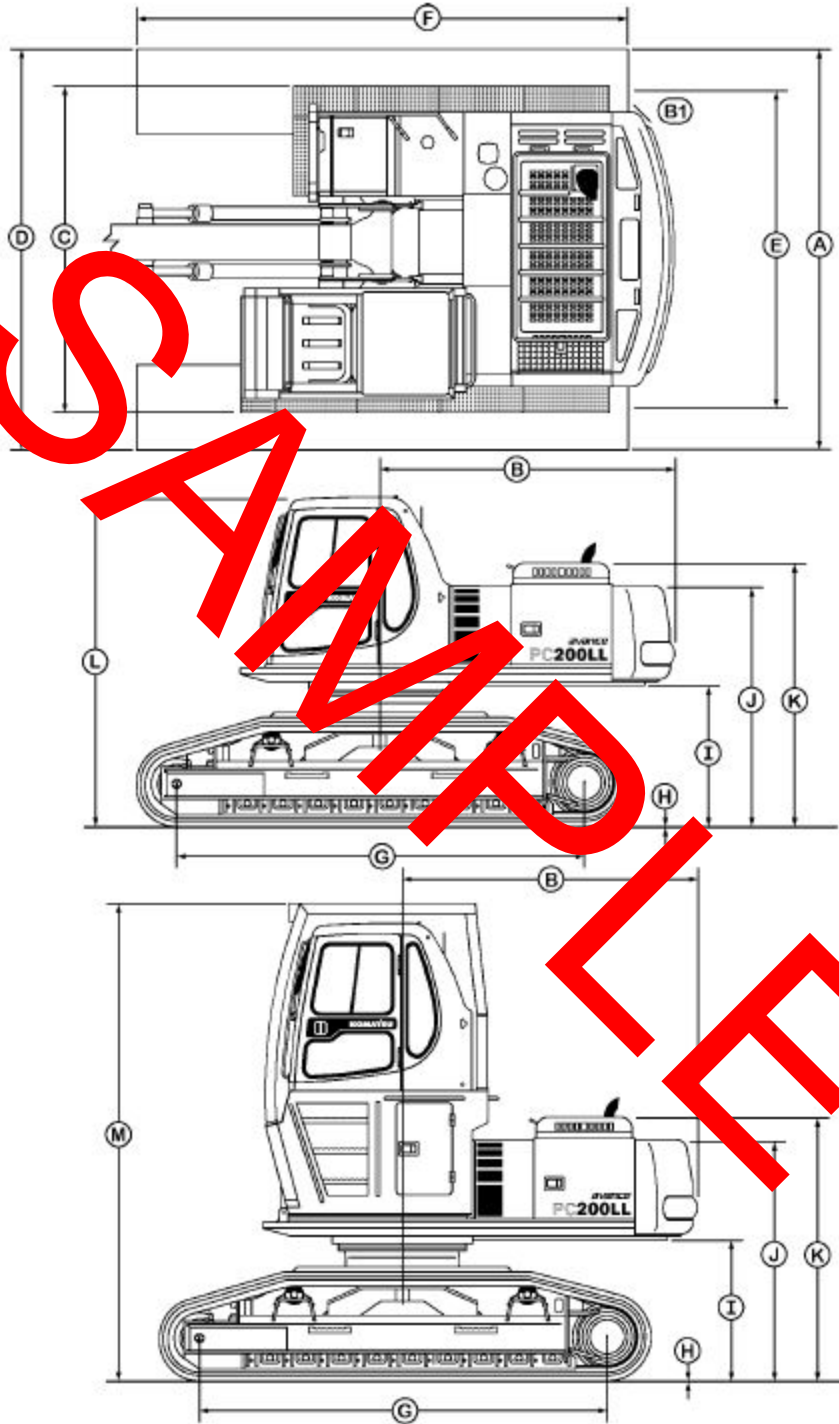


# GENERAL ASSEMBLY DRAWING

## PC200LL

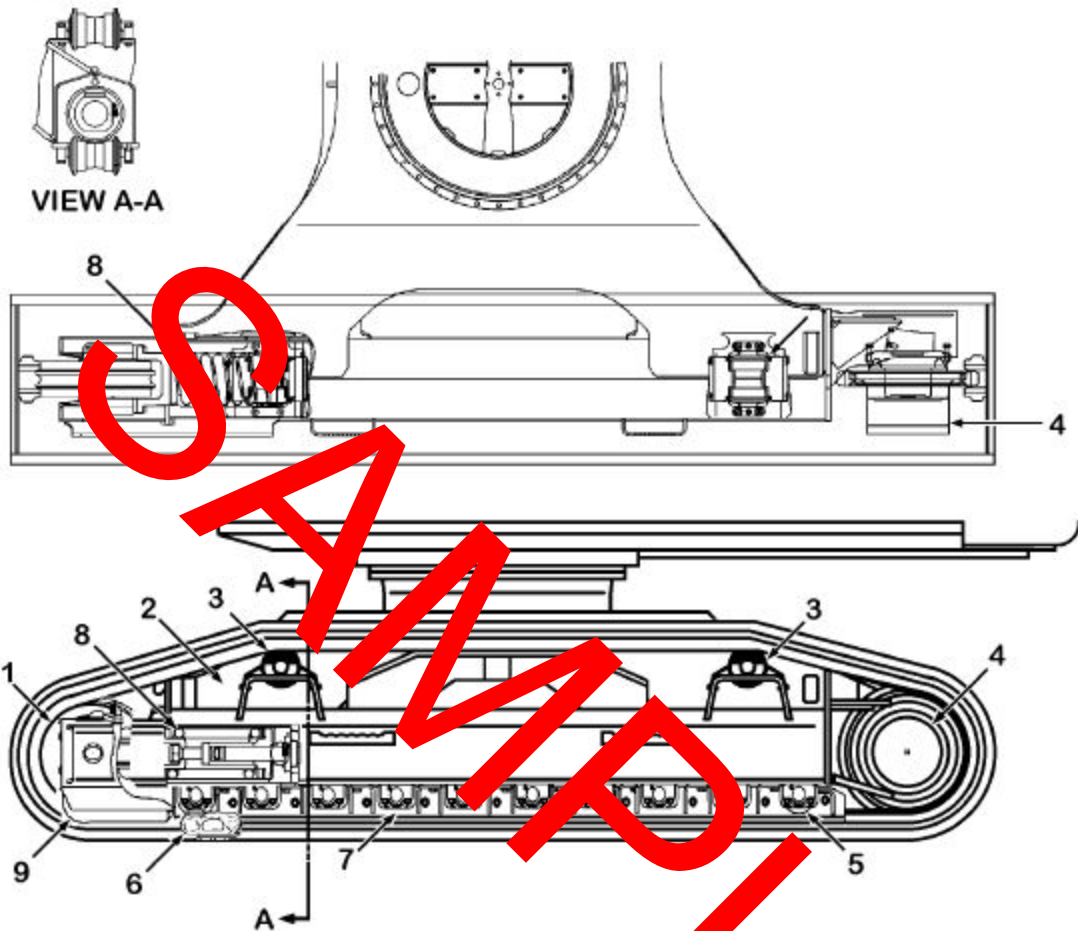


PC049306

Item	Description	Dimension	
A	Overall width	3320 mm	
B	Tail swing radius	2860 mm	
	Swing center to rear end distance	2855 mm	
C	Upper structure width	3220 mm	
D	Width of crawler	600 mm shoes	3220 mm
		700 mm shoes	3320 mm
		800 mm shoes	3420 mm
		900 mm shoes	3520 mm
E	Track gauge	2620 mm	
F	Track length	4610 mm	
G	Length of track on ground	3805 mm	
H	Grouser height	26 mm	
I	Ground clearance, counterweight	1340 mm	
	Minimum ground clearance	711 mm	
J	Machine height	2295 mm	
K	Engine compartment height	2580 mm	
L	Overall height	w/o riser	3230 mm
		with riser	4610 mm

# TRACK FRAME • RECOIL SPRING

★ The diagram shows the PC200LL-6



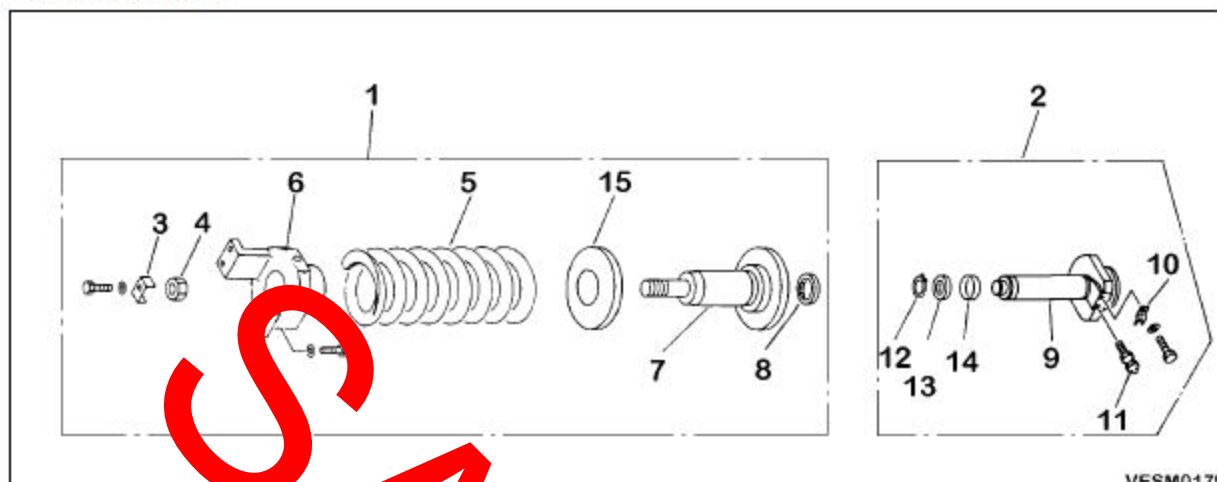
VESM0174

- 1. Idler
- 2. Track frame
- 3. Carrier roller
- 4. Final drive
- 5. Track roller
- 6. Track shoe
- 7. Full roller guard
- 8. Recoil spring
- 9. Front guard

● No. of rollers	
Model	No. of rollers (each side)
PC200LL	10
PC220LL	10

## RECOIL SPRING

## Disassembly



VESM0179

1. Remove piston assembly (2) from recoil spring assembly (1).

2. Disassembly of recoil spring assembly

A. Set recoil spring assembly (1) to tool H1.



**WARNING!** The recoil spring is under a large installed load, so be sure to set the tool properly. Failure to do this is dangerous.

★ Installed load of spring:

PC200, PC220:..... 139.3 kN (19.2 t)

B. Apply hydraulic pressure slowly to compress spring, and remove lock plate (3), then remove nut (4).

★ Compress the spring to a point where the nut becomes loose.

★ Release the hydraulic pressure slowly and release the tension of the spring.

★ Free length of spring:

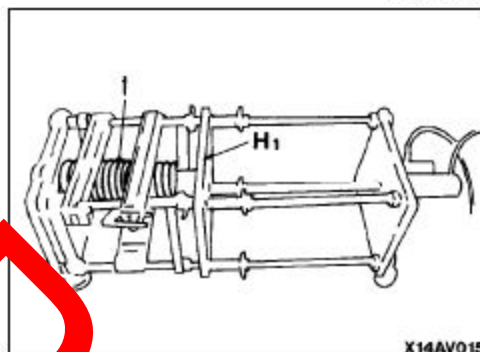
PC200, PC220:..... 603.5 mm

C. Remove yoke (6), plate (15), cylinder (7), and dust seal (8) from spring (5).

3. Disassembly of piston assembly

A. Remove lock plate (10) from piston (9), then remove valve (11).

B. Remove snap ring (12), then remove U-packing (13) and ring (14).



X14AV015

## MAINTENANCE

### WHEN REQUIRED

#### CHECKING, CLEANING OR REPLACING THE AIR CLEANER ELEMENT



#### WARNING

Never clean or replace the air cleaner element with the engine running.

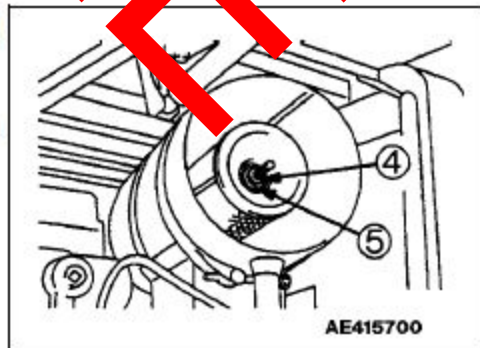
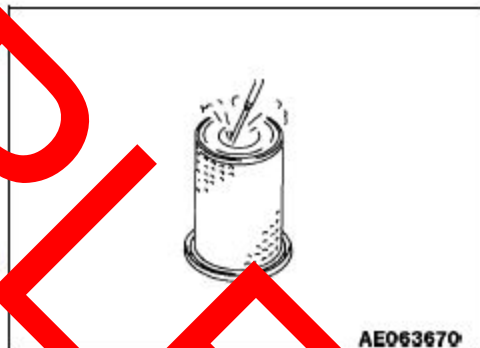
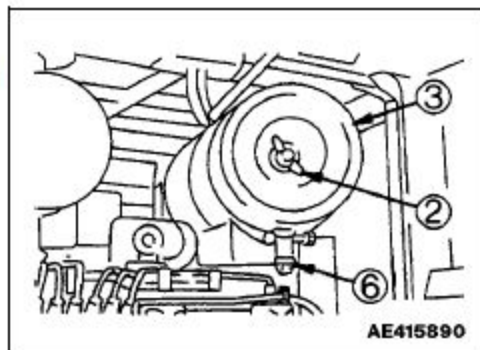
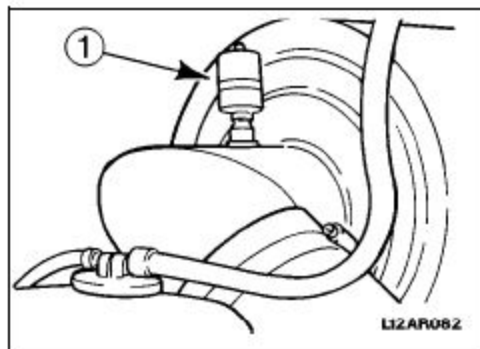
When using pressurized air to clean the element wear safety glasses or goggles to protect the eyes.

#### CHECKING

- Whenever the red piston in the dust indicator (1) appears, clean the air cleaner element.

#### CLEANING OR REPLACING THE OUTER ELEMENT

- Remove wing nut (2), and cover cap to remove outer element.
- Clean the inside of the air cleaner by:
  - Direct dry compressed air (less than 7 kg/cm<sup>2</sup> (100 psi)) through element from inside along its folds, then direct it from outside along its folds and again from inside.
- Remove one seal from the outer element whenever the outer element has been cleaned.
- Replace the outer element after it has been cleaned 6 times or been in use for one year. Replace the inner element at the same time.
- If the dust indicator display red immediately after the outer element has been cleaned, replace both inner and outer elements, even if the outer element has not been cleaned 6 times.
- Check inner element mounting nuts (4) for looseness and, retighten them if necessary.  
Torque to: ..... 5.4 ± 0.5 Nm (4.0 ± 0.4 lbf ft)
- Replace seal washer or wing nut with new parts if they are broken.  
Torque to: ..... 5.4 ± 0.5 Nm (4.0 ± 0.4 lbf ft)



## EVERY 250 HOURS SERVICE

Perform the 50-hour and 100-hour maintenance procedures at this time as well.

### CHANGING THE ENGINE OIL AND REPLACING THE ENGINE OIL FILTER

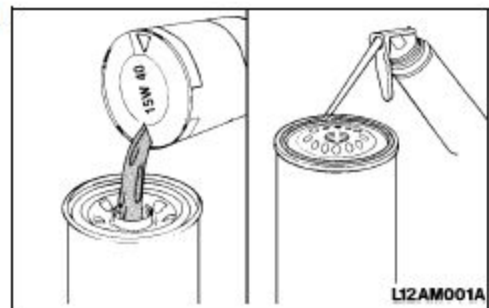
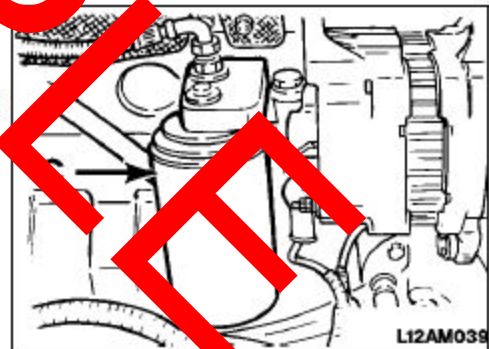
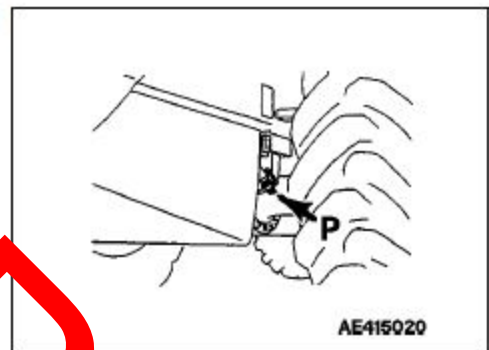
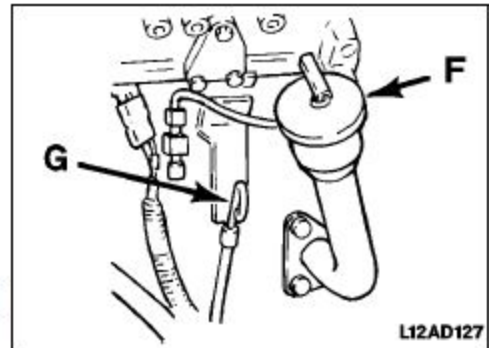
#### **WARNING**

Before changing the oil, wait, at least 10 minutes for the engine to cool down after running it.

If the filter is removed before the oil settles the oil might continue to spill.

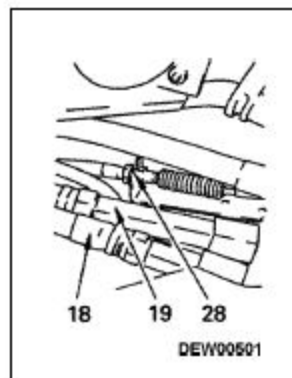
For details of the oil to use and refill capacity see "USE OF FUEL, COOLANT AND LUBRICANTS ACCORDING TO AMBIENT TEMPERATURE" on page 3-11.

1. Warm up the engine to operating temperature and then turn the engine OFF.
2. Open the engine hoods and lock in position.
3. Open oil filler (F) and remove drain plug (P) to drain oil.
4. After draining, tighten the drain plug.
5. Clean the area around the oil filter.
6. Using a filter wrench, remove oil filter cartridge (C) by turning it counterclockwise.
7. Clean the filter gasket surface of the filter header.
8. Fill a new oil filter with engine oil. Then, apply engine oil or a thin coat of grease to the seal.

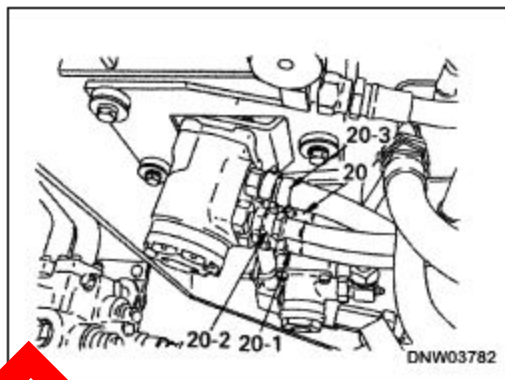


7. Disconnect the accelerator cable (28) under the pedal.  
 ★ Remove the cable clamp at the floor board.

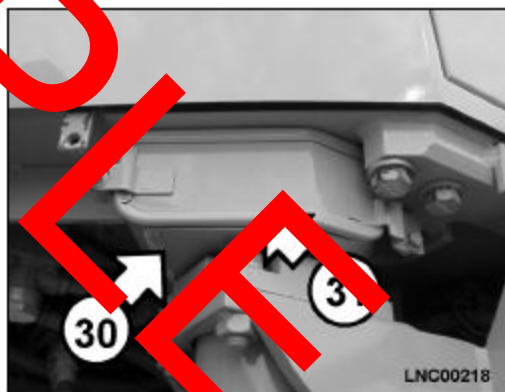
※3



8. Disconnect the following steering valve piping:
- Hose (20-1) from between the steering valve (L port) and the stop valve (right-hand)
  - Hose (20-1) from between the steering valve (R port) and the stop valve (right-hand)
  - Hose (20-2) from between the steering valve (L port) and the accumulator charge valve
  - Hose (20-3) from between the steering valve (T port) and the drain line



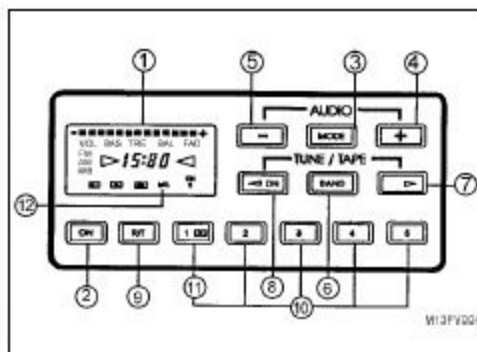
9. Cab and floorboard
- Remove the mounting cover (31) of the floor board (30), then remove the 4 viscous damper mounting nuts (32) that secure the floor board in place.



10. RADIO STATION PRE-SET MEMORIES

To set any of the five pre-set memories in each band:

- A. Turn on the system and select the band.
- B. Select the first station to be pre-set with the UP and DN tuning controls (7) and (8).
- C. Press the desired pre-set button (1 through 5) and hold until a "beep" is heard.
- D. Release the button. The display will show "CH1", "CH2" etc., depending on which button was set. Now simply press the desired pre-set button to recall the station in memory.



- E. Repeat the procedure for each button and four bands. You can change any pre-set without affecting the others. It's unlikely that more than one Weather Band station will be available in a given area, so most of the Weather Band pre-sets will go unused.

11. DOLBY® NOISE REDUCTION (NR)

Dolby noise reduction helps reduce background noise common on cassette recordings. If cassette has been recorded with Dolby noise reduction (indicated by the symbol), press this button to engage the system.

Press the button again to turn the system off. To most listeners, tapes recorded without Dolby noise reduction sound better when played back without Dolby noise reduction.

Dolby and are trademarks of Dolby Laboratories Licensing Corporation.

12. AUTO-METAL TAPE SENSOR

Cassettes with metal or CrO2 tape require special equalization circuitry to play back the best sound. The system automatically recognizes and adjusts for the special tape and displays "METAL" on the LCD display.

SETTING THE CLOCK

- 1. Turn on the radio power. Remove cassette from the player.
- 2. Press and hold R/T button (9) until the time display begins to flash. Release the R/T button.
- 3. Within 10 seconds of releasing the R/T button, press the down tuning (DN) (8) to advance hours. Press the UP button (7) to advance minutes.
- 4. About 10 seconds after the time is set, the display will stop flashing and time keeping will begin.

REMOTE CONTROL UNIT

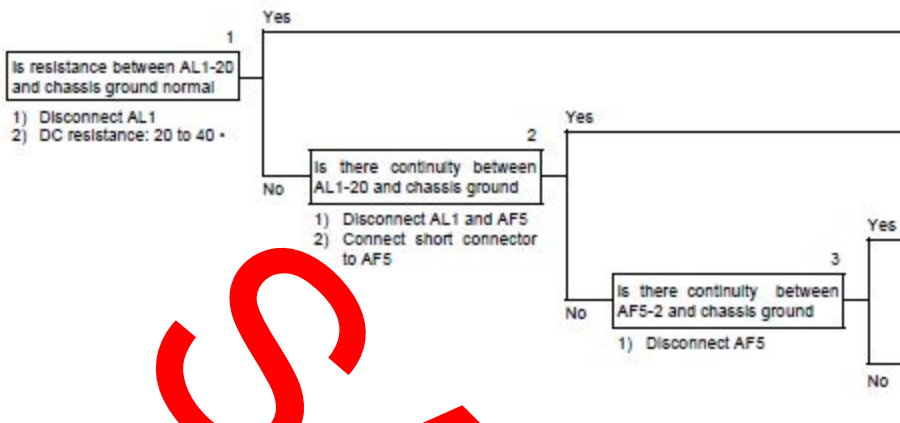
- 1. Turn off radio power.
- 2. Grasp the sides of the remote at the top serrated edges and pull upward.

Remark

The remote when removed from the cradle is inoperable and power has been turned off. Do not expose the remote or cradle to extreme heat, direct sunlight, solvents or water. Use slightly damp, soft cloth to clean the remote; never immerse in water. Keep the male telephone-type plug in the cradle clean. Use of a damp cotton swab is acceptable.

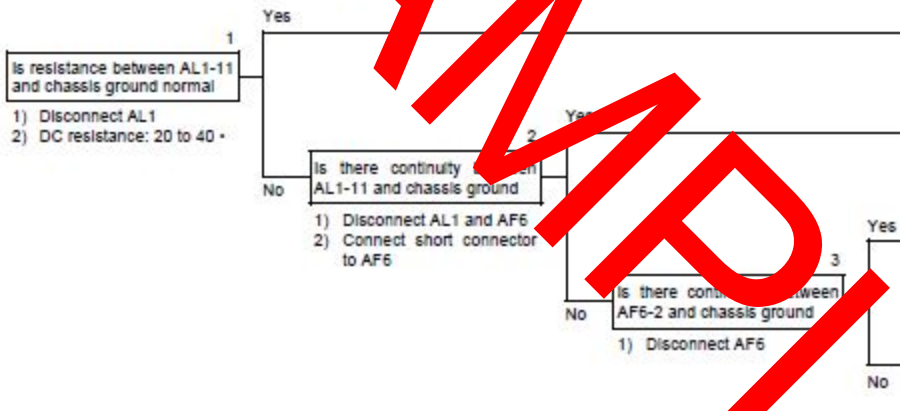


(b) Error code [d1] is displayed



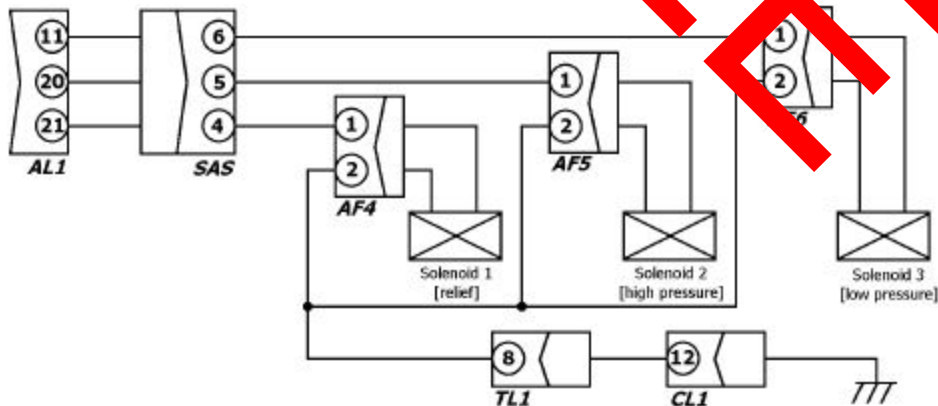
Cause	Remedy
Defective controller	Replace
Defective solenoid	Replace
Disconnection in harness between AL1-20 to SAS-5 to AF5-1	Repair or replace
Disconnection in harness between AF5-2 to TL1-8 to CL1-12 to chassis ground	Repair or replace

(c) Error code [d2] is displayed



Cause	Remedy
Defective controller	Replace
Defective solenoid	Replace
Disconnection in harness between AL1-11 to SAS-6 to AF6-1	Repair or replace
Disconnection in harness between AF6-2 to TL1-8 to CL1-12 to chassis ground	Repair or replace

D1 (a), (b) or (c) Related electric circuit diagram



TOW90349

