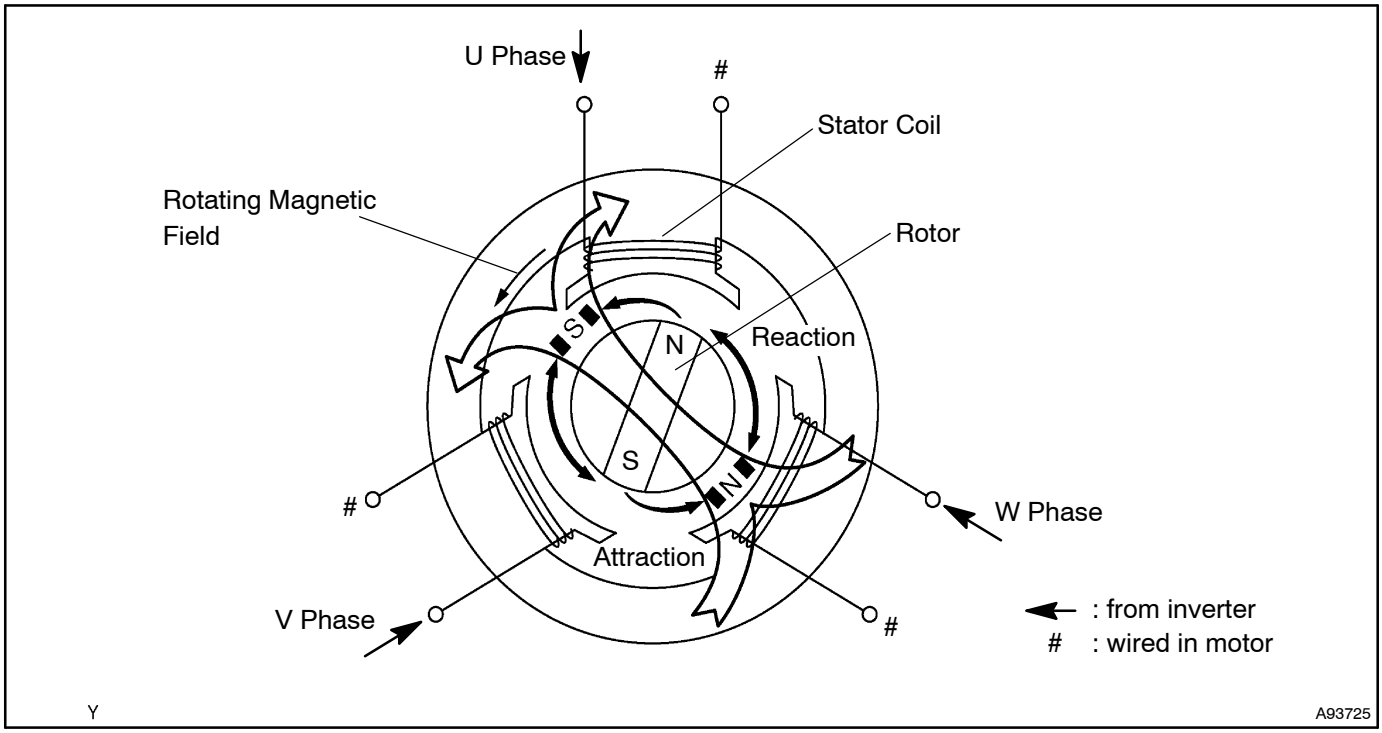
DTC P0A90/251 DRIVE MOTOR "A" PERFORMANCE

CIRCUIT DESCRIPTION

When three–phase alternating current flows through the three–phase windings of the stator coil, a rotating magnetic field is generated in the motor. The system controls the rotating magnetic field in accordance with the rotating position and speed of the rotor. As a result, the permanent magnets provided on the rotor are pulled in the rotating direction, which cause the generation of torque.

The generated torque is practically proportionate to the amount of current. Therefore, the system controls the speed of the motor by regulating the frequency of the alternating current. Furthermore, the system properly controls the rotating magnetic field and the angle of the rotor magnets in order to generate high torque in an efficient manner, even at high speeds.



DTC No.	INF Code	DTC Detection Condition	Trouble Area
P0A90	251	MG2 magnetic force deterioration or same phase short circuit	• Hybrid vehicle motor

INSPECTION PROCEDURE

1	READ OUTPUT DTC(HYBRID CONTROL)

(a) Connect the intelligent tester II to the DLC3.
(b) Turn the power switch ON (IG).
(c) Turn the intelligent tester II ON.
(d) On the intelligent tester II, enter the following menus: Powertrain / Hybrid Control / DTC.
(e) Read DTCs.

Result: DTC P0A90 (INF 251) and other DTCs are output

HINT:

If any other codes besides P0A90 (INF 251) are output, perform troubleshooting for those DTCs first.

YES → GO TO RELEVANT DTC CHART (See page 05–268)

NO → REPLACE HYBRID VEHICLE MOTOR ASSY