## TB0251 Fault finding servo drives

Fault finding checklist for servo problems

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## **Technical Bulletin**

TB Number:	251
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Machine:	All
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Circulate to:	Service
Title:	Fault finding servo drives

## Symptoms

Code	Description
	Error message Stall
	Error message Following error
	Error message Controller error
	Neuron has encountered a problem
	Grinding noise from motor / gearbox
	Motor Jerkiness
	Flashing lights on servo drive
	Fuse tripe out
	No movement of an axis
	Inconsistent accuracy
	Axis will not stop
	Will not initialise
	Motor getting hot
	Snapping tools

## Actions / Checks

Code	Description	Tick
	Check journals not seized	
	Check grubscrew and keyway	
	Check backlash	
	Check lights on drive unit - look up error code if possible	

Test with jog meter	
Put in setup mode and test manually	
Check operator training / understanding	
Check clamps returned to safe position	
Check rollers free to turn	
Check for swarf behind bottom roller retracting CLOUI on ZX	
Check operator loaded correct size	
Check correct tool fitted and not blunt	
Check zip gate assemblies or clackers for swarf build up	
Check gripper height	
Check beam rollers height	
Check mid clamp switch working ok	
Check input voltage / phases	
Check clutch not stuck on	
Check G axis alignment / belt	
Check for blockages in way of axis	
Check end of profile does not hit anything on way in and out	
Check datum switches work reliably	
Check shaft not broken / gears not fallen off	
Check datum positions in parameter files not causing axis to hit end of travel	
Check datum striker plate / sensor plate, not tapered	
Datum to material setting on saw side causing bottoming out	
Wrong loadpos / eject pos files	
Break in cable	
Samsung white plug pins not plugged together / burnt out	
Encoder plug in drive not inserted correctly	
Drive on contactor contacts not working correctly	
Gain parameters / drive tuning	
Check last time it is serviced	
Swap motor for similar motor	
Swap drive for similar drive	
Blue eject bar not back / wobbling	
Clamp pressures	
Blue channel bar pressure and function	
	Put in setup mode and test manually   Check operator training / understanding   Check clamps returned to safe position   Check rollers free to turn   Check operator loaded correct size   Check correct tool fitted and not blunt   Check gripper height   Check beam rollers height   Check dump switch working ok   Check dutch not stuck on   Check datum switch working on way in and out   Check datum switches work reliably   Check datum switches in parameter files not causing axis to hit end of travel   Check datum positions in parameter files not causing out   Wrong loadpos / eject pos files   Break in cable   Samsung white plug pins not plugged together / burnt out   Encoder plug in drive not inserted correctly   Drive on contactor contacts not working correctly   Gain parameters / drive tuning   Check last time it is serviced   Swap motor for similar motor   Swap drive for similar drive   Blue eject bar not back / wobbling   Clamp pressures