SEBM01750209

SHOP MANUAL

KOMATSU®

D155A-2

MACHINE MODEL **D155A-2**

SERIAL No. **50001 and up**

- This shop manual may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require. Materials and specifications are subject to change without notice.

- D155A-2 mount the S6D155-4 engine.
  For details of the engine, see the 155-4 Series Engine Shop Manual.

MidWestTech | Komatsu D155A-2 Crawler Dozer Service Manual | Publication SEBM01750209 Order the manual at mid-west-tech.com >

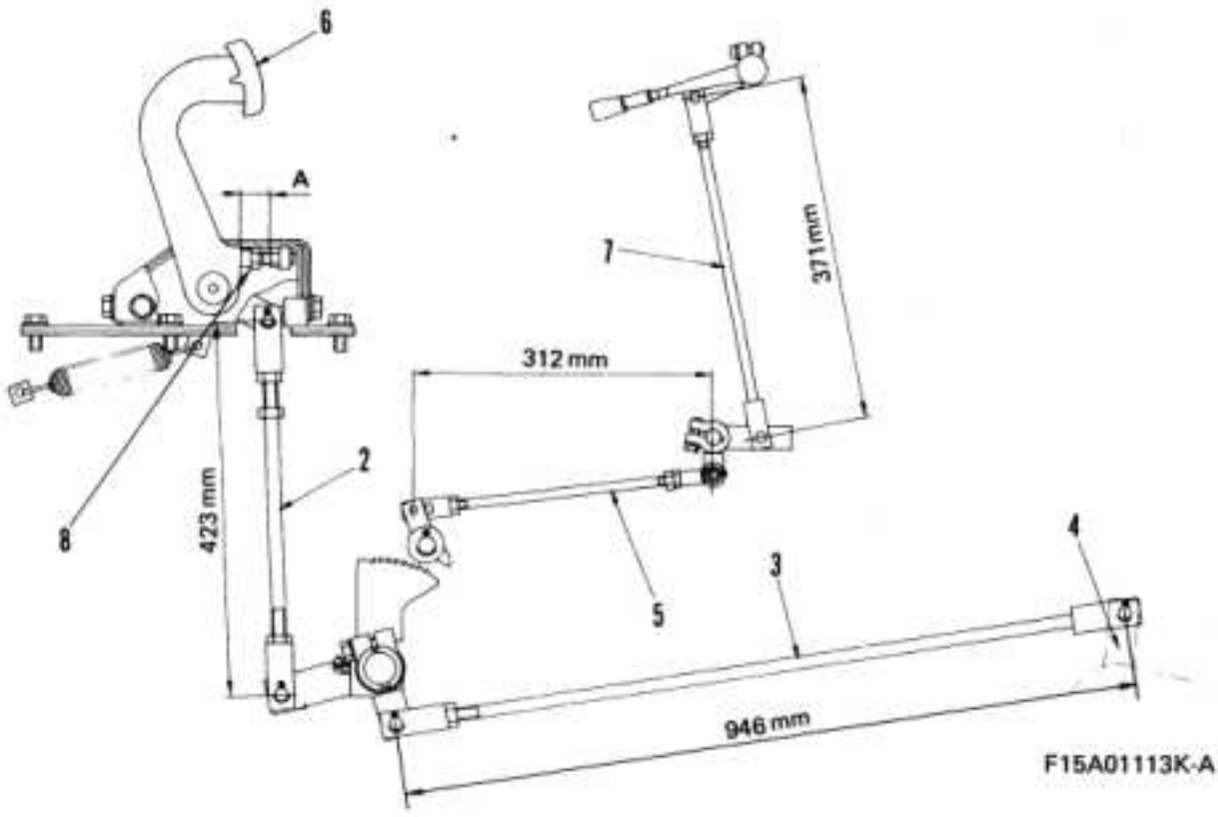
10 STRUCTURE AND FUNCTION

General 10- 2
Power train hydraulic system 10- 4
Power train hydraulic circuit diagram 10- 5
Torque converter 10- 6
TORQFLOW transmission 10-10
Transmission control 10-16
TORQFLOW hydraulic piping 10-17
TORQFLOW hydraulic system 10-18
TORQFLOW hydraulic circuit diagram 10-19
Transmission control valve 10-20
Transmission lubrication relief valve 10-25
Transmission pump 10-26
Transmission and steering oil strainer 10-27
Transmission oil filter 10-28
Steering oil filter 10-29
Bevel gear shaft and steering clutch 10-30
Steering control 10-32
Steering control (For assist brake) 10-33
Steering and brake piping 10-33-1
Steering and brake hydraulic system 10-34
Steering and brake hydraulic circuit diagram 10-35
Steering pump 10-36
Steering main relief valve 10-37
Steering brake 10-42
Spring assist brake system 10-45-1
Final drive 10-46
PTO (Power take off) 10-47
Track group 10-48
Idler cushion 10-49
Idler 10-50
Track roller and carrier roller 10-51
Track (Lubricated track link) 10-52
Track (Dry type track link) 10- 53
Suspension 10- 54
Hydraulic piping 10- 56
Hydraulic control 10- 60
Hydraulic system 10- 62
Hydraulic circuit diagram 10- 63
Hydraulic tank 10- 64
Hydraulic pump 10- 65
Blade lift and ripper control valve 10- 66
Blade tilt control valve 10- 71
Ripper selector valve and pilot check valve 10- 72
Hydraulic lever operation 10- 76
Hydraulic cylinder 10- 80
Cylinder stay 10- 84
Work equipment control hydraulic system 10- 86
Work equipment control hydraulic circuit diagram 10- 87
Pilot solenoid valve 10- 88
Pin-puller solenoid valve (For giant ripper) 10- 89
Pin-puller cylinder (For giant ripper) 10- 91
Rotary servo valve 10- 92
Straight tilt dozer 10- 96
Variable multiple shank ripper 10- 98
Variable giant ripper 10-100
Electrical circuit diagram 10-102-1
EVMS (Electronic vehicle monitoring system 10-103
APS (Auto priming system) 10-109
Air conditioner 10-110

017502

MidWestTech | Komatsu D155A-2 Crawler Dozer Service Manual | Publication SEBM... Order the manual at mid-west-tech.com >

ADJUSTING BRAKE PEDAL LINKAGE



017502

★ Tighten the locknuts of the rod and cable securely, and bend the cotter pin securely.

1. Adjust with the bumper (8) so that dimension A at the brake pedal is 40 mm.
2. Set lever (1) vertical.
3. In this condition, connect rod (2).
4. Pull rod (3), and adjust the yoke of rod (3) so that lever (4) lightly contacts the spool inside the brake housing, then connect lever (1).

★ After connecting each rod, check that there is no play at the connecting pin.

★ Standard length of rods
- Rod (2): 423 mm
- Rod (3): 946 mm
- Rod (5): 312 mm
- Rod (7): 371 mm

5. Run the engine at idling, and check that the travel of brake pedal (6) is 160 ± 10 mm.

★ Check that there is no dragging of the brake when the engine is running at low idling.

★ Adjust the clearance of the brake lining.
For details, see TESTING AND ADJUSTING, Adjusting travel of brake pedal.

MidWestTech | Komatsu D155A-2 Crawler Dozer Service Manual | Publication SEBM... Order the manual at mid-west-tech.com >

METHOD OF USING TROUBLESHOOTING CHART

(See "Example 1")

1. Problem number and symptoms

The problem number and symptoms are written at the top left of the troubleshooting chart.
Categories of problem numbers

Problem No.	Location of failure
M-OO	Troubleshooting of machine monitor (use symptom to go immediately to trouble-shooting; Judgement Table not used)

2. Categories for same symptom

Even though the symptom is the same, if the machine model or component is different, the method of using the troubleshooting chart may be different. In such cases, the symptom is divided into sections (a), (b), etc.
Select the appropriate section and start troubleshooting from that point. If there are no sections, start troubleshooting from the beginning.

3. Following the troubleshooting chart

- Carry out the check or measurement inside the box. If the result is "YES", follow the YES arrow; if the result is "NO", follow the NO arrow.



(**Note:** The number at the top right corner of each box is only a list number; it does not necessarily indicate the order for troubleshooting.)

- If the YES or NO arrow leads directly to the Cause column, take the action given in the Remedy column; if the arrow leads to another box, carry out the check listed in the box.
- The method for testing and measuring, and the judgement values are given in the box. If the answer or the values is correct, follow the YES arrow; if the answer or the value is not correct, follow the NO answer.
- Any instructions given below the box are work to be carried out before making the check listed in the box.
  These instructions include preparatory work, operations to be carried out, and judgement values. If the preparatory work is not carried out, or the operations are carried out wrongly, mistakes will be made in judgement, or the machine may be damaged. Therefore, before making the check or measurement in the box, read these instructions carefully and carry them out in the order listed. Then go on to the check or measurement.

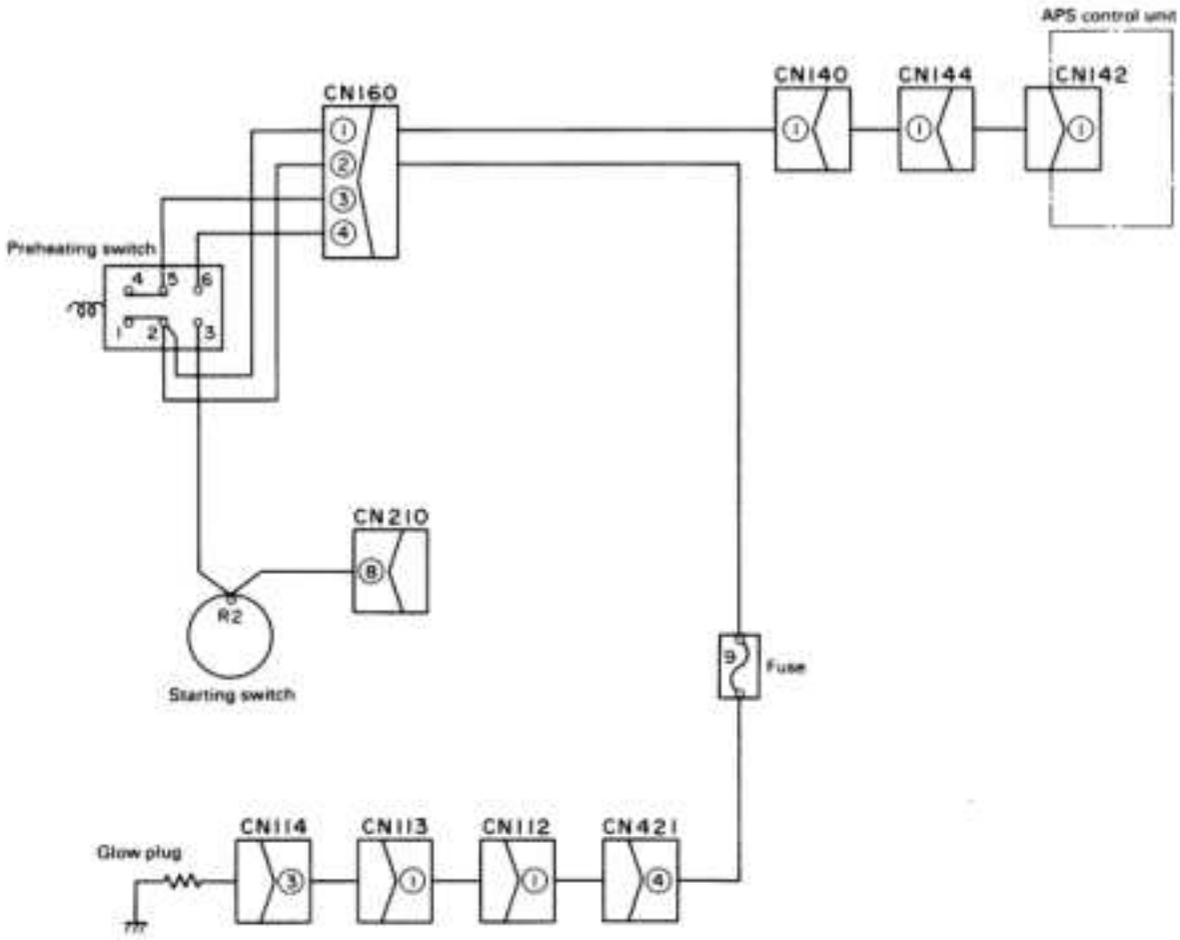
4. General precautions

In the troubleshooting chart some precautions apply to the whole troubleshooting procedure for that symptom. Such precautions are marked ★, and are listed below the symptom.
The precautions marked ★ are not usually repeated in the instructions under each box, but they apply in each case and must not be forgotten.

017502

MidWestTech | Komatsu D155A-2 Crawler Dozer Service Manual | Publication SEBM... Order the manual at mid-west-tech.com >

E-2 Related electrical circuit diagram

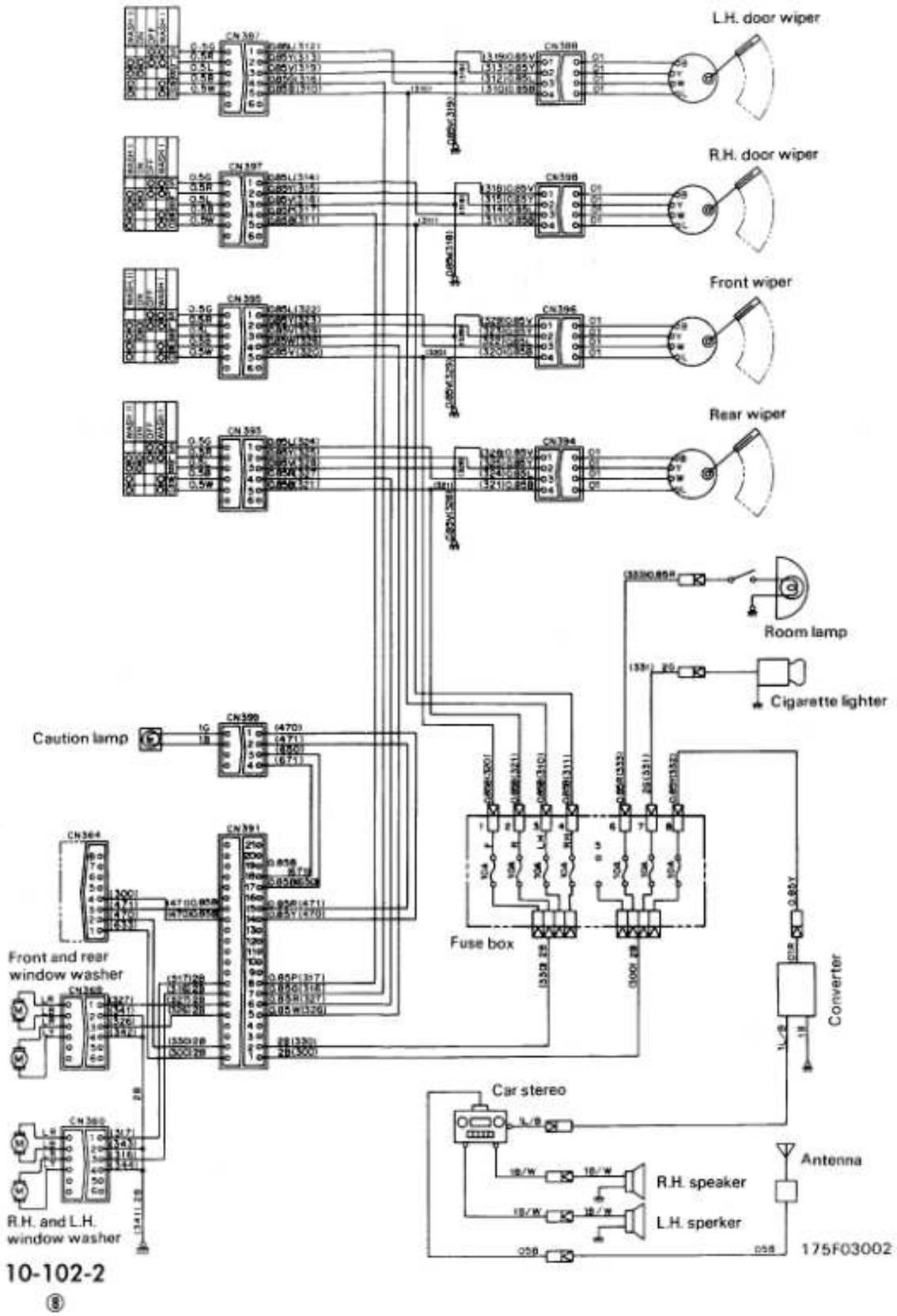


017502

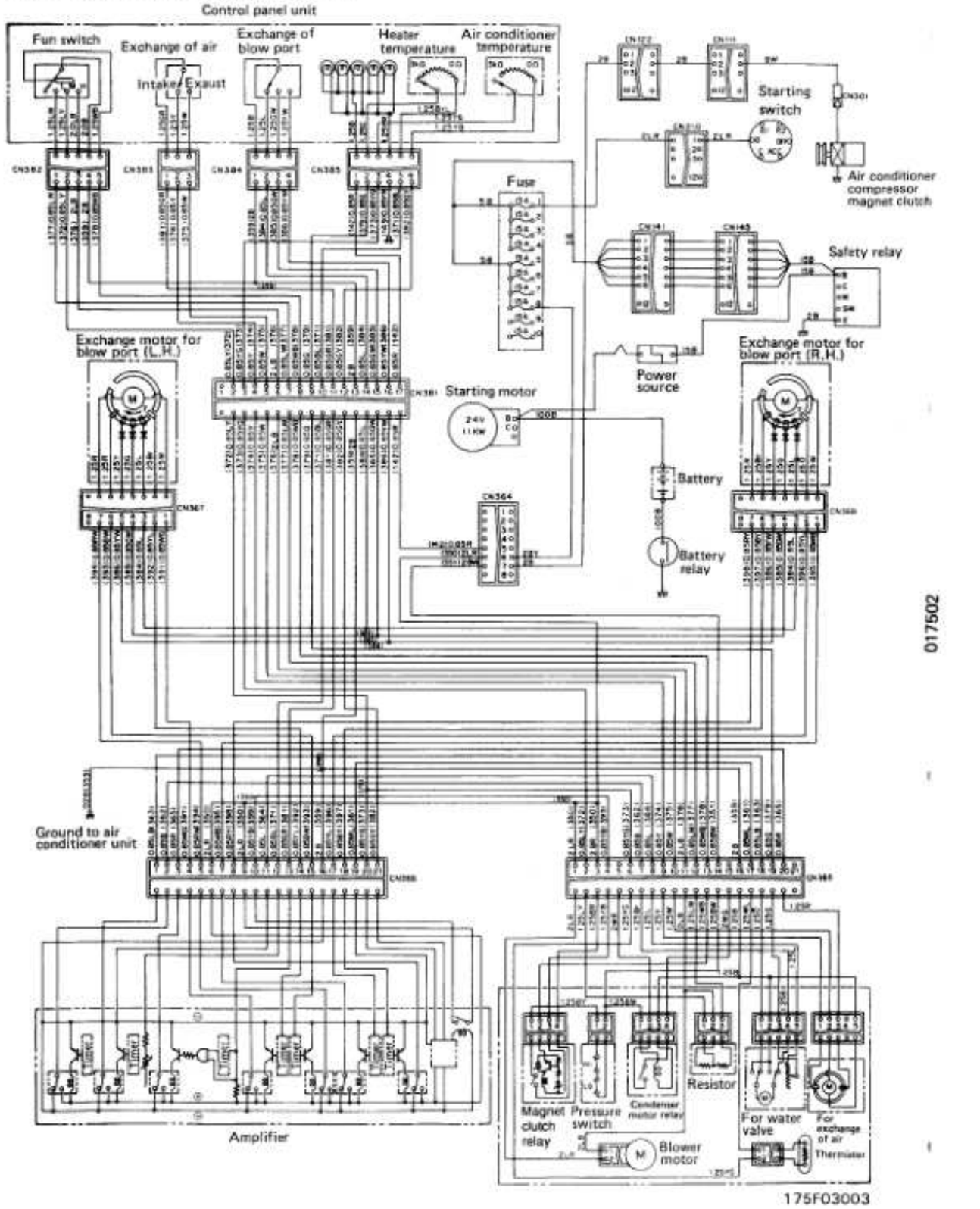
F17502203

MidWestTech | Komatsu D155A-2 Crawler Dozer Service Manual | Publication SEBM... Order the manual at mid-west-tech.com >

CAB ELECTRICAL CIRCUIT



AIR CONDITIONER ELECTRICAL CIRCUIT



017502

MidWestTech | Komatsu D155A-2 Crawler Dozer Service Manual | Publication SEBM01750209
Order the manual at mid-west-tech.com >