



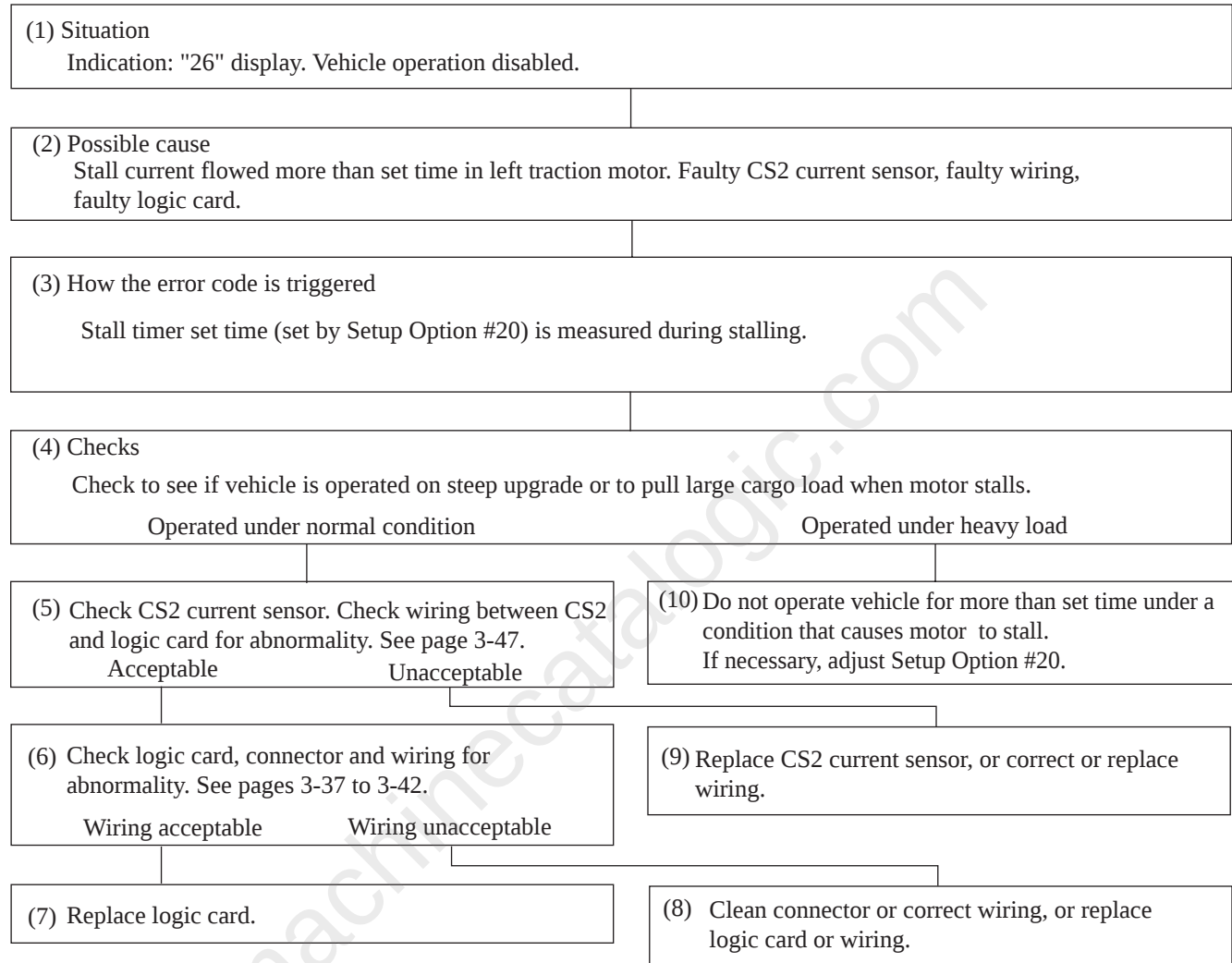
Service Manual

Chassis, Mast, & Options

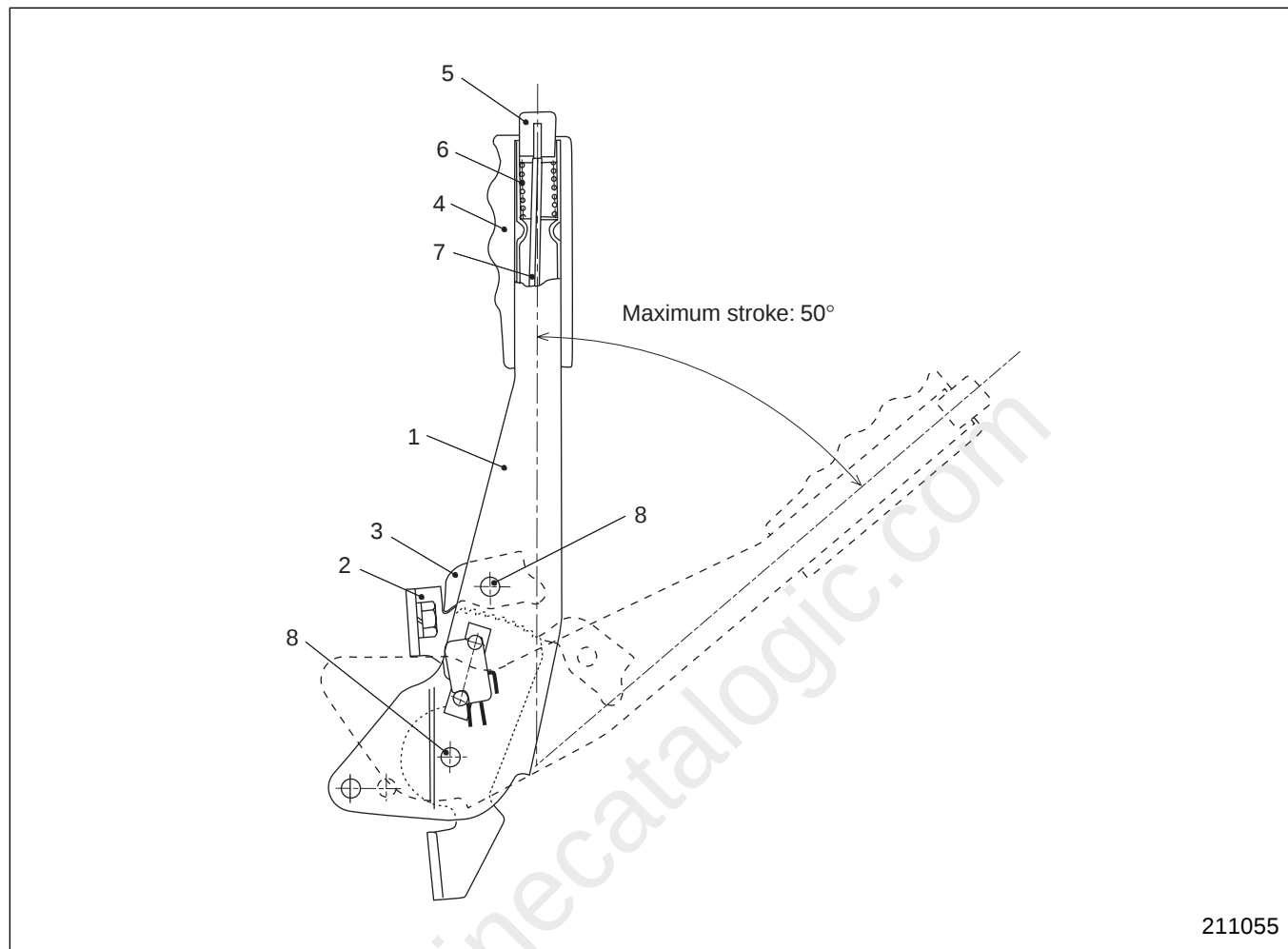
EP16KT	ETB4A-00011-up (48V)
EP16KT	ETB4B-00011-up (36V)
EP18KT	ETB5A-00011-up (48V)
EP18KT	ETB5B-00011-up (36V)
EP20KT	ETB5A-50001-up (48V)
EP20KT	ETB5B-50001-up (36V)

Problem: Left Motor, Stall Timer (26)

Indication: "26" display. Vehicle operation (traction and pump motors) disabled.



Parking Brake Lever



211055

- 1 Lever body
- 2 Gear
- 3 Notch
- 4 Grip

- 5 Stopper
- 6 Spring
- 7 Hook
- 8 Pin

The parking brake lever is mounted on the left side of the dashboard.

When the grip is pulled, the parking brake cable moves the pad assembly of the caliper to clamp the brake disc and apply stopping force.

Notch 3 engages with gear 2 to retain the lever in position. To release the parking brake, pull the grip and press stopper 5. This disengages the gear from the notch, and the lever returns to the original position.

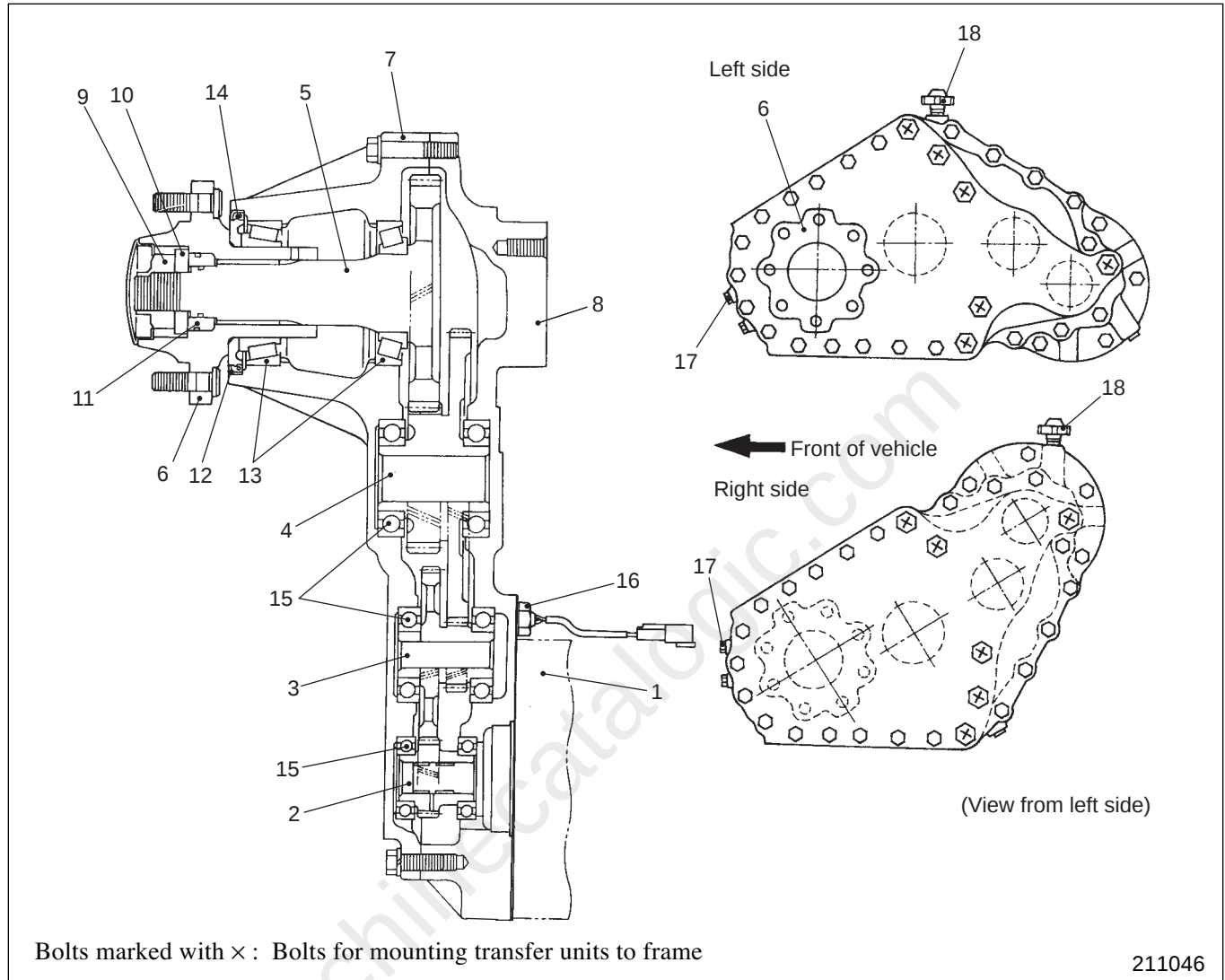
The maximum lever stroke is 50 degrees. There are a total of 14 gear teeth. Adjust the parking brake so that the brake activates and applies force when the third or fourth tooth of gear 2 engages with the notch.

Grip operating effort	294 N (30 kgf) [66 lbf]
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SERVICE DATA

Inspection/Maintenance Location and Item		Pre-operation Inspection	Periodic Inspection Interval				Remarks Service Standard
			Every Month or 200 Hours	Every 3 Months or 600 Hours	Every 6 Months or 1200 Hours	Every 12 Months or 2400 Hours	
Safety devices and others							
Head guard and backrest	Mounting looseness	☐	☐	☐	☐	☐	
	Deformation, cracking and damage	☐	☐	☐	☐	☐	
Safety devices	Turn signal operation and mounting condition	☐	☐	☐	☐	☐	
	Alarm device operation and mounting condition	☐	☐	☐	☐	☐	
	Lamp operation and mounting condition	☐	☐	☐	☐	☐	
	Backup warning device operation and mounting condition	☐	☐	☐	☐	☐	
	Rear-view mirror dirtiness and damage	☐	☐	☐	☐	☐	
	Rear-view mirror image and condition	☐	☐	☐	☐	☐	
	Proper function of seat belt and hip restraint	☐	☐	☐	☐	☐	
Instruments	Instrument operations	☐	☐	☐	☐	☐	
Seat	Looseness and damage	☐	☐	☐	☐	☐	
Vehicle body	Damage and cracking in frame and cross-members					☐	
Oil and grease replacement	Inspection of chassis lubricating conditions after cleaning		☐	☐	☐	☐	
	Confirmation of oil replacement intervals		☐	☐	☐	☐	

Structure and Functions (Part 2)



- | | | |
|----------------|-------------------------|-------------------|
| 1 Drive motor | 8 Main case | 15 Ball bearing |
| 2 Input gear | 9 Nut | 16 Generator |
| 3 Second gear | 10 Plate | 17 Oil level plug |
| 4 Third gear | 11 Spacer | 18 Air breather |
| 5 Output shaft | 12 Retainer | |
| 6 Wheel hub | 13 Taper roller bearing | |
| 7 Cover | 14 Oil seal | |

The left and right transfer units are identical, and are mounted on the frame with bolts marked with an × in the diagram.

The left and right transfer units are installed to the drive motors. The motor shafts are jointed to the involute splines of the input gears.

Driving force is transmitted via the input gear, second gear, third gear, then to the output shaft that rotates the wheel hub.

The generator detects rotating speed.

Helical gears are used for reduced operating noise.

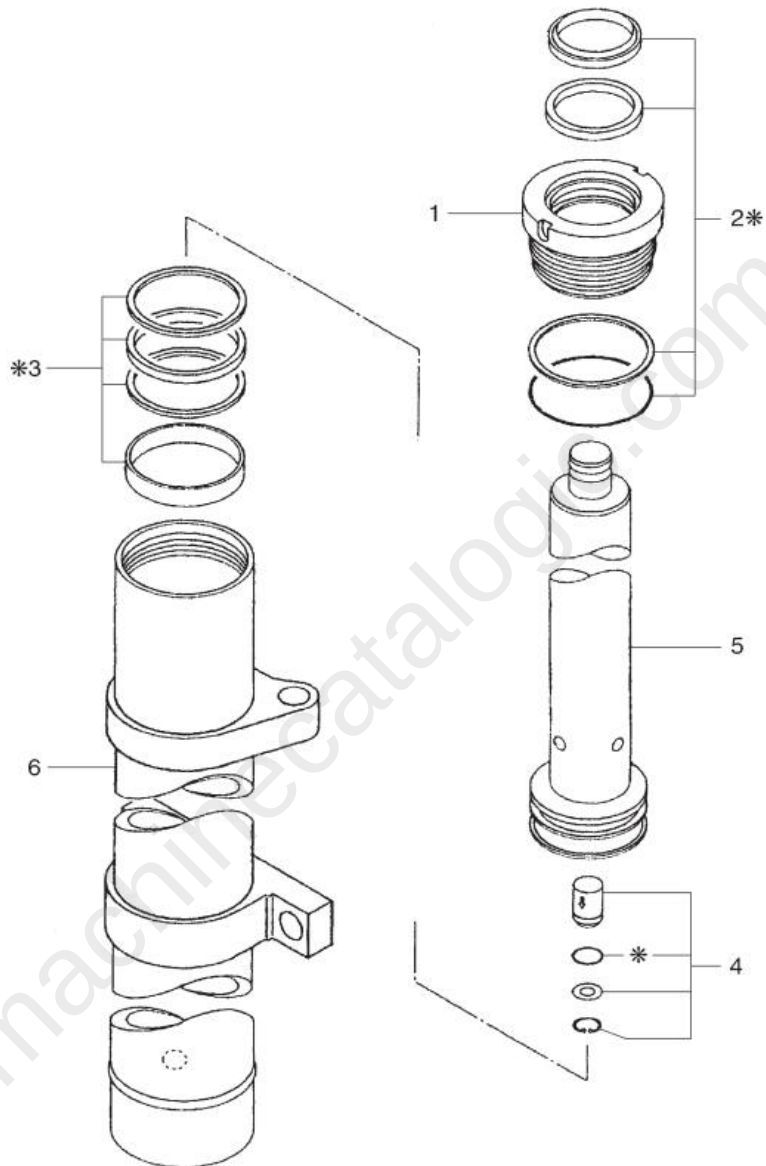
The output shaft is provided with two taper roller bearings to withstand heavy loads.

Transfer reducing gear ratio	17.478
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Duplex Mast, Triplex Mast First Cylinder

Disassembly

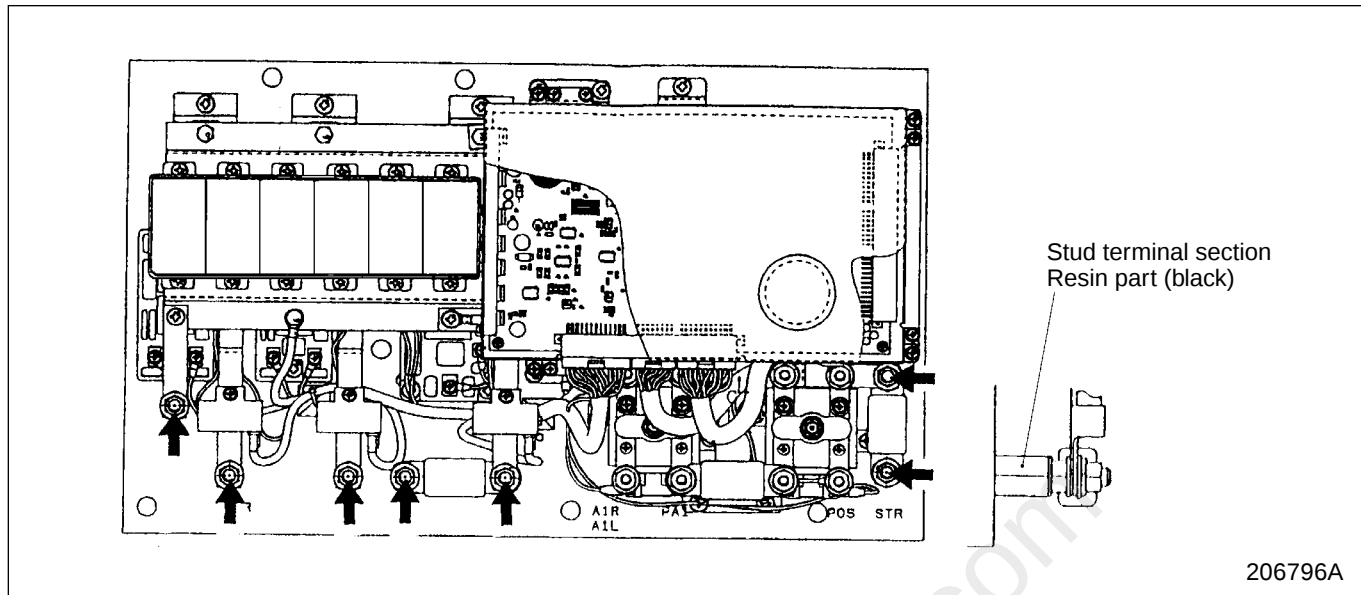
*: Parts contained in seal kit



207642

Sequence

- | | |
|--|--|
| 1 Retainer | 4 Circlip, Washer, O-ring, Check valve |
| 2 O-ring, Backup ring, Rod seal, Wiper
Remove parts 3 through 5 as sub-assembly from
part 6. | 5 Piston rod, Piston |
| 3 Wear ring, Nylon ring, Piston seal | 6 Cylinder tube |



Component Testing

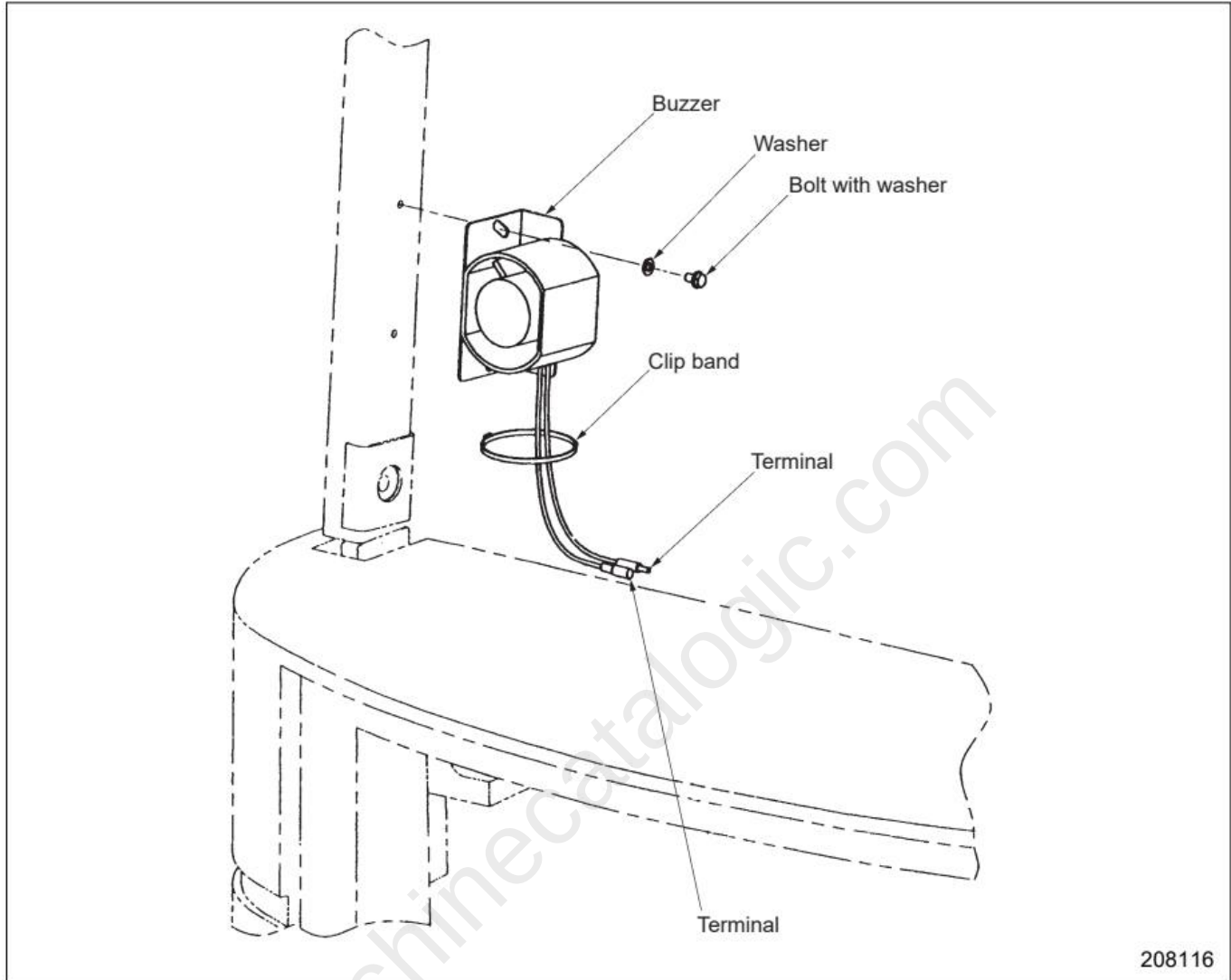
⚠ CAUTION

- (a) Use compressed air to clean the controller. Using steam or a solvent for cleaning can damage parts.
- (b) For cleaning, use an air compressor equipped with a moisture-removing filter. Do not set the air pressure above 196 kPa (2 kgf/cm²) [28 psi].
- (c) When connecting the battery plug for the first time after maintenance work, check to make sure that resistance between the positive (+) and negative (-) battery terminals on the vehicle side is 10 kΩ or higher.

NOTE

When installing wires and cables, be sure to tie them together at the busbar.

Backup Buzzer Kit



208116

Full Version Available

Caterpillar EP16KT Forklift Service and Schematic Manual (99719-67120)

Caterpillar EP16KT Forklift service manual, covers hydraulics, drive unit, wiring, and diagnostics in PDF. Instant PDF download.

[VIEW THE FULL MANUAL](#)