Service Manual



ST3000 Series

Printed in Germany ● Revision Level A

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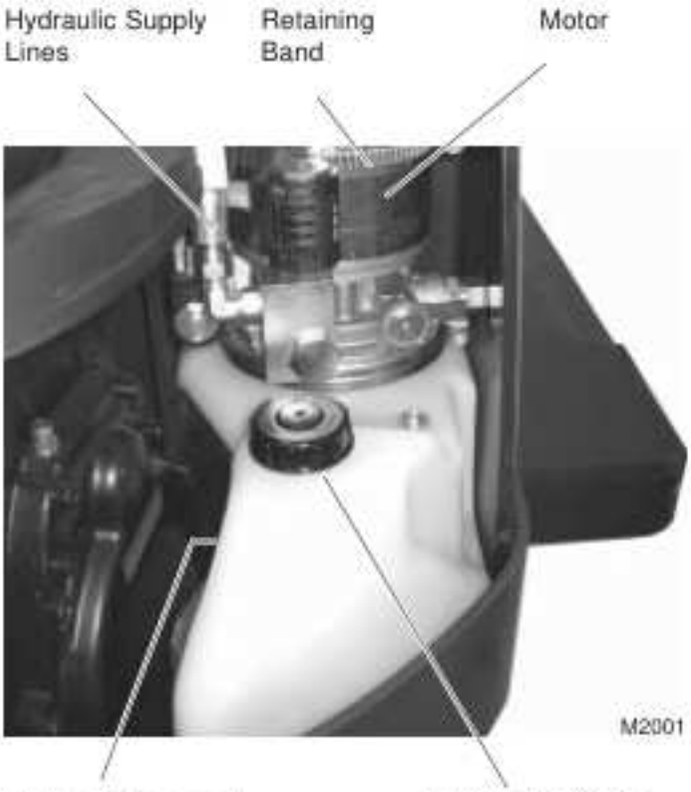
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Hydraulic Reservoir Capacity

The hydraulic reservoir capacity is 5.7 liters when the oil in reservoir is at the full mark. The top of the hydraulic reservoir protection plate (see Illustration 3) serves as the reservoir oil level full mark. When checking the oil level in the reservoir, make certain the cylinders are in the retracted position and all air has been bled from the hydraulic system.



Before operating the truck, make certain the reservoir is filled to the full mark with an approved lubricant recommended for the particular truck application. For oil grades see the lubricant table in Chapter 1.

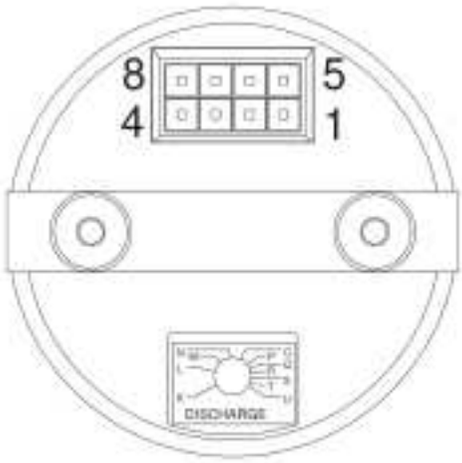
The hydraulic oil is filled to the top level of the hydraulic reservoir protection plate. The oil level should not deviate by more than +/- 5mm from this level.

Changing the hydraulic oil and hydraulic filter

- Lower forks completely and lower the mast to collapsed height.
- Place key switch in the OFF position, remove key and disconnect the battery.
- Attach warning tag to control handle to advise others that the truck is being serviced.
- Chock drive tyre and load wheels.
- Remove front cover from power unit to obtain access to hydraulic reservoir.
- Remove knuckle cover and split center cover from control handle. Then turn control handle 90° (towards hydraulic reservoir) to provide better access to hydraulic system components.
- Loosen retaining band used to secure motor to truck frame and slide the band upward to release it from the frame.
- Disconnect hydraulic supply lines to motor/pump assembly. Cap hydraulic ports to minimize oil loss and prevent hydraulic system contamination.
- Disconnect all power cables from the hydraulic unit. Insulate the cable ends to prevent arcing. Match mark cables and motor terminals to avoid confusion when cables are reconnected later.
- The reservoir and motor/pump assembly are now free to move. Carefully lift and pull reservoir forward as far as possible. Then remove reservoir and motor/pump assembly from power unit frame.
- Remove screw from clamp used to secure the pump motor to the reservoir. Then remove clamp from lip of reservoir and let it rest on top of reservoir.
- Remove motor/pump assembly from reservoir.
- Dispose of oil and remove any residue that may have accumulated in the reservoir. Make certain to dispose of oil in accordance with your local government regulations.
- Remove retaining ring used to secure screen in suction line filter housing on bottom of pump. Replace the filter. Attach the screen back onto the suction line filter housing. Secure the screen with the retaining ring.

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TROUBLESHOOTING



CONNECTOR TERMINAL - 802833	
PIN NO.	**RELAY OPTION K**
1	No Connection
2	+ Keyswitch
3	Relay ARM (+) Lockout
4	Relay N.C. (-) Lockout
5	Common (B-)
6	Truck Hours
7	B + Low (24V)
8	B + High (48V)

M1479

SYMPTOME:	PRÜFEN:
Die Messgeräte lassen sich nicht zurückstellen.	Den Ladezustand der Batterie sowohl in Bezug auf Spannung als auch auf die spezifische Dichte überprüfen. Die Einstellungen entsprechen 2,09 Volt pro Zelle. Batterien, die bei einer Batteriesäuretemperatur von 25° / 77° F und unter maximalem Ladestrom bis 1250 SG geladen wurden, weisen diese Spannung auf. Wenn bei einer Batterie kein Reset möglich ist, muss die Batterie und/oder das Ladegerät überprüft werden.
Der Stapler muss zu schnell wieder geladen werden	Die spezifische Dichte der Batterie überprüfen, wenn die rote LED des Messgerätes blinkt. Nicht die Einstellung ENTLADUNG in Richtung K drehen, wenn die spezifische Dichte der Batterie einer Entladung von mehr als 80% entspricht (1150 SG bei den meisten Batterien bei einer Batteriesäure-Temperatur von 25°C / 77°F bei maximalem Ladestrom). Eine Verlängerung der Betriebszeit lässt sich erzielen, indem man die Einstellung ENTLADUNG von N in Richtung K dreht, sofern die Batterie nicht eine Entladung von mehr als 80 % anzeigt.

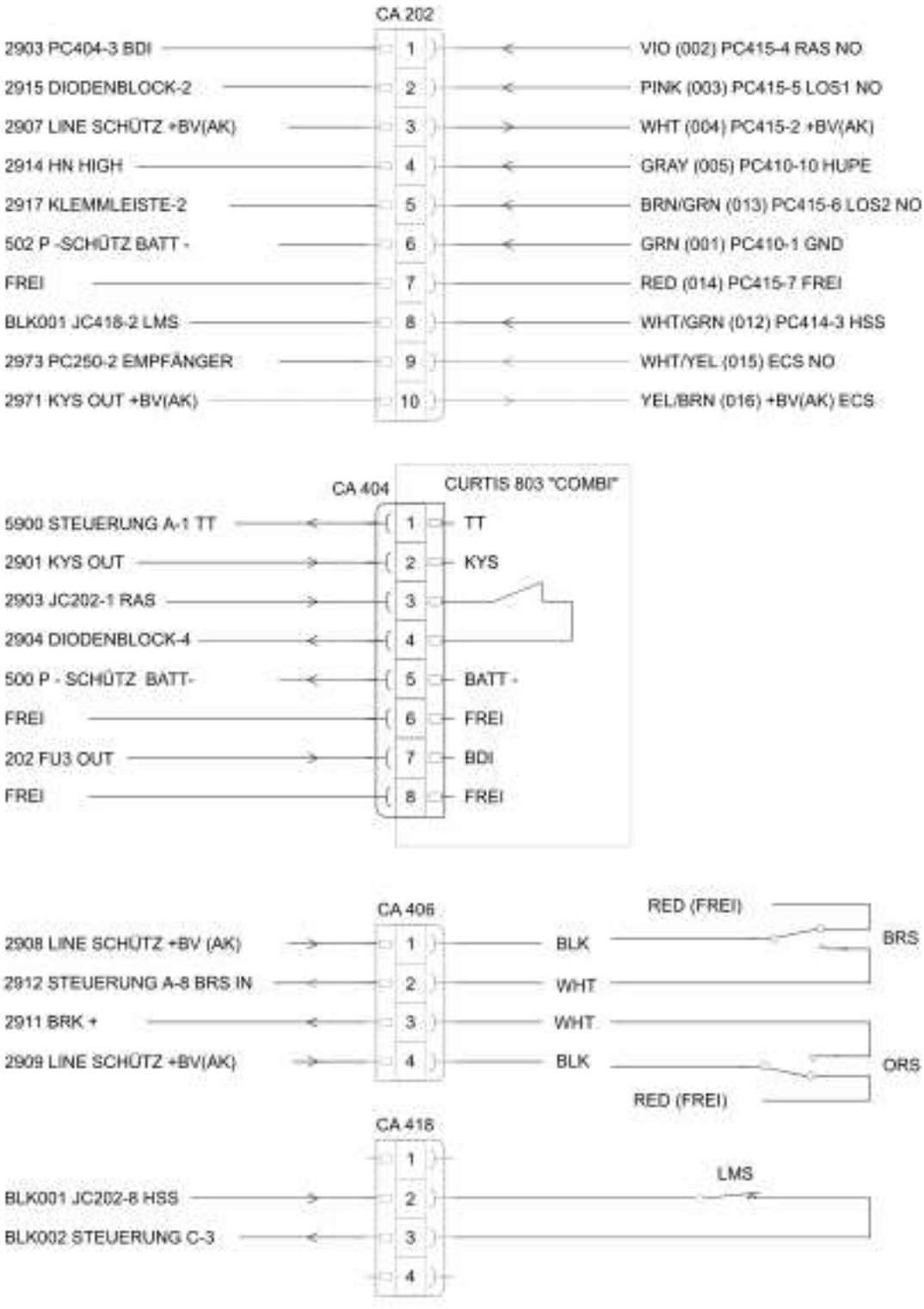
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WARNING!

Tow tractors must use the 802833 Battery Indicator. Installing the 130997 Indicator in tow tractors could result in damage to gage.

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Power Unit - Control Circuit



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