

TROUBLE SHOOTING - BASIC PROCEDURES

1990 Volvo 740

BASIC STARTER TROUBLE SHOOTING CHART

CONDITION	POSSIBLE CAUSE	CORRECTION
Starter Fails to Operate	Dead battery or bad connections between starter and battery	Check battery charge and all wires and connections to starter
	Ignition switch faulty or misadjusted	Adjust or replace ignition switch
	Open circuit between starter switch ignition terminal on starter relay	Check and repair wires and connections as necessary
	Starter relay or starter defective	See Testing in STARTER article
	Open solenoid pull-in wire	See Testing in STARTER article
Starter Does Not Operate and Headlights Dim	Weak battery or dead cell	Charge or replace battery as necessary
	Loose or corroded battery connections	Check that battery connections are clean and tight
	Internal ground in starter windings	See Testing in STARTER article
	Grounded starter fields	See Testing in STARTERS
	Armature rubbing on pole shoes	See STARTER article

STARTER - BOSCH

1990 Volvo 740

STARTER DOES NOT CRANK ENGINE

1) Ensure battery is fully charged. Ensure electrical and ground connections are clean and tight. With ignition switch in crank position, measure voltage at starter solenoid spade terminal. If reading is at least 8 volts, go to step 3).

2) If reading is less than 8 volts, measure voltage at ignition switch. If reading is at least 8 volts, check wiring between ignition switch and starter solenoid. If reading is not at least 8 volts, replace ignition switch.

3) Measure voltage at field (starter) terminal of starter solenoid. If reading is at least 8 volts, repair or replace starter. If reading is not at least 8 volts, replace starter solenoid.

NOTE: On vehicles with automatic transmissions, also check park/neutral switch.