

Is the resistance greater than 10K ohms?

Yes	No
GO to KC32 .	REPAIR the short circuit. Clear the PCM DTCs. REPEAT the self-test.

KC32 CHECK THE IES FOR A SHORT TO VOLTAGE

Measure the voltage between:

(+) BCM-C Connector, Harness Side	(-)
IES	Ground

Is any voltage present?

Yes	No
REPAIR the short circuit. Clear the PCM DTCs. REPEAT the self-test.	INSTALL a new BCM. REFER to the service information , Multifunction Electronic Modules.

PINPOINT TEST KF: FAN CONTROL RELAYS > INTRODUCTION

This pinpoint test is intended to diagnose the following:

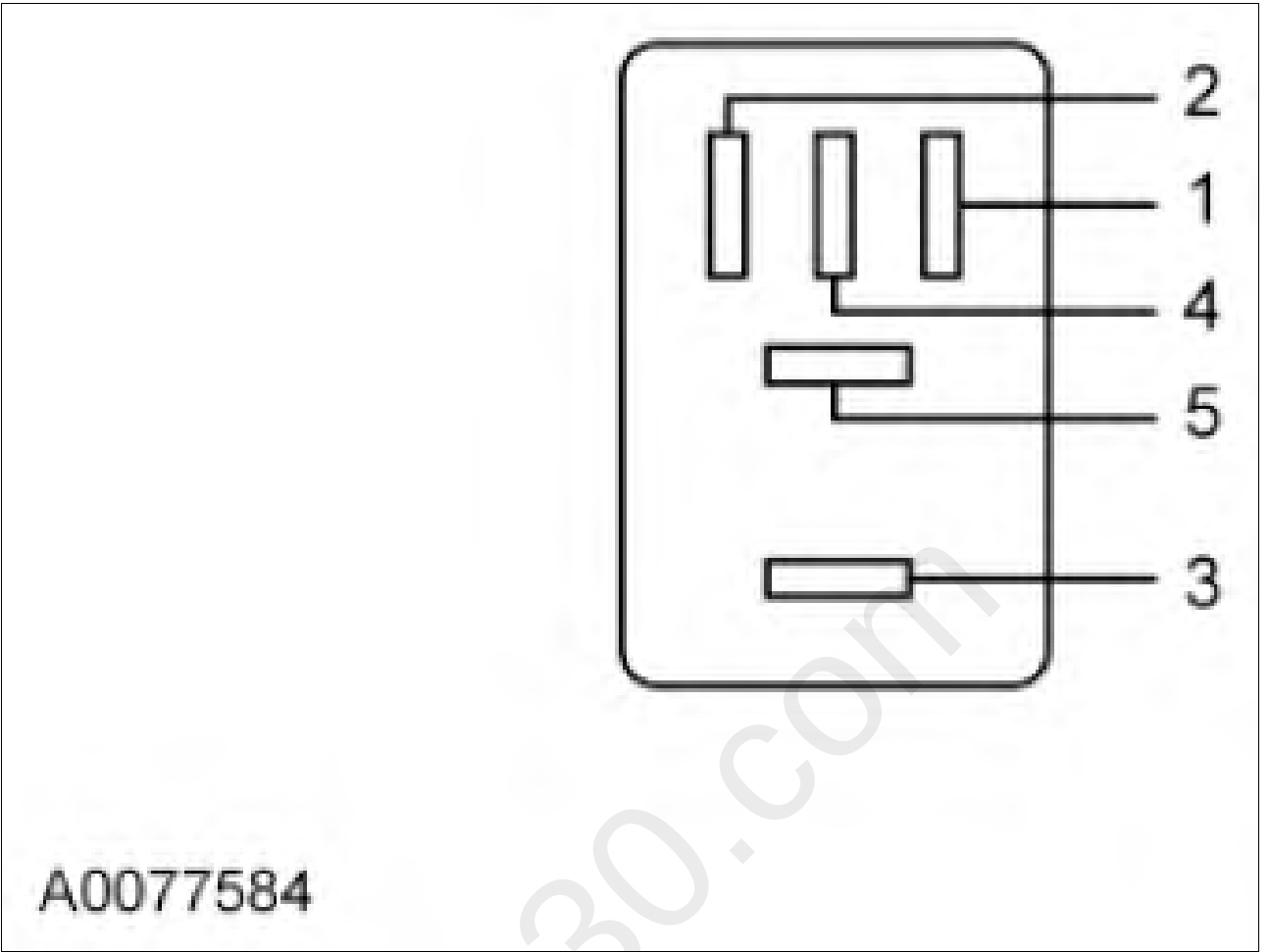
- CAC fan relay
- fan control (FC1, FC2, FC3, FC4, FC5) relays
- harness circuits: CACCF, LFC, MFC, HFC and VPWR
- PCM (12A650)

Although the PCM output circuits are called LFC, MFC, and HFC, cooling fan operation is controlled by a combination of these outputs.

COOLING FAN REFERENCE

	PCM Output	Low Speed	Medium Speed	High Speed
Vehicles With 5 Fan Control Relays	LFC	ON	ON	ON
	MFC	OFF	ON	ON
	HFC	OFF	OFF	ON
All others	LFC	ON	N/A	ON
	HFC	OFF	N/A	ON

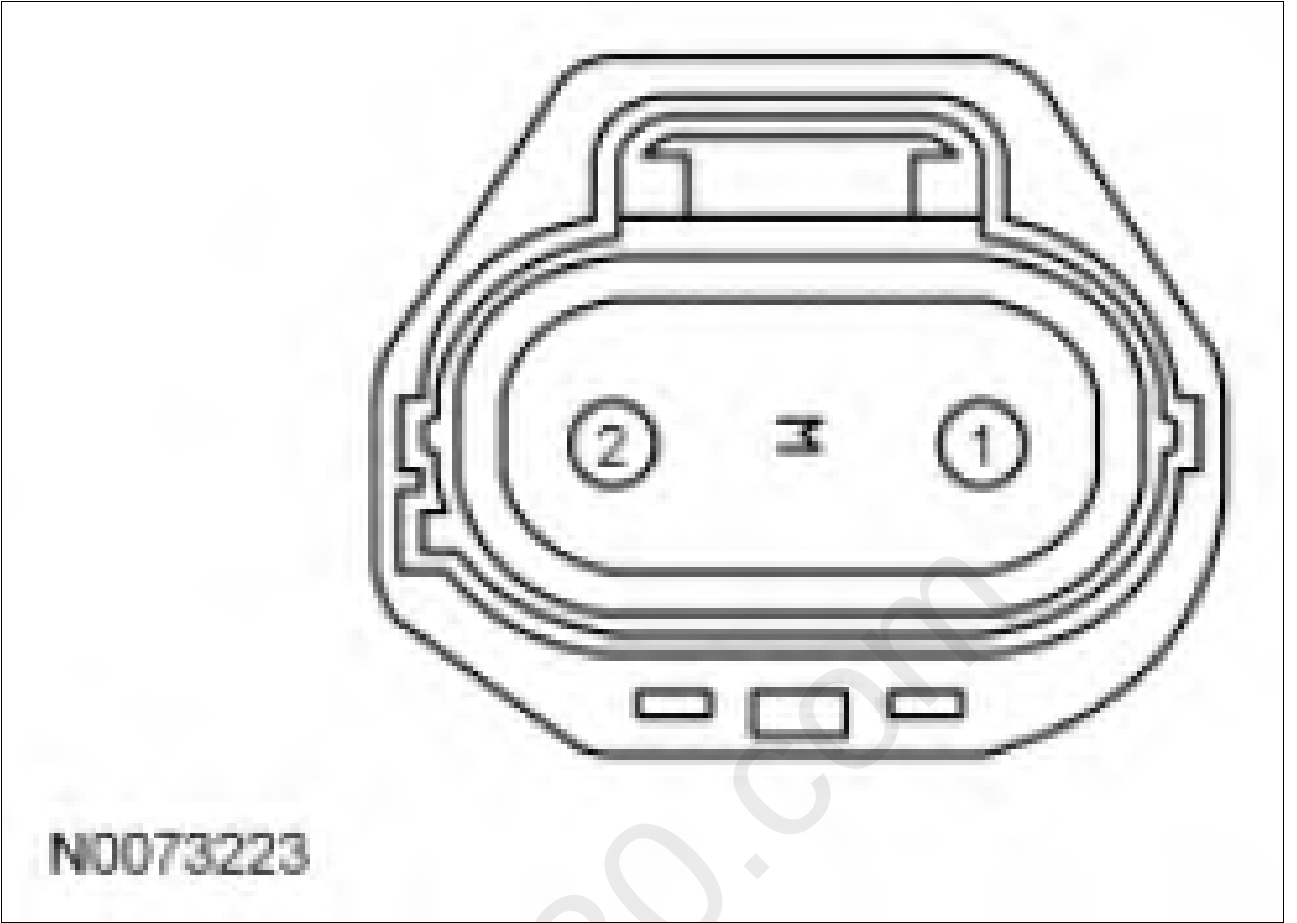
Fig 1: Identifying Charge Air Cooler Cooling Fan Relay Connector



Courtesy of FORD MOTOR CO.

Pin	Circuit
5	FANPWR (Fan Power)
2	CACCF (Charge Air Cooler Cooling Fan)
3	B+ (Battery Positive Voltage)
1	VPWR (Vehicle Power)

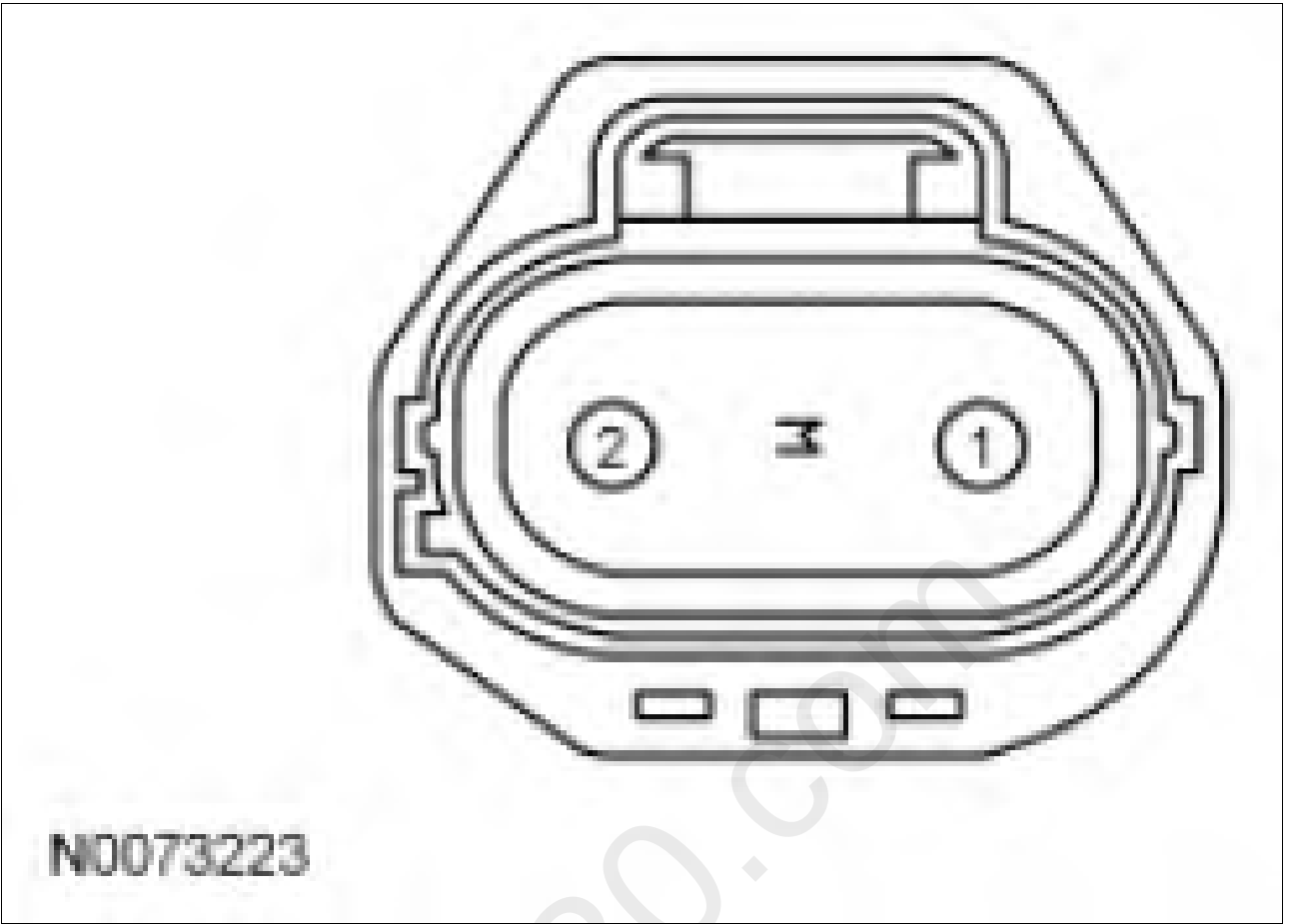
Fig 2: Identifying Charge Air Cooler Cooling Fan Motor Connector



Courtesy of FORD MOTOR CO.

Pin	Circuit
2	GND (Ground)
1	FANPWR (Fan Power)

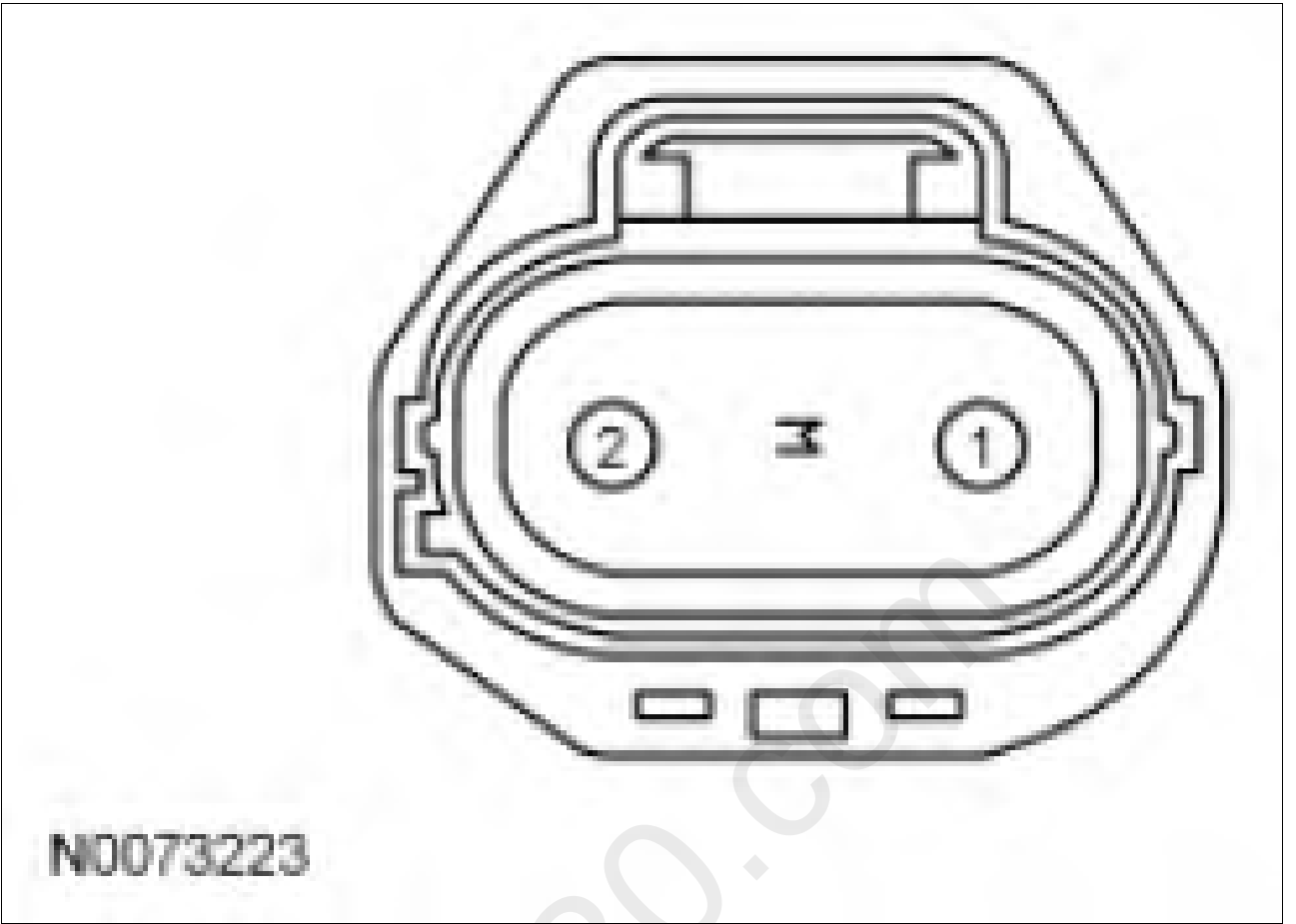
Fig 3: Identifying Cooling Fan Motor 1 Connector



Courtesy of FORD MOTOR CO.

Vehicle	Connector	Pin	Circuit
Fiesta	A	1 2	GND FANPWR
All other vehicles	A	2 1	FC FANPWR

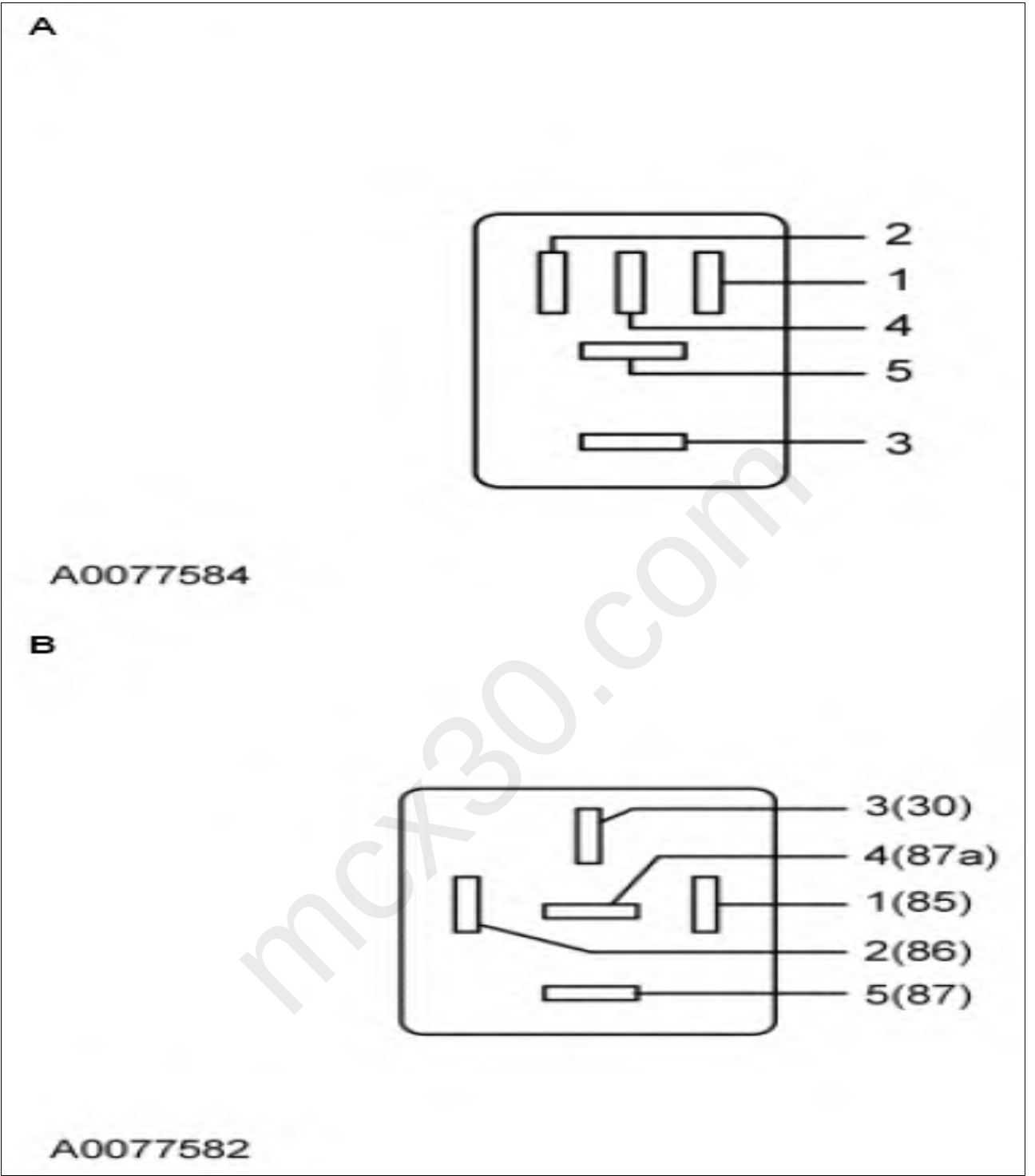
Fig 4: Identifying Cooling Fan Motor 2 Connector



Courtesy of FORD MOTOR CO.

Pin	Circuit
2	GND (Ground)
1	FANPWR (Fan Power)

Fig 5: Identifying Fan Control 1 (FC1) Relay Connector



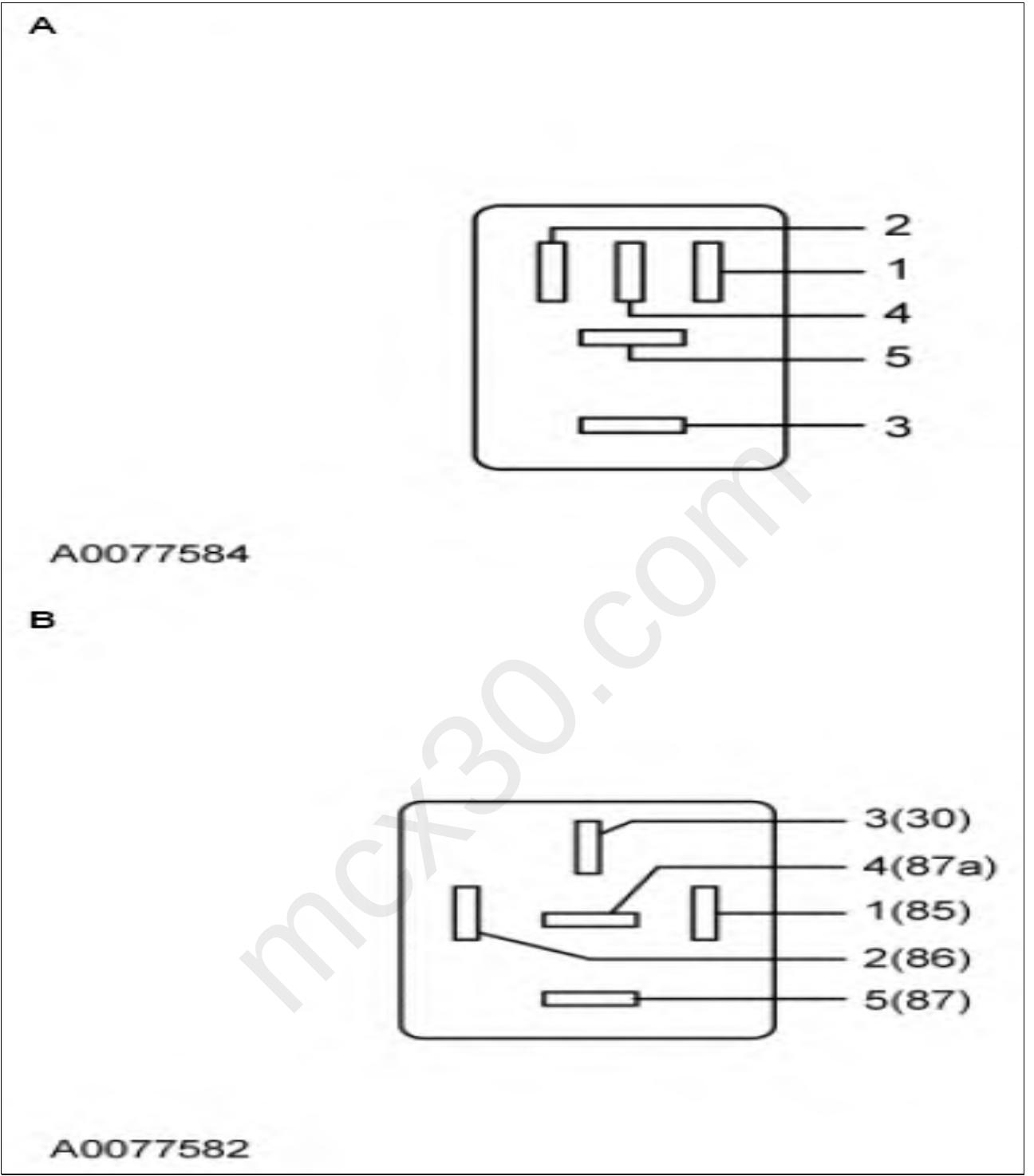
Courtesy of FORD MOTOR CO.

Vehicle	Connector	Pin	Circuit
Expedition, Edge, F-150, Fiesta,	A	5 2 3 1	FANPWR LFC B+ VPWR

Flex, Fusion, MKT, MKZ, Navigator			
Explorer, MKS, Mustang, Taurus	A	5 1 3 2	FANPWR LFC B+ VPWR
MKC, Transit	B	5 2 3 1	FANPWR LFC B+ VPWR

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Fig 6: Identifying Fan Control 2 (FC2) Relay Connector



Courtesy of FORD MOTOR CO.

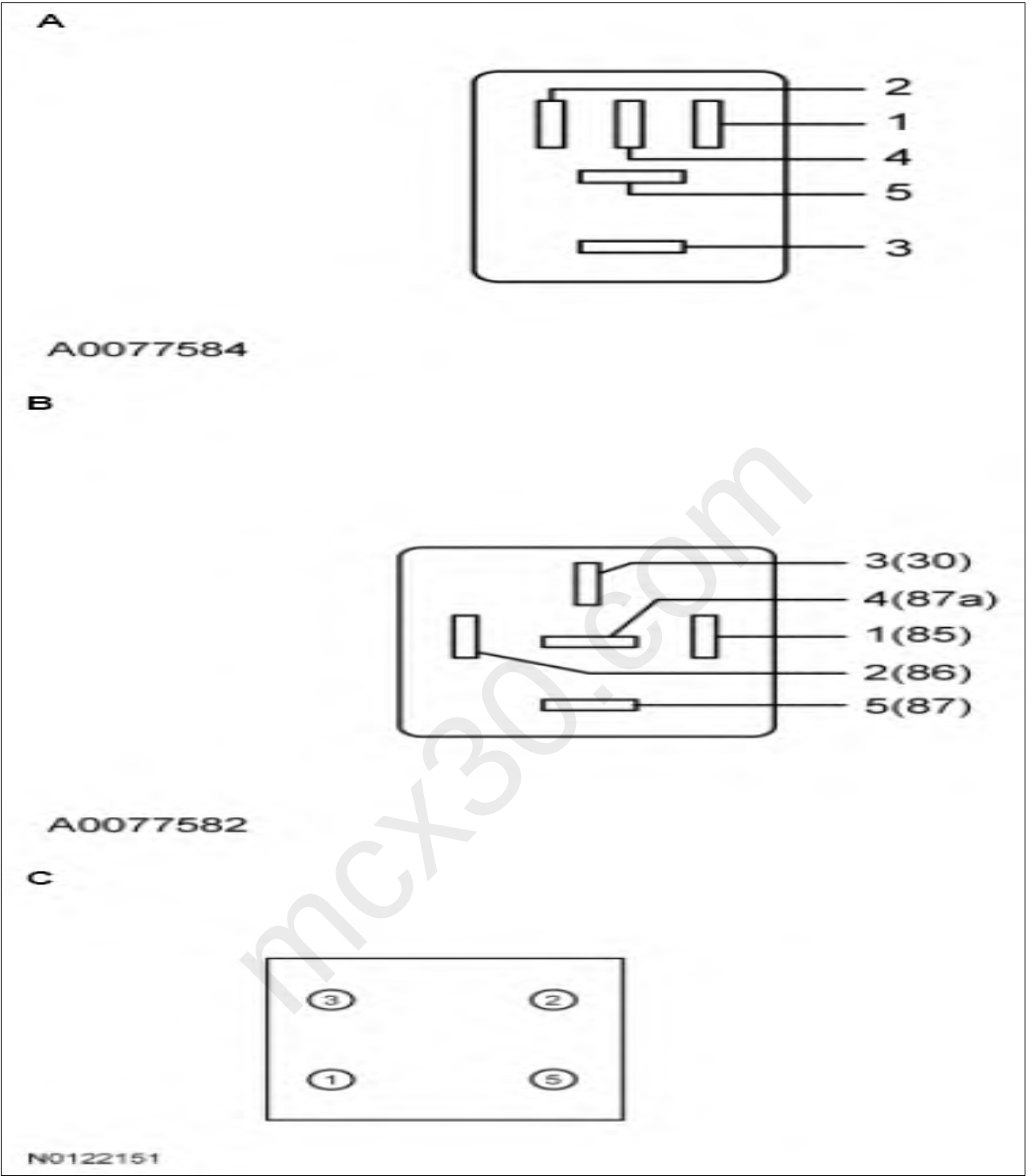
Vehicle	Connector	Pin	Circuit
Explorer, Fusion, MKS, MKZ,	A	5 4 3 1	GND FANPWR FC HFC

Mustang, Taurus		2	VPWR
Edge, F-150	A	5 4 3 2 1	GND FANPWR FC HFC VPWR
Expedition, Flex, MKC With 3 Fan Relays, MKT, Navigator	B	5 4 3 2 1	GND FANPWR FC HFC VPWR
MKC With 5 Fan Relays	B	4 5 2 1, 3	FANRSTR1 FANPWR MFC VPWR
Transit	B	3 4 2 1	FANPWR FC HFC VPWR



NOTE: The HFC circuit may be wired to the FC3 and FC5 relays. Refer to the service information for additional information.

Fig 7: Identifying Fan Control 3 (FC3) Relay Connector



Courtesy of FORD MOTOR CO.

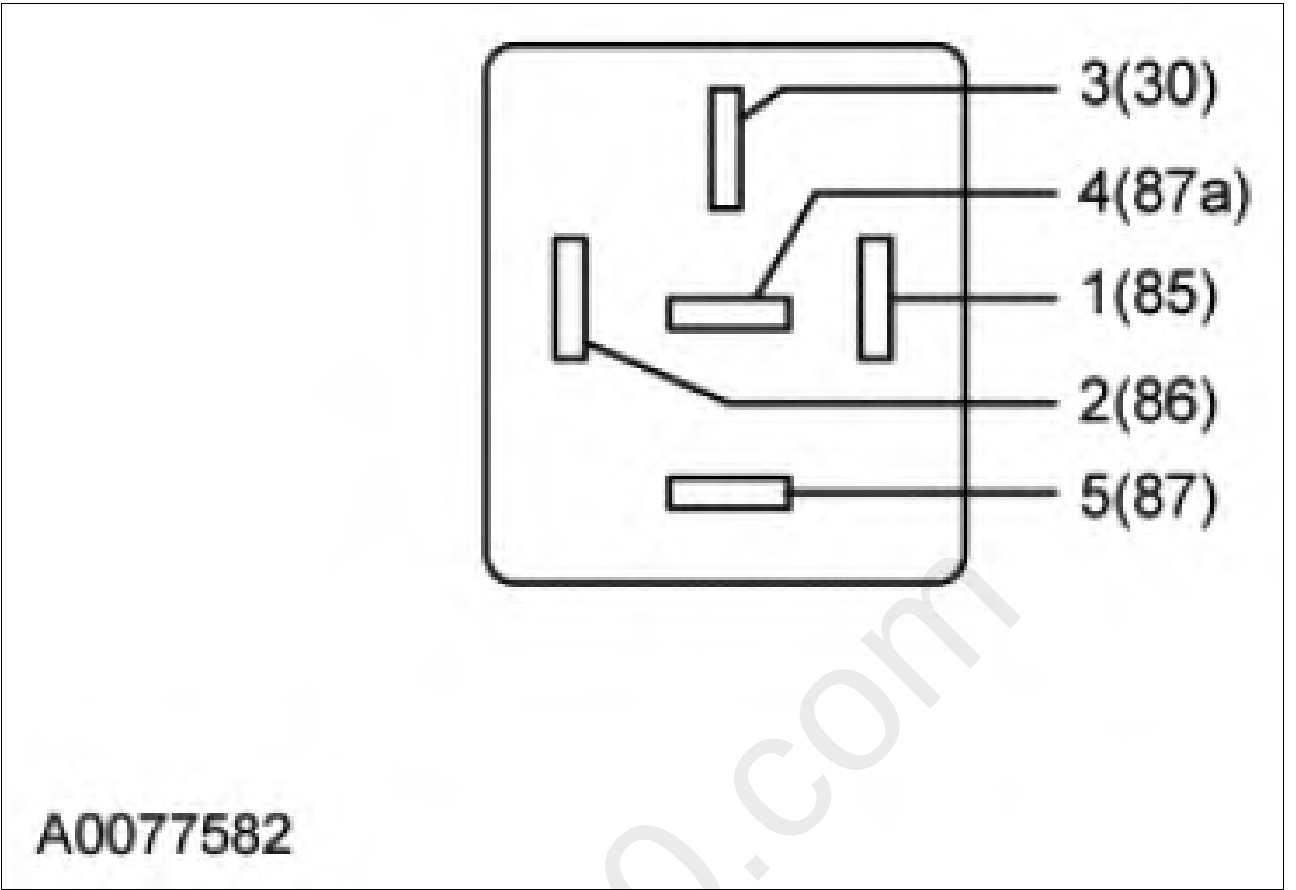
Vehicle	Connector	Pin	Circuit
Expedition, Edge, F-150, Navigator	A	5 2 3 1	FANPWR HFC B+ VPWR

Explorer, MKS	B	5 1 3 2	FANPWR HFC B+ VPWR
Fiesta, Flex, MKC With 3 Fan Relays, MKT	B	5 2 3 1	FANPWR HFC B+ VPWR
Fusion, MKZ	C	3 2 5 1	FANPWR HFC B+ VPWR
MKC With 5 Fan Relays	A	5 3 4 2 1	GND FC FANPWR HFC VPWR
Mustang	A	3 1 5 2	FANPWR HFC B+ VPWR
Transit	B	5 3 2 1	HFC VPWR GND FC



NOTE: The MFC circuit may be wired to the FC2 and FC4 relays. Refer to the Wiring Diagrams service information for additional information.

Fig 8: Identifying Fan Control 4 (FC4) Relay Connector



Courtesy of FORD MOTOR CO.

Pin	Circuit
5	FANPWR (Fan Power)
4	FANRSTR2 (Fan Resistor 2)
2	MFC (Medium Fan Control)
1, 3	VPWR (Vehicle Power)