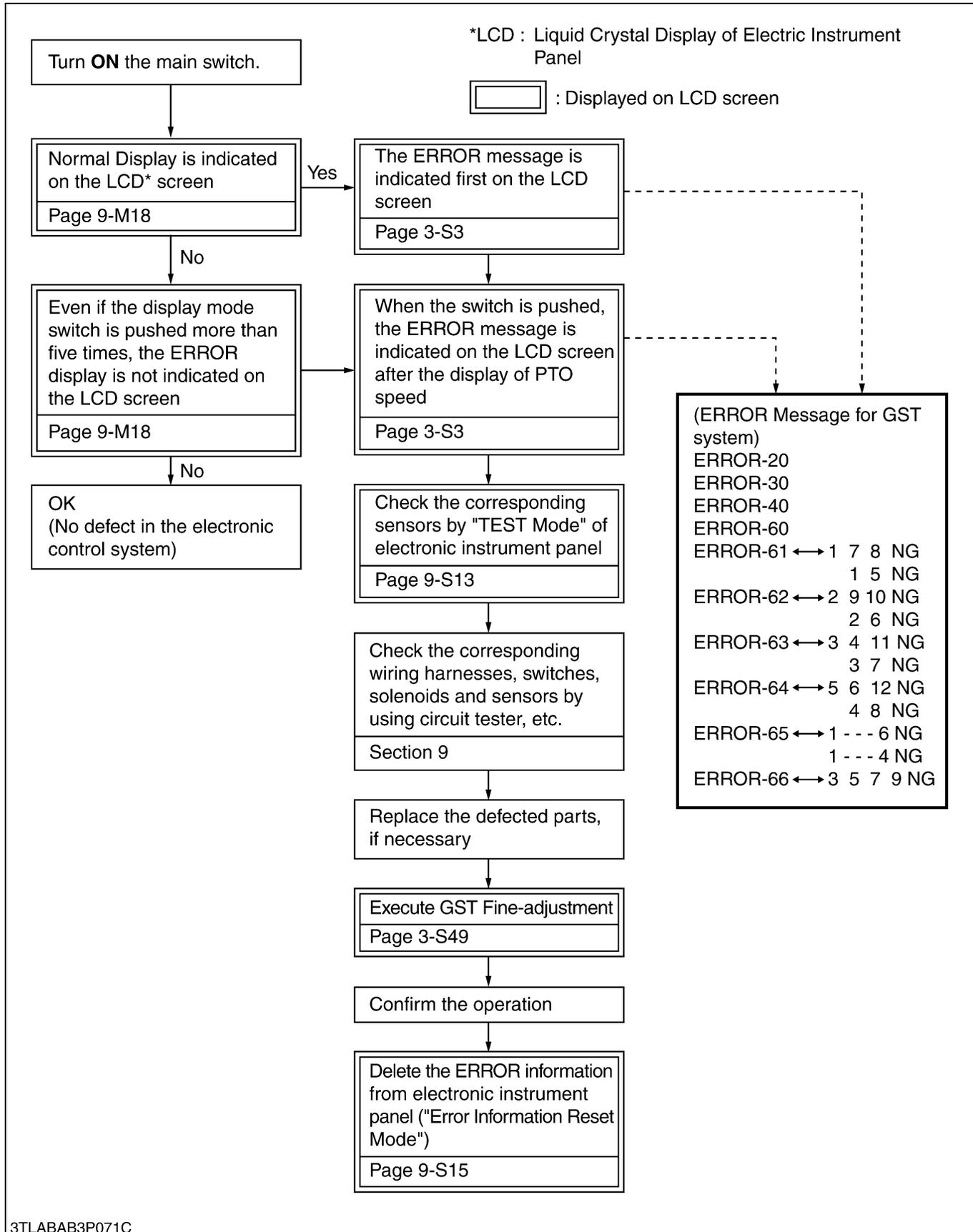
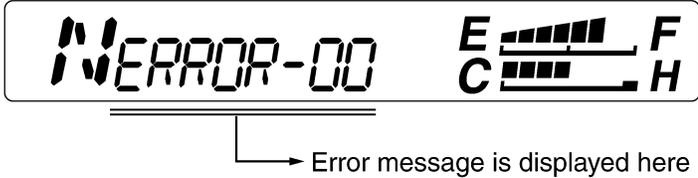


[2] GST SYSTEM

■ Electrical Diagnosis by Electronic Instrument Panel (IntelliPanel)



■ Error Display

				
Display on LCD Screen	Trouble Item	Probable Cause	Solution	Reference Page
	Communication error between ECU and electronic instrument panel	<ul style="list-style-type: none"> • Fuse blown out • Communication line between ECU and electronic instrument panel is broken or short-circuited • No signals from ECU for longer than 5 seconds (error cleared if signal sent and received later) • ECU defective 	<ul style="list-style-type: none"> • Check fuse • Check ECU connector • Check communication line between ECU and electronic instrument panel at ECU connector • Replace ECU 	9-S27 9-S27 9-S31 9-S28
	ECU memory device has failed	<ul style="list-style-type: none"> • ECU memory device failure 	<ul style="list-style-type: none"> • Replace ECU 	9-S28
	Input voltage to lever sensor from ECU is failed	<ul style="list-style-type: none"> • Lever sensor input voltage drop below 2.6 V for 0.1 second or more • Ground wire of lever sensor short-circuited 	<ul style="list-style-type: none"> • Check ground wire • Check input voltage at ECU connector • Check sensor connector 	9-S27 9-S29 –
	GST lever sensor is failed	<ul style="list-style-type: none"> • Lever sensor output terminal is out of adjustment • Lever sensor output wire terminal broken or short-circuited • Input line broken • Lever sensor defective 	<ul style="list-style-type: none"> • It is possible to run at its selected speed position until engine is stopped. • Check sensor connector • Check sensor voltage by Test mode (Mode A) • Check lever sensor wire connector (voltage) or check sensor resistance • Replace lever sensor 	– – 9-S13 9-S29, S31 9-M15
	Proportional reducing valve failure	<ul style="list-style-type: none"> • Output voltage of proportional reducing valve terminal or return current is out of specification • Valve wire broken or short-circuited • Proportional reducing valve defective 	<ul style="list-style-type: none"> • Check connector of proportional reducing valve • Check proportional reducing valve resistance at valve or ECU connector • Check grounding wire • Connect emergency connector and move 	– 9-S30, S32 9-S27 9-M17

Display on LCD Screen	Trouble Item	Probable Cause	Solution	Reference Page
	Solenoid 1 failure (At forward or neutral)	<ul style="list-style-type: none"> • Solenoid output terminal's voltage is out of specification • Solenoid broken or short-circuited • Wiring harness broken or short-circuited • Grounding plate of solenoid is poor contact with chassis 	<ul style="list-style-type: none"> • Able to travel at speeds other than 1, 7 and 8 (Forward) or 1 and 5 (Reverse) • Check the wiring connector of solenoid • Check a resistance between solenoid and GND • Replace GST valve 	—
	Solenoid 1 failure (At reverse)			9-S30, S32 3-S79
	Solenoid 2 failure (At forward or neutral)			—
	Solenoid 2 failure (At reverse)			9-S30, S32 3-S79
	Solenoid 3 failure (At forward or neutral)			—
	Solenoid 3 failure (At reverse)			9-S30, S32 3-S79

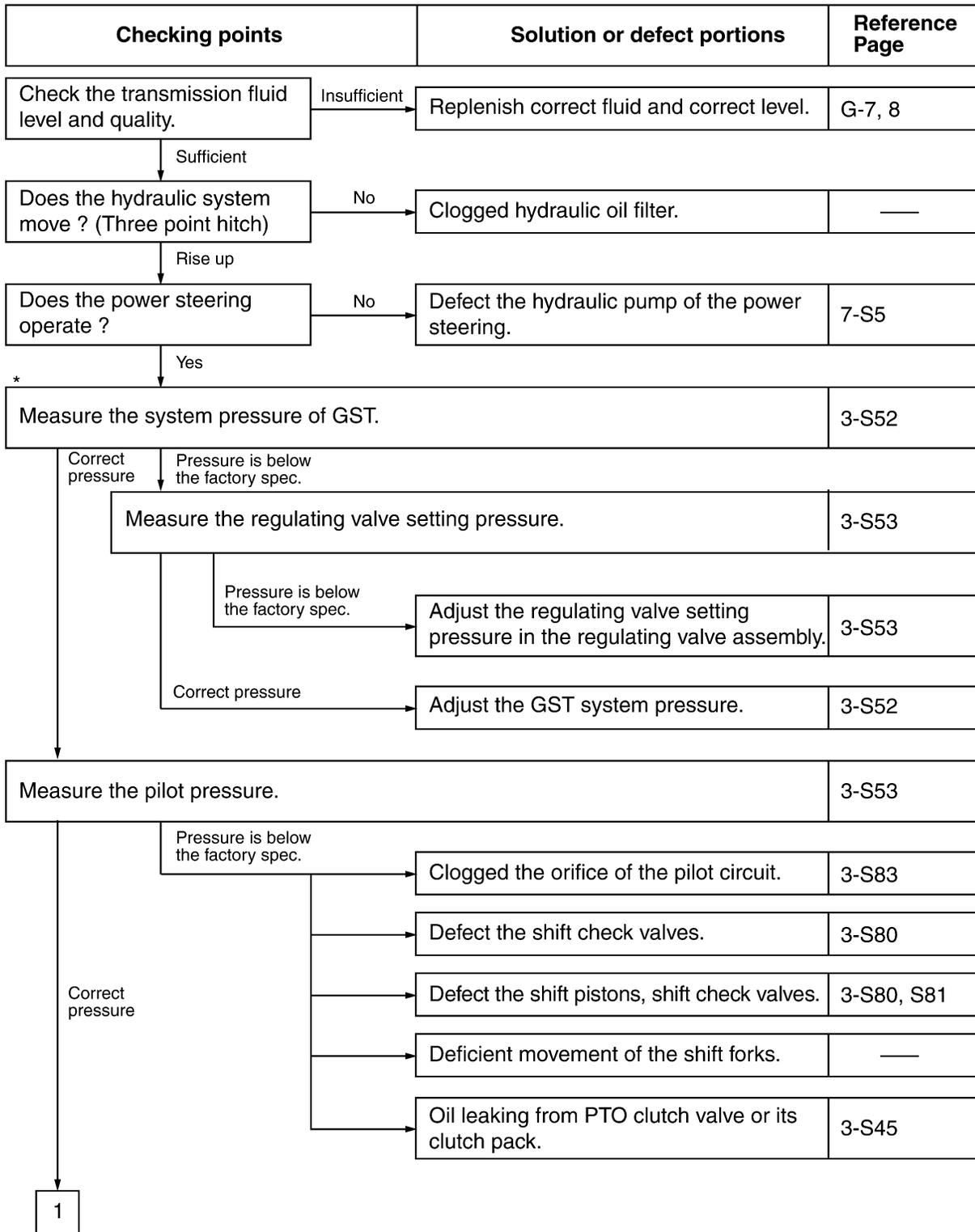
W1011845

Display on LCD Screen	Trouble Item	Probable Cause	Solution	Reference Page
	Solenoid 4 failure (At forward or neutral)	<ul style="list-style-type: none"> • Solenoid output terminal's voltage is out of specification • Solenoid broken or short-circuited • Wiring harness broken or short-circuited • Grounding plate of solenoid is poor contact with chassis 	<ul style="list-style-type: none"> • Able to travel at speeds other than 5, 6 and 12 (Forward) or 4 and 8 (Reverse) • Check the wiring connector of solenoid • Check a resistance between solenoid and GND • Replace GST valve 	–
	Solenoid 4 failure (At reverse)			–
	Solenoid 6 (Main range gear shift) failure (At forward or neutral)			–
	Solenoid 6 (Main range gear shift) failure (At reverse)			–
	Solenoid 5 (Sub-range gear shift) failure			–
			<ul style="list-style-type: none"> • Able to travel at speeds other than 3, 5, 7 and 9 (Forward) • Check the wiring connector of solenoid • Check a resistance between solenoid and GND • Replace GST valve 	–

W1087197

■ Error Message Does not Indicate on LCD

1. The tractor does not move while shifted.



3TLABAB3P089B

Checking points	Solution or defect portions	Reference Page	
1			
Measure the GST clutch pressure.		3-S54	
Correct pressure	Pressure is below the factory spec.	Defect the pressure switch.	9-S31
		Clogged the filter of proportional reducing valve.	3-S83
		Defect the clutch valve.	3-S82
		Defect the GST clutch pack.	3-S67
		Defect the GST clutch pack.	3-S67
		Defect the synchronizer units.	3-S64, S69
		Defect the gears, on the shaft.	—

2. The time needed to start the tractor.

Check the transmission fluid level and quality.	Insufficient	Replenish correct fluid and correct level.	G-7, 8
Check the * mark onwards of "1. The tractor does not move while shifted".	Sufficient	Improperly adjusted GST valve.	3-S50
		Improperly adjusted shifting shock.	3-S51
		Defect oil temperature sensor.	9-S32

3. Quick engagement while starting or large shock while shifting.

Check the transmission fluid level and quality.	Insufficient	Replenish correct fluid and correct level.	G-7, 8
Check the * mark onwards of "1. The tractor does not move while shifted".	Sufficient	Improperly adjusted GST valve.	3-S50
		Improperly adjusted shifting shock.	3-S51
		Defect oil temperature sensor.	9-S32
		Defect pressure switch.	9-S31