

Powertrain Management: All Technical Service Bulletins

Spark Plug Wire - Miss/Buck/Spark Knock

Article No.

94-4-10

02/23/94

- ^ BUCK/JERK - 5.0L - SPARK PLUG WIRE ROUTING AND FIRING ORDER
- ^ IGNITION - 5.0L - SPARK PLUG WIRE ROUTING AND FIRING ORDER
- ^ MISS - 5.0L - SPARK PLUG WIRE ROUTING AND FIRING ORDER
- ^ SPARK KNOCK - 5.0L - SPARK PLUG WIRE ROUTING AND FIRING ORDER
- ^ SURGE - 5.0L - SPARK PLUG WIRE ROUTING AND FIRING ORDER
- ^ ENGINE - 5.0L - SPARK PLUG WIRE ROUTING AND FIRING ORDER

LIGHT TRUCK:

1987-94 BRONCO, E-150, E-250, F-150, F-250

ISSUE:

Engine miss, spark knock, buck/jerk, surge and other driveability concerns may be caused by induction crossfire. This occurs because of improperly routed spark plug wires.

ACTION:

If spark plug replacement is performed, the correct firing order and spark plug wire routing is essential to prevent the possibility of induction crossfire between cylinders. Refer to the following procedures for inspection of the spark plug wire routing and firing order. Properly reroute the spark plug wires if required.

FIRING ORDER

- ^ The firing order for 1987-1993 vehicles is 1-5-4-2-6-3-7-8. If # 7 and # 8, or # 2 and # 4 spark plug wires are routed next to each other at the separation bracket, an induction crossfire condition can occur.
- ^ The firing order for 1994 vehicles is 1-3-7-2-6-5-4-8. On these vehicles the # 1 and # 3, or # 5 and # 6 spark plug wires must be separated to eliminate the possibility of an induction crossfire.
- ^ To eliminate the possibility of the coil wire becoming disconnected, route the coil wire under the spark plug wires at the distributor cap.

1987-1993 VEHICLES

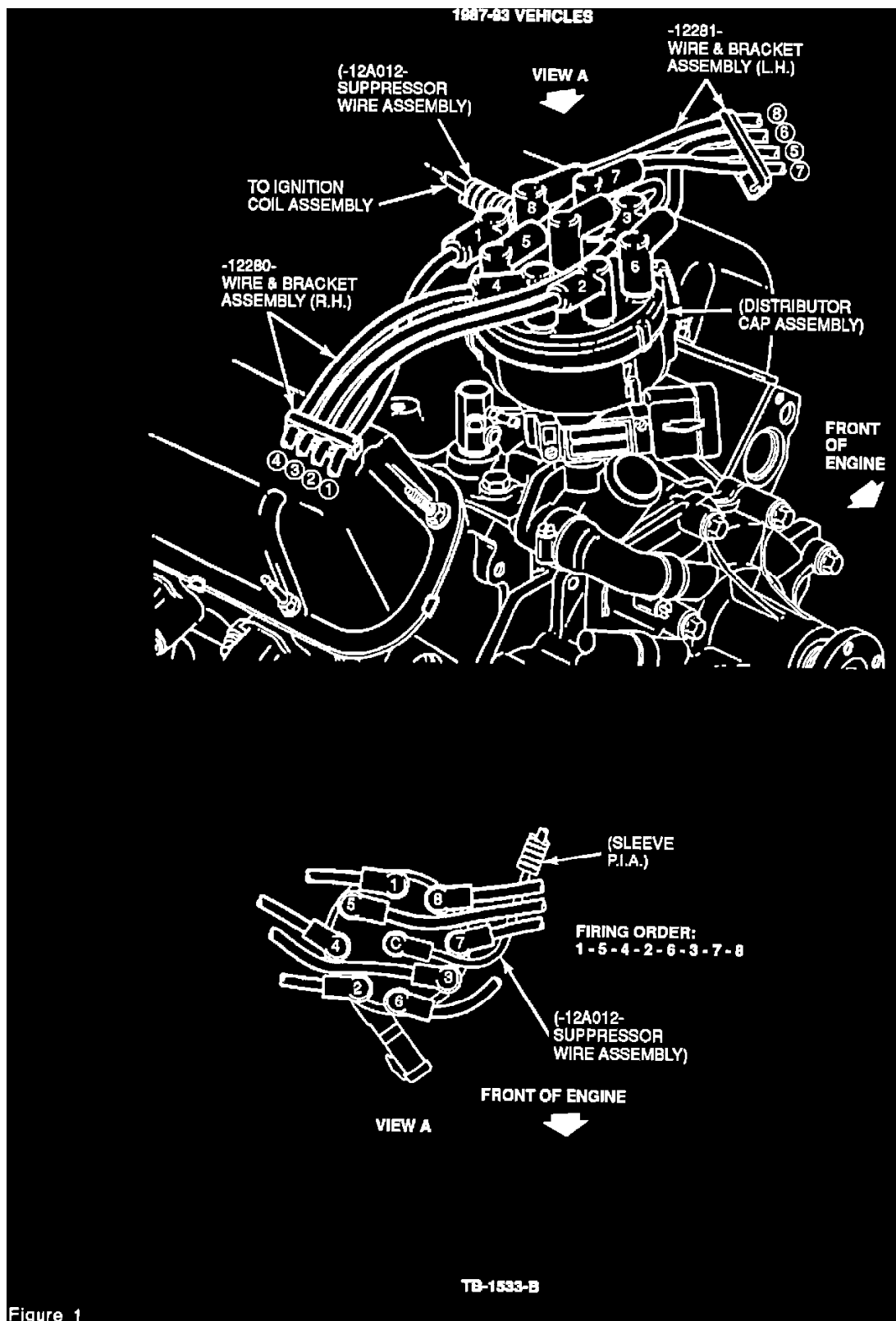


Figure 1

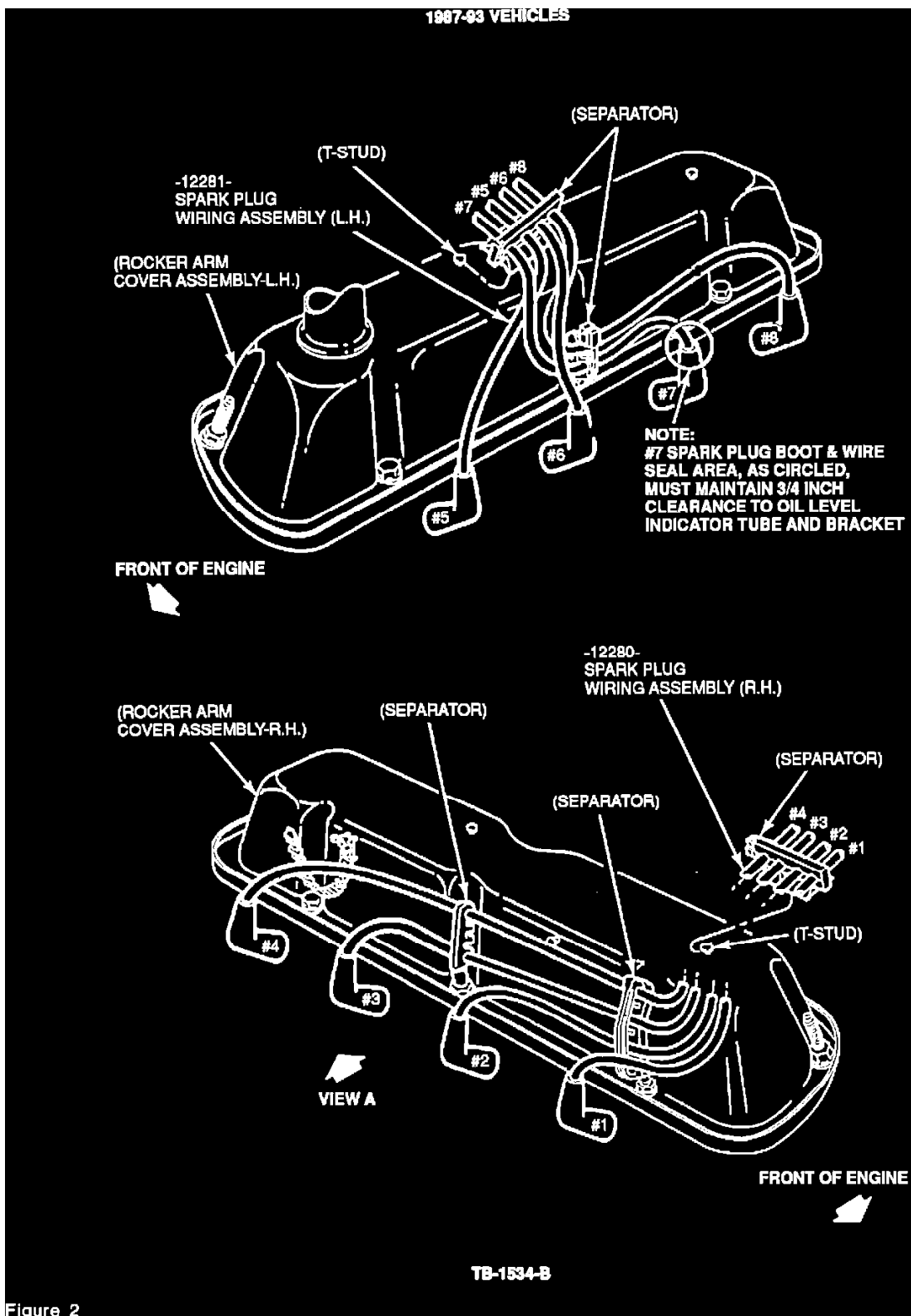


Figure 2

1. Inspect the routing of the spark plug wires. Refer to Figures 1 and 2.
2. Make any spark plug wiring corrections as required.

1994 VEHICLES

BRONCO OR F-SERIES

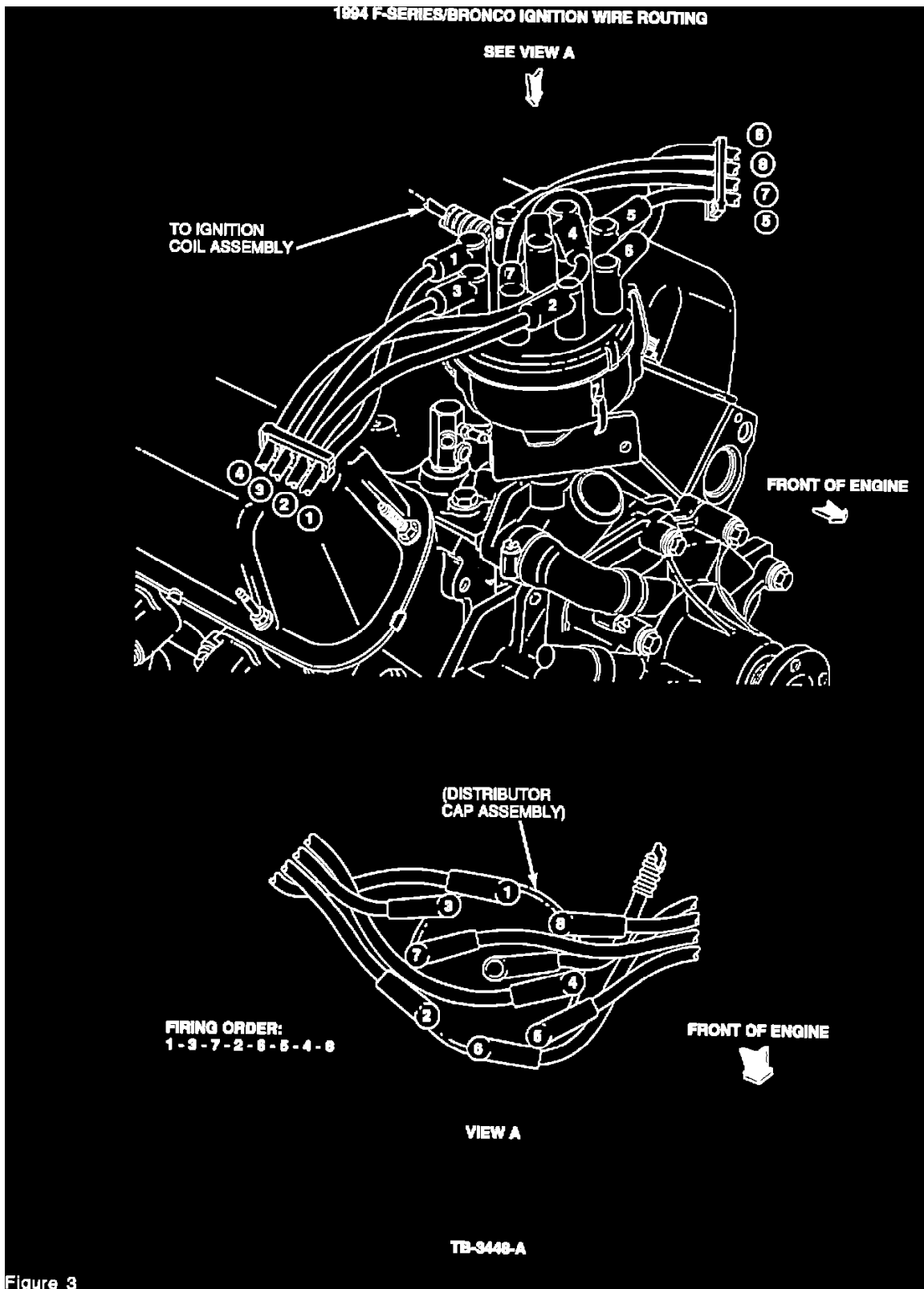


Figure 3

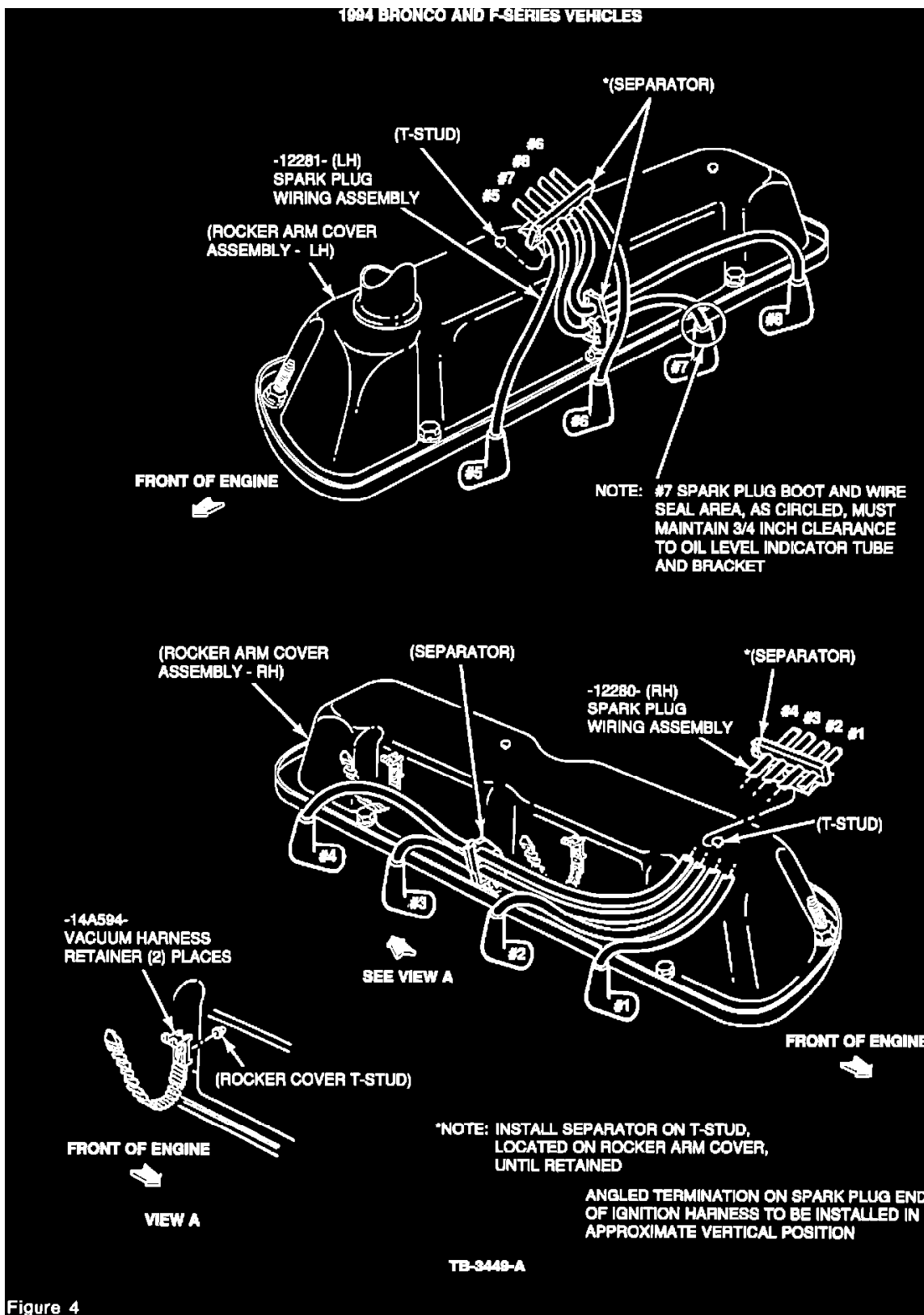
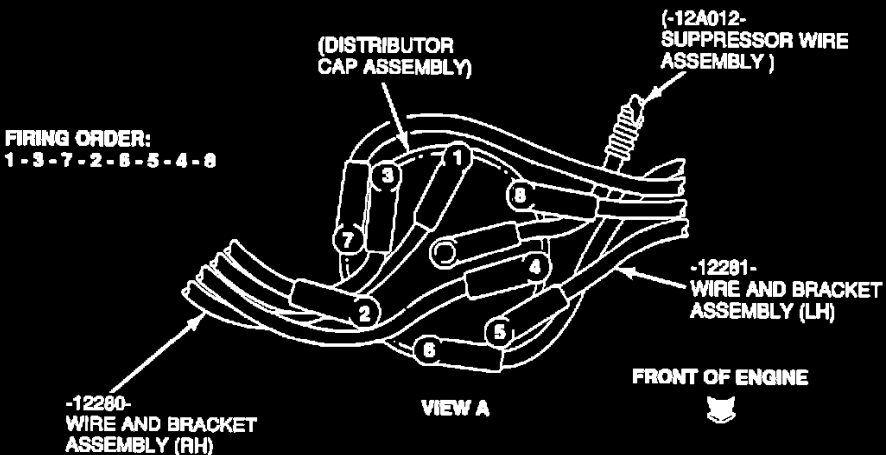
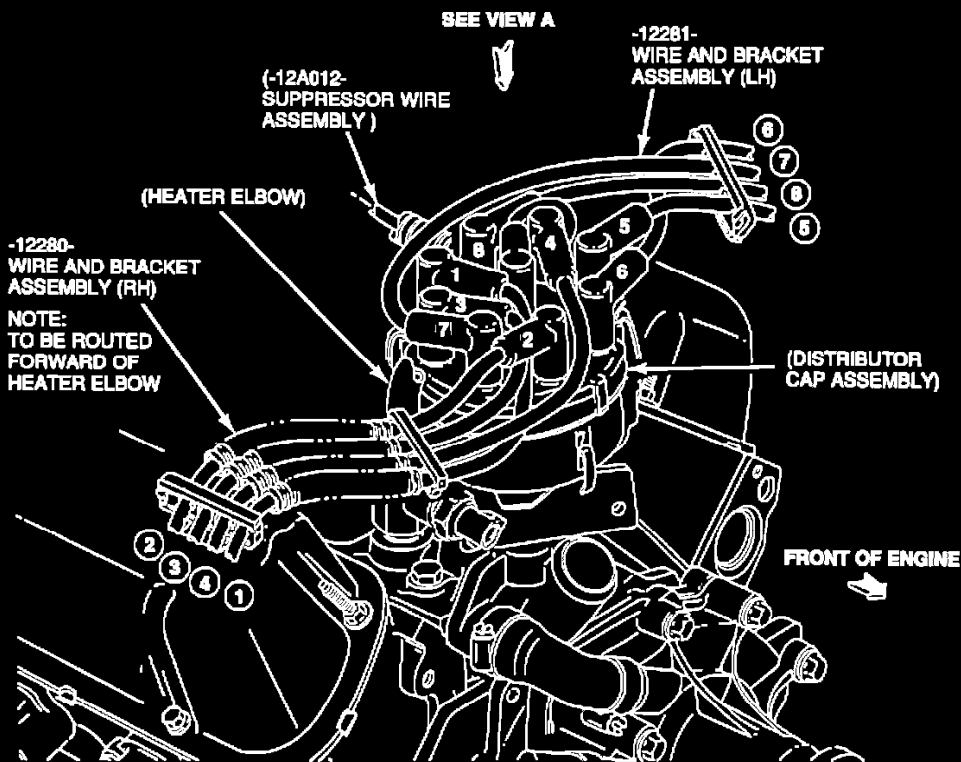


Figure 4

1. Inspect the routing of the spark plug wires. Refer to Figures 3 and 4.
2. Make any spark plug wiring corrections as required.

1994 "E" SERIES IGNITION WIRE ROUTING



TB-3450-A

Figure 5

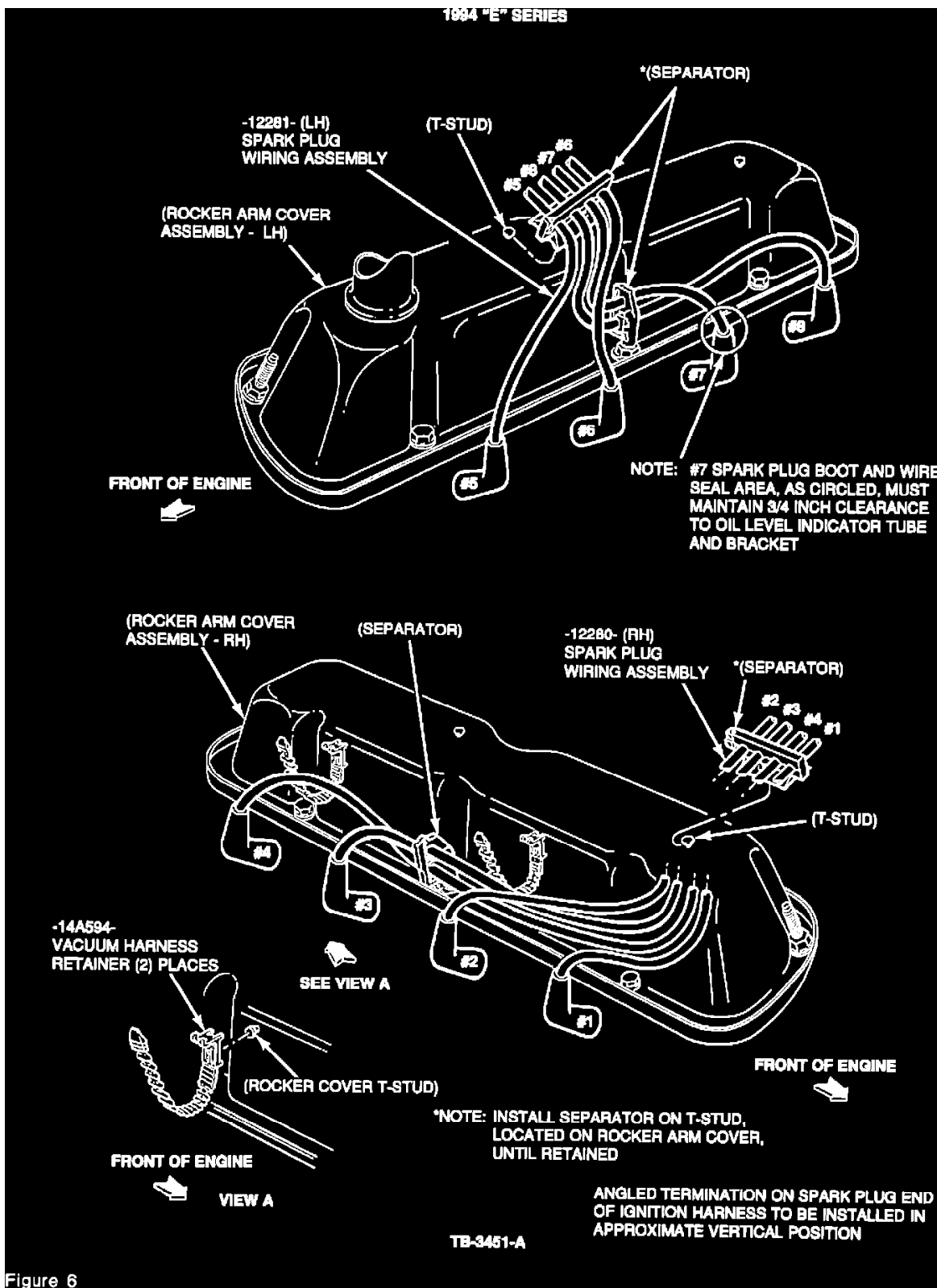


Figure 6

3. Inspect the routing of the spark plug wires. Refer to Figures 5 and 6.
4. Make any spark plug wiring corrections as required.

OTHER APPLICABLE ARTICLES: 90-4-14

WARRANTY STATUS:

Eligible Under The Provisions Of Bumper To Bumper Warranty Coverage For 1992-94 Models And Basic Warranty For All Other Models, 1992 Model And Later Federal Emissions And California Emissions For All Model Years

OPERATION	DESCRIPTION	TIME
940410A	Re-route Spark Plug Wires - F-Series, Bronco 5.0L	0.4 Hr.

940410B Re-route Spark Plug Wires -
Econoline 5.0L 0.6 Hr.

DEALER CODING

BASIC PART NO.	CONDITION CODE
12286	43

OASIS CODES:

10497000, 609000, 609400, 609500, 609600, 610000, 610500, 610600, 610700, 612000, 612500, 612600, 615000, 615500, 615600