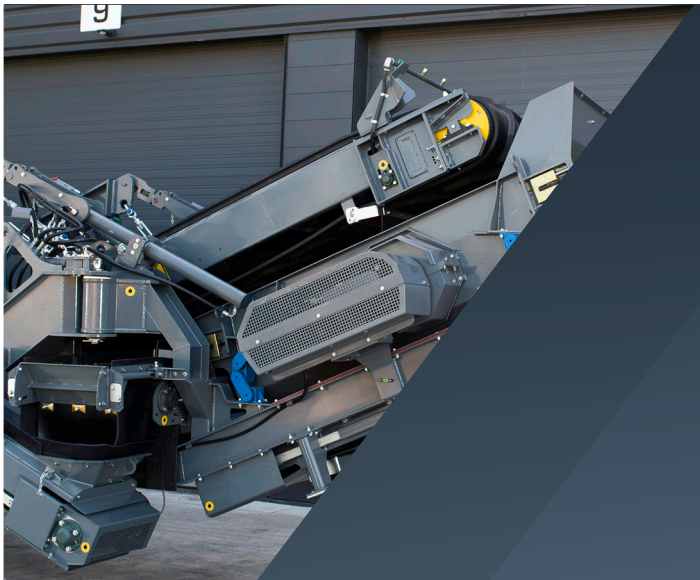


Welcome! to our world

RM® COMPACT CRUSHING

MAXIMUM POWER

Short description

HELP
RM 90GO!
04.155-

EN

RM 90GO!

1 Contents - Error codes

1.1 How to rectify an error

Fig. 1: Error code display

Read error code

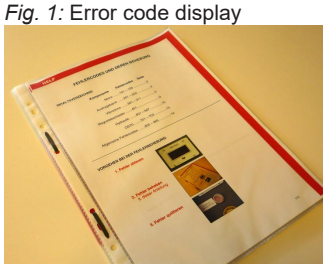


Fig. 2: Short description HELP

Rectify malfunction according to instructions

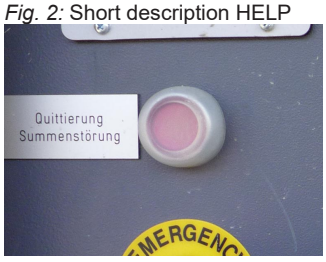


Fig. 3: Reset error signal

Reset error code

	The error code cannot be reset until the error has been rectified

1.2 Procedure for starting up the machine again

⚠ WARNING

Danger of squashing/crushing because rotor is free to rotate with crusher housing open

The rotor could rotate without warning and squash or trap parts of the body.

1. Immediately secure the rotor using the lock bar once the crusher housing is open.

If the machine is stopped as the result of an error code, please use the following procedure to start the machine again in order to avoid a material blockage in the crusher housing:

1. Disengage crusher.
2. Open the lock pins on the crushing box by hand.
3. Start engine without the crusher engaged.
4. Start main discharge belt to remove crushed material.
5. Switch off the main discharge belt again.
6. Switch off the diesel engine.

⚠ WARNING

Danger of snagging and drawing in to crusher drive belt pulleys while checking rotor freewheel

Danger of snagging and drawing limbs into machinery.

1. Take extra care when checking rotor freewheel.
2. Personal safety equipment is to be used at all times.

⚠ WARNING

Danger of squashing if hydraulics are not activated using both hands

Danger of squashing and trapping hands in crusher box and in hydraulic cylinders.

1. NEVER attempt to bypass or bridge the two-hand safety system.

7. Check that the rotor rotates freely.

▷ If rotor does not rotate freely:

- Open crusher housing (start engine without crusher engaged, operate hydraulic lever and switch off engine).
- Remove any material from the crusher if required.
- Now check that the rotor moves freely.

▷ If rotor rotates freely:

- Close crusher unit.
- Start engine with the crusher engaged.

⚠ DANGER

Risk of falling material while freeing crushing box of residual material

Check for loose material falling from the crusher inlet.

1. Use suitable tools (shovel, etc.) to free crushing box of rest material.
2. Prevent the rotor from rotating (use lock bar).
3. NEVER enter the crushing box.

The discharge belts can be operated without the crusher engaged and with the crusher housing open so that the material can be removed from the machine.

2 Diesel engine

⚠ WARNING

Danger of burns to the skin by hot utilities

When checking and topping up oil and coolant levels there is a risk of liquid and vapour escaping under pressure if the cap is opened too quickly. This can lead to burns to the skin. Topping up is to be carried out using a suitable filling vessel to the connection provided.

1. Check and top up utilities ONLY after the machine has been switched off.
2. Wait until the oil and/or coolant has cooled down.
3. Open cap gradually to allow pressure to escape.
4. Wear suitable personal safety equipment.

⚠ CAUTION

Danger of hot surfaces on right-hand motor compartment doors

Risk of burns to skin.

1. NEVER touch the right-hand motor compartment doors during and directly after operating the machine.
2. Wear personal protection equipment.

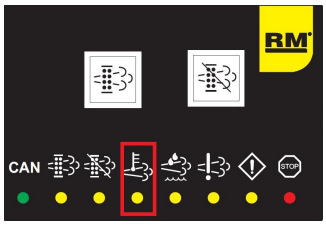


Fig. 4:

Preventive measures on machines with Tier 4f diesel engines

If the indicated lamp goes on:

Risk of burning in the area around the exhaust. Please maintain a safety distance of at least 2 m around the back end of the machine as soon as this lamp goes on. Make sure that no flammable or ignitable materials are located in the danger area.

2.1 Diesel engine - Coolant temperature is too high

Machine switches off in stages (electrical motors, diesel engine).

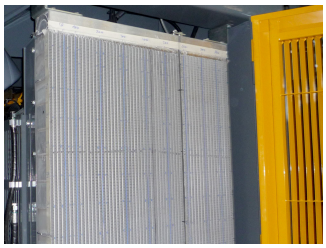


Fig. 5: Engine radiator fins

Coolant temperature is too high.

1. Check coolant level and top-up if required.
2. Clean the cooler.
3. Wait until temperature of coolant has cooled down again.

2.2 Diesel engine - Air filter clogged

All drives continue running.

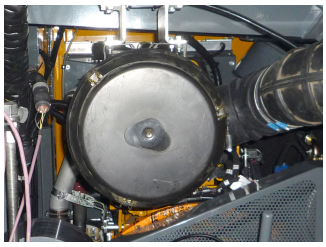


Fig. 6: Engine air filter

Fine air filter clogged.

1. Replace the filter cartridge.

Coarse air filter clogged.

1. Replace the filter cartridge.

2.3 Diesel engine - oil pressure is too low

⚠ WARNING

Danger of fire in connection with engine oil

There is a risk of fire if oil comes into contact with hot engine components. Before topping up oil:

1. The machine must be horizontal.
2. Engine must be allowed to cool for at least 10 minutes.

Machine (diesel engine) switches off.

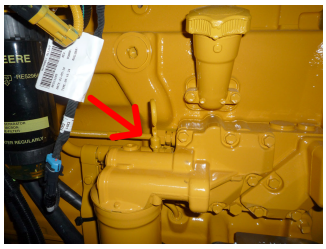


Fig. 7: Engine oil level

Diesel engine oil level is too low.

1. Check the oil level.
2. Top up the oil if required.
   (Refer to oil specification in the John Deere operating instructions.)

Incorrect oil in use (note specifications for temperature and viscosity).

1. Change the oil and filter.
   (Refer to oil specification in the John Deere operating instructions.)

Oil pump defect.

1. Contact RUBBLE MASTER service partner or Deutz customer service.

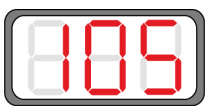
2.4 Diesel engine - Water in primary fuel filter trap.

Machine (diesel engine) switches off.

Water in primary fuel filter trap.

1. Remove drain bolt on filter to drain water.
2. If draining water does not work, then replace trap on primary fuel filter.

2.5 Diesel engine - coolant level is too low

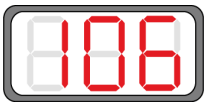


Machine (diesel engine) switches off.

Coolant level is too low.

1. Check coolant level.
2. Fill up coolant to inspection glass.

2.6 Diesel engine - rotor speed too low when starting



Machine (diesel engine) switches off.

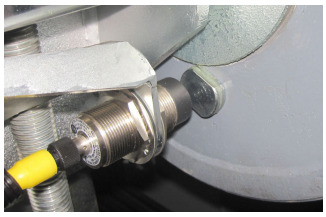
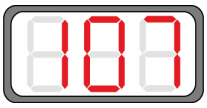


Fig. 8: Proximity switch rotor speed

Rotor is jammed.

1. Check that the rotor rotates freely.
2. Remove blockage from rotor if required.

2.7 Diesel engine - rpm too low when starting



Machine (diesel engine) switches off.

The engine switches off while crusher is engaged if the engine speed is below 1,200 rpm for longer than 10 seconds when starting.

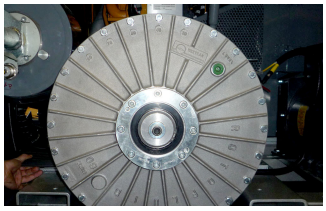
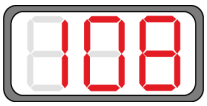


Fig. 9: Hydraulic clutch fuse

1. Check that the rotor rotates freely.
2. Check the oil level of the hydraulic clutch and top up if required (9 l, VG 22 HLP):
   Rotate clutch until fuse is at 45° (see picture), remove fuse and top up oil to level of fuse, then install fuse again. Make sure you use original fuses if lost or damaged.

2.8 Diesel engine - speed too low during operation 1



Electrical motors switch off.

Fig. 10: Engine speed sensor

All electrical drives switch off if the speed during operation remains below 1,500 rpm for longer than 1 second.

1. Reduce the feed conveyor speed.
2. Increase the crushing gap.

2.9 Diesel engine - speed too low during operation 2

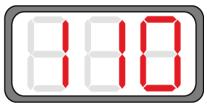
Machine (diesel engine) switches off.

Fig. 11: Engine speed sensor

Diesel engine switches off if the speed during operation remains below 1,200 rpm for longer than 10 seconds.

1. Reduce the feed conveyor speed.
2. Increase the crushing gap.

2.10 Diesel engine - EMERGENCY STOP triggered



Machine (diesel engine) switches off.

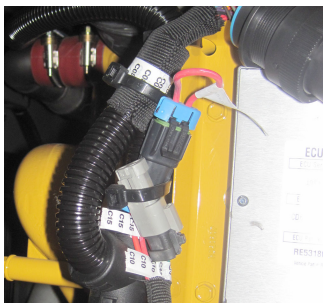


Fig. 12:

Connector C15 at engine has been removed.

1. Check connector C15 on engine wiring loom.

2.11 Diesel engine - crusher speed below limit

Diesel engine switches off.

Crusher speed fallen below 1450 rpm, engine and all electrical drives switch off.

1. Remove material from the crushing box.
2. Check the free-running of the rotor.
3. Start the machine again.

2.12 Diesel engine - speed too low during operation - frequency converter switches off

Fig. 13:

Speed has fallen below reset speed.

Frequency converter circuit breaker is reset. Speed is lower, possibly because material in crusher is too large / much.

1. Reduce the feed conveyor speed.
2. Increase the crushing gap.
3. Reset the error.

2.13 Diesel engine - error circuit breaker motor release

Machine (diesel engine) starts, no clearance for electrical motors.

Machine continues running.

1. Contact your RUBBLE MASTER service partner.

2.14 Diesel engine - fuel level low

Feed belt switches off

The fuel tank level has fallen below 10%. The feed belt switches off.

1. The error can be reset and processing continued as normal for approx. 30 minutes.
2. Refuel within 30 minutes; the error message will not be displayed a second time. The error is displayed again after restarting.
3. The error is no longer displayed after refuelling.

	If the tank runs out of fuel, damage may be caused to the engine.

2.15 Diesel engine - communication error with engine control unit

Machine (diesel engine) switches off.

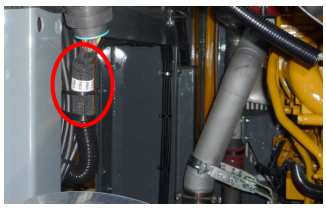


Fig. 14:

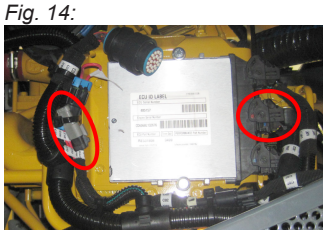


Fig. 15:

Communication with engine control unit interrupted.

1. Check connector C09, C10 and J02 on diesel engine.
2. Contact your RUBBLE MASTER service partner.

2.16 Diesel engine - fuel filter clogged

Supply pressure too low.

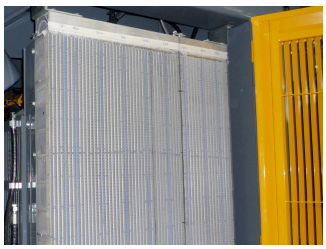


Fig. 16: Engine radiator fins

Replace fuel filter

1. Check fuel line filter and replace if required.

2.17 Diesel engine - water in fuel

Blow water out of the condensate trap.

1. Check the fuel line filter and the fuel main filter for water or residues.
2. If required, drain water into a suitable container and dispose of carefully (see John Deere operating instructions).

2.18 Diesel engine - engine oil pressure too low

Check engine oil level.

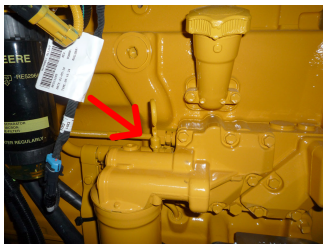


Fig. 17: Engine oil level

1. Check oil level of diesel engine and top up if necessary (see utility specifications in John Deere operating instructions)

2.19 Diesel engine - Turbocharger air temperature is too high

Check cooler for contamination.

Fig. 18: Engine radiator fins

1. Check cooler fins and clean using compressed air or high-pressure cleaner if required.

2.20 Diesel engine - diesel particulate filter slightly contaminated

Machine continues to run, status lamp: DPF status goes on.

Slight contamination of exhaust filter.

1. Machine can continue to be operated normally. Check that the DPF regeneration lock has been switched off.
2. Machine must run continuously for at least 4 hours. All day would be ideal. (engine regenerates)

2.21 Diesel engine - diesel particulate filter medium contaminated

Machine continues to run, engine power reduced to 50% and status lamp: DPF status goes on.

⚠ WARNING

Danger of fire and burns in the vicinity of diesel particulate filter regeneration

Danger due to exhaust gas at 650°C.

1. Keep at least 2 m away from the exhaust system because the exhaust gas is at a temperature of up to 650°C and can cause serious burns.
2. Make sure that no flammable or ignitable materials are located in the vicinity of the exhaust system.

Medium contamination of exhaust filter.

1. Switch machine off.
2. Disengage crusher.
3. Switch off main switch at control panel. If the DPF regeneration lock is active then this must be deactivated.
4. Start the machine again with these settings.
5. Start manual regeneration by pressing the button "Manual regeneration DPF" for 3 seconds.
6. The start of cleaning is signalled by the button illuminating briefly.
7. Regeneration starts and the engine speeds up.
8. Regeneration is finished as soon as the engine returns to idling speed. (takes approx. 20-40 minutes)

2.22 Diesel engine - diesel particulate filter heavily contaminated

Machine switches off.

Heavy contamination of exhaust filter.

1. Contact your RUBBLE MASTER service partner.

2.23 Diesel engine - diagnostic error codes for diesel engine unit

Rectifying the following error codes may be performed by authorised technicians only. Contact your RUBBLE MASTER service partner.

A more detailed description of how to rectify these errors is provided in the engine manufacturer's handbook.

Error code 150 - 199

Display Machine	Error code Engine manufacturer		Description
	SPN	FMI	
150	000028	03	Analogue throttle control voltage (B) high
151	000028	04	Analogue throttle control voltage (B) low
152	000029	03	Analogue throttle control voltage (A) high
153	000029	04	Analogue throttle control voltage (A) low
154	000029	14	Analogue throttle position sensor voltage (A) outside permissible range
155	000084	31	Vehicle speed - adjustment error
156	000089	09	Crawler gear speed invalid or missing
157	000091	03	Analogue multi-stage throttle control voltage high
158	000091	04	Analogue multi-stage throttle control voltage low
159	000091	07	Calibration of throttle lever required
160	000091	08	Abnormal pulse width of PBM throttle position signal
161	000091	09	Throttle position invalid
162	000091	13	Calibration of throttle control interrupted
163	000091	14	Throttle position voltage outside crusher
164	000094	01	Common rail pressure extremely low
165	000094	03	Fuel pressure - inlet voltage too high
166	000094	04	Input voltage of common rail pressure sensor low
167	000094	10	Common rail pressure loss detected
168	000094	13	Common rail pressure higher than expected
169	000094	16	Common rail pressure relatively high
170	000094	17	Common rail pressure not built up
171	000094	18	Common rail pressure relatively low
172	000095	15	Main fuel filter - differential pressure
173	000097	00	Constant water in fuel detected
174	000097	03	Signal voltage for water in fuel high
175	000097	04	Signal voltage for water in fuel low
176	000097	16	Water in fuel detected
177	000097	31	Water in fuel detected
178	000100	01	Engine oil pressure extremely low

Display Machine	Error code Engine manufacturer		Description
179	000100	03	Input voltage of engine oil pressure sensor high
180	000100	04	Input voltage of engine oil pressure sensor low
181	000100	16	Engine oil pressure relatively high
182	000100	18	Engine oil pressure relatively low
183	000100	31	Oil pressure detected at engine speed zero
184	000102	03	Input voltage of manifold air pressure sensor high
185	000102	04	Input voltage of manifold air pressure sensor low
186	000102	16	Manifold air pressure relatively high
187	000102	18	Manifold air pressure relatively low
188	000103	00	Extremely high turbocharger speed
189	000103	02	Turbocharger speed signal irregular
190	000103	08	Failure of signal "turbocharger speed in permissible range"
191	000103	16	Relatively high turbocharger speed
192	000103	31	Turbocharger speed signal not present
193	000105	00	Manifold air temperature extremely high (manifold air pressure = AGR mixed air temperature)
194	000105	03	Input voltage of manifold air temperature sensor high
195	000105	04	Input voltage of manifold air temperature sensor low
196	000105	16	Manifold air pressure relatively high
197	000107	00	Air filter - differential pressure
198	000108	03	Input voltage of air pressure sensor high
199	000108	04	Input voltage of air pressure sensor low

Error code 250 - 299

Display Machine	Error code Engine manufacturer		Description
	SPN	**FMI**	
250	000110	00	Engine coolant temperature high (highest severity)
251	000110	03	Input voltage of engine coolant temperature sensor high
252	000110	04	Input voltage of engine coolant temperature sensor low
253	000110	15	Engine coolant temperature high (lowest severity)
254	000110	16	Engine coolant temperature high (medium severity)
255	000111	01	Engine coolant level low
256	000157	00	Common rail pressure extremely low
257	000157	03	Input voltage of fuel common rail pressure sensor high
258	000157	04	Input voltage of common rail pressure sensor low
259	000157	10	Common rail pressure loss detected

Display Machine	Error code Engine manu-facturer		Description
260	000157	13	Common rail pressure higher than expected
261	000157	17	Common rail pressure not built up
262	000158	17	ECU switch off error
263	000174	00	Fuel temperature high (highest severity)
264	000174	03	Input voltage of fuel temperature sensor high
265	000174	04	Input voltage of fuel temperature sensor low
266	000174	16	Fuel temperature high (medium severity)
267	000189	00	Motor speed reduction
268	000190	00	Extremely high motor speed
269	000190	16	Medium motor speed
270	000237	02	Vehicle identification number invalid
271	000237	13	Vehicle identification option code invalid
272	000237	31	Vehicle model number invalid
273	000412	03	Input voltage of exhaust return temperature sensor high
274	000412	04	Input voltage of exhaust return temperature sensor low
275	000412	16	Exhaust return temperature relatively high
276	000412	18	Exhaust return temperature relatively low
277	000611	03	Wiring for electronic injection nozzles short-circuited at power source
278	000611	04	Wiring for electronic injection nozzles short-circuited at earth
279	000620	03	Sensor supply voltage No. 2 high
280	000620	04	Sensor supply voltage No. 2 low
281	000627	01	Problem with the supply voltage for the electronic injection nozzles
282	000628	12	ECU programming error
283	000629	12	ECU programming error
284	000629	13	ECU programming error
285	000636	02	Pump position sensor input noise
286	000636	05	Pump position sensor current low
287	000636	06	Pump position sensor current high
288	000636	08	Pump position sensor input signal not present
289	000636	10	Pump position sensor input sample error
290	000637	02	Crankshaft position sensor input noise
291	000637	05	Crankshaft position sensor current low
292	000637	06	Crankshaft position sensor current high
293	000637	07	Crankshafts pumps setting incorrectly matched
294	000637	08	Crankshaft position sensor input signal not present
295	000637	10	Crankshaft position sensor input sample error

Display Machine	Error code Engine manufacturer		Description
296	000639	13	CAN bus error
297	000641	04	Position of adjustable turbine geometry below permissible range
298	000641	05	Power circuit of actuator for adjustable turbine geometry interrupted
299	000641	12	Communication error - adjustable turbine geometry

Error code 350 - 399

Display Machine	Error code Engine manufacturer		Description
	SPN	**FMI**	
350	000641	13	Learn error for adjustable turbine geometry
351	000641	16	Temperature of actuator for adjustable turbine geometry relatively high
352	000647	05	Fan clutch current low
353	000647	07	Fan clutch set incorrectly
354	000651	02	Part number of injection jet on cylinder no. 1 not detected
355	000651	05	Power circuit for electronic injection jet on cylinder no. 1 interrupted
356	000651	06	Power circuit for electronic injection jet on cylinder no. 1 short circuit
357	000651	07	Injection failure of electronic injection jet on cylinder no. 1
358	000651	13	Calibration information for injection jet on cylinder no. 1 not detected
359	000652	02	Part number of injection jet on cylinder no. 2 not detected
360	000652	05	Power circuit for electronic injection jet on cylinder no. 2 interrupted
361	000652	06	Power circuit for electronic injection jet on cylinder no. 2 short circuit
362	000652	07	Injection failure of electronic injection jet on cylinder no. 2
363	000652	13	Calibration information for injection jet on cylinder no. 2 not detected
364	000653	02	Part number of injection jet on cylinder no. 3 not detected
365	000653	05	Power circuit for electronic injection jet on cylinder no. 3 interrupted
366	000653	06	Power circuit for electronic injection jet on cylinder no. 3 short circuit
367	000653	07	Injection failure of electronic injection jet on cylinder no. 3
368	000653	13	Calibration information for injection jet on cylinder no. 3 not detected
369	000654	02	Part number of injection jet on cylinder no. 4 not detected
370	000654	05	Power circuit for electronic injection jet on cylinder no. 4 interrupted

Display Machine	Error code Engine manufacturer		Description
371	000654	06	Power circuit for electronic injection jet on cylinder no. 4 short circuit
372	000654	07	Injection failure of electronic injection jet on cylinder no. 4
373	000654	13	Calibration information for injection jet on cylinder no. 4 not detected
374	000655	02	Part number of injection jet on cylinder no. 5 not detected
375	000655	05	Power circuit for electronic injection jet on cylinder no. 5 interrupted
376	000655	06	Power circuit for electronic injection jet on cylinder no. 5 short circuit
377	000655	07	Injection failure of electronic injection jet on cylinder no. 5
378	000655	13	Calibration information for injection nozzle on cylinder no. 5 not detected
379	000656	02	Part number of injection jet on cylinder no. 6 not detected
380	000656	05	Power circuit for electronic injection jet on cylinder no. 6 interrupted
381	000656	06	Power circuit for electronic injection jet on cylinder no. 6 short circuit
382	000656	07	Injection failure of electronic injection jet on cylinder no. 6
383	000656	13	Calibration information for injection jet on cylinder no. 6 not detected
384	000676	03	Glow plug relay voltage high
385	000676	05	Glow plug relay voltage low
386	000750	02	Turbine speed sensor input noise
387	000750	08	Turbine speed sensor input signal not present
388	000750	10	Turbine speed sensor input sample error
389	000898	09	Crawler gear speed or torque signal not valid
390	000970	31	Motor switch off - additional request
391	000971	31	External fuel throttle switch active
392	001075	05	Fuel feed pumps current low
393	001075	06	Fuel feed pumps current high
394	001075	08	Fuel feed pumps malfunction
395	001075	12	Fuel feed pumps malfunction
396	001079	03	Sensor supply voltage No. 1 high
397	001079	04	Sensor supply voltage No. 1 low
398	001080	03	Supply voltage of fuel common rail pressure sensor high
399	001080	04	Supply voltage of common rail pressure sensor low

Error code 450 - 499

Display Machine	Error code Engine manu-facturer		Description
	SPN	FMI	
450	001109	31	Motor protection switch off warning
451	001110	31	Motor protection switch off
452	001136	00	ECU temperature extremely high
453	001136	16	ECU temperature relatively high
454	001172	00	Compressor inlet temperature extremely high
455	001172	03	Input voltage of compressor inlet temperature sensor high
456	001172	04	Input voltage of compressor inlet temperature sensor low
457	001172	15	Compressor inlet temperature high (lowest severity)
458	001172	16	Compressor inlet temperature relatively low
459	001180	16	Turbine inlet temperature relatively high
460	001209	03	Input voltage of exhaust pressure sensor high
461	001209	04	Input voltage of exhaust pressure sensor low
462	001209	16	Exhaust pressure relatively high
463	001209	18	Exhaust pressure relatively low
464	001347	03	Pump return line in high level short circuit
465	001347	05	Pump control valve error
466	001347	07	Common rail pressure control error
467	001347	10	Pump control valve no fuel flow detected
468	001382	15	Fuel line filter - differential pressure
469	001568	02	Torque curve selection not valid
470	001569	31	Fuel throttle
471	001639	01	Fan speed signal not present
472	001639	16	Fan speed higher than expected
473	001639	18	Fan speed lower than expected
474	002000	09	Vehicle code missing
475	002000	13	Safety issue
476	002005	09	ACU signal not present
477	002049	09	CAB signal not present
478	002071	09	CCU not present
479	002630	00	Fresh air temperature of exhaust return extreme
480	002630	03	Input voltage of exhaust return fresh air temperature sensor high
481	002630	04	Input voltage of exhaust return fresh air temperature sensor low
482	002630	15	Fresh air temperature of exhaust return high, lowest severity
483	002630	16	Fresh air temperature of exhaust return relatively high
484	002630	18	Fresh air temperature of exhaust return relatively low

Display Machine	Error code Engine manufacturer		Description
485	002659	16	Flow rate of exhaust return relatively high
486	002659	18	Flow rate of exhaust return relatively low
487	002790	16	Turbocharger compressor outlet temperature too high, medium severity
488	002791	03	Input voltage of exhaust return valve high
489	002791	04	Input voltage of exhaust return valve low
490	002791	05	Exhaust return valve current low
491	002791	06	Exhaust return valve current high
492	002791	07	Mechanical fault on exhaust return valve
493	002791	13	Display for exhaust return valve position sensor not valid
494	002791	14	Exhaust return valve does not respond
495	002795	07	Actuator for adjustable turbine geometry does not respond or is set incorrectly
496	002795	12	Intelligent system or components of actuator for adjustable turbine geometry defective
497	004354	14	AdBlue hose heating 1 - heating malfunction
498	004334	01	Pressure of exhaust treatment reagent - leaking
499	004334	13	Pressure of exhaust treatment reagent - plausibility

Error code 550 - 599

Display Machine	Error code Engine manufacturer		Description
	SPN	FMI	
550	004374	10	AdBlue pump motor speed - no signal from pump
551	004334	04	Pressure of exhaust treatment reagent - short circuit to ground
552	004334	05	Pressure of exhaust treatment reagent - interruption
553	004334	07	Pressure of exhaust treatment reagent - setup error
554	003512	13	Pressure of exhaust treatment reagent - electric malfunction
555	004355	14	Pressure of exhaust treatment reagent - heating system failure
556	004356	14	Pressure of exhaust treatment reagent - heating system failure
557	002061	08	Pressure of exhaust treatment reagent - heating system failure
558	003031	00	Temperature of exhaust treatment reagent in vessel - temperature too high
559	003031	01	Temperature of exhaust treatment reagent in vessel - temperature too low
560	003031	04	Temperature of exhaust treatment reagent in vessel - short circuit to ground
561	003031	05	Temperature of exhaust treatment reagent in vessel - interruption

Display Machine	Error code Engine manufacturer		Description
562	004337	00	Reagent filter temperature - temperature too high
563	004337	01	Reagent filter temperature - temperature too low, electrical heating system not possible.
564	004337	02	Reagent filter temperature - outside working range
565	004337	04	Reagent filter temperature - short circuit to ground
566	004337	05	Reagent filter temperature - interruption
567	001761	03	Level of exhaust treatment reagent - SCH
568	001761	04	Level of exhaust treatment reagent - SCL, interruption
569	001761	00	Level of exhaust treatment reagent - level low, cooling performance limited
570	002061	13	Level of exhaust treatment reagent - sensor supply voltage outside range
571	000158	16	AdBlue ECU voltage - too high
572	000158	18	AdBlue ECU voltage - too low
573	000158	12	AdBlue ECU voltage - internal supply error
574	002061	14	AdBlue ECU voltage - critical internal supply error
575	003241	04	Exhaust temperature sensor No. 1 - short circuit to ground
576	003241	05	Exhaust temperature sensor No. 1 - interruption
577	003363	03	AdBlue vessel heated valve - short circuit to battery
578	003363	04	AdBlue vessel heated valve - short circuit to ground
579	003363	05	AdBlue vessel heated valve - interruption
580	003511	03	AdBlue ECU EEPROM - ECU internal supply high
581	003511	04	AdBlue ECU EEPROM - ECU internal supply low
582	002061	12	AdBlue ECU EEPROM - test total, communication or write
583	000858	03	AdBlue inside filter heating - short circuit to battery
584	000858	04	AdBlue inside filter heating - short circuit to ground
585	000858	05	AdBlue inside filter heating - interruption
586	004355	03	AdBlue hose heating 2 - short circuit to battery
587	004355	04	AdBlue hose heating 2 - short circuit to ground
588	004355	05	AdBlue hose heating 2 - interruption
589	520223	03	AdBlue ECU main relay - short circuit to battery
590	520223	04	AdBlue ECU main relay - short circuit to ground
591	520223	05	AdBlue ECU main relay - interruption
592	520223	06	AdBlue ECU main relay - switch-off too late
593	004374	00	AdBlue pump motor speed - speed too high
594	004374	01	AdBlue pump motor speed - speed too low
595	003361	03	AdBlue metering valve - short circuit to battery
596	003361	04	AdBlue metering valve - short circuit to ground

Display Machine	Error code Engine manufacturer		Description
597	003361	05	AdBlue metering valve - interruption
598	003361	07	AdBlue metering valve - valve or hose clogged
599	003361	10	AdBlue metering valve - valve stuck

Error code 651 - 699

Display Machine	Error code Engine manufacturer		Description
	SPN	FMI	
651	003361	14	AdBlue metering valve - frozen too often
652	002061	07	AdBlue coolant flow valve - mechanical problem
653	004356	03	AdBlue hose heating 3 - short circuit to battery
654	004356	04	AdBlue hose heating 3 - short circuit to ground
655	004356	05	AdBlue hose heating 3 - interruption
656	004354	03	AdBlue hose heating 1 - short circuit to battery
657	004354	04	AdBlue hose heating 1 - short circuit to ground
658	004354	05	AdBlue hose heating 1 - interruption
659	004357	03	AdBlue hose heating 4 - short circuit to battery
660	004357	04	AdBlue hose heating 4 - short circuit to ground
661	004357	05	AdBlue hose heating 4 - interruption
662	004376	03	AdBlue direction valve - short circuit to battery
663	004376	04	AdBlue direction valve - short circuit to ground
664	004376	05	AdBlue direction valve - interruption
665	004376	07	AdBlue direction valve - mechanical problem
666	000859	03	AdBlue external filter heating - short circuit to battery
667	000859	04	AdBlue external filter heating - short circuit to ground
668	000859	05	AdBlue external filter heating - interruption
669	001231	09	CAN frames from UDS/ACM - time exceeded
670	001231	02	CAN2 J1939 communication connection - short circuit or interruption in a cable
671	003226	02	NOx sensor, exhaust outlet - plausibility
672	003226	07	NOx sensor, exhaust outlet - removed
673	003226	03	NOx sensor, exhaust outlet - short circuit NOx signal
674	003226	05	NOx sensor, exhaust outlet - interruption NOx signal
675	003226	09	NOx sensor, exhaust outlet - abnormal updates
676	003226	12	NOx sensor, exhaust outlet - wrong value
677	003226	13	NOx sensor, exhaust outlet - section check

Display Machine	Error code Engine manufacturer		Description
678	003226	14	NOx sensor, exhaust outlet - no sensor signal due to battery voltage
679	005394	17	SCR system performance - metering error
680	005246	16	Cause level - cause level 3 or 4
681	005246	00	Cause level - cause level 5
682	005246	15	Cause level - cause level 1 or 2
683	000613	-	ECU cable harness faulty'
684	003216	-	Malfunction NOx sensor on DPF outlet
685	004341	-	DEF metering unit malfunction pressure line heating
686	004343	-	DEF metering unit malfunction intake line heating
687	004345	-	DEF metering unit malfunction return line heating
688	004360	-	Malfunction temperature sensor at SCR inlet
689	004366	-	DEF tank malfunction temperature control
690	005127	-	Sensor supply voltage 9
691	005128	-	Error sensor supply voltage 10
692	005246	-	Cause level'
693	005435	-	Malfunction DEF metering unit pump
694	005571	-	High-pressure common rail pressure relief valve
695	005743	-	Communication loss temperature sensor module SCR
696	005745	-	DEF metering unit malfunction heating system
697	520629	-	Unallowed input mapping
698	523653	-	ECU supply voltage #3
699	523665	-	ECU supply voltage #1

Error code 750 - 799

Display Machine	Error code Engine manufacturer		Description
	SPN	**FMI**	
750	523666	-	ECU supply voltage #2
751	000027	-	Position signal of EGR valve
752	000028	-	Signal of digital gas control
753	000029	-	Signal of secondary analogue gas control
754	000051	-	Position signal of servo for throttle
755	000054	-	Signal of gas control
756	000091	-	Signal of primary analogue gas control
757	000094	-	Signal for fuel pressure low
758	000096	-	Fuel level

Display Machine	Error code Engine manu-facturer		Description
759	000097	-	Signal for water in fuel
760	000100	-	Signal for engine oil pressure
761	000101	-	Signal for pressure in crank case
762	000102	-	Signal for manifold air pressure
763	000103	-	Signal for turbocharger speed
764	000105	-	Signal for manifold air temperature
765	000107	-	Air filter - pressure difference
766	000108	-	Signal for barometric air pressure
767	000109	-	Signal for engine coolant pressure
768	000110	-	Signal for engine coolant temperature
769	000111	-	Switch for engine coolant level - warning
770	000127	-	Signal for transmission oil pressure
771	000157	-	Signal for fuel pressure in common rail
772	000158	-	ECU shutting down
773	000168	-	Disconnected battery voltage
774	000174	-	Signal for fuel temperature
775	000177	-	Signal for transmission oil temperature
776	000189	-	Throttling engine speed
777	000190	-	Engine speed
778	000191	-	Motor/pump speed
779	000237	-	FIN safety data
780	000412	-	Signal for EGR temperature
781	000569	-	Signal for differential lock on rear axle
782	000611	-	Control 1 for injection nozzle
783	000612	-	Control 2 for injection nozzle
784	000620	-	Sensor supply voltage
785	000627	-	All injection jet circuits
786	000628	-	ECU programming
787	000629	-	ECU-EEPROM
788	000632	-	Fuel shut-off valve
789	000636	-	Signal for cam shaft position
790	000637	-	Signal for crank shaft position
791	000638	-	Position of pinion
792	000639	-	CAN bus
793	000640	-	External motor protection
794	000641	-	VGT actuator motor
795	000644	-	Line, ECU synchronous current circuit

Display Machine	Error code Engine manufacturer		Description
796	000647	-	Circuit for controlling engine blower
797	000651	-	Injection nozzle 1
798	000652	-	Injection nozzle 2
799	000653	-	Injection nozzle 3

Error code 900 - 949

Display Machine	Error code Engine manufacturer		Description
	SPN	FMI	
900	000654	-	Injection nozzle 4
901	000655	-	Injection nozzle 5
902	000656	-	Injection nozzle 6
903	000676	-	Output signal of relay for cold start
904	000729	-	Signal for air heating intake
905	000833	-	Sensor for position of pinion
906	000834	-	Actuation element of pinion
907	000898	-	Signal for requested engine speed
908	000970	-	Switch for external shut-down
909	000971	-	Switch for external throttle
910	000974	-	Signal of remote gas control
911	001075	-	Data of low pressure fuel pump
912	001076	-	Control valve of fuel injection pump
913	001077	-	Control valve of fuel injection pump
914	001078	-	Sensor for speed/position of fuel injection pump
915	001079	-	Voltage for sensor supply 1
916	001080	-	Sensor supply voltage
917	001109	-	Motor protection about to trip
918	001110	-	Motor protection
919	001136	-	Signal for ECU temperature
920	001172	-	Intake air temperature
921	001176	-	Intake air pressure
922	001180	-	Calculated intake temperature of VGT turbine
923	001209	-	Signal for pressure in exhaust manifold
924	001321	-	Control circuit for trigger
925	001347	-	Control circuit for intake control valve
926	001348	-	Control valve 2 for fuel pump
927	001349	-	Signal for redundant fuel pressure in common rail

Display Machine	Error code Engine manufacturer		Description
928	001485	-	Power supply relay for pump
929	001568	-	Selecting torque curve
930	001569	-	Throttling engine power
931	001638	-	Signal for hydraulic oil temperature
932	001639	-	Signal for blower speed
933	001762	-	Signal for hydraulic oil pressure
934	002000	-	Wrong ECU
935	002629	-	Signal for outlet temperature of compressor for turbo charger (with unchangeable geometry)
936	002630	-	Signal for outlet temperature of intercooler
937	002659	-	Signal for EGR flowrate
938	002790	-	Outlet temperature of compressor for turbo charger (with unchangeable geometry)
939	002791	-	Circuit for controlling EGR valve
940	002795	-	VGT calibration version
941	002797	-	High voltage supply 1 for injection nozzle
942	002798	-	High voltage supply 2 for injection nozzle
943	003246	-	Outlet temperature of diesel particulate filter
944	003251	-	Signal for differential pressure at diesel particulate filter
945	003464	-	Circuit for controlling servo motor for throttle flap
946	003471	-	Signal for control valve at fuel dosing
947	003480	-	Signal for inlet pressure at fuel dosing
948	003482	-	Signal for shut-off valve on fuel dosing
949	003509	-	Sensor supply voltage 1

Error code 950 - 997

Display Machine	Error code Engine manufacturer		Description
	SPN	**FMI**	
950	003510	-	Sensor supply voltage 2
951	003511	-	Sensor supply voltage 3
952	003512	-	Sensor supply voltage 4
953	003513	-	Sensor supply voltage 5
954	003514	-	Sensor supply voltage 6
955	003556	-	Fuel dosing nozzle
956	003587	-	Circuit for automatic aether control
957	003597	-	Supply voltage for injection nozzles

Display Machine	Error code Engine manufacturer		Description
958	003598	-	Supply voltage 2 for injection nozzles
959	003659	-	Overflow valve circuit 1
960	003660	-	Overflow valve circuit 2
961	003661	-	Overflow valve circuit 3
962	003662	-	Overflow valve circuit 4
963	003663	-	Overflow valve circuit 5
964	003664	-	Overflow valve circuit 6
965	003711	-	Inlet temperature of diesel oxidation catalyst
966	003719	-	Calculated soot level
967	003720	-	Calculated ash level
968	003822	-	Position signal of rear EGR valve
969	003936	-	Frequency of diesel particulate filter malfunctions
970	004077	-	Signal for outlet pressure at fuel dosing
971	004490	-	Air humidity of intake air
972	004765	-	Inlet temperature of diesel oxidation catalyst
973	004766	-	Outlet temperature of diesel oxidation catalyst
974	004795	-	Diesel particulate filter missing
975	005018	-	Frequency of diesel oxidation catalyst malfunctions
976	005125	-	Sensor supply voltage 7
977	005126	-	Sensor supply voltage 8
978	005298	-	Frequency of diesel oxidation catalyst malfunctions
979	005456	-	Signal for inlet temperature at fuel dosing
980	003719	15	Soot level high, exhaust filter cleaning required
981	003719	16	Soot level very high, reduce speed
982	003719	00	Soot level very high, reduce speed, exhaust filter service required
983	003697	-	Diesel particulate filter lamp command
984	003698	-	Exhaust system high temperature lamp command
985	003703	-	Diesel particulate filter active regeneration inhibited due to inhibit switch
986	522458	-	Data of fuel dosing pump
987	522494	-	Communication of intake air sensor
988	522495	-	Module for exhaust filter temperature
989	523379	-	Earth point 7
990	523744	-	Compressor for air conditioning
991	523926	-	Signal 1 of sensor for pump pressure
992	523927	-	Signal 2 of sensor for pump pressure
993	524037	-	Circuit for front drive switch

Display Machine	Error code Engine manu-facturer		Description
994	524223	-	Signal for differential lock on rear axle
995	524225	-	Motor starter circuit breaker
996	524235	-	Circuit voltage of solenoids for front drive
997	004364	-	Low NOx transformation in SCR due to poor DEF quality

3 Main discharge belt

⚠ WARNING

Danger of squashing/crushing while conveyor belts are in operation

Risk of squashing/crushing in area between drive/tail rollers, support rollers and side guide rollers and the belt.

1. NEVER enter or reach into the danger area during operation.
2. NEVER touch the conveyor belts while they are in operation.

3.1 Main discharge belt - motor protection switch tripped

Main discharge belt and feed belt switch off.

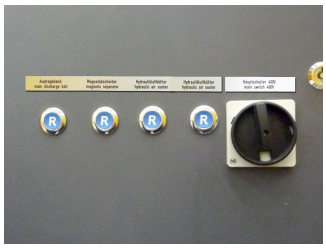


Fig. 19: Main switch circuit breaker

Main discharge belt blocked.

1. Remove material from the belt drums.
2. Remove material from the support and tail rollers.
3. Remove material from the crusher outlet.
4. Press reset button on main discharge belt motor protection switch.
5. When you restart the conveyor belt, check and adjust the belt tracking and tension. Remove any objects obstructing the belt path.

Cables and cable connections on main discharge belt are damaged.

1. If damaged, contact RUBBLE MASTER service partner.

3.2 Main discharge belt - Temperature high

Main discharge belt and feed belt switch off.

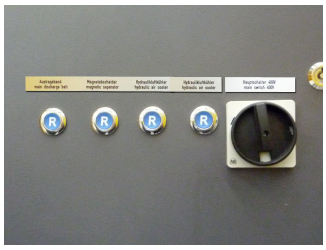


Fig. 20: Motor protection switch

Main discharge belt blocked or overloaded. Temperature of Belt drum motor too high.

1. Remove material from drums, support rollers and tail rollers and the crusher outlet.
2. Wait until Belt drum motor has cooled down.
3. When you restart the conveyor belt, check and adjust the belt tracking and tension. Remove any objects obstructing the belt path.

Cables and cable connections on Belt drum motor are damaged.

1. If damaged, contact RUBBLE MASTER service partner.

3.3 Main discharge belt - main protection switch tripped

Main discharge belt and feed belt switch off.

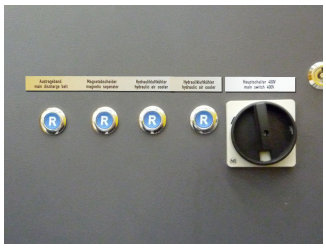


Fig. 21: Main switch circuit breaker

Main discharge belt blocked.

1. Remove material from the belt drum.
2. Remove material from the support and tail rollers.
3. Remove material from the crusher outlet.
4. Press button 55F1 to open the doors.
5. When you restart the conveyor belt, check and adjust the belt tracking and tension. Remove any objects obstructing the belt path.
6. Cables and cable connections on main discharge belt are damaged.
7. If damaged, contact RUBBLE MASTER service partner.

3.4 Main discharge belt - Short circuit temperature supervision

Main discharge belt and feed belt switch off.

Short circuit in cable

1. Check cables and cable connections.
2. If damaged or defective, contact your RUBBLE MASTER service partner.

3.5 Main discharge belt - Wire break in temperature supervision

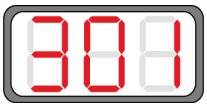
Main discharge belt and feed belt switch off.

Cables or cable connections defective

1. Check cable and cable connections.
2. If damaged or defective, contact your RUBBLE MASTER service partner.

4 Feeder

4.1 Feed belt - no parameters set

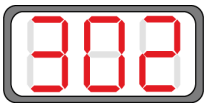


Frequency convertor and feed belt switch off.

No parameters loaded / general malfunction.

1. Check the supply on the frequency converter.
2. Contact RUBBLE MASTER service partner.

4.2 Feed belt – frequency converter temperature too high

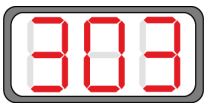


Frequency convertor and feed belt switch off.

Temperature of frequency converter too high.

1. Check cooling fins on frequency converter and clean if required.
2. Wait until frequency converter has cooled down.
3. If error reoccurs, contact RUBBLE MASTER service partner.

4.3 Feed belt – drive motor temperature too high

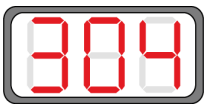


Frequency convertor and feed belt switch off.

Temperature of drive motors too high.

1. Wait until drive motors have cooled down.
2. If error reoccurs, contact RUBBLE MASTER service partner.
3. Check the connector on both drive motors; a poor connection can cause the temperature supervision loop to be interrupted.

4.4 Feed belt – brake overload

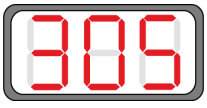


Frequency convertor and feed belt switch off.

Braking resistance overload due to feed belt speed being changed too quickly.

1. Wait until brake resistor has cooled down.
2. Reduce the feed conveyor speed.

4.5 Feed belt – motor overload



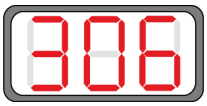
Frequency convertor and feed belt switch off.

1. Motor current draw too high for too long.
2. Start the machine again.

If the fault occurs again:

1. Check whether the drive motors have been over-lubricated.
2. Contact RUBBLE MASTER service partner.

4.6 Feed belt – motor over-current

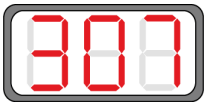


Frequency convertor and feed belt switch off.

Short circuit or excessive load.

1. Contact RUBBLE MASTER service partner.

4.7 Feed belt – intermediate voltage too high – too low

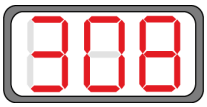


Frequency convertor and feed belt switch off.

Intermediate circuit voltage out of tolerance range (too high – too low).

1. Check the motor speed at the operator panel.
2. Check the tension of the alternator fan belt and tighten if required.
3. If error reoccurs, contact RUBBLE MASTER service partner.

4.8 Feed belt – phase error



Frequency convertor and feed belt switch off.

Only two phases connected.

1. Contact RUBBLE MASTER service partner.

4.9 Feed belt - frequency converter in generator mode

Feed belt switches off.

Intermediate circuit voltage too high.

1. Check brake resistance at contact.
2. Contact your RUBBLE MASTER service partner.

4.10 Feed belt - supply voltage too low

Frequency convertor and feed belt switch off.

Supply voltage too low.

1. Check the motor speed at the operator panel.
2. Check the tension of the alternator fan belt and tighten if required.
3. If error reoccurs, contact your RUBBLE MASTER service partner.

4.11 Feed belt - short-circuit at outlet (brake or motor)

Frequency convertor and feed belt switch off.

Short-circuit at outlet (brake or motor).

1. Contact RUBBLE MASTER service partner.

4.12 Feed belt - short-circuit at outlet phase W (brake)

Frequency converter and feed belt switch off.

Short-circuit at outlet phase W.

1. Contact RUBBLE MASTER service partner.

4.13 Feed belt - short-circuit at outlet phase V (brake)

Frequency convertor and feed belt switch off.

Short-circuit at outlet phase V.

1. Contact RUBBLE MASTER service partner.

4.14 Feed belt - short-circuit at outlet phase U (brake)

Frequency convertor and feed belt switch off.

Short-circuit at outlet phase U.

1. Contact RUBBLE MASTER service partner.

4.15 Feed belt - frequency converter bypass active

Emergency operation feed belt active.

Fig. 22:

The frequency converter has been bridged using a jumper. Emergency operation of the feed belt has been activated by inserting a jumper in the main control cabinet. The feed belt can only be ON/OFF controlled.

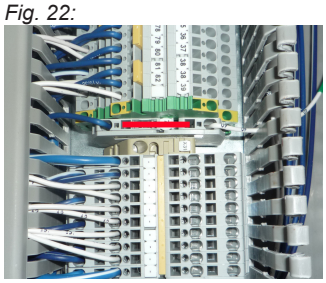


Fig. 23: Jumper in control cabinet is marked red

1. Remove the jumper on the frequency converter.
2. Connect up the frequency converter again.
3. Remove the jumper in the main control cabinet.
4. Contact your RUBBLE MASTER service partner.

4.16 Feed belt - communication error with frequency converter

Feed belt switches off.

Fig. 24: CAN connector

Communication with frequency converter interrupted.

1. Check the CAN connector on the frequency converter.
2. Contact RUBBLE MASTER service partner.

4.17 Feed belt – general error

Feed belt switches off.

General malfunction.

1. Contact your RUBBLE MASTER service partner.

4.18 Feed belt - SCF4 IGBT short circuit

Feed belt switches off.

Power section malfunction.

1. Please contact your RUBBLE MASTER service partner.

4.19 Feed belt - SCF3 short circuit to ground

Feed belt switches off.

Power section malfunction.

1. Please contact your RUBBLE MASTER service partner.

4.20 Feed belt - OSF supply voltage too high

Frequency convertor and feed belt switch off.

Mains voltage too high. Power supply malfunction.

1. Check the supply voltage at the frequency converter.
2. If the malfunction cannot be remedied in this way then please contact your RUBBLE MASTER service partner.

4.21 Feed belt – InF7 internal malfunction

Feed belt switches off.

The initialisation of the frequency converter is not complete.

1. Please contact your RUBBLE MASTER service partner.

4.22 Feed belt – InF8 internal malfunction

Feed belt switches off.

Voltage supply to control section is not correct.

1. Please contact your RUBBLE MASTER service partner.

4.23 Feed belt - InF9 current measuring not correct

Feed belt switches off.

Current measuring is not correct.

1. Please contact your RUBBLE MASTER service partner.

4.24 Feed belt – EEF1 internal memory malfunction

Feed belt switches off.

Malfunction of internal memory on control card.

1. Contact RUBBLE MASTER service partner.

4.25 Feed belt – InF1 internal malfunction

Feed belt switches off.

Power card deviates from the saved power card.

1. Please contact your RUBBLE MASTER service partner.

4.26 Feed belt - CFF incorrect configuration

Feed belt switches off.

Configuration malfunction at frequency converter.

1. Please contact your RUBBLE MASTER service partner.

4.27 Feed belt – InF6 internal malfunction

Feed belt switches off.

The option installed in the frequency converter is not known.

1. Please contact your RUBBLE MASTER service partner.

4.28 Feed belt - brF brake response contact

The response contact on the brake does not agree with the brake logic.

The motor is not stopped fast enough by the brake (recognised by speed measurement at pulse input).

1. Contact RUBBLE MASTER service partner.

4.29 Feed belt - LFF2 loss of setpoint

Feed belt switches off.

Loss of setpoint 4 – 20 mA at analog input AI2.

1. Please contact your RUBBLE MASTER service partner.

Vibro-channel and frequency converter switch off.

Loss of setpoint 4 – 20 mA at analog input AI2.

2. Contact RUBBLE MASTER service partner.

4.30 Feed belt - ECF mechanical coupling of encoder

Feed belt switches off.

Wire break in mechanical coupling of encoder.

1. Please contact your RUBBLE MASTER service partner.

4.31 Feed belt - SLF1 communication modbus

Feed belt switches off.

Communication interruption on Modbus-Bus.

1. Please contact your RUBBLE MASTER service partner.

4.32 Feed belt – ILF internal malfunction

Feed belt switches off.

Malfunction in the communication between option card and frequency converter.

1. Please contact your RUBBLE MASTER service partner.

4.33 Feed belt - SLF3 communication PowerSuite

Feed belt switches off.

Communication malfunction with the graphic terminal.

1. Please contact your RUBBLE MASTER service partner.

4.34 Feedbelt - COF communication interruption CANopen

Feed belt switches off.

Communication interruption on CANopen Bus.

1. Check the CAN connector on the frequency converter.
2. If the malfunction cannot be remedied in this way then please contact your RUBBLE MASTER service partner.

Vibro-channel switches off:

Communication interruption on CANopen-Bus.

1. Check the CAN connector on the frequency converter.
2. If the malfunction cannot be remedied in this way then please contact your RUBBLE MASTER service partner.

4.35 Feed belt – EPF1 external malfunction

Feed belt switches off.

Malfunction triggered by an external device, depending on user.

1. Please contact your RUBBLE MASTER service partner.

4.36 Feed belt – tnF

Feed belt switches off.

Special motor or variable frequency drive motor not matched to frequency converter. Motor not connected to frequency converter.

1. Please contact your RUBBLE MASTER service partner.

4.37 Feed belt – bLF brake control

Feed belt switches off.

Current for brake stroke cannot be reached. Threshold value for brake release frequency not set, although brake logic is assigned.

1. Please contact your RUBBLE MASTER service partner.

4.38 Feed belt – SSF

Feed belt switches off.

Change to torque limiting.

1. Please contact your RUBBLE MASTER service partner.

4.39 Feed belt - PrF Power removal

Feed belt switches off.

Malfunction in frequency converter safety function "Power Removal".

1. Please contact your RUBBLE MASTER service partner.

4.40 Feed belt – AnF

Feed belt switches off.

The rpm signal from the encoder is not consistent with the setpoint.

1. Contact RUBBLE MASTER service partner.

4.41 Feed belt – dLF malfunction load variation

Feed belt switches off.

Load variation not normal.

1. Contact RUBBLE MASTER service partner.

5 Magnetic separator

5.1 Magnetic separator - motor protection switch tripped

Magnetic separator switches off.

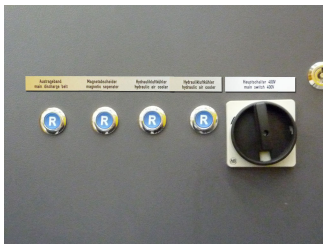


Fig. 25: Motor protection switch

Magnetic separator belt blocked.

1. Remove any material from drive rollers.
2. Press reset button on magnetic separator motor protection switch.

Cables and cable connections on magnetic separator are damaged.

1. Contact RUBBLE MASTER service partner.

5.2 Magnetic separator - thermal contact open

Magnetic separator belt blocked or overloaded.

Magnetic separator switches off.

1. Remove material from the magnetic separator belt.
2. Make sure no metal objects are jammed in the magnetic belt drums.

6 Side conveyor belt

⚠ WARNING

Danger of squashing/crushing while conveyor belts are in operation

Risk of squashing/crushing in area between drive/tail rollers, support rollers and side guide rollers and the belt.

1. NEVER enter or reach into the danger area during operation.
2. NEVER touch the conveyor belts while they are in operation.

6.1 Side discharge belt - motor protection switch tripped

Side discharge belt and vibro-channel switch off.

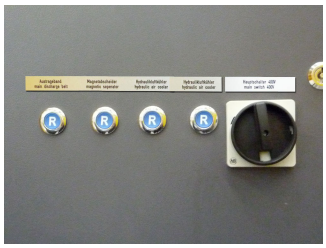


Fig. 26: Motor protection switch

Side discharge belt blocked.

1. Remove material from the belt drums.
2. Remove material from the support and tail rollers.
3. Remove material from the bypass chamber.
4. Press reset button on side discharge belt motor protection switch.
5. When you restart the conveyor belt, check and adjust the belt tracking and tension. Remove any objects obstructing the belt path.

Cables and cable connections on side discharge belt are damaged.

1. If damaged, contact RUBBLE MASTER service partner.

6.2 Side discharge belt - thermal contact open

Side discharge belt and vibro-channel switch off.

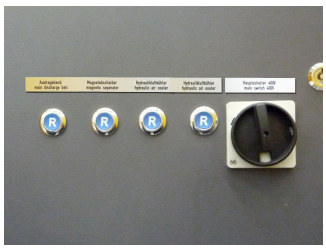


Fig. 27: Motor protection switch

Side discharge belt blocked or overloaded. Temperature of drive motor too high.

1. Remove material from drums, support rollers and tail rollers and the by-pass chamber.
2. Wait until belt drum motor has cooled down.
3. When you restart the conveyor belt, check and adjust the belt tracking and tension. Remove any objects obstructing the belt path.

Cables and cable connections on belt drive motor are damaged.

1. If damaged, contact RUBBLE MASTER service partner.

7 Hydraulics

⚠ WARNING

Danger of hot surfaces on hydraulic components

Risk of burning skin on hydraulic power unit, hydraulic cylinders and hydraulic lines during and directly after operation.

1. NEVER touch hydraulic components during and directly after operating the machine.
2. Wear safety gloves.

⚠ WARNING

Danger of burns to the skin by hot utilities

When checking and topping up oil and coolant levels there is a risk of liquid and vapour escaping under pressure if the cap is opened too quickly. This can lead to burns to the skin. Topping up is to be carried out using a suitable filling vessel to the connection provided.

1. Check and top up utilities ONLY after the machine has been switched off.
2. Wait until the oil and/or coolant has cooled down.
3. Open cap gradually to allow pressure to escape.
4. Wear suitable personal safety equipment.

7.1 Hydraulics - hydraulic oil level is low

Machine (diesel engine) switches off.

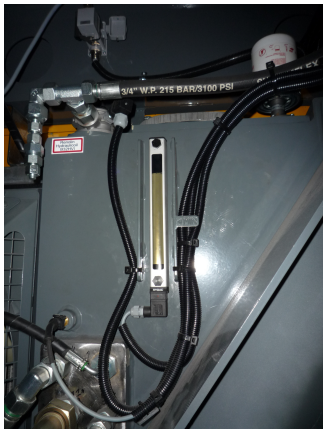


Fig. 28: Hydraulic oil tank

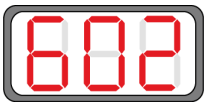
Not enough oil in hydraulic oil tank.

1. Check hydraulic oil level and top-up if required.
2. Check the hydraulic components on the machine for leaks.

Float level switch in hydraulic tank inspection glass defective or not connected.

1. Replace float level switch or connect up.

7.2 Hydraulics - hydraulic oil temperature is too high



Hydraulic components (crawler gear, hydraulic cylinders, etc.) cannot be operated.

Hydraulic oil cooler clogged or fan motor defective, causing oil to overheat (above 80°C).

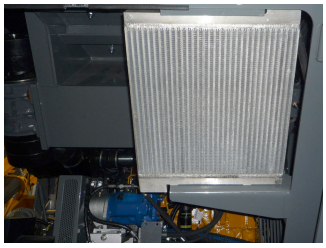


Fig. 29: Hydraulic oil cooler fins

1. Wait until temperature of hydraulic oil has fallen below 80°C (Error can be reset).
2. Clean the hydraulic oil cooler.
3. Check fan motor: air must be flowing through the outlet grille.

Fig. 30: Hydraulic oil cooler

7.3 Hydraulics – motor protection switch for fan motor tripped

Air fan motor for cooling hydraulics switches off.

Fig. 31: Hydraulic oil cooler

Air fan vanes blocked or damaged

1. Check cooling fan rotates freely.
2. Contact your RUBBLE MASTER service partner if motor protection switch is tripped frequently.

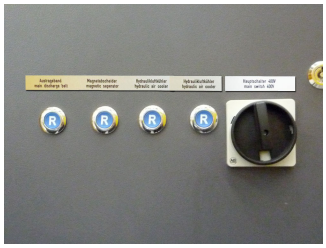


Fig. 32: Motor protection switch

3. Press reset button on hydraulics motor protection switch (after 1 or 2 minutes).

7.4 Hydraulics - hydraulic oil filter clogged

Hydraulic components (crawler gear, hydraulic cylinders, etc.) cannot be operated.

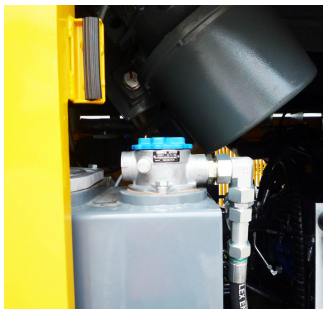
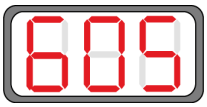


Fig. 33: Electric contamination sensor

Hydraulic oil filter clogged.

1. Check hydraulic return line filter and replace if required.

7.5 Hydraulics - hydraulic oil temperature sensor short circuit



Hydraulic components (crawler gear, hydraulic cylinders, etc.) cannot be operated.

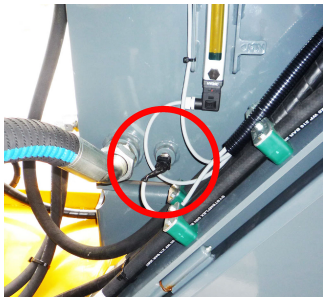


Fig. 34: Temperature sensor

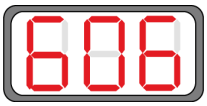
Short circuit in temperature sensor.

1. Check sensor and replace if required.

Short circuit in cable.

1. Check cables and cable connections.
2. If damaged or defective, contact your RUBBLE MASTER service partner.

7.6 Hydraulics - hydraulic oil temperature sensor open line



Hydraulic components (crawler gear, hydraulic cylinders, etc.) cannot be operated.

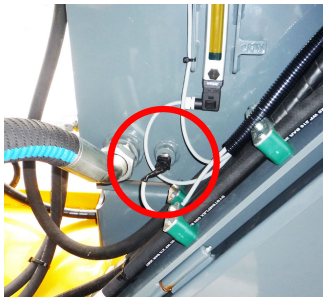


Fig. 35: Temperature sensor

Temperature sensor defect.

1. Check sensor and replace if required.

Cables or cable connections defective.

1. Check cable and cable connections.
2. If damaged or defective, contact your RUBBLE MASTER service partner.

7.7 Hydraulics - hydraulic oil temperature too low

Hydraulic components (crawler gear, hydraulic cylinders, etc.) cannot be operated.

Hydraulic oil too cold (- 15 °C).

1. Let diesel engine run (15 to 30 minutes) to warm up hydraulic oil.
2. Reset the error signal as soon as the hydraulic oil is above - 15 °C.

7.8 Hydraulics - hydraulic oil temperature is too high

Hydraulic system too hot

Hydraulic components cannot be operated.

1. Check function of hydraulic cooler fan.
2. Check hydraulic cooler for contamination and clean if required.

7.9 Hydraulics - hydraulic oil temperature too low for crawler gear

Hydraulic oil temperature too low for crawler gear.

Hydraulic oil is to viscous to move crawler gear. The crawler gear is blocked.

1. Let diesel engine run (15 to 30 minutes) to warm up hydraulic oil.
2. Reset the error signal as soon as the hydraulic oil temperature is above - 15 °C.

7.10 Hydraulics - hydraulic oil temperature too high for crawler gear

Hydraulic system too hot

1. Crawler gear hydraulics cannot be operated.
2. Check function of hydraulic cooler fan.
3. Check hydraulic cooler for contamination and clean if required.

7.11 Hydraulics – Cable to crawler gear valve right front interrupted

Crawler gear does not work.

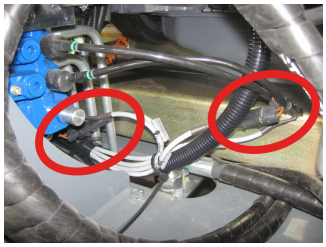


Fig. 36: Connector on crawler gear valves

Electrical connection to crawler gear valve interrupted.

1. Check the connectors on the crawler gear block.
2. Contact your RUBBLE MASTER service partner.

7.12 Hydraulics – Cable to crawler gear valve right front damaged

Crawler gear does not work.

Cable to crawler gear valve is damaged (short circuit).

1. Contact your RUBBLE MASTER service partner.

7.13 Hydraulics – Cable to crawler gear valve right rear interrupted

Crawler gear does not work.

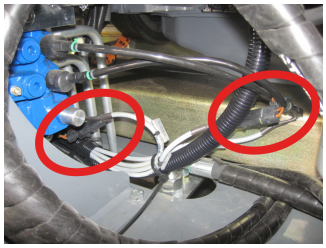


Fig. 37: Connector on crawler gear valves

Electrical connection to crawler gear valve interrupted.

1. Check the connectors on the crawler gear block.
2. Contact your RUBBLE MASTER service partner.

7.14 Hydraulics – Cable to crawler gear valve right rear damaged

Crawler gear does not work.

Cable to crawler gear valve is damaged (short circuit).

1. Contact your RUBBLE MASTER service partner.

7.15 Hydraulics – Cable to crawler gear valve left front interrupted

Crawler gear does not work.

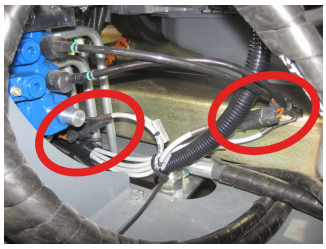


Fig. 38: Connector on crawler gear valves

Electrical connection to crawler gear valve interrupted.

1. Check the connectors on the crawler gear block.
2. Contact your RUBBLE MASTER service partner.

7.16 Hydraulics – Cable to crawler gear valve left front damaged

Crawler gear does not work.

Cable to crawler gear valve is damaged (short circuit).

1. Contact your RUBBLE MASTER service partner.

7.17 Hydraulics – Cable to crawler gear valve left rear interrupted

Crawler gear does not work.

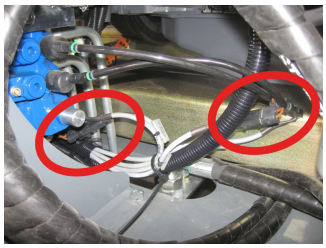


Fig. 39: Connector on crawler gear valves

Electrical connection to crawler gear valve interrupted.

1. Check the connectors on the crawler gear block.
2. Contact your RUBBLE MASTER service partner.

7.18 Hydraulics – Cable to crawler gear valve left rear damaged

Crawler gear does not work.

Cable to crawler gear valve is damaged (short circuit).

1. Contact your RUBBLE MASTER service partner.

7.19 Hydraulics – motor protection switch for hydraulic power unit tripped

Ancillary hydraulics are blocked.

Motor, cable or cable connections on hydraulic power unit are damaged or unit is overloaded.

1. Contact RUBBLE MASTER service partner.

7.20 Hydraulics – Shut-off valve crawler gear / ancillary hydraulics defective

Ancillary hydraulics blocked.

After starting, the self-test detects shut-off valve defect and blocks the ancillary hydraulics.

1. Check the connector on the hydraulics pressure switch.
2. Contact your RUBBLE MASTER service partner.

7.21 Hydraulics - crawler gear valve defective

Crawler gear blocked.

Defective crawler gear valve detected.

1. Contact your RUBBLE MASTER service partner.

7.22 Hydraulics - hydraulic test not possible during start

Hydraulics are blocked.

Automatic self-test on hydraulics cannot be completed because emergency control pendant is connected.

1. Deactivate the emergency control pendant.
2. Contact your RUBBLE MASTER service partner.

7.23 Hydraulics - LS valve stuck in ON position

Hydraulics are blocked.

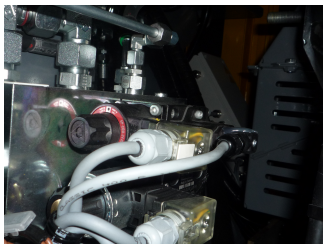


Fig. 40: LS valve

LS valve stuck in ON position.

1. Check the connector on the LS valve.
2. Contact your RUBBLE MASTER service partner.

7.24 Hydraulics - LS valve stuck in OFF position

Hydraulics are blocked.

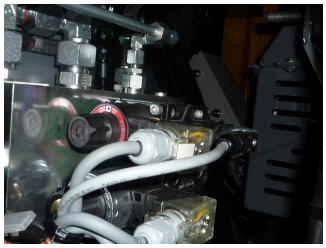


Fig. 41: LS valve

LS valve stuck in OFF position.

1. Check the connector on the LS valve.
2. Contact your RUBBLE MASTER service partner.

7.25 Hydraulics - vortex pressure switch 1 tripped

Check if crushing gap has changed.

Pressure switch 1 on VORTEX 9-10-4 crusher has tripped due to excessive load on an impact arm.

1. Check impact arm setting.
2. Reset error.
3. Contact your RUBBLE MASTER service partner.

7.26 Hydraulics - vortex malfunction during automatic gap adjustment

Grinding arm has changed position.

Due to a large block of rock, etc. the grinding arm has been overloaded and has changed position. Resetting system is blocked.

1. Check grinding arm setting.
2. Check limit switch on grinding arm.
3. Contact your RUBBLE MASTER service partner.

7.27 Hydraulics - vortex pressure switch 2 tripped

Check if crushing gap has changed.

Pressure switch 2 on VORTEX 9-10-4 crusher has tripped due to excessive load on an grinding arm.

1. Check grinding arm setting.
2. Reset error.
3. Contact your RUBBLE MASTER service partner.

7.28 Hydraulics - bypass stuck in intermediate position

Bypass does not reach limit position in required time.

Bypass can only be moved manually. Automatic mode is blocked.

Material jammed.

1. Remove the jammed material.

Limit switch has changed position.

1. Check limit switch on bypass flap.

Cables on limit switch damaged.

1. Check cable and cable connections.
2. If damaged or defective, contact your RUBBLE MASTER service partner.

7.29 Hydraulics - limit switch bypass malfunction

Both limit switches have been triggered. Bypass can only be moved manually.

Limit switches have changed position.

1. Check the switch gaps.
2. Adjust the limit switches accordingly.
3. Contact your RUBBLE MASTER service partner.

7.30 Hydraulics - unexpected pressure at crawler gear valves

Impermissible pressure at crawler gear valves. Hydraulics are blocked.

Logic valve (ancillary hydraulics) has not locked properly.

1. Contact your RUBBLE MASTER service partner.

8 Oversize grain separator /Mesh screen (option)

8.1 Oversize grain separator / Mobile screen - motor protection switch main belt tripped

OS / MS main belt switches off..

Fig. 42: Control cabinet OS / MS + RFB

OS / MS main belt blocked.

1. Remove material from the belt drums.
2. Press reset button on motor protection switch "OS/MS main belt".

Cable and cable connections on OS / MS main belt are damaged.

1. Contact RUBBLE MASTER service partner.

8.2 Oversize grain separator / Mobile screen - motor protection switch oversize grain belt tripped

OS oversize grain belt switches off.

Fig. 43: Control cabinet OS + RFB

OS oversize grain belt blocked.

1. Remove material from the belt drums.
2. Press reset button on motor protection switch "OS oversize grain belt".

Cable and cable connections on OS oversize grain belt are damaged.

1. Contact RUBBLE MASTER service partner.

8.3 Refeeding belt - motor protection switch tripped

Refeeding belt or screen deck switches off.

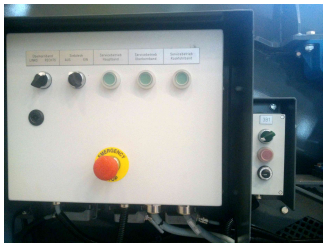


Fig. 44: Control cabinet OS + RFB

Refeeding belt blocked.

1. Remove material from the belt drums.
2. Press reset button on refeeding belt motor protection switch.

Cables and cable connections on refeeding belt are damaged.

1. Contact RUBBLE MASTER service partner.

8.4 OS EverClean / Mobile screen – motor protection switch tripped

OS EverClean switches off.

Fig. 45: Control cabinet OS + RFB

Screen cascades blocked.

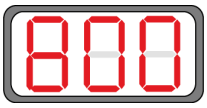
1. Remove material from the screen cascades.
2. Press reset button on motor protection switch "OS EverClean".

Cable and cable connections on OS EverClean are damaged.

1. Contact RUBBLE MASTER service partner.

9 General error codes

9.1 EMERGENCY STOP triggered



Machine (diesel engine) switches off or will not start up.

One or more EMERGENCY STOP buttons have been pressed, or the dummy plug for the emergency control pendant has not been inserted.

1. Reset the EMERGENCY STOP button and make sure that the dummy plug (inside left-hand door of cabinet, below main battery switch) is plugged in.
2. Start the machine again (turn ignition key to "0" and start the diesel engine again). Error signal can only be reset by starting the machine again.

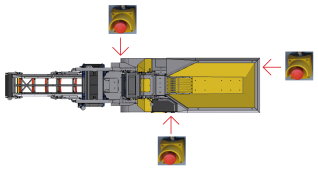


Fig. 46: EMERGENCY STOP buttons on the machine

One of the EMERGENCY STOP buttons or the dummy plug for the emergency control pendant is damaged.

1. Contact RUBBLE MASTER service partner.

For location of EMERGENCY STOP buttons refer to section "EMERGENCY STOP systems".

9.2 No clutch signal

Machine (diesel engine) switches off.

Fig. 47: Clutch

Crusher is neither engaged or disengaged (when clutch is activated while engine is running).

1. Engage / disengage clutch.
2. Start the engine.

9.3 Crusher open

Engine cannot start with crusher engaged.

Fig. 48: Clutch

Interlock prevents engine from starting if crusher housing is open and rotor is engaged.

1. Disengage crusher.
2. Start engine and close the crusher housing.
3. Switch off engine and start again with crusher engaged.

9.4 Clutch engagement time exceeded

Machine switches off.

Clutch engagement time has been exceeded.

1. Check the pneumatic system for leaks.

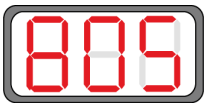
9.5 Clutch not disengaged when machine started

Machine does not start.

Start disable

1. Release some air.
2. Check the pneumatic system for leaks.

9.6 Stop machine pressed on remote control



Machine (diesel engine) switches off.

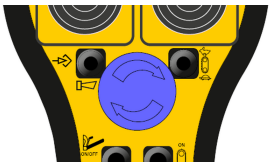
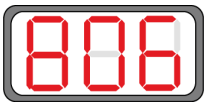


Fig. 49: Stop machine button on remote control

Stop machine button has been pressed on remote control.

1. Start the machine again (turn ignition key to "0" and start the diesel engine again). Error signal can only be reset by starting the machine again.

9.7 Generator temperature too high



Feed belt switches off.

Fig. 50: generator

1. Wait 15 – 30 minutes: the temperature supervisor on the generator has been tripped and must be allowed to cool down. Troubleshoot cause.

Generator heavily clogged.

1. Unscrew the cover behind the generator and carefully remove dust from the generator using compressed air.

External power draw too high

1. Reduce the external power draw.
   A total power output of 15 kVA is available.

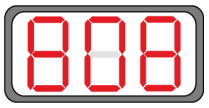
9.8 Clutch disengage malfunction

Machine switches off.

Clutch disengaging pressure not reached.

1. Check the pneumatic system for leaks.
2. Please contact your RUBBLE MASTER service partner if the problem is not resolved.

9.9 Crusher motor overloaded



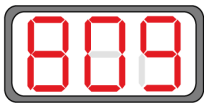
Crusher motor switches off.

Crusher blocked or overloaded. Temperature of crusher motor too high.

1. Remove material from the crusher.
2. Wait until crusher motor has cooled down.
3. When you restart the crusher, check and adjust the speed of the feed belt.

If the error occurs again, please contact your RUBBLE MASTER service partner.

9.10 General error on soft starter / frequency converter for crusher motor



Crusher cannot start up.

1. Contact your RUBBLE MASTER service partner.
2. Give error code on frequency converter to your RUBBLE MASTER service partner.

9.11 CAN communication error with soft starter / frequency converter

Crusher motor switches off.

Communication with soft starter / frequency converter interrupted.

1. Check the connector on the soft starter / frequency converter.
2. Contact your RUBBLE MASTER service partner.

9.12 Tank level indicator at minimum

Machine continues to run.

Machine needs to be switched off soon.

1. Refuel

9.13 Tank indicator sensor signal malfunction

Machine continues to run.

Tank indicator defective.

1. Contact your RUBBLE MASTER service partner.

9.14 Central lubrication system (option) empty

Machine continues running.

Fig. 51: Central lubrication system

Central lubrication system lubricant pot is empty.

1. Fill the lubrication pot (refer to central lubrication system operating instructions).

9.15 Clutch malfunction - simultaneously engaged and disengaged

Machine switches off.

The limit switches on the clutch lever signal engaged and disengaged at the same time. Possible defect or limit switches on clutch lever have moved.

1. Check the limit switches.
2. Contact your RUBBLE MASTER service partner.

9.16 Anti-theft protection activated

The machine has a start block.

Machine cannot be started.

1. This can be reset using SMS text message or release code.
2. If the machine cannot be started in this way then please contact your RUBBLE MASTER service partner.

9.17 Supply voltage failure SPS VBB_O

Machine components may fail (Main discharge belt, etc.).

1. Check the automotive fuses.
2. Contact your RUBBLE MASTER service partner.

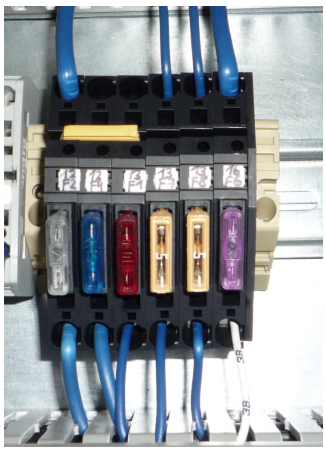


Fig. 52: Automotive fuses

9.18 Supply voltage failure SPS VBB_O_E

Machine components may fail (Main discharge belt, etc.).

1. Check the automotive fuses.
2. Contact your RUBBLE MASTER service partner.

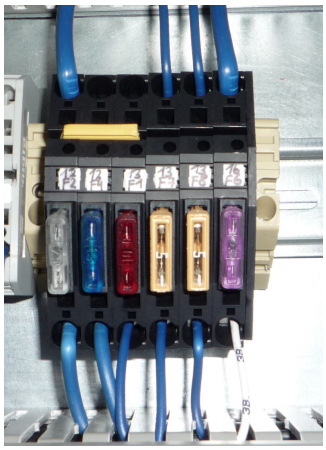


Fig. 53: Automotive fuses

9.19 Supply voltage failure SPS VBB_R

Machine components may fail (Main discharge belt, etc.).

1. Check the automotive fuses.
2. Contact your RUBBLE MASTER service partner.

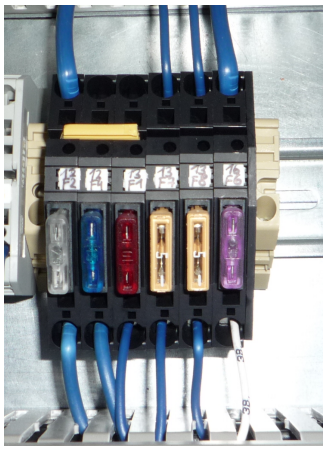


Fig. 54: Automotive fuses

9.20 Supply voltage failure SPS VBB_R_E

Machine components may fail (Main discharge belt, etc.).

1. Check the automotive fuses.
2. Contact your RUBBLE MASTER service partner.

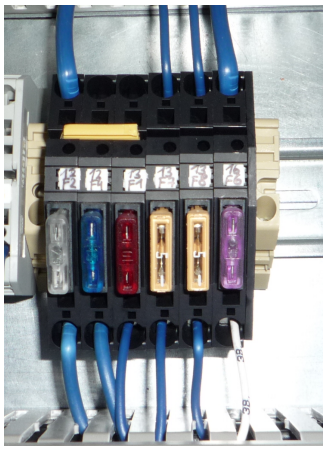


Fig. 55: Automotive fuses

9.21 Battery voltage too low

Machine does not start.

Battery voltage below 20 Volts.

1. Charge battery using a suitable charger.
2. Fit new battery.

9.22 Battery voltage below 23V during start

Possible battery defect.

Battery voltage is too low. Possible difficulties while starting the machine.

1. Check the battery.
2. Contact your RUBBLE MASTER service partner.

9.23 Battery voltage too low during operation.

Possible battery defect.

Battery voltage too low during operation and it is possible that the alternator is not charging the battery properly.

1. Check the battery.
2. Check the alternator.
3. Contact your RUBBLE MASTER service partner.

9.24 Ambient temperature sensor signal malfunction

Machine continues to run.

Reverse air direction of motor cooler not possible.

1. Contact your RUBBLE MASTER service partner.

9.25 Cooling circuit - motor protection switch tripped for cooling circuit pump

Pump for cooling circuit switches off.

Pump blocked or damaged.

1. Check pump rotates freely.
2. Contact your RUBBLE MASTER service partner if motor protection switch is tripped frequently.
3. Press reset button on coolant motor protection switch (after 1 or 2 minutes).

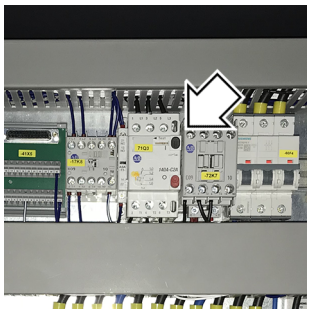
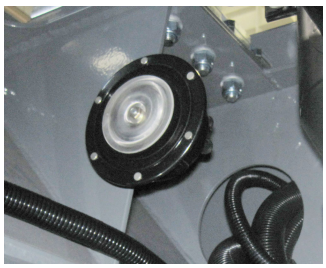


Fig. 56: Motor protection switch for coolant pump

9.26 Cable in horn circuit damaged

Machine continues running.



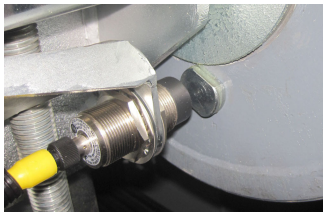
Cable in horn circuit damaged (short circuit)

1. Contact your RUBBLE MASTER service partner.

Fig. 57: Horn

9.27 Proximity switch rotor speed defective

Machine continues running.



The proximity switch for detecting the rotor speed is defective.

1. Replace the proximity switch (original RUBBLE MASTER spare part).

Fig. 58: Proximity switch rotor speed

9.28 Internal communication error

Machine switches off.

Internal PLC communication interface malfunction.

1. Contact your RUBBLE MASTER service partner.

9.29 Cable to horn interrupted

Machine continues running.

Fig. 59: Horn - cable interrupted

Electrical connection to horn interrupted.

1. Check connector on horn.
2. Contact your RUBBLE MASTER service partner.

9.30 Machine identification malfunction

PLC does not start. Machine does not function.

No machine version assigned using inputs/outputs.

1. Contact RUBBLE MASTER service partner.

9.31 PLC expansion module not online

Machine cannot start up.

Error in CAN network to I/O modules.

1. Check connector on I/O modules.
2. Contact RUBBLE MASTER service partner.

9.32 CAN communication error with remote control

Machine continues running.

Fig. 60: Receiver on remote control

Communication with receiver on remote control interrupted.

1. Check the connector on the receiver.
2. Contact your RUBBLE MASTER service partner.

9.33 CAN communication error with PLC expansion module 1

Machine continues running. Operation of oversize grain separator and side discharge belt Mesh screen **not possible.**

Communication with PLC expansion module 1 interrupted.

1. Contact your RUBBLE MASTER service partner.

9.34 Communication with oversize grain separator / Mobile screen defective

Machine continues running. Oversize grain separator, main discharge belt and feed belt switch off.

Fig. 61: OS connector 16-pin

Communication with oversize grain separator interrupted.

1. Check the connector on the oversize grain separator.
2. Contact your RUBBLE MASTER service partner.

9.35 Machine parameter malfunction

Machine cannot start up.

No parameters have been installed.

1. Contact RUBBLE MASTER service partner.

9.36 Machine type coding malfunction

Machine cannot start up.

Machine type coding not recognised.

1. Contact RUBBLE MASTER service partner.

9.37 I/O module 2 is offline

I/O module 2 in CAN-Bus network not detected. Operation of oversize grain separator, side discharge belt or mesh screen not possible.

Communication with PLC expansion module 1 interrupted.

1. Contact RUBBLE MASTER service partner.

9.38 I/O module 3 is offline

I/O module 3 in CAN-Bus network not detected.

1. Contact RUBBLE MASTER service partner.

9.39 Machine hardware not coded

Machine cannot start up.

No machine hardware detected.

1. Contact RUBBLE MASTER service partner.

9.40 Remote control joy stick left malfunction

Crawler gear blocked.

Remote control joy stick left malfunction.

1. Contact RUBBLE MASTER service partner.

9.41 Remote control joy stick right malfunction

Crawler gear blocked.

Remote control joy stick right malfunction.

1. Contact RUBBLE MASTER service partner.

9.42 PLC side 1 overheating

Machine continues to run. Not possible to start up again.

PLC overheating.

1. Switch off machine and allow to cool.

9.43 PLC side 2 overheating

Machine continues to run. Not possible to start up again.

PLC overheating.

1. Switch off machine and allow to cool.

9.44 Ad Blue low

Machine continues running.

Ad Blue level low.

1. Top up with Ad Blue.

9.45 Ad Blue empty

Machine switches off.

Ad Blue tank empty.

1. Top up with Ad Blue.

9.46 Coolant level malfunction

Machine switches off.

Coolant level too low.

1. Top up with coolant (see John Deere description of malfunctions)

9.47 Generator frequency too low

Generator defect.

Generator frequency too low.

1. Check the generator.
2. Contact your RUBBLE MASTER service partner.

9.48 Hydraulic clutch unit thermal contact

Clutch is not activated.

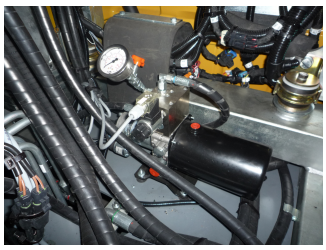


Fig. 62: Thermal contact

Thermal contact has tripped as a result of overheating or defect.

1. Check the connector on the clutch unit.
2. Contact your RUBBLE MASTER service partner.

9.49 CAN 1 warning

An error has occurred at CAN 1.

Interruption to CAN connection or participant is defective.

1. Check CAN cables.
2. Contact your RUBBLE MASTER service partner.

9.50 CAN 1 Bus off

CAN Bus switches off.

Interruption to CAN connection or participant is defective.

1. Check CAN cables.
2. Contact your RUBBLE MASTER service partner.

9.51 CAN 2 warning

An error has occurred at CAN 2.

Interruption to CAN connection or participant is defective.

1. Check the CAN cables.
2. Contact your RUBBLE MASTER service partner.

9.52 CAN 2 Bus off

CAN Bus switches off.

Interruption to CAN connection or participant is defective.

1. Check CAN cables.
2. Contact your RUBBLE MASTER service partner.

9.53 Hydraulic clutch does not reach operating pressure

Machine switches off.

Hydraulic clutch does not reach required pressure within the specified time of 10 seconds. The machine switches off because there is a risk of damaging the hydraulic clutch if the pressure is too low.

This can be caused by a leak in the system, a defective pump or a defective clutch valve.

1. Check the clutch for leaks.
2. Contact your RUBBLE MASTER service partner.

9.54 Metal detector not active

After starting, no signal is received from metal detector. The feed belt is blocked.

This can be caused by a cable break or a defective metal detector.

1. Check the wiring on the metal detector.
2. Contact your RUBBLE MASTER service partner.

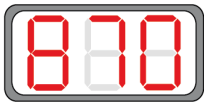
9.55 Automatic bypass not closed

When activating automatic mode, the bypass was not in the closed limit position. The

automatic mode is blocked.

1. Close the bypass manually.
2. Contact your RUBBLE MASTER service partner.

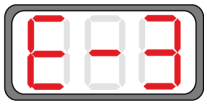
9.56 Power supply - circuit switch error



Circuit switch defect.

1. Contact RUBBLE MASTER service partner.

9.57 Start disable



Machine (diesel engine) cannot be started up again.

The start disable is active for 20 seconds after the diesel engine is switched off.

1. Wait 20 seconds and start the machine again.