vehicle and the 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 mileage.
- Avoid sharp turns to prevent rolling.
- Remove wheel stand when transporting.
- **DO NOT** transport generator with fuel in tank.

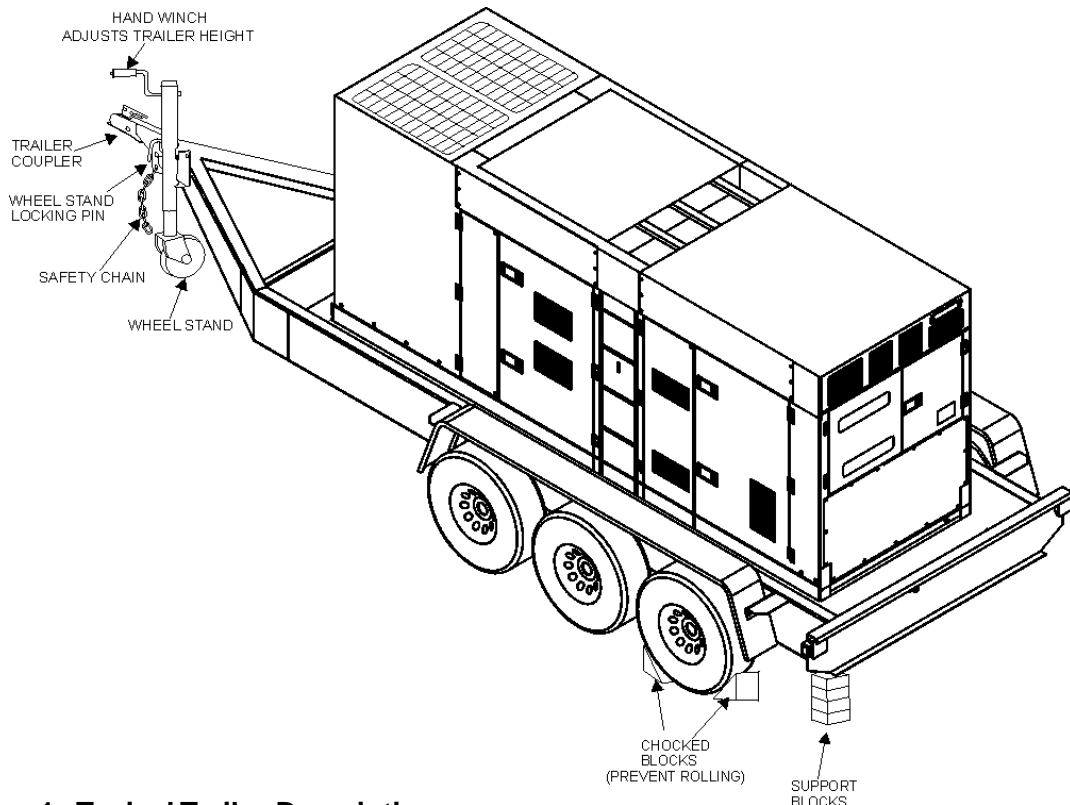


Figure 1. Typical Trailer Description

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 intended to 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 this section:

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

Use the following definitions while 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 measurement 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** - The wheel hub is connected to the trailer's axle.
11. **Tire Rim** - Tires are 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 for 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 on page 17). Please note 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 shock 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 page 16 for proper wiring connections.
16. **Application** - Indicates which units can be employed on a particular trailer.

DCA-800SSK — 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-800SSK — 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:

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

Road testing is necessary in order to properly synchronize the towing vehicle's braking to the trailer's braking. 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. Refer to Table 5 for electric brake troubleshooting guidelines.

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.

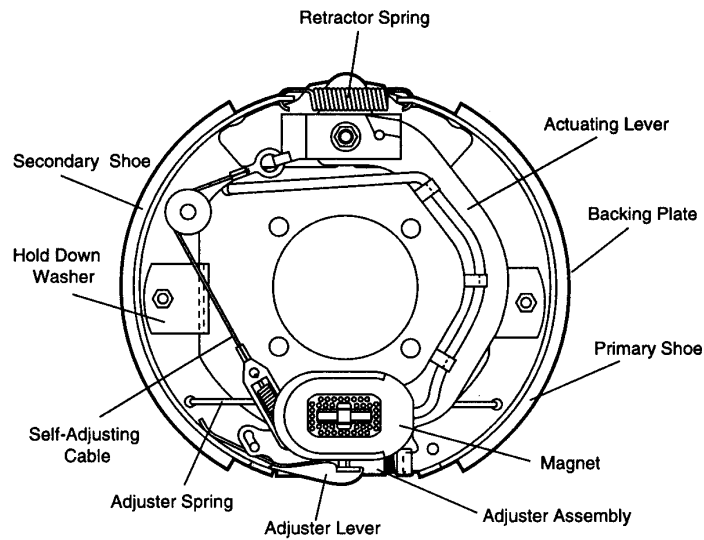


Figure 2. Electrical Brake Components

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.

Figure 3 below displays the major hydraulic/air/surge brake components that will require inspection and maintenance. Inspect these components as required using steps 1 through 6 as referenced in the electric brake adjustments section. Reference Table 6 for hydraulic brake troubleshooting guidelines.

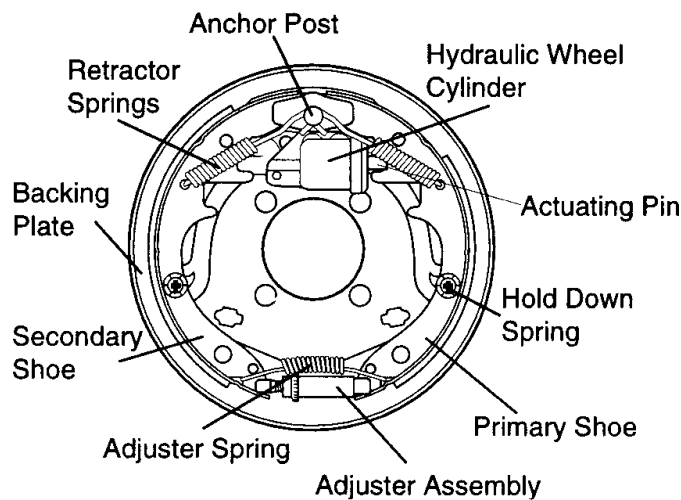


Figure 3. Hydraulic Brake Components

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:



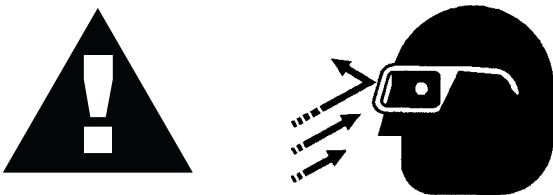
DO NOT attempt to repair or modify a wheel. DO NOT install an inner tube to correct a leak through the rim. If the rim is cracked, the air pressure in the inner tube may cause pieces of the rim

to explode (break off) with great force and cause serious eye or bodily injury.

Tire Wear/Inflation

Tire inflation pressure is the most important factor in preserving tire life. Pressure should be checked cold before operation. **DO NOT** bleed air from tires when they are hot. Check inflation pressure weekly to insure the maximum tire life and to prevent premature tread wear. Table 2 (Tire Wear Troubleshooting) will help pinpoint the causes and solutions of tire wear problems.

CAUTION:



NOTE

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

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 chamber 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.

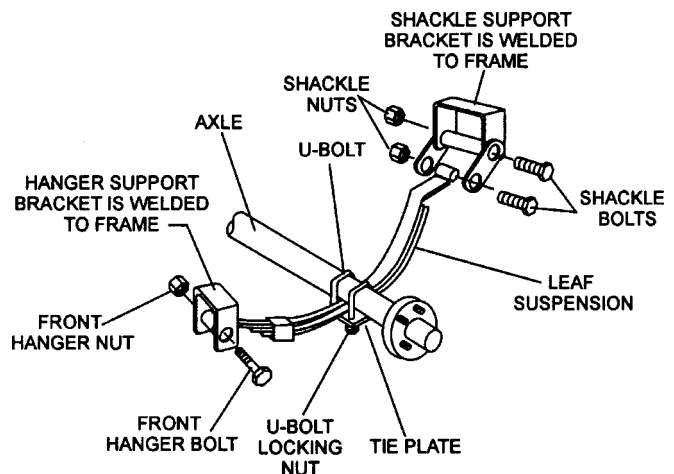


Figure 4. Suspension Components

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 attachment 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 for continued safe operation.

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

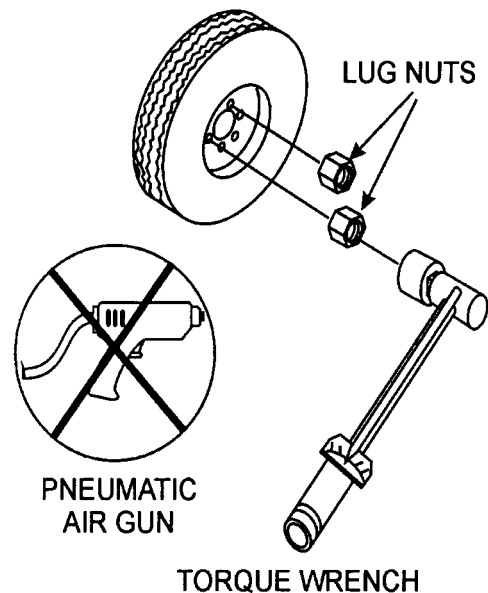
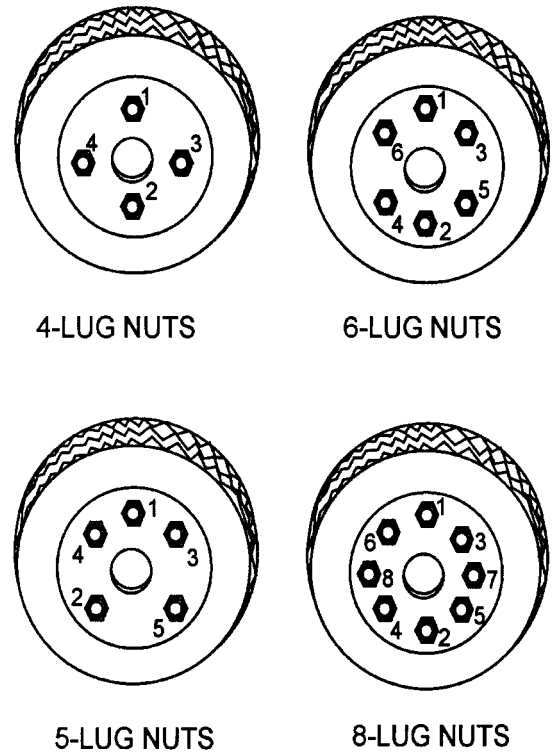


Figure 5. Lug Nut Tightening Sequence

NOTE

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

TYPICAL 7 POLE TRAILER WIRE DIAGRAM

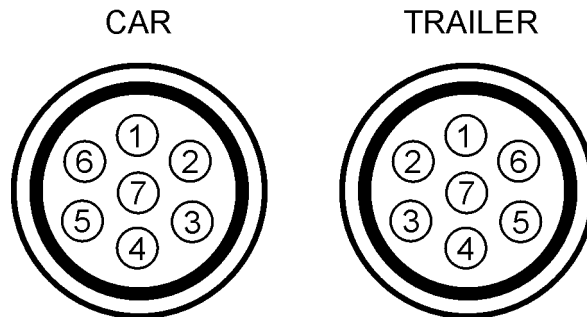


Figure 6. Typical Trailer Wire Connector

TABLE 5. TRAILER WIRE DIAGRAM

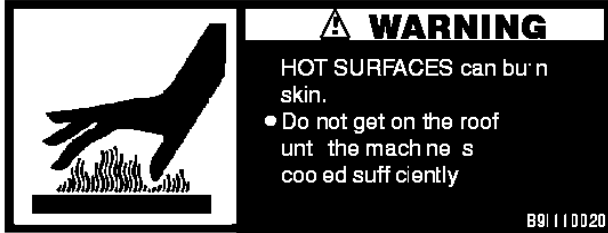
POLE	DESCRIPTION	COLOR
1 / L	LEFT TURN	YELLOW
2 / 54G	REVERSE	BLACK
3 / 31	EARTH	WHITE
4 / R	RIGHT TURN	GREEN
5 / 58R	SERVICE BRAKES	BLUE
6 / 54	STOP LAMP	RED
7 / 58L	TAIL LAMPS	BROWN

Table 6. Air Brake Troubleshooting

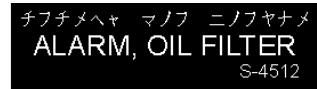
Symptom	Possible Cause	Solution
No Brakes	Brake line broken or kinked?	Repair or replace.
Weak Brakes or Brakes Pull to One Side	Brake lining glazed?	Reburnish or replace.
	Trailer overloaded?	Correct weight.
	Brake drums scored or grooved?	Machine or replace.
	Tire pressure correct?	Inflate all tires 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-800SSK — OPERATION AND SAFETY DECALS

The DCA-800SSK generator is equipped with a number of safety decals. These 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. If any of the decals on the generator become unreadable, replace them by contacting your representative.



P/N B9511100204



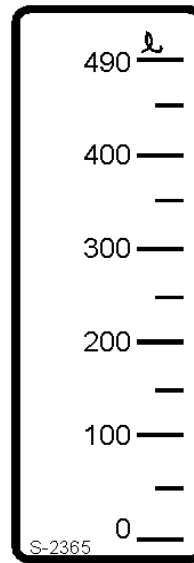
P/N0840655604



P/N 0800686004



P/N 0966810000



P/N 0840607104



P/N 0800688404



P/N 0800688504

CAUTIONS AGAINST OIL AND FUEL INFILTRATION!

Should oil or fuel infiltrate into the internal sound-absorbing materials, it will cause trouble. Strictly observe the following to keep the machine interior constantly clean:

FUEL
 Feed : Exercise care not to spill oil.
 Air vent : Apply a piece of cloth or similar material to safeguard against fuel infiltration.
 Filter cleaning:
 When detaching the filter for cleaning, apply a piece of cloth or similar material to prevent fuel from dripping.

Oil
 Feed : Exercise care not to spill oil.
 Filter cleaning:
 : When detaching the filter for cleaning, apply a piece of cloth or similar material to prevent oil from dripping.

Denyo Co., Ltd. S-544A

P/N 0800615102

DCA-800SSK — OPERATION AND SAFETY DECALS

SAFETY INSTRUCTIONS

Improper operation of this machine can cause severe injury or death.

- Read the instruction manual carefully before operating or servicing.

This machine should only be operated by a person with sufficient knowledge and skill to ensure safe operation.

High voltage circuits are located inside the output terminal cover and control panel.

- Close the cover and control panel before operating.

Moving parts and hot surfaces are contained within the enclosure.

- Close all doors and lock them before operating.

B92110040

P/N B9521100404

ENGINE SPEED

S-4452

P/N 9039208704

HIGH



LOW

S-4451

P/N 9039208694

WHISPERWATT 800



MQ POWER CORP.
WHISPERWATT 800
800 KVA AC GENERATOR
MODEL DCA-800SSK

C56110090

ヤナメヘノホチフ デマヨナメ モヤマミナメ TERMINAL COVER STOPPER



ラネナホ デマヨナメ ノモ
 デフマモナ マメ ヘマヨノホヌ

← WHEN COVER IS
 CLOSE OR MOVING

ラネナホ デマヨナメ ノモ
 マミナホ

← WHEN COVER IS
 OPEN

S-4516

P/N 0840655704

デママフノホヌ ラチヤナメ **COOLING WATER**

ツナ モユメナ ヤマ マミナメチヤナ ヤネノモ ヘチチネノホナ ラノヤネ ノヤモ
 メチトノチヤマメ チチミ デマヘミフナヤナフル モナチユメナトヨ メナミフチチナ
 ヤネナ チチミ ラノヤネ チ ホナラ マホナ ラネナホ トチヘチヌナトヨ

Be sure to operate this machine with its radiator cap completely secured. Replace the cap with a new one when damaged or deformed.

S-961

P/N 0800689204

Precautions on handling the oil drain pump

(1) Handling procedures

Connect an oil-discharging hose to the the "OUT" side of the pump and turn on the battery switch. Remove the plug from the pump and feed priming oil. Then, turn on the pump main body switch and drain oil from the oil pan.

(2) Precautions

1. Operate the pump only after feeding a sufficient amount of priming oil; do not idle the pump. Use the priming oil of the same kind with that to be pumped up.
2. The rating of the pump is 25 minutes.
 Do not operate the pump continuously over that value.
3. Always keep the main body switch OFF unless replacing oil.

S-2570

P/N 0840611903

DCA-800SSK — OPERATION AND SAFETY DECALS

**CIRCUIT
BREAKER**
S-3031

P/N 08406 24504




P/N 0840625902

SUPPORT HOOK
Never use it for lifting the unit.
Use the LIFT HOOK on the roof for lifting.
S-2257

P/N 13206 21504

WATER • OIL CHECK AND FILL DAILY
(S-511304)


P/N C0551000404



⚠ WARNING
ELECTRIC SHOCK HAZARD
• Always complete the grounding path from the ground terminal on this genset to an external grounding source. See instruction manual for details.

B91110040


P/N B9511100404



⚠ WARNING
HOT PARTS can burn skin
• Do not touch until the machine has sufficiently cooled

B90400030


P/N B9504000304



⚠ WARNING
HOT COOLANT can cause severe burns
• Do not remove cap if radiator is hot

B90410010

P/N B9504100104



⚠ WARNING
DIESEL FUEL can cause fire or explosion
• Stop engine before fueling.
• Keep cigarettes, sparks and flame away.

B90450000

P/N B9504500004

DIESEL FUEL
S-1756

P/N 1320620904

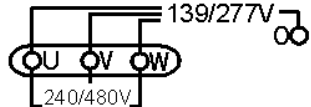
**FUEL
DRAIN PLUG** ↓
S-1883

P/N 6360620004

DCA-800SSK — OPERATION AND SAFETY DECALS

	WARNING <ul style="list-style-type: none"> • Only operate machine in well ventilated areas. • Do not inhale exhaust gases.
	DANGEROUS GAS Only qualified personnel should install, use, or service this equipment.


P/N B950420004

3-Phase output terminal Keep the loads balancing when using plural single loads.	
C05100040	

P/N C0551000404

GROUND
S-2635


P/N 0840614104

	WARNING ELECTRIC SHOCK HAZARD <ul style="list-style-type: none"> • Always complete the grounding path from the ground terminal on this genset to an external grounding source. See instruction manual for details.
	B91110040

P/N B9511100404

WARNING <ul style="list-style-type: none"> • Before connecting this generator to any building electrical system a licensed electrician must install an isolation (transfer) switch. • Serious injury or death may result without this transfer switch.
B91110030

P/N B9511100304

	WARNING ELECTRIC SHOCK HAZARD <ul style="list-style-type: none"> • Do not touch output terminals while this machine is operating. • Turn power off before servicing.
	B93110050

P/N B9531100504

DCA-800SSK — SPECIFICATIONS

Table 7. Specifications

Generator Specifications

Model	DCA-800SSK
Type	Revolving field, self ventilated, open protected type synchronous generator
Armature Connection	Star with Neutral
Phase	3
Standby Output	880KVA (740 KW)
Prime Output	800 KVA (640 KW)
Voltage	208,220,240,416,440,480 reconnectable (3 phase) 1200,127,139,240,254,277 adjustable (single phase)
Frequency	60 Hz
Speed	1800 rpm
Power Factor	0.8
Sound Level dB(A)	73 (full load at 23 feet)

Engine Specifications

Model	KOMATSU SA12v140	
Type	direct injection, turbo-charged with after-cooler	
No. of Cylinders	12 cylinders	
Bore x Stroke	5.5 in. x 6.5 in. (140 mm x 165 mm)	
Rated Output	980 HP/1800 rpm	
Displacement	1858 cu. in. (30480 cc)	
Starting	Electric	
Coolant Capacity	42.3 gal. (160.1 liters)	
Lube Oil Capacity	39.9 gal. (151.0 liters)	
Fuel Consumption	43.7gal. (165.4L)/hr at full load	33.0gal.(124.9L)/hr at 3/4 load
	24.0gal(90.9L)/hr at 1/2 load	14.9gal(56.4L)/hr at 1/4 load
Battery	12V- 200 AH x 4	
Fuel	#2 Diesel Fuel	

DCA-800SSK FAMILIARIZATION

Generator

The MQ Power Model DCA-800SSK is a 640 kW *generator* that has been 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
- Air Cleaner indicator
- 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

Control Box

The "Control Box" is provided with the following:

- Main Circuit Breaker 2500 amps
- On/Off circuit breaker lights
- Over-Current Relay
- High Idle Adjust Trimmer

Microprocessor Controlled Alarm System

The DCA-800SSK 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-800SSK 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-800SSK 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-800SSK** is powered by a 4 cycle, turbocharged KOMATSU Model SA12V140 *diesel* engine. This engine is designed to meet every performance requirement for the generator. Reference Table 7, page 24 for engine specifications.

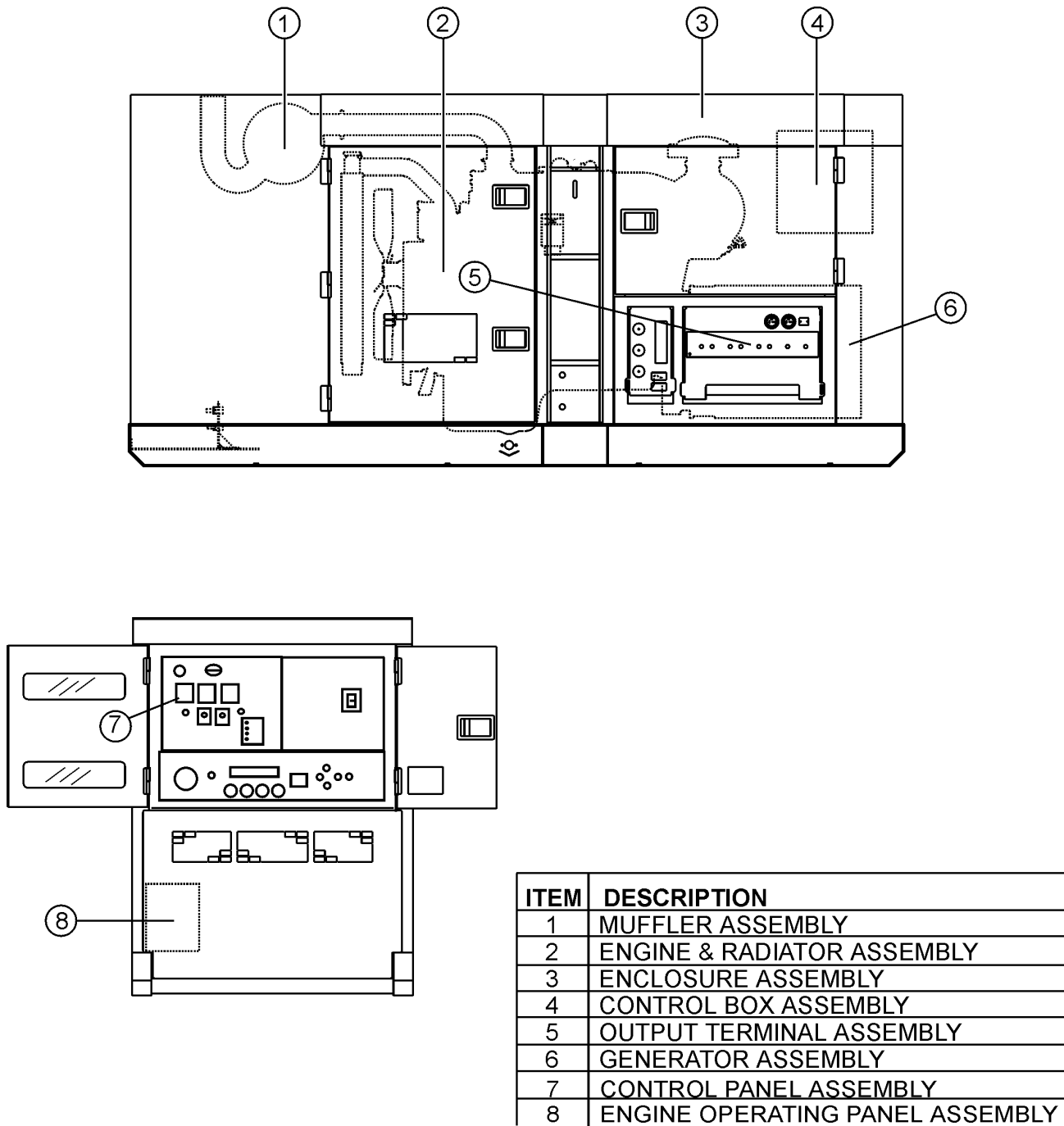
In keeping with Multiquip's policy of constantly improving its products, the specifications quoted herein are subject to change without prior notice.

The basic controls and indicators for the DCA-800SSK generator are addressed on the following pages.

Mechanical Governor System

The mechanical governor system control the RPM of the engine. When the engine demands increase or decrease, the mechanical governor system regulates the frequency variation to $\pm 1.0\%$. The electronic governor option increases frequency variation to $\pm 0.25\%$.

DCA-800SSK — MAJOR COMPONENTS

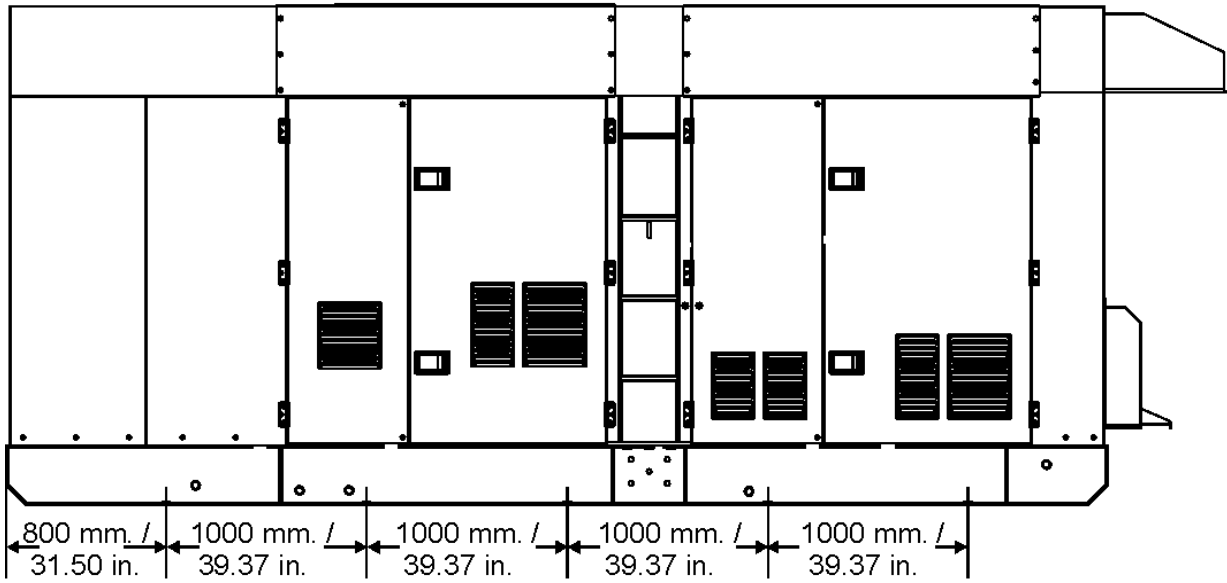


ITEM	DESCRIPTION
1	MUFFLER ASSEMBLY
2	ENGINE & RADIATOR ASSEMBLY
3	ENCLOSURE ASSEMBLY
4	CONTROL BOX ASSEMBLY
5	OUTPUT TERMINAL ASSEMBLY
6	GENERATOR ASSEMBLY
7	CONTROL PANEL ASSEMBLY
8	ENGINE OPERATING PANEL ASSEMBLY

Figure 7. Major Components

DCA-800SSK — DIMENSIONS (TOP AND SIDE)

SIDE VIEW



(BOLT HOLE LOCATION)

TOP VIEW

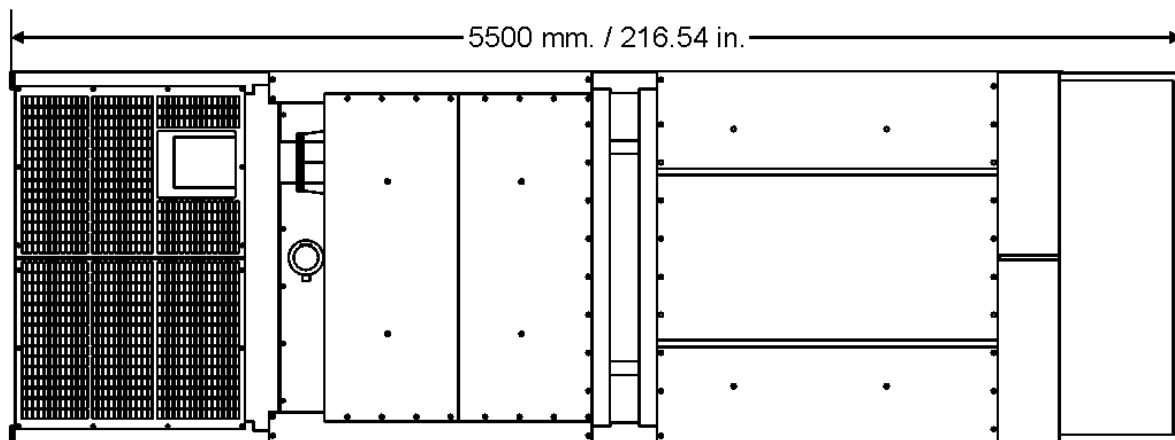


Figure 8a. Dimensions

DCA-800SSK — DIMENSIONS (FRONT AND REAR)

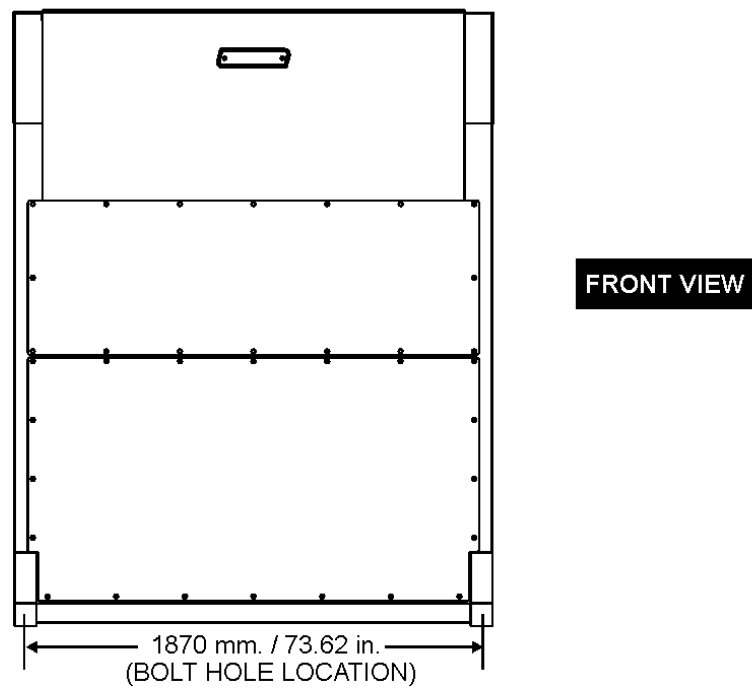
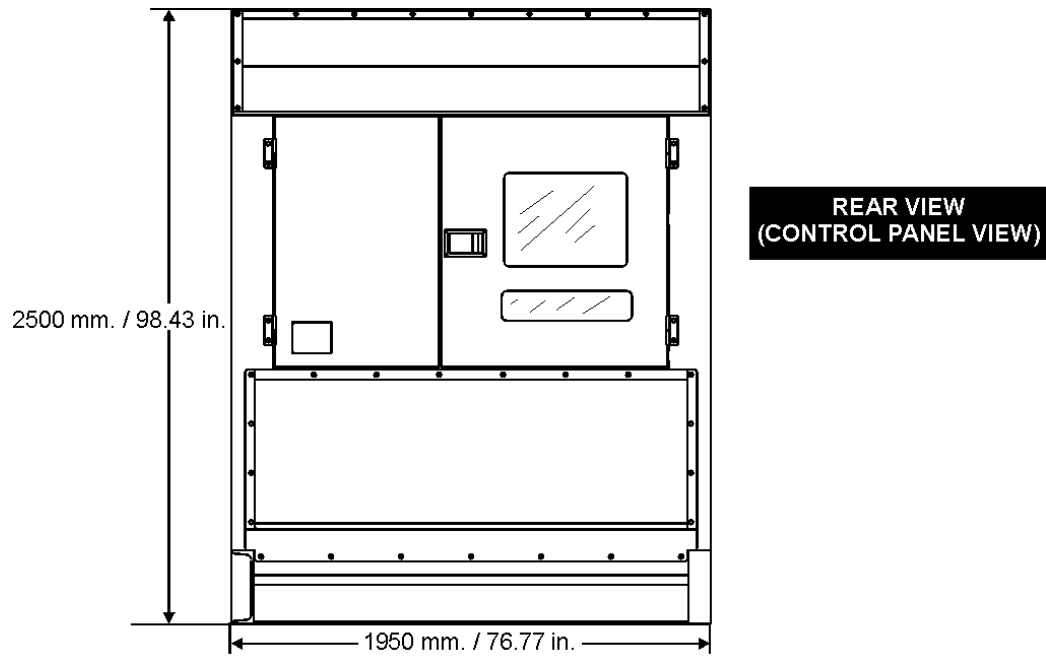


Figure 8b. Dimensions

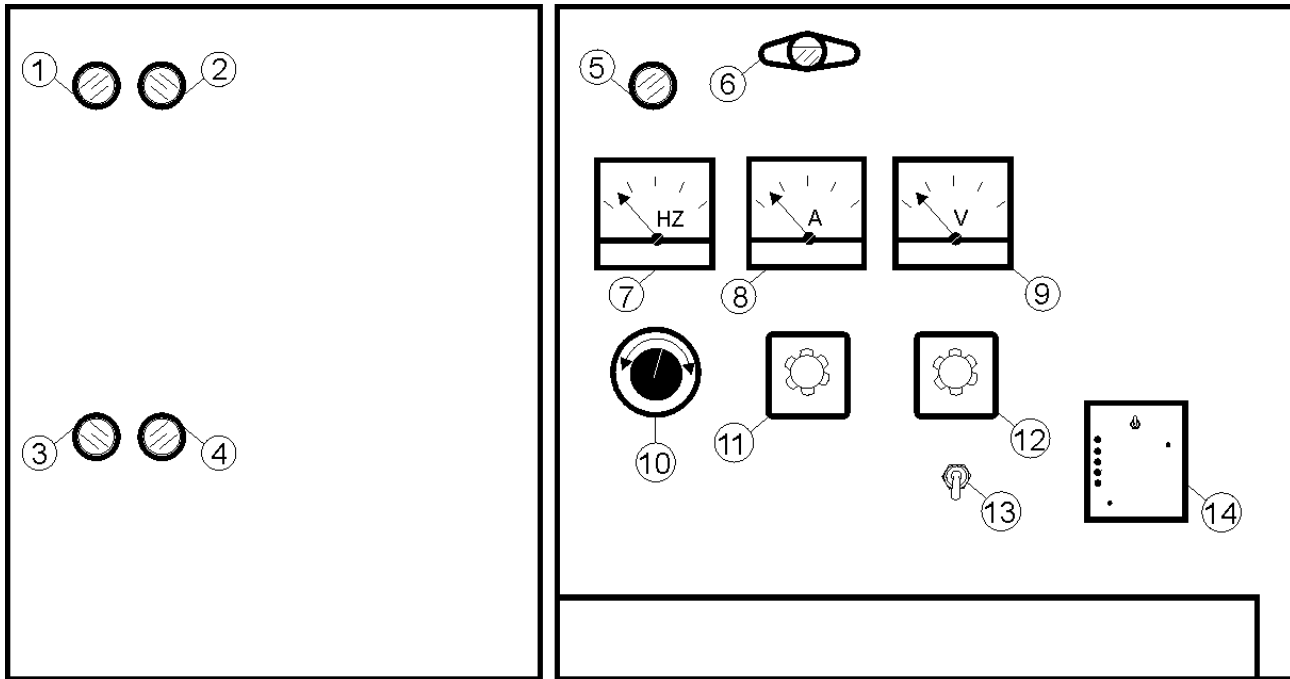


Figure 9. Control Panel

NO.	NAME
1	CIRCUIT BREAKER (OFF) LAMP
2	CIRCUIT BREAKER (ON) LAMP
3	CIRCUIT BREAKER RESET SWITCH
4	CIRCUIT BREAKER SWITCH
5	PILOT LAMP
6	PANEL LIGHT
7	FREQUENCY METER
8	AC AMMETER
9	AC VOLTMETER
10	VOLTAGE REGULATOR
11	AMMETER CHANGE-OVER SWITCH
12	VOLTMETER CHANGE-OVER SWITCH
13	PANEL LIGHT SWITCH
14	MPEC MODULE

The definitions below describe the controls and functions of the DCA-800SSK " **Control Panel**" (Figure 9).

1. **Circuit Breaker OFF lamp** - This indicates the main circuit breaker is "OFF" and the generator is unable to supply power to the load.
2. **Circuit Breaker ON lamp** - This indicates the main circuit breaker is in "ON" and the generator is able to supply power to the load.
3. **Circuit Breaker Reset Switch** - This button will turn off the circuit breaker.
4. **Circuit Breaker Switch** - This button will turn on the main circuit breaker.
5. **Pilot Lamp** – Indicates that the generator is working properly.
6. **Panel Light** – Normally used in dark areas or at night time. When activated, panel lights will illuminate. When lit this light will make it easier to read the meters and gauges. When the generator is not in use be sure to turn the panel light switch to the OFF position.
7. **Frequency Meter** - Indicates the output frequency in hertz (Hz). Typical reading is 60Hz.
8. **AC Ammeter** - Indicates the amount of current the load is drawing from the generator.
9. **AC Voltmeter** - Indicates the single phase output voltage present at the UVW terminals.
10. **Voltage Regulator Control** – Allows manual adjustment of the generator's output voltage.
11. **Ammeter Change-Over Switch** - This switch allows the AC ammeter to indicate the current flow into the load connected to any phase of the output terminals or to be switched off.
12. **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.
13. **Panel Light Switch** - When activated will turn on control panel light.
14. **MPEC (Microprocessor Engine Control Module)** - (MPEC) has a vertical row of status LED's (Figure 10), that when lit, indicates an engine malfunction (fault) has been detected. When a fault has been detected by the MPEC as a major fault, it will shut down the generator.

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 shutdown by the MPEC's " Over Crank Protection" mode. If the engine engages at a speed (RPM's) that is not safe, the MPEC will shutdown the engine by initializing the "Over Speed Protection" mode.

Also the MPEC will shutdown 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.

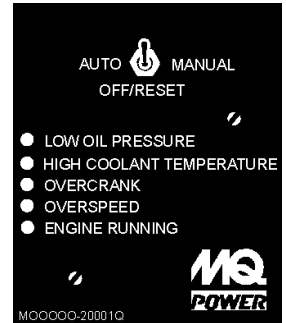


Figure 10. MPEC Module

- 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.
- D. **Overcrank Shutdown** – Indicates the unit has attempted to be started a pre- programmed number of times, and has failed to start. The number of cycles and duration are programmable. Typical programmable start settings is 3 cycles with a 10 second duration .This is considered a **major** fault.
- E. **Overspeed Shutdown** – Indicates that the engine is running at an unsafe speed. This is considered a **major** fault.
- F. **Engine Running** – Indicates that engine is running at a safe operating speed.

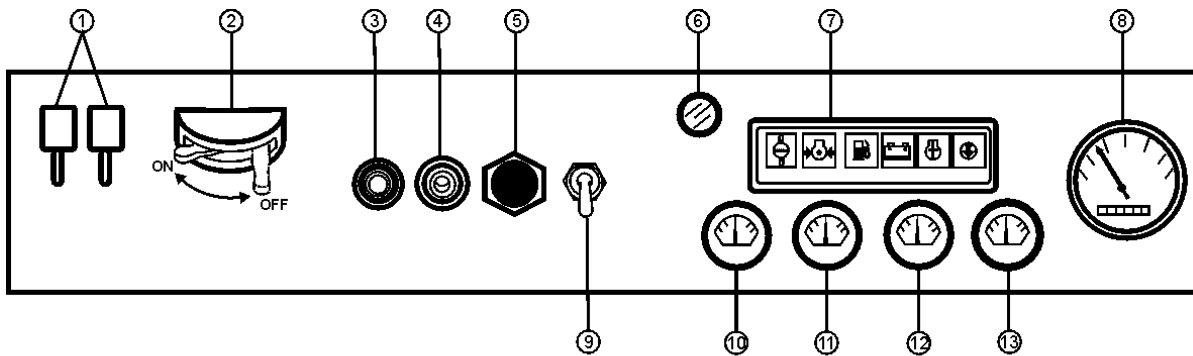


Figure 11. Engine Operating Panel

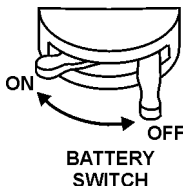
NO.	NAME
1	AIR CLEANER INDICATOR
2	BATTERY SWITCH
3	PREHEAT BUTTON
4	PREHEAT LAMP
5	EMERGENCY STOP BUTTON
6	ALARM LAMP, OIL FILTER
7	LED MODULE
8	TACHOMETER
9	ENGINE SPEED SWITCH
10	OIL PRESSURE GAUGE
11	WATER TEMP GAUGE
12	CHARGING AMMETER
13	FUEL LEVEL GAUGE

DCA-800SSK — ENGINE OPERATING PANEL

The definitions below describe the controls and functions of the DCA-800SSK "**Engine Operating Panel**" (Figure 11).

1. **Air cleaner indicator** - Indicates the air cleaner needs to be replaced when lit.

2. **Battery Switch** - This switch should be set to the "ON" position during normal operation. When the engine has been stopped, place this switch in the "OFF" position. **DO NOT** turn this switch during normal operation; it will cause damage to the electrical equipment.



3. **Preheat Button** - Press and hold this button for 30 seconds until the preheat lamp is lit (ON).



4. **Preheat lamp** - Indicates that the glow plugs of the diesel engine are hot is ready to start.



5. **Emergency Stop Button** - Press this button to stop the engine in the event of an emergency. **DO NOT** use this button as a normal means of stopping the engine.

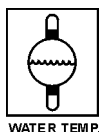


6. **Alarm Lamp, Oil Filter** - Indicates the oil filter is clogged and needs replacement.

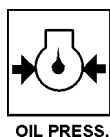


7. **Engine Display LED Module**- This module displays the following engine failures:

A. **Overheat Lamp** - This lamp turns on when the cooling water temperature rises beyond normal level. If the this light is on, the emergency shutdown device will stop the engine.



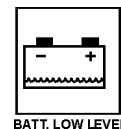
B. **Low Oil Pressure Lamp** - This lamp will turn on if the Auto-OFF/Reset-Manual switch on the MPEC is set in "Manual" position. It will remain lit until the oil pressure is at a normal level. If the lamp turns on at any time during the normal working time of the generator, it will shut down the engine.



C. **Low Fuel Level Lamp** - When lit, this indicates to add fuel. Let the engine cool before adding diesel fuel.



D. **Low Battery Fluid Lamp** - This indicates the battery fluid level is low. This indicator will shut down the engine. Refill the battery with distilled water.



E. **Clogged Air Filter Lamp** - This indicates the air filter is clogged. Stop the engine and replace the air filter.



8. **Tachometer** - Indicates engine speed in RPMs for 60Hz operation. Normal operation is 1800 RPMs when the load is applied. A built in hour meter will record the number of operational hours that the generator has been in use.

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

10. **Oil Pressure Gauge** - This gauge indicates the oil pressure. During normal operation, the gauge should read in the 'green' zone. When starting the generator, the oil pressure may read slightly higher, but after the engine warms up, it should return to the 'green' zone.

11. **Water Temp Gauge** - This indicates the temperature of the coolant. During normal operation this gauge should read in the 'green' zone.

12. **Charging Ammeter Gauge** - This gauge indicates the current supplied by the alternator, which supplies current from the generator's control circuits and battery charging system.

13. **Fuel Level Gauge** - This gauge indicates diesel fuel level.

DCA-800SSK — OUTPUT TERMINAL OVERVIEW

DCA-800SSK FAMILIARIZATION

The “Output Terminal Panel” is provided with the following:

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

Control Box

The “Control Box” is provided with the following:

- Main Circuit Breaker 2500 amps
- On/Off circuit breaker lights
- Over-Current Relay
- High Idle Adjust Trimmer

Output Terminal Panel

The Output Control Panel (See Figure 13) is located on the right hand side (left from control panel) of the generator. The UVWO lugs are protected by a face plate cover that can be secured in the close position by a pad lock. (See Figure 12).

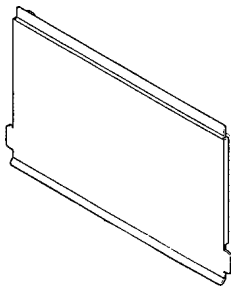


FIGURE 12. Output Terminal Cover

Duplex Receptacle

The DCA-800SSK does not have any duplex receptacles.

Connecting Load

Loads can be connected to the generator by the UVWO Lugs . Make sure to read the operation manual before attempting to connect a load to the generator.

Circuit Breakers

To protect the generator from an overload, a 3-pole, 2500 amp, *main* circuit breaker is provided to protect the UVWO output terminals 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.

Maximum Output

The entire load connected to the UVW Lugs, all four slots in the duplex receptacles, and the must not exceed 704 kW in standby or 640 kW in prime output.

Twist Lock Dual Voltage Receptacles

Three CS-6369 auxiliary power receptacles have been provided to supply 208/120V. The voltage regulator knob on the control panel may need to be used to adjust the voltage to 208 or 416V.

DCA-800SSK — OUTPUT TERMINAL OVERVIEW

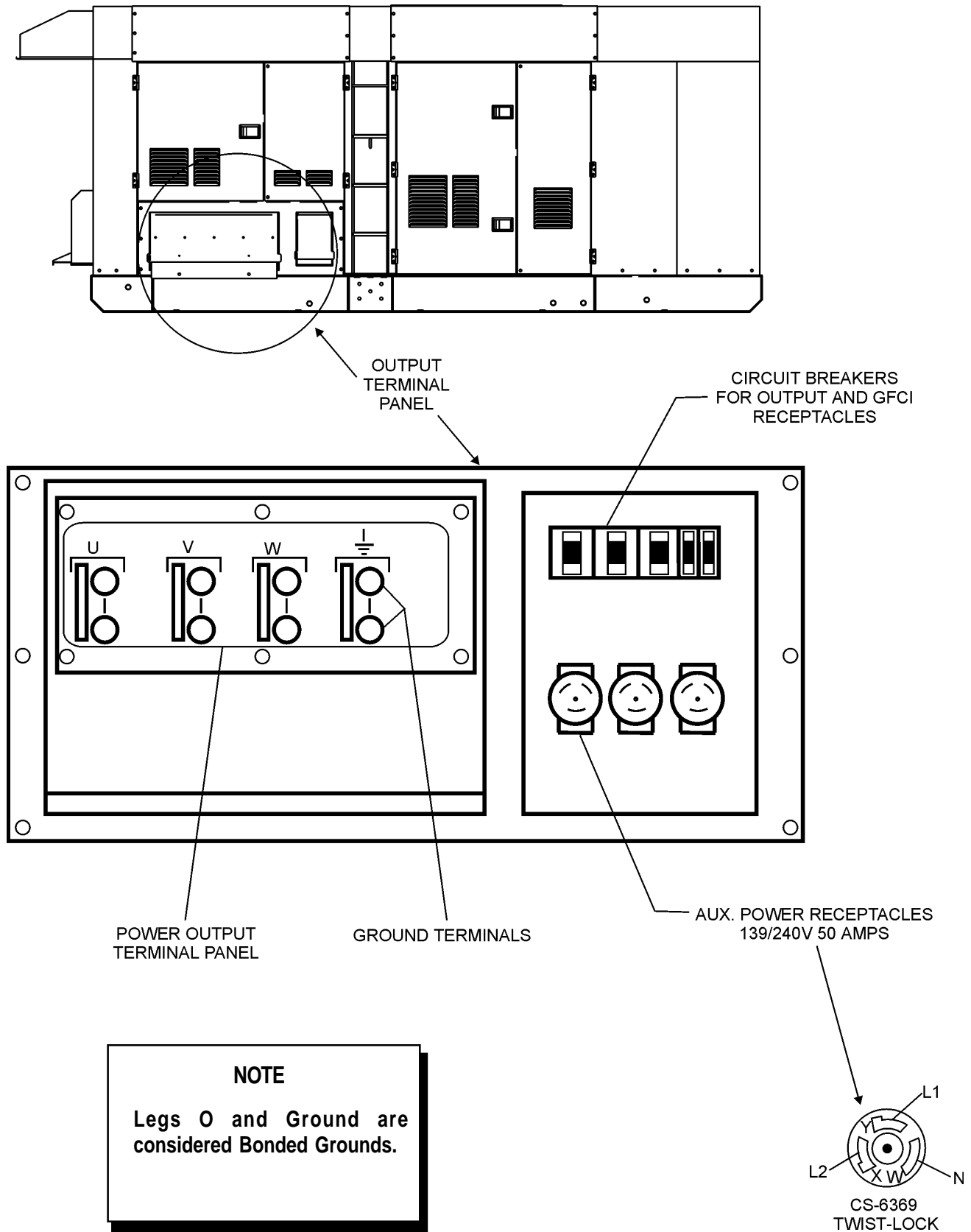


Figure 13. Output Terminal Panel

DCA-800SSK — OUTPUT TERMINAL OVERVIEW

Output Terminal Panel Available Voltages

A wide range of voltages are available to supply load to many different applications. Voltages may be selected by using the voltage change-over board and how you hookup your hard wire connection to the generator. To obtain some of the voltages listed, fine adjustment with the Voltage Regulator on the control panel is necessary. See the table below (Table 8) for a list of available voltages the generator is able to supply.

TABLE 8. VOLTAGES AVAILABLE

MODEL	DCA800SSK					
3 PHASE VOLTAGE (RECONNECTABLE)	208 VOLT	220 VOLT	240 VOLT	416 VOLT	440 VOLT	480 VOLT
SINGLE PHASE (ADJUSTABLE)	120 VOLT	127 VOLT	139 VOLT	240 VOLT	254 VOLT	277 VOLT

CAUTION :



NEVER attempt to change the Voltage Change-over board while the engine is engaged.

Maximum Amps

The following table show the maximum amps the entire generator can provide. Do not exceed the maximum amps listed. (See Table 9)

Table 9. Maximum Amps

Model:	DCA800SSK
Rated Voltage	Maximum Amps
Single Phase 120 Volt	1777.8 amps (4 wire)
Single Phase 240 Volt	888.9 amps (4 wire)
Three Phase 240 Volt	1924.6 amps
Three Phase 480 Volt	962.3 amps

Over Current Relay

An over current relay is connected to the circuit breaker. In an over current situation, both the circuit breaker and the over current relay may trip. If the circuit breaker can not be reset, the reset button on the over current relay must be pressed. The over current relay is located in the control box.

DCA-800SSK — OUTPUT TERMINAL OVERVIEW

How to read the output terminal gauges.

The gauges and knobs on the control panel **DO NOT** effect the generator output in any fashion. They are there to simply help the operator observe how much power is being produced at the UVWO legs.

To read the output of the W-U legs, for example, place the AC Voltmeter Change-over switch to the W-U position and the AC ammeter Change -over Switch to the U or W position to read the output on the selected leg.

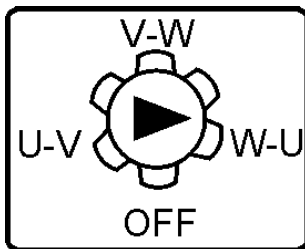


FIGURE 14. AC Voltmeter Change-over switch (Reading the W-U leg on the output terminal panel)

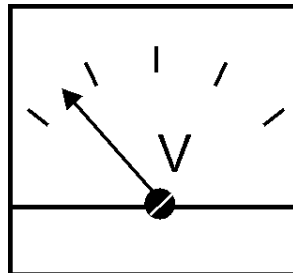


FIGURE 15. AC Voltmeter Gauge (Volt reading on W-U Lug)

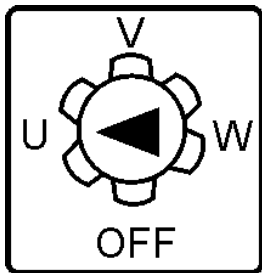


FIGURE 16. AC Ammeter Change-over Switch (Reading the U leg on the output terminal panel)

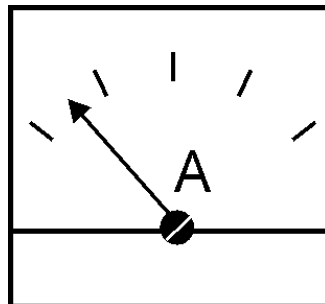


FIGURE 17. AC Ammeter (Amp reading on U lug)

DCA-800SSK — OUTPUT TERMINAL OVERVIEW

Voltage Change-over Board

The voltage change-over board changes the available voltages of the output terminal panel UVWO lugs. The voltage change-over board is located on the control box behind the control panel. There are six (6) plates that can be set into two set positions to get six different voltages. Unless specified differently, the generator comes from the factory in the 240V position.

240 Volt Set position

The voltage change-over board 240V set position uses all 6 plates in 6 different connection places. See figure 18 below.

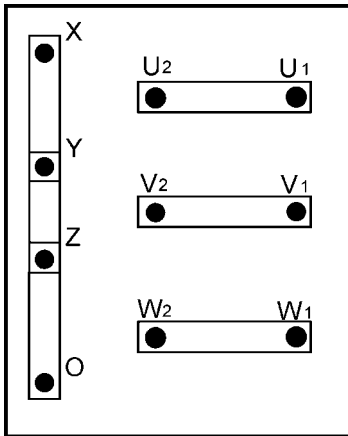


FIGURE 18. Voltage Change-over Board 240V set position.

3 Phase, 240 Volt

The following connection, with the voltage change-over board set into the 240V set position (See Figure 18), can offer **THREE PHASE** power at 240V. After hooking up the hard wires to the lugs as shown in figure 19 below, 240V will be the voltage output.

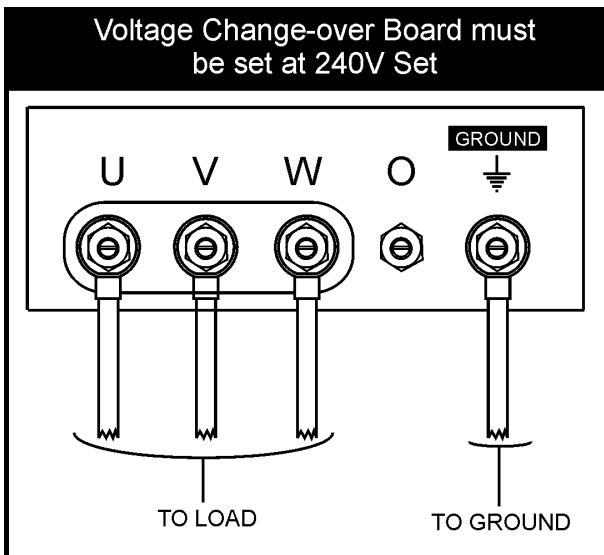


FIGURE 19. Hard Wire Hookup for Three Phase 240V

Single Phase, 240 Volt

The following connection, with the voltage change-over board set into the 240V set position (See Figure 18), can offer **SINGLE PHASE** power at 240V. After hooking up the hard wires to the lugs as shown in figure 20 below, 240V will be the voltage output.

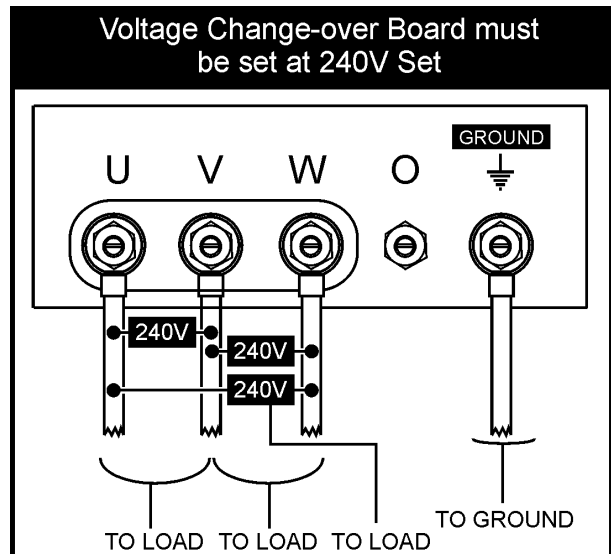


FIGURE 20. Hard Wire Hookup for Single Phase 240V

Single Phase, 139 Volt

The following connection, with the voltage change-over board set into the 240V set position (See Figure 18), can offer **SINGLE PHASE** power at 139V. After hooking up the hard wires to the lugs as shown in figure 21 below, 139V will be the voltage output.

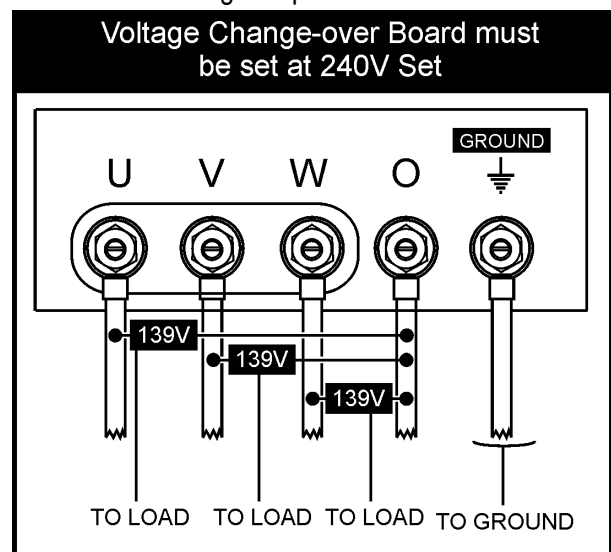


FIGURE 21. Hard Wire Hookup for Single Phase 139V

DCA-800SSK — OUTPUT TERMINAL OVERVIEW

480 Volt Set position

The voltage change-over board 480V set position uses all 6 plates in 3 different connection places. There are 2 plates at every position (Every plate is used). See figure 22 below.

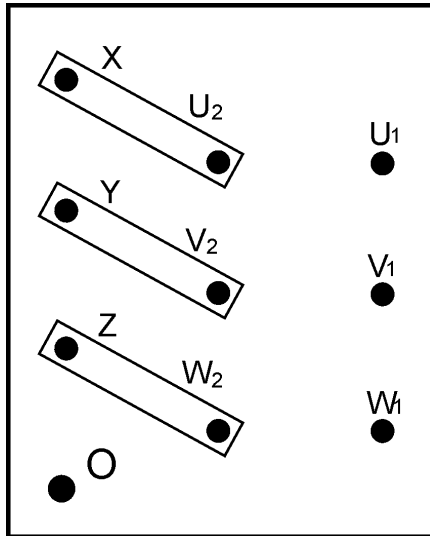


FIGURE 22. Voltage Change-over Board 480V set position.

3 Phase, 480 Volt

The following connection, with the voltage change-over board set into the 480V set position (See Figure 22), can offer **THREE PHASE** power at 480V. After hooking up the hard wires to the lugs as shown in figure 23 below, 480V will be the voltage output.

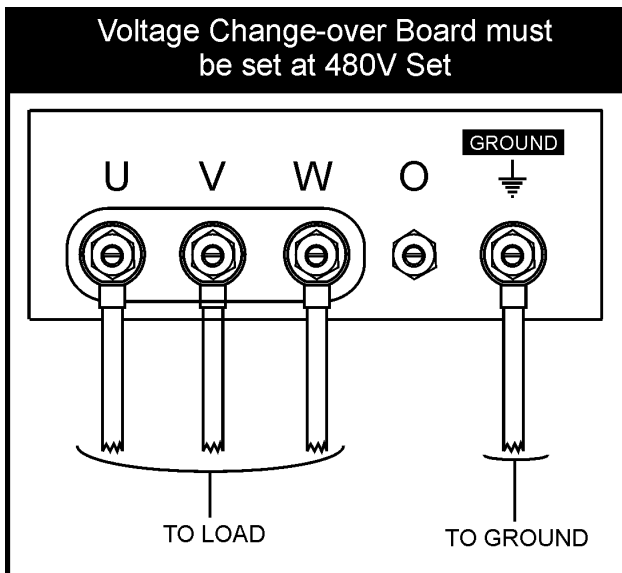


FIGURE 23. Hard Wire Hookup for Three Phase 480V

Single Phase, 480 Volt

The following connection, with the voltage change-over board set into the 480V set position (See Figure 22), can offer **SINGLE PHASE** power at 480V. After hooking up the hard wires to the lugs as shown in figure 24 below, 480V will be the voltage output.

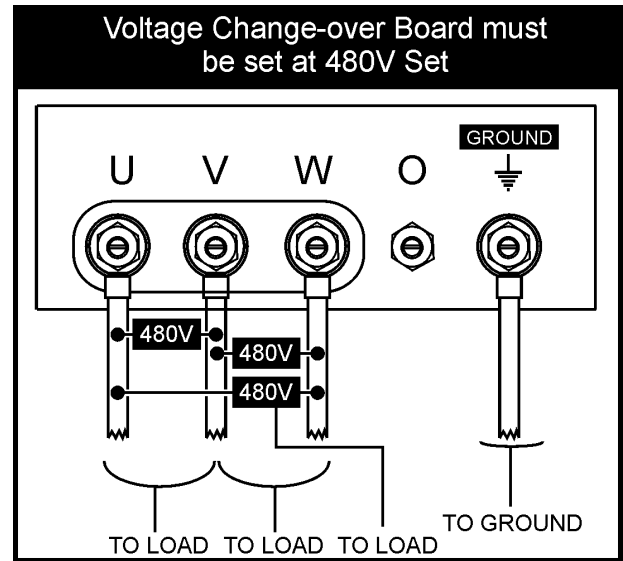


FIGURE 24. Hard Wire Hookup for Single Phase 480V

Single Phase, 277 Volt

The following connection, with the voltage change-over board set into the 480V set position (See Figure 22), can offer **SINGLE PHASE** power at 277V. After hooking up the hard wires to the lugs as shown in figure 25 below, 277V will be the voltage output.

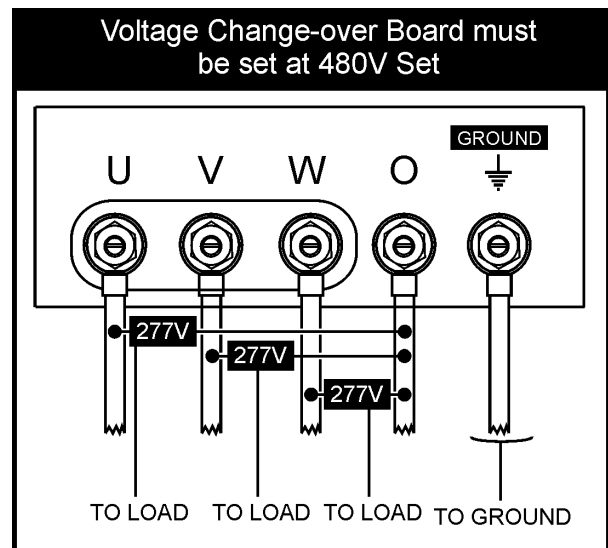


FIGURE 25. Hard Wire Hookup for Single Phase 277V

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 that it cannot slide or shift around. Also install the generator in a manner 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 and alternator parts.

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 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 250-64(b) and 250-66 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 mm²) or larger.
 - b. Aluminum - 8 AWG (8.4 mm²) or larger.
2. When grounding the generator (Figure 26) 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 250-52(c) 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.

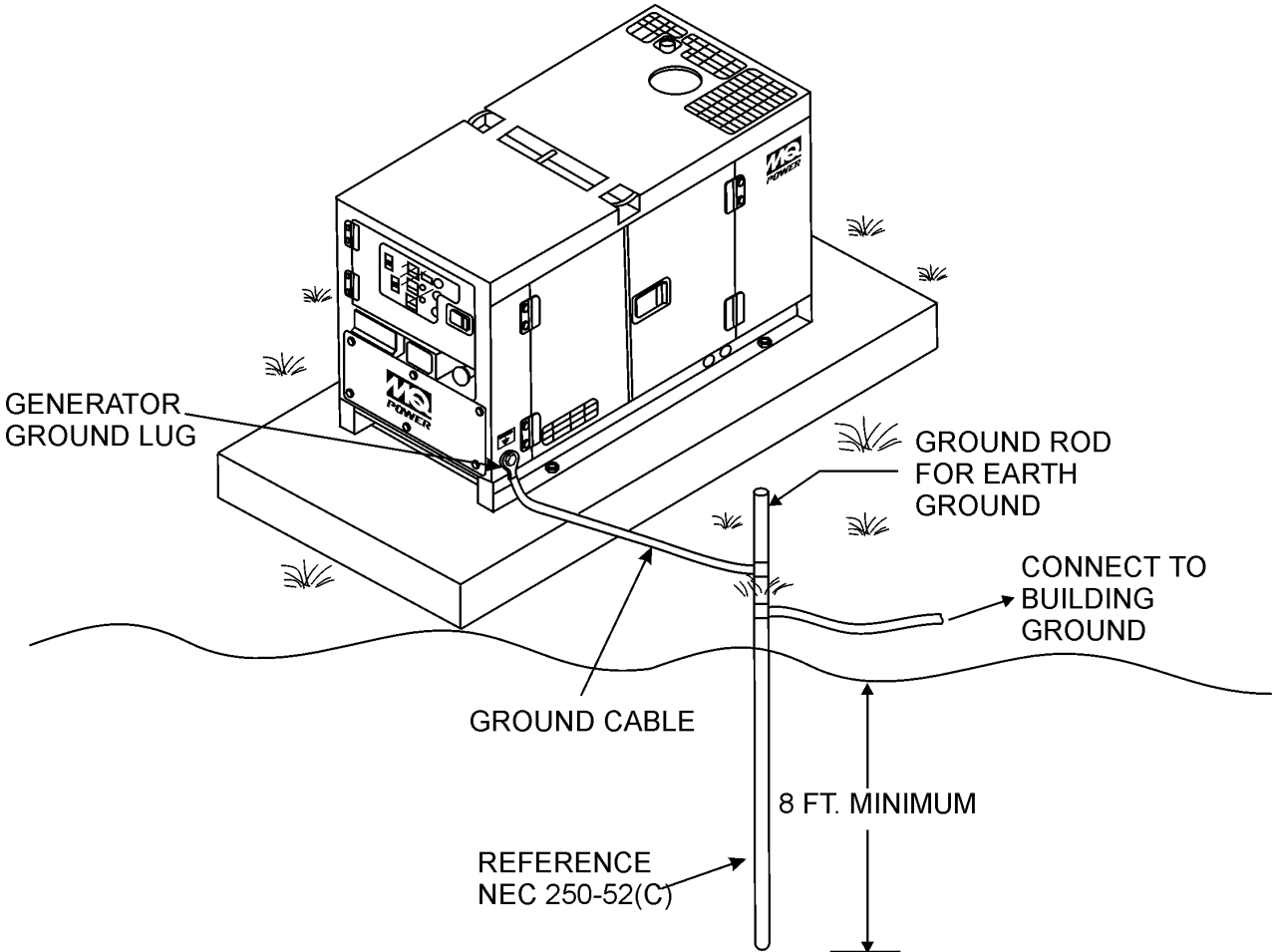


Figure 26. Typical Generator Grounding Application

CAUTION :



Always check Local, State, and Federal laws before grounding generator set. Only licenced electricians are qualified to ground a generator set.

General Inspection Prior to Operation

The DCA-800SSK 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 the Cable Selection Guide (Table 10) as a guide for selecting proper cable size.

Circuit Breakers

To protect the generator from an overload, a 2500 amp, **main** circuit breaker is provided to protect the UVW output terminals 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 10. 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 that the oil level is maintained between the two notches (Figure 27) on the dipstick. See Table 11 for proper selection of engine oil.

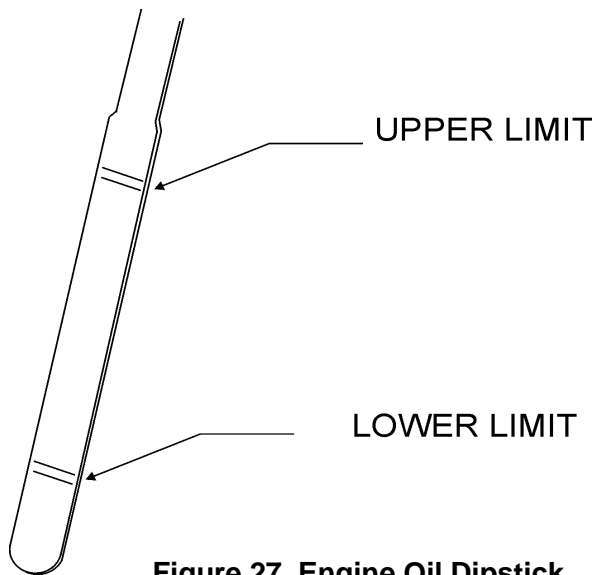


Figure 27. Engine Oil Dipstick

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 24, 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 fuel spillage occurs, wipe up the spilled fuel 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 11. 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. Make sure the coolant level in the reserve tank is always between the "H" and the "L" markings.

Operation in Freezing Weather

When operating in freezing weather, be certain the proper amount of antifreeze (Table 12) has been added.

Table 12. Anti-Freeze Operating Temperatures

Vol % Anti-Freeze	Freezing Point		Boiling Point	
	°C	°F	°C	°F
40	-24	-12	106	222
50	-37	-34	108	226

NOTE

When the antifreeze is mixed with water, the antifreeze 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 28) when depressed with the thumb as shown below.

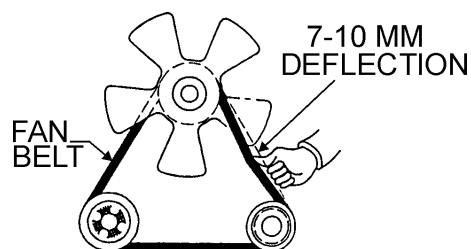


Figure 28. Fan Belt Tension

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 that the battery cables (Figure 29) 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.

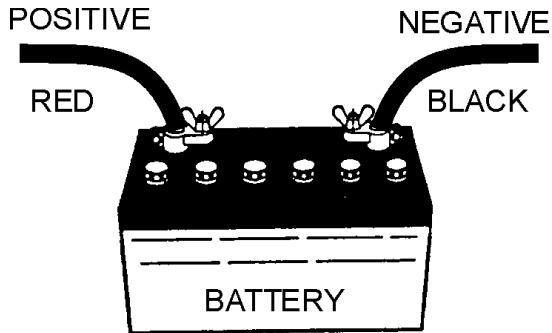


Figure 29. Battery Connections

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.

$$\text{WATTS} = \text{VOLTAGE} \times \text{AMPERAGE}$$

The power factor of this generator is 0.8. See Table 13. below when connecting loads.

Table 13. 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:

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

NOTE

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

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.

CAUTION:



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

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.

DCA-800SSK — 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 11 on page 45).
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 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 diesel fuel. 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. Switch the **MAIN LOAD** and **G.F.C.I.** circuit breakers to the "OFF" position prior to starting the engine.

2. Connect the load to the UVW terminals as shown in Figure 30. These terminals can be found on the output terminal panel, see page 37, Figure 13. To gain access to the output terminals lift the UVW cover. Tighten the terminal nuts securely to prevent load wires from slipping out.

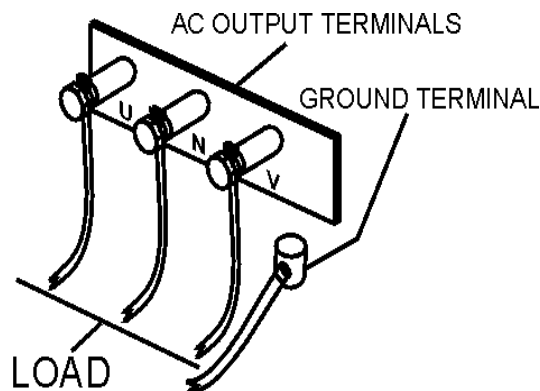


Figure 30. UVW Terminal Lugs (Load)

3. Connect the negative battery cable (BLACK) to the negative post on the battery (Figure 31).

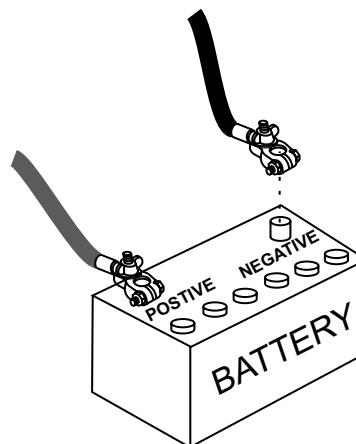


Figure 31. Battery Connections

DCA-800SSK — GENERATOR START-UP PROCEDURE (MANUAL)

4. Close all engine enclosure doors (Figure 32).

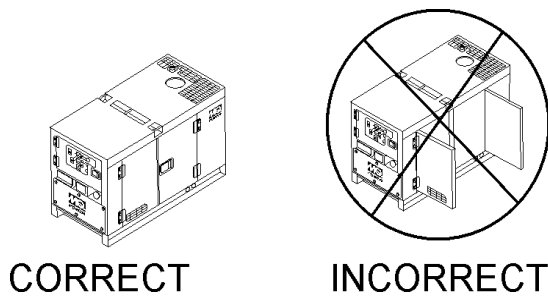


Figure 32. Engine Enclosure Doors

7. Place the Off/Manual/Auto switch (Figure 36) in the **MANUAL** position (down). Observe that the engine begins to crank.

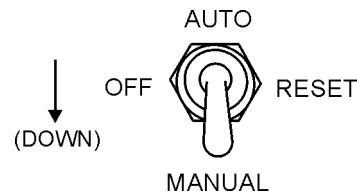


Figure 36. Off/Manual/Auto Switch (Manual)

5. Set the battery ON/OFF switch (Figure 33) to the "ON" position.

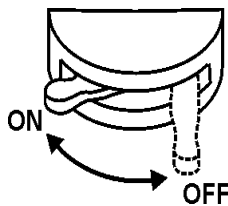


Figure 33. Battery ON/OFF Switch

8. After engine starts, verify that the "Engine Running" status LED (Figure 37) on the Microprocessor Engine Control Module (MPEC) display is "ON" (lit).



Figure 37. MPEC Engine Running Status LED

6. When starting the generator in **COLD** weather conditions, press and hold the engine preheat button (Figure 34) until the preheat lamp (Figure 35) is lit (ON).



Figure 34. Engine Pre-Heat Button

9. The generator's frequency meter (Figure 38) displays the 60 cycle output frequency in **HERTZ**.



Figure 35. Engine Pre-Heat Lamp

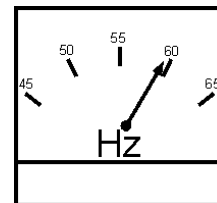


Figure 38. Frequency Meter (Hz)

DCA-800SSK — GENERATOR START-UP PROCEDURE (MANUAL)

10. The generator's voltage meter (Figure 39) displays the 120 VAC in **VOLTS**. If the voltage is not within the specified frequency tolerance, use the voltage adjustment control knob (Figure 40) to increase or decrease the desired voltage.

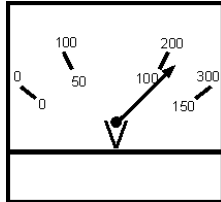


Figure 39. Voltage Meter (Volts)

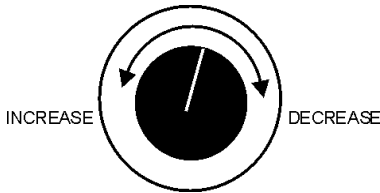


Figure 40. Voltage Adjust Control Knob

11. The ammeter (Figure 41) 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.

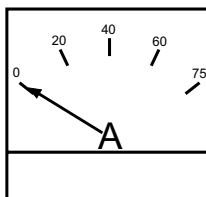


Figure 41. Ammeter (No Load)

12. The engine oil pressure gauge (Figure 42) will indicate the oil pressure (kg/ cm²) of the engine. Under normal operating conditions the oil pressure should be approximately 25 psi.

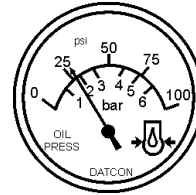


Figure 42. Oil Pressure Gauge

13. The coolant temperature gauge (Figure 43) will indicate the coolant temperature. Under normal operating conditions the coolant temperature should be between 165 and 215 degrees Fahrenheit (Green Zone).

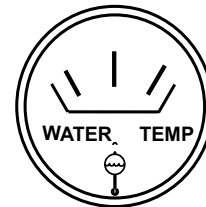


Figure 43. Coolant Temperature Gauge

14. Set the engine speed switch (Figure 44) to low to idle engine, set to high before applying a load.

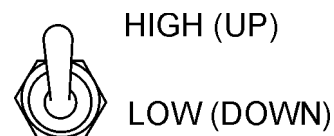


Figure 44. Engine Speed Switch

DCA-800SSK — GENERATOR START-UP PROCEDURE (MANUAL)

15. The tachometer (Figure 45) will indicate the speed of the engine when the generator is operating. Under normal operating conditions this speed should be approximately 1800 RPM's.

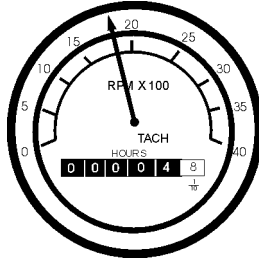


Figure 45. Engine Tachometer

16. After the engine has been running for a few minutes, look at the status LED'S on the "MPEC" display (Figure 37) and check it for any abnormal conditions. If any abnormal conditions exist, take corrective action to solve the problem.
17. If there are no abnormal problems shown on the "MPEC" LED display, turn the MAIN, GFCI and LOAD circuit breakers to their "ON" position.
18. Look at the generator's ammeter (Figure 38) 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.

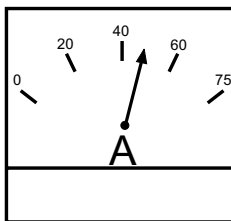


Figure 38. Ammeter (Load)

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

DCA-800SSK — GENERATOR START-UP PROCEDURE (AUTO)

CAUTION:



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

Starting the generator in "**AUTO**" mode, it is similar to starting the generator in "**MANUAL**" mode, with some exceptions:

CAUTION:



When running the generator in the **AUTO** mode, the generator may start at any time without warning. **NEVER** attempt to perform any maintenance when the generator is in 'AUTO'.

1. Perform steps 1 through 6 (Before Starting Engine, page 49-50).
2. Place the Off/Manual/Auto Switch (Figure 39) in the **AUTO** position (UP). The generator is now in the "Auto" position and is monitoring commercial power. When commercial power falls below a specified level, the engine will begin to crank. When commercial power is restored, the generator will shutdown until the next power failure.

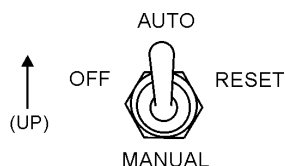


Figure 39. Off/Manual Auto Switch in 'AUTO'

3. Continue following the steps as outlines in the manual start-up procedure when the generator is running under the "Auto" position. (Steps 9 through 19 pgs 50-52).

DCA-800SSK — GENERATOR SHUTDOWN PROCEDURE

Engine Shutdown

To shutdown 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 40) to the idle (low) position.

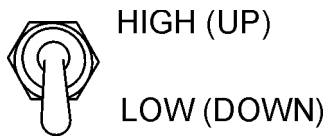


Figure 40. Engine Speed Switch

3. Let the engine cool by running it for 3-5 minutes with no load applied.
4. Place the Off/Manual/Auto Switch (Figure 41) in the "OFF/RESET" position.

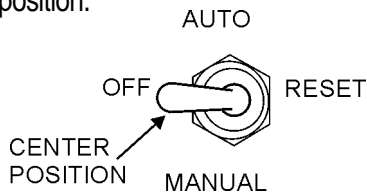


Figure 41. Off/Manual Auto Switch (OFF)

5. Verify that the "Engine Running" status LED (Figure 42) on the Microprocessor Engine Control Module (MPEC) display is "OFF" (not lit).

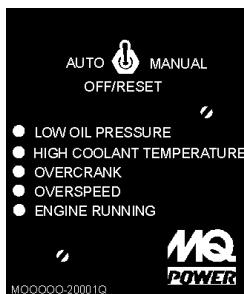
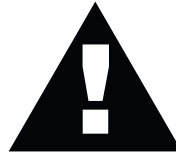


Figure 42. MPEC Engine Running Status LED (OFF)

6. Remove the load from the UVWO terminal strip (Figure 13).

Emergency Stop

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



1. To stop the engine in the event of an emergency, **PUSH** the emergency stop button (Figure 43).

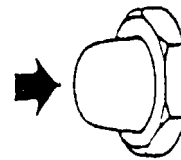


Figure 43. Emergency Stop Button

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 and clean heavy duty paper element with kerosene, or foam element with liquid detergent and hot water. Wrap foam element in a cloth and squeeze dry. For heavy duty paper element, wipe excess kerosene with towel.

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 10, page 31.

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.

TABLE 14.

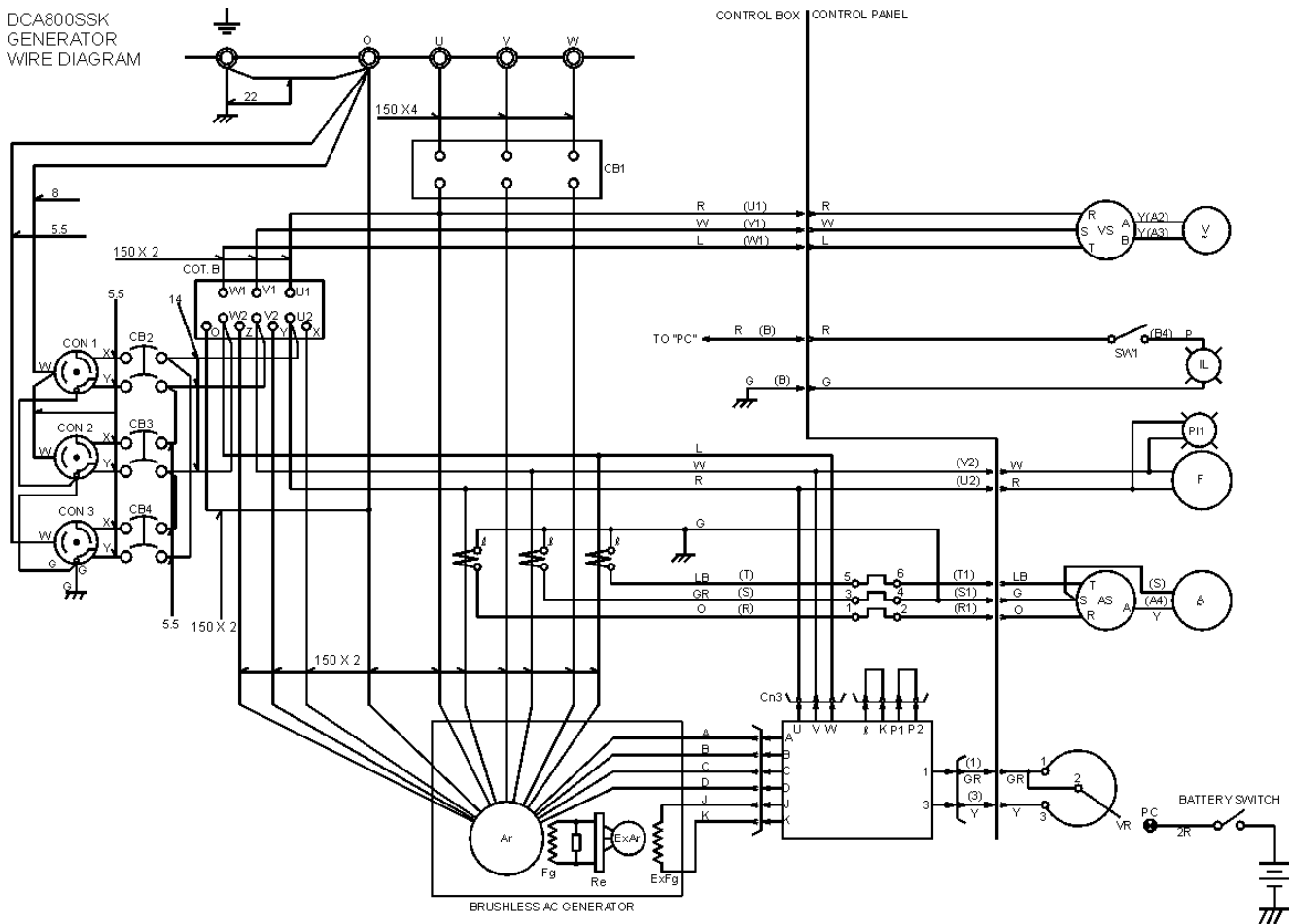
INSPECTION / MAINTENANCE		10 Hrs DAILY	250 Hrs	500 Hrs	1000 Hrs
ENGINE	Check Engine Fluid Levels	X			
	Check Air Cleaner	X			
	Check Battery Acid Level	X			
	Check Fan Belt Condition	X			
	Check for Leaks	X			
	Check for Loosening of Parts	X			
	Replace Engine Oil and Filter * ¹		X		
	Clean Air Filter		X		
	Drain Bottom of Fuel Tank		X		
	Clean Unit, Inside and Outside		X		
	Change Fuel Filter * ²			X	
	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 and filter at 100 hours, first time only.

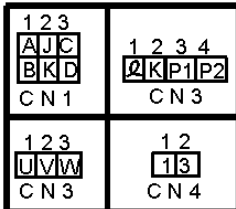
*² Replace fuel filter at 250 Hours, first time only.

DCA-800SSK — GENERATOR WIRING DIAGRAM

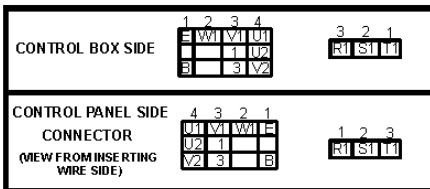
DCA800SSK
GENERATOR
WIRE DIAGRAM



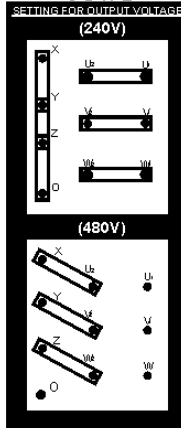
AVR CONNECTOR



(VIEW FROM INSERTING WIRE SIDE)



COT. B

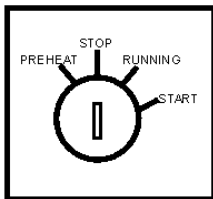
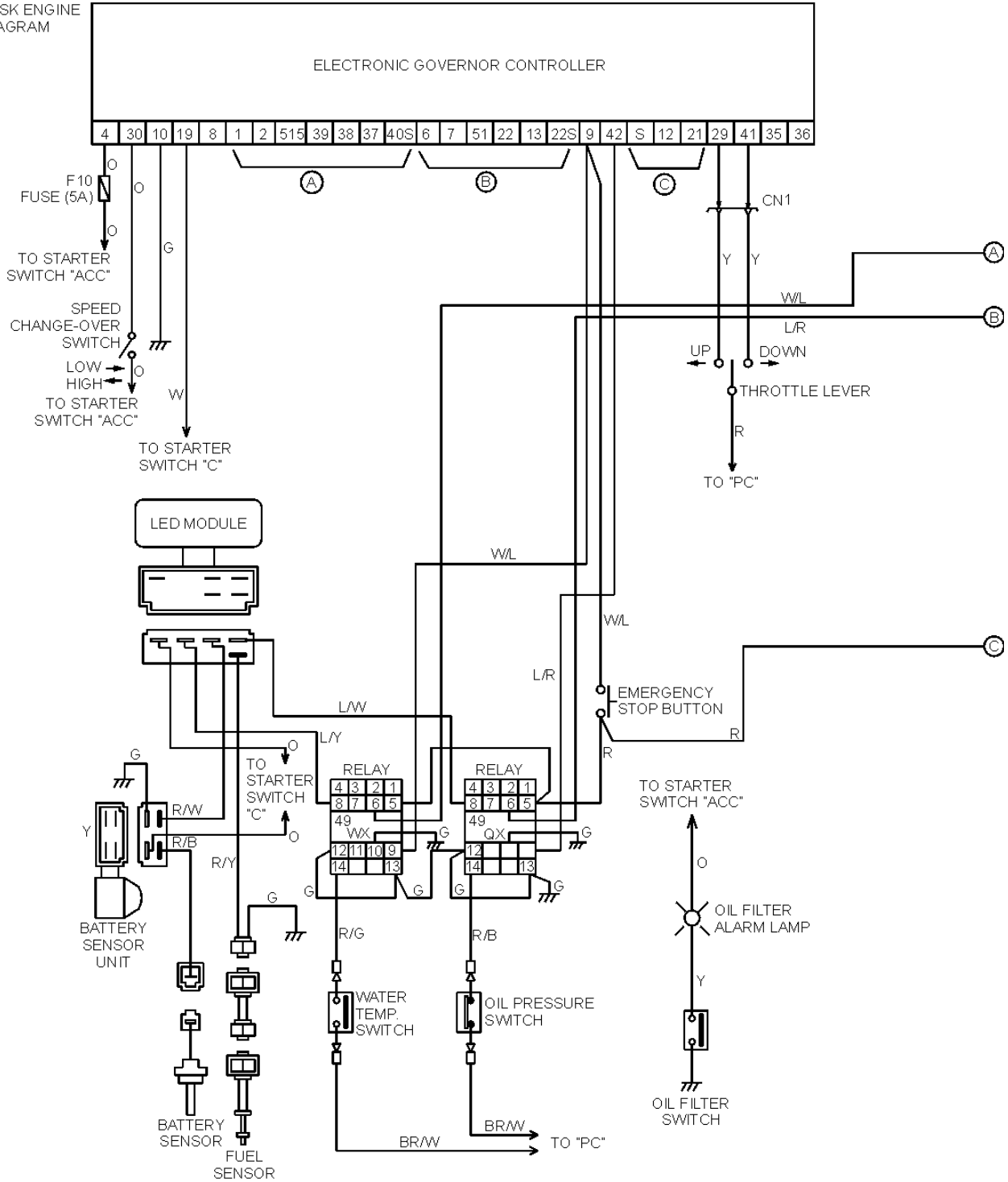


MARK	NAME
AR	MAIN GENERATOR ARMATURE WINDING
Fg	MAIN GENERATOR FIELD WINDING
ExAr	EXCITER ARMATURE WINDING
ExFg	EXCITER FIELD WINDING
AVR	AUTOMATIC VOLTAGE REGULATOR
VR	VOLTAGE REGULATING RHEOSTAT
Re	RECTIFIER
CT1~3	CURRENT TRANSFORMER (1500/5A)
C B 1	CIRCUIT BREAKER (2500A)
OC	OVER CURRENT RELAY
COT. B	BOLTAGE CHANGE-OVER BOARD
AS	AMMETER CHANGE-OVER SWITCH
A	AC AMMETER (0~1500 3000A)
VS	VOLTMETER CHANGE-OVER SWITCH
V	AC VOLTMETER (0~600)
F	FREQUENCY METER (45~65HZ)
PI1	PILOT LAMP
CB2~4	AUX. CIRCUIT BREAKER (50A)
CON1~5	AUX POWER RECEPTACLE (50A)
IL	PANEL LIGHT
SW1	PANEL LIGHT SWITCH

WIRE SIZE	COLOR CODE
125: 125 mm ²	CODE/ WIRE COLOR
100: 100 mm ²	B BLACK R RED
80: 80 mm ²	L BLUE W WHITE
22: 22 mm ²	BR BROWN Y YELLOW
14: 14 mm ²	G GREEN LB LIGHT BLUE
8: 8 mm ²	GR GRAY LG LIGHT GREEN
5.5: 5.5 mm ²	V VIOLET O ORAGNE
	P PINK
NO MARK WIRE SIZE: 1.25 mm ²	

DCA-800SSK — ENGINE WIRING DIAGRAM

DCA800SSK ENGINE WIRE DIAGRAM



	STARTER SWITCH CONNECTION					
	B	BR	R1	R2	C	ACC
STOP	●					
PREHEAT	●	●	●			●
RUNNING	●	●				●
START	●	●		●	●	●

WIRE SIZE	COLOR CODE			
	CODE/WIRE COLOR			
150: 150 mm ²	B	BLACK	R	RED
100: 100 mm ²	L	BLUE	W	WHITE
20: 20 mm ²	BR	BROWN	Y	YELLOW
5: 5 mm ²	G	GREEN	LB	LIGHT BLUE
2: 2 mm ²	GR	GRAY	LG	LIGHT GREEN
NO MARK	V	VIOLET	O	ORAGNE
SIZE: 1.25 mm ²	P	PINK		

DCA-800SSK — TROUBLESHOOTING (ENGINE)

All generator breakdowns can be prevented by proper handling and maintenance inspections. In the event of a breakdown, use the Engine Troubleshooting (Table 15)

information shown below and on the preceding page. If the problem cannot be remedied consult our company's business office or service plant.

TABLE 15. 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 15. 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-800SSK — TROUBLESHOOTING GENERATOR

All generator breakdowns can be prevented by proper handling and maintenance inspections. In the event of a breakdown, use the Engine and Generator Troubleshooting (Table 16) information shown below. If the problem cannot be remedied consult our company's business office or service plant.

TABLE 16. 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 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 n 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-800SSK —TROUBLESHOOTING MPEC

All generator breakdowns can be prevented by proper handling and maintenance inspections. In the event of a breakdown, use the MPEC Troubleshooting (Table 17) information shown below. If the problem cannot be remedied consult our company's business office or service plant.

TABLE 17. 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-800SSK W/KOMATSU SA12v140
DIESEL ENGINE 1 TO 3 UNITS**

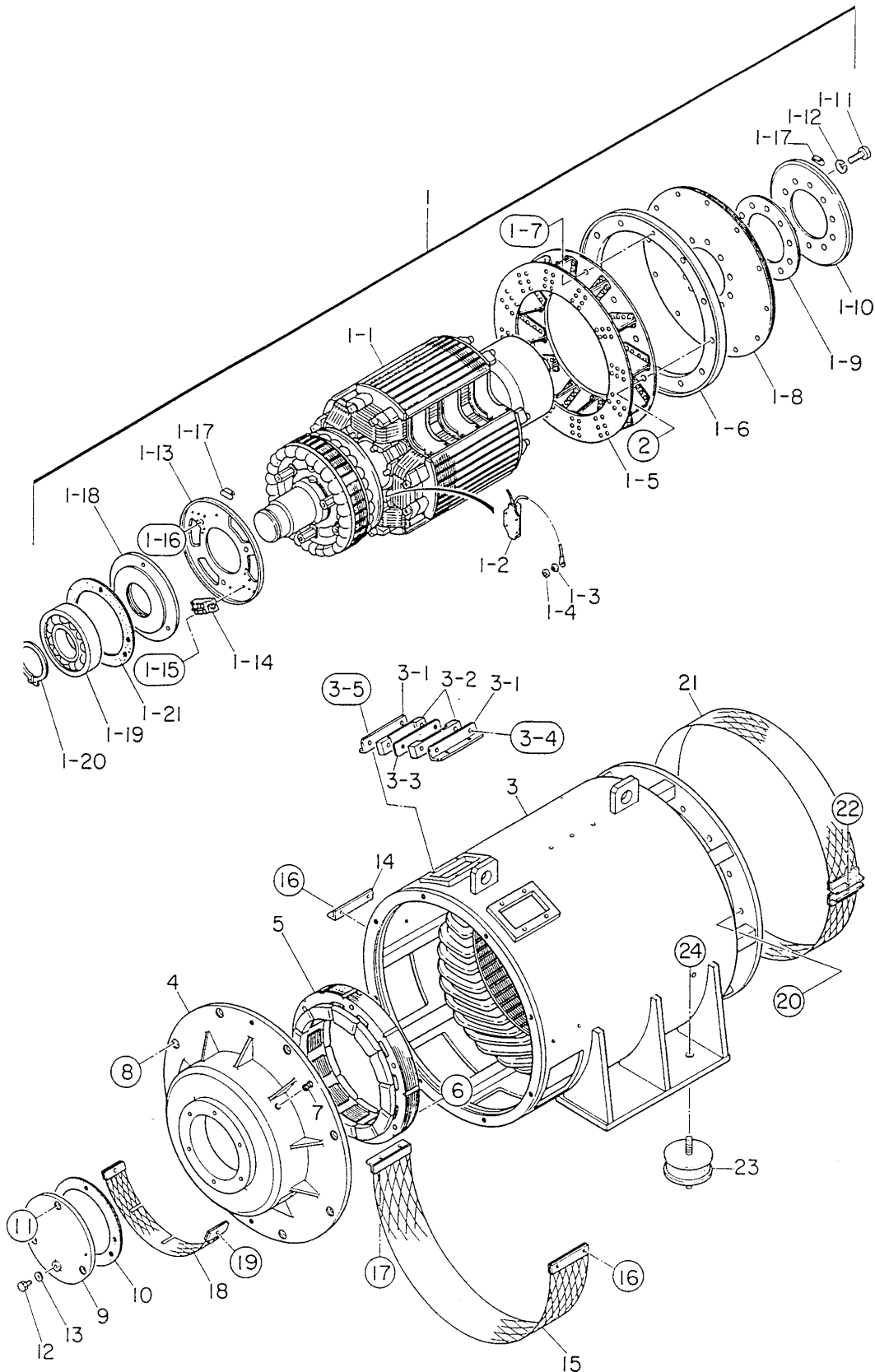
Qty. P/N Description

1 to 5 Units

Qty.	P/N	Description
10	5610262520	AIR FILTER, INNER
10	5610262530	AIR FILTER, OUTER
10	6003117111	FUEL FILTER
10	6002111231	OIL FILTER
5	6004111171	CARTRIDGE, CORROSION RESISTOR
1	0601810575	PILOT LAMP, ENGINE TROUBLE
1	0601810576	PILOT LAMP, ENGINE TROUBLE
2	0412222274	ENGINE FAN BELT
2	6008155390	SWITCH, STARTER
5	615	KEY SET, STARTER SWITCH (2)
1	6215619720	RADIATOR HOSE (UPPER)
1	6215619750	RADIATOR HOSE (LOWER)
1	0605505030	FUEL CAP
1	0601820625	AUTOMATIC VOLTAGE REGULATOR
1	7520150704	CIRCUIT BREAKER
1	0601840073	VOLTAGE REGULATOR (RHEOSTAT)
2	0601840121	KNOB, VOLTAGE REGULATOR
1	0601810072	PILOT LAMP
2	0601810261	BULB, PILOT LAMP
1	0602122200	UNIT, OIL PRESSURE
1	0602123206	UNIT, WATER TEMPERATURE
1	0602121052	CHARGING AMMETER

DCA-800SSK — GENERATOR ASSY.

GENERATOR ASSY.



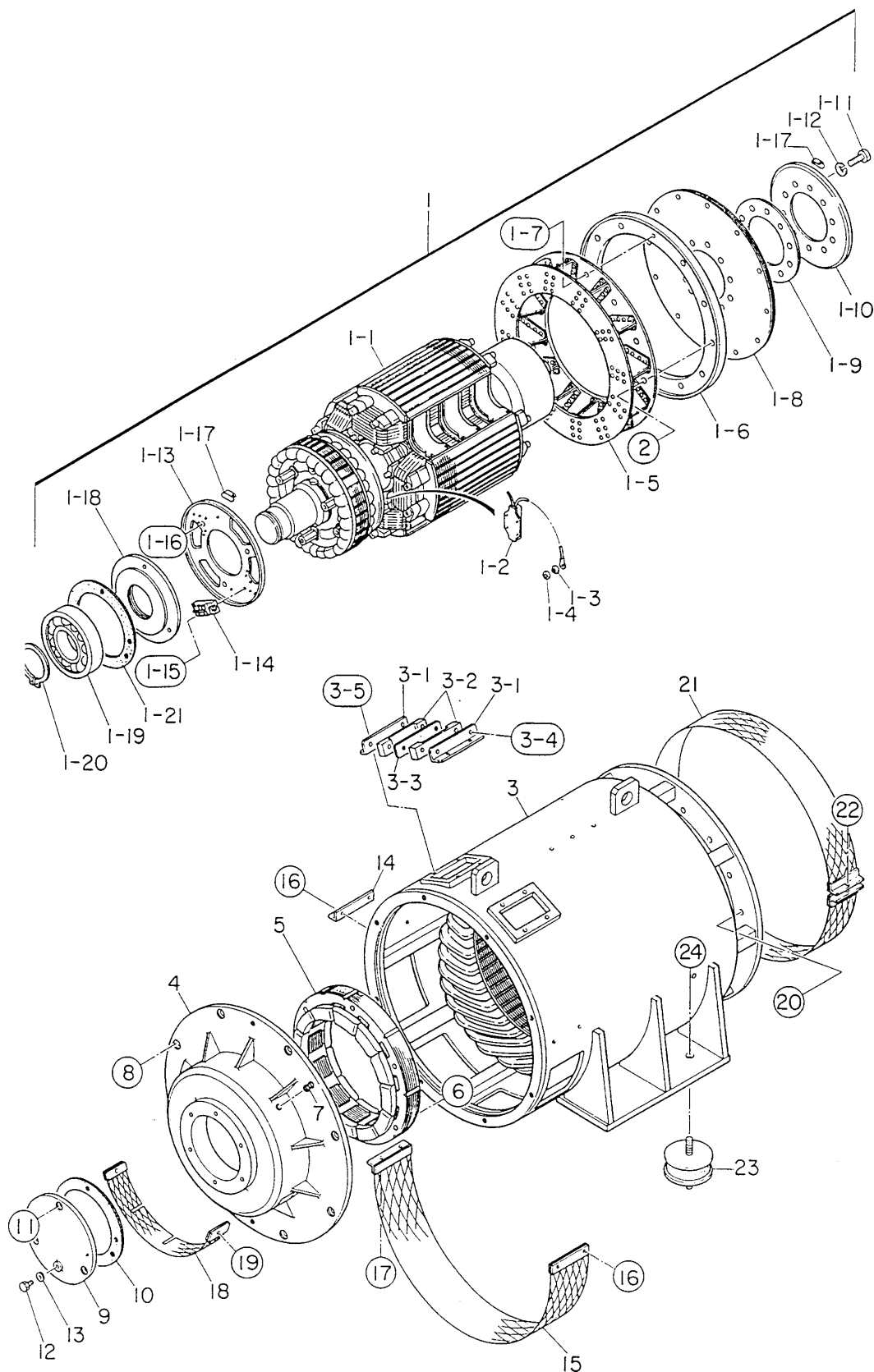
DCA-800SSK — GENERATOR ASSY.

GENERATOR ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	C5110000102	ROTOR ASSY.	1	INCLUDE ITEMS W/*
1-1*		FIELD ASSY.	1	
1-2*	0601842366	RESISTOR	4	SMRK 80W 50K OHM
1-3*	8171020004	INSULATOR WASHER	6	
1-4*	8171020504	INSULATOR WASHER	6	
1-5*	C5111100002	FAN	6	
1-6*	C5163400003	COUPLING RING	1	
1-7*	0010312025	HEX. HEAD BOLT	1	
	0042512000	LOCK WASHER	2	
1-8*	C5163100104	COUPLING DISK ASSY.	2	
1-9*	C5163200004	WASHER, COUPLING HUB	1	
1-10*	C5111300003	BALANCING PLATE	1	
1-11*	0012724060	HEX. HEAD BOLT	10	
1-12*	0042524000	LOCK WASHER	10	
1-13*	8461026023	SET PLATE, RECTIFIER	1	
1-14*	0601823282	RECTIFIER	2	RM50TC-24
1-15*	0018205020	HEX. SOCKET HEAD CAP SCREW	4	
	0040005000	LOCK WASHER	4	
	0041205000	PLAIN WASHER	4	
1-16*	0010112020	HEX. HEAD BOLT	6	
	0040012000	LOCK WASHER	6	
1-17*	060100020	BALANCING WEIGHT KIT	1	
1-18*	C5111500003	BEARING FLANGE	1	
1-19*	0070106322	BEARING	1	
1-20*	0080000110	SNAP RING	1	
1-21*	C5153300104	GASKET, BEARING	1	
2	0012116065	HEX. HEAD BOLT	10	
	0042516000	LOCK WASHER	10	
3	C5130000003	STRATOR ASSY.	1	
3-1	C5131200404	CLAMPER	4	
3-2	C5131200014	CLAMPER	4	
3-3	C5131200504	CLAMPER	2	
3-4	0016310090	HEX. HEAD BOLT	4	
	0030010000	HEX. NUT	4	
	0040010000	LOCK WASHER	8	
	0041210000	PLAIN WASHER	4	
3-5	0017110020	HEX. HEAD BOLT	8	

DCA-800SSK — GENERATOR ASSY.

GENERATOR ASSY.



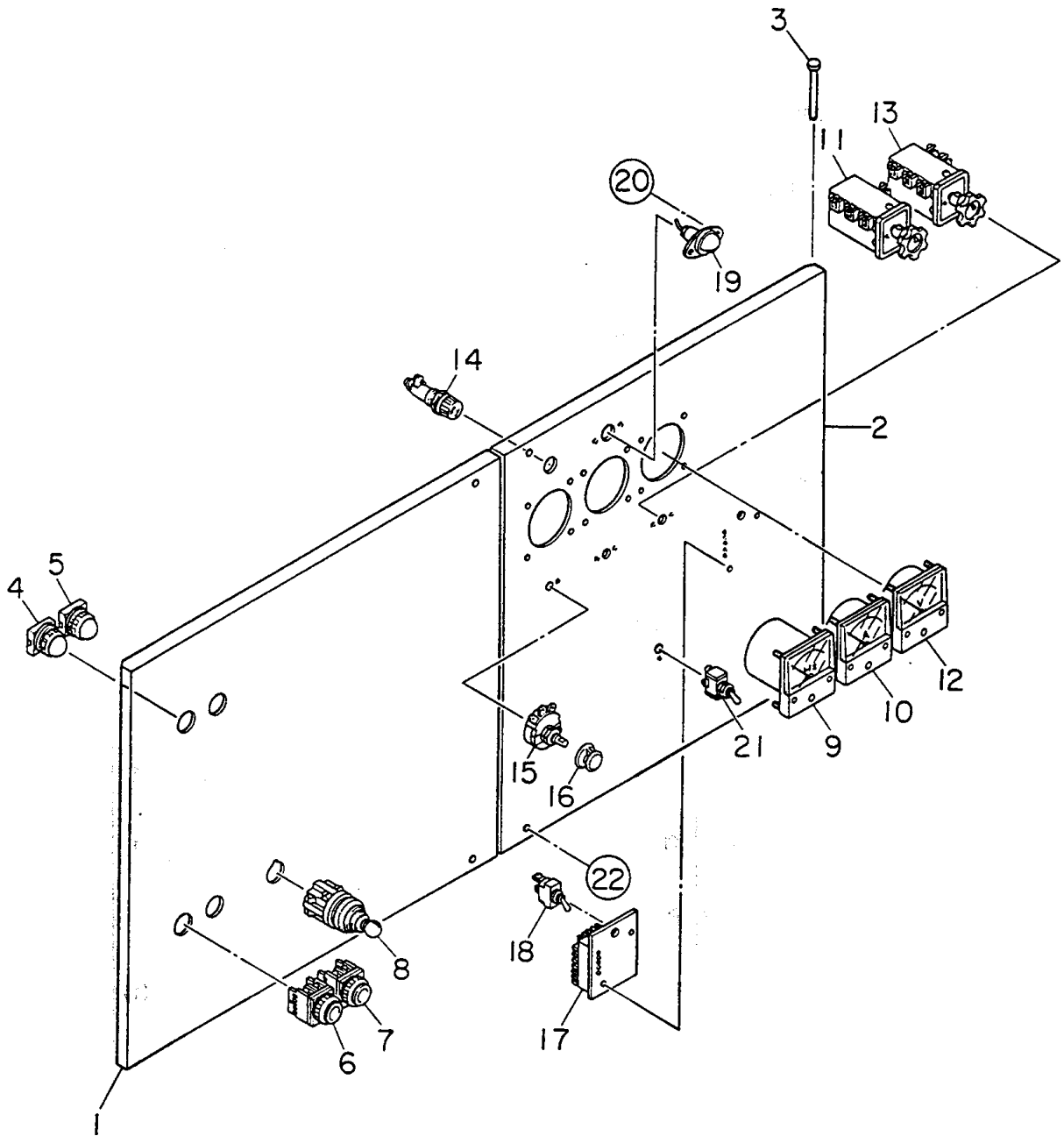
DCA-800SSK — GENERATOR ASSY.

GENERATOR ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
4	C5153000002	END BRACKET	1	
5	C4137000003	FIELD ASSY., EXCITER	1	
6	0012110075	HEX. HEAD BOLT	6	
	0042610000	LOCK WASHER	6	
	0041210000	PLAIN WASHER	6	
7	0845044904	GROMMET	1	
8	0016316045	HEX. HEAD BOLT	8	
	0040016000	LOCK WASHER	8	
	0041216000	PLAIN WASHER	8	
9	C5153300003	COVER, BEARING	1	
10	C5153300104	GASKET, BEARING	1	
11	0016308095	HEX. HEAD BOLT	3	
	0040008000	LOCK WASHER	3	
	0041208000	PLAIN WASHER	3	
12	0010110016	HEX. HEAD BOLT	1	
13	0803000104	PACKING	1	
14	8461335004	BRACKET, COVER	1	
15	C5131300103	COVER, STATOR	1	
16	0017106012	HEX. HEAD BOLT	4	
17	0017106050	HEX. HEAD BOLT	2	
18	8461333003	COVER, EXCITER	1	
19	0017106012	HEX. HEAD BOLT	2	
20	0012112040	HEX. HEAD BOLT	16	
	0042512000	LOCK WASHER	16	
21	C5131300003	COVER, FAN	1	
22	0017106050	HEX. HEAD BOLT	1	
23	0605000012	RUBBER SUSPENSION	4	
24	0030020000	HEX. NUT	8	
	0040020000	LOCK WASHER	8	

DCA-800SSK — CONTROL PANEL ASSY.

CONTROL PANEL ASSY.



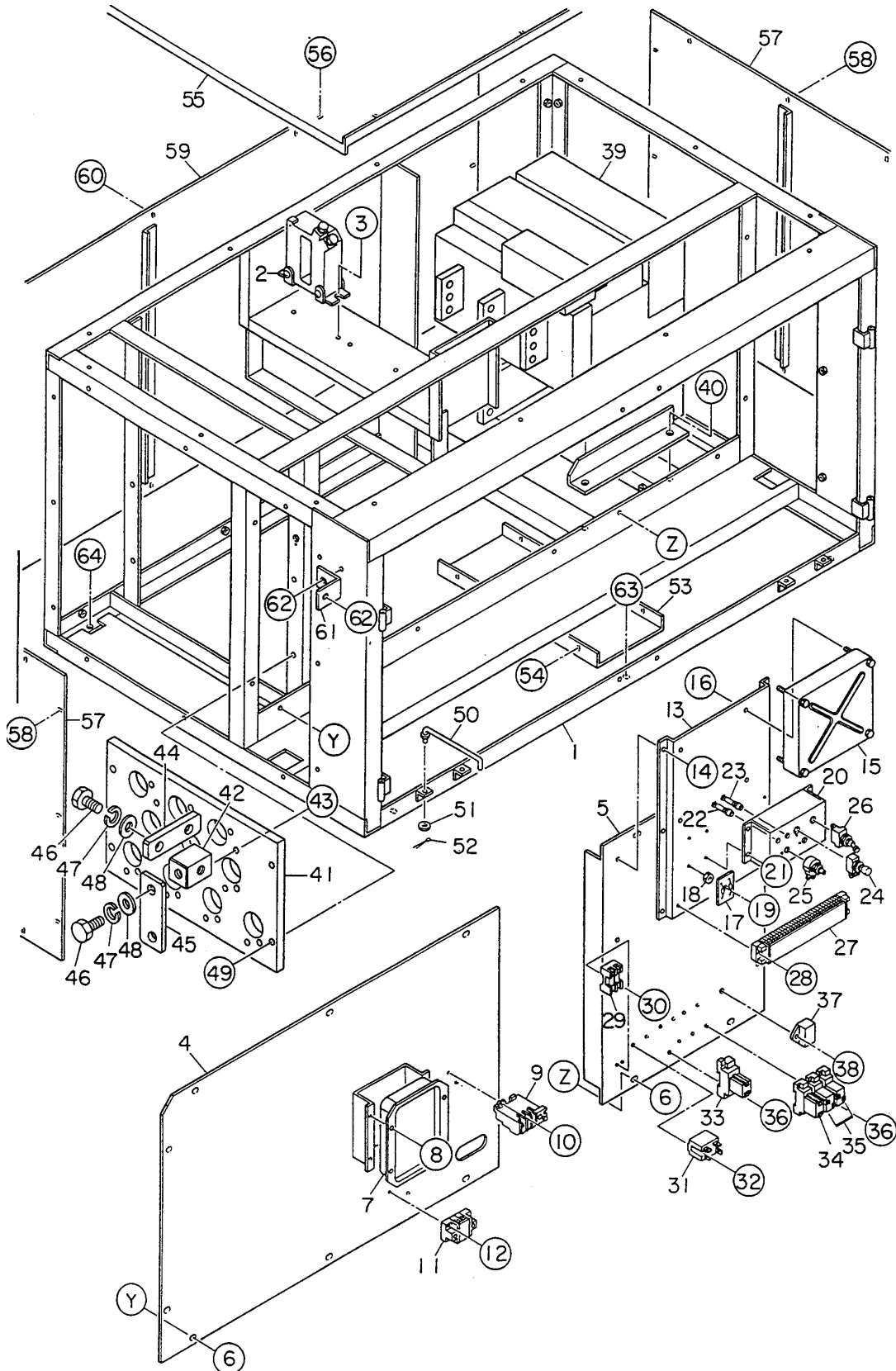
DCA-800SSK — CONTROL PANEL ASSY.

CONTROL PANEL ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	C5224000503	CONTROL PANEL	1	
2	C5224000403	CONTROL PANEL	1	
3	0605011211	PIN	4	
4	0601810476	OFF LAMP, CIRCUIT BREAKER	1	APN133-G
	0601810235	BULB	1	LS-3
5	0601810467	ON LAMP, CIRCUIT BREAKER	1	APN133-R
	0601810235	BULB	1	LS-3
6	0601830498	OFF SWITCH, CIRCUIT BREAKER	1	AH30-FR10
7	0601831224	ON SWITCH, CIRCUIT BREAKER	1	AH30-FB10
8	0601830780	THROTTLE LEVER	1	ARNS1-2020
9	0601800480	FREQUENCY METER	1	PAK-100 0~1500A 0~3000A
10	0601800795	AC AMMETER	1	SL-2 AS
11	0601801040	CHANGE-OVER SWITCH, AMMETER	1	PCK-100 0~6000V
12	0601800252	AC VOLTMETER	1	SL-2 VS
13	0601801041	CHANGE-OVER SWITCH, VOLTMETER	1	SP-132DC 220V
14	0601810072	PILOT LAMP	1	CT-13W
	0601810261	BULB	1	RA20A2SE102BJ 2W 1K OHMS
15	0601840073	RHEOSTAT (VOLTAGE REGULATOR)	1	ECU-88LG-24
16	0601840121	KNOB	1	
17	0601827395	ENGINE CONTROLLER	1	
18	0601831340	SWITCH	1	
19	0601810161	PANEL LIGHT	1	
	0601810214	BULB	1	
20	0207004000	HEX. NUT	2	
21	0601830710	SWITCH, PANEL LIGHT	1	
22	C9221100004	HEX. HEAD BOLT	4	
	0040008000	LOCK WASHER	4	
	0041208000	PLAIN WASHER	4	
	0080200007	SNAP RING	4	

DCA-800SSK — CONTROL BOX ASSY.

CONTROL BOX ASSY.



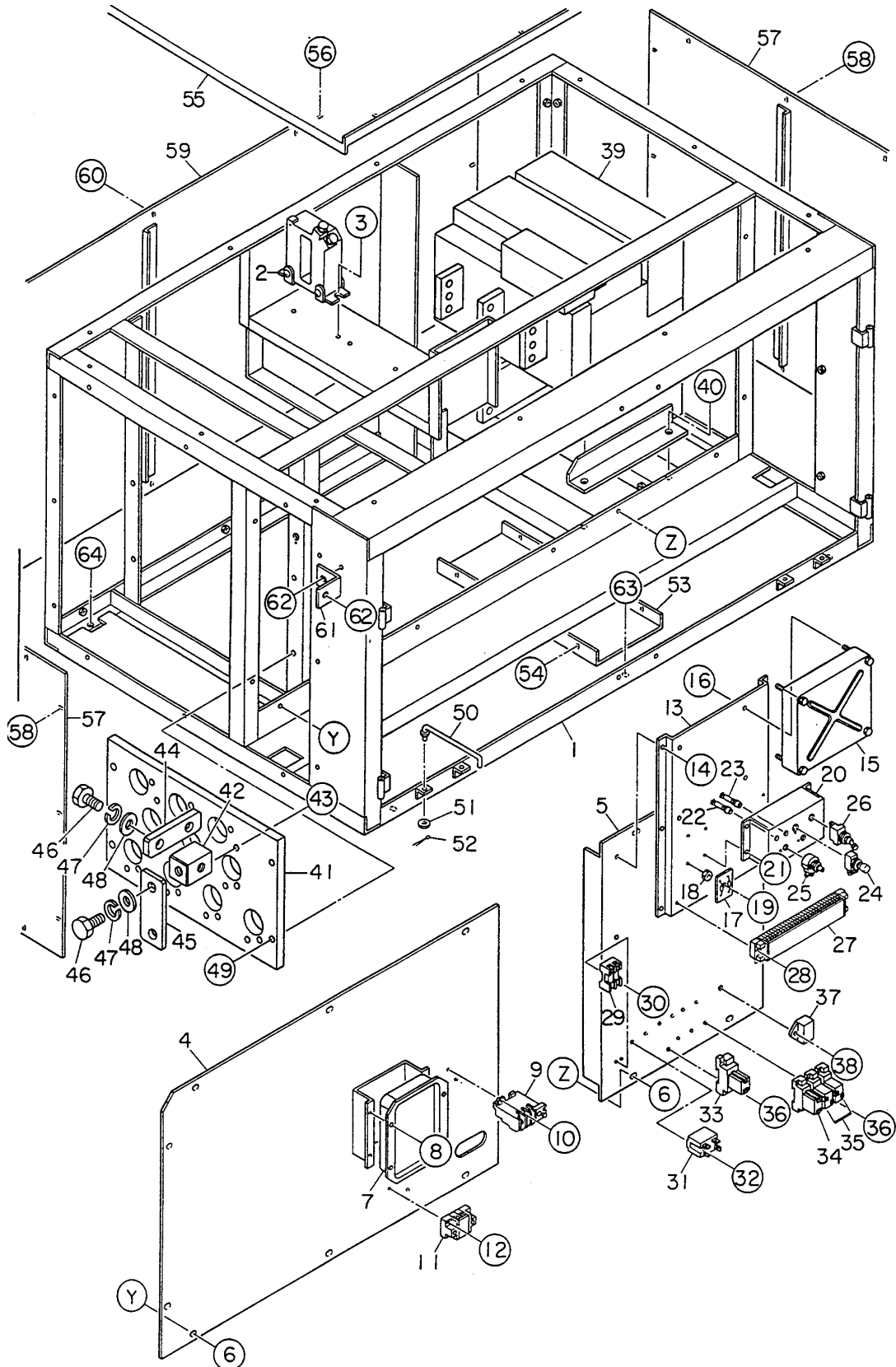
DCA-800SSK — CONTROL BOX ASSY.

CONTROL BOX ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	C5214000002	CONTROL BOX	1	
2	0601806166	CURRENT TRANSFORMER, AMMETER....	3	..... CW040LM 1500/5A
3	0017108020	HEX. HEAD BOLT	6	
4	C5261500603	SET PANEL, ELECTRIC PARTS	1	
5	C5261500703	SET PANEL, ELECTRIC PARTS	1	
6	0017108020	HEX. HEAD BOLT	14	
7	0601820625	AUTOMATIC VOLTAGE REGULATOR.....	1	..... NTA-5A-2T
8	0027105016	MACHINE SCREW	4	
9	0601820892	OVER CURRENT RELAY	1	..... TH-N20 HZKP 3.6A
10	0027104016	MACHINE SCREW	2	
11	0601815020	TERMINAL BOARD	1	
12	0027104020	MACHINE SCREW	2	
13	C5352800003	BRACKET, CONTROLLER	1	
14	0017106016	HEX. HEAD BOLT	6	
15	6215819121	CONTROLLER	1	..... REPLACES 0602202553
16	0207006000	HEX. NUT	4	
17	Z0110000904	RESISTOR UNIT	2	..... 1/4W 560 OHMS x4
18	0030006000	HEX. NUT	2	
19	0027105020	MACHINE SCREW	2	
20	C5352800104	BRACKET	1	
21	0017105016	HEX. HEAD BOLT	4	
22	0601810575	PILOT LAMP, ENGINE TROUBLE	1	..... KRE-108-4R DC24V
23	0601810576	PILOT LAMP, ENGINE TROUBLE	1	..... KRE-108-4G DC24V
24	0601831205	RESET SWITCH, PILOT LAMP	1	..... SB-221N/0
25	0601840009	RHEOSTAT (DROOP & IDLE SPEED	2	..... RA20A2SE502BJ 2W 5K OHMS CONTROLLER)
26	0601831323	SWITCH, OVER SPEED TEST	1	..... S-1AL
27	0601815802	TERMINAL BOARD	1	
28	0027104020	MACHINE SCREW	2	
29	0601802133	FUSE (LEFT SIDE), 5A	1	
	0601802149	FUSE (RIGHT SIDE), 10A	1	
	0601802211	HOLDER, FUSE	1	
30	0021004020	MACHINE SCREW	2	
31	0601823706	RELAY	1	..... HE1A DC24V AHE1212
32	0027104016	MACHINE SCREW	2	
33	0601823732	RELAY	1	..... LY2 DC24V
	0601823109	SOCKET	1	
	0601824400	HOLDER	1	

DCA-800SSK — CONTROL BOX ASSY.

CONTROL BOX ASSY.



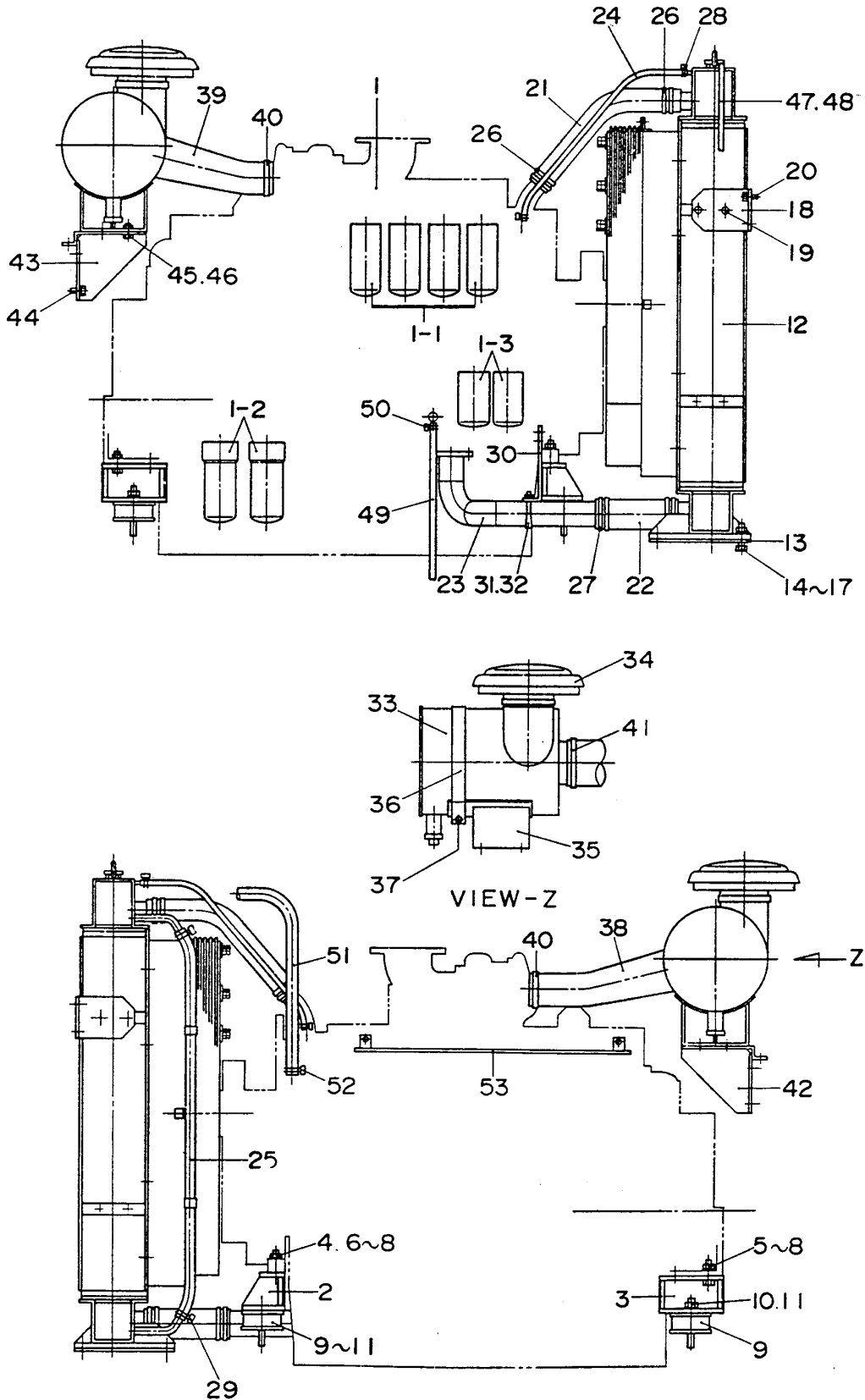
DCA-800SSK — CONTROL BOX ASSY.

CONTROL BOX ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
34	0601823757	RELAY	1	
	0601823143	SOCKET	1	
	0601824400	HOLDER	1	
35	0601823759	RELAY	2	MY4 DC24V
	0601823146	SOCKET	2	
	0601824400	HOLDER	2	
36	0027104016	MACHINE SCREW	8	
37	0602201911	UNIT, BATTERY SENSOR	1	C7038A-00-00
38	0017106016	HEX. HEAD BOLT	1	
39	7520150704	CIRCUIT BREAKER	1	AT25
40	0017112030	HEX. HEAD BOLT	4	
41	7521861303	CHANGE-OVER BOARD, VOLTAGE	1	
42	C5277000004	CHANGE TERMINAL	10	
43	0017108035	HEX. HEAD BOLT	20	
44	C5277200004	TERMINAL PLATE	10	
45	C5277300004	CHANGE PLATE	6	
46	0801832504	HEX. HEAD BOLT	20	
47	0040020000	LOCK WASHER	20	
48	0041420000	PLAIN WASHER	20	
49	0010110040	HEX. HEAD BOLT	4	
	0040010000	LOCK WASHER	4	
	0041210000	PLAIN WASHER	4	
50	3871824004	STOPPER, CONTROL PANEL	2	
51	0041206000	PLAIN WASHER	2	
52	0605010502	SNAP PIN	2	
53	7521828704	FLOOR PANEL	1	
54	0017106016	HEX. HEAD BOLT	4	
55	7521814703	COVER, CONTROL BOX	1	
56	0017106016	HEX. HEAD BOLT	14	
57	7521826704	SIDE PANEL, CONTROL BOX	2	
58	0017106016	HEX. HEAD BOLT	24	
59	7521827603	PANEL, CONTROL BOX	1	
60	0017106016	HEX. HEAD BOLT	15	
61	7521811904	BRACKET	2	
62	0017110025	HEX. HEAD BOLT	4	
63	0017108020	HEX. HEAD BOLT	3	
64	0017110030	HEX. HEAD BOLT	4	
	0207010000	HEX. NUT	4	

DCA-800SSK — ENGINE & RADIATOR ASSY.

ENGINE & RADIATOR ASSY.



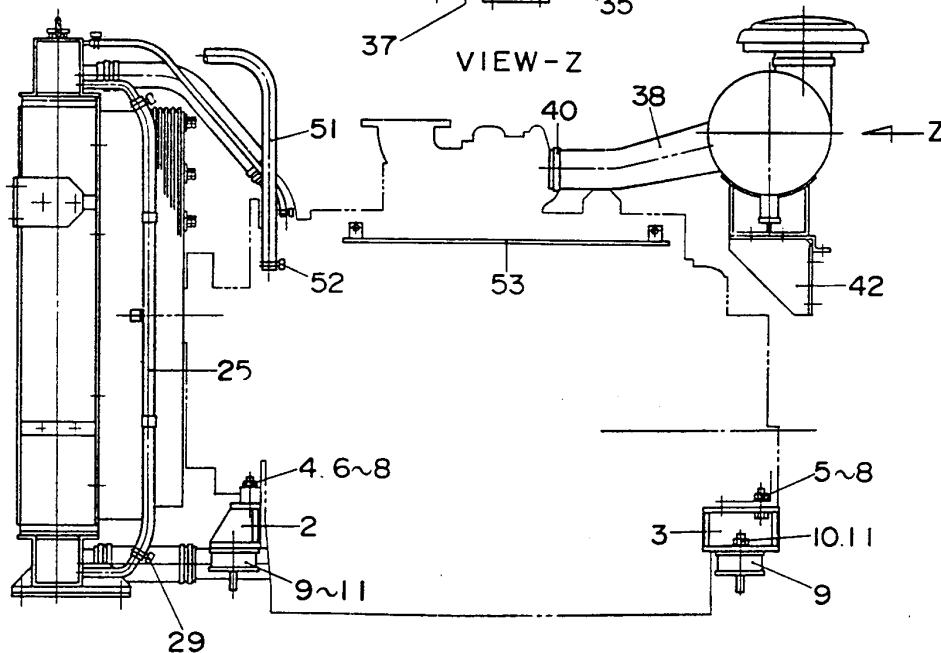
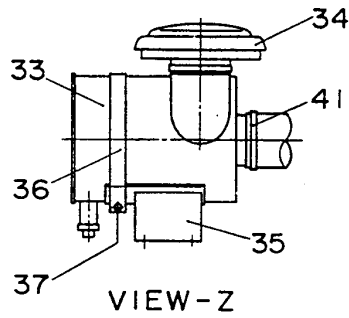
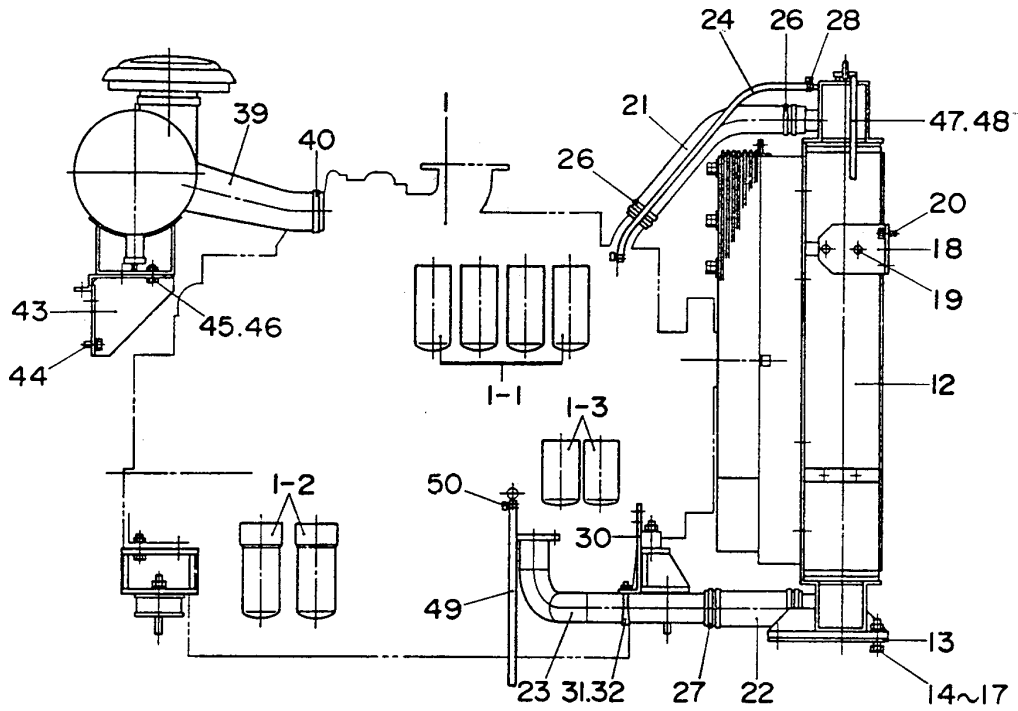
DCA-800SSK — ENGINE & RADIATOR ASSY.

ENGINE & RADIATOR ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	C5924200024	ENGINE	1	KOMATSU SA12V 140
1-1	6002111231	CARTRIDGE, OIL FILTER	4	REPLACES 0602041146
1-2	6003117111	CARTRIDGE, FUEL FILTER	2	REPLACES 0602042157
1-3	6004111171	CARTRIDGE, CORROSION RESISTOR	2	REPLACES 0602045144
2	C5304200004	ENGINE FOOT	1	
3	C5304200104	ENGINE FOOT	2	
4	0010120100	HEX. HEAD BOLT	2	
5	0010120060	HEX. HEAD BOLT	6	
6	0030020000	HEX. NUT	6	
7	0040020000	LOCK WASHER	6	
8	0041220000	PLAIN WASHER	6	
9	0605000012	RUBBER SUSPENSION	5	
10	0030020000	HEX. NUT	10	
11	0040020000	LOCK WASHER	10	
12	6215619711	RADIATOR	1	REPLACES 0602011987
13	6995621350	RUBBER SHEET	2	REPLACES 0605000098
14	0010118080	HEX. HEAD BOLT	8	
15	0030018000	HEX. NUT	8	
16	0040018000	LOCK WASHER	8	
17	0041218000	PLAIN WASHER	8	
18	C5311100004	BRACKET, RADIATOR	2	
19	0017112025	HEX. HEAD BOLT	4	
20	0017110025	HEX. HEAD BOLT	4	
21	6215619720	RADIATOR HOSE	2	REPLACES 0602014595
22	6215619750	RADIATOR HOSE	1	REPLACES 0602014643
23	6215619730	RADIATOR PIPE	1	REPLACES 0602013369
24	0726120914	RADIATOR HOSE	2	REPLACES 0602014596
25	0726122620	RADIATOR HOSE	1	REPLACES 0602014597
26	0728100909	HOSE BAND	8	REPLACES 0602014056
27	0728101159	HOSE BAND	4	REPLACES 0602014356
28	0728001920	HOSE BAND	4	REPLACES 0602014058
29	0728100419	HOSE BAND	2	REPLACES 0602014057
30	6215619740	BRACKET	1	REPLACES 0602013860
31	0728328973	U BOLT	1	REPLACES 0602011548
32	0159901214	NUT	2	REPLACES 0602011650
33	6152817500	AIR CLEANER	2	REPLACES 0602046254
	5610262520	ELEMENT, AIR CLEANER, INNER	2	REPLACES 0602046348
	5610262530	ELEMENT, AIR CLEANER, OUTER	2	REPLACES 0602046348

DCA-800SSK — ENGINE & RADIATOR ASSY.

ENGINE & RADIATOR ASSY.



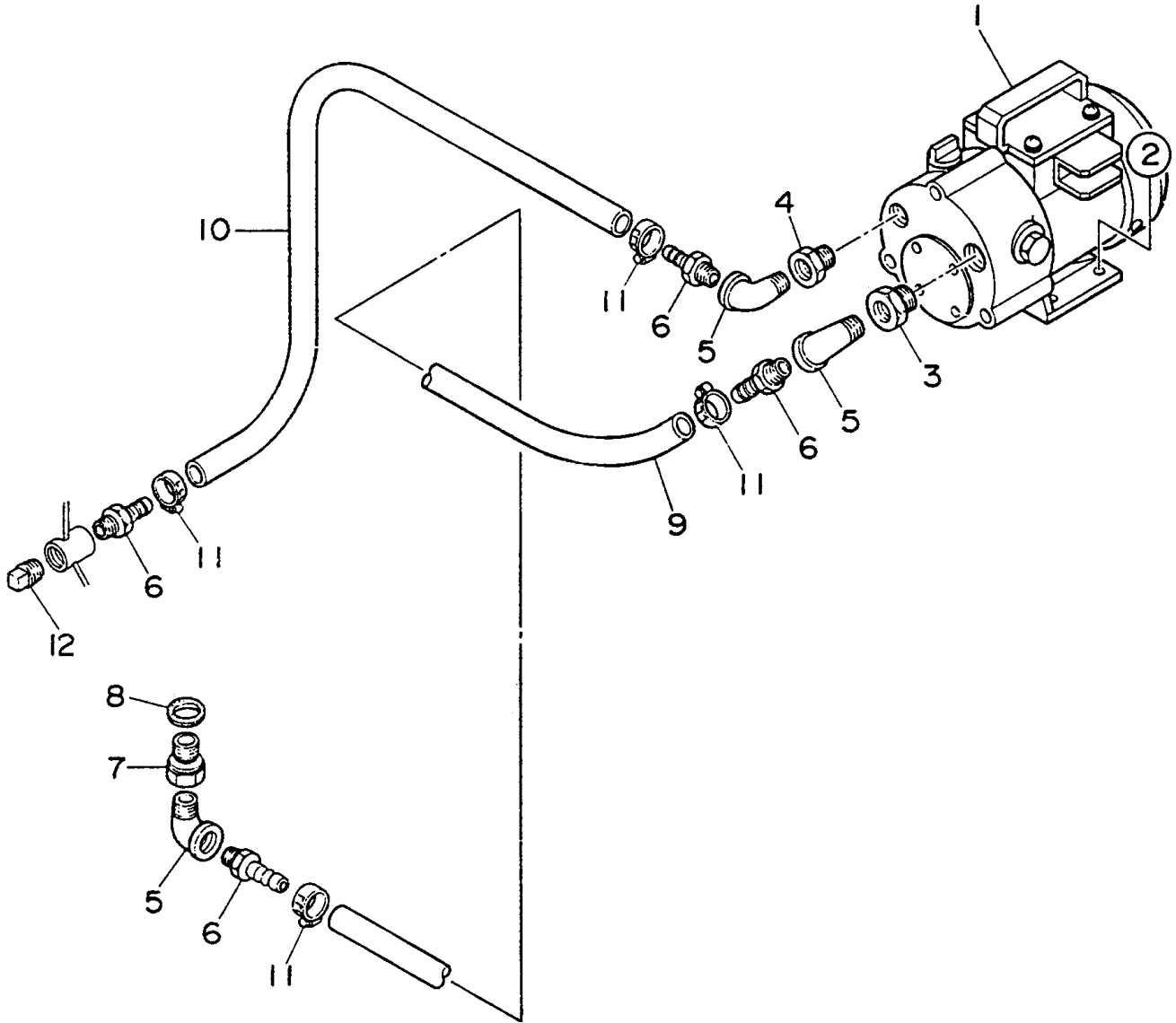
DCA-800SSK — ENGINE & RADIATOR ASSY.

ENGINE & RADIATOR ASSY.

NO	PART NO	PART NAME	QTY.	REMARKS
34	6001813960	CAP, AIR CLEANER	2	REPLACES 0602040752
35	6215114410	BRACKET, AIR CLEANER	2	REPLACES 0602040950
36	6151119970	BAND, AIR CLEANER	2	REPLACES 0602040560
37	6643114641	BOLT	2	REPLACES 0602011547
38	6215114470	HOSE, AIR CLEANER	1	REPLACES 0602040353
39	6215114480	HOSE, AIR CLEANER	1	REPLACES 0602040354
40	1252151H1	HOSE BAND	2	REPLACES 0602040450
41	0728900170	HOSE BAND	2	REPLACES 0602040451
42	C5374200103	BRACKET, AIR CLEANER	1	
43	C5374200003	BRACKER, AIR CLEANER	1	
44	0017110030	HEX. HEAD BOLT	8	
45	0017110030	HEX. HEAD BOLT	8	
46	0207010000	HEX. NUT	8	
47	0193602800	HOSE	1	
48	0605515170	HOSE CLIP	1	
49	0194201500	HOSE	1	
50	0605515019	HOSE BAND	1	
51	0728100549	BREATHER HOSE	1	REPLACES 0602014069
52	0728100549	HOSE BAND	2	REPLACES 0602014069
53	C5358300204	CLAMPER	1	

DCA-800SSK — OIL DRAIN ASSY.

OIL DRAIN ASSY.

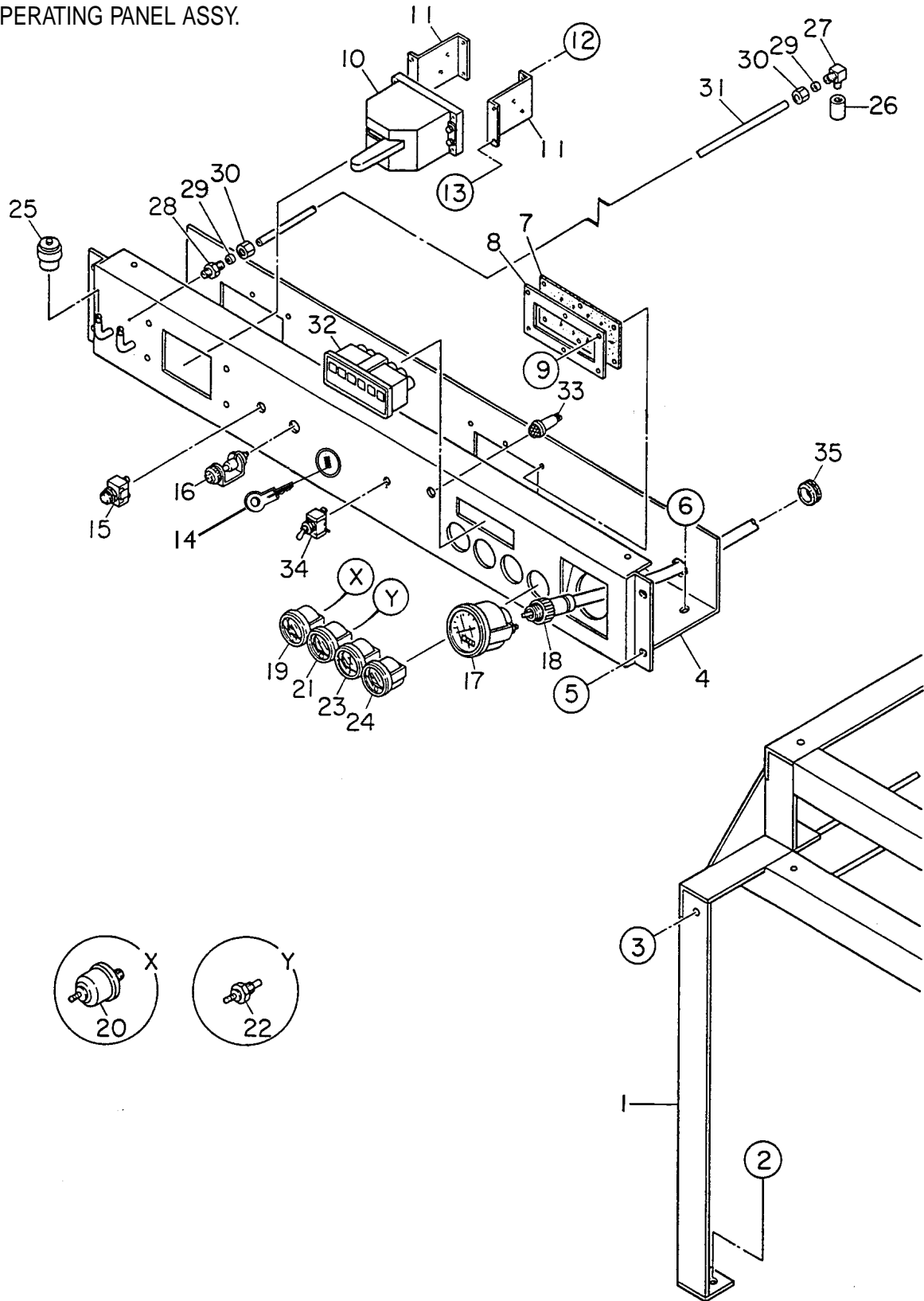


OIL DRAIN ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	0602023160	PUMP	1	GM-2524H
2	0017108040	HEX. HEAD BOLT	4	
	0207008000	HEX. NUT	4	
3	0131710060	BUSHING, 1 x 1/2	1	
4	0131708060	BUSHING 3/4 x 1/2	1	
5	0130206000	STREET ELBOW, 1/2	3	
6	0602022202	HOSE JOINT	4	
7	3502054124	DRAIN JOINT	1	
8	0802024004	PACKING	1	
9	0191602700	HOSE	1	
10	0191601600	HOSE	1	
11	0605515134	HOSE BAND	4	
12	0132006000	PLUG, 1/2	1	

DCA-800SSK — ENGINE OPERATING PANEL ASSY.

ENGINE OPERATING PANEL ASSY.



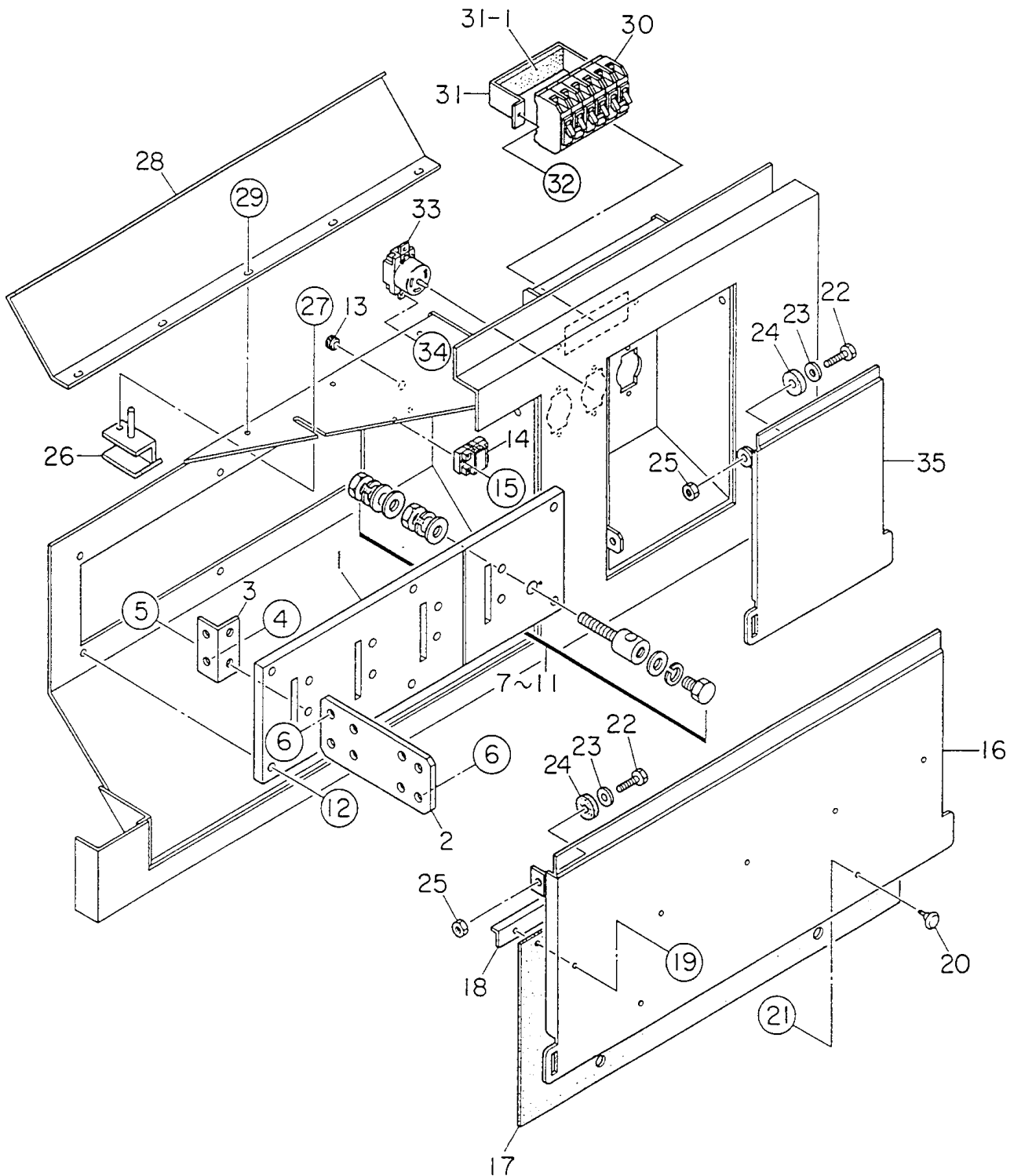
DCA-800SSK — ENGINE OPERATING PANEL ASSY.

ENGINE OPERATING PANEL ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	C548400002	SUPPORT LEG	1	
2	0017112045	HEX. HEAD BOLT	4	
	0030012000	HEX. NUT	4	
	0041212000	PLAIN WASHER	4	
3	0017110025	HEX. HEAD BOLT	2	
	0207010000	HEX. NUT	2	
4	C5352100203	OPERATING PANEL	1	
5	0017108020	HEX. HEAD BOLT	4	
6	0017108020	HEX. HEAD BOLT	3	
7	8085182004	RUBBER COVER	3	
8	8085183004	SET FRAME, RUBBER COVER	3	
9	0017106020	HEX. HEAD BOLT	18	
10	0602101016	BATTERY SWITCH	1	0315251001
11	7522258304	BRACKET, BATTERY SWITCH	2	
12	0017106030	HEX. HEAD BOLT	4	
	0207006000	HEX. NUT	4	
13	0025006016	MACHINE SCREW	4	
	0042306000	LOCK WASHER	4	
	0042506000	PLAIN WASHER	4	
14	6008155390	STARTER SWITCH	1	REPLACES 0602100049
14-1	615	KEY, STARTER SWITCH	1	
15	0806410000	EMERGENCY STOP BUTTON	1	REPLACES 0602104045
16	6008153730	PREHEAT INDICATOR	1	REPLACES 0602102055
17	0602120054	TACHOMETER	1	25000-KX4110
18	0602120173	CABLE, TACHOMETER	1	62500-KA4110 L=4000
19	0602122060	OIL PRESSURE GAUGE	1	4200-KX1410
20	0602122200	UNIT, OIL PRESSURE	1	53000-AC0101
21	0602123061	WATER TEMPERATURE GAUGE	1	40000-KX0910
22	0602123206	UNIT, WATER TEMPERATURE	1	51400-KS0600
23	0602121052	CHARGING AMMETER	1	43000-KV0300
24	0602125060	FUEL GAUGE	1	41000-KW0110
25	0602040692	INDICATOR, AIR CLEANER	2	RBX00-2254
26	6203306104	SOCKET	2	
27	0603301000	ELBOW UNION	2	
28	0603300000	HALF UNION	2	
29	0603302000	SLEEVE	4	
30	0603303000	NUT	4	
31	0190002900	NYLON PIPE	2	
32	0602115008	LED MODULE	1	V33676A
33	0602103091	ALARM LAMP, OIL FILTER	1	REPLACES 0602103090
	0601810244	BULB	1	
34	0601830710	ENGINE SPEED SWITCH	1	S-301T
35	0601850267	GROMMET	1	

DCA-800SSK — OUTPUT TERMINAL ASSY.

OUTPUT TERMINAL ASSY.



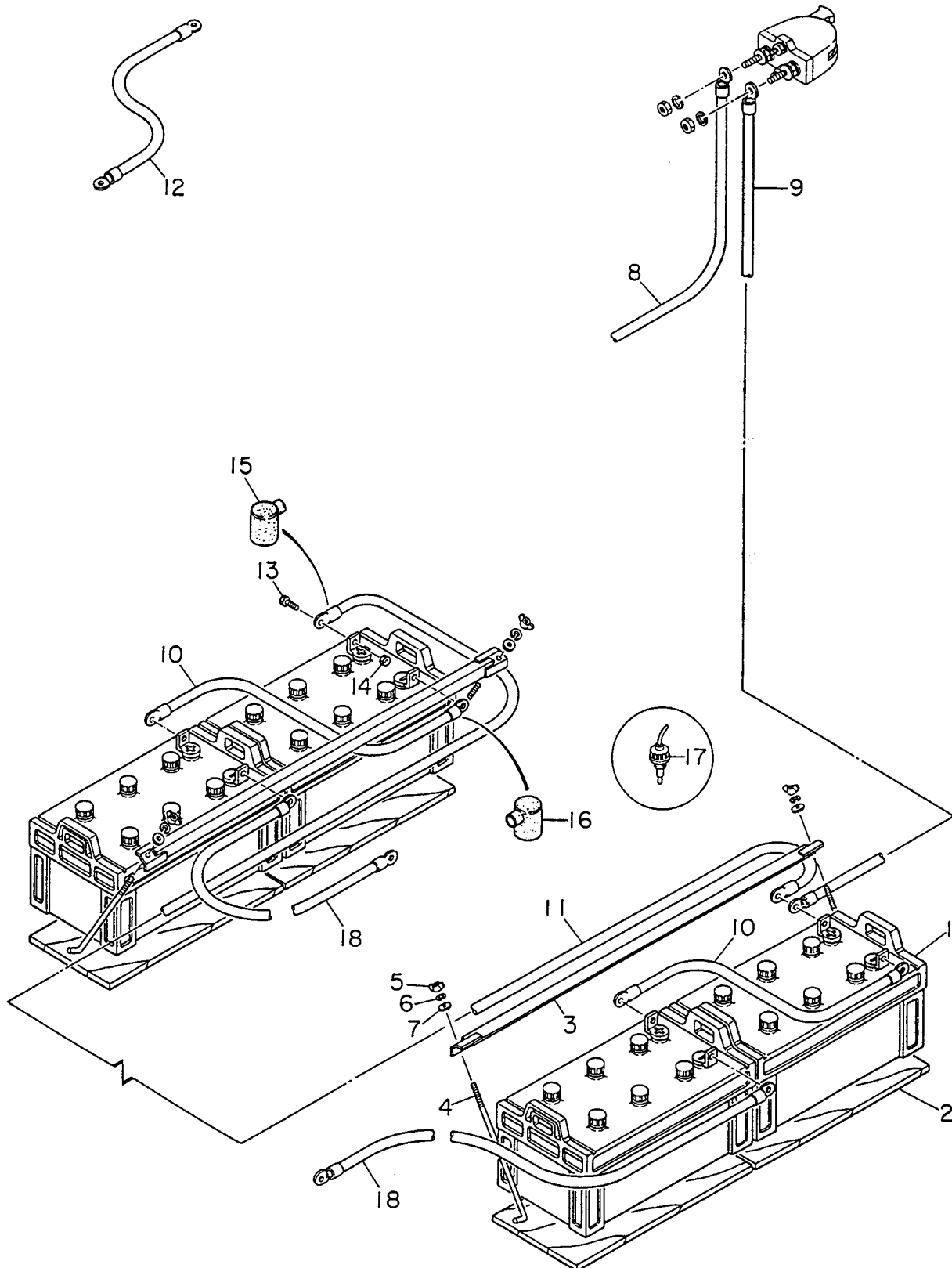
DCA-800SSK — OUTPUT TERMINAL ASSY.

OUTPUT TERMINAL ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	C5231700003	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	
	0041212000	PLAIN WASHER	16	
5	0010112060	HEX. HEAD BOLT	8	
	0030012000	HEX. NUT	8	
	0040012000	LOCK WASHER	8	
	0041212000	PLAIN WASHER	16	
6	0010112040	HEX. HEAD BOLT	24	
	0030012000	HEX. NUT	24	
	0040012000	LOCK WASHER	24	
	0041212000	PLAIN WASHER	48	
7	C5234000004	TERMINAL	1	
8	0801830904	HEX. HEAD BOLT	1	
9	0039320000	HEX. NUT	2	
10	0040020000	LOCK WASHER	3	
11	0041420000	PLAIN WASHER	5	
12	0019112060	HEX. HEAD BOLT	6	
	0042312000	LOCK WASHER	6	
	0042412000	PLAIN WASHER	6	
13	0601850275	GROMMET	1	
14	0601815324	TERMINAL BOARD	1	
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	
	0442406000	PLAIN WASHER	5	
20	0605010660	KNOB	2	
21	0207006000	HEX. NUT	2	
22	0010112045	HEX. HEAD BOLT	4	
23	0041212000	PLAIN WASHER	4	
24	0805009804	STAY RUBBER	4	
25	0030012000	HEX. NUT	4	
26	7521865603	STOPPER	1	
27	0010108030	HEX. HEAD BOLT	1	
	0030008000	HEX. NUT	1	
	0041208000	PLAIN WASHER	2	
28	C4237100504	COVER	1	
29	0017108020	HEX. HEAD BOLT	5	
30	0601805840	CIRCUIT BREAKER	3	KM-52 265V 50A
31	C5261600004	BRACKET, CIRCUIT BREAKER	1	INCLUDE ITEM W/*
31-1*	0223300150	RUBBER CUSHION	1	
32	0017106030	HEX. HEAD BOLT	2	
33	0601812535	RECEPTACLE	3	CS6369
34	0027104015	MACHINE SCREW	6	
	0030004000	HEX. NUT	6	
	0041204000	PLAIN WASHER	6	
35	C4237101203	COVER	1	

DCA-800SSK — BATTERY ASSY.

BATTERY ASSY.



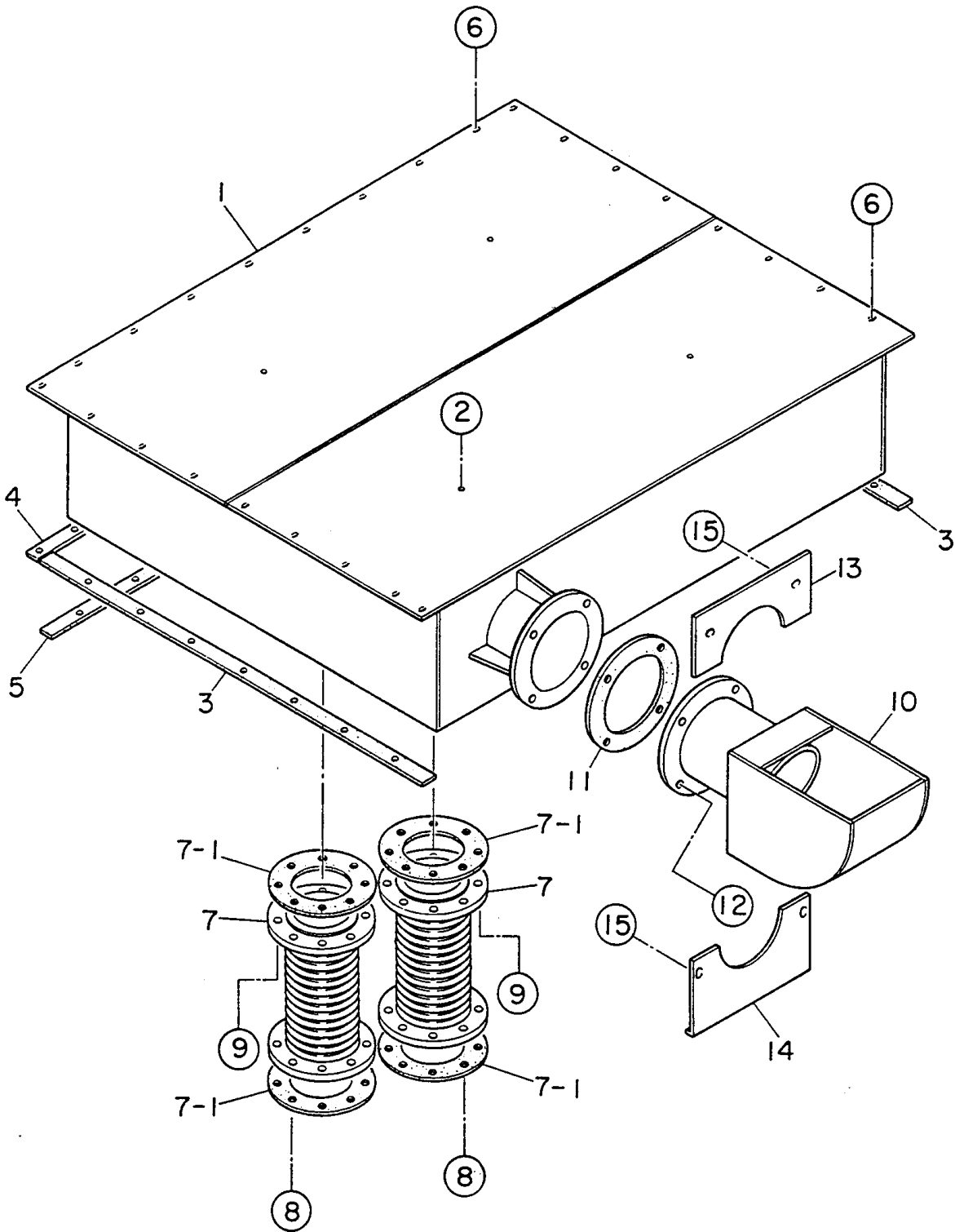
DCA-800SSK — BATTERY ASSY.

BATTERY ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	0168719052	BATTERY	4	
2	0805018904	BATTERY SHEET	4	
3	0805006404	BATTERY BAND	2	
4	0805006504	BATTERY BOLT	4	
5	0037808000	WING NUT	4	
6	0040008000	LOCK WASHER	4	
7	0041208000	PLAIN WASHER	4	
8	C5347800104	BATTERY CABLE	1	
9	C5347800004	BATTERY CABLE	1	
10	7522280904	BATTERY CABLE	2	
11	C5347600104	BATTERY CABLE	1	
12	C5347400004	EARTH CABLE	1	
13	0347010030	HEX. HEAD BOLT	8	
14	0208110000	HEX. NUT	8	
15	0845040114	TERMINAL CAP (+)	4	
16	0845041004	TERMINAL CAP (-)	4	
17	0602220205	BATTERY SENSOR	1	
18	C5347600004	BATTERY CABLE	2	

DCA-800SSK — MUFFLER ASSY.

MUFFLER ASSY.



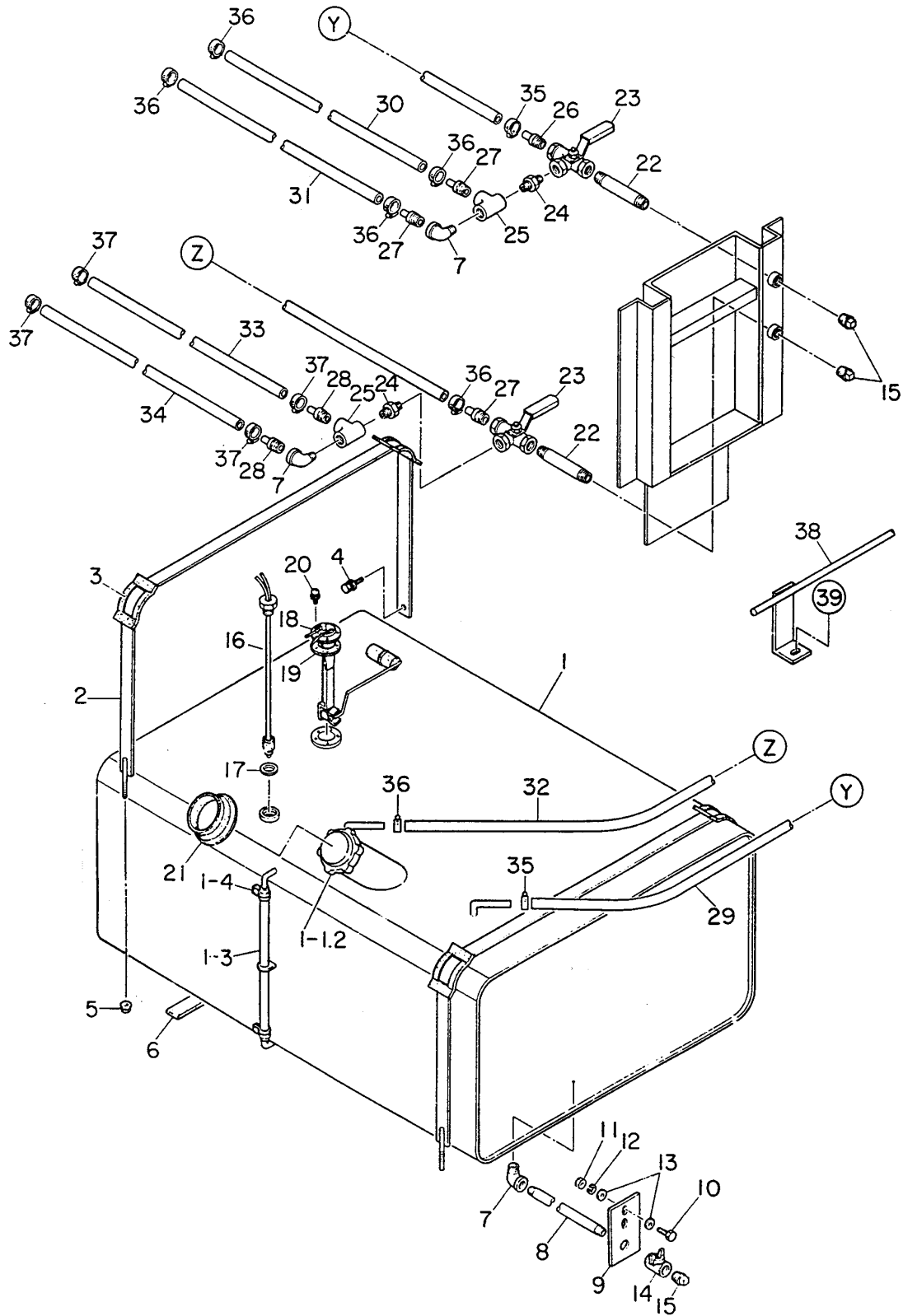
DCA-800SSK — MUFFLER ASSY.

MUFFLER ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	C5331100002	MUFFLER	1	
2	0019112030	HEX. HEAD BOLT	4	
	0042312000	LOCK WASHER	4	
	0042412000	PLAIN WASHER	4	
3	C5335200104	PACKING	2	
4	C5335200204	PACKING	1	
5	C5335200304	PACKING	1	
6	0019110035	HEX. HEAD BOLT	24	
	0042310000	LOCK WASHER	24	
	0042410000	PLAIN WASHER	24	
7	C5334000103	EXHAUST PIPE	2	
7-1	C4334200504	GASKET	4	
8	0010116070	HEX. HEAD BOLT	16	
	0030016000	HEX. NUT	16	
	0040016000	LOCK WASHER	16	
	0041216000	PLAIN WASHER	32	
9	0010116050	HEX. HEAD BOLT	16	
	0040016000	LOCK WASHER	16	
	0041216000	PLAIN WASHER	16	
10	7522355103	OUTLET PIPE	1	
11	C5335200004	GASKET	1	
12	0010116070	HEX. HEAD BOLT	4	
	0030016000	HEX. NUT	4	
	0040016000	LOCK WASHER	4	
	0041216000	PLAIN WASHER	8	
13	7525125704	COVER	1	
14	C5331300004	COVER	1	
15	0017108020	HEX. HEAD BOLT	4	

DCA-800SSK — FUEL TANK ASSY.

FUEL TANK ASSY.



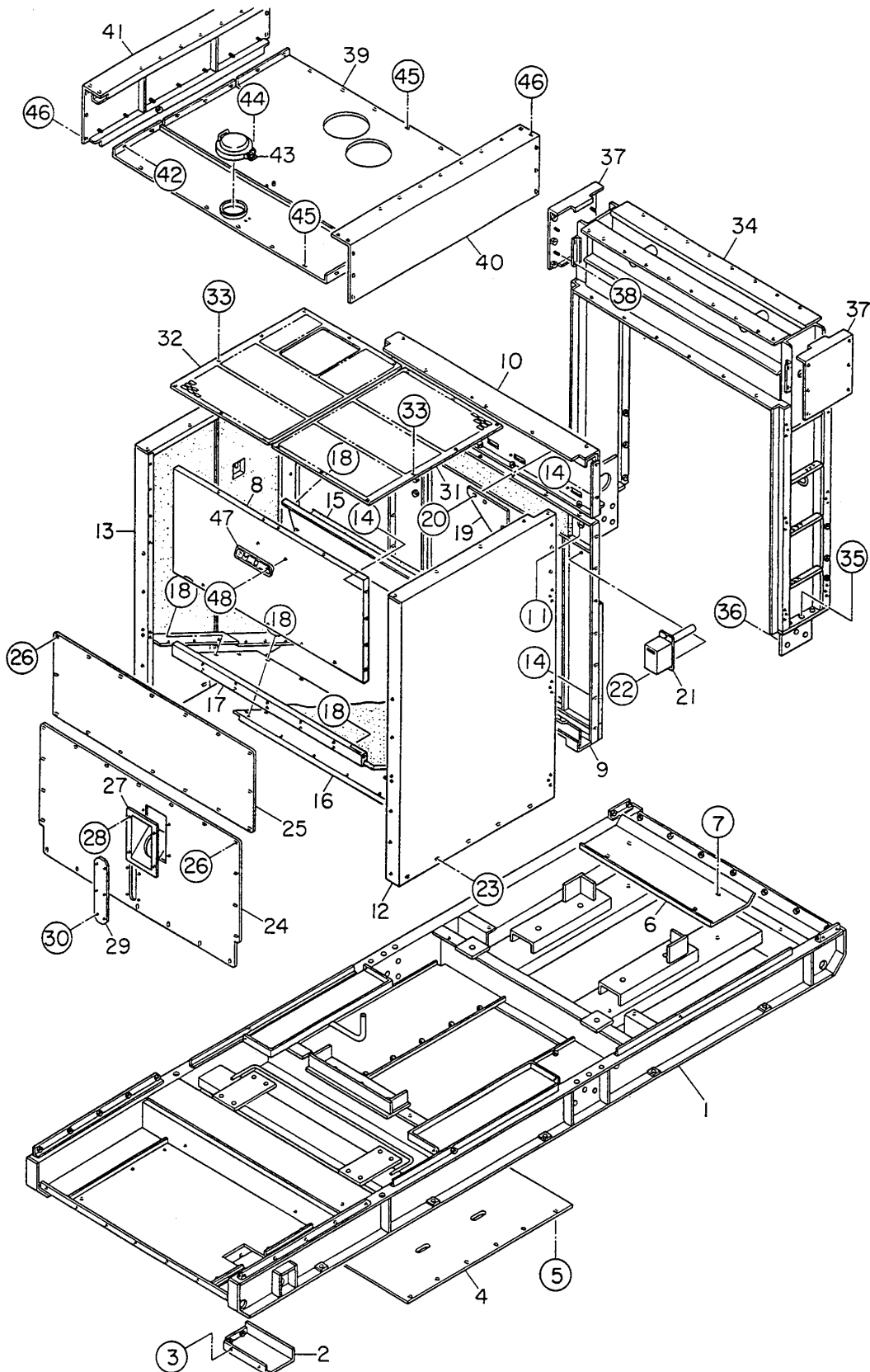
DCA-800SSK — FUEL TANK ASSY.

FUEL TANK ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	C5364000303	FUEL TANK	1	
1-1	0605505030	CAP, FUEL TANK	1	REPLACES 0605505005
	0601850590	KEY, FUEL TANK	1	
1-2	0810105400	FUEL FILTER	1	
1-3	0264100425	HOSE, FUEL GAUGE	1	
1-4	0605515079	HOSE BAND	2	
2	7435523104	TANK BAND	2	
3	0805003414	PAD, TANK BAND	4	
4	0017108020	HEX. HEAD BOLT	2	
5	0207308000	HEX. NUT	2	
6	0222100600	TANK SHEET	6	
7	0130206000	STREET ELBOW, 1/2	3	
8	7525512104	DRAIN PIPE	1	
9	7525516504	BRACKET	1	
10	0019108030	HEX. HEAD BOLT	2	
11	0205008000	HEX. NUT	2	
12	0042308000	LOCK WASHER	2	
13	0042408000	PLAIN WASHER	2	
14	0603325011	VALVE	1	
15	0132006000	PLUG, 1/2	3	
16	0605503009	FUEL SENSOR	1	
17	0802120604	PACKING	1	
18	0605501050	UNIT, FUEL	1	52000-KA9810
19	0602021155	PACKING	1	52391-KW3700
20	0022905015	MACHINE SCREW	5	
21	0845039604	RUBBER SEAL	1	
22	7435512104	LONG NIPPLE	2	
23	0605511033	THREE WAY VALVE	2	
24	0131506000	NIPPLE, 1/2	2	
25	0130406000	T JOINT, 1/2	2	
26	0602022293	HOSE JOINT	1	
27	0602022203	HOSE JOINT	3	
28	6185517204	HOSE JOINT	2	
29	0191504300	SUCTION HOSE	1	
30	0191302500	SUCTION HOSE	1	
31	0191301100	SUCTION HOSE	1	
32	0191004500	RETURN HOSE	1	
33	0191002500	RETURN HOSE	1	
34	0191001100	RETURN HOSE	1	
35	0605515032	HOSE BAND	2	
36	0605515014	HOSE BAND	6	
37	0605515155	HOSE BAND	4	
38	C5358300104	CLAMPER	1	
39	0017110025	HEX. HEAD BOLT	2	

DCA-800SSK — ENCLOSURE #1 ASSY.

ENCLOSURE #1 ASSY.



DCA-800SSK — ENCLOSURE #1 ASSY.

ENCLOSURE #1 ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	C5414000002	BASE	1	
2	7525116004	FLOOR PANEL	1	
3	0019110030	HEX. HEAD BOLT	4	
	0042310000	LOCK WASHER	4	
	0042410000	PLAIN WASHER	4	
4	C5414100004	FLOOR PANEL	1	
5	0019208020	HEX. HEAD BOLT	12	
6	C5414600004	GUIDE PANEL, AIR	1	
7	0017108020	HEX. HEAD BOLT	4	
8	C5424001303	FRONT FRAME	1	
	C5494100003	LINING	1	
9	C5424000803	FRONT FRAME	1	
	C5494100003	LINING	1	
10	C5424000003	FRONT FRAME	1	
11	0017108020	HEX. HEAD BOLT	6	
12	C5424000202	FRONT FRAME	1	
	C5494100003	LINING	1	
13	C5424000302	FRONT FRAME	1	
	C5494100003	LINING	1	
14	0017108020	HEX. HEAD BOLT	26	
15	C5424000603	GUIDE PANEL, AIR	1	
	C5494100003	LINING	1	
16	C5424000403	GUIDE PANEL, AIR	1	
	C5494100003	LINING	1	
17	C5424000503	GUIDE PANEL, AIR	1	
	C5494100003	LINING	1	
18	0017108020	HEX. HEAD BOLT	36	
19	C5424000704	GUSSET	2	
20	0017110025	HEX. HEAD BOLT	8	
21	C5327100003	BREATHER PIPE	1	
22	0017110025	HEX. HEAD BOLT	2	
23	0019210025	HEX. HEAD BOLT	10	
24	7525125403	COVER, FRONT FRAME	1	
25	7525125103	COVER, FRONT FRAME	1	
	C5494100304	LINING	1	
26	0019208020	HEX. HEAD BOLT	36	
27	0845042703	FILLER BRACKET	1	
28	0019208020	HEX. HEAD BOLT	4	
29	7525125304	COVER	1	
30	0019106020	HEX. HEAD BOLT	6	
	0042306000	LOCK WASHER	6	
	0042406000	PLAIN WASHER	6	

ADD THE FOLLOWING DIGITS AFTER THE PART NUMBER
WHEN ORDERING ANY PAINTED PANEL TO INDICATE

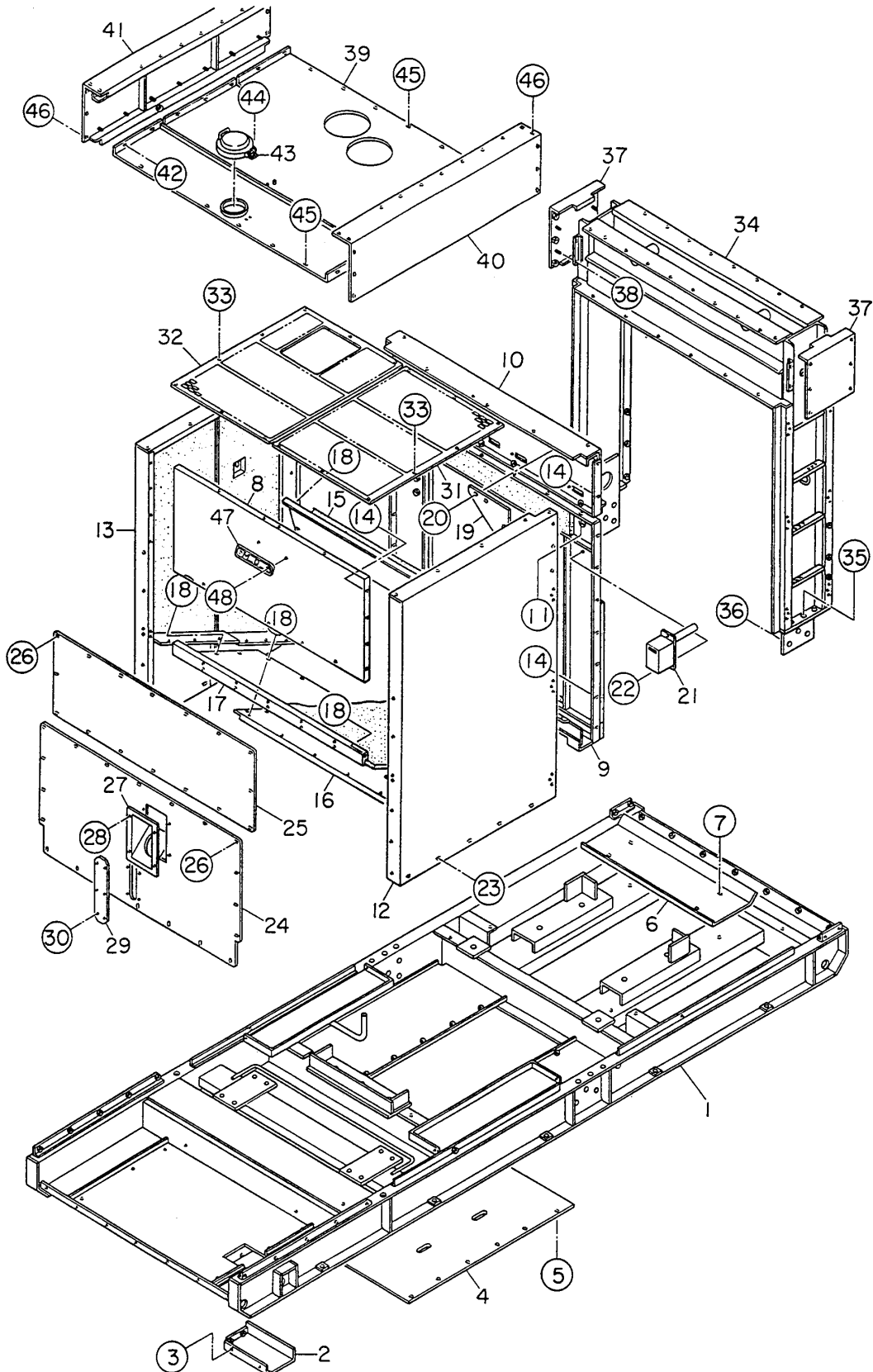
COLOR OF UNIT:

1-ORANGE	5 -BLACK
2-WHITE	6 -CATERPILLAR YELLOW
3 -SPECTRUM GRAY	7 -CATO GOLD
4 -SUNBELT GREEN	8 -RED

THE SERIAL NUMBER MAY BE REQUIRED.

DCA-800SSK — ENCLOSURE #1 ASSY.

ENCLOSURE #1 ASSY.



DCA-800SSK — ENCLOSURE #1 ASSY.

ENCLOSURE #1 ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
31	C5424200103	COVER, FRONT FRAME	1	
32	C5424200203	COVER, FRONT FRAME	1	
33	0019208020	HEX. HEAD BOLT	16	
34	C5434000002	CENTER FRAME	1	
35	0010120075	HEX. HEAD BOLT	6	
	0030020000	HEX. NUT	6	
	0040020000	LOCK WASHER	6	
	0041220000	PLAIN WASHER	6	
36	0010120065	HEX. HEAD BOLT	10	
	0030020000	HEX. NUT	10	
	0040020000	LOCK WASHER	10	
	0041220000	PLAIN WASHER	10	
37	C5434200003	COVER	2	
38	0207008000	HEX. NUT	8	
39	C5464100203	ROOF PANEL	1	
40	C5464100003	ROOF PANEL	1	
41	C5464100103	ROOF PANEL	1	
42	0207008000	HEX. NUT	14	
43	0800251701	FILLER COVER	1	
44	0019206016	HEX. HEAD BOLT	2	
45	0019208020	HEX. HEAD BOLT	12	
46	0019210025	HEX. HEAD BOLT	18	
47	0600500090	EMBLEM	1	
48	0021106016	MACHINE SCREW	2	

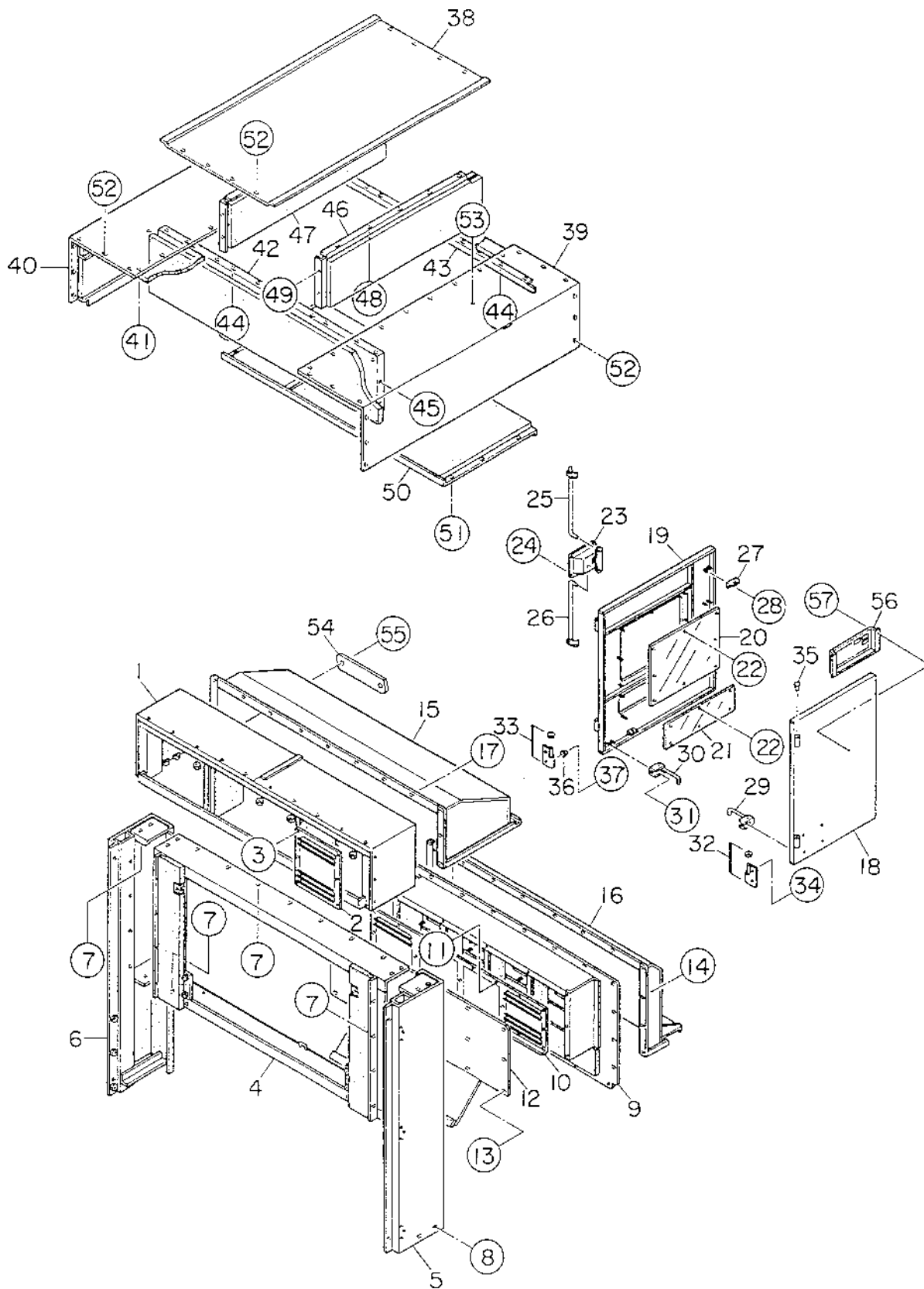
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WHEN ORDERING ANY PAINTED PANEL TO INDICATE
COLOR OF UNIT:

1-ORANGE	5 -BLACK
2-WHITE	6 -CATERPILLAR YELLOW
3-SPECTRUM GRAY	7 -CATO GOLD
4 -SUNBELT GREEN	8 -RED

THE SERIAL NUMBER MAY BE REQUIRED.

DCA-800SSK — ENCLOSURE #2 ASSY.

ENCLOSURE #2 ASSY.



DCA-800SSK — ENCLOSURE #2 ASSY.

ENCLOSURE #2 ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	C5444000313	REAR FRAME	1	
	C5494300104	LINING	1	
2	7525151004	LOUVER PANEL	5	
3	0207006000	NEX. NUT	40	
4	C5444000203	REAR FRAME	1	
	C5494300004	LINING	1	
5	C5444000003	REAR FRAME	1	
	C5494300004	LINING	1	
6	C5444400103	REAR FRAME	1	
	C5494300004	LINING	1	
7	0017110025	HEX. HEAD BOLT	23	
8	0019210025	HEX. HEAD BOLT	4	
9	7525155403	COVER, REAR FRAME	1	
	7525944304	LINING	1	
10	7525151804	LOUVER PANEL	1	
11	0205006000	HEX. NUT	21	
	0042306000	LOCK WASHER	21	
	0042406000	PLAIN WASHER	21	
12	C5444300004	DUCT COVER	1	
	C5494300204	LINING	1	
13	0017108020	HEX. HEAD BOLT	15	
14	0019208020	HEX. HEAD BOLT	21	
15	C5444300303	VISOR	1	
16	7525165603	VISOR	1	
17	0019208020	HEX. HEAD BOLT	13	
18	C5444200113	DOOR, REAR FRAME	1	
19	C5444200003	DOOR, REAR FRAME	1	
20	7525147014	WINDOW PLATE	1	
21	7525147114	WINDOW PLATE	1	
22	0207306000	HEX. NUT	14	
23	B9114000102	DOOR HANDLE	1	
24	0021806016	MACHINE SCREW	4	
25	7525146404	DOOR ROD	1	
26	7525146504	DOOR ROD	1	
27	0845050704	STAY	4	
28	0205006000	HEX. NUT	8	
	0042306000	LOCK WASHER	8	
	0042406000	PLAIN WASHER	8	

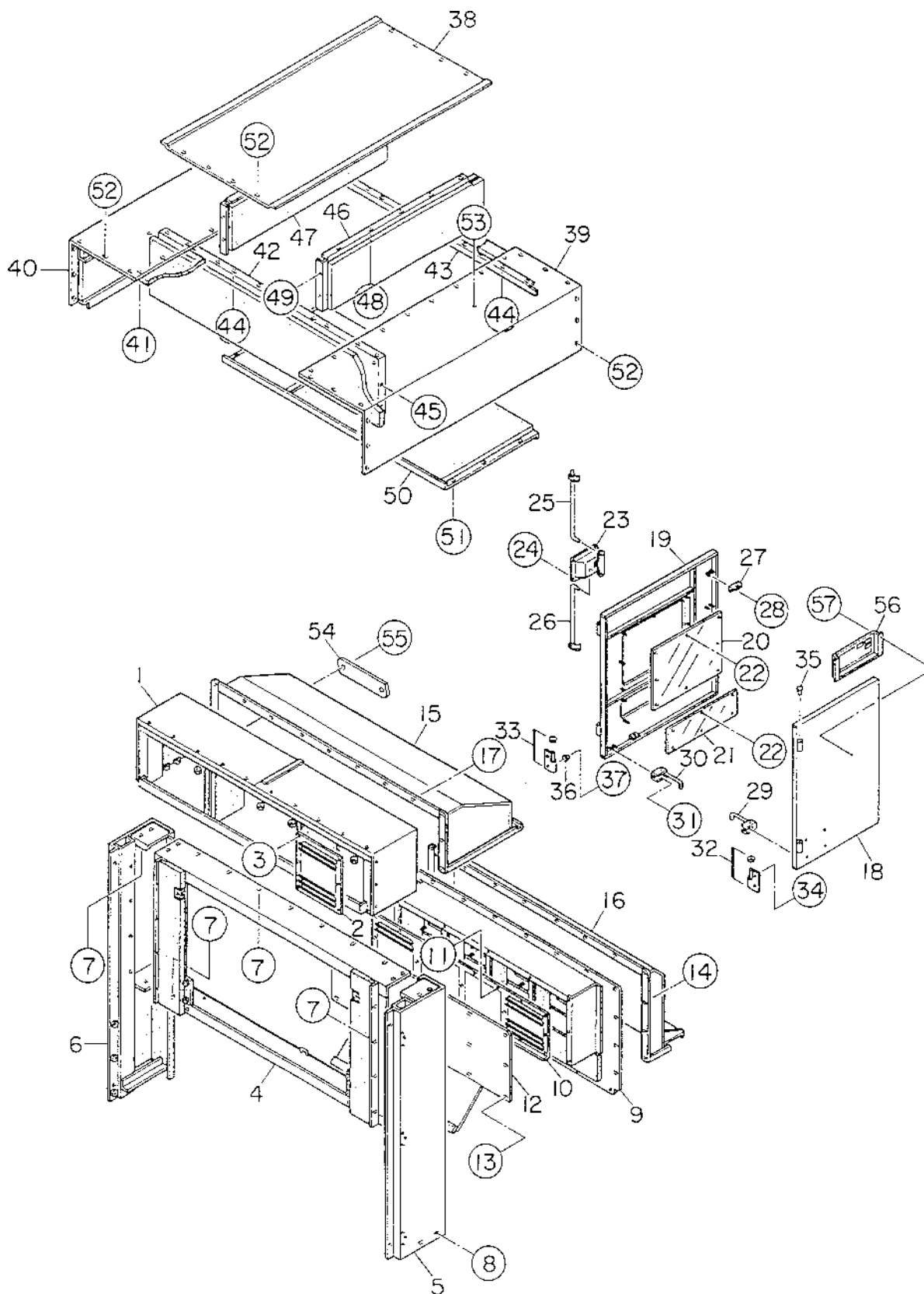
ADD THE FOLLOWING DIGITS AFTER THE PART NUMBER
WHEN ORDERING ANY PAINTED PANEL TO INDICATE
COLOR OF UNIT:

1-ORANGE	5-BLACK
2-WHITE	6-CATERPILLAR YELLOW
3-SPECTRUM GRAY	7-CATO GOLD
4-SUNBELT GREEN	8-RED

THE SERIAL NUMBER MAY BE REQUIRED.

DCA-800SSK — ENCLOSURE #2 ASSY.

ENCLOSURE #2 ASSY.



DCA-800SSK — ENCLOSURE #2 ASSY.

ENCLOSURE #2 ASSY.

NO	PART NO	PART NAME	QTY.	REMARKS
29	0805011304	STOPPER, DOOR	1	
30	0805011204	STOPPER, DOOR	1	
31	0205006000	HEX. NUT	4	
	0042306000	LOCK WASHER	4	
	0042406000	PLAIN WASHER	4	
32	M9110100204	HINGE	2	REPLACES 0845047104
	0845045004	WASHER	2	
33	M9110100304	HINGE	2	REPLACES 0845047204
	0845045004	WASHER	2	
34	0019208020	HEX. HEAD BOLT	4	
35	0845031504	CAP	4	
36	0601850097	STOPPER	4	
37	0021008025	MACHINE SCREW	4	
38	C5464200203	ROOF PANEL	1	
	C5494500003	LINING	1	
39	C5464200003	ROOF PANEL	1	
	C5494500003	LINING	1	
40	C5464200103	ROOF PANEL	1	
	C5494500003	LINING	1	
41	0207008000	HEX. NUT	18	
42	C5464200504	PANEL	1	
	C5494500003	LINING	1	
43	C5464200604	GUIDE	1	
44	0207008000	HEX. NUT	20	
45	0017108020	HEX. HEAD BOLT	4	
46	C5464200404	PANEL	1	
	C5494500003	LINING	1	
47	C5464200304	PANEL	1	
	C5494500003	LINING	1	
48	0207008000	HEX. NUT	10	
49	0017108020	HEX. HEAD BOLT	4	
50	C5464400004	COVER, ROOF PANEL	1	
	C5494500104	LINING	1	
51	0017108020	HEX. HEAD BOLT	12	
52	0019210025	HEX. HEAD BOLT	32	
53	0019112030	HEX. HEAD BOLT	4	
	0042312000	LOCK WASHER	4	
	0042412000	PLAIN WASHER	4	
54	0600500090	EMBLEM	1	
55	0021106016	MACHINE SCREW	2	
56	B9114500104	DOOR POCKET	1	
57	0207006000	HEX. NUT	4	

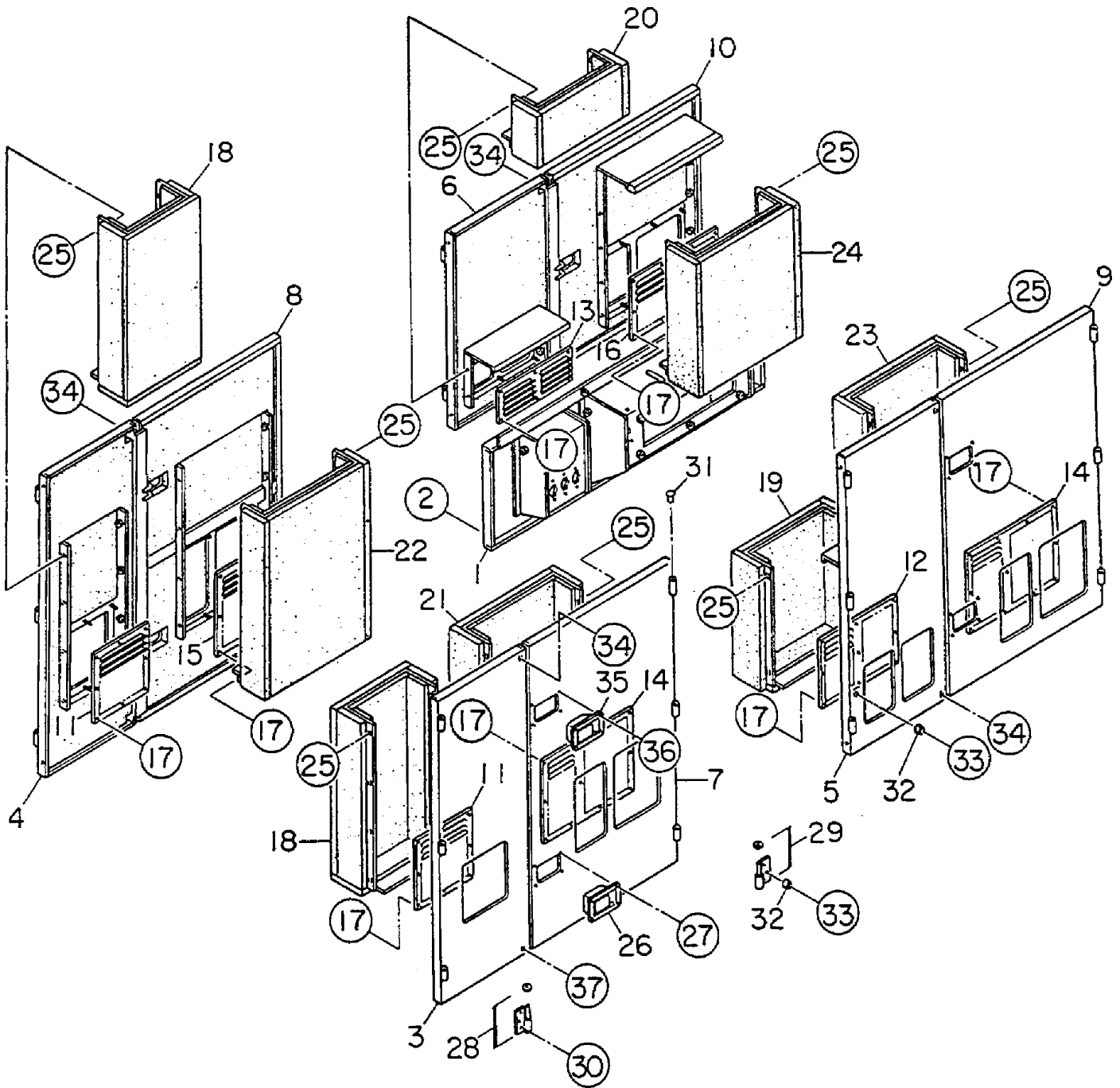
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WHEN ORDERING ANY PAINTED PANEL TO INDICATE
COLOR OF UNIT:

1-ORANGE	5 -BLACK
2-WHITE	6 -CATERPILLAR YELLOW
3 -SPECTRUM GRAY	7 -CATO GOLD
4 -SUNBELT GREEN	8 -RED

THE SERIAL NUMBER MAY BE REQUIRED.

DCA-800SSK — ENCLOSURE #3 ASSY.

ENCLOSURE #3 ASSY.



DCA-800SSK — ENCLOSURE #3 ASSY.

ENCLOSURE #3 ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	C5454200403	SPLASHER PANEL	1	
2	0019110070	HEX. HEAD BOLT	6	
	0042310000	LOCK WASHER	6	
	0042410000	PLAIN WASHER	6	
3	C5454100003	SIDE PANEL	1	
	C5494400004	LINING	1	
4	C5454100103	SIDE PANEL	1	
	C5494400104	LINING	1	
5	7525173803	SIDE PANEL	1	
	7525972504	LINING	1	
6	7525173903	SIDE PANEL	1	
	7525972704	LINING	1	
7	7525173203	SIDE DOOR	1	
	7525970904	LINING	1	
8	7525173303	SIDE DOOR	1	
	7525971104	LINING	1	
9	7525173403	SIDE DOOR	1	
	7525971304	LINING	1	
10	7525173503	SIDE DOOR	1	
	7595971504	LINING	1	
11	7525151004	LOUVER PANEL	2	
12	7525151604	LOUVER PANEL	1	
13	7525151704	LOUVER PANEL	1	
14	7525151304	LOUVER PANEL	2	
15	7525151404	LOUVER PANEL	1	
16	7525151504	LOUVER PANEL	1	
17	0205006000	HEX. NUT	75	
	0042306000	LOCK WASHER	75	
	0042406000	PLAIN WASHER	75	
18	7435176204	DUCT	2	
	C5494400204	LINING	2	
19	7525176504	DUCT	1	
	7525966904	LINING	1	
20	7525176604	DUCT	1	
	7525967104	LINING	1	
21	7525176004	DUCT	1	
	7525967304	LINING	1	
22	C5454300004	DUCT	1	
	C5497400004	LINING	1	
23	7525176004	DUCT	1	
	7525966504	LINING	1	

ADD THE FOLLOWING DIGITS AFTER THE PART NUMBER
WHEN ORDERING ANY PAINTED PANEL TO INDICATE

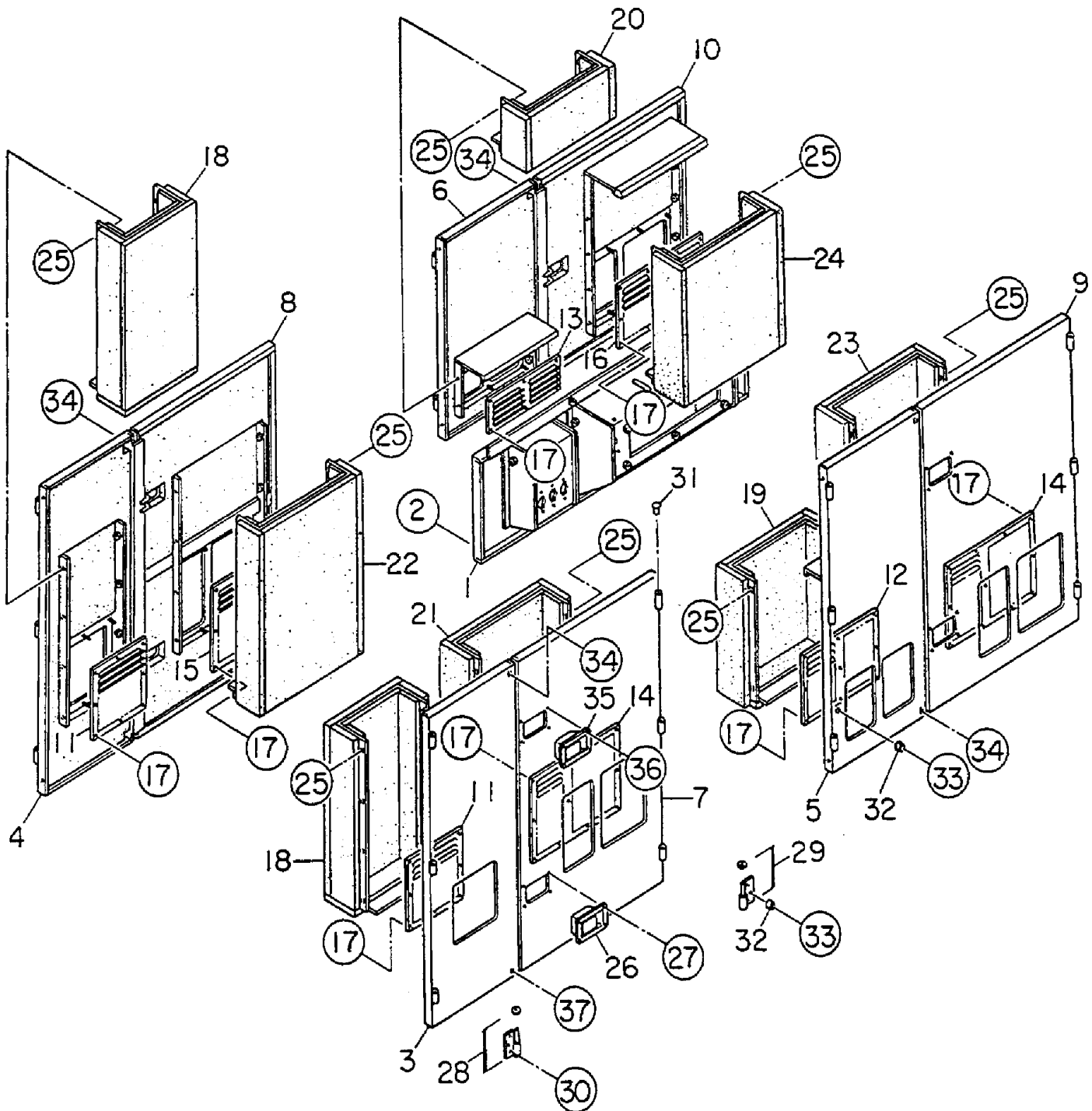
COLOR OF UNIT:

1-ORANGE	5 -BLACK
2-WHITE	6 -CATERPILLAR YELLOW
3 -SPECTRUM GRAY	7 -CATO GOLD
4 -SUNBELT GREEN	8 -RED

THE SERIAL NUMBER MAY BE REQUIRED.

DCA-800SSK — ENCLOSURE #3 ASSY.

ENCLOSURE #3 ASSY.



ENCLOSURE #3 ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
24	7525176704	DUCT	1	
	7525966704	LINING	1	
25	0019208020	HEX. HEAD BOLT	58	
26	0825007362	DOOR HANDLE	3	
27	0021806016	MACHINE SCREW	12	
28	0845046904	HINGE	11	
	0845045004	WASHER	11	
29	0845047004	HINGE	11	
	0845045004	WASHER	11	
30	0019208020	HEX. HEAD BOLT	52	
31	0845031504	CAP	22	
32	0601850097	STOPPER	15	
33	0021008025	MACHINE SCREW	15	
34	0019110070	HEX. HEAD BOLT	8	
	0042310000	LOCK WASHER	8	
	0042410000	PLAIN WASHER	8	
35	B9114000002	DOOR HANDLE	4	
36	0021806016	MACHINE SCREW	16	
37	0019110055	HEX. HEAD BOLT	2	
	0042310000	LOCK WASHER	2	
	0042410000	PLAIN WASHER	2	

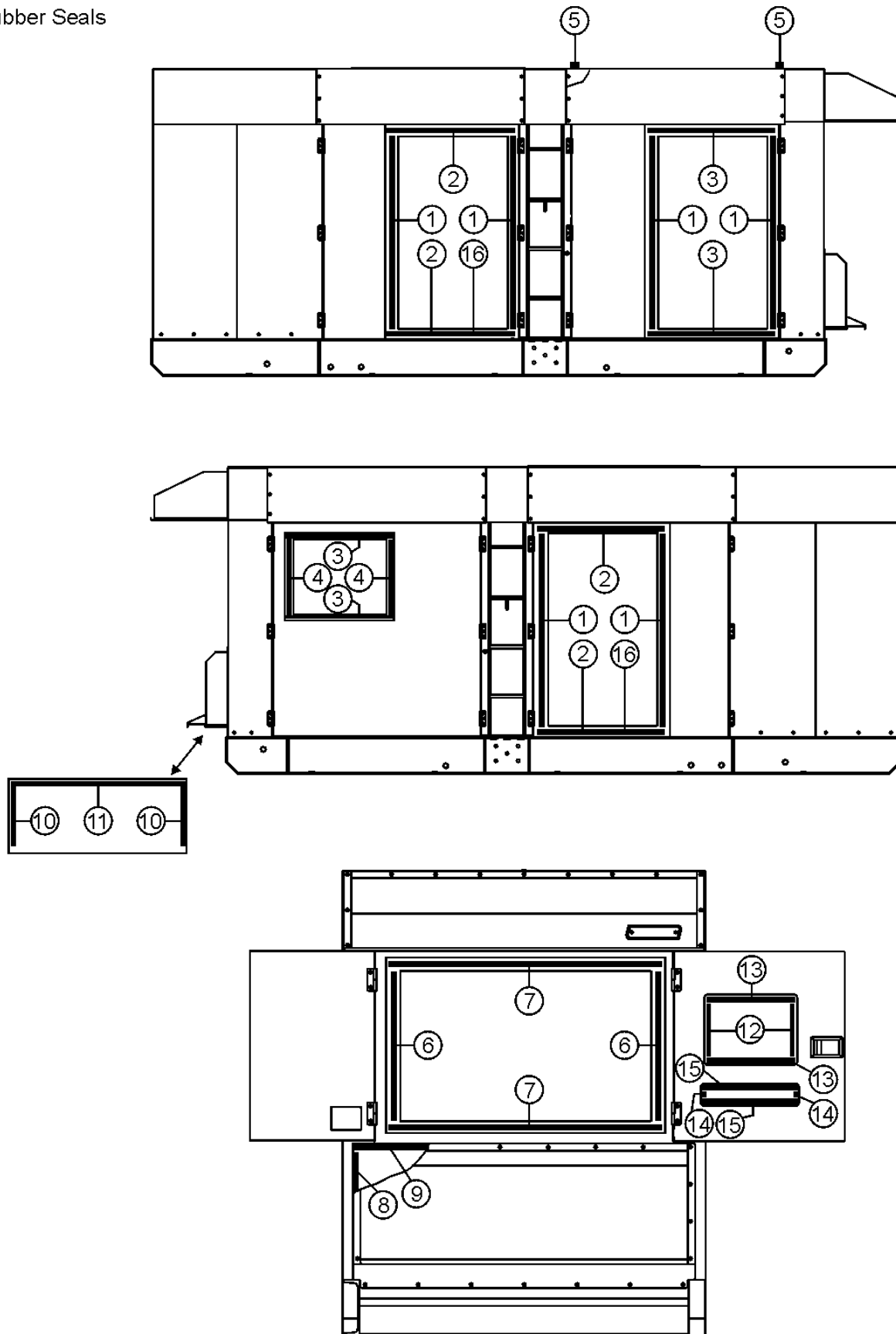
ADD THE FOLLOWING DIGITS AFTER THE PART NUMBER
WHEN ORDERING ANY PAINTED PANEL TO INDICATE
COLOR OF UNIT:

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2-WHITE	6-CATERPILLAR YELLOW
3-SPECTRUM GRAY	7-CATO GOLD
4-SUNBELT GREEN	8-RED

THE SERIAL NUMBER MAY BE REQUIRED.

DCA-800SSK — RUBBER SEALS ASSY.

Rubber Seals



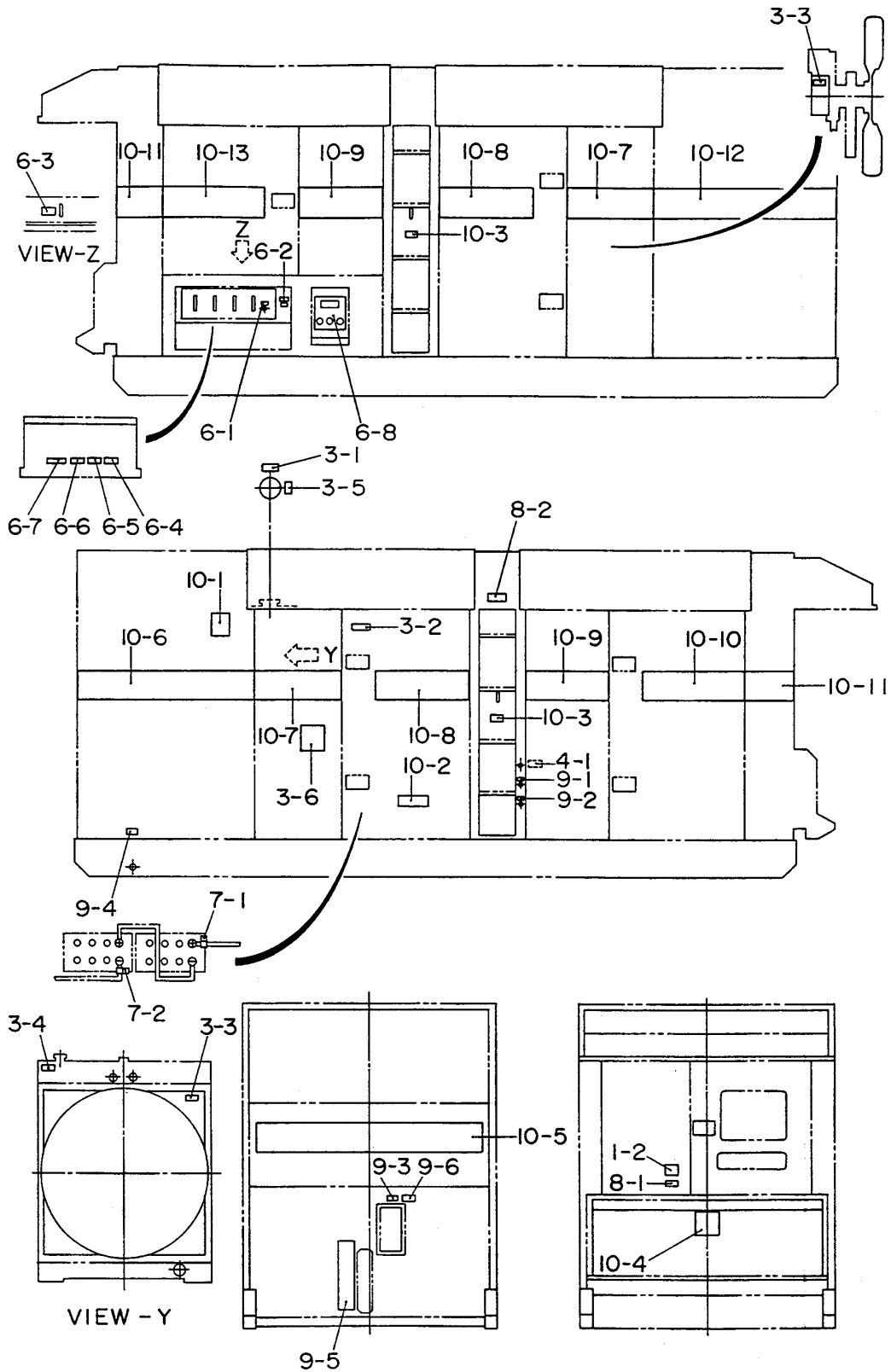
DCA-800SSK — RUBBER SEALS ASSY.

RUBBER SEALS ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	0228901690	RUBBER SEAL	8	
2	0228900995	RUBBER SEAL	4	
3	0228901035	RUBBER SEAL	4	
4	0228901090	RUBBER SEAL	2	
5	0229201950	RUBBER SEAL	2	
6	0228801030	RUBBER SEAL	2	
7	0228801590	RUBBER SEAL	2	
8	0229200710	RUBBER SEAL	2	
9	0229201840	RUBBER SEAL	1	
10	0229200625	RUBBER SEAL	2	
11	0229201840	RUBBER SEAL	1	
12	0228100380	RUBBER SEAL	2	
13	0228100550	RUBBER SEAL	2	
14	0228100120	RUBBER SEAL	2	
15	0228100580	RUBBER SEAL	2	
16	0228901000	RUBBER SEAL	2	

DCA-800SSK — NAME PLATE AND DECALS

NAME PLATE AND DECALS



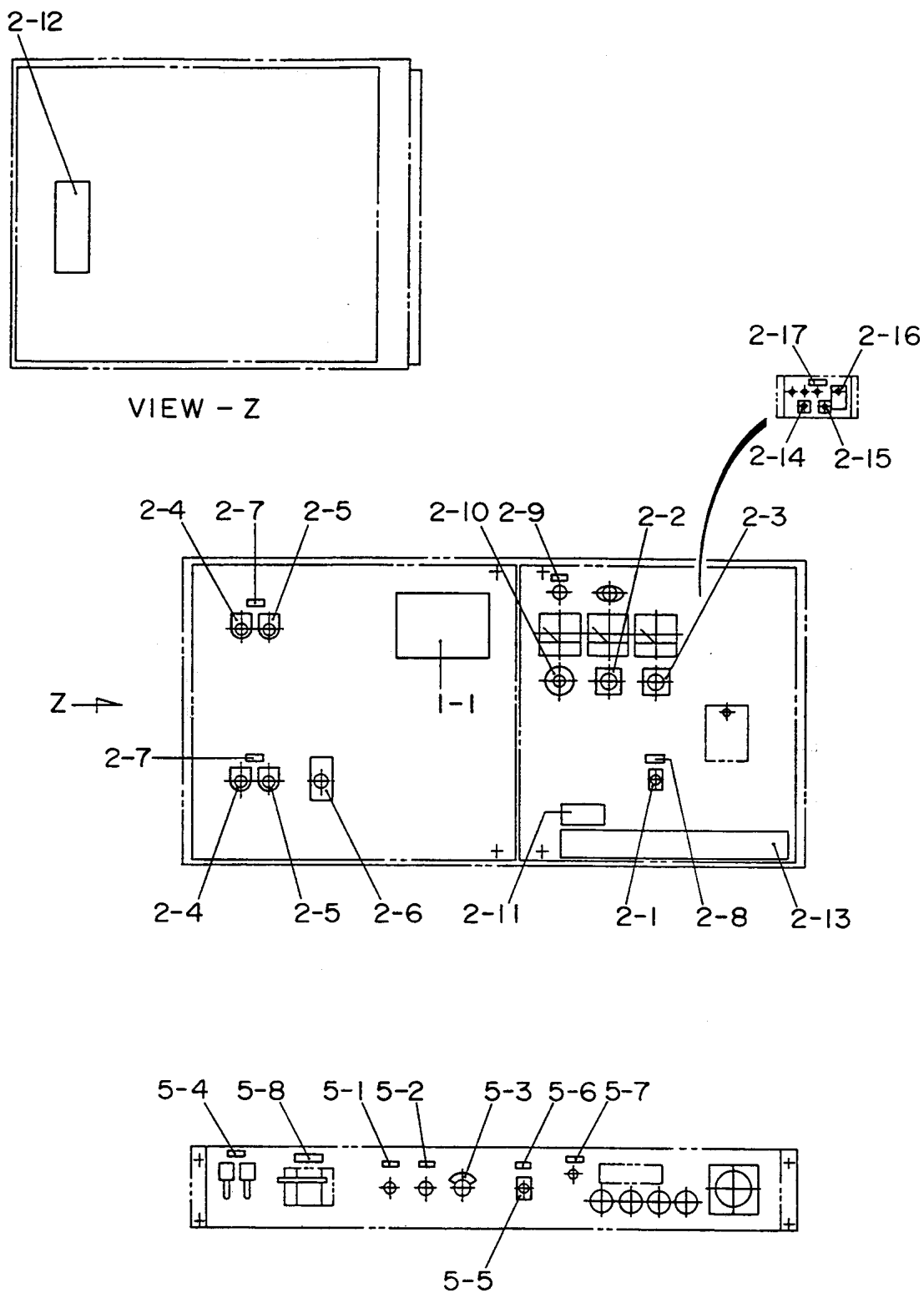
DCA-800SSK — NAME PLATE AND DECALS

NAME PLATE AND DECALS

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1-2	B9521100404	DECAL; SAFETY INSTRUCTIONS	1	B92110040
ENGINE & RADIATOR GROUP				
3-1	0800689204	DECAL; COOLING WATER	1	S-961
3-2	B9504000304	DECAL; CAUTION HOT PARTS	1	B90400030
3-3	B9504000404	DECAL; WARNING MOVING PARTS	2	B90400040
3-4	B9504100104	DECAL; WARNING HOT COOLANT	1	B90410010
3-5	0966810000	DECAL; WARNING	1	REPLACES 0600501100
3-6	6162937111	DECAL; FUEL PRIMING	1	REPLACES 0600500011
OIL DRAIN GROUP				
4-1	0840611903	DECAL; PRECAUTIONS ON HANDLING	1	S-2570
OUTPUT TERMINAL GROUP				
6-1	0840614104	DECAL; GROUND	1	S-2635
6-2	9039202064	DECAL; START CONTACT	1	S-4468
6-3	0840655704	DECAL; TERMINAL COVER STOPPER	1	S-4516
6-4	B9511100304	DECAL; WARNING	1	B91110030
6-5	B9511100404	DECAL; WARNING ELECTRIC SHOCK HAZARD	1	B91110040
6-6	B9531100504	DECAL; WARNING ELECTRIC SHOCK HAZARD	1	B93110050
6-7	C0551000404	DECAL; 3-PHASE OUTPUT TERMINAL	1	C05100040
6-8	C5551000203	DECAL; RECEPTACLE & CIRCUIT BREAKER ..	1	C55100020
BATTERY GROUP				
7-1	0800689404	DECAL; +	1	S-2090
7-2	0800689504	DECAL; -	1	S-2091
MUFFLER GROUP				
8-1	B9504200004	DECAL; WARNING ENGINE EXHAUST	1	B90420000
8-2	B9511100204	DECAL; CAUTION HOT SURFACES	1	B91110020
FUEL TANK GROUP				
9-1	0800688404	DECAL; FUEL INLET	1	S-1344
9-2	0800688504	DECAL; FUEL OUTLET	1	S-1345
9-3	1320620904	DECAL; DIESEL FUEL	1	S-1756
9-4	6360620004	DECAL; FUEL DRAIN PLUG	1	S-1883
9-5	0840607104	DECAL; FUEL GAUGE	1	S-2365
9-6	B9504500004	DECAL; WARNING DIESEL FUEL	1	B90450000
BONNET GROUP				
10-1	0800615102	DECAL; CAUTION AGAINST OIL AND	1	S-544A
10-2	1320610603	DECAL; WATER-OIL	1	S-1760
10-3	1320621504	DECAL; SUPPORT HOOK	2	S-2257
10-4	0840625902	DECAL; MQ	1	S-3057
10-5	C5561100703	STRIPE	1	
10-6	C5561100603	STRIPE	1	
10-7	C4561101204	STRIPE	2	
10-8	C5561100804	STRIPE	2	
10-9	C5561100204	STRIPE	2	
10-10	C5561100503	STRIPE	1	
10-11	C5561100004	STRIPE	2	

DCA-800SSK — NAME PLATE AND DECALS

NAME PLATE AND DECALS



DCA-800SSK — NAME PLATE AND DECALS

NAME PLATE AND DECALS

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
CONTROL PANEL GROUP				
2-1	0800520904	PLATE; ON-OFF	1	AT-202
2-2	0800520904	PLATE; AMMETER CHANGE-OVER SWITCH	1	N-2438
2-3	0800520814	PLATE; VOLTMETER CHANGE-OVER SWITCH	1	N-2439
2-4	0800564004	PLATE; OFF	2	N-3805
2-5	0800565004	PLATE; ON	2	N-3806
2-6	0800588004	PLATE; THROTTLE LEVER	1	N-3808
2-7	0840624504	DECAL; CIRCUIT BREAKER	2	S-3031
2-8	0840624604	DECAL; PANEL LIGHT SWITCH	1	S-3032
2-9	0840624704	DECAL; PILOT LAMP	1	S-3033
2-10	0840624804	DECAL; VOLTAGE REGULATOR	1	S-3034
2-11	B9531100604	DECAL; WARNING ELECTRIC SHOCK HAZARD	1	B93110060
2-12	C5551000303	DECAL; SETTING FOR OUTPUT VOLTAGE	1	C55100030
2-13	C5561100903	DECAL; WHISPERWATT 800	1	C56110090
2-14	Z0110001204	DECAL; DROOP	1	Z01000120
2-15	Z0110001304	DECAL; IDLE SPEED	1	Z01001230
2-16	Z0110001404	DECAL; O.S.SW	1	Z01000140
2-17	Z0110001504	DECAL; RESET	1	Z01000150
ENGINE OPERATING PANEL GROUP				
5-1	0800686004	DECAL; STOP BUTTON	1	S-878
5-2	0840625004	DECAL; PREHEAT LAMP	1	S-3036
5-4	0840625314	DECAL; AIR CLEANER INDICATOR	1	S-3039A
5-5	9039208694	DECAL; HIGH-LOW	1	S-4451
5-6	9039208704	DECAL; ENGINE SPEED	1	S-4452
5-7	0840655604	DECAL; ALARM, OIL FILTER	1	S-4512
5-8	C0551000504	DECAL; BATTERY SWITCH	1	C05120050
1-1	C5552000003	DECAL; HANDLING PROCEDURES	1	C55200000

PAYMENT TERMS

Terms of payment for parts are net 10 days.

FREIGHT POLICY

All parts orders will be shipped collect or prepaid with the charges added to the invoice. All shipments are F.O.B. point of origin. Multiquip's responsibility ceases when a signed manifest has been obtained from the carrier, and any claim for shortage or damage must be settled between the consignee and the carrier.

MINIMUM ORDER

The minimum charge for orders from Multiquip is \$15.00 net. Customers will be asked for instructions regarding handling of orders not meeting this requirement.

RETURNED GOODS POLICY

Return shipments will be accepted and credit will be allowed, subject to the following provisions:

1. A Returned Material Authorization must be approved by Multiquip prior to shipment.
2. To obtain a Return Material Authorization, a list must be provided to Multiquip Parts Sales that defines item numbers, quantities, and descriptions of the items to be returned.
 - a. The parts numbers and descriptions must match the current parts price list.
 - b. The list must be typed or computer generated.
 - c. The list must state the reason(s) for the return.
 - d. The list must reference the sales order(s) or invoice(s) under which the items were originally purchased.
 - e. The list must include the name and phone number of the person requesting the RMA.
3. A copy of the Return Material Authorization must accompany the return shipment.
4. Freight is at the sender's expense. All parts must be returned freight prepaid to Multiquip's designated receiving point.
5. Parts must be in new and resalable condition, in the original Multiquip package (if any), and with Multiquip part numbers clearly marked.
6. The following items are not returnable:
 - a. Obsolete parts. (If an item is listed in the parts price book as being replaced by another item, it is obsolete.)
 - b. Any parts with a limited shelf life (such as gaskets, seals, "O" rings, and other rubber parts) that were purchased more than six months prior to the return date.
 - c. Any line item with an extended dealer net price of less than \$5.00.
 - d. Special order items.
 - e. Electrical components.
 - f. Paint, chemicals, and lubricants.
 - g. Decals and paper products.
 - h. Items purchased in kits.
7. The sender will be notified of any material received that is not acceptable.
8. Such material will be held for 5 working days from notification, pending instructions. If a reply is not received within 5 days, the material will be returned to the sender at his expense.
9. Credit on returned parts will be issued at dealer net price at time of the original purchase, less a 15% restocking charge.
10. In cases where an item is accepted for which the original purchase document can not be determined, the price will be based on the list price that was effective twelve months prior to the RMA date.
11. Credit issued will be applied to future purchases only.

PRICING AND REBATES

Prices are subject to change without prior notice. Price changes are effective on a specific date and all orders received on or after that date will be billed at the revised price. Rebates for price declines and added charges for price increases will not be made for stock on hand at the time of any price change.

Multiquip reserves the right to quote and sell direct to Government agencies, and to Original Equipment Manufacturer accounts who use our products as integral parts of their own products.

SPECIAL EXPEDITING SERVICE

A \$20.00 to \$50.00 surcharge will be added to the invoice for special handling including bus shipments, insured parcel post or in cases where Multiquip must personally deliver the parts to the carrier.

LIMITATIONS OF SELLER'S LIABILITY

Multiquip shall not be liable here under for damages in excess of the purchase price of the item with respect to which damages are claimed, and in no event shall Multiquip be liable for loss of profit or good will or for any other special, consequential or incidental damages.

LIMITATION OF WARRANTIES

No warranties, express or implied, are made in connection with the sale of parts or trade accessories nor as to any engine not manufactured by Multiquip. Such warranties made in connection with the sale of new, complete units are made exclusively by a statement of warranty packaged with such units, and Multiquip neither assumes nor authorizes any person to assume for it any other obligation or liability whatever in connection with the sale of its products. A part from such written statement of warranty, there are no warranties, express, implied or statutory, which extend beyond the description of the products on the face hereof.

PARTS AND OPERATION MANUAL

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

Manufactured for Multiquip Inc.
by
DENYO, MANUFACTURING, CO., USA



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WWW: multiquip.com

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